

ANALYTICAL REPORT

Job Number: 480-144297-1

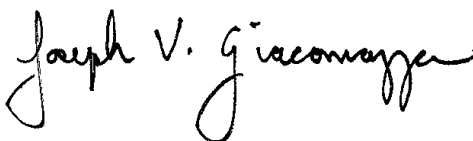
Job Description: Mayville Site# 907030A

Contract Number: C100700

For:

New York State D.E.C.
270 Michigan Avenue
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Attention: Bryan G. Kowalewski



Approved for release.
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11/27/2018 2:55 PM

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11/27/2018

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Job Narrative
480-144297-1

Comments

No additional comments.

Receipt

The samples were received on 10/26/2018 6:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.9° C and 4.9° C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): GPW-5 (480-144297-10). The container labels list PMW-5, While COC lists GPW-5. Labeled according to COC.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-443500 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: GPW-13 (480-144297-1), GPW-20 (480-144297-5) and GMW-2 (480-144297-6).

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-443500 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8260C: The sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, when verified by the laboratory, the pH was greater than 2 and the following sample was analyzed after 7 days from sampling: EW-14 (480-144297-3).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: EW-16 (480-144297-2), EW-14 (480-144297-3), EW-10 (480-144297-7), GPW-5 (480-144297-10) and DUP (480-144297-11). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: EW-16 (480-144297-2) and EW-14 (480-144297-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, when verified by the laboratory, the pH was greater than 2 and the following sample was analyzed after 7 days from sampling: EW-14 (480-144297-3).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-443801 recovered above the upper control limit for Cyclohexane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: EW-16 (480-144297-2) and EW-14 (480-144297-3).

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 following sample was diluted due to the nature of the sample matrix: EW-10 (480-144297-7). Elevated reporting limits (RLs) are provided.

Method(s) 8270D SIM ID: The breakdown of 4,4'-DDT in the tuning evaluation exceeded 20%. Breakdown is not a criteria of the method but rather an internal check performed by the laboratory to evaluate the peak shape of 1,4-Dioxane and 1,4-Dioxane-d8. No adverse performance was observed and QC recoveries were in control. The data have been reported. (DFTPP 480-444681/2).

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

LCMS

Method(s) 537 (modified): Results for sample EW-10 (480-144297-7) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-6:2 FTS and M2-8:2 FTS in the following sample: DUP (480-144297-11). Re-analysis was performed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

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

Organic Prep

Method(s) 3510C: Elevated reporting limits are provided for the following sample due to insufficient sample provided for preparation: GPW-6 (480-144297-9).

Method(s) 3535: Due to the matrix of the sample being a turbid brown color and having a thick layer of mud at the bottom of the sample container, the sample was decanted and centrifuged. After the sample was centrifuged, it was fortified with IDA and extracted: GPW-6 (480-144297-9).

Method(s) 3535: The following sample contains a Matrix Spike and a Matrix Spike Duplicate sample container, however the parent sample was observed to be a bit darker in color than the MS/MSD samples: GMW-2 (480-144297-6).

Method(s) 3535: The following samples were observed to be a light brown color and contained sediment prior to extraction: GPW-20 (480-144297-5), GMW-2 (480-144297-6), GMW-2 (480-144297-6[MS]), GMW-2 (480-144297-6[MSD]) and GPW-5 (480-144297-10). Due to these samples having non-settleable particulate matter, it ended up plugging the SPE extraction disk. The amount of sample remaining is recorded in the "Notes" field of the prep batch. The "Tare Weight" recorded is the weight of the emptied bottle. The reporting limits (RLs) have been adjusted proportionately.

Method(s) 3535: The following samples were observed to be a light yellow color after extraction: EW-10 (480-144297-7), GPW-6 (480-144297-9) and DUP (480-144297-11).

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: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Qualifiers

GC/MS VOA

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

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
*	Isotope Dilution analyte is outside acceptance limits.

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: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-144297-1	GPW-13	Water	10/24/18 15:45	10/26/18 18:15
480-144297-2	EW-16	Water	10/25/18 15:45	10/26/18 18:15
480-144297-3	EW-14	Water	10/26/18 09:45	10/26/18 18:15
480-144297-4	TB	Water	10/26/18 00:00	10/26/18 18:15
480-144297-5	GPW-20	Water	10/24/18 10:35	10/26/18 18:15
480-144297-6	GMW-2	Water	10/24/18 12:15	10/26/18 18:15
480-144297-7	EW-10	Water	10/25/18 11:55	10/26/18 18:15
480-144297-8	SB-19	Water	10/25/18 13:50	10/26/18 18:15
480-144297-9	GPW-6	Water	10/25/18 17:25	10/26/18 18:15
480-144297-10	GPW-5	Water	10/25/18 18:00	10/26/18 18:15
480-144297-11	DUP	Water	10/25/18 00:00	10/26/18 18:15

Detection Summary

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-13

Lab Sample ID: 480-144297-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	22		10	3.0	ug/L	1		8260C	Total/NA
Trichloroethene	0.67	J	1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: EW-16

Lab Sample ID: 480-144297-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	370	J	1000	290	ug/L	1000		8260C	Total/NA
cis-1,2-Dichloroethene	130000	E	1000	810	ug/L	1000		8260C	Total/NA
trans-1,2-Dichloroethene	1200		1000	900	ug/L	1000		8260C	Total/NA
Trichloroethene	58000		1000	460	ug/L	1000		8260C	Total/NA
Vinyl chloride	8100		1000	900	ug/L	1000		8260C	Total/NA
cis-1,2-Dichloroethene - DL	150000		2000	1600	ug/L	2000		8260C	Total/NA
Trichloroethene - DL	62000		2000	920	ug/L	2000		8260C	Total/NA
Vinyl chloride - DL	9400		2000	1800	ug/L	2000		8260C	Total/NA

Client Sample ID: EW-14

Lab Sample ID: 480-144297-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	220	J	400	120	ug/L	400		8260C	Total/NA
cis-1,2-Dichloroethene	120000	E	400	320	ug/L	400		8260C	Total/NA
trans-1,2-Dichloroethene	450		400	360	ug/L	400		8260C	Total/NA
Trichloroethene	410		400	180	ug/L	400		8260C	Total/NA
Vinyl chloride	41000	E	400	360	ug/L	400		8260C	Total/NA
cis-1,2-Dichloroethene - DL	170000		2000	1600	ug/L	2000		8260C	Total/NA
Vinyl chloride - DL	51000		2000	1800	ug/L	2000		8260C	Total/NA

Client Sample ID: TB

Lab Sample ID: 480-144297-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.86	J	1.0	0.81	ug/L	1		8260C	Total/NA

Client Sample ID: GPW-20

Lab Sample ID: 480-144297-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.7	J	10	3.0	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.25	J	1.0	0.16	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	0.40	J	1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.25	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.41	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.3		1.8	0.48	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GMW-2

Lab Sample ID: 480-144297-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.3		1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.99	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.47	J B	1.7	0.14	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.58	J	1.7	0.46	ng/L	1		537 (modified)	Total/NA

Client Sample ID: EW-10

Lab Sample ID: 480-144297-7

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: EW-10 (Continued)

Lab Sample ID: 480-144297-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6900		200	160	ug/L	200		8260C	Total/NA
Vinyl chloride	7100		200	180	ug/L	200		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	3.2		1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.92	J	1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.6	J	1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.3	J	1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.3		1.8	0.76	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.3	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	2.1		1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.6	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.87	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.6		1.8	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.33	J	1.8	0.31	ng/L	1		537 (modified)	Total/NA

Client Sample ID: SB-19

Lab Sample ID: 480-144297-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.2	J	10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	16		1.0	0.81	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.37	J	1.0	0.36	ug/L	1		8260C	Total/NA
Trichloroethene	14		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	1.6		1.0	0.90	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	0.73	J	1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.94	J	1.7	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.2	J	1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.60	J	1.7	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.9		1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.4	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.8	B	1.7	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.6		1.7	0.47	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GPW-6

Lab Sample ID: 480-144297-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16		10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	21		1.0	0.81	ug/L	1		8260C	Total/NA
Cyclohexane	0.28	J	1.0	0.18	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.22	J	1.0	0.16	ug/L	1		8260C	Total/NA
Trichloroethene	3.9		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	6.0		1.0	0.90	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	0.88	J	1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.96	J	1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.58	J	1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.34	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.79	J	1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.45	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.0	J	1.8	0.49	ng/L	1		537 (modified)	Total/NA

Client Sample ID: GPW-5

Lab Sample ID: 480-144297-10

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-5 (Continued)

Lab Sample ID: 480-144297-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6800		100	81	ug/L	100		8260C	Total/NA
Trichloroethene	8400		100	46	ug/L	100		8260C	Total/NA
Vinyl chloride	430		100	90	ug/L	100		8260C	Total/NA
1,4-Dioxane	0.79		0.19	0.095	ug/L	1		8270D SIM ID	Total/NA
Perfluoropentanoic acid (PFPeA)	1.5	J	1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.2	J	1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.90	J	1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.6	J	1.8	0.76	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.9		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.57	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.4		1.8	0.48	ng/L	1		537 (modified)	Total/NA

Client Sample ID: DUP

Lab Sample ID: 480-144297-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	12000		200	160	ug/L	200		8260C	Total/NA
Vinyl chloride	7800		200	180	ug/L	200		8260C	Total/NA
1,4-Dioxane	0.49		0.19	0.095	ug/L	1		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	5.6		1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.6		1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.0		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.1	J	1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.2		1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.3	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	2.0		1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.2	J	1.8	0.97	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	0.50	J	1.8	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.43	J	1.8	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.76	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	6.0		1.8	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.35	J	1.8	0.31	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-13

Date Collected: 10/24/18 15:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-1

Matrix: Water

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			11/04/18 15:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/04/18 15:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/04/18 15:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/04/18 15:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/04/18 15:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/04/18 15:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/04/18 15:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/04/18 15:41	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/04/18 15:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/04/18 15:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/04/18 15:41	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/04/18 15:41	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/04/18 15:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/04/18 15:41	1
2-Hexanone	ND		5.0	1.2	ug/L			11/04/18 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/04/18 15:41	1
Acetone	22		10	3.0	ug/L			11/04/18 15:41	1
Benzene	ND		1.0	0.41	ug/L			11/04/18 15:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/04/18 15:41	1
Bromoform	ND		1.0	0.26	ug/L			11/04/18 15:41	1
Bromomethane	ND		1.0	0.69	ug/L			11/04/18 15:41	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/04/18 15:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/04/18 15:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/04/18 15:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/04/18 15:41	1
Chloroethane	ND		1.0	0.32	ug/L			11/04/18 15:41	1
Chloroform	ND		1.0	0.34	ug/L			11/04/18 15:41	1
Chloromethane	ND		1.0	0.35	ug/L			11/04/18 15:41	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/04/18 15:41	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/04/18 15:41	1
Cyclohexane	ND		1.0	0.18	ug/L			11/04/18 15:41	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/04/18 15:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/04/18 15:41	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/04/18 15:41	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/04/18 15:41	1
Methyl acetate	ND		2.5	1.3	ug/L			11/04/18 15:41	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/04/18 15:41	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/04/18 15:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/04/18 15:41	1
Styrene	ND		1.0	0.73	ug/L			11/04/18 15:41	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/04/18 15:41	1
Toluene	ND		1.0	0.51	ug/L			11/04/18 15:41	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/04/18 15:41	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/04/18 15:41	1
Trichloroethene	0.67	J	1.0	0.46	ug/L			11/04/18 15:41	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/04/18 15:41	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/04/18 15:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/04/18 15:41	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-13

Date Collected: 10/24/18 15:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		11/04/18 15:41	1
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		11/04/18 15:41	1
4-Bromofluorobenzene (Surr)	103		73 - 120		11/04/18 15:41	1
Dibromofluoromethane (Surr)	103		75 - 123		11/04/18 15:41	1

Client Sample ID: EW-16

Date Collected: 10/25/18 15:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1000	820	ug/L			11/06/18 02:55	1000
1,1,2,2-Tetrachloroethane	ND		1000	210	ug/L			11/06/18 02:55	1000
1,1,2-Trichloroethane	ND		1000	230	ug/L			11/06/18 02:55	1000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1000	310	ug/L			11/06/18 02:55	1000
1,1-Dichloroethane	ND		1000	380	ug/L			11/06/18 02:55	1000
1,1-Dichloroethene	370	J	1000	290	ug/L			11/06/18 02:55	1000
1,2,4-Trichlorobenzene	ND		1000	410	ug/L			11/06/18 02:55	1000
1,2-Dibromo-3-Chloropropane	ND		1000	390	ug/L			11/06/18 02:55	1000
1,2-Dichlorobenzene	ND		1000	790	ug/L			11/06/18 02:55	1000
1,2-Dichloroethane	ND		1000	210	ug/L			11/06/18 02:55	1000
1,2-Dichloropropane	ND		1000	720	ug/L			11/06/18 02:55	1000
1,3-Dichlorobenzene	ND		1000	780	ug/L			11/06/18 02:55	1000
1,4-Dichlorobenzene	ND		1000	840	ug/L			11/06/18 02:55	1000
2-Butanone (MEK)	ND		10000	1300	ug/L			11/06/18 02:55	1000
2-Hexanone	ND		5000	1200	ug/L			11/06/18 02:55	1000
4-Methyl-2-pentanone (MIBK)	ND		5000	2100	ug/L			11/06/18 02:55	1000
Acetone	ND		10000	3000	ug/L			11/06/18 02:55	1000
Benzene	ND		1000	410	ug/L			11/06/18 02:55	1000
Bromodichloromethane	ND		1000	390	ug/L			11/06/18 02:55	1000
Bromoform	ND		1000	260	ug/L			11/06/18 02:55	1000
Bromomethane	ND		1000	690	ug/L			11/06/18 02:55	1000
Carbon disulfide	ND		1000	190	ug/L			11/06/18 02:55	1000
Carbon tetrachloride	ND		1000	270	ug/L			11/06/18 02:55	1000
Chlorobenzene	ND		1000	750	ug/L			11/06/18 02:55	1000
Dibromochloromethane	ND		1000	320	ug/L			11/06/18 02:55	1000
Chloroethane	ND		1000	320	ug/L			11/06/18 02:55	1000
Chloroform	ND		1000	340	ug/L			11/06/18 02:55	1000
Chloromethane	ND		1000	350	ug/L			11/06/18 02:55	1000
cis-1,2-Dichloroethene	130000	E	1000	810	ug/L			11/06/18 02:55	1000
cis-1,3-Dichloropropene	ND		1000	360	ug/L			11/06/18 02:55	1000
Cyclohexane	ND		1000	180	ug/L			11/06/18 02:55	1000
Dichlorodifluoromethane	ND		1000	680	ug/L			11/06/18 02:55	1000
Ethylbenzene	ND		1000	740	ug/L			11/06/18 02:55	1000
1,2-Dibromoethane	ND		1000	730	ug/L			11/06/18 02:55	1000
Isopropylbenzene	ND		1000	790	ug/L			11/06/18 02:55	1000
Methyl acetate	ND		2500	1300	ug/L			11/06/18 02:55	1000
Methyl tert-butyl ether	ND		1000	160	ug/L			11/06/18 02:55	1000
Methylcyclohexane	ND		1000	160	ug/L			11/06/18 02:55	1000
Methylene Chloride	ND		1000	440	ug/L			11/06/18 02:55	1000

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: EW-16

Date Collected: 10/25/18 15:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1000	730	ug/L			11/06/18 02:55	1000
Tetrachloroethene	ND		1000	360	ug/L			11/06/18 02:55	1000
Toluene	ND		1000	510	ug/L			11/06/18 02:55	1000
trans-1,2-Dichloroethene	1200		1000	900	ug/L			11/06/18 02:55	1000
trans-1,3-Dichloropropene	ND		1000	370	ug/L			11/06/18 02:55	1000
Trichloroethene	58000		1000	460	ug/L			11/06/18 02:55	1000
Trichlorofluoromethane	ND		1000	880	ug/L			11/06/18 02:55	1000
Vinyl chloride	8100		1000	900	ug/L			11/06/18 02:55	1000
Xylenes, Total	ND		2000	660	ug/L			11/06/18 02:55	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	97		80 - 120		11/06/18 02:55	1000
<i>1,2-Dichloroethane-d4 (Surr)</i>	90		77 - 120		11/06/18 02:55	1000
<i>4-Bromofluorobenzene (Surr)</i>	97		73 - 120		11/06/18 02:55	1000
<i>Dibromofluoromethane (Surr)</i>	91		75 - 123		11/06/18 02:55	1000

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2000	1600	ug/L			11/06/18 12:26	2000
1,1,2,2-Tetrachloroethane	ND		2000	420	ug/L			11/06/18 12:26	2000
1,1,2-Trichloroethane	ND		2000	460	ug/L			11/06/18 12:26	2000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2000	620	ug/L			11/06/18 12:26	2000
1,1-Dichloroethane	ND		2000	760	ug/L			11/06/18 12:26	2000
1,1-Dichloroethene	ND		2000	580	ug/L			11/06/18 12:26	2000
1,2,4-Trichlorobenzene	ND		2000	820	ug/L			11/06/18 12:26	2000
1,2-Dibromo-3-Chloropropane	ND		2000	780	ug/L			11/06/18 12:26	2000
1,2-Dichlorobenzene	ND		2000	1600	ug/L			11/06/18 12:26	2000
1,2-Dichloroethane	ND		2000	420	ug/L			11/06/18 12:26	2000
1,2-Dichloropropane	ND		2000	1400	ug/L			11/06/18 12:26	2000
1,3-Dichlorobenzene	ND		2000	1600	ug/L			11/06/18 12:26	2000
1,4-Dichlorobenzene	ND		2000	1700	ug/L			11/06/18 12:26	2000
2-Butanone (MEK)	ND		20000	2600	ug/L			11/06/18 12:26	2000
2-Hexanone	ND		10000	2500	ug/L			11/06/18 12:26	2000
4-Methyl-2-pentanone (MIBK)	ND		10000	4200	ug/L			11/06/18 12:26	2000
Acetone	ND		20000	6000	ug/L			11/06/18 12:26	2000
Benzene	ND		2000	820	ug/L			11/06/18 12:26	2000
Bromodichloromethane	ND		2000	780	ug/L			11/06/18 12:26	2000
Bromoform	ND		2000	520	ug/L			11/06/18 12:26	2000
Bromomethane	ND		2000	1400	ug/L			11/06/18 12:26	2000
Carbon disulfide	ND		2000	380	ug/L			11/06/18 12:26	2000
Carbon tetrachloride	ND		2000	540	ug/L			11/06/18 12:26	2000
Chlorobenzene	ND		2000	1500	ug/L			11/06/18 12:26	2000
Dibromochloromethane	ND		2000	640	ug/L			11/06/18 12:26	2000
Chloroethane	ND		2000	640	ug/L			11/06/18 12:26	2000
Chloroform	ND		2000	680	ug/L			11/06/18 12:26	2000
Chloromethane	ND		2000	700	ug/L			11/06/18 12:26	2000
cis-1,2-Dichloroethene	150000		2000	1600	ug/L			11/06/18 12:26	2000
cis-1,3-Dichloropropene	ND		2000	720	ug/L			11/06/18 12:26	2000
Cyclohexane	ND		2000	360	ug/L			11/06/18 12:26	2000
Dichlorodifluoromethane	ND		2000	1400	ug/L			11/06/18 12:26	2000

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: EW-16

Date Collected: 10/25/18 15:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		2000	1500	ug/L			11/06/18 12:26	2000
1,2-Dibromoethane	ND		2000	1500	ug/L			11/06/18 12:26	2000
Isopropylbenzene	ND		2000	1600	ug/L			11/06/18 12:26	2000
Methyl acetate	ND		5000	2600	ug/L			11/06/18 12:26	2000
Methyl tert-butyl ether	ND		2000	320	ug/L			11/06/18 12:26	2000
Methylcyclohexane	ND		2000	320	ug/L			11/06/18 12:26	2000
Methylene Chloride	ND		2000	880	ug/L			11/06/18 12:26	2000
Styrene	ND		2000	1500	ug/L			11/06/18 12:26	2000
Tetrachloroethene	ND		2000	720	ug/L			11/06/18 12:26	2000
Toluene	ND		2000	1000	ug/L			11/06/18 12:26	2000
trans-1,2-Dichloroethene	ND		2000	1800	ug/L			11/06/18 12:26	2000
trans-1,3-Dichloropropene	ND		2000	740	ug/L			11/06/18 12:26	2000
Trichloroethene	62000		2000	920	ug/L			11/06/18 12:26	2000
Trichlorofluoromethane	ND		2000	1800	ug/L			11/06/18 12:26	2000
Vinyl chloride	9400		2000	1800	ug/L			11/06/18 12:26	2000
Xylenes, Total	ND		4000	1300	ug/L			11/06/18 12:26	2000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/06/18 12:26	2000
1,2-Dichloroethane-d4 (Surr)	92		77 - 120		11/06/18 12:26	2000
4-Bromofluorobenzene (Surr)	97		73 - 120		11/06/18 12:26	2000
Dibromofluoromethane (Surr)	92		75 - 123		11/06/18 12:26	2000

Client Sample ID: EW-14

Date Collected: 10/26/18 09:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		400	330	ug/L			11/06/18 03:23	400
1,1,2,2-Tetrachloroethane	ND		400	84	ug/L			11/06/18 03:23	400
1,1,2-Trichloroethane	ND		400	92	ug/L			11/06/18 03:23	400
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		400	120	ug/L			11/06/18 03:23	400
1,1-Dichloroethane	ND		400	150	ug/L			11/06/18 03:23	400
1,1-Dichloroethene	220	J	400	120	ug/L			11/06/18 03:23	400
1,2,4-Trichlorobenzene	ND		400	160	ug/L			11/06/18 03:23	400
1,2-Dibromo-3-Chloropropane	ND		400	160	ug/L			11/06/18 03:23	400
1,2-Dichlorobenzene	ND		400	320	ug/L			11/06/18 03:23	400
1,2-Dichloroethane	ND		400	84	ug/L			11/06/18 03:23	400
1,2-Dichloropropane	ND		400	290	ug/L			11/06/18 03:23	400
1,3-Dichlorobenzene	ND		400	310	ug/L			11/06/18 03:23	400
1,4-Dichlorobenzene	ND		400	340	ug/L			11/06/18 03:23	400
2-Butanone (MEK)	ND		4000	530	ug/L			11/06/18 03:23	400
2-Hexanone	ND		2000	500	ug/L			11/06/18 03:23	400
4-Methyl-2-pentanone (MIBK)	ND		2000	840	ug/L			11/06/18 03:23	400
Acetone	ND		4000	1200	ug/L			11/06/18 03:23	400
Benzene	ND		400	160	ug/L			11/06/18 03:23	400
Bromodichloromethane	ND		400	160	ug/L			11/06/18 03:23	400
Bromoform	ND		400	100	ug/L			11/06/18 03:23	400
Bromomethane	ND		400	280	ug/L			11/06/18 03:23	400

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: EW-14

Date Collected: 10/26/18 09:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		400	76	ug/L			11/06/18 03:23	400
Carbon tetrachloride	ND		400	110	ug/L			11/06/18 03:23	400
Chlorobenzene	ND		400	300	ug/L			11/06/18 03:23	400
Dibromochloromethane	ND		400	130	ug/L			11/06/18 03:23	400
Chloroethane	ND		400	130	ug/L			11/06/18 03:23	400
Chloroform	ND		400	140	ug/L			11/06/18 03:23	400
Chloromethane	ND		400	140	ug/L			11/06/18 03:23	400
cis-1,2-Dichloroethene	120000	E	400	320	ug/L			11/06/18 03:23	400
cis-1,3-Dichloropropene	ND		400	140	ug/L			11/06/18 03:23	400
Cyclohexane	ND		400	72	ug/L			11/06/18 03:23	400
Dichlorodifluoromethane	ND		400	270	ug/L			11/06/18 03:23	400
Ethylbenzene	ND		400	300	ug/L			11/06/18 03:23	400
1,2-Dibromoethane	ND		400	290	ug/L			11/06/18 03:23	400
Isopropylbenzene	ND		400	320	ug/L			11/06/18 03:23	400
Methyl acetate	ND		1000	520	ug/L			11/06/18 03:23	400
Methyl tert-butyl ether	ND		400	64	ug/L			11/06/18 03:23	400
Methylcyclohexane	ND		400	64	ug/L			11/06/18 03:23	400
Methylene Chloride	ND		400	180	ug/L			11/06/18 03:23	400
Styrene	ND		400	290	ug/L			11/06/18 03:23	400
Tetrachloroethene	ND		400	140	ug/L			11/06/18 03:23	400
Toluene	ND		400	200	ug/L			11/06/18 03:23	400
trans-1,2-Dichloroethene	450		400	360	ug/L			11/06/18 03:23	400
trans-1,3-Dichloropropene	ND		400	150	ug/L			11/06/18 03:23	400
Trichloroethene	410		400	180	ug/L			11/06/18 03:23	400
Trichlorofluoromethane	ND		400	350	ug/L			11/06/18 03:23	400
Vinyl chloride	41000	E	400	360	ug/L			11/06/18 03:23	400
Xylenes, Total	ND		800	260	ug/L			11/06/18 03:23	400

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	93		80 - 120		11/06/18 03:23	400
<i>1,2-Dichloroethane-d4 (Surr)</i>	89		77 - 120		11/06/18 03:23	400
<i>4-Bromofluorobenzene (Surr)</i>	92		73 - 120		11/06/18 03:23	400
<i>Dibromofluoromethane (Surr)</i>	91		75 - 123		11/06/18 03:23	400

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2000	1600	ug/L			11/06/18 12:54	2000
1,1,2,2-Tetrachloroethane	ND		2000	420	ug/L			11/06/18 12:54	2000
1,1,2-Trichloroethane	ND		2000	460	ug/L			11/06/18 12:54	2000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2000	620	ug/L			11/06/18 12:54	2000
1,1-Dichloroethane	ND		2000	760	ug/L			11/06/18 12:54	2000
1,1-Dichloroethene	ND		2000	580	ug/L			11/06/18 12:54	2000
1,2,4-Trichlorobenzene	ND		2000	820	ug/L			11/06/18 12:54	2000
1,2-Dibromo-3-Chloropropane	ND		2000	780	ug/L			11/06/18 12:54	2000
1,2-Dichlorobenzene	ND		2000	1600	ug/L			11/06/18 12:54	2000
1,2-Dichloroethane	ND		2000	420	ug/L			11/06/18 12:54	2000
1,2-Dichloropropane	ND		2000	1400	ug/L			11/06/18 12:54	2000
1,3-Dichlorobenzene	ND		2000	1600	ug/L			11/06/18 12:54	2000
1,4-Dichlorobenzene	ND		2000	1700	ug/L			11/06/18 12:54	2000
2-Butanone (MEK)	ND		20000	2600	ug/L			11/06/18 12:54	2000

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: EW-14

Date Collected: 10/26/18 09:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		10000	2500	ug/L			11/06/18 12:54	2000
4-Methyl-2-pentanone (MIBK)	ND		10000	4200	ug/L			11/06/18 12:54	2000
Acetone	ND		20000	6000	ug/L			11/06/18 12:54	2000
Benzene	ND		2000	820	ug/L			11/06/18 12:54	2000
Bromodichloromethane	ND		2000	780	ug/L			11/06/18 12:54	2000
Bromoform	ND		2000	520	ug/L			11/06/18 12:54	2000
Bromomethane	ND		2000	1400	ug/L			11/06/18 12:54	2000
Carbon disulfide	ND		2000	380	ug/L			11/06/18 12:54	2000
Carbon tetrachloride	ND		2000	540	ug/L			11/06/18 12:54	2000
Chlorobenzene	ND		2000	1500	ug/L			11/06/18 12:54	2000
Dibromochloromethane	ND		2000	640	ug/L			11/06/18 12:54	2000
Chloroethane	ND		2000	640	ug/L			11/06/18 12:54	2000
Chloroform	ND		2000	680	ug/L			11/06/18 12:54	2000
Chloromethane	ND		2000	700	ug/L			11/06/18 12:54	2000
cis-1,2-Dichloroethene	170000		2000	1600	ug/L			11/06/18 12:54	2000
cis-1,3-Dichloropropene	ND		2000	720	ug/L			11/06/18 12:54	2000
Cyclohexane	ND		2000	360	ug/L			11/06/18 12:54	2000
Dichlorodifluoromethane	ND		2000	1400	ug/L			11/06/18 12:54	2000
Ethylbenzene	ND		2000	1500	ug/L			11/06/18 12:54	2000
1,2-Dibromoethane	ND		2000	1500	ug/L			11/06/18 12:54	2000
Isopropylbenzene	ND		2000	1600	ug/L			11/06/18 12:54	2000
Methyl acetate	ND		5000	2600	ug/L			11/06/18 12:54	2000
Methyl tert-butyl ether	ND		2000	320	ug/L			11/06/18 12:54	2000
Methylcyclohexane	ND		2000	320	ug/L			11/06/18 12:54	2000
Methylene Chloride	ND		2000	880	ug/L			11/06/18 12:54	2000
Styrene	ND		2000	1500	ug/L			11/06/18 12:54	2000
Tetrachloroethene	ND		2000	720	ug/L			11/06/18 12:54	2000
Toluene	ND		2000	1000	ug/L			11/06/18 12:54	2000
trans-1,2-Dichloroethene	ND		2000	1800	ug/L			11/06/18 12:54	2000
trans-1,3-Dichloropropene	ND		2000	740	ug/L			11/06/18 12:54	2000
Trichloroethene	ND		2000	920	ug/L			11/06/18 12:54	2000
Trichlorofluoromethane	ND		2000	1800	ug/L			11/06/18 12:54	2000
Vinyl chloride	51000		2000	1800	ug/L			11/06/18 12:54	2000
Xylenes, Total	ND		4000	1300	ug/L			11/06/18 12:54	2000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/06/18 12:54	2000
1,2-Dichloroethane-d4 (Surr)	91		77 - 120		11/06/18 12:54	2000
4-Bromofluorobenzene (Surr)	95		73 - 120		11/06/18 12:54	2000
Dibromofluoromethane (Surr)	93		75 - 123		11/06/18 12:54	2000

Client Sample ID: TB

Date Collected: 10/26/18 00:00

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-4

Matrix: Water

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			11/06/18 03:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/06/18 03:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/06/18 03:51	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: TB

Lab Sample ID: 480-144297-4

Date Collected: 10/26/18 00:00

Matrix: Water

Date Received: 10/26/18 18:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/06/18 03:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/06/18 03:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/06/18 03:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/06/18 03:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/06/18 03:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/06/18 03:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/06/18 03:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/06/18 03:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/06/18 03:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/06/18 03:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/06/18 03:51	1
2-Hexanone	ND		5.0	1.2	ug/L			11/06/18 03:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/06/18 03:51	1
Acetone	ND		10	3.0	ug/L			11/06/18 03:51	1
Benzene	ND		1.0	0.41	ug/L			11/06/18 03:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/06/18 03:51	1
Bromoform	ND		1.0	0.26	ug/L			11/06/18 03:51	1
Bromomethane	ND		1.0	0.69	ug/L			11/06/18 03:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/06/18 03:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/06/18 03:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/06/18 03:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/06/18 03:51	1
Chloroethane	ND		1.0	0.32	ug/L			11/06/18 03:51	1
Chloroform	ND		1.0	0.34	ug/L			11/06/18 03:51	1
Chloromethane	ND		1.0	0.35	ug/L			11/06/18 03:51	1
cis-1,2-Dichloroethene	0.86	J	1.0	0.81	ug/L			11/06/18 03:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/06/18 03:51	1
Cyclohexane	ND		1.0	0.18	ug/L			11/06/18 03:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/06/18 03:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/06/18 03:51	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/06/18 03:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/06/18 03:51	1
Methyl acetate	ND		2.5	1.3	ug/L			11/06/18 03:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/06/18 03:51	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/06/18 03:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/06/18 03:51	1
Styrene	ND		1.0	0.73	ug/L			11/06/18 03:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/06/18 03:51	1
Toluene	ND		1.0	0.51	ug/L			11/06/18 03:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/06/18 03:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/06/18 03:51	1
Trichloroethene	ND		1.0	0.46	ug/L			11/06/18 03:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/06/18 03:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/06/18 03:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/06/18 03:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		11/06/18 03:51	1
1,2-Dichloroethane-d4 (Surr)	92		77 - 120		11/06/18 03:51	1
4-Bromofluorobenzene (Surr)	94		73 - 120		11/06/18 03:51	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: TB

Date Collected: 10/26/18 00:00

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-4

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	95		75 - 123		11/06/18 03:51	1

Client Sample ID: GPW-20

Date Collected: 10/24/18 10:35

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-5

Matrix: Water

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			11/04/18 16:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/04/18 16:05	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/04/18 16:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/04/18 16:05	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/04/18 16:05	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/04/18 16:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/04/18 16:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/04/18 16:05	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/04/18 16:05	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/04/18 16:05	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/04/18 16:05	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/04/18 16:05	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/04/18 16:05	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/04/18 16:05	1
2-Hexanone	ND		5.0	1.2	ug/L			11/04/18 16:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/04/18 16:05	1
Acetone	5.7	J	10	3.0	ug/L			11/04/18 16:05	1
Benzene	ND		1.0	0.41	ug/L			11/04/18 16:05	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/04/18 16:05	1
Bromoform	ND		1.0	0.26	ug/L			11/04/18 16:05	1
Bromomethane	ND		1.0	0.69	ug/L			11/04/18 16:05	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/04/18 16:05	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/04/18 16:05	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/04/18 16:05	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/04/18 16:05	1
Chloroethane	ND		1.0	0.32	ug/L			11/04/18 16:05	1
Chloroform	ND		1.0	0.34	ug/L			11/04/18 16:05	1
Chloromethane	ND		1.0	0.35	ug/L			11/04/18 16:05	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/04/18 16:05	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/04/18 16:05	1
Cyclohexane	ND		1.0	0.18	ug/L			11/04/18 16:05	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/04/18 16:05	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/04/18 16:05	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/04/18 16:05	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/04/18 16:05	1
Methyl acetate	ND		2.5	1.3	ug/L			11/04/18 16:05	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/04/18 16:05	1
Methylcyclohexane	0.25	J	1.0	0.16	ug/L			11/04/18 16:05	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/04/18 16:05	1
Styrene	ND		1.0	0.73	ug/L			11/04/18 16:05	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/04/18 16:05	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-20

Lab Sample ID: 480-144297-5

Date Collected: 10/24/18 10:35

Matrix: Water

Date Received: 10/26/18 18:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.51	ug/L			11/04/18 16:05	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/04/18 16:05	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/04/18 16:05	1
Trichloroethene	ND		1.0	0.46	ug/L			11/04/18 16:05	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/04/18 16:05	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/04/18 16:05	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/04/18 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		11/04/18 16:05	1
1,2-Dichloroethane-d4 (Surr)	112		77 - 120		11/04/18 16:05	1
4-Bromofluorobenzene (Surr)	107		73 - 120		11/04/18 16:05	1
Dibromofluoromethane (Surr)	109		75 - 123		11/04/18 16:05	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		10/30/18 07:37	11/10/18 08:05	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane-d8	30		15 - 110				10/30/18 07:37	11/10/18 08:05	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.40	J	1.8	0.31	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.43	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.51	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.75	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorobutanesulfonic acid (PFBS)	0.25	J	1.8	0.18	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorohexanesulfonic acid (PFHxS)	0.41	J B	1.8	0.15	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorooctanesulfonic acid (PFOS)	3.3		1.8	0.48	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		11/07/18 07:22	11/09/18 08:10	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.31	ng/L		11/07/18 07:22	11/09/18 08:10	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7	ng/L		11/07/18 07:22	11/09/18 08:10	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		11/07/18 07:22	11/09/18 08:10	1
6:2 FTS	ND		18	1.8	ng/L		11/07/18 07:22	11/09/18 08:10	1
8:2 FTS	ND		18	1.8	ng/L		11/07/18 07:22	11/09/18 08:10	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	33		25 - 150				11/07/18 07:22	11/09/18 08:10	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-20

Date Collected: 10/24/18 10:35

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-5

Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5-PFPeA DNU	50		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C2 PFHxA	60		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C4 PFHpA	65		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C4 PFOA	69		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C5 PFNA	66		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C2 PFDA	60		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C2 PFUnA	56		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C2 PFDoA	50		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C2 PFTeDA	49		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C3 PFBS	57		25 - 150	11/07/18 07:22	11/09/18 08:10	1
18O2 PFHxS	68		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C4 PFOS	62		25 - 150	11/07/18 07:22	11/09/18 08:10	1
13C8 FOSA	59		25 - 150	11/07/18 07:22	11/09/18 08:10	1
d3-NMeFOSAA	53		25 - 150	11/07/18 07:22	11/09/18 08:10	1
d5-NEtFOSAA	55		25 - 150	11/07/18 07:22	11/09/18 08:10	1
M2-6:2 FTS	68		25 - 150	11/07/18 07:22	11/09/18 08:10	1
M2-8:2 FTS	54		25 - 150	11/07/18 07:22	11/09/18 08:10	1

Client Sample ID: GMW-2

Date Collected: 10/24/18 12:15

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	F1	1.0	0.82	ug/L			11/04/18 16:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/04/18 16:28	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/04/18 16:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	1.0	0.31	ug/L			11/04/18 16:28	1
1,1-Dichloroethane	ND	F1	1.0	0.38	ug/L			11/04/18 16:28	1
1,1-Dichloroethene	ND	F1	1.0	0.29	ug/L			11/04/18 16:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/04/18 16:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/04/18 16:28	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/04/18 16:28	1
1,2-Dichloroethane	ND	F1	1.0	0.21	ug/L			11/04/18 16:28	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/04/18 16:28	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/04/18 16:28	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/04/18 16:28	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/04/18 16:28	1
2-Hexanone	ND		5.0	1.2	ug/L			11/04/18 16:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/04/18 16:28	1
Acetone	ND		10	3.0	ug/L			11/04/18 16:28	1
Benzene	ND		1.0	0.41	ug/L			11/04/18 16:28	1
Bromodichloromethane	ND	F1	1.0	0.39	ug/L			11/04/18 16:28	1
Bromoform	ND		1.0	0.26	ug/L			11/04/18 16:28	1
Bromomethane	ND		1.0	0.69	ug/L			11/04/18 16:28	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/04/18 16:28	1
Carbon tetrachloride	ND	F1	1.0	0.27	ug/L			11/04/18 16:28	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/04/18 16:28	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/04/18 16:28	1
Chloroethane	ND		1.0	0.32	ug/L			11/04/18 16:28	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GMW-2

Date Collected: 10/24/18 12:15

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.34	ug/L			11/04/18 16:28	1
Chloromethane	ND		1.0	0.35	ug/L			11/04/18 16:28	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/04/18 16:28	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/04/18 16:28	1
Cyclohexane	ND		1.0	0.18	ug/L			11/04/18 16:28	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/04/18 16:28	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/04/18 16:28	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/04/18 16:28	1
Isopropylbenzene	ND	F1	1.0	0.79	ug/L			11/04/18 16:28	1
Methyl acetate	ND		2.5	1.3	ug/L			11/04/18 16:28	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/04/18 16:28	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/04/18 16:28	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/04/18 16:28	1
Styrene	ND		1.0	0.73	ug/L			11/04/18 16:28	1
Tetrachloroethene	ND	F1	1.0	0.36	ug/L			11/04/18 16:28	1
Toluene	ND		1.0	0.51	ug/L			11/04/18 16:28	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/04/18 16:28	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/04/18 16:28	1
Trichloroethene	ND		1.0	0.46	ug/L			11/04/18 16:28	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/04/18 16:28	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/04/18 16:28	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/04/18 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		11/04/18 16:28	1
1,2-Dichloroethane-d4 (Surr)	112		77 - 120		11/04/18 16:28	1
4-Bromofluorobenzene (Surr)	101		73 - 120		11/04/18 16:28	1
Dibromofluoromethane (Surr)	106		75 - 123		11/04/18 16:28	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		0.19	0.095	ug/L		10/30/18 07:37	11/10/18 02:50	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane-d8	28		15 - 110				10/30/18 07:37	11/10/18 02:50	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	2.3		1.7	0.30	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.41	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.49	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.21	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorooctanoic acid (PFOA)	ND		1.7	0.72	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.26	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.93	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorobutanesulfonic acid (PFBS)	0.99 J		1.7	0.17	ng/L		11/07/18 07:22	11/09/18 08:18	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GMW-2

Date Collected: 10/24/18 12:15

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	0.47	J B	1.7	0.14	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorooctanesulfonic acid (PFOS)	0.58	J	1.7	0.46	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		11/07/18 07:22	11/09/18 08:18	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30	ng/L		11/07/18 07:22	11/09/18 08:18	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		11/07/18 07:22	11/09/18 08:18	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		11/07/18 07:22	11/09/18 08:18	1
6:2 FTS	ND		17	1.7	ng/L		11/07/18 07:22	11/09/18 08:18	1
8:2 FTS	ND		17	1.7	ng/L		11/07/18 07:22	11/09/18 08:18	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	43		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C5-PFPeA DNU	51		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C2 PFHxA	54		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C4 PFHpA	57		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C4 PFOA	56		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C5 PFNA	55		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C2 PFDA	56		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C2 PFUnA	43		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C2 PFDoA	37		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C2 PFTeDA	32		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C3 PFBS	49		25 - 150				11/07/18 07:22	11/09/18 08:18	1
18O2 PFHxS	56		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C4 PFOS	55		25 - 150				11/07/18 07:22	11/09/18 08:18	1
13C8 FOSA	49		25 - 150				11/07/18 07:22	11/09/18 08:18	1
d3-NMeFOSAA	40		25 - 150				11/07/18 07:22	11/09/18 08:18	1
d5-NEtFOSAA	38		25 - 150				11/07/18 07:22	11/09/18 08:18	1
M2-6:2 FTS	59		25 - 150				11/07/18 07:22	11/09/18 08:18	1
M2-8:2 FTS	52		25 - 150				11/07/18 07:22	11/09/18 08:18	1

Client Sample ID: EW-10

Date Collected: 10/25/18 11:55

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	160	ug/L			11/06/18 04:18	200
1,1,2,2-Tetrachloroethane	ND		200	42	ug/L			11/06/18 04:18	200
1,1,2-Trichloroethane	ND		200	46	ug/L			11/06/18 04:18	200
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		200	62	ug/L			11/06/18 04:18	200
1,1-Dichloroethane	ND		200	76	ug/L			11/06/18 04:18	200
1,1-Dichloroethene	ND		200	58	ug/L			11/06/18 04:18	200
1,2,4-Trichlorobenzene	ND		200	82	ug/L			11/06/18 04:18	200
1,2-Dibromo-3-Chloropropane	ND		200	78	ug/L			11/06/18 04:18	200
1,2-Dichlorobenzene	ND		200	160	ug/L			11/06/18 04:18	200
1,2-Dichloroethane	ND		200	42	ug/L			11/06/18 04:18	200
1,2-Dichloropropane	ND		200	140	ug/L			11/06/18 04:18	200

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: EW-10

Date Collected: 10/25/18 11:55

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		200	160	ug/L			11/06/18 04:18	200
1,4-Dichlorobenzene	ND		200	170	ug/L			11/06/18 04:18	200
2-Butanone (MEK)	ND		2000	260	ug/L			11/06/18 04:18	200
2-Hexanone	ND		1000	250	ug/L			11/06/18 04:18	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			11/06/18 04:18	200
Acetone	ND		2000	600	ug/L			11/06/18 04:18	200
Benzene	ND		200	82	ug/L			11/06/18 04:18	200
Bromodichloromethane	ND		200	78	ug/L			11/06/18 04:18	200
Bromoform	ND		200	52	ug/L			11/06/18 04:18	200
Bromomethane	ND		200	140	ug/L			11/06/18 04:18	200
Carbon disulfide	ND		200	38	ug/L			11/06/18 04:18	200
Carbon tetrachloride	ND		200	54	ug/L			11/06/18 04:18	200
Chlorobenzene	ND		200	150	ug/L			11/06/18 04:18	200
Dibromochloromethane	ND		200	64	ug/L			11/06/18 04:18	200
Chloroethane	ND		200	64	ug/L			11/06/18 04:18	200
Chloroform	ND		200	68	ug/L			11/06/18 04:18	200
Chloromethane	ND		200	70	ug/L			11/06/18 04:18	200
cis-1,2-Dichloroethene	6900		200	160	ug/L			11/06/18 04:18	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			11/06/18 04:18	200
Cyclohexane	ND		200	36	ug/L			11/06/18 04:18	200
Dichlorodifluoromethane	ND		200	140	ug/L			11/06/18 04:18	200
Ethylbenzene	ND		200	150	ug/L			11/06/18 04:18	200
1,2-Dibromoethane	ND		200	150	ug/L			11/06/18 04:18	200
Isopropylbenzene	ND		200	160	ug/L			11/06/18 04:18	200
Methyl acetate	ND		500	260	ug/L			11/06/18 04:18	200
Methyl tert-butyl ether	ND		200	32	ug/L			11/06/18 04:18	200
Methylcyclohexane	ND		200	32	ug/L			11/06/18 04:18	200
Methylene Chloride	ND		200	88	ug/L			11/06/18 04:18	200
Styrene	ND		200	150	ug/L			11/06/18 04:18	200
Tetrachloroethene	ND		200	72	ug/L			11/06/18 04:18	200
Toluene	ND		200	100	ug/L			11/06/18 04:18	200
trans-1,2-Dichloroethene	ND		200	180	ug/L			11/06/18 04:18	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			11/06/18 04:18	200
Trichloroethene	ND		200	92	ug/L			11/06/18 04:18	200
Trichlorofluoromethane	ND		200	180	ug/L			11/06/18 04:18	200
Vinyl chloride	7100		200	180	ug/L			11/06/18 04:18	200
Xylenes, Total	ND		400	130	ug/L			11/06/18 04:18	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/06/18 04:18	200
1,2-Dichloroethane-d4 (Surr)	89		77 - 120		11/06/18 04:18	200
4-Bromofluorobenzene (Surr)	97		73 - 120		11/06/18 04:18	200
Dibromofluoromethane (Surr)	90		75 - 123		11/06/18 04:18	200

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		0.97	0.49	ug/L		10/30/18 07:37	11/10/18 08:29	5
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	25		15 - 110				10/30/18 07:37	11/10/18 08:29	5

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: EW-10

Date Collected: 10/25/18 11:55

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-7

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.2		1.8	0.31	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluoropentanoic acid (PFPeA)	0.92	J	1.8	0.44	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorohexanoic acid (PFHxA)	1.6	J	1.8	0.52	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluoroheptanoic acid (PFHpA)	1.3	J	1.8	0.22	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorooctanoic acid (PFOA)	3.3		1.8	0.76	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorononanoic acid (PFNA)	1.3	J	1.8	0.24	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorodecanoic acid (PFDA)	2.1		1.8	0.28	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.99	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorobutanesulfonic acid (PFBS)	1.6	J	1.8	0.18	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorohexanesulfonic acid (PFHxS)	0.87	J B	1.8	0.15	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorooctanesulfonic acid (PFOS)	5.6		1.8	0.48	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		11/07/18 07:22	11/09/18 08:40	1
Perfluorooctanesulfonamide (FOSA)	0.33	J	1.8	0.31	ng/L		11/07/18 07:22	11/09/18 08:40	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8	ng/L		11/07/18 07:22	11/09/18 08:40	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		11/07/18 07:22	11/09/18 08:40	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	56		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C5-PFPeA DNU	74		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C2 PFHxA	85		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C4 PFHpA	94		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C4 PFOA	101		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C5 PFNA	109		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C2 PFDA	100		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C2 PFUnA	117		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C2 PFDoA	116		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C2 PFTeDA	100		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C3 PFBS	92		25 - 150	11/07/18 07:22	11/09/18 08:40	1
18O2 PFHxS	102		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C4 PFOS	114		25 - 150	11/07/18 07:22	11/09/18 08:40	1
13C8 FOSA	106		25 - 150	11/07/18 07:22	11/09/18 08:40	1
d3-NMeFOSAA	126		25 - 150	11/07/18 07:22	11/09/18 08:40	1
d5-NEtFOSAA	131		25 - 150	11/07/18 07:22	11/09/18 08:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 FTS	ND		90	9.0	ng/L		11/07/18 07:22	11/14/18 02:06	5
8:2 FTS	ND		90	9.0	ng/L		11/07/18 07:22	11/14/18 02:06	5
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
M2-6:2 FTS	101		25 - 150				11/07/18 07:22	11/14/18 02:06	5
M2-8:2 FTS	89		25 - 150				11/07/18 07:22	11/14/18 02:06	5

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: SB-19

Date Collected: 10/25/18 13:50

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-8

Matrix: Water

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			11/06/18 04:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/06/18 04:46	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/06/18 04:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/06/18 04:46	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/06/18 04:46	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/06/18 04:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/06/18 04:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/06/18 04:46	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/06/18 04:46	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/06/18 04:46	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/06/18 04:46	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/06/18 04:46	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/06/18 04:46	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/06/18 04:46	1
2-Hexanone	ND		5.0	1.2	ug/L			11/06/18 04:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/06/18 04:46	1
Acetone	3.2	J	10	3.0	ug/L			11/06/18 04:46	1
Benzene	ND		1.0	0.41	ug/L			11/06/18 04:46	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/06/18 04:46	1
Bromoform	ND		1.0	0.26	ug/L			11/06/18 04:46	1
Bromomethane	ND		1.0	0.69	ug/L			11/06/18 04:46	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/06/18 04:46	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/06/18 04:46	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/06/18 04:46	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/06/18 04:46	1
Chloroethane	ND		1.0	0.32	ug/L			11/06/18 04:46	1
Chloroform	ND		1.0	0.34	ug/L			11/06/18 04:46	1
Chloromethane	ND		1.0	0.35	ug/L			11/06/18 04:46	1
cis-1,2-Dichloroethene	16		1.0	0.81	ug/L			11/06/18 04:46	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/06/18 04:46	1
Cyclohexane	ND		1.0	0.18	ug/L			11/06/18 04:46	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/06/18 04:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/06/18 04:46	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/06/18 04:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/06/18 04:46	1
Methyl acetate	ND		2.5	1.3	ug/L			11/06/18 04:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/06/18 04:46	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/06/18 04:46	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/06/18 04:46	1
Styrene	ND		1.0	0.73	ug/L			11/06/18 04:46	1
Tetrachloroethene	0.37	J	1.0	0.36	ug/L			11/06/18 04:46	1
Toluene	ND		1.0	0.51	ug/L			11/06/18 04:46	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/06/18 04:46	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/06/18 04:46	1
Trichloroethene	14		1.0	0.46	ug/L			11/06/18 04:46	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/06/18 04:46	1
Vinyl chloride	1.6		1.0	0.90	ug/L			11/06/18 04:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/06/18 04:46	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: SB-19

Date Collected: 10/25/18 13:50

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		11/06/18 04:46	1
1,2-Dichloroethane-d4 (Surr)	94		77 - 120		11/06/18 04:46	1
4-Bromofluorobenzene (Surr)	95		73 - 120		11/06/18 04:46	1
Dibromofluoromethane (Surr)	94		75 - 123		11/06/18 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		0.19	0.096	ug/L		10/30/18 07:37	11/10/18 08:53	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	30		15 - 110				10/30/18 07:37	11/10/18 08:53	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.73	J	1.7	0.30	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluoropentanoic acid (PFPeA)	0.94	J	1.7	0.42	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorohexanoic acid (PFHxA)	1.2	J	1.7	0.50	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluoroheptanoic acid (PFHpA)	0.60	J	1.7	0.22	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorooctanoic acid (PFOA)	2.9		1.7	0.73	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.27	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.95	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorobutanesulfonic acid (PFBS)	1.4	J	1.7	0.17	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorohexanesulfonic acid (PFHxS)	1.8	B	1.7	0.15	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorooctanesulfonic acid (PFOS)	3.6		1.7	0.47	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.28	ng/L		11/07/18 07:22	11/14/18 02:13	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30	ng/L		11/07/18 07:22	11/14/18 02:13	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7	ng/L		11/07/18 07:22	11/14/18 02:13	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		11/07/18 07:22	11/14/18 02:13	1
6:2 FTS	ND		17	1.7	ng/L		11/07/18 07:22	11/14/18 02:13	1
8:2 FTS	ND		17	1.7	ng/L		11/07/18 07:22	11/14/18 02:13	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	66		25 - 150				11/07/18 07:22	11/14/18 02:13	1
13C5-PFPeA DNU	91		25 - 150				11/07/18 07:22	11/14/18 02:13	1
13C2 PFHxA	97		25 - 150				11/07/18 07:22	11/14/18 02:13	1
13C4 PFHpA	100		25 - 150				11/07/18 07:22	11/14/18 02:13	1
13C4 PFOA	95		25 - 150				11/07/18 07:22	11/14/18 02:13	1
13C5 PFNA	104		25 - 150				11/07/18 07:22	11/14/18 02:13	1
13C2 PFDA	99		25 - 150				11/07/18 07:22	11/14/18 02:13	1
13C2 PFUnA	97		25 - 150				11/07/18 07:22	11/14/18 02:13	1
13C2 PFDoA	94		25 - 150				11/07/18 07:22	11/14/18 02:13	1
13C2 PFTeDA	90		25 - 150				11/07/18 07:22	11/14/18 02:13	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: SB-19

Date Collected: 10/25/18 13:50

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-8

Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	91		25 - 150	11/07/18 07:22	11/14/18 02:13	1
18O2 PFHxS	96		25 - 150	11/07/18 07:22	11/14/18 02:13	1
13C4 PFOS	105		25 - 150	11/07/18 07:22	11/14/18 02:13	1
13C8 FOSA	89		25 - 150	11/07/18 07:22	11/14/18 02:13	1
d3-NMeFOSAA	95		25 - 150	11/07/18 07:22	11/14/18 02:13	1
d5-NEtFOSAA	100		25 - 150	11/07/18 07:22	11/14/18 02:13	1
M2-6:2 FTS	99		25 - 150	11/07/18 07:22	11/14/18 02:13	1
M2-8:2 FTS	88		25 - 150	11/07/18 07:22	11/14/18 02:13	1

Client Sample ID: GPW-6

Date Collected: 10/25/18 17:25

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-9

Matrix: Water

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			11/06/18 05:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/06/18 05:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/06/18 05:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/06/18 05:13	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/06/18 05:13	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/06/18 05:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/06/18 05:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/06/18 05:13	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/06/18 05:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/06/18 05:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/06/18 05:13	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/06/18 05:13	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/06/18 05:13	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/06/18 05:13	1
2-Hexanone	ND		5.0	1.2	ug/L			11/06/18 05:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/06/18 05:13	1
Acetone	16		10	3.0	ug/L			11/06/18 05:13	1
Benzene	ND		1.0	0.41	ug/L			11/06/18 05:13	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/06/18 05:13	1
Bromoform	ND		1.0	0.26	ug/L			11/06/18 05:13	1
Bromomethane	ND		1.0	0.69	ug/L			11/06/18 05:13	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/06/18 05:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/06/18 05:13	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/06/18 05:13	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/06/18 05:13	1
Chloroethane	ND		1.0	0.32	ug/L			11/06/18 05:13	1
Chloroform	ND		1.0	0.34	ug/L			11/06/18 05:13	1
Chloromethane	ND		1.0	0.35	ug/L			11/06/18 05:13	1
cis-1,2-Dichloroethene	21		1.0	0.81	ug/L			11/06/18 05:13	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/06/18 05:13	1
Cyclohexane	0.28	J	1.0	0.18	ug/L			11/06/18 05:13	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/06/18 05:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/06/18 05:13	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/06/18 05:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/06/18 05:13	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-6

Date Collected: 10/25/18 17:25

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	ND		2.5	1.3	ug/L			11/06/18 05:13	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/06/18 05:13	1
Methylcyclohexane	0.22	J	1.0	0.16	ug/L			11/06/18 05:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/06/18 05:13	1
Styrene	ND		1.0	0.73	ug/L			11/06/18 05:13	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/06/18 05:13	1
Toluene	ND		1.0	0.51	ug/L			11/06/18 05:13	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/06/18 05:13	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/06/18 05:13	1
Trichloroethene	3.9		1.0	0.46	ug/L			11/06/18 05:13	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/06/18 05:13	1
Vinyl chloride	6.0		1.0	0.90	ug/L			11/06/18 05:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/06/18 05:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		11/06/18 05:13	1
1,2-Dichloroethane-d4 (Surr)	94		77 - 120		11/06/18 05:13	1
4-Bromofluorobenzene (Surr)	96		73 - 120		11/06/18 05:13	1
Dibromofluoromethane (Surr)	93		75 - 123		11/06/18 05:13	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		0.40	0.20	ug/L		10/30/18 07:37	11/10/18 09:17	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane-d8	54		15 - 110				10/30/18 07:37	11/10/18 09:17	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.88	J	1.8	0.32	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluoropentanoic acid (PFPeA)	0.96	J	1.8	0.45	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorohexanoic acid (PFHxA)	0.58	J	1.8	0.53	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluoroheptanoic acid (PFHpA)	0.34	J	1.8	0.23	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorooctanoic acid (PFOA)	0.79	J	1.8	0.77	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.25	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.8	0.18	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorohexanesulfonic acid (PFHxS)	0.45	J B	1.8	0.15	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorooctanesulfonic acid (PFOS)	1.0	J	1.8	0.49	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		11/07/18 07:22	11/09/18 08:55	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.32	ng/L		11/07/18 07:22	11/09/18 08:55	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8	ng/L		11/07/18 07:22	11/09/18 08:55	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-6

Date Collected: 10/25/18 17:25

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NETFOSAA)	ND		18	1.7	ng/L		11/07/18 07:22	11/09/18 08:55	1
6:2 FTS	ND		18	1.8	ng/L		11/07/18 07:22	11/09/18 08:55	1
8:2 FTS	ND		18	1.8	ng/L		11/07/18 07:22	11/09/18 08:55	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	44		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C5-PFPeA DNU	71		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C2 PFHxA	82		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C4 PFHpA	92		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C4 PFOA	98		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C5 PFNA	92		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C2 PFDA	92		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C2 PFUnA	98		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C2 PFDoA	89		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C2 PFTeDA	82		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C3 PFBS	79		25 - 150				11/07/18 07:22	11/09/18 08:55	1
18O2 PFHxS	94		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C4 PFOS	97		25 - 150				11/07/18 07:22	11/09/18 08:55	1
13C8 FOSA	102		25 - 150				11/07/18 07:22	11/09/18 08:55	1
d3-NMeFOSAA	92		25 - 150				11/07/18 07:22	11/09/18 08:55	1
d5-NEtFOSAA	100		25 - 150				11/07/18 07:22	11/09/18 08:55	1
M2-6:2 FTS	137		25 - 150				11/07/18 07:22	11/09/18 08:55	1
M2-8:2 FTS	105		25 - 150				11/07/18 07:22	11/09/18 08:55	1

Client Sample ID: GPW-5

Date Collected: 10/25/18 18:00

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			11/06/18 05:41	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			11/06/18 05:41	100
1,1,2-Trichloroethane	ND		100	23	ug/L			11/06/18 05:41	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			11/06/18 05:41	100
1,1-Dichloroethane	ND		100	38	ug/L			11/06/18 05:41	100
1,1-Dichloroethene	ND		100	29	ug/L			11/06/18 05:41	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			11/06/18 05:41	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			11/06/18 05:41	100
1,2-Dichlorobenzene	ND		100	79	ug/L			11/06/18 05:41	100
1,2-Dichloroethane	ND		100	21	ug/L			11/06/18 05:41	100
1,2-Dichloropropane	ND		100	72	ug/L			11/06/18 05:41	100
1,3-Dichlorobenzene	ND		100	78	ug/L			11/06/18 05:41	100
1,4-Dichlorobenzene	ND		100	84	ug/L			11/06/18 05:41	100
2-Butanone (MEK)	ND		1000	130	ug/L			11/06/18 05:41	100
2-Hexanone	ND		500	120	ug/L			11/06/18 05:41	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			11/06/18 05:41	100
Acetone	ND		1000	300	ug/L			11/06/18 05:41	100
Benzene	ND		100	41	ug/L			11/06/18 05:41	100
Bromodichloromethane	ND		100	39	ug/L			11/06/18 05:41	100
Bromoform	ND		100	26	ug/L			11/06/18 05:41	100

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-5

Lab Sample ID: 480-144297-10

Date Collected: 10/25/18 18:00

Matrix: Water

Date Received: 10/26/18 18:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		100	69	ug/L			11/06/18 05:41	100
Carbon disulfide	ND		100	19	ug/L			11/06/18 05:41	100
Carbon tetrachloride	ND		100	27	ug/L			11/06/18 05:41	100
Chlorobenzene	ND		100	75	ug/L			11/06/18 05:41	100
Dibromochloromethane	ND		100	32	ug/L			11/06/18 05:41	100
Chloroethane	ND		100	32	ug/L			11/06/18 05:41	100
Chloroform	ND		100	34	ug/L			11/06/18 05:41	100
Chloromethane	ND		100	35	ug/L			11/06/18 05:41	100
cis-1,2-Dichloroethene	6800		100	81	ug/L			11/06/18 05:41	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			11/06/18 05:41	100
Cyclohexane	ND		100	18	ug/L			11/06/18 05:41	100
Dichlorodifluoromethane	ND		100	68	ug/L			11/06/18 05:41	100
Ethylbenzene	ND		100	74	ug/L			11/06/18 05:41	100
1,2-Dibromoethane	ND		100	73	ug/L			11/06/18 05:41	100
Isopropylbenzene	ND		100	79	ug/L			11/06/18 05:41	100
Methyl acetate	ND		250	130	ug/L			11/06/18 05:41	100
Methyl tert-butyl ether	ND		100	16	ug/L			11/06/18 05:41	100
Methylcyclohexane	ND		100	16	ug/L			11/06/18 05:41	100
Methylene Chloride	ND		100	44	ug/L			11/06/18 05:41	100
Styrene	ND		100	73	ug/L			11/06/18 05:41	100
Tetrachloroethene	ND		100	36	ug/L			11/06/18 05:41	100
Toluene	ND		100	51	ug/L			11/06/18 05:41	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			11/06/18 05:41	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			11/06/18 05:41	100
Trichloroethene	8400		100	46	ug/L			11/06/18 05:41	100
Trichlorofluoromethane	ND		100	88	ug/L			11/06/18 05:41	100
Vinyl chloride	430		100	90	ug/L			11/06/18 05:41	100
Xylenes, Total	ND		200	66	ug/L			11/06/18 05:41	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	95		80 - 120		11/06/18 05:41	100
<i>1,2-Dichloroethane-d4 (Surr)</i>	87		77 - 120		11/06/18 05:41	100
<i>4-Bromofluorobenzene (Surr)</i>	95		73 - 120		11/06/18 05:41	100
<i>Dibromofluoromethane (Surr)</i>	88		75 - 123		11/06/18 05:41	100

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	0.79		0.19	0.095	ug/L		10/30/18 07:37	11/10/18 09:41	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	27		15 - 110				10/30/18 07:37	11/10/18 09:41	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	0.31	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluoropentanoic acid (PFPeA)	1.5	J	1.8	0.44	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorohexanoic acid (PFHxA)	1.2	J	1.8	0.52	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluoroheptanoic acid (PFHpA)	0.90	J	1.8	0.22	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorooctanoic acid (PFOA)	1.6	J	1.8	0.76	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		11/07/18 07:22	11/14/18 02:21	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-5

Date Collected: 10/25/18 18:00

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorobutanesulfonic acid (PFBS)	1.9		1.8	0.18	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorohexanesulfonic acid (PFHxS)	0.57	J B	1.8	0.15	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorooctanesulfonic acid (PFOS)	3.4		1.8	0.48	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		11/07/18 07:22	11/14/18 02:21	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.31	ng/L		11/07/18 07:22	11/14/18 02:21	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8	ng/L		11/07/18 07:22	11/14/18 02:21	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		11/07/18 07:22	11/14/18 02:21	1
6:2 FTS	ND		18	1.8	ng/L		11/07/18 07:22	11/14/18 02:21	1
8:2 FTS	ND		18	1.8	ng/L		11/07/18 07:22	11/14/18 02:21	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	54		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C5-PFPeA DNU	72		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C2 PFHxA	74		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C4 PFHpA	82		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C4 PFOA	88		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C5 PFNA	84		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C2 PFDA	79		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C2 PFUnA	77		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C2 PFDoA	58		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C2 PFTeDA	48		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C3 PFBS	76		25 - 150	11/07/18 07:22	11/14/18 02:21	1
18O2 PFHxS	86		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C4 PFOS	85		25 - 150	11/07/18 07:22	11/14/18 02:21	1
13C8 FOSA	73		25 - 150	11/07/18 07:22	11/14/18 02:21	1
d3-NMeFOSAA	80		25 - 150	11/07/18 07:22	11/14/18 02:21	1
d5-NEtFOSAA	75		25 - 150	11/07/18 07:22	11/14/18 02:21	1
M2-6:2 FTS	112		25 - 150	11/07/18 07:22	11/14/18 02:21	1
M2-8:2 FTS	73		25 - 150	11/07/18 07:22	11/14/18 02:21	1

Client Sample ID: DUP

Date Collected: 10/25/18 00:00

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	160	ug/L			11/06/18 06:08	200
1,1,2,2-Tetrachloroethane	ND		200	42	ug/L			11/06/18 06:08	200
1,1,2-Trichloroethane	ND		200	46	ug/L			11/06/18 06:08	200
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		200	62	ug/L			11/06/18 06:08	200
1,1-Dichloroethane	ND		200	76	ug/L			11/06/18 06:08	200

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: DUP

Lab Sample ID: 480-144297-11

Date Collected: 10/25/18 00:00

Matrix: Water

Date Received: 10/26/18 18:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		200	58	ug/L			11/06/18 06:08	200
1,2,4-Trichlorobenzene	ND		200	82	ug/L			11/06/18 06:08	200
1,2-Dibromo-3-Chloropropane	ND		200	78	ug/L			11/06/18 06:08	200
1,2-Dichlorobenzene	ND		200	160	ug/L			11/06/18 06:08	200
1,2-Dichloroethane	ND		200	42	ug/L			11/06/18 06:08	200
1,2-Dichloropropane	ND		200	140	ug/L			11/06/18 06:08	200
1,3-Dichlorobenzene	ND		200	160	ug/L			11/06/18 06:08	200
1,4-Dichlorobenzene	ND		200	170	ug/L			11/06/18 06:08	200
2-Butanone (MEK)	ND		2000	260	ug/L			11/06/18 06:08	200
2-Hexanone	ND		1000	250	ug/L			11/06/18 06:08	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			11/06/18 06:08	200
Acetone	ND		2000	600	ug/L			11/06/18 06:08	200
Benzene	ND		200	82	ug/L			11/06/18 06:08	200
Bromodichloromethane	ND		200	78	ug/L			11/06/18 06:08	200
Bromoform	ND		200	52	ug/L			11/06/18 06:08	200
Bromomethane	ND		200	140	ug/L			11/06/18 06:08	200
Carbon disulfide	ND		200	38	ug/L			11/06/18 06:08	200
Carbon tetrachloride	ND		200	54	ug/L			11/06/18 06:08	200
Chlorobenzene	ND		200	150	ug/L			11/06/18 06:08	200
Dibromochloromethane	ND		200	64	ug/L			11/06/18 06:08	200
Chloroethane	ND		200	64	ug/L			11/06/18 06:08	200
Chloroform	ND		200	68	ug/L			11/06/18 06:08	200
Chloromethane	ND		200	70	ug/L			11/06/18 06:08	200
cis-1,2-Dichloroethene	12000		200	160	ug/L			11/06/18 06:08	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			11/06/18 06:08	200
Cyclohexane	ND		200	36	ug/L			11/06/18 06:08	200
Dichlorodifluoromethane	ND		200	140	ug/L			11/06/18 06:08	200
Ethylbenzene	ND		200	150	ug/L			11/06/18 06:08	200
1,2-Dibromoethane	ND		200	150	ug/L			11/06/18 06:08	200
Isopropylbenzene	ND		200	160	ug/L			11/06/18 06:08	200
Methyl acetate	ND		500	260	ug/L			11/06/18 06:08	200
Methyl tert-butyl ether	ND		200	32	ug/L			11/06/18 06:08	200
Methylcyclohexane	ND		200	32	ug/L			11/06/18 06:08	200
Methylene Chloride	ND		200	88	ug/L			11/06/18 06:08	200
Styrene	ND		200	150	ug/L			11/06/18 06:08	200
Tetrachloroethene	ND		200	72	ug/L			11/06/18 06:08	200
Toluene	ND		200	100	ug/L			11/06/18 06:08	200
trans-1,2-Dichloroethene	ND		200	180	ug/L			11/06/18 06:08	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			11/06/18 06:08	200
Trichloroethene	ND		200	92	ug/L			11/06/18 06:08	200
Trichlorofluoromethane	ND		200	180	ug/L			11/06/18 06:08	200
Vinyl chloride	7800		200	180	ug/L			11/06/18 06:08	200
Xylenes, Total	ND		400	130	ug/L			11/06/18 06:08	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/06/18 06:08	200
1,2-Dichloroethane-d4 (Surr)	88		77 - 120		11/06/18 06:08	200
4-Bromofluorobenzene (Surr)	96		73 - 120		11/06/18 06:08	200
Dibromofluoromethane (Surr)	92		75 - 123		11/06/18 06:08	200

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: DUP

Lab Sample ID: 480-144297-11

Date Collected: 10/25/18 00:00

Matrix: Water

Date Received: 10/26/18 18:15

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	0.49		0.19	0.095	ug/L		10/30/18 07:37	11/10/18 10:05	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	23		15 - 110				10/30/18 07:37	11/10/18 10:05	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	5.6		1.8	0.31	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluoropentanoic acid (PFPeA)	2.6		1.8	0.43	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorohexanoic acid (PFHxA)	2.0		1.8	0.51	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluoroheptanoic acid (PFHpA)	1.1 J		1.8	0.22	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorooctanoic acid (PFOA)	3.2		1.8	0.75	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorononanoic acid (PFNA)	1.3 J		1.8	0.24	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorodecanoic acid (PFDA)	2.0		1.8	0.27	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluoroundecanoic acid (PFUnA)	1.2 J		1.8	0.97	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorododecanoic acid (PFDoA)	0.50 J		1.8	0.48	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.1	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorotetradecanoic acid (PFTeA)	0.43 J		1.8	0.26	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorobutanesulfonic acid (PFBS)	1.0 J		1.8	0.18	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorohexanesulfonic acid (PFHxS)	0.76 J B		1.8	0.15	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorooctanesulfonic acid (PFOS)	6.0		1.8	0.48	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		11/07/18 07:22	11/14/18 02:28	1
Perfluorooctanesulfonamide (FOSA)	0.35 J		1.8	0.31	ng/L		11/07/18 07:22	11/14/18 02:28	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7	ng/L		11/07/18 07:22	11/14/18 02:28	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		11/07/18 07:22	11/14/18 02:28	1
6:2 FTS	ND		18	1.8	ng/L		11/07/18 07:22	11/14/18 02:28	1
8:2 FTS	ND		18	1.8	ng/L		11/07/18 07:22	11/14/18 02:28	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	52		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C5-PFPeA DNU	74		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C2 PFHxA	79		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C4 PFHpA	90		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C4 PFOA	93		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C5 PFNA	99		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C2 PFDA	103		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C2 PFUnA	103		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C2 PFDoA	84		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C2 PFTeA	69		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C3 PFBS	86		25 - 150				11/07/18 07:22	11/14/18 02:28	1
18O2 PFHxS	91		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C4 PFOS	94		25 - 150				11/07/18 07:22	11/14/18 02:28	1
13C8 FOSA	91		25 - 150				11/07/18 07:22	11/14/18 02:28	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: DUP

Date Collected: 10/25/18 00:00

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-11

Matrix: Water

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
d3-NMeFOSAA	113		25 - 150	11/07/18 07:22	11/14/18 02:28	1
d5-NEtFOSAA	116		25 - 150	11/07/18 07:22	11/14/18 02:28	1
M2-6:2 FTS	192	*	25 - 150	11/07/18 07:22	11/14/18 02:28	1
M2-8:2 FTS	174	*	25 - 150	11/07/18 07:22	11/14/18 02:28	1

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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)			
		TOL (80-120)	DCA (77-120)	BFB (73-120)	DBFM (75-123)
480-144297-1	GPW-13	99	107	103	103
480-144297-2	EW-16	97	90	97	91
480-144297-2 - DL	EW-16	97	92	97	92
480-144297-3	EW-14	93	89	92	91
480-144297-3 - DL	EW-14	97	91	95	93
480-144297-4	TB	95	92	94	95
480-144297-5	GPW-20	101	112	107	109
480-144297-6	GMW-2	99	112	101	106
480-144297-6 MS	GMW-2	97	107	103	99
480-144297-6 MSD	GMW-2	96	104	102	100
480-144297-7	EW-10	97	89	97	90
480-144297-8	SB-19	95	94	95	94
480-144297-9	GPW-6	96	94	96	93
480-144297-10	GPW-5	95	87	95	88
480-144297-11	DUP	97	88	96	92
LCS 480-443500/5	Lab Control Sample	102	111	103	110
LCS 480-443770/7	Lab Control Sample	96	91	99	89
LCS 480-443801/5	Lab Control Sample	96	90	99	91
MB 480-443500/7	Method Blank	96	106	100	107
MB 480-443770/9	Method Blank	96	95	94	91
MB 480-443801/26	Method Blank	95	90	95	90

Surrogate Legend

TOL = Toluene-d8 (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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)
480-144297-5	GPW-20	30
480-144297-6	GMW-2	28
480-144297-6 MS	GMW-2	32
480-144297-6 MSD	GMW-2	32
480-144297-7	EW-10	25
480-144297-8	SB-19	30
480-144297-9	GPW-6	54
480-144297-10	GPW-5	27
480-144297-11	DUP	23
LCS 480-442433/2-A	Lab Control Sample	36
MB 480-442433/1-A	Method Blank	32

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	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
480-144297-5	GPW-20	33	50	60	65	69	66	60	56
480-144297-6	GMW-2	43	51	54	57	56	55	56	43
480-144297-6 MS	GMW-2	51	63	69	71	76	68	62	64
480-144297-6 MSD	GMW-2	49	61	67	73	70	69	61	56
480-144297-7	EW-10	56	74	85	94	101	109	100	117
480-144297-7 - DL	EW-10								
480-144297-8	SB-19	66	91	97	100	95	104	99	97
480-144297-9	GPW-6	44	71	82	92	98	92	92	98
480-144297-10	GPW-5	54	72	74	82	88	84	79	77
480-144297-11	DUP	52	74	79	90	93	99	103	103
LCS 320-257492/2-A	Lab Control Sample	94	93	92	95	95	93	95	95
MB 320-257492/1-A	Method Blank	95	95	98	98	97	97	105	96

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	3C3-PFB: (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOS: (25-150)	-NEtFOS/ (25-150)
480-144297-5	GPW-20	50	49	57	68	62	59	53	55
480-144297-6	GMW-2	37	32	49	56	55	49	40	38
480-144297-6 MS	GMW-2	49	55	66	75	68	66	62	57
480-144297-6 MSD	GMW-2	50	49	65	70	68	63	53	49
480-144297-7	EW-10	116	100	92	102	114	106	126	131
480-144297-7 - DL	EW-10								
480-144297-8	SB-19	94	90	91	96	105	89	95	100
480-144297-9	GPW-6	89	82	79	94	97	102	92	100
480-144297-10	GPW-5	58	48	76	86	85	73	80	75
480-144297-11	DUP	84	69	86	91	94	91	113	116
LCS 320-257492/2-A	Lab Control Sample	87	96	90	96	94	88	95	98
MB 320-257492/1-A	Method Blank	93	94	92	99	99	97	96	100

TestAmerica Buffalo

Isotope Dilution Summary

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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)	
		M262FTS (25-150)	M282FTS (25-150)
480-144297-5	GPW-20	68	54
480-144297-6	GMW-2	59	52
480-144297-6 MS	GMW-2	75	61
480-144297-6 MSD	GMW-2	75	58
480-144297-7	EW-10		
480-144297-7 - DL	EW-10	101	89
480-144297-8	SB-19	99	88
480-144297-9	GPW-6	137	105
480-144297-10	GPW-5	112	73
480-144297-11	DUP	192 *	174 *
LCS 320-257492/2-A	Lab Control Sample	92	85
MB 320-257492/1-A	Method Blank	91	101

Surrogate Legend

PFBA = 13C4 PFBA
 PFPeA = 13C5-PFPeA DNU
 PFHxA = 13C2 PFHxA
 PFHpA = 13C4 PFHpA
 PFOA = 13C4 PFOA
 PFNA = 13C5 PFNA
 PFDA = 13C2 PFDA
 PFUnA = 13C2 PFUnA
 PFDaA = 13C2 PFDaA
 PFTDA = 13C2 PFTeDA
 13C3-PFBS = 13C3 PFBS
 PFHxS = 18O2 PFHxS
 PFOS = 13C4 PFOS
 PFOSA = 13C8 FOSA
 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: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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

Lab Sample ID: MB 480-443500/7

Matrix: Water

Analysis Batch: 443500

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/04/18 12:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/04/18 12:17	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/04/18 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/04/18 12:17	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/04/18 12:17	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/04/18 12:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/04/18 12:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/04/18 12:17	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/04/18 12:17	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/04/18 12:17	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/04/18 12:17	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/04/18 12:17	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/04/18 12:17	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/04/18 12:17	1
2-Hexanone	ND		5.0	1.2	ug/L			11/04/18 12:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/04/18 12:17	1
Acetone	ND		10	3.0	ug/L			11/04/18 12:17	1
Benzene	ND		1.0	0.41	ug/L			11/04/18 12:17	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/04/18 12:17	1
Bromoform	ND		1.0	0.26	ug/L			11/04/18 12:17	1
Bromomethane	ND		1.0	0.69	ug/L			11/04/18 12:17	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/04/18 12:17	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/04/18 12:17	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/04/18 12:17	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/04/18 12:17	1
Chloroethane	ND		1.0	0.32	ug/L			11/04/18 12:17	1
Chloroform	ND		1.0	0.34	ug/L			11/04/18 12:17	1
Chloromethane	ND		1.0	0.35	ug/L			11/04/18 12:17	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/04/18 12:17	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/04/18 12:17	1
Cyclohexane	ND		1.0	0.18	ug/L			11/04/18 12:17	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/04/18 12:17	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/04/18 12:17	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/04/18 12:17	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/04/18 12:17	1
Methyl acetate	ND		2.5	1.3	ug/L			11/04/18 12:17	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/04/18 12:17	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/04/18 12:17	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/04/18 12:17	1
Styrene	ND		1.0	0.73	ug/L			11/04/18 12:17	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/04/18 12:17	1
Toluene	ND		1.0	0.51	ug/L			11/04/18 12:17	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/04/18 12:17	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/04/18 12:17	1
Trichloroethene	ND		1.0	0.46	ug/L			11/04/18 12:17	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/04/18 12:17	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/04/18 12:17	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/04/18 12:17	1

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		11/04/18 12:17	1
1,2-Dichloroethane-d4 (Surr)	106		77 - 120		11/04/18 12:17	1
4-Bromofluorobenzene (Surr)	100		73 - 120		11/04/18 12:17	1
Dibromofluoromethane (Surr)	107		75 - 123		11/04/18 12:17	1

Lab Sample ID: LCS 480-443500/5

Matrix: Water

Analysis Batch: 443500

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	29.0		ug/L		116	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.5		ug/L		94	76 - 120
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	34.0		ug/L		136	61 - 148
1,1-Dichloroethane	25.0	25.8		ug/L		103	77 - 120
1,1-Dichloroethene	25.0	29.8		ug/L		119	66 - 127
1,2,4-Trichlorobenzene	25.0	24.3		ug/L		97	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	56 - 134
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	27.5		ug/L		110	75 - 120
1,2-Dichloropropane	25.0	24.1		ug/L		96	76 - 120
1,3-Dichlorobenzene	25.0	25.4		ug/L		102	77 - 120
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 120
2-Butanone (MEK)	125	118		ug/L		95	57 - 140
2-Hexanone	125	122		ug/L		97	65 - 127
4-Methyl-2-pentanone (MIBK)	125	119		ug/L		95	71 - 125
Acetone	125	129		ug/L		103	56 - 142
Benzene	25.0	24.8		ug/L		99	71 - 124
Bromodichloromethane	25.0	27.2		ug/L		109	80 - 122
Bromoform	25.0	27.2		ug/L		109	61 - 132
Bromomethane	25.0	23.5		ug/L		94	55 - 144
Carbon disulfide	25.0	25.4		ug/L		102	59 - 134
Carbon tetrachloride	25.0	30.4		ug/L		122	72 - 134
Chlorobenzene	25.0	24.7		ug/L		99	80 - 120
Dibromochloromethane	25.0	27.5		ug/L		110	75 - 125
Chloroethane	25.0	24.9		ug/L		100	69 - 136
Chloroform	25.0	26.6		ug/L		106	73 - 127
Chloromethane	25.0	22.5		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	24.6		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	27.7		ug/L		111	74 - 124
Cyclohexane	25.0	27.5		ug/L		110	59 - 135
Dichlorodifluoromethane	25.0	24.0		ug/L		96	59 - 135
Ethylbenzene	25.0	25.2		ug/L		101	77 - 123
1,2-Dibromoethane	25.0	26.3		ug/L		105	77 - 120
Isopropylbenzene	25.0	27.2		ug/L		109	77 - 122
Methyl acetate	50.0	43.2		ug/L		86	74 - 133
Methyl tert-butyl ether	25.0	25.4		ug/L		101	77 - 120
Methylcyclohexane	25.0	27.8		ug/L		111	68 - 134
Methylene Chloride	25.0	24.9		ug/L		100	75 - 124
Styrene	25.0	25.8		ug/L		103	80 - 120
Tetrachloroethene	25.0	26.9		ug/L		108	74 - 122
Toluene	25.0	24.1		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	26.9		ug/L		107	73 - 127

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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

Lab Sample ID: LCS 480-443500/5

Matrix: Water

Analysis Batch: 443500

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	25.0	26.9		ug/L		107	80 - 120
Trichloroethene	25.0	25.2		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	29.4		ug/L		118	62 - 150
Vinyl chloride	25.0	24.4		ug/L		98	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	111		77 - 120
4-Bromofluorobenzene (Surr)	103		73 - 120
Dibromofluoromethane (Surr)	110		75 - 123

Lab Sample ID: 480-144297-6 MS

Matrix: Water

Analysis Batch: 443500

Client Sample ID: GMW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND	F1	25.0	35.0	F1	ug/L		140	73 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	26.5		ug/L		106	76 - 120
1,1,2-Trichloroethane	ND		25.0	27.9		ug/L		112	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	25.0	38.6	F1	ug/L		154	61 - 148
1,1-Dichloroethane	ND	F1	25.0	30.5	F1	ug/L		122	77 - 120
1,1-Dichloroethene	ND	F1	25.0	34.4	F1	ug/L		138	66 - 127
1,2,4-Trichlorobenzene	ND		25.0	28.6		ug/L		115	79 - 122
1,2-Dibromo-3-Chloropropane	ND		25.0	28.2		ug/L		113	56 - 134
1,2-Dichlorobenzene	ND		25.0	27.8		ug/L		111	80 - 124
1,2-Dichloroethane	ND	F1	25.0	30.6	F1	ug/L		122	75 - 120
1,2-Dichloropropane	ND		25.0	27.9		ug/L		111	76 - 120
1,3-Dichlorobenzene	ND		25.0	28.2		ug/L		113	77 - 120
1,4-Dichlorobenzene	ND		25.0	27.6		ug/L		110	78 - 124
2-Butanone (MEK)	ND		125	125		ug/L		100	57 - 140
2-Hexanone	ND		125	133		ug/L		106	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		125	136		ug/L		109	71 - 125
Acetone	ND		125	125		ug/L		100	56 - 142
Benzene	ND		25.0	28.4		ug/L		114	71 - 124
Bromodichloromethane	ND	F1	25.0	30.3		ug/L		121	80 - 122
Bromoform	ND		25.0	29.2		ug/L		117	61 - 132
Bromomethane	ND		25.0	26.8		ug/L		107	55 - 144
Carbon disulfide	ND		25.0	28.0		ug/L		112	59 - 134
Carbon tetrachloride	ND	F1	25.0	35.8	F1	ug/L		143	72 - 134
Chlorobenzene	ND		25.0	29.3		ug/L		117	80 - 120
Dibromochloromethane	ND		25.0	29.8		ug/L		119	75 - 125
Chloroethane	ND		25.0	30.9		ug/L		124	69 - 136
Chloroform	ND		25.0	30.1		ug/L		120	73 - 127
Chloromethane	ND		25.0	26.6		ug/L		106	68 - 124
cis-1,2-Dichloroethene	ND		25.0	30.0		ug/L		120	74 - 124
cis-1,3-Dichloropropene	ND		25.0	29.3		ug/L		117	74 - 124
Cyclohexane	ND		25.0	31.1		ug/L		124	59 - 135

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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

Lab Sample ID: 480-144297-6 MS

Matrix: Water

Analysis Batch: 443500

Client Sample ID: GMW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	ND		25.0	25.5		ug/L		102	59 - 135
Ethylbenzene	ND		25.0	29.4		ug/L		118	77 - 123
1,2-Dibromoethane	ND		25.0	28.5		ug/L		114	77 - 120
Isopropylbenzene	ND	F1	25.0	30.5		ug/L		122	77 - 122
Methyl acetate	ND		50.0	47.7		ug/L		95	74 - 133
Methyl tert-butyl ether	ND		25.0	28.6		ug/L		114	77 - 120
Methylcyclohexane	ND		25.0	32.1		ug/L		128	68 - 134
Methylene Chloride	ND		25.0	27.5		ug/L		110	75 - 124
Styrene	ND		25.0	29.1		ug/L		116	80 - 120
Tetrachloroethene	ND	F1	25.0	32.2	F1	ug/L		129	74 - 122
Toluene	ND		25.0	28.7		ug/L		115	80 - 122
trans-1,2-Dichloroethene	ND		25.0	31.2		ug/L		125	73 - 127
trans-1,3-Dichloropropene	ND		25.0	28.5		ug/L		114	80 - 120
Trichloroethene	ND		25.0	30.0		ug/L		120	74 - 123
Trichlorofluoromethane	ND		25.0	34.4		ug/L		137	62 - 150
Vinyl chloride	ND		25.0	29.3		ug/L		117	65 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	97		80 - 120
1,2-Dichloroethane-d4 (Surr)	107		77 - 120
4-Bromofluorobenzene (Surr)	103		73 - 120
Dibromofluoromethane (Surr)	99		75 - 123

Lab Sample ID: 480-144297-6 MSD

Matrix: Water

Analysis Batch: 443500

Client Sample ID: GMW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND	F1	25.0	34.2	F1	ug/L		137	73 - 126	2	15
1,1,2,2-Tetrachloroethane	ND		25.0	26.6		ug/L		106	76 - 120	0	15
1,1,2-Trichloroethane	ND		25.0	28.3		ug/L		113	76 - 122	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	25.0	34.3		ug/L		137	61 - 148	12	20
1,1-Dichloroethane	ND	F1	25.0	30.5	F1	ug/L		122	77 - 120	0	20
1,1-Dichloroethene	ND	F1	25.0	34.0	F1	ug/L		136	66 - 127	1	16
1,2,4-Trichlorobenzene	ND		25.0	27.9		ug/L		111	79 - 122	3	20
1,2-Dibromo-3-Chloropropane	ND		25.0	28.3		ug/L		113	56 - 134	0	15
1,2-Dichlorobenzene	ND		25.0	28.0		ug/L		112	80 - 124	1	20
1,2-Dichloroethane	ND	F1	25.0	30.1	F1	ug/L		121	75 - 120	1	20
1,2-Dichloropropane	ND		25.0	26.9		ug/L		108	76 - 120	3	20
1,3-Dichlorobenzene	ND		25.0	28.2		ug/L		113	77 - 120	0	20
1,4-Dichlorobenzene	ND		25.0	28.8		ug/L		115	78 - 124	4	20
2-Butanone (MEK)	ND		125	124		ug/L		99	57 - 140	1	20
2-Hexanone	ND		125	131		ug/L		104	65 - 127	2	15
4-Methyl-2-pentanone (MIBK)	ND		125	132		ug/L		105	71 - 125	3	35
Acetone	ND		125	120		ug/L		96	56 - 142	4	15
Benzene	ND		25.0	28.6		ug/L		115	71 - 124	1	13
Bromodichloromethane	ND	F1	25.0	30.9	F1	ug/L		124	80 - 122	2	15

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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

Lab Sample ID: 480-144297-6 MSD

Matrix: Water

Analysis Batch: 443500

Client Sample ID: GMW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		25.0	29.5		ug/L		118	61 - 132	1	15
Bromomethane	ND		25.0	29.3		ug/L		117	55 - 144	9	15
Carbon disulfide	ND		25.0	28.2		ug/L		113	59 - 134	1	15
Carbon tetrachloride	ND	F1	25.0	36.4	F1	ug/L		146	72 - 134	2	15
Chlorobenzene	ND		25.0	28.7		ug/L		115	80 - 120	2	25
Dibromochloromethane	ND		25.0	28.7		ug/L		115	75 - 125	4	15
Chloroethane	ND		25.0	31.9		ug/L		127	69 - 136	3	15
Chloroform	ND		25.0	29.9		ug/L		120	73 - 127	1	20
Chloromethane	ND		25.0	26.6		ug/L		106	68 - 124	0	15
cis-1,2-Dichloroethene	ND		25.0	28.2		ug/L		113	74 - 124	6	15
cis-1,3-Dichloropropene	ND		25.0	29.2		ug/L		117	74 - 124	0	15
Cyclohexane	ND		25.0	29.4		ug/L		118	59 - 135	6	20
Dichlorodifluoromethane	ND		25.0	24.0		ug/L		96	59 - 135	6	20
Ethylbenzene	ND		25.0	29.6		ug/L		118	77 - 123	1	15
1,2-Dibromoethane	ND		25.0	28.9		ug/L		116	77 - 120	1	15
Isopropylbenzene	ND	F1	25.0	31.3	F1	ug/L		125	77 - 122	3	20
Methyl acetate	ND		50.0	45.3		ug/L		91	74 - 133	5	20
Methyl tert-butyl ether	ND		25.0	27.5		ug/L		110	77 - 120	4	37
Methylcyclohexane	ND		25.0	32.0		ug/L		128	68 - 134	0	20
Methylene Chloride	ND		25.0	27.7		ug/L		111	75 - 124	1	15
Styrene	ND		25.0	29.1		ug/L		117	80 - 120	0	20
Tetrachloroethene	ND	F1	25.0	31.8	F1	ug/L		127	74 - 122	1	20
Toluene	ND		25.0	28.3		ug/L		113	80 - 122	1	15
trans-1,2-Dichloroethene	ND		25.0	30.8		ug/L		123	73 - 127	1	20
trans-1,3-Dichloropropene	ND		25.0	29.3		ug/L		117	80 - 120	3	15
Trichloroethene	ND		25.0	29.7		ug/L		119	74 - 123	1	16
Trichlorofluoromethane	ND		25.0	34.9		ug/L		140	62 - 150	2	20
Vinyl chloride	ND		25.0	29.4		ug/L		118	65 - 133	0	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	96		80 - 120
1,2-Dichloroethane-d4 (Surr)	104		77 - 120
4-Bromofluorobenzene (Surr)	102		73 - 120
Dibromofluoromethane (Surr)	100		75 - 123

Lab Sample ID: MB 480-443770/9

Matrix: Water

Analysis Batch: 443770

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/05/18 23:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/05/18 23:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/05/18 23:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/05/18 23:56	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/05/18 23:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/05/18 23:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/05/18 23:56	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/05/18 23:56	1

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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

Lab Sample ID: MB 480-443770/9

Matrix: Water

Analysis Batch: 443770

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/05/18 23:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/05/18 23:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/05/18 23:56	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/05/18 23:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/05/18 23:56	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/05/18 23:56	1
2-Hexanone	ND		5.0	1.2	ug/L			11/05/18 23:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/05/18 23:56	1
Acetone	ND		10	3.0	ug/L			11/05/18 23:56	1
Benzene	ND		1.0	0.41	ug/L			11/05/18 23:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/05/18 23:56	1
Bromoform	ND		1.0	0.26	ug/L			11/05/18 23:56	1
Bromomethane	ND		1.0	0.69	ug/L			11/05/18 23:56	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/05/18 23:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/05/18 23:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/05/18 23:56	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/05/18 23:56	1
Chloroethane	ND		1.0	0.32	ug/L			11/05/18 23:56	1
Chloroform	ND		1.0	0.34	ug/L			11/05/18 23:56	1
Chloromethane	ND		1.0	0.35	ug/L			11/05/18 23:56	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/05/18 23:56	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/05/18 23:56	1
Cyclohexane	ND		1.0	0.18	ug/L			11/05/18 23:56	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/05/18 23:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/05/18 23:56	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/05/18 23:56	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/05/18 23:56	1
Methyl acetate	ND		2.5	1.3	ug/L			11/05/18 23:56	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/05/18 23:56	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/05/18 23:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/05/18 23:56	1
Styrene	ND		1.0	0.73	ug/L			11/05/18 23:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/05/18 23:56	1
Toluene	ND		1.0	0.51	ug/L			11/05/18 23:56	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/05/18 23:56	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/05/18 23:56	1
Trichloroethene	ND		1.0	0.46	ug/L			11/05/18 23:56	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/05/18 23:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/05/18 23:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/05/18 23:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		11/05/18 23:56	1
1,2-Dichloroethane-d4 (Surr)	95		77 - 120		11/05/18 23:56	1
4-Bromofluorobenzene (Surr)	94		73 - 120		11/05/18 23:56	1
Dibromofluoromethane (Surr)	91		75 - 123		11/05/18 23:56	1

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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

Lab Sample ID: LCS 480-443770/7

Matrix: Water

Analysis Batch: 443770

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	24.3		ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.3		ug/L		93	76 - 120
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.5		ug/L		106	61 - 148
1,1-Dichloroethane	25.0	26.4		ug/L		106	77 - 120
1,1-Dichloroethene	25.0	24.3		ug/L		97	66 - 127
1,2,4-Trichlorobenzene	25.0	24.2		ug/L		97	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.1		ug/L		88	56 - 134
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	22.1		ug/L		88	75 - 120
1,2-Dichloropropane	25.0	26.4		ug/L		106	76 - 120
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	80 - 120
2-Butanone (MEK)	125	132		ug/L		105	57 - 140
2-Hexanone	125	137		ug/L		110	65 - 127
4-Methyl-2-pentanone (MIBK)	125	139		ug/L		111	71 - 125
Acetone	125	128		ug/L		103	56 - 142
Benzene	25.0	26.2		ug/L		105	71 - 124
Bromodichloromethane	25.0	23.7		ug/L		95	80 - 122
Bromoform	25.0	24.3		ug/L		97	61 - 132
Bromomethane	25.0	21.9		ug/L		88	55 - 144
Carbon disulfide	25.0	27.2		ug/L		109	59 - 134
Carbon tetrachloride	25.0	23.7		ug/L		95	72 - 134
Chlorobenzene	25.0	25.4		ug/L		102	80 - 120
Dibromochloromethane	25.0	23.9		ug/L		96	75 - 125
Chloroethane	25.0	25.3		ug/L		101	69 - 136
Chloroform	25.0	23.2		ug/L		93	73 - 127
Chloromethane	25.0	22.0		ug/L		88	68 - 124
cis-1,2-Dichloroethene	25.0	24.5		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	25.4		ug/L		102	74 - 124
Cyclohexane	25.0	29.6		ug/L		118	59 - 135
Dichlorodifluoromethane	25.0	23.1		ug/L		92	59 - 135
Ethylbenzene	25.0	26.9		ug/L		108	77 - 123
1,2-Dibromoethane	25.0	23.7		ug/L		95	77 - 120
Isopropylbenzene	25.0	27.1		ug/L		109	77 - 122
Methyl acetate	50.0	52.4		ug/L		105	74 - 133
Methyl tert-butyl ether	25.0	22.9		ug/L		92	77 - 120
Methylcyclohexane	25.0	27.2		ug/L		109	68 - 134
Methylene Chloride	25.0	22.3		ug/L		89	75 - 124
Styrene	25.0	27.9		ug/L		112	80 - 120
Tetrachloroethene	25.0	25.8		ug/L		103	74 - 122
Toluene	25.0	26.3		ug/L		105	80 - 122
trans-1,2-Dichloroethene	25.0	25.3		ug/L		101	73 - 127
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	80 - 120
Trichloroethene	25.0	25.4		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	21.6		ug/L		86	62 - 150
Vinyl chloride	25.0	20.6		ug/L		82	65 - 133

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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

Lab Sample ID: LCS 480-443770/7

Matrix: Water

Analysis Batch: 443770

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	96		80 - 120
1,2-Dichloroethane-d4 (Surr)	91		77 - 120
4-Bromofluorobenzene (Surr)	99		73 - 120
Dibromofluoromethane (Surr)	89		75 - 123

Lab Sample ID: MB 480-443801/26

Matrix: Water

Analysis Batch: 443801

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/06/18 11:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/06/18 11:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/06/18 11:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/06/18 11:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/06/18 11:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/06/18 11:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/06/18 11:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/06/18 11:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/06/18 11:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/06/18 11:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/06/18 11:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/06/18 11:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/06/18 11:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/06/18 11:59	1
2-Hexanone	ND		5.0	1.2	ug/L			11/06/18 11:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/06/18 11:59	1
Acetone	ND		10	3.0	ug/L			11/06/18 11:59	1
Benzene	ND		1.0	0.41	ug/L			11/06/18 11:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/06/18 11:59	1
Bromoform	ND		1.0	0.26	ug/L			11/06/18 11:59	1
Bromomethane	ND		1.0	0.69	ug/L			11/06/18 11:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/06/18 11:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/06/18 11:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/06/18 11:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/06/18 11:59	1
Chloroethane	ND		1.0	0.32	ug/L			11/06/18 11:59	1
Chloroform	ND		1.0	0.34	ug/L			11/06/18 11:59	1
Chloromethane	ND		1.0	0.35	ug/L			11/06/18 11:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/06/18 11:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/06/18 11:59	1
Cyclohexane	ND		1.0	0.18	ug/L			11/06/18 11:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/06/18 11:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/06/18 11:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/06/18 11:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/06/18 11:59	1
Methyl acetate	ND		2.5	1.3	ug/L			11/06/18 11:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/06/18 11:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/06/18 11:59	1

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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

Lab Sample ID: MB 480-443801/26

Matrix: Water

Analysis Batch: 443801

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0	0.44	ug/L			11/06/18 11:59	1
Styrene	ND		1.0	0.73	ug/L			11/06/18 11:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/06/18 11:59	1
Toluene	ND		1.0	0.51	ug/L			11/06/18 11:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/06/18 11:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/06/18 11:59	1
Trichloroethene	ND		1.0	0.46	ug/L			11/06/18 11:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/06/18 11:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/06/18 11:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/06/18 11:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		11/06/18 11:59	1
1,2-Dichloroethane-d4 (Surr)	90		77 - 120		11/06/18 11:59	1
4-Bromofluorobenzene (Surr)	95		73 - 120		11/06/18 11:59	1
Dibromofluoromethane (Surr)	90		75 - 123		11/06/18 11:59	1

Lab Sample ID: LCS 480-443801/5

Matrix: Water

Analysis Batch: 443801

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	24.4		ug/L		98	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		96	76 - 120
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.4		ug/L		114	61 - 148
1,1-Dichloroethane	25.0	26.3		ug/L		105	77 - 120
1,1-Dichloroethene	25.0	23.4		ug/L		94	66 - 127
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.2		ug/L		89	56 - 134
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	22.3		ug/L		89	75 - 120
1,2-Dichloropropane	25.0	26.6		ug/L		106	76 - 120
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	80 - 120
2-Butanone (MEK)	125	139		ug/L		111	57 - 140
2-Hexanone	125	144		ug/L		115	65 - 127
4-Methyl-2-pentanone (MIBK)	125	143		ug/L		115	71 - 125
Acetone	125	139		ug/L		111	56 - 142
Benzene	25.0	25.9		ug/L		103	71 - 124
Bromodichloromethane	25.0	24.2		ug/L		97	80 - 122
Bromoform	25.0	24.8		ug/L		99	61 - 132
Bromomethane	25.0	21.7		ug/L		87	55 - 144
Carbon disulfide	25.0	26.4		ug/L		106	59 - 134
Carbon tetrachloride	25.0	24.1		ug/L		96	72 - 134
Chlorobenzene	25.0	25.5		ug/L		102	80 - 120
Dibromochloromethane	25.0	24.4		ug/L		98	75 - 125

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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

Lab Sample ID: LCS 480-443801/5

Matrix: Water

Analysis Batch: 443801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	25.0	25.3		ug/L		101	69 - 136
Chloroform	25.0	23.3		ug/L		93	73 - 127
Chloromethane	25.0	21.5		ug/L		86	68 - 124
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	74 - 124
Cyclohexane	25.0	29.9		ug/L		120	59 - 135
Dichlorodifluoromethane	25.0	21.5		ug/L		86	59 - 135
Ethylbenzene	25.0	26.6		ug/L		106	77 - 123
1,2-Dibromoethane	25.0	24.4		ug/L		97	77 - 120
Isopropylbenzene	25.0	26.9		ug/L		108	77 - 122
Methyl acetate	50.0	54.3		ug/L		109	74 - 133
Methyl tert-butyl ether	25.0	23.5		ug/L		94	77 - 120
Methylcyclohexane	25.0	27.9		ug/L		112	68 - 134
Methylene Chloride	25.0	22.0		ug/L		88	75 - 124
Styrene	25.0	27.8		ug/L		111	80 - 120
Tetrachloroethene	25.0	26.2		ug/L		105	74 - 122
Toluene	25.0	26.6		ug/L		107	80 - 122
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	73 - 127
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	80 - 120
Trichloroethene	25.0	25.2		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	21.6		ug/L		86	62 - 150
Vinyl chloride	25.0	20.1		ug/L		81	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	96		80 - 120
1,2-Dichloroethane-d4 (Surr)	90		77 - 120
4-Bromofluorobenzene (Surr)	99		73 - 120
Dibromofluoromethane (Surr)	91		75 - 123

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

Lab Sample ID: MB 480-442433/1-A

Matrix: Water

Analysis Batch: 444681

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 442433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		10/30/18 07:37	11/10/18 01:14	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	32		15 - 110				10/30/18 07:37	11/10/18 01:14	1

Lab Sample ID: LCS 480-442433/2-A

Matrix: Water

Analysis Batch: 444681

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 442433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	1.00	1.04		ug/L		104	40 - 140

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

		LCS	LCS
Isotope Dilution	%Recovery	Qualifier	Limits
1,4-Dioxane-d8	36		15 - 110

Lab Sample ID: 480-144297-6 MS
Matrix: Water
Analysis Batch: 444681

Client Sample ID: GMW-2
Prep Type: Total/NA
Prep Batch: 442433
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,4-Dioxane	ND		0.952	0.997		ug/L		105	40 - 140
		MS	MS						
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	32		15 - 110						

Lab Sample ID: 480-144297-6 MSD
Matrix: Water
Analysis Batch: 444681

Client Sample ID: GMW-2
Prep Type: Total/NA
Prep Batch: 442433
%Rec. RPD

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,4-Dioxane	ND		0.952	1.00		ug/L		105	40 - 140	1	20
		MSD	MSD								
Isotope Dilution	%Recovery	Qualifier	Limits								
1,4-Dioxane-d8	32		15 - 110								

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-257492/1-A
Matrix: Water
Analysis Batch: 258039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257492

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorohexanesulfonic acid (PFHxS)	0.285	J	2.0	0.17	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/07/18 07:22	11/09/18 07:55	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.35	ng/L		11/07/18 07:22	11/09/18 07:55	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		11/07/18 07:22	11/09/18 07:55	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		11/07/18 07:22	11/09/18 07:55	1
6:2 FTS	ND		20	2.0	ng/L		11/07/18 07:22	11/09/18 07:55	1
8:2 FTS	ND		20	2.0	ng/L		11/07/18 07:22	11/09/18 07:55	1

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

<i>Isotope Dilution</i>	<i>MB MB</i> <i>%Recovery Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	95	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C5-PFPeA DNU	95	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C2 PFHxA	98	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C4 PFHpA	98	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C4 PFOA	97	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C5 PFNA	97	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C2 PFDA	105	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C2 PFUnA	96	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C2 PFDoA	93	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C2 PFTeDA	94	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C3 PFBS	92	25 - 150	11/07/18 07:22	11/09/18 07:55	1
18O2 PFHxS	99	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C4 PFOS	99	25 - 150	11/07/18 07:22	11/09/18 07:55	1
13C8 FOSA	97	25 - 150	11/07/18 07:22	11/09/18 07:55	1
d3-NMeFOSAA	96	25 - 150	11/07/18 07:22	11/09/18 07:55	1
d5-NEtFOSAA	100	25 - 150	11/07/18 07:22	11/09/18 07:55	1
M2-6:2 FTS	91	25 - 150	11/07/18 07:22	11/09/18 07:55	1
M2-8:2 FTS	101	25 - 150	11/07/18 07:22	11/09/18 07:55	1

Lab Sample ID: LCS 320-257492/2-A
Matrix: Water
Analysis Batch: 258039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257492
%Rec.

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
Perfluorobutanoic acid (PFBA)	40.0	41.2		ng/L		103	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	41.2		ng/L		103	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	39.6		ng/L		99	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	38.8		ng/L		97	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	42.6		ng/L		106	64 - 124
Perfluorononanoic acid (PFNA)	40.0	43.7		ng/L		109	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	42.5		ng/L		106	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	39.3		ng/L		98	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	40.7		ng/L		102	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	44.9		ng/L		112	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	36.0		ng/L		90	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	38.2		ng/L		108	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.7		ng/L		95	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	44.9		ng/L		118	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	36.5		ng/L		98	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	44.6		ng/L		116	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	42.8		ng/L		107	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	37.6		ng/L		94	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	40.9		ng/L		102	65 - 125
6:2 FTS	37.9	32.0		ng/L		84	66 - 126
8:2 FTS	38.3	36.9		ng/L		96	67 - 127

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	94		25 - 150
13C5-PFPeA DNU	93		25 - 150
13C2 PFHxA	92		25 - 150
13C4 PFHpA	95		25 - 150
13C4 PFOA	95		25 - 150
13C5 PFNA	93		25 - 150
13C2 PFDA	95		25 - 150
13C2 PFUnA	95		25 - 150
13C2 PFDoA	87		25 - 150
13C2 PFTeDA	96		25 - 150
13C3 PFBS	90		25 - 150
18O2 PFHxS	96		25 - 150
13C4 PFOS	94		25 - 150
13C8 FOSA	88		25 - 150
d3-NMeFOSAA	95		25 - 150
d5-NEtFOSAA	98		25 - 150
M2-6:2 FTS	92		25 - 150
M2-8:2 FTS	85		25 - 150

Lab Sample ID: 480-144297-6 MS

Matrix: Water

Analysis Batch: 258039

Client Sample ID: GMW-2

Prep Type: Total/NA

Prep Batch: 257492

Analyte	Sample		Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Perfluorobutanoic acid (PFBA)	2.3		34.0	38.0		ng/L		105	70 - 130
Perfluoropentanoic acid (PFPeA)	ND		34.0	35.3		ng/L		104	66 - 126
Perfluorohexanoic acid (PFHxA)	ND		34.0	33.4		ng/L		98	66 - 126
Perfluoroheptanoic acid (PFHpA)	ND		34.0	34.4		ng/L		101	66 - 126
Perfluorooctanoic acid (PFOA)	ND		34.0	32.8		ng/L		96	64 - 124
Perfluorononanoic acid (PFNA)	ND		34.0	34.7		ng/L		102	68 - 128
Perfluorodecanoic acid (PFDA)	ND		34.0	39.5		ng/L		116	69 - 129
Perfluoroundecanoic acid (PFUnA)	ND		34.0	33.4		ng/L		98	60 - 120
Perfluorododecanoic acid (PFDoA)	ND		34.0	34.2		ng/L		100	71 - 131
Perfluorotridecanoic acid (PFTriA)	ND		34.0	32.4		ng/L		95	72 - 132
Perfluorotetradecanoic acid (PFTeA)	ND		34.0	31.3		ng/L		92	68 - 128
Perfluorobutanesulfonic acid (PFBS)	0.99	J	30.1	34.6		ng/L		112	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	0.47	J B	31.0	28.4		ng/L		90	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	ND		32.4	36.7		ng/L		113	68 - 128
Perfluorooctanesulfonic acid (PFOS)	0.58	J	31.6	33.3		ng/L		103	67 - 127
Perfluorodecanesulfonic acid (PFDS)	ND		32.8	28.9		ng/L		88	68 - 128
Perfluorooctanesulfonamide (FOSA)	ND		34.0	33.9		ng/L		100	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		34.0	30.9		ng/L		91	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		34.0	34.1		ng/L		100	65 - 125
6:2 FTS	ND		32.3	30.6		ng/L		95	66 - 126
8:2 FTS	ND		32.6	33.9		ng/L		104	67 - 127

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

<i>Isotope Dilution</i>	<i>MS %Recovery</i>	<i>MS Qualifier</i>	<i>Limits</i>
13C4 PFBA	51		25 - 150
13C5-PFPeA DNU	63		25 - 150
13C2 PFHxA	69		25 - 150
13C4 PFHpA	71		25 - 150
13C4 PFOA	76		25 - 150
13C5 PFNA	68		25 - 150
13C2 PFDA	62		25 - 150
13C2 PFUnA	64		25 - 150
13C2 PFDoA	49		25 - 150
13C2 PFTeDA	55		25 - 150
13C3 PFBS	66		25 - 150
18O2 PFHxS	75		25 - 150
13C4 PFOS	68		25 - 150
13C8 FOSA	66		25 - 150
d3-NMeFOSAA	62		25 - 150
d5-NEtFOSAA	57		25 - 150
M2-6:2 FTS	75		25 - 150
M2-8:2 FTS	61		25 - 150

Lab Sample ID: 480-144297-6 MSD
Matrix: Water
Analysis Batch: 258039

Client Sample ID: GMW-2
Prep Type: Total/NA
Prep Batch: 257492

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
Perfluorobutanoic acid (PFBA)	2.3		33.5	38.1		ng/L		107	70 - 130	0	30
Perfluoropentanoic acid (PFPeA)	ND		33.5	34.2		ng/L		102	66 - 126	3	30
Perfluorohexanoic acid (PFHxA)	ND		33.5	31.9		ng/L		95	66 - 126	5	30
Perfluoroheptanoic acid (PFHpA)	ND		33.5	33.6		ng/L		100	66 - 126	2	30
Perfluorooctanoic acid (PFOA)	ND		33.5	36.5		ng/L		109	64 - 124	11	30
Perfluorononanoic acid (PFNA)	ND		33.5	32.8		ng/L		98	68 - 128	6	30
Perfluorodecanoic acid (PFDA)	ND		33.5	35.4		ng/L		106	69 - 129	11	30
Perfluoroundecanoic acid (PFUnA)	ND		33.5	33.5		ng/L		100	60 - 120	0	30
Perfluorododecanoic acid (PFDoA)	ND		33.5	31.5		ng/L		94	71 - 131	8	30
Perfluorotridecanoic acid (PFTriA)	ND		33.5	31.1		ng/L		93	72 - 132	4	30
Perfluorotetradecanoic acid (PFTeA)	ND		33.5	31.5		ng/L		94	68 - 128	0	30
Perfluorobutanesulfonic acid (PFBS)	0.99	J	29.6	33.2		ng/L		109	73 - 133	4	30
Perfluorohexanesulfonic acid (PFHxS)	0.47	J B	30.5	29.5		ng/L		95	63 - 123	4	30
Perfluoroheptanesulfonic Acid (PFHpS)	ND		31.9	36.9		ng/L		116	68 - 128	0	30
Perfluorooctanesulfonic acid (PFOS)	0.58	J	31.1	29.9		ng/L		95	67 - 127	11	30
Perfluorodecanesulfonic acid (PFDS)	ND		32.3	24.9		ng/L		77	68 - 128	15	30
Perfluorooctanesulfonamide (FOSA)	ND		33.5	33.3		ng/L		99	70 - 130	2	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		33.5	32.3		ng/L		96	67 - 127	4	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		33.5	34.7		ng/L		104	65 - 125	2	30
6:2 FTS	ND		31.7	30.8		ng/L		97	66 - 126	0	30
8:2 FTS	ND		32.1	32.8		ng/L		102	67 - 127	3	30

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

<i>Isotope Dilution</i>	<i>MSD</i> <i>%Recovery</i>	<i>MSD</i> <i>Qualifier</i>	<i>Limits</i>
13C4 PFBA	49		25 - 150
13C5-PFPeA DNU	61		25 - 150
13C2 PFHxA	67		25 - 150
13C4 PFHpA	73		25 - 150
13C4 PFOA	70		25 - 150
13C5 PFNA	69		25 - 150
13C2 PFDA	61		25 - 150
13C2 PFUnA	56		25 - 150
13C2 PFDoA	50		25 - 150
13C2 PFTeDA	49		25 - 150
13C3 PFBS	65		25 - 150
18O2 PFHxS	70		25 - 150
13C4 PFOS	68		25 - 150
13C8 FOSA	63		25 - 150
d3-NMeFOSAA	53		25 - 150
d5-NEtFOSAA	49		25 - 150
M2-6:2 FTS	75		25 - 150
M2-8:2 FTS	58		25 - 150

QC Association Summary

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

GC/MS VOA

Analysis Batch: 443500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144297-1	GPW-13	Total/NA	Water	8260C	
480-144297-5	GPW-20	Total/NA	Water	8260C	
480-144297-6	GMW-2	Total/NA	Water	8260C	
MB 480-443500/7	Method Blank	Total/NA	Water	8260C	
LCS 480-443500/5	Lab Control Sample	Total/NA	Water	8260C	
480-144297-6 MS	GMW-2	Total/NA	Water	8260C	
480-144297-6 MSD	GMW-2	Total/NA	Water	8260C	

Analysis Batch: 443770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144297-2	EW-16	Total/NA	Water	8260C	
480-144297-3	EW-14	Total/NA	Water	8260C	
480-144297-4	TB	Total/NA	Water	8260C	
480-144297-7	EW-10	Total/NA	Water	8260C	
480-144297-8	SB-19	Total/NA	Water	8260C	
480-144297-9	GPW-6	Total/NA	Water	8260C	
480-144297-10	GPW-5	Total/NA	Water	8260C	
480-144297-11	DUP	Total/NA	Water	8260C	
MB 480-443770/9	Method Blank	Total/NA	Water	8260C	
LCS 480-443770/7	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 443801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144297-2 - DL	EW-16	Total/NA	Water	8260C	
480-144297-3 - DL	EW-14	Total/NA	Water	8260C	
MB 480-443801/26	Method Blank	Total/NA	Water	8260C	
LCS 480-443801/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 442433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144297-5	GPW-20	Total/NA	Water	3510C	
480-144297-6	GMW-2	Total/NA	Water	3510C	
480-144297-7	EW-10	Total/NA	Water	3510C	
480-144297-8	SB-19	Total/NA	Water	3510C	
480-144297-9	GPW-6	Total/NA	Water	3510C	
480-144297-10	GPW-5	Total/NA	Water	3510C	
480-144297-11	DUP	Total/NA	Water	3510C	
MB 480-442433/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-442433/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-144297-6 MS	GMW-2	Total/NA	Water	3510C	
480-144297-6 MSD	GMW-2	Total/NA	Water	3510C	

Analysis Batch: 444681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144297-6	GMW-2	Total/NA	Water	8270D SIM ID	442433
MB 480-442433/1-A	Method Blank	Total/NA	Water	8270D SIM ID	442433
LCS 480-442433/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	442433
480-144297-6 MS	GMW-2	Total/NA	Water	8270D SIM ID	442433

TestAmerica Buffalo

QC Association Summary

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

GC/MS Semi VOA (Continued)

Analysis Batch: 444681 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144297-6 MSD	GMW-2	Total/NA	Water	8270D SIM ID	442433

Analysis Batch: 444687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144297-5	GPW-20	Total/NA	Water	8270D SIM ID	442433
480-144297-7	EW-10	Total/NA	Water	8270D SIM ID	442433
480-144297-8	SB-19	Total/NA	Water	8270D SIM ID	442433
480-144297-9	GPW-6	Total/NA	Water	8270D SIM ID	442433
480-144297-10	GPW-5	Total/NA	Water	8270D SIM ID	442433
480-144297-11	DUP	Total/NA	Water	8270D SIM ID	442433

LCMS

Prep Batch: 257492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144297-5	GPW-20	Total/NA	Water	3535	
480-144297-6	GMW-2	Total/NA	Water	3535	
480-144297-7 - DL	EW-10	Total/NA	Water	3535	
480-144297-7	EW-10	Total/NA	Water	3535	
480-144297-8	SB-19	Total/NA	Water	3535	
480-144297-9	GPW-6	Total/NA	Water	3535	
480-144297-10	GPW-5	Total/NA	Water	3535	
480-144297-11	DUP	Total/NA	Water	3535	
MB 320-257492/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-257492/2-A	Lab Control Sample	Total/NA	Water	3535	
480-144297-6 MS	GMW-2	Total/NA	Water	3535	
480-144297-6 MSD	GMW-2	Total/NA	Water	3535	

Analysis Batch: 258039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144297-5	GPW-20	Total/NA	Water	537 (modified)	257492
480-144297-6	GMW-2	Total/NA	Water	537 (modified)	257492
480-144297-7	EW-10	Total/NA	Water	537 (modified)	257492
480-144297-9	GPW-6	Total/NA	Water	537 (modified)	257492
MB 320-257492/1-A	Method Blank	Total/NA	Water	537 (modified)	257492
LCS 320-257492/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	257492
480-144297-6 MS	GMW-2	Total/NA	Water	537 (modified)	257492
480-144297-6 MSD	GMW-2	Total/NA	Water	537 (modified)	257492

Analysis Batch: 258999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144297-7 - DL	EW-10	Total/NA	Water	537 (modified)	257492
480-144297-8	SB-19	Total/NA	Water	537 (modified)	257492
480-144297-10	GPW-5	Total/NA	Water	537 (modified)	257492
480-144297-11	DUP	Total/NA	Water	537 (modified)	257492

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-13

Date Collected: 10/24/18 15:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443500	11/04/18 15:41	KMN	TAL BUF

Client Sample ID: EW-16

Date Collected: 10/25/18 15:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1000	443770	11/06/18 02:55	RJF	TAL BUF
Total/NA	Analysis	8260C	DL	2000	443801	11/06/18 12:26	RLB	TAL BUF

Client Sample ID: EW-14

Date Collected: 10/26/18 09:45

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		400	443770	11/06/18 03:23	RJF	TAL BUF
Total/NA	Analysis	8260C	DL	2000	443801	11/06/18 12:54	RLB	TAL BUF

Client Sample ID: TB

Date Collected: 10/26/18 00:00

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443770	11/06/18 03:51	RJF	TAL BUF

Client Sample ID: GPW-20

Date Collected: 10/24/18 10:35

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443500	11/04/18 16:05	KMN	TAL BUF
Total/NA	Prep	3510C			442433	10/30/18 07:37	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	444687	11/10/18 08:05	DMR	TAL BUF
Total/NA	Prep	3535			257492	11/07/18 07:22	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	258039	11/09/18 08:10	S1M	TAL SAC

Client Sample ID: GMW-2

Date Collected: 10/24/18 12:15

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443500	11/04/18 16:28	KMN	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			442433	10/30/18 07:37	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	444681	11/10/18 02:50	DMR	TAL BUF
Total/NA	Prep	3535			257492	11/07/18 07:22	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	258039	11/09/18 08:18	S1M	TAL SAC

Client Sample ID: EW-10

Date Collected: 10/25/18 11:55

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	443770	11/06/18 04:18	RJF	TAL BUF
Total/NA	Prep	3510C			442433	10/30/18 07:37	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	444687	11/10/18 08:29	DMR	TAL BUF
Total/NA	Prep	3535	DL		257492	11/07/18 07:22	MYV	TAL SAC
Total/NA	Analysis	537 (modified)	DL	5	258999	11/14/18 02:06	S1M	TAL SAC
Total/NA	Prep	3535			257492	11/07/18 07:22	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	258039	11/09/18 08:40	S1M	TAL SAC

Client Sample ID: SB-19

Date Collected: 10/25/18 13:50

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443770	11/06/18 04:46	RJF	TAL BUF
Total/NA	Prep	3510C			442433	10/30/18 07:37	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	444687	11/10/18 08:53	DMR	TAL BUF
Total/NA	Prep	3535			257492	11/07/18 07:22	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	258999	11/14/18 02:13	S1M	TAL SAC

Client Sample ID: GPW-6

Date Collected: 10/25/18 17:25

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443770	11/06/18 05:13	RJF	TAL BUF
Total/NA	Prep	3510C			442433	10/30/18 07:37	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	444687	11/10/18 09:17	DMR	TAL BUF
Total/NA	Prep	3535			257492	11/07/18 07:22	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	258039	11/09/18 08:55	S1M	TAL SAC

Client Sample ID: GPW-5

Date Collected: 10/25/18 18:00

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	443770	11/06/18 05:41	RJF	TAL BUF
Total/NA	Prep	3510C			442433	10/30/18 07:37	JMP	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Client Sample ID: GPW-5

Date Collected: 10/25/18 18:00

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D SIM ID		1	444687	11/10/18 09:41	DMR	TAL BUF
Total/NA	Prep	3535			257492	11/07/18 07:22	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	258999	11/14/18 02:21	S1M	TAL SAC

Client Sample ID: DUP

Date Collected: 10/25/18 00:00

Date Received: 10/26/18 18:15

Lab Sample ID: 480-144297-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	443770	11/06/18 06:08	RJF	TAL BUF
Total/NA	Prep	3510C			442433	10/30/18 07:37	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	444687	11/10/18 10:05	DMR	TAL BUF
Total/NA	Prep	3535			257492	11/07/18 07:22	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	258999	11/14/18 02:28	S1M	TAL SAC

Laboratory References:

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

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Method Summary

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

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 SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC
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 = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: New York State D.E.C.
Project/Site: Mayville Site# 907030A

TestAmerica Job ID: 480-144297-1

Laboratory: 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	03-31-19

Laboratory: TestAmerica Sacramento

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
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD ELAP		L2468	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-19
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-19
Illinois	NELAP	5	200060	03-17-19
Kansas	NELAP	7	E-10375	11-30-18
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-19
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-19
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	12-31-20
Utah	NELAP	8	CA00044	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

Method 8260C

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 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 #
GPW-13	480-144297-1	103	107	99	103
EW-16	480-144297-2	91	90	97	97
EW-16 DL	480-144297-2 DL	92	92	97	97
EW-14	480-144297-3	91	89	93	92
EW-14 DL	480-144297-3 DL	93	91	97	95
TB	480-144297-4	95	92	95	94
GPW-20	480-144297-5	109	112	101	107
GMW-2	480-144297-6	106	112	99	101
EW-10	480-144297-7	90	89	97	97
SB-19	480-144297-8	94	94	95	95
GPW-6	480-144297-9	93	94	96	96
GPW-5	480-144297-10	88	87	95	95
DUP	480-144297-11	92	88	97	96
	MB 480-443500/7	107	106	96	100
	MB 480-443770/9	91	95	96	94
	MB 480-443801/26	90	90	95	95
	LCS 480-443500/5	110	111	102	103
	LCS 480-443770/7	89	91	96	99
	LCS 480-443801/5	91	90	96	99
GMW-2 MS	480-144297-6 MS	99	107	97	103
GMW-2 MSD	480-144297-6 MSD	100	104	96	102

	<u>QC LIMITS</u>
DBFM = Dibromofluoromethane (Surr)	75-123
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: T5003.D
 Lab ID: LCS 480-443500/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	29.0	116	73-126	
1,1,2,2-Tetrachloroethane	25.0	23.5	94	76-120	
1,1,2-Trichloroethane	25.0	25.1	100	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	34.0	136	61-148	
1,1-Dichloroethane	25.0	25.8	103	77-120	
1,1-Dichloroethene	25.0	29.8	119	66-127	
1,2,4-Trichlorobenzene	25.0	24.3	97	79-122	
1,2-Dibromo-3-Chloropropane	25.0	24.7	99	56-134	
1,2-Dichlorobenzene	25.0	24.5	98	80-124	
1,2-Dichloroethane	25.0	27.5	110	75-120	
1,2-Dichloropropane	25.0	24.1	96	76-120	
1,3-Dichlorobenzene	25.0	25.4	102	77-120	
1,4-Dichlorobenzene	25.0	25.2	101	80-120	
2-Butanone (MEK)	125	118	95	57-140	
2-Hexanone	125	122	97	65-127	
4-Methyl-2-pentanone (MIBK)	125	119	95	71-125	
Acetone	125	129	103	56-142	
Benzene	25.0	24.8	99	71-124	
Bromodichloromethane	25.0	27.2	109	80-122	
Bromoform	25.0	27.2	109	61-132	
Bromomethane	25.0	23.5	94	55-144	
Carbon disulfide	25.0	25.4	102	59-134	
Carbon tetrachloride	25.0	30.4	122	72-134	
Chlorobenzene	25.0	24.7	99	80-120	
Dibromochloromethane	25.0	27.5	110	75-125	
Chloroethane	25.0	24.9	100	69-136	
Chloroform	25.0	26.6	106	73-127	
Chloromethane	25.0	22.5	90	68-124	
cis-1,2-Dichloroethene	25.0	24.6	98	74-124	
cis-1,3-Dichloropropene	25.0	27.7	111	74-124	
Cyclohexane	25.0	27.5	110	59-135	
Dichlorodifluoromethane	25.0	24.0	96	59-135	
Ethylbenzene	25.0	25.2	101	77-123	
1,2-Dibromoethane	25.0	26.3	105	77-120	
Isopropylbenzene	25.0	27.2	109	77-122	
Methyl acetate	50.0	43.2	86	74-133	
Methyl tert-butyl ether	25.0	25.4	101	77-120	
Methylcyclohexane	25.0	27.8	111	68-134	
Methylene Chloride	25.0	24.9	100	75-124	
Styrene	25.0	25.8	103	80-120	
Tetrachloroethene	25.0	26.9	108	74-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: T5003.D
Lab ID: LCS 480-443500/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	24.1	97	80-122	
trans-1,2-Dichloroethene	25.0	26.9	107	73-127	
trans-1,3-Dichloropropene	25.0	26.9	107	80-120	
Trichloroethene	25.0	25.2	101	74-123	
Trichlorofluoromethane	25.0	29.4	118	62-150	
Vinyl chloride	25.0	24.4	98	65-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: P37829.D
 Lab ID: LCS 480-443770/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	24.3	97	73-126	
1,1,2,2-Tetrachloroethane	25.0	23.3	93	76-120	
1,1,2-Trichloroethane	25.0	24.3	97	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.5	106	61-148	
1,1-Dichloroethane	25.0	26.4	106	77-120	
1,1-Dichloroethene	25.0	24.3	97	66-127	
1,2,4-Trichlorobenzene	25.0	24.2	97	79-122	
1,2-Dibromo-3-Chloropropane	25.0	22.1	88	56-134	
1,2-Dichlorobenzene	25.0	25.1	100	80-124	
1,2-Dichloroethane	25.0	22.1	88	75-120	
1,2-Dichloropropane	25.0	26.4	106	76-120	
1,3-Dichlorobenzene	25.0	25.2	101	77-120	
1,4-Dichlorobenzene	25.0	25.4	102	80-120	
2-Butanone (MEK)	125	132	105	57-140	
2-Hexanone	125	137	110	65-127	
4-Methyl-2-pentanone (MIBK)	125	139	111	71-125	
Acetone	125	128	103	56-142	
Benzene	25.0	26.2	105	71-124	
Bromodichloromethane	25.0	23.7	95	80-122	
Bromoform	25.0	24.3	97	61-132	
Bromomethane	25.0	21.9	88	55-144	
Carbon disulfide	25.0	27.2	109	59-134	
Carbon tetrachloride	25.0	23.7	95	72-134	
Chlorobenzene	25.0	25.4	102	80-120	
Dibromochloromethane	25.0	23.9	96	75-125	
Chloroethane	25.0	25.3	101	69-136	
Chloroform	25.0	23.2	93	73-127	
Chloromethane	25.0	22.0	88	68-124	
cis-1,2-Dichloroethene	25.0	24.5	98	74-124	
cis-1,3-Dichloropropene	25.0	25.4	102	74-124	
Cyclohexane	25.0	29.6	118	59-135	
Dichlorodifluoromethane	25.0	23.1	92	59-135	
Ethylbenzene	25.0	26.9	108	77-123	
1,2-Dibromoethane	25.0	23.7	95	77-120	
Isopropylbenzene	25.0	27.1	109	77-122	
Methyl acetate	50.0	52.4	105	74-133	
Methyl tert-butyl ether	25.0	22.9	92	77-120	
Methylcyclohexane	25.0	27.2	109	68-134	
Methylene Chloride	25.0	22.3	89	75-124	
Styrene	25.0	27.9	112	80-120	
Tetrachloroethene	25.0	25.8	103	74-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: P37829.D
Lab ID: LCS 480-443770/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	26.3	105	80-122	
trans-1,2-Dichloroethene	25.0	25.3	101	73-127	
trans-1,3-Dichloropropene	25.0	25.8	103	80-120	
Trichloroethene	25.0	25.4	102	74-123	
Trichlorofluoromethane	25.0	21.6	86	62-150	
Vinyl chloride	25.0	20.6	82	65-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: P37854.D
 Lab ID: LCS 480-443801/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	24.4	98	73-126	
1,1,2,2-Tetrachloroethane	25.0	24.1	96	76-120	
1,1,2-Trichloroethane	25.0	24.3	97	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.4	114	61-148	
1,1-Dichloroethane	25.0	26.3	105	77-120	
1,1-Dichloroethene	25.0	23.4	94	66-127	
1,2,4-Trichlorobenzene	25.0	24.5	98	79-122	
1,2-Dibromo-3-Chloropropane	25.0	22.2	89	56-134	
1,2-Dichlorobenzene	25.0	25.4	102	80-124	
1,2-Dichloroethane	25.0	22.3	89	75-120	
1,2-Dichloropropane	25.0	26.6	106	76-120	
1,3-Dichlorobenzene	25.0	25.2	101	77-120	
1,4-Dichlorobenzene	25.0	25.4	102	80-120	
2-Butanone (MEK)	125	139	111	57-140	
2-Hexanone	125	144	115	65-127	
4-Methyl-2-pentanone (MIBK)	125	143	115	71-125	
Acetone	125	139	111	56-142	
Benzene	25.0	25.9	103	71-124	
Bromodichloromethane	25.0	24.2	97	80-122	
Bromoform	25.0	24.8	99	61-132	
Bromomethane	25.0	21.7	87	55-144	
Carbon disulfide	25.0	26.4	106	59-134	
Carbon tetrachloride	25.0	24.1	96	72-134	
Chlorobenzene	25.0	25.5	102	80-120	
Dibromochloromethane	25.0	24.4	98	75-125	
Chloroethane	25.0	25.3	101	69-136	
Chloroform	25.0	23.3	93	73-127	
Chloromethane	25.0	21.5	86	68-124	
cis-1,2-Dichloroethene	25.0	24.8	99	74-124	
cis-1,3-Dichloropropene	25.0	26.0	104	74-124	
Cyclohexane	25.0	29.9	120	59-135	
Dichlorodifluoromethane	25.0	21.5	86	59-135	
Ethylbenzene	25.0	26.6	106	77-123	
1,2-Dibromoethane	25.0	24.4	97	77-120	
Isopropylbenzene	25.0	26.9	108	77-122	
Methyl acetate	50.0	54.3	109	74-133	
Methyl tert-butyl ether	25.0	23.5	94	77-120	
Methylcyclohexane	25.0	27.9	112	68-134	
Methylene Chloride	25.0	22.0	88	75-124	
Styrene	25.0	27.8	111	80-120	
Tetrachloroethene	25.0	26.2	105	74-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: P37854.D
Lab ID: LCS 480-443801/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	26.6	107	80-122	
trans-1,2-Dichloroethene	25.0	25.1	100	73-127	
trans-1,3-Dichloropropene	25.0	25.8	103	80-120	
Trichloroethene	25.0	25.2	101	74-123	
Trichlorofluoromethane	25.0	21.6	86	62-150	
Vinyl chloride	25.0	20.1	81	65-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: T5024.D
 Lab ID: 480-144297-6 MS Client ID: GMW-2 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	ND	35.0	140	73-126	F1
1,1,2,2-Tetrachloroethane	25.0	ND	26.5	106	76-120	
1,1,2-Trichloroethane	25.0	ND	27.9	112	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	ND	38.6	154	61-148	F1
1,1-Dichloroethane	25.0	ND	30.5	122	77-120	F1
1,1-Dichloroethene	25.0	ND	34.4	138	66-127	F1
1,2,4-Trichlorobenzene	25.0	ND	28.6	115	79-122	
1,2-Dibromo-3-Chloropropane	25.0	ND	28.2	113	56-134	
1,2-Dichlorobenzene	25.0	ND	27.8	111	80-124	
1,2-Dichloroethane	25.0	ND	30.6	122	75-120	F1
1,2-Dichloropropane	25.0	ND	27.9	111	76-120	
1,3-Dichlorobenzene	25.0	ND	28.2	113	77-120	
1,4-Dichlorobenzene	25.0	ND	27.6	110	78-124	
2-Butanone (MEK)	125	ND	125	100	57-140	
2-Hexanone	125	ND	133	106	65-127	
4-Methyl-2-pentanone (MIBK)	125	ND	136	109	71-125	
Acetone	125	ND	125	100	56-142	
Benzene	25.0	ND	28.4	114	71-124	
Bromodichloromethane	25.0	ND	30.3	121	80-122	
Bromoform	25.0	ND	29.2	117	61-132	
Bromomethane	25.0	ND	26.8	107	55-144	
Carbon disulfide	25.0	ND	28.0	112	59-134	
Carbon tetrachloride	25.0	ND	35.8	143	72-134	F1
Chlorobenzene	25.0	ND	29.3	117	80-120	
Dibromochloromethane	25.0	ND	29.8	119	75-125	
Chloroethane	25.0	ND	30.9	124	69-136	
Chloroform	25.0	ND	30.1	120	73-127	
Chloromethane	25.0	ND	26.6	106	68-124	
cis-1,2-Dichloroethene	25.0	ND	30.0	120	74-124	
cis-1,3-Dichloropropene	25.0	ND	29.3	117	74-124	
Cyclohexane	25.0	ND	31.1	124	59-135	
Dichlorodifluoromethane	25.0	ND	25.5	102	59-135	
Ethylbenzene	25.0	ND	29.4	118	77-123	
1,2-Dibromoethane	25.0	ND	28.5	114	77-120	
Isopropylbenzene	25.0	ND	30.5	122	77-122	
Methyl acetate	50.0	ND	47.7	95	74-133	
Methyl tert-butyl ether	25.0	ND	28.6	114	77-120	
Methylcyclohexane	25.0	ND	32.1	128	68-134	
Methylene Chloride	25.0	ND	27.5	110	75-124	
Styrene	25.0	ND	29.1	116	80-120	
Tetrachloroethene	25.0	ND	32.2	129	74-122	F1

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: T5024.D
 Lab ID: 480-144297-6 MS Client ID: GMW-2 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Toluene	25.0	ND	28.7	115	80-122	
trans-1,2-Dichloroethene	25.0	ND	31.2	125	73-127	
trans-1,3-Dichloropropene	25.0	ND	28.5	114	80-120	
Trichloroethene	25.0	ND	30.0	120	74-123	
Trichlorofluoromethane	25.0	ND	34.4	137	62-150	
Vinyl chloride	25.0	ND	29.3	117	65-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: T5025.D
 Lab ID: 480-144297-6 MSD Client ID: GMW-2 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	25.0	34.2	137	2	15	73-126	F1
1,1,2,2-Tetrachloroethane	25.0	26.6	106	0	15	76-120	
1,1,2-Trichloroethane	25.0	28.3	113	1	15	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	34.3	137	12	20	61-148	
1,1-Dichloroethane	25.0	30.5	122	0	20	77-120	F1
1,1-Dichloroethene	25.0	34.0	136	1	16	66-127	F1
1,2,4-Trichlorobenzene	25.0	27.9	111	3	20	79-122	
1,2-Dibromo-3-Chloropropane	25.0	28.3	113	0	15	56-134	
1,2-Dichlorobenzene	25.0	28.0	112	1	20	80-124	
1,2-Dichloroethane	25.0	30.1	121	1	20	75-120	F1
1,2-Dichloropropane	25.0	26.9	108	3	20	76-120	
1,3-Dichlorobenzene	25.0	28.2	113	0	20	77-120	
1,4-Dichlorobenzene	25.0	28.8	115	4	20	78-124	
2-Butanone (MEK)	125	124	99	1	20	57-140	
2-Hexanone	125	131	104	2	15	65-127	
4-Methyl-2-pentanone (MIBK)	125	132	105	3	35	71-125	
Acetone	125	120	96	4	15	56-142	
Benzene	25.0	28.6	115	1	13	71-124	
Bromodichloromethane	25.0	30.9	124	2	15	80-122	F1
Bromoform	25.0	29.5	118	1	15	61-132	
Bromomethane	25.0	29.3	117	9	15	55-144	
Carbon disulfide	25.0	28.2	113	1	15	59-134	
Carbon tetrachloride	25.0	36.4	146	2	15	72-134	F1
Chlorobenzene	25.0	28.7	115	2	25	80-120	
Dibromochloromethane	25.0	28.7	115	4	15	75-125	
Chloroethane	25.0	31.9	127	3	15	69-136	
Chloroform	25.0	29.9	120	1	20	73-127	
Chloromethane	25.0	26.6	106	0	15	68-124	
cis-1,2-Dichloroethene	25.0	28.2	113	6	15	74-124	
cis-1,3-Dichloropropene	25.0	29.2	117	0	15	74-124	
Cyclohexane	25.0	29.4	118	6	20	59-135	
Dichlorodifluoromethane	25.0	24.0	96	6	20	59-135	
Ethylbenzene	25.0	29.6	118	1	15	77-123	
1,2-Dibromoethane	25.0	28.9	116	1	15	77-120	
Isopropylbenzene	25.0	31.3	125	3	20	77-122	F1
Methyl acetate	50.0	45.3	91	5	20	74-133	
Methyl tert-butyl ether	25.0	27.5	110	4	37	77-120	
Methylcyclohexane	25.0	32.0	128	0	20	68-134	
Methylene Chloride	25.0	27.7	111	1	15	75-124	
Styrene	25.0	29.1	117	0	20	80-120	
Tetrachloroethene	25.0	31.8	127	1	20	74-122	F1

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: T5025.D
 Lab ID: 480-144297-6 MSD Client ID: GMW-2 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Toluene	25.0	28.3	113	1	15	80-122	
trans-1,2-Dichloroethene	25.0	30.8	123	1	20	73-127	
trans-1,3-Dichloropropene	25.0	29.3	117	3	15	80-120	
Trichloroethene	25.0	29.7	119	1	16	74-123	
Trichlorofluoromethane	25.0	34.9	140	2	20	62-150	
Vinyl chloride	25.0	29.4	118	0	15	65-133	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Lab File ID: T5005.D Lab Sample ID: MB 480-443500/7
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: HP5975T Date Analyzed: 11/04/2018 12:17
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 480-443500/5	T5003.D	11/04/2018 11:30
GPW-13	480-144297-1	T5014.D	11/04/2018 15:41
GPW-20	480-144297-5	T5015.D	11/04/2018 16:05
GMW-2	480-144297-6	T5016.D	11/04/2018 16:28
GMW-2 MS	480-144297-6 MS	T5024.D	11/04/2018 19:39
GMW-2 MSD	480-144297-6 MSD	T5025.D	11/04/2018 20:03

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Lab File ID: P37831.D Lab Sample ID: MB 480-443770/9
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: HP5973P Date Analyzed: 11/05/2018 23:56
GC Column: ZB-624 (60) ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-443770/7	P37829.D	11/05/2018 22:46
EW-16	480-144297-2	P37837.D	11/06/2018 02:55
EW-14	480-144297-3	P37838.D	11/06/2018 03:23
TB	480-144297-4	P37839.D	11/06/2018 03:51
EW-10	480-144297-7	P37840.D	11/06/2018 04:18
SB-19	480-144297-8	P37841.D	11/06/2018 04:46
GPW-6	480-144297-9	P37842.D	11/06/2018 05:13
GPW-5	480-144297-10	P37843.D	11/06/2018 05:41
DUP	480-144297-11	P37844.D	11/06/2018 06:08

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Lab File ID: P37857.D Lab Sample ID: MB 480-443801/26
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: HP5973P Date Analyzed: 11/06/2018 11:59
GC Column: ZB-624 (60) ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-443801/5	P37854.D	11/06/2018 10:16
EW-16 DL	480-144297-2 DL	P37858.D	11/06/2018 12:26
EW-14 DL	480-144297-3 DL	P37859.D	11/06/2018 12:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Lab File ID: P37181.D BFB Injection Date: 10/22/2018
 Instrument ID: HP5973P BFB Injection Time: 14:13
 Analysis Batch No.: 440877

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.1
75	30.0 - 60.0 % of mass 95	51.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	0.7 (0.7) 1
174	50.0 - 120.00 % of mass 95	97.8
175	5.0 - 9.0 % of mass 174	7.5 (7.7) 1
176	95.0 - 101.0 % of mass 174	96.2 (98.4) 1
177	5.0 - 9.0 % of mass 176	6.4 (6.7) 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 480-440877/7	P37183.D	10/22/2018	15:16
	IC 480-440877/8	P37184.D	10/22/2018	15:44
	IC 480-440877/9	P37185.D	10/22/2018	16:12
	IC 480-440877/10	P37186.D	10/22/2018	16:39
	ICIS 480-440877/11	P37187.D	10/22/2018	17:07
	IC 480-440877/12	P37188.D	10/22/2018	17:34
	IC 480-440877/13	P37189.D	10/22/2018	18:02

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Lab File ID: P37826.D BFB Injection Date: 11/05/2018
Instrument ID: HP5973P BFB Injection Time: 21:16
Analysis Batch No.: 443770

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.8
75	30.0 - 60.0 % of mass 95	49.8
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	0.1 (0.1) 1
174	50.0 - 120.00 % of mass 95	94.9
175	5.0 - 9.0 % of mass 174	7.6 (8.0) 1
176	95.0 - 101.0 % of mass 174	90.6 (95.5) 1
177	5.0 - 9.0 % of mass 176	6.6 (7.3) 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 480-443770/3	P37827.D	11/05/2018	21:51
	LCS 480-443770/7	P37829.D	11/05/2018	22:46
	MB 480-443770/9	P37831.D	11/05/2018	23:56
EW-16	480-144297-2	P37837.D	11/06/2018	02:55
EW-14	480-144297-3	P37838.D	11/06/2018	03:23
TB	480-144297-4	P37839.D	11/06/2018	03:51
EW-10	480-144297-7	P37840.D	11/06/2018	04:18
SB-19	480-144297-8	P37841.D	11/06/2018	04:46
GPW-6	480-144297-9	P37842.D	11/06/2018	05:13
GPW-5	480-144297-10	P37843.D	11/06/2018	05:41
DUP	480-144297-11	P37844.D	11/06/2018	06:08

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Lab File ID: P37851.D BFB Injection Date: 11/06/2018
 Instrument ID: HP5973P BFB Injection Time: 08:54
 Analysis Batch No.: 443801

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.5
75	30.0 - 60.0 % of mass 95	47.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.9
173	Less than 2.0 % of mass 174	0.3 (0.4) 1
174	50.0 - 120.00 % of mass 95	94.1
175	5.0 - 9.0 % of mass 174	7.2 (7.7) 1
176	95.0 - 101.0 % of mass 174	92.1 (97.9) 1
177	5.0 - 9.0 % of mass 176	6.7 (7.3) 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 480-443801/3	P37852.D	11/06/2018	09:21
	LCS 480-443801/5	P37854.D	11/06/2018	10:16
	MB 480-443801/26	P37857.D	11/06/2018	11:59
EW-16 DL	480-144297-2 DL	P37858.D	11/06/2018	12:26
EW-14 DL	480-144297-3 DL	P37859.D	11/06/2018	12:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Lab File ID: T4699.D BFB Injection Date: 10/29/2018
 Instrument ID: HP5975T BFB Injection Time: 12:47
 Analysis Batch No.: 442312

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.8
75	30.0 - 60.0 % of mass 95	53.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	1.1 (1.4) 1
174	50.0 - 120.00 % of mass 95	81.0
175	5.0 - 9.0 % of mass 174	6.8 (8.4) 1
176	95.0 - 101.0 % of mass 174	79.9 (98.6) 1
177	5.0 - 9.0 % of mass 176	4.5 (5.7) 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 480-442312/4	T4701.D	10/29/2018	14:27
	IC 480-442312/5	T4702.D	10/29/2018	14:51
	IC 480-442312/6	T4703.D	10/29/2018	15:15
	IC 480-442312/7	T4704.D	10/29/2018	15:39
	IC 480-442312/8	T4705.D	10/29/2018	16:02
	ICIS 480-442312/9	T4706.D	10/29/2018	16:26
	IC 480-442312/10	T4707.D	10/29/2018	16:49
	IC 480-442312/11	T4708.D	10/29/2018	17:13

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Lab File ID: T5000.D BFB Injection Date: 11/04/2018
 Instrument ID: HP5975T BFB Injection Time: 10:19
 Analysis Batch No.: 443500

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.8
75	30.0 - 60.0 % of mass 95	54.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	0.7 (0.9) 1
174	50.0 - 120.00 % of mass 95	79.9
175	5.0 - 9.0 % of mass 174	6.9 (8.7) 1
176	95.0 - 101.0 % of mass 174	76.4 (95.6) 1
177	5.0 - 9.0 % of mass 176	6.0 (7.9) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-443500/3	T5001.D	11/04/2018	10:43
	LCS 480-443500/5	T5003.D	11/04/2018	11:30
	MB 480-443500/7	T5005.D	11/04/2018	12:17
GPW-13	480-144297-1	T5014.D	11/04/2018	15:41
GPW-20	480-144297-5	T5015.D	11/04/2018	16:05
GMW-2	480-144297-6	T5016.D	11/04/2018	16:28
GMW-2 MS	480-144297-6 MS	T5024.D	11/04/2018	19:39
GMW-2 MSD	480-144297-6 MSD	T5025.D	11/04/2018	20:03

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: ICIS 480-440877/11 Date Analyzed: 10/22/2018 17:07
 Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm)
 Lab File ID (Standard): P37187.D Heated Purge: (Y/N) N
 Calibration ID: 35153

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	240815	10.34	495282	14.29	561890	17.25	
UPPER LIMIT	481630	10.84	990564	14.79	1123780	17.75	
LOWER LIMIT	120408	9.84	247641	13.79	280945	16.75	
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-443770/3		263261	10.34	526917	14.29	599383	17.25
CCVIS 480-443801/3		249839	10.34	506889	14.29	573702	17.25

FB = Fluorobenzene (IS)
 CBNZd5 = Chlorobenzene-d5
 DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 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: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: CCVIS 480-443770/3 Date Analyzed: 11/05/2018 21:51
 Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm)
 Lab File ID (Standard): P37827.D Heated Purge: (Y/N) N
 Calibration ID: 35155

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		263261	10.34	526917	14.29	599383	17.25
UPPER LIMIT		526522	10.84	1053834	14.79	1198766	17.75
LOWER LIMIT		131631	9.84	263459	13.79	299692	16.75
LAB SAMPLE ID		CLIENT SAMPLE ID					
LCS 480-443770/7		259487	10.34	516772	14.29	590141	17.25
MB 480-443770/9		240641	10.34	488676	14.28	526969	17.25
480-144297-2	EW-16	235738	10.34	462420	14.28	503181	17.25
480-144297-3	EW-14	237320	10.34	476377	14.28	497661	17.25
480-144297-4	TB	227200	10.34	470167	14.29	493534	17.25
480-144297-7	EW-10	235587	10.34	460389	14.29	492523	17.25
480-144297-8	SB-19	224440	10.34	461755	14.28	491623	17.25
480-144297-9	GPW-6	228062	10.34	461914	14.28	500687	17.25
480-144297-10	GPW-5	235769	10.34	455880	14.29	490154	17.25
480-144297-11	DUP	230214	10.34	452463	14.29	489800	17.25

FB = Fluorobenzene (IS)
 CBNZd5 = Chlorobenzene-d5
 DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 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: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: CCVIS 480-443801/3 Date Analyzed: 11/06/2018 09:21
 Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm)
 Lab File ID (Standard): P37852.D Heated Purge: (Y/N) N
 Calibration ID: 35155

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	249839	10.34	506889	14.29	573702	17.25	
UPPER LIMIT	499678	10.84	1013778	14.79	1147404	17.75	
LOWER LIMIT	124920	9.84	253445	13.79	286851	16.75	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-443801/5		246972	10.34	498035	14.29	574995	17.25
MB 480-443801/26		239700	10.34	485315	14.29	517300	17.25
480-144297-2 DL	EW-16 DL	235705	10.34	477774	14.29	520141	17.25
480-144297-3 DL	EW-14 DL	231374	10.34	465349	14.28	498210	17.25

FB = Fluorobenzene (IS)
 CBNZd5 = Chlorobenzene-d5
 DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 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: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: ICIS 480-442312/9 Date Analyzed: 10/29/2018 16:26
 Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm)
 Lab File ID (Standard): T4706.D Heated Purge: (Y/N) N
 Calibration ID: 35209

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	155408	4.59	570473	6.88	365872	8.73	
UPPER LIMIT	310816	5.09	1140946	7.38	731744	9.23	
LOWER LIMIT	77704	4.09	285237	6.38	182936	8.23	
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-443500/3		134398	4.58	506000	6.87	296001	8.73

FB = Fluorobenzene (IS)
 CBNZd5 = Chlorobenzene-d5
 DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 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: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: CCVIS 480-443500/3 Date Analyzed: 11/04/2018 10:43
 Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm)
 Lab File ID (Standard): T5001.D Heated Purge: (Y/N) N
 Calibration ID: 35212

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		134398	4.58	506000	6.87	296001	8.73
UPPER LIMIT		268796	5.08	1012000	7.37	592002	9.23
LOWER LIMIT		67199	4.08	253000	6.37	148001	8.23
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-443500/5		127313	4.59	477328	6.88	300296	8.73
MB 480-443500/7		128177	4.59	482954	6.88	300789	8.73
480-144297-1	GPW-13	127708	4.59	469367	6.88	288723	8.73
480-144297-5	GPW-20	121060	4.59	464933	6.88	301350	8.73
480-144297-6	GMW-2	122601	4.59	474304	6.87	298648	8.73
480-144297-6 MS	GMW-2 MS	126968	4.59	475556	6.87	299887	8.73
480-144297-6 MSD	GMW-2 MSD	129671	4.59	484541	6.88	299369	8.73

FB = Fluorobenzene (IS)
 CBNZd5 = Chlorobenzene-d5
 DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 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: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: GPW-13 Lab Sample ID: 480-144297-1

Matrix: Water Lab File ID: T5014.D

Analysis Method: 8260C Date Collected: 10/24/2018 15:45

Sample wt/vol: 5 (mL) Date Analyzed: 11/04/2018 15:41

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.: 443500 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
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
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
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
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	22		10	3.0
71-43-2	Benzene	ND		1.0	0.41
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
124-48-1	Dibromochloromethane	ND		1.0	0.32
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
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GPW-13</u>	Lab Sample ID: <u>480-144297-1</u>
Matrix: <u>Water</u>	Lab File ID: <u>T5014.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/24/2018 15:45</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/04/2018 15:41</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (20)</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443500</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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	0.67	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
2037-26-5	Toluene-d8 (Surr)	99		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5014.D
 Lims ID: 480-144297-B-1
 Client ID: GPW-13
 Sample Type: Client
 Inject. Date: 04-Nov-2018 15:41:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-144297-B-1
 Misc. Info.: 480-0076114-016
 Operator ID: RF Instrument ID: HP5975T
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 05-Nov-2018 08:41:45 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0320

First Level Reviewer: nowakk

Date: 05-Nov-2018 08:43:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.589	4.589	0.000	97	127708	25.0	
* 2 Chlorobenzene-d5	117	6.879	6.879	0.000	92	469367	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	288723	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.133	4.123	0.010	92	158297	25.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.371	4.371	0.000	0	260561	26.7	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	95	516985	24.7	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	197524	25.8	
11 Dichlorodifluoromethane	85		1.107				ND	
13 Chloromethane	50		1.252				ND	
14 Vinyl chloride	62		1.325				ND	
15 Bromomethane	94		1.584				ND	
16 Chloroethane	64		1.636				ND	
17 Trichlorofluoromethane	101		1.802				ND	
22 1,1-Dichloroethene	96		2.258				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.268				ND	
23 Acetone	43	2.371	2.372	-0.001	99	52525	21.6	
25 Carbon disulfide	76		2.434				ND	
28 Methyl acetate	43		2.631				ND	
30 Methylene Chloride	84		2.724				ND	
33 Methyl tert-butyl ether	73		2.900				ND	
32 trans-1,2-Dichloroethene	96		2.910				ND	
36 1,1-Dichloroethane	63		3.273				ND	
43 cis-1,2-Dichloroethene	96		3.739				ND	
44 2-Butanone (MEK)	43		3.771				ND	
50 Chloroform	83		3.999				ND	
51 1,1,1-Trichloroethane	97		4.092				ND	
52 Cyclohexane	56		4.092				ND	
53 Carbon tetrachloride	117		4.195				ND	
55 Benzene	78		4.372				ND	
57 1,2-Dichloroethane	62		4.434				ND	
60 Trichloroethene	95	4.859	4.859	-0.001	83	5242	0.6659	

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5014.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Methylcyclohexane	83		4.942				ND	
63 1,2-Dichloropropane	63		5.045				ND	
67 Dichlorobromomethane	83		5.273				ND	
71 cis-1,3-Dichloropropene	75		5.594				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.698				ND	
73 Toluene	92	5.812	5.812	0.000	97	4828	0.2710	
75 trans-1,3-Dichloropropene	75		6.019				ND	
78 1,1,2-Trichloroethane	83		6.164				ND	
79 Tetrachloroethene	166		6.206				ND	
81 2-Hexanone	43		6.330				ND	
82 Chlorodibromomethane	129		6.465				ND	
83 Ethylene Dibromide	107		6.548				ND	
86 Chlorobenzene	112		6.900				ND	
88 Ethylbenzene	91		6.962				ND	
90 m-Xylene & p-Xylene	106		7.056				ND	
91 o-Xylene	106		7.367				ND	
92 Styrene	104		7.387				ND	
93 Bromoform	173		7.584				ND	
95 Isopropylbenzene	105		7.646				ND	
98 1,1,2,2-Tetrachloroethane	83		7.968				ND	
110 1,3-Dichlorobenzene	146		8.672				ND	
113 1,4-Dichlorobenzene	146		8.755				ND	
116 1,2-Dichlorobenzene	146		9.056				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.729				ND	
119 1,2,4-Trichlorobenzene	180		10.372				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_IS_00209	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_Surr_00181	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5014.D

Injection Date: 04-Nov-2018 15:41:30

Instrument ID: HP5975T

Operator ID: RF

Lims ID: 480-144297-B-1

Lab Sample ID: 480-144297-1

Worklist Smp#: 16

Client ID: GPW-13

Purge Vol: 5.000 mL

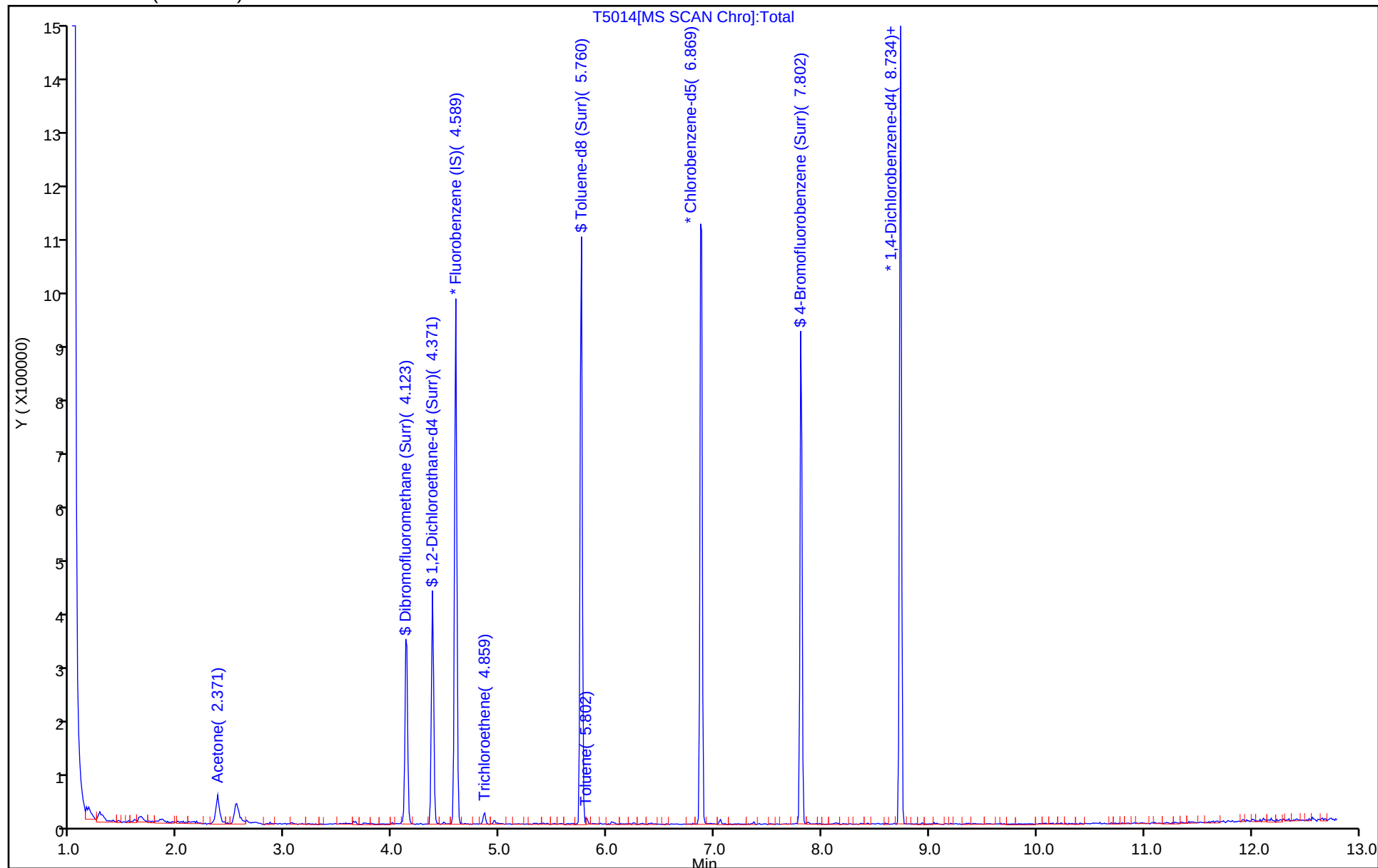
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5014.D

Injection Date: 04-Nov-2018 15:41:30

Instrument ID: HP5975T

Lims ID: 480-144297-B-1

Lab Sample ID: 480-144297-1

Client ID: GPW-13

Operator ID: RF

ALS Bottle#: 16

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

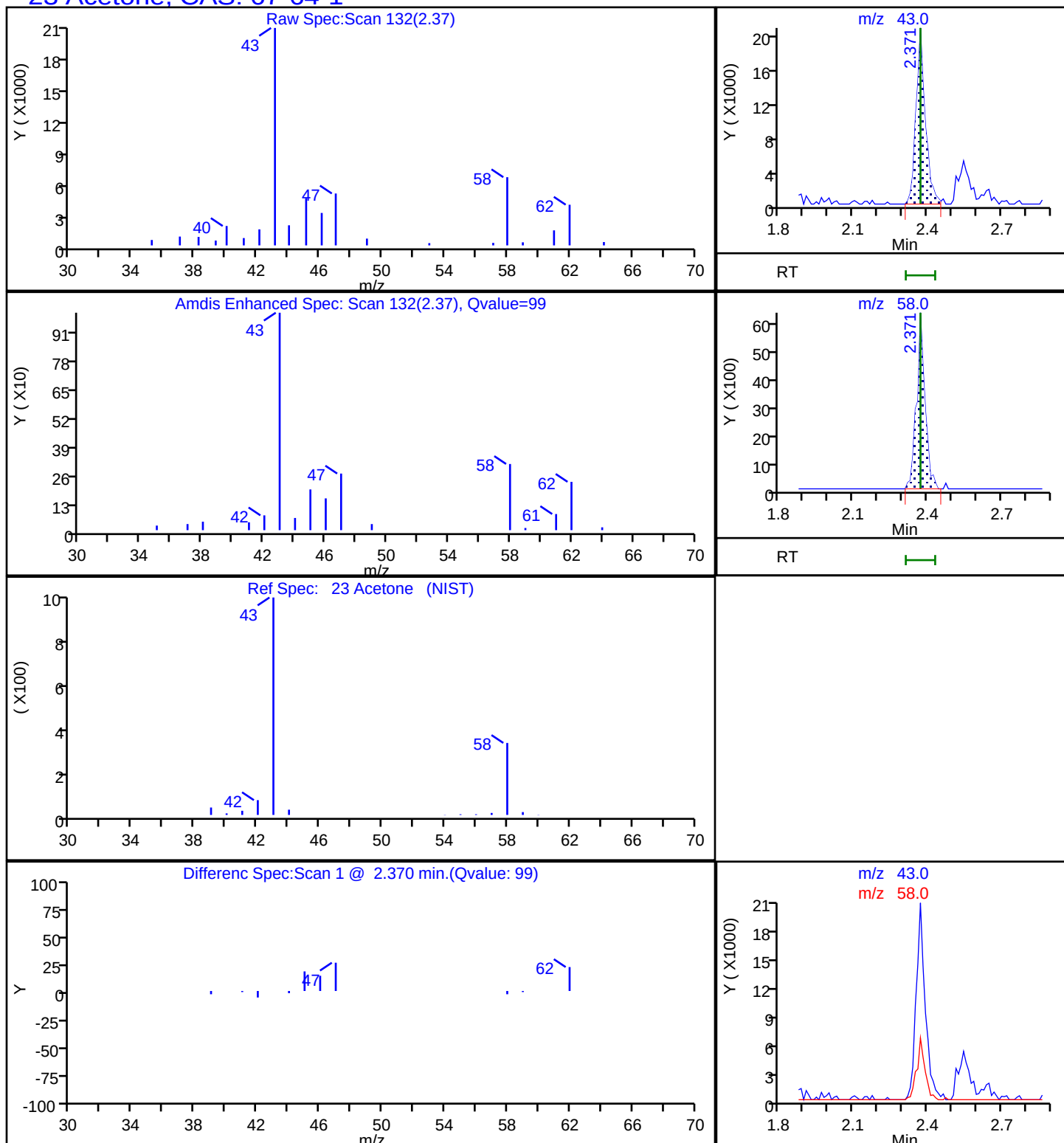
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

23 Acetone, CAS: 67-64-1



TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181104-76114.b\\T5014.D

Injection Date: 04-Nov-2018 15:41:30

Instrument ID: HP5975T

Lims ID: 480-144297-B-1

Lab Sample ID: 480-144297-1

Client ID: GPW-13

Operator ID: RF

ALS Bottle#: 16

Worklist Smp#: 16

Purge Vol: 5.000 mL

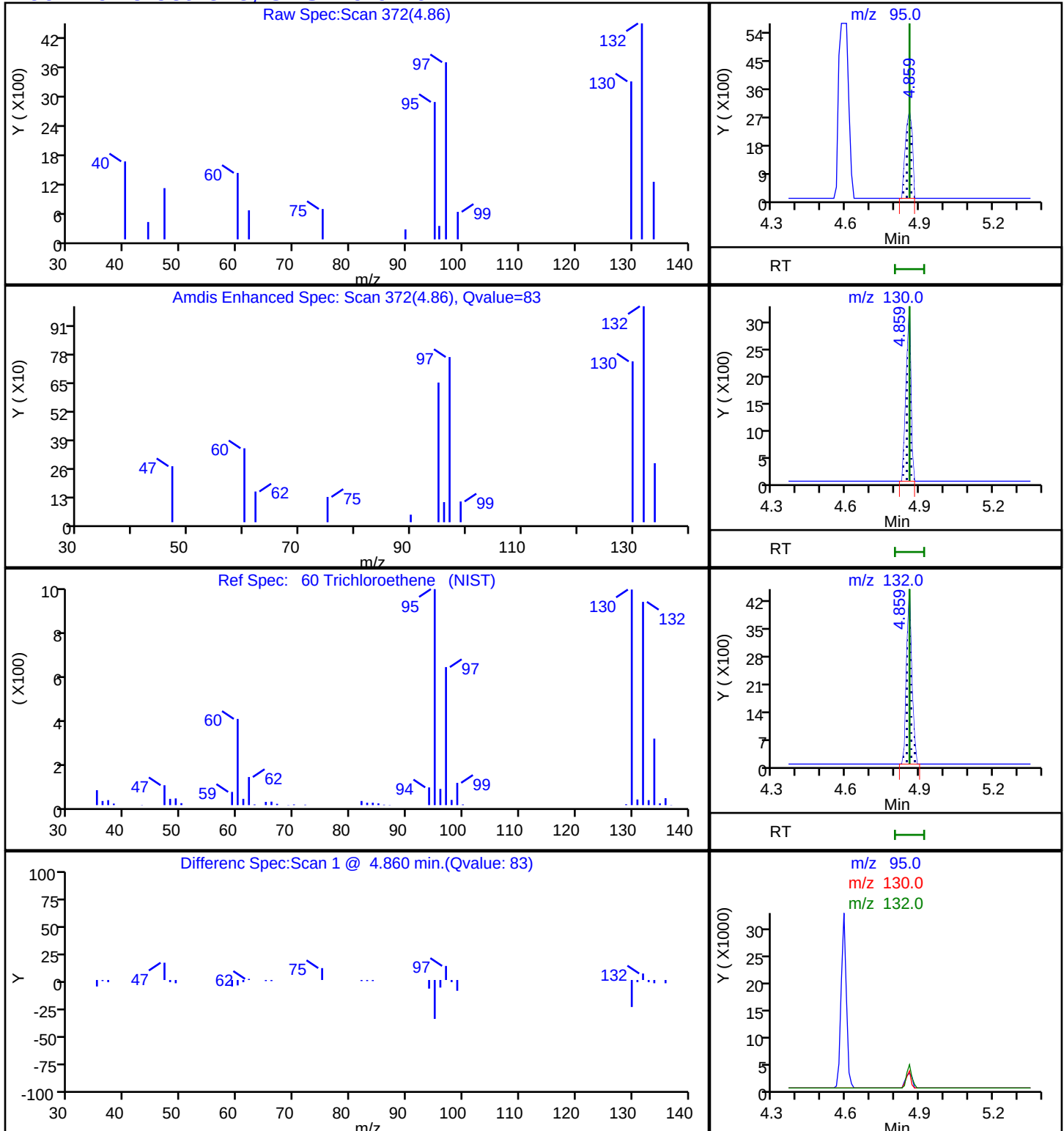
Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>EW-16</u>	Lab Sample ID: <u>480-144297-2</u>
Matrix: <u>Water</u>	Lab File ID: <u>P37837.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/25/2018 15:45</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/06/2018 02:55</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1000</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443770</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1000	820
79-34-5	1,1,2,2-Tetrachloroethane	ND		1000	210
79-00-5	1,1,2-Trichloroethane	ND		1000	230
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1000	310
75-34-3	1,1-Dichloroethane	ND		1000	380
75-35-4	1,1-Dichloroethene	370	J	1000	290
120-82-1	1,2,4-Trichlorobenzene	ND		1000	410
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1000	390
95-50-1	1,2-Dichlorobenzene	ND		1000	790
107-06-2	1,2-Dichloroethane	ND		1000	210
78-87-5	1,2-Dichloropropane	ND		1000	720
541-73-1	1,3-Dichlorobenzene	ND		1000	780
106-46-7	1,4-Dichlorobenzene	ND		1000	840
78-93-3	2-Butanone (MEK)	ND		10000	1300
591-78-6	2-Hexanone	ND		5000	1200
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5000	2100
67-64-1	Acetone	ND		10000	3000
71-43-2	Benzene	ND		1000	410
75-27-4	Bromodichloromethane	ND		1000	390
75-25-2	Bromoform	ND		1000	260
74-83-9	Bromomethane	ND		1000	690
75-15-0	Carbon disulfide	ND		1000	190
56-23-5	Carbon tetrachloride	ND		1000	270
108-90-7	Chlorobenzene	ND		1000	750
124-48-1	Dibromochloromethane	ND		1000	320
75-00-3	Chloroethane	ND		1000	320
67-66-3	Chloroform	ND		1000	340
74-87-3	Chloromethane	ND		1000	350
156-59-2	cis-1,2-Dichloroethene	130000	E	1000	810
10061-01-5	cis-1,3-Dichloropropene	ND		1000	360
110-82-7	Cyclohexane	ND		1000	180
75-71-8	Dichlorodifluoromethane	ND		1000	680
100-41-4	Ethylbenzene	ND		1000	740
106-93-4	1,2-Dibromoethane	ND		1000	730
98-82-8	Isopropylbenzene	ND		1000	790

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: EW-16 Lab Sample ID: 480-144297-2
 Matrix: Water Lab File ID: P37837.D
 Analysis Method: 8260C Date Collected: 10/25/2018 15:45
 Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 02:55
 Soil Aliquot Vol: _____ Dilution Factor: 1000
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2500	1300
1634-04-4	Methyl tert-butyl ether	ND		1000	160
108-87-2	Methylcyclohexane	ND		1000	160
75-09-2	Methylene Chloride	ND		1000	440
100-42-5	Styrene	ND		1000	730
127-18-4	Tetrachloroethene	ND		1000	360
108-88-3	Toluene	ND		1000	510
156-60-5	trans-1,2-Dichloroethene	1200		1000	900
10061-02-6	trans-1,3-Dichloropropene	ND		1000	370
79-01-6	Trichloroethene	58000		1000	460
75-69-4	Trichlorofluoromethane	ND		1000	880
75-01-4	Vinyl chloride	8100		1000	900
1330-20-7	Xylenes, Total	ND		2000	660

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		77-120
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37837.D
 Lims ID: 480-144297-B-2
 Client ID: EW-16
 Sample Type: Client
 Inject. Date: 06-Nov-2018 02:55:30 ALS Bottle#: 12 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1000.0000
 Sample Info: 480-144297-B-2
 Misc. Info.: 480-0076157-031
 Operator ID: RB Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 14:50:05 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 14:50:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	235738	25.0	
* 2 Chlorobenzene-d5	82	14.284	14.284	0.000	86	462420	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	503181	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.545	9.539	0.006	94	308011	22.6	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.995	0.000	0	179452	22.4	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.319	0.006	93	1055106	24.3	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	96	378246	24.2	
10 Dichlorodifluoromethane	85		4.252				ND	
11 Chloromethane	50		4.666				ND	
17 Vinyl chloride	62	4.855	4.855	0.000	98	216205	8.11	
12 Bromomethane	94		5.481				ND	
13 Chloroethane	64		5.615				ND	
14 Trichlorofluoromethane	101		5.956				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.625				ND	
25 1,1-Dichloroethene	96	6.729	6.722	0.007	34	5024	0.3691	
24 Acetone	43		6.807				ND	
27 Carbon disulfide	76		7.118				ND	U
30 Methyl acetate	43		7.172				ND	
31 Methylene Chloride	84		7.391				ND	
32 Methyl tert-butyl ether	73		7.604				ND	
35 trans-1,2-Dichloroethene	96	7.696	7.696	0.000	97	18076	1.24	
40 1,1-Dichloroethane	63		8.249				ND	
44 2-Butanone (MEK)	43		8.931				ND	
43 cis-1,2-Dichloroethene	96	8.961	8.955	0.000	81	2241035	132.8	E
49 Chloroform	83		9.326				ND	
52 1,1,1-Trichloroethane	97		9.557				ND	
54 Cyclohexane	56		9.594				ND	
55 Carbon tetrachloride	117		9.752				ND	
57 Benzene	78		10.032				ND	
60 1,2-Dichloroethane	62		10.087				ND	
62 Trichloroethene	95	10.786	10.786	0.000	95	853428	57.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		10.987				ND	
63 1,2-Dichloropropane	63		11.127				ND	
70 Dichlorobromomethane	83		11.461				ND	
73 cis-1,3-Dichloropropene	75		11.997				ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100				ND	
76 Toluene	92		12.417				ND	U
78 trans-1,3-Dichloropropene	75		12.709				ND	
79 1,1,2-Trichloroethane	83		12.994				ND	
80 Tetrachloroethene	166		13.147				ND	
83 2-Hexanone	43		13.183				ND	
81 Chlorodibromomethane	129		13.572				ND	
85 Ethylene Dibromide	107		13.767				ND	
87 Chlorobenzene	112		14.327				ND	
89 Ethylbenzene	91		14.375				ND	
90 m-Xylene & p-Xylene	106		14.509				ND	
93 o-Xylene	106		15.057				ND	U
94 Styrene	104		15.087				ND	
92 Bromoform	173		15.470				ND	
95 Isopropylbenzene	105		15.489				ND	
97 1,1,2,2-Tetrachloroethane	83		15.957				ND	
110 1,3-Dichlorobenzene	146		17.174				ND	
111 1,4-Dichlorobenzene	146		17.277				ND	U
116 1,2-Dichlorobenzene	146		17.776				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.810				ND	
119 1,2,4-Trichlorobenzene	180		19.911				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

U - Marked Undetected

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37837.D

Injection Date: 06-Nov-2018 02:55:30

Instrument ID: HP5973P

Operator ID: RB

Lims ID: 480-144297-B-2

Lab Sample ID: 480-144297-2

Worklist Smp#: 31

Client ID: EW-16

Purge Vol: 5.000 mL

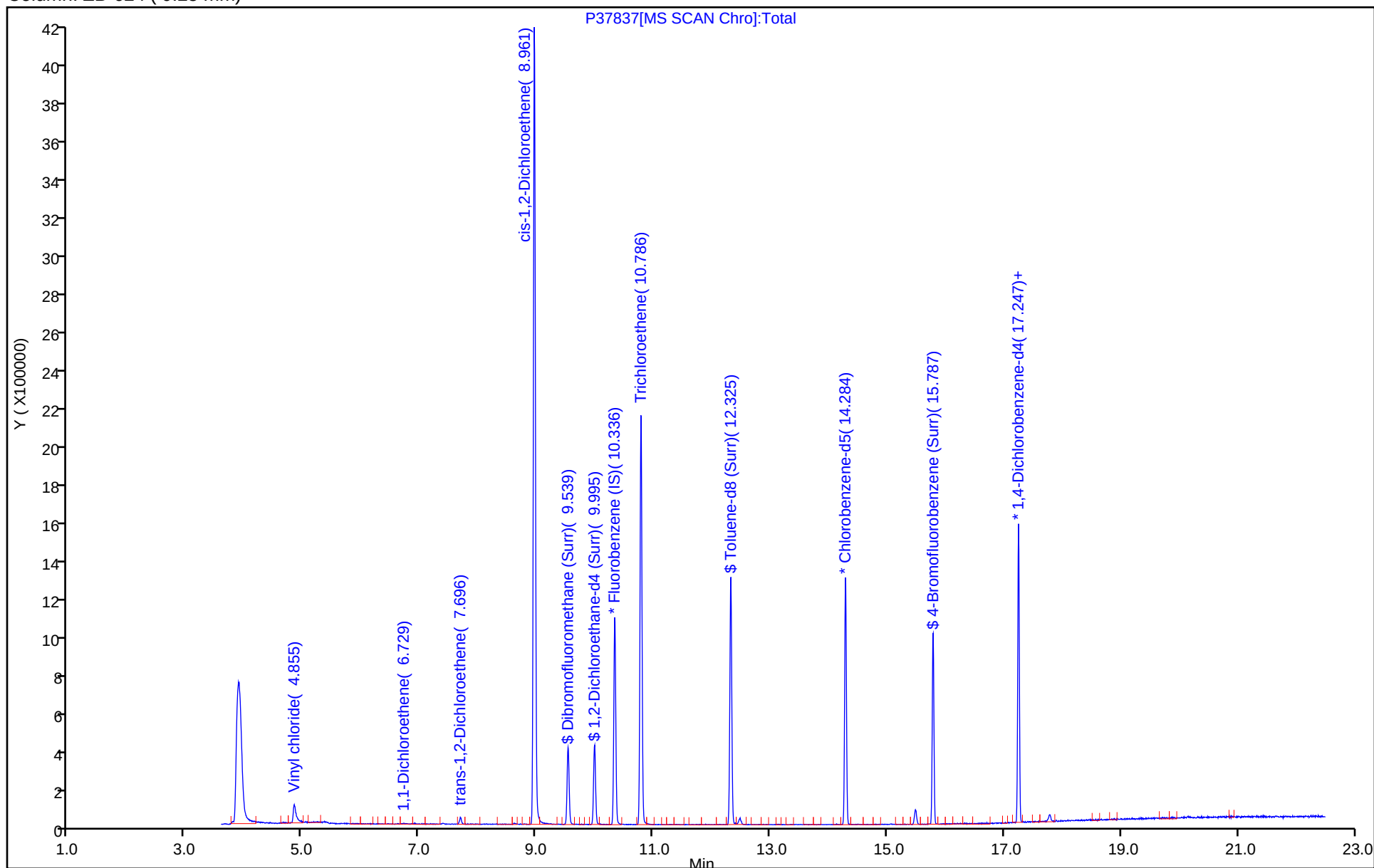
Dil. Factor: 1000.0000

ALS Bottle#: 12

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37837.D

Injection Date: 06-Nov-2018 02:55:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RB

ALS Bottle#: 12

Worklist Smp#: 31

Purge Vol: 5.000 mL

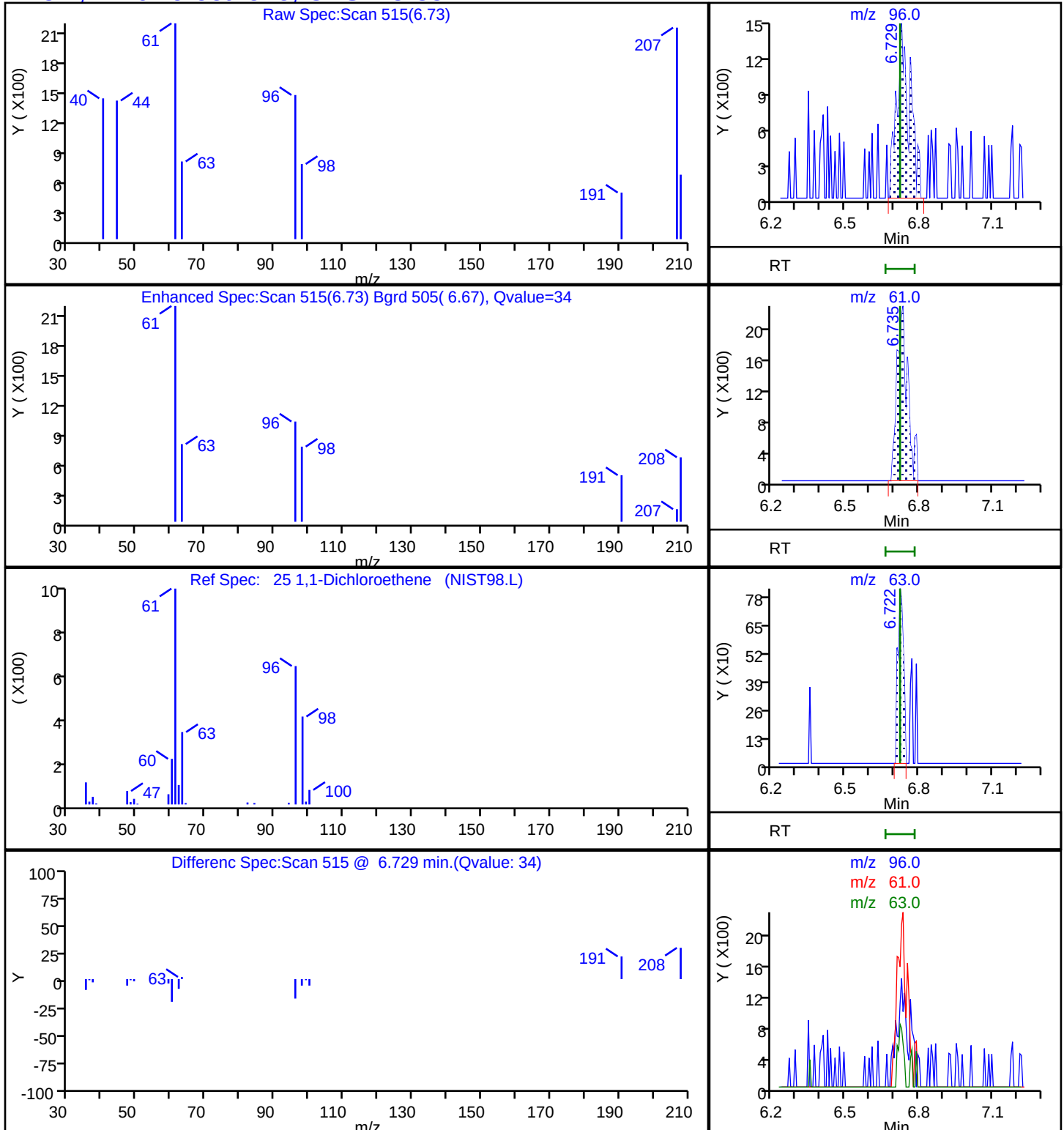
Dil. Factor: 1000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

25 1,1-Dichloroethene, CAS: 75-35-4

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37837.D

Injection Date: 06-Nov-2018 02:55:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RB

ALS Bottle#: 12

Worklist Smp#: 31

Purge Vol: 5.000 mL

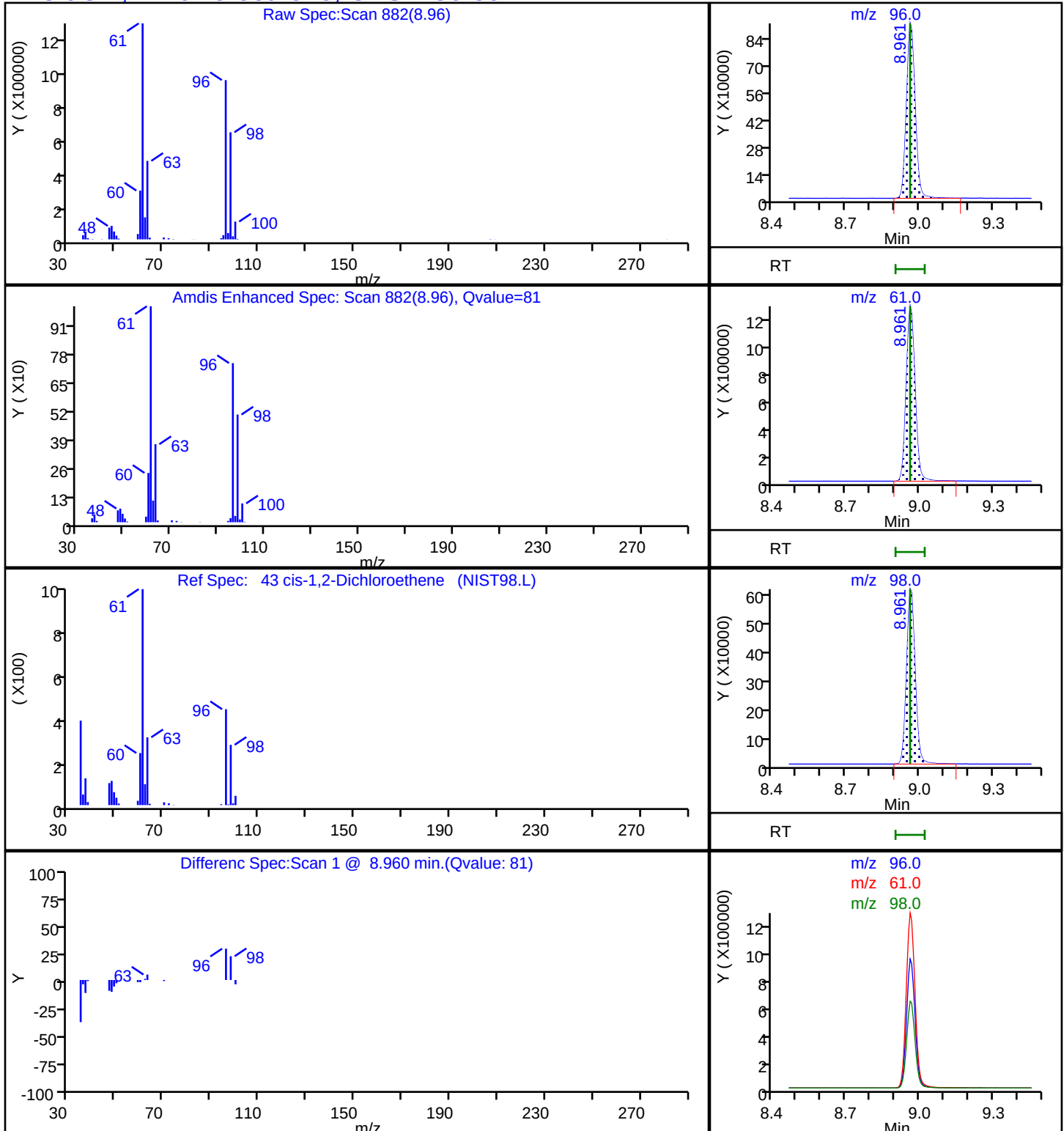
Dil. Factor: 1000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37837.D

Injection Date: 06-Nov-2018 02:55:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RB

ALS Bottle#: 12

Worklist Smp#: 31

Purge Vol: 5.000 mL

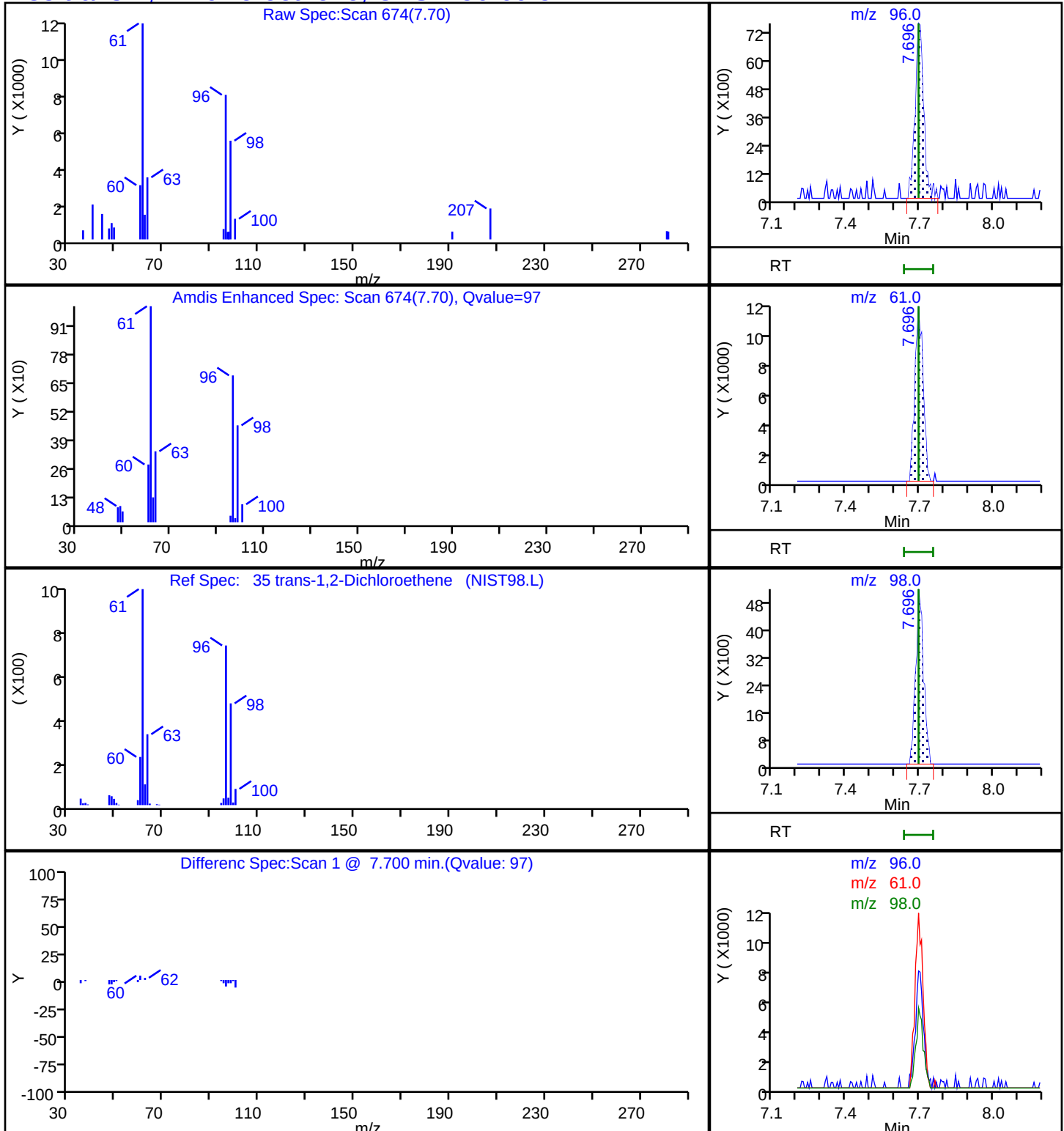
Dil. Factor: 1000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

35 trans-1,2-Dichloroethene, CAS: 156-60-5

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37837.D

Injection Date: 06-Nov-2018 02:55:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RB

ALS Bottle#: 12

Worklist Smp#: 31

Purge Vol: 5.000 mL

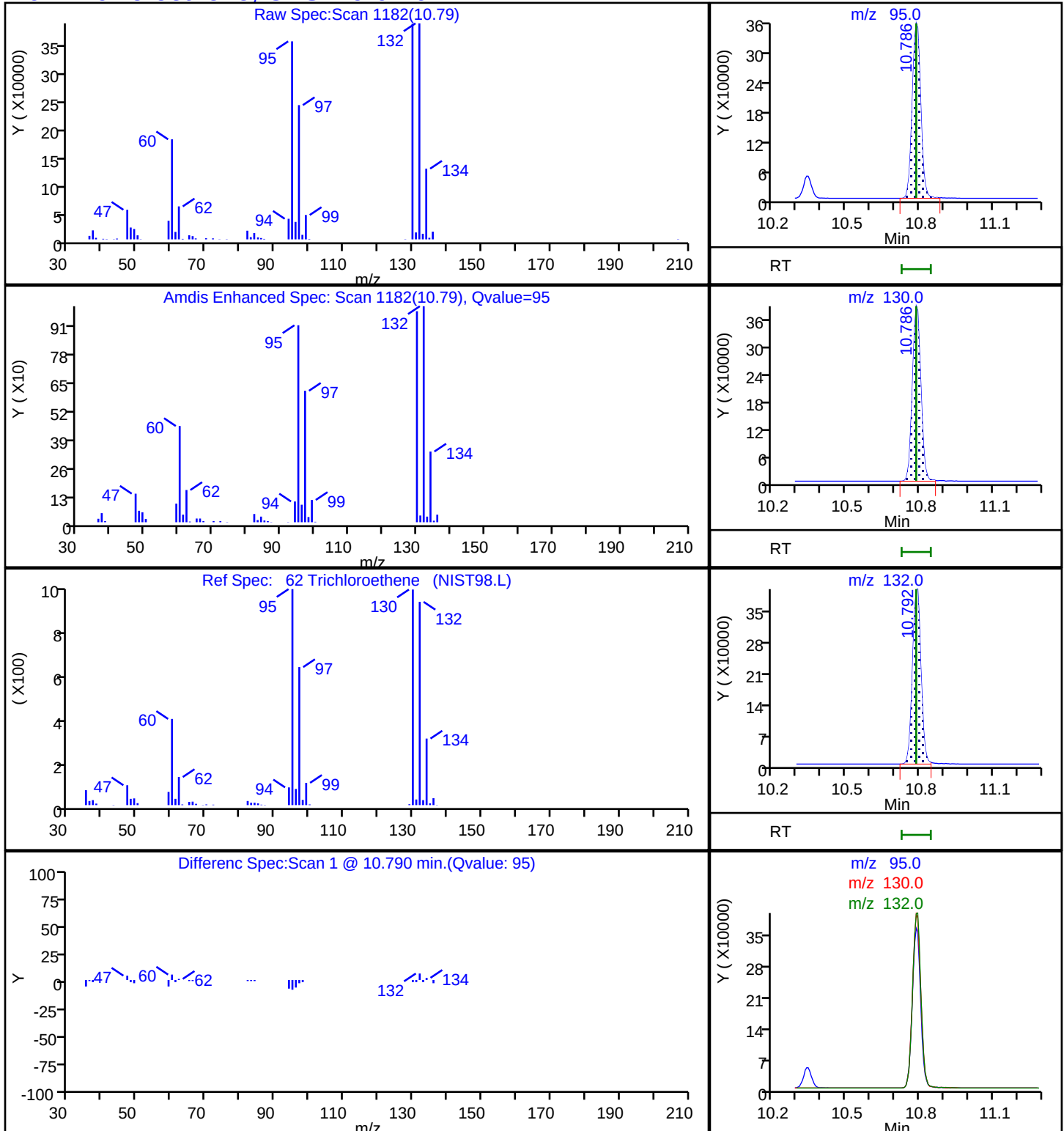
Dil. Factor: 1000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

62 Trichloroethene, CAS: 79-01-6

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37837.D

Injection Date: 06-Nov-2018 02:55:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RB

ALS Bottle#: 12

Worklist Smp#: 31

Purge Vol: 5.000 mL

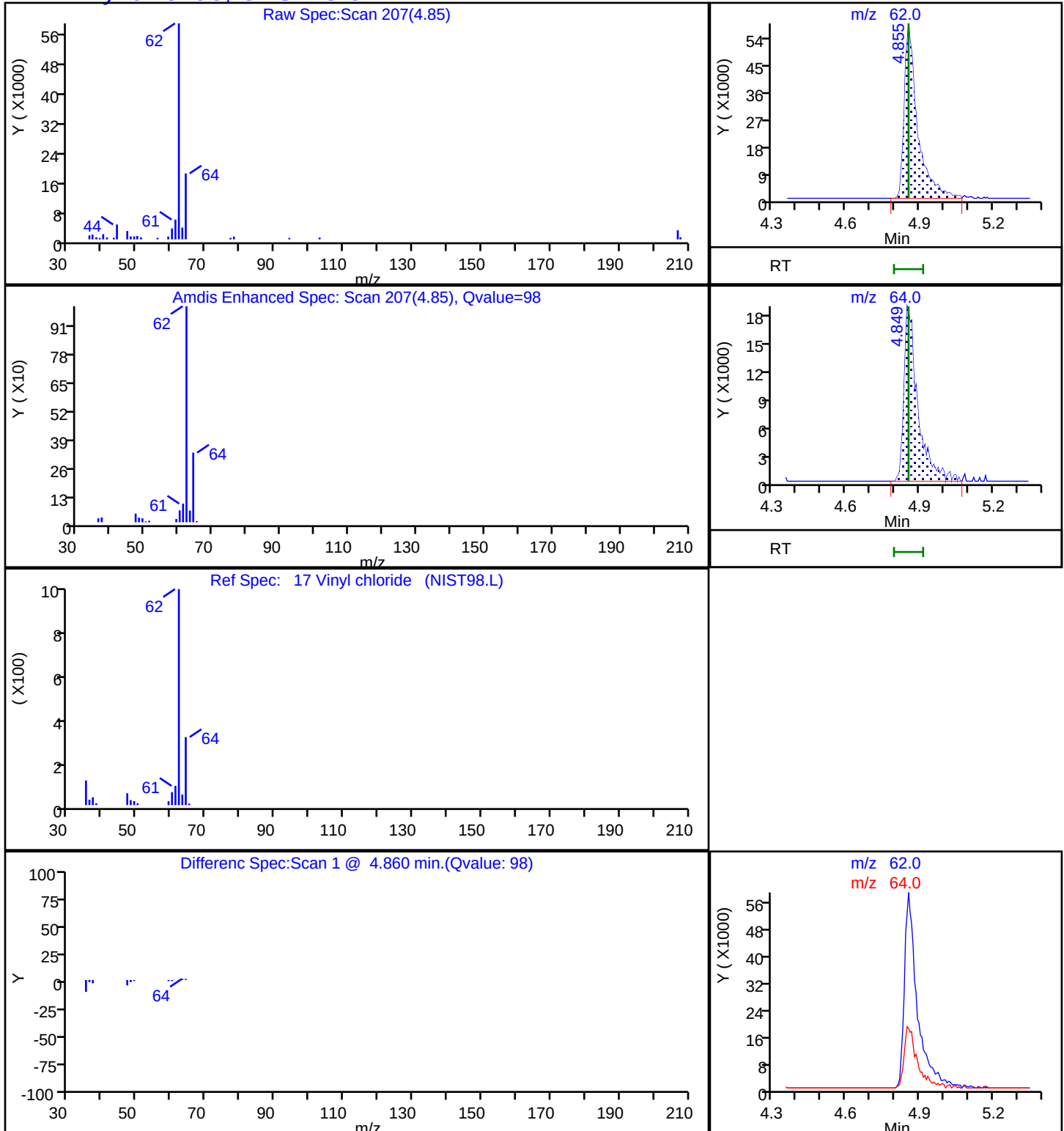
Dil. Factor: 1000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

17 Vinyl chloride, CAS: 75-01-4

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37837.D

Injection Date: 06-Nov-2018 02:55:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RB

ALS Bottle#: 12 Worklist Smp#: 31

Purge Vol: 5.000 mL

Dil. Factor: 1000.0000

Method: P-8260H2O

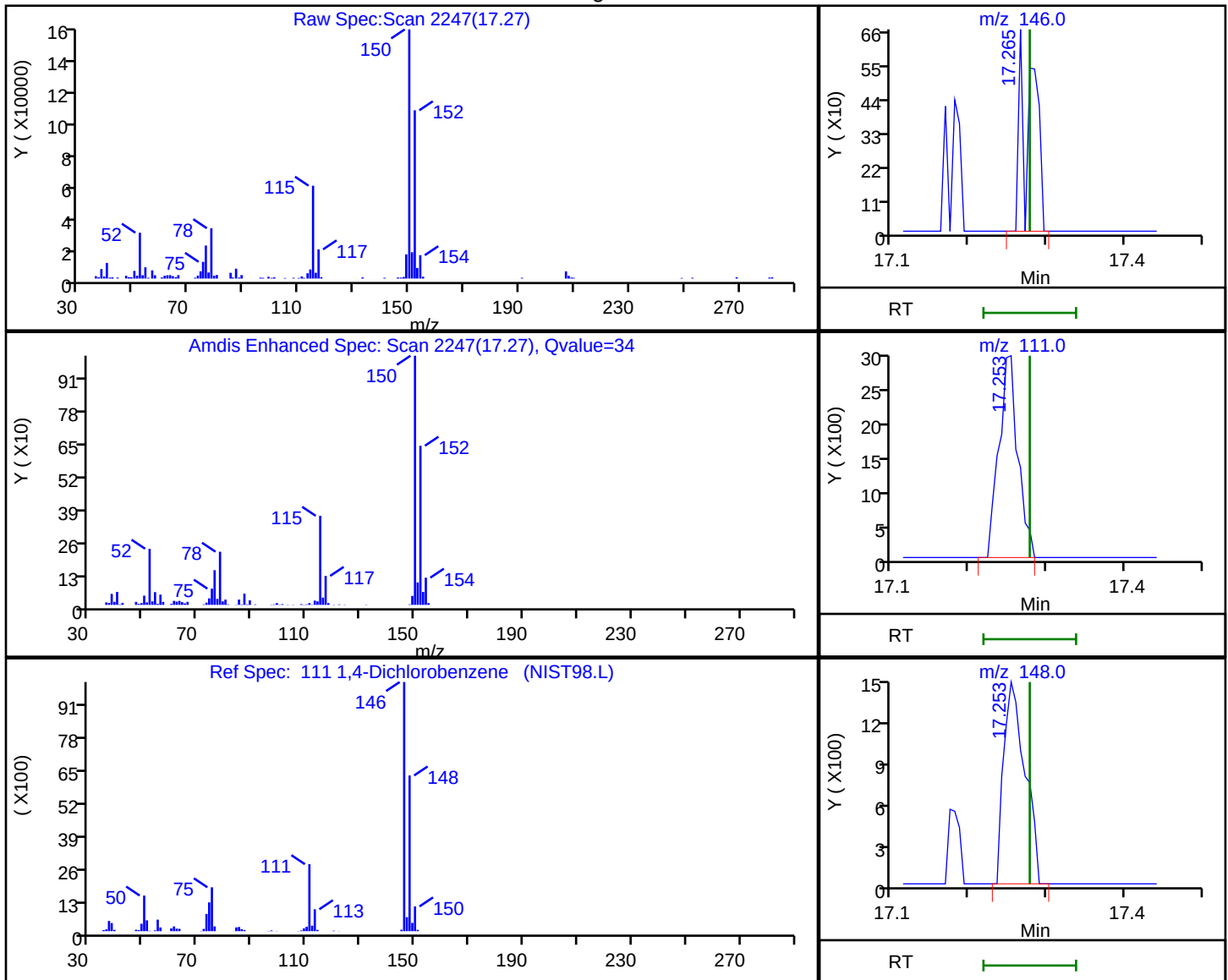
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

111 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
17.27	146.00	781	0.023193
17.25	111.00	4972	
17.25	148.00	2831	

Reviewer: farrellr, 06-Nov-2018 14:49:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\37837.D

Injection Date: 06-Nov-2018 02:55:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RB

ALS Bottle#: 12 Worklist Smp#: 31

Purge Vol: 5.000 mL

Dil. Factor: 1000.0000

Method: P-8260H2O

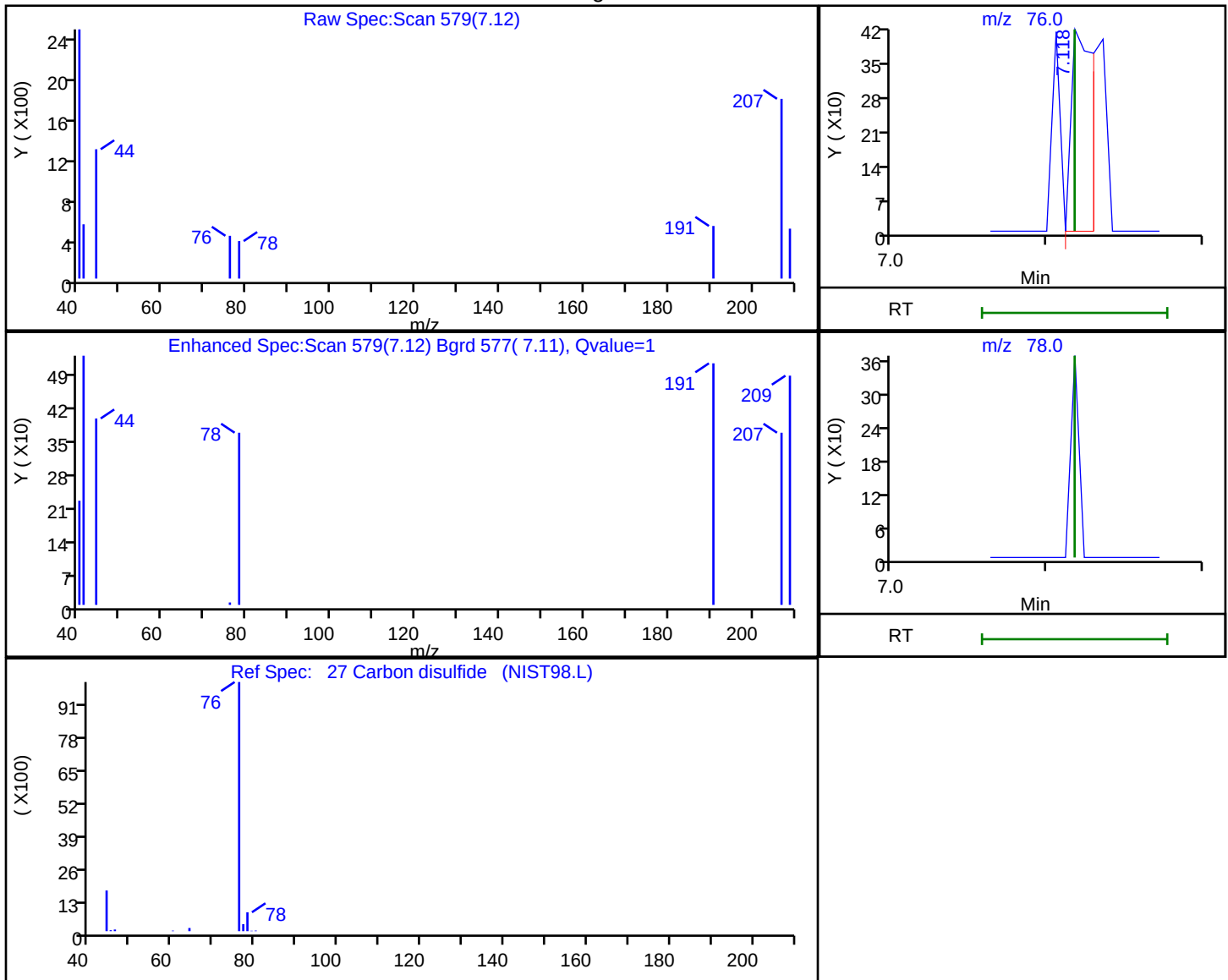
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
7.12	76.00	418	0.010361
7.12	78.00	0	

Reviewer: farrellr, 06-Nov-2018 14:49:11

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37837.D

Injection Date: 06-Nov-2018 02:55:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RB

ALS Bottle#: 12 Worklist Smp#: 31

Purge Vol: 5.000 mL

Dil. Factor: 1000.0000

Method: P-8260H2O

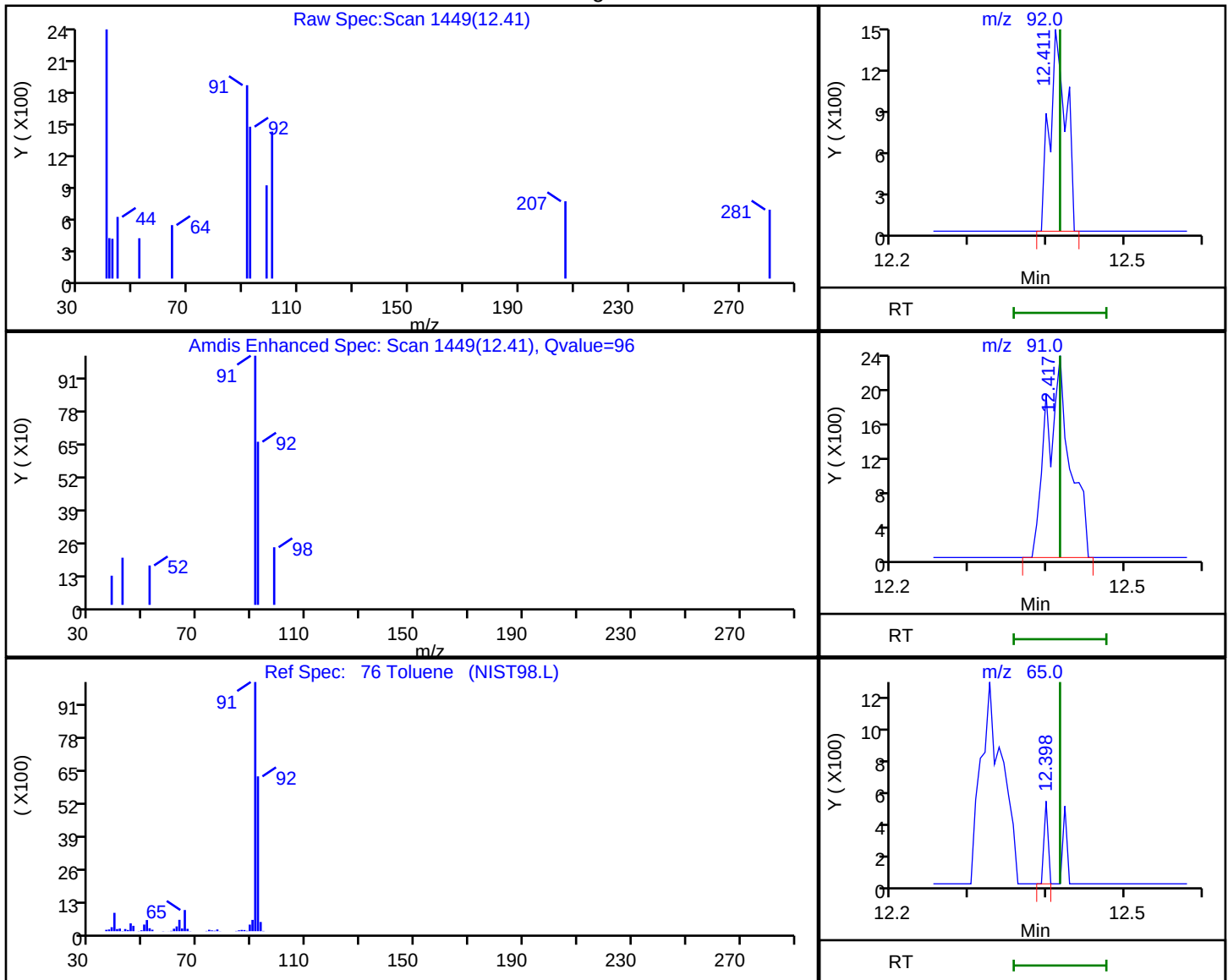
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
12.41	92.00	2042	0.060749
12.42	91.00	4872	
12.40	65.00	183	

Reviewer: farrellr, 06-Nov-2018 14:49:29

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37837.D

Injection Date: 06-Nov-2018 02:55:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RB

ALS Bottle#: 12 Worklist Smp#: 31

Purge Vol: 5.000 mL

Dil. Factor: 1000.0000

Method: P-8260H2O

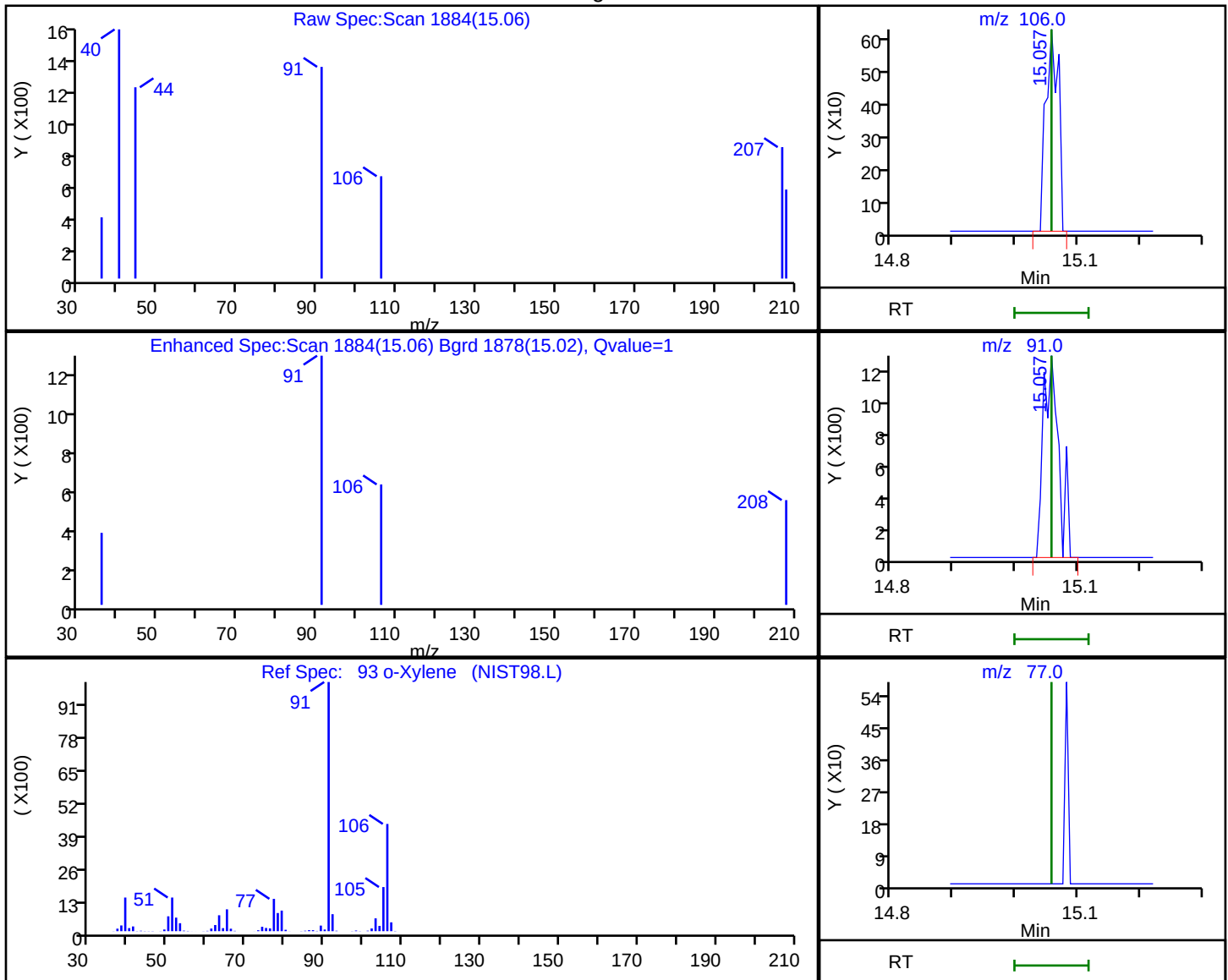
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

93 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
15.06	106.00	875	0.035075
15.06	91.00	2226	
15.06	105.00	183	
15.06	77.00	0	

Reviewer: farrellr, 06-Nov-2018 14:49:55

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>EW-16 DL</u>	Lab Sample ID: <u>480-144297-2 DL</u>
Matrix: <u>Water</u>	Lab File ID: <u>P37858.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/25/2018 15:45</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/06/2018 12:26</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>2000</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443801</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		2000	1600
79-34-5	1,1,2,2-Tetrachloroethane	ND		2000	420
79-00-5	1,1,2-Trichloroethane	ND		2000	460
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2000	620
75-34-3	1,1-Dichloroethane	ND		2000	760
75-35-4	1,1-Dichloroethene	ND		2000	580
120-82-1	1,2,4-Trichlorobenzene	ND		2000	820
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2000	780
95-50-1	1,2-Dichlorobenzene	ND		2000	1600
107-06-2	1,2-Dichloroethane	ND		2000	420
78-87-5	1,2-Dichloropropane	ND		2000	1400
541-73-1	1,3-Dichlorobenzene	ND		2000	1600
106-46-7	1,4-Dichlorobenzene	ND		2000	1700
78-93-3	2-Butanone (MEK)	ND		20000	2600
591-78-6	2-Hexanone	ND		10000	2500
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10000	4200
67-64-1	Acetone	ND		20000	6000
71-43-2	Benzene	ND		2000	820
75-27-4	Bromodichloromethane	ND		2000	780
75-25-2	Bromoform	ND		2000	520
74-83-9	Bromomethane	ND		2000	1400
75-15-0	Carbon disulfide	ND		2000	380
56-23-5	Carbon tetrachloride	ND		2000	540
108-90-7	Chlorobenzene	ND		2000	1500
124-48-1	Dibromochloromethane	ND		2000	640
75-00-3	Chloroethane	ND		2000	640
67-66-3	Chloroform	ND		2000	680
74-87-3	Chloromethane	ND		2000	700
156-59-2	cis-1,2-Dichloroethene	150000		2000	1600
10061-01-5	cis-1,3-Dichloropropene	ND		2000	720
110-82-7	Cyclohexane	ND		2000	360
75-71-8	Dichlorodifluoromethane	ND		2000	1400
100-41-4	Ethylbenzene	ND		2000	1500
106-93-4	1,2-Dibromoethane	ND		2000	1500
98-82-8	Isopropylbenzene	ND		2000	1600

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: EW-16 DL Lab Sample ID: 480-144297-2 DL
 Matrix: Water Lab File ID: P37858.D
 Analysis Method: 8260C Date Collected: 10/25/2018 15:45
 Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 12:26
 Soil Aliquot Vol: _____ Dilution Factor: 2000
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443801 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		5000	2600
1634-04-4	Methyl tert-butyl ether	ND		2000	320
108-87-2	Methylcyclohexane	ND		2000	320
75-09-2	Methylene Chloride	ND		2000	880
100-42-5	Styrene	ND		2000	1500
127-18-4	Tetrachloroethene	ND		2000	720
108-88-3	Toluene	ND		2000	1000
156-60-5	trans-1,2-Dichloroethene	ND		2000	1800
10061-02-6	trans-1,3-Dichloropropene	ND		2000	740
79-01-6	Trichloroethene	62000		2000	920
75-69-4	Trichlorofluoromethane	ND		2000	1800
75-01-4	Vinyl chloride	9400		2000	1800
1330-20-7	Xylenes, Total	ND		4000	1300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		77-120
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
1868-53-7	Dibromofluoromethane (Surr)	92		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37858.D
 Lims ID: 480-144297-C-2
 Client ID: EW-16
 Sample Type: Client
 Inject. Date: 06-Nov-2018 12:26:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 2000.0000
 Sample Info: 480-144297-C-2
 Misc. Info.: 480-0076160-008
 Operator ID: RF Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 16:21:50 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0310

First Level Reviewer: baroner

Date: 06-Nov-2018 16:21:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	235705	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.284	0.006	86	477774	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	520141	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	93	313377	23.0	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.989	0.006	0	185020	23.1	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.331	0.000	93	1093329	24.3	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.794	0.000	95	390162	24.1	
10 Dichlorodifluoromethane	85		4.252				ND	
11 Chloromethane	50		4.666				ND	
17 Vinyl chloride	62	4.861	4.855	0.006	96	125469	4.71	
12 Bromomethane	94		5.475				ND	
13 Chloroethane	64		5.621				ND	
14 Trichlorofluoromethane	101		5.956				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.631				ND	
25 1,1-Dichloroethene	96	6.722	6.722	-0.006	15	2909	0.2138	Ma
24 Acetone	43		6.807				ND	
27 Carbon disulfide	76		7.118				ND	U
30 Methyl acetate	43		7.172				ND	
31 Methylene Chloride	84	7.410	7.410	0.019	91	5141	0.2838	a
32 Methyl tert-butyl ether	73		7.604				ND	
35 trans-1,2-Dichloroethene	96	7.708	7.696	0.012	97	10665	0.7330	
40 1,1-Dichloroethane	63		8.249				ND	
44 2-Butanone (MEK)	43		8.931				ND	
43 cis-1,2-Dichloroethene	96	8.967	8.967	0.000	82	1232214	73.0	
49 Chloroform	83		9.326				ND	
52 1,1,1-Trichloroethane	97		9.557				ND	
54 Cyclohexane	56		9.600				ND	
55 Carbon tetrachloride	117		9.752				ND	
57 Benzene	78		10.038				ND	
60 1,2-Dichloroethane	62		10.086				ND	
62 Trichloroethene	95	10.786	10.786	0.000	96	457188	30.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		10.987				ND	
63 1,2-Dichloropropane	63		11.127				ND	
70 Dichlorobromomethane	83		11.461				ND	
73 cis-1,3-Dichloropropene	75		11.997				ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100				ND	
76 Toluene	92		12.416				ND	
78 trans-1,3-Dichloropropene	75		12.708				ND	
79 1,1,2-Trichloroethane	83		13.000				ND	
80 Tetrachloroethene	166		13.140				ND	
83 2-Hexanone	43		13.189				ND	
81 Chlorodibromomethane	129		13.572				ND	
85 Ethylene Dibromide	107		13.773				ND	
87 Chlorobenzene	112		14.327				ND	
89 Ethylbenzene	91		14.375				ND	
90 m-Xylene & p-Xylene	106		14.509				ND	
93 o-Xylene	106		15.057				ND	
94 Styrene	104		15.087				ND	
92 Bromoform	173		15.470				ND	
95 Isopropylbenzene	105		15.489				ND	
97 1,1,2,2-Tetrachloroethane	83		15.963				ND	
110 1,3-Dichlorobenzene	146		17.174				ND	
111 1,4-Dichlorobenzene	146		17.277				ND	
116 1,2-Dichlorobenzene	146		17.776				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.816				ND	
119 1,2,4-Trichlorobenzene	180		19.911				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:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr_00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37858.D

Injection Date: 06-Nov-2018 12:26:30

Instrument ID: HP5973P

Operator ID: RF

Lims ID: 480-144297-C-2

Lab Sample ID: 480-144297-2

Worklist Smp#: 8

Client ID: EW-16

Purge Vol: 5.000 mL

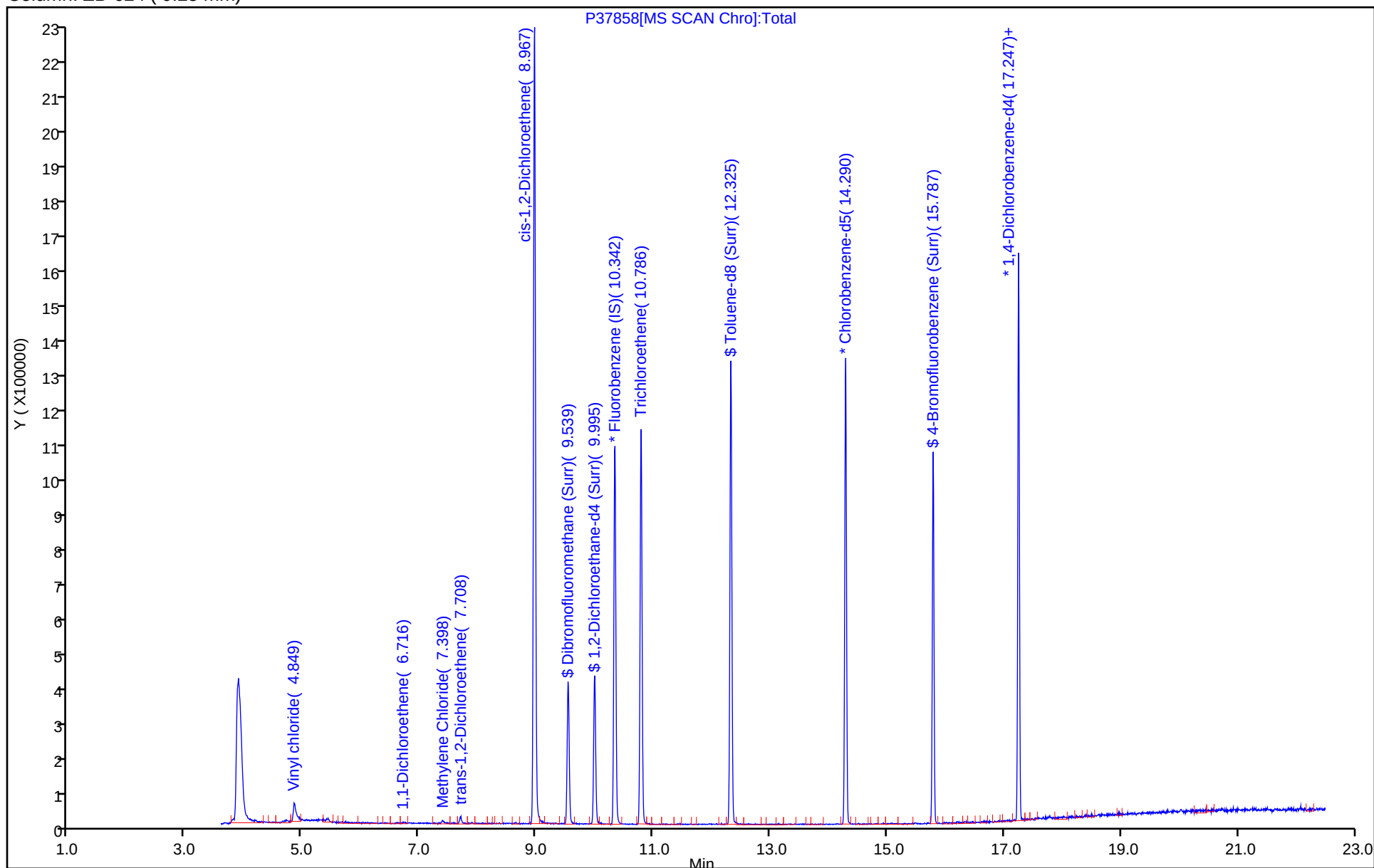
Dil. Factor: 2000.0000

ALS Bottle#: 8

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37858.D

Injection Date: 06-Nov-2018 12:26:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RF

ALS Bottle#: 8

Worklist Smp#: 8

Purge Vol: 5.000 mL

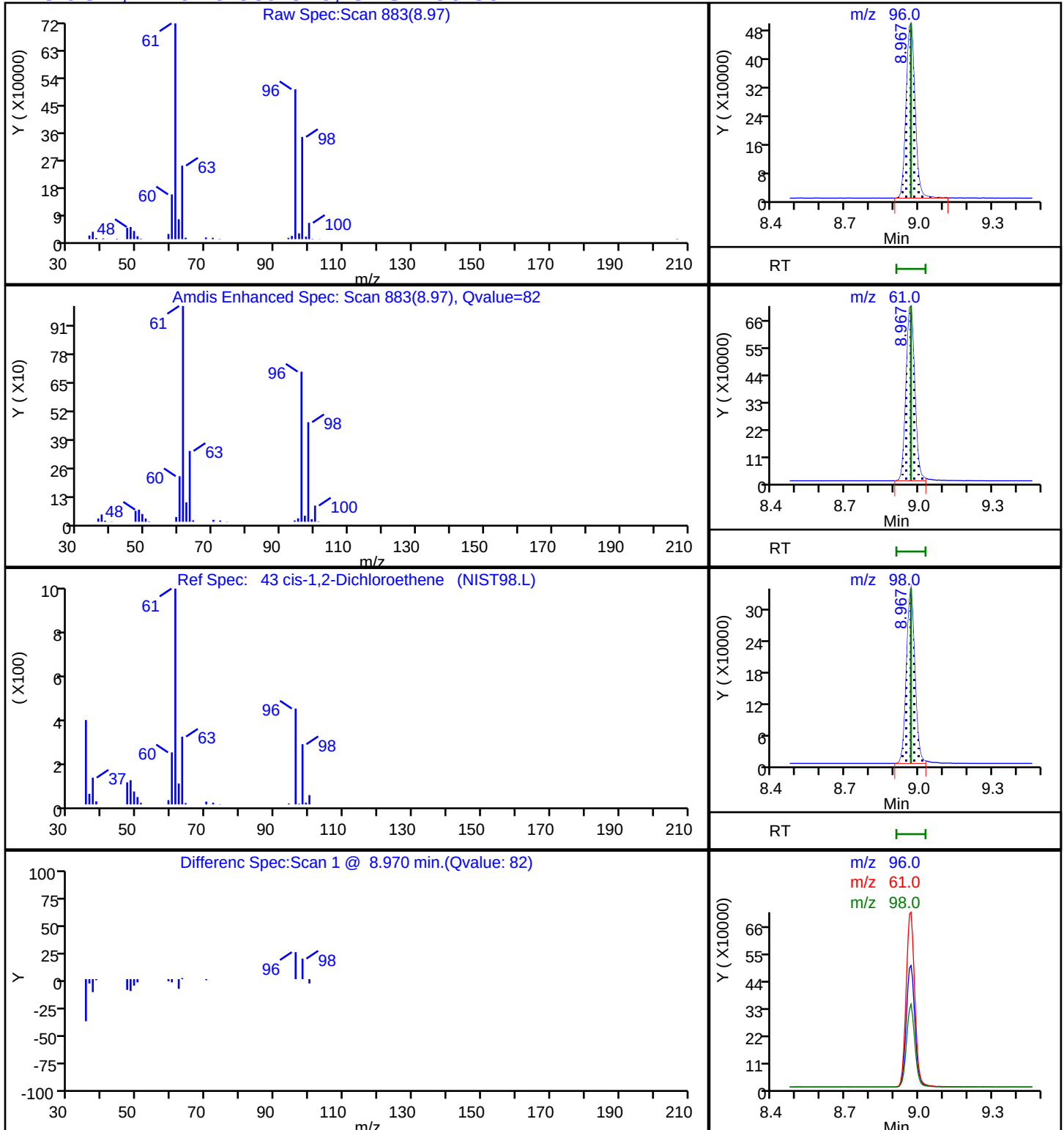
Dil. Factor: 2000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37858.D

Injection Date: 06-Nov-2018 12:26:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RF

ALS Bottle#: 8

Worklist Smp#: 8

Purge Vol: 5.000 mL

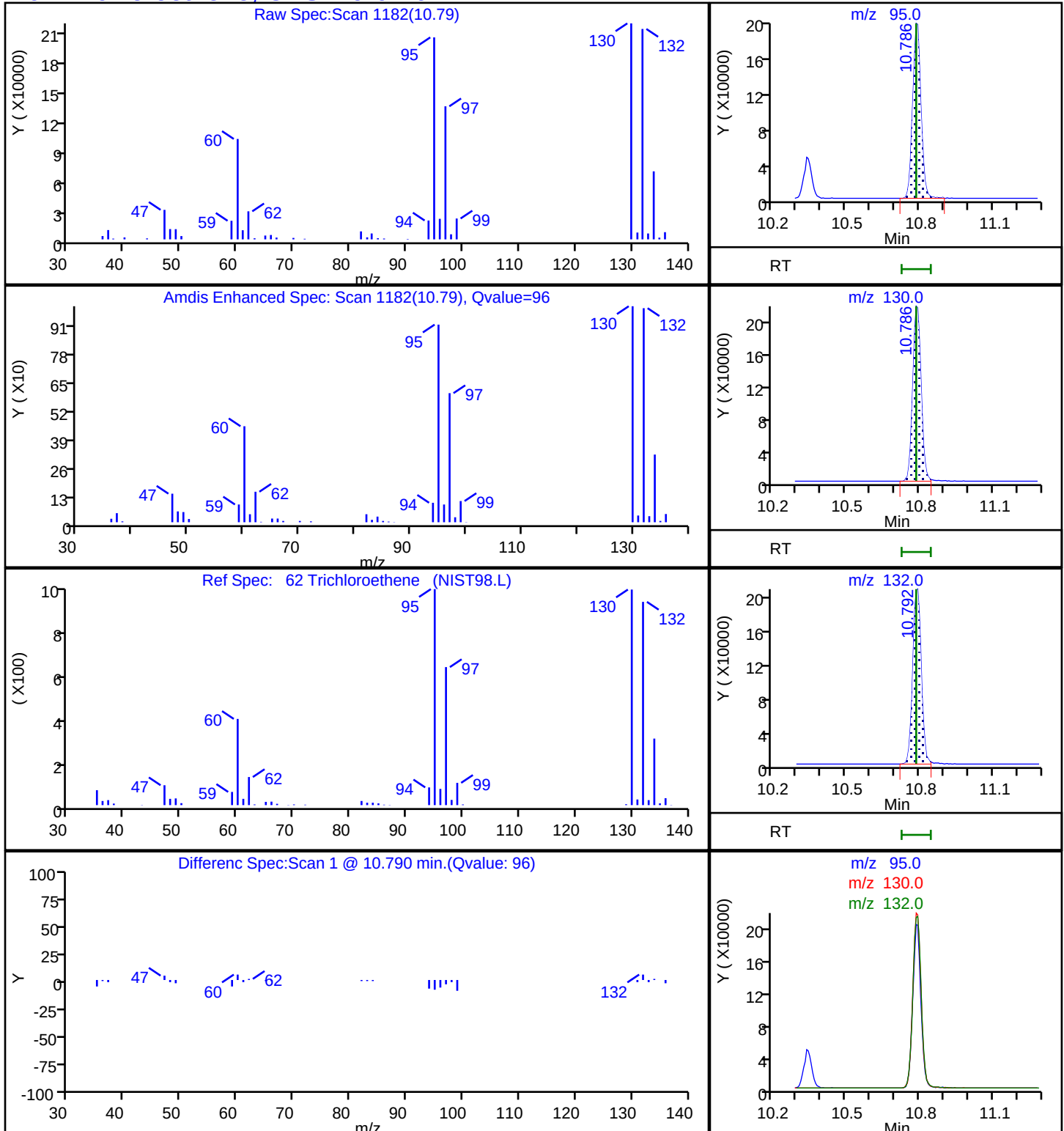
Dil. Factor: 2000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

62 Trichloroethene, CAS: 79-01-6

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37858.D

Instrument ID: HP5973P

Lab Sample ID: 480-144297-2

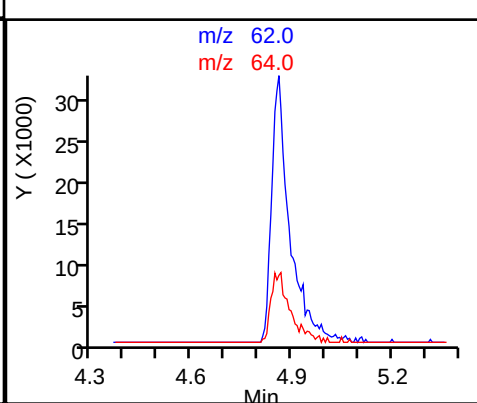
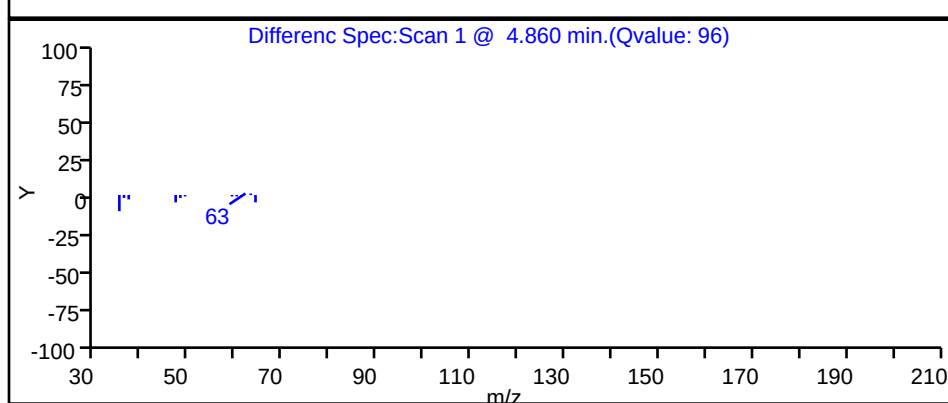
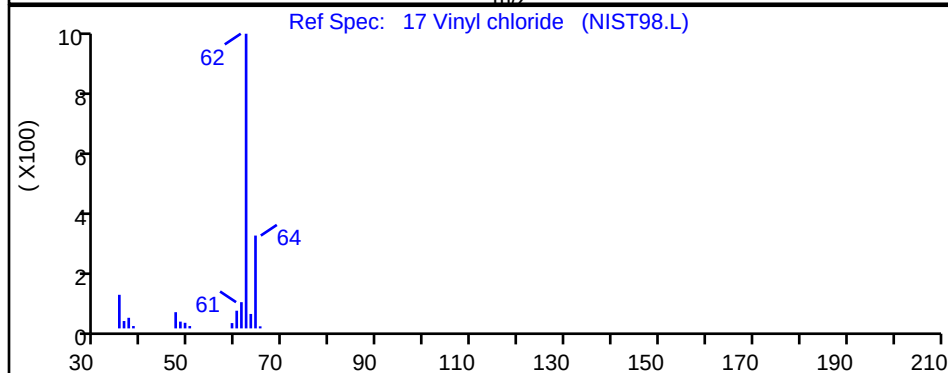
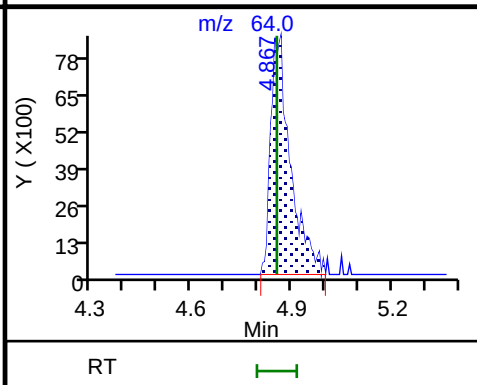
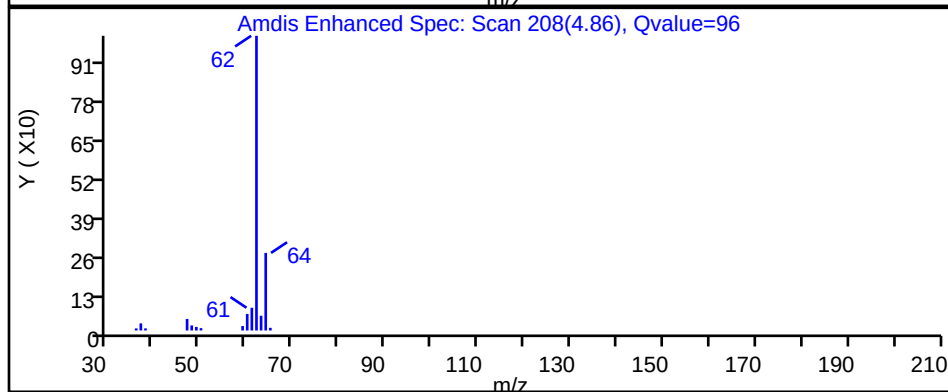
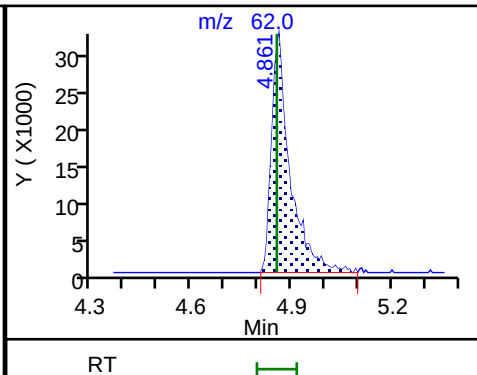
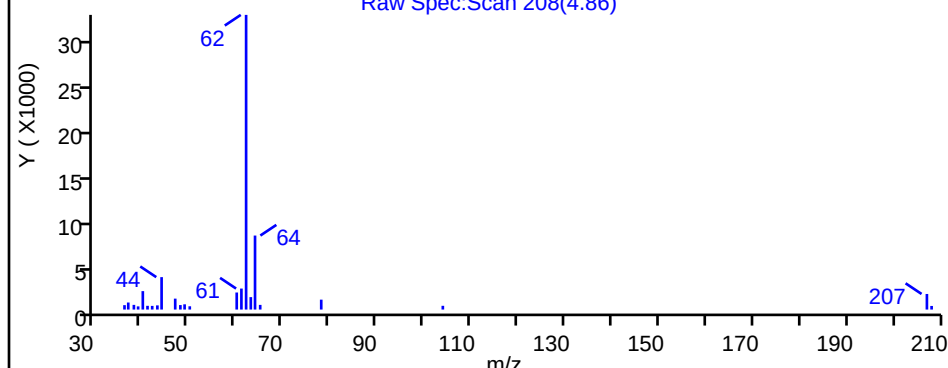
ALS Bottle#: 8 Worklist Smp#: 8

Dil. Factor: 2000.0000

Limit Group: MV - 8260C ICAL

Detector MS SCAN

Raw Spec:Scan 208(4.86)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37858.D

Injection Date: 06-Nov-2018 12:26:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RF

ALS Bottle#: 8 Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 2000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

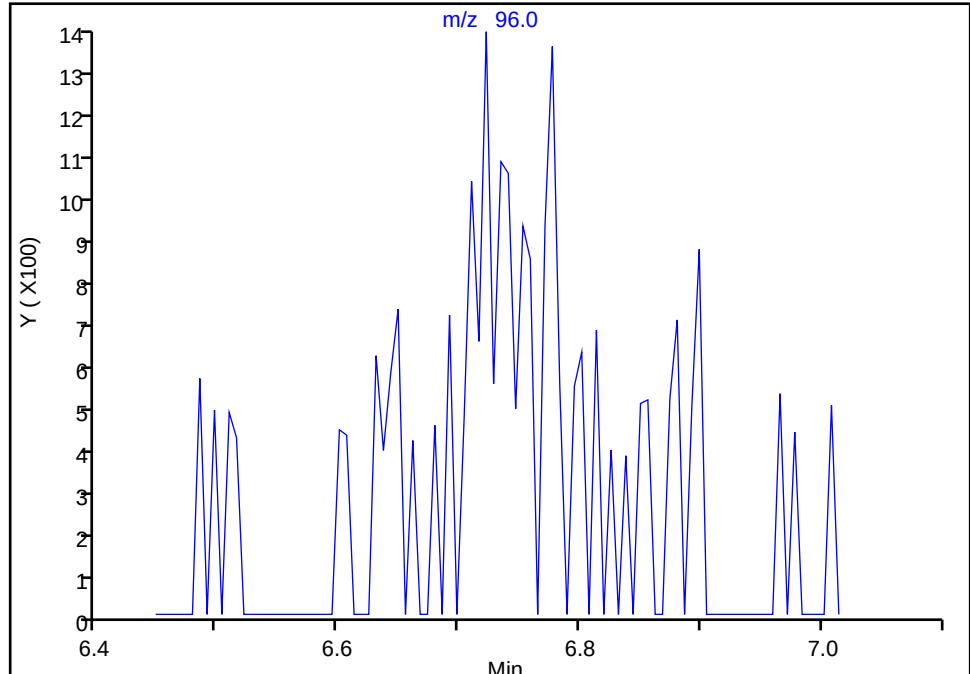
25 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

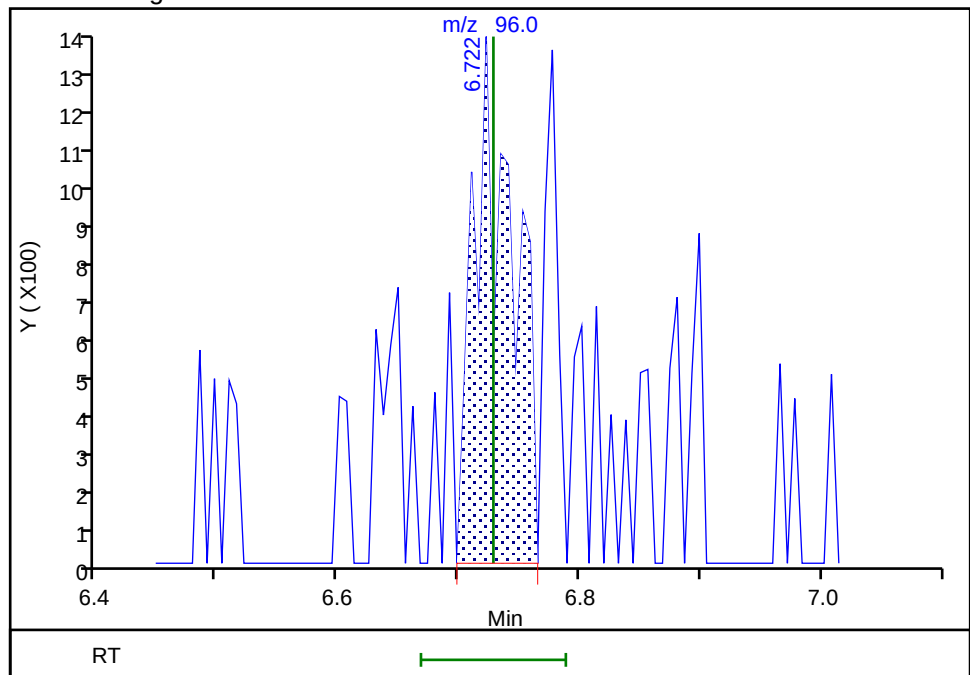
Not Detected

Expected RT: 6.73

Processing Integration Results



Manual Integration Results



RT: 6.72

Area: 2909

Amount: 0.213760

Amount Units: ug/L

Reviewer: baroner, 06-Nov-2018 16:20:56

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\37858.D

Injection Date: 06-Nov-2018 12:26:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RF

ALS Bottle#: 8 Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 2000.0000

Method: P-8260H2O

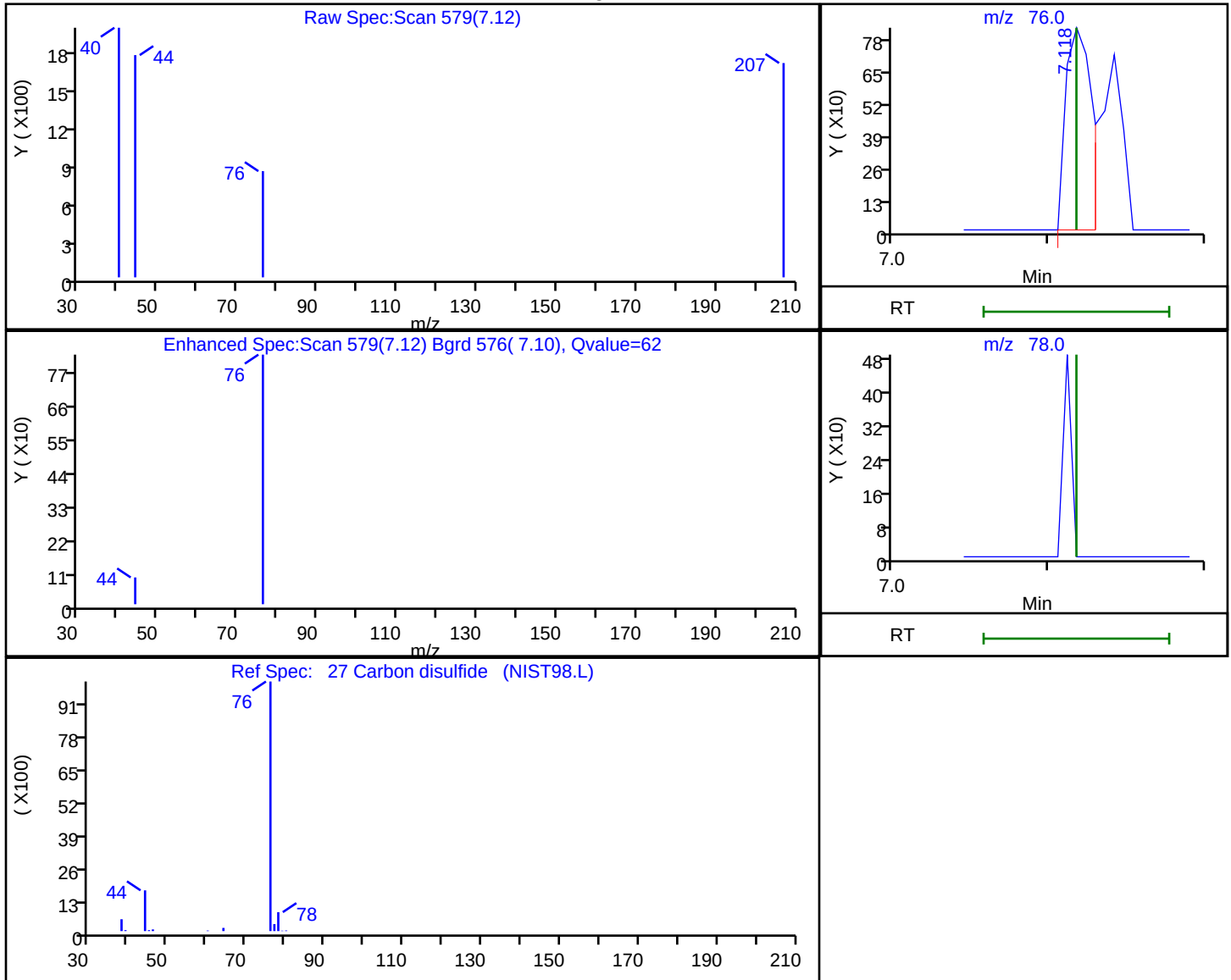
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
7.12	76.00	972	0.024096
7.12	78.00	0	

Reviewer: baroner, 06-Nov-2018 16:21:04

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37858.D

Injection Date: 06-Nov-2018 12:26:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-2

Lab Sample ID: 480-144297-2

Client ID: EW-16

Operator ID: RF

ALS Bottle#: 8 Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 2000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

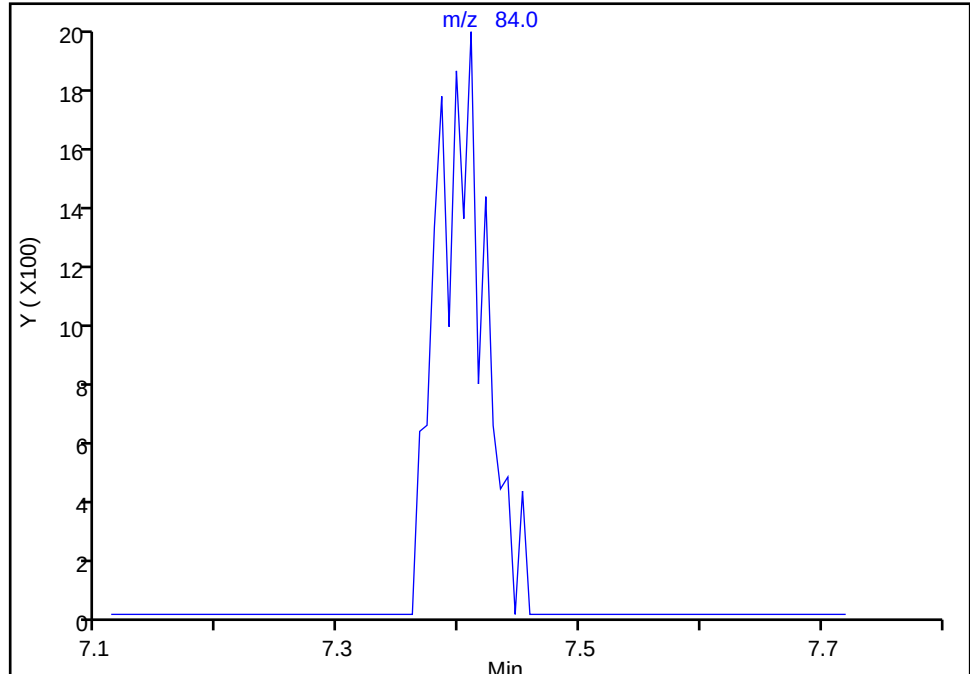
31 Methylene Chloride, CAS: 75-09-2

Signal: 1

Not Detected

Expected RT: 7.39

Processing Integration Results



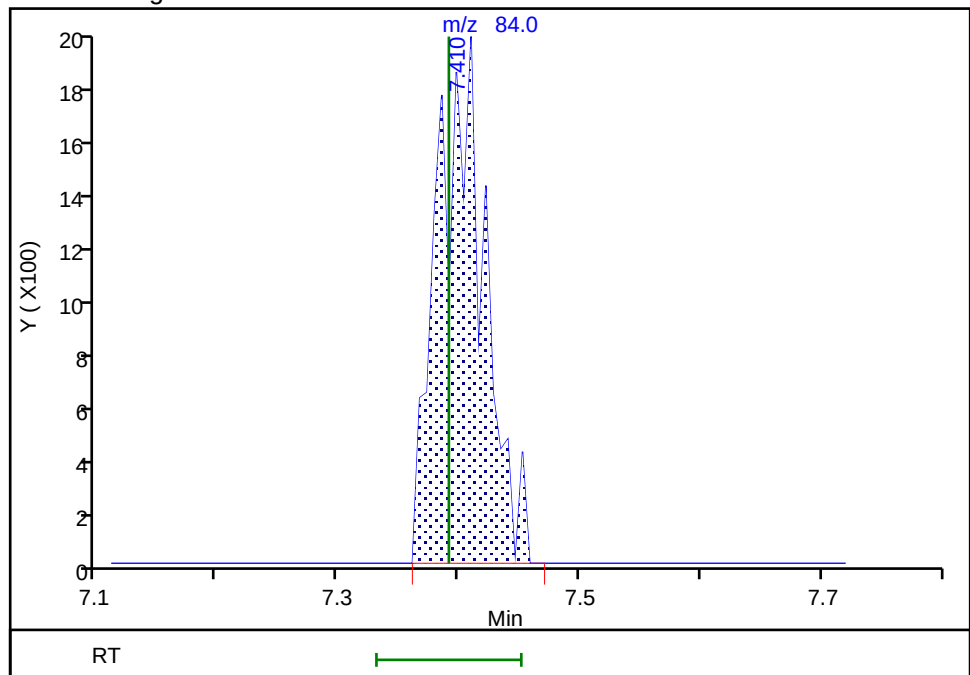
RT: 7.41

Area: 5141

Amount: 0.283786

Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 06-Nov-2018 16:21:08

Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>EW-14</u>	Lab Sample ID: <u>480-144297-3</u>
Matrix: <u>Water</u>	Lab File ID: <u>P37838.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/26/2018 09:45</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/06/2018 03:23</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>400</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443770</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		400	330
79-34-5	1,1,2,2-Tetrachloroethane	ND		400	84
79-00-5	1,1,2-Trichloroethane	ND		400	92
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		400	120
75-34-3	1,1-Dichloroethane	ND		400	150
75-35-4	1,1-Dichloroethene	220	J	400	120
120-82-1	1,2,4-Trichlorobenzene	ND		400	160
96-12-8	1,2-Dibromo-3-Chloropropane	ND		400	160
95-50-1	1,2-Dichlorobenzene	ND		400	320
107-06-2	1,2-Dichloroethane	ND		400	84
78-87-5	1,2-Dichloropropane	ND		400	290
541-73-1	1,3-Dichlorobenzene	ND		400	310
106-46-7	1,4-Dichlorobenzene	ND		400	340
78-93-3	2-Butanone (MEK)	ND		4000	530
591-78-6	2-Hexanone	ND		2000	500
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		2000	840
67-64-1	Acetone	ND		4000	1200
71-43-2	Benzene	ND		400	160
75-27-4	Bromodichloromethane	ND		400	160
75-25-2	Bromoform	ND		400	100
74-83-9	Bromomethane	ND		400	280
75-15-0	Carbon disulfide	ND		400	76
56-23-5	Carbon tetrachloride	ND		400	110
108-90-7	Chlorobenzene	ND		400	300
124-48-1	Dibromochloromethane	ND		400	130
75-00-3	Chloroethane	ND		400	130
67-66-3	Chloroform	ND		400	140
74-87-3	Chloromethane	ND		400	140
156-59-2	cis-1,2-Dichloroethene	120000	E	400	320
10061-01-5	cis-1,3-Dichloropropene	ND		400	140
110-82-7	Cyclohexane	ND		400	72
75-71-8	Dichlorodifluoromethane	ND		400	270
100-41-4	Ethylbenzene	ND		400	300
106-93-4	1,2-Dibromoethane	ND		400	290
98-82-8	Isopropylbenzene	ND		400	320

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>EW-14</u>	Lab Sample ID: <u>480-144297-3</u>
Matrix: <u>Water</u>	Lab File ID: <u>P37838.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/26/2018 09:45</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/06/2018 03:23</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>400</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443770</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		1000	520
1634-04-4	Methyl tert-butyl ether	ND		400	64
108-87-2	Methylcyclohexane	ND		400	64
75-09-2	Methylene Chloride	ND		400	180
100-42-5	Styrene	ND		400	290
127-18-4	Tetrachloroethene	ND		400	140
108-88-3	Toluene	ND		400	200
156-60-5	trans-1,2-Dichloroethene	450		400	360
10061-02-6	trans-1,3-Dichloropropene	ND		400	150
79-01-6	Trichloroethene	410		400	180
75-69-4	Trichlorofluoromethane	ND		400	350
75-01-4	Vinyl chloride	41000	E	400	360
1330-20-7	Xylenes, Total	ND		800	260

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	93		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		77-120
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37838.D
 Lims ID: 480-144297-B-3
 Client ID: EW-14
 Sample Type: Client
 Inject. Date: 06-Nov-2018 03:23:30 ALS Bottle#: 13 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 400.0000
 Sample Info: 480-144297-B-3
 Misc. Info.: 480-0076157-032
 Operator ID: RB Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 14:51:11 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 14:51:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.342	10.336	0.006	98	237320	25.0	
* 2 Chlorobenzene-d5	82	14.284	14.284	0.000	86	476377	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	497661	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	93	310822	22.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.995	0.000	0	179424	22.2	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.319	0.006	93	1039619	23.2	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	95	371380	23.0	
10 Dichlorodifluoromethane	85		4.252				ND	
11 Chloromethane	50		4.666				ND	
17 Vinyl chloride	62	4.855	4.855	0.000	98	2779598	103.6	E
12 Bromomethane	94		5.481				ND	
13 Chloroethane	64		5.615				ND	
14 Trichlorofluoromethane	101		5.956				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.625				ND	
25 1,1-Dichloroethene	96	6.735	6.722	0.013	92	7393	0.5396	
24 Acetone	43		6.807				ND	Ua
27 Carbon disulfide	76		7.118				ND	U
30 Methyl acetate	43		7.172				ND	
31 Methylene Chloride	84		7.391				ND	
32 Methyl tert-butyl ether	73		7.604				ND	
35 trans-1,2-Dichloroethene	96	7.702	7.696	0.006	93	16433	1.12	
40 1,1-Dichloroethane	63		8.249				ND	U
44 2-Butanone (MEK)	43		8.931				ND	
43 cis-1,2-Dichloroethene	96	8.961	8.955	0.000	73	4950640	291.4	E
49 Chloroform	83		9.326				ND	
52 1,1,1-Trichloroethane	97		9.557				ND	
54 Cyclohexane	56		9.594				ND	
55 Carbon tetrachloride	117		9.752				ND	
57 Benzene	78		10.032				ND	
60 1,2-Dichloroethane	62		10.087				ND	
62 Trichloroethene	95	10.786	10.786	0.000	91	15455	1.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		10.987				ND	
63 1,2-Dichloropropane	63		11.127				ND	
70 Dichlorobromomethane	83		11.461				ND	
73 cis-1,3-Dichloropropene	75		11.997				ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100				ND	
76 Toluene	92		12.417				ND	Ua
78 trans-1,3-Dichloropropene	75		12.709				ND	
79 1,1,2-Trichloroethane	83		12.994				ND	
80 Tetrachloroethene	166		13.147				ND	
83 2-Hexanone	43		13.183				ND	
81 Chlorodibromomethane	129		13.572				ND	
85 Ethylene Dibromide	107		13.767				ND	
87 Chlorobenzene	112		14.327				ND	
89 Ethylbenzene	91		14.375				ND	
90 m-Xylene & p-Xylene	106		14.509				ND	
93 o-Xylene	106		15.057				ND	U
94 Styrene	104		15.087				ND	
92 Bromoform	173		15.470				ND	
95 Isopropylbenzene	105		15.489				ND	
97 1,1,2,2-Tetrachloroethane	83		15.957				ND	
110 1,3-Dichlorobenzene	146		17.174				ND	
111 1,4-Dichlorobenzene	146		17.277				ND	
116 1,2-Dichlorobenzene	146		17.776				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.810				ND	
119 1,2,4-Trichlorobenzene	180		19.911				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37838.D

Injection Date: 06-Nov-2018 03:23:30

Instrument ID: HP5973P

Operator ID: RB

Lims ID: 480-144297-B-3

Lab Sample ID: 480-144297-3

Worklist Smp#: 32

Client ID: EW-14

Purge Vol: 5.000 mL

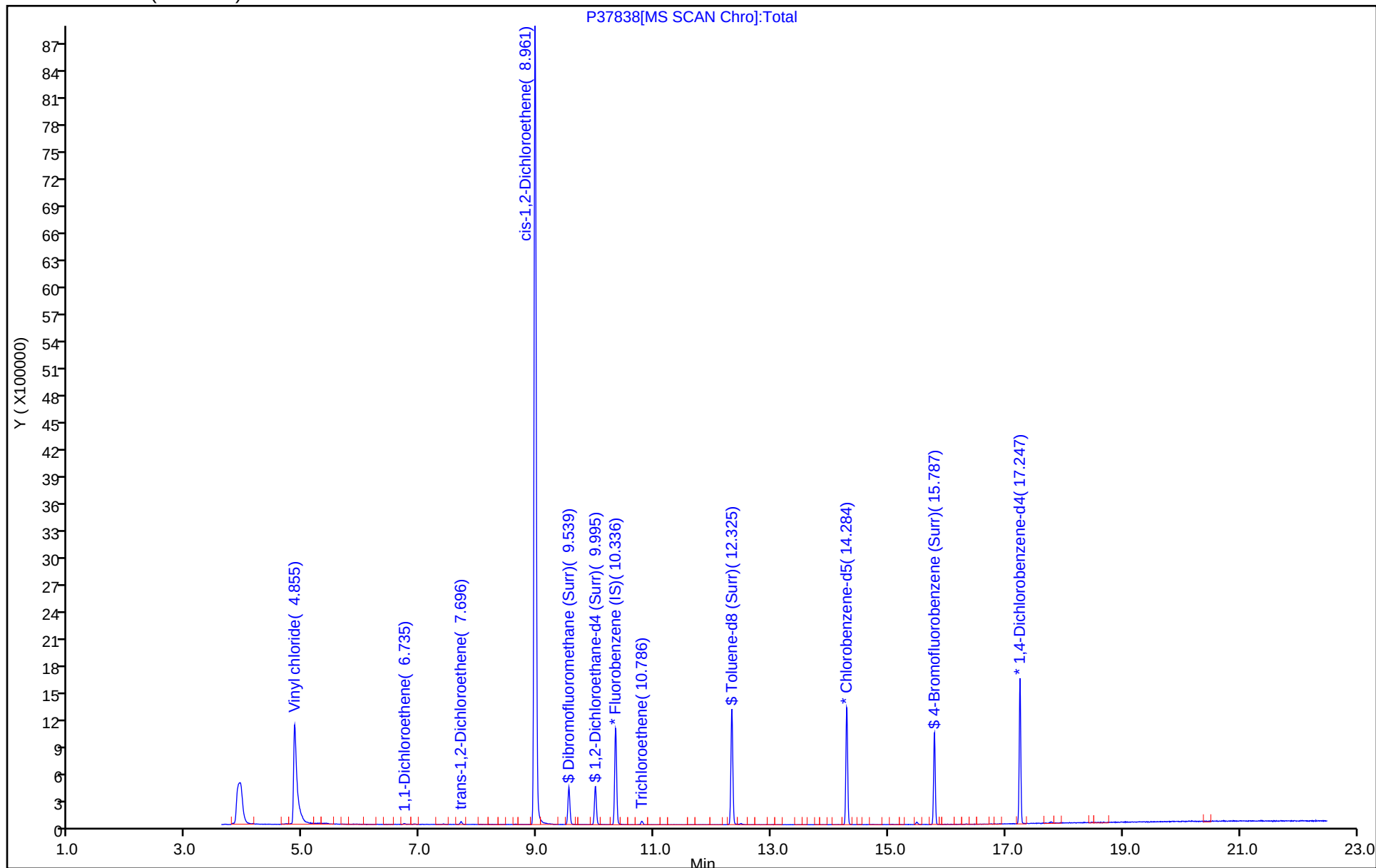
Dil. Factor: 400.0000

ALS Bottle#: 13

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37838.D

Injection Date: 06-Nov-2018 03:23:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RB

ALS Bottle#: 13

Worklist Smp#: 32

Purge Vol: 5.000 mL

Dil. Factor: 400.0000

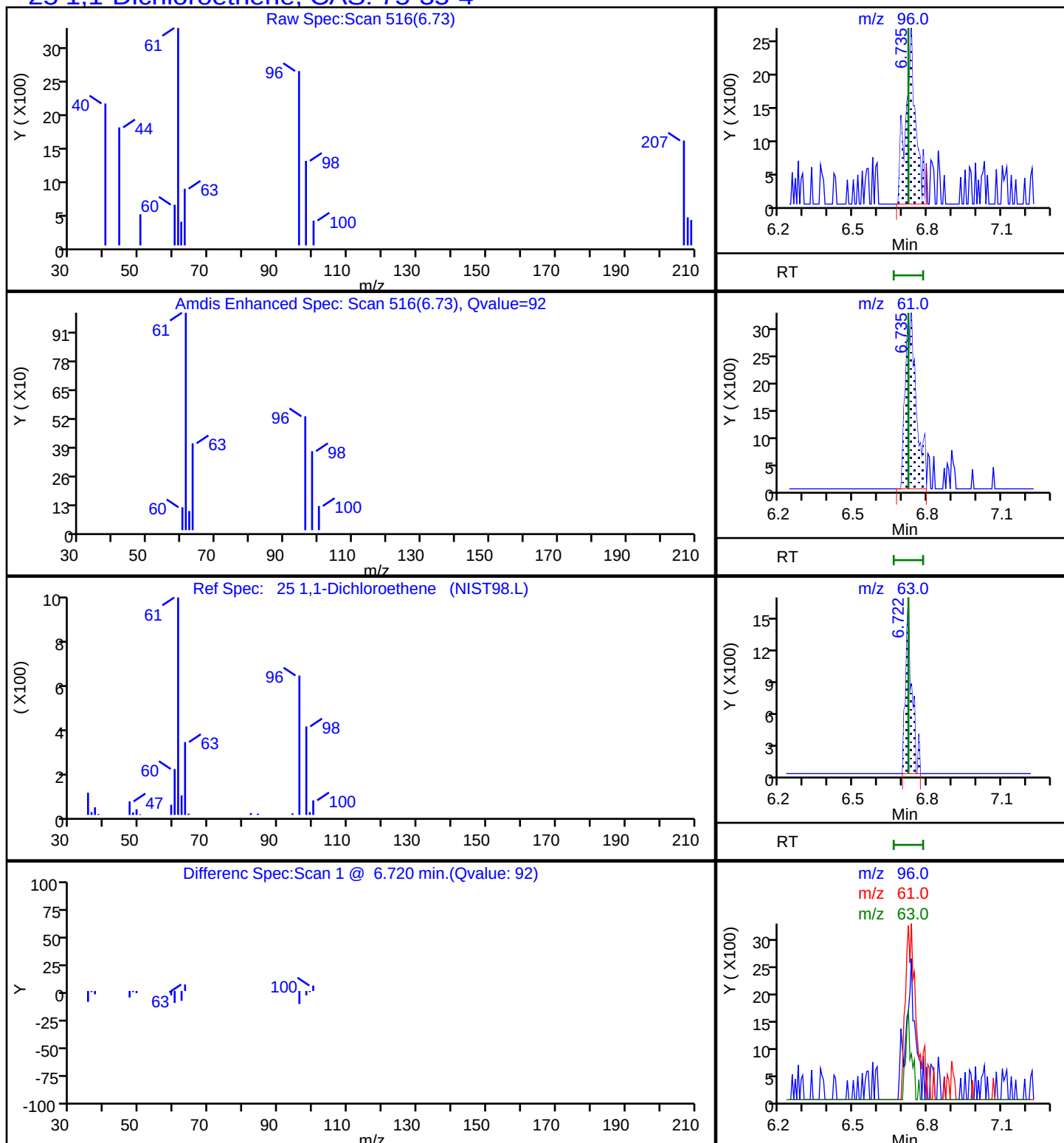
Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector MS SCAN

25 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37838.D

Injection Date: 06-Nov-2018 03:23:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RB

ALS Bottle#: 13

Worklist Smp#: 32

Purge Vol: 5.000 mL

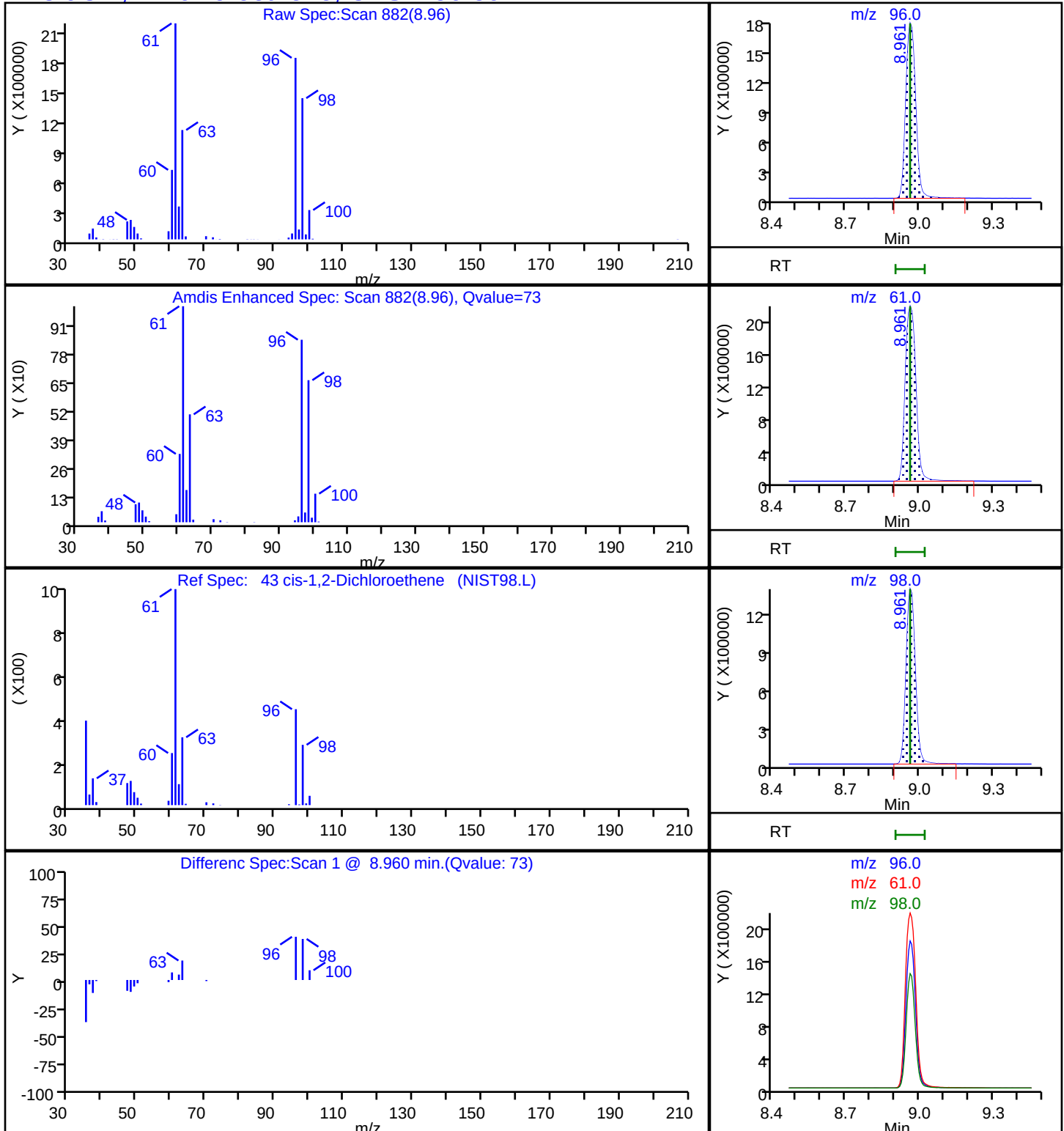
Dil. Factor: 400.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37838.D

Injection Date: 06-Nov-2018 03:23:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RB

ALS Bottle#: 13

Worklist Smp#: 32

Purge Vol: 5.000 mL

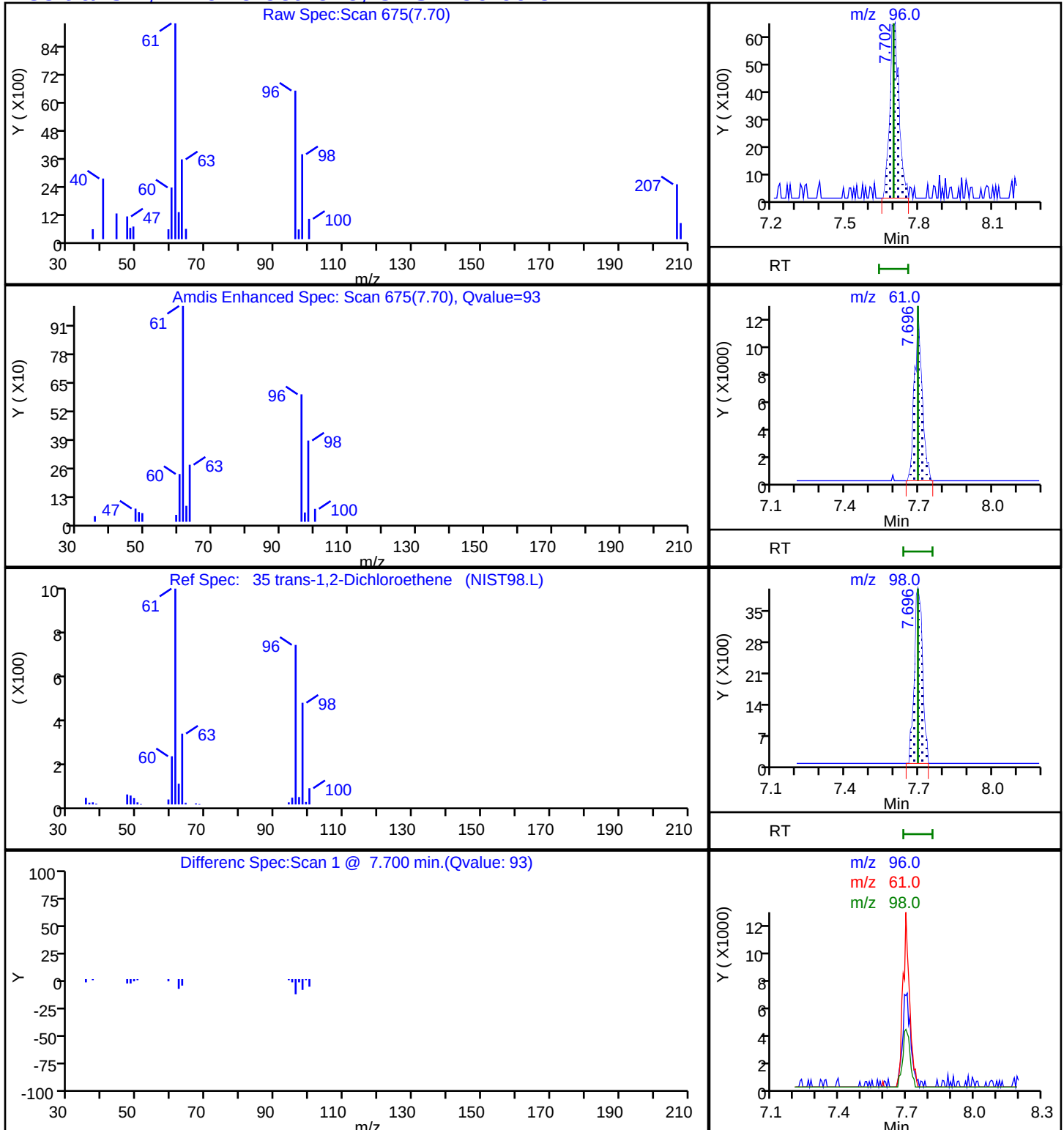
Dil. Factor: 400.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

35 trans-1,2-Dichloroethene, CAS: 156-60-5

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37838.D

Injection Date: 06-Nov-2018 03:23:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RB

ALS Bottle#: 13

Worklist Smp#: 32

Purge Vol: 5.000 mL

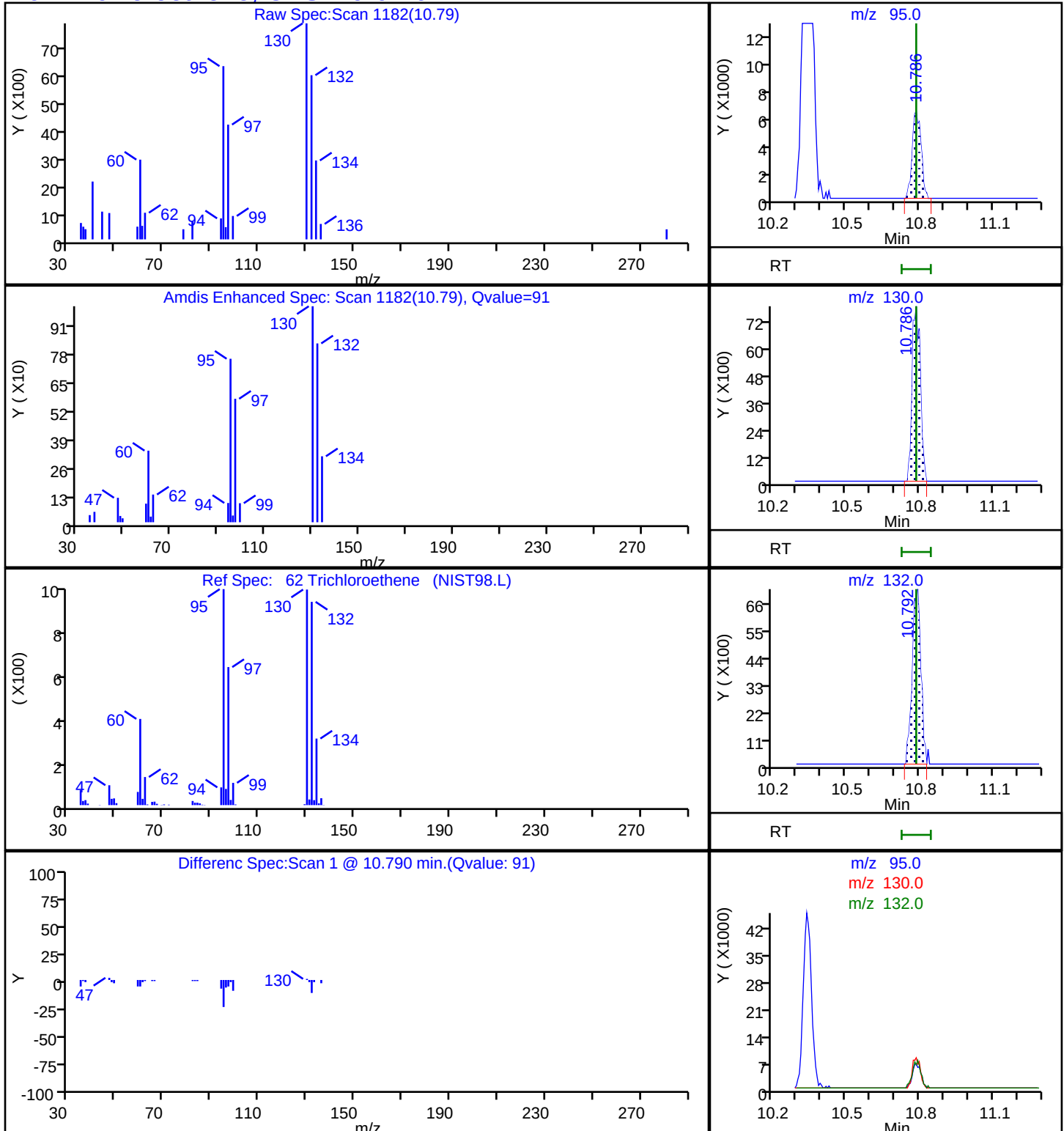
Dil. Factor: 400.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

62 Trichloroethene, CAS: 79-01-6

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37838.D

Injection Date: 06-Nov-2018 03:23:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RB

ALS Bottle#: 13

Worklist Smp#: 32

Purge Vol: 5.000 mL

Dil. Factor: 400.0000

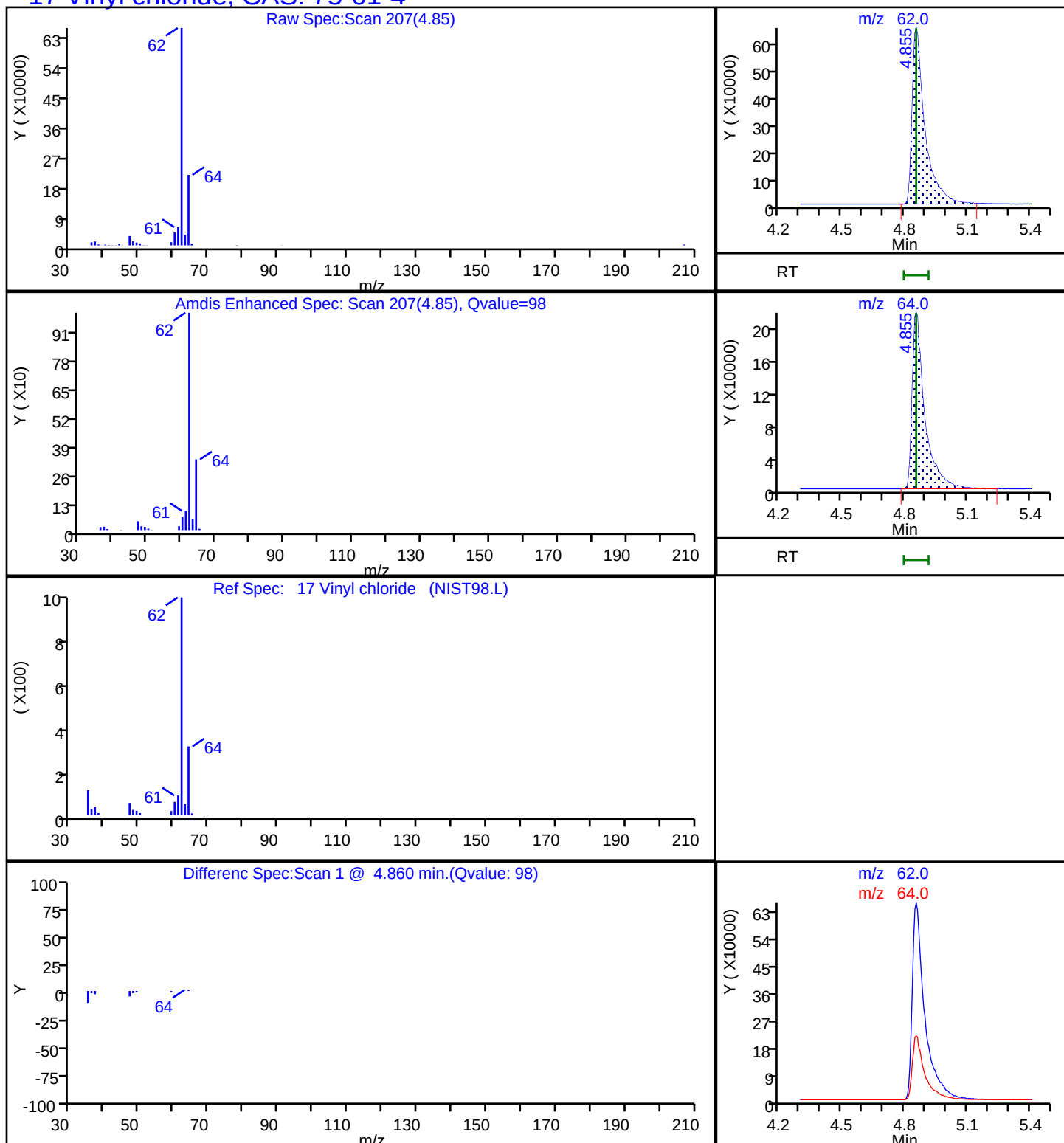
Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector MS SCAN

17 Vinyl chloride, CAS: 75-01-4



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37838.D

Injection Date: 06-Nov-2018 03:23:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RB

ALS Bottle#: 13 Worklist Smp#: 32

Purge Vol: 5.000 mL

Dil. Factor: 400.0000

Method: P-8260H2O

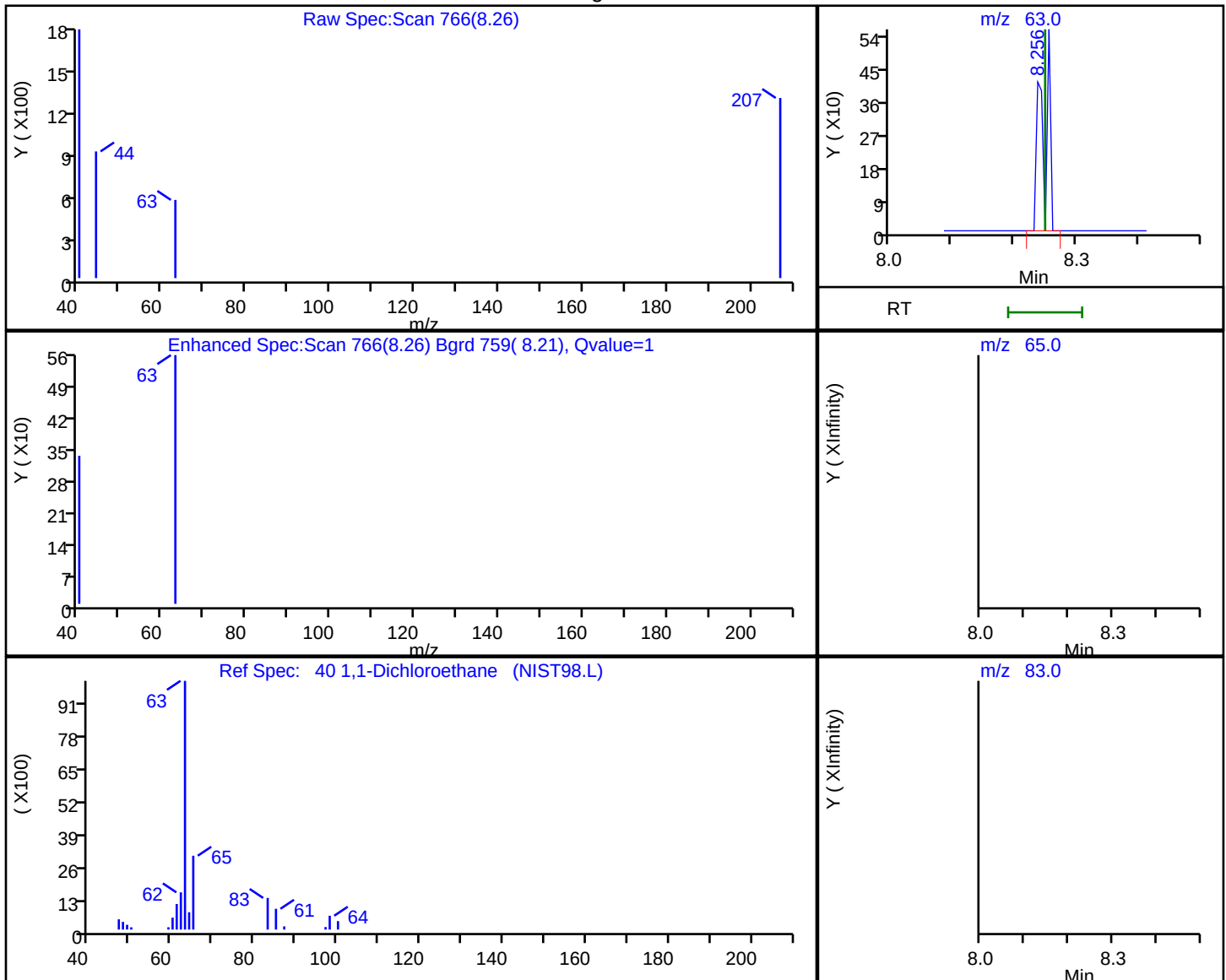
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

40 1,1-Dichloroethane, CAS: 75-34-3

Processing Results



RT	Mass	Response	Amount
8.26	63.00	489	0.017722
8.25	65.00	0	
8.25	83.00	0	

Reviewer: farrellr, 06-Nov-2018 14:50:33

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5973P\\20181105-76157.b\\P37838.D

Injection Date: 06-Nov-2018 03:23:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RB

ALS Bottle#: 13 Worklist Smp#: 32

Purge Vol: 5.000 mL

Dil. Factor: 400.0000

Method: P-8260H2O

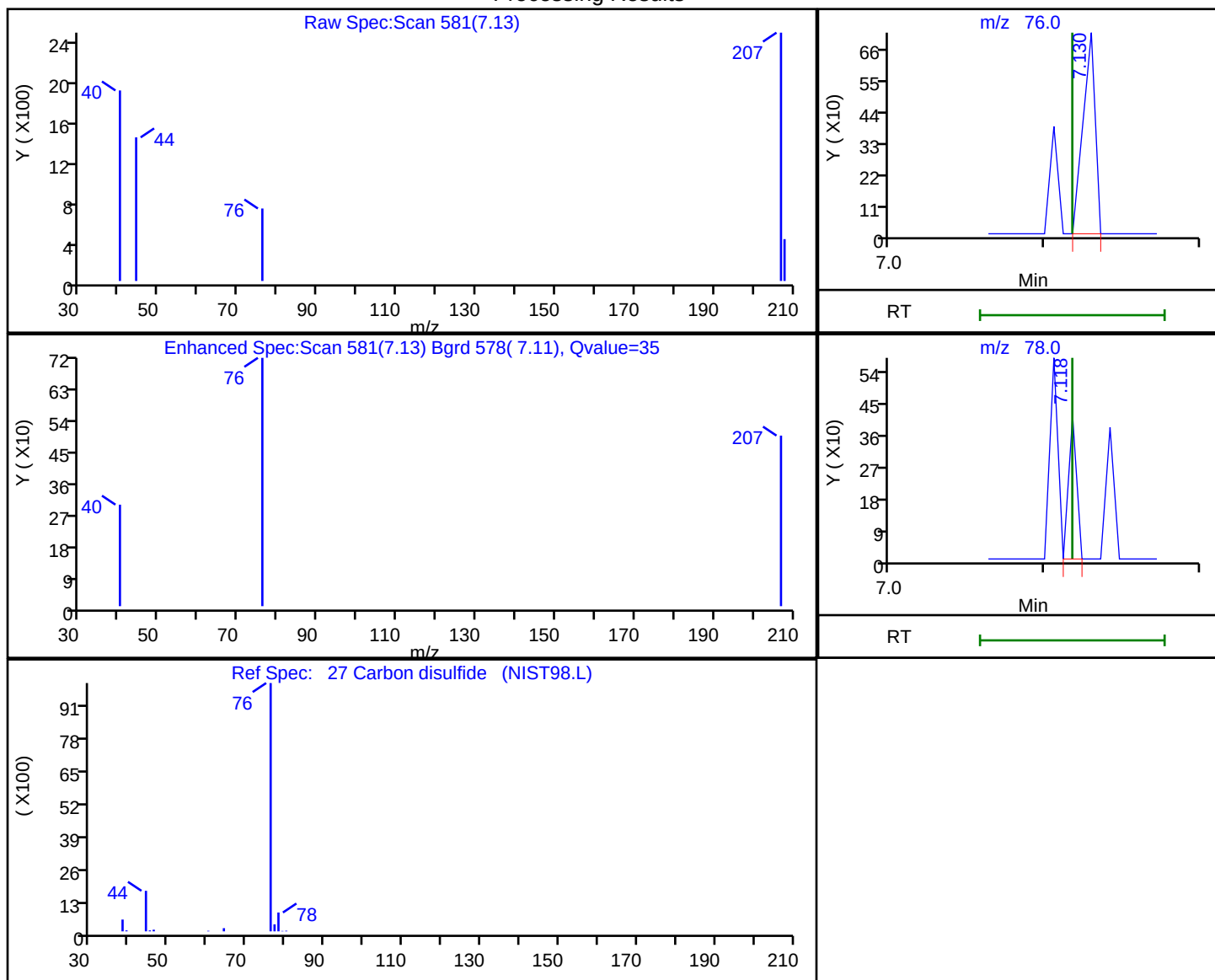
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
7.13	76.00	391	0.009627
7.12	78.00	149	

Reviewer: farrellr, 06-Nov-2018 14:50:27

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\37838.D

Injection Date: 06-Nov-2018 03:23:30

Instrument ID: HP5973P

Lims ID: 480-144297-B-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RB

ALS Bottle#: 13 Worklist Smp#: 32

Purge Vol: 5.000 mL

Dil. Factor: 400.0000

Method: P-8260H2O

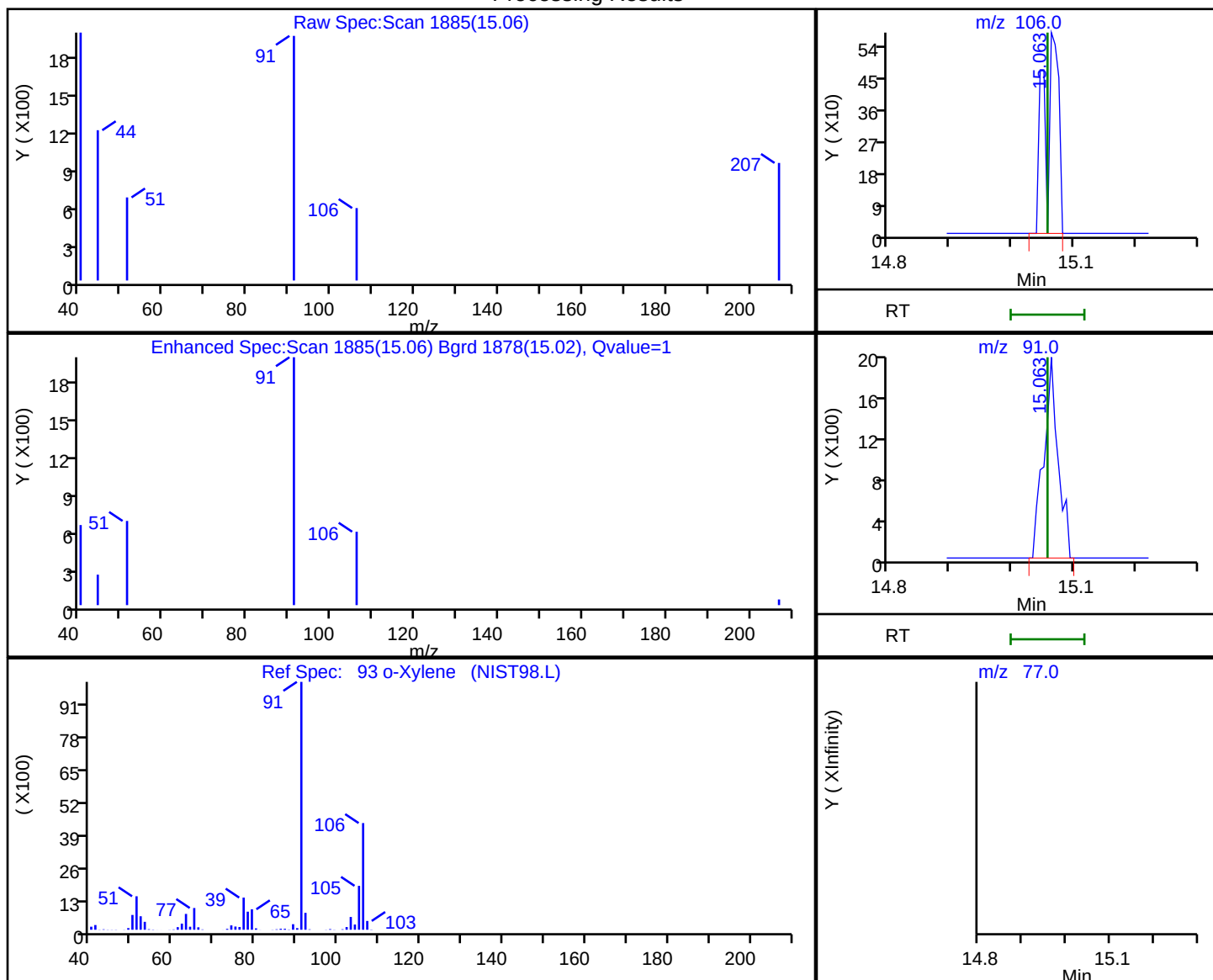
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

93 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
15.06	106.00	906	0.035254
15.06	91.00	3139	
15.06	77.00	0	
15.06	105.00	0	

Reviewer: farrellr, 06-Nov-2018 14:51:04

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>EW-14 DL</u>	Lab Sample ID: <u>480-144297-3 DL</u>
Matrix: <u>Water</u>	Lab File ID: <u>P37859.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/26/2018 09:45</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/06/2018 12:54</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>2000</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443801</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		2000	1600
79-34-5	1,1,2,2-Tetrachloroethane	ND		2000	420
79-00-5	1,1,2-Trichloroethane	ND		2000	460
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2000	620
75-34-3	1,1-Dichloroethane	ND		2000	760
75-35-4	1,1-Dichloroethene	ND		2000	580
120-82-1	1,2,4-Trichlorobenzene	ND		2000	820
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2000	780
95-50-1	1,2-Dichlorobenzene	ND		2000	1600
107-06-2	1,2-Dichloroethane	ND		2000	420
78-87-5	1,2-Dichloropropane	ND		2000	1400
541-73-1	1,3-Dichlorobenzene	ND		2000	1600
106-46-7	1,4-Dichlorobenzene	ND		2000	1700
78-93-3	2-Butanone (MEK)	ND		20000	2600
591-78-6	2-Hexanone	ND		10000	2500
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10000	4200
67-64-1	Acetone	ND		20000	6000
71-43-2	Benzene	ND		2000	820
75-27-4	Bromodichloromethane	ND		2000	780
75-25-2	Bromoform	ND		2000	520
74-83-9	Bromomethane	ND		2000	1400
75-15-0	Carbon disulfide	ND		2000	380
56-23-5	Carbon tetrachloride	ND		2000	540
108-90-7	Chlorobenzene	ND		2000	1500
124-48-1	Dibromochloromethane	ND		2000	640
75-00-3	Chloroethane	ND		2000	640
67-66-3	Chloroform	ND		2000	680
74-87-3	Chloromethane	ND		2000	700
156-59-2	cis-1,2-Dichloroethene	170000		2000	1600
10061-01-5	cis-1,3-Dichloropropene	ND		2000	720
110-82-7	Cyclohexane	ND		2000	360
75-71-8	Dichlorodifluoromethane	ND		2000	1400
100-41-4	Ethylbenzene	ND		2000	1500
106-93-4	1,2-Dibromoethane	ND		2000	1500
98-82-8	Isopropylbenzene	ND		2000	1600

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: EW-14 DL Lab Sample ID: 480-144297-3 DL
 Matrix: Water Lab File ID: P37859.D
 Analysis Method: 8260C Date Collected: 10/26/2018 09:45
 Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 12:54
 Soil Aliquot Vol: _____ Dilution Factor: 2000
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443801 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		5000	2600
1634-04-4	Methyl tert-butyl ether	ND		2000	320
108-87-2	Methylcyclohexane	ND		2000	320
75-09-2	Methylene Chloride	ND		2000	880
100-42-5	Styrene	ND		2000	1500
127-18-4	Tetrachloroethene	ND		2000	720
108-88-3	Toluene	ND		2000	1000
156-60-5	trans-1,2-Dichloroethene	ND		2000	1800
10061-02-6	trans-1,3-Dichloropropene	ND		2000	740
79-01-6	Trichloroethene	ND		2000	920
75-69-4	Trichlorofluoromethane	ND		2000	1800
75-01-4	Vinyl chloride	51000		2000	1800
1330-20-7	Xylenes, Total	ND		4000	1300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		77-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
1868-53-7	Dibromofluoromethane (Surr)	93		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37859.D
 Lims ID: 480-144297-C-3
 Client ID: EW-14
 Sample Type: Client
 Inject. Date: 06-Nov-2018 12:54:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 2000.0000
 Sample Info: 480-144297-C-3
 Misc. Info.: 480-0076160-009
 Operator ID: RF Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 16:22:32 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0310

First Level Reviewer: baroner

Date: 06-Nov-2018 16:22:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.342	10.336	0.006	98	231374	25.0	
* 2 Chlorobenzene-d5	82	14.284	14.284	0.000	86	465349	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	498210	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.545	9.539	0.006	93	309698	23.2	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.989	0.006	0	179416	22.8	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.331	0.000	93	1056010	24.1	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.794	0.000	94	375762	23.9	
10 Dichlorodifluoromethane	85		4.252				ND	
11 Chloromethane	50		4.666				ND	
17 Vinyl chloride	62	4.861	4.855	0.006	98	662540	25.3	
12 Bromomethane	94		5.475				ND	
13 Chloroethane	64		5.621				ND	
14 Trichlorofluoromethane	101		5.956				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.631				ND	
25 1,1-Dichloroethene	96	6.722	6.722	-0.006	8	3268	0.2446	a
24 Acetone	43		6.807				ND	
27 Carbon disulfide	76		7.118				ND	U
30 Methyl acetate	43		7.172				ND	
31 Methylene Chloride	84	7.392	7.410	0.001	92	4742	0.2667	
32 Methyl tert-butyl ether	73		7.604				ND	
35 trans-1,2-Dichloroethene	96	7.696	7.696	0.000	89	5714	0.4001	
40 1,1-Dichloroethane	63		8.249				ND	
44 2-Butanone (MEK)	43		8.931				ND	
43 cis-1,2-Dichloroethene	96	8.967	8.967	0.000	82	1408572	85.0	
49 Chloroform	83		9.326				ND	
52 1,1,1-Trichloroethane	97		9.557				ND	
54 Cyclohexane	56		9.600				ND	
55 Carbon tetrachloride	117		9.752				ND	
57 Benzene	78		10.038				ND	
60 1,2-Dichloroethane	62		10.086				ND	
62 Trichloroethene	95	10.786	10.786	0.000	93	5397	0.3709	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		10.987				ND	
63 1,2-Dichloropropane	63		11.127				ND	
70 Dichlorobromomethane	83		11.461				ND	
73 cis-1,3-Dichloropropene	75		11.997				ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100				ND	
76 Toluene	92		12.416				ND	
78 trans-1,3-Dichloropropene	75		12.708				ND	
79 1,1,2-Trichloroethane	83		13.000				ND	
80 Tetrachloroethene	166		13.140				ND	
83 2-Hexanone	43		13.189				ND	
81 Chlorodibromomethane	129		13.572				ND	
85 Ethylene Dibromide	107		13.773				ND	
87 Chlorobenzene	112		14.327				ND	
89 Ethylbenzene	91		14.375				ND	
90 m-Xylene & p-Xylene	106		14.509				ND	
93 o-Xylene	106		15.057				ND	
94 Styrene	104		15.087				ND	
92 Bromoform	173		15.470				ND	
95 Isopropylbenzene	105		15.489				ND	
97 1,1,2,2-Tetrachloroethane	83		15.963				ND	
110 1,3-Dichlorobenzene	146		17.174				ND	
111 1,4-Dichlorobenzene	146		17.277				ND	
116 1,2-Dichlorobenzene	146		17.776				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.816				ND	
119 1,2,4-Trichlorobenzene	180		19.911				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37859.D

Injection Date: 06-Nov-2018 12:54:30

Instrument ID: HP5973P

Operator ID: RF

Lims ID: 480-144297-C-3

Lab Sample ID: 480-144297-3

Worklist Smp#: 9

Client ID: EW-14

Purge Vol: 5.000 mL

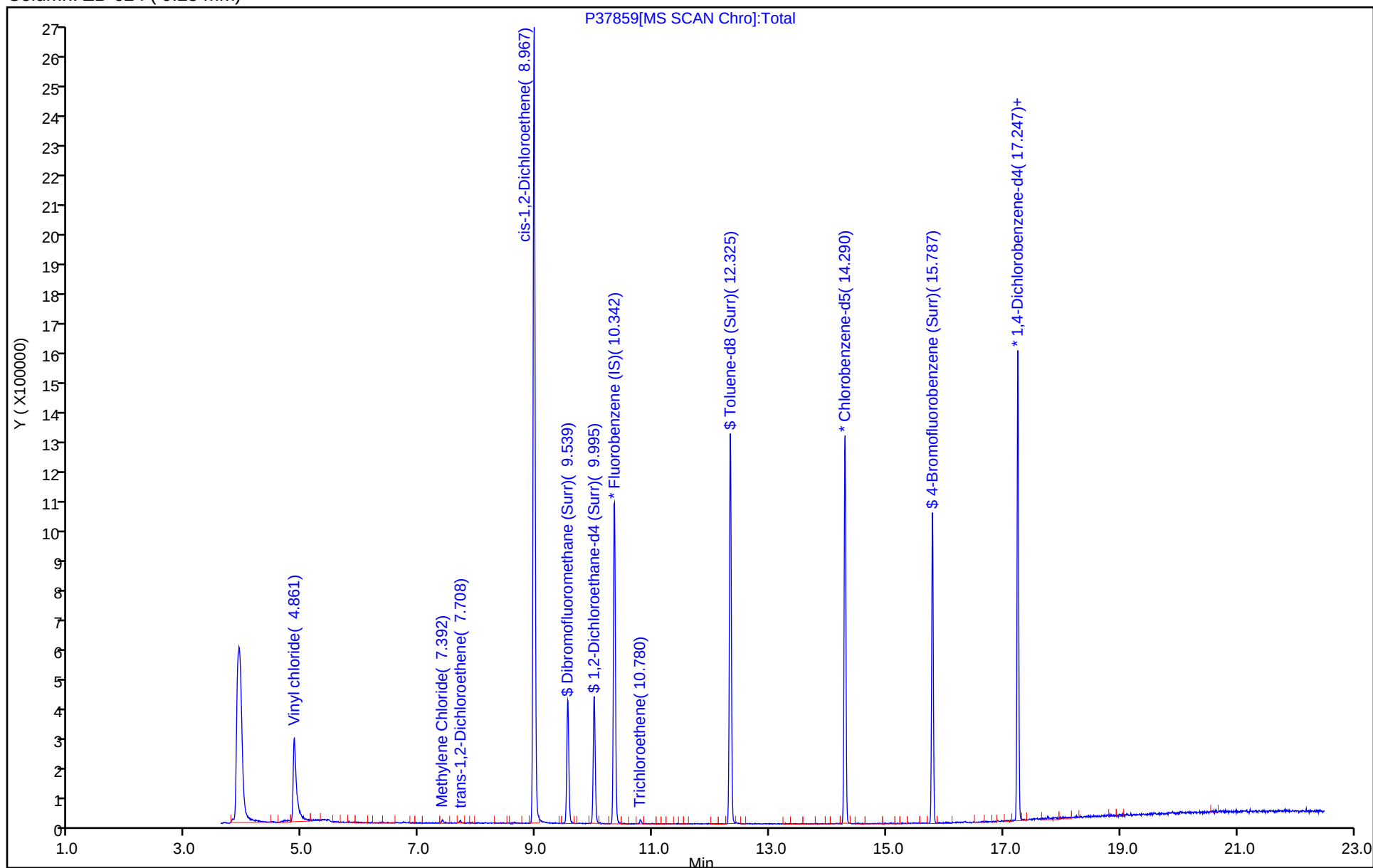
Dil. Factor: 2000.0000

ALS Bottle#: 9

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37859.D

Injection Date: 06-Nov-2018 12:54:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RF

ALS Bottle#: 9

Worklist Smp#: 9

Purge Vol: 5.000 mL

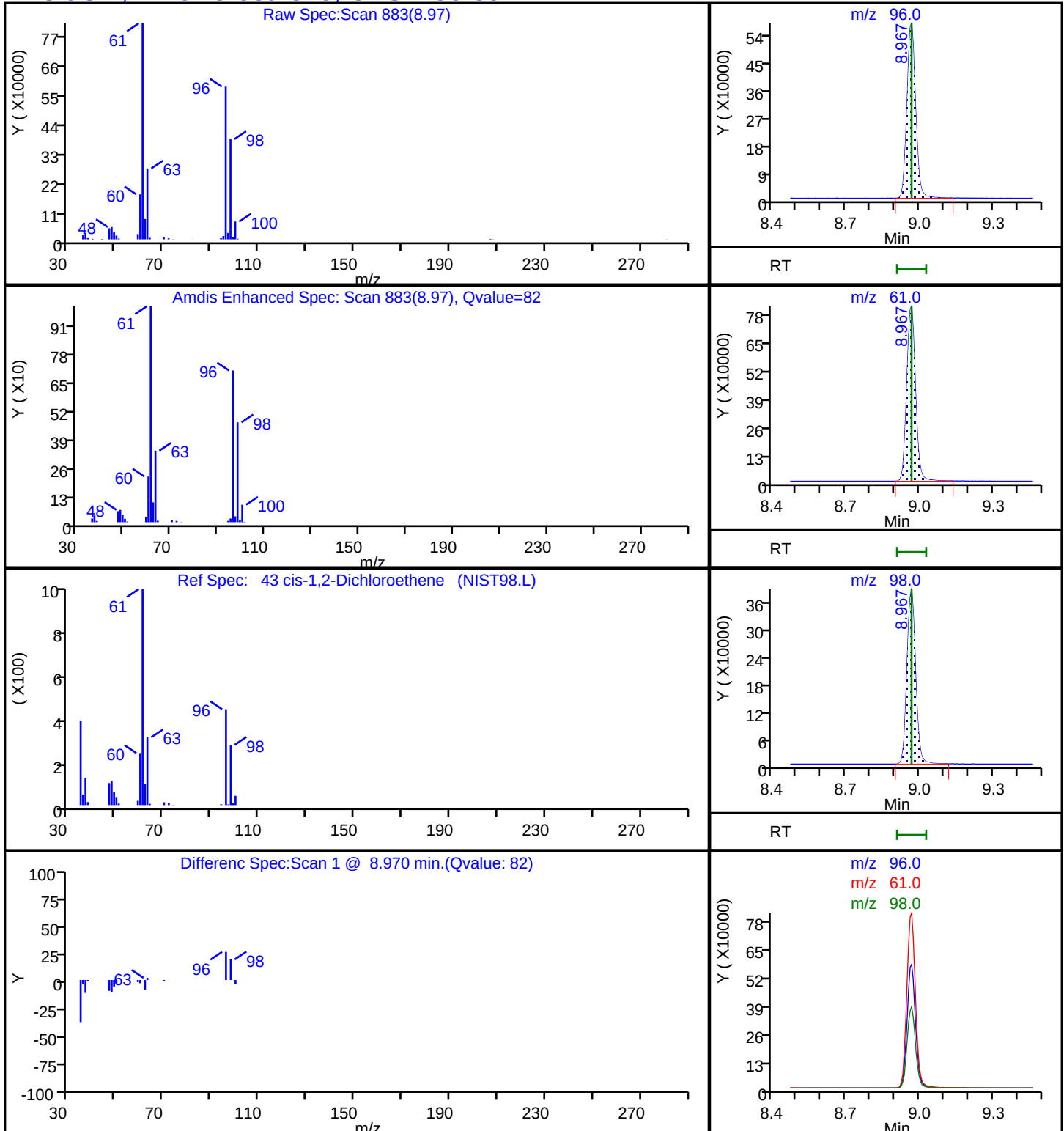
Dil. Factor: 2000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37859.D

Injection Date: 06-Nov-2018 12:54:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RF

ALS Bottle#: 9

Worklist Smp#: 9

Purge Vol: 5.000 mL

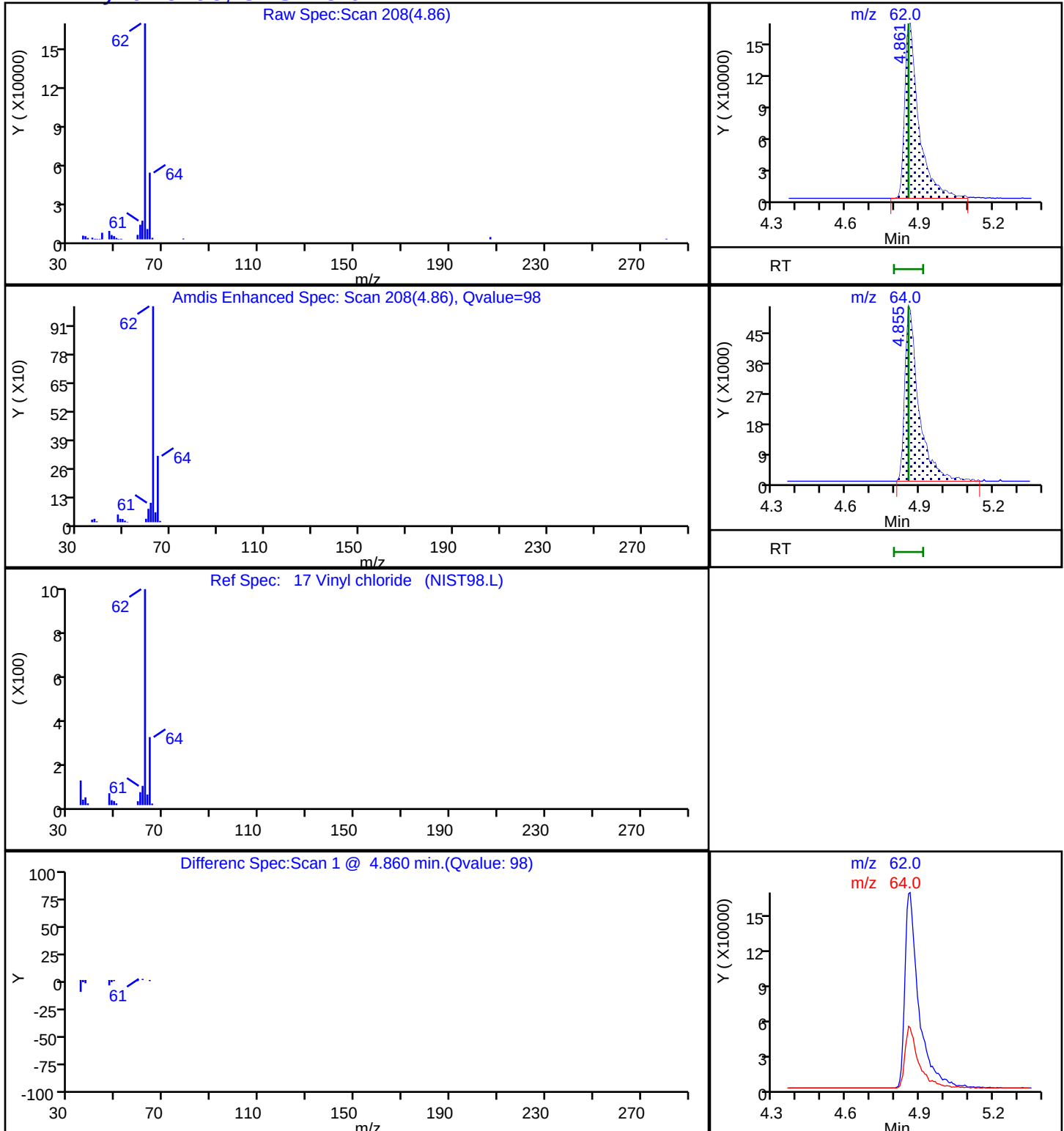
Dil. Factor: 2000.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

17 Vinyl chloride, CAS: 75-01-4

TestAmerica Buffalo

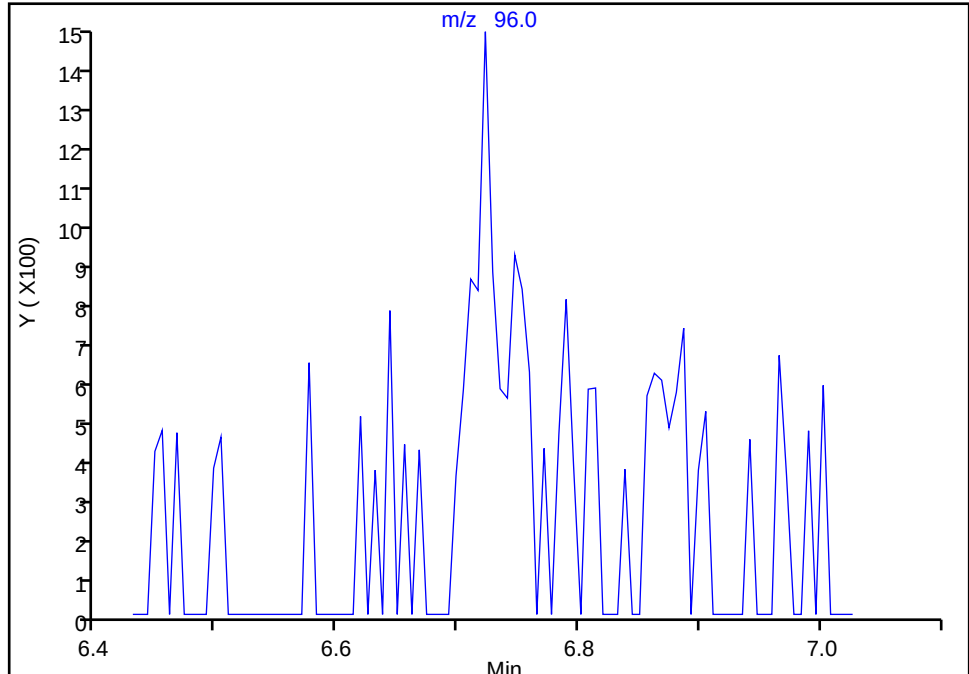
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37859.D
Injection Date: 06-Nov-2018 12:54:30 Instrument ID: HP5973P
Lims ID: 480-144297-C-3 Lab Sample ID: 480-144297-3
Client ID: EW-14
Operator ID: RF ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 2000.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

25 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

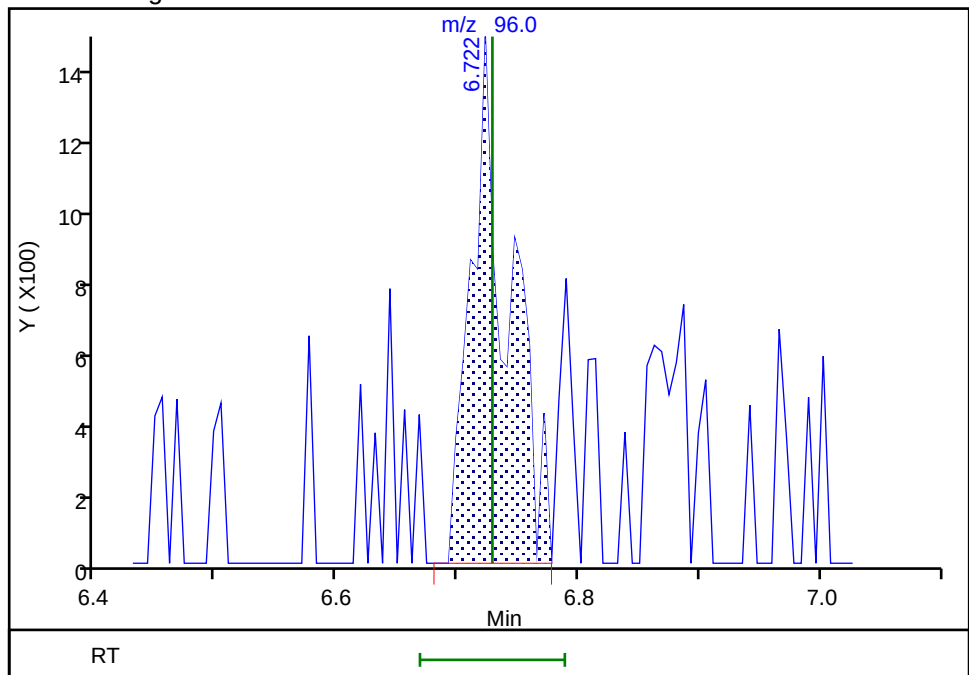
Not Detected
Expected RT: 6.73

Processing Integration Results



Manual Integration Results

RT: 6.72
Area: 3268
Amount: 0.244636
Amount Units: ug/L



Reviewer: baroner, 06-Nov-2018 16:22:09

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\37859.D

Injection Date: 06-Nov-2018 12:54:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-3

Lab Sample ID: 480-144297-3

Client ID: EW-14

Operator ID: RF

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 2000.0000

Method: P-8260H2O

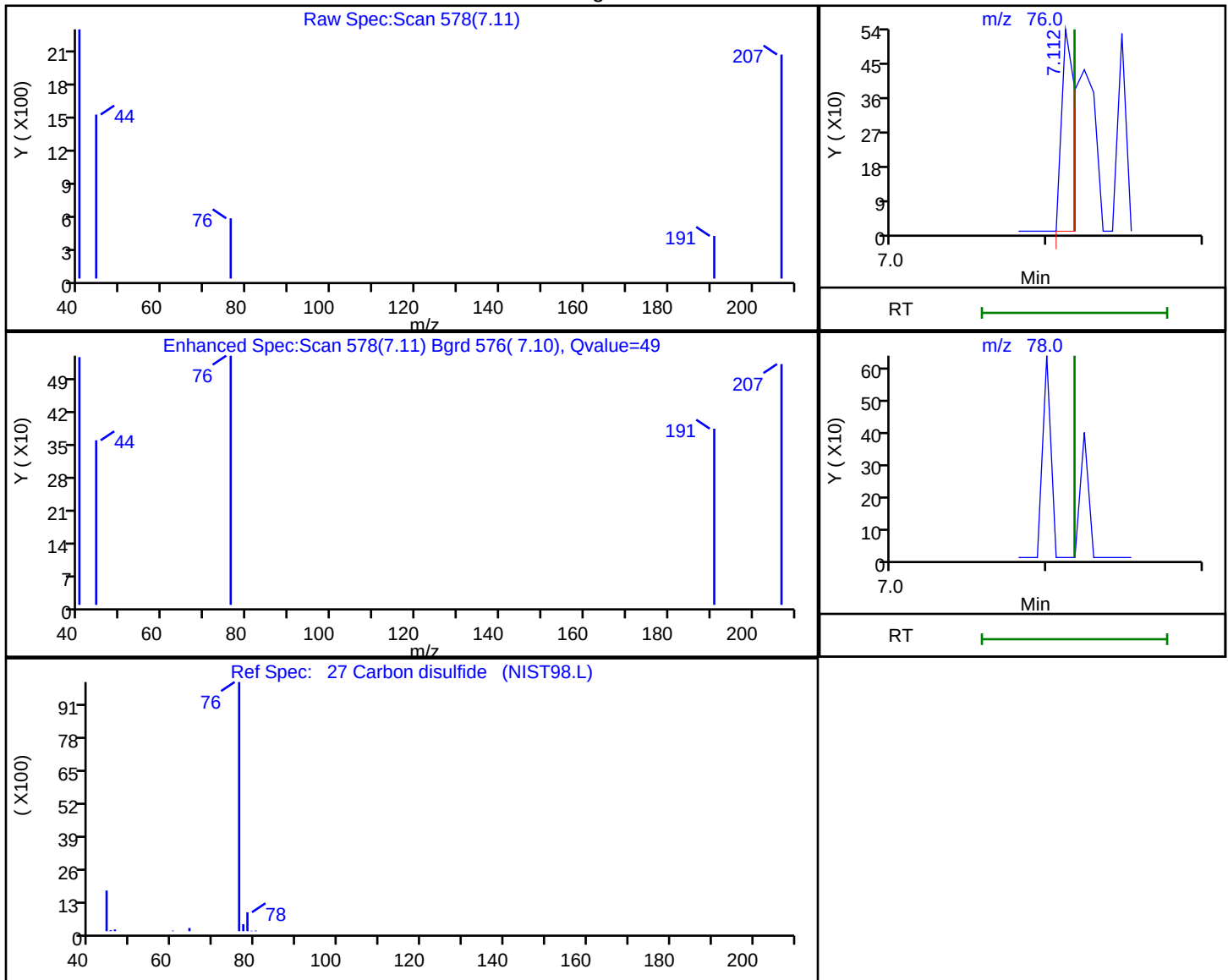
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
7.11	76.00	333	0.008410
7.12	78.00	0	

Reviewer: baroner, 06-Nov-2018 16:22:15

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>TB</u>	Lab Sample ID: <u>480-144297-4</u>
Matrix: <u>Water</u>	Lab File ID: <u>P37839.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/26/2018 00:00</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/06/2018 03:51</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443770</u>	Units: <u>ug/L</u>

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
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
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
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
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
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
124-48-1	Dibromochloromethane	ND		1.0	0.32
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	0.86	J	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
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: TB Lab Sample ID: 480-144297-4
 Matrix: Water Lab File ID: P37839.D
 Analysis Method: 8260C Date Collected: 10/26/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 03:51
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
2037-26-5	Toluene-d8 (Surr)	95		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		77-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
1868-53-7	Dibromofluoromethane (Surr)	95		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37839.D
 Lims ID: 480-144297-A-4
 Client ID: TB
 Sample Type: Client
 Inject. Date: 06-Nov-2018 03:51:30 ALS Bottle#: 14 Worklist Smp#: 33
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-144297-A-4
 Misc. Info.: 480-0076157-033
 Operator ID: RB Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 14:51:55 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 14:51:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.342	10.336	0.006	98	227200	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.284	0.006	86	470167	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	493534	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	94	312251	23.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.995	0.000	0	176988	22.9	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.319	0.006	93	1045324	23.7	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	95	372567	23.4	
10 Dichlorodifluoromethane	85		4.252				ND	
11 Chloromethane	50		4.666				ND	
17 Vinyl chloride	62	4.867	4.855	0.012	24	5522	0.2150	
12 Bromomethane	94		5.481				ND	
13 Chloroethane	64		5.615				ND	
14 Trichlorofluoromethane	101		5.956				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.625				ND	
25 1,1-Dichloroethene	96		6.722				ND	
24 Acetone	43	6.826	6.826	0.019	98	17383	2.82	a
27 Carbon disulfide	76		7.118				ND	
30 Methyl acetate	43		7.172				ND	
31 Methylene Chloride	84		7.391				ND	
32 Methyl tert-butyl ether	73		7.604				ND	
35 trans-1,2-Dichloroethene	96		7.696				ND	
40 1,1-Dichloroethane	63		8.249				ND	
44 2-Butanone (MEK)	43		8.931				ND	
43 cis-1,2-Dichloroethene	96	8.961	8.955	0.000	76	13927	0.8562	
49 Chloroform	83		9.326				ND	
52 1,1,1-Trichloroethane	97		9.557				ND	
54 Cyclohexane	56		9.594				ND	
55 Carbon tetrachloride	117		9.752				ND	
57 Benzene	78		10.032				ND	
60 1,2-Dichloroethane	62		10.087				ND	
62 Trichloroethene	95		10.786				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		10.987				ND	
63 1,2-Dichloropropane	63		11.127				ND	
70 Dichlorobromomethane	83		11.461				ND	
73 cis-1,3-Dichloropropene	75		11.997				ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100				ND	
76 Toluene	92		12.417				ND	
78 trans-1,3-Dichloropropene	75		12.709				ND	
79 1,1,2-Trichloroethane	83		12.994				ND	
80 Tetrachloroethene	166		13.147				ND	
83 2-Hexanone	43		13.183				ND	
81 Chlorodibromomethane	129		13.572				ND	
85 Ethylene Dibromide	107		13.767				ND	
87 Chlorobenzene	112		14.327				ND	
89 Ethylbenzene	91		14.375				ND	
90 m-Xylene & p-Xylene	106		14.509				ND	
93 o-Xylene	106		15.057				ND	
94 Styrene	104		15.087				ND	
92 Bromoform	173		15.470				ND	
95 Isopropylbenzene	105		15.489				ND	
97 1,1,2,2-Tetrachloroethane	83		15.957				ND	
110 1,3-Dichlorobenzene	146		17.174				ND	
111 1,4-Dichlorobenzene	146		17.277				ND	
116 1,2-Dichlorobenzene	146		17.776				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.810				ND	
119 1,2,4-Trichlorobenzene	180		19.911				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr_00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37839.D

Injection Date: 06-Nov-2018 03:51:30

Instrument ID: HP5973P

Operator ID: RB

Lims ID: 480-144297-A-4

Lab Sample ID: 480-144297-4

Worklist Smp#: 33

Client ID: TB

Purge Vol: 5.000 mL

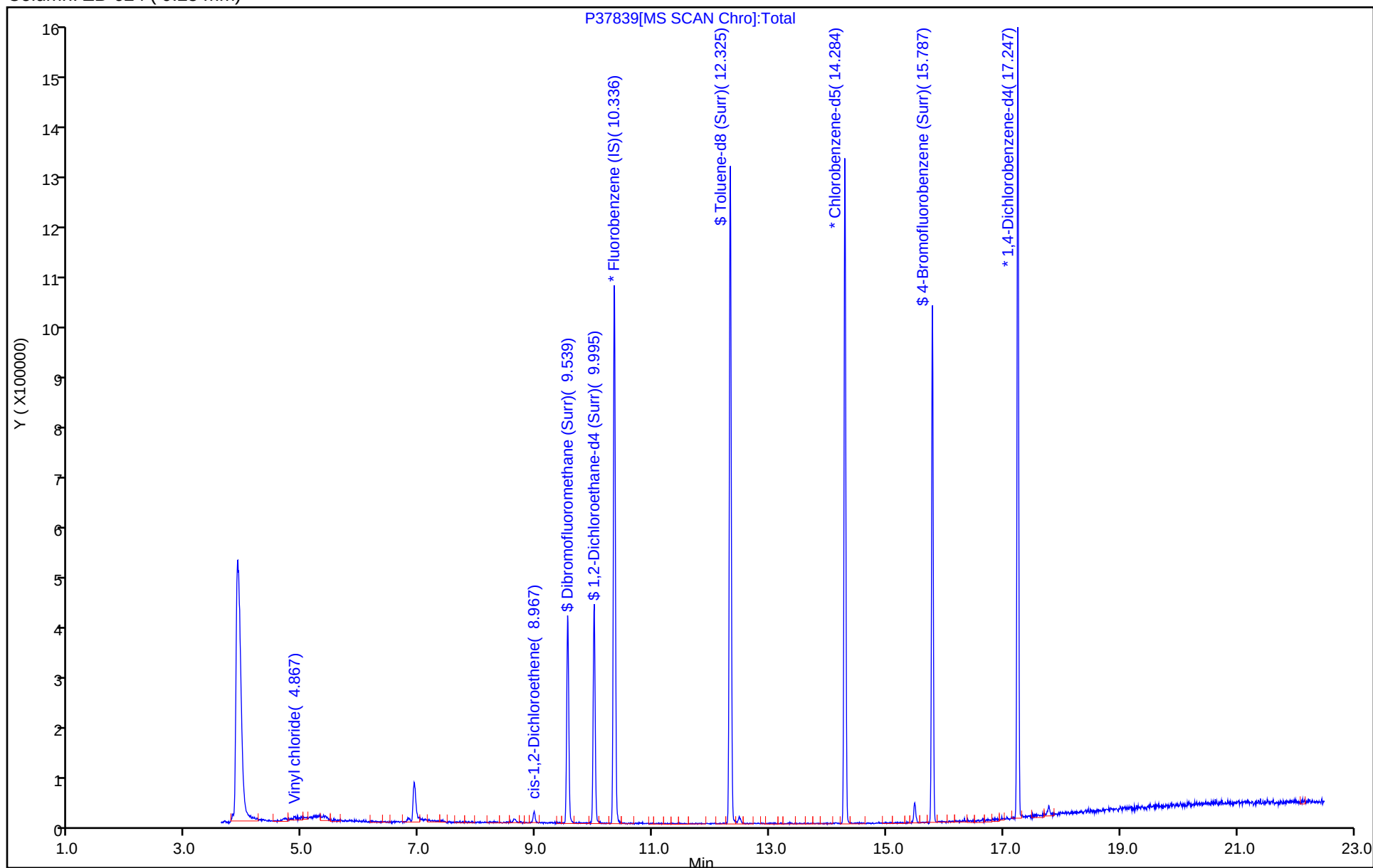
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37839.D

Injection Date: 06-Nov-2018 03:51:30

Instrument ID: HP5973P

Lims ID: 480-144297-A-4

Lab Sample ID: 480-144297-4

Client ID: TB

Operator ID: RB

ALS Bottle#: 14

Worklist Smp#: 33

Purge Vol: 5.000 mL

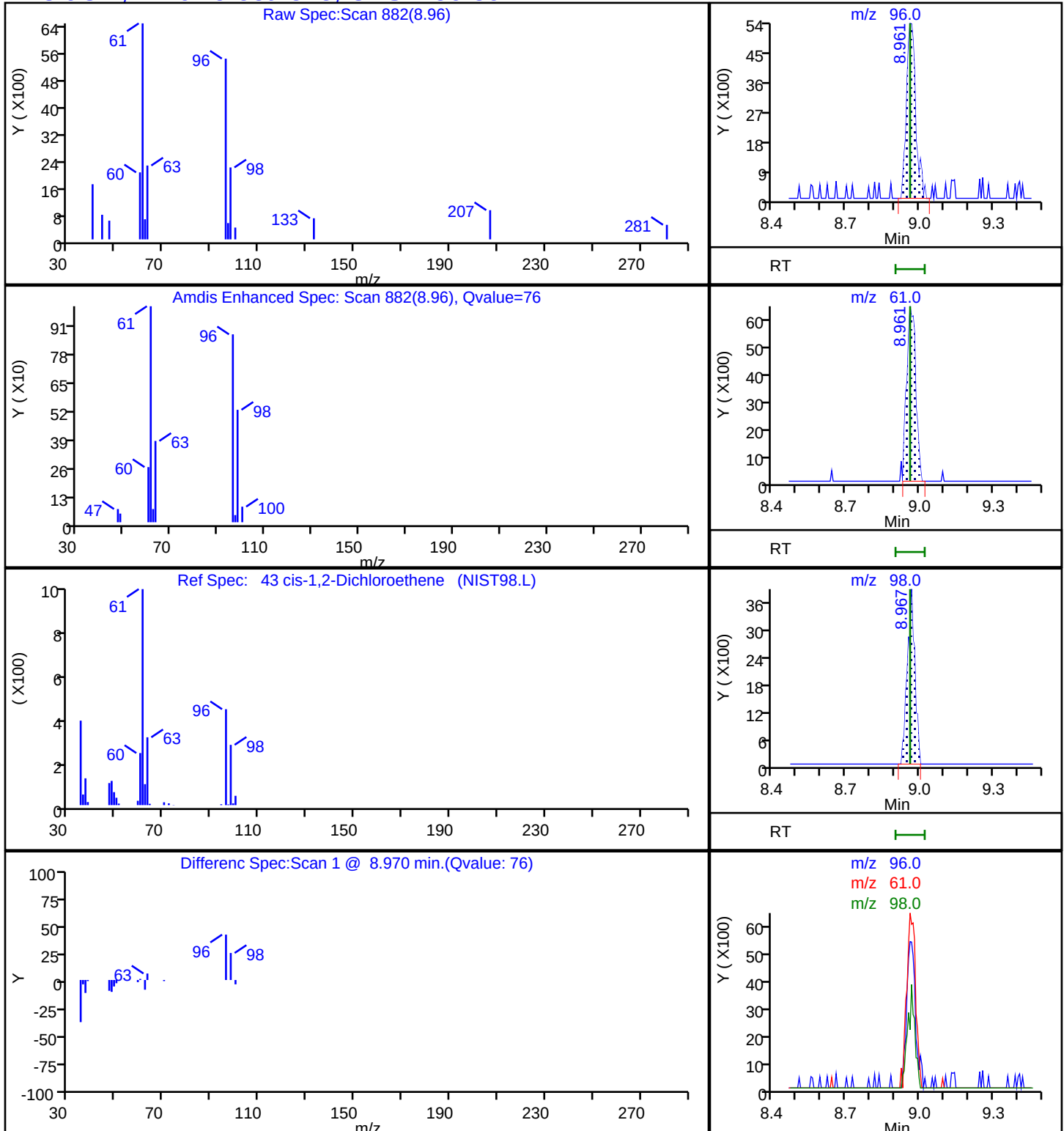
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Buffalo

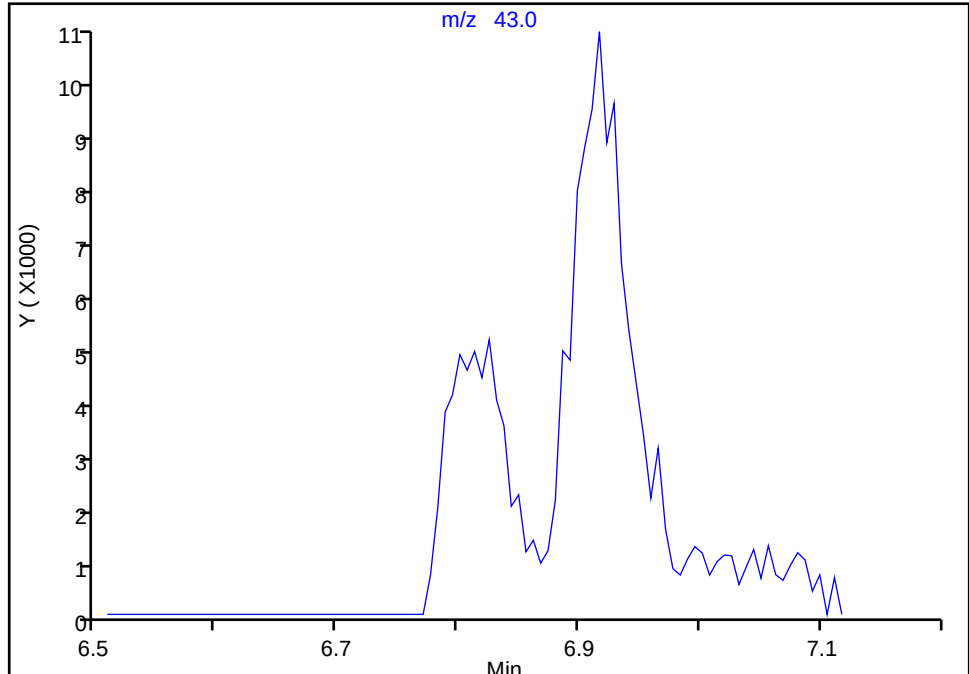
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37839.D
Injection Date: 06-Nov-2018 03:51:30 Instrument ID: HP5973P
Lims ID: 480-144297-A-4 Lab Sample ID: 480-144297-4
Client ID: TB
Operator ID: RB ALS Bottle#: 14 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 1

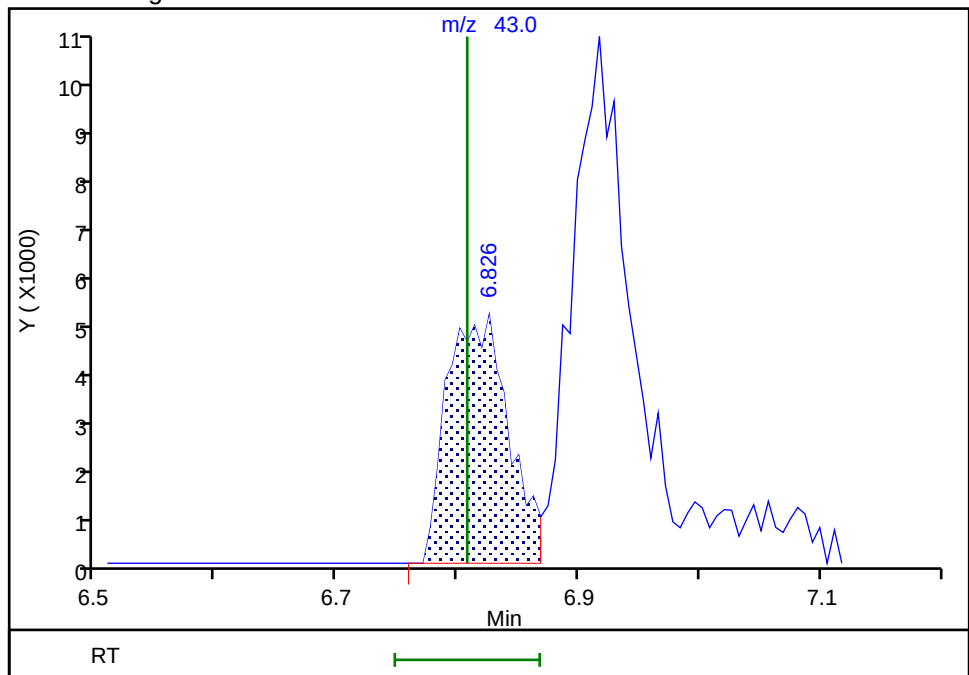
Not Detected
Expected RT: 6.81

Processing Integration Results



RT: 6.83
Area: 17383
Amount: 2.818658
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 06-Nov-2018 14:51:29

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GPW-20</u>	Lab Sample ID: <u>480-144297-5</u>
Matrix: <u>Water</u>	Lab File ID: <u>T5015.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/24/2018 10:35</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/04/2018 16:05</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (20)</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443500</u>	Units: <u>ug/L</u>

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
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
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
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
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	5.7	J	10	3.0
71-43-2	Benzene	ND		1.0	0.41
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
124-48-1	Dibromochloromethane	ND		1.0	0.32
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
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: GPW-20 Lab Sample ID: 480-144297-5
 Matrix: Water Lab File ID: T5015.D
 Analysis Method: 8260C Date Collected: 10/24/2018 10:35
 Sample wt/vol: 5 (mL) Date Analyzed: 11/04/2018 16:05
 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.: 443500 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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	0.25	J	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
2037-26-5	Toluene-d8 (Surr)	101		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		77-120
460-00-4	4-Bromofluorobenzene (Surr)	107		73-120
1868-53-7	Dibromofluoromethane (Surr)	109		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5015.D
 Lims ID: 480-144297-D-5
 Client ID: GPW-20
 Sample Type: Client
 Inject. Date: 04-Nov-2018 16:05:30 ALS Bottle#: 17 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-144297-D-5
 Misc. Info.: 480-0076114-017
 Operator ID: RF Instrument ID: HP5975T
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 05-Nov-2018 08:41:45 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0320

First Level Reviewer: nowakk

Date: 05-Nov-2018 08:43:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.589	4.589	0.000	97	121060	25.0	
* 2 Chlorobenzene-d5	117	6.879	6.879	0.000	93	464933	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	301350	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.123	0.000	93	159890	27.4	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.371	4.371	0.000	0	260151	28.1	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	95	521019	25.2	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	202642	26.7	
11 Dichlorodifluoromethane	85		1.107				ND	
13 Chloromethane	50		1.252				ND	
14 Vinyl chloride	62		1.325				ND	
15 Bromomethane	94		1.584				ND	
16 Chloroethane	64		1.636				ND	
17 Trichlorofluoromethane	101		1.802				ND	
22 1,1-Dichloroethene	96		2.258				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.268				ND	
23 Acetone	43	2.371	2.372	-0.001	97	13222	5.73	
25 Carbon disulfide	76		2.434				ND	
28 Methyl acetate	43		2.631				ND	
30 Methylene Chloride	84		2.724				ND	
33 Methyl tert-butyl ether	73		2.900				ND	
32 trans-1,2-Dichloroethene	96		2.910				ND	
36 1,1-Dichloroethane	63		3.273				ND	
43 cis-1,2-Dichloroethene	96		3.739				ND	
44 2-Butanone (MEK)	43		3.771				ND	
50 Chloroform	83		3.999				ND	
51 1,1,1-Trichloroethane	97		4.092				ND	
52 Cyclohexane	56		4.092				ND	
53 Carbon tetrachloride	117		4.195				ND	
55 Benzene	78		4.372				ND	
57 1,2-Dichloroethane	62		4.434				ND	
60 Trichloroethene	95		4.859				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Methylcyclohexane	83	4.952	4.942	0.010	84	2428	0.2456	
63 1,2-Dichloropropane	63		5.045				ND	
67 Dichlorobromomethane	83		5.273				ND	
71 cis-1,3-Dichloropropene	75		5.594				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.698				ND	
73 Toluene	92		5.812				ND	
75 trans-1,3-Dichloropropene	75		6.019				ND	
78 1,1,2-Trichloroethane	83		6.164				ND	
79 Tetrachloroethene	166		6.206				ND	
81 2-Hexanone	43		6.330				ND	
82 Chlorodibromomethane	129		6.465				ND	
83 Ethylene Dibromide	107		6.548				ND	
86 Chlorobenzene	112		6.900				ND	
88 Ethylbenzene	91		6.962				ND	
90 m-Xylene & p-Xylene	106		7.056				ND	
91 o-Xylene	106		7.367				ND	
92 Styrene	104		7.387				ND	
93 Bromoform	173		7.584				ND	
95 Isopropylbenzene	105		7.646				ND	
98 1,1,2,2-Tetrachloroethane	83		7.968				ND	
110 1,3-Dichlorobenzene	146		8.672				ND	
113 1,4-Dichlorobenzene	146		8.755				ND	
116 1,2-Dichlorobenzene	146		9.056				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.729				ND	
119 1,2,4-Trichlorobenzene	180		10.372				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_IS_00209	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_Surr_00181	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5015.D

Injection Date: 04-Nov-2018 16:05:30

Instrument ID: HP5975T

Operator ID: RF

Lims ID: 480-144297-D-5

Lab Sample ID: 480-144297-5

Worklist Smp#: 17

Client ID: GPW-20

Purge Vol: 5.000 mL

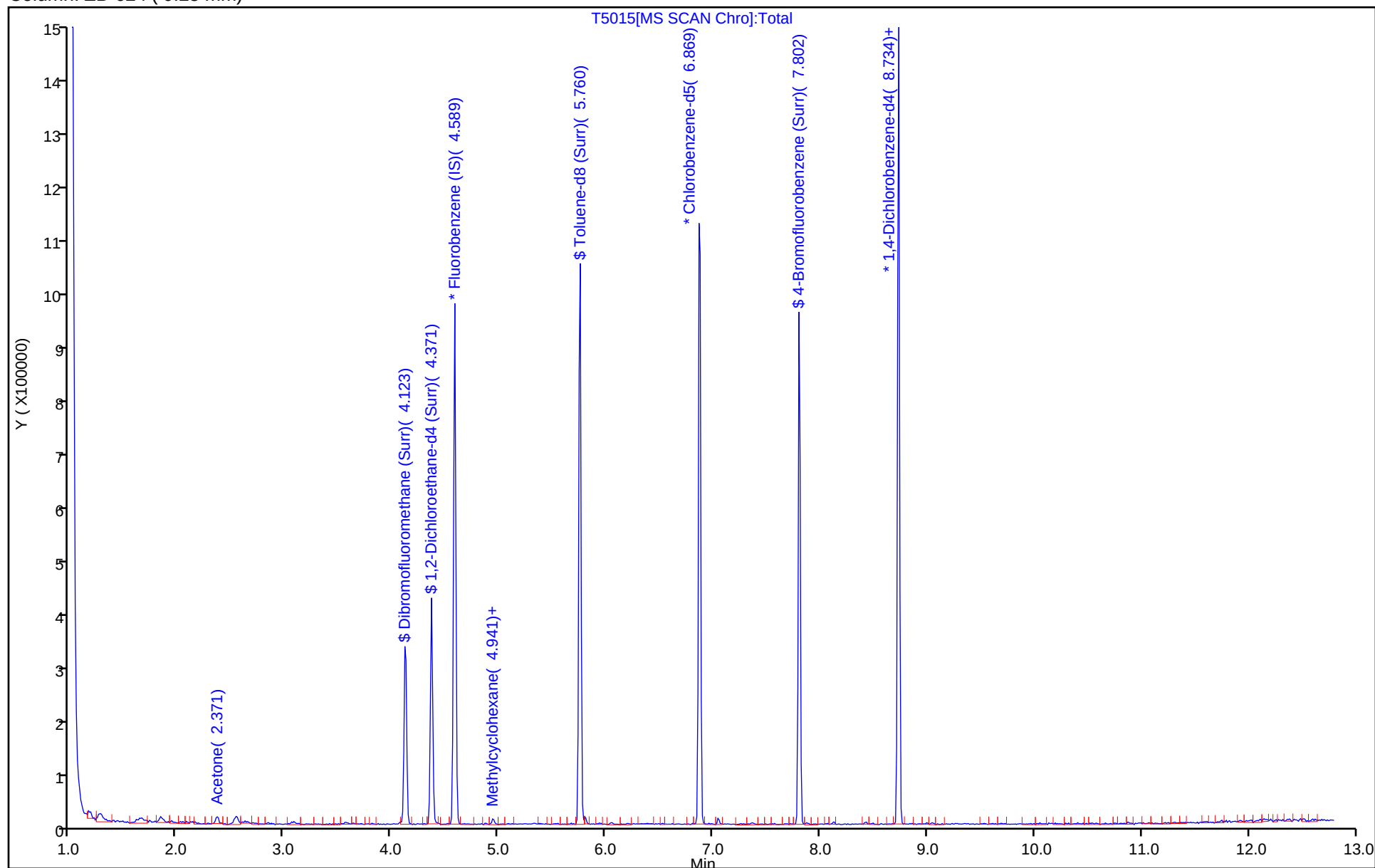
Dil. Factor: 1.0000

ALS Bottle#: 17

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5015.D

Injection Date: 04-Nov-2018 16:05:30

Instrument ID: HP5975T

Lims ID: 480-144297-D-5

Lab Sample ID: 480-144297-5

Client ID: GPW-20

Operator ID: RF

ALS Bottle#: 17

Worklist Smp#: 17

Purge Vol: 5.000 mL

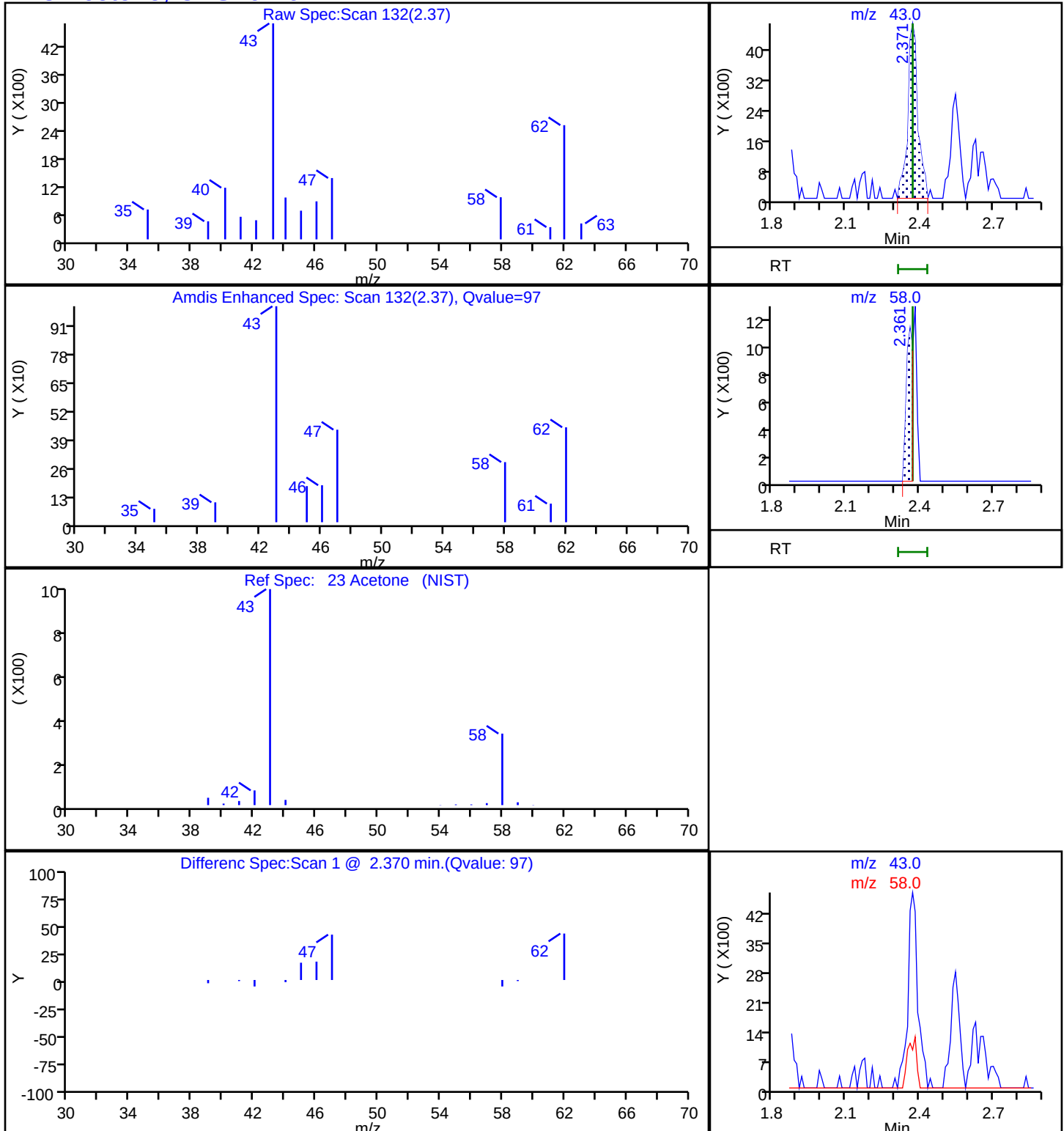
Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

23 Acetone, CAS: 67-64-1

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5015.D

Injection Date: 04-Nov-2018 16:05:30

Instrument ID: HP5975T

Lims ID: 480-144297-D-5

Lab Sample ID: 480-144297-5

Client ID: GPW-20

Operator ID: RF

ALS Bottle#: 17

Worklist Smp#: 17

Purge Vol: 5.000 mL

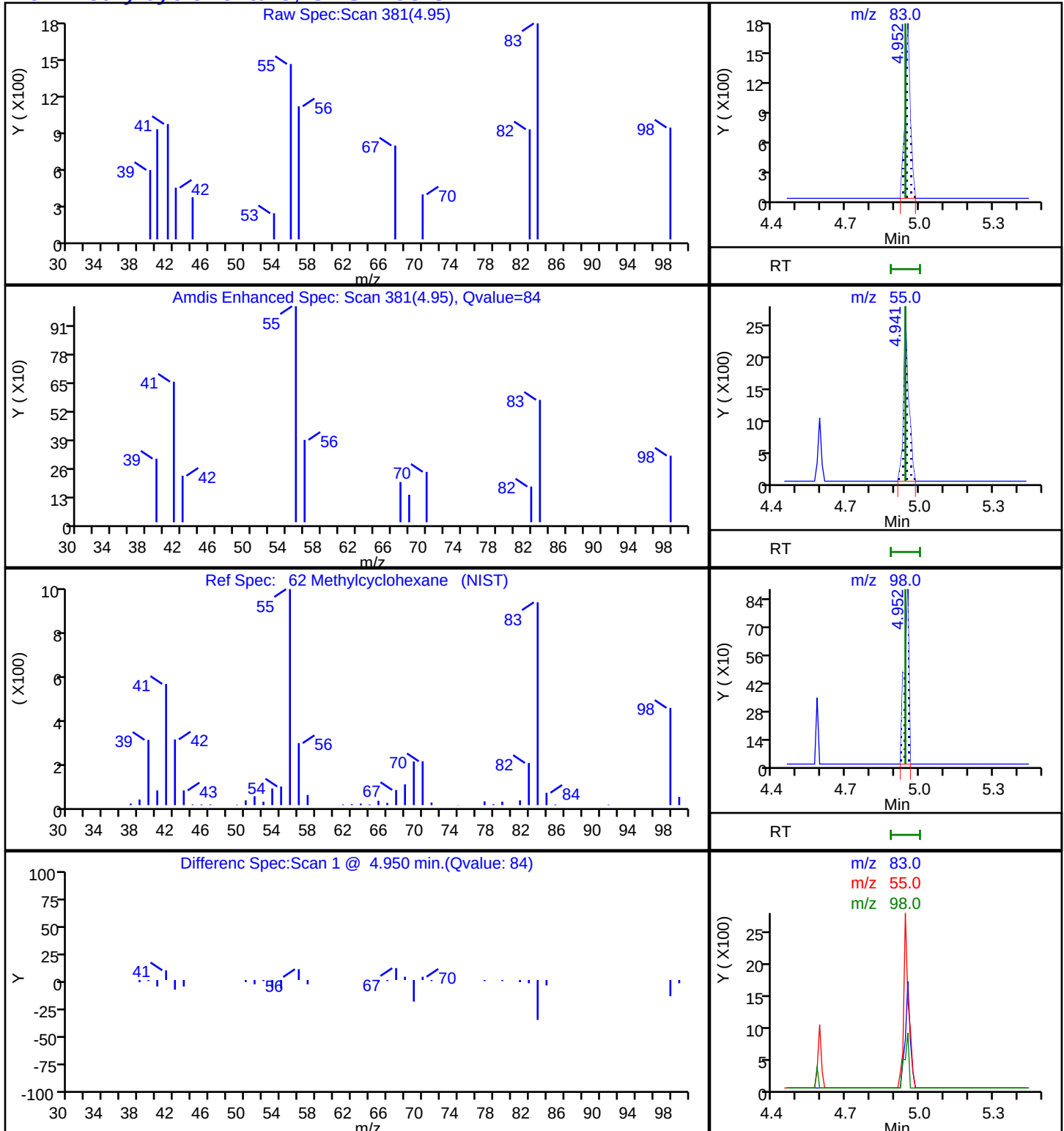
Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

62 Methylcyclohexane, CAS: 108-87-2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: GMW-2 Lab Sample ID: 480-144297-6

Matrix: Water Lab File ID: T5016.D

Analysis Method: 8260C Date Collected: 10/24/2018 12:15

Sample wt/vol: 5 (mL) Date Analyzed: 11/04/2018 16:28

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.: 443500 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND	F1	1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	1.0	0.31
75-34-3	1,1-Dichloroethane	ND	F1	1.0	0.38
75-35-4	1,1-Dichloroethene	ND	F1	1.0	0.29
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
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND	F1	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
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
75-27-4	Bromodichloromethane	ND	F1	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	F1	1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
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
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND	F1	1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: GMW-2 Lab Sample ID: 480-144297-6

Matrix: Water Lab File ID: T5016.D

Analysis Method: 8260C Date Collected: 10/24/2018 12:15

Sample wt/vol: 5 (mL) Date Analyzed: 11/04/2018 16:28

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.: 443500 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
2037-26-5	Toluene-d8 (Surr)	99		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		77-120
460-00-4	4-Bromofluorobenzene (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	106		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5016.D
 Lims ID: 480-144297-D-6
 Client ID: GMW-2
 Sample Type: Client
 Inject. Date: 04-Nov-2018 16:28:30 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-144297-D-6
 Misc. Info.: 480-0076114-018
 Operator ID: RF Instrument ID: HP5975T
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 05-Nov-2018 08:41:45 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0320

First Level Reviewer: nowakk

Date: 05-Nov-2018 08:51:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.589	4.589	0.000	97	122601	25.0	
* 2 Chlorobenzene-d5	117	6.869	6.879	-0.010	92	474304	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	298648	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.123	0.000	92	156252	26.4	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.371	4.371	0.000	0	263685	28.1	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	95	520650	24.7	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	195167	25.2	
11 Dichlorodifluoromethane	85		1.107				ND	
13 Chloromethane	50		1.252				ND	
14 Vinyl chloride	62		1.325				ND	
15 Bromomethane	94		1.584				ND	
16 Chloroethane	64		1.636				ND	
17 Trichlorofluoromethane	101		1.802				ND	
22 1,1-Dichloroethene	96		2.258				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.268				ND	
23 Acetone	43	2.361	2.372	-0.011	75	6280	2.69	
25 Carbon disulfide	76		2.434				ND	
28 Methyl acetate	43		2.631				ND	
30 Methylene Chloride	84		2.724				ND	
33 Methyl tert-butyl ether	73		2.900				ND	
32 trans-1,2-Dichloroethene	96		2.910				ND	
36 1,1-Dichloroethane	63		3.273				ND	
43 cis-1,2-Dichloroethene	96		3.739				ND	
44 2-Butanone (MEK)	43		3.771				ND	
50 Chloroform	83		3.999				ND	
51 1,1,1-Trichloroethane	97		4.092				ND	
52 Cyclohexane	56		4.092				ND	
53 Carbon tetrachloride	117		4.195				ND	
55 Benzene	78		4.372				ND	
57 1,2-Dichloroethane	62		4.434				ND	
60 Trichloroethene	95		4.859				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Methylcyclohexane	83		4.942				ND	
63 1,2-Dichloropropane	63		5.045				ND	
67 Dichlorobromomethane	83		5.273				ND	
71 cis-1,3-Dichloropropene	75		5.594				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.698				ND	
73 Toluene	92		5.812				ND	
75 trans-1,3-Dichloropropene	75		6.019				ND	
78 1,1,2-Trichloroethane	83		6.164				ND	
79 Tetrachloroethene	166		6.206				ND	
81 2-Hexanone	43		6.330				ND	
82 Chlorodibromomethane	129		6.465				ND	
83 Ethylene Dibromide	107		6.548				ND	
86 Chlorobenzene	112		6.900				ND	
88 Ethylbenzene	91		6.962				ND	
90 m-Xylene & p-Xylene	106		7.056				ND	
91 o-Xylene	106		7.367				ND	
92 Styrene	104		7.387				ND	
93 Bromoform	173		7.584				ND	
95 Isopropylbenzene	105		7.646				ND	
98 1,1,2,2-Tetrachloroethane	83		7.968				ND	
110 1,3-Dichlorobenzene	146		8.672				ND	
113 1,4-Dichlorobenzene	146		8.755				ND	
116 1,2-Dichlorobenzene	146		9.056				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.729				ND	
119 1,2,4-Trichlorobenzene	180		10.372				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_IS_00209	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_Surr_00181	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181104-76114.b\\T5016.D

Injection Date: 04-Nov-2018 16:28:30

Instrument ID: HP5975T

Operator ID: RF

Lims ID: 480-144297-D-6

Lab Sample ID: 480-144297-6

Worklist Smp#: 18

Client ID: GMW-2

Purge Vol: 5.000 mL

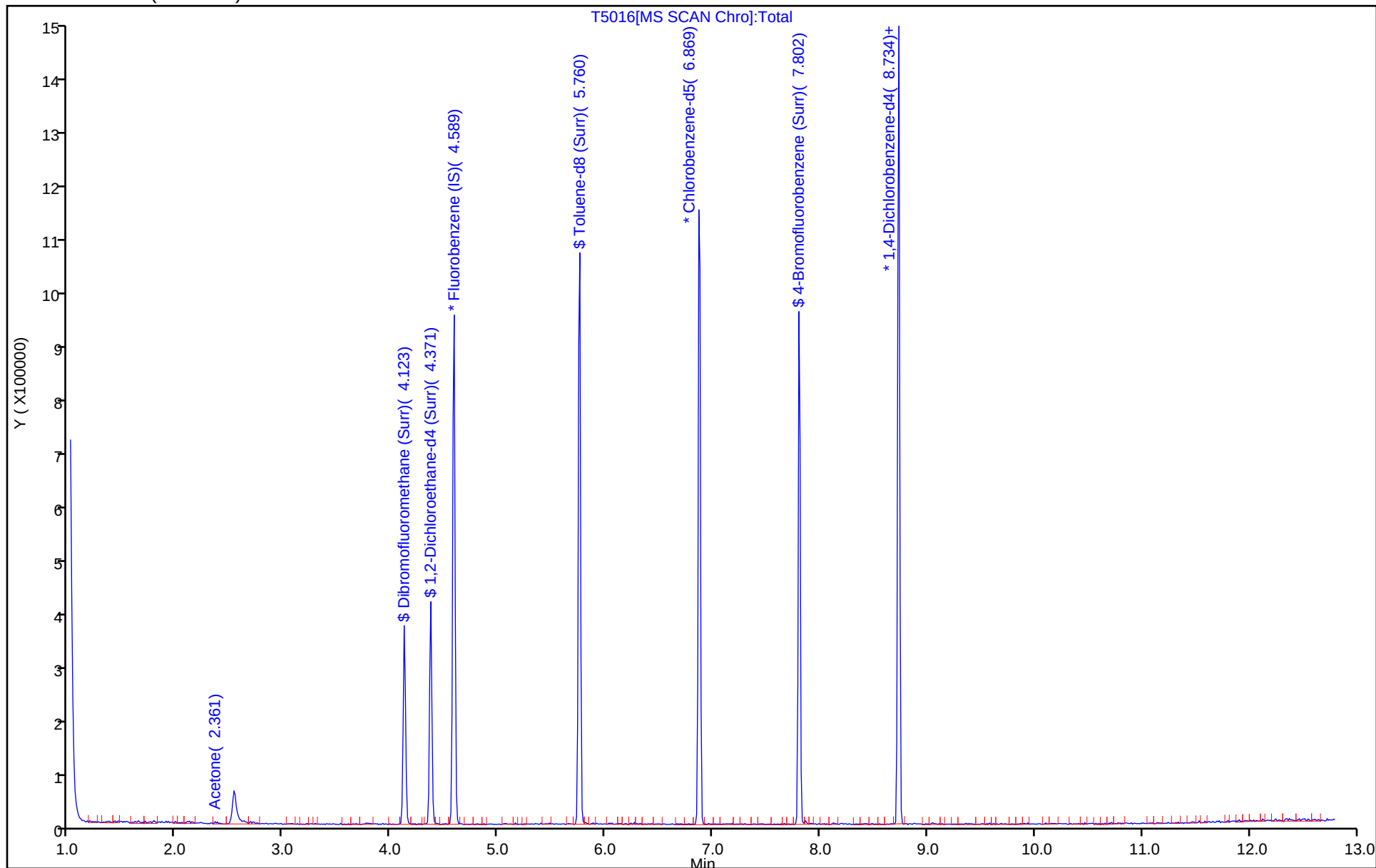
Dil. Factor: 1.0000

ALS Bottle#: 18

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>EW-10</u>	Lab Sample ID: <u>480-144297-7</u>
Matrix: <u>Water</u>	Lab File ID: <u>P37840.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/25/2018 11:55</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/06/2018 04:18</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>200</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443770</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		200	160
79-34-5	1,1,2,2-Tetrachloroethane	ND		200	42
79-00-5	1,1,2-Trichloroethane	ND		200	46
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		200	62
75-34-3	1,1-Dichloroethane	ND		200	76
75-35-4	1,1-Dichloroethene	ND		200	58
120-82-1	1,2,4-Trichlorobenzene	ND		200	82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		200	78
95-50-1	1,2-Dichlorobenzene	ND		200	160
107-06-2	1,2-Dichloroethane	ND		200	42
78-87-5	1,2-Dichloropropane	ND		200	140
541-73-1	1,3-Dichlorobenzene	ND		200	160
106-46-7	1,4-Dichlorobenzene	ND		200	170
78-93-3	2-Butanone (MEK)	ND		2000	260
591-78-6	2-Hexanone	ND		1000	250
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1000	420
67-64-1	Acetone	ND		2000	600
71-43-2	Benzene	ND		200	82
75-27-4	Bromodichloromethane	ND		200	78
75-25-2	Bromoform	ND		200	52
74-83-9	Bromomethane	ND		200	140
75-15-0	Carbon disulfide	ND		200	38
56-23-5	Carbon tetrachloride	ND		200	54
108-90-7	Chlorobenzene	ND		200	150
124-48-1	Dibromochloromethane	ND		200	64
75-00-3	Chloroethane	ND		200	64
67-66-3	Chloroform	ND		200	68
74-87-3	Chloromethane	ND		200	70
156-59-2	cis-1,2-Dichloroethene	6900		200	160
10061-01-5	cis-1,3-Dichloropropene	ND		200	72
110-82-7	Cyclohexane	ND		200	36
75-71-8	Dichlorodifluoromethane	ND		200	140
100-41-4	Ethylbenzene	ND		200	150
106-93-4	1,2-Dibromoethane	ND		200	150
98-82-8	Isopropylbenzene	ND		200	160

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: EW-10 Lab Sample ID: 480-144297-7

Matrix: Water Lab File ID: P37840.D

Analysis Method: 8260C Date Collected: 10/25/2018 11:55

Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 04:18

Soil Aliquot Vol: _____ Dilution Factor: 200

Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		500	260
1634-04-4	Methyl tert-butyl ether	ND		200	32
108-87-2	Methylcyclohexane	ND		200	32
75-09-2	Methylene Chloride	ND		200	88
100-42-5	Styrene	ND		200	150
127-18-4	Tetrachloroethene	ND		200	72
108-88-3	Toluene	ND		200	100
156-60-5	trans-1,2-Dichloroethene	ND		200	180
10061-02-6	trans-1,3-Dichloropropene	ND		200	74
79-01-6	Trichloroethene	ND		200	92
75-69-4	Trichlorofluoromethane	ND		200	180
75-01-4	Vinyl chloride	7100		200	180
1330-20-7	Xylenes, Total	ND		400	130

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		77-120
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
1868-53-7	Dibromofluoromethane (Surr)	90		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37840.D
 Lims ID: 480-144297-D-7
 Client ID: EW-10
 Sample Type: Client
 Inject. Date: 06-Nov-2018 04:18:30 ALS Bottle#: 15 Worklist Smp#: 34
 Purge Vol: 5.000 mL Dil. Factor: 200.0000
 Sample Info: 480-144297-D-7
 Misc. Info.: 480-0076157-034
 Operator ID: RB Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 14:52:50 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 14:52:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	235587	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.284	0.006	86	460389	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	96	492523	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	94	306390	22.5	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.995	0.000	0	178479	22.3	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.319	0.006	93	1046747	24.2	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	96	376722	24.2	
10 Dichlorodifluoromethane	85		4.252				ND	
11 Chloromethane	50		4.666				ND	
17 Vinyl chloride	62	4.855	4.855	0.000	98	951582	35.7	
12 Bromomethane	94		5.481				ND	
13 Chloroethane	64		5.615				ND	
14 Trichlorofluoromethane	101		5.956				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.625				ND	
25 1,1-Dichloroethene	96		6.722				ND	
24 Acetone	43		6.807				ND	
27 Carbon disulfide	76		7.118				ND	
30 Methyl acetate	43		7.172				ND	
31 Methylene Chloride	84		7.391				ND	
32 Methyl tert-butyl ether	73		7.604				ND	
35 trans-1,2-Dichloroethene	96		7.696				ND	
40 1,1-Dichloroethane	63		8.249				ND	
44 2-Butanone (MEK)	43		8.931				ND	
43 cis-1,2-Dichloroethene	96	8.967	8.955	0.006	82	585279	34.7	
49 Chloroform	83		9.326				ND	
52 1,1,1-Trichloroethane	97		9.557				ND	
54 Cyclohexane	56		9.594				ND	
55 Carbon tetrachloride	117		9.752				ND	
57 Benzene	78		10.032				ND	
60 1,2-Dichloroethane	62		10.087				ND	
62 Trichloroethene	95		10.786				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		10.987				ND	
63 1,2-Dichloropropane	63		11.127				ND	
70 Dichlorobromomethane	83		11.461				ND	
73 cis-1,3-Dichloropropene	75		11.997				ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100				ND	
76 Toluene	92		12.417				ND	Ua
78 trans-1,3-Dichloropropene	75		12.709				ND	
79 1,1,2-Trichloroethane	83		12.994				ND	
80 Tetrachloroethene	166		13.147				ND	
83 2-Hexanone	43		13.183				ND	
81 Chlorodibromomethane	129		13.572				ND	
85 Ethylene Dibromide	107		13.767				ND	
87 Chlorobenzene	112		14.327				ND	
89 Ethylbenzene	91		14.375				ND	
90 m-Xylene & p-Xylene	106		14.509				ND	
93 o-Xylene	106		15.057				ND	
94 Styrene	104		15.087				ND	
92 Bromoform	173		15.470				ND	
95 Isopropylbenzene	105		15.489				ND	
97 1,1,2,2-Tetrachloroethane	83		15.957				ND	
110 1,3-Dichlorobenzene	146		17.174				ND	
111 1,4-Dichlorobenzene	146		17.277				ND	
116 1,2-Dichlorobenzene	146		17.776				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.810				ND	
119 1,2,4-Trichlorobenzene	180		19.911				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37840.D

Injection Date: 06-Nov-2018 04:18:30

Instrument ID: HP5973P

Operator ID: RB

Lims ID: 480-144297-D-7

Lab Sample ID: 480-144297-7

Worklist Smp#: 34

Client ID: EW-10

Purge Vol: 5.000 mL

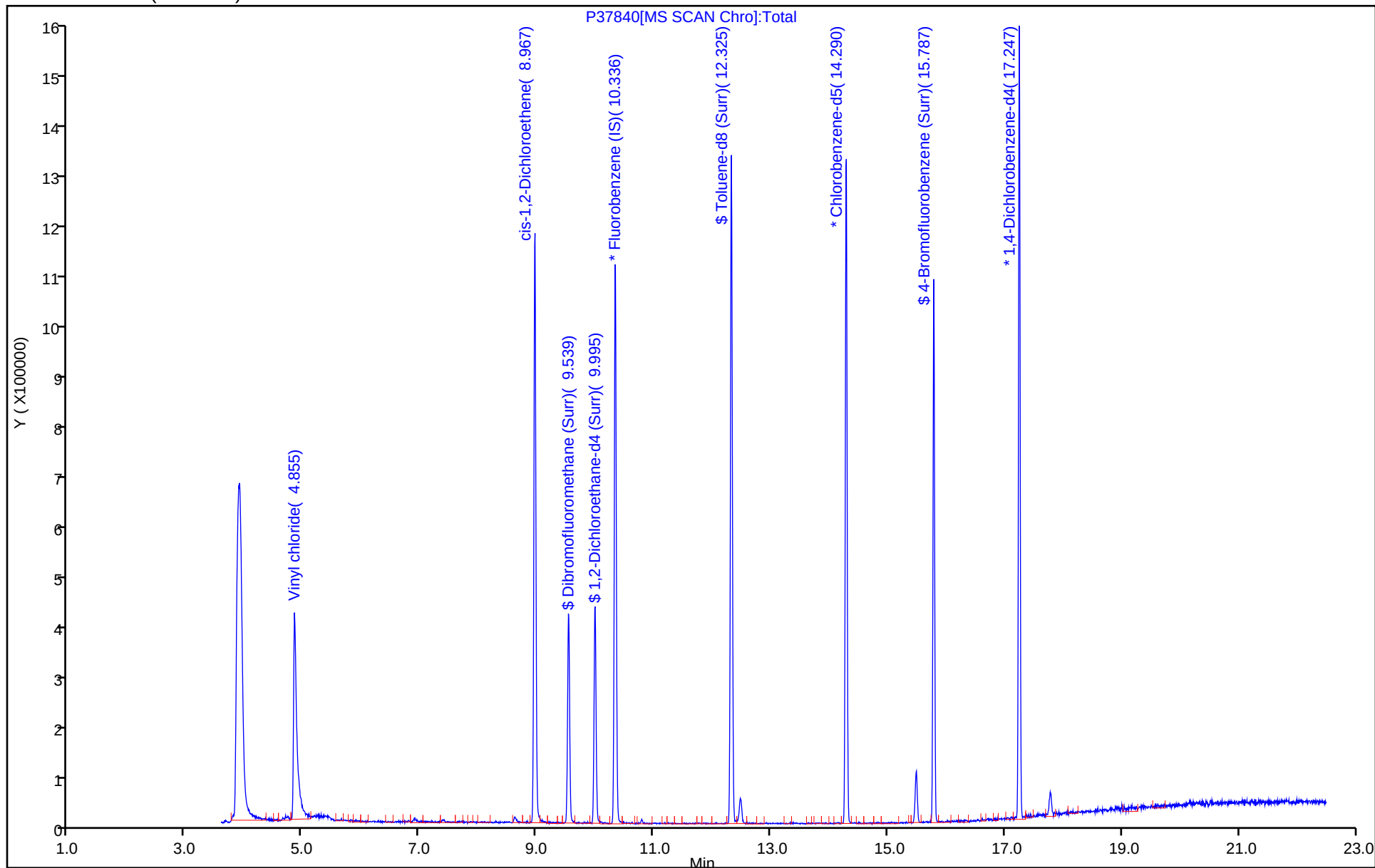
Dil. Factor: 200.0000

ALS Bottle#: 15

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37840.D

Injection Date: 06-Nov-2018 04:18:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-7

Lab Sample ID: 480-144297-7

Client ID: EW-10

Operator ID: RB

ALS Bottle#: 15

Worklist Smp#: 34

Purge Vol: 5.000 mL

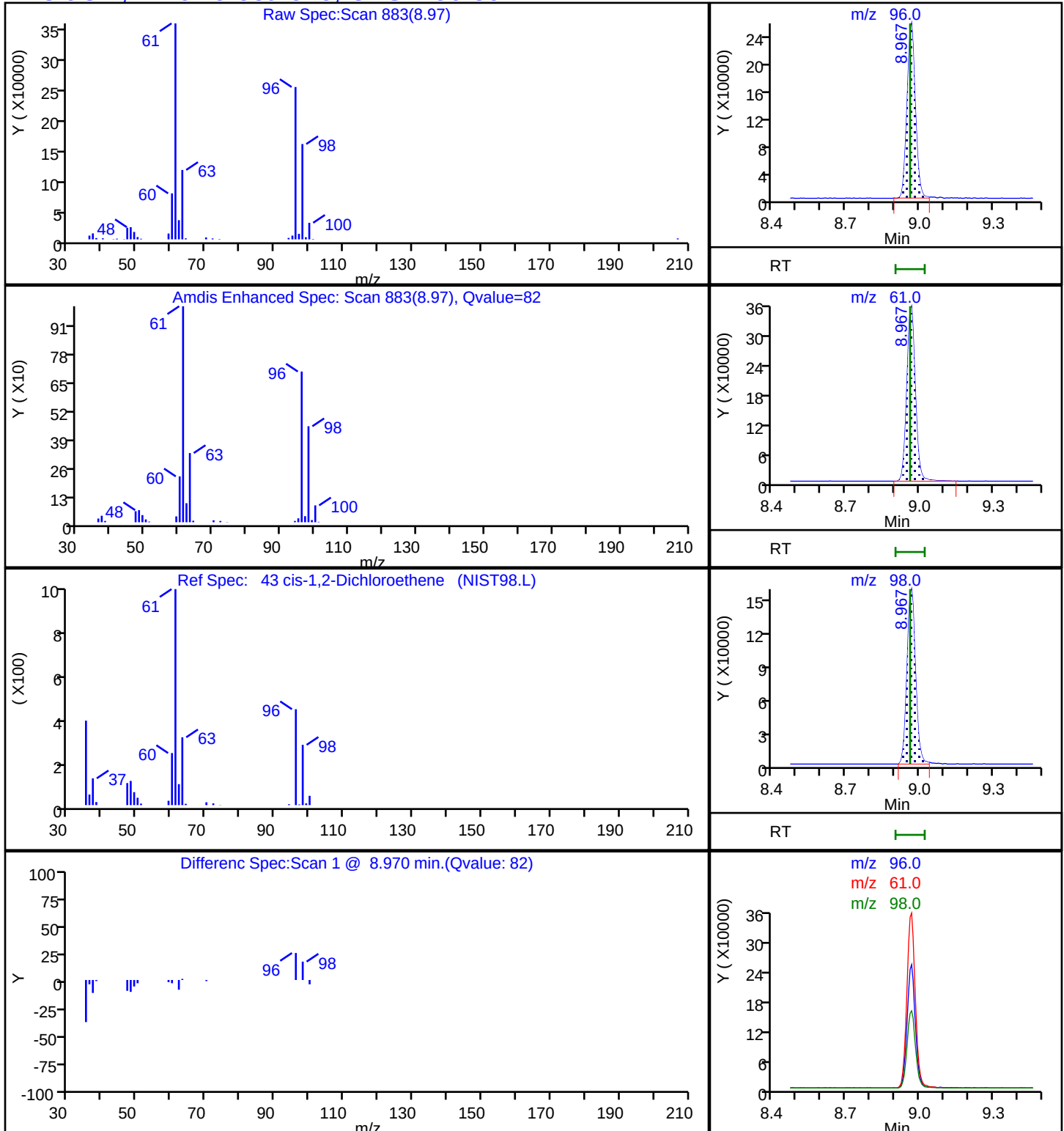
Dil. Factor: 200.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37840.D

Injection Date: 06-Nov-2018 04:18:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-7

Lab Sample ID: 480-144297-7

Client ID: EW-10

Operator ID: RB

ALS Bottle#: 15

Worklist Smp#: 34

Purge Vol: 5.000 mL

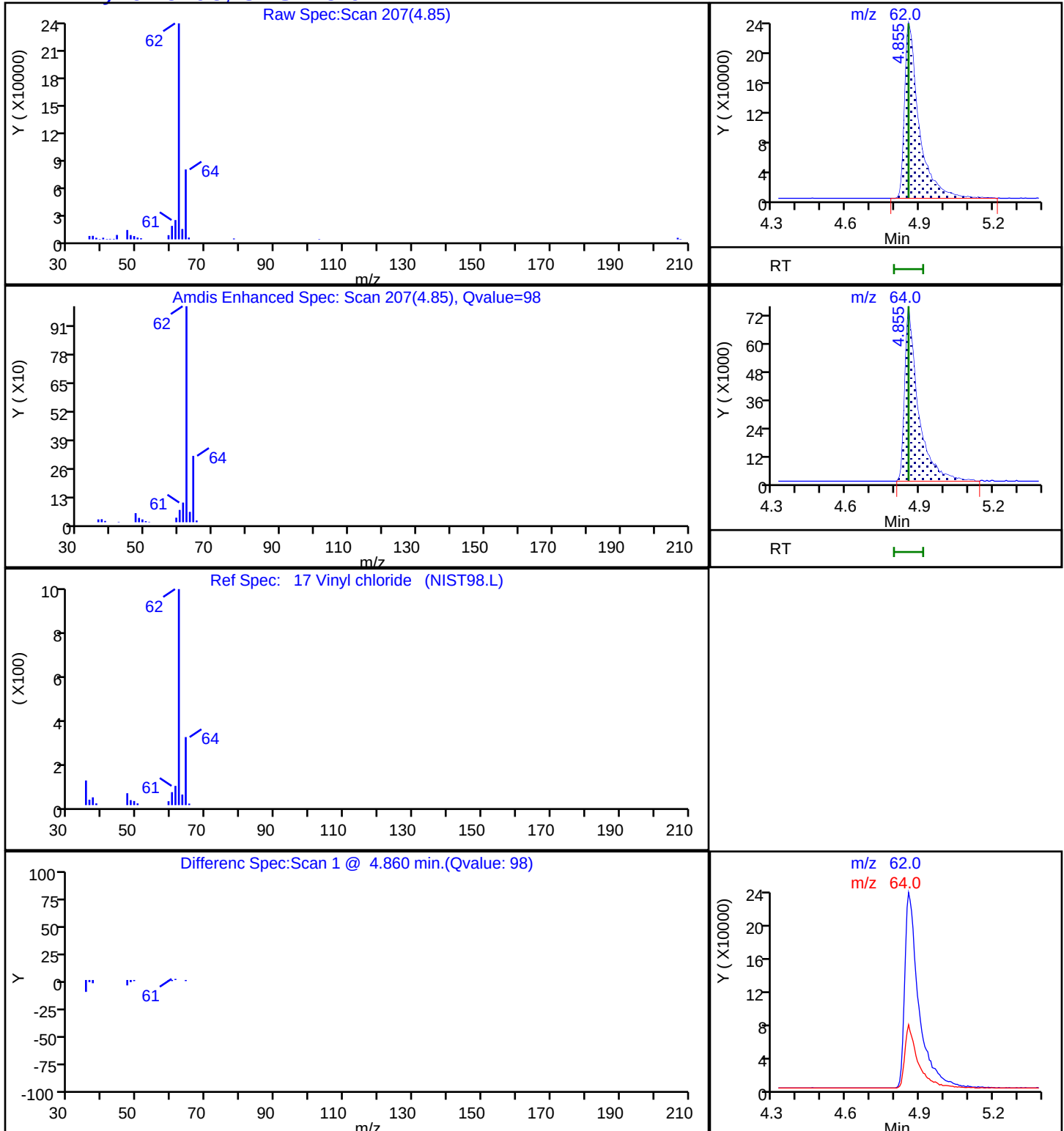
Dil. Factor: 200.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

17 Vinyl chloride, CAS: 75-01-4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>SB-19</u>	Lab Sample ID: <u>480-144297-8</u>
Matrix: <u>Water</u>	Lab File ID: <u>P37841.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/25/2018 13:50</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/06/2018 04:46</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443770</u>	Units: <u>ug/L</u>

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
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
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
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
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	3.2	J	10	3.0
71-43-2	Benzene	ND		1.0	0.41
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
124-48-1	Dibromochloromethane	ND		1.0	0.32
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	16		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
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: SB-19 Lab Sample ID: 480-144297-8
 Matrix: Water Lab File ID: P37841.D
 Analysis Method: 8260C Date Collected: 10/25/2018 13:50
 Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 04:46
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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	0.37	J	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	14		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	1.6		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	95		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		77-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
1868-53-7	Dibromofluoromethane (Surr)	94		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37841.D
 Lims ID: 480-144297-D-8
 Client ID: SB-19
 Sample Type: Client
 Inject. Date: 06-Nov-2018 04:46:30 ALS Bottle#: 16 Worklist Smp#: 35
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-144297-D-8
 Misc. Info.: 480-0076157-035
 Operator ID: RB Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 14:54:53 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 14:54:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	224440	25.0	
* 2 Chlorobenzene-d5	82	14.284	14.284	0.000	86	461755	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	491623	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	93	305934	23.6	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.989	9.995	-0.006	0	179337	23.5	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.319	0.006	93	1029605	23.7	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	95	372657	23.9	
10 Dichlorodifluoromethane	85		4.252				ND	
11 Chloromethane	50		4.666				ND	
17 Vinyl chloride	62	4.855	4.855	0.000	97	41655	1.64	
12 Bromomethane	94		5.481				ND	
13 Chloroethane	64		5.615				ND	
14 Trichlorofluoromethane	101		5.956				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.625				ND	
25 1,1-Dichloroethene	96		6.722				ND	
24 Acetone	43	6.807	6.826	0.000	97	19364	3.18	
27 Carbon disulfide	76		7.118				ND	U
30 Methyl acetate	43		7.172				ND	
31 Methylene Chloride	84		7.391				ND	
32 Methyl tert-butyl ether	73		7.604				ND	
35 trans-1,2-Dichloroethene	96		7.696				ND	Ua
40 1,1-Dichloroethane	63		8.249				ND	
44 2-Butanone (MEK)	43		8.931				ND	Ua
43 cis-1,2-Dichloroethene	96	8.967	8.955	0.006	82	258742	16.1	
49 Chloroform	83		9.326				ND	
52 1,1,1-Trichloroethane	97		9.557				ND	
54 Cyclohexane	56		9.594				ND	
55 Carbon tetrachloride	117		9.752				ND	
57 Benzene	78		10.032				ND	
60 1,2-Dichloroethane	62		10.087				ND	
62 Trichloroethene	95	10.792	10.786	0.006	96	196219	13.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		10.987				ND	
63 1,2-Dichloropropane	63		11.127				ND	
70 Dichlorobromomethane	83		11.461				ND	
73 cis-1,3-Dichloropropene	75		11.997				ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100				ND	
76 Toluene	92		12.417				ND	
78 trans-1,3-Dichloropropene	75		12.709				ND	
79 1,1,2-Trichloroethane	83		12.994				ND	
80 Tetrachloroethene	166	13.153	13.153	0.006	93	5884	0.3725	a
83 2-Hexanone	43		13.183				ND	
81 Chlorodibromomethane	129		13.572				ND	
85 Ethylene Dibromide	107		13.767				ND	
87 Chlorobenzene	112		14.327				ND	
89 Ethylbenzene	91		14.375				ND	
90 m-Xylene & p-Xylene	106		14.509				ND	
93 o-Xylene	106		15.057				ND	
94 Styrene	104		15.087				ND	
92 Bromoform	173		15.470				ND	
95 Isopropylbenzene	105		15.489				ND	
97 1,1,2,2-Tetrachloroethane	83		15.957				ND	
110 1,3-Dichlorobenzene	146		17.174				ND	
111 1,4-Dichlorobenzene	146		17.277				ND	
116 1,2-Dichlorobenzene	146		17.776				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.810				ND	
119 1,2,4-Trichlorobenzene	180		19.911				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37841.D

Injection Date: 06-Nov-2018 04:46:30

Instrument ID: HP5973P

Operator ID: RB

Lims ID: 480-144297-D-8

Lab Sample ID: 480-144297-8

Worklist Smp#: 35

Client ID: SB-19

Purge Vol: 5.000 mL

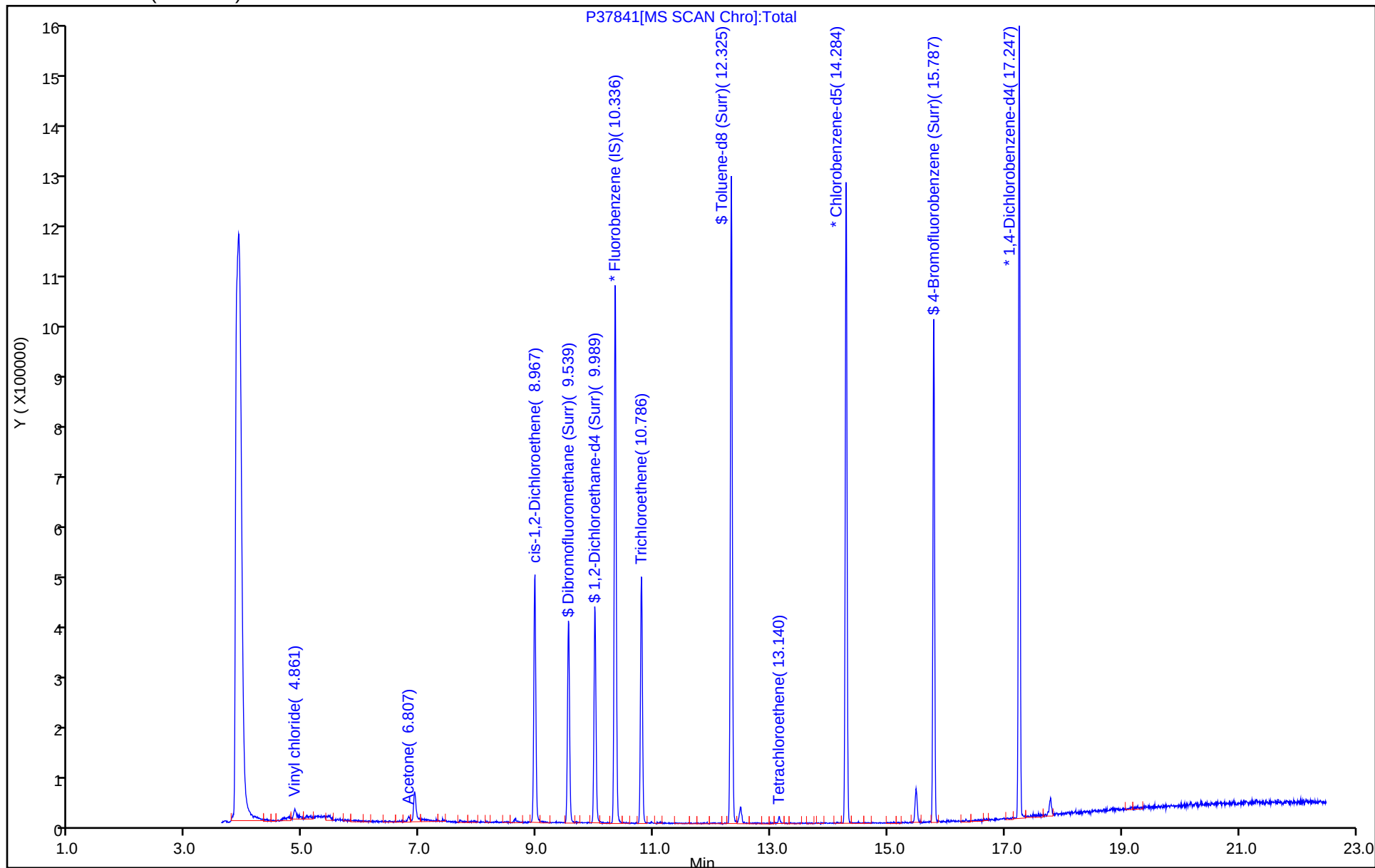
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37841.D

Injection Date: 06-Nov-2018 04:46:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-8

Lab Sample ID: 480-144297-8

Client ID: SB-19

Operator ID: RB

ALS Bottle#: 16

Worklist Smp#: 35

Purge Vol: 5.000 mL

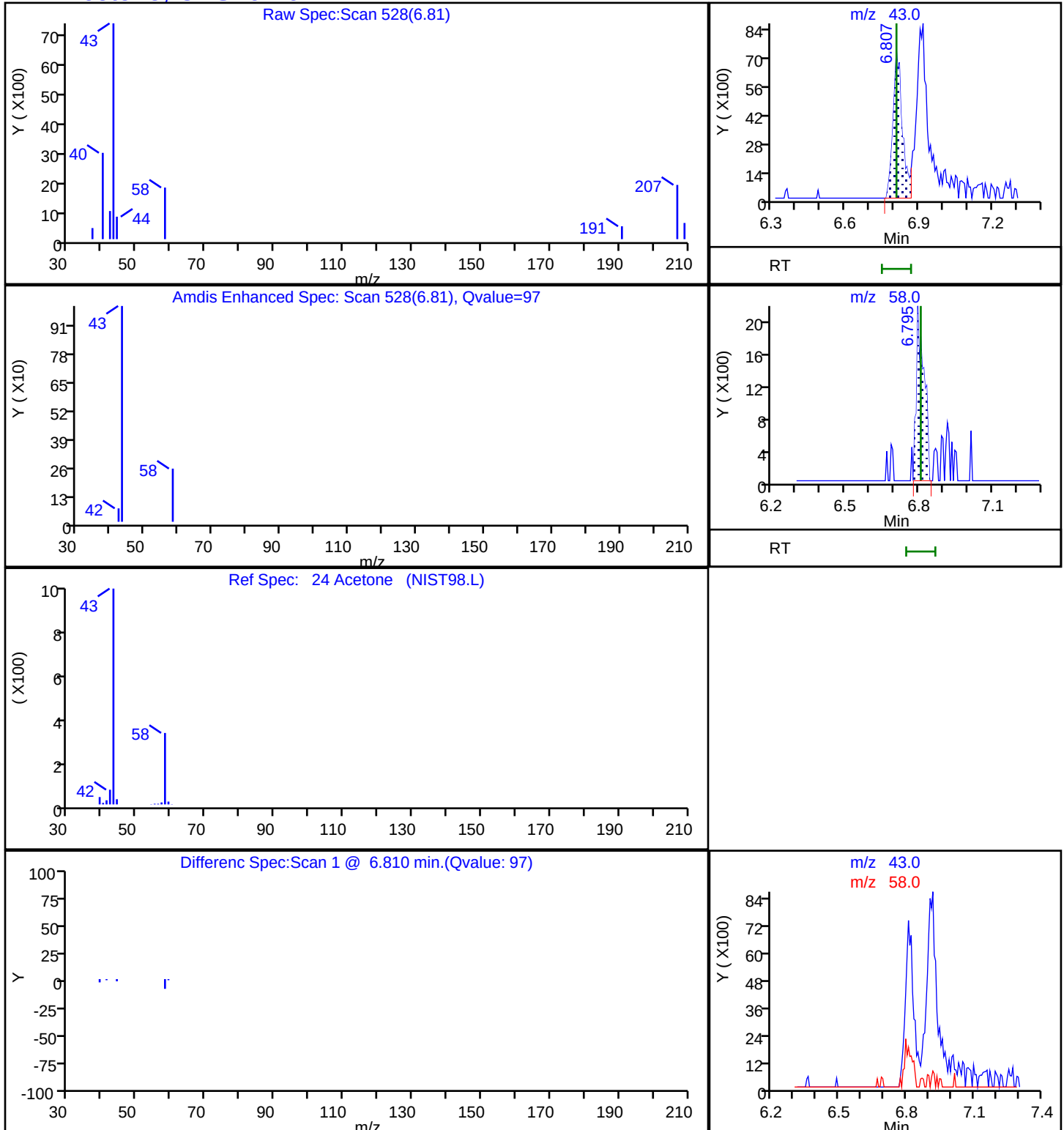
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37841.D

Injection Date: 06-Nov-2018 04:46:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-8

Lab Sample ID: 480-144297-8

Client ID: SB-19

Operator ID: RB

ALS Bottle#: 16

Worklist Smp#: 35

Purge Vol: 5.000 mL

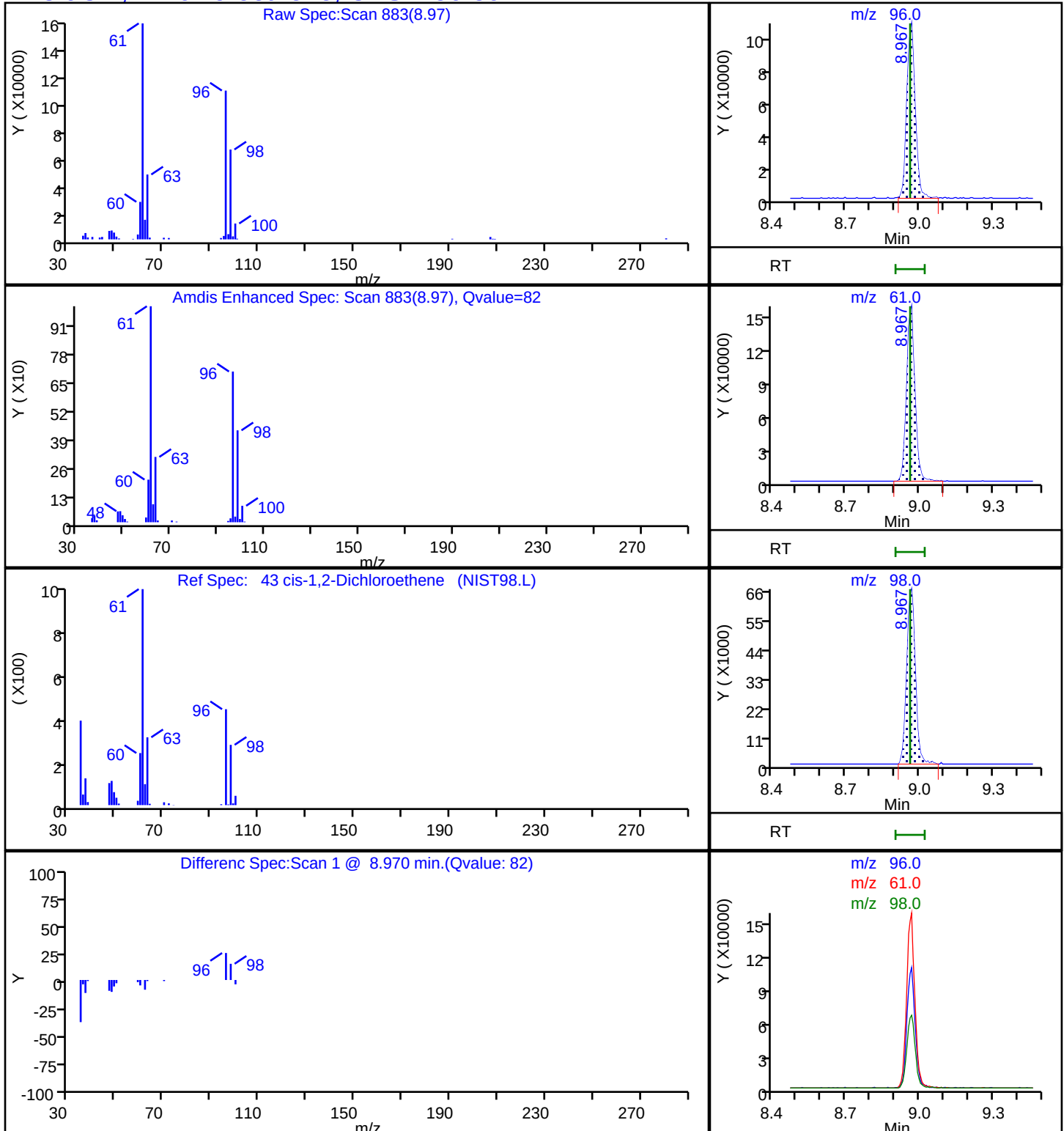
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37841.D

Injection Date: 06-Nov-2018 04:46:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-8

Lab Sample ID: 480-144297-8

Client ID: SB-19

Operator ID: RB

ALS Bottle#: 16

Worklist Smp#: 35

Purge Vol: 5.000 mL

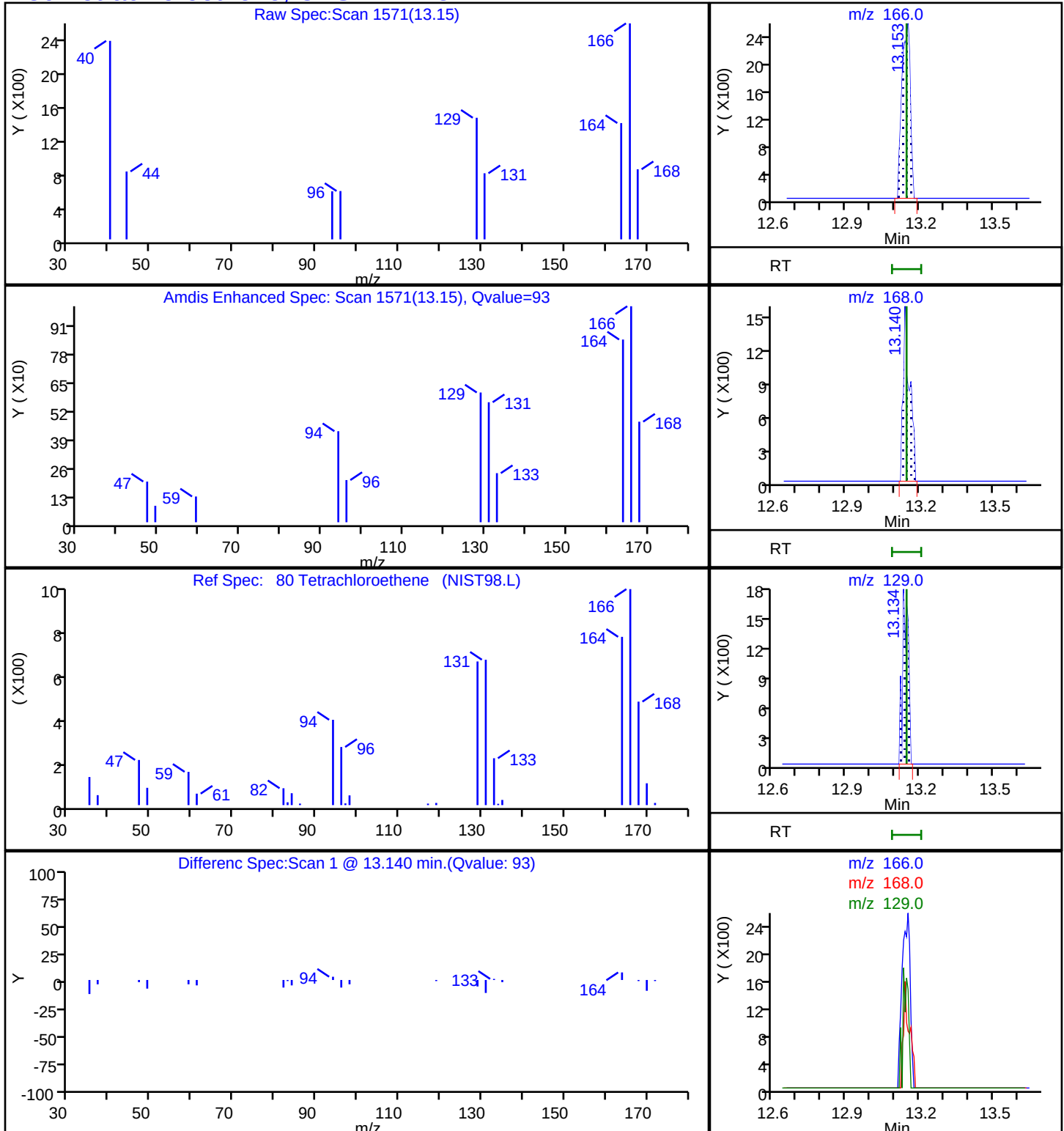
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37841.D

Injection Date: 06-Nov-2018 04:46:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-8

Lab Sample ID: 480-144297-8

Client ID: SB-19

Operator ID: RB

ALS Bottle#: 16

Worklist Smp#: 35

Purge Vol: 5.000 mL

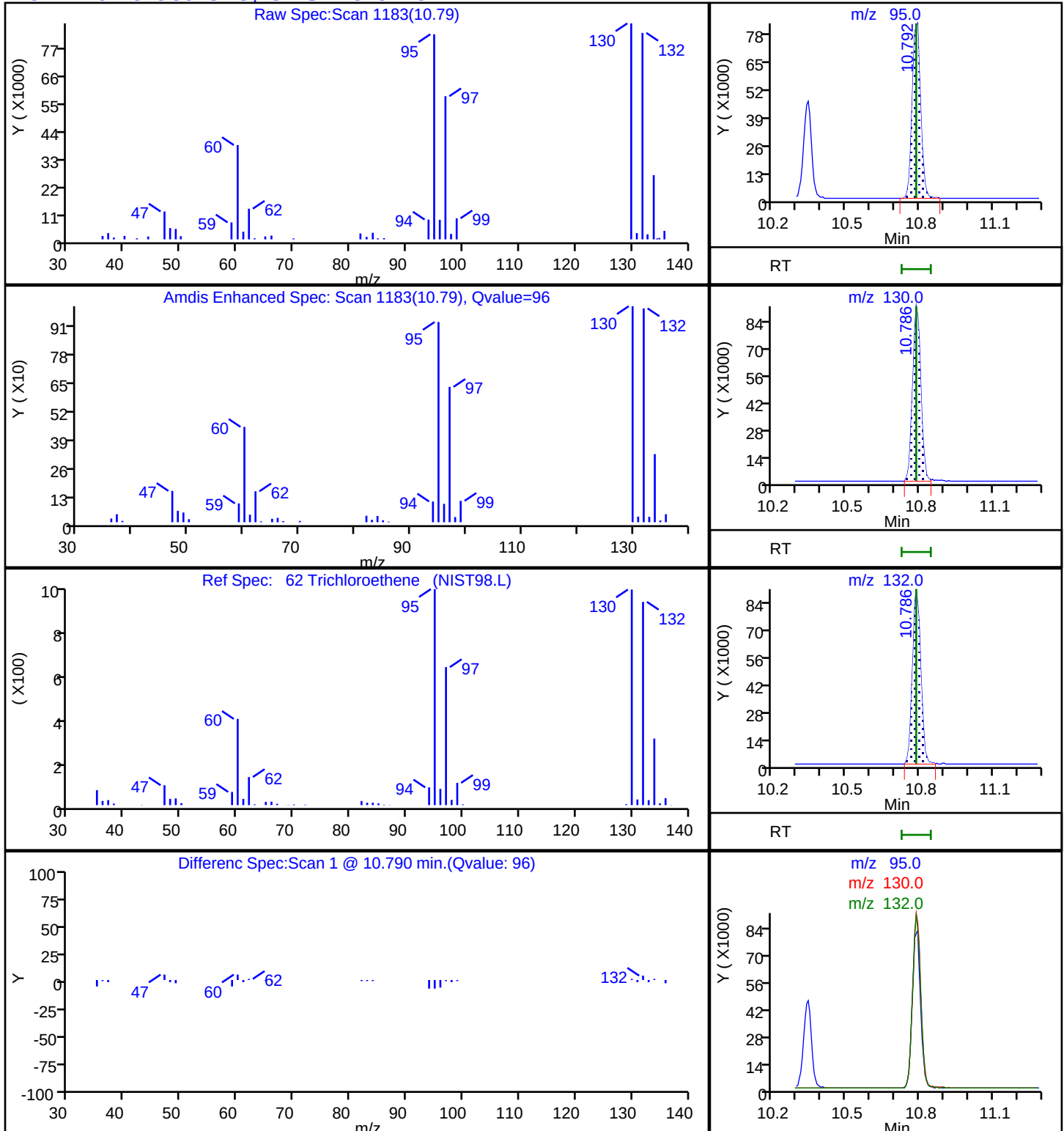
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

62 Trichloroethene, CAS: 79-01-6

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37841.D

Injection Date: 06-Nov-2018 04:46:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-8

Lab Sample ID: 480-144297-8

Client ID: SB-19

Operator ID: RB

ALS Bottle#: 16

Worklist Smp#: 35

Purge Vol: 5.000 mL

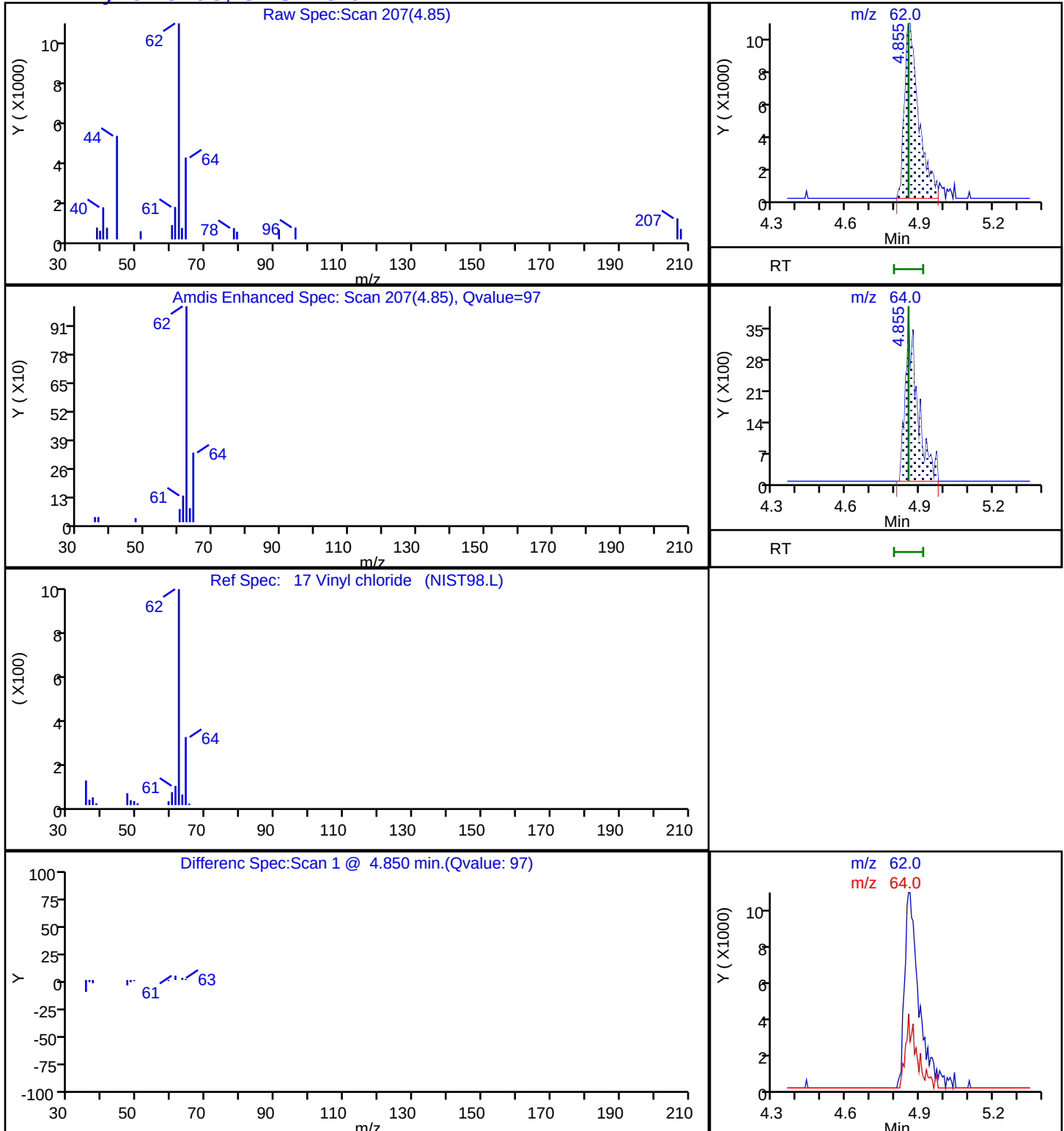
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

17 Vinyl chloride, CAS: 75-01-4

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\37841.D

Injection Date: 06-Nov-2018 04:46:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-8

Lab Sample ID: 480-144297-8

Client ID: SB-19

Operator ID: RB

ALS Bottle#: 16

Worklist Smp#: 35

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: P-8260H2O

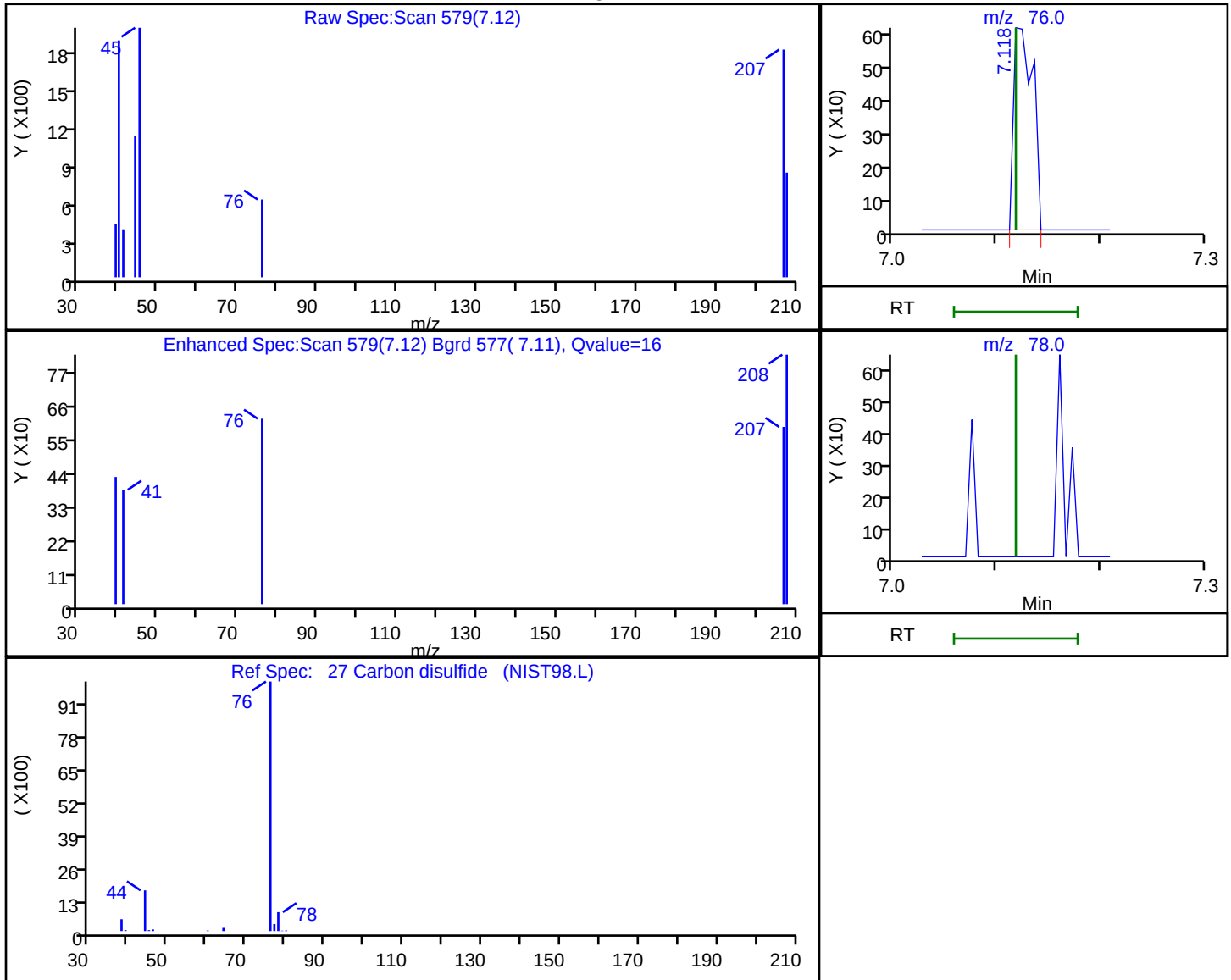
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
7.12	76.00	792	0.020619
7.12	78.00	0	

Reviewer: farrellr, 06-Nov-2018 14:53:10

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\HP37841.D

Injection Date: 06-Nov-2018 04:46:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-8

Lab Sample ID: 480-144297-8

Client ID: SB-19

Operator ID: RB

ALS Bottle#: 16

Worklist Smp#: 35

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

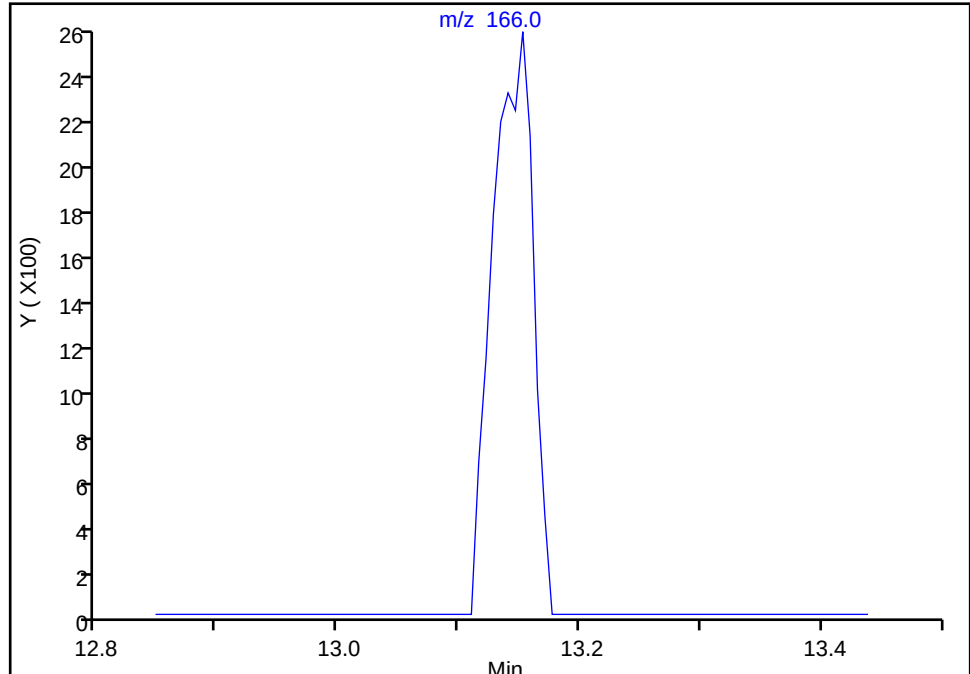
80 Tetrachloroethene, CAS: 127-18-4

Signal: 1

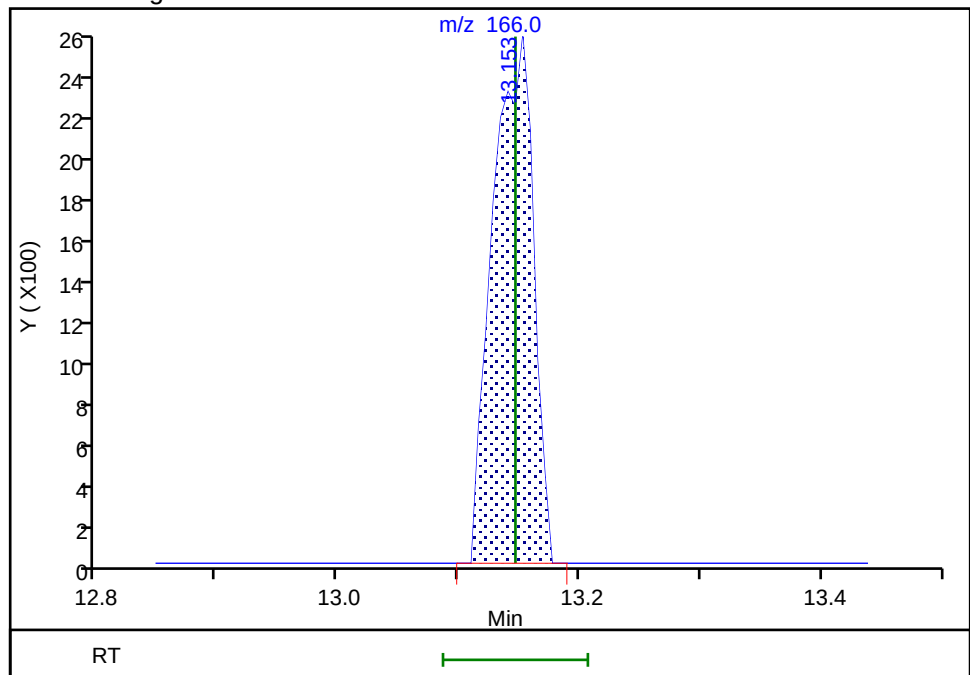
Not Detected

Expected RT: 13.15

Processing Integration Results



Manual Integration Results



RT: 13.15

Area: 5884

Amount: 0.372534

Amount Units: ug/L

Reviewer: farrellr, 06-Nov-2018 14:54:21

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GPW-6</u>	Lab Sample ID: <u>480-144297-9</u>
Matrix: <u>Water</u>	Lab File ID: <u>P37842.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/25/2018 17:25</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/06/2018 05:13</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443770</u>	Units: <u>ug/L</u>

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
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
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
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
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	16		10	3.0
71-43-2	Benzene	ND		1.0	0.41
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
124-48-1	Dibromochloromethane	ND		1.0	0.32
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	21		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	0.28	J	1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: GPW-6 Lab Sample ID: 480-144297-9

Matrix: Water Lab File ID: P37842.D

Analysis Method: 8260C Date Collected: 10/25/2018 17:25

Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 05:13

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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	0.22	J	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	3.9		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	6.0		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	96		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		77-120
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
1868-53-7	Dibromofluoromethane (Surr)	93		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37842.D
 Lims ID: 480-144297-C-9
 Client ID: GPW-6
 Sample Type: Client
 Inject. Date: 06-Nov-2018 05:13:30 ALS Bottle#: 17 Worklist Smp#: 36
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-144297-C-9
 Misc. Info.: 480-0076157-036
 Operator ID: RB Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 14:58:25 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 14:58:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	228062	25.0	
* 2 Chlorobenzene-d5	82	14.284	14.284	0.000	86	461914	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	500687	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	94	305354	23.2	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.995	0.000	0	183107	23.6	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.319	0.006	93	1044281	24.1	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	94	374686	24.0	
10 Dichlorodifluoromethane	85		4.252				ND	
11 Chloromethane	50		4.666				ND	
17 Vinyl chloride	62	4.855	4.855	0.000	98	155257	6.02	
12 Bromomethane	94		5.481				ND	
13 Chloroethane	64		5.615				ND	
14 Trichlorofluoromethane	101		5.956				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.625				ND	
25 1,1-Dichloroethene	96		6.722				ND	
24 Acetone	43	6.807	6.826	0.000	99	95983	15.5	
27 Carbon disulfide	76		7.118				ND	U
30 Methyl acetate	43		7.172				ND	
31 Methylene Chloride	84		7.391				ND	
32 Methyl tert-butyl ether	73		7.604				ND	
35 trans-1,2-Dichloroethene	96		7.696				ND	
40 1,1-Dichloroethane	63		8.249				ND	
44 2-Butanone (MEK)	43		8.931				ND	
43 cis-1,2-Dichloroethene	96	8.961	8.955	0.000	82	338846	20.8	
49 Chloroform	83		9.326				ND	
52 1,1,1-Trichloroethane	97		9.557				ND	
54 Cyclohexane	56	9.594	9.594	0.000	56	5817	0.2841	
55 Carbon tetrachloride	117		9.752				ND	
57 Benzene	78	10.044	10.032	0.012	83	11623	0.2162	
60 1,2-Dichloroethane	62		10.087				ND	
62 Trichloroethene	95	10.786	10.786	0.000	94	55419	3.86	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83	10.993	10.987	0.006	92	3672	0.2162	
63 1,2-Dichloropropane	63		11.127				ND	
70 Dichlorobromomethane	83		11.461				ND	
73 cis-1,3-Dichloropropene	75		11.997				ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100				ND	
76 Toluene	92	12.416	12.423	0.000	96	14616	0.4353	
78 trans-1,3-Dichloropropene	75		12.709				ND	
79 1,1,2-Trichloroethane	83		12.994				ND	
80 Tetrachloroethene	166		13.147				ND	
83 2-Hexanone	43		13.183				ND	
81 Chlorodibromomethane	129		13.572				ND	
85 Ethylene Dibromide	107		13.767				ND	
87 Chlorobenzene	112		14.327				ND	
89 Ethylbenzene	91		14.375				ND	Ua
90 m-Xylene & p-Xylene	106		14.509				ND	
93 o-Xylene	106		15.057				ND	
94 Styrene	104		15.087				ND	
92 Bromoform	173		15.470				ND	
95 Isopropylbenzene	105		15.489				ND	
97 1,1,2,2-Tetrachloroethane	83		15.957				ND	
110 1,3-Dichlorobenzene	146		17.174				ND	
111 1,4-Dichlorobenzene	146		17.277				ND	
116 1,2-Dichlorobenzene	146		17.776				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.810				ND	
119 1,2,4-Trichlorobenzene	180		19.911				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37842.D

Injection Date: 06-Nov-2018 05:13:30

Instrument ID: HP5973P

Operator ID: RB

Lims ID: 480-144297-C-9

Lab Sample ID: 480-144297-9

Worklist Smp#: 36

Client ID: GPW-6

Purge Vol: 5.000 mL

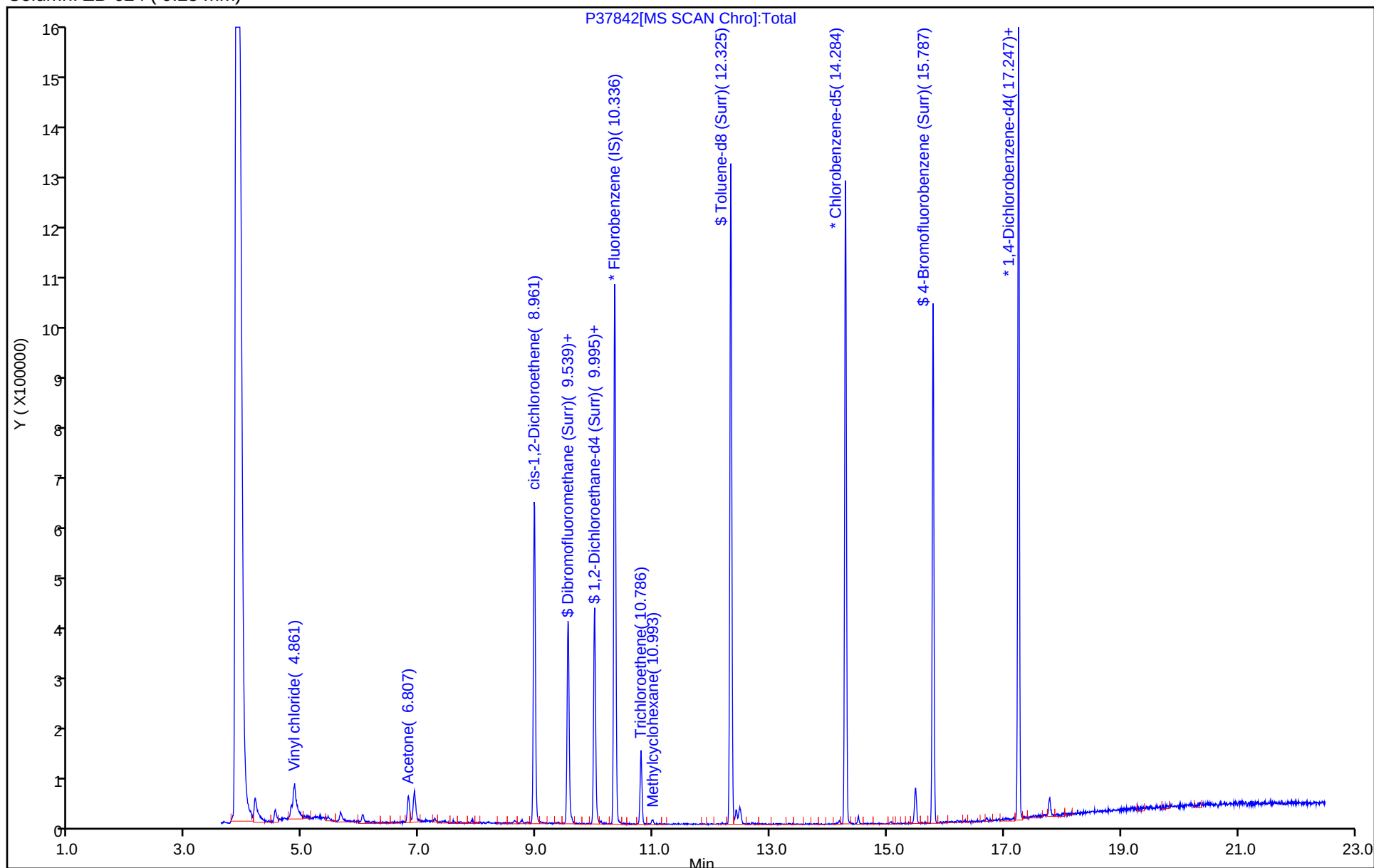
Dil. Factor: 1.0000

ALS Bottle#: 17

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37842.D

Injection Date: 06-Nov-2018 05:13:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-9

Lab Sample ID: 480-144297-9

Client ID: GPW-6

Operator ID: RB

ALS Bottle#: 17

Worklist Smp#: 36

Purge Vol: 5.000 mL

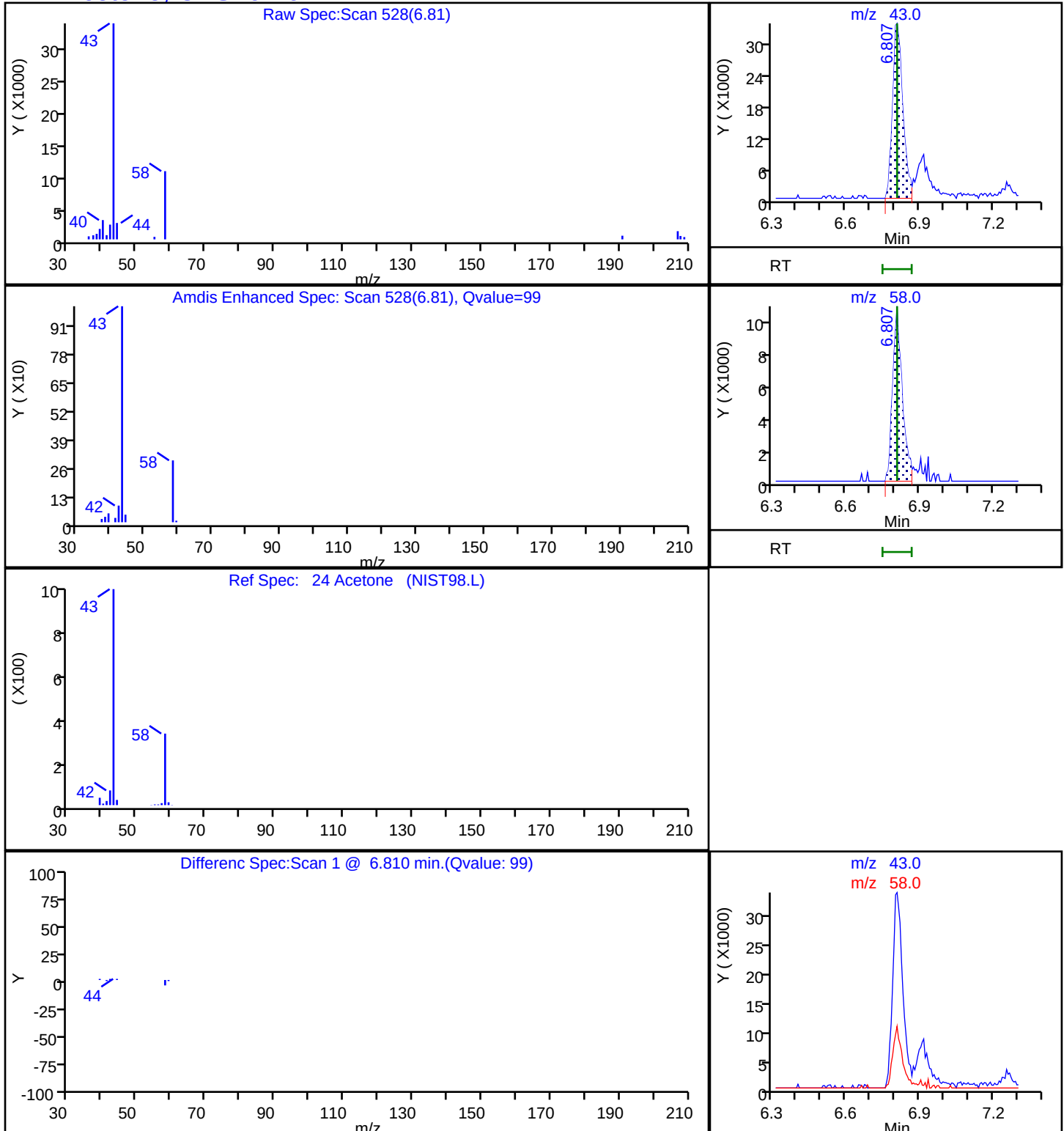
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37842.D

Injection Date: 06-Nov-2018 05:13:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-9

Lab Sample ID: 480-144297-9

Client ID: GPW-6

Operator ID: RB

ALS Bottle#: 17

Worklist Smp#: 36

Purge Vol: 5.000 mL

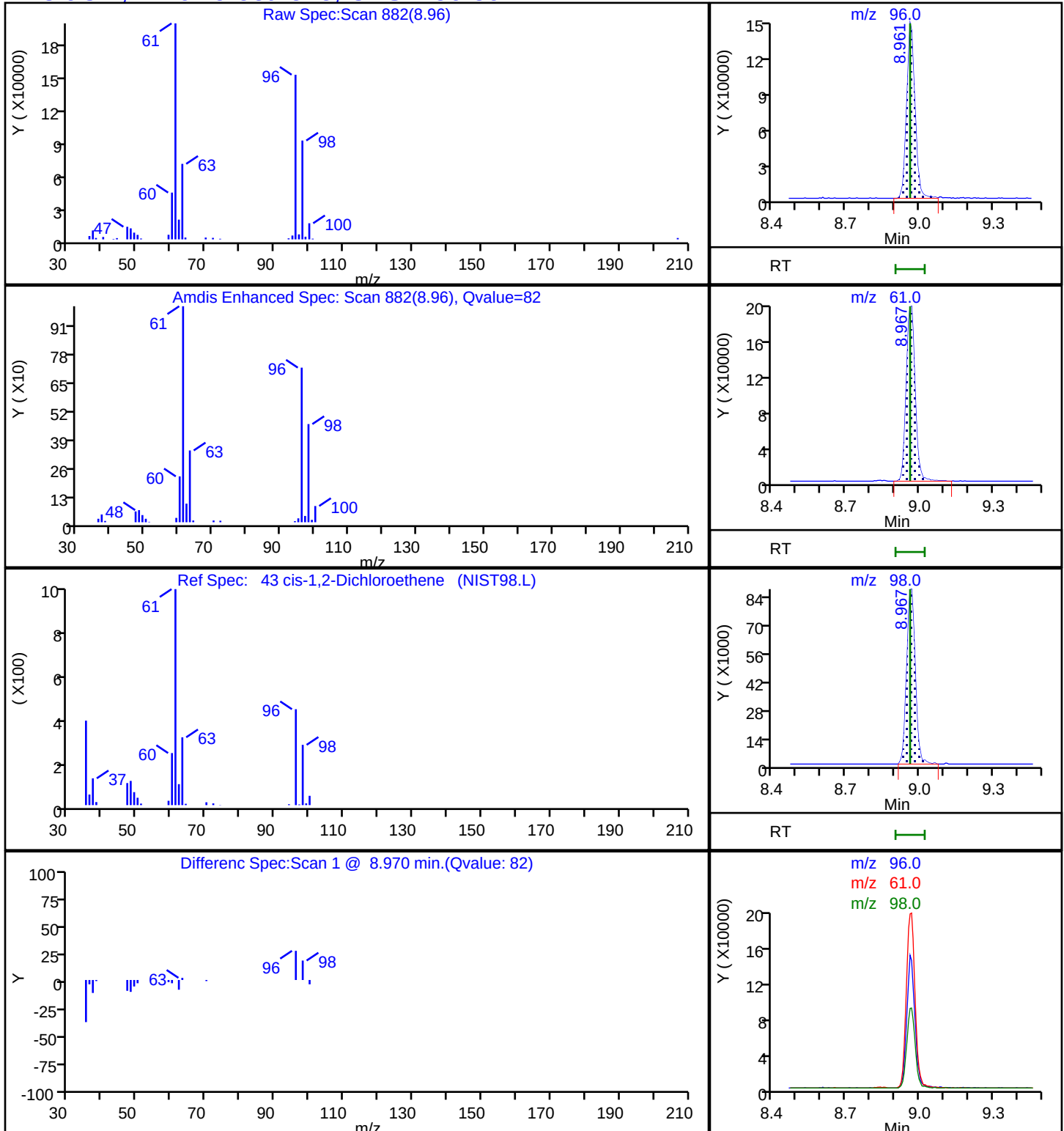
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37842.D

Injection Date: 06-Nov-2018 05:13:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-9

Lab Sample ID: 480-144297-9

Client ID: GPW-6

Operator ID: RB

ALS Bottle#: 17

Worklist Smp#: 36

Purge Vol: 5.000 mL

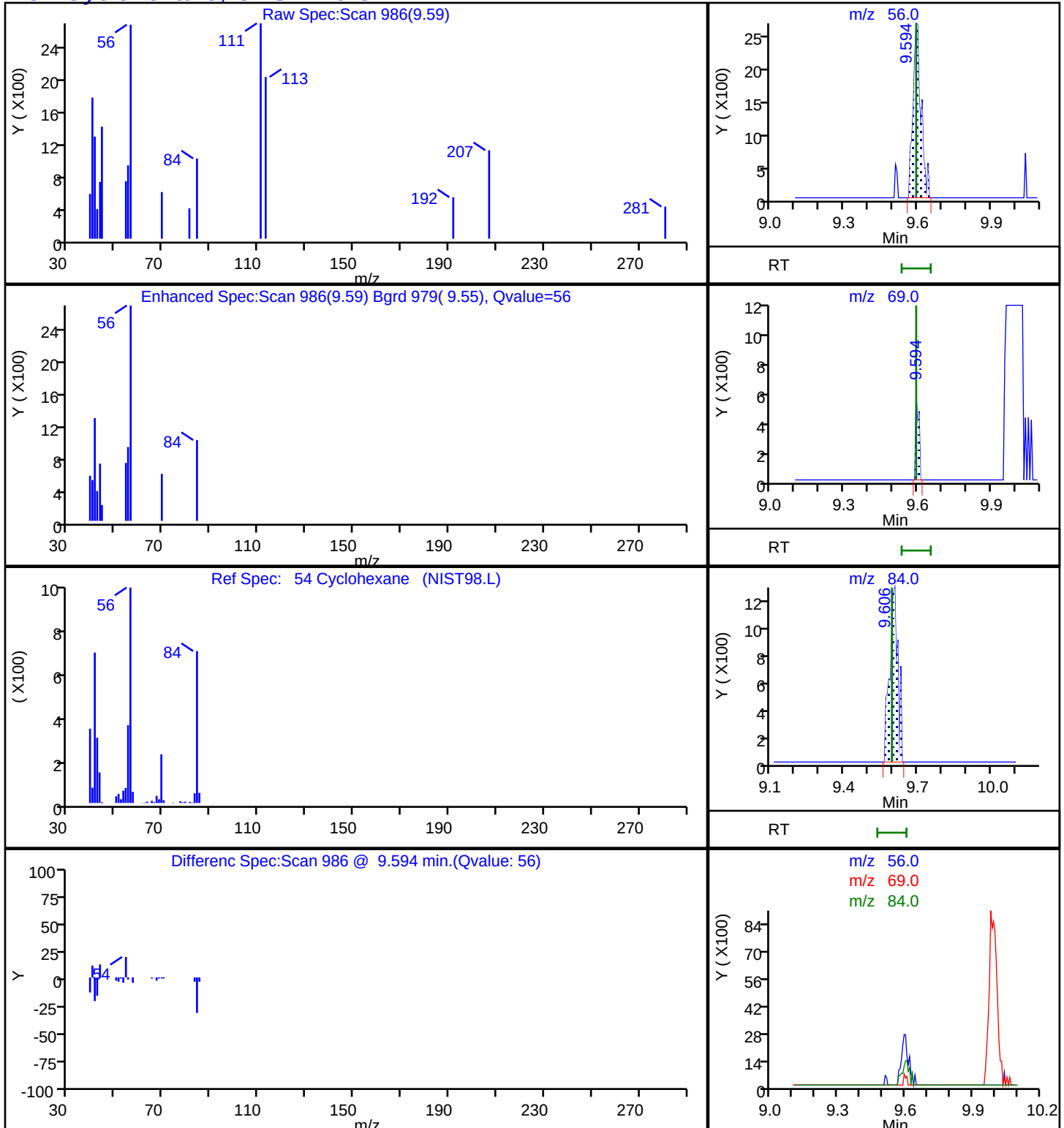
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

54 Cyclohexane, CAS: 110-82-7

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37842.D

Injection Date: 06-Nov-2018 05:13:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-9

Lab Sample ID: 480-144297-9

Client ID: GPW-6

Operator ID: RB

ALS Bottle#: 17

Worklist Smp#: 36

Purge Vol: 5.000 mL

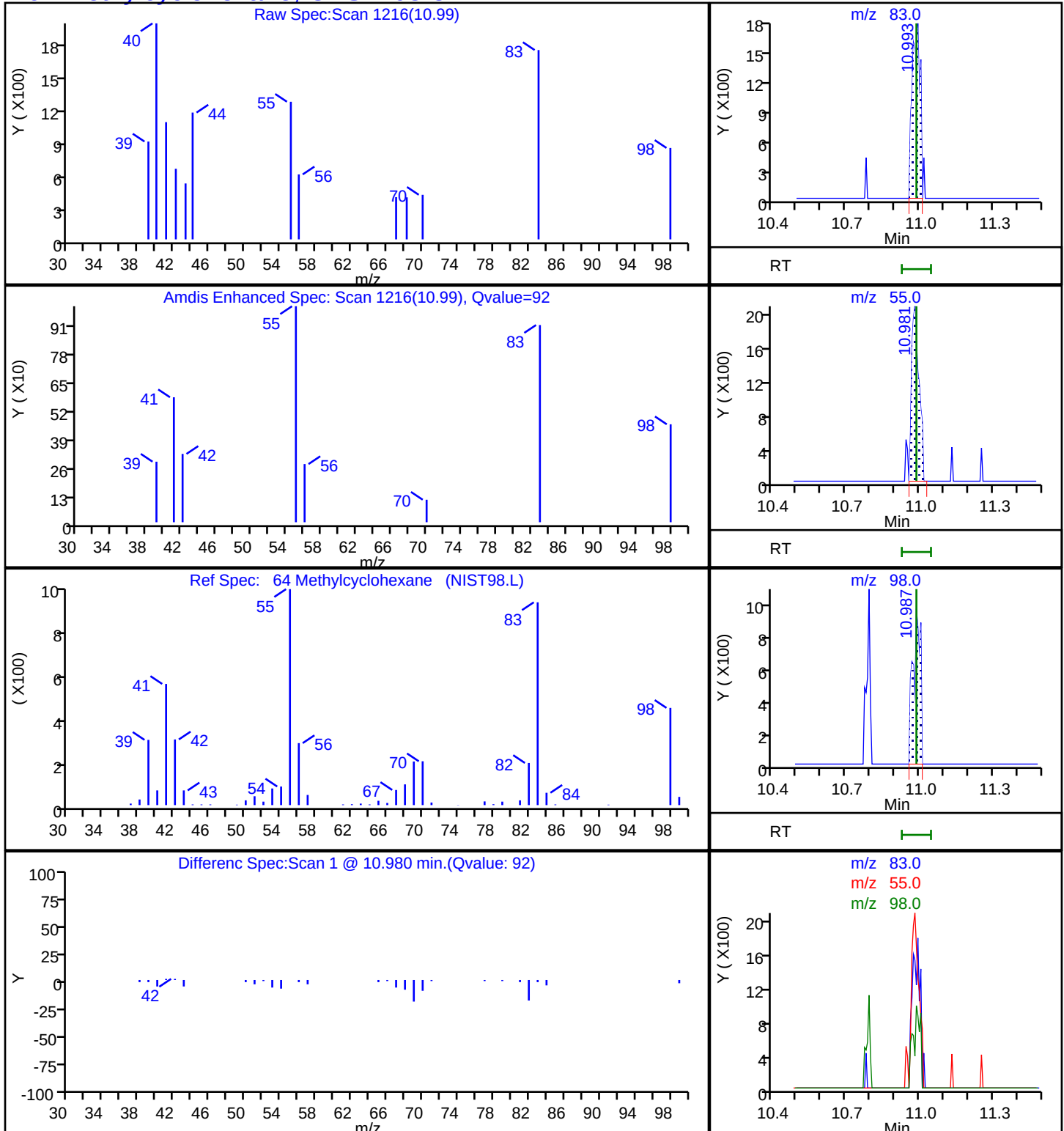
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

64 Methylcyclohexane, CAS: 108-87-2

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37842.D

Injection Date: 06-Nov-2018 05:13:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-9

Lab Sample ID: 480-144297-9

Client ID: GPW-6

Operator ID: RB

ALS Bottle#: 17

Worklist Smp#: 36

Purge Vol: 5.000 mL

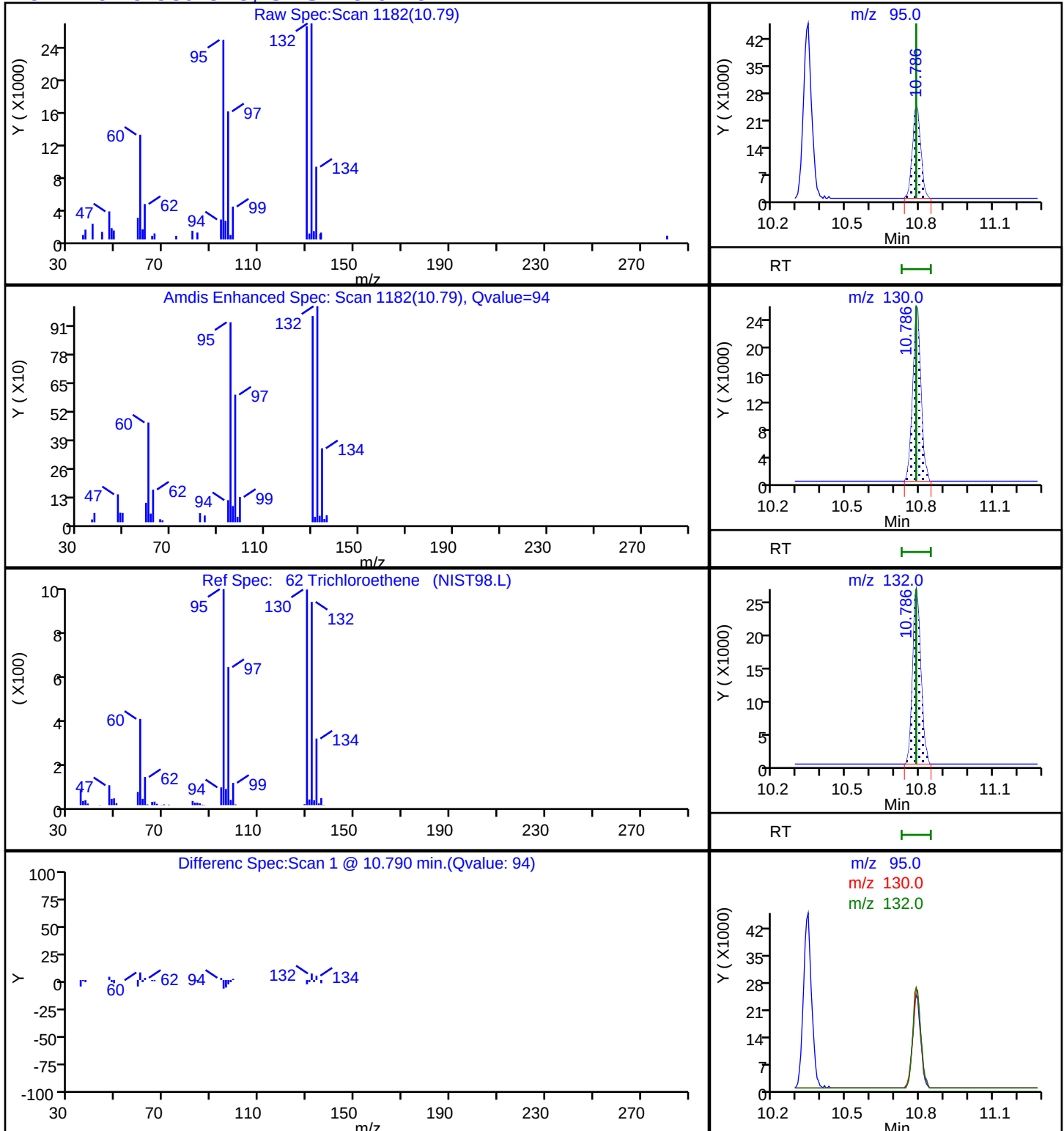
Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

62 Trichloroethene, CAS: 79-01-6

Detector MS SCAN

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37842.D

Injection Date: 06-Nov-2018 05:13:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-9

Lab Sample ID: 480-144297-9

Client ID: GPW-6

Operator ID: RB

ALS Bottle#: 17 Worklist Smp#: 36

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: P-8260H2O

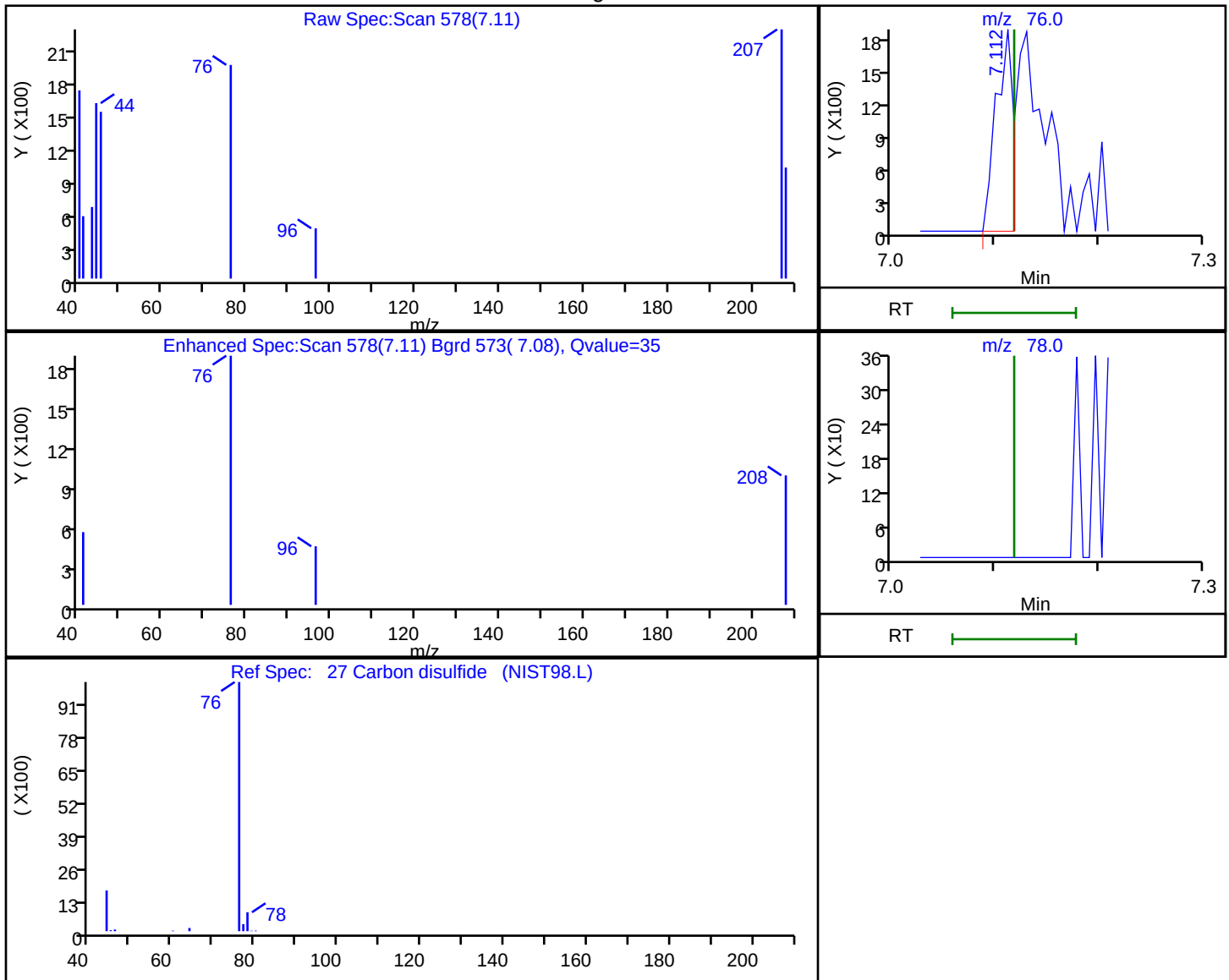
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
7.11	76.00	2179	0.055829
7.12	78.00	0	

Reviewer: farrellr, 06-Nov-2018 14:56:51

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GPW-5</u>	Lab Sample ID: <u>480-144297-10</u>
Matrix: <u>Water</u>	Lab File ID: <u>P37843.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/25/2018 18:00</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/06/2018 05:41</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>100</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (60)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443770</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		100	82
79-34-5	1,1,2,2-Tetrachloroethane	ND		100	21
79-00-5	1,1,2-Trichloroethane	ND		100	23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31
75-34-3	1,1-Dichloroethane	ND		100	38
75-35-4	1,1-Dichloroethene	ND		100	29
120-82-1	1,2,4-Trichlorobenzene	ND		100	41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		100	39
95-50-1	1,2-Dichlorobenzene	ND		100	79
107-06-2	1,2-Dichloroethane	ND		100	21
78-87-5	1,2-Dichloropropane	ND		100	72
541-73-1	1,3-Dichlorobenzene	ND		100	78
106-46-7	1,4-Dichlorobenzene	ND		100	84
78-93-3	2-Butanone (MEK)	ND		1000	130
591-78-6	2-Hexanone	ND		500	120
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		500	210
67-64-1	Acetone	ND		1000	300
71-43-2	Benzene	ND		100	41
75-27-4	Bromodichloromethane	ND		100	39
75-25-2	Bromoform	ND		100	26
74-83-9	Bromomethane	ND		100	69
75-15-0	Carbon disulfide	ND		100	19
56-23-5	Carbon tetrachloride	ND		100	27
108-90-7	Chlorobenzene	ND		100	75
124-48-1	Dibromochloromethane	ND		100	32
75-00-3	Chloroethane	ND		100	32
67-66-3	Chloroform	ND		100	34
74-87-3	Chloromethane	ND		100	35
156-59-2	cis-1,2-Dichloroethene	6800		100	81
10061-01-5	cis-1,3-Dichloropropene	ND		100	36
110-82-7	Cyclohexane	ND		100	18
75-71-8	Dichlorodifluoromethane	ND		100	68
100-41-4	Ethylbenzene	ND		100	74
106-93-4	1,2-Dibromoethane	ND		100	73
98-82-8	Isopropylbenzene	ND		100	79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: GPW-5 Lab Sample ID: 480-144297-10
 Matrix: Water Lab File ID: P37843.D
 Analysis Method: 8260C Date Collected: 10/25/2018 18:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 05:41
 Soil Aliquot Vol: _____ Dilution Factor: 100
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		250	130
1634-04-4	Methyl tert-butyl ether	ND		100	16
108-87-2	Methylcyclohexane	ND		100	16
75-09-2	Methylene Chloride	ND		100	44
100-42-5	Styrene	ND		100	73
127-18-4	Tetrachloroethene	ND		100	36
108-88-3	Toluene	ND		100	51
156-60-5	trans-1,2-Dichloroethene	ND		100	90
10061-02-6	trans-1,3-Dichloropropene	ND		100	37
79-01-6	Trichloroethene	8400		100	46
75-69-4	Trichlorofluoromethane	ND		100	88
75-01-4	Vinyl chloride	430		100	90
1330-20-7	Xylenes, Total	ND		200	66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	95		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		77-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
1868-53-7	Dibromofluoromethane (Surr)	88		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37843.D
 Lims ID: 480-144297-C-10
 Client ID: GPW-5
 Sample Type: Client
 Inject. Date: 06-Nov-2018 05:41:30 ALS Bottle#: 18 Worklist Smp#: 37
 Purge Vol: 5.000 mL Dil. Factor: 100.0000
 Sample Info: 480-144297-C-10
 Misc. Info.: 480-0076157-037
 Operator ID: RB Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 14:59:13 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 14:59:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	235769	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.284	0.006	85	455880	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	490154	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	94	300877	22.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.995	0.000	0	173326	21.6	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.319	0.006	92	1021498	23.8	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	96	365839	23.7	
10 Dichlorodifluoromethane	85		4.252				ND	
11 Chloromethane	50		4.666				ND	
17 Vinyl chloride	62	4.861	4.855	0.006	97	114517	4.30	
12 Bromomethane	94		5.481				ND	
13 Chloroethane	64		5.615				ND	
14 Trichlorofluoromethane	101		5.956				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.625				ND	
25 1,1-Dichloroethene	96		6.722				ND	Ua
24 Acetone	43		6.807				ND	
27 Carbon disulfide	76		7.118				ND	U
30 Methyl acetate	43		7.172				ND	
31 Methylene Chloride	84		7.391				ND	
32 Methyl tert-butyl ether	73		7.604				ND	
35 trans-1,2-Dichloroethene	96	7.702	7.702	0.006	94	11007	0.7563	
40 1,1-Dichloroethane	63		8.249				ND	
44 2-Butanone (MEK)	43		8.931				ND	
43 cis-1,2-Dichloroethene	96	8.961	8.955	0.000	82	1155718	68.5	
49 Chloroform	83		9.326				ND	
52 1,1,1-Trichloroethane	97		9.557				ND	
54 Cyclohexane	56		9.594				ND	
55 Carbon tetrachloride	117		9.752				ND	
57 Benzene	78		10.032				ND	
60 1,2-Dichloroethane	62		10.087				ND	
62 Trichloroethene	95	10.786	10.786	0.000	95	1247528	84.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		10.987				ND	
63 1,2-Dichloropropane	63		11.127				ND	
70 Dichlorobromomethane	83		11.461				ND	
73 cis-1,3-Dichloropropene	75		11.997				ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100				ND	
76 Toluene	92		12.417				ND	
78 trans-1,3-Dichloropropene	75		12.709				ND	
79 1,1,2-Trichloroethane	83		12.994				ND	
80 Tetrachloroethene	166		13.147				ND	
83 2-Hexanone	43		13.183				ND	
81 Chlorodibromomethane	129		13.572				ND	
85 Ethylene Dibromide	107		13.767				ND	
87 Chlorobenzene	112		14.327				ND	
89 Ethylbenzene	91		14.375				ND	
90 m-Xylene & p-Xylene	106		14.509				ND	
93 o-Xylene	106		15.057				ND	
94 Styrene	104		15.087				ND	
92 Bromoform	173		15.470				ND	
95 Isopropylbenzene	105		15.489				ND	
97 1,1,2,2-Tetrachloroethane	83		15.957				ND	
110 1,3-Dichlorobenzene	146		17.174				ND	
111 1,4-Dichlorobenzene	146		17.277				ND	
116 1,2-Dichlorobenzene	146		17.776				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.810				ND	
119 1,2,4-Trichlorobenzene	180		19.911				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37843.D

Injection Date: 06-Nov-2018 05:41:30

Instrument ID: HP5973P

Operator ID: RB

Lims ID: 480-144297-C-10

Lab Sample ID: 480-144297-10

Worklist Smp#: 37

Client ID: GPW-5

Purge Vol: 5.000 mL

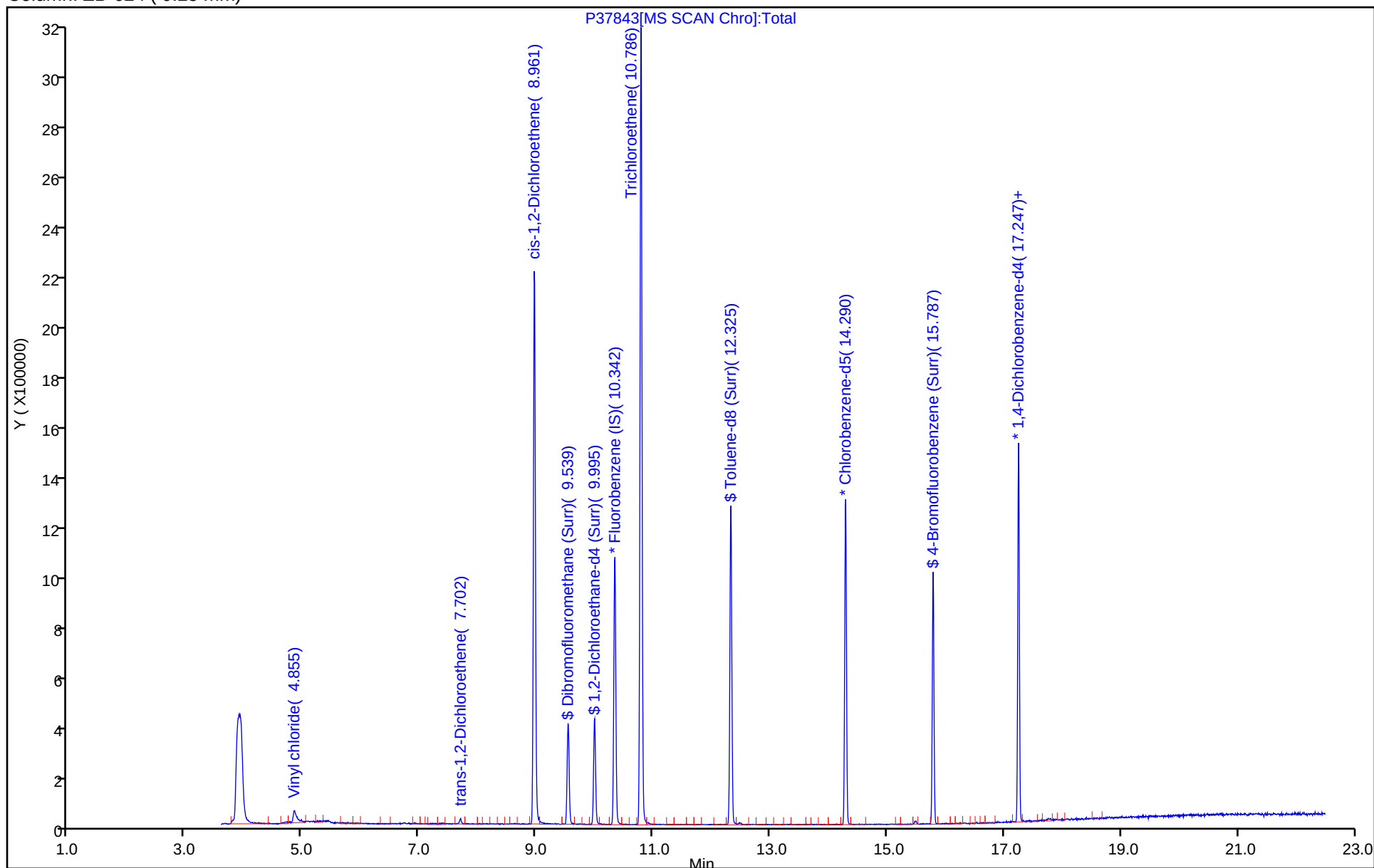
Dil. Factor: 100.0000

ALS Bottle#: 18

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37843.D

Injection Date: 06-Nov-2018 05:41:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-10

Lab Sample ID: 480-144297-10

Client ID: GPW-5

Operator ID: RB

ALS Bottle#: 18

Worklist Smp#: 37

Purge Vol: 5.000 mL

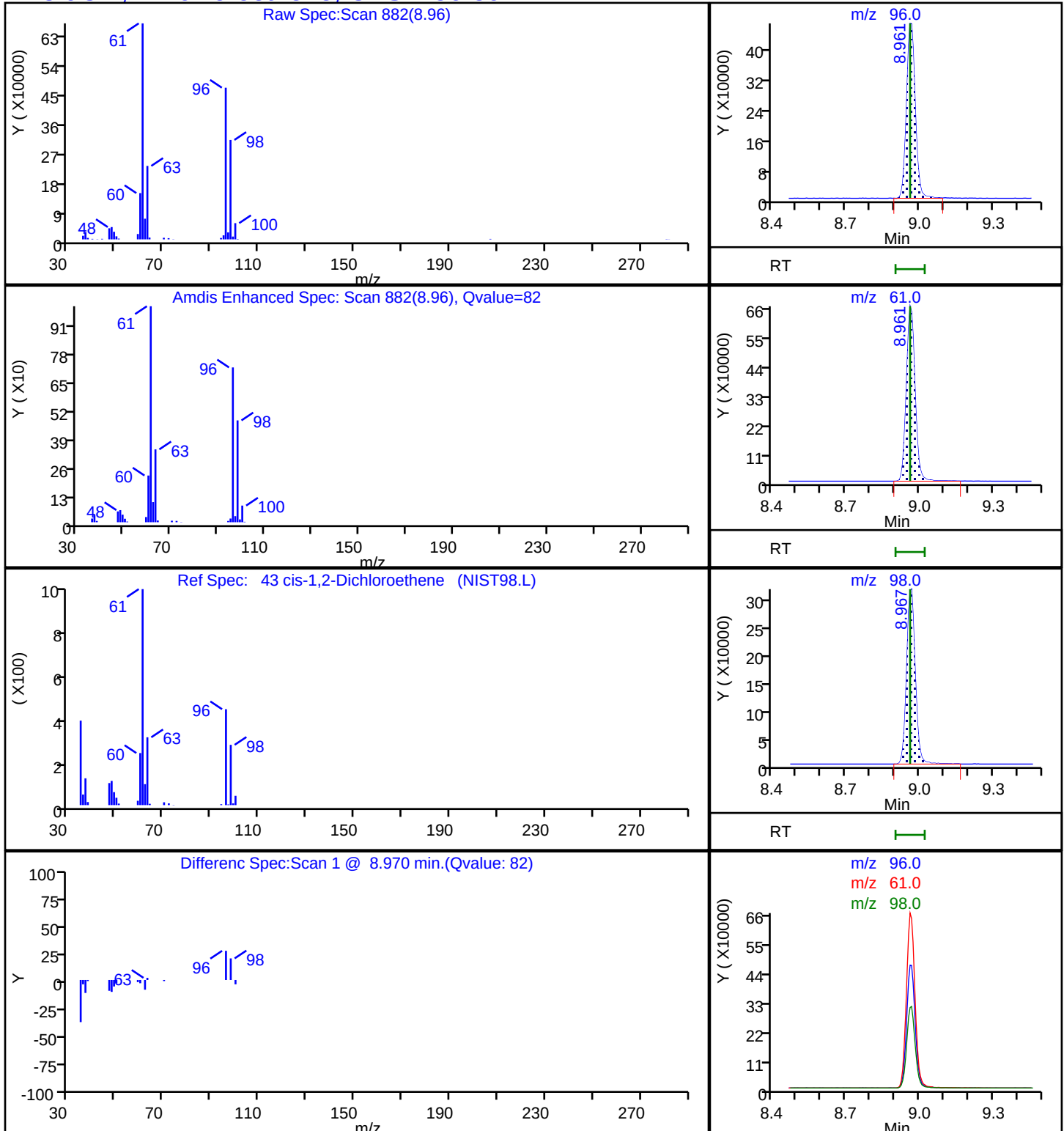
Dil. Factor: 100.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37843.D

Injection Date: 06-Nov-2018 05:41:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-10

Lab Sample ID: 480-144297-10

Client ID: GPW-5

Operator ID: RB

ALS Bottle#: 18

Worklist Smp#: 37

Purge Vol: 5.000 mL

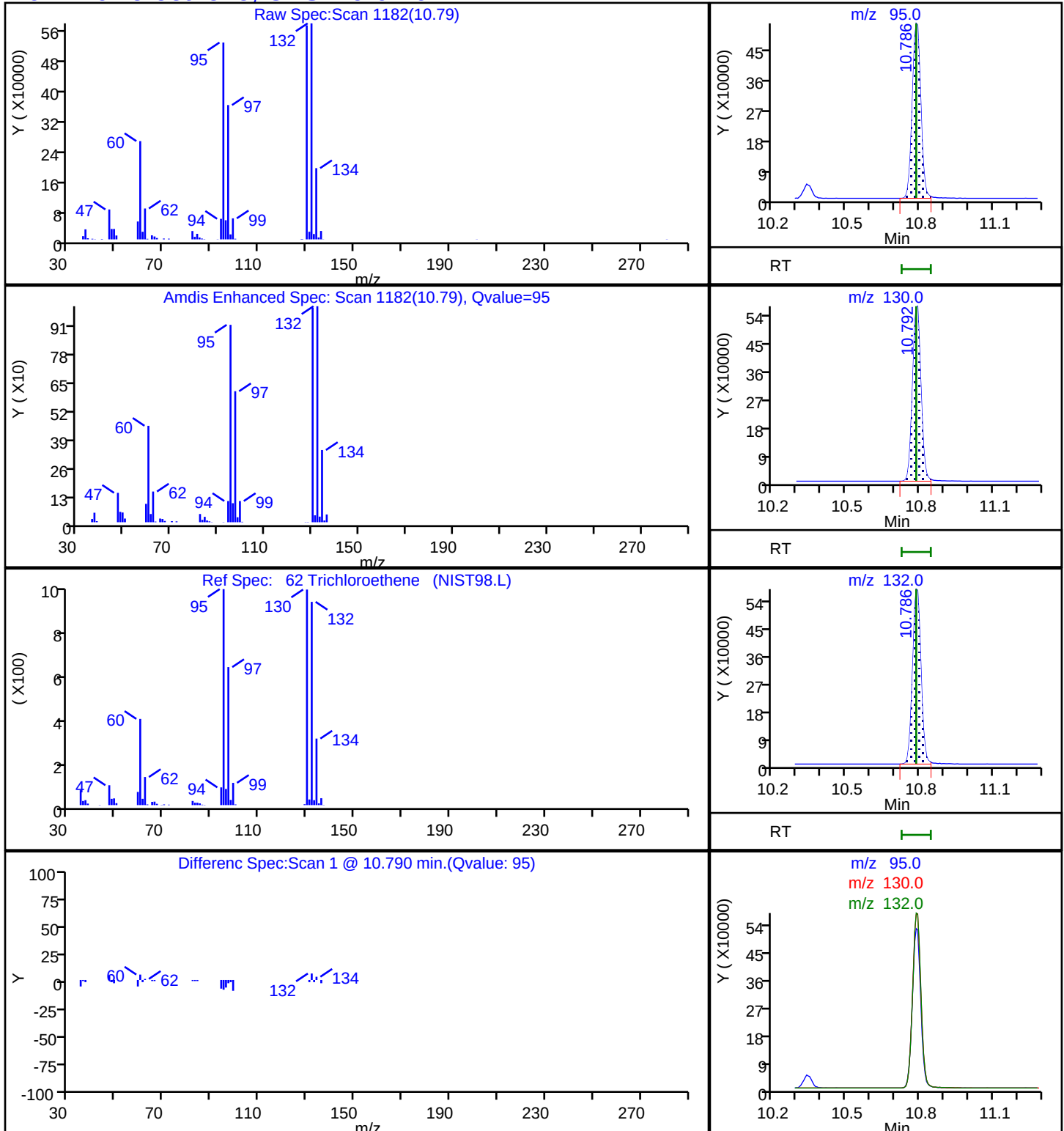
Dil. Factor: 100.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

62 Trichloroethene, CAS: 79-01-6

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37843.D

Injection Date: 06-Nov-2018 05:41:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-10

Lab Sample ID: 480-144297-10

Client ID: GPW-5

Operator ID: RB

ALS Bottle#: 18 Worklist Smp#: 37

Purge Vol: 5.000 mL

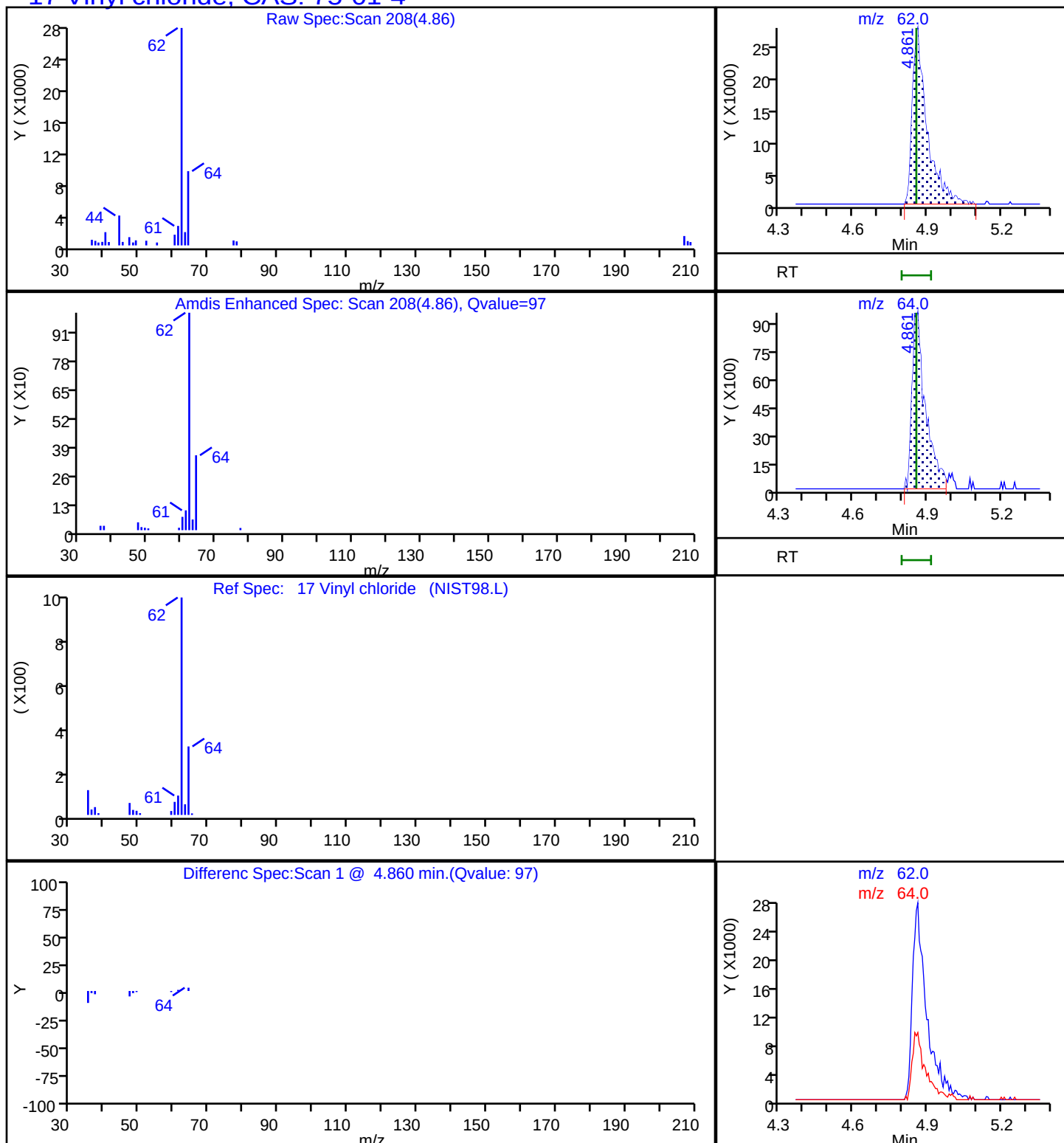
Dil. Factor: 100.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

17 Vinyl chloride, CAS: 75-01-4

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\37843.D

Injection Date: 06-Nov-2018 05:41:30

Instrument ID: HP5973P

Lims ID: 480-144297-C-10

Lab Sample ID: 480-144297-10

Client ID: GPW-5

Operator ID: RB

ALS Bottle#: 18 Worklist Smp#: 37

Purge Vol: 5.000 mL

Dil. Factor: 100.0000

Method: P-8260H2O

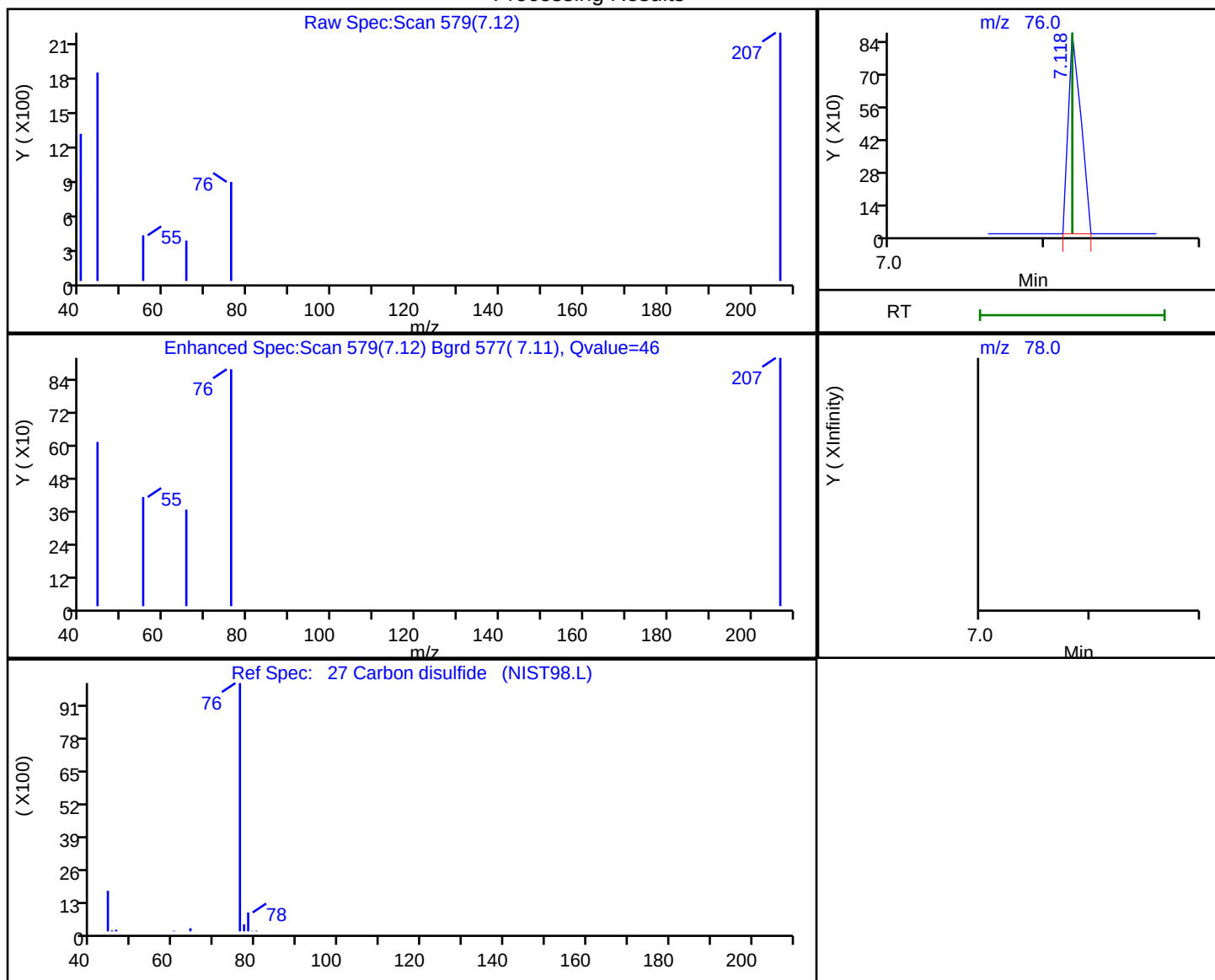
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
7.12	76.00	494	0.012243
7.12	78.00	0	

Reviewer: farrellr, 06-Nov-2018 14:58:49

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: DUP Lab Sample ID: 480-144297-11
 Matrix: Water Lab File ID: P37844.D
 Analysis Method: 8260C Date Collected: 10/25/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 06:08
 Soil Aliquot Vol: _____ Dilution Factor: 200
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		200	160
79-34-5	1,1,2,2-Tetrachloroethane	ND		200	42
79-00-5	1,1,2-Trichloroethane	ND		200	46
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		200	62
75-34-3	1,1-Dichloroethane	ND		200	76
75-35-4	1,1-Dichloroethene	ND		200	58
120-82-1	1,2,4-Trichlorobenzene	ND		200	82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		200	78
95-50-1	1,2-Dichlorobenzene	ND		200	160
107-06-2	1,2-Dichloroethane	ND		200	42
78-87-5	1,2-Dichloropropane	ND		200	140
541-73-1	1,3-Dichlorobenzene	ND		200	160
106-46-7	1,4-Dichlorobenzene	ND		200	170
78-93-3	2-Butanone (MEK)	ND		2000	260
591-78-6	2-Hexanone	ND		1000	250
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1000	420
67-64-1	Acetone	ND		2000	600
71-43-2	Benzene	ND		200	82
75-27-4	Bromodichloromethane	ND		200	78
75-25-2	Bromoform	ND		200	52
74-83-9	Bromomethane	ND		200	140
75-15-0	Carbon disulfide	ND		200	38
56-23-5	Carbon tetrachloride	ND		200	54
108-90-7	Chlorobenzene	ND		200	150
124-48-1	Dibromochloromethane	ND		200	64
75-00-3	Chloroethane	ND		200	64
67-66-3	Chloroform	ND		200	68
74-87-3	Chloromethane	ND		200	70
156-59-2	cis-1,2-Dichloroethene	12000		200	160
10061-01-5	cis-1,3-Dichloropropene	ND		200	72
110-82-7	Cyclohexane	ND		200	36
75-71-8	Dichlorodifluoromethane	ND		200	140
100-41-4	Ethylbenzene	ND		200	150
106-93-4	1,2-Dibromoethane	ND		200	150
98-82-8	Isopropylbenzene	ND		200	160

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: DUP Lab Sample ID: 480-144297-11
 Matrix: Water Lab File ID: P37844.D
 Analysis Method: 8260C Date Collected: 10/25/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 06:08
 Soil Aliquot Vol: _____ Dilution Factor: 200
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		500	260
1634-04-4	Methyl tert-butyl ether	ND		200	32
108-87-2	Methylcyclohexane	ND		200	32
75-09-2	Methylene Chloride	ND		200	88
100-42-5	Styrene	ND		200	150
127-18-4	Tetrachloroethene	ND		200	72
108-88-3	Toluene	ND		200	100
156-60-5	trans-1,2-Dichloroethene	ND		200	180
10061-02-6	trans-1,3-Dichloropropene	ND		200	74
79-01-6	Trichloroethene	ND		200	92
75-69-4	Trichlorofluoromethane	ND		200	180
75-01-4	Vinyl chloride	7800		200	180
1330-20-7	Xylenes, Total	ND		400	130

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		77-120
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
1868-53-7	Dibromofluoromethane (Surr)	92		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37844.D
 Lims ID: 480-144297-D-11
 Client ID: DUP
 Sample Type: Client
 Inject. Date: 06-Nov-2018 06:08:30 ALS Bottle#: 19 Worklist Smp#: 38
 Purge Vol: 5.000 mL Dil. Factor: 200.0000
 Sample Info: 480-144297-D-11
 Misc. Info.: 480-0076157-038
 Operator ID: RB Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 15:00:10 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 15:00:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.342	10.336	0.006	98	230214	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.284	0.006	86	452463	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	96	489800	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	94	304237	22.9	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.995	0.000	0	172553	22.1	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.319	0.006	93	1031700	24.3	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	96	365864	23.9	
10 Dichlorodifluoromethane	85		4.252				ND	
11 Chloromethane	50		4.666				ND	U
17 Vinyl chloride	62	4.855	4.855	0.000	98	1021234	39.2	
12 Bromomethane	94		5.481				ND	
13 Chloroethane	64		5.615				ND	
14 Trichlorofluoromethane	101		5.956				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.625				ND	
25 1,1-Dichloroethene	96		6.722				ND	
24 Acetone	43		6.807				ND	Ua
27 Carbon disulfide	76		7.118				ND	
30 Methyl acetate	43		7.172				ND	
31 Methylene Chloride	84	7.385	7.391	-0.006	43	3632	0.2053	
32 Methyl tert-butyl ether	73		7.604				ND	
35 trans-1,2-Dichloroethene	96		7.696				ND	Ua
40 1,1-Dichloroethane	63		8.249				ND	
44 2-Butanone (MEK)	43		8.931				ND	
43 cis-1,2-Dichloroethene	96	8.967	8.955	0.006	82	973677	59.1	
49 Chloroform	83		9.326				ND	
52 1,1,1-Trichloroethane	97		9.557				ND	
54 Cyclohexane	56		9.594				ND	
55 Carbon tetrachloride	117		9.752				ND	
57 Benzene	78		10.032				ND	
60 1,2-Dichloroethane	62		10.087				ND	
62 Trichloroethene	95		10.786				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		10.987				ND	
63 1,2-Dichloropropane	63		11.127				ND	
70 Dichlorobromomethane	83		11.461				ND	
73 cis-1,3-Dichloropropene	75		11.997				ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100				ND	
76 Toluene	92		12.417				ND	
78 trans-1,3-Dichloropropene	75		12.709				ND	
79 1,1,2-Trichloroethane	83		12.994				ND	
80 Tetrachloroethene	166		13.147				ND	
83 2-Hexanone	43		13.183				ND	
81 Chlorodibromomethane	129		13.572				ND	
85 Ethylene Dibromide	107		13.767				ND	
87 Chlorobenzene	112		14.327				ND	
89 Ethylbenzene	91		14.375				ND	
90 m-Xylene & p-Xylene	106		14.509				ND	
93 o-Xylene	106		15.057				ND	
94 Styrene	104		15.087				ND	
92 Bromoform	173		15.470				ND	
95 Isopropylbenzene	105		15.489				ND	
97 1,1,2,2-Tetrachloroethane	83		15.957				ND	
110 1,3-Dichlorobenzene	146		17.174				ND	
111 1,4-Dichlorobenzene	146		17.277				ND	
116 1,2-Dichlorobenzene	146		17.776				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.810				ND	
119 1,2,4-Trichlorobenzene	180		19.911				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37844.D

Injection Date: 06-Nov-2018 06:08:30

Instrument ID: HP5973P

Operator ID: RB

Lims ID: 480-144297-D-11

Lab Sample ID: 480-144297-11

Worklist Smp#: 38

Client ID: DUP

Purge Vol: 5.000 mL

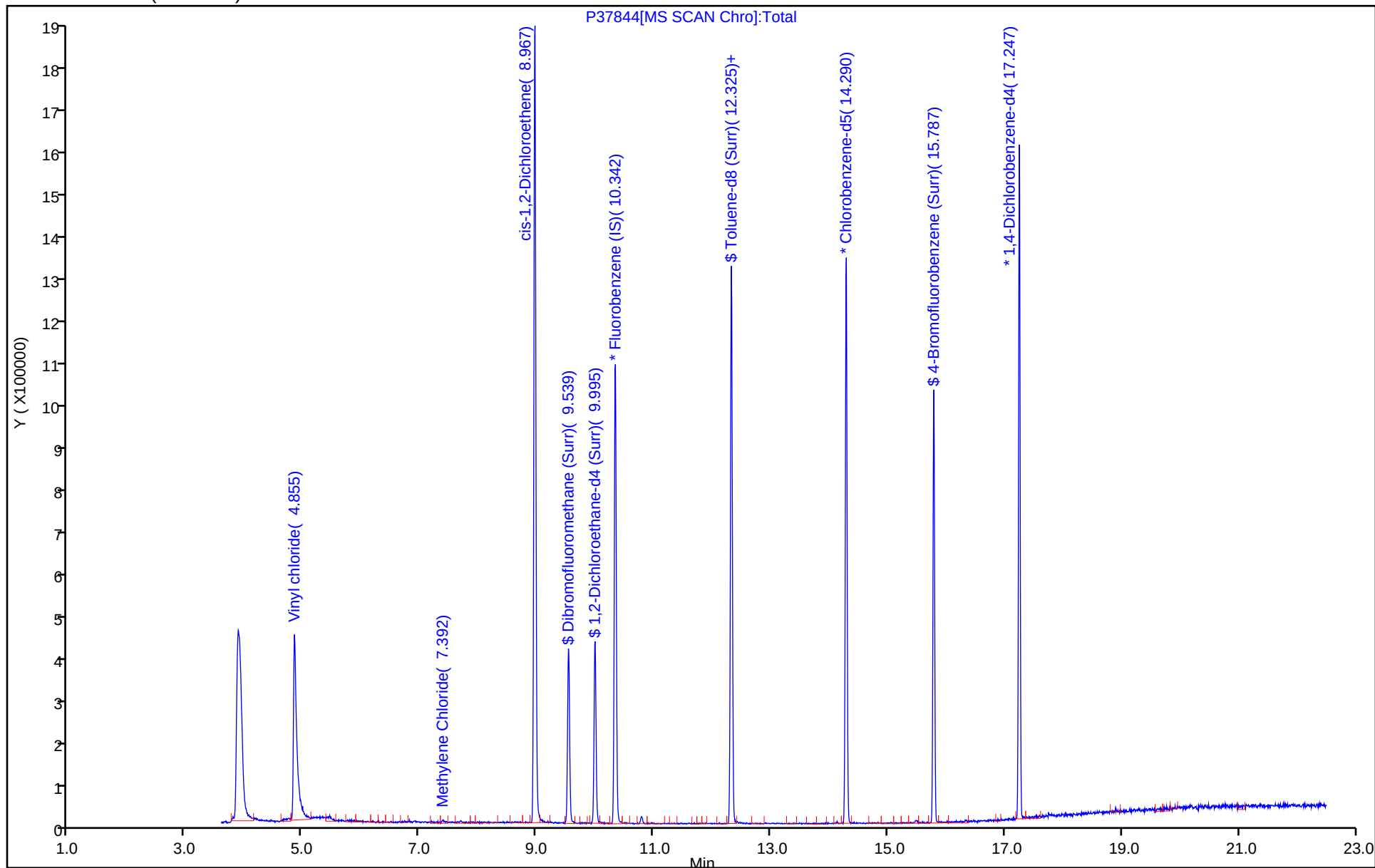
Dil. Factor: 200.0000

ALS Bottle#: 19

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37844.D

Injection Date: 06-Nov-2018 06:08:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-11

Lab Sample ID: 480-144297-11

Client ID: DUP

Operator ID: RB

ALS Bottle#: 19

Worklist Smp#: 38

Purge Vol: 5.000 mL

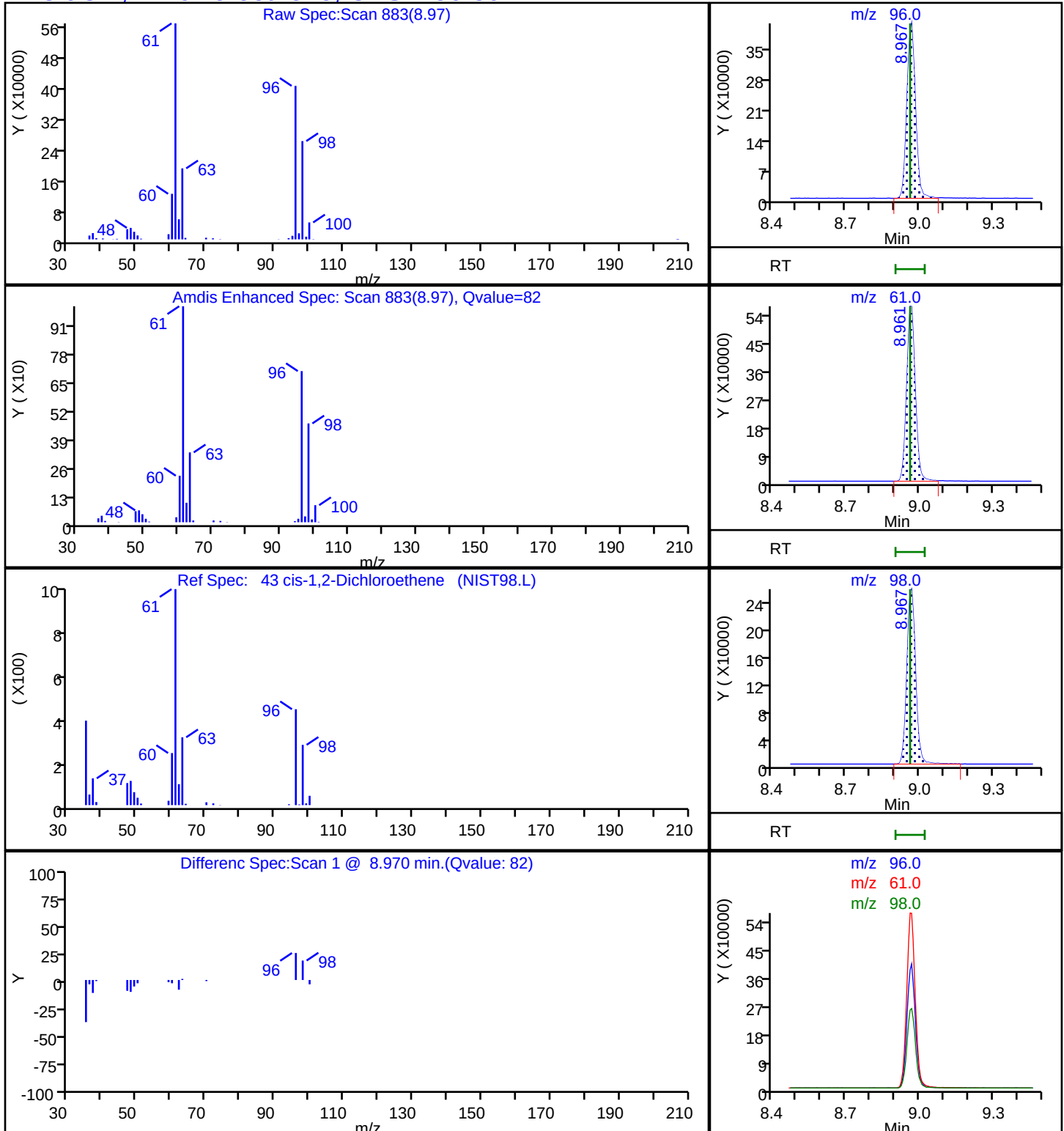
Dil. Factor: 200.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37844.D

Injection Date: 06-Nov-2018 06:08:30

Instrument ID: HP5973P

Lims ID: 480-144297-D-11

Lab Sample ID: 480-144297-11

Client ID: DUP

Operator ID: RB

ALS Bottle#: 19

Worklist Smp#: 38

Purge Vol: 5.000 mL

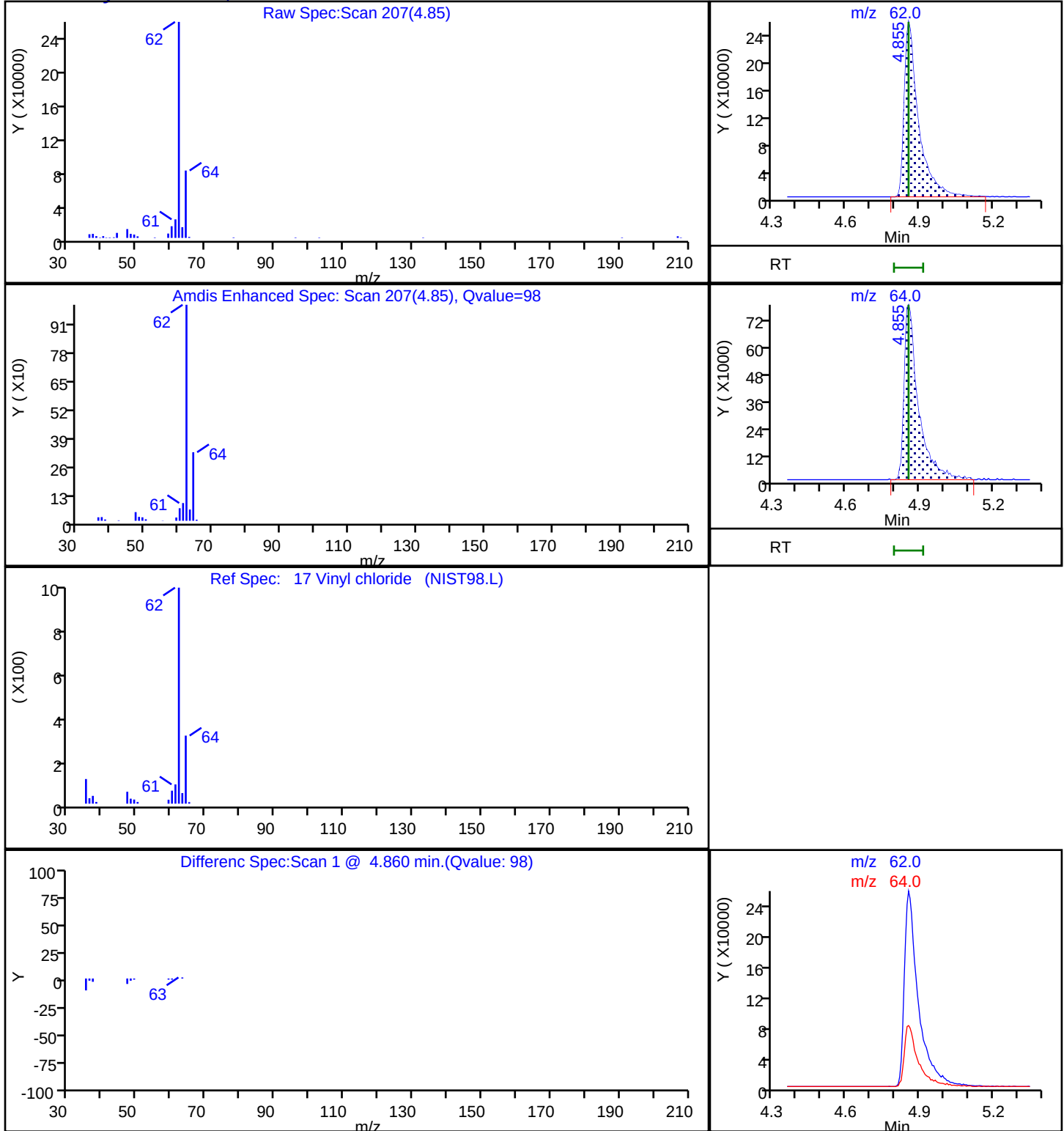
Dil. Factor: 200.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

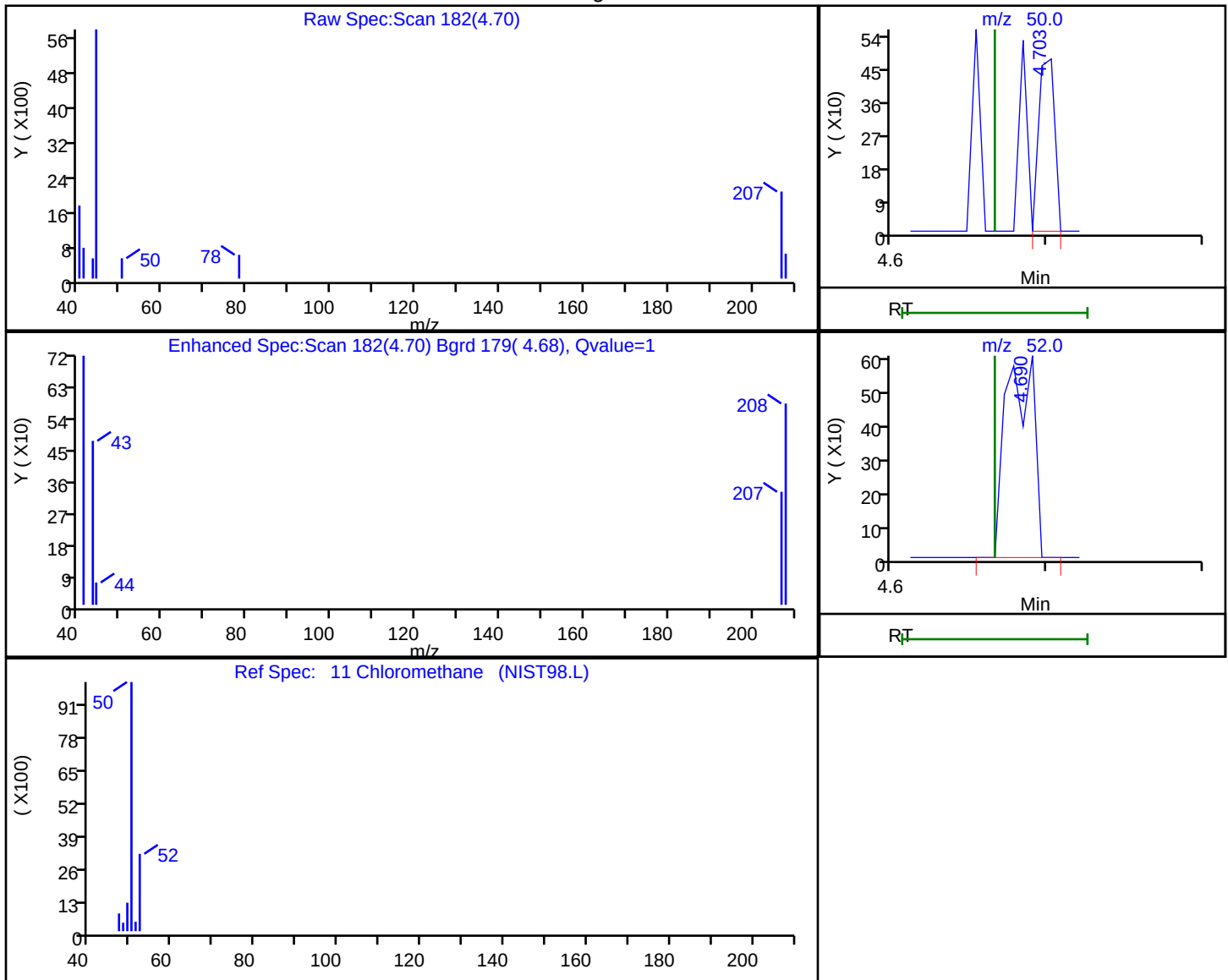
17 Vinyl chloride, CAS: 75-01-4

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\37844.D
Injection Date: 06-Nov-2018 06:08:30 Instrument ID: HP5973P
Lims ID: 480-144297-D-11 Lab Sample ID: 480-144297-11
Client ID: DUP
Operator ID: RB ALS Bottle#: 19 Worklist Smp#: 38
Purge Vol: 5.000 mL Dil. Factor: 200.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

11 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
4.70	50.00	338	0.010334
4.69	52.00	757	

Reviewer: farrellr, 06-Nov-2018 14:59:23

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 440877

SDG No.: _____

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/22/2018 15:16 Calibration End Date: 10/22/2018 18:02 Calibration ID: 35153

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-440877/7	P37183.D
Level 2	IC 480-440877/8	P37184.D
Level 3	IC 480-440877/9	P37185.D
Level 4	IC 480-440877/10	P37186.D
Level 5	ICIS 480-440877/11	P37187.D
Level 6	IC 480-440877/12	P37188.D
Level 7	IC 480-440877/13	P37189.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															
Dichlorodifluoromethane	+++++ 1.8425	2.2802 2.0787	2.1177	2.0004	2.1781	Ave		2.0829			0.1000	7.2		20.0			
Chloromethane	3.7537 2.9352	4.3677 3.0550	3.6550	3.6213	3.4742	Ave		3.5517			0.1000	13.4		20.0			
Vinyl chloride	2.9427 2.3773	3.1395 2.6575	2.8593	2.9700	2.8336	Ave		2.8257			0.1000	8.7		20.0			
Butadiene	2.6868 2.1238	2.8617 2.4123	2.7196	2.6932	2.6341	Ave		2.5902				9.5		20.0			
Bromomethane	+++++ 1.4572	1.9385 1.5818	1.7009	1.7918	1.6634	Ave		1.6889			0.1000	9.9		20.0			
Chloroethane	+++++ 1.2437	1.3242 1.3202	1.4256	1.4865	1.3159	Ave		1.3527			0.1000	6.5		20.0			
Dichlorofluoromethane	3.4921 2.8827	3.7725 3.0919	3.4159	3.4427	3.2212	Ave		3.3313				8.8		20.0			
Trichlorofluoromethane	+++++ 2.5341	2.8986 2.9309	2.9327	2.9234	2.9362	Ave		2.8593			0.1000	5.6		20.0			
Ethyl ether	+++++ 1.3766	1.4844 1.3639	1.4679	1.4228	1.3924	Ave		1.4180				3.5		20.0			
Acrolein	0.2534 0.2587	0.2512 0.2742	0.2539	0.2829	0.2672	Ave		0.2630				4.6		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	1.3809 1.2758	0.9642 1.5245	1.4198	1.2617	1.3774	Ave		1.3149			0.1000	13.6		20.0			
1,1-Dichloroethene	+++++ 1.3112	1.5633 1.4602	1.5281	1.3498	1.4477	Ave		1.4434			0.1000	6.8		20.0			
Acetone	+++++ 0.6190	0.7192 0.6527	0.7040	0.7080	0.6687	Ave		0.6786			0.1000	5.7		20.0			
Iodomethane	+++++ 2.6937	2.3098 2.8986	2.8489	2.6803	2.8766	Ave		2.7180				8.1		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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 440877
SDG No.: _____
Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 10/22/2018 15:16 Calibration End Date: 10/22/2018 18:02 Calibration ID: 35153

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	++++ 3.8599	4.2470 4.1033	4.6396	4.2729	4.5481	Ave		4.2785			0.1000	6.7		20.0			
Methyl acetate	++++ 1.4720	1.5713 1.4403	1.6562	1.6825	1.5693	Ave		1.5653			0.1000	6.2		20.0			
Allyl chloride	2.4469 2.4221	2.3019 2.4827	2.5214	2.4097	2.5012	Ave		2.4408				3.0		20.0			
Methylene Chloride	2.0444 1.6272	2.5882 1.6913	1.9815	1.7832	1.7342	Ave		1.9214			0.1000	17.2		20.0			
2-Methyl-2-propanol	++++ 0.1985	0.1718 0.2485	0.2188	0.2117	0.2081	Ave		0.2096				12.0		20.0			
Methyl tert-butyl ether	++++ 4.1303	4.5275 4.1808	4.5413	4.4863	4.2862	Ave		4.3587			0.1000	4.2		20.0			
trans-1,2-Dichloroethene	1.5596 1.4455	1.5010 1.5386	1.6651	1.5258	1.5672	Ave		1.5433			0.1000	4.4		20.0			
Acrylonitrile	0.7553 0.6741	0.7533 0.5728	0.8014	0.7759	0.7350	Ave		0.7240				10.7		20.0			
Hexane	++++ 1.7396	1.8012 1.8622	2.0573	1.7079	1.8363	Ave		1.8341				6.7		20.0			
Vinyl acetate	++++ 3.6333	3.6216 2.9324	3.8649	3.9624	3.9077	Ave		3.6537				10.4		20.0			
1,1-Dichloroethane	2.9516 2.8682	2.7169 2.8858	2.9707	2.9503	3.0040	Ave		2.9068			0.2000	3.3		20.0			
2-Butanone (MEK)	0.9892 0.9764	1.0973 0.8927	1.0696	1.0891	1.0336	Ave		1.0211			0.1000	7.2		20.0			
2,2-Dichloropropane	1.9807 1.7990	1.8471 2.0270	1.9527	1.8811	1.8116	Ave		1.8999				4.6		20.0			
cis-1,2-Dichloroethene	1.8734 1.6842	1.7558 1.7231	1.9393	1.7463	1.8070	Ave		1.7899			0.1000	5.0		20.0			
Chlorobromomethane	++++ 0.8845	0.8588 0.9139	0.9484	0.9212	0.9174	Ave		0.9074				3.5		20.0			
Tetrahydrofuran	0.6495 0.6286	0.7066 0.6496	0.6650	0.6808	0.6670	Ave		0.6639				3.8		20.0			
Chloroform	2.9978 2.7397	2.9515 2.6975	3.0803	2.9548	2.8709	Ave		2.8989			0.2000	4.8		20.0			
1,1,1-Trichloroethane	2.3385 2.1960	2.0621 2.3429	2.5097	2.2231	2.3095	Ave		2.2831			0.1000	6.2		20.0			
Cyclohexane	++++ 2.1778	2.0518 2.2875	2.5145	2.1320	2.3026	Ave		2.2444			0.1000	7.2		20.0			
1,1-Dichloropropene	++++ 1.9936	2.0154 2.1083	2.1223	2.0276	2.0805	Ave		2.0579				2.6		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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 440877
SDG No.: _____
Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 10/22/2018 15:16 Calibration End Date: 10/22/2018 18:02 Calibration ID: 35153

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	2.0435 2.1533	2.0181 2.3048	2.3533	2.0714	2.2163	Ave		2.1658			0.1000	6.0		20.0			
Isobutyl alcohol	++++ 0.1070	0.1110 0.1188	0.1088	0.1118	0.1106	Ave		0.1113				3.6		20.0			
Benzene	++++ 5.5050	6.2226 4.8874	6.5311	6.1495	6.0711	Ave		5.8945			0.5000	10.1		20.0			
1,2-Dichloroethane	++++ 2.4626	2.5090 2.4163	2.6925	2.5742	2.5982	Ave		2.5421			0.1000	3.9		20.0			
n-Heptane	++++ 1.3853	1.3487 1.4913	1.5820	1.2857	1.4528	Ave		1.4243				7.5		20.0			
Trichloroethene	++++ 1.5221	1.4266 1.5914	1.7187	1.5659	1.6083	Ave		1.5722			0.2000	6.2		20.0			
Methylcyclohexane	2.0523 1.8073	1.4533 1.9750	2.0883	1.7253	1.9327	Ave		1.8620			0.1000	11.9		20.0			
1,2-Dichloropropane	++++ 1.6578	1.6634 1.6793	1.7758	1.7198	1.6994	Ave		1.6992			0.1000	2.6		20.0			
1,4-Dioxane	++++ 0.0063	0.0040 0.0083	0.0068	0.0082	0.0076	Ave		0.0069				23.1	*	20.0			
Dibromomethane	++++ 1.1261	1.1159 1.1673	1.1788	1.1918	1.1881	Ave		1.1613			0.1000	2.8		20.0			
Bromodichloromethane	++++ 2.2166	1.9594 2.2508	2.1857	2.2771	2.2671	Ave		2.1928			0.2000	5.4		20.0			
2-Chloroethyl vinyl ether	++++ 0.7168	0.5623 0.7846	0.6182	0.5821	0.6425	Ave		0.6511				13.0		20.0			
cis-1,3-Dichloropropene	++++ 2.4752	2.1888 2.4744	2.4037	2.4096	2.5276	Ave		2.4132			0.2000	4.9		20.0			
4-Methyl-2-pentanone (MIBK)	0.9104 0.8744	0.9148 0.6363	1.0287	1.0893	1.0143	Ave		0.9240			0.1000	16.1		20.0			
Toluene	++++ 1.7410	1.8318 1.6527	1.8999	1.9121	1.8663	Ave		1.8173			0.4000	5.6		20.0			
Ethyl methacrylate	0.8345 1.0091	0.7531 1.0131	0.8610	0.9275	1.0208	Ave		0.9170				11.4		20.0			
trans-1,3-Dichloropropene	++++ 1.1801	0.8991 1.1785	1.1199	1.1495	1.1802	Ave		1.1179			0.1000	9.8		20.0			
1,1,2-Trichloroethane	++++ 0.6132	0.6774 0.5997	0.6238	0.6441	0.6292	Ave		0.6312			0.1000	4.3		20.0			
Tetrachloroethene	++++ 0.8124	0.8569 0.8383	0.9285	0.8398	0.8549	Ave		0.8551			0.2000	4.6		20.0			
2-Hexanone	0.7329 0.6869	0.6865 0.5312	0.7411	0.8005	0.7821	Ave		0.7088			0.1000	12.6		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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 440877
SDG No.: _____
Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 10/22/2018 15:16 Calibration End Date: 10/22/2018 18:02 Calibration ID: 35153

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,3-Dichloropropane	++++ 1.2324	1.2446 1.1767	1.2838	1.2998	1.2767	Ave		1.2523				3.6		20.0			
Dibromochloromethane	++++ 0.9189	0.8069 0.9053	0.8676	0.9216	0.9170	Ave		0.8896			0.1000	5.1		20.0			
1,2-Dibromoethane	++++ 0.7966	0.8537 0.8007	0.8056	0.8209	0.8373	Ave		0.8191				2.8		20.0			
Chlorobenzene	2.3629 2.0776	2.1844 1.8627	2.3245	2.3284	2.2454	Ave		2.1980			0.5000	8.1		20.0			
Ethylbenzene	++++ 3.0570	3.2883 2.4704	3.5400	3.4614	3.4047	Ave		3.2037			0.1000	12.4		20.0			
1,1,1,2-Tetrachloroethane	0.8404 0.8589	0.7833 0.8581	0.8174	0.8570	0.8730	Ave		0.8412				3.7		20.0			
m,p-Xylene	1.3680 1.3382	1.2843 1.3270	1.4551	1.3600	1.4069	Ave		1.3628			0.1000	4.1		20.0			
o-Xylene	++++ 1.3295	1.3109 1.3082	1.3843	1.3731	1.3861	Ave		1.3487			0.3000	2.7		20.0			
Styrene	2.0300 2.2733	1.8944 2.0188	2.3203	2.3736	2.3591	Ave		2.1814			0.3000	8.9		20.0			
Bromoform	0.5784 0.6663	0.5357 0.7130	0.6044	0.6388	0.6688	Ave		0.6293			0.1000	9.6		20.0			
Isopropylbenzene	2.9555 2.5346	2.6736 2.0934	3.0783	2.7741	2.8971	Ave		2.7152			0.1000	12.1		20.0			
1,1,2,2-Tetrachloroethane	++++ 0.8738	0.9164 0.8430	0.9901	0.9507	0.9282	Ave		0.9170			0.3000	5.8		20.0			
trans-1,4-Dichloro-2-butene	++++ 0.2853	0.1733 0.3138	0.2113	0.2364	0.2746	Ave		0.2491				20.8	*	20.0			
N-Propylbenzene	3.3347 2.8022	3.1219 2.2051	3.5818	3.2871	3.3066	Ave		3.0913				14.8		20.0			
Bromobenzene	0.9106 0.8851	0.9252 0.8821	1.0344	0.9407	0.9353	Ave		0.9305				5.5		20.0			
1,2,3-Trichloropropane	++++ 0.2882	0.3091 0.2868	0.2921	0.3060	0.2971	Ave		0.2966				3.1		20.0			
1,3,5-Trimethylbenzene	2.4523 2.1983	2.0464 1.8643	2.5247	2.3250	2.4414	Ave		2.2646				10.7		20.0			
2-Chlorotoluene	++++ 0.7596	0.7039 0.7804	0.8689	0.7864	0.7988	Ave		0.7830				6.9		20.0			
4-Chlorotoluene	++++ 0.7982	0.7697 0.8030	0.8840	0.8383	0.8418	Ave		0.8225				4.9		20.0			
tert-Butylbenzene	++++ 0.4909	0.5056 0.5329	0.5044	0.4840	0.5396	Ave		0.5096				4.4		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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 440877
SDG No.: _____
Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 10/22/2018 15:16 Calibration End Date: 10/22/2018 18:02 Calibration ID: 35153

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.4905 2.3265	2.3370 1.9179	2.7424	2.5352	2.6177	Ave		2.4239				11.0		20.0			
sec-Butylbenzene	++++ 2.3951	2.5040 2.0202	2.9610	2.5670	2.7852	Ave		2.5387				12.8		20.0			
4-Isopropyltoluene	2.1769 2.1323	2.0837 1.8550	2.5558	2.2102	2.3937	Ave		2.2011				10.2		20.0			
1,3-Dichlorobenzene	++++ 1.5240	1.6234 1.3961	1.7491	1.6796	1.7005	Ave		1.6121			0.6000	8.1		20.0			
1,4-Dichlorobenzene	++++ 1.5805	1.7590 1.4190	1.8215	1.7109	1.7475	Ave		1.6731			0.5000	8.8		20.0			
n-Butylbenzene	2.1229 1.8114	1.9773 1.6219	2.1306	1.8606	2.0583	Ave		1.9404				9.6		20.0			
1,2-Dichlorobenzene	++++ 1.5028	1.5814 1.3773	1.7394	1.6630	1.6432	Ave		1.5845			0.4000	8.1		20.0			
1,2-Dibromo-3-Chloropropane	++++ 0.1878	0.1931 0.2033	0.1812	0.1844	0.1950	Ave		0.1908			0.0500	4.2		20.0			
1,2,4-Trichlorobenzene	++++ 1.0192	1.1416 1.0250	1.1069	1.0679	1.0928	Ave		1.0756			0.2000	4.4		20.0			
Hexachlorobutadiene	++++ 0.3284	0.3903 0.3663	0.3643	0.3126	0.3469	Ave		0.3515				8.0		20.0			
Naphthalene	2.6900 2.7780	2.7757 2.3052	3.0778	3.1035	3.1008	Ave		2.8330				10.3		20.0			
1,2,3-Trichlorobenzene	++++ 1.0065	1.0322 1.0010	1.0854	1.0160	1.0556	Ave		1.0328				3.1		20.0			
Dibromofluoromethane (Surr)	1.4439 1.4547	1.4218 1.4451	1.4393	1.4522	1.4448	Ave		1.4431				0.7		20.0			
1,2-Dichloroethane-d4 (Surr)	0.8420 0.8453	0.8620 0.8564	0.8230	0.8556	0.8643	Ave		0.8498				1.7		20.0			
Toluene-d8 (Surr)	2.3281 2.3561	2.3811 2.3236	2.3265	2.3963	2.3358	Ave		2.3496				1.2		20.0			
4-Bromofluorobenzene (Surr)	0.8209 0.8691	0.8345 0.8745	0.8308	0.8599	0.8307	Ave		0.8458				2.5		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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 440877

SDG No.: _____

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/22/2018 15:16 Calibration End Date: 10/22/2018 18:02 Calibration ID: 35153

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-440877/7	P37183.D
Level 2	IC 480-440877/8	P37184.D
Level 3	IC 480-440877/9	P37185.D
Level 4	IC 480-440877/10	P37186.D
Level 5	ICIS 480-440877/11	P37187.D
Level 6	IC 480-440877/12	P37188.D
Level 7	IC 480-440877/13	P37189.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	++++ 926587	20186 2237018	94995	182516	524515	++++ 50.0	1.00 100	5.00	10.0	25.0
Chloromethane	FB	Ave	16973 1476102	38666 3287711	163956	330405	836630	0.500 50.0	1.00 100	5.00	10.0	25.0
Vinyl chloride	FB	Ave	13306 1195516	27793 2859934	128261	270978	682366	0.500 50.0	1.00 100	5.00	10.0	25.0
Butadiene	FB	Ave	12149 1068076	25334 2596048	121995	245726	634328	0.500 50.0	1.00 100	5.00	10.0	25.0
Bromomethane	FB	Ave	++++ 732807	17161 1702268	76297	163479	400565	++++ 50.0	1.00 100	5.00	10.0	25.0
Chloroethane	FB	Ave	++++ 625436	11723 1420793	63948	135623	316877	++++ 50.0	1.00 100	5.00	10.0	25.0
Dichlorofluoromethane	FB	Ave	15790 1449694	33397 3327395	153230	314102	775718	0.500 50.0	1.00 100	5.00	10.0	25.0
Trichlorofluoromethane	FB	Ave	++++ 1274406	25661 3154148	131553	266730	707074	++++ 50.0	1.00 100	5.00	10.0	25.0
Ethyl ether	FB	Ave	++++ 692300	13141 1467833	65849	129817	335305	++++ 50.0	1.00 100	5.00	10.0	25.0
Acrolein	FB	Ave	5729 650462	11118 1475188	56937	129061	321682	2.50 250	5.00 500	25.0	50.0	125
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	6244 641612	8536 1640670	63688	115112	331698	0.500 50.0	1.00 100	5.00	10.0	25.0
1,1-Dichloroethene	FB	Ave	++++ 659386	13840 1571461	68548	123157	348632	++++ 50.0	1.00 100	5.00	10.0	25.0
Acetone	FB	Ave	++++ 1556401	31836 3512132	157894	322983	805186	++++ 250	5.00 500	25.0	50.0	125
Iodomethane	FB	Ave	++++ 1354646	20448 3119357	127794	244550	692735	++++ 50.0	1.00 100	5.00	10.0	25.0
Carbon disulfide	FB	Ave	++++ 1941146	37598 4415825	208121	389848	1095253	++++ 50.0	1.00 100	5.00	10.0	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 440877

SDG No.: _____

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/22/2018 15:16 Calibration End Date: 10/22/2018 18:02 Calibration ID: 35153

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Ave	++++ 1480513	27820 3099957	148592	307017	755816	++++ 100	2.00 200	10.0	20.0	50.0
Allyl chloride	FB	Ave	11064 1218047	20378 2671847	113103	219854	602327	0.500 50.0	1.00 100	5.00	10.0	25.0
Methylene Chloride	FB	Ave	9244 818331	22913 1820135	88888	162697	417623	0.500 50.0	1.00 100	5.00	10.0	25.0
2-Methyl-2-propanol	FB	Ave	++++ 998390	15212 2674530	98131	193178	501101	++++ 500	10.0 1000	50.0	100	250
Methyl tert-butyl ether	FB	Ave	++++ 2077119	40081 4499280	203714	409319	1032177	++++ 50.0	1.00 100	5.00	10.0	25.0
trans-1,2-Dichloroethene	FB	Ave	7052 726929	13288 1655836	74694	139216	377413	0.500 50.0	1.00 100	5.00	10.0	25.0
Acrylonitrile	FB	Ave	34153 3390084	66692 6164695	359487	707933	1770016	5.00 500	10.0 1000	50.0	100	250
Hexane	FB	Ave	++++ 874835	15946 2004062	92288	155826	442201	++++ 50.0	1.00 100	5.00	10.0	25.0
Vinyl acetate	FB	Ave	++++ 3654400	64122 6311612	346745	723042	1882069	++++ 100	2.00 200	10.0	20.0	50.0
1,1-Dichloroethane	FB	Ave	13346 1442404	24052 3105586	133259	269178	723403	0.500 50.0	1.00 100	5.00	10.0	25.0
2-Butanone (MEK)	FB	Ave	22364 2455082	48572 4803729	239895	496819	1244509	2.50 250	5.00 500	25.0	50.0	125
2,2-Dichloropropane	FB	Ave	8956 904737	16352 2181440	87592	171628	436269	0.500 50.0	1.00 100	5.00	10.0	25.0
cis-1,2-Dichloroethene	FB	Ave	8471 846991	15544 1854361	86992	159332	435141	0.500 50.0	1.00 100	5.00	10.0	25.0
Chlorobromomethane	FB	Ave	++++ 444820	7603 983485	42545	84053	220914	++++ 50.0	1.00 100	5.00	10.0	25.0
Tetrahydrofuran	FB	Ave	5874 632205	12510 1398145	59659	124229	321242	1.00 100	2.00 200	10.0	20.0	50.0
Chloroform	FB	Ave	13555 1377771	26129 2902997	138178	269587	691348	0.500 50.0	1.00 100	5.00	10.0	25.0
1,1,1-Trichloroethane	FB	Ave	10574 1104355	18255 2521331	112581	202832	556156	0.500 50.0	1.00 100	5.00	10.0	25.0
Cyclohexane	FB	Ave	++++ 1095223	18164 2461736	112796	194521	554500	++++ 50.0	1.00 100	5.00	10.0	25.0
1,1-Dichloropropene	FB	Ave	++++ 1002560	17842 2268845	95202	184997	501014	++++ 50.0	1.00 100	5.00	10.0	25.0
Carbon tetrachloride	FB	Ave	9240 1082908	17866 2480370	105564	188989	533708	0.500 50.0	1.00 100	5.00	10.0	25.0
Isobutyl alcohol	FB	Ave	++++ 1345507	24556 3195087	121978	254986	665964	++++ 1250	25.0 2500	125	250	625

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 440877

SDG No.: _____

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/22/2018 15:16 Calibration End Date: 10/22/2018 18:02 Calibration ID: 35153

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	++++ 2768458	55087 5259715	292974	561073	1462016	++++ 50.0	1.00 100	5.00	10.0	25.0
1,2-Dichloroethane	FB	Ave	++++ 1238459	22212 2600342	120781	234866	625677	++++ 50.0	1.00 100	5.00	10.0	25.0
n-Heptane	FB	Ave	++++ 696672	11940 1604937	70967	117308	349856	++++ 50.0	1.00 100	5.00	10.0	25.0
Trichloroethene	FB	Ave	++++ 765479	12629 1712588	77097	142873	387311	++++ 50.0	1.00 100	5.00	10.0	25.0
Methylcyclohexane	FB	Ave	9280 908884	12866 2125419	93675	157418	465421	0.500 50.0	1.00 100	5.00	10.0	25.0
1,2-Dichloropropane	FB	Ave	++++ 833681	14726 1807185	79657	156913	409246	++++ 50.0	1.00 100	5.00	10.0	25.0
1,4-Dioxane	CBNZ d5	Ave	++++ 129944	1474 374765	12670	30496	75188	++++ 1000	20.0 2000	100	200	500
Dibromomethane	FB	Ave	++++ 566329	9879 1256249	52878	108742	286106	++++ 50.0	1.00 100	5.00	10.0	25.0
Bromodichloromethane	FB	Ave	++++ 1114703	17346 2422235	98047	207759	545959	++++ 50.0	1.00 100	5.00	10.0	25.0
2-Chloroethyl vinyl ether	FB	Ave	++++ 360501	4978 844341	27732	53106	154715	++++ 50.0	1.00 100	5.00	10.0	25.0
cis-1,3-Dichloropropene	FB	Ave	++++ 1244758	19377 2662878	107826	219844	608675	++++ 50.0	1.00 100	5.00	10.0	25.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	41749 4507744	83427 7181276	479879	1017030	2511819	2.50 250	5.00 500	25.0	50.0	125
Toluene	CBNZ d5	Ave	++++ 1794970	33411 3730715	177252	357034	924327	++++ 50.0	1.00 100	5.00	10.0	25.0
Ethyl methacrylate	CBNZ d5	Ave	7654 1040352	13736 2286972	80329	173194	505606	0.500 50.0	1.00 100	5.00	10.0	25.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	++++ 1216730	16399 2660365	104480	214647	584554	++++ 50.0	1.00 100	5.00	10.0	25.0
1,1,2-Trichloroethane	CBNZ d5	Ave	++++ 632203	12355 1353826	58195	120262	311629	++++ 50.0	1.00 100	5.00	10.0	25.0
Tetrachloroethene	CBNZ d5	Ave	++++ 837600	15630 1892428	86622	156812	423404	++++ 50.0	1.00 100	5.00	10.0	25.0
2-Hexanone	CBNZ d5	Ave	33608 3541028	62612 5995978	345705	747352	1936874	2.50 250	5.00 500	25.0	50.0	125
1,3-Dichloropropane	CBNZ d5	Ave	++++ 1270664	22701 2656131	119769	242699	632336	++++ 50.0	1.00 100	5.00	10.0	25.0
Dibromochloromethane	CBNZ d5	Ave	++++ 947407	14718 2043666	80943	172089	454184	++++ 50.0	1.00 100	5.00	10.0	25.0
1,2-Dibromoethane	CBNZ d5	Ave	++++ 821275	15572 1807430	75154	153293	414694	++++ 50.0	1.00 100	5.00	10.0	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 440877

SDG No.: _____

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/22/2018 15:16 Calibration End Date: 10/22/2018 18:02 Calibration ID: 35153

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	21671 2142073	39843 4204825	216863	434767	1112120	0.500 50.0	1.00 100	5.00	10.0	25.0
Ethylbenzene	CBNZ d5	Ave	++++ 3151853	59978 5576655	330259	646340	1686293	++++ 50.0	1.00 100	5.00	10.0	25.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	7708 885540	14288 1936917	76262	160034	432366	0.500 50.0	1.00 100	5.00	10.0	25.0
m,p-Xylene	CBNZ d5	Ave	12547 1379699	23426 2995503	135753	253944	696807	0.500 50.0	1.00 100	5.00	10.0	25.0
o-Xylene	CBNZ d5	Ave	++++ 1370729	23910 2953033	129145	256400	686535	++++ 50.0	1.00 100	5.00	10.0	25.0
Styrene	CBNZ d5	Ave	18618 2343849	34553 4557068	216468	443223	1168423	0.500 50.0	1.00 100	5.00	10.0	25.0
Bromoform	CBNZ d5	Ave	5305 686943	9771 1609377	56390	119289	331250	0.500 50.0	1.00 100	5.00	10.0	25.0
Isopropylbenzene	DCBd 4	Ave	29581 3050888	54048 5500568	315657	590930	1627829	0.500 50.0	1.00 100	5.00	10.0	25.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	++++ 1051835	18526 2215194	101524	202524	521525	++++ 50.0	1.00 100	5.00	10.0	25.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	++++ 343365	3503 824645	21669	50352	154271	++++ 50.0	1.00 100	5.00	10.0	25.0
N-Propylbenzene	DCBd 4	Ave	33376 3372995	63110 5794088	367284	700217	1857933	0.500 50.0	1.00 100	5.00	10.0	25.0
Bromobenzene	DCBd 4	Ave	9114 1065382	18704 2317699	106066	200392	525516	0.500 50.0	1.00 100	5.00	10.0	25.0
1,2,3-Trichloropropane	DCBd 4	Ave	++++ 346963	6249 753571	29950	65180	166941	++++ 50.0	1.00 100	5.00	10.0	25.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	24544 2646082	41370 4898669	258892	495266	1371788	0.500 50.0	1.00 100	5.00	10.0	25.0
2-Chlorotoluene	DCBd 4	Ave	++++ 914303	14230 2050550	89094	167518	448836	++++ 50.0	1.00 100	5.00	10.0	25.0
4-Chlorotoluene	DCBd 4	Ave	++++ 960799	15560 2109951	90647	178565	473027	++++ 50.0	1.00 100	5.00	10.0	25.0
tert-Butylbenzene	DCBd 4	Ave	++++ 590873	10220 1400301	51726	103107	303177	++++ 50.0	1.00 100	5.00	10.0	25.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	24927 2800409	47243 5039425	281208	540049	1470843	0.500 50.0	1.00 100	5.00	10.0	25.0
sec-Butylbenzene	DCBd 4	Ave	++++ 2882988	50620 5308196	303623	546830	1564971	++++ 50.0	1.00 100	5.00	10.0	25.0
4-Isopropyltoluene	DCBd 4	Ave	21788 2566653	42124 4874116	262080	470819	1345023	0.500 50.0	1.00 100	5.00	10.0	25.0
1,3-Dichlorobenzene	DCBd 4	Ave	++++ 1834401	32817 3668414	179352	357777	955507	++++ 50.0	1.00 100	5.00	10.0	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 440877

SDG No.: _____

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/22/2018 15:16 Calibration End Date: 10/22/2018 18:02 Calibration ID: 35153

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	++++ 1902510	35559 3728690	186780	364459	981886	++++ 50.0	1.00 100	5.00	10.0	25.0
n-Butylbenzene	DCBd 4	Ave	21248 2180329	39972 4261652	218475	396338	1156535	0.500 50.0	1.00 100	5.00	10.0	25.0
1,2-Dichlorobenzene	DCBd 4	Ave	++++ 1808937	31969 3618963	178357	354256	923285	++++ 50.0	1.00 100	5.00	10.0	25.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	++++ 226074	3903 534195	18578	39281	109575	++++ 50.0	1.00 100	5.00	10.0	25.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	++++ 1226857	23079 2693320	113509	227476	614011	++++ 50.0	1.00 100	5.00	10.0	25.0
Hexachlorobutadiene	DCBd 4	Ave	++++ 395273	7891 962421	37358	66599	194900	++++ 50.0	1.00 100	5.00	10.0	25.0
Naphthalene	DCBd 4	Ave	26923 3343879	56113 6057268	315603	661111	1742315	0.500 50.0	1.00 100	5.00	10.0	25.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	++++ 1211572	20867 2630364	111295	216419	593129	++++ 50.0	1.00 100	5.00	10.0	25.0
Dibromofluoromethane (Surr)	FB	Ave	326449 365791	314665 388794	322828	331236	347939	25.0 25.0	25.0 25.0	25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	190352 212554	190774 230399	184591	195156	208148	25.0 25.0	25.0 25.0	25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	1067599 1214561	1085744 1311284	1085261	1118638	1156882	25.0 25.0	25.0 25.0	25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	376438 448016	380507 493522	387538	401399	411428	25.0 25.0	25.0 25.0	25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 22-Oct-2018 15:16:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC
 Misc. Info.: 480-0075728-007
 Operator ID: OI/RF Instrument ID: HP5973P
 Sublist: chrom-P-8260H2O*sub11
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Oct-2018 13:32:41 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1005

First Level Reviewer: baroner

Date: 22-Oct-2018 23:49:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.342	-0.006	98	226084	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.284	14.290	-0.006	86	458573	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	96	500436	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.545	9.539	0.006	91	326449	25.0	25.0	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.989	0.006	0	190352	25.0	24.8	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.325	0.000	93	1067599	25.0	24.8	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	95	376438	25.0	24.3	
10 Dichlorodifluoromethane	85	4.246	4.252	-0.006	39	11742	0.5000	0.6234	
11 Chloromethane	50	4.666	4.666	0.000	67	16973	0.5000	0.5284	M
17 Vinyl chloride	62	4.861	4.855	0.006	44	13306	0.5000	0.5207	
144 Butadiene	54	4.910	4.897	0.013	94	12149	0.5000	0.5186	
12 Bromomethane	94	5.494	5.475	0.019	41	11042	0.5000	0.7230	
13 Chloroethane	64	5.627	5.615	0.012	62	5377	0.5000	0.4396	
19 Dichlorofluoromethane	67	5.895	5.901	-0.006	93	15790	0.5000	0.5241	
14 Trichlorofluoromethane	101	5.968	5.962	0.006	38	13808	0.5000	0.5340	
20 Ethyl ether	59	6.315	6.321	-0.006	68	5611	0.5000	0.4376	a
22 Acrolein	56	6.631	6.625	0.006	93	5729	2.50	2.41	
16 1,1,2-Trichloro-1,2,2-trif	101	6.637	6.637	0.000	80	6244	0.5000	0.5251	Ma
25 1,1-Dichloroethene	96	6.735	6.728	0.007	48	9234	0.5000	0.7074	
24 Acetone	43	6.814	6.814	0.000	96	17591	2.50	2.87	M
18 Iodomethane	142	7.033	7.027	0.006	75	10394	0.5000	0.4229	
27 Carbon disulfide	76	7.124	7.118	0.006	98	21791	0.5000	0.5632	
30 Methyl acetate	43	7.179	7.179	0.000	47	16421	1.00	1.16	a
28 3-Chloro-1-propene	41	7.203	7.203	0.000	78	11064	0.5000	0.5012	M
31 Methylene Chloride	84	7.398	7.398	0.000	91	9244	0.5000	0.5320	
33 2-Methyl-2-propanol	59	7.422	7.416	0.006	52	8332	5.00	4.40	
32 Methyl tert-butyl ether	73	7.605	7.611	-0.006	95	17490	0.5000	0.4437	
35 trans-1,2-Dichloroethene	96	7.702	7.702	0.000	88	7052	0.5000	0.5053	
34 Acrylonitrile	53	7.738	7.732	0.006	97	34153	5.00	5.22	
36 Hexane	57	7.897	7.903	-0.006	93	9644	0.5000	0.5814	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.207	8.195	0.012	97	27543	1.00	0.8336	
40 1,1-Dichloroethane	63	8.249	8.249	0.000	94	13346	0.5000	0.5077	
44 2-Butanone (MEK)	43	8.931	8.931	0.000	98	22364	2.50	2.42	
45 2,2-Dichloropropane	77	8.943	8.943	0.000	57	8956	0.5000	0.5213	
43 cis-1,2-Dichloroethene	96	8.967	8.967	0.000	81	8471	0.5000	0.5233	
50 Chlorobromomethane	128	9.302	9.290	0.012	62	4681	0.5000	0.5705	
51 Tetrahydrofuran	42	9.308	9.308	0.000	68	5874	1.00	0.9784	a
49 Chloroform	83	9.320	9.332	-0.012	94	13555	0.5000	0.5171	
52 1,1,1-Trichloroethane	97	9.557	9.563	-0.006	88	10574	0.5000	0.5121	
54 Cyclohexane	56	9.600	9.606	-0.006	63	11904	0.5000	0.5865	
56 1,1-Dichloropropene	75	9.734	9.734	0.000	81	8996	0.5000	0.4834	
53 Isobutyl alcohol	43	9.764	9.752	0.012	59	10058	12.5	10.0	M
55 Carbon tetrachloride	117	9.752	9.752	0.000	89	9240	0.5000	0.4718	
57 Benzene	78	10.032	10.032	0.000	92	31631	0.5000	0.5934	
60 1,2-Dichloroethane	62	10.093	10.093	0.000	92	12266	0.5000	0.5335	
59 n-Heptane	43	10.087	10.099	-0.012	77	7315	0.5000	0.5679	a
62 Trichloroethene	95	10.798	10.786	0.012	92	8446	0.5000	0.5940	
64 Methylcyclohexane	83	10.993	10.987	0.006	87	9280	0.5000	0.5511	a
63 1,2-Dichloropropane	63	11.133	11.127	0.006	89	7105	0.5000	0.4624	
68 1,4-Dioxane	88	11.297	11.249	0.048	0	843	10.0	6.69	M
69 Dibromomethane	93	11.334	11.334	0.000	85	5959	0.5000	0.5674	
70 Dichlorobromomethane	83	11.456	11.462	-0.006	90	9067	0.5000	0.4572	
71 2-Chloroethyl vinyl ether	63	11.711	11.711	0.000	1	2281	0.5000	0.3874	a
73 cis-1,3-Dichloropropene	75	11.997	11.997	0.000	93	10012	0.5000	0.4588	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	96	41749	2.50	2.46	
76 Toluene	92	12.423	12.417	0.006	97	19513	0.5000	0.5854	
77 Ethyl methacrylate	69	12.636	12.642	-0.006	81	7654	0.5000	0.4550	
78 trans-1,3-Dichloropropene	75	12.721	12.709	0.012	90	8555	0.5000	0.4172	a
79 1,1,2-Trichloroethane	83	13.007	12.995	0.012	87	5310	0.5000	0.4586	a
80 Tetrachloroethene	166	13.141	13.147	-0.006	90	8862	0.5000	0.5650	
83 2-Hexanone	43	13.189	13.189	0.000	97	33608	2.50	2.59	
82 1,3-Dichloropropane	76	13.238	13.232	0.006	85	12291	0.5000	0.5351	
81 Chlorodibromomethane	129	13.560	13.573	-0.012	87	7162	0.5000	0.4389	
85 Ethylene Dibromide	107	13.767	13.773	-0.006	92	6987	0.5000	0.4650	
87 Chlorobenzene	112	14.333	14.327	0.006	91	21671	0.5000	0.5375	
89 Ethylbenzene	91	14.370	14.369	0.001	96	34694	0.5000	0.5904	
88 1,1,1,2-Tetrachloroethane	131	14.406	14.406	0.000	83	7708	0.5000	0.4996	
90 m-Xylene & p-Xylene	106	14.516	14.509	0.007	0	12547	0.5000	0.5019	a
93 o-Xylene	106	15.051	15.057	-0.006	97	12808	0.5000	0.5177	
94 Styrene	104	15.081	15.087	-0.006	94	18618	0.5000	0.4653	
92 Bromoform	173	15.477	15.471	0.006	40	5305	0.5000	0.4595	
95 Isopropylbenzene	105	15.495	15.489	0.006	96	29581	0.5000	0.5443	
97 1,1,2,2-Tetrachloroethane	83	15.957	15.957	0.000	89	10612	0.5000	0.5781	
99 N-Propylbenzene	91	16.012	16.012	0.000	98	33376	0.5000	0.5394	
98 trans-1,4-Dichloro-2-buten	53	16.018	16.012	0.006	42	1216	0.5000	0.2439	
100 Bromobenzene	156	16.030	16.036	-0.006	87	9114	0.5000	0.4893	
101 1,2,3-Trichloropropane	110	16.061	16.055	0.006	77	2554	0.5000	0.4302	
102 1,3,5-Trimethylbenzene	105	16.201	16.207	-0.006	93	24544	0.5000	0.5414	
103 2-Chlorotoluene	126	16.225	16.219	0.006	97	9078	0.5000	0.5792	
105 4-Chlorotoluene	126	16.347	16.347	0.000	97	7741	0.5000	0.4702	
106 tert-Butylbenzene	134	16.651	16.645	0.006	91	4092	0.5000	0.4012	
107 1,2,4-Trimethylbenzene	105	16.712	16.706	0.006	98	24927	0.5000	0.5137	

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	16.906	16.906	0.000	93	33099	0.5000	0.6513	
112 4-Isopropyltoluene	119	17.058	17.058	0.000	95	21788	0.5000	0.4945	
110 1,3-Dichlorobenzene	146	17.174	17.174	0.000	97	18310	0.5000	0.5674	
111 1,4-Dichlorobenzene	146	17.284	17.277	0.007	91	21129	0.5000	0.6309	a
115 n-Butylbenzene	91	17.570	17.569	0.001	98	21248	0.5000	0.5470	
116 1,2-Dichlorobenzene	146	17.770	17.776	-0.006	96	18344	0.5000	0.5784	
117 1,2-Dibromo-3-Chloropropan	75	18.817	18.817	0.000	1	3260	0.5000	0.8536	
119 1,2,4-Trichlorobenzene	180	19.912	19.912	0.000	89	13089	0.5000	0.6079	
120 Hexachlorobutadiene	225	20.033	20.033	0.000	4	4323	0.5000	0.6145	
121 Naphthalene	128	20.350	20.350	0.000	96	26923	0.5000	0.4748	
122 1,2,3-Trichlorobenzene	180	20.721	20.727	-0.006	90	11404	0.5000	0.5516	
S 123 1,2-Dichloroethene, Total	1				0			1.03	
S 124 1,3-Dichloropropene, Total	1				0			0.8760	
S 125 Total BTEX	1				0			2.79	
S 126 Xylenes, Total	1				0			1.02	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00138

Amount Added: 0.50

Units: uL

GAS CORP mix_00308

Amount Added: 0.50

Units: uL

P 8260 IS_00335

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00309

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Operator ID: OI/RF

Client ID:

Worklist Smp#: 7

Purge Vol: 5.000 mL

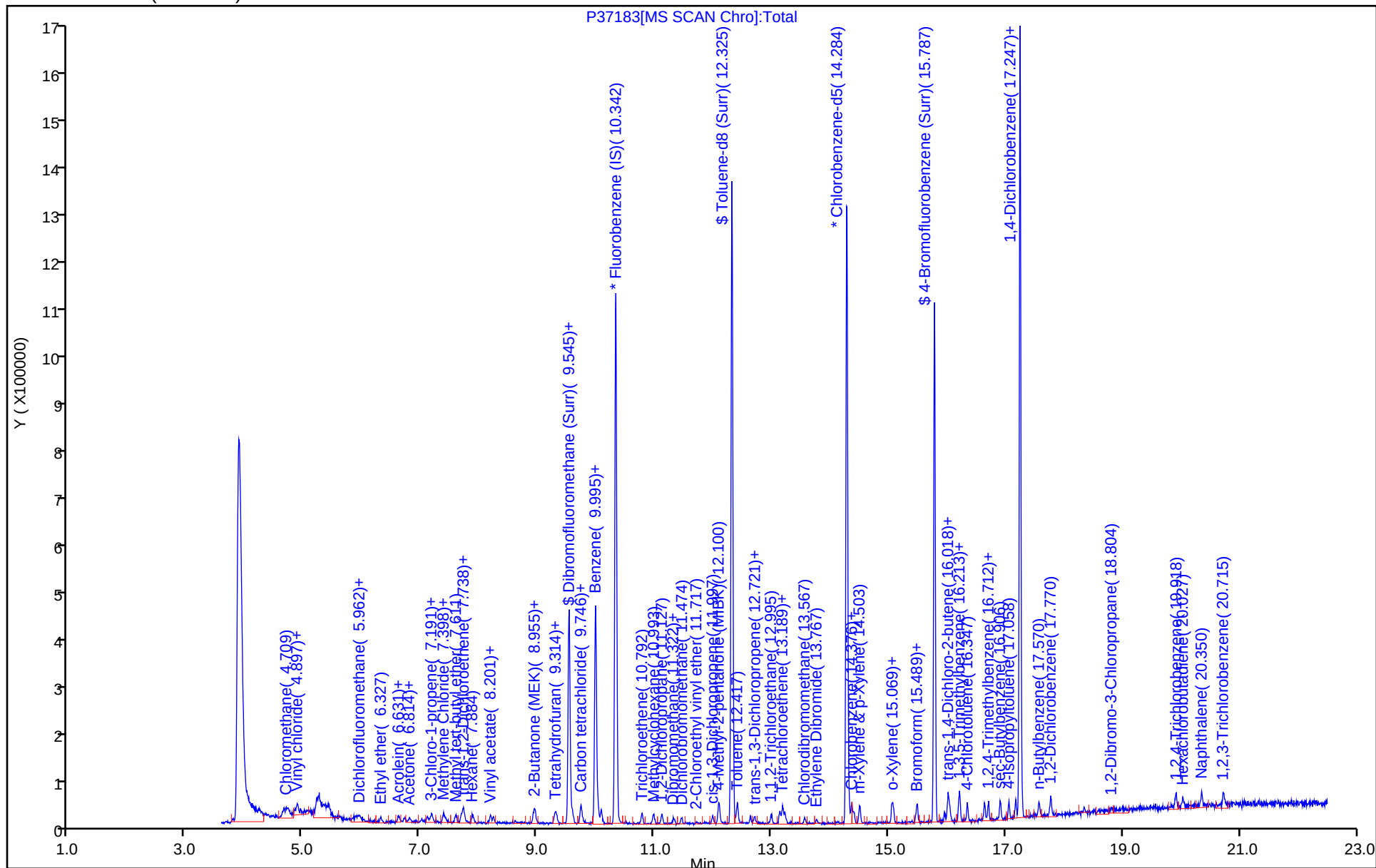
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

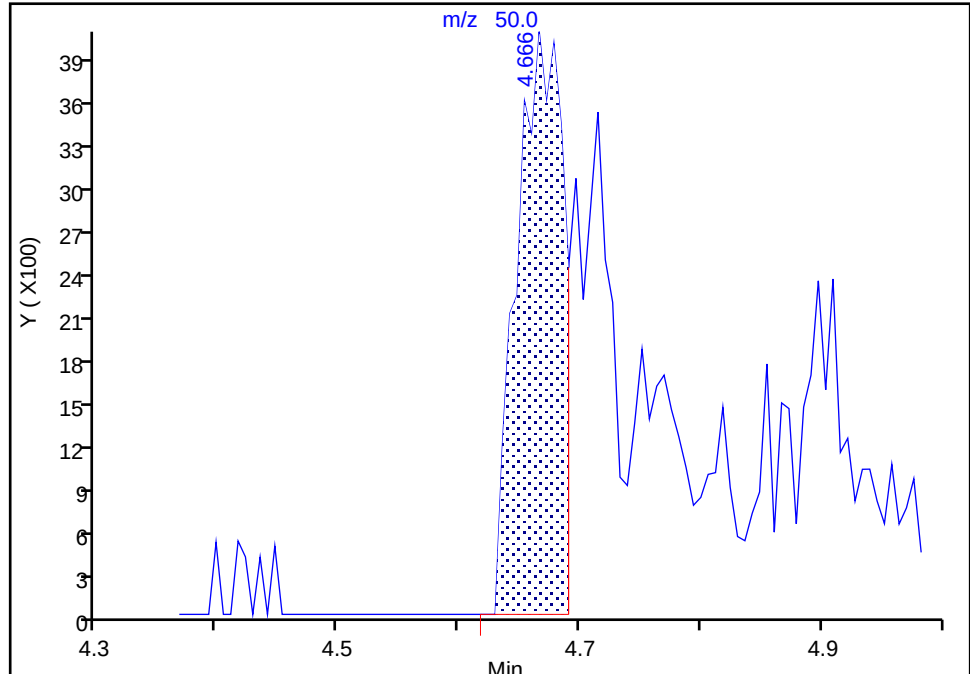
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D
Injection Date: 22-Oct-2018 15:16:30 Instrument ID: HP5973P
Lims ID: IC
Client ID:
Operator ID: OI/RF ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

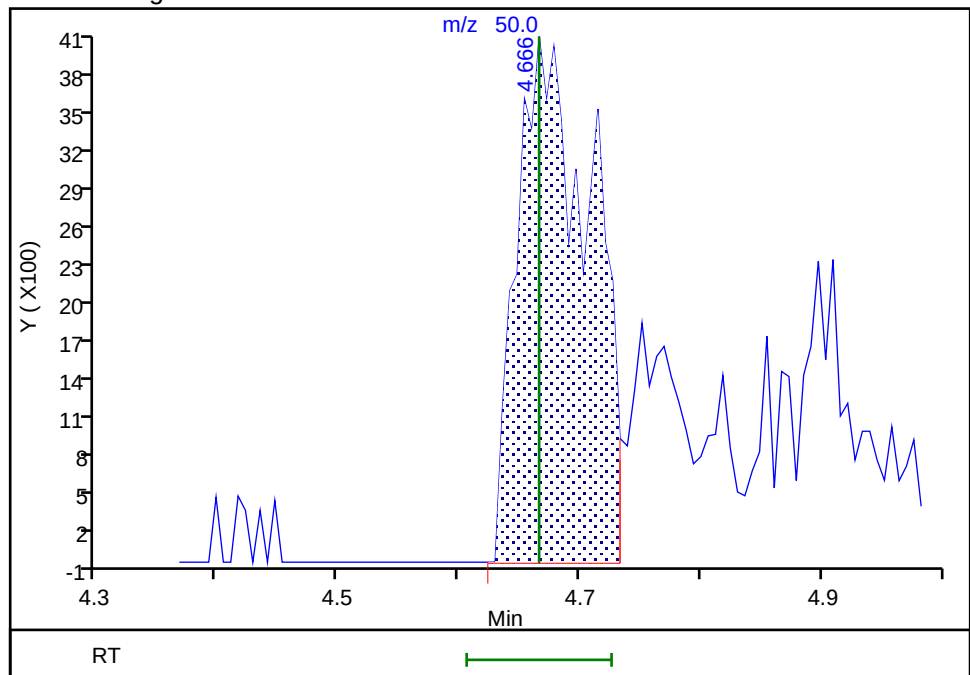
RT: 4.67
Area: 10737
Amount: 0.353915
Amount Units: ug/L

Processing Integration Results



RT: 4.67
Area: 16973
Amount: 0.528433
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:48:29

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Client ID:

Operator ID: OI/RF

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

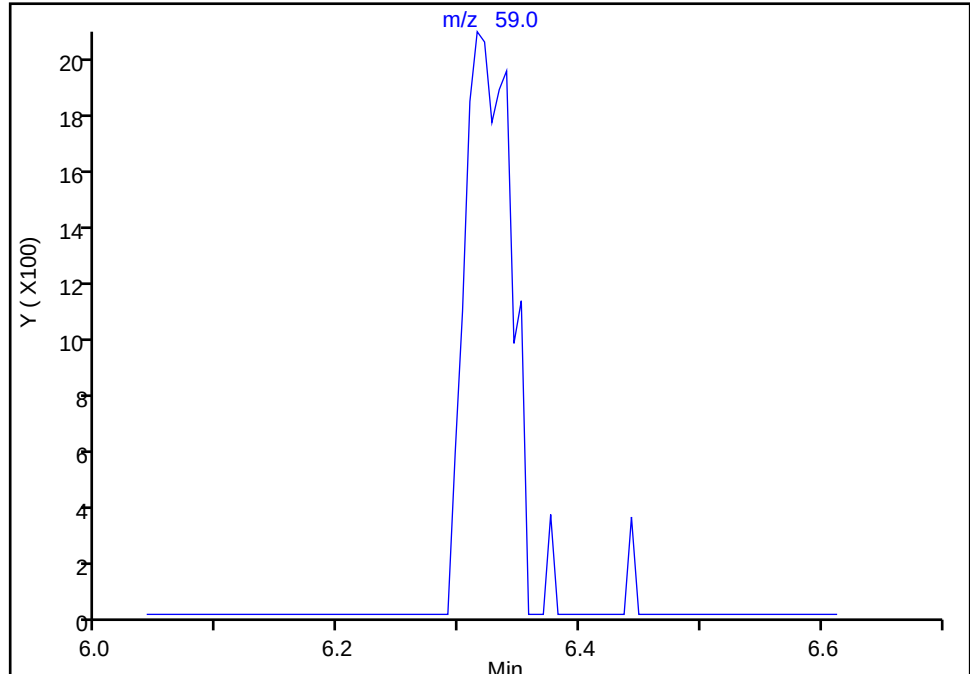
20 Ethyl ether, CAS: 60-29-7

Signal: 1

Not Detected

Expected RT: 6.32

Processing Integration Results



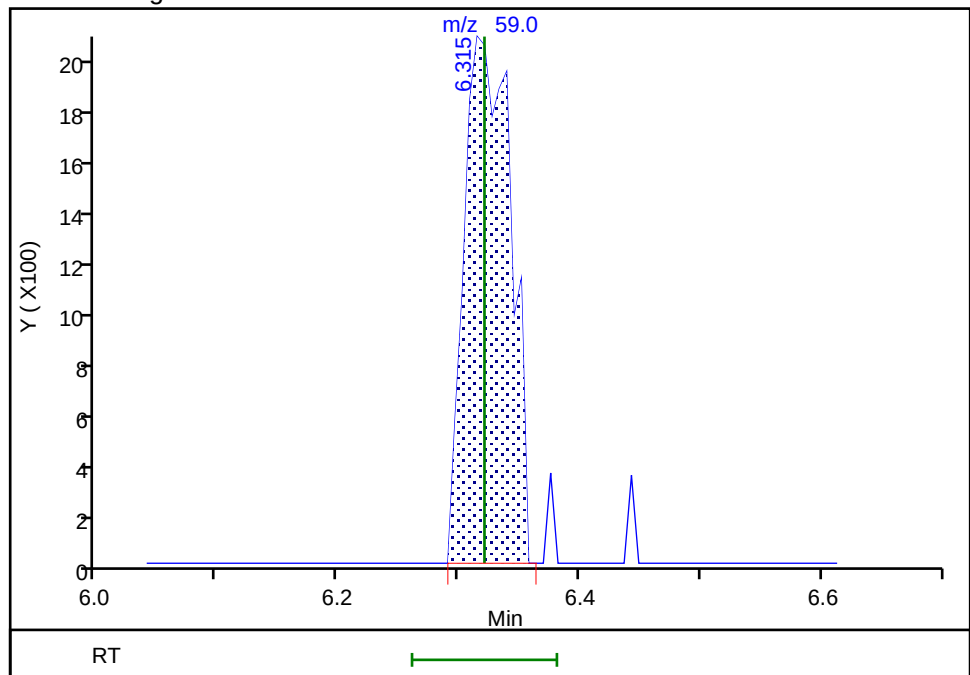
RT: 6.31

Area: 5611

Amount: 0.437551

Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:48:40

Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Client ID:

Operator ID: OI/RF

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

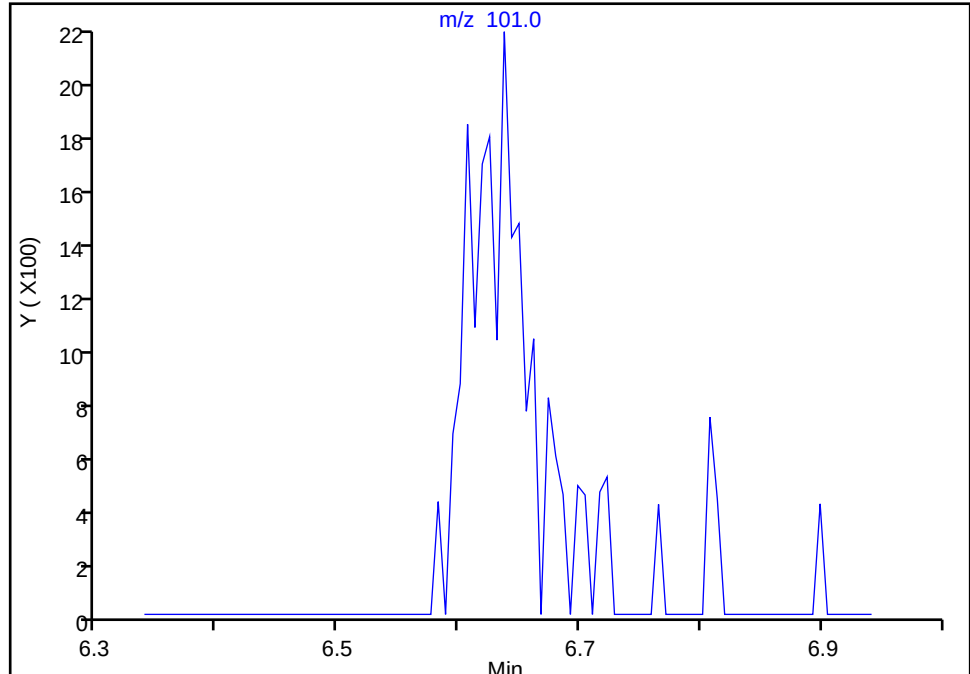
16 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

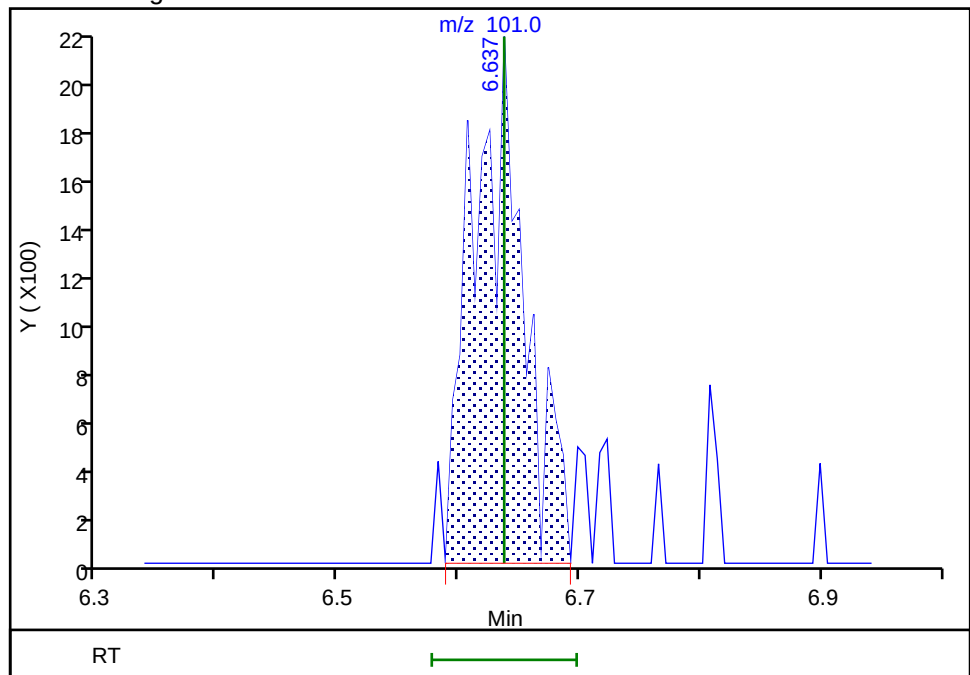
Not Detected

Expected RT: 6.64

Processing Integration Results



Manual Integration Results



RT: 6.64

Area: 6244

Amount: 0.525097

Amount Units: ug/L

Reviewer: baroner, 22-Oct-2018 23:49:00

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Client ID:

Operator ID: OI/RF

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

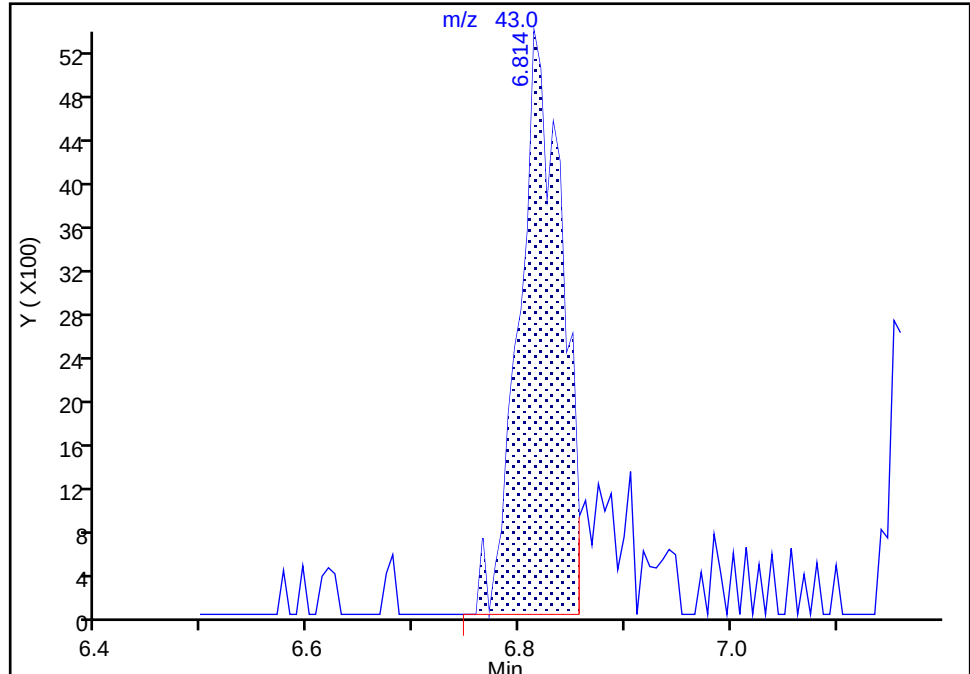
MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 1

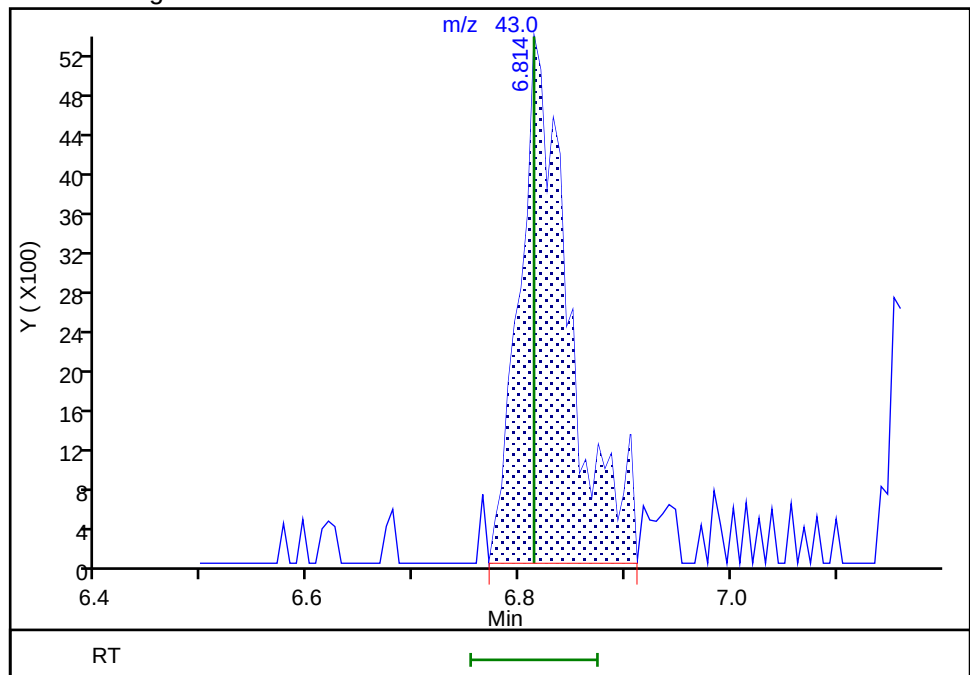
RT: 6.81
Area: 15136
Amount: 2.471163
Amount Units: ug/L

Processing Integration Results



RT: 6.81
Area: 17591
Amount: 2.866465
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:49:47

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Client ID:

Operator ID: OI/RF

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

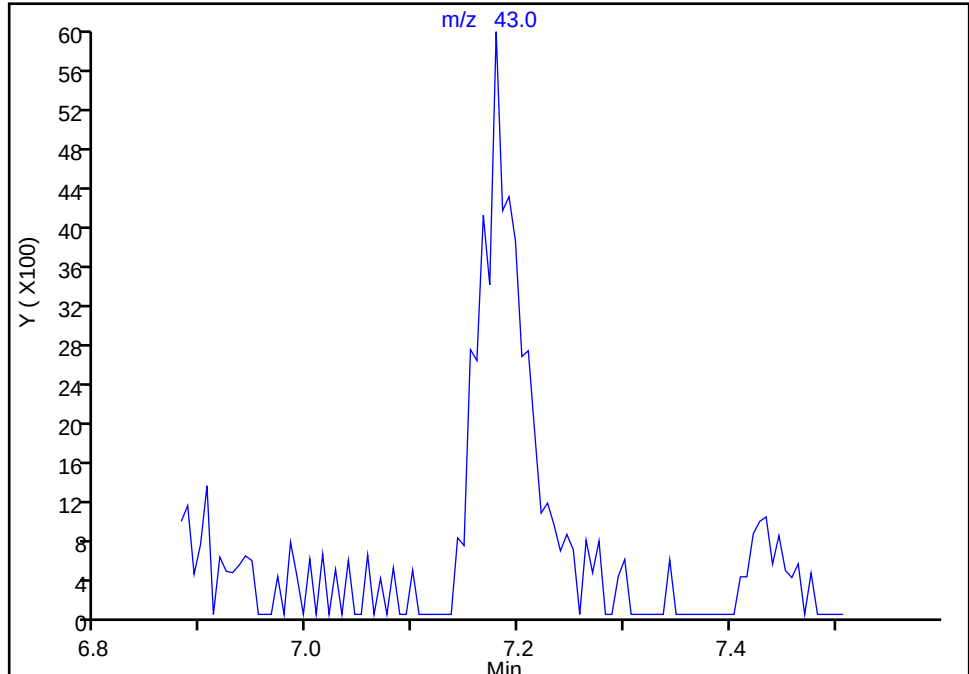
30 Methyl acetate, CAS: 79-20-9

Signal: 1

Not Detected

Expected RT: 7.18

Processing Integration Results



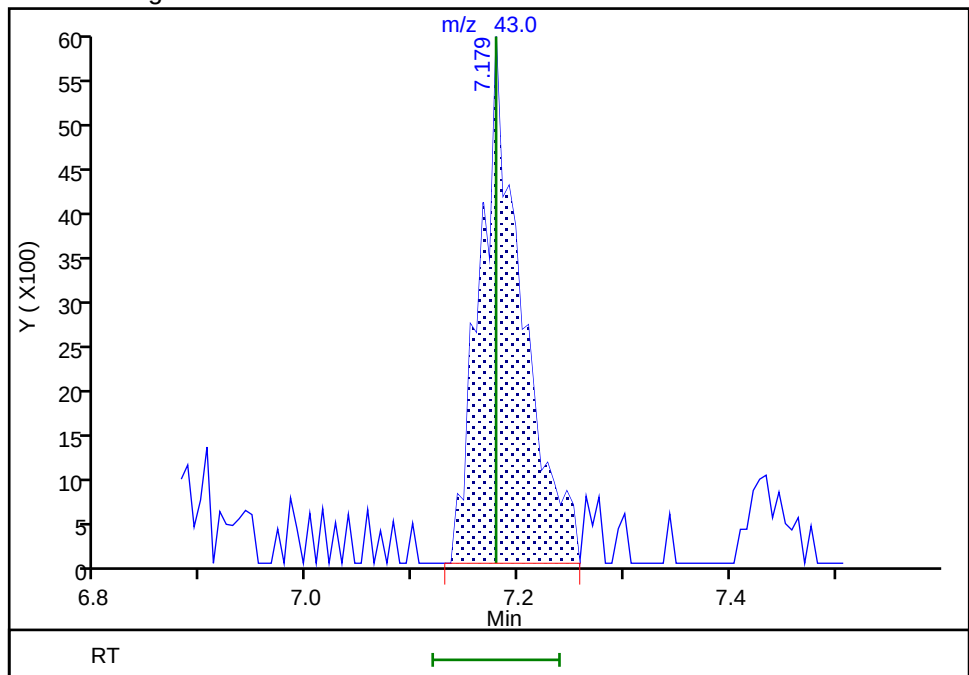
RT: 7.18

Area: 16421

Amount: 1.160069

Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:49:54

Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Client ID:

Operator ID: OI/RF

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

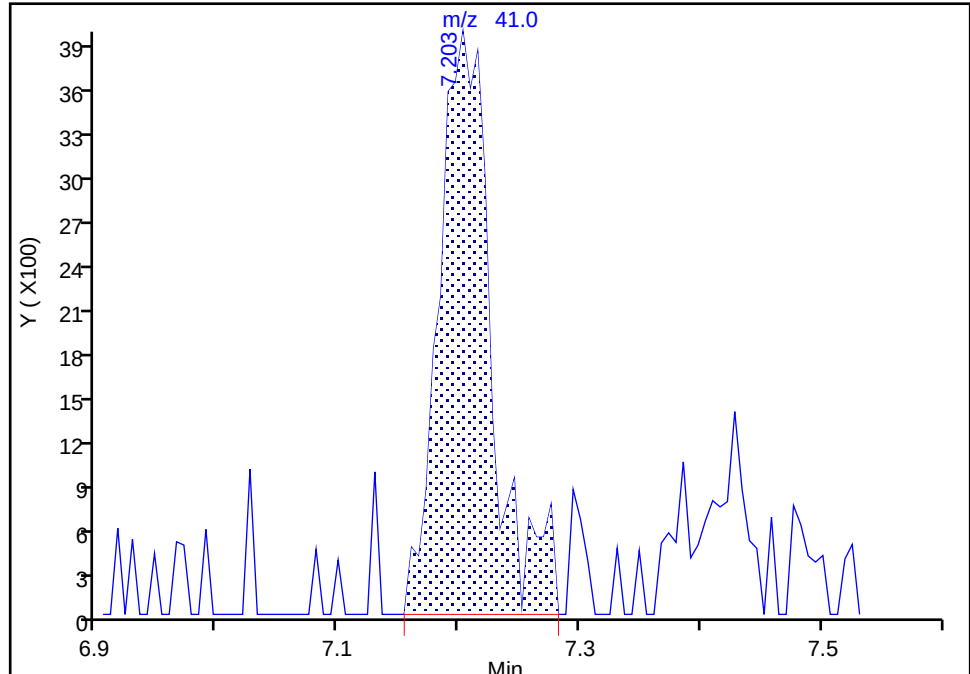
MS SCAN

28 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

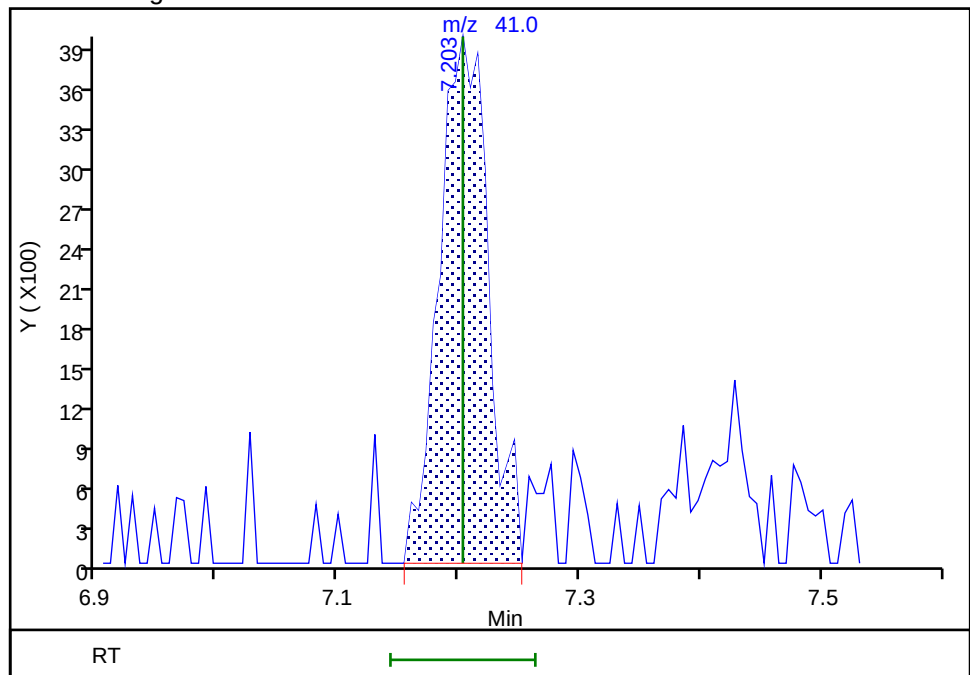
RT: 7.20
Area: 11945
Amount: 0.535051
Amount Units: ug/L

Processing Integration Results



RT: 7.20
Area: 11064
Amount: 0.501240
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:50:11

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

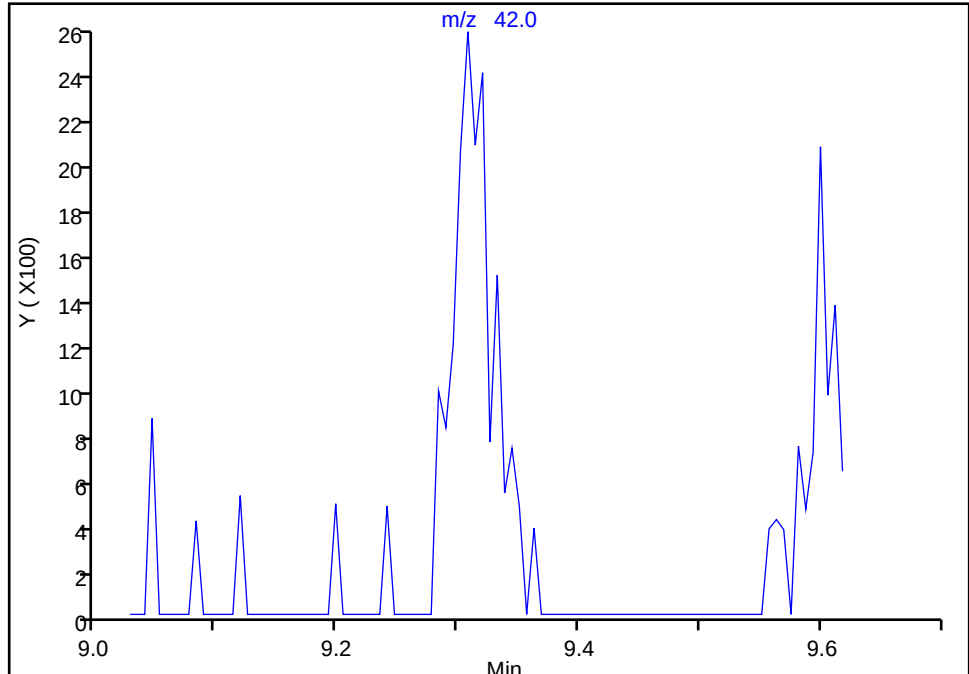
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D
Injection Date: 22-Oct-2018 15:16:30 Instrument ID: HP5973P
Lims ID: IC
Client ID:
Operator ID: OI/RF ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

51 Tetrahydrofuran, CAS: 109-99-9

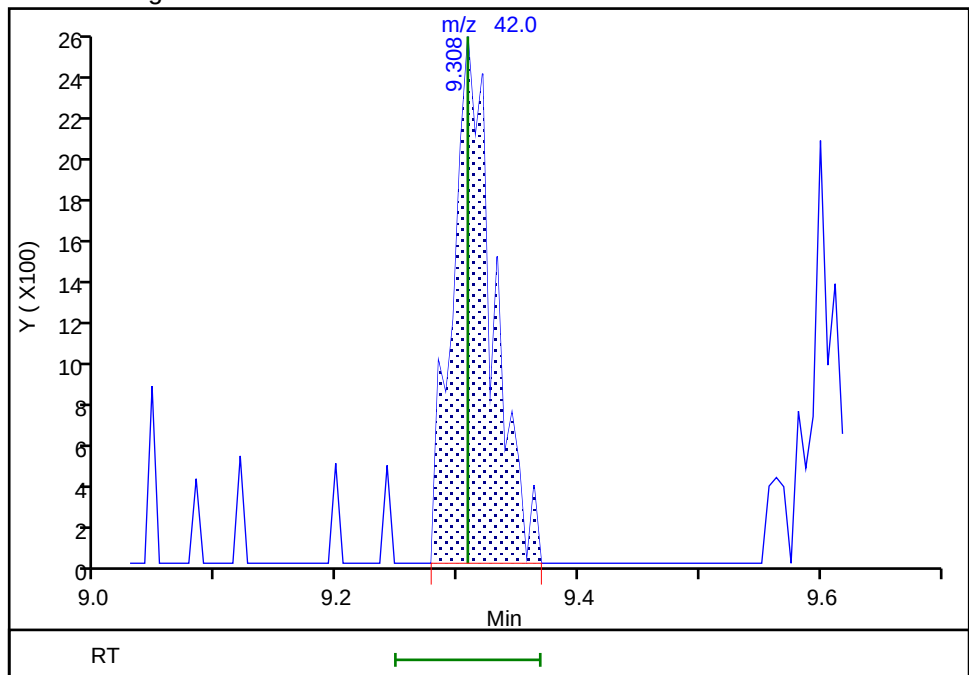
Signal: 1

Not Detected
Expected RT: 9.31

Processing Integration Results



Manual Integration Results



RT: 9.31
Area: 5874
Amount: 0.978428
Amount Units: ug/L

Reviewer: baroner, 22-Oct-2018 23:50:24
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Client ID:

Operator ID: OI/RF

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

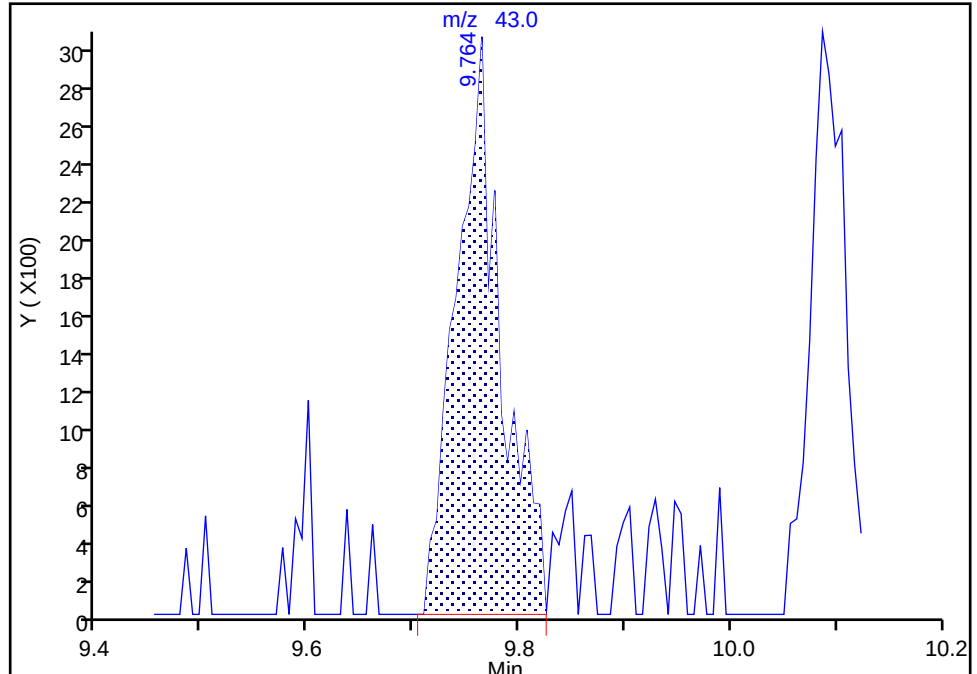
Detector: MS SCAN

53 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

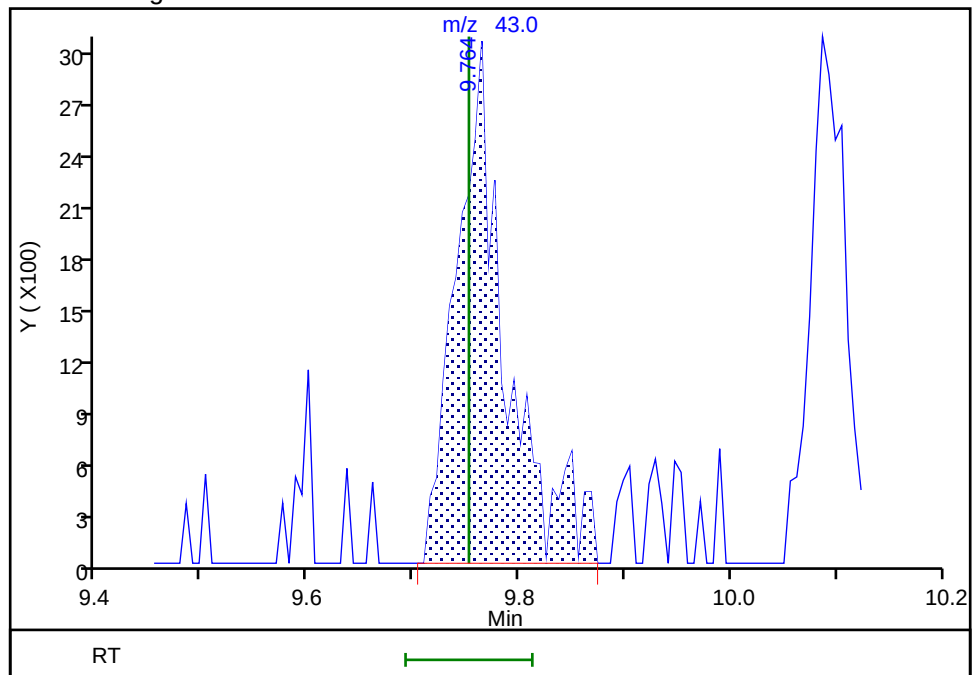
RT: 9.76
Area: 9017
Amount: 9.868553
Amount Units: ug/L

Processing Integration Results



RT: 9.76
Area: 10058
Amount: 9.991201
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:54:47

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

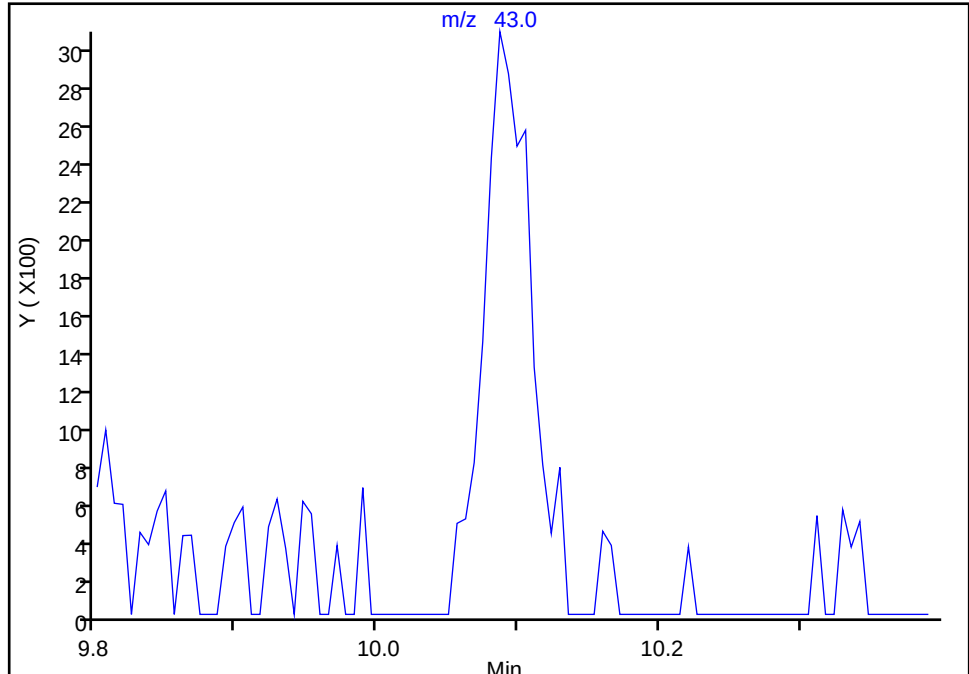
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D
Injection Date: 22-Oct-2018 15:16:30 Instrument ID: HP5973P
Lims ID: IC
Client ID:
Operator ID: OI/RF ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

59 n-Heptane, CAS: 142-82-5

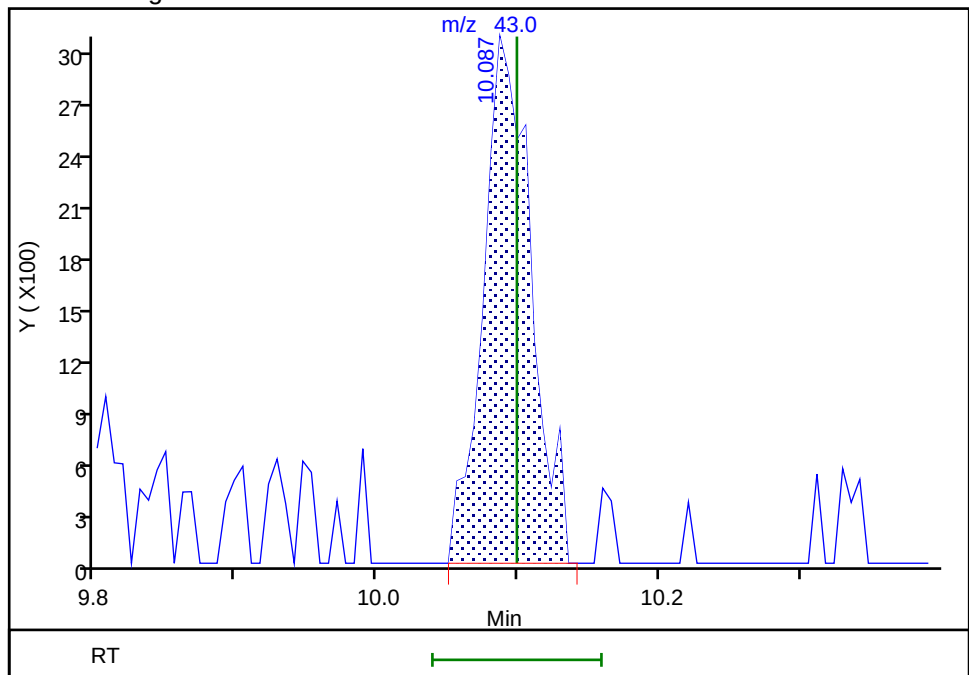
Signal: 1

Not Detected
Expected RT: 10.10

Processing Integration Results



Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:50:34
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

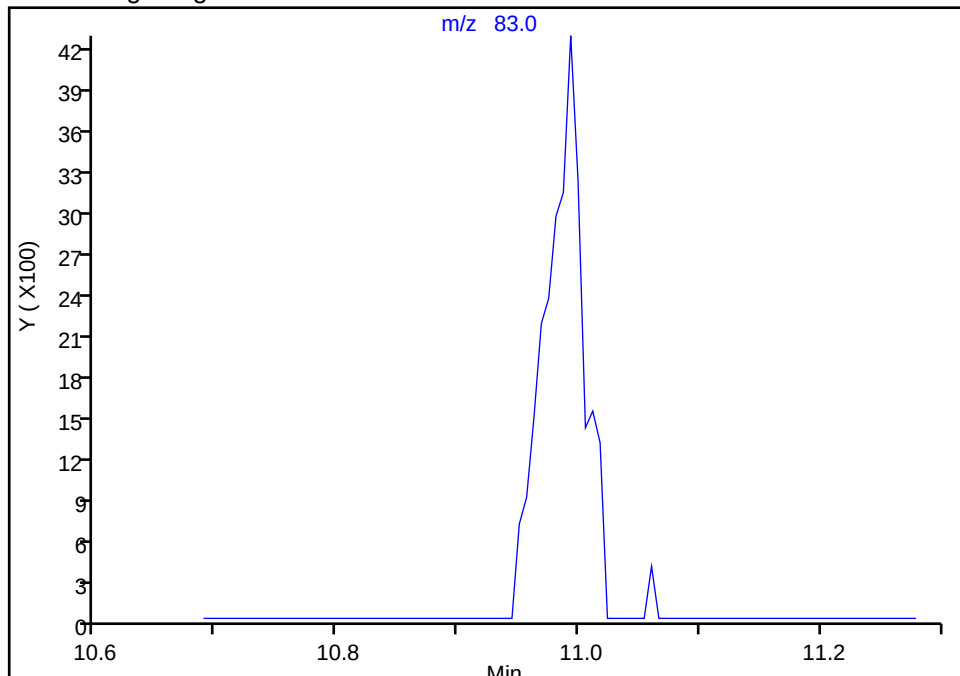
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D
Injection Date: 22-Oct-2018 15:16:30 Instrument ID: HP5973P
Lims ID: IC
Client ID:
Operator ID: OI/RF ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

64 Methylcyclohexane, CAS: 108-87-2

Signal: 1

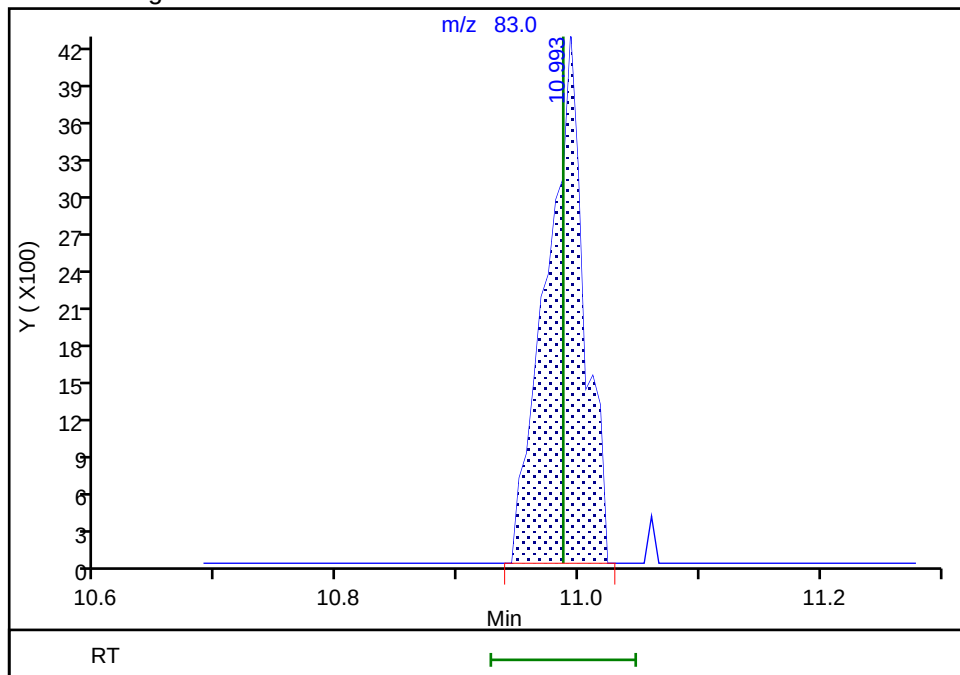
Not Detected
Expected RT: 10.99

Processing Integration Results



RT: 10.99
Area: 9280
Amount: 0.551100
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:50:40
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Client ID:

Operator ID: OI/RF

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

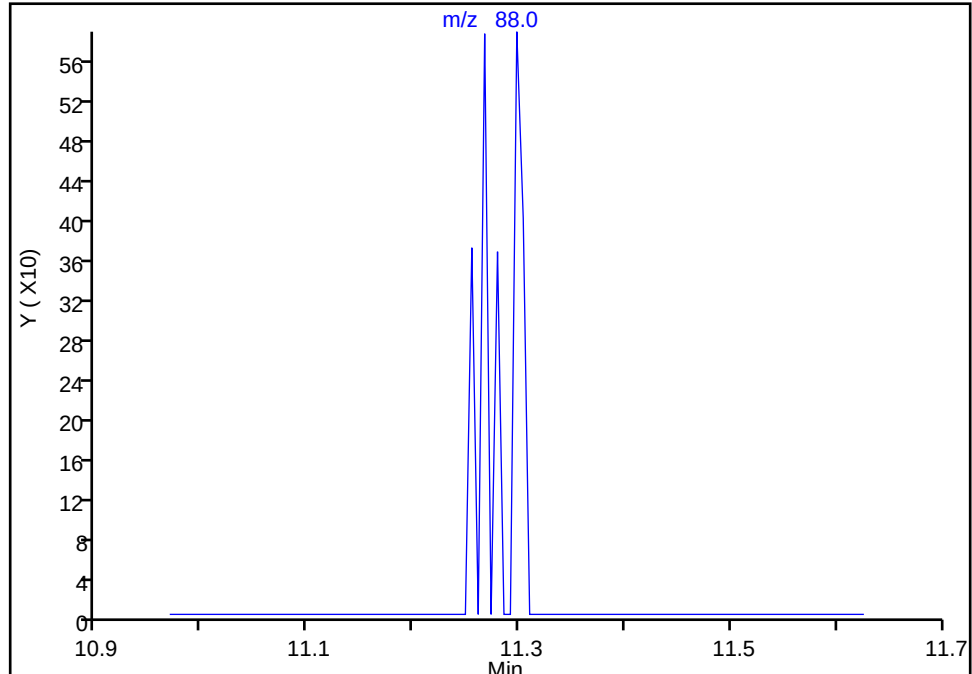
68 1,4-Dioxane, CAS: 123-91-1

Signal: 1

Not Detected

Expected RT: 11.25

Processing Integration Results



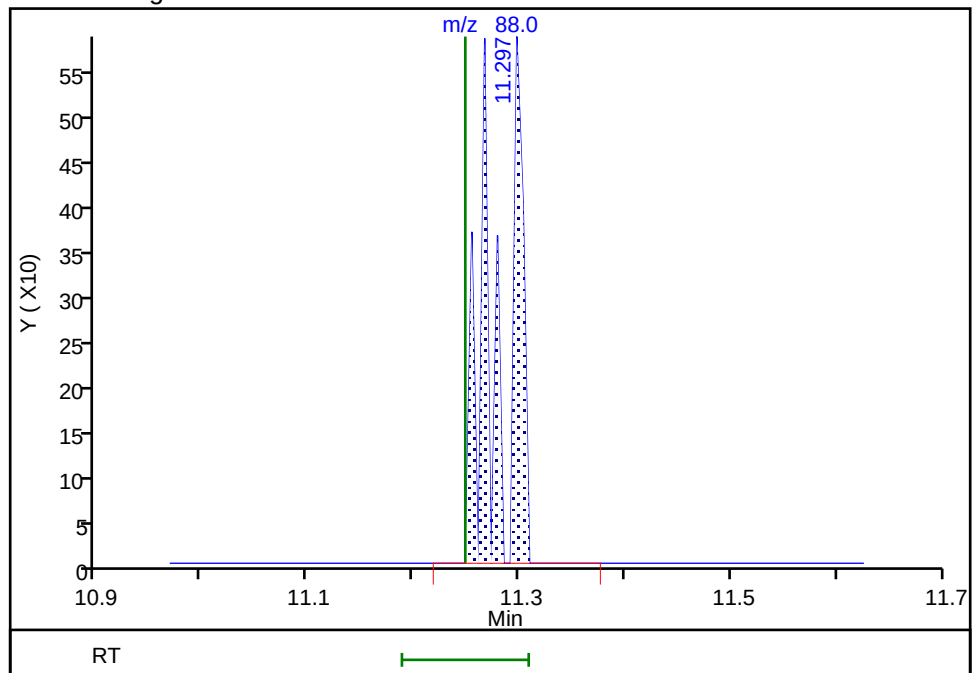
RT: 11.30

Area: 843

Amount: 6.694483

Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 23-Oct-2018 08:12:22

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

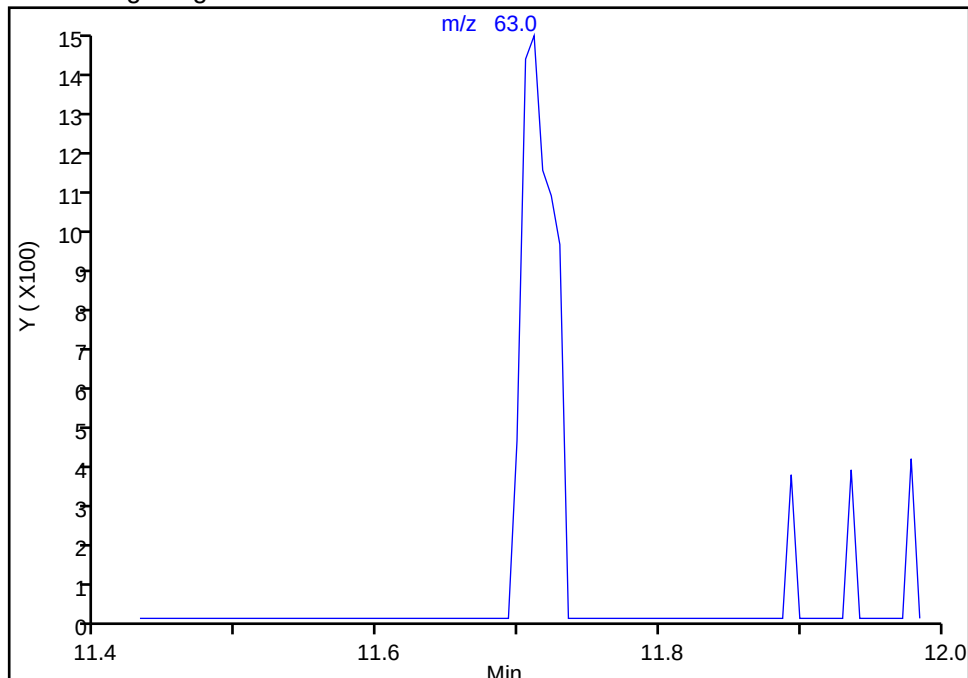
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D
Injection Date: 22-Oct-2018 15:16:30 Instrument ID: HP5973P
Lims ID: IC
Client ID:
Operator ID: OI/RF ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

71 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

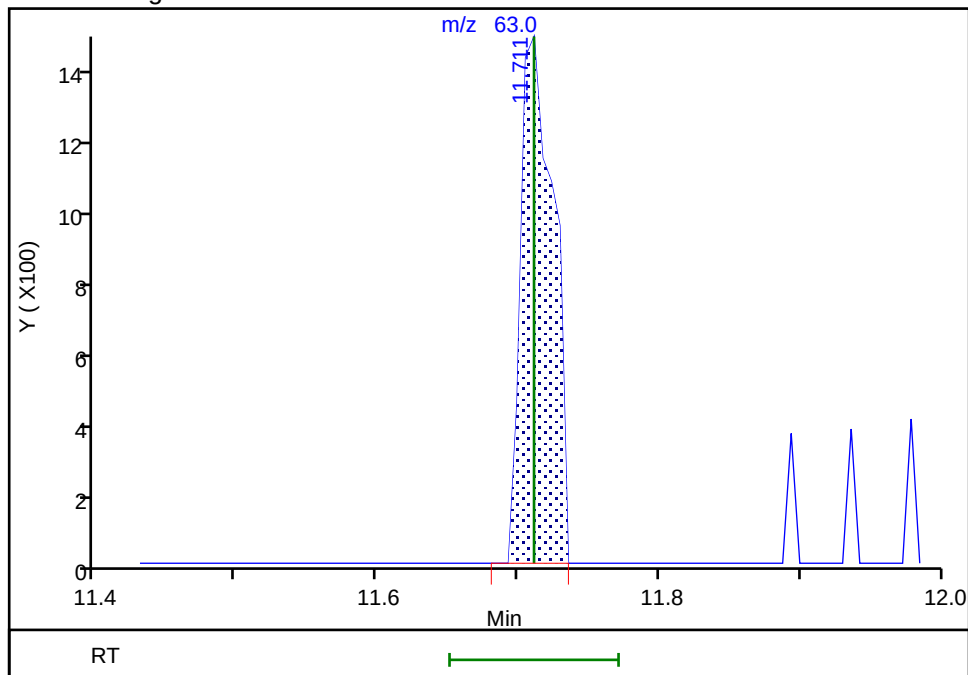
Not Detected
Expected RT: 11.71

Processing Integration Results



RT: 11.71
Area: 2281
Amount: 0.387402
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:50:47

Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Client ID:

Operator ID: OI/RF

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

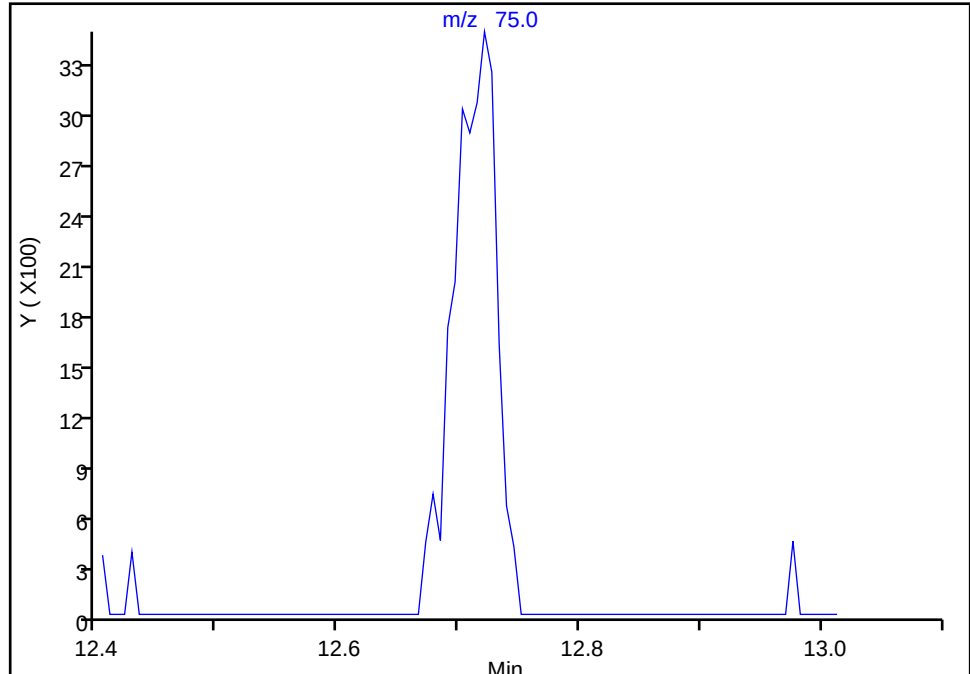
78 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 1

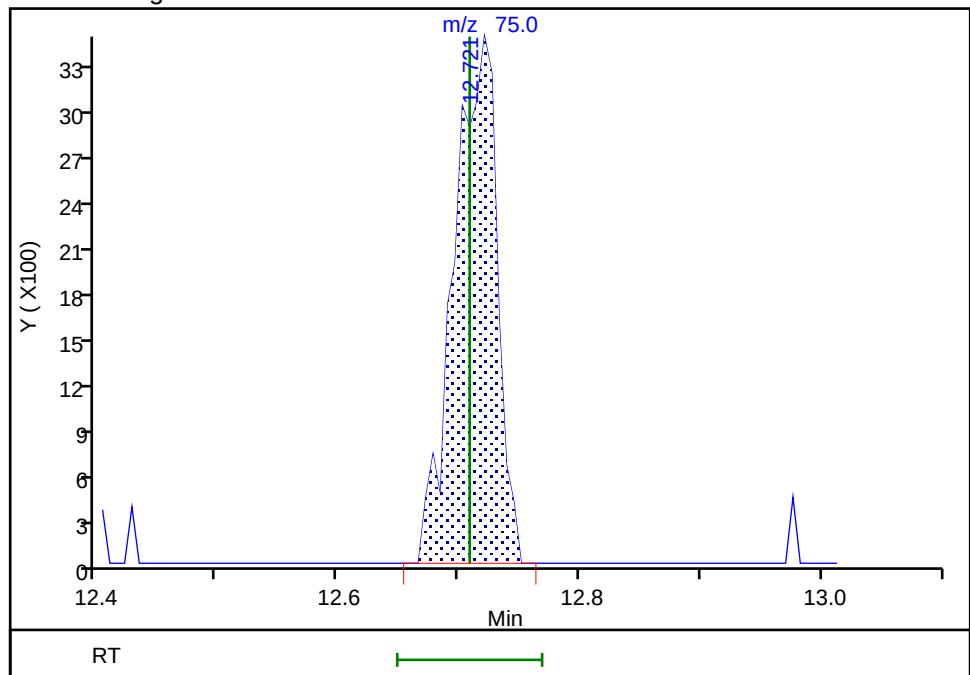
Not Detected

Expected RT: 12.71

Processing Integration Results



Manual Integration Results



RT: 12.72

Area: 8555

Amount: 0.417203

Amount Units: ug/L

Reviewer: baroner, 22-Oct-2018 23:50:53

Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

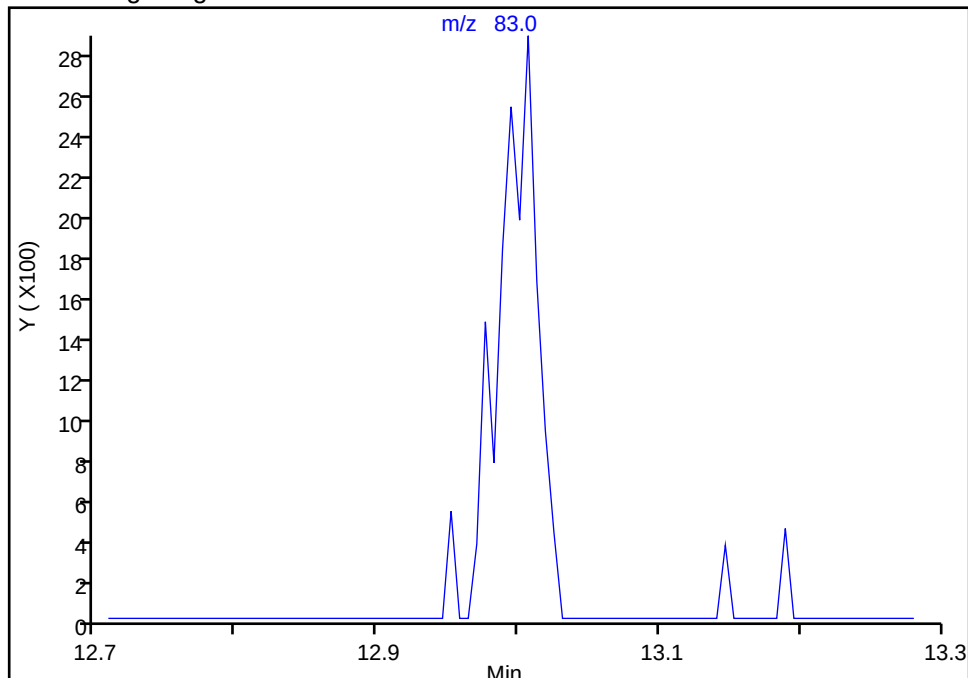
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D
Injection Date: 22-Oct-2018 15:16:30 Instrument ID: HP5973P
Lims ID: IC
Client ID:
Operator ID: OI/RF ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

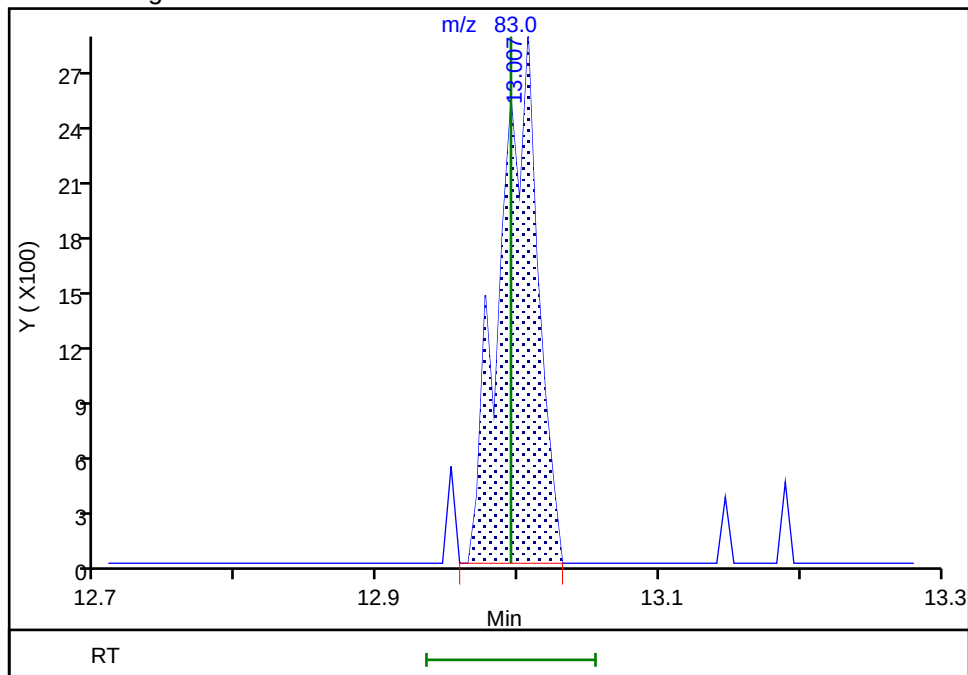
Not Detected
Expected RT: 12.99

Processing Integration Results



RT: 13.01
Area: 5310
Amount: 0.458611
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:50:56

Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Client ID:

Operator ID: OI/RF

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

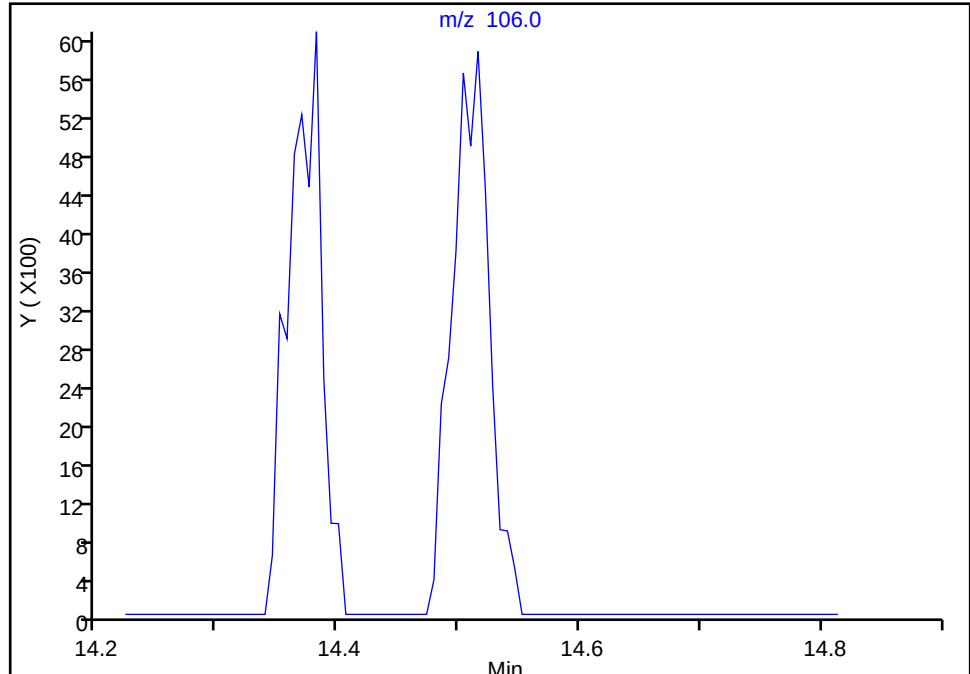
90 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

Not Detected

Expected RT: 14.51

Processing Integration Results



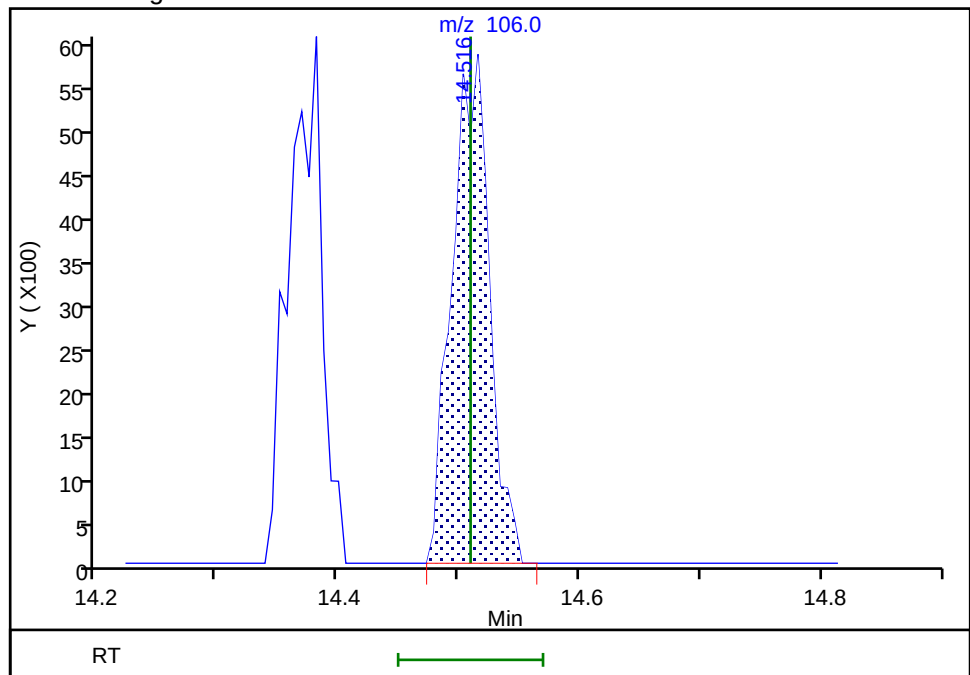
RT: 14.52

Area: 12547

Amount: 0.501927

Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:51:03

Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37183.D

Injection Date: 22-Oct-2018 15:16:30

Instrument ID: HP5973P

Lims ID: IC

Client ID:

Operator ID: OI/RF

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

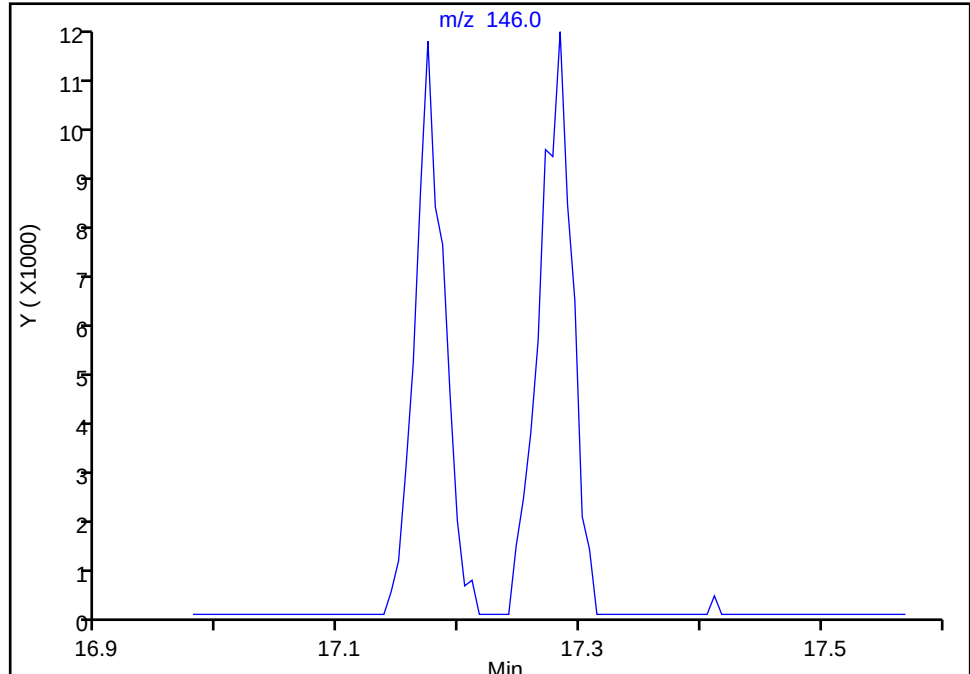
111 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

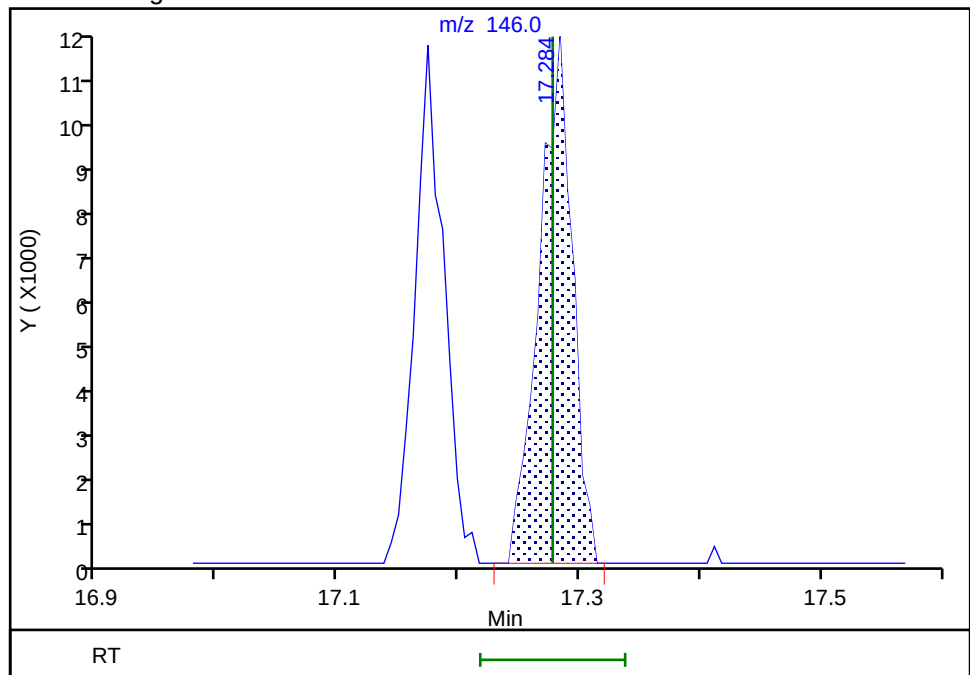
Not Detected

Expected RT: 17.28

Processing Integration Results



Manual Integration Results



RT: 17.28

Area: 21129

Amount: 0.630891

Amount Units: ug/L

Reviewer: baroner, 22-Oct-2018 23:51:13

Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37184.D
 Lims ID: IC 2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 22-Oct-2018 15:44:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC 2
 Misc. Info.: 480-0075728-008
 Operator ID: OI/RF Instrument ID: HP5973P
 Sublist: chrom-P-8260H2O*sub11
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Oct-2018 13:32:49 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1005

First Level Reviewer: baroner

Date: 22-Oct-2018 23:51:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.342	10.342	0.000	98	221320	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.284	14.290	-0.006	86	455993	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	505388	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	93	314665	25.0	24.6	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.989	0.006	0	190774	25.0	25.4	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.325	0.000	94	1085744	25.0	25.3	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	95	380507	25.0	24.7	
10 Dichlorodifluoromethane	85	4.258	4.252	0.006	69	20186	1.00	1.09	
11 Chloromethane	50	4.660	4.666	-0.006	74	38666	1.00	1.23	
17 Vinyl chloride	62	4.849	4.855	-0.006	96	27793	1.00	1.11	
144 Butadiene	54	4.897	4.897	0.000	91	25334	1.00	1.10	
12 Bromomethane	94	5.469	5.475	-0.006	75	17161	1.00	1.15	
13 Chloroethane	64	5.621	5.615	0.006	49	11723	1.00	0.9790	
19 Dichlorofluoromethane	67	5.901	5.901	0.000	57	33397	1.00	1.13	
14 Trichlorofluoromethane	101	5.956	5.962	-0.006	96	25661	1.00	1.01	
20 Ethyl ether	59	6.315	6.321	-0.006	94	13141	1.00	1.05	
22 Acrolein	56	6.631	6.625	0.006	96	11118	5.00	4.77	
16 1,1,2-Trichloro-1,2,2-trif	101	6.631	6.637	-0.006	84	8536	1.00	0.7333	
25 1,1-Dichloroethene	96	6.728	6.728	0.000	96	13840	1.00	1.08	
24 Acetone	43	6.820	6.814	0.006	94	31836	5.00	5.30	
18 Iodomethane	142	7.033	7.027	0.006	98	20448	1.00	0.8498	
27 Carbon disulfide	76	7.124	7.118	0.006	99	37598	1.00	0.99	M
30 Methyl acetate	43	7.172	7.179	-0.007	99	27820	2.00	2.01	
28 3-Chloro-1-propene	41	7.197	7.203	-0.006	88	20378	1.00	0.9431	
31 Methylene Chloride	84	7.398	7.398	0.000	96	22913	1.00	1.35	
33 2-Methyl-2-propanol	59	7.410	7.416	-0.006	43	15212	10.0	8.20	
32 Methyl tert-butyl ether	73	7.610	7.611	-0.001	99	40081	1.00	1.04	
35 trans-1,2-Dichloroethene	96	7.708	7.702	0.006	92	13288	1.00	0.9726	a
34 Acrylonitrile	53	7.732	7.732	0.000	98	66692	10.0	10.4	
36 Hexane	57	7.902	7.903	-0.001	93	15946	1.00	0.9821	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.194	8.195	-0.001	97	64122	2.00	1.98	
40 1,1-Dichloroethane	63	8.243	8.249	-0.006	95	24052	1.00	0.9347	
44 2-Butanone (MEK)	43	8.937	8.931	0.006	97	48572	5.00	5.37	a
45 2,2-Dichloropropane	77	8.949	8.943	0.006	59	16352	1.00	0.9722	
43 cis-1,2-Dichloroethene	96	8.961	8.967	-0.006	82	15544	1.00	0.9810	
50 Chlorobromomethane	128	9.296	9.290	0.006	95	7603	1.00	0.9465	
51 Tetrahydrofuran	42	9.314	9.308	0.006	77	12510	2.00	2.13	
49 Chloroform	83	9.326	9.332	-0.006	94	26129	1.00	1.02	
52 1,1,1-Trichloroethane	97	9.557	9.563	-0.006	35	18255	1.00	0.9032	
54 Cyclohexane	56	9.606	9.606	0.000	85	18164	1.00	0.9142	
56 1,1-Dichloropropene	75	9.740	9.734	0.006	92	17842	1.00	0.9793	
55 Carbon tetrachloride	117	9.746	9.752	-0.006	89	17866	1.00	0.9318	
53 Isobutyl alcohol	43	9.764	9.752	0.012	62	24556	25.0	24.9	M
57 Benzene	78	10.038	10.032	0.006	92	55087	1.00	1.06	
60 1,2-Dichloroethane	62	10.086	10.093	-0.007	97	22212	1.00	0.9870	
59 n-Heptane	43	10.093	10.099	-0.006	73	11940	1.00	0.9469	
62 Trichloroethene	95	10.786	10.786	0.000	93	12629	1.00	0.9074	
64 Methylcyclohexane	83	10.981	10.987	-0.006	90	12866	1.00	0.7805	
63 1,2-Dichloropropane	63	11.121	11.127	-0.006	89	14726	1.00	0.9789	
68 1,4-Dioxane	88	11.248	11.249	-0.001	31	1474	20.0	11.8	M
69 Dibromomethane	93	11.328	11.334	-0.006	91	9879	1.00	0.9609	
70 Dichlorobromomethane	83	11.461	11.462	-0.001	94	17346	1.00	0.8936	
71 2-Chloroethyl vinyl ether	63	11.717	11.711	0.006	86	4978	1.00	0.8637	
73 cis-1,3-Dichloropropene	75	11.991	11.997	-0.006	92	19377	1.00	0.9070	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	98	83427	5.00	4.95	
76 Toluene	92	12.416	12.417	-0.001	98	33411	1.00	1.01	
77 Ethyl methacrylate	69	12.629	12.642	-0.013	90	13736	1.00	0.8212	
78 trans-1,3-Dichloropropene	75	12.709	12.709	-0.001	93	16399	1.00	0.8043	
79 1,1,2-Trichloroethane	83	13.001	12.995	0.006	91	12355	1.00	1.07	
80 Tetrachloroethene	166	13.147	13.147	0.000	90	15630	1.00	1.00	
83 2-Hexanone	43	13.183	13.189	-0.006	96	62612	5.00	4.84	
82 1,3-Dichloropropane	76	13.226	13.232	-0.006	90	22701	1.00	0.99	
81 Chlorodibromomethane	129	13.566	13.573	-0.006	88	14718	1.00	0.9071	
85 Ethylene Dibromide	107	13.767	13.773	-0.006	93	15572	1.00	1.04	
87 Chlorobenzene	112	14.327	14.327	0.000	96	39843	1.00	0.99	
89 Ethylbenzene	91	14.375	14.369	0.006	96	59978	1.00	1.03	
88 1,1,1,2-Tetrachloroethane	131	14.412	14.406	0.006	89	14288	1.00	0.9313	
90 m-Xylene & p-Xylene	106	14.509	14.509	0.000	0	23426	1.00	0.9424	
93 o-Xylene	106	15.057	15.057	0.000	95	23910	1.00	0.9720	
94 Styrene	104	15.081	15.087	-0.006	96	34553	1.00	0.8684	
92 Bromoform	173	15.470	15.471	-0.001	94	9771	1.00	0.8512	
95 Isopropylbenzene	105	15.495	15.489	0.006	97	54048	1.00	0.9847	a
97 1,1,2,2-Tetrachloroethane	83	15.951	15.957	-0.006	95	18526	1.00	1.00	
98 trans-1,4-Dichloro-2-buten	53	16.012	16.012	0.000	43	3503	1.00	0.6956	
99 N-Propylbenzene	91	16.018	16.012	0.006	98	63110	1.00	1.01	
100 Bromobenzene	156	16.030	16.036	-0.006	90	18704	1.00	0.99	
101 1,2,3-Trichloropropane	110	16.054	16.055	-0.001	80	6249	1.00	1.04	
102 1,3,5-Trimethylbenzene	105	16.200	16.207	-0.007	95	41370	1.00	0.9037	
103 2-Chlorotoluene	126	16.219	16.219	0.000	95	14230	1.00	0.8990	
105 4-Chlorotoluene	126	16.353	16.347	0.006	96	15560	1.00	0.9358	
106 tert-Butylbenzene	134	16.638	16.645	-0.007	91	10220	1.00	0.99	
107 1,2,4-Trimethylbenzene	105	16.705	16.706	-0.001	97	47243	1.00	0.9641	

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	16.906	16.906	0.000	94	50620	1.00	0.9863	
112 4-Isopropyltoluene	119	17.058	17.058	0.000	97	42124	1.00	0.9467	
110 1,3-Dichlorobenzene	146	17.180	17.174	0.006	95	32817	1.00	1.01	
111 1,4-Dichlorobenzene	146	17.277	17.277	0.000	92	35559	1.00	1.05	
115 n-Butylbenzene	91	17.569	17.569	0.000	99	39972	1.00	1.02	
116 1,2-Dichlorobenzene	146	17.782	17.776	0.006	97	31969	1.00	1.00	
117 1,2-Dibromo-3-Chloropropan	75	18.804	18.817	-0.013	1	3903	1.00	1.01	
119 1,2,4-Trichlorobenzene	180	19.911	19.912	-0.001	91	23079	1.00	1.06	
120 Hexachlorobutadiene	225	20.039	20.033	0.006	84	7891	1.00	1.11	
121 Naphthalene	128	20.349	20.350	-0.001	97	56113	1.00	0.9798	
122 1,2,3-Trichlorobenzene	180	20.733	20.727	0.006	93	20867	1.00	1.00	a
S 125 Total BTEX	1				0			5.00	
S 126 Xylenes, Total	1				0			1.91	
S 123 1,2-Dichloroethene, Total	1				0			1.95	
S 124 1,3-Dichloropropene, Total	1				0			1.71	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00138

Amount Added: 1.00

Units: uL

GAS CORP mix_00308

Amount Added: 1.00

Units: uL

P 8260 IS_00335

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00309

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37184.D

Injection Date: 22-Oct-2018 15:44:30

Instrument ID: HP5973P

Operator ID: OI/RF

Lims ID: IC 2

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

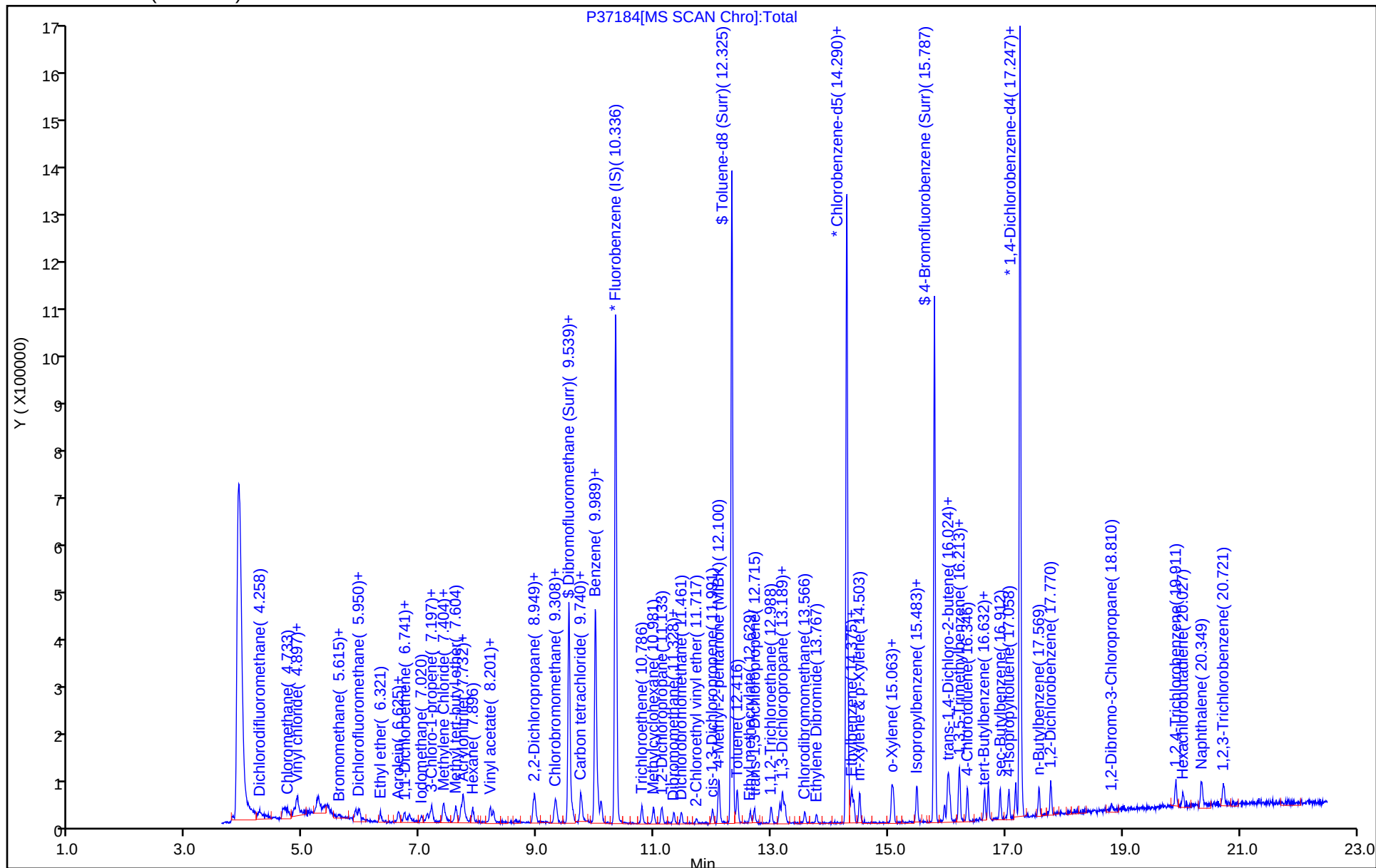
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

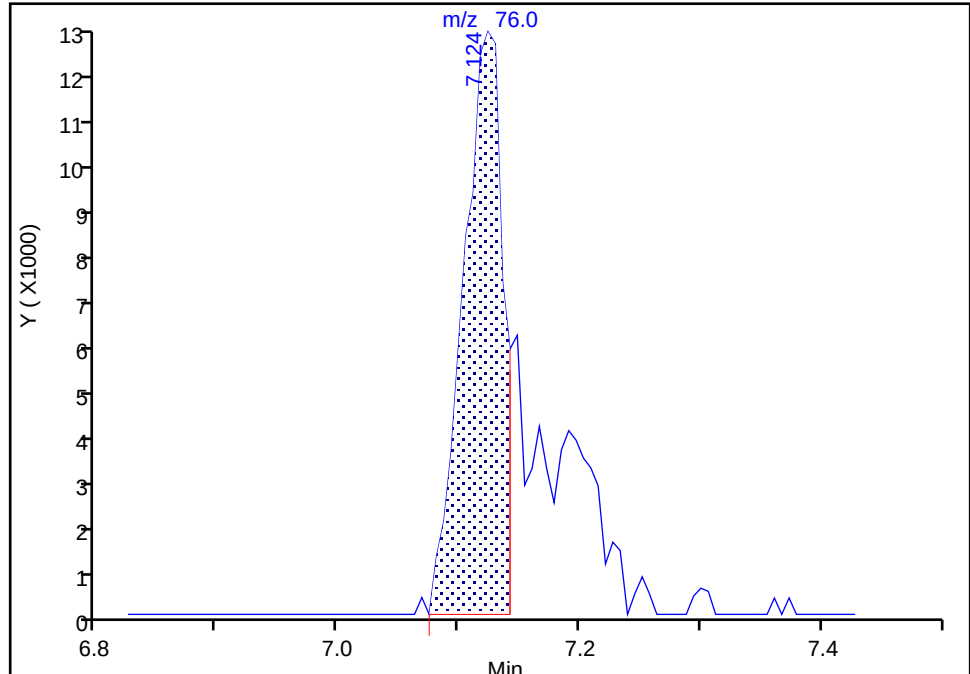
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37184.D
Injection Date: 22-Oct-2018 15:44:30 Instrument ID: HP5973P
Lims ID: IC 2
Client ID:
Operator ID: OI/RF ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Signal: 1

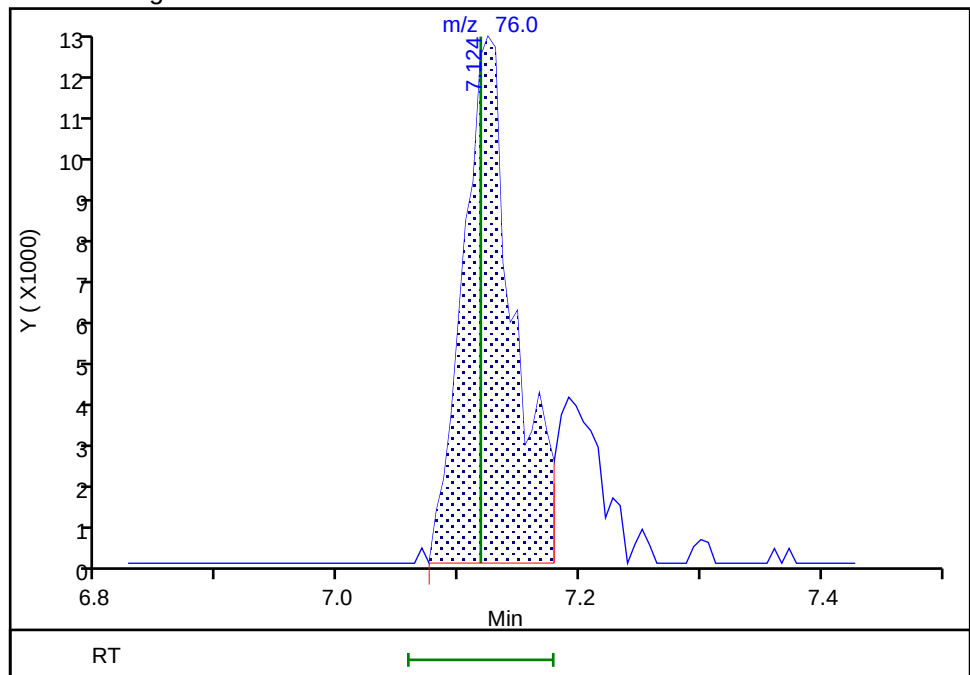
RT: 7.12
Area: 29608
Amount: 0.791260
Amount Units: ug/L

Processing Integration Results



RT: 7.12
Area: 37598
Amount: 0.992652
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:53:46
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37184.D

Injection Date: 22-Oct-2018 15:44:30

Instrument ID: HP5973P

Lims ID: IC 2

Client ID:

Operator ID: OI/RF

ALS Bottle#:

8

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

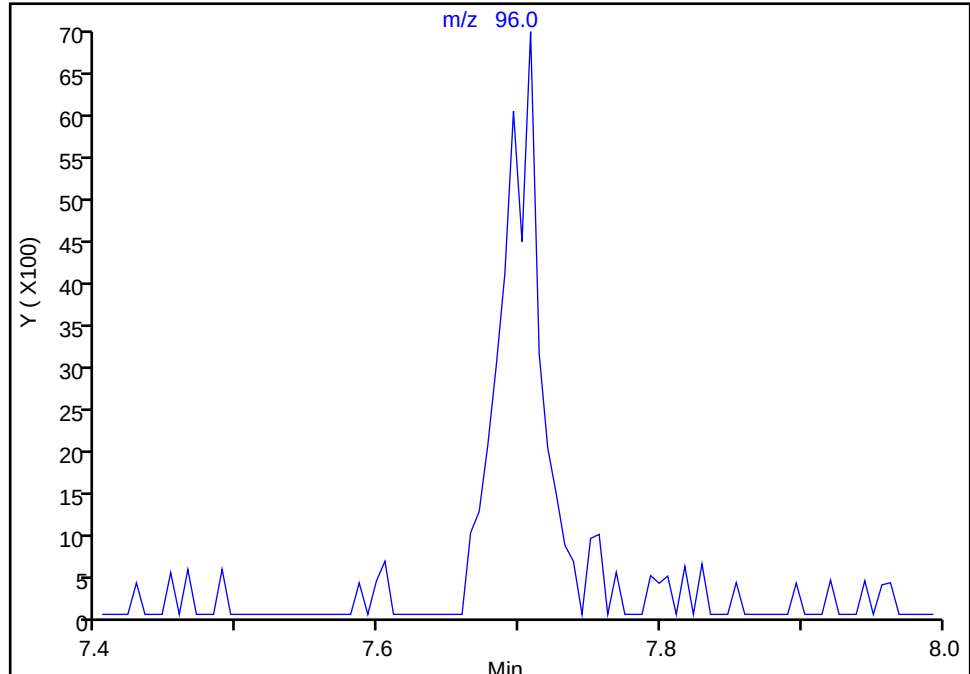
35 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

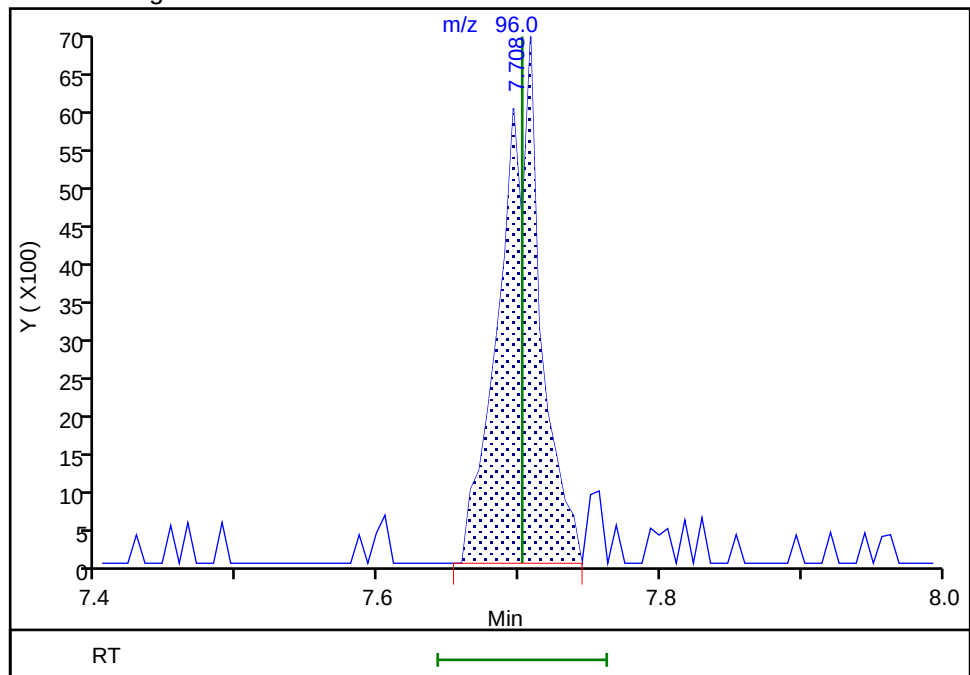
Not Detected

Expected RT: 7.70

Processing Integration Results



Manual Integration Results



RT: 7.71

Area: 13288

Amount: 0.972604

Amount Units: ug/L

Reviewer: baroner, 22-Oct-2018 23:53:54

Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

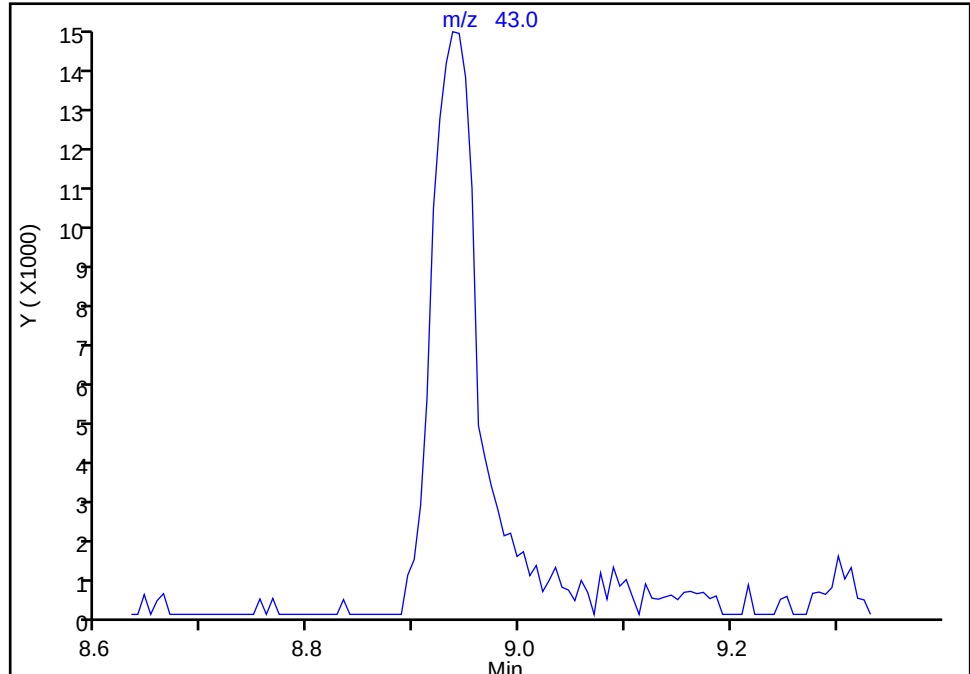
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37184.D
Injection Date: 22-Oct-2018 15:44:30 Instrument ID: HP5973P
Lims ID: IC 2
Client ID:
Operator ID: OI/RF ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

44 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

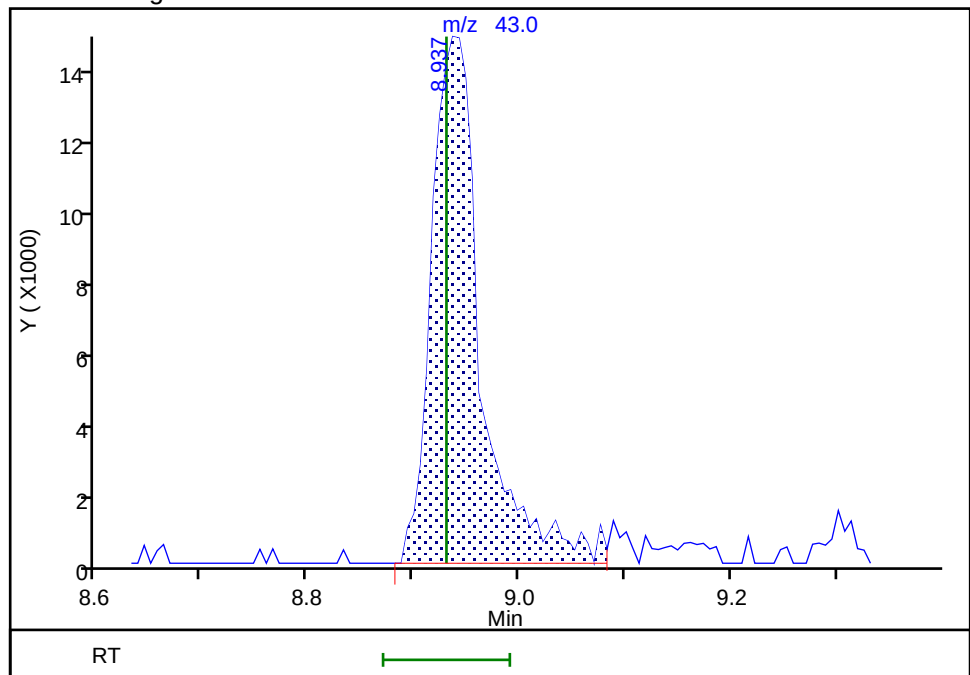
Not Detected
Expected RT: 8.93

Processing Integration Results



RT: 8.94
Area: 48572
Amount: 5.373138
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:54:00
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

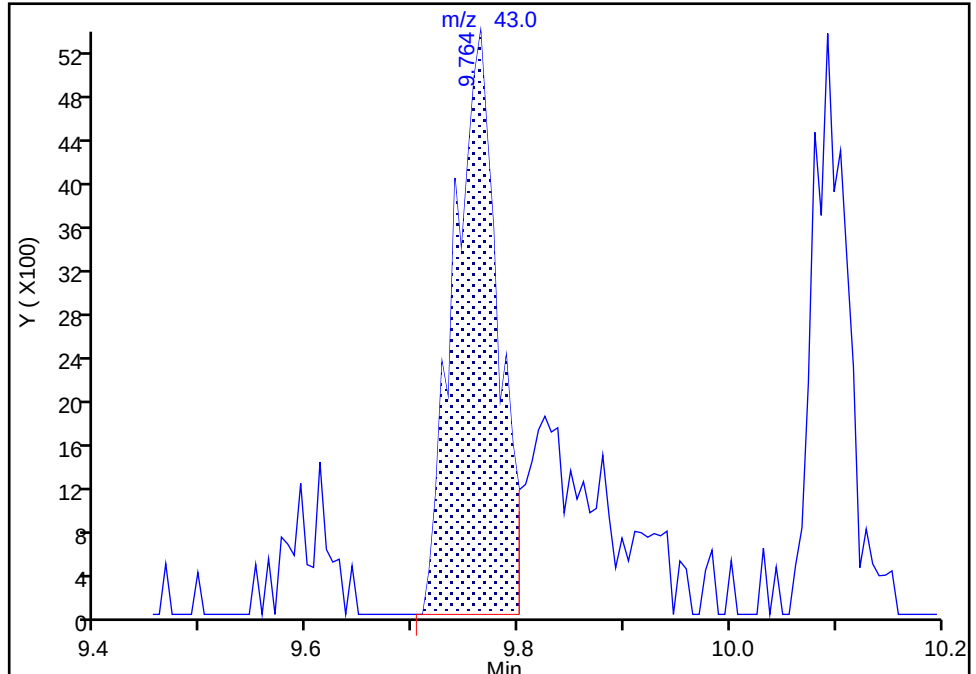
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37184.D
Injection Date: 22-Oct-2018 15:44:30 Instrument ID: HP5973P
Lims ID: IC 2
Client ID:
Operator ID: OI/RF ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

53 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

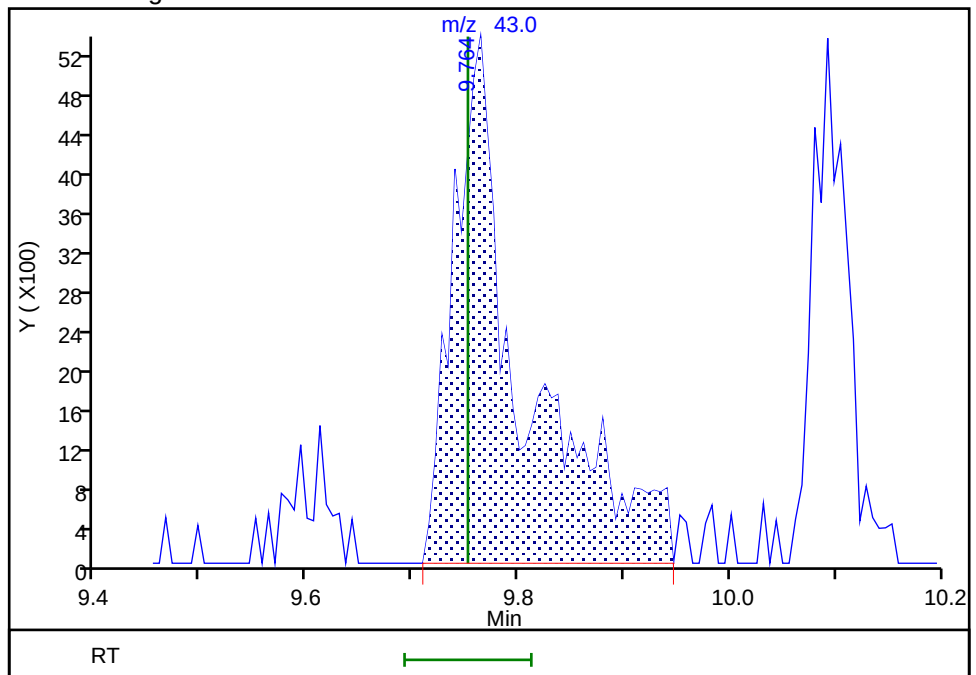
RT: 9.76
Area: 15611
Amount: 17.228719
Amount Units: ug/L

Processing Integration Results



RT: 9.76
Area: 24556
Amount: 24.917981
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:55:19
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37184.D

Injection Date: 22-Oct-2018 15:44:30

Instrument ID: HP5973P

Lims ID: IC 2

Client ID:

Operator ID: OI/RF

ALS Bottle#:

8

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

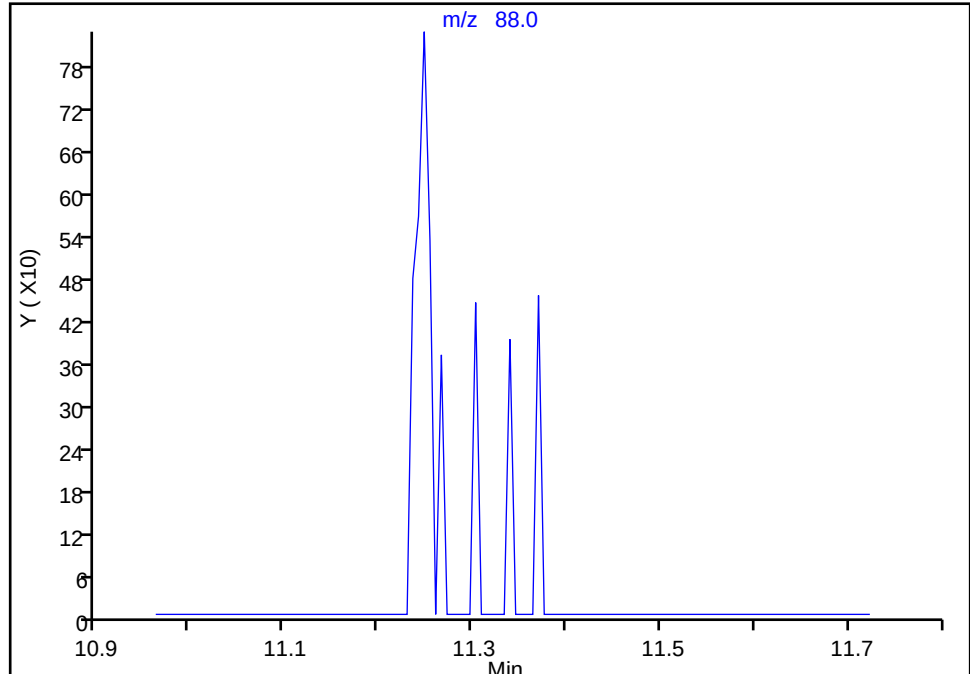
68 1,4-Dioxane, CAS: 123-91-1

Signal: 1

Not Detected

Expected RT: 11.25

Processing Integration Results



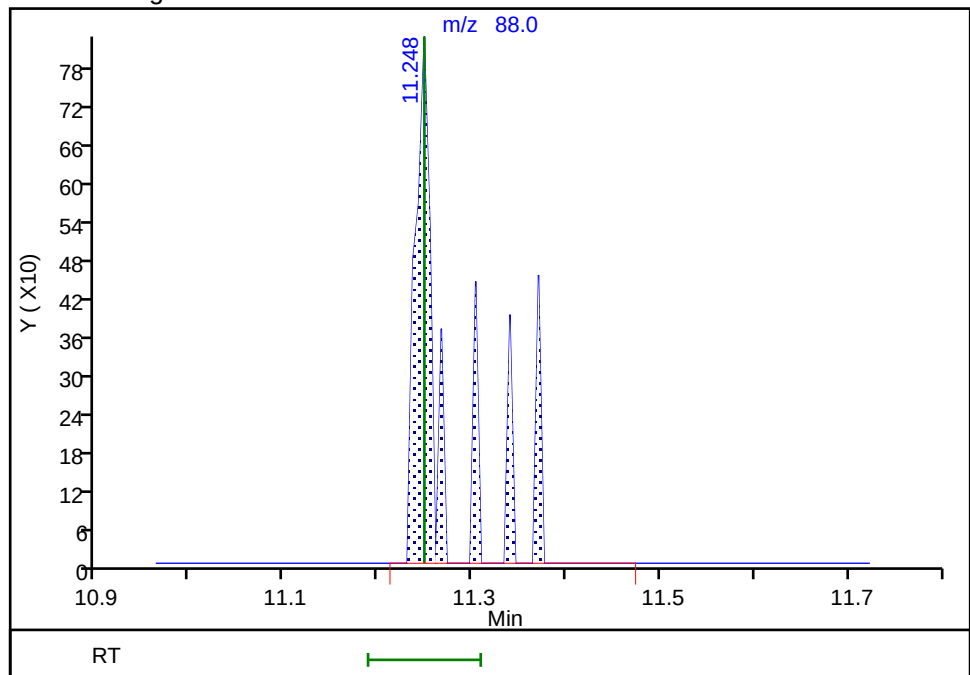
RT: 11.25

Area: 1474

Amount: 11.771647

Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 23-Oct-2018 08:13:53

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

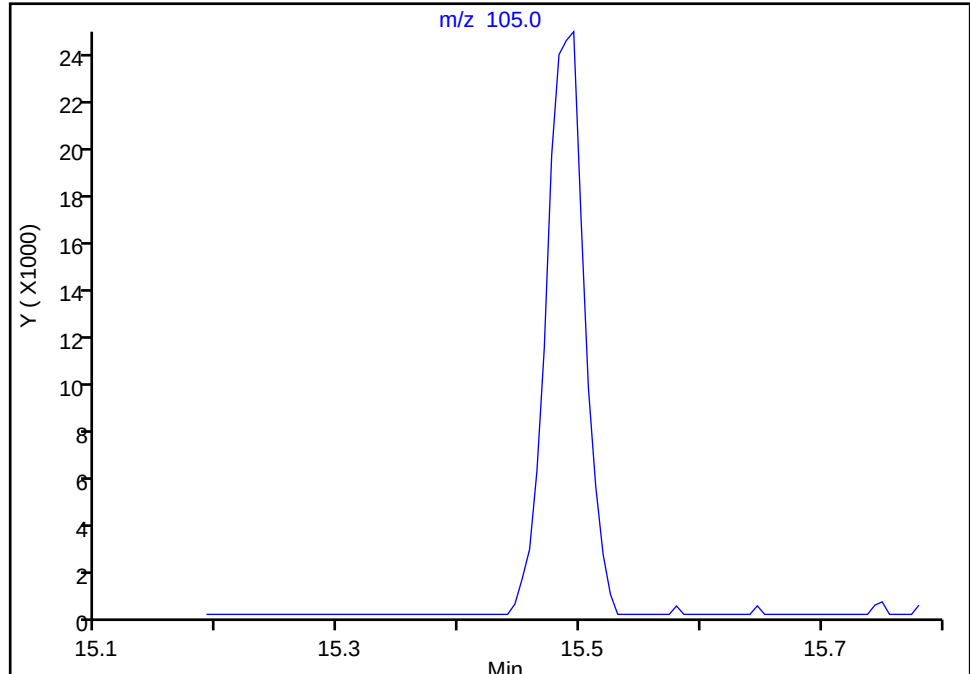
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37184.D
Injection Date: 22-Oct-2018 15:44:30 Instrument ID: HP5973P
Lims ID: IC 2
Client ID:
Operator ID: OI/RF ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

95 Isopropylbenzene, CAS: 98-82-8

Signal: 1

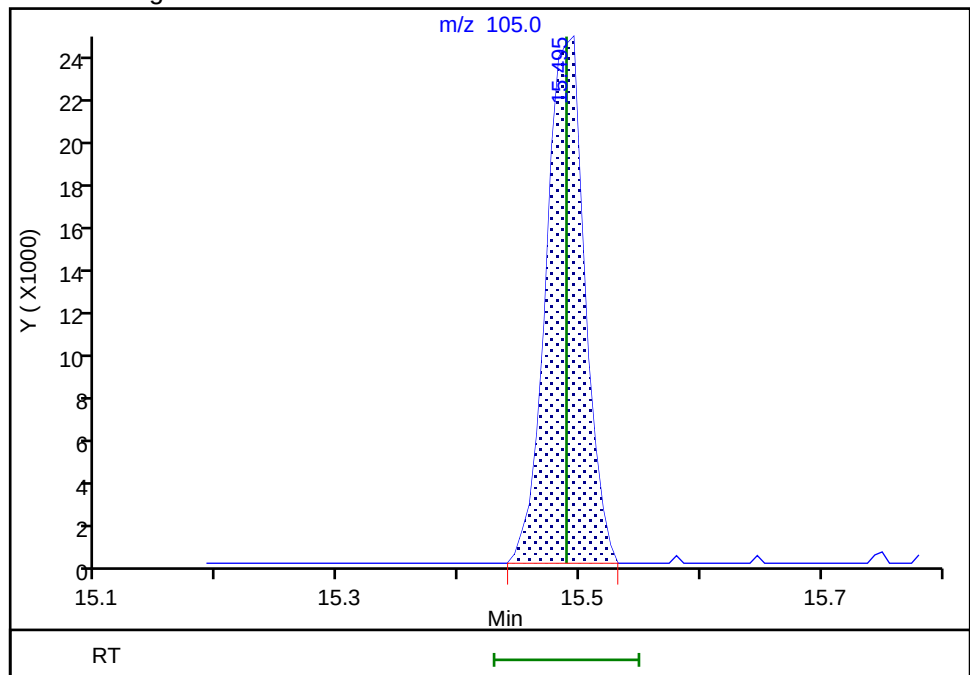
Not Detected
Expected RT: 15.49

Processing Integration Results



RT: 15.49
Area: 54048
Amount: 0.984670
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:56:13
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37184.D

Injection Date: 22-Oct-2018 15:44:30

Instrument ID: HP5973P

Lims ID: IC 2

Client ID:

Operator ID: OI/RF

ALS Bottle#:

8

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

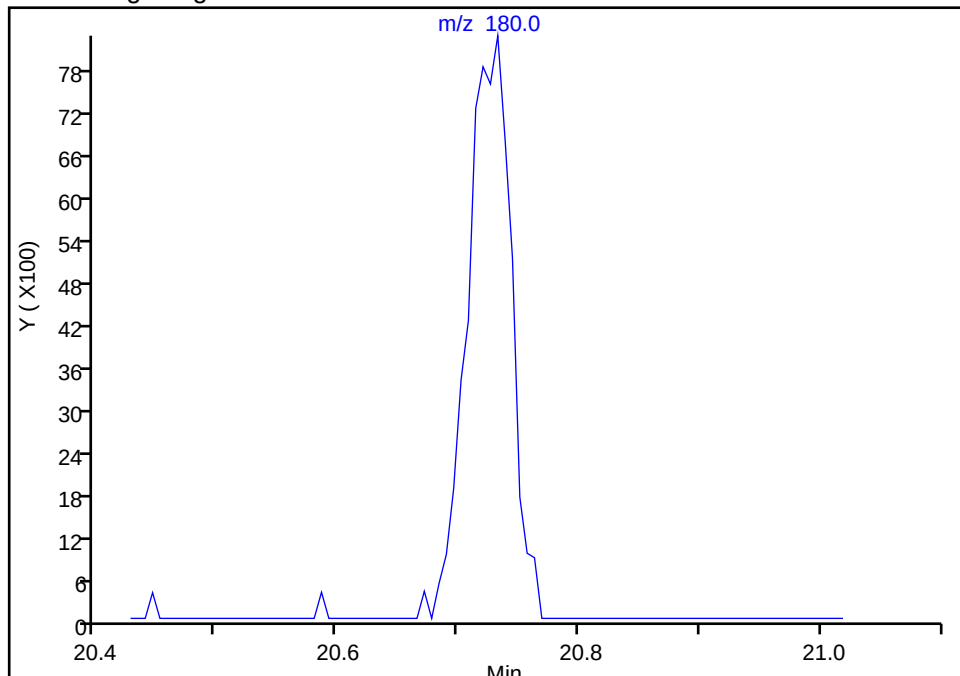
122 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

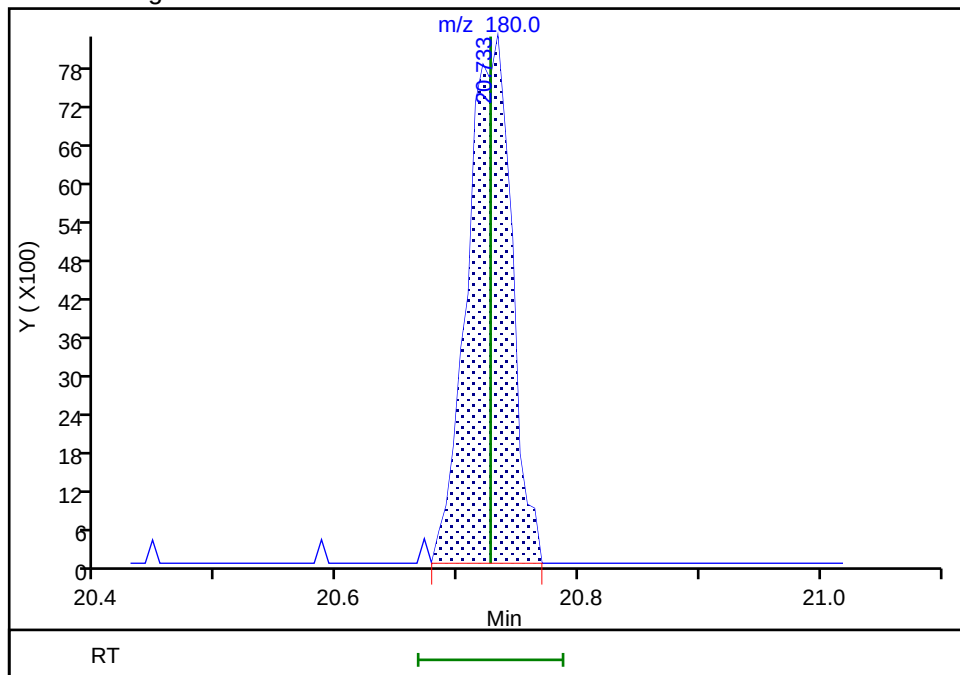
Not Detected

Expected RT: 20.73

Processing Integration Results



Manual Integration Results



RT: 20.73

Area: 20867

Amount: 0.999458

Amount Units: ug/L

Reviewer: baroner, 22-Oct-2018 23:56:22

Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37185.D
 Lims ID: IC 3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 22-Oct-2018 16:12:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC 3
 Misc. Info.: 480-0075728-009
 Operator ID: OI/RF Instrument ID: HP5973P
 Sublist: chrom-P-8260H2O*sub11
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Oct-2018 13:32:56 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1005

First Level Reviewer: baroner

Date: 22-Oct-2018 23:57:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.342	-0.006	98	224290	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.290	0.000	86	466469	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	512711	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	93	322828	25.0	24.9	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.989	9.989	0.000	0	184591	25.0	24.2	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.325	0.000	94	1085261	25.0	24.8	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	94	387538	25.0	24.6	
10 Dichlorodifluoromethane	85	4.252	4.252	0.000	97	94995	5.00	5.08	
11 Chloromethane	50	4.672	4.666	0.006	99	163956	5.00	5.15	
17 Vinyl chloride	62	4.855	4.855	0.000	97	128261	5.00	5.06	
144 Butadiene	54	4.903	4.897	0.006	94	121995	5.00	5.25	
12 Bromomethane	94	5.469	5.475	-0.006	89	76297	5.00	5.04	
13 Chloroethane	64	5.615	5.615	0.000	98	63948	5.00	5.27	
19 Dichlorofluoromethane	67	5.895	5.901	-0.006	97	153230	5.00	5.13	
14 Trichlorofluoromethane	101	5.956	5.962	-0.006	96	131553	5.00	5.13	
20 Ethyl ether	59	6.321	6.321	0.000	96	65849	5.00	5.18	
22 Acrolein	56	6.625	6.625	0.000	98	56937	25.0	24.1	
16 1,1,2-Trichloro-1,2,2-trif	101	6.625	6.637	-0.012	85	63688	5.00	5.40	M
25 1,1-Dichloroethene	96	6.734	6.728	0.006	94	68548	5.00	5.29	
24 Acetone	43	6.814	6.814	0.000	100	157894	25.0	25.9	
18 Iodomethane	142	7.014	7.027	-0.013	99	127794	5.00	5.24	
27 Carbon disulfide	76	7.118	7.118	0.000	100	208121	5.00	5.42	
30 Methyl acetate	43	7.172	7.179	-0.007	98	148592	10.0	10.6	
28 3-Chloro-1-propene	41	7.197	7.203	-0.006	86	113103	5.00	5.16	
31 Methylene Chloride	84	7.404	7.398	0.006	98	88888	5.00	5.16	
33 2-Methyl-2-propanol	59	7.422	7.416	0.006	94	98131	50.0	52.2	
32 Methyl tert-butyl ether	73	7.604	7.611	-0.007	99	203714	5.00	5.21	
35 trans-1,2-Dichloroethene	96	7.696	7.702	-0.006	94	74694	5.00	5.39	
34 Acrylonitrile	53	7.732	7.732	0.000	99	359487	50.0	55.3	
36 Hexane	57	7.896	7.903	-0.007	96	92288	5.00	5.61	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.194	8.195	-0.001	97	346745	10.0	10.6	
40 1,1-Dichloroethane	63	8.255	8.249	0.006	97	133259	5.00	5.11	
44 2-Butanone (MEK)	43	8.937	8.931	0.006	98	239895	25.0	26.2	
45 2,2-Dichloropropane	77	8.943	8.943	0.000	61	87592	5.00	5.14	
43 cis-1,2-Dichloroethene	96	8.967	8.967	0.000	83	86992	5.00	5.42	
50 Chlorobromomethane	128	9.296	9.290	0.006	96	42545	5.00	5.23	
51 Tetrahydrofuran	42	9.302	9.308	-0.006	83	59659	10.0	10.0	
49 Chloroform	83	9.326	9.332	-0.006	94	138178	5.00	5.31	
52 1,1,1-Trichloroethane	97	9.557	9.563	-0.006	97	112581	5.00	5.50	
54 Cyclohexane	56	9.600	9.606	-0.006	97	112796	5.00	5.60	
56 1,1-Dichloropropene	75	9.734	9.734	0.000	92	95202	5.00	5.16	
53 Isobutyl alcohol	43	9.758	9.752	0.006	87	121978	125.0	122.1	
55 Carbon tetrachloride	117	9.752	9.752	0.000	91	105564	5.00	5.43	
57 Benzene	78	10.032	10.032	0.000	96	292974	5.00	5.54	
60 1,2-Dichloroethane	62	10.093	10.093	0.000	96	120781	5.00	5.30	
59 n-Heptane	43	10.099	10.099	0.000	79	70967	5.00	5.55	
62 Trichloroethene	95	10.786	10.786	0.000	96	77097	5.00	5.47	
64 Methylcyclohexane	83	10.981	10.987	-0.006	94	93675	5.00	5.61	
63 1,2-Dichloropropane	63	11.133	11.127	0.006	92	79657	5.00	5.23	
68 1,4-Dioxane	88	11.255	11.249	0.006	51	12670	100.0	98.9	
69 Dibromomethane	93	11.340	11.334	0.006	94	52878	5.00	5.08	
70 Dichlorobromomethane	83	11.455	11.462	-0.007	96	98047	5.00	4.98	
71 2-Chloroethyl vinyl ether	63	11.711	11.711	0.000	93	27732	5.00	4.75	
73 cis-1,3-Dichloropropene	75	11.991	11.997	-0.006	91	107826	5.00	4.98	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	100	479879	25.0	27.8	
76 Toluene	92	12.416	12.417	-0.001	98	177252	5.00	5.23	
77 Ethyl methacrylate	69	12.635	12.642	-0.007	91	80329	5.00	4.69	
78 trans-1,3-Dichloropropene	75	12.709	12.709	-0.001	98	104480	5.00	5.01	
79 1,1,2-Trichloroethane	83	13.001	12.995	0.005	92	58195	5.00	4.94	
80 Tetrachloroethene	166	13.147	13.147	0.000	97	86622	5.00	5.43	
83 2-Hexanone	43	13.189	13.189	0.000	97	345705	25.0	26.1	
82 1,3-Dichloropropane	76	13.232	13.232	0.000	96	119769	5.00	5.13	
81 Chlorodibromomethane	129	13.572	13.573	0.000	89	80943	5.00	4.88	
85 Ethylene Dibromide	107	13.773	13.773	0.000	98	75154	5.00	4.92	
87 Chlorobenzene	112	14.327	14.327	0.000	97	216863	5.00	5.29	
89 Ethylbenzene	91	14.375	14.369	0.006	98	330259	5.00	5.52	
88 1,1,1,2-Tetrachloroethane	131	14.400	14.406	-0.006	92	76262	5.00	4.86	
90 m-Xylene & p-Xylene	106	14.509	14.509	0.000	0	135753	5.00	5.34	
93 o-Xylene	106	15.057	15.057	0.000	97	129145	5.00	5.13	
94 Styrene	104	15.087	15.087	0.000	96	216468	5.00	5.32	
92 Bromoform	173	15.470	15.471	-0.001	95	56390	5.00	4.80	
95 Isopropylbenzene	105	15.489	15.489	0.000	96	315657	5.00	5.67	
97 1,1,2,2-Tetrachloroethane	83	15.963	15.957	0.006	96	101524	5.00	5.40	
99 N-Propylbenzene	91	16.012	16.012	0.000	98	367284	5.00	5.79	
98 trans-1,4-Dichloro-2-buten	53	16.012	16.012	0.000	43	21669	5.00	4.24	
100 Bromobenzene	156	16.036	16.036	0.000	92	106066	5.00	5.56	
101 1,2,3-Trichloropropane	110	16.054	16.055	-0.001	83	29950	5.00	4.92	
102 1,3,5-Trimethylbenzene	105	16.200	16.207	-0.007	95	258892	5.00	5.57	
103 2-Chlorotoluene	126	16.219	16.219	0.000	96	89094	5.00	5.55	
105 4-Chlorotoluene	126	16.353	16.347	0.006	97	90647	5.00	5.37	
106 tert-Butylbenzene	134	16.638	16.645	-0.007	93	51726	5.00	4.95	
107 1,2,4-Trimethylbenzene	105	16.705	16.706	-0.001	97	281208	5.00	5.66	

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	16.906	16.906	0.000	94	303623	5.00	5.83	
112 4-Isopropyltoluene	119	17.058	17.058	0.000	97	262080	5.00	5.81	
110 1,3-Dichlorobenzene	146	17.174	17.174	0.000	98	179352	5.00	5.42	
111 1,4-Dichlorobenzene	146	17.283	17.277	0.006	96	186780	5.00	5.44	
115 n-Butylbenzene	91	17.569	17.569	0.000	98	218475	5.00	5.49	
116 1,2-Dichlorobenzene	146	17.770	17.776	-0.006	98	178357	5.00	5.49	
117 1,2-Dibromo-3-Chloropropan	75	18.810	18.817	-0.007	83	18578	5.00	4.75	
119 1,2,4-Trichlorobenzene	180	19.905	19.912	-0.007	94	113509	5.00	5.15	
120 Hexachlorobutadiene	225	20.021	20.033	-0.012	94	37358	5.00	5.18	
121 Naphthalene	128	20.349	20.350	-0.001	97	315603	5.00	5.43	
122 1,2,3-Trichlorobenzene	180	20.727	20.727	0.000	96	111295	5.00	5.25	
S 123 1,2-Dichloroethene, Total	1				0			10.8	
S 124 1,3-Dichloropropene, Total	1				0			9.99	
S 125 Total BTEX	1				0			26.8	
S 126 Xylenes, Total	1				0			10.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00138

Amount Added: 5.00

Units: uL

GAS CORP mix_00308

Amount Added: 5.00

Units: uL

P 8260 IS_00335

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00309

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5973P\\20181022-75728.b\\P37185.D

Injection Date: 22-Oct-2018 16:12:30

Instrument ID: HP5973P

Operator ID: OI/RF

Lims ID: IC 3

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

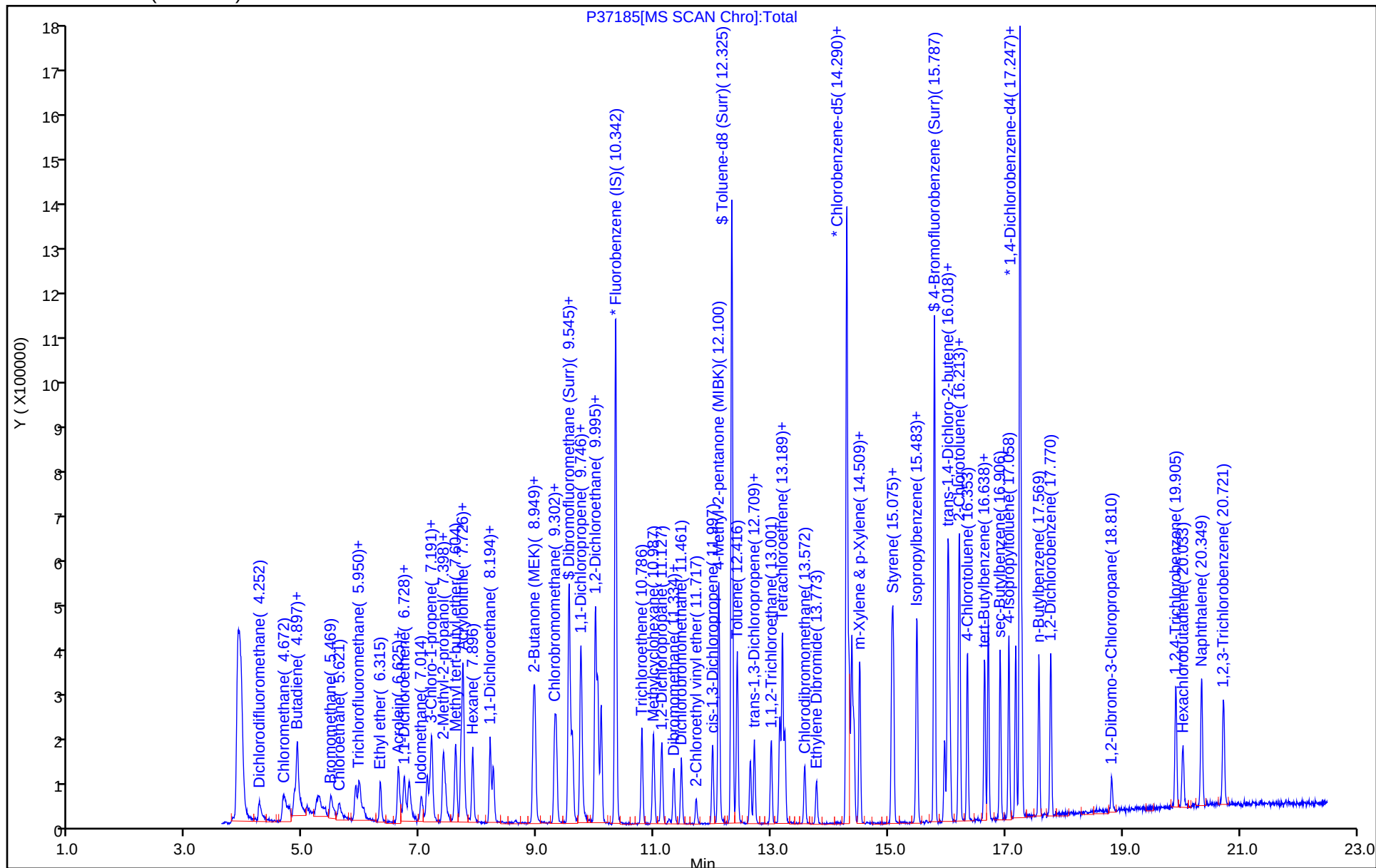
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37185.D

Injection Date: 22-Oct-2018 16:12:30

Instrument ID: HP5973P

Lims ID: IC 3

Client ID:

Operator ID: OI/RF

ALS Bottle#:

9

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

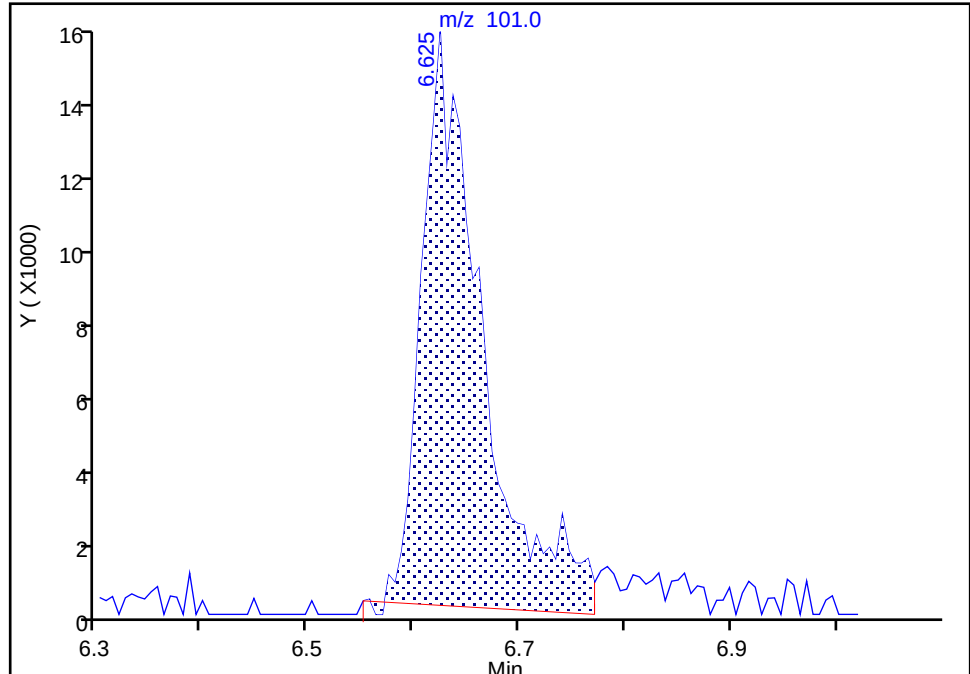
MS SCAN

16 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

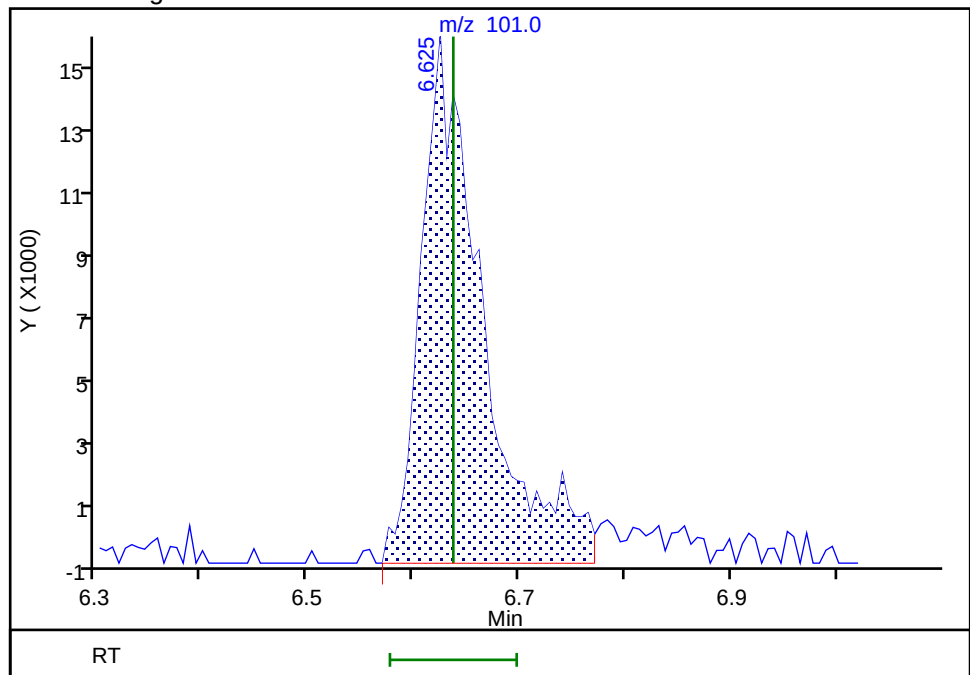
RT: 6.62
Area: 61457
Amount: 5.318814
Amount Units: ug/L

Processing Integration Results



RT: 6.62
Area: 63688
Amount: 5.398758
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 23:58:20

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37186.D
 Lims ID: IC 4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 22-Oct-2018 16:39:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC 4
 Misc. Info.: 480-0075728-010
 Operator ID: OI/RF Instrument ID: HP5973P
 Sublist: chrom-P-8260H2O*sub11
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Oct-2018 13:33:04 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1005

First Level Reviewer: baroner

Date: 22-Oct-2018 23:59:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	228096	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.290	0.000	86	466817	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	532548	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	92	331236	25.0	25.2	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.995	0.000	0	195156	25.0	25.2	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.325	0.000	94	1118638	25.0	25.5	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	95	401399	25.0	25.4	
10 Dichlorodifluoromethane	85	4.253	4.253	0.000	98	182516	10.0	9.60	
11 Chloromethane	50	4.666	4.666	0.000	99	330405	10.0	10.2	
17 Vinyl chloride	62	4.849	4.849	0.000	98	270978	10.0	10.5	
144 Butadiene	54	4.897	4.897	0.000	94	245726	10.0	10.4	
12 Bromomethane	94	5.469	5.469	0.000	90	163479	10.0	10.6	
13 Chloroethane	64	5.609	5.609	0.000	99	135623	10.0	11.0	
19 Dichlorofluoromethane	67	5.901	5.901	0.000	98	314102	10.0	10.3	
14 Trichlorofluoromethane	101	5.956	5.956	0.000	97	266730	10.0	10.2	
20 Ethyl ether	59	6.321	6.321	0.000	96	129817	10.0	10.0	
22 Acrolein	56	6.619	6.619	0.000	98	129061	50.0	53.8	
16 1,1,2-Trichloro-1,2,2-trif	101	6.625	6.625	0.000	76	115112	10.0	9.60	M
25 1,1-Dichloroethene	96	6.729	6.729	0.000	94	123157	10.0	9.35	
24 Acetone	43	6.808	6.808	0.000	98	322983	50.0	52.2	
18 Iodomethane	142	7.021	7.021	0.000	99	244550	10.0	9.86	
27 Carbon disulfide	76	7.118	7.118	0.000	100	389848	10.0	9.99	
30 Methyl acetate	43	7.173	7.173	0.000	99	307017	20.0	21.5	
28 3-Chloro-1-propene	41	7.197	7.197	0.000	85	219854	10.0	9.87	
31 Methylene Chloride	84	7.392	7.392	0.000	97	162697	10.0	9.28	
33 2-Methyl-2-propanol	59	7.422	7.422	0.000	96	193178	100.0	101.0	M
32 Methyl tert-butyl ether	73	7.605	7.605	0.000	99	409319	10.0	10.3	
35 trans-1,2-Dichloroethene	96	7.696	7.696	0.000	96	139216	10.0	9.89	
34 Acrylonitrile	53	7.732	7.732	0.000	97	707933	100.0	107.2	
36 Hexane	57	7.897	7.897	0.000	95	155826	10.0	9.31	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.195	8.195	0.000	98	723042	20.0	21.7	
40 1,1-Dichloroethane	63	8.249	8.249	0.000	97	269178	10.0	10.1	
44 2-Butanone (MEK)	43	8.931	8.931	0.000	98	496819	50.0	53.3	
45 2,2-Dichloropropane	77	8.943	8.943	0.000	60	171628	10.0	9.90	
43 cis-1,2-Dichloroethene	96	8.961	8.961	0.000	85	159332	10.0	9.76	
50 Chlorobromomethane	128	9.296	9.296	0.000	96	84053	10.0	10.2	
51 Tetrahydrofuran	42	9.314	9.314	0.000	92	124229	20.0	20.5	
49 Chloroform	83	9.326	9.326	0.000	95	269587	10.0	10.2	
52 1,1,1-Trichloroethane	97	9.563	9.563	0.000	98	202832	10.0	9.74	
54 Cyclohexane	56	9.600	9.600	0.000	94	194521	10.0	9.50	
56 1,1-Dichloropropene	75	9.740	9.740	0.000	93	184997	10.0	9.85	
55 Carbon tetrachloride	117	9.752	9.752	0.000	93	188989	10.0	9.56	
53 Isobutyl alcohol	43	9.758	9.758	0.000	87	254986	250.0	251.1	
57 Benzene	78	10.032	10.032	0.000	98	561073	10.0	10.4	
60 1,2-Dichloroethane	62	10.087	10.087	0.000	96	234866	10.0	10.1	
59 n-Heptane	43	10.099	10.099	0.000	73	117308	10.0	9.03	
62 Trichloroethene	95	10.786	10.786	0.000	95	142873	10.0	9.96	
64 Methylcyclohexane	83	10.987	10.987	0.000	96	157418	10.0	9.27	
63 1,2-Dichloropropane	63	11.127	11.127	0.000	91	156913	10.0	10.1	
68 1,4-Dioxane	88	11.249	11.249	0.000	95	30496	200.0	237.9	
69 Dibromomethane	93	11.328	11.328	0.000	93	108742	10.0	10.3	
70 Dichlorobromomethane	83	11.462	11.462	0.000	96	207759	10.0	10.4	
71 2-Chloroethyl vinyl ether	63	11.711	11.711	0.000	94	53106	10.0	8.94	
73 cis-1,3-Dichloropropene	75	11.997	11.997	0.000	92	219844	10.0	9.98	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	98	1017030	50.0	58.9	
76 Toluene	92	12.417	12.417	0.000	97	357034	10.0	10.5	
77 Ethyl methacrylate	69	12.642	12.642	0.000	90	173194	10.0	10.1	
78 trans-1,3-Dichloropropene	75	12.709	12.709	0.000	96	214647	10.0	10.3	
79 1,1,2-Trichloroethane	83	12.995	12.995	0.000	94	120262	10.0	10.2	
80 Tetrachloroethene	166	13.141	13.141	0.000	97	156812	10.0	9.82	
83 2-Hexanone	43	13.189	13.189	0.000	98	747352	50.0	56.5	
82 1,3-Dichloropropane	76	13.232	13.232	0.000	96	242699	10.0	10.4	
81 Chlorodibromomethane	129	13.566	13.566	0.000	90	172089	10.0	10.4	
85 Ethylene Dibromide	107	13.767	13.767	0.000	98	153293	10.0	10.0	
87 Chlorobenzene	112	14.327	14.327	0.000	98	434767	10.0	10.6	
89 Ethylbenzene	91	14.370	14.370	0.000	98	646340	10.0	10.8	
88 1,1,1,2-Tetrachloroethane	131	14.412	14.412	0.000	95	160034	10.0	10.2	
90 m-Xylene & p-Xylene	106	14.509	14.509	0.000	0	253944	10.0	9.98	
93 o-Xylene	106	15.057	15.057	0.000	96	256400	10.0	10.2	
94 Styrene	104	15.081	15.081	0.000	97	443223	10.0	10.9	
92 Bromoform	173	15.477	15.477	0.000	93	119289	10.0	10.2	
95 Isopropylbenzene	105	15.489	15.489	0.000	96	590930	10.0	10.2	
97 1,1,2,2-Tetrachloroethane	83	15.957	15.957	0.000	95	202524	10.0	10.4	
98 trans-1,4-Dichloro-2-buten	53	16.006	16.006	0.000	41	50352	10.0	9.49	
99 N-Propylbenzene	91	16.012	16.012	0.000	99	700217	10.0	10.6	
100 Bromobenzene	156	16.036	16.036	0.000	90	200392	10.0	10.1	
101 1,2,3-Trichloropropane	110	16.055	16.055	0.000	86	65180	10.0	10.3	
102 1,3,5-Trimethylbenzene	105	16.201	16.201	0.000	95	495266	10.0	10.3	
103 2-Chlorotoluene	126	16.219	16.219	0.000	95	167518	10.0	10.0	
105 4-Chlorotoluene	126	16.347	16.347	0.000	98	178565	10.0	10.2	
106 tert-Butylbenzene	134	16.645	16.645	0.000	93	103107	10.0	9.50	
107 1,2,4-Trimethylbenzene	105	16.706	16.706	0.000	98	540049	10.0	10.5	

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	16.912	16.912	0.000	95	546830	10.0	10.1	
112 4-Isopropyltoluene	119	17.058	17.058	0.000	97	470819	10.0	10.0	
110 1,3-Dichlorobenzene	146	17.174	17.174	0.000	99	357777	10.0	10.4	
111 1,4-Dichlorobenzene	146	17.277	17.277	0.000	96	364459	10.0	10.2	
115 n-Butylbenzene	91	17.569	17.569	0.000	98	396338	10.0	9.59	
116 1,2-Dichlorobenzene	146	17.776	17.776	0.000	97	354256	10.0	10.5	
117 1,2-Dibromo-3-Chloropropan	75	18.811	18.811	0.000	82	39281	10.0	9.66	
119 1,2,4-Trichlorobenzene	180	19.912	19.912	0.000	93	227476	10.0	9.93	
120 Hexachlorobutadiene	225	20.033	20.033	0.000	96	66599	10.0	8.90	
121 Naphthalene	128	20.350	20.350	0.000	97	661111	10.0	11.0	
122 1,2,3-Trichlorobenzene	180	20.727	20.727	0.000	95	216419	10.0	9.84	
S 125 Total BTEX	1				0			51.9	
S 126 Xylenes, Total	1				0			20.2	
S 123 1,2-Dichloroethene, Total	1				0			19.6	
S 124 1,3-Dichloropropene, Total	1				0			20.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00138

Amount Added: 5.00

Units: uL

GAS CORP mix_00308

Amount Added: 5.00

Units: uL

P 8260 IS_00335

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00309

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5973P\\20181022-75728.b\\P37186.D

Injection Date: 22-Oct-2018 16:39:30

Instrument ID: HP5973P

Operator ID: OI/RF

Lims ID: IC 4

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

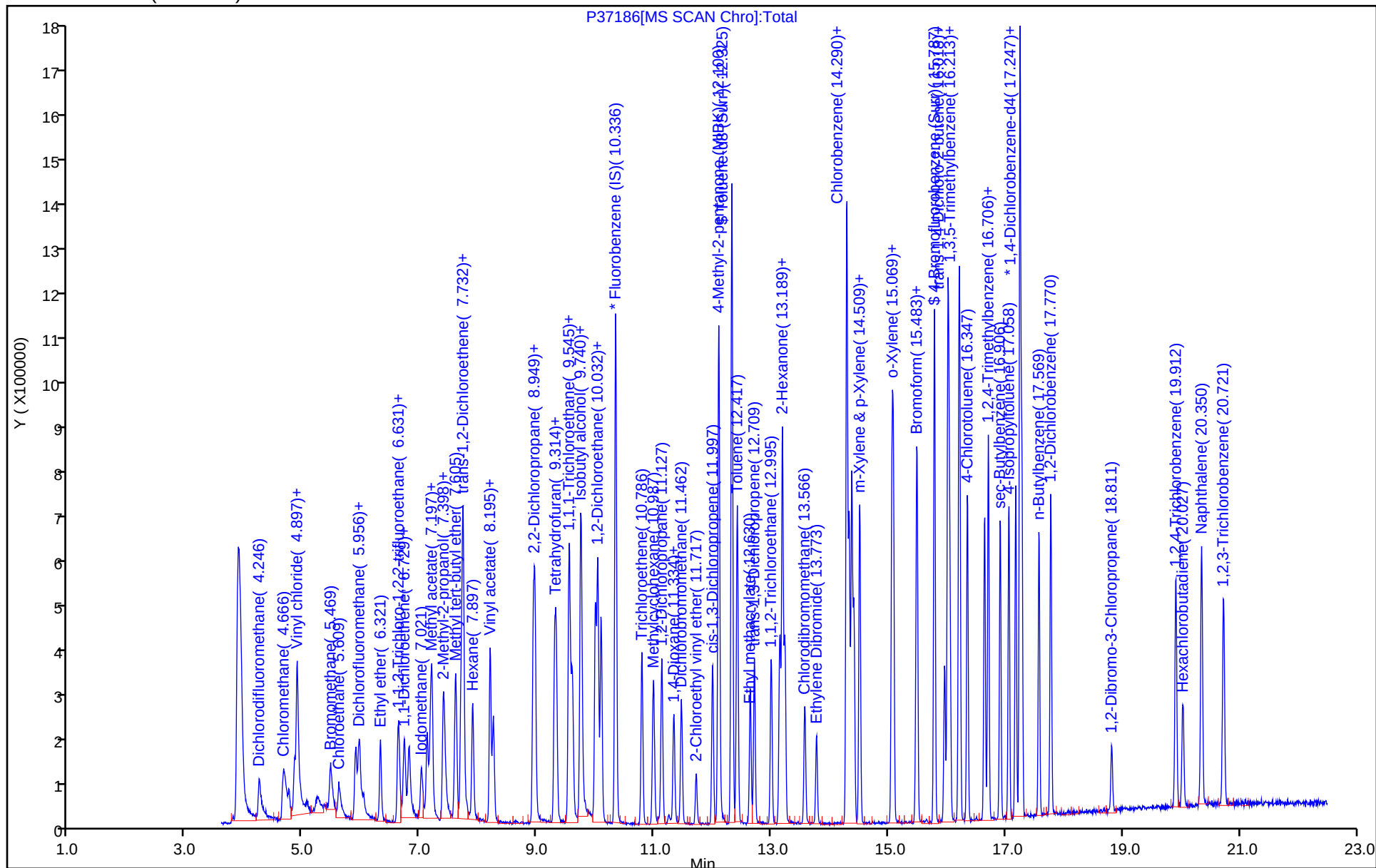
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37186.D

Injection Date: 22-Oct-2018 16:39:30

Instrument ID: HP5973P

Lims ID: IC 4

Client ID:

Operator ID: OI/RF

ALS Bottle#: 10

Worklist Smp#: 10

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

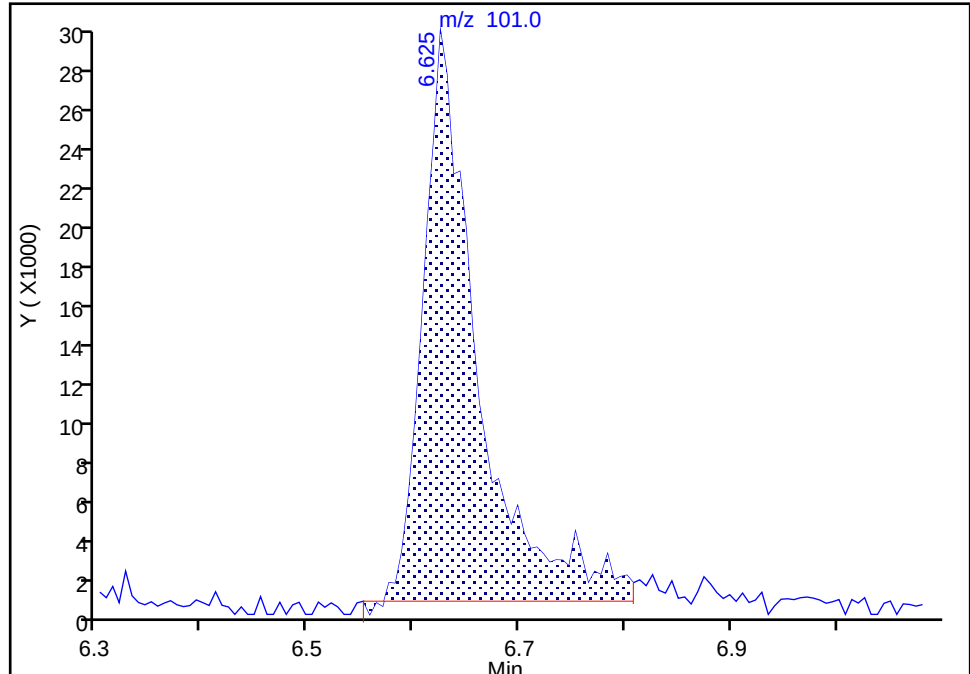
Detector: MS SCAN

16 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

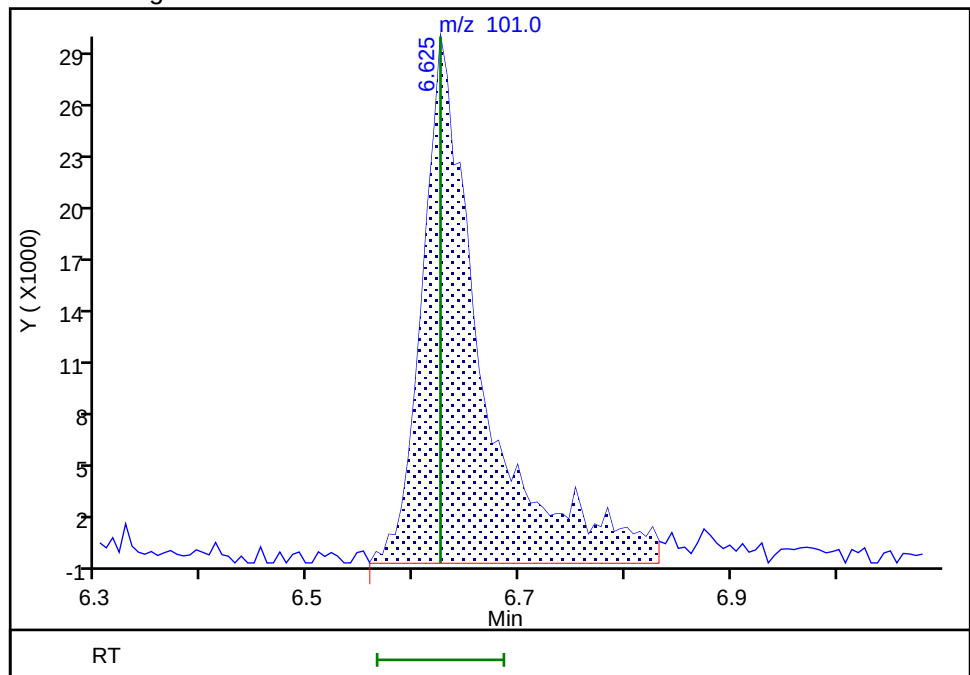
RT: 6.63
Area: 102412
Amount: 8.667569
Amount Units: ug/L

Processing Integration Results



RT: 6.63
Area: 115112
Amount: 9.595091
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 23-Oct-2018 00:00:47

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\IP37186.D

Injection Date: 22-Oct-2018 16:39:30

Instrument ID: HP5973P

Lims ID: IC 4

Client ID:

Operator ID: OI/RF

ALS Bottle#:

10

Worklist Smp#: 10

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

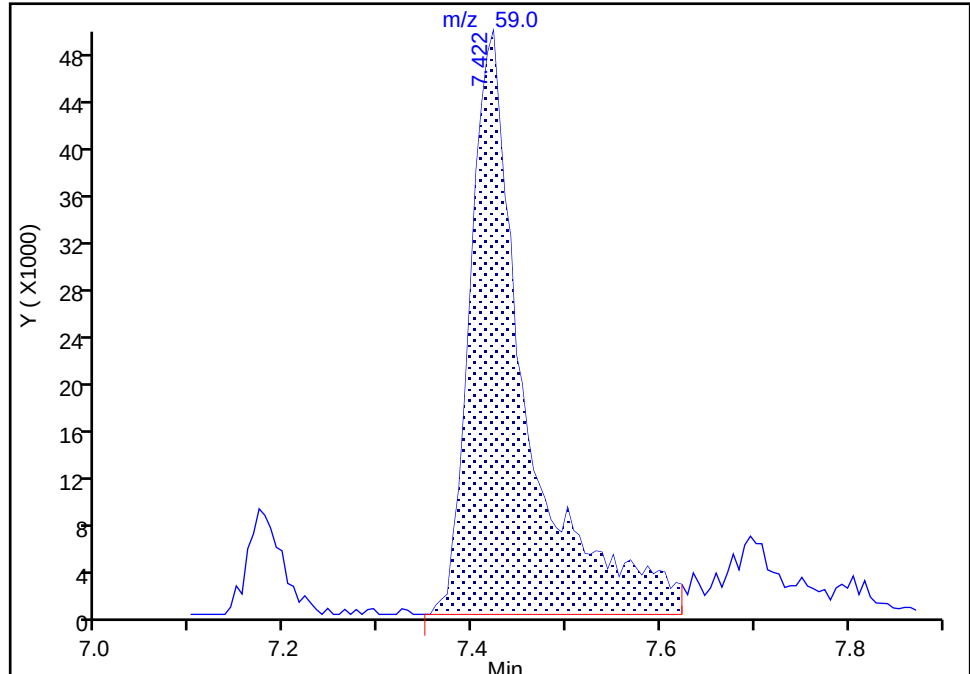
MS SCAN

33 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

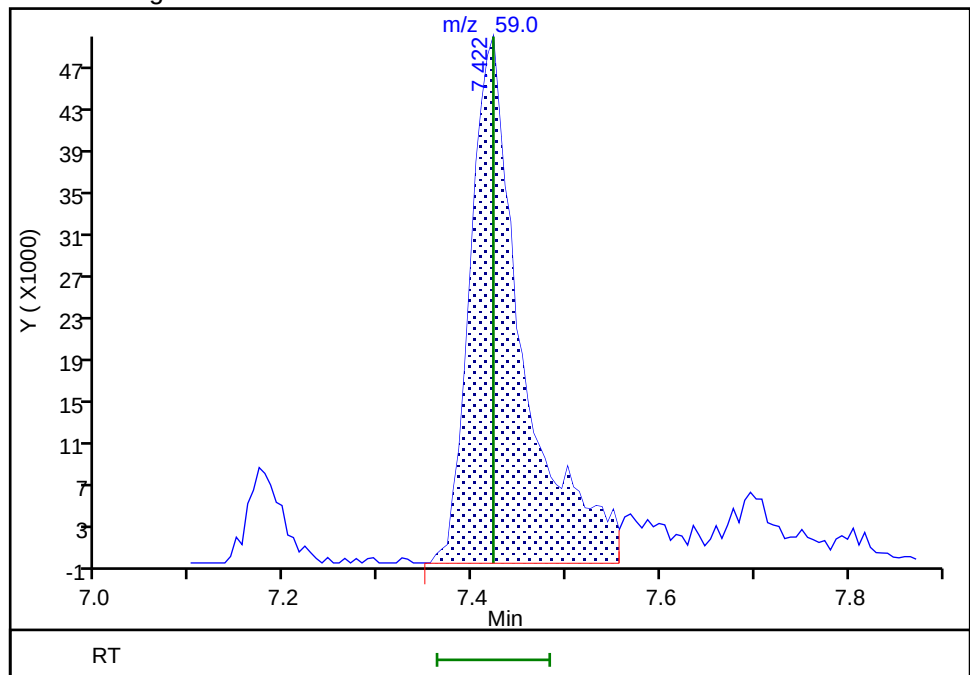
RT: 7.42
Area: 206887
Amount: 108.2941
Amount Units: ug/L

Processing Integration Results



RT: 7.42
Area: 193178
Amount: 101.0272
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 23-Oct-2018 00:01:39

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37187.D
 Lims ID: ICIS 5
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 22-Oct-2018 17:07:30 ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS 5
 Misc. Info.: 480-0075728-011
 Operator ID: OI/RF Instrument ID: HP5973P
 Sublist: chrom-P-8260H2O*sub11
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Oct-2018 13:33:11 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1005

First Level Reviewer: baroner

Date: 22-Oct-2018 22:10:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	240815	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.290	0.000	86	495282	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	561890	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	92	347939	25.0	25.0	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.989	9.989	0.000	0	208148	25.0	25.4	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.325	0.000	94	1156882	25.0	24.9	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	95	411428	25.0	24.6	
10 Dichlorodifluoromethane	85	4.252	4.252	0.000	98	524515	25.0	26.1	
11 Chloromethane	50	4.666	4.666	0.000	98	836630	25.0	24.5	
17 Vinyl chloride	62	4.855	4.855	0.000	98	682366	25.0	25.1	
144 Butadiene	54	4.897	4.897	0.000	93	634328	25.0	25.4	
12 Bromomethane	94	5.475	5.475	0.000	93	400565	25.0	24.6	
13 Chloroethane	64	5.615	5.615	0.000	98	316877	25.0	24.3	M
19 Dichlorofluoromethane	67	5.901	5.901	0.000	98	775718	25.0	24.2	
14 Trichlorofluoromethane	101	5.962	5.962	0.000	97	707074	25.0	25.7	M
20 Ethyl ether	59	6.321	6.321	0.000	97	335305	25.0	24.5	
22 Acrolein	56	6.625	6.625	0.000	98	321682	125.0	127.0	
16 1,1,2-Trichloro-1,2,2-trif	101	6.637	6.637	0.000	77	331698	25.0	26.2	
25 1,1-Dichloroethene	96	6.728	6.728	0.000	95	348632	25.0	25.1	
24 Acetone	43	6.814	6.814	0.000	99	805186	125.0	123.2	
18 Iodomethane	142	7.027	7.027	0.000	100	692735	25.0	26.5	
27 Carbon disulfide	76	7.118	7.118	0.000	100	1095253	25.0	26.6	
30 Methyl acetate	43	7.179	7.179	0.000	99	755816	50.0	50.1	
28 3-Chloro-1-propene	41	7.203	7.203	0.000	84	602327	25.0	25.6	
31 Methylene Chloride	84	7.398	7.398	0.000	99	417623	25.0	22.6	
33 2-Methyl-2-propanol	59	7.416	7.416	0.000	97	501101	250.0	248.2	
32 Methyl tert-butyl ether	73	7.611	7.611	0.000	99	1032177	25.0	24.6	
35 trans-1,2-Dichloroethene	96	7.702	7.702	0.000	95	377413	25.0	25.4	
34 Acrylonitrile	53	7.732	7.732	0.000	98	1770016	250.0	253.8	
36 Hexane	57	7.903	7.903	0.000	95	442201	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
38 Vinyl acetate	43	8.195	8.195	0.000	98	1882069	50.0	53.5	
40 1,1-Dichloroethane	63	8.249	8.249	0.000	97	723403	25.0	25.8	
44 2-Butanone (MEK)	43	8.931	8.931	0.000	99	1244509	125.0	126.5	
45 2,2-Dichloropropane	77	8.943	8.943	0.000	92	436269	25.0	23.8	
43 cis-1,2-Dichloroethene	96	8.967	8.967	0.000	85	435141	25.0	25.2	
50 Chlorobromomethane	128	9.290	9.290	0.000	97	220914	25.0	25.3	
51 Tetrahydrofuran	42	9.308	9.308	0.000	90	321242	50.0	50.2	
49 Chloroform	83	9.332	9.332	0.000	95	691348	25.0	24.8	
52 1,1,1-Trichloroethane	97	9.563	9.563	0.000	98	556156	25.0	25.3	
54 Cyclohexane	56	9.606	9.606	0.000	95	554500	25.0	25.6	
56 1,1-Dichloropropene	75	9.734	9.734	0.000	90	501014	25.0	25.3	
53 Isobutyl alcohol	43	9.752	9.752	0.000	83	665964	625.0	621.1	M
55 Carbon tetrachloride	117	9.752	9.752	0.000	91	533708	25.0	25.6	
57 Benzene	78	10.032	10.032	0.000	99	1462016	25.0	25.7	
60 1,2-Dichloroethane	62	10.093	10.093	0.000	97	625677	25.0	25.6	
59 n-Heptane	43	10.099	10.099	0.000	96	349856	25.0	25.5	
62 Trichloroethene	95	10.786	10.786	0.000	95	387311	25.0	25.6	
64 Methylcyclohexane	83	10.987	10.987	0.000	95	465421	25.0	25.9	
63 1,2-Dichloropropane	63	11.127	11.127	0.000	91	409246	25.0	25.0	
68 1,4-Dioxane	88	11.249	11.249	0.000	89	75188	500.0	552.8	
69 Dibromomethane	93	11.334	11.334	0.000	96	286106	25.0	25.6	
70 Dichlorobromomethane	83	11.462	11.462	0.000	96	545959	25.0	25.8	
71 2-Chloroethyl vinyl ether	63	11.711	11.711	0.000	95	154715	25.0	24.7	
73 cis-1,3-Dichloropropene	75	11.997	11.997	0.000	92	608675	25.0	26.2	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	97	2511819	125.0	137.2	
76 Toluene	92	12.417	12.417	0.000	98	924327	25.0	25.7	
77 Ethyl methacrylate	69	12.642	12.642	0.000	90	505606	25.0	27.8	
78 trans-1,3-Dichloropropene	75	12.709	12.709	0.000	97	584554	25.0	26.4	
79 1,1,2-Trichloroethane	83	12.995	12.995	0.000	93	311629	25.0	24.9	
80 Tetrachloroethene	166	13.147	13.147	0.000	96	423404	25.0	25.0	
83 2-Hexanone	43	13.189	13.189	0.000	97	1936874	125.0	137.9	
82 1,3-Dichloropropane	76	13.232	13.232	0.000	95	632336	25.0	25.5	
81 Chlorodibromomethane	129	13.573	13.573	0.000	90	454184	25.0	25.8	
85 Ethylene Dibromide	107	13.773	13.773	0.000	99	414694	25.0	25.6	
87 Chlorobenzene	112	14.327	14.327	0.000	97	1112120	25.0	25.5	
89 Ethylbenzene	91	14.369	14.369	0.000	96	1686293	25.0	26.6	
88 1,1,1,2-Tetrachloroethane	131	14.406	14.406	0.000	95	432366	25.0	25.9	
90 m-Xylene & p-Xylene	106	14.509	14.509	0.000	0	696807	25.0	25.8	
93 o-Xylene	106	15.057	15.057	0.000	97	686535	25.0	25.7	
94 Styrene	104	15.087	15.087	0.000	96	1168423	25.0	27.0	
92 Bromoform	173	15.471	15.471	0.000	95	331250	25.0	26.6	
95 Isopropylbenzene	105	15.489	15.489	0.000	97	1627829	25.0	26.7	
97 1,1,2,2-Tetrachloroethane	83	15.957	15.957	0.000	97	521525	25.0	25.3	
99 N-Propylbenzene	91	16.012	16.012	0.000	98	1857933	25.0	26.7	
98 trans-1,4-Dichloro-2-buten	53	16.012	16.012	0.000	79	154271	25.0	27.6	
100 Bromobenzene	156	16.036	16.036	0.000	93	525516	25.0	25.1	
101 1,2,3-Trichloropropane	110	16.055	16.055	0.000	87	166941	25.0	25.0	
102 1,3,5-Trimethylbenzene	105	16.207	16.207	0.000	96	1371788	25.0	27.0	
103 2-Chlorotoluene	126	16.219	16.219	0.000	95	448836	25.0	25.5	
105 4-Chlorotoluene	126	16.347	16.347	0.000	97	473027	25.0	25.6	
106 tert-Butylbenzene	134	16.645	16.645	0.000	94	303177	25.0	26.5	
107 1,2,4-Trimethylbenzene	105	16.706	16.706	0.000	98	1470843	25.0	27.0	

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	16.906	16.906	0.000	95	1564971	25.0	27.4	
112 4-Isopropyltoluene	119	17.058	17.058	0.000	96	1345023	25.0	27.2	
110 1,3-Dichlorobenzene	146	17.174	17.174	0.000	99	955507	25.0	26.4	
111 1,4-Dichlorobenzene	146	17.277	17.277	0.000	94	981886	25.0	26.1	
115 n-Butylbenzene	91	17.569	17.569	0.000	98	1156535	25.0	26.5	
116 1,2-Dichlorobenzene	146	17.776	17.776	0.000	97	923285	25.0	25.9	
117 1,2-Dibromo-3-Chloropropan	75	18.817	18.817	0.000	85	109575	25.0	25.6	
119 1,2,4-Trichlorobenzene	180	19.912	19.912	0.000	94	614011	25.0	25.4	
120 Hexachlorobutadiene	225	20.033	20.033	0.000	97	194900	25.0	24.7	
121 Naphthalene	128	20.350	20.350	0.000	98	1742315	25.0	27.4	
122 1,2,3-Trichlorobenzene	180	20.727	20.727	0.000	95	593129	25.0	25.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00138

Amount Added: 12.50

Units: uL

GAS CORP mix_00308

Amount Added: 12.50

Units: uL

P 8260 IS_00335

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr_00309

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37187.D

Injection Date: 22-Oct-2018 17:07:30

Instrument ID: HP5973P

Operator ID: OI/RF

Lims ID: ICIS 5

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

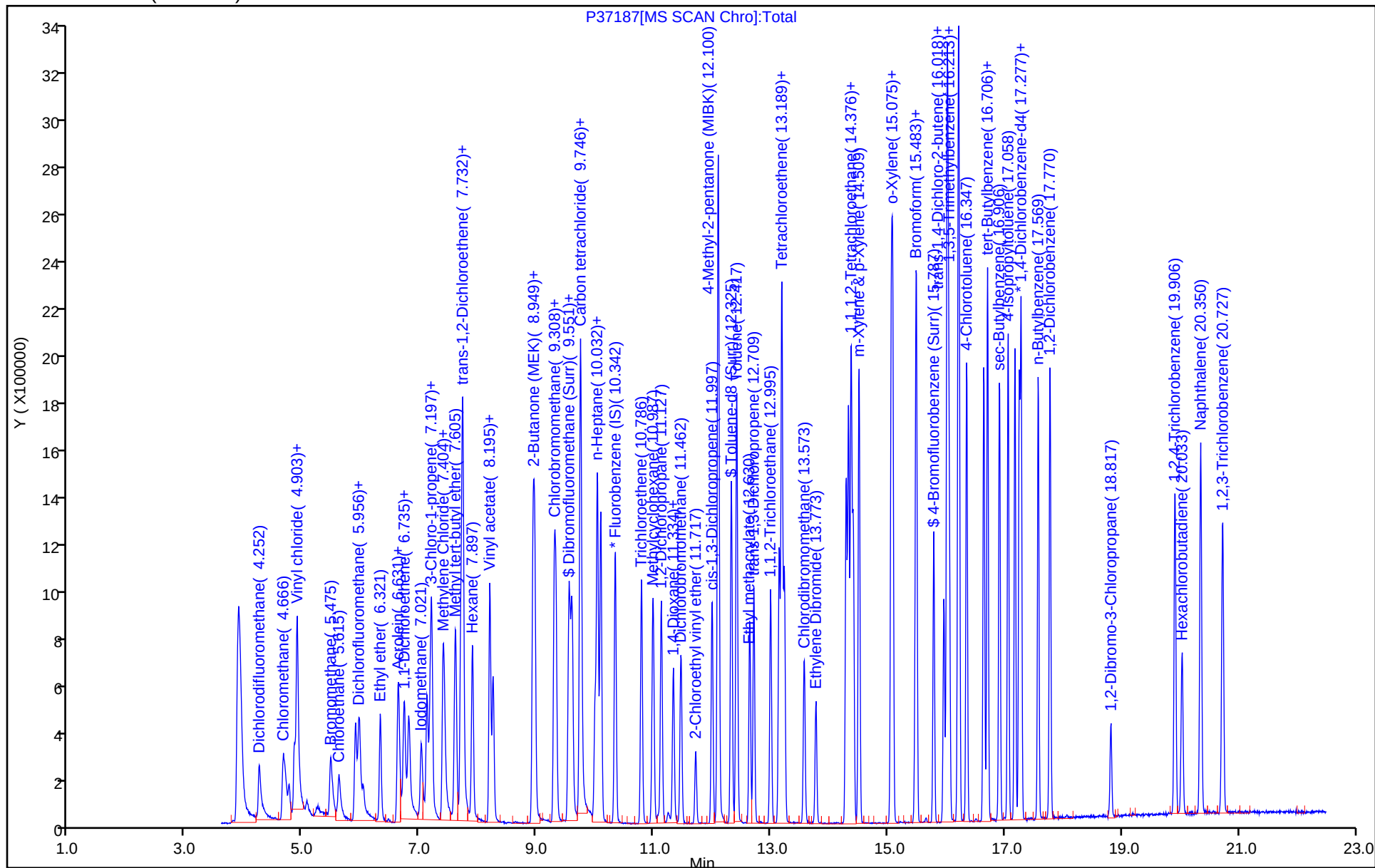
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

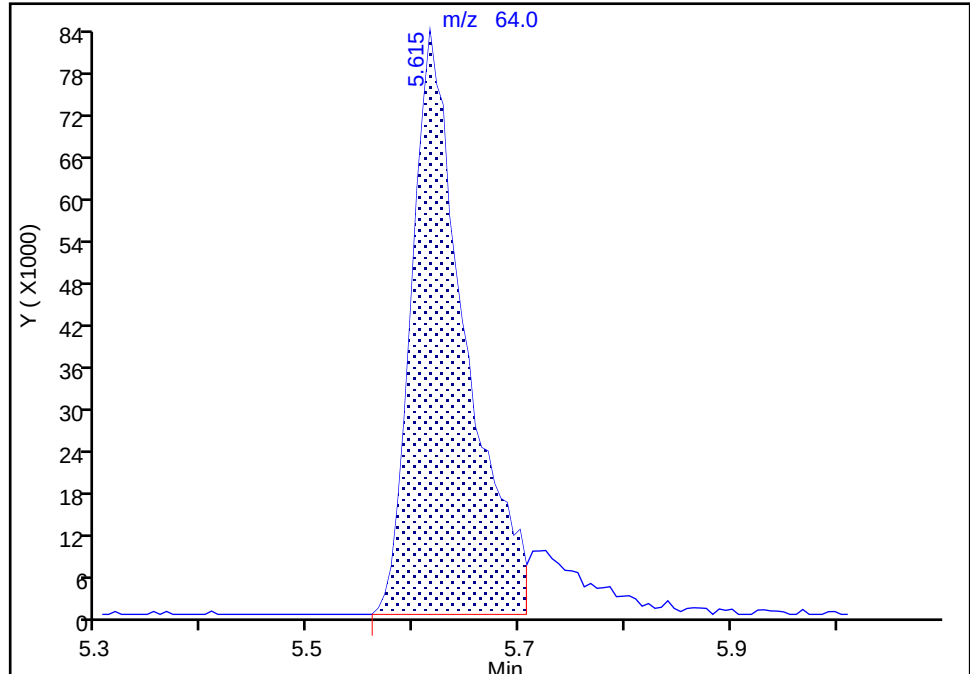
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Injection Date: 22-Oct-2018 17:07:30 Instrument ID: HP5973P
Lims ID: ICIS 5
Client ID:
Operator ID: OI/RF ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

13 Chloroethane, CAS: 75-00-3

Signal: 1

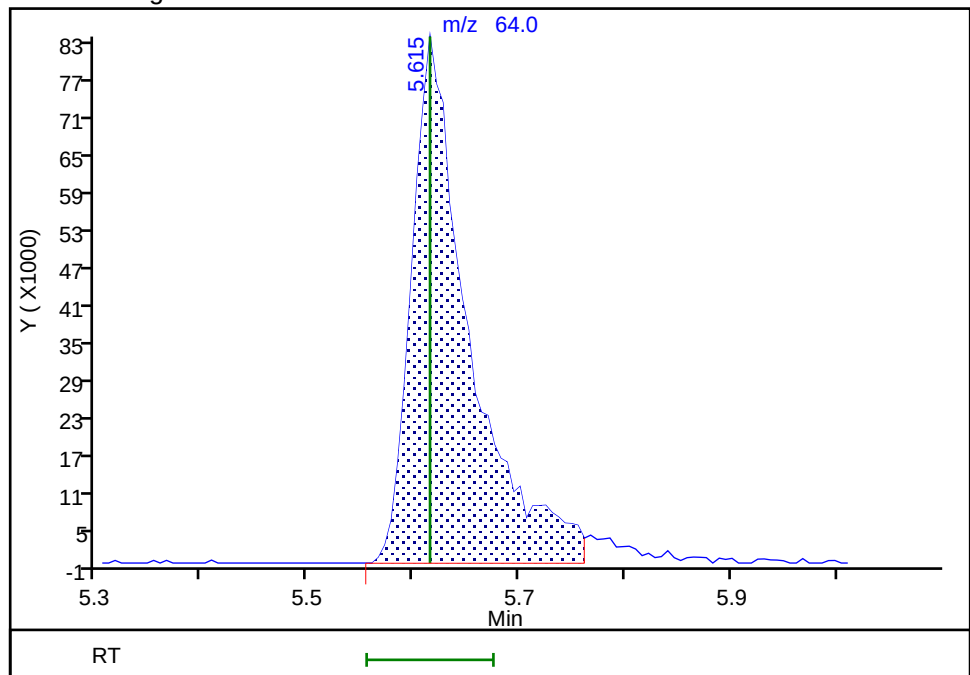
RT: 5.62
Area: 292822
Amount: 22.790135
Amount Units: ug/L

Processing Integration Results



RT: 5.62
Area: 316877
Amount: 24.319608
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 22:07:38

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

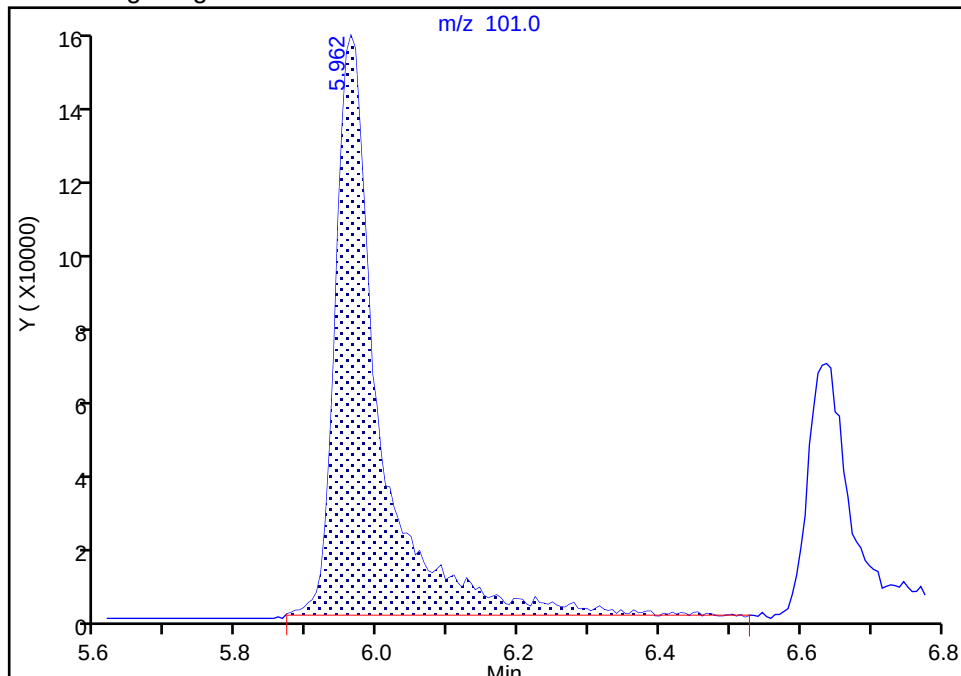
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Injection Date: 22-Oct-2018 17:07:30 Instrument ID: HP5973P
Lims ID: ICIS 5
Client ID:
Operator ID: OI/RF ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

14 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

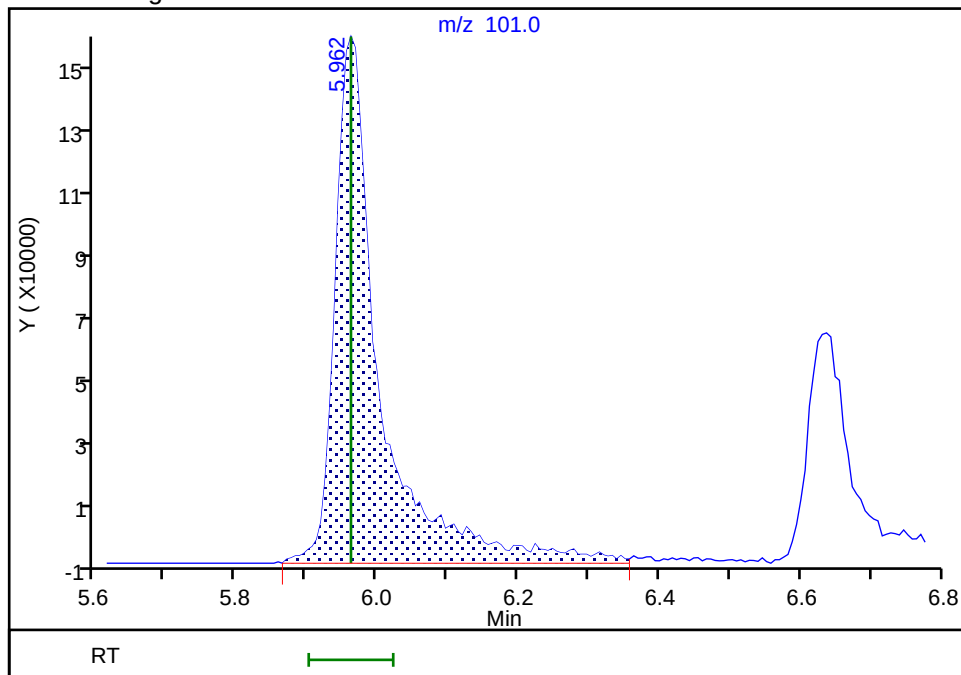
RT: 5.96
Area: 683915
Amount: 24.693720
Amount Units: ug/L

Processing Integration Results



RT: 5.96
Area: 707074
Amount: 25.671923
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 22:08:13

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

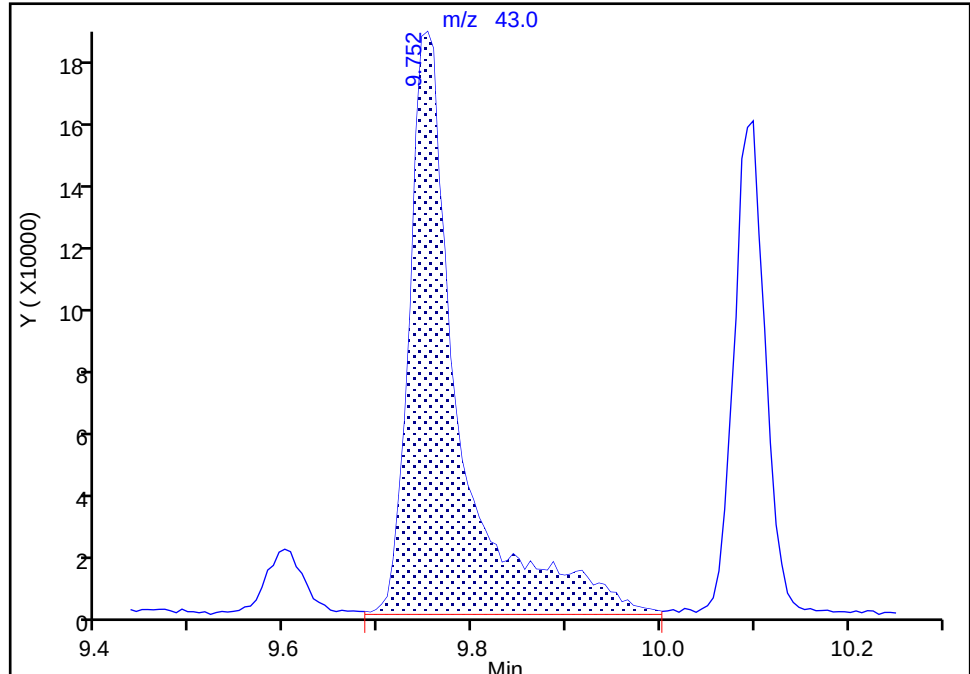
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Injection Date: 22-Oct-2018 17:07:30 Instrument ID: HP5973P
Lims ID: ICIS 5
Client ID:
Operator ID: OI/RF ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

53 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

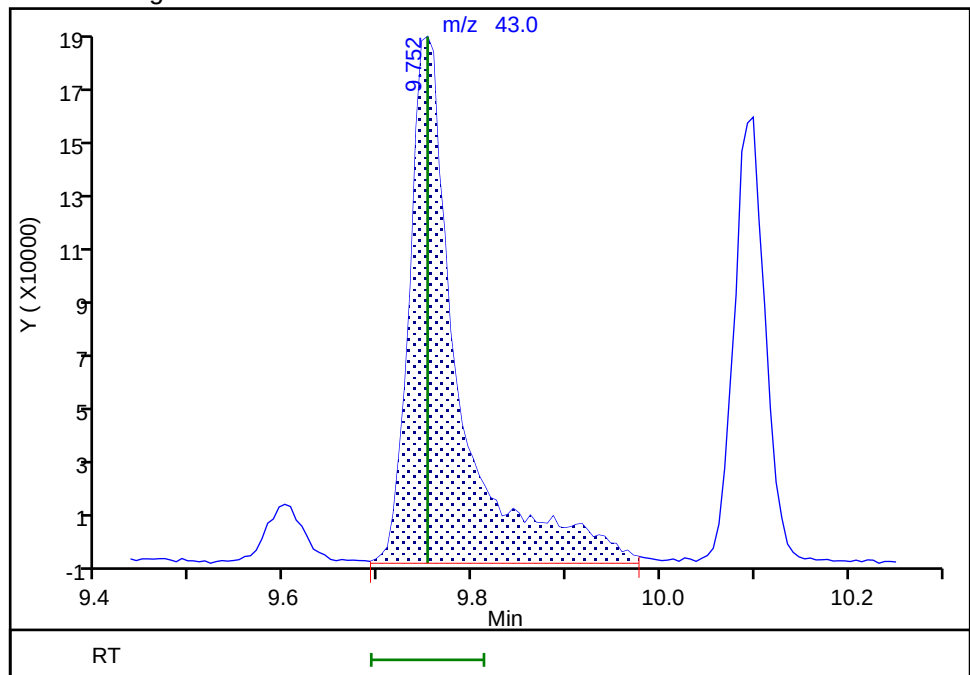
RT: 9.75
Area: 668290
Amount: 662.3656
Amount Units: ug/L

Processing Integration Results



RT: 9.75
Area: 665964
Amount: 621.0737
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 22-Oct-2018 22:09:51
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37188.D
 Lims ID: IC 6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 22-Oct-2018 17:34:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC 6
 Misc. Info.: 480-0075728-012
 Operator ID: OI/RF Instrument ID: HP5973P
 Sublist: chrom-P-8260H2O*sub11
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Oct-2018 13:33:21 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1005

First Level Reviewer: baroner

Date: 23-Oct-2018 00:02:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	251449	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.284	14.290	-0.006	85	515507	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	96	601851	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	92	365791	25.0	25.2	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.989	9.989	0.000	0	212554	25.0	24.9	
\$ 5 Toluene-d8 (Surr)	98	12.319	12.325	-0.006	93	1214561	25.0	25.1	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	93	448016	25.0	25.7	
10 Dichlorodifluoromethane	85	4.246	4.252	-0.006	99	926587	50.0	44.2	
11 Chloromethane	50	4.672	4.666	0.006	99	1476102	50.0	41.3	
17 Vinyl chloride	62	4.849	4.855	-0.006	98	1195516	50.0	42.1	
144 Butadiene	54	4.897	4.897	0.000	93	1068076	50.0	41.0	M
12 Bromomethane	94	5.481	5.475	0.006	92	732807	50.0	43.1	
13 Chloroethane	64	5.615	5.615	0.000	97	625436	50.0	46.0	
19 Dichlorofluoromethane	67	5.895	5.901	-0.006	97	1449694	50.0	43.3	
14 Trichlorofluoromethane	101	5.962	5.962	0.000	98	1274406	50.0	44.3	M
20 Ethyl ether	59	6.315	6.321	-0.006	96	692300	50.0	48.5	
22 Acrolein	56	6.619	6.625	-0.006	98	650462	250.0	245.9	
16 1,1,2-Trichloro-1,2,2-trif	101	6.631	6.637	-0.006	92	641612	50.0	48.5	
25 1,1-Dichloroethene	96	6.729	6.728	0.001	96	659386	50.0	45.4	
24 Acetone	43	6.808	6.814	-0.006	99	1556401	250.0	228.0	
18 Iodomethane	142	7.021	7.027	-0.006	99	1354646	50.0	49.6	
27 Carbon disulfide	76	7.118	7.118	0.000	99	1941146	50.0	45.1	
30 Methyl acetate	43	7.173	7.179	-0.006	98	1480513	100.0	94.0	
28 3-Chloro-1-propene	41	7.197	7.203	-0.006	84	1218047	50.0	49.6	
31 Methylene Chloride	84	7.392	7.398	-0.006	98	818331	50.0	42.3	
33 2-Methyl-2-propanol	59	7.416	7.416	0.000	97	998390	500.0	473.6	M
32 Methyl tert-butyl ether	73	7.605	7.611	-0.006	100	2077119	50.0	47.4	
35 trans-1,2-Dichloroethene	96	7.696	7.702	-0.006	95	726929	50.0	46.8	
34 Acrylonitrile	53	7.726	7.732	-0.006	97	3390084	500.0	465.6	
36 Hexane	57	7.891	7.903	-0.013	95	874835	50.0	47.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.195	8.195	0.000	98	3654400	100.0	99.4	
40 1,1-Dichloroethane	63	8.249	8.249	0.000	97	1442404	50.0	49.3	
44 2-Butanone (MEK)	43	8.931	8.931	0.000	99	2455082	250.0	239.0	
45 2,2-Dichloropropane	77	8.943	8.943	0.000	95	904737	50.0	47.3	
43 cis-1,2-Dichloroethene	96	8.961	8.967	-0.006	87	846991	50.0	47.0	
50 Chlorobromomethane	128	9.296	9.290	0.006	97	444820	50.0	48.7	
51 Tetrahydrofuran	42	9.302	9.308	-0.006	87	632205	100.0	94.7	
49 Chloroform	83	9.326	9.332	-0.006	95	1377771	50.0	47.3	
52 1,1,1-Trichloroethane	97	9.557	9.563	-0.006	98	1104355	50.0	48.1	
54 Cyclohexane	56	9.600	9.606	-0.006	95	1095223	50.0	48.5	
56 1,1-Dichloropropene	75	9.734	9.734	0.000	92	1002560	50.0	48.4	
55 Carbon tetrachloride	117	9.752	9.752	0.000	92	1082908	50.0	49.7	
53 Isobutyl alcohol	43	9.746	9.752	-0.006	97	1345507	1250.0	1201.7	
57 Benzene	78	10.032	10.032	0.000	99	2768458	50.0	46.7	
60 1,2-Dichloroethane	62	10.087	10.093	-0.006	97	1238459	50.0	48.4	
59 n-Heptane	43	10.099	10.099	0.000	93	696672	50.0	48.6	
62 Trichloroethene	95	10.786	10.786	0.000	95	765479	50.0	48.4	
64 Methylcyclohexane	83	10.987	10.987	0.000	96	908884	50.0	48.5	
63 1,2-Dichloropropane	63	11.127	11.127	0.000	90	833681	50.0	48.8	
68 1,4-Dioxane	88	11.243	11.249	-0.006	95	129944	1000.0	918.0	
69 Dibromomethane	93	11.334	11.334	0.000	95	566329	50.0	48.5	
70 Dichlorobromomethane	83	11.462	11.462	0.000	97	1114703	50.0	50.5	
71 2-Chloroethyl vinyl ether	63	11.711	11.711	0.000	93	360501	50.0	55.1	
73 cis-1,3-Dichloropropene	75	11.991	11.997	-0.006	91	1244758	50.0	51.3	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	92	4507744	250.0	236.6	
76 Toluene	92	12.417	12.417	0.000	97	1794970	50.0	47.9	
77 Ethyl methacrylate	69	12.636	12.642	-0.006	91	1040352	50.0	55.0	
78 trans-1,3-Dichloropropene	75	12.709	12.709	0.000	97	1216730	50.0	52.8	
79 1,1,2-Trichloroethane	83	13.001	12.995	0.006	94	632203	50.0	48.6	
80 Tetrachloroethene	166	13.141	13.147	-0.006	96	837600	50.0	47.5	
83 2-Hexanone	43	13.183	13.189	-0.006	94	3541028	250.0	242.3	
82 1,3-Dichloropropane	76	13.232	13.232	0.000	95	1270664	50.0	49.2	
81 Chlorodibromomethane	129	13.573	13.573	0.001	90	947407	50.0	51.6	
85 Ethylene Dibromide	107	13.767	13.773	-0.006	99	821275	50.0	48.6	
87 Chlorobenzene	112	14.327	14.327	0.000	96	2142073	50.0	47.3	
89 Ethylbenzene	91	14.370	14.369	0.001	96	3151853	50.0	47.7	
88 1,1,1,2-Tetrachloroethane	131	14.406	14.406	0.000	95	885540	50.0	51.1	
90 m-Xylene & p-Xylene	106	14.509	14.509	0.000	0	1379699	50.0	49.1	
93 o-Xylene	106	15.057	15.057	0.000	93	1370729	50.0	49.3	
94 Styrene	104	15.087	15.087	0.000	95	2343849	50.0	52.1	
92 Bromoform	173	15.471	15.471	0.000	95	686943	50.0	52.9	
95 Isopropylbenzene	105	15.489	15.489	0.000	98	3050888	50.0	46.7	
97 1,1,2,2-Tetrachloroethane	83	15.957	15.957	0.000	96	1051835	50.0	47.6	
98 trans-1,4-Dichloro-2-buten	53	16.006	16.012	-0.006	58	343365	50.0	57.3	
99 N-Propylbenzene	91	16.012	16.012	0.000	96	3372995	50.0	45.3	
100 Bromobenzene	156	16.030	16.036	-0.006	91	1065382	50.0	47.6	
101 1,2,3-Trichloropropane	110	16.055	16.055	0.000	84	346963	50.0	48.6	
102 1,3,5-Trimethylbenzene	105	16.201	16.207	-0.006	97	2646082	50.0	48.5	
103 2-Chlorotoluene	126	16.219	16.219	0.000	95	914303	50.0	48.5	
105 4-Chlorotoluene	126	16.353	16.347	0.006	96	960799	50.0	48.5	
106 tert-Butylbenzene	134	16.639	16.645	-0.006	94	590873	50.0	48.2	
107 1,2,4-Trimethylbenzene	105	16.706	16.706	0.000	97	2800409	50.0	48.0	

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	16.906	16.906	0.000	96	2882988	50.0	47.2	
112 4-Isopropyltoluene	119	17.058	17.058	0.000	95	2566653	50.0	48.4	
110 1,3-Dichlorobenzene	146	17.174	17.174	0.000	96	1834401	50.0	47.3	
111 1,4-Dichlorobenzene	146	17.277	17.277	0.000	92	1902510	50.0	47.2	
115 n-Butylbenzene	91	17.569	17.569	0.000	96	2180329	50.0	46.7	
116 1,2-Dichlorobenzene	146	17.776	17.776	0.000	96	1808937	50.0	47.4	
117 1,2-Dibromo-3-Chloropropan	75	18.811	18.817	-0.006	84	226074	50.0	49.2	
119 1,2,4-Trichlorobenzene	180	19.906	19.912	-0.006	94	1226857	50.0	47.4	
120 Hexachlorobutadiene	225	20.033	20.033	0.000	97	395273	50.0	46.7	
121 Naphthalene	128	20.350	20.350	0.000	98	3343879	50.0	49.0	
122 1,2,3-Trichlorobenzene	180	20.727	20.727	0.000	95	1211572	50.0	48.7	
S 125 Total BTEX	1				0			240.7	
S 126 Xylenes, Total	1				0			98.4	
S 123 1,2-Dichloroethene, Total	1				0			93.9	
S 124 1,3-Dichloropropene, Total	1				0			104.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00138

Amount Added: 25.00

Units: uL

GAS CORP mix_00308

Amount Added: 25.00

Units: uL

P 8260 IS_00335

Amount Added: 1.25

Units: uL

Run Reagent

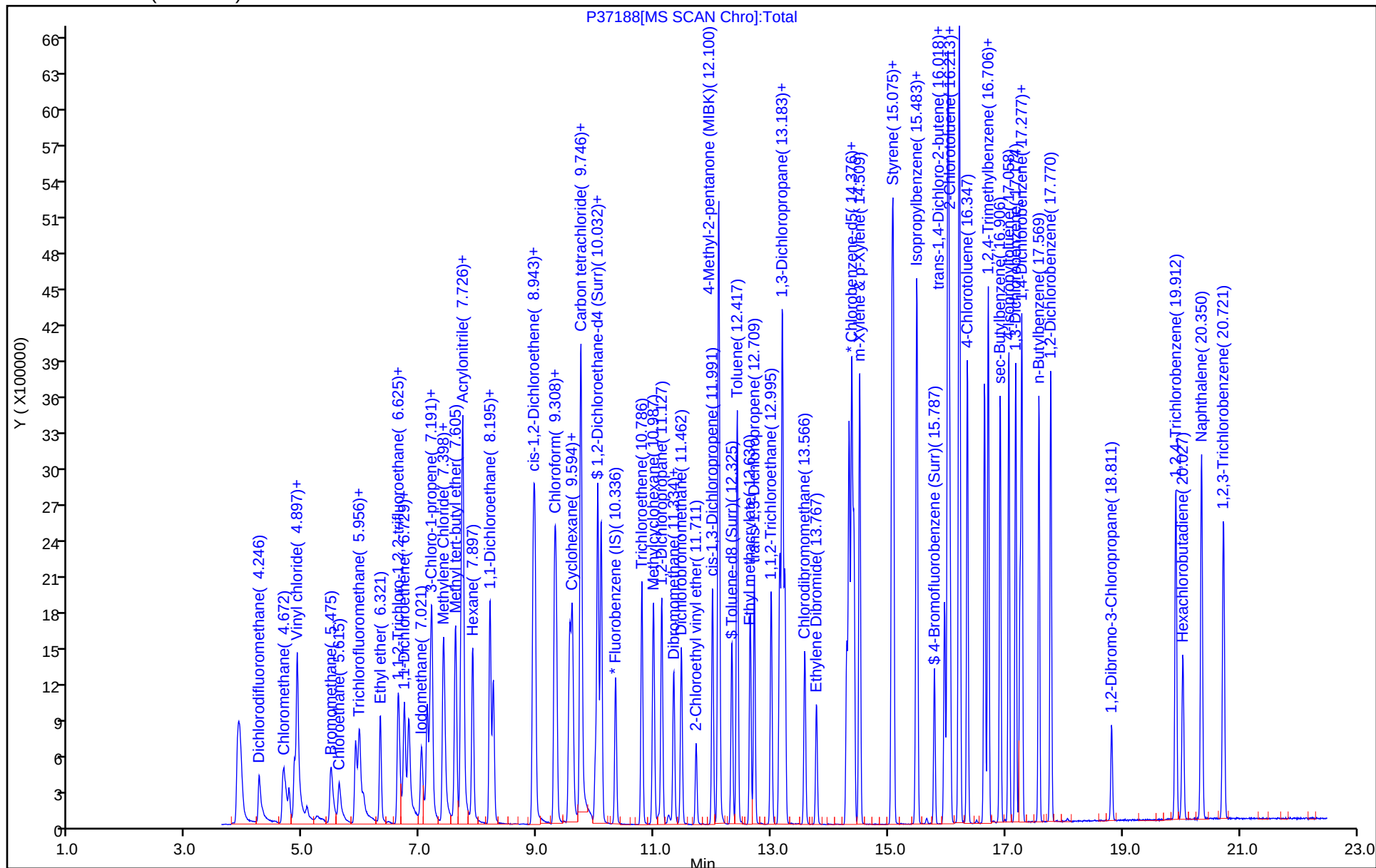
P 8260 Surr._00309

Amount Added: 1.25

Units: uL

Run Reagent

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37188.D

Injection Date: 22-Oct-2018 17:34:30

Instrument ID: HP5973P

Lims ID: IC 6

Client ID:

Operator ID: OI/RF

ALS Bottle#: 12

Worklist Smp#: 12

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

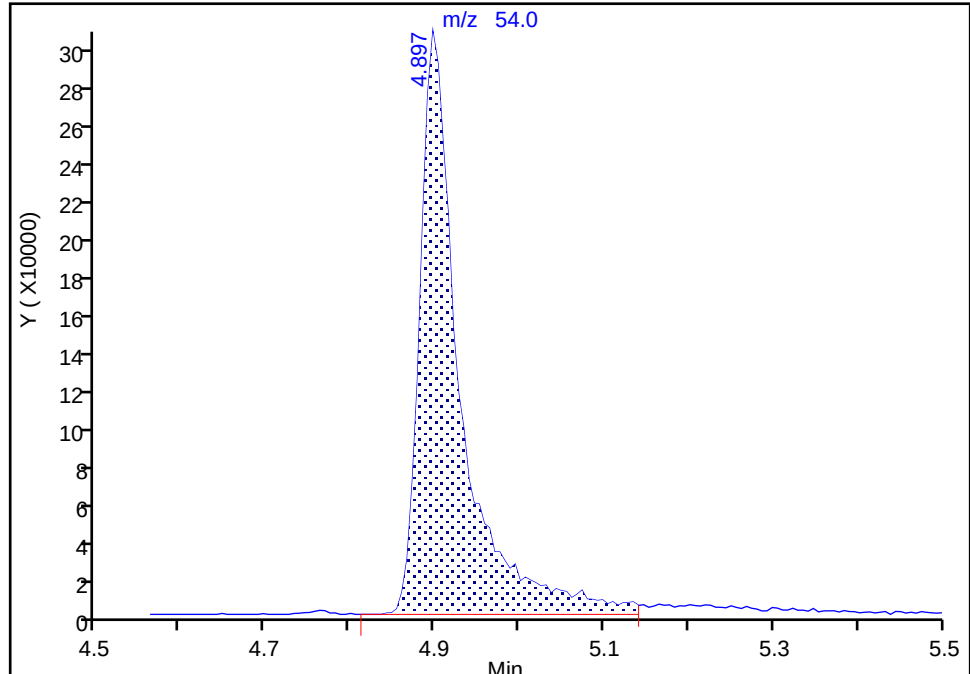
Detector: MS SCAN

144 Butadiene, CAS: 106-99-0

Signal: 1

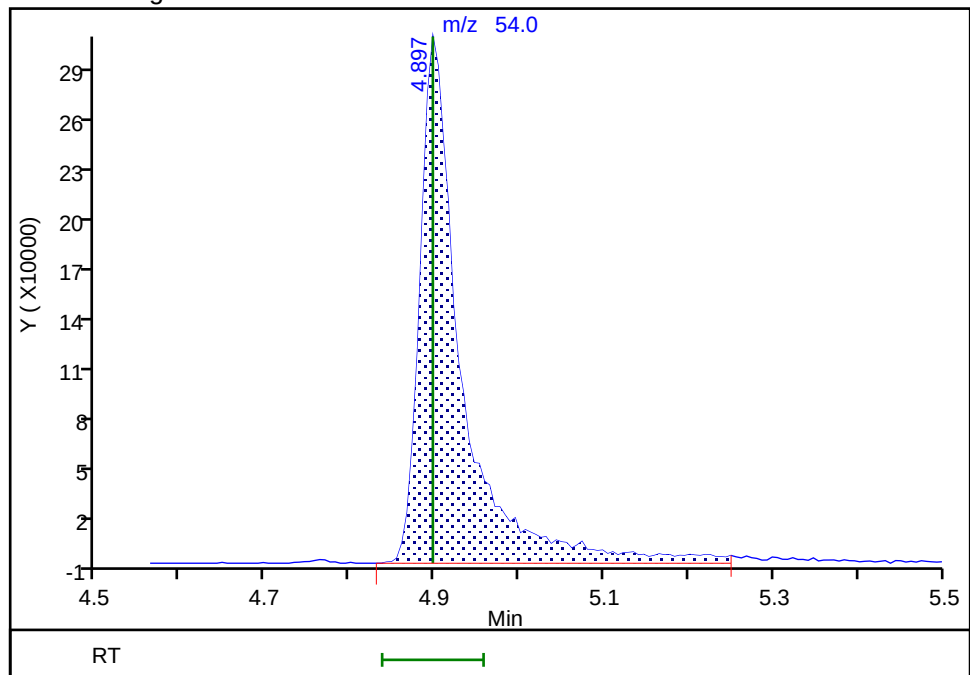
RT: 4.90
Area: 1037962
Amount: 39.973363
Amount Units: ug/L

Processing Integration Results



RT: 4.90
Area: 1068076
Amount: 40.997250
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 23-Oct-2018 00:04:17

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37188.D

Injection Date: 22-Oct-2018 17:34:30

Instrument ID: HP5973P

Lims ID: IC 6

Client ID:

Operator ID: OI/RF

ALS Bottle#:

12

Worklist Smp#: 12

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

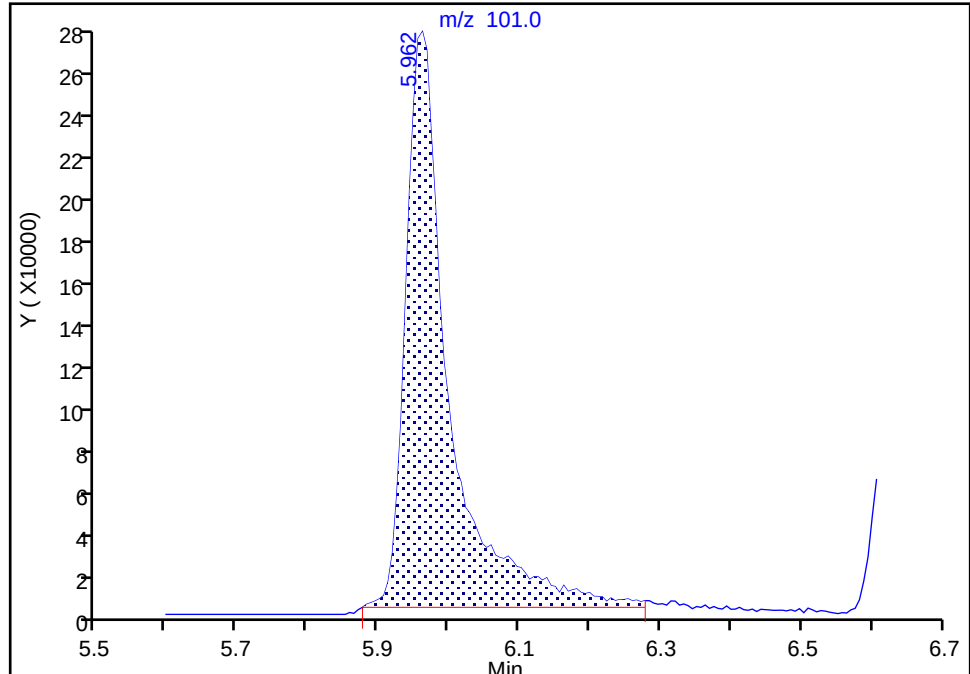
MS SCAN

14 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

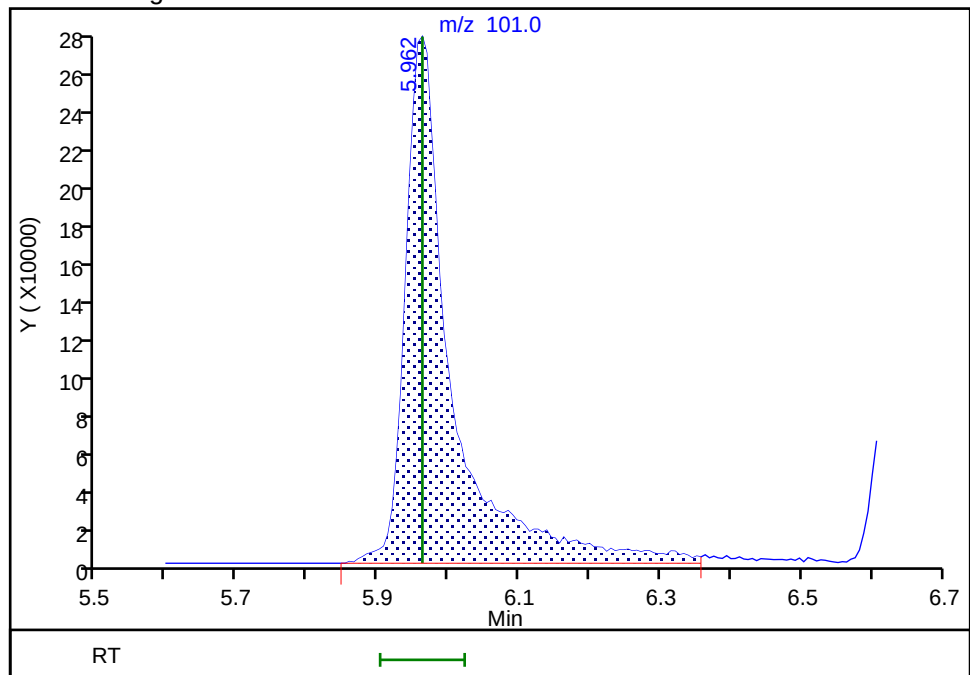
RT: 5.96
Area: 1168573
Amount: 40.954692
Amount Units: ug/L

Processing Integration Results



RT: 5.96
Area: 1274406
Amount: 44.313389
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 23-Oct-2018 00:05:27

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

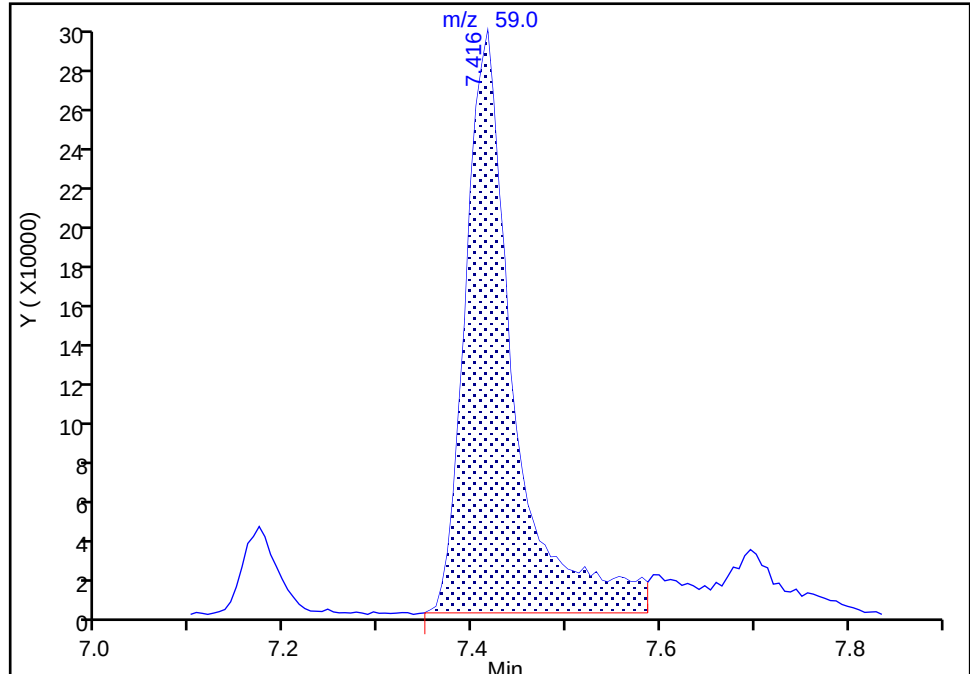
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37188.D
Injection Date: 22-Oct-2018 17:34:30 Instrument ID: HP5973P
Lims ID: IC 6
Client ID:
Operator ID: OI/RF ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

33 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

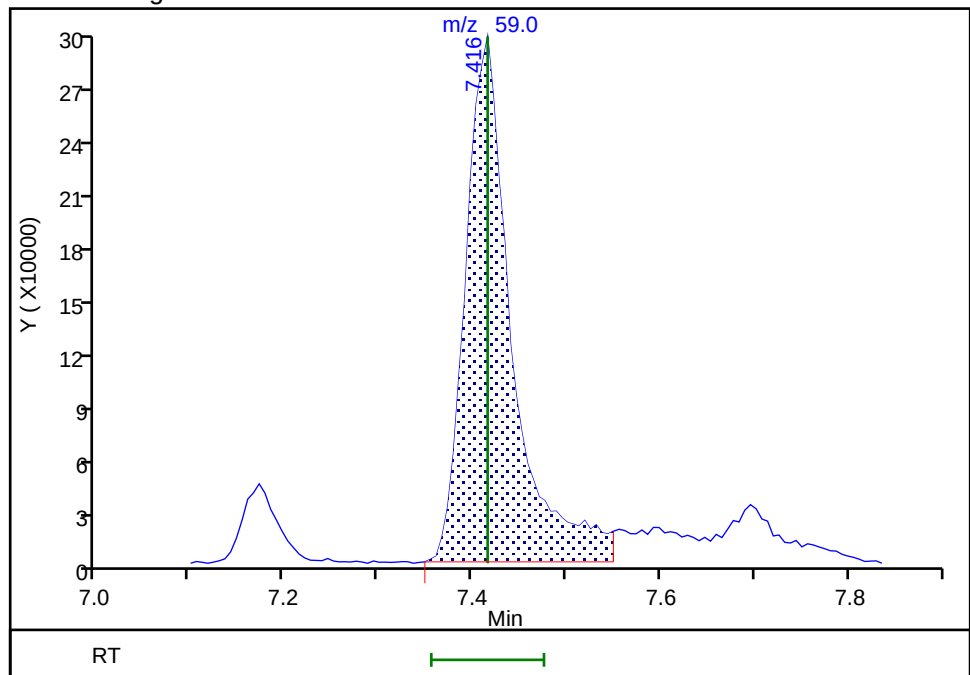
RT: 7.42
Area: 1034822
Amount: 497.0438
Amount Units: ug/L

Processing Integration Results



RT: 7.42
Area: 998390
Amount: 473.6401
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 23-Oct-2018 00:06:53

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37189.D
 Lims ID: IC 7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 22-Oct-2018 18:02:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC 7
 Misc. Info.: 480-0075728-013
 Operator ID: OI/RF Instrument ID: HP5973P
 Sublist: chrom-P-8260H2O*sub11
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 23-Oct-2018 13:33:31 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1005

First Level Reviewer: baroner

Date: 23-Oct-2018 00:06:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	269042	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.290	0.000	85	564336	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	96	656906	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	92	388794	25.0	25.0	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.989	9.989	0.000	0	230399	25.0	25.2	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.325	0.000	93	1311284	25.0	24.7	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	94	493522	25.0	25.9	
10 Dichlorodifluoromethane	85	4.252	4.252	0.000	98	2237018	100.0	99.8	
11 Chloromethane	50	4.672	4.666	0.006	99	3287711	100.0	86.0	
17 Vinyl chloride	62	4.855	4.855	0.000	98	2859934	100.0	94.0	
144 Butadiene	54	4.903	4.897	0.006	92	2596048	100.0	93.1	
12 Bromomethane	94	5.475	5.475	0.000	93	1702268	100.0	93.7	
13 Chloroethane	64	5.615	5.615	0.000	97	1420793	100.0	97.6	
19 Dichlorofluoromethane	67	5.901	5.901	0.000	97	3327395	100.0	92.8	
14 Trichlorofluoromethane	101	5.962	5.962	0.000	99	3154148	100.0	102.5	M
20 Ethyl ether	59	6.321	6.321	0.000	96	1467833	100.0	96.2	
22 Acrolein	56	6.619	6.625	-0.006	98	1475188	500.0	521.1	
16 1,1,2-Trichloro-1,2,2-trif	101	6.631	6.637	-0.006	93	1640670	100.0	115.9	
25 1,1-Dichloroethene	96	6.734	6.728	0.006	97	1571461	100.0	101.2	
24 Acetone	43	6.807	6.814	-0.007	99	3512132	500.0	480.9	
18 Iodomethane	142	7.020	7.027	-0.007	99	3119357	100.0	106.6	
27 Carbon disulfide	76	7.118	7.118	0.000	99	4415825	100.0	95.9	
30 Methyl acetate	43	7.173	7.179	-0.007	97	3099957	200.0	184.0	
28 3-Chloro-1-propene	41	7.197	7.203	-0.006	84	2671847	100.0	101.7	
31 Methylene Chloride	84	7.392	7.398	-0.006	98	1820135	100.0	88.0	
33 2-Methyl-2-propanol	59	7.410	7.416	-0.006	97	2674530	1000.0	1185.8	M
32 Methyl tert-butyl ether	73	7.604	7.611	-0.007	98	4499280	100.0	95.9	
35 trans-1,2-Dichloroethene	96	7.696	7.702	-0.006	96	1655836	100.0	99.7	
34 Acrylonitrile	53	7.726	7.732	-0.006	92	6164695	1000.0	791.2	
36 Hexane	57	7.896	7.903	-0.007	96	2004062	100.0	101.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.188	8.195	-0.007	99	6311612	200.0	160.5	
40 1,1-Dichloroethane	63	8.249	8.249	0.000	96	3105586	100.0	99.3	
44 2-Butanone (MEK)	43	8.925	8.931	-0.006	98	4803729	500.0	437.1	
45 2,2-Dichloropropane	77	8.943	8.943	0.000	92	2181440	100.0	106.7	
43 cis-1,2-Dichloroethene	96	8.961	8.967	-0.006	85	1854361	100.0	96.3	
50 Chlorobromomethane	128	9.296	9.290	0.006	97	983485	100.0	100.7	
51 Tetrahydrofuran	42	9.302	9.308	-0.006	87	1398145	200.0	195.7	
49 Chloroform	83	9.326	9.332	-0.006	95	2902997	100.0	93.1	
52 1,1,1-Trichloroethane	97	9.557	9.563	-0.006	96	2521331	100.0	102.6	
54 Cyclohexane	56	9.600	9.606	-0.006	95	2461736	100.0	101.9	
56 1,1-Dichloropropene	75	9.740	9.734	0.006	91	2268845	100.0	102.4	
53 Isobutyl alcohol	43	9.746	9.752	-0.006	89	3195087	2500.0	2667.1	
55 Carbon tetrachloride	117	9.752	9.752	0.000	94	2480370	100.0	106.4	
57 Benzene	78	10.032	10.032	0.000	95	5259715	100.0	82.9	
60 1,2-Dichloroethane	62	10.087	10.093	-0.006	96	2600342	100.0	95.0	
59 n-Heptane	43	10.093	10.099	-0.006	93	1604937	100.0	104.7	
62 Trichloroethene	95	10.786	10.786	0.000	94	1712588	100.0	101.2	
64 Methylcyclohexane	83	10.987	10.987	0.000	96	2125419	100.0	106.1	
63 1,2-Dichloropropane	63	11.127	11.127	0.000	90	1807185	100.0	98.8	
68 1,4-Dioxane	88	11.242	11.249	-0.007	96	374765	2000.0	2418.4	M
69 Dibromomethane	93	11.334	11.334	0.000	96	1256249	100.0	100.5	
70 Dichlorobromomethane	83	11.461	11.462	-0.001	95	2422235	100.0	102.6	
71 2-Chloroethyl vinyl ether	63	11.711	11.711	0.000	94	844341	100.0	120.5	
73 cis-1,3-Dichloropropene	75	11.997	11.997	0.000	90	2662878	100.0	102.5	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	85	7181276	500.0	344.3	
76 Toluene	92	12.417	12.417	0.000	90	3730715	100.0	90.9	
77 Ethyl methacrylate	69	12.642	12.642	0.000	92	2286972	100.0	110.5	
78 trans-1,3-Dichloropropene	75	12.709	12.709	0.000	96	2660365	100.0	105.4	
79 1,1,2-Trichloroethane	83	12.994	12.995	-0.001	95	1353826	100.0	95.0	
80 Tetrachloroethene	166	13.147	13.147	0.000	95	1892428	100.0	98.0	
83 2-Hexanone	43	13.189	13.189	0.000	86	5995978	500.0	374.8	
82 1,3-Dichloropropane	76	13.232	13.232	0.000	95	2656131	100.0	94.0	
81 Chlorodibromomethane	129	13.572	13.573	0.000	90	2043666	100.0	101.8	
85 Ethylene Dibromide	107	13.767	13.773	-0.006	99	1807430	100.0	97.7	
87 Chlorobenzene	112	14.327	14.327	0.000	89	4204825	100.0	84.7	
89 Ethylbenzene	91	14.375	14.369	0.006	90	5576655	100.0	77.1	
88 1,1,1,2-Tetrachloroethane	131	14.412	14.406	0.006	94	1936917	100.0	102.0	
90 m-Xylene & p-Xylene	106	14.509	14.509	0.000	0	2995503	100.0	97.4	
93 o-Xylene	106	15.057	15.057	0.000	91	2953033	100.0	97.0	
94 Styrene	104	15.087	15.087	0.000	89	4557068	100.0	92.5	
92 Bromoform	173	15.471	15.471	-0.001	95	1609377	100.0	113.3	
95 Isopropylbenzene	105	15.489	15.489	0.000	94	5500568	100.0	77.1	
97 1,1,2,2-Tetrachloroethane	83	15.957	15.957	0.000	97	2215194	100.0	91.9	
99 N-Propylbenzene	91	16.012	16.012	0.000	89	5794088	100.0	71.3	
98 trans-1,4-Dichloro-2-buten	53	16.012	16.012	0.000	86	824645	100.0	126.0	
100 Bromobenzene	156	16.036	16.036	0.000	90	2317699	100.0	94.8	
101 1,2,3-Trichloropropane	110	16.055	16.055	0.000	89	753571	100.0	96.7	
102 1,3,5-Trimethylbenzene	105	16.207	16.207	0.000	92	4898669	100.0	82.3	
103 2-Chlorotoluene	126	16.219	16.219	0.000	89	2050550	100.0	99.7	
105 4-Chlorotoluene	126	16.353	16.347	0.006	89	2109951	100.0	97.6	
106 tert-Butylbenzene	134	16.645	16.645	0.000	91	1400301	100.0	104.6	
107 1,2,4-Trimethylbenzene	105	16.705	16.706	-0.001	90	5039425	100.0	79.1	

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	16.912	16.906	0.006	94	5308196	100.0	79.6	
112 4-Isopropyltoluene	119	17.058	17.058	0.000	89	4874116	100.0	84.3	
110 1,3-Dichlorobenzene	146	17.174	17.174	0.000	91	3668414	100.0	86.6	
111 1,4-Dichlorobenzene	146	17.277	17.277	0.000	85	3728690	100.0	84.8	
115 n-Butylbenzene	91	17.569	17.569	0.000	89	4261652	100.0	83.6	
116 1,2-Dichlorobenzene	146	17.776	17.776	0.000	93	3618963	100.0	86.9	
117 1,2-Dibromo-3-Chloropropan	75	18.810	18.817	-0.007	85	534195	100.0	106.6	
119 1,2,4-Trichlorobenzene	180	19.912	19.912	0.000	95	2693320	100.0	95.3	
120 Hexachlorobutadiene	225	20.033	20.033	0.000	95	962421	100.0	104.2	
121 Naphthalene	128	20.350	20.350	0.000	97	6057268	100.0	81.4	
122 1,2,3-Trichlorobenzene	180	20.727	20.727	0.000	94	2630364	100.0	96.9	
S 123 1,2-Dichloroethene, Total	1				0			196.0	
S 124 1,3-Dichloropropene, Total	1				0			208.0	
S 125 Total BTEX	1				0			445.3	
S 126 Xylenes, Total	1				0			194.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00138

Amount Added: 50.00

Units: uL

GAS CORP mix_00308

Amount Added: 50.00

Units: uL

P 8260 IS_00335

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00309

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37189.D

Injection Date: 22-Oct-2018 18:02:30

Instrument ID: HP5973P

Operator ID: OI/RF

Lims ID: IC 7

Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL

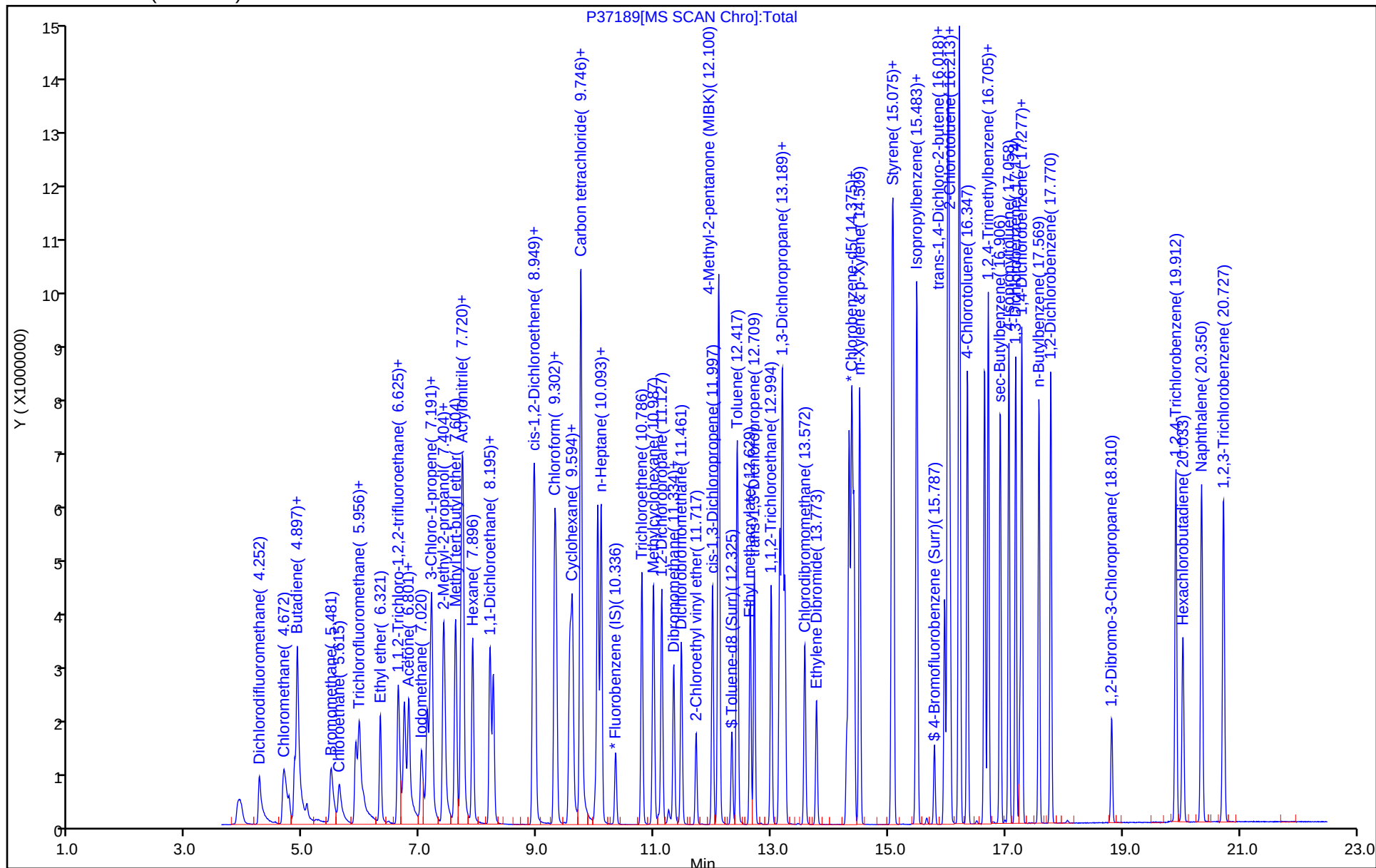
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37189.D

Injection Date: 22-Oct-2018 18:02:30

Instrument ID: HP5973P

Lims ID: IC 7

Client ID:

Operator ID: OI/RF

ALS Bottle#:

13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

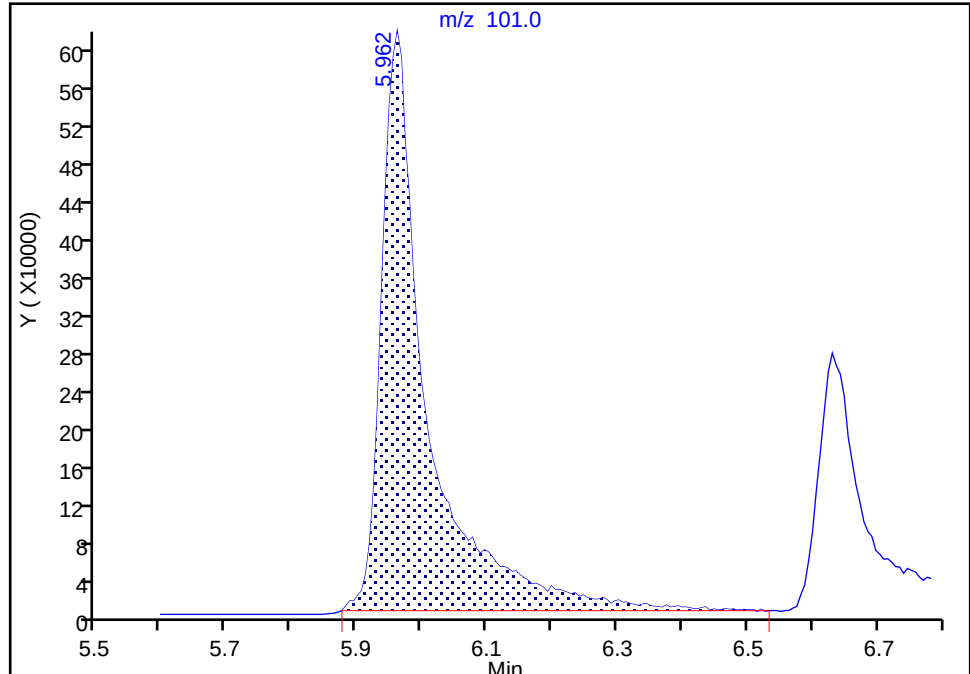
MS SCAN

14 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

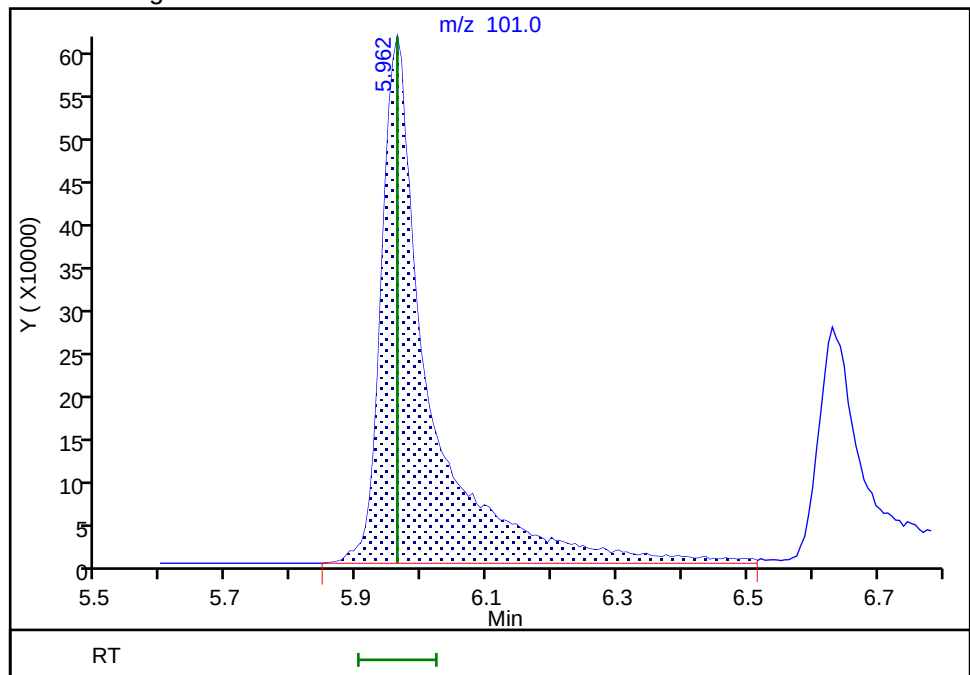
RT: 5.96
Area: 3002416
Amount: 97.312878
Amount Units: ug/L

Processing Integration Results



RT: 5.96
Area: 3154148
Amount: 102.5036
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 23-Oct-2018 00:08:50

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37189.D

Injection Date: 22-Oct-2018 18:02:30

Instrument ID: HP5973P

Lims ID: IC 7

Client ID:

Operator ID: OI/RF

ALS Bottle#:

13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

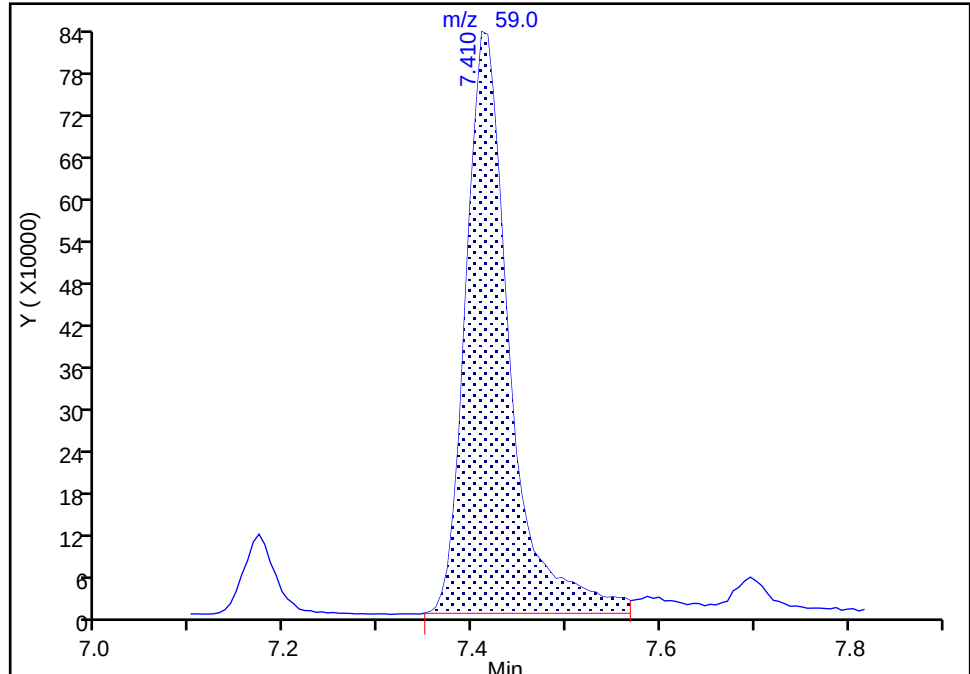
Detector: MS SCAN

33 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

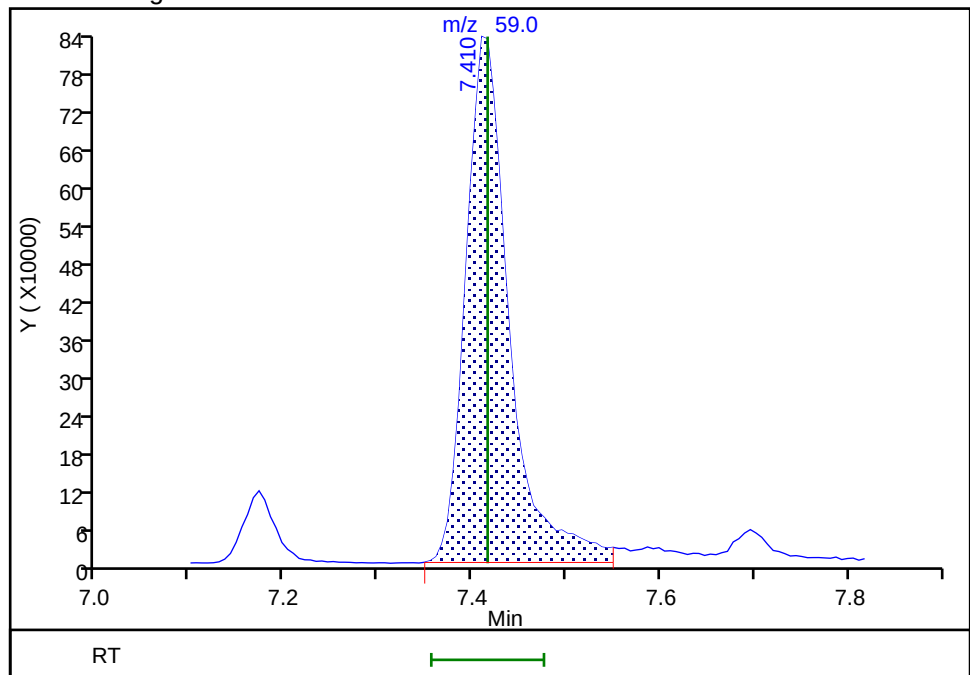
RT: 7.41
Area: 2693024
Amount: 1207.4920
Amount Units: ug/L

Processing Integration Results



RT: 7.41
Area: 2674530
Amount: 1185.8385
Amount Units: ug/L

Manual Integration Results



Reviewer: baroner, 23-Oct-2018 00:06:23

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37189.D

Injection Date: 22-Oct-2018 18:02:30

Instrument ID: HP5973P

Lims ID: IC 7

Client ID:

Operator ID: OI/RF

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

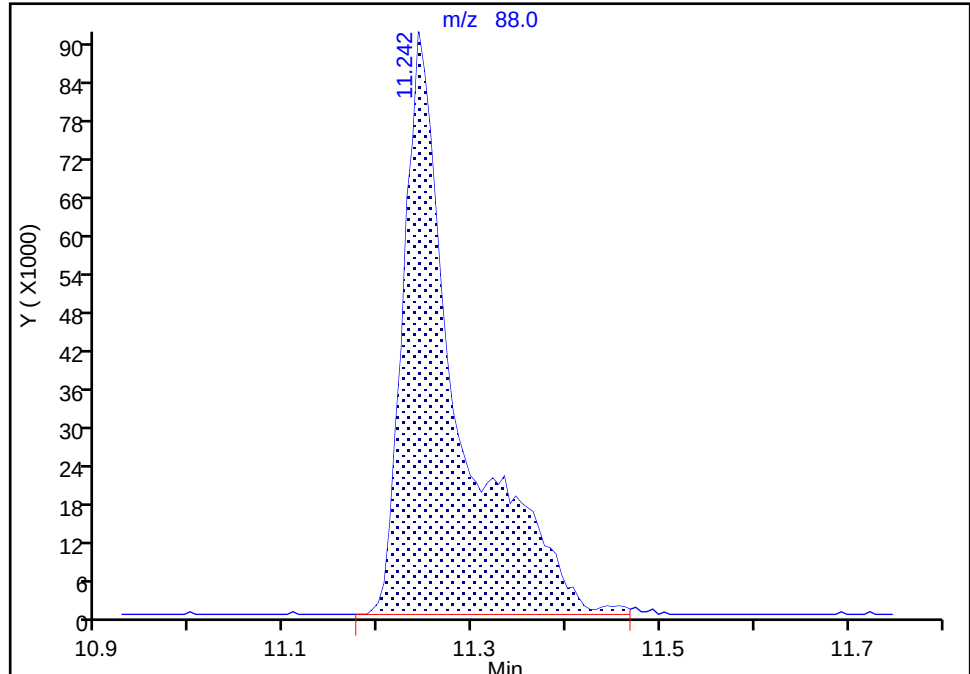
Detector: MS SCAN

68 1,4-Dioxane, CAS: 123-91-1

Signal: 1

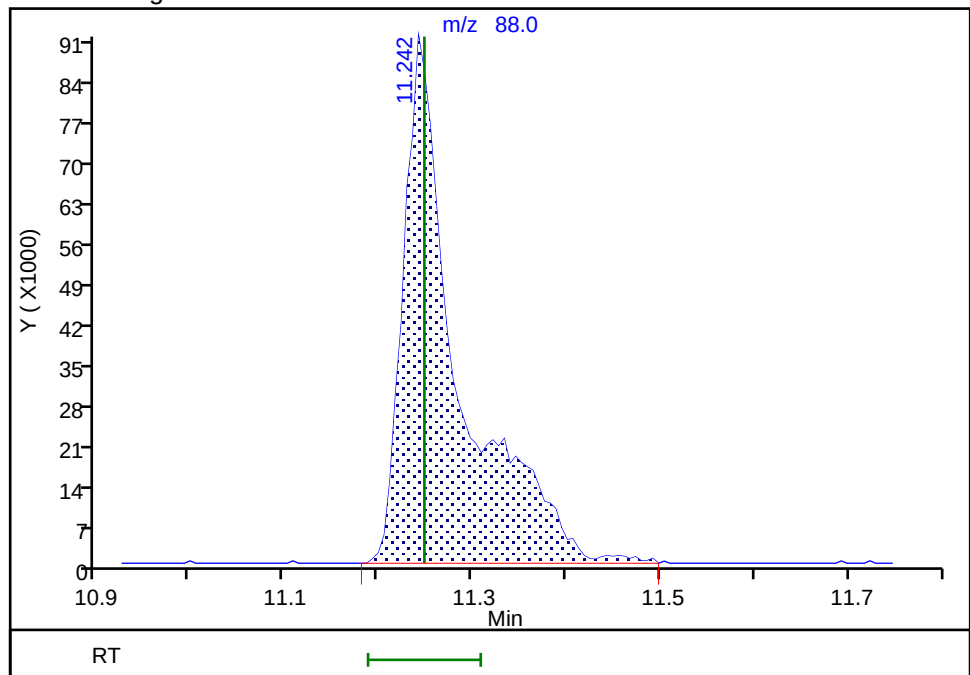
RT: 11.24
Area: 373758
Amount: 2413.1588
Amount Units: ug/L

Processing Integration Results



RT: 11.24
Area: 374765
Amount: 2418.3502
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 23-Oct-2018 08:15:16

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442312

SDG No.: _____

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2018 14:27 Calibration End Date: 10/29/2018 17:13 Calibration ID: 35209

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-442312/4	T4701.D
Level 2	IC 480-442312/5	T4702.D
Level 3	IC 480-442312/6	T4703.D
Level 4	IC 480-442312/7	T4704.D
Level 5	IC 480-442312/8	T4705.D
Level 6	ICIS 480-442312/9	T4706.D
Level 7	IC 480-442312/10	T4707.D
Level 8	IC 480-442312/11	T4708.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	+++++	2.0561	1.9417	2.5928	2.1906	Ave		2.3060			0.1000	12.0		20.0			
	2.2383	2.4374	2.6849														
Chloromethane	2.2941	2.1497	2.1478	2.3511	2.1677	Ave		2.2353			0.1000	3.7		20.0			
	2.2096	2.2284	2.3343														
Vinyl chloride	1.4974	1.3377	1.6286	1.7327	1.4590	Ave		1.6071			0.1000	10.4		20.0			
	1.6445	1.7040	1.8531														
Butadiene	1.9386	1.3756	1.4583	1.9286	1.5490	Ave		1.7320				14.0		20.0			
	1.7161	1.9002	1.9900														
Bromomethane	+++++	1.0275	1.2519	1.0244	0.8294	Ave		1.0174			0.1000	12.5		20.0			
	0.9788	0.9529	1.0572														
Chloroethane	+++++	0.8567	0.8069	0.8218	0.6858	Ave		0.8222			0.1000	8.9		20.0			
	0.8117	0.8445	0.9281														
Trichlorofluoromethane	2.4638	2.3621	2.6552	3.2270	2.7553	Ave		2.8524			0.1000	12.1		20.0			
	2.9763	3.1045	3.2752														
Dichlorofluoromethane	3.2164	2.6542	2.3726	2.9091	2.2378	Ave		2.6511				11.6		20.0			
	2.6190	2.5036	2.6958														
Ethyl ether	1.2299	1.0513	0.8894	1.1394	0.9958	Ave		1.0848				9.7		20.0			
	1.1324	1.1005	1.1401														
Acrolein	+++++	0.2992	0.2033	0.2985	0.2292	Ave		0.2474				15.2		20.0			
	0.2451	0.2189	0.2377														
1,1-Dichloroethene	1.0040	0.9510	0.7171	0.9991	0.8576	Ave		0.9266			0.1000	10.9		20.0			
	0.9157	0.9354	1.0326														
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	0.8652	0.6462	1.0500	0.9260	Ave		0.9657			0.1000	17.5		20.0			
	1.0538	1.0873	1.1313														
Acetone	0.5466	0.5223	0.4820	0.4812	0.4379	Ave		0.4767			0.1000	8.6		20.0			
	0.4631	0.4280	0.4527														
Iodomethane	2.2198	1.8055	2.2752	2.1478	1.8456	Ave		2.0804				8.2		20.0			
	2.0941	2.0716	2.1835														

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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442312
SDG No.: _____
Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 10/29/2018 14:27 Calibration End Date: 10/29/2018 17:13 Calibration ID: 35209

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	3.8567 3.5316	3.4188 3.5496	3.3169 3.9090	3.4301	2.9758	Ave		3.4985			0.1000	8.5		20.0			
Allyl chloride	++++ 2.7538	2.4039 2.7623	2.6498 2.9161	2.7500	2.3946	Ave		2.6615				7.3		20.0			
Methyl acetate	++++ 1.1982	1.1903 1.0921	1.3611 1.1406	1.3460	1.0015	Ave		1.1900			0.1000	10.9		20.0			
Methylene Chloride	++++ 1.3904	3.2424 1.3320	2.0735 1.3641	1.7629	1.3670	Lin1	1.7480	1.3234			0.1000				0.9990		0.9900
2-Methyl-2-propanol	++++ 0.1615	0.1446 0.1512	0.1402 0.1630	0.1703	0.1451	Ave		0.1537				7.4		20.0			
Methyl tert-butyl ether	4.7551 4.4487	4.3893 4.1447	4.3947 4.5202	4.7548	3.7797	Ave		4.3484			0.1000	8.1		20.0			
trans-1,2-Dichloroethene	1.0253 1.2331	1.2513 1.2875	1.2048 1.3604	1.2455	1.1573	Ave		1.2206			0.1000	8.1		20.0			
Acrylonitrile	0.6331 0.6298	0.5587 0.5662	0.6436 0.6089	0.6414	0.5539	Ave		0.6044				6.4		20.0			
Hexane	2.5042 2.2327	2.2628 2.3437	1.5786 2.4838	2.2351	1.9332	Ave		2.1968				13.9		20.0			
1,1-Dichloroethane	2.1460 2.7369	2.5270 2.7072	2.9014 2.8909	2.8668	2.3768	Ave		2.6441			0.2000	10.3		20.0			
Vinyl acetate	3.0770 3.5491	2.9200 3.3914	3.4582 3.6667	3.4964	2.9547	Ave		3.3142				8.7		20.0			
2,2-Dichloropropane	2.2795 2.4148	2.2949 2.4305	2.2815 2.7057	2.4479	2.0255	Ave		2.3600				8.2		20.0			
cis-1,2-Dichloroethene	++++ 1.4704	1.6250 1.5063	1.6658 1.5484	1.5676	1.3217	Ave		1.5293			0.1000	7.4		20.0			
2-Butanone (MEK)	0.7281 0.7215	0.6279 0.6467	0.7083 0.7304	0.7514	0.6568	Ave		0.6964			0.1000	6.6		20.0			
Chlorobromomethane	++++ 0.7120	0.5535 0.7584	0.7239 0.7813	0.8690	0.7336	Ave		0.7331				13.0		20.0			
Tetrahydrofuran	++++ 0.4697	0.5075 0.4480	0.4445 0.4483	0.4634	0.3978	Ave		0.4542				7.3		20.0			
Chloroform	3.0400 2.9218	2.7728 2.8436	2.8945 2.9705	3.0045	2.5567	Ave		2.8756			0.2000	5.4		20.0			
1,1,1-Trichloroethane	2.4284 2.7756	2.8725 2.7888	2.2880 3.1219	2.7333	2.3199	Ave		2.6661			0.1000	11.0		20.0			
Cyclohexane	++++ 2.7788	2.8563 2.9497	1.7917 3.2024	2.8094	2.4637	Ave		2.6932			0.1000	16.9		20.0			
Carbon tetrachloride	2.1149 2.4311	2.0894 2.5770	1.8136 2.8924	2.2765	2.1046	Ave		2.2874			0.1000	14.8		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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442312
SDG No.: _____
Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 10/29/2018 14:27 Calibration End Date: 10/29/2018 17:13 Calibration ID: 35209

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	++++ 1.9011	1.9442 1.9916	1.7801 2.1431	1.8548	1.6902	Ave		1.9007				7.7		20.0			
Benzene	5.4331 5.0419	5.1977 4.9272	4.8285 5.2232	5.4523	4.3346	Ave		5.0548			0.5000	7.2		20.0			
Isobutyl alcohol	++++ 0.0649	0.0725 0.0608	0.0443 0.0654	0.0619	0.0559	Ave		0.0608				14.6		20.0			
1,2-Dichloroethane	++++ 3.0902	2.7573 2.8893	2.6151 3.0473	3.2776	2.6151	Ave		2.8989			0.1000	8.7		20.0			
n-Heptane	++++ 2.6873	2.4383 2.7823	2.0977 2.9378	2.5080	2.4880	Ave		2.5628				10.6		20.0			
Trichloroethene	1.7190 1.5271	1.4770 1.5094	1.4850 1.5863	1.6086	1.4158	Ave		1.5410			0.2000	6.1		20.0			
Methylcyclohexane	++++ 2.0802	1.8648 2.2476	1.6180 2.4909	2.0031	1.9875	Ave		2.0417			0.1000	13.6		20.0			
1,2-Dichloropropane	1.6369 1.4426	1.3641 1.3978	1.4394 1.5044	1.5147	1.3053	Ave		1.4507			0.1000	7.1		20.0			
Dibromomethane	++++ 1.0086	0.8686 0.9528	0.9862 1.0121	0.9827	0.8577	Ave		0.9527			0.1000	6.7		20.0			
1,4-Dioxane	++++ 0.0030	++++ 0.0029	0.0024 0.0025	0.0032	0.0027	Ave		0.0028				11.2		20.0			
Bromodichloromethane	2.2061 2.3139	2.1615 2.2042	2.1920 2.4593	2.1021	1.8835	Ave		2.1903			0.2000	7.5		20.0			
2-Chloroethyl vinyl ether	0.8218 1.0063	1.0382 0.9627	0.9400 1.0416	1.0615	0.8871	Ave		0.9699				8.6		20.0			
cis-1,3-Dichloropropene	2.0792 2.2410	1.9969 2.2121	1.8793 2.4149	2.2556	1.7903	Ave		2.1087			0.2000	10.0		20.0			
4-Methyl-2-pentanone (MIBK)	0.3738 0.4353	0.3703 0.4213	0.3934 0.4114	0.4197	0.3870	Ave		0.4015			0.1000	5.9		20.0			
Toluene	1.1323 0.8975	1.0023 0.9526	0.8986 0.9439	0.9384	0.8247	Ave		0.9488			0.4000	9.5		20.0			
trans-1,3-Dichloropropene	++++ 0.6340	0.4903 0.6432	0.6018 0.6424	0.5544	0.5127	Ave		0.5827			0.1000	11.0		20.0			
Ethyl methacrylate	++++ 0.4275	0.4243 0.4321	0.3938 0.4353	0.3863	0.4038	Ave		0.4147				4.8		20.0			
1,1,2-Trichloroethane	++++ 0.2583	0.2179 0.2618	0.2679 0.2584	0.2638	0.2459	Ave		0.2534			0.1000	6.8		20.0			
Tetrachloroethene	0.3646 0.4419	0.5131 0.4605	0.3932 0.4507	0.4161	0.4102	Ave		0.4313			0.2000	10.6		20.0			
1,3-Dichloropropane	0.6312 0.5940	0.5621 0.5660	0.5995 0.5598	0.5933	0.5610	Ave		0.5833				4.4		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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442312
SDG No.: _____
Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 10/29/2018 14:27 Calibration End Date: 10/29/2018 17:13 Calibration ID: 35209

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.2748 0.3005	0.2686 0.2848	0.2836 0.2795	0.2787	0.2686	Ave		0.2799			0.1000	3.7		20.0			
Dibromochloromethane	++++ 0.4298	0.4082 0.4564	0.3898 0.4649	0.3910	0.3676	Ave		0.4154			0.1000	8.7		20.0			
1,2-Dibromoethane	0.3719 0.3578	0.2508 0.3280	0.3522 0.3377	0.3466	0.3188	Ave		0.3330				11.2		20.0			
Chlorobenzene	++++ 1.0851	0.9110 1.0623	1.0999 1.0717	1.0431	1.0116	Ave		1.0407			0.5000	6.2		20.0			
Ethylbenzene	1.9568 1.9123	2.0233 1.9235	1.8983 1.9380	1.9270	1.7001	Ave		1.9099			0.1000	4.9		20.0			
1,1,1,2-Tetrachloroethane	0.4496 0.4308	0.3555 0.4318	0.3977 0.4389	0.4033	0.3709	Ave		0.4098				8.3		20.0			
m,p-Xylene	++++ 0.7239	0.7167 0.7287	0.6821 0.7376	0.7024	0.6611	Ave		0.7075			0.1000	3.9		20.0			
o-Xylene	++++ 0.7169	0.7404 0.7221	0.7294 0.7123	0.7033	0.6452	Ave		0.7099			0.3000	4.4		20.0			
Styrene	1.0659 1.2602	1.1195 1.2331	1.1887 1.2315	1.2392	1.0578	Ave		1.1745			0.3000	7.0		20.0			
Bromoform	0.2410 0.2794	0.2765 0.2988	0.1983 0.3076	0.2587	0.2238	Ave		0.2605			0.1000	14.4		20.0			
Isopropylbenzene	2.7046 3.0616	2.7097 3.3692	3.1191 3.3524	3.1498	2.7445	Ave		3.0264			0.1000	9.1		20.0			
Bromobenzene	0.9221 0.8440	0.7898 0.8655	0.8976 0.8857	0.8413	0.7354	Ave		0.8477				7.2		20.0			
1,1,2,2-Tetrachloroethane	0.6715 0.6103	0.6342 0.6156	0.5919 0.6377	0.6534	0.6053	Ave		0.6275			0.3000	4.2		20.0			
N-Propylbenzene	3.0250 3.5682	3.2711 3.7969	3.4605 3.9038	3.6301	3.1886	Ave		3.4805				8.7		20.0			
1,2,3-Trichloropropane	++++ 0.2648	0.2658 0.2493	0.2772 0.2501	0.2221	0.2568	Ave		0.2551				6.9		20.0			
trans-1,4-Dichloro-2-butene	++++ 0.2806	0.1965 0.3106	0.2211 0.3264	0.2559	0.2277	Ave		0.2598				18.6		20.0			
2-Chlorotoluene	0.6798 0.7069	0.6428 0.7366	0.7293 0.7666	0.6724	0.6319	Ave		0.6958				6.8		20.0			
1,3,5-Trimethylbenzene	2.6449 2.7225	2.3642 2.9536	2.5390 3.0132	2.7541	2.5018	Ave		2.6867				8.3		20.0			
4-Chlorotoluene	2.1533 2.3933	2.2558 2.5734	2.5117 2.5902	2.6500	2.2308	Ave		2.4198				7.8		20.0			
tert-Butylbenzene	0.5260 0.5394	0.5533 0.5940	0.5673 0.6085	0.5723	0.5123	Ave		0.5591				5.9		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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442312
SDG No.: _____
Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 10/29/2018 14:27 Calibration End Date: 10/29/2018 17:13 Calibration ID: 35209

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.6246 2.8589	2.7403 3.0977	2.7226 3.0850	3.0212	2.7737	Ave		2.8655				6.3		20.0			
sec-Butylbenzene	2.8044 3.2330	2.9450 3.5532	2.9862 3.5930	3.2346	2.9546	Ave		3.1630				9.2		20.0			
1,3-Dichlorobenzene	1.6340 1.5131	1.5194 1.5965	1.5122 1.5674	1.6848	1.4237	Ave		1.5564			0.6000	5.3		20.0			
4-Isopropyltoluene	2.3538 2.8918	2.7820 3.1769	2.8689 3.3090	3.0671	2.6703	Ave		2.8900				10.4		20.0			
1,4-Dichlorobenzene	1.5071 1.5069	1.5652 1.6398	1.6717 1.6228	1.7160	1.5318	Ave		1.5952			0.5000	5.0		20.0			
n-Butylbenzene	2.2084 2.7045	2.3803 2.9356	2.3610 2.9242	2.7656	2.3276	Ave		2.5759				11.2		20.0			
1,2-Dichlorobenzene	1.5228 1.4482	1.6198 1.5539	1.5883 1.5326	1.5572	1.3930	Ave		1.5270			0.4000	4.8		20.0			
1,2-Dibromo-3-Chloropropane	++++ 0.1486	0.1519 0.1602	0.1430 0.1690	0.1210	0.1323	Ave		0.1466			0.0500	11.1		20.0			
1,2,4-Trichlorobenzene	1.4703 1.3077	1.1778 1.3598	1.1876 1.4062	1.4313	1.2387	Ave		1.3224			0.2000	8.5		20.0			
Hexachlorobutadiene	0.6287 0.7175	0.7394 0.7872	0.7012 0.8156	0.6728	0.6316	Ave		0.7117				9.5		20.0			
Naphthalene	2.0879 2.5538	2.1108 2.6948	2.3496 2.7413	2.4606	2.3832	Ave		2.4228				10.0		20.0			
1,2,3-Trichlorobenzene	0.9840 1.1864	1.2723 1.2606	1.2165 1.3077	1.1969	1.1247	Ave		1.1936				8.6		20.0			
Dibromofluoromethane (Surr)	1.2000 1.1864	1.2734 1.1431	1.1442 1.2293	1.2229	1.2512	Ave		1.2063				3.9		20.0			
1,2-Dichloroethane-d4 (Surr)	1.8721 1.9074	1.8925 1.8865	1.8610 1.9765	1.9455	1.9610	Ave		1.9128				2.2		20.0			
Toluene-d8 (Surr)	1.1463 1.1314	1.0986 1.1007	1.0939 1.0547	1.1206	1.1551	Ave		1.1127				2.9		20.0			
4-Bromofluorobenzene (Surr)	0.4135 0.4109	0.4122 0.4002	0.3888 0.4011	0.4110	0.4222	Ave		0.4075				2.5		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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442312

SDG No.: _____

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2018 14:27 Calibration End Date: 10/29/2018 17:13 Calibration ID: 35209

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-442312/4	T4701.D
Level 2	IC 480-442312/5	T4702.D
Level 3	IC 480-442312/6	T4703.D
Level 4	IC 480-442312/7	T4704.D
Level 5	IC 480-442312/8	T4705.D
Level 6	ICIS 480-442312/9	T4706.D
Level 7	IC 480-442312/10	T4707.D
Level 8	IC 480-442312/11	T4708.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	++++ 347849	12605 788277	24601 1631155	78263	131043	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	5840 343386	13179 720670	27212 1418208	70966	129672	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	3812 255562	8201 551074	20634 1125834	52301	87277	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	4935 266697	8433 614521	18477 1209027	58214	92660	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	++++ 152110	6299 308162	15862 642269	30922	49618	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	++++ 126144	5252 273103	10223 563833	24805	41026	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	6272 462543	14481 1003995	33641 1989791	97404	164823	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorofluoromethane	FB	Ave	8188 407020	16272 809678	30061 1637795	87809	133869	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl ether	FB	Ave	3131 175991	6445 355908	11268 692634	34391	59572	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrolein	FB	Ave	++++ 190469	9170 353978	12876 722126	45054	68558	++++ 125	5.00 250	10.0 500	25.0	50.0
1,1-Dichloroethene	FB	Ave	2556 142311	5830 302506	9086 627330	30157	51302	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	++++ 163765	5304 351639	8187 687329	31694	55395	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	6958 359817	16009 692007	30537 1375036	72622	130991	2.00 125	5.00 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	5651 325442	11069 669978	28826 1326554	64829	110405	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	9818 548840	20959 1147944	42024 2374844	103536	178011	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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442312

SDG No.: _____

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2018 14:27 Calibration End Date: 10/29/2018 17:13 Calibration ID: 35209

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	++++ 427963	14737 893326	33573 1771639	83006	143245	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Methyl acetate	FB	Ave	++++ 372415	14594 706388	34490 1385935	81258	119822	++++ 50.0	2.00 100	4.00 200	10.0	20.0
Methylene Chloride	FB	Lin1	++++ 216076	19878 430785	26271 828774	53212	81776	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Methyl-2-propanol	FB	Ave	++++ 251010	8863 488897	17757 990408	51408	86828	++++ 250	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	12105 691366	26909 1340408	50612 2746176	143519	226105	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	2610 191636	7671 416393	15265 826513	37593	69230	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrylonitrile	FB	Ave	16118 978763	34250 1831148	81543 3699160	193594	331324	4.00 250	10.0 500	20.0 1000	50.0	100
Hexane	FB	Ave	6375 346978	13872 757950	20000 1509035	67466	115647	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	5463 425334	15492 875514	36760 1756342	86533	142180	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl acetate	FB	Ave	15666 1103119	35803 2193573	87629 4455356	211070	353501	0.800 50.0	2.00 100	4.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	5803 375286	14069 786029	28906 1643808	73887	121168	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	++++ 228511	9962 487154	21105 940721	47318	79065	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	9268 560635	19246 1045664	44871 2218843	113409	196447	2.00 125	5.00 250	10.0 500	25.0	50.0
Chlorobromomethane	FB	Ave	++++ 110657	3393 245276	9172 474686	26231	43886	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrahydrofuran	FB	Ave	++++ 146001	6223 289785	11264 544755	27974	47591	++++ 50.0	2.00 100	4.00 200	10.0	20.0
Chloroform	FB	Ave	7739 454068	16999 919622	36673 1804711	90689	152942	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	6182 431355	17610 901924	28988 1896686	82502	138776	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Cyclohexane	FB	Ave	++++ 431847	17511 953944	22701 1945580	84800	147381	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	FB	Ave	5384 377813	12809 833416	22978 1757245	68714	125896	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	FB	Ave	++++ 295449	11919 644100	22554 1301999	55986	101111	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	FB	Ave	13831 783552	31865 1593464	61176 3173330	164574	259299	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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442312

SDG No.: _____

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2018 14:27 Calibration End Date: 10/29/2018 17:13 Calibration ID: 35209

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	++++ 252113	11113 491876	14037 993485	46744	83552	++++ 625	25.0 1250	50.0 2500	125	250
1,2-Dichloroethane	FB	Ave	++++ 480241	16904 934427	33133 1851363	98932	156439	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Heptane	FB	Ave	++++ 417628	14948 899813	26577 1784819	75703	148831	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	FB	Ave	4376 237330	9055 488134	18815 963723	48553	84693	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Methylcyclohexane	FB	Ave	++++ 323284	11432 726885	20500 1513348	60463	118895	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	FB	Ave	4167 224188	8363 452045	18237 913980	45721	78084	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	FB	Ave	++++ 156746	5325 308126	12495 614880	29662	51310	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dioxane	CBNZ d5	Ave	++++ 34253	++++ 66471	2196 118300	7221	11527	++++ 500	++++ 1000	40.0 2000	100	200
Bromodichloromethane	FB	Ave	5616 359606	13251 712859	27772 1494144	63451	112673	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	2092 156390	6365 311333	11910 632803	32041	53069	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	5293 348265	12242 715417	23811 1467143	68082	107096	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	16762 1241591	42666 2419399	91550 4853919	239280	418865	2.00 125	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZ d5	Ave	10154 511999	23097 1094178	41821 2227531	107001	178530	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	++++ 361676	11300 738813	28009 1515984	63211	110994	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	++++ 243884	9779 496315	18326 1027348	44048	87420	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	++++ 147363	5021 300703	12467 609823	30079	53222	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	3270 252075	11824 528891	18302 1063589	47443	88806	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	5660 338836	12953 650126	27900 1321049	67647	121448	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	CBNZ d5	Ave	12323 857158	30946 1635619	66003 3297735	158871	290731	2.00 125	5.00 250	10.0 500	25.0	50.0
Dibromochloromethane	CBNZ d5	Ave	++++ 245190	9406 524174	18141 1097169	44589	79583	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	3335 204113	5779 376742	16393 796858	39519	69014	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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442312

SDG No.: _____

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2018 14:27 Calibration End Date: 10/29/2018 17:13 Calibration ID: 35209

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	+++++ 619007	20994 1220124	51190 2529280	118942	218978	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	17548 1090898	46628 2209240	88350 4573618	219729	368035	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	4032 245741	8192 495902	18511 1035898	45990	80288	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
m,p-Xylene	CBNZ d5	Ave	+++++ 412989	16517 836925	31745 1740706	80094	143107	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	CBNZ d5	Ave	+++++ 408960	17062 829403	33948 1680978	80196	139659	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	CBNZ d5	Ave	9559 718906	25798 1416356	55325 2906371	141296	228980	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	CBNZ d5	Ave	2161 159394	6371 343204	9228 725989	29503	48451	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	15349 1120145	37020 2320511	87654 4697157	217365	364686	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	5233 308803	10790 596098	25224 1241011	58055	97719	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	3811 223284	8665 423968	16635 893444	45093	80428	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	17167 1305489	44690 2615068	97247 5469704	250511	423698	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 96874	3631 171705	7789 350421	15324	34120	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 102655	2684 213929	6212 457395	17663	30252	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	3858 258627	8782 507316	20496 1074059	46399	83971	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	15010 996099	32300 2034274	71350 4221873	190058	332427	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	12220 875632	30818 1772394	70584 3629197	182879	296421	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	2985 197336	7559 409127	15941 852639	39496	68078	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	14895 1046008	37438 2133506	76511 4322479	208490	368559	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	15915 1182866	40234 2447190	83918 5034219	223221	392606	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	9273 553585	20758 1099592	42496 2196165	116269	189177	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	13358 1058042	38007 2188067	80623 4636401	211662	354823	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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442312

SDG No.: _____

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2018 14:27 Calibration End Date: 10/29/2018 17:13 Calibration ID: 35209

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	8553 551333	21384 1129420	46979 2273808	118420	203539	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	12533 989488	32520 2021882	66349 4097215	190853	309286	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	8642 529848	22130 1070232	44634 2147431	107463	185104	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	++++ 54355	2075 110333	4019 236797	8352	17585	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	8344 478447	16091 936529	33375 1970212	98771	164595	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	3568 262512	10101 542166	19705 1142799	46430	83927	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	11849 934361	28837 1856035	66030 3840931	169808	316673	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	5584 434086	17382 868245	34187 1832280	82597	149444	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	190929 184374	195172 184841	181210 186708	184560	187124	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	297870 296421	290054 305043	294732 300203	293621	293275	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	642486 645460	632957 632117	636400 622238	638877	625141	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	231785 234435	237476 229823	226203 236627	234315	228506	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

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
 Lims ID: IC 0.4
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 29-Oct-2018 14:27:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 0.4
 Misc. Info.: 480-0075946-004
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 29-Oct-2018 23:41:25 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0323

First Level Reviewer: milligana

Date: 29-Oct-2018 20:54:05

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	4.589	4.589	0.000	97	159106	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.869	6.879	-0.010	93	560477	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	354691	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.133	-0.010	93	190929	25.0	24.9	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.372	4.372	0.000	0	297870	25.0	24.5	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	95	642486	25.0	25.8	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	231785	25.0	25.4	
11 Dichlorodifluoromethane	85	1.076	1.107	-0.031	24	4226	0.4000	0.2880	M
13 Chloromethane	50	1.252	1.263	-0.011	34	5840	0.4000	0.4105	M
14 Vinyl chloride	62	1.304	1.325	-0.021	28	3812	0.4000	0.3727	
151 Butadiene	54	1.325	1.346	-0.021	35	4935	0.4000	0.4477	
15 Bromomethane	94	1.594	1.594	0.000	12	4669	0.4000	0.7211	a
16 Chloroethane	64	1.636	1.656	-0.020	28	2756	0.4000	0.5267	M
17 Trichlorofluoromethane	101	1.791	1.802	-0.011	32	6272	0.4000	0.3455	M
18 Dichlorofluoromethane	67	1.802	1.833	-0.031	41	8188	0.4000	0.4853	a
19 Ethyl ether	59	2.050	2.061	-0.011	57	3131	0.4000	0.4535	
21 Acrolein	56	2.226	2.226	0.000	43	4047	2.00	2.57	
20 1,1,2-Trichloro-1,2,2-trif	101	2.278	2.257	0.021	41	1666	0.4000	0.2711	a
22 1,1-Dichloroethene	96	2.258	2.257	0.001	93	2556	0.4000	0.4334	
23 Acetone	43	2.372	2.371	0.001	20	6958	2.00	2.29	M
24 Iodomethane	142	2.413	2.403	0.010	87	5651	0.4000	0.4268	
25 Carbon disulfide	76	2.423	2.434	-0.011	94	9818	0.4000	0.4409	M
27 3-Chloro-1-propene	41	2.589	2.589	0.000	89	8737	0.4000	0.5158	M
28 Methyl acetate	43	2.631	2.631	0.000	99	10827	0.8000	1.43	
30 Methylene Chloride	84	2.714	2.724	-0.010	88	12543	0.4000	0.1684	Ma
31 2-Methyl-2-propanol	59	2.890	2.890	0.000	30	2236	4.00	2.29	
33 Methyl tert-butyl ether	73	2.910	2.910	0.000	94	12105	0.4000	0.4374	
32 trans-1,2-Dichloroethene	96	2.900	2.921	-0.021	70	2610	0.4000	0.3360	
34 Acrylonitrile	53	2.973	2.973	0.000	93	16118	4.00	4.19	
35 Hexane	57	3.066	3.076	-0.010	87	6375	0.4000	0.4560	Ma

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	3.273	3.273	0.000	38	5463	0.4000	0.3246	
39 Vinyl acetate	43	3.315	3.325	-0.010	96	15666	0.8000	0.7427	
42 2,2-Dichloropropane	77	3.719	3.719	0.000	55	5803	0.4000	0.3864	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	81	5152	0.4000	0.5293	
44 2-Butanone (MEK)	43	3.771	3.770	0.001	98	9268	2.00	2.09	Ma
47 Chlorobromomethane	128	3.936	3.936	0.000	92	2803	0.4000	0.6008	
48 Tetrahydrofuran	42	3.947	3.947	0.000	78	3365	0.8000	1.16	
50 Chloroform	83	4.009	3.998	0.011	94	7739	0.4000	0.4229	
52 Cyclohexane	56	4.081	4.092	-0.011	83	5357	0.4000	0.3125	
51 1,1,1-Trichloroethane	97	4.092	4.092	0.000	76	6182	0.4000	0.3643	
53 Carbon tetrachloride	117	4.185	4.195	-0.010	85	5384	0.4000	0.3698	a
54 1,1-Dichloropropene	75	4.206	4.206	0.000	86	3819	0.4000	0.3157	
55 Benzene	78	4.372	4.372	0.000	43	13831	0.4000	0.4299	
56 Isobutyl alcohol	43	4.403	4.403	0.000	36	2956	10.0	7.64	
57 1,2-Dichloroethane	62	4.423	4.434	-0.011	96	10496	0.4000	0.5689	
59 n-Heptane	43	4.506	4.506	0.000	69	5144	0.4000	0.3154	
60 Trichloroethene	95	4.859	4.859	0.000	89	4376	0.4000	0.4462	
62 Methylcyclohexane	83	4.942	4.942	0.000	59	3436	0.4000	0.2644	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	80	4167	0.4000	0.4514	
66 1,4-Dioxane	88		5.159				ND	ND	
65 Dibromomethane	93	5.159	5.159	0.000	84	3224	0.4000	0.5317	
67 Dichlorobromomethane	83	5.273	5.273	0.000	91	5616	0.4000	0.4029	Ma
69 2-Chloroethyl vinyl ether	63	5.480	5.491	-0.011	37	2092	0.4000	0.3389	
71 cis-1,3-Dichloropropene	75	5.594	5.594	0.000	89	5293	0.4000	0.3944	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	95	16762	2.00	1.86	
73 Toluene	92	5.802	5.812	-0.010	92	10154	0.4000	0.4774	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	54	3966	0.4000	0.3036	
77 Ethyl methacrylate	69	6.050	6.050	0.000	48	4954	0.4000	0.5328	
78 1,1,2-Trichloroethane	83	6.164	6.164	0.000	70	2967	0.4000	0.5222	Ma
79 Tetrachloroethene	166	6.206	6.206	0.000	85	3270	0.4000	0.3382	
80 1,3-Dichloropropane	76	6.289	6.289	0.000	92	5660	0.4000	0.4328	
81 2-Hexanone	43	6.330	6.330	0.000	96	12323	2.00	1.96	
82 Chlorodibromomethane	129	6.465	6.465	0.000	19	5313	0.4000	0.5705	a
83 Ethylene Dibromide	107	6.548	6.548	0.000	48	3335	0.4000	0.4468	
86 Chlorobenzene	112	6.900	6.900	0.000	72	11702	0.4000	0.5016	
88 Ethylbenzene	91	6.962	6.962	0.000	96	17548	0.4000	0.4098	
89 1,1,1,2-Tetrachloroethane	131	6.973	6.973	0.000	46	4032	0.4000	0.4388	
90 m-Xylene & p-Xylene	106	7.056	7.056	0.000	0	8049	0.4000	0.5075	
91 o-Xylene	106	7.367	7.366	0.001	96	8729	0.4000	0.5484	
92 Styrene	104	7.387	7.387	0.000	88	9559	0.4000	0.3630	Ma
93 Bromoform	173	7.584	7.584	0.000	43	2161	0.4000	0.3700	
95 Isopropylbenzene	105	7.646	7.646	0.000	96	15349	0.4000	0.3575	
97 Bromobenzene	156	7.926	7.926	0.000	82	5233	0.4000	0.4351	
98 1,1,2,2-Tetrachloroethane	83	7.968	7.968	0.000	1	3811	0.4000	0.4281	a
99 N-Propylbenzene	91	7.978	7.978	0.000	97	17167	0.4000	0.3476	
100 1,2,3-Trichloropropane	110	7.988	7.988	0.000	48	2113	0.4000	0.5837	
101 trans-1,4-Dichloro-2-buten	53	7.999	7.999	0.000	1	966	0.4000	0.2621	
105 2-Chlorotoluene	126	8.071	8.061	0.010	90	3858	0.4000	0.3908	a
104 1,3,5-Trimethylbenzene	105	8.123	8.123	0.000	90	15010	0.4000	0.3938	
102 4-Chlorotoluene	91	8.154	8.154	0.000	96	12220	0.4000	0.3559	
106 tert-Butylbenzene	134	8.382	8.382	0.000	90	2985	0.4000	0.3763	
107 1,2,4-Trimethylbenzene	105	8.424	8.423	0.001	94	14895	0.4000	0.3664	

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	8.558	8.558	0.000	94	15915	0.4000	0.3546	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	79	9273	0.4000	0.4199	
111 4-Isopropyltoluene	119	8.672	8.672	0.000	92	13358	0.4000	0.3258	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	34	8553	0.4000	0.3779	a
115 n-Butylbenzene	91	9.014	9.014	0.000	96	12533	0.4000	0.3429	
116 1,2-Dichlorobenzene	146	9.066	9.056	0.010	89	8642	0.4000	0.3989	
117 1,2-Dibromo-3-Chloropropan	75	9.740	9.729	0.011	1	1323	0.4000	0.6362	a
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	87	8344	0.4000	0.4447	a
120 Hexachlorobutadiene	225	10.486	10.475	0.011	81	3568	0.4000	0.3533	
121 Naphthalene	128	10.589	10.579	0.010	98	11849	0.4000	0.3447	a
122 1,2,3-Trichlorobenzene	180	10.786	10.786	0.000	85	5584	0.4000	0.3297	
S 124 1,2-Dichloroethene, Total	1				0			0.8653	
S 125 Total BTEX	1				0			2.37	
S 126 Xylenes, Total	1				0			1.06	
S 123 1,3-Dichloropropene, Total	1				0			0.6980	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00138	Amount Added: 0.40	Units: uL	
GAS CORP mix_00309	Amount Added: 0.40	Units: uL	
T_8260_Surr_00181	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00209	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181029-75946.b\\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

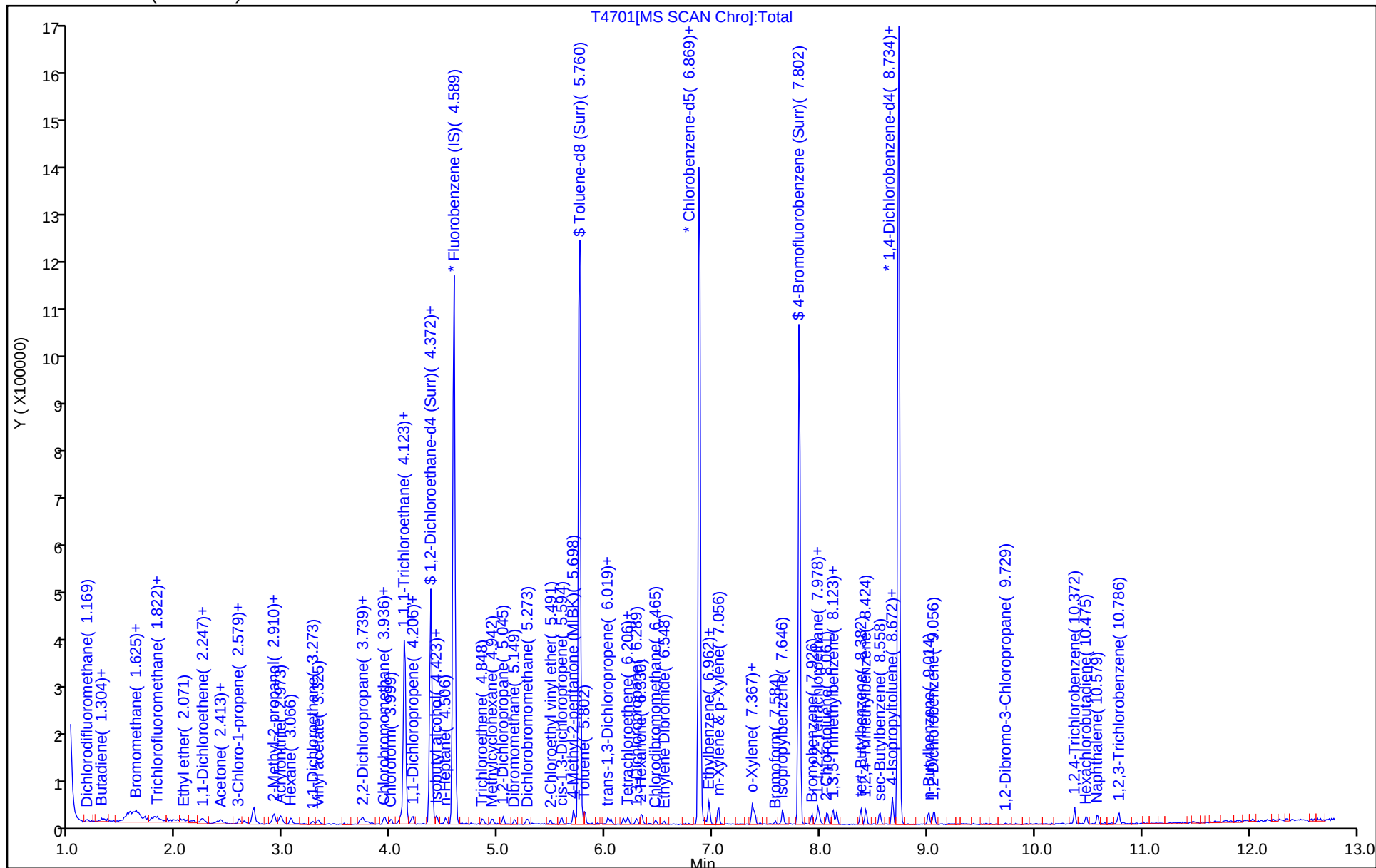
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Operator ID: KN

Worklist Smp#: 4

ALS Bottle#: 4



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

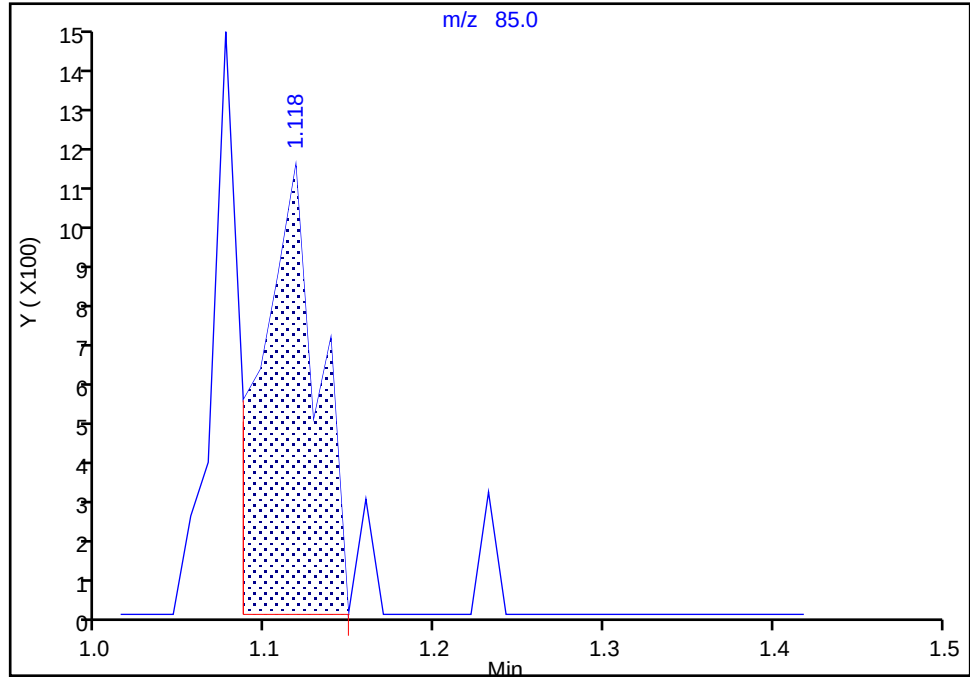
Detector: MS SCAN

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

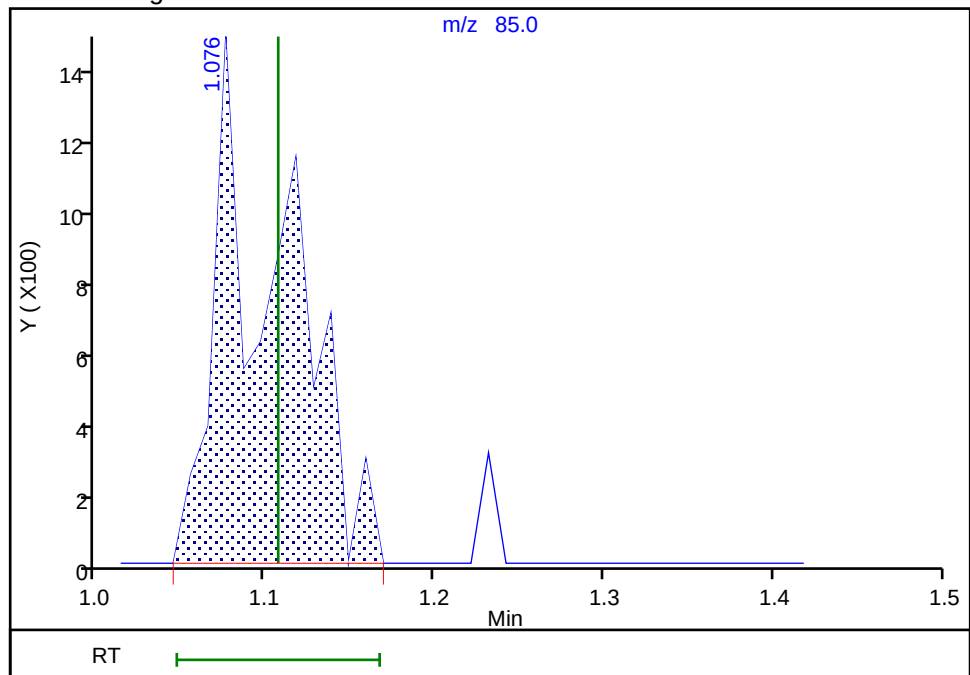
RT: 1.12
Area: 2722
Amount: 0.454558
Amount Units: ug/L

Processing Integration Results



RT: 1.08
Area: 4226
Amount: 0.287957
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:46:57

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

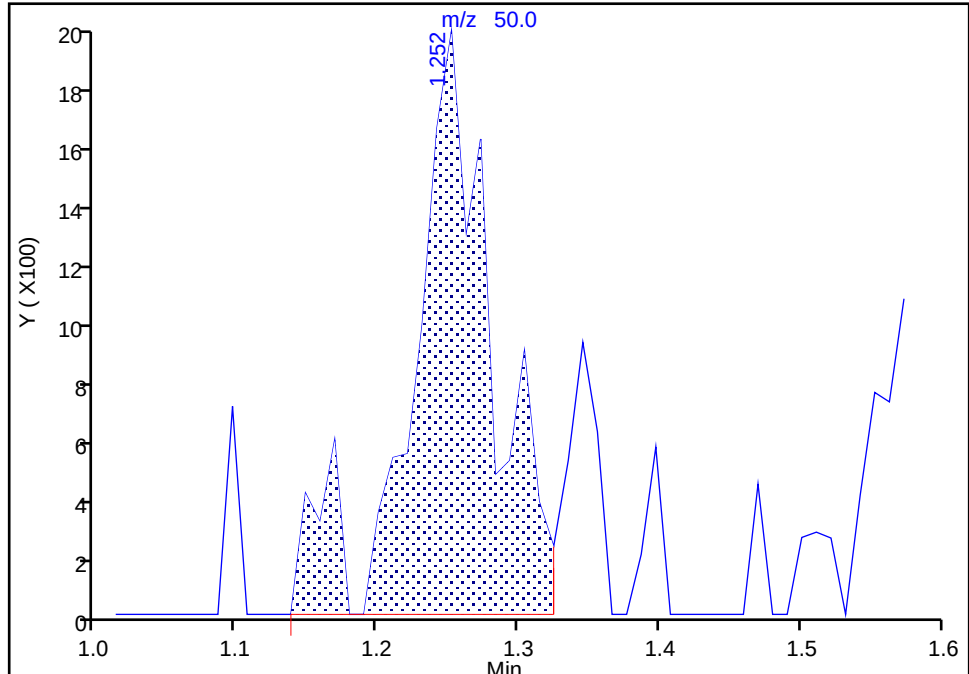
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

13 Chloromethane, CAS: 74-87-3

Signal: 1

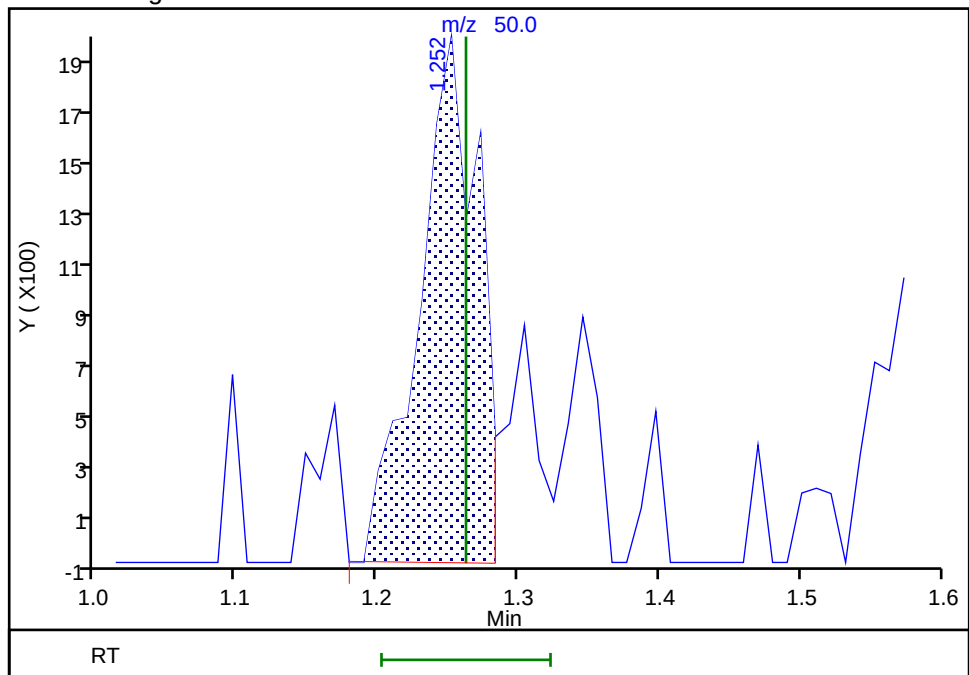
RT: 1.25
Area: 7921
Amount: 0.510773
Amount Units: ug/L

Processing Integration Results



RT: 1.25
Area: 5840
Amount: 0.410510
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:47:21
Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

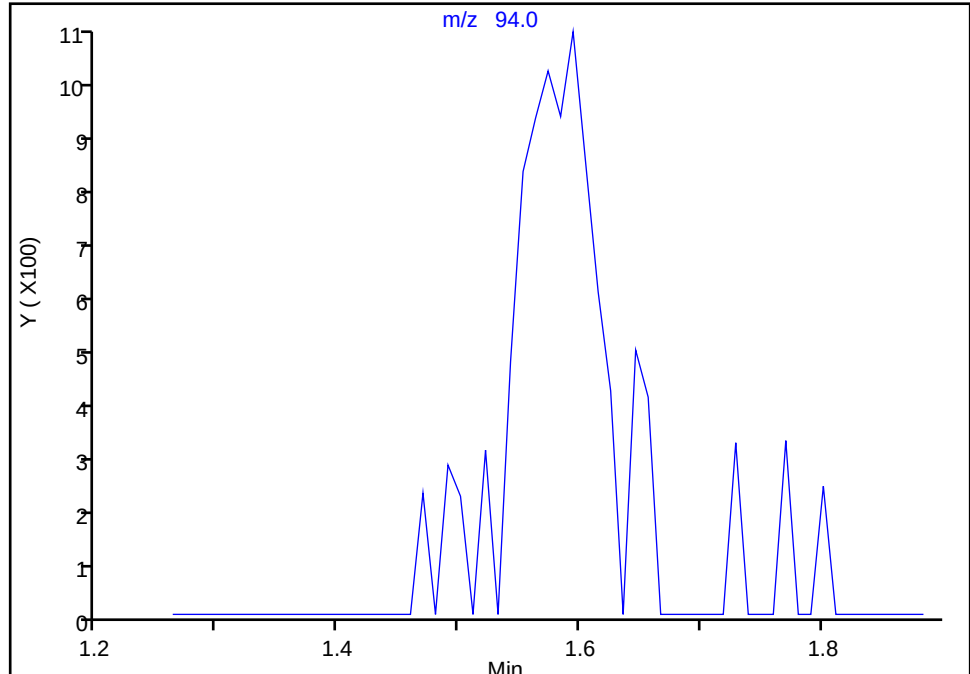
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

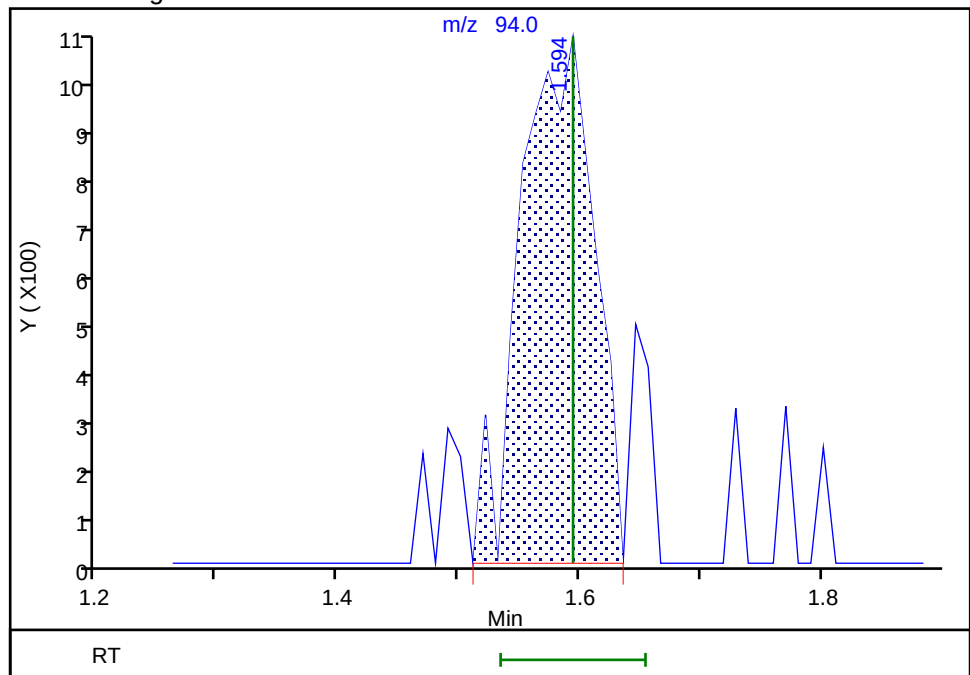
Not Detected
Expected RT: 1.59

Processing Integration Results



RT: 1.59
Area: 4669
Amount: 0.721050
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:47:37
Audit Action: Assigned Compound ID

Audit Reason: Split Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

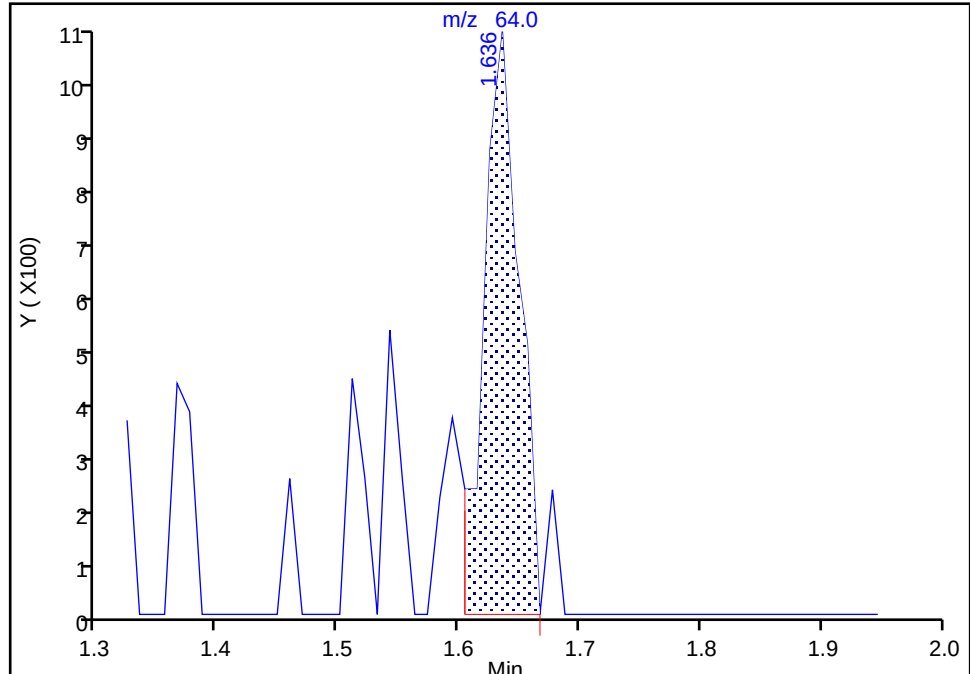
Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

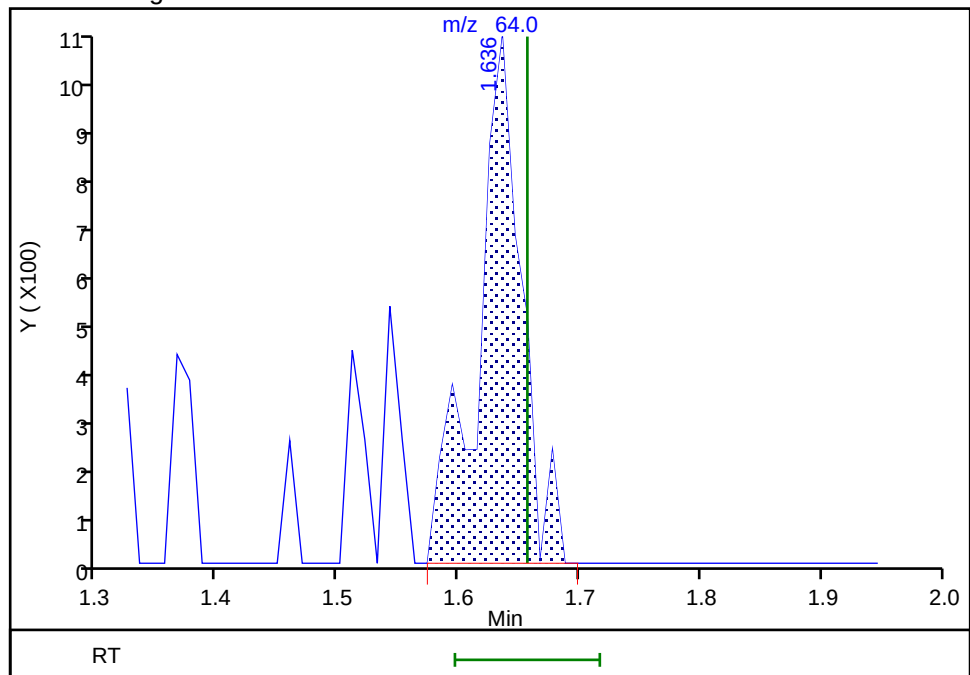
RT: 1.64
Area: 2247
Amount: 0.425506
Amount Units: ug/L

Processing Integration Results



RT: 1.64
Area: 2756
Amount: 0.526691
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:47:55

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

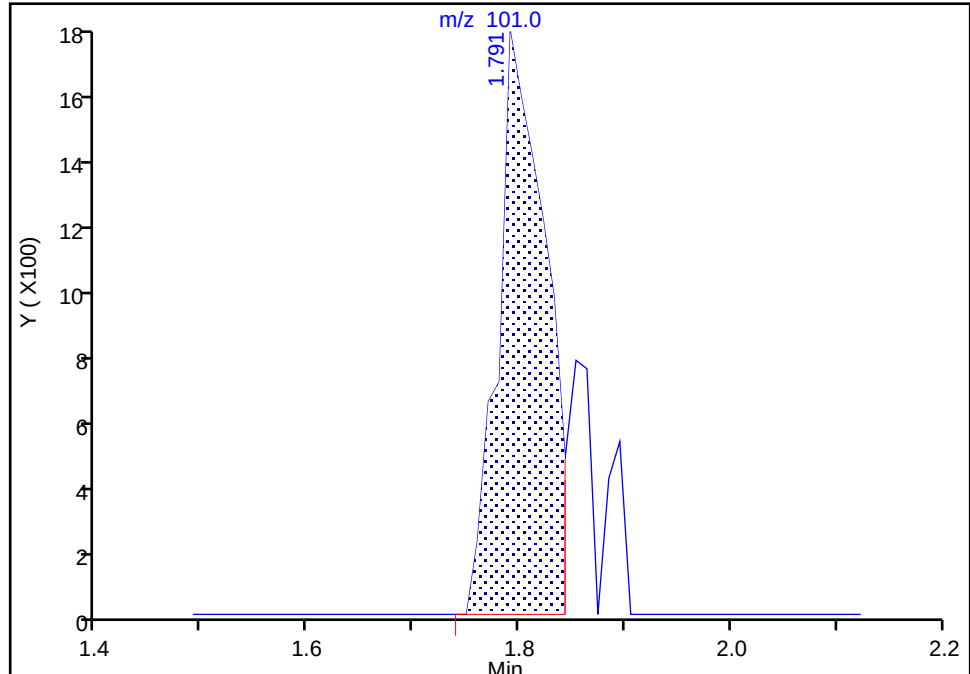
Detector: MS SCAN

17 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

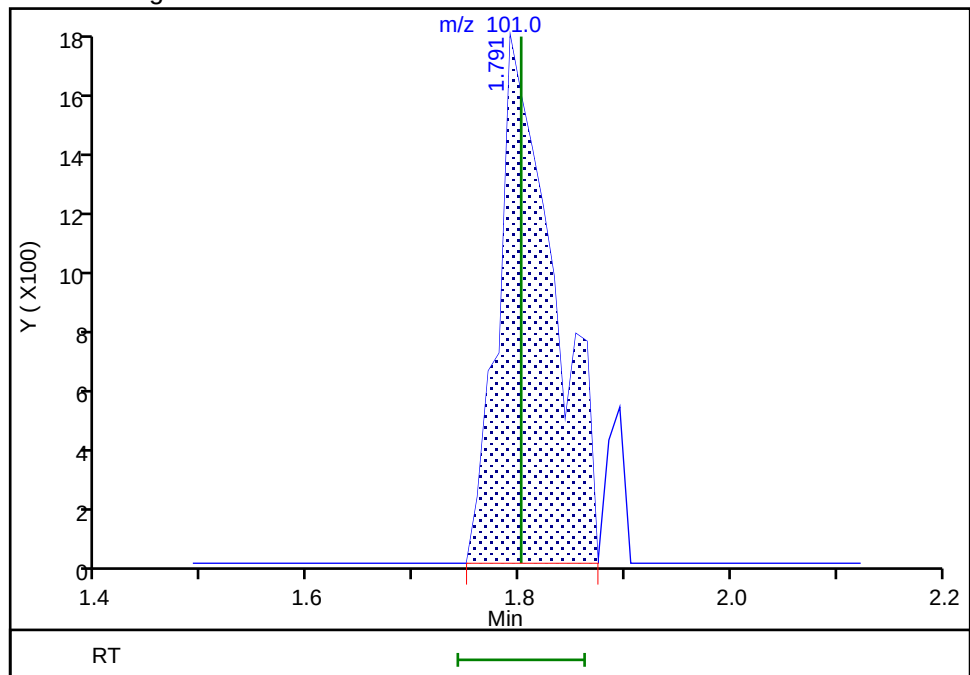
RT: 1.79
Area: 5362
Amount: 0.298081
Amount Units: ug/L

Processing Integration Results



RT: 1.79
Area: 6272
Amount: 0.345499
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:48:11

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

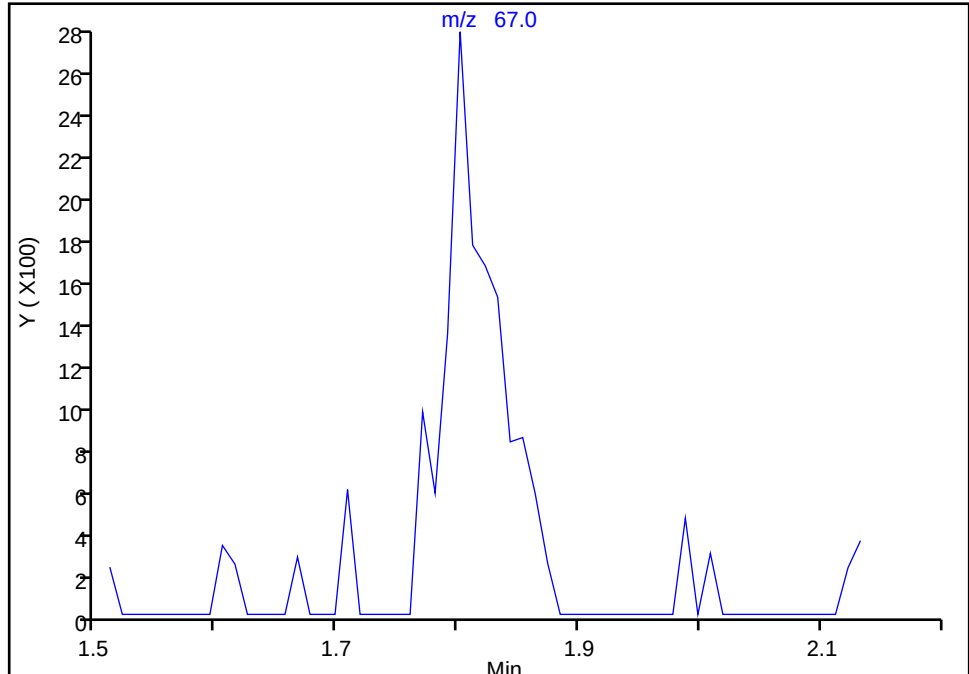
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

18 Dichlorofluoromethane, CAS: 75-43-4

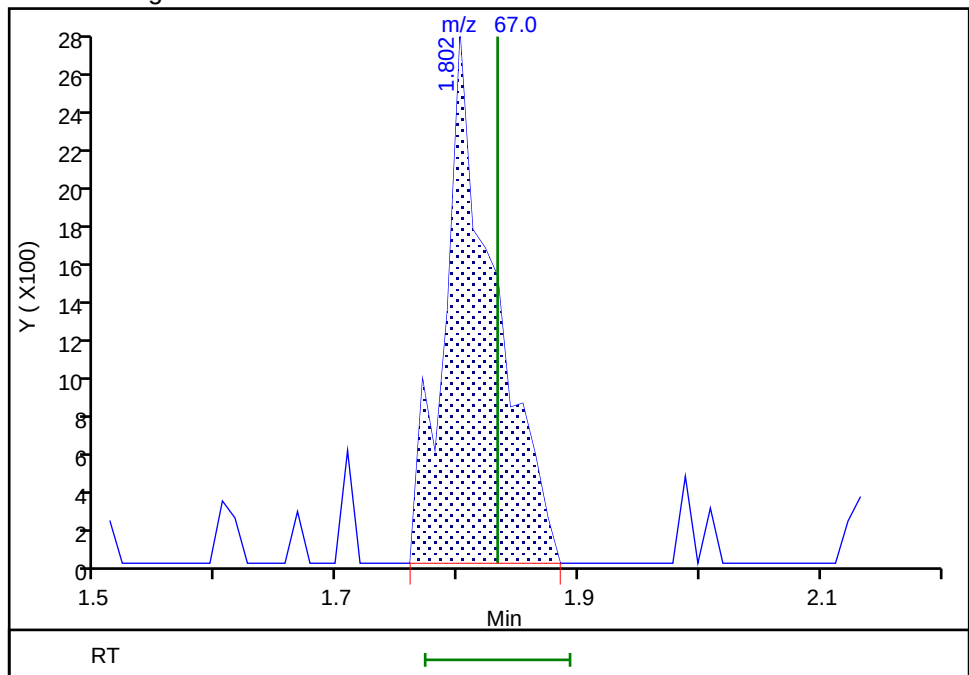
Signal: 1

Not Detected
Expected RT: 1.83

Processing Integration Results



Manual Integration Results



RT: 1.80
Area: 8188
Amount: 0.485297
Amount Units: ug/L

Reviewer: milligana, 29-Oct-2018 20:48:22
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

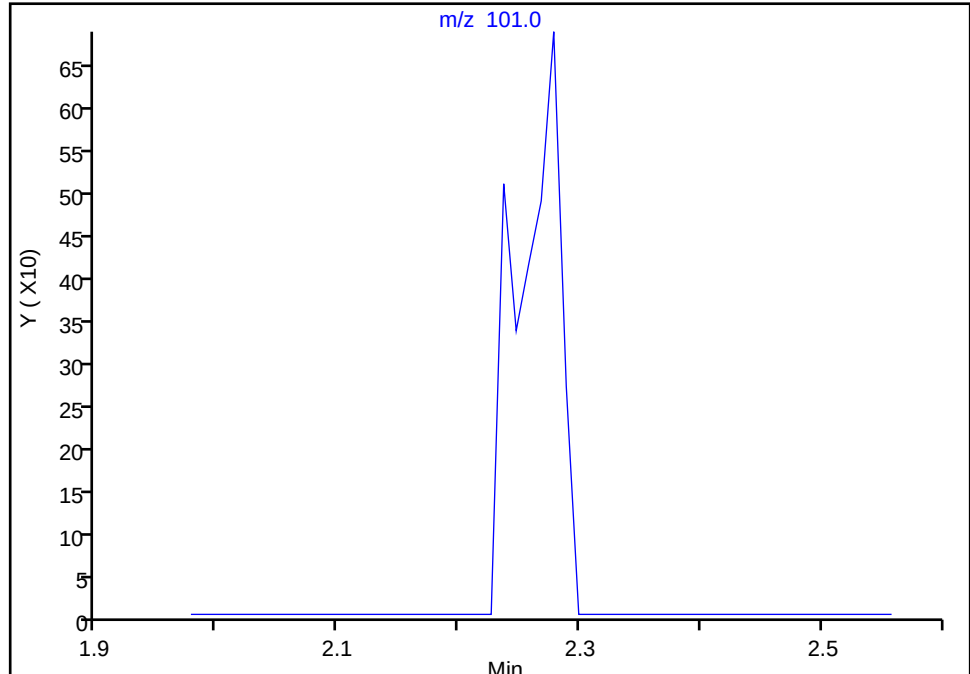
20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

Not Detected

Expected RT: 2.26

Processing Integration Results



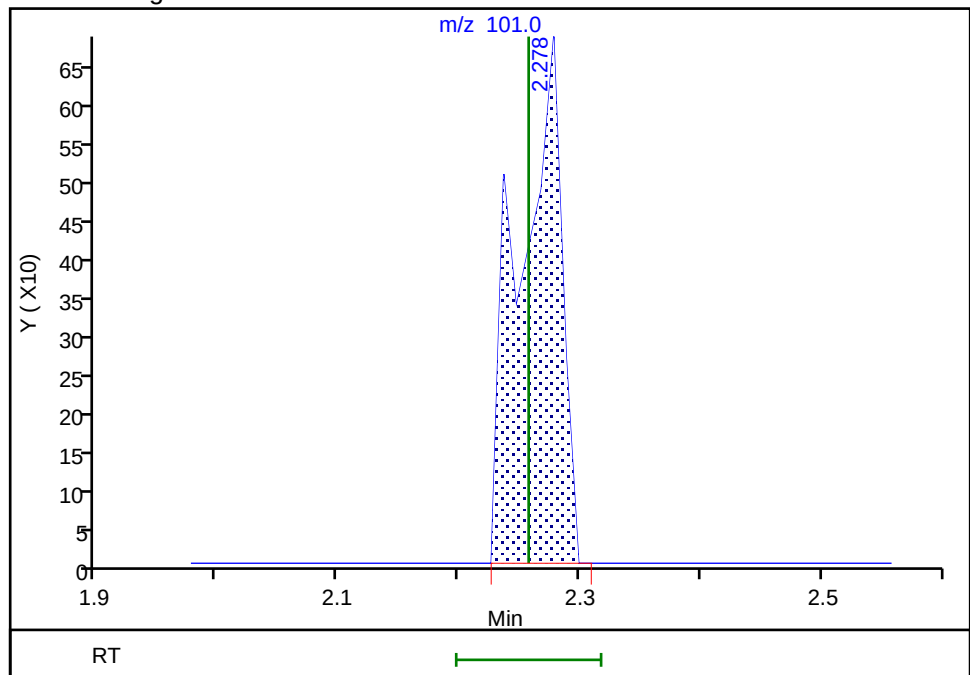
RT: 2.28

Area: 1666

Amount: 0.271077

Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:48:37

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

TestAmerica Buffalo

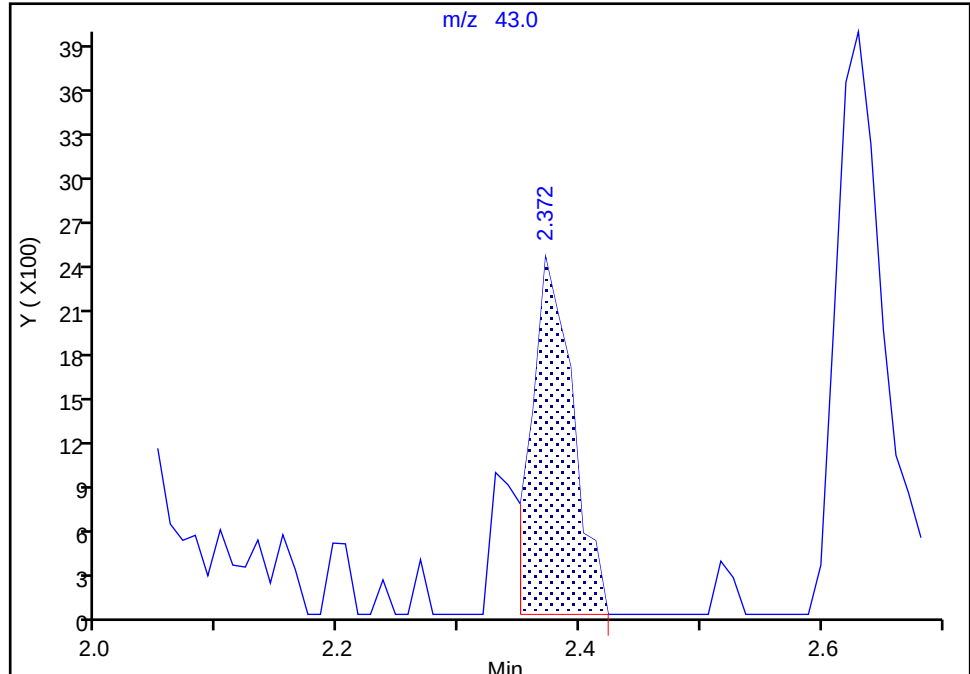
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

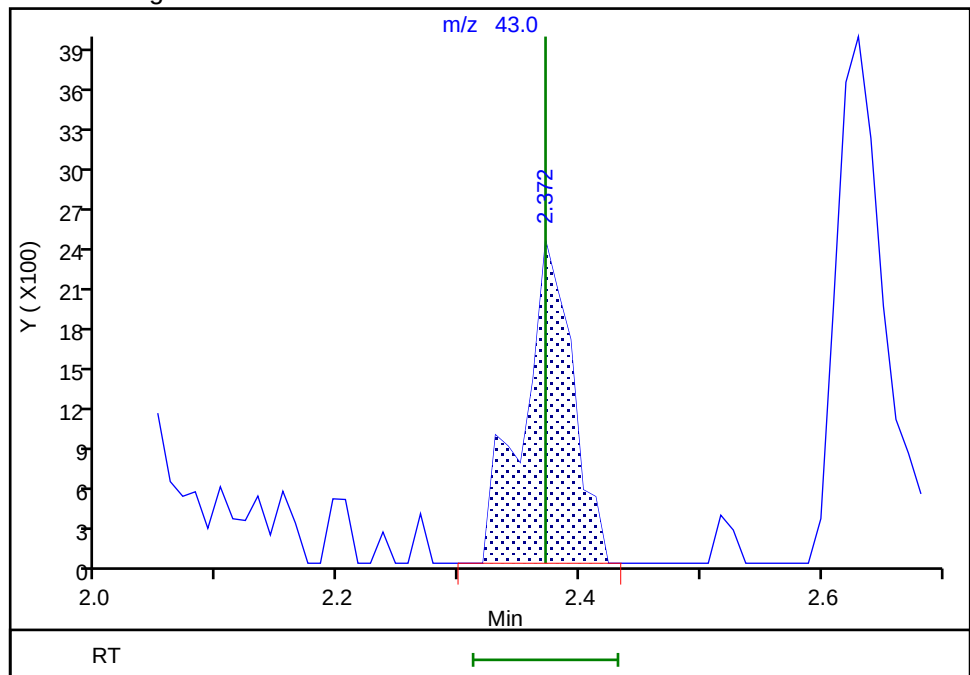
RT: 2.37
Area: 5811
Amount: 1.962472
Amount Units: ug/L

Processing Integration Results



RT: 2.37
Area: 6958
Amount: 2.293366
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:48:50
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

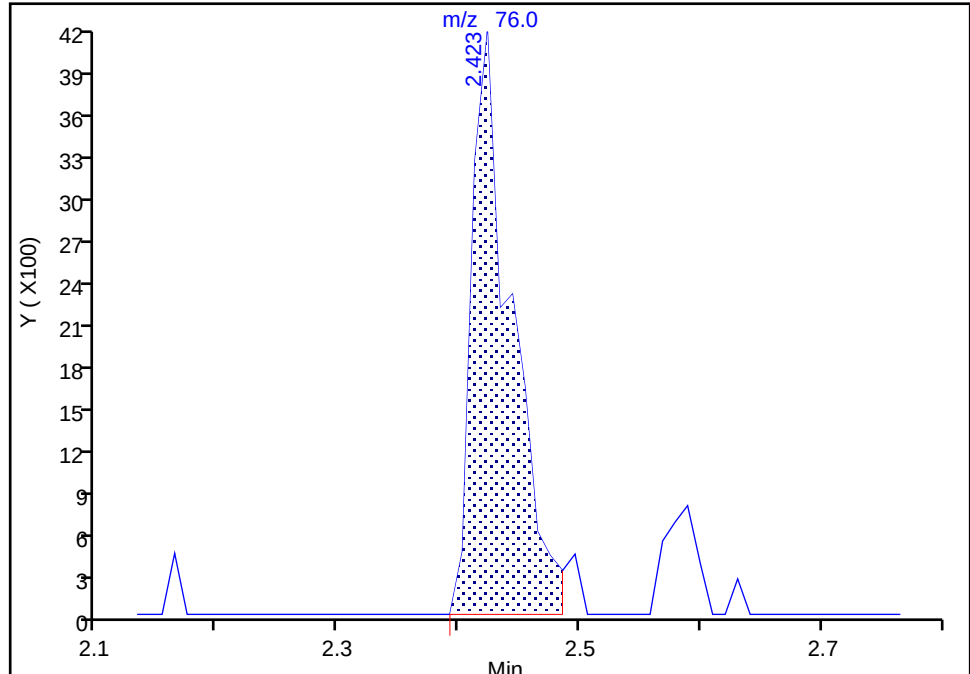
Detector: MS SCAN

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

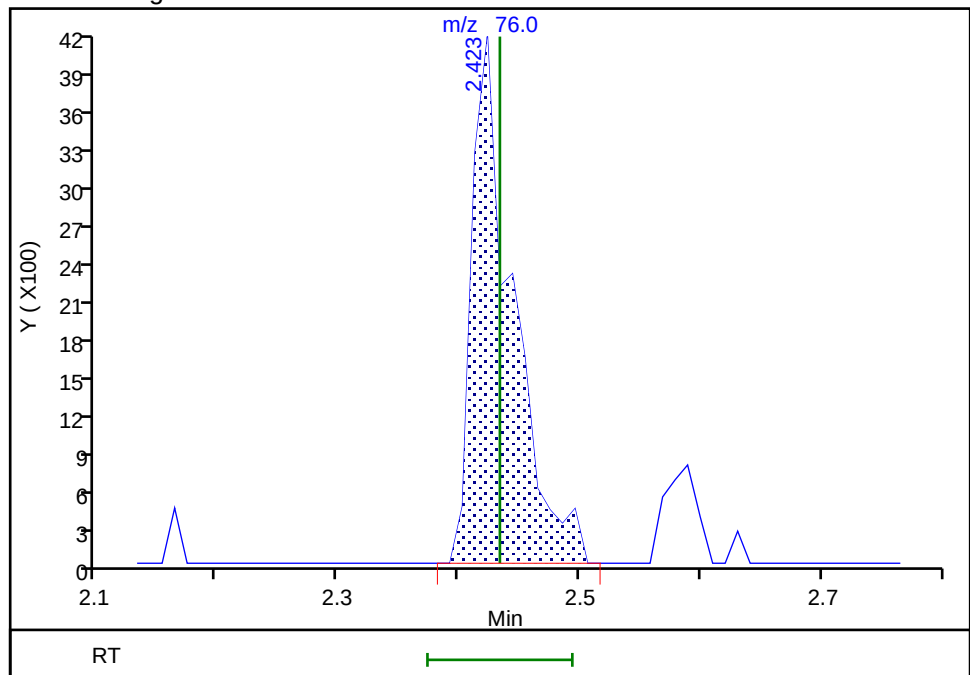
RT: 2.42
Area: 9549
Amount: 0.430494
Amount Units: ug/L

Processing Integration Results



RT: 2.42
Area: 9818
Amount: 0.440950
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:49:05

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

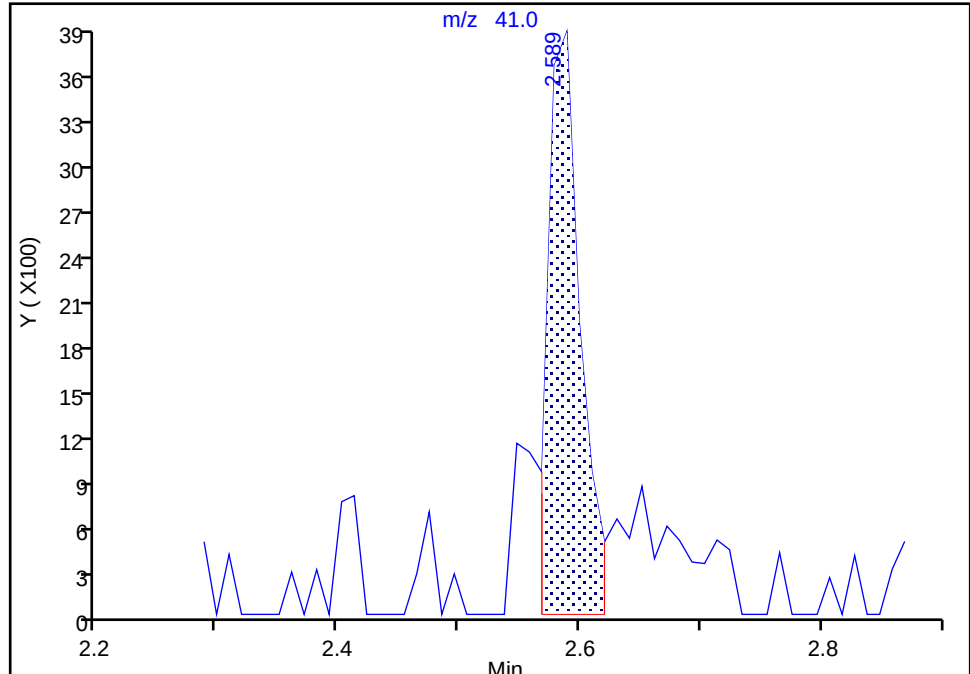
Detector: MS SCAN

27 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

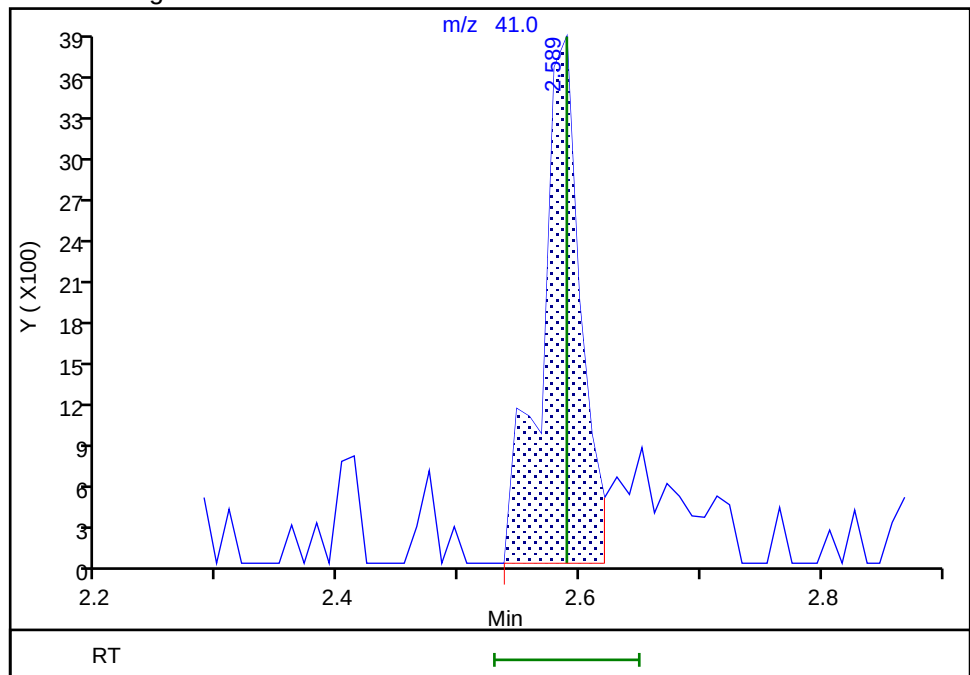
RT: 2.59
Area: 7358
Amount: 0.429779
Amount Units: ug/L

Processing Integration Results



RT: 2.59
Area: 8737
Amount: 0.515812
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:49:40

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

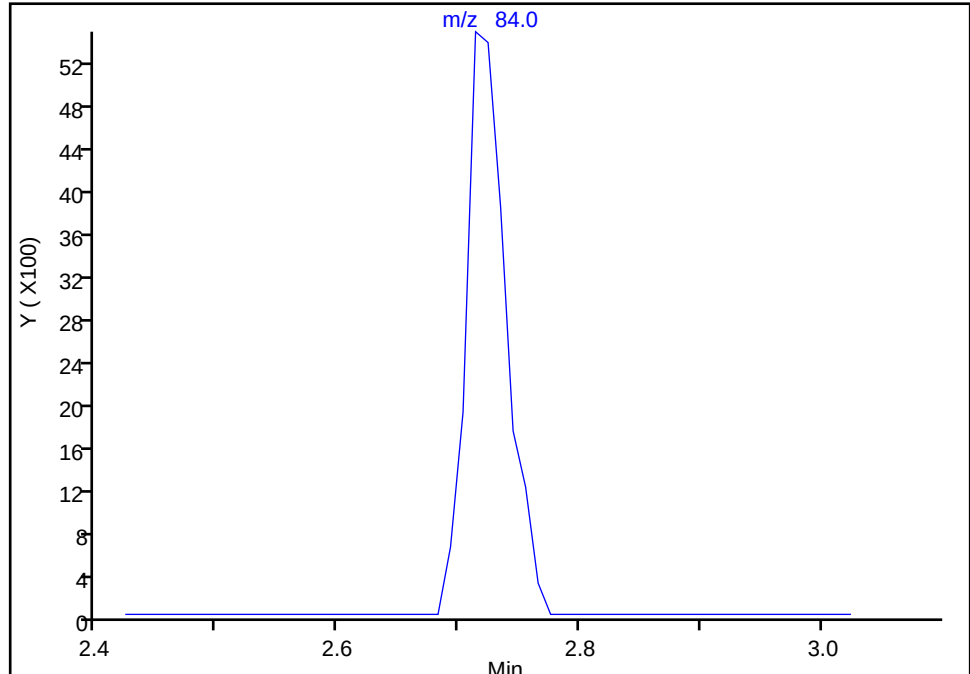
30 Methylene Chloride, CAS: 75-09-2

Signal: 1

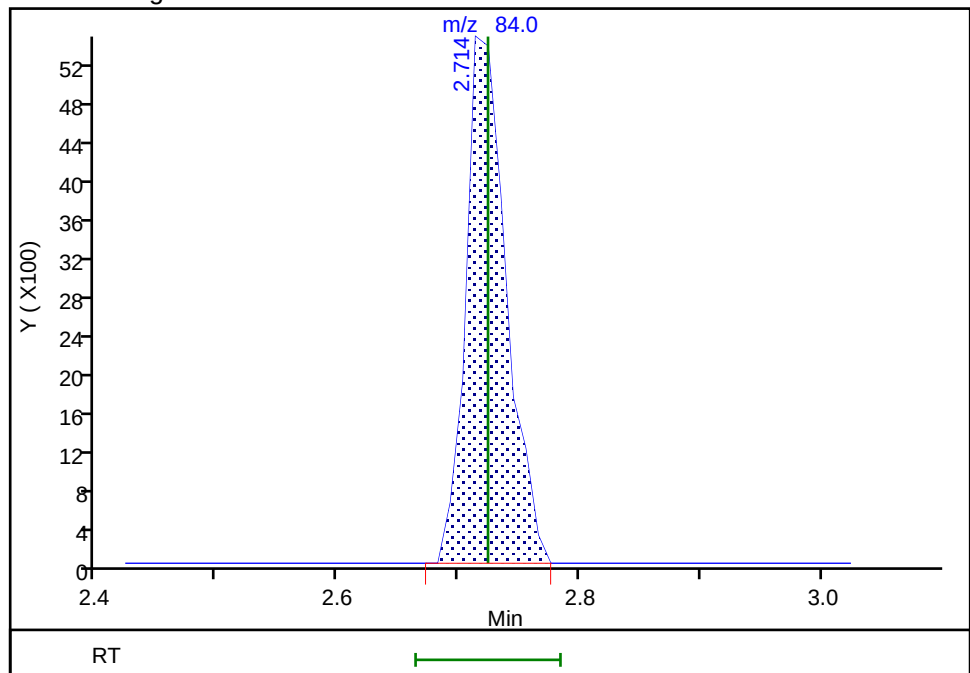
Not Detected

Expected RT: 2.72

Processing Integration Results



Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:50:03

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

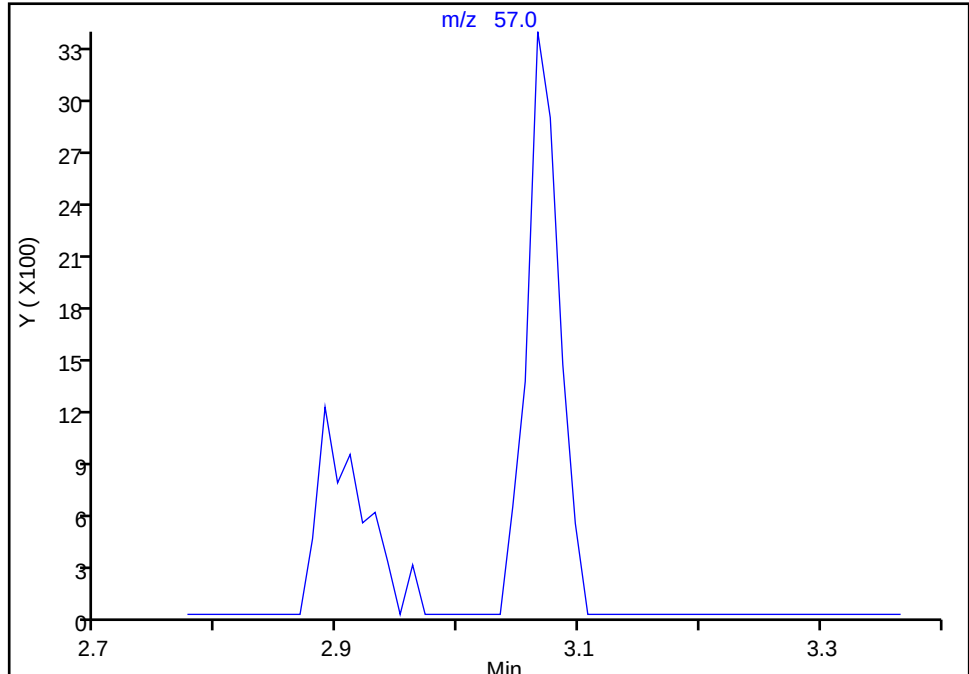
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

35 Hexane, CAS: 110-54-3

Signal: 1

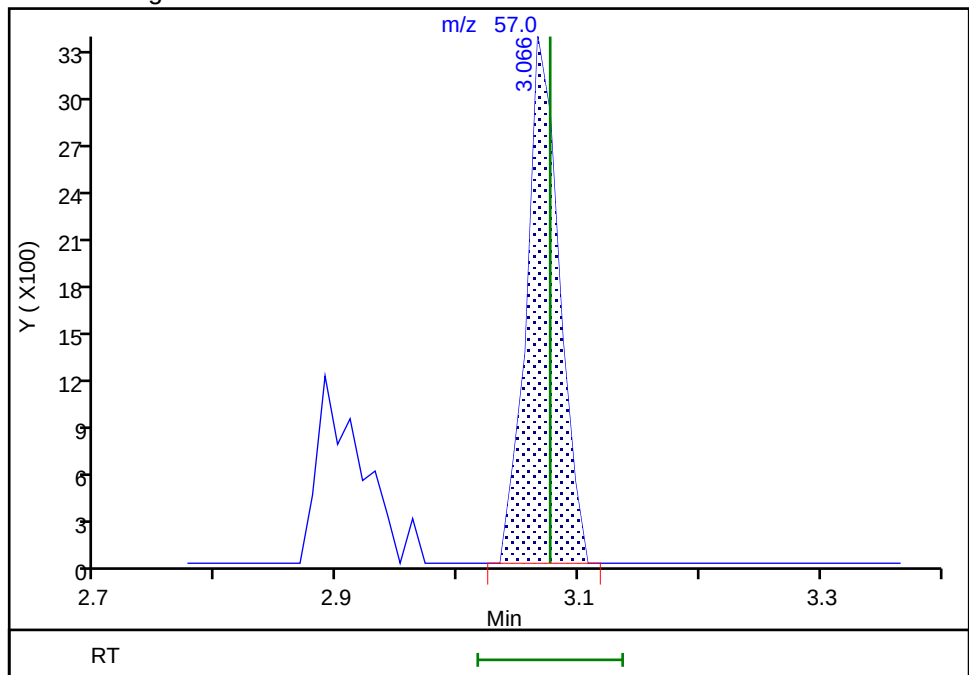
Not Detected
Expected RT: 3.08

Processing Integration Results



RT: 3.07
Area: 6375
Amount: 0.455984
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:50:28
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

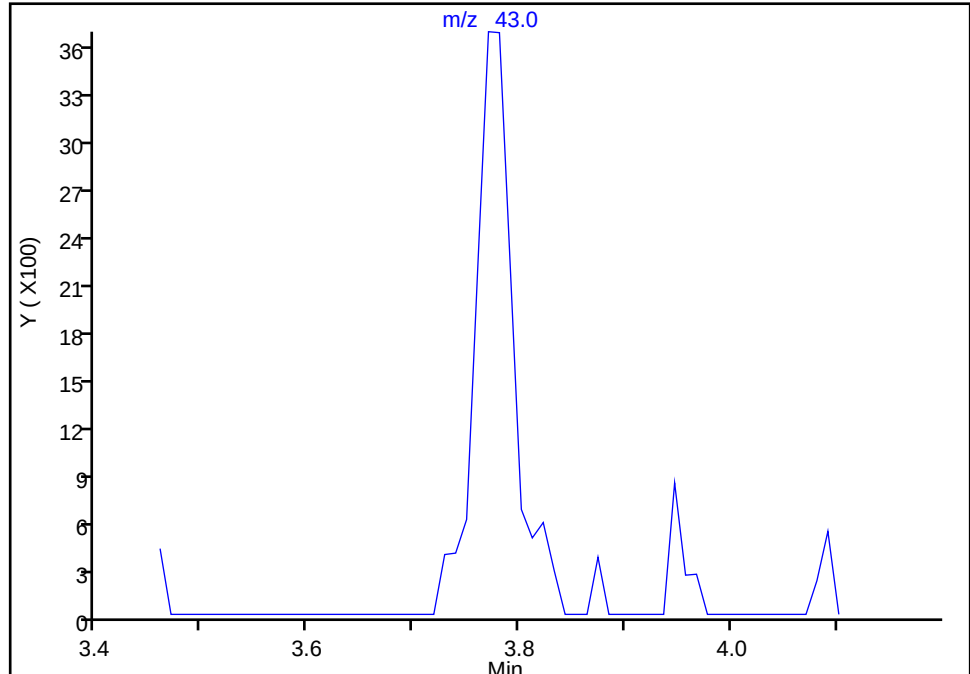
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

44 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

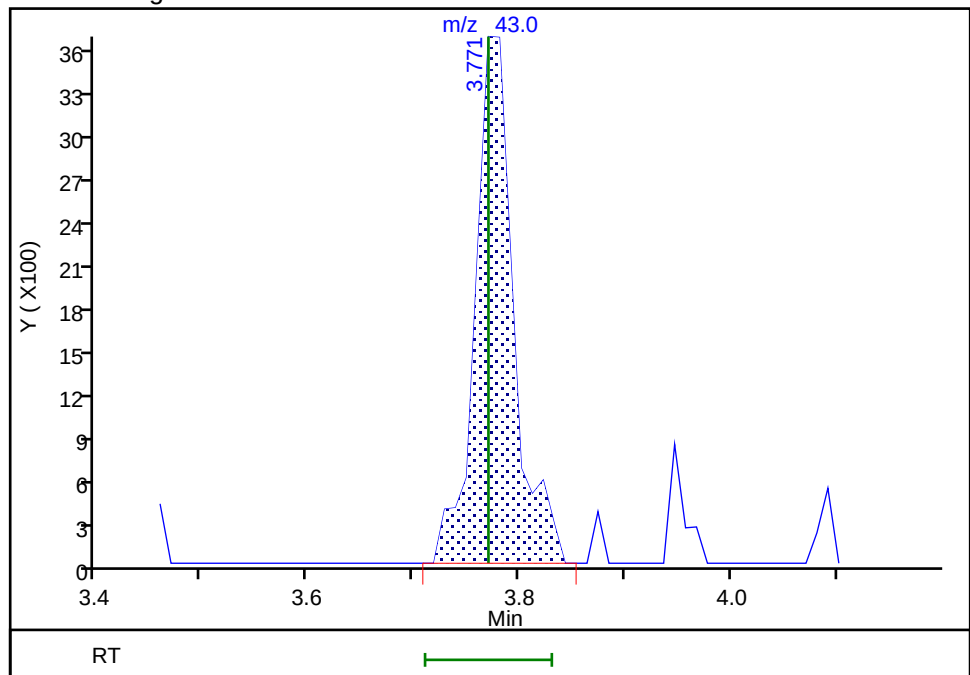
Not Detected
Expected RT: 3.77

Processing Integration Results



RT: 3.77
Area: 9268
Amount: 2.091149
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:50:47
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

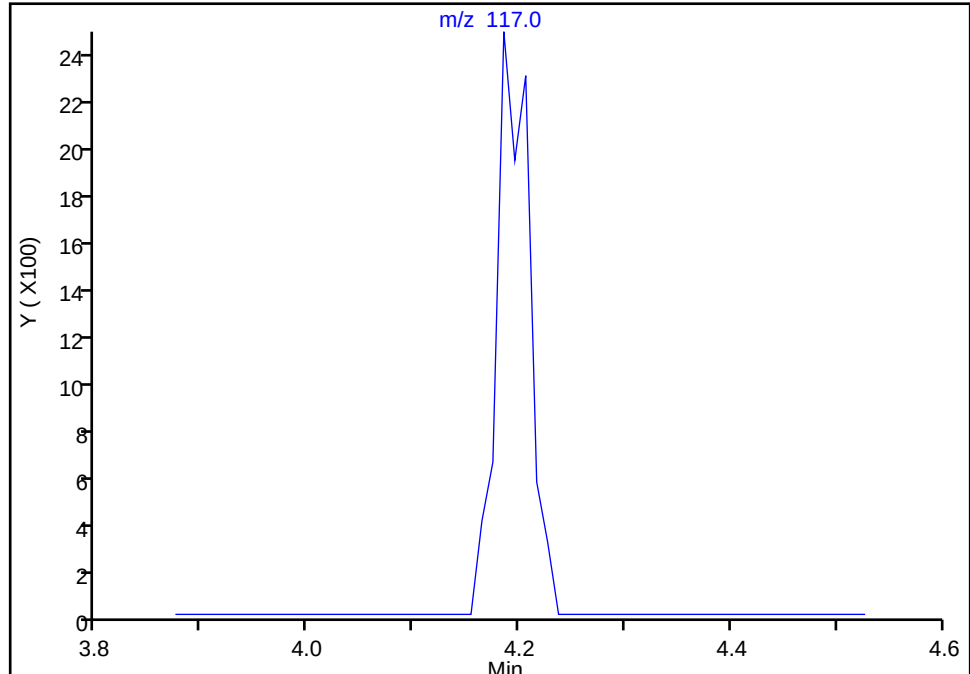
53 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

Not Detected

Expected RT: 4.20

Processing Integration Results



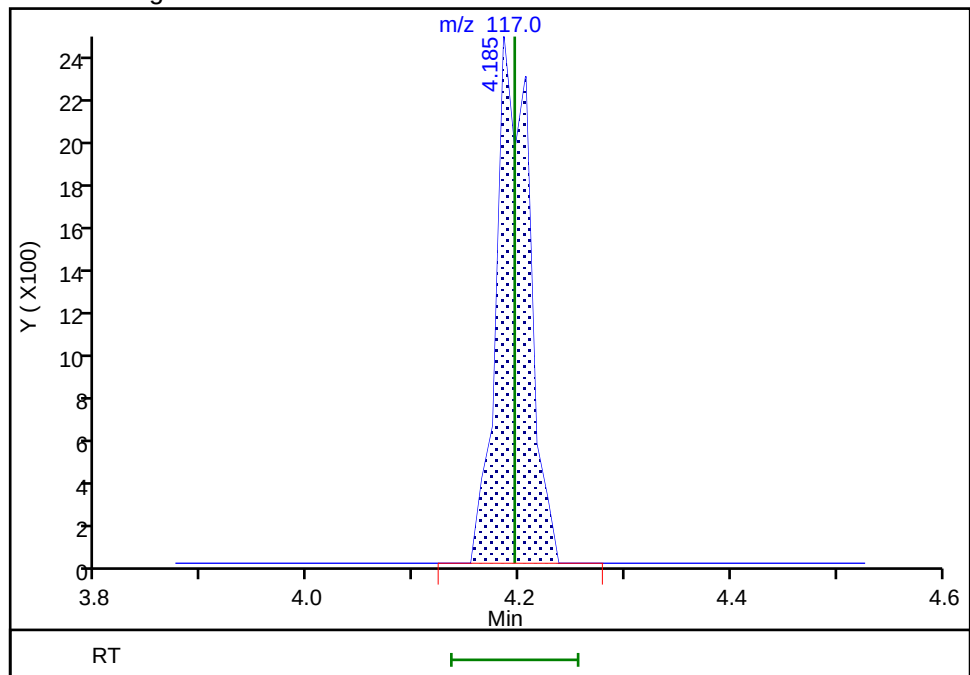
RT: 4.19

Area: 5384

Amount: 0.369837

Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:51:02

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

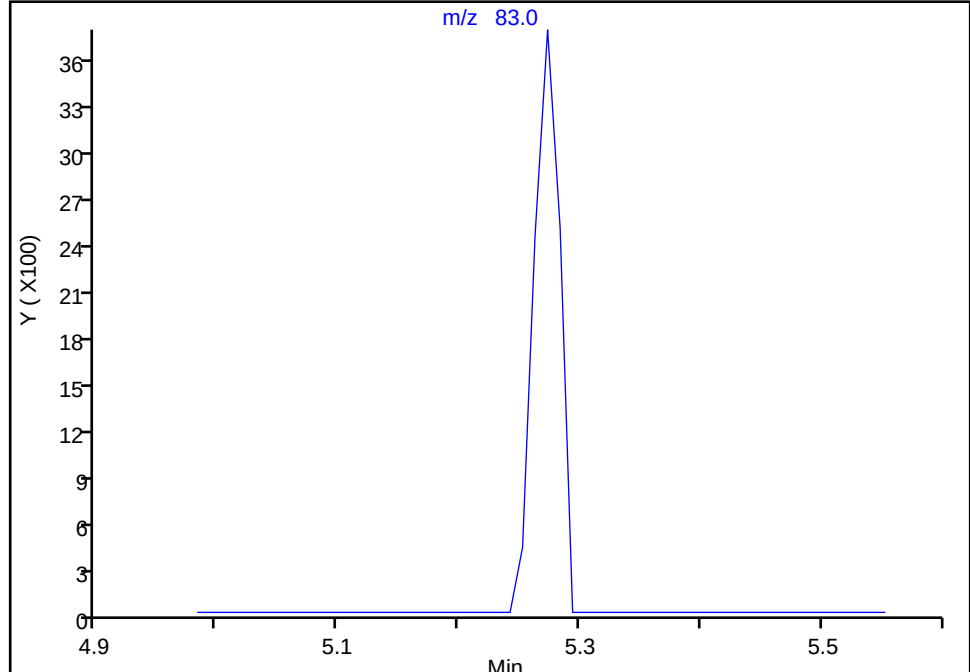
67 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

Not Detected

Expected RT: 5.27

Processing Integration Results



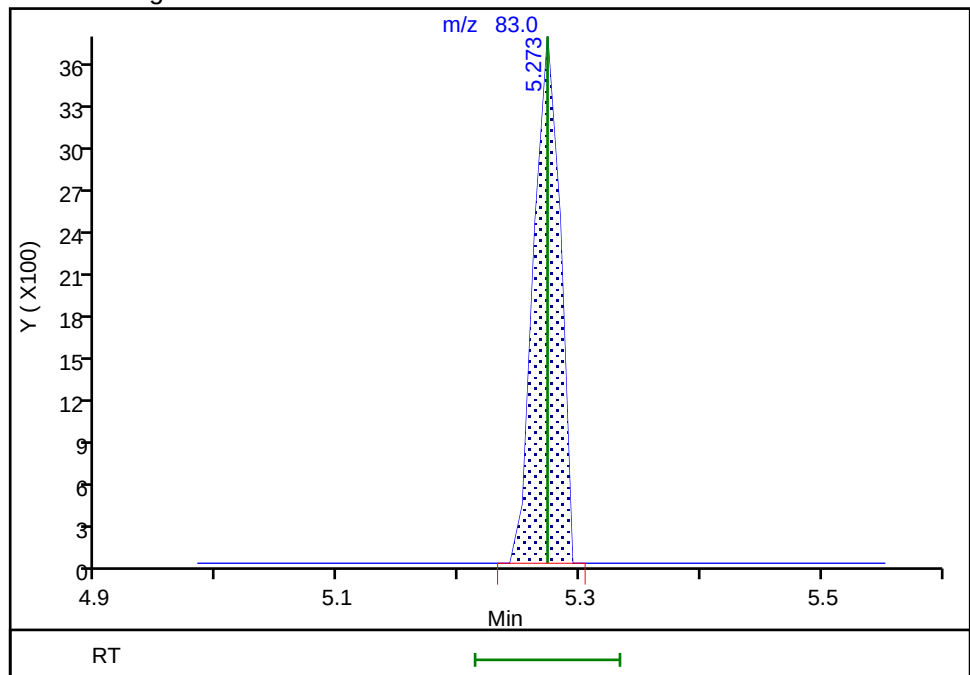
RT: 5.27

Area: 5616

Amount: 0.402875

Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:51:32

Audit Action: Manually Integrated

Audit Reason: Assign Peak

TestAmerica Buffalo

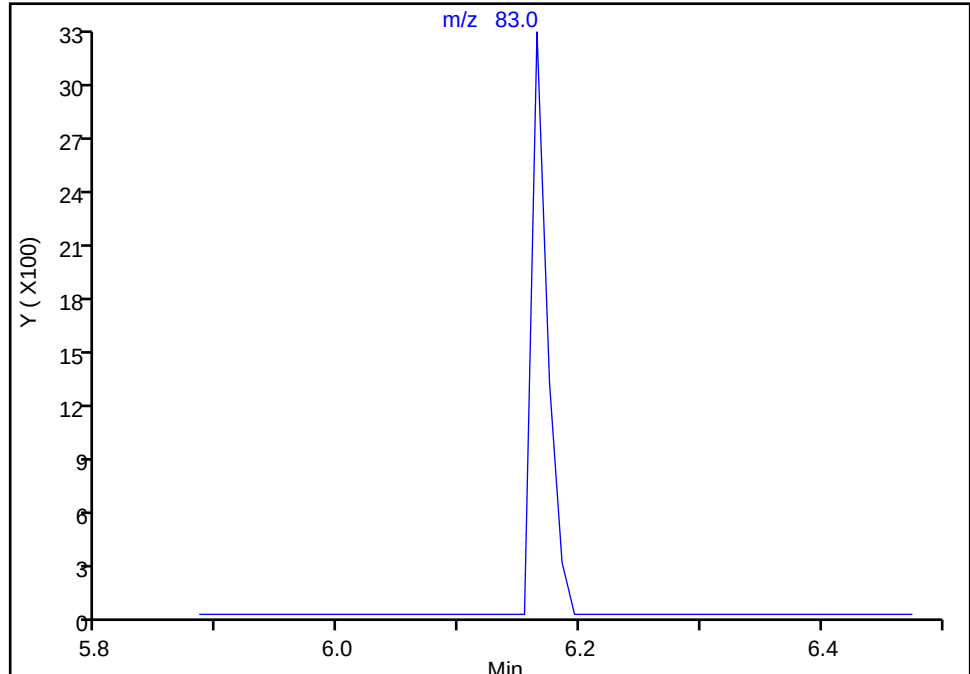
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

78 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

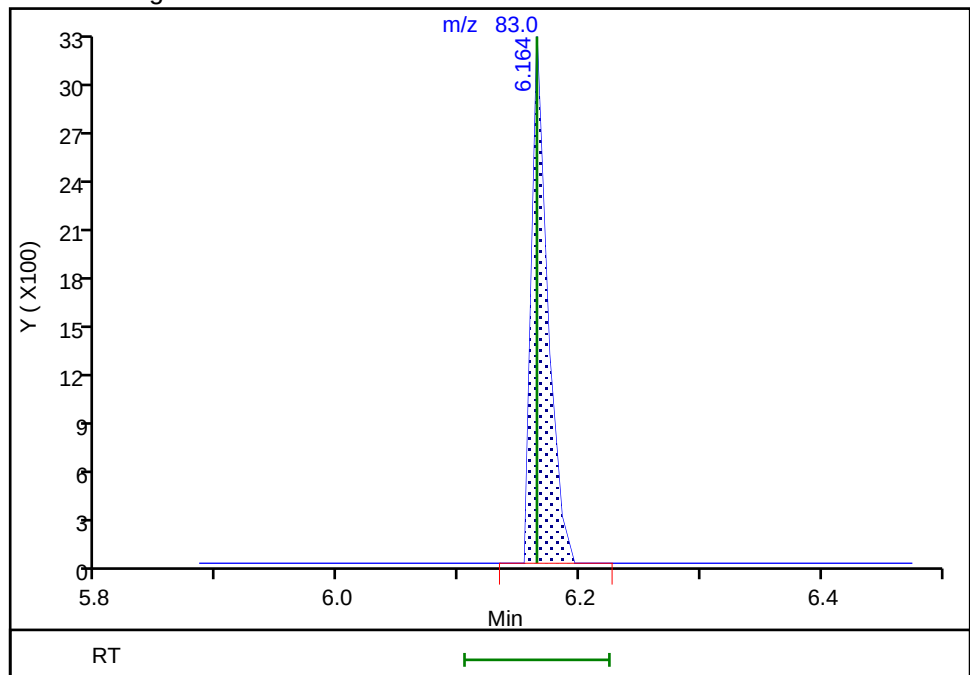
Not Detected
Expected RT: 6.16

Processing Integration Results



RT: 6.16
Area: 2967
Amount: 0.522231
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:51:49
Audit Action: Manually Integrated

Audit Reason: Assign Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: T-8260

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

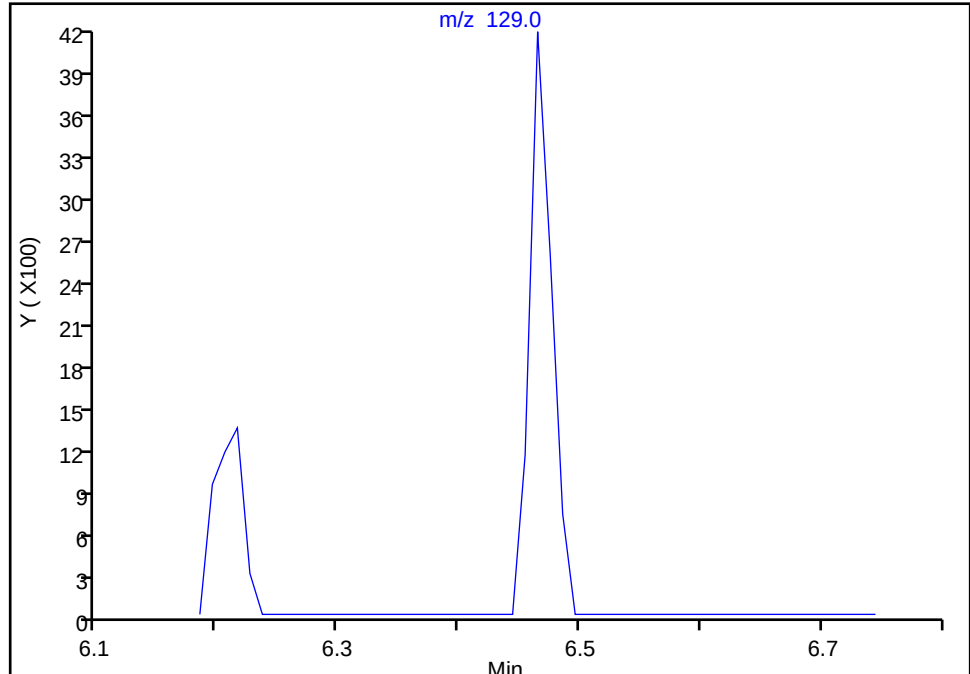
82 Chlorodibromomethane, CAS: 124-48-1

Signal: 1

Not Detected

Expected RT: 6.46

Processing Integration Results



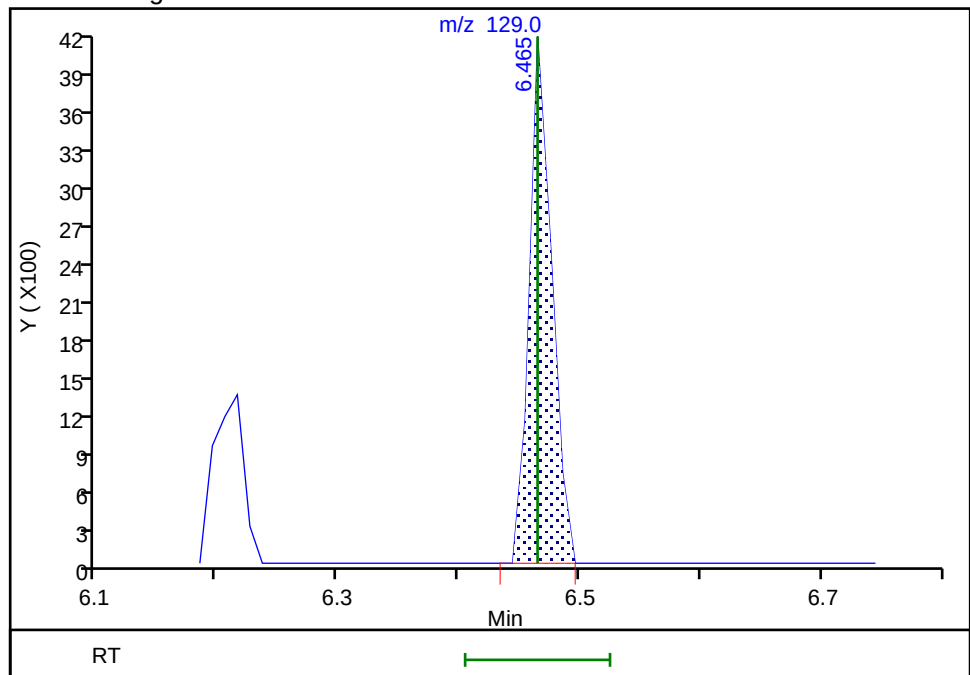
RT: 6.46

Area: 5313

Amount: 0.570520

Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:51:58

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Buffalo

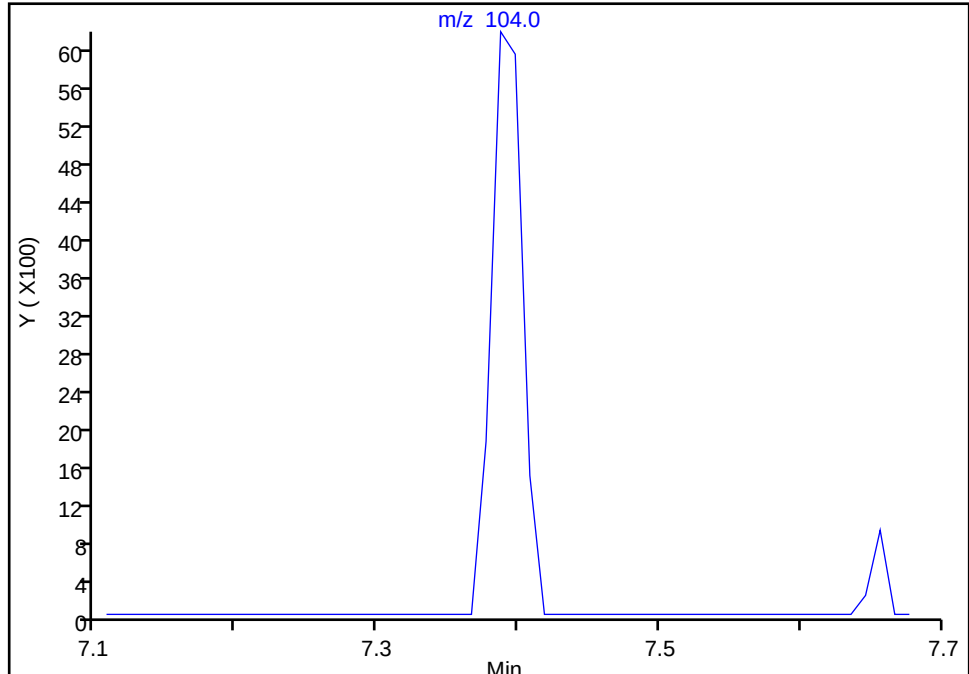
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

92 Styrene, CAS: 100-42-5

Signal: 1

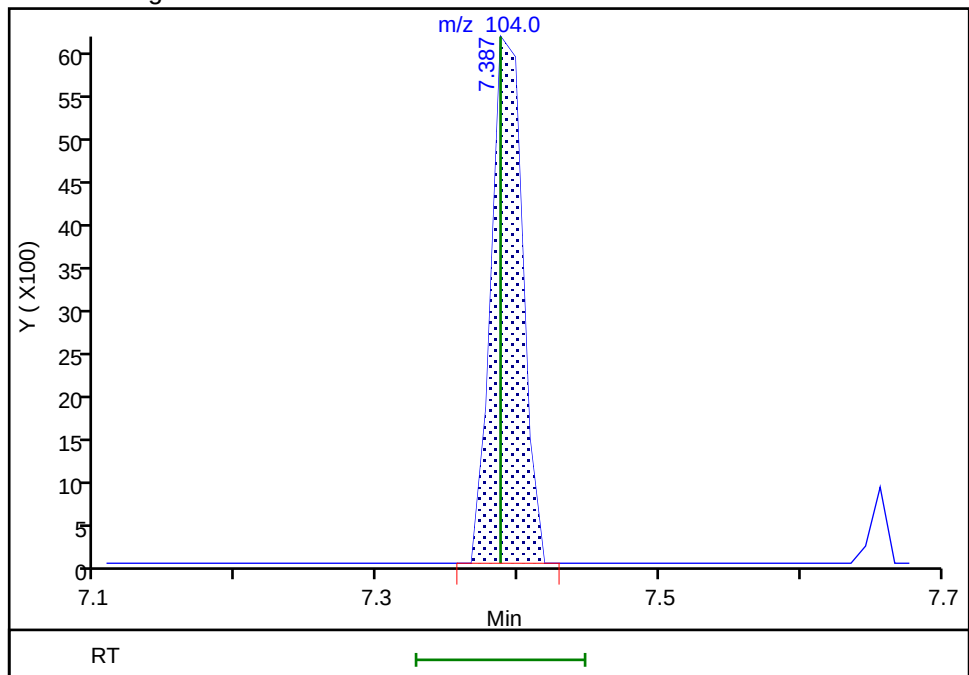
Not Detected
Expected RT: 7.39

Processing Integration Results



RT: 7.39
Area: 9559
Amount: 0.363032
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:52:16
Audit Action: Manually Integrated

Audit Reason: Assign Peak

TestAmerica Buffalo

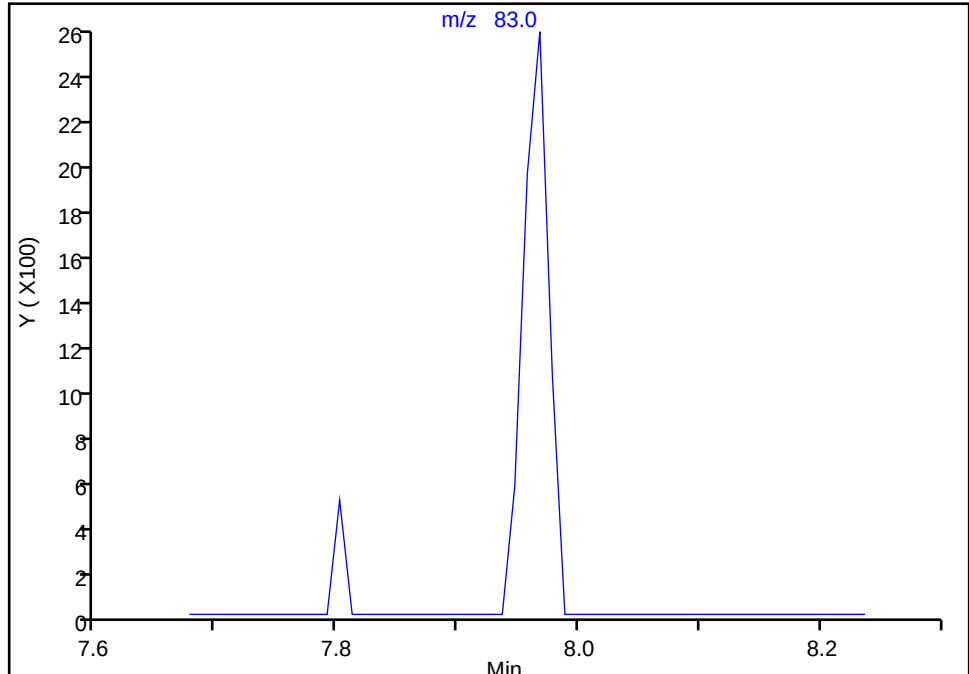
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

98 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Signal: 1

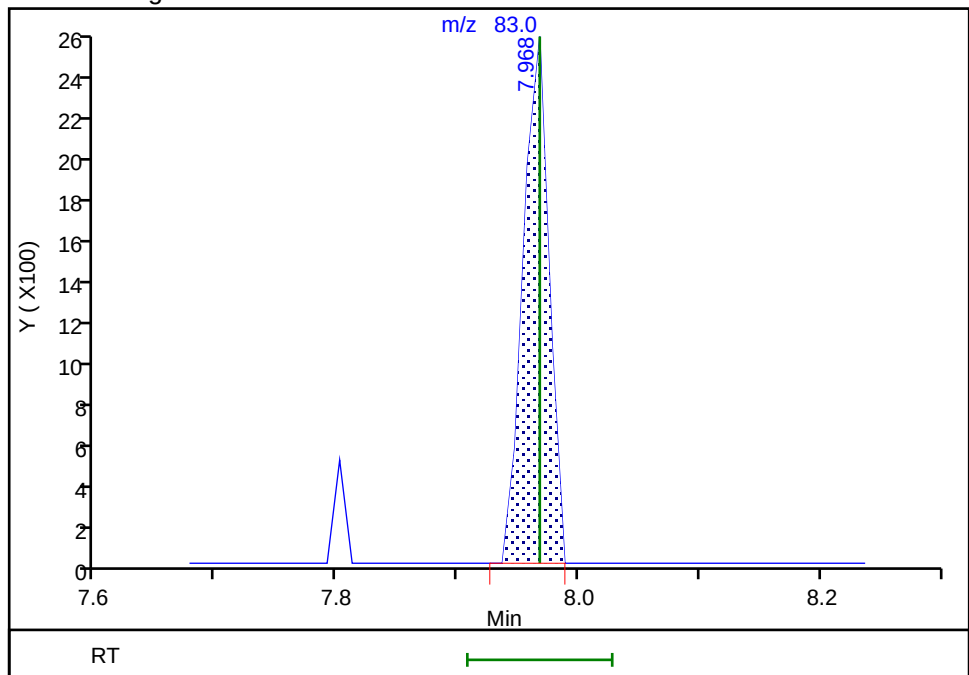
Not Detected
Expected RT: 7.97

Processing Integration Results



RT: 7.97
Area: 3811
Amount: 0.428075
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:52:23
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Buffalo

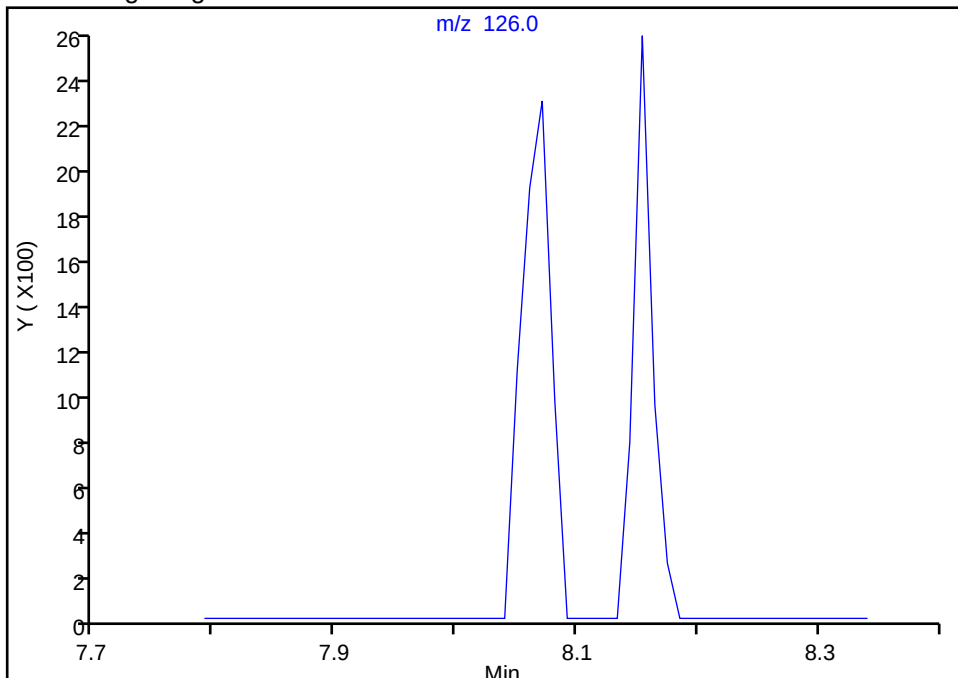
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

105 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

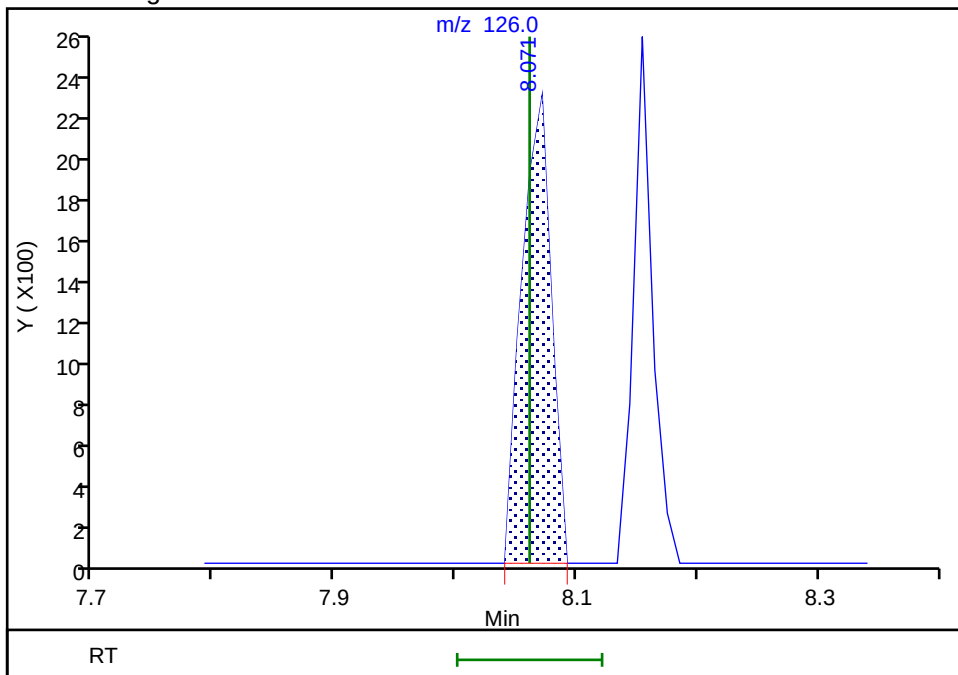
Not Detected
Expected RT: 8.06

Processing Integration Results



RT: 8.07
Area: 3858
Amount: 0.390819
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:52:50
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Buffalo

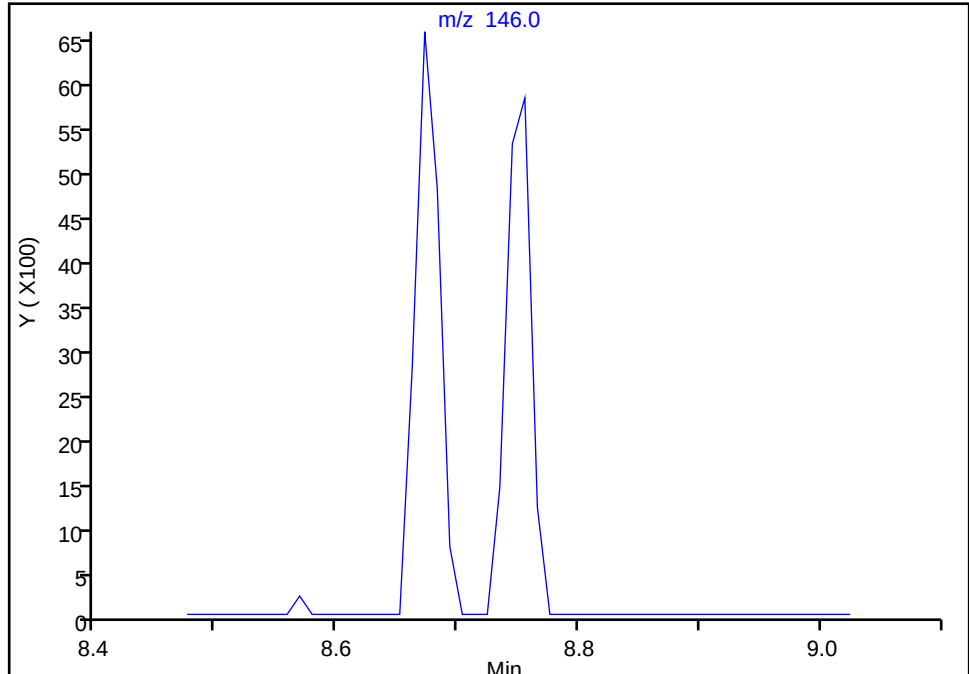
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D
Injection Date: 29-Oct-2018 14:27:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

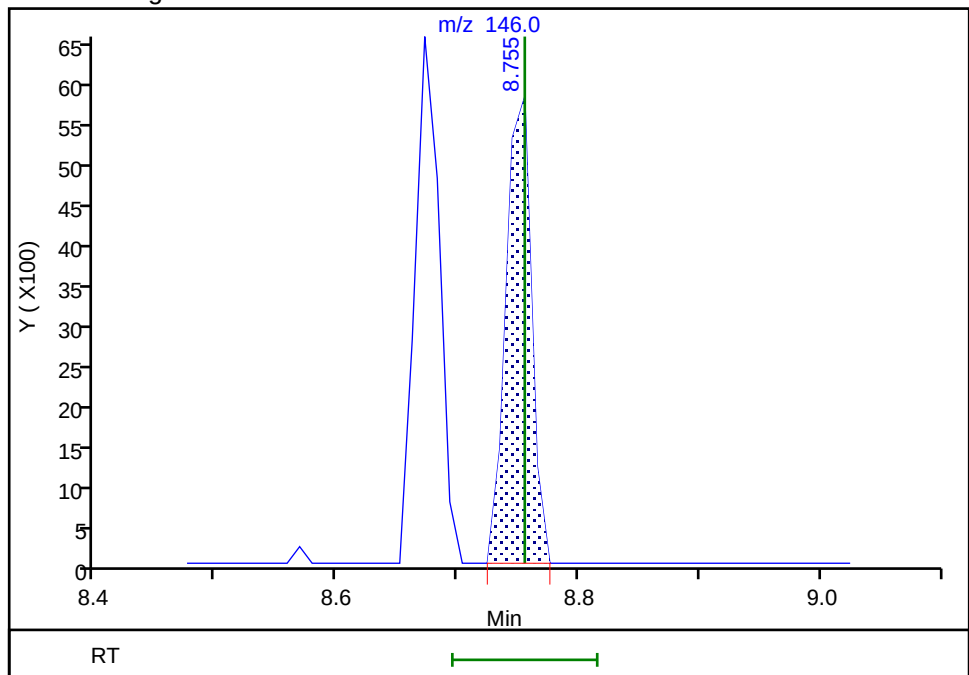
Not Detected
Expected RT: 8.76

Processing Integration Results



RT: 8.76
Area: 8553
Amount: 0.377920
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:53:04
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: T-8260

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

MS SCAN

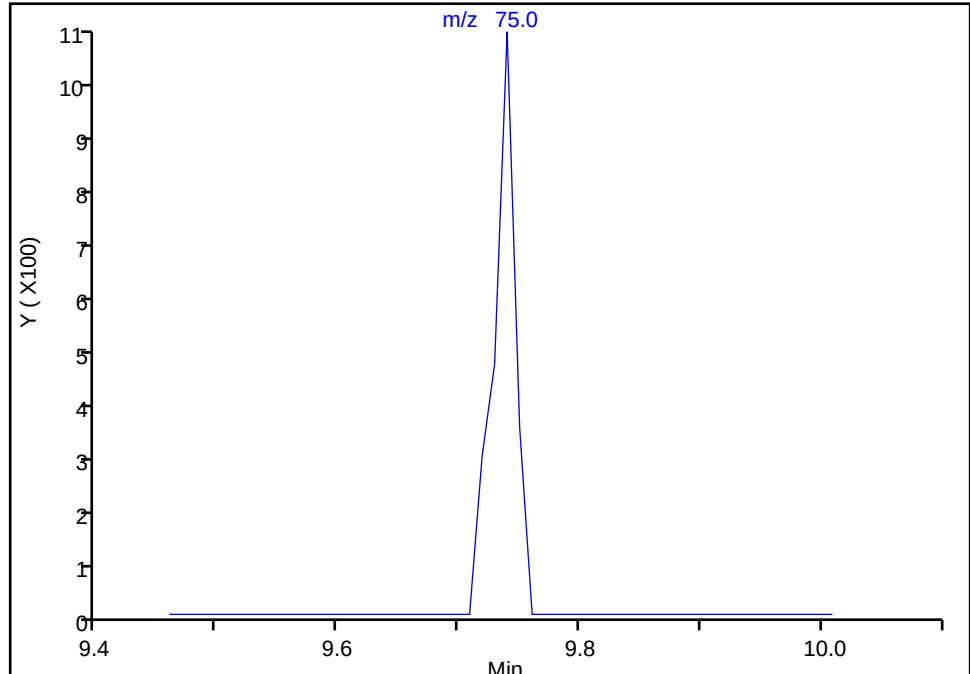
117 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

Not Detected

Expected RT: 9.73

Processing Integration Results



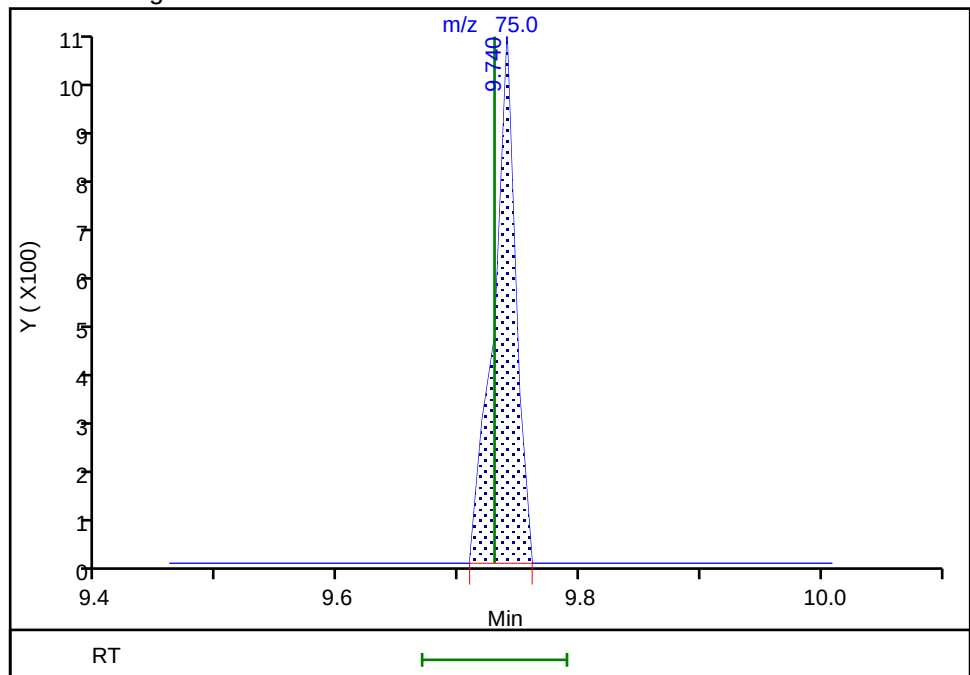
RT: 9.74

Area: 1323

Amount: 0.636195

Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:53:34

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

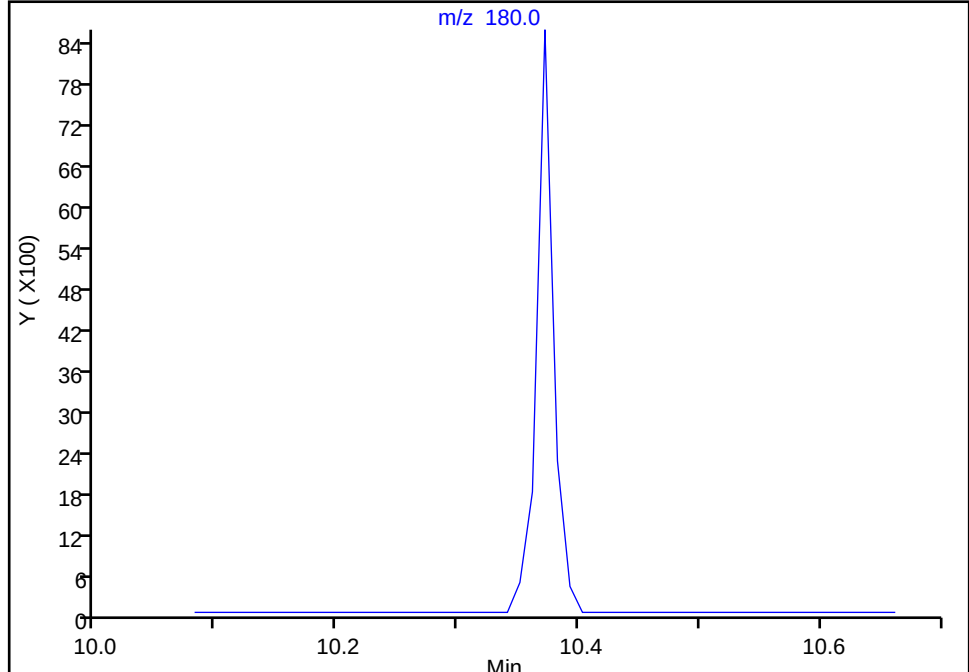
119 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

Not Detected

Expected RT: 10.37

Processing Integration Results



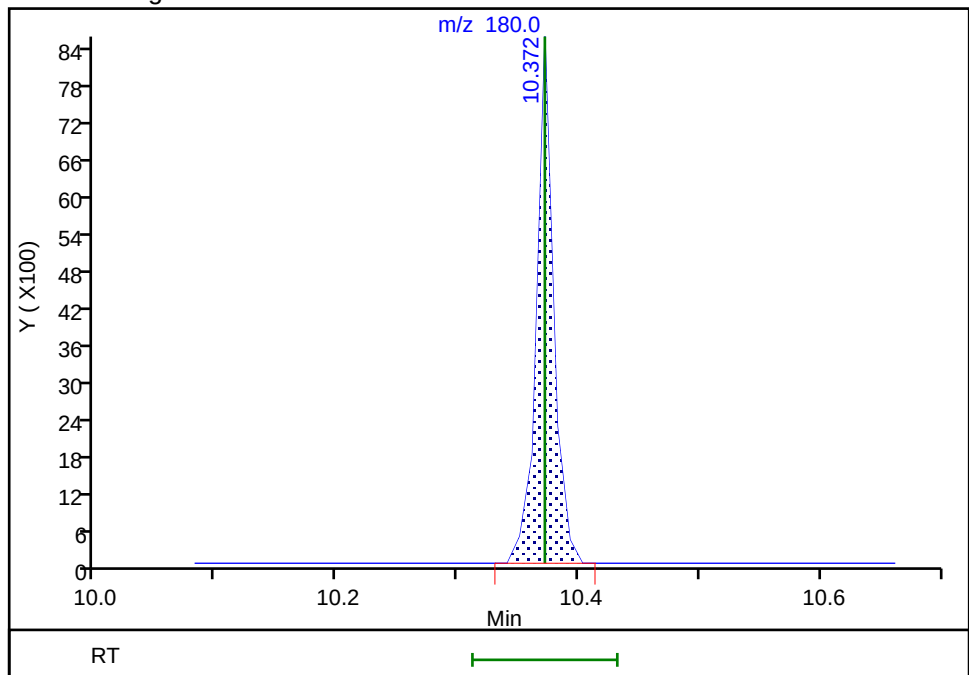
RT: 10.37

Area: 8344

Amount: 0.444731

Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:53:39

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4701.D

Injection Date: 29-Oct-2018 14:27:30

Instrument ID: HP5975T

Lims ID: IC 0.4

Client ID:

Operator ID: KN

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector: MS SCAN

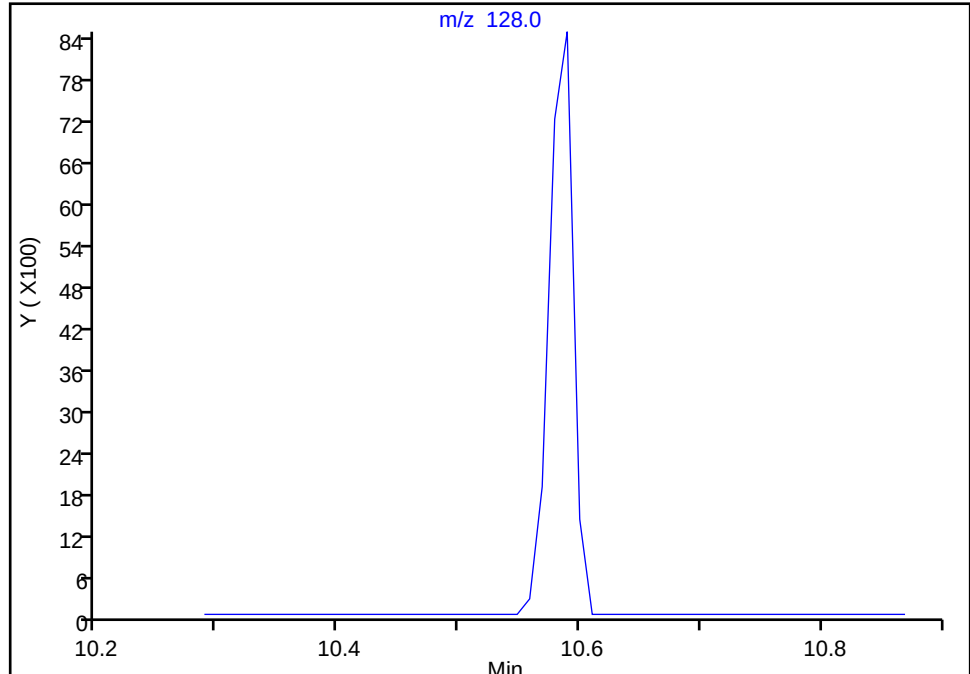
121 Naphthalene, CAS: 91-20-3

Signal: 1

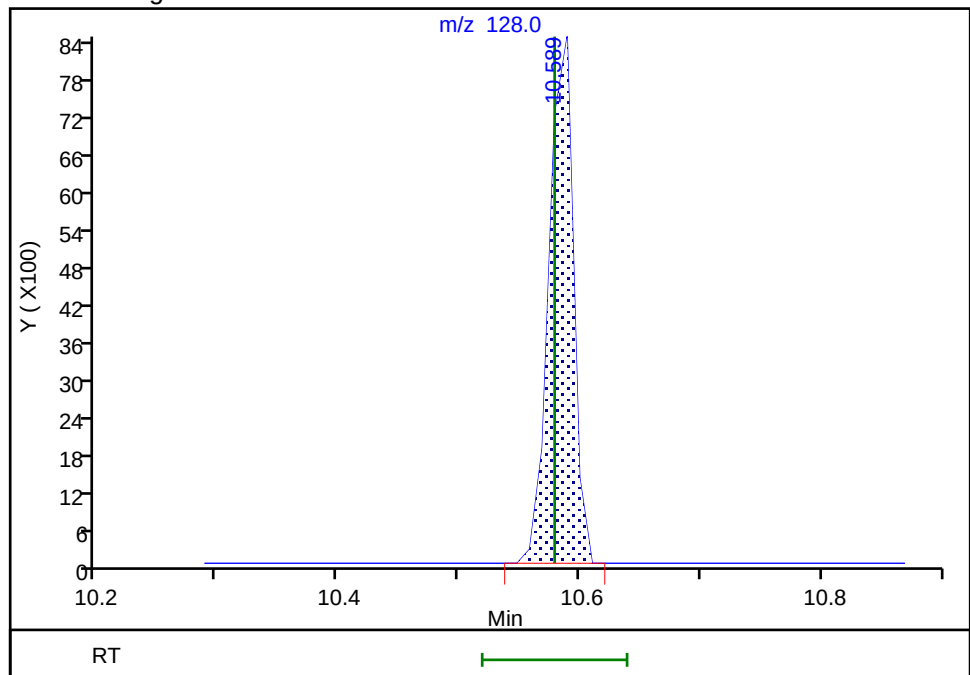
Not Detected

Expected RT: 10.58

Processing Integration Results



Manual Integration Results



RT: 10.59

Area: 11849

Amount: 0.344716

Amount Units: ug/L

Reviewer: milligana, 29-Oct-2018 20:53:45

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 29-Oct-2018 14:51:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Misc. Info.: 480-0075946-005
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 29-Oct-2018 23:41:34 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0323

First Level Reviewer: milligana

Date: 29-Oct-2018 20:46:32

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	4.589	4.589	0.000	97	153264	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.869	6.879	-0.010	92	576128	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	341549	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.133	-0.010	92	195172	25.0	26.4	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.371	4.372	-0.001	0	290054	25.0	24.7	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	96	632957	25.0	24.7	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	237476	25.0	25.3	
11 Dichlorodifluoromethane	85	1.097	1.107	-0.010	36	12605	1.00	0.8916	M
13 Chloromethane	50	1.231	1.263	-0.032	98	13179	1.00	0.9617	M
14 Vinyl chloride	62	1.314	1.325	-0.011	94	8201	1.00	0.8324	
151 Butadiene	54	1.314	1.346	-0.032	82	8433	1.00	0.7942	
15 Bromomethane	94	1.563	1.594	-0.031	84	6299	1.00	1.01	M
16 Chloroethane	64	1.636	1.656	-0.020	60	5252	1.00	1.04	
17 Trichlorofluoromethane	101	1.791	1.802	-0.011	88	14481	1.00	0.8281	
18 Dichlorofluoromethane	67	1.812	1.833	-0.021	93	16272	1.00	1.00	
19 Ethyl ether	59	2.050	2.061	-0.011	94	6445	1.00	0.9691	
21 Acrolein	56	2.226	2.226	0.000	77	9170	5.00	6.05	
22 1,1-Dichloroethene	96	2.247	2.257	-0.010	87	5830	1.00	1.03	
20 1,1,2-Trichloro-1,2,2-trif	101	2.247	2.257	-0.010	50	5304	1.00	0.8959	
23 Acetone	43	2.361	2.371	-0.010	93	16009	5.00	5.48	M
24 Iodomethane	142	2.392	2.403	-0.011	90	11069	1.00	0.8679	
25 Carbon disulfide	76	2.423	2.434	-0.011	99	20959	1.00	0.9772	
27 3-Chloro-1-propene	41	2.579	2.589	-0.010	91	14737	1.00	0.9032	
28 Methyl acetate	43	2.630	2.631	-0.001	97	14594	2.00	2.00	
30 Methylene Chloride	84	2.713	2.724	-0.011	90	19878	1.00	1.13	a
31 2-Methyl-2-propanol	59	2.889	2.890	-0.001	31	8863	10.0	9.41	M
33 Methyl tert-butyl ether	73	2.900	2.910	-0.010	96	26909	1.00	1.01	
32 trans-1,2-Dichloroethene	96	2.910	2.921	-0.011	91	7671	1.00	1.03	
34 Acrylonitrile	53	2.972	2.973	-0.001	99	34250	10.0	9.24	
35 Hexane	57	3.066	3.076	-0.010	92	13872	1.00	1.03	a

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	3.273	3.273	0.000	94	15492	1.00	0.9557	
39 Vinyl acetate	43	3.314	3.325	-0.011	97	35803	2.00	1.76	
42 2,2-Dichloropropane	77	3.698	3.719	-0.021	85	14069	1.00	0.9724	a
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	86	9962	1.00	1.06	
44 2-Butanone (MEK)	43	3.770	3.770	0.000	95	19246	5.00	4.51	
47 Chlorobromomethane	128	3.926	3.936	-0.010	88	3393	1.00	0.7549	
48 Tetrahydrofuran	42	3.936	3.947	-0.011	50	6223	2.00	2.23	
50 Chloroform	83	3.998	3.998	0.000	93	16999	1.00	0.9643	a
51 1,1,1-Trichloroethane	97	4.081	4.092	-0.011	96	17610	1.00	1.08	
52 Cyclohexane	56	4.092	4.092	0.000	92	17511	1.00	1.06	
53 Carbon tetrachloride	117	4.185	4.195	-0.010	69	12809	1.00	0.9134	
54 1,1-Dichloropropene	75	4.206	4.206	0.000	87	11919	1.00	1.02	
55 Benzene	78	4.371	4.372	-0.001	46	31865	1.00	1.03	
56 Isobutyl alcohol	43	4.402	4.403	-0.001	42	11113	25.0	29.8	
57 1,2-Dichloroethane	62	4.423	4.434	-0.011	96	16904	1.00	0.9512	
59 n-Heptane	43	4.506	4.506	0.000	93	14948	1.00	0.9514	
60 Trichloroethene	95	4.848	4.859	-0.011	85	9055	1.00	0.9585	
62 Methylcyclohexane	83	4.941	4.942	-0.001	89	11432	1.00	0.9133	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	82	8363	1.00	0.9404	
65 Dibromomethane	93	5.149	5.159	-0.010	88	5325	1.00	0.9118	
66 1,4-Dioxane	88	5.149	5.159	-0.010	36	591	20.0	9.27	Ma
67 Dichlorobromomethane	83	5.273	5.273	0.000	96	13251	1.00	0.9868	a
69 2-Chloroethyl vinyl ether	63	5.480	5.491	-0.011	89	6365	1.00	1.07	
71 cis-1,3-Dichloropropene	75	5.584	5.594	-0.010	82	12242	1.00	0.9470	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	98	42666	5.00	4.61	
73 Toluene	92	5.801	5.812	-0.011	97	23097	1.00	1.06	
75 trans-1,3-Dichloropropene	75	6.029	6.019	0.010	92	11300	1.00	0.8415	
77 Ethyl methacrylate	69	6.050	6.050	0.000	86	9779	1.00	1.02	
78 1,1,2-Trichloroethane	83	6.175	6.164	0.011	95	5021	1.00	0.8598	a
79 Tetrachloroethene	166	6.206	6.206	0.000	93	11824	1.00	1.19	
80 1,3-Dichloropropane	76	6.289	6.289	0.000	92	12953	1.00	0.9635	
81 2-Hexanone	43	6.330	6.330	0.000	99	30946	5.00	4.80	
82 Chlorodibromomethane	129	6.465	6.465	0.000	82	9406	1.00	0.9826	
83 Ethylene Dibromide	107	6.537	6.548	-0.011	85	5779	1.00	0.7531	
86 Chlorobenzene	112	6.890	6.900	-0.010	87	20994	1.00	0.8754	
88 Ethylbenzene	91	6.962	6.962	0.000	98	46628	1.00	1.06	
89 1,1,1,2-Tetrachloroethane	131	6.973	6.973	-0.001	83	8192	1.00	0.8674	
90 m-Xylene & p-Xylene	106	7.055	7.056	-0.001	0	16517	1.00	1.01	
91 o-Xylene	106	7.366	7.366	0.000	98	17062	1.00	1.04	
92 Styrene	104	7.387	7.387	0.000	95	25798	1.00	0.9531	
93 Bromoform	173	7.574	7.584	-0.010	90	6371	1.00	1.06	
95 Isopropylbenzene	105	7.646	7.646	0.000	98	37020	1.00	0.8954	
97 Bromobenzene	156	7.926	7.926	0.000	95	10790	1.00	0.9317	
98 1,1,2,2-Tetrachloroethane	83	7.967	7.968	-0.001	46	8665	1.00	1.01	
99 N-Propylbenzene	91	7.978	7.978	0.000	97	44690	1.00	0.9398	
100 1,2,3-Trichloropropane	110	7.988	7.988	0.000	47	3631	1.00	1.04	
101 trans-1,4-Dichloro-2-buten	53	7.998	7.999	-0.001	1	2684	1.00	0.7561	
105 2-Chlorotoluene	126	8.061	8.061	0.000	92	8782	1.00	0.9239	
104 1,3,5-Trimethylbenzene	105	8.123	8.123	0.000	97	32300	1.00	0.8800	
102 4-Chlorotoluene	91	8.154	8.154	0.000	97	30818	1.00	0.9322	
106 tert-Butylbenzene	134	8.382	8.382	0.000	94	7559	1.00	0.9895	
107 1,2,4-Trimethylbenzene	105	8.423	8.423	0.000	95	37438	1.00	0.9563	

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	8.558	8.558	0.000	96	40234	1.00	0.9311	
111 4-Isopropyltoluene	119	8.672	8.672	0.000	97	38007	1.00	0.9626	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	74	20758	1.00	0.9762	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	90	21384	1.00	0.9812	
115 n-Butylbenzene	91	9.014	9.014	0.000	96	32520	1.00	0.9241	
116 1,2-Dichlorobenzene	146	9.066	9.056	0.010	90	22130	1.00	1.06	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	1	2075	1.00	1.04	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	94	16091	1.00	0.8906	
120 Hexachlorobutadiene	225	10.486	10.475	0.011	93	10101	1.00	1.04	
121 Naphthalene	128	10.589	10.579	0.010	97	28837	1.00	0.8712	
122 1,2,3-Trichlorobenzene	180	10.786	10.786	0.000	91	17382	1.00	1.07	
S 126 Xylenes, Total	1				0			2.06	
S 123 1,3-Dichloropropene, Total	1				0			1.79	
S 124 1,2-Dichloroethene, Total	1				0			2.09	
S 125 Total BTEX	1				0			5.20	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00138

Amount Added: 1.00

Units: uL

GAS CORP mix_00309

Amount Added: 1.00

Units: uL

T_8260_Surr_00181

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00209

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181029-75946.b\\T4702.D

Injection Date: 29-Oct-2018 14:51:30

Instrument ID: HP5975T

Lims ID: IC

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Operator ID: KN

Worklist Smp#: 5

ALS Bottle#: 5



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D

Injection Date: 29-Oct-2018 14:51:30

Instrument ID: HP5975T

Lims ID: IC

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 (0.25 mm)

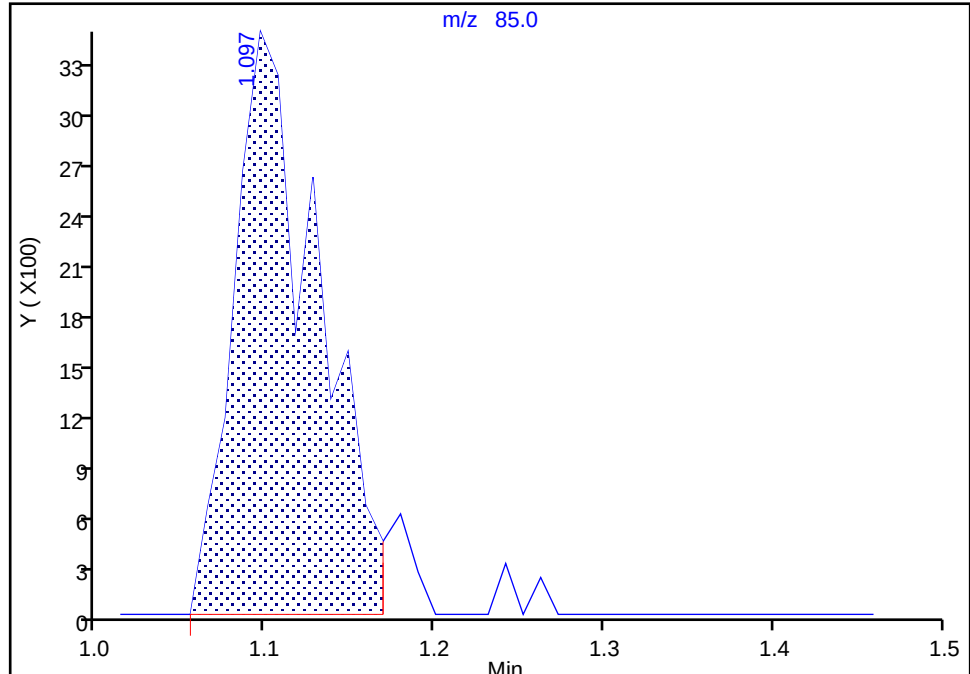
Detector: MS SCAN

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

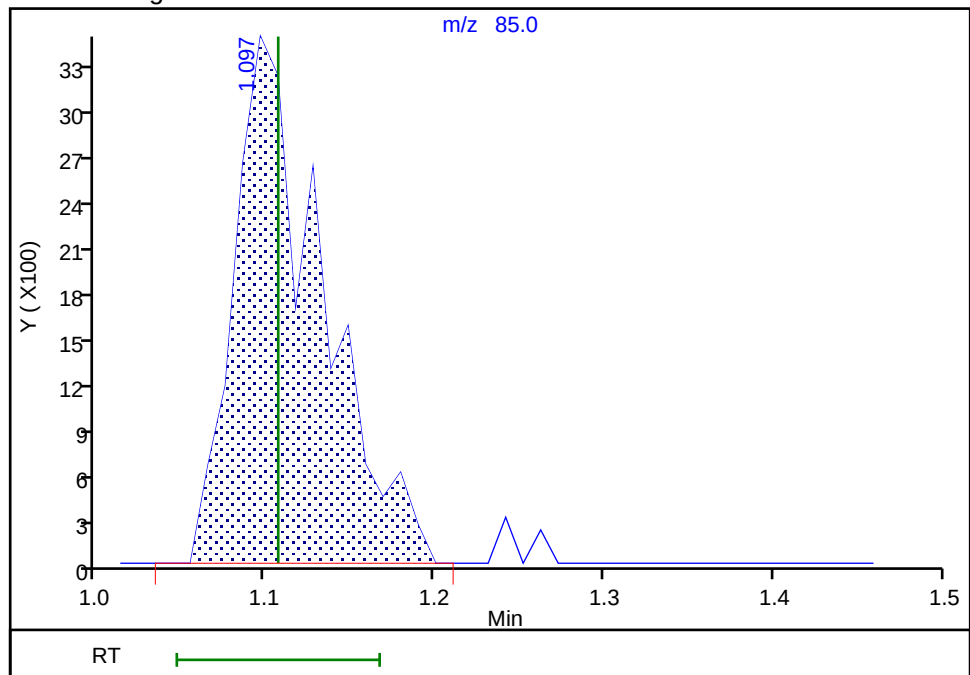
RT: 1.10
Area: 12072
Amount: 1.066676
Amount Units: ug/L

Processing Integration Results



RT: 1.10
Area: 12605
Amount: 0.891637
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:42:30

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

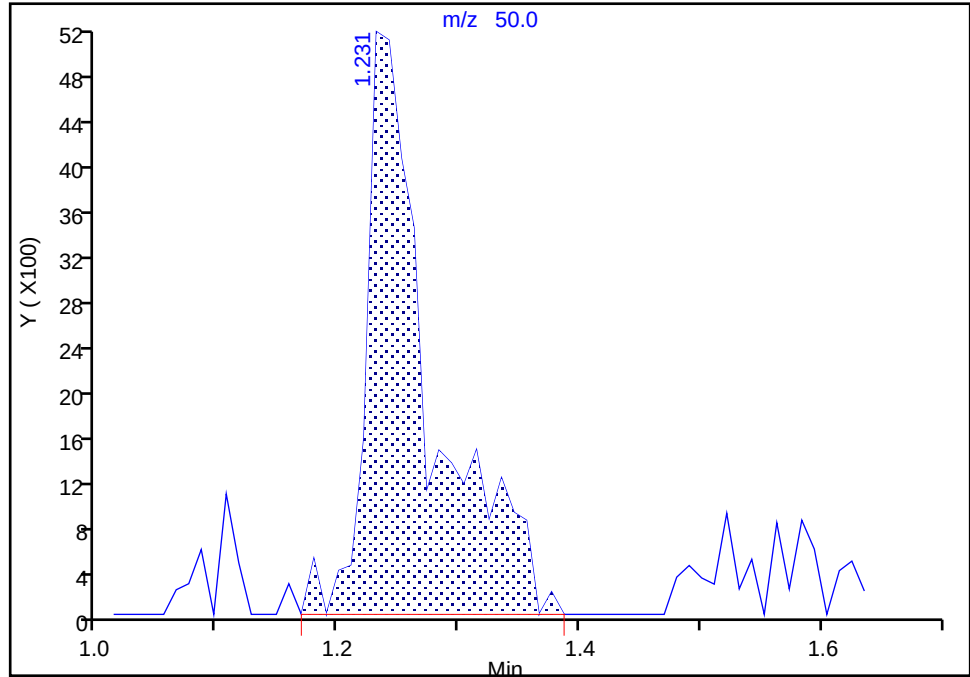
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D
Injection Date: 29-Oct-2018 14:51:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

13 Chloromethane, CAS: 74-87-3

Signal: 1

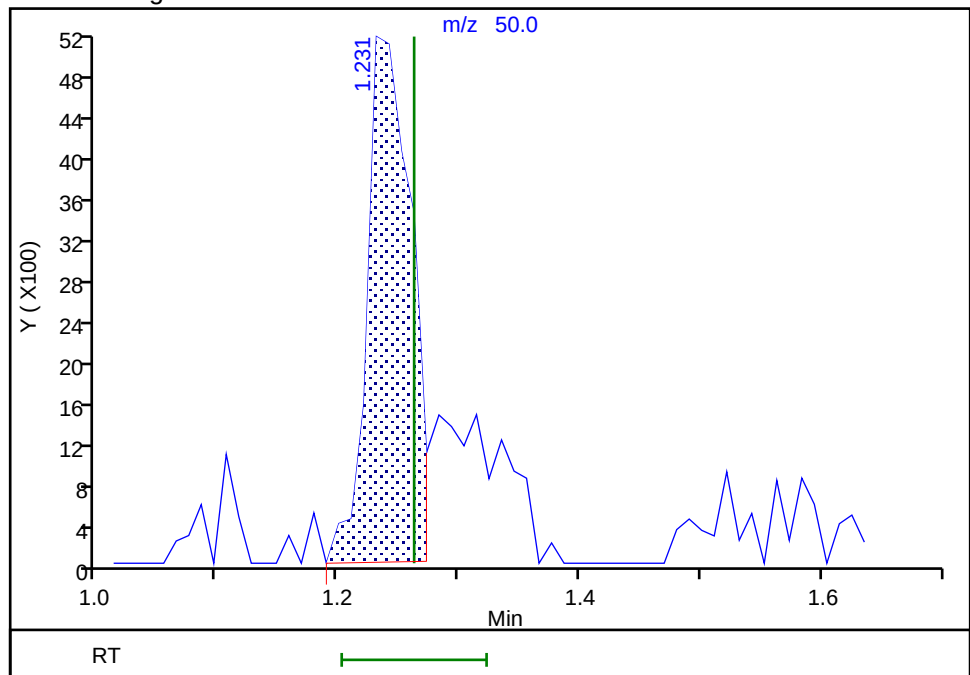
RT: 1.23
Area: 19396
Amount: 1.234189
Amount Units: ug/L

Processing Integration Results



RT: 1.23
Area: 13179
Amount: 0.961701
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:42:55
Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

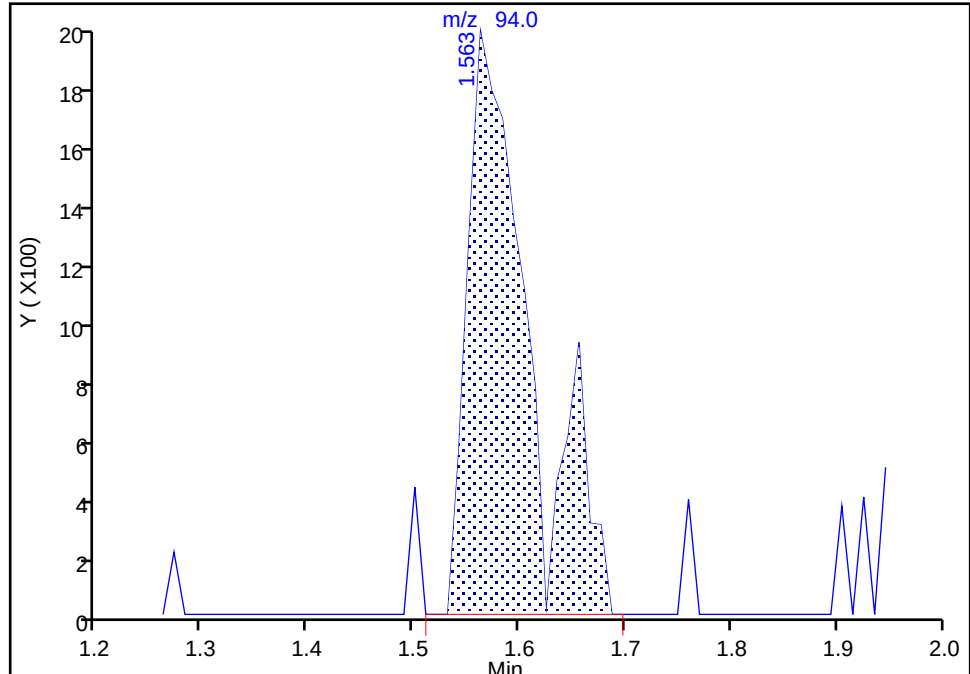
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D
Injection Date: 29-Oct-2018 14:51:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

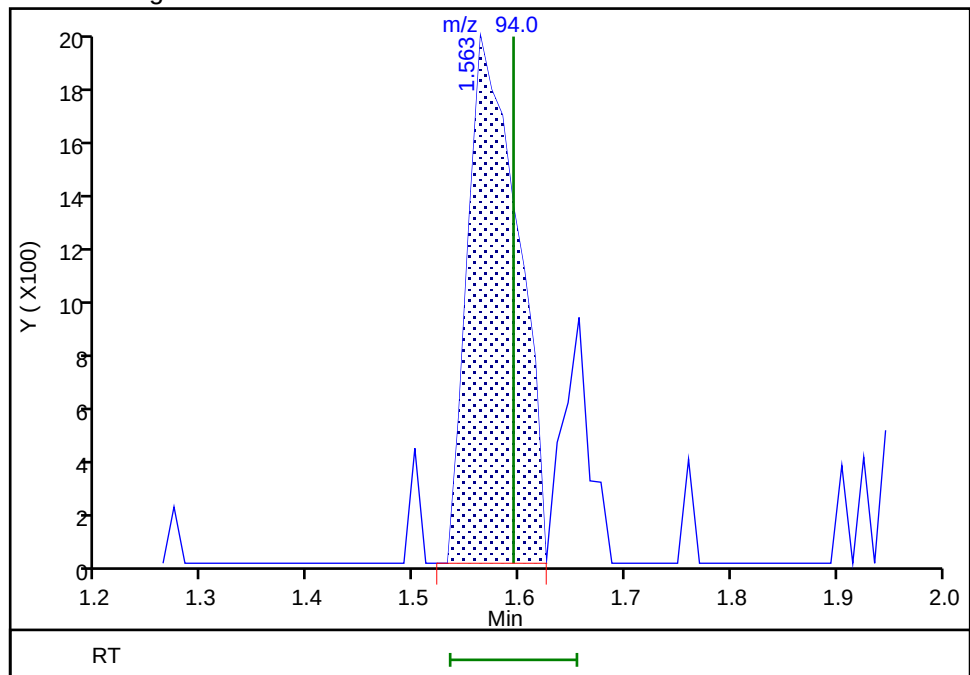
RT: 1.56
Area: 7852
Amount: 1.225848
Amount Units: ug/L

Processing Integration Results



RT: 1.56
Area: 6299
Amount: 1.009856
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:43:18
Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

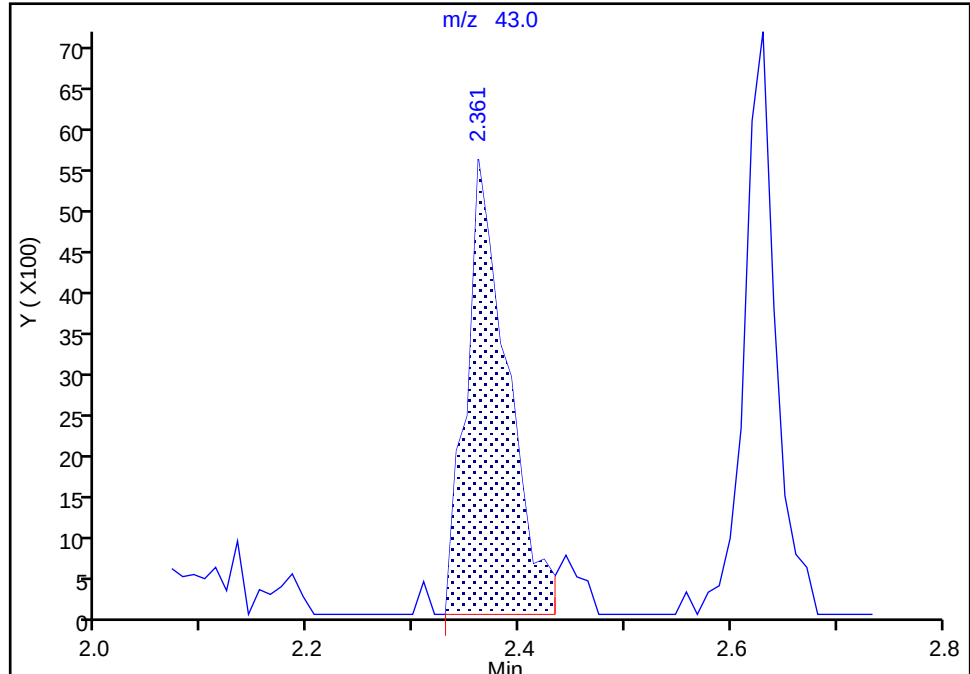
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D
Injection Date: 29-Oct-2018 14:51:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

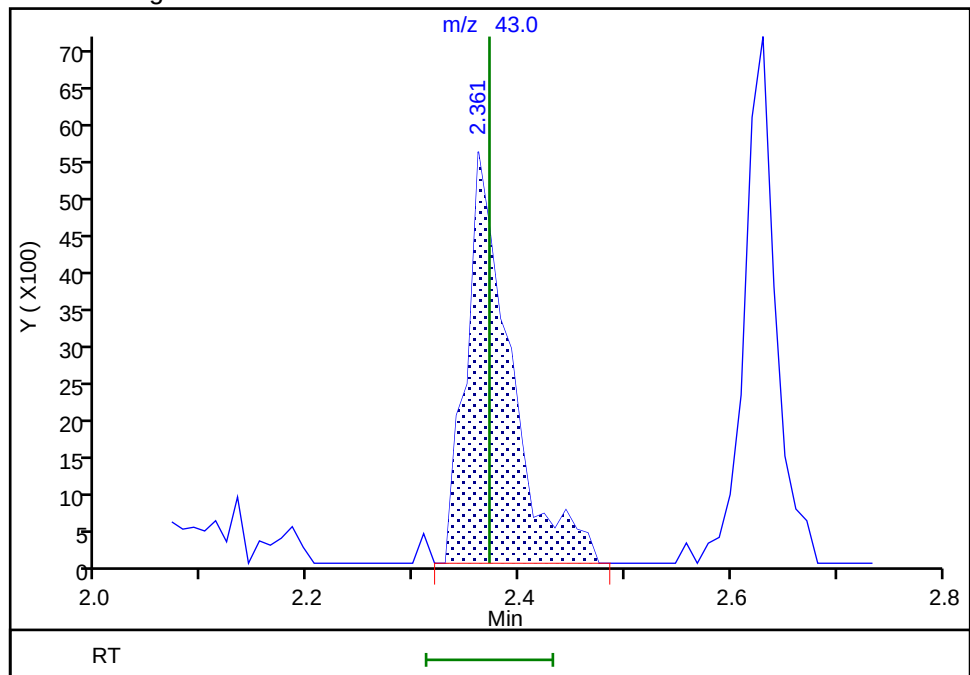
RT: 2.36
Area: 15020
Amount: 5.311900
Amount Units: ug/L

Processing Integration Results



RT: 2.36
Area: 16009
Amount: 5.477718
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:43:49
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D

Injection Date: 29-Oct-2018 14:51:30

Instrument ID: HP5975T

Lims ID: IC

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 (0.25 mm)

Detector: MS SCAN

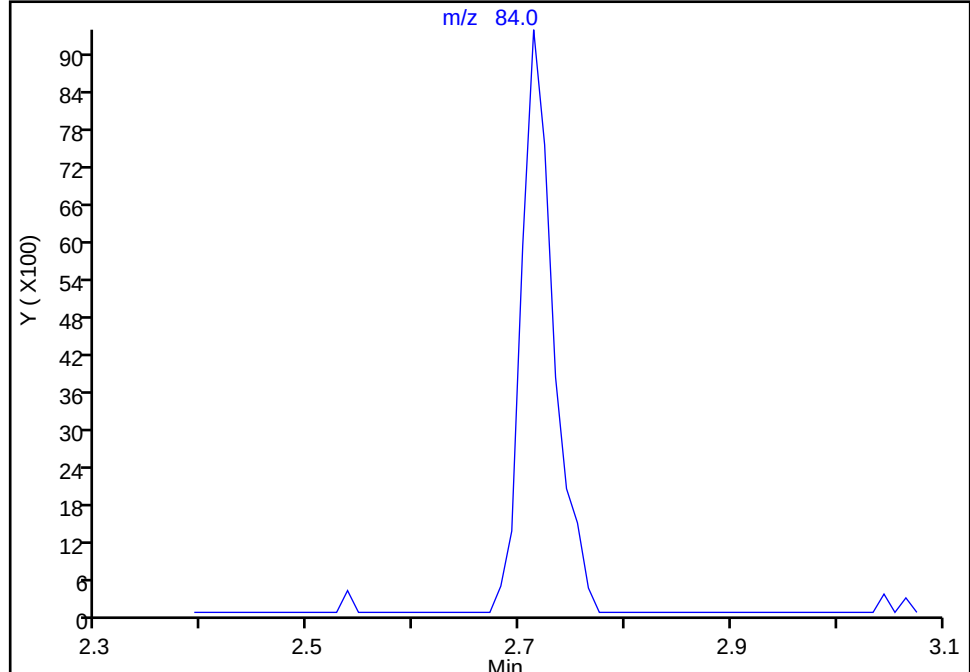
30 Methylene Chloride, CAS: 75-09-2

Signal: 1

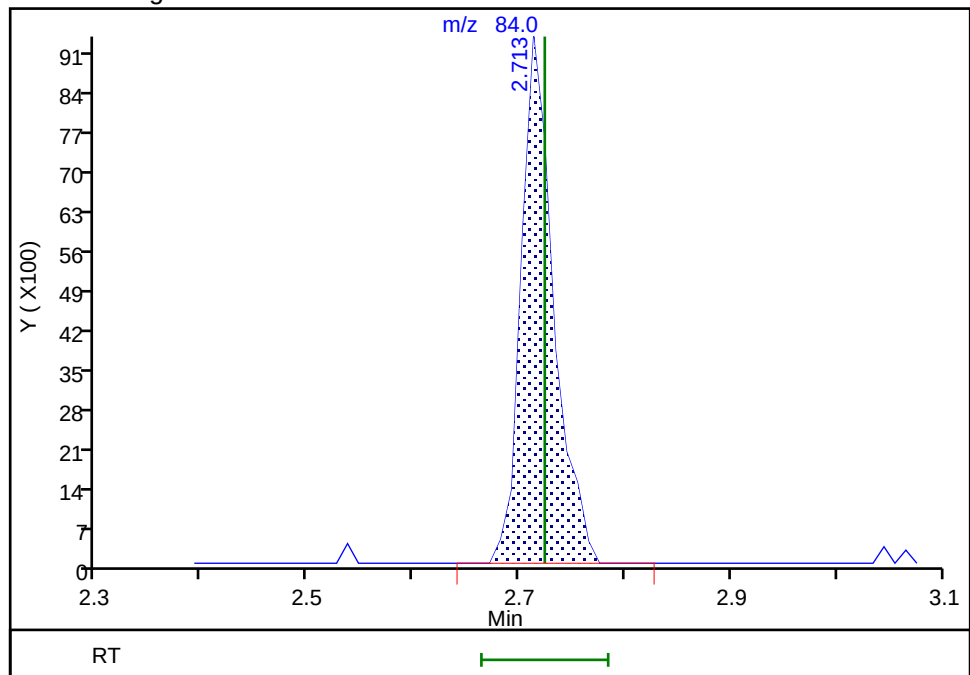
Not Detected

Expected RT: 2.72

Processing Integration Results



Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:44:02

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D

Injection Date: 29-Oct-2018 14:51:30

Instrument ID: HP5975T

Lims ID: IC

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 (0.25 mm)

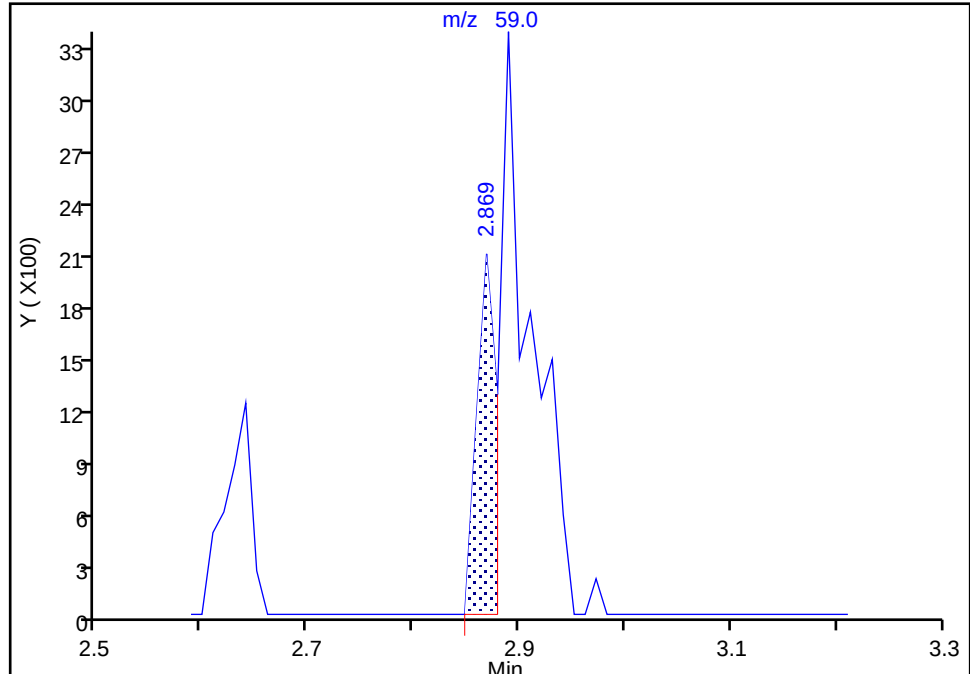
Detector: MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

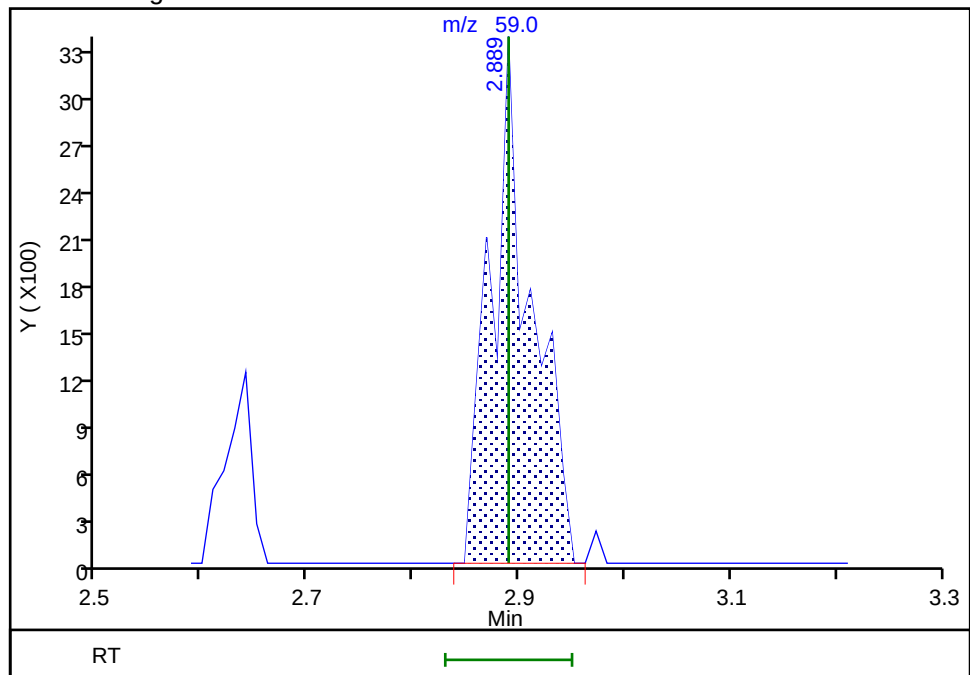
RT: 2.87
Area: 2737
Amount: 3.357406
Amount Units: ug/L

Processing Integration Results



RT: 2.89
Area: 8863
Amount: 9.406099
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:44:16

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D

Injection Date: 29-Oct-2018 14:51:30

Instrument ID: HP5975T

Lims ID: IC

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 (0.25 mm)

Detector: MS SCAN

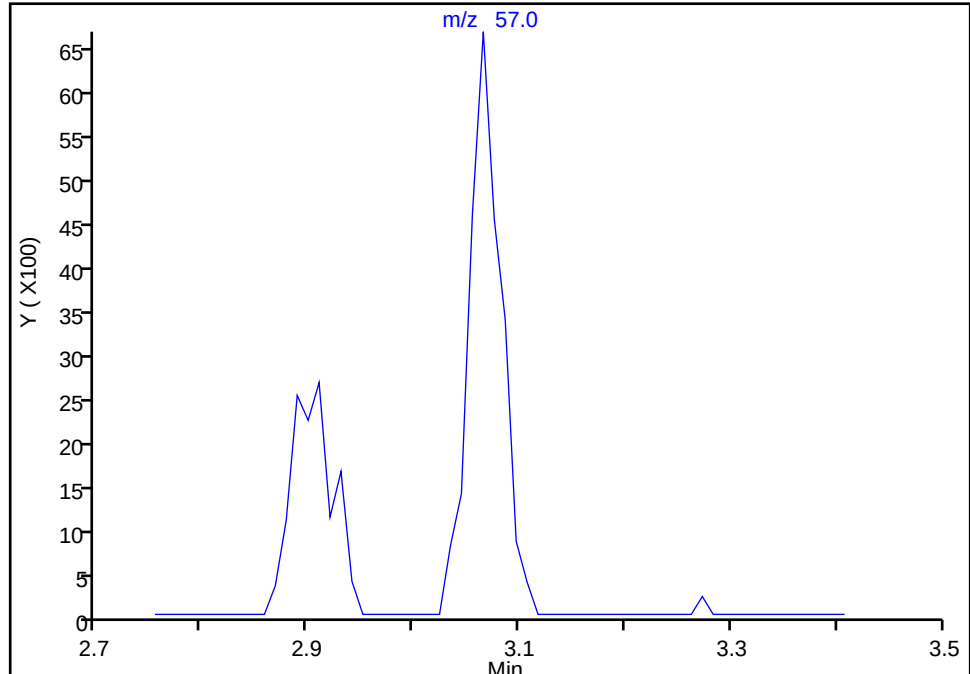
35 Hexane, CAS: 110-54-3

Signal: 1

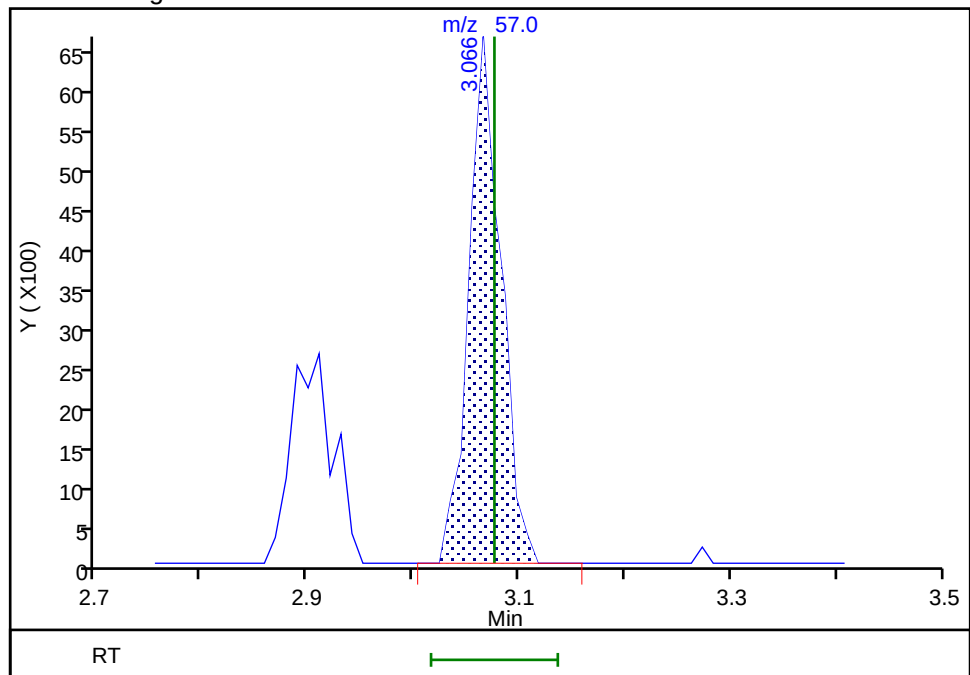
Not Detected

Expected RT: 3.08

Processing Integration Results



Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:44:25

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D

Injection Date: 29-Oct-2018 14:51:30

Instrument ID: HP5975T

Lims ID: IC

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 (0.25 mm)

Detector: MS SCAN

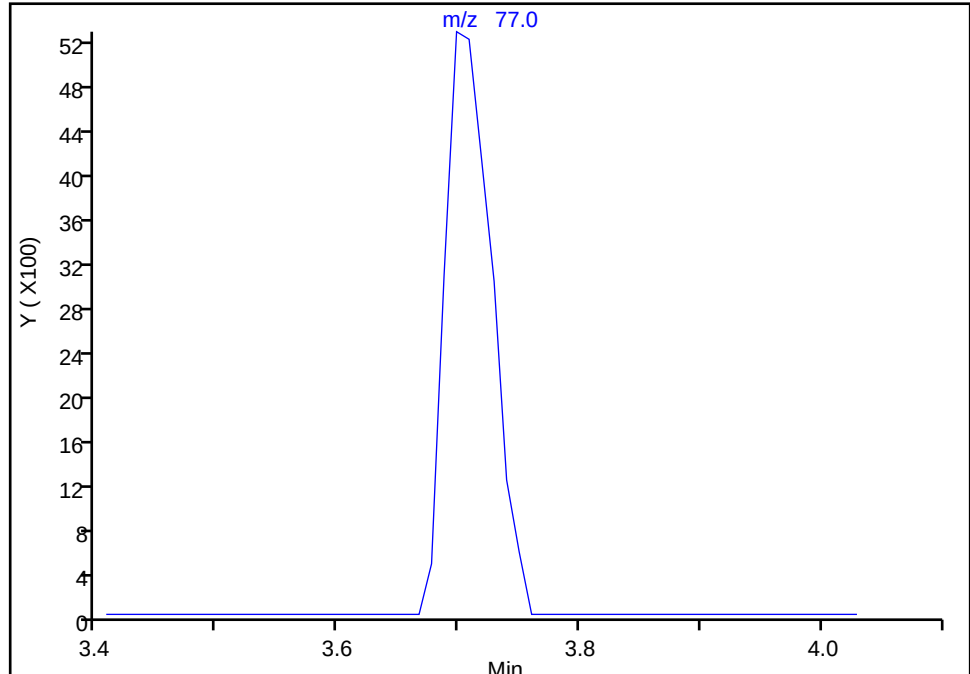
42 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

Not Detected

Expected RT: 3.72

Processing Integration Results



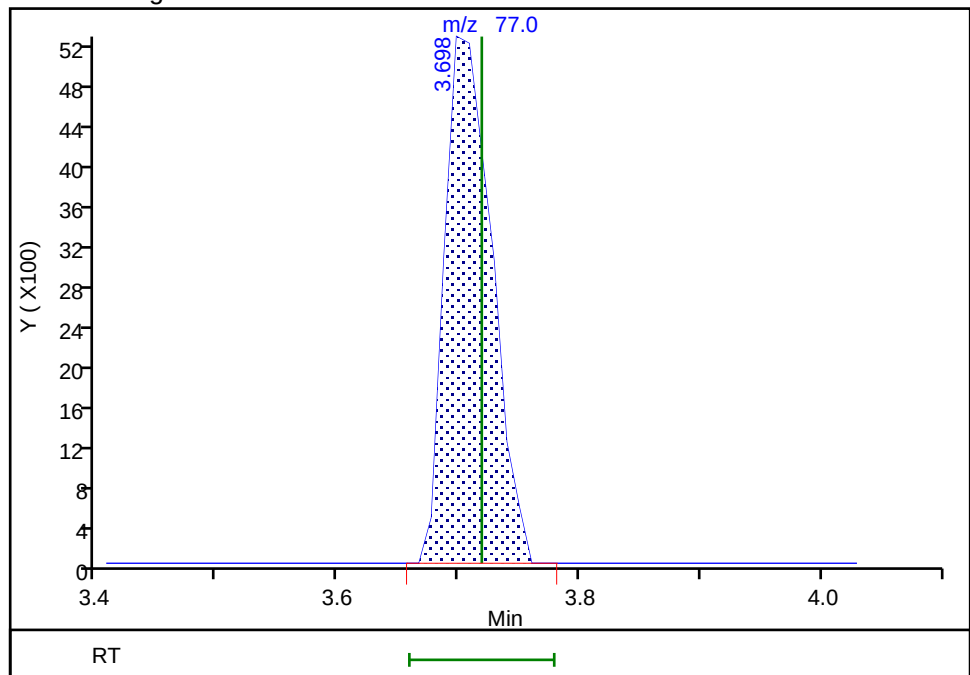
RT: 3.70

Area: 14069

Amount: 0.972397

Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:44:33

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D

Injection Date: 29-Oct-2018 14:51:30

Instrument ID: HP5975T

Lims ID: IC

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 (0.25 mm)

Detector: MS SCAN

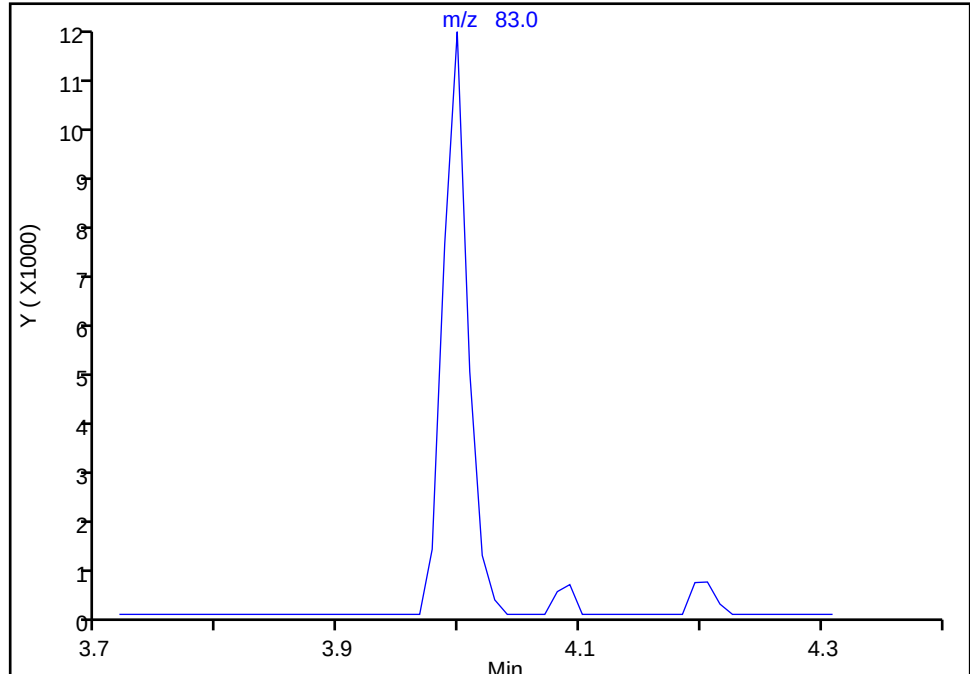
50 Chloroform, CAS: 67-66-3

Signal: 1

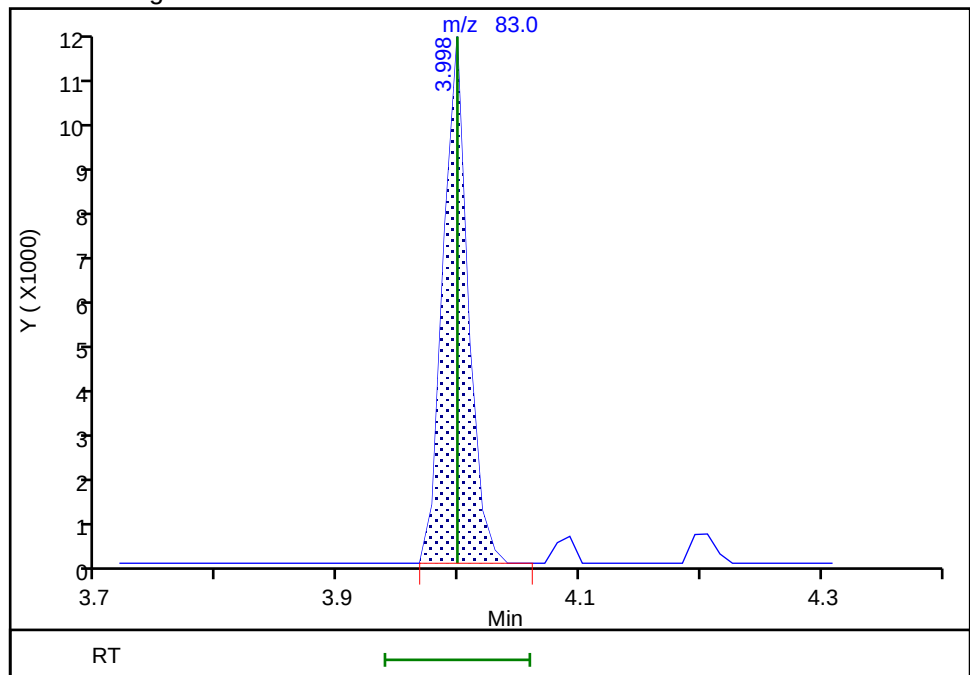
Not Detected

Expected RT: 4.00

Processing Integration Results



Manual Integration Results



RT: 4.00

Area: 16999

Amount: 0.964276

Amount Units: ug/L

Reviewer: milligana, 29-Oct-2018 20:44:40

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

TestAmerica Buffalo

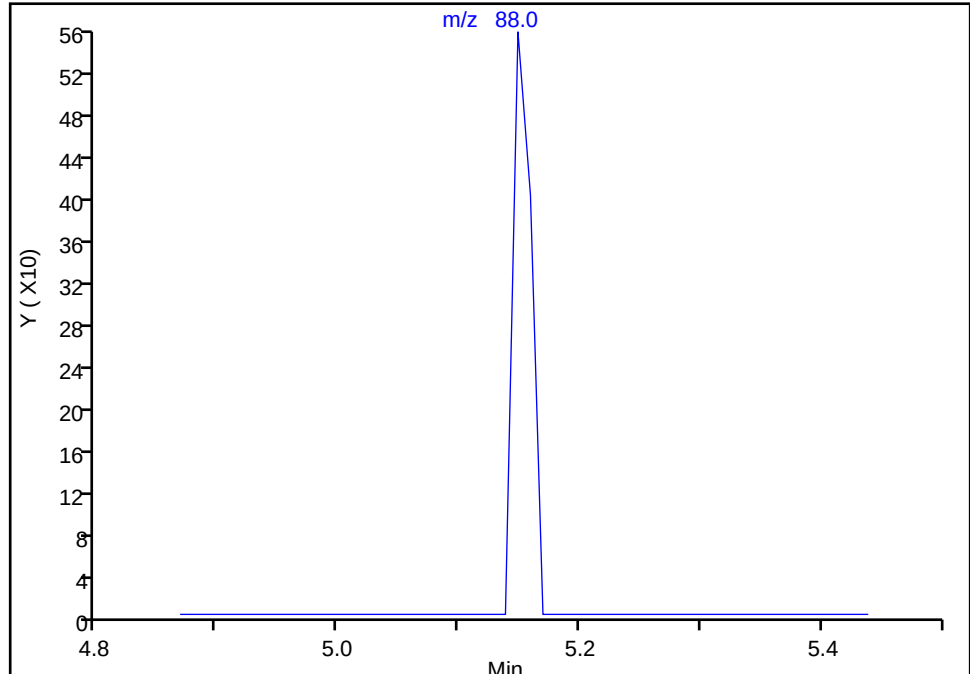
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D
Injection Date: 29-Oct-2018 14:51:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

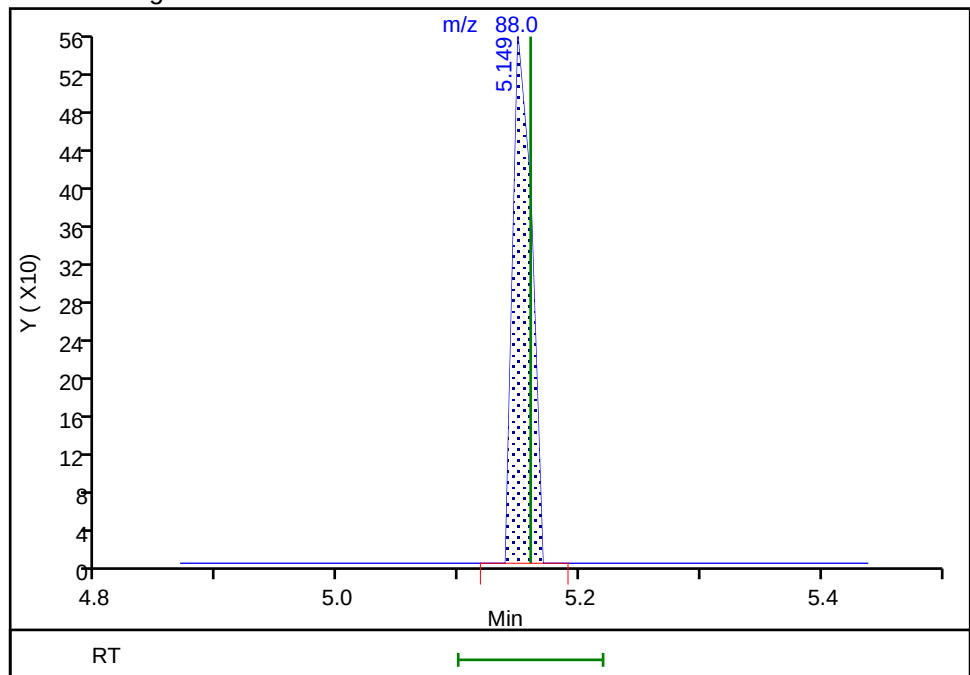
Not Detected
Expected RT: 5.16

Processing Integration Results



RT: 5.15
Area: 591
Amount: 9.274861
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:45:04
Audit Action: Manually Integrated

Audit Reason: Assign Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D

Injection Date: 29-Oct-2018 14:51:30

Instrument ID: HP5975T

Lims ID: IC

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 (0.25 mm)

Detector

MS SCAN

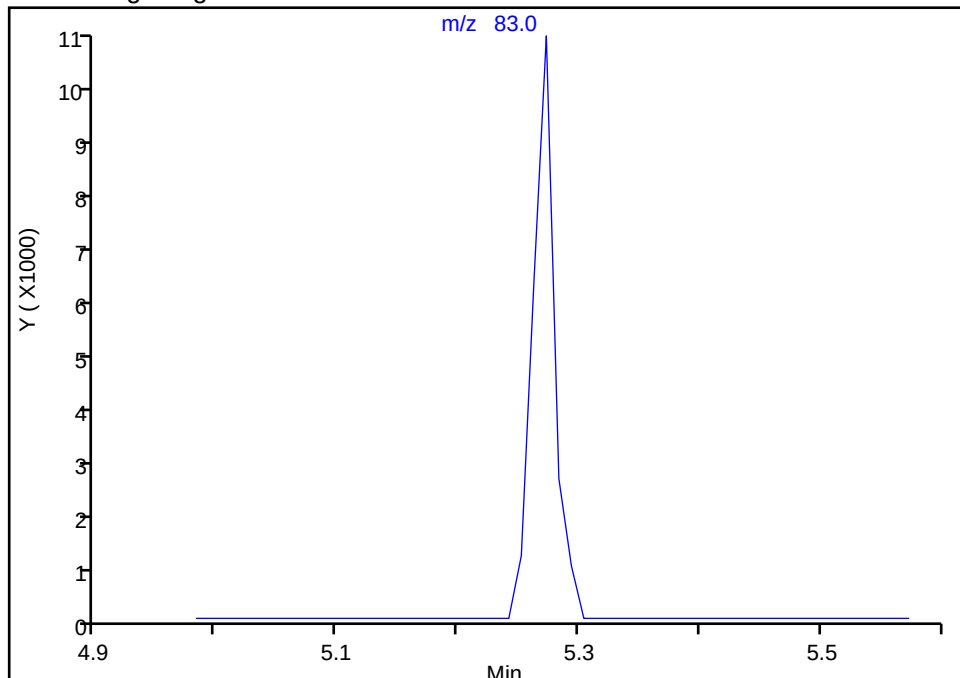
67 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

Not Detected

Expected RT: 5.27

Processing Integration Results



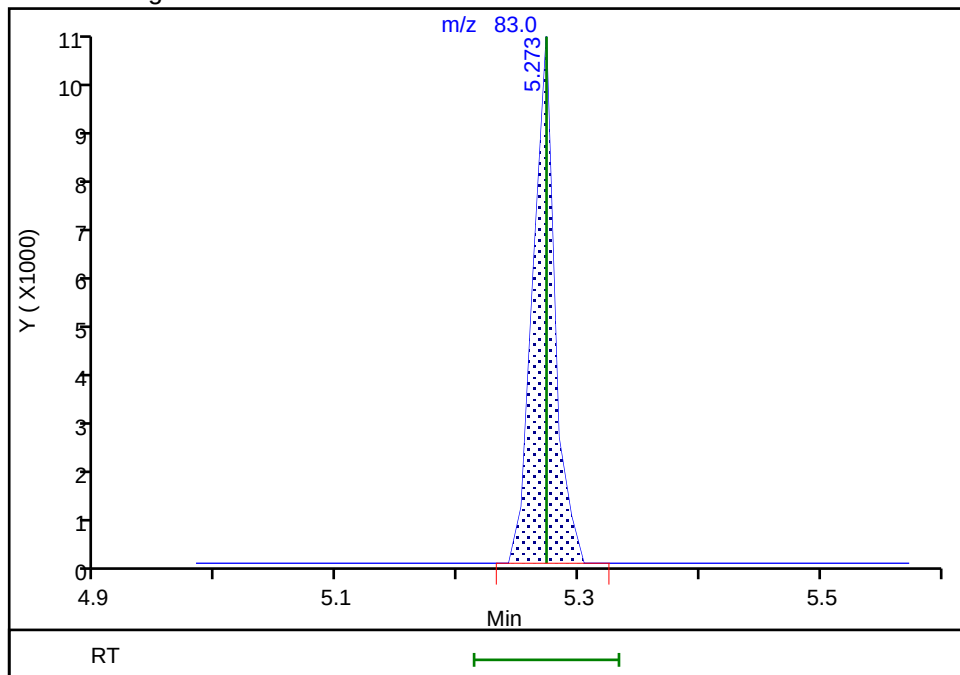
RT: 5.27

Area: 13251

Amount: 0.986820

Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:45:14

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Buffalo

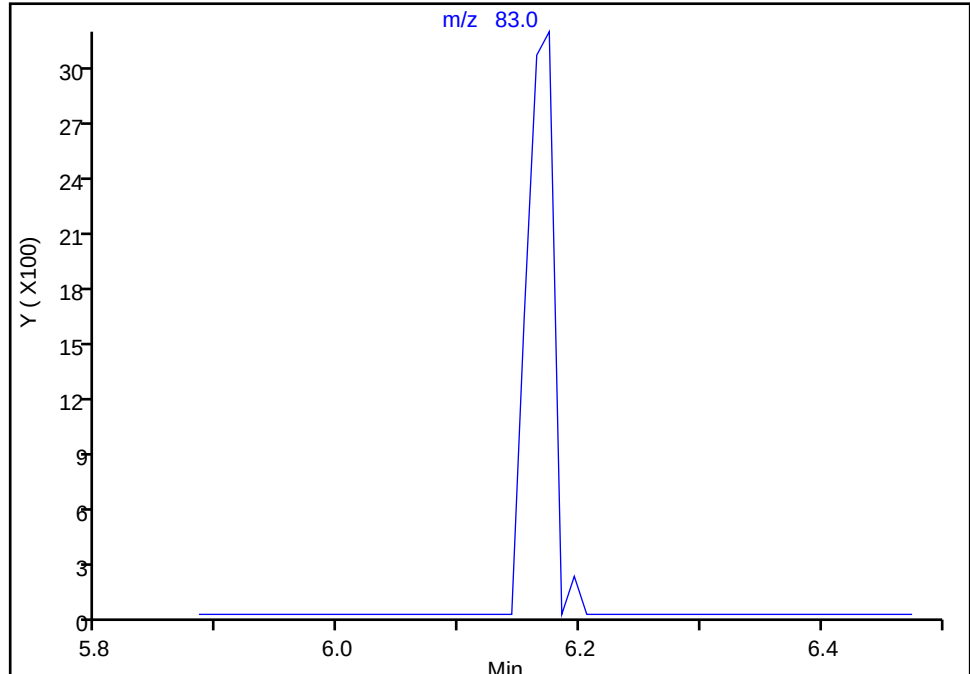
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4702.D
Injection Date: 29-Oct-2018 14:51:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

78 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

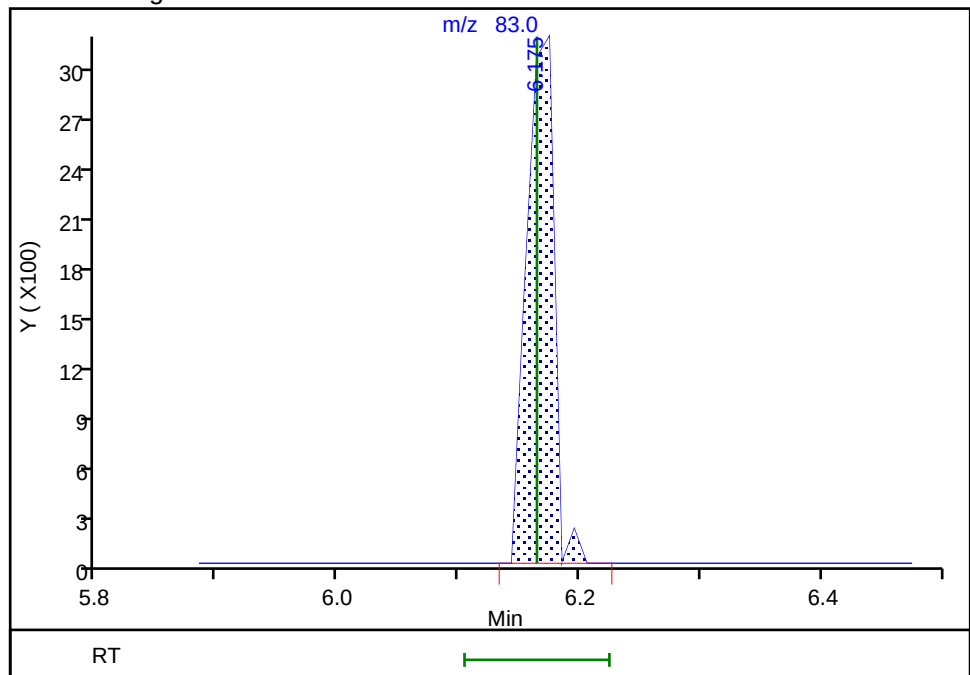
Not Detected
Expected RT: 6.16

Processing Integration Results



RT: 6.17
Area: 5021
Amount: 0.859754
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:45:26
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4703.D
 Lims ID: IC 2
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 29-Oct-2018 15:15:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 2
 Misc. Info.: 480-0075946-006
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 29-Oct-2018 23:41:42 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0323

First Level Reviewer: milligana

Date: 29-Oct-2018 20:42:07

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	4.589	4.589	0.000	97	158373	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.869	6.879	-0.010	91	581771	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	351277	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.133	-0.010	92	181210	25.0	23.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.372	4.372	0.000	0	294732	25.0	24.3	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	96	636400	25.0	24.6	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	226203	25.0	23.9	
11 Dichlorodifluoromethane	85	1.097	1.107	-0.010	95	24601	2.00	1.68	M
13 Chloromethane	50	1.252	1.263	-0.011	96	27212	2.00	1.92	M
14 Vinyl chloride	62	1.325	1.325	0.000	95	20634	2.00	2.03	
151 Butadiene	54	1.325	1.346	-0.021	79	18477	2.00	1.68	
15 Bromomethane	94	1.584	1.594	-0.010	95	15862	2.00	2.46	
16 Chloroethane	64	1.636	1.656	-0.020	55	10223	2.00	1.96	M
17 Trichlorofluoromethane	101	1.791	1.802	-0.011	81	33641	2.00	1.86	
18 Dichlorofluoromethane	67	1.833	1.833	0.000	95	30061	2.00	1.79	
19 Ethyl ether	59	2.061	2.061	0.000	90	11268	2.00	1.64	
21 Acrolein	56	2.226	2.226	0.000	79	12876	10.0	8.22	
20 1,1,2-Trichloro-1,2,2-trif	101	2.247	2.257	-0.010	48	8187	2.00	1.34	
22 1,1-Dichloroethene	96	2.247	2.257	-0.010	91	9086	2.00	1.55	
23 Acetone	43	2.371	2.371	0.000	95	30537	10.0	10.1	
24 Iodomethane	142	2.403	2.403	0.000	96	28826	2.00	2.19	
25 Carbon disulfide	76	2.423	2.434	-0.011	100	42024	2.00	1.90	
27 3-Chloro-1-propene	41	2.589	2.589	0.000	84	33573	2.00	1.99	
28 Methyl acetate	43	2.631	2.631	0.000	99	34490	4.00	4.58	
30 Methylene Chloride	84	2.713	2.724	-0.011	92	26271	2.00	1.81	
31 2-Methyl-2-propanol	59	2.900	2.890	0.010	40	17757	20.0	18.2	
33 Methyl tert-butyl ether	73	2.900	2.910	-0.010	93	50612	2.00	1.84	
32 trans-1,2-Dichloroethene	96	2.910	2.921	-0.011	89	15265	2.00	1.97	
34 Acrylonitrile	53	2.973	2.973	-0.001	100	81543	20.0	21.3	
35 Hexane	57	3.076	3.076	0.000	90	20000	2.00	1.44	

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	3.273	3.273	0.000	97	36760	2.00	2.19	
39 Vinyl acetate	43	3.314	3.325	-0.011	97	87629	4.00	4.17	
42 2,2-Dichloropropane	77	3.708	3.719	-0.011	89	28906	2.00	1.93	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	86	21105	2.00	2.18	
44 2-Butanone (MEK)	43	3.770	3.770	0.000	97	44871	10.0	10.2	
47 Chlorobromomethane	128	3.936	3.936	0.000	84	9172	2.00	1.97	
48 Tetrahydrofuran	42	3.947	3.947	0.000	79	11264	4.00	3.91	
50 Chloroform	83	3.998	3.998	0.000	95	36673	2.00	2.01	
52 Cyclohexane	56	4.092	4.092	0.000	79	22701	2.00	1.33	
51 1,1,1-Trichloroethane	97	4.081	4.092	-0.011	95	28988	2.00	1.72	
53 Carbon tetrachloride	117	4.195	4.195	0.000	82	22978	2.00	1.59	
54 1,1-Dichloropropene	75	4.206	4.206	0.000	88	22554	2.00	1.87	
55 Benzene	78	4.372	4.372	0.000	52	61176	2.00	1.91	
56 Isobutyl alcohol	43	4.413	4.403	0.010	41	14037	50.0	36.4	
57 1,2-Dichloroethane	62	4.434	4.434	0.000	95	33133	2.00	1.80	
59 n-Heptane	43	4.506	4.506	0.000	94	26577	2.00	1.64	
60 Trichloroethene	95	4.848	4.859	-0.011	93	18815	2.00	1.93	
62 Methylcyclohexane	83	4.952	4.942	0.010	98	20500	2.00	1.58	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	76	18237	2.00	1.98	
66 1,4-Dioxane	88	5.149	5.159	-0.010	32	2196	40.0	34.1	
65 Dibromomethane	93	5.159	5.159	0.000	92	12495	2.00	2.07	
67 Dichlorobromomethane	83	5.273	5.273	0.000	96	27772	2.00	2.00	
69 2-Chloroethyl vinyl ether	63	5.480	5.491	-0.011	90	11910	2.00	1.94	
71 cis-1,3-Dichloropropene	75	5.584	5.594	-0.010	86	23811	2.00	1.78	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	98	91550	10.0	9.80	
73 Toluene	92	5.802	5.812	-0.010	95	41821	2.00	1.89	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	96	28009	2.00	2.07	
77 Ethyl methacrylate	69	6.050	6.050	0.000	93	18326	2.00	1.90	
78 1,1,2-Trichloroethane	83	6.175	6.164	0.011	89	12467	2.00	2.11	
79 Tetrachloroethene	166	6.206	6.206	0.000	92	18302	2.00	1.82	
80 1,3-Dichloropropane	76	6.289	6.289	0.000	95	27900	2.00	2.06	
81 2-Hexanone	43	6.341	6.330	0.010	96	66003	10.0	10.1	
82 Chlorodibromomethane	129	6.465	6.465	0.000	87	18141	2.00	1.88	
83 Ethylene Dibromide	107	6.548	6.548	0.000	95	16393	2.00	2.12	
86 Chlorobenzene	112	6.900	6.900	0.000	89	51190	2.00	2.11	a
88 Ethylbenzene	91	6.962	6.962	0.000	99	88350	2.00	1.99	M
89 1,1,1,2-Tetrachloroethane	131	6.973	6.973	0.000	87	18511	2.00	1.94	
90 m-Xylene & p-Xylene	106	7.056	7.056	0.000	0	31745	2.00	1.93	
91 o-Xylene	106	7.366	7.366	0.000	95	33948	2.00	2.05	
92 Styrene	104	7.387	7.387	0.000	96	55325	2.00	2.02	
93 Bromoform	173	7.584	7.584	0.000	93	9228	2.00	1.52	
95 Isopropylbenzene	105	7.646	7.646	0.000	97	87654	2.00	2.06	
97 Bromobenzene	156	7.926	7.926	0.000	94	25224	2.00	2.12	
98 1,1,2,2-Tetrachloroethane	83	7.967	7.968	-0.001	95	16635	2.00	1.89	
99 N-Propylbenzene	91	7.978	7.978	0.000	97	97247	2.00	1.99	
100 1,2,3-Trichloropropane	110	7.988	7.988	0.000	90	7789	2.00	2.17	
101 trans-1,4-Dichloro-2-buten	53	8.009	7.999	0.010	71	6212	2.00	1.70	
105 2-Chlorotoluene	126	8.071	8.061	0.010	94	20496	2.00	2.10	
104 1,3,5-Trimethylbenzene	105	8.123	8.123	0.000	93	71350	2.00	1.89	
102 4-Chlorotoluene	91	8.154	8.154	0.000	97	70584	2.00	2.08	
106 tert-Butylbenzene	134	8.382	8.382	0.000	93	15941	2.00	2.03	
107 1,2,4-Trimethylbenzene	105	8.423	8.423	0.000	97	76511	2.00	1.90	

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	8.558	8.558	0.000	96	83918	2.00	1.89	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	74	42496	2.00	1.94	
111 4-Isopropyltoluene	119	8.672	8.672	0.000	95	80623	2.00	1.99	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	92	46979	2.00	2.10	
115 n-Butylbenzene	91	9.014	9.014	0.000	96	66349	2.00	1.83	
116 1,2-Dichlorobenzene	146	9.056	9.056	0.000	92	44634	2.00	2.08	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	70	4019	2.00	1.95	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	93	33375	2.00	1.80	
120 Hexachlorobutadiene	225	10.486	10.475	0.011	92	19705	2.00	1.97	
121 Naphthalene	128	10.589	10.579	0.010	97	66030	2.00	1.94	
122 1,2,3-Trichlorobenzene	180	10.786	10.786	0.000	94	34187	2.00	2.04	
S 124 1,2-Dichloroethene, Total	1				0			4.15	
S 125 Total BTEX	1				0			9.78	
S 126 Xylenes, Total	1				0			3.98	
S 123 1,3-Dichloropropene, Total	1				0			3.85	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GAS CORP mix_00309

Amount Added: 2.00

Units: uL

8260 CORP mix_00138

Amount Added: 2.00

Units: uL

T_8260_Surr_00181

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00209

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4703.D

Injection Date: 29-Oct-2018 15:15:30

Instrument ID: HP5975T

Lims ID: IC 2

Operator ID: KN

Client ID:

Worklist Smp#: 6

Purge Vol: 5.000 mL

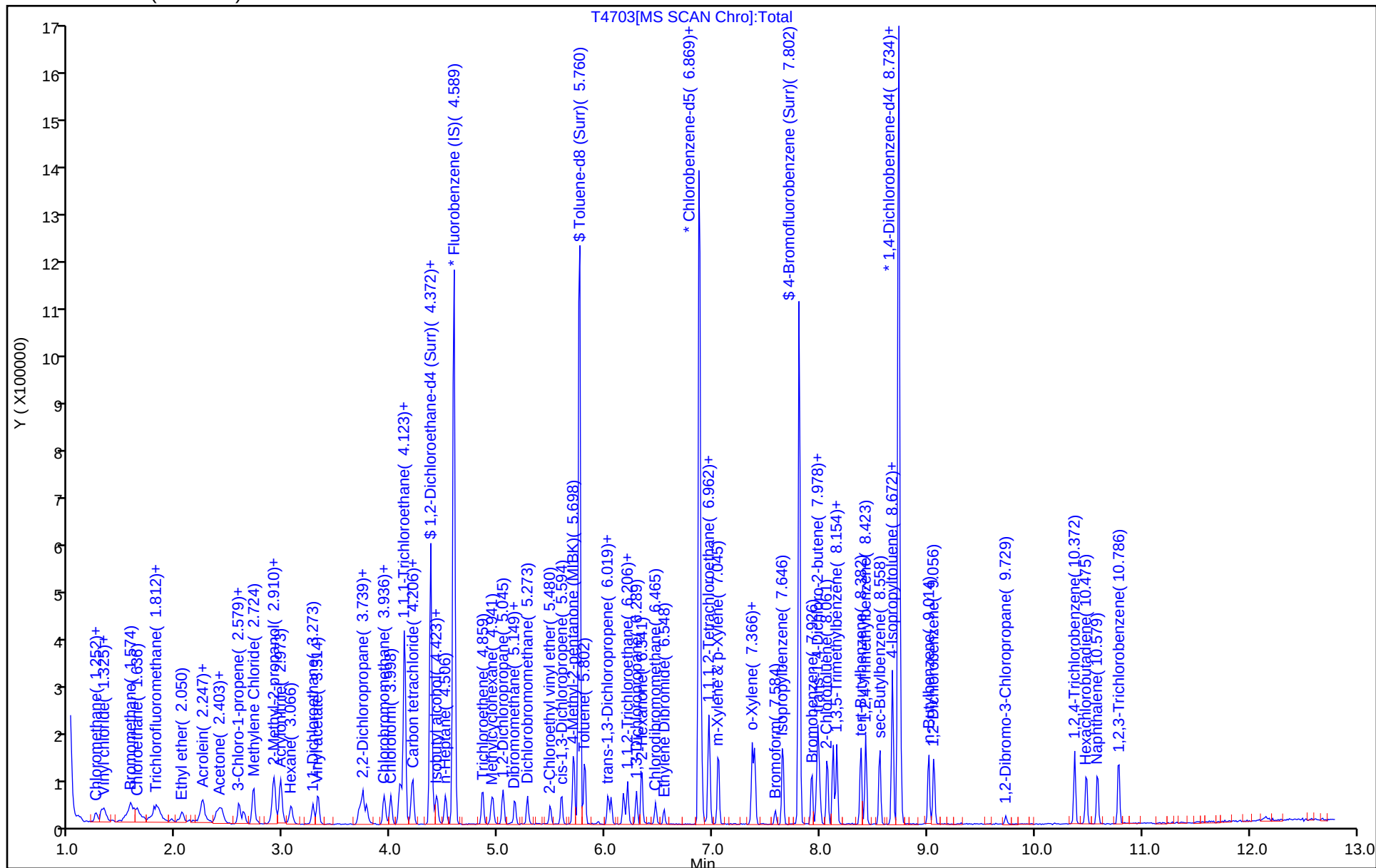
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4703.D

Injection Date: 29-Oct-2018 15:15:30

Instrument ID: HP5975T

Lims ID: IC 2

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 (0.25 mm)

Detector

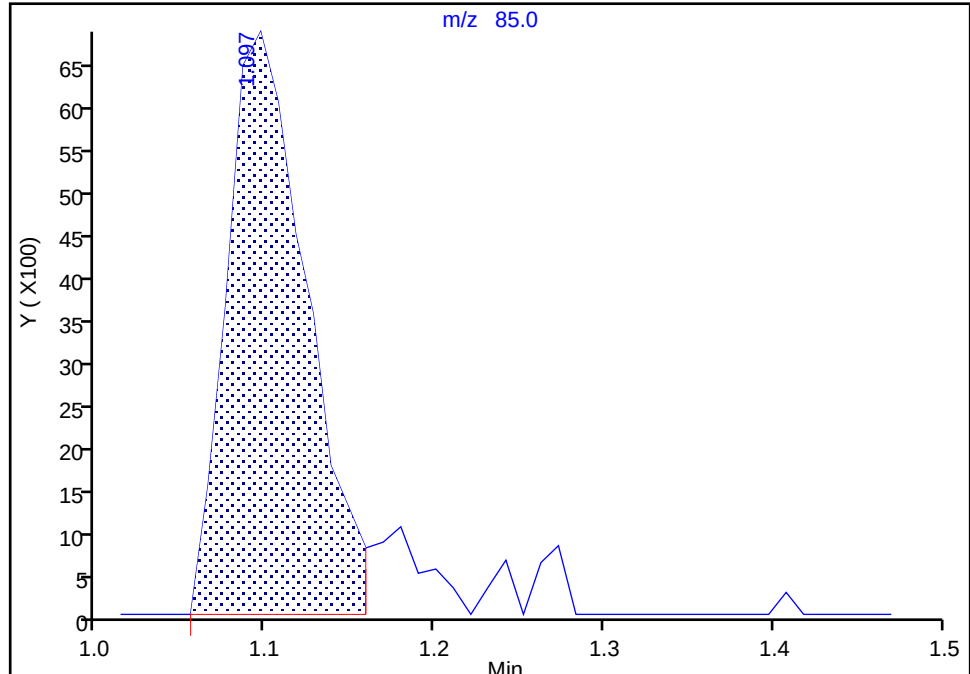
MS SCAN

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

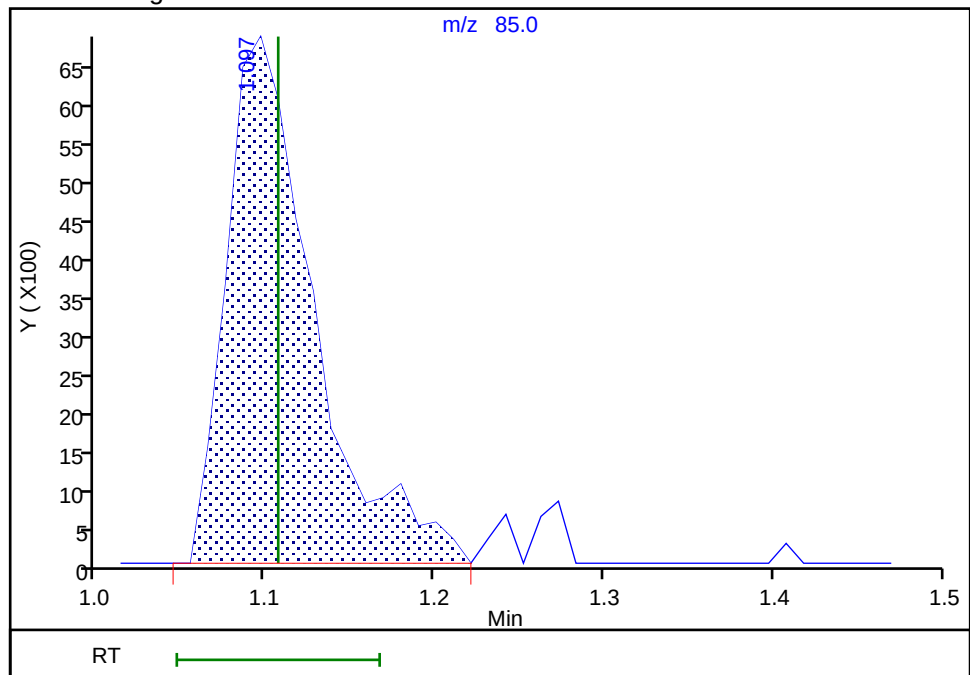
RT: 1.10
Area: 22604
Amount: 1.707464
Amount Units: ug/L

Processing Integration Results



RT: 1.10
Area: 24601
Amount: 1.684058
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:38:49

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4703.D

Injection Date: 29-Oct-2018 15:15:30

Instrument ID: HP5975T

Lims ID: IC 2

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 (0.25 mm)

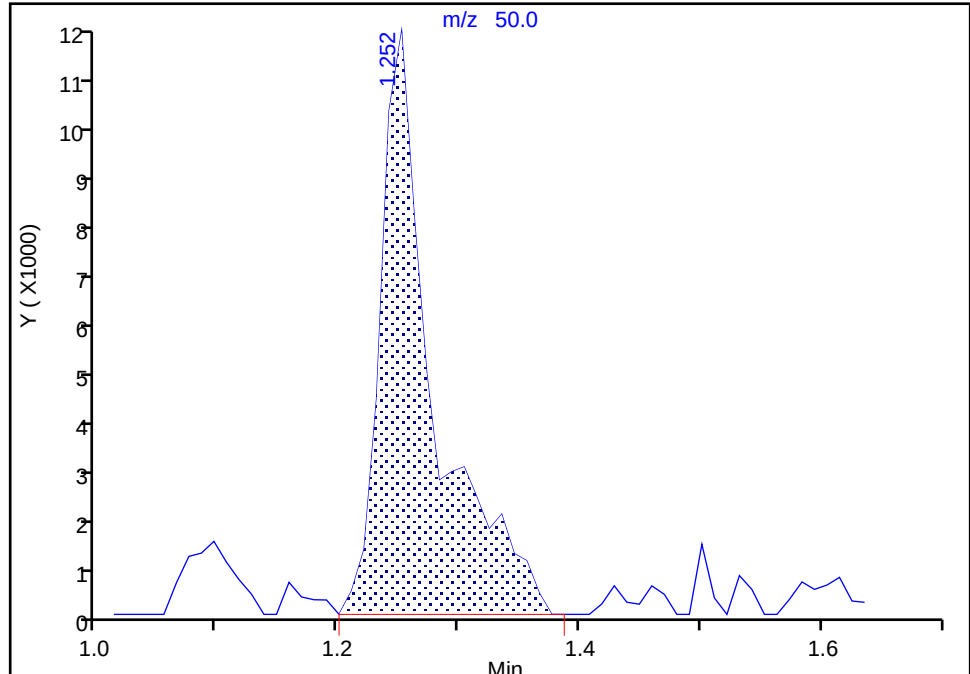
Detector: MS SCAN

13 Chloromethane, CAS: 74-87-3

Signal: 1

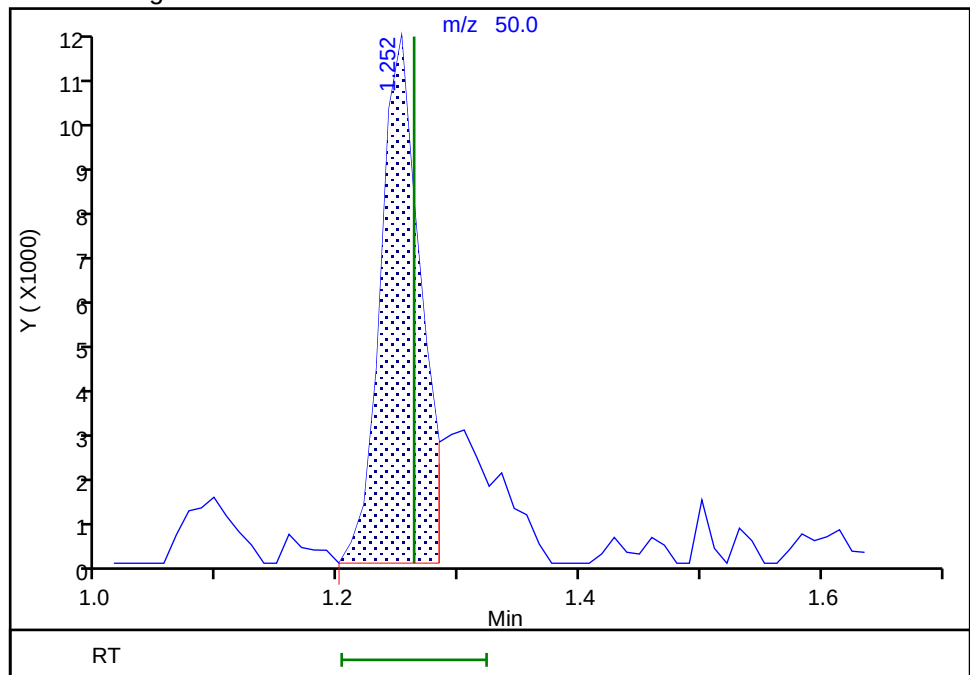
RT: 1.25
Area: 36386
Amount: 2.164180
Amount Units: ug/L

Processing Integration Results



RT: 1.25
Area: 27212
Amount: 1.921662
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:39:09

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4703.D

Injection Date: 29-Oct-2018 15:15:30

Instrument ID: HP5975T

Lims ID: IC 2

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 (0.25 mm)

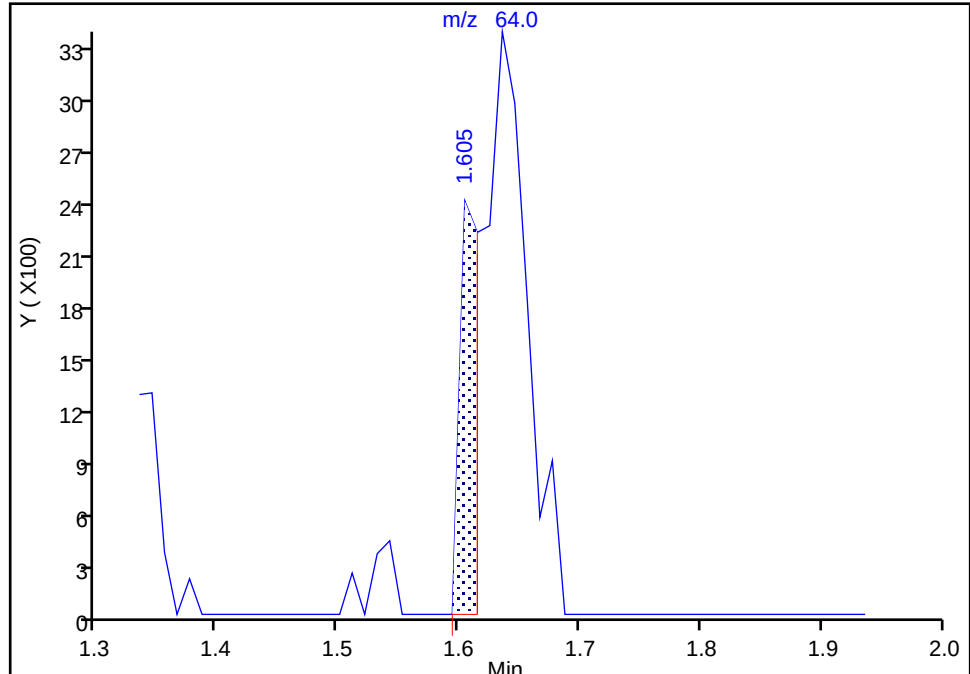
Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

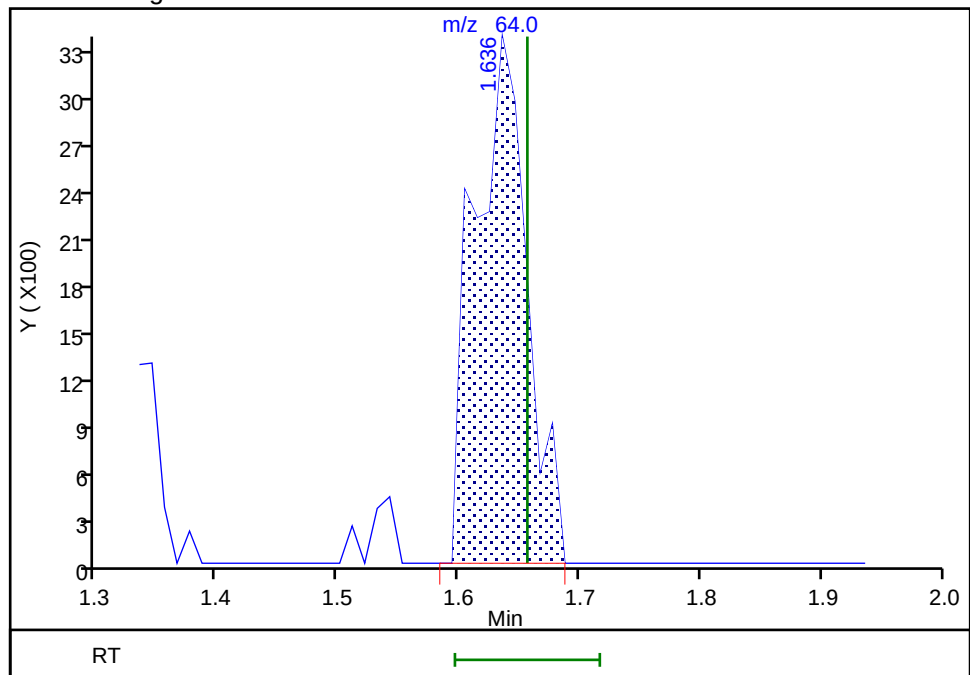
RT: 1.60
Area: 2863
Amount: 0.596900
Amount Units: ug/L

Processing Integration Results



RT: 1.64
Area: 10223
Amount: 1.962728
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:39:24

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

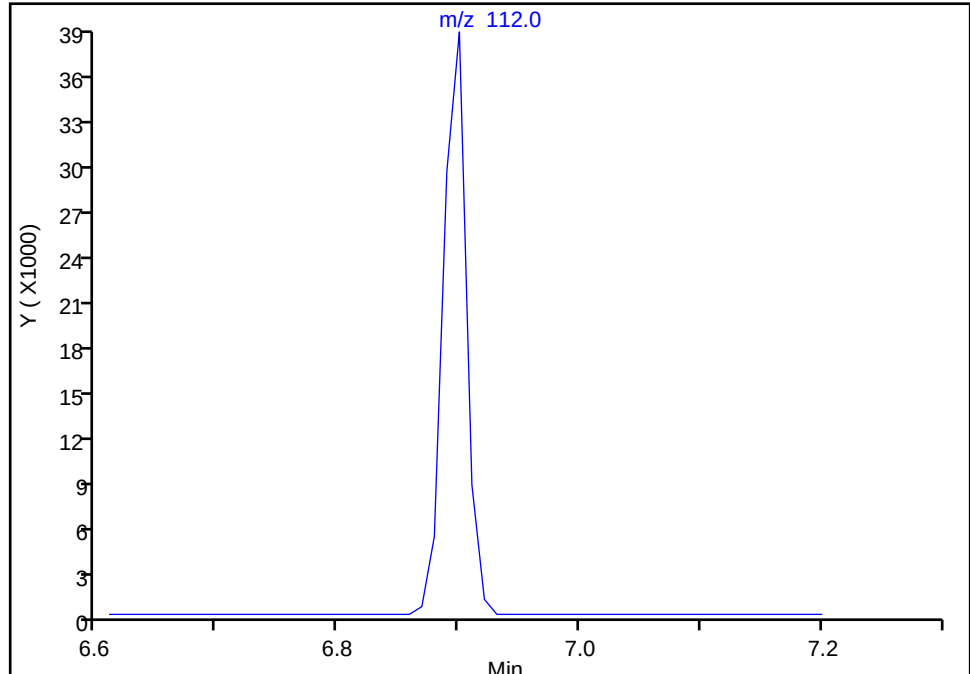
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4703.D
Injection Date: 29-Oct-2018 15:15:30 Instrument ID: HP5975T
Lims ID: IC 2
Client ID:
Operator ID: KN ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

86 Chlorobenzene, CAS: 108-90-7

Signal: 1

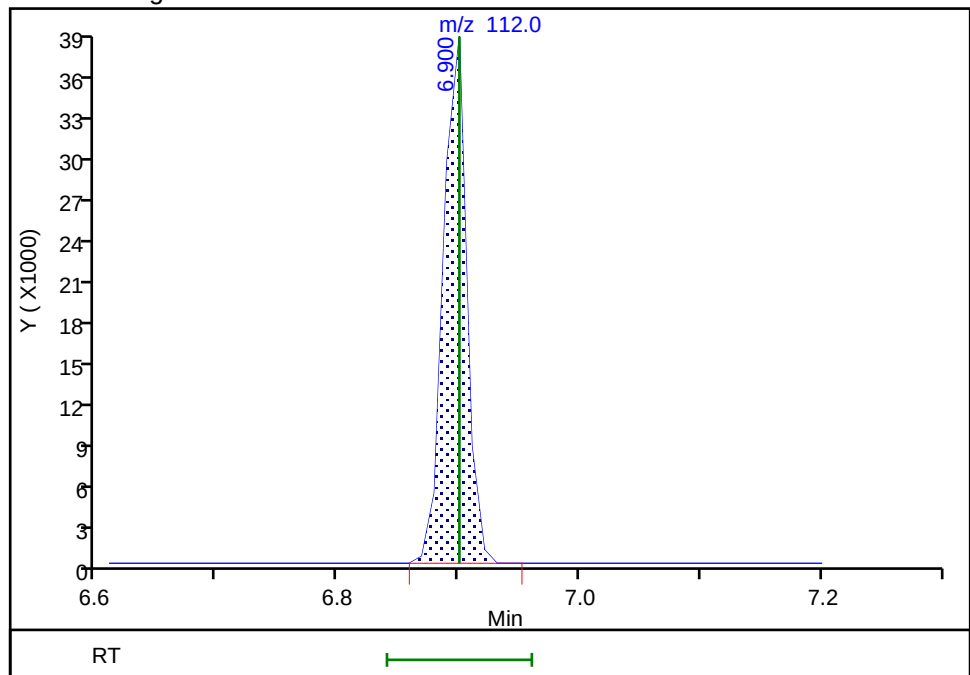
Not Detected
Expected RT: 6.90

Processing Integration Results



RT: 6.90
Area: 51190
Amount: 2.113784
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:40:17
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4703.D

Injection Date: 29-Oct-2018 15:15:30

Instrument ID: HP5975T

Lims ID: IC 2

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 (0.25 mm)

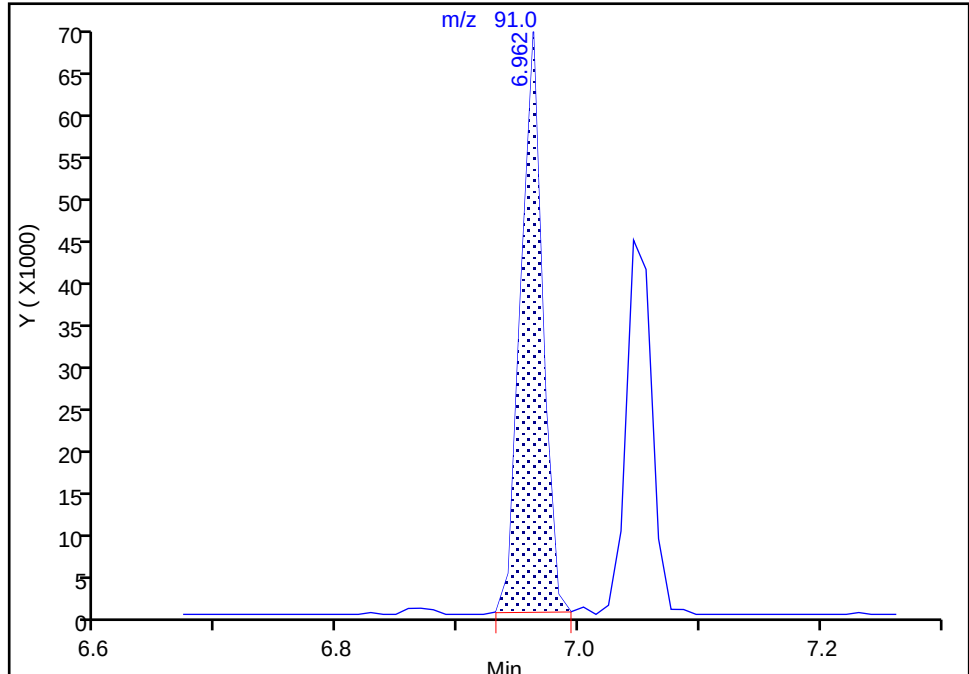
Detector: MS SCAN

88 Ethylbenzene, CAS: 100-41-4

Signal: 1

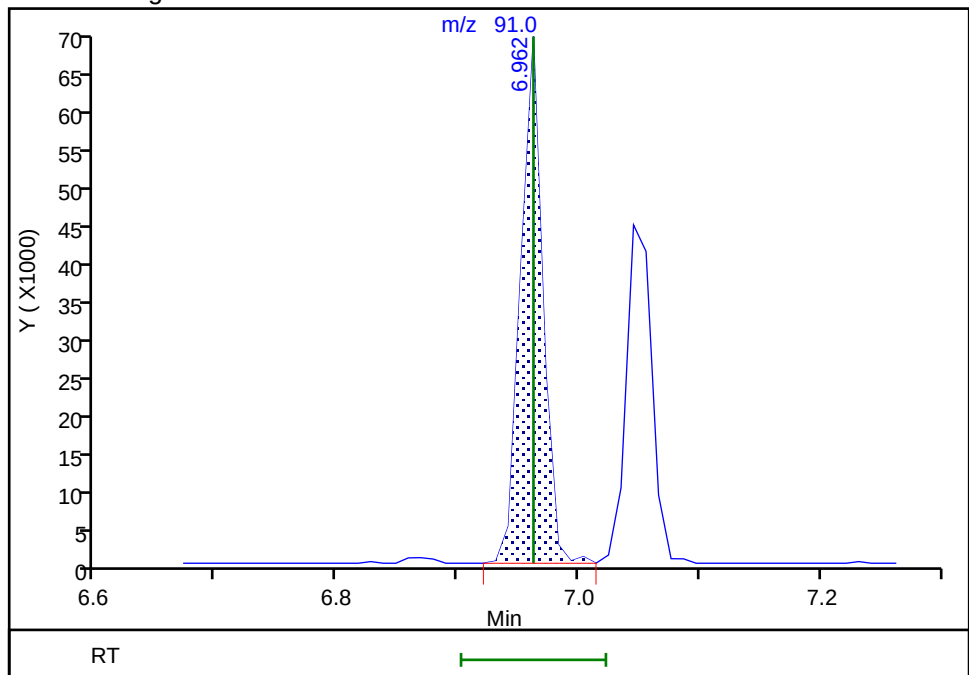
RT: 6.96
Area: 86757
Amount: 1.956372
Amount Units: ug/L

Processing Integration Results



RT: 6.96
Area: 88350
Amount: 1.987831
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:40:35

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4704.D
 Lims ID: IC 3
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 29-Oct-2018 15:39:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 3
 Misc. Info.: 480-0075946-007
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 29-Oct-2018 23:41:49 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0323

First Level Reviewer: milligana

Date: 29-Oct-2018 20:35:02

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	4.589	4.589	0.000	97	150921	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.879	6.879	0.000	92	570129	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	345049	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.133	-0.010	90	184560	25.0	25.3	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.372	4.372	0.000	0	293621	25.0	25.4	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	95	638877	25.0	25.2	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	234315	25.0	25.2	
11 Dichlorodifluoromethane	85	1.097	1.107	-0.010	98	78263	5.00	5.62	M
13 Chloromethane	50	1.252	1.263	-0.011	99	70966	5.00	5.26	M
14 Vinyl chloride	62	1.325	1.325	0.000	95	52301	5.00	5.39	
151 Butadiene	54	1.304	1.346	-0.042	89	58214	5.00	5.57	
15 Bromomethane	94	1.574	1.594	-0.020	97	30922	5.00	5.03	
16 Chloroethane	64	1.646	1.656	-0.010	93	24805	5.00	5.00	
17 Trichlorofluoromethane	101	1.791	1.802	-0.011	79	97404	5.00	5.66	M
18 Dichlorofluoromethane	67	1.822	1.833	-0.011	94	87809	5.00	5.49	
19 Ethyl ether	59	2.050	2.061	-0.011	98	34391	5.00	5.25	
21 Acrolein	56	2.237	2.226	0.011	96	45054	25.0	30.2	
22 1,1-Dichloroethene	96	2.247	2.257	-0.010	93	30157	5.00	5.39	
20 1,1,2-Trichloro-1,2,2-trif	101	2.257	2.257	0.000	51	31694	5.00	5.44	
23 Acetone	43	2.382	2.371	0.011	91	72622	25.0	25.2	
24 Iodomethane	142	2.403	2.403	0.000	95	64829	5.00	5.16	
25 Carbon disulfide	76	2.423	2.434	-0.011	100	103536	5.00	4.90	
27 3-Chloro-1-propene	41	2.589	2.589	0.000	86	83006	5.00	5.17	
28 Methyl acetate	43	2.631	2.631	0.000	100	81258	10.0	11.3	
30 Methylene Chloride	84	2.724	2.724	0.000	93	53212	5.00	5.34	a
31 2-Methyl-2-propanol	59	2.879	2.890	-0.011	75	51408	50.0	55.4	
33 Methyl tert-butyl ether	73	2.900	2.910	-0.010	97	143519	5.00	5.47	
32 trans-1,2-Dichloroethene	96	2.910	2.921	-0.011	89	37593	5.00	5.10	
34 Acrylonitrile	53	2.973	2.973	-0.001	94	193594	50.0	53.1	
35 Hexane	57	3.076	3.076	0.000	94	67466	5.00	5.09	

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	3.273	3.273	0.000	96	86533	5.00	5.42	
39 Vinyl acetate	43	3.314	3.325	-0.011	97	211070	10.0	10.5	
42 2,2-Dichloropropane	77	3.719	3.719	0.000	90	73887	5.00	5.19	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	88	47318	5.00	5.13	
44 2-Butanone (MEK)	43	3.770	3.770	0.000	97	113409	25.0	27.0	
47 Chlorobromomethane	128	3.936	3.936	0.000	91	26231	5.00	5.93	
48 Tetrahydrofuran	42	3.947	3.947	0.000	88	27974	10.0	10.2	
50 Chloroform	83	3.998	3.998	0.000	95	90689	5.00	5.22	
51 1,1,1-Trichloroethane	97	4.092	4.092	0.000	96	82502	5.00	5.13	
52 Cyclohexane	56	4.092	4.092	0.000	89	84800	5.00	5.22	
53 Carbon tetrachloride	117	4.195	4.195	0.000	92	68714	5.00	4.98	
54 1,1-Dichloropropene	75	4.206	4.206	0.000	86	55986	5.00	4.88	
55 Benzene	78	4.372	4.372	0.000	70	164574	5.00	5.39	
56 Isobutyl alcohol	43	4.403	4.403	0.000	90	46744	125.0	127.3	
57 1,2-Dichloroethane	62	4.423	4.434	-0.011	95	98932	5.00	5.65	
59 n-Heptane	43	4.506	4.506	0.000	97	75703	5.00	4.89	
60 Trichloroethene	95	4.848	4.859	-0.011	91	48553	5.00	5.22	
62 Methylcyclohexane	83	4.941	4.942	-0.001	92	60463	5.00	4.91	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	89	45721	5.00	5.22	
65 Dibromomethane	93	5.159	5.159	0.000	87	29662	5.00	5.16	
66 1,4-Dioxane	88	5.159	5.159	0.000	34	7221	100.0	114.5	
67 Dichlorobromomethane	83	5.273	5.273	0.000	97	63451	5.00	4.80	
69 2-Chloroethyl vinyl ether	63	5.480	5.491	-0.011	93	32041	5.00	5.47	
71 cis-1,3-Dichloropropene	75	5.594	5.594	0.000	90	68082	5.00	5.35	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	98	239280	25.0	26.1	
73 Toluene	92	5.802	5.812	-0.010	98	107001	5.00	4.95	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	97	63211	5.00	4.76	
77 Ethyl methacrylate	69	6.050	6.050	0.000	91	44048	5.00	4.66	
78 1,1,2-Trichloroethane	83	6.164	6.164	0.000	93	30079	5.00	5.20	a
79 Tetrachloroethene	166	6.206	6.206	0.000	84	47443	5.00	4.82	
80 1,3-Dichloropropane	76	6.289	6.289	0.000	96	67647	5.00	5.09	
81 2-Hexanone	43	6.341	6.330	0.010	96	158871	25.0	24.9	
82 Chlorodibromomethane	129	6.465	6.465	0.000	90	44589	5.00	4.71	
83 Ethylene Dibromide	107	6.548	6.548	0.000	96	39519	5.00	5.20	
86 Chlorobenzene	112	6.900	6.900	0.000	93	118942	5.00	5.01	a
88 Ethylbenzene	91	6.962	6.962	0.000	99	219729	5.00	5.04	
89 1,1,1,2-Tetrachloroethane	131	6.973	6.973	0.000	85	45990	5.00	4.92	
90 m-Xylene & p-Xylene	106	7.045	7.056	-0.011	0	80094	5.00	4.96	
91 o-Xylene	106	7.366	7.366	0.000	97	80196	5.00	4.95	
92 Styrene	104	7.387	7.387	0.000	93	141296	5.00	5.28	
93 Bromoform	173	7.584	7.584	0.000	95	29503	5.00	4.97	
95 Isopropylbenzene	105	7.646	7.646	0.000	97	217365	5.00	5.20	
97 Bromobenzene	156	7.926	7.926	0.000	93	58055	5.00	4.96	
98 1,1,2,2-Tetrachloroethane	83	7.968	7.968	0.000	95	45093	5.00	5.21	
99 N-Propylbenzene	91	7.978	7.978	0.000	98	250511	5.00	5.21	
100 1,2,3-Trichloropropane	110	7.999	7.988	0.011	88	15324	5.00	4.35	
101 trans-1,4-Dichloro-2-buten	53	7.999	7.999	0.000	69	17663	5.00	4.93	
105 2-Chlorotoluene	126	8.061	8.061	0.000	94	46399	5.00	4.83	
104 1,3,5-Trimethylbenzene	105	8.123	8.123	0.000	93	190058	5.00	5.13	
102 4-Chlorotoluene	91	8.154	8.154	0.000	99	182879	5.00	5.48	
106 tert-Butylbenzene	134	8.382	8.382	0.000	91	39496	5.00	5.12	
107 1,2,4-Trimethylbenzene	105	8.423	8.423	0.000	97	208490	5.00	5.27	

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	8.558	8.558	0.000	96	223221	5.00	5.11	
111 4-Isopropyltoluene	119	8.672	8.672	0.000	96	211662	5.00	5.31	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	74	116269	5.00	5.41	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	93	118420	5.00	5.38	
115 n-Butylbenzene	91	9.014	9.014	0.000	98	190853	5.00	5.37	
116 1,2-Dichlorobenzene	146	9.056	9.056	0.000	94	107463	5.00	5.10	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	86	8352	5.00	4.13	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	91	98771	5.00	5.41	
120 Hexachlorobutadiene	225	10.475	10.475	0.000	95	46430	5.00	4.73	
121 Naphthalene	128	10.579	10.579	0.000	97	169808	5.00	5.08	
122 1,2,3-Trichlorobenzene	180	10.786	10.786	0.000	94	82597	5.00	5.01	
S 126 Xylenes, Total	1				0			9.92	
S 123 1,3-Dichloropropene, Total	1				0			10.1	
S 124 1,2-Dichloroethene, Total	1				0			10.2	
S 125 Total BTEX	1				0			25.3	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00138

Amount Added: 5.00

Units: uL

GAS CORP mix_00309

Amount Added: 5.00

Units: uL

T_8260_Surr_00181

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00209

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181029-75946.b\\T4704.D

Injection Date: 29-Oct-2018 15:39:30

Instrument ID: HP5975T

Lims ID: IC 3

Operator ID: KN

Client ID:

Worklist Smp#: 7

Purge Vol: 5.000 mL

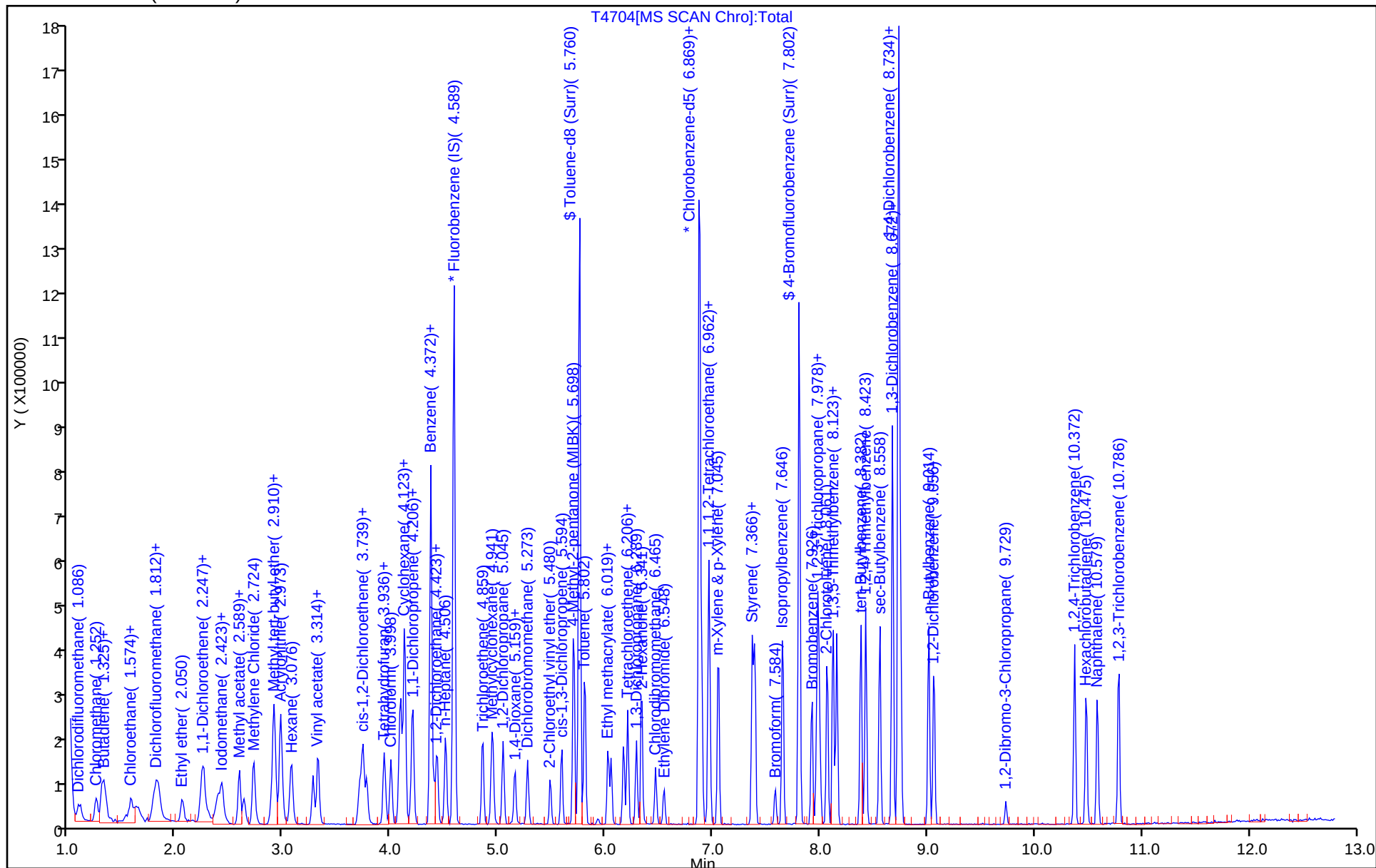
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4704.D

Injection Date: 29-Oct-2018 15:39:30

Instrument ID: HP5975T

Lims ID: IC 3

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 (0.25 mm)

Detector

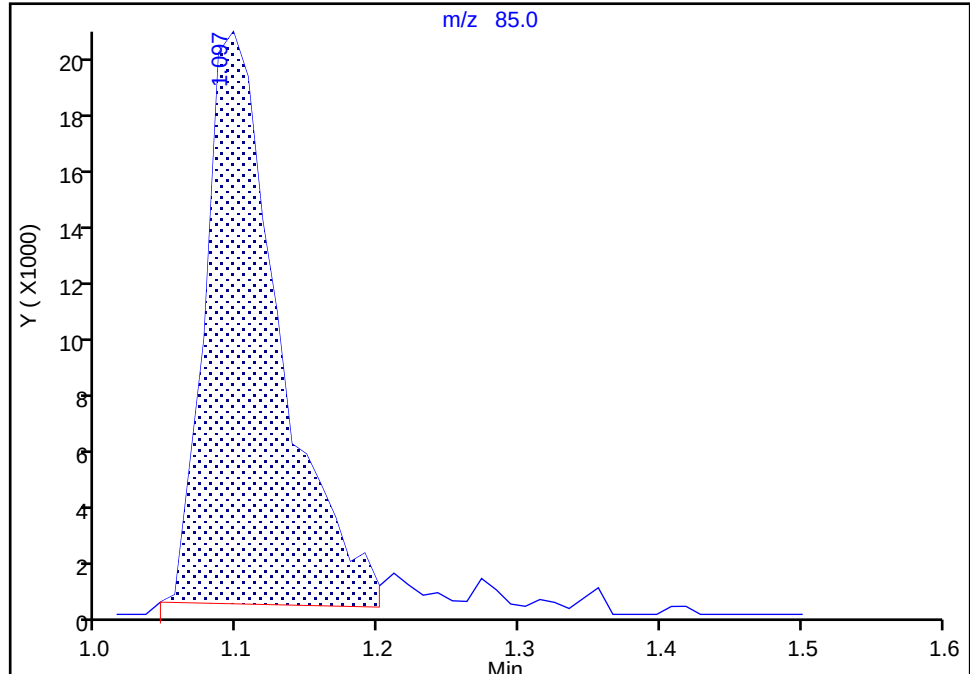
MS SCAN

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

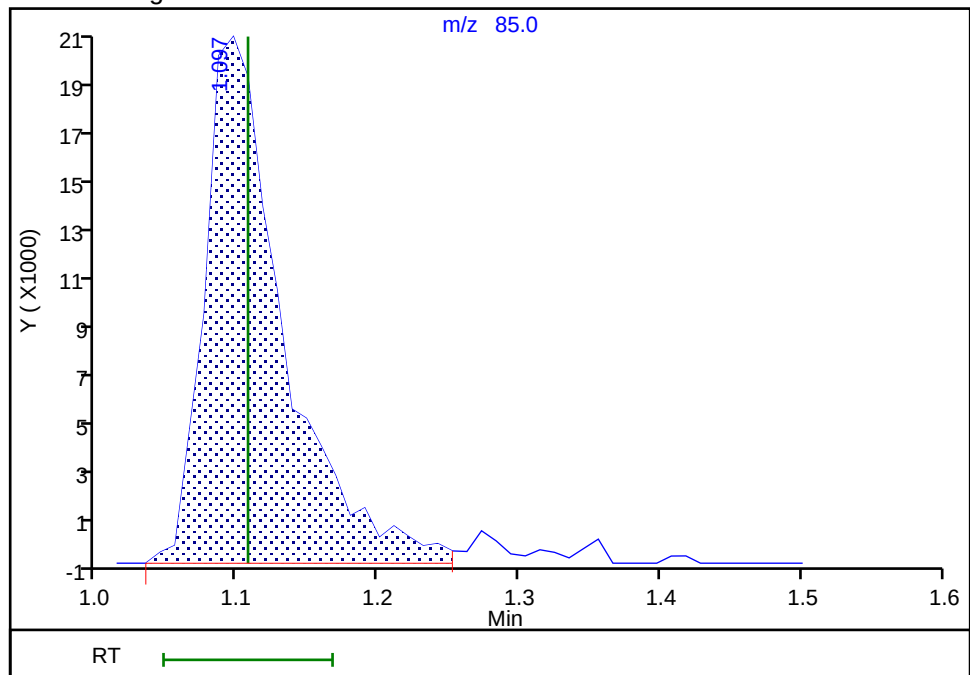
RT: 1.10
Area: 72220
Amount: 5.020120
Amount Units: ug/L

Processing Integration Results



RT: 1.10
Area: 78263
Amount: 5.622017
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:35:54

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4704.D

Injection Date: 29-Oct-2018 15:39:30

Instrument ID: HP5975T

Lims ID: IC 3

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 (0.25 mm)

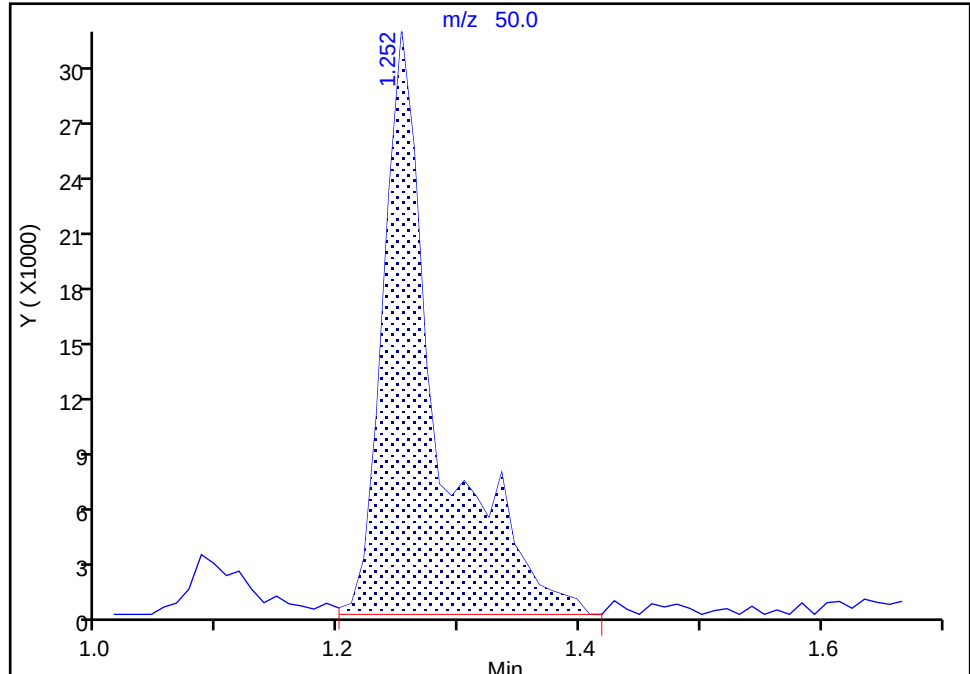
Detector: MS SCAN

13 Chloromethane, CAS: 74-87-3

Signal: 1

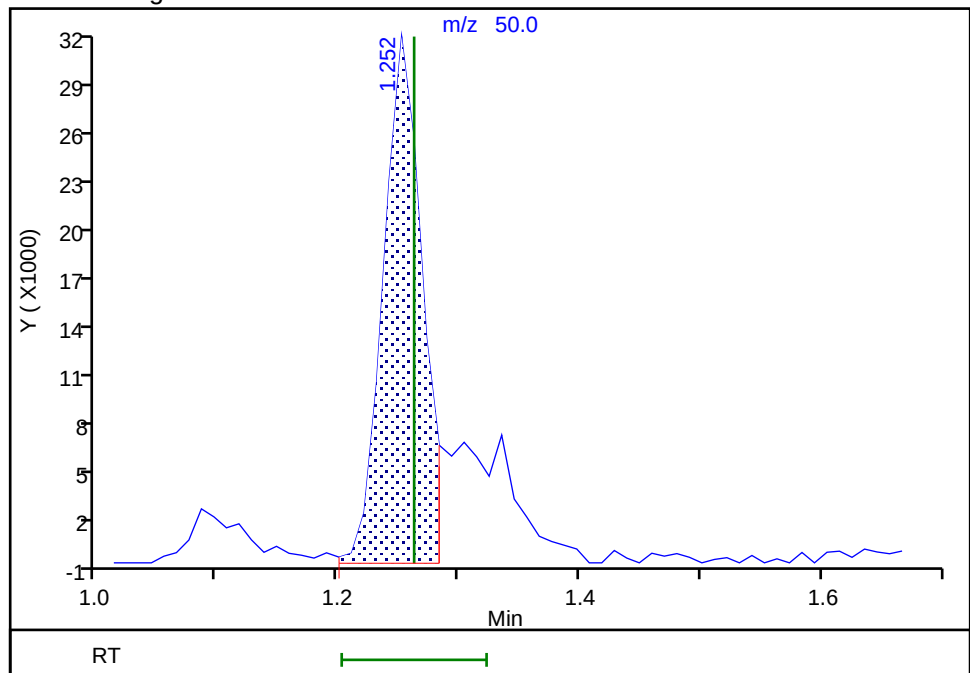
RT: 1.25
Area: 98043
Amount: 5.871311
Amount Units: ug/L

Processing Integration Results



RT: 1.25
Area: 70966
Amount: 5.258942
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:36:12

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

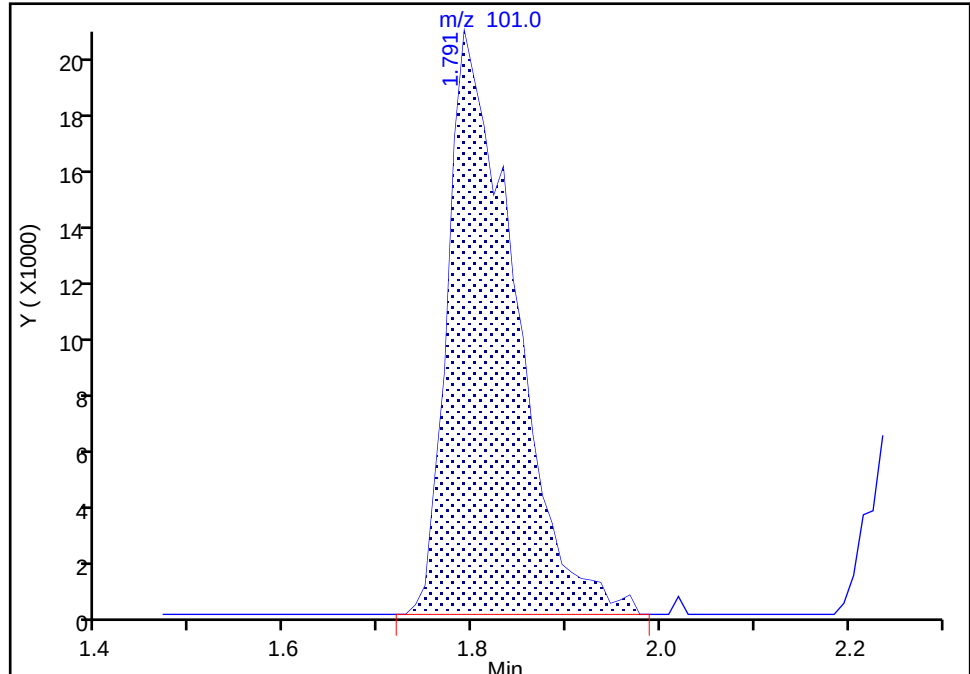
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4704.D
Injection Date: 29-Oct-2018 15:39:30 Instrument ID: HP5975T
Lims ID: IC 3
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

17 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

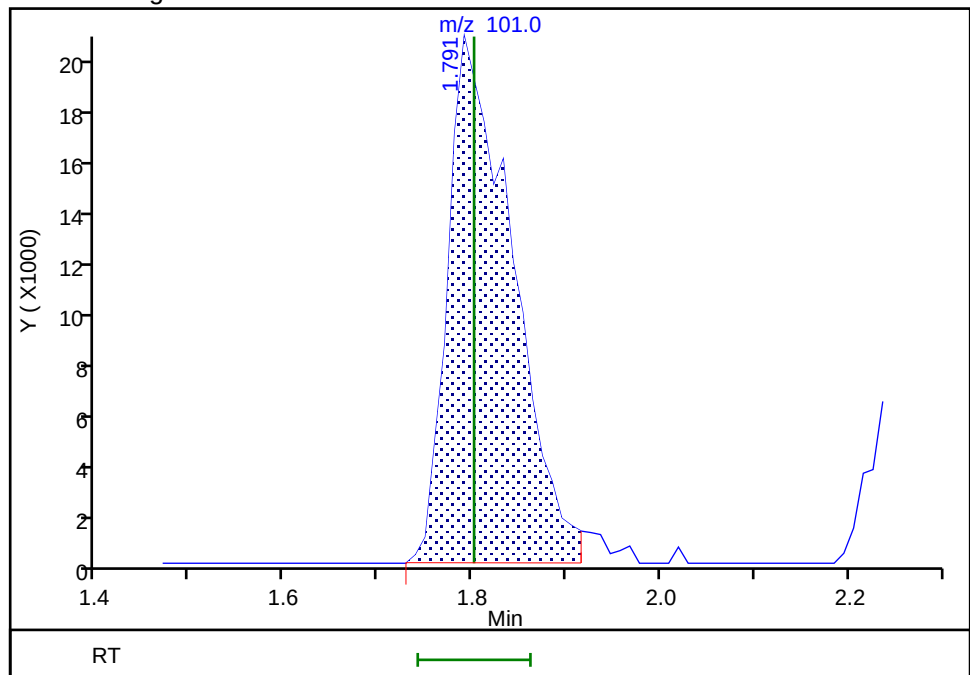
RT: 1.79
Area: 99971
Amount: 5.836975
Amount Units: ug/L

Processing Integration Results



RT: 1.79
Area: 97404
Amount: 5.656594
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:36:35
Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4704.D

Injection Date: 29-Oct-2018 15:39:30

Instrument ID: HP5975T

Lims ID: IC 3

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 (0.25 mm)

Detector

MS SCAN

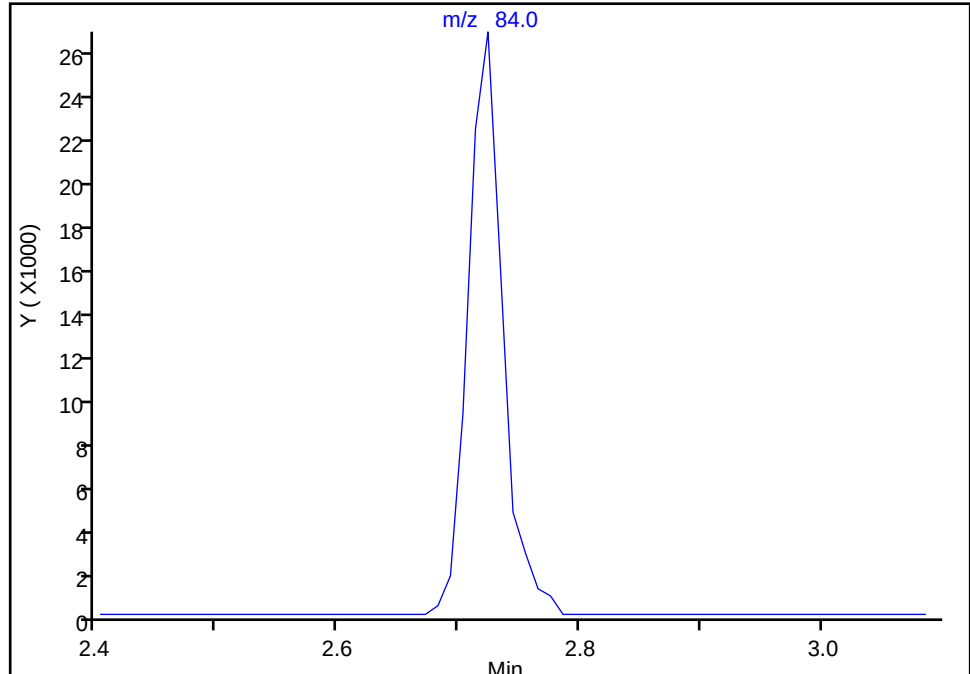
30 Methylene Chloride, CAS: 75-09-2

Signal: 1

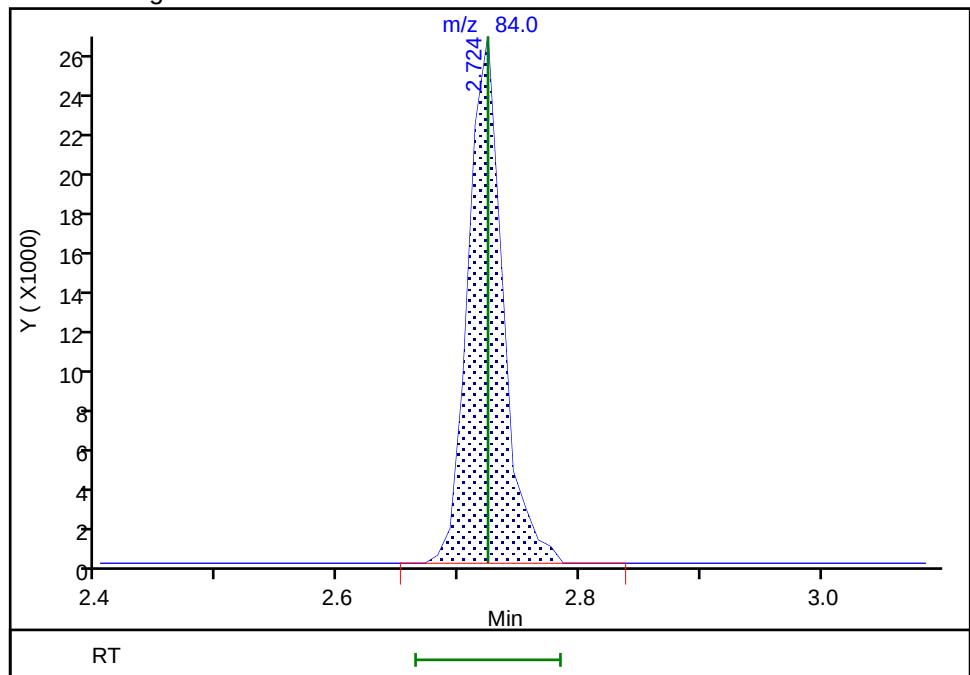
Not Detected

Expected RT: 2.72

Processing Integration Results



Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:37:10

Audit Action: Assigned Compound ID

Audit Reason: Split Peak

TestAmerica Buffalo

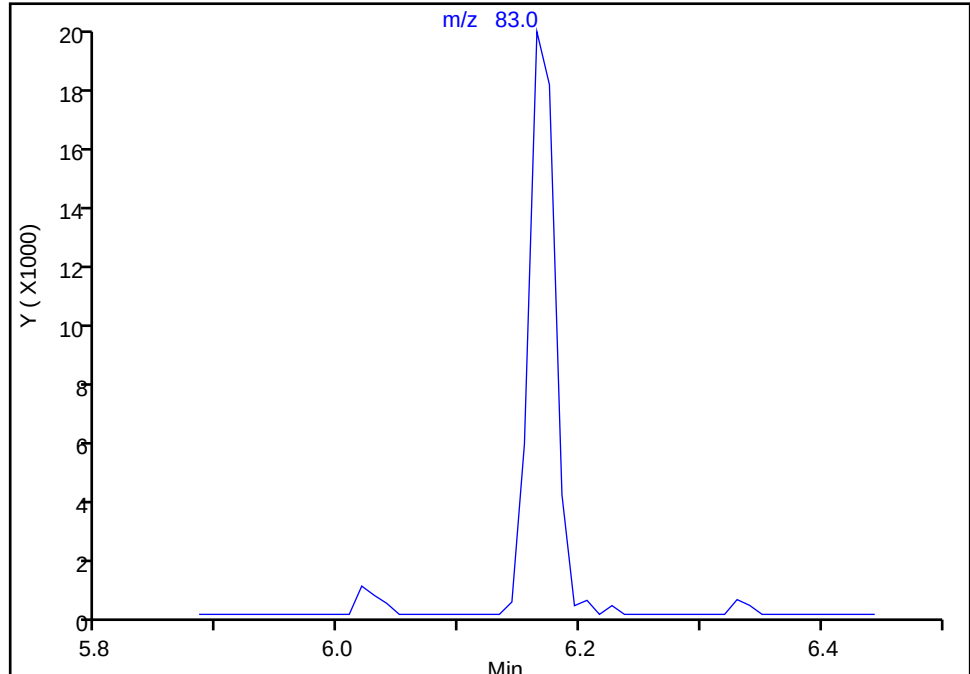
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4704.D
Injection Date: 29-Oct-2018 15:39:30 Instrument ID: HP5975T
Lims ID: IC 3
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

78 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

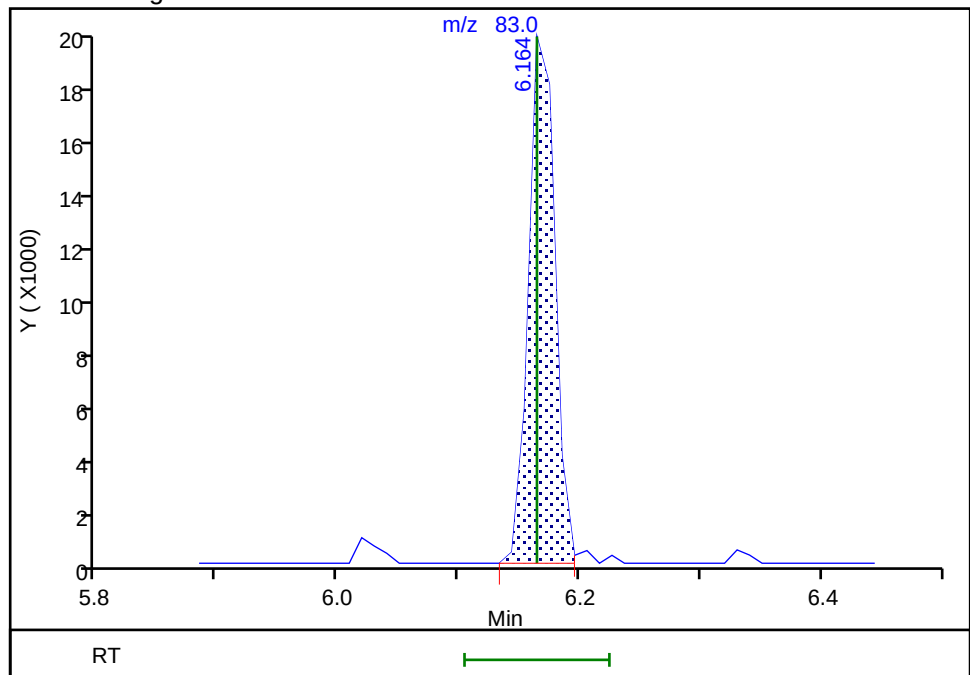
Not Detected
Expected RT: 6.16

Processing Integration Results



RT: 6.16
Area: 30079
Amount: 5.204672
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:37:55
Audit Action: Assigned Compound ID

Audit Reason: Split Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4704.D

Injection Date: 29-Oct-2018 15:39:30

Instrument ID: HP5975T

Lims ID: IC 3

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 (0.25 mm)

Detector: MS SCAN

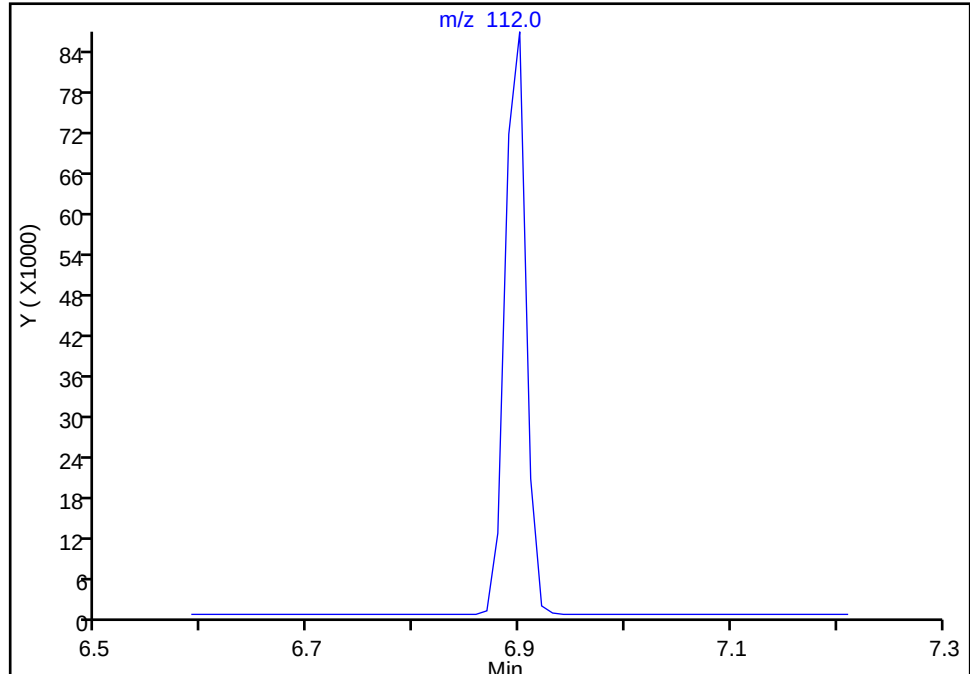
86 Chlorobenzene, CAS: 108-90-7

Signal: 1

Not Detected

Expected RT: 6.90

Processing Integration Results



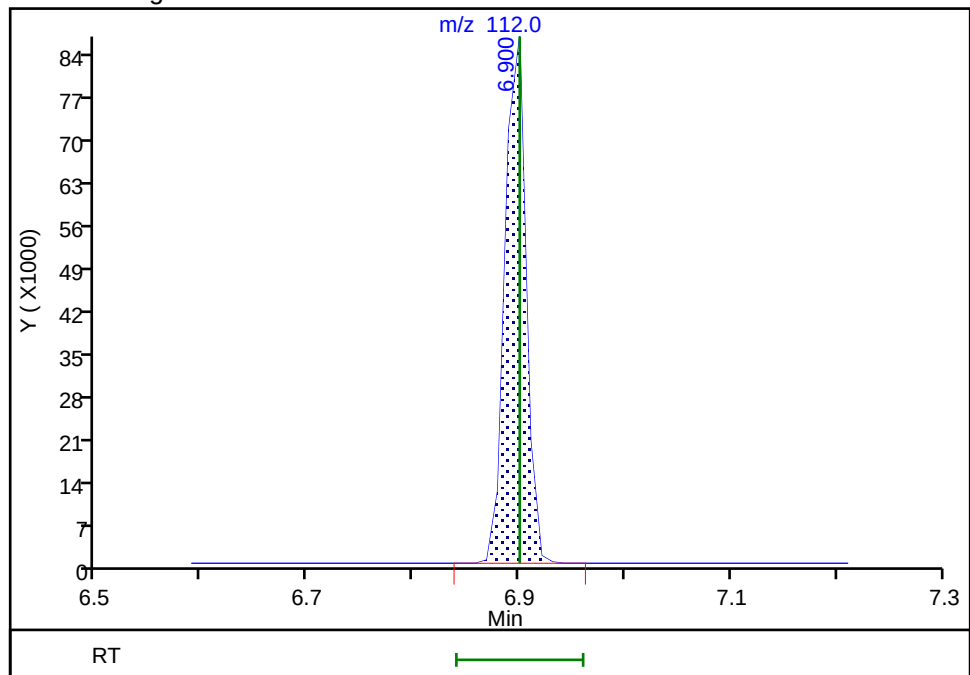
RT: 6.90

Area: 118942

Amount: 5.011752

Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:38:03

Audit Action: Assigned Compound ID

Audit Reason: Split Peak

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4705.D
 Lims ID: IC 4
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 29-Oct-2018 16:02:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 4
 Misc. Info.: 480-0075946-008
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 29-Oct-2018 23:41:56 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0323

First Level Reviewer: milligana

Date: 29-Oct-2018 20:34:41

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	4.589	4.589	0.000	98	149551	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.869	6.879	-0.010	93	541181	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	332194	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.133	-0.010	92	187124	25.0	25.9	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.372	4.372	0.000	0	293275	25.0	25.6	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	96	625141	25.0	26.0	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	228506	25.0	25.9	
11 Dichlorodifluoromethane	85	1.107	1.107	0.000	98	131043	10.0	9.50	M
13 Chloromethane	50	1.252	1.263	-0.011	99	129672	10.0	9.70	
14 Vinyl chloride	62	1.325	1.325	0.000	97	87277	10.0	9.08	
151 Butadiene	54	1.335	1.346	-0.011	90	92660	10.0	8.94	
15 Bromomethane	94	1.584	1.594	-0.010	94	49618	10.0	8.15	
16 Chloroethane	64	1.636	1.656	-0.020	95	41026	10.0	8.34	
17 Trichlorofluoromethane	101	1.802	1.802	0.000	97	164823	10.0	9.66	
18 Dichlorofluoromethane	67	1.833	1.833	0.000	96	133869	10.0	8.44	M
19 Ethyl ether	59	2.061	2.061	0.000	92	59572	10.0	9.18	
21 Acrolein	56	2.226	2.226	0.000	95	68558	50.0	46.3	
20 1,1,2-Trichloro-1,2,2-trif	101	2.278	2.257	0.021	66	55395	10.0	9.59	M
22 1,1-Dichloroethene	96	2.258	2.257	0.001	91	51302	10.0	9.26	
23 Acetone	43	2.372	2.371	0.001	98	130991	50.0	45.9	
24 Iodomethane	142	2.403	2.403	0.000	91	110405	10.0	8.87	
25 Carbon disulfide	76	2.434	2.434	0.000	99	178011	10.0	8.51	M
27 3-Chloro-1-propene	41	2.589	2.589	0.000	88	143245	10.0	9.00	
28 Methyl acetate	43	2.631	2.631	0.000	99	119822	20.0	16.8	
30 Methylene Chloride	84	2.724	2.724	0.000	91	81776	10.0	9.01	
31 2-Methyl-2-propanol	59	2.900	2.890	0.010	44	86828	100.0	94.4	
33 Methyl tert-butyl ether	73	2.910	2.910	0.000	99	226105	10.0	8.69	
32 trans-1,2-Dichloroethene	96	2.910	2.921	-0.011	91	69230	10.0	9.48	
34 Acrylonitrile	53	2.973	2.973	0.000	99	331324	100.0	91.6	
35 Hexane	57	3.066	3.076	-0.010	94	115647	10.0	8.80	

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	3.273	3.273	0.000	97	142180	10.0	8.99	M
39 Vinyl acetate	43	3.325	3.325	0.000	96	353501	20.0	17.8	
42 2,2-Dichloropropane	77	3.719	3.719	0.000	91	121168	10.0	8.58	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	86	79065	10.0	8.64	
44 2-Butanone (MEK)	43	3.771	3.770	0.000	97	196447	50.0	47.2	
47 Chlorobromomethane	128	3.936	3.936	0.000	94	43886	10.0	10.0	
48 Tetrahydrofuran	42	3.947	3.947	0.000	86	47591	20.0	17.5	
50 Chloroform	83	3.999	3.998	0.000	95	152942	10.0	8.89	
52 Cyclohexane	56	4.092	4.092	0.000	93	147381	10.0	9.15	
51 1,1,1-Trichloroethane	97	4.092	4.092	0.000	95	138776	10.0	8.70	
53 Carbon tetrachloride	117	4.195	4.195	0.000	97	125896	10.0	9.20	M
54 1,1-Dichloropropene	75	4.206	4.206	0.000	88	101111	10.0	8.89	
55 Benzene	78	4.372	4.372	0.000	82	259299	10.0	8.58	
56 Isobutyl alcohol	43	4.403	4.403	0.000	92	83552	250.0	229.6	
57 1,2-Dichloroethane	62	4.434	4.434	0.000	97	156439	10.0	9.02	
59 n-Heptane	43	4.506	4.506	0.000	97	148831	10.0	9.71	
60 Trichloroethene	95	4.859	4.859	0.000	93	84693	10.0	9.19	
62 Methylcyclohexane	83	4.942	4.942	0.000	98	118895	10.0	9.73	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	86	78084	10.0	9.00	
66 1,4-Dioxane	88	5.159	5.159	0.000	33	11527	200.0	192.6	
65 Dibromomethane	93	5.159	5.159	0.000	93	51310	10.0	9.00	M
67 Dichlorobromomethane	83	5.273	5.273	0.000	98	112673	10.0	8.60	
69 2-Chloroethyl vinyl ether	63	5.480	5.491	-0.011	91	53069	10.0	9.15	
71 cis-1,3-Dichloropropene	75	5.594	5.594	0.000	87	107096	10.0	8.49	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	98	418865	50.0	48.2	
73 Toluene	92	5.802	5.812	-0.010	97	178530	10.0	8.69	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	94	110994	10.0	8.80	
77 Ethyl methacrylate	69	6.050	6.050	0.000	97	87420	10.0	9.74	
78 1,1,2-Trichloroethane	83	6.164	6.164	0.000	94	53222	10.0	9.70	
79 Tetrachloroethene	166	6.206	6.206	0.000	94	88806	10.0	9.51	
80 1,3-Dichloropropane	76	6.289	6.289	0.000	98	121448	10.0	9.62	M
81 2-Hexanone	43	6.330	6.330	0.000	98	290731	50.0	48.0	
82 Chlorodibromomethane	129	6.465	6.465	0.000	90	79583	10.0	8.85	
83 Ethylene Dibromide	107	6.548	6.548	0.000	97	69014	10.0	9.57	
86 Chlorobenzene	112	6.900	6.900	0.000	95	218978	10.0	9.72	
88 Ethylbenzene	91	6.962	6.962	0.000	99	368035	10.0	8.90	
89 1,1,1,2-Tetrachloroethane	131	6.973	6.973	0.000	87	80288	10.0	9.05	
90 m-Xylene & p-Xylene	106	7.056	7.056	0.000	0	143107	10.0	9.34	
91 o-Xylene	106	7.366	7.366	0.000	98	139659	10.0	9.09	
92 Styrene	104	7.387	7.387	0.000	92	228980	10.0	9.01	
93 Bromoform	173	7.584	7.584	0.000	94	48451	10.0	8.59	M
95 Isopropylbenzene	105	7.646	7.646	0.000	97	364686	10.0	9.07	
97 Bromobenzene	156	7.926	7.926	0.000	91	97719	10.0	8.68	
98 1,1,2,2-Tetrachloroethane	83	7.968	7.968	0.000	96	80428	10.0	9.65	
99 N-Propylbenzene	91	7.978	7.978	0.000	98	423698	10.0	9.16	
100 1,2,3-Trichloropropane	110	7.999	7.988	0.011	89	34120	10.0	10.1	
101 trans-1,4-Dichloro-2-buten	53	7.999	7.999	0.000	78	30252	10.0	8.76	
105 2-Chlorotoluene	126	8.061	8.061	0.000	93	83971	10.0	9.08	
104 1,3,5-Trimethylbenzene	105	8.123	8.123	0.000	94	332427	10.0	9.31	
102 4-Chlorotoluene	91	8.154	8.154	0.000	99	296421	10.0	9.22	
106 tert-Butylbenzene	134	8.382	8.382	0.000	92	68078	10.0	9.16	M
107 1,2,4-Trimethylbenzene	105	8.424	8.423	0.001	97	368559	10.0	9.68	

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	8.558	8.558	0.000	96	392606	10.0	9.34	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	74	189177	10.0	9.15	
111 4-Isopropyltoluene	119	8.672	8.672	0.000	95	354823	10.0	9.24	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	93	203539	10.0	9.60	
115 n-Butylbenzene	91	9.014	9.014	0.000	97	309286	10.0	9.04	
116 1,2-Dichlorobenzene	146	9.056	9.056	0.000	92	185104	10.0	9.12	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	75	17585	10.0	9.03	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	93	164595	10.0	9.37	
120 Hexachlorobutadiene	225	10.475	10.475	0.000	96	83927	10.0	8.87	
121 Naphthalene	128	10.579	10.579	0.000	98	316673	10.0	9.84	
122 1,2,3-Trichlorobenzene	180	10.786	10.786	0.000	93	149444	10.0	9.42	
S 124 1,2-Dichloroethene, Total	1				0			18.1	
S 125 Total BTEX	1				0			44.6	
S 126 Xylenes, Total	1				0			18.4	
S 123 1,3-Dichloropropene, Total	1				0			17.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00138

Amount Added: 5.00

Units: uL

GAS CORP mix_00309

Amount Added: 5.00

Units: uL

T_8260_Surr_00181

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00209

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181029-75946.b\\T4705.D

Injection Date: 29-Oct-2018 16:02:30

Instrument ID: HP5975T

Lims ID: IC 4

Operator ID: KN

Client ID:

Worklist Smp#: 8

Purge Vol: 5.000 mL

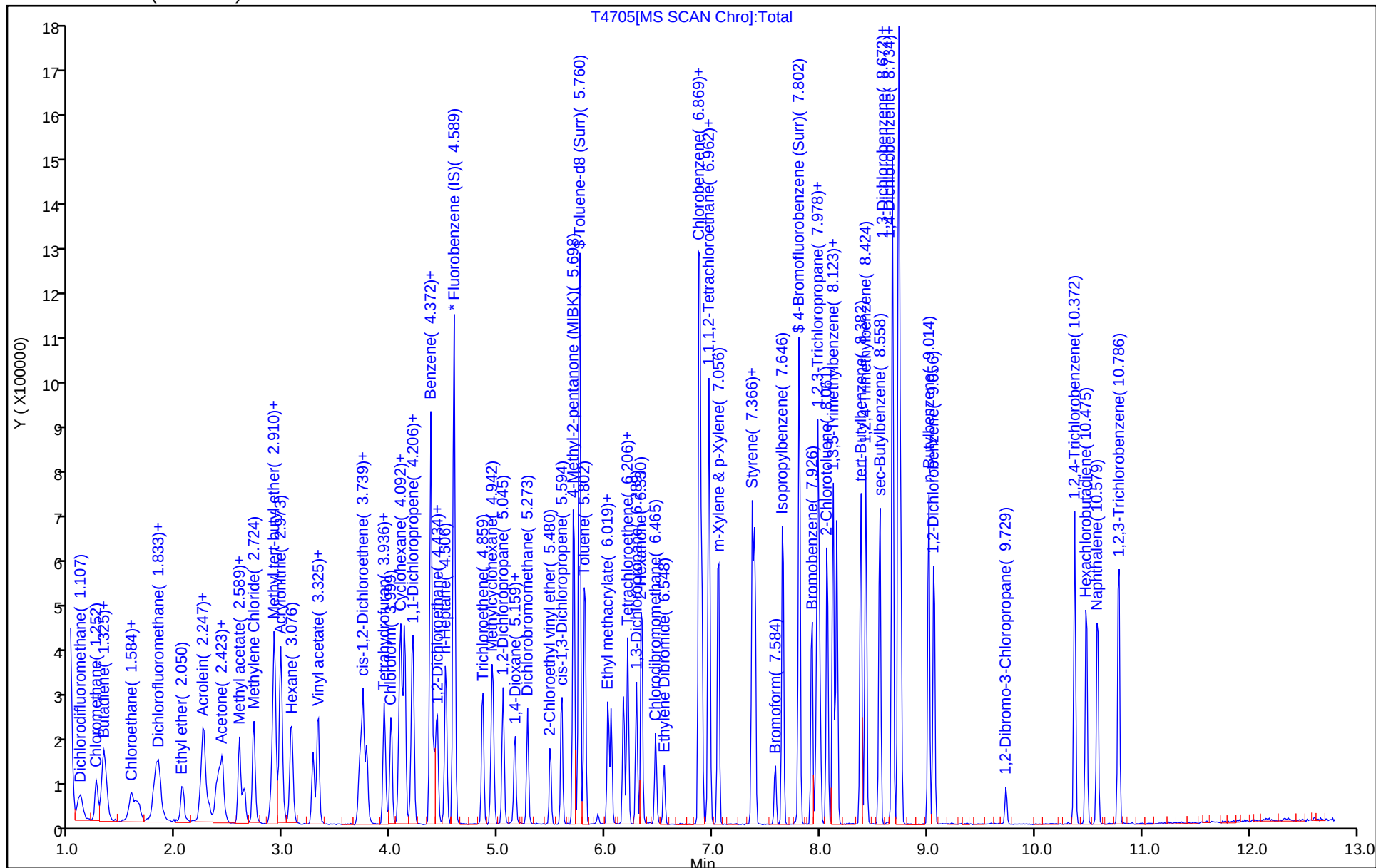
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4705.D

Injection Date: 29-Oct-2018 16:02:30

Instrument ID: HP5975T

Lims ID: IC 4

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 (0.25 mm)

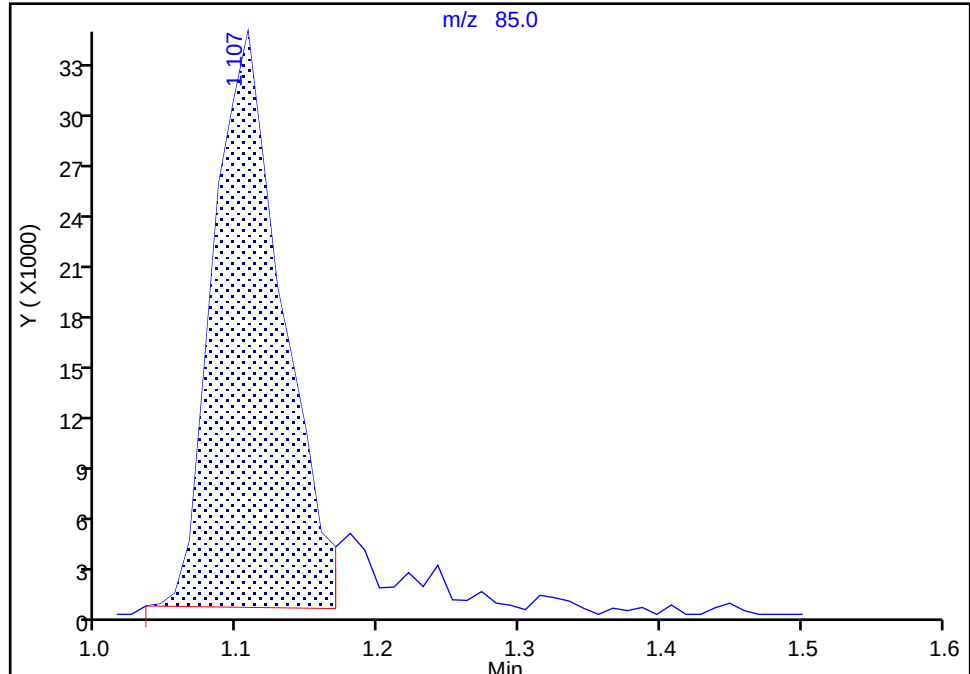
Detector: MS SCAN

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

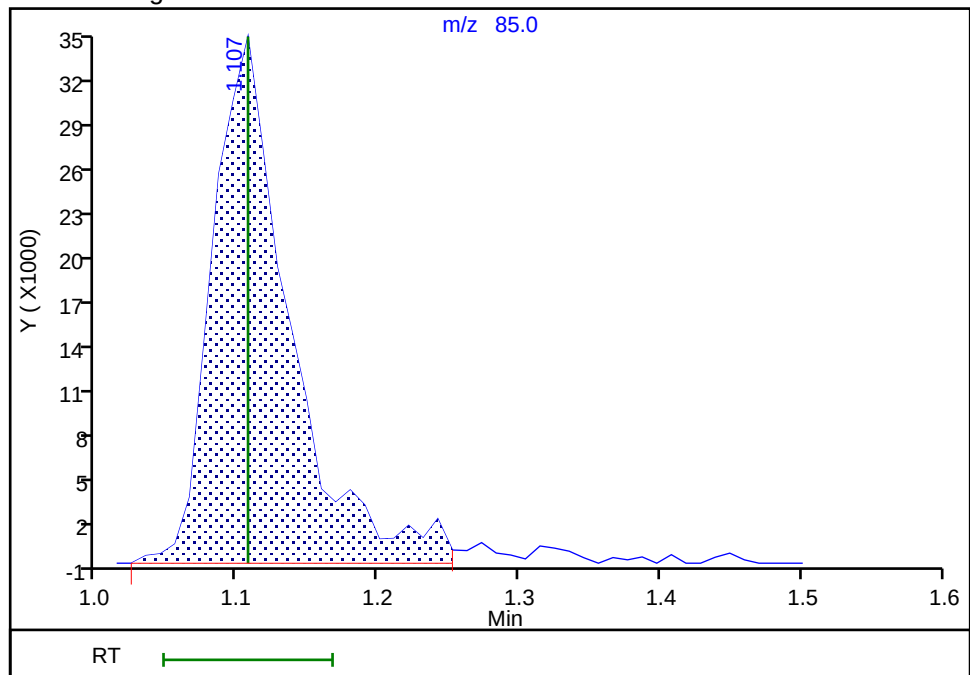
RT: 1.11
Area: 115255
Amount: 7.939229
Amount Units: ug/L

Processing Integration Results



RT: 1.11
Area: 131043
Amount: 9.499698
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:35:25

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4705.D

Injection Date: 29-Oct-2018 16:02:30

Instrument ID: HP5975T

Lims ID: IC 4

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 (0.25 mm)

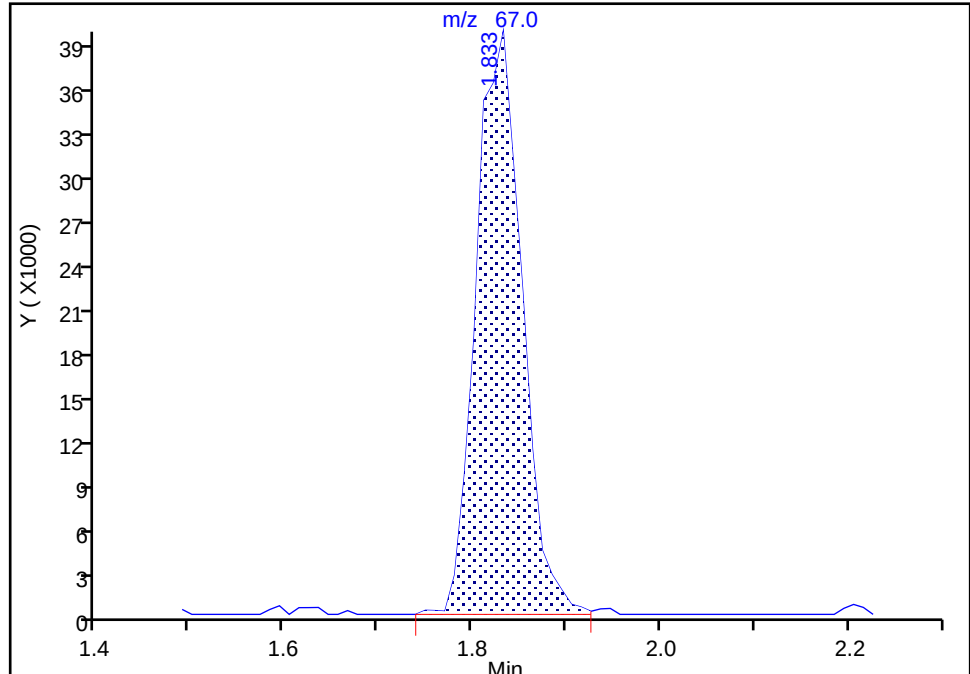
Detector: MS SCAN

18 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

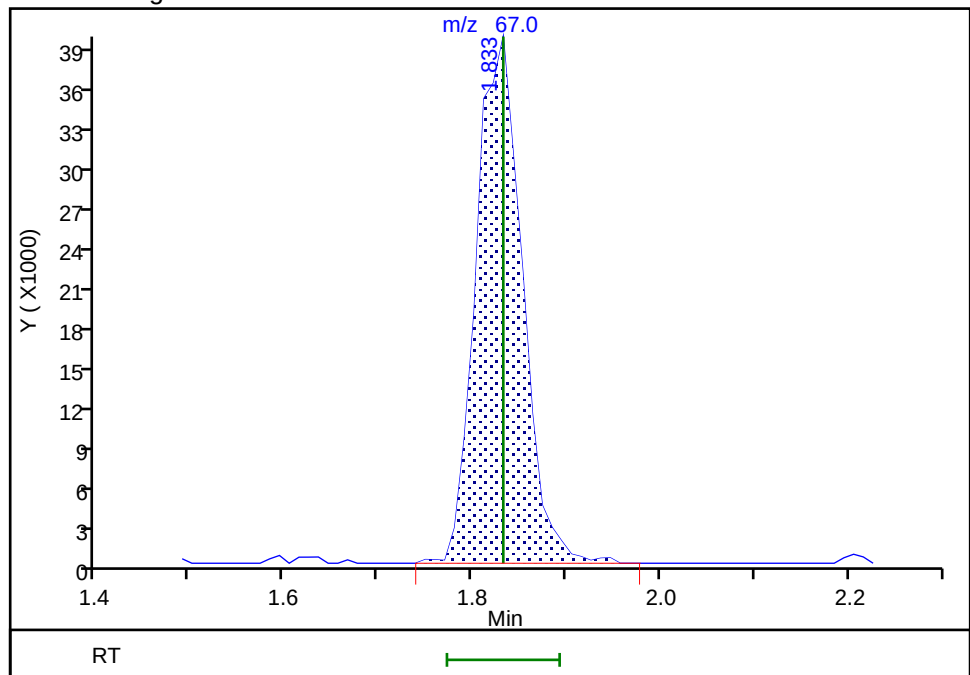
RT: 1.83
Area: 133389
Amount: 8.679134
Amount Units: ug/L

Processing Integration Results



RT: 1.83
Area: 133869
Amount: 8.441254
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:31:30

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4705.D

Injection Date: 29-Oct-2018 16:02:30

Instrument ID: HP5975T

Lims ID: IC 4

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 (0.25 mm)

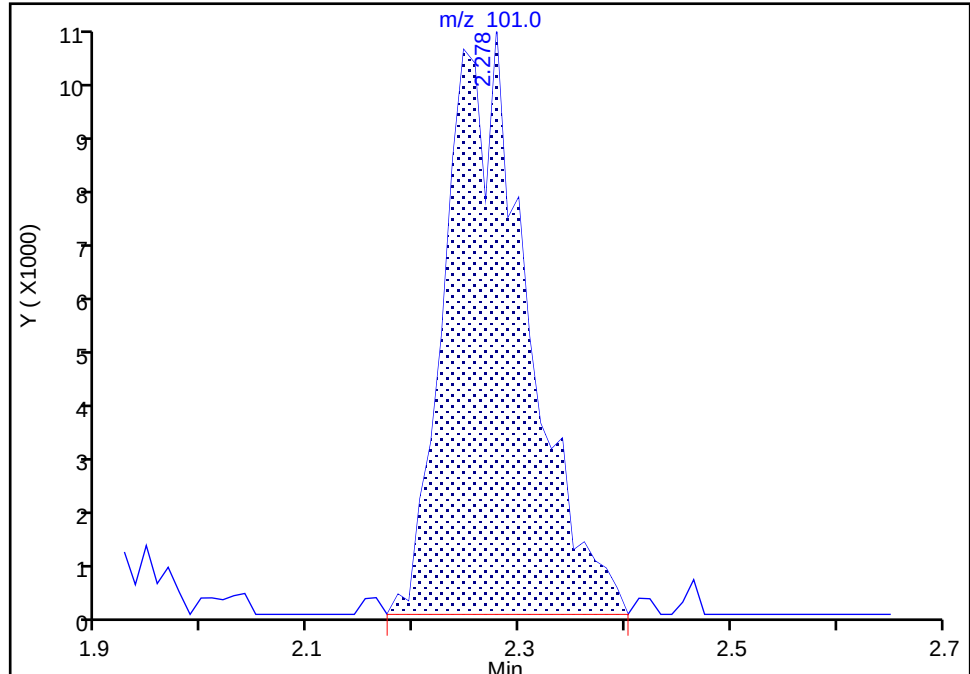
Detector: MS SCAN

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

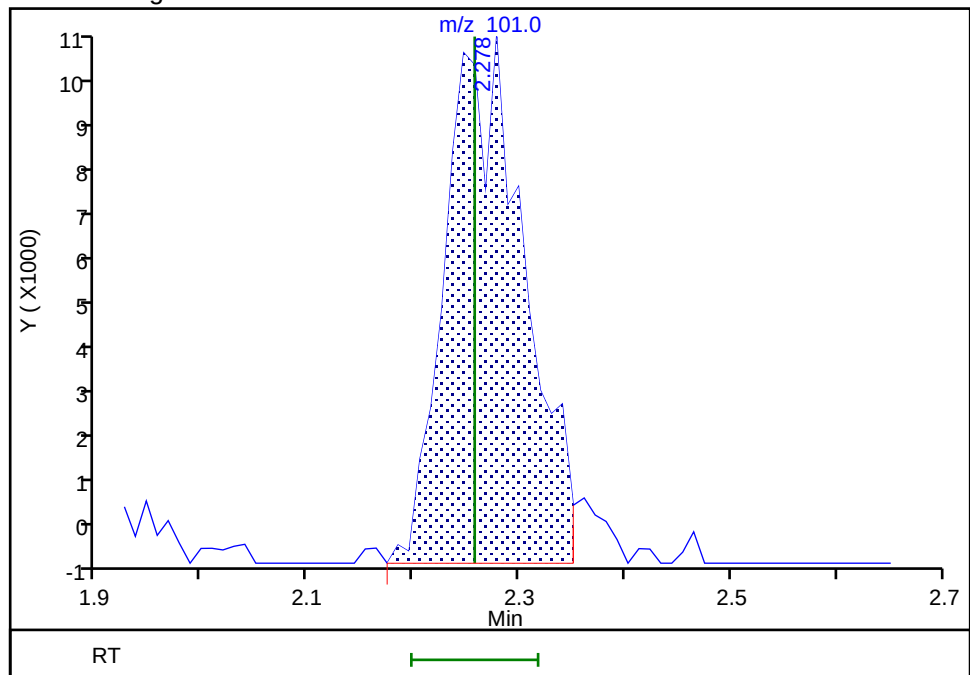
RT: 2.28
Area: 57644
Amount: 9.725512
Amount Units: ug/L

Processing Integration Results



RT: 2.28
Area: 55395
Amount: 9.589258
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:32:00

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4705.D

Injection Date: 29-Oct-2018 16:02:30

Instrument ID: HP5975T

Lims ID: IC 4

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 (0.25 mm)

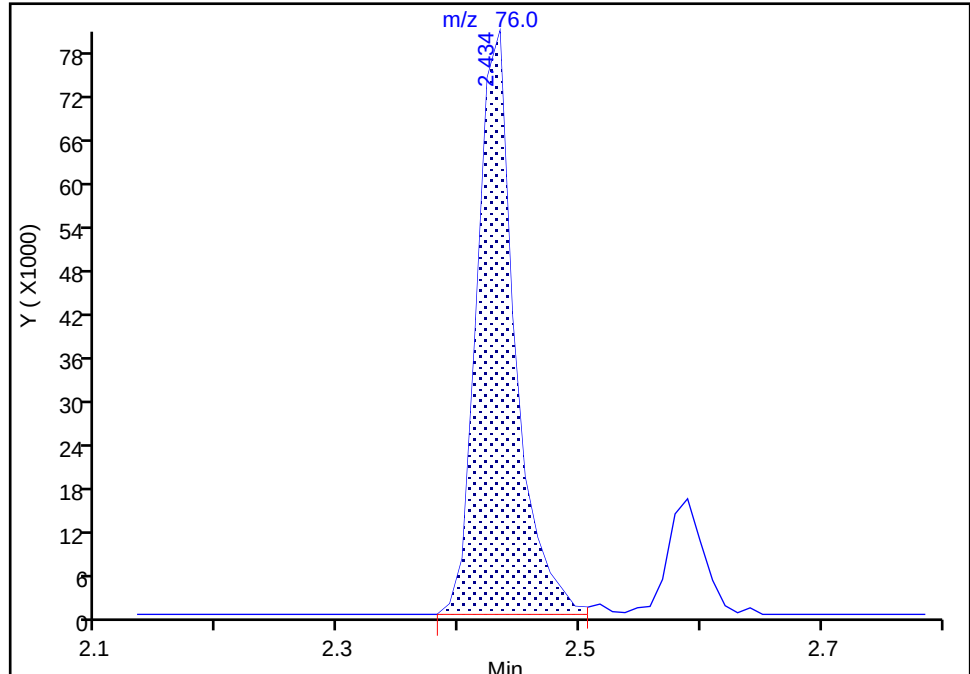
Detector: MS SCAN

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

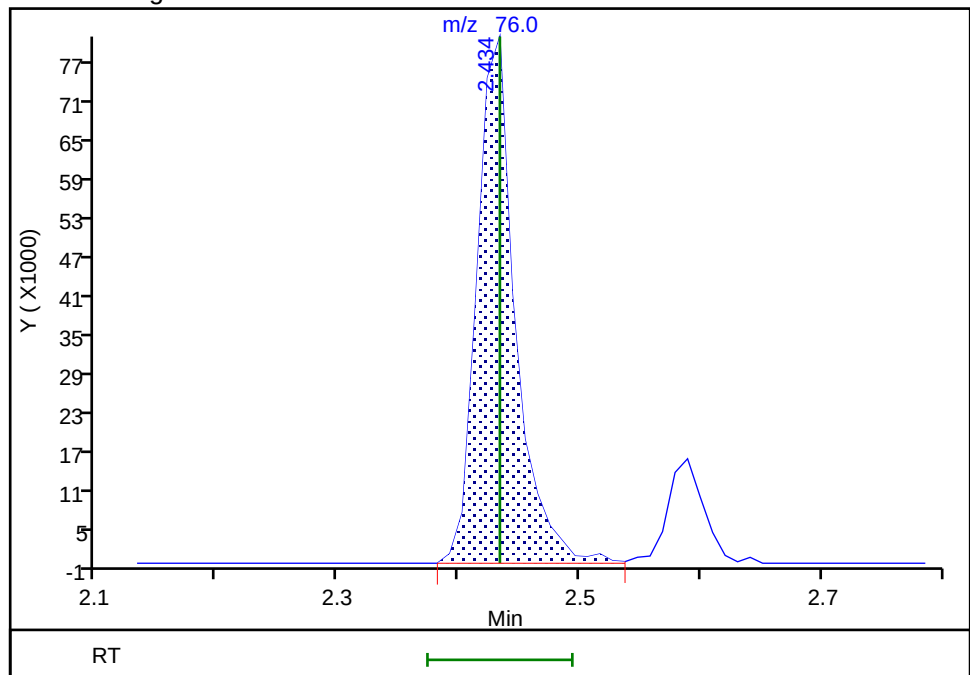
RT: 2.43
Area: 176734
Amount: 8.483183
Amount Units: ug/L

Processing Integration Results



RT: 2.43
Area: 178011
Amount: 8.505702
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:32:44

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4705.D

Injection Date: 29-Oct-2018 16:02:30

Instrument ID: HP5975T

Lims ID: IC 4

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 (0.25 mm)

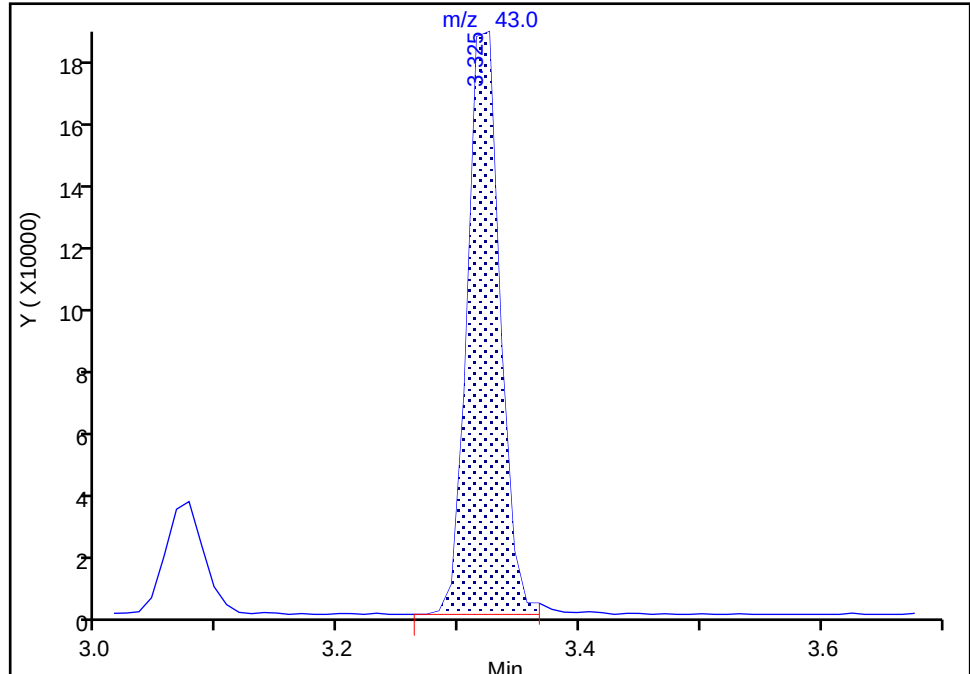
Detector: MS SCAN

39 Vinyl acetate, CAS: 108-05-4

Signal: 1

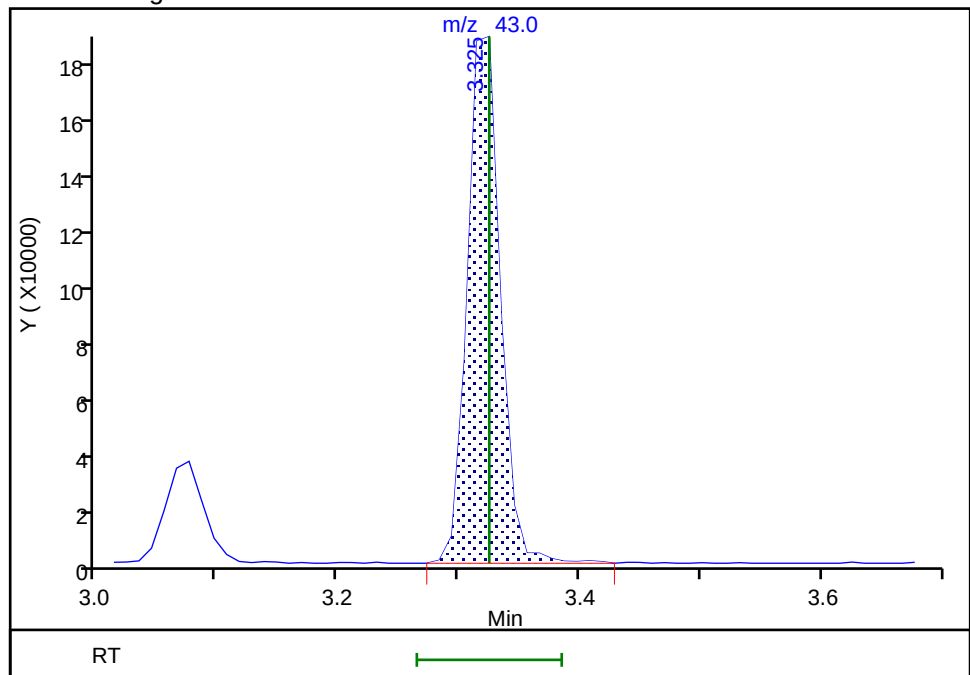
RT: 3.32
Area: 350813
Amount: 17.710000
Amount Units: ug/L

Processing Integration Results



RT: 3.32
Area: 353501
Amount: 17.830576
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:33:07

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4705.D

Injection Date: 29-Oct-2018 16:02:30

Instrument ID: HP5975T

Lims ID: IC 4

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 (0.25 mm)

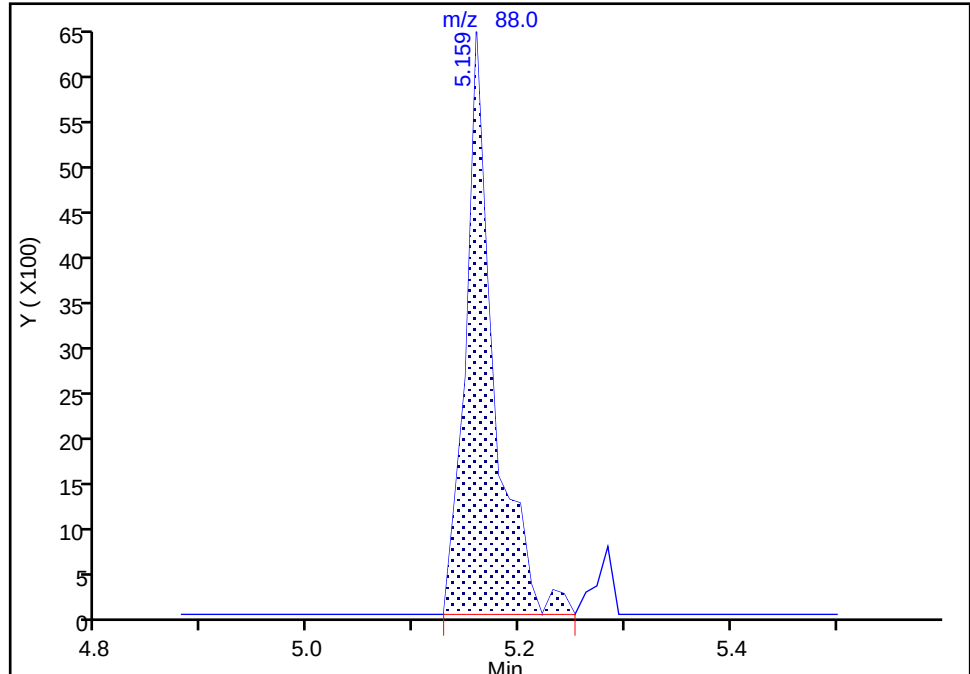
Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

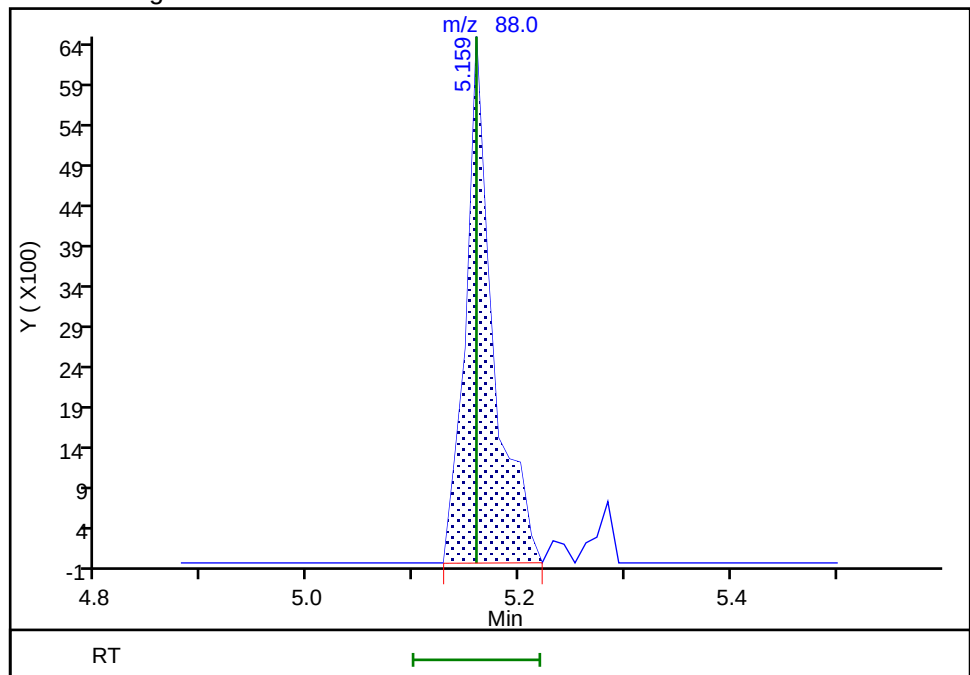
RT: 5.16
Area: 11833
Amount: 191.4631
Amount Units: ug/L

Processing Integration Results



RT: 5.16
Area: 11527
Amount: 192.5807
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:33:48

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4706.D
 Lims ID: ICIS 5
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 29-Oct-2018 16:26:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: icis 5
 Misc. Info.: 480-0075946-009
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 29-Oct-2018 23:42:04 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0323

First Level Reviewer: milligana

Date: 29-Oct-2018 20:29:45

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	4.589	4.589	0.000	97	155408	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.879	6.879	0.000	90	570473	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	96	365872	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.133	4.133	0.000	93	184374	25.0	24.6	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.372	4.372	0.000	0	296421	25.0	24.9	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	96	645460	25.0	25.4	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	234435	25.0	25.2	
11 Dichlorodifluoromethane	85	1.107	1.107	0.000	99	347849	25.0	24.3	
13 Chloromethane	50	1.263	1.263	0.000	99	343386	25.0	24.7	
14 Vinyl chloride	62	1.325	1.325	0.000	97	255562	25.0	25.6	
151 Butadiene	54	1.346	1.346	0.000	94	266697	25.0	24.8	
15 Bromomethane	94	1.594	1.594	0.000	96	152110	25.0	24.0	
16 Chloroethane	64	1.656	1.656	0.000	95	126144	25.0	24.7	
17 Trichlorofluoromethane	101	1.802	1.802	0.000	97	462543	25.0	26.1	
18 Dichlorofluoromethane	67	1.833	1.833	0.000	96	407020	25.0	24.7	
19 Ethyl ether	59	2.061	2.061	0.000	98	175991	25.0	26.1	
21 Acrolein	56	2.226	2.226	0.000	99	190469	125.0	123.8	
22 1,1-Dichloroethene	96	2.257	2.257	0.000	91	142311	25.0	24.7	
20 1,1,2-Trichloro-1,2,2-trif	101	2.257	2.257	0.000	72	163765	25.0	27.3	
23 Acetone	43	2.371	2.371	0.000	98	359817	125.0	121.4	
24 Iodomethane	142	2.403	2.403	0.000	90	325442	25.0	25.2	
25 Carbon disulfide	76	2.434	2.434	0.000	100	548840	25.0	25.2	
27 3-Chloro-1-propene	41	2.589	2.589	0.000	89	427963	25.0	25.9	
28 Methyl acetate	43	2.631	2.631	0.000	100	372415	50.0	50.3	
30 Methylene Chloride	84	2.724	2.724	0.000	93	216076	25.0	24.9	
31 2-Methyl-2-propanol	59	2.890	2.890	0.000	77	251010	250.0	262.7	
33 Methyl tert-butyl ether	73	2.910	2.910	0.000	98	691366	25.0	25.6	
32 trans-1,2-Dichloroethene	96	2.921	2.921	0.000	90	191636	25.0	25.3	
34 Acrylonitrile	53	2.973	2.973	0.000	100	978763	250.0	260.5	
35 Hexane	57	3.076	3.076	0.000	95	346978	25.0	25.4	

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	3.273	3.273	0.000	97	425334	25.0	25.9	
39 Vinyl acetate	43	3.325	3.325	0.000	97	1103119	50.0	53.5	
42 2,2-Dichloropropane	77	3.719	3.719	0.000	91	375286	25.0	25.6	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	87	228511	25.0	24.0	
44 2-Butanone (MEK)	43	3.770	3.770	0.000	97	560635	125.0	129.5	
47 Chlorobromomethane	128	3.936	3.936	0.000	91	110657	25.0	24.3	
48 Tetrahydrofuran	42	3.947	3.947	0.000	94	146001	50.0	51.7	
50 Chloroform	83	3.998	3.998	0.000	95	454068	25.0	25.4	
51 1,1,1-Trichloroethane	97	4.092	4.092	0.000	97	431355	25.0	26.0	
52 Cyclohexane	56	4.092	4.092	0.000	94	431847	25.0	25.8	
53 Carbon tetrachloride	117	4.195	4.195	0.000	97	377813	25.0	26.6	
54 1,1-Dichloropropene	75	4.206	4.206	0.000	92	295449	25.0	25.0	
55 Benzene	78	4.372	4.372	0.000	94	783552	25.0	24.9	
56 Isobutyl alcohol	43	4.403	4.403	0.000	94	252113	625.0	666.8	
57 1,2-Dichloroethane	62	4.434	4.434	0.000	97	480241	25.0	26.7	
59 n-Heptane	43	4.506	4.506	0.000	97	417628	25.0	26.2	
60 Trichloroethene	95	4.859	4.859	0.000	95	237330	25.0	24.8	
62 Methylcyclohexane	83	4.942	4.942	0.000	97	323284	25.0	25.5	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	85	224188	25.0	24.9	
65 Dibromomethane	93	5.159	5.159	0.000	92	156746	25.0	26.5	
66 1,4-Dioxane	88	5.159	5.159	0.000	36	34253	500.0	542.9	
67 Dichlorobromomethane	83	5.273	5.273	0.000	97	359606	25.0	26.4	
69 2-Chloroethyl vinyl ether	63	5.491	5.491	0.000	93	156390	25.0	25.9	
71 cis-1,3-Dichloropropene	75	5.594	5.594	0.000	89	348265	25.0	26.6	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	99	1241591	125.0	135.5	
73 Toluene	92	5.812	5.812	0.000	97	511999	25.0	23.6	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	97	361676	25.0	27.2	
77 Ethyl methacrylate	69	6.050	6.050	0.000	92	243884	25.0	25.8	
78 1,1,2-Trichloroethane	83	6.164	6.164	0.000	93	147363	25.0	25.5	
79 Tetrachloroethene	166	6.206	6.206	0.000	95	252075	25.0	25.6	
80 1,3-Dichloropropane	76	6.289	6.289	0.000	98	338836	25.0	25.5	
81 2-Hexanone	43	6.330	6.330	0.000	98	857158	125.0	134.2	
82 Chlorodibromomethane	129	6.465	6.465	0.000	91	245190	25.0	25.9	
83 Ethylene Dibromide	107	6.548	6.548	0.000	98	204113	25.0	26.9	
86 Chlorobenzene	112	6.900	6.900	0.000	91	619007	25.0	26.1	
88 Ethylbenzene	91	6.962	6.962	0.000	99	1090898	25.0	25.0	
89 1,1,1,2-Tetrachloroethane	131	6.973	6.973	0.000	89	245741	25.0	26.3	
90 m-Xylene & p-Xylene	106	7.056	7.056	0.000	0	412989	25.0	25.6	
91 o-Xylene	106	7.366	7.366	0.000	99	408960	25.0	25.2	
92 Styrene	104	7.387	7.387	0.000	93	718906	25.0	26.8	
93 Bromoform	173	7.584	7.584	0.000	97	159394	25.0	26.8	
95 Isopropylbenzene	105	7.646	7.646	0.000	98	1120145	25.0	25.3	
97 Bromobenzene	156	7.926	7.926	0.000	91	308803	25.0	24.9	
98 1,1,2,2-Tetrachloroethane	83	7.968	7.968	0.000	96	223284	25.0	24.3	
99 N-Propylbenzene	91	7.978	7.978	0.000	99	1305489	25.0	25.6	
100 1,2,3-Trichloropropane	110	7.988	7.988	0.000	90	96874	25.0	25.9	
101 trans-1,4-Dichloro-2-buten	53	7.999	7.999	0.000	90	102655	25.0	27.0	
105 2-Chlorotoluene	126	8.061	8.061	0.000	94	258627	25.0	25.4	
104 1,3,5-Trimethylbenzene	105	8.123	8.123	0.000	94	996099	25.0	25.3	
102 4-Chlorotoluene	91	8.154	8.154	0.000	100	875632	25.0	24.7	
106 tert-Butylbenzene	134	8.382	8.382	0.000	92	197336	25.0	24.1	
107 1,2,4-Trimethylbenzene	105	8.423	8.423	0.000	97	1046008	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
109 sec-Butylbenzene	105	8.558	8.558	0.000	96	1182866	25.0	25.6	
111 4-Isopropyltoluene	119	8.672	8.672	0.000	95	1058042	25.0	25.0	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	73	553585	25.0	24.3	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	94	551333	25.0	23.6	
115 n-Butylbenzene	91	9.014	9.014	0.000	98	989488	25.0	26.2	
116 1,2-Dichlorobenzene	146	9.056	9.056	0.000	94	529848	25.0	23.7	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	81	54355	25.0	25.3	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	94	478447	25.0	24.7	
120 Hexachlorobutadiene	225	10.475	10.475	0.000	96	262512	25.0	25.2	
121 Naphthalene	128	10.579	10.579	0.000	98	934361	25.0	26.4	
122 1,2,3-Trichlorobenzene	180	10.786	10.786	0.000	94	434086	25.0	24.8	

Reagents:

8260 CORP mix_00138	Amount Added: 12.50	Units: uL	
GAS CORP mix_00309	Amount Added: 12.50	Units: uL	
T_8260_Surr_00181	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00209	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181029-75946.b\\T4706.D

Injection Date: 29-Oct-2018 16:26:30

Instrument ID: HP5975T

Lims ID: ICIS 5

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

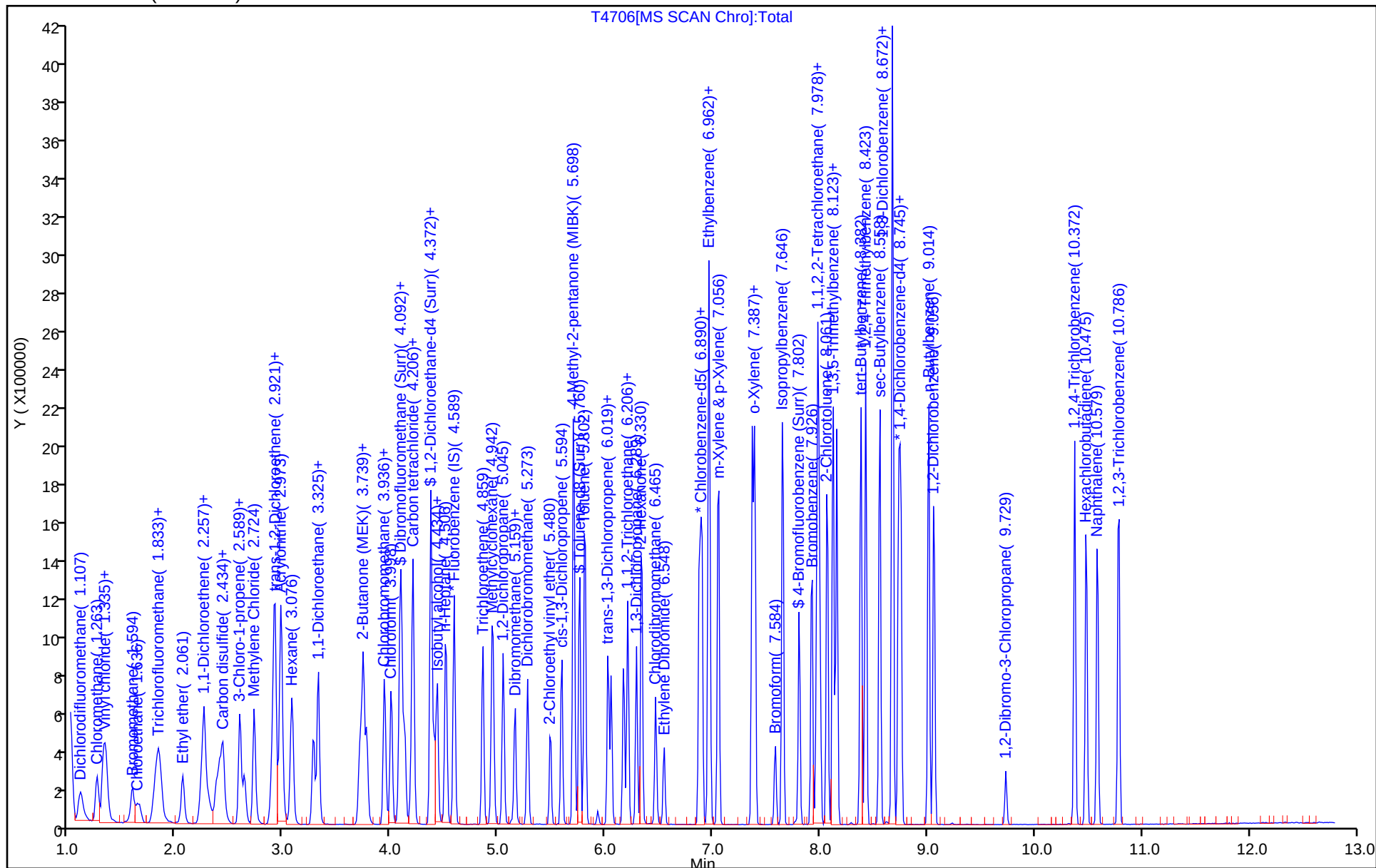
Limit Group: MV - 8260C ICAL

Operator ID: KN

Worklist Smp#: 9

ALS Bottle#: 9

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4707.D
 Lims ID: IC 6
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 29-Oct-2018 16:49:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 6
 Misc. Info.: 480-0075946-010
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 29-Oct-2018 23:42:12 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0323

First Level Reviewer: milligana

Date: 29-Oct-2018 20:57:53

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	4.589	4.589	0.000	97	161702	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.869	6.879	-0.010	91	574284	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	344368	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.133	-0.010	92	184841	25.0	23.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.371	4.372	-0.001	0	305043	25.0	24.7	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	96	632117	25.0	24.7	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	229823	25.0	24.6	
11 Dichlorodifluoromethane	85	1.086	1.107	-0.021	99	788277	50.0	52.9	
13 Chloromethane	50	1.242	1.263	-0.021	98	720670	50.0	49.8	M
14 Vinyl chloride	62	1.314	1.325	-0.011	96	551074	50.0	53.0	
151 Butadiene	54	1.325	1.346	-0.021	89	614521	50.0	54.9	
15 Bromomethane	94	1.573	1.594	-0.021	96	308162	50.0	46.8	M
16 Chloroethane	64	1.636	1.656	-0.020	96	273103	50.0	51.4	
17 Trichlorofluoromethane	101	1.812	1.802	0.010	84	1003995	50.0	54.4	M
18 Dichlorofluoromethane	67	1.822	1.833	-0.011	95	809678	50.0	47.2	
19 Ethyl ether	59	2.050	2.061	-0.011	95	355908	50.0	50.7	M
21 Acrolein	56	2.226	2.226	0.000	96	353978	250.0	221.2	M
20 1,1,2-Trichloro-1,2,2-trif	101	2.257	2.257	0.000	92	351639	50.0	56.3	M
22 1,1-Dichloroethene	96	2.247	2.257	-0.010	89	302506	50.0	50.5	
23 Acetone	43	2.361	2.371	-0.010	97	692007	250.0	224.4	M
24 Iodomethane	142	2.392	2.403	-0.011	92	669978	50.0	49.8	
25 Carbon disulfide	76	2.423	2.434	-0.011	99	1147944	50.0	50.7	
27 3-Chloro-1-propene	41	2.579	2.589	-0.010	87	893326	50.0	51.9	
28 Methyl acetate	43	2.620	2.631	-0.011	100	706388	100.0	91.8	
30 Methylene Chloride	84	2.713	2.724	-0.011	93	430785	50.0	49.0	
31 2-Methyl-2-propanol	59	2.890	2.890	0.000	71	488897	500.0	491.8	
33 Methyl tert-butyl ether	73	2.900	2.910	-0.010	98	1340408	50.0	47.7	
32 trans-1,2-Dichloroethene	96	2.910	2.921	-0.011	91	416393	50.0	52.7	
34 Acrylonitrile	53	2.962	2.973	-0.011	98	1831148	500.0	468.4	
35 Hexane	57	3.066	3.076	-0.010	95	757950	50.0	53.3	

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	3.273	3.273	0.000	97	875514	50.0	51.2	
39 Vinyl acetate	43	3.314	3.325	-0.011	97	2193573	100.0	102.3	
42 2,2-Dichloropropane	77	3.708	3.719	-0.011	92	786029	50.0	51.5	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	87	487154	50.0	49.2	
44 2-Butanone (MEK)	43	3.770	3.770	0.000	98	1045664	250.0	232.1	
47 Chlorobromomethane	128	3.936	3.936	0.000	95	245276	50.0	51.7	
48 Tetrahydrofuran	42	3.936	3.947	-0.011	94	289785	100.0	98.6	
50 Chloroform	83	3.998	3.998	0.000	95	919622	50.0	49.4	
52 Cyclohexane	56	4.081	4.092	-0.011	94	953944	50.0	54.8	
51 1,1,1-Trichloroethane	97	4.081	4.092	-0.011	97	901924	50.0	52.3	
53 Carbon tetrachloride	117	4.195	4.195	0.000	97	833416	50.0	56.3	
54 1,1-Dichloropropene	75	4.206	4.206	0.000	91	644100	50.0	52.4	
55 Benzene	78	4.371	4.372	-0.001	95	1593464	50.0	48.7	
56 Isobutyl alcohol	43	4.403	4.403	0.000	92	491876	1250.0	1250.2	
57 1,2-Dichloroethane	62	4.423	4.434	-0.011	97	934427	50.0	49.8	
59 n-Heptane	43	4.506	4.506	0.000	96	899813	50.0	54.3	
60 Trichloroethene	95	4.848	4.859	-0.011	94	488134	50.0	49.0	
62 Methylcyclohexane	83	4.941	4.942	-0.001	97	726885	50.0	55.0	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	85	452045	50.0	48.2	
66 1,4-Dioxane	88	5.159	5.159	0.000	37	66471	1000.0	1046.5	
65 Dibromomethane	93	5.149	5.159	-0.010	94	308126	50.0	50.0	
67 Dichlorobromomethane	83	5.273	5.273	0.000	97	712859	50.0	50.3	
69 2-Chloroethyl vinyl ether	63	5.480	5.491	-0.011	90	311333	50.0	49.6	
71 cis-1,3-Dichloropropene	75	5.594	5.594	0.000	90	715417	50.0	52.5	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	99	2419399	250.0	262.3	
73 Toluene	92	5.802	5.812	-0.010	98	1094178	50.0	50.2	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	98	738813	50.0	55.2	
77 Ethyl methacrylate	69	6.050	6.050	0.000	94	496315	50.0	52.1	
78 1,1,2-Trichloroethane	83	6.164	6.164	0.000	96	300703	50.0	51.7	
79 Tetrachloroethene	166	6.206	6.206	0.000	94	528891	50.0	53.4	
80 1,3-Dichloropropane	76	6.289	6.289	0.000	98	650126	50.0	48.5	
81 2-Hexanone	43	6.330	6.330	0.000	99	1635619	250.0	254.4	
82 Chlorodibromomethane	129	6.465	6.465	0.000	90	524174	50.0	54.9	
83 Ethylene Dibromide	107	6.548	6.548	0.000	99	376742	50.0	49.3	
86 Chlorobenzene	112	6.900	6.900	0.000	91	1220124	50.0	51.0	
88 Ethylbenzene	91	6.962	6.962	0.000	99	2209240	50.0	50.4	
89 1,1,1,2-Tetrachloroethane	131	6.973	6.973	0.000	90	495902	50.0	52.7	
90 m-Xylene & p-Xylene	106	7.055	7.056	-0.001	0	836925	50.0	51.5	
91 o-Xylene	106	7.366	7.366	0.000	99	829403	50.0	50.9	
92 Styrene	104	7.387	7.387	0.000	94	1416356	50.0	52.5	
93 Bromoform	173	7.584	7.584	0.000	95	343204	50.0	57.4	
95 Isopropylbenzene	105	7.646	7.646	0.000	97	2320511	50.0	55.7	
97 Bromobenzene	156	7.926	7.926	0.000	91	596098	50.0	51.1	
98 1,1,2,2-Tetrachloroethane	83	7.967	7.968	-0.001	96	423968	50.0	49.1	
99 N-Propylbenzene	91	7.978	7.978	0.000	98	2615068	50.0	54.5	
100 1,2,3-Trichloropropane	110	7.988	7.988	0.000	90	171705	50.0	48.9	
101 trans-1,4-Dichloro-2-buten	53	7.999	7.999	0.000	89	213929	50.0	59.8	
105 2-Chlorotoluene	126	8.061	8.061	0.000	94	507316	50.0	52.9	
104 1,3,5-Trimethylbenzene	105	8.123	8.123	0.000	93	2034274	50.0	55.0	
102 4-Chlorotoluene	91	8.154	8.154	0.000	99	1772394	50.0	53.2	
106 tert-Butylbenzene	134	8.382	8.382	0.000	92	409127	50.0	53.1	
107 1,2,4-Trimethylbenzene	105	8.423	8.423	0.000	98	2133506	50.0	54.1	

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	8.558	8.558	0.000	96	2447190	50.0	56.2	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	85	1099592	50.0	51.3	
111 4-Isopropyltoluene	119	8.672	8.672	0.000	95	2188067	50.0	55.0	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	94	1129420	50.0	51.4	
115 n-Butylbenzene	91	9.014	9.014	0.000	98	2021882	50.0	57.0	
116 1,2-Dichlorobenzene	146	9.056	9.056	0.000	95	1070232	50.0	50.9	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	80	110333	50.0	54.6	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	94	936529	50.0	51.4	
120 Hexachlorobutadiene	225	10.486	10.475	0.011	97	542166	50.0	55.3	
121 Naphthalene	128	10.589	10.579	0.010	98	1856035	50.0	55.6	
122 1,2,3-Trichlorobenzene	180	10.786	10.786	0.000	94	868245	50.0	52.8	
S 124 1,2-Dichloroethene, Total	1				0			102.0	
S 125 Total BTEX	1				0			251.6	
S 126 Xylenes, Total	1				0			102.4	
S 123 1,3-Dichloropropene, Total	1				0			107.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00138

Amount Added: 25.00

Units: uL

GAS CORP mix_00309

Amount Added: 25.00

Units: uL

T_8260_Surr_00181

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00209

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181029-75946.b\\T4707.D

Injection Date: 29-Oct-2018 16:49:30

Instrument ID: HP5975T

Lims ID: IC 6

Operator ID: KN

Client ID:

Worklist Smp#: 10

Purge Vol: 5.000 mL

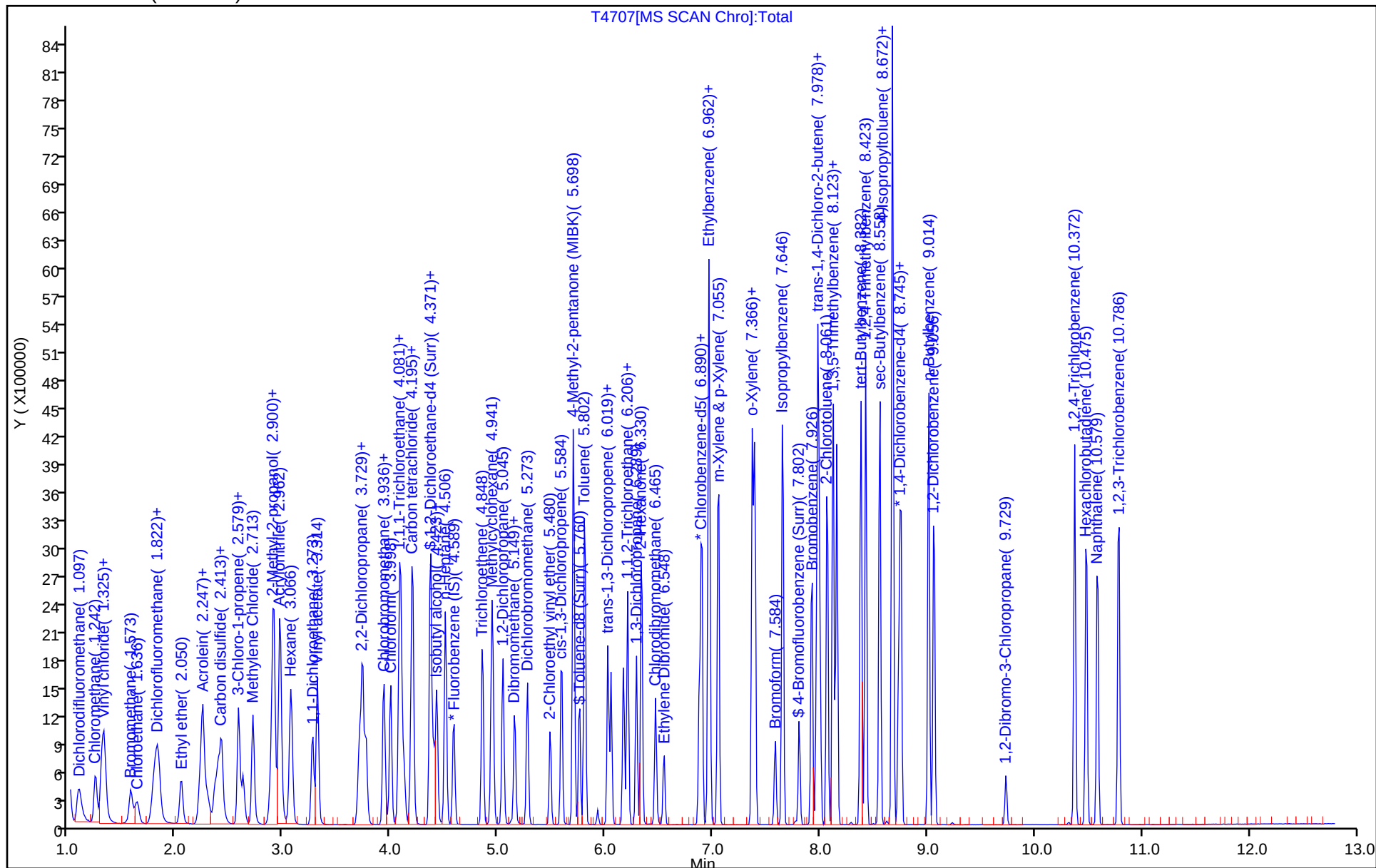
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4707.D

Injection Date: 29-Oct-2018 16:49:30

Instrument ID: HP5975T

Lims ID: IC 6

Client ID:

Operator ID: KN

ALS Bottle#: 10 Worklist Smp#: 10

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

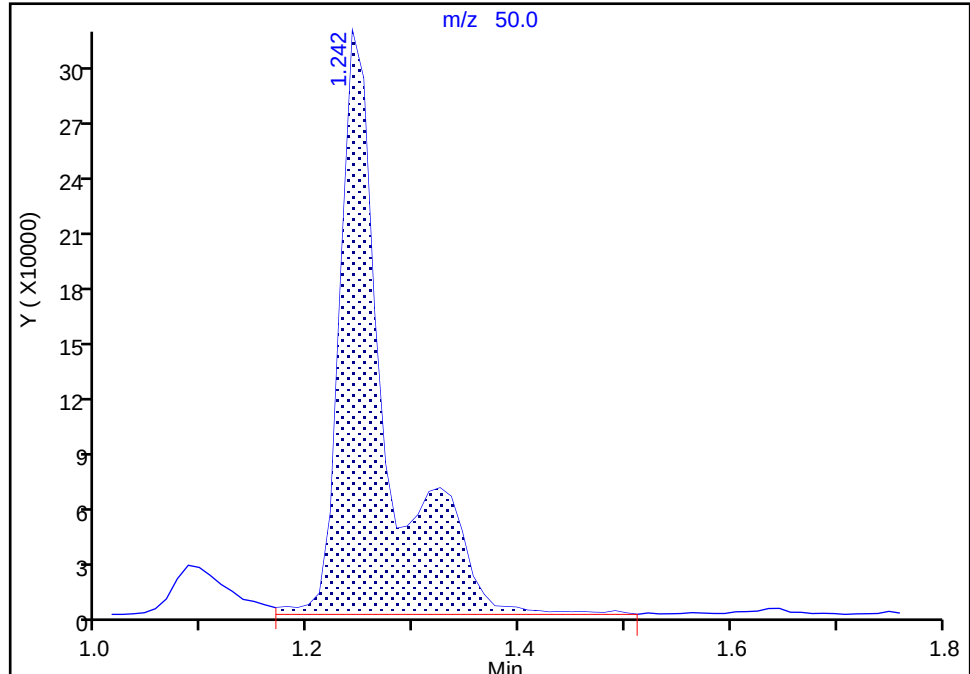
Detector: MS SCAN

13 Chloromethane, CAS: 74-87-3

Signal: 1

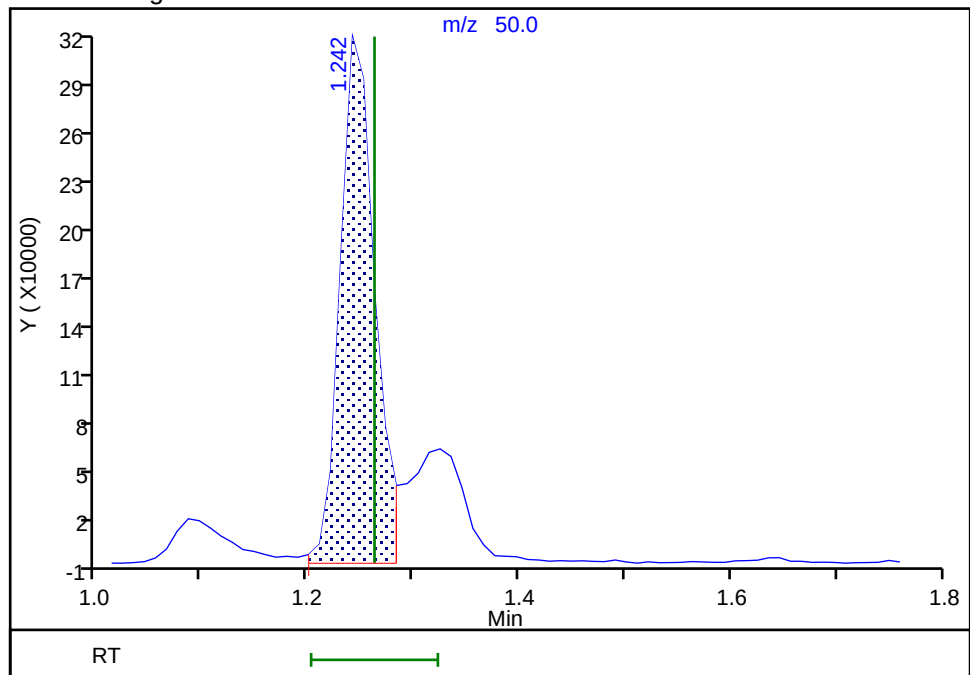
RT: 1.24
Area: 977336
Amount: 64.724328
Amount Units: ug/L

Processing Integration Results



RT: 1.24
Area: 720670
Amount: 49.844677
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:54:34

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4707.D

Injection Date: 29-Oct-2018 16:49:30

Instrument ID: HP5975T

Lims ID: IC 6

Client ID:

Operator ID: KN

ALS Bottle#: 10 Worklist Smp#: 10

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

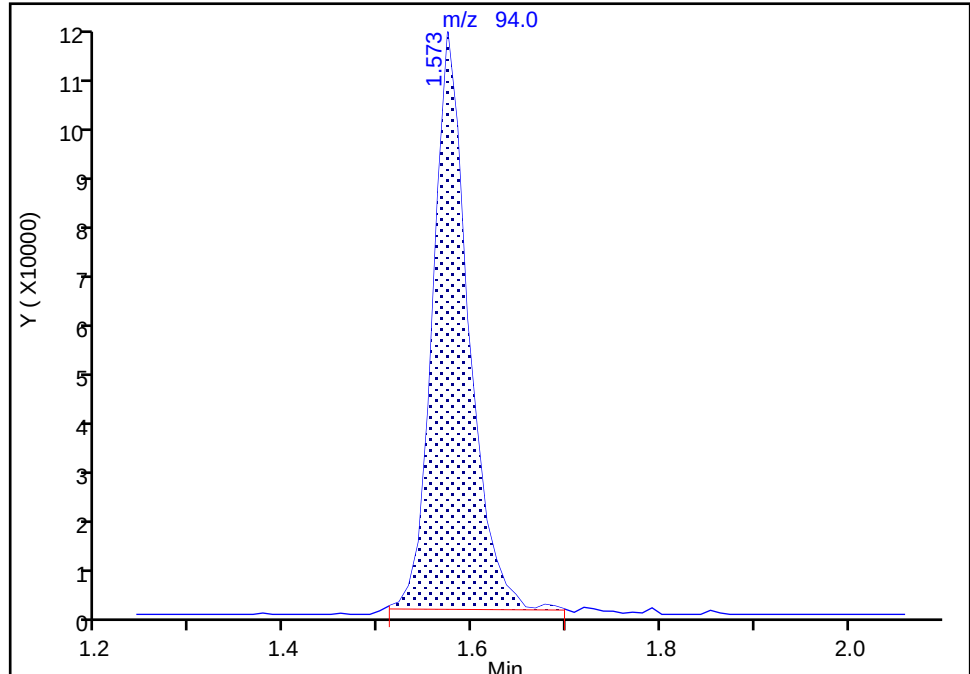
Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

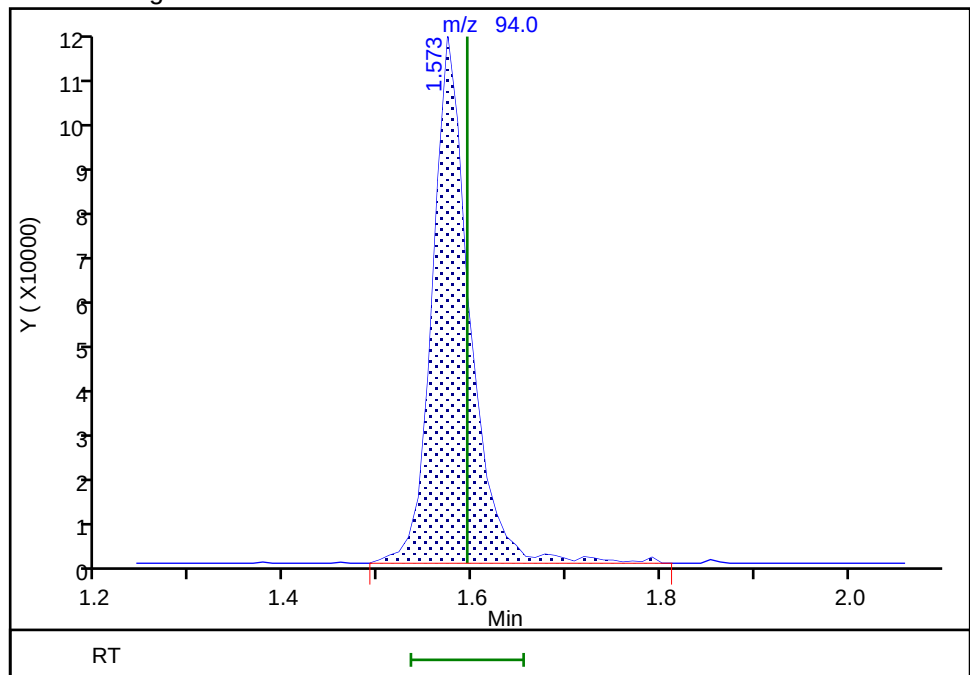
RT: 1.57
Area: 292835
Amount: 45.888627
Amount Units: ug/L

Processing Integration Results



RT: 1.57
Area: 308162
Amount: 46.826519
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:54:51

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4707.D

Injection Date: 29-Oct-2018 16:49:30

Instrument ID: HP5975T

Lims ID: IC 6

Client ID:

Operator ID: KN

ALS Bottle#:

10

Worklist Smp#: 10

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: T-8260

Limit Group:

MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Detector

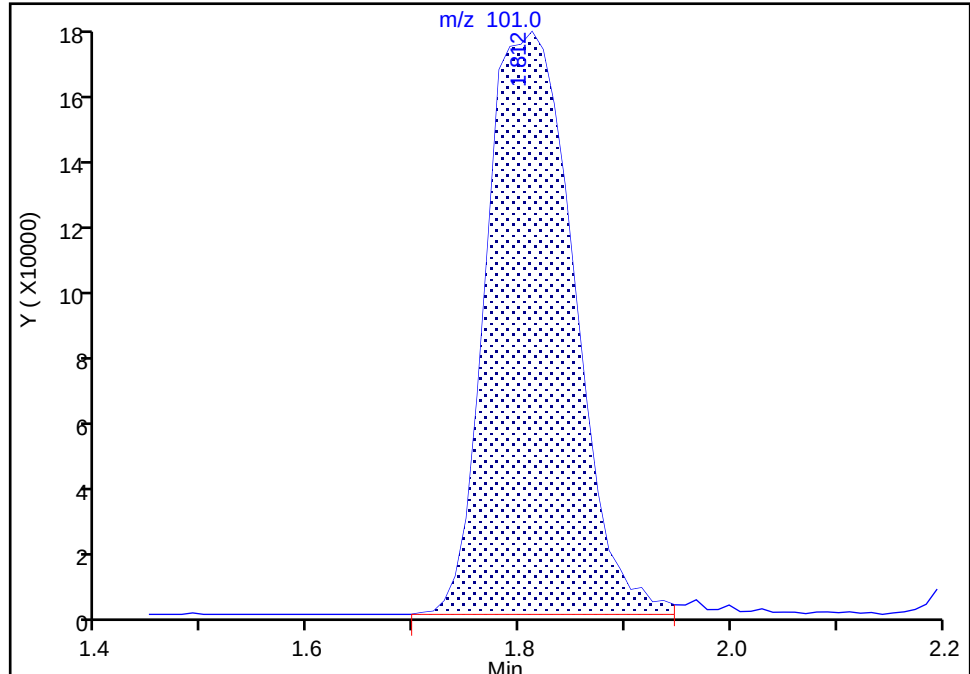
MS SCAN

17 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

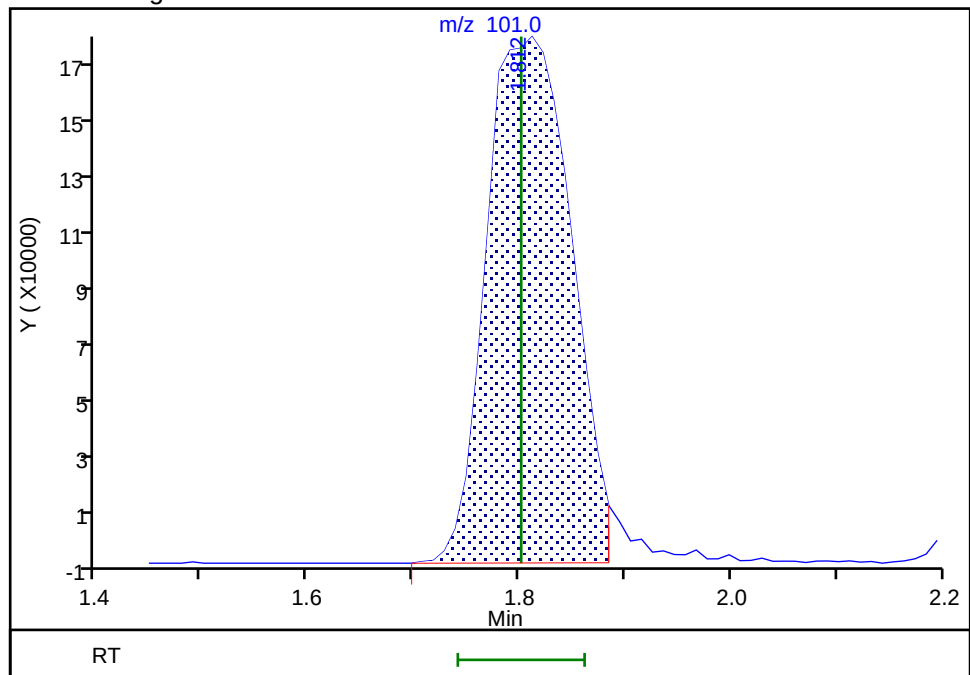
RT: 1.81
Area: 1030186
Amount: 55.473054
Amount Units: ug/L

Processing Integration Results



RT: 1.81
Area: 1003995
Amount: 54.418184
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:55:29

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4707.D

Injection Date: 29-Oct-2018 16:49:30

Instrument ID: HP5975T

Lims ID: IC 6

Client ID:

Operator ID: KN

ALS Bottle#: 10

Worklist Smp#: 10

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

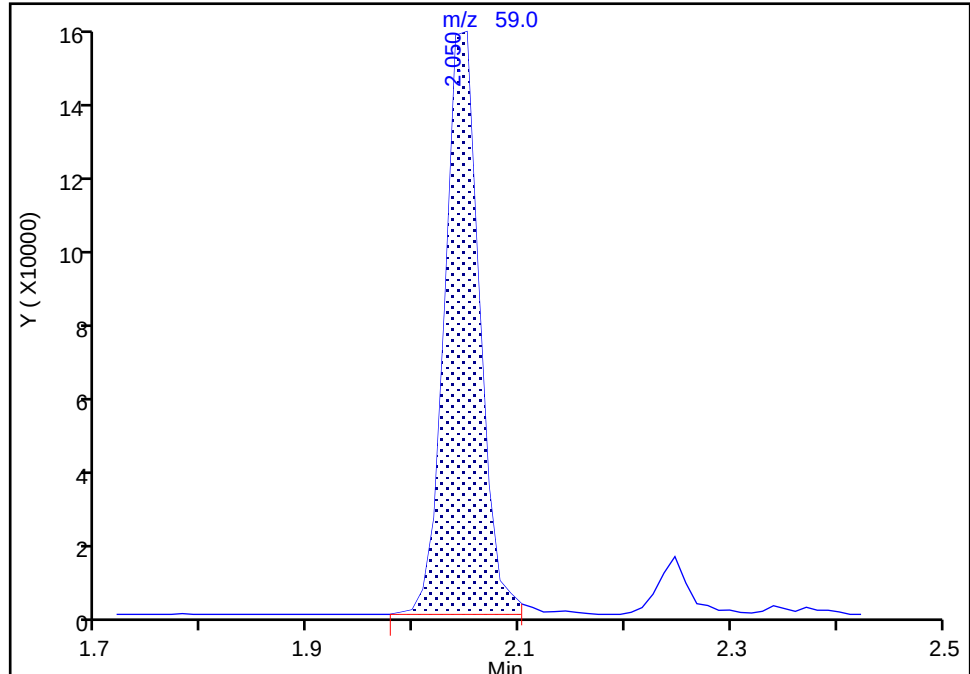
Detector: MS SCAN

19 Ethyl ether, CAS: 60-29-7

Signal: 1

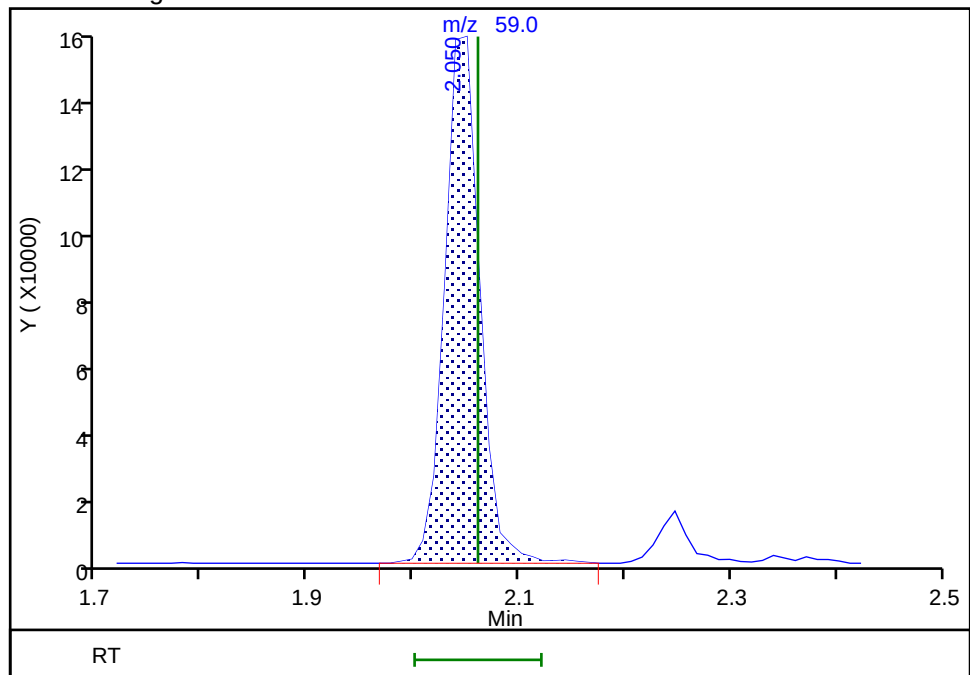
RT: 2.05
Area: 352844
Amount: 50.339872
Amount Units: ug/L

Processing Integration Results



RT: 2.05
Area: 355908
Amount: 50.721579
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:55:56

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4707.D

Injection Date: 29-Oct-2018 16:49:30

Instrument ID: HP5975T

Lims ID: IC 6

Client ID:

Operator ID: KN

ALS Bottle#: 10

Worklist Smp#: 10

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

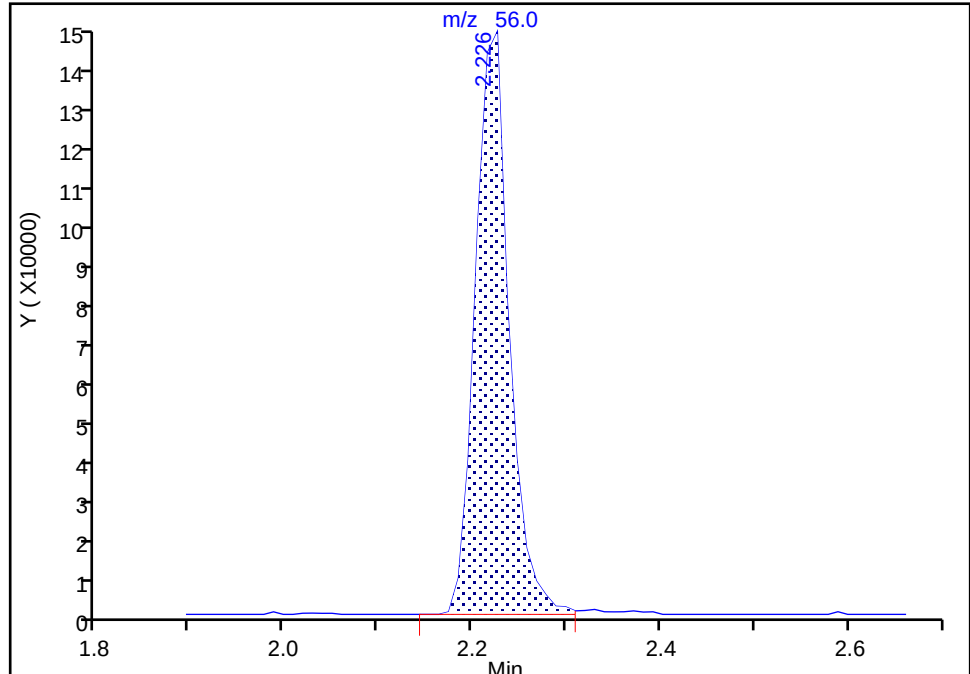
Detector: MS SCAN

21 Acrolein, CAS: 107-02-8

Signal: 1

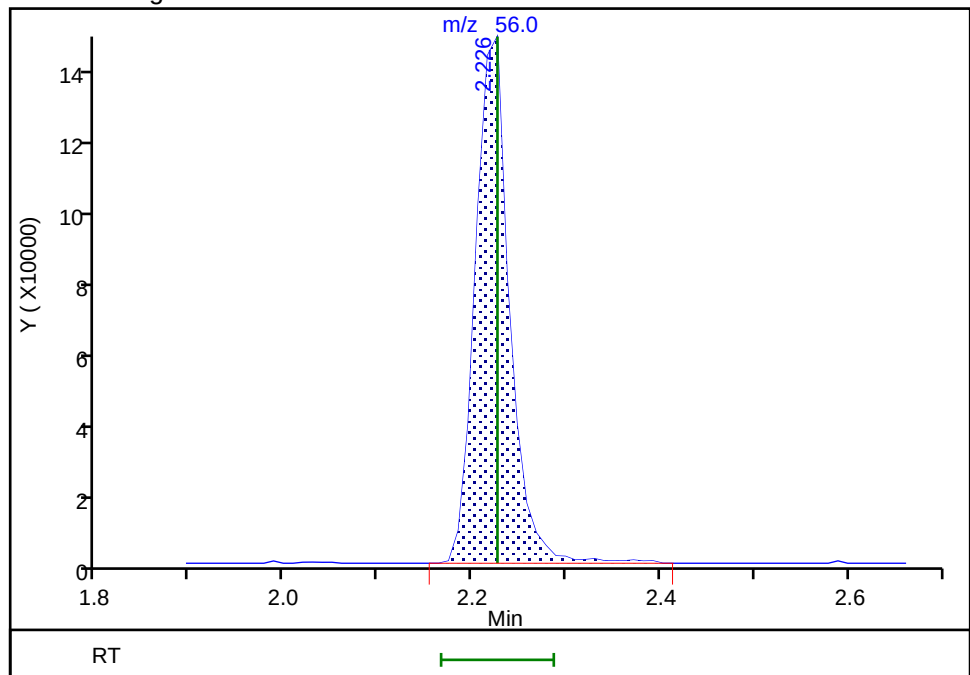
RT: 2.23
Area: 350224
Amount: 211.8675
Amount Units: ug/L

Processing Integration Results



RT: 2.23
Area: 353978
Amount: 221.1952
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:56:14

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4707.D

Injection Date: 29-Oct-2018 16:49:30

Instrument ID: HP5975T

Lims ID: IC 6

Client ID:

Operator ID: KN

ALS Bottle#: 10

Worklist Smp#: 10

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

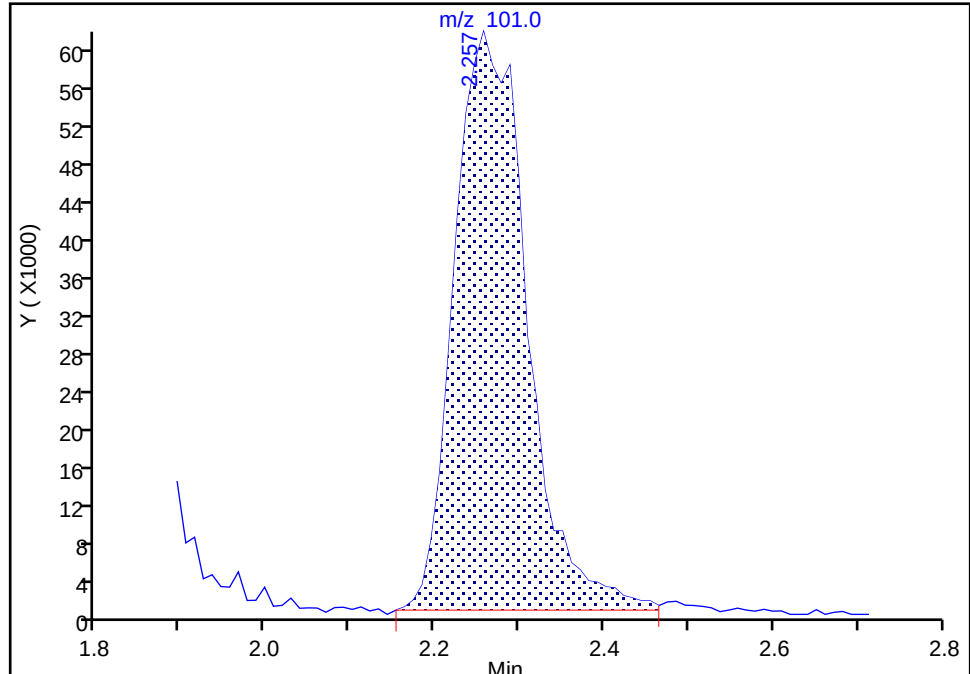
Detector: MS SCAN

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

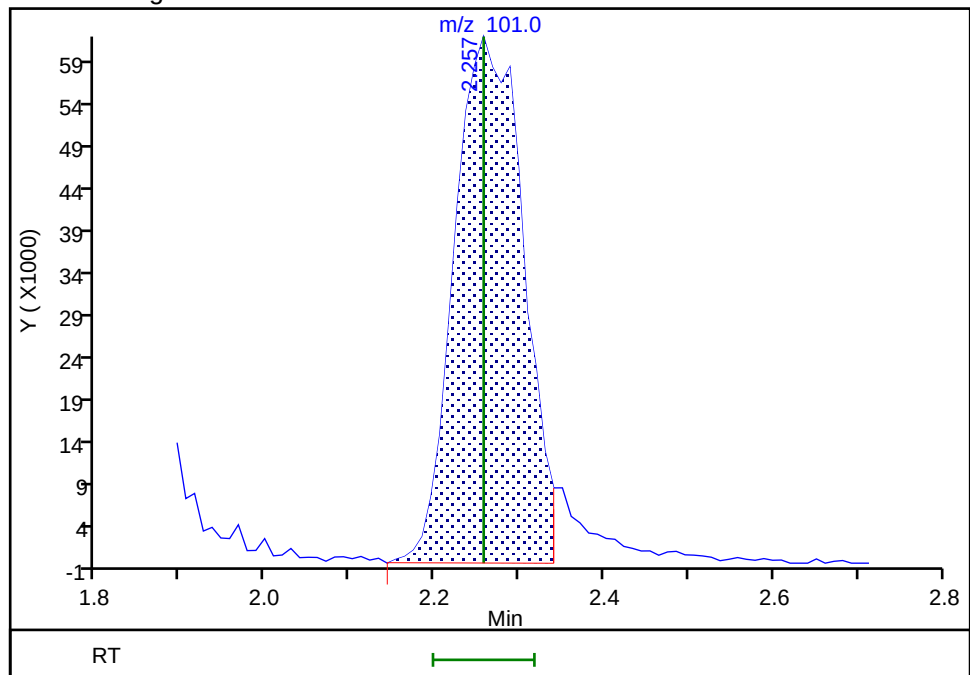
RT: 2.26
Area: 367652
Amount: 60.208572
Amount Units: ug/L

Processing Integration Results



RT: 2.26
Area: 351639
Amount: 56.297019
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:56:32

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4707.D

Injection Date: 29-Oct-2018 16:49:30

Instrument ID: HP5975T

Lims ID: IC 6

Client ID:

Operator ID: KN

ALS Bottle#: 10

Worklist Smp#: 10

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

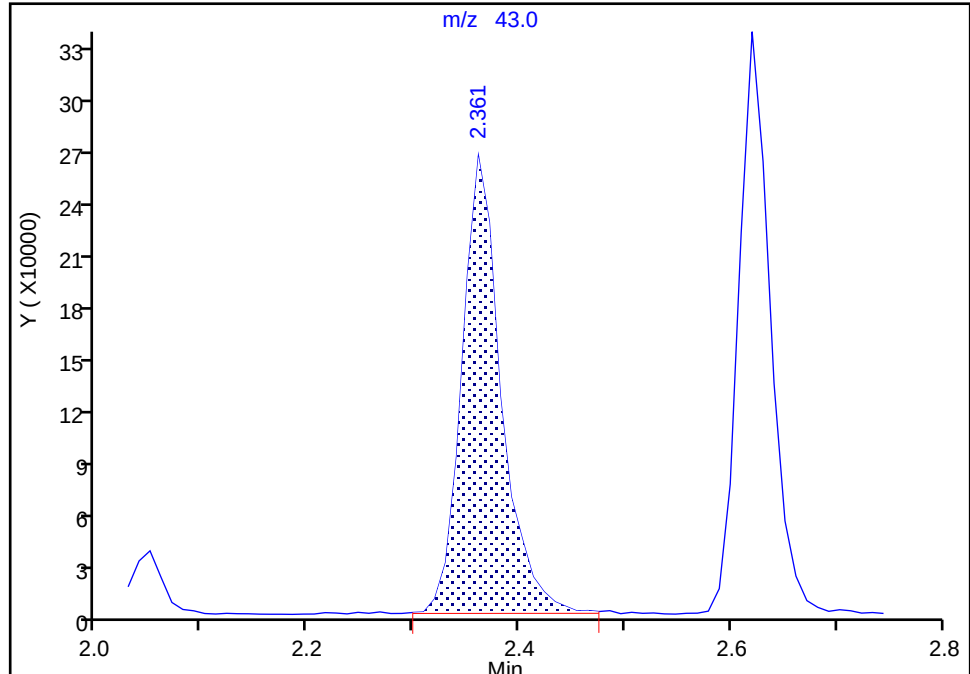
Detector: MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

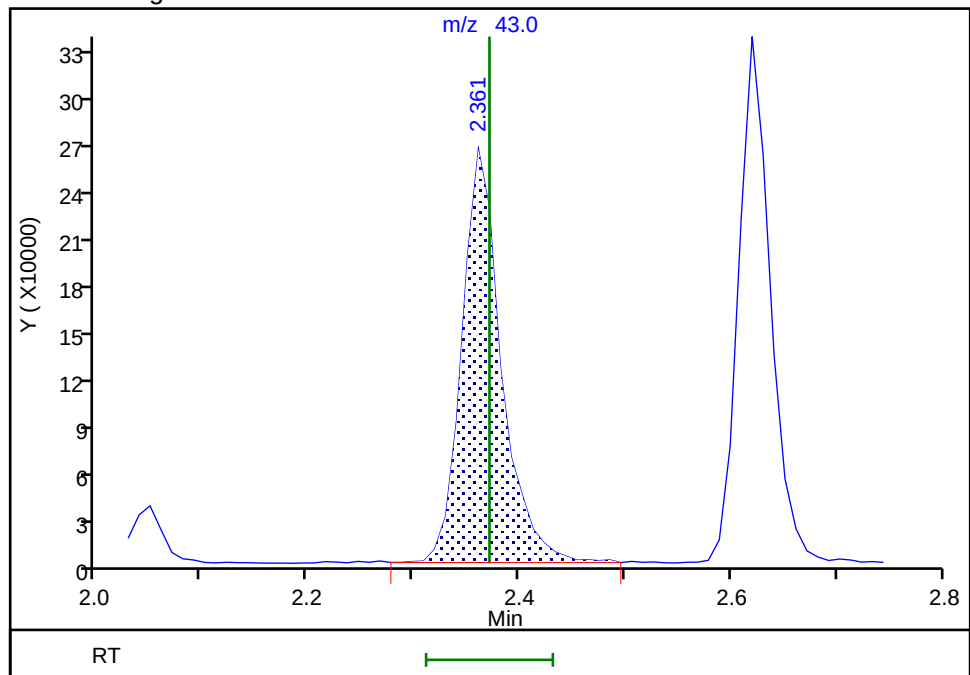
RT: 2.36
Area: 689530
Amount: 223.7113
Amount Units: ug/L

Processing Integration Results



RT: 2.36
Area: 692007
Amount: 224.4247
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:56:56

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4708.D
 Lims ID: IC 7
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 29-Oct-2018 17:13:30 ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 7
 Misc. Info.: 480-0075946-011
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 29-Oct-2018 23:42:18 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0323

First Level Reviewer: milligana

Date: 29-Oct-2018 21:01:32

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	4.589	4.589	0.000	97	151885	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.879	6.879	0.000	91	589991	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	96	350284	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.133	-0.010	91	186708	25.0	25.5	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.371	4.372	-0.001	0	300203	25.0	25.8	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	95	622238	25.0	23.7	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	236627	25.0	24.6	
11 Dichlorodifluoromethane	85	1.107	1.107	0.000	99	1631155	100.0	116.4	
13 Chloromethane	50	1.252	1.263	-0.011	99	1418208	100.0	104.4	
14 Vinyl chloride	62	1.325	1.325	0.000	98	1125834	100.0	115.3	
151 Butadiene	54	1.335	1.346	-0.011	92	1209027	100.0	114.9	
15 Bromomethane	94	1.584	1.594	-0.010	97	642269	100.0	103.9	M
16 Chloroethane	64	1.646	1.656	-0.010	96	563833	100.0	112.9	
17 Trichlorofluoromethane	101	1.833	1.802	0.031	78	1989791	100.0	114.8	M
18 Dichlorofluoromethane	67	1.833	1.833	0.000	96	1637795	100.0	101.7	
19 Ethyl ether	59	2.061	2.061	-0.001	97	692634	100.0	105.1	
21 Acrolein	56	2.226	2.226	0.000	97	722126	500.0	480.4	M
22 1,1-Dichloroethene	96	2.257	2.257	0.000	90	627330	100.0	111.4	
20 1,1,2-Trichloro-1,2,2-trif	101	2.278	2.257	0.021	91	687329	100.0	117.2	M
23 Acetone	43	2.371	2.371	0.000	97	1375036	500.0	474.8	
24 Iodomethane	142	2.402	2.403	-0.001	91	1326554	100.0	105.0	
25 Carbon disulfide	76	2.434	2.434	0.000	99	2374844	100.0	111.7	
27 3-Chloro-1-propene	41	2.589	2.589	0.000	86	1771639	100.0	109.6	
28 Methyl acetate	43	2.630	2.631	-0.001	100	1385935	200.0	191.7	
30 Methylene Chloride	84	2.724	2.724	0.000	93	828774	100.0	101.8	
31 2-Methyl-2-propanol	59	2.879	2.890	-0.011	97	990408	1000.0	1060.6	
33 Methyl tert-butyl ether	73	2.910	2.910	0.000	99	2746176	100.0	104.0	
32 trans-1,2-Dichloroethene	96	2.921	2.921	0.000	90	826513	100.0	111.5	
34 Acrylonitrile	53	2.972	2.973	-0.001	98	3699160	1000.0	1007.3	
35 Hexane	57	3.076	3.076	0.000	94	1509035	100.0	113.1	

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	3.273	3.273	0.000	98	1756342	100.0	109.3	
39 Vinyl acetate	43	3.325	3.325	0.000	97	4455356	200.0	221.3	
42 2,2-Dichloropropane	77	3.719	3.719	0.000	91	1643808	100.0	114.6	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	88	940721	100.0	101.2	
44 2-Butanone (MEK)	43	3.770	3.770	0.000	97	2218843	500.0	524.4	
47 Chlorobromomethane	128	3.936	3.936	0.000	91	474686	100.0	106.6	
48 Tetrahydrofuran	42	3.947	3.947	0.000	92	544755	200.0	197.4	
50 Chloroform	83	3.998	3.998	0.000	95	1804711	100.0	103.3	
51 1,1,1-Trichloroethane	97	4.092	4.092	0.000	97	1896686	100.0	117.1	
52 Cyclohexane	56	4.092	4.092	0.000	91	1945580	100.0	118.9	
53 Carbon tetrachloride	117	4.195	4.195	0.000	97	1757245	100.0	126.4	
54 1,1-Dichloropropene	75	4.206	4.206	0.000	91	1301999	100.0	112.7	
55 Benzene	78	4.371	4.372	-0.001	95	3173330	100.0	103.3	
56 Isobutyl alcohol	43	4.403	4.403	0.000	93	993485	2500.0	2688.5	
57 1,2-Dichloroethane	62	4.434	4.434	0.000	97	1851363	100.0	105.1	
59 n-Heptane	43	4.506	4.506	0.000	97	1784819	100.0	114.6	
60 Trichloroethene	95	4.859	4.859	0.000	95	963723	100.0	102.9	
62 Methylcyclohexane	83	4.941	4.942	-0.001	98	1513348	100.0	122.0	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	85	913980	100.0	103.7	
65 Dibromomethane	93	5.159	5.159	0.000	92	614880	100.0	106.2	
66 1,4-Dioxane	88	5.159	5.159	0.000	34	118300	2000.0	1812.9	M
67 Dichlorobromomethane	83	5.273	5.273	0.000	98	1494144	100.0	112.3	
69 2-Chloroethyl vinyl ether	63	5.480	5.491	-0.011	90	632803	100.0	107.4	
71 cis-1,3-Dichloropropene	75	5.594	5.594	0.000	89	1467143	100.0	114.5	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	98	4853919	500.0	512.3	
73 Toluene	92	5.812	5.812	0.000	98	2227531	100.0	99.5	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	98	1515984	100.0	110.2	
77 Ethyl methacrylate	69	6.050	6.050	0.000	94	1027348	100.0	105.0	
78 1,1,2-Trichloroethane	83	6.164	6.164	0.000	96	609823	100.0	102.0	
79 Tetrachloroethene	166	6.206	6.206	0.000	94	1063589	100.0	104.5	
80 1,3-Dichloropropane	76	6.289	6.289	0.000	97	1321049	100.0	96.0	
81 2-Hexanone	43	6.330	6.330	0.000	98	3297735	500.0	499.3	
82 Chlorodibromomethane	129	6.465	6.465	0.000	90	1097169	100.0	111.9	
83 Ethylene Dibromide	107	6.548	6.548	0.000	99	796858	100.0	101.4	
86 Chlorobenzene	112	6.900	6.900	0.000	91	2529280	100.0	103.0	
88 Ethylbenzene	91	6.962	6.962	0.000	99	4573618	100.0	101.5	
89 1,1,1,2-Tetrachloroethane	131	6.973	6.973	0.000	90	1035898	100.0	107.1	
90 m-Xylene & p-Xylene	106	7.055	7.056	-0.001	0	1740706	100.0	104.3	
91 o-Xylene	106	7.366	7.366	0.000	99	1680978	100.0	100.3	
92 Styrene	104	7.387	7.387	0.000	93	2906371	100.0	104.9	
93 Bromoform	173	7.584	7.584	0.000	96	725989	100.0	118.1	
95 Isopropylbenzene	105	7.646	7.646	0.000	98	4697157	100.0	110.8	
97 Bromobenzene	156	7.926	7.926	0.000	92	1241011	100.0	104.5	
98 1,1,2,2-Tetrachloroethane	83	7.967	7.968	-0.001	95	893444	100.0	101.6	
99 N-Propylbenzene	91	7.978	7.978	0.000	99	5469704	100.0	112.2	
100 1,2,3-Trichloropropane	110	7.988	7.988	0.000	89	350421	100.0	98.0	
101 trans-1,4-Dichloro-2-buten	53	7.999	7.999	0.000	84	457395	100.0	125.6	
105 2-Chlorotoluene	126	8.071	8.061	0.010	95	1074059	100.0	110.2	
104 1,3,5-Trimethylbenzene	105	8.123	8.123	0.000	93	4221873	100.0	112.2	
102 4-Chlorotoluene	91	8.154	8.154	0.000	99	3629197	100.0	107.0	
106 tert-Butylbenzene	134	8.382	8.382	0.000	92	852639	100.0	108.8	
107 1,2,4-Trimethylbenzene	105	8.423	8.423	0.000	98	4322479	100.0	107.7	

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	8.558	8.558	0.000	96	5034219	100.0	113.6	
111 4-Isopropyltoluene	119	8.672	8.672	0.000	96	4636401	100.0	114.5	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	70	2196165	100.0	100.7	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	92	2273808	100.0	101.7	
115 n-Butylbenzene	91	9.014	9.014	0.000	98	4097215	100.0	113.5	
116 1,2-Dichlorobenzene	146	9.066	9.056	0.010	95	2147431	100.0	100.4	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	81	236797	100.0	115.3	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	94	1970212	100.0	106.3	
120 Hexachlorobutadiene	225	10.486	10.475	0.011	97	1142799	100.0	114.6	
121 Naphthalene	128	10.579	10.579	0.000	98	3840931	100.0	113.1	
122 1,2,3-Trichlorobenzene	180	10.786	10.786	0.000	94	1832280	100.0	109.6	
S 126 Xylenes, Total	1				0			204.6	
S 123 1,3-Dichloropropene, Total	1				0			224.8	
S 124 1,2-Dichloroethene, Total	1				0			212.7	
S 125 Total BTEX	1				0			508.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00138

Amount Added: 50.00

Units: uL

GAS CORP mix_00309

Amount Added: 50.00

Units: uL

T_8260_Surr_00181

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00209

Amount Added: 1.00

Units: uL

Run Reagent

Operator ID: KN

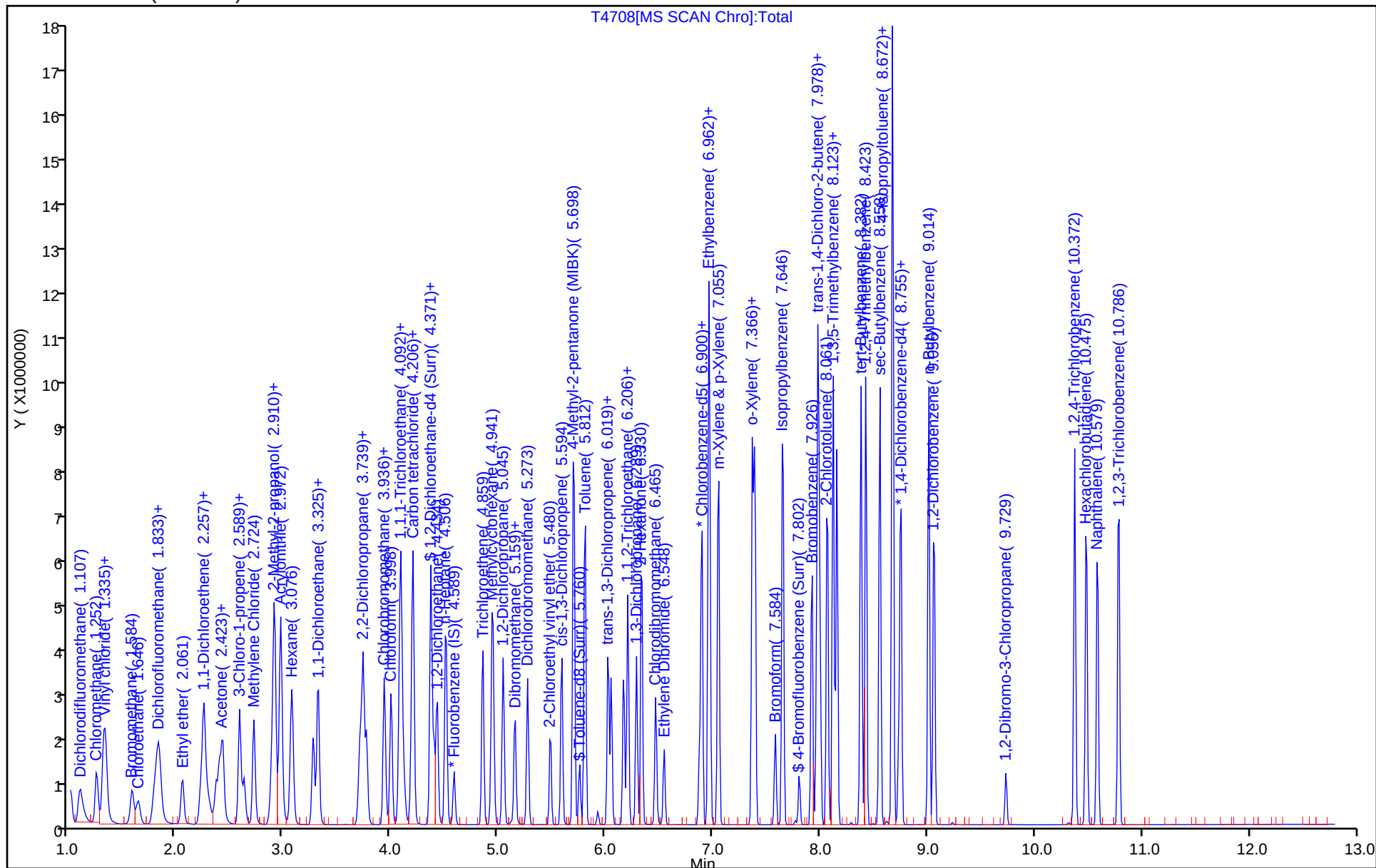
Worklist Smp#: 11

Client ID:

ALS Bottle#: 11

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

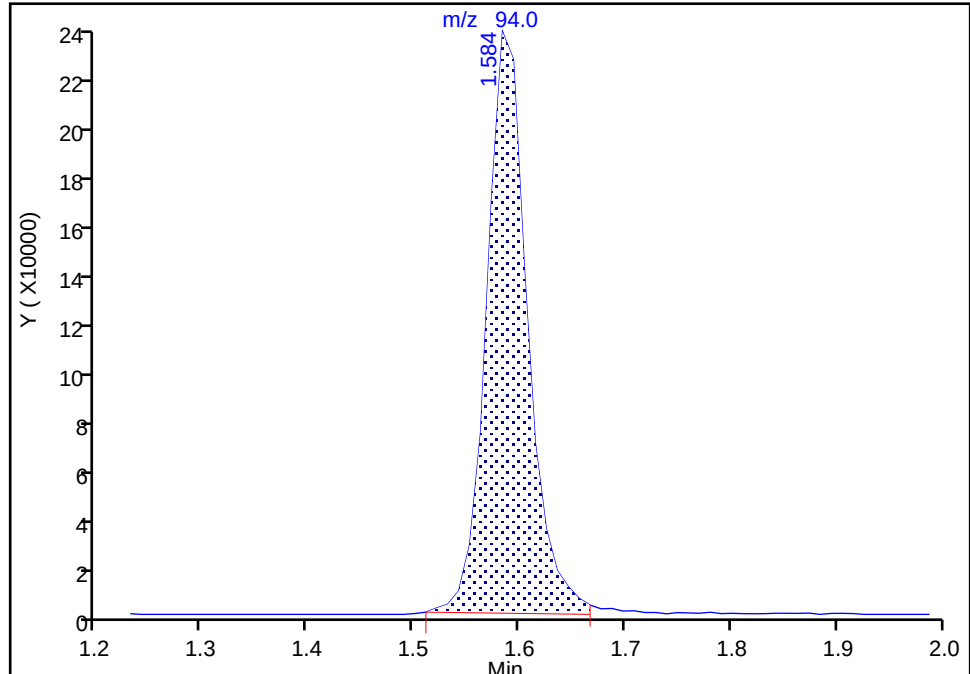
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Injection Date: 29-Oct-2018 17:13:30 Instrument ID: HP5975T
Lims ID: IC 7
Client ID:
Operator ID: KN ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

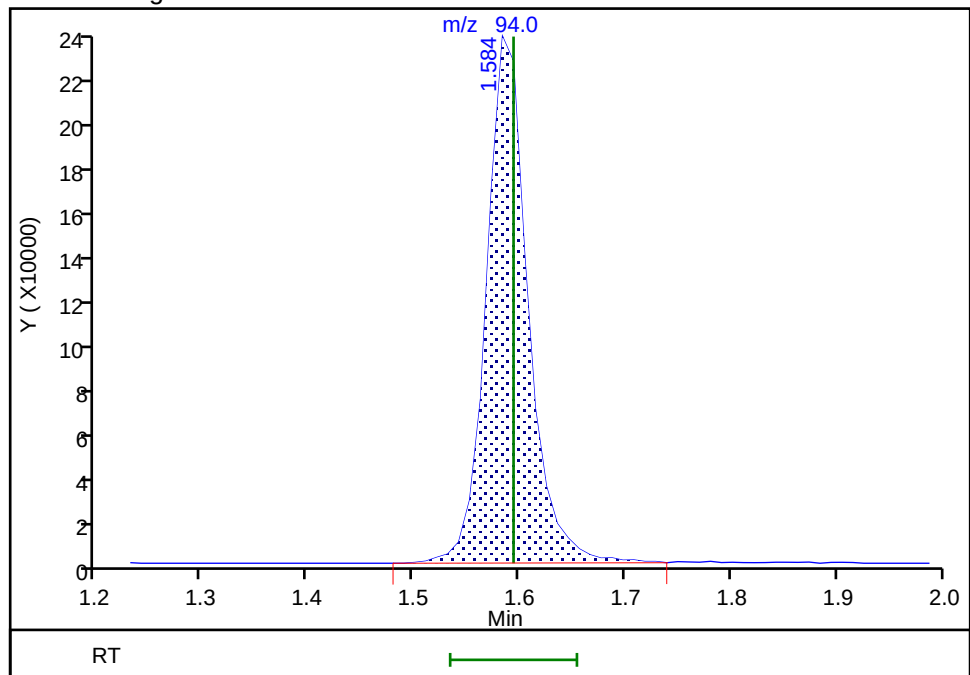
RT: 1.58
Area: 633590
Amount: 104.6717
Amount Units: ug/L

Processing Integration Results



RT: 1.58
Area: 642269
Amount: 103.9035
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:58:28
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4708.D

Injection Date: 29-Oct-2018 17:13:30

Instrument ID: HP5975T

Lims ID: IC 7

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 (0.25 mm)

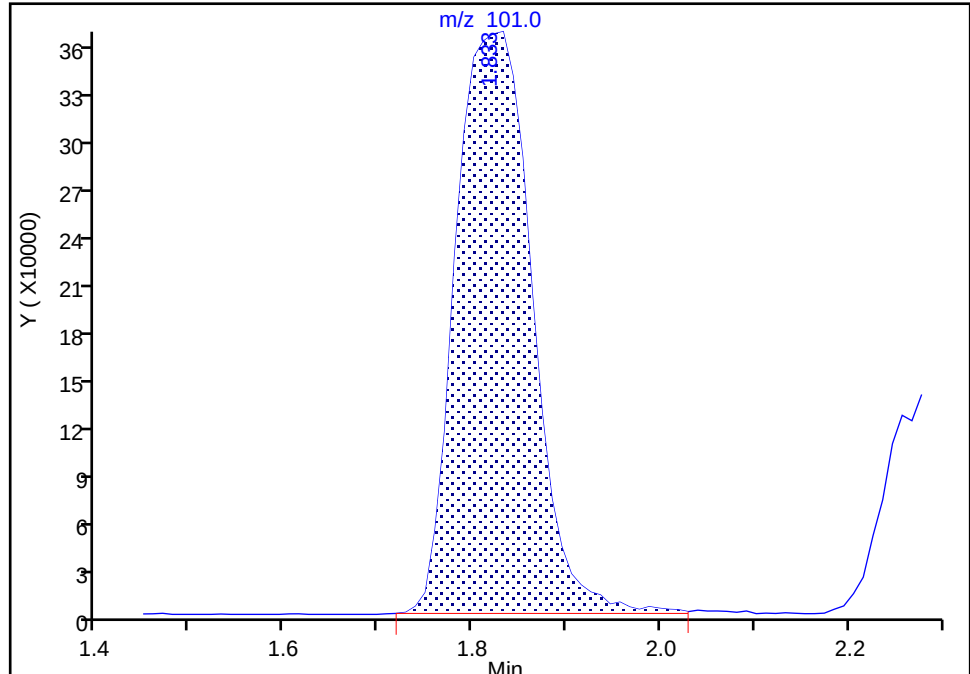
Detector: MS SCAN

17 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

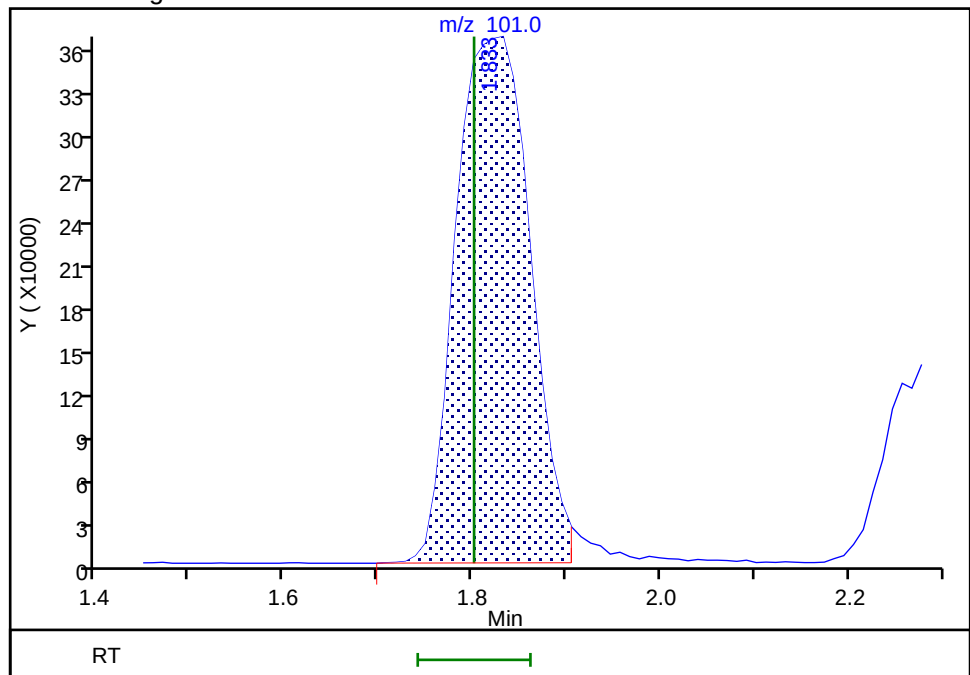
RT: 1.83
Area: 2031740
Amount: 116.8878
Amount Units: ug/L

Processing Integration Results



RT: 1.83
Area: 1989791
Amount: 114.8208
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:58:51

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Buffalo

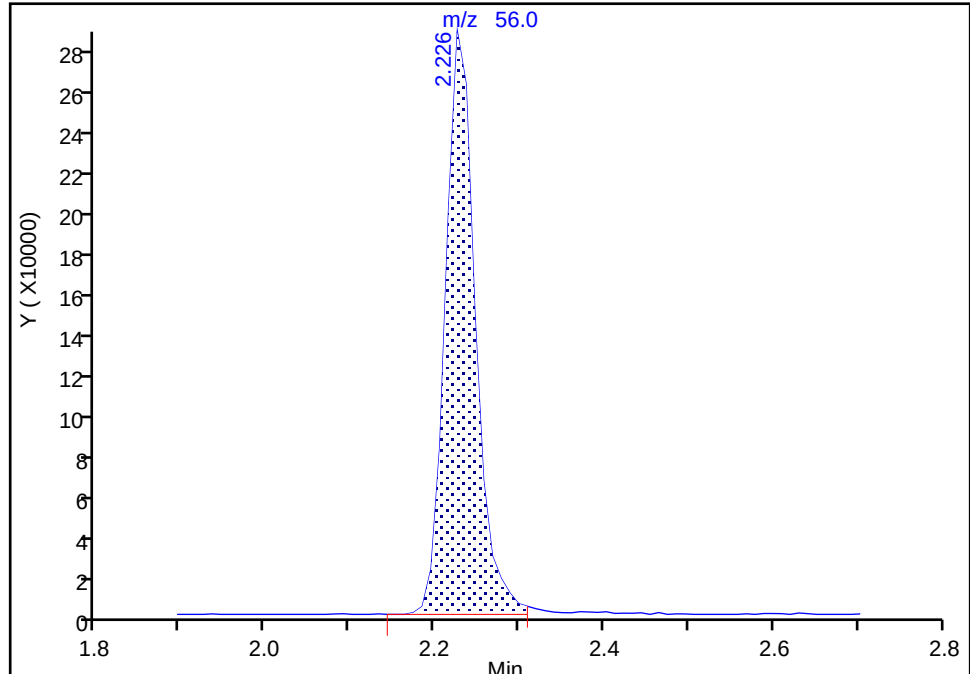
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Injection Date: 29-Oct-2018 17:13:30 Instrument ID: HP5975T
Lims ID: IC 7
Client ID:
Operator ID: KN ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

21 Acrolein, CAS: 107-02-8

Signal: 1

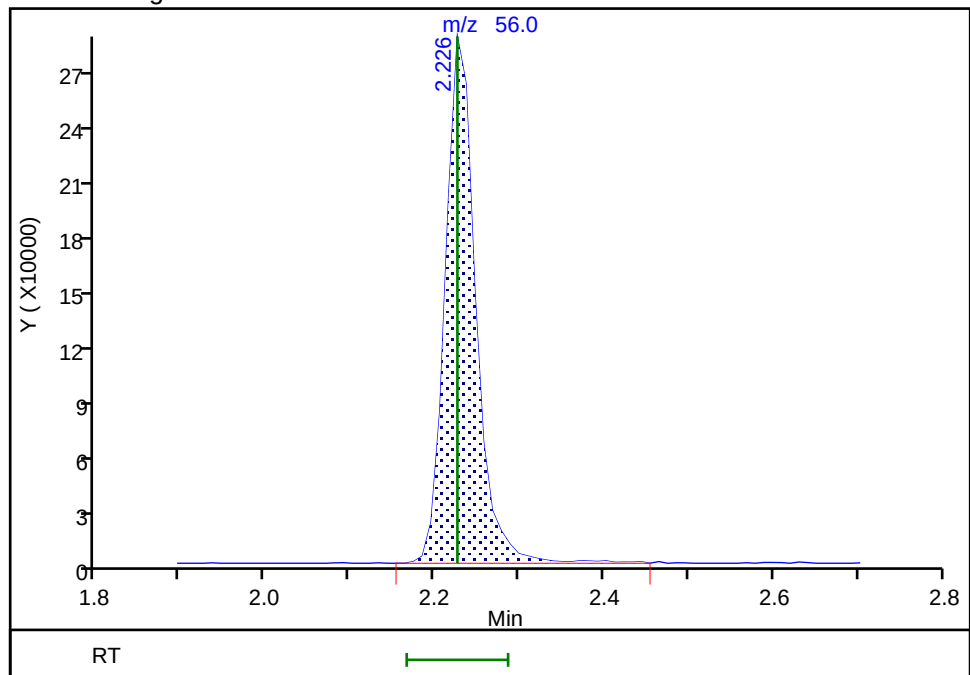
RT: 2.23
Area: 713058
Amount: 458.7234
Amount Units: ug/L

Processing Integration Results



RT: 2.23
Area: 722126
Amount: 480.4111
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:59:14
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

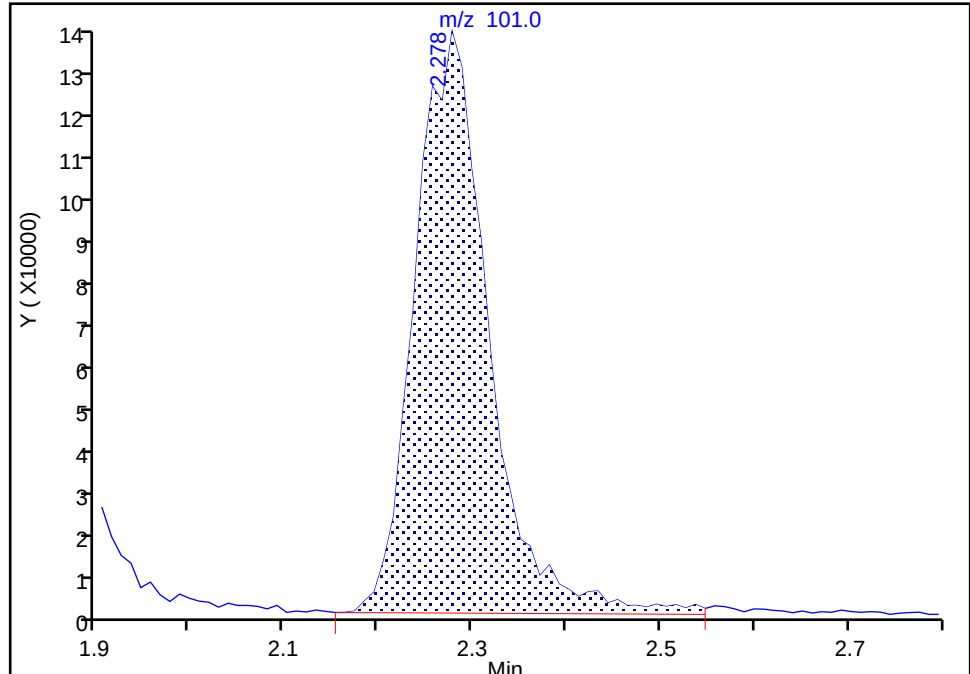
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Injection Date: 29-Oct-2018 17:13:30 Instrument ID: HP5975T
Lims ID: IC 7
Client ID:
Operator ID: KN ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

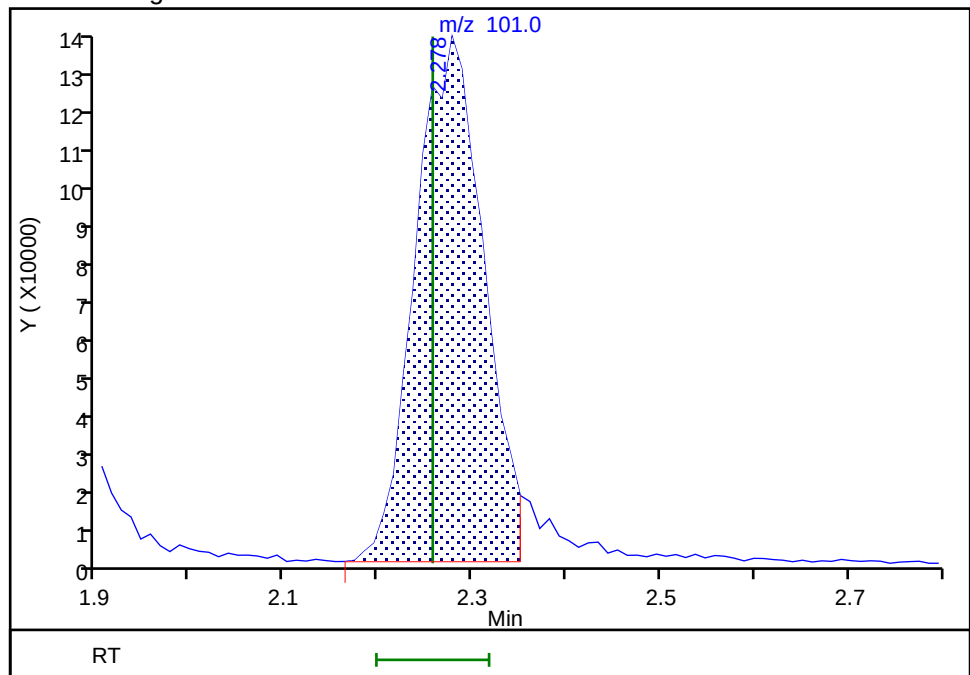
RT: 2.28
Area: 741269
Amount: 100.0348
Amount Units: ug/L

Processing Integration Results



RT: 2.28
Area: 687329
Amount: 117.1530
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 20:59:56
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4708.D

Injection Date: 29-Oct-2018 17:13:30

Instrument ID: HP5975T

Lims ID: IC 7

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 (0.25 mm)

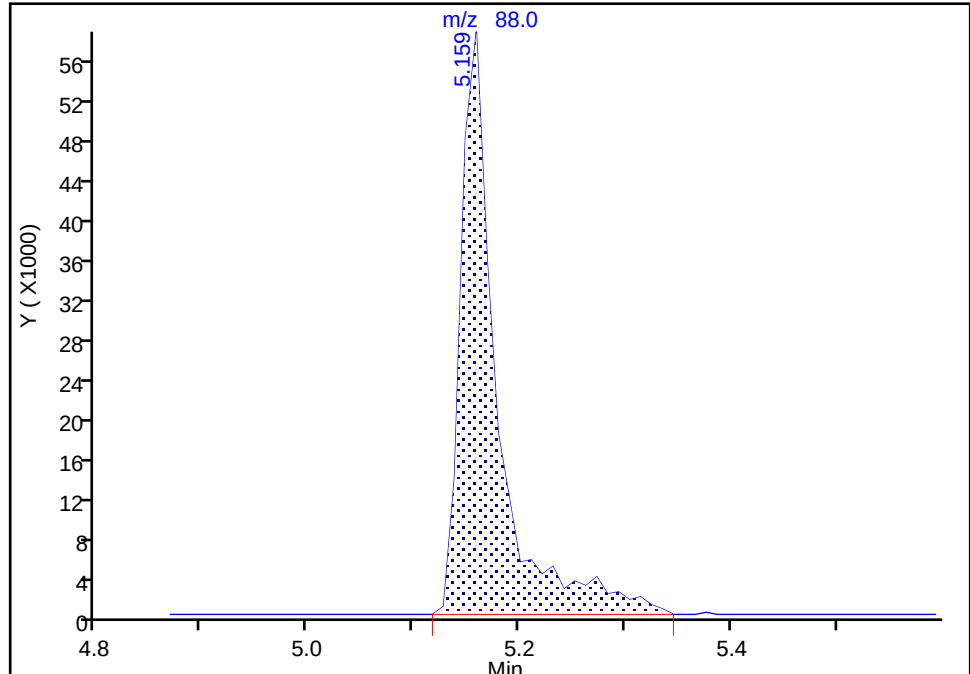
Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

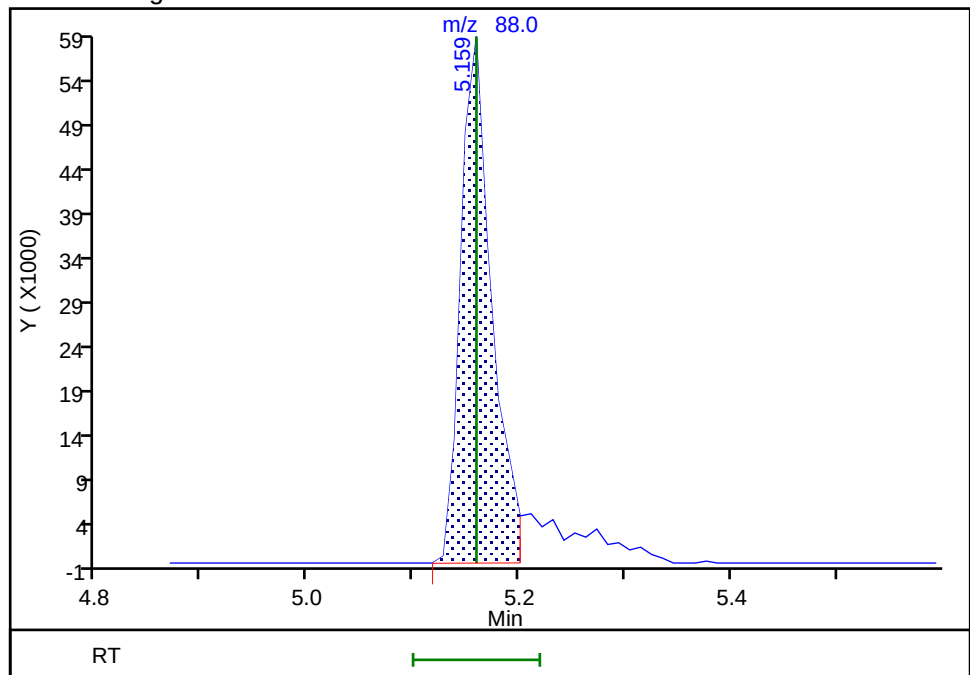
RT: 5.16
Area: 140443
Amount: 2005.9089
Amount Units: ug/L

Processing Integration Results



RT: 5.16
Area: 118300
Amount: 1812.9185
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 29-Oct-2018 21:00:36

Audit Action: Manually Integrated

Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-443770/3 Calibration Date: 11/05/2018 21:51
 Instrument ID: HP5973P Calib Start Date: 10/22/2018 15:16
 GC Column: ZB-624 (60) ID: 0.25 (mm) Calib End Date: 10/22/2018 18:02
 Lab File ID: P37827.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	2.083	1.852	0.1000	22.2	25.0	-11.1	50.0
Chloromethane	Ave	3.552	3.168	0.1000	22.3	25.0	-10.8	20.0
Vinyl chloride	Ave	2.826	2.278	0.1000	20.2	25.0	-19.4	20.0
Butadiene	Ave	2.590	2.168		20.9	25.0	-16.3	20.0
Bromomethane	Ave	1.689	1.454	0.1000	21.5	25.0	-13.9	50.0
Chloroethane	Ave	1.353	1.349	0.1000	24.9	25.0	-0.3	50.0
Dichlorofluoromethane	Ave	3.331	2.921		21.9	25.0	-12.3	20.0
Trichlorofluoromethane	Ave	2.859	2.342	0.1000	20.5	25.0	-18.1	20.0
Ethyl ether	Ave	1.418	1.532		27.0	25.0	8.0	20.0
Acrolein	Ave	0.2630	0.3595		171	125	36.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.315	1.438	0.1000	27.3	25.0	9.4	20.0
1,1-Dichloroethene	Ave	1.443	1.467	0.1000	25.4	25.0	1.7	20.0
Acetone	Ave	0.6786	0.7141	0.1000	132	125	5.2	50.0
Iodomethane	Ave	2.718	2.850		26.2	25.0	4.9	20.0
Carbon disulfide	Ave	4.278	4.628	0.1000	27.0	25.0	8.2	20.0
Methyl acetate	Ave	1.565	1.684	0.1000	53.8	50.0	7.6	50.0
Allyl chloride	Ave	2.441	3.019		30.9	25.0	23.7*	20.0
Methylene Chloride	Ave	1.921	1.764	0.1000	23.0	25.0	-8.2	20.0
2-Methyl-2-propanol	Ave	0.2096	0.2309		275	250	10.2	50.0
Methyl tert-butyl ether	Ave	4.359	4.165	0.1000	23.9	25.0	-4.5	20.0
trans-1,2-Dichloroethene	Ave	1.543	1.554	0.1000	25.2	25.0	0.7	20.0
Acrylonitrile	Ave	0.7240	0.8014		277	250	10.7	20.0
Hexane	Ave	1.834	2.056		28.0	25.0	12.1	20.0
Vinyl acetate	Ave	3.654	3.907		53.5	50.0	6.9	20.0
1,1-Dichloroethane	Ave	2.907	3.020	0.2000	26.0	25.0	3.9	20.0
2-Butanone (MEK)	Ave	1.021	1.100	0.1000	135	125	7.7	20.0
2,2-Dichloropropane	Ave	1.900	1.891		24.9	25.0	-0.5	20.0
cis-1,2-Dichloroethene	Ave	1.790	1.747	0.1000	24.4	25.0	-2.4	20.0
Chlorobromomethane	Ave	0.9074	0.8966		24.7	25.0	-1.2	20.0
Tetrahydrofuran	Ave	0.6639	0.7134		53.7	50.0	7.5	20.0
Chloroform	Ave	2.899	2.651	0.2000	22.9	25.0	-8.5	20.0
1,1,1-Trichloroethane	Ave	2.283	2.194	0.1000	24.0	25.0	-3.9	20.0
Cyclohexane	Ave	2.244	2.660	0.1000	29.6	25.0	18.5	20.0
1,1-Dichloropropene	Ave	2.058	2.067		25.1	25.0	0.5	20.0
Isobutyl alcohol	Ave	0.1113	0.1194		670	625	7.2	50.0
Carbon tetrachloride	Ave	2.166	2.048	0.1000	23.6	25.0	-5.4	20.0
Benzene	Ave	5.894	6.086	0.5000	25.8	25.0	3.2	20.0
1,2-Dichloroethane	Ave	2.542	2.251	0.1000	22.1	25.0	-11.5	20.0
n-Heptane	Ave	1.424	1.662		29.2	25.0	16.7	20.0
Trichloroethene	Ave	1.572	1.558	0.2000	24.8	25.0	-0.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-443770/3 Calibration Date: 11/05/2018 21:51
 Instrument ID: HP5973P Calib Start Date: 10/22/2018 15:16
 GC Column: ZB-624 (60) ID: 0.25 (mm) Calib End Date: 10/22/2018 18:02
 Lab File ID: P37827.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	1.862	2.003	0.1000	26.9	25.0	7.6	20.0
1,2-Dichloropropane	Ave	1.699	1.783	0.1000	26.2	25.0	4.9	20.0
1,4-Dioxane	Ave	0.0069	0.0083		607	500	21.3	50.0
Dibromomethane	Ave	1.161	1.052	0.1000	22.7	25.0	-9.4	20.0
Bromodichloromethane	Ave	2.193	2.097	0.2000	23.9	25.0	-4.4	20.0
2-Chloroethyl vinyl ether	Ave	0.6511	0.7177		27.6	25.0	10.2	20.0
cis-1,3-Dichloropropene	Ave	2.413	2.449	0.2000	25.4	25.0	1.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9240	1.031	0.1000	139	125	11.5	20.0
Toluene	Ave	1.817	1.898	0.4000	26.1	25.0	4.5	20.0
Ethyl methacrylate	Ave	0.9170	1.004		27.4	25.0	9.5	20.0
trans-1,3-Dichloropropene	Ave	1.118	1.160	0.1000	25.9	25.0	3.7	20.0
1,1,2-Trichloroethane	Ave	0.6312	0.6100	0.1000	24.2	25.0	-3.4	20.0
Tetrachloroethene	Ave	0.8551	0.8920	0.2000	26.1	25.0	4.3	20.0
2-Hexanone	Ave	0.7088	0.7847	0.1000	138	125	10.7	20.0
1,3-Dichloropropane	Ave	1.252	1.219		24.3	25.0	-2.6	20.0
Dibromochloromethane	Ave	0.8896	0.8540	0.1000	24.0	25.0	-4.0	20.0
1,2-Dibromoethane	Ave	0.8191	0.7907		24.1	25.0	-3.5	20.0
Chlorobenzene	Ave	2.198	2.186	0.5000	24.9	25.0	-0.5	20.0
Ethylbenzene	Ave	3.204	3.338	0.1000	26.0	25.0	4.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8412	0.8253		24.5	25.0	-1.9	20.0
m,p-Xylene	Ave	1.363	1.422	0.1000	26.1	25.0	4.4	20.0
o-Xylene	Ave	1.349	1.387	0.3000	25.7	25.0	2.8	20.0
Styrene	Ave	2.181	2.370	0.3000	27.2	25.0	8.6	20.0
Bromoform	Ave	0.6293	0.6193	0.1000	24.6	25.0	-1.6	50.0
Isopropylbenzene	Ave	2.715	2.877	0.1000	26.5	25.0	6.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9170	0.8623	0.3000	23.5	25.0	-6.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2491	0.2740		27.5	25.0	10.0	50.0
N-Propylbenzene	Ave	3.091	3.218		26.0	25.0	4.1	20.0
Bromobenzene	Ave	0.9305	0.9094		24.4	25.0	-2.3	20.0
1,2,3-Trichloropropane	Ave	0.2966	0.2710		22.8	25.0	-8.6	20.0
1,3,5-Trimethylbenzene	Ave	2.265	2.436		26.9	25.0	7.6	20.0
2-Chlorotoluene	Ave	0.7830	0.7941		25.4	25.0	1.4	20.0
4-Chlorotoluene	Ave	0.8225	0.8269		25.1	25.0	0.5	20.0
tert-Butylbenzene	Ave	0.5096	0.5263		25.8	25.0	3.3	20.0
1,2,4-Trimethylbenzene	Ave	2.424	2.546		26.3	25.0	5.0	20.0
sec-Butylbenzene	Ave	2.539	2.724		26.8	25.0	7.3	20.0
4-Isopropyltoluene	Ave	2.201	2.368		26.9	25.0	7.6	20.0
1,3-Dichlorobenzene	Ave	1.612	1.602	0.6000	24.8	25.0	-0.6	20.0
1,4-Dichlorobenzene	Ave	1.673	1.662	0.5000	24.8	25.0	-0.7	20.0
n-Butylbenzene	Ave	1.940	1.977		25.5	25.0	1.9	20.0
1,2-Dichlorobenzene	Ave	1.585	1.559	0.4000	24.6	25.0	-1.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-443770/3 Calibration Date: 11/05/2018 21:51
 Instrument ID: HP5973P Calib Start Date: 10/22/2018 15:16
 GC Column: ZB-624 (60) ID: 0.25 (mm) Calib End Date: 10/22/2018 18:02
 Lab File ID: P37827.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	0.1908	0.1685	0.0500	22.1	25.0	-11.7	50.0
1,2,4-Trichlorobenzene	Ave	1.076	1.042	0.2000	24.2	25.0	-3.1	20.0
Hexachlorobutadiene	Ave	0.3515	0.3655		26.0	25.0	4.0	20.0
Naphthalene	Ave	2.833	2.848		25.1	25.0	0.5	20.0
1,2,3-Trichlorobenzene	Ave	1.033	1.010		24.4	25.0	-2.2	20.0
Dibromofluoromethane (Surr)	Ave	1.443	1.338		23.2	25.0	-7.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.8498	0.7603		22.4	25.0	-10.5	20.0
Toluene-d8 (Surr)	Ave	2.350	2.293		24.4	25.0	-2.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8458	0.8262		24.4	25.0	-2.3	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37827.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 05-Nov-2018 21:51:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 480-0076157-003
 Operator ID: RB Instrument ID: HP5973P
 Sublist: chrom-P-8260H2O*sub11
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 14:40:30 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: baroner

Date: 05-Nov-2018 22:30:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	263261	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.290	0.000	85	526917	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	94	599383	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	93	352368	25.0	23.2	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.995	0.000	0	200164	25.0	22.4	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.325	0.000	92	1208445	25.0	24.4	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	94	435337	25.0	24.4	
10 Dichlorodifluoromethane	85	4.252	4.252	0.000	99	487429	25.0	22.2	
11 Chloromethane	50	4.666	4.666	0.000	99	834065	25.0	22.3	
17 Vinyl chloride	62	4.855	4.855	0.000	98	599708	25.0	20.2	
144 Butadiene	54	4.897	4.897	0.000	91	570657	25.0	20.9	
12 Bromomethane	94	5.481	5.481	0.000	91	382735	25.0	21.5	
13 Chloroethane	64	5.615	5.615	0.000	98	355173	25.0	24.9	
19 Dichlorofluoromethane	67	5.901	5.901	0.000	98	768930	25.0	21.9	
14 Trichlorofluoromethane	101	5.956	5.956	0.000	98	616668	25.0	20.5	
20 Ethyl ether	59	6.321	6.321	0.000	97	403213	25.0	27.0	
22 Acrolein	56	6.619	6.619	0.000	100	473182	125.0	170.8	
16 1,1,2-Trichloro-1,2,2-trif	101	6.625	6.625	0.000	91	378651	25.0	27.3	
25 1,1-Dichloroethene	96	6.722	6.722	0.000	96	386330	25.0	25.4	
24 Acetone	43	6.807	6.807	0.000	99	939967	125.0	131.5	
18 Iodomethane	142	7.014	7.014	0.000	98	750372	25.0	26.2	
27 Carbon disulfide	76	7.118	7.118	0.000	100	1218469	25.0	27.0	
30 Methyl acetate	43	7.172	7.172	0.000	99	886741	50.0	53.8	
28 3-Chloro-1-propene	41	7.197	7.197	0.000	89	794910	25.0	30.9	
31 Methylene Chloride	84	7.391	7.391	0.000	97	464516	25.0	23.0	
33 2-Methyl-2-propanol	59	7.416	7.416	0.000	99	607788	250.0	275.4	
32 Methyl tert-butyl ether	73	7.604	7.604	0.000	99	1096399	25.0	23.9	
35 trans-1,2-Dichloroethene	96	7.696	7.696	0.000	95	409014	25.0	25.2	
34 Acrylonitrile	53	7.726	7.726	0.000	98	2109644	250.0	276.7	
36 Hexane	57	7.896	7.896	0.000	95	541261	25.0	28.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.195	8.195	0.000	97	2056993	50.0	53.5	
40 1,1-Dichloroethane	63	8.249	8.249	0.000	96	795152	25.0	26.0	
44 2-Butanone (MEK)	43	8.931	8.931	0.000	98	1447725	125.0	134.6	
45 2,2-Dichloropropane	77	8.943	8.943	0.000	93	497890	25.0	24.9	
43 cis-1,2-Dichloroethene	96	8.961	8.961	0.000	86	459934	25.0	24.4	
50 Chlorobromomethane	128	9.296	9.296	0.000	95	236032	25.0	24.7	
51 Tetrahydrofuran	42	9.302	9.302	0.000	94	375625	50.0	53.7	
49 Chloroform	83	9.326	9.326	0.000	96	697948	25.0	22.9	
52 1,1,1-Trichloroethane	97	9.557	9.557	0.000	98	577621	25.0	24.0	
54 Cyclohexane	56	9.594	9.594	0.000	95	700362	25.0	29.6	
56 1,1-Dichloropropene	75	9.734	9.734	0.000	94	544269	25.0	25.1	
53 Isobutyl alcohol	43	9.746	9.746	0.000	94	785668	625.0	670.2	
55 Carbon tetrachloride	117	9.752	9.752	0.000	72	539234	25.0	23.6	
57 Benzene	78	10.032	10.032	0.000	98	1602206	25.0	25.8	
60 1,2-Dichloroethane	62	10.087	10.087	0.000	95	592617	25.0	22.1	
59 n-Heptane	43	10.093	10.093	0.000	97	437633	25.0	29.2	
62 Trichloroethene	95	10.786	10.786	0.000	95	410102	25.0	24.8	
64 Methylcyclohexane	83	10.987	10.987	0.000	96	527387	25.0	26.9	
63 1,2-Dichloropropane	63	11.127	11.127	0.000	96	469294	25.0	26.2	
68 1,4-Dioxane	88	11.242	11.242	0.000	97	87772	500.0	606.6	
69 Dibromomethane	93	11.334	11.334	0.000	94	277059	25.0	22.7	
70 Dichlorobromomethane	83	11.461	11.461	0.000	98	552068	25.0	23.9	
71 2-Chloroethyl vinyl ether	63	11.717	11.717	0.000	92	188936	25.0	27.6	
73 cis-1,3-Dichloropropene	75	11.997	11.997	0.000	94	644773	25.0	25.4	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	97	2715095	125.0	139.4	
76 Toluene	92	12.417	12.417	0.000	98	1000266	25.0	26.1	
77 Ethyl methacrylate	69	12.636	12.636	0.000	93	528882	25.0	27.4	
78 trans-1,3-Dichloropropene	75	12.709	12.709	0.000	95	610962	25.0	25.9	
79 1,1,2-Trichloroethane	83	12.994	12.994	0.000	92	321410	25.0	24.2	
80 Tetrachloroethene	166	13.147	13.147	0.000	98	470000	25.0	26.1	
83 2-Hexanone	43	13.183	13.183	0.000	97	2067425	125.0	138.4	
82 1,3-Dichloropropane	76	13.232	13.232	0.000	96	642535	25.0	24.3	
81 Chlorodibromomethane	129	13.572	13.572	0.000	89	450003	25.0	24.0	
85 Ethylene Dibromide	107	13.767	13.767	0.000	98	416638	25.0	24.1	
87 Chlorobenzene	112	14.327	14.327	0.000	97	1151964	25.0	24.9	
89 Ethylbenzene	91	14.375	14.375	0.000	96	1758839	25.0	26.0	
88 1,1,1,2-Tetrachloroethane	131	14.412	14.412	0.000	95	434856	25.0	24.5	
90 m-Xylene & p-Xylene	106	14.509	14.509	0.000	0	749394	25.0	26.1	
93 o-Xylene	106	15.057	15.057	0.000	96	730898	25.0	25.7	
94 Styrene	104	15.087	15.087	0.000	96	1248714	25.0	27.2	
92 Bromoform	173	15.470	15.470	0.000	98	326322	25.0	24.6	
95 Isopropylbenzene	105	15.489	15.489	0.000	96	1724325	25.0	26.5	
97 1,1,2,2-Tetrachloroethane	83	15.957	15.957	0.000	95	516862	25.0	23.5	
98 trans-1,4-Dichloro-2-buten	53	16.006	16.006	0.000	84	164215	25.0	27.5	
99 N-Propylbenzene	91	16.012	16.012	0.000	97	1928941	25.0	26.0	
100 Bromobenzene	156	16.036	16.036	0.000	94	545075	25.0	24.4	
101 1,2,3-Trichloropropane	110	16.054	16.054	0.000	80	162456	25.0	22.8	
102 1,3,5-Trimethylbenzene	105	16.200	16.200	0.000	95	1459942	25.0	26.9	
103 2-Chlorotoluene	126	16.219	16.219	0.000	96	475980	25.0	25.4	
105 4-Chlorotoluene	126	16.347	16.347	0.000	97	495650	25.0	25.1	
106 tert-Butylbenzene	134	16.645	16.645	0.000	94	315481	25.0	25.8	
107 1,2,4-Trimethylbenzene	105	16.705	16.705	0.000	97	1526107	25.0	26.3	

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	16.906	16.906	0.000	94	1632432	25.0	26.8	
112 4-Isopropyltoluene	119	17.058	17.058	0.000	96	1419444	25.0	26.9	
110 1,3-Dichlorobenzene	146	17.174	17.174	0.000	99	960368	25.0	24.8	
111 1,4-Dichlorobenzene	146	17.277	17.277	0.000	95	996192	25.0	24.8	
115 n-Butylbenzene	91	17.569	17.569	0.000	97	1185096	25.0	25.5	
116 1,2-Dichlorobenzene	146	17.776	17.776	0.000	97	934251	25.0	24.6	
117 1,2-Dibromo-3-Chloropropan	75	18.810	18.810	0.000	87	101022	25.0	22.1	
119 1,2,4-Trichlorobenzene	180	19.911	19.911	0.000	95	624665	25.0	24.2	
120 Hexachlorobutadiene	225	20.027	20.027	0.000	96	219085	25.0	26.0	
121 Naphthalene	128	20.349	20.349	0.000	97	1707316	25.0	25.1	
122 1,2,3-Trichlorobenzene	180	20.721	20.721	0.000	95	605325	25.0	24.4	

Reagents:

8260 CORP mix_00139	Amount Added: 12.50	Units: uL	
GAS CORP mix_00310	Amount Added: 12.50	Units: uL	
P 8260 IS_00336	Amount Added: 1.25	Units: uL	Run Reagent
P 8260 Surr._00310	Amount Added: 1.25	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37827.D

Injection Date: 05-Nov-2018 21:51:30

Instrument ID: HP5973P

Operator ID: RB

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

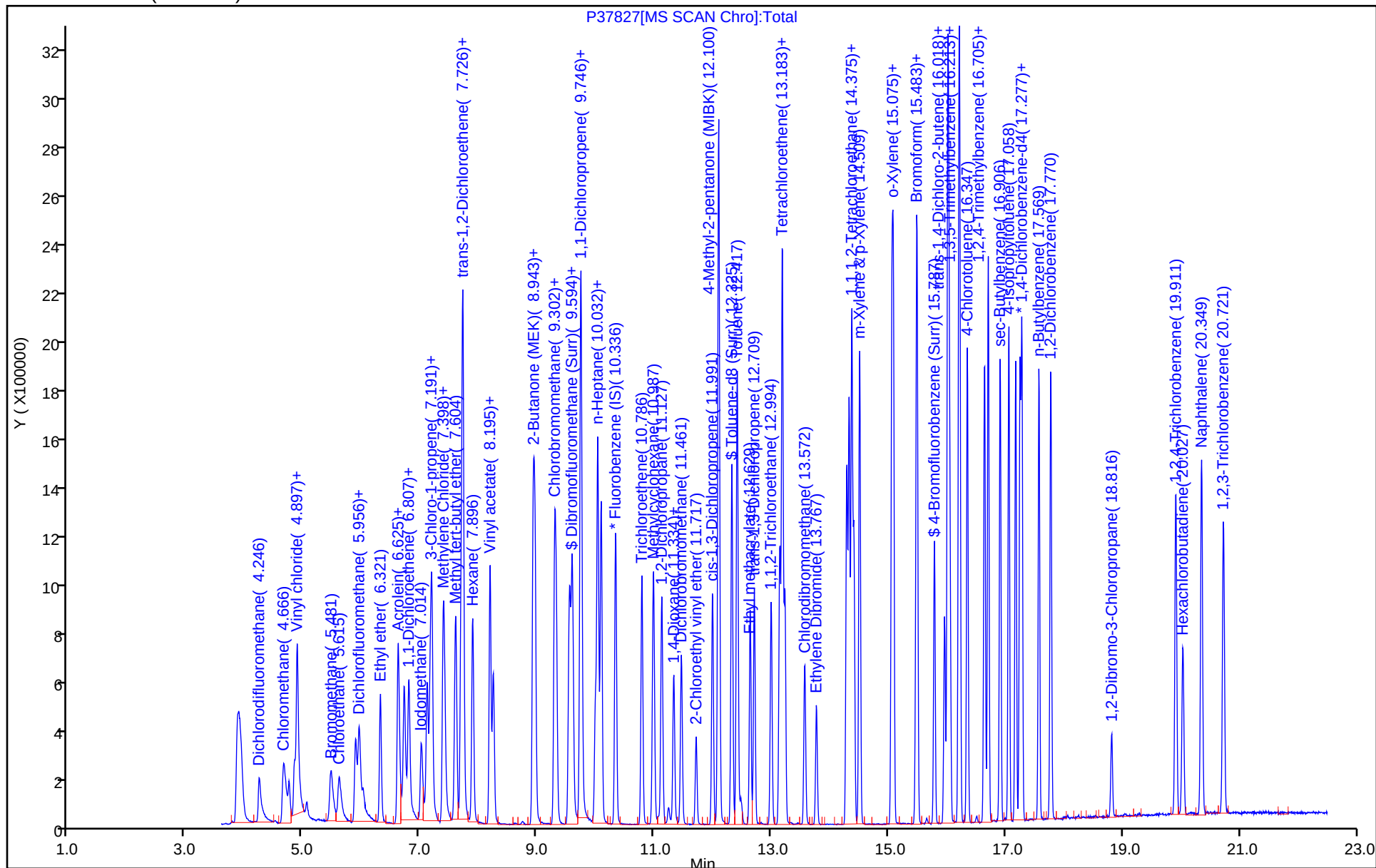
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCVIS 480-443801/3 Calibration Date: 11/06/2018 09:21

Instrument ID: HP5973P Calib Start Date: 10/22/2018 15:16

GC Column: ZB-624 (60) ID: 0.25 (mm) Calib End Date: 10/22/2018 18:02

Lab File ID: P37852.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	2.083	1.970	0.1000	23.6	25.0	-5.4	50.0
Chloromethane	Ave	3.552	3.184	0.1000	22.4	25.0	-10.4	20.0
Vinyl chloride	Ave	2.826	2.373	0.1000	21.0	25.0	-16.0	20.0
Butadiene	Ave	2.590	2.329		22.5	25.0	-10.1	20.0
Bromomethane	Ave	1.689	1.505	0.1000	22.3	25.0	-10.9	50.0
Chloroethane	Ave	1.353	1.368	0.1000	25.3	25.0	1.1	50.0
Dichlorofluoromethane	Ave	3.331	2.973		22.3	25.0	-10.8	20.0
Trichlorofluoromethane	Ave	2.859	2.585	0.1000	22.6	25.0	-9.6	20.0
Ethyl ether	Ave	1.418	1.531		27.0	25.0	8.0	20.0
Acrolein	Ave	0.2630	0.3730		177	125	41.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.315	1.461	0.1000	27.8	25.0	11.1	20.0
1,1-Dichloroethene	Ave	1.443	1.456	0.1000	25.2	25.0	0.9	20.0
Acetone	Ave	0.6786	0.7500	0.1000	138	125	10.5	50.0
Iodomethane	Ave	2.718	2.798		25.7	25.0	3.0	20.0
Carbon disulfide	Ave	4.278	4.355	0.1000	25.5	25.0	1.8	20.0
Methyl acetate	Ave	1.565	1.675	0.1000	53.5	50.0	7.0	50.0
Allyl chloride	Ave	2.441	3.010		30.8	25.0	23.3*	20.0
Methylene Chloride	Ave	1.921	1.725	0.1000	22.4	25.0	-10.2	20.0
2-Methyl-2-propanol	Ave	0.2096	0.2493		297	250	19.0	50.0
Methyl tert-butyl ether	Ave	4.359	4.067	0.1000	23.3	25.0	-6.7	20.0
trans-1,2-Dichloroethene	Ave	1.543	1.504	0.1000	24.4	25.0	-2.6	20.0
Acrylonitrile	Ave	0.7240	0.7997		276	250	10.5	20.0
Hexane	Ave	1.834	2.111		28.8	25.0	15.1	20.0
Vinyl acetate	Ave	3.654	4.045		55.3	50.0	10.7	20.0
1,1-Dichloroethane	Ave	2.907	3.005	0.2000	25.8	25.0	3.4	20.0
2-Butanone (MEK)	Ave	1.021	1.100	0.1000	135	125	7.7	20.0
2,2-Dichloropropane	Ave	1.900	1.806		23.8	25.0	-5.0	20.0
cis-1,2-Dichloroethene	Ave	1.790	1.741	0.1000	24.3	25.0	-2.7	20.0
Chlorobromomethane	Ave	0.9074	0.8784		24.2	25.0	-3.2	20.0
Tetrahydrofuran	Ave	0.6639	0.7054		53.1	50.0	6.3	20.0
Chloroform	Ave	2.899	2.651	0.2000	22.9	25.0	-8.6	20.0
1,1,1-Trichloroethane	Ave	2.283	2.140	0.1000	23.4	25.0	-6.3	20.0
Cyclohexane	Ave	2.244	2.708	0.1000	30.2	25.0	20.7*	20.0
1,1-Dichloropropene	Ave	2.058	2.054		25.0	25.0	-0.2	20.0
Carbon tetrachloride	Ave	2.166	2.065	0.1000	23.8	25.0	-4.7	20.0
Isobutyl alcohol	Ave	0.1113	0.1320		741	625	18.6	50.0
Benzene	Ave	5.894	6.043	0.5000	25.6	25.0	2.5	20.0
1,2-Dichloroethane	Ave	2.542	2.184	0.1000	21.5	25.0	-14.1	20.0
n-Heptane	Ave	1.424	1.787		31.4	25.0	25.4*	20.0
Trichloroethene	Ave	1.572	1.565	0.2000	24.9	25.0	-0.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCVIS 480-443801/3 Calibration Date: 11/06/2018 09:21

Instrument ID: HP5973P Calib Start Date: 10/22/2018 15:16

GC Column: ZB-624 (60) ID: 0.25 (mm) Calib End Date: 10/22/2018 18:02

Lab File ID: P37852.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	1.862	2.012	0.1000	27.0	25.0	8.1	20.0
1,2-Dichloropropane	Ave	1.699	1.768	0.1000	26.0	25.0	4.0	20.0
1,4-Dioxane	Ave	0.0069	0.0096		698	500	39.7	50.0
Dibromomethane	Ave	1.161	1.039	0.1000	22.4	25.0	-10.5	20.0
Bromodichloromethane	Ave	2.193	2.081	0.2000	23.7	25.0	-5.1	20.0
2-Chloroethyl vinyl ether	Ave	0.6511	0.5677		21.8	25.0	-12.8	20.0
cis-1,3-Dichloropropene	Ave	2.413	2.480	0.2000	25.7	25.0	2.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9240	1.025	0.1000	139	125	11.0	20.0
Toluene	Ave	1.817	1.871	0.4000	25.7	25.0	3.0	20.0
Ethyl methacrylate	Ave	0.9170	0.9744		26.6	25.0	6.3	20.0
trans-1,3-Dichloropropene	Ave	1.118	1.129	0.1000	25.2	25.0	1.0	20.0
1,1,2-Trichloroethane	Ave	0.6312	0.6003	0.1000	23.8	25.0	-4.9	20.0
Tetrachloroethene	Ave	0.8551	0.8724	0.2000	25.5	25.0	2.0	20.0
2-Hexanone	Ave	0.7088	0.7867	0.1000	139	125	11.0	20.0
1,3-Dichloropropane	Ave	1.252	1.195		23.9	25.0	-4.6	20.0
Dibromochloromethane	Ave	0.8896	0.8484	0.1000	23.8	25.0	-4.6	20.0
1,2-Dibromoethane	Ave	0.8191	0.7682		23.4	25.0	-6.2	20.0
Chlorobenzene	Ave	2.198	2.171	0.5000	24.7	25.0	-1.2	20.0
Ethylbenzene	Ave	3.204	3.270	0.1000	25.5	25.0	2.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8412	0.8233		24.5	25.0	-2.1	20.0
m,p-Xylene	Ave	1.363	1.398	0.1000	25.6	25.0	2.6	20.0
o-Xylene	Ave	1.349	1.359	0.3000	25.2	25.0	0.7	20.0
Styrene	Ave	2.181	2.338	0.3000	26.8	25.0	7.2	20.0
Bromoform	Ave	0.6293	0.6135	0.1000	24.4	25.0	-2.5	50.0
Isopropylbenzene	Ave	2.715	2.831	0.1000	26.1	25.0	4.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9170	0.8602	0.3000	23.5	25.0	-6.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2491	0.2544		25.5	25.0	2.1	50.0
N-Propylbenzene	Ave	3.091	3.194		25.8	25.0	3.3	20.0
Bromobenzene	Ave	0.9305	0.8974		24.1	25.0	-3.6	20.0
1,2,3-Trichloropropane	Ave	0.2966	0.2697		22.7	25.0	-9.1	20.0
1,3,5-Trimethylbenzene	Ave	2.265	2.429		26.8	25.0	7.3	20.0
2-Chlorotoluene	Ave	0.7830	0.7855		25.1	25.0	0.3	20.0
4-Chlorotoluene	Ave	0.8225	0.8144		24.8	25.0	-1.0	20.0
tert-Butylbenzene	Ave	0.5096	0.5180		25.4	25.0	1.7	20.0
1,2,4-Trimethylbenzene	Ave	2.424	2.526		26.0	25.0	4.2	20.0
sec-Butylbenzene	Ave	2.539	2.749		27.1	25.0	8.3	20.0
4-Isopropyltoluene	Ave	2.201	2.389		27.1	25.0	8.5	20.0
1,3-Dichlorobenzene	Ave	1.612	1.615	0.6000	25.1	25.0	0.2	20.0
1,4-Dichlorobenzene	Ave	1.673	1.681	0.5000	25.1	25.0	0.5	20.0
n-Butylbenzene	Ave	1.940	2.013		25.9	25.0	3.7	20.0
1,2-Dichlorobenzene	Ave	1.585	1.595	0.4000	25.2	25.0	0.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-443801/3 Calibration Date: 11/06/2018 09:21
 Instrument ID: HP5973P Calib Start Date: 10/22/2018 15:16
 GC Column: ZB-624 (60) ID: 0.25 (mm) Calib End Date: 10/22/2018 18:02
 Lab File ID: P37852.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	0.1908	0.1753	0.0500	23.0	25.0	-8.1	50.0
1,2,4-Trichlorobenzene	Ave	1.076	1.076	0.2000	25.0	25.0	0.0	20.0
Hexachlorobutadiene	Ave	0.3515	0.3774		26.8	25.0	7.4	20.0
Naphthalene	Ave	2.833	2.896		25.6	25.0	2.2	20.0
1,2,3-Trichlorobenzene	Ave	1.033	1.033		25.0	25.0	-0.0	20.0
Dibromofluoromethane (Surr)	Ave	1.443	1.309		22.7	25.0	-9.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.8498	0.7423		21.8	25.0	-12.7	20.0
Toluene-d8 (Surr)	Ave	2.350	2.232		23.7	25.0	-5.0	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8458	0.8292		24.5	25.0	-2.0	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37852.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 06-Nov-2018 09:21:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 480-0076160-003
 Operator ID: RF Instrument ID: HP5973P
 Sublist: chrom-P-8260H2O*sub11
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 09:37:51 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 09:37:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.342	10.342	0.000	98	249839	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.290	0.000	85	506889	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	94	573702	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	94	327084	25.0	22.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.989	9.989	0.000	0	185454	25.0	21.8	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.325	0.000	92	1131165	25.0	23.7	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	96	420323	25.0	24.5	
10 Dichlorodifluoromethane	85	4.252	4.252	0.000	99	492286	25.0	23.6	
11 Chloromethane	50	4.666	4.666	0.000	99	795458	25.0	22.4	
17 Vinyl chloride	62	4.855	4.855	0.000	97	592983	25.0	21.0	
144 Butadiene	54	4.903	4.903	0.000	91	581936	25.0	22.5	
12 Bromomethane	94	5.475	5.475	0.000	90	376047	25.0	22.3	
13 Chloroethane	64	5.621	5.621	0.000	98	341698	25.0	25.3	
19 Dichlorofluoromethane	67	5.895	5.895	0.000	98	742784	25.0	22.3	
14 Trichlorofluoromethane	101	5.956	5.956	0.000	98	645832	25.0	22.6	
20 Ethyl ether	59	6.321	6.321	0.000	97	382604	25.0	27.0	
22 Acrolein	56	6.625	6.625	0.000	99	465889	125.0	177.2	
16 1,1,2-Trichloro-1,2,2-trif	101	6.631	6.631	0.000	89	364891	25.0	27.8	
25 1,1-Dichloroethene	96	6.728	6.728	0.000	95	363875	25.0	25.2	
24 Acetone	43	6.807	6.807	0.000	99	936948	125.0	138.2	
18 Iodomethane	142	7.020	7.020	0.000	98	699090	25.0	25.7	
27 Carbon disulfide	76	7.118	7.118	0.000	100	1088166	25.0	25.5	
30 Methyl acetate	43	7.172	7.172	0.000	99	837052	50.0	53.5	
28 3-Chloro-1-propene	41	7.203	7.203	0.000	89	752043	25.0	30.8	
31 Methylene Chloride	84	7.391	7.391	0.000	96	430968	25.0	22.4	
33 2-Methyl-2-propanol	59	7.416	7.416	0.000	99	622845	250.0	297.4	
32 Methyl tert-butyl ether	73	7.604	7.604	0.000	98	1016101	25.0	23.3	
35 trans-1,2-Dichloroethene	96	7.696	7.696	0.000	95	375670	25.0	24.4	
34 Acrylonitrile	53	7.726	7.726	0.000	99	1997852	250.0	276.1	
36 Hexane	57	7.896	7.896	0.000	96	527331	25.0	28.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.194	8.194	0.000	97	2021019	50.0	55.3	
40 1,1-Dichloroethane	63	8.249	8.249	0.000	96	750853	25.0	25.8	
44 2-Butanone (MEK)	43	8.931	8.931	0.000	98	1373855	125.0	134.6	
45 2,2-Dichloropropane	77	8.943	8.943	0.000	93	451160	25.0	23.8	
43 cis-1,2-Dichloroethene	96	8.967	8.967	0.000	87	434946	25.0	24.3	
50 Chlorobromomethane	128	9.296	9.296	0.000	96	219450	25.0	24.2	
51 Tetrahydrofuran	42	9.308	9.308	0.000	94	352453	50.0	53.1	
49 Chloroform	83	9.326	9.326	0.000	96	662274	25.0	22.9	
52 1,1,1-Trichloroethane	97	9.557	9.557	0.000	99	534598	25.0	23.4	
54 Cyclohexane	56	9.600	9.600	0.000	95	676670	25.0	30.2	
56 1,1-Dichloropropene	75	9.740	9.740	0.000	90	513270	25.0	25.0	
55 Carbon tetrachloride	117	9.752	9.752	0.000	69	515806	25.0	23.8	
53 Isobutyl alcohol	43	9.752	9.752	0.000	93	824426	625.0	741.1	
57 Benzene	78	10.038	10.038	0.000	98	1509776	25.0	25.6	
60 1,2-Dichloroethane	62	10.086	10.086	0.000	96	545753	25.0	21.5	
59 n-Heptane	43	10.099	10.099	0.000	97	446386	25.0	31.4	
62 Trichloroethene	95	10.786	10.786	0.000	96	391078	25.0	24.9	
64 Methylcyclohexane	83	10.987	10.987	0.000	96	502682	25.0	27.0	
63 1,2-Dichloropropane	63	11.127	11.127	0.000	96	441685	25.0	26.0	
68 1,4-Dioxane	88	11.248	11.248	0.000	97	97219	500.0	698.5	
69 Dibromomethane	93	11.334	11.334	0.000	93	259686	25.0	22.4	
70 Dichlorobromomethane	83	11.461	11.461	0.000	97	519877	25.0	23.7	
71 2-Chloroethyl vinyl ether	63	11.717	11.717	0.000	92	141828	25.0	21.8	
73 cis-1,3-Dichloropropene	75	11.997	11.997	0.000	94	619528	25.0	25.7	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	97	2599052	125.0	138.7	
76 Toluene	92	12.416	12.416	0.000	98	948557	25.0	25.7	
77 Ethyl methacrylate	69	12.642	12.642	0.000	94	493911	25.0	26.6	
78 trans-1,3-Dichloropropene	75	12.708	12.708	0.000	95	572294	25.0	25.2	
79 1,1,2-Trichloroethane	83	13.000	13.000	0.000	93	304305	25.0	23.8	
80 Tetrachloroethene	166	13.140	13.140	0.000	98	442229	25.0	25.5	
83 2-Hexanone	43	13.189	13.189	0.000	97	1993921	125.0	138.8	
82 1,3-Dichloropropane	76	13.232	13.232	0.000	96	605597	25.0	23.9	
81 Chlorodibromomethane	129	13.572	13.572	0.000	90	430020	25.0	23.8	
85 Ethylene Dibromide	107	13.773	13.773	0.000	98	389390	25.0	23.4	
87 Chlorobenzene	112	14.327	14.327	0.000	98	1100541	25.0	24.7	
89 Ethylbenzene	91	14.375	14.375	0.000	98	1657563	25.0	25.5	
88 1,1,1,2-Tetrachloroethane	131	14.406	14.406	0.000	96	417294	25.0	24.5	
90 m-Xylene & p-Xylene	106	14.509	14.509	0.000	0	708422	25.0	25.6	
93 o-Xylene	106	15.057	15.057	0.000	96	688696	25.0	25.2	
94 Styrene	104	15.087	15.087	0.000	96	1184968	25.0	26.8	
92 Bromoform	173	15.470	15.470	0.000	97	310949	25.0	24.4	
95 Isopropylbenzene	105	15.489	15.489	0.000	96	1624152	25.0	26.1	
97 1,1,2,2-Tetrachloroethane	83	15.963	15.963	0.000	95	493495	25.0	23.5	
98 trans-1,4-Dichloro-2-buten	53	16.012	16.012	0.000	57	145965	25.0	25.5	
99 N-Propylbenzene	91	16.018	16.018	0.000	98	1832165	25.0	25.8	
100 Bromobenzene	156	16.036	16.036	0.000	94	514851	25.0	24.1	
101 1,2,3-Trichloropropane	110	16.054	16.054	0.000	81	154721	25.0	22.7	
102 1,3,5-Trimethylbenzene	105	16.207	16.207	0.000	96	1393532	25.0	26.8	
103 2-Chlorotoluene	126	16.225	16.225	0.000	97	450615	25.0	25.1	
105 4-Chlorotoluene	126	16.353	16.353	0.000	97	467203	25.0	24.8	
106 tert-Butylbenzene	134	16.645	16.645	0.000	94	297176	25.0	25.4	
107 1,2,4-Trimethylbenzene	105	16.705	16.705	0.000	97	1448885	25.0	26.0	

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	16.912	16.912	0.000	94	1576912	25.0	27.1	
112 4-Isopropyltoluene	119	17.058	17.058	0.000	96	1370741	25.0	27.1	
110 1,3-Dichlorobenzene	146	17.174	17.174	0.000	99	926756	25.0	25.1	
111 1,4-Dichlorobenzene	146	17.277	17.277	0.000	94	964175	25.0	25.1	
115 n-Butylbenzene	91	17.569	17.569	0.000	97	1154739	25.0	25.9	
116 1,2-Dichlorobenzene	146	17.776	17.776	0.000	98	915084	25.0	25.2	
117 1,2-Dibromo-3-Chloropropan	75	18.816	18.816	0.000	87	100543	25.0	23.0	
119 1,2,4-Trichlorobenzene	180	19.911	19.911	0.000	94	617049	25.0	25.0	
120 Hexachlorobutadiene	225	20.033	20.033	0.000	96	216501	25.0	26.8	
121 Naphthalene	128	20.349	20.349	0.000	98	1661515	25.0	25.6	
122 1,2,3-Trichlorobenzene	180	20.727	20.727	0.000	96	592417	25.0	25.0	

Reagents:

8260 CORP mix_00139

Amount Added: 12.50

Units: uL

GAS CORP mix_00310

Amount Added: 12.50

Units: uL

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37852.D

Injection Date: 06-Nov-2018 09:21:30

Instrument ID: HP5973P

Operator ID: RF

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

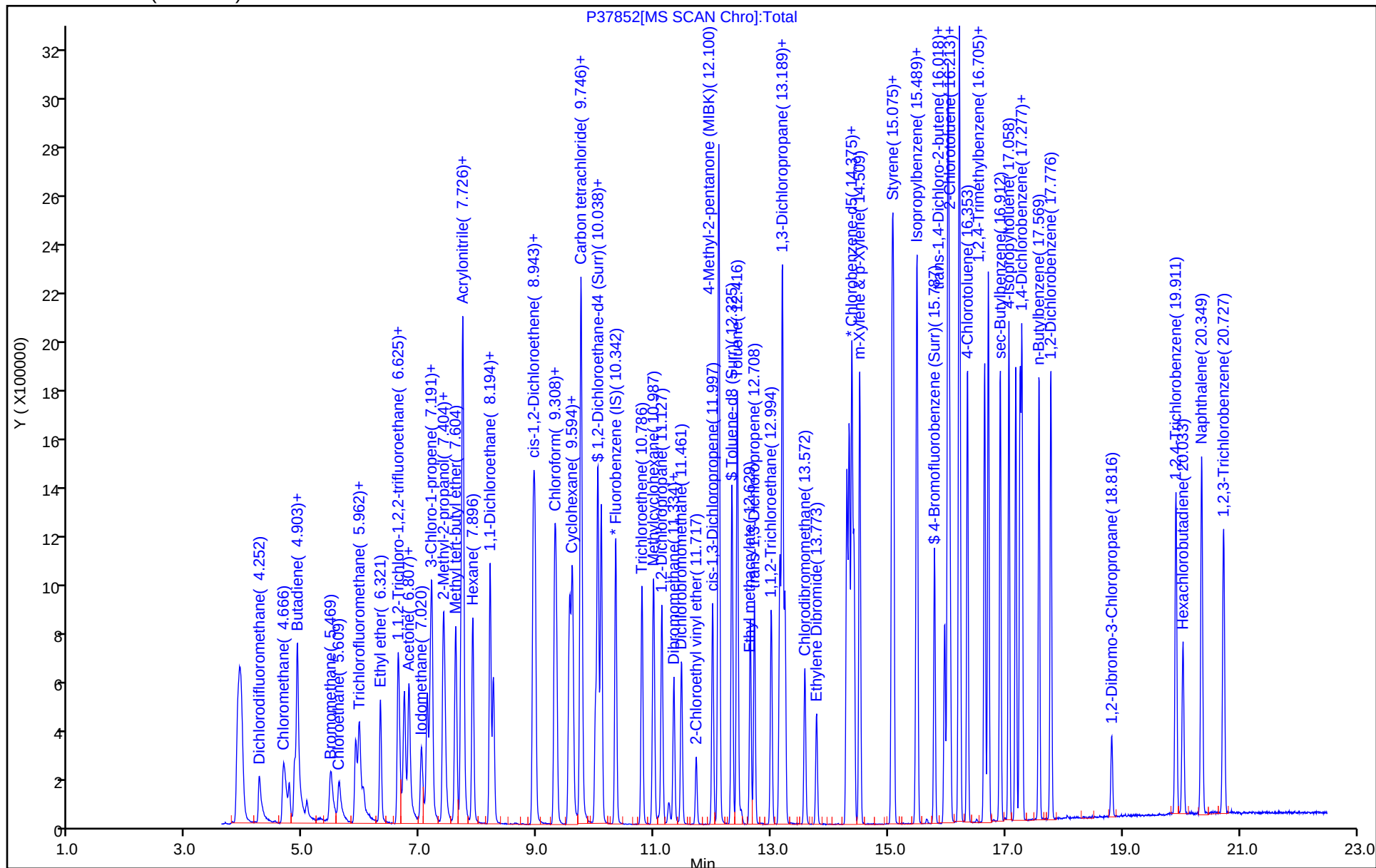
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCVIS 480-443500/3 Calibration Date: 11/04/2018 10:43

Instrument ID: HP5975T Calib Start Date: 10/29/2018 14:27

GC Column: ZB-624 (20) ID: 0.18 (mm) Calib End Date: 10/29/2018 17:13

Lab File ID: T5001.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	2.306	1.879	0.1000	20.4	25.0	-18.5	50.0
Chloromethane	Ave	2.235	1.926	0.1000	21.5	25.0	-13.8	20.0
Butadiene	Ave	1.732	1.580		22.8	25.0	-8.8	20.0
Vinyl chloride	Ave	1.607	1.432	0.1000	22.3	25.0	-10.9	20.0
Bromomethane	Ave	1.017	0.9496	0.1000	23.3	25.0	-6.7	50.0
Chloroethane	Ave	0.8222	0.7347	0.1000	22.3	25.0	-10.6	50.0
Trichlorofluoromethane	Ave	2.852	3.178	0.1000	27.9	25.0	11.4	20.0
Dichlorofluoromethane	Ave	2.651	2.415		22.8	25.0	-8.9	20.0
Ethyl ether	Ave	1.085	1.091		25.1	25.0	0.6	20.0
Acrolein	Ave	0.2474	0.2168		110	125	-12.4	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.9657	1.285	0.1000	33.3	25.0	33.1*	20.0
1,1-Dichloroethene	Ave	0.9266	1.106	0.1000	29.8	25.0	19.4	20.0
Acetone	Ave	0.4767	0.4727	0.1000	124	125	-0.8	50.0
Iodomethane	Ave	2.080	2.086		25.1	25.0	0.2	20.0
Carbon disulfide	Ave	3.499	3.337	0.1000	23.8	25.0	-4.6	20.0
Allyl chloride	Ave	2.661	2.546		23.9	25.0	-4.4	20.0
Methyl acetate	Ave	1.190	1.052	0.1000	44.2	50.0	-11.6	50.0
Methylene Chloride	Lin1		1.233	0.1000	22.0	25.0	-12.1	20.0
2-Methyl-2-propanol	Ave	0.1537	0.1308		213	250	-14.9	50.0
Methyl tert-butyl ether	Ave	4.348	4.132	0.1000	23.8	25.0	-5.0	20.0
trans-1,2-Dichloroethene	Ave	1.221	1.224	0.1000	25.1	25.0	0.2	20.0
Acrylonitrile	Ave	0.6044	0.5453		226	250	-9.8	20.0
Hexane	Ave	2.197	2.283		26.0	25.0	3.9	20.0
1,1-Dichloroethane	Ave	2.644	2.567	0.2000	24.3	25.0	-2.9	20.0
Vinyl acetate	Ave	3.314	3.236		48.8	50.0	-2.4	20.0
2,2-Dichloropropane	Ave	2.360	2.644		28.0	25.0	12.0	20.0
cis-1,2-Dichloroethene	Ave	1.529	1.436	0.1000	23.5	25.0	-6.1	20.0
2-Butanone (MEK)	Ave	0.6964	0.6397	0.1000	115	125	-8.1	20.0
Chlorobromomethane	Ave	0.7331	0.7108		24.2	25.0	-3.0	20.0
Tetrahydrofuran	Ave	0.4542	0.3798		41.8	50.0	-16.4	20.0
Chloroform	Ave	2.876	2.890	0.2000	25.1	25.0	0.5	20.0
Cyclohexane	Ave	2.693	2.802	0.1000	26.0	25.0	4.1	20.0
1,1,1-Trichloroethane	Ave	2.666	3.002	0.1000	28.2	25.0	12.6	20.0
Carbon tetrachloride	Ave	2.287	2.663	0.1000	29.1	25.0	16.4	20.0
1,1-Dichloropropene	Ave	1.901	2.011		26.5	25.0	5.8	20.0
Benzene	Ave	5.055	4.747	0.5000	23.5	25.0	-6.1	20.0
Isobutyl alcohol	Ave	0.0608	0.0516		530	625	-15.1	50.0
1,2-Dichloroethane	Ave	2.899	3.058	0.1000	26.4	25.0	5.5	20.0
n-Heptane	Ave	2.563	2.706		26.4	25.0	5.6	20.0
Trichloroethene	Ave	1.541	1.550	0.2000	25.1	25.0	0.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCVIS 480-443500/3 Calibration Date: 11/04/2018 10:43

Instrument ID: HP5975T Calib Start Date: 10/29/2018 14:27

GC Column: ZB-624 (20) ID: 0.18 (mm) Calib End Date: 10/29/2018 17:13

Lab File ID: T5001.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	2.042	2.229	0.1000	27.3	25.0	9.2	20.0
1,2-Dichloropropane	Ave	1.451	1.330	0.1000	22.9	25.0	-8.3	20.0
1,4-Dioxane	Ave	0.0028	0.0025		448	500	-10.4	50.0
Dibromomethane	Ave	0.9527	0.9087	0.1000	23.8	25.0	-4.6	20.0
Bromodichloromethane	Ave	2.190	2.303	0.2000	26.3	25.0	5.1	20.0
2-Chloroethyl vinyl ether	Ave	0.9699	0.8847		22.8	25.0	-8.8	20.0
cis-1,3-Dichloropropene	Ave	2.109	2.091	0.2000	24.8	25.0	-0.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4015	0.3746	0.1000	117	125	-6.7	20.0
Toluene	Ave	0.9488	0.8524	0.4000	22.5	25.0	-10.2	20.0
trans-1,3-Dichloropropene	Ave	0.5827	0.5872	0.1000	25.2	25.0	0.8	20.0
Ethyl methacrylate	Ave	0.4147	0.3978		24.0	25.0	-4.1	20.0
1,1,2-Trichloroethane	Ave	0.2534	0.2307	0.1000	22.8	25.0	-9.0	20.0
Tetrachloroethene	Ave	0.4313	0.4617	0.2000	26.8	25.0	7.0	20.0
1,3-Dichloropropane	Ave	0.5833	0.5321		22.8	25.0	-8.8	20.0
2-Hexanone	Ave	0.2799	0.2649	0.1000	118	125	-5.4	20.0
Dibromochloromethane	Ave	0.4154	0.4161	0.1000	25.0	25.0	0.2	20.0
1,2-Dibromoethane	Ave	0.3330	0.3243		24.4	25.0	-2.6	20.0
Chlorobenzene	Ave	1.041	1.027	0.5000	24.7	25.0	-1.3	20.0
Ethylbenzene	Ave	1.910	1.867	0.1000	24.4	25.0	-2.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4098	0.4156		25.4	25.0	1.4	20.0
m,p-Xylene	Ave	0.7075	0.6947	0.1000	24.5	25.0	-1.8	20.0
o-Xylene	Ave	0.7099	0.6362	0.3000	22.4	25.0	-10.4	20.0
Styrene	Ave	1.174	1.149	0.3000	24.4	25.0	-2.2	20.0
Bromoform	Ave	0.2605	0.2624	0.1000	25.2	25.0	0.7	50.0
Isopropylbenzene	Ave	3.026	3.159	0.1000	26.1	25.0	4.4	20.0
Bromobenzene	Ave	0.8477	0.8655		25.5	25.0	2.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6275	0.5854	0.3000	23.3	25.0	-6.7	20.0
N-Propylbenzene	Ave	3.481	3.838		27.6	25.0	10.3	20.0
1,2,3-Trichloropropane	Ave	0.2551	0.2439		23.9	25.0	-4.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2598	0.2652		25.5	25.0	2.1	50.0
2-Chlorotoluene	Ave	0.6958	0.7127		25.6	25.0	2.4	20.0
1,3,5-Trimethylbenzene	Ave	2.687	2.918		27.2	25.0	8.6	20.0
4-Chlorotoluene	Ave	2.420	2.530		26.1	25.0	4.5	20.0
tert-Butylbenzene	Ave	0.5591	0.5823		26.0	25.0	4.1	20.0
1,2,4-Trimethylbenzene	Ave	2.866	3.030		26.4	25.0	5.8	20.0
sec-Butylbenzene	Ave	3.163	3.438		27.2	25.0	8.7	20.0
1,3-Dichlorobenzene	Ave	1.556	1.542	0.6000	24.8	25.0	-0.9	20.0
4-Isopropyltoluene	Ave	2.890	3.200		27.7	25.0	10.7	20.0
1,4-Dichlorobenzene	Ave	1.595	1.620	0.5000	25.4	25.0	1.5	20.0
n-Butylbenzene	Ave	2.576	2.813		27.3	25.0	9.2	20.0
1,2-Dichlorobenzene	Ave	1.527	1.484	0.4000	24.3	25.0	-2.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-443500/3 Calibration Date: 11/04/2018 10:43
 Instrument ID: HP5975T Calib Start Date: 10/29/2018 14:27
 GC Column: ZB-624 (20) ID: 0.18 (mm) Calib End Date: 10/29/2018 17:13
 Lab File ID: T5001.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	0.1466	0.1514	0.0500	25.8	25.0	3.3	50.0
1,2,4-Trichlorobenzene	Ave	1.322	1.362	0.2000	25.8	25.0	3.0	20.0
Hexachlorobutadiene	Ave	0.7117	0.7930		27.9	25.0	11.4	20.0
Naphthalene	Ave	2.423	2.523		26.0	25.0	4.1	20.0
1,2,3-Trichlorobenzene	Ave	1.194	1.272		26.6	25.0	6.6	20.0
Dibromofluoromethane (Surr)	Ave	1.206	1.193		24.7	25.0	-1.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.913	2.043		26.7	25.0	6.8	20.0
Toluene-d8 (Surr)	Ave	1.113	1.067		24.0	25.0	-4.1	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4075	0.4041		24.8	25.0	-0.8	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5001.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 04-Nov-2018 10:43:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ccvis
 Misc. Info.: 480-0076114-003
 Operator ID: RF Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 04-Nov-2018 11:00:12 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0315

First Level Reviewer: farrellr

Date: 04-Nov-2018 11:00:12

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	4.579	4.579	0.000	97	134398	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.869	6.869	0.000	92	506000	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	296001	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.123	0.000	91	160286	25.0	24.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.372	4.372	0.000	0	274635	25.0	26.7	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	95	540135	25.0	24.0	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	204484	25.0	24.8	
11 Dichlorodifluoromethane	85	1.097	1.097	0.000	99	252587	25.0	20.4	
13 Chloromethane	50	1.242	1.242	0.000	99	258897	25.0	21.5	M
14 Vinyl chloride	62	1.314	1.314	0.000	97	192410	25.0	22.3	
151 Butadiene	54	1.314	1.314	0.000	97	212415	25.0	22.8	
15 Bromomethane	94	1.574	1.574	0.000	95	127625	25.0	23.3	
16 Chloroethane	64	1.636	1.636	0.000	95	98748	25.0	22.3	
17 Trichlorofluoromethane	101	1.802	1.802	0.000	84	427146	25.0	27.9	
18 Dichlorofluoromethane	67	1.812	1.812	0.000	95	324540	25.0	22.8	
19 Ethyl ether	59	2.050	2.050	0.000	95	146613	25.0	25.1	
21 Acrolein	56	2.216	2.216	0.000	97	145704	125.0	109.5	
22 1,1-Dichloroethene	96	2.247	2.247	0.000	92	148672	25.0	29.8	
20 1,1,2-Trichloro-1,2,2-trif	101	2.247	2.247	0.000	50	172687	25.0	33.3	
23 Acetone	43	2.361	2.361	0.000	98	317664	125.0	124.0	
24 Iodomethane	142	2.392	2.392	0.000	92	280287	25.0	25.1	
25 Carbon disulfide	76	2.423	2.423	0.000	99	448499	25.0	23.8	
27 3-Chloro-1-propene	41	2.579	2.579	0.000	86	342110	25.0	23.9	
28 Methyl acetate	43	2.620	2.620	0.000	100	282845	50.0	44.2	
30 Methylene Chloride	84	2.713	2.713	0.000	93	165774	25.0	22.0	
31 2-Methyl-2-propanol	59	2.879	2.879	0.000	53	175735	250.0	212.7	
33 Methyl tert-butyl ether	73	2.900	2.900	0.000	98	555350	25.0	23.8	
32 trans-1,2-Dichloroethene	96	2.910	2.910	0.000	90	164438	25.0	25.1	
34 Acrylonitrile	53	2.962	2.962	0.000	99	732828	250.0	225.5	
35 Hexane	57	3.066	3.066	0.000	93	306858	25.0	26.0	

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	3.273	3.273	0.000	98	344955	25.0	24.3	
39 Vinyl acetate	43	3.315	3.315	0.000	97	869877	50.0	48.8	
42 2,2-Dichloropropane	77	3.708	3.708	0.000	92	355339	25.0	28.0	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	88	192929	25.0	23.5	
44 2-Butanone (MEK)	43	3.771	3.771	0.000	98	429862	125.0	114.8	
47 Chlorobromomethane	128	3.936	3.936	0.000	95	95527	25.0	24.2	
48 Tetrahydrofuran	42	3.936	3.936	0.000	93	102090	50.0	41.8	
50 Chloroform	83	3.999	3.999	0.000	95	388385	25.0	25.1	
52 Cyclohexane	56	4.081	4.081	0.000	87	376631	25.0	26.0	
51 1,1,1-Trichloroethane	97	4.092	4.092	0.000	97	403528	25.0	28.2	
53 Carbon tetrachloride	117	4.195	4.195	0.000	96	357861	25.0	29.1	
54 1,1-Dichloropropene	75	4.206	4.206	0.000	91	270308	25.0	26.5	
55 Benzene	78	4.372	4.372	0.000	92	637953	25.0	23.5	
56 Isobutyl alcohol	43	4.392	4.392	0.000	95	173454	625.0	530.5	
57 1,2-Dichloroethane	62	4.423	4.423	0.000	98	410954	25.0	26.4	
59 n-Heptane	43	4.506	4.506	0.000	95	363747	25.0	26.4	
60 Trichloroethene	95	4.848	4.848	0.000	95	208270	25.0	25.1	
62 Methylcyclohexane	83	4.942	4.942	0.000	98	299628	25.0	27.3	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	81	178713	25.0	22.9	
65 Dibromomethane	93	5.149	5.149	0.000	90	122129	25.0	23.8	
66 1,4-Dioxane	88	5.149	5.149	0.000	34	25063	500.0	447.8	
67 Dichlorobromomethane	83	5.273	5.273	0.000	98	309461	25.0	26.3	
69 2-Chloroethyl vinyl ether	63	5.480	5.480	0.000	90	118896	25.0	22.8	
71 cis-1,3-Dichloropropene	75	5.594	5.594	0.000	88	281012	25.0	24.8	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	99	947653	125.0	116.6	
73 Toluene	92	5.802	5.802	0.000	97	431293	25.0	22.5	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	97	297132	25.0	25.2	
77 Ethyl methacrylate	69	6.050	6.050	0.000	94	201287	25.0	24.0	
78 1,1,2-Trichloroethane	83	6.164	6.164	0.000	94	116725	25.0	22.8	
79 Tetrachloroethene	166	6.206	6.206	0.000	95	233601	25.0	26.8	
80 1,3-Dichloropropane	76	6.289	6.289	0.000	97	269248	25.0	22.8	
81 2-Hexanone	43	6.330	6.330	0.000	98	670114	125.0	118.3	
82 Chlorodibromomethane	129	6.465	6.465	0.000	89	210537	25.0	25.0	
83 Ethylene Dibromide	107	6.548	6.548	0.000	97	164112	25.0	24.4	
86 Chlorobenzene	112	6.900	6.900	0.000	91	519470	25.0	24.7	
88 Ethylbenzene	91	6.962	6.962	0.000	99	944838	25.0	24.4	
89 1,1,1,2-Tetrachloroethane	131	6.973	6.973	0.000	87	210310	25.0	25.4	
90 m-Xylene & p-Xylene	106	7.056	7.056	0.000	0	351519	25.0	24.5	
91 o-Xylene	106	7.366	7.366	0.000	98	321895	25.0	22.4	
92 Styrene	104	7.387	7.387	0.000	92	581159	25.0	24.4	
93 Bromoform	173	7.584	7.584	0.000	96	132753	25.0	25.2	
95 Isopropylbenzene	105	7.646	7.646	0.000	98	935103	25.0	26.1	
97 Bromobenzene	156	7.926	7.926	0.000	91	256202	25.0	25.5	
98 1,1,2,2-Tetrachloroethane	83	7.968	7.968	0.000	96	173285	25.0	23.3	
99 N-Propylbenzene	91	7.978	7.978	0.000	99	1135955	25.0	27.6	
100 1,2,3-Trichloropropane	110	7.988	7.988	0.000	90	72179	25.0	23.9	
101 trans-1,4-Dichloro-2-buten	53	7.999	7.999	0.000	80	78494	25.0	25.5	
105 2-Chlorotoluene	126	8.061	8.061	0.000	94	210957	25.0	25.6	
104 1,3,5-Trimethylbenzene	105	8.123	8.123	0.000	93	863761	25.0	27.2	
102 4-Chlorotoluene	91	8.154	8.154	0.000	99	748773	25.0	26.1	
106 tert-Butylbenzene	134	8.382	8.382	0.000	91	172365	25.0	26.0	
107 1,2,4-Trimethylbenzene	105	8.424	8.424	0.000	98	897016	25.0	26.4	

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	8.558	8.558	0.000	96	1017505	25.0	27.2	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	72	456353	25.0	24.8	
111 4-Isopropyltoluene	119	8.672	8.672	0.000	95	947158	25.0	27.7	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	92	479377	25.0	25.4	
115 n-Butylbenzene	91	9.014	9.014	0.000	97	832634	25.0	27.3	
116 1,2-Dichlorobenzene	146	9.056	9.056	0.000	93	439271	25.0	24.3	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	79	44800	25.0	25.8	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	93	403295	25.0	25.8	
120 Hexachlorobutadiene	225	10.475	10.475	0.000	96	234732	25.0	27.9	
121 Naphthalene	128	10.579	10.579	0.000	98	746742	25.0	26.0	
122 1,2,3-Trichlorobenzene	180	10.786	10.786	0.000	93	376518	25.0	26.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00139

Amount Added: 12.50

Units: uL

GAS CORP mix_00310

Amount Added: 12.50

Units: uL

T_8260_IS_00209

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_Surr_00181

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181104-76114.b\\T5001.D

Injection Date: 04-Nov-2018 10:43:30

Instrument ID: HP5975T

Lims ID: CCVIS

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: T-8260

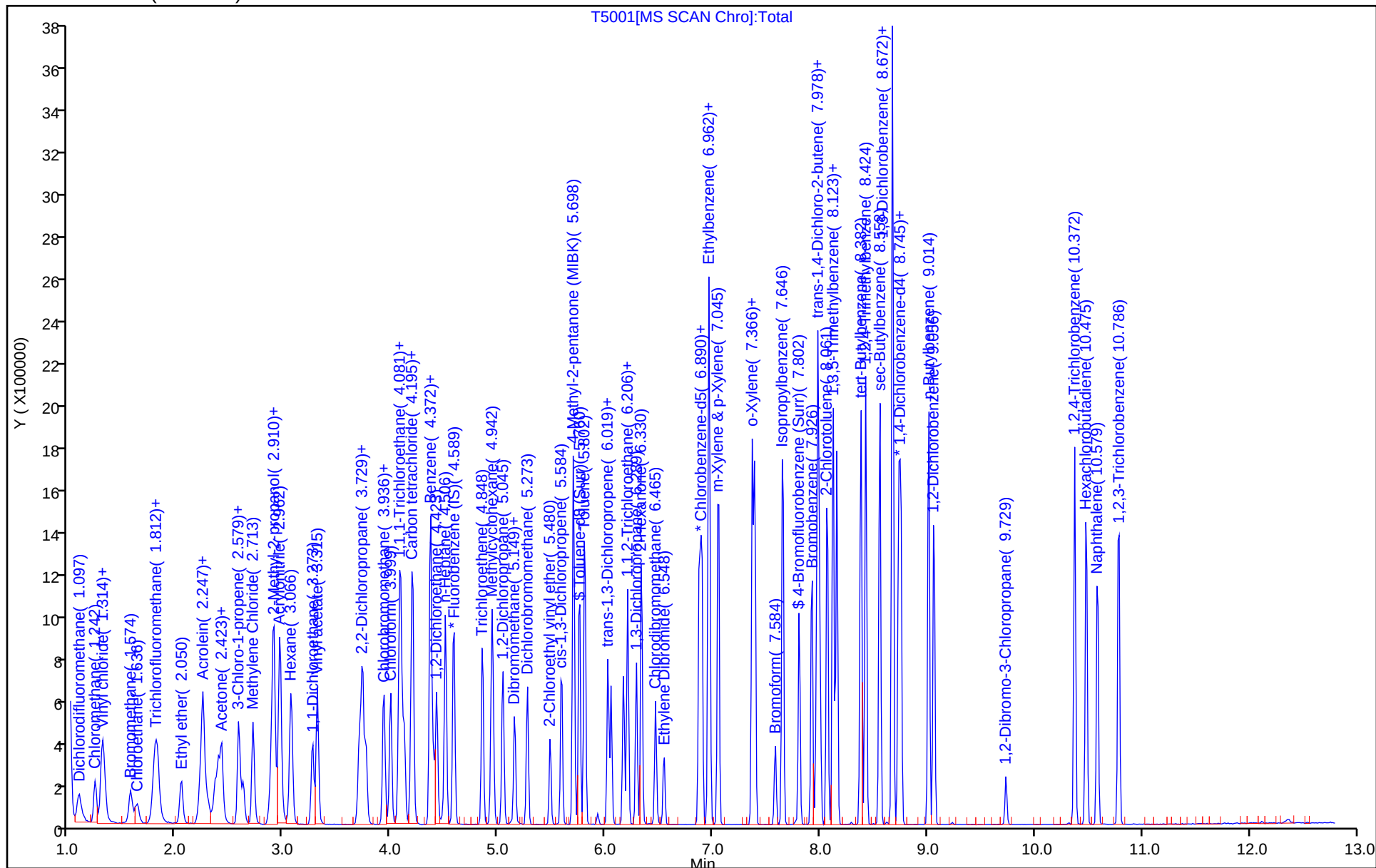
Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)

Operator ID: RF

Worklist Smp#: 3

ALS Bottle#: 3



TestAmerica Buffalo

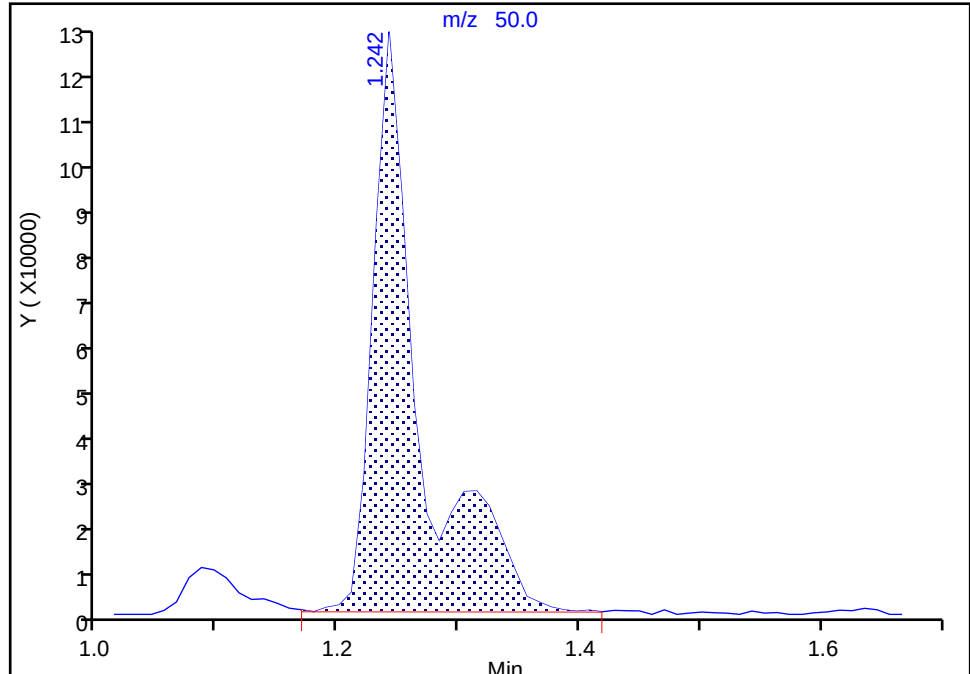
Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5001.D
Injection Date: 04-Nov-2018 10:43:30 Instrument ID: HP5975T
Lims ID: CCVIS
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector: MS SCAN

13 Chloromethane, CAS: 74-87-3

Signal: 1

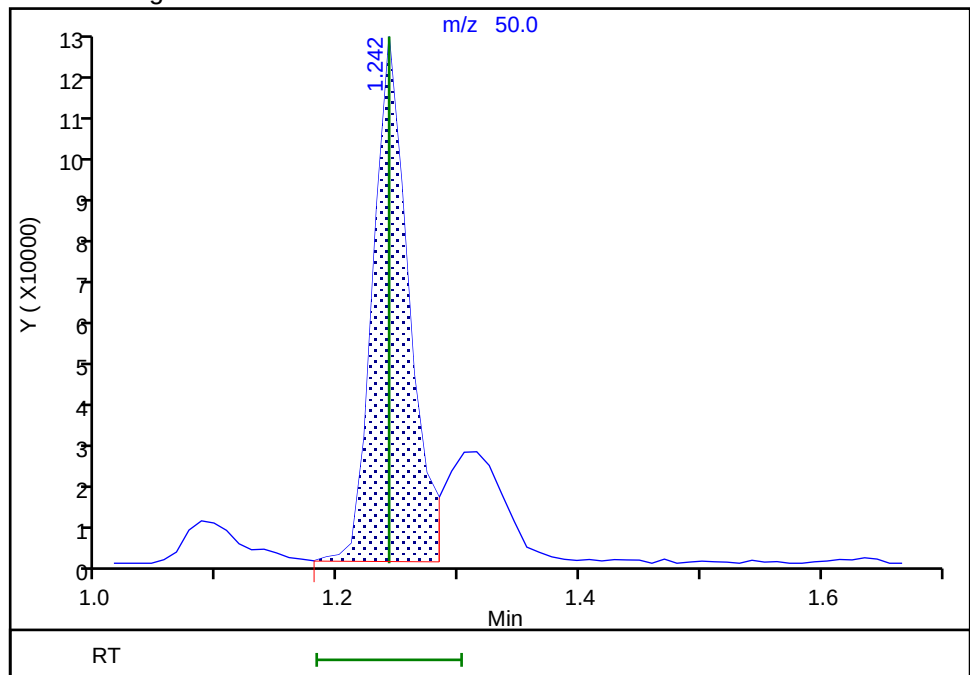
RT: 1.24
Area: 338471
Amount: 28.166079
Amount Units: ug/L

Processing Integration Results



RT: 1.24
Area: 258897
Amount: 21.544278
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 04-Nov-2018 10:59:05
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37181.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 22-Oct-2018 14:13:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 480-0075728-005
Operator ID: OI/RF Instrument ID: HP5973P
Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 23-Oct-2018 13:33:38 Calib Date: 23-Oct-2018 01:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1005

First Level Reviewer: farrellr

Date: 23-Oct-2018 09:28:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags

\$ 21 BFB	95	7.554	7.554	0.000	0	116080	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_WRK_00080

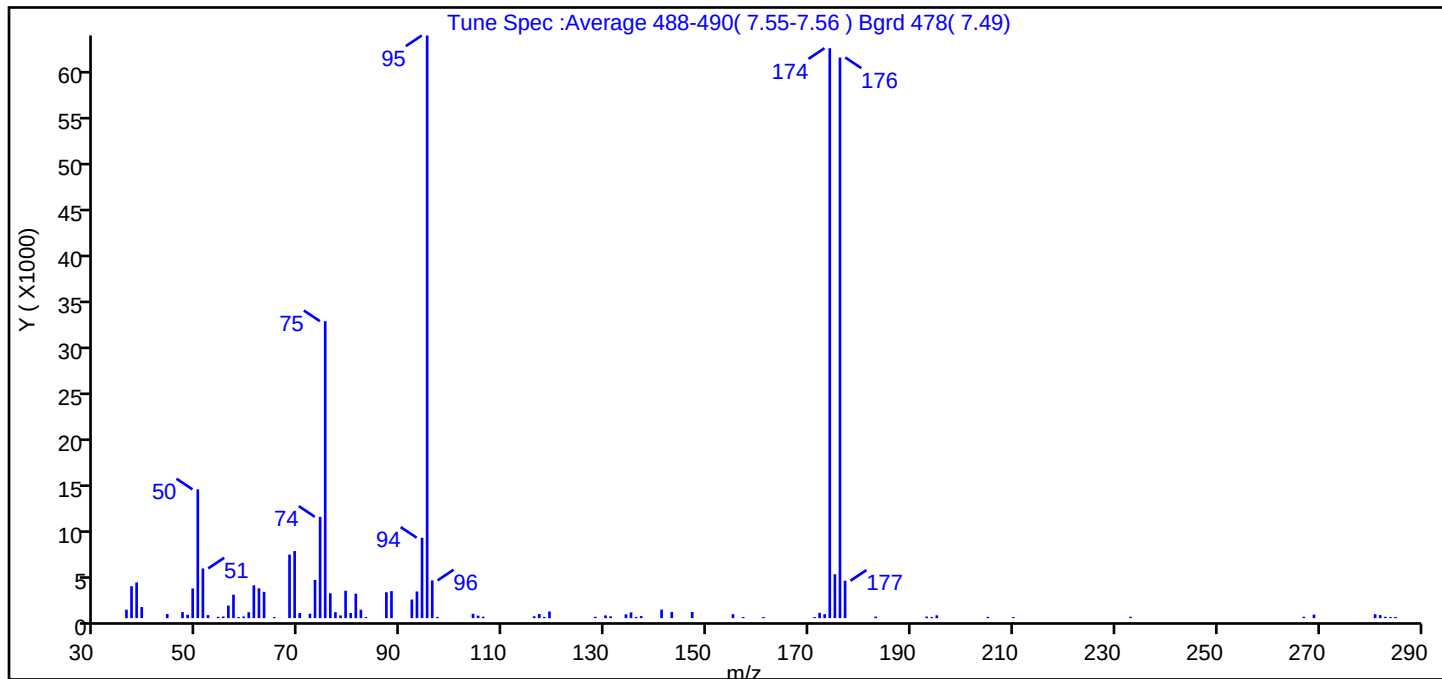
Amount Added: 1.00

Units: uL

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37181.D
Injection Date: 22-Oct-2018 14:13:30 Instrument ID: HP5973P
Lims ID: BFB
Client ID:
Operator ID: OI/RF ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

\$ 21 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.1
75	30 to 60% of m/z 95	51.0
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.7 (0.7)
174	50 to 120% of m/z 95	97.8
175	5 to 9% of m/z 174	7.5 (7.7)
176	Greater than 95% but less than 101% of m/z 174	96.2 (98.4)
177	5 to 9% of m/z 176	6.4 (6.7)

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\IP-8260H2O.rsl\spectra.d
Injection Date: 22-Oct-2018 14:13:30
Spectrum: Tune Spec :Average 488-490(7.55-7.56) Bgrd 478(7.49)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	927	68.00	6944	97.00	137	172.00	588
37.00	3490	69.00	7328	104.00	477	173.00	429
38.00	3902	70.00	559	105.00	271	174.00	62304
39.00	1219	72.00	484	106.00	158	175.00	4794
44.00	458	73.00	4187	116.00	210	176.00	61288
47.00	660	74.00	11079	117.00	454	177.00	4086
48.00	365	75.00	32464	118.00	123	183.00	170
49.00	3244	76.00	2721	119.00	728	193.00	173
50.00	14077	77.00	658	128.00	147	194.00	131
51.00	5435	78.00	299	130.00	300	195.00	310
52.00	334	79.00	2995	131.00	198	205.00	140
54.00	145	80.00	559	134.00	417	210.00	123
55.00	180	81.00	2670	135.00	633	233.00	148
56.00	1370	82.00	922	136.00	135	267.00	153
57.00	2563	83.00	123	137.00	229	269.00	386
58.00	118	87.00	2833	141.00	931	281.00	436
59.00	177	88.00	2956	143.00	677	282.00	334
60.00	642	92.00	2037	147.00	673	283.00	152
61.00	3590	93.00	2916	155.00	439	284.00	120
62.00	3261	94.00	8788	157.00	126	285.00	130
63.00	2869	95.00	63696	161.00	121		
65.00	125	96.00	4125	171.00	118		

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37826.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 05-Nov-2018 21:16:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 480-0076157-002
Operator ID: RB Instrument ID: HP5973P
Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 06-Nov-2018 14:40:00 Calib Date: 23-Oct-2018 01:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: baroner

Date: 05-Nov-2018 21:19:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags

\$ 21 BFB	95	7.548	7.548	0.000	0	203281	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_WRK_00080

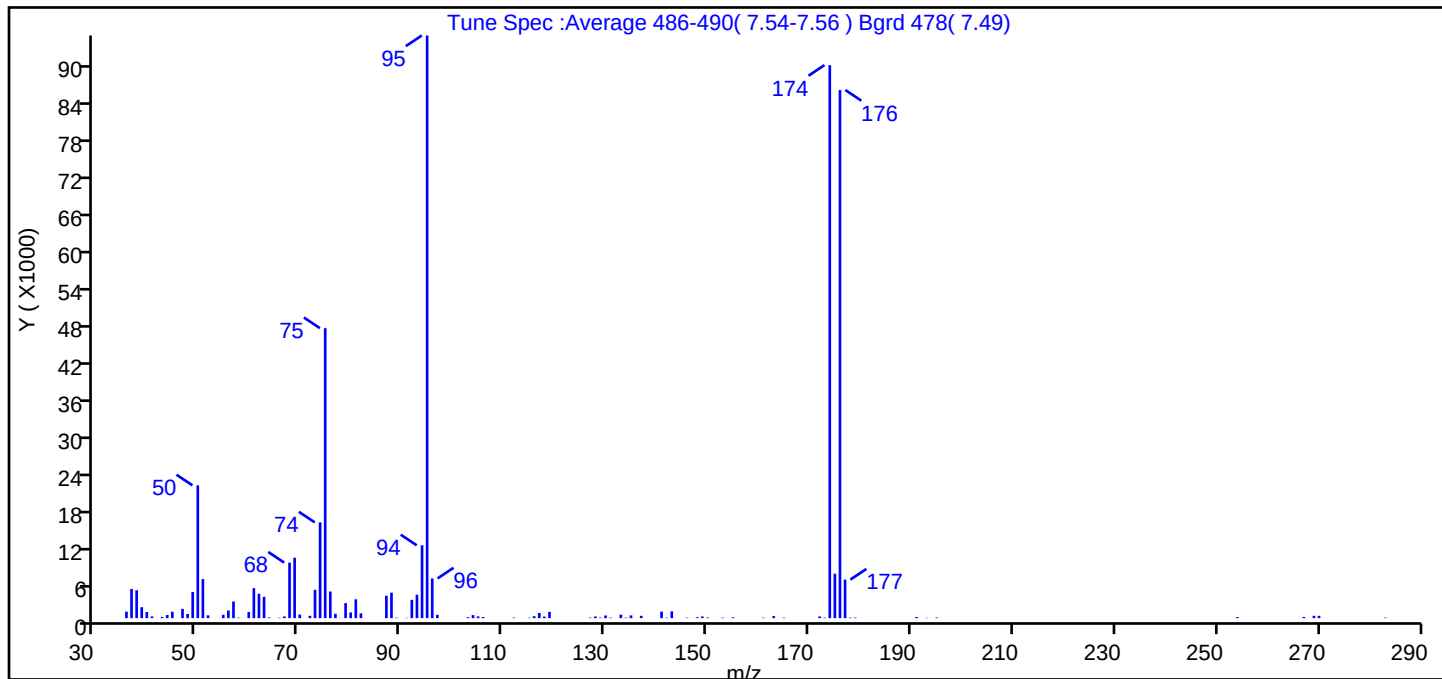
Amount Added: 1.00

Units: uL

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37826.D
Injection Date: 05-Nov-2018 21:16:30 Instrument ID: HP5973P
Lims ID: BFB
Client ID:
Operator ID: RB ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

\$ 21 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.8
75	30 to 60% of m/z 95	49.8
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.1 (0.1)
174	50 to 120% of m/z 95	94.9
175	5 to 9% of m/z 174	7.6 (8.0)
176	Greater than 95% but less than 101% of m/z 174	90.6 (95.5)
177	5 to 9% of m/z 176	6.6 (7.3)

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\IP37826.D\IP-8260H2O.rslt\spectra.d
Injection Date: 05-Nov-2018 21:16:30
Spectrum: Tune Spec :Average 486-490(7.54-7.56) Bgrd 478(7.49)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 98

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1060	67.00	277	103.00	153	150.00	107
37.00	4746	68.00	9023	104.00	498	153.00	79
38.00	4536	69.00	9817	105.00	288	155.00	144
39.00	1776	70.00	580	106.00	188	161.00	73
40.00	995	72.00	377	112.00	77	163.00	341
41.00	284	73.00	4599	115.00	75	165.00	82
43.00	195	74.00	15557	116.00	314	172.00	277
44.00	514	75.00	47120	117.00	839	173.00	87
45.00	1040	76.00	4324	118.00	246	174.00	89864
47.00	1511	77.00	703	119.00	1026	175.00	7233
48.00	677	78.00	32	127.00	75	176.00	85824
49.00	4250	79.00	2437	128.00	270	177.00	6265
50.00	21576	80.00	919	129.00	90	178.00	84
51.00	6344	81.00	3061	130.00	430	179.00	96
52.00	455	82.00	775	131.00	80	191.00	182
55.00	540	87.00	3645	133.00	563	193.00	48
56.00	1243	88.00	4140	134.00	83	195.00	105
57.00	2712	89.00	88	135.00	446	209.00	1
58.00	72	91.00	47	137.00	378	254.00	168
60.00	998	92.00	2969	141.00	1065	267.00	192
61.00	4864	93.00	3804	142.00	72	269.00	376
62.00	3958	94.00	11833	143.00	1105	270.00	384
63.00	3468	95.00	94680	146.00	79	283.00	79
64.00	117	96.00	6454	148.00	150		
66.00	70	97.00	535	149.00	273		

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37851.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 06-Nov-2018 08:54:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 480-0076160-002
Operator ID: RF Instrument ID: HP5973P
Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 06-Nov-2018 08:50:26 Calib Date: 23-Oct-2018 01:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 08:50:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags

\$ 21 BFB	95	7.554	7.554	0.000	0	146944	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_WRK_00080

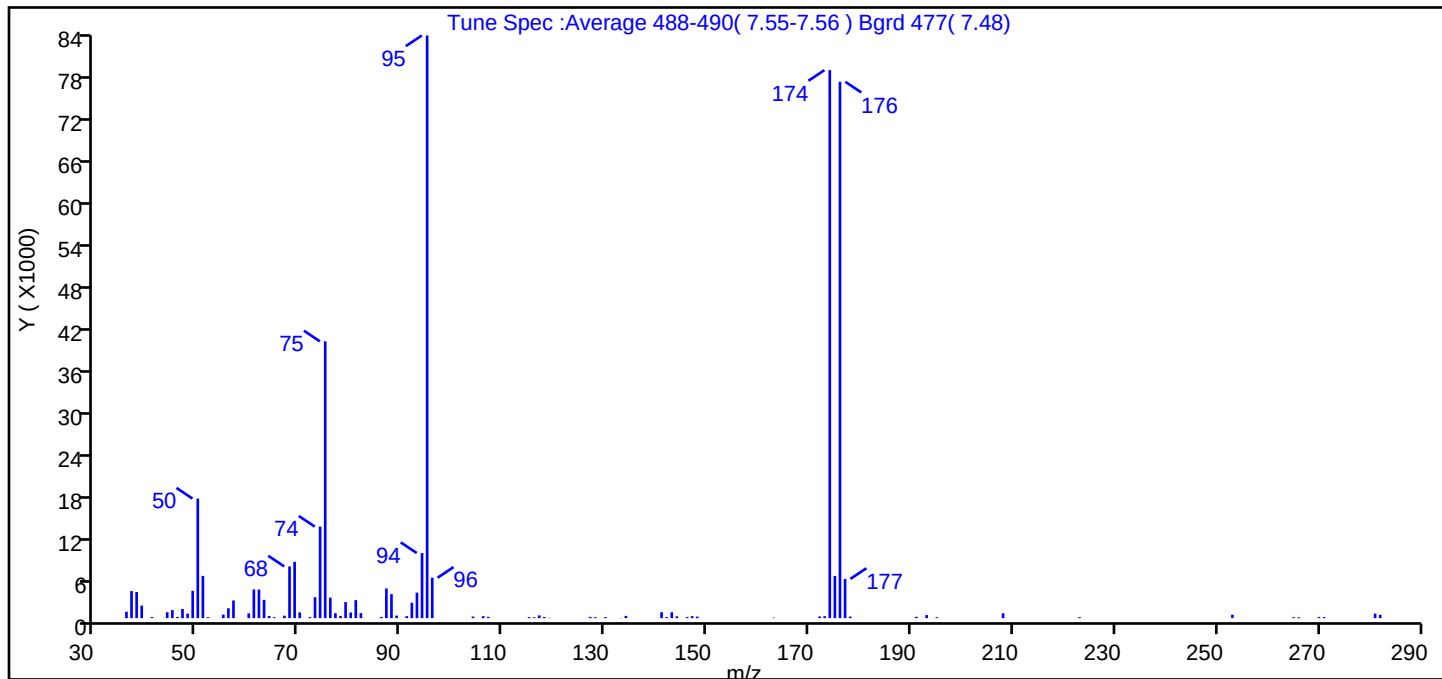
Amount Added: 1.00

Units: uL

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37851.D
Injection Date: 06-Nov-2018 08:54:30 Instrument ID: HP5973P
Lims ID: BFB
Client ID:
Operator ID: RF ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

\$ 21 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.5
75	30 to 60% of m/z 95	47.5
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.3 (0.4)
174	50 to 120% of m/z 95	94.1
175	5 to 9% of m/z 174	7.2 (7.7)
176	Greater than 95% but less than 101% of m/z 174	92.1 (97.9)
177	5 to 9% of m/z 176	6.7 (7.3)

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\IP-8260H2O.rslt\spectra.d
Injection Date: 06-Nov-2018 08:54:30
Spectrum: Tune Spec :Average 488-490(7.55-7.56) Bgrd 477(7.48)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 88

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	916	65.00	132	93.00	3635	147.00	286
37.00	3864	67.00	348	94.00	9278	148.00	218
38.00	3726	68.00	7369	95.00	83040	163.00	67
39.00	1788	69.00	8030	96.00	5758	172.00	241
41.00	153	70.00	818	104.00	230	173.00	279
44.00	844	72.00	155	106.00	280	174.00	78104
45.00	1144	73.00	2984	107.00	172	175.00	6018
46.00	166	74.00	13045	115.00	154	176.00	76440
47.00	1308	75.00	39448	116.00	119	177.00	5594
48.00	642	76.00	2920	117.00	393	178.00	224
49.00	3893	77.00	710	118.00	160	191.00	189
50.00	17040	78.00	314	119.00	40	193.00	437
51.00	6022	79.00	2292	127.00	176	195.00	132
52.00	133	80.00	808	128.00	134	208.00	693
55.00	508	81.00	2571	130.00	152	223.00	139
56.00	1406	82.00	723	133.00	31	253.00	486
57.00	2522	86.00	180	134.00	321	265.00	134
60.00	673	87.00	4223	141.00	849	266.00	120
61.00	4091	88.00	3422	142.00	153	270.00	172
62.00	4075	89.00	363	143.00	838	271.00	154
63.00	2609	91.00	285	144.00	257	281.00	653
64.00	308	92.00	2199	146.00	154	282.00	473

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4699.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 29-Oct-2018 12:47:30 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: bfb
 Misc. Info.: 480-0075946-002
 Operator ID: KN Instrument ID: HP5975T
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 29-Oct-2018 23:42:25 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0323

First Level Reviewer: nowakk Date: 29-Oct-2018 12:56:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags

\$ 5 BFB 95 5.157 5.157 0.000 86 358024 NR NR

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_WRK_00080 Amount Added: 1.00 Units: uL

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4699.D

Injection Date: 29-Oct-2018 12:47:30

Instrument ID: HP5975T

Lims ID: BFB

Client ID:

Operator ID: KN

ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 uL

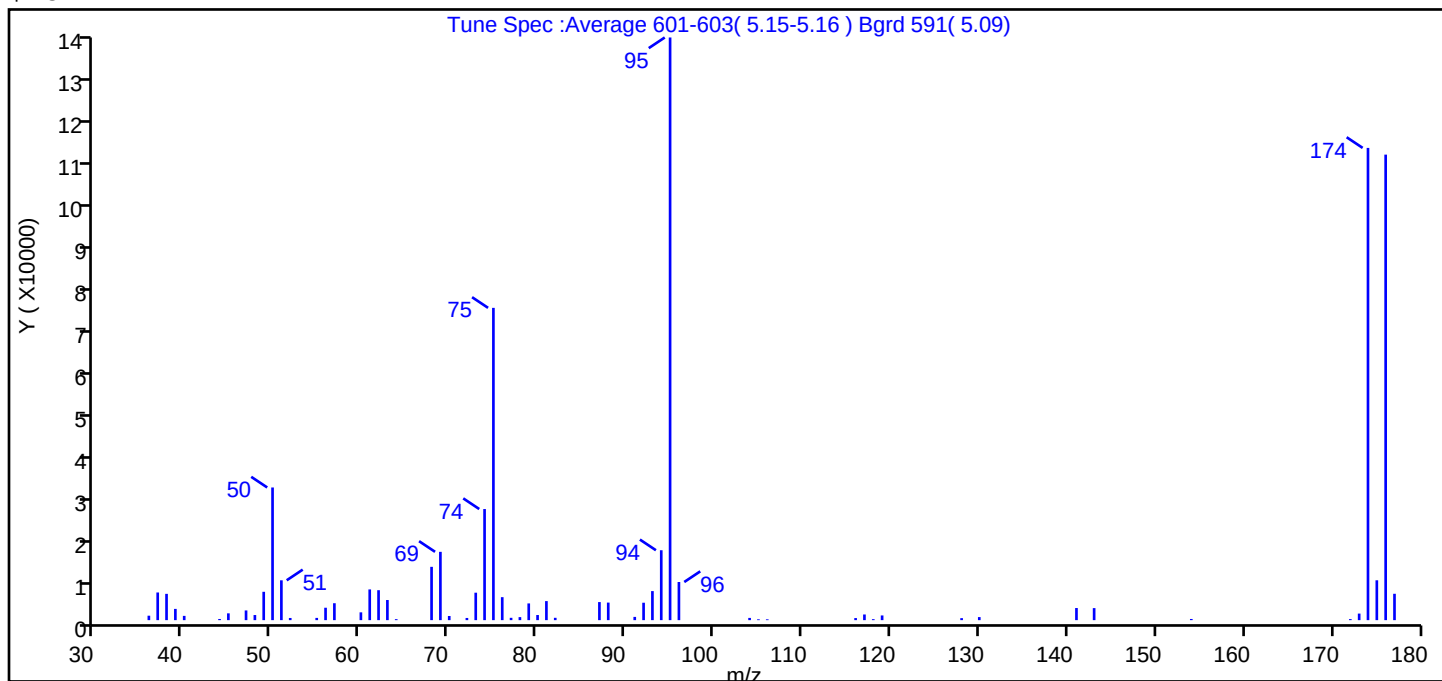
Dil. Factor: 1.0000

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	22.8
75	30 to 60% of m/z 95	53.6
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	1.1 (1.4)
174	50 to 120% of m/z 95	81.0
175	5 to 9% of m/z 174	6.8 (8.4)
176	Greater than 95% but less than 101% of m/z 174	79.9 (98.6)
177	5 to 9% of m/z 176	4.5 (5.7)

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4699.D\T-8260.rslt\spectra.d
Injection Date: 29-Oct-2018 12:47:30
Spectrum: Tune Spec :Average 601-603(5.15-5.16) Bgrd 591(5.09)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 61

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1007	60.00	1768	80.00	1159	118.00	222
37.00	6262	61.00	6954	81.00	4311	119.00	1064
38.00	5953	62.00	6778	82.00	529	128.00	453
39.00	2545	63.00	4557	87.00	4088	130.00	691
40.00	965	64.00	222	88.00	3974	141.00	2743
44.00	262	68.00	12068	91.00	734	143.00	2724
45.00	1540	69.00	15464	92.00	3943	154.00	265
47.00	2198	70.00	939	93.00	6574	172.00	234
48.00	1157	72.00	493	94.00	15825	173.00	1485
49.00	6417	73.00	6214	95.00	131904	174.00	106904
50.00	30032	74.00	25152	96.00	8633	175.00	9023
51.00	9020	75.00	70696	104.00	505	176.00	105384
52.00	492	76.00	5201	105.00	187	177.00	5969
55.00	507	77.00	527	106.00	184		
56.00	2809	78.00	685	116.00	471		
57.00	3829	79.00	3785	117.00	1283		

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5000.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 04-Nov-2018 10:19:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: bfb
Misc. Info.: 480-0076114-002
Operator ID: RF Instrument ID: HP5975T
Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 04-Nov-2018 10:35:23 Calib Date: 29-Oct-2018 21:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: farrellr

Date: 04-Nov-2018 10:35:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags

\$ 5 BFB 95 5.169 5.169 0.000 84 82808 NR NR

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

BFB_WRK_00080

Amount Added: 1.00

Units: uL

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5000.D

Injection Date: 04-Nov-2018 10:19:30

Instrument ID: HP5975T

Lims ID: BFB

Client ID:

Operator ID: RF

ALS Bottle#:

2

Worklist Smp#:

2

Injection Vol: 1.0 uL

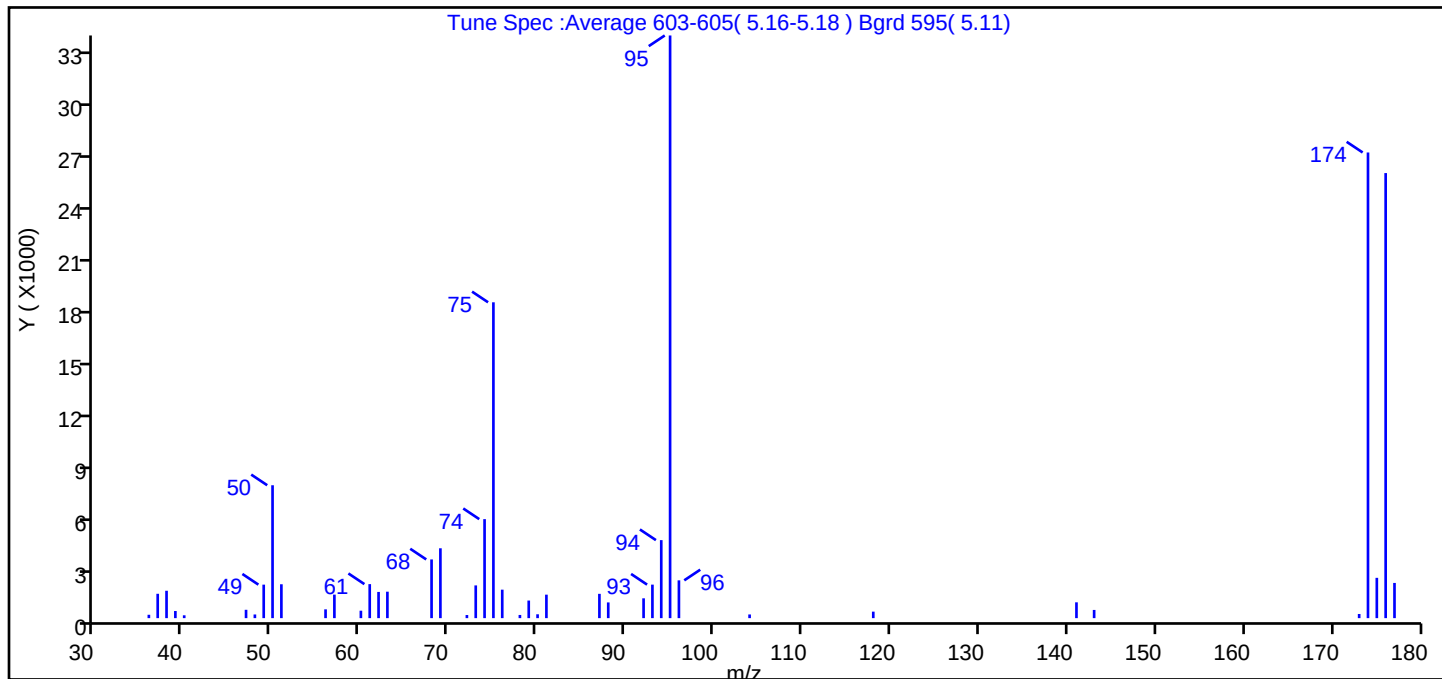
Dil. Factor: 1.0000

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	22.8
75	30 to 60% of m/z 95	54.2
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.7 (0.9)
174	50 to 120% of m/z 95	79.9
175	5 to 9% of m/z 174	6.9 (8.7)
176	Greater than 95% but less than 101% of m/z 174	76.4 (95.6)
177	5 to 9% of m/z 176	6.0 (7.9)

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5000.D\T-8260.rslt\spectra.d
Injection Date: 04-Nov-2018 10:19:30
Spectrum: Tune Spec :Average 603-605(5.16-5.18) Bgrd 595(5.11)
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	197	57.00	1371	76.00	1659	96.00	2202
37.00	1419	60.00	434	78.00	186	104.00	215
38.00	1595	61.00	1982	79.00	1025	118.00	379
39.00	415	62.00	1527	80.00	225	141.00	922
40.00	166	63.00	1541	81.00	1368	143.00	478
47.00	486	68.00	3420	87.00	1416	173.00	242
48.00	214	69.00	4070	88.00	916	174.00	27128
49.00	1952	72.00	182	92.00	1155	175.00	2348
50.00	7742	73.00	1907	93.00	1953	176.00	25928
51.00	1974	74.00	5768	94.00	4545	177.00	2051
56.00	513	75.00	18400	95.00	33944		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 480-443500/7

Matrix: Water Lab File ID: T5005.D

Analysis Method: 8260C Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 11/04/2018 12:17

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.: 443500 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
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
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
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
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
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
124-48-1	Dibromochloromethane	ND		1.0	0.32
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
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 480-443500/7
 Matrix: Water Lab File ID: T5005.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/04/2018 12:17
 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.: 443500 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
2037-26-5	Toluene-d8 (Surr)	96		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	100		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5005.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 04-Nov-2018 12:17:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: mb
 Misc. Info.: 480-0076114-007
 Operator ID: RF Instrument ID: HP5975T
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 04-Nov-2018 13:43:27 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0315

First Level Reviewer: farrellr

Date: 04-Nov-2018 13:43:27

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	4.589	4.589	0.000	96	128177	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.879	6.879	0.000	92	482954	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	98	300789	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.123	0.000	92	165452	25.0	26.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.371	4.371	0.000	0	260155	25.0	26.5	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	96	518367	25.0	24.1	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	196509	25.0	25.0	
12 Chlorodifluoromethane	51		1.107					ND	
11 Dichlorodifluoromethane	85		1.107					ND	
13 Chloromethane	50		1.252					ND	
151 Butadiene	54		1.325					ND	
14 Vinyl chloride	62		1.325					ND	
15 Bromomethane	94		1.584					ND	
16 Chloroethane	64		1.636					ND	
17 Trichlorofluoromethane	101		1.802					ND	
18 Dichlorofluoromethane	67		1.833					ND	
19 Ethyl ether	59		2.050					ND	
148 Ethanol	45		2.081					ND	
84 Propene oxide	58		2.143					ND	
21 Acrolein	56		2.226					ND	
22 1,1-Dichloroethene	96		2.258					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.268					ND	
23 Acetone	43		2.372					ND	
24 Iodomethane	142		2.403					ND	
25 Carbon disulfide	76		2.434					ND	
26 Isopropyl alcohol	45		2.537					ND	
27 3-Chloro-1-propene	41		2.589					ND	
28 Methyl acetate	43		2.631					ND	
29 Acetonitrile	40		2.641					ND	
30 Methylene Chloride	84		2.724					ND	
31 2-Methyl-2-propanol	59		2.890					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		2.900					ND	
32 trans-1,2-Dichloroethene	96		2.910					ND	
34 Acrylonitrile	53		2.973					ND	
35 Hexane	57		3.076					ND	
36 1,1-Dichloroethane	63		3.273					ND	
37 Isopropyl ether	45		3.283					ND	
38 2-Chloro-1,3-butadiene	53		3.314					ND	
39 Vinyl acetate	43		3.315					ND	
139 Halothane	117		3.325					ND	
40 1,1-Dimethoxyethane	75		3.346					ND	
41 Tert-butyl ethyl ether	59		3.563					ND	
42 2,2-Dichloropropane	77		3.719					ND	
43 cis-1,2-Dichloroethene	96		3.739					ND	
44 2-Butanone (MEK)	43		3.771					ND	
45 Ethyl acetate	43		3.791					ND	
46 Propionitrile	54		3.853					ND	
47 Chlorobromomethane	128		3.936					ND	
49 Methacrylonitrile	41		3.947					ND	
48 Tetrahydrofuran	42		3.947					ND	
50 Chloroform	83		3.999					ND	
52 Cyclohexane	56		4.092					ND	
51 1,1,1-Trichloroethane	97		4.092					ND	
53 Carbon tetrachloride	117		4.195					ND	
54 1,1-Dichloropropene	75		4.206					ND	
152 Isooctane	57		4.361					ND	
55 Benzene	78		4.372					ND	
56 Isobutyl alcohol	43		4.403					ND	
58 Tert-amyl methyl ether	73		4.434					ND	
57 1,2-Dichloroethane	62		4.434					ND	
147 t-Amyl alcohol	59		4.444					ND	
59 n-Heptane	43		4.506					ND	
1 1,4-Difluorobenzene	114		4.672					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.765					ND	
60 Trichloroethene	95		4.859					ND	
61 n-Butanol	56		4.879					ND	
62 Methylcyclohexane	83		4.942					ND	
140 2,4,4-Trimethyl-2-pentene	97		4.952					ND	
142 Ethyl acrylate	55		4.952					ND	
63 1,2-Dichloropropane	63		5.045					ND	
64 Methyl methacrylate	41		5.118					ND	
65 Dibromomethane	93		5.149					ND	
66 1,4-Dioxane	88		5.159					ND	
67 Dichlorobromomethane	83		5.273					ND	
68 2-Nitropropane	43		5.470					ND	
69 2-Chloroethyl vinyl ether	63		5.480					ND	
70 Epichlorohydrin	57		5.553					ND	
71 cis-1,3-Dichloropropene	75		5.594					ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.698					ND	
73 Toluene	92		5.812					ND	
74 2-Methylthiophene	97		5.905					ND	
75 trans-1,3-Dichloropropene	75		6.019					ND	
76 3-Methylthiophene	97		6.040					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		6.050					ND	
78 1,1,2-Trichloroethane	83		6.164					ND	
79 Tetrachloroethene	166		6.206					ND	
80 1,3-Dichloropropane	76		6.289					ND	
81 2-Hexanone	43		6.330					ND	
155 n-Butyl acetate	43		6.413					ND	
82 Chlorodibromomethane	129		6.465					ND	
83 Ethylene Dibromide	107		6.548					ND	
146 1-Chlorohexane	55		6.848					ND	
85 3-Chlorobenzotrifluoride	180		6.869					ND	
86 Chlorobenzene	112		6.900					ND	
87 4-Chlorobenzotrifluoride	180		6.910					ND	
88 Ethylbenzene	91		6.962					ND	
89 1,1,1,2-Tetrachloroethane	131		6.973					ND	
90 m-Xylene & p-Xylene	106		7.056					ND	
91 o-Xylene	106		7.367					ND	
92 Styrene	104		7.387					ND	
93 Bromoform	173		7.584					ND	
94 2-Chlorobenzotrifluoride	180		7.594					ND	
95 Isopropylbenzene	105		7.646					ND	
96 Cyclohexanone	55		7.812					ND	U
97 Bromobenzene	156		7.926					ND	
98 1,1,2,2-Tetrachloroethane	83		7.968					ND	
99 N-Propylbenzene	91		7.978					ND	
100 1,2,3-Trichloropropane	110		7.988					ND	
101 trans-1,4-Dichloro-2-buten	53		7.999					ND	
105 2-Chlorotoluene	126		8.071					ND	
103 3-Chlorotoluene	126		8.123					ND	
104 1,3,5-Trimethylbenzene	105		8.123					ND	
102 4-Chlorotoluene	91		8.154					ND	
106 tert-Butylbenzene	134		8.382					ND	
107 1,2,4-Trimethylbenzene	105		8.424					ND	
108 Pentachloroethane	167		8.434					ND	
109 sec-Butylbenzene	105		8.558					ND	
111 4-Isopropyltoluene	119		8.672					ND	
110 1,3-Dichlorobenzene	146		8.672					ND	
112 Dicyclopentadiene	66		8.734					ND	Ua
113 1,4-Dichlorobenzene	146		8.755					ND	
114 1,2,3-Trimethylbenzene	105		8.776					ND	
150 Benzyl chloride	126		8.879					ND	
115 n-Butylbenzene	91		9.014					ND	
116 1,2-Dichlorobenzene	146		9.056					ND	
117 1,2-Dibromo-3-Chloropropan	75		9.729					ND	
118 1,3,5-Trichlorobenzene	180		9.854					ND	
119 1,2,4-Trichlorobenzene	180		10.372					ND	
120 Hexachlorobutadiene	225		10.486					ND	U
121 Naphthalene	128		10.579					ND	
122 1,2,3-Trichlorobenzene	180		10.786					ND	
149 2-Methylnaphthalene	142		11.470					ND	
144 1-Bromopropane TIC	1		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
143 Propene 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
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	
135 Hexachloroethane	117		0.000					ND	
137 Methyl acrylate	1		0.000					ND	
136 Nitrobenzene	77		0.000					ND	
S 126 Xylenes, Total	1		30.000					ND	
S 123 1,3-Dichloropropene, Total	1		30.000					ND	
S 124 1,2-Dichloroethene, 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

a - User Assigned ID

Reagents:

T_8260_IS_00209	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_Surr_00181	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5005.D

Injection Date: 04-Nov-2018 12:17:30

Instrument ID: HP5975T

Operator ID: RF

Lims ID: MB

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

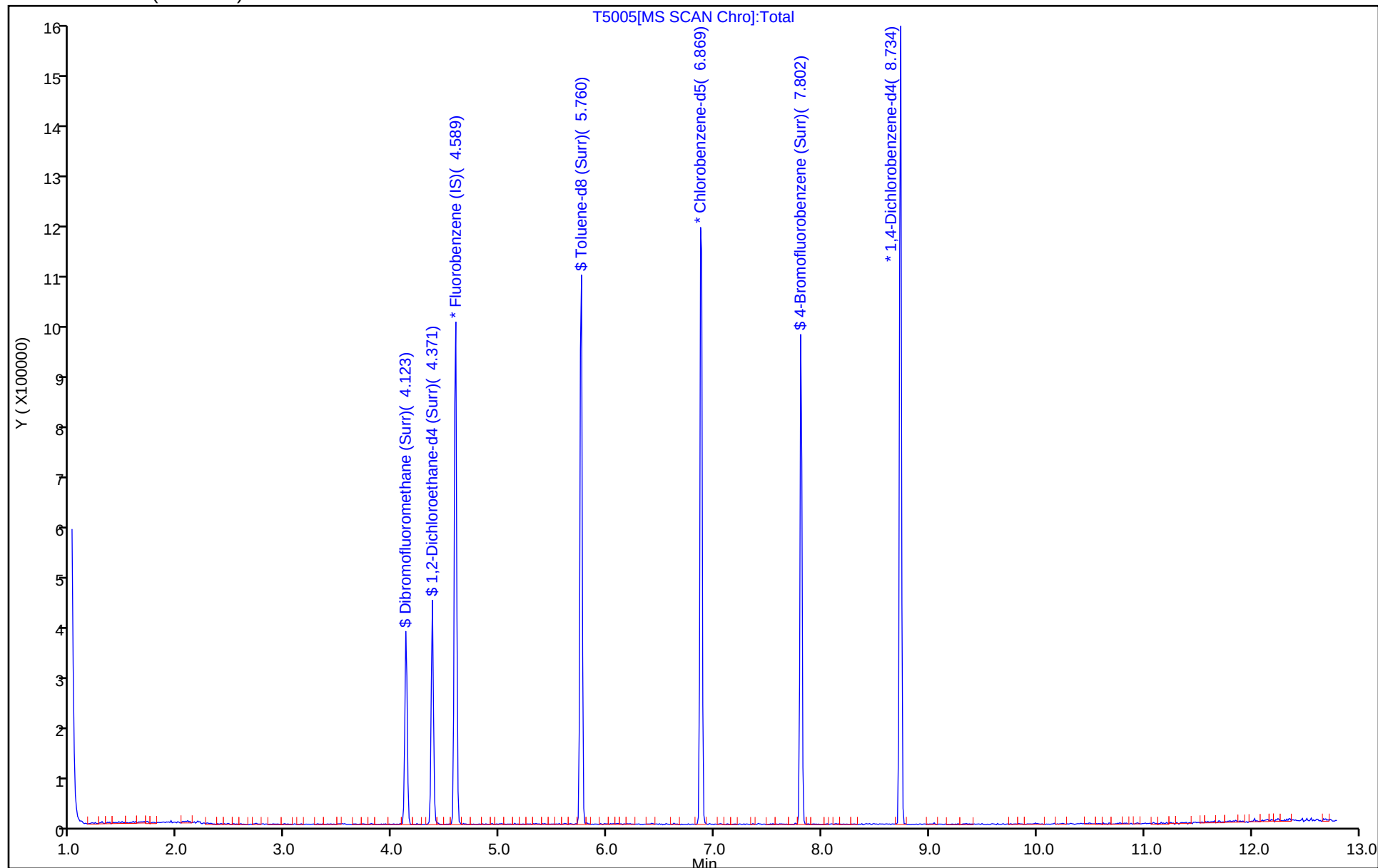
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 480-443770/9

Matrix: Water Lab File ID: P37831.D

Analysis Method: 8260C Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 11/05/2018 23:56

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 443770 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
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
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
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
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
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
124-48-1	Dibromochloromethane	ND		1.0	0.32
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
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 480-443770/9
 Matrix: Water Lab File ID: P37831.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/05/2018 23:56
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
2037-26-5	Toluene-d8 (Surr)	96		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		77-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37831.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 05-Nov-2018 23:56:30 ALS Bottle#: 6 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 480-0076157-009
 Operator ID: RB Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 00:10:44 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0326

First Level Reviewer: baroner

Date: 06-Nov-2018 00:11:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.342	10.336	0.006	98	240641	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.284	14.284	0.000	86	488676	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	526969	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.545	0.000	93	316382	25.0	22.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.989	9.995	-0.006	0	194710	25.0	23.8	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.319	0.006	92	1098403	25.0	23.9	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	95	389687	25.0	23.6	
10 Dichlorodifluoromethane	85		4.252					ND	
15 Chlorodifluoromethane	51		4.295					ND	
11 Chloromethane	50		4.666					ND	
17 Vinyl chloride	62		4.855					ND	
144 Butadiene	54		4.897					ND	
12 Bromomethane	94		5.481					ND	
13 Chloroethane	64		5.615					ND	
19 Dichlorofluoromethane	67		5.901					ND	
14 Trichlorofluoromethane	101		5.956					ND	
141 Ethanol	45		6.236					ND	
20 Ethyl ether	59		6.321					ND	
26 Propene oxide	58		6.497					ND	
22 Acrolein	56		6.619					ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.625					ND	
25 1,1-Dichloroethene	96		6.722					ND	
24 Acetone	43		6.807					ND	
23 Isopropyl alcohol	45		6.911					ND	
18 Iodomethane	142		7.014					ND	
27 Carbon disulfide	76		7.118					ND	U
30 Methyl acetate	43		7.172					ND	
28 3-Chloro-1-propene	41		7.197					ND	U
29 Acetonitrile	40		7.245					ND	
31 Methylene Chloride	84		7.391					ND	
33 2-Methyl-2-propanol	59		7.416					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
32 Methyl tert-butyl ether	73		7.604					ND	
35 trans-1,2-Dichloroethene	96		7.696					ND	
34 Acrylonitrile	53		7.726					ND	
36 Hexane	57		7.896					ND	
37 Isopropyl ether	45		8.121					ND	
38 Vinyl acetate	43		8.195					ND	
39 1,1-Dimethoxyethane	75		8.249					ND	
40 1,1-Dichloroethane	63		8.249					ND	
41 2-Chloro-1,3-butadiene	53		8.322					ND	
42 Tert-butyl ethyl ether	59		8.566					ND	
46 Ethyl acetate	43		8.894					ND	
44 2-Butanone (MEK)	43		8.931					ND	
45 2,2-Dichloropropane	77		8.943					ND	
43 cis-1,2-Dichloroethene	96		8.961					ND	
47 Propionitrile	54		9.095					ND	
48 Methacrylonitrile	41		9.247					ND	
50 Chlorobromomethane	128		9.296					ND	
51 Tetrahydrofuran	42		9.302					ND	
49 Chloroform	83		9.326					ND	
52 1,1,1-Trichloroethane	97		9.557					ND	
54 Cyclohexane	56		9.594					ND	
66 2-Methylthiophene	97		9.687					ND	
56 1,1-Dichloropropene	75		9.734					ND	
53 Isobutyl alcohol	43		9.746					ND	
55 Carbon tetrachloride	117		9.752					ND	
140 t-Amyl alcohol	59		9.874					ND	
67 3-Methylthiophene	97		9.894					ND	
146 Isooctane	57		9.922					ND	
58 Tert-amyl methyl ether	73		9.995					ND	
57 Benzene	78		10.032					ND	
60 1,2-Dichloroethane	62		10.087					ND	
59 n-Heptane	43		10.093					ND	
1 1,4-Difluorobenzene	114		10.409					ND	
61 n-Butanol	56		10.555					ND	
145 Ethyl acrylate	55		10.768					ND	
62 Trichloroethene	95		10.786					ND	
64 Methylcyclohexane	83		10.987					ND	
65 Methyl methacrylate	41		11.066					ND	
63 1,2-Dichloropropane	63		11.127					ND	
68 1,4-Dioxane	88		11.242					ND	
69 Dibromomethane	93		11.334					ND	
70 Dichlorobromomethane	83		11.461					ND	
71 2-Chloroethyl vinyl ether	63		11.717					ND	
72 2-Nitropropane	43		11.766					ND	
74 Epichlorohydrin	57		11.918					ND	
73 cis-1,3-Dichloropropene	75		11.997					ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100					ND	
76 Toluene	92		12.417					ND	
77 Ethyl methacrylate	69		12.636					ND	
78 trans-1,3-Dichloropropene	75		12.709					ND	
79 1,1,2-Trichloroethane	83		12.994					ND	
80 Tetrachloroethene	166		13.147					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
83 2-Hexanone	43		13.183					ND	
82 1,3-Dichloropropane	76		13.232					ND	
149 n-Butyl acetate	43		13.244					ND	
81 Chlorodibromomethane	129		13.572					ND	
85 Ethylene Dibromide	107		13.767					ND	
84 3-Chlorobenzotrifluoride	180		14.108					ND	
139 1-Chlorohexane	55		14.120					ND	
86 4-Chlorobenzotrifluoride	180		14.181					ND	
87 Chlorobenzene	112		14.327					ND	
89 Ethylbenzene	91		14.375					ND	
88 1,1,1,2-Tetrachloroethane	131		14.412					ND	
90 m-Xylene & p-Xylene	106		14.509					ND	
93 o-Xylene	106		15.057					ND	
94 Styrene	104		15.087					ND	
91 2-Chlorobenzotrifluoride	180		15.367					ND	
92 Bromoform	173		15.470					ND	
95 Isopropylbenzene	105		15.489					ND	
96 Cyclohexanone	55		15.793					ND	
97 1,1,2,2-Tetrachloroethane	83		15.957					ND	
98 trans-1,4-Dichloro-2-buten	53		16.006					ND	
99 N-Propylbenzene	91		16.012					ND	
100 Bromobenzene	156		16.036					ND	
101 1,2,3-Trichloropropane	110		16.054					ND	
102 1,3,5-Trimethylbenzene	105		16.200					ND	
103 2-Chlorotoluene	126		16.219					ND	
104 3-Chlorotoluene	126		16.286					ND	
105 4-Chlorotoluene	126		16.347					ND	
106 tert-Butylbenzene	134		16.645					ND	
107 1,2,4-Trimethylbenzene	105		16.705					ND	
108 Pentachloroethane	167		16.778					ND	
109 sec-Butylbenzene	105		16.906					ND	
112 4-Isopropyltoluene	119		17.058					ND	
110 1,3-Dichlorobenzene	146		17.174					ND	
113 1,2,3-Trimethylbenzene	105		17.265					ND	U
114 Dicyclopentadiene	66		17.277					ND	
111 1,4-Dichlorobenzene	146		17.277					ND	
143 Benzyl chloride	126		17.442					ND	
115 n-Butylbenzene	91		17.569					ND	
116 1,2-Dichlorobenzene	146		17.776					ND	
117 1,2-Dibromo-3-Chloropropan	75		18.810					ND	
118 1,3,5-Trichlorobenzene	180		18.993					ND	
119 1,2,4-Trichlorobenzene	180		19.911					ND	
120 Hexachlorobutadiene	225	20.027	20.027	0.000	87	4968		0.6706	
121 Naphthalene	128		20.349					ND	
122 1,2,3-Trichlorobenzene	180		20.721					ND	U
142 2-Methylnaphthalene	142		22.284					ND	U
136 Propene oxide TIC	1		0.000					ND	
138 Ethylene oxide TIC	1		0.000					ND	
137 1-Bromopropane TIC	1		0.000					ND	
134 Halothane	1		0.000					ND	
135 Pentachloroethane TIC	1		0.000					ND	
S 125 Total BTEX	1		30.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
S 126 Xylenes, Total	1		30.000					ND	
S 123 1,2-Dichloroethene, Total	1		30.000					ND	
S 124 1,3-Dichloropropene, Total	1		30.000					ND	
S 151 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr_00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37831.D

Injection Date: 05-Nov-2018 23:56:30

Instrument ID: HP5973P

Operator ID: RB

Lims ID: MB

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

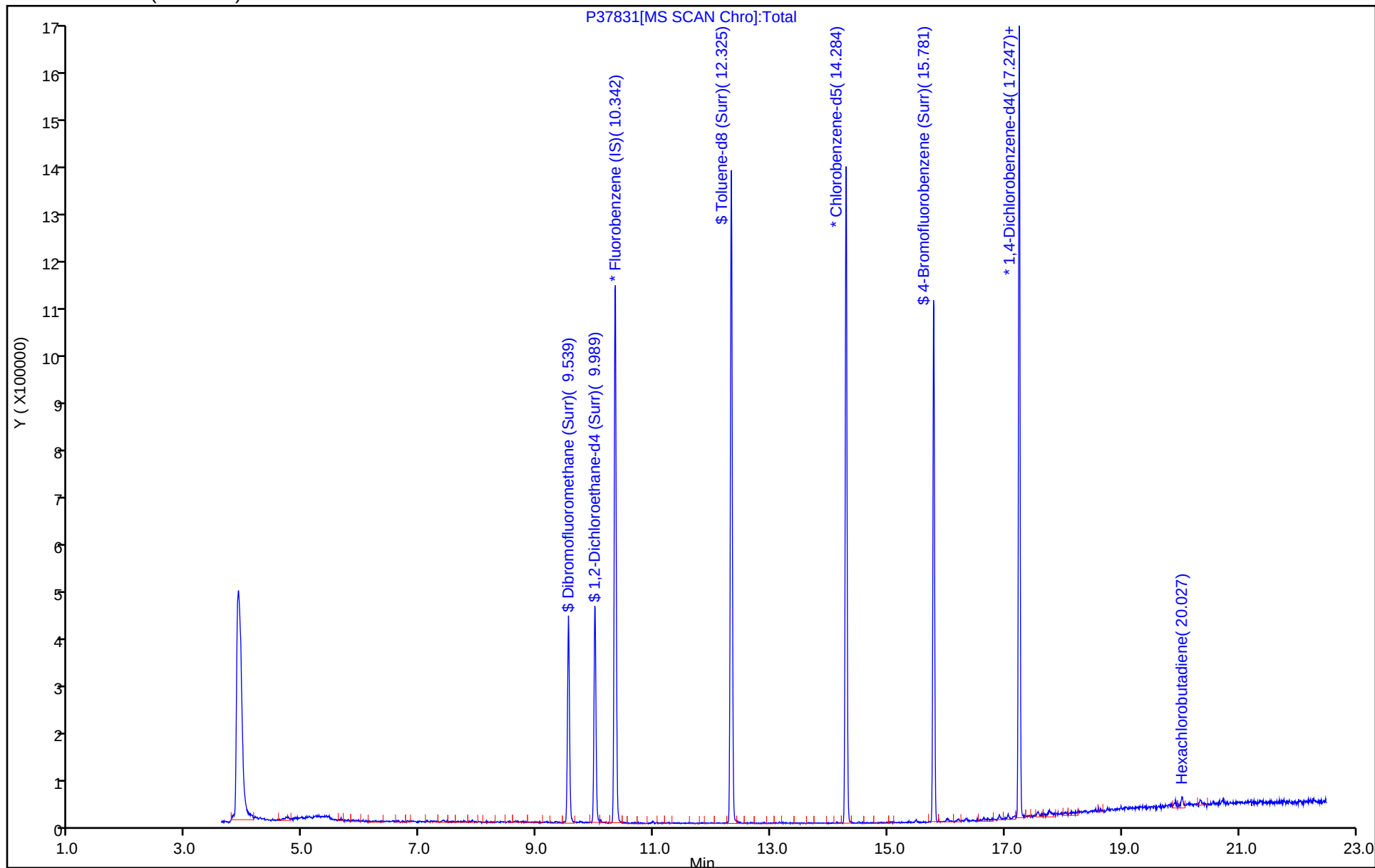
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\37831.D

Injection Date: 05-Nov-2018 23:56:30

Instrument ID: HP5973P

Lims ID: MB

Client ID:

Operator ID: RB

ALS Bottle#:

6

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

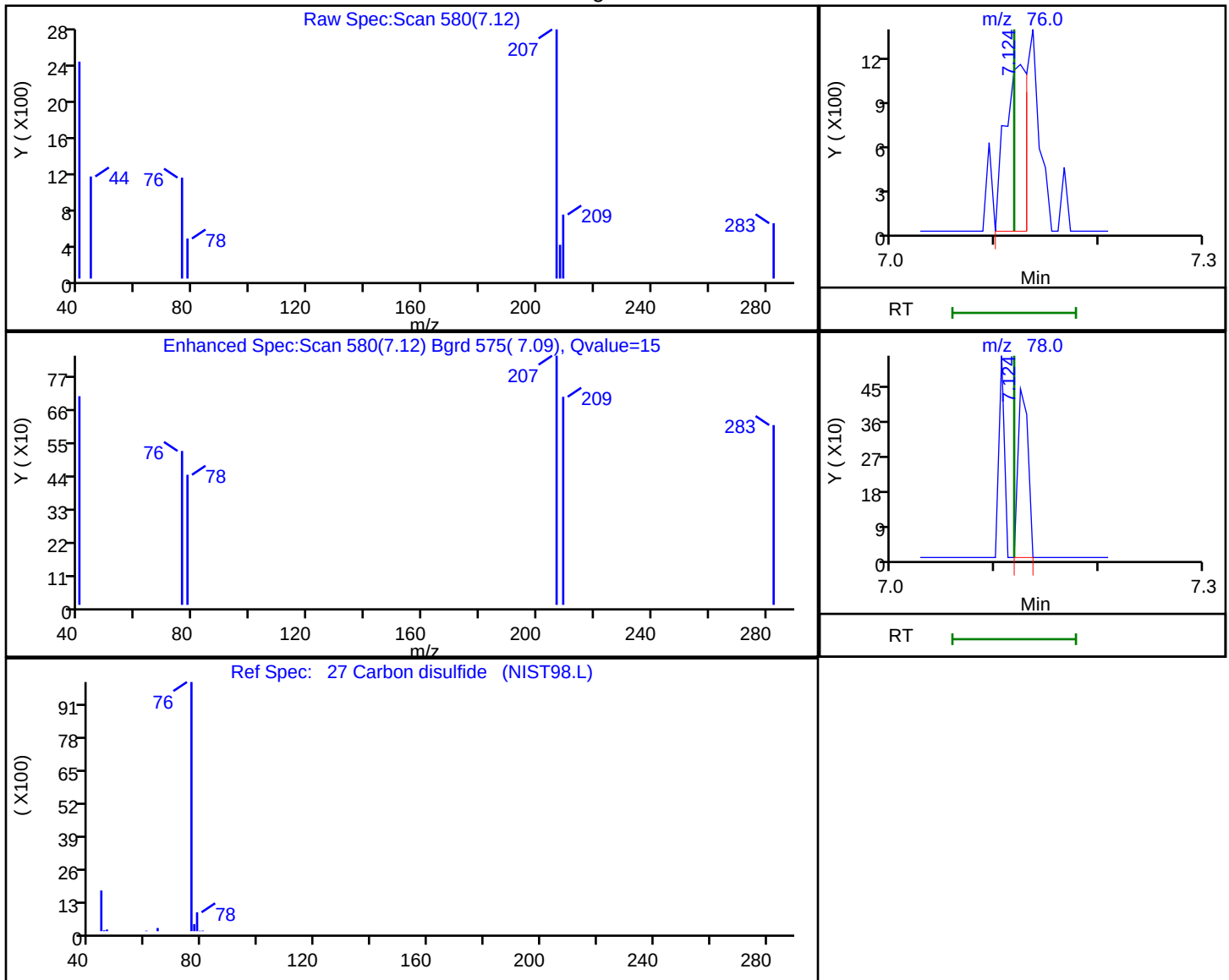
Column: ZB-624 (0.25 mm)

Detector

MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
7.12	76.00	1678	0.040022
7.12	78.00	295	

Reviewer: baroner, 06-Nov-2018 00:10:03

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 480-443801/26

Matrix: Water Lab File ID: P37857.D

Analysis Method: 8260C Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 11:59

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 443801 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
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
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
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
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
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
124-48-1	Dibromochloromethane	ND		1.0	0.32
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
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 480-443801/26
 Matrix: Water Lab File ID: P37857.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 11:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443801 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
2037-26-5	Toluene-d8 (Surr)	95		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		77-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
1868-53-7	Dibromofluoromethane (Surr)	90		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37857.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 06-Nov-2018 11:59:30 ALS Bottle#: 7 Worklist Smp#: 26
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: X87541
 Operator ID: RF Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 15:16:41 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 15:16:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	239700	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.284	0.006	86	485315	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	95	517300	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.545	9.545	0.006	93	312538	25.0	22.6	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.989	0.006	0	184095	25.0	22.6	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.330	0.000	92	1085934	25.0	23.8	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.793	0.000	95	389513	25.0	23.7	
10 Dichlorodifluoromethane	85		4.252					ND	
15 Chlorodifluoromethane	51		4.289					ND	
11 Chloromethane	50		4.666					ND	
17 Vinyl chloride	62		4.855					ND	
144 Butadiene	54		4.903					ND	
12 Bromomethane	94		5.475					ND	
13 Chloroethane	64		5.621					ND	
19 Dichlorofluoromethane	67		5.895					ND	
14 Trichlorofluoromethane	101		5.956					ND	
141 Ethanol	45		6.230					ND	
20 Ethyl ether	59		6.321					ND	
26 Propene oxide	58		6.497					ND	
22 Acrolein	56		6.625					ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.631					ND	
25 1,1-Dichloroethene	96		6.728					ND	
24 Acetone	43		6.807					ND	
23 Isopropyl alcohol	45		6.911					ND	
18 Iodomethane	142		7.020					ND	
27 Carbon disulfide	76		7.118					ND	U
30 Methyl acetate	43		7.172					ND	
28 3-Chloro-1-propene	41		7.203					ND	
29 Acetonitrile	40		7.252					ND	
31 Methylene Chloride	84		7.391					ND	
33 2-Methyl-2-propanol	59		7.416					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
32 Methyl tert-butyl ether	73		7.604					ND	
35 trans-1,2-Dichloroethene	96		7.696					ND	
34 Acrylonitrile	53		7.726					ND	
36 Hexane	57	7.896	7.896	0.000	91	4027		0.2290	
37 Isopropyl ether	45		8.122					ND	
38 Vinyl acetate	43		8.194					ND	
40 1,1-Dichloroethane	63		8.249					ND	
39 1,1-Dimethoxyethane	75		8.255					ND	
41 2-Chloro-1,3-butadiene	53		8.322					ND	
42 Tert-butyl ethyl ether	59		8.566					ND	
46 Ethyl acetate	43		8.894					ND	
44 2-Butanone (MEK)	43		8.931					ND	
45 2,2-Dichloropropane	77		8.943					ND	
43 cis-1,2-Dichloroethene	96		8.967					ND	U
47 Propionitrile	54		9.095					ND	
48 Methacrylonitrile	41		9.247					ND	
50 Chlorobromomethane	128		9.296					ND	
51 Tetrahydrofuran	42		9.308					ND	
49 Chloroform	83		9.326					ND	
52 1,1,1-Trichloroethane	97		9.557					ND	
54 Cyclohexane	56		9.600					ND	
66 2-Methylthiophene	97		9.687					ND	
56 1,1-Dichloropropene	75		9.740					ND	
55 Carbon tetrachloride	117		9.752					ND	
53 Isobutyl alcohol	43		9.752					ND	
140 t-Amyl alcohol	59		9.874					ND	
67 3-Methylthiophene	97		9.894					ND	
146 Isooctane	57		9.922					ND	U
58 Tert-amyl methyl ether	73		9.989					ND	
57 Benzene	78		10.038					ND	
60 1,2-Dichloroethane	62		10.086					ND	
59 n-Heptane	43	10.105	10.099	0.006	92	4417		0.3234	
1 1,4-Difluorobenzene	114		10.415					ND	
61 n-Butanol	56		10.555					ND	
145 Ethyl acrylate	55		10.768					ND	
62 Trichloroethene	95		10.786					ND	
64 Methylcyclohexane	83		10.987					ND	Ua
65 Methyl methacrylate	41		11.072					ND	
63 1,2-Dichloropropane	63		11.127					ND	
68 1,4-Dioxane	88		11.248					ND	
69 Dibromomethane	93		11.334					ND	
70 Dichlorobromomethane	83		11.461					ND	
71 2-Chloroethyl vinyl ether	63		11.717					ND	
72 2-Nitropropane	43		11.766					ND	
74 Epichlorohydrin	57		11.918					ND	
73 cis-1,3-Dichloropropene	75		11.997					ND	
75 4-Methyl-2-pentanone (MIBK)	43		12.100					ND	
76 Toluene	92		12.416					ND	
77 Ethyl methacrylate	69		12.642					ND	
78 trans-1,3-Dichloropropene	75		12.708					ND	
79 1,1,2-Trichloroethane	83		13.000					ND	
80 Tetrachloroethene	166		13.140					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
83 2-Hexanone	43		13.189					ND	
82 1,3-Dichloropropane	76		13.232					ND	
149 n-Butyl acetate	43		13.244					ND	
81 Chlorodibromomethane	129		13.572					ND	
85 Ethylene Dibromide	107		13.773					ND	
84 3-Chlorobenzotrifluoride	180		14.108					ND	
139 1-Chlorohexane	55		14.120					ND	
86 4-Chlorobenzotrifluoride	180		14.181					ND	
87 Chlorobenzene	112		14.327					ND	
89 Ethylbenzene	91		14.375					ND	Ua
88 1,1,1,2-Tetrachloroethane	131		14.406					ND	
90 m-Xylene & p-Xylene	106		14.509					ND	
93 o-Xylene	106		15.057					ND	
94 Styrene	104		15.087					ND	
91 2-Chlorobenzotrifluoride	180		15.367					ND	
92 Bromoform	173		15.470					ND	
95 Isopropylbenzene	105		15.489					ND	
96 Cyclohexanone	55		15.793					ND	
97 1,1,2,2-Tetrachloroethane	83		15.963					ND	
98 trans-1,4-Dichloro-2-buten	53		16.012					ND	
99 N-Propylbenzene	91		16.018					ND	Ua
100 Bromobenzene	156		16.036					ND	
101 1,2,3-Trichloropropane	110		16.054					ND	
102 1,3,5-Trimethylbenzene	105		16.207					ND	
103 2-Chlorotoluene	126		16.225					ND	U
104 3-Chlorotoluene	126		16.286					ND	
105 4-Chlorotoluene	126		16.353					ND	
106 tert-Butylbenzene	134		16.645					ND	U
107 1,2,4-Trimethylbenzene	105		16.705					ND	
108 Pentachloroethane	167		16.785					ND	
109 sec-Butylbenzene	105		16.912					ND	Ua
112 4-Isopropyltoluene	119	17.052	17.058	-0.006	94	7296		0.1602	
110 1,3-Dichlorobenzene	146		17.174					ND	
113 1,2,3-Trimethylbenzene	105		17.265					ND	U
111 1,4-Dichlorobenzene	146		17.277					ND	
114 Dicyclopentadiene	66		17.284					ND	
143 Benzyl chloride	126		17.448					ND	
115 n-Butylbenzene	91		17.569					ND	Ua
116 1,2-Dichlorobenzene	146		17.776					ND	
117 1,2-Dibromo-3-Chloropropan	75		18.816					ND	
118 1,3,5-Trichlorobenzene	180		18.993					ND	
119 1,2,4-Trichlorobenzene	180	19.911	19.911	0.000	8	4154		0.1866	
120 Hexachlorobutadiene	225		20.033					ND	U
121 Naphthalene	128		20.349					ND	
122 1,2,3-Trichlorobenzene	180		20.727					ND	
142 2-Methylnaphthalene	142		22.284					ND	
136 Propene oxide TIC	1		0.000					ND	
138 Ethylene oxide TIC	1		0.000					ND	
137 1-Bromopropane TIC	1		0.000					ND	
134 Halothane	1		0.000					ND	
135 Pentachloroethane TIC	1		0.000					ND	
S 125 Total BTEX	1		30.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
S 126 Xylenes, Total	1		30.000					ND	
S 123 1,2-Dichloroethene, Total	1		30.000					ND	
S 124 1,3-Dichloropropene, Total	1		30.000					ND	
S 151 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37857.D

Injection Date: 06-Nov-2018 11:59:30

Instrument ID: HP5973P

Operator ID: RF

Lims ID: MB

Worklist Smp#: 26

Client ID:

Purge Vol: 5.000 mL

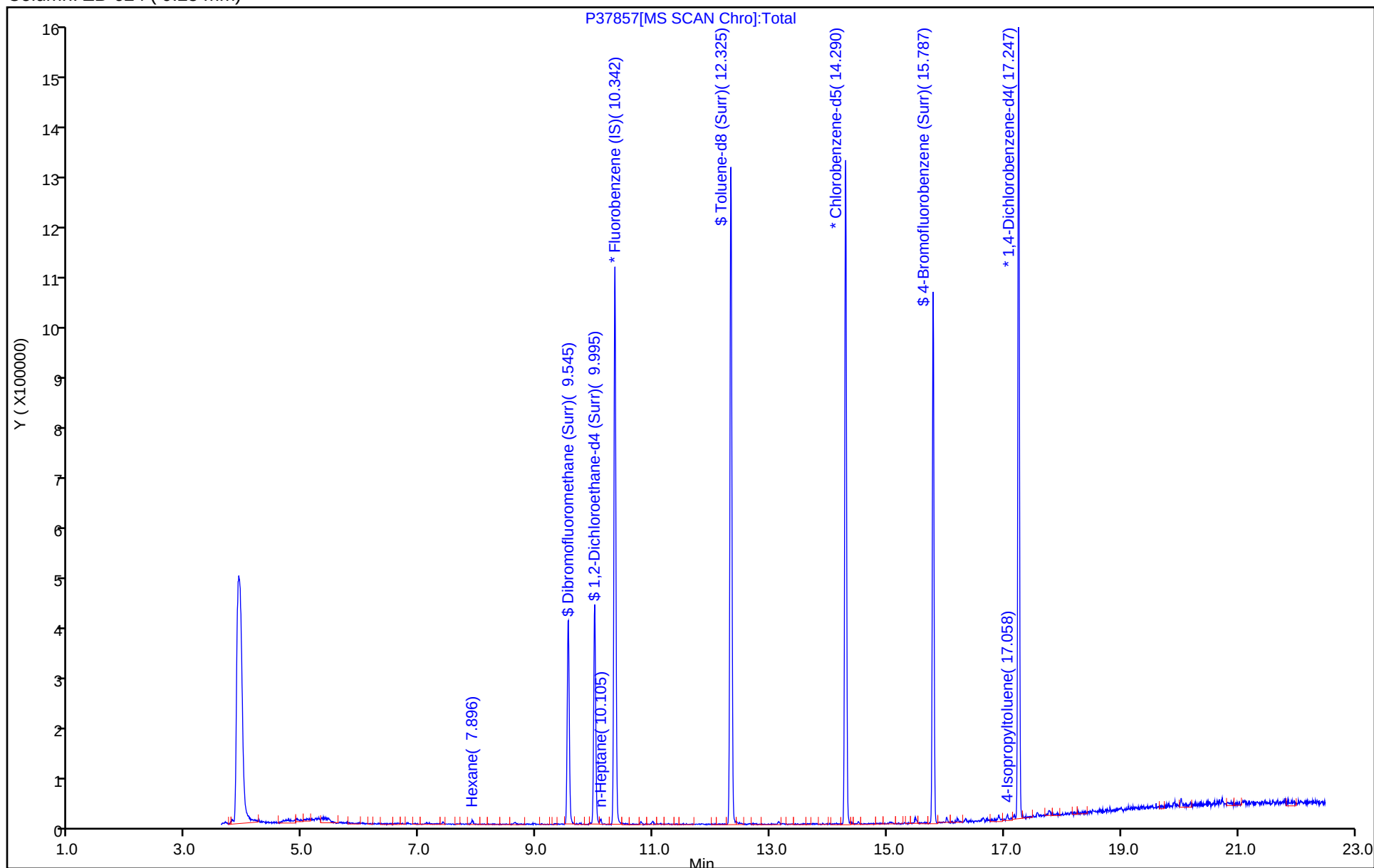
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\37857.D

Injection Date: 06-Nov-2018 11:59:30

Instrument ID: HP5973P

Lims ID: MB

Client ID:

Operator ID: RF

ALS Bottle#:

7

Worklist Smp#: 26

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

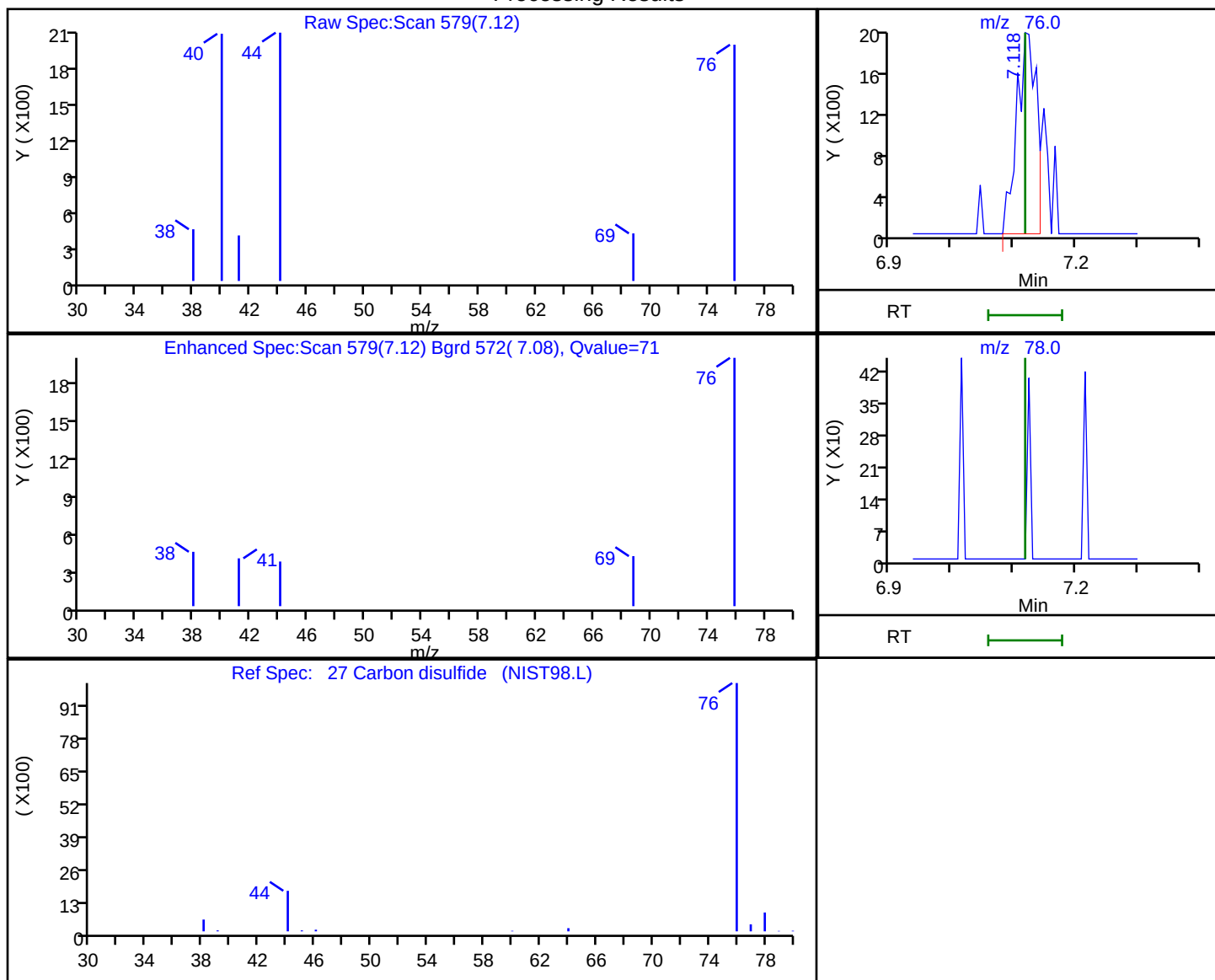
Column: ZB-624 (0.25 mm)

Detector

MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
7.12	76.00	4314	0.105164
7.12	78.00	0	

Reviewer: farrellr, 06-Nov-2018 15:14:42

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37857.D

Injection Date: 06-Nov-2018 11:59:30

Instrument ID: HP5973P

Lims ID: MB

Client ID:

Operator ID: RF

ALS Bottle#:

7

Worklist Smp#: 26

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: P-8260H2O

Limit Group:

MV - 8260C ICAL

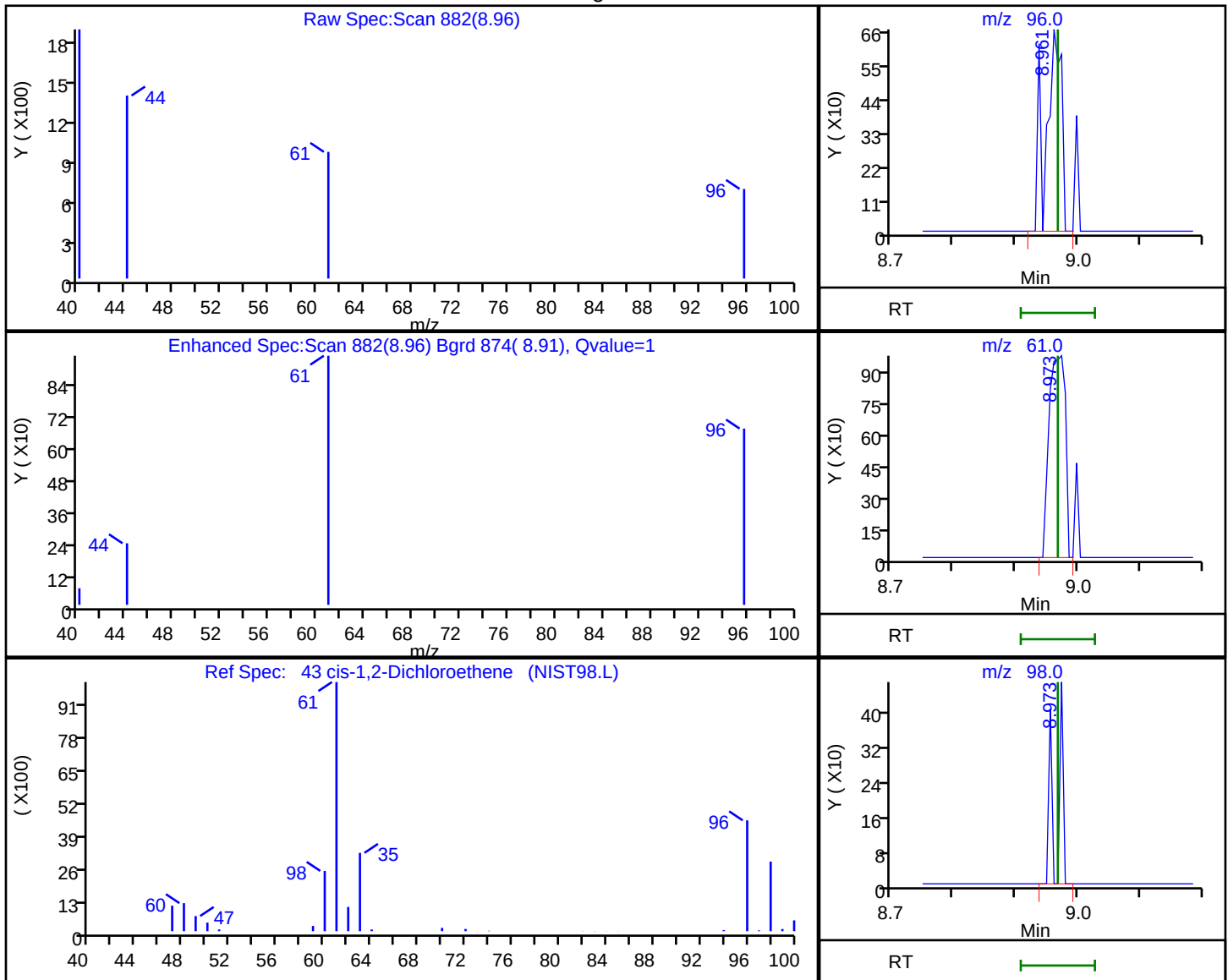
Column: ZB-624 (0.25 mm)

Detector

MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2

Processing Results



RT	Mass	Response	Amount
8.96	96.00	1157	0.067419
8.97	61.00	1777	
8.97	98.00	320	

Reviewer: farrellr, 06-Nov-2018 15:14:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 480-443500/5

Matrix: Water Lab File ID: T5003.D

Analysis Method: 8260C Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 11/04/2018 11:30

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.: 443500 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	29.0		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	23.5		1.0	0.21
79-00-5	1,1,2-Trichloroethane	25.1		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	34.0		1.0	0.31
75-34-3	1,1-Dichloroethane	25.8		1.0	0.38
75-35-4	1,1-Dichloroethene	29.8		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	24.3		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	24.7		1.0	0.39
95-50-1	1,2-Dichlorobenzene	24.5		1.0	0.79
107-06-2	1,2-Dichloroethane	27.5		1.0	0.21
78-87-5	1,2-Dichloropropane	24.1		1.0	0.72
541-73-1	1,3-Dichlorobenzene	25.4		1.0	0.78
106-46-7	1,4-Dichlorobenzene	25.2		1.0	0.84
78-93-3	2-Butanone (MEK)	118		10	1.3
591-78-6	2-Hexanone	122		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	119		5.0	2.1
67-64-1	Acetone	129		10	3.0
71-43-2	Benzene	24.8		1.0	0.41
75-27-4	Bromodichloromethane	27.2		1.0	0.39
75-25-2	Bromoform	27.2		1.0	0.26
74-83-9	Bromomethane	23.5		1.0	0.69
75-15-0	Carbon disulfide	25.4		1.0	0.19
56-23-5	Carbon tetrachloride	30.4		1.0	0.27
108-90-7	Chlorobenzene	24.7		1.0	0.75
124-48-1	Dibromochloromethane	27.5		1.0	0.32
75-00-3	Chloroethane	24.9		1.0	0.32
67-66-3	Chloroform	26.6		1.0	0.34
74-87-3	Chloromethane	22.5		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	24.6		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	27.7		1.0	0.36
110-82-7	Cyclohexane	27.5		1.0	0.18
75-71-8	Dichlorodifluoromethane	24.0		1.0	0.68
100-41-4	Ethylbenzene	25.2		1.0	0.74
106-93-4	1,2-Dibromoethane	26.3		1.0	0.73
98-82-8	Isopropylbenzene	27.2		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 480-443500/5
 Matrix: Water Lab File ID: T5003.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/04/2018 11:30
 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.: 443500 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	43.2		2.5	1.3
1634-04-4	Methyl tert-butyl ether	25.4		1.0	0.16
108-87-2	Methylcyclohexane	27.8		1.0	0.16
75-09-2	Methylene Chloride	24.9		1.0	0.44
100-42-5	Styrene	25.8		1.0	0.73
127-18-4	Tetrachloroethene	26.9		1.0	0.36
108-88-3	Toluene	24.1		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	26.9		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	26.9		1.0	0.37
79-01-6	Trichloroethene	25.2		1.0	0.46
75-69-4	Trichlorofluoromethane	29.4		1.0	0.88
75-01-4	Vinyl chloride	24.4		1.0	0.90
1330-20-7	Xylenes, Total	50.9		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	110		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5003.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 04-Nov-2018 11:30:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcs
 Misc. Info.: 480-0076114-005
 Operator ID: RF Instrument ID: HP5975T
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 04-Nov-2018 13:37:40 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0315

First Level Reviewer: farrellr

Date: 04-Nov-2018 13:37:40

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	4.589	4.589	0.000	97	127313	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.879	6.879	0.000	93	477328	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	300296	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.123	0.000	93	169111	25.0	27.5	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.372	4.372	0.000	0	270802	25.0	27.8	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	96	540171	25.0	25.4	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	199896	25.0	25.7	
11 Dichlorodifluoromethane	85	1.107	1.107	0.000	98	281445	25.0	24.0	
13 Chloromethane	50	1.252	1.252	0.000	99	256411	25.0	22.5	
151 Butadiene	54	1.325	1.325	0.000	91	220451	25.0	25.0	
14 Vinyl chloride	62	1.325	1.325	0.000	97	199927	25.0	24.4	
15 Bromomethane	94	1.584	1.584	0.000	98	121958	25.0	23.5	
16 Chloroethane	64	1.636	1.636	0.000	95	104262	25.0	24.9	
17 Trichlorofluoromethane	101	1.802	1.802	0.000	96	427521	25.0	29.4	
18 Dichlorofluoromethane	67	1.833	1.833	0.000	96	328842	25.0	24.4	
19 Ethyl ether	59	2.050	2.050	0.000	95	148472	25.0	26.9	
21 Acrolein	56	2.226	2.226	0.000	99	144736	125.0	114.9	
22 1,1-Dichloroethene	96	2.258	2.258	0.000	92	140445	25.0	29.8	
20 1,1,2-Trichloro-1,2,2-trif	101	2.268	2.268	0.000	50	167253	25.0	34.0	
23 Acetone	43	2.372	2.372	0.000	96	313564	125.0	129.2	
24 Iodomethane	142	2.403	2.403	0.000	89	278818	25.0	26.3	
25 Carbon disulfide	76	2.434	2.434	0.000	99	452524	25.0	25.4	
27 3-Chloro-1-propene	41	2.589	2.589	0.000	86	343248	25.0	25.3	
28 Methyl acetate	43	2.631	2.631	0.000	99	261560	50.0	43.2	
30 Methylene Chloride	84	2.724	2.724	0.000	94	176664	25.0	24.9	
31 2-Methyl-2-propanol	59	2.890	2.890	0.000	50	178679	250.0	228.3	
33 Methyl tert-butyl ether	73	2.900	2.900	0.000	99	561358	25.0	25.4	
32 trans-1,2-Dichloroethene	96	2.910	2.910	0.000	93	166989	25.0	26.9	
34 Acrylonitrile	53	2.973	2.973	0.000	98	701636	250.0	227.9	
35 Hexane	57	3.076	3.076	0.000	95	297350	25.0	26.6	
36 1,1-Dichloroethane	63	3.273	3.273	0.000	97	346959	25.0	25.8	

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	3.315	3.315	0.000	97	797734	50.0	47.3	
42 2,2-Dichloropropane	77	3.719	3.719	0.000	93	354611	25.0	29.5	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	88	191489	25.0	24.6	
44 2-Butanone (MEK)	43	3.771	3.771	0.000	97	420013	125.0	118.4	
47 Chlorobromomethane	128	3.936	3.936	0.000	93	96405	25.0	25.8	
48 Tetrahydrofuran	42	3.947	3.947	0.000	91	99720	50.0	43.1	
50 Chloroform	83	3.999	3.999	0.000	95	389084	25.0	26.6	
52 Cyclohexane	56	4.092	4.092	0.000	88	377312	25.0	27.5	
51 1,1,1-Trichloroethane	97	4.092	4.092	0.000	97	393306	25.0	29.0	
53 Carbon tetrachloride	117	4.195	4.195	0.000	95	354184	25.0	30.4	
54 1,1-Dichloropropene	75	4.206	4.206	0.000	89	256680	25.0	26.5	
55 Benzene	78	4.372	4.372	0.000	93	639326	25.0	24.8	
56 Isobutyl alcohol	43	4.403	4.403	0.000	95	175362	625.0	566.1	
57 1,2-Dichloroethane	62	4.434	4.434	0.000	97	406705	25.0	27.5	
59 n-Heptane	43	4.506	4.506	0.000	95	353419	25.0	27.1	
60 Trichloroethene	95	4.859	4.859	0.000	94	197937	25.0	25.2	
62 Methylcyclohexane	83	4.942	4.942	0.000	97	288716	25.0	27.8	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	82	178115	25.0	24.1	
65 Dibromomethane	93	5.149	5.149	0.000	90	126204	25.0	26.0	
66 1,4-Dioxane	88	5.159	5.159	0.000	35	22973	500.0	435.2	
67 Dichlorobromomethane	83	5.273	5.273	0.000	98	303005	25.0	27.2	
69 2-Chloroethyl vinyl ether	63	5.480	5.480	0.000	91	112846	25.0	22.8	
71 cis-1,3-Dichloropropene	75	5.594	5.594	0.000	89	297954	25.0	27.7	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	99	909572	125.0	118.6	
73 Toluene	92	5.812	5.812	0.000	96	437406	25.0	24.1	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	95	298801	25.0	26.9	
77 Ethyl methacrylate	69	6.050	6.050	0.000	92	187416	25.0	23.7	
78 1,1,2-Trichloroethane	83	6.164	6.164	0.000	96	121454	25.0	25.1	
79 Tetrachloroethene	166	6.206	6.206	0.000	94	221341	25.0	26.9	
80 1,3-Dichloropropane	76	6.289	6.289	0.000	95	261998	25.0	23.5	
81 2-Hexanone	43	6.330	6.330	0.000	98	649815	125.0	121.6	
82 Chlorodibromomethane	129	6.465	6.465	0.000	89	218125	25.0	27.5	
83 Ethylene Dibromide	107	6.548	6.548	0.000	94	167400	25.0	26.3	
86 Chlorobenzene	112	6.900	6.900	0.000	90	490601	25.0	24.7	
88 Ethylbenzene	91	6.962	6.962	0.000	99	917747	25.0	25.2	
89 1,1,1,2-Tetrachloroethane	131	6.973	6.973	0.000	88	208685	25.0	26.7	
90 m-Xylene & p-Xylene	106	7.056	7.056	0.000	0	349048	25.0	25.8	
91 o-Xylene	106	7.367	7.367	0.000	99	339762	25.0	25.1	
92 Styrene	104	7.387	7.387	0.000	91	577872	25.0	25.8	
93 Bromoform	173	7.584	7.584	0.000	96	135320	25.0	27.2	
95 Isopropylbenzene	105	7.646	7.646	0.000	97	989491	25.0	27.2	
97 Bromobenzene	156	7.926	7.926	0.000	92	262667	25.0	25.8	
98 1,1,2,2-Tetrachloroethane	83	7.968	7.968	0.000	96	177089	25.0	23.5	
99 N-Propylbenzene	91	7.978	7.978	0.000	99	1104673	25.0	26.4	
100 1,2,3-Trichloropropane	110	7.988	7.988	0.000	91	68717	25.0	22.4	
101 trans-1,4-Dichloro-2-buten	53	7.999	7.999	0.000	78	77260	25.0	24.8	
105 2-Chlorotoluene	126	8.071	8.071	0.000	94	209602	25.0	25.1	
104 1,3,5-Trimethylbenzene	105	8.123	8.123	0.000	93	859808	25.0	26.6	
102 4-Chlorotoluene	91	8.154	8.154	0.000	99	758630	25.0	26.1	
106 tert-Butylbenzene	134	8.382	8.382	0.000	92	166698	25.0	24.8	
107 1,2,4-Trimethylbenzene	105	8.424	8.424	0.000	97	906544	25.0	26.3	
109 sec-Butylbenzene	105	8.558	8.558	0.000	96	1006065	25.0	26.5	

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	8.672	8.672	0.000	95	934568	25.0	26.9	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	73	474544	25.0	25.4	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	96	482427	25.0	25.2	
115 n-Butylbenzene	91	9.014	9.014	0.000	98	845615	25.0	27.3	
116 1,2-Dichlorobenzene	146	9.056	9.056	0.000	95	449341	25.0	24.5	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	81	43423	25.0	24.7	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	94	386113	25.0	24.3	
120 Hexachlorobutadiene	225	10.486	10.486	0.000	97	237364	25.0	27.8	
121 Naphthalene	128	10.579	10.579	0.000	98	746768	25.0	25.7	
122 1,2,3-Trichlorobenzene	180	10.786	10.786	0.000	95	383076	25.0	26.7	
S 126 Xylenes, Total	1				0			50.9	
S 123 1,3-Dichloropropene, Total	1				0			54.6	
S 124 1,2-Dichloroethene, Total	1				0			51.5	
S 125 Total BTEX	1				0			125.1	

Reagents:

8260 CORP mix_00139	Amount Added: 12.50	Units: uL	
GAS CORP mix_00310	Amount Added: 12.50	Units: uL	
T_8260_IS_00209	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_Surr_00181	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181104-76114.b\\T5003.D

Injection Date: 04-Nov-2018 11:30:30

Instrument ID: HP5975T

Lims ID: LCS

Operator ID: RF

Client ID:

Worklist Smp#: 5

Purge Vol: 5.000 mL

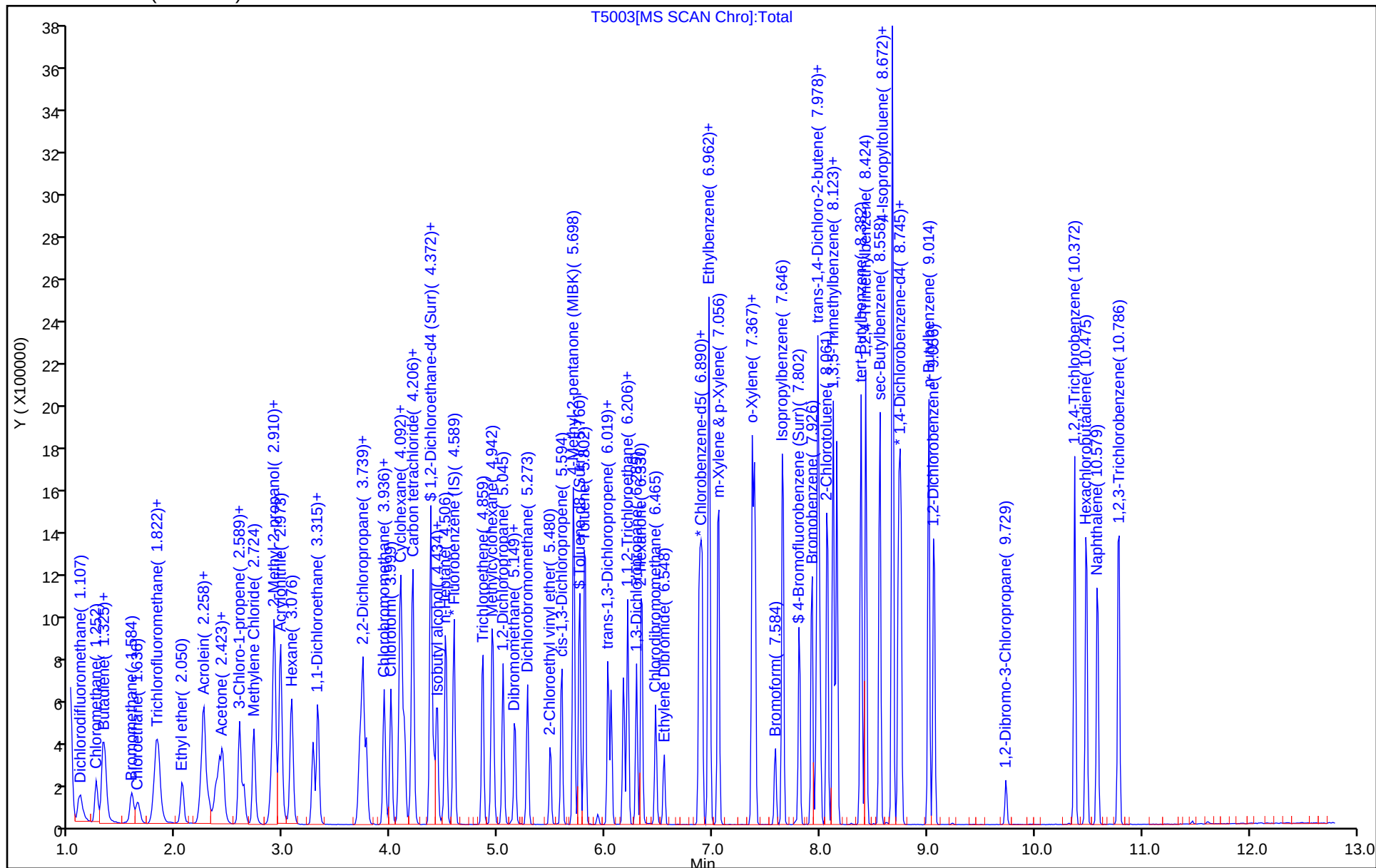
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 480-443770/7

Matrix: Water Lab File ID: P37829.D

Analysis Method: 8260C Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 11/05/2018 22:46

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	24.3		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	23.3		1.0	0.21
79-00-5	1,1,2-Trichloroethane	24.3		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	26.5		1.0	0.31
75-34-3	1,1-Dichloroethane	26.4		1.0	0.38
75-35-4	1,1-Dichloroethene	24.3		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	24.2		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	22.1		1.0	0.39
95-50-1	1,2-Dichlorobenzene	25.1		1.0	0.79
107-06-2	1,2-Dichloroethane	22.1		1.0	0.21
78-87-5	1,2-Dichloropropane	26.4		1.0	0.72
541-73-1	1,3-Dichlorobenzene	25.2		1.0	0.78
106-46-7	1,4-Dichlorobenzene	25.4		1.0	0.84
78-93-3	2-Butanone (MEK)	132		10	1.3
591-78-6	2-Hexanone	137		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	139		5.0	2.1
67-64-1	Acetone	128		10	3.0
71-43-2	Benzene	26.2		1.0	0.41
75-27-4	Bromodichloromethane	23.7		1.0	0.39
75-25-2	Bromoform	24.3		1.0	0.26
74-83-9	Bromomethane	21.9		1.0	0.69
75-15-0	Carbon disulfide	27.2		1.0	0.19
56-23-5	Carbon tetrachloride	23.7		1.0	0.27
108-90-7	Chlorobenzene	25.4		1.0	0.75
124-48-1	Dibromochloromethane	23.9		1.0	0.32
75-00-3	Chloroethane	25.3		1.0	0.32
67-66-3	Chloroform	23.2		1.0	0.34
74-87-3	Chloromethane	22.0		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	24.5		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	25.4		1.0	0.36
110-82-7	Cyclohexane	29.6		1.0	0.18
75-71-8	Dichlorodifluoromethane	23.1		1.0	0.68
100-41-4	Ethylbenzene	26.9		1.0	0.74
106-93-4	1,2-Dibromoethane	23.7		1.0	0.73
98-82-8	Isopropylbenzene	27.1		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 480-443770/7
 Matrix: Water Lab File ID: P37829.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/05/2018 22:46
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443770 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	52.4		2.5	1.3
1634-04-4	Methyl tert-butyl ether	22.9		1.0	0.16
108-87-2	Methylcyclohexane	27.2		1.0	0.16
75-09-2	Methylene Chloride	22.3		1.0	0.44
100-42-5	Styrene	27.9		1.0	0.73
127-18-4	Tetrachloroethene	25.8		1.0	0.36
108-88-3	Toluene	26.3		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	25.3		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	25.8		1.0	0.37
79-01-6	Trichloroethene	25.4		1.0	0.46
75-69-4	Trichlorofluoromethane	21.6		1.0	0.88
75-01-4	Vinyl chloride	20.6		1.0	0.90
1330-20-7	Xylenes, Total	52.6		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	96		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		77-120
460-00-4	4-Bromofluorobenzene (Surr)	99		73-120
1868-53-7	Dibromofluoromethane (Surr)	89		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P37829.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 05-Nov-2018 22:46:30 ALS Bottle#: 4 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 480-0076157-007
 Operator ID: RB Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181105-76157.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 05-Nov-2018 22:57:10 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0326

First Level Reviewer: baroner

Date: 05-Nov-2018 23:02:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.336	10.336	0.000	98	259487	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.290	0.000	85	516772	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	94	590141	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	93	334408	25.0	22.3	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.995	0.000	0	201159	25.0	22.8	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.325	0.000	93	1167581	25.0	24.0	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	95	432541	25.0	24.7	
10 Dichlorodifluoromethane	85	4.246	4.252	-0.006	99	498373	25.0	23.1	
11 Chloromethane	50	4.666	4.666	0.000	99	811126	25.0	22.0	
17 Vinyl chloride	62	4.854	4.855	-0.001	98	603135	25.0	20.6	
144 Butadiene	54	4.903	4.897	0.006	91	585665	25.0	21.8	
12 Bromomethane	94	5.475	5.481	-0.006	91	383706	25.0	21.9	
13 Chloroethane	64	5.621	5.615	0.006	98	354540	25.0	25.3	
19 Dichlorofluoromethane	67	5.901	5.901	0.000	97	763790	25.0	22.1	
14 Trichlorofluoromethane	101	5.962	5.956	0.006	97	641166	25.0	21.6	
20 Ethyl ether	59	6.321	6.321	0.000	99	392452	25.0	26.7	
22 Acrolein	56	6.619	6.619	0.000	100	445729	125.0	163.3	
16 1,1,2-Trichloro-1,2,2-trif	101	6.631	6.625	0.006	90	361284	25.0	26.5	
25 1,1-Dichloroethene	96	6.728	6.722	0.006	95	363427	25.0	24.3	
24 Acetone	43	6.807	6.807	0.000	100	903764	125.0	128.3	
18 Iodomethane	142	7.020	7.014	0.006	98	731678	25.0	25.9	
27 Carbon disulfide	76	7.118	7.118	0.000	100	1207857	25.0	27.2	
30 Methyl acetate	43	7.172	7.172	0.000	100	850800	50.0	52.4	
28 3-Chloro-1-propene	41	7.197	7.197	0.000	89	798809	25.0	31.5	
31 Methylene Chloride	84	7.397	7.391	0.006	96	445338	25.0	22.3	
33 2-Methyl-2-propanol	59	7.416	7.416	0.000	98	558115	250.0	256.6	
32 Methyl tert-butyl ether	73	7.604	7.604	0.000	98	1037005	25.0	22.9	
35 trans-1,2-Dichloroethene	96	7.695	7.696	-0.001	95	405630	25.0	25.3	
34 Acrylonitrile	53	7.726	7.726	0.000	99	2030276	250.0	270.2	
36 Hexane	57	7.896	7.896	0.000	95	538411	25.0	28.3	
38 Vinyl acetate	43	8.194	8.195	0.000	97	1943743	50.0	51.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
40 1,1-Dichloroethane	63	8.249	8.249	0.000	96	797818	25.0	26.4	
44 2-Butanone (MEK)	43	8.924	8.931	-0.007	98	1396660	125.0	131.8	
45 2,2-Dichloropropane	77	8.943	8.943	0.000	91	446392	25.0	22.6	
43 cis-1,2-Dichloroethene	96	8.961	8.961	0.000	85	455947	25.0	24.5	
50 Chlorobromomethane	128	9.289	9.296	-0.007	94	227357	25.0	24.1	
51 Tetrahydrofuran	42	9.302	9.302	0.000	91	360707	50.0	52.3	
49 Chloroform	83	9.326	9.326	0.000	96	697357	25.0	23.2	
52 1,1,1-Trichloroethane	97	9.557	9.557	0.000	98	574793	25.0	24.3	
54 Cyclohexane	56	9.600	9.594	0.006	95	688659	25.0	29.6	
56 1,1-Dichloropropene	75	9.740	9.734	0.006	92	542349	25.0	25.4	
53 Isobutyl alcohol	43	9.746	9.746	0.000	89	770418	625.0	666.8	
55 Carbon tetrachloride	117	9.752	9.752	0.000	96	533762	25.0	23.7	
57 Benzene	78	10.032	10.032	0.000	98	1600793	25.0	26.2	
60 1,2-Dichloroethane	62	10.086	10.087	0.000	96	583396	25.0	22.1	
59 n-Heptane	43	10.092	10.093	-0.001	96	443106	25.0	30.0	
62 Trichloroethene	95	10.786	10.786	0.000	96	414169	25.0	25.4	
64 Methylcyclohexane	83	10.987	10.987	0.000	96	525257	25.0	27.2	
63 1,2-Dichloropropane	63	11.127	11.127	0.000	97	465646	25.0	26.4	
68 1,4-Dioxane	88	11.248	11.242	0.006	98	70770	500.0	498.7	
69 Dibromomethane	93	11.327	11.334	-0.007	95	271332	25.0	22.5	
70 Dichlorobromomethane	83	11.461	11.461	0.000	98	540516	25.0	23.7	
71 2-Chloroethyl vinyl ether	63	11.711	11.717	-0.006	91	165731	25.0	24.5	
73 cis-1,3-Dichloropropene	75	11.990	11.997	-0.007	93	635679	25.0	25.4	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	97	2646134	125.0	138.5	
76 Toluene	92	12.416	12.416	0.000	98	986615	25.0	26.3	
77 Ethyl methacrylate	69	12.635	12.635	-0.001	95	512751	25.0	27.0	
78 trans-1,3-Dichloropropene	75	12.708	12.708	-0.001	95	596742	25.0	25.8	
79 1,1,2-Trichloroethane	83	12.994	12.994	0.000	92	317217	25.0	24.3	
80 Tetrachloroethene	166	13.140	13.146	-0.007	97	455284	25.0	25.8	
83 2-Hexanone	43	13.183	13.183	0.000	97	2007621	125.0	137.0	
82 1,3-Dichloropropane	76	13.232	13.232	0.000	96	641970	25.0	24.8	
81 Chlorodibromomethane	129	13.566	13.572	-0.006	90	439900	25.0	23.9	
85 Ethylene Dibromide	107	13.767	13.767	0.000	100	401415	25.0	23.7	
87 Chlorobenzene	112	14.327	14.327	0.000	98	1155733	25.0	25.4	
89 Ethylbenzene	91	14.369	14.375	-0.006	96	1784646	25.0	26.9	
88 1,1,1,2-Tetrachloroethane	131	14.406	14.412	-0.006	95	438281	25.0	25.2	
90 m-Xylene & p-Xylene	106	14.509	14.509	0.000	0	746837	25.0	26.5	
93 o-Xylene	106	15.057	15.057	0.000	96	728451	25.0	26.1	
94 Styrene	104	15.081	15.087	-0.006	96	1259510	25.0	27.9	
92 Bromoform	173	15.470	15.470	0.000	96	315649	25.0	24.3	
95 Isopropylbenzene	105	15.489	15.489	0.000	96	1739896	25.0	27.1	
97 1,1,2,2-Tetrachloroethane	83	15.957	15.957	0.000	96	504713	25.0	23.3	
98 trans-1,4-Dichloro-2-buten	53	16.012	16.006	0.006	64	139681	25.0	23.8	
99 N-Propylbenzene	91	16.012	16.012	0.000	98	1940925	25.0	26.6	
100 Bromobenzene	156	16.030	16.036	-0.006	92	539613	25.0	24.6	
101 1,2,3-Trichloropropane	110	16.048	16.054	-0.006	78	159161	25.0	22.7	
102 1,3,5-Trimethylbenzene	105	16.200	16.200	0.000	96	1459826	25.0	27.3	
103 2-Chlorotoluene	126	16.219	16.219	0.000	96	479813	25.0	26.0	
105 4-Chlorotoluene	126	16.346	16.346	0.000	97	496893	25.0	25.6	
106 tert-Butylbenzene	134	16.644	16.644	-0.001	94	317698	25.0	26.4	
107 1,2,4-Trimethylbenzene	105	16.705	16.705	0.000	97	1548235	25.0	27.1	
109 sec-Butylbenzene	105	16.906	16.906	0.000	94	1652248	25.0	27.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
112 4-Isopropyltoluene	119	17.058	17.058	0.000	97	1454599	25.0	28.0	
110 1,3-Dichlorobenzene	146	17.174	17.174	0.000	99	960274	25.0	25.2	
111 1,4-Dichlorobenzene	146	17.277	17.277	0.000	95	1004181	25.0	25.4	
115 n-Butylbenzene	91	17.569	17.569	0.000	97	1201783	25.0	26.2	
116 1,2-Dichlorobenzene	146	17.776	17.776	0.000	98	939681	25.0	25.1	
117 1,2-Dibromo-3-Chloropropan	75	18.810	18.810	0.000	86	99354	25.0	22.1	
119 1,2,4-Trichlorobenzene	180	19.911	19.911	0.000	94	614820	25.0	24.2	
120 Hexachlorobutadiene	225	20.033	20.027	0.006	97	213393	25.0	25.7	
121 Naphthalene	128	20.349	20.349	0.000	97	1612045	25.0	24.1	
122 1,2,3-Trichlorobenzene	180	20.726	20.721	0.005	96	580054	25.0	23.8	

Reagents:

8260 CORP mix_00139	Amount Added: 12.50	Units: uL	
GAS CORP mix_00310	Amount Added: 12.50	Units: uL	
P 8260 IS_00336	Amount Added: 1.25	Units: uL	Run Reagent
P 8260 Surr._00310	Amount Added: 1.25	Units: uL	Run Reagent

Operator ID: RB

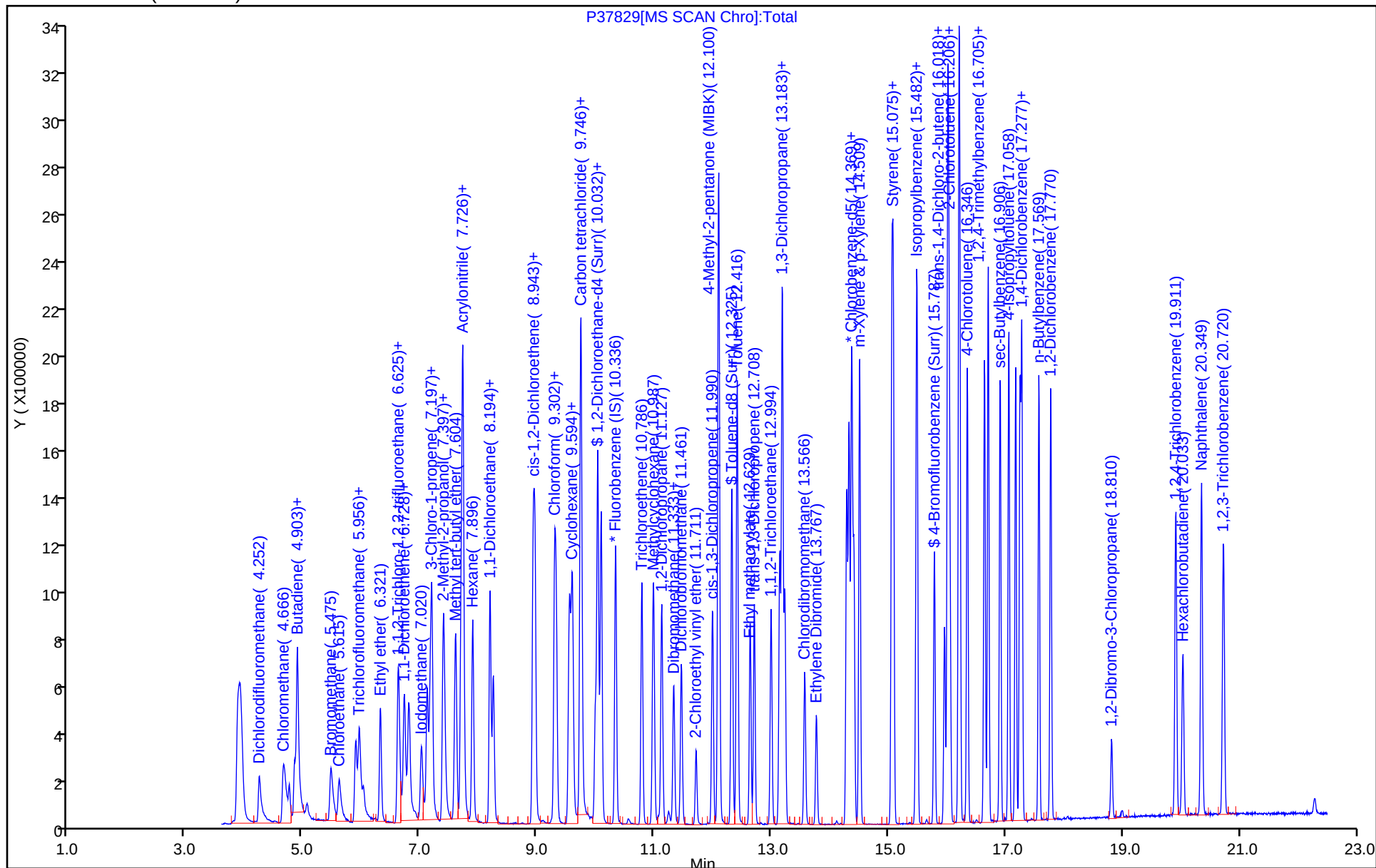
Worklist Smp#: 7

Client ID:

ALS Bottle#: 4

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 480-443801/5

Matrix: Water Lab File ID: P37854.D

Analysis Method: 8260C Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 10:16

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 443801 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	24.4		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	24.1		1.0	0.21
79-00-5	1,1,2-Trichloroethane	24.3		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	28.4		1.0	0.31
75-34-3	1,1-Dichloroethane	26.3		1.0	0.38
75-35-4	1,1-Dichloroethene	23.4		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	24.5		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	22.2		1.0	0.39
95-50-1	1,2-Dichlorobenzene	25.4		1.0	0.79
107-06-2	1,2-Dichloroethane	22.3		1.0	0.21
78-87-5	1,2-Dichloropropane	26.6		1.0	0.72
541-73-1	1,3-Dichlorobenzene	25.2		1.0	0.78
106-46-7	1,4-Dichlorobenzene	25.4		1.0	0.84
78-93-3	2-Butanone (MEK)	139		10	1.3
591-78-6	2-Hexanone	144		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	143		5.0	2.1
67-64-1	Acetone	139		10	3.0
71-43-2	Benzene	25.9		1.0	0.41
75-27-4	Bromodichloromethane	24.2		1.0	0.39
75-25-2	Bromoform	24.8		1.0	0.26
74-83-9	Bromomethane	21.7		1.0	0.69
75-15-0	Carbon disulfide	26.4		1.0	0.19
56-23-5	Carbon tetrachloride	24.1		1.0	0.27
108-90-7	Chlorobenzene	25.5		1.0	0.75
124-48-1	Dibromochloromethane	24.4		1.0	0.32
75-00-3	Chloroethane	25.3		1.0	0.32
67-66-3	Chloroform	23.3		1.0	0.34
74-87-3	Chloromethane	21.5		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	24.8		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	26.0		1.0	0.36
110-82-7	Cyclohexane	29.9		1.0	0.18
75-71-8	Dichlorodifluoromethane	21.5		1.0	0.68
100-41-4	Ethylbenzene	26.6		1.0	0.74
106-93-4	1,2-Dibromoethane	24.4		1.0	0.73
98-82-8	Isopropylbenzene	26.9		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 480-443801/5
 Matrix: Water Lab File ID: P37854.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/06/2018 10:16
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (60) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 443801 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	54.3		2.5	1.3
1634-04-4	Methyl tert-butyl ether	23.5		1.0	0.16
108-87-2	Methylcyclohexane	27.9		1.0	0.16
75-09-2	Methylene Chloride	22.0		1.0	0.44
100-42-5	Styrene	27.8		1.0	0.73
127-18-4	Tetrachloroethene	26.2		1.0	0.36
108-88-3	Toluene	26.6		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	25.1		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	25.8		1.0	0.37
79-01-6	Trichloroethene	25.2		1.0	0.46
75-69-4	Trichlorofluoromethane	21.6		1.0	0.88
75-01-4	Vinyl chloride	20.1		1.0	0.90
1330-20-7	Xylenes, Total	52.7		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	96		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		77-120
460-00-4	4-Bromofluorobenzene (Surr)	99		73-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P37854.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 06-Nov-2018 10:16:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 480-0076160-005
 Operator ID: RF Instrument ID: HP5973P
 Method: \\ChromNA\Buffalo\ChromData\HP5973P\20181106-76160.b\P-8260H2O.m
 Limit Group: MV - 8260C ICAL
 Last Update: 06-Nov-2018 11:57:23 Calib Date: 23-Oct-2018 01:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5973P\20181022-75728.b\P37204.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 06-Nov-2018 14:12:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.342	10.336	0.006	98	246972	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.290	14.284	0.006	85	498035	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.247	17.247	0.000	94	574995	25.0	25.0	
\$ 148 Dibromofluoromethane (Surr	113	9.539	9.539	0.000	94	324170	25.0	22.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	67	9.995	9.989	0.006	0	189013	25.0	22.5	
\$ 5 Toluene-d8 (Surr)	98	12.325	12.325	0.000	93	1125016	25.0	24.0	
\$ 6 4-Bromofluorobenzene (Surr	174	15.787	15.787	0.000	95	415499	25.0	24.7	
10 Dichlorodifluoromethane	85	4.252	4.252	0.000	99	442273	25.0	21.5	
11 Chloromethane	50	4.672	4.666	0.006	99	754753	25.0	21.5	
17 Vinyl chloride	62	4.855	4.855	0.000	98	561930	25.0	20.1	
144 Butadiene	54	4.903	4.903	0.000	90	554589	25.0	21.7	
12 Bromomethane	94	5.475	5.475	0.000	90	362467	25.0	21.7	
13 Chloroethane	64	5.615	5.621	-0.006	98	337674	25.0	25.3	
19 Dichlorofluoromethane	67	5.901	5.895	0.006	98	720946	25.0	21.9	
14 Trichlorofluoromethane	101	5.956	5.956	0.000	97	609153	25.0	21.6	
20 Ethyl ether	59	6.321	6.321	0.000	98	380407	25.0	27.2	
22 Acrolein	56	6.619	6.625	-0.006	100	439206	125.0	169.0	
16 1,1,2-Trichloro-1,2,2-trif	101	6.631	6.631	0.000	61	368857	25.0	28.4	
25 1,1-Dichloroethene	96	6.728	6.728	0.000	95	334284	25.0	23.4	
24 Acetone	43	6.807	6.807	0.000	99	931758	125.0	139.0	
18 Iodomethane	142	7.026	7.020	0.006	98	697776	25.0	26.0	
27 Carbon disulfide	76	7.118	7.118	0.000	100	1115241	25.0	26.4	
30 Methyl acetate	43	7.172	7.172	0.000	99	839938	50.0	54.3	
28 3-Chloro-1-propene	41	7.197	7.203	-0.006	89	751778	25.0	31.2	
31 Methylene Chloride	84	7.391	7.391	0.000	97	418361	25.0	22.0	
33 2-Methyl-2-propanol	59	7.410	7.416	-0.006	98	593446	250.0	286.6	
32 Methyl tert-butyl ether	73	7.604	7.604	0.000	99	1010385	25.0	23.5	
35 trans-1,2-Dichloroethene	96	7.696	7.696	0.000	96	382496	25.0	25.1	
34 Acrylonitrile	53	7.732	7.726	0.006	99	1960048	250.0	274.0	
36 Hexane	57	7.896	7.896	0.000	95	528371	25.0	29.2	
38 Vinyl acetate	43	8.194	8.194	0.000	97	1961664	50.0	54.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
40 1,1-Dichloroethane	63	8.249	8.249	0.000	96	756644	25.0	26.3	
44 2-Butanone (MEK)	43	8.931	8.931	0.000	98	1400979	125.0	138.9	
45 2,2-Dichloropropane	77	8.943	8.943	0.000	91	447823	25.0	23.9	
43 cis-1,2-Dichloroethene	96	8.961	8.967	-0.006	86	437878	25.0	24.8	
50 Chlorobromomethane	128	9.296	9.296	0.000	94	217306	25.0	24.2	
51 Tetrahydrofuran	42	9.302	9.308	-0.006	93	358220	50.0	54.6	
49 Chloroform	83	9.326	9.326	0.000	96	668133	25.0	23.3	
52 1,1,1-Trichloroethane	97	9.563	9.557	0.006	98	551315	25.0	24.4	
54 Cyclohexane	56	9.600	9.600	0.000	95	663627	25.0	29.9	
56 1,1-Dichloropropene	75	9.740	9.740	0.000	93	515410	25.0	25.4	
55 Carbon tetrachloride	117	9.758	9.752	0.006	91	514893	25.0	24.1	
53 Isobutyl alcohol	43	9.746	9.752	-0.006	96	803882	625.0	731.0	
57 Benzene	78	10.032	10.038	-0.006	98	1505543	25.0	25.9	
60 1,2-Dichloroethane	62	10.086	10.086	0.000	96	560335	25.0	22.3	
59 n-Heptane	43	10.099	10.099	0.000	97	445976	25.0	31.7	
62 Trichloroethene	95	10.786	10.786	0.000	96	390688	25.0	25.2	
64 Methylcyclohexane	83	10.987	10.987	0.000	96	512878	25.0	27.9	
63 1,2-Dichloropropane	63	11.127	11.127	0.000	96	446295	25.0	26.6	
68 1,4-Dioxane	88	11.242	11.248	-0.006	94	74587	500.0	545.4	
69 Dibromomethane	93	11.334	11.334	0.000	93	260780	25.0	22.7	
70 Dichlorobromomethane	83	11.461	11.461	0.000	97	524258	25.0	24.2	
71 2-Chloroethyl vinyl ether	63	11.711	11.717	-0.006	92	149701	25.0	23.3	
73 cis-1,3-Dichloropropene	75	11.997	11.997	0.000	94	620467	25.0	26.0	
75 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	97	2639378	125.0	143.4	
76 Toluene	92	12.416	12.416	0.000	98	964601	25.0	26.6	
77 Ethyl methacrylate	69	12.635	12.641	-0.007	94	505148	25.0	27.7	
78 trans-1,3-Dichloropropene	75	12.708	12.708	0.000	96	575126	25.0	25.8	
79 1,1,2-Trichloroethane	83	12.994	13.000	-0.006	93	305236	25.0	24.3	
80 Tetrachloroethene	166	13.146	13.140	0.006	98	446115	25.0	26.2	
83 2-Hexanone	43	13.189	13.189	0.000	97	2037589	125.0	144.3	
82 1,3-Dichloropropane	76	13.232	13.231	0.000	97	616728	25.0	24.7	
81 Chlorodibromomethane	129	13.572	13.572	0.000	90	432031	25.0	24.4	
85 Ethylene Dibromide	107	13.767	13.773	-0.006	100	397446	25.0	24.4	
87 Chlorobenzene	112	14.327	14.326	0.000	98	1116727	25.0	25.5	
89 Ethylbenzene	91	14.375	14.375	0.000	97	1697800	25.0	26.6	
88 1,1,1,2-Tetrachloroethane	131	14.412	14.406	0.006	95	423274	25.0	25.3	
90 m-Xylene & p-Xylene	106	14.509	14.509	0.000	0	719883	25.0	26.5	
93 o-Xylene	106	15.057	15.057	0.000	96	702802	25.0	26.2	
94 Styrene	104	15.087	15.087	0.000	96	1207624	25.0	27.8	
92 Bromoform	173	15.470	15.470	0.000	96	311002	25.0	24.8	
95 Isopropylbenzene	105	15.489	15.488	0.000	96	1679561	25.0	26.9	
97 1,1,2,2-Tetrachloroethane	83	15.957	15.963	-0.006	95	507396	25.0	24.1	
98 trans-1,4-Dichloro-2-buten	53	16.012	16.012	0.000	77	138828	25.0	24.2	
99 N-Propylbenzene	91	16.012	16.018	-0.006	98	1880548	25.0	26.4	
100 Bromobenzene	156	16.036	16.036	0.000	90	529127	25.0	24.7	
101 1,2,3-Trichloropropane	110	16.054	16.054	0.000	83	159895	25.0	23.4	
102 1,3,5-Trimethylbenzene	105	16.207	16.206	0.001	96	1419111	25.0	27.2	
103 2-Chlorotoluene	126	16.219	16.225	-0.006	97	460408	25.0	25.6	
105 4-Chlorotoluene	126	16.353	16.352	0.000	97	478843	25.0	25.3	
106 tert-Butylbenzene	134	16.645	16.644	0.000	94	309131	25.0	26.4	
107 1,2,4-Trimethylbenzene	105	16.705	16.705	0.000	97	1499599	25.0	26.9	
109 sec-Butylbenzene	105	16.912	16.912	0.000	94	1613952	25.0	27.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
112 4-Isopropyltoluene	119	17.058	17.058	0.000	96	1403344	25.0	27.7	
110 1,3-Dichlorobenzene	146	17.174	17.174	0.000	99	935937	25.0	25.2	
111 1,4-Dichlorobenzene	146	17.277	17.277	0.000	95	976755	25.0	25.4	
115 n-Butylbenzene	91	17.569	17.569	0.000	97	1181327	25.0	26.5	
116 1,2-Dichlorobenzene	146	17.776	17.776	0.000	98	926507	25.0	25.4	
117 1,2-Dibromo-3-Chloropropan	75	18.816	18.816	0.000	87	97410	25.0	22.2	
119 1,2,4-Trichlorobenzene	180	19.911	19.911	0.000	94	606828	25.0	24.5	
120 Hexachlorobutadiene	225	20.027	20.033	-0.006	96	209499	25.0	25.9	
121 Naphthalene	128	20.349	20.349	0.000	97	1655864	25.0	25.4	
122 1,2,3-Trichlorobenzene	180	20.727	20.727	0.000	96	587181	25.0	24.7	

Reagents:

8260 CORP mix_00139

Amount Added: 12.50

Units: uL

GAS CORP mix_00310

Amount Added: 12.50

Units: uL

P 8260 IS_00336

Amount Added: 1.25

Units: uL

Run Reagent

P 8260 Surr._00310

Amount Added: 1.25

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5973P\\20181106-76160.b\\P37854.D

Injection Date: 06-Nov-2018 10:16:30

Instrument ID: HP5973P

Operator ID: RF

Lims ID: LCS

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

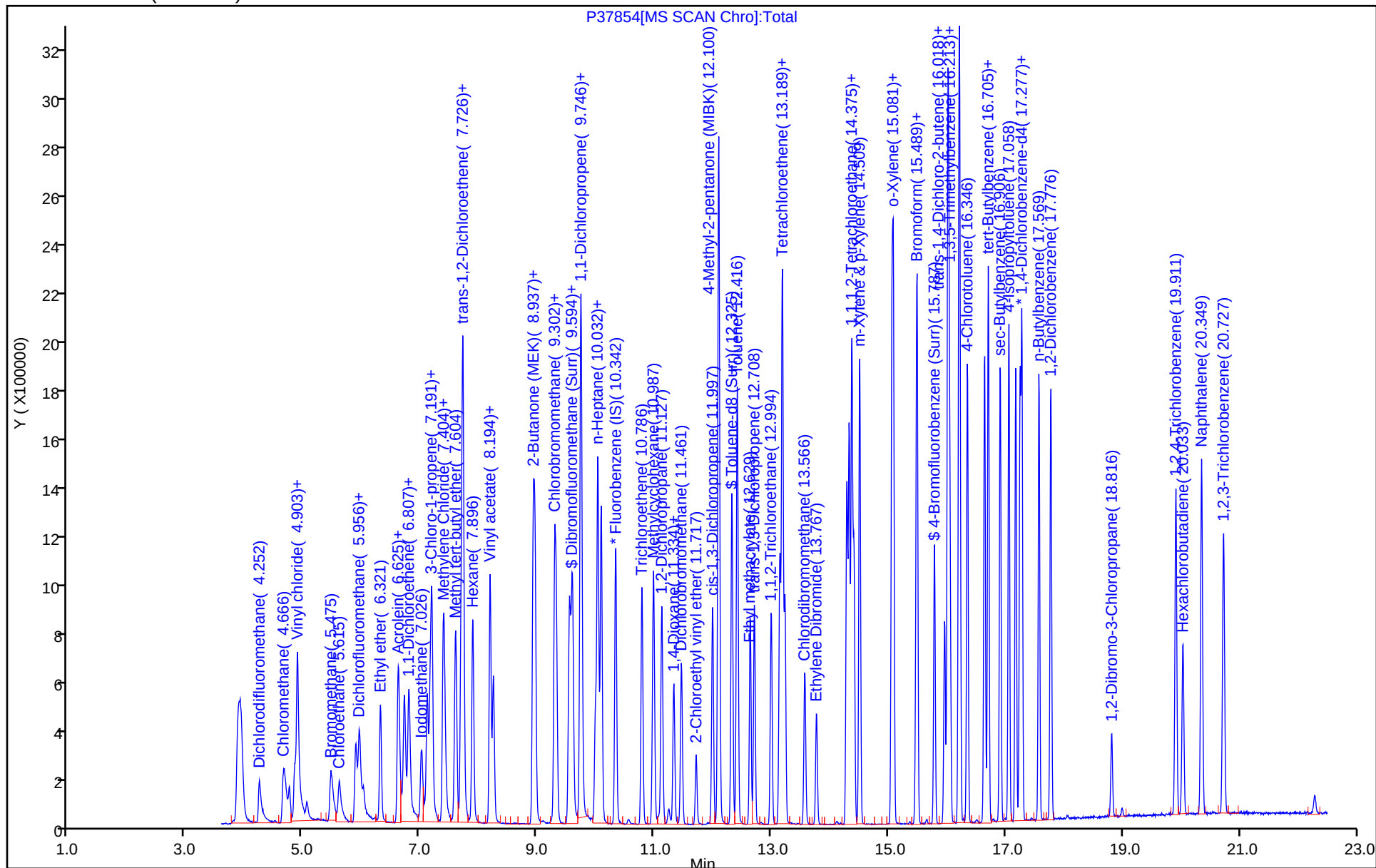
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: P-8260H2O

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GMW-2 MS</u>	Lab Sample ID: <u>480-144297-6 MS</u>
Matrix: <u>Water</u>	Lab File ID: <u>T5024.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/24/2018 12:15</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/04/2018 19:39</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (20)</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443500</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	35.0		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	26.5		1.0	0.21
79-00-5	1,1,2-Trichloroethane	27.9		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	38.6		1.0	0.31
75-34-3	1,1-Dichloroethane	30.5		1.0	0.38
75-35-4	1,1-Dichloroethene	34.4		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	28.6		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	28.2		1.0	0.39
95-50-1	1,2-Dichlorobenzene	27.8		1.0	0.79
107-06-2	1,2-Dichloroethane	30.6		1.0	0.21
78-87-5	1,2-Dichloropropane	27.9		1.0	0.72
541-73-1	1,3-Dichlorobenzene	28.2		1.0	0.78
106-46-7	1,4-Dichlorobenzene	27.6		1.0	0.84
78-93-3	2-Butanone (MEK)	125		10	1.3
591-78-6	2-Hexanone	133		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	136		5.0	2.1
67-64-1	Acetone	125		10	3.0
71-43-2	Benzene	28.4		1.0	0.41
75-27-4	Bromodichloromethane	30.3		1.0	0.39
75-25-2	Bromoform	29.2		1.0	0.26
74-83-9	Bromomethane	26.8		1.0	0.69
75-15-0	Carbon disulfide	28.0		1.0	0.19
56-23-5	Carbon tetrachloride	35.8		1.0	0.27
108-90-7	Chlorobenzene	29.3		1.0	0.75
124-48-1	Dibromochloromethane	29.8		1.0	0.32
75-00-3	Chloroethane	30.9		1.0	0.32
67-66-3	Chloroform	30.1		1.0	0.34
74-87-3	Chloromethane	26.6		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	30.0		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	29.3		1.0	0.36
110-82-7	Cyclohexane	31.1		1.0	0.18
75-71-8	Dichlorodifluoromethane	25.5		1.0	0.68
100-41-4	Ethylbenzene	29.4		1.0	0.74
106-93-4	1,2-Dibromoethane	28.5		1.0	0.73
98-82-8	Isopropylbenzene	30.5		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: GMW-2 MS Lab Sample ID: 480-144297-6 MS

Matrix: Water Lab File ID: T5024.D

Analysis Method: 8260C Date Collected: 10/24/2018 12:15

Sample wt/vol: 5 (mL) Date Analyzed: 11/04/2018 19:39

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.: 443500 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	47.7		2.5	1.3
1634-04-4	Methyl tert-butyl ether	28.6		1.0	0.16
108-87-2	Methylcyclohexane	32.1		1.0	0.16
75-09-2	Methylene Chloride	27.5		1.0	0.44
100-42-5	Styrene	29.1		1.0	0.73
127-18-4	Tetrachloroethene	32.2		1.0	0.36
108-88-3	Toluene	28.7		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	31.2		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	28.5		1.0	0.37
79-01-6	Trichloroethene	30.0		1.0	0.46
75-69-4	Trichlorofluoromethane	34.4		1.0	0.88
75-01-4	Vinyl chloride	29.3		1.0	0.90
1330-20-7	Xylenes, Total	58.6		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	99		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5024.D
 Lims ID: 480-144297-C-6 MS
 Client ID: GMW-2
 Sample Type: MS
 Inject. Date: 04-Nov-2018 19:39:30 ALS Bottle#: 26 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-144297-C-6 MS
 Misc. Info.: 480-0076114-019
 Operator ID: RF Instrument ID: HP5975T
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 05-Nov-2018 09:22:34 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0320

First Level Reviewer: nowakk

Date: 05-Nov-2018 09:22:34

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	4.589	4.589	0.000	96	126968	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.869	6.879	-0.010	93	475556	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	299887	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.123	0.000	93	151793	25.0	24.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.371	4.371	0.000	0	258780	25.0	26.6	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	95	513548	25.0	24.3	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	200085	25.0	25.8	
11 Dichlorodifluoromethane	85	1.097	1.107	-0.010	98	298766	25.0	25.5	
13 Chloromethane	50	1.252	1.252	0.000	99	301954	25.0	26.6	
14 Vinyl chloride	62	1.325	1.325	0.000	95	239244	25.0	29.3	
15 Bromomethane	94	1.573	1.584	-0.011	98	138680	25.0	26.8	
16 Chloroethane	64	1.646	1.636	0.010	95	129057	25.0	30.9	
17 Trichlorofluoromethane	101	1.801	1.802	-0.001	86	497735	25.0	34.4	
22 1,1-Dichloroethene	96	2.257	2.258	-0.001	90	162100	25.0	34.4	
20 1,1,2-Trichloro-1,2,2-trif	101	2.278	2.278	0.010	92	189407	25.0	38.6	a
23 Acetone	43	2.361	2.372	-0.011	97	301827	125.0	124.7	
25 Carbon disulfide	76	2.423	2.434	-0.011	98	497116	25.0	28.0	
28 Methyl acetate	43	2.631	2.631	-0.001	95	288579	50.0	47.7	
30 Methylene Chloride	84	2.724	2.724	0.000	93	193953	25.0	27.5	
33 Methyl tert-butyl ether	73	2.900	2.900	0.000	99	630630	25.0	28.6	
32 trans-1,2-Dichloroethene	96	2.910	2.910	0.000	90	193469	25.0	31.2	
36 1,1-Dichloroethane	63	3.273	3.273	0.000	97	410172	25.0	30.5	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	88	233259	25.0	30.0	
44 2-Butanone (MEK)	43	3.770	3.771	-0.001	98	441984	125.0	125.0	
50 Chloroform	83	3.998	3.999	-0.001	97	439445	25.0	30.1	
51 1,1,1-Trichloroethane	97	4.092	4.092	0.000	97	473877	25.0	35.0	
52 Cyclohexane	56	4.092	4.092	0.000	86	425363	25.0	31.1	
53 Carbon tetrachloride	117	4.195	4.195	0.000	96	416355	25.0	35.8	
55 Benzene	78	4.371	4.372	-0.001	94	729596	25.0	28.4	
57 1,2-Dichloroethane	62	4.423	4.434	-0.011	97	449793	25.0	30.6	
60 Trichloroethene	95	4.848	4.859	-0.011	94	234885	25.0	30.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
62 Methylcyclohexane	83	4.941	4.942	-0.001	97	332999	25.0	32.1	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	82	205244	25.0	27.9	
67 Dichlorobromomethane	83	5.273	5.273	0.000	97	337363	25.0	30.3	
71 cis-1,3-Dichloropropene	75	5.594	5.594	0.000	89	313494	25.0	29.3	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	98	1037395	125.0	135.8	
73 Toluene	92	5.802	5.812	-0.010	98	518627	25.0	28.7	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	98	316034	25.0	28.5	
78 1,1,2-Trichloroethane	83	6.164	6.165	0.000	94	134685	25.0	27.9	
79 Tetrachloroethene	166	6.206	6.206	0.000	94	264229	25.0	32.2	
81 2-Hexanone	43	6.330	6.330	0.000	99	707326	125.0	132.9	
82 Chlorodibromomethane	129	6.465	6.465	0.000	90	235271	25.0	29.8	
83 Ethylene Dibromide	107	6.548	6.548	0.000	96	180513	25.0	28.5	
86 Chlorobenzene	112	6.900	6.900	0.000	91	580747	25.0	29.3	
88 Ethylbenzene	91	6.962	6.962	0.000	100	1069050	25.0	29.4	
90 m-Xylene & p-Xylene	106	7.056	7.056	0.000	0	402801		29.9	
91 o-Xylene	106	7.366	7.367	-0.001	98	386971		28.7	
92 Styrene	104	7.387	7.387	0.000	92	649693	25.0	29.1	
93 Bromoform	173	7.584	7.584	0.000	96	144847	25.0	29.2	
95 Isopropylbenzene	105	7.646	7.646	0.000	98	1106300	25.0	30.5	
98 1,1,2,2-Tetrachloroethane	83	7.967	7.968	-0.001	96	199519	25.0	26.5	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	71	526811	25.0	28.2	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	92	527380	25.0	27.6	
116 1,2-Dichlorobenzene	146	9.056	9.056	0.000	94	509861	25.0	27.8	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	81	49626	25.0	28.2	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	94	454162	25.0	28.6	
S 126 Xylenes, Total	1				0			58.6	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260 CORP mix_00139

Amount Added: 12.50

Units: uL

GAS CORP mix_00310

Amount Added: 12.50

Units: uL

T_8260_IS_00209

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_Surr_00181

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5024.D

Injection Date: 04-Nov-2018 19:39:30

Instrument ID: HP5975T

Operator ID: RF

Lims ID: 480-144297-C-6 MS

Worklist Smp#: 19

Client ID: GMW-2

Purge Vol: 5.000 mL

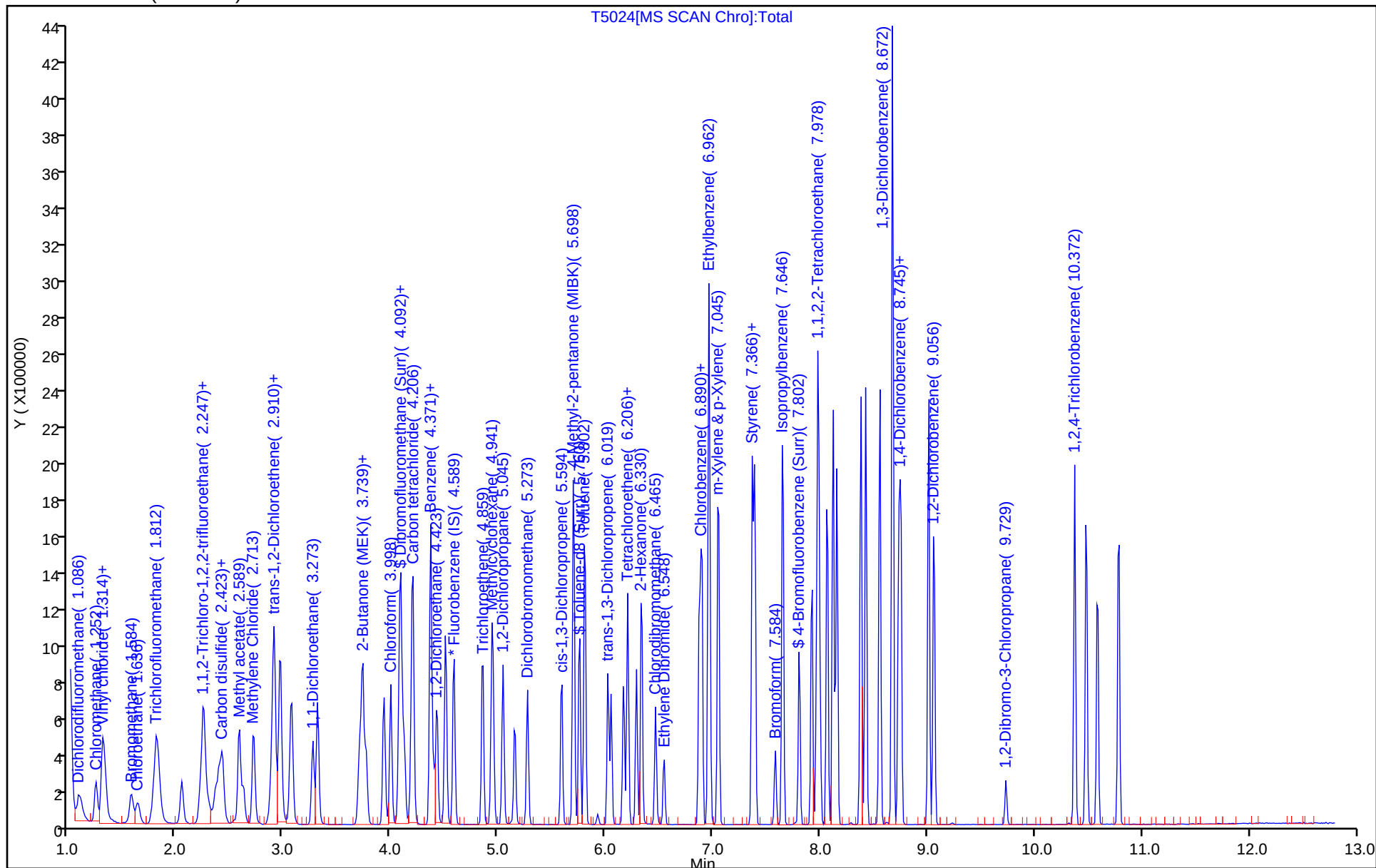
Dil. Factor: 1.0000

ALS Bottle#: 26

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5024.D
Injection Date: 04-Nov-2018 19:39:30 Instrument ID: HP5975T
Lims ID: 480-144297-C-6 MS
Client ID: GMW-2
Operator ID: RF
Purge Vol: 5.000 mL
Method: T-8260
Column: ZB-624 (0.25 mm)

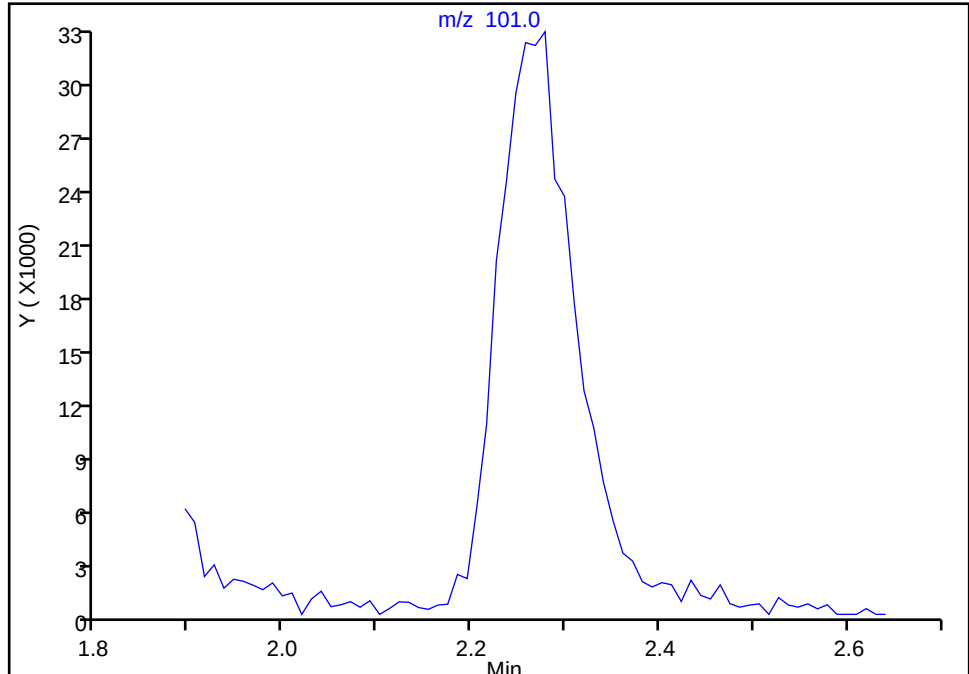
ALS Bottle#: 26 Worklist Smp#: 19
Dil. Factor: 1.0000
Limit Group: MV - 8260C ICAL
Detector: MS SCAN

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

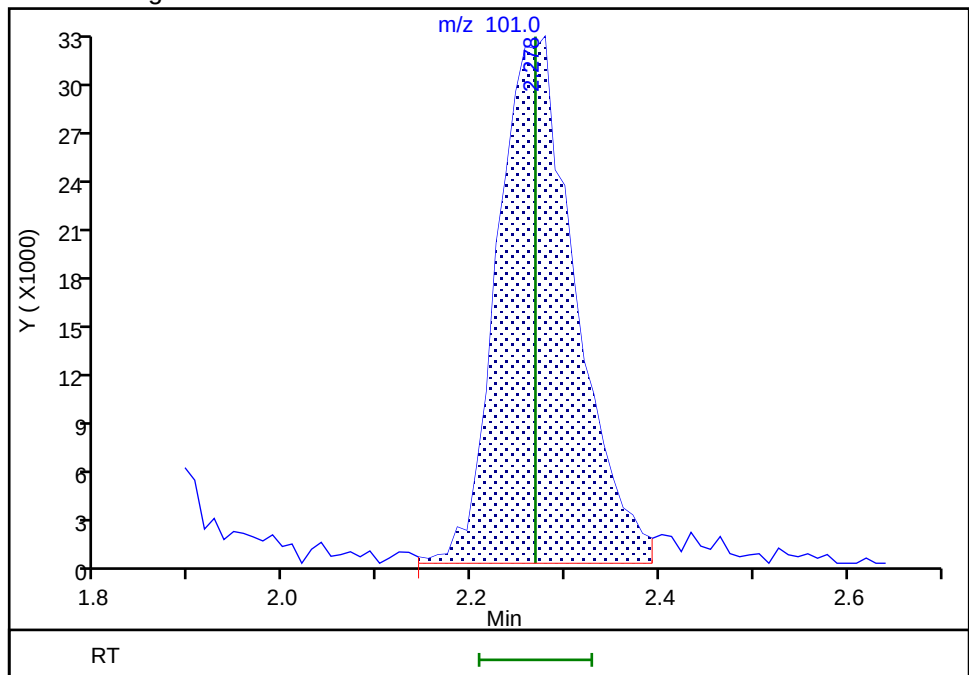
Not Detected
Expected RT: 2.27

Processing Integration Results



RT: 2.28
Area: 189407
Amount: 38.619398
Amount Units: ug/L

Manual Integration Results



Reviewer: nowakk, 05-Nov-2018 09:21:48
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Client Sample ID: GMW-2 MSD Lab Sample ID: 480-144297-6 MSD

Matrix: Water Lab File ID: T5025.D

Analysis Method: 8260C Date Collected: 10/24/2018 12:15

Sample wt/vol: 5 (mL) Date Analyzed: 11/04/2018 20:03

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.: 443500 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	34.2		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	26.6		1.0	0.21
79-00-5	1,1,2-Trichloroethane	28.3		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	34.3		1.0	0.31
75-34-3	1,1-Dichloroethane	30.5		1.0	0.38
75-35-4	1,1-Dichloroethene	34.0		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	27.9		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	28.3		1.0	0.39
95-50-1	1,2-Dichlorobenzene	28.0		1.0	0.79
107-06-2	1,2-Dichloroethane	30.1		1.0	0.21
78-87-5	1,2-Dichloropropane	26.9		1.0	0.72
541-73-1	1,3-Dichlorobenzene	28.2		1.0	0.78
106-46-7	1,4-Dichlorobenzene	28.8		1.0	0.84
78-93-3	2-Butanone (MEK)	124		10	1.3
591-78-6	2-Hexanone	131		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	132		5.0	2.1
67-64-1	Acetone	120		10	3.0
71-43-2	Benzene	28.6		1.0	0.41
75-27-4	Bromodichloromethane	30.9		1.0	0.39
75-25-2	Bromoform	29.5		1.0	0.26
74-83-9	Bromomethane	29.3		1.0	0.69
75-15-0	Carbon disulfide	28.2		1.0	0.19
56-23-5	Carbon tetrachloride	36.4		1.0	0.27
108-90-7	Chlorobenzene	28.7		1.0	0.75
124-48-1	Dibromochloromethane	28.7		1.0	0.32
75-00-3	Chloroethane	31.9		1.0	0.32
67-66-3	Chloroform	29.9		1.0	0.34
74-87-3	Chloromethane	26.6		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	28.2		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	29.2		1.0	0.36
110-82-7	Cyclohexane	29.4		1.0	0.18
75-71-8	Dichlorodifluoromethane	24.0		1.0	0.68
100-41-4	Ethylbenzene	29.6		1.0	0.74
106-93-4	1,2-Dibromoethane	28.9		1.0	0.73
98-82-8	Isopropylbenzene	31.3		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GMW-2 MSD</u>	Lab Sample ID: <u>480-144297-6 MSD</u>
Matrix: <u>Water</u>	Lab File ID: <u>T5025.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>10/24/2018 12:15</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/04/2018 20:03</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>ZB-624 (20)</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>443500</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	45.3		2.5	1.3
1634-04-4	Methyl tert-butyl ether	27.5		1.0	0.16
108-87-2	Methylcyclohexane	32.0		1.0	0.16
75-09-2	Methylene Chloride	27.7		1.0	0.44
100-42-5	Styrene	29.1		1.0	0.73
127-18-4	Tetrachloroethene	31.8		1.0	0.36
108-88-3	Toluene	28.3		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	30.8		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	29.3		1.0	0.37
79-01-6	Trichloroethene	29.7		1.0	0.46
75-69-4	Trichlorofluoromethane	34.9		1.0	0.88
75-01-4	Vinyl chloride	29.4		1.0	0.90
1330-20-7	Xylenes, Total	59.2		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	96		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	100		75-123

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5025.D
 Lims ID: 480-144297-C-6 MSD
 Client ID: GMW-2
 Sample Type: MSD
 Inject. Date: 04-Nov-2018 20:03:30 ALS Bottle#: 27 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-144297-C-6 MSD
 Misc. Info.: 480-0076114-020
 Operator ID: RF Instrument ID: HP5975T
 Method: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 05-Nov-2018 09:23:19 Calib Date: 29-Oct-2018 21:34:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Buffalo\ChromData\HP5975T\20181029-75946.b\T4719.D
 Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX0320

First Level Reviewer: nowakk

Date: 05-Nov-2018 09:23:19

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	4.589	4.589	0.000	97	129671	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.879	6.879	0.000	92	484541	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.734	8.734	0.000	97	299369	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.123	4.123	0.000	92	157048	25.0	25.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.372	4.371	0.001	0	256994	25.0	25.9	
\$ 6 Toluene-d8 (Surr)	98	5.760	5.760	0.000	95	518082	25.0	24.0	
\$ 7 4-Bromofluorobenzene (Surr	174	7.802	7.802	0.000	0	201426	25.0	25.5	
11 Dichlorodifluoromethane	85	1.097	1.107	-0.010	99	286892	25.0	24.0	
13 Chloromethane	50	1.252	1.252	0.000	99	308152	25.0	26.6	M
14 Vinyl chloride	62	1.325	1.325	0.000	96	245401	25.0	29.4	
15 Bromomethane	94	1.584	1.584	0.000	97	154491	25.0	29.3	
16 Chloroethane	64	1.646	1.636	0.010	96	135874	25.0	31.9	
17 Trichlorofluoromethane	101	1.812	1.802	0.010	98	516819	25.0	34.9	
22 1,1-Dichloroethene	96	2.258	2.258	0.000	90	163191	25.0	34.0	
20 1,1,2-Trichloro-1,2,2-trif	101	2.268	2.278	0.000	90	172046	25.0	34.3	
23 Acetone	43	2.372	2.372	0.000	96	296171	125.0	119.8	
25 Carbon disulfide	76	2.434	2.434	0.000	98	511937	25.0	28.2	
28 Methyl acetate	43	2.631	2.631	0.000	99	279718	50.0	45.3	
30 Methylene Chloride	84	2.724	2.724	0.000	93	199275	25.0	27.7	
33 Methyl tert-butyl ether	73	2.910	2.900	0.010	98	620992	25.0	27.5	
32 trans-1,2-Dichloroethene	96	2.910	2.910	0.000	90	194828	25.0	30.8	
36 1,1-Dichloroethane	63	3.273	3.273	0.000	97	418955	25.0	30.5	
43 cis-1,2-Dichloroethene	96	3.739	3.739	0.000	88	223702	25.0	28.2	
44 2-Butanone (MEK)	43	3.771	3.771	0.000	97	447494	125.0	123.9	
50 Chloroform	83	3.999	3.999	0.000	96	446526	25.0	29.9	
51 1,1,1-Trichloroethane	97	4.092	4.092	0.000	97	473347	25.0	34.2	
52 Cyclohexane	56	4.092	4.092	0.000	85	411073	25.0	29.4	
53 Carbon tetrachloride	117	4.195	4.195	0.000	97	431945	25.0	36.4	
55 Benzene	78	4.372	4.372	0.000	94	751063	25.0	28.6	
57 1,2-Dichloroethane	62	4.434	4.434	0.000	98	453225	25.0	30.1	
60 Trichloroethene	95	4.859	4.859	0.000	94	237068	25.0	29.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
62 Methylcyclohexane	83	4.942	4.942	0.000	98	338690	25.0	32.0	
63 1,2-Dichloropropane	63	5.045	5.045	0.000	84	202436	25.0	26.9	
67 Dichlorobromomethane	83	5.273	5.273	0.000	96	351332	25.0	30.9	
71 cis-1,3-Dichloropropene	75	5.594	5.594	0.000	90	319752	25.0	29.2	
72 4-Methyl-2-pentanone (MIBK)	43	5.698	5.698	0.000	98	1026188	125.0	131.9	
73 Toluene	92	5.802	5.812	-0.010	97	521196	25.0	28.3	
75 trans-1,3-Dichloropropene	75	6.019	6.019	0.000	98	331283	25.0	29.3	
78 1,1,2-Trichloroethane	83	6.164	6.165	0.000	96	138995	25.0	28.3	
79 Tetrachloroethene	166	6.206	6.206	0.000	93	265589	25.0	31.8	
81 2-Hexanone	43	6.330	6.330	0.000	99	708101	125.0	130.5	
82 Chlorodibromomethane	129	6.465	6.465	0.000	91	231102	25.0	28.7	
83 Ethylene Dibromide	107	6.548	6.548	0.000	99	186475	25.0	28.9	
86 Chlorobenzene	112	6.900	6.900	0.000	92	579794	25.0	28.7	
88 Ethylbenzene	91	6.962	6.962	0.000	99	1095216	25.0	29.6	
90 m-Xylene & p-Xylene	106	7.056	7.056	0.000	0	414662		30.2	
91 o-Xylene	106	7.367	7.367	0.000	99	398434		29.0	
92 Styrene	104	7.387	7.387	0.000	93	663453	25.0	29.1	
93 Bromoform	173	7.584	7.584	0.000	95	148876	25.0	29.5	
95 Isopropylbenzene	105	7.646	7.646	0.000	98	1135876	25.0	31.3	
98 1,1,2,2-Tetrachloroethane	83	7.968	7.968	0.000	97	199633	25.0	26.6	
110 1,3-Dichlorobenzene	146	8.672	8.672	0.000	71	526361	25.0	28.2	
113 1,4-Dichlorobenzene	146	8.755	8.755	0.000	96	550509	25.0	28.8	
116 1,2-Dichlorobenzene	146	9.066	9.056	0.010	94	512245	25.0	28.0	
117 1,2-Dibromo-3-Chloropropan	75	9.729	9.729	0.000	82	49706	25.0	28.3	
119 1,2,4-Trichlorobenzene	180	10.372	10.372	0.000	94	441257	25.0	27.9	
S 126 Xylenes, Total	1				0			59.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00139

Amount Added: 12.50

Units: uL

GAS CORP mix_00310

Amount Added: 12.50

Units: uL

T_8260_IS_00209

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_Surr_00181

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5975T\\20181104-76114.b\\T5025.D

Injection Date: 04-Nov-2018 20:03:30

Instrument ID: HP5975T

Operator ID: RF

Lims ID: 480-144297-C-6 MSD

Worklist Smp#: 20

Client ID: GMW-2

Purge Vol: 5.000 mL

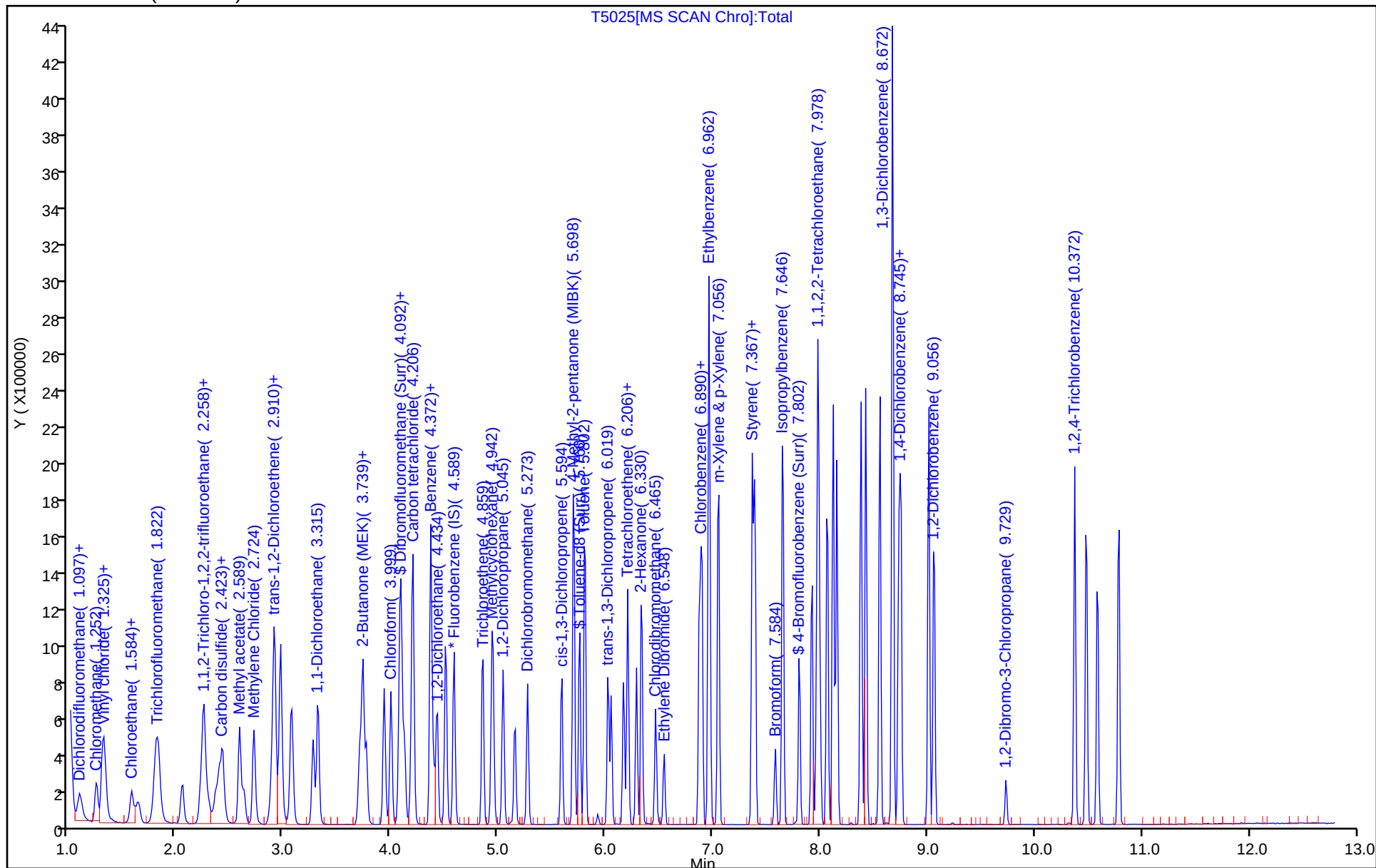
Dil. Factor: 1.0000

ALS Bottle#: 27

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5975T\20181104-76114.b\T5025.D
Injection Date: 04-Nov-2018 20:03:30 Instrument ID: HP5975T
Lims ID: 480-144297-C-6 MSD
Client ID: GMW-2
Operator ID: RF
Purge Vol: 5.000 mL
Method: T-8260
Column: ZB-624 (0.25 mm)

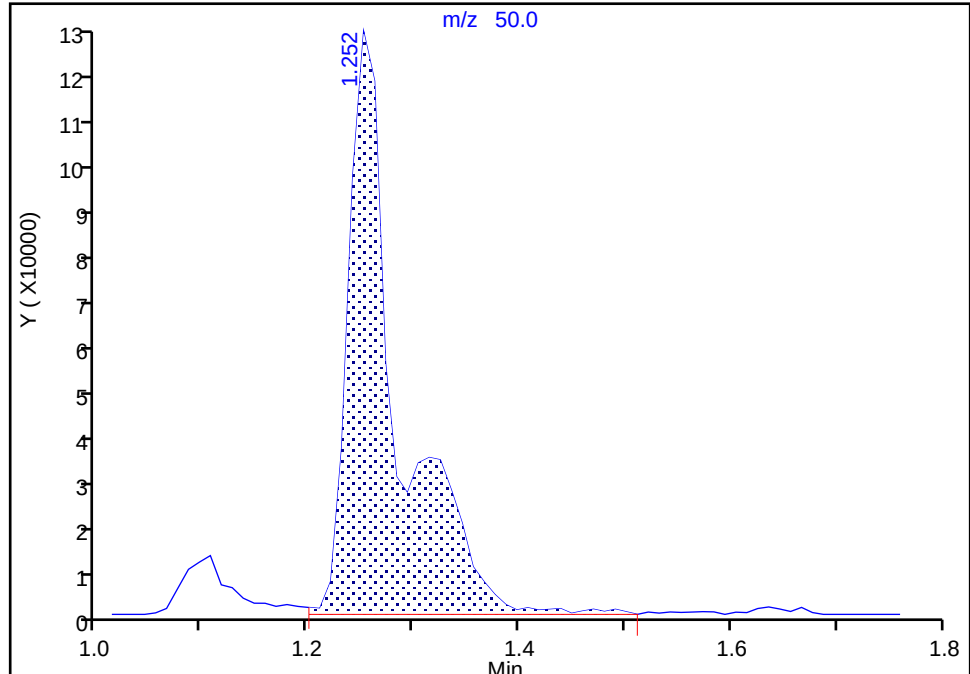
ALS Bottle#: 27 Worklist Smp#: 20
Dil. Factor: 1.0000
Limit Group: MV - 8260C ICAL
Detector: MS SCAN

13 Chloromethane, CAS: 74-87-3

Signal: 1

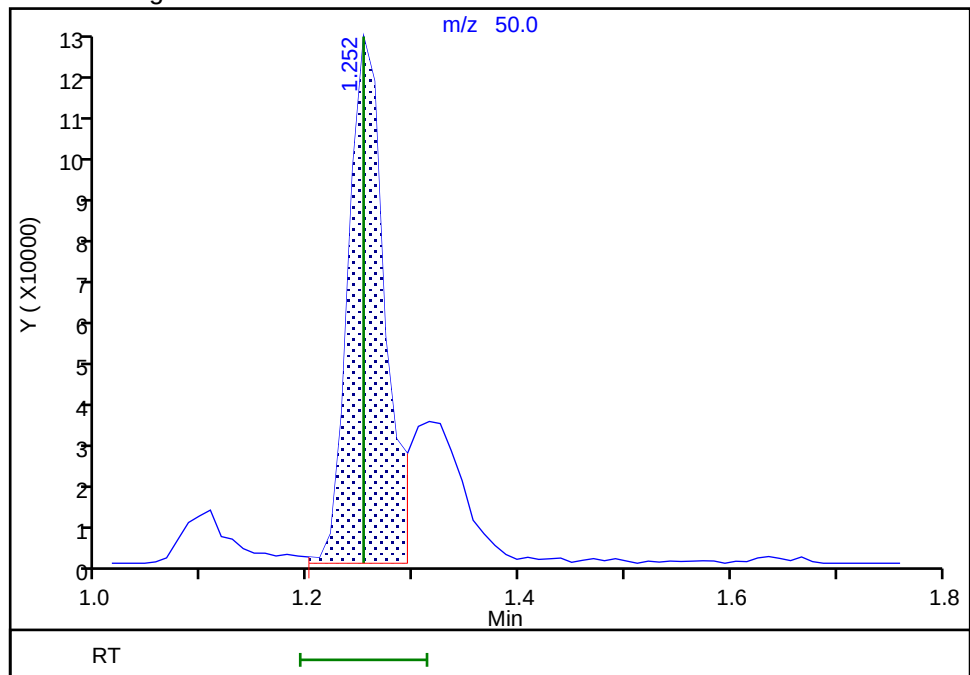
RT: 1.25
Area: 421024
Amount: 36.312967
Amount Units: ug/L

Processing Integration Results



RT: 1.25
Area: 308152
Amount: 26.577851
Amount Units: ug/L

Manual Integration Results



Reviewer: nowakk, 05-Nov-2018 09:23:01

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica BuffaloJob No.: 480-144297-1

SDG No.: _____

Instrument ID: HP5973PStart Date: 10/22/2018 14:13Analysis Batch Number: 440877End Date: 10/23/2018 01:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-440877/5		10/22/2018 14:13	1	P37181.D	ZB-624 (60) 0.25 (mm)
IC 480-440877/7		10/22/2018 15:16	1	P37183.D	ZB-624 (60) 0.25 (mm)
IC 480-440877/8		10/22/2018 15:44	1	P37184.D	ZB-624 (60) 0.25 (mm)
IC 480-440877/9		10/22/2018 16:12	1	P37185.D	ZB-624 (60) 0.25 (mm)
IC 480-440877/10		10/22/2018 16:39	1	P37186.D	ZB-624 (60) 0.25 (mm)
ICIS 480-440877/11		10/22/2018 17:07	1	P37187.D	ZB-624 (60) 0.25 (mm)
IC 480-440877/12		10/22/2018 17:34	1	P37188.D	ZB-624 (60) 0.25 (mm)
IC 480-440877/13		10/22/2018 18:02	1	P37189.D	ZB-624 (60) 0.25 (mm)
IC 480-440877/15		10/22/2018 18:57	1		ZB-624 (60) 0.25 (mm)
IC 480-440877/16		10/22/2018 19:25	1		ZB-624 (60) 0.25 (mm)
IC 480-440877/17		10/22/2018 19:52	1		ZB-624 (60) 0.25 (mm)
IC 480-440877/18		10/22/2018 20:20	1		ZB-624 (60) 0.25 (mm)
IC 480-440877/19		10/22/2018 20:47	1		ZB-624 (60) 0.25 (mm)
IC 480-440877/21		10/22/2018 21:42	1		ZB-624 (60) 0.25 (mm)
MDLV 480-440877/23		10/22/2018 22:38	1		ZB-624 (60) 0.25 (mm)
MDLV 480-440877/24		10/22/2018 23:06	1		ZB-624 (60) 0.25 (mm)
ICV 480-440877/25		10/22/2018 23:33	1		ZB-624 (60) 0.25 (mm)
ICV 480-440877/26		10/23/2018 00:01	1		ZB-624 (60) 0.25 (mm)
IC 480-440877/28		10/23/2018 01:27	1		ZB-624 (60) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica BuffaloJob No.: 480-144297-1

SDG No.: _____

Instrument ID: HP5973PStart Date: 11/05/2018 21:16Analysis Batch Number: 443770End Date: 11/06/2018 08:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-443770/2		11/05/2018 21:16	1	P37826.D	ZB-624 (60) 0.25 (mm)
CCVIS 480-443770/3		11/05/2018 21:51	1	P37827.D	ZB-624 (60) 0.25 (mm)
CCV 480-443770/25		11/05/2018 22:18	1		ZB-624 (60) 0.25 (mm)
LCS 480-443770/7		11/05/2018 22:46	1	P37829.D	ZB-624 (60) 0.25 (mm)
RL 480-443770/8		11/05/2018 23:28	1		ZB-624 (60) 0.25 (mm)
MB 480-443770/9		11/05/2018 23:56	1	P37831.D	ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 00:37	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 01:05	20		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 01:32	80		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 02:00	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 02:28	1		ZB-624 (60) 0.25 (mm)
480-144297-2		11/06/2018 02:55	1000	P37837.D	ZB-624 (60) 0.25 (mm)
480-144297-3		11/06/2018 03:23	400	P37838.D	ZB-624 (60) 0.25 (mm)
480-144297-4		11/06/2018 03:51	1	P37839.D	ZB-624 (60) 0.25 (mm)
480-144297-7		11/06/2018 04:18	200	P37840.D	ZB-624 (60) 0.25 (mm)
480-144297-8		11/06/2018 04:46	1	P37841.D	ZB-624 (60) 0.25 (mm)
480-144297-9		11/06/2018 05:13	1	P37842.D	ZB-624 (60) 0.25 (mm)
480-144297-10		11/06/2018 05:41	100	P37843.D	ZB-624 (60) 0.25 (mm)
480-144297-11		11/06/2018 06:08	200	P37844.D	ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 06:36	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 07:03	10		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 07:31	2		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 07:59	20		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 08:26	20		ZB-624 (60) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica BuffaloJob No.: 480-144297-1

SDG No.: _____

Instrument ID: HP5973PStart Date: 11/06/2018 08:54Analysis Batch Number: 443801End Date: 11/06/2018 19:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-443801/2		11/06/2018 08:54	1	P37851.D	ZB-624 (60) 0.25 (mm)
CCVIS 480-443801/3		11/06/2018 09:21	1	P37852.D	ZB-624 (60) 0.25 (mm)
CCV 480-443801/4		11/06/2018 09:49	1		ZB-624 (60) 0.25 (mm)
LCS 480-443801/5		11/06/2018 10:16	1	P37854.D	ZB-624 (60) 0.25 (mm)
RL 480-443801/6		11/06/2018 10:44	1		ZB-624 (60) 0.25 (mm)
MB 480-443801/26		11/06/2018 11:59	1	P37857.D	ZB-624 (60) 0.25 (mm)
480-144297-2 DL		11/06/2018 12:26	2000	P37858.D	ZB-624 (60) 0.25 (mm)
480-144297-3 DL		11/06/2018 12:54	2000	P37859.D	ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 13:21	4		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 13:49	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 14:17	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 14:44	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 15:12	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 15:39	2		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 16:07	2		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 16:34	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 17:02	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 17:30	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 17:57	1		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 18:25	20		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 18:52	20		ZB-624 (60) 0.25 (mm)
ZZZZZ		11/06/2018 19:20	20		ZB-624 (60) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica BuffaloJob No.: 480-144297-1

SDG No.: _____

Instrument ID: HP5975TStart Date: 10/29/2018 12:47Analysis Batch Number: 442312End Date: 10/29/2018 23:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-442312/2		10/29/2018 12:47	1	T4699.D	ZB-624 (20) 0.18 (mm)
IC 480-442312/4		10/29/2018 14:27	1	T4701.D	ZB-624 (20) 0.18 (mm)
IC 480-442312/5		10/29/2018 14:51	1	T4702.D	ZB-624 (20) 0.18 (mm)
IC 480-442312/6		10/29/2018 15:15	1	T4703.D	ZB-624 (20) 0.18 (mm)
IC 480-442312/7		10/29/2018 15:39	1	T4704.D	ZB-624 (20) 0.18 (mm)
IC 480-442312/8		10/29/2018 16:02	1	T4705.D	ZB-624 (20) 0.18 (mm)
ICIS 480-442312/9		10/29/2018 16:26	1	T4706.D	ZB-624 (20) 0.18 (mm)
IC 480-442312/10		10/29/2018 16:49	1	T4707.D	ZB-624 (20) 0.18 (mm)
IC 480-442312/11		10/29/2018 17:13	1	T4708.D	ZB-624 (20) 0.18 (mm)
MDLV 480-442312/13		10/29/2018 18:00	1		ZB-624 (20) 0.18 (mm)
MDLV 480-442312/14		10/29/2018 18:24	1		ZB-624 (20) 0.18 (mm)
IC 480-442312/16		10/29/2018 19:11	1		ZB-624 (20) 0.18 (mm)
IC 480-442312/17		10/29/2018 19:35	1		ZB-624 (20) 0.18 (mm)
IC 480-442312/18		10/29/2018 19:58	1		ZB-624 (20) 0.18 (mm)
IC 480-442312/19		10/29/2018 20:22	1		ZB-624 (20) 0.18 (mm)
IC 480-442312/20		10/29/2018 20:46	1		ZB-624 (20) 0.18 (mm)
IC 480-442312/21		10/29/2018 21:10	1		ZB-624 (20) 0.18 (mm)
IC 480-442312/22		10/29/2018 21:34	1		ZB-624 (20) 0.18 (mm)
MDLV 480-442312/24		10/29/2018 22:21	1		ZB-624 (20) 0.18 (mm)
ICV 480-442312/25		10/29/2018 22:45	1		ZB-624 (20) 0.18 (mm)
ICV 480-442312/26		10/29/2018 23:09	1		ZB-624 (20) 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica BuffaloJob No.: 480-144297-1

SDG No.: _____

Instrument ID: HP5975TStart Date: 11/04/2018 10:19Analysis Batch Number: 443500End Date: 11/04/2018 22:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-443500/2		11/04/2018 10:19	1	T5000.D	ZB-624 (20) 0.18 (mm)
CCVIS 480-443500/3		11/04/2018 10:43	1	T5001.D	ZB-624 (20) 0.18 (mm)
CCV 480-443500/4		11/04/2018 11:07	1		ZB-624 (20) 0.18 (mm)
LCS 480-443500/5		11/04/2018 11:30	1	T5003.D	ZB-624 (20) 0.18 (mm)
RL 480-443500/6		11/04/2018 11:54	1		ZB-624 (20) 0.18 (mm)
MB 480-443500/7		11/04/2018 12:17	1	T5005.D	ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 12:57	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 13:20	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 13:43	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 14:07	4		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 14:30	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 14:54	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 15:18	1		ZB-624 (20) 0.18 (mm)
480-144297-1		11/04/2018 15:41	1	T5014.D	ZB-624 (20) 0.18 (mm)
480-144297-5		11/04/2018 16:05	1	T5015.D	ZB-624 (20) 0.18 (mm)
480-144297-6		11/04/2018 16:28	1	T5016.D	ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 16:52	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 17:15	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 17:39	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 18:03	4		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 18:27	2		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 18:51	4		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 19:15	1		ZB-624 (20) 0.18 (mm)
480-144297-6 MS		11/04/2018 19:39	1	T5024.D	ZB-624 (20) 0.18 (mm)
480-144297-6 MSD		11/04/2018 20:03	1	T5025.D	ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 20:50	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 21:13	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 21:37	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 22:01	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 22:24	1		ZB-624 (20) 0.18 (mm)
ZZZZZ		11/04/2018 22:48	1		ZB-624 (20) 0.18 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Batch Number: 443500 Batch Start Date: 11/04/18 10:19 Batch Analyst: Nowak, Kate-Lynn MBatch Method: 8260C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00139	BFB_WRK 00080	GAS CORP mix 00310
BFB 480-443500/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-443500/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-443500/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-443500/7		8260C		5 mL	5 mL				
480-144297-B-1	GPW-13	8260C	T	5 mL	5 mL	<2 SU			
480-144297-D-5	GPW-20	8260C	T	5 mL	5 mL	<2 SU			
480-144297-D-6	GMW-2	8260C	T	5 mL	5 mL	<2 SU			
480-144297-C-6 MS	GMW-2	8260C	T	5 mL	5 mL	<2 SU	12.5 uL		12.5 uL
480-144297-C-6 MSD	GMW-2	8260C	T	5 mL	5 mL	<2 SU	12.5 uL		12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	T_8260_IS 00209	T_8260_Surr 00181				
BFB 480-443500/2		8260C							
CCVIS 480-443500/3		8260C		1 uL	1 uL				
LCS 480-443500/5		8260C		1 uL	1 uL				
MB 480-443500/7		8260C		1 uL	1 uL				
480-144297-B-1	GPW-13	8260C	T	1 uL	1 uL				
480-144297-D-5	GPW-20	8260C	T	1 uL	1 uL				
480-144297-D-6	GMW-2	8260C	T	1 uL	1 uL				
480-144297-C-6 MS	GMW-2	8260C	T	1 uL	1 uL				
480-144297-C-6 MSD	GMW-2	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: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Batch Number: 443500 Batch Start Date: 11/04/18 10:19 Batch Analyst: Nowak, Kate-Lynn MBatch 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.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Batch Number: 443770 Batch Start Date: 11/05/18 21:16 Batch Analyst: Farrell, Ryan JBatch Method: 8260C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00139	BFB_WRK 00080	GAS CORP mix 00310
BFB 480-443770/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-443770/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-443770/7		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-443770/9		8260C		5 mL	5 mL				
480-144297-B-2	EW-16	8260C	T	5 mL	5 mL	<2 SU			
480-144297-B-3	EW-14	8260C	T	5 mL	5 mL	5 SU			
480-144297-A-4	TB	8260C	T	5 mL	5 mL	<2 SU			
480-144297-D-7	EW-10	8260C	T	5 mL	5 mL	<2 SU			
480-144297-D-8	SB-19	8260C	T	5 mL	5 mL	<2 SU			
480-144297-C-9	GPW-6	8260C	T	5 mL	5 mL	<2 SU			
480-144297-C-10	GPW-5	8260C	T	5 mL	5 mL	<2 SU			
480-144297-D-11	DUP	8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	P 8260 IS 00336	P 8260 Surr. 00310	AnalysisComment			
BFB 480-443770/2		8260C							
CCVIS 480-443770/3		8260C		1.25 uL	1.25 uL				
LCS 480-443770/7		8260C		1.25 uL	1.25 uL				
MB 480-443770/9		8260C		1.25 uL	1.25 uL				
480-144297-B-2	EW-16	8260C	T	1.25 uL	1.25 uL	rerunning higher			
480-144297-B-3	EW-14	8260C	T	1.25 uL	1.25 uL	rerunning higher			
480-144297-A-4	TB	8260C	T	1.25 uL	1.25 uL				
480-144297-D-7	EW-10	8260C	T	1.25 uL	1.25 uL				
480-144297-D-8	SB-19	8260C	T	1.25 uL	1.25 uL				
480-144297-C-9	GPW-6	8260C	T	1.25 uL	1.25 uL				
480-144297-C-10	GPW-5	8260C	T	1.25 uL	1.25 uL				
480-144297-D-11	DUP	8260C	T	1.25 uL	1.25 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.

8260C

Page 1 of 2

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Batch Number: 443770 Batch Start Date: 11/05/18 21:16 Batch Analyst: Farrell, Ryan JBatch Method: 8260C Batch End Date: _____

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Batch Number: 443801 Batch Start Date: 11/06/18 08:54 Batch Analyst: Barone, Rachel LBatch Method: 8260C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00139	BFB_WRK 00080	GAS CORP mix 00310
BFB 480-443801/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-443801/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-443801/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
480-144297-C-2	EW-16	8260C	T	5 mL	5 mL	<2 SU			
480-144297-C-3	EW-14	8260C	T	5 mL	5 mL	7 SU			
MB 480-443801/26		8260C		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	P 8260 IS 00336	P 8260 Surr. 00310				
BFB 480-443801/2		8260C							
CCVIS 480-443801/3		8260C		1.25 uL	1.25 uL				
LCS 480-443801/5		8260C		1.25 uL	1.25 uL				
480-144297-C-2	EW-16	8260C	T	1.25 uL	1.25 uL				
480-144297-C-3	EW-14	8260C	T	1.25 uL	1.25 uL				
MB 480-443801/26		8260C		1.25 uL	1.25 uL				

Batch Notes	

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: TestAmerica Buffalo

Job No.: 480-144297-1

SDG No.: _____

Matrix: Water

Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DXE #
GPW-20	480-144297-5	30
GMW-2	480-144297-6	28
EW-10	480-144297-7	25
SB-19	480-144297-8	30
GPW-6	480-144297-9	54
GPW-5	480-144297-10	27
DUP	480-144297-11	23
	MB 480-442433/1-A	32
	LCS 480-442433/2-A	36
GMW-2 MS	480-144297-6 MS	32
GMW-2 MSD	480-144297-6 MSD	32

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: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: U3313169.D
Lab ID: LCS 480-442433/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	1.00	1.04	104	40-140	
1,4-Dioxane-d8	10.0	3.63	36	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 RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: U3313170.D
Lab ID: 480-144297-6 MS Client ID: GMW-2 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	0.952	ND	0.997	105	40-140	
1,4-Dioxane-d8	9.52	2.7	3.02	32	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: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: U3313171.D
Lab ID: 480-144297-6 MSD Client ID: GMW-2 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,4-Dioxane	0.952	1.00	105	1	20	40-140	
1,4-Dioxane-d8	9.52	3.07	32			15-110	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM ID

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Lab File ID: U3313168.D Lab Sample ID: MB 480-442433/1-A
Matrix: Water Date Extracted: 10/30/2018 07:37
Instrument ID: HP5973U Date Analyzed: 11/10/2018 01:14
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-442433/2-A	U3313169.D	11/10/2018 01:38
GMW-2 MS	480-144297-6 MS	U3313170.D	11/10/2018 02:02
GMW-2 MSD	480-144297-6 MSD	U3313171.D	11/10/2018 02:26
GMW-2	480-144297-6	U3313172.D	11/10/2018 02:50
GPW-20	480-144297-5	U3313185.D	11/10/2018 08:05
EW-10	480-144297-7	U3313186.D	11/10/2018 08:29
SB-19	480-144297-8	U3313187.D	11/10/2018 08:53
GPW-6	480-144297-9	U3313188.D	11/10/2018 09:17
GPW-5	480-144297-10	U3313189.D	11/10/2018 09:41
DUP	480-144297-11	U3313190.D	11/10/2018 10:05

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Lab File ID: U3312592.D DFTPP Injection Date: 10/26/2018
Instrument ID: HP5973U DFTPP Injection Time: 17:27
Analysis Batch No.: 442039

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	52.8
68	Less than 2% of mass 69	0.0 (0.0) 1
69	Mass 69 Relative abundance	48.8
70	Less than 2% of mass 69	0.3 (0.6) 1
127	10-80% of Base Peak	52.6
197	Less than 2% of mass 198	0.0
198	Base peak	100.0
199	5-9% of mass 198	7.1
275	10-60% of Base Peak	25.2
365	Greater than 1% of mass 198	3.1
441	present but less than 24% of mass 442	9.3 (16.0) 2
442	Greater than 50% of mass 198	58.1
443	15-24% of mass 442	11.4 (19.6) 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
	IC 480-442039/3	U3312593.D	10/26/2018	17:56
	IC 480-442039/4	U3312594.D	10/26/2018	18:20
	ICIS 480-442039/5	U3312595.D	10/26/2018	18:45
	IC 480-442039/6	U3312596.D	10/26/2018	19:08
	IC 480-442039/7	U3312597.D	10/26/2018	19:32
	IC 480-442039/8	U3312598.D	10/26/2018	19:56

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Lab File ID: U3313145.D DFTPP Injection Date: 11/09/2018
Instrument ID: HP5973U DFTPP Injection Time: 16:02
Analysis Batch No.: 444681

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	57.4
68	Less than 2% of mass 69	0.0 (0.0) 1
69	Mass 69 Relative abundance	52.4
70	Less than 2% of mass 69	0.3 (0.6) 1
127	10-80% of Base Peak	55.3
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	28.0
365	Greater than 1% of mass 198	4.3
441	present but less than 24% of mass 442	12.4 (16.4) 2
442	Greater than 50% of mass 198	75.8
443	15-24% of mass 442	15.2 (20.0) 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
	CCVIS 480-444681/3	U3313146.D	11/09/2018	16:30
	MB 480-442433/1-A	U3313168.D	11/10/2018	01:14
	LCS 480-442433/2-A	U3313169.D	11/10/2018	01:38
GMW-2 MS	480-144297-6 MS	U3313170.D	11/10/2018	02:02
GMW-2 MSD	480-144297-6 MSD	U3313171.D	11/10/2018	02:26
GMW-2	480-144297-6	U3313172.D	11/10/2018	02:50

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Lab File ID: U3313175.D DFTPP Injection Date: 11/10/2018
Instrument ID: HP5973U DFTPP Injection Time: 04:02
Analysis Batch No.: 444687

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	54.7
68	Less than 2% of mass 69	0.0 (0.0) 1
69	Mass 69 Relative abundance	51.1
70	Less than 2% of mass 69	0.3 (0.7) 1
127	10-80% of Base Peak	55.1
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	27.8
365	Greater than 1% of mass 198	4.1
441	present but less than 24% of mass 442	12.9 (16.4) 2
442	Greater than 50% of mass 198	78.9
443	15-24% of mass 442	16.0 (20.2) 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 480-444687/3	U3313176.D	11/10/2018	04:30
GPW-20	480-144297-5	U3313185.D	11/10/2018	08:05
EW-10	480-144297-7	U3313186.D	11/10/2018	08:29
SB-19	480-144297-8	U3313187.D	11/10/2018	08:53
GPW-6	480-144297-9	U3313188.D	11/10/2018	09:17
GPW-5	480-144297-10	U3313189.D	11/10/2018	09:41
DUP	480-144297-11	U3313190.D	11/10/2018	10:05

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: ICIS 480-442039/5 Date Analyzed: 10/26/2018 18:45
 Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)
 Lab File ID (Standard): U3312595.D Heated Purge: (Y/N) N
 Calibration ID: 35206

	DCBd4					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	769210	5.90				
UPPER LIMIT	1538420	6.40				
LOWER LIMIT	384605	5.40				
LAB SAMPLE ID	CLIENT SAMPLE ID					
CCVIS 480-444681/3		522845 5.69				
CCVIS 480-444687/3		447653 5.69				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 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: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: CCVIS 480-444681/3 Date Analyzed: 11/09/2018 16:30
 Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25 (mm)
 Lab File ID (Standard): U3313146.D Heated Purge: (Y/N) N
 Calibration ID: 35206

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		522845	5.69				
UPPER LIMIT		1045690	6.19				
LOWER LIMIT		261423	5.19				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 480-442433/1-A		418563	5.69				
LCS 480-442433/2-A		412323	5.69				
480-144297-6 MS	GMW-2 MS	425986	5.69				
480-144297-6 MSD	GMW-2 MSD	410478	5.69				
480-144297-6	GMW-2	429424	5.69				

DCBd4 = 1,4-Dichlorobenzene-d4
 DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 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: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: CCVIS 480-444687/3 Date Analyzed: 11/10/2018 04:30
 Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25 (mm)
 Lab File ID (Standard): U3313176.D Heated Purge: (Y/N) N
 Calibration ID: 35206

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		447653	5.69				
UPPER LIMIT		895306	6.19				
LOWER LIMIT		223827	5.19				
LAB SAMPLE ID	CLIENT SAMPLE ID						
480-144297-5	GPW-20	427027	5.69				
480-144297-7	EW-10	438671	5.69				
480-144297-8	SB-19	392380	5.69				
480-144297-9	GPW-6	377920	5.69				
480-144297-10	GPW-5	396551	5.69				
480-144297-11	DUP	431897	5.73				

DCBd4 = 1,4-Dichlorobenzene-d4
 DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Client Sample ID: GPW-20 Lab Sample ID: 480-144297-5
Matrix: Water Lab File ID: U3313185.D
Analysis Method: 8270D SIM ID Date Collected: 10/24/2018 10:35
Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
Sample wt/vol: 980 (mL) Date Analyzed: 11/10/2018 08:05
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.: 444687 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	30		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313185.D
 Lims ID: 480-144297-A-5-A
 Client ID: GPW-20
 Sample Type: Client
 Inject. Date: 10-Nov-2018 08:05:30 ALS Bottle#: 49 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076305-012
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:27:10 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 12:00:52

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	2.430	2.353	0.077	94	145481	2.98	29.8	
3 1,4-Dioxane	88		2.394				ND		
* 2 1,4-Dichlorobenzene-d4	152	5.690	5.686	0.004	95	427027	4.00		

Reagents:

MB_LLIS_WRK_00157 Amount Added: 20.00 Units: uL Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313185.D

Injection Date: 10-Nov-2018 08:05:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: 480-144297-A-5-A

Lab Sample ID: 480-144297-5

Worklist Smp#: 12

Client ID: GPW-20

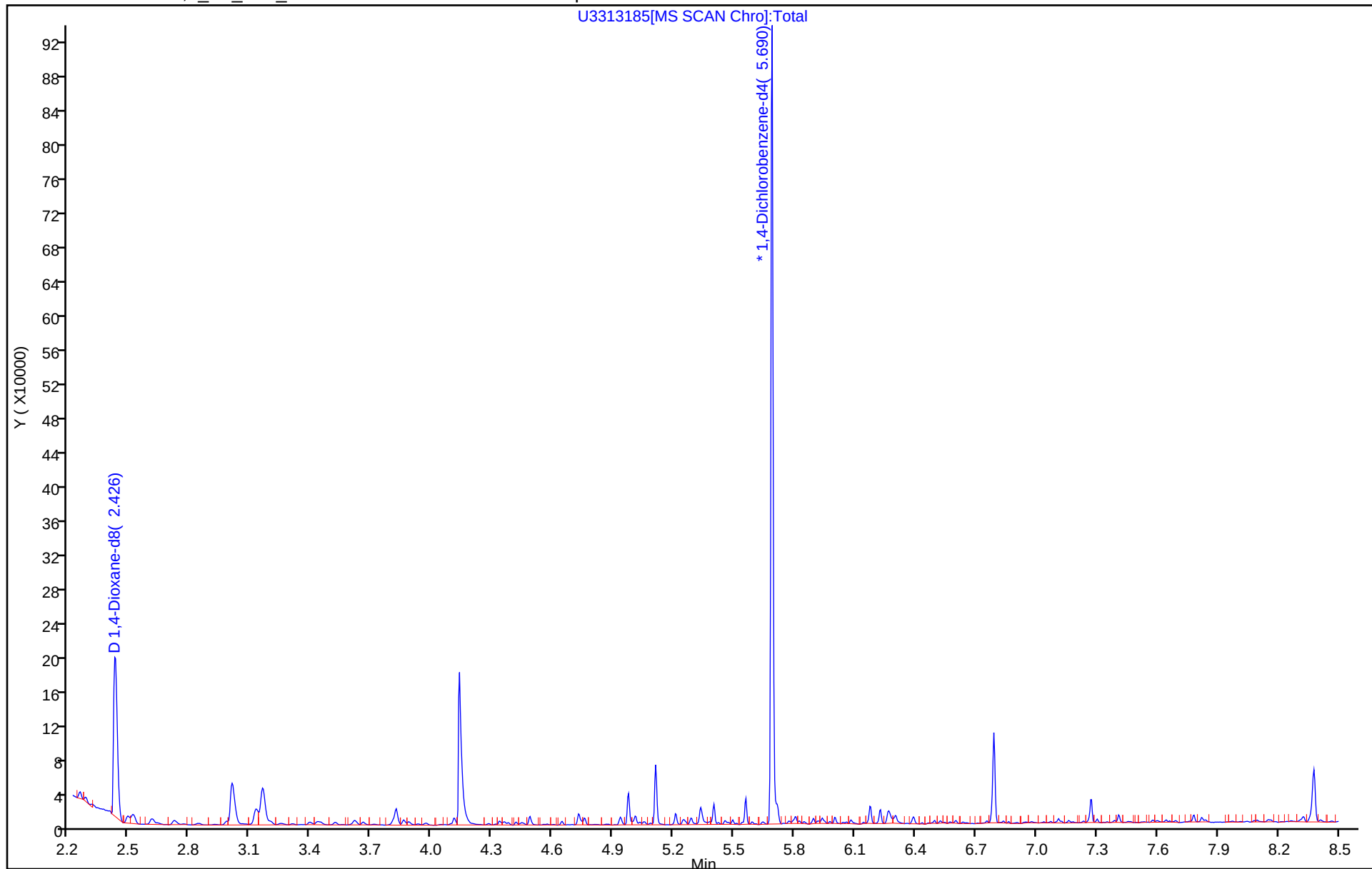
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 49

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313185.D

Injection Date: 10-Nov-2018 08:05:30

Instrument ID: HP5973U

Lims ID: 480-144297-A-5-A

Lab Sample ID: 480-144297-5

Client ID: GPW-20

Operator ID: DR

ALS Bottle#: 49

Worklist Smp#: 12

Injection Vol: 1.0 ul

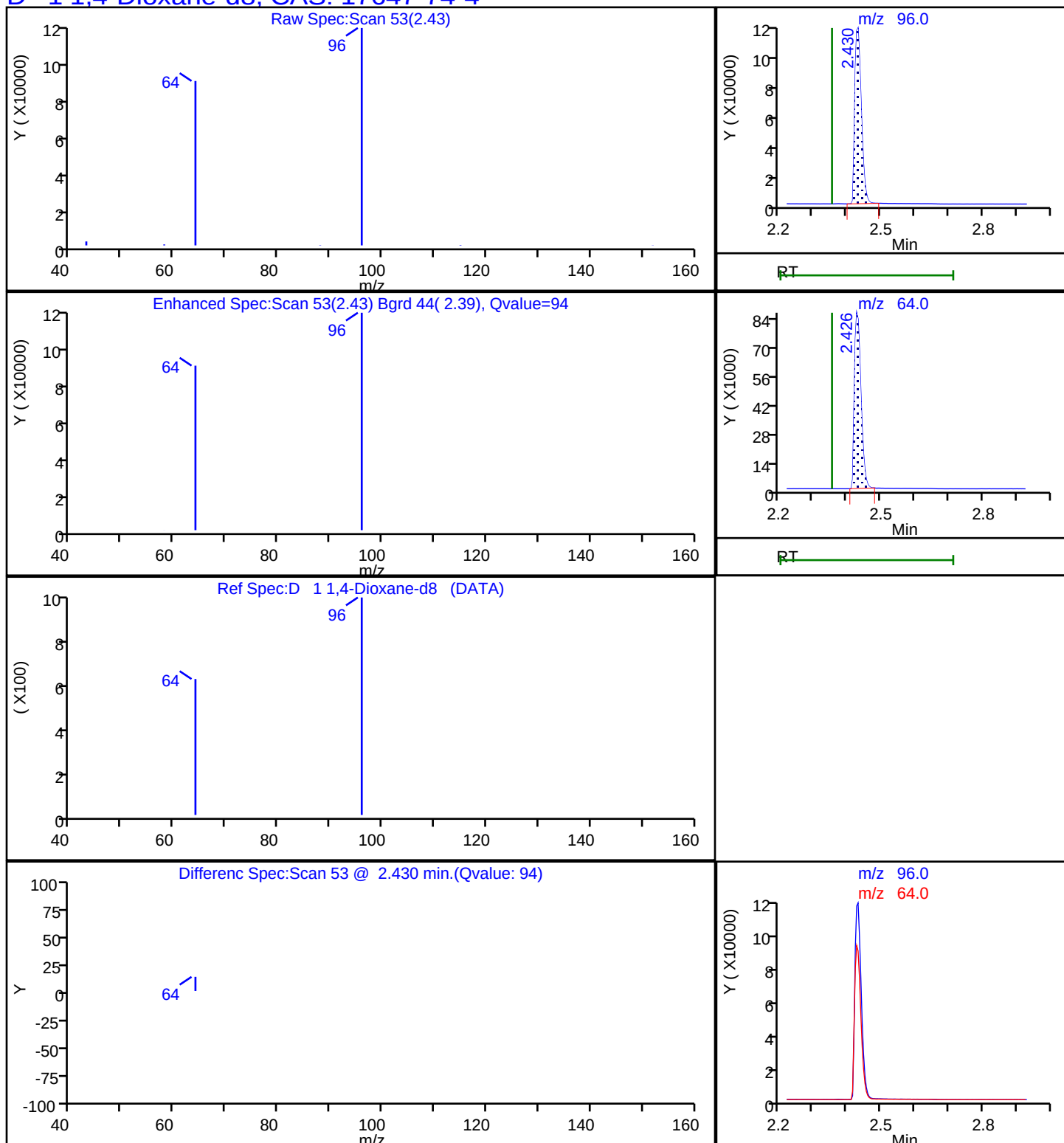
Dil. Factor: 1.0000

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: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Client Sample ID: GMW-2 Lab Sample ID: 480-144297-6
Matrix: Water Lab File ID: U3313172.D
Analysis Method: 8270D SIM ID Date Collected: 10/24/2018 12:15
Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
Sample wt/vol: 1050 (mL) Date Analyzed: 11/10/2018 02:50
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.: 444681 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	28		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313172.D
 Lims ID: 480-144297-A-6-A
 Client ID: GMW-2
 Sample Type: Client
 Inject. Date: 10-Nov-2018 02:50:30 ALS Bottle#: 36 Worklist Smp#: 29
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076303-029
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:12:47 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 11:59:54

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	2.430	2.357	0.073	93	139797	2.84	28.4	
3 1,4-Dioxane	88		2.394				ND		
* 2 1,4-Dichlorobenzene-d4	152	5.690	5.686	0.004	92	429424	4.00		

Reagents:

MB_LLIS_WRK_00157 Amount Added: 20.00 Units: uL Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313172.D

Injection Date: 10-Nov-2018 02:50:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: 480-144297-A-6-A

Lab Sample ID: 480-144297-6

Worklist Smp#: 29

Client ID: GMW-2

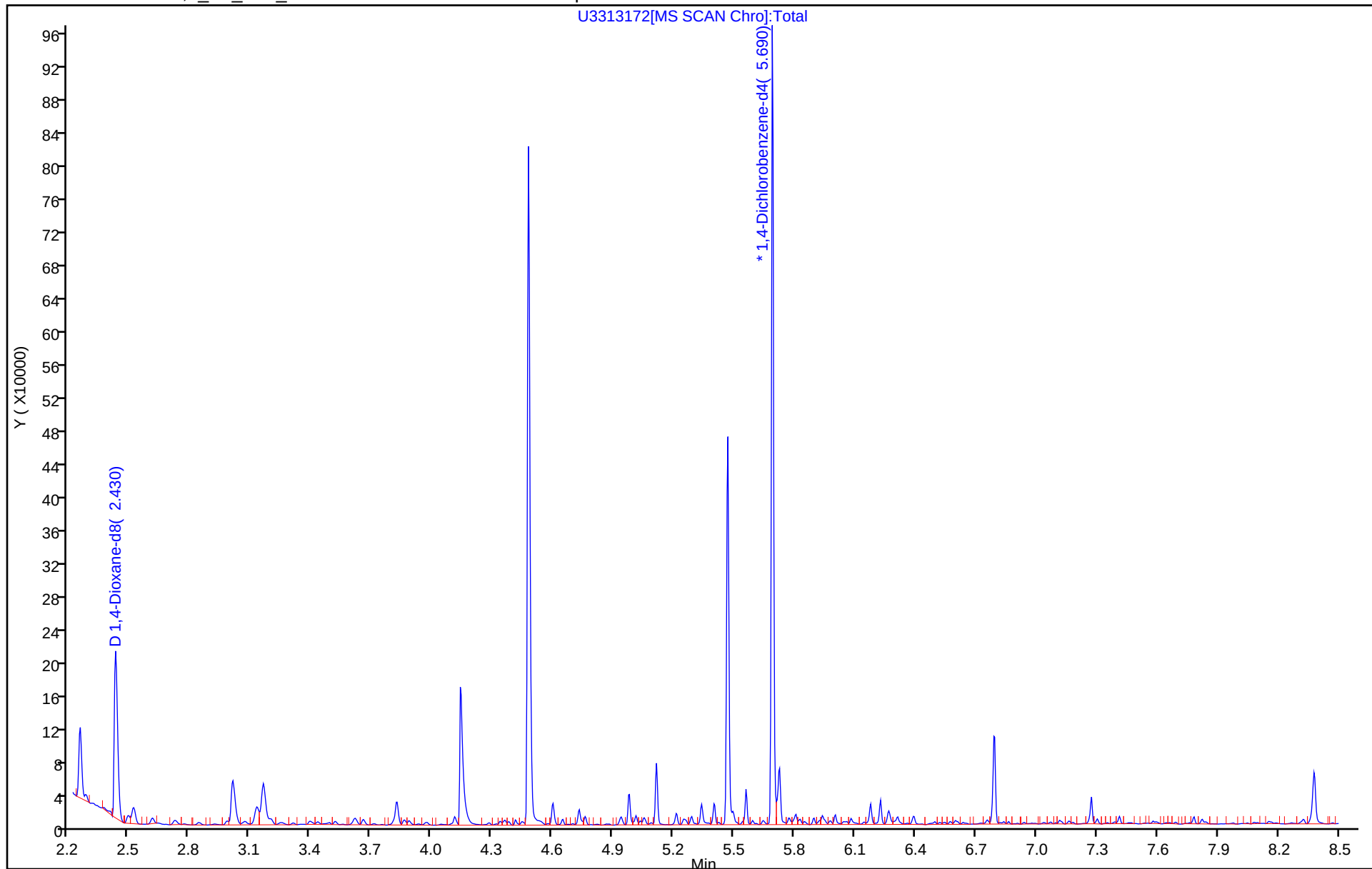
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 36

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313172.D

Injection Date: 10-Nov-2018 02:50:30

Instrument ID: HP5973U

Lims ID: 480-144297-A-6-A

Lab Sample ID: 480-144297-6

Client ID: GMW-2

Operator ID: DR

ALS Bottle#: 36

Worklist Smp#: 29

Injection Vol: 1.0 ul

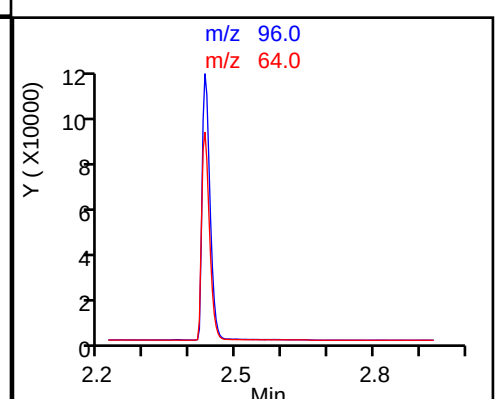
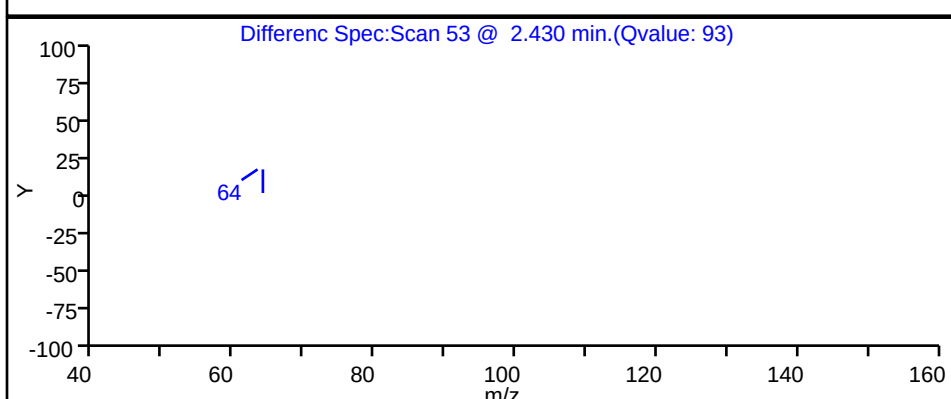
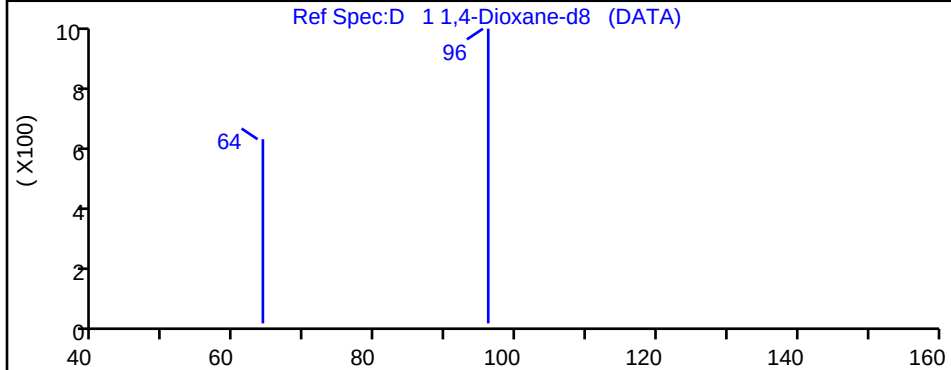
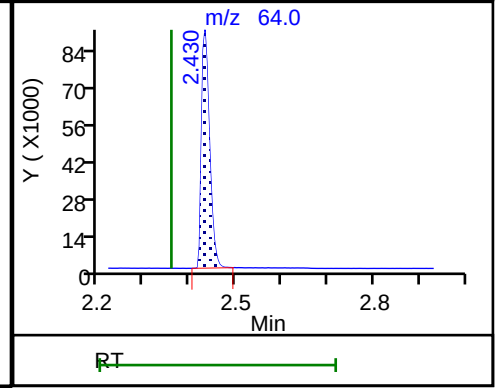
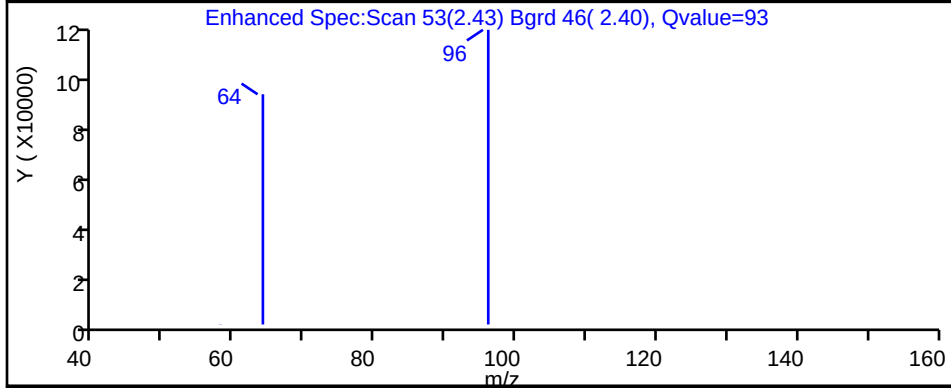
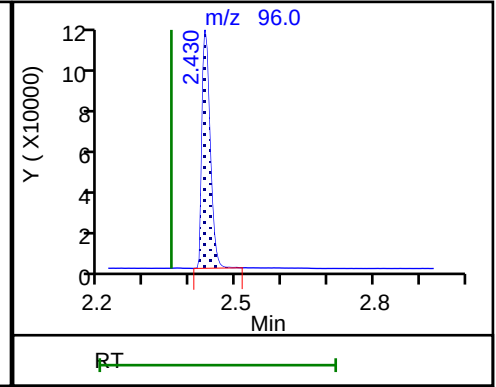
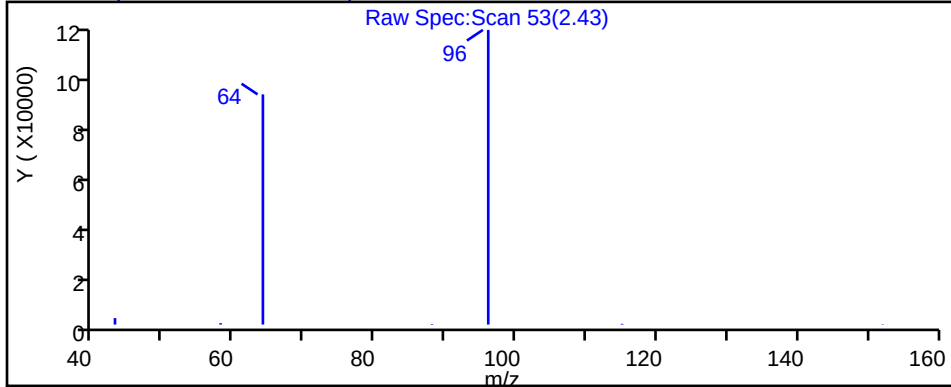
Dil. Factor: 1.0000

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: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Client Sample ID: EW-10 Lab Sample ID: 480-144297-7
Matrix: Water Lab File ID: U3313186.D
Analysis Method: 8270D SIM ID Date Collected: 10/25/2018 11:55
Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
Sample wt/vol: 1030 (mL) Date Analyzed: 11/10/2018 08:29
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.: 444687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.97	0.49

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	25		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313186.D
 Lims ID: 480-144297-A-7-A
 Client ID: EW-10
 Sample Type: Client
 Inject. Date: 10-Nov-2018 08:29:30 ALS Bottle#: 50 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 480-0076305-013
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:27:10 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 12:01:00

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	2.382	2.353	0.029	93	25097	0.4998	25.0	
3 1,4-Dioxane	88		2.394				ND		U
* 2 1,4-Dichlorobenzene-d4	152	5.694	5.686	0.008	93	438671	4.00		

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

MB_LLIS_WRK_00157

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313186.D

Injection Date: 10-Nov-2018 08:29:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: 480-144297-A-7-A

Lab Sample ID: 480-144297-7

Worklist Smp#: 13

Client ID: EW-10

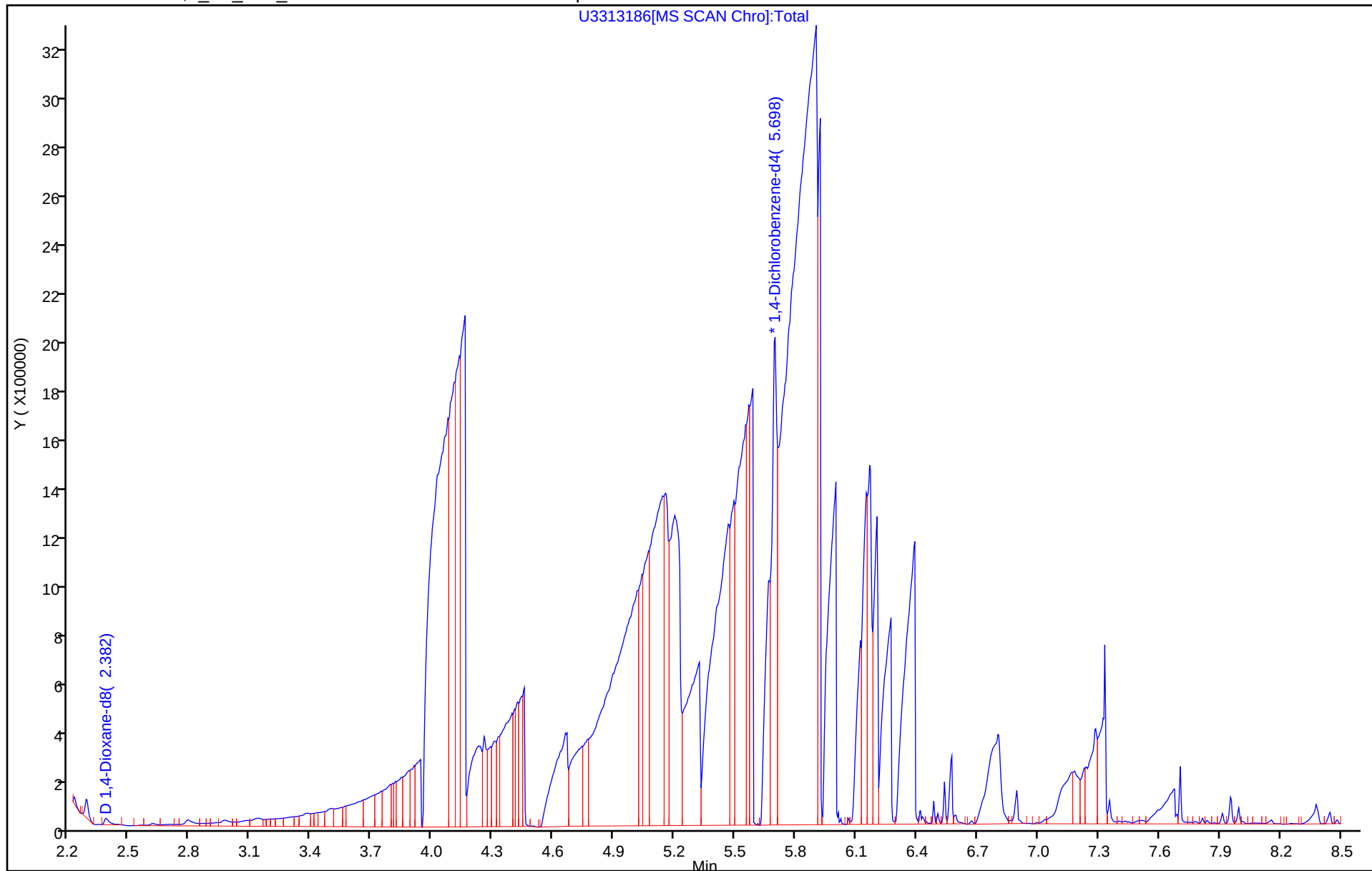
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 50

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313186.D

Injection Date: 10-Nov-2018 08:29:30

Instrument ID: HP5973U

Lims ID: 480-144297-A-7-A

Lab Sample ID: 480-144297-7

Client ID: EW-10

Operator ID: DR

ALS Bottle#: 50

Worklist Smp#: 13

Injection Vol: 1.0 ul

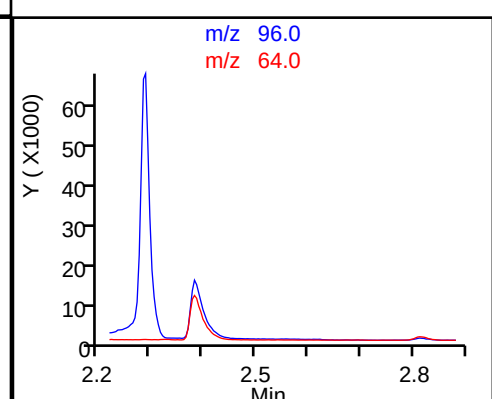
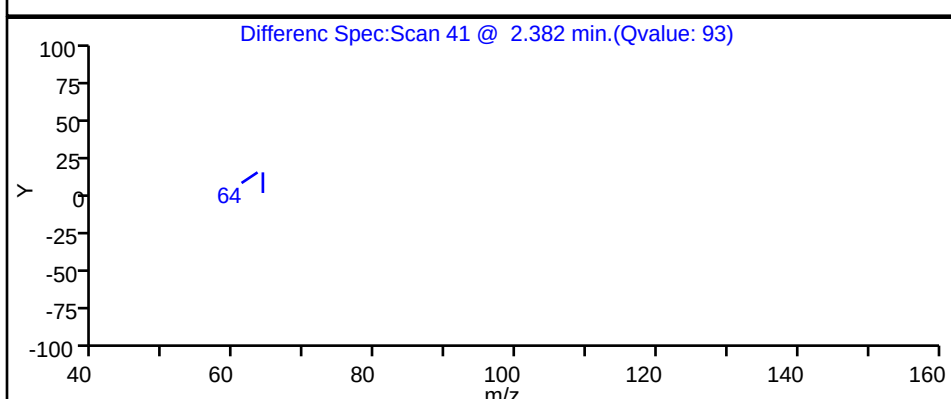
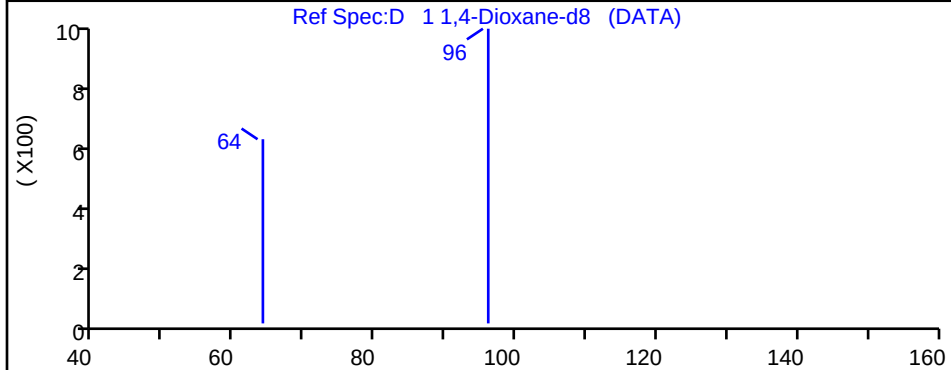
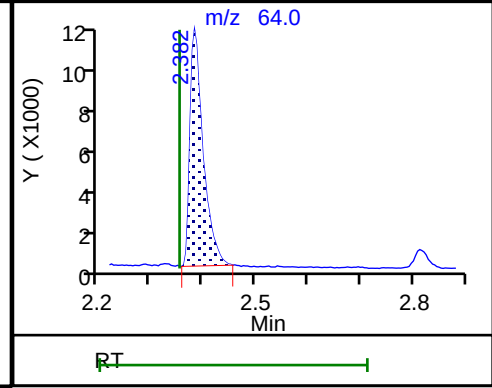
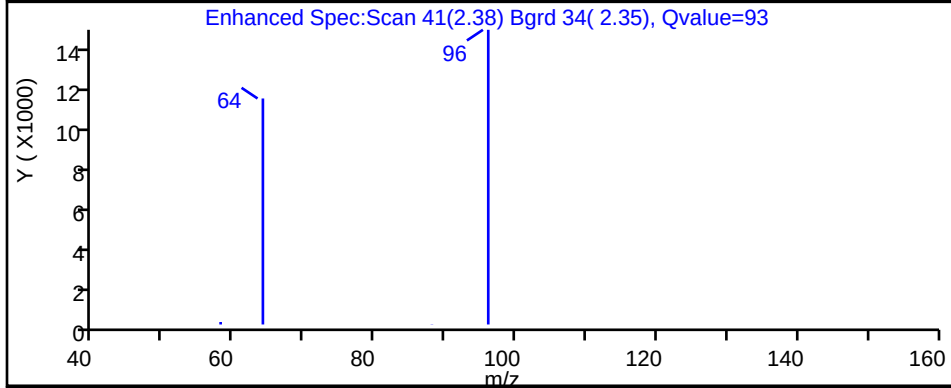
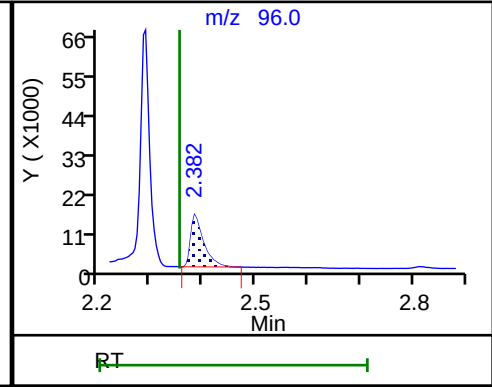
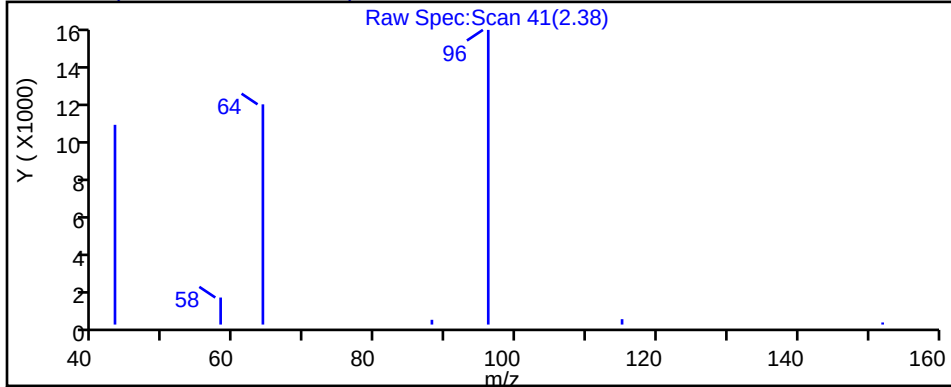
Dil. Factor: 5.0000

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

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313186.D

Injection Date: 10-Nov-2018 08:29:30

Instrument ID: HP5973U

Lims ID: 480-144297-A-7-A

Lab Sample ID: 480-144297-7

Client ID: EW-10

Operator ID: DR

ALS Bottle#: 50 Worklist Smp#: 13

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

Method: 1,4_Dx_SIM_HP5973U

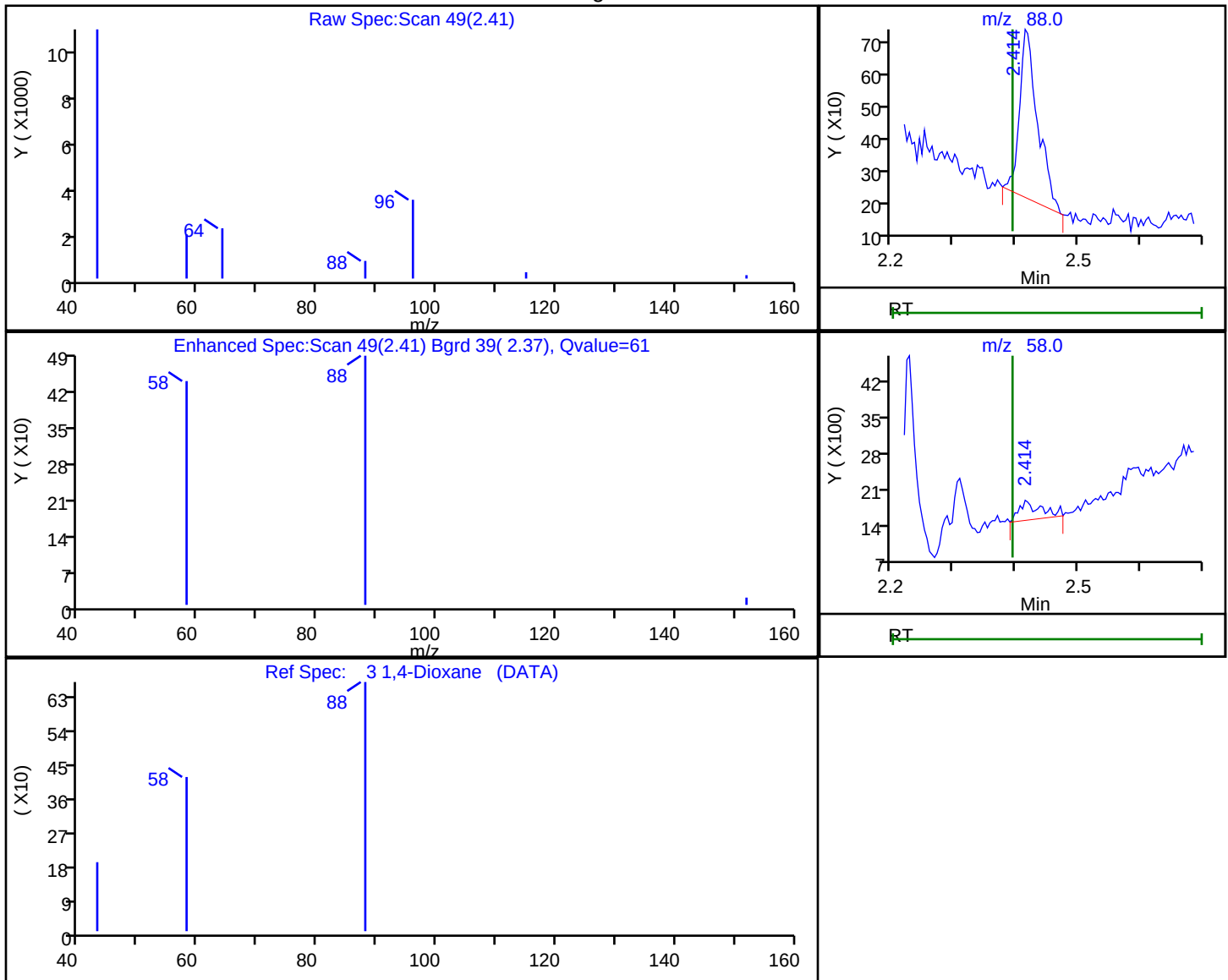
Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.41	88.00	1068	0.380766
2.41	58.00	914	

Reviewer: richardsd, 13-Nov-2018 12:00:57

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: SB-19 Lab Sample ID: 480-144297-8
 Matrix: Water Lab File ID: U3313187.D
 Analysis Method: 8270D SIM ID Date Collected: 10/25/2018 13:50
 Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
 Sample wt/vol: 1040 (mL) Date Analyzed: 11/10/2018 08:53
 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.: 444687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.19	0.096

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	30		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313187.D
 Lims ID: 480-144297-B-8-A
 Client ID: SB-19
 Sample Type: Client
 Inject. Date: 10-Nov-2018 08:53:30 ALS Bottle#: 51 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076305-014
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:27:10 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 12:01:03

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	2.430	2.353	0.077	94	134878	3.00	30.0	
3 1,4-Dioxane	88		2.394				ND		
* 2 1,4-Dichlorobenzene-d4	152	5.690	5.686	0.004	95	392380	4.00		

Reagents:

MB_LLIS_WRK_00157 Amount Added: 20.00 Units: uL Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313187.D

Injection Date: 10-Nov-2018 08:53:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: 480-144297-B-8-A

Lab Sample ID: 480-144297-8

Worklist Smp#: 14

Client ID: SB-19

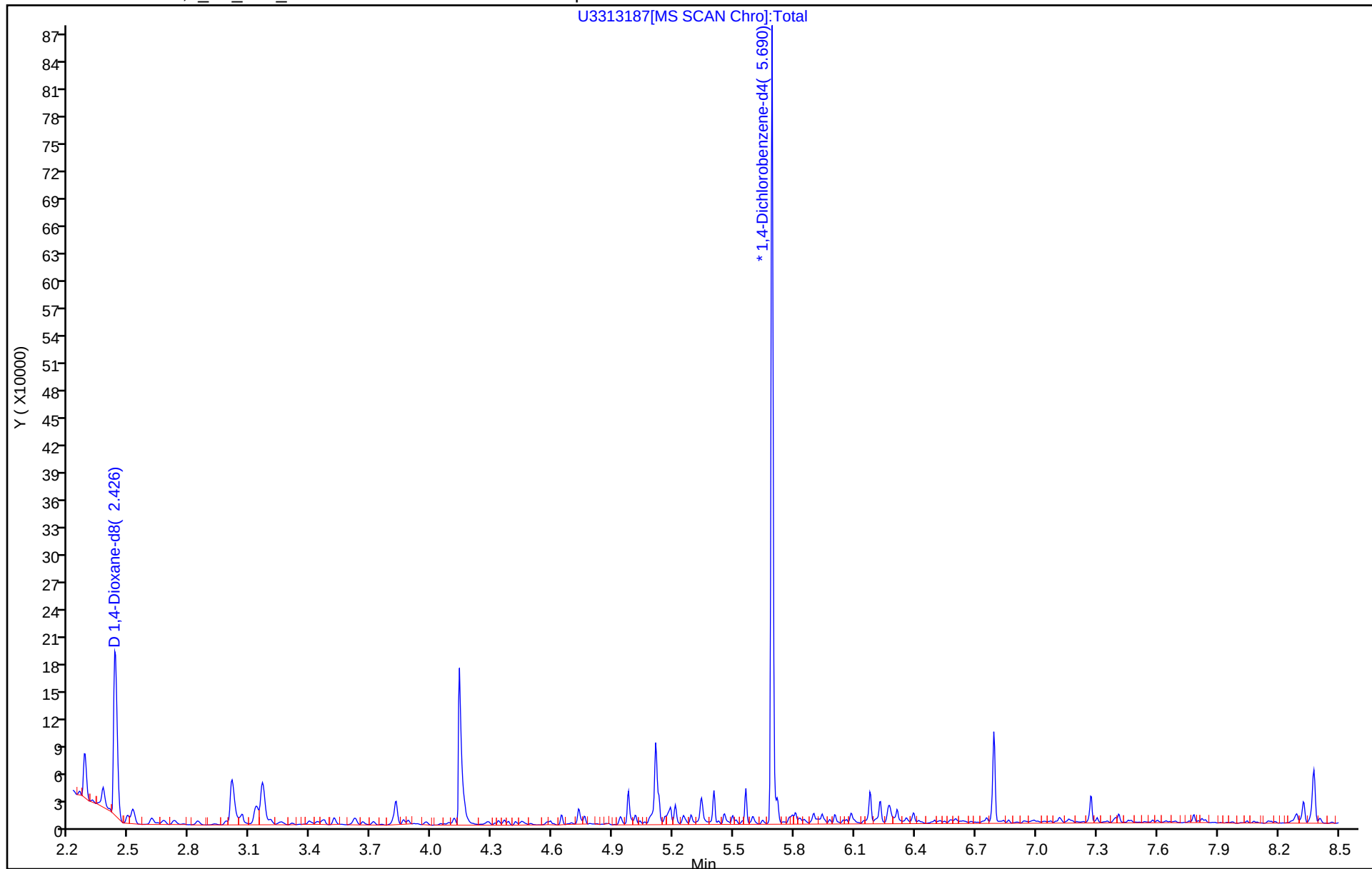
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 51

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313187.D

Injection Date: 10-Nov-2018 08:53:30

Instrument ID: HP5973U

Lims ID: 480-144297-B-8-A

Lab Sample ID: 480-144297-8

Client ID: SB-19

Operator ID: DR

ALS Bottle#: 51

Worklist Smp#: 14

Injection Vol: 1.0 ul

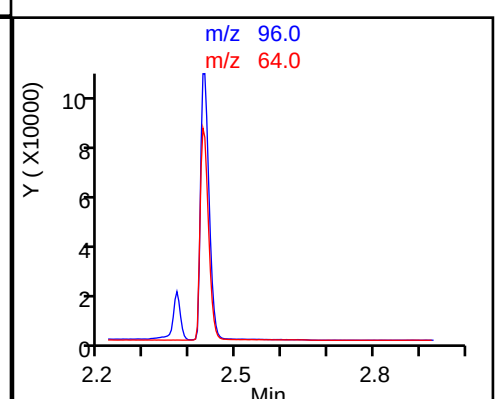
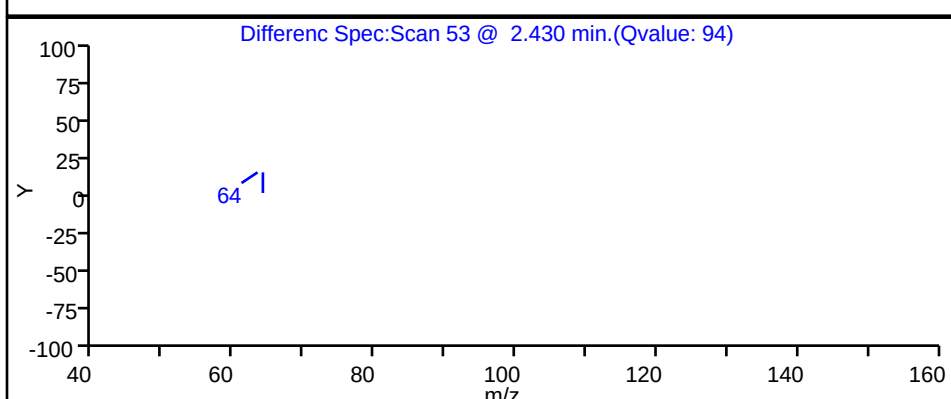
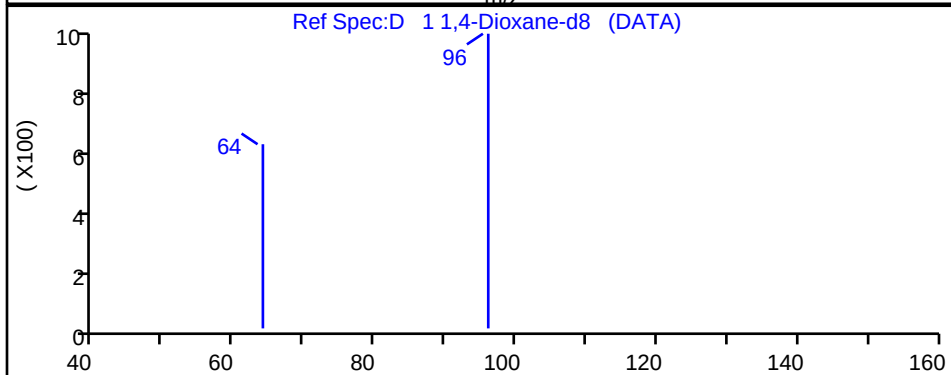
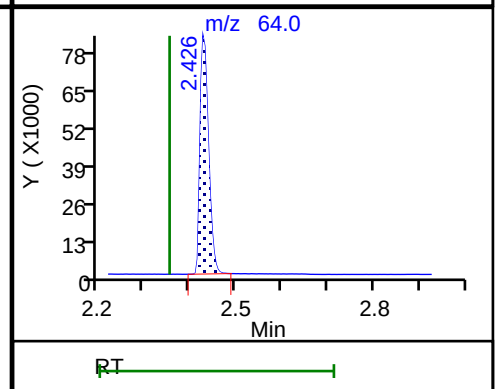
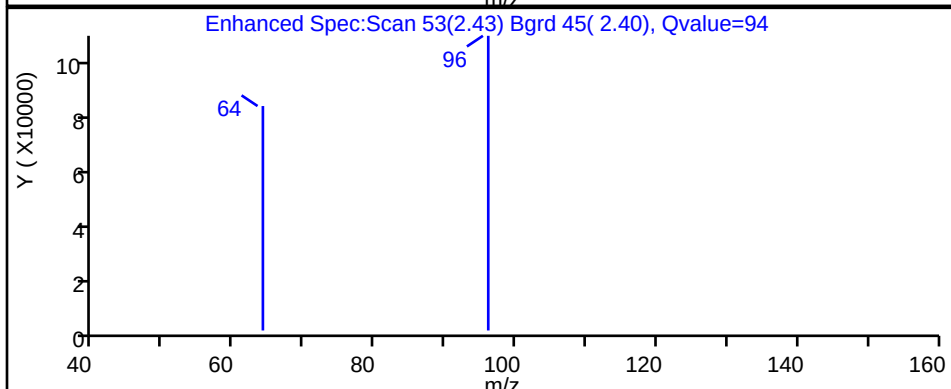
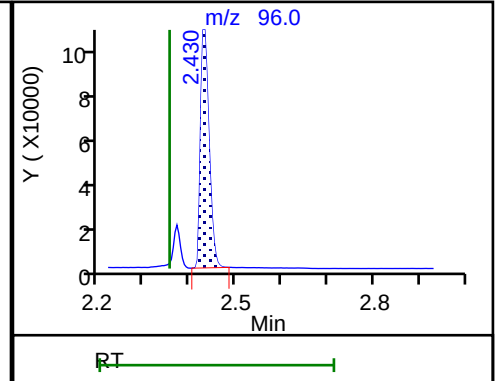
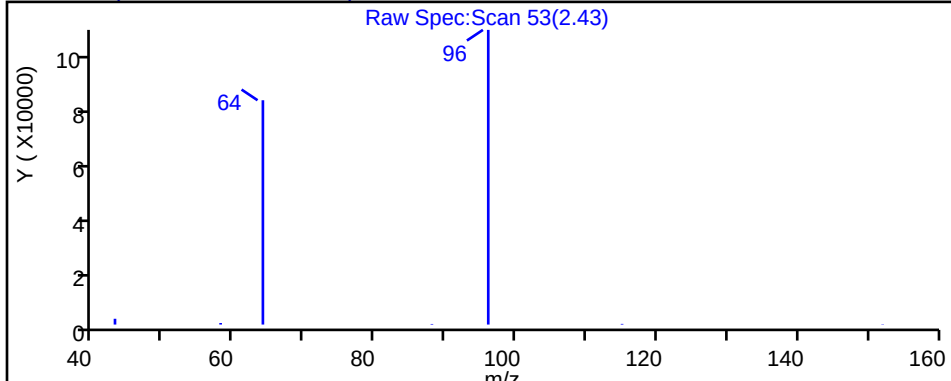
Dil. Factor: 1.0000

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

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Client Sample ID: GPW-6 Lab Sample ID: 480-144297-9
Matrix: Water Lab File ID: U3313188.D
Analysis Method: 8270D SIM ID Date Collected: 10/25/2018 17:25
Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
Sample wt/vol: 500 (mL) Date Analyzed: 11/10/2018 09:17
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.: 444687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.40	0.20

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	54		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313188.D
 Lims ID: 480-144297-A-9-A
 Client ID: GPW-6
 Sample Type: Client
 Inject. Date: 10-Nov-2018 09:17:30 ALS Bottle#: 52 Worklist Smp#: 15
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076305-015
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:27:10 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 12:01:07

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	2.455	2.353	0.102	94	234743	5.43	54.3	
3 1,4-Dioxane	88		2.394				ND		
* 2 1,4-Dichlorobenzene-d4	152	5.690	5.686	0.004	92	377920	4.00		

Reagents:

MB_LLIS_WRK_00157 Amount Added: 20.00 Units: uL Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313188.D

Injection Date: 10-Nov-2018 09:17:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: 480-144297-A-9-A

Lab Sample ID: 480-144297-9

Worklist Smp#: 15

Client ID: GPW-6

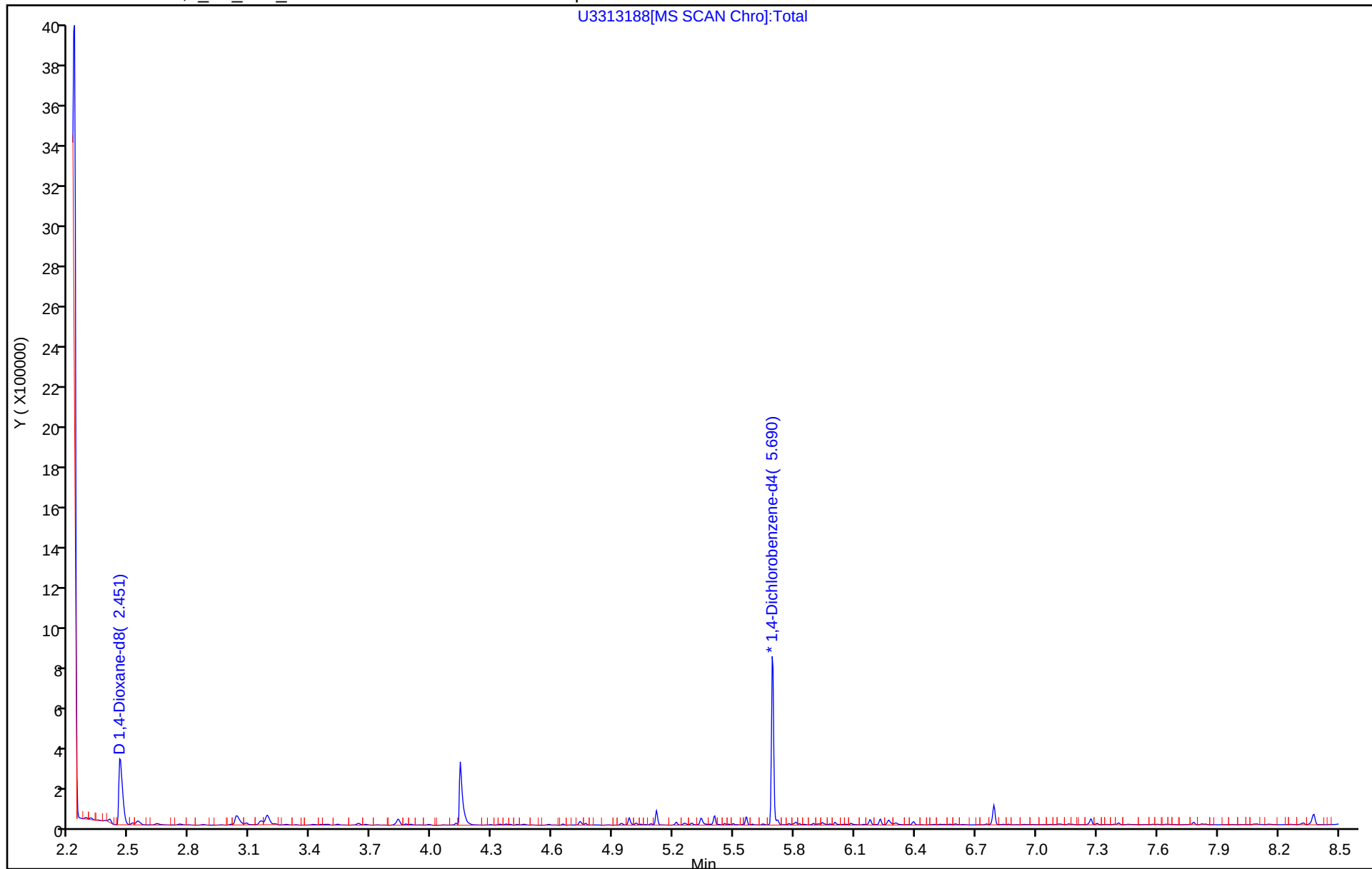
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 52

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313188.D

Injection Date: 10-Nov-2018 09:17:30

Instrument ID: HP5973U

Lims ID: 480-144297-A-9-A

Lab Sample ID: 480-144297-9

Client ID: GPW-6

Operator ID: DR

ALS Bottle#: 52

Worklist Smp#: 15

Injection Vol: 1.0 ul

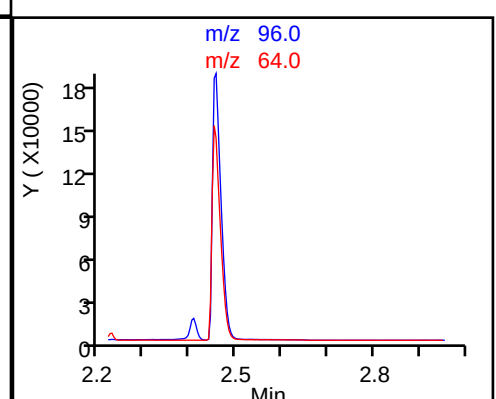
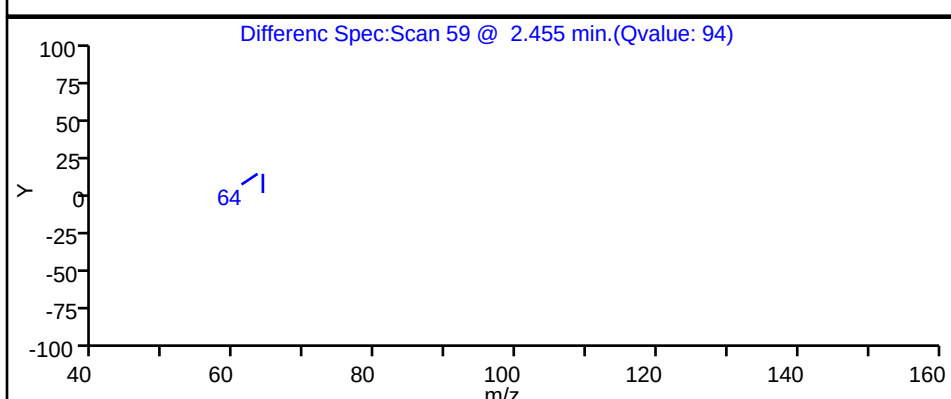
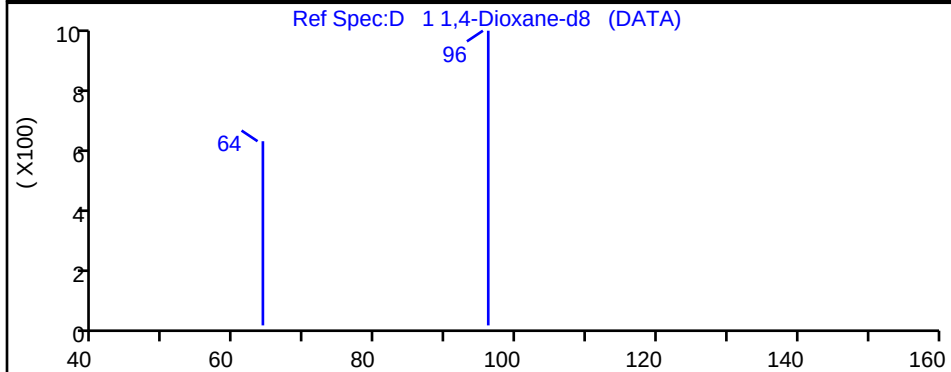
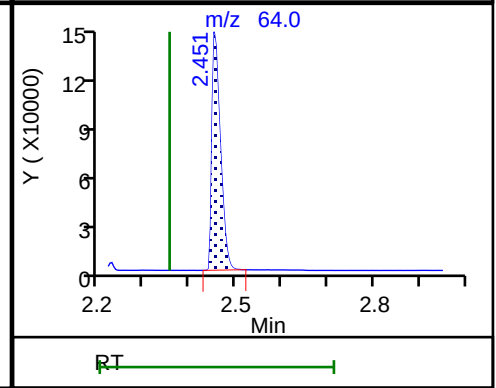
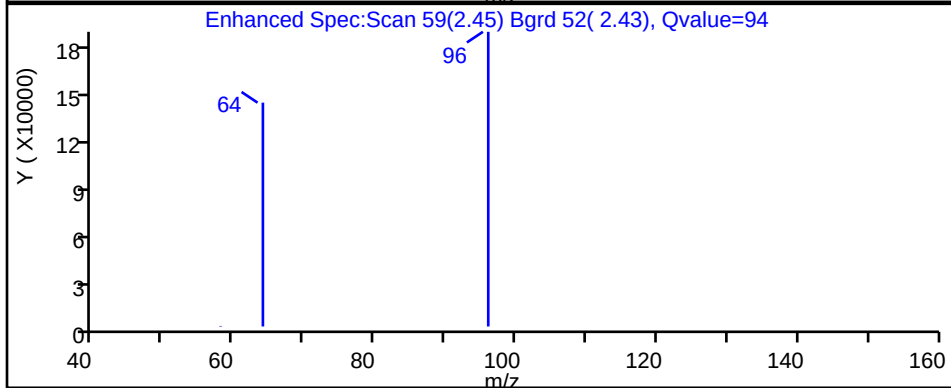
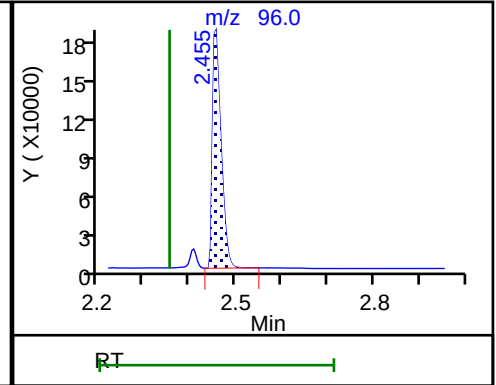
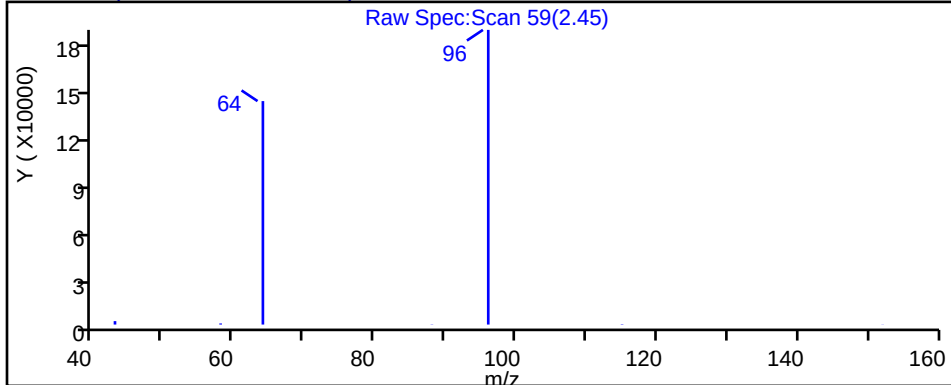
Dil. Factor: 1.0000

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: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Client Sample ID: GPW-5 Lab Sample ID: 480-144297-10
Matrix: Water Lab File ID: U3313189.D
Analysis Method: 8270D SIM ID Date Collected: 10/25/2018 18:00
Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
Sample wt/vol: 1050 (mL) Date Analyzed: 11/10/2018 09:41
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.: 444687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.79		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	27		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313189.D
 Lims ID: 480-144297-A-10-A
 Client ID: GPW-5
 Sample Type: Client
 Inject. Date: 10-Nov-2018 09:41:30 ALS Bottle#: 53 Worklist Smp#: 16
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076305-016
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:27:10 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICAL File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 12:01:25

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	2.430	2.353	0.077	20	123320	2.72	27.2	a
3 1,4-Dioxane	88	2.467	2.394	0.073	88	11988	0.8277		a
* 2 1,4-Dichlorobenzene-d4	152	5.690	5.686	0.004	95	396551	4.00		

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MB_LLIS_WRK_00157

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313189.D

Injection Date: 10-Nov-2018 09:41:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: 480-144297-A-10-A

Lab Sample ID: 480-144297-10

Worklist Smp#: 16

Client ID: GPW-5

Injection Vol: 1.0 ul

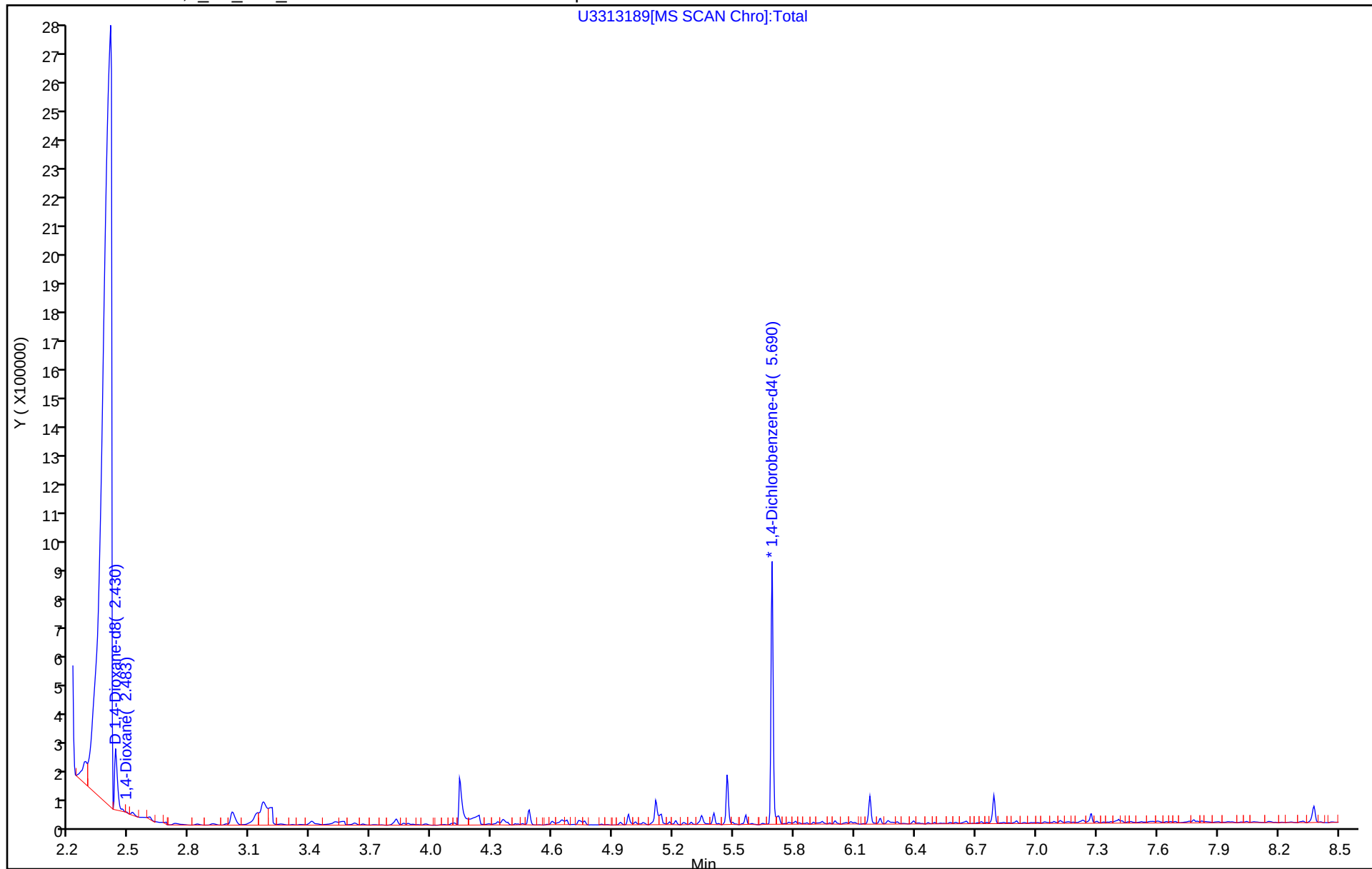
Dil. Factor: 1.0000

ALS Bottle#: 53

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

U3313189[MS SCAN Chro]:Total



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313189.D

Injection Date: 10-Nov-2018 09:41:30

Instrument ID: HP5973U

Lims ID: 480-144297-A-10-A

Lab Sample ID: 480-144297-10

Client ID: GPW-5

Operator ID: DR

ALS Bottle#: 53

Worklist Smp#: 16

Injection Vol: 1.0 ul

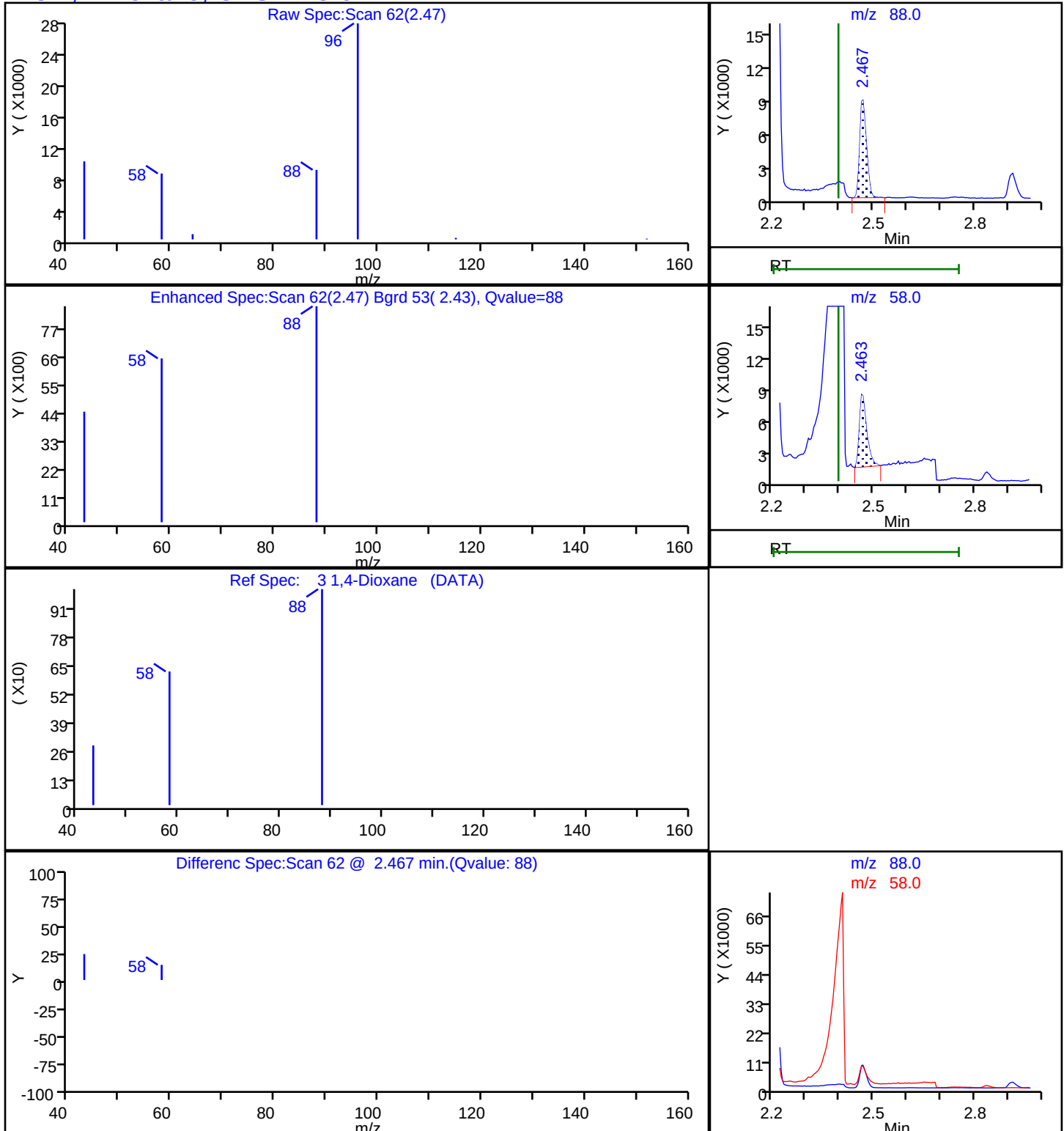
Dil. Factor: 1.0000

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

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313189.D

Injection Date: 10-Nov-2018 09:41:30

Instrument ID: HP5973U

Lims ID: 480-144297-A-10-A

Lab Sample ID: 480-144297-10

Client ID: GPW-5

Operator ID: DR

ALS Bottle#: 53

Worklist Smp#: 16

Injection Vol: 1.0 ul

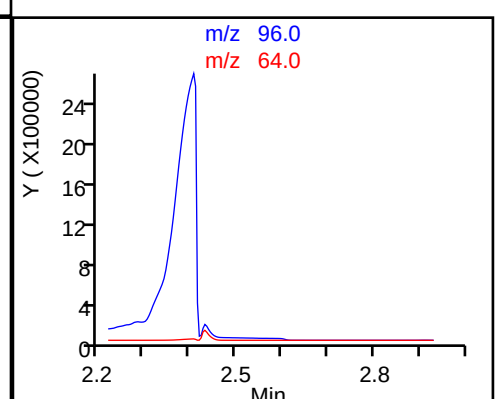
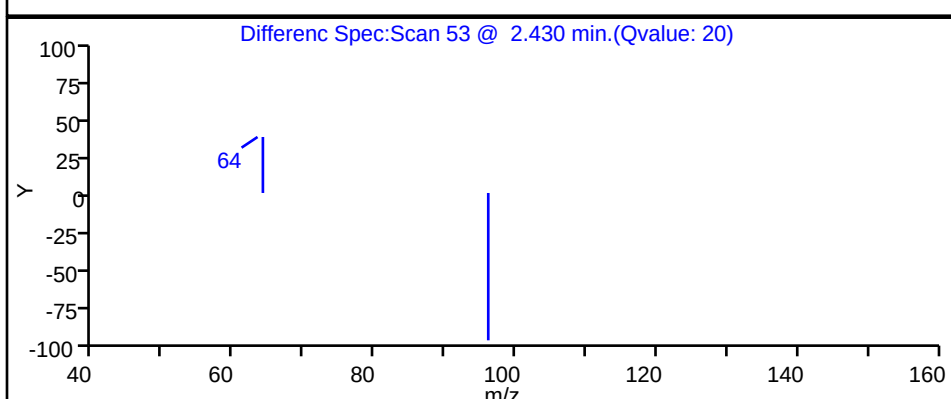
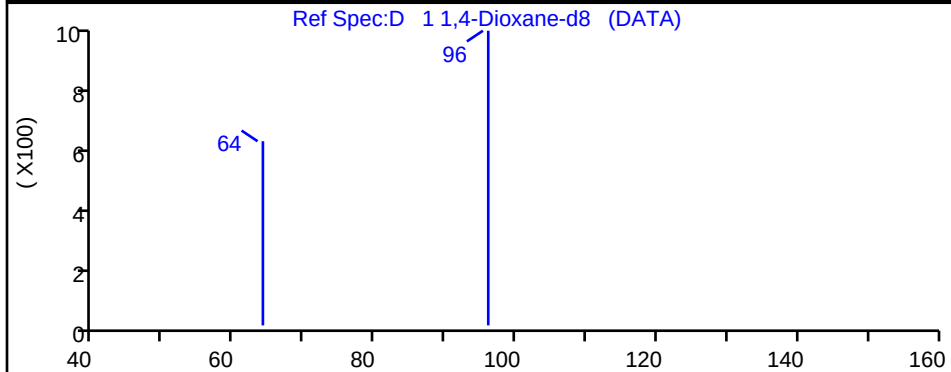
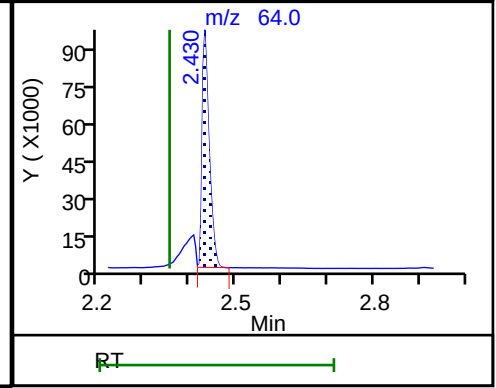
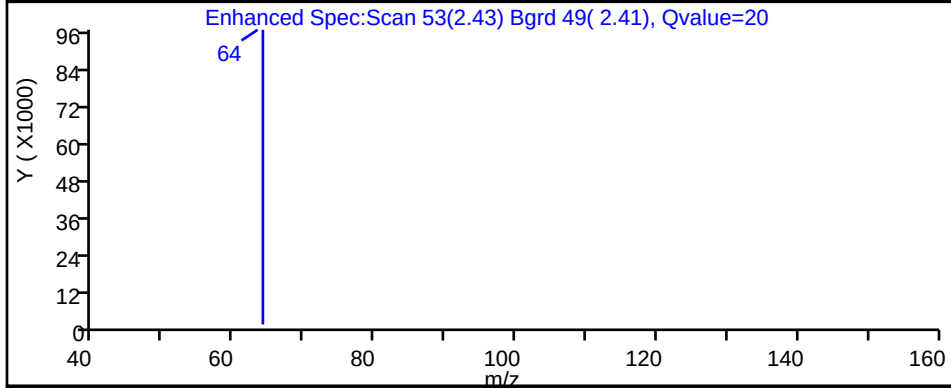
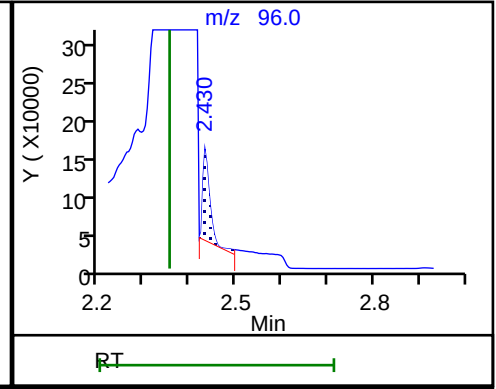
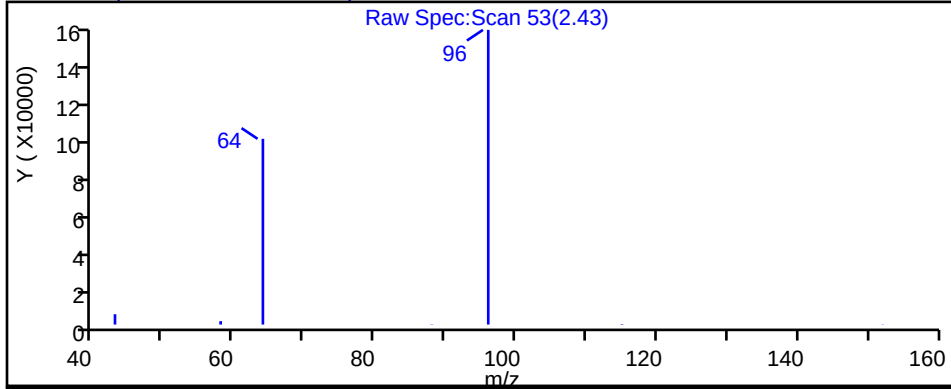
Dil. Factor: 1.0000

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

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313189.D

Injection Date: 10-Nov-2018 09:41:30

Instrument ID: HP5973U

Lims ID: 480-144297-A-10-A

Lab Sample ID: 480-144297-10

Client ID: GPW-5

Operator ID: DR

ALS Bottle#: 53 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:

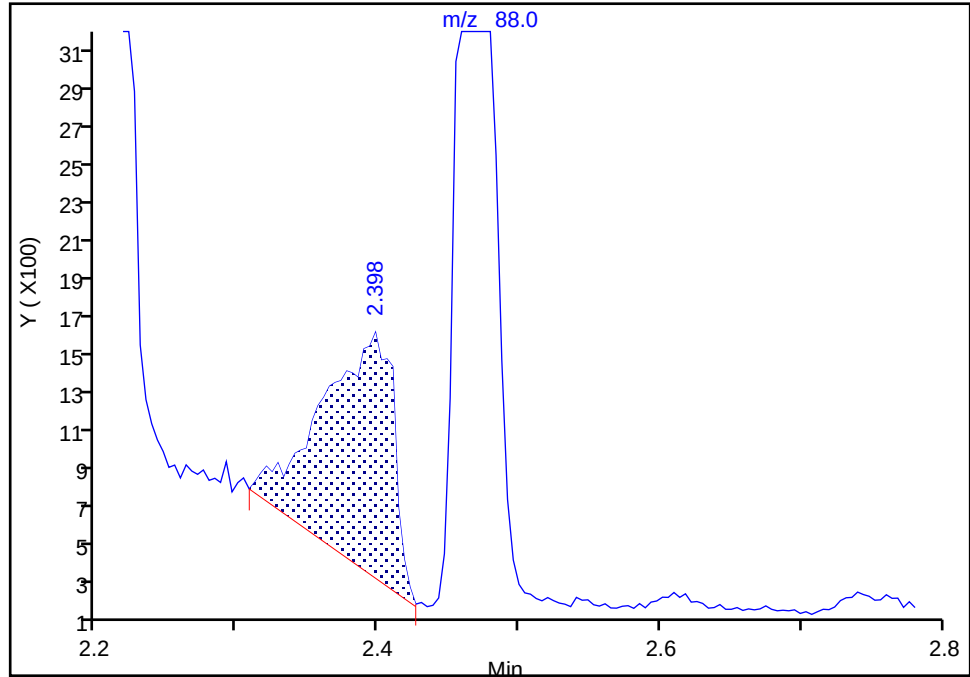
Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

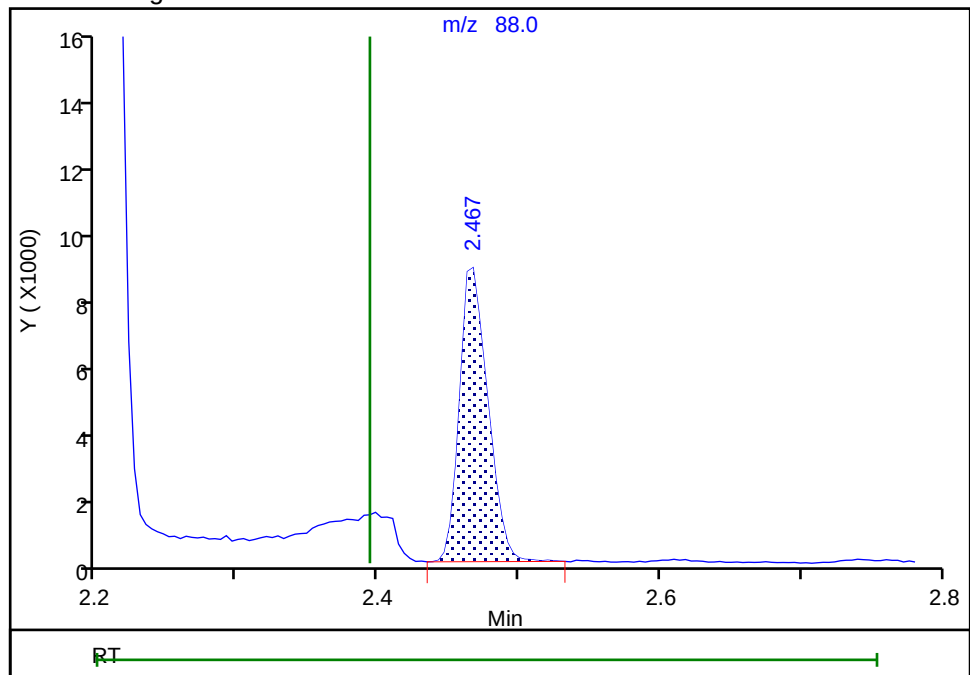
RT: 2.40
Area: 4439
Amount: 0.037261
Amount Units: ng/ul

Processing Integration Results



RT: 2.47
Area: 11988
Amount: 0.827723
Amount Units: ng/ul

Manual Integration Results



Reviewer: richardsd, 13-Nov-2018 12:01:13

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313189.D

Injection Date: 10-Nov-2018 09:41:30

Instrument ID: HP5973U

Lims ID: 480-144297-A-10-A

Lab Sample ID: 480-144297-10

Client ID: GPW-5

Operator ID: DR

ALS Bottle#: 53 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:

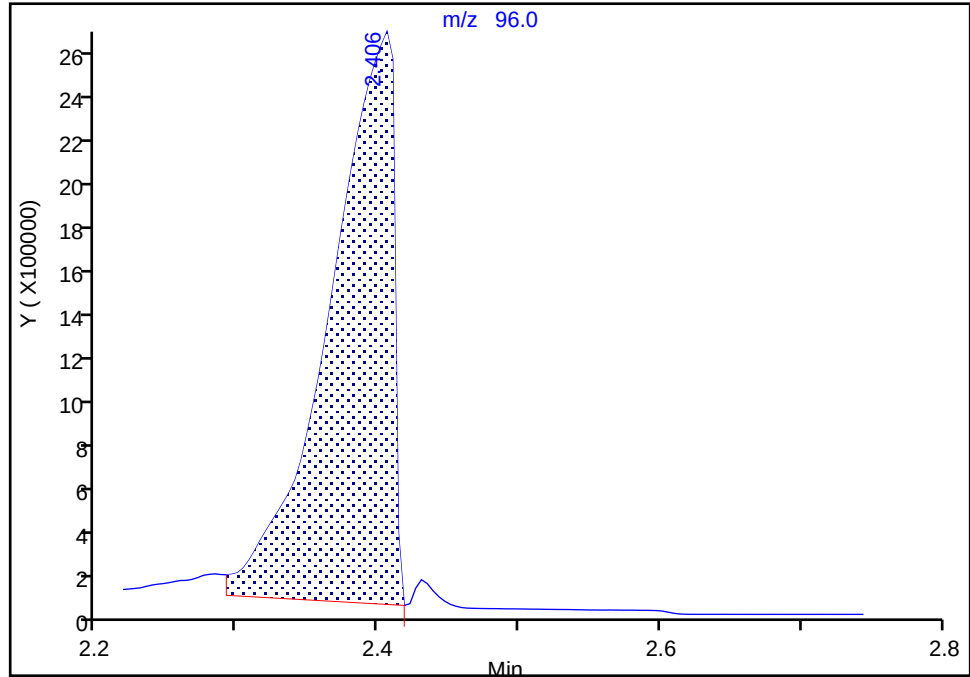
Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

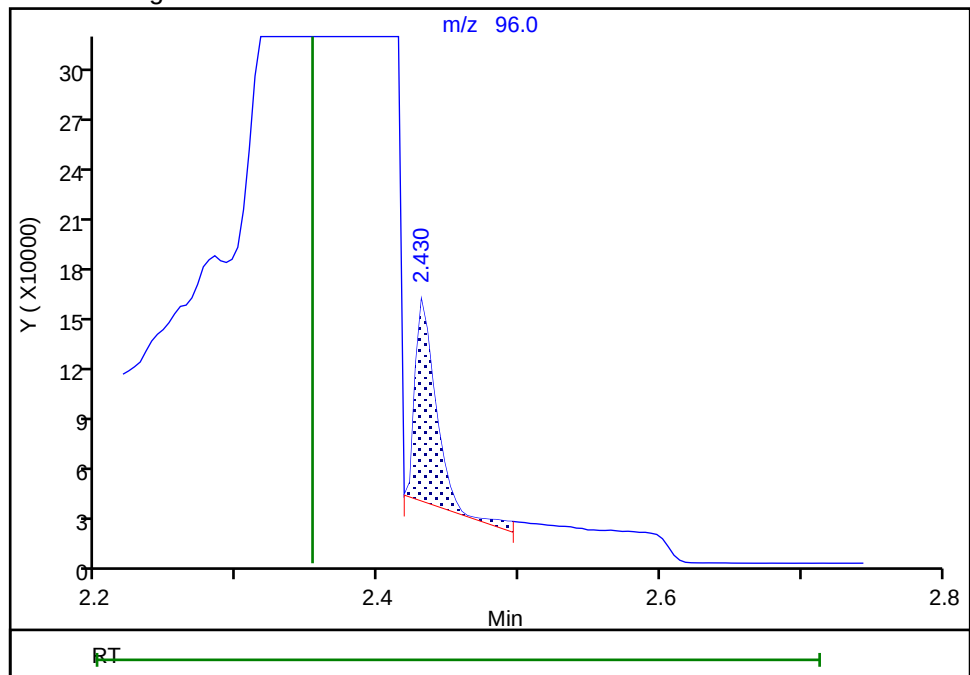
RT: 2.41
Area: 8073706
Amount: 177.8603
Amount Units: ng/ul

Processing Integration Results



RT: 2.43
Area: 123320
Amount: 2.716687
Amount Units: ng/ul

Manual Integration Results



Reviewer: richardsd, 13-Nov-2018 12:01:15

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Client Sample ID: DUP Lab Sample ID: 480-144297-11
Matrix: Water Lab File ID: U3313190.D
Analysis Method: 8270D SIM ID Date Collected: 10/25/2018 00:00
Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
Sample wt/vol: 1050(mL) Date Analyzed: 11/10/2018 10:05
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.: 444687 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.49		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	23		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313190.D
 Lims ID: 480-144297-B-11-A
 Client ID: DUP
 Sample Type: Client
 Inject. Date: 10-Nov-2018 10:05:30 ALS Bottle#: 54 Worklist Smp#: 17
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076305-017
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:27:10 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 12:01:33

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	2.451	2.353	0.098	92	114640	2.32	23.2	
3 1,4-Dioxane	88	2.483	2.394	0.089	16	6760	0.5150		
* 2 1,4-Dichlorobenzene-d4	152	5.727	5.686	0.041	92	431897	4.00		

Reagents:

MB_LLIS_WRK_00157 Amount Added: 20.00 Units: uL Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313190.D

Injection Date: 10-Nov-2018 10:05:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: 480-144297-B-11-A

Lab Sample ID: 480-144297-11

Worklist Smp#: 17

Client ID: DUP

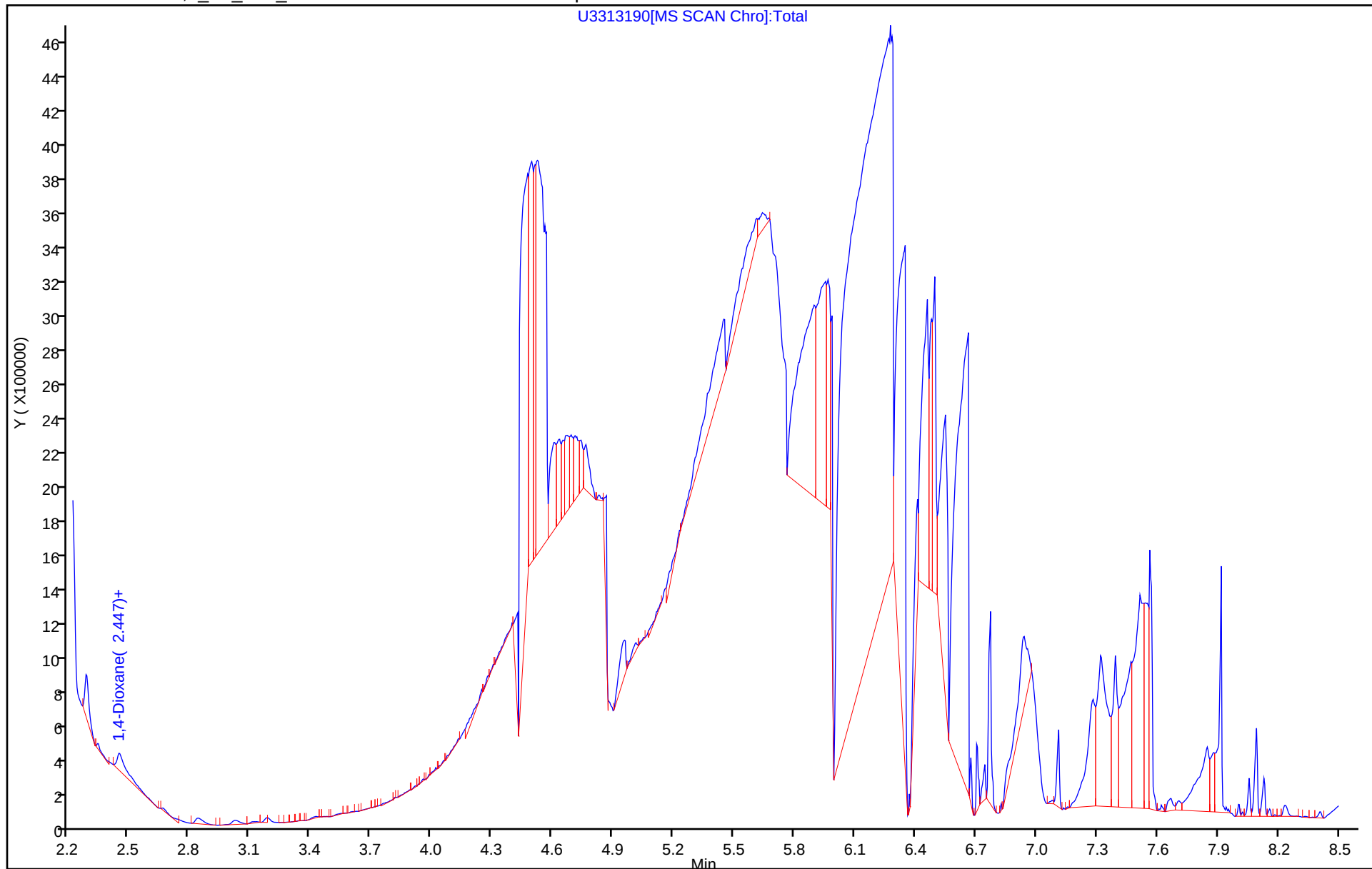
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 54

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313190.D

Injection Date: 10-Nov-2018 10:05:30

Instrument ID: HP5973U

Lims ID: 480-144297-B-11-A

Lab Sample ID: 480-144297-11

Client ID: DUP

Operator ID: DR

ALS Bottle#: 54

Worklist Smp#: 17

Injection Vol: 1.0 ul

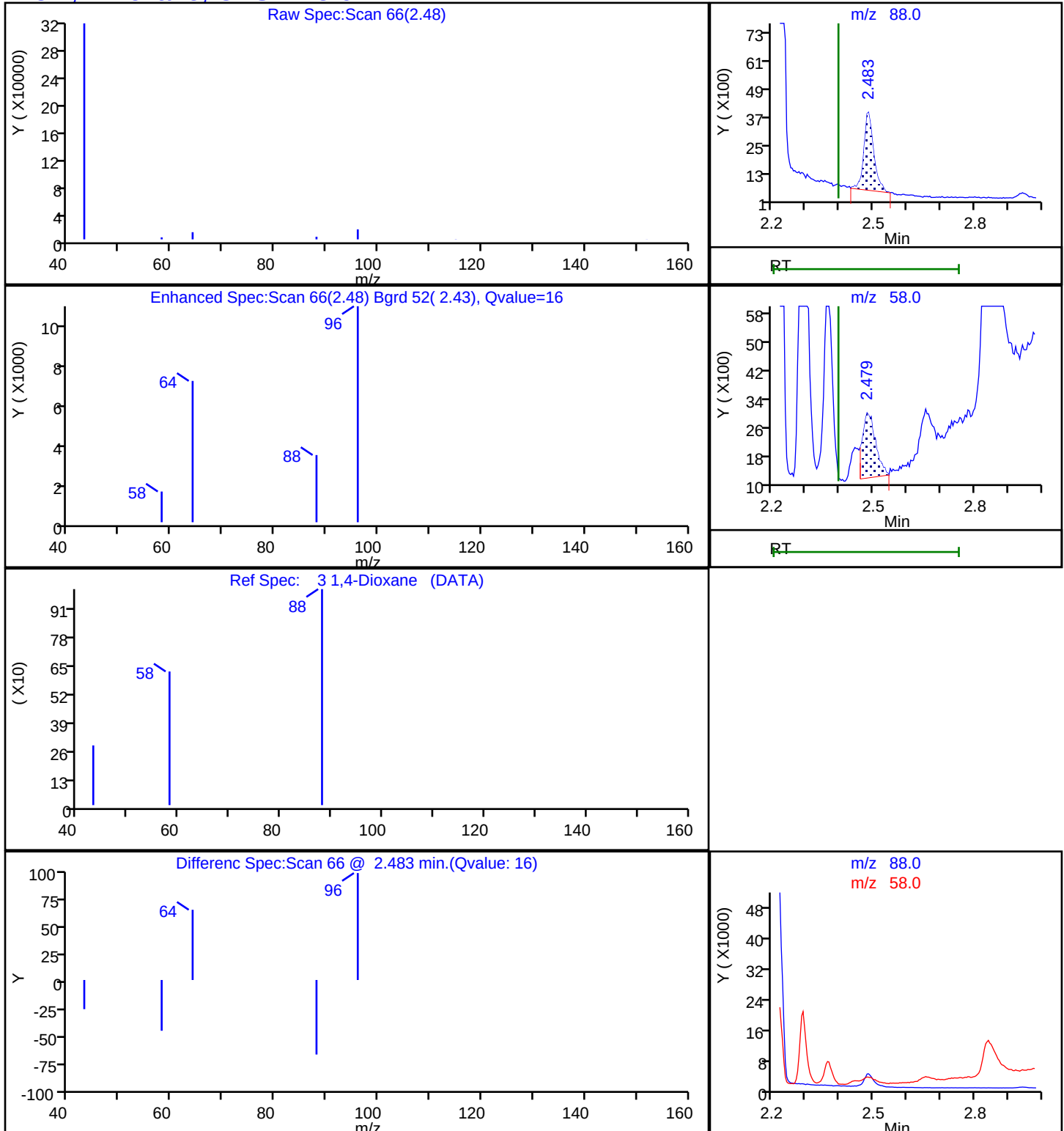
Dil. Factor: 1.0000

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

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313190.D

Injection Date: 10-Nov-2018 10:05:30

Instrument ID: HP5973U

Lims ID: 480-144297-B-11-A

Lab Sample ID: 480-144297-11

Client ID: DUP

Operator ID: DR

ALS Bottle#: 54

Worklist Smp#: 17

Injection Vol: 1.0 ul

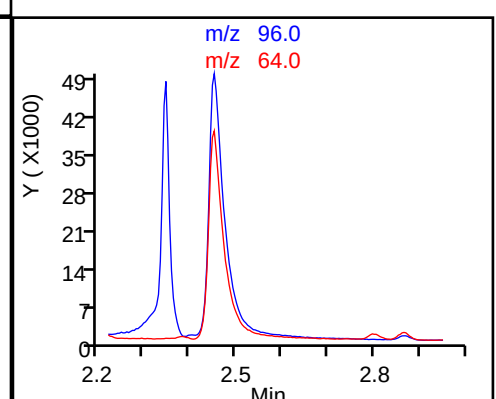
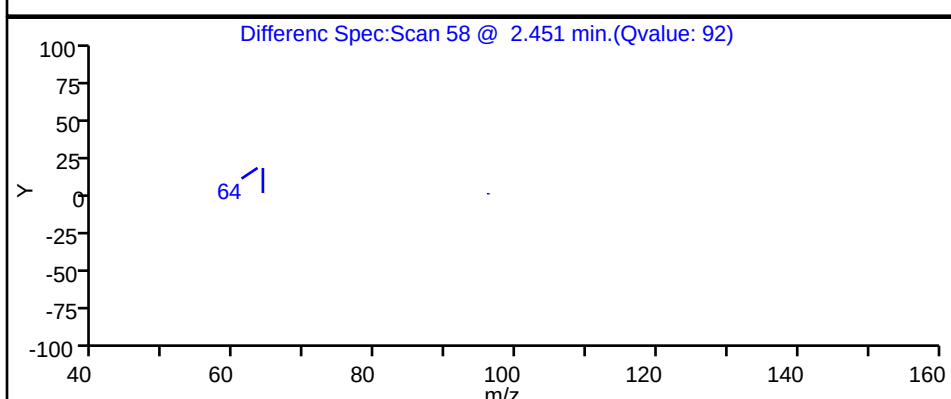
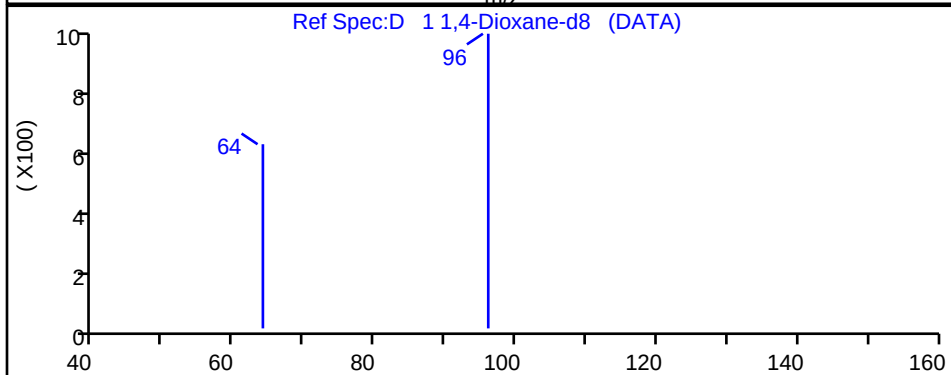
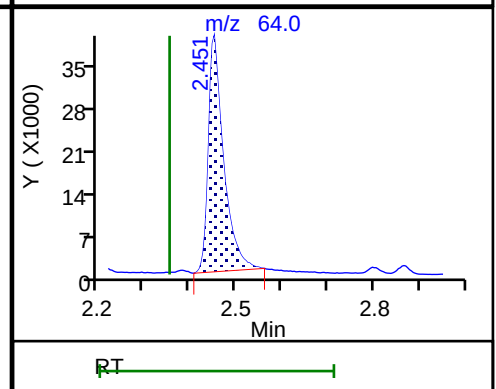
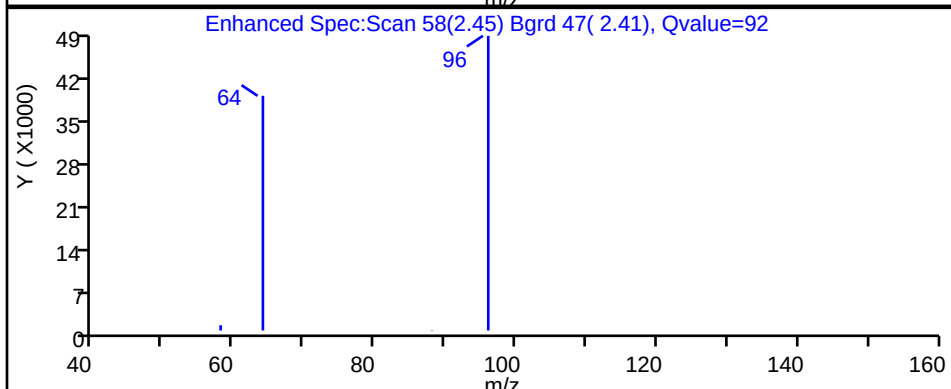
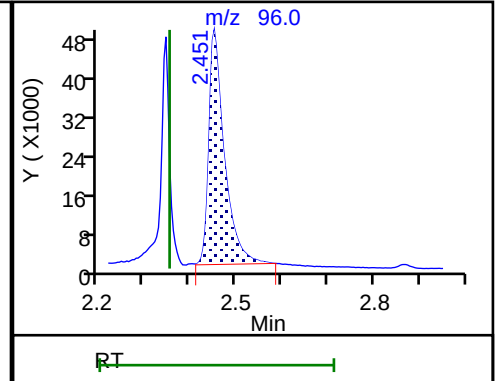
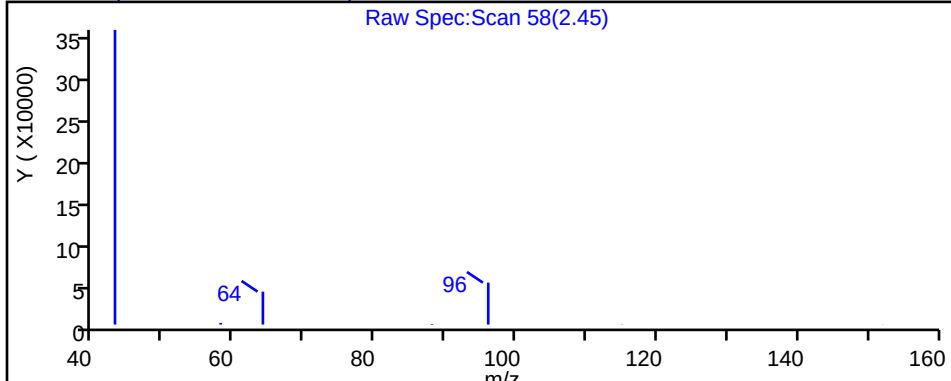
Dil. Factor: 1.0000

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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442039

SDG No.: _____

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2018 17:56 Calibration End Date: 10/26/2018 19:56 Calibration ID: 35206

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-442039/3	U3312593.D
Level 2	ICIS 480-442039/5	U3312595.D
Level 3	IC 480-442039/6	U3312596.D
Level 4	IC 480-442039/7	U3312597.D
Level 5	IC 480-442039/8	U3312598.D
Level 6	IC 480-442039/4	U3312594.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	1.0272 1.1181	1.1403	1.1674	1.2020	1.1911	L2ID	-0.040	1.2228			0.0100				1.0000		0.9900
1,4-Dioxane-d8	0.4652 0.4652	0.4519	0.4606	0.4543	0.4501	Ave		0.4579			0.0100	1.5		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: TestAmerica Buffalo Job No.: 480-144297-1 Analy Batch No.: 442039

SDG No.: _____

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/26/2018 17:56 Calibration End Date: 10/26/2018 19:56 Calibration ID: 35206

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-442039/3	U3312593.D
Level 2	ICIS 480-442039/5	U3312595.D
Level 3	IC 480-442039/6	U3312596.D
Level 4	IC 480-442039/7	U3312597.D
Level 5	IC 480-442039/8	U3312598.D
Level 6	IC 480-442039/4	U3312594.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		L2ID	25072 47655	59461	107956	146288	154566	0.200 0.400	0.600	0.800	1.00	1.20
1,4-Dioxane-d8	DCBd 4	Ave	244071 426208	521445	924722	1217025	1297680	2.00 4.00	6.00	8.00	10.0	12.0

Curve Type Legend:

Ave = Average ISTD
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312593.D
 Lims ID: IC - SIM 0.2
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 26-Oct-2018 17:56:30 ALS Bottle#: 3 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC - 0.2 SIM
 Operator ID: DR Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 29-Oct-2018 12:21:16 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: richardsd

Date: 29-Oct-2018 12:20:34

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	2.691	2.687	0.004	93	244071	2.00	2.03	
3 1,4-Dioxane	88	2.732	2.732	0.000	89	25072	0.2000	0.2008	
* 2 1,4-Dichlorobenzene-d4	152	5.898	5.898	0.000	95	1049327	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00053

Amount Added: 1.00

Units: mL

MB_LLIS_WRK_00156

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312593.D

Injection Date: 26-Oct-2018 17:56:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: IC - SIM 0.2

Worklist Smp#: 3

Client ID:

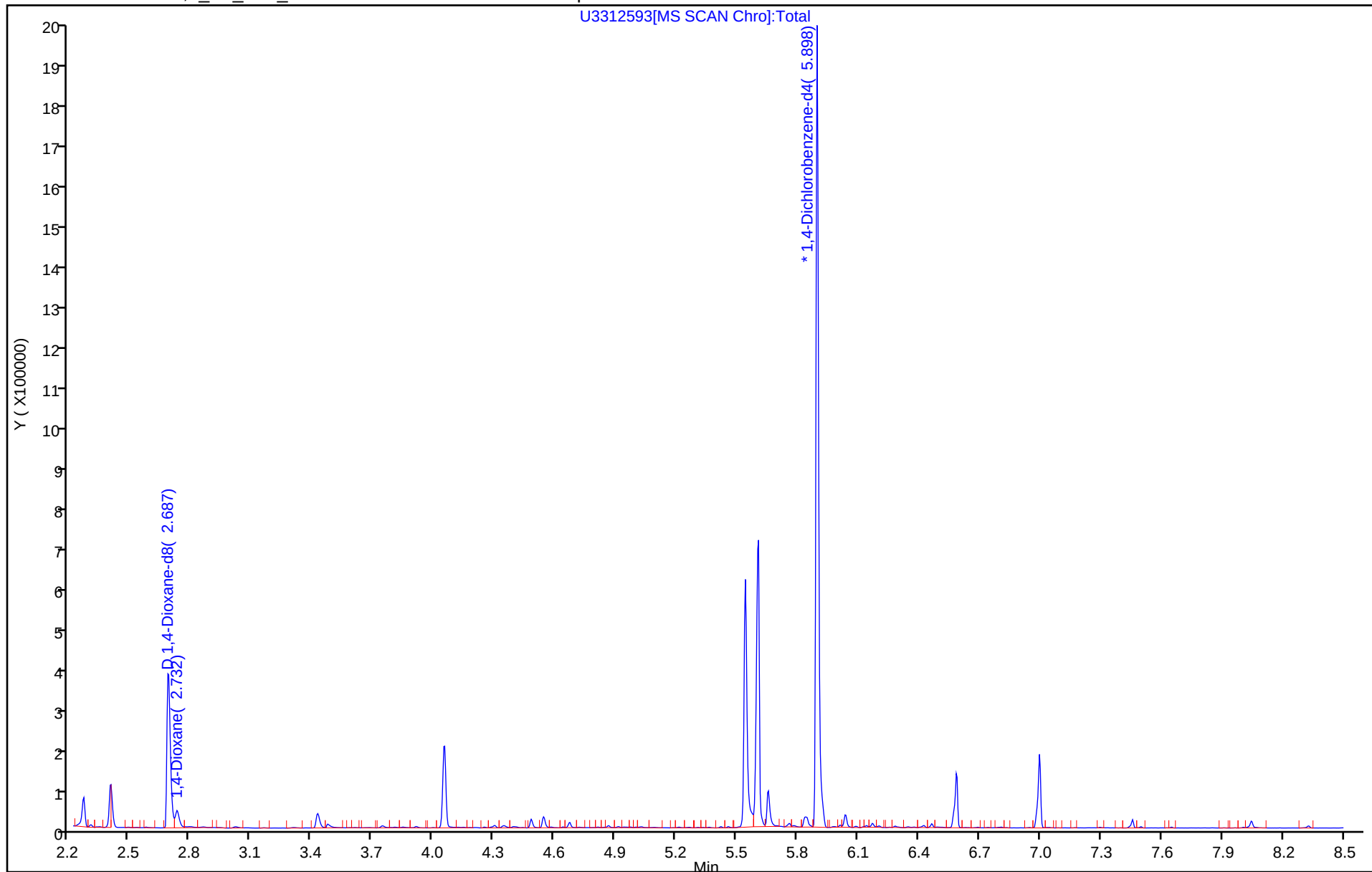
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 3

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312594.D
 Lims ID: IC - SIM 0.4
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 26-Oct-2018 18:20:30 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC 0.4 SIM
 Operator ID: DR Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 29-Oct-2018 12:21:17 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: richardsd

Date: 29-Oct-2018 12:20:20

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	2.687	2.687	0.000	93	426208	4.00	4.06	
3 1,4-Dioxane	88	2.728	2.732	-0.004	88	47655	0.4000	0.3985	
* 2 1,4-Dichlorobenzene-d4	152	5.898	5.898	0.000	95	916170	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00054
 MB_LLIS_WRK_00156

Amount Added: 1.00
 Amount Added: 20.00

Units: mL
 Units: uL Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312594.D

Injection Date: 26-Oct-2018 18:20:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: IC - SIM 0.4

Worklist Smp#: 4

Client ID:

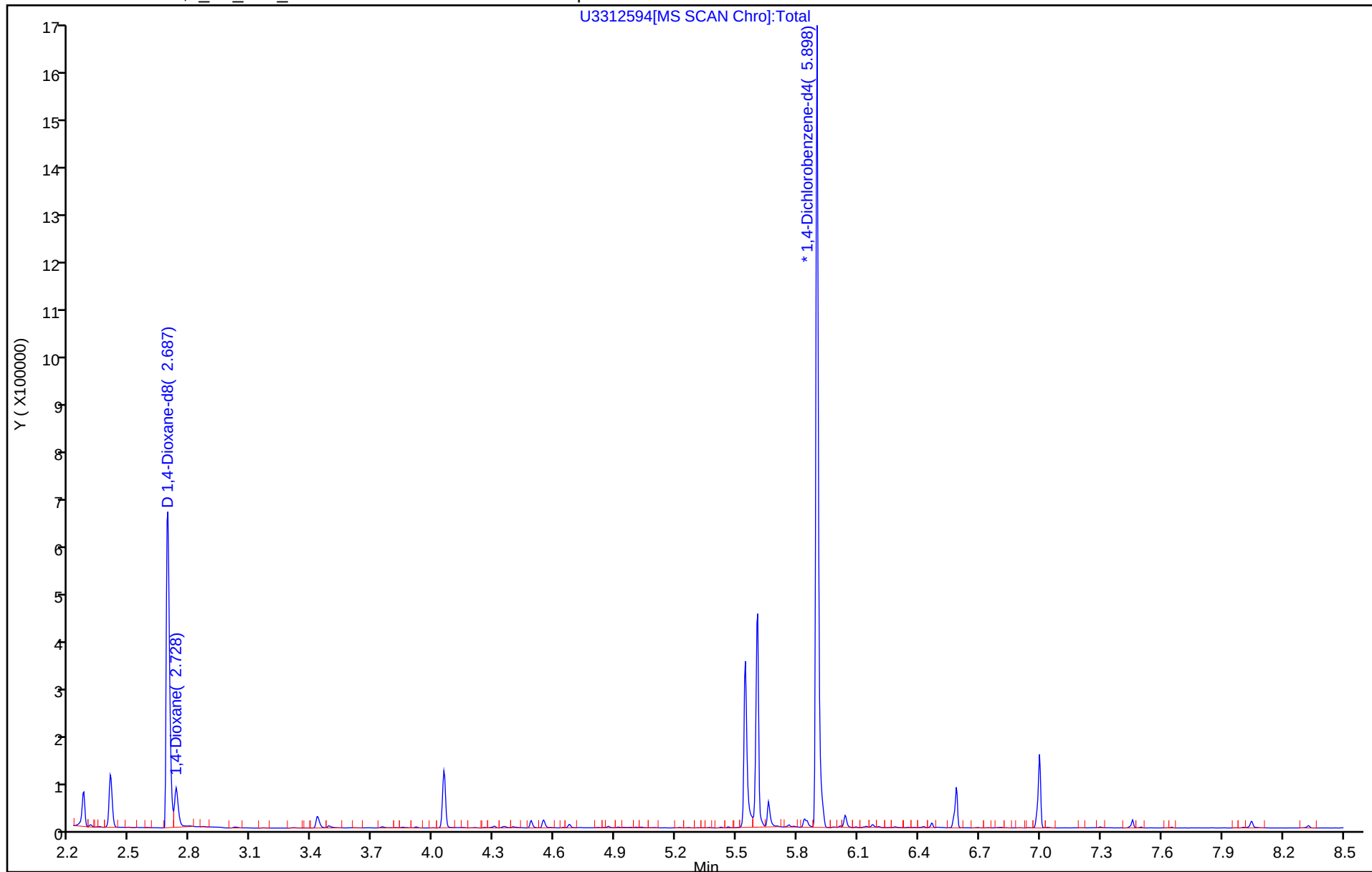
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 4

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312595.D
 Lims ID: ICIS - SIM 0.6
 Client ID:
 Sample Type: ICIS Calib Level: 3
 Inject. Date: 26-Oct-2018 18:45:30 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: ICIS- 0.6 SIM
 Operator ID: DR Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 29-Oct-2018 12:21:18 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: richardsd

Date: 29-Oct-2018 12:20:02

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	2.687	2.687	0.000	92	521445	6.00	5.92	
3 1,4-Dioxane	88	2.732	2.732	0.000	90	59461	0.6000	0.5923	
* 2 1,4-Dichlorobenzene-d4	152	5.898	5.898	0.000	96	769210	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00059
 MB_LLIS_WRK_00156

Amount Added: 1.00
 Amount Added: 20.00

Units: mL
 Units: uL Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312595.D

Injection Date: 26-Oct-2018 18:45:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: ICIS - SIM 0.6

Worklist Smp#: 5

Client ID:

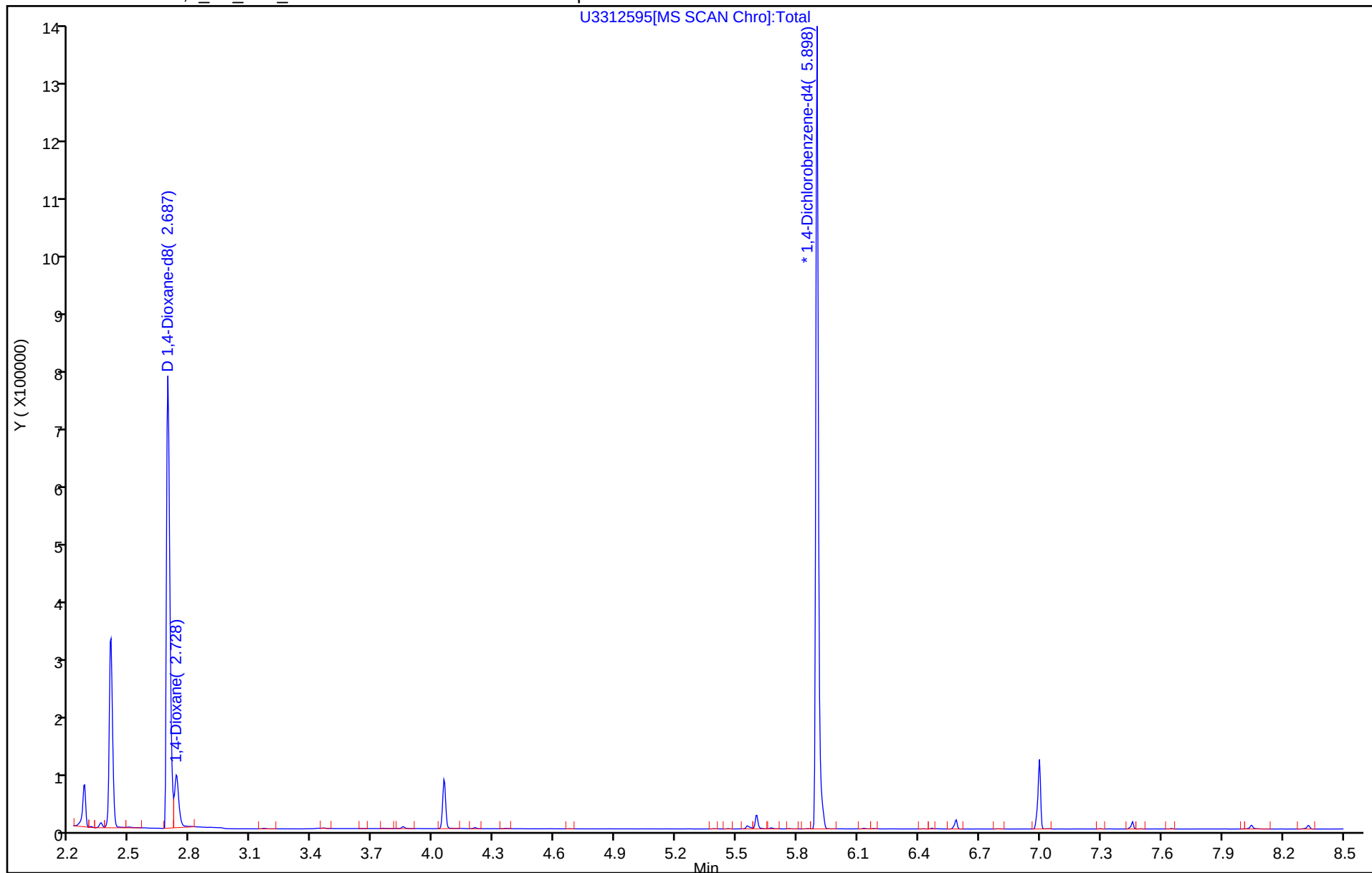
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 5

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312596.D
 Lims ID: IC - SIM 0.8
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 26-Oct-2018 19:08:30 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC - 0.8 SIM
 Operator ID: DR Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 29-Oct-2018 12:21:19 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: richardsd

Date: 29-Oct-2018 12:20:15

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	2.691	2.687	0.004	92	924722	8.00	8.05	
3 1,4-Dioxane	88	2.732	2.732	0.000	90	107956	0.8000	0.7965	
* 2 1,4-Dichlorobenzene-d4	152	5.898	5.898	0.000	95	1003796	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00056 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00156 Amount Added: 20.00 Units: uL Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312596.D

Injection Date: 26-Oct-2018 19:08:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: IC - SIM 0.8

Worklist Smp#: 6

Client ID:

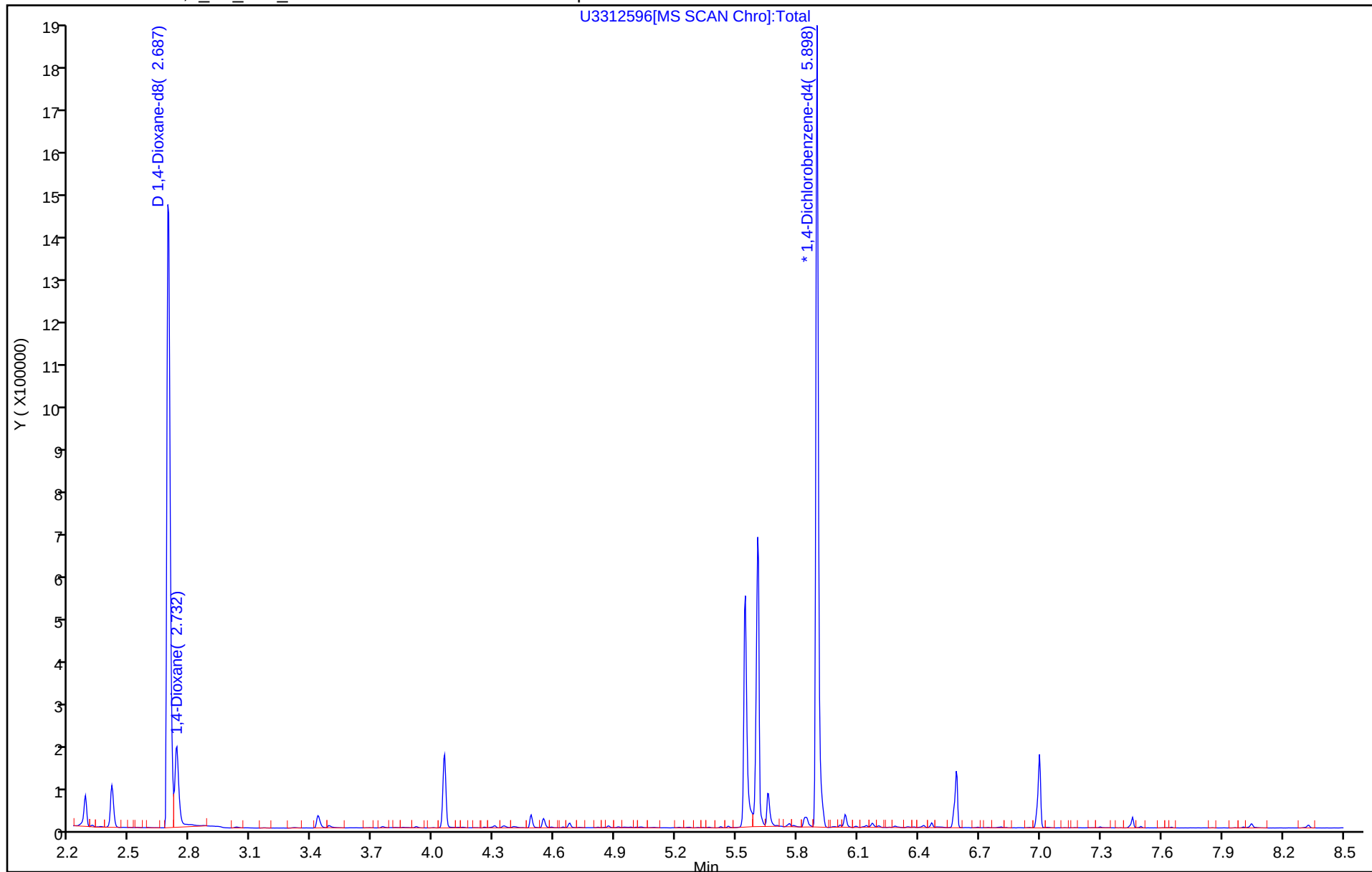
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 6

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312597.D
 Lims ID: IC - SIM 1.0
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 26-Oct-2018 19:32:30 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0075895-007
 Operator ID: DR Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 29-Oct-2018 12:21:20 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: richardsd

Date: 29-Oct-2018 12:20:14

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	2.687	2.687	0.000	91	1217025	10.0	9.92	
3 1,4-Dioxane	88	2.728	2.732	-0.004	88	146288	1.00	1.02	
* 2 1,4-Dichlorobenzene-d4	152	5.898	5.898	0.000	95	1071553	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00057 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00156 Amount Added: 20.00 Units: uL Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312597.D

Injection Date: 26-Oct-2018 19:32:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: IC - SIM 1.0

Worklist Smp#: 7

Client ID:

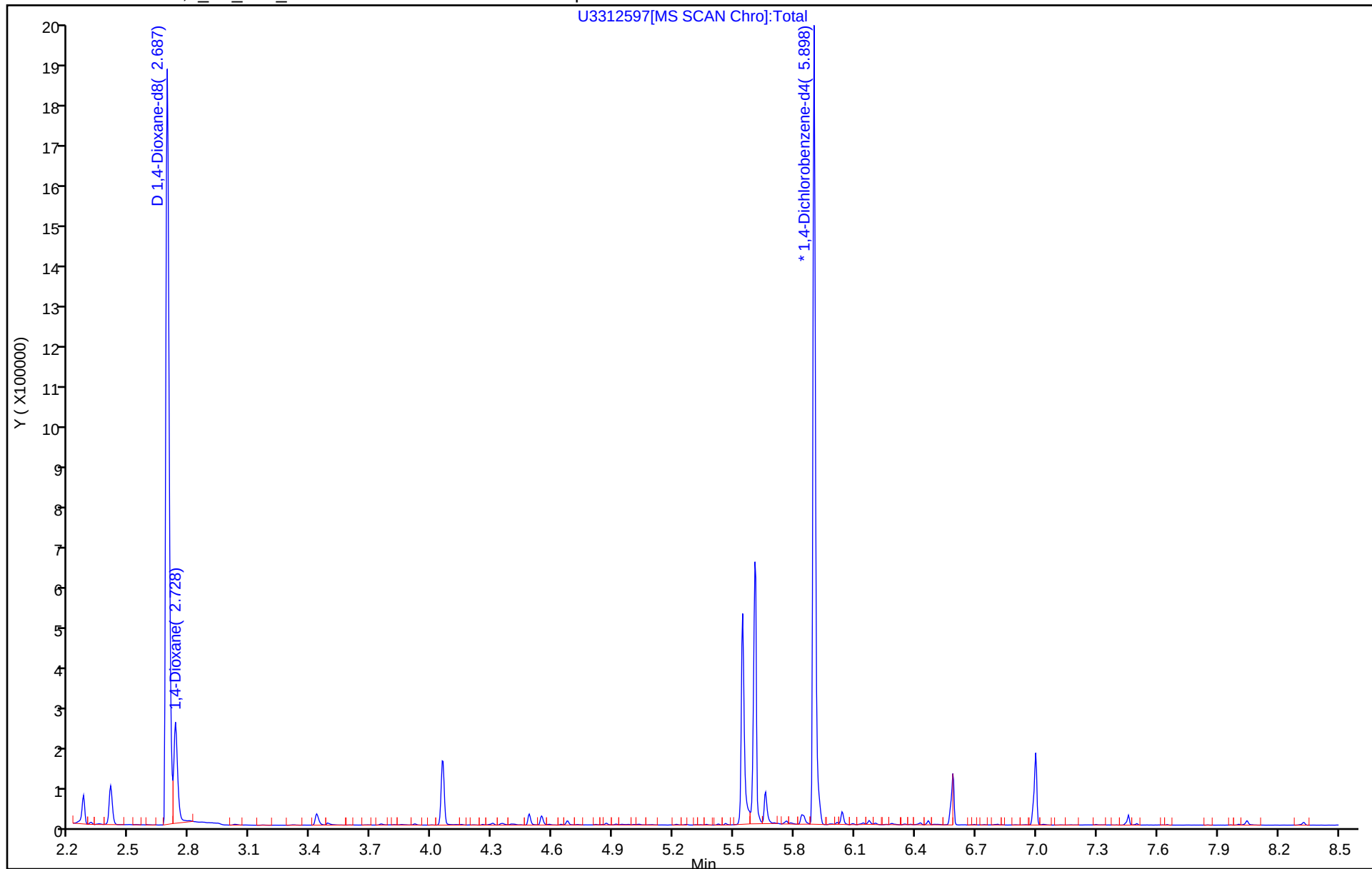
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 7

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Lims ID: IC - SIM 1.2
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 26-Oct-2018 19:56:30 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0075895-008
 Operator ID: DR Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 29-Oct-2018 12:21:21 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: richardsd

Date: 29-Oct-2018 12:20:12

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	2.687	2.687	0.000	93	1297680	12.0	11.8	
3 1,4-Dioxane	88	2.728	2.732	-0.004	91	154566	1.20	1.20	
* 2 1,4-Dichlorobenzene-d4	152	5.898	5.898	0.000	96	961134	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00058

Amount Added: 1.00

Units: mL

MB_LLIS_WRK_00156

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D

Injection Date: 26-Oct-2018 19:56:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: IC - SIM 1.2

Worklist Smp#: 8

Client ID:

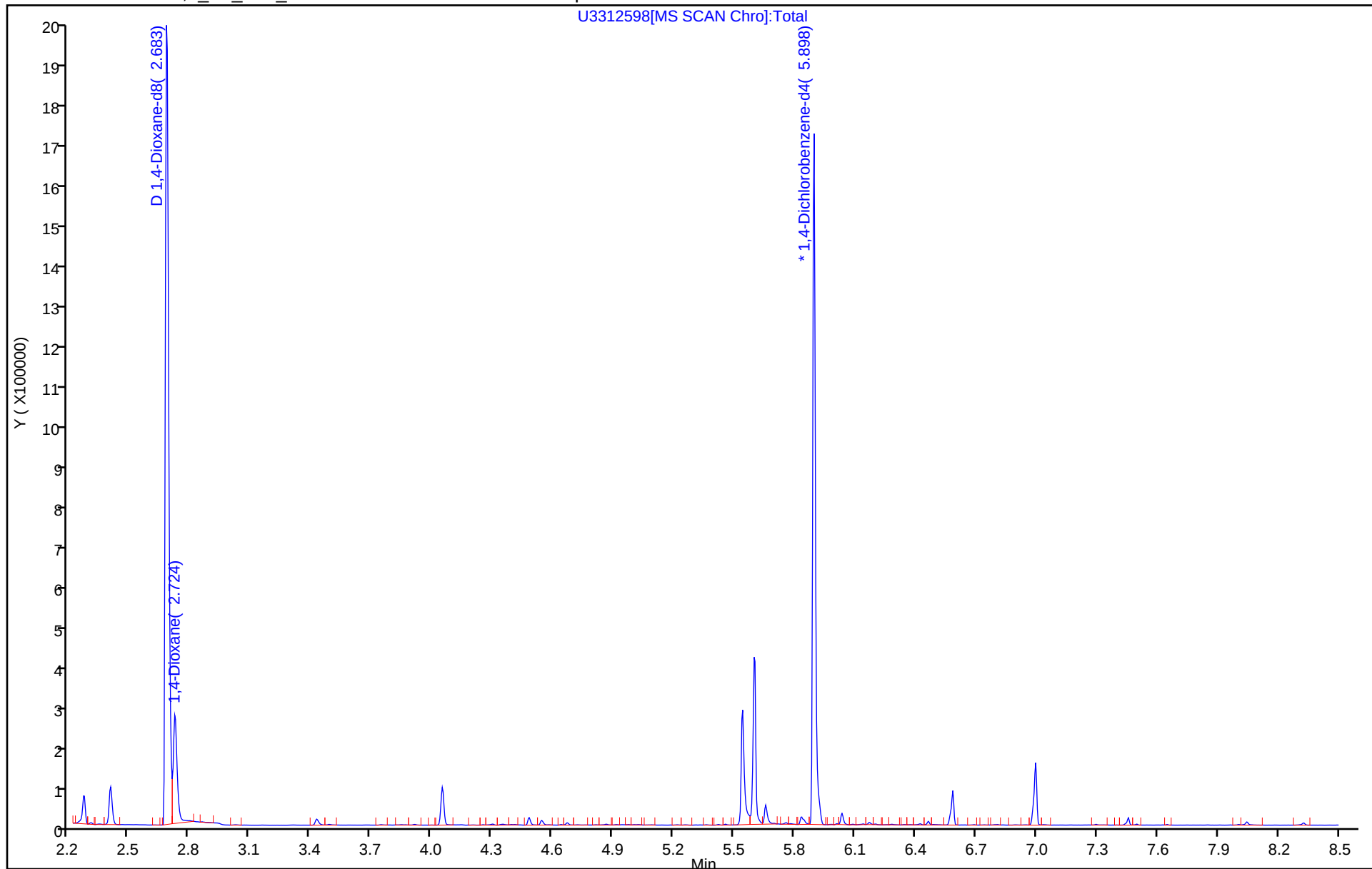
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 8

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Lab Sample ID: CCVIS 480-444681/3 Calibration Date: 11/09/2018 16:30
Instrument ID: HP5973U Calib Start Date: 10/26/2018 17:56
GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm) Calib End Date: 10/26/2018 19:56
Lab File ID: U3313146.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	L2ID		1.156	0.0100	600	600	-0.0	20.0
1,4-Dioxane-d8	Ave	0.4579	0.4545	0.0100	5960	6000	-0.7	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313146.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 09-Nov-2018 16:30:30 ALS Bottle#: 10 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076303-003
 Operator ID: DR Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:12:47 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 11:54:41

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	2.353	2.357	-0.004	90	356447	6.00	5.96	
3 1,4-Dioxane	88	2.394	2.394	0.000	88	41192	0.6000	0.5998	
* 2 1,4-Dichlorobenzene-d4	152	5.686	5.686	0.000	93	522845	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00059

Amount Added: 1.00

Units: mL

MB_LLIS_WRK_00157

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313146.D

Injection Date: 09-Nov-2018 16:30:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

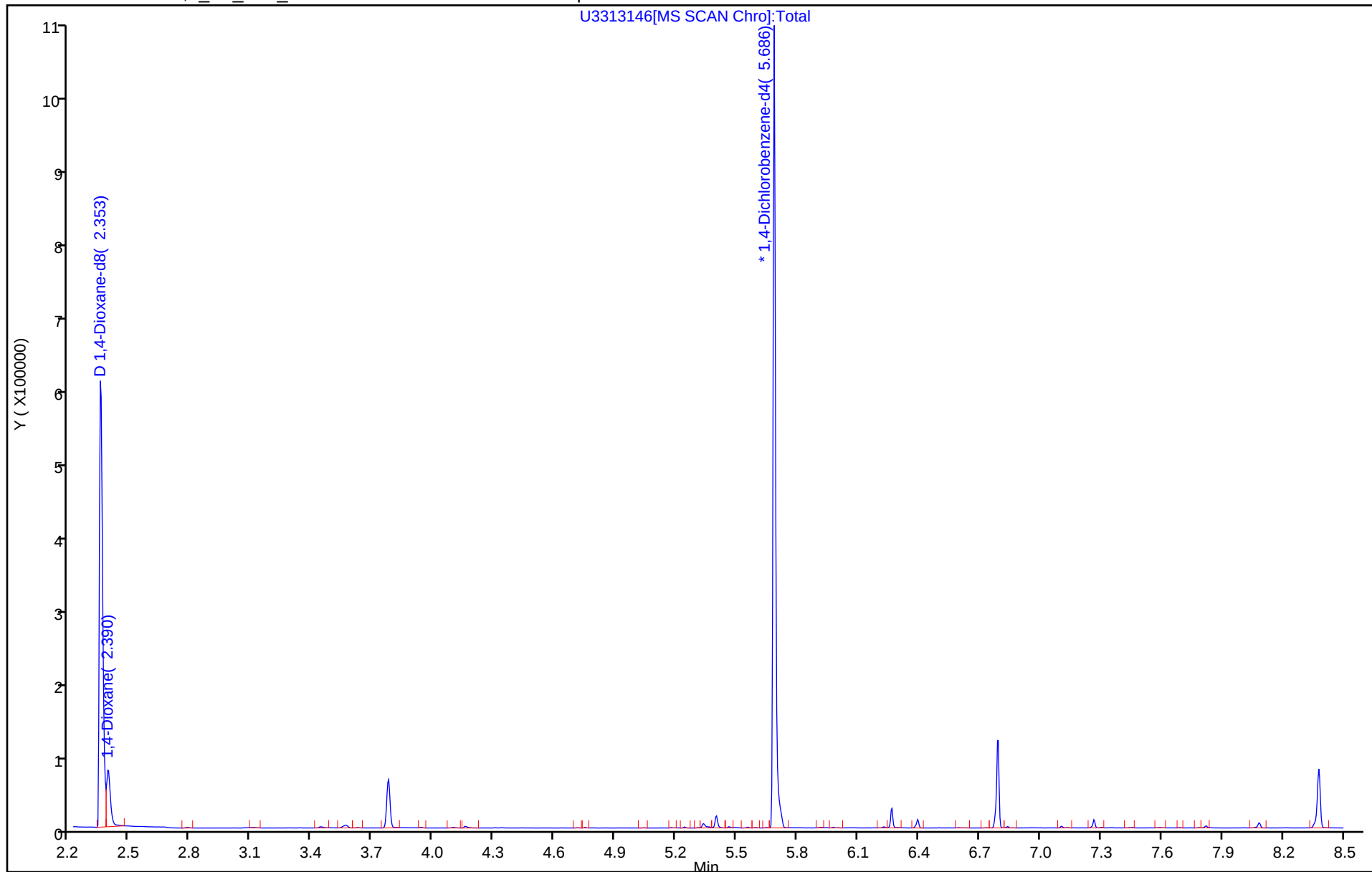
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 10

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Lab Sample ID: CCVIS 480-444687/3 Calibration Date: 11/10/2018 04:30
Instrument ID: HP5973U Calib Start Date: 10/26/2018 17:56
GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm) Calib End Date: 10/26/2018 19:56
Lab File ID: U3313176.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	L2ID		1.139	0.0100	591	600	-1.4	20.0
1,4-Dioxane-d8	Ave	0.4579	0.4427	0.0100	5800	6000	-3.3	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313176.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 10-Nov-2018 04:30:30 ALS Bottle#: 40 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076305-003
 Operator ID: DR Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:27:10 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 12-Nov-2018 12:30:46

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	2.357	2.353	0.004	94	297242	6.00	5.80	
3 1,4-Dioxane	88	2.394	2.394	0.000	88	33847	0.6000	0.5915	
* 2 1,4-Dichlorobenzene-d4	152	5.686	5.686	0.000	94	447653	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00059

Amount Added: 1.00

Units: mL

MB_LLIS_WRK_00157

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313176.D

Injection Date: 10-Nov-2018 04:30:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

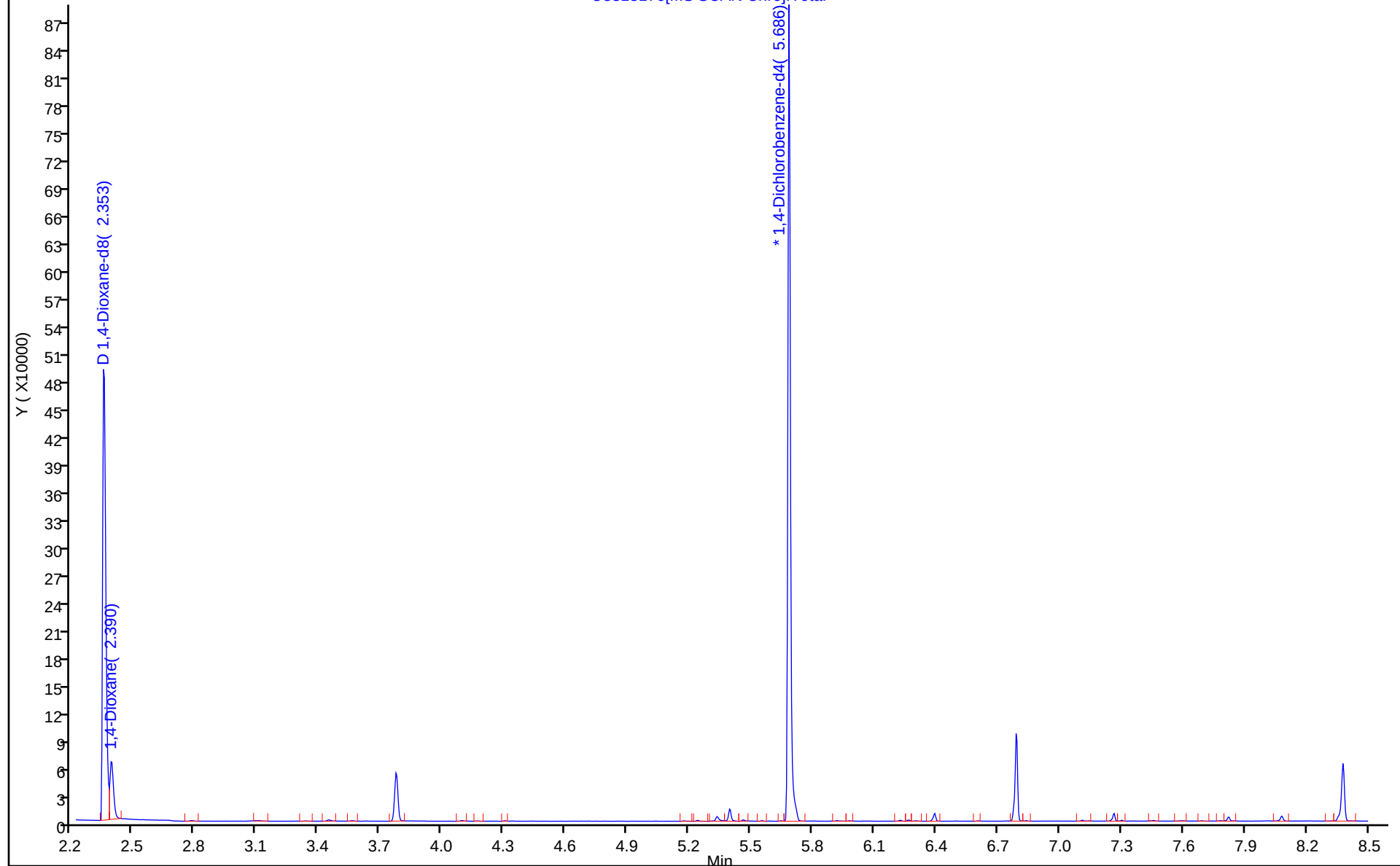
Dil. Factor: 1.0000

ALS Bottle#: 40

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

U3313176[MS SCAN Chro]:Total



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312592.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 26-Oct-2018 17:27:30 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: DFTPP
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 29-Oct-2018 12:21:34 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: Deconvolution ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: richardsd

Date: 29-Oct-2018 12:19:34

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	10.976	10.976	0.000	0	13780			NR
5 4,4'-DDD	235	11.269	11.269	0.000	97	14879			NR
6 4,4'-DDT	235	11.553	11.553	0.000	98	1338498	NR		NR

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MB_DFTPP_WRK_00343

Amount Added: 1.00

Units: mL

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312592.D

Injection Date: 26-Oct-2018 17:27:30

Instrument ID: HP5973U

Lims ID: DFTPP

Client ID:

Operator ID: DR

ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 ul

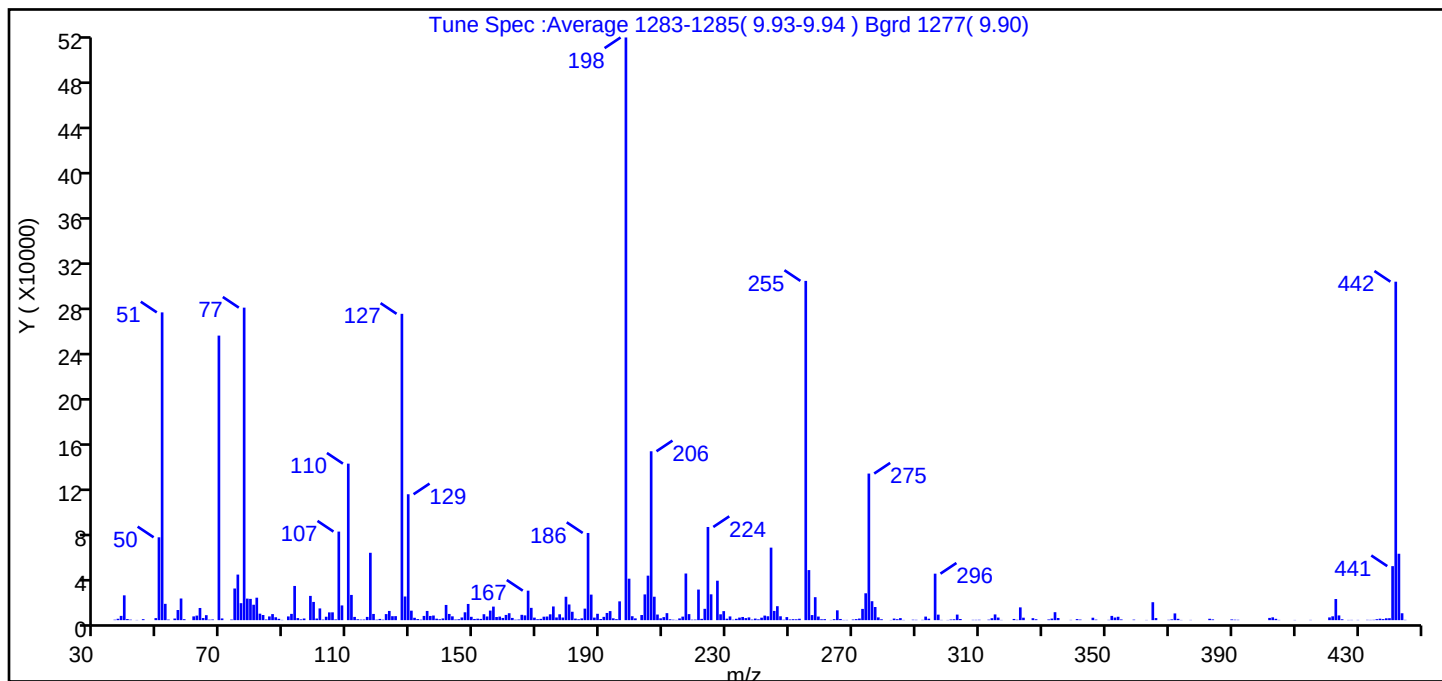
Dil. Factor: 1.0000

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 (172.2)
51	10-80% of the base peak	52.8
68	<2% of mass 69	0.0 (0.0)
69	Present	48.8
70	<2% of mass 69	0.3 (0.6)
127	10-80% of the base peak	52.6
197	<2% of mass 198	0.0
199	5-9% of mass 198	7.1
275	10-60% of the base peak	25.2
365	>1% of mass 198	3.1
441	present but <24% of mass 442	9.3 (16.0)
442	base peak, or >50% of 198	58.1
443	15-24% of mass 442	11.4 (19.6)

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312592.D\1,4_Dx_SIM_HP5973U.rsl\tspe
Injection Date: 26-Oct-2018 17:27:30
Spectrum: Tune Spec :Average 1283-1285(9.93-9.94) Bgrd 1277(9.90)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 311

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	391	129.00	112072	209.00	1610	297.00	4906
37.00	1218	130.00	8431	210.00	2699	298.00	218
38.00	3789	131.00	2113	211.00	6236	300.00	171
39.00	22080	132.00	958	212.00	766	301.00	560
40.00	978	133.00	465	213.00	399	302.00	748
41.00	430	134.00	3753	214.00	220	303.00	4952
43.00	178	135.00	8183	215.00	1537	304.00	1016
45.00	854	136.00	3742	216.00	3141	308.00	272
49.00	1817	137.00	4109	217.00	41520	309.00	276
50.00	73752	138.00	1295	218.00	5366	310.00	341
51.00	273984	139.00	790	219.00	421	313.00	427
52.00	14515	140.00	1521	220.00	496	314.00	1707
53.00	510	141.00	13529	221.00	27224	315.00	5101
55.00	1427	142.00	5518	222.00	1148	316.00	2294
56.00	9018	143.00	3390	223.00	10073	317.00	190
57.00	19272	144.00	560	224.00	82936	321.00	1057
58.00	844	145.00	804	225.00	23000	322.00	348
61.00	3355	146.00	2385	227.00	35104	323.00	11375
62.00	4047	147.00	6985	228.00	5206	324.00	2180
63.00	10825	148.00	14417	229.00	8026	327.00	1741
64.00	1873	149.00	2963	230.00	1278	328.00	803
65.00	4427	150.00	1056	231.00	3321	332.00	621
66.00	432	151.00	1307	232.00	394	333.00	1391
67.00	610	152.00	1086	233.00	1194	334.00	7082
69.00	253312	153.00	5277	234.00	2270	335.00	1915
70.00	1518	154.00	3253	235.00	2825	339.00	239
73.00	535	155.00	8509	236.00	1816	341.00	941
74.00	28168	156.00	12059	237.00	2450	342.00	494
75.00	40560	157.00	2785	238.00	513	346.00	2159
76.00	15103	158.00	3165	239.00	1400	347.00	498
77.00	278208	159.00	1959	240.00	718	351.00	248
78.00	19168	160.00	4649	241.00	2188	352.00	3778
79.00	18928	161.00	6170	242.00	4050	353.00	2319

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312592.D\1_4_Dx_SIM_HP5973U.rsl\tspe

Injection Date: 26-Oct-2018 17:27:30

Spectrum: Tune Spec :Average 1283-1285(9.93-9.94) Bgrd 1277(9.90)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 311

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	13715	162.00	1972	243.00	3449	354.00	3004
81.00	19984	163.00	400	244.00	64560	355.00	630
82.00	5760	164.00	564	245.00	8210	359.00	464
83.00	4568	165.00	4736	246.00	12418	363.00	185
84.00	582	166.00	4247	247.00	3441	365.00	15967
85.00	3304	167.00	26240	248.00	380	366.00	1841
86.00	5387	168.00	10937	249.00	2715	370.00	283
87.00	2560	169.00	2239	250.00	598	371.00	681
88.00	1186	170.00	845	251.00	843	372.00	5990
89.00	216	171.00	1144	252.00	758	373.00	1184
91.00	3312	172.00	3076	253.00	1258	374.00	177
92.00	5577	173.00	3211	255.00	302016	377.00	212
93.00	30440	174.00	5197	256.00	44560	383.00	1226
94.00	1829	175.00	12179	257.00	4512	384.00	655
95.00	698	176.00	2388	258.00	20440	390.00	631
96.00	1462	177.00	5222	259.00	3202	391.00	397
98.00	21592	178.00	2329	260.00	781	392.00	316
99.00	16212	179.00	20816	261.00	871	402.00	1990
100.00	1423	180.00	13951	263.00	201	403.00	2510
101.00	10441	181.00	7470	264.00	825	404.00	1177
102.00	498	182.00	1382	265.00	8736	405.00	209
103.00	3036	183.00	789	266.00	1048	410.00	178
104.00	6906	184.00	1560	267.00	182	415.00	221
105.00	6956	185.00	10251	268.00	216	421.00	2417
106.00	635	186.00	77600	270.00	555	422.00	3414
107.00	78840	187.00	22720	271.00	916	423.00	18808
108.00	13100	188.00	2270	272.00	1412	424.00	4203
110.00	139328	189.00	5661	273.00	10006	425.00	797
111.00	22448	190.00	999	274.00	23920	427.00	196
112.00	2881	191.00	2930	275.00	130496	428.00	225
113.00	810	192.00	6394	276.00	16856	430.00	217
114.00	478	193.00	8057	277.00	11689	433.00	284
115.00	543	194.00	1625	278.00	2451	434.00	231
116.00	2878	195.00	898	279.00	784	435.00	303

Report Date: 29-Oct-2018 12:21:35

Chrom Revision: 2.3 12-Oct-2018 08:24:38

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312592.D\1,4_Dx_SIM_HP5973U.rslt\spe

Injection Date: 26-Oct-2018 17:27:30

Spectrum: Tune Spec :Average 1283-1285(9.93-9.94) Bgrd 1277(9.90)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 311

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	59968	196.00	16728	282.00	166	436.00	853
118.00	5516	198.00	518720	283.00	1392	437.00	1302
119.00	431	199.00	36912	284.00	838	438.00	923
120.00	1075	200.00	3492	285.00	1803	439.00	1640
121.00	430	201.00	1578	286.00	197	440.00	1731
122.00	5393	203.00	4555	289.00	385	441.00	48088
123.00	8186	204.00	22912	290.00	297	442.00	301312
124.00	3527	205.00	39608	292.00	270	443.00	59112
125.00	3576	206.00	150336	293.00	3164	444.00	6127
127.00	272704	207.00	20848	294.00	1287	445.00	263
128.00	21056	208.00	4993	296.00	41376		

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312592.D
Injection Date: 26-Oct-2018 17:27:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR 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

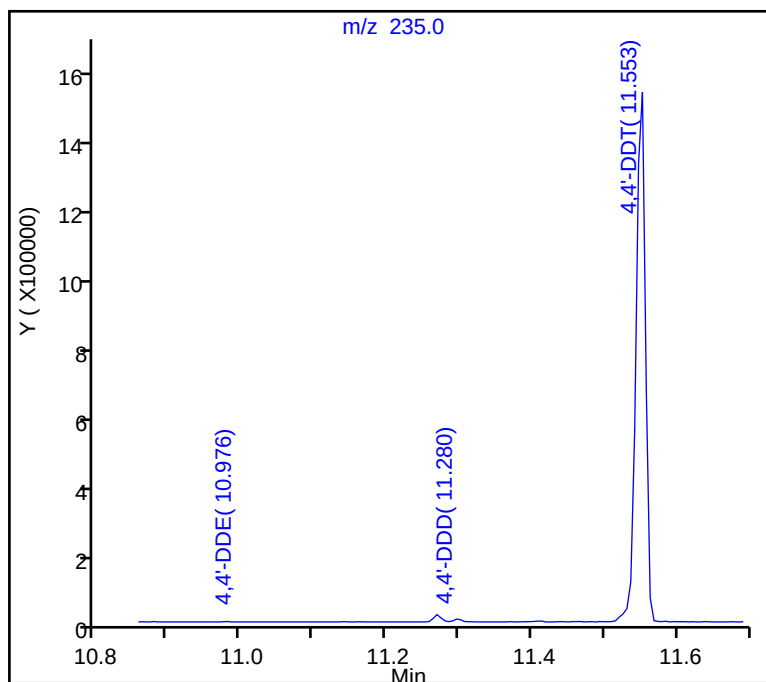
%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

6 4,4'-DDT, Area = 1338498

5 4,4'-DDD, Area = 14879

7 4,4'-DDE, Area = 13780

%Breakdown: 2.10%, Max Limit: 20.00%
Passed



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313145.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 09-Nov-2018 16:02:30 ALS Bottle#: 9 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076303-002
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:12:46 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: Deconvolution ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 12-Nov-2018 12:35:51

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		10.965					ND	
5 4,4'-DDD	235	11.045	11.045	0.000	96	209108		NR	
6 4,4'-DDT	235	11.307	11.307	0.000	96	730291	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MB_DFTPP_WRK_00343

Amount Added: 1.00

Units: mL

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313145.D

Injection Date: 09-Nov-2018 16:02:30

Instrument ID: HP5973U

Lims ID: DFTPP

Client ID:

Operator ID: DR

ALS Bottle#: 9 Worklist Smp#: 2

Injection Vol: 1.0 ul

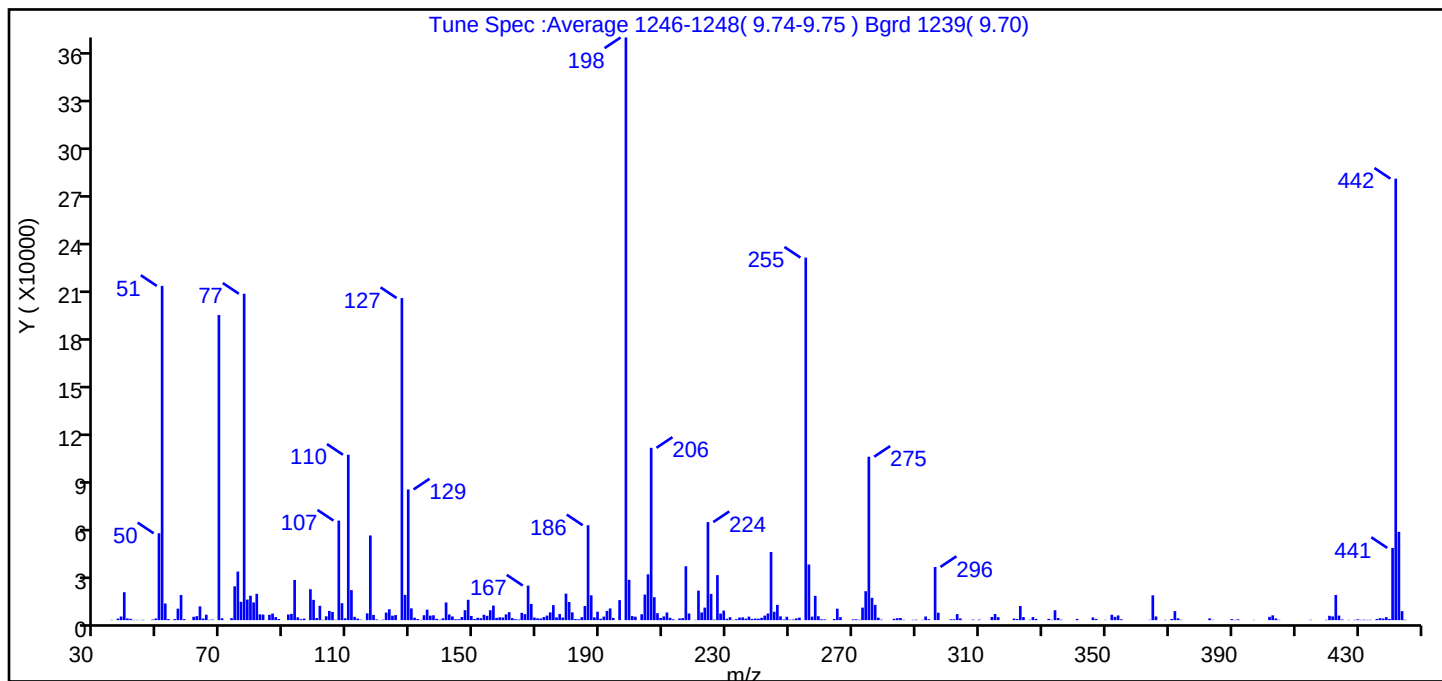
Dil. Factor: 1.0000

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 (132.0)
51	10-80% of the base peak	57.4
68	<2% of mass 69	0.0 (0.0)
69	Present	52.4
70	<2% of mass 69	0.3 (0.6)
127	10-80% of the base peak	55.3
197	<2% of mass 198	0.0
199	5-9% of mass 198	6.9
275	10-60% of the base peak	28.0
365	>1% of mass 198	4.3
441	present but <24% of mass 442	12.4 (16.4)
442	base peak, or >50% of 198	75.8
443	15-24% of mass 442	15.2 (20.0)

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313145.D\1,4_Dx_SIM_HP5973U.rsl\tspe
Injection Date: 09-Nov-2018 16:02:30
Spectrum: Tune Spec :Average 1246-1248(9.74-9.75) Bgrd 1239(9.70)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	194	125.00	3156	205.00	28512	296.00	33080
37.00	945	127.00	200320	206.00	107176	297.00	4622
38.00	2242	128.00	15740	207.00	14266	301.00	494
39.00	17384	129.00	81280	208.00	4331	302.00	520
40.00	1066	130.00	7322	209.00	1375	303.00	3749
41.00	825	131.00	1532	210.00	2307	304.00	1051
42.00	191	132.00	724	211.00	4772	308.00	353
43.00	166	133.00	188	212.00	1449	310.00	352
44.00	108	134.00	3045	213.00	529	314.00	1970
45.00	205	135.00	6517	215.00	1066	315.00	3791
48.00	387	136.00	2801	216.00	1289	316.00	1862
49.00	1024	137.00	3018	217.00	33504	321.00	966
50.00	54024	138.00	838	218.00	4120	322.00	713
51.00	207872	139.00	293	220.00	209	323.00	8808
52.00	10352	140.00	1174	221.00	18344	324.00	1900
53.00	662	141.00	10998	222.00	4781	326.00	256
55.00	673	142.00	3519	223.00	7793	327.00	1893
56.00	7143	143.00	2313	224.00	60984	328.00	789
57.00	15615	144.00	568	225.00	16325	332.00	776
58.00	617	145.00	579	226.00	364	333.00	236
61.00	2081	146.00	1920	227.00	28000	334.00	6164
62.00	2487	147.00	6199	228.00	4093	335.00	1289
63.00	8563	148.00	12670	229.00	5935	336.00	277
64.00	1029	149.00	2593	230.00	841	341.00	768
65.00	3384	150.00	707	231.00	1855	346.00	1690
66.00	194	151.00	1455	232.00	180	347.00	757
67.00	345	152.00	1196	233.00	596	350.00	189
69.00	189760	153.00	3342	234.00	1597	352.00	3351
70.00	1158	154.00	2693	235.00	1702	353.00	2043
73.00	1217	155.00	6140	236.00	945	354.00	2935
74.00	21024	156.00	9046	237.00	2184	355.00	556
75.00	30208	157.00	1397	238.00	778	364.00	209
76.00	11386	158.00	1767	239.00	1001	365.00	15427

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313145.D\1_4_Dx_SIM_HP5973U.rsl\tspe

Injection Date: 09-Nov-2018 16:02:30

Spectrum: Tune Spec :Average 1246-1248(9.74-9.75) Bgrd 1239(9.70)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	203008	159.00	1662	240.00	902	366.00	2288
78.00	12791	160.00	3587	241.00	1435	369.00	223
79.00	15178	161.00	4985	242.00	2818	371.00	764
80.00	11027	162.00	1273	243.00	4131	372.00	5613
81.00	16344	163.00	581	244.00	42384	373.00	1138
82.00	3593	164.00	400	245.00	5207	374.00	177
83.00	3476	165.00	4551	246.00	9497	383.00	1099
85.00	3304	166.00	3753	247.00	2362	384.00	192
86.00	4083	167.00	21504	248.00	410	390.00	616
87.00	1900	168.00	10094	249.00	2096	391.00	187
88.00	677	169.00	1596	250.00	274	392.00	523
91.00	3505	170.00	1109	251.00	397	397.00	167
92.00	3908	171.00	1022	252.00	1091	402.00	2042
93.00	25000	172.00	1963	253.00	1561	403.00	2985
94.00	1734	173.00	2828	255.00	225472	404.00	1049
95.00	592	174.00	4810	256.00	34584	405.00	210
96.00	963	175.00	9329	257.00	2171	415.00	236
98.00	19224	176.00	1714	258.00	15104	420.00	232
99.00	12617	177.00	3771	259.00	2443	421.00	2706
100.00	1323	178.00	1653	260.00	521	422.00	2317
101.00	8917	179.00	16488	261.00	460	423.00	15643
102.00	214	180.00	11297	264.00	711	424.00	2835
103.00	2381	181.00	4828	265.00	7120	425.00	439
104.00	5718	182.00	691	266.00	1848	427.00	176
105.00	5073	183.00	545	270.00	505	429.00	235
106.00	228	184.00	1831	271.00	519	430.00	543
107.00	61912	185.00	8774	272.00	258	431.00	194
108.00	10533	186.00	59024	273.00	7793	432.00	298
109.00	1128	187.00	15422	274.00	18008	433.00	176
110.00	102872	188.00	1736	275.00	101632	434.00	235
111.00	18680	189.00	5243	276.00	13882	436.00	725
112.00	2063	190.00	829	277.00	9482	437.00	1223
113.00	972	191.00	2204	278.00	1517	438.00	1030
114.00	285	192.00	5782	279.00	303	439.00	1854

Report Date: 13-Nov-2018 12:12:46

Chrom Revision: 2.3 12-Oct-2018 08:24:38

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313145.D\1,4_Dx_SIM_HP5973U.rslt\spe

Injection Date: 09-Nov-2018 16:02:30

Spectrum: Tune Spec :Average 1246-1248(9.74-9.75) Bgrd 1239(9.70)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	4208	193.00	7277	283.00	835	440.00	722
117.00	52656	194.00	1410	284.00	1199	441.00	44920
118.00	3259	196.00	12449	285.00	1343	442.00	274560
119.00	451	198.00	362368	286.00	215	443.00	54920
120.00	94	199.00	25080	289.00	225	444.00	5603
121.00	262	200.00	2521	290.00	305	445.00	253
122.00	4711	201.00	2133	292.00	204		
123.00	6766	203.00	3662	293.00	2268		
124.00	2748	204.00	15890	294.00	589		

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313145.D

Injection Date: 09-Nov-2018 16:02:30

Instrument ID: HP5973U

Lims ID: DFTPP

Client ID:

Operator ID: DR

ALS Bottle#: 9 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 =

$$\left(\frac{\text{Area Breakdown Cpnds}}{\text{Total Area Breakdown Cpnds}} \right) * 100$$

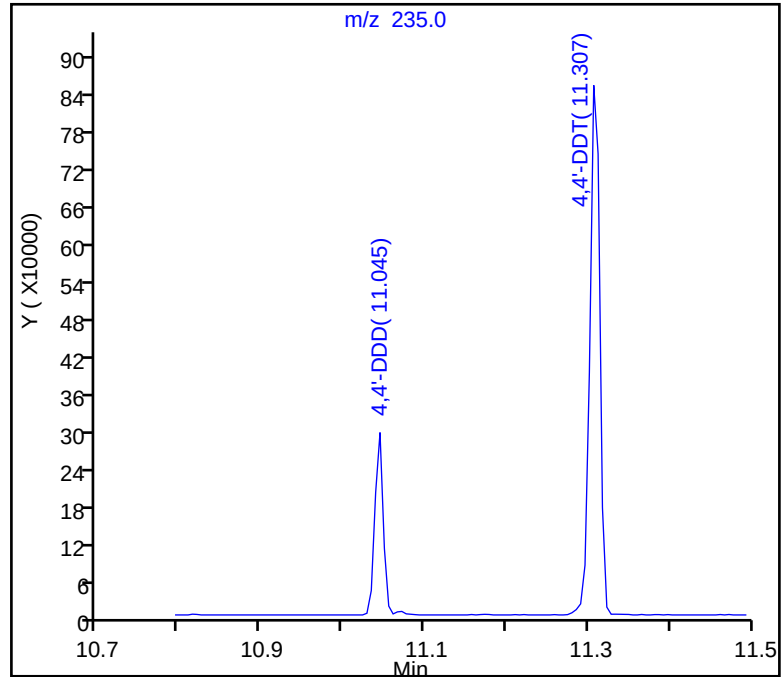
6 4,4'-DDT, Area = 730291

5 4,4'-DDD, Area = 209108

7 4,4'-DDE, Area = 0

%Breakdown:* 22.26%, Max Limit: 20.00%

Failed



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313175.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 10-Nov-2018 04:02:30 ALS Bottle#: 39 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076305-002
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:27:08 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: Deconvolution ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 12-Nov-2018 11:10:08

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	10.762	10.762	0.000	0	3791		NR	a
5 4,4'-DDD	235	11.045	11.045	0.000	95	113232		NR	
6 4,4'-DDT	235	11.312	11.312	0.000	97	741772	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

MB_DFTPP_WRK_00343

Amount Added: 1.00

Units: mL

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313175.D

Injection Date: 10-Nov-2018 04:02:30

Instrument ID: HP5973U

Lims ID: DFTPP

Client ID:

Operator ID: DR

ALS Bottle#: 39 Worklist Smp#: 2

Injection Vol: 1.0 ul

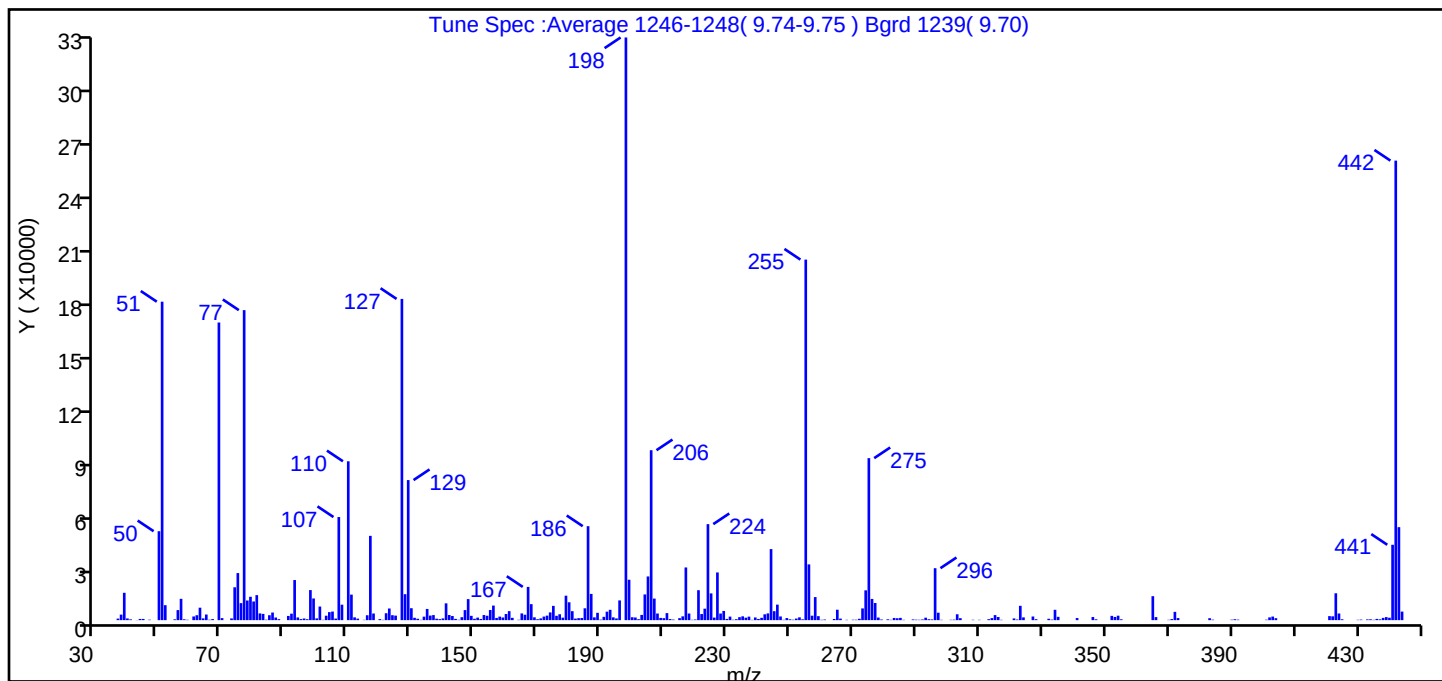
Dil. Factor: 1.0000

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 (126.8)
51	10-80% of the base peak	54.7
68	<2% of mass 69	0.0 (0.0)
69	Present	51.1
70	<2% of mass 69	0.3 (0.7)
127	10-80% of the base peak	55.1
197	<2% of mass 198	0.0
199	5-9% of mass 198	6.9
275	10-60% of the base peak	27.8
365	>1% of mass 198	4.1
441	present but <24% of mass 442	12.9 (16.4)
442	base peak, or >50% of 198	78.9
443	15-24% of mass 442	16.0 (20.2)

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313175.D\1,4_Dx_SIM_HP5973U.rsl\tspe
Injection Date: 10-Nov-2018 04:02:30
Spectrum: Tune Spec :Average 1246-1248(9.74-9.75) Bgrd 1239(9.70)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 298

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	854	128.00	14364	205.00	24184	286.00	175
38.00	3058	129.00	77520	206.00	94056	289.00	400
39.00	15137	130.00	6604	207.00	11935	290.00	270
40.00	942	131.00	1301	208.00	3671	291.00	200
41.00	441	132.00	769	209.00	1237	292.00	376
43.00	79	133.00	188	210.00	1090	293.00	1364
44.00	663	134.00	1939	211.00	3895	294.00	509
45.00	671	135.00	6190	212.00	601	295.00	402
47.00	248	136.00	2533	213.00	317	296.00	28760
50.00	49216	137.00	2795	215.00	1114	297.00	4114
51.00	176256	138.00	792	216.00	2101	298.00	177
52.00	8282	139.00	561	217.00	29160	301.00	200
55.00	449	140.00	961	218.00	3677	302.00	280
56.00	5569	141.00	9301	219.00	187	303.00	3249
57.00	11799	142.00	2850	220.00	359	304.00	1091
58.00	469	143.00	2280	221.00	16576	308.00	202
59.00	203	144.00	713	222.00	3378	310.00	192
61.00	2046	145.00	204	223.00	6342	313.00	534
62.00	2720	146.00	1635	224.00	53144	314.00	1140
63.00	6890	147.00	5563	225.00	14807	315.00	2789
64.00	988	148.00	11648	226.00	1410	316.00	1743
65.00	3114	149.00	2376	227.00	26400	317.00	190
66.00	230	150.00	761	228.00	3655	321.00	940
67.00	596	151.00	1406	229.00	5088	322.00	349
69.00	164736	152.00	639	230.00	673	323.00	7931
70.00	1124	153.00	2827	231.00	1956	324.00	1532
73.00	954	154.00	2439	232.00	231	327.00	2020
74.00	18184	155.00	5600	233.00	517	328.00	527
75.00	26056	156.00	8063	234.00	1652	332.00	756
76.00	9417	157.00	1220	235.00	2119	333.00	308
77.00	171584	158.00	1962	236.00	1372	334.00	5726
78.00	10869	159.00	1472	237.00	1939	335.00	1835
79.00	12937	160.00	3399	238.00	175	341.00	1166

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313175.D\1_4_Dx_SIM_HP5973U.rsl\tspe

Injection Date: 10-Nov-2018 04:02:30

Spectrum: Tune Spec :Average 1246-1248(9.74-9.75) Bgrd 1239(9.70)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 298

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	10329	161.00	4981	239.00	1491	346.00	1727
81.00	13847	162.00	1279	240.00	668	347.00	478
82.00	3729	164.00	199	241.00	1291	352.00	2369
83.00	3456	165.00	3721	242.00	3224	353.00	1762
84.00	242	166.00	2990	243.00	3732	354.00	2461
85.00	2720	167.00	18400	244.00	39328	355.00	476
86.00	4209	168.00	8864	245.00	4956	365.00	13268
87.00	1445	169.00	1564	246.00	8588	366.00	1686
88.00	559	170.00	515	247.00	2036	370.00	184
91.00	2326	171.00	963	248.00	184	371.00	596
92.00	3586	172.00	1972	249.00	1144	372.00	4592
93.00	22200	173.00	2497	250.00	466	373.00	1160
94.00	1488	174.00	4277	251.00	235	383.00	1079
95.00	591	175.00	7894	252.00	874	384.00	269
96.00	917	176.00	2403	253.00	1555	390.00	245
97.00	519	177.00	3262	254.00	465	391.00	509
98.00	16640	178.00	1375	255.00	199552	392.00	286
99.00	11994	179.00	13536	256.00	30856	401.00	251
100.00	979	180.00	9897	257.00	2468	402.00	1516
101.00	7532	181.00	4963	258.00	12762	403.00	1985
102.00	187	182.00	860	259.00	2209	404.00	1083
103.00	2462	183.00	1095	260.00	200	421.00	2228
104.00	4433	184.00	1196	261.00	344	422.00	2122
105.00	4747	185.00	6555	264.00	645	423.00	14872
106.00	877	186.00	52008	265.00	5770	424.00	3685
107.00	57064	187.00	14522	266.00	847	425.00	475
108.00	8550	188.00	1536	268.00	184	430.00	196
110.00	87928	189.00	4049	270.00	243	431.00	304
111.00	14128	190.00	288	271.00	237	433.00	409
112.00	1545	191.00	1831	272.00	752	434.00	465
113.00	840	192.00	4692	273.00	6493	435.00	183
115.00	168	193.00	5727	274.00	16504	436.00	678
116.00	2709	194.00	1547	275.00	89664	437.00	448
117.00	46656	195.00	953	276.00	11741	438.00	1248

Report Date: 13-Nov-2018 12:27:09

Chrom Revision: 2.3 12-Oct-2018 08:24:38

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313175.D\1,4_Dx_SIM_HP5973U.rslt\spe

Injection Date: 10-Nov-2018 04:02:30

Spectrum: Tune Spec :Average 1246-1248(9.74-9.75) Bgrd 1239(9.70)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 298

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	3672	196.00	10928	277.00	9474	439.00	1693
120.00	570	198.00	322496	278.00	1433	440.00	1334
121.00	179	199.00	22352	279.00	362	441.00	41712
122.00	3821	200.00	1606	281.00	459	442.00	254336
123.00	6449	201.00	1471	282.00	187	443.00	51464
124.00	2737	202.00	533	283.00	1211	444.00	4736
125.00	2500	203.00	2891	284.00	1060		
127.00	177792	204.00	14223	285.00	1263		

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76305.b\U3313175.D

Injection Date: 10-Nov-2018 04:02:30

Instrument ID: HP5973U

Lims ID: DFTPP

Client ID:

Operator ID: DR

ALS Bottle#: 39 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 =

$$\left(\frac{\text{Area Breakdown Cpnds}}{\text{Total Area Breakdown Cpnds}} \right) * 100$$

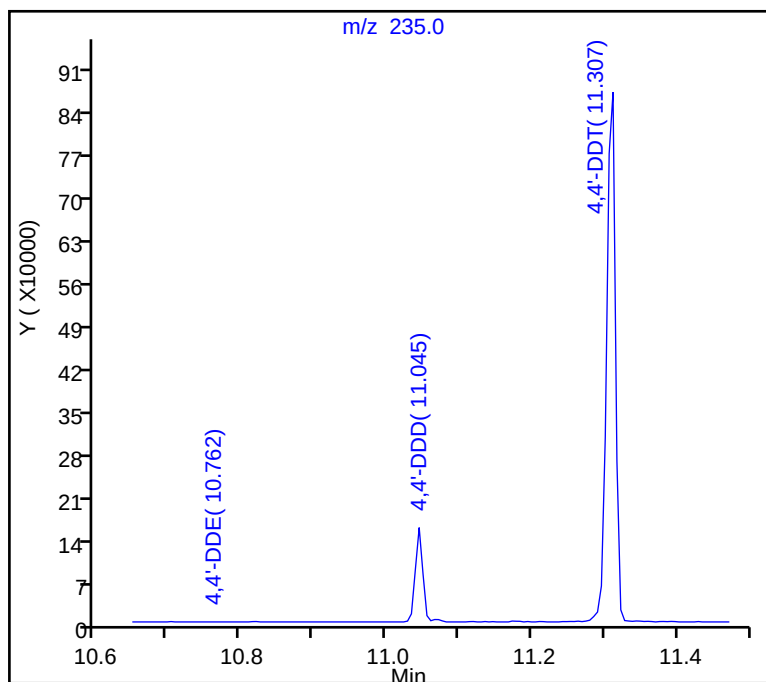
6 4,4'-DDT, Area = 741772

5 4,4'-DDD, Area = 113232

7 4,4'-DDE, Area = 3791

%Breakdown: 13.63%, Max Limit: 20.00%

Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 480-442433/1-A
 Matrix: Water Lab File ID: U3313168.D
 Analysis Method: 8270D SIM ID Date Collected: _____
 Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
 Sample wt/vol: 1000 (mL) Date Analyzed: 11/10/2018 01:14
 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.: 444681 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	32		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313168.D
 Lims ID: MB 480-442433/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 10-Nov-2018 01:14:30 ALS Bottle#: 32 Worklist Smp#: 25
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076303-025
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:12:47 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 11:59:39

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	2.435	2.357	0.078	92	152261	10.0	3.18	
3 1,4-Dioxane	88		2.394					ND	
* 2 1,4-Dichlorobenzene-d4	152	5.694	5.686	0.008	95	418563	4.00	4.00	

Reagents:

MB_LLIS_WRK_00157 Amount Added: 20.00 Units: uL Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313168.D

Injection Date: 10-Nov-2018 01:14:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: MB 480-442433/1-A

Worklist Smp#: 25

Client ID:

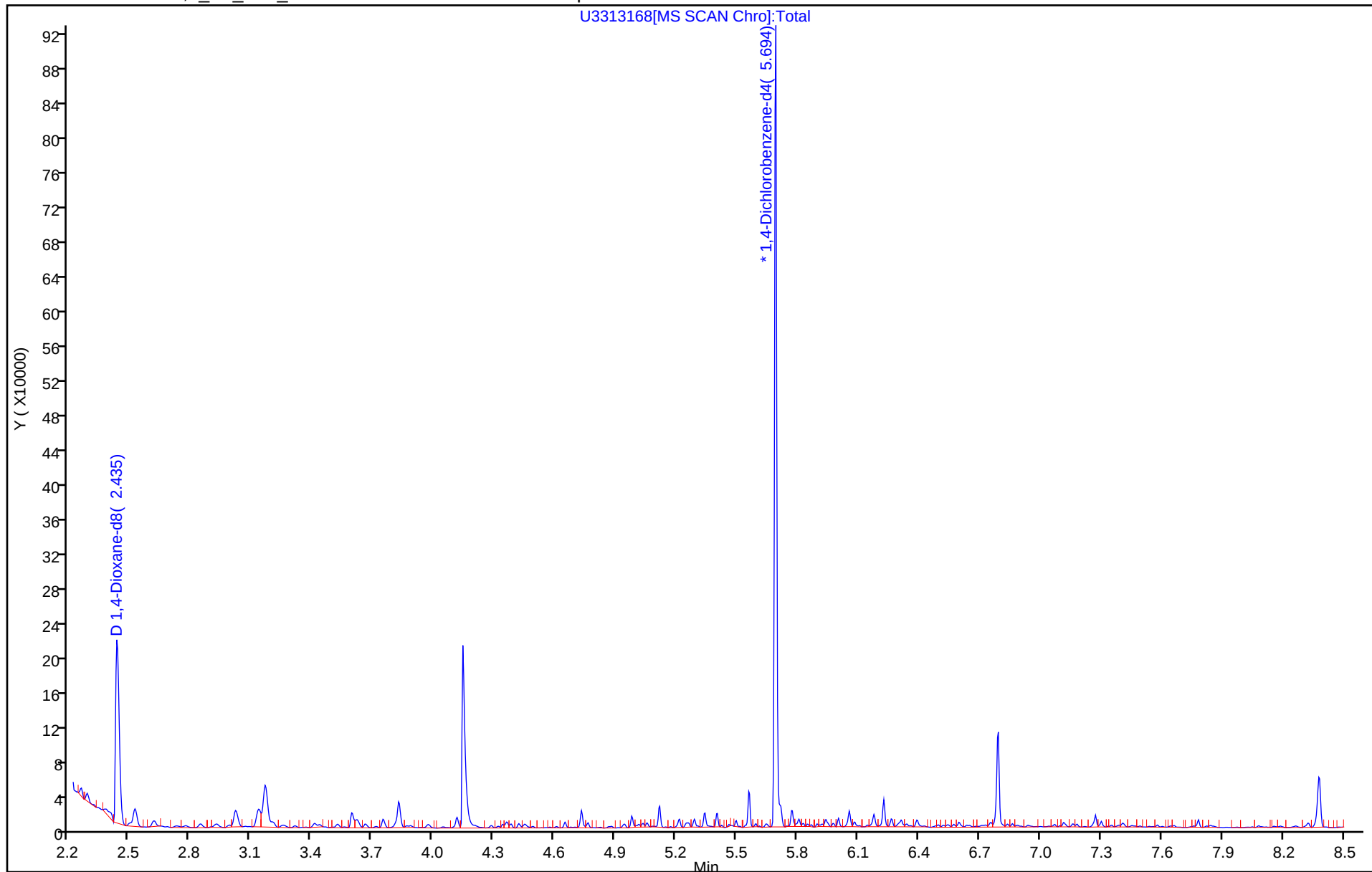
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 32

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



TestAmerica Buffalo

Data File: \\ChromNA\\Buffalo\\ChromData\\HP5973U\\20181109-76303.b\\U3313168.D

Injection Date: 10-Nov-2018 01:14:30

Instrument ID: HP5973U

Lims ID: MB 480-442433/1-A

Client ID:

Operator ID: DR

ALS Bottle#: 32

Worklist Smp#: 25

Injection Vol: 1.0 ul

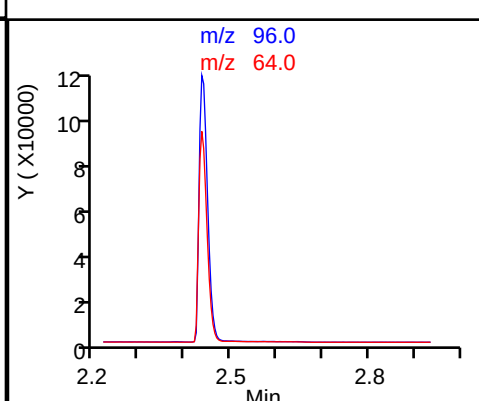
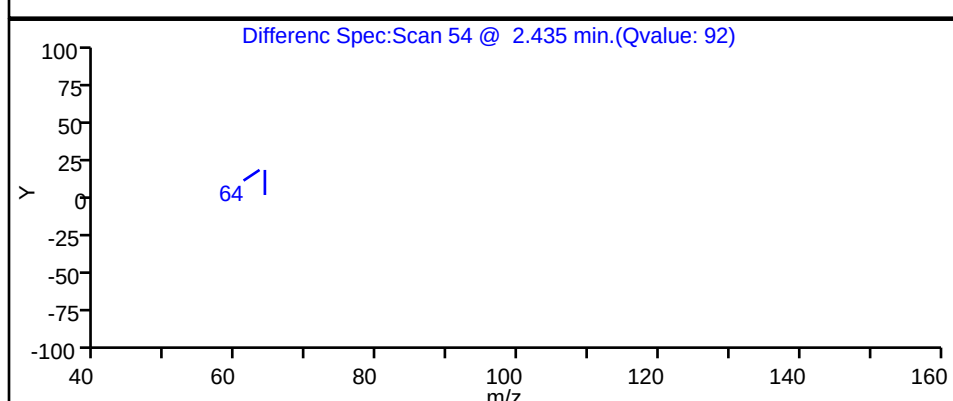
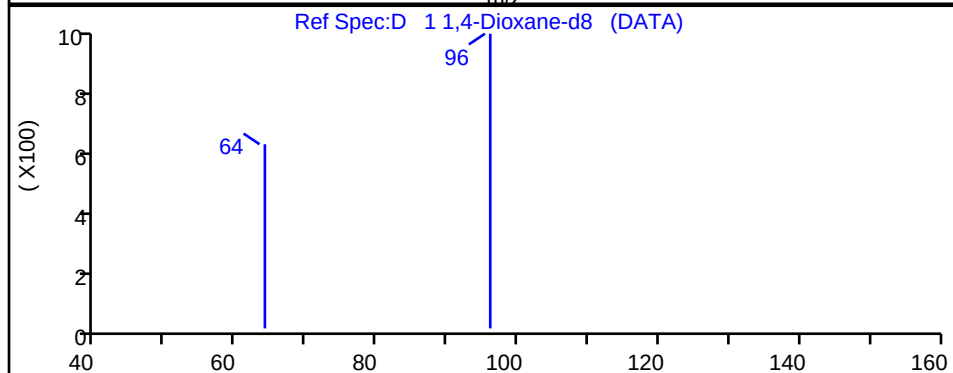
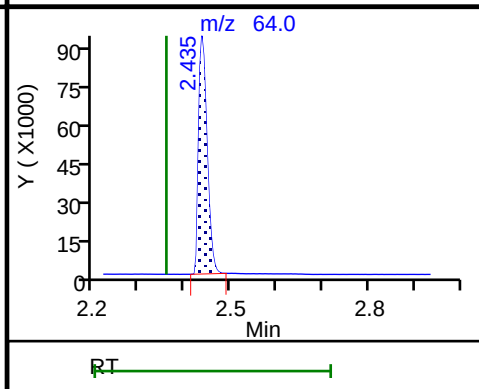
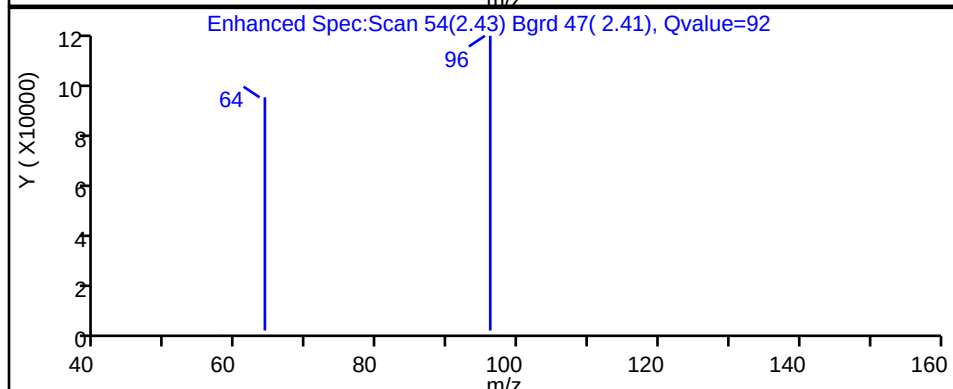
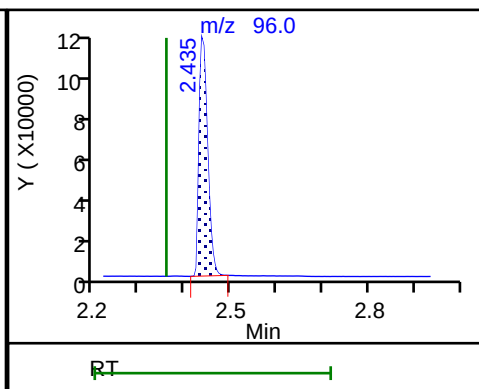
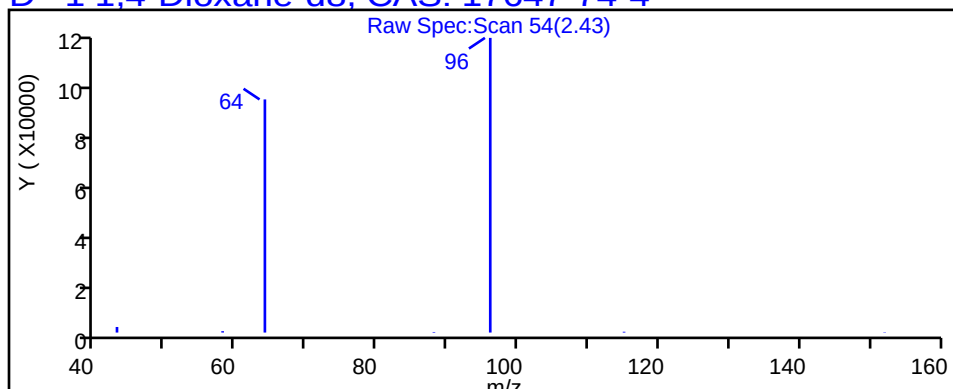
Dil. Factor: 1.0000

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: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 480-442433/2-A
Matrix: Water Lab File ID: U3313169.D
Analysis Method: 8270D SIM ID Date Collected: _____
Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
Sample wt/vol: 1000 (mL) Date Analyzed: 11/10/2018 01:38
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.: 444681 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.04		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	36		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313169.D
 Lims ID: LCS 480-442433/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 10-Nov-2018 01:38:30 ALS Bottle#: 33 Worklist Smp#: 26
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076303-026
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:12:47 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 11:59:44

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	2.492	2.357	0.135	93	171207	10.0	3.63	a
3 1,4-Dioxane	88	2.528	2.394	0.134	88	21026	1.00	1.04	a
* 2 1,4-Dichlorobenzene-d4	152	5.694	5.686	0.008	92	412323	4.00	4.00	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MB_LLIS_WRK_00157

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313169.D

Injection Date: 10-Nov-2018 01:38:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: LCS 480-442433/2-A

Worklist Smp#: 26

Client ID:

Injection Vol: 1.0 ul

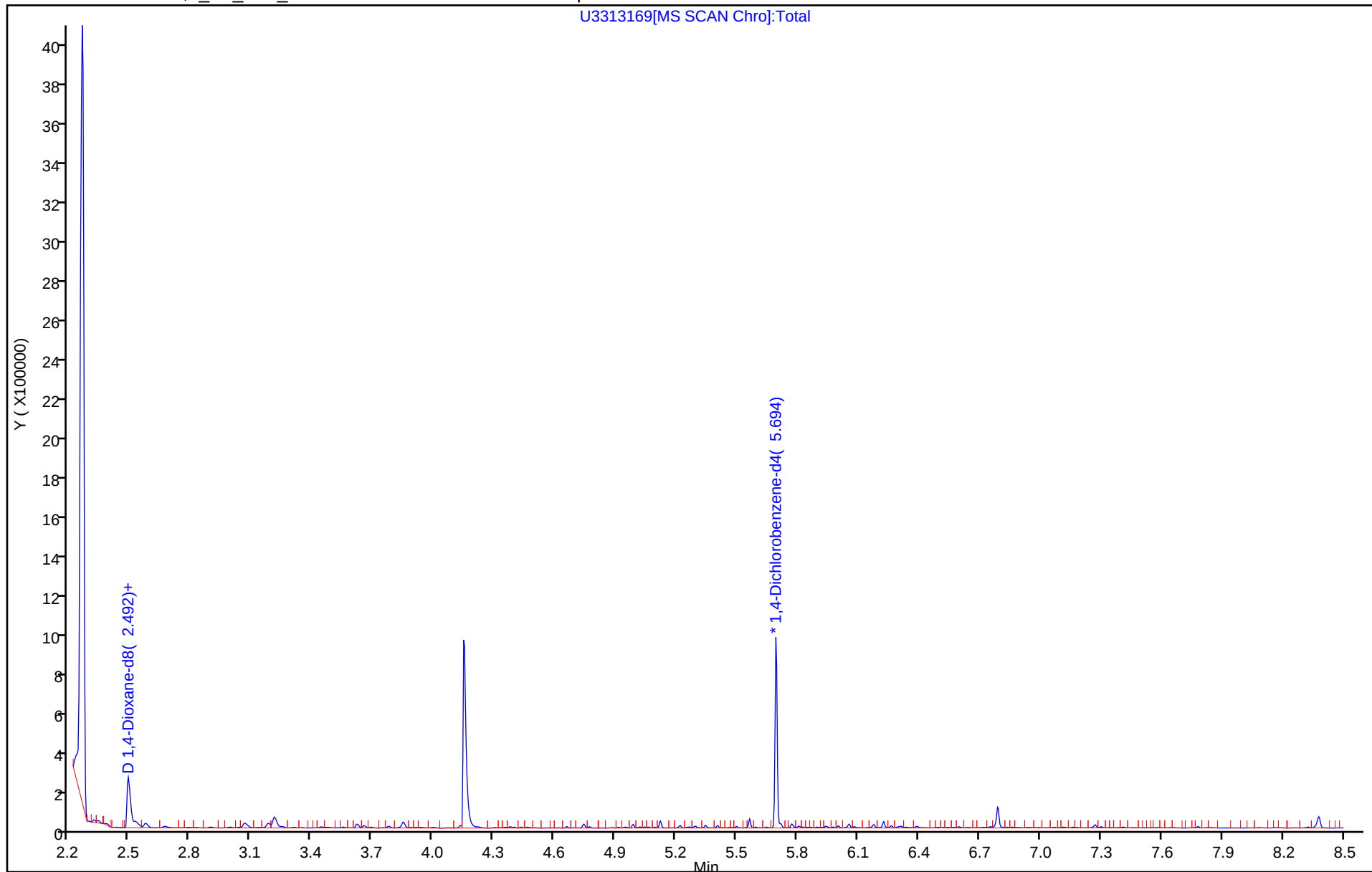
Dil. Factor: 1.0000

ALS Bottle#: 33

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

U3313169[MS SCAN Chro]:Total



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313169.D

Injection Date: 10-Nov-2018 01:38:30

Instrument ID: HP5973U

Lims ID: LCS 480-442433/2-A

Client ID:

Operator ID: DR

ALS Bottle#:

33

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:

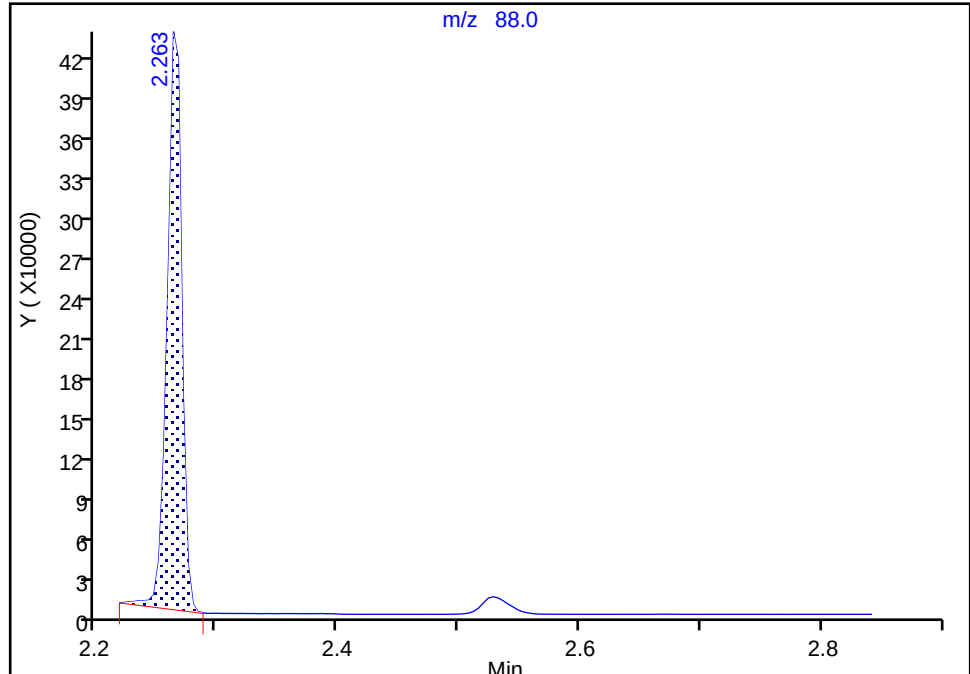
Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

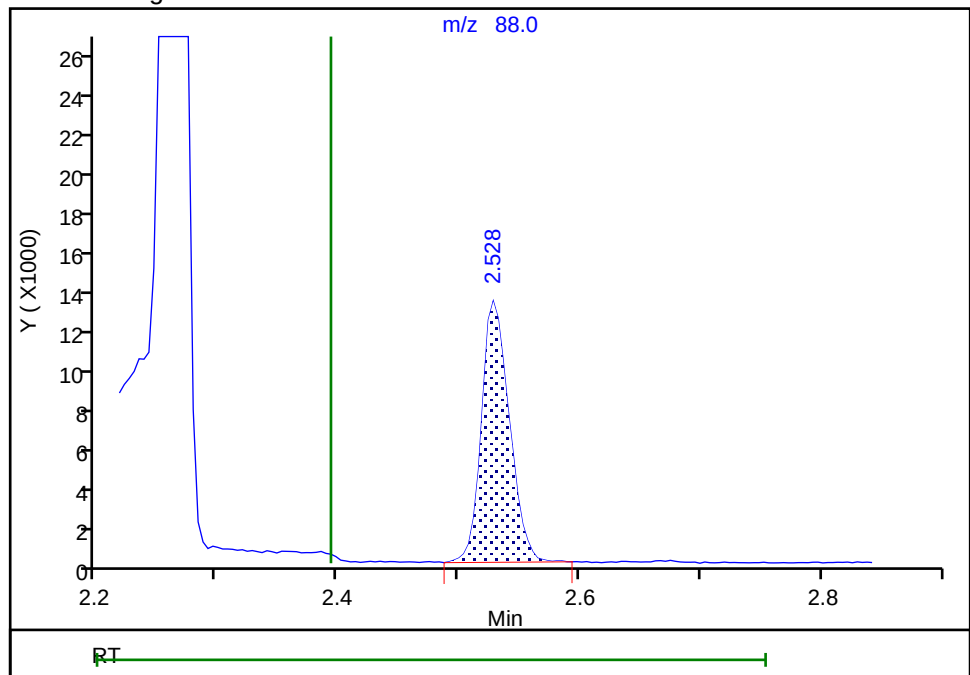
RT: 2.26
Area: 365547
Amount: 12353
Amount Units: ng/ul

Processing Integration Results



RT: 2.53
Area: 21026
Amount: 1.037071
Amount Units: ng/ul

Manual Integration Results



Reviewer: richardsd, 13-Nov-2018 11:59:42

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313169.D

Injection Date: 10-Nov-2018 01:38:30

Instrument ID: HP5973U

Lims ID: LCS 480-442433/2-A

Client ID:

Operator ID: DR

ALS Bottle#:

33

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:

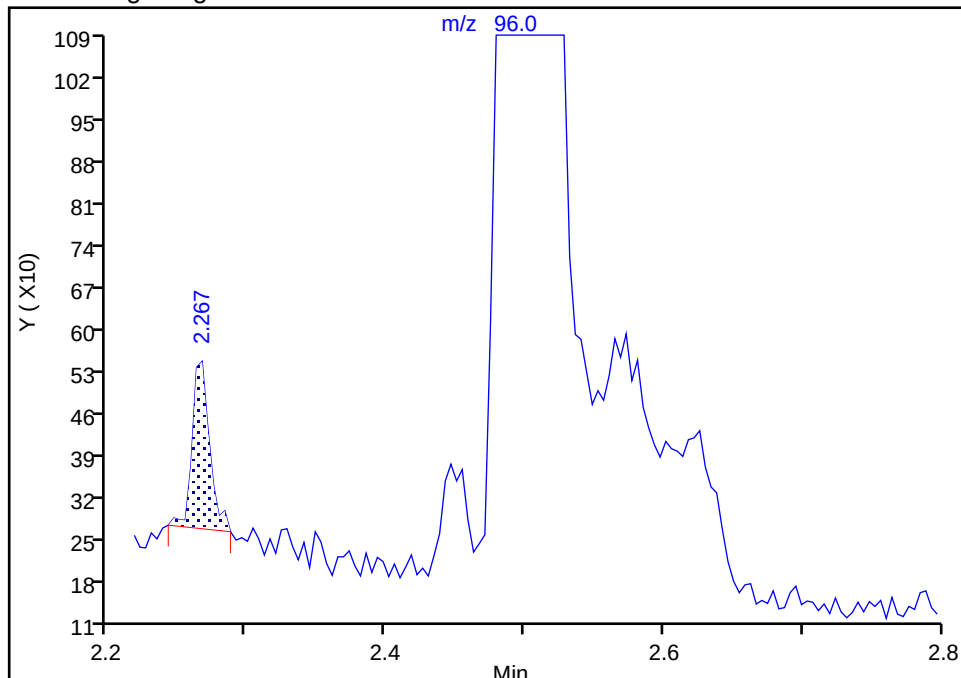
Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

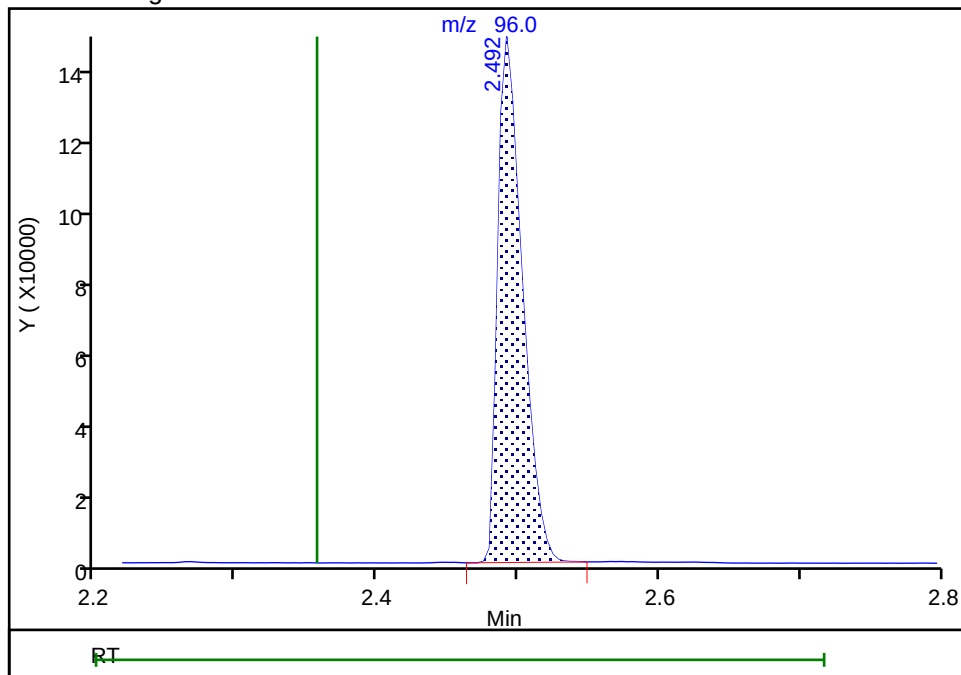
RT: 2.27
Area: 242
Amount: 0.005127
Amount Units: ng/ul

Processing Integration Results



RT: 2.49
Area: 171207
Amount: 3.627347
Amount Units: ng/ul

Manual Integration Results



Reviewer: richardsd, 13-Nov-2018 11:59:43

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
SDG No.: _____
Client Sample ID: GMW-2 MS Lab Sample ID: 480-144297-6 MS
Matrix: Water Lab File ID: U3313170.D
Analysis Method: 8270D SIM ID Date Collected: 10/24/2018 12:15
Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
Sample wt/vol: 1050 (mL) Date Analyzed: 11/10/2018 02:02
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.: 444681 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.997		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	32		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313170.D
 Lims ID: 480-144297-B-6-A MS
 Client ID: GMW-2
 Sample Type: MS
 Inject. Date: 10-Nov-2018 02:02:30 ALS Bottle#: 34 Worklist Smp#: 27
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076303-027
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:12:47 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICAL File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 11:59:49

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	2.483	2.357	0.126	94	154376	10.0	3.17	a
3 1,4-Dioxane	88	2.520	2.394	0.126	88	19140	1.00	1.05	
* 2 1,4-Dichlorobenzene-d4	152	5.694	5.686	0.008	94	425986	4.00	4.00	
7 4,4'-DDE	246		10.965					ND	
5 4,4'-DDD	235		11.045					ND	
6 4,4'-DDT	235		11.307					ND	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MB_LLIS_WRK_00157

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313170.D

Injection Date: 10-Nov-2018 02:02:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: 480-144297-B-6-A MS

Worklist Smp#: 27

Client ID: GMW-2

Injection Vol: 1.0 ul

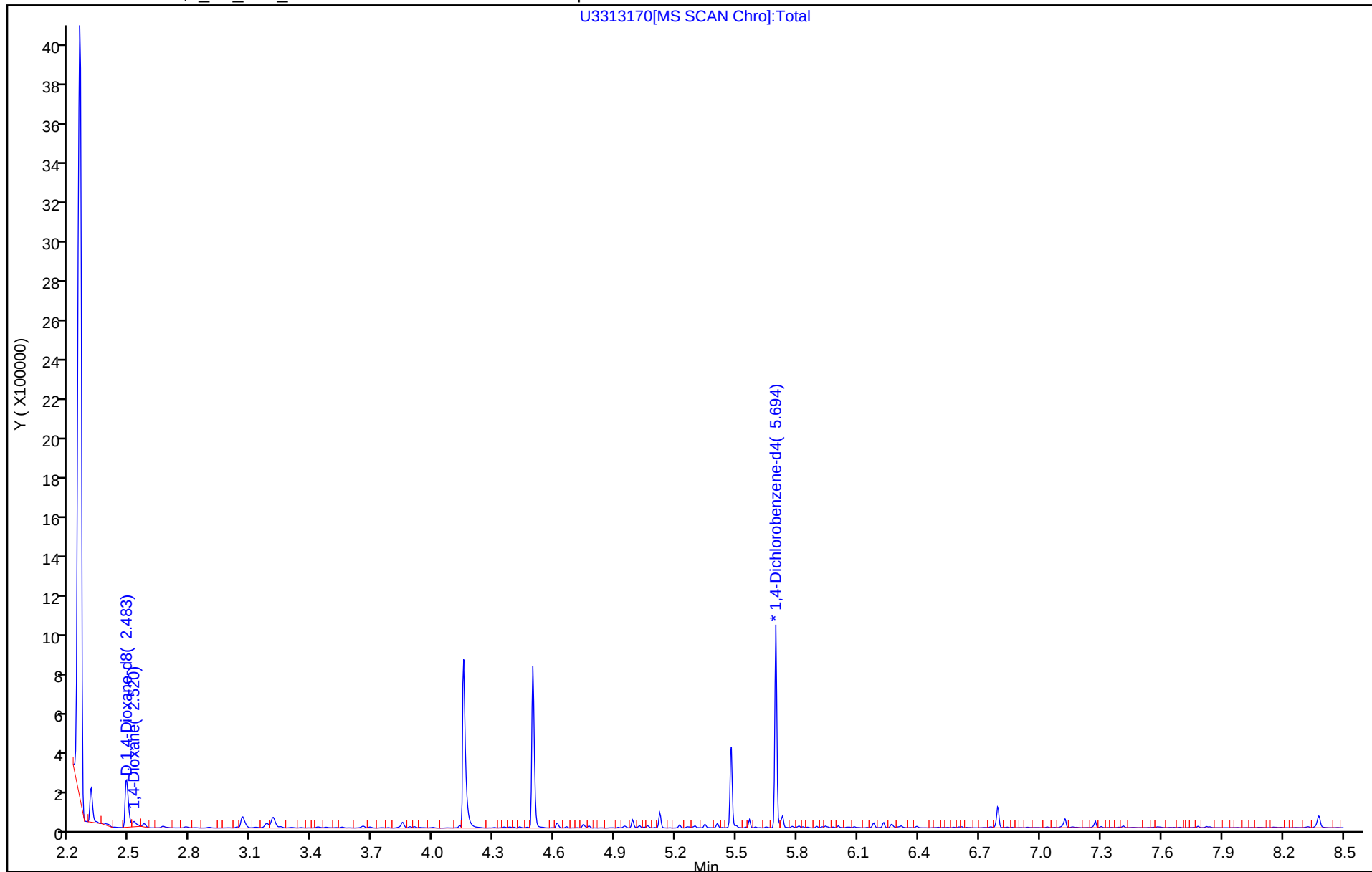
Dil. Factor: 1.0000

ALS Bottle#: 34

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

U3313170[MS SCAN Chro]:Total



TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313170.D

Injection Date: 10-Nov-2018 02:02:30

Instrument ID: HP5973U

Lims ID: 480-144297-B-6-A MS

Client ID: GMW-2

Operator ID: DR

ALS Bottle#: 34 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:

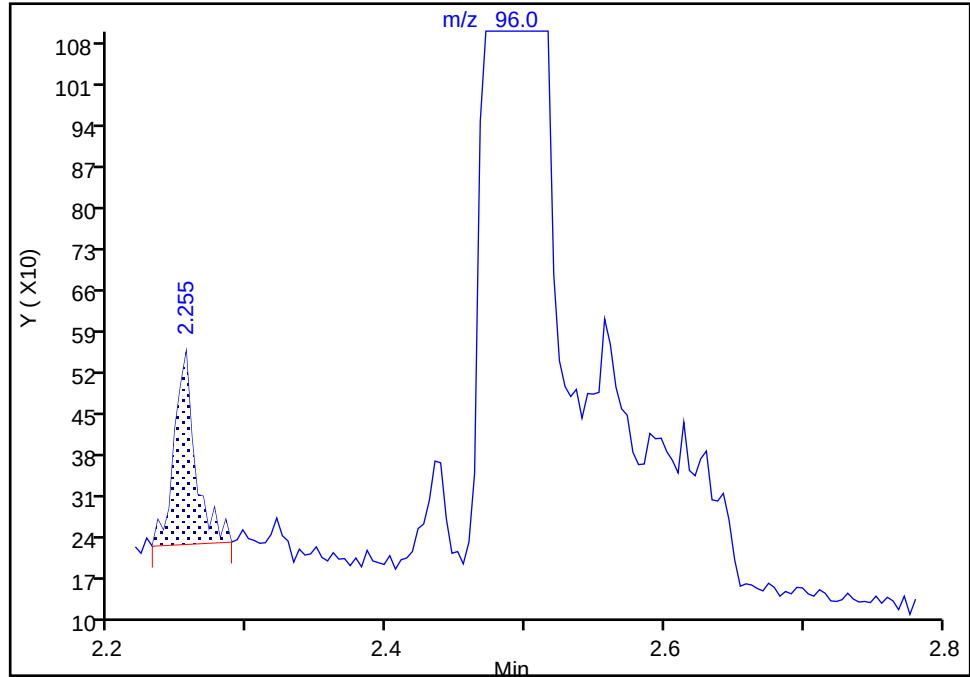
Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

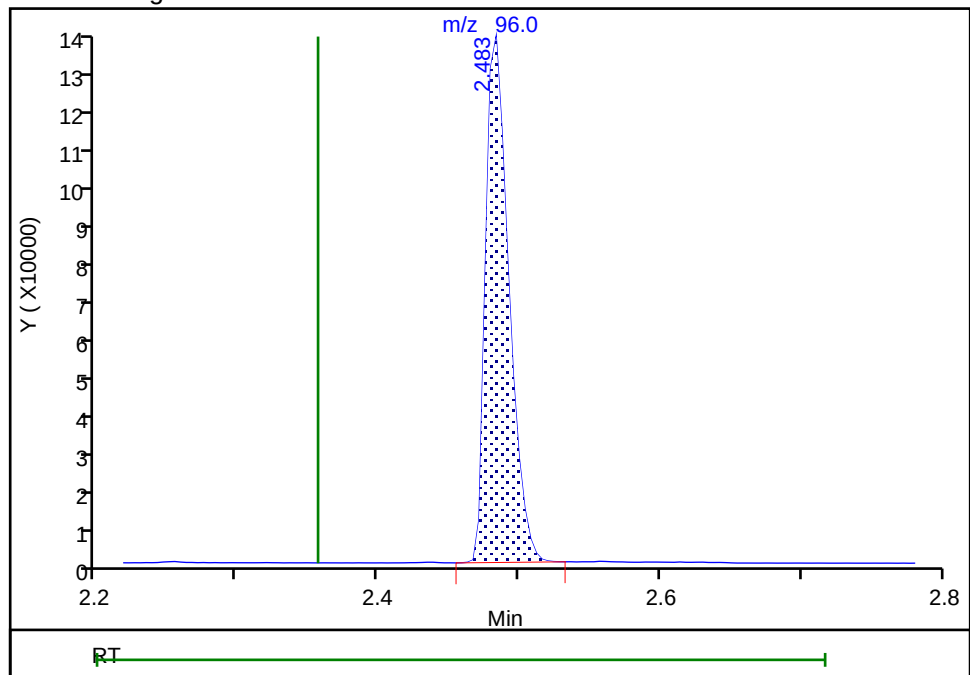
RT: 2.26
Area: 341
Amount: 0.006993
Amount Units: ng/ul

Processing Integration Results



RT: 2.48
Area: 154376
Amount: 3.165844
Amount Units: ng/ul

Manual Integration Results



Reviewer: richardsd, 13-Nov-2018 11:59:48

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1
 SDG No.: _____
 Client Sample ID: GMW-2 MSD Lab Sample ID: 480-144297-6 MSD
 Matrix: Water Lab File ID: U3313171.D
 Analysis Method: 8270D SIM ID Date Collected: 10/24/2018 12:15
 Extract. Method: 3510C Date Extracted: 10/30/2018 07:37
 Sample wt/vol: 1050 (mL) Date Analyzed: 11/10/2018 02:26
 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.: 444681 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.00		0.19	0.095

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	32		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313171.D
 Lims ID: 480-144297-B-6-B MSD
 Client ID: GMW-2
 Sample Type: MSD
 Inject. Date: 10-Nov-2018 02:26:30 ALS Bottle#: 35 Worklist Smp#: 28
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0076303-028
 Operator ID: DR Instrument ID: HP5973U
 Method: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 13-Nov-2018 12:12:47 Calib Date: 26-Oct-2018 19:56:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICAL File: \\ChromNA\Buffalo\ChromData\HP5973U\20181026-75895.b\U3312598.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: richardsd

Date: 13-Nov-2018 11:59:52

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	2.475	2.357	0.118	93	151279	10.0	3.22	a
3 1,4-Dioxane	88	2.512	2.394	0.118	89	18872	1.00	1.05	
* 2 1,4-Dichlorobenzene-d4	152	5.694	5.686	0.008	93	410478	4.00	4.00	
7 4,4'-DDE	246		10.965					ND	
5 4,4'-DDD	235		11.045					ND	
6 4,4'-DDT	235		11.307					ND	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MB_LLIS_WRK_00157

Amount Added: 20.00

Units: uL

Run Reagent

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313171.D

Injection Date: 10-Nov-2018 02:26:30

Instrument ID: HP5973U

Operator ID: DR

Lims ID: 480-144297-B-6-B MSD

Worklist Smp#: 28

Client ID: GMW-2

Injection Vol: 1.0 ul

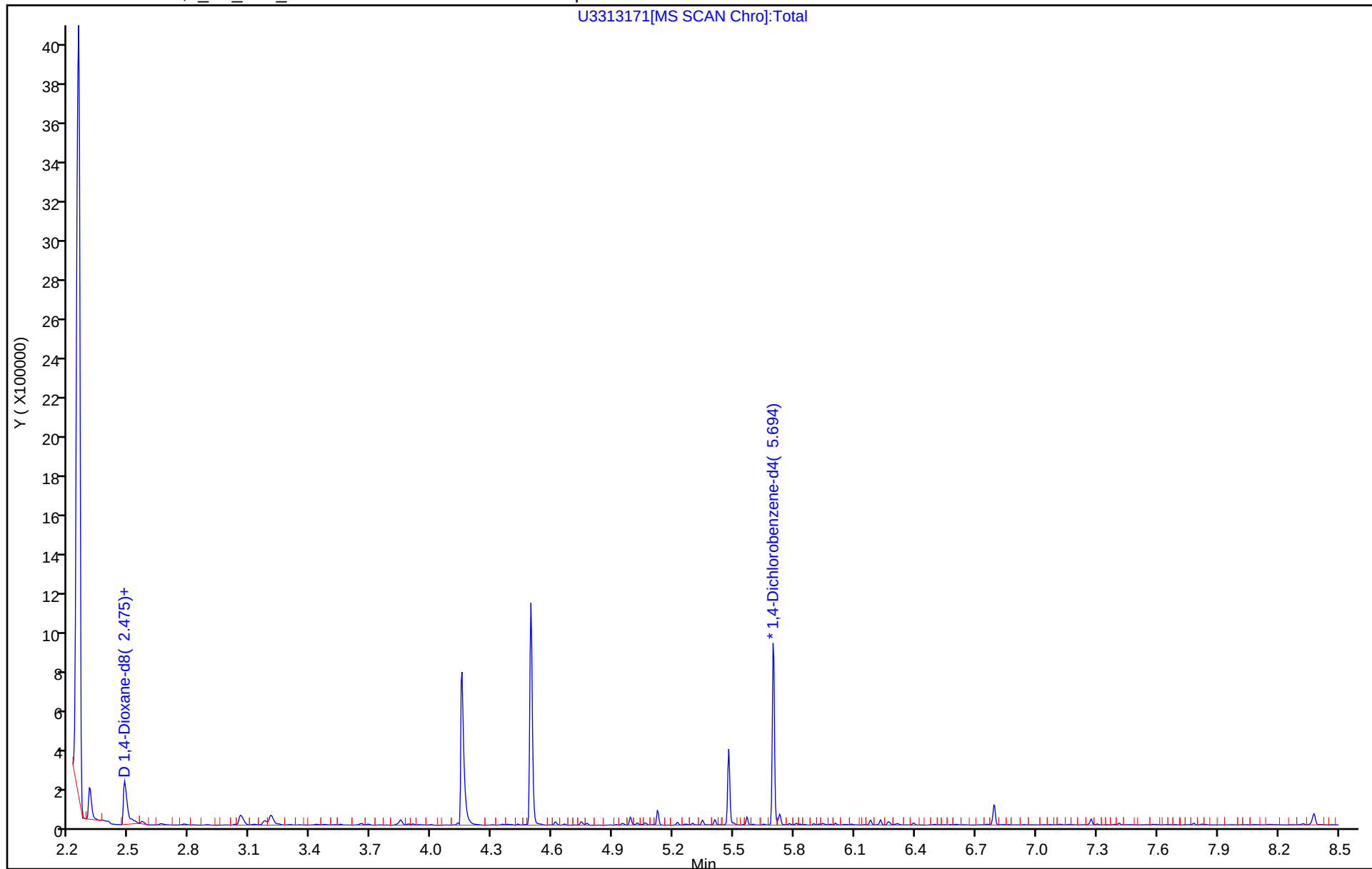
Dil. Factor: 1.0000

ALS Bottle#: 35

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

U3313171[MS SCAN Chro]:Total



TestAmerica Buffalo

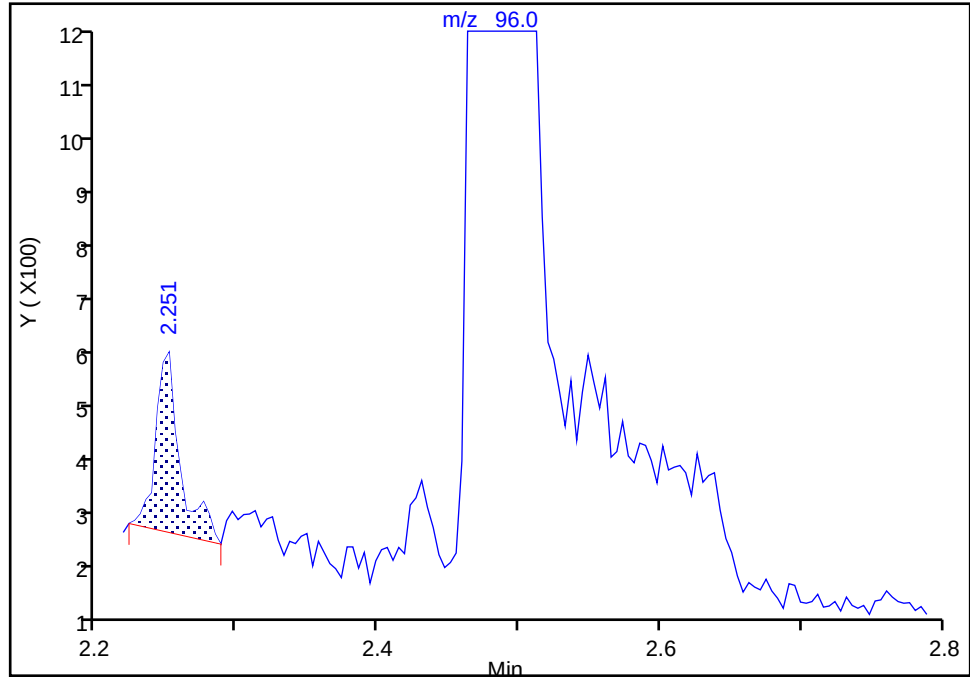
Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20181109-76303.b\U3313171.D
Injection Date: 10-Nov-2018 02:26:30 Instrument ID: HP5973U
Lims ID: 480-144297-B-6-B MSD
Client ID: GMW-2
Operator ID: DR ALS Bottle#: 35 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4

Signal: 1

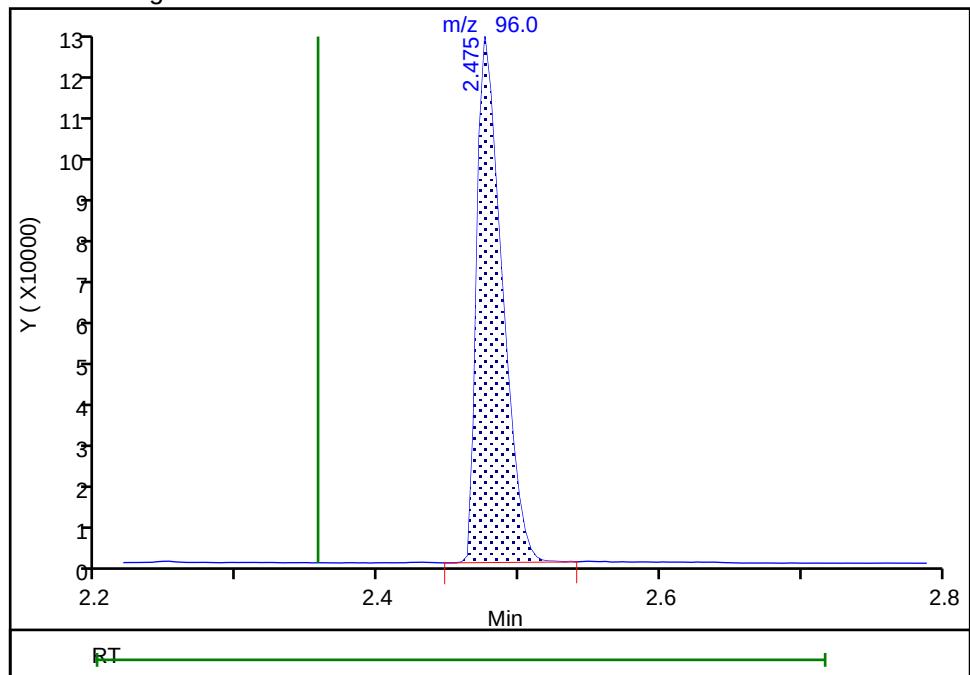
RT: 2.25
Area: 382
Amount: 0.008130
Amount Units: ng/ul

Processing Integration Results



RT: 2.48
Area: 151279
Amount: 3.219540
Amount Units: ng/ul

Manual Integration Results



Reviewer: richardsd, 13-Nov-2018 11:59:51

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Instrument ID: HP5973U Start Date: 10/26/2018 17:27Analysis Batch Number: 442039 End Date: 10/26/2018 20:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-442039/2		10/26/2018 17:27	1	U3312592.D	RXI-5Sil MS(0.5 0.25 (mm))
IC 480-442039/3		10/26/2018 17:56	1	U3312593.D	RXI-5Sil MS(0.5 0.25 (mm))
IC 480-442039/4		10/26/2018 18:20	1	U3312594.D	RXI-5Sil MS(0.5 0.25 (mm))
ICIS 480-442039/5		10/26/2018 18:45	1	U3312595.D	RXI-5Sil MS(0.5 0.25 (mm))
IC 480-442039/6		10/26/2018 19:08	1	U3312596.D	RXI-5Sil MS(0.5 0.25 (mm))
IC 480-442039/7		10/26/2018 19:32	1	U3312597.D	RXI-5Sil MS(0.5 0.25 (mm))
IC 480-442039/8		10/26/2018 19:56	1	U3312598.D	RXI-5Sil MS(0.5 0.25 (mm))
ICV 480-442039/9		10/26/2018 20:20	1		RXI-5Sil MS(0.5 0.25 (mm))

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica BuffaloJob No.: 480-144297-1

SDG No.: _____

Instrument ID: HP5973UStart Date: 11/09/2018 16:02Analysis Batch Number: 444681End Date: 11/10/2018 03:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-444681/2		11/09/2018 16:02	1	U3313145.D	RXI-5Sil MS(0.5 0.25 (mm))
CCVIS 480-444681/3		11/09/2018 16:30	1	U3313146.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 16:54	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 17:18	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 17:42	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 18:06	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 18:30	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 18:54	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 19:17	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 19:41	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 20:05	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 20:29	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 20:53	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 21:16	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 21:40	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 22:04	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 22:28	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 22:52	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 23:15	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/09/2018 23:39	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 00:03	5		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 00:27	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 00:50	1		RXI-5Sil MS(0.5 0.25 (mm))
MB 480-442433/1-A		11/10/2018 01:14	1	U3313168.D	RXI-5Sil MS(0.5 0.25 (mm))
LCS 480-442433/2-A		11/10/2018 01:38	1	U3313169.D	RXI-5Sil MS(0.5 0.25 (mm))
480-144297-6 MS		11/10/2018 02:02	1	U3313170.D	RXI-5Sil MS(0.5 0.25 (mm))
480-144297-6 MSD		11/10/2018 02:26	1	U3313171.D	RXI-5Sil MS(0.5 0.25 (mm))
480-144297-6		11/10/2018 02:50	1	U3313172.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 03:14	1		RXI-5Sil MS(0.5 0.25 (mm))

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica BuffaloJob No.: 480-144297-1

SDG No.: _____

Instrument ID: HP5973UStart Date: 11/10/2018 04:02Analysis Batch Number: 444687End Date: 11/10/2018 15:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-444687/2		11/10/2018 04:02	1	U3313175.D	RXI-5Sil MS(0.5 0.25 (mm))
CCVIS 480-444687/3		11/10/2018 04:30	1	U3313176.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 04:54	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 05:18	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 05:42	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 06:06	5		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 06:30	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 06:54	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 07:18	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 07:41	1		RXI-5Sil MS(0.5 0.25 (mm))
480-144297-5		11/10/2018 08:05	1	U3313185.D	RXI-5Sil MS(0.5 0.25 (mm))
480-144297-7		11/10/2018 08:29	5	U3313186.D	RXI-5Sil MS(0.5 0.25 (mm))
480-144297-8		11/10/2018 08:53	1	U3313187.D	RXI-5Sil MS(0.5 0.25 (mm))
480-144297-9		11/10/2018 09:17	1	U3313188.D	RXI-5Sil MS(0.5 0.25 (mm))
480-144297-10		11/10/2018 09:41	1	U3313189.D	RXI-5Sil MS(0.5 0.25 (mm))
480-144297-11		11/10/2018 10:05	1	U3313190.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 10:29	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 10:53	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 11:16	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 11:40	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 12:04	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 12:28	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 12:52	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 13:16	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 13:40	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 14:03	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 14:27	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 14:51	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		11/10/2018 15:15	1		RXI-5Sil MS(0.5 0.25 (mm))

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Batch Number: 442433 Batch Start Date: 10/30/18 07:37 Batch Analyst: Pollock, Jacob MBatch Method: 3510C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	OP_SIM LCS 00005	OP_SimSurr 00011
MB 480-442433/1		3510C, 8270D SIM ID		1000 mL	1 mL	7 SU	<2 SU		1 mL
LCS 480-442433/2		3510C, 8270D SIM ID		1000 mL	1 mL	7 SU	<2 SU	1 mL	1 mL
480-144297-B-6 MS	GMW-2	3510C, 8270D SIM ID	T	1050 mL	1 mL	7 SU	<2 SU	1 mL	1 mL
480-144297-B-6 MSD	GMW-2	3510C, 8270D SIM ID	T	1050 mL	1 mL	7 SU	<2 SU	1 mL	1 mL
480-144297-A-6	GMW-2	3510C, 8270D SIM ID	T	1050 mL	1 mL	7 SU	<2 SU		1 mL
480-144297-A-5	GPW-20	3510C, 8270D SIM ID	T	980 mL	1 mL	7 SU	<2 SU		1 mL
480-144297-A-7	EW-10	3510C, 8270D SIM ID	T	1030 mL	1 mL	8 SU	<2 SU		1 mL
480-144297-B-8	SB-19	3510C, 8270D SIM ID	T	1040 mL	1 mL	7 SU	<2 SU		1 mL
480-144297-A-9	GPW-6	3510C, 8270D SIM ID	T	500 mL	1 mL	7 SU	<2 SU		1 mL
480-144297-A-10	GPW-5	3510C, 8270D SIM ID	T	1050 mL	1 mL	7 SU	<2 SU		1 mL
480-144297-B-11	DUP	3510C, 8270D SIM ID	T	1050 mL	1 mL	7 SU	<2 SU		1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
MB 480-442433/1		3510C, 8270D SIM ID							
LCS 480-442433/2		3510C, 8270D SIM ID							
480-144297-B-6 MS	GMW-2	3510C, 8270D SIM ID	T						
480-144297-B-6 MSD	GMW-2	3510C, 8270D SIM ID	T						
480-144297-A-6	GMW-2	3510C, 8270D SIM ID	T						
480-144297-A-5	GPW-20	3510C, 8270D SIM ID	T	Contains some sediment					
480-144297-A-7	EW-10	3510C, 8270D SIM ID	T	Contains some sediment					
480-144297-B-8	SB-19	3510C, 8270D SIM ID	T	Contains a little sediment					

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: TestAmerica Buffalo Job No.: 480-144297-1

SDG No.: _____

Batch Number: 442433 Batch Start Date: 10/30/18 07:37 Batch Analyst: Pollock, Jacob MBatch Method: 3510C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
480-144297-A-9	GPW-6	3510C, 8270D SIM ID	T	Contains a lot of sediment					
480-144297-A-10	GPW-5	3510C, 8270D SIM ID	T	Contains some sediment					
480-144297-B-11	DUP	3510C, 8270D SIM ID	T	Contains some sediment					

Batch Notes	
Acid Used for pH Adjustment ID	4932774
Analyst ID - Concentration	JP, SP
Analyst ID - Extraction	JP
Method/Fraction	3510C/8270D_SIM_MS_ID
Na2SO4 ID	4895626
Prep Solvent ID	4964719
Prep Solvent Volume Used	180 mL
Analyst ID - Spike Analyst	JP
Analyst ID - Spike Witness Analyst	JP
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.

Method PFC IDA

Fluorinated Hydrocarbons by Method
PFAS IDA

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): GeminiC18 3 ID: 3 (mm)

Client Sample ID	Lab Sample ID	M262FTS #	M282FTS #
EW-10 DL	480-144297-7 DL	101	89

M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

QC LIMITS
25-150
25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low
 GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	M262FTS #	PFOA #
GPW-20	480-144297-5	33	50	57	60	65	68	68	69
GMW-2	480-144297-6	43	51	49	54	57	56	59	56
SB-19	480-144297-8	66	91	91	97	100	96	99	95
GPW-6	480-144297-9	44	71	79	82	92	94	137	98
GPW-5	480-144297-10	54	72	76	74	82	86	112	88
DUP	480-144297-11	52	74	86	79	90	91	192 *	93
	MB 320-257492/1-A	95	95	92	98	98	99	91	97
	LCS 320-257492/2-A	94	93	90	92	95	96	92	95
GMW-2 MS	480-144297-6 MS	51	63	66	69	71	75	75	76
GMW-2 MSD	480-144297-6 MSD	49	61	65	67	73	70	75	70

	<u>QC LIMITS</u>
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5-PFPeA DNU	25-150
PFBS = 13C3 PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4 PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
M262FTS = M2-6:2 FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low
 GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFNA #	PFOS #	M282FTS #	PFOSA #	PFDA #	d3NMFOS #	d5NEFOS #	PFUnA #
GPW-20	480-144297-5	66	62	54	59	60	53	55	56
GMW-2	480-144297-6	55	55	52	49	56	40	38	43
SB-19	480-144297-8	104	105	88	89	99	95	100	97
GPW-6	480-144297-9	92	97	105	102	92	92	100	98
GPW-5	480-144297-10	84	85	73	73	79	80	75	77
DUP	480-144297-11	99	94	174 *	91	103	113	116	103
	MB 320-257492/1-A	97	99	101	97	105	96	100	96
	LCS 320-257492/2-A	93	94	85	88	95	95	98	95
GMW-2 MS	480-144297-6 MS	68	68	61	66	62	62	57	64
GMW-2 MSD	480-144297-6 MSD	69	68	58	63	61	53	49	56

	<u>QC LIMITS</u>
PFNA = 13C5 PFNA	25-150
PFOS = 13C4 PFOS	25-150
PFOSA = 13C8 FOSA	25-150
M282FTS = M2-8:2 FTS	25-150
PFDA = 13C2 PFDA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFUnA = 13C2 PFUnA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFD _o A #	PFTD _A #
GPW-20	480-144297-5	50	49
GMW-2	480-144297-6	37	32
SB-19	480-144297-8	94	90
GPW-6	480-144297-9	89	82
GPW-5	480-144297-10	58	48
DUP	480-144297-11	84	69
	MB 320-257492/1-A	93	94
	LCS 320-257492/2-A	87	96
GMW-2 MS	480-144297-6 MS	49	55
GMW-2 MSD	480-144297-6 MSD	50	49

PFD_oA = 13C2 PFD_oA
PFTD_A = 13C2 PFTeD_A

QC LIMITS
25-150
25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low
 GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	PFOA #	PFNA #
EW-10	480-144297-7	56	74	92	85	94	102	101	109

	<u>QC LIMITS</u>
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5-PFPeA DNU	25-150
PFBS = 13C3 PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4 PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
PFOA = 13C4 PFOA	25-150
PFNA = 13C5 PFNA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low
 GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	PFOS #	PFOSA #	PFDA #	d3NMFOS #	d5NEFOS #	PFUnA #	PFDoA #	PFTDA #
EW-10	480-144297-7	114	106	100	126	131	117	116	100

	<u>QC LIMITS</u>
PFOS = 13C4 PFOS	25-150
PFOSA = 13C8 FOSA	25-150
PFDA = 13C2 PFDA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFUnA = 13C2 PFUnA	25-150
PFDoA = 13C2 PFDoA	25-150
PFTDA = 13C2 PFTeDA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 2018.11.08LLC_008.d
Lab ID: LCS 320-257492/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	41.2	103	70-130	
Perfluoropentanoic acid (PFPeA)	40.0	41.2	103	66-126	
Perfluorohexanoic acid (PFHxA)	40.0	39.6	99	66-126	
Perfluoroheptanoic acid (PFHpA)	40.0	38.8	97	66-126	
Perfluorooctanoic acid (PFOA)	40.0	42.6	106	64-124	
Perfluorononanoic acid (PFNA)	40.0	43.7	109	68-128	
Perfluorodecanoic acid (PFDA)	40.0	42.5	106	69-129	
Perfluoroundecanoic acid (PFUnA)	40.0	39.3	98	60-120	
Perfluorododecanoic acid (PFDoA)	40.0	40.7	102	71-131	
Perfluorotridecanoic acid (PFTriA)	40.0	44.9	112	72-132	
Perfluorotetradecanoic acid (PFTeA)	40.0	36.0	90	68-128	
Perfluorobutanesulfonic acid (PFBS)	35.4	38.2	108	73-133	
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.7	95	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	44.9	118	68-128	
Perfluorooctanesulfonic acid (PFOS)	37.1	36.5	98	67-127	
Perfluorodecanesulfonic acid (PFDS)	38.6	44.6	116	68-128	
Perfluorooctanesulfonamide (FOSA)	40.0	42.8	107	70-130	
N-methylperfluorooctanesulfona midoacetic acid (NMeFOSAA)	40.0	37.6	94	67-127	
N-ethylperfluorooctanesulfonam idoacetic acid (NEtFOSAA)	40.0	40.9	102	65-125	
6:2 FTS	37.9	32.0	84	66-126	
8:2 FTS	38.3	36.9	96	67-127	
13C4 PFBA	100	93.9	94	25-150	
13C5-PFPeA DNU	100	93.5	93	25-150	
13C2 PFHxA	100	91.8	92	25-150	
13C4 PFHpA	100	95.3	95	25-150	
13C4 PFOA	100	94.6	95	25-150	
13C5 PFNA	100	93.0	93	25-150	
13C2 PFDA	100	94.8	95	25-150	
13C2 PFUnA	100	95.2	95	25-150	
13C2 PFDoA	100	86.8	87	25-150	
13C2 PFTeDA	100	95.8	96	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 2018.11.08LLC_008.d
 Lab ID: LCS 320-257492/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
13C3 PFBS	93.0	83.6	90	25-150	
18O2 PFHxS	94.6	91.3	96	25-150	
13C4 PFOS	95.6	89.6	94	25-150	
13C8 FOSA	100	88.1	88	25-150	
d3-NMeFOSAA	100	95.0	95	25-150	
d5-NEtFOSAA	100	98.3	98	25-150	
M2-6:2 FTS	95.0	86.9	92	25-150	
M2-8:2 FTS	95.8	81.8	85	25-150	

Column to be used to flag recovery and RPD values
 FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Sacramento

Job No.: 480-144297-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 2018.11.08LLC_011.d

Lab ID: 480-144297-6 MS

Client ID: GMW-2 MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	34.0	2.3	38.0	105	70-130	
Perfluoropentanoic acid (PFPeA)	34.0	ND	35.3	104	66-126	
Perfluorohexanoic acid (PFHxA)	34.0	ND	33.4	98	66-126	
Perfluoroheptanoic acid (PFHpA)	34.0	ND	34.4	101	66-126	
Perfluorooctanoic acid (PFOA)	34.0	ND	32.8	96	64-124	
Perfluorononanoic acid (PFNA)	34.0	ND	34.7	102	68-128	
Perfluorodecanoic acid (PFDA)	34.0	ND	39.5	116	69-129	
Perfluoroundecanoic acid (PFUnA)	34.0	ND	33.4	98	60-120	
Perfluorododecanoic acid (PFDoA)	34.0	ND	34.2	100	71-131	
Perfluorotridecanoic acid (PFTriA)	34.0	ND	32.4	95	72-132	
Perfluorotetradecanoic acid (PFTeA)	34.0	ND	31.3	92	68-128	
Perfluorobutanesulfonic acid (PFBS)	30.1	0.99 J	34.6	112	73-133	
Perfluorohexanesulfonic acid (PFHxS)	31.0	0.47 J	28.4	90	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	32.4	ND	36.7	113	68-128	
Perfluorooctanesulfonic acid (PFOS)	31.6	0.58 J	33.3	103	67-127	
Perfluorodecanesulfonic acid (PFDS)	32.8	ND	28.9	88	68-128	
Perfluorooctanesulfonamide (FOSA)	34.0	ND	33.9	100	70-130	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	34.0	ND	30.9	91	67-127	
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	34.0	ND	34.1	100	65-125	
6:2 FTS	32.3	ND	30.6	95	66-126	
8:2 FTS	32.6	ND	33.9	104	67-127	
13C4 PFBA	85.1	36	43.6	51	25-150	
13C5-PFPeA DNU	85.1	43	53.3	63	25-150	
13C2 PFHxA	85.1	46	58.5	69	25-150	
13C4 PFHpA	85.1	48	60.4	71	25-150	
13C4 PFOA	85.1	47	64.7	76	25-150	
13C5 PFNA	85.1	47	58.0	68	25-150	
13C2 PFDA	85.1	48	53.1	62	25-150	
13C2 PFUnA	85.1	36	54.5	64	25-150	
13C2 PFDoA	85.1	31	41.9	49	25-150	
13C2 PFTeDA	85.1	27	46.7	55	25-150	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 2018.11.08LLC_011.d
 Lab ID: 480-144297-6 MS Client ID: GMW-2 MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
13C3 PFBS	79.2	39	52.3	66	25-150	
18O2 PFHxS	80.5	45	60.8	75	25-150	
13C4 PFOS	81.4	45	55.6	68	25-150	
13C8 FOSA	85.1	42	56.0	66	25-150	
d3-NMeFOSAA	85.1	34	53.2	62	25-150	
d5-NEtFOSAA	85.1	32	48.7	57	25-150	
M2-6:2 FTS	80.9	47	60.7	75	25-150	
M2-8:2 FTS	81.5	42	49.6	61	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: TestAmerica Sacramento

Job No.: 480-144297-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 2018.11.08LLC_012.d

Lab ID: 480-144297-6 MSD

Client ID: GMW-2 MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Perfluorobutanoic acid (PFBA)	33.5	38.1	107	0	30	70-130	
Perfluoropentanoic acid (PFPeA)	33.5	34.2	102	3	30	66-126	
Perfluorohexanoic acid (PFHxA)	33.5	31.9	95	5	30	66-126	
Perfluoroheptanoic acid (PFHpA)	33.5	33.6	100	2	30	66-126	
Perfluorooctanoic acid (PFOA)	33.5	36.5	109	11	30	64-124	
Perfluorononanoic acid (PFNA)	33.5	32.8	98	6	30	68-128	
Perfluorodecanoic acid (PFDA)	33.5	35.4	106	11	30	69-129	
Perfluoroundecanoic acid (PFUnA)	33.5	33.5	100	0	30	60-120	
Perfluorododecanoic acid (PFDoA)	33.5	31.5	94	8	30	71-131	
Perfluorotridecanoic acid (PFTriA)	33.5	31.1	93	4	30	72-132	
Perfluorotetradecanoic acid (PFTeA)	33.5	31.5	94	0	30	68-128	
Perfluorobutanesulfonic acid (PFBS)	29.6	33.2	109	4	30	73-133	
Perfluorohexanesulfonic acid (PFHxS)	30.5	29.5	95	4	30	63-123	
Perfluoroheptanesulfonic Acid (PFHpS)	31.9	36.9	116	0	30	68-128	
Perfluorooctanesulfonic acid (PFOS)	31.1	29.9	95	11	30	67-127	
Perfluorodecanesulfonic acid (PFDS)	32.3	24.9	77	15	30	68-128	
Perfluorooctanesulfonamide (FOSA)	33.5	33.3	99	2	30	70-130	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	33.5	32.3	96	4	30	67-127	
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	33.5	34.7	104	2	30	65-125	
6:2 FTS	31.7	30.8	97	0	30	66-126	
8:2 FTS	32.1	32.8	102	3	30	67-127	
13C4 PFBA	83.7	40.6	49			25-150	
13C5-PFPeA DNU	83.7	50.7	61			25-150	
13C2 PFHxA	83.7	56.2	67			25-150	
13C4 PFHpA	83.7	61.0	73			25-150	
13C4 PFOA	83.7	58.8	70			25-150	
13C5 PFNA	83.7	57.5	69			25-150	
13C2 PFDA	83.7	51.0	61			25-150	
13C2 PFUnA	83.7	46.6	56			25-150	
13C2 PFDoA	83.7	41.7	50			25-150	
13C2 PFTeDA	83.7	40.9	49			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: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 2018.11.08LLC_012.d
 Lab ID: 480-144297-6 MSD Client ID: GMW-2 MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
13C3 PFBS	77.8	50.9	65			25-150	
18O2 PFHxS	79.1	55.8	70			25-150	
13C4 PFOS	80.0	54.4	68			25-150	
13C8 FOSA	83.7	52.4	63			25-150	
d3-NMeFOSAA	83.7	44.2	53			25-150	
d5-NEtFOSAA	83.7	41.1	49			25-150	
M2-6:2 FTS	79.5	59.6	75			25-150	
M2-8:2 FTS	80.2	46.2	58			25-150	

Column to be used to flag recovery and RPD values
 FORM III 537 (modified)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Lab File ID: 2018.11.08LLC_007.d Lab Sample ID: MB 320-257492/1-A
 Matrix: Water Date Extracted: 11/07/2018 07:22
 Instrument ID: A9 Date Analyzed: 11/09/2018 07:55
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-257492/2-A	2018.11.08L LC 008.d	11/09/2018 08:03
GPW-20	480-144297-5	2018.11.08L LC 009.d	11/09/2018 08:10
GMW-2	480-144297-6	2018.11.08L LC 010.d	11/09/2018 08:18
GMW-2 MS	480-144297-6 MS	2018.11.08L LC 011.d	11/09/2018 08:25
GMW-2 MSD	480-144297-6 MSD	2018.11.08L LC 012.d	11/09/2018 08:33
EW-10	480-144297-7	2018.11.08L LC 013.d	11/09/2018 08:40
GPW-6	480-144297-9	2018.11.08L LC 015.d	11/09/2018 08:55
EW-10 DL	480-144297-7 DL	2018.11.13L LAAA 028.d	11/14/2018 02:06
SB-19	480-144297-8	2018.11.13L LAAA 029.d	11/14/2018 02:13
GPW-5	480-144297-10	2018.11.13L LAAA 030.d	11/14/2018 02:21
DUP	480-144297-11	2018.11.13L LAAA 031.d	11/14/2018 02:28

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: IC 320-257055/5 Date Analyzed: 11/05/2018 15:59
 Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3 (mm)
 Lab File ID (Standard): 2018.11.05ICAL_008. Heated Purge: (Y/N) N
 Calibration ID: 42032

	13PFOA					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	2156265	2.64				
UPPER LIMIT	3234398	2.84				
LOWER LIMIT	1078133	2.44				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICB 320-257055/9		2044440	2.65			
ICV 320-257055/10		2068327	2.64			
CCV 320-258995/3 CCVIS		2523993	2.60			

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
 RT Limit = $\pm$ 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: CCV 320-258995/3 Date Analyzed: 11/14/2018 00:15
 Instrument ID: A8_N GC Column: GeminiC18 3x100 ID: 3 (mm)
 Lab File ID (Standard): 2018.11.13LLAAA_006 Heated Purge: (Y/N) N
 Calibration ID: 42032

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2523993	2.60				
UPPER LIMIT		3785990	2.80				
LOWER LIMIT		1261997	2.40				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-258995/1		2197140	2.60				
CCVL 320-258995/2		2242955	2.60				
CCV 320-258999/1		2627607	2.60				
480-144297-7 DL	EW-10 DL	534329*	2.60				
480-144297-8	SB-19	2744565	2.58				
480-144297-10	GPW-5	2997778	2.60				
480-144297-11	DUP	3183783	2.59				
CCV 320-258999/9		2771286	2.58				

13PFOA = 13C2 PFOA
 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
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: IC 320-255834/5 Date Analyzed: 10/30/2018 13:35
 Instrument ID: A9 GC Column: Acquity ID: 2.1 (mm)
 Lab File ID (Standard): 2018.10.30ICALA_005 Heated Purge: (Y/N) N
 Calibration ID: 41944

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		8163503	2.50				
UPPER LIMIT		12245255	2.70				
LOWER LIMIT		4081752	2.30				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 320-255834/9		8227254	2.51				
ICV 320-255834/10		8013101	2.50				
CCV 320-258039/3 CCVIS		8382392	2.54				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
 RT Limit = $\pm$ 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Sample No.: CCV 320-258039/3 Date Analyzed: 11/09/2018 07:48
 Instrument ID: A9 GC Column: Acquity ID: 2.1 (mm)
 Lab File ID (Standard): 2018.11.08LLC_006.d Heated Purge: (Y/N) N
 Calibration ID: 41944

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		8382392	2.54				
UPPER LIMIT		12573588	2.74				
LOWER LIMIT		4191196	2.34				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-258039/1		8250297	2.54				
CCVL 320-258039/2		8368440	2.54				
MB 320-257492/1-A		8797505	2.54				
LCS 320-257492/2-A		9135595	2.56				
480-144297-5	GPW-20	10810156	2.56				
480-144297-6	GMW-2	9064697	2.56				
480-144297-6 MS	GMW-2 MS	9304673	2.56				
480-144297-6 MSD	GMW-2 MSD	8957665	2.57				
480-144297-7	EW-10	7719158	2.57				
480-144297-9	GPW-6	9341755	2.59				
CCV 320-258039/15		8479401	2.57				

13PFOA = 13C2 PFOA
 13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
 RT Limit = $\pm$ 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GPW-20</u>	Lab Sample ID: <u>480-144297-5</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_009.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/24/2018 10:35</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>281.9 (mL)</u>	Date Analyzed: <u>11/09/2018 08:10</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.40	J	1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.8	0.43
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.51
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.8	0.75
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.25	J	1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.41	J B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3.3		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2 FTS	ND		18	1.8
39108-34-4	8:2 FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GPW-20</u>	Lab Sample ID: <u>480-144297-5</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_009.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/24/2018 10:35</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>281.9 (mL)</u>	Date Analyzed: <u>11/09/2018 08:10</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	33		25-150
STL01893	13C5-PFPeA DNU	50		25-150
STL00993	13C2 PFHxA	60		25-150
STL01892	13C4 PFHpA	65		25-150
STL00990	13C4 PFOA	69		25-150
STL00995	13C5 PFNA	66		25-150
STL00996	13C2 PFDA	60		25-150
STL00997	13C2 PFUnA	56		25-150
STL00998	13C2 PFDoA	50		25-150
STL02116	13C2 PFTeDA	49		25-150
STL02337	13C3 PFBS	57		25-150
STL00994	18O2 PFHxS	68		25-150
STL00991	13C4 PFOS	62		25-150
STL01056	13C8 FOSA	59		25-150
STL02118	d3-NMeFOSAA	53		25-150
STL02117	d5-NEtFOSAA	55		25-150
STL02279	M2-6:2 FTS	68		25-150
STL02280	M2-8:2 FTS	54		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_009.d
 Lims ID: 480-144297-F-5-A
 Client ID: GPW-20
 Sample Type: Client
 Inject. Date: 09-Nov-2018 08:10:47 ALS Bottle#: 3 Worklist Smp#: 6
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 480-144297-f-5-a
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: A9\Administrator Instrument ID: A9
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 11:50:37 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d
 Column 1 : Det: EXP1
 Process Host: CTX0318

First Level Reviewer: mongkols

Date: 12-Nov-2018 11:50:37

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	1.352	1.346	0.006	0.529	3257420	0.8275	33.1	3949	
2 Perfluorobutanoic acid	212.90 > 169.00	1.352	1.352	0.0	1.000	13743	0.0113		1.0	
D 3 13C5 PFPeA	267.90 > 223.00	1.609	1.601	0.008	0.629	4663119	1.24	49.8	2397	M
D 47 13C3 PFBS	301.90 > 83.00	1.643	1.636	0.007	0.642	69178	1.34	57.5	76.4	M
5 Perfluorobutanesulfonic acid	298.90 > 80.00	1.643	1.643	0.0	1.000	21422	0.006972		1.0	M
	298.90 > 99.00	1.643	1.643	0.0	1.000	6655	3.22(1.35-4.05)		0.9	M
D 7 13C2 PFHxA	315.00 > 270.00	1.883	1.873	0.010	0.736	5932993	1.50	60.1	5855	
D 9 13C4 PFHpA	367.00 > 322.00	2.204	2.191	0.013	0.862	7490614	1.61	64.5	10439	
D 11 18O2 PFHxS	403.00 > 84.00	2.216	2.203	0.013	0.866	4881257	1.62	68.3	12688	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.216	2.216	0.0	1.000	30235	0.0116		2.6	
	399.00 > 99.00	2.204	2.216	-0.012	0.994	7774	3.89(1.90-5.70)		2.9	
D 12 M2-6:2 FTS	429.00 > 81.00	2.528	2.513	0.015	0.988	689940	1.62	68.0	484	
13 1H,1H,2H,2H-perfluorooctanesulfoni	427.00 > 407.00	2.528	2.528	0.0	1.000	28708	0.0453		105	
D 14 13C4 PFOA	417.00 > 372.00	2.558	2.543	0.015	1.000	7372854	1.73	69.3	11384	
* 62 13C2 PFOA	415.00 > 370.00	2.558	2.543	0.015		10810156	2.50		15723	

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	2.543	2.543	0.0	0.994	38409	0.0120			1.4	M
413.00 > 169.00	2.543	2.543	0.0	0.994	11213		3.43(1.36-4.08)		15.2	M
D 18 13C4 PFOS										
503.00 > 80.00	2.932	2.914	0.018	1.146	4504073	1.47		61.7	3136	
D 19 13C5 PFNA										
468.00 > 423.00	2.932	2.914	0.018	1.146	6499345	1.65		66.1	7577	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	2.932	2.914	0.018	1.000	190608	0.0939			97.1	M
499.00 > 99.00	2.932	2.914	0.018	1.000	49753		3.83(2.04-6.12)		213	
D 21 13C8 FOSA										
506.00 > 78.00	3.281	3.264	0.017	1.283	2505053	1.48		59.3	4821	
D 23 13C2 PFDA										
515.00 > 470.00	3.281	3.264	0.017	1.283	6122353	1.51		60.5	8559	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.281	3.264	0.017	1.283	69122	1.31		54.5	367	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.281	3.264	0.017	1.000	2995	0.007269			19.1	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.281	3.264	0.017	1.000	14913	0.004953			43.4	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.438	3.422	0.016	1.344	2316824	1.32		52.9	3344	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.438	3.437	0.001	1.000	7333	0.007912			4.5	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.608	3.591	0.017	1.000	5677	0.007869			19.2	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.608	3.591	0.017	1.410	1972713	1.38		55.3	1945	
D 30 13C2 PFUnA										
565.00 > 520.00	3.608	3.591	0.017	1.410	4748348	1.40		56.1	6870	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.608	3.607	0.001	1.000	17628	0.008163			4.6	
563.00 > 169.00	3.608	3.607	0.001	1.000	1745		10.10(5.24-15.72)		6.9	
D 36 13C2 PFDoA										
615.00 > 570.00	3.900	3.883	0.017	1.525	5194096	1.25		49.9	5536	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.161	4.145	0.016	1.067	7729	0.004550			3.5	
663.00 > 169.00	4.161	4.145	0.016	1.067	1627		4.75(3.09-9.27)		6.7	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.397	4.381	0.016	1.000	1770	0.006361			8.1	
713.00 > 219.00	4.381	4.381	0.0	0.996	1577		1.12(0.70-2.09)		7.6	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.397	4.381	0.016	1.719	3804735	1.22		48.9	4796	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_009.d

Injection Date: 09-Nov-2018 08:10:47

Instrument ID: A9

Lims ID: 480-144297-F-5-A

Lab Sample ID: 320-144297-5

Client ID: GPW-20

Operator ID: A9\Administrator

ALS Bottle#: 3

Worklist Smp#: 6

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

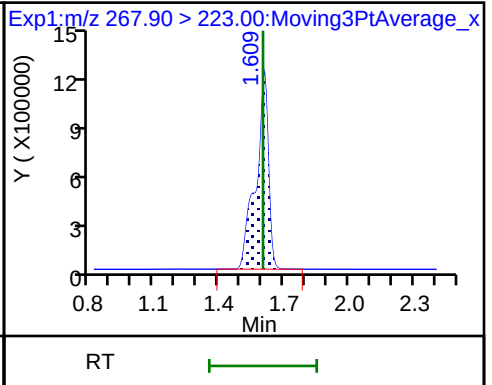
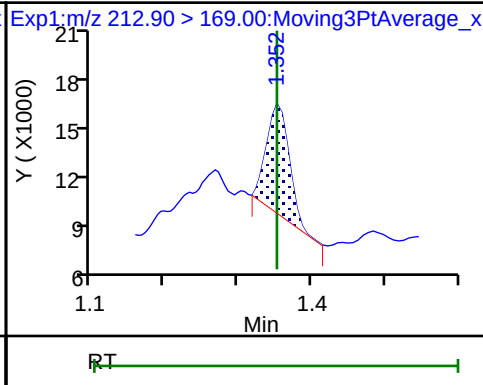
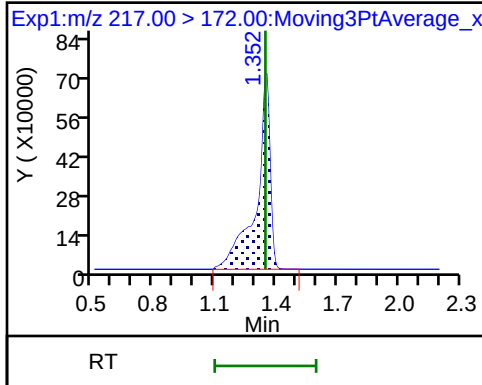
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

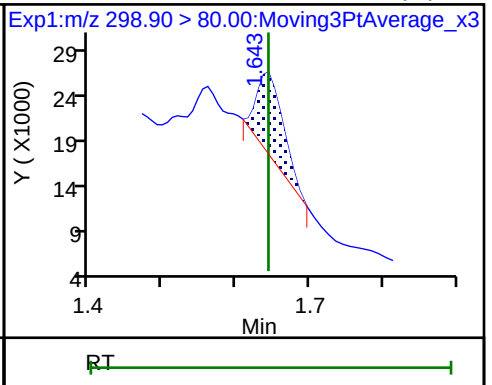
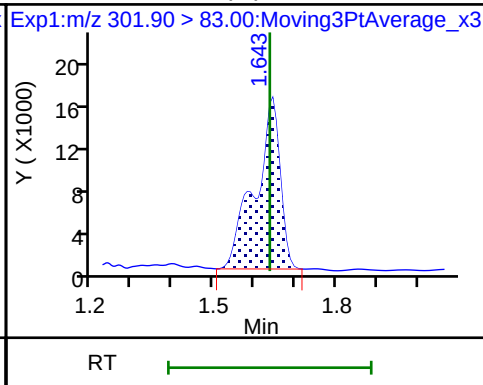
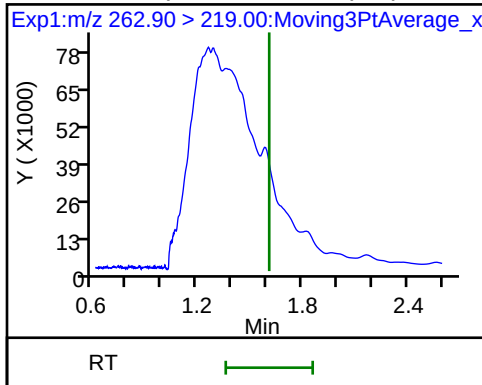
D 3 13C5 PFPeA (M)



4 Perfluoropentanoic acid (ND)

D 47 13C3 PFBS (M)

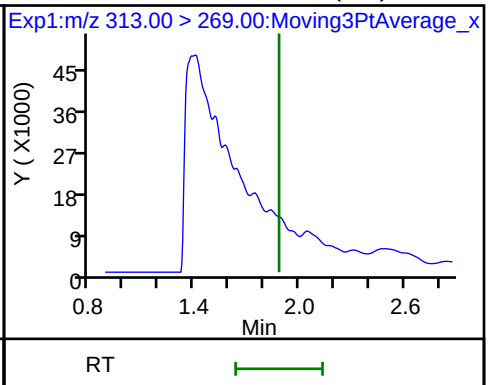
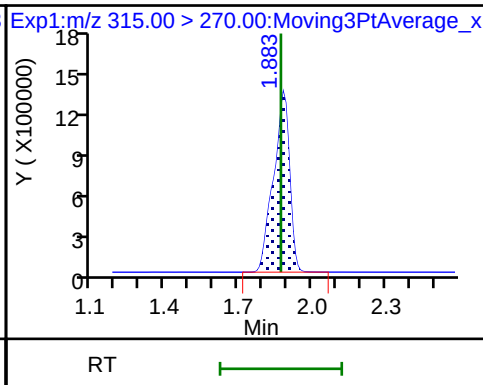
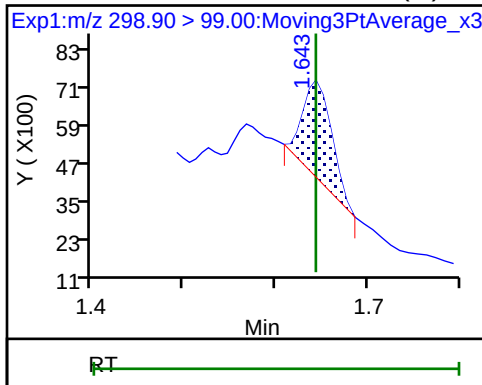
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid (M)

D 7 13C2 PFHxA

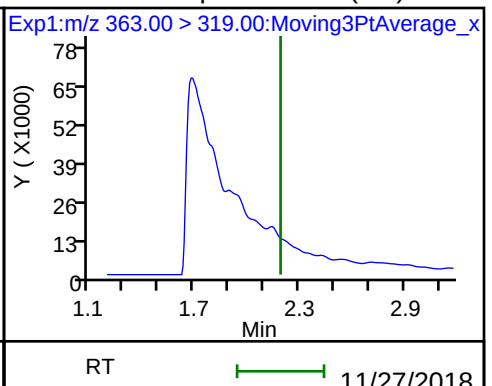
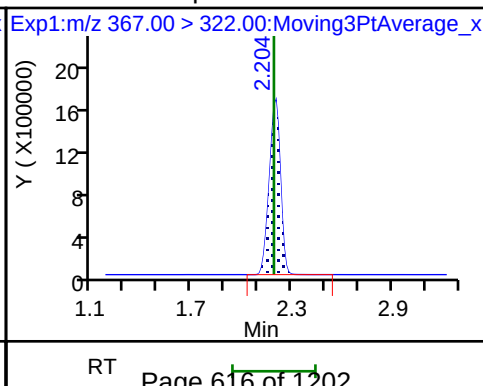
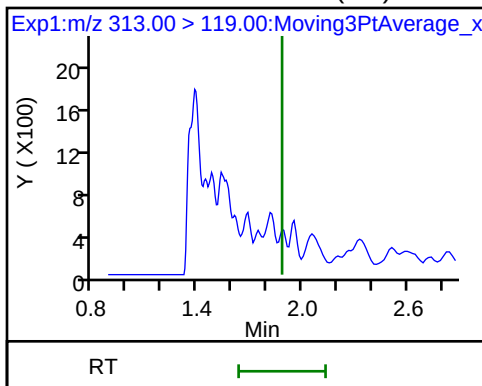
6 Perfluorohexanoic acid (ND)

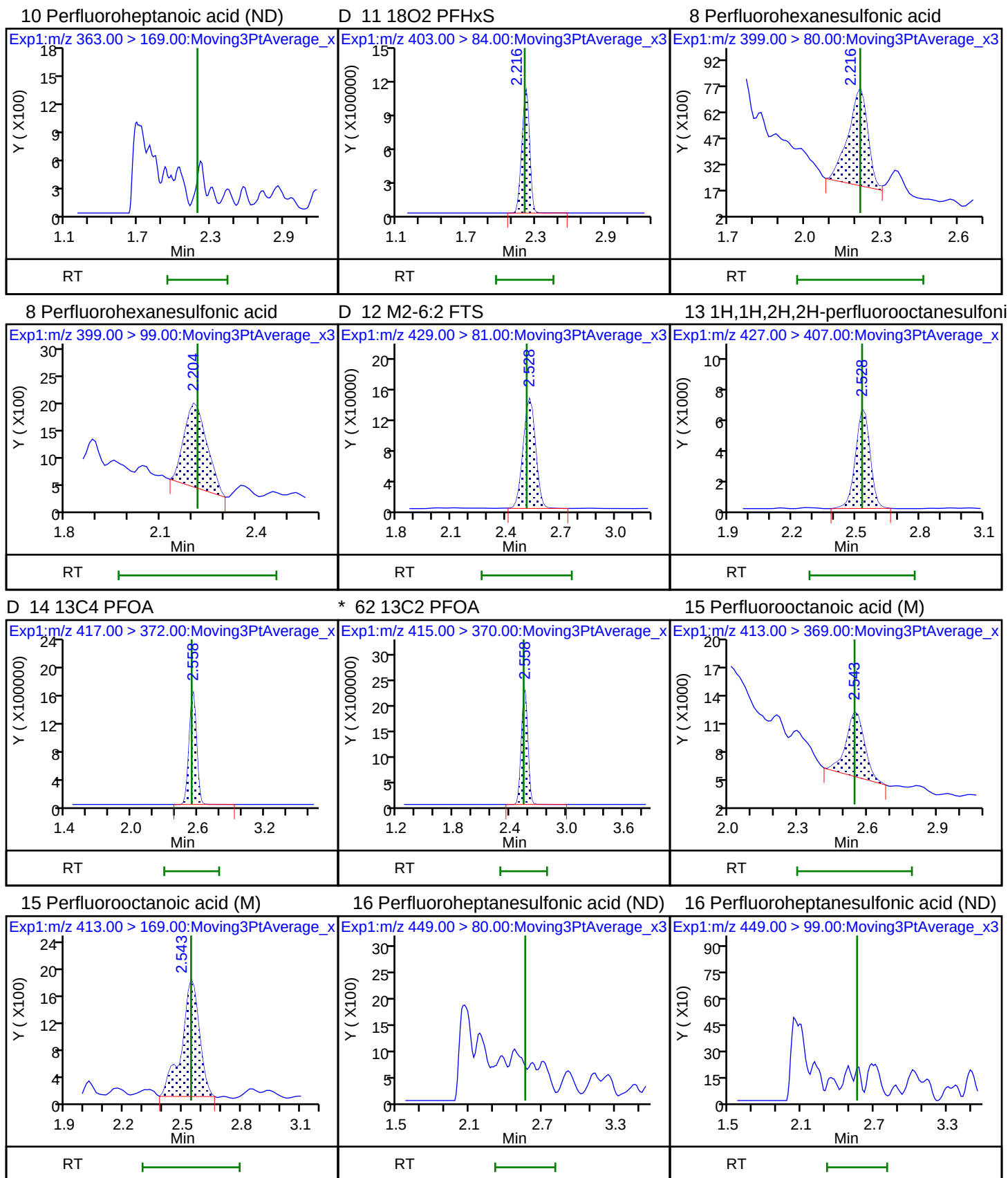


6 Perfluorohexanoic acid (ND)

D 9 13C4 PFHpA

10 Perfluoroheptanoic acid (ND)

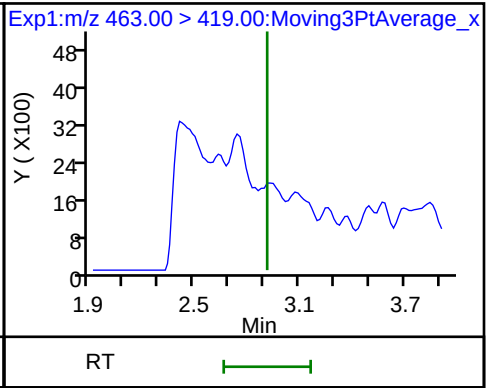
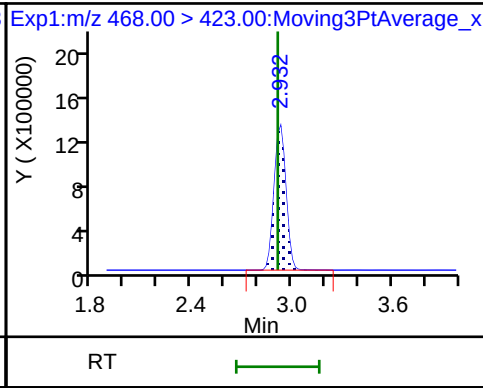
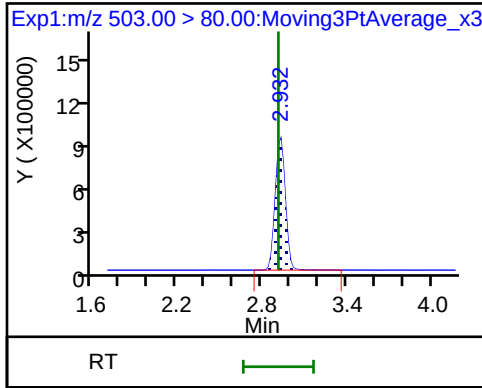




D 18 13C4 PFOS

D 19 13C5 PFNA

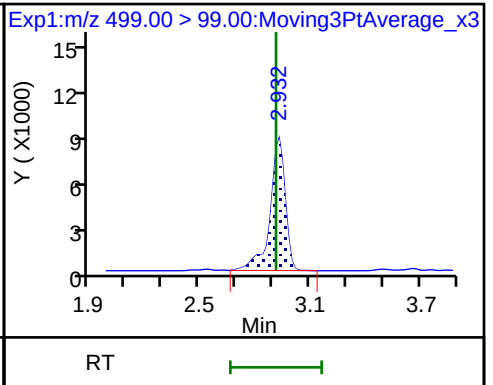
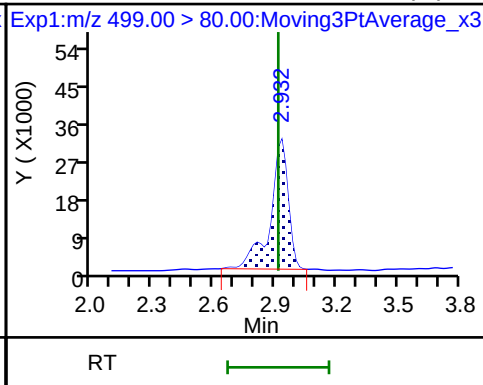
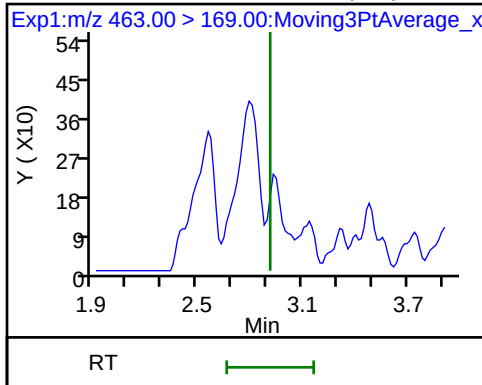
20 Perfluorononanoic acid (ND)



20 Perfluorononanoic acid (ND)

17 Perfluorooctanesulfonic acid (M)

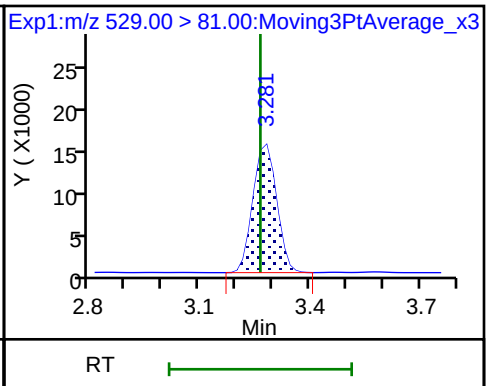
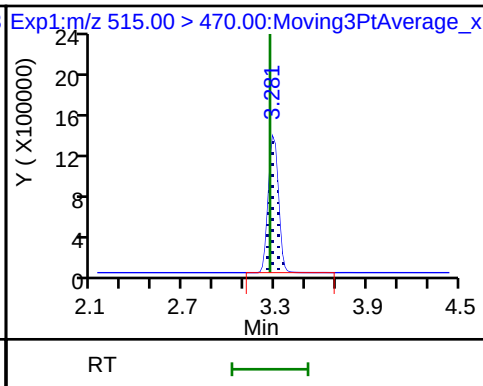
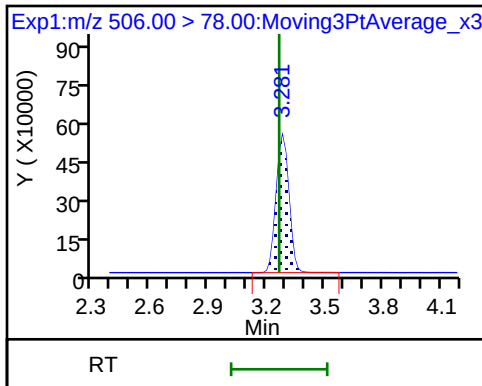
17 Perfluorooctanesulfonic acid



D 21 13C8 FOSA

D 23 13C2 PFDA

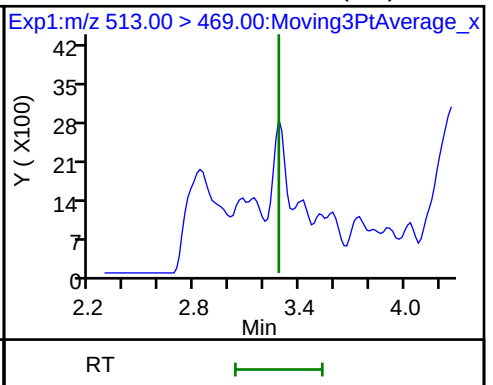
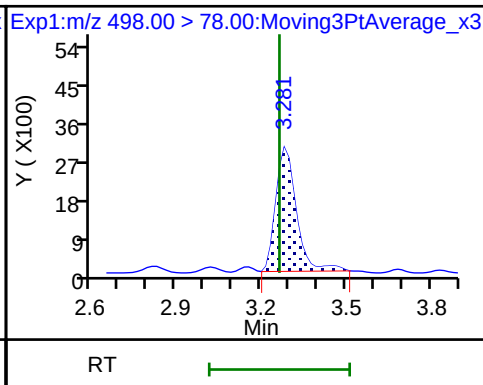
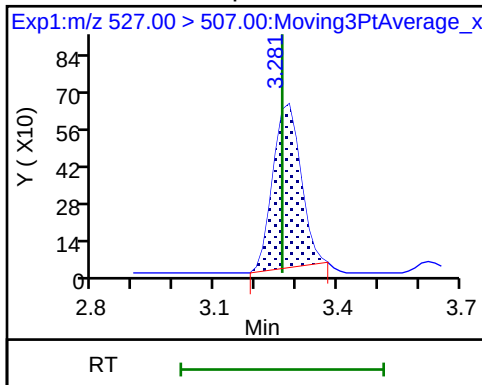
D 26 M2-8:2 FTS

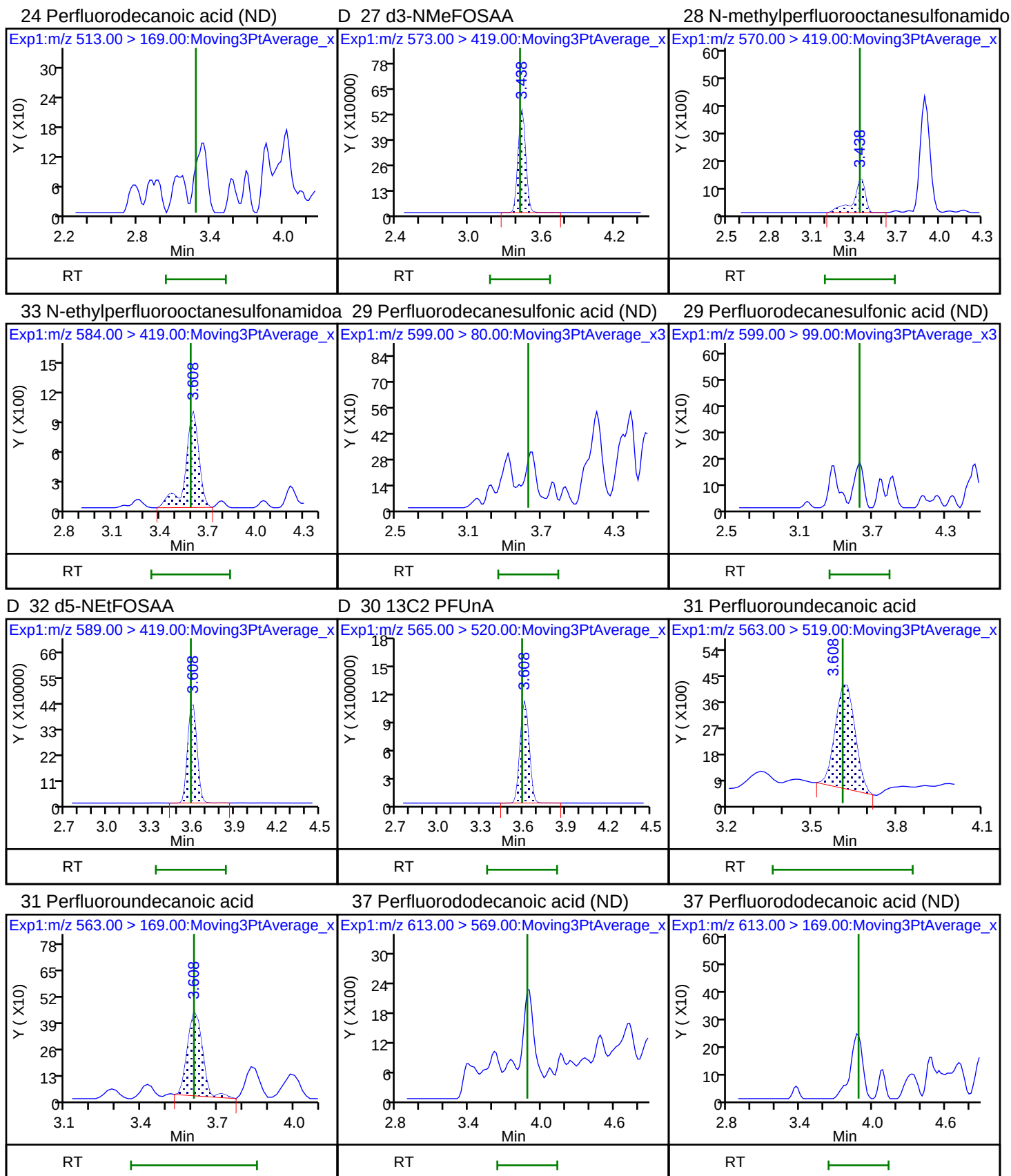


25 1H,1H,2H,2H-perfluorodecanesulfoni

22 Perfluorooctanesulfonamide

24 Perfluorodecanoic acid (ND)

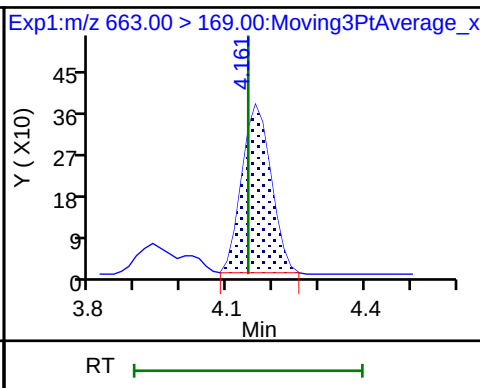
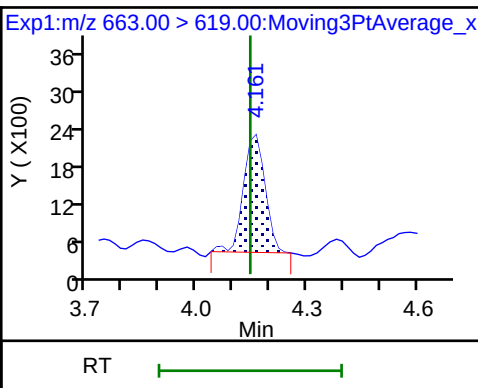
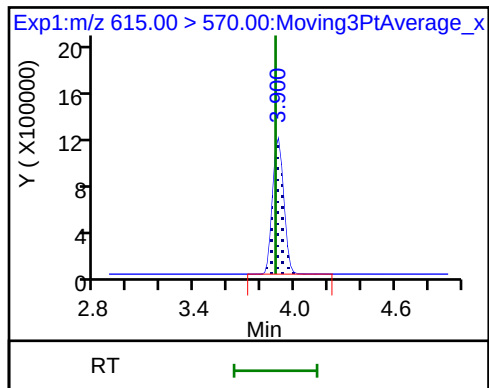




D 36 13C2 PFDaA

41 Perfluorotridecanoic acid

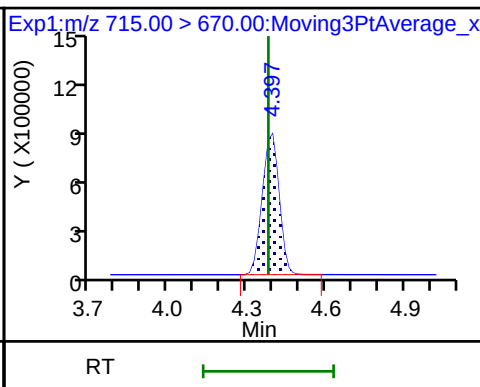
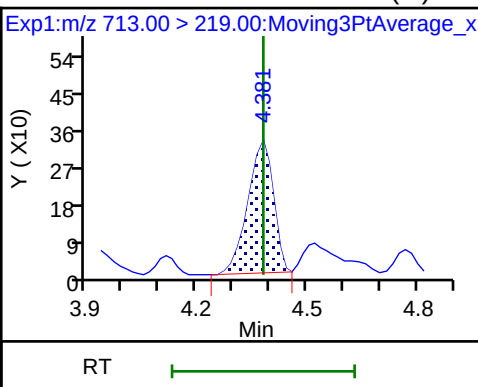
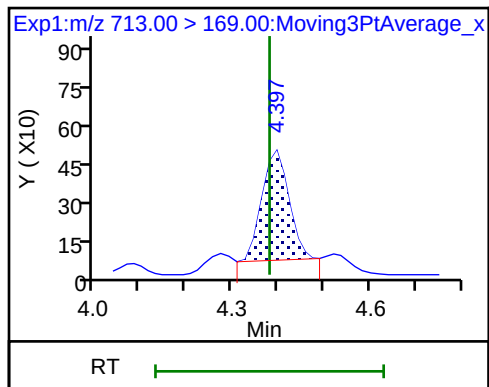
41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid (M)

D 43 13C2 PFTeDA



TestAmerica Sacramento

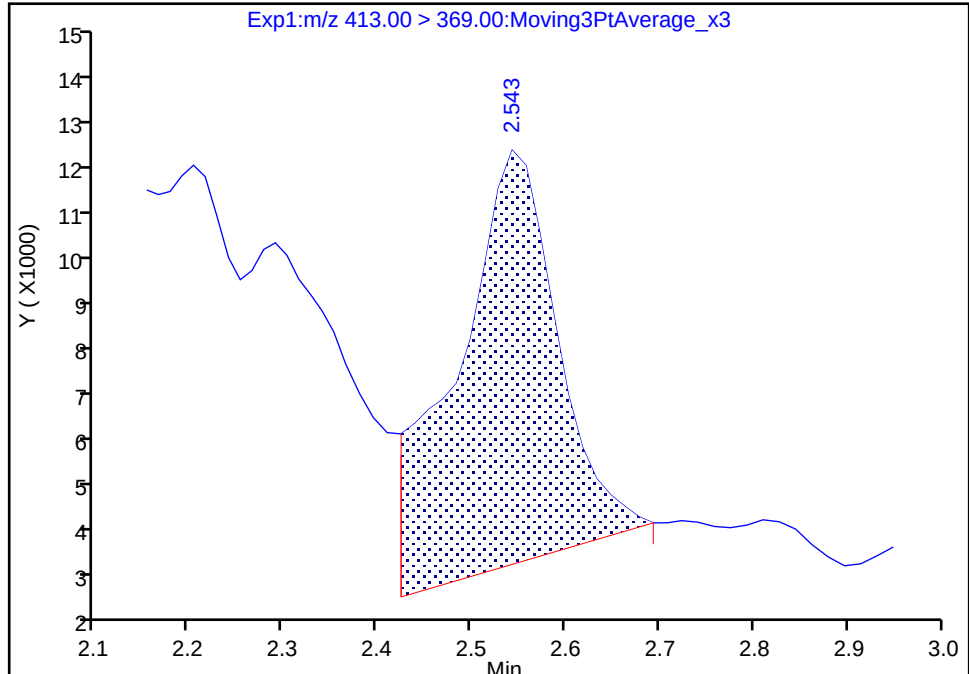
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_009.d				
Injection Date:	09-Nov-2018 08:10:47	Instrument ID:	A9		
Lims ID:	480-144297-F-5-A	Lab Sample ID:	320-144297-5		
Client ID:	GPW-20				
Operator ID:	A9\Administrator	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

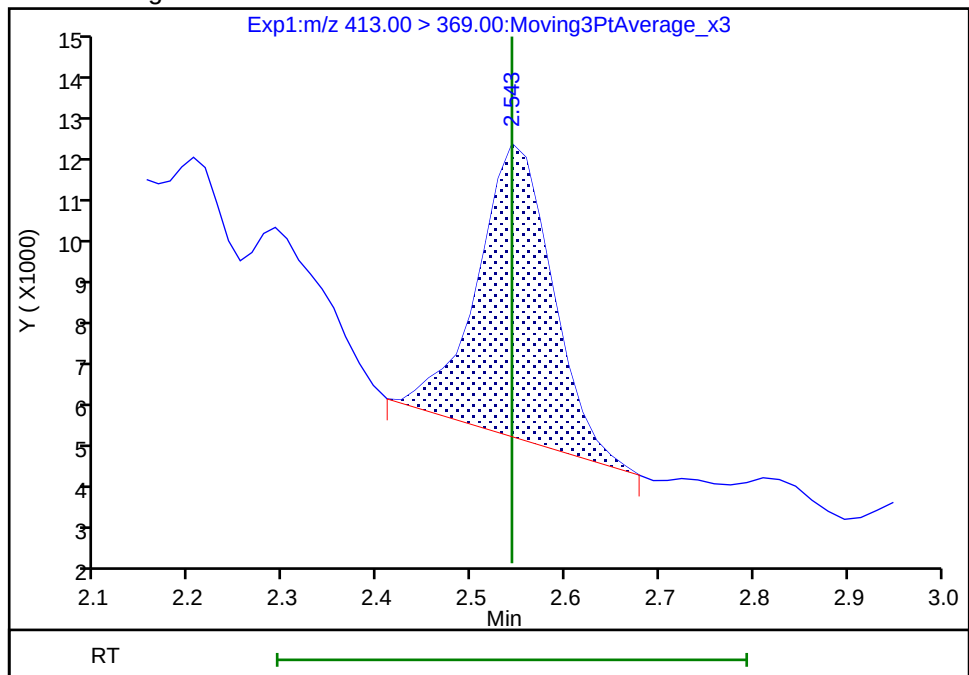
RT: 2.54
Area: 65809
Amount: 0.020641
Amount Units: ng/ml

Processing Integration Results



RT: 2.54
Area: 38409
Amount: 0.012047
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:50:08
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

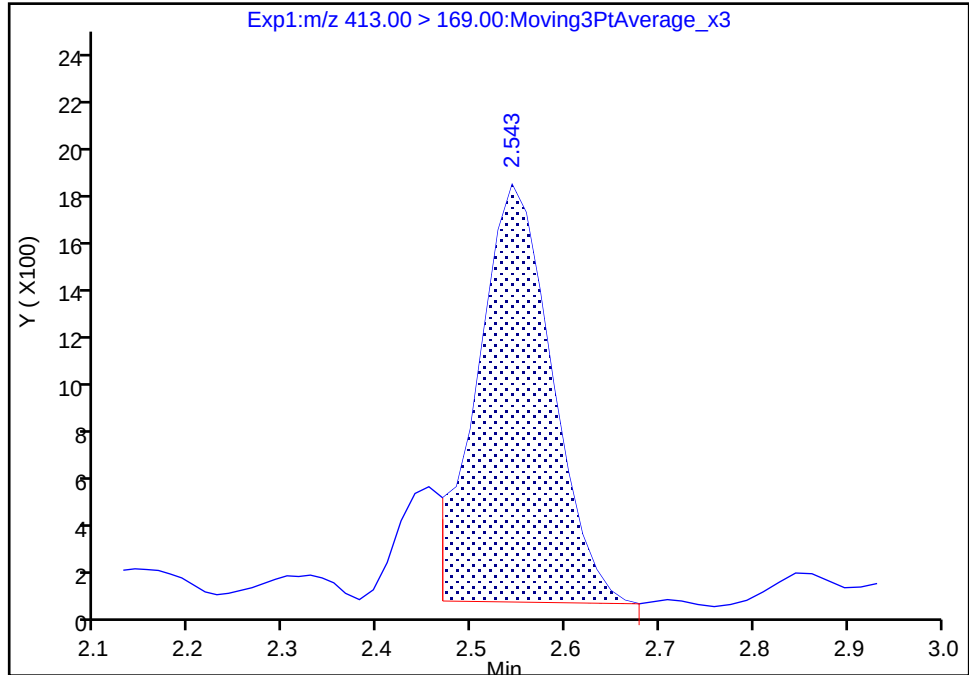
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_009.d
Injection Date: 09-Nov-2018 08:10:47 Instrument ID: A9
Lims ID: 480-144297-F-5-A Lab Sample ID: 320-144297-5
Client ID: GPW-20
Operator ID: A9\Administrator ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

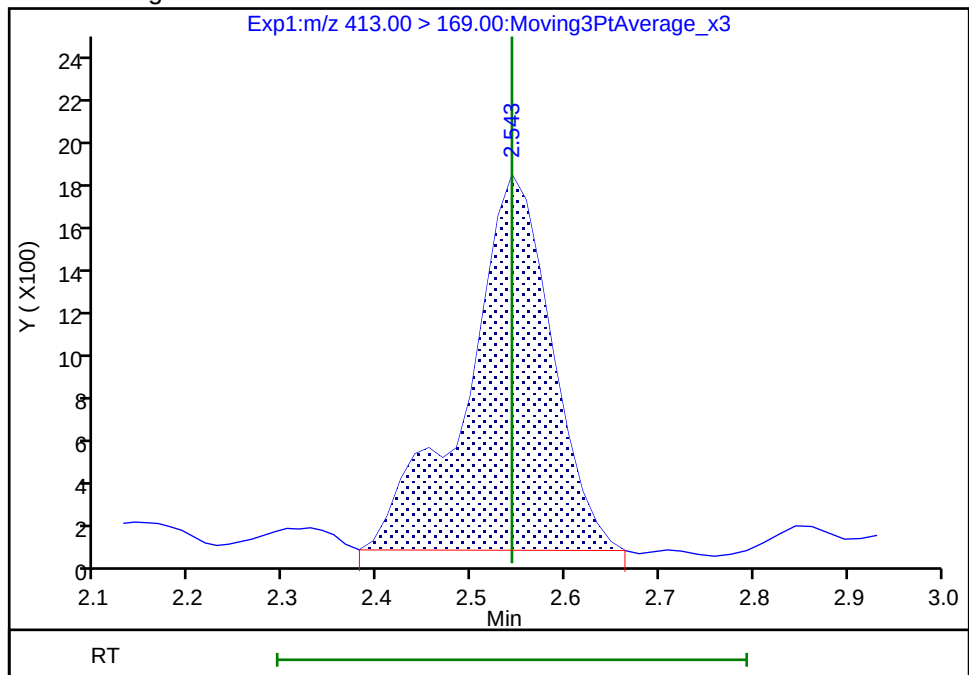
RT: 2.54
Area: 9824
Amount: 0.020641
Amount Units: ng/ml

Processing Integration Results



RT: 2.54
Area: 11213
Amount: 0.012047
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:50:12

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

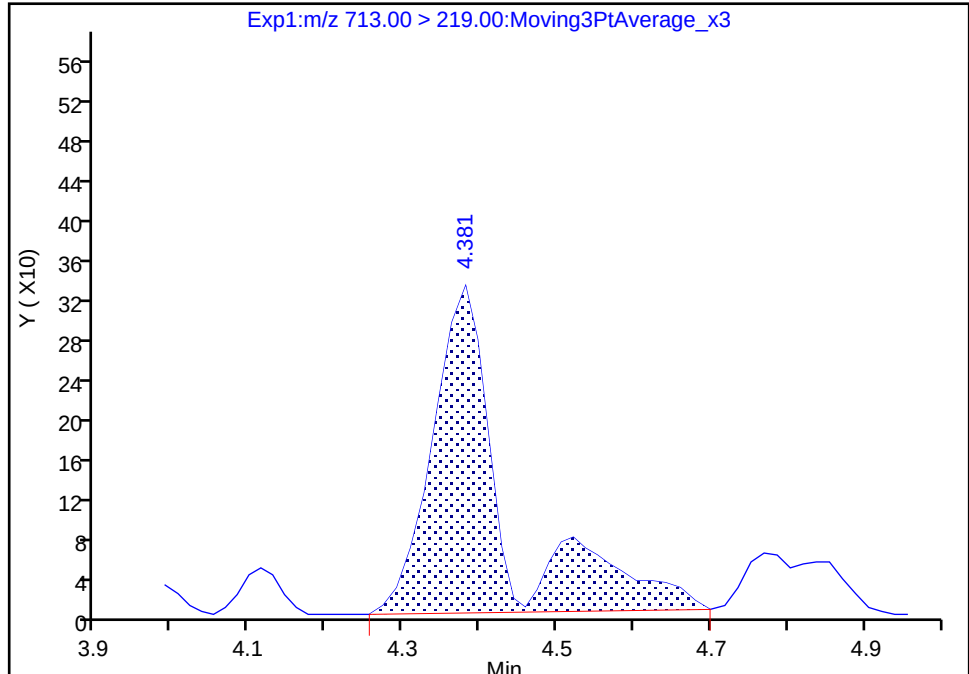
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_009.d				
Injection Date:	09-Nov-2018 08:10:47	Instrument ID:	A9		
Lims ID:	480-144297-F-5-A	Lab Sample ID:	320-144297-5		
Client ID:	GPW-20				
Operator ID:	A9\Administrator	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

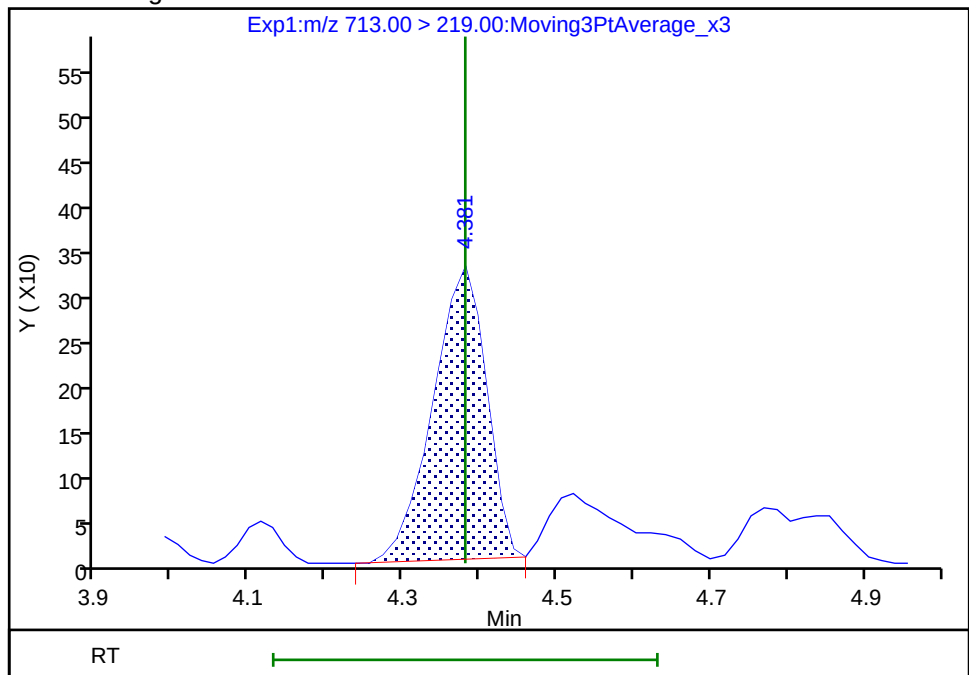
RT: 4.38
Area: 2153
Amount: 0.006361
Amount Units: ng/ml

Processing Integration Results



RT: 4.38
Area: 1577
Amount: 0.006361
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:50:34

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

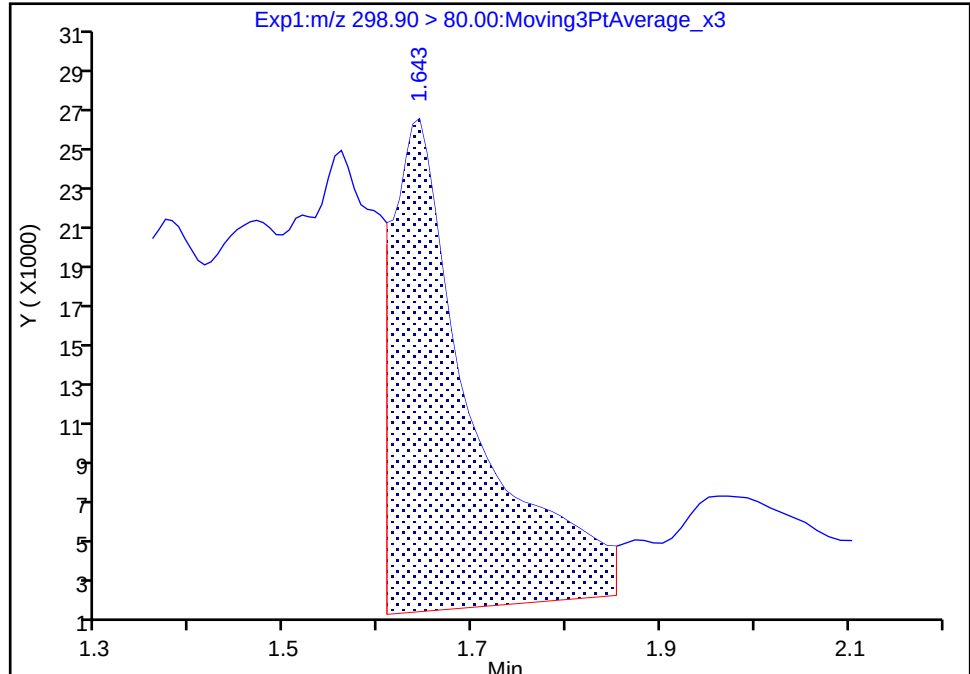
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_009.d				
Injection Date:	09-Nov-2018 08:10:47	Instrument ID:	A9		
Lims ID:	480-144297-F-5-A	Lab Sample ID:	320-144297-5		
Client ID:	GPW-20				
Operator ID:	A9\Administrator	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

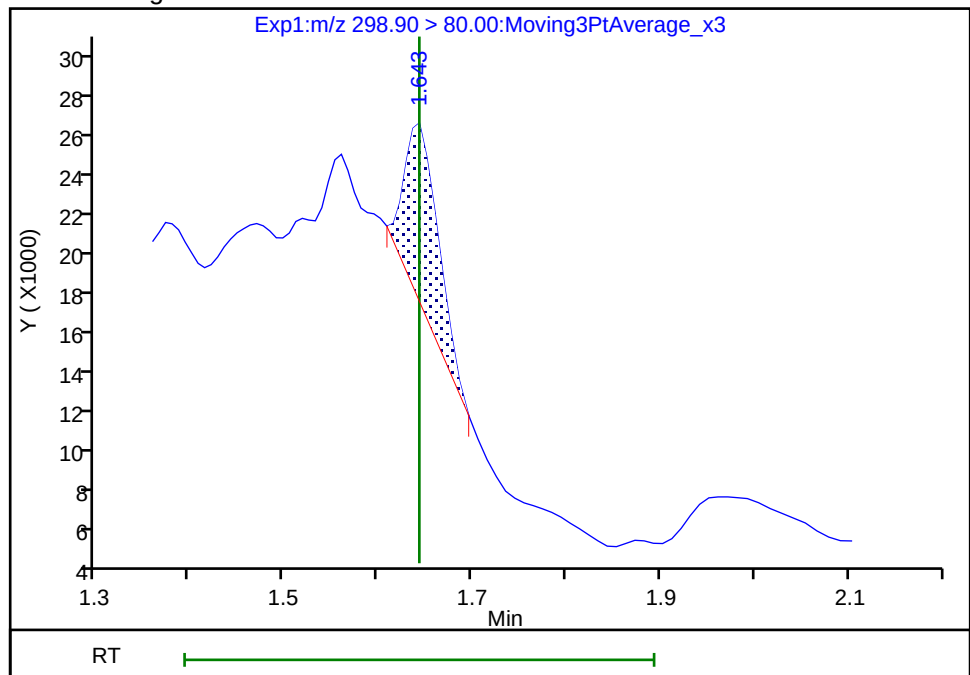
RT: 1.64
Area: 140454
Amount: 0.045715
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 21422
Amount: 0.006972
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:49:50
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

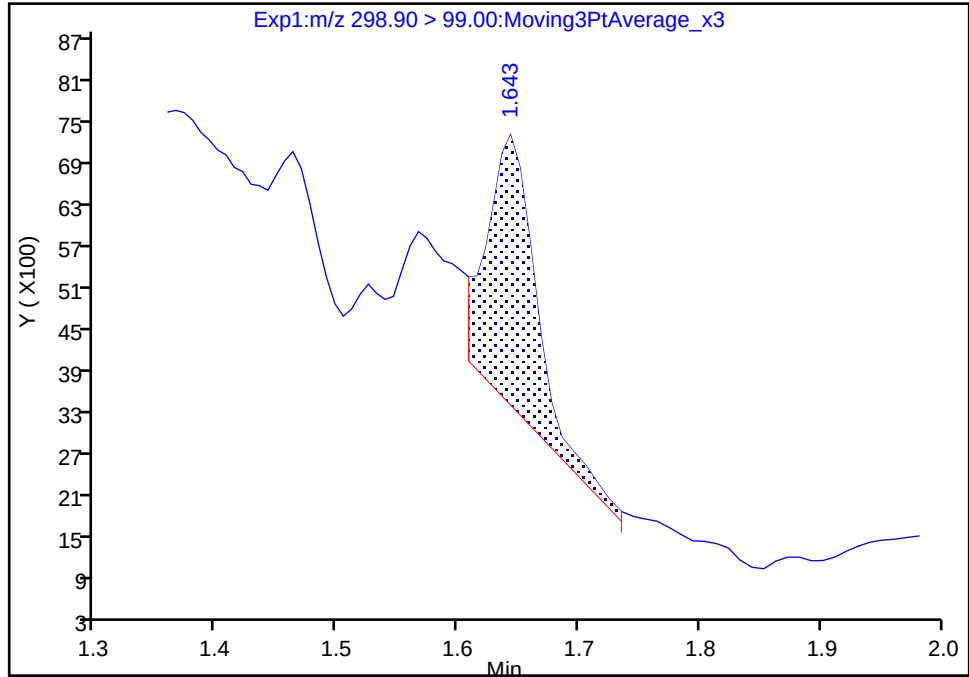
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_009.d
Injection Date: 09-Nov-2018 08:10:47 Instrument ID: A9
Lims ID: 480-144297-F-5-A Lab Sample ID: 320-144297-5
Client ID: GPW-20
Operator ID: A9\Administrator ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

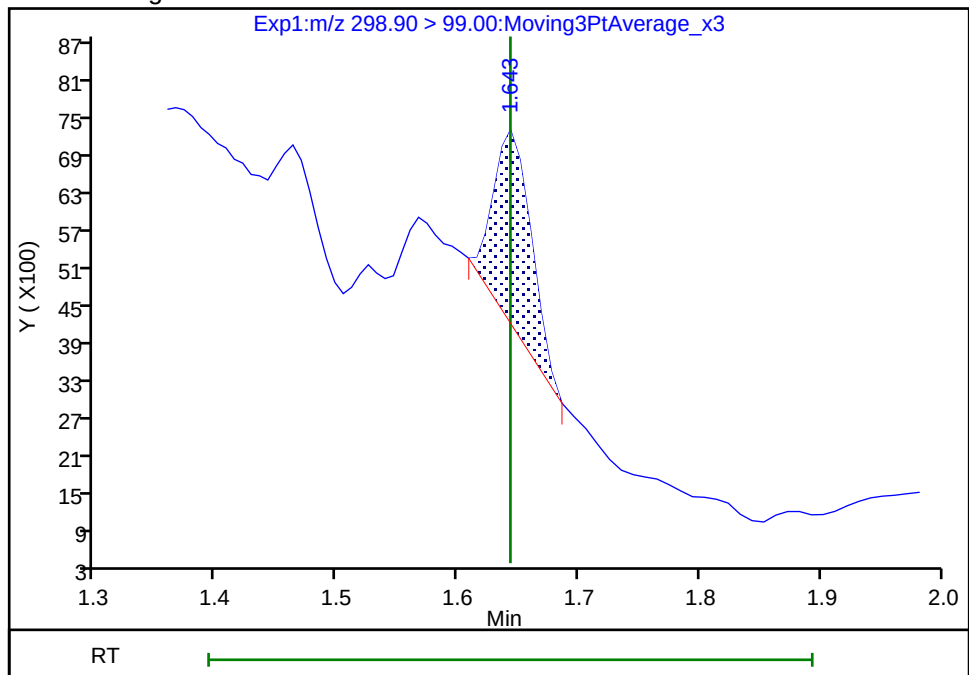
RT: 1.64
Area: 10838
Amount: 0.045715
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 6655
Amount: 0.006972
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:49:58

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

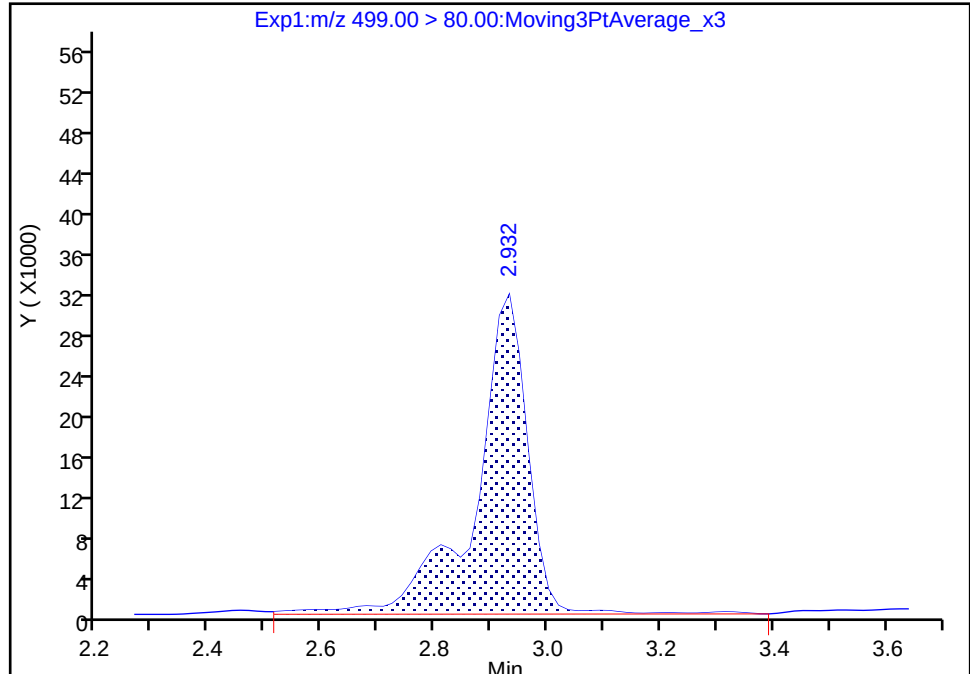
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_009.d
Injection Date: 09-Nov-2018 08:10:47 Instrument ID: A9
Lims ID: 480-144297-F-5-A Lab Sample ID: 320-144297-5
Client ID: GPW-20
Operator ID: A9\Administrator ALS Bottle#: 3 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

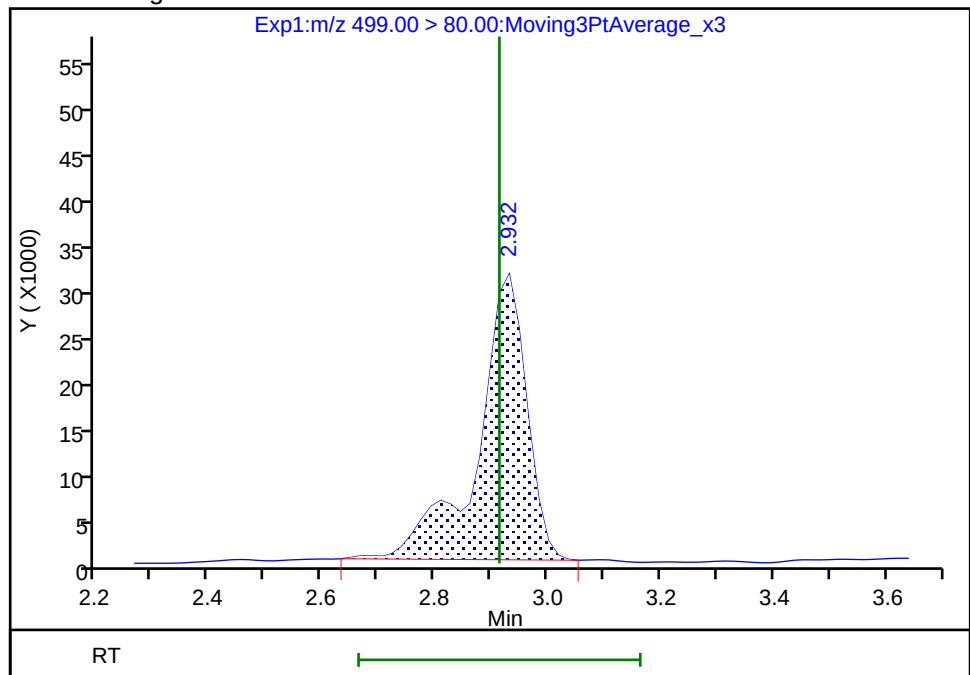
RT: 2.93
Area: 206255
Amount: 0.101627
Amount Units: ng/ml

Processing Integration Results



RT: 2.93
Area: 190608
Amount: 0.093917
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:50:19
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

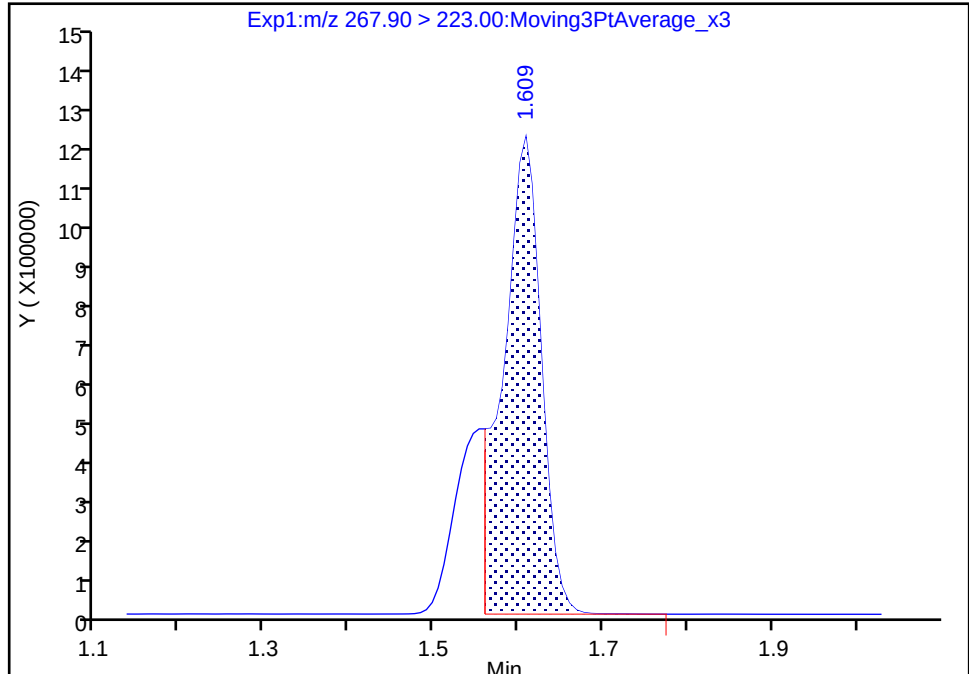
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_009.d				
Injection Date:	09-Nov-2018 08:10:47	Instrument ID:	A9		
Lims ID:	480-144297-F-5-A	Lab Sample ID:	320-144297-5		
Client ID:	GPW-20				
Operator ID:	A9\Administrator	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

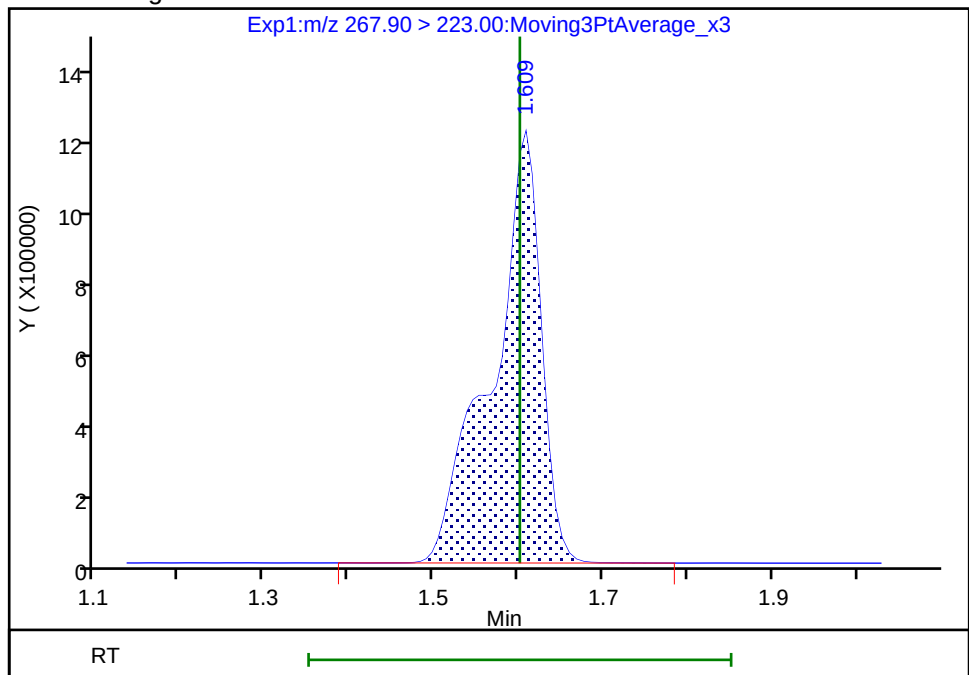
RT: 1.61
Area: 3582916
Amount: 0.956304
Amount Units: ng/ml

Processing Integration Results



RT: 1.61
Area: 4663119
Amount: 1.244617
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:49:27

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

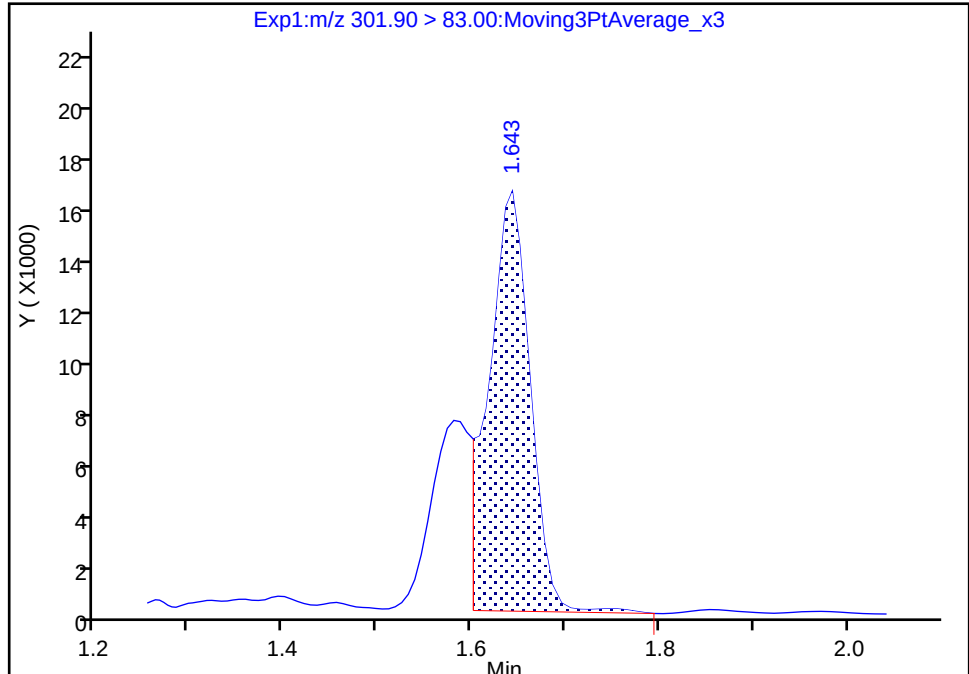
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_009.d				
Injection Date:	09-Nov-2018 08:10:47	Instrument ID:	A9		
Lims ID:	480-144297-F-5-A	Lab Sample ID:	320-144297-5		
Client ID:	GPW-20				
Operator ID:	A9\Administrator	ALS Bottle#:	3	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

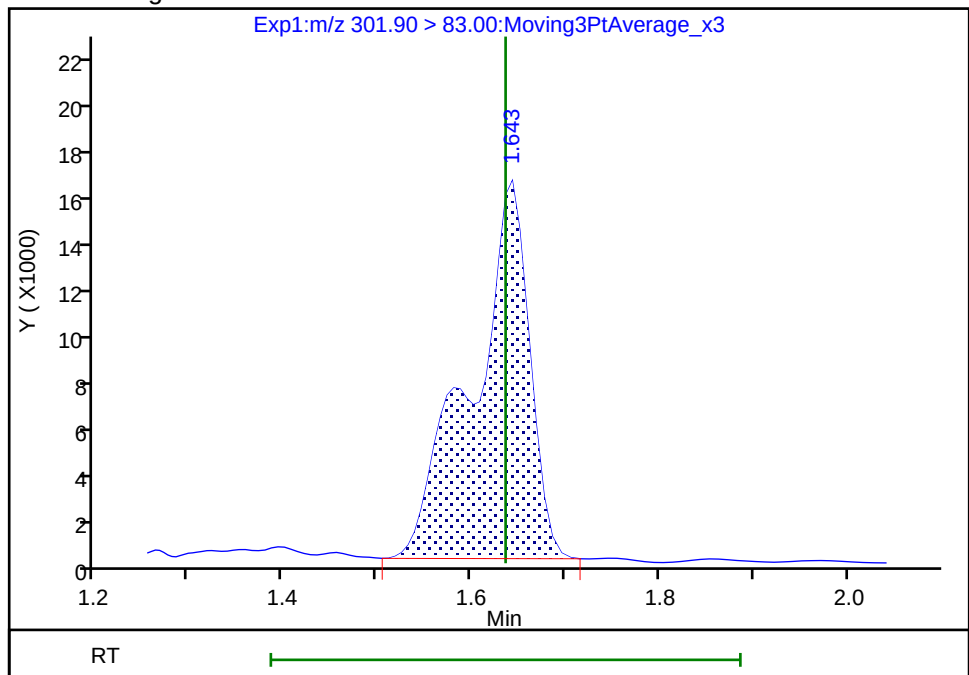
RT: 1.64
Area: 49207
Amount: 0.950208
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 69178
Amount: 1.335856
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:49:33

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GMW-2</u>	Lab Sample ID: <u>480-144297-6</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_010.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/24/2018 12:15</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>295.8 (mL)</u>	Date Analyzed: <u>11/09/2018 08:18</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.3		1.7	0.30
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.7	0.41
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.49
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.7	0.72
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.26
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.93
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.99	J	1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.47	J B	1.7	0.14
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.58	J	1.7	0.46
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6
27619-97-2	6:2 FTS	ND		17	1.7
39108-34-4	8:2 FTS	ND		17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GMW-2</u>	Lab Sample ID: <u>480-144297-6</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_010.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/24/2018 12:15</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>295.8 (mL)</u>	Date Analyzed: <u>11/09/2018 08:18</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	43		25-150
STL01893	13C5-PFPeA DNU	51		25-150
STL00993	13C2 PFHxA	54		25-150
STL01892	13C4 PFHpA	57		25-150
STL00990	13C4 PFOA	56		25-150
STL00995	13C5 PFNA	55		25-150
STL00996	13C2 PFDA	56		25-150
STL00997	13C2 PFUnA	43		25-150
STL00998	13C2 PFDoA	37		25-150
STL02116	13C2 PFTeDA	32		25-150
STL02337	13C3 PFBS	49		25-150
STL00994	18O2 PFHxS	56		25-150
STL00991	13C4 PFOS	55		25-150
STL01056	13C8 FOSA	49		25-150
STL02118	d3-NMeFOSAA	40		25-150
STL02117	d5-NEtFOSAA	38		25-150
STL02279	M2-6:2 FTS	59		25-150
STL02280	M2-8:2 FTS	52		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d
 Lims ID: 480-144297-F-6-C
 Client ID: GMW-2
 Sample Type: Client
 Inject. Date: 09-Nov-2018 08:18:17 ALS Bottle#: 4 Worklist Smp#: 7
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 480-144297-f-6-c
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: A9\Administrator Instrument ID: A9
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 12:11:56 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d
 Column 1 : Det: EXP1
 Process Host: CTX0318

First Level Reviewer: mongkols

Date: 12-Nov-2018 12:11:56

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	1.352	1.346	0.006	0.529	3519590	1.07	42.7	6445	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.352	1.352	0.0	1.000	90603	0.0688		3.7		M
D 3 13C5 PFPeA										M
267.90 > 223.00	1.608	1.601	0.007	0.629	3973619	1.26		50.6	4263	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.608	1.609	-0.001	1.000	11396	0.007162		2.1		M
D 47 13C3 PFBS										M
301.90 > 83.00	1.643	1.636	0.007	0.642	49824	1.15		49.3	104	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.643	1.643	0.0	1.000	64944	0.0293		3.3		M
298.90 > 99.00	1.651	1.643	0.008	1.005	22831		2.84(1.35-4.05)	4.4		M
D 7 13C2 PFHxA										
315.00 > 270.00	1.882	1.873	0.009	0.736	4511194	1.36		54.5	6260	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.982	1.971	0.011	0.775	519441	1.21		48.5	1641	
D 9 13C4 PFHpA										
367.00 > 322.00	2.203	2.191	0.012	0.862	5546468	1.42		57.0	10342	
D 11 18O2 PFHxS										
403.00 > 84.00	2.216	2.203	0.013	0.866	3365383	1.33		56.2	9031	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.216	2.216	0.0	1.000	24922	0.0139		6.6		M
399.00 > 99.00	2.216	2.216	0.0	1.000	5967		4.18(1.90-5.70)	4.2		M
D 12 M2-6:2 FTS										
429.00 > 81.00	2.528	2.513	0.015	0.988	502968	1.40		59.1	719	
D 73 13C8 PFOA										
421.00 > 376.00	2.557	2.528	0.029		6576	0.001911		0.0	26.0	

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	2.528	2.528	0.0	1.000	3665	0.007931		12.4	
D 14 13C4 PFOA	417.00 > 372.00	2.557	2.543	0.014	1.000	5011121	1.40	56.2	7409	
* 62 13C2 PFOA	415.00 > 370.00	2.557	2.543	0.014		9064697	2.50		10614	
15 Perfluorooctanoic acid	413.00 > 369.00	2.557	2.543	0.014	1.000	23724	0.0109		1.4	M
413.00 > 169.00	2.557	2.543	0.014	1.000	17120		1.39(1.36-4.08)		14.8	M
D 18 13C4 PFOS	503.00 > 80.00	2.931	2.914	0.017	1.146	3385475	1.32	55.3	3123	
D 19 13C5 PFNA	468.00 > 423.00	2.931	2.914	0.017	1.146	4545067	1.38	55.1	5145	
17 Perfluorooctanesulfonic acid	499.00 > 80.00	2.931	2.914	0.017	1.000	26320	0.0173		7.6	M
499.00 > 99.00	2.931	2.914	0.017	1.000	3944		6.67(2.04-6.12)		22.4	M
D 21 13C8 FOSA	506.00 > 78.00	3.281	3.264	0.017	1.283	1745354	1.23	49.2	3602	
D 23 13C2 PFDA	515.00 > 470.00	3.281	3.264	0.017	1.283	4791954	1.41	56.4	6709	
D 26 M2-8:2 FTS	529.00 > 81.00	3.281	3.264	0.017	1.283	54937	1.24	51.7	291	
22 Perfluorooctanesulfonamide	498.00 > 78.00	3.281	3.264	0.017	1.000	13295	0.006338		32.2	
D 27 d3-NMeFOSAA	573.00 > 419.00	3.437	3.422	0.015	1.344	1466240	1.00	39.9	2550	
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	3.452	3.437	0.015	1.004	1845	0.003146		1.4	
D 32 d5-NEtFOSAA	589.00 > 419.00	3.607	3.591	0.016	1.410	1149359	0.9613	38.5	1489	
D 30 13C2 PFUnA	565.00 > 520.00	3.607	3.591	0.016	1.410	3047419	1.07	43.0	4184	
66 11-Chloroeicosafuoro-3-oxaundecan	631.00 > 451.00	3.759	3.759	0.0	1.282	1250	0.000636		4.4	
D 36 13C2 PFDaA	615.00 > 570.00	3.899	3.883	0.016	1.525	3250399	0.9304	37.2	4859	
D 43 13C2 PFTeDA	715.00 > 670.00	4.396	4.381	0.015	1.719	2117942	0.8112	32.4	4531	
45 Perfluorohexadecanoic acid	813.00 > 769.00	4.803	4.786	0.017	1.000	21556	0.001622		12.2	
813.00 > 169.00	4.803	4.786	0.017	1.000	3835		5.62(2.77-8.32)		19.3	
D 44 13C2 PFHxDA	815.00 > 770.00	4.803	4.786	0.017	1.878	2142913	0.8261	33.0	3532	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d

Injection Date: 09-Nov-2018 08:18:17

Instrument ID: A9

Lims ID: 480-144297-F-6-C

Lab Sample ID: 320-144297-6

Client ID: GMW-2

Operator ID: A9\Administrator

ALS Bottle#: 4

Worklist Smp#: 7

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

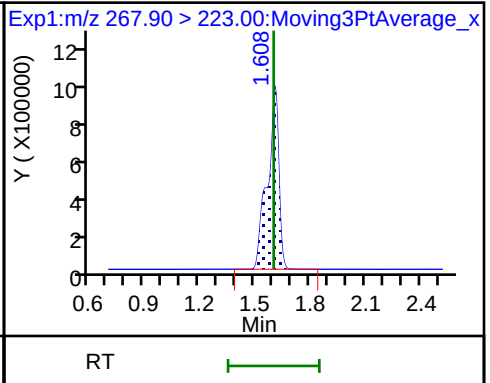
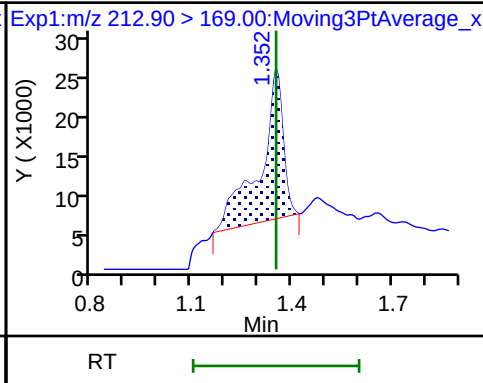
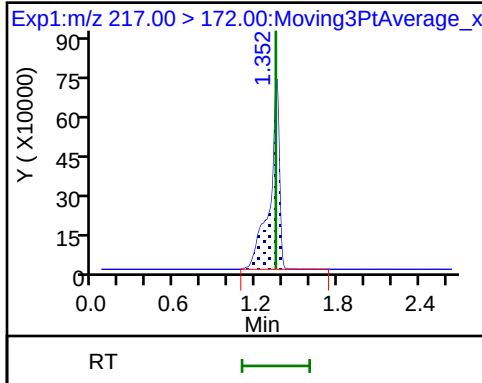
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

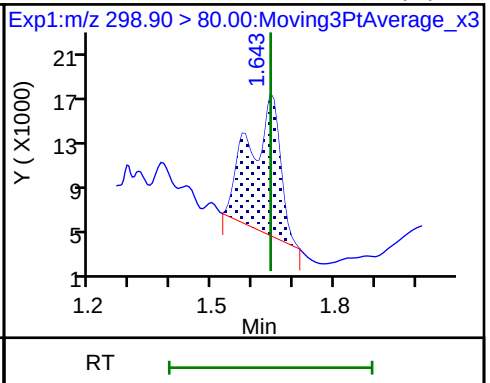
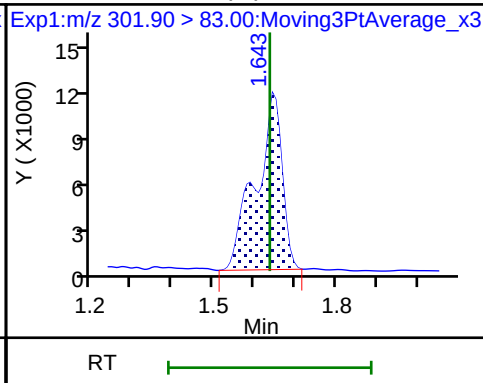
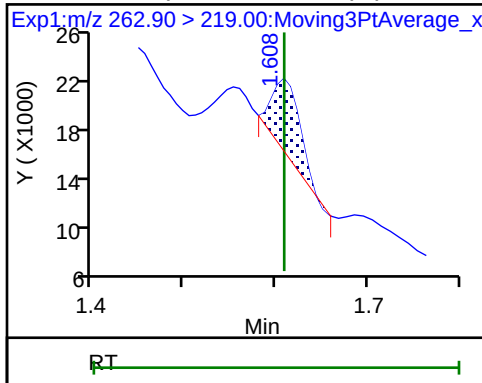
D 3 13C5 PFPeA (M)



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS (M)

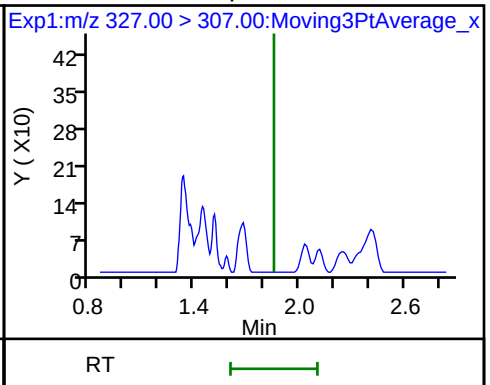
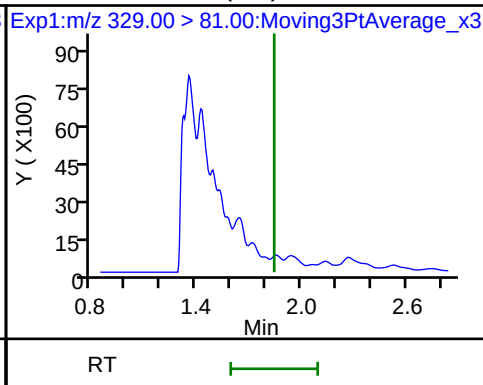
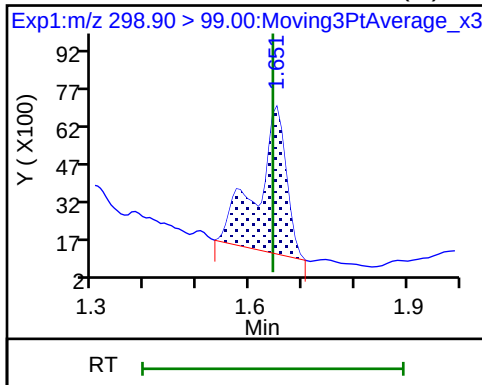
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid (M)

D 60 M2-4:2 FTS (ND)

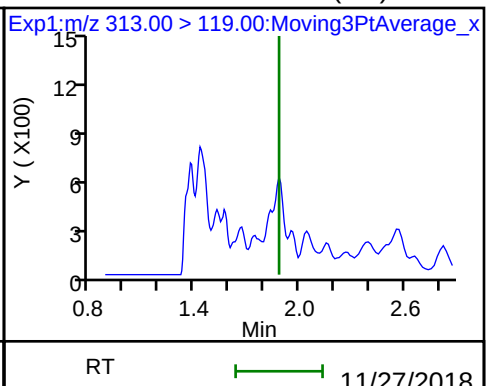
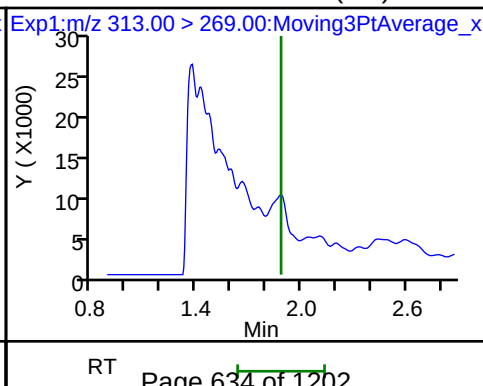
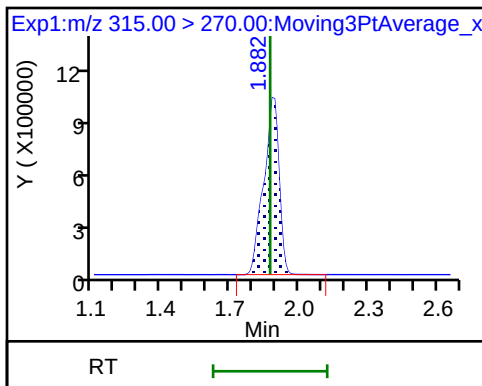
61 1H,1H,2H,2H-perfluorohexanesulfoni (ND)



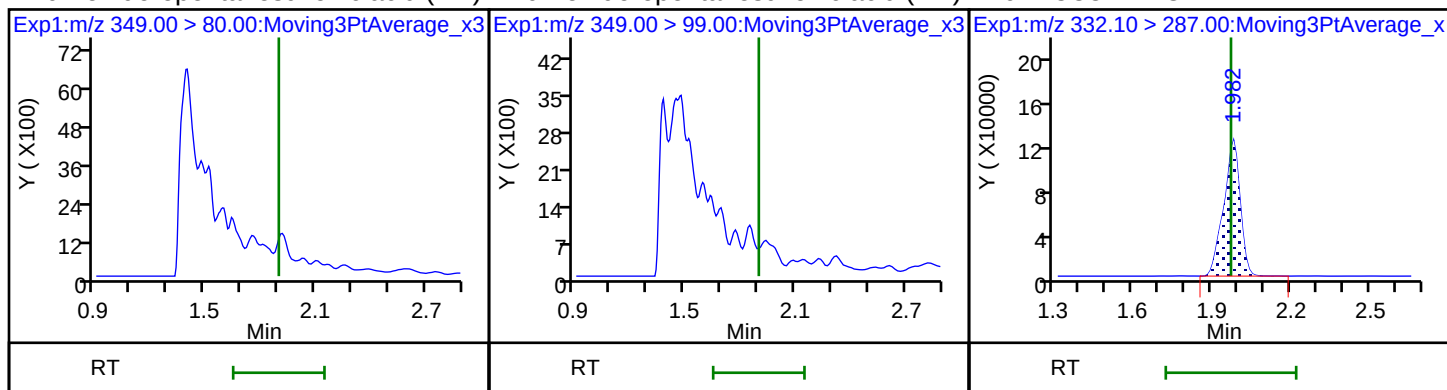
D 7 13C2 PFHxA

6 Perfluorohexanoic acid (ND)

6 Perfluorohexanoic acid (ND)

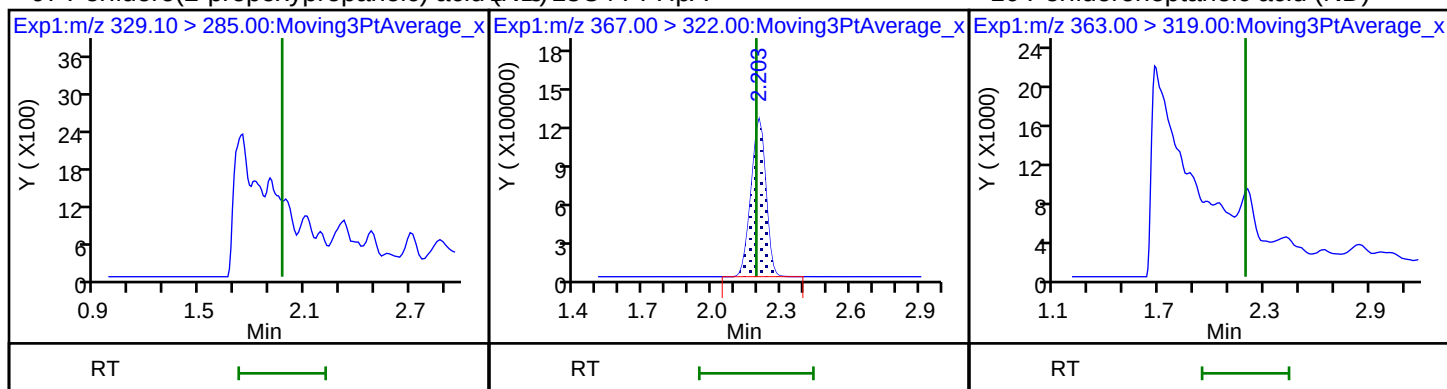


70 Perfluoropentanesulfonic acid (ND) 70 Perfluoropentanesulfonic acid (ND) D 64 13C3 HFPO-DA



67 Perfluoro(2-propoxypropanoic) acid (ND) 13C4 PFHpA

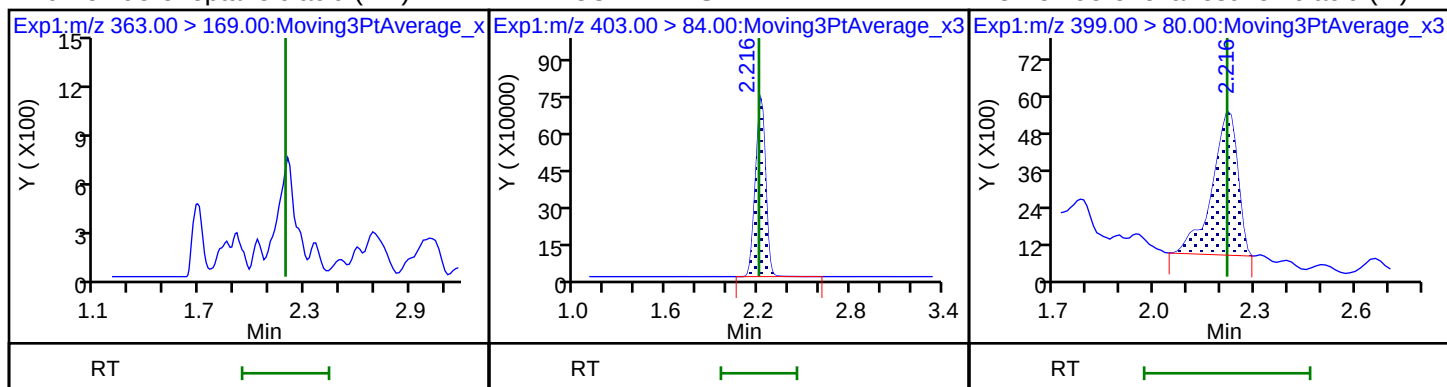
10 Perfluoroheptanoic acid (ND)



10 Perfluoroheptanoic acid (ND)

D 11 18O2 PFHxS

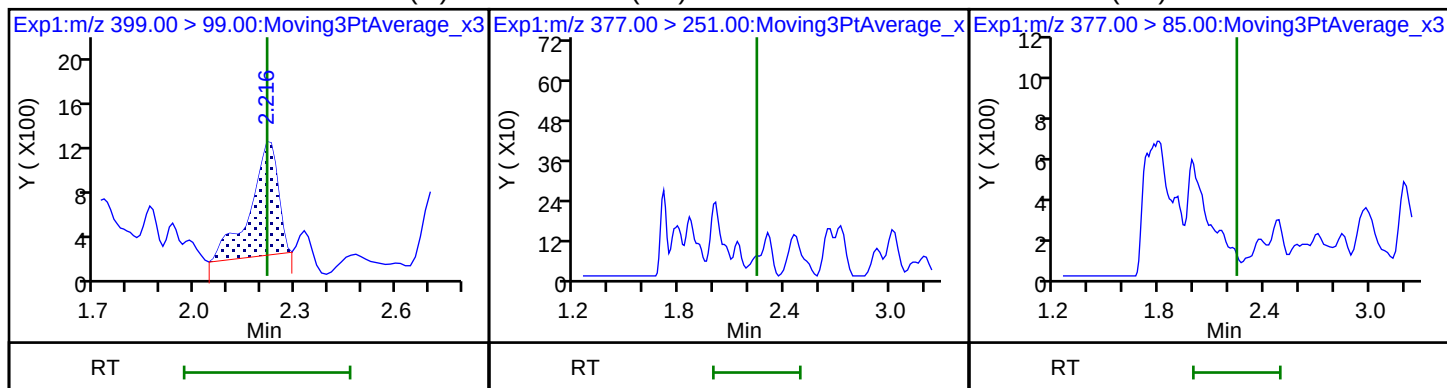
8 Perfluorohexanesulfonic acid (M)



8 Perfluorohexanesulfonic acid (M)

76 DONA (ND)

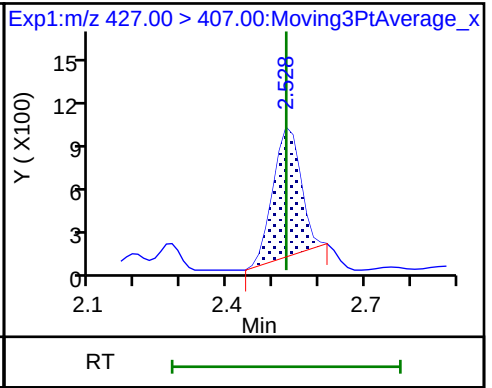
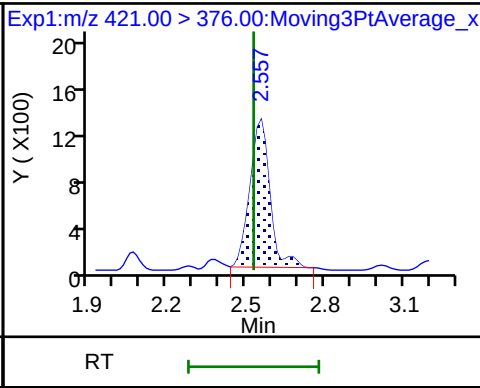
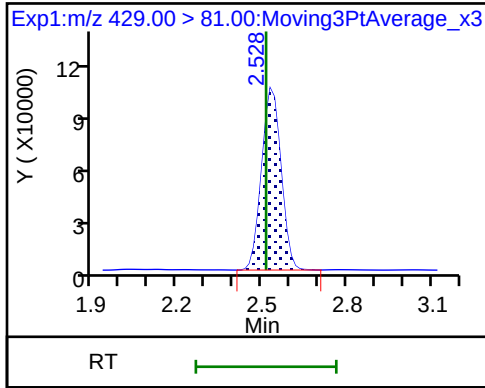
76 DONA (ND)



D 12 M2-6:2 FTS

D 73 13C8 PFOA

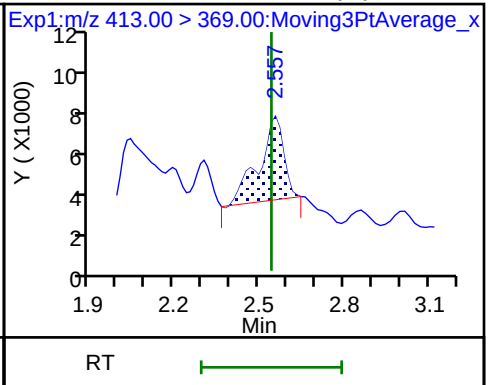
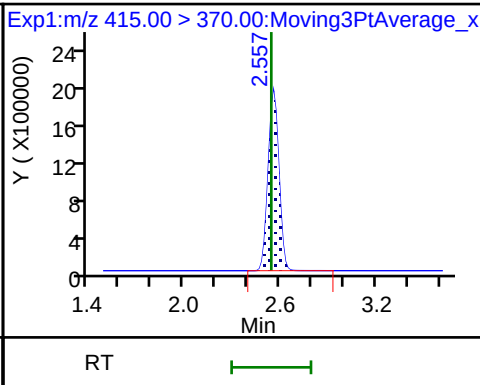
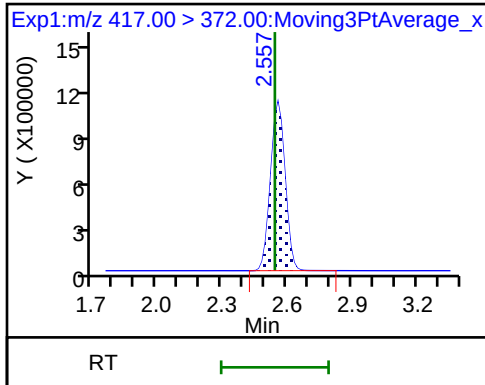
13 1H,1H,2H,2H-perfluorooctanesulfoni



D 14 13C4 PFOA

* 62 13C2 PFOA

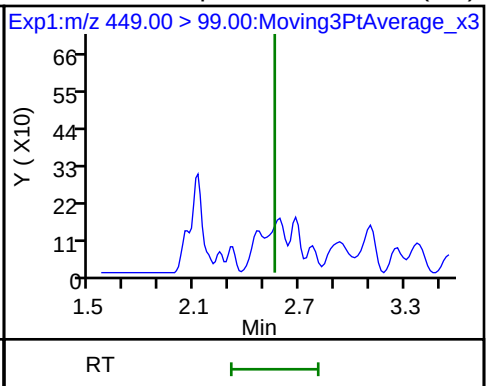
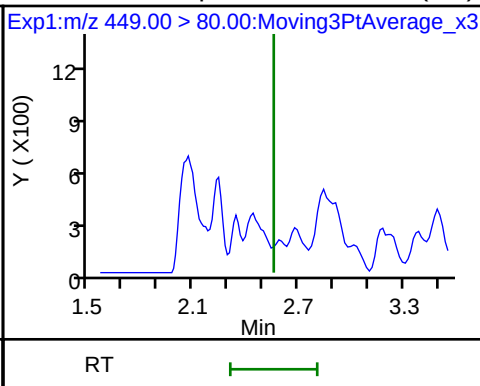
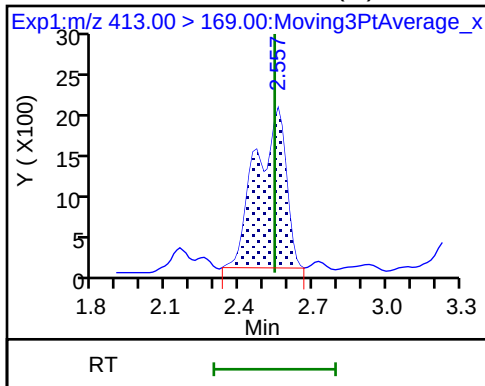
15 Perfluorooctanoic acid (M)



15 Perfluorooctanoic acid (M)

16 Perfluoroheptanesulfonic acid (ND)

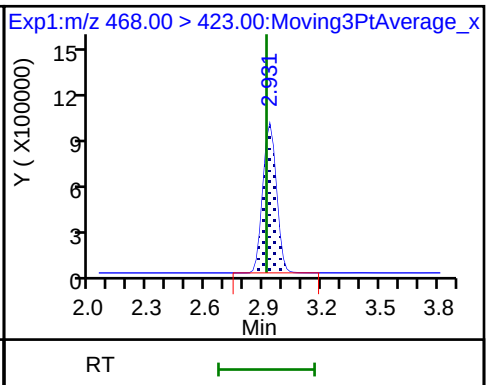
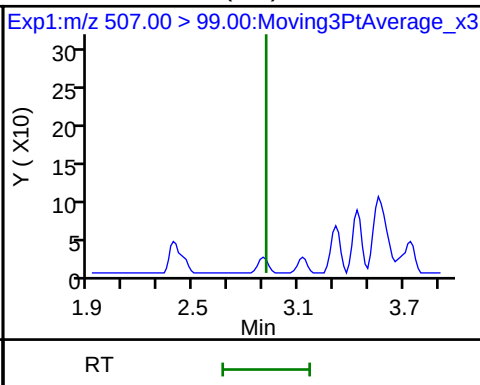
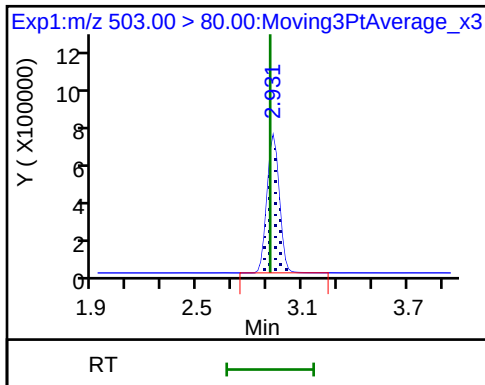
16 Perfluoroheptanesulfonic acid (ND)

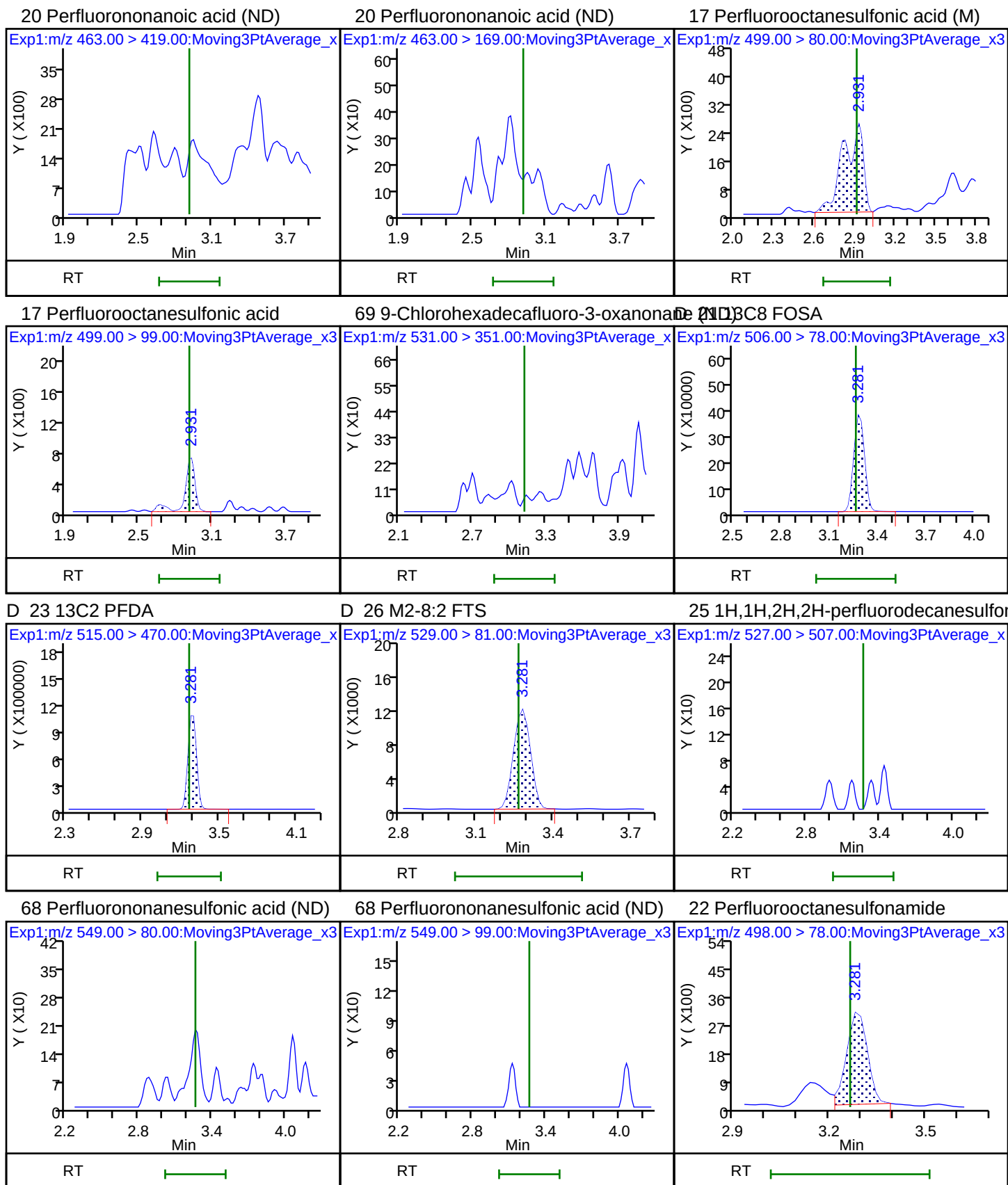


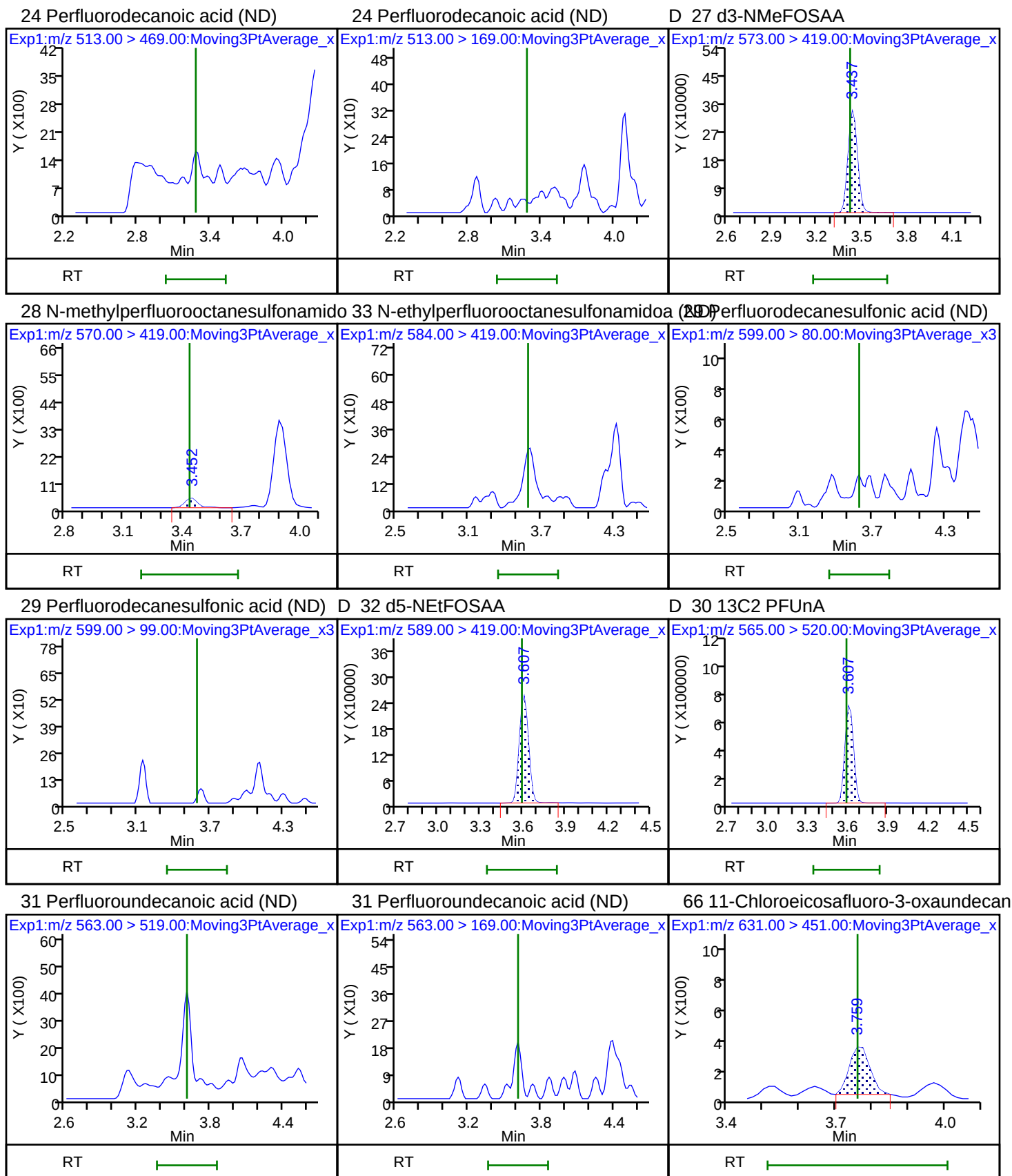
D 18 13C4 PFOS

D 72 13C8 PFOS (ND)

D 19 13C5 PFNA

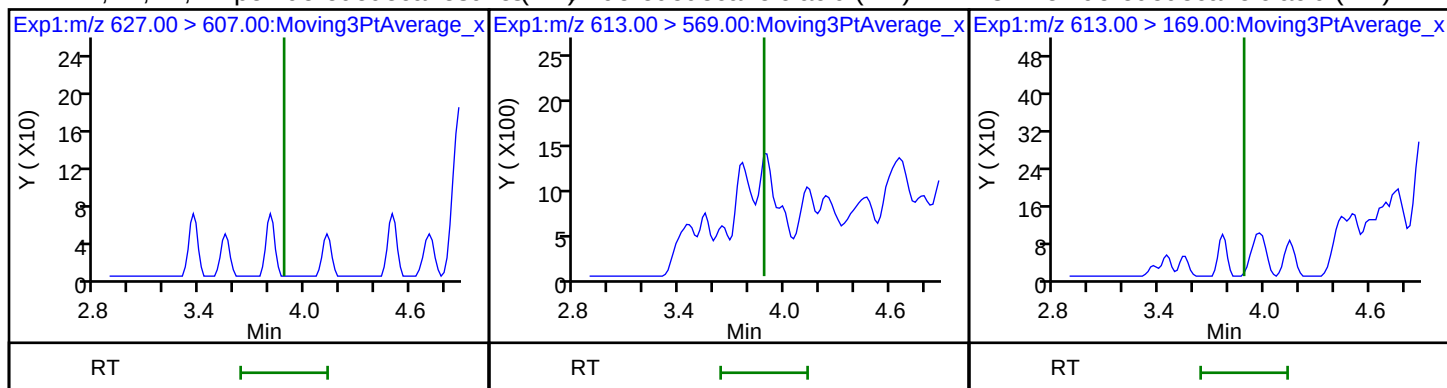






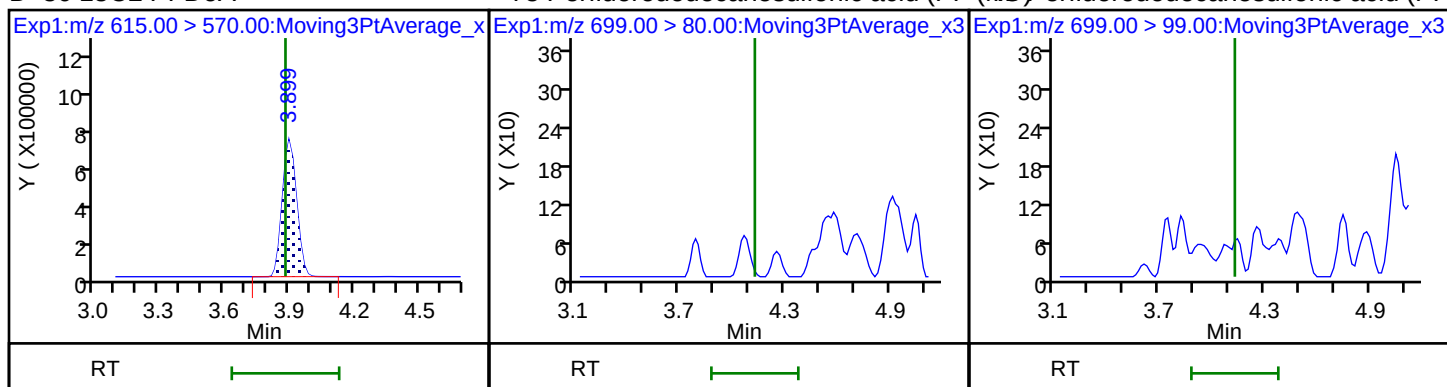
74 1H,1H,2H,2H-perfluorododecanesulfonic acid (ND)

37 Perfluorododecanoic acid (ND)



D 36 13C2 PFDa

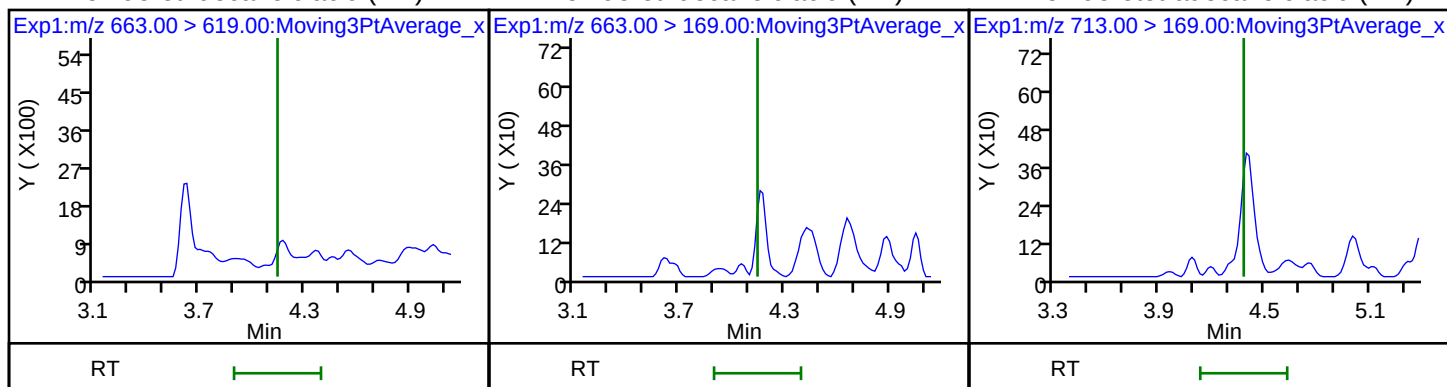
75 Perfluorododecanesulfonic acid (PF (ND) Perfluorododecanesulfonic acid (PF (ND)



41 Perfluorotridecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

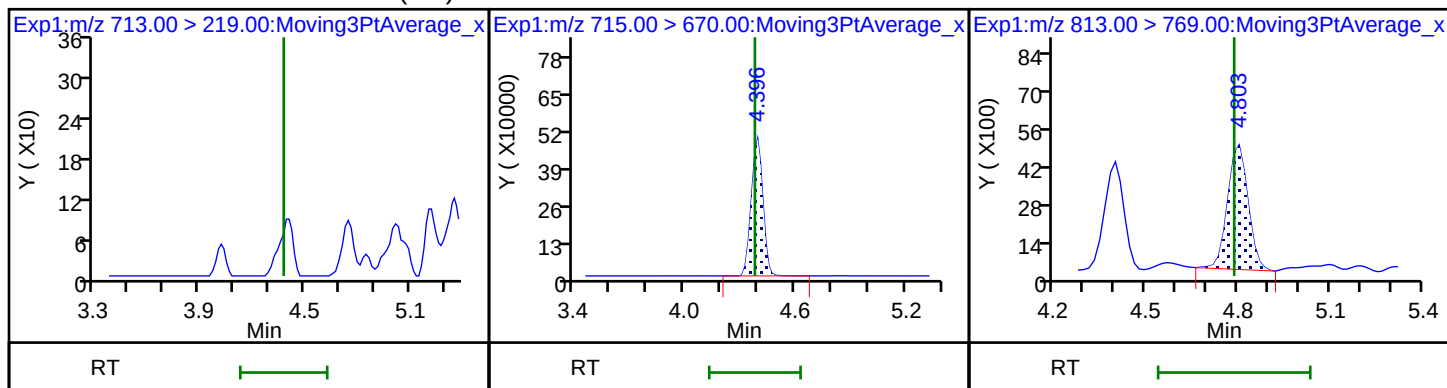
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)

D 43 13C2 PFTeDA

45 Perfluorohexadecanoic acid

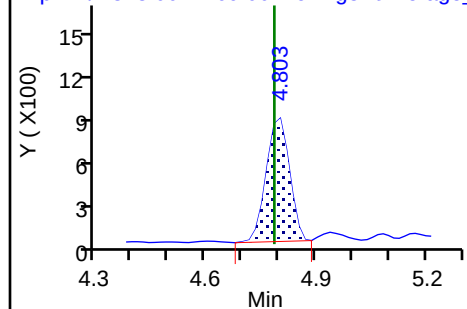


45 Perfluorohexadecanoic acid

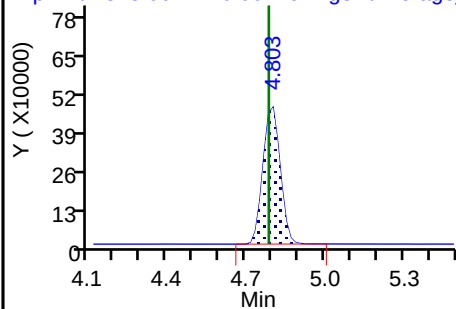
D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid (ND)

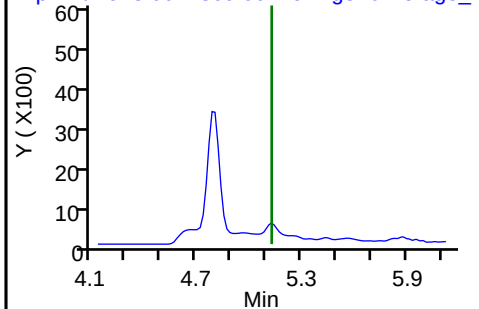
Exp1:m/z 813.00 > 169.00:Moving3PtAverage_x



Exp1:m/z 815.00 > 770.00:Moving3PtAverage_x

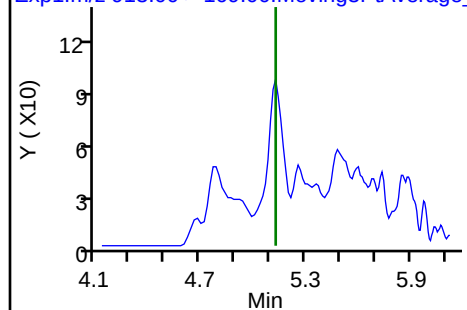


Exp1:m/z 913.00 > 869.00:Moving3PtAverage_x



46 Perfluorooctadecanoic acid (ND)

Exp1:m/z 913.00 > 169.00:Moving3PtAverage_x



TestAmerica Sacramento

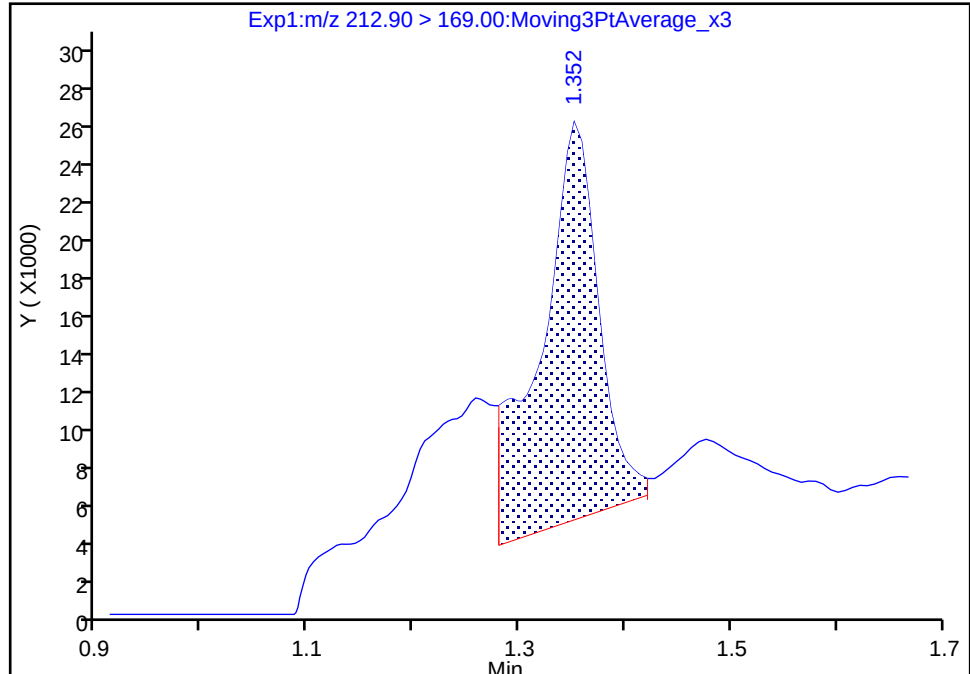
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d				
Injection Date:	09-Nov-2018 08:18:17	Instrument ID:	A9		
Lims ID:	480-144297-F-6-C	Lab Sample ID:	320-144297-6		
Client ID:	GMW-2				
Operator ID:	A9\Administrator	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

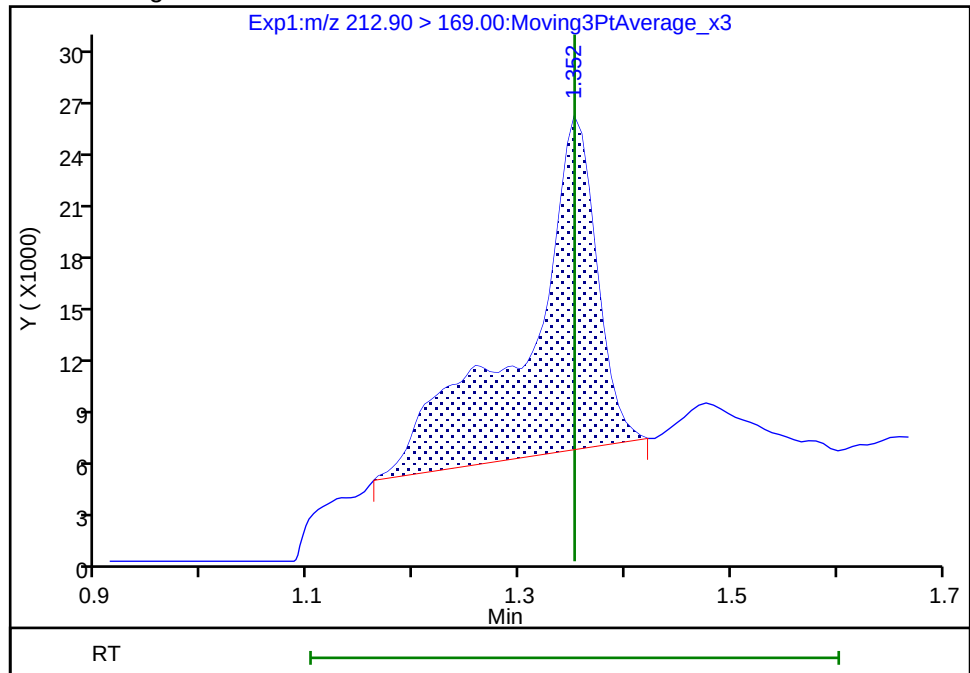
RT: 1.35
Area: 78715
Amount: 0.059753
Amount Units: ng/ml

Processing Integration Results



RT: 1.35
Area: 90603
Amount: 0.068778
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:10:47

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

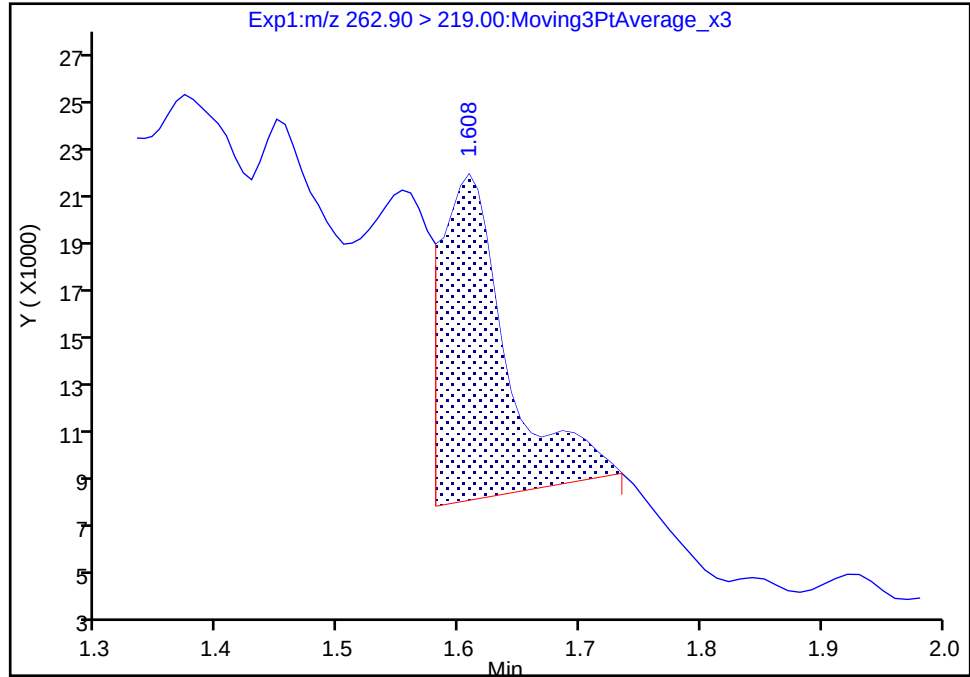
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d
Injection Date: 09-Nov-2018 08:18:17 Instrument ID: A9
Lims ID: 480-144297-F-6-C Lab Sample ID: 320-144297-6
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

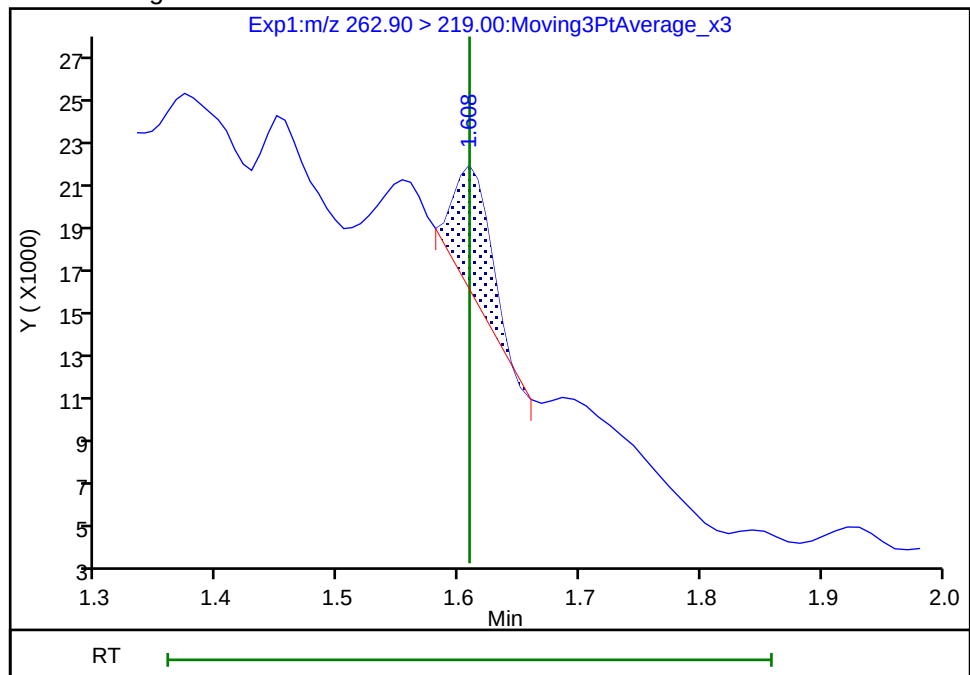
RT: 1.61
Area: 48920
Amount: 0.030745
Amount Units: ng/ml

Processing Integration Results



RT: 1.61
Area: 11396
Amount: 0.007162
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:10:56
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

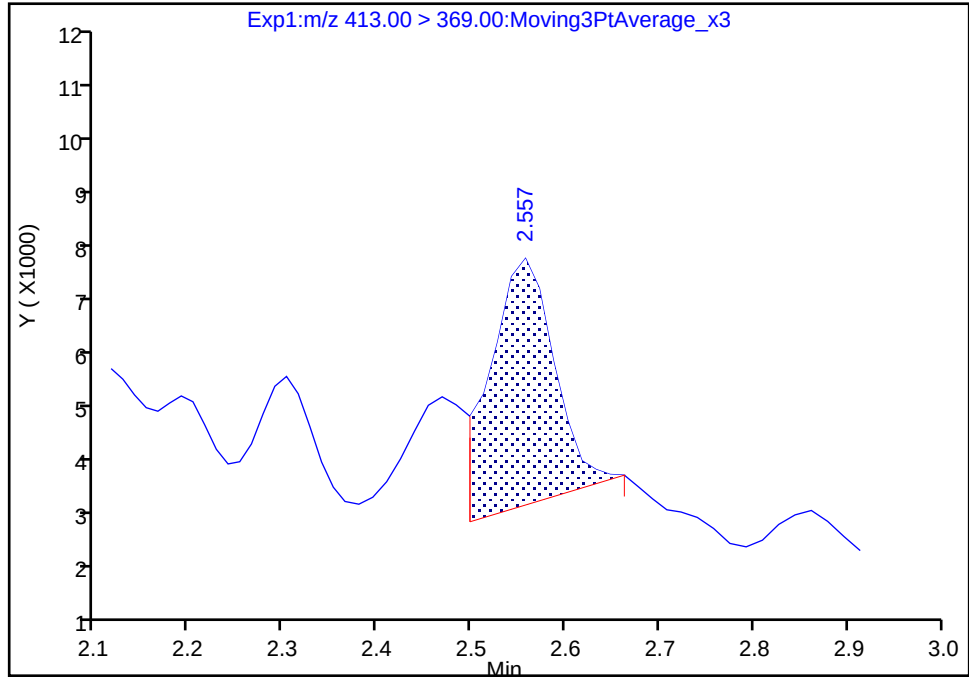
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d				
Injection Date:	09-Nov-2018 08:18:17	Instrument ID:	A9		
Lims ID:	480-144297-F-6-C	Lab Sample ID:	320-144297-6		
Client ID:	GMW-2				
Operator ID:	A9\Administrator	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

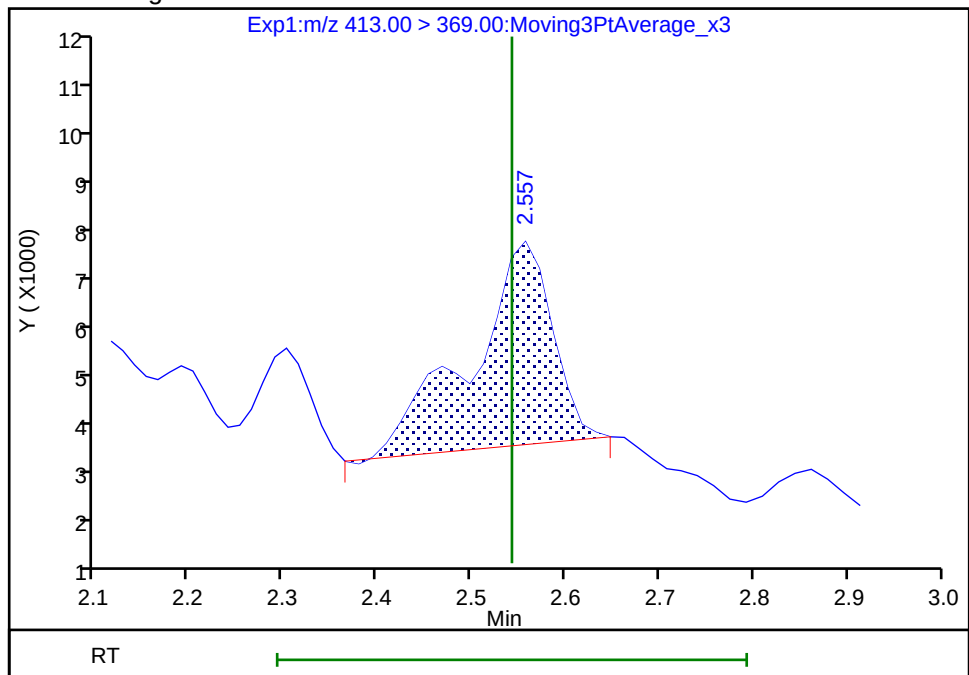
RT: 2.56
Area: 20260
Amount: 0.009349
Amount Units: ng/ml

Processing Integration Results



RT: 2.56
Area: 23724
Amount: 0.010948
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:11:32
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

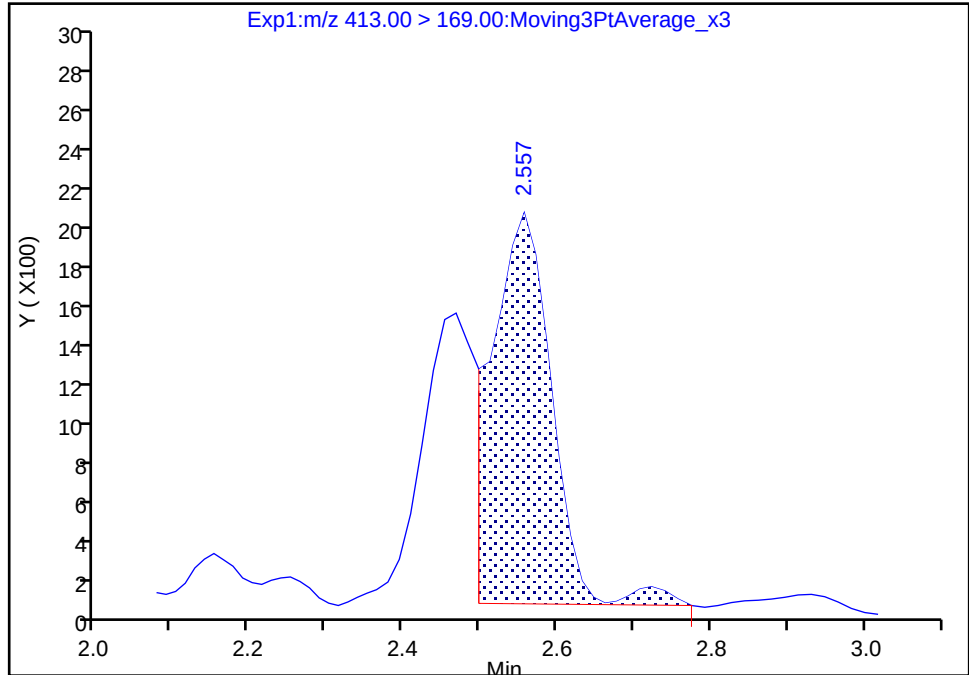
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d
Injection Date: 09-Nov-2018 08:18:17 Instrument ID: A9
Lims ID: 480-144297-F-6-C Lab Sample ID: 320-144297-6
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

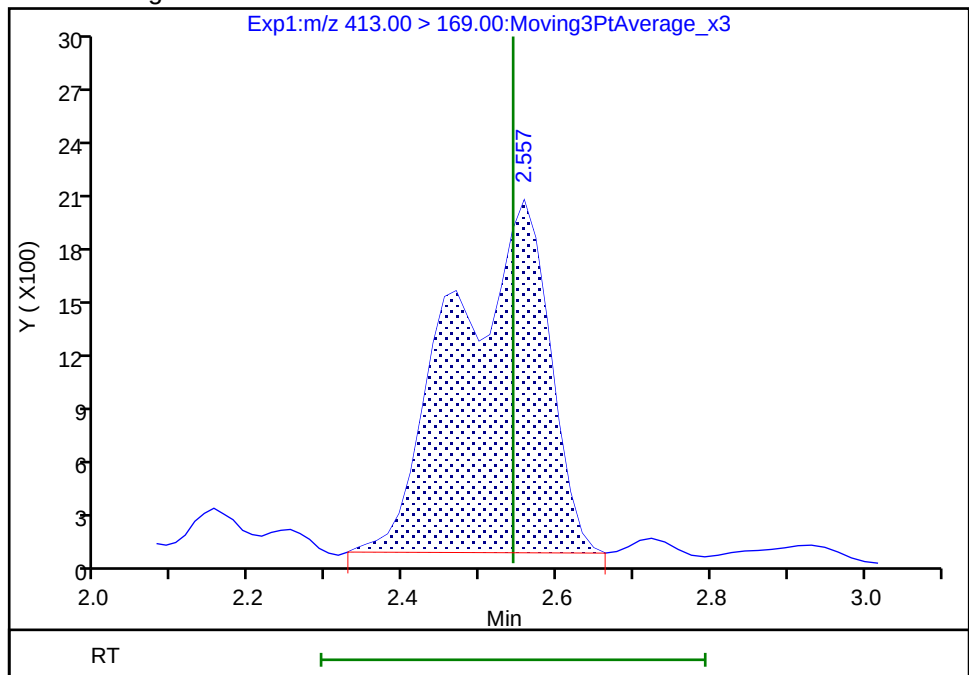
RT: 2.56
Area: 10644
Amount: 0.009349
Amount Units: ng/ml

Processing Integration Results



RT: 2.56
Area: 17120
Amount: 0.010948
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:11:35

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

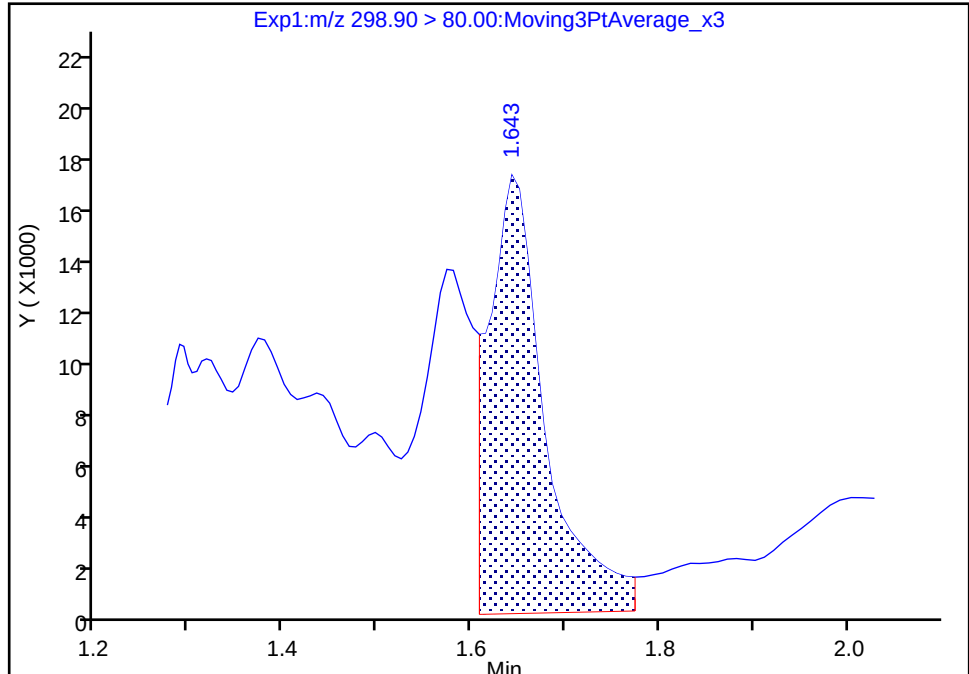
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d				
Injection Date:	09-Nov-2018 08:18:17	Instrument ID:	A9		
Lims ID:	480-144297-F-6-C	Lab Sample ID:	320-144297-6		
Client ID:	GMW-2				
Operator ID:	A9\Administrator	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

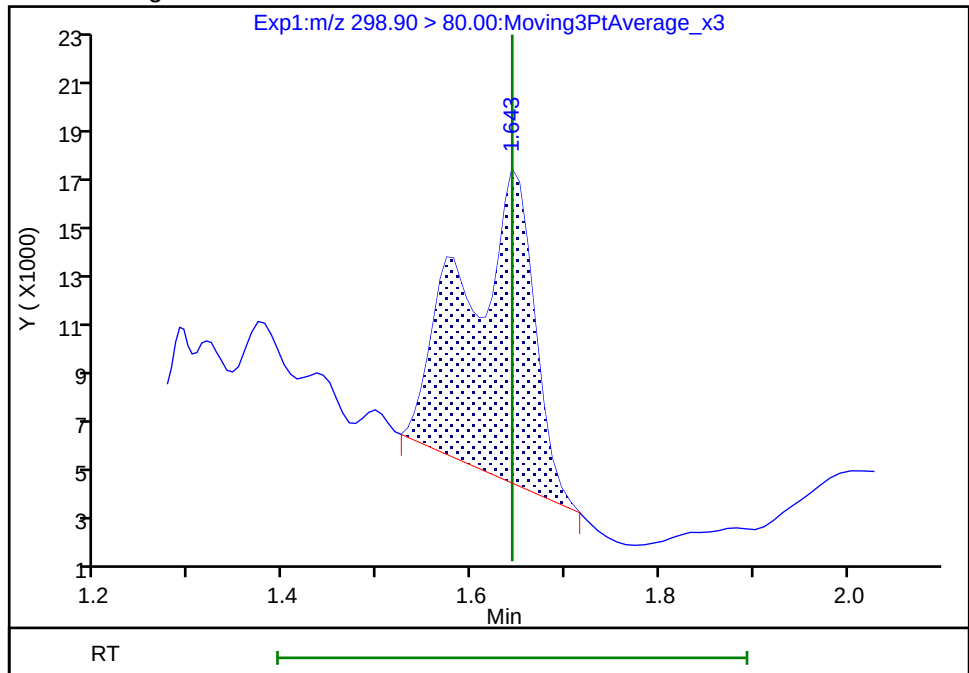
RT: 1.64
Area: 69741
Amount: 0.031517
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 64944
Amount: 0.029349
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:11:01
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

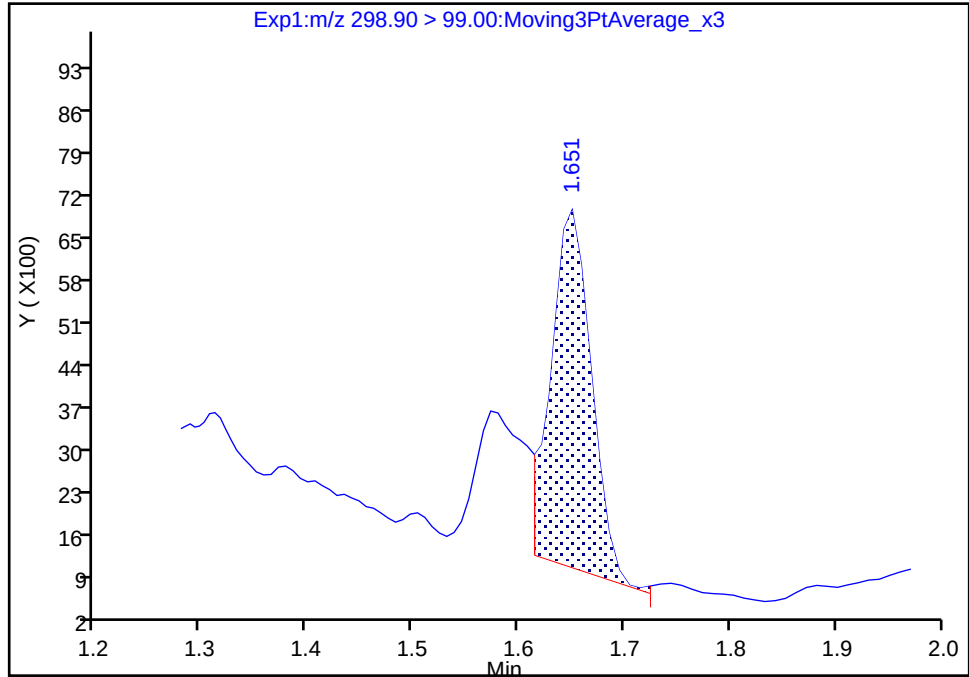
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d
Injection Date: 09-Nov-2018 08:18:17 Instrument ID: A9
Lims ID: 480-144297-F-6-C Lab Sample ID: 320-144297-6
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

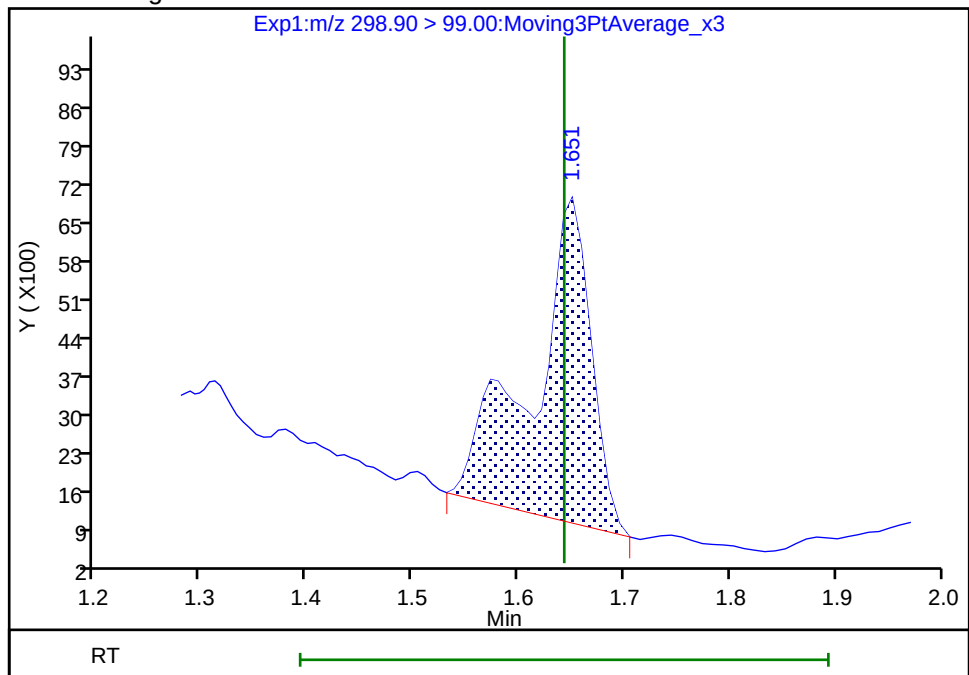
RT: 1.65
Area: 15461
Amount: 0.031517
Amount Units: ng/ml

Processing Integration Results



RT: 1.65
Area: 22831
Amount: 0.029349
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:11:05

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

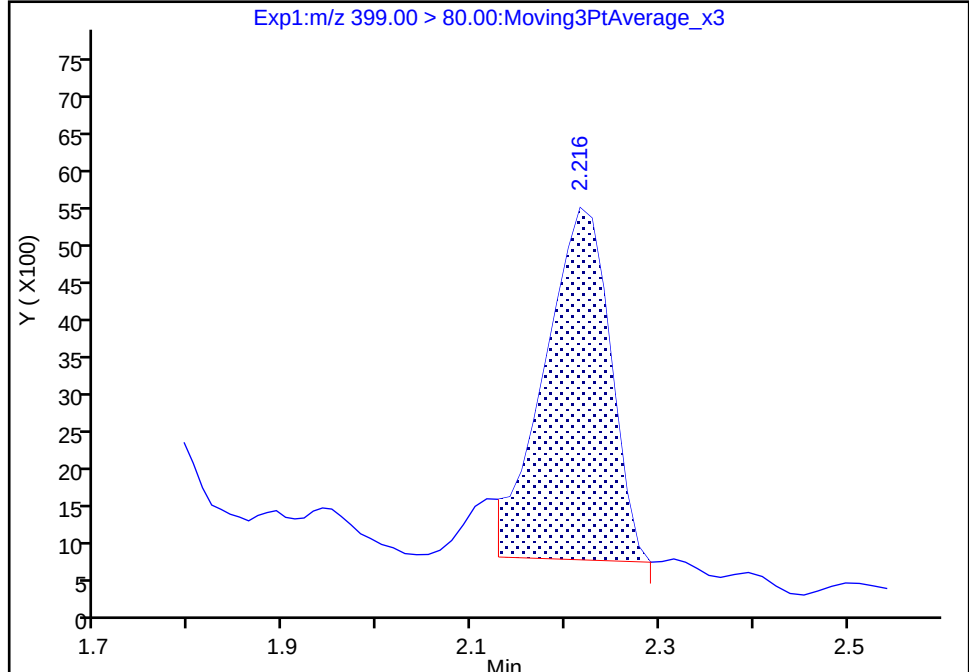
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d				
Injection Date:	09-Nov-2018 08:18:17	Instrument ID:	A9		
Lims ID:	480-144297-F-6-C	Lab Sample ID:	320-144297-6		
Client ID:	GMW-2				
Operator ID:	A9\Administrator	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

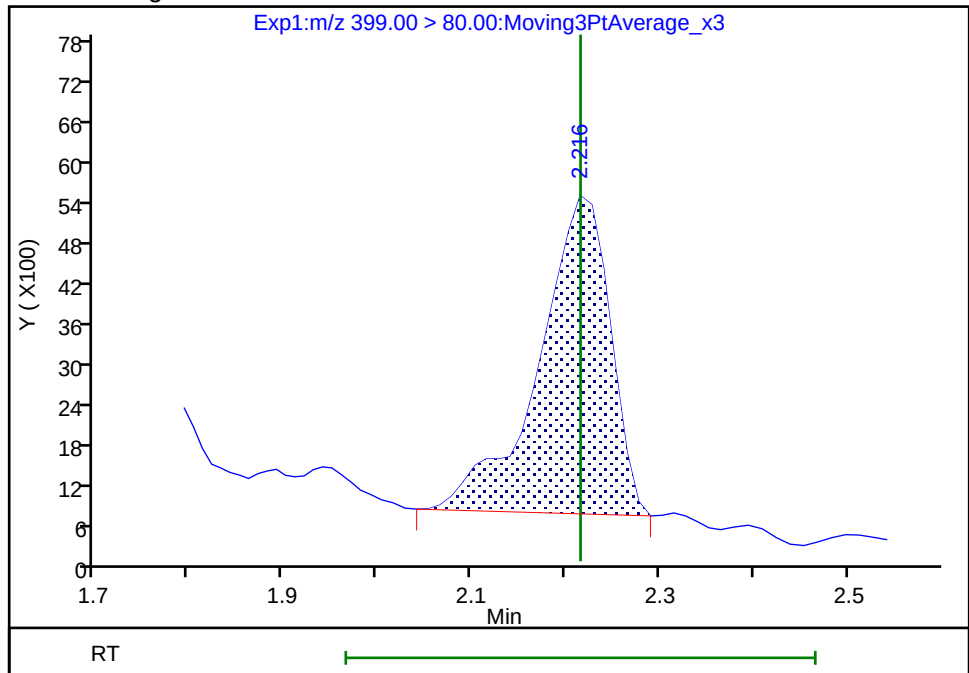
RT: 2.22
Area: 22994
Amount: 0.012827
Amount Units: ng/ml

Processing Integration Results



RT: 2.22
Area: 24922
Amount: 0.013903
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:11:18
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

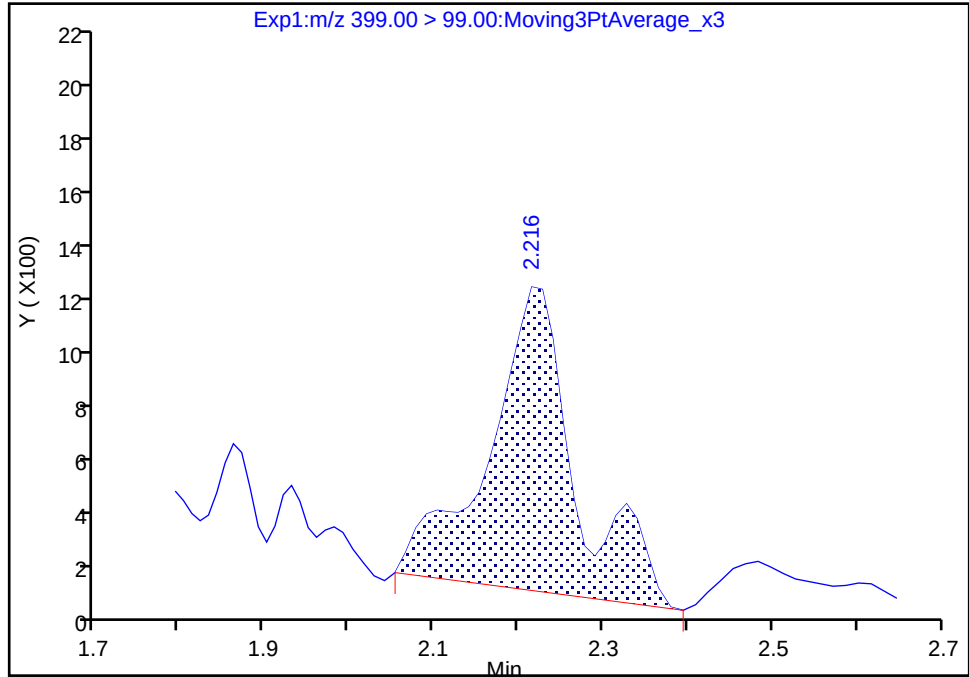
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d
Injection Date: 09-Nov-2018 08:18:17 Instrument ID: A9
Lims ID: 480-144297-F-6-C Lab Sample ID: 320-144297-6
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

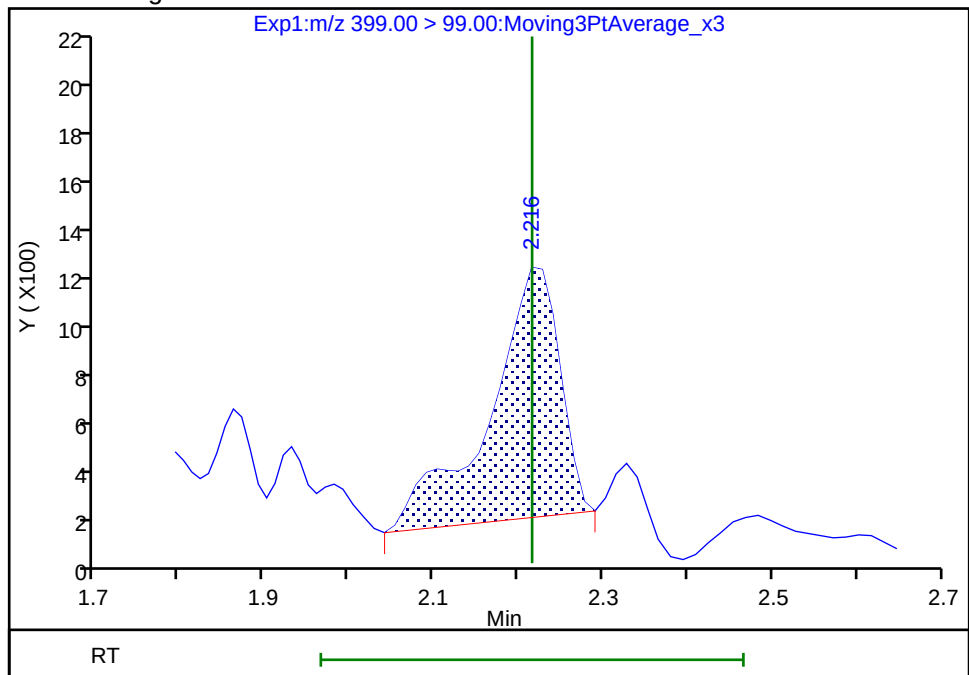
RT: 2.22
Area: 8081
Amount: 0.012827
Amount Units: ng/ml

Processing Integration Results



RT: 2.22
Area: 5967
Amount: 0.013903
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:11:25

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 648 of 1202

11/27/2018

TestAmerica Sacramento

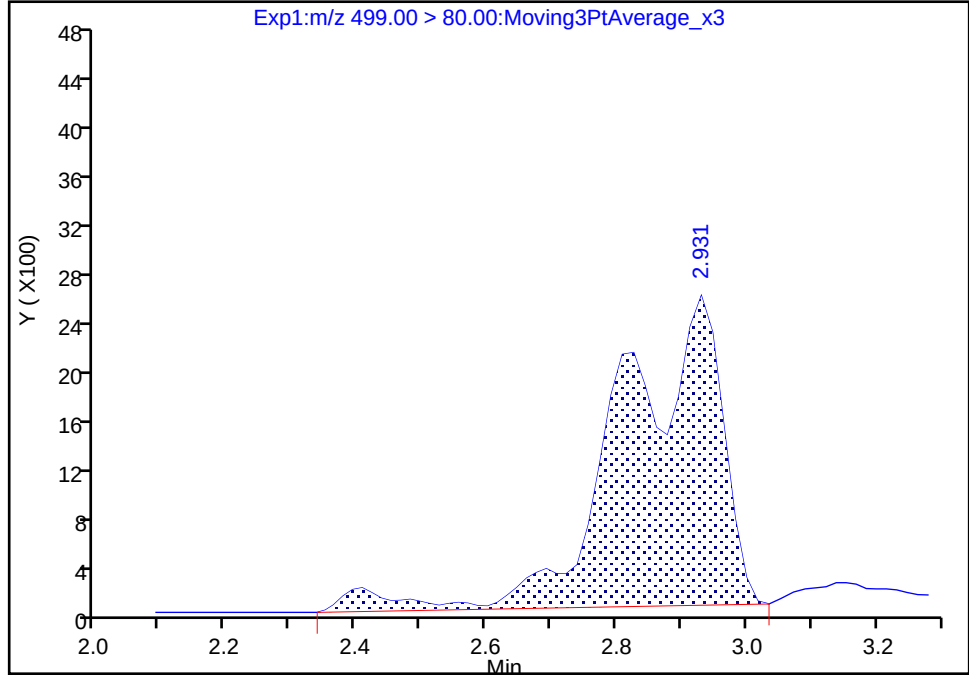
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_010.d
Injection Date: 09-Nov-2018 08:18:17 Instrument ID: A9
Lims ID: 480-144297-F-6-C Lab Sample ID: 320-144297-6
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 4 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

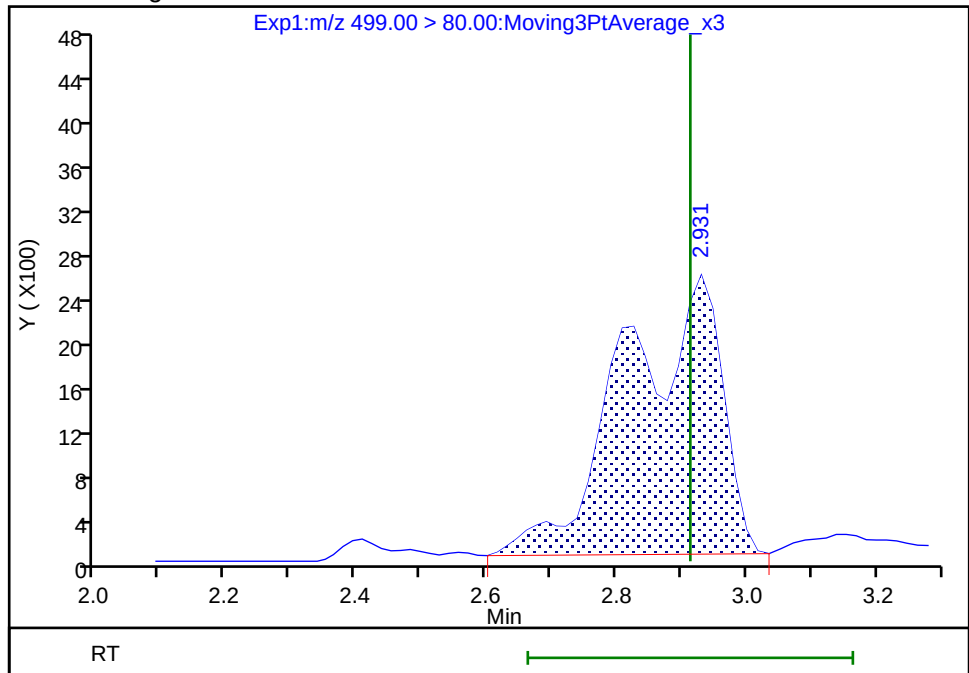
RT: 2.93
Area: 27948
Amount: 0.018321
Amount Units: ng/ml

Processing Integration Results



RT: 2.93
Area: 26320
Amount: 0.017253
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:11:43
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

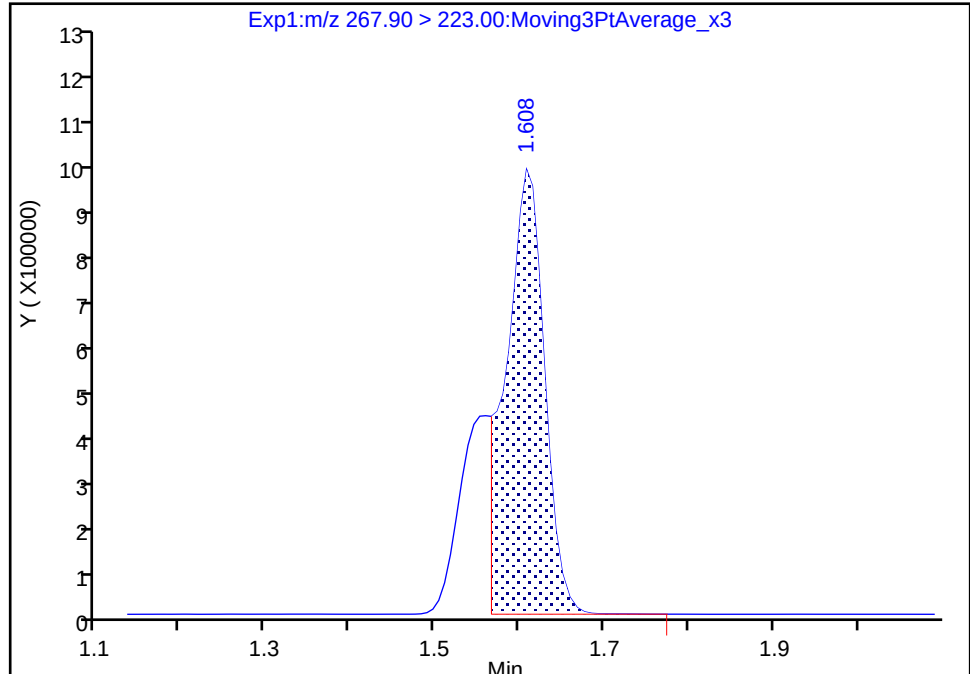
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Injection Date:	09-Nov-2018 08:18:17	Instrument ID:	A9		
Lims ID:	480-144297-F-6-C	Lab Sample ID:	320-144297-6		
Client ID:	GMW-2				
Operator ID:	A9\Administrator	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

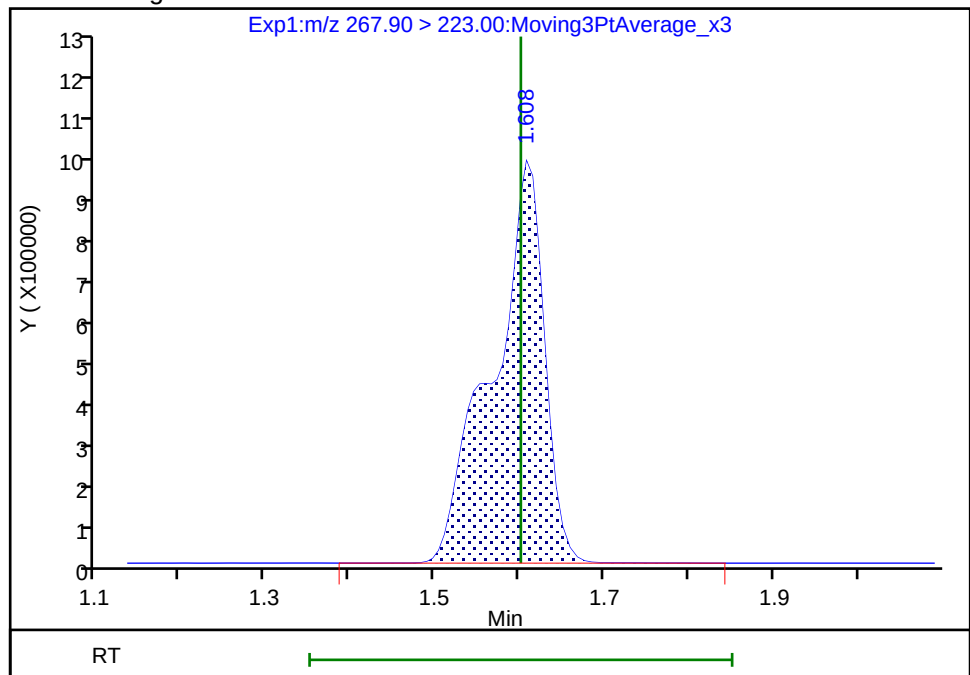
RT: 1.61
Area: 2919572
Amount: 0.929303
Amount Units: ng/ml

Processing Integration Results



RT: 1.61
Area: 3973619
Amount: 1.264807
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:10:27

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

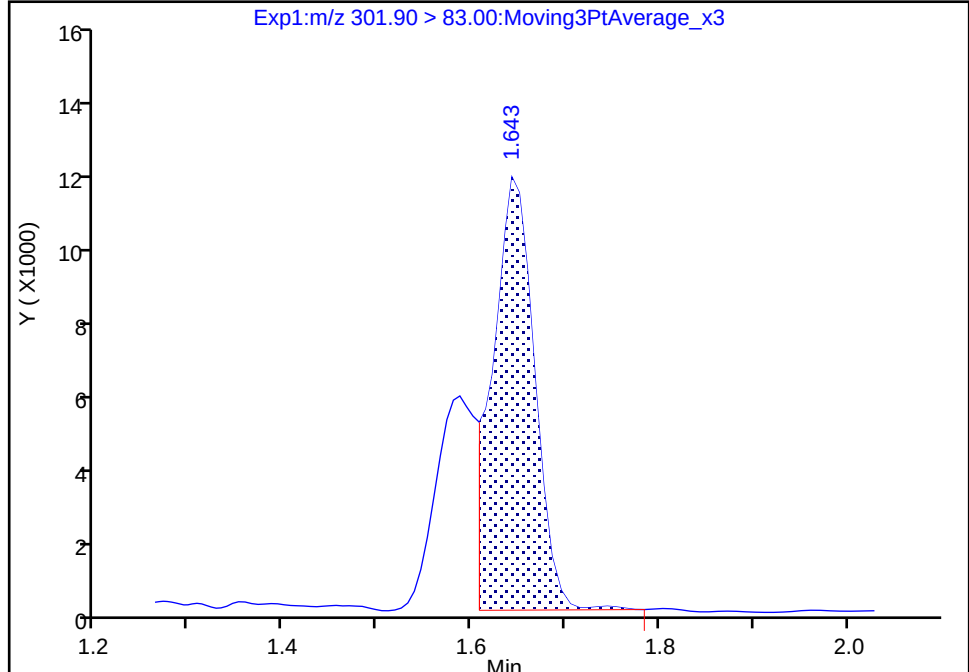
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Injection Date:	09-Nov-2018 08:18:17	Instrument ID:	A9		
Lims ID:	480-144297-F-6-C	Lab Sample ID:	320-144297-6		
Client ID:	GMW-2				
Operator ID:	A9\Administrator	ALS Bottle#:	4	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

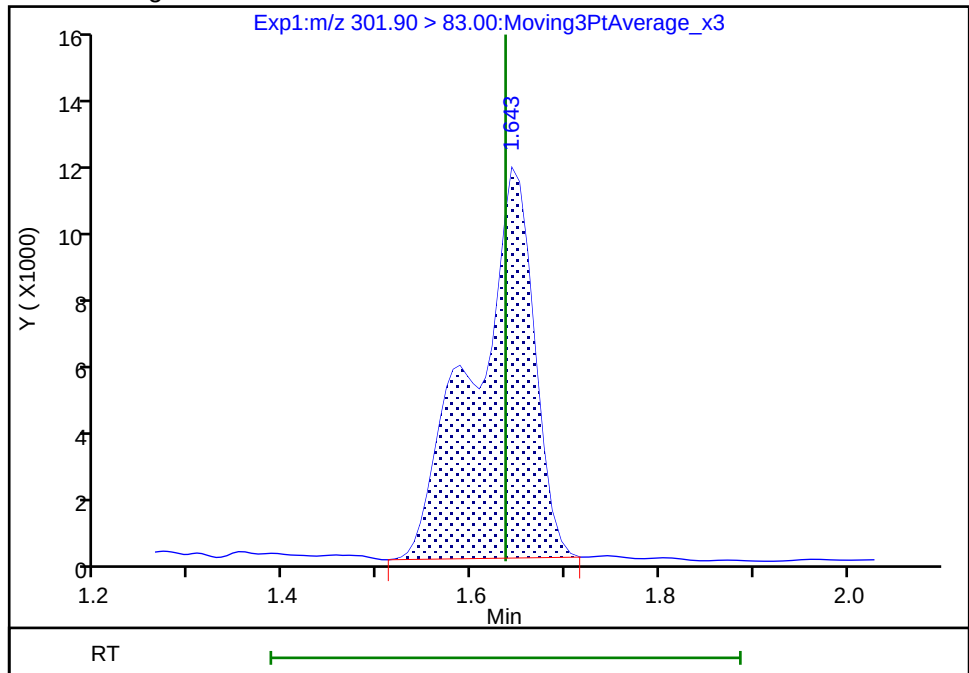
RT: 1.64
Area: 34028
Amount: 0.783622
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 49824
Amount: 1.147385
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:10:33

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>EW-10</u>	Lab Sample ID: <u>480-144297-7</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_013.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 11:55</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>279.1 (mL)</u>	Date Analyzed: <u>11/09/2018 08:40</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.2		1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.92	J	1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	1.6	J	1.8	0.52
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.3	J	1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	3.3		1.8	0.76
375-95-1	Perfluorononanoic acid (PFNA)	1.3	J	1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	2.1		1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.99
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.6	J	1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.87	J B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	5.6		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	0.33	J	1.8	0.31
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>EW-10</u>	Lab Sample ID: <u>480-144297-7</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_013.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 11:55</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>279.1 (mL)</u>	Date Analyzed: <u>11/09/2018 08:40</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	56		25-150
STL01893	13C5-PFPeA DNU	74		25-150
STL00993	13C2 PFHxA	85		25-150
STL01892	13C4 PFHpA	94		25-150
STL00990	13C4 PFOA	101		25-150
STL00995	13C5 PFNA	109		25-150
STL00996	13C2 PFDA	100		25-150
STL00997	13C2 PFUnA	117		25-150
STL00998	13C2 PFDoA	116		25-150
STL02116	13C2 PFTeDA	100		25-150
STL02337	13C3 PFBS	92		25-150
STL00994	18O2 PFHxS	102		25-150
STL00991	13C4 PFOS	114		25-150
STL01056	13C8 FOSA	106		25-150
STL02118	d3-NMeFOSAA	126		25-150
STL02117	d5-NEtFOSAA	131		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d
 Lims ID: 480-144297-F-7-A
 Client ID: EW-10
 Sample Type: Client
 Inject. Date: 09-Nov-2018 08:40:52 ALS Bottle#: 7 Worklist Smp#: 10
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 480-144297-f-7-a
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: A9\Administrator Instrument ID: A9
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 12:22:50 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d
 Column 1 : Det: EXP1
 Process Host: CTX0318

First Level Reviewer: mongkols

Date: 12-Nov-2018 12:22:49

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	1.359	1.346	0.013	0.528	3922759	1.40		55.8	3695	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.380	1.352	0.028	1.015	129991	0.0885			0.4	M
D 3 13C5 PFPeA										
267.90 > 223.00	1.622	1.601	0.021	0.631	4967706	1.86		74.3	1180	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.615	1.609	0.006	0.996	50891	0.0256			1.5	M
D 47 13C3 PFBS										
301.90 > 83.00	1.651	1.636	0.015	0.642	78754	2.13		91.6	36.7	
5 Perfluorobutanesulfonic acid										RM
298.90 > 80.00	1.660	1.643	0.017	1.005	157098	0.0449			2.2	RM
298.90 > 99.00	1.660	1.643	0.017	1.005	32243		4.87(1.35-4.05)		1.6	M
D 7 13C2 PFHxA										
315.00 > 270.00	1.902	1.873	0.029	0.739	6028167	2.14		85.5	3828	
6 Perfluorohexanoic acid										M
313.00 > 269.00	1.892	1.883	0.010	0.995	96821	0.0446			0.5	
313.00 > 119.00	1.892	1.883	0.010	0.995	7038		13.76(6.96-20.87)		1.8	M
D 9 13C4 PFHpA										
367.00 > 322.00	2.216	2.191	0.025	0.861	7828850	2.36		94.4	6797	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.216	2.191	0.025	1.000	119982	0.0361			0.9	
363.00 > 169.00	2.216	2.191	0.025	1.000	27096		4.43(2.17-6.52)		12.1	
D 11 18O2 PFHxS										
403.00 > 84.00	2.241	2.203	0.038	0.871	5227453	2.42		102	7095	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.228	2.216	0.012	0.994	67915	0.0244			2.3	M
399.00 > 99.00	2.241	2.216	0.025	1.000	11925		5.70(1.90-5.70)		1.4	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	2.557	2.513	0.044	0.994	2311560	7.58		319	338	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.557	2.528	0.029	1.000	68265	0.0321			71.8	
D 14 13C4 PFOA										
417.00 > 372.00	2.572	2.543	0.029	1.000	7644368	2.52		101	6137	
* 62 13C2 PFOA										
415.00 > 370.00	2.572	2.543	0.029		7719158	2.50			5168	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.572	2.543	0.029	1.000	304980	0.0923			2.9	M
413.00 > 169.00	2.572	2.543	0.029	1.000	130336		2.34(1.36-4.08)		51.0	
D 18 13C4 PFOS										
503.00 > 80.00	2.949	2.914	0.035	1.146	5934822	2.72		114	597	
D 19 13C5 PFNA										
468.00 > 423.00	2.949	2.914	0.035	1.146	7633844	2.72		109	6230	
20 Perfluorononanoic acid										M
463.00 > 419.00	2.949	2.914	0.035	1.000	108097	0.0354			2.4	M
463.00 > 169.00	2.949	2.914	0.035	1.000	18899		5.72(2.68-8.03)		10.1	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	2.949	2.914	0.035	1.000	419820	0.1570			31.9	M
499.00 > 99.00	2.949	2.914	0.035	1.000	87719		4.79(2.04-6.12)		67.2	M
D 21 13C8 FOSA										
506.00 > 78.00	3.298	3.264	0.034	1.282	3210304	2.66		106	4888	
D 23 13C2 PFDA										
515.00 > 470.00	3.314	3.264	0.050	1.288	7264890	2.51		100	6910	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.298	3.264	0.034	1.282	258338	6.83		285	346	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.298	3.264	0.034	1.000	1892	0.001229			10.9	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.314	3.264	0.050	1.005	35534	0.009210			25.4	
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.314	3.281	0.033	1.000	185413	0.0588			7.8	M
513.00 > 169.00	3.314	3.281	0.033	1.000	11660		15.90(7.12-21.35)		15.0	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.452	3.422	0.030	1.342	3931383	3.14		126	3616	
28 N-methylperfluorooctanesulfonamido										M
570.00 > 419.00	3.452	3.437	0.015	1.000	11322	0.007199			4.7	M
33 N-ethylperfluorooctanesulfonamidoa										M
584.00 > 419.00	3.624	3.591	0.033	1.000	4184	0.003435			7.1	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.624	3.591	0.033	1.409	3330930	3.27		131	2666	
D 30 13C2 PFUnA										
565.00 > 520.00	3.624	3.591	0.033	1.409	7044415	2.92		117	6963	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.624	3.607	0.017	1.000	60364	0.0188			8.0	
563.00 > 169.00	3.624	3.607	0.017	1.000	5140		11.74(5.24-15.72)		5.5	

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	3.917	3.883	0.034	1.523	8597918	2.89		116	8427	
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	4.412	4.381	0.031	1.000	2850	0.006992			5.8	RM
713.00 > 219.00	4.412	4.381	0.031	1.000	1292		2.21(0.70-2.09)		5.7	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.412	4.381	0.031	1.715	5573738	2.51		100	8635	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d

Injection Date: 09-Nov-2018 08:40:52

Instrument ID: A9

Lims ID: 480-144297-F-7-A

Lab Sample ID: 320-144297-7

Client ID: EW-10

Operator ID: A9\Administrator

ALS Bottle#: 7

Worklist Smp#: 10

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

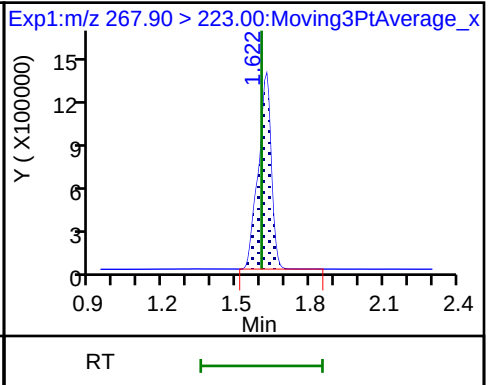
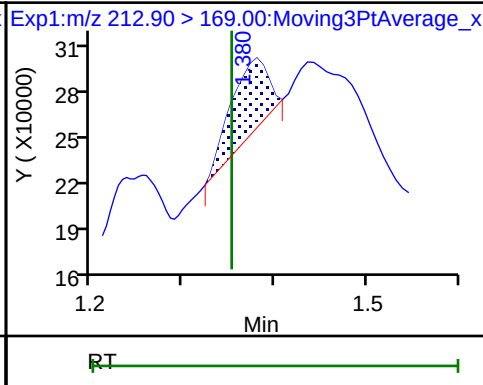
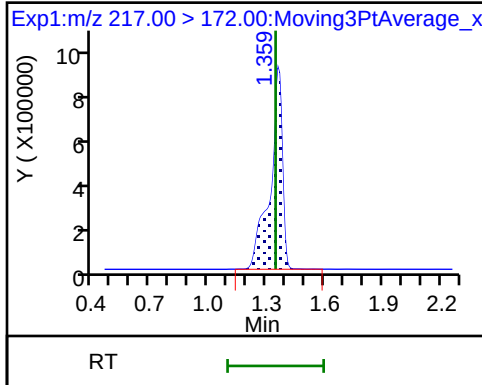
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

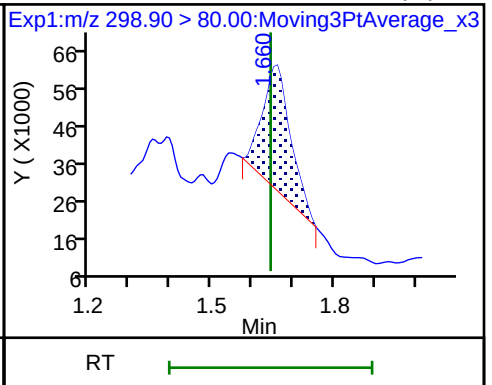
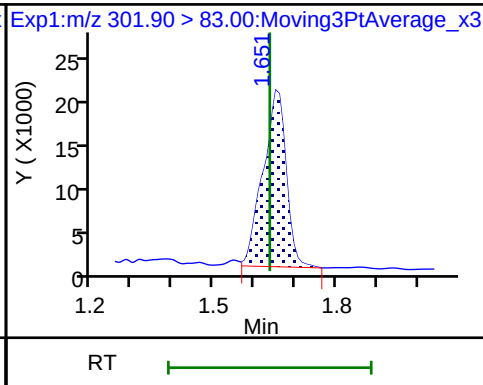
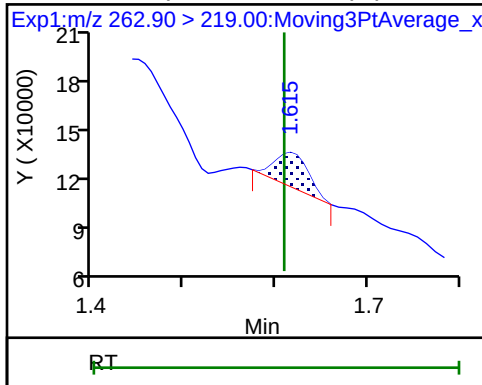
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

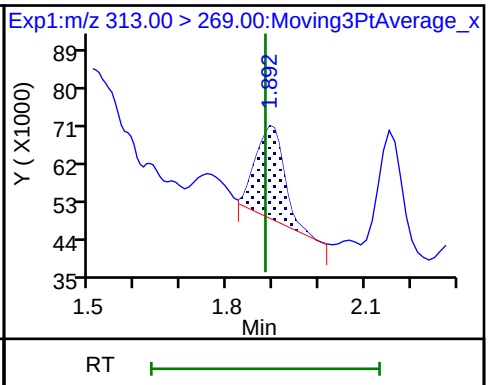
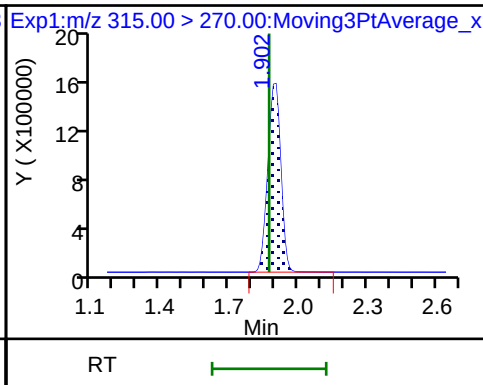
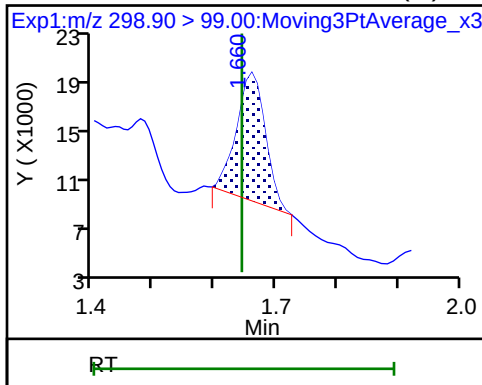
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid (M)

D 7 13C2 PFHxA

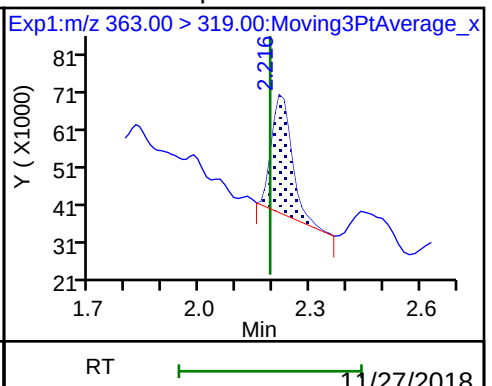
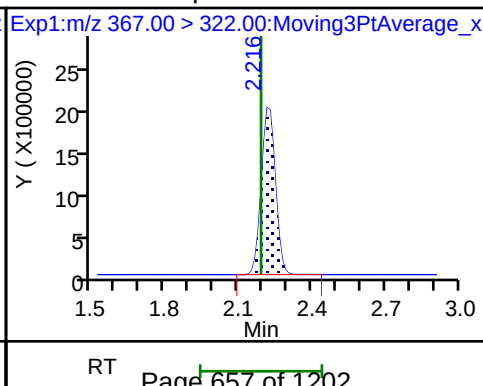
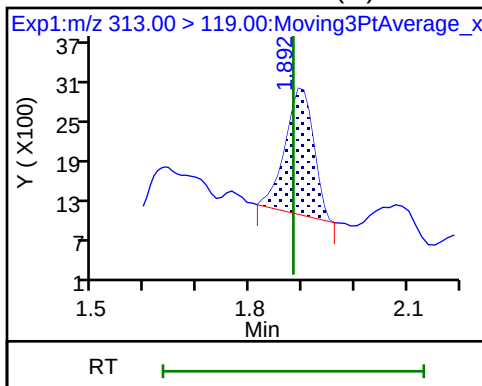
6 Perfluorohexanoic acid

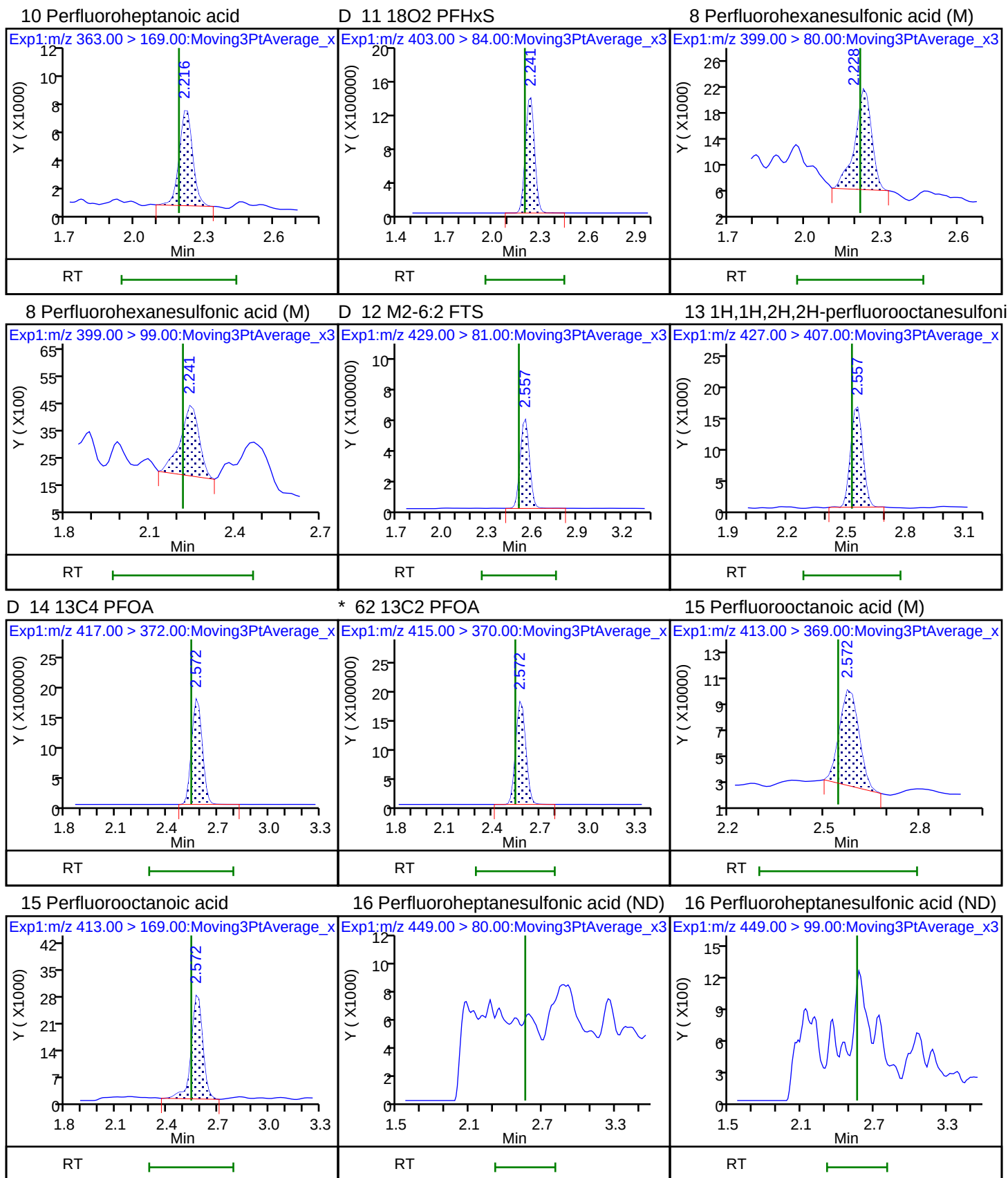


6 Perfluorohexanoic acid (M)

D 9 13C4 PFHpA

10 Perfluoroheptanoic acid

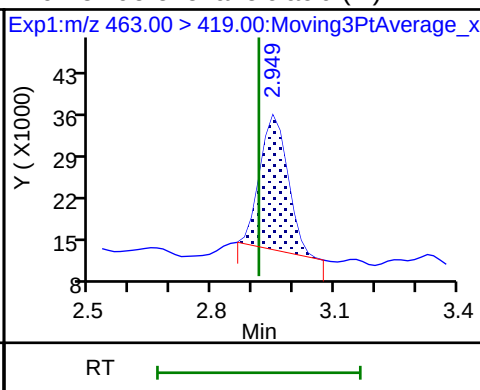
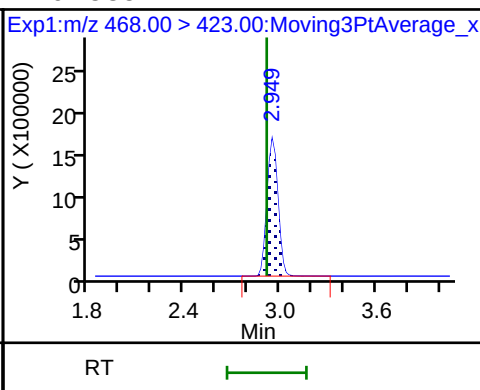
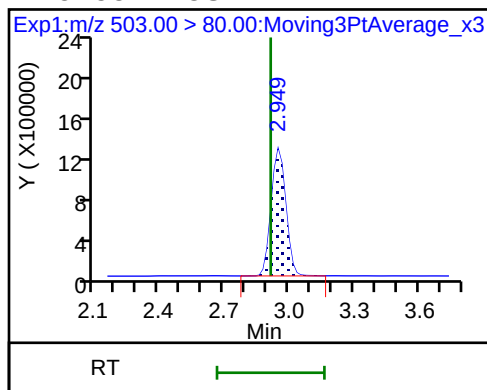




D 18 13C4 PFOS

D 19 13C5 PFNA

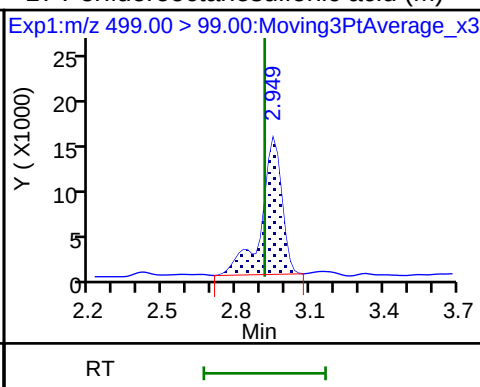
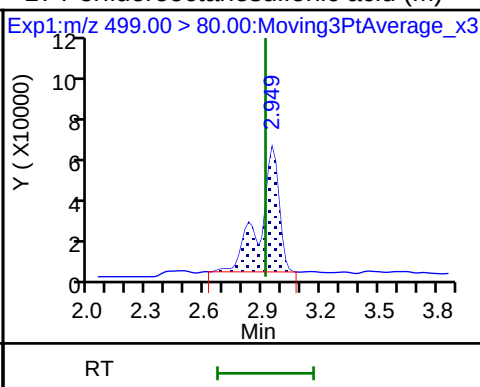
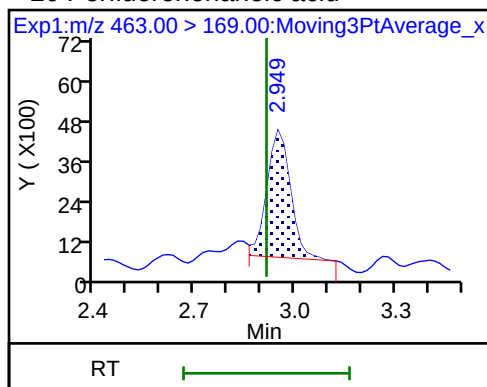
20 Perfluorononanoic acid (M)



20 Perfluorononanoic acid

17 Perfluorooctanesulfonic acid (M)

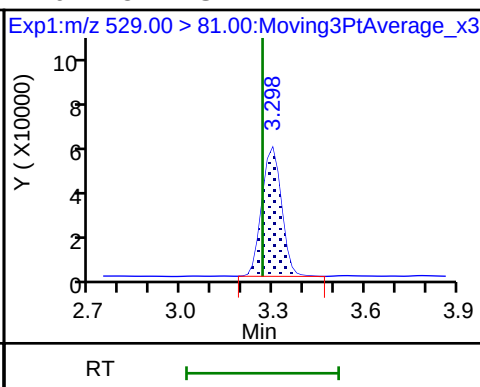
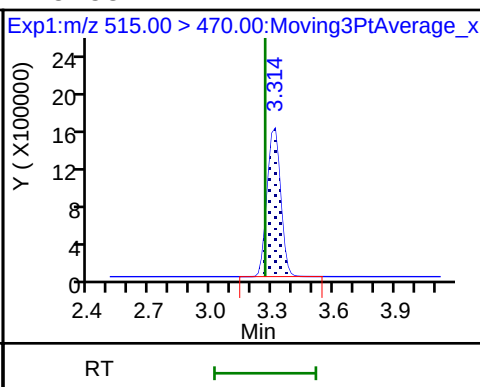
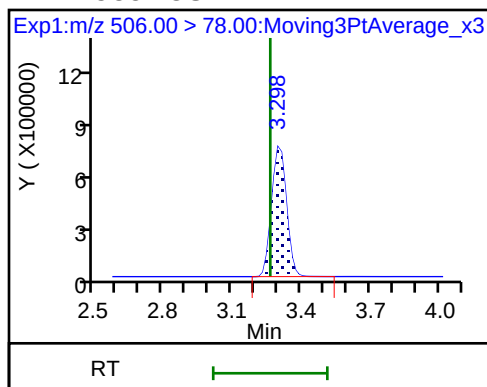
17 Perfluorooctanesulfonic acid (M)



D 21 13C8 FOSA

D 23 13C2 PFDA

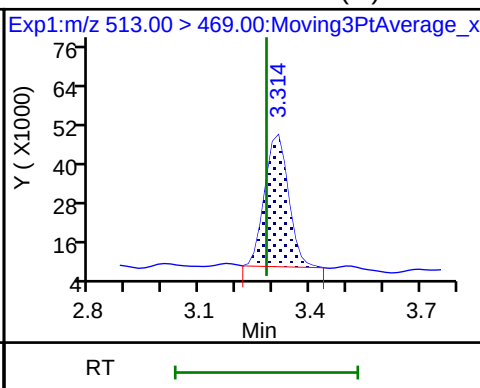
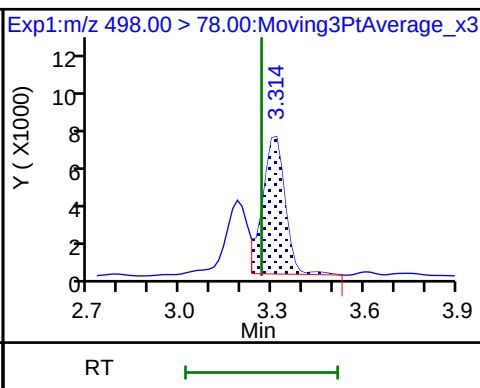
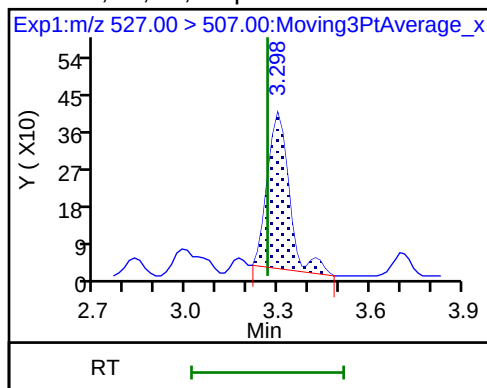
D 26 M2-8:2 FTS

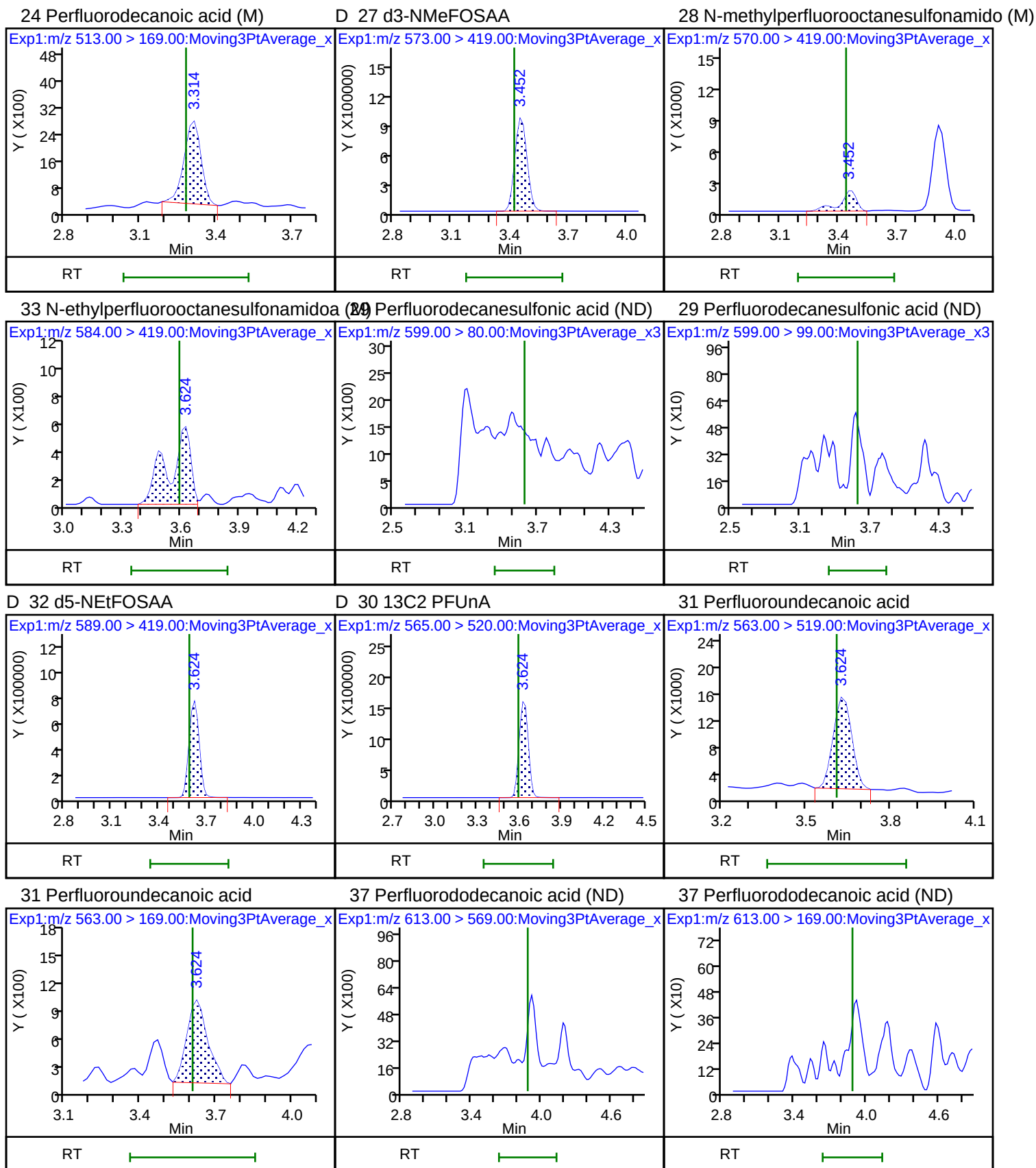


25 1H,1H,2H,2H-perfluorodecanesulfoni

22 Perfluorooctanesulfonamide

24 Perfluorodecanoic acid (M)





D 36 13C2 PFDaA

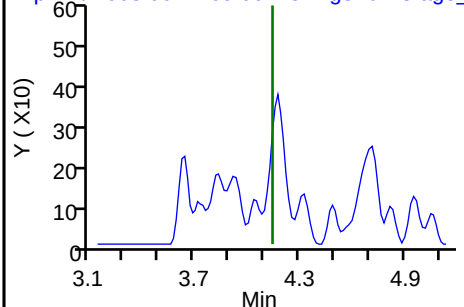
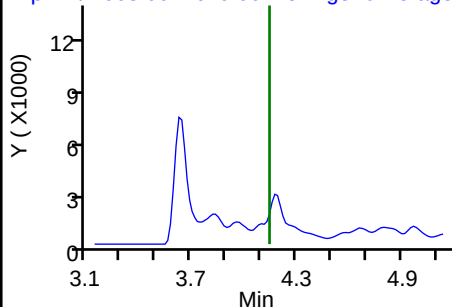
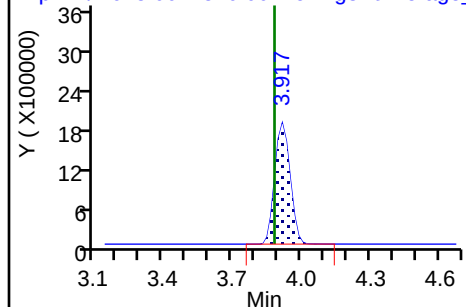
41 Perfluorotridecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

Exp1:m/z 615.00 > 570.00:Moving3PtAverage_x

Exp1:m/z 663.00 > 619.00:Moving3PtAverage_x

Exp1:m/z 663.00 > 169.00:Moving3PtAverage_x



42 Perfluorotetradecanoic acid (M)

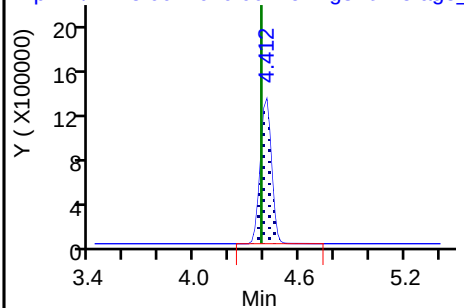
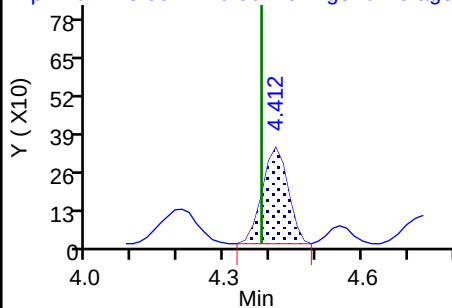
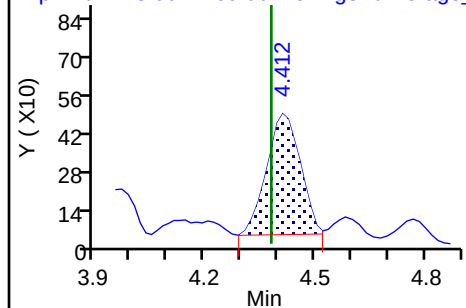
42 Perfluorotetradecanoic acid (M)

D 43 13C2 PFTeDA

Exp1:m/z 713.00 > 169.00:Moving3PtAverage_x

Exp1:m/z 713.00 > 219.00:Moving3PtAverage_x

Exp1:m/z 715.00 > 670.00:Moving3PtAverage_x



TestAmerica Sacramento

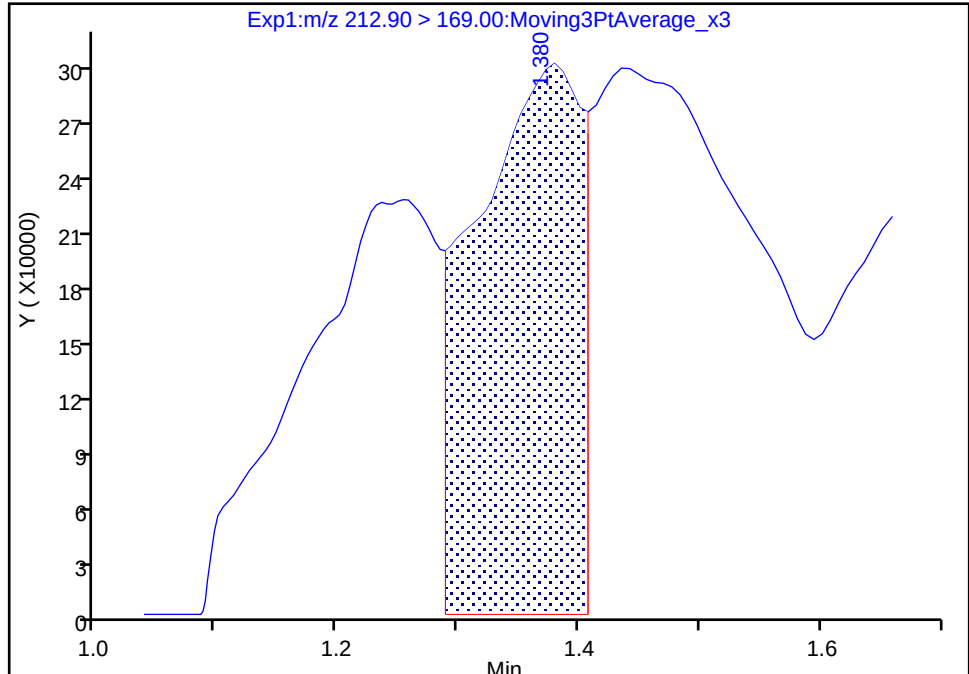
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d
Injection Date: 09-Nov-2018 08:40:52 Instrument ID: A9
Lims ID: 480-144297-F-7-A Lab Sample ID: 320-144297-7
Client ID: EW-10
Operator ID: A9\Administrator ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

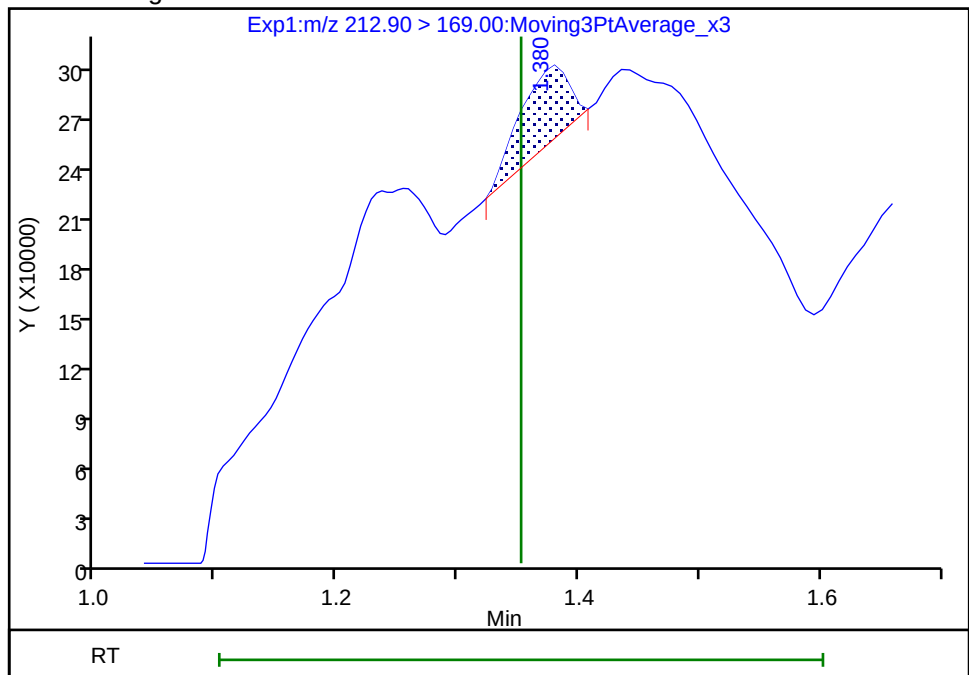
RT: 1.38
Area: 1775334
Amount: 1.209162
Amount Units: ng/ml

Processing Integration Results



RT: 1.38
Area: 129991
Amount: 0.088536
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:17:26

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

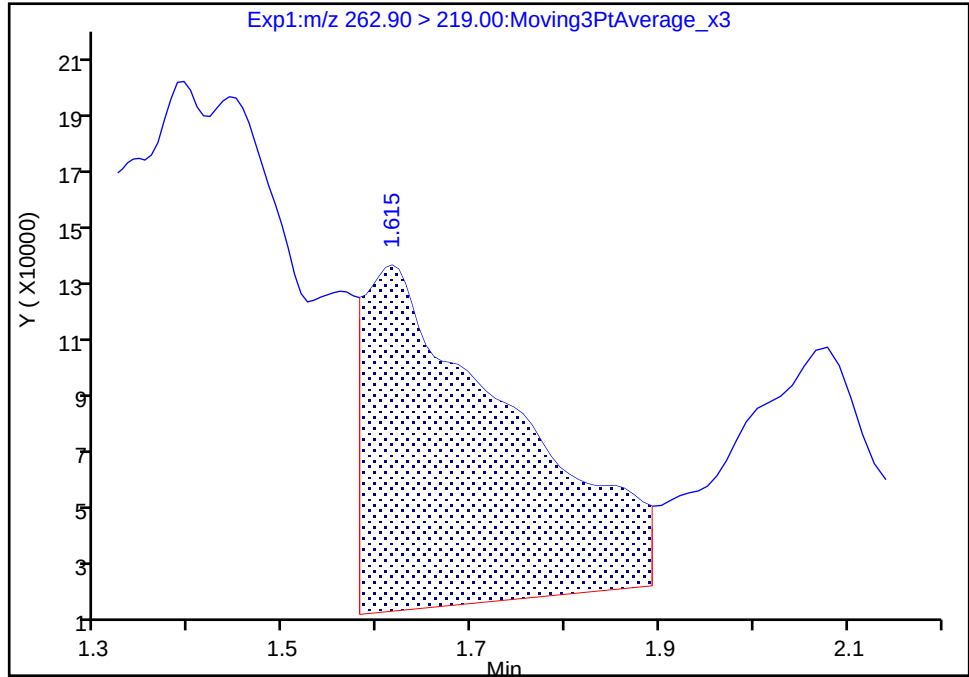
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d
Injection Date: 09-Nov-2018 08:40:52 Instrument ID: A9
Lims ID: 480-144297-F-7-A Lab Sample ID: 320-144297-7
Client ID: EW-10
Operator ID: A9\Administrator ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

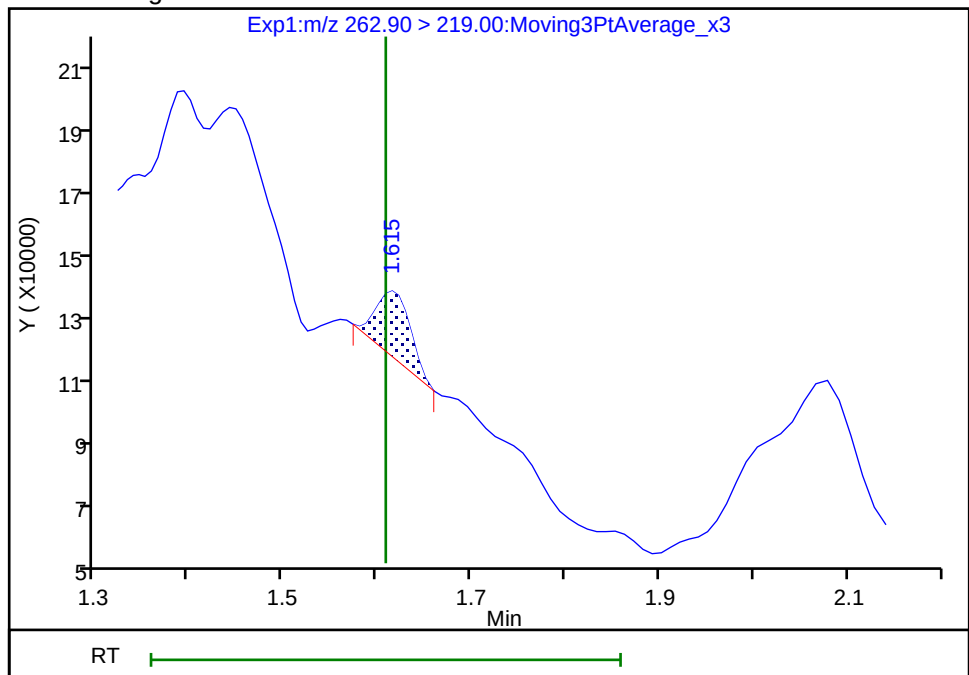
RT: 1.62
Area: 1246691
Amount: 0.626735
Amount Units: ng/ml

Processing Integration Results



RT: 1.62
Area: 50891
Amount: 0.025584
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:17:33

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

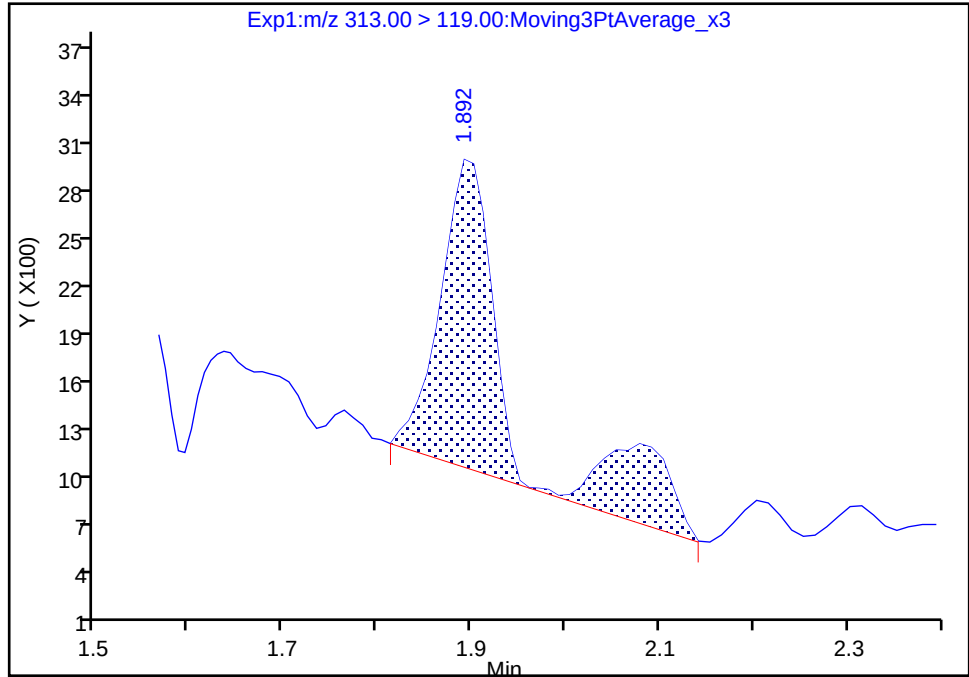
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d				
Injection Date:	09-Nov-2018 08:40:52	Instrument ID:	A9		
Lims ID:	480-144297-F-7-A	Lab Sample ID:	320-144297-7		
Client ID:	EW-10				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

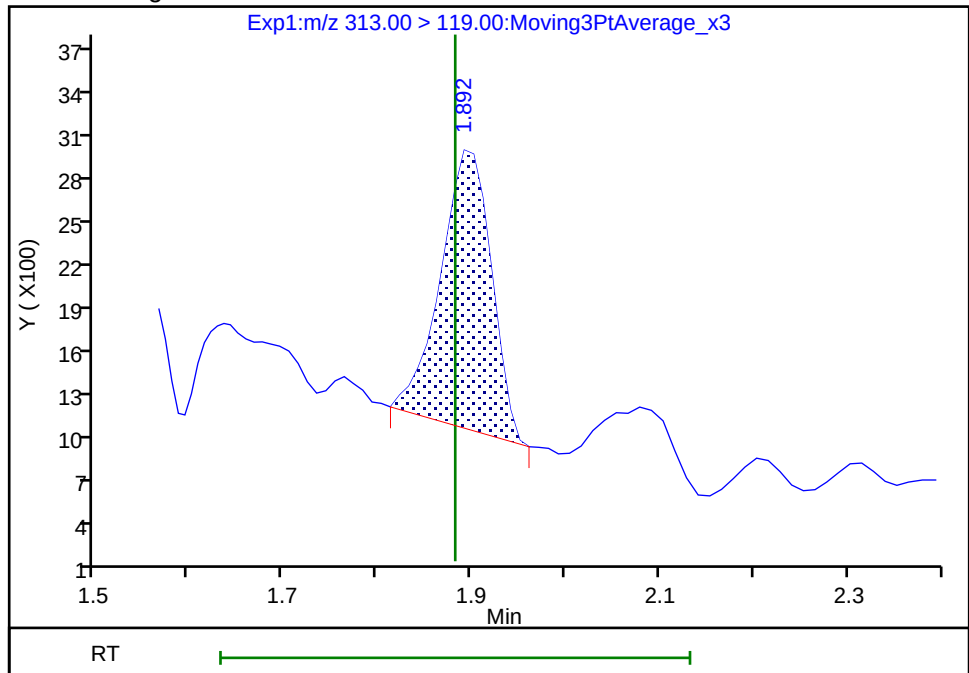
RT: 1.89
Area: 9544
Amount: 0.044630
Amount Units: ng/ml

Processing Integration Results



RT: 1.89
Area: 7038
Amount: 0.044630
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:18:33
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

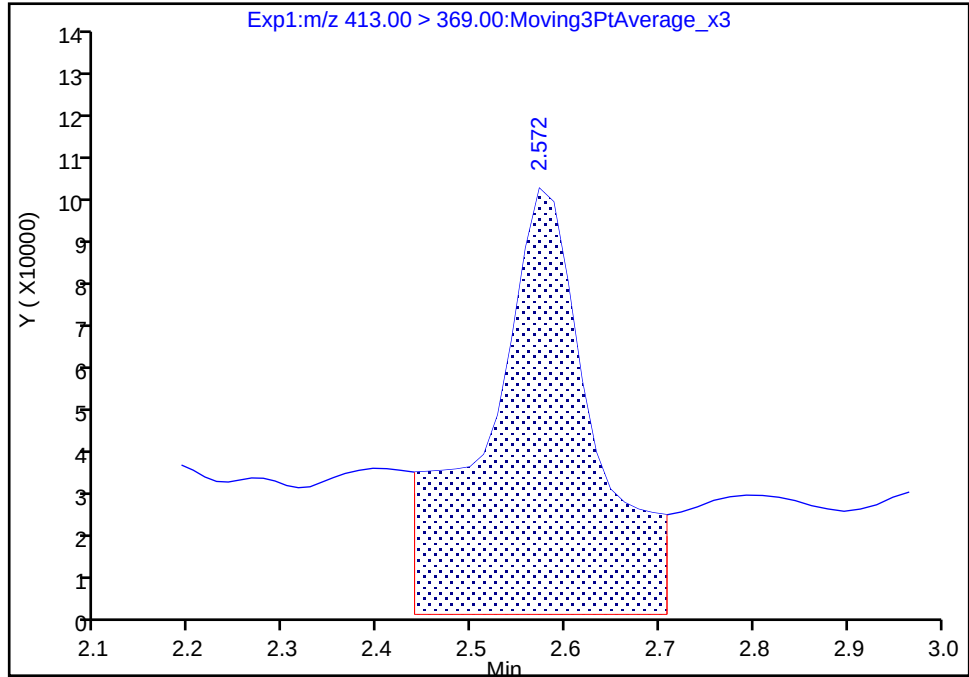
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d				
Injection Date:	09-Nov-2018 08:40:52	Instrument ID:	A9		
Lims ID:	480-144297-F-7-A	Lab Sample ID:	320-144297-7		
Client ID:	EW-10				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

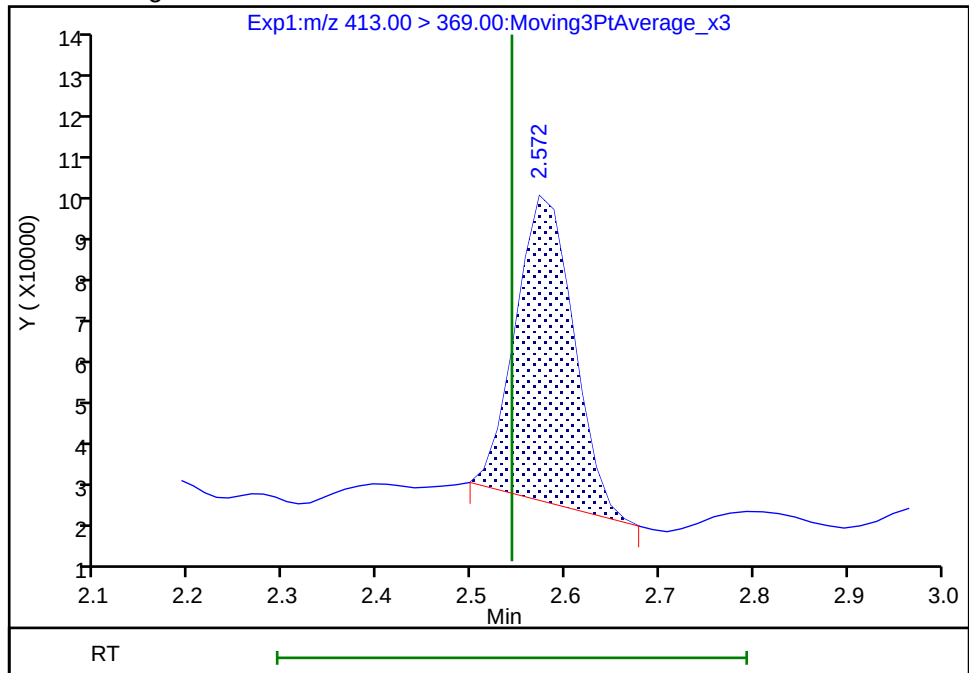
RT: 2.57
Area: 798288
Amount: 0.241485
Amount Units: ng/ml

Processing Integration Results



RT: 2.57
Area: 304980
Amount: 0.092257
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:19:35
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

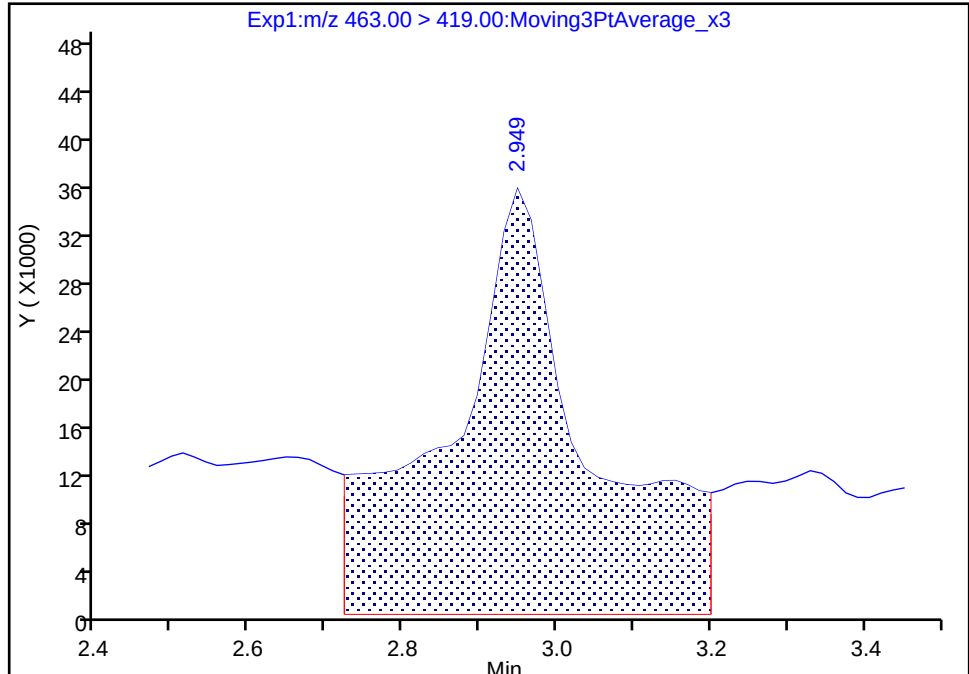
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d				
Injection Date:	09-Nov-2018 08:40:52	Instrument ID:	A9		
Lims ID:	480-144297-F-7-A	Lab Sample ID:	320-144297-7		
Client ID:	EW-10				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

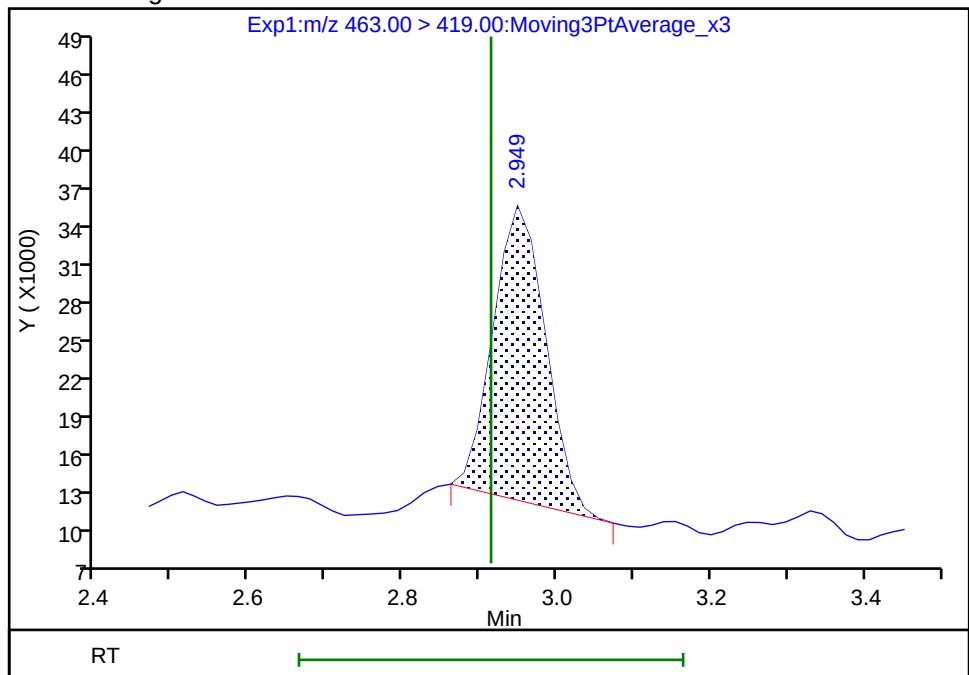
RT: 2.95
Area: 455164
Amount: 0.148897
Amount Units: ng/ml

Processing Integration Results



RT: 2.95
Area: 108097
Amount: 0.035362
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:19:46
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

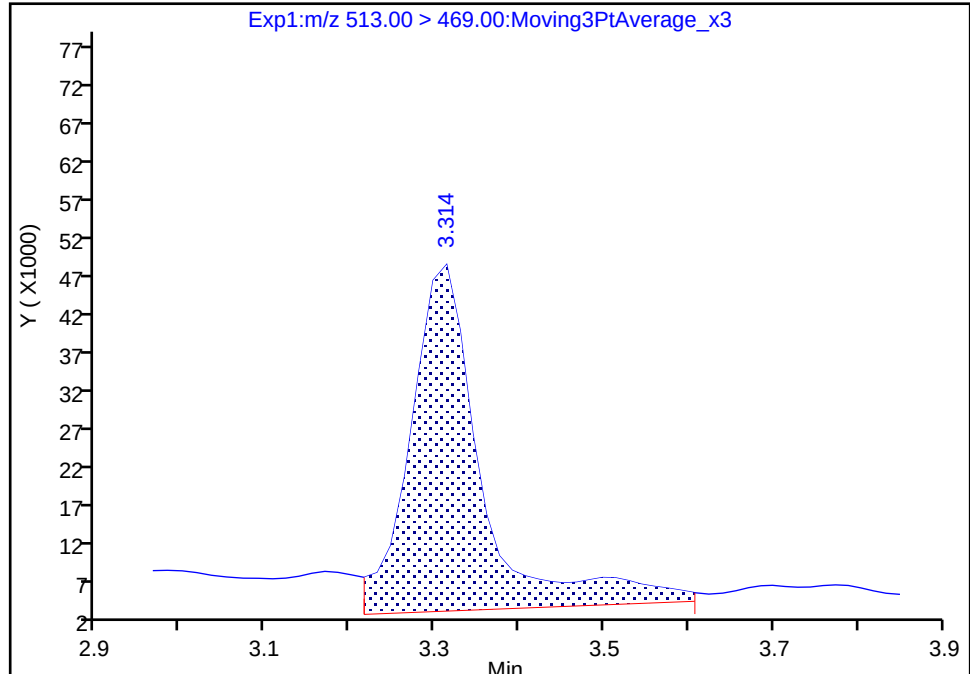
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d				
Injection Date:	09-Nov-2018 08:40:52	Instrument ID:	A9		
Lims ID:	480-144297-F-7-A	Lab Sample ID:	320-144297-7		
Client ID:	EW-10				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

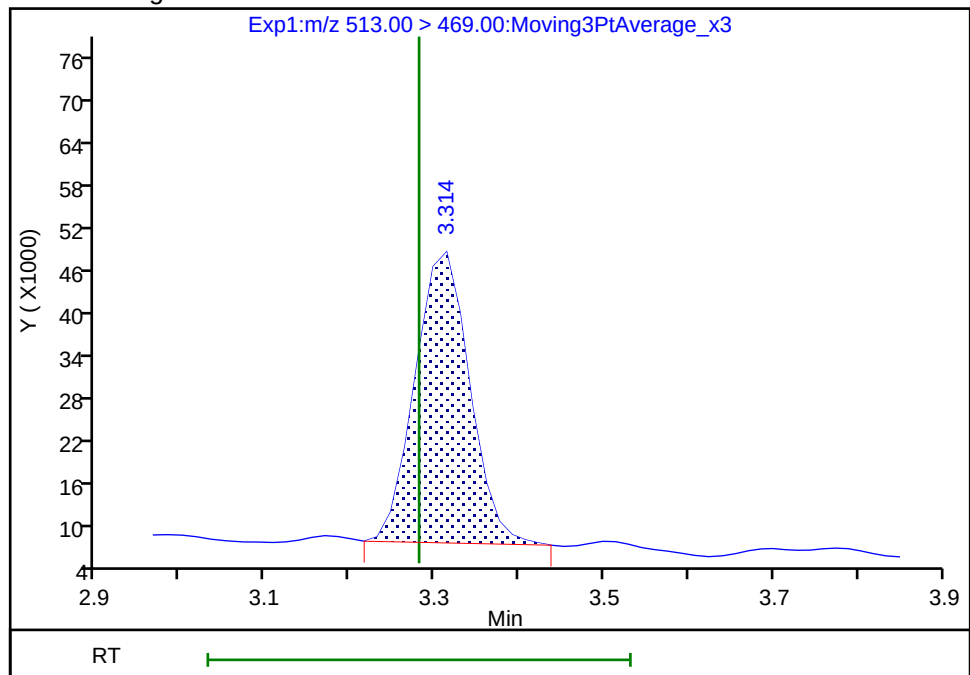
RT: 3.31
Area: 267302
Amount: 0.084736
Amount Units: ng/ml

Processing Integration Results



RT: 3.31
Area: 185413
Amount: 0.058777
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:20:08
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

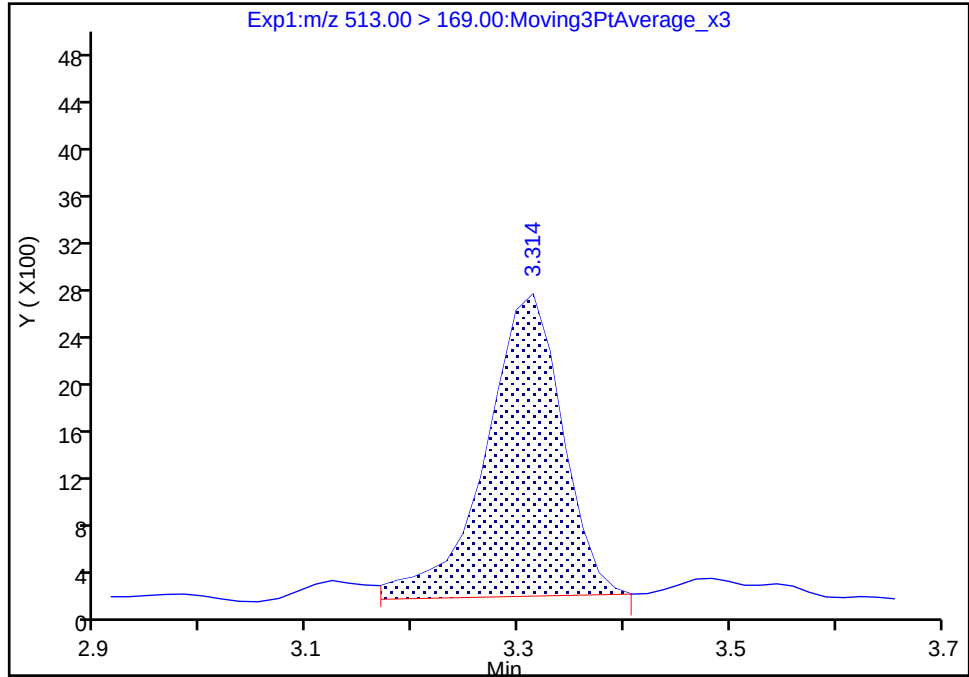
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d
Injection Date: 09-Nov-2018 08:40:52 Instrument ID: A9
Lims ID: 480-144297-F-7-A Lab Sample ID: 320-144297-7
Client ID: EW-10
Operator ID: A9\Administrator ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

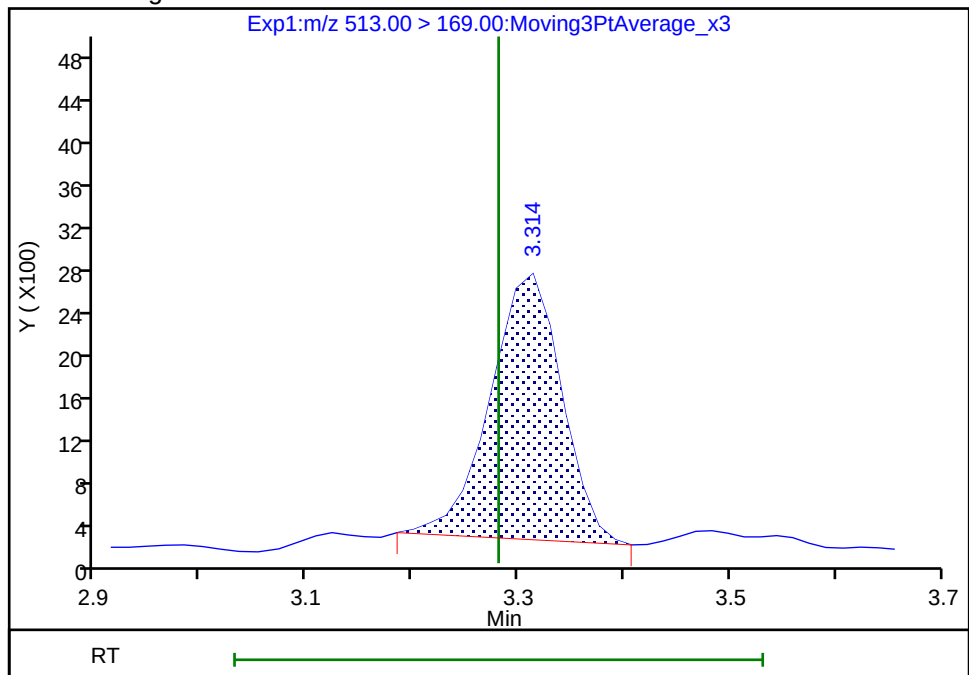
RT: 3.31
Area: 12823
Amount: 0.084736
Amount Units: ng/ml

Processing Integration Results



RT: 3.31
Area: 11660
Amount: 0.058777
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:20:11

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

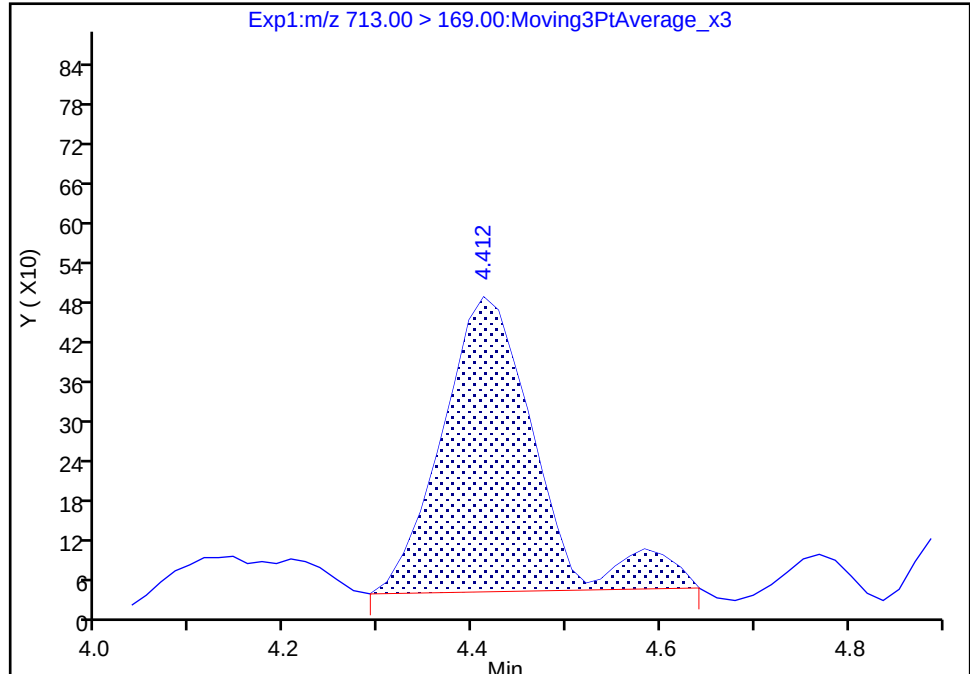
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d				
Injection Date:	09-Nov-2018 08:40:52	Instrument ID:	A9		
Lims ID:	480-144297-F-7-A	Lab Sample ID:	320-144297-7		
Client ID:	EW-10				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

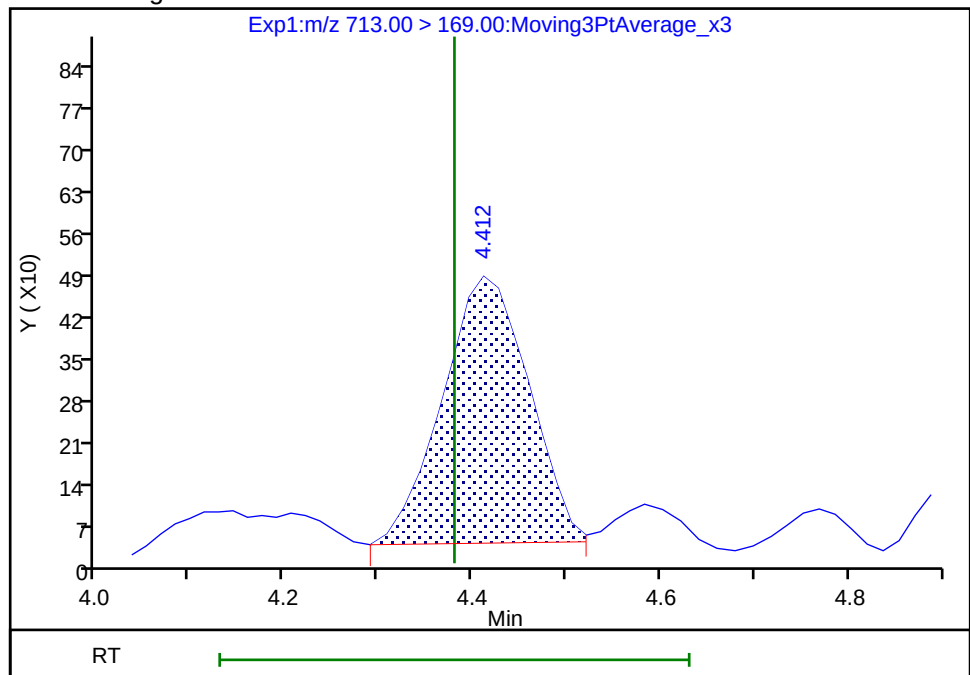
RT: 4.41
Area: 3101
Amount: 0.007607
Amount Units: ng/ml

Processing Integration Results



RT: 4.41
Area: 2850
Amount: 0.006992
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:20:37

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

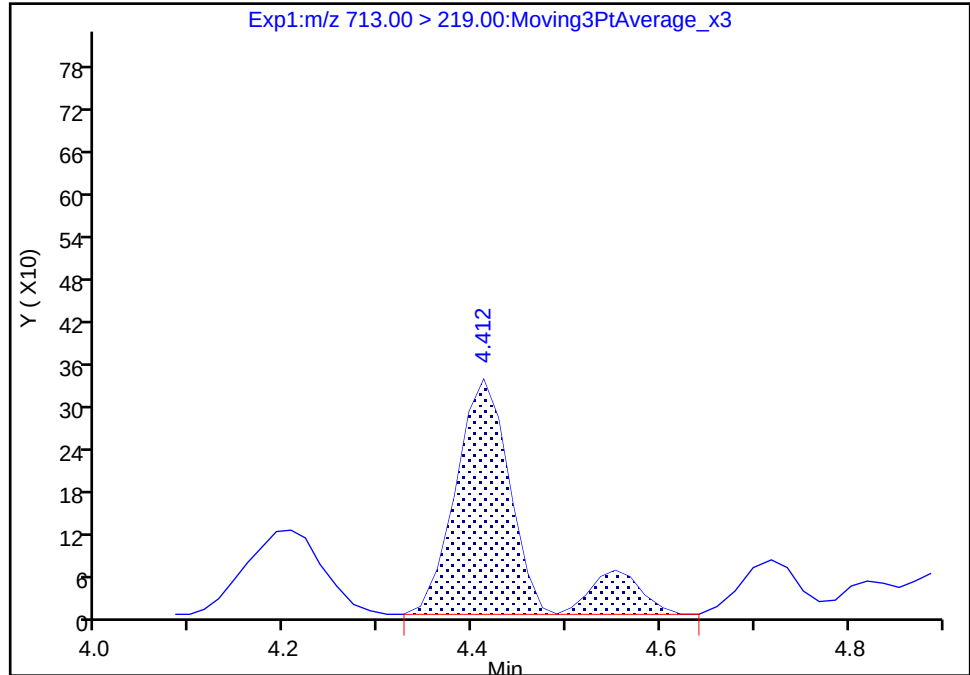
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d
Injection Date: 09-Nov-2018 08:40:52 Instrument ID: A9
Lims ID: 480-144297-F-7-A Lab Sample ID: 320-144297-7
Client ID: EW-10
Operator ID: A9\Administrator ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

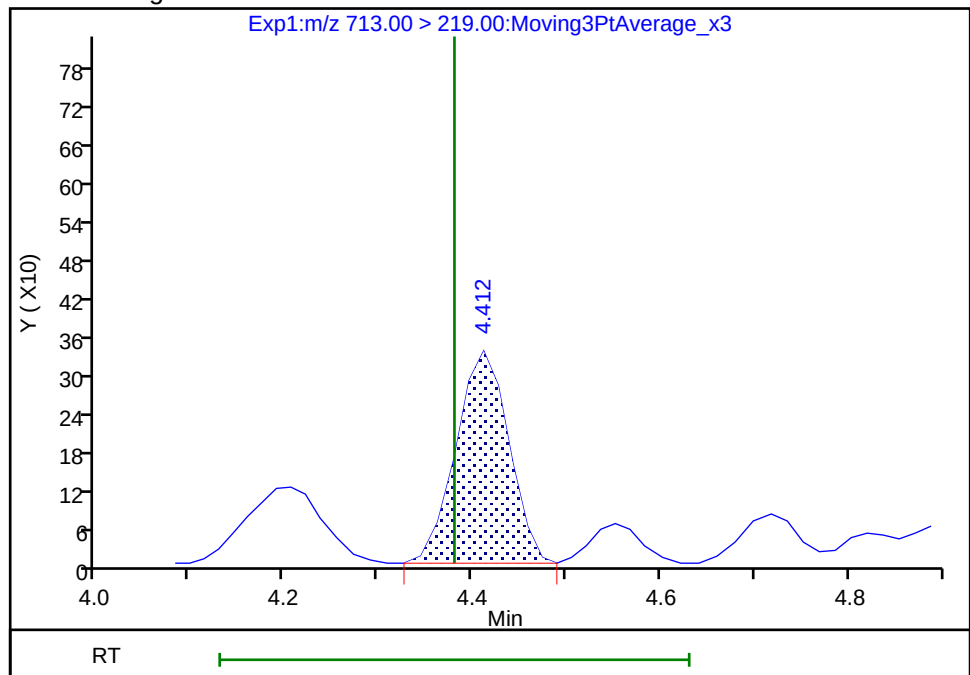
RT: 4.41
Area: 1522
Amount: 0.007607
Amount Units: ng/ml

Processing Integration Results



RT: 4.41
Area: 1292
Amount: 0.006992
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:20:39

Audit Action: Manually Integrated

Audit Reason: Baseline

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TestAmerica Sacramento

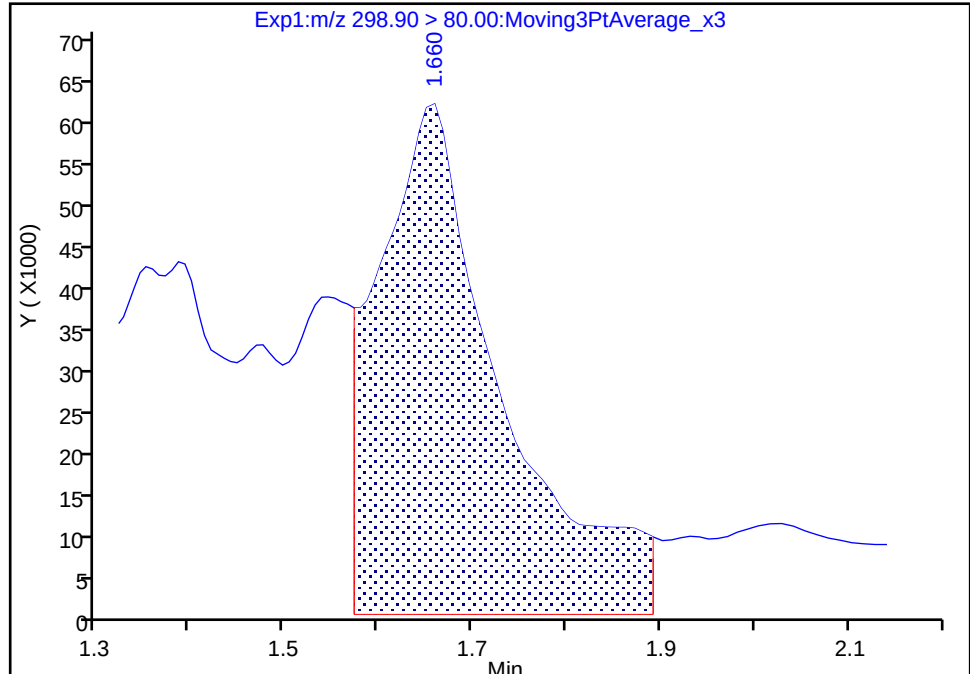
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d				
Injection Date:	09-Nov-2018 08:40:52	Instrument ID:	A9		
Lims ID:	480-144297-F-7-A	Lab Sample ID:	320-144297-7		
Client ID:	EW-10				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

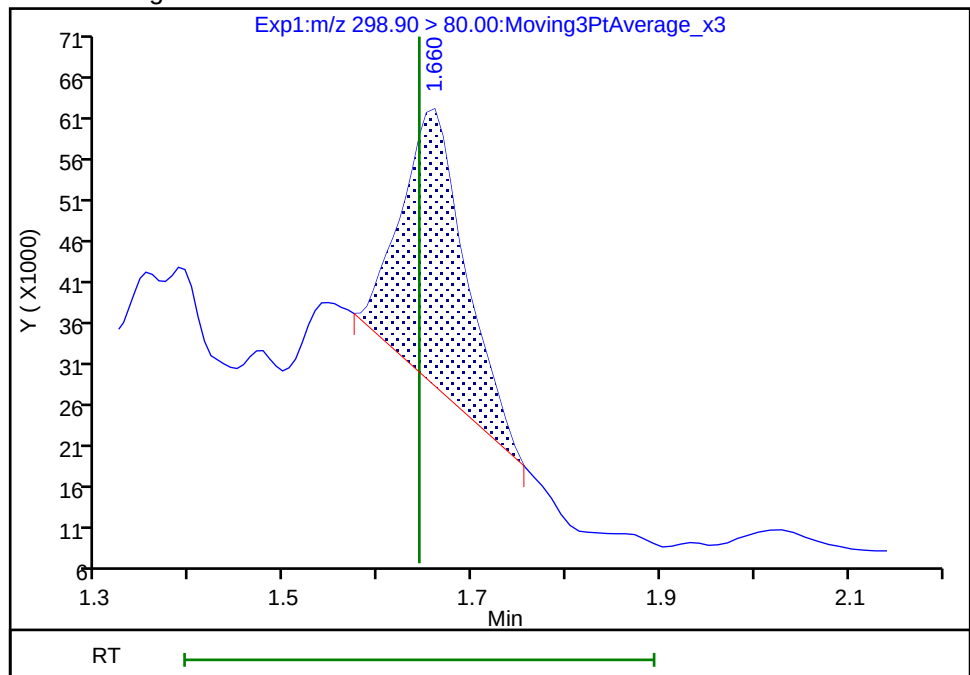
RT: 1.66
Area: 561014
Amount: 0.160395
Amount Units: ng/ml

Processing Integration Results



RT: 1.66
Area: 157098
Amount: 0.044915
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:18:21
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

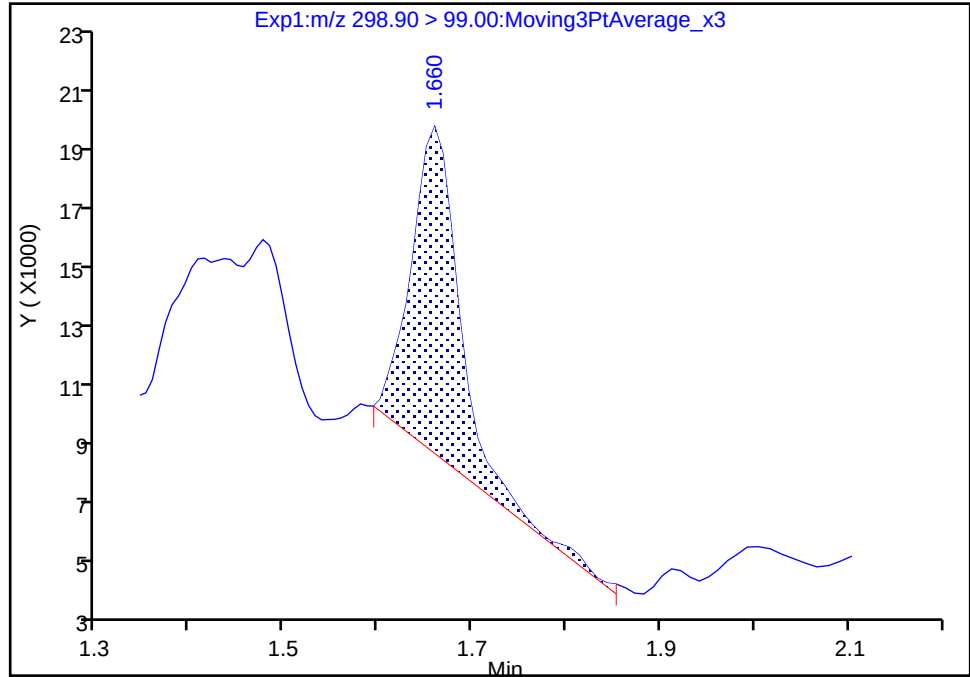
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d
Injection Date: 09-Nov-2018 08:40:52 Instrument ID: A9
Lims ID: 480-144297-F-7-A Lab Sample ID: 320-144297-7
Client ID: EW-10
Operator ID: A9\Administrator ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

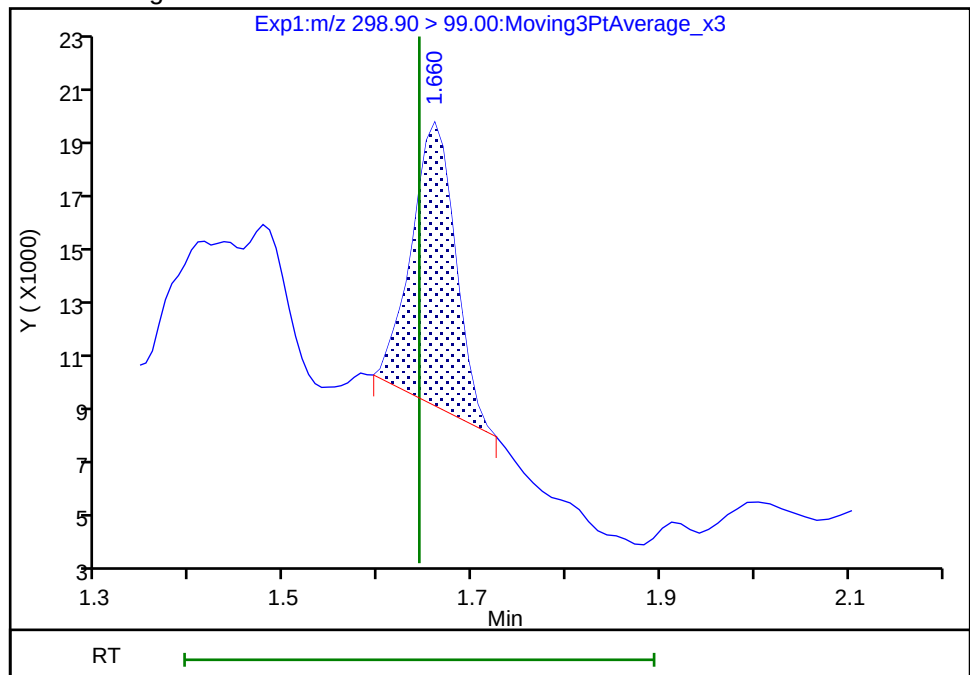
RT: 1.66
Area: 37563
Amount: 0.160395
Amount Units: ng/ml

Processing Integration Results



RT: 1.66
Area: 32243
Amount: 0.044915
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:18:25

Audit Action: Manually Integrated

Audit Reason: Baseline

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TestAmerica Sacramento

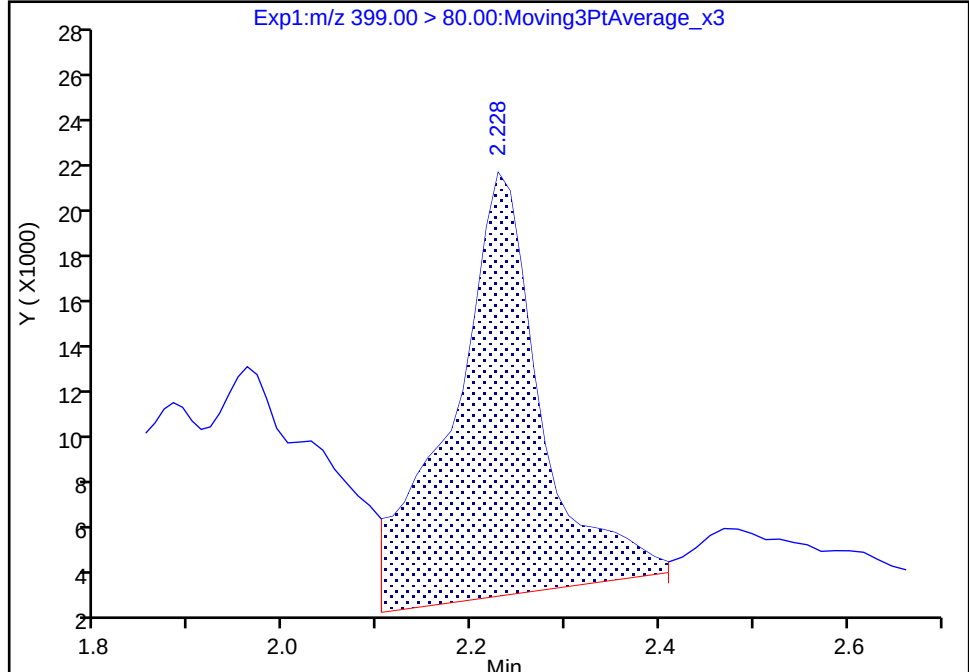
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d				
Injection Date:	09-Nov-2018 08:40:52	Instrument ID:	A9		
Lims ID:	480-144297-F-7-A	Lab Sample ID:	320-144297-7		
Client ID:	EW-10				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

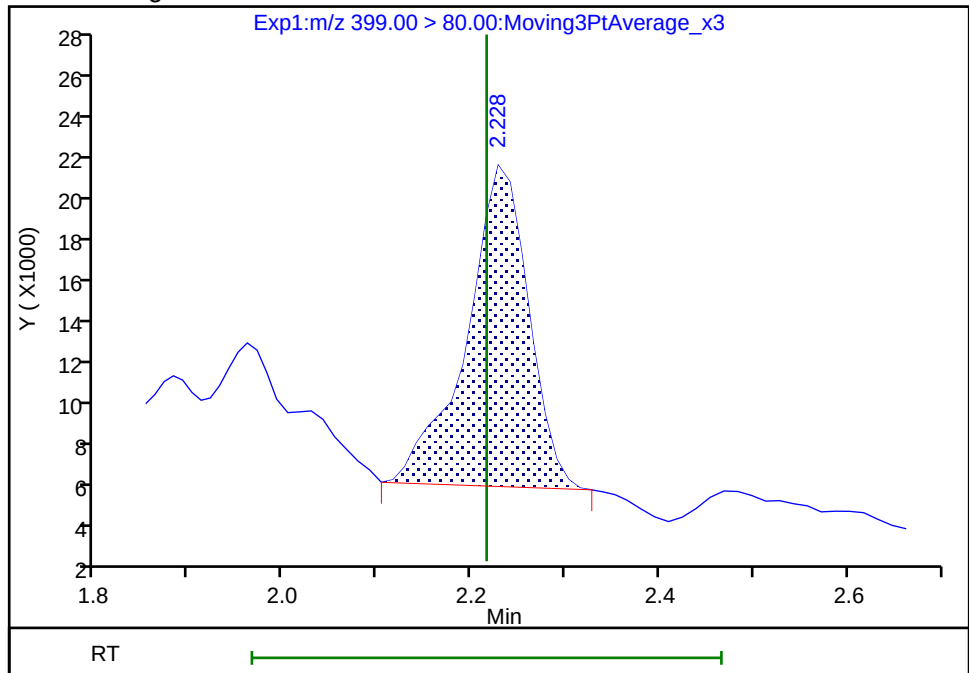
RT: 2.23
Area: 117545
Amount: 0.042215
Amount Units: ng/ml

Processing Integration Results



RT: 2.23
Area: 67915
Amount: 0.024391
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:19:25
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

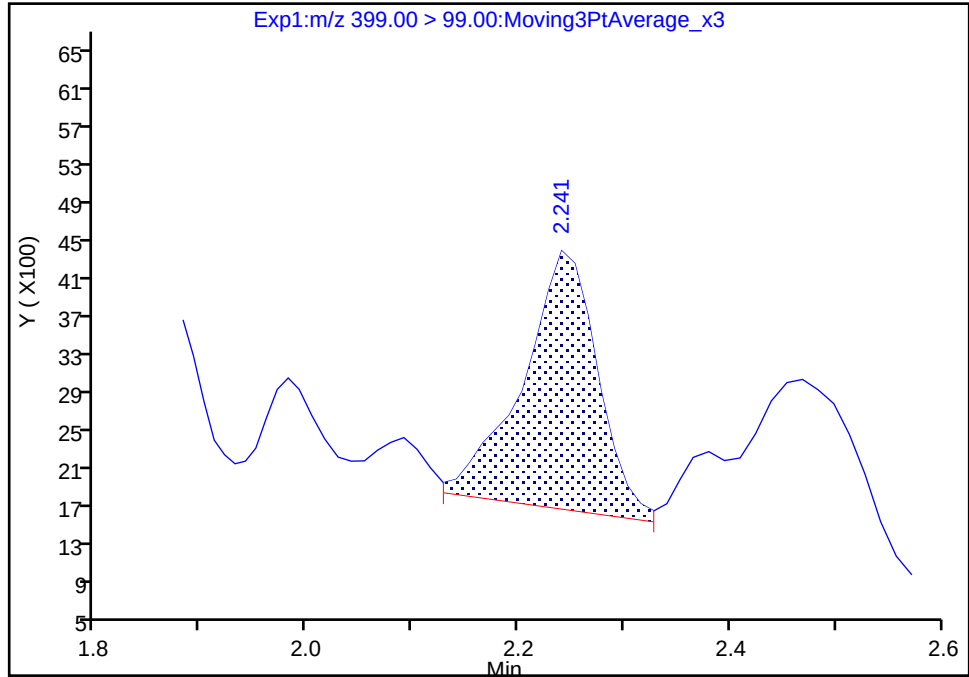
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d
Injection Date: 09-Nov-2018 08:40:52 Instrument ID: A9
Lims ID: 480-144297-F-7-A Lab Sample ID: 320-144297-7
Client ID: EW-10
Operator ID: A9\Administrator ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

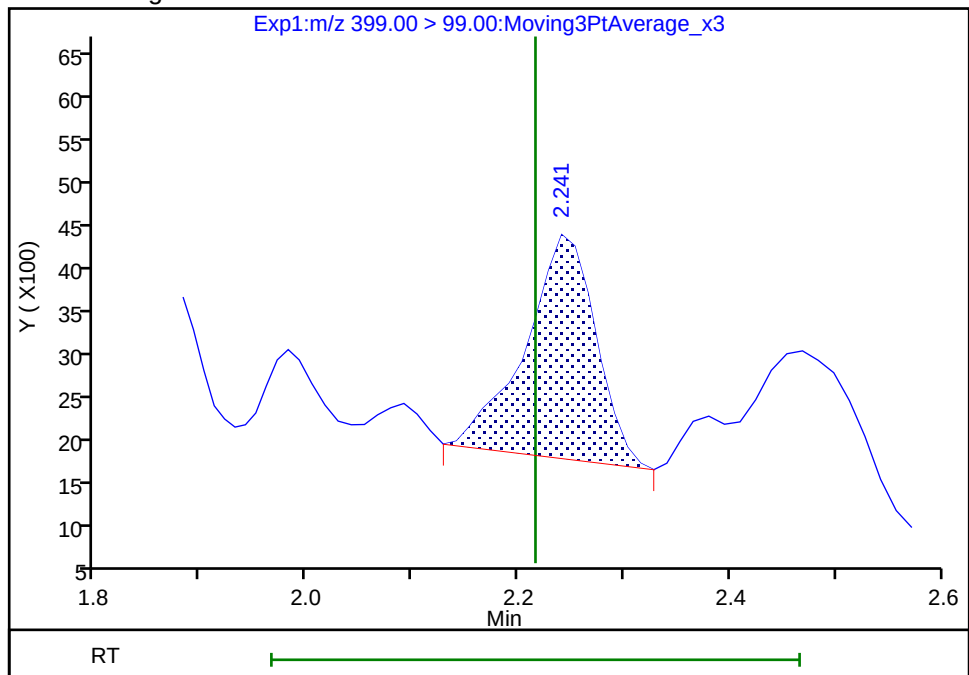
RT: 2.24
Area: 13227
Amount: 0.042215
Amount Units: ng/ml

Processing Integration Results



RT: 2.24
Area: 11925
Amount: 0.024391
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:19:29

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

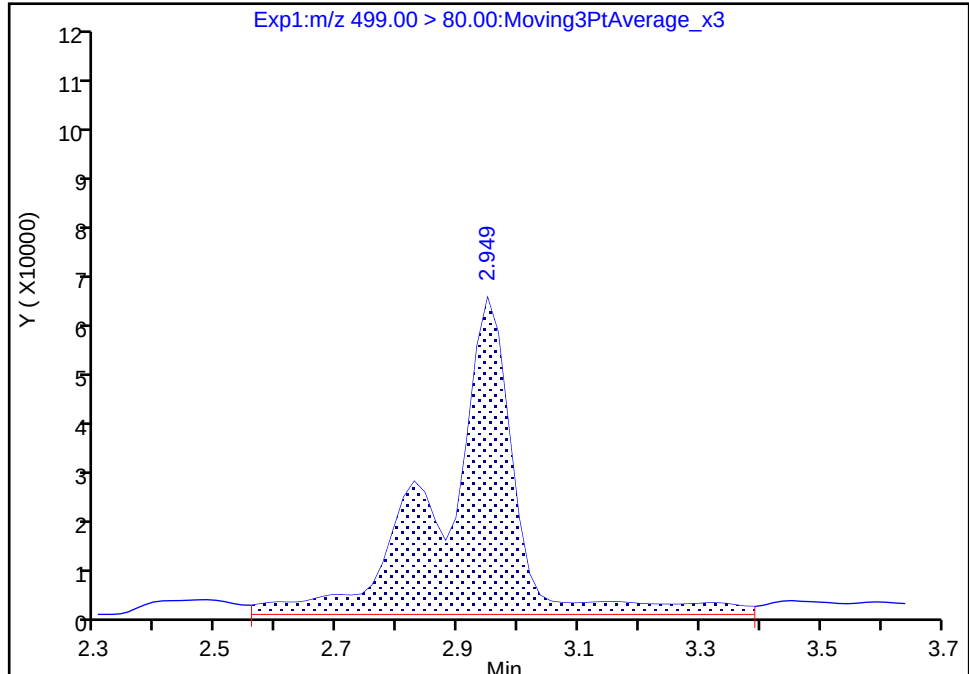
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d				
Injection Date:	09-Nov-2018 08:40:52	Instrument ID:	A9		
Lims ID:	480-144297-F-7-A	Lab Sample ID:	320-144297-7		
Client ID:	EW-10				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

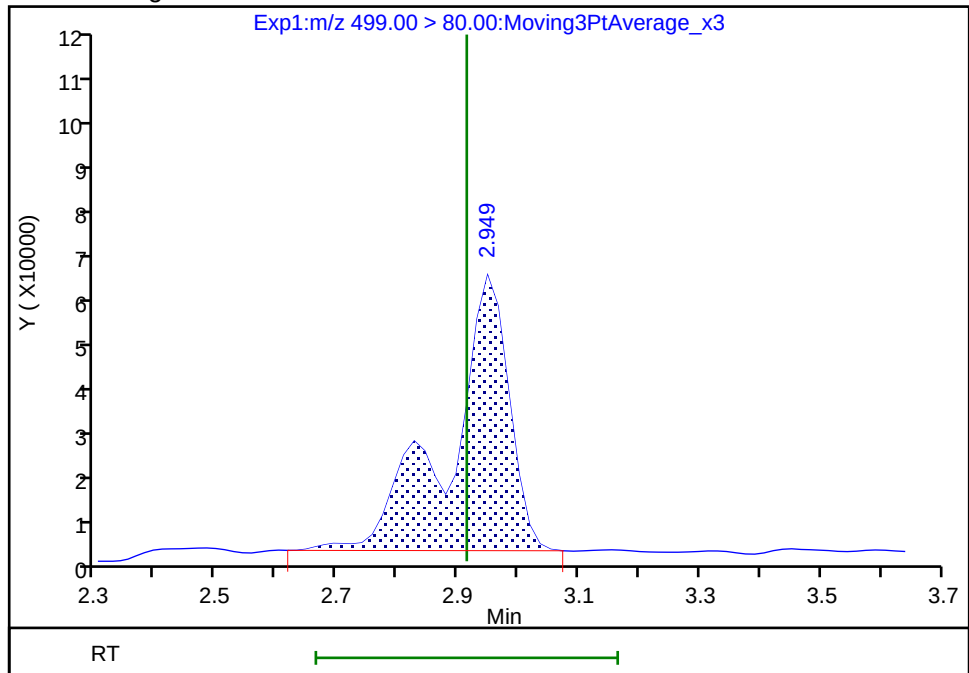
RT: 2.95
Area: 533306
Amount: 0.199425
Amount Units: ng/ml

Processing Integration Results



RT: 2.95
Area: 419820
Amount: 0.156988
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:19:54
Audit Action: Manually Integrated

Audit Reason: Baseline
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11/27/2018

TestAmerica Sacramento

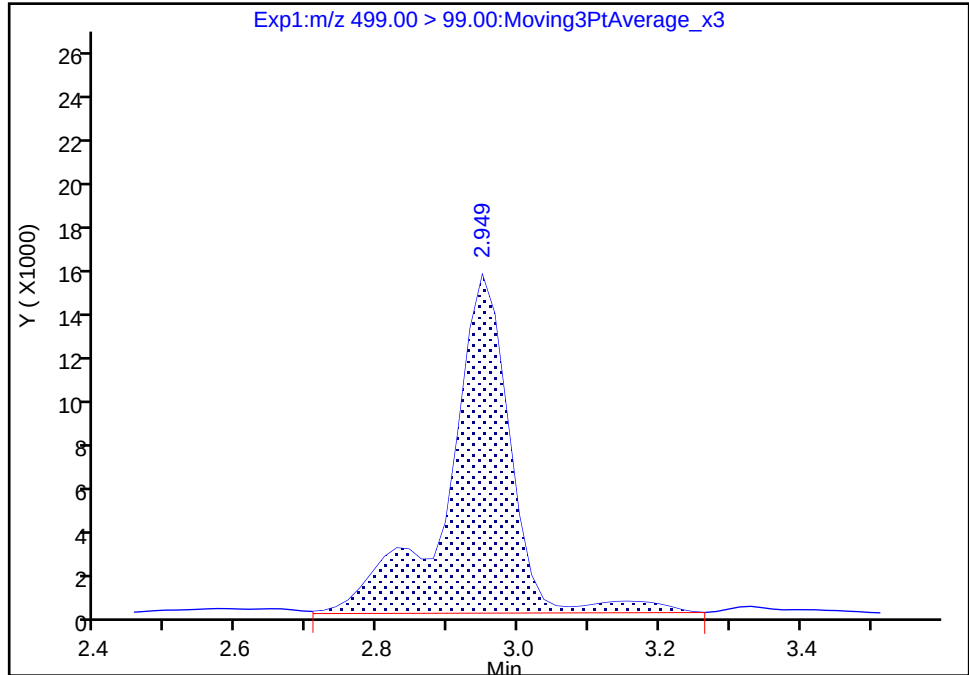
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d
Injection Date: 09-Nov-2018 08:40:52 Instrument ID: A9
Lims ID: 480-144297-F-7-A Lab Sample ID: 320-144297-7
Client ID: EW-10
Operator ID: A9\Administrator ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

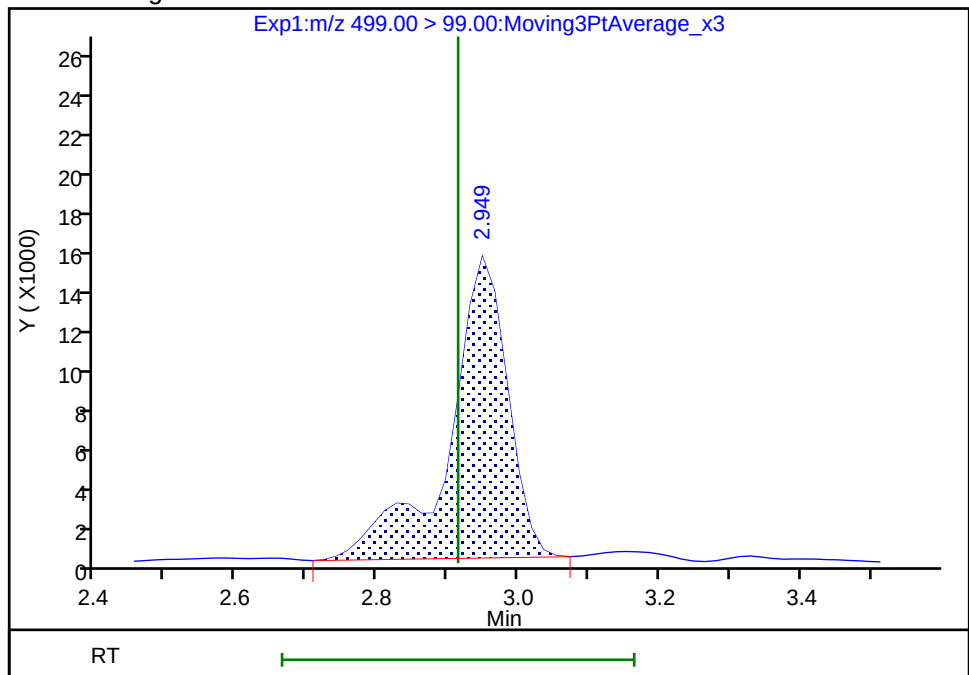
RT: 2.95
Area: 95473
Amount: 0.199425
Amount Units: ng/ml

Processing Integration Results



RT: 2.95
Area: 87719
Amount: 0.156988
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:19:57

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

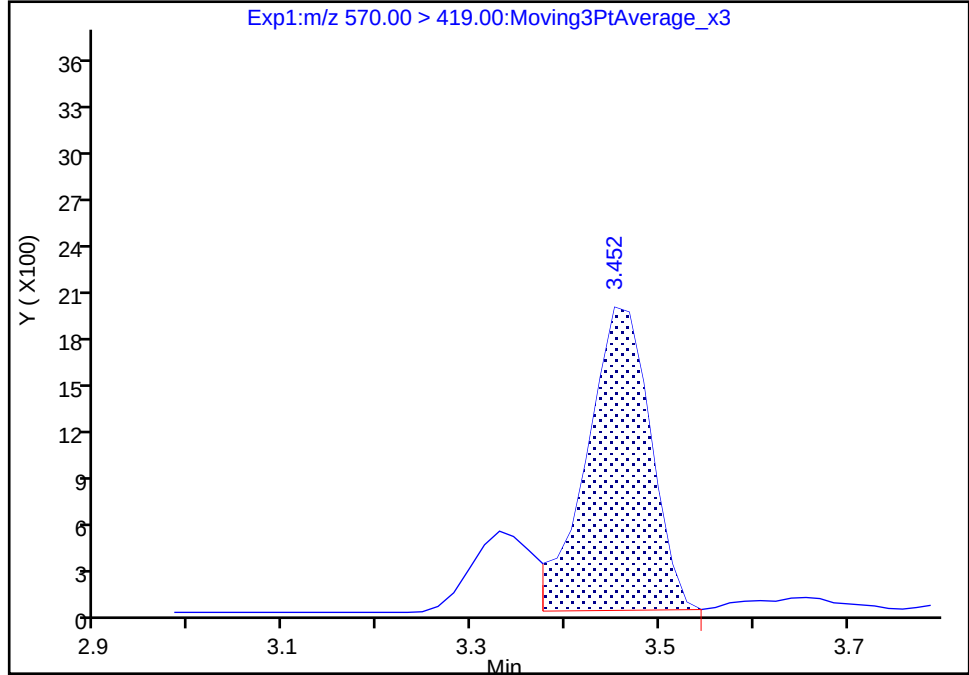
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_013.d
Injection Date: 09-Nov-2018 08:40:52 Instrument ID: A9
Lims ID: 480-144297-F-7-A Lab Sample ID: 320-144297-7
Client ID: EW-10
Operator ID: A9\Administrator ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

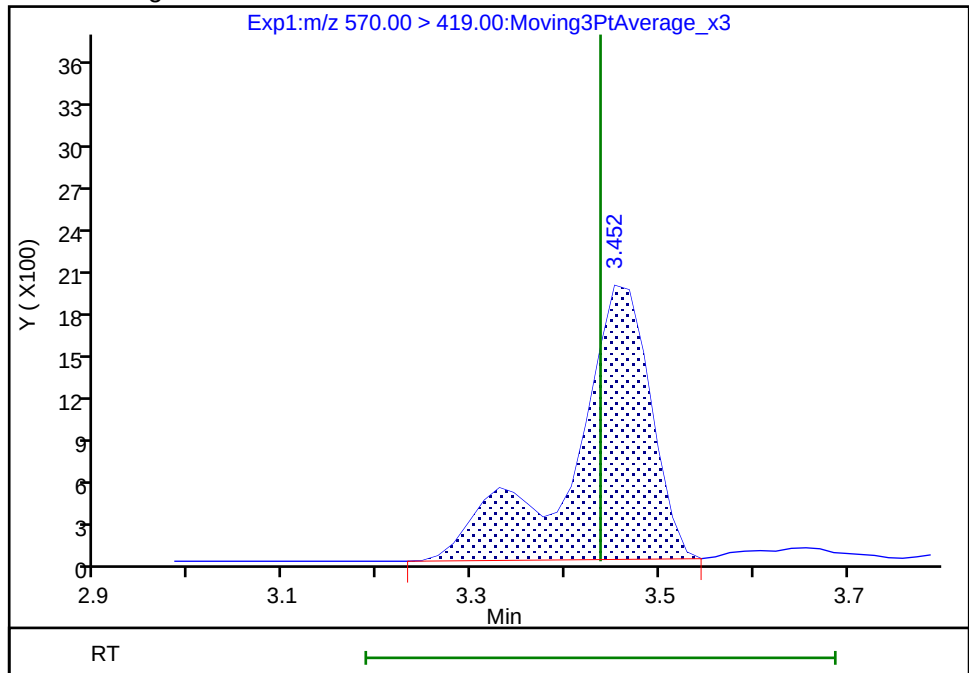
RT: 3.45
Area: 9058
Amount: 0.005760
Amount Units: ng/ml

Processing Integration Results



RT: 3.45
Area: 11322
Amount: 0.007199
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:20:17
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

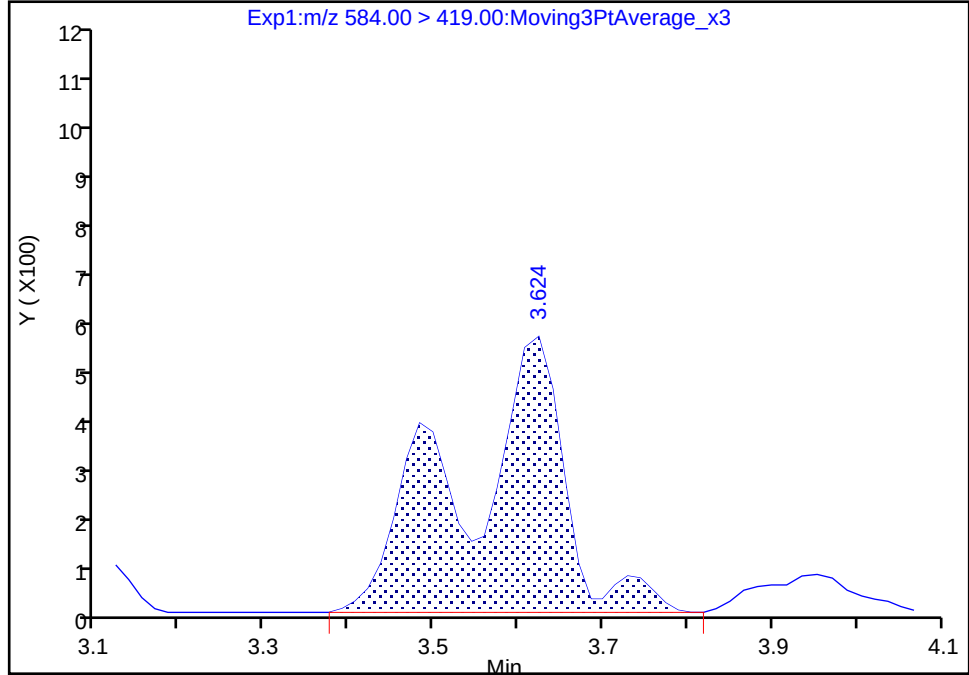
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Injection Date:	09-Nov-2018 08:40:52	Instrument ID:	A9		
Lims ID:	480-144297-F-7-A	Lab Sample ID:	320-144297-7		
Client ID:	EW-10				
Operator ID:	A9\Administrator	ALS Bottle#:	7	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

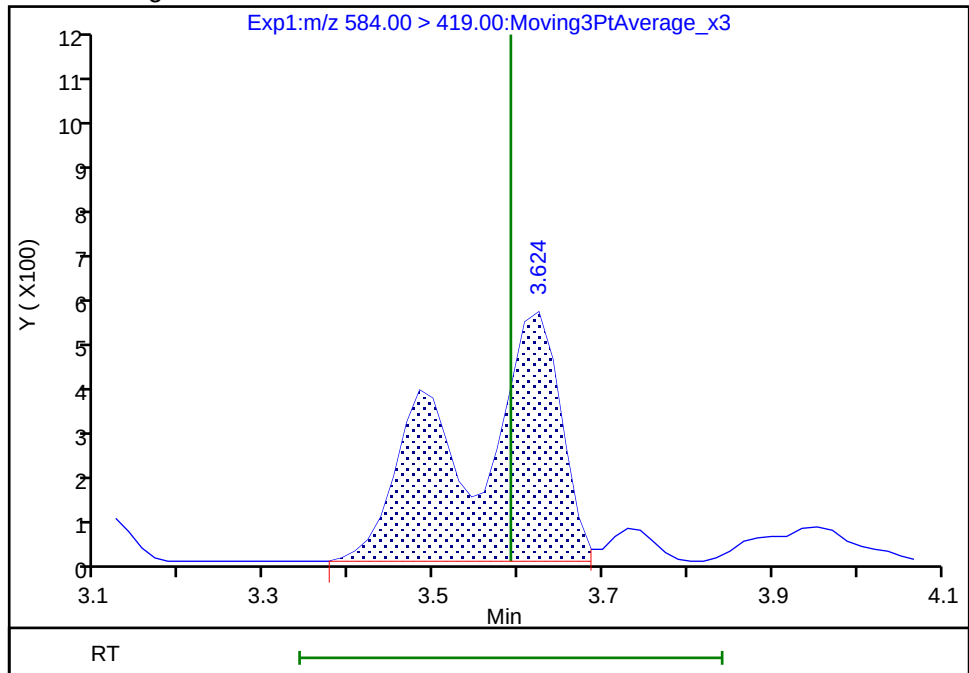
RT: 3.62
Area: 4440
Amount: 0.003645
Amount Units: ng/ml

Processing Integration Results



RT: 3.62
Area: 4184
Amount: 0.003435
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:20:27
Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>EW-10 DL</u>	Lab Sample ID: <u>480-144297-7 DL</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.13LLAAA_028.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 11:55</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>279.1 (mL)</u>	Date Analyzed: <u>11/14/2018 02:06</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>2 (uL)</u>	GC Column: <u>GeminiC18 3x100</u> ID: <u>3 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258999</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
27619-97-2	6:2 FTS	ND		90	9.0
39108-34-4	8:2 FTS	ND		90	9.0

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL02279	M2-6:2 FTS	101		25-150
STL02280	M2-8:2 FTS	89		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_028.d
 Lims ID: 480-144297-F-7-A
 Client ID: EW-10
 Sample Type: Client
 Inject. Date: 14-Nov-2018 02:06:29 ALS Bottle#: 15 Worklist Smp#: 2
 Injection Vol: 2.0 ul Dil. Factor: 5.0000
 Sample Info: 480-144297-f-7-a 5X (#257492)
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 26-Nov-2018 09:37:03 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_011.d
 Column 1 : Det: EXP1
 Process Host: CTX0324

First Level Reviewer: mongkols

Date: 26-Nov-2018 09:37:03

Ratio Calibration: None

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	1.399	1.406	-0.008	0.539	680184	0.4286		85.7	1168	
D 3 13C5 PFPeA										
267.90 > 223.00	1.668	1.670	-0.002	0.643	512842	0.4897		97.9	708	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.668	1.676	-0.008	1.000	21158	0.0184		0.5		M
5 Perfluorobutanesulfonic acid										R
298.90 > 80.00	1.700	1.700	0.0	1.000	17161	0.009706	Target=2.49	1.4		R
298.90 > 99.00	1.700	1.700	0.0	1.000	3702		4.64(1.25-3.74)	0.7		
D 47 13C3 PFBS										
301.90 > 83.00	1.700	1.702	-0.002	0.655	10486	0.4733		102	25.5	
D 7 13C2 PFHxA										
315.00 > 270.00	1.939	1.943	-0.004	0.747	522795	0.4543		90.9	1465	
10 Perfluoroheptanoic acid										R
363.00 > 319.00	2.269	2.236	0.033	1.005	15750	0.0128	Target=2.27	1.4		R
363.00 > 169.00	2.258	2.236	0.022	1.000	3268		4.82(1.13-3.40)	2.4		
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.280	2.258	0.022	1.005	8446	0.005910	Target=3.00	3.6		M
399.00 > 99.00	2.280	2.258	0.022	1.005	2464		3.43(1.50-4.49)	1.8		M
D 9 13C4 PFHpA										
367.00 > 322.00	2.258	2.265	-0.007	0.870	552587	0.5203		104	2091	
D 11 18O2 PFHxS										
403.00 > 84.00	2.269	2.277	-0.007	0.874	592630	0.4559		96.4	2691	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.575	2.561	0.014	1.003	4315	0.0118		6.4		
D 12 M2-6:2 FTS										
429.00 > 81.00	2.568	2.579	-0.011	0.989	109910	0.4775		101	170	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 62 13C2 PFOA										S
415.00 > 370.00	2.595	2.595	0.0		534329	0.5000			1983	
D 14 13C4 PFOA										
417.00 > 372.00	2.595	2.604	-0.009	1.000	531988	0.5112		102	2873	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.595	2.675	-0.080	1.000	25264	0.0209	Target=1.68		2.3	M
413.00 > 169.00	2.601	2.675	-0.074	1.002	10862		2.33(0.84-2.52)		12.8	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	2.967	2.957	0.010	1.000	40803	0.0425	Target=4.62		34.2	M
499.00 > 99.00	2.967	2.957	0.010	1.000	8496		4.80(2.31-6.93)		11.9	M
D 18 13C4 PFOS										
503.00 > 80.00	2.967	2.970	-0.003	1.143	397199	0.4657		97.4	748	
D 19 13C5 PFNA										
468.00 > 423.00	2.967	2.970	-0.003	1.143	417380	0.4823		96.5	3467	
D 21 13C8 FOSA										
506.00 > 78.00	3.311	3.312	-0.001	1.276	501772	0.4200		84.0	1977	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.304	3.313	-0.009	0.998	2513	0.002509			14.0	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.318	3.319	-0.001	1.279	104119	0.4269		89.1	254	
24 Perfluorodecanoic acid										R
513.00 > 469.00	3.325	3.321	0.004	1.000	8504	0.0116	Target=4.73		4.9	R
513.00 > 169.00	3.325	3.321	0.004	1.000	463		18.37(2.36-7.09)		2.3	
D 23 13C2 PFDA										
515.00 > 470.00	3.325	3.326	-0.001	1.281	356576	0.4767		95.3	1844	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.481	3.482	-0.001	1.341	170826	0.4684		93.7	1016	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.652	3.653	-0.001	1.407	194503	0.5004		100	345	
D 30 13C2 PFUnA										
565.00 > 520.00	3.659	3.666	-0.007	1.410	282215	0.4779		95.6	1984	
D 36 13C2 PFDoA										
615.00 > 570.00	3.960	3.960	0.0	1.526	248664	0.3973		79.5	1114	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.458	4.466	-0.008	1.718	307645	0.3953		79.1	1370	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_028.d

Injection Date: 14-Nov-2018 02:06:29

Instrument ID: A8_N

Lims ID: 480-144297-F-7-A

Lab Sample ID: 320-144297-7

Client ID: EW-10

Operator ID: SACINSTLCMS01

ALS Bottle#: 15

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 5.0000

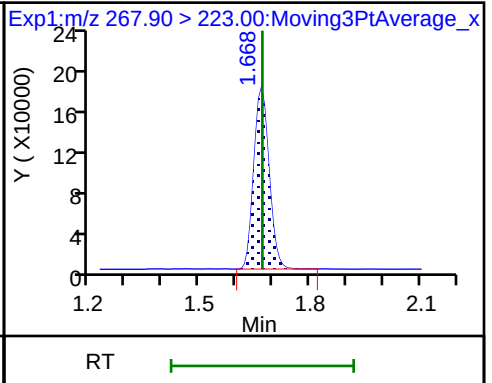
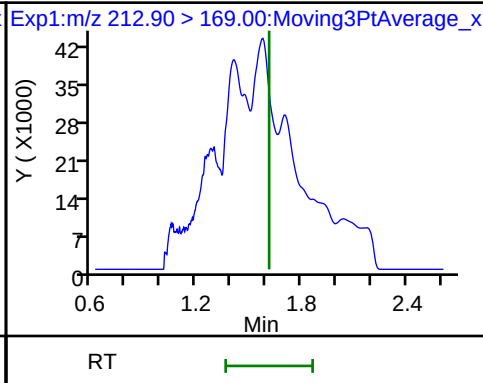
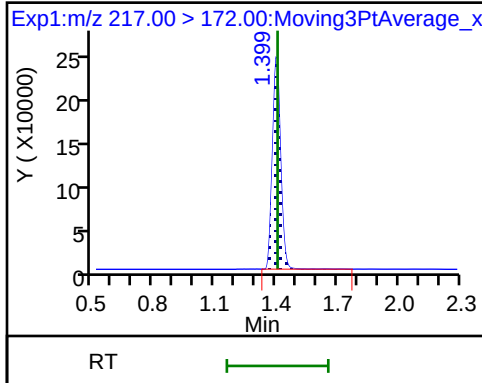
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (ND)

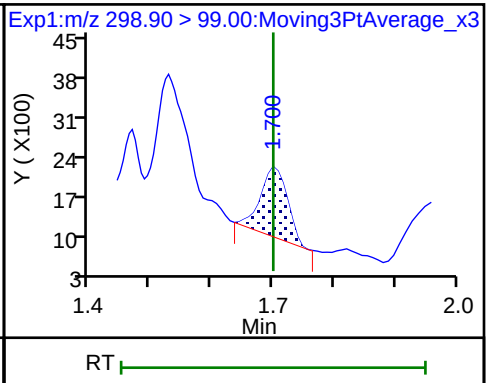
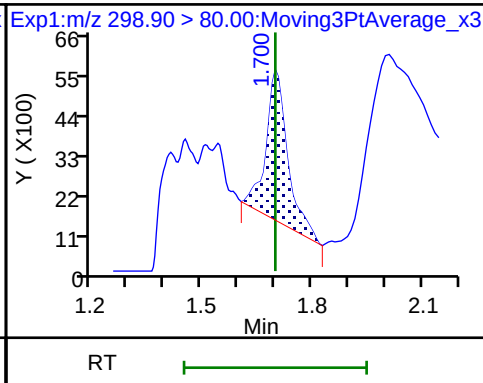
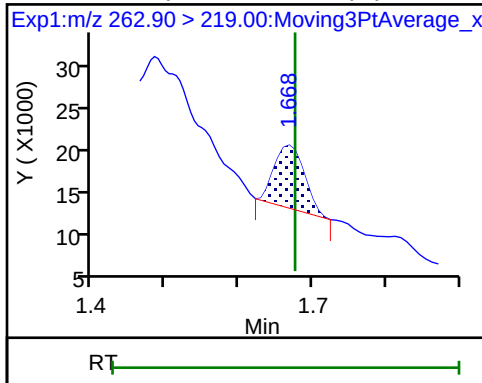
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

5 Perfluorobutanesulfonic acid

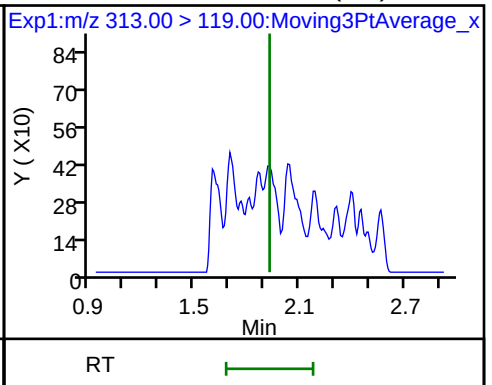
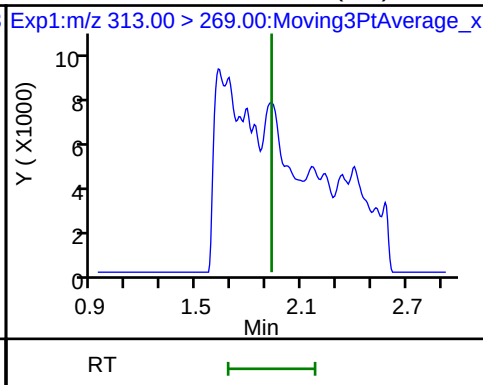
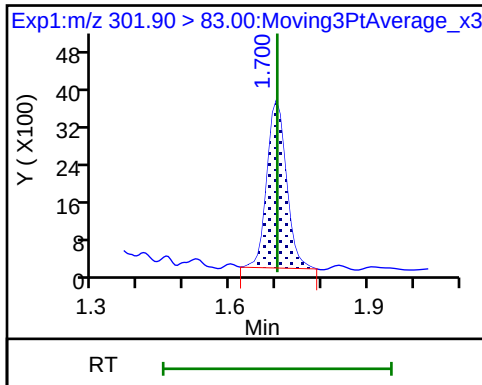
5 Perfluorobutanesulfonic acid



D 47 13C3 PFBS

6 Perfluorohexanoic acid (ND)

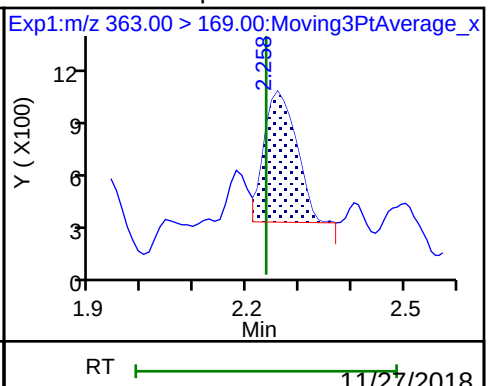
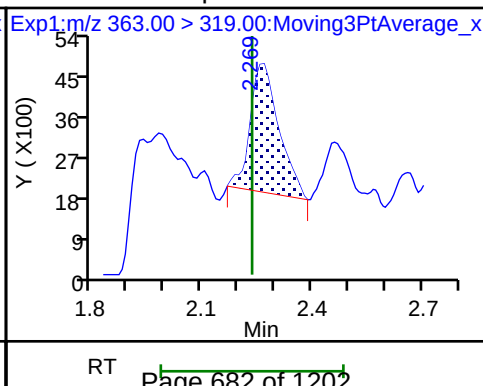
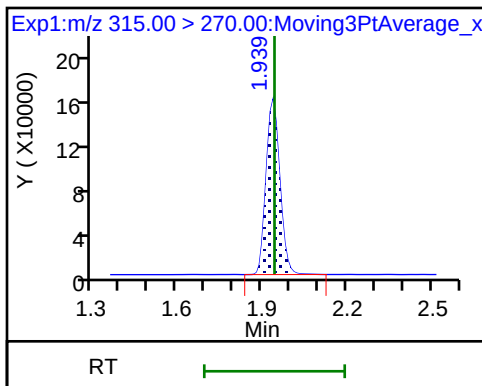
6 Perfluorohexanoic acid (ND)



D 7 13C2 PFHxA

10 Perfluoroheptanoic acid

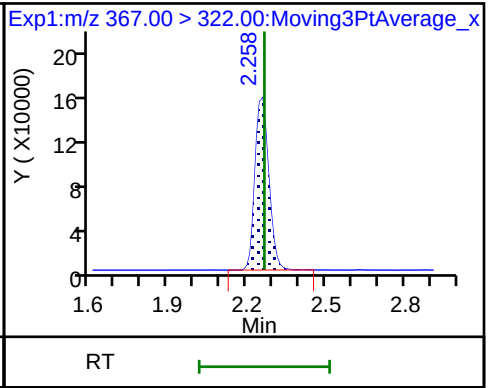
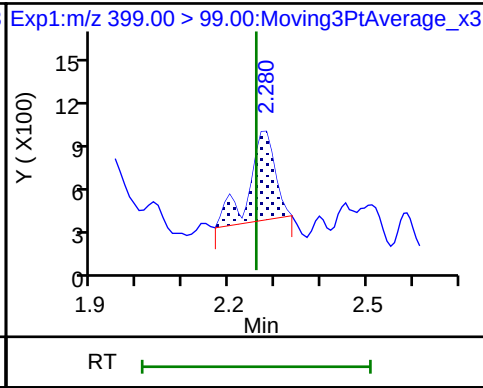
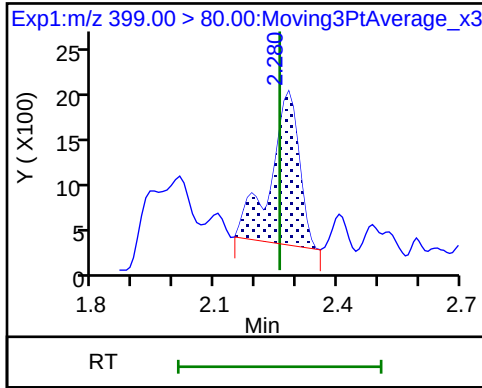
10 Perfluoroheptanoic acid



8 Perfluorohexanesulfonic acid (M)

8 Perfluorohexanesulfonic acid (M)

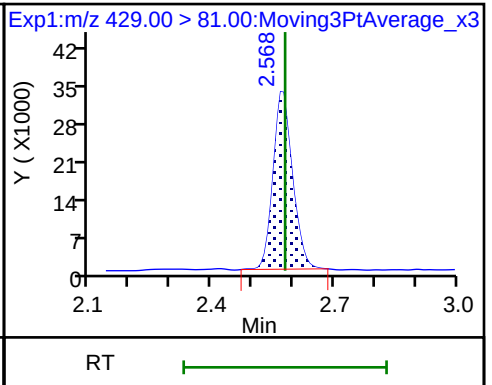
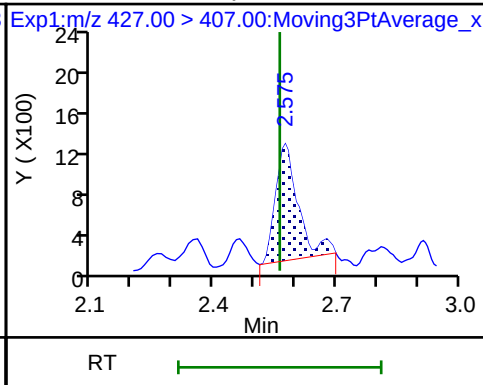
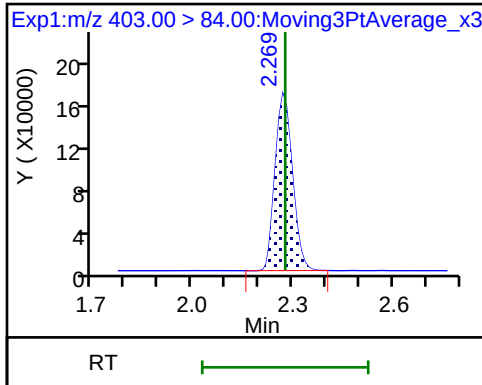
D 9 13C4 PFHpA



D 11 18O2 PFHxS

13 1H,1H,2H,2H-perfluorooctanesulfonD

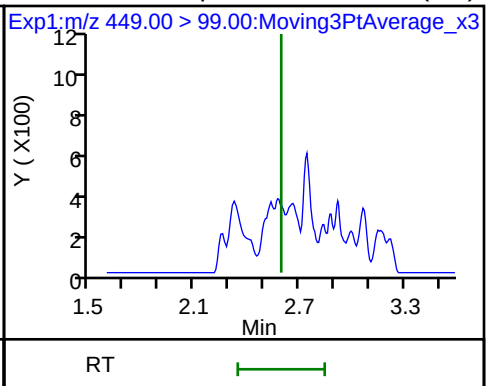
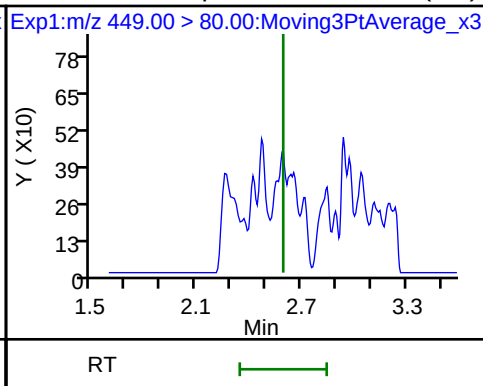
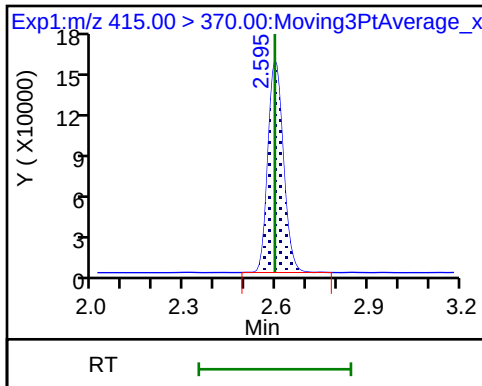
12 M2-6:2 FTS



* 62 13C2 PFOA

16 Perfluoroheptanesulfonic acid (ND)

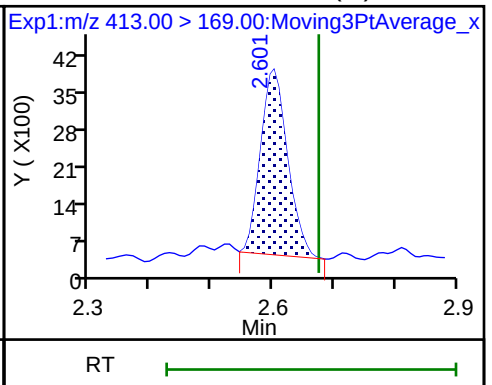
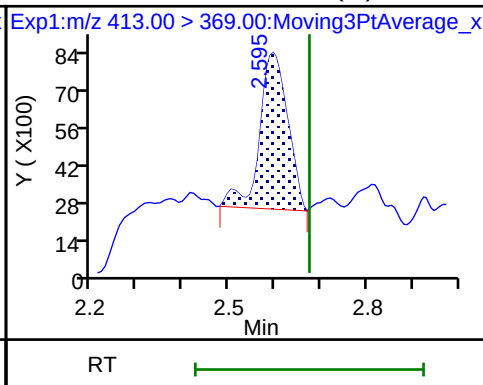
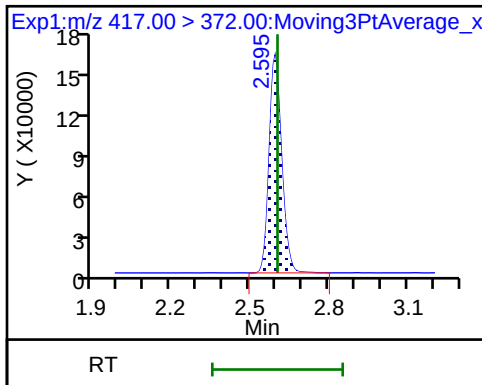
16 Perfluoroheptanesulfonic acid (ND)

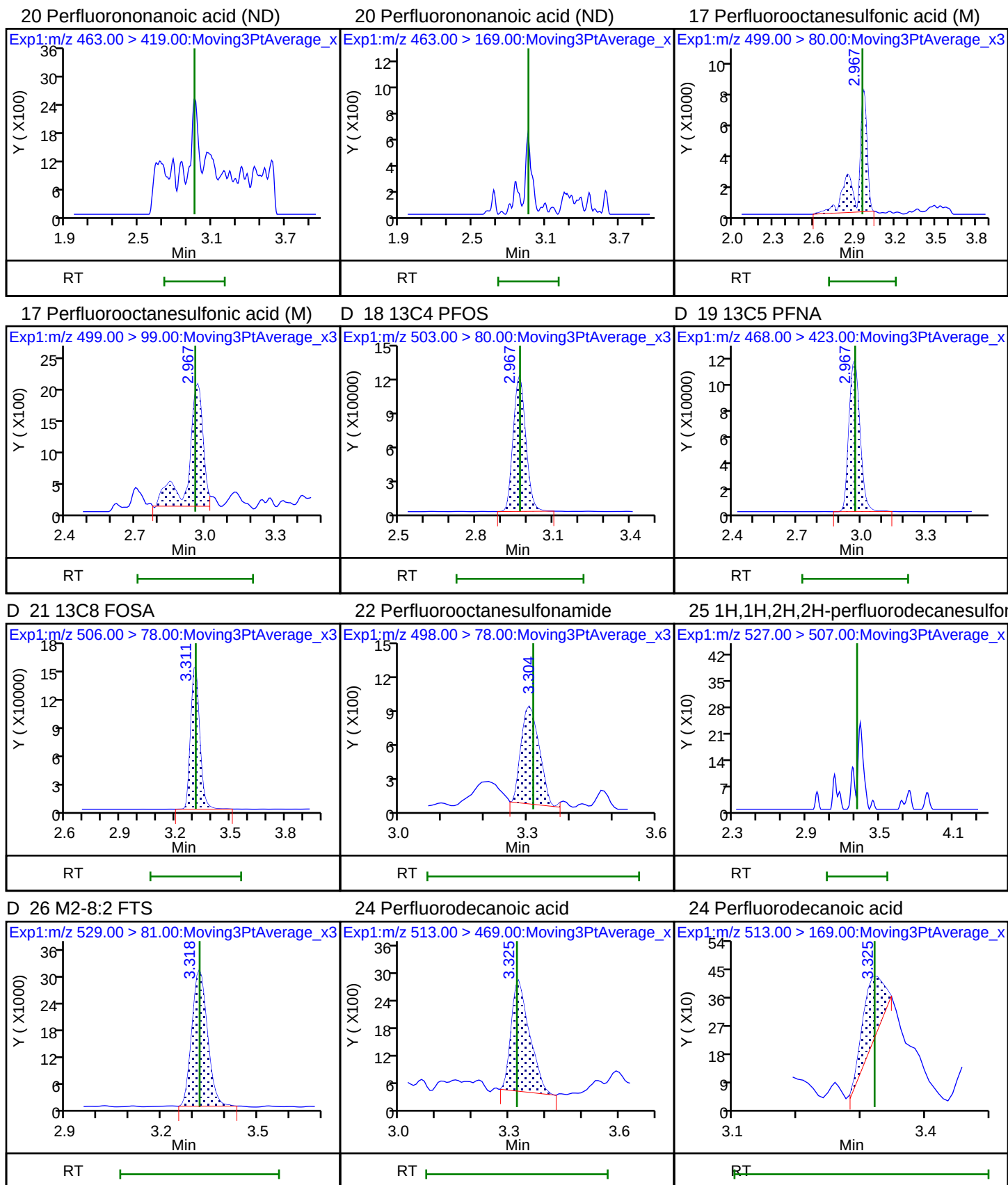


D 14 13C4 PFOA

15 Perfluorooctanoic acid (M)

15 Perfluorooctanoic acid (M)

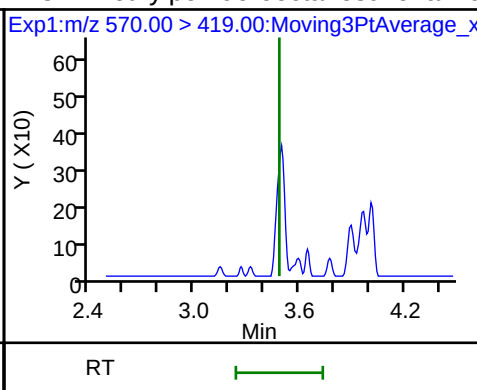
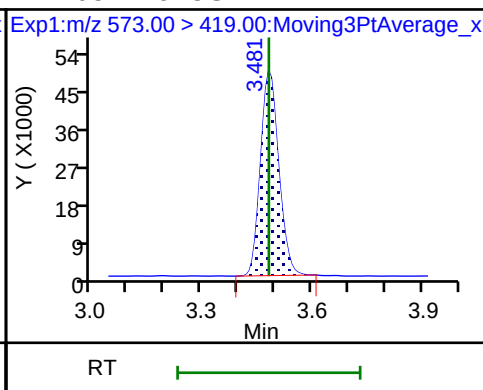
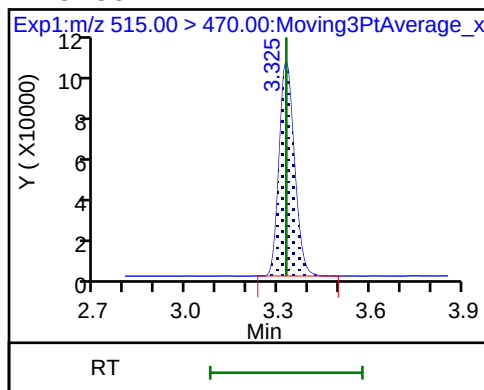




D 23 13C2 PFDA

D 27 d3-NMeFOSAA

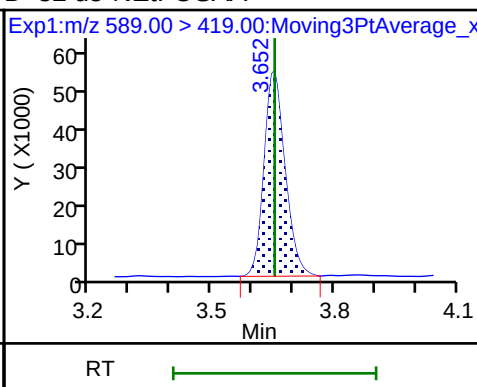
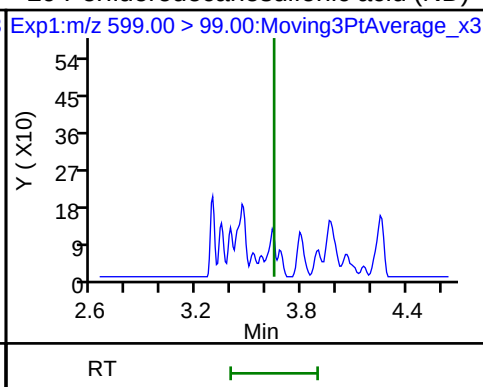
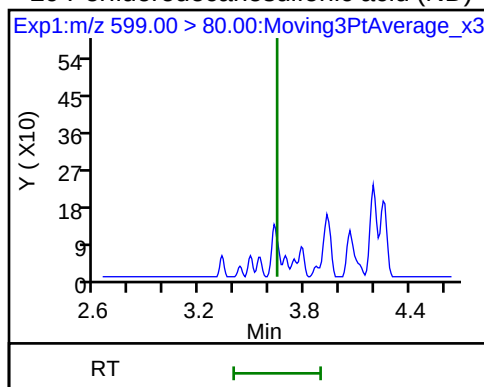
28 N-methylperfluorooctanesulfonamido (ND)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

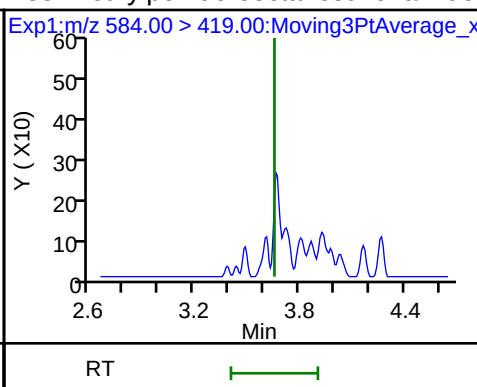
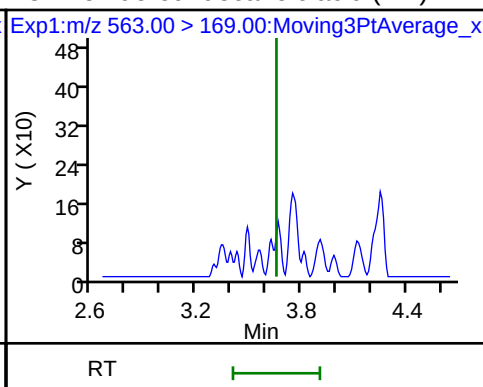
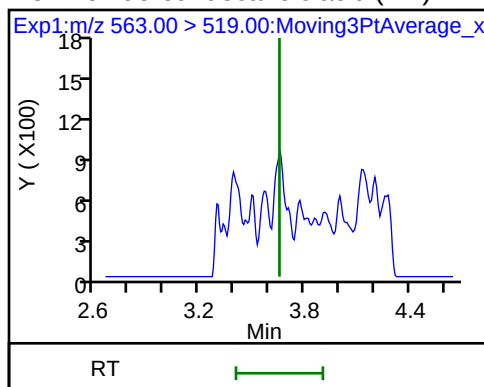
D 32 d5-NEtFOSAA



31 Perfluoroundecanoic acid (ND)

31 Perfluoroundecanoic acid (ND)

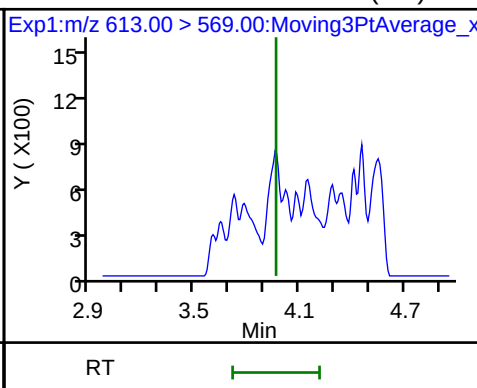
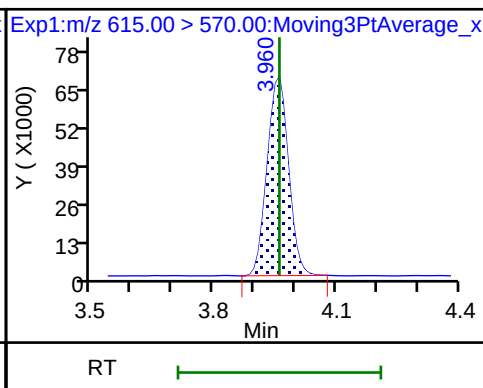
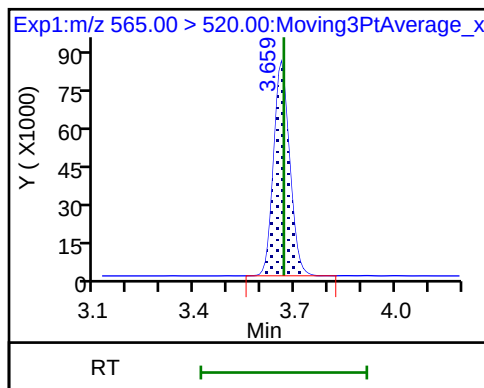
33 N-ethylperfluorooctanesulfonamidoa (ND)



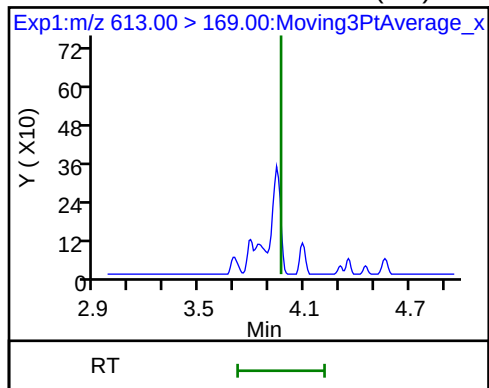
D 30 13C2 PFUnA

D 36 13C2 PFDaA

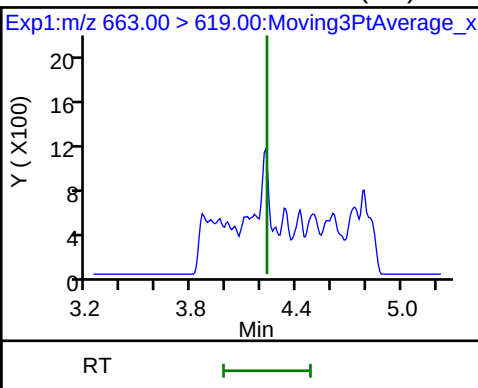
37 Perfluorododecanoic acid (ND)



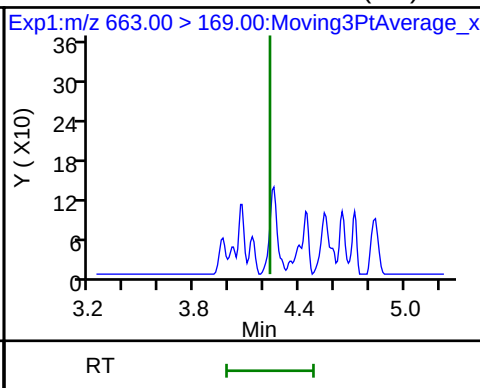
37 Perfluorododecanoic acid (ND)



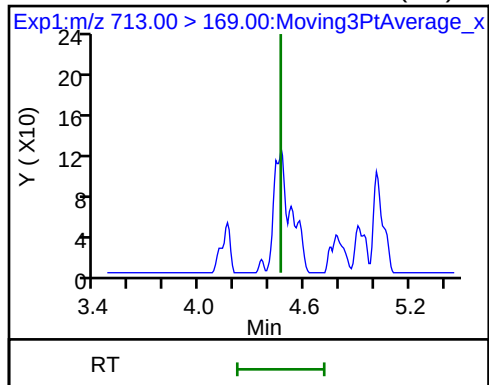
41 Perfluorotridecanoic acid (ND)



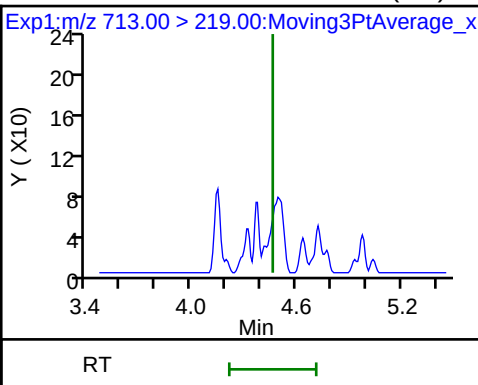
41 Perfluorotridecanoic acid (ND)



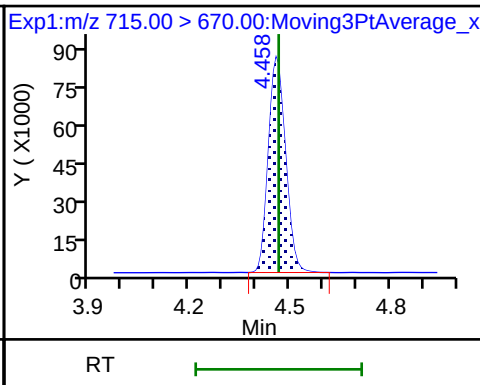
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2 PFTeDA



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>SB-19</u>	Lab Sample ID: <u>480-144297-8</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.13LLAAA_029.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 13:50</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>289.8 (mL)</u>	Date Analyzed: <u>11/14/2018 02:13</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>2 (uL)</u>	GC Column: <u>GeminiC18 3x100 ID: 3 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258999</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.73	J	1.7	0.30
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.94	J	1.7	0.42
307-24-4	Perfluorohexanoic acid (PFHxA)	1.2	J	1.7	0.50
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.60	J	1.7	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	2.9		1.7	0.73
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.95
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.4	J	1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.8	B	1.7	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3.6		1.7	0.47
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6
27619-97-2	6:2 FTS	ND		17	1.7
39108-34-4	8:2 FTS	ND		17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>SB-19</u>	Lab Sample ID: <u>480-144297-8</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.13LLAAA_029.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 13:50</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>289.8 (mL)</u>	Date Analyzed: <u>11/14/2018 02:13</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>2 (uL)</u>	GC Column: <u>GeminiC18 3x100</u> ID: <u>3 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258999</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	66		25-150
STL01893	13C5-PFPeA DNU	91		25-150
STL00993	13C2 PFHxA	97		25-150
STL01892	13C4 PFHpA	100		25-150
STL00990	13C4 PFOA	95		25-150
STL00995	13C5 PFNA	104		25-150
STL00996	13C2 PFDA	99		25-150
STL00997	13C2 PFUnA	97		25-150
STL00998	13C2 PFDoA	94		25-150
STL02116	13C2 PFTeDA	90		25-150
STL02337	13C3 PFBS	91		25-150
STL00994	18O2 PFHxS	96		25-150
STL00991	13C4 PFOS	105		25-150
STL01056	13C8 FOSA	89		25-150
STL02118	d3-NMeFOSAA	95		25-150
STL02117	d5-NEtFOSAA	100		25-150
STL02279	M2-6:2 FTS	99		25-150
STL02280	M2-8:2 FTS	88		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d
 Lims ID: 480-144297-F-8-A
 Client ID: SB-19
 Sample Type: Client
 Inject. Date: 14-Nov-2018 02:13:55 ALS Bottle#: 16 Worklist Smp#: 3
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-144297-f-8-a
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 26-Nov-2018 09:39:43 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_011.d
 Column 1 : Det: EXP1
 Process Host: CTX0324

First Level Reviewer: mongkols

Date: 26-Nov-2018 09:39:43

Ratio Calibration: None

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	1.406	1.406	0.0	0.545	2681480	1.64		65.8	5064	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.594	1.614	-0.020	1.134	21630	0.0213			0.9	M
D 3 13C5 PFPeA										
267.90 > 223.00	1.670	1.670	0.0	0.648	2452918	2.28		91.2	3466	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.662	1.676	-0.014	0.995	30022	0.0273			0.9	M
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.710	1.700	0.010	1.005	65555	0.0404	Target=2.49		7.6	
298.90 > 99.00	1.710	1.700	0.010	1.005	24089		2.72(1.25-3.74)		4.5	
D 47 13C3 PFBS										
301.90 > 83.00	1.702	1.702	0.0	0.660	48114	2.11		90.9	103	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.933	1.928	0.005	1.000	40247	0.0345	Target=10.07		2.9	
313.00 > 119.00	1.933	1.928	0.005	1.000	3800		10.59(5.03-15.10)		4.5	
D 7 13C2 PFHxA										
315.00 > 270.00	1.933	1.943	-0.010	0.749	2872064	2.43		97.2	5994	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.244	2.236	0.008	1.000	21310	0.0175	Target=2.27		2.9	M
363.00 > 169.00	2.244	2.236	0.008	1.000	7771		2.74(1.13-3.40)		7.8	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.255	2.258	-0.003	0.995	74068	0.0508	Target=3.00		38.8	M
399.00 > 99.00	2.266	2.258	0.008	1.000	31207		2.37(1.50-4.49)		20.1	M
D 9 13C4 PFHpA										
367.00 > 322.00	2.244	2.265	-0.021	0.870	2738670	2.51		100	5532	
D 11 18O2 PFHxS										
403.00 > 84.00	2.266	2.277	-0.010	0.878	3021149	2.26		95.7	7986	

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	2.558	2.561	-0.003	1.000	5450	0.0148			11.4	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.558	2.579	-0.021	0.992	553531	2.34		98.6	818	
* 62 13C2 PFOA										S
415.00 > 370.00	2.579	2.595	-0.016		2744565	2.50			3504	
D 14 13C4 PFOA										
417.00 > 372.00	2.579	2.604	-0.025	1.000	2533419	2.37		94.8	4145	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.579	2.675	-0.096	1.000	97204	0.0843	Target=1.68		9.0	M
413.00 > 169.00	2.579	2.675	-0.096	1.000	66786		1.46(0.84-2.52)		52.7	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	2.829	2.957	-0.128	0.959	110793	0.1047	Target=4.62		59.7	M
499.00 > 99.00	2.944	2.957	-0.013	0.998	17152		6.46(2.31-6.93)		23.9	M
D 18 13C4 PFOS										
503.00 > 80.00	2.950	2.970	-0.020	1.144	2189744	2.50		105	3678	
D 19 13C5 PFNA										
468.00 > 423.00	2.944	2.970	-0.026	1.141	2318890	2.61		104	5493	
D 21 13C8 FOSA										
506.00 > 78.00	3.291	3.312	-0.021	1.276	2741767	2.23		89.4	4535	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.298	3.313	-0.015	1.002	3844	0.003511			31.4	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.298	3.319	-0.021	1.279	525538	2.10		87.6	1100	
D 23 13C2 PFDA										
515.00 > 470.00	3.305	3.326	-0.021	1.281	1902364	2.48		99.0	4787	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.468	3.482	-0.014	1.344	887549	2.37		94.8	2442	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.634	3.653	-0.019	1.409	995568	2.49		99.7	1511	
31 Perfluoroundecanoic acid										R
563.00 > 519.00	3.641	3.656	-0.015	0.998	6552	0.0123	Target=4.24		4.8	R
563.00 > 169.00	3.641	3.656	-0.015	0.998	938		6.99(2.12-6.36)		7.1	
D 30 13C2 PFUnA										
565.00 > 520.00	3.648	3.666	-0.018	1.414	1478056	2.44		97.5	3072	
D 36 13C2 PFDaA										
615.00 > 570.00	3.951	3.960	-0.009	1.532	1506664	2.34		93.7	5075	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.208	4.230	-0.022	1.065	2703	0.004266	Target=2.51		2.0	
663.00 > 169.00	4.208	4.230	-0.022	1.065	1371		1.97(1.25-3.76)		9.9	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.452	4.466	-0.014	1.726	1801749	2.25		90.1	5528	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d

Injection Date: 14-Nov-2018 02:13:55

Instrument ID: A8_N

Lims ID: 480-144297-F-8-A

Lab Sample ID: 320-144297-8

Client ID: SB-19

Operator ID: SACINSTLCMS01

ALS Bottle#: 16

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

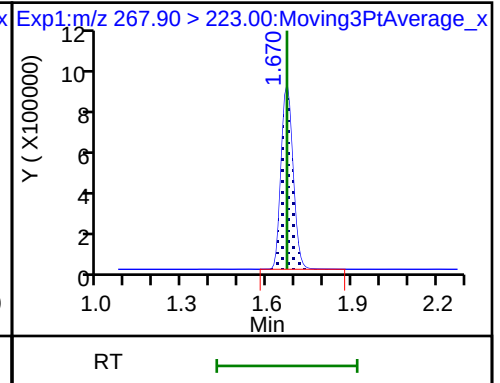
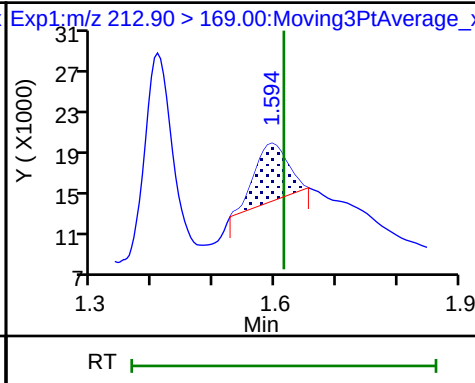
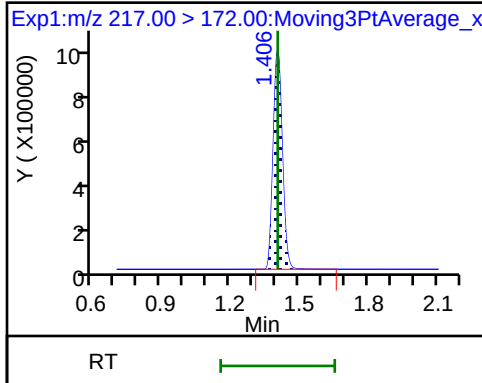
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

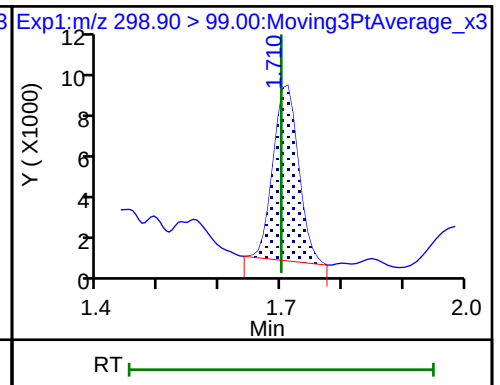
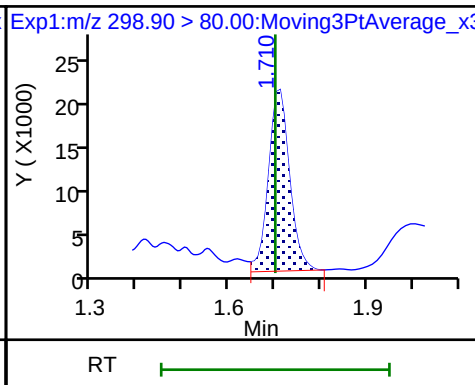
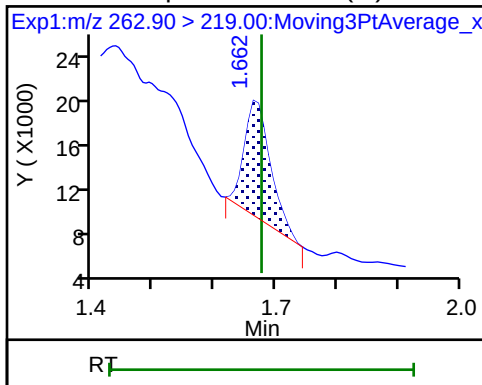
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

5 Perfluorobutanesulfonic acid

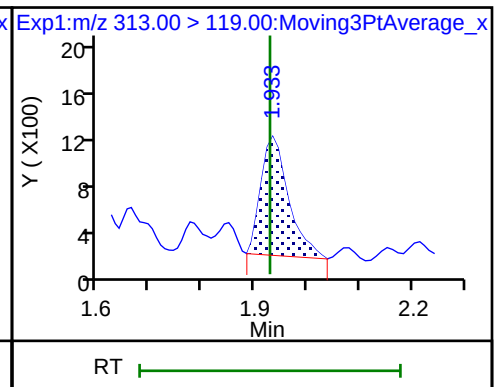
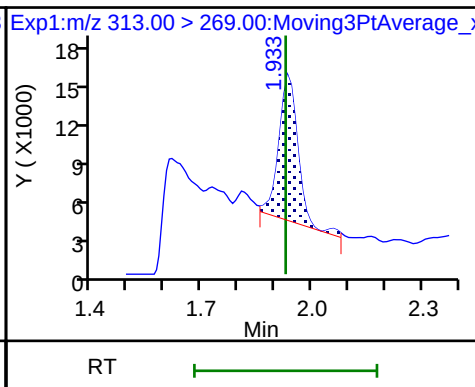
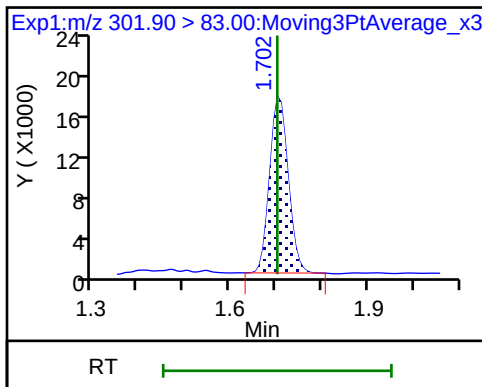
5 Perfluorobutanesulfonic acid



D 47 13C3 PFBS

6 Perfluorohexanoic acid

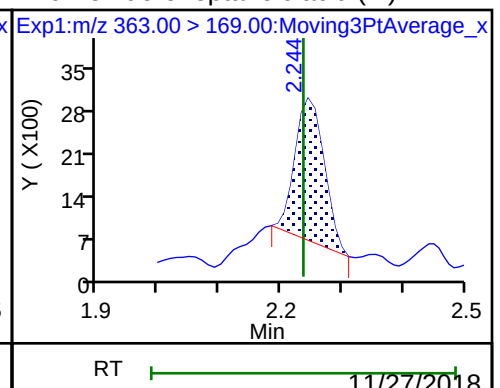
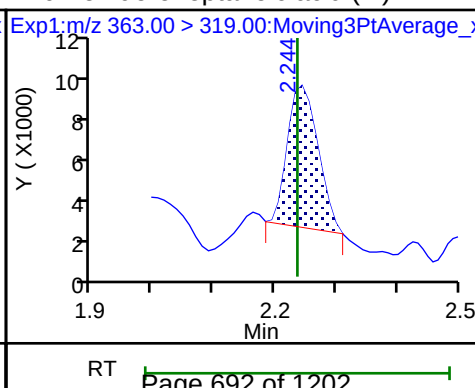
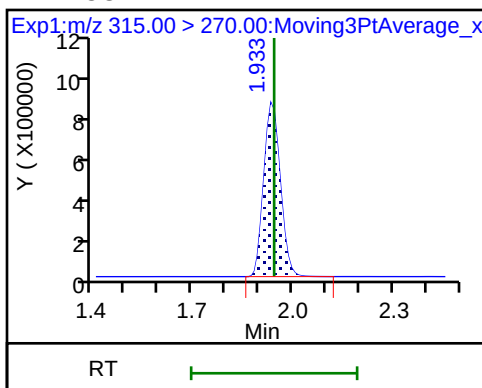
6 Perfluorohexanoic acid



D 7 13C2 PFHxA

10 Perfluoroheptanoic acid (M)

10 Perfluoroheptanoic acid (M)

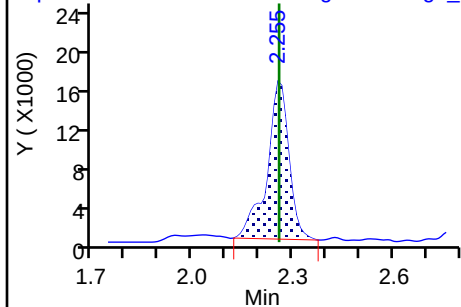


8 Perfluorohexanesulfonic acid (M)

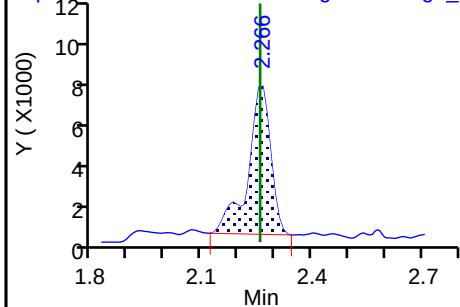
8 Perfluorohexanesulfonic acid (M)

D 9 13C4 PFHpA

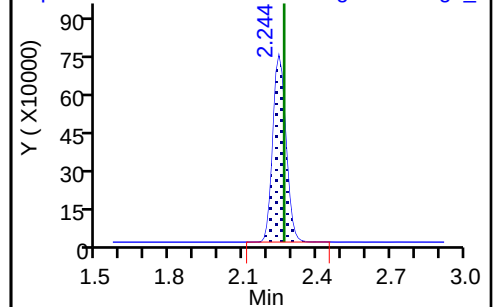
Exp1:m/z 399.00 > 80.00:Moving3PtAverage_x3



Exp1:m/z 399.00 > 99.00:Moving3PtAverage_x3



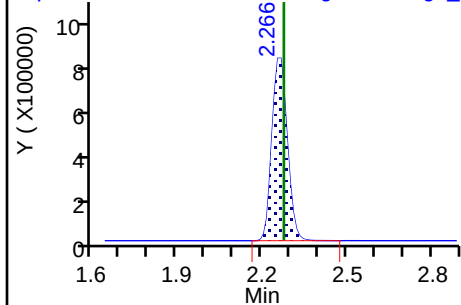
Exp1:m/z 367.00 > 322.00:Moving3PtAverage_x3



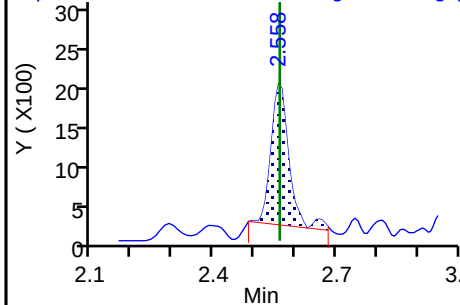
D 11 18O2 PFHxS

13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2 FTS

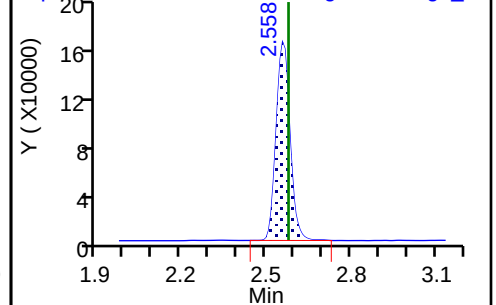
Exp1:m/z 403.00 > 84.00:Moving3PtAverage_x3



Exp1:m/z 427.00 > 407.00:Moving3PtAverage_x3



Exp1:m/z 429.00 > 81.00:Moving3PtAverage_x3

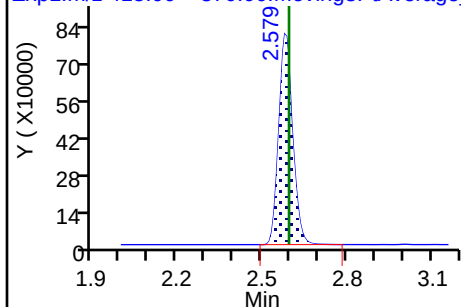


* 62 13C2 PFOA

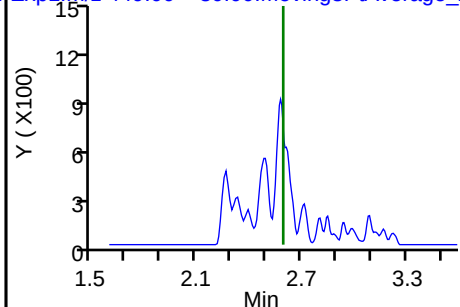
16 Perfluoroheptanesulfonic acid (ND)

16 Perfluoroheptanesulfonic acid (ND)

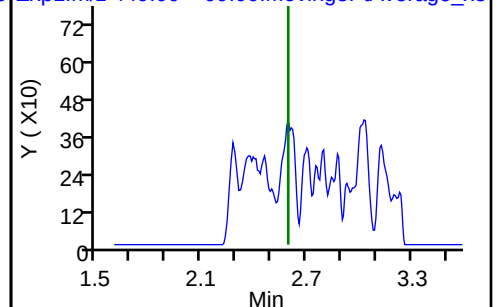
Exp1:m/z 415.00 > 370.00:Moving3PtAverage_x3



Exp1:m/z 449.00 > 80.00:Moving3PtAverage_x3



Exp1:m/z 449.00 > 99.00:Moving3PtAverage_x3

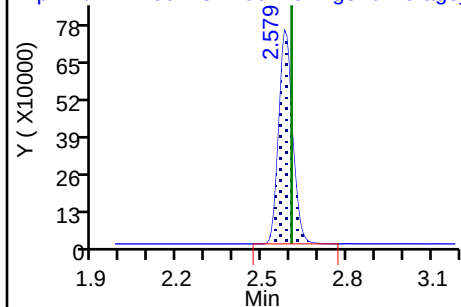


D 14 13C4 PFOA

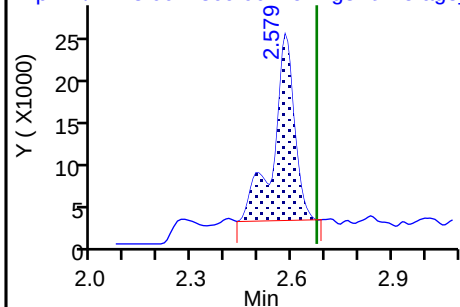
15 Perfluorooctanoic acid (M)

15 Perfluorooctanoic acid (M)

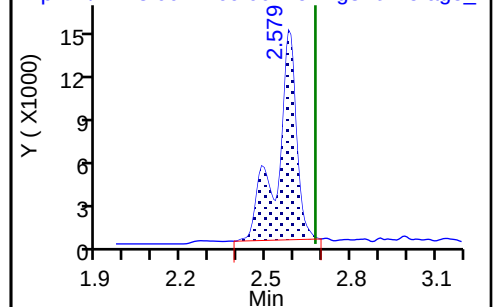
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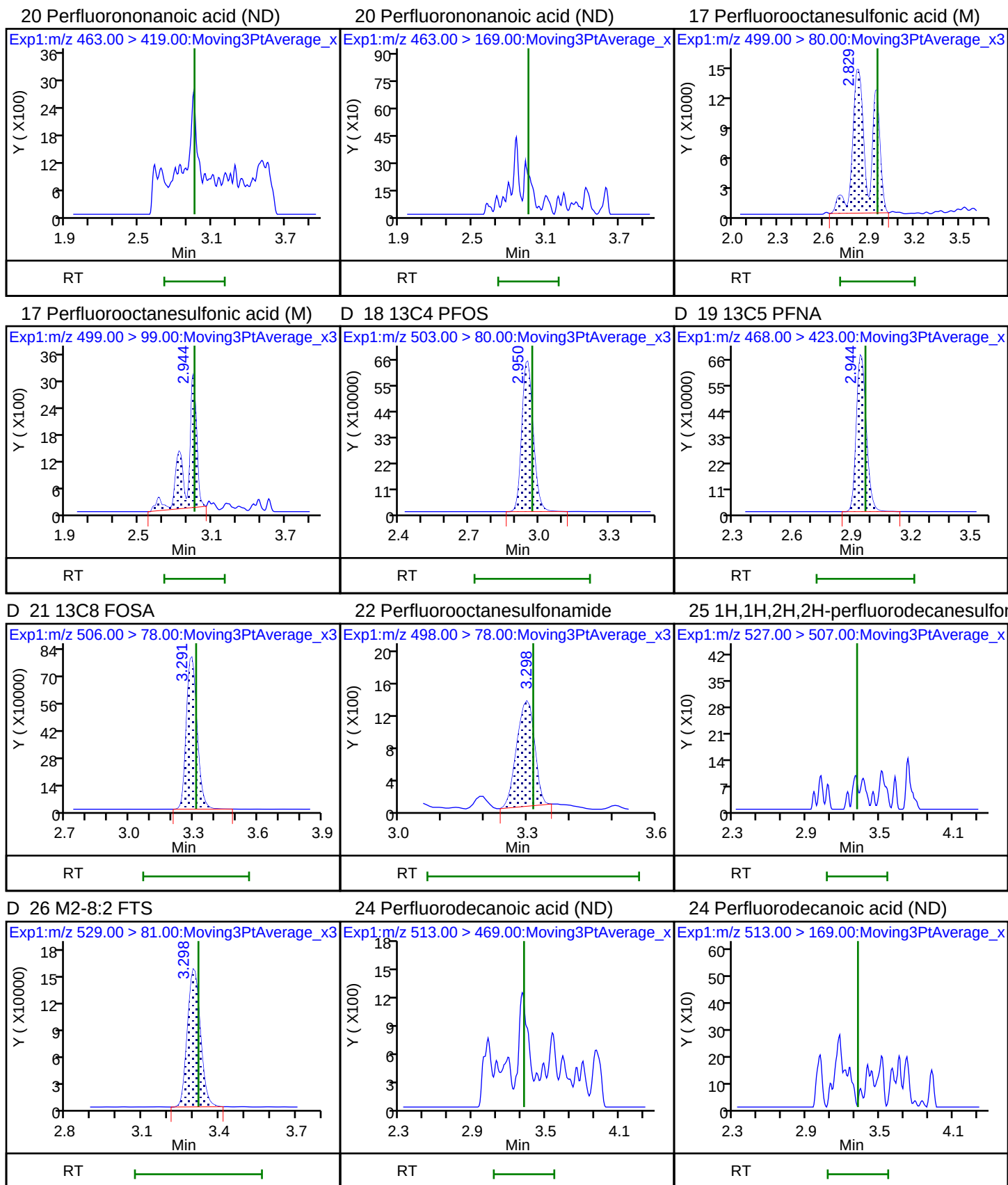


Exp1:m/z 413.00 > 369.00:Moving3PtAverage_x3



Exp1:m/z 413.00 > 169.00:Moving3PtAverage_x3

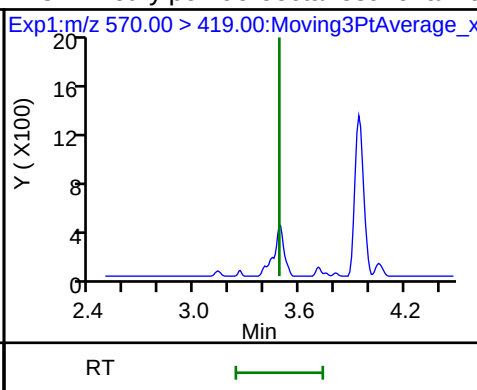
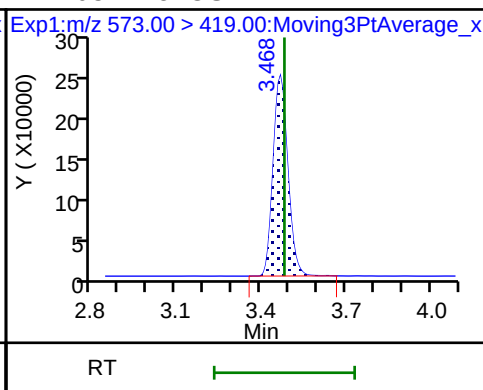
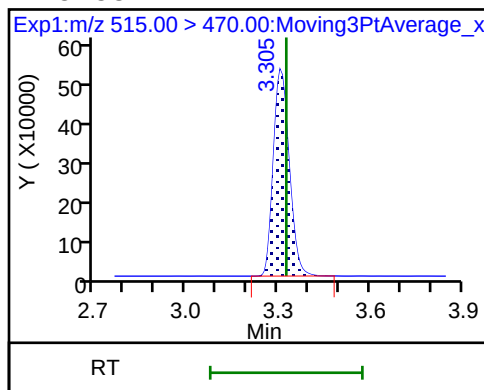




D 23 13C2 PFDA

D 27 d3-NMeFOSAA

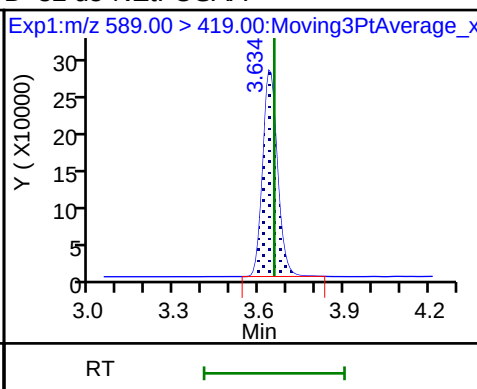
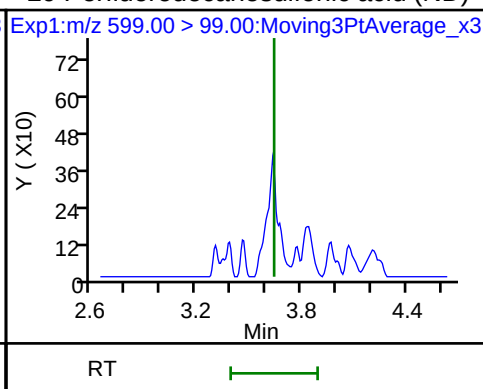
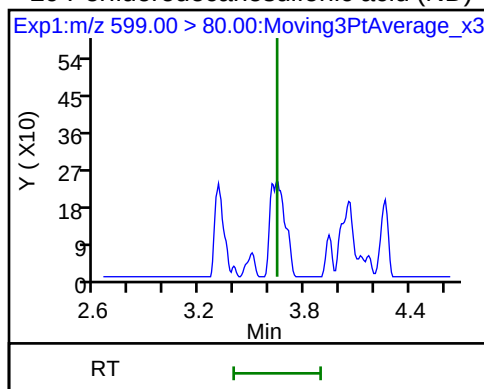
28 N-methylperfluorooctanesulfonamido (ND)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

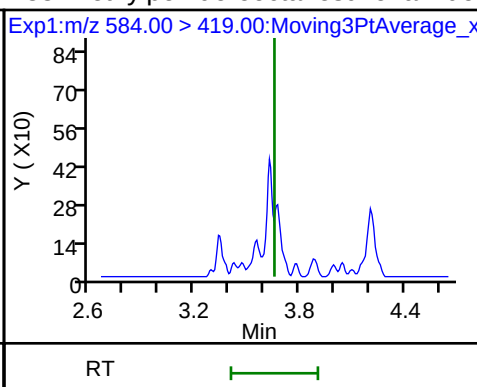
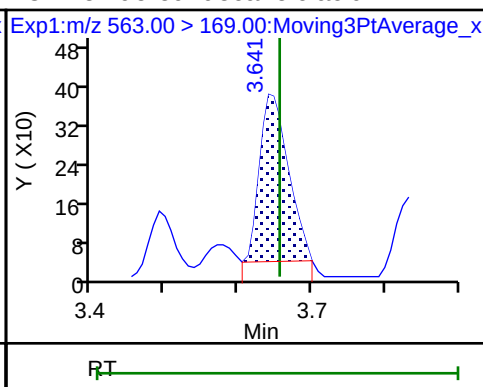
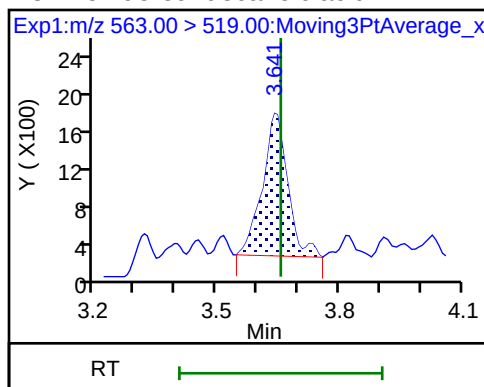
D 32 d5-NEtFOSAA



31 Perfluoroundecanoic acid

31 Perfluoroundecanoic acid

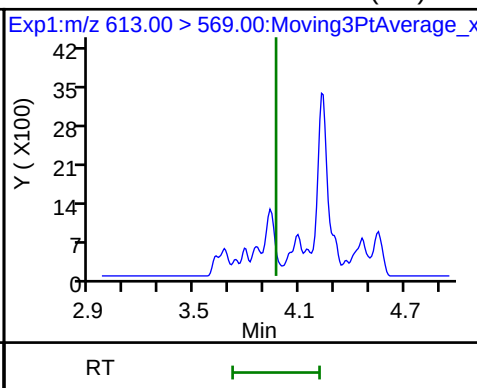
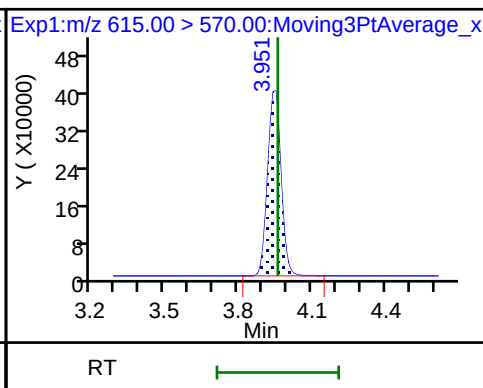
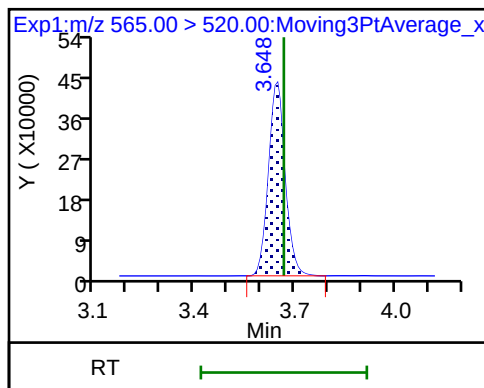
33 N-ethylperfluorooctanesulfonamidoa (ND)



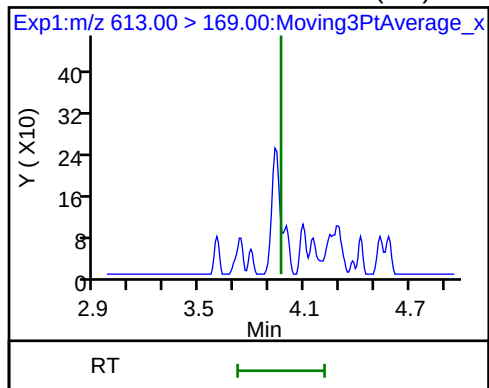
D 30 13C2 PFUnA

D 36 13C2 PFDaA

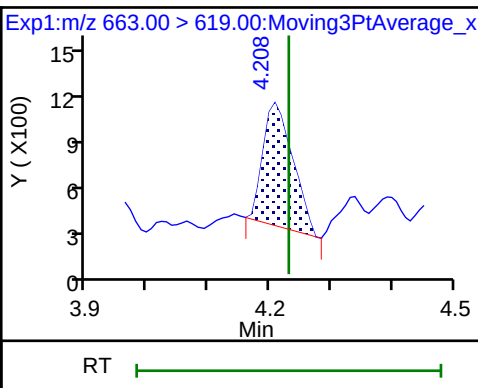
37 Perfluorododecanoic acid (ND)



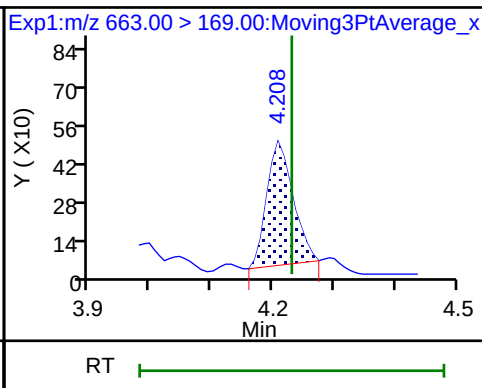
37 Perfluorododecanoic acid (ND)



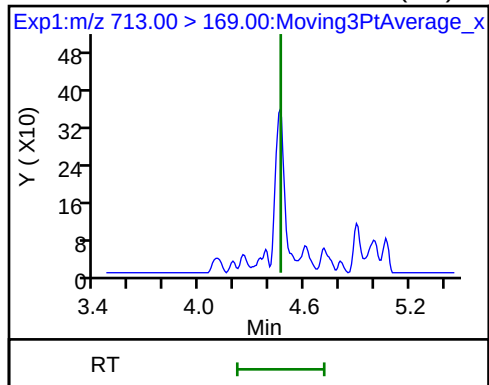
41 Perfluorotridecanoic acid



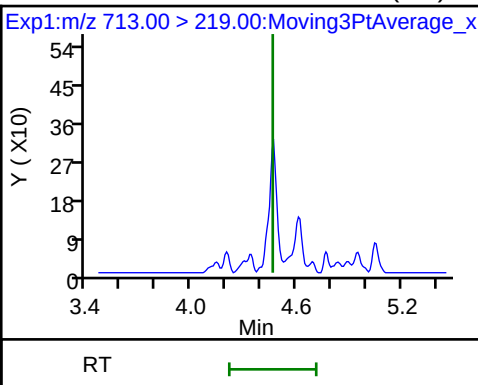
41 Perfluorotridecanoic acid



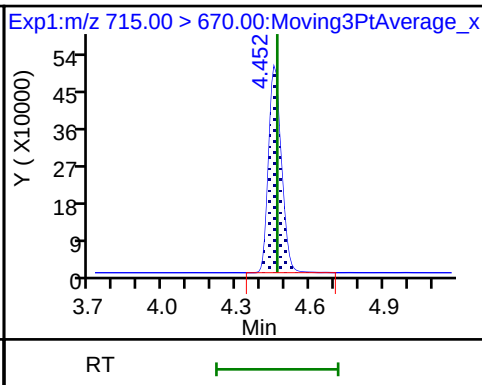
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2 PFTeDA



TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d

Injection Date: 14-Nov-2018 02:13:55

Instrument ID: A8_N

Lims ID: 480-144297-F-8-A

Lab Sample ID: 320-144297-8

Client ID: SB-19

Operator ID: SACINSTLCMS01

ALS Bottle#: 16

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

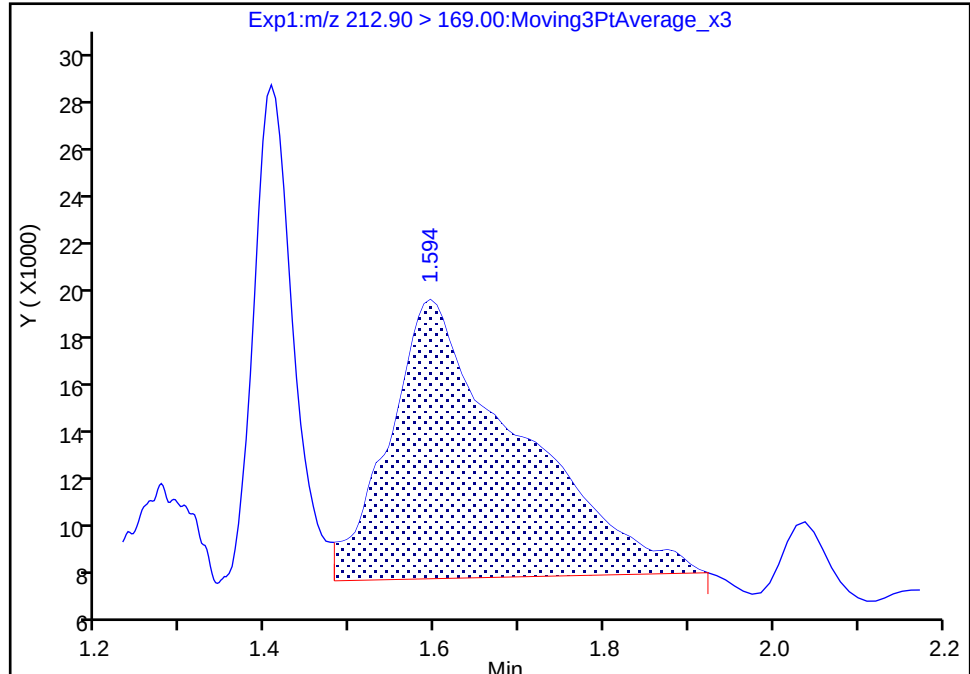
Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

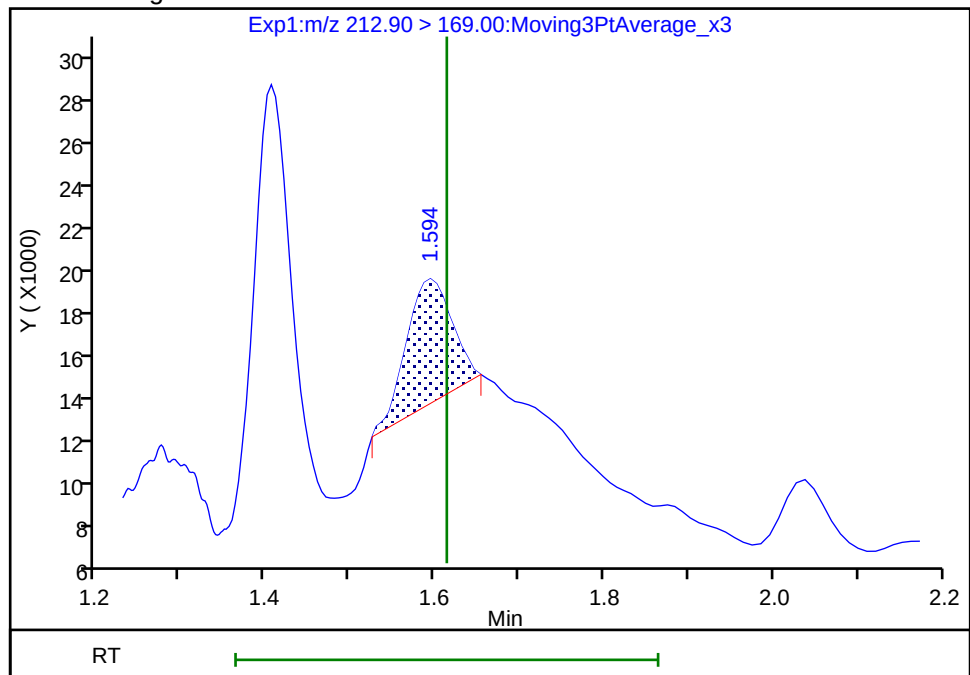
RT: 1.59
Area: 124798
Amount: 0.122783
Amount Units: ng/ml

Processing Integration Results



RT: 1.59
Area: 21630
Amount: 0.021281
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:39:33

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d

Injection Date: 14-Nov-2018 02:13:55

Instrument ID: A8_N

Lims ID: 480-144297-F-8-A

Lab Sample ID: 320-144297-8

Client ID: SB-19

Operator ID: SACINSTLCMS01

ALS Bottle#: 16

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

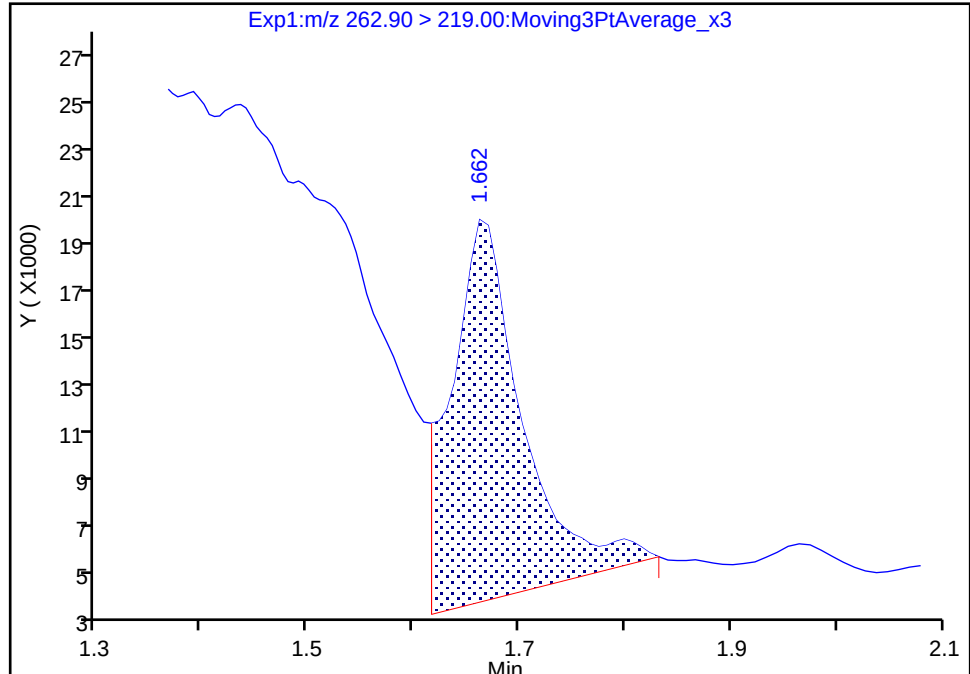
Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

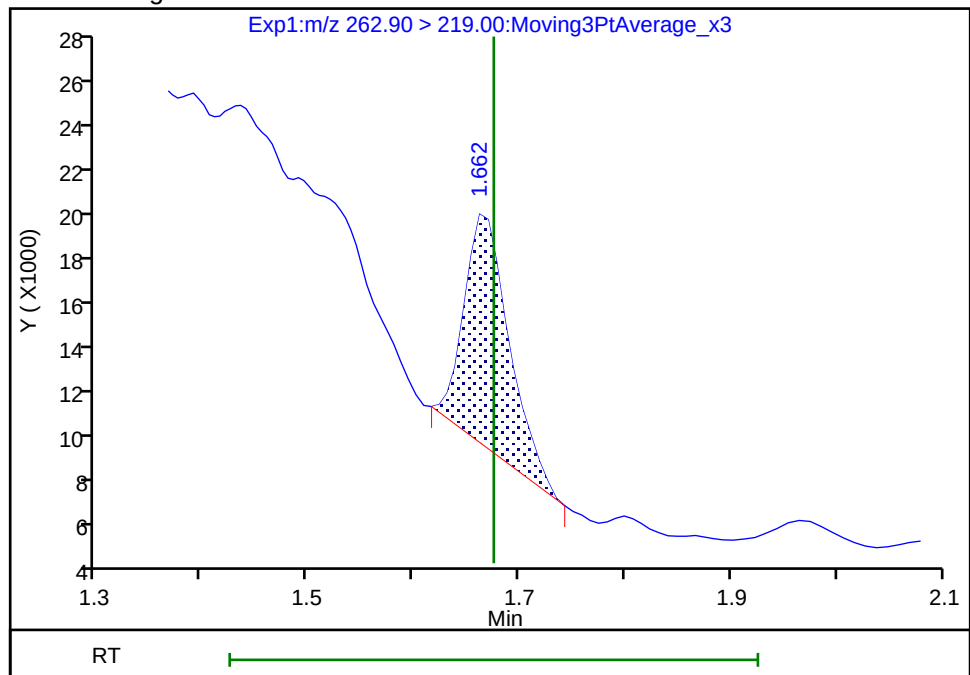
RT: 1.66
Area: 74009
Amount: 0.067298
Amount Units: ng/ml

Processing Integration Results



RT: 1.66
Area: 30022
Amount: 0.027300
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:39:23

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d

Injection Date: 14-Nov-2018 02:13:55

Instrument ID: A8_N

Lims ID: 480-144297-F-8-A

Lab Sample ID: 320-144297-8

Client ID: SB-19

Operator ID: SACINSTLCMS01

ALS Bottle#: 16

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

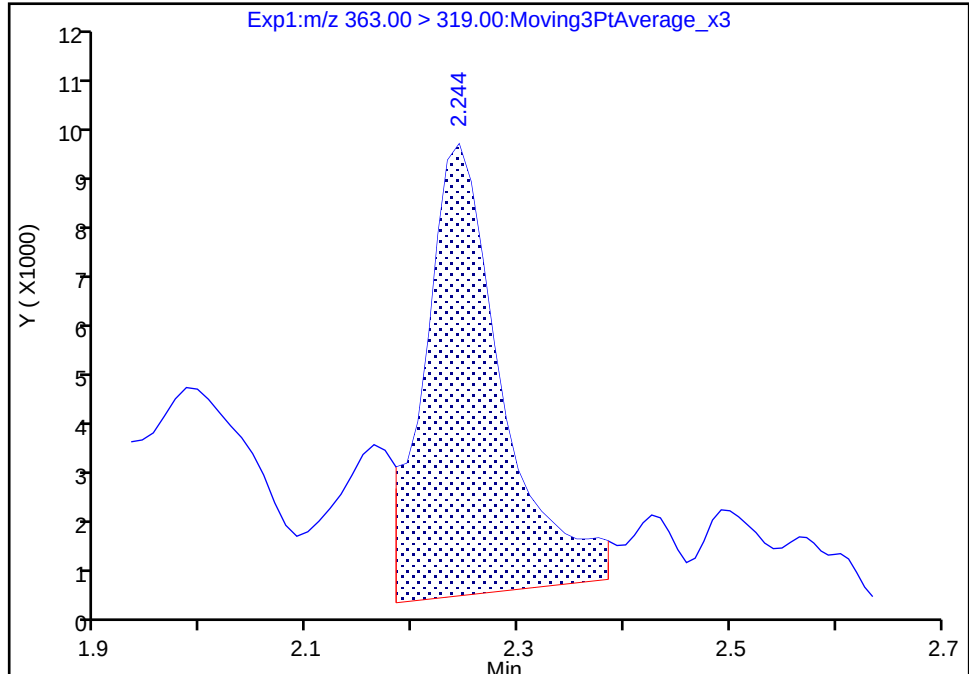
Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

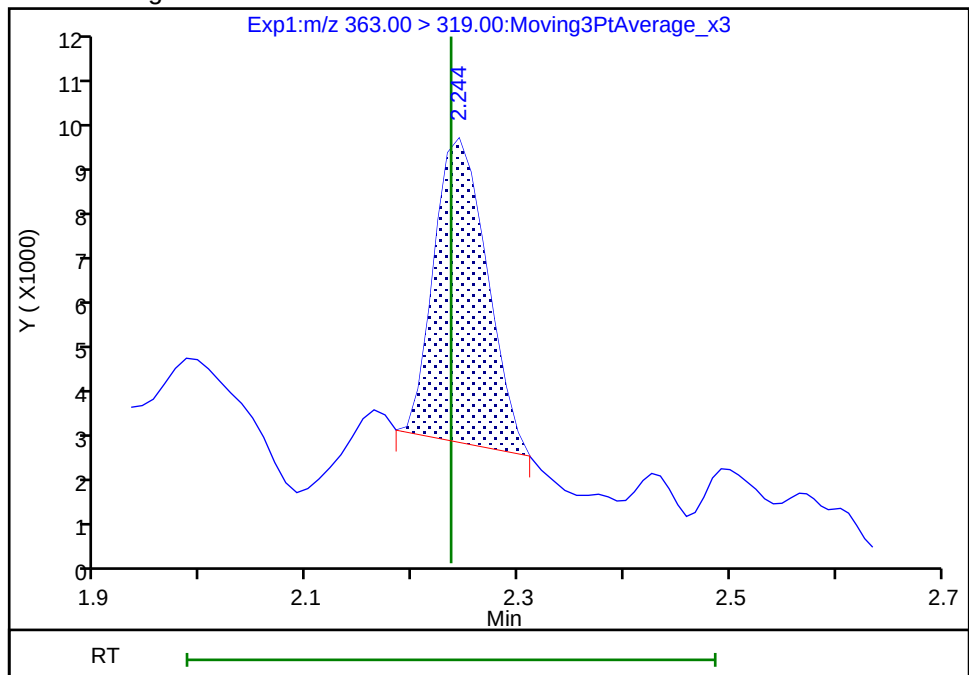
RT: 2.24
Area: 41580
Amount: 0.034184
Amount Units: ng/ml

Processing Integration Results



RT: 2.24
Area: 21310
Amount: 0.017520
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:39:07

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

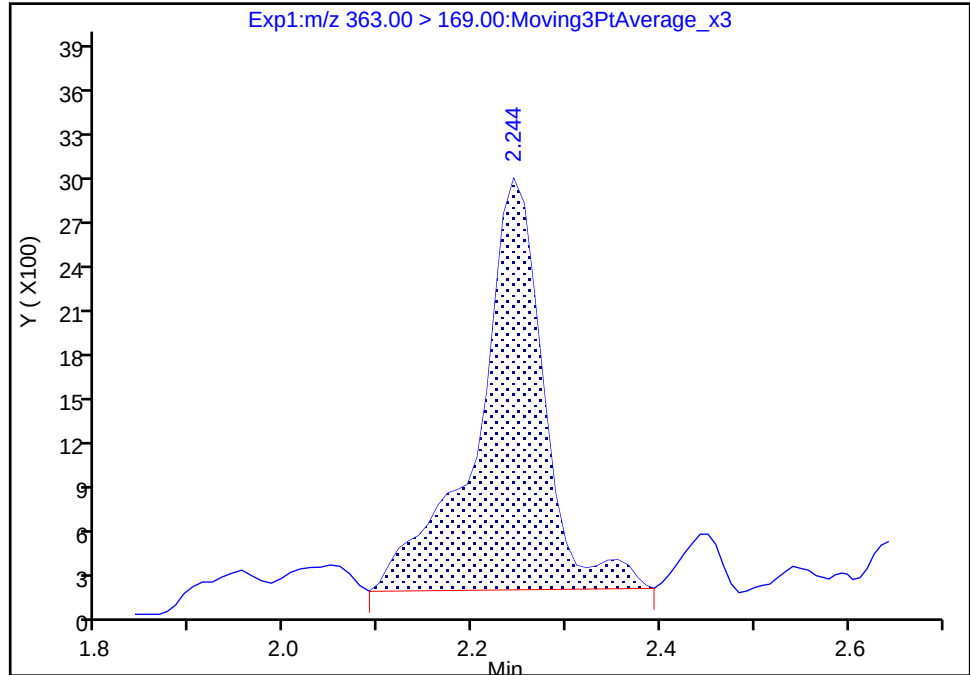
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d
Injection Date: 14-Nov-2018 02:13:55 Instrument ID: A8_N
Lims ID: 480-144297-F-8-A Lab Sample ID: 320-144297-8
Client ID: SB-19
Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

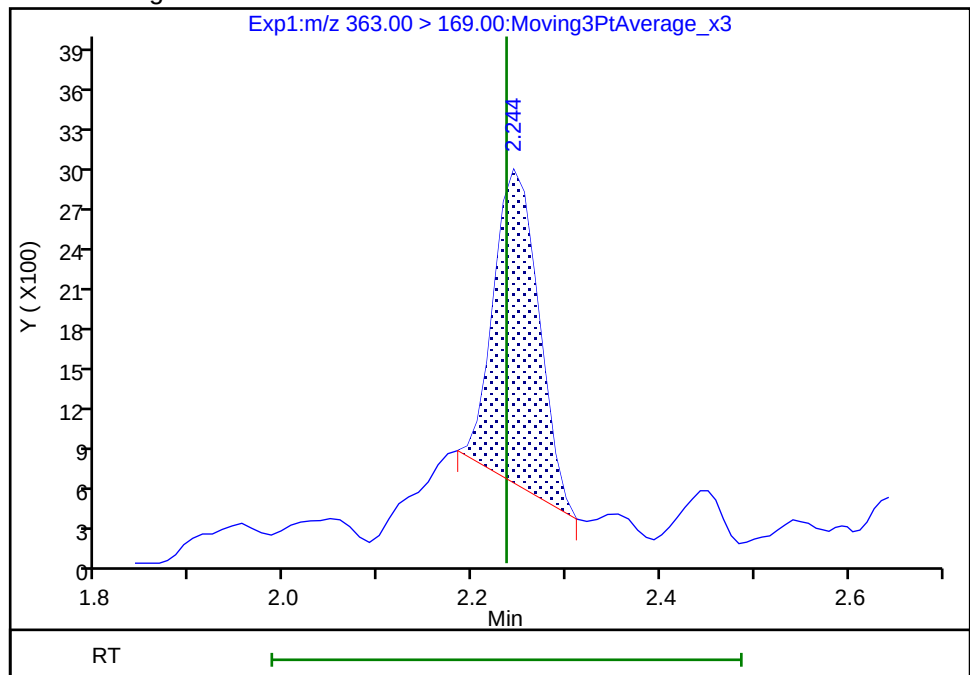
RT: 2.24
Area: 13648
Amount: 0.034184
Amount Units: ng/ml

Processing Integration Results



RT: 2.24
Area: 7771
Amount: 0.017520
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:39:13

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

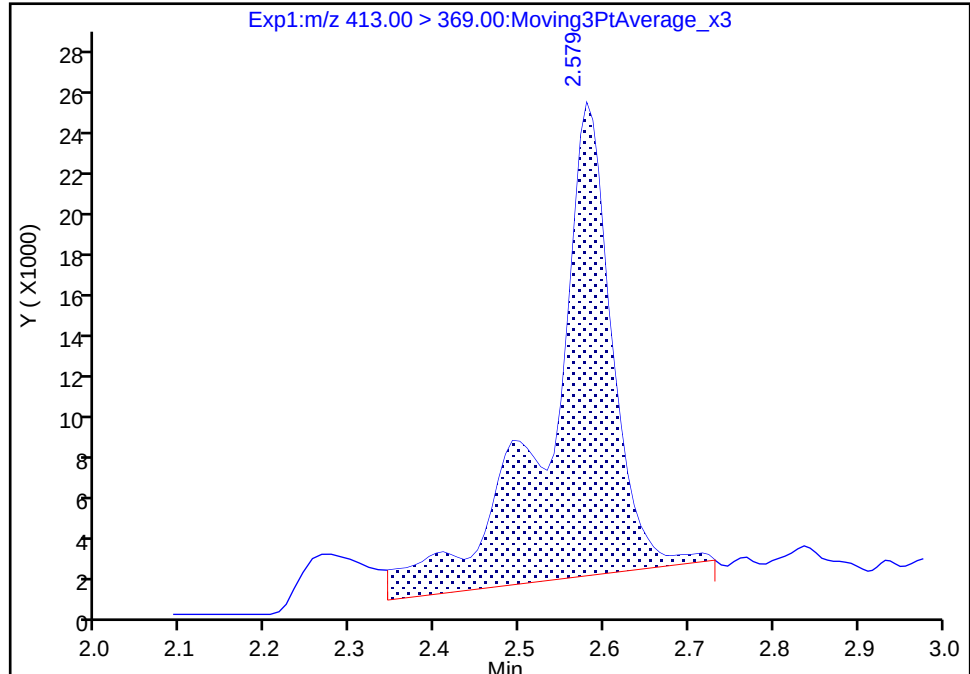
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d
Injection Date: 14-Nov-2018 02:13:55 Instrument ID: A8_N
Lims ID: 480-144297-F-8-A Lab Sample ID: 320-144297-8
Client ID: SB-19
Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

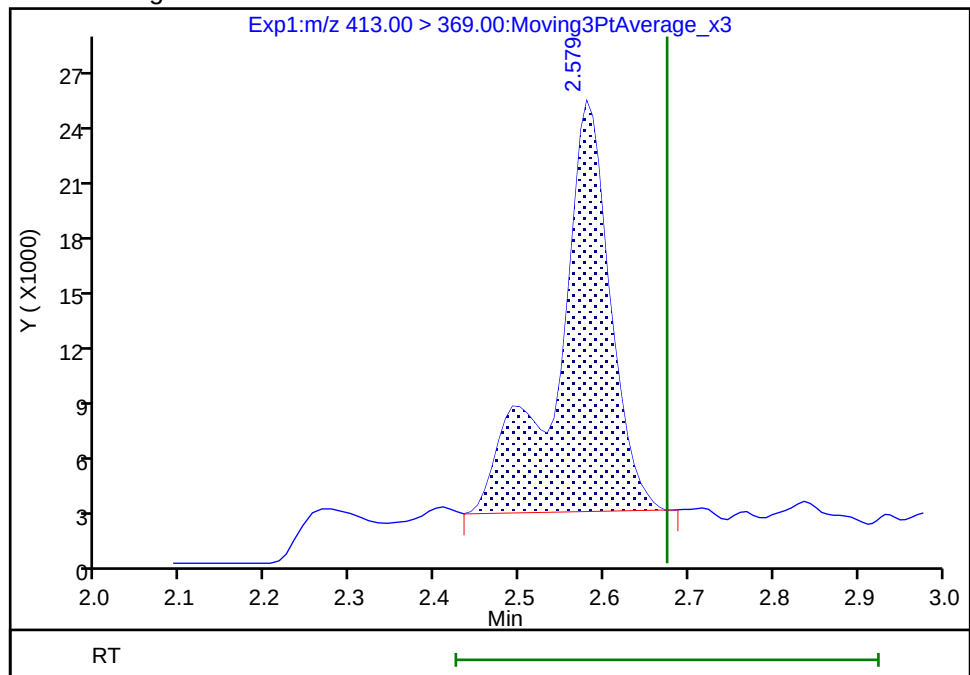
RT: 2.58
Area: 122361
Amount: 0.106139
Amount Units: ng/ml

Processing Integration Results



RT: 2.58
Area: 97204
Amount: 0.084317
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:38:46

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

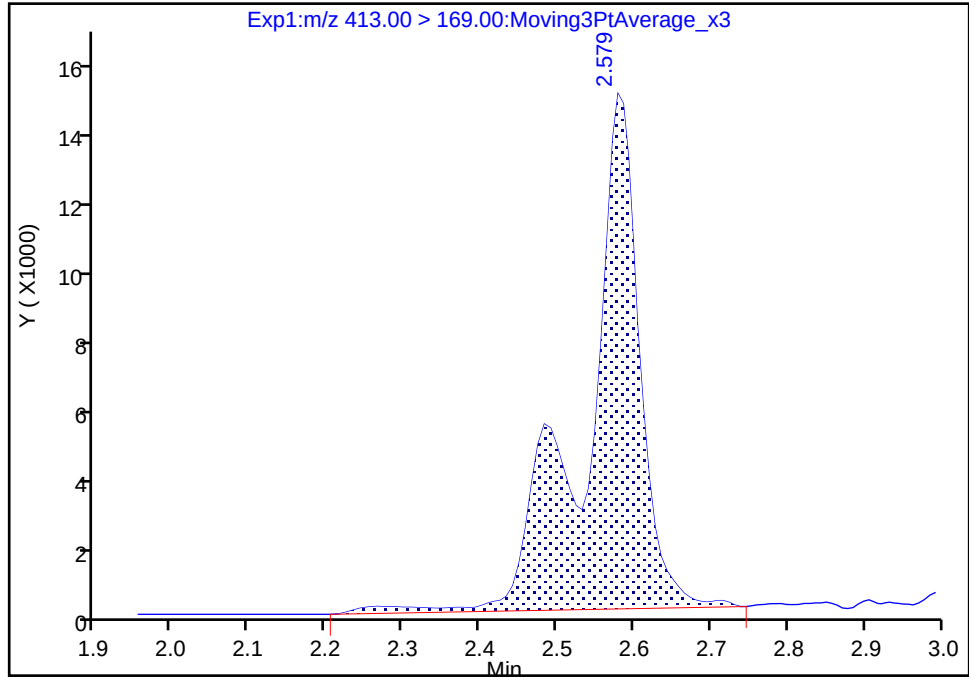
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d
Injection Date: 14-Nov-2018 02:13:55 Instrument ID: A8_N
Lims ID: 480-144297-F-8-A Lab Sample ID: 320-144297-8
Client ID: SB-19
Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

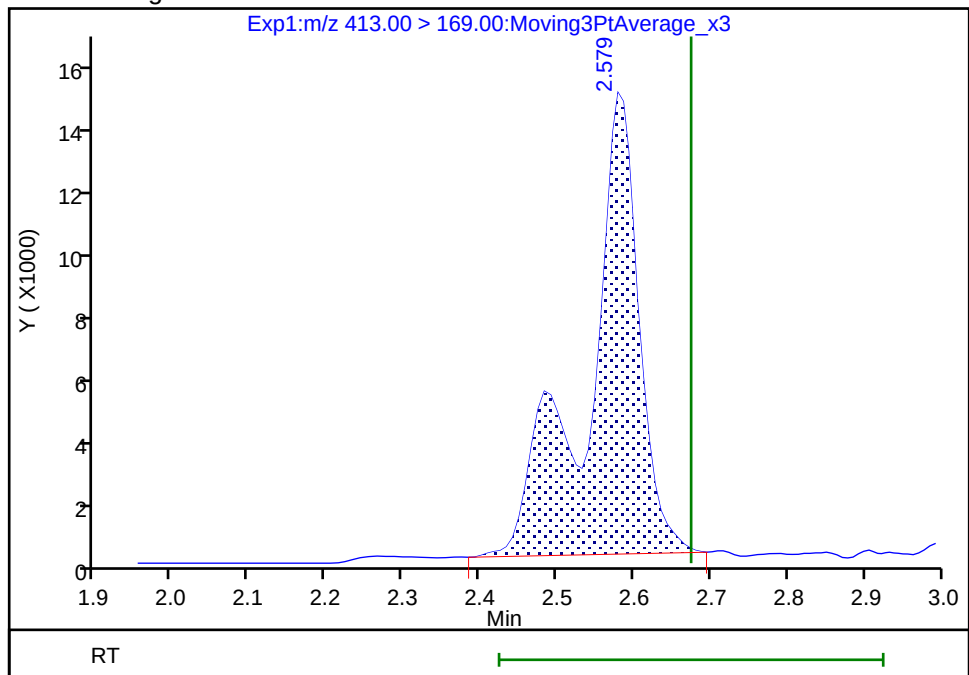
RT: 2.58
Area: 70823
Amount: 0.106139
Amount Units: ng/ml

Processing Integration Results



RT: 2.58
Area: 66786
Amount: 0.084317
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:38:50

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d

Injection Date: 14-Nov-2018 02:13:55

Instrument ID: A8_N

Lims ID: 480-144297-F-8-A

Lab Sample ID: 320-144297-8

Client ID: SB-19

Operator ID: SACINSTLCMS01

ALS Bottle#: 16

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

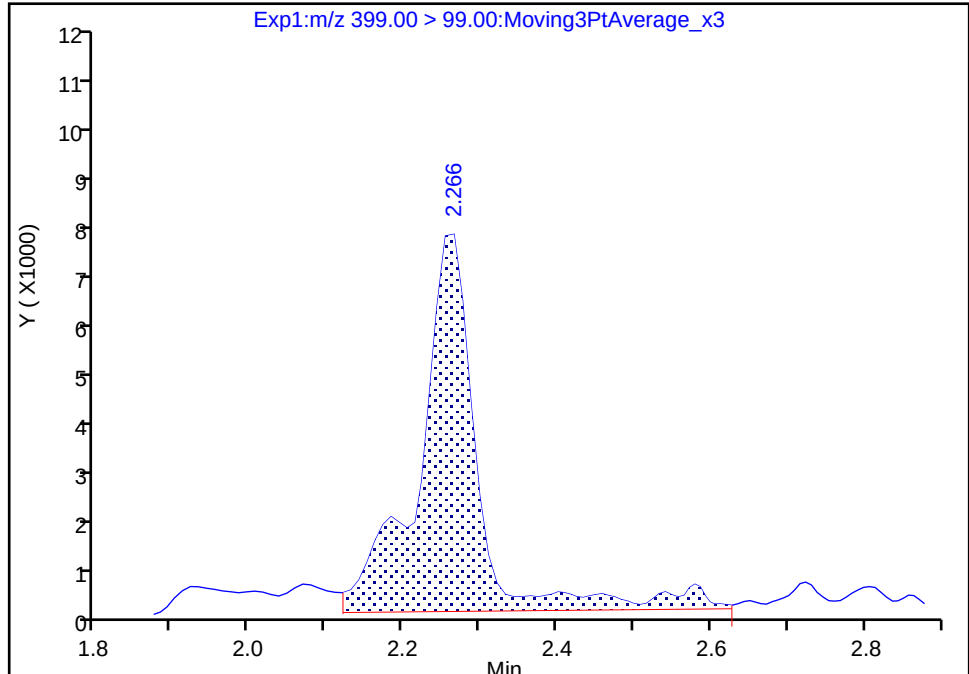
Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

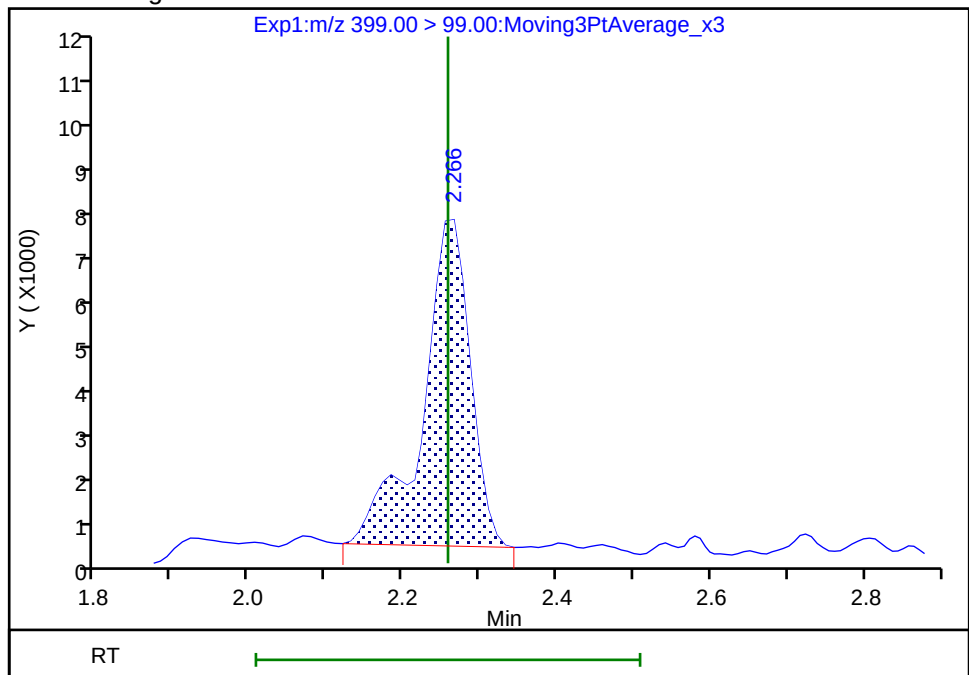
RT: 2.27
Area: 40195
Amount: 0.056943
Amount Units: ng/ml

Processing Integration Results



RT: 2.27
Area: 31207
Amount: 0.050834
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:38:57

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

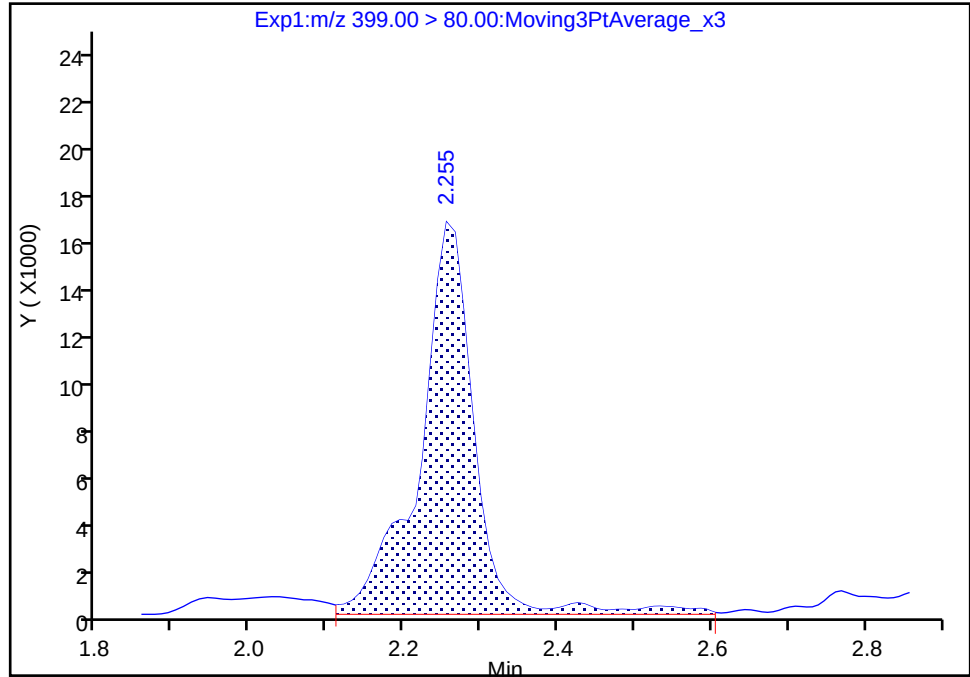
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d
Injection Date: 14-Nov-2018 02:13:55 Instrument ID: A8_N
Lims ID: 480-144297-F-8-A Lab Sample ID: 320-144297-8
Client ID: SB-19
Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

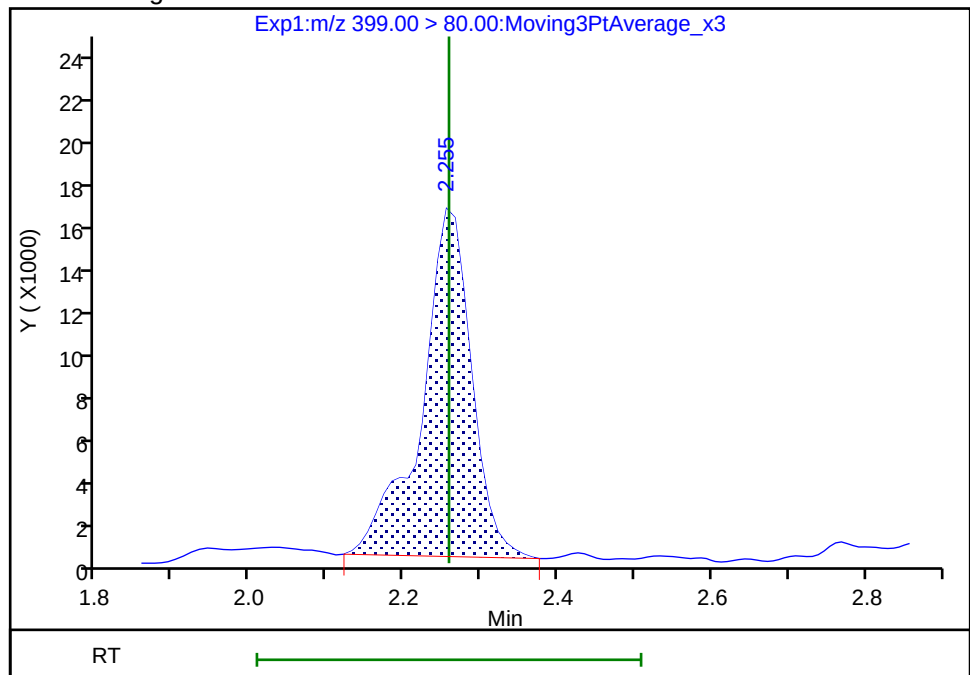
RT: 2.25
Area: 82970
Amount: 0.056943
Amount Units: ng/ml

Processing Integration Results



RT: 2.25
Area: 74068
Amount: 0.050834
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:39:01

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d

Injection Date: 14-Nov-2018 02:13:55

Instrument ID: A8_N

Lims ID: 480-144297-F-8-A

Lab Sample ID: 320-144297-8

Client ID: SB-19

Operator ID: SACINSTLCMS01

ALS Bottle#: 16

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

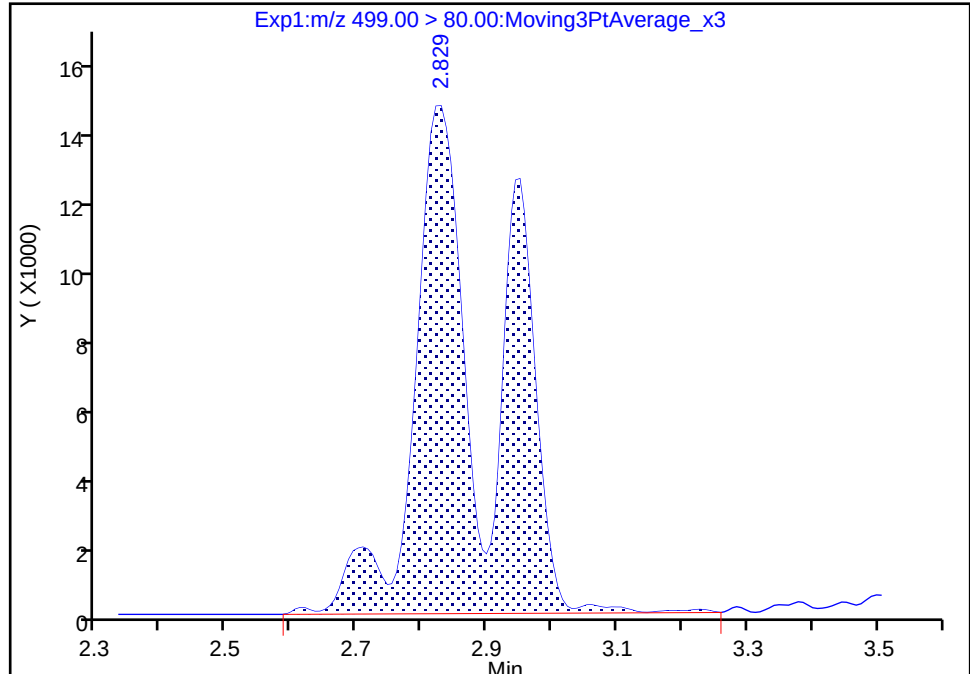
Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

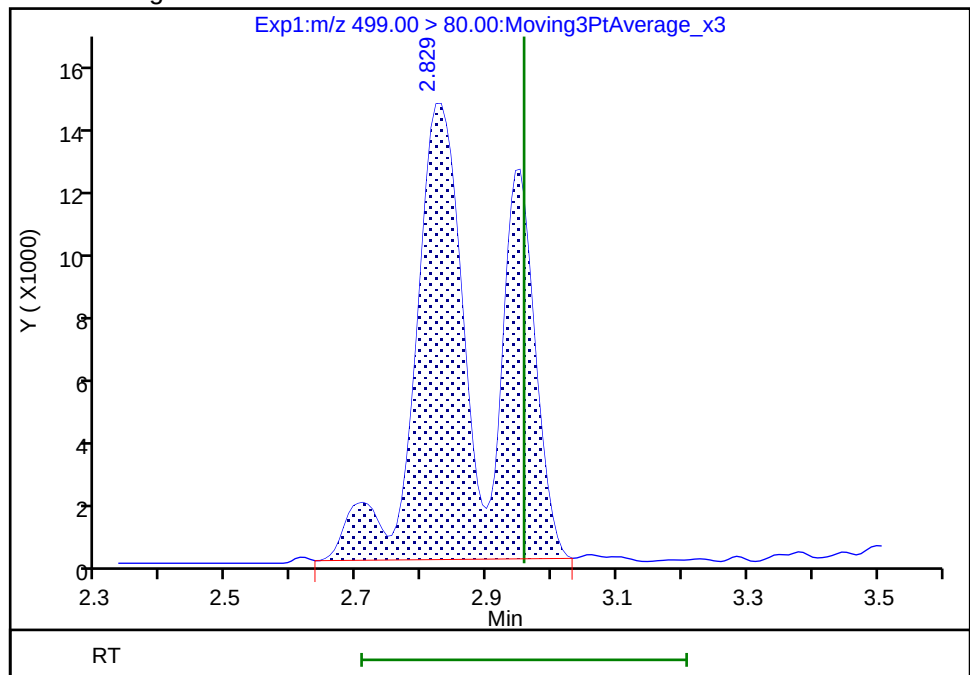
RT: 2.83
Area: 114604
Amount: 0.108351
Amount Units: ng/ml

Processing Integration Results



RT: 2.83
Area: 110793
Amount: 0.104748
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:38:32

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

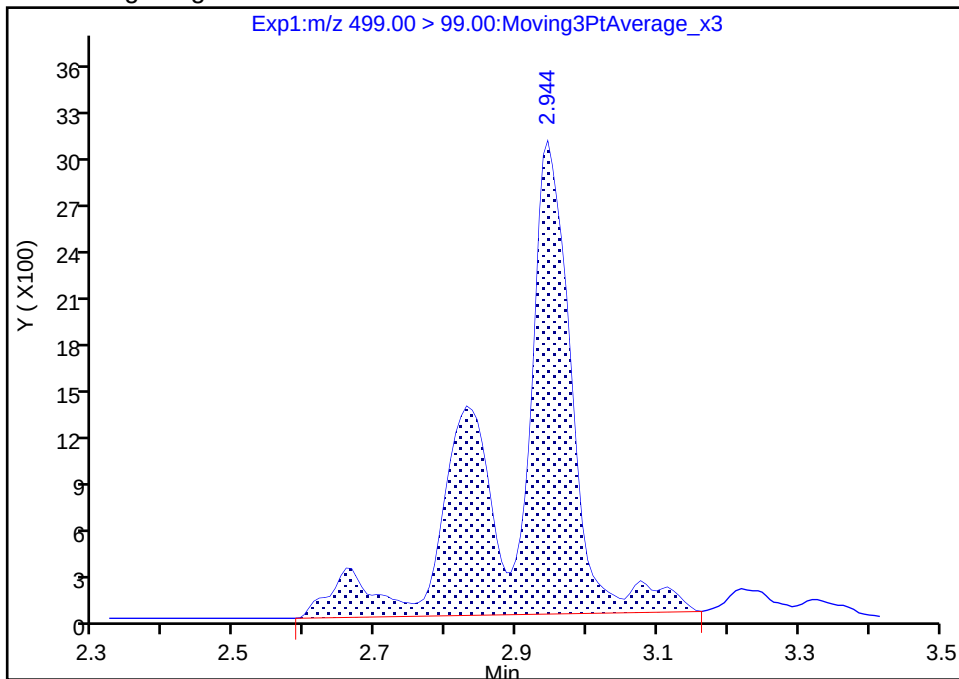
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_029.d
Injection Date: 14-Nov-2018 02:13:55 Instrument ID: A8_N
Lims ID: 480-144297-F-8-A Lab Sample ID: 320-144297-8
Client ID: SB-19
Operator ID: SACINSTLCMS01 ALS Bottle#: 16 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

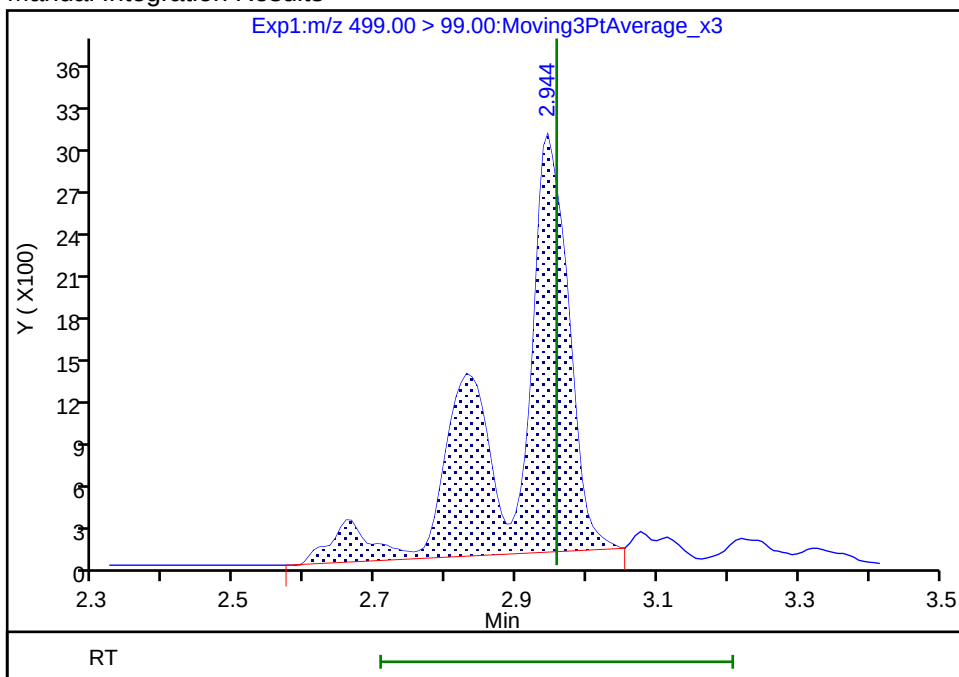
RT: 2.94
Area: 19163
Amount: 0.108351
Amount Units: ng/ml

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 17152
Amount: 0.104748
Amount Units: ng/ml



Reviewer: mongkols, 26-Nov-2018 09:38:37

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GPW-6</u>	Lab Sample ID: <u>480-144297-9</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_015.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 17:25</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>274.6 (mL)</u>	Date Analyzed: <u>11/09/2018 08:55</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.88	J	1.8	0.32
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.96	J	1.8	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	0.58	J	1.8	0.53
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.34	J	1.8	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	0.79	J	1.8	0.77
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.45	J B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.0	J	1.8	0.49
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.32
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2 FTS	ND		18	1.8
39108-34-4	8:2 FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GPW-6</u>	Lab Sample ID: <u>480-144297-9</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_015.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 17:25</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>274.6 (mL)</u>	Date Analyzed: <u>11/09/2018 08:55</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	44		25-150
STL01893	13C5-PFPeA DNU	71		25-150
STL00993	13C2 PFHxA	82		25-150
STL01892	13C4 PFHpA	92		25-150
STL00990	13C4 PFOA	98		25-150
STL00995	13C5 PFNA	92		25-150
STL00996	13C2 PFDA	92		25-150
STL00997	13C2 PFUnA	98		25-150
STL00998	13C2 PFDoA	89		25-150
STL02116	13C2 PFTeDA	82		25-150
STL02337	13C3 PFBS	79		25-150
STL00994	18O2 PFHxS	94		25-150
STL00991	13C4 PFOS	97		25-150
STL01056	13C8 FOSA	102		25-150
STL02118	d3-NMeFOSAA	92		25-150
STL02117	d5-NEtFOSAA	100		25-150
STL02279	M2-6:2 FTS	137		25-150
STL02280	M2-8:2 FTS	105		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_015.d
 Lims ID: 480-144297-F-9-A
 Client ID: GPW-6
 Sample Type: Client
 Inject. Date: 09-Nov-2018 08:55:58 ALS Bottle#: 9 Worklist Smp#: 12
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 480-144297-f-9-a
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: A9\Administrator Instrument ID: A9
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 12:29:50 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d

Column 1 : Det: EXP1
 Process Host: CTX0318

First Level Reviewer: mongkols Date: 12-Nov-2018 12:29:50

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	1.375	1.346	0.029	0.531	3766687	1.11		44.3	5953	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.375	1.352	0.023	1.000	34197	0.0243			1.5	M
D 3 13C5 PFPeA										
267.90 > 223.00	1.638	1.601	0.037	0.633	5742913	1.77		71.0	3200	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.604	1.609	-0.005	0.979	60869	0.0265			2.4	M
D 47 13C3 PFBS										
301.90 > 83.00	1.670	1.636	0.034	0.645	82640	1.85		79.4	93.1	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.670	1.643	0.027	1.000	108158	0.0295			3.0	M
298.90 > 99.00	1.670	1.643	0.027	1.000	43856		2.47(1.35-4.05)		3.0	M
D 7 13C2 PFHxA										
315.00 > 270.00	1.914	1.873	0.041	0.739	6998416	2.05		82.0	6079	
6 Perfluorohexanoic acid										M
313.00 > 269.00	1.904	1.883	0.022	0.995	40202	0.0160			0.5	M
313.00 > 119.00	1.924	1.883	0.042	1.005	2739		14.68(6.96-20.87)		1.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	2.243	2.191	0.052	0.866	9194851	2.29		91.6	10403	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.230	2.191	0.039	0.994	35957	0.009217			0.4	
363.00 > 169.00	2.243	2.191	0.052	1.000	11597		3.10(2.17-6.52)		10.8	
D 11 18O2 PFHxS										
403.00 > 84.00	2.255	2.203	0.052	0.871	5822081	2.23		94.3	10182	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.255	2.216	0.039	1.000	38725	0.0125			4.1	M
399.00 > 99.00	2.255	2.216	0.039	1.000	8682		4.46(1.90-5.70)		3.5	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										M
429.00 > 81.00	2.574	2.513	0.061	0.994	1201570	3.25		137	533	M
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.559	2.528	0.031	0.994	11844	0.0107			28.3	
D 14 13C4 PFOA										
417.00 > 372.00	2.589	2.543	0.046	1.000	8962510	2.44		97.5	13036	
* 62 13C2 PFOA										
415.00 > 370.00	2.589	2.543	0.046		9341755	2.50			11825	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.589	2.543	0.046	1.000	84483	0.0218			1.7	
413.00 > 169.00	2.589	2.543	0.046	1.000	27965		3.02(1.36-4.08)		34.2	M
D 18 13C4 PFOS										
503.00 > 80.00	2.968	2.914	0.054	1.146	6090903	2.31		96.6	3135	
D 19 13C5 PFNA										
468.00 > 423.00	2.968	2.914	0.054	1.146	7852354	2.31		92.4	9230	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	2.846	2.914	-0.068	0.959	78059	0.0284			17.8	M
499.00 > 99.00	2.864	2.914	-0.050	0.965	6012		12.98(2.04-6.12)		8.9	M
D 21 13C8 FOSA										
506.00 > 78.00	3.315	3.264	0.051	1.280	3711799	2.54		102	5924	
D 23 13C2 PFDA										
515.00 > 470.00	3.331	3.264	0.067	1.286	8037791	2.30		91.9	10088	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.315	3.264	0.051	1.280	114819	2.51		105	598	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	3.315	3.264	0.051	1.000	1713	0.000384			5.9	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.469	3.422	0.047	1.340	3489793	2.31		92.3	4514	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.642	3.591	0.051	1.406	3093746	2.51		100	4311	
D 30 13C2 PFUnA										
565.00 > 520.00	3.642	3.591	0.051	1.406	7192632	2.46		98.4	8179	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.642	3.607	0.035	1.000	26121	0.007985			6.6	
563.00 > 169.00	3.642	3.607	0.035	1.000	2284		11.44(5.24-15.72)		9.2	
D 36 13C2 PFDaA										
615.00 > 570.00	3.936	3.883	0.053	1.520	7985858	2.22		88.7	7022	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.428	4.381	0.047	1.710	5505218	2.05		81.8	8343	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_015.d

Injection Date: 09-Nov-2018 08:55:58

Instrument ID: A9

Lims ID: 480-144297-F-9-A

Lab Sample ID: 320-144297-9

Client ID: GPW-6

Operator ID: A9\Administrator

ALS Bottle#: 9

Worklist Smp#: 12

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

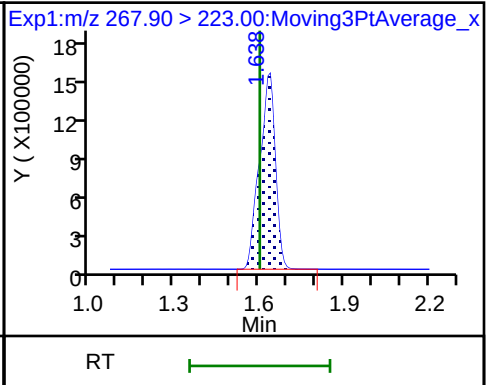
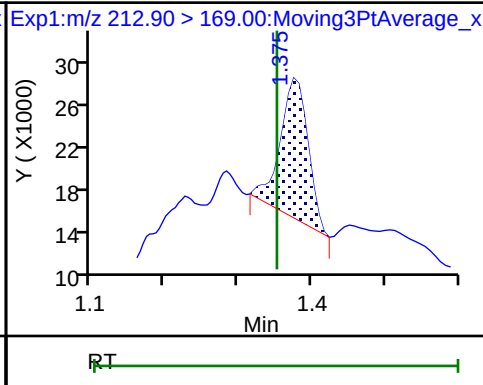
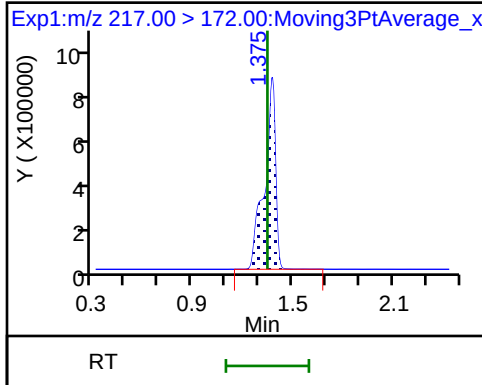
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

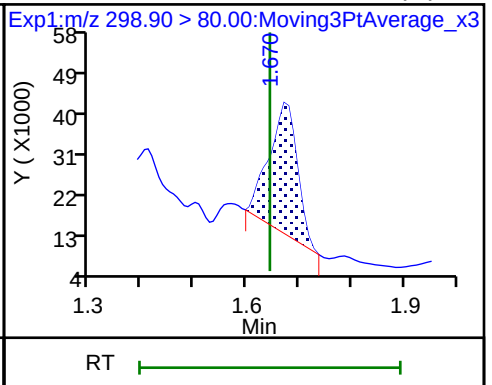
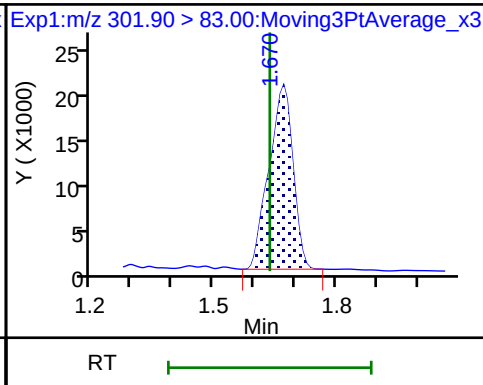
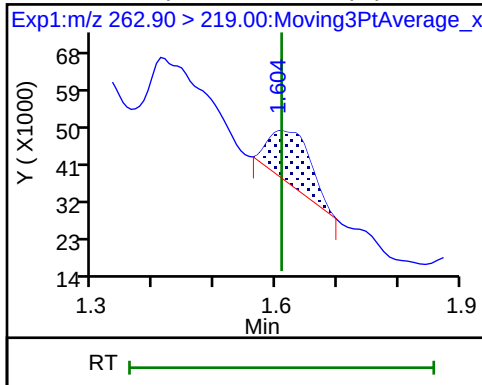
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

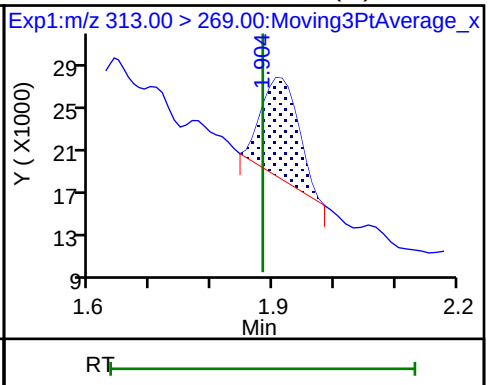
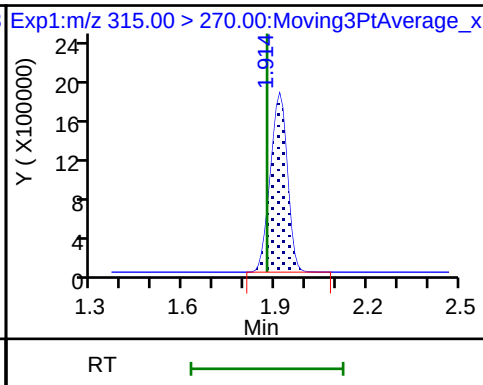
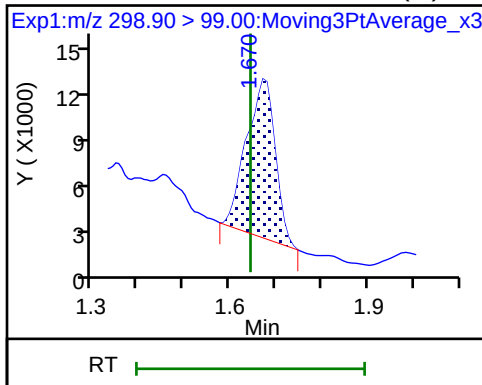
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid (M)

D 7 13C2 PFHxA

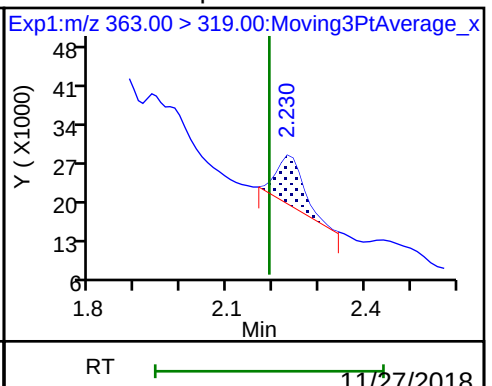
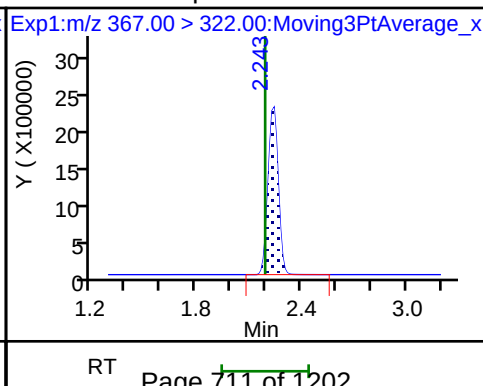
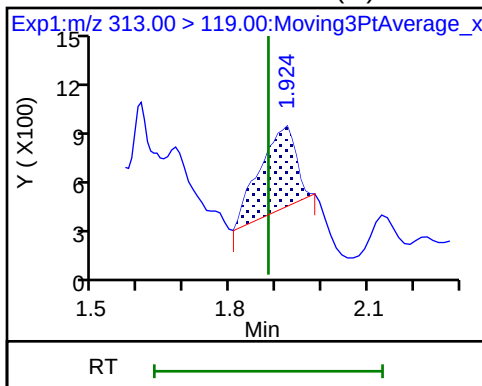
6 Perfluorohexanoic acid (M)

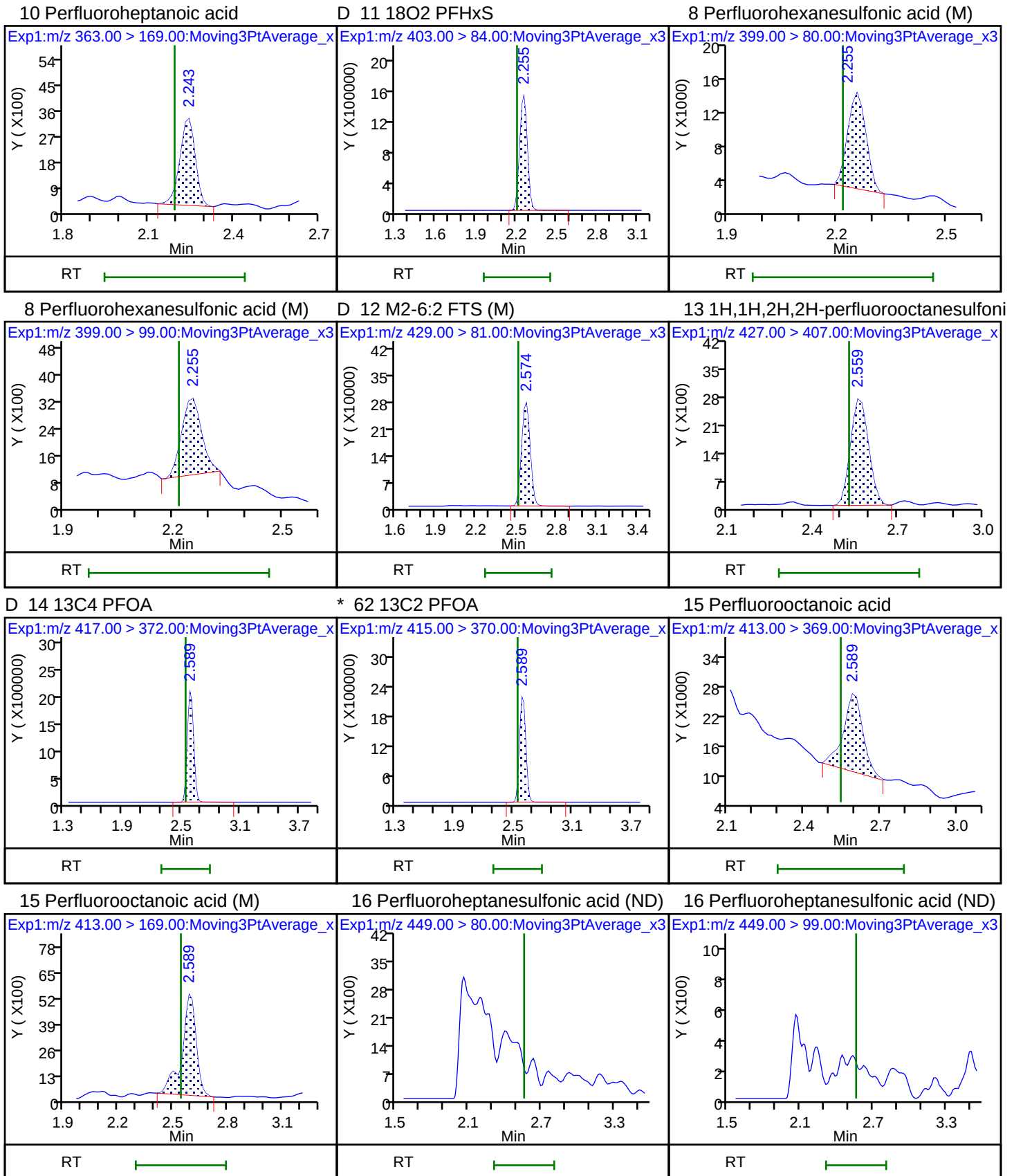


6 Perfluorohexanoic acid (M)

D 9 13C4 PFHpA

10 Perfluoroheptanoic acid

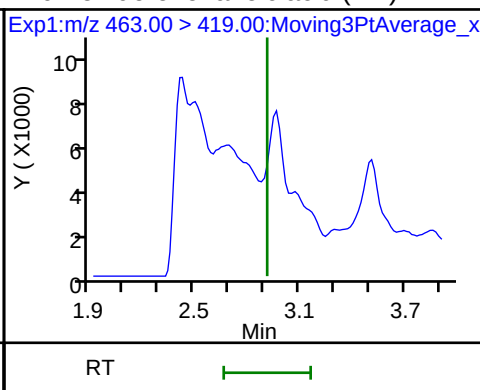
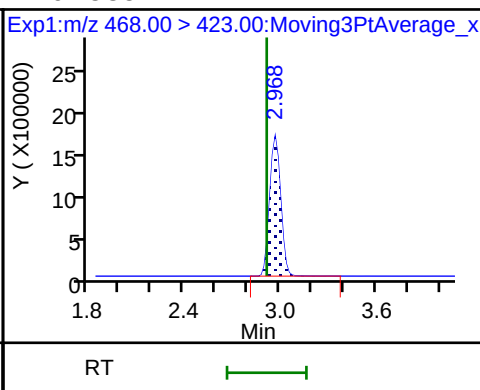
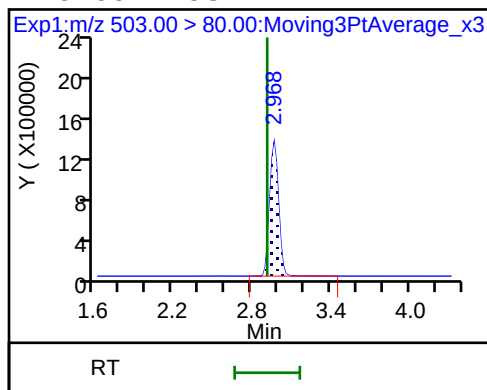




D 18 13C4 PFOS

D 19 13C5 PFNA

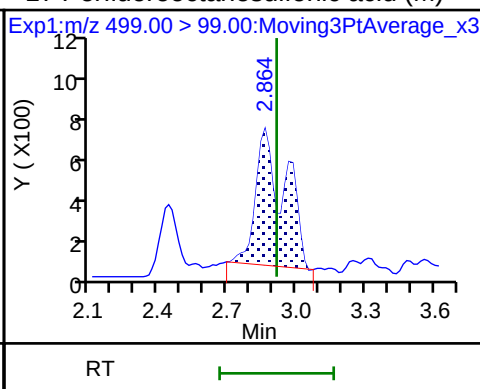
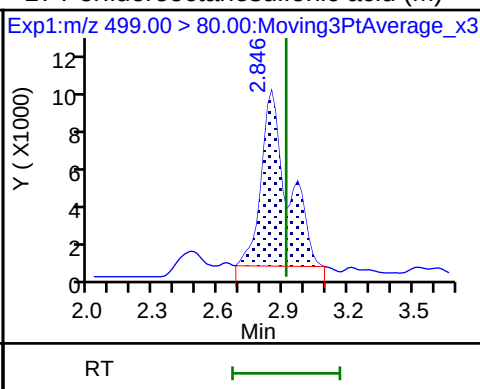
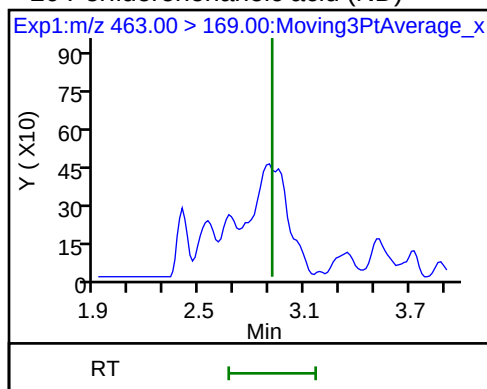
20 Perfluorononanoic acid (ND)



20 Perfluorononanoic acid (ND)

17 Perfluorooctanesulfonic acid (M)

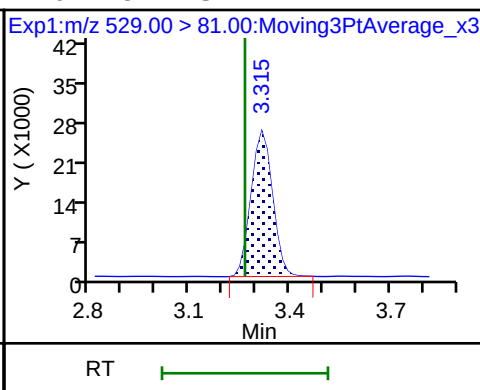
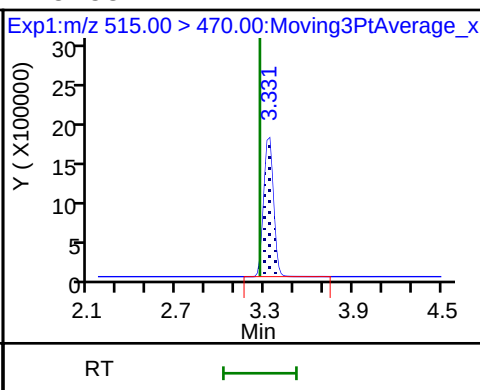
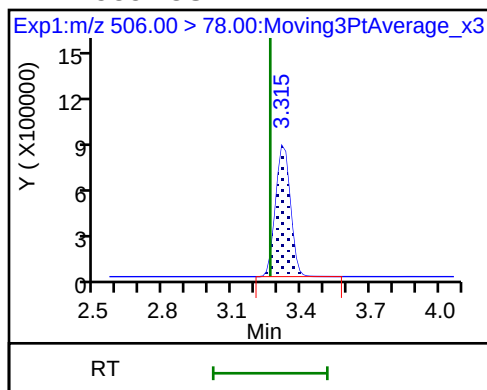
17 Perfluorooctanesulfonic acid (M)



D 21 13C8 FOSA

D 23 13C2 PFDA

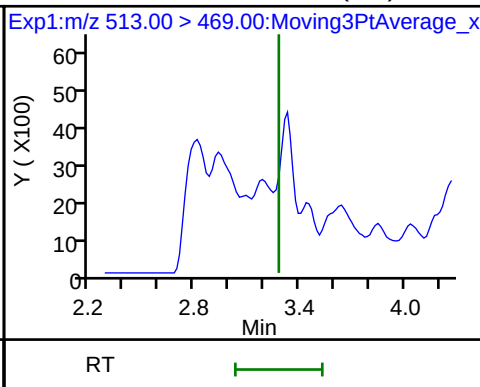
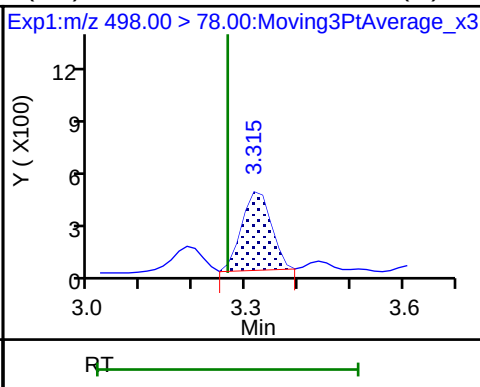
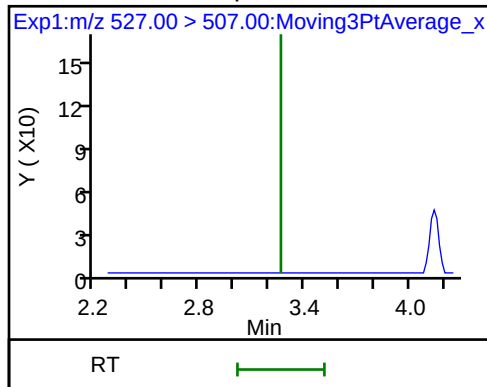
D 26 M2-8:2 FTS

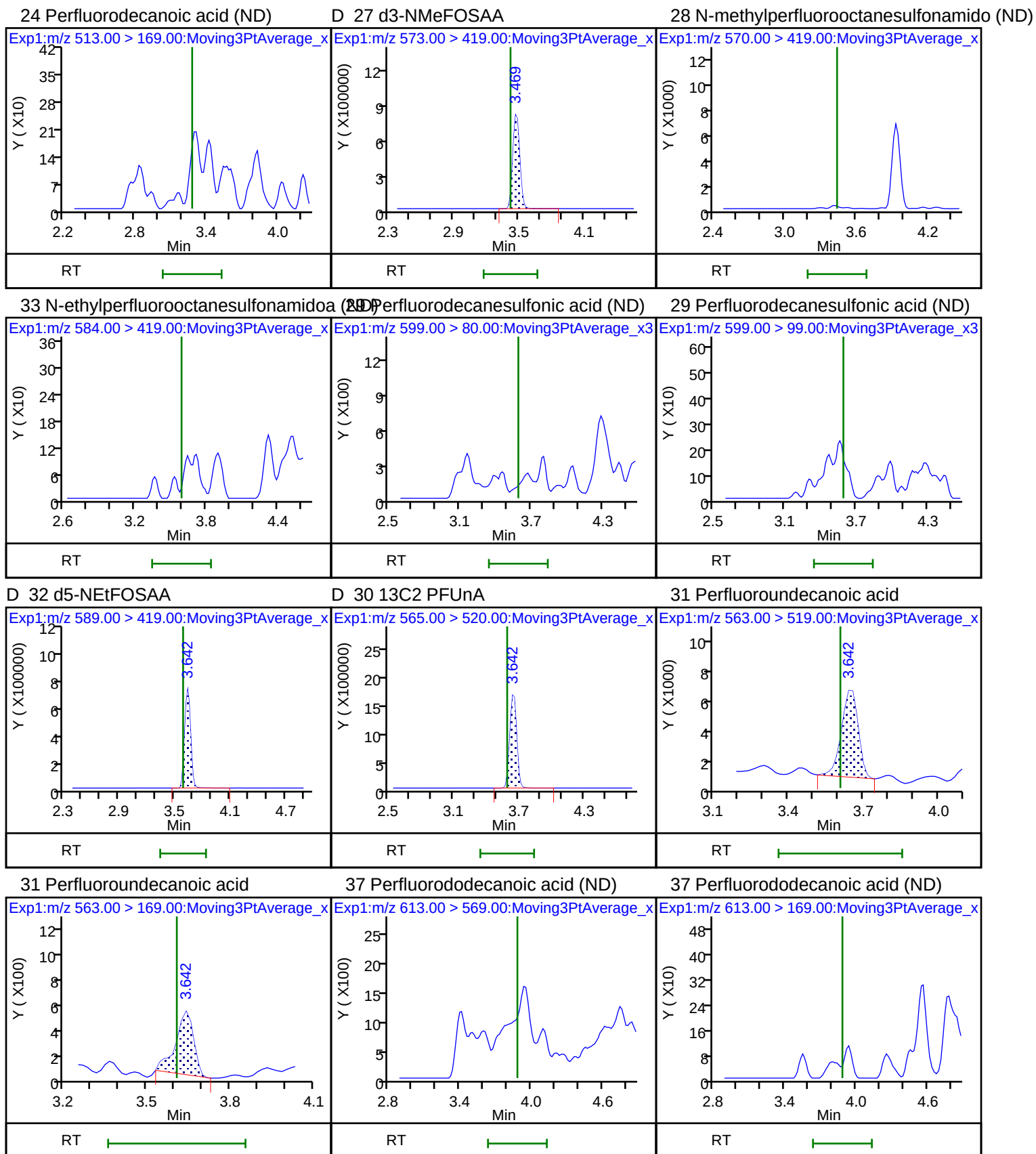


25 1H,1H,2H,2H-perfluorodecanesulfonamide (ND)

22 Perfluorooctanesulfonamide (M)

24 Perfluorodecanoic acid (ND)

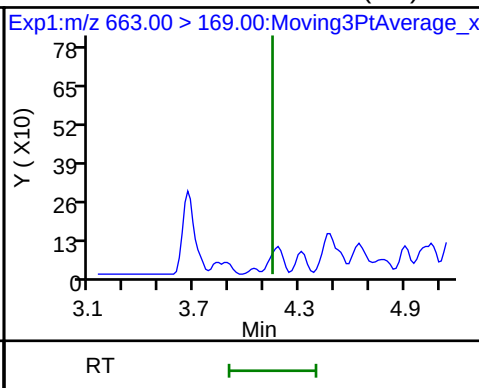
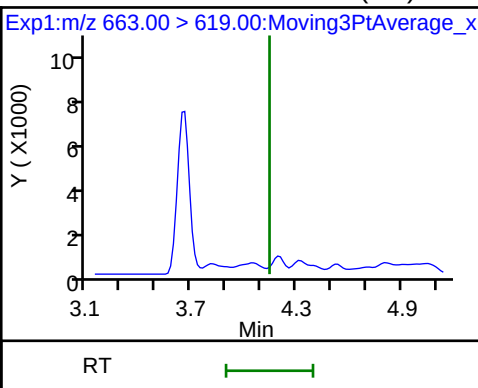
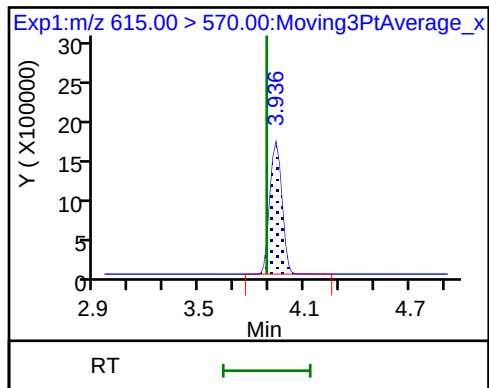




D 36 13C2 PFDaA

41 Perfluorotridecanoic acid (ND)

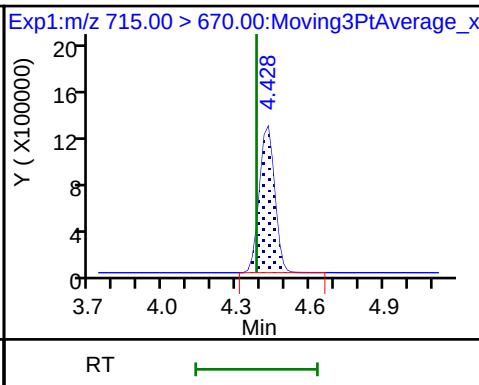
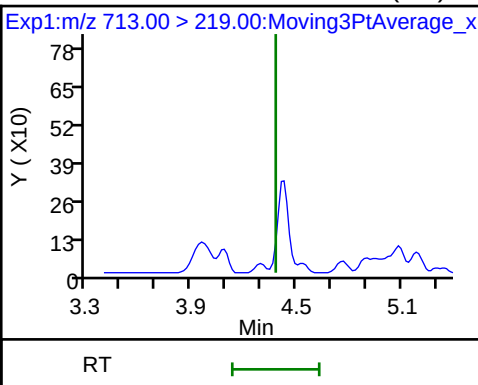
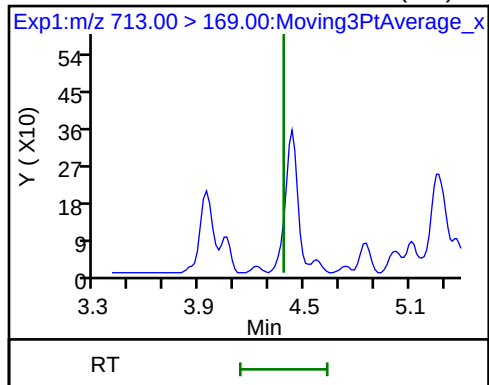
41 Perfluorotridecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)

42 Perfluorotetradecanoic acid (ND)

D 43 13C2 PFTeDA



TestAmerica Sacramento

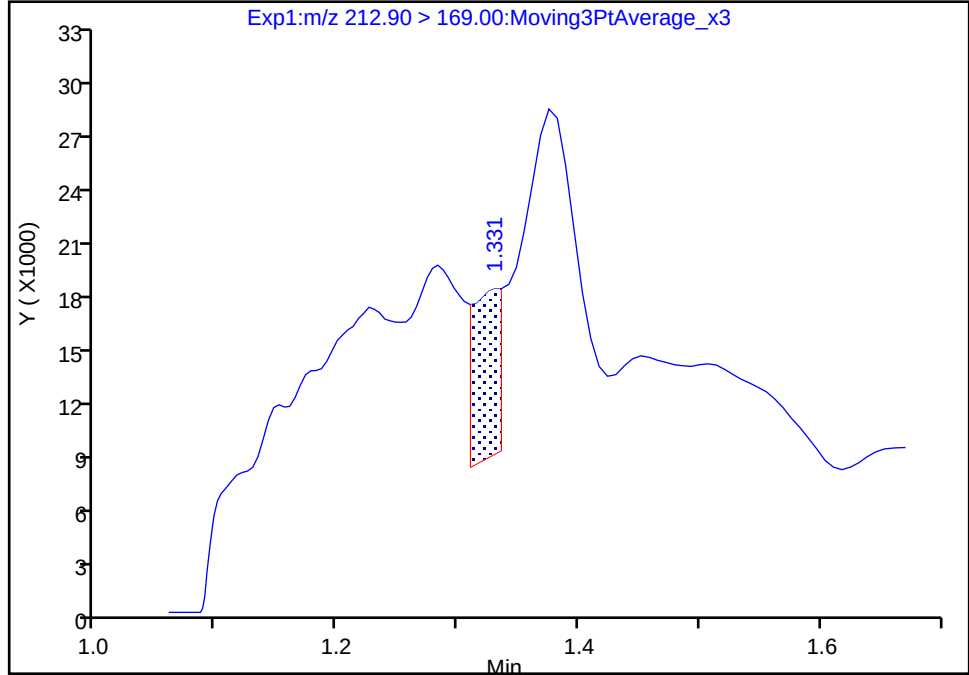
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Injection Date:	09-Nov-2018 08:55:58	Instrument ID:	A9		
Lims ID:	480-144297-F-9-A	Lab Sample ID:	320-144297-9		
Client ID:	GPW-6				
Operator ID:	A9\Administrator	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

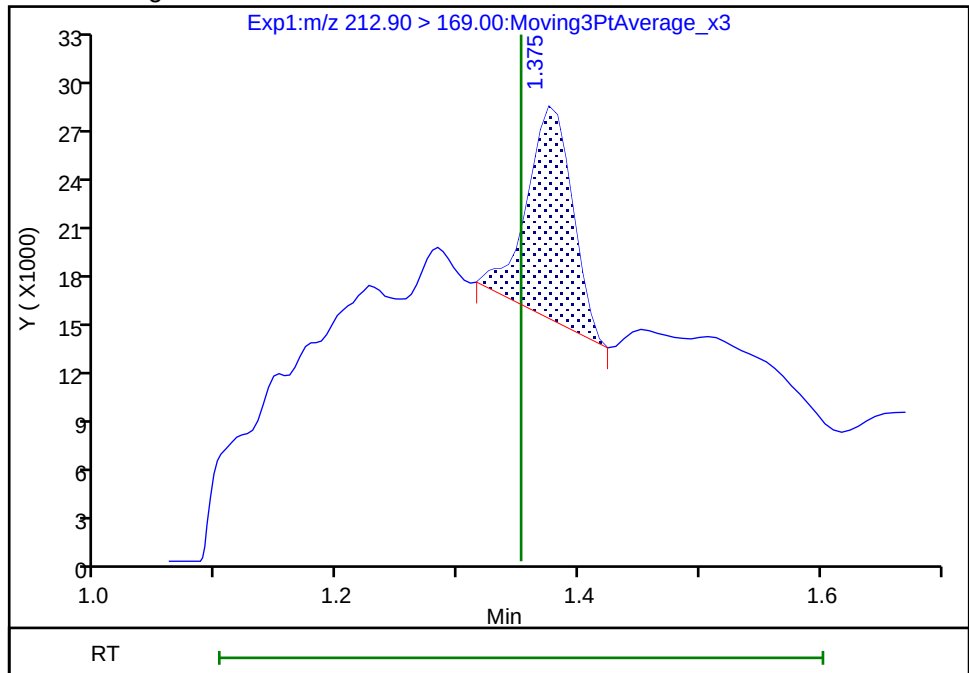
RT: 1.33
Area: 14169
Amount: 0.010050
Amount Units: ng/ml

Processing Integration Results



RT: 1.38
Area: 34197
Amount: 0.024256
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:28:13

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

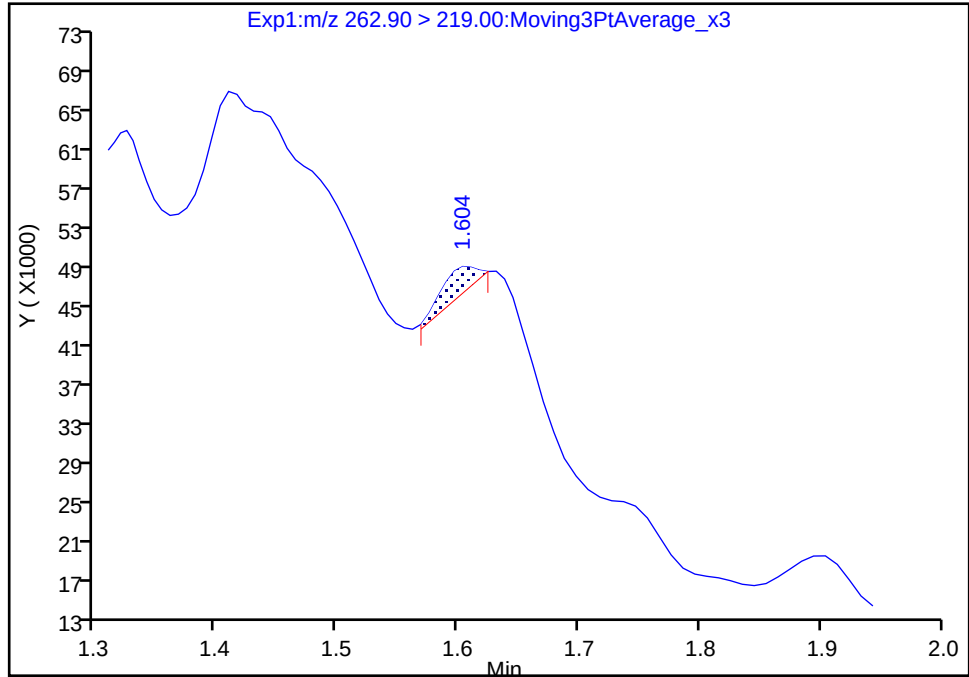
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_015.d
Injection Date: 09-Nov-2018 08:55:58 Instrument ID: A9
Lims ID: 480-144297-F-9-A Lab Sample ID: 320-144297-9
Client ID: GPW-6
Operator ID: A9\Administrator ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

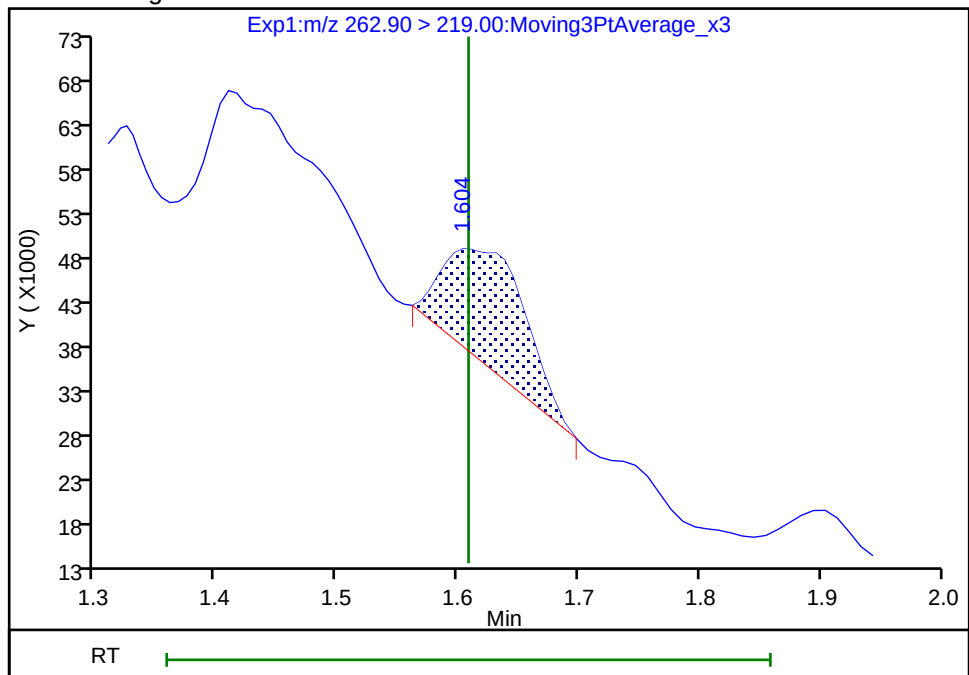
RT: 1.60
Area: 5861
Amount: 0.002549
Amount Units: ng/ml

Processing Integration Results



RT: 1.60
Area: 60869
Amount: 0.026469
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:28:25
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

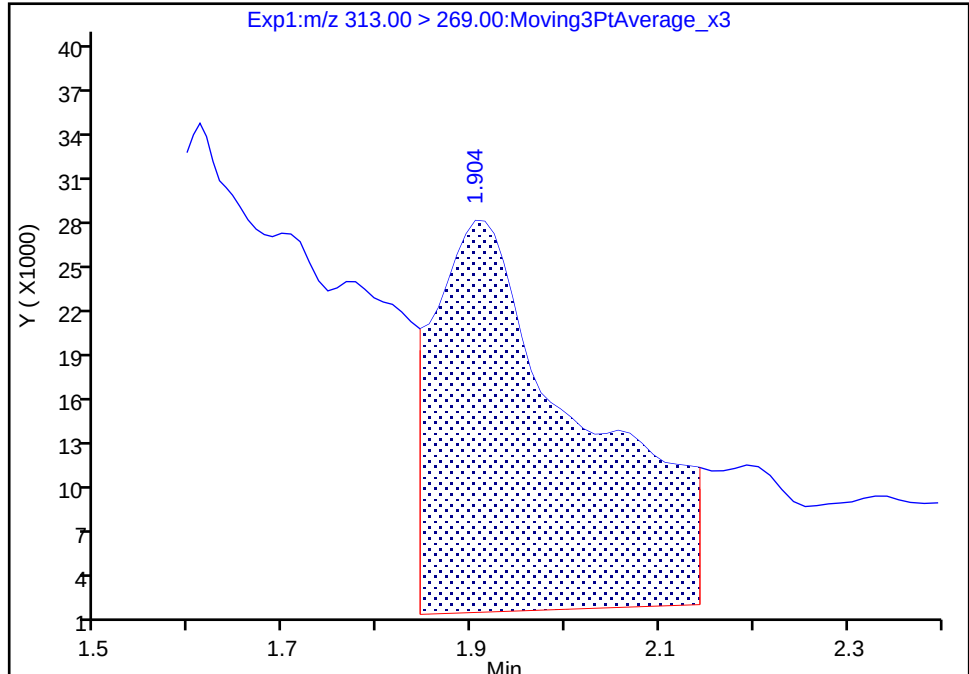
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Injection Date: 09-Nov-2018 08:55:58 Instrument ID: A9
Lims ID: 480-144297-F-9-A Lab Sample ID: 320-144297-9
Client ID: GPW-6
Operator ID: A9\Administrator ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

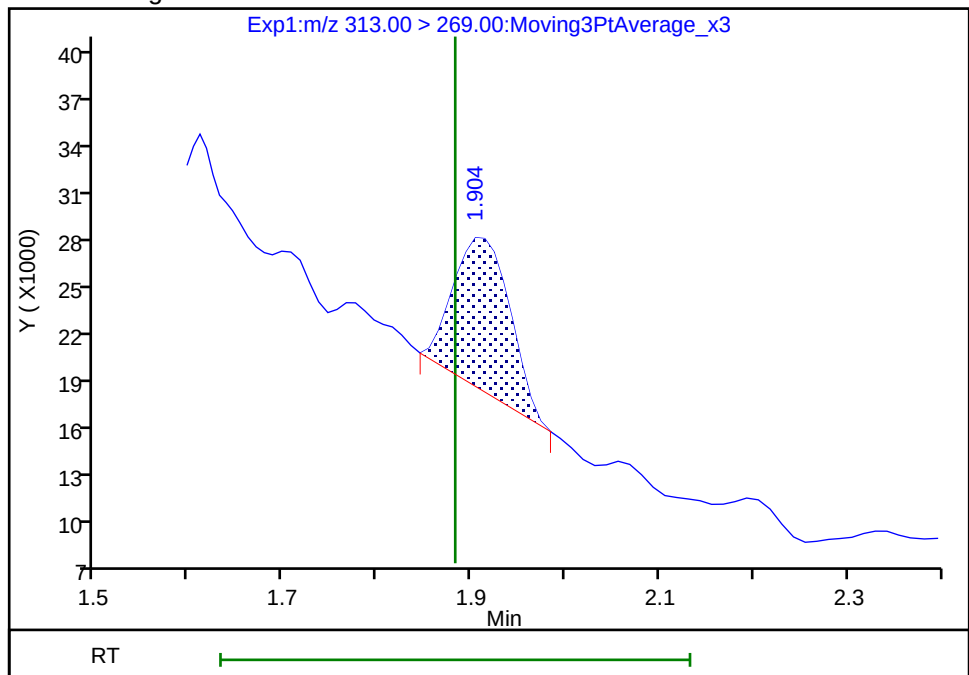
RT: 1.90
Area: 285792
Amount: 0.113473
Amount Units: ng/ml

Processing Integration Results



RT: 1.90
Area: 40202
Amount: 0.015962
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:28:52
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

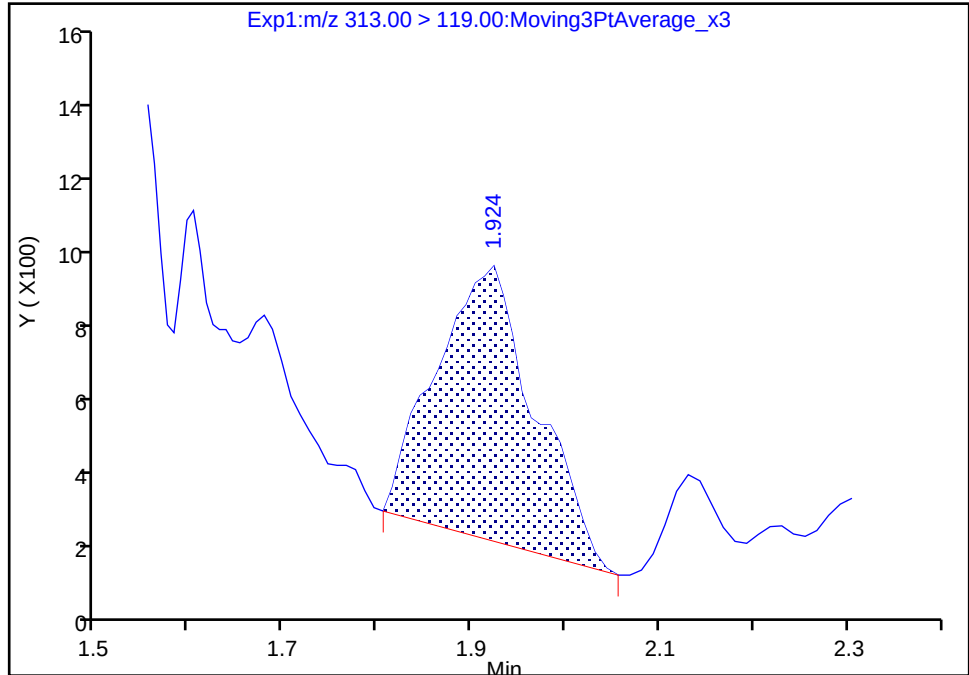
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Injection Date: 09-Nov-2018 08:55:58 Instrument ID: A9
Lims ID: 480-144297-F-9-A Lab Sample ID: 320-144297-9
Client ID: GPW-6
Operator ID: A9\Administrator ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

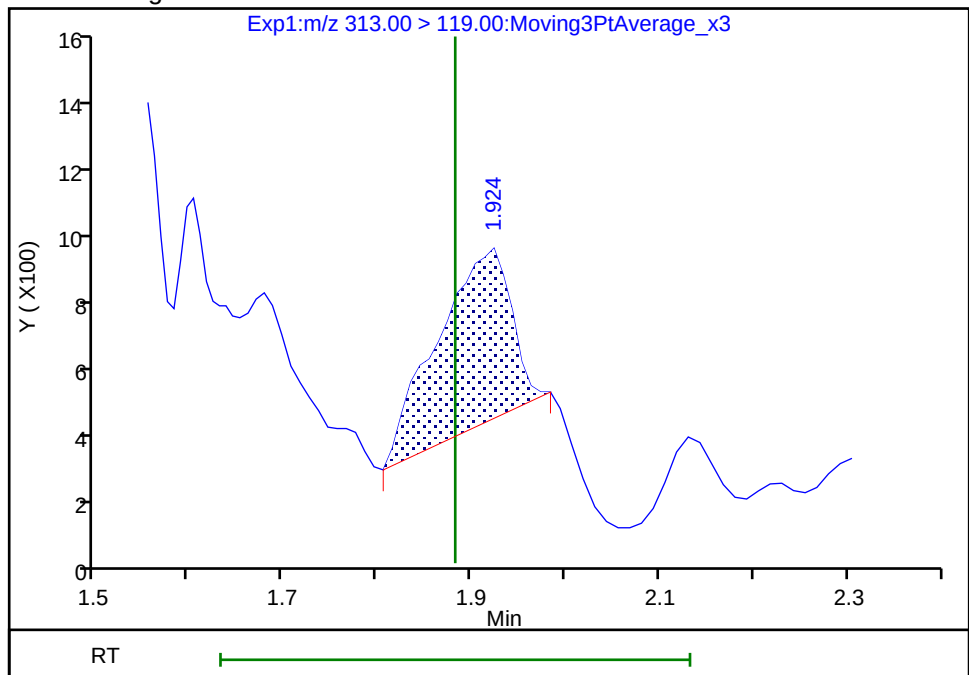
RT: 1.92
Area: 5136
Amount: 0.113473
Amount Units: ng/ml

Processing Integration Results



RT: 1.92
Area: 2739
Amount: 0.015962
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:28:57

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

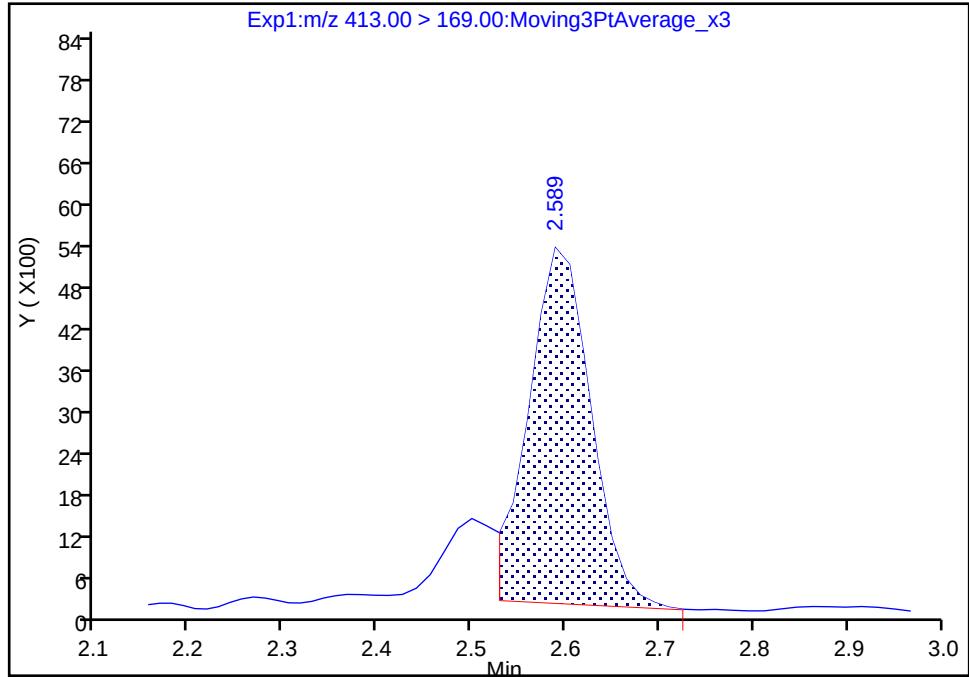
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Injection Date:	09-Nov-2018 08:55:58	Instrument ID:	A9		
Lims ID:	480-144297-F-9-A	Lab Sample ID:	320-144297-9		
Client ID:	GPW-6				
Operator ID:	A9\Administrator	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

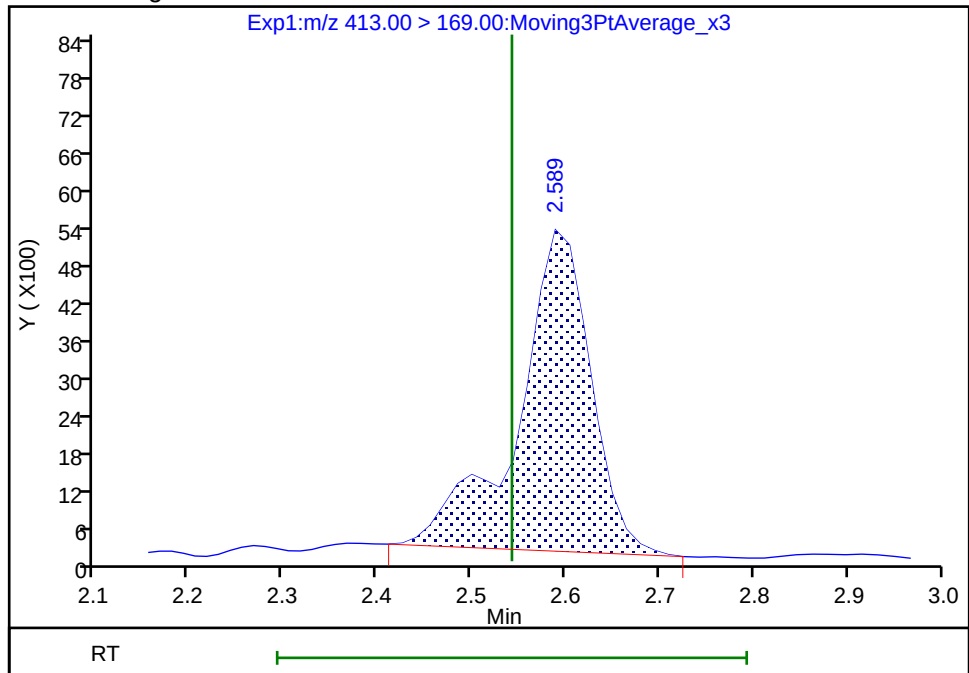
RT: 2.59
Area: 23653
Amount: 0.021798
Amount Units: ng/ml

Processing Integration Results



RT: 2.59
Area: 27965
Amount: 0.021798
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:29:19
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

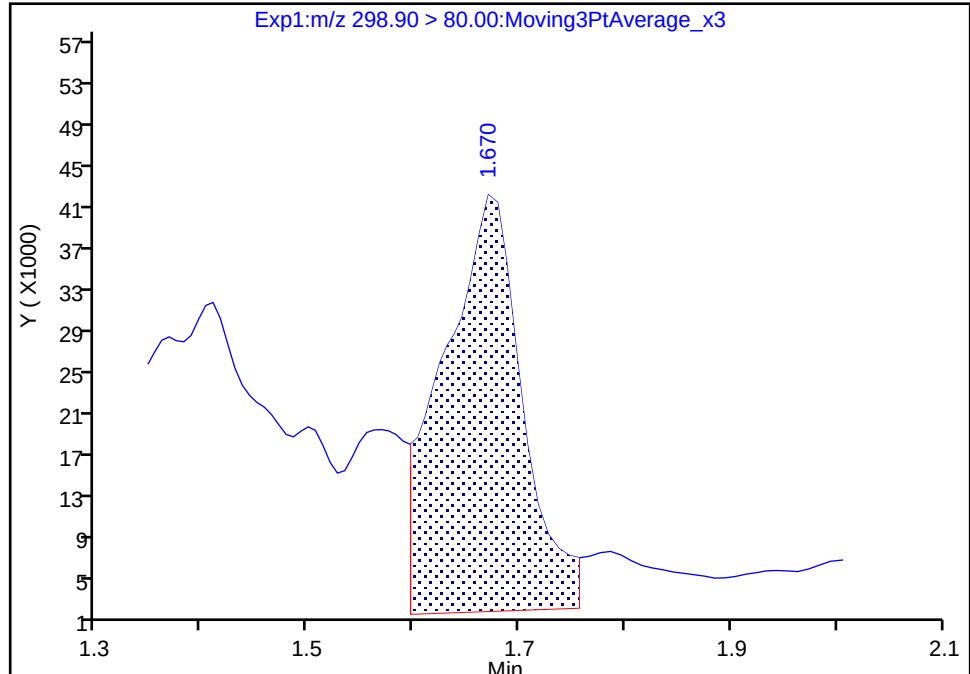
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_015.d				
Injection Date:	09-Nov-2018 08:55:58	Instrument ID:	A9		
Lims ID:	480-144297-F-9-A	Lab Sample ID:	320-144297-9		
Client ID:	GPW-6				
Operator ID:	A9\Administrator	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

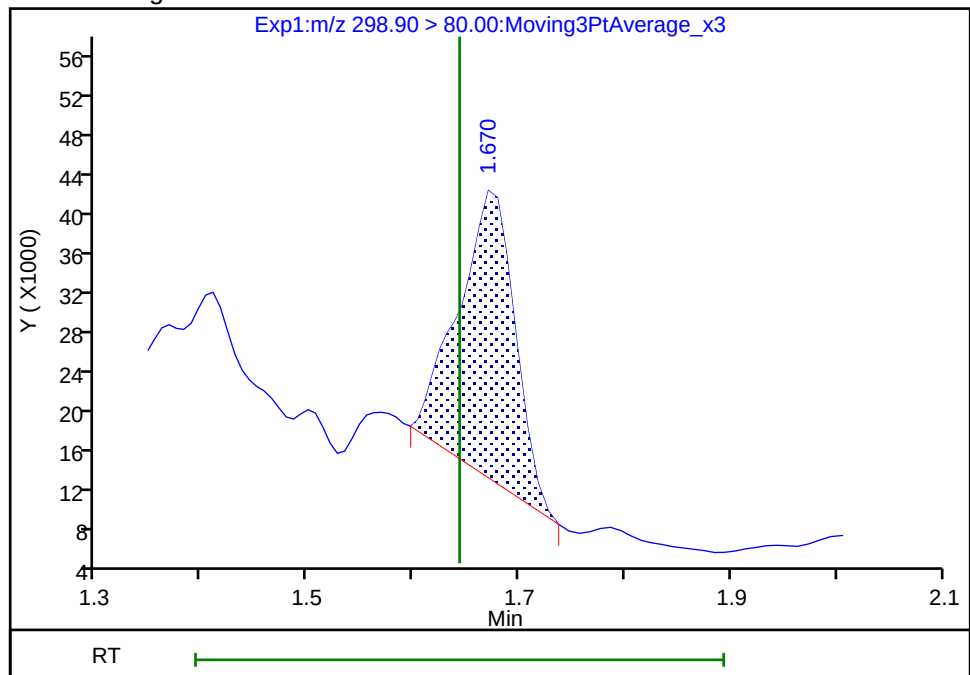
RT: 1.67
Area: 207148
Amount: 0.056439
Amount Units: ng/ml

Processing Integration Results



RT: 1.67
Area: 108158
Amount: 0.029468
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:28:39

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

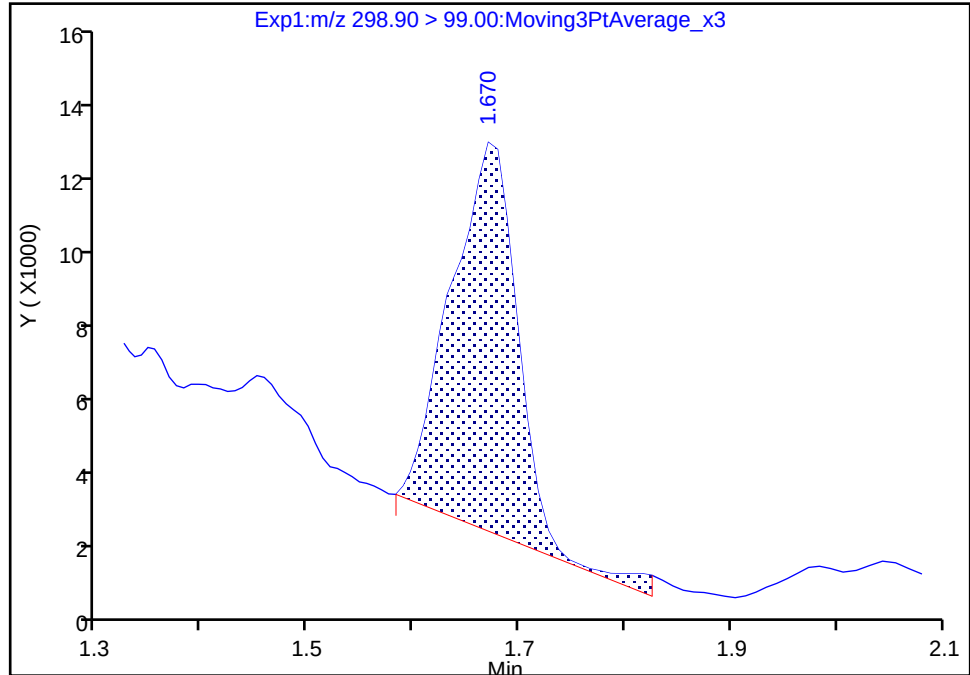
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_015.d
Injection Date: 09-Nov-2018 08:55:58 Instrument ID: A9
Lims ID: 480-144297-F-9-A Lab Sample ID: 320-144297-9
Client ID: GPW-6
Operator ID: A9\Administrator ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

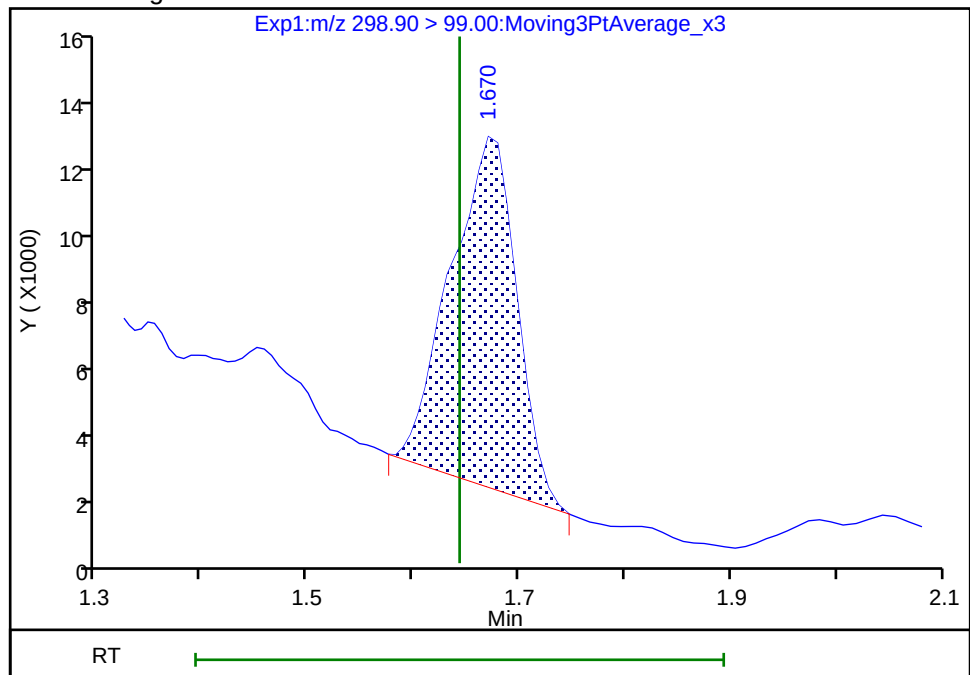
RT: 1.67
Area: 45082
Amount: 0.056439
Amount Units: ng/ml

Processing Integration Results



RT: 1.67
Area: 43856
Amount: 0.029468
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:28:42

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

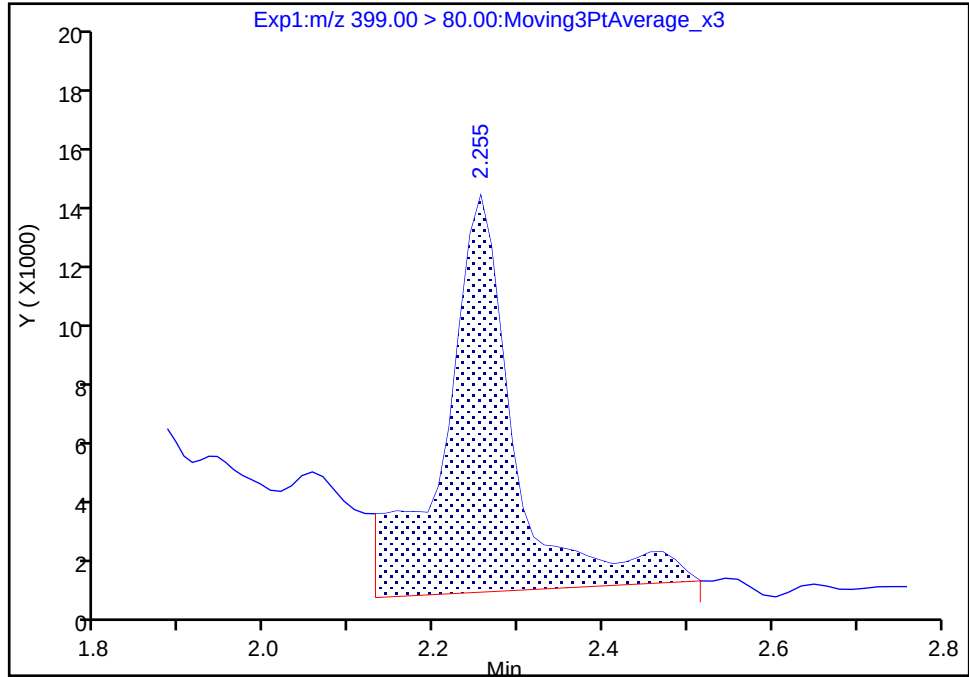
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_015.d
Injection Date: 09-Nov-2018 08:55:58 Instrument ID: A9
Lims ID: 480-144297-F-9-A Lab Sample ID: 320-144297-9
Client ID: GPW-6
Operator ID: A9\Administrator ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

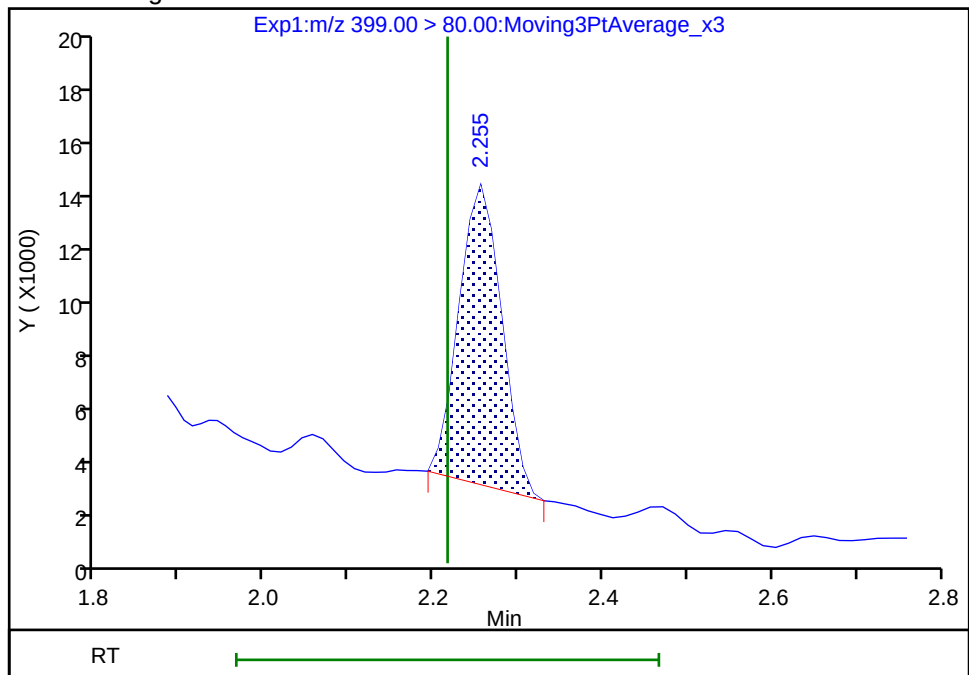
RT: 2.26
Area: 76710
Amount: 0.024736
Amount Units: ng/ml

Processing Integration Results



RT: 2.26
Area: 38725
Amount: 0.012487
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:29:06
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

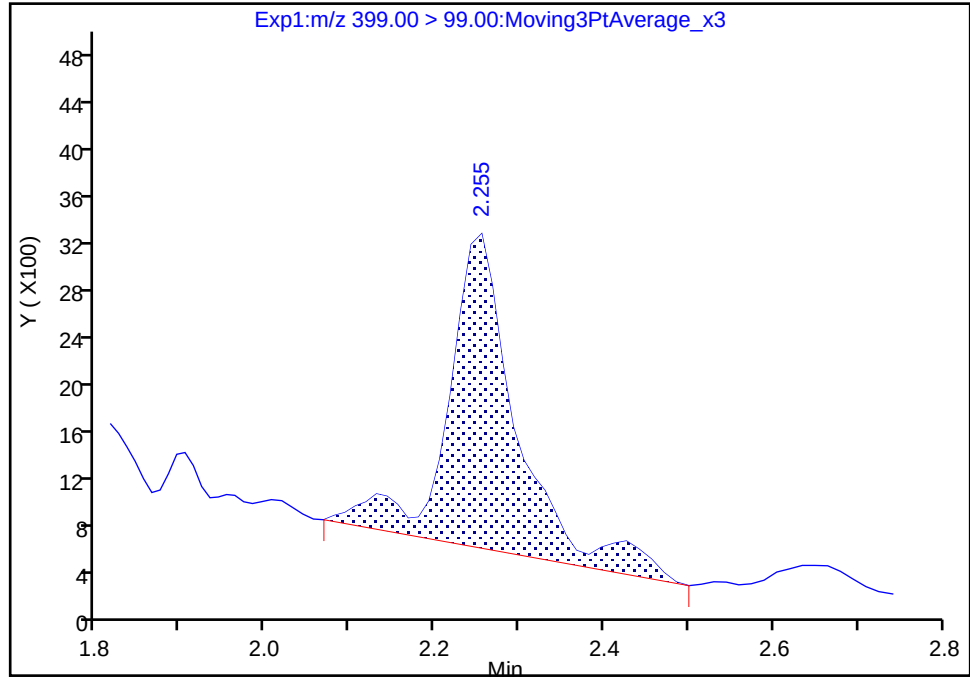
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_015.d
Injection Date: 09-Nov-2018 08:55:58 Instrument ID: A9
Lims ID: 480-144297-F-9-A Lab Sample ID: 320-144297-9
Client ID: GPW-6
Operator ID: A9\Administrator ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

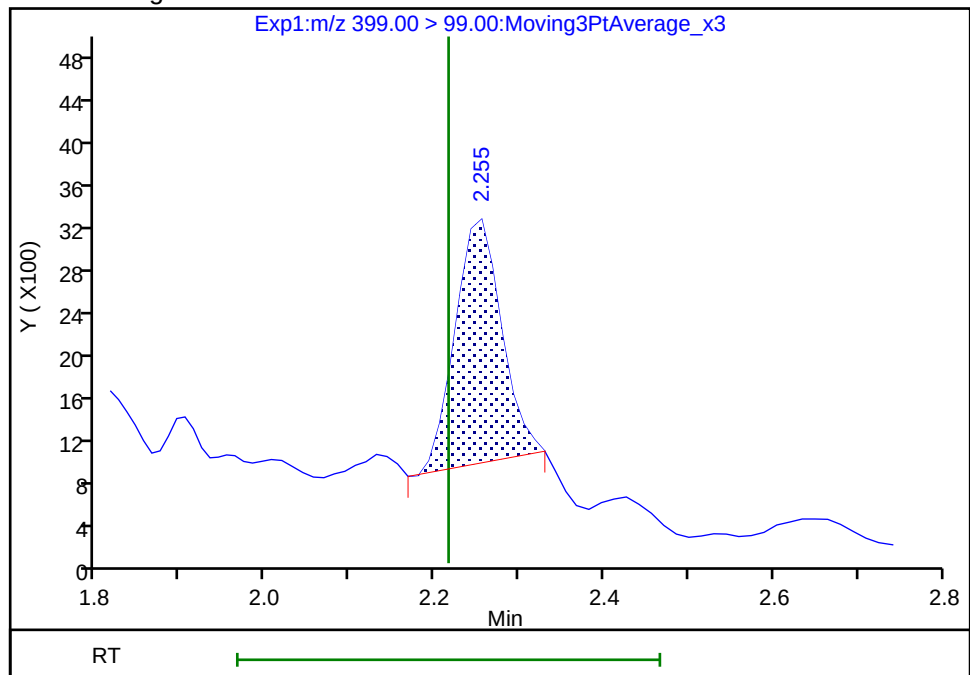
RT: 2.26
Area: 15241
Amount: 0.024736
Amount Units: ng/ml

Processing Integration Results



RT: 2.26
Area: 8682
Amount: 0.012487
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:29:09

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 724 of 1202

11/27/2018

TestAmerica Sacramento

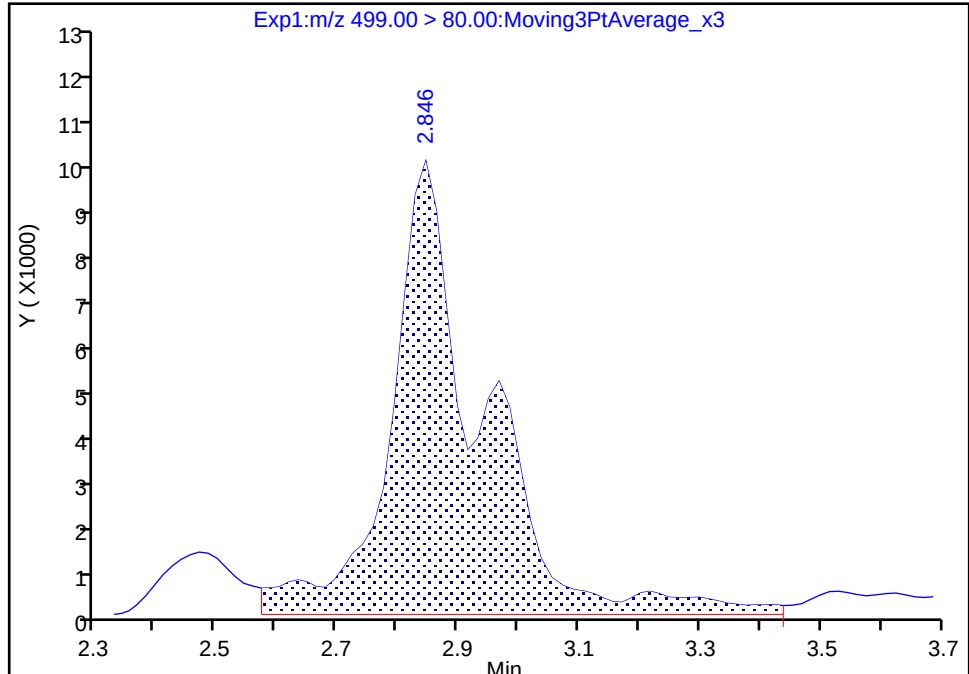
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Injection Date: 09-Nov-2018 08:55:58 Instrument ID: A9
Lims ID: 480-144297-F-9-A Lab Sample ID: 320-144297-9
Client ID: GPW-6
Operator ID: A9\Administrator ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

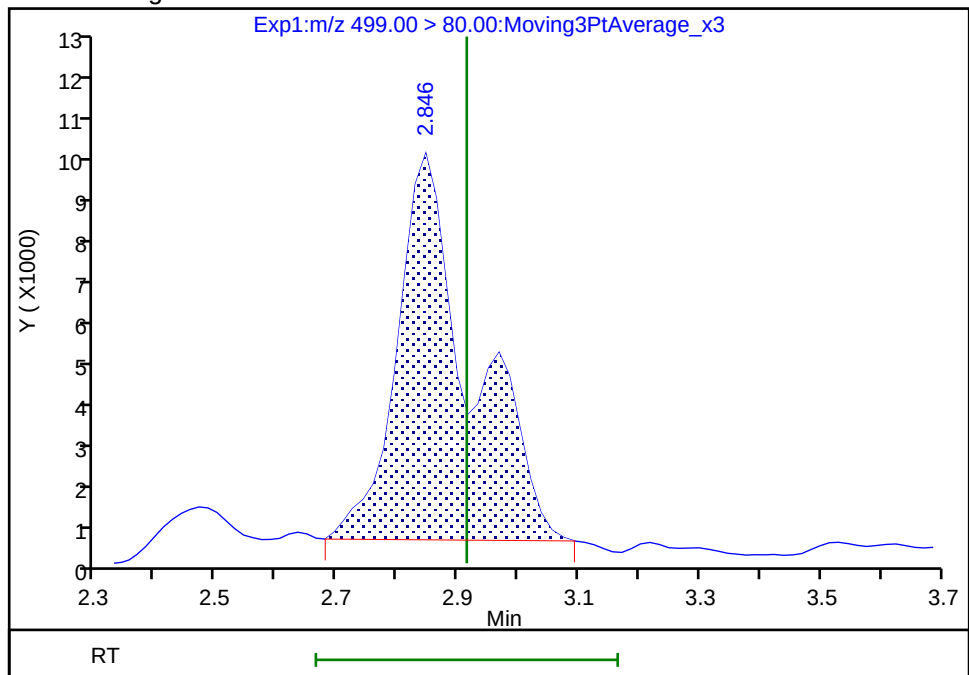
RT: 2.85
Area: 102514
Amount: 0.037352
Amount Units: ng/ml

Processing Integration Results



RT: 2.85
Area: 78059
Amount: 0.028441
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:29:28
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

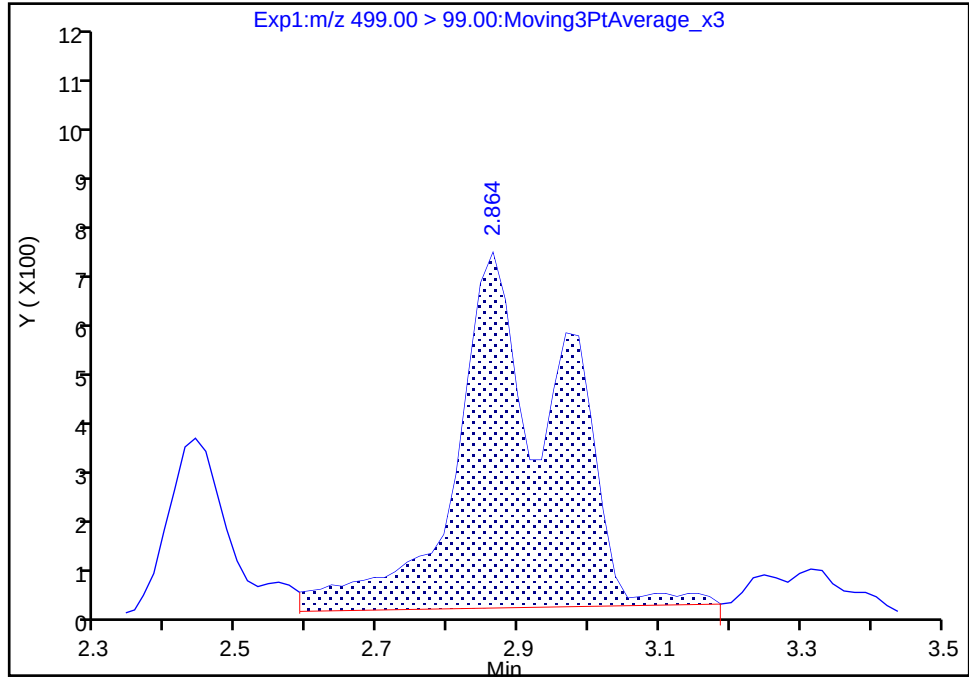
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Injection Date: 09-Nov-2018 08:55:58 Instrument ID: A9
Lims ID: 480-144297-F-9-A Lab Sample ID: 320-144297-9
Client ID: GPW-6
Operator ID: A9\Administrator ALS Bottle#: 9 Worklist Smp#: 12
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

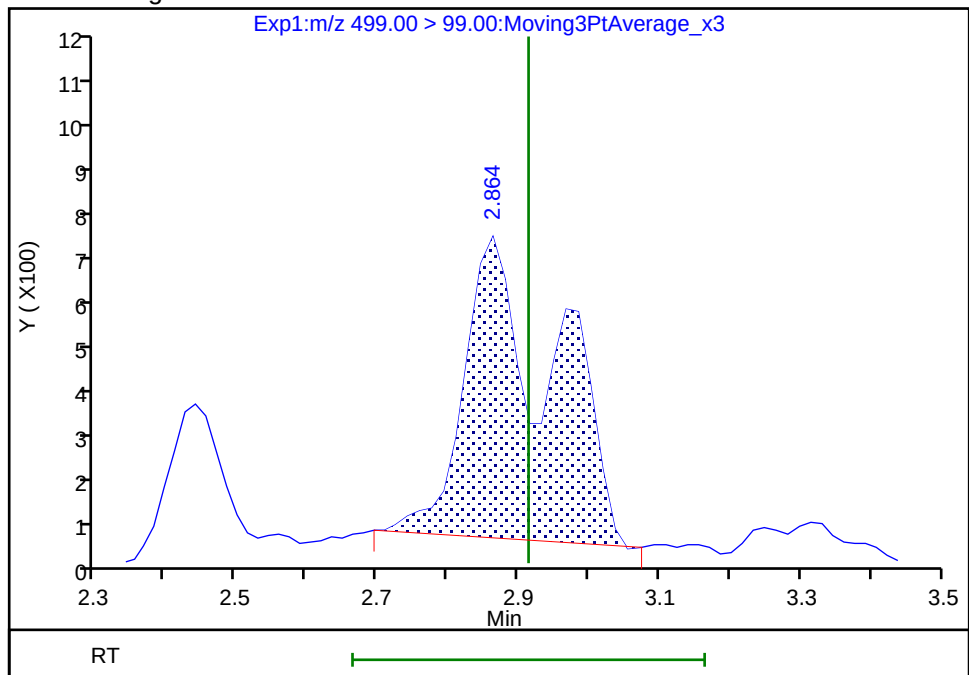
RT: 2.86
Area: 7422
Amount: 0.037352
Amount Units: ng/ml

Processing Integration Results



RT: 2.86
Area: 6012
Amount: 0.028441
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:29:32

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

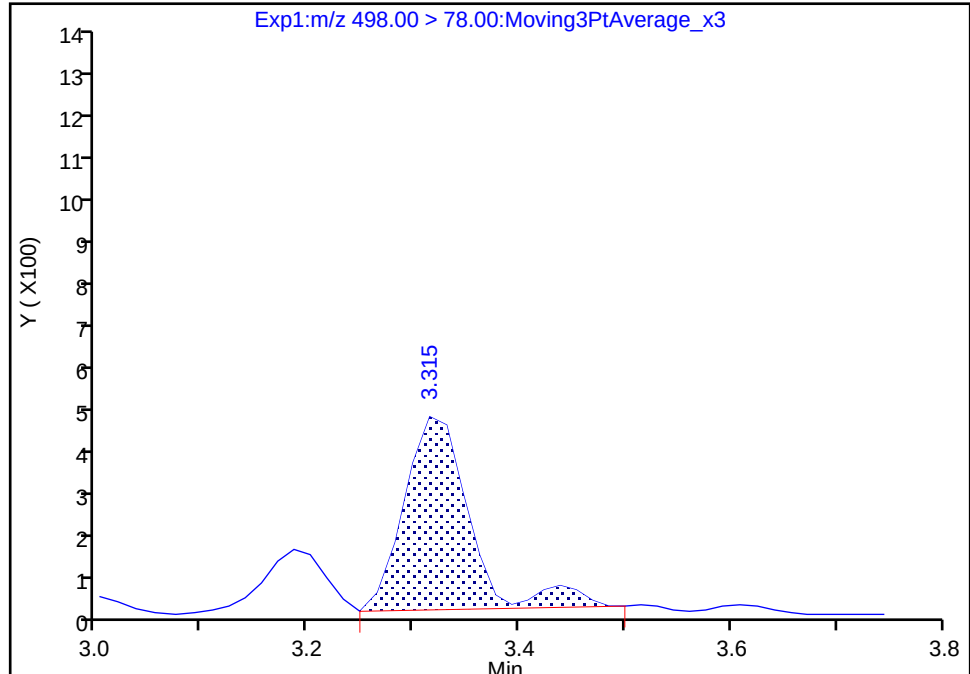
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_015.d				
Injection Date:	09-Nov-2018 08:55:58	Instrument ID:	A9		
Lims ID:	480-144297-F-9-A	Lab Sample ID:	320-144297-9		
Client ID:	GPW-6				
Operator ID:	A9\Administrator	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

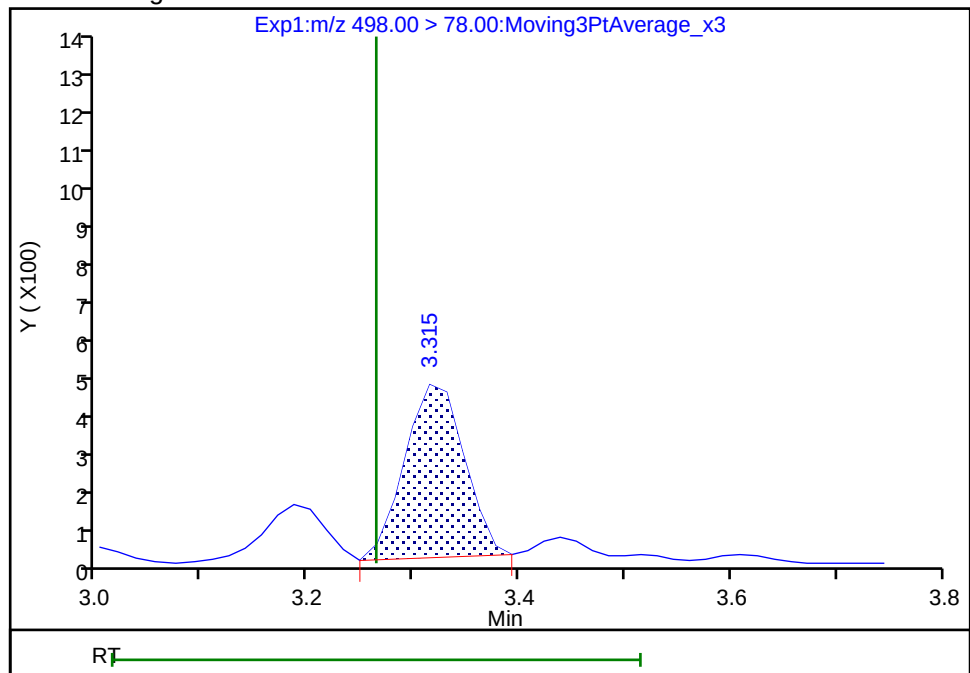
RT: 3.31
Area: 1901
Amount: 0.000426
Amount Units: ng/ml

Processing Integration Results



RT: 3.31
Area: 1713
Amount: 0.000384
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:29:39

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

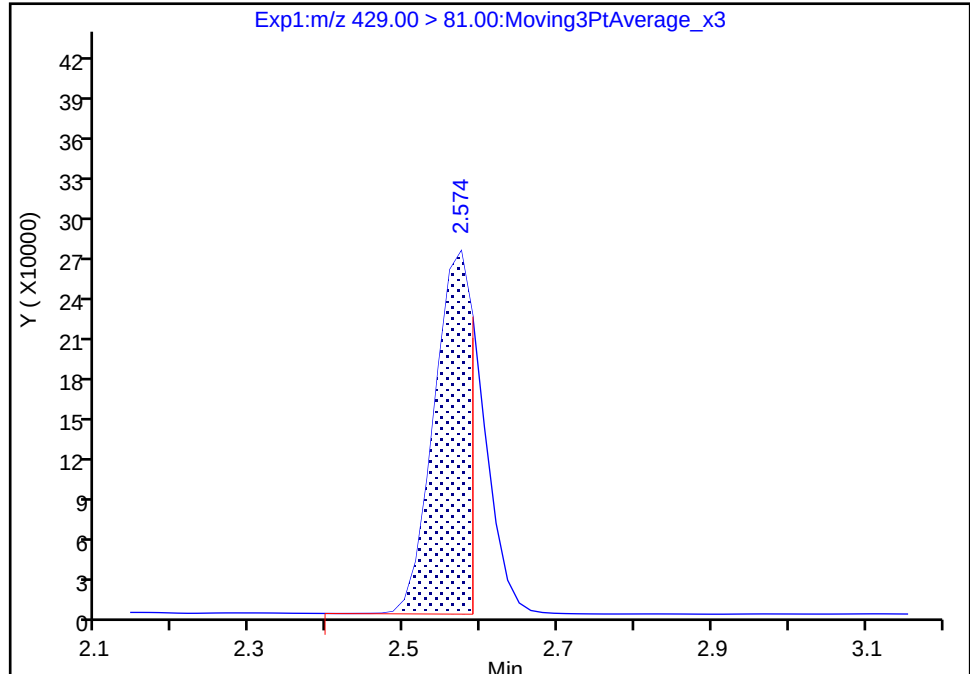
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_015.d				
Injection Date:	09-Nov-2018 08:55:58	Instrument ID:	A9		
Lims ID:	480-144297-F-9-A	Lab Sample ID:	320-144297-9		
Client ID:	GPW-6				
Operator ID:	A9\Administrator	ALS Bottle#:	9	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	PFAS_A9	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

D 12 M2-6:2 FTS, CAS: STL02279

Signal: 1

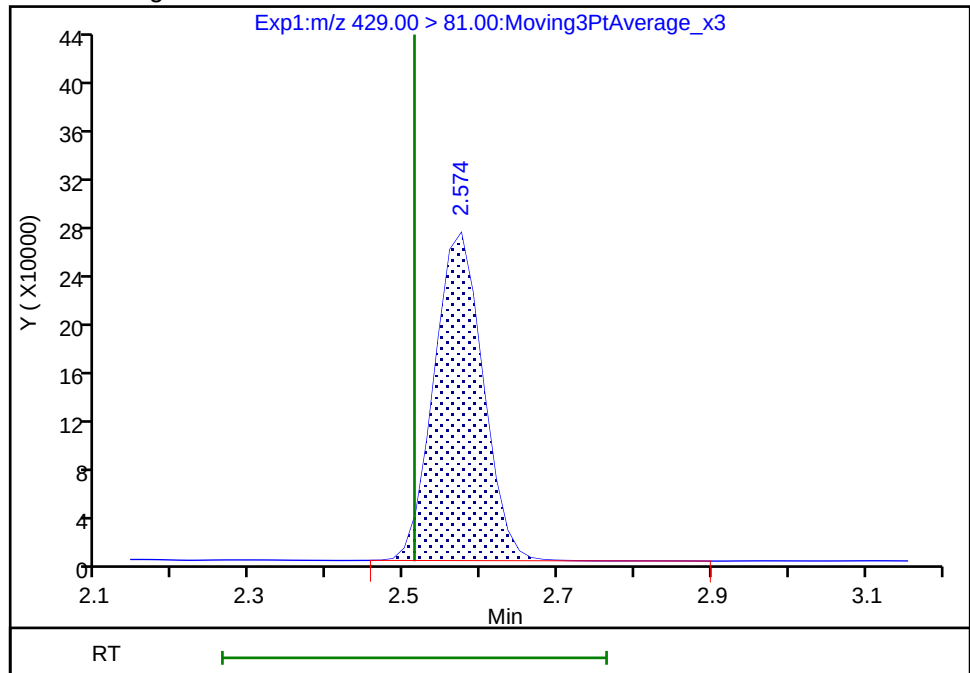
RT: 2.57
Area: 880214
Amount: 2.384446
Amount Units: ng/ml

Processing Integration Results



RT: 2.57
Area: 1201570
Amount: 3.254980
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:28:01
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GPW-5</u>	Lab Sample ID: <u>480-144297-10</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.13LLAAA_030.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 18:00</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>280.9(mL)</u>	Date Analyzed: <u>11/14/2018 02:21</u>
Con. Extract Vol.: <u>10.00(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>2(uL)</u>	GC Column: <u>GeminiC18 3x100 ID: 3(mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258999</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.5	J	1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	1.2	J	1.8	0.52
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.90	J	1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	1.6	J	1.8	0.76
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.9		1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.57	J B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3.4		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.31
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2 FTS	ND		18	1.8
39108-34-4	8:2 FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GPW-5</u>	Lab Sample ID: <u>480-144297-10</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.13LLAAA_030.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 18:00</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>280.9 (mL)</u>	Date Analyzed: <u>11/14/2018 02:21</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>2 (uL)</u>	GC Column: <u>GeminiC18 3x100</u> ID: <u>3 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258999</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	54		25-150
STL01893	13C5-PFPeA DNU	72		25-150
STL00993	13C2 PFHxA	74		25-150
STL01892	13C4 PFHpA	82		25-150
STL00990	13C4 PFOA	88		25-150
STL00995	13C5 PFNA	84		25-150
STL00996	13C2 PFDA	79		25-150
STL00997	13C2 PFUnA	77		25-150
STL00998	13C2 PFDoA	58		25-150
STL02116	13C2 PFTeDA	48		25-150
STL02337	13C3 PFBS	76		25-150
STL00994	18O2 PFHxS	86		25-150
STL00991	13C4 PFOS	85		25-150
STL01056	13C8 FOSA	73		25-150
STL02118	d3-NMeFOSAA	80		25-150
STL02117	d5-NEtFOSAA	75		25-150
STL02279	M2-6:2 FTS	112		25-150
STL02280	M2-8:2 FTS	73		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d
 Lims ID: 480-144297-F-10-A
 Client ID: GPW-5
 Sample Type: Client
 Inject. Date: 14-Nov-2018 02:21:22 ALS Bottle#: 17 Worklist Smp#: 4
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-144297-f-10-a
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 26-Nov-2018 09:41:33 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_011.d
 Column 1 : Det: EXP1
 Process Host: CTX0324

First Level Reviewer: mongkols

Date: 26-Nov-2018 09:41:33

Ratio Calibration: None

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	1.401	1.406	-0.005	0.539	2409195	1.35		54.1	3911	
D 3 13C5 PFPeA										
267.90 > 223.00	1.670	1.670	0.0	0.643	2119150	1.80		72.1	1702	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.662	1.676	-0.014	0.995	40786	0.0429			0.6	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.702	1.700	0.002	1.000	80496	0.0542	Target=2.49		2.4	M
298.90 > 99.00	1.702	1.700	0.002	1.000	37197		2.16(1.25-3.74)		5.4	
D 47 13C3 PFBS										
301.90 > 83.00	1.702	1.702	0.0	0.655	44074	1.77		76.3	76.3	
6 Perfluorohexanoic acid										M
313.00 > 269.00	1.944	1.928	0.016	1.005	34228	0.0350	Target=10.07		0.9	M
313.00 > 119.00	1.933	1.928	0.005	1.000	3713		9.22(5.03-15.10)		3.4	M
D 7 13C2 PFHxA										
315.00 > 270.00	1.933	1.943	-0.010	0.744	2401726	1.86		74.4	4054	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.255	2.236	0.019	1.000	27372	0.0252	Target=2.27		1.5	
363.00 > 169.00	2.255	2.236	0.019	1.000	8893		3.08(1.13-3.40)		7.5	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.277	2.258	0.019	1.000	22694	0.0159	Target=3.00		5.1	M
399.00 > 99.00	2.277	2.258	0.019	1.000	7071		3.21(1.50-4.49)		3.1	M
D 9 13C4 PFHpA										
367.00 > 322.00	2.255	2.265	-0.010	0.868	2443361	2.05		82.0	5951	
D 11 18O2 PFHxS										
403.00 > 84.00	2.277	2.277	0.001	0.876	2961286	2.03		85.8	6172	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.579	2.561	0.018	1.000	4215	0.009196			7.9	

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	2.579	2.579	0.0	0.993	688534	2.67		112	449	
* 62 13C2 PFOA										s
415.00 > 370.00	2.599	2.595	0.004		2997778	2.50			5578	
D 14 13C4 PFOA										
417.00 > 372.00	2.593	2.604	-0.011	0.998	2569413	2.20		88.0	4943	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.599	2.675	-0.076	1.002	53548	0.0458	Target=1.68		4.3	M
413.00 > 169.00	2.599	2.675	-0.076	1.002	29349		1.82(0.84-2.52)		23.6	M
20 Perfluorononanoic acid										
463.00 > 419.00	2.971	2.957	0.014	1.002	5076	0.005799	Target=3.79		1.4	
463.00 > 169.00	2.963	2.957	0.006	1.000	1134		4.48(1.90-5.69)		6.7	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	2.963	2.957	0.006	1.000	89644	0.0951	Target=4.62		25.6	M
499.00 > 99.00	2.963	2.957	0.006	1.000	8192		10.94(2.31-6.93)		7.9	M
D 18 13C4 PFOS										
503.00 > 80.00	2.963	2.970	-0.007	1.140	1952018	2.04		85.3	2025	
D 19 13C5 PFNA										
468.00 > 423.00	2.963	2.970	-0.007	1.140	2050480	2.11		84.5	5585	
D 21 13C8 FOSA										
506.00 > 78.00	3.312	3.312	0.0	1.275	2457318	1.83		73.3	3926	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.320	3.319	0.001	1.277	480477	1.76		73.3	794	
D 23 13C2 PFDA										
515.00 > 470.00	3.327	3.326	0.001	1.280	1651741	1.97		78.7	3251	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.491	3.482	0.009	1.343	817744	2.00		79.9	1579	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.654	3.653	0.001	1.406	816103	1.87		74.8	1301	
D 30 13C2 PFUnA										
565.00 > 520.00	3.661	3.666	-0.005	1.409	1269474	1.92		76.6	2811	
D 36 13C2 PFDoA										
615.00 > 570.00	3.961	3.960	0.001	1.524	1009757	1.44		57.5	3509	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.467	4.466	0.001	1.719	1054643	1.21		48.3	3550	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d

Injection Date: 14-Nov-2018 02:21:22

Instrument ID: A8_N

Lims ID: 480-144297-F-10-A

Lab Sample ID: 320-144297-10

Client ID: GPW-5

Operator ID: SACINSTLCMS01

ALS Bottle#: 17

Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

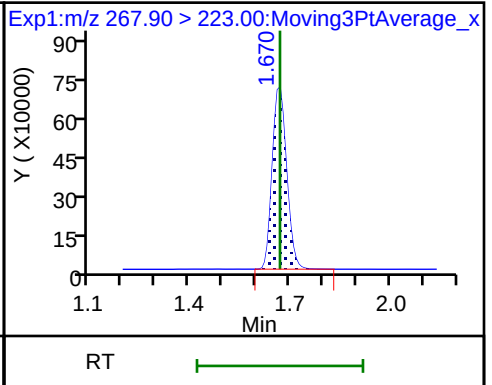
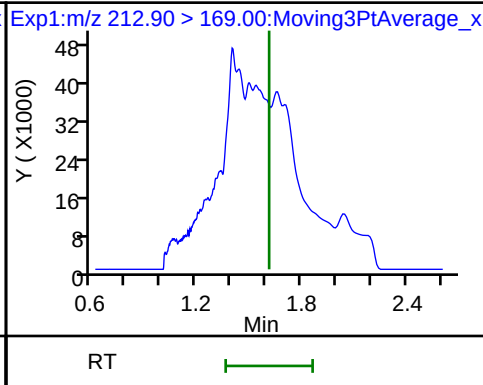
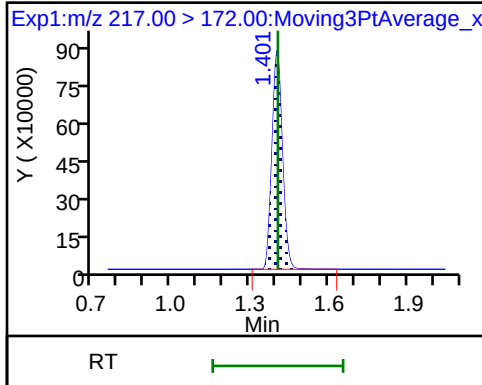
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (ND)

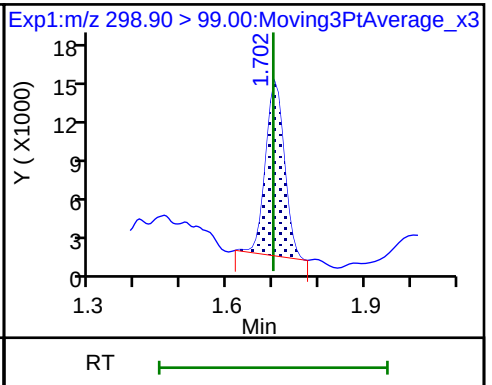
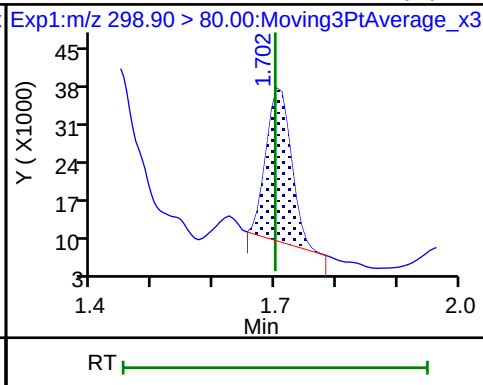
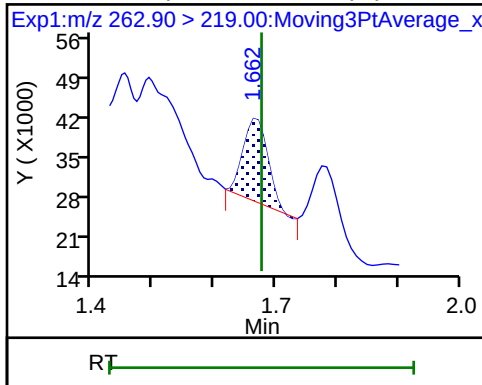
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

5 Perfluorobutanesulfonic acid (M)

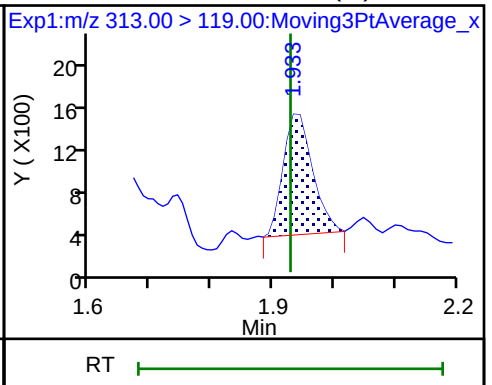
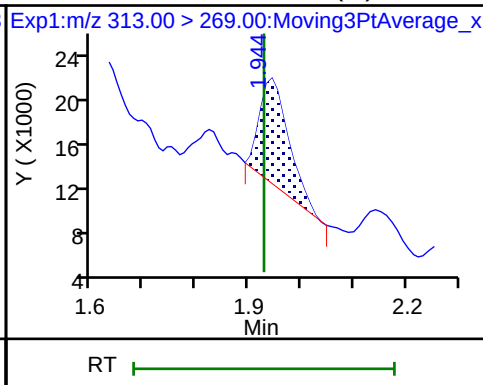
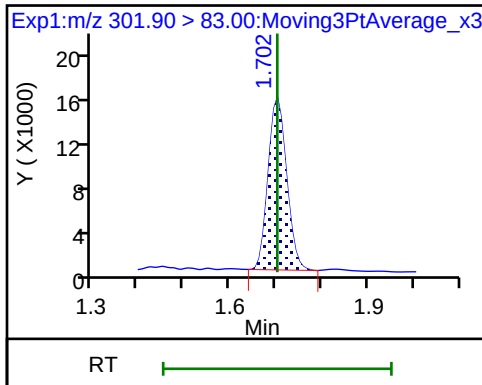
5 Perfluorobutanesulfonic acid



D 47 13C3 PFBS

6 Perfluorohexanoic acid (M)

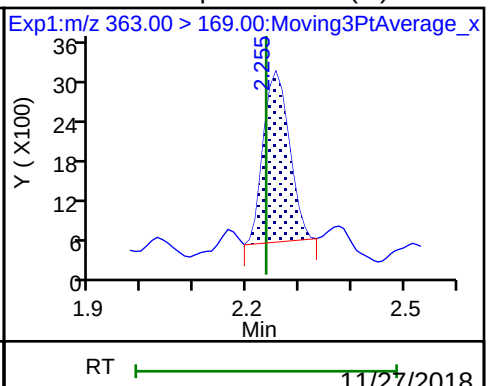
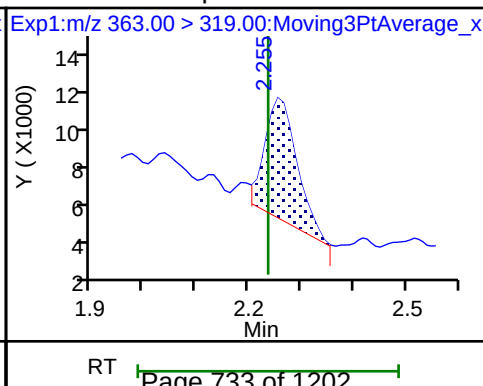
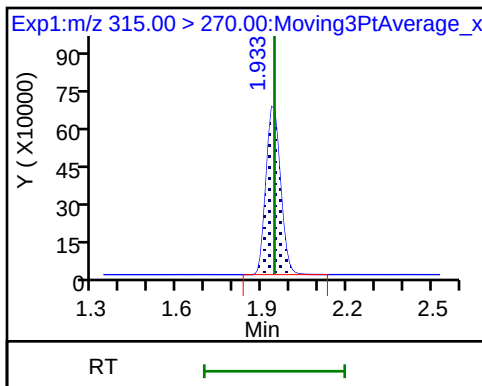
6 Perfluorohexanoic acid (M)



D 7 13C2 PFHxA

10 Perfluoroheptanoic acid

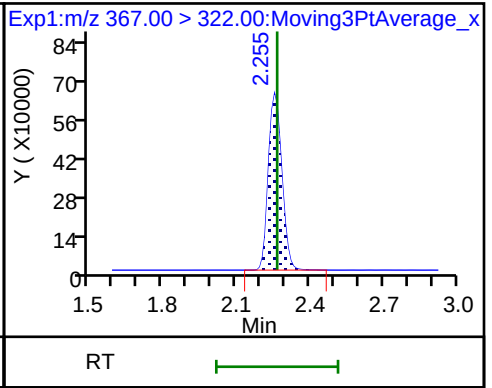
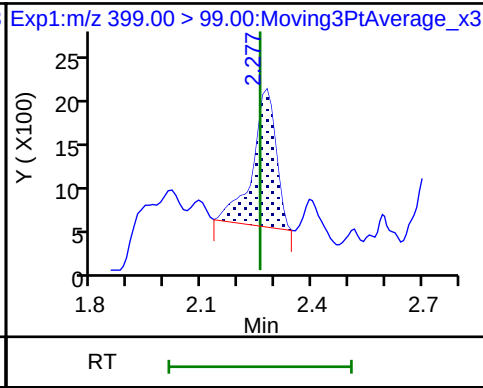
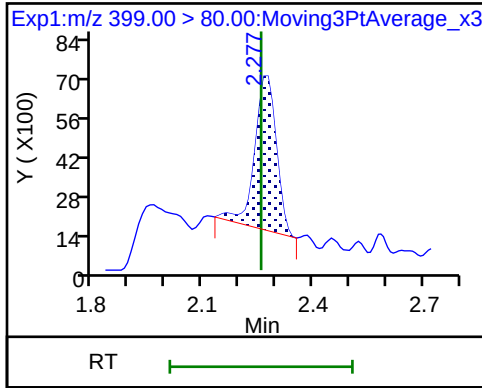
10 Perfluoroheptanoic acid (M)



8 Perfluorohexanesulfonic acid (M)

8 Perfluorohexanesulfonic acid (M)

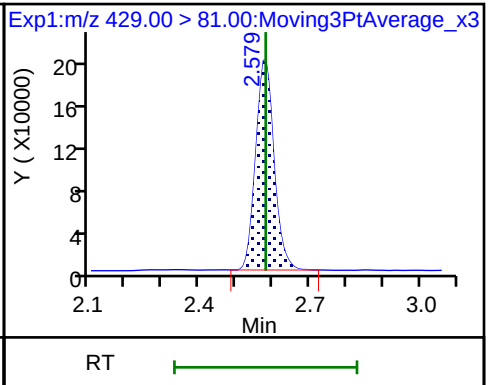
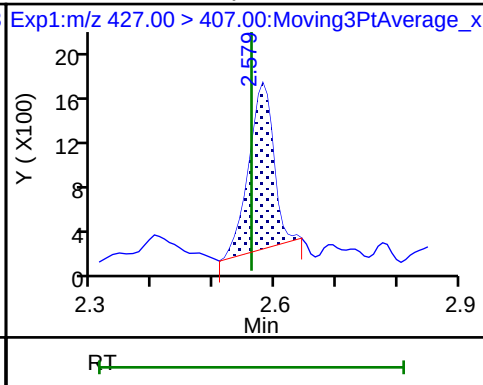
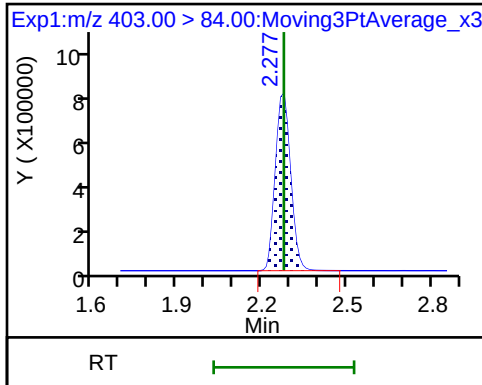
D 9 13C4 PFHpA



D 11 18O2 PFHxS

13 1H,1H,2H,2H-perfluorooctanesulfonD

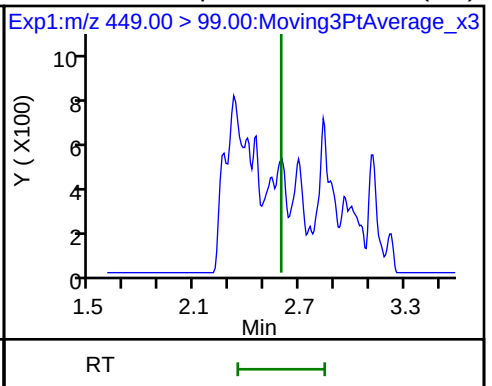
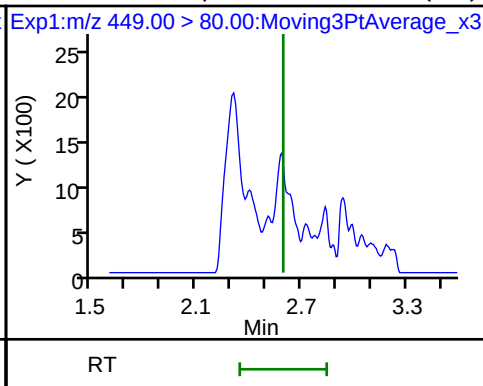
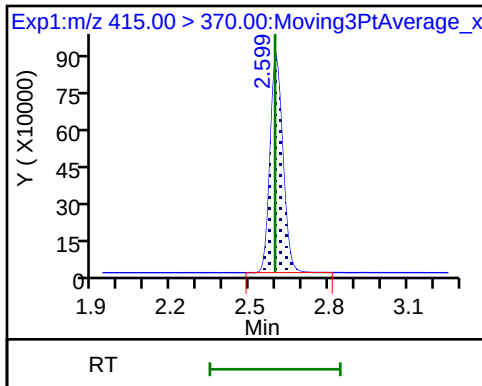
12 M2-6:2 FTS



* 62 13C2 PFOA

16 Perfluoroheptanesulfonic acid (ND)

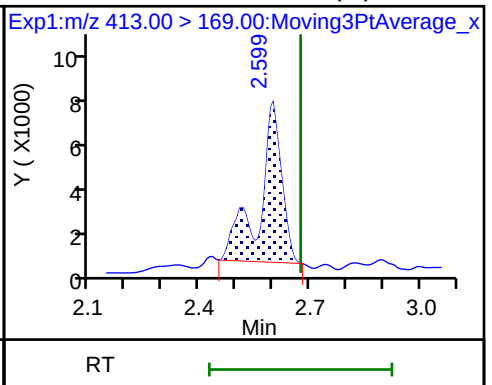
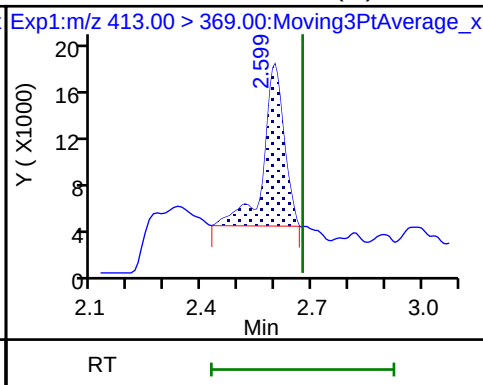
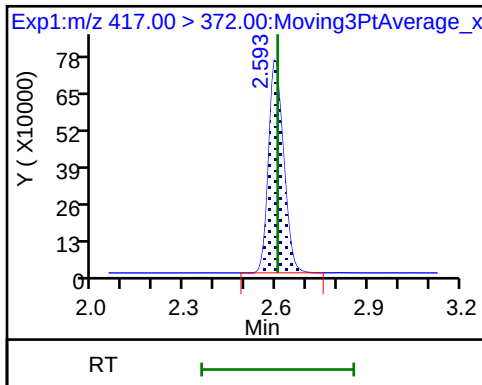
16 Perfluoroheptanesulfonic acid (ND)

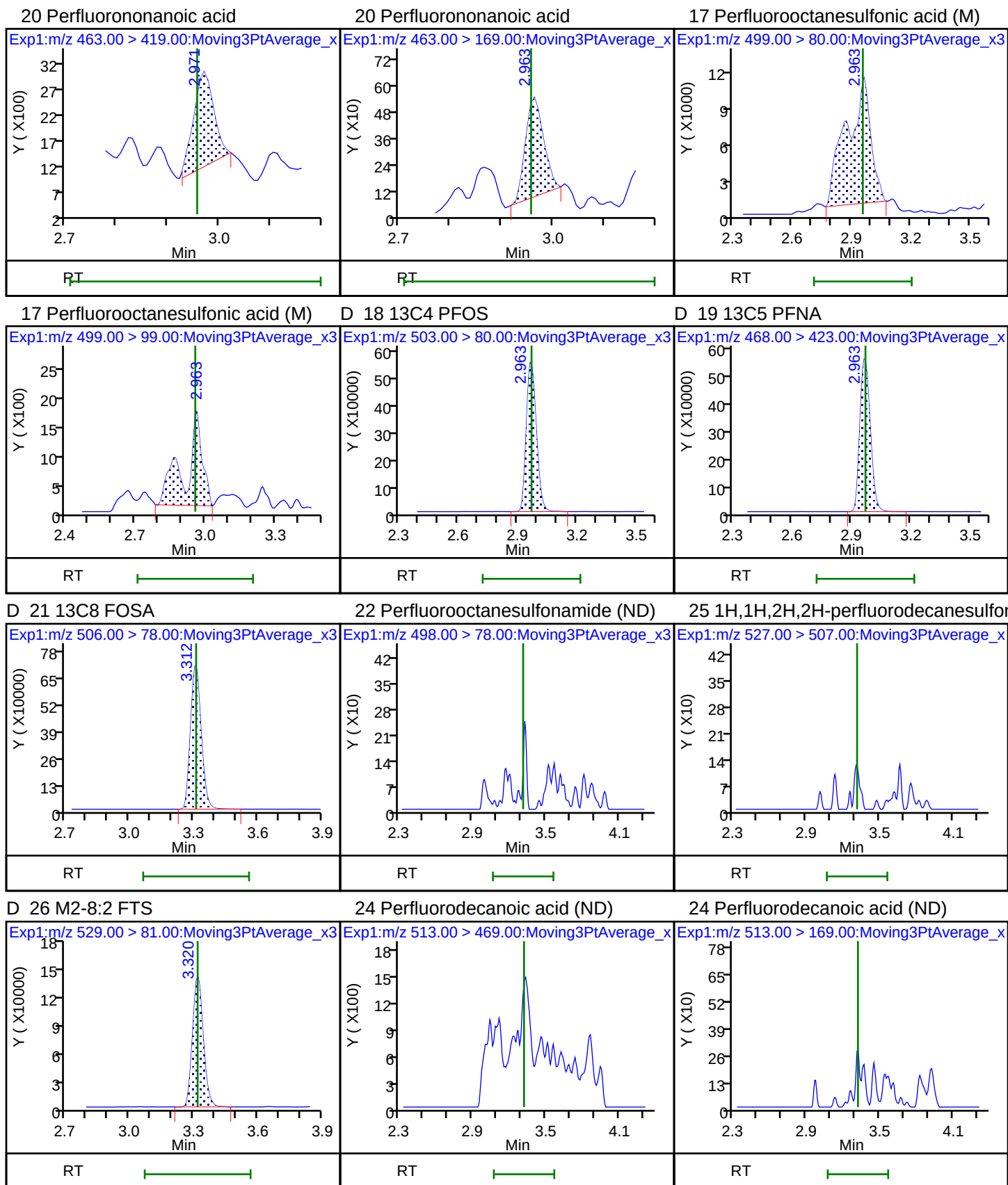


D 14 13C4 PFOA

15 Perfluorooctanoic acid (M)

15 Perfluorooctanoic acid (M)

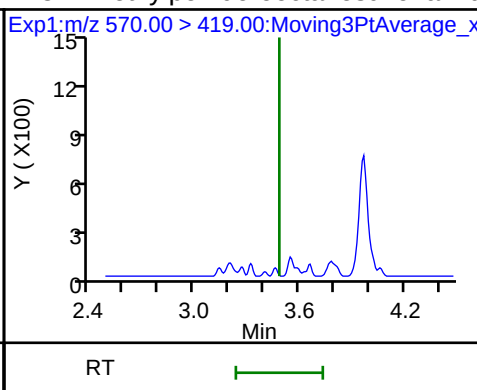
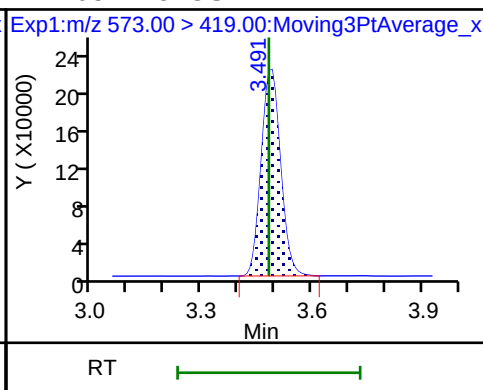
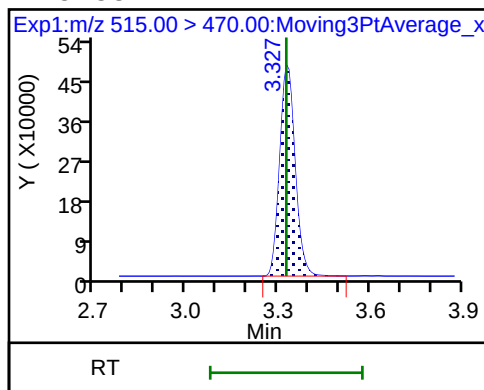




D 23 13C2 PFDA

D 27 d3-NMeFOSAA

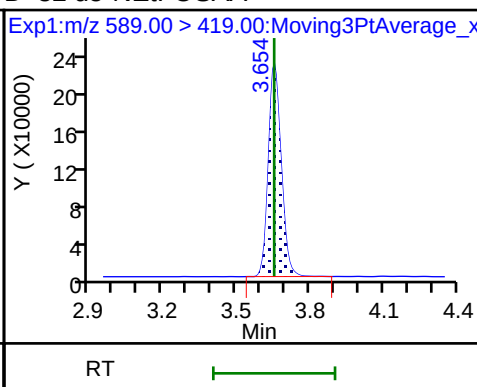
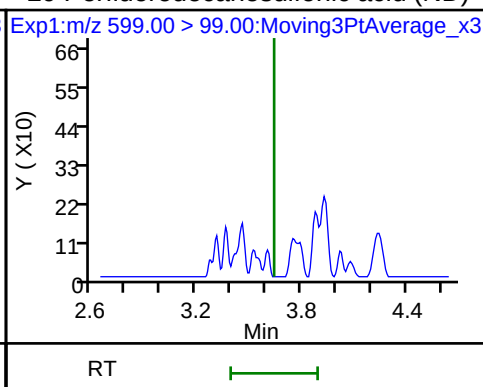
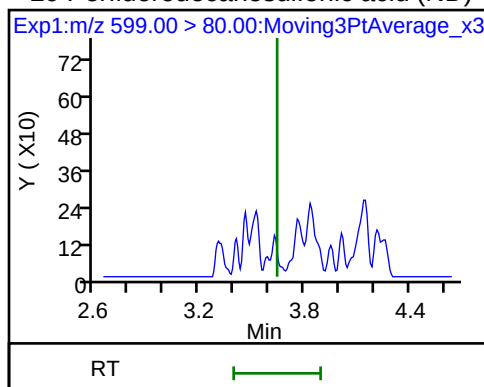
28 N-methylperfluorooctanesulfonamido (ND)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

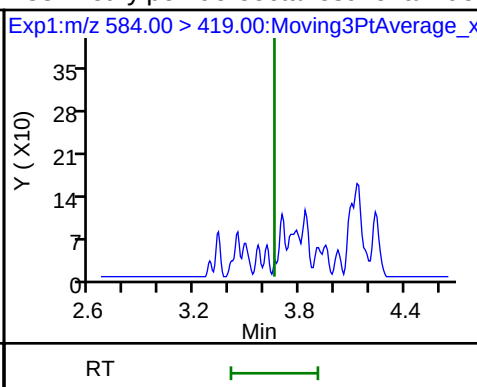
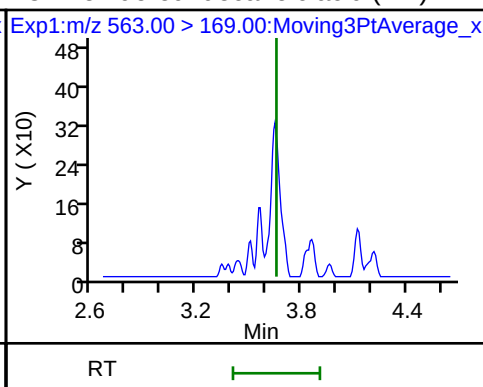
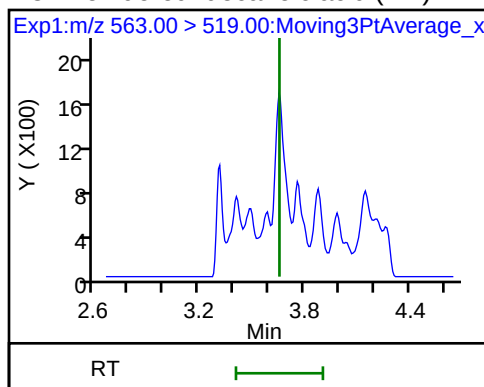
D 32 d5-NEtFOSAA



31 Perfluoroundecanoic acid (ND)

31 Perfluoroundecanoic acid (ND)

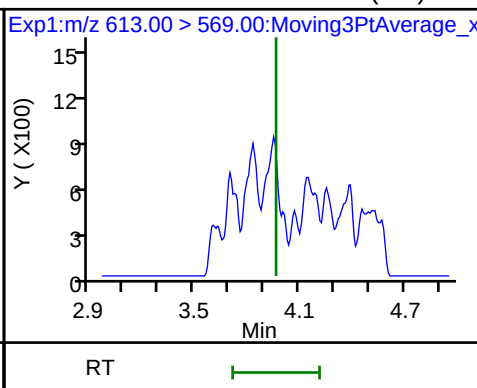
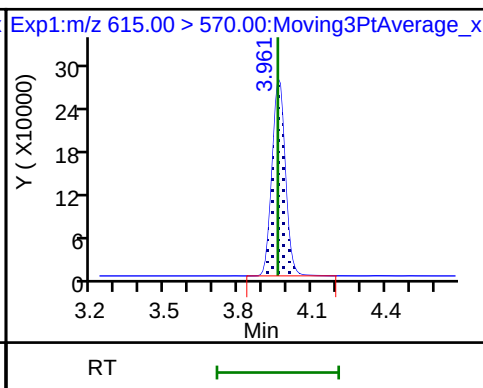
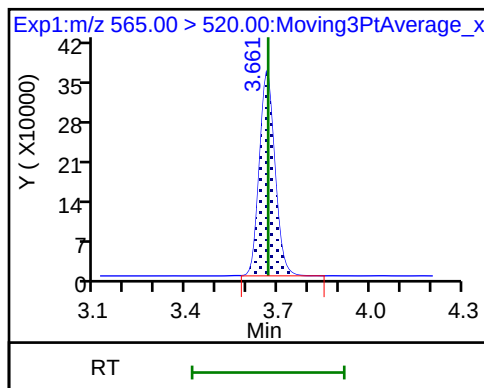
33 N-ethylperfluorooctanesulfonamidoa (ND)



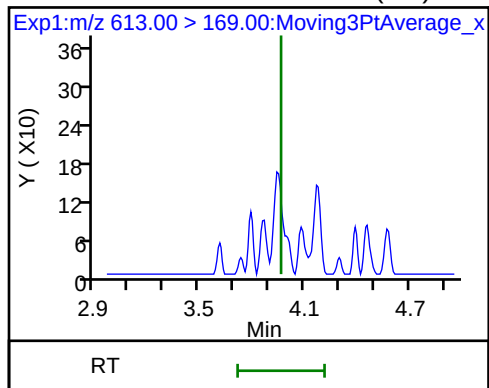
D 30 13C2 PFUnA

D 36 13C2 PFDaA

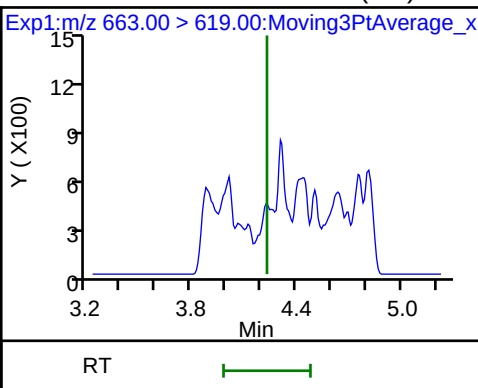
37 Perfluorododecanoic acid (ND)



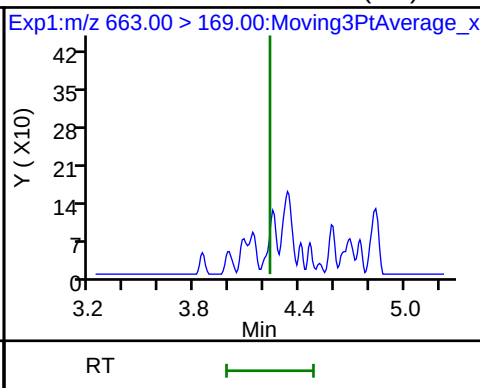
37 Perfluorododecanoic acid (ND)



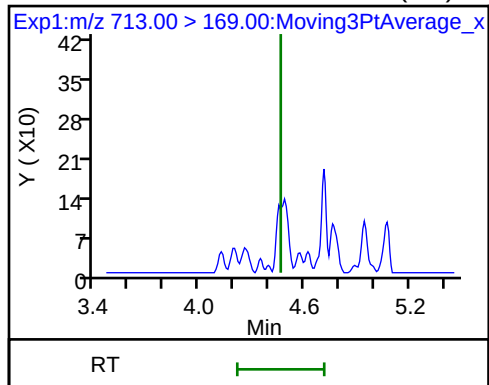
41 Perfluorotridecanoic acid (ND)



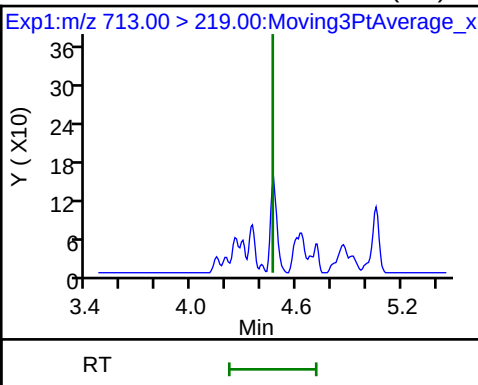
41 Perfluorotridecanoic acid (ND)



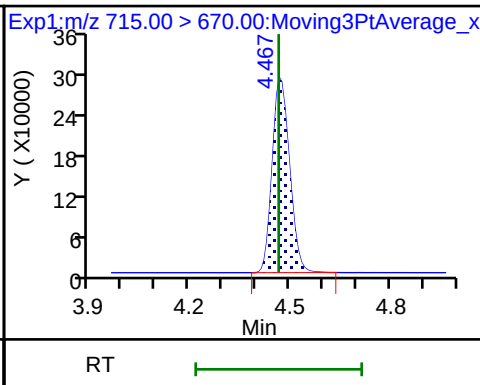
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)



D 43 13C2 PFTeDA



TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d

Injection Date: 14-Nov-2018 02:21:22

Instrument ID: A8_N

Lims ID: 480-144297-F-10-A

Lab Sample ID: 320-144297-10

Client ID: GPW-5

Operator ID: SACINSTLCMS01

ALS Bottle#: 17 Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

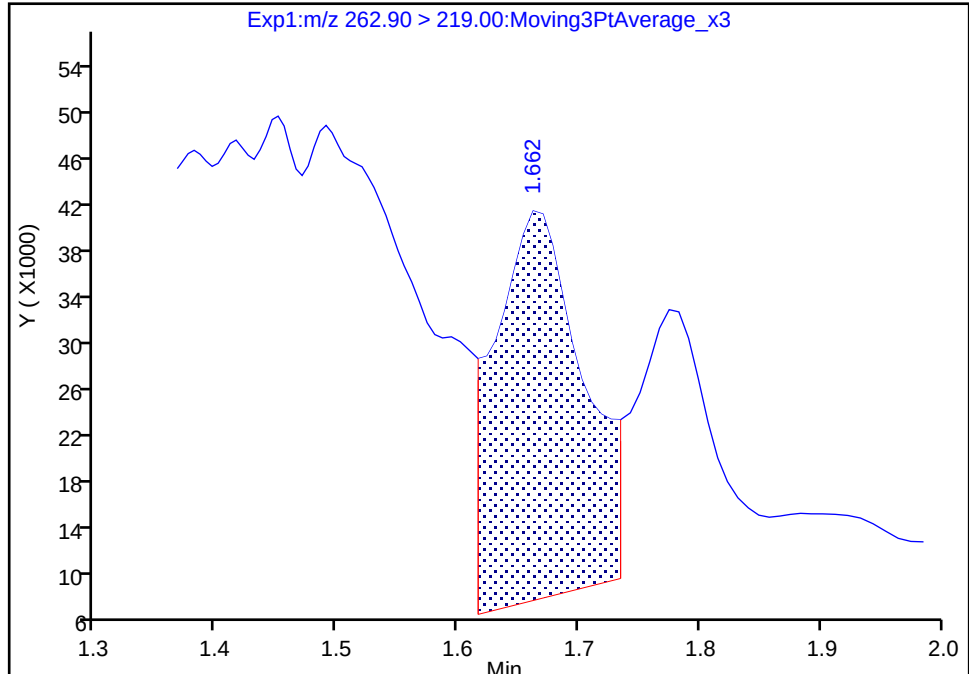
Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

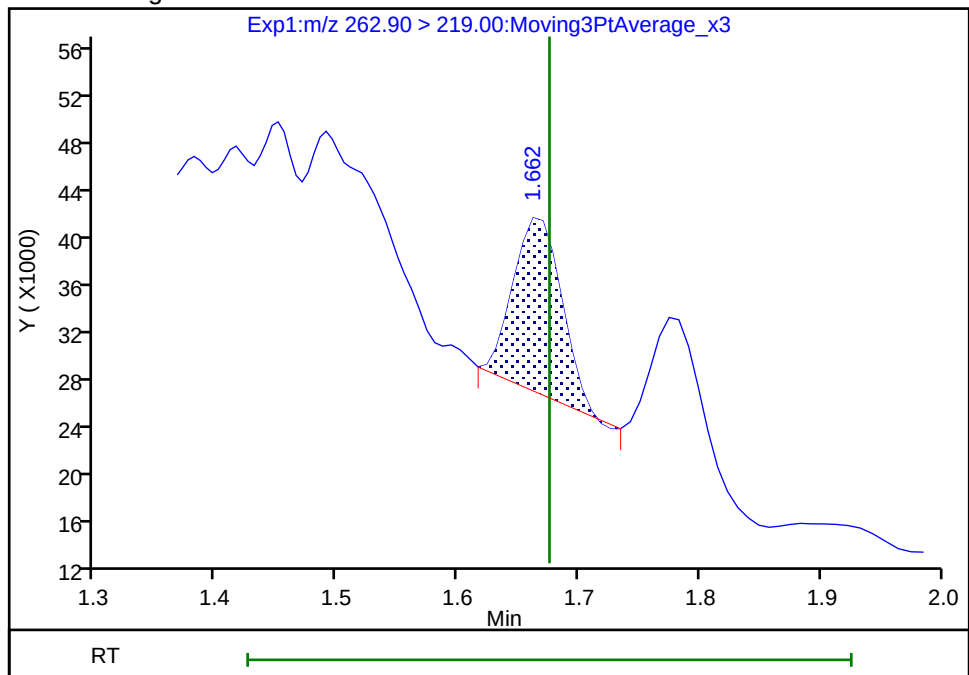
RT: 1.66
Area: 165514
Amount: 0.174211
Amount Units: ng/ml

Processing Integration Results



RT: 1.66
Area: 40786
Amount: 0.042929
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:41:19

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d

Injection Date: 14-Nov-2018 02:21:22

Instrument ID: A8_N

Lims ID: 480-144297-F-10-A

Lab Sample ID: 320-144297-10

Client ID: GPW-5

Operator ID: SACINSTLCMS01

ALS Bottle#: 17 Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

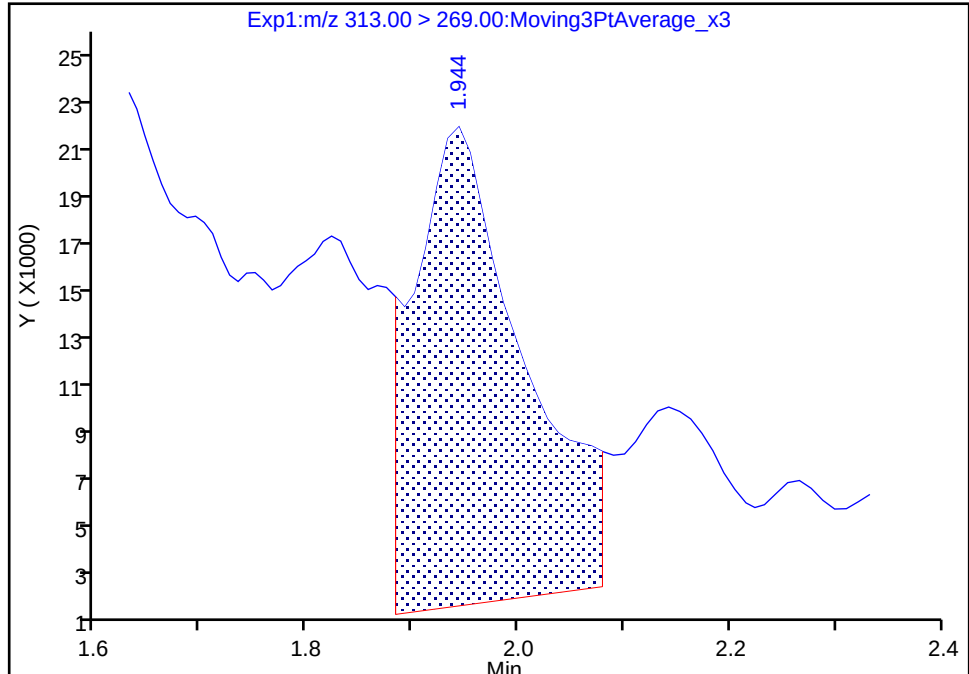
Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

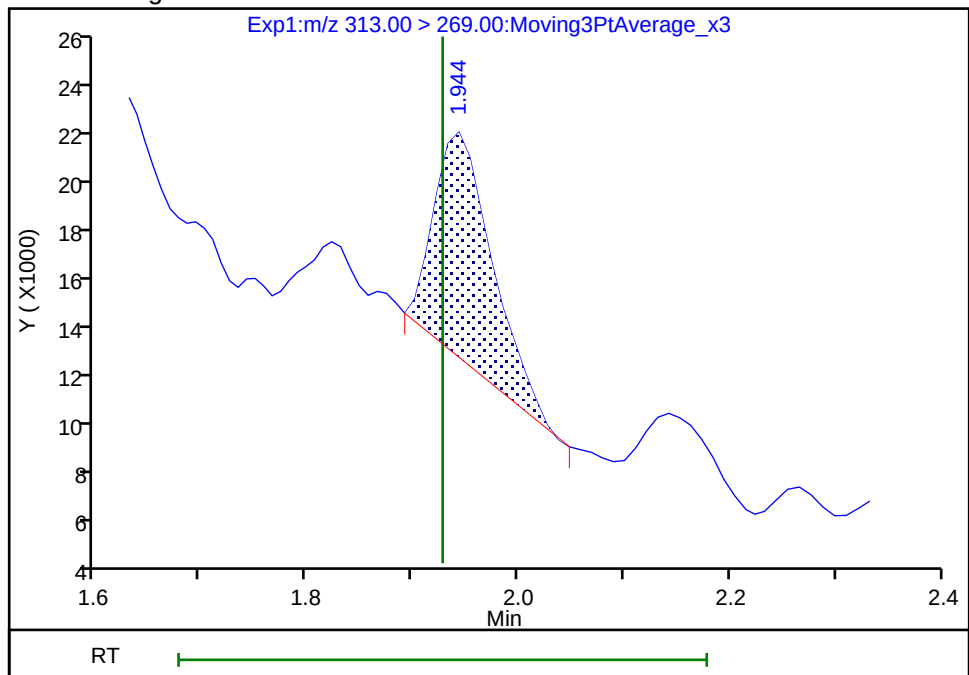
RT: 1.94
Area: 136608
Amount: 0.139841
Amount Units: ng/ml

Processing Integration Results



RT: 1.94
Area: 34228
Amount: 0.035038
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:41:05

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

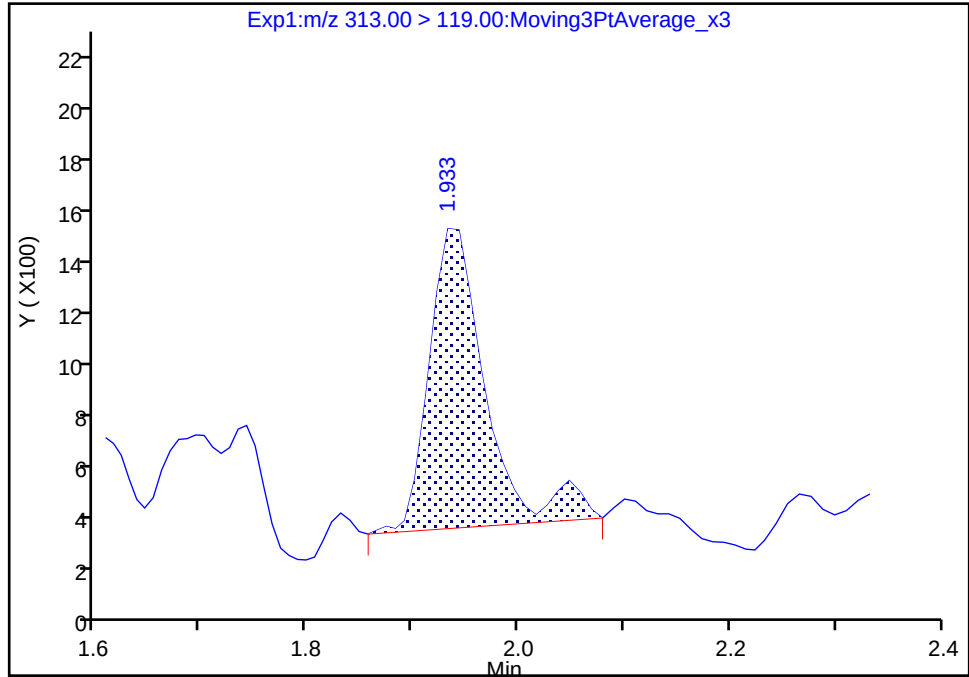
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d
Injection Date: 14-Nov-2018 02:21:22 Instrument ID: A8_N
Lims ID: 480-144297-F-10-A Lab Sample ID: 320-144297-10
Client ID: GPW-5
Operator ID: SACINSTLCMS01 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

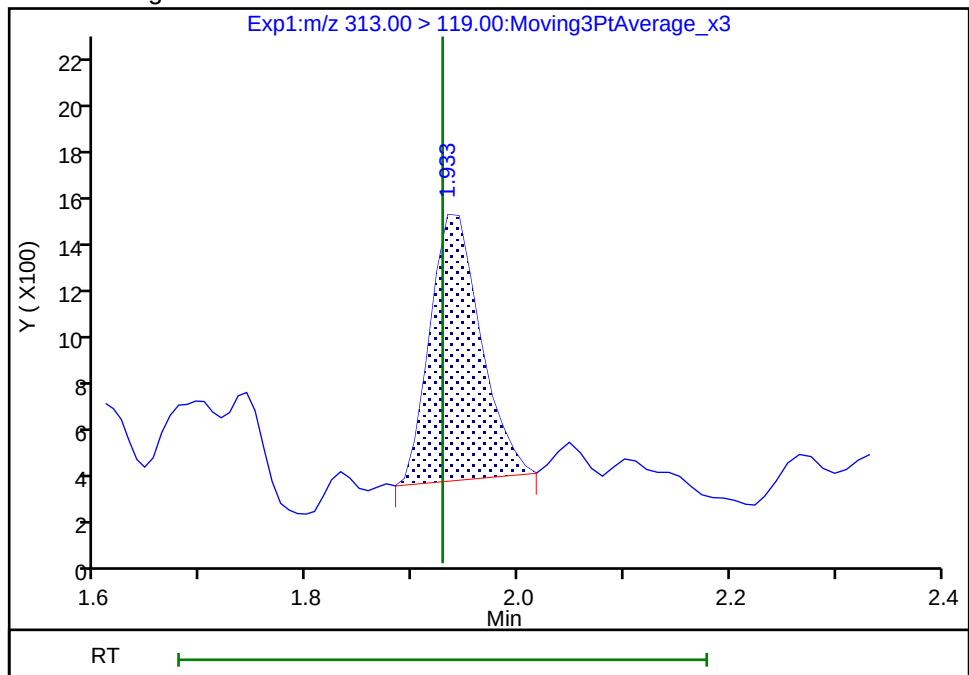
RT: 1.93
Area: 4205
Amount: 0.139841
Amount Units: ng/ml

Processing Integration Results



RT: 1.93
Area: 3713
Amount: 0.035038
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:41:09

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d

Injection Date: 14-Nov-2018 02:21:22

Instrument ID: A8_N

Lims ID: 480-144297-F-10-A

Lab Sample ID: 320-144297-10

Client ID: GPW-5

Operator ID: SACINSTLCMS01

ALS Bottle#: 17 Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

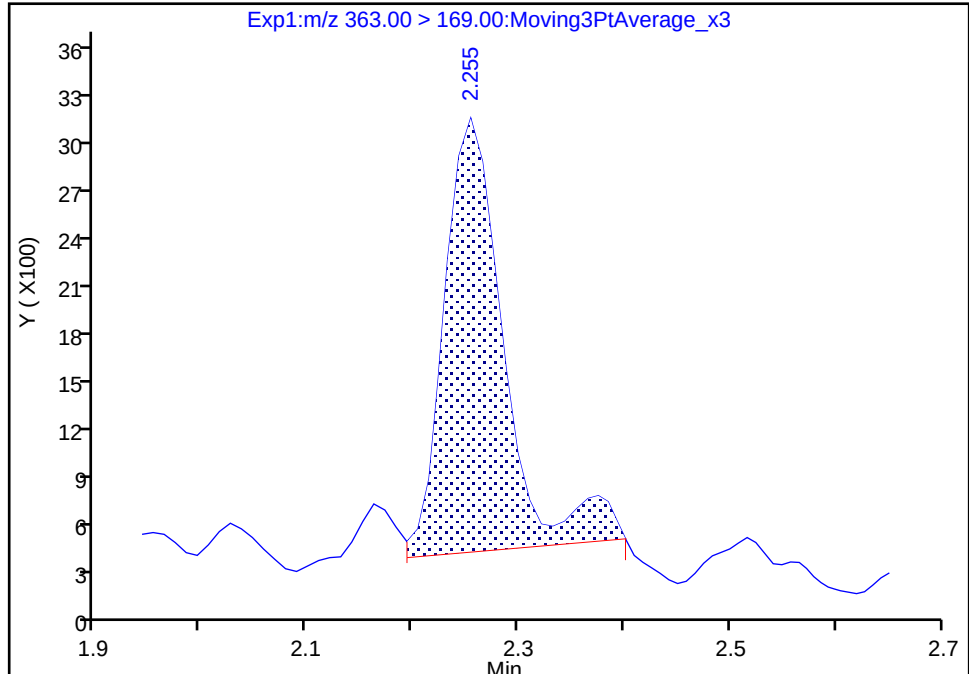
Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

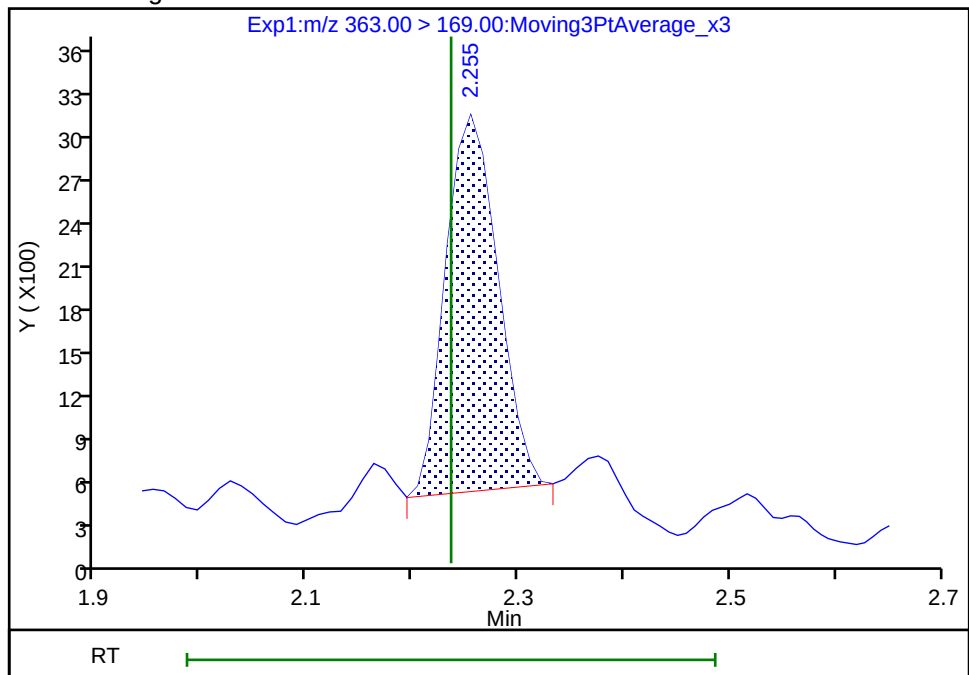
RT: 2.25
Area: 10570
Amount: 0.025223
Amount Units: ng/ml

Processing Integration Results



RT: 2.25
Area: 8893
Amount: 0.025223
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:41:00

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

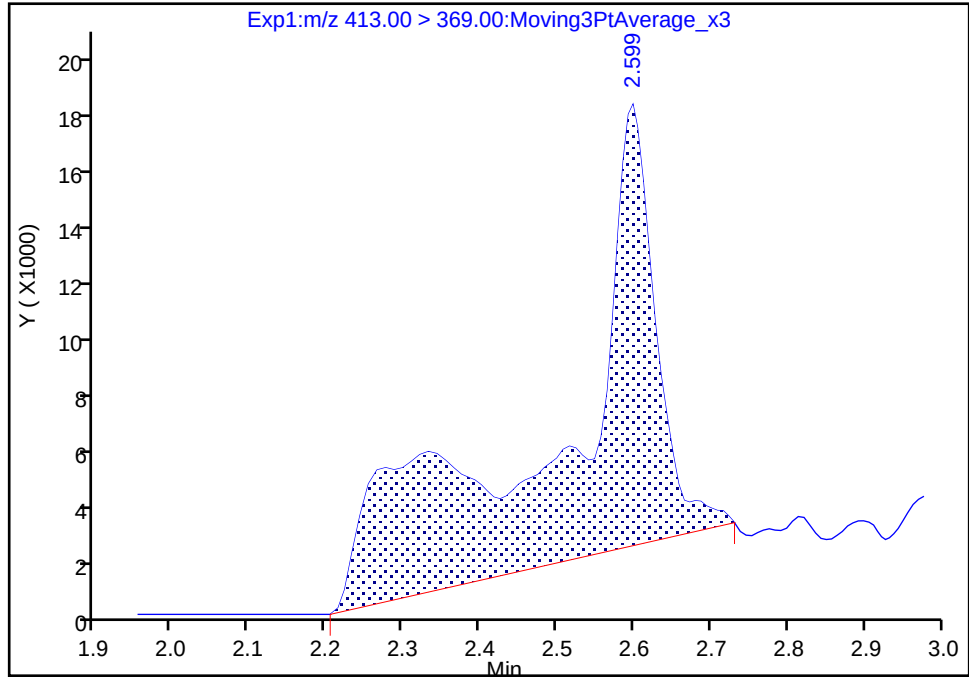
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d
Injection Date: 14-Nov-2018 02:21:22 Instrument ID: A8_N
Lims ID: 480-144297-F-10-A Lab Sample ID: 320-144297-10
Client ID: GPW-5
Operator ID: SACINSTLCMS01 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

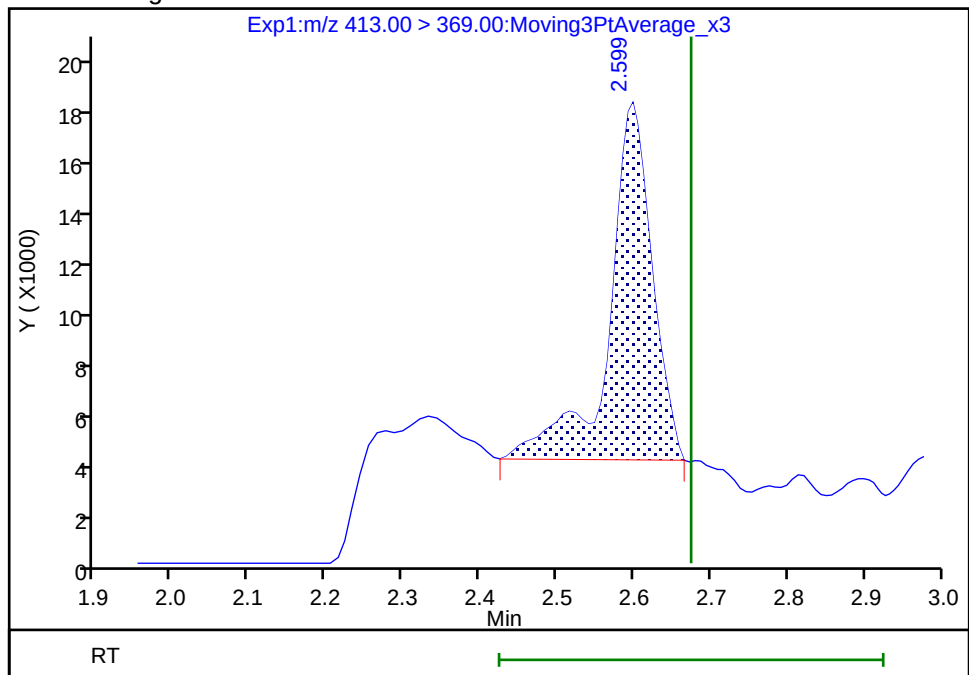
RT: 2.60
Area: 131946
Amount: 0.112849
Amount Units: ng/ml

Processing Integration Results



RT: 2.60
Area: 53548
Amount: 0.045798
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:40:36
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

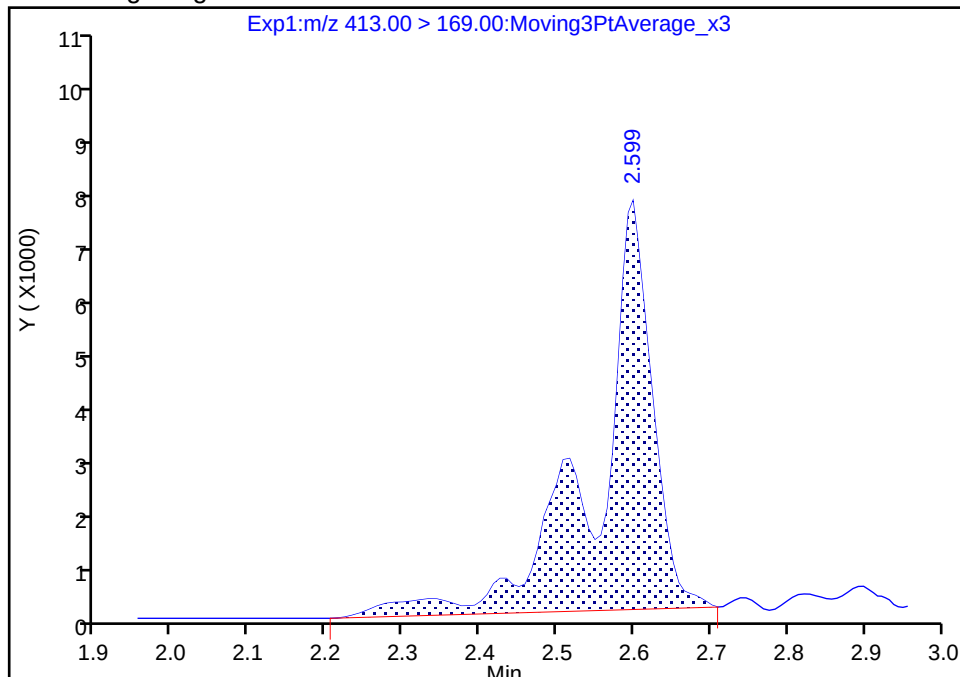
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d
Injection Date: 14-Nov-2018 02:21:22 Instrument ID: A8_N
Lims ID: 480-144297-F-10-A Lab Sample ID: 320-144297-10
Client ID: GPW-5
Operator ID: SACINSTLCMS01 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

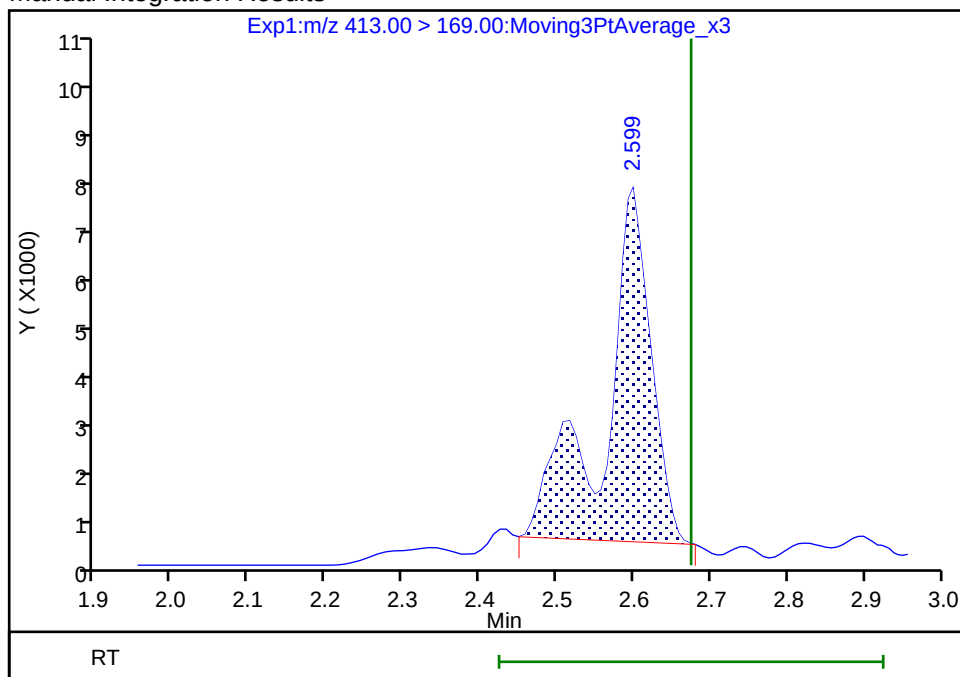
RT: 2.60
Area: 37853
Amount: 0.112849
Amount Units: ng/ml

Processing Integration Results



RT: 2.60
Area: 29349
Amount: 0.045798
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:40:40

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d

Injection Date: 14-Nov-2018 02:21:22

Instrument ID: A8_N

Lims ID: 480-144297-F-10-A

Lab Sample ID: 320-144297-10

Client ID: GPW-5

Operator ID: SACINSTLCMS01

ALS Bottle#: 17 Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

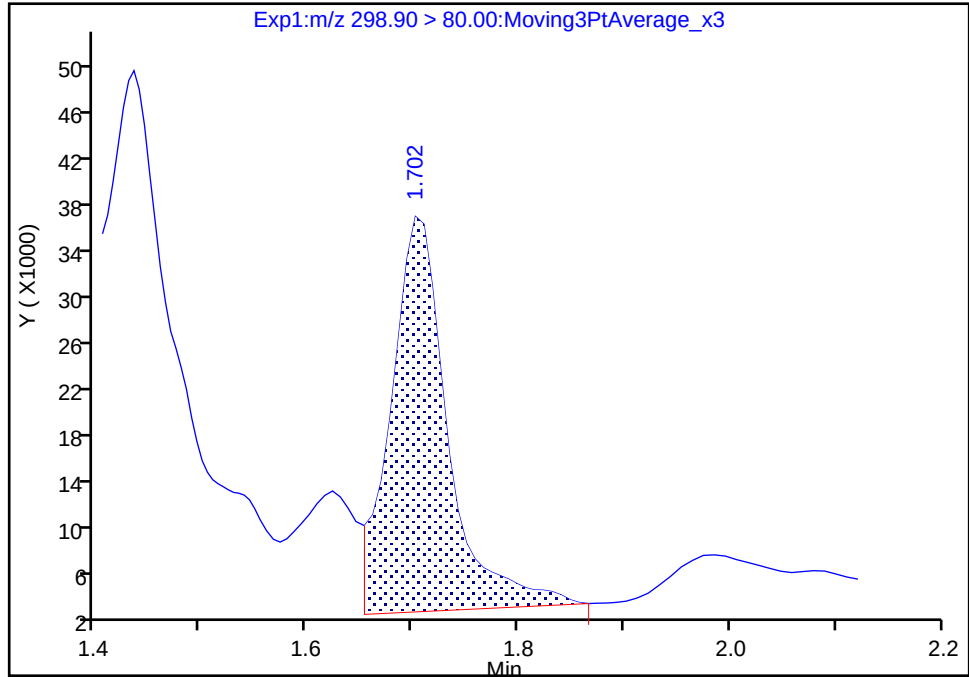
Detector: EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

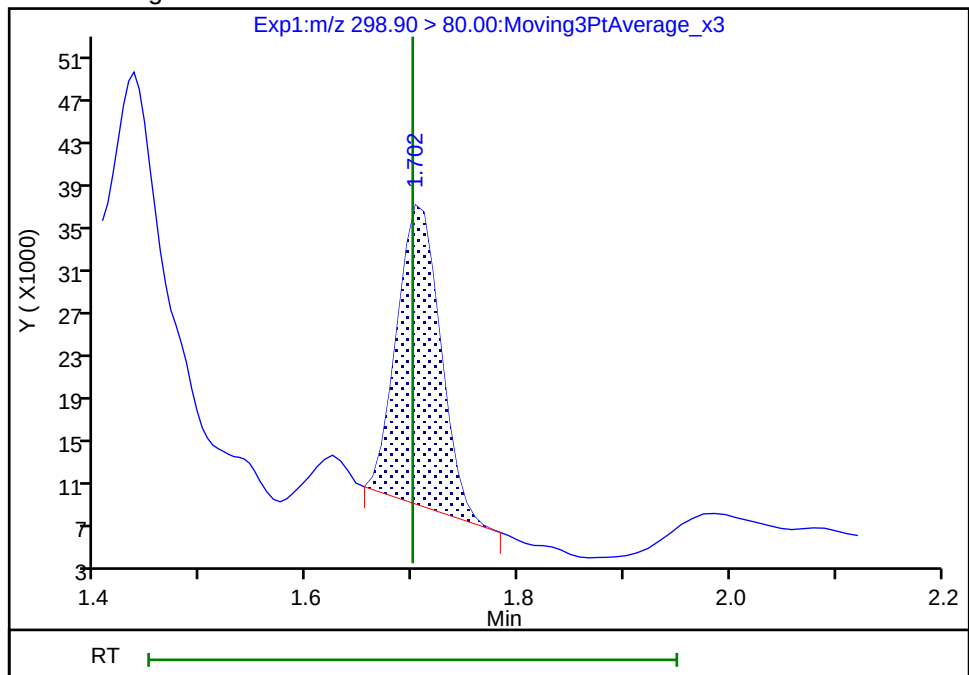
RT: 1.70
Area: 126677
Amount: 0.085229
Amount Units: ng/ml

Processing Integration Results



RT: 1.70
Area: 80496
Amount: 0.054158
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:41:14

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d

Injection Date: 14-Nov-2018 02:21:22

Instrument ID: A8_N

Lims ID: 480-144297-F-10-A

Lab Sample ID: 320-144297-10

Client ID: GPW-5

Operator ID: SACINSTLCMS01

ALS Bottle#: 17 Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

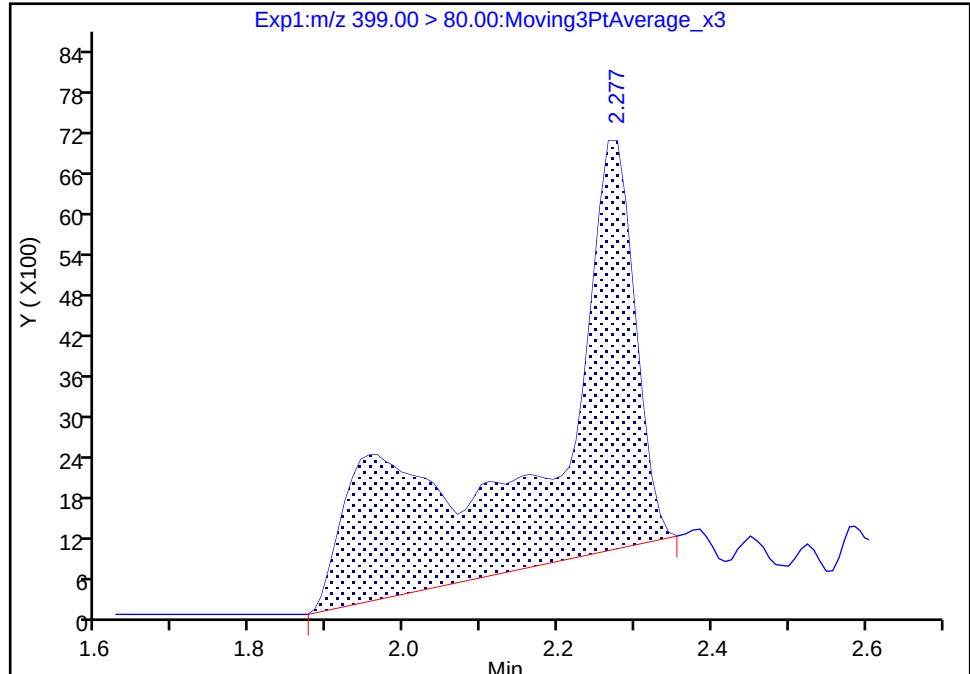
Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

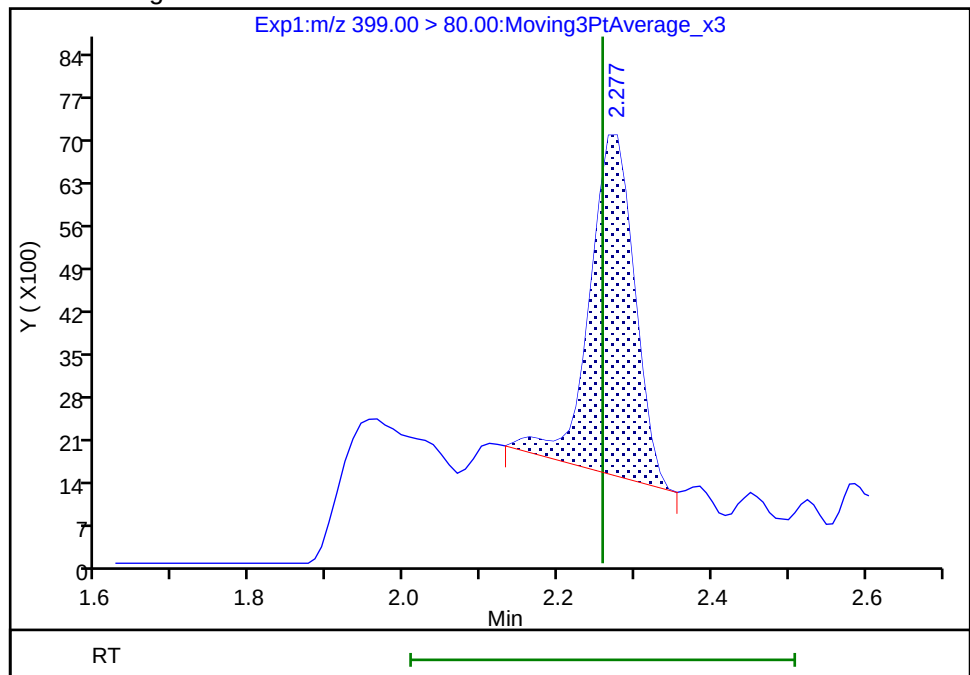
RT: 2.28
Area: 53143
Amount: 0.037210
Amount Units: ng/ml

Processing Integration Results



RT: 2.28
Area: 22694
Amount: 0.015890
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:40:50

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

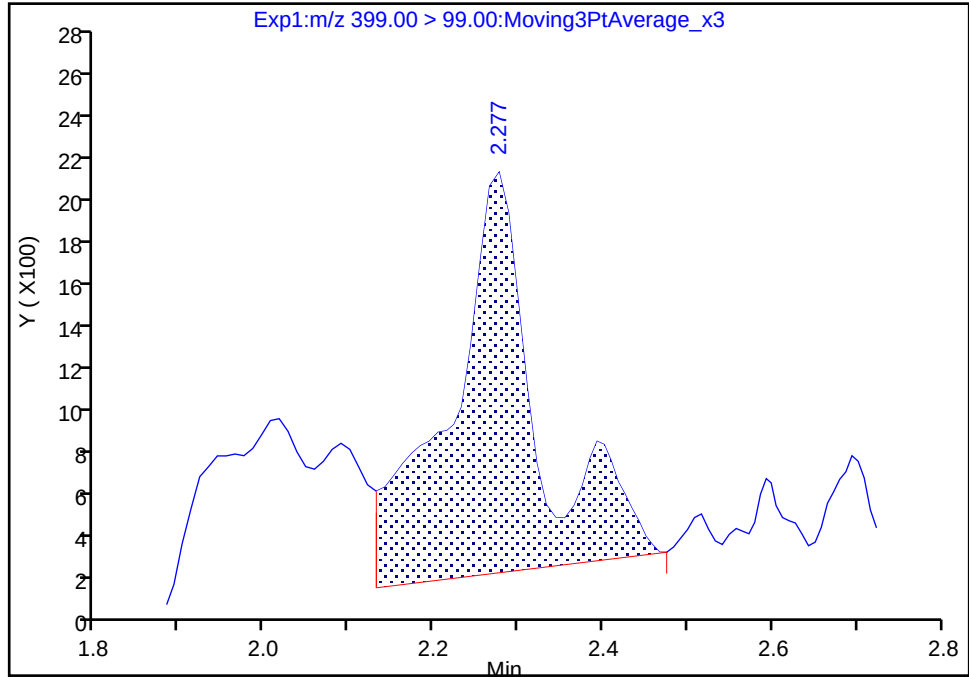
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d
Injection Date: 14-Nov-2018 02:21:22 Instrument ID: A8_N
Lims ID: 480-144297-F-10-A Lab Sample ID: 320-144297-10
Client ID: GPW-5
Operator ID: SACINSTLCMS01 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

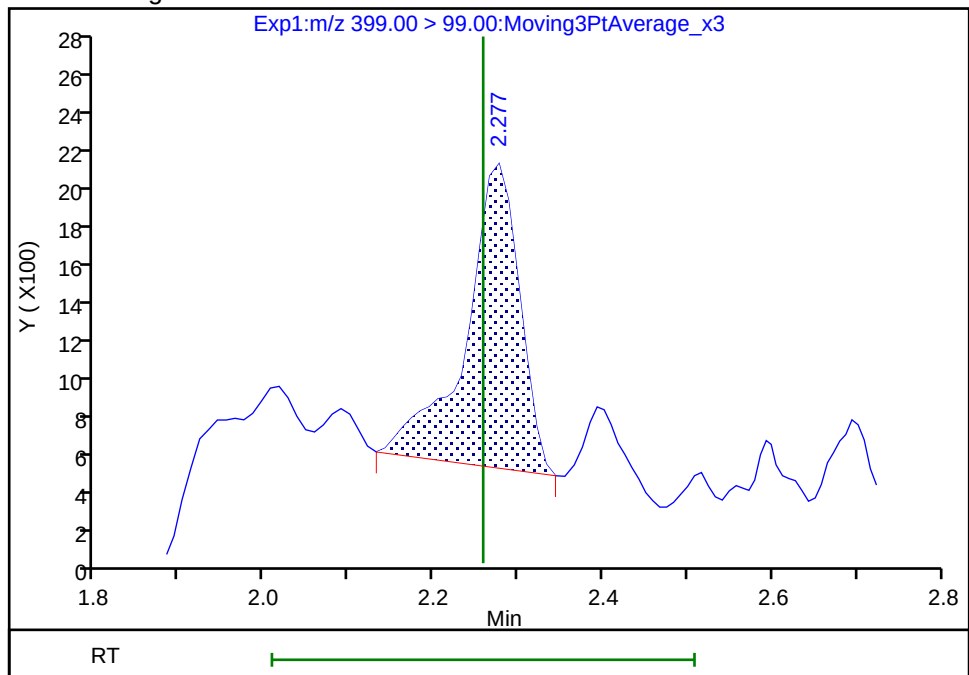
RT: 2.28
Area: 13680
Amount: 0.037210
Amount Units: ng/ml

Processing Integration Results



RT: 2.28
Area: 7071
Amount: 0.015890
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:40:53

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

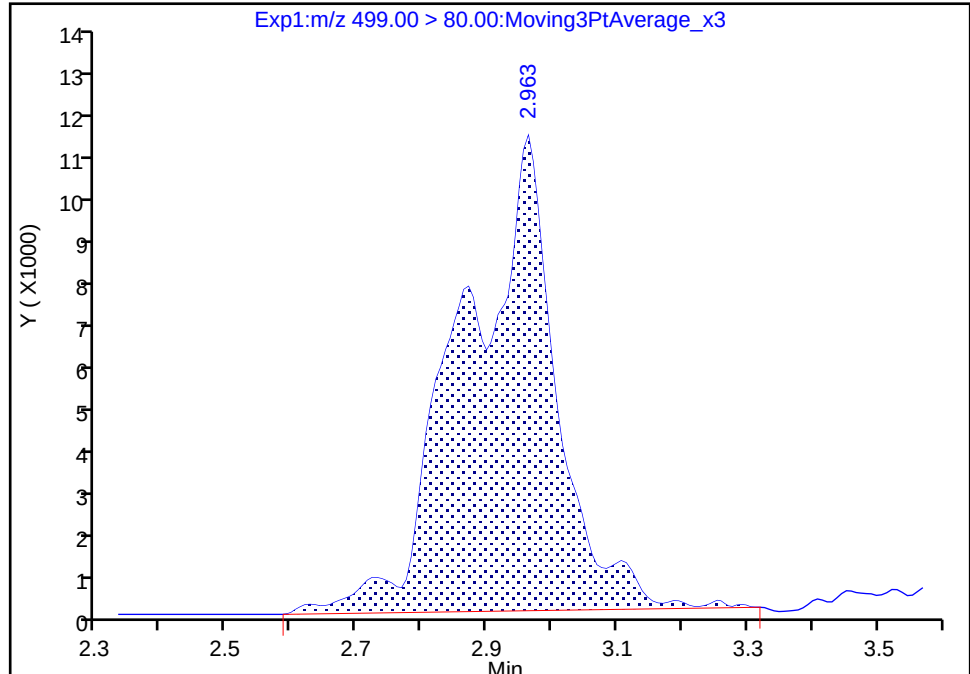
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d				
Injection Date:	14-Nov-2018 02:21:22	Instrument ID:	A8_N		
Lims ID:	480-144297-F-10-A	Lab Sample ID:	320-144297-10		
Client ID:	GPW-5				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	17	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

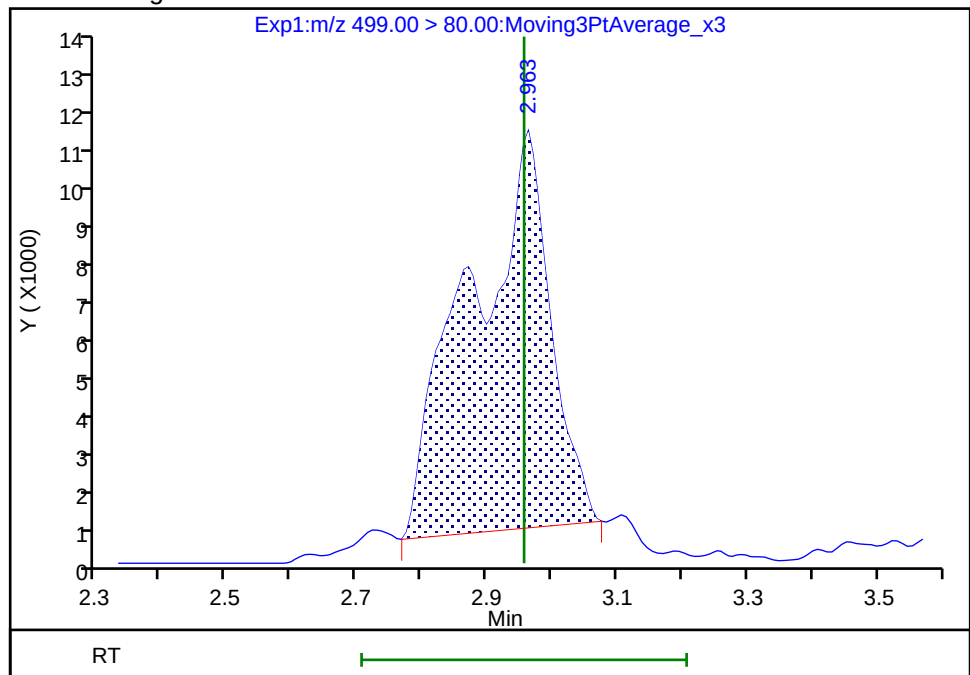
RT: 2.96
Area: 113422
Amount: 0.120293
Amount Units: ng/ml

Processing Integration Results



RT: 2.96
Area: 89644
Amount: 0.095074
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:40:23
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

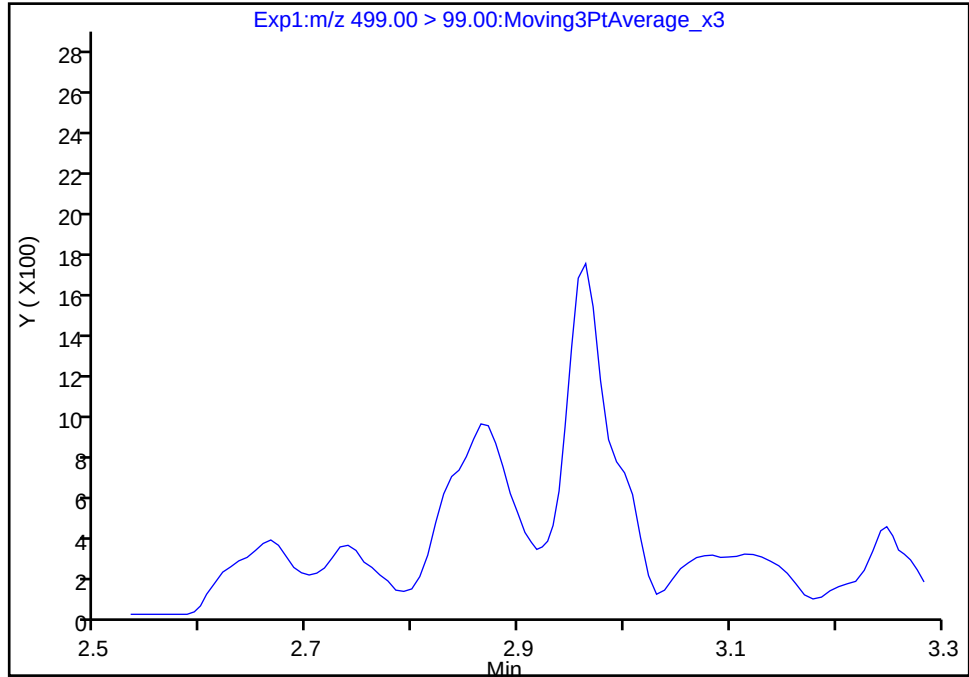
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_030.d
Injection Date: 14-Nov-2018 02:21:22 Instrument ID: A8_N
Lims ID: 480-144297-F-10-A Lab Sample ID: 320-144297-10
Client ID: GPW-5
Operator ID: SACINSTLCMS01 ALS Bottle#: 17 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

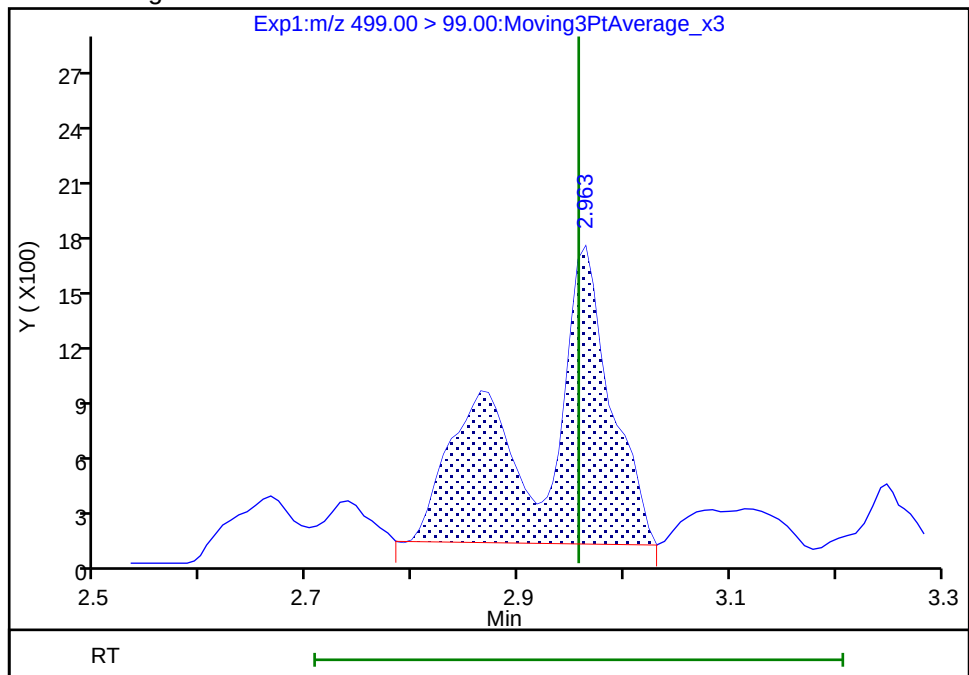
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Area: 0
Amount: 0.120293
Amount Units: ng/ml

Processing Integration Results



RT: 2.96
Area: 8192
Amount: 0.095074
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:40:27

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>DUP</u>	Lab Sample ID: <u>480-144297-11</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.13LLAAA_031.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 00:00</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>283.7 (mL)</u>	Date Analyzed: <u>11/14/2018 02:28</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>2 (uL)</u>	GC Column: <u>GeminiC18 3x100 ID: 3 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258999</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	5.6		1.8	0.31
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.6		1.8	0.43
307-24-4	Perfluorohexanoic acid (PFHxA)	2.0		1.8	0.51
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.1	J	1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	3.2		1.8	0.75
375-95-1	Perfluorononanoic acid (PFNA)	1.3	J	1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	2.0		1.8	0.27
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.2	J	1.8	0.97
307-55-1	Perfluorododecanoic acid (PFDoA)	0.50	J	1.8	0.48
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.43	J	1.8	0.26
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.8	0.18
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.76	J B	1.8	0.15
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	6.0		1.8	0.48
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	0.35	J	1.8	0.31
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7
27619-97-2	6:2 FTS	ND		18	1.8
39108-34-4	8:2 FTS	ND		18	1.8

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>DUP</u>	Lab Sample ID: <u>480-144297-11</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.13LLAA_031.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/25/2018 00:00</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>283.7 (mL)</u>	Date Analyzed: <u>11/14/2018 02:28</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>2 (uL)</u>	GC Column: <u>GeminiC18 3x100</u> ID: <u>3 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258999</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	52		25-150
STL01893	13C5-PFPeA DNU	74		25-150
STL00993	13C2 PFHxA	79		25-150
STL01892	13C4 PFHpA	90		25-150
STL00990	13C4 PFOA	93		25-150
STL00995	13C5 PFNA	99		25-150
STL00996	13C2 PFDA	103		25-150
STL00997	13C2 PFUnA	103		25-150
STL00998	13C2 PFDoA	84		25-150
STL02116	13C2 PFTeDA	69		25-150
STL02337	13C3 PFBS	86		25-150
STL00994	18O2 PFHxS	91		25-150
STL00991	13C4 PFOS	94		25-150
STL01056	13C8 FOSA	91		25-150
STL02118	d3-NMeFOSAA	113		25-150
STL02117	d5-NEtFOSAA	116		25-150
STL02279	M2-6:2 FTS	192	*	25-150
STL02280	M2-8:2 FTS	174	*	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d
 Lims ID: 480-144297-F-11-A
 Client ID: DUP
 Sample Type: Client
 Inject. Date: 14-Nov-2018 02:28:47 ALS Bottle#: 18 Worklist Smp#: 5
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-144297-f-11-a
 Misc. Info.: Plate: 1 Rack: 3
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 26-Nov-2018 09:47:08 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_011.d
 Column 1 : Det: EXP1
 Process Host: CTX0324

First Level Reviewer: mongkols

Date: 26-Nov-2018 09:47:08

Ratio Calibration: None

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.411	1.403	0.008	1.011	148198	0.1583			2.4	M
D 1 13C4 PFBA										
217.00 > 172.00	1.396	1.406	-0.010	0.538	2469127	1.31		52.2	2825	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.654	1.668	-0.014	0.995	77687	0.0748			0.5	M
D 3 13C5 PFPeA										
267.90 > 223.00	1.662	1.670	-0.008	0.641	2316733	1.86		74.3	1151	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.694	1.700	-0.006	1.000	51801	0.0289	Target=2.49		1.5	M
298.90 > 99.00	1.694	1.700	-0.006	1.000	18559		2.79(1.25-3.74)		1.5	M
D 47 13C3 PFBS										
301.90 > 83.00	1.694	1.702	-0.008	0.653	53082	2.01		86.5	46.3	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.922	1.928	-0.006	0.995	62174	0.0562	Target=10.07		0.9	
313.00 > 119.00	1.933	1.928	0.005	1.000	4255		14.61(5.03-15.10)		1.9	
D 7 13C2 PFHxA										
315.00 > 270.00	1.933	1.943	-0.010	0.745	2718268	1.98		79.3	4178	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.243	2.236	0.007	1.000	39840	0.0315	Target=2.27		1.5	M
363.00 > 169.00	2.243	2.236	0.007	1.000	16214		2.46(1.13-3.40)		11.4	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.266	2.258	0.008	1.000	34497	0.0215	Target=3.00		3.2	M
399.00 > 99.00	2.266	2.258	0.008	1.000	13030		2.65(1.50-4.49)		3.2	M
D 9 13C4 PFHpA										
367.00 > 322.00	2.243	2.265	-0.022	0.865	2848400	2.25		90.0	5742	
D 11 18O2 PFHxS										
403.00 > 84.00	2.266	2.277	-0.010	0.874	3323952	2.15		90.7	5668	

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	2.565	2.561	0.004	0.997	39517	0.0474		46.1	
D 12 M2-6:2 FTS	429.00 > 81.00	2.572	2.579	-0.007	0.992	1252762	4.57	192	328	
* 62 13C2 PFOA	415.00 > 370.00	2.593	2.581	0.012		3183783	2.50		5679	S
15 Perfluorooctanoic acid	413.00 > 369.00	2.593	2.581	0.012	1.000	121506	0.0922	Target=1.68	6.6	M
413.00 > 169.00	2.593	2.581	0.012	1.000	67957		1.79(0.84-2.52)	49.7	M	M
D 14 13C4 PFOA	417.00 > 372.00	2.593	2.604	-0.011	1.000	2897113	2.34	93.4	5110	
20 Perfluorononanoic acid	463.00 > 419.00	2.964	2.957	0.007	1.000	41702	0.0382	Target=3.79	5.3	
463.00 > 169.00	2.964	2.957	0.007	1.000	9281		4.49(1.90-5.69)	26.0		
17 Perfluorooctanesulfonic acid	499.00 > 80.00	2.964	2.957	0.007	1.000	187206	0.1688	Target=4.62	40.4	M
499.00 > 99.00	2.964	2.957	0.007	1.000	37973		4.93(2.31-6.93)	20.2	M	M
D 18 13C4 PFOS	503.00 > 80.00	2.964	2.970	-0.006	1.143	2295399	2.26	94.5	634	
D 19 13C5 PFNA	468.00 > 423.00	2.964	2.970	-0.006	1.143	2559789	2.48	99.3	4127	
22 Perfluorooctanesulfonamide	498.00 > 78.00	3.313	3.306	0.007	1.002	12948	0.0100		18.1	
D 21 13C8 FOSA	506.00 > 78.00	3.305	3.312	-0.007	1.275	3234828	2.27	90.9	2960	
25 1H,1H,2H,2H-perfluorodecanesulfoni	527.00 > 507.00	3.320	3.313	0.007	1.000	1985	0.003038		12.9	M
D 26 M2-8:2 FTS	529.00 > 81.00	3.320	3.319	0.001	1.280	1210655	4.17	174	588	
24 Perfluorodecanoic acid	513.00 > 469.00	3.327	3.321	0.006	1.000	53095	0.0564	Target=4.73	11.0	
513.00 > 169.00	3.320	3.321	-0.001	0.998	7863		6.75(2.36-7.09)	19.0		
D 23 13C2 PFDA	515.00 > 470.00	3.327	3.326	0.001	1.283	2292412	2.57	103	3927	
D 27 d3-NMeFOSAA	573.00 > 419.00	3.483	3.482	0.001	1.343	1224083	2.82	113	2289	
D 32 d5-NEtFOSAA	589.00 > 419.00	3.654	3.653	0.001	1.409	1342056	2.90	116	1710	
31 Perfluoroundecanoic acid	563.00 > 519.00	3.661	3.656	0.005	1.000	22014	0.0337	Target=4.24	8.4	R
563.00 > 169.00	3.661	3.656	0.005	1.000	2541		8.66(2.12-6.36)	12.0	R	
D 30 13C2 PFUnA	565.00 > 520.00	3.661	3.666	-0.005	1.412	1818217	2.58	103	4166	
D 36 13C2 PFDaA	615.00 > 570.00	3.961	3.960	0.001	1.528	1575379	2.11	84.5	4602	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
37 Perfluorododecanoic acid										
613.00 > 569.00	3.961	3.965	-0.004	1.000	9711	0.0143	Target=4.27		4.8	
613.00 > 169.00	3.961	3.965	-0.004	1.000	1945		4.99(2.13-6.40)		10.3	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.222	4.230	-0.008	1.066	6964	0.0105	Target=2.51		4.3	R
663.00 > 169.00	4.222	4.230	-0.008	1.066	1812		3.84(1.25-3.76)		11.3	R
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.457	4.463	-0.006	0.998	2157	0.0122	Target=1.42		17.8	
713.00 > 219.00	4.464	4.463	0.001	1.000	1713		1.26(0.71-2.13)		18.7	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.464	4.466	-0.002	1.722	1597477	1.72		68.9	5044	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d

Injection Date: 14-Nov-2018 02:28:47

Instrument ID: A8_N

Lims ID: 480-144297-F-11-A

Lab Sample ID: 320-144297-11

Client ID: DUP

Operator ID: SACINSTLCMS01

ALS Bottle#: 18

Worklist Smp#: 5

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

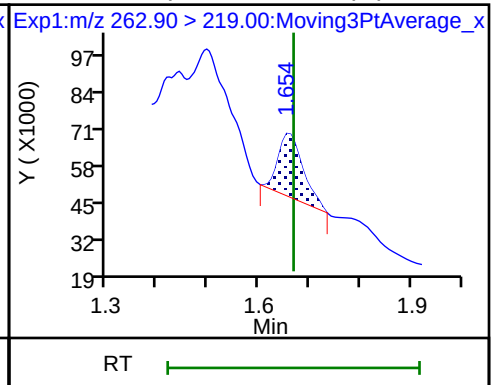
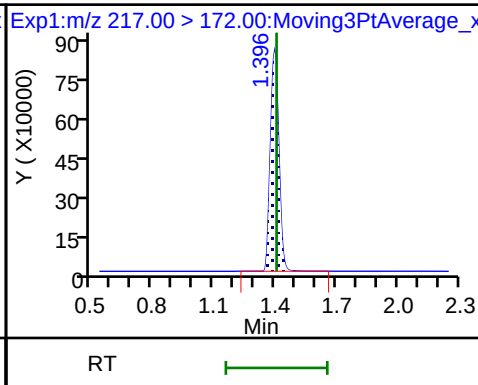
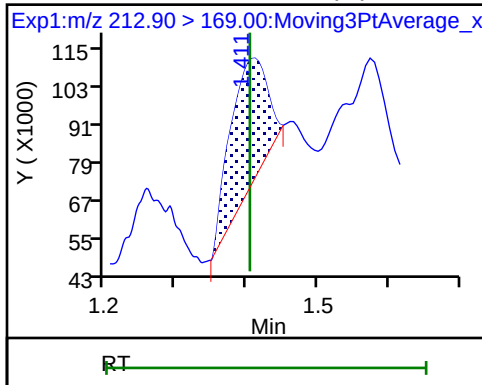
Method: A8_N

Limit Group: LC PFC ICAL

2 Perfluorobutanoic acid (M)

D 1 13C4 PFBA

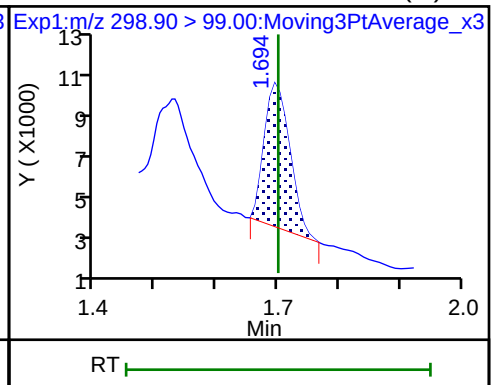
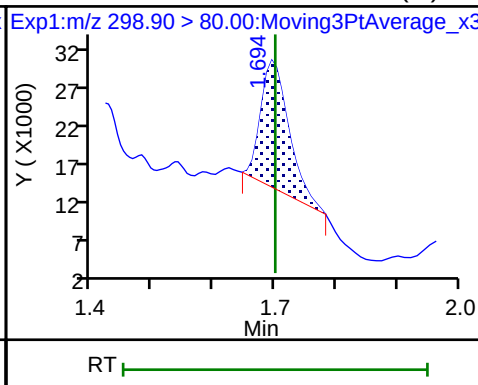
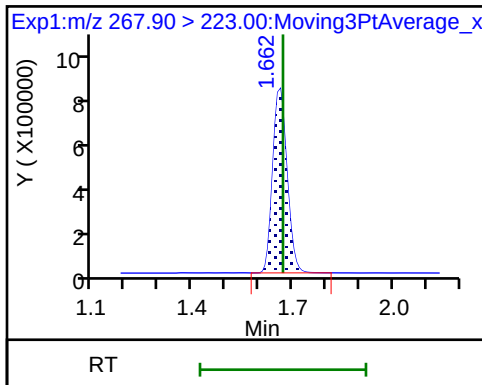
4 Perfluoropentanoic acid (M)



D 3 13C5 PFPeA

5 Perfluorobutanesulfonic acid (M)

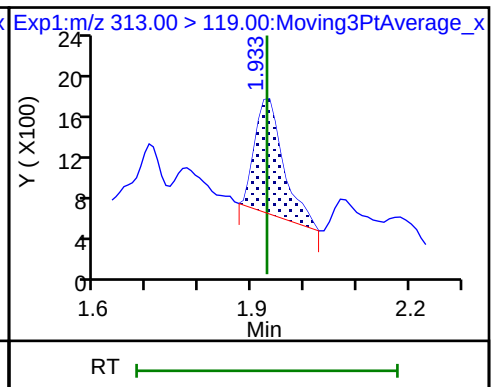
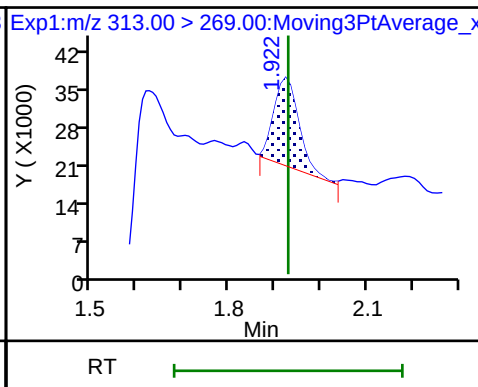
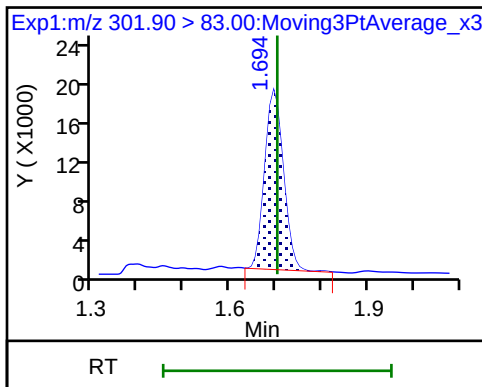
5 Perfluorobutanesulfonic acid (M)



D 47 13C3 PFBS

6 Perfluorohexanoic acid

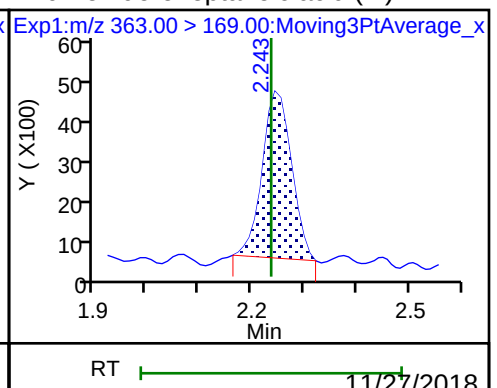
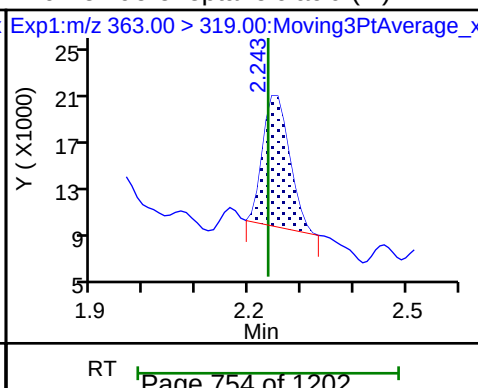
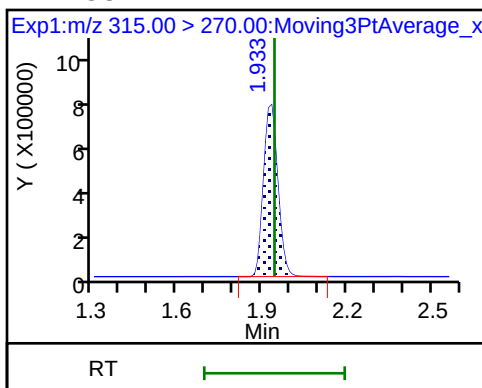
6 Perfluorohexanoic acid



D 7 13C2 PFHxA

10 Perfluoroheptanoic acid (M)

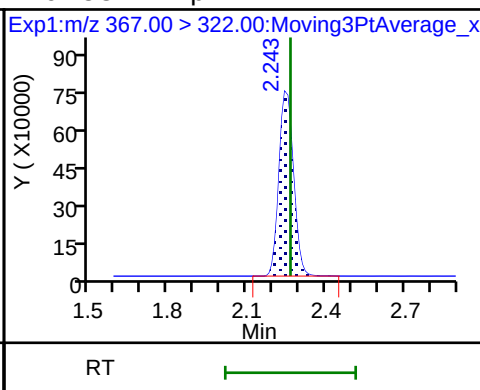
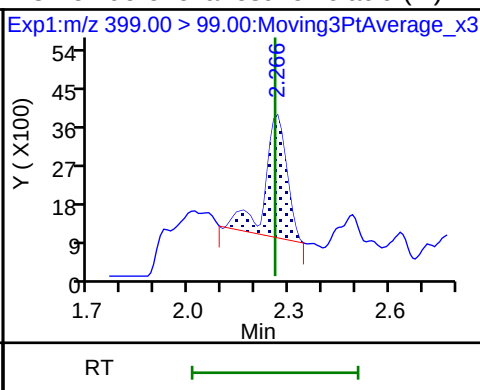
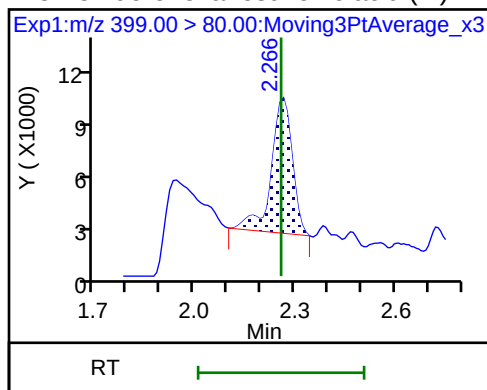
10 Perfluoroheptanoic acid (M)



8 Perfluorohexanesulfonic acid (M)

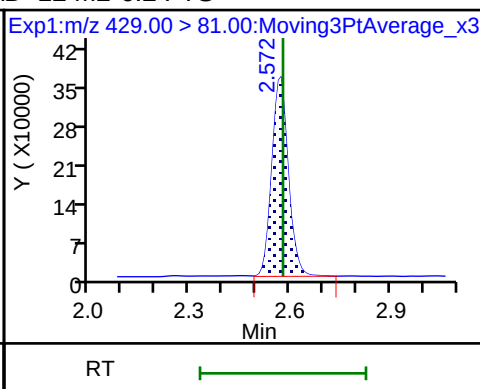
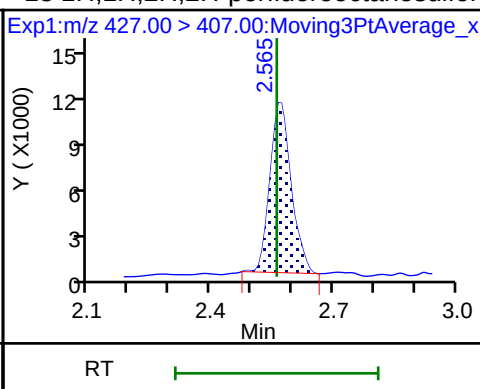
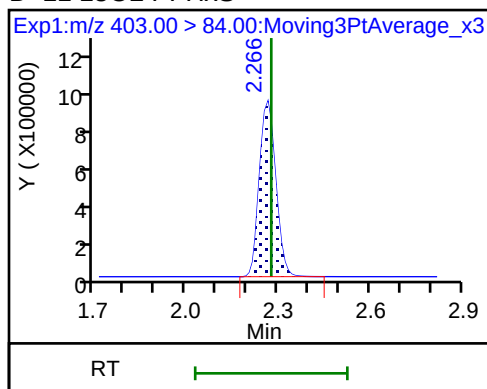
8 Perfluorohexanesulfonic acid (M)

D 9 13C4 PFHpA



D 11 18O2 PFHxS

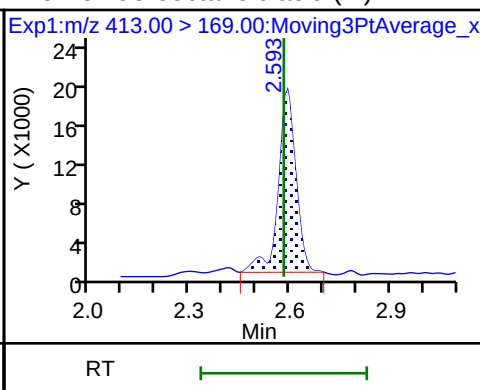
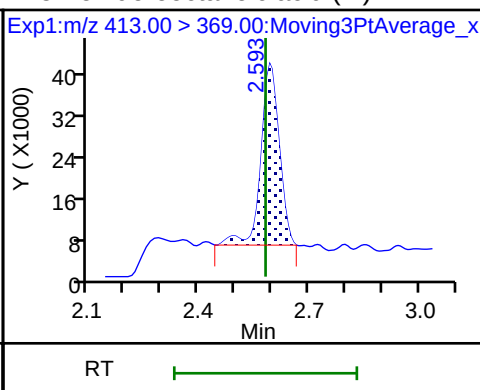
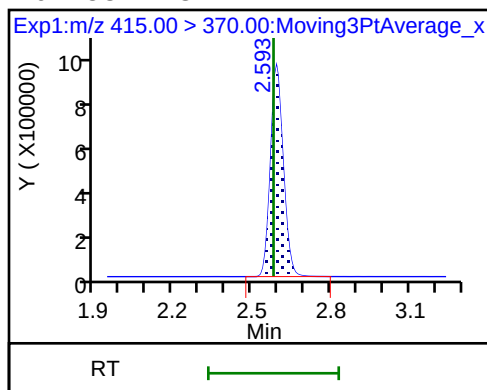
13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2 FTS



* 62 13C2 PFOA

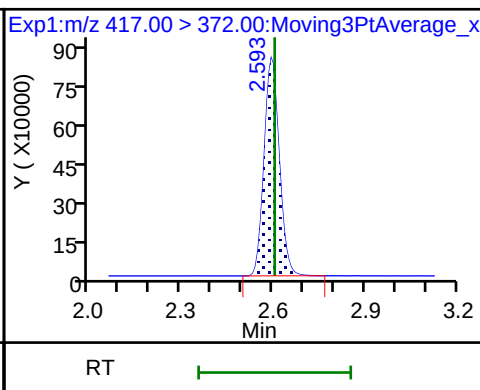
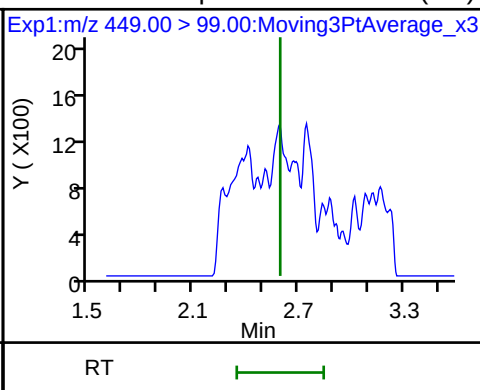
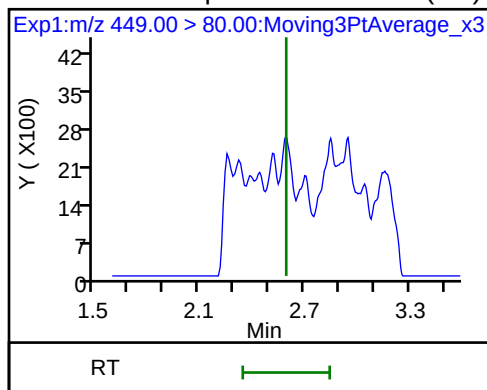
15 Perfluorooctanoic acid (M)

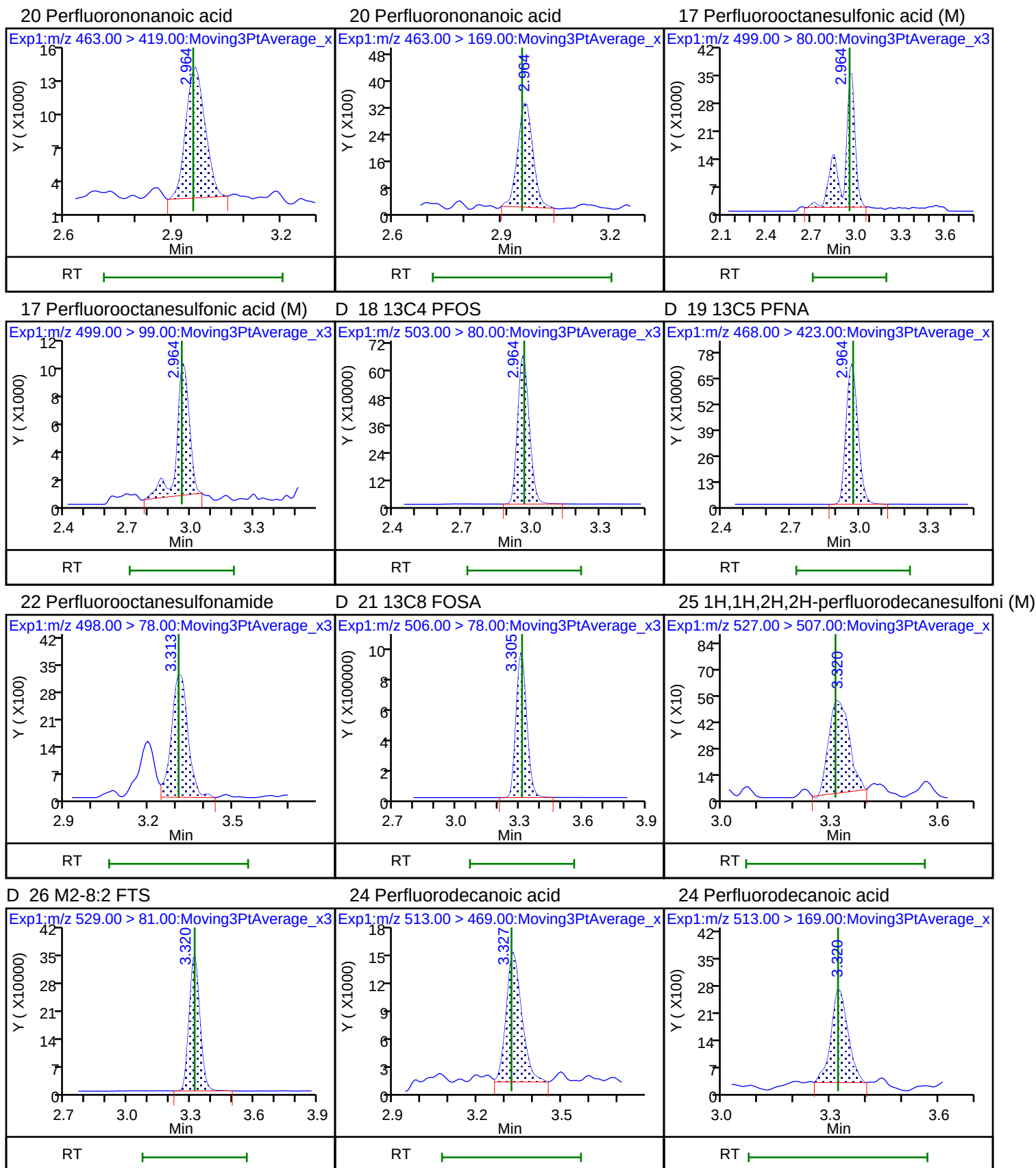
15 Perfluorooctanoic acid (M)



16 Perfluoroheptanesulfonic acid (ND)

16 Perfluoroheptanesulfonic acid (ND) D 14 13C4 PFOA

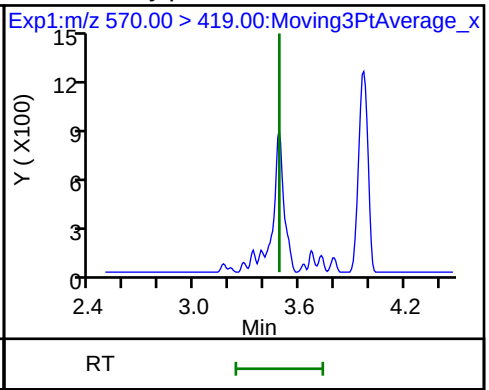
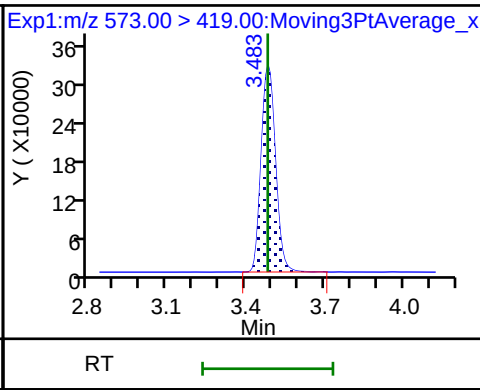
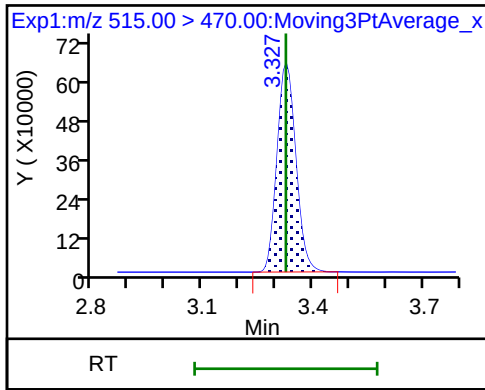




D 23 13C2 PFDA

D 27 d3-NMeFOSAA

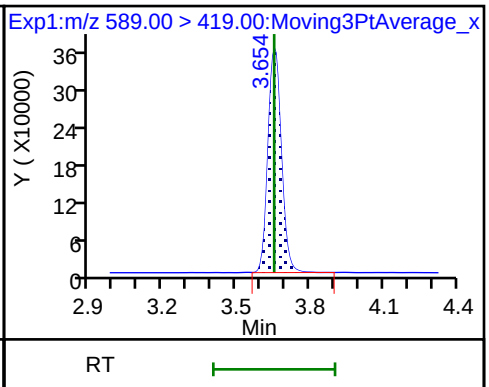
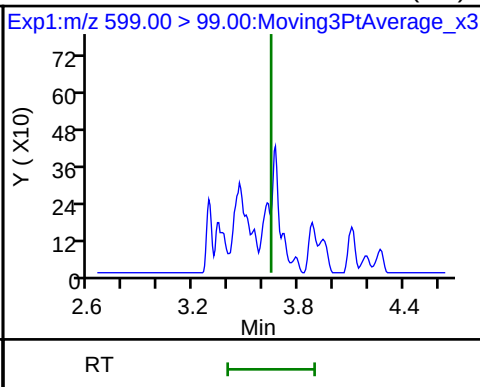
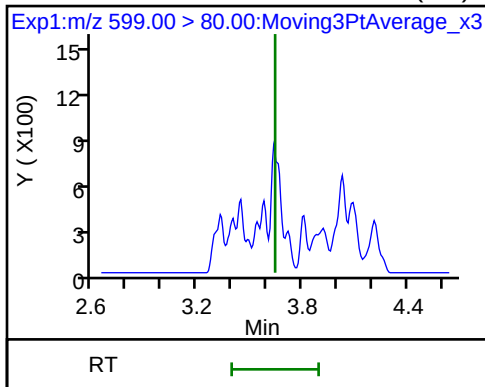
28 N-methylperfluorooctanesulfonamido (ND)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

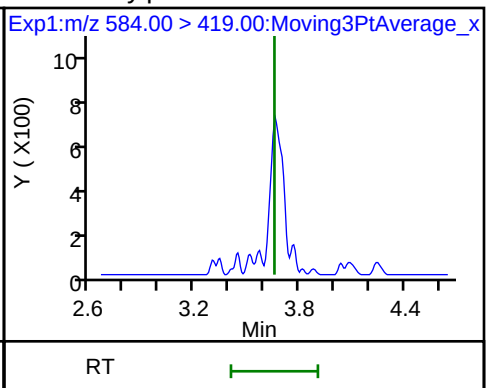
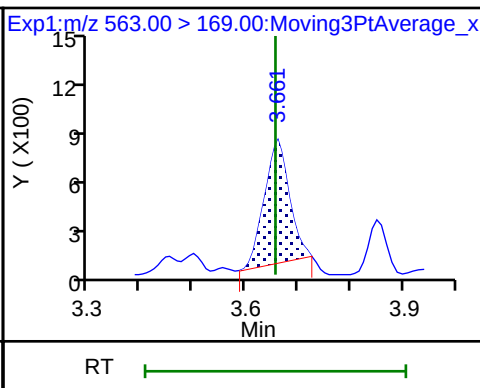
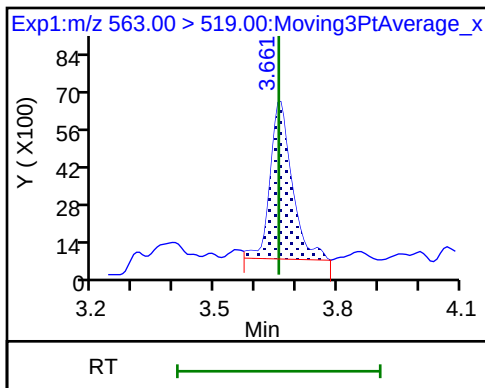
D 32 d5-NEtFOSAA



31 Perfluoroundecanoic acid

31 Perfluoroundecanoic acid

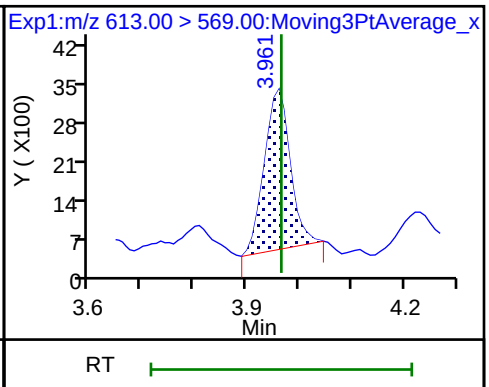
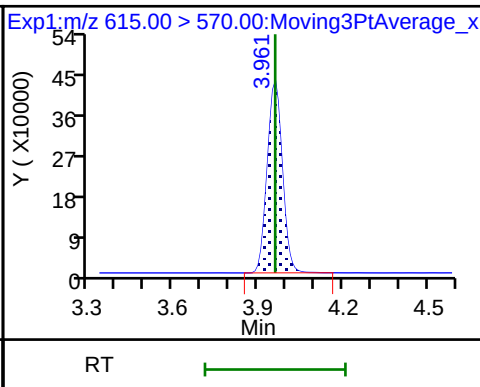
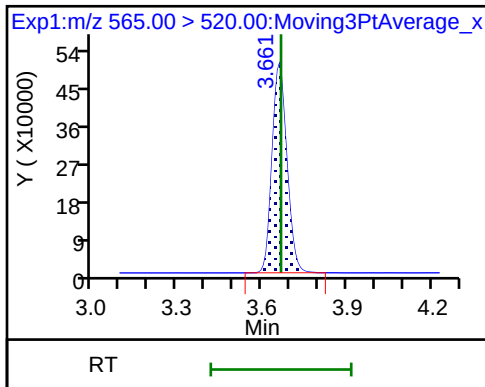
33 N-ethylperfluorooctanesulfonamidoa (ND)



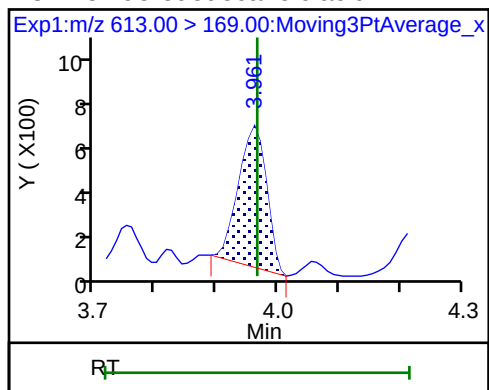
D 30 13C2 PFUnA

D 36 13C2 PFDaA

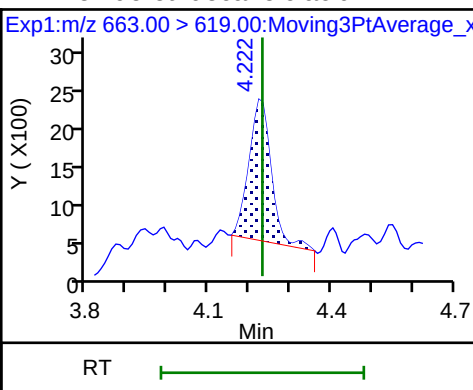
37 Perfluorododecanoic acid



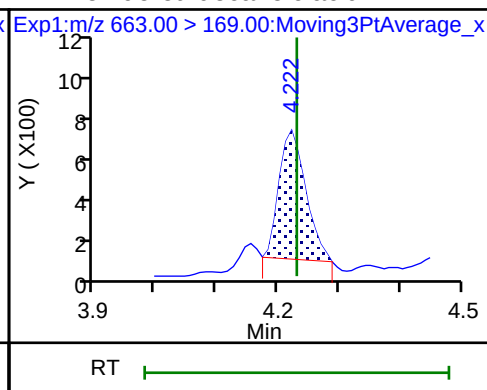
37 Perfluorododecanoic acid



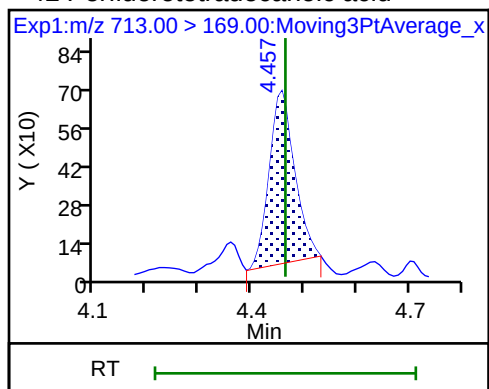
41 Perfluorotridecanoic acid



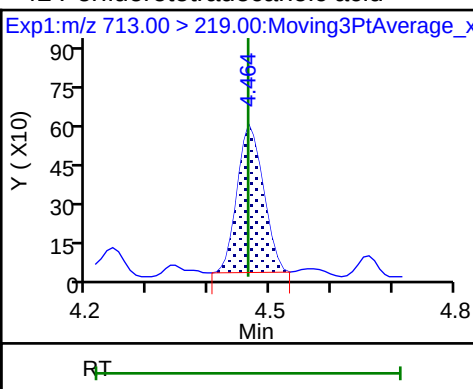
41 Perfluorotridecanoic acid



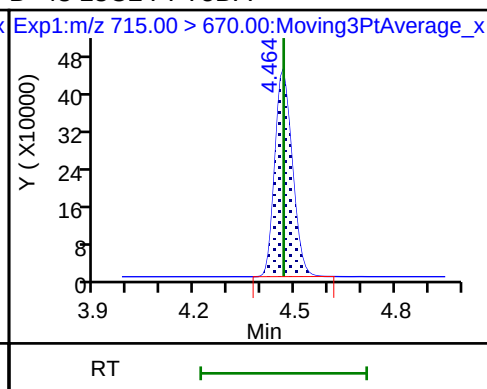
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid



D 43 13C2 PFTeDA



TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d

Injection Date: 14-Nov-2018 02:28:47

Instrument ID: A8_N

Lims ID: 480-144297-F-11-A

Lab Sample ID: 320-144297-11

Client ID: DUP

Operator ID: SACINSTLCMS01

ALS Bottle#: 18 Worklist Smp#: 5

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

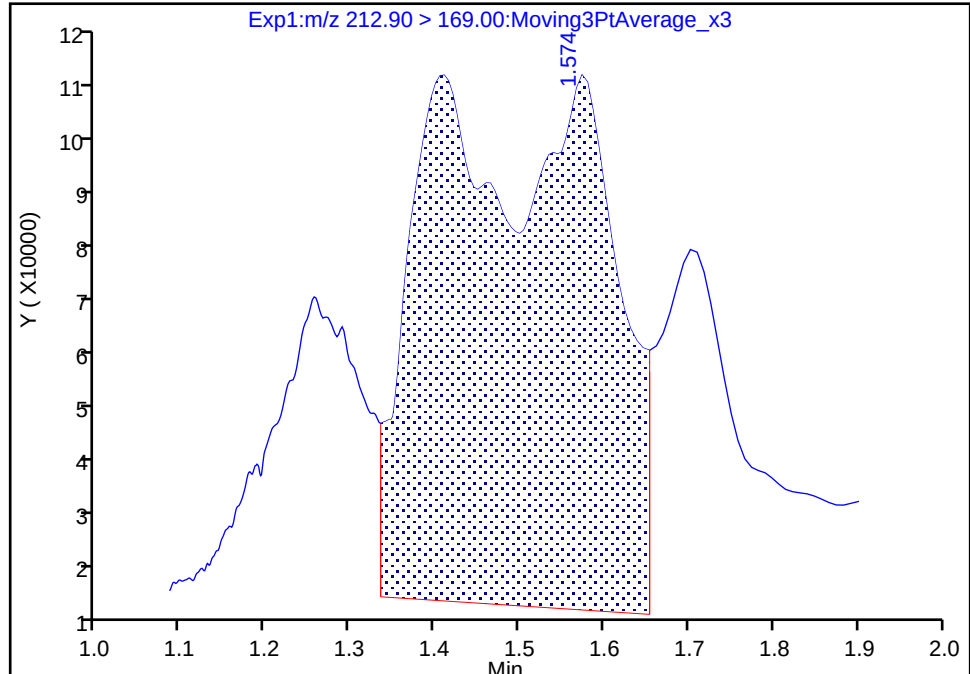
Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

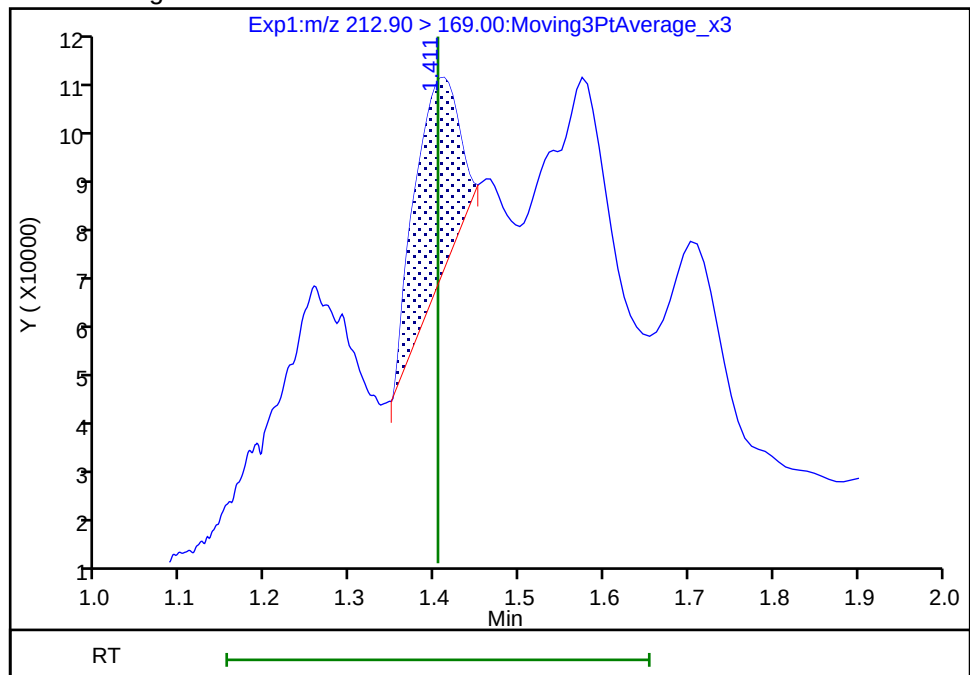
RT: 1.57
Area: 1445442
Amount: 1.544405
Amount Units: ng/ml

Processing Integration Results



RT: 1.41
Area: 148198
Amount: 0.158344
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:45:32

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d

Injection Date: 14-Nov-2018 02:28:47

Instrument ID: A8_N

Lims ID: 480-144297-F-11-A

Lab Sample ID: 320-144297-11

Client ID: DUP

Operator ID: SACINSTLCMS01

ALS Bottle#: 18 Worklist Smp#: 5

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

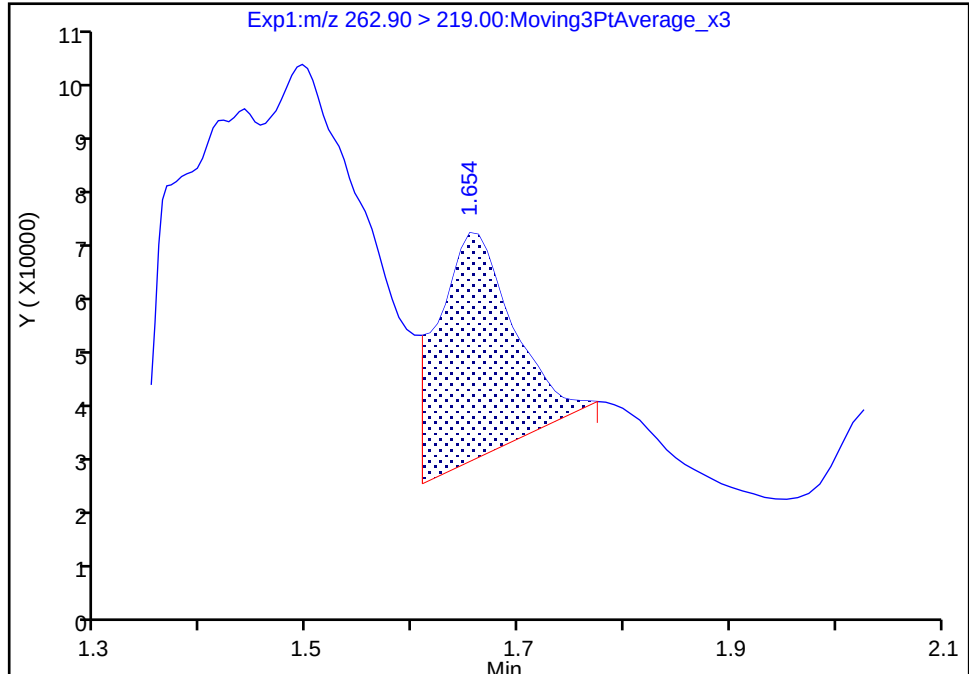
Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

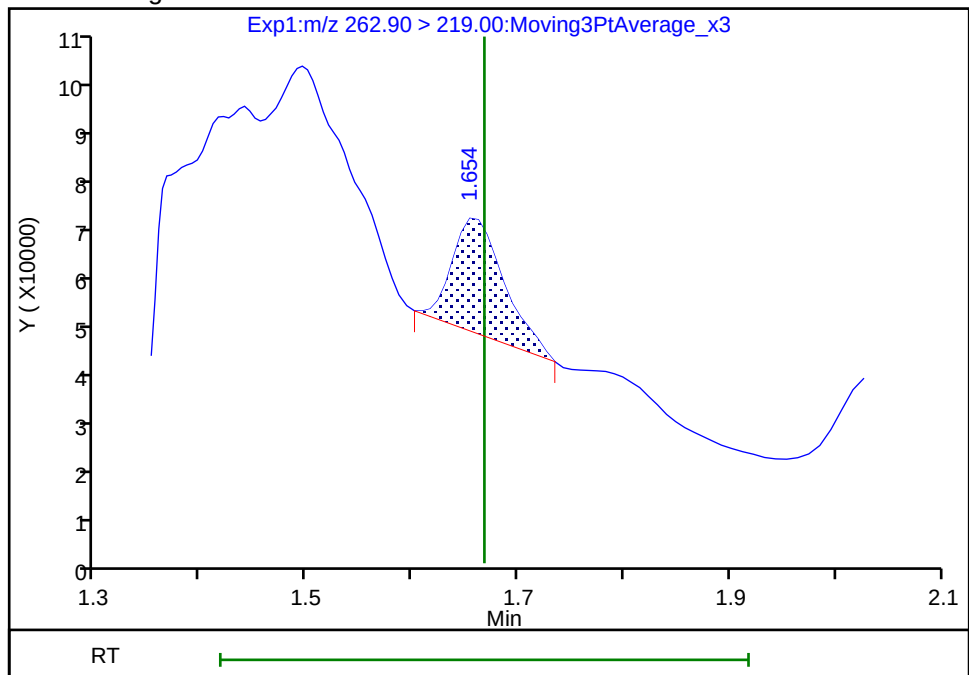
RT: 1.65
Area: 201519
Amount: 0.194018
Amount Units: ng/ml

Processing Integration Results



RT: 1.65
Area: 77687
Amount: 0.074795
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:45:38

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

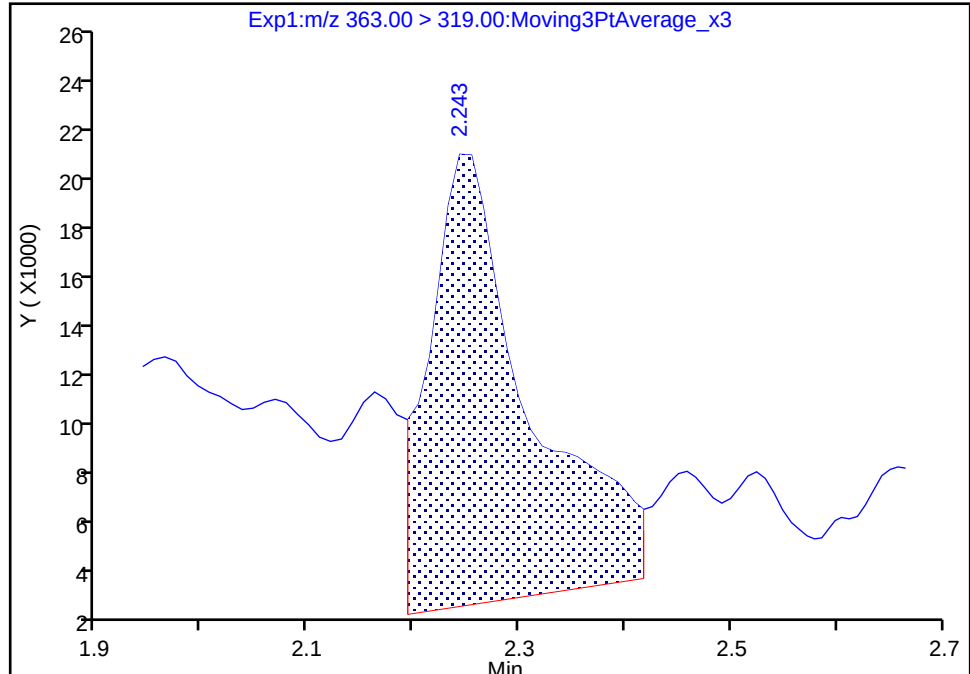
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d				
Injection Date:	14-Nov-2018 02:28:47	Instrument ID:	A8_N		
Lims ID:	480-144297-F-11-A	Lab Sample ID:	320-144297-11		
Client ID:	DUP				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	18	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

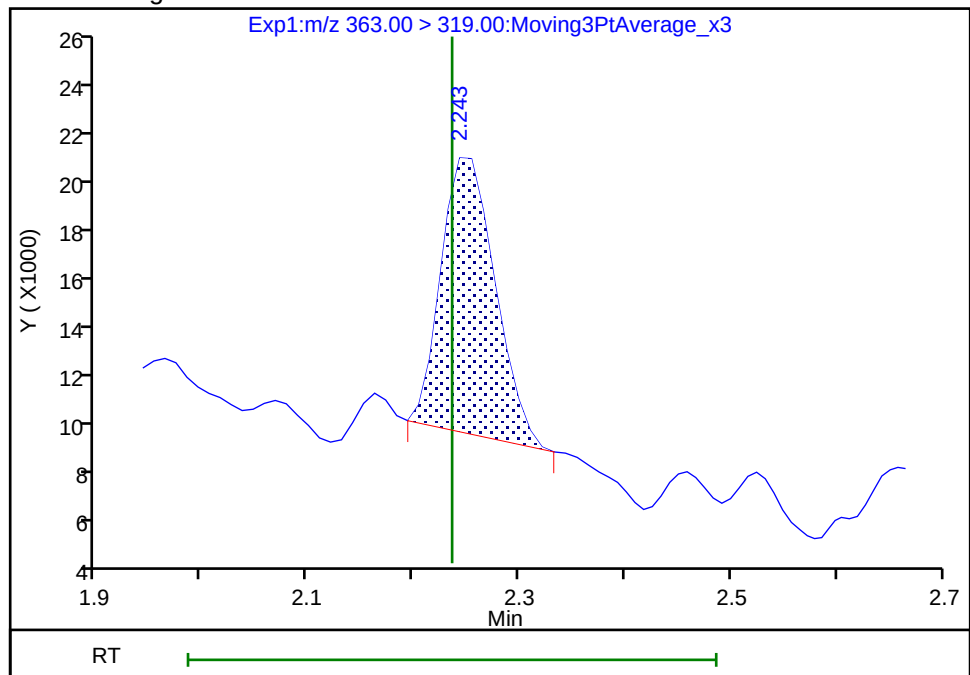
RT: 2.24
Area: 118924
Amount: 0.094005
Amount Units: ng/ml

Processing Integration Results



RT: 2.24
Area: 39840
Amount: 0.031492
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:46:07

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

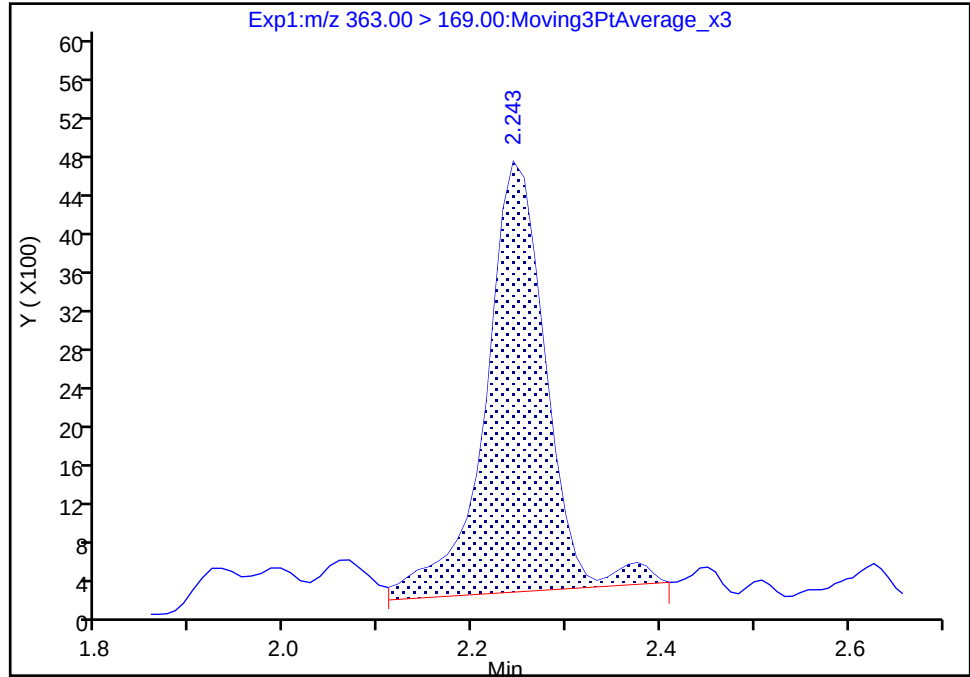
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d
Injection Date: 14-Nov-2018 02:28:47 Instrument ID: A8_N
Lims ID: 480-144297-F-11-A Lab Sample ID: 320-144297-11
Client ID: DUP
Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

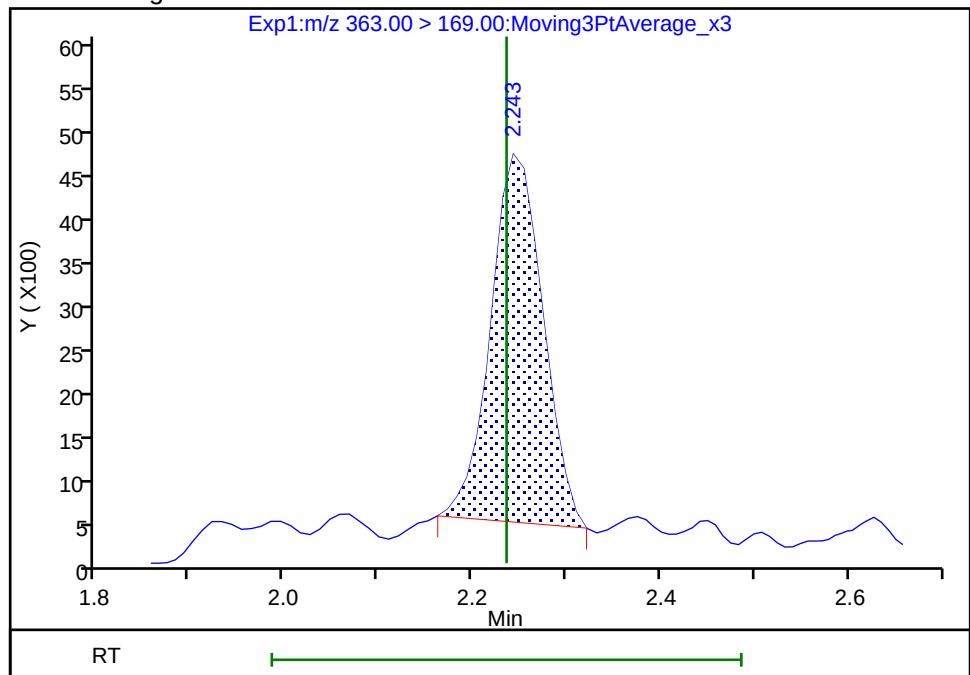
RT: 2.24
Area: 19953
Amount: 0.094005
Amount Units: ng/ml

Processing Integration Results



RT: 2.24
Area: 16214
Amount: 0.031492
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:46:09

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

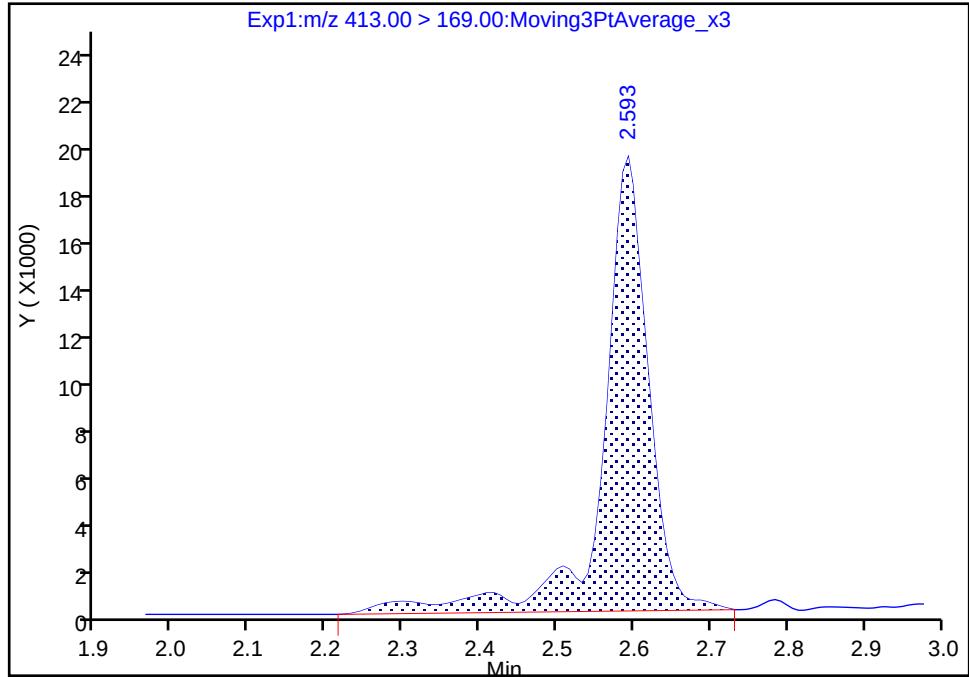
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d
Injection Date: 14-Nov-2018 02:28:47 Instrument ID: A8_N
Lims ID: 480-144297-F-11-A Lab Sample ID: 320-144297-11
Client ID: DUP
Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

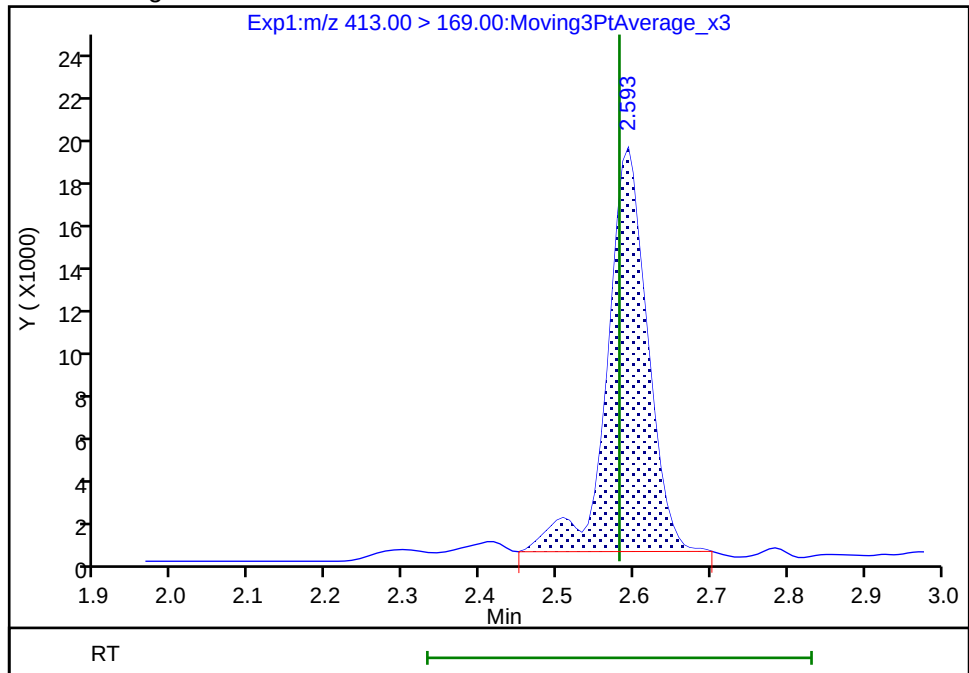
RT: 2.59
Area: 79033
Amount: 0.161255
Amount Units: ng/ml

Processing Integration Results



RT: 2.59
Area: 67957
Amount: 0.092166
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:46:27

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

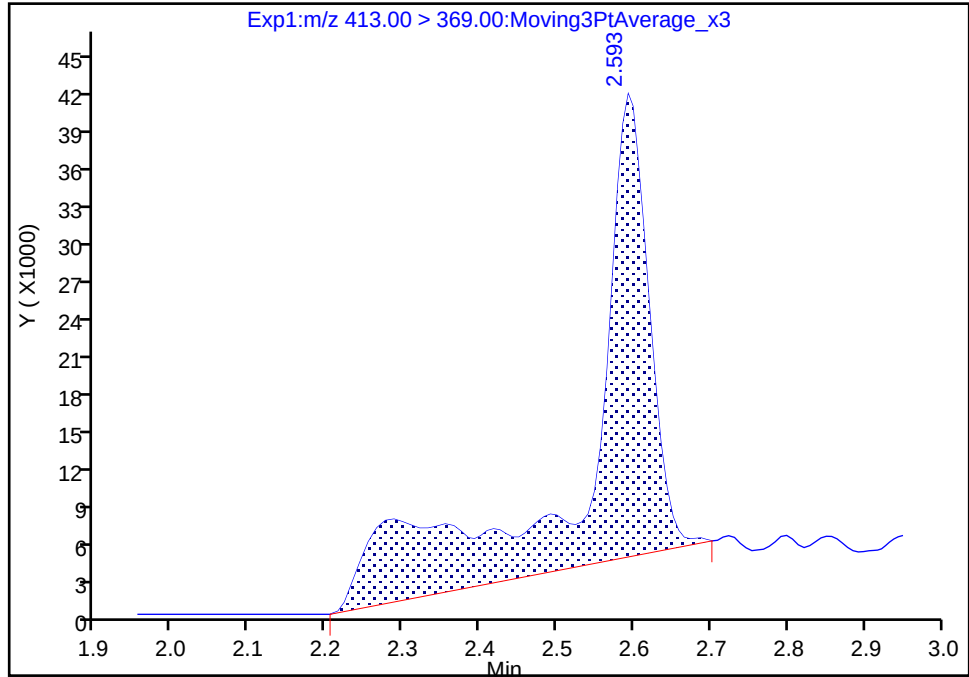
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d
Injection Date: 14-Nov-2018 02:28:47 Instrument ID: A8_N
Lims ID: 480-144297-F-11-A Lab Sample ID: 320-144297-11
Client ID: DUP
Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

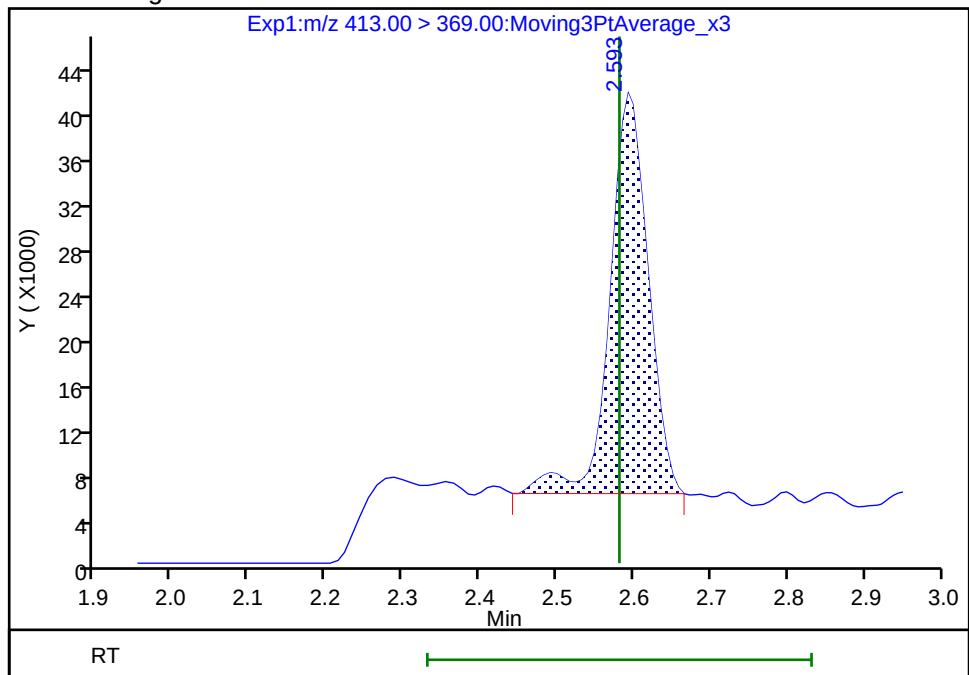
RT: 2.59
Area: 212589
Amount: 0.161255
Amount Units: ng/ml

Processing Integration Results



RT: 2.59
Area: 121506
Amount: 0.092166
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:46:30

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

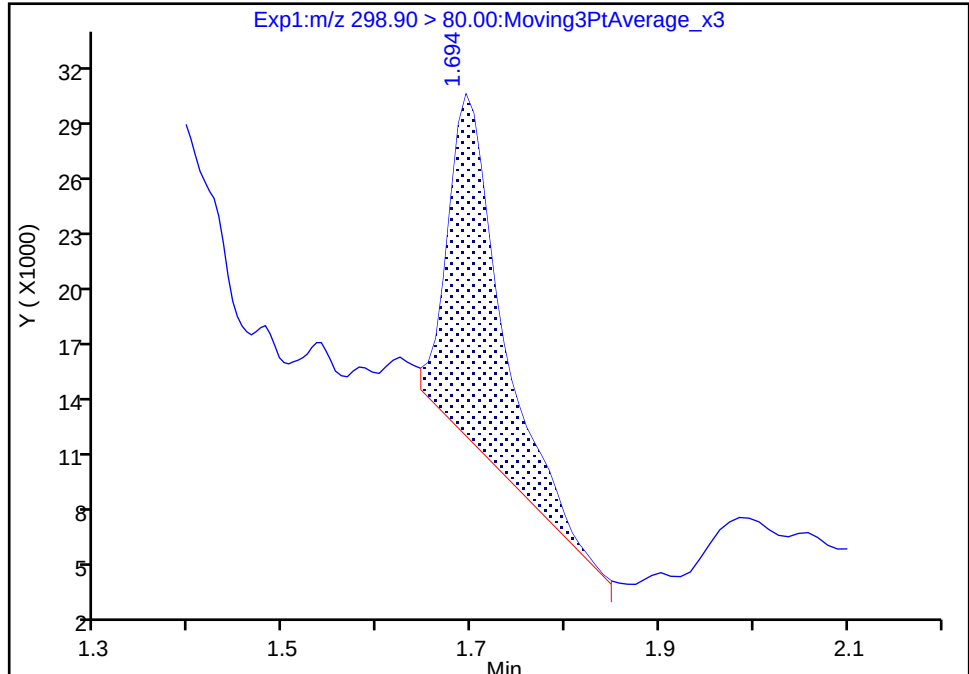
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d				
Injection Date:	14-Nov-2018 02:28:47	Instrument ID:	A8_N		
Lims ID:	480-144297-F-11-A	Lab Sample ID:	320-144297-11		
Client ID:	DUP				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	18	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector:	EXP1		

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

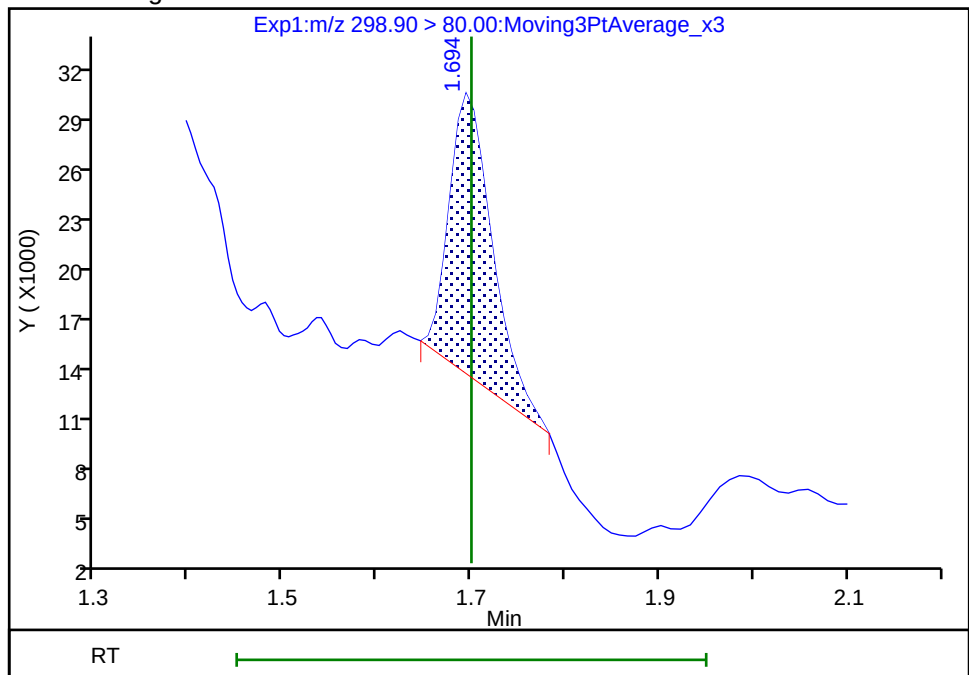
RT: 1.69
Area: 69961
Amount: 0.039082
Amount Units: ng/ml

Processing Integration Results



RT: 1.69
Area: 51801
Amount: 0.028937
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:45:55
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

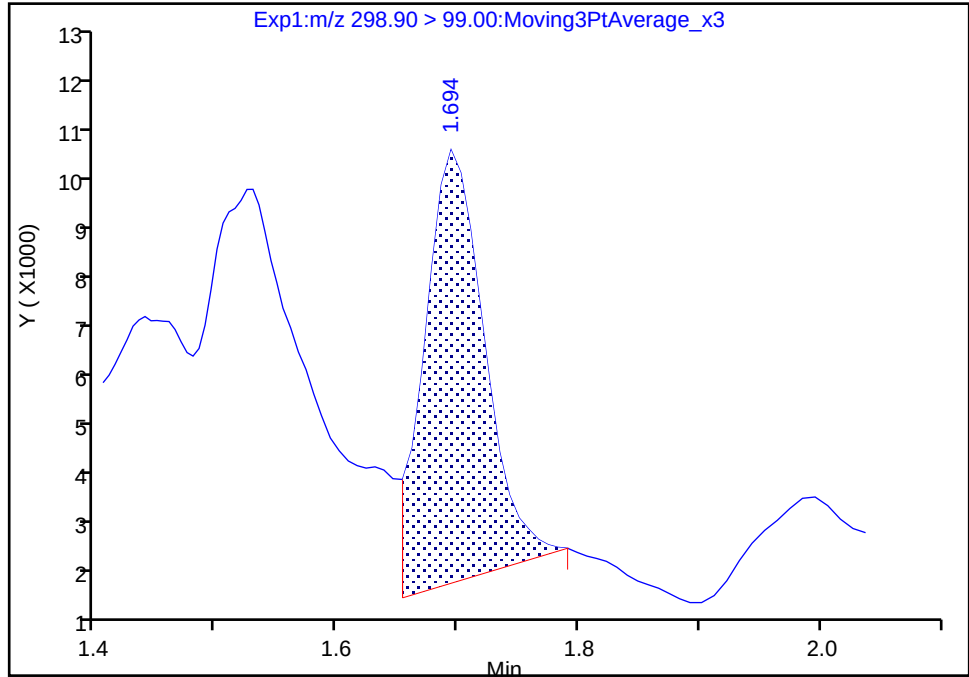
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d
Injection Date: 14-Nov-2018 02:28:47 Instrument ID: A8_N
Lims ID: 480-144297-F-11-A Lab Sample ID: 320-144297-11
Client ID: DUP
Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

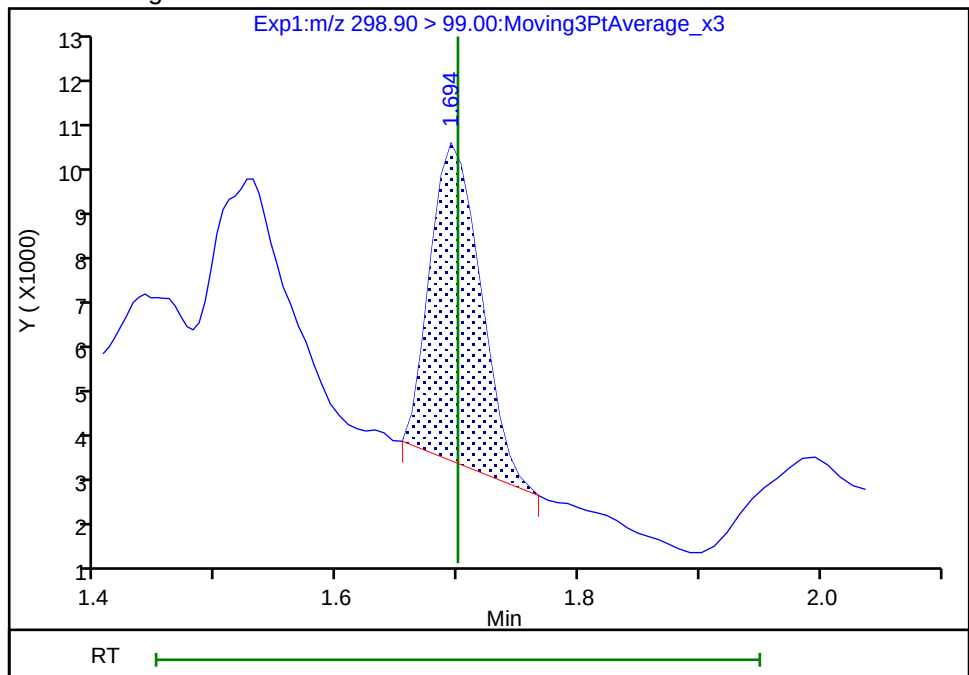
RT: 1.69
Area: 27098
Amount: 0.039082
Amount Units: ng/ml

Processing Integration Results



RT: 1.69
Area: 18559
Amount: 0.028937
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:45:58

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d

Injection Date: 14-Nov-2018 02:28:47

Instrument ID: A8_N

Lims ID: 480-144297-F-11-A

Lab Sample ID: 320-144297-11

Client ID: DUP

Operator ID: SACINSTLCMS01

ALS Bottle#: 18 Worklist Smp#: 5

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

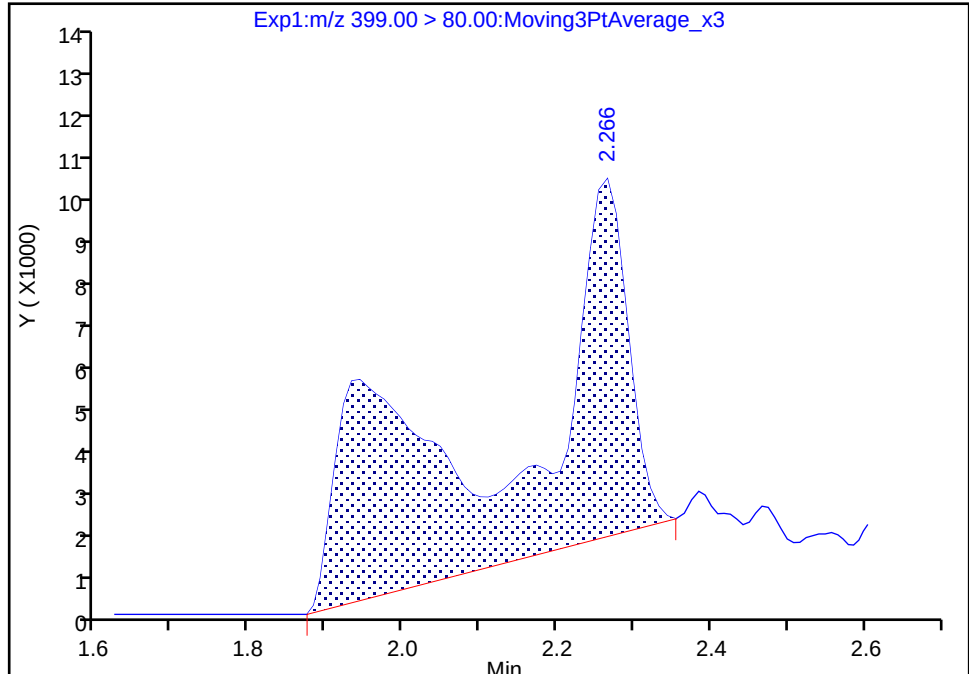
Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

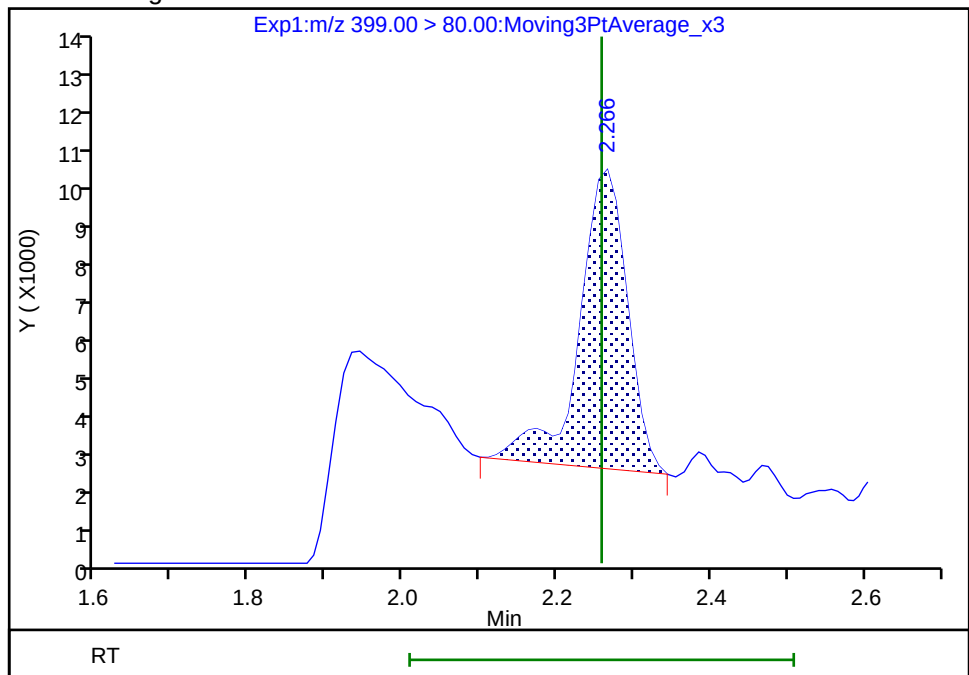
RT: 2.27
Area: 93410
Amount: 0.058268
Amount Units: ng/ml

Processing Integration Results



RT: 2.27
Area: 34497
Amount: 0.021519
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:46:16

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

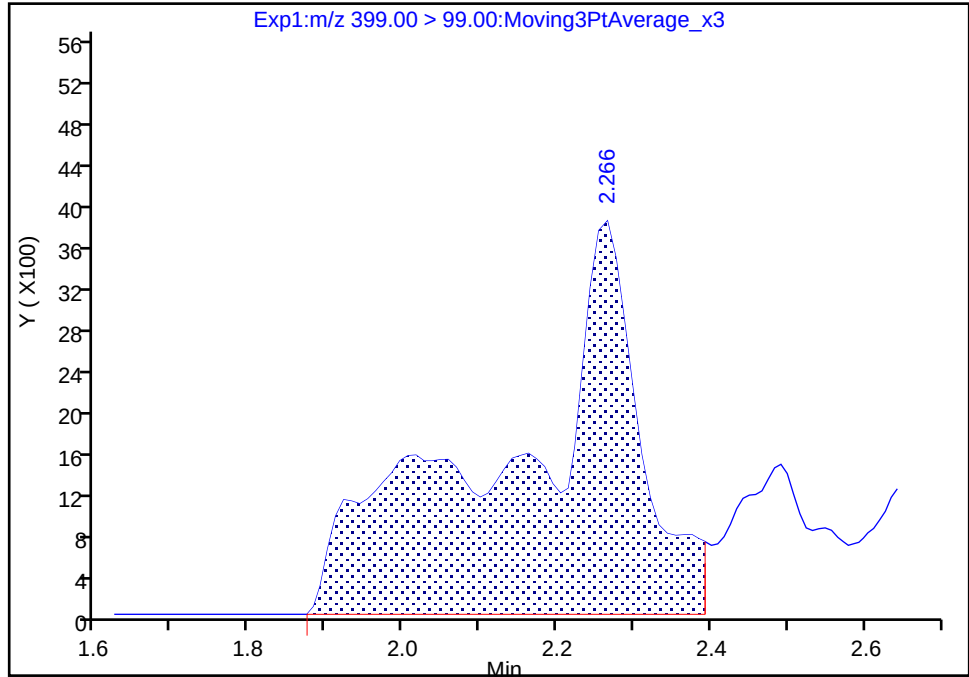
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d
Injection Date: 14-Nov-2018 02:28:47 Instrument ID: A8_N
Lims ID: 480-144297-F-11-A Lab Sample ID: 320-144297-11
Client ID: DUP
Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

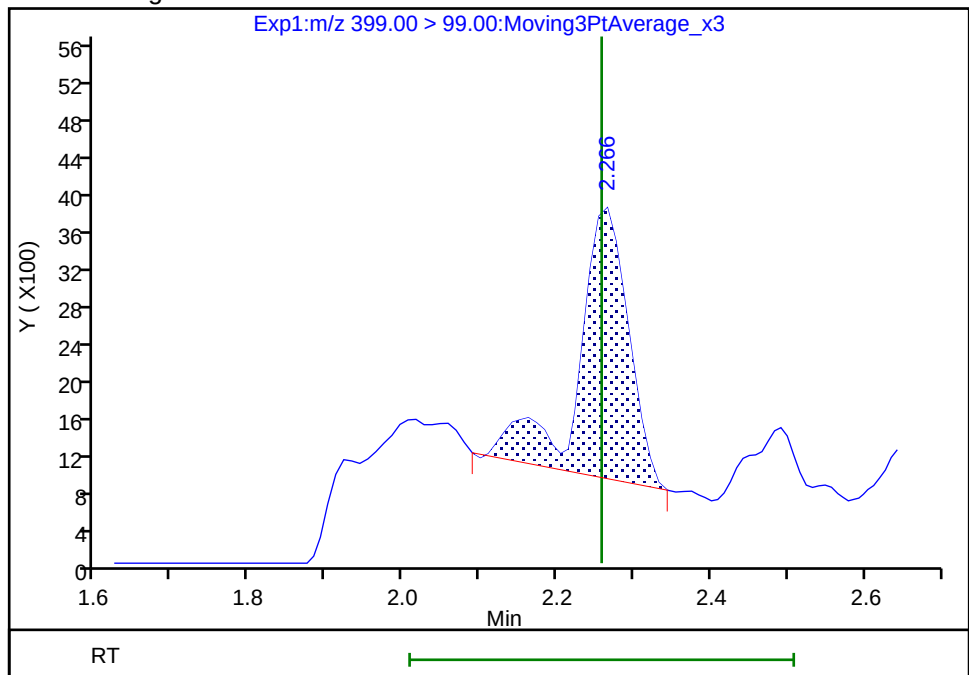
RT: 2.27
Area: 45102
Amount: 0.058268
Amount Units: ng/ml

Processing Integration Results



RT: 2.27
Area: 13030
Amount: 0.021519
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:46:19

Audit Action: Manually Integrated

Audit Reason: Baseline

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11/27/2018

TestAmerica Sacramento

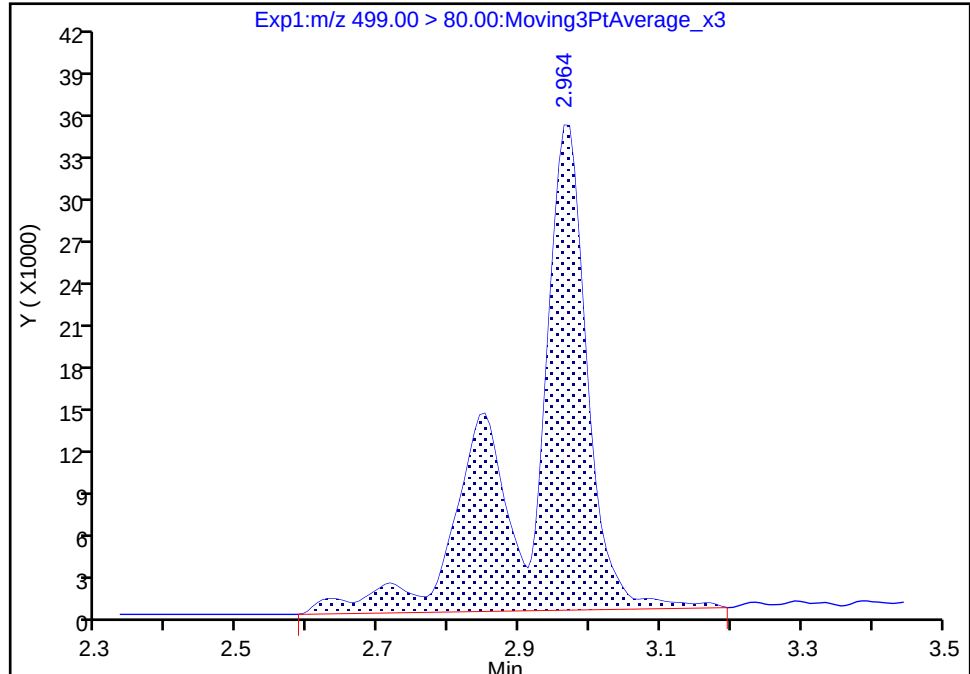
Data File:	\\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d				
Injection Date:	14-Nov-2018 02:28:47	Instrument ID:	A8_N		
Lims ID:	480-144297-F-11-A	Lab Sample ID:	320-144297-11		
Client ID:	DUP				
Operator ID:	SACINSTLCMS01	ALS Bottle#:	18	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	A8_N	Limit Group:	LC PFC ICAL		
Column:		Detector	EXP1		

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

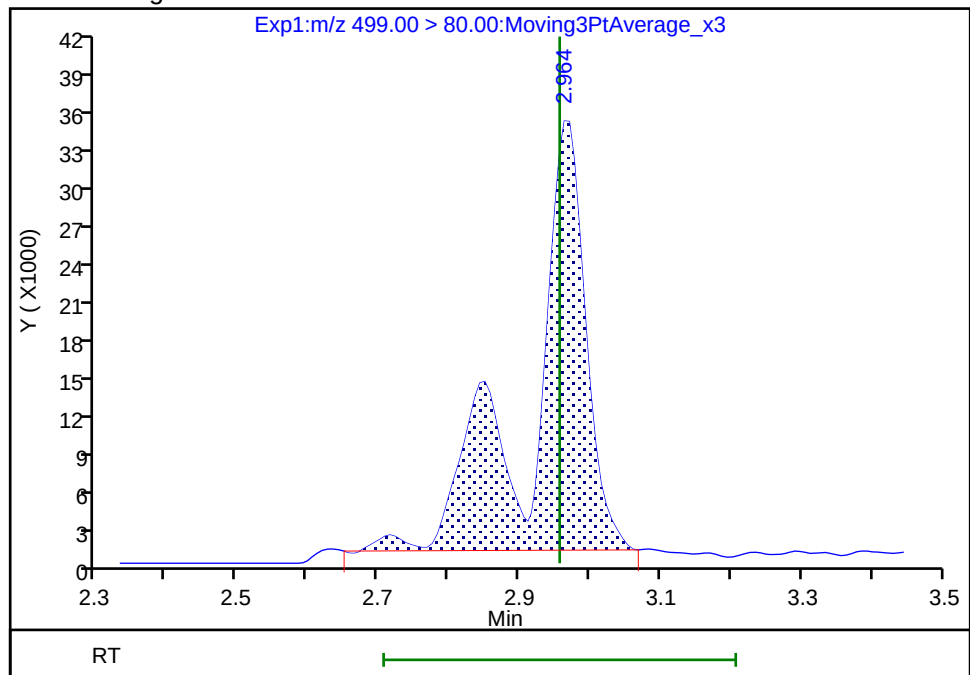
RT: 2.96
Area: 213248
Amount: 0.192333
Amount Units: ng/ml

Processing Integration Results



RT: 2.96
Area: 187206
Amount: 0.168845
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:46:39
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

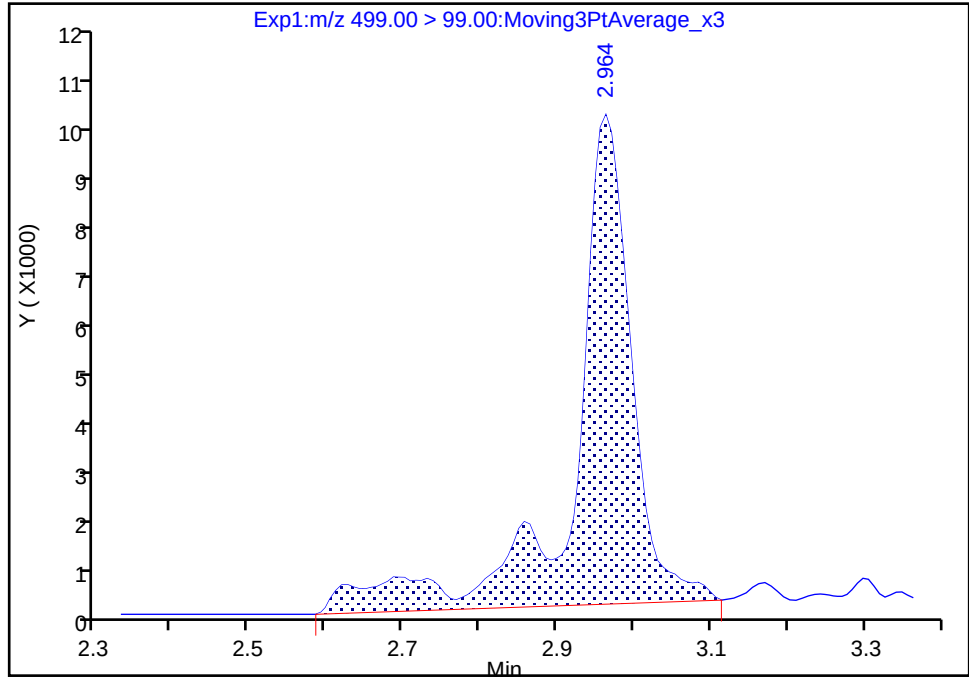
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d
Injection Date: 14-Nov-2018 02:28:47 Instrument ID: A8_N
Lims ID: 480-144297-F-11-A Lab Sample ID: 320-144297-11
Client ID: DUP
Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

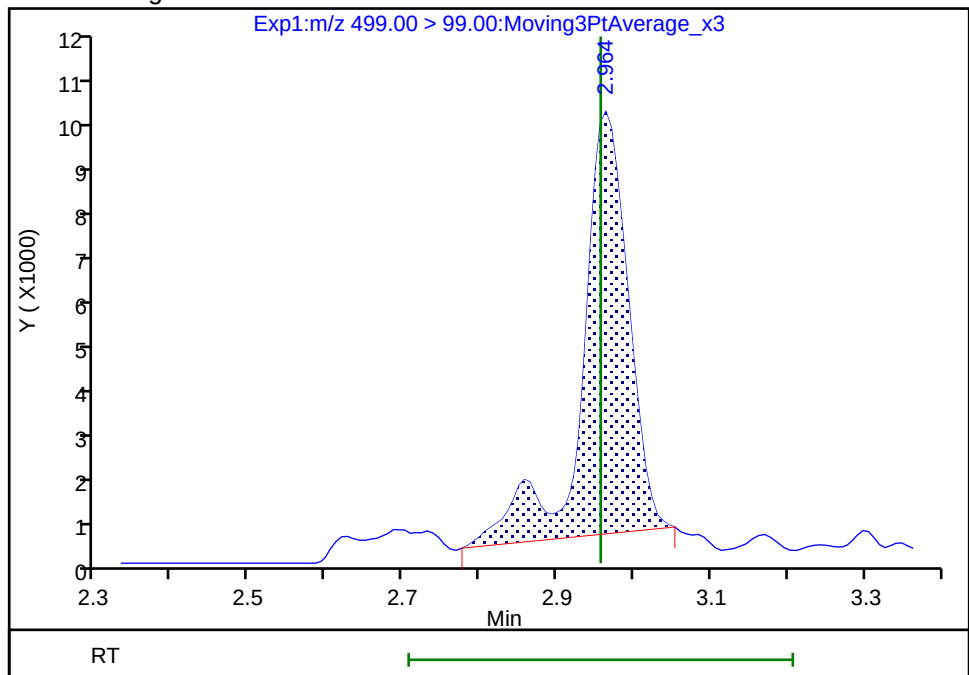
RT: 2.96
Area: 50518
Amount: 0.192333
Amount Units: ng/ml

Processing Integration Results



RT: 2.96
Area: 37973
Amount: 0.168845
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:46:42

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

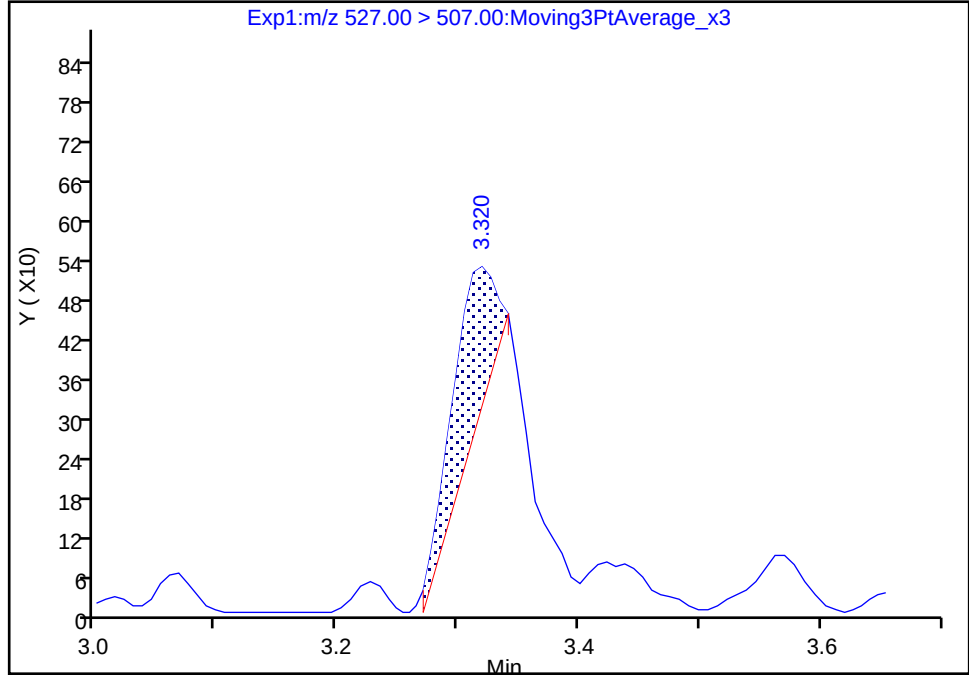
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_031.d
Injection Date: 14-Nov-2018 02:28:47 Instrument ID: A8_N
Lims ID: 480-144297-F-11-A Lab Sample ID: 320-144297-11
Client ID: DUP
Operator ID: SACINSTLCMS01 ALS Bottle#: 18 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

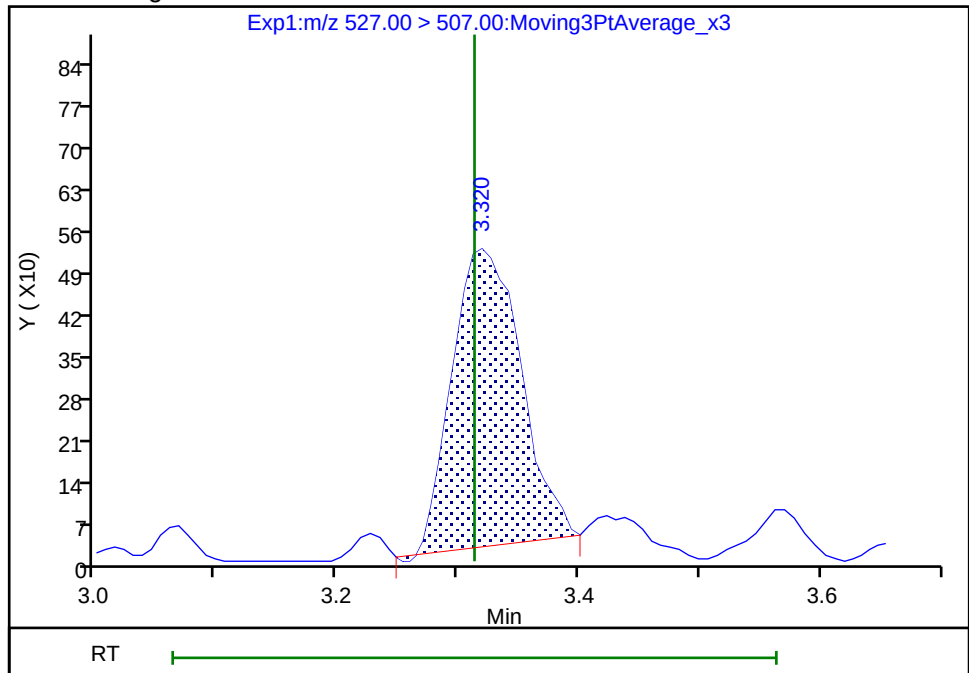
RT: 3.32
Area: 595
Amount: 0.000911
Amount Units: ng/ml

Processing Integration Results



RT: 3.32
Area: 1985
Amount: 0.003038
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:46:56

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 257055

SDG No.: _____

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/05/2018 15:37 Calibration End Date: 11/05/2018 16:22 Calibration ID: 42032

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-257055/2	2018.11.05ICAL_005.d
Level 2	IC 320-257055/3	2018.11.05ICAL_006.d
Level 3	IC 320-257055/4	2018.11.05ICAL_007.d
Level 4	IC 320-257055/5	2018.11.05ICAL_008.d
Level 5	IC 320-257055/6	2018.11.05ICAL_009.d
Level 6	IC 320-257055/7	2018.11.05ICAL_010.d
Level 7	IC 320-257055/8	2018.11.05ICAL_011.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.9658 0.9725	0.9162 0.9388	0.9490	0.9510	0.9400	AveID		0.9476				2.0		35.0			
Perfluoropentanoic acid (PFPeA)	1.2827 1.0703	1.0952 1.0924	1.1305	1.0610	1.1138	AveID		1.1208				6.7		35.0			
Perfluorobutanesulfonic acid (PFBS)	76.168 83.358	78.411 73.048	79.632	80.183	78.047	AveID		78.407				4.1		50.0			
4:2 FTS	14.874 15.728	12.488 14.969	15.503	15.642	15.061	AveID		14.895				7.5		50.0			
Perfluorohexanoic acid (PFHxA)	1.1703 0.9941	1.0845 0.9741	0.8956	0.9999	0.9994	AveID		1.0169				8.6		35.0			
Perfluoropentanesulfonic acid (PFPeS)	65.364 69.402	61.383 66.329	70.895	72.566	66.867	AveID		67.544				5.6		50.0			
HFPO-DA (GenX)	4.0269 3.2705	3.7931 2.6962	3.5383	2.8453	3.3754	AveID		3.3637				14.2		35.0			
Perfluoroheptanoic acid (PFHpA)	1.1585 1.1561	1.1171 1.0285	1.1469	1.0650	1.1003	AveID		1.1103				4.5		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.3598 1.0670	1.3552 1.0560	1.0697	1.0337	1.0430	AveID		1.1406				13.0		35.0			
DONA	4.1763 4.0420	3.9452 3.7178	4.1406	4.0780	4.1326	AveID		4.0332				3.9		50.0			
6:2 FTS	1.7453 1.5428	1.6803 1.5633	1.5326	1.4800	1.5228	AveID		1.5810				6.0		35.0			
Perfluorooctanoic acid (PFOA)	1.1434 1.0928	1.2341 1.1376	1.1238	1.1571	1.0746	AveID		1.1376				4.5		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	1.3937 1.3785	1.2440 1.3126	1.2937	1.3115	1.3388	AveID		1.3247				3.9		50.0			
Perfluorononanoic acid (PFNA)	1.0629 1.1166	1.0385 1.0582	1.0520	1.0900	1.0520	AveID		1.0672				2.5		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: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 257055
SDG No.: _____
Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N
Calibration Start Date: 11/05/2018 15:37 Calibration End Date: 11/05/2018 16:22 Calibration ID: 42032

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorooctanesulfonic acid (PFOS)	1.2213 1.0928	1.2384 1.1487	1.1463	1.1037	1.1299	AveID		1.1544				4.8		35.0			
F-53B Major	2.0502 1.9978	1.9942 2.0829	1.9701	1.8944	2.0019	AveID		1.9988				3.0		50.0			
Perfluorooctanesulfonamide (FOSA)	1.0281 1.0261	1.0040 1.0072	0.9701	0.9750	0.9771	AveID		0.9982				2.4		35.0			
8:2 FTS	1.2989 1.2277	1.4962 1.2259	1.3467	1.2205	1.2330	AveID		1.2927				7.9		35.0			
Perfluorononanesulfonic acid (PFNS)	0.7762 0.7992	0.8208 0.8110	0.8047	0.7800	0.8090	AveID		0.8001				2.1		50.0			
Perfluorodecanoic acid (PFDA)	1.0675 1.0131	1.0001 1.0440	1.0185	0.9679	1.0695	AveID		1.0258				3.6		35.0			
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.9401 0.9521	0.9390 0.9399	0.9070	0.9218	0.9505	AveID		0.9358				1.7		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.6181 0.6590	0.7017 0.6548	0.6113	0.6103	0.6418	AveID		0.6424				5.1		50.0			
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.8401 0.8498	0.8047 0.8695	0.8158	0.8867	0.8183	AveID		0.8407				3.6		35.0			
Perfluoroundecanoic acid (PFUnA)	1.0806 0.8554	0.9761 0.8716	0.8054	0.8578	0.8381	AveID		0.8979				10.7		35.0			
F-53B Minor	2.8729 2.9416	2.7753 2.8692	2.8344	2.7195	2.9711	AveID		2.8549				3.1		50.0			
Perfluorododecanoic acid (PFDoA)	0.9982 1.1097	1.1406 1.0784	1.1854	0.9838	1.0711	AveID		1.0810				6.7		35.0			
10:2 FTS	0.8606 0.9168	0.9216 0.9093	0.9450	0.8814	0.9338	AveID		0.9098				3.2		50.0			
Perfluorododecanesulfonic acid (PFDoS)	0.2904 0.2919	0.3144 0.2890	0.2778	0.2872	0.2851	AveID		0.2908				3.9		50.0			
Perfluorotridecanoic acid (PFTriA)	0.9600 1.1328	1.0483 1.0722	1.0169	1.0702	1.0584	AveID		1.0513				5.1		50.0			
Perfluorotetradecanoic acid (PFTeA)	++++ 0.2737	0.3090 0.2683	0.2673	0.2670	0.2688	AveID		0.2757				6.0		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.7243 0.9222	1.2378 0.8821	0.9780	0.8927	0.9212	LlID	0.0197	0.8945							1.0000		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	1.1187 1.0997	1.0744 1.0591	1.1199	1.0724	1.1099	AveID		1.0934				2.3		50.0			
13C4 PFBA	1.4419 1.4707	1.5087 1.5425	1.4722	1.4798	1.4788	Ave		1.4849				2.2		50.0			
13C5-PFPeA DNU	0.9361 1.0048	0.9870 1.0036	0.9567	1.0016	0.9702	Ave		0.9800				2.7		50.0			

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: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 257055
SDG No.: _____
Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N
Calibration Start Date: 11/05/2018 15:37 Calibration End Date: 11/05/2018 16:22 Calibration ID: 42032

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
13C3 PFBS	0.0214 0.0200	0.0212 0.0221	0.0194	0.0201	0.0210	Ave		0.0207				4.5		50.0			
M2-4:2 FTS	0.1340 0.1310	0.1385 0.1435	0.1365	0.1333	0.1358	Ave		0.1361				3.0		50.0			
13C2 PFHxA	1.0705 1.0501	1.0789 1.0964	1.1377	1.0464	1.0575	Ave		1.0768				3.0		50.0			
13C3 HFPO-DA	0.0696 0.0648	0.0651 0.0817	0.0649	0.0703	0.0608	Ave		0.0682				9.9		50.0			
13C4 PFHpA	0.9786 0.9855	0.9771 1.0174	1.0107	0.9900	0.9967	Ave		0.9937				1.6		50.0			
18O2 PFHxS	1.2211 1.2229	1.2186 1.2229	1.2041	1.2312	1.1941	Ave		1.2164				1.1		50.0			
M2-6:2 FTS	0.2141 0.2020	0.2215 0.2063	0.2235	0.2239	0.2163	Ave		0.2154				4.0		50.0			
13C8 PFOA	1.7845 1.6906	1.6432 1.7215	1.7014	1.6310	1.6389	Ave		1.6873				3.3		50.0			
13C4 PFOA	0.9953 0.9835	0.9603 0.9521	0.9824	0.9690	0.9740	Ave		0.9738				1.5		50.0			
13C8 PFOS	0.4162 0.4320	0.4327 0.4408	0.4231	0.4371	0.4227	Ave		0.4292				2.1		50.0			
13C5 PFNA	0.7897 0.7719	0.8276 0.8466	0.8301	0.7972	0.8051	Ave		0.8097				3.2		50.0			
13C4 PFOS	0.7524 0.8062	0.7943 0.8305	0.7913	0.8240	0.7883	Ave		0.7981				3.2		50.0			
13C8 FOSA	1.1175 1.0865	1.1357 1.1421	1.1108	1.1183	1.1146	Ave		1.1179				1.6		50.0			
M2-8:2 FTS	0.2445 0.2236	0.2427 0.2257	0.2139	0.2300	0.2172	Ave		0.2282				5.2		50.0			
13C2 PFDA	0.7059 0.6928	0.7151 0.7056	0.6943	0.7118	0.6737	Ave		0.6999				2.0		50.0			
d3-NMeFOSAA	0.3338 0.3306	0.3407 0.3546	0.3469	0.3412	0.3411	Ave		0.3413				2.3		50.0			
d5-NEtFOSAA	0.3570 0.3535	0.3688 0.3600	0.3728	0.3683	0.3658	Ave		0.3637				1.9		50.0			
13C2 PFUnA	0.5622 0.5544	0.5325 0.5520	0.5653	0.5402	0.5617	Ave		0.5526				2.2		50.0			
13C2 PFDoA	0.5811 0.5531	0.5982 0.5921	0.5796	0.6036	0.5923	Ave		0.5857				2.9		50.0			
13C2 PFTeDA	0.7047 0.7111	0.7492 0.7404	0.7449	0.7383	0.7096	Ave		0.7283				2.6		50.0			

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: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 257055
 SDG No.: _____
 Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N
 Calibration Start Date: 11/05/2018 15:37 Calibration End Date: 11/05/2018 16:22 Calibration ID: 42032

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															
13C2 PFHxDA	1.2584 1.2804	1.3180 1.3604	1.2495	1.3305	1.2221	Ave		1.2885				3.8		50.0			

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: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 257055

SDG No.: _____

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/05/2018 15:37 Calibration End Date: 11/05/2018 16:22 Calibration ID: 42032

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-257055/2	2018.11.05ICAL_005.d
Level 2	IC 320-257055/3	2018.11.05ICAL_006.d
Level 3	IC 320-257055/4	2018.11.05ICAL_007.d
Level 4	IC 320-257055/5	2018.11.05ICAL_008.d
Level 5	IC 320-257055/6	2018.11.05ICAL_009.d
Level 6	IC 320-257055/7	2018.11.05ICAL_010.d
Level 7	IC 320-257055/8	2018.11.05ICAL_011.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	29327 6235306	58646 11919889	299805	1213788	2946412	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	25287 4688474	45864 9023931	232087	916539	2290428	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	30302 6440039	62287 11725282	292744	1227851	3070423	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	6252 1283836	10481 2538578	60217	253075	626019	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	26383 4551027	49641 8790631	218664	902432	2240195	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	27592 5689362	51739 11297139	276545	1179089	2791292	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		AveID	5903 924219	10484 1812448	49252	172554	434907	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	23875 4967049	46309 8613122	248766	909372	2324560	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	31820 5176506	63761 9672973	251525	998869	2402003	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
DONA		AveID	62338 13382545	125231 23940159	662329	2730298	6504093	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
6:2 FTS		AveID	7461 1287846	14971 2516126	69675	271006	661841	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluorooctanoic acid (PFOA)		AveID	23989 4690078	50327 8924431	237151	968056	2220566	0.0250 5.01	0.0501 10.0	0.250	1.00	2.50
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	21024 4612380	39906 8542271	209141	887409	2129477	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorononanoic acid (PFNA)		AveID	17676 3757576	36464 7373753	187411	749501	1795148	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorooctanesulfonic acid (PFOS)		AveID	17959 3564476	38725 7287004	180631	727964	1751860	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 257055

SDG No.: _____

Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/05/2018 15:37 Calibration End Date: 11/05/2018 16:22 Calibration ID: 42032

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
F-53B Major		AveID	30278 6544285	62630 13270063	311796	1254849	3117286	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorooctanesulfonamide (FOSA)		AveID	24195 4860477	48375 9468467	231251	940445	2308339	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
8:2 FTS		AveID	6406 1146670	14760 2181704	59227	231938	543721	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorononanesulfonic acid (PFNS)		AveID	11807 2696677	26553 5321823	131179	532168	1297646	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
Perfluorodecanoic acid (PFDA)		AveID	15870 3060002	30342 6063707	151756	594214	1527073	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)		AveID	6609 1372332	13573 2743554	67521	271276	687298	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	9441 2232842	22793 4314774	100073	418125	1033631	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)		AveID	6316 1309515	12591 2576478	65273	281640	634430	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroundecanoic acid (PFUnA)		AveID	12793 2067599	22050 3960522	97707	399664	997833	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
F-53B Minor		AveID	42883 9739121	88096 18476169	453384	1820731	4676041	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
Perfluorododecanoic acid (PFDoA)		AveID	12216 2675528	28947 5255919	147450	512231	1344674	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
10:2 FTS		AveID	4271 861695	9149 1628299	41821	168534	414364	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluorododecanesulfonic acid (PFDoS)		AveID	4455 992955	10255 1912167	45657	197574	461063	0.0242 4.84	0.0484 9.68	0.242	0.968	2.42
Perfluorotridecanoic acid (PFTriA)		AveID	11748 2731257	26605 5225888	126491	557204	1328758	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	++++ 848636	9823 1634920	42727	170019	404255	++++ 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L1ID	45694 5147498	69220 9877680	262244	1024380	2386140	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	29645 6138474	60080 11858619	300287	1230663	2874878	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
13C4 PFBA	13PF OA	Ave	3036421 3205790	3200520 3174189	3159326	3190775	3134324	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5-PFPeA DNU	13PF OA	Ave	1971381 2190350	2093817 2065249	2053002	2159677	2056403	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 PFBS	13PF OA	Ave	41853 40639	41785 42217	38675	40275	41388	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2 FTS	13PF OA	Ave	263654 266697	274363 275788	273681	268526	268917	2.34 2.34	2.34 2.34	2.34	2.34	2.34

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 257055
SDG No.: _____
Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3(mm) Heated Purge: (Y/N) N
Calibration Start Date: 11/05/2018 15:37 Calibration End Date: 11/05/2018 16:22 Calibration ID: 42032

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C2 PFHxA	13PF OA	Ave	2254334 2288974	2288677 2256153	2441549	2256270	2241434	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PF OA	Ave	146589 141297	138197 168057	139195	151615	128847	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFHpA	13PF OA	Ave	2060913 2148184	2072686 2093651	2169000	2134715	2112589	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	2432696 2521778	2445515 2380566	2444423	2511444	2394139	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2 FTS	13PF OA	Ave	428397 418263	446415 403235	455571	458750	435535	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C8 PFOA	13PF OA	Ave	3679025 3607690	3412606 3468098	3574552	3443086	3400623	2.45 2.45	2.45 2.45	2.45	2.45	2.45
13C4 PFOA	13PF OA	Ave	2095900 2143725	2037041 1959232	2108160	2089403	2064386	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 PFOS	13PF OA	Ave	837904 900175	877464 867215	867980	901122	856418	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	1663012 1682623	1755570 1742009	1781441	1718987	1706492	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFOS	13PF OA	Ave	1514847 1680035	1610728 1633772	1623364	1698658	1597250	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C8 FOSA	13PF OA	Ave	2353303 2368357	2409215 2350223	2383706	2411284	2362355	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2 FTS	13PF OA	Ave	493181 467005	493252 444904	439805	475074	440986	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C2 PFDA	13PF OA	Ave	1486632 1510201	1516934 1452019	1489933	1534784	1427858	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	703033 720713	722699 729728	744482	735735	723064	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	751845 770491	782325 740834	800112	794063	775302	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	1183842 1208490	1129525 1135961	1213174	1164806	1190624	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	1223813 1205545	1268918 1218482	1243862	1301600	1255462	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFTeDA	13PF OA	Ave	1483949 1550035	1589348 1523530	1598506	1592014	1503990	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFHxDA	13PF OA	Ave	2649975 2790916	2795988 2799335	2681378	2868904	2590229	2.50 2.50	2.50 2.50	2.50	2.50	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 257055
SDG No.: _____
Instrument ID: A8_N GC Column: GeminiC18 3 ID: 3 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 11/05/2018 15:37 Calibration End Date: 11/05/2018 16:22 Calibration ID: 42032

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
LlID = Linear 1/conc IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d
 Lims ID: IC L1 Full
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 05-Nov-2018 15:37:31 ALS Bottle#: 10 Worklist Smp#: 2
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 1
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub37
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 05-Nov-2018 16:58:42 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0305

First Level Reviewer: roycea

Date: 05-Nov-2018 16:25:06

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	1.411	1.413	-0.002	0.537	3036421	2.43		97.1	7851	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.411	1.415	-0.004	1.000	29327	0.0255		102	4.3	M
D 3 13C5 PFPeA										
267.90 > 223.00	1.671	1.681	-0.010	0.636	1971381	2.39		95.5	6008	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.679	1.682	-0.003	1.005	25287	0.0286		114	3.9	M
D 47 13C3 PFBS										
301.90 > 83.00	1.711	1.716	-0.005	0.651	41853	2.40		103	286	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.711	1.719	-0.008	1.000	30302	0.0215		97.1	13.7	
298.90 > 99.00	1.711	1.719	-0.008	1.000	13229		2.29(1.25-3.74)	97.1	9.2	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.923	1.928	-0.005	0.732	263654	2.30		98.5	260	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.923	1.929	-0.006	1.124	6252	0.0233		99.9	47.0	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.955	1.960	-0.005	1.000	26383	0.0288		115	11.9	
313.00 > 119.00	1.955	1.960	-0.005	1.000	2266		11.64(5.03-15.10)	115	7.1	
D 7 13C2 PFHxA										
315.00 > 270.00	1.955	1.960	-0.005	0.744	2254334	2.49		99.4	5375	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.975	1.983	-0.008	1.155	27592	0.0227		96.8	124	
349.00 > 99.00	1.975	1.983	-0.008	1.155	11790		2.34(1.36-4.07)	96.8	57.1	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.049	2.056	-0.007	1.000	5903	0.0299		120	4.1	

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	2.049	2.056	-0.007	0.779	146589	2.55		102	670	
D 9 13C4 PFHpA										
367.00 > 322.00	2.277	2.285	-0.008	0.867	2060913	2.46		98.5	5403	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.277	2.288	-0.011	1.000	23875	0.0261		104	9.0	
363.00 > 169.00	2.289	2.288	0.001	1.005	10457		2.28(1.13-3.40)	104	18.5	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.300	2.305	-0.005	1.000	31820	0.0271		119	45.4	
399.00 > 99.00	2.300	2.305	-0.005	1.000	10043		3.17(1.50-4.49)	119	22.0	M
D 11 18O2 PFHxS										
403.00 > 84.00	2.300	2.305	-0.005	0.875	2432696	2.37		100	4108	
77 DONA										
377.00 > 251.00	2.322	2.329	-0.007	0.774	62338	0.0244		104	237	
377.00 > 85.00	2.322	2.329	-0.007	0.774	37838		1.65(0.85-2.54)	104	108	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.599	2.609	-0.010	0.989	428397	2.36		99.4	948	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.613	2.611	0.002	1.005	7461	0.0262		110	23.6	
D 73 13C8 PFOA										
421.00 > 376.00	2.621	2.628	-0.007	0.997	3679025	2.59		106	7147	
* 62 13C2 PFOA										
415.00 > 370.00	2.628	2.636	-0.008		2105889	2.50			3319	
D 14 13C4 PFOA										
417.00 > 372.00	2.628	2.636	-0.008	1.000	2095900	2.56		102	4050	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.628	2.637	-0.009	1.000	23989	0.0252		101	2.6	M
413.00 > 169.00	2.636	2.637	-0.001	1.003	12263		1.96(0.84-2.52)	101	27.2	M
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.636	2.646	-0.010	0.878	21024	0.0250		105	89.9	
449.00 > 99.00	2.644	2.646	-0.002	0.881	4798		4.38(1.94-5.82)	105	18.2	
D 72 13C8 PFOS										
507.00 > 99.00	3.002	3.008	-0.006	1.142	837904	2.32		97.0	2539	
D 19 13C5 PFNA										
468.00 > 423.00	3.002	3.009	-0.007	1.142	1663012	2.44		97.5	3373	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.002	3.010	-0.008	1.000	17676	0.0249		99.6	5.4	M
463.00 > 169.00	3.002	3.010	-0.008	1.000	5214		3.39(1.90-5.69)	99.6	43.1	
D 18 13C4 PFOS										
503.00 > 80.00	3.002	3.010	-0.008	1.142	1514847	2.25		94.3	3273	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.009	3.011	-0.002	1.003	17959	0.0245		106	13.2	M
499.00 > 99.00	2.994	3.011	-0.017	0.997	3804		4.72(2.31-6.93)	106	15.9	M
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.212	3.225	-0.013	1.070	30278	0.0239		103	72.1	
D 21 13C8 FOSA										
506.00 > 78.00	3.343	3.351	-0.008	1.272	2353303	2.50		100.0	3547	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.343	3.352	-0.009	1.000	24195	0.0257		103	157	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.351	3.360	-0.009	1.275	493181	2.57		107	1247	
25 1H,1H,2H,2H-perfluorodecanesulfoni										M
527.00 > 507.00	3.358	3.362	-0.004	1.002	6406	0.0241		100	27.8	M
68 Perfluorononanesulfonic acid										M
549.00 > 80.00	3.358	3.363	-0.005	1.119	11807	0.0233		97.0	74.8	
549.00 > 99.00	3.366	3.363	0.003	1.121	3331		3.54(1.33-3.97)	97.0	20.0	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	3.366	3.370	-0.004	1.000	15870	0.0260		104	17.5	M
513.00 > 169.00	3.366	3.370	-0.004	1.000	3115		5.09(2.36-7.09)	104	13.4	M
D 23 13C2 PFDA										
515.00 > 470.00	3.366	3.372	-0.006	1.281	1486632	2.52		101	3202	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.517	3.527	-0.010	1.338	703033	2.45		97.8	1870	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.517	3.530	-0.013	1.000	6609	0.0251		100	5.0	
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	3.686	3.691	-0.005	1.228	9441	0.0232		96.2	44.9	M
599.00 > 99.00	3.678	3.691	-0.013	1.225	2912		3.24(1.39-4.16)	96.2	16.5	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.686	3.698	-0.012	1.403	751845	2.45		98.2	756	
D 30 13C2 PFUnA										
565.00 > 520.00	3.695	3.703	-0.008	1.406	1183842	2.54		102	4009	
33 N-ethylperfluorooctanesulfonamidoa										M
584.00 > 419.00	3.686	3.703	-0.017	1.000	6316	0.0250		99.9	19.3	M
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	3.695	3.706	-0.011	1.000	12793	0.0301		120	11.1	R
563.00 > 169.00	3.686	3.706	-0.020	0.998	1552		8.24(2.12-6.36)	120	10.5	M
35 MeFOSA										
512.00 > 169.00	3.864	3.866	-0.002		6598	NC			34.1	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.864	3.866	-0.002	1.287	42883	0.0237		101	136	
D 36 13C2 PFDaA										
615.00 > 570.00	3.992	4.001	-0.009	1.519	1223813	2.48		99.2	3828	
37 Perfluorododecanoic acid										M
613.00 > 569.00	3.992	4.001	-0.009	1.000	12216	0.0231		92.3	9.0	M
613.00 > 169.00	4.026	4.001	0.025	1.008	3264		3.74(2.13-6.40)	92.3	19.1	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.992	4.005	-0.013	1.191	4271	0.0228		94.6	40.0	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.241	4.243	-0.002	1.413	4455	0.0242		99.9	34.5	
699.00 > 99.00	4.241	4.243	-0.002	1.413	5715		0.78(0.00-0.00)	99.9	50.7	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.260	4.268	-0.008	1.067	11748	0.0228		91.3	6.7	M
663.00 > 169.00	4.269	4.268	0.001	1.069	5398		2.18(1.25-3.76)	91.3	48.7	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.502	4.508	-0.006	1.000	5951	0.0364		145	50.7	
713.00 > 219.00	4.492	4.508	-0.016	0.998	2991		1.99(0.71-2.13)	145	57.4	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.502	4.509	-0.007	1.713	1483949	2.42		96.8	2708	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.917	4.926	-0.009	1.871	2649975	2.44		97.7	3216	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.917	4.928	-0.011	1.000	45694	0.0261		105	9.0	
813.00 > 169.00	4.917	4.928	-0.011	1.000	9378		4.87(2.86-8.58)	105	72.4	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.266	5.275	-0.009	1.071	29645	0.0256		102	5.1	M
913.00 > 169.00	5.266	5.275	-0.009	1.071	3613		8.21(3.83-11.48)	102	28.5	M

QC Flag Legend

Processing Flags

NC - Not Calibrated

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL1_00010

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

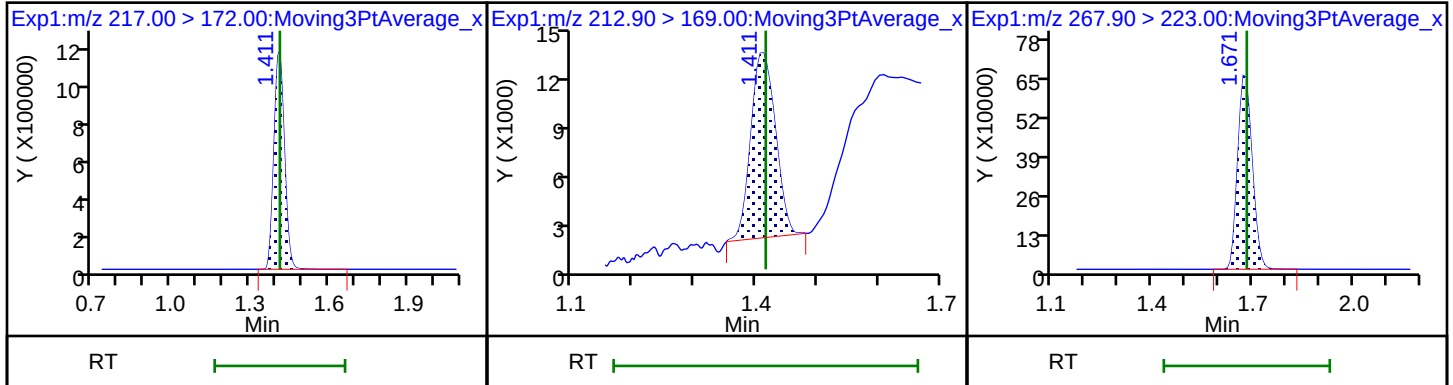
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

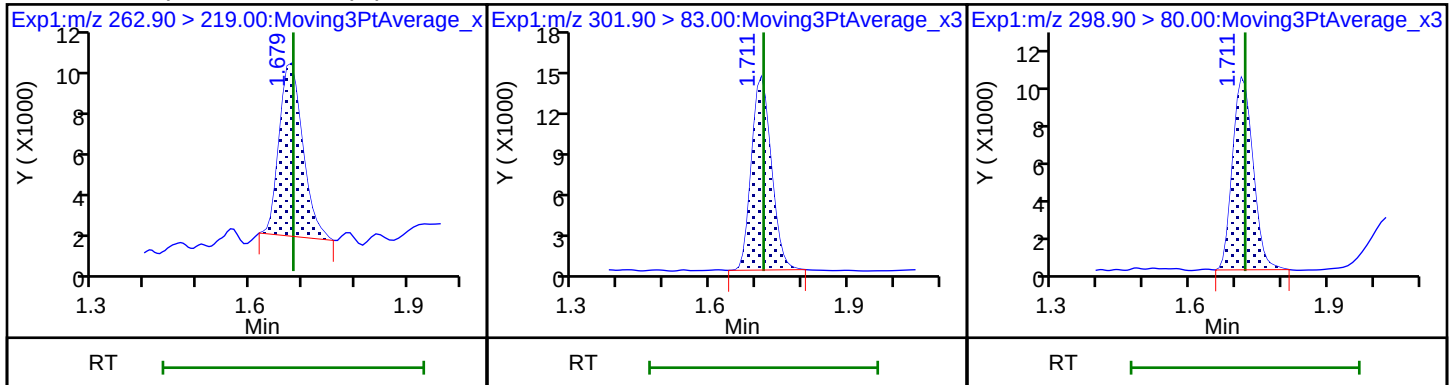
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

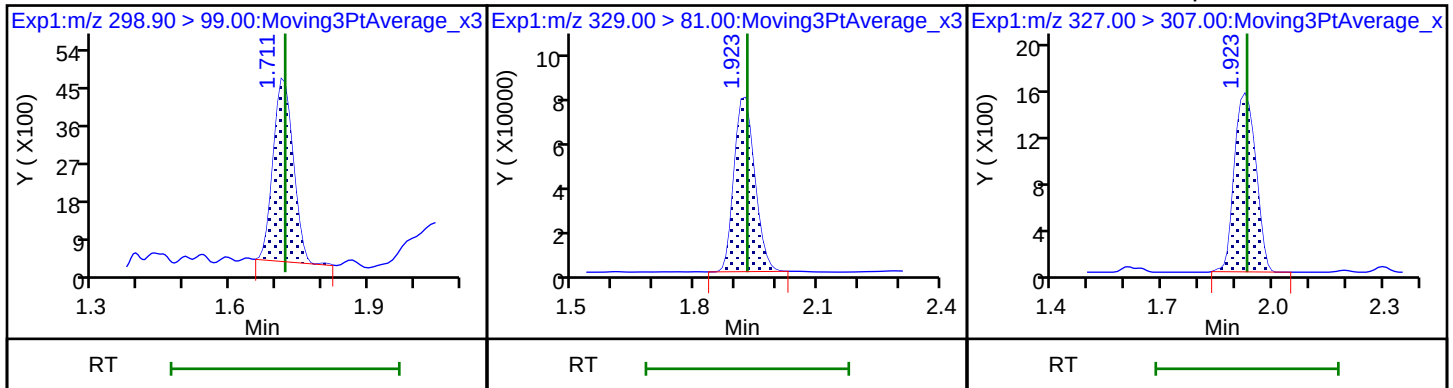
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

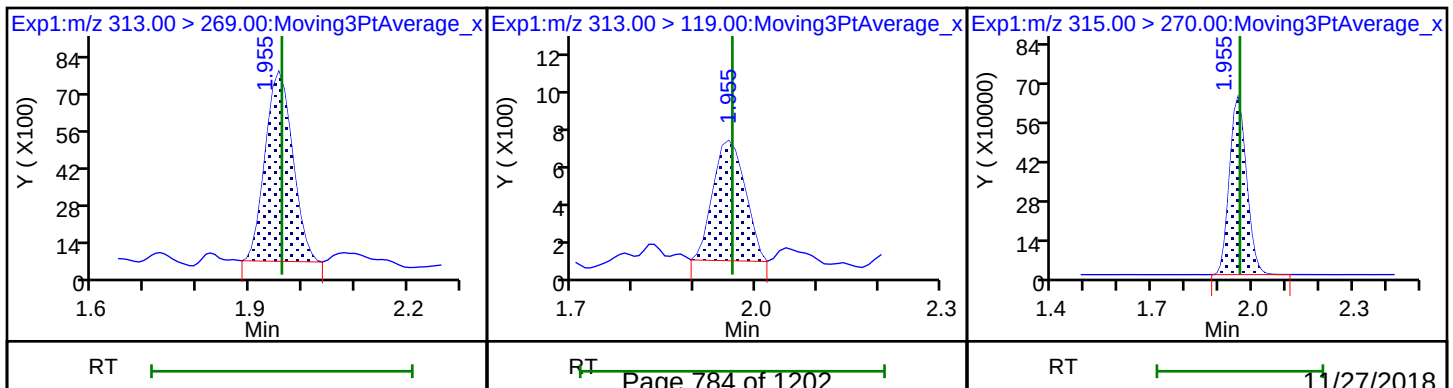
61 1H,1H,2H,2H-perfluorohexanesulfoni

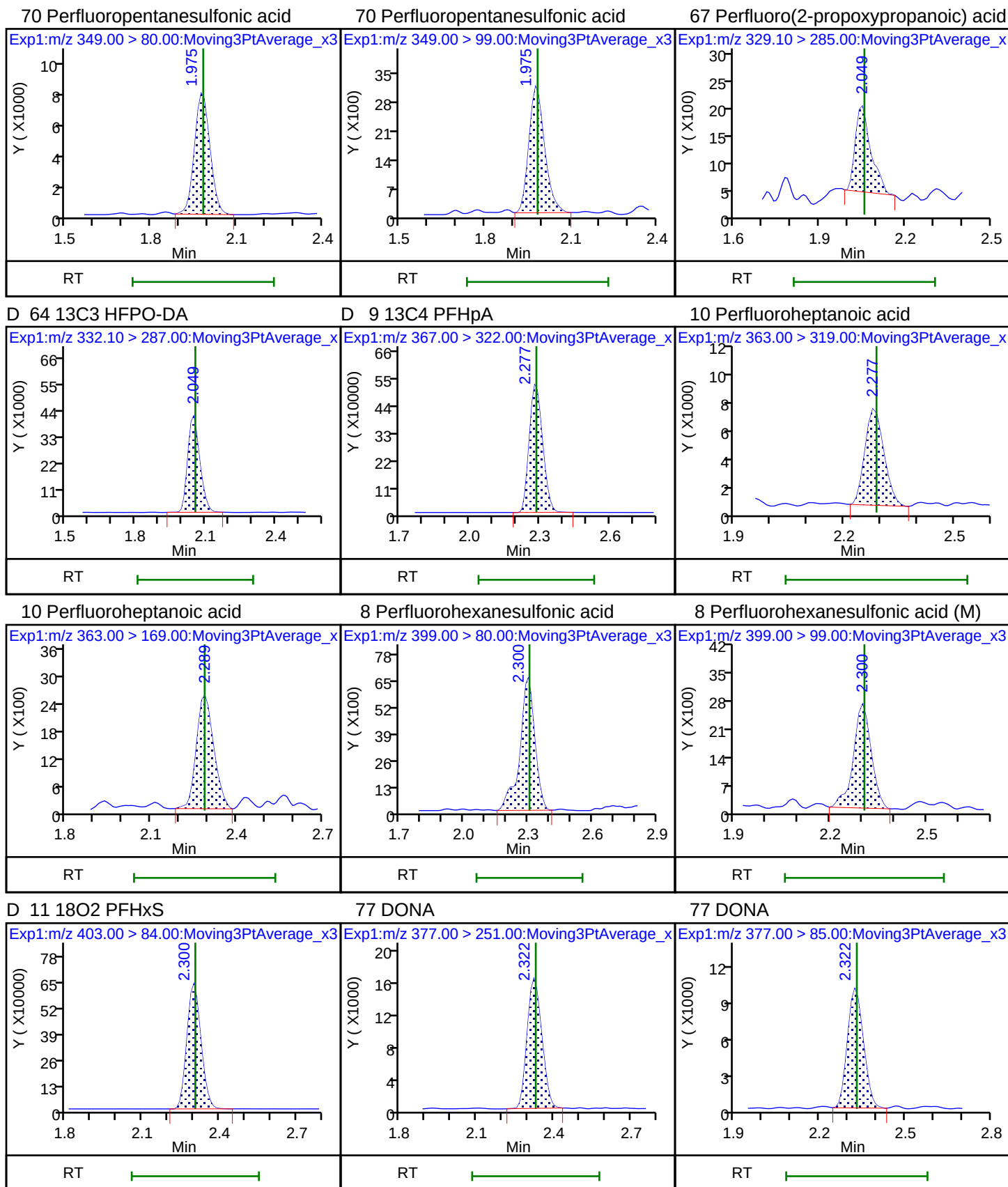


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

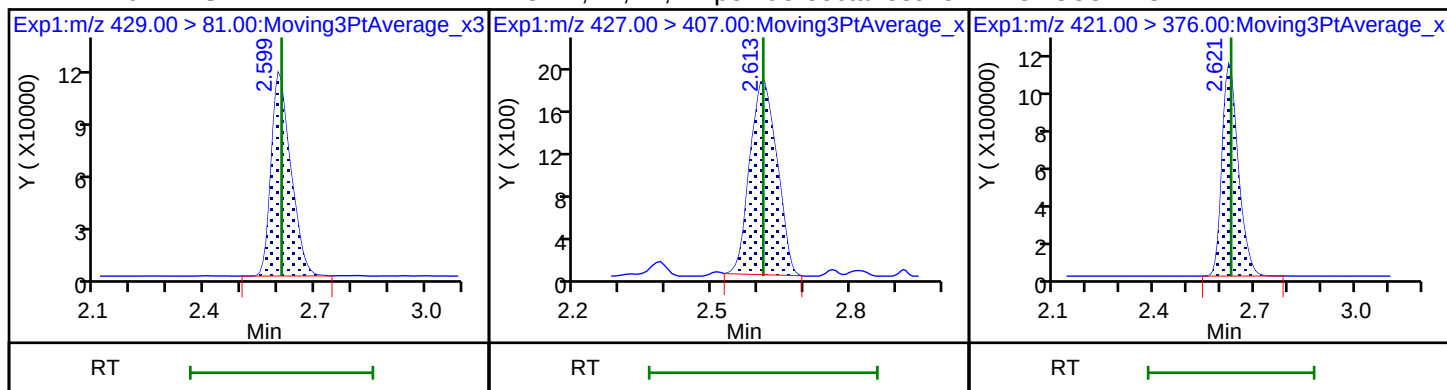
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

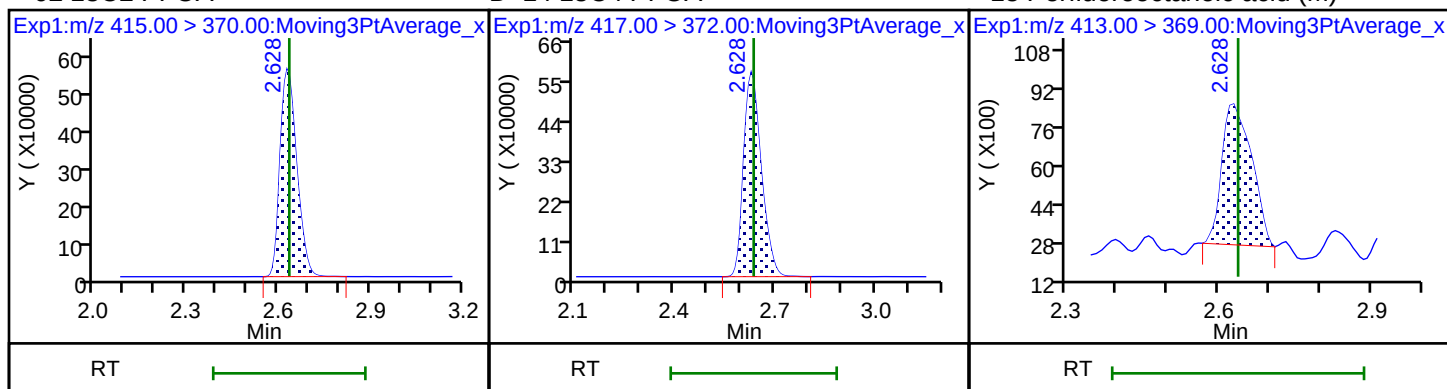
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



* 62 13C2 PFOA

D 14 13C4 PFOA

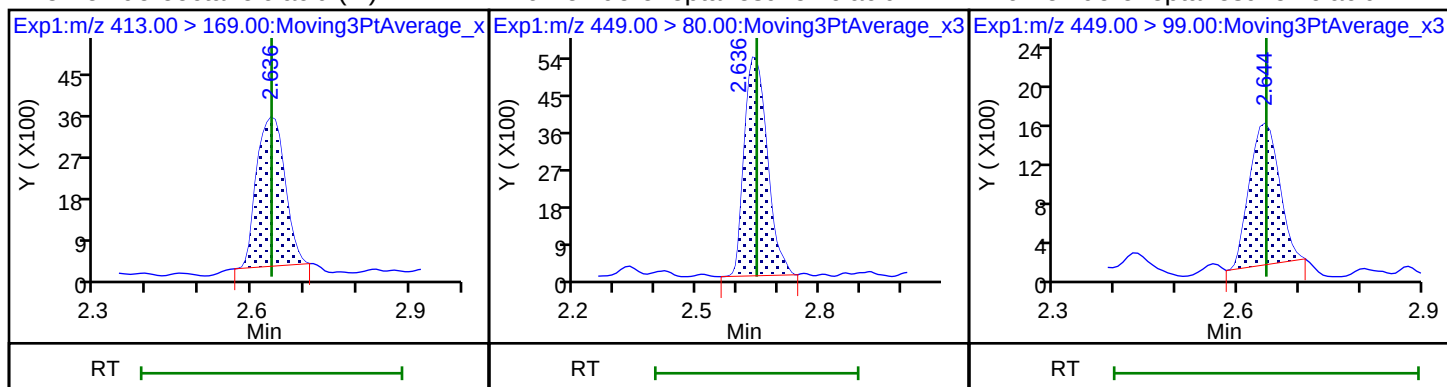
15 Perfluorooctanoic acid (M)



15 Perfluorooctanoic acid (M)

16 Perfluoroheptanesulfonic acid

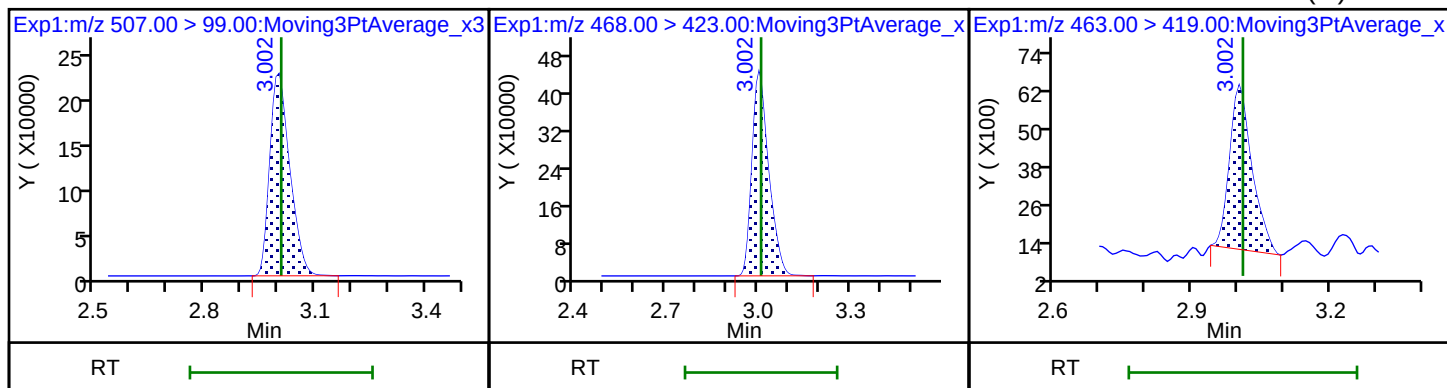
16 Perfluoroheptanesulfonic acid

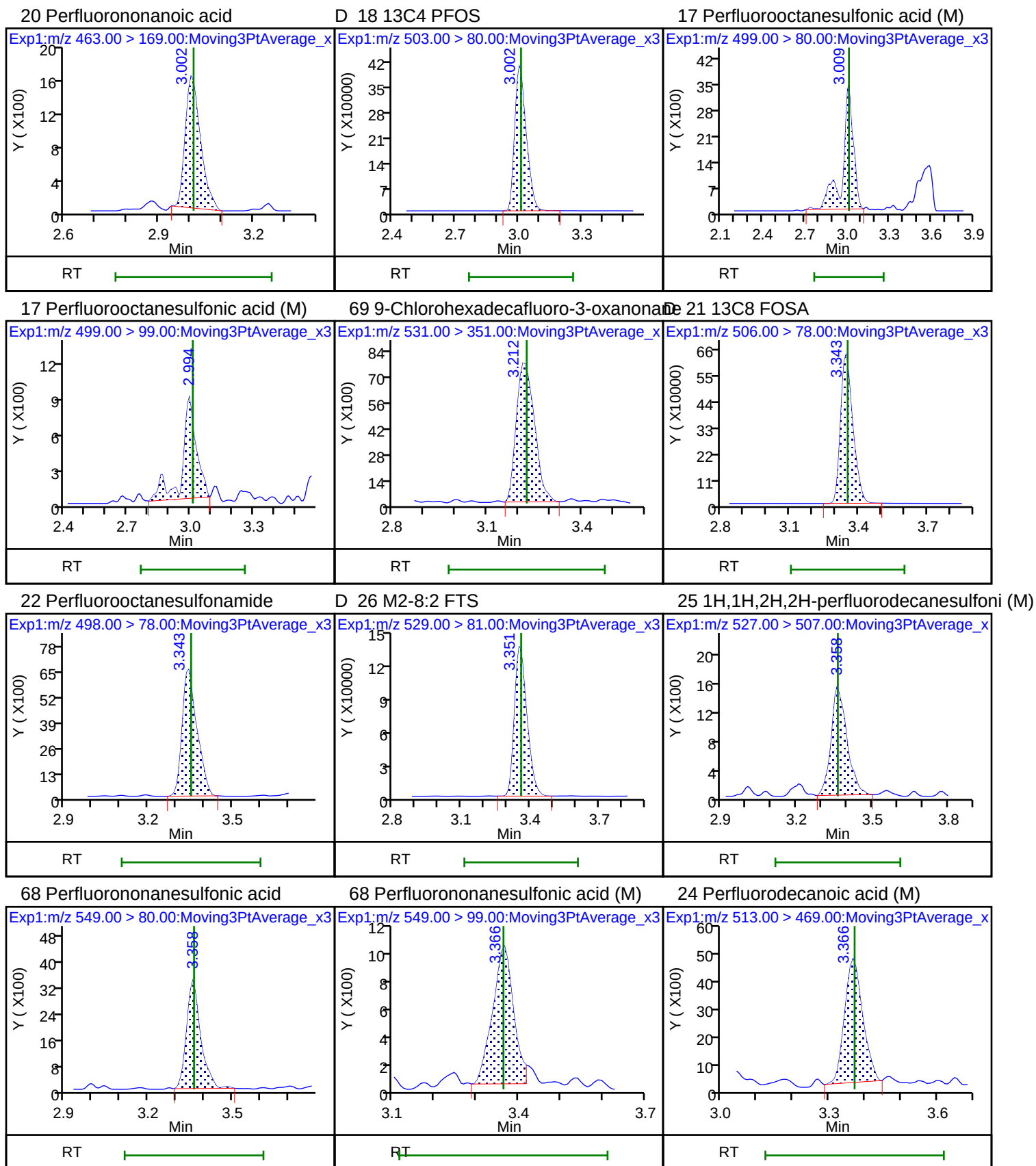


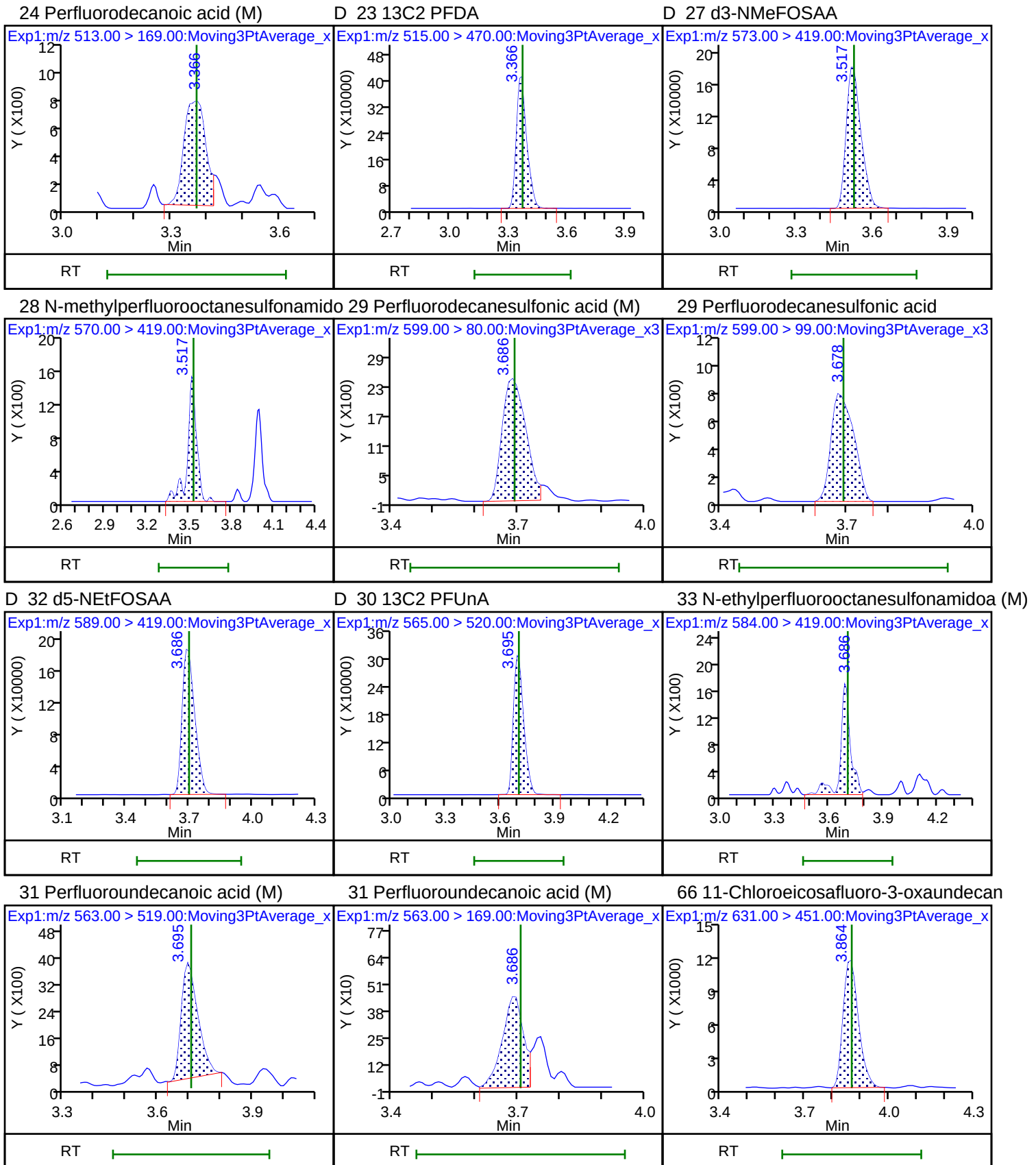
D 72 13C8 PFOS

D 19 13C5 PFNA

20 Perfluorononanoic acid (M)



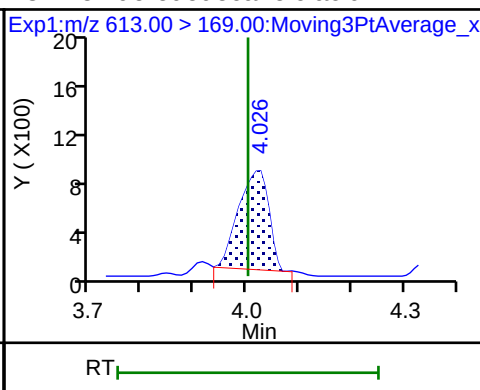
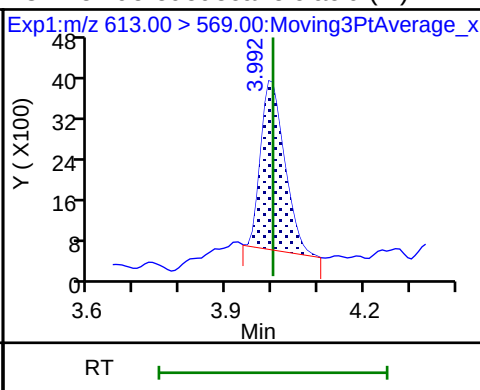
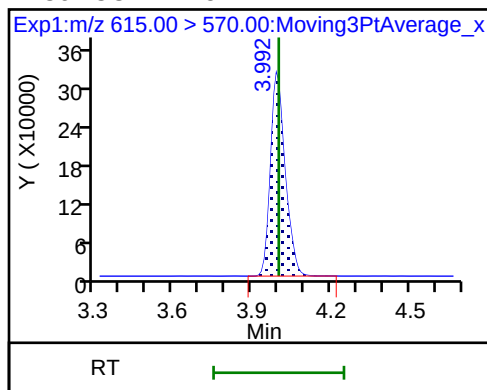




D 36 13C2 PFDaA

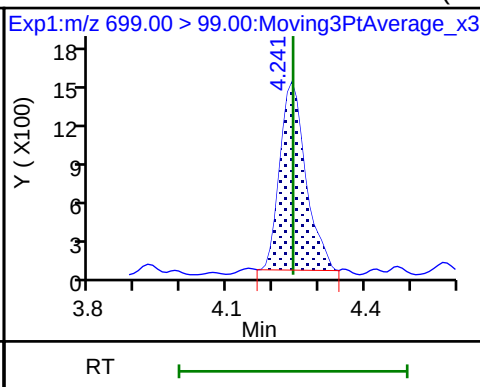
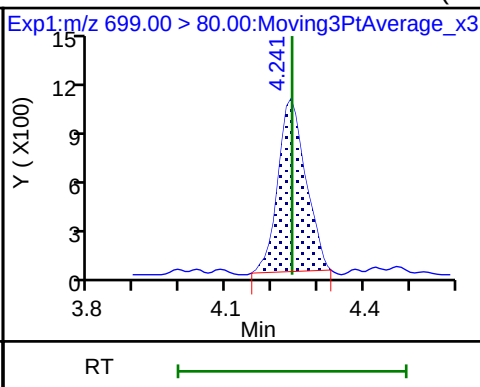
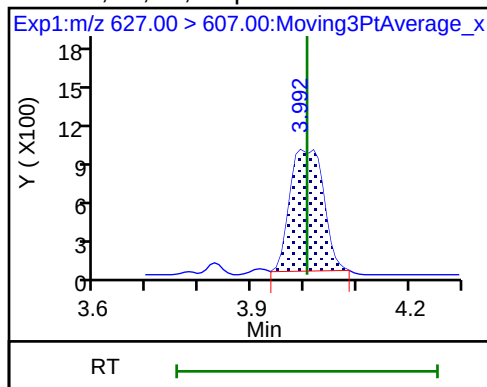
37 Perfluorododecanoic acid (M)

37 Perfluorododecanoic acid



74 1H,1H,2H,2H-perfluorododecanesulfonate 75 Perfluorododecanesulfonic acid (PF

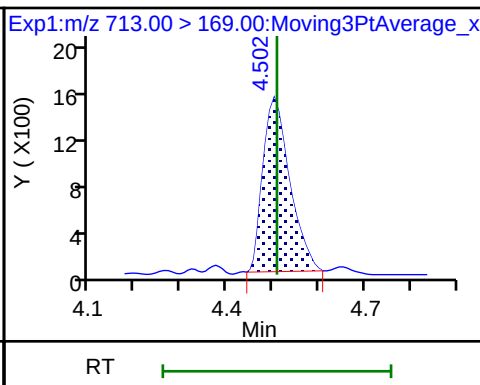
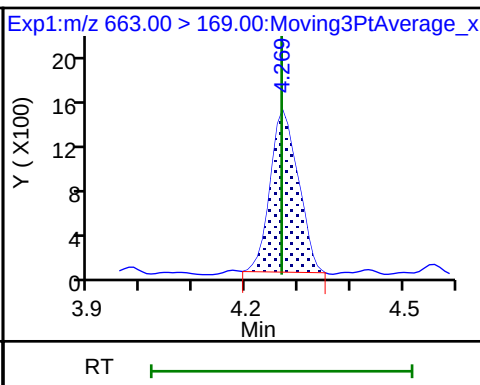
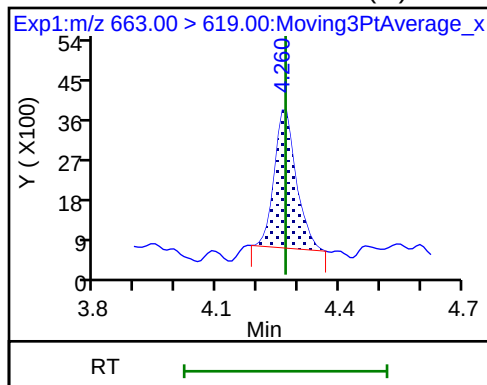
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid (M)

41 Perfluorotridecanoic acid

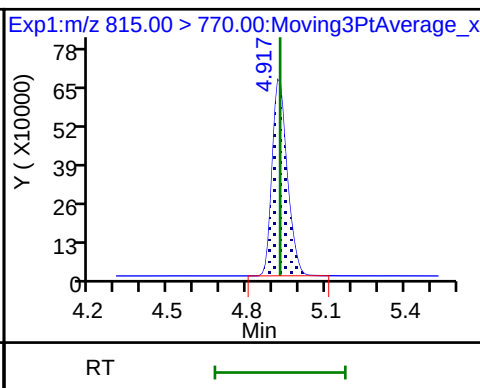
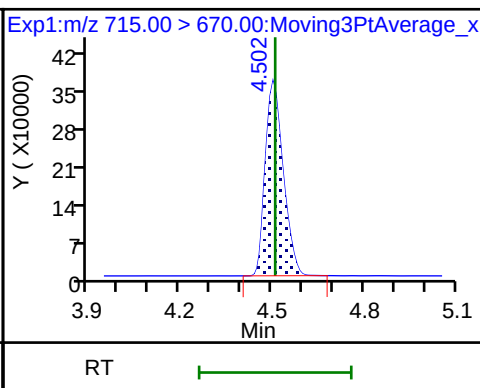
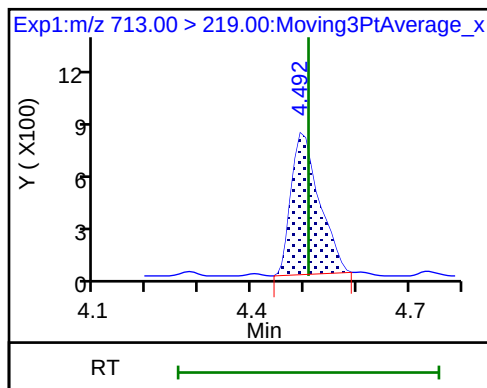
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

D 44 13C2 PFHxDA

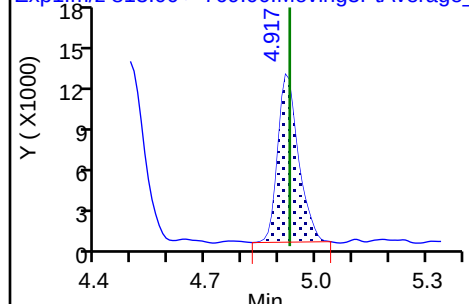


45 Perfluorohexadecanoic acid

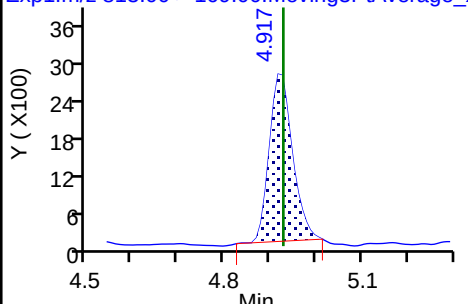
45 Perfluorohexadecanoic acid

46 Perfluorooctadecanoic acid

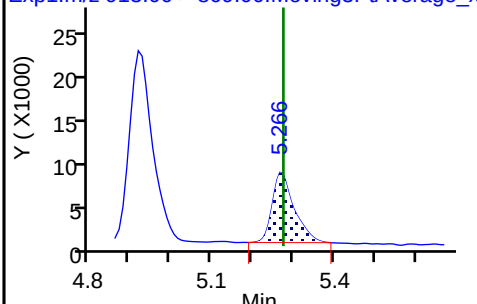
Exp1:m/z 813.00 > 769.00:Moving3PtAverage_x



Exp1:m/z 813.00 > 169.00:Moving3PtAverage_x

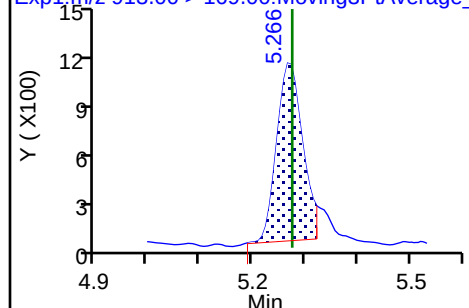


Exp1:m/z 913.00 > 869.00:Moving3PtAverage_x



46 Perfluorooctadecanoic acid (M)

Exp1:m/z 913.00 > 169.00:Moving3PtAverage_x



TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

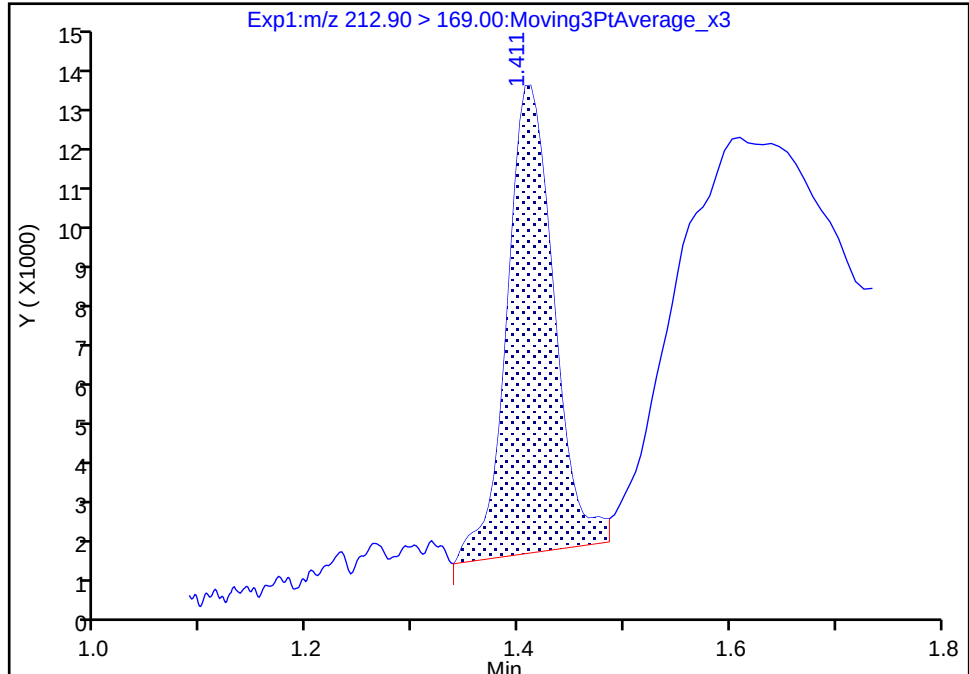
Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

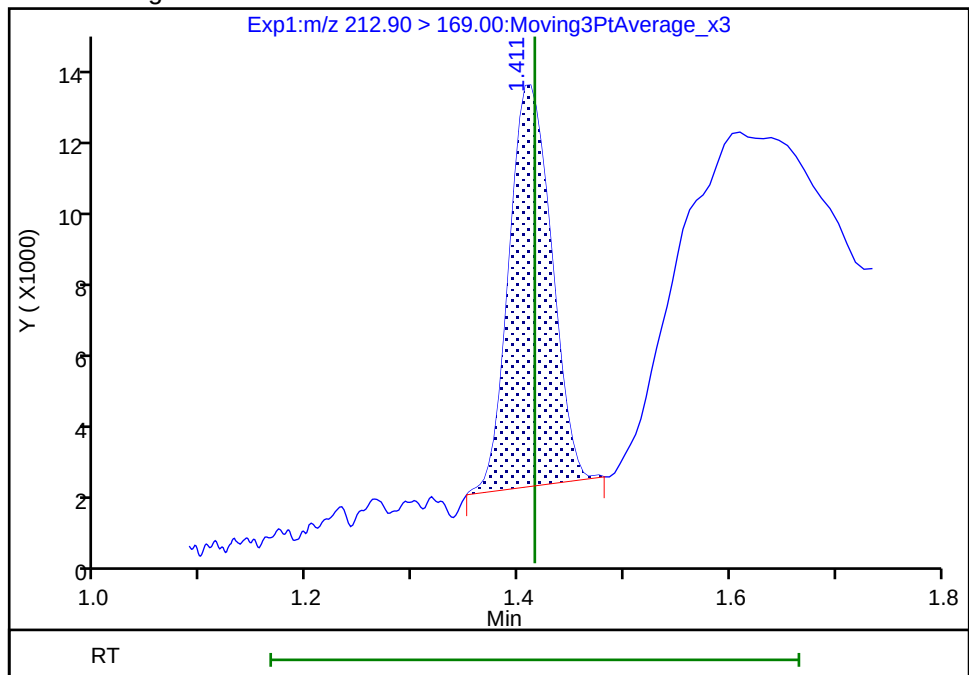
RT: 1.41
Area: 34048
Amount: 0.028339
Amount Units: ng/ml

Processing Integration Results



RT: 1.41
Area: 29327
Amount: 0.025481
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:19:51

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

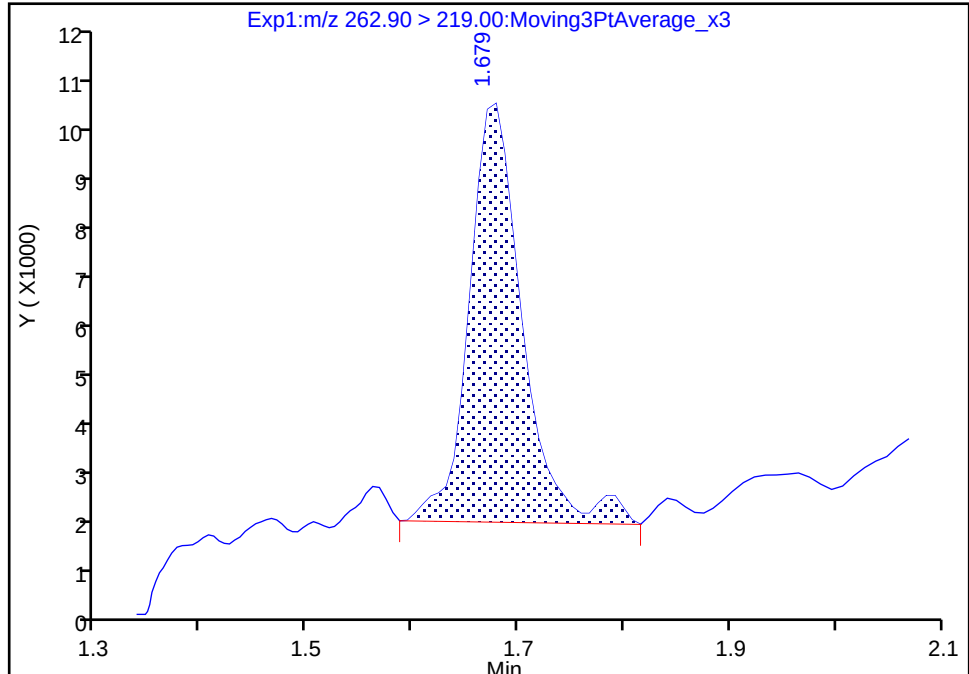
Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

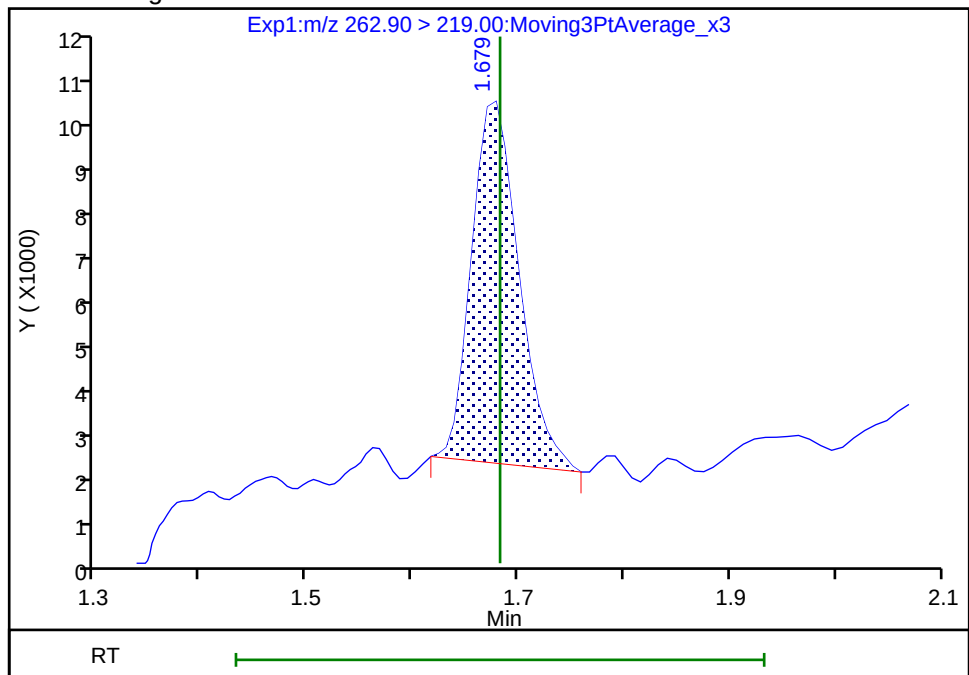
RT: 1.68
Area: 29776
Amount: 0.031056
Amount Units: ng/ml

Processing Integration Results



RT: 1.68
Area: 25287
Amount: 0.028611
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:19:59

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

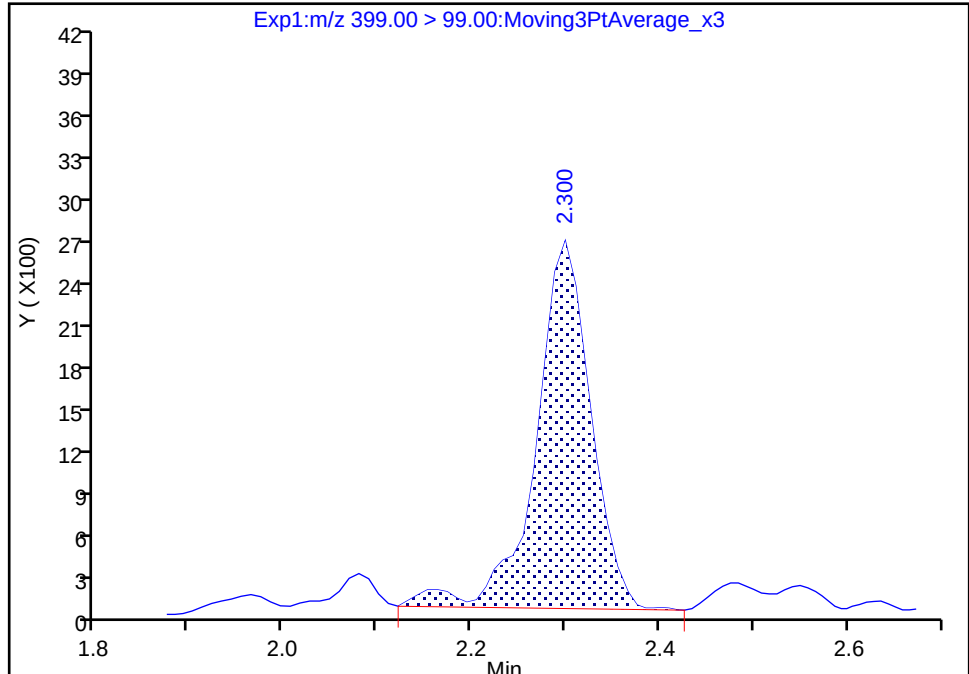
Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

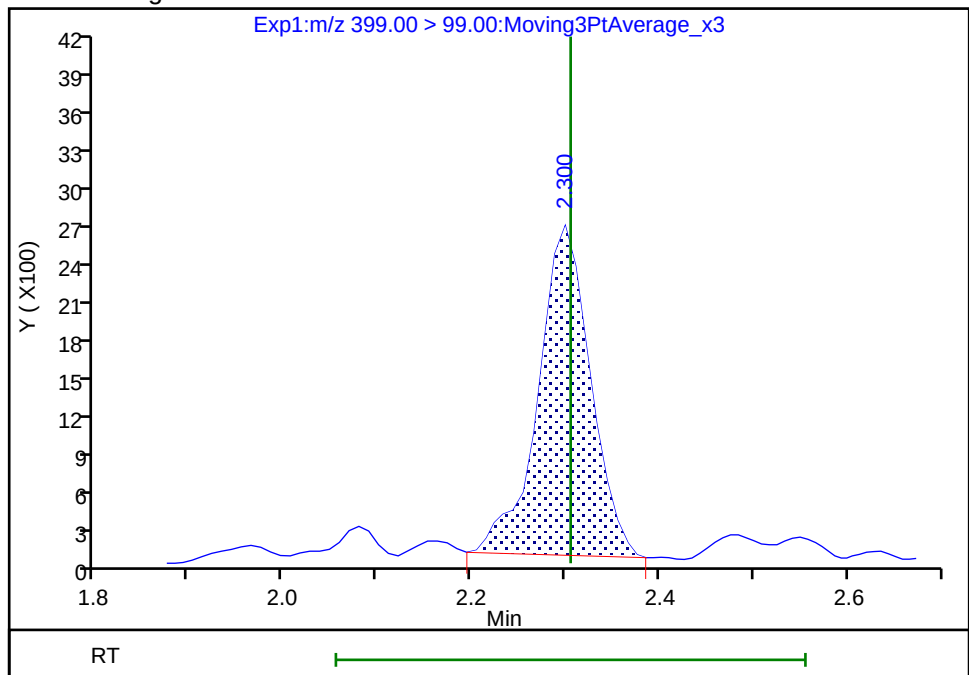
RT: 2.30
Area: 10668
Amount: 0.026389
Amount Units: ng/ml

Processing Integration Results



RT: 2.30
Area: 10043
Amount: 0.027121
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:20:10

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

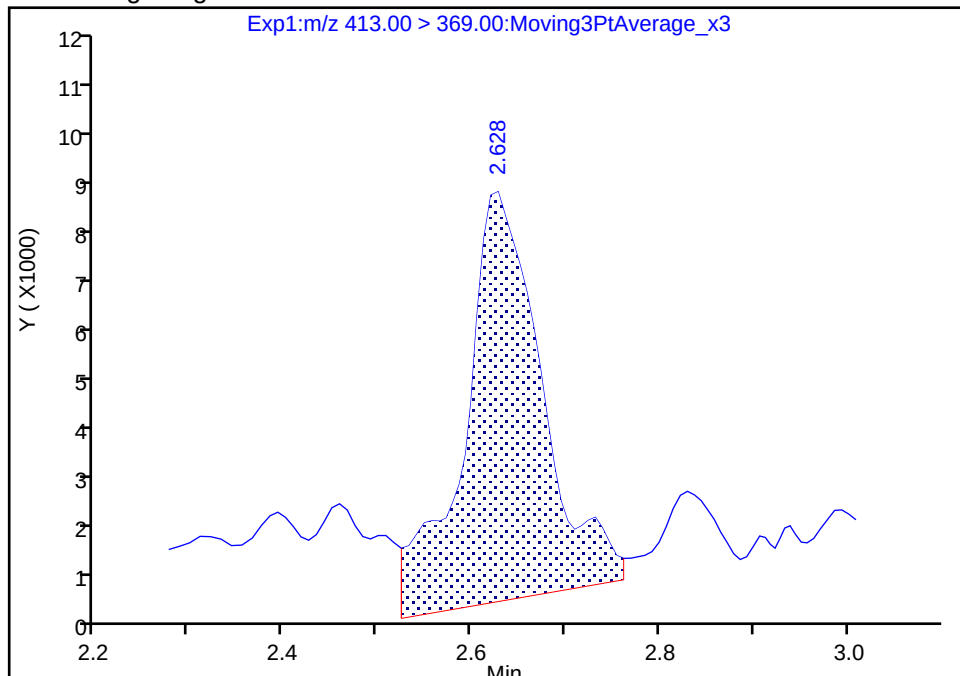
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d
Injection Date: 05-Nov-2018 15:37:31 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

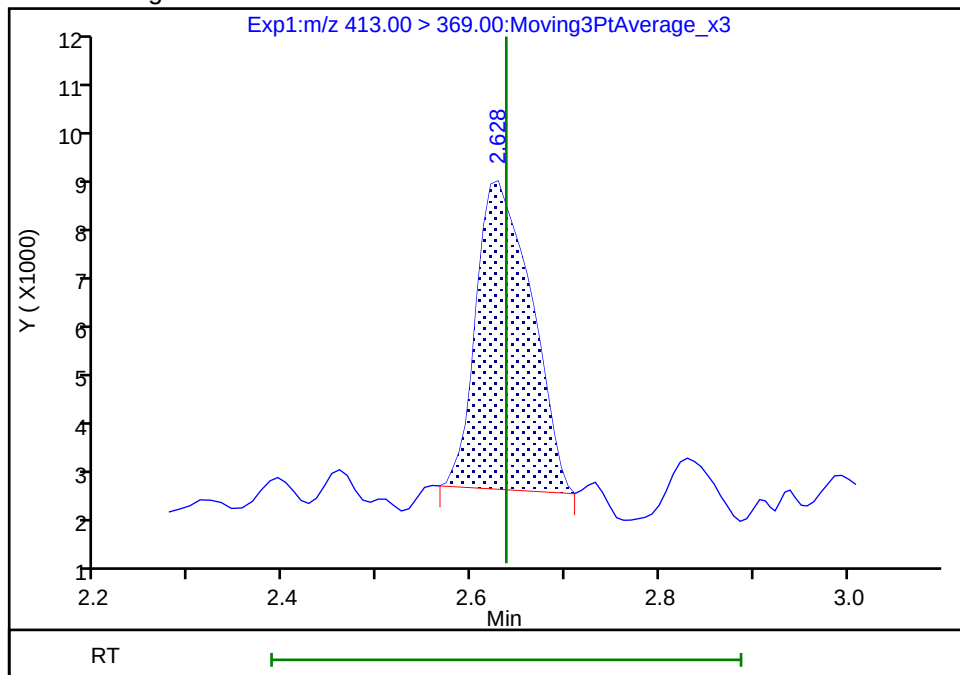
RT: 2.63
Area: 41773
Amount: 0.034649
Amount Units: ng/ml

Processing Integration Results



RT: 2.63
Area: 23989
Amount: 0.025152
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:20:19
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor:

1.0000

Method: A8_N

Limit Group:

LC PFC ICAL

Column:

Detector

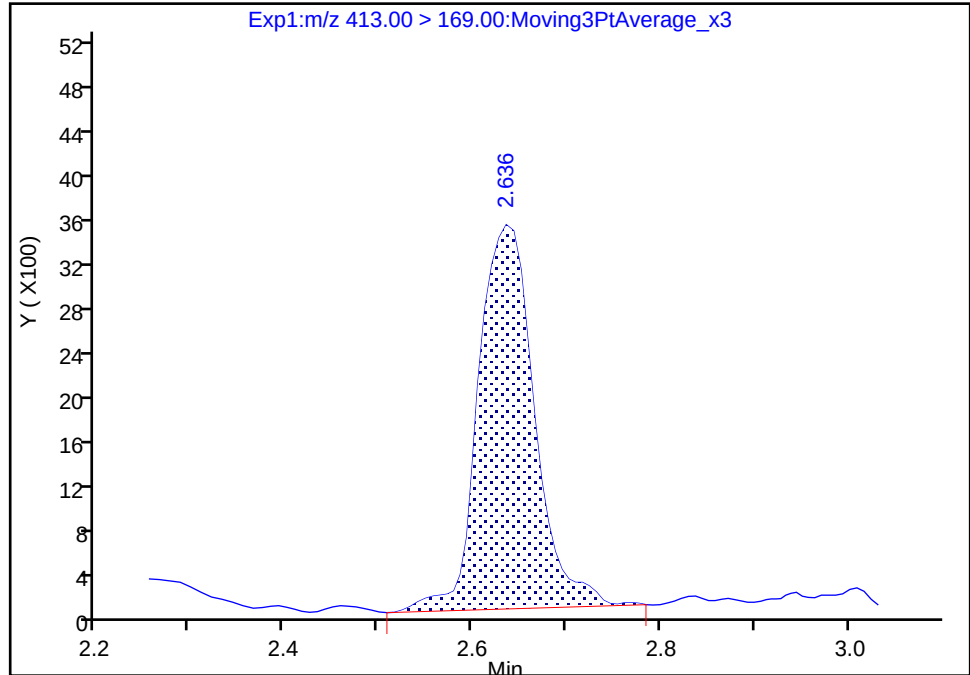
EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

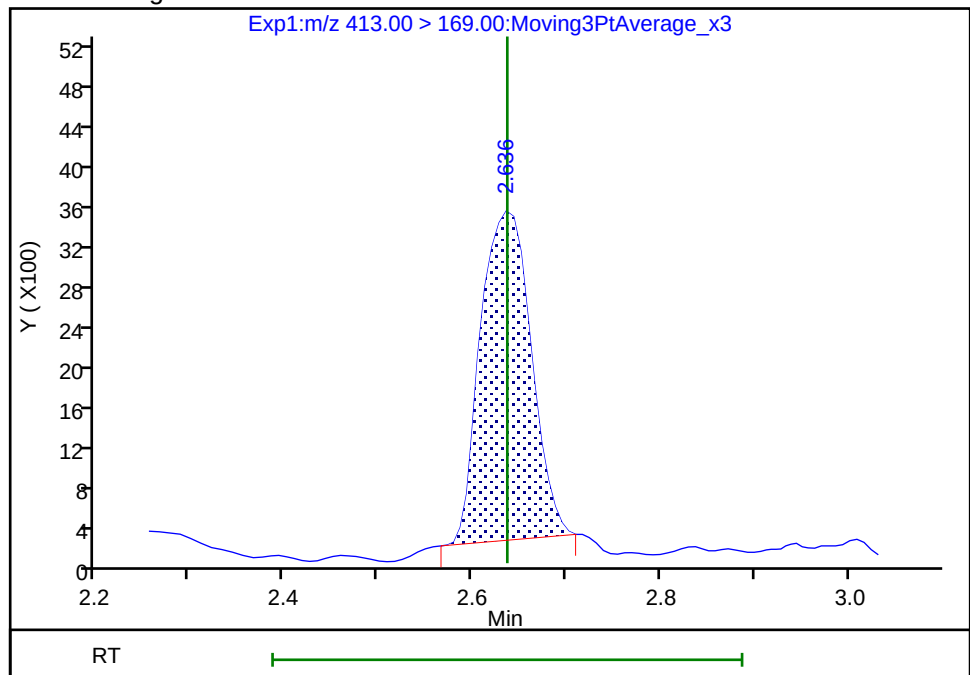
RT: 2.64
Area: 14411
Amount: 0.034649
Amount Units: ng/ml

Processing Integration Results



RT: 2.64
Area: 12263
Amount: 0.025152
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:20:22

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 10 Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

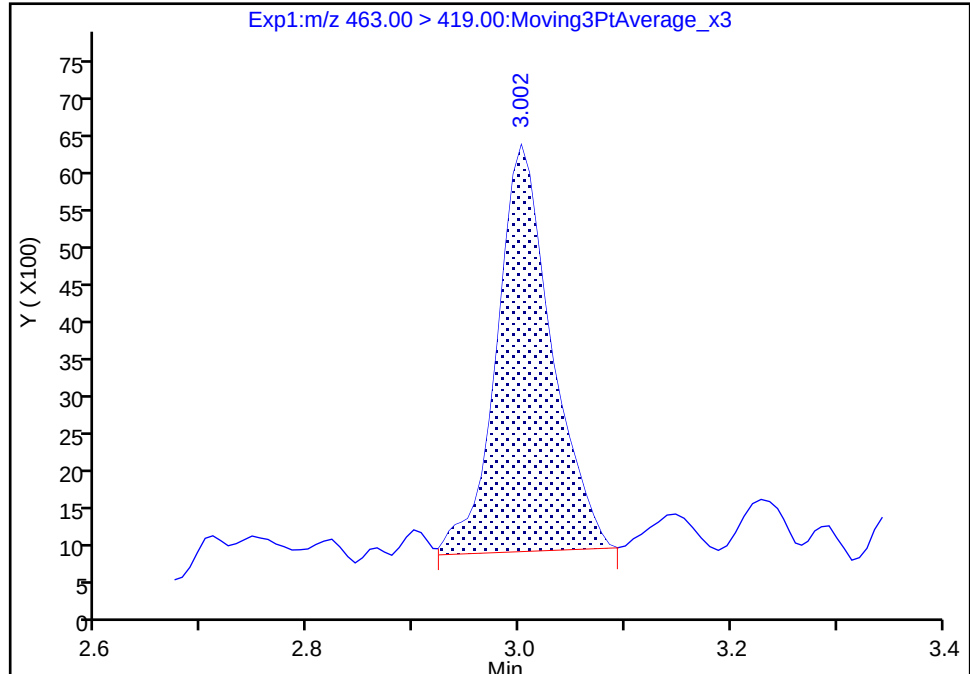
Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

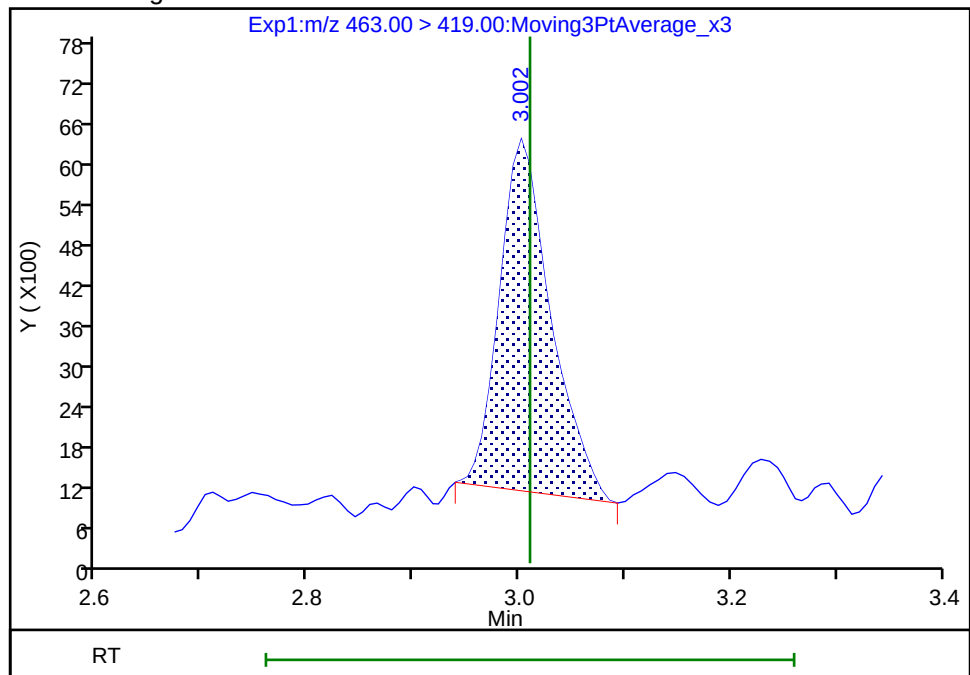
RT: 3.00
Area: 19739
Amount: 0.026905
Amount Units: ng/ml

Processing Integration Results



RT: 3.00
Area: 17676
Amount: 0.024900
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:20:34

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

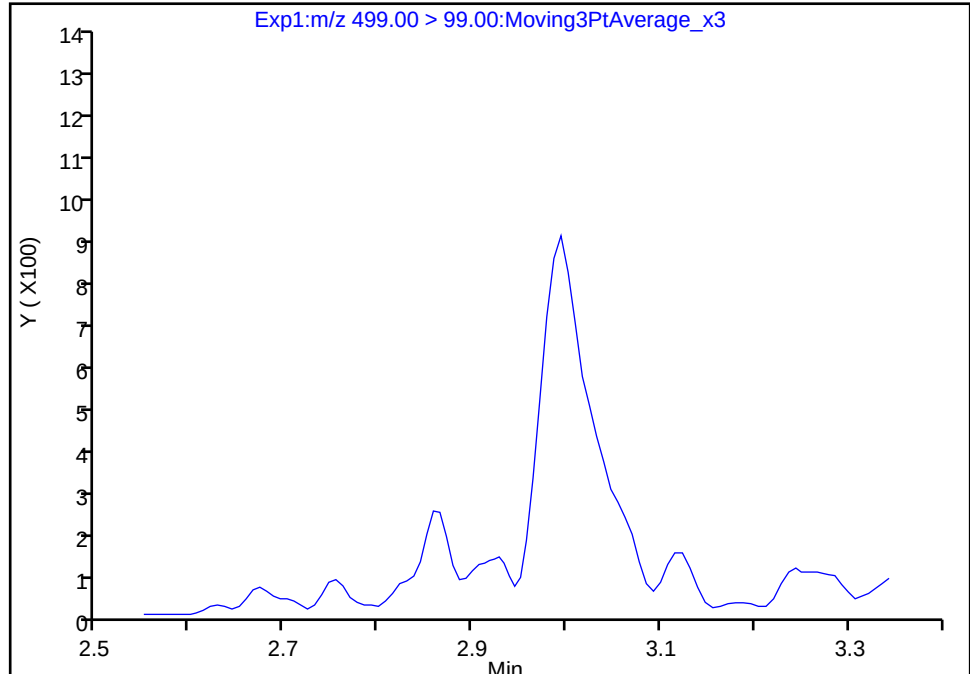
Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

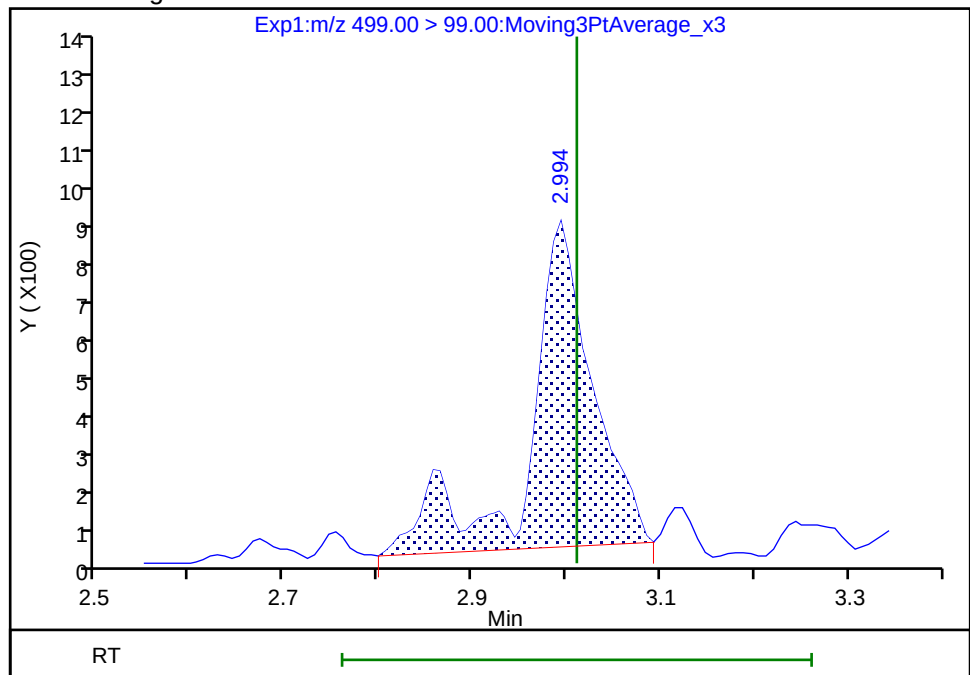
RT: 3.02
Area: 0
Amount: 0.025390
Amount Units: ng/ml

Processing Integration Results



RT: 2.99
Area: 3804
Amount: 0.024544
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:20:57

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

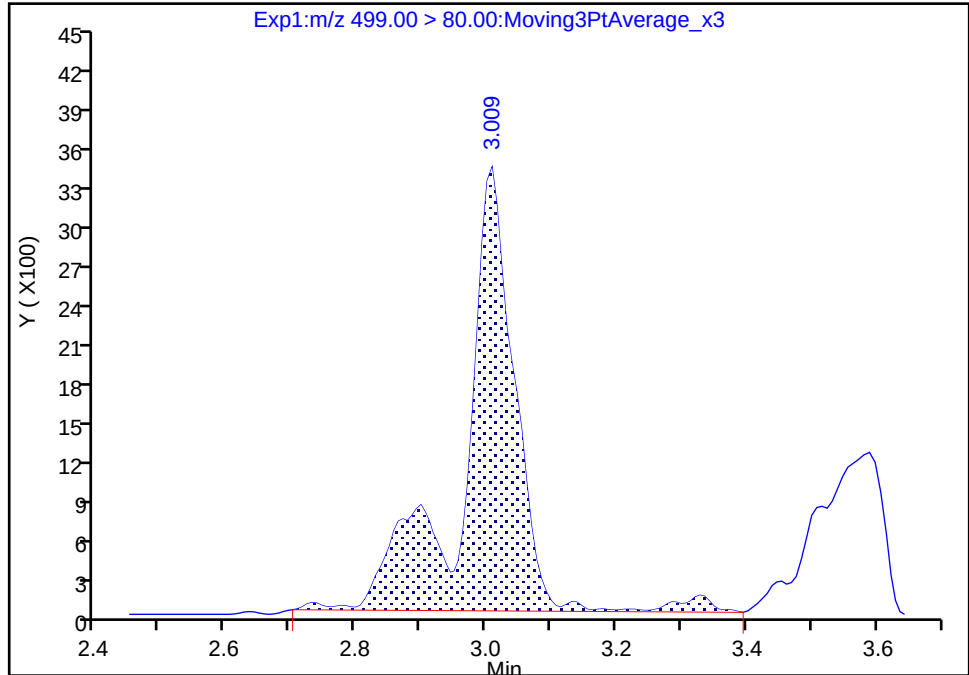
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_005.d
Injection Date: 05-Nov-2018 15:37:31 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

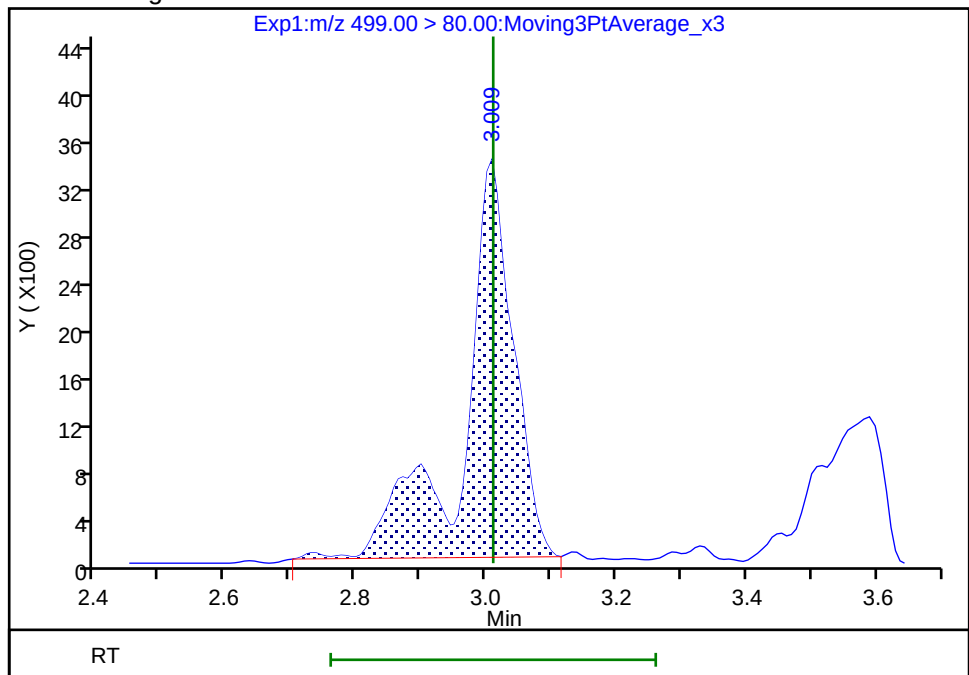
RT: 3.01
Area: 19029
Amount: 0.025390
Amount Units: ng/ml

Processing Integration Results



RT: 3.01
Area: 17959
Amount: 0.024544
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:20:57

Audit Action: Manually Integrated

Audit Reason: Baseline

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11/27/2018

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

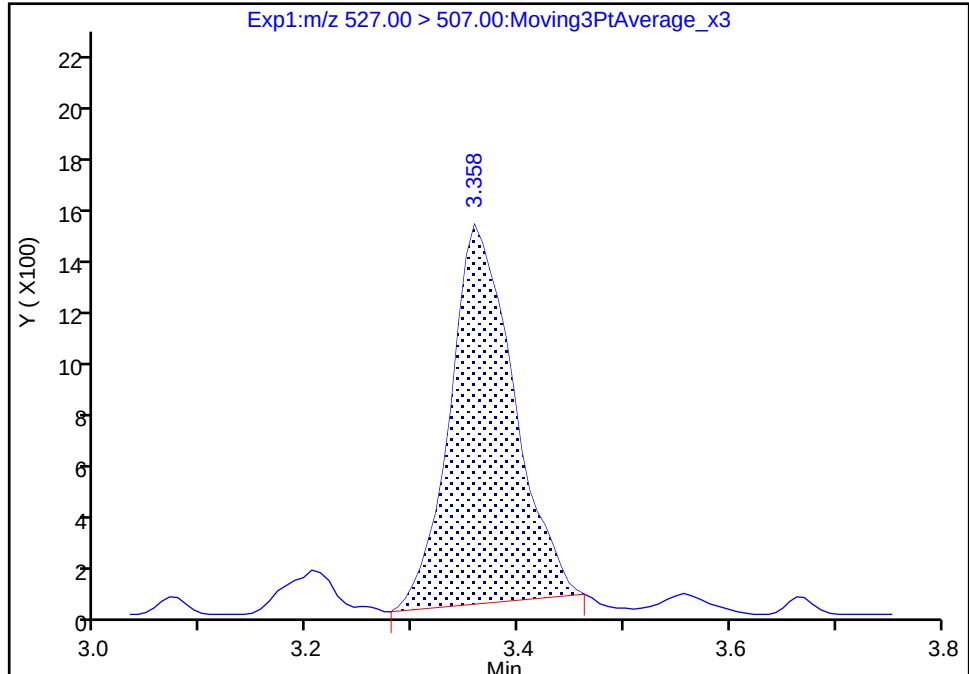
Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

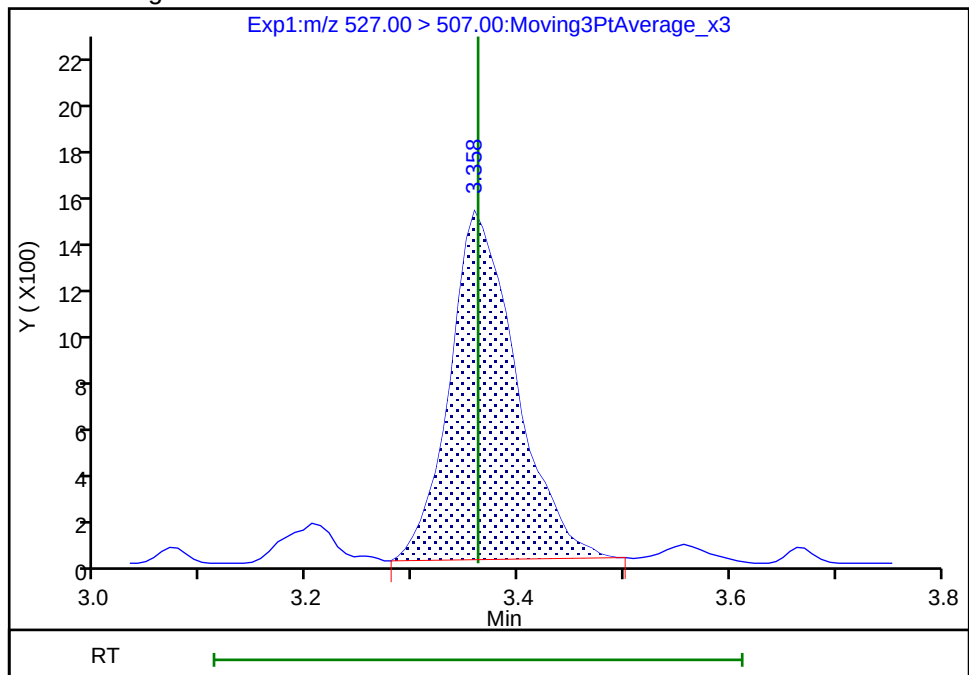
RT: 3.36
Area: 6060
Amount: 0.022550
Amount Units: ng/ml

Processing Integration Results



RT: 3.36
Area: 6406
Amount: 0.024065
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:21:36

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

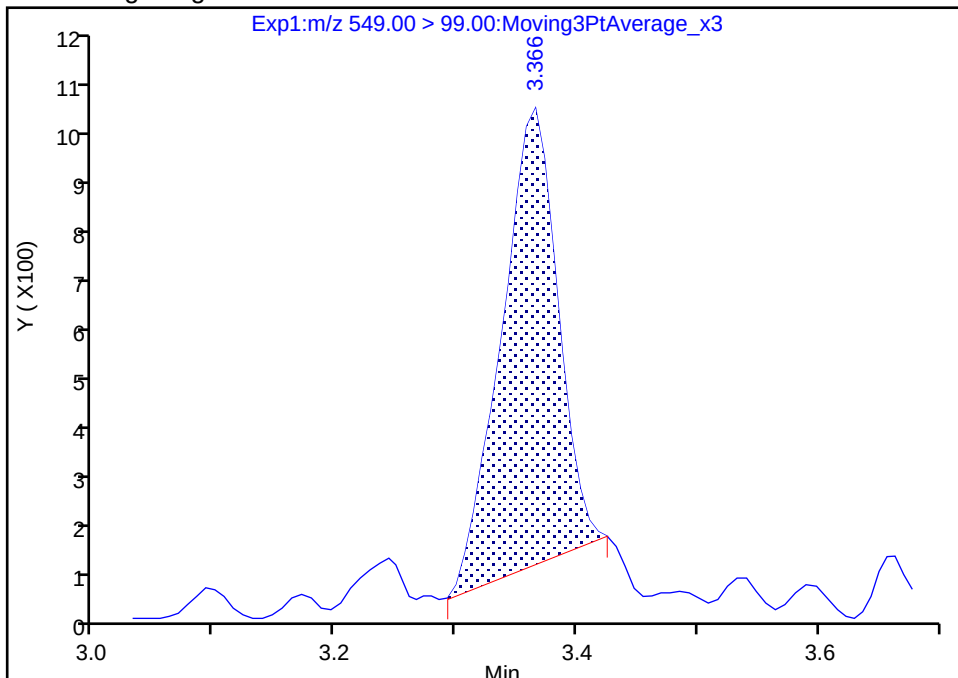
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d
Injection Date: 05-Nov-2018 15:37:31 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

68 Perfluorononanesulfonic acid, CAS: 68259-12-1

Signal: 2

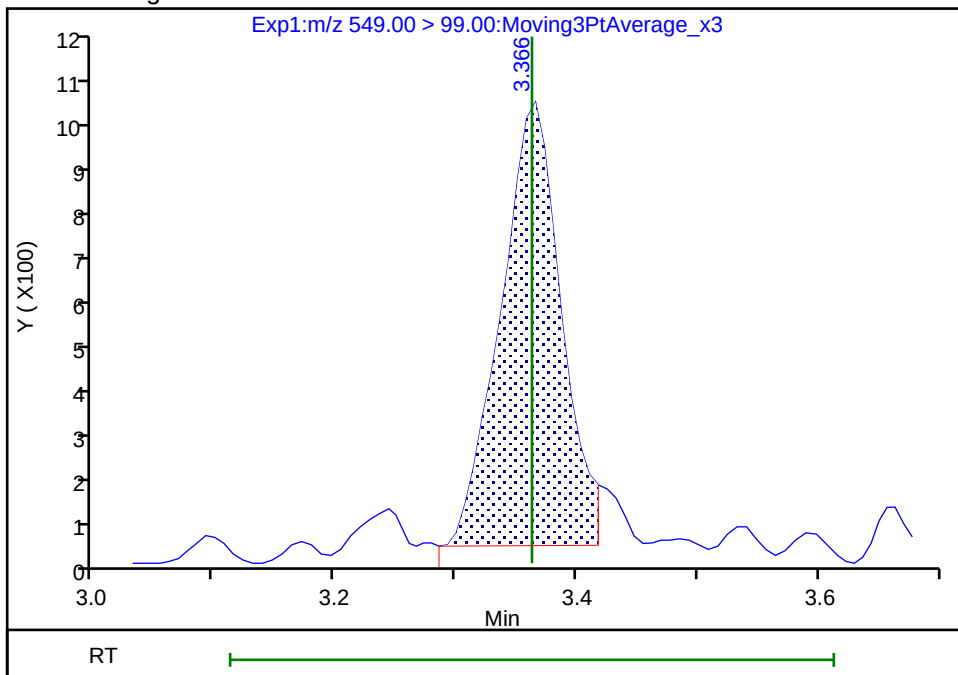
RT: 3.37
Area: 2904
Amount: 0.023339
Amount Units: ng/ml

Processing Integration Results



RT: 3.37
Area: 3331
Amount: 0.023282
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:21:48

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

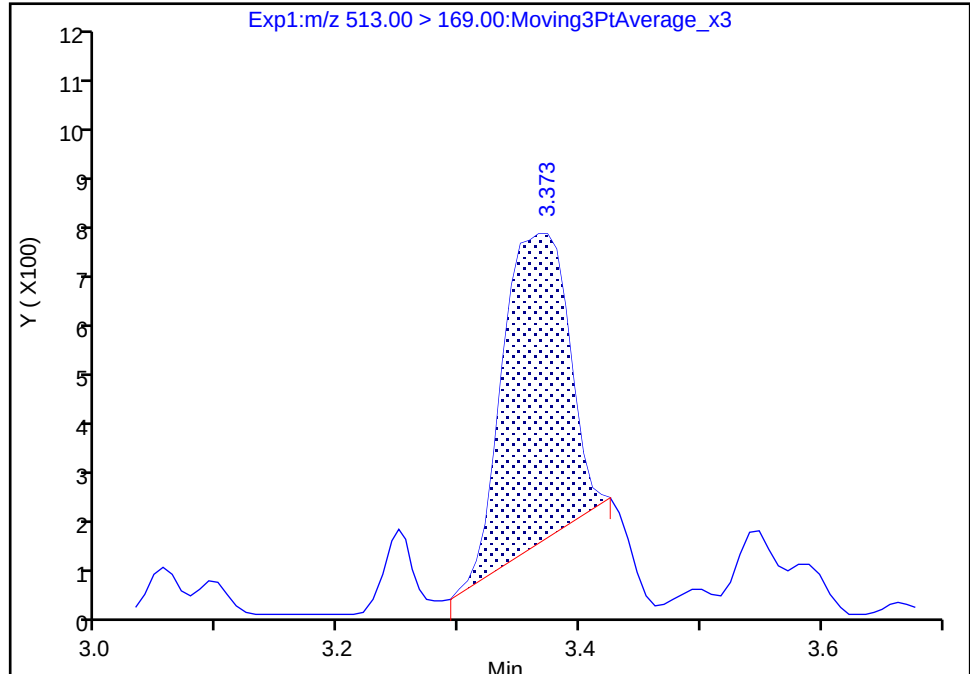
Detector EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

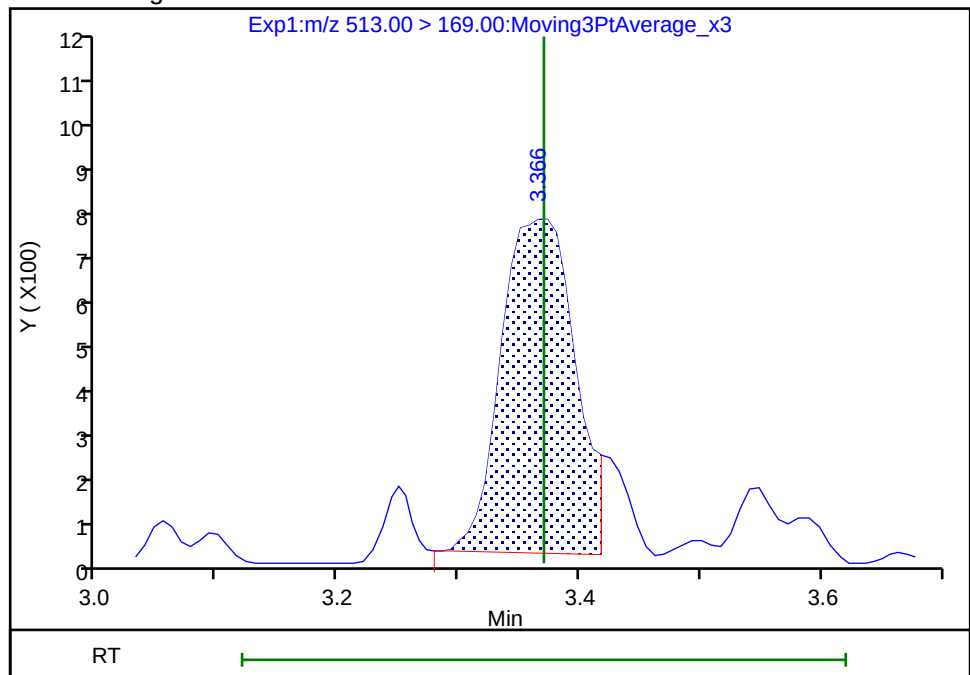
RT: 3.37
Area: 2350
Amount: 0.027251
Amount Units: ng/ml

Processing Integration Results



RT: 3.37
Area: 3115
Amount: 0.026016
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:21:57

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

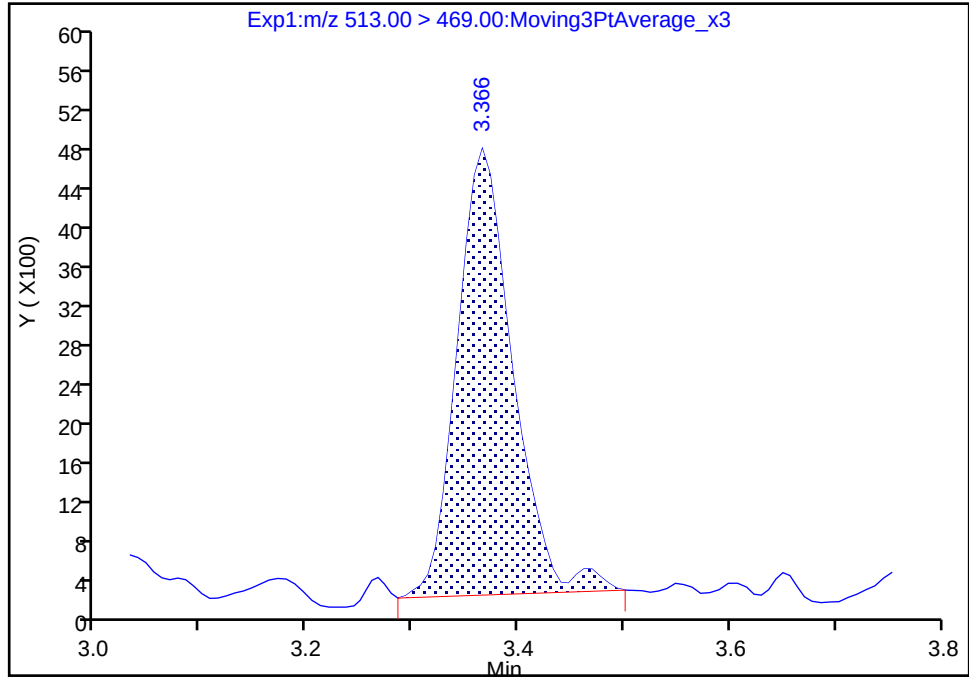
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_005.d
Injection Date: 05-Nov-2018 15:37:31 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

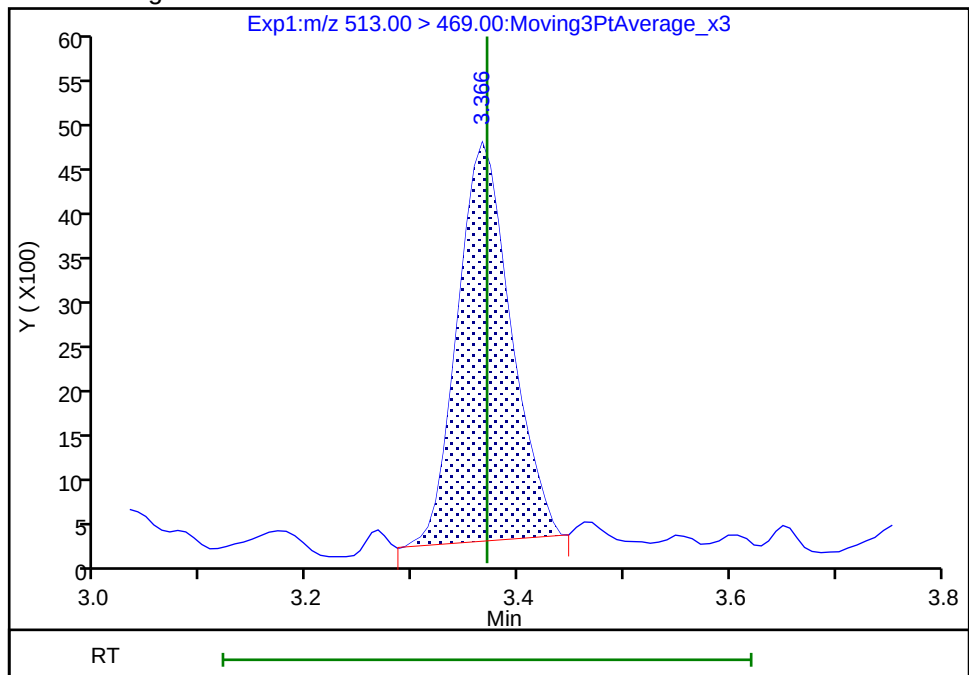
RT: 3.37
Area: 16810
Amount: 0.027251
Amount Units: ng/ml

Processing Integration Results



RT: 3.37
Area: 15870
Amount: 0.026016
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:22:04

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

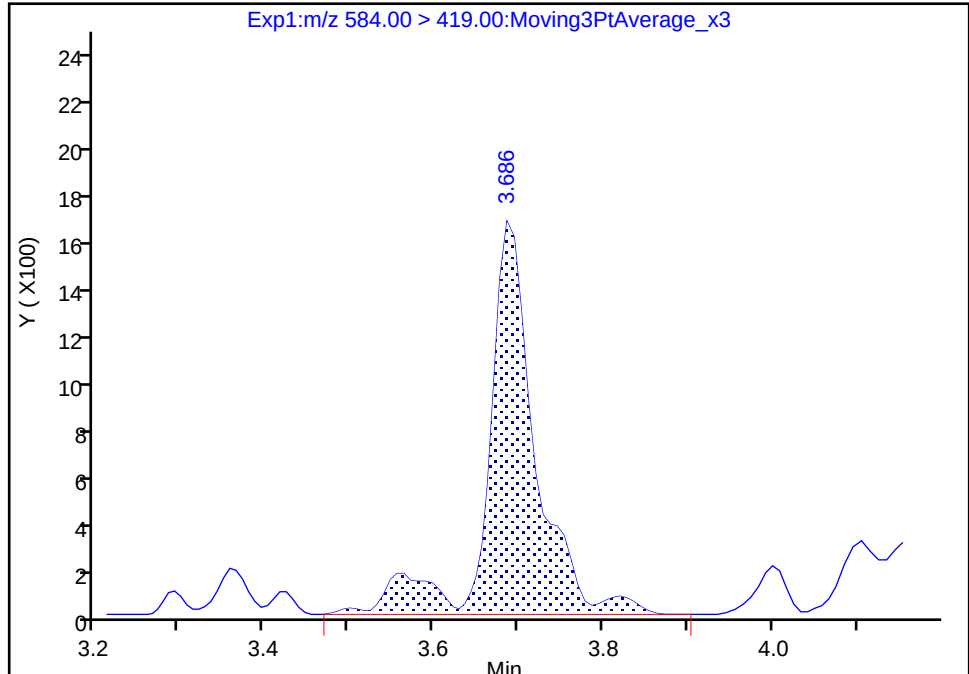
Detector: EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

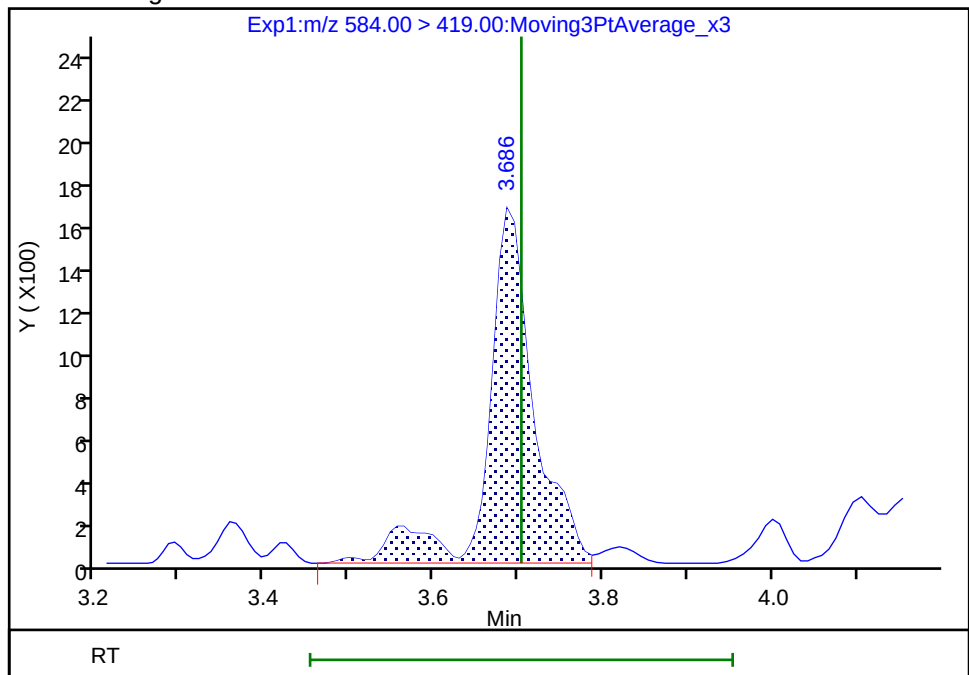
RT: 3.69
Area: 6559
Amount: 0.025737
Amount Units: ng/ml

Processing Integration Results



RT: 3.69
Area: 6316
Amount: 0.024981
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:22:28

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

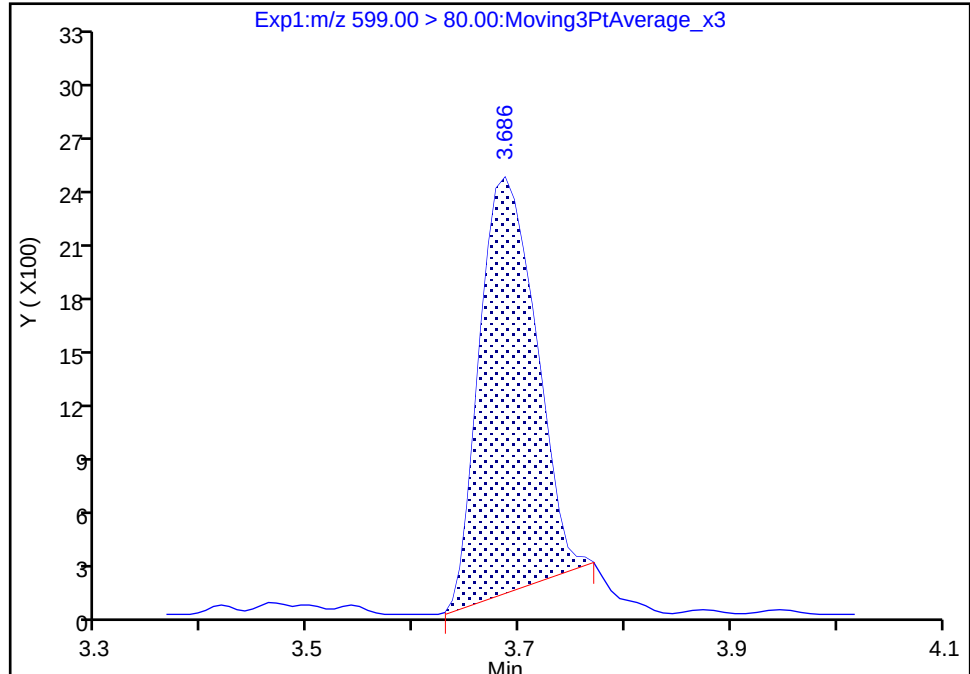
Detector: EXP1

29 Perfluorodecanesulfonic acid, CAS: 335-77-3

Signal: 1

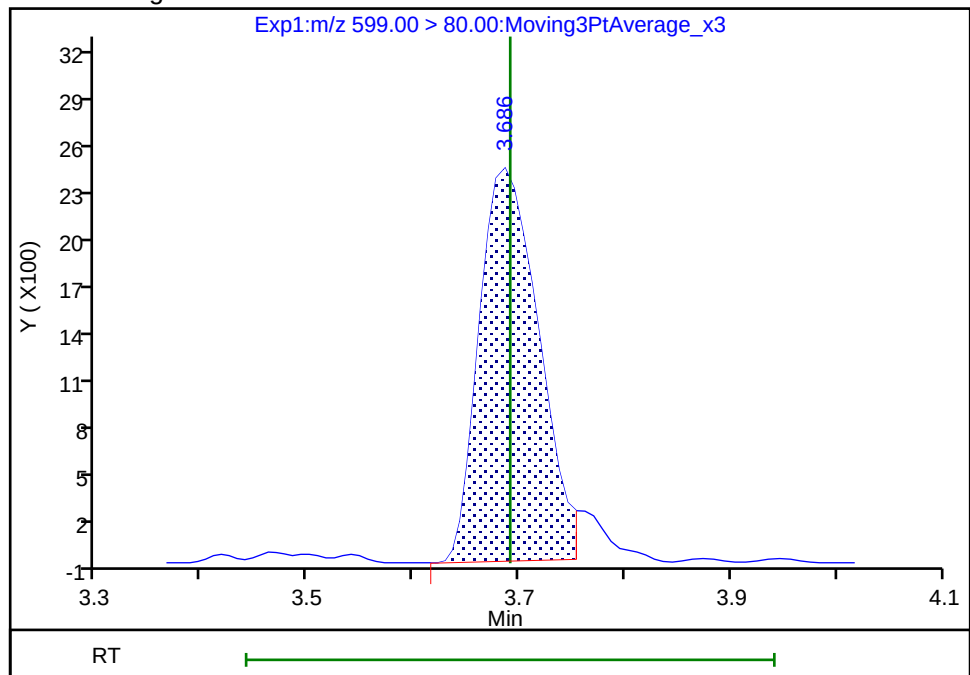
RT: 3.69
Area: 8603
Amount: 0.021695
Amount Units: ng/ml

Processing Integration Results



RT: 3.69
Area: 9441
Amount: 0.023186
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:22:18

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

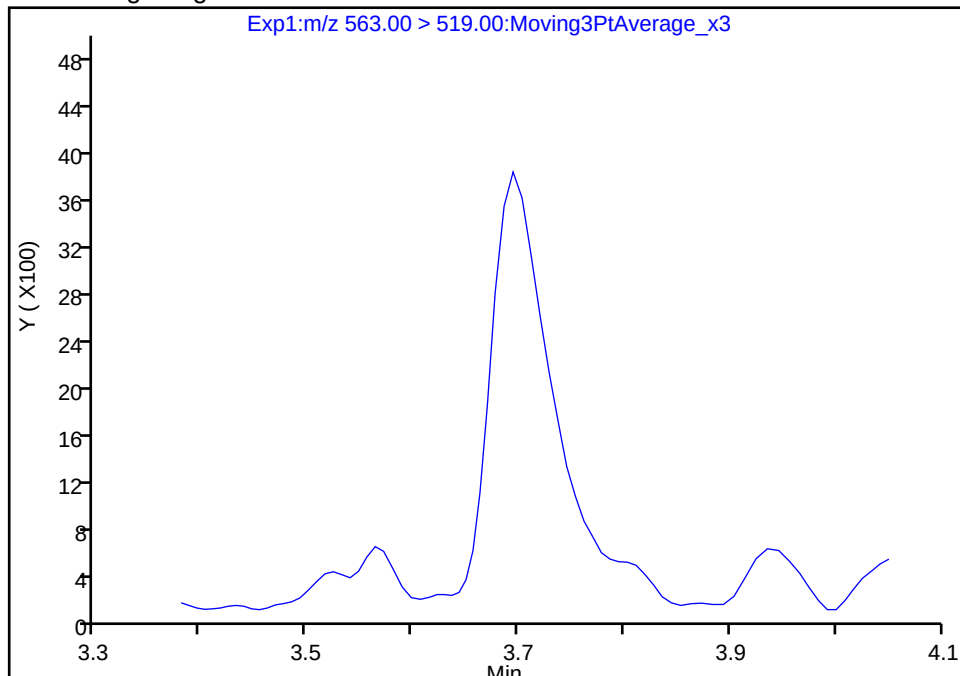
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d
Injection Date: 05-Nov-2018 15:37:31 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

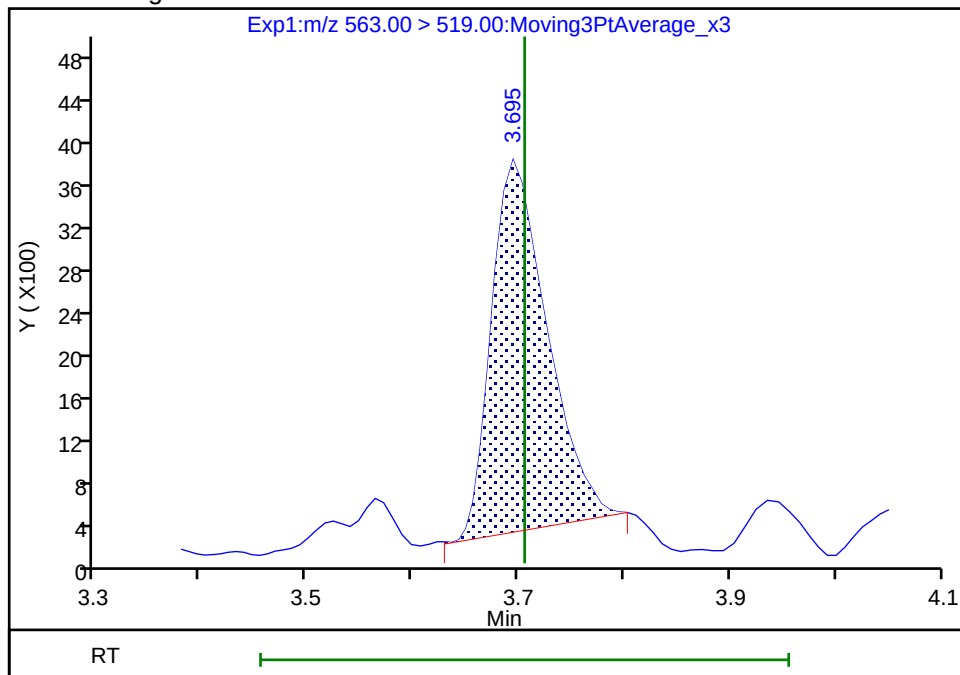
Not Detected
Expected RT: 3.71

Processing Integration Results



RT: 3.69
Area: 12793
Amount: 0.030089
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:22:39

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

TestAmerica Sacramento

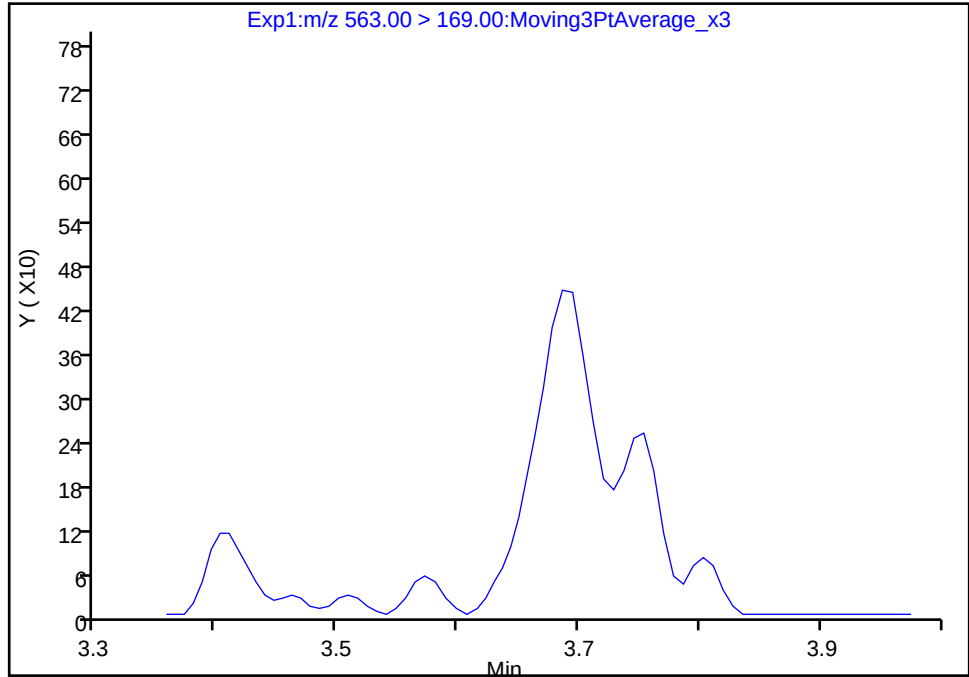
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d
Injection Date: 05-Nov-2018 15:37:31 Instrument ID: A8_N
Lims ID: IC L1 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

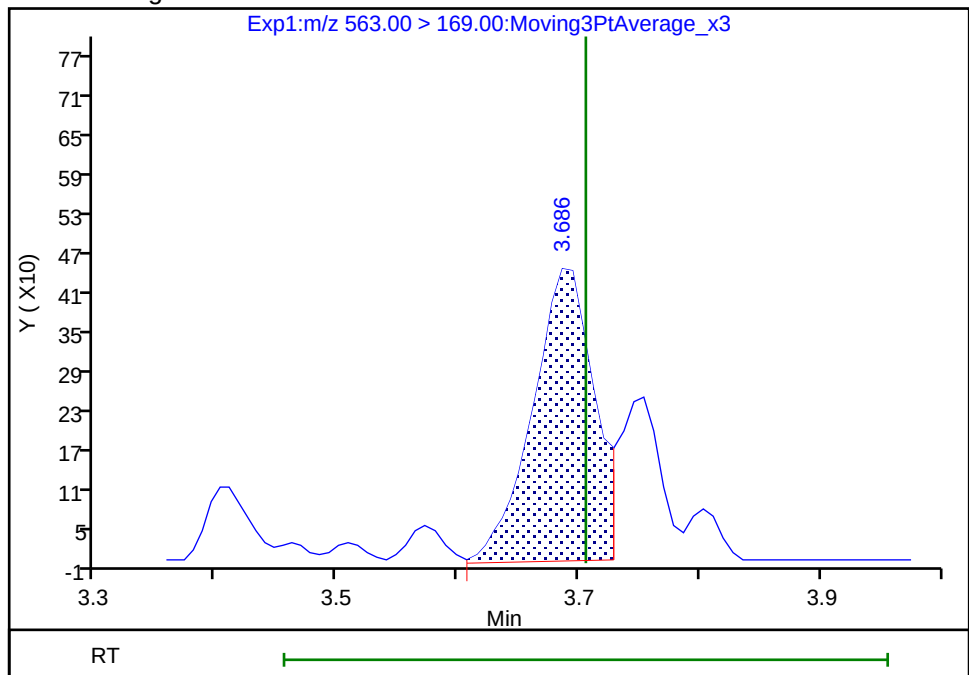
Not Detected
Expected RT: 3.71

Processing Integration Results



Manual Integration Results

RT: 3.69
Area: 1552
Amount: 0.030089
Amount Units: ng/ml



Reviewer: roycea, 05-Nov-2018 16:22:48

Audit Action: Manually Integrated

Audit Reason: Assign Peak

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor:

1.0000

Method: A8_N

Limit Group:

LC PFC ICAL

Column:

Detector

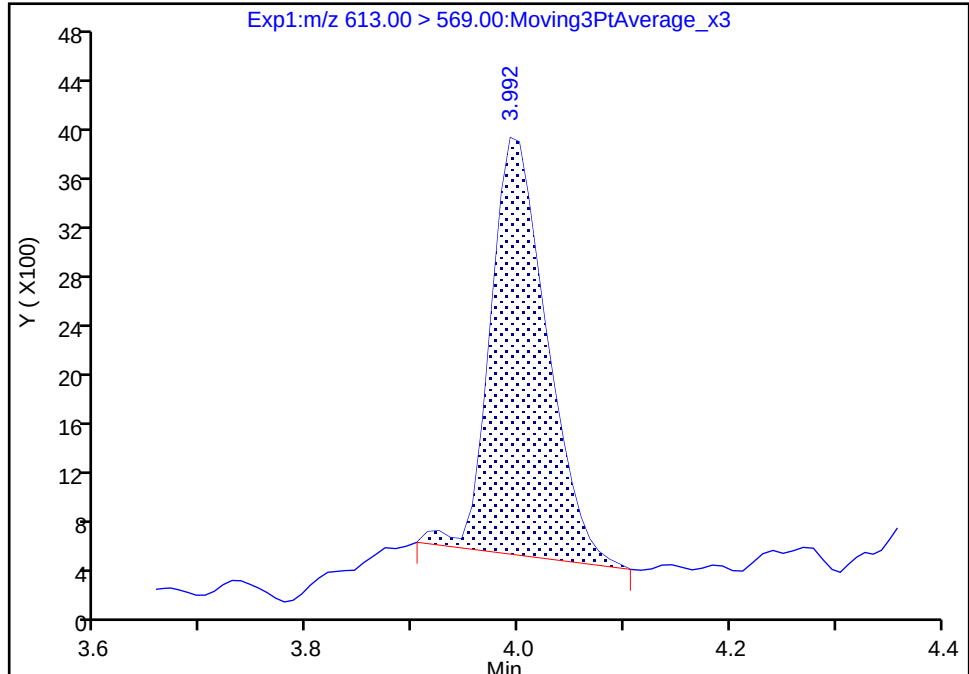
EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

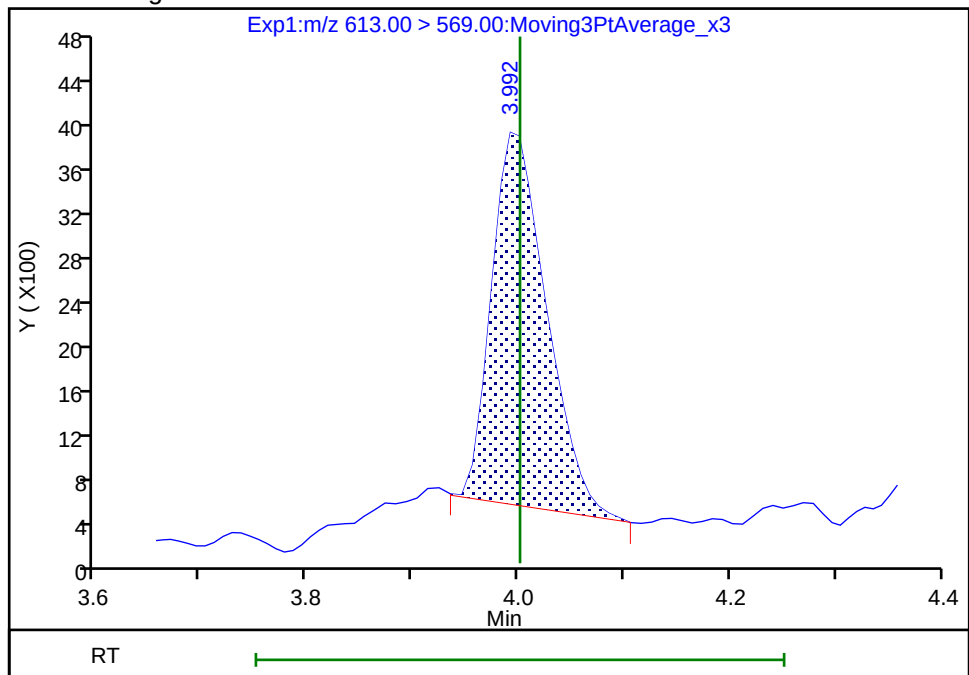
RT: 3.99
Area: 12698
Amount: 0.023412
Amount Units: ng/ml

Processing Integration Results



RT: 3.99
Area: 12216
Amount: 0.023084
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:23:07

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

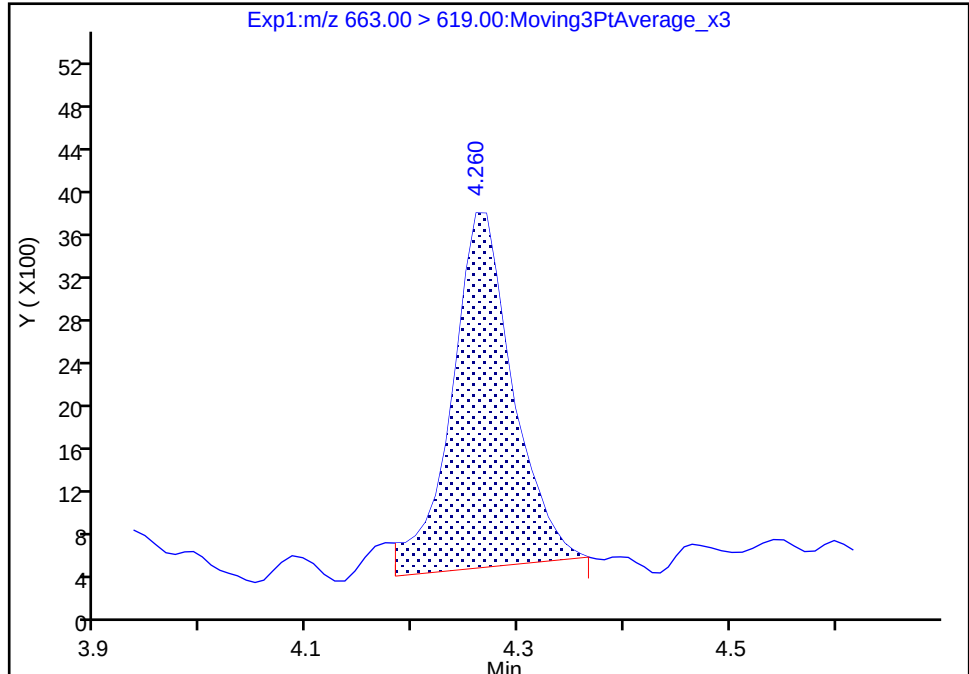
Detector: EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

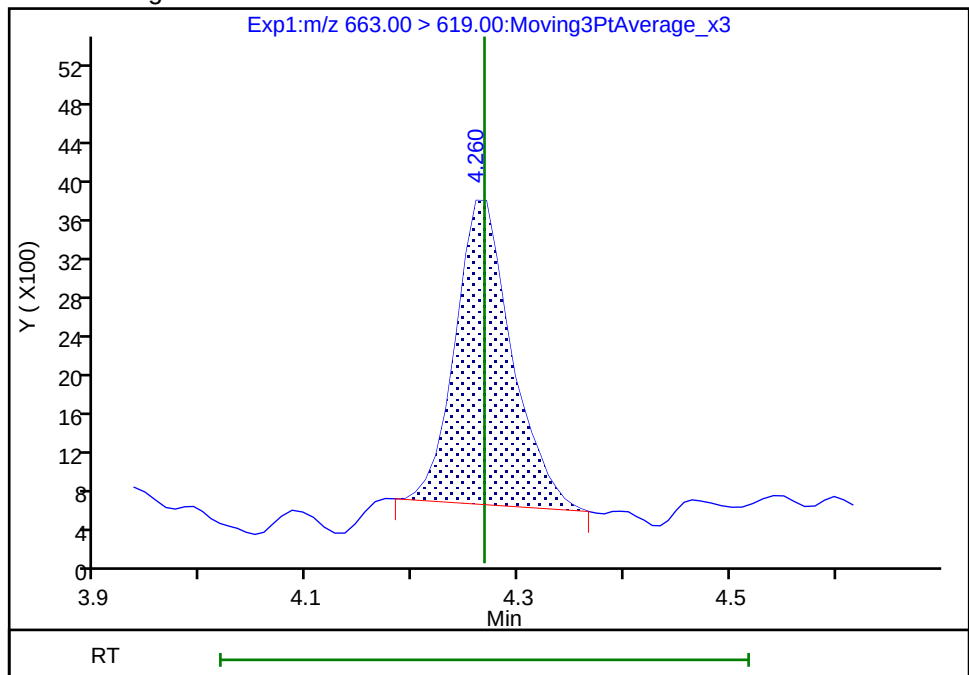
RT: 4.26
Area: 13452
Amount: 0.025648
Amount Units: ng/ml

Processing Integration Results



RT: 4.26
Area: 11748
Amount: 0.022829
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:23:22

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_005.d

Injection Date: 05-Nov-2018 15:37:31

Instrument ID: A8_N

Lims ID: IC L1 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

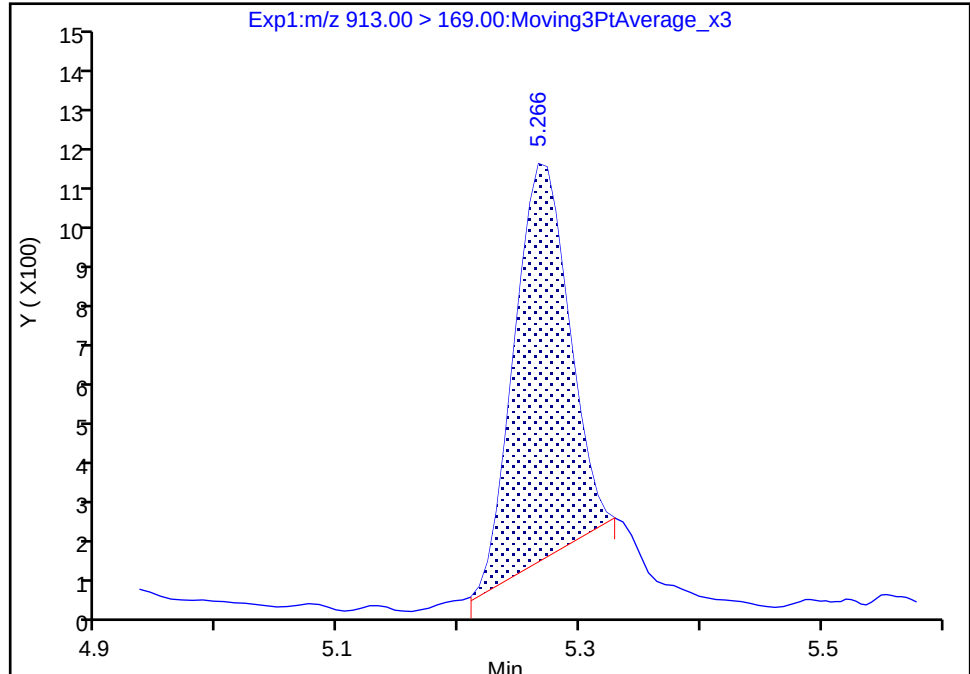
Detector EXP1

46 Perfluorooctadecanoic acid, CAS: 16517-11-6

Signal: 2

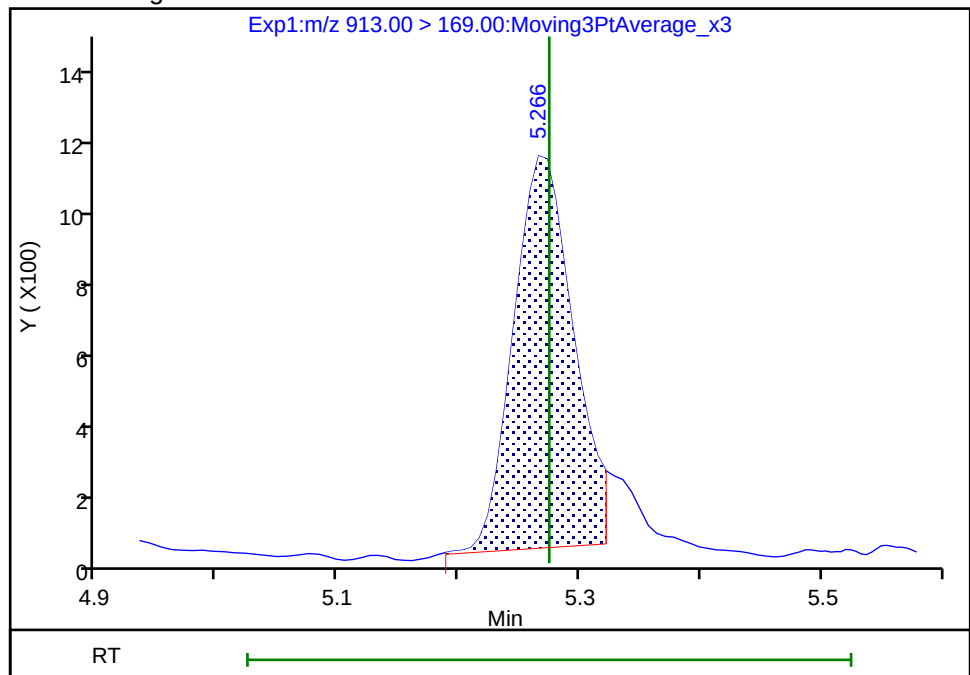
RT: 5.27
Area: 3021
Amount: 0.025447
Amount Units: ng/ml

Processing Integration Results



RT: 5.27
Area: 3613
Amount: 0.025577
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:23:34

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_006.d
 Lims ID: IC L2 Full
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 05-Nov-2018 15:44:56 ALS Bottle#: 11 Worklist Smp#: 3
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 2
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub37
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 05-Nov-2018 16:58:50 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0305

First Level Reviewer: roycea

Date: 05-Nov-2018 16:28:58

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	1.416	1.413	0.003	0.537	3200520	2.54		102	7975	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.416	1.415	0.001	1.000	58646	0.0483		96.7	8.7	M
D 3 13C5 PFPeA										
267.90 > 223.00	1.688	1.681	0.007	0.640	2093817	2.52		101	8432	
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.688	1.682	0.006	1.000	45864	0.0489		97.7	7.1	M
D 47 13C3 PFBS										
301.90 > 83.00	1.720	1.716	0.004	0.652	41785	2.38		102	290	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.720	1.719	0.001	1.000	62287	0.0442		100	28.5	
298.90 > 99.00	1.720	1.719	0.001	1.000	24158		2.58(1.25-3.74)	100	15.6	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.935	1.928	0.007	0.734	274363	2.38		102	247	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.935	1.929	0.006	1.125	10481	0.0392		83.8	148	
6 Perfluorohexanoic acid										R
313.00 > 269.00	1.966	1.960	0.006	1.000	49641	0.0533		107	22.8	R
313.00 > 119.00	1.966	1.960	0.006	1.000	3070		16.17(5.03-15.10)	107	12.9	
D 7 13C2 PFHxA										
315.00 > 270.00	1.966	1.960	0.006	0.746	2288677	2.50		100	5912	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.987	1.983	0.004	1.155	51739	0.0426		90.9	212	
349.00 > 99.00	1.987	1.983	0.004	1.155	18091		2.86(1.36-4.07)	90.9	97.3	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.060	2.056	0.004	1.000	10484	0.0564		113	8.9	

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	2.060	2.056	0.004	0.781	138197	2.39		95.6	641	
D 9 13C4 PFHpA										
367.00 > 322.00	2.290	2.285	0.005	0.868	2072686	2.46		98.3	4997	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.290	2.288	0.002	1.000	46309	0.0503		101	15.1	
363.00 > 169.00	2.290	2.288	0.002	1.000	19537		2.37(1.13-3.40)	101	35.0	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.312	2.305	0.007	1.000	63761	0.0541		119	92.7	
399.00 > 99.00	2.312	2.305	0.007	1.000	19596		3.25(1.50-4.49)	119	34.3	M
D 11 18O2 PFHxS										
403.00 > 84.00	2.312	2.305	0.007	0.877	2445515	2.37		100	4292	
77 DONA										
377.00 > 251.00	2.334	2.329	0.005	0.776	125231	0.0461		97.8	350	
377.00 > 85.00	2.334	2.329	0.005	0.776	76420		1.64(0.85-2.54)	97.8	269	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.606	2.609	-0.003	0.988	446415	2.44		103	1965	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.606	2.611	-0.005	1.000	14971	0.0504		106	65.5	
D 73 13C8 PFOA										
421.00 > 376.00	2.629	2.628	0.001	0.997	3412606	2.38		97.4	8835	
* 62 13C2 PFOA										
415.00 > 370.00	2.637	2.636	0.001		2121320	2.50			3857	
D 14 13C4 PFOA										
417.00 > 372.00	2.637	2.636	0.001	1.000	2037041	2.47		98.6	4999	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.637	2.637	0.0	1.000	50327	0.0543		108	5.2	M
413.00 > 169.00	2.637	2.637	0.0	1.000	27446		1.83(0.84-2.52)	108	57.3	M
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.645	2.646	-0.001	0.879	39906	0.0447		93.9	155	
449.00 > 99.00	2.645	2.646	-0.001	0.879	11049		3.61(1.94-5.82)	93.9	48.3	
D 72 13C8 PFOS										
507.00 > 99.00	3.008	3.008	0.0	1.141	877464	2.41		101	3414	
D 19 13C5 PFNA										
468.00 > 423.00	3.008	3.009	-0.001	1.141	1755570	2.56		102	3676	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.008	3.010	-0.002	1.000	36464	0.0487		97.3	10.7	M
463.00 > 169.00	3.008	3.010	-0.002	1.000	9830		3.71(1.90-5.69)	97.3	78.4	
D 18 13C4 PFOS										
503.00 > 80.00	3.008	3.010	-0.002	1.141	1610728	2.38		99.5	2355	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.008	3.011	-0.003	1.000	38725	0.0498		107	21.0	
499.00 > 99.00	3.008	3.011	-0.003	1.000	9693		4.00(2.31-6.93)	107	31.4	M
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.228	3.225	0.003	1.073	62630	0.0465		99.8	114	
D 21 13C8 FOSA										
506.00 > 78.00	3.349	3.351	-0.002	1.270	2409215	2.54		102	2672	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.349	3.352	-0.003	1.000	48375	0.0503		101	375	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.357	3.360	-0.003	1.273	493252	2.55		106	2551	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.357	3.362	-0.005	1.000	14760	0.0554		116	77.6	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.364	3.363	0.001	1.118	26553	0.0492		103	228	
549.00 > 99.00	3.364	3.363	0.001	1.118	9016		2.95(1.33-3.97)	103	61.6	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.364	3.370	-0.006	0.998	30342	0.0487		97.5	31.8	
513.00 > 169.00	3.364	3.370	-0.006	0.998	6675		4.55(2.36-7.09)	97.5	23.1	
D 23 13C2 PFDA										
515.00 > 470.00	3.371	3.372	-0.001	1.279	1516934	2.55		102	3329	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.523	3.527	-0.004	1.336	722699	2.50		99.8	1839	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.523	3.530	-0.007	1.000	13573	0.0502		100	9.6	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.684	3.691	-0.007	1.225	22793	0.0526		109	116	
599.00 > 99.00	3.684	3.691	-0.007	1.225	8285		2.75(1.39-4.16)	109	63.8	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.701	3.698	0.003	1.404	782325	2.53		101	704	
D 30 13C2 PFUnA										
565.00 > 520.00	3.701	3.703	-0.002	1.404	1129525	2.41		96.4	3625	
33 N-ethylperfluorooctanesulfonamidoa										M
584.00 > 419.00	3.692	3.703	-0.011	0.998	12591	0.0479		95.7	47.9	M
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.701	3.706	-0.005	1.000	22050	0.0544		109	18.3	
563.00 > 169.00	3.710	3.706	0.004	1.002	4817		4.58(2.12-6.36)	109	28.5	
35 MeFOSA										
512.00 > 169.00	3.861	3.866	-0.005		12627	NC			106	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.861	3.866	-0.005	1.284	88096	0.0458		97.2	320	
D 36 13C2 PFDaA										
615.00 > 570.00	3.998	4.001	-0.003	1.516	1268918	2.55		102	5122	
37 Perfluorododecanoic acid										M
613.00 > 569.00	3.998	4.001	-0.003	1.000	28947	0.0528		106	23.9	M
613.00 > 169.00	4.007	4.001	0.006	1.002	8065		3.59(2.13-6.40)	106	40.0	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.007	4.005	0.002	1.194	9149	0.0488		101	68.2	
75 Perfluorododecanesulfonic acid (PF										M
699.00 > 80.00	4.239	4.243	-0.004	1.409	10255	0.0523		108	66.6	M
699.00 > 99.00	4.239	4.243	-0.004	1.409	13263		0.77(0.00-0.00)	108	96.1	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.267	4.268	-0.001	1.067	26605	0.0499		99.7	14.4	M
663.00 > 169.00	4.267	4.268	-0.001	1.067	8742		3.04(1.25-3.76)	99.7	72.3	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.498	4.508	-0.010	0.998	9823	0.0560		112	90.0	
713.00 > 219.00	4.507	4.508	-0.001	1.000	5550		1.77(0.71-2.13)	112	44.0	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.507	4.509	-0.002	1.710	1589348	2.57		103	2694	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.919	4.926	-0.007	1.866	2795988	2.56		102	4550	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.929	4.928	0.001	1.002	69220	0.0471		94.3	12.6	
813.00 > 169.00	4.919	4.928	-0.009	1.000	14009		4.94(2.86-8.58)	94.3	108	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.268	5.275	-0.007	1.071	60080	0.0491		98.3	9.3	
913.00 > 169.00	5.268	5.275	-0.007	1.071	8501		7.07(3.83-11.48)	98.3	84.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_006.d

Injection Date: 05-Nov-2018 15:44:56

Instrument ID: A8_N

Lims ID: IC L2 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 11

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

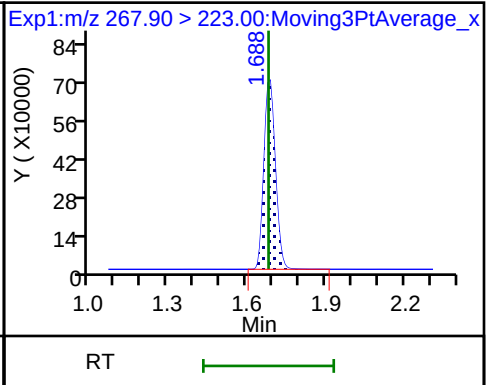
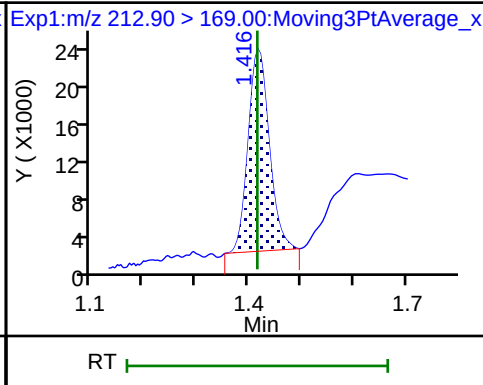
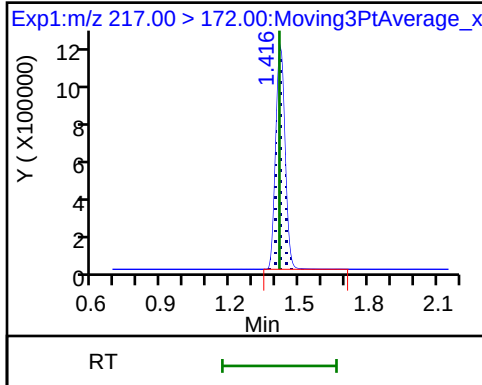
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

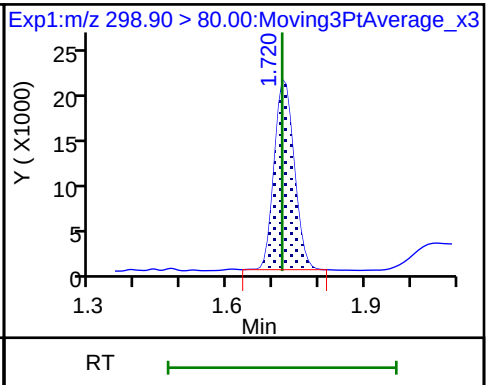
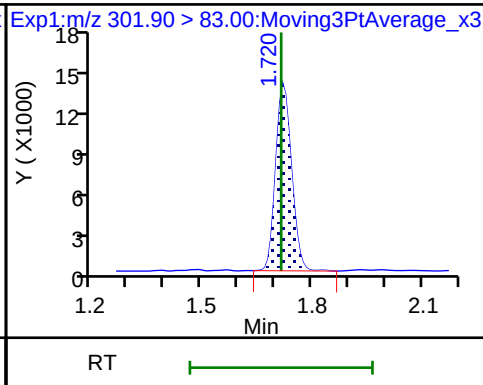
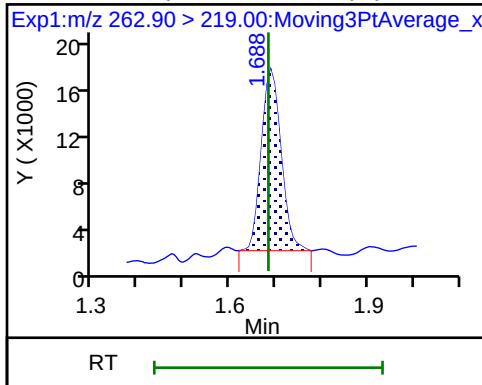
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

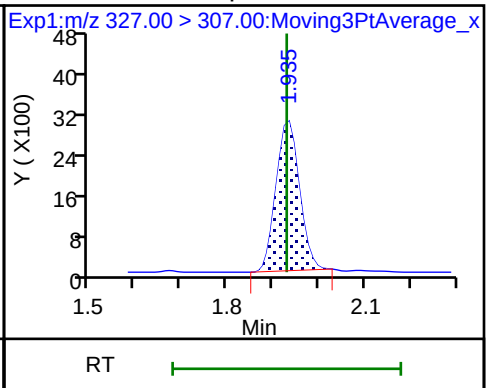
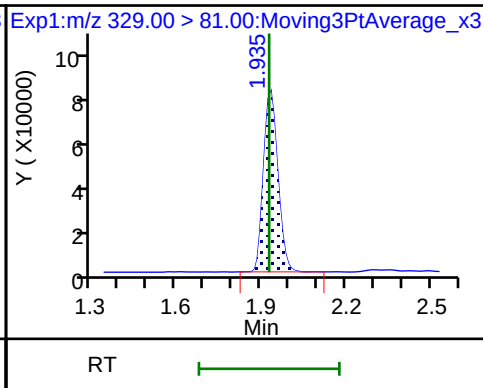
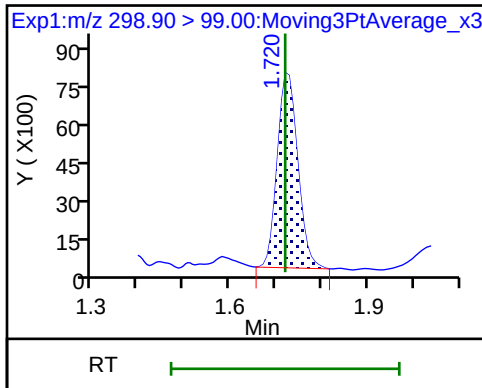
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

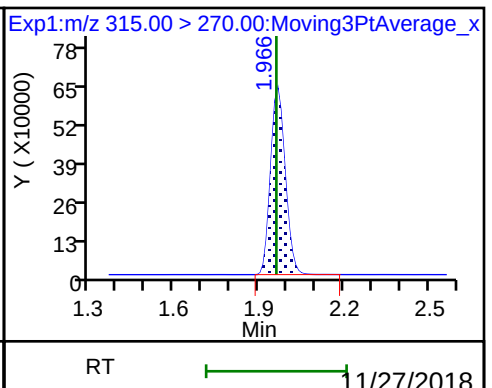
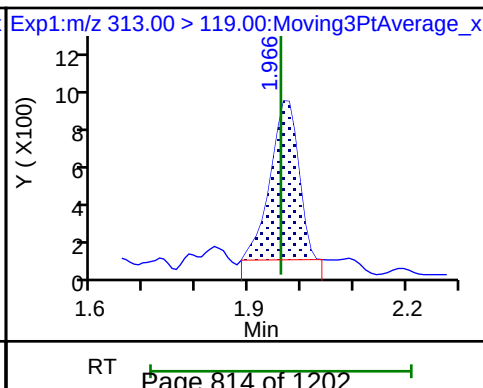
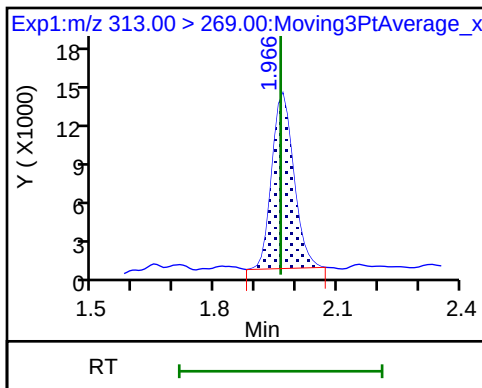
61 1H,1H,2H,2H-perfluorohexanesulfoni

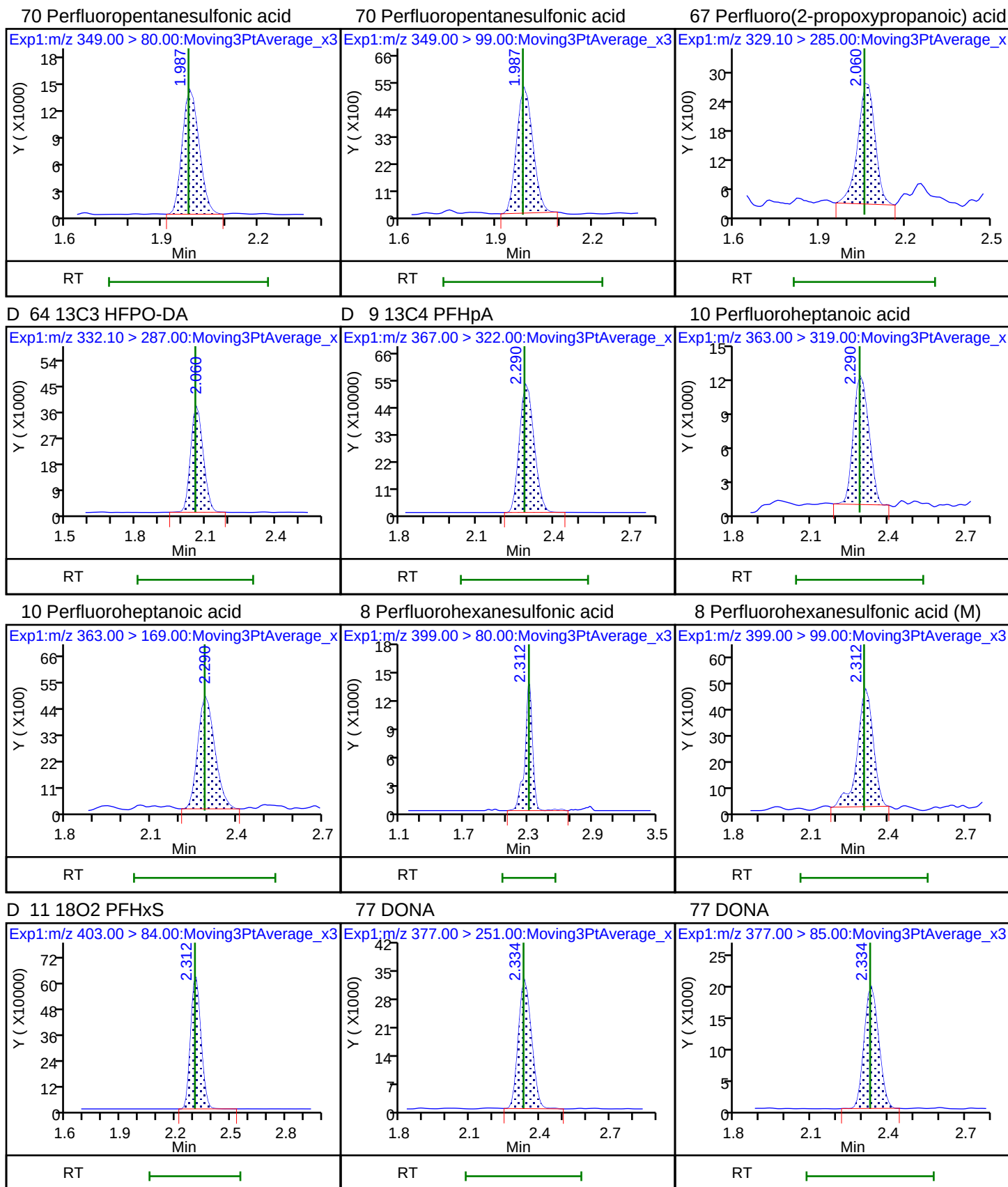


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

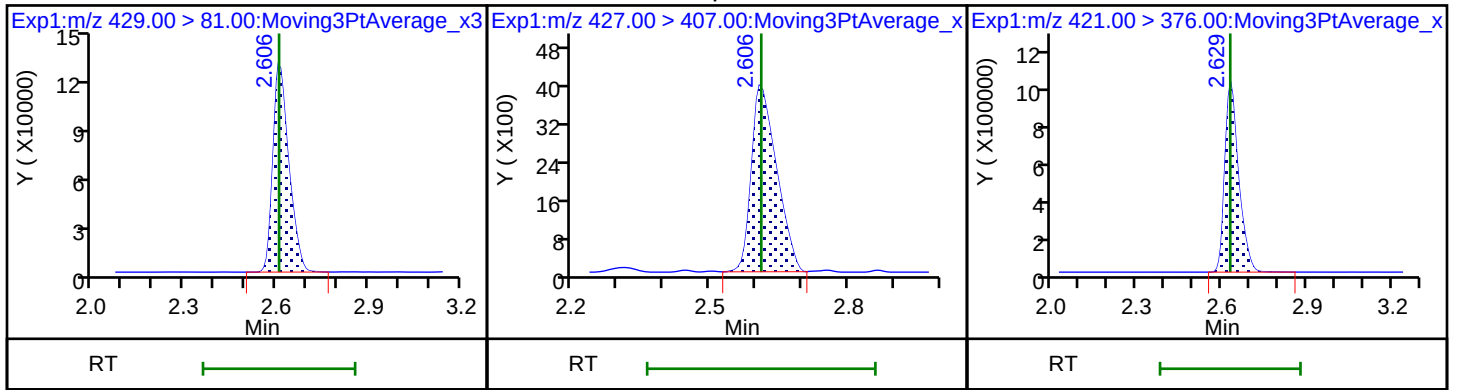
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

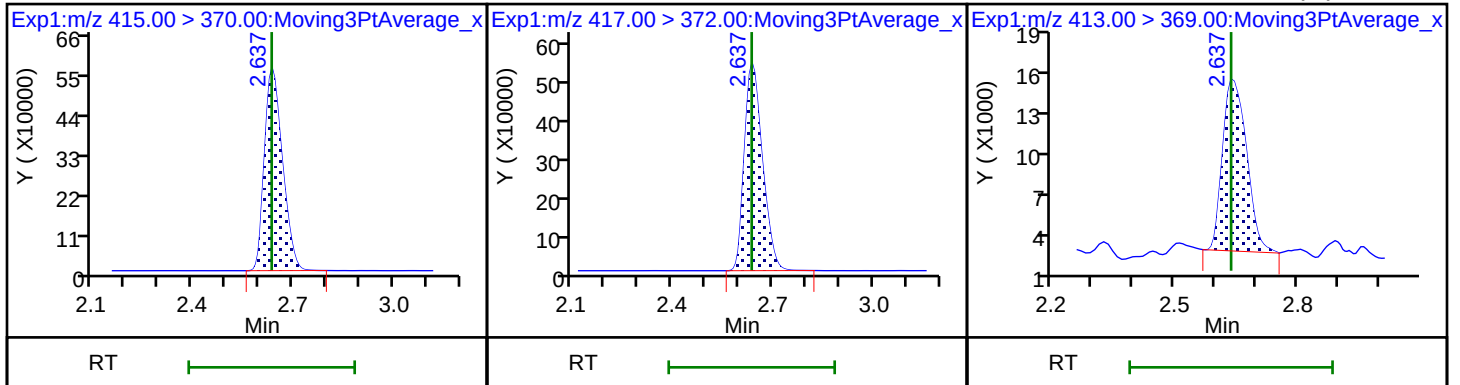
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



* 62 13C2 PFOA

D 14 13C4 PFOA

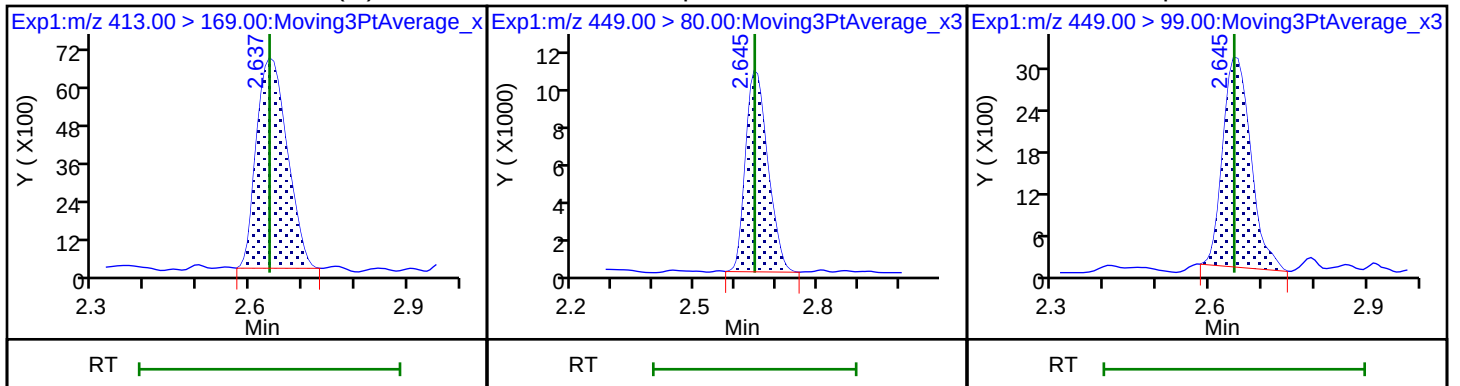
15 Perfluorooctanoic acid (M)



15 Perfluorooctanoic acid (M)

16 Perfluoroheptanesulfonic acid

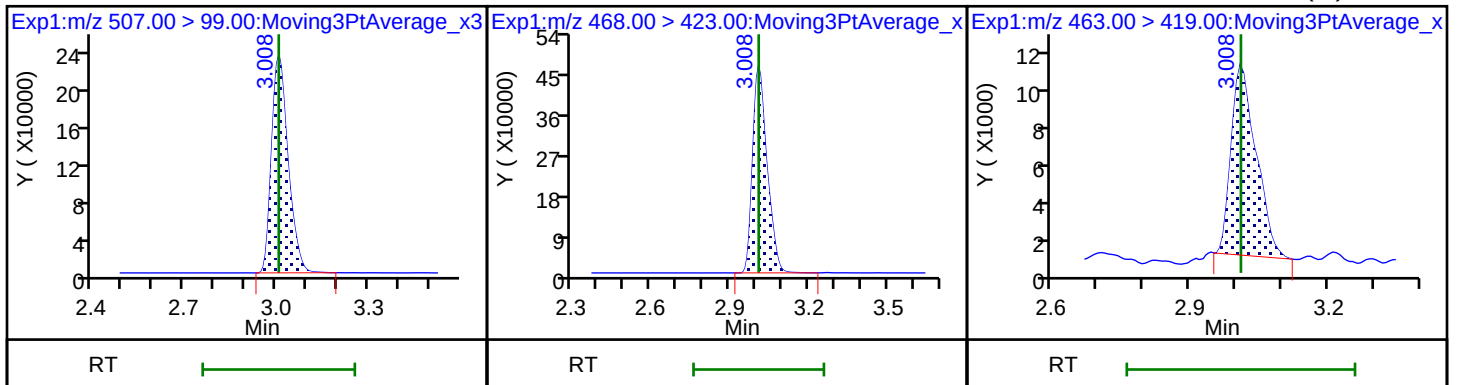
16 Perfluoroheptanesulfonic acid

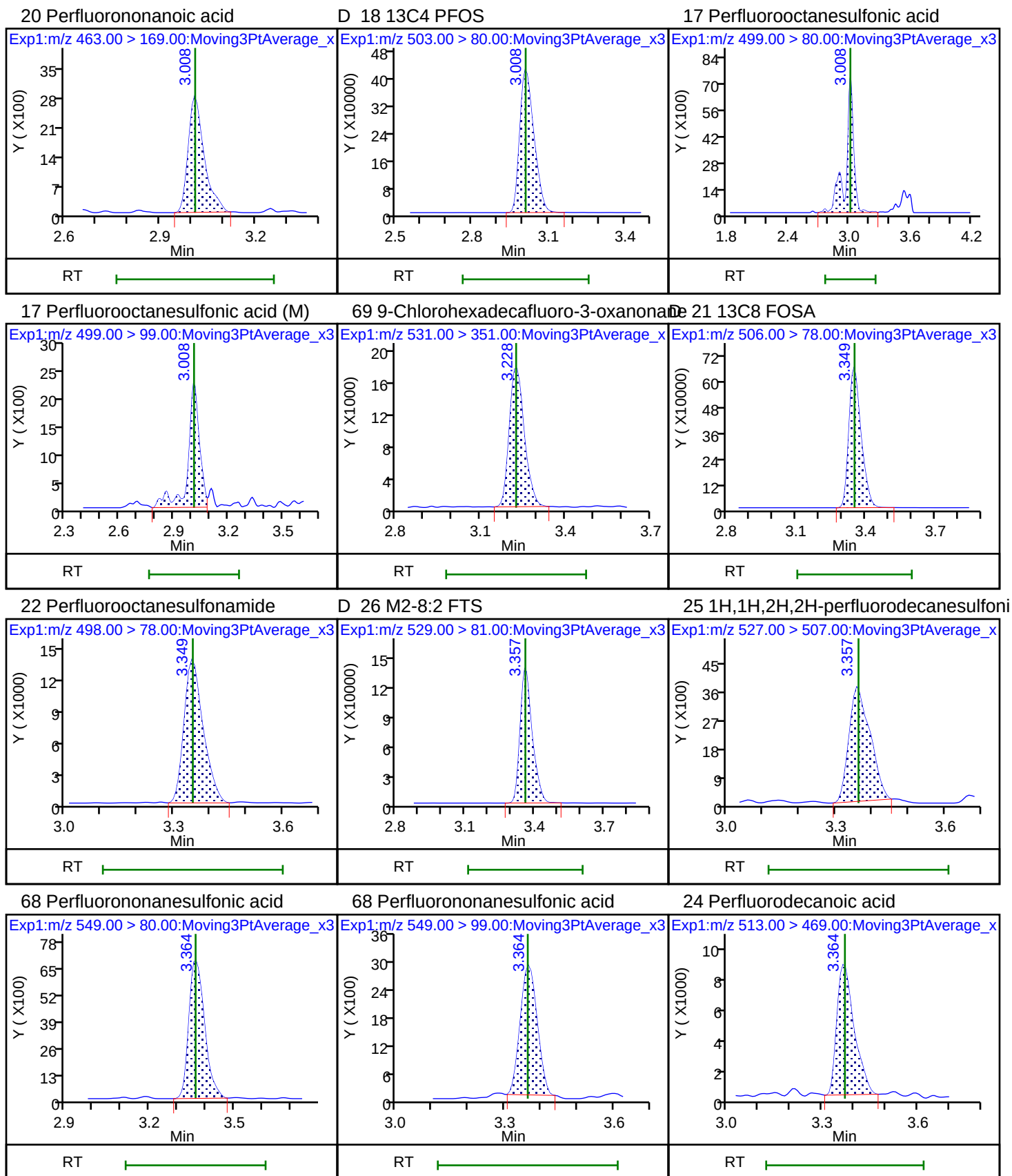


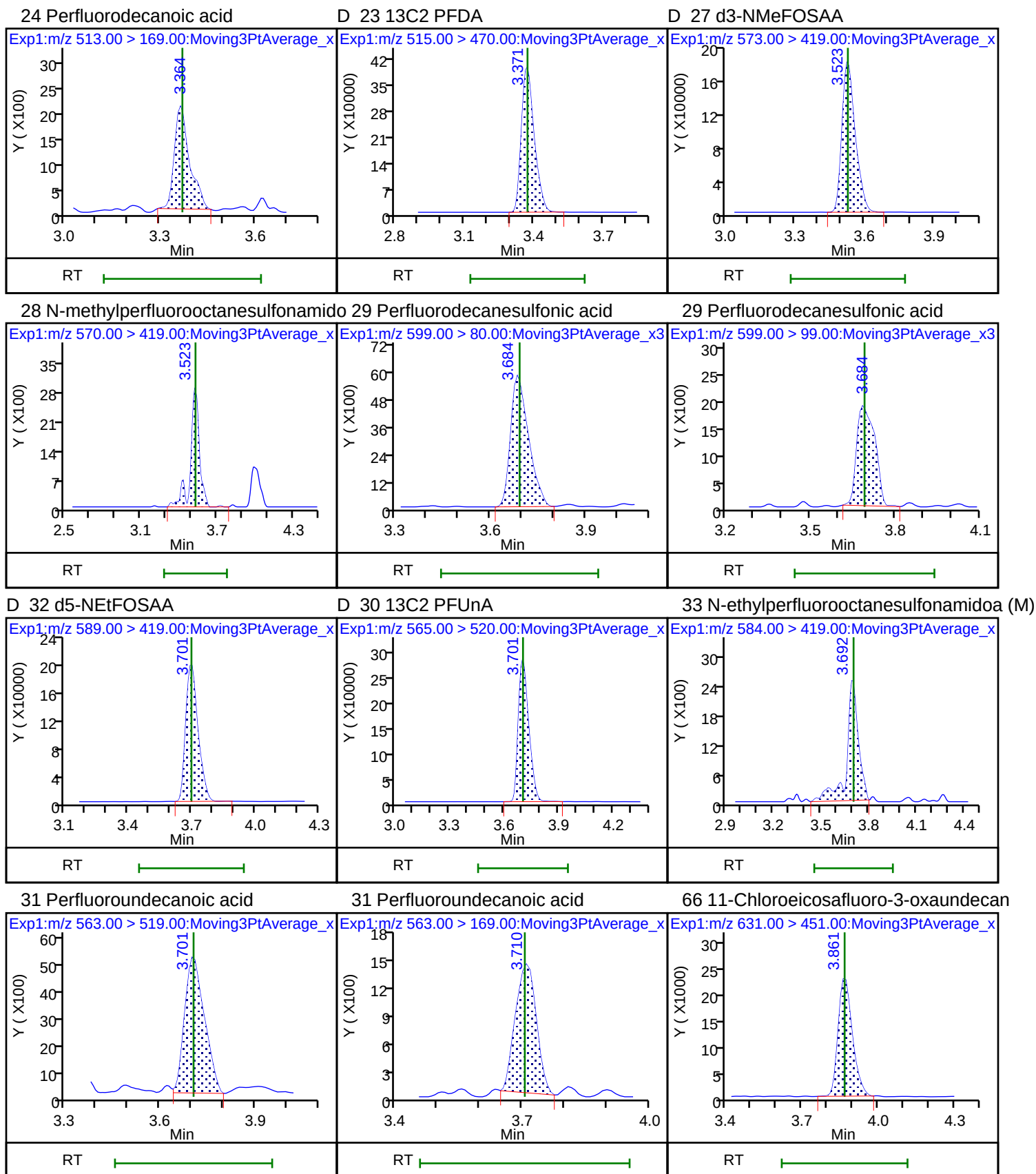
D 72 13C8 PFOS

D 19 13C5 PFNA

20 Perfluorononanoic acid (M)



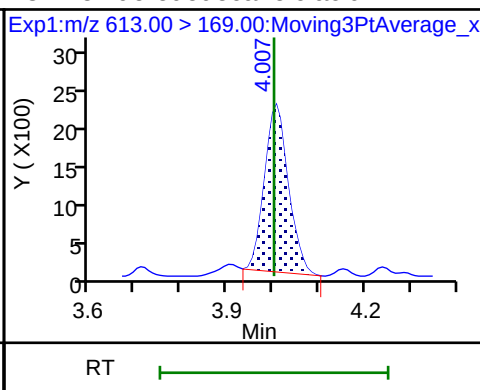
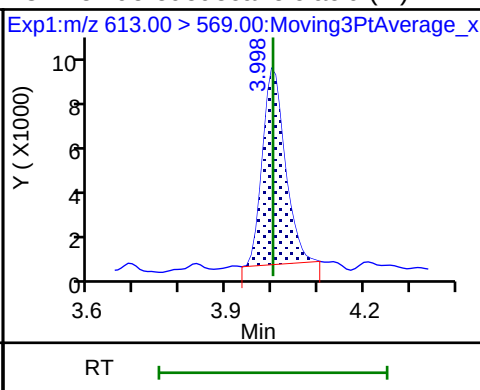
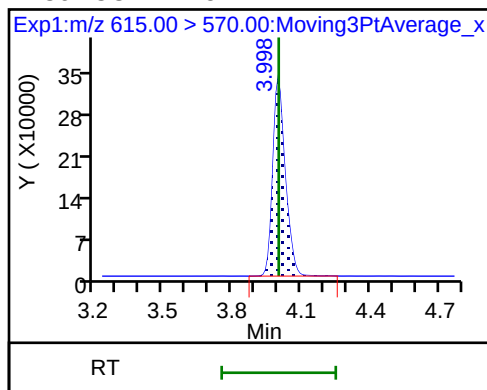




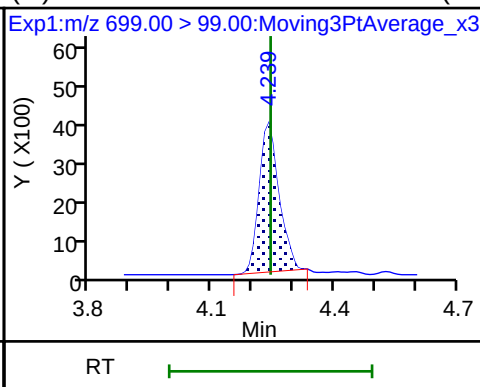
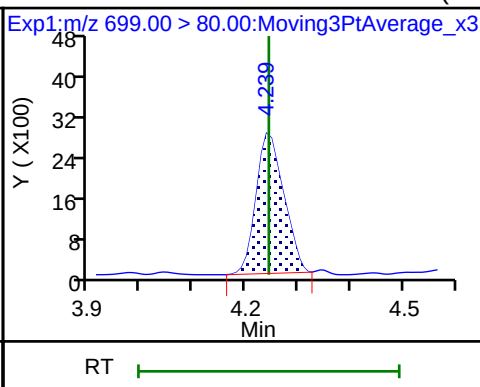
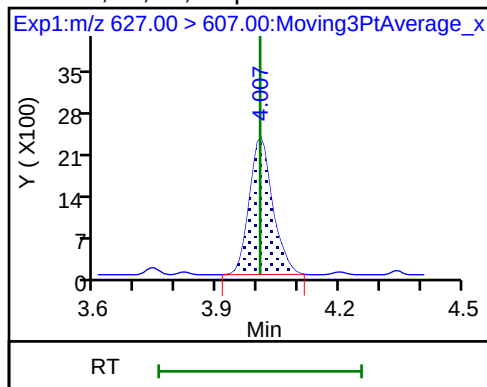
D 36 13C2 PFDaA

37 Perfluorododecanoic acid (M)

37 Perfluorododecanoic acid



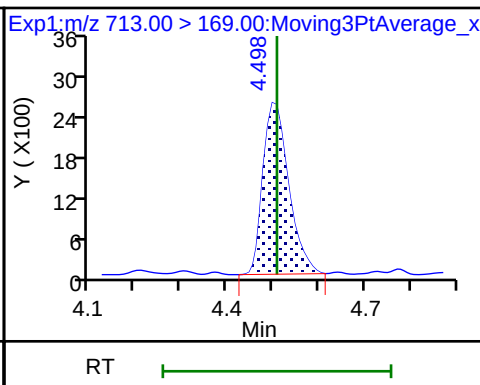
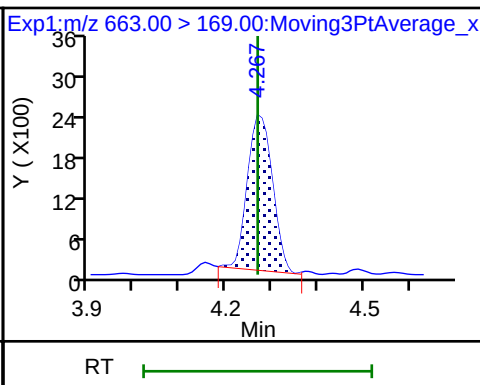
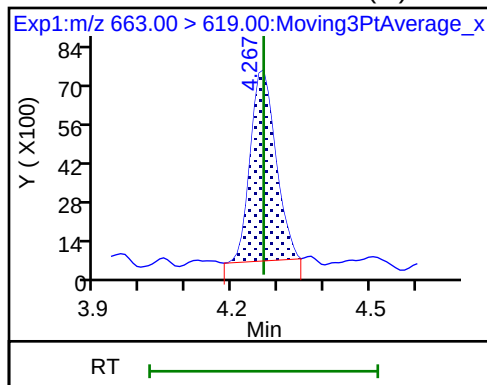
74 1H,1H,2H,2H-perfluorododecanesulfonate 75 Perfluorododecanesulfonic acid (PF (M) 75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid (M)

41 Perfluorotridecanoic acid

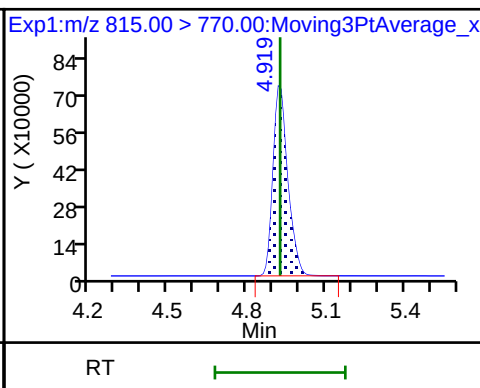
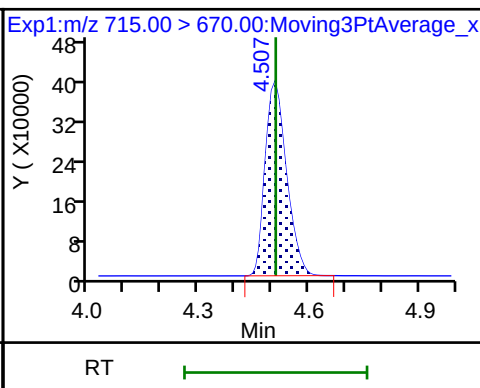
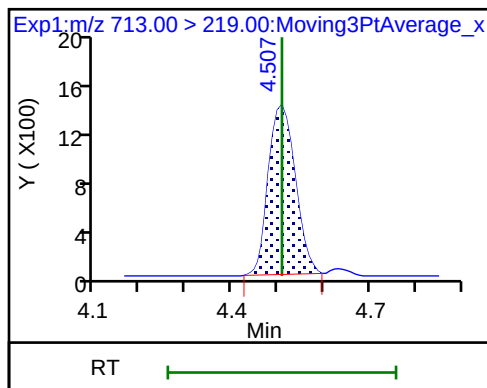
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

D 44 13C2 PFHxDA



45 Perfluorohexadecanoic acid

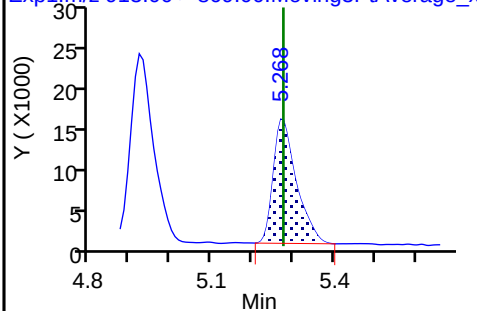
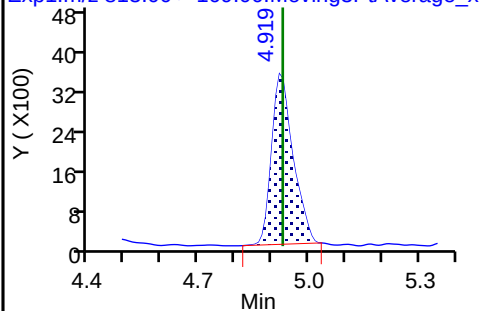
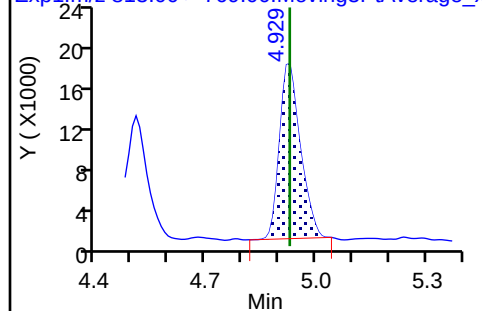
45 Perfluorohexadecanoic acid

46 Perfluorooctadecanoic acid

Exp1:m/z 813.00 > 769.00:Moving3PtAverage_x

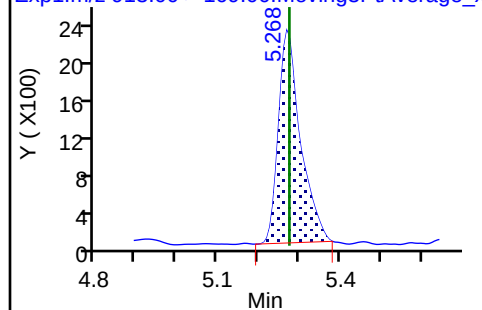
Exp1:m/z 813.00 > 169.00:Moving3PtAverage_x

Exp1:m/z 913.00 > 869.00:Moving3PtAverage_x



46 Perfluorooctadecanoic acid

Exp1:m/z 913.00 > 169.00:Moving3PtAverage_x



TestAmerica Sacramento

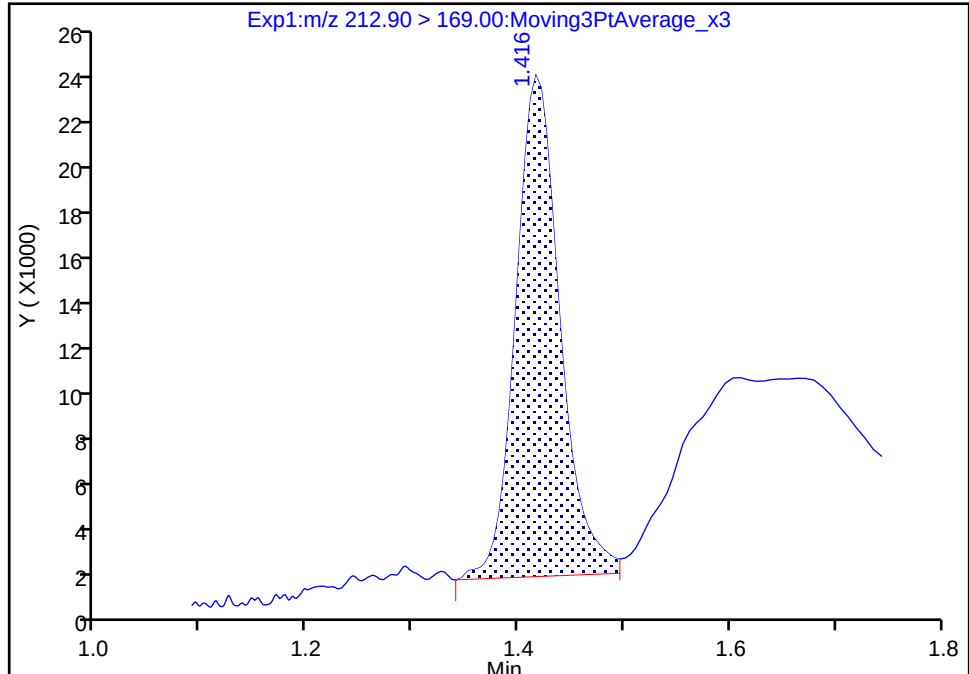
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_006.d
Injection Date: 05-Nov-2018 15:44:56 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

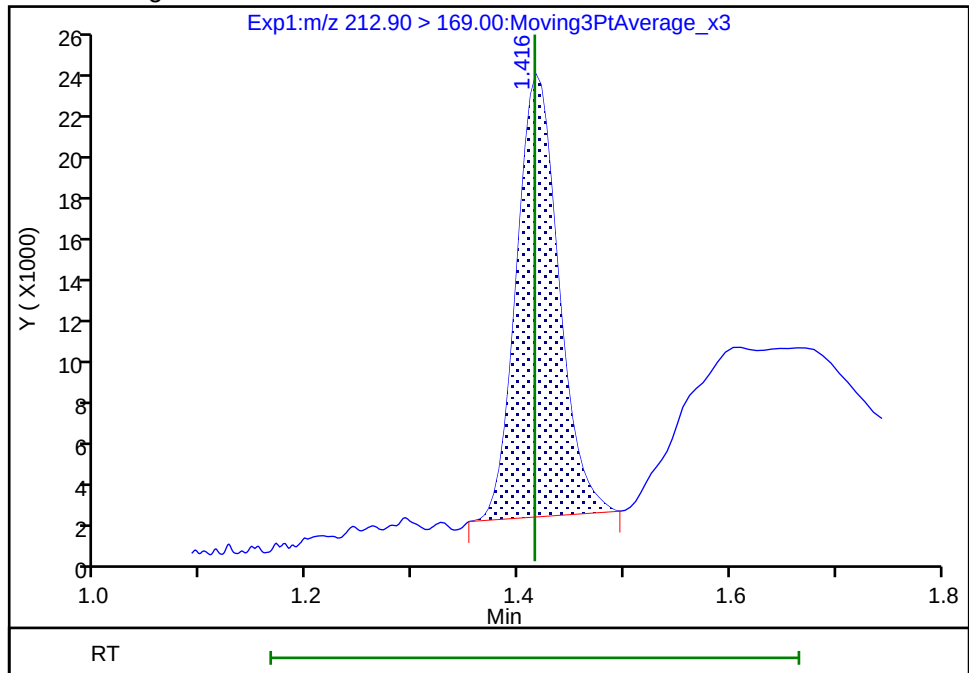
RT: 1.42
Area: 63029
Amount: 0.051386
Amount Units: ng/ml

Processing Integration Results



RT: 1.42
Area: 58646
Amount: 0.048342
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:25:50
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_006.d

Injection Date: 05-Nov-2018 15:44:56

Instrument ID: A8_N

Lims ID: IC L2 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

11

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

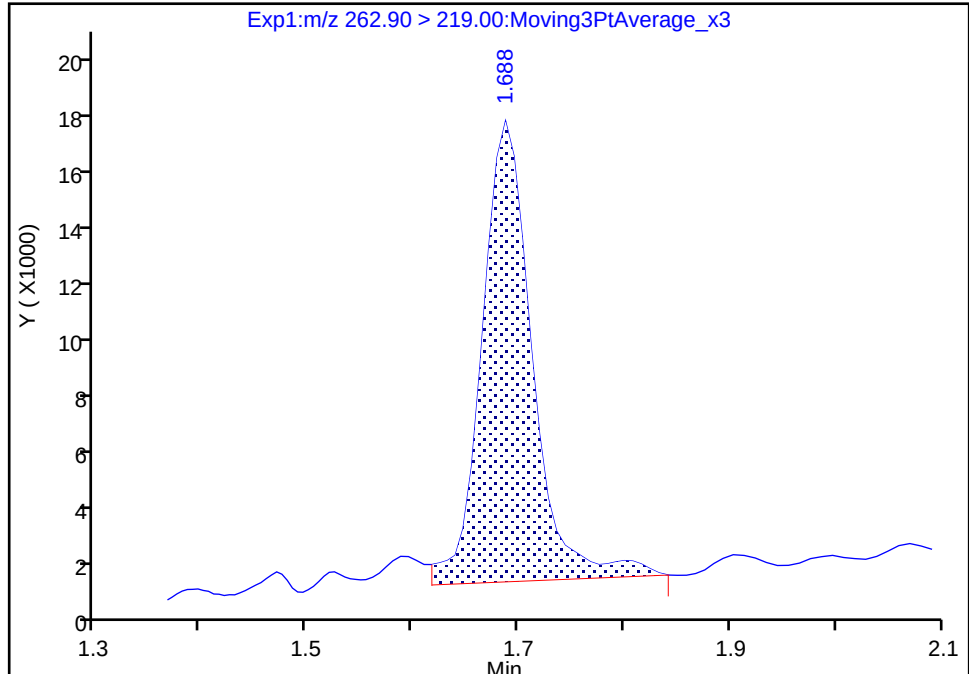
Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

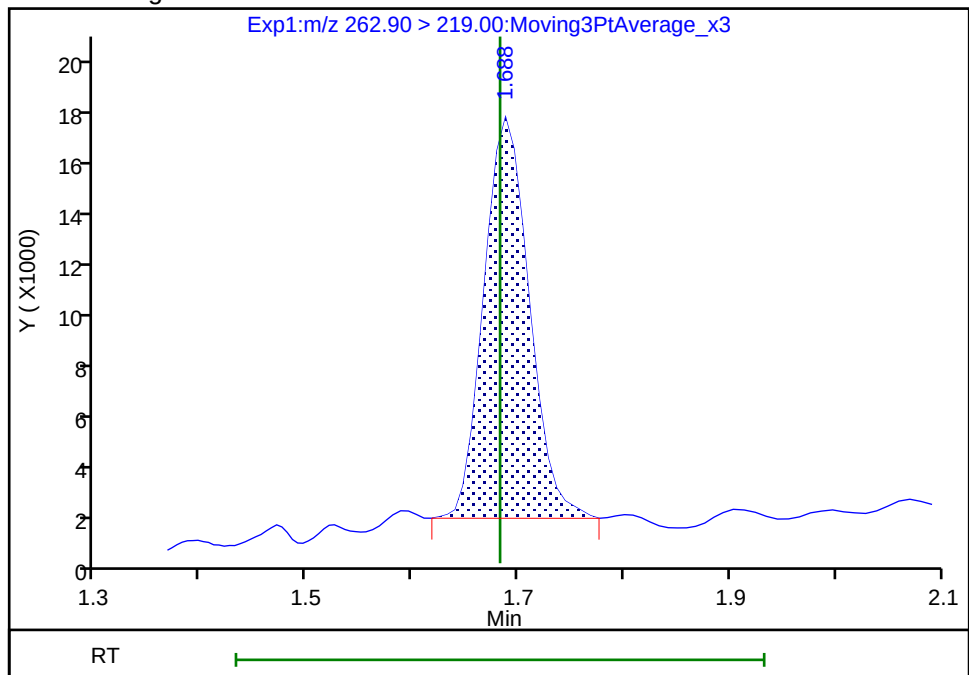
RT: 1.69
Area: 52918
Amount: 0.053988
Amount Units: ng/ml

Processing Integration Results



RT: 1.69
Area: 45864
Amount: 0.048858
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:25:57

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_006.d

Injection Date: 05-Nov-2018 15:44:56

Instrument ID: A8_N

Lims ID: IC L2 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

11

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

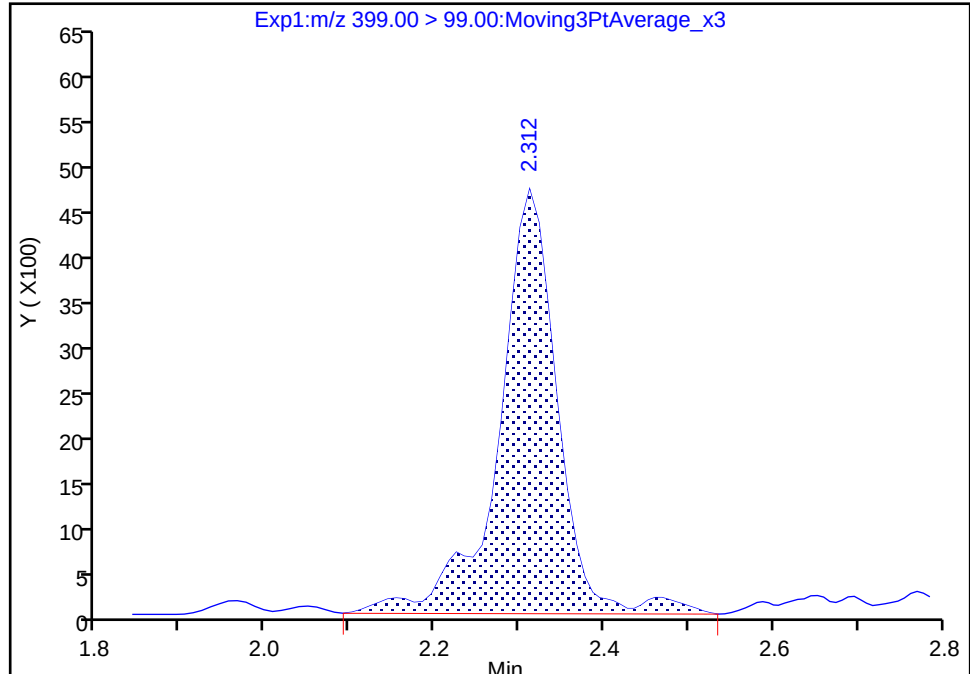
Detector EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

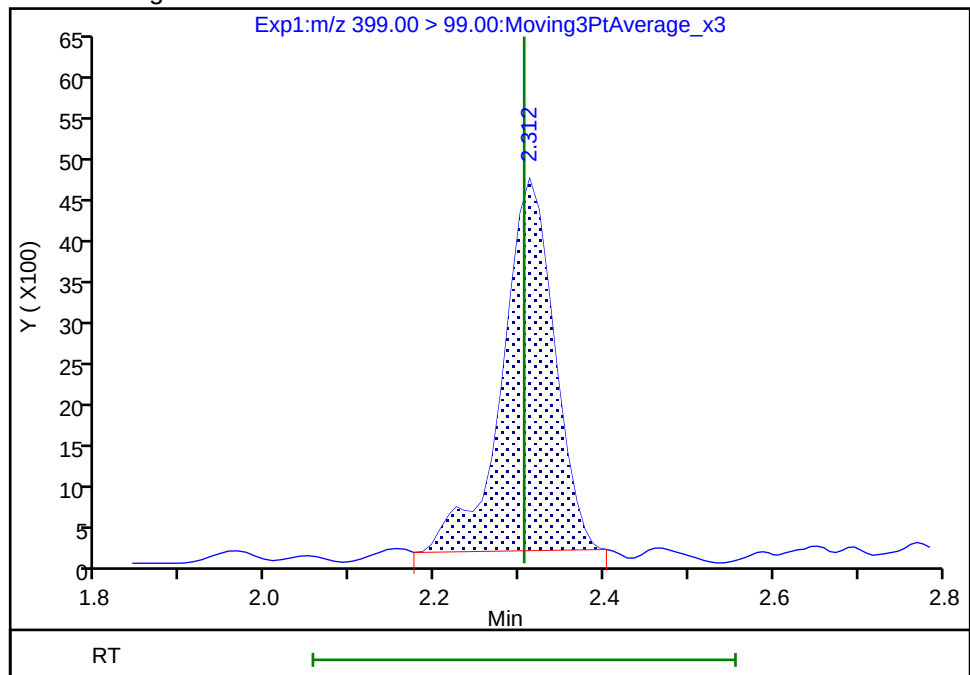
RT: 2.31
Area: 22862
Amount: 0.052601
Amount Units: ng/ml

Processing Integration Results



RT: 2.31
Area: 19596
Amount: 0.054060
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:26:09

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

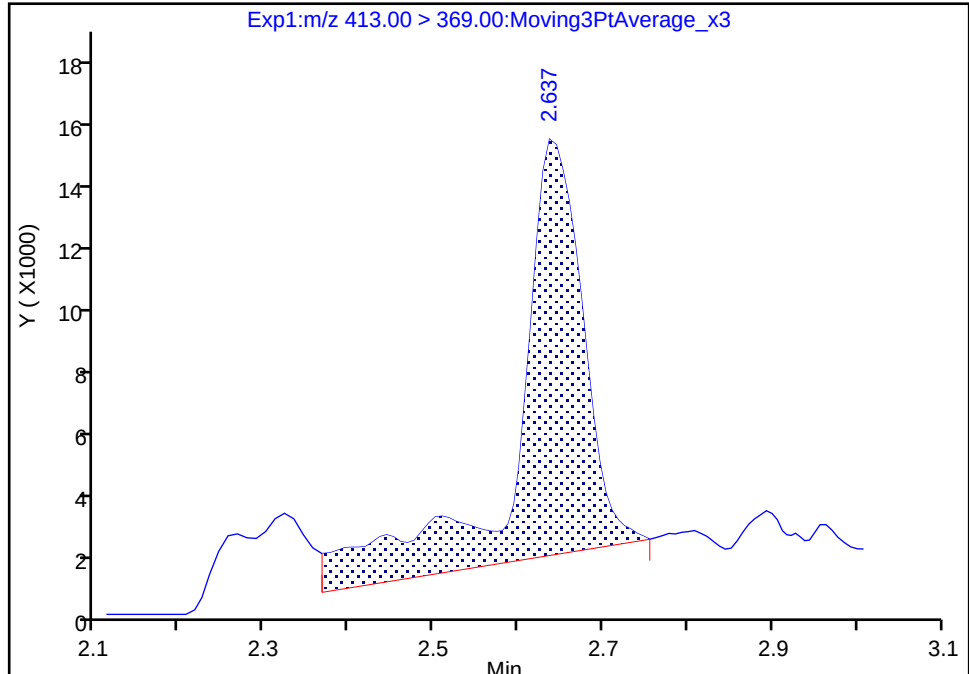
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_006.d
Injection Date: 05-Nov-2018 15:44:56 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

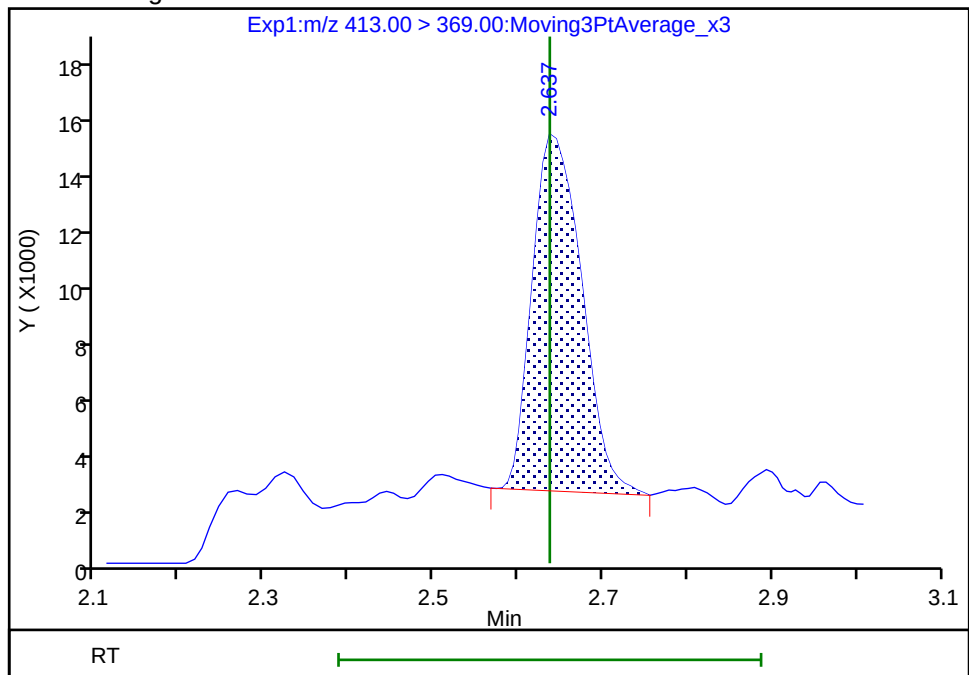
RT: 2.64
Area: 72582
Amount: 0.070221
Amount Units: ng/ml

Processing Integration Results



RT: 2.64
Area: 50327
Amount: 0.054292
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:26:17

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

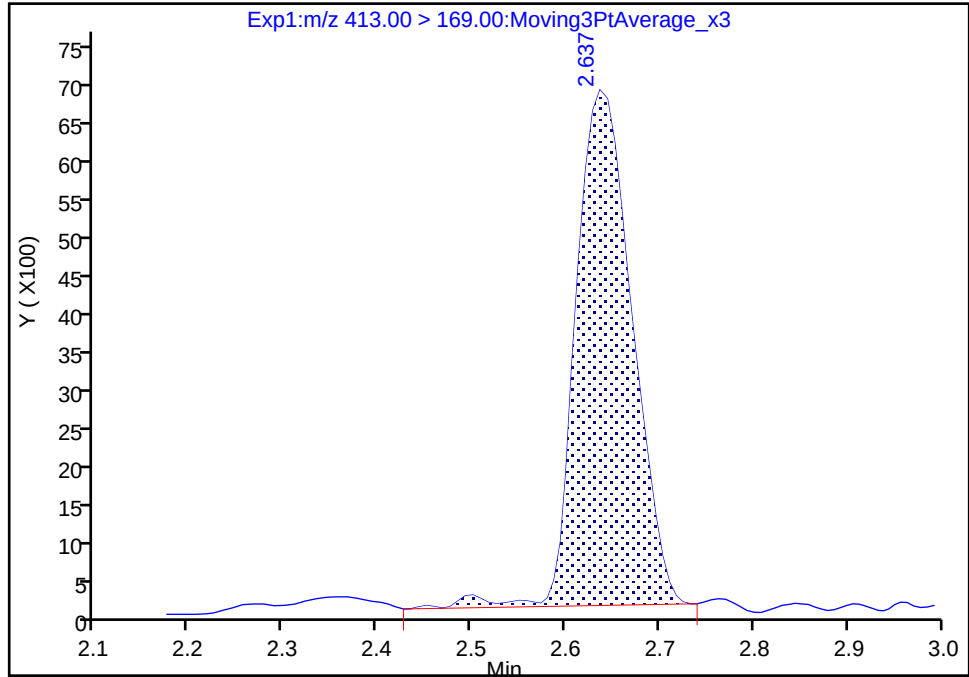
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_006.d
Injection Date: 05-Nov-2018 15:44:56 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

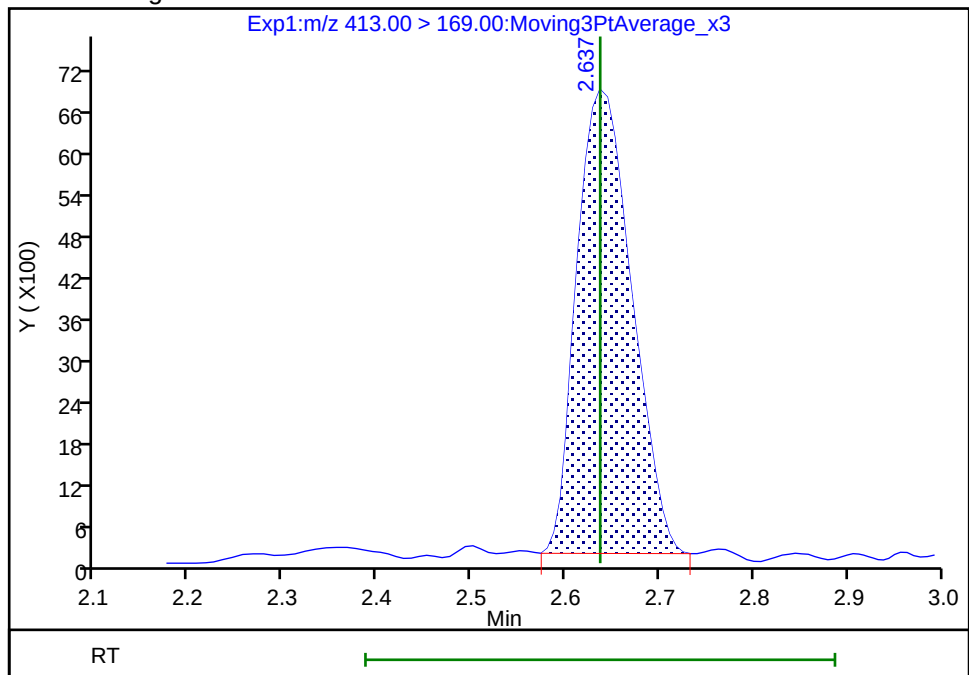
RT: 2.64
Area: 28198
Amount: 0.070221
Amount Units: ng/ml

Processing Integration Results



RT: 2.64
Area: 27446
Amount: 0.054292
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:26:27

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_006.d

Injection Date: 05-Nov-2018 15:44:56

Instrument ID: A8_N

Lims ID: IC L2 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

11

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

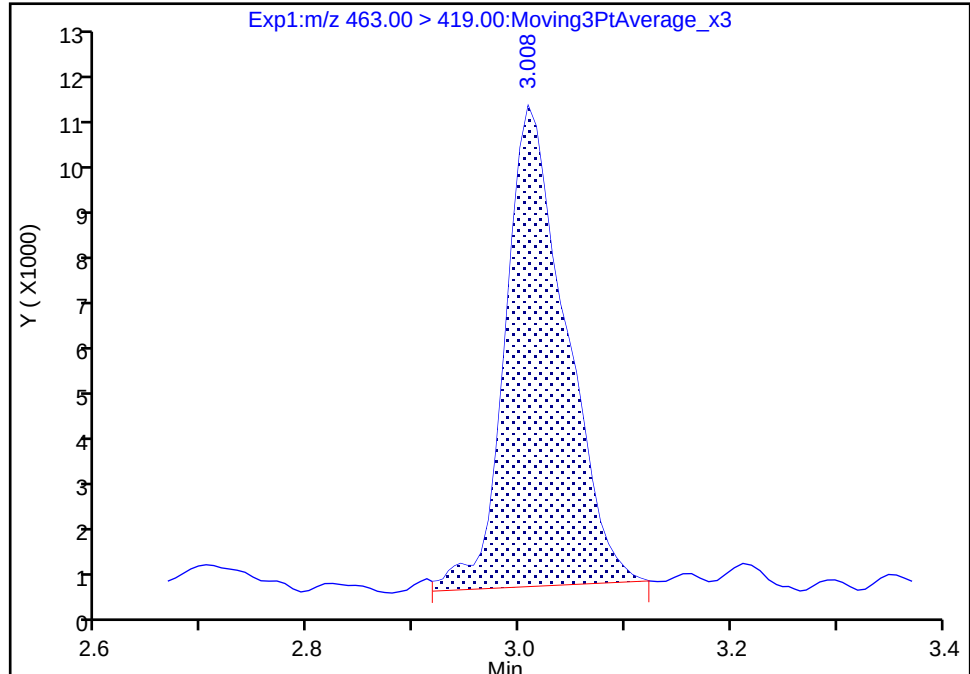
Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

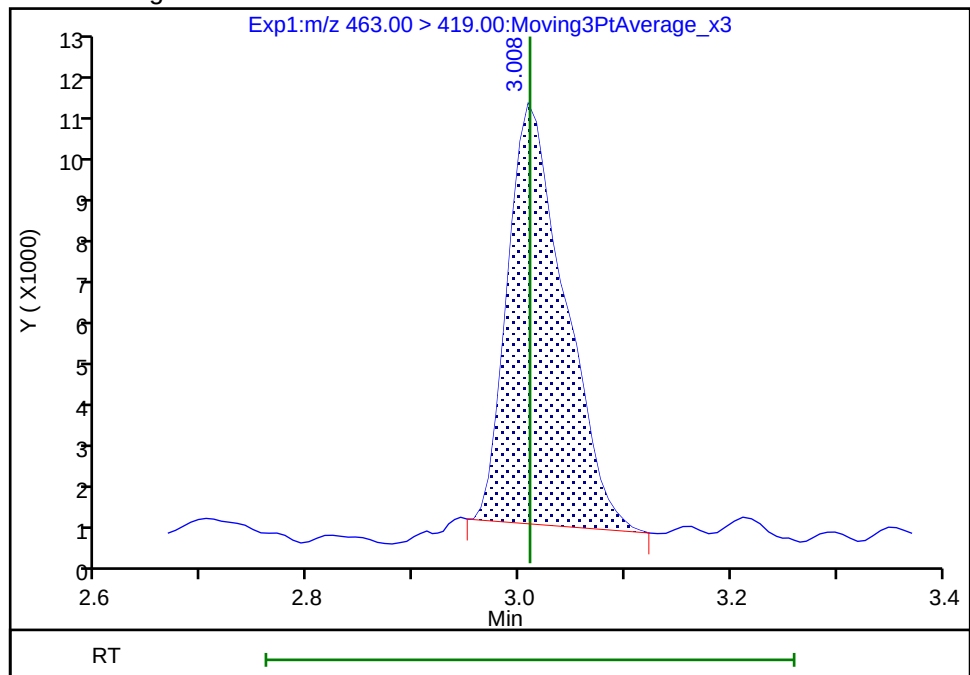
RT: 3.01
Area: 39804
Amount: 0.052576
Amount Units: ng/ml

Processing Integration Results



RT: 3.01
Area: 36464
Amount: 0.048658
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:27:00

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

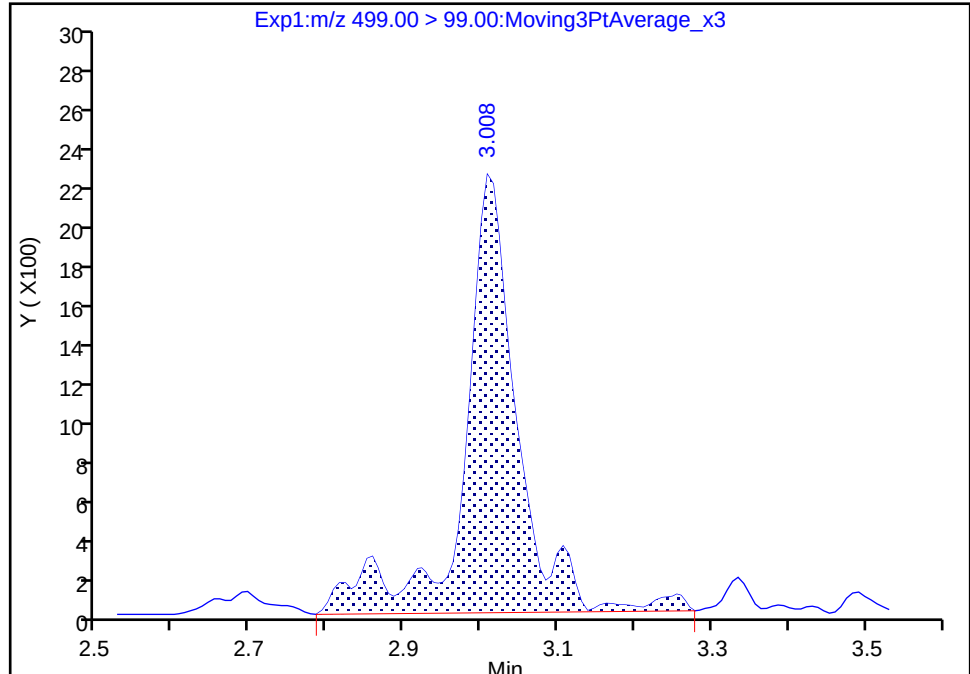
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_006.d
Injection Date: 05-Nov-2018 15:44:56 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

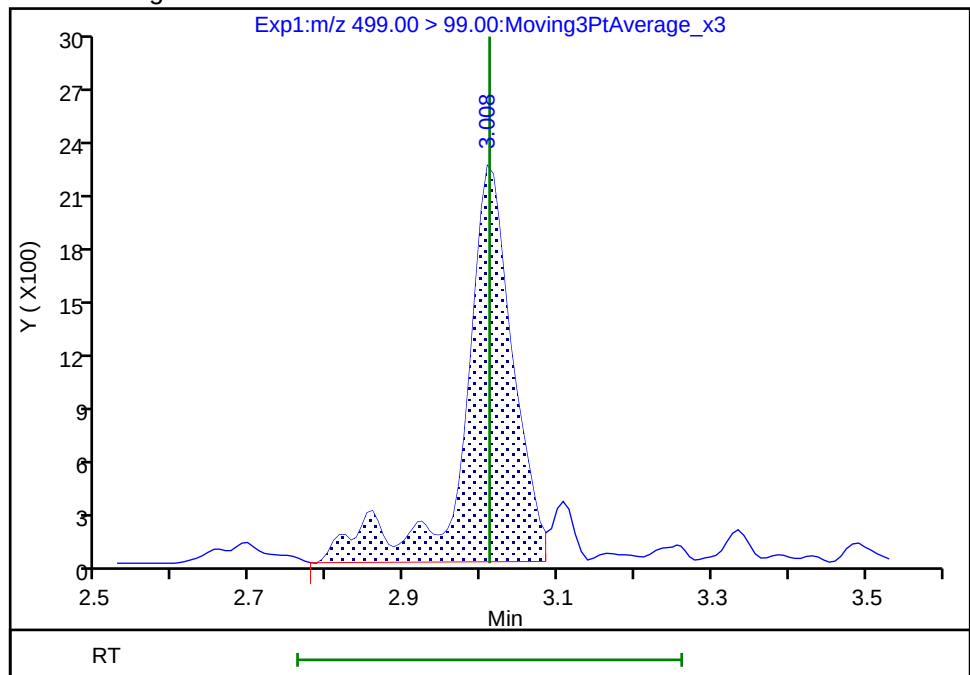
RT: 3.01
Area: 10685
Amount: 0.049199
Amount Units: ng/ml

Processing Integration Results



RT: 3.01
Area: 9693
Amount: 0.049773
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:26:48
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_006.d

Injection Date: 05-Nov-2018 15:44:56

Instrument ID: A8_N

Lims ID: IC L2 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

11

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

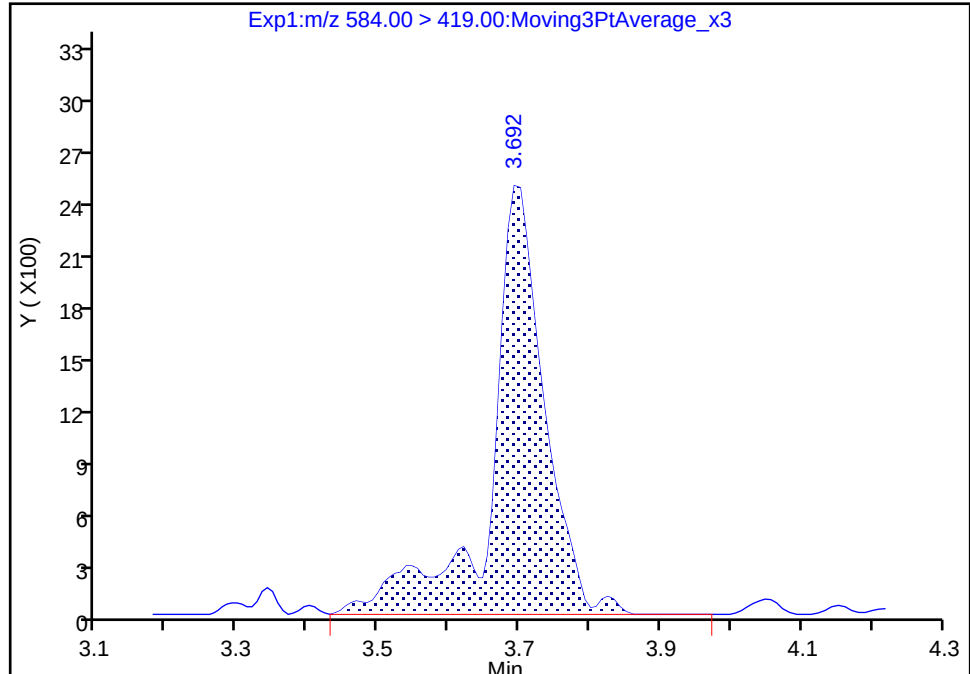
Detector EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

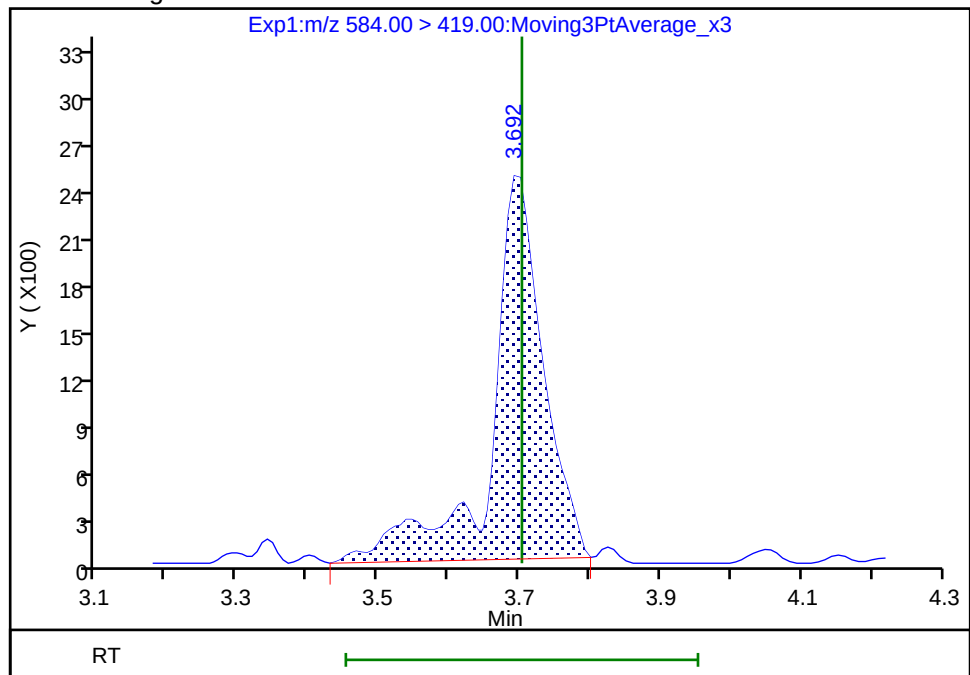
RT: 3.69
Area: 13203
Amount: 0.050172
Amount Units: ng/ml

Processing Integration Results



RT: 3.69
Area: 12591
Amount: 0.047860
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:27:32

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_006.d

Injection Date: 05-Nov-2018 15:44:56

Instrument ID: A8_N

Lims ID: IC L2 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 11

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

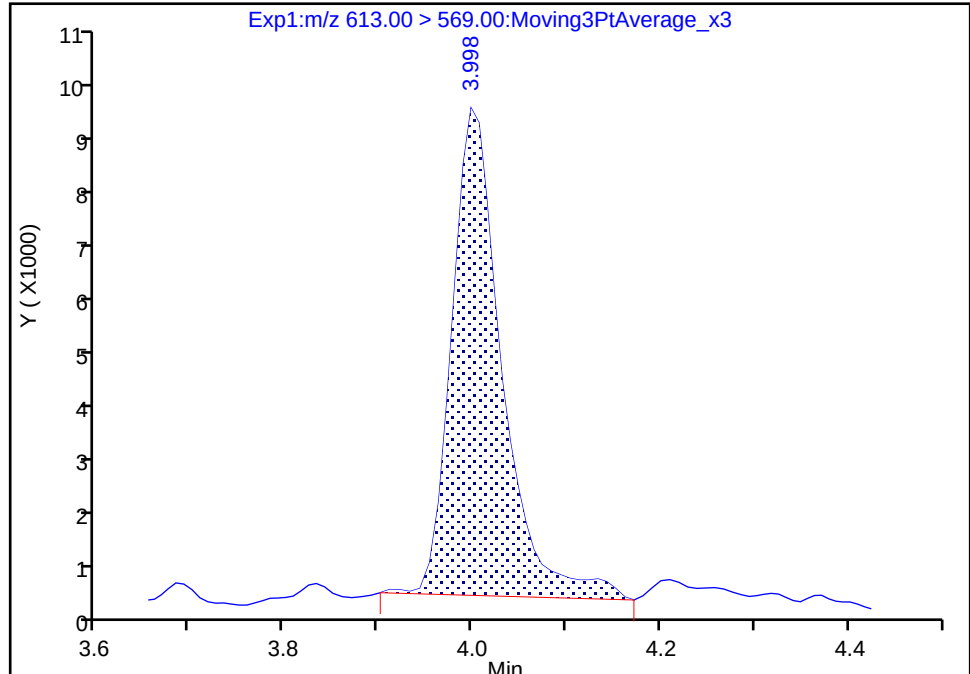
Detector: EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

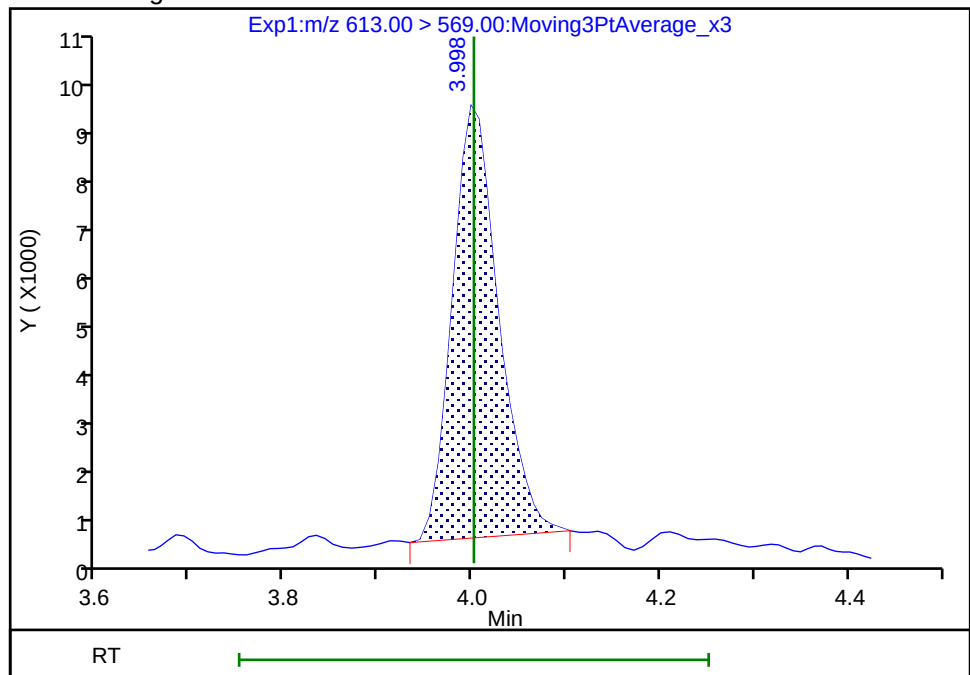
RT: 4.00
Area: 32026
Amount: 0.057356
Amount Units: ng/ml

Processing Integration Results



RT: 4.00
Area: 28947
Amount: 0.052756
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:27:26

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

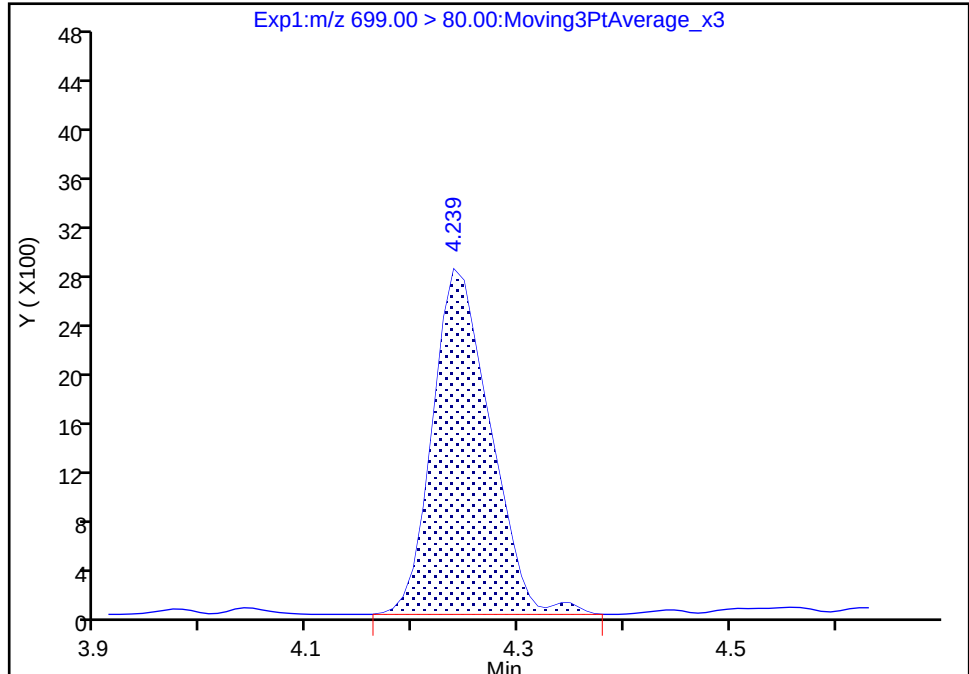
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_006.d
Injection Date: 05-Nov-2018 15:44:56 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

75 Perfluorododecanesulfonic acid (PFDoS), CAS: 79780-39-5

Signal: 1

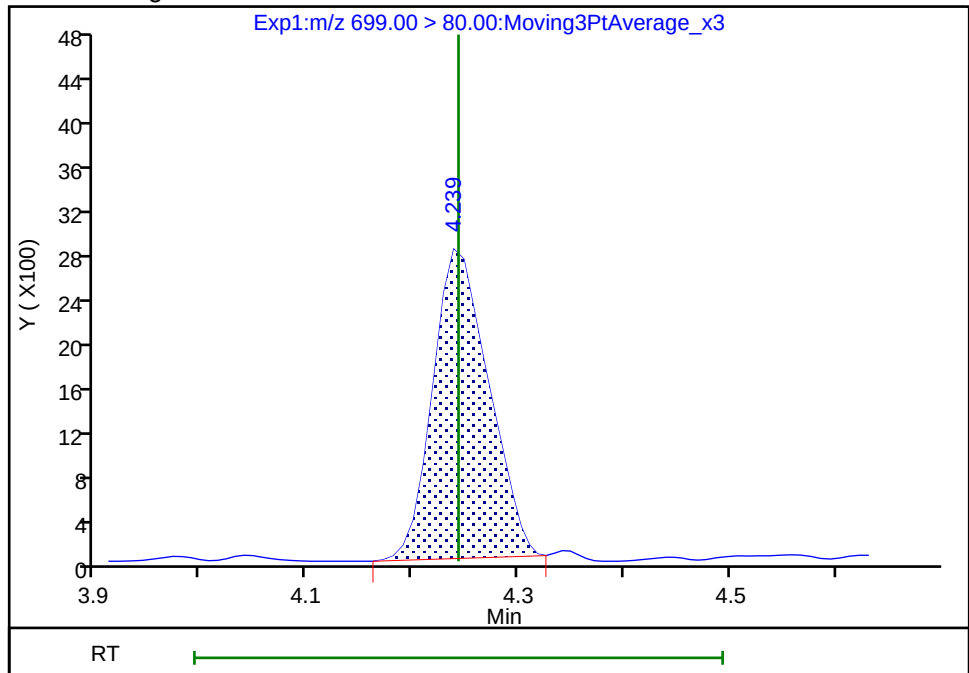
RT: 4.24
Area: 10677
Amount: 0.053967
Amount Units: ng/ml

Processing Integration Results



RT: 4.24
Area: 10255
Amount: 0.052324
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:27:51
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

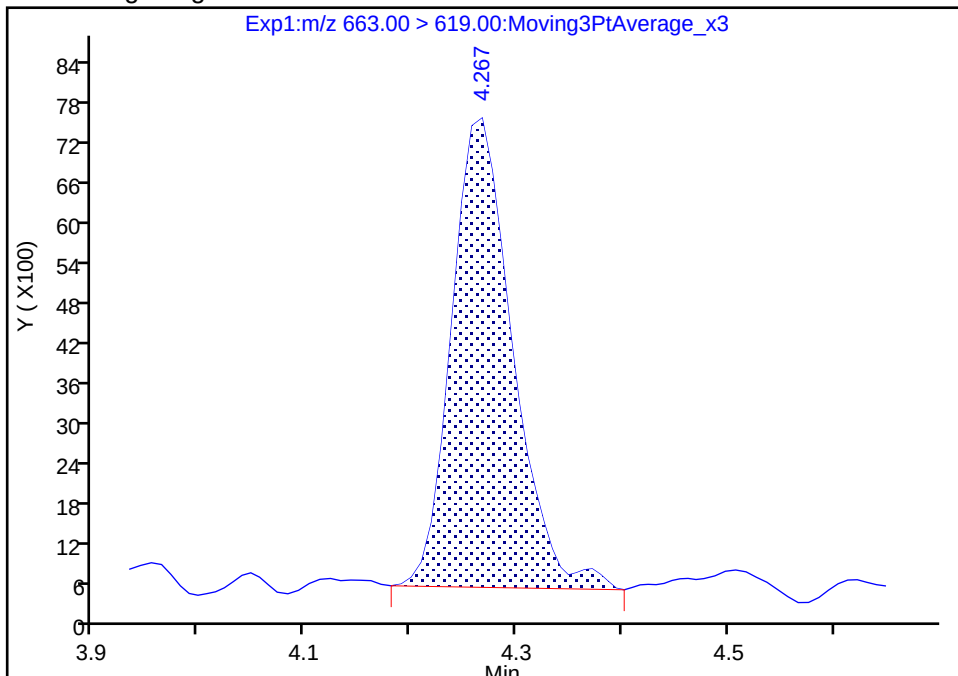
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_006.d
Injection Date: 05-Nov-2018 15:44:56 Instrument ID: A8_N
Lims ID: IC L2 Full
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

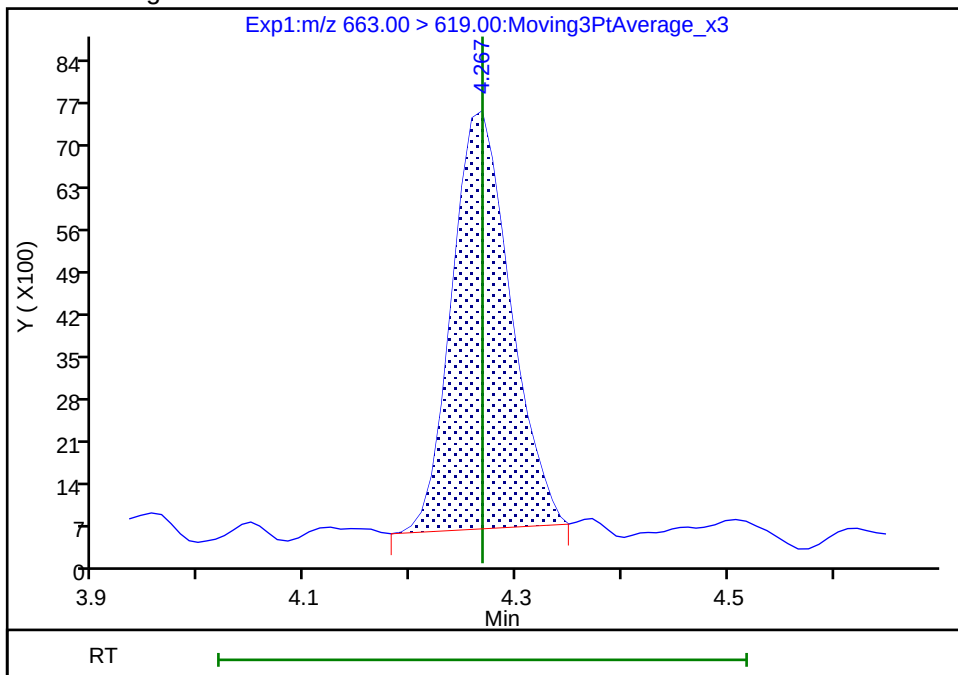
RT: 4.27
Area: 28230
Amount: 0.053296
Amount Units: ng/ml

Processing Integration Results



RT: 4.27
Area: 26605
Amount: 0.049861
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:27:59

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_007.d
 Lims ID: IC L3 Full
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 05-Nov-2018 15:52:20 ALS Bottle#: 12 Worklist Smp#: 4
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 3
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub37
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 05-Nov-2018 16:58:57 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0305

First Level Reviewer: roycea

Date: 05-Nov-2018 16:31:29

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	1.411	1.413	-0.002	0.537	3159326	2.48		99.1	7842	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.416	1.415	0.001	1.004	299805	0.2504		100	44.6	
D 3 13C5 PFPeA										
267.90 > 223.00	1.678	1.681	-0.003	0.639	2053002	2.44		97.6	8271	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.678	1.682	-0.004	1.000	232087	0.2522		101	36.8	
D 47 13C3 PFBS										
301.90 > 83.00	1.710	1.716	-0.006	0.651	38675	2.17		93.5	328	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.718	1.719	-0.001	1.005	292744	0.2245		102	120	
298.90 > 99.00	1.718	1.719	-0.001	1.005	125806		2.33(1.25-3.74)	102	88.1	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.922	1.928	-0.006	0.732	273681	2.34		100	263	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.922	1.929	-0.007	1.124	60217	0.2430		104	1295	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.954	1.960	-0.006	1.000	218664	0.2202		88.1	90.3	
313.00 > 119.00	1.954	1.960	-0.006	1.000	20739		10.54(5.03-15.10)	88.1	65.5	
D 7 13C2 PFHxA										
315.00 > 270.00	1.954	1.960	-0.006	0.744	2441549	2.64		106	6733	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.975	1.983	-0.008	1.155	276545	0.2461		105	1095	
349.00 > 99.00	1.975	1.983	-0.008	1.155	108770		2.54(1.36-4.07)	105	396	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.048	2.056	-0.008	1.000	49252	0.2630		105	47.1	

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	2.048	2.056	-0.008	0.779	139195	2.38		95.1	609	
D 9 13C4 PFHpA										
367.00 > 322.00	2.277	2.285	-0.008	0.867	2169000	2.54		102	4585	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.277	2.288	-0.011	1.000	248766	0.2582		103	82.6	
363.00 > 169.00	2.277	2.288	-0.011	1.000	101580		2.45(1.13-3.40)	103	185	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.299	2.305	-0.006	1.000	251525	0.2134		93.8	354	
399.00 > 99.00	2.299	2.305	-0.006	1.000	87406		2.88(1.50-4.49)	93.8	170	
D 11 18O2 PFHxS										
403.00 > 84.00	2.299	2.305	-0.006	0.875	2444423	2.34		99.0	4269	
77 DONA										
377.00 > 251.00	2.321	2.329	-0.008	0.772	662329	0.2418		103	1542	
377.00 > 85.00	2.321	2.329	-0.008	0.772	393860		1.68(0.85-2.54)	103	996	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.604	2.609	-0.005	0.991	455571	2.46		104	1676	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.604	2.611	-0.007	1.000	69675	0.2297		96.9	251	
D 73 13C8 PFOA										
421.00 > 376.00	2.620	2.628	-0.008	0.997	3574552	2.47		101	11594	
* 62 13C2 PFOA										
415.00 > 370.00	2.627	2.636	-0.009		2145959	2.50			3697	
D 14 13C4 PFOA										
417.00 > 372.00	2.627	2.636	-0.009	1.000	2108160	2.52		101	4212	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.627	2.637	-0.010	1.000	237151	0.2472		98.8	26.5	M
413.00 > 169.00	2.627	2.637	-0.010	1.000	132639		1.79(0.84-2.52)	98.8	222	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.643	2.646	-0.003	0.879	209141	0.2324		97.7	703	
449.00 > 99.00	2.643	2.646	-0.003	0.879	54849		3.81(1.94-5.82)	97.7	184	
D 72 13C8 PFOS										
507.00 > 99.00	3.000	3.008	-0.008	1.142	867980	2.36		98.6	2863	
D 19 13C5 PFNA										
468.00 > 423.00	3.008	3.009	-0.001	1.145	1781441	2.56		103	5002	
20 Perfluorononanoic acid										
463.00 > 419.00	3.008	3.010	-0.002	1.000	187411	0.2464		98.6	50.3	
463.00 > 169.00	3.008	3.010	-0.002	1.000	46871		4.00(1.90-5.69)	98.6	317	
D 18 13C4 PFOS										
503.00 > 80.00	3.008	3.010	-0.002	1.145	1623364	2.37		99.1	3726	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.008	3.011	-0.003	1.000	180631	0.2304		99.3	103	
499.00 > 99.00	3.008	3.011	-0.003	1.000	37951		4.76(2.31-6.93)	99.3	109	M
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.219	3.225	-0.006	1.070	311796	0.2297		98.6	508	
D 21 13C8 FOSA										
506.00 > 78.00	3.349	3.351	-0.002	1.275	2383706	2.48		99.4	5550	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.349	3.352	-0.003	1.000	231251	0.2430		97.2	1044	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.356	3.360	-0.004	1.277	439805	2.24		93.7	1572	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.356	3.362	-0.006	1.000	59227	0.2495		104	220	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.356	3.363	-0.007	1.116	131179	0.2414		101	678	
549.00 > 99.00	3.356	3.363	-0.007	1.116	49202		2.67(1.33-3.97)	101	262	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.364	3.370	-0.006	0.998	151756	0.2482		99.3	155	
513.00 > 169.00	3.371	3.370	0.001	1.000	27800		5.46(2.36-7.09)	99.3	89.4	
D 23 13C2 PFDA										
515.00 > 470.00	3.371	3.372	-0.001	1.283	1489933	2.48		99.2	3982	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.523	3.527	-0.004	1.341	744482	2.54		102	2045	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.531	3.530	0.001	1.002	67521	0.2423		96.9	80.4	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.683	3.691	-0.008	1.224	100073	0.2293		95.2	531	
599.00 > 99.00	3.691	3.691	0.0	1.227	36672		2.73(1.39-4.16)	95.2	244	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.691	3.698	-0.007	1.405	800112	2.56		103	603	
D 30 13C2 PFUnA										
565.00 > 520.00	3.700	3.703	-0.003	1.408	1213174	2.56		102	2021	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.700	3.703	-0.003	1.002	65273	0.2426		97.0	253	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.700	3.706	-0.006	1.000	97707	0.2243		89.7	79.1	
563.00 > 169.00	3.700	3.706	-0.006	1.000	25271		3.87(2.12-6.36)	89.7	118	
35 MeFOSA										
512.00 > 169.00	3.859	3.866	-0.007		66816	NC			224	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.869	3.866	0.003	1.286	453384	0.2338		99.3	1392	
D 36 13C2 PFDaA										
615.00 > 570.00	4.004	4.001	0.003	1.524	1243862	2.47		99.0	1655	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.004	4.001	0.003	1.000	147450	0.2741		110	98.2	
613.00 > 169.00	4.004	4.001	0.003	1.000	32534		4.53(2.13-6.40)	110	171	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.004	4.005	-0.001	1.193	41821	0.2503		104	326	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.246	4.243	0.003	1.412	45657	0.2311		95.5	279	
699.00 > 99.00	4.246	4.243	0.003	1.412	73312		0.62(0.00-0.00)	95.5	474	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.265	4.268	-0.003	1.065	126491	0.2418		96.7	67.9	
663.00 > 169.00	4.265	4.268	-0.003	1.065	44679		2.83(1.25-3.76)	96.7	317	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.505	4.508	-0.003	1.000	42727	0.2424		97.0	390	
713.00 > 219.00	4.505	4.508	-0.003	1.000	27021		1.58(0.71-2.13)	97.0	333	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.505	4.509	-0.004	1.715	1598506	2.56		102	3302	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.927	4.926	0.001	1.875	2681378	2.42		97.0	3295	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.927	4.928	-0.001	1.000	262244	0.2513		101	44.8	
813.00 > 169.00	4.927	4.928	-0.001	1.000	51083		5.13(2.86-8.58)	101	379	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.273	5.275	-0.002	1.070	300287	0.2560		102	43.4	
913.00 > 169.00	5.273	5.275	-0.002	1.070	41694		7.20(3.83-11.48)	102	298	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL3_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_007.d

Injection Date: 05-Nov-2018 15:52:20

Instrument ID: A8_N

Lims ID: IC L3 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 12

Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

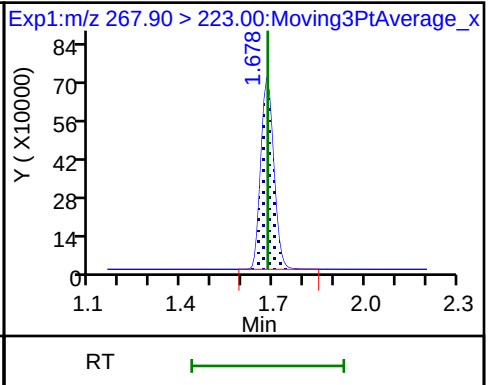
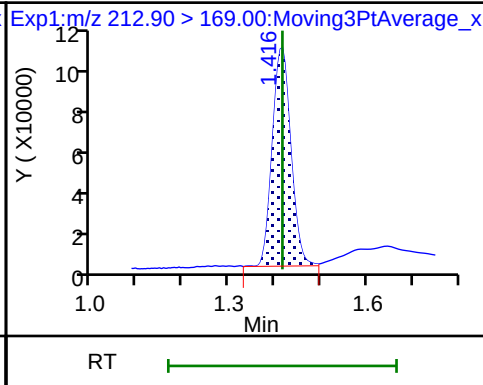
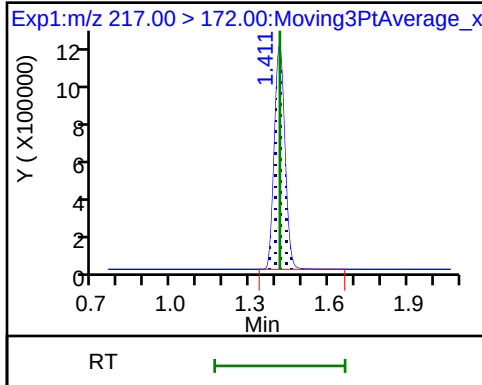
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

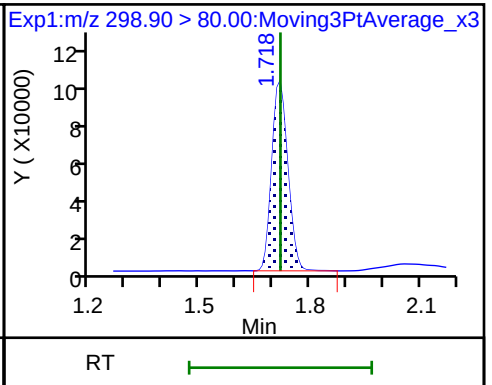
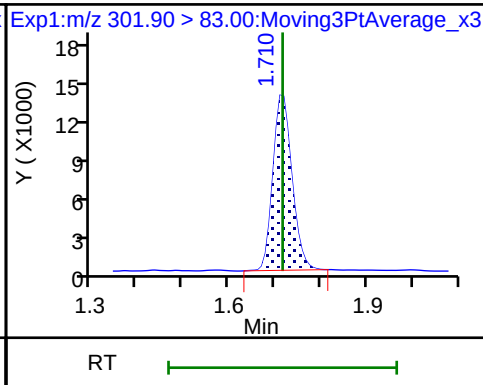
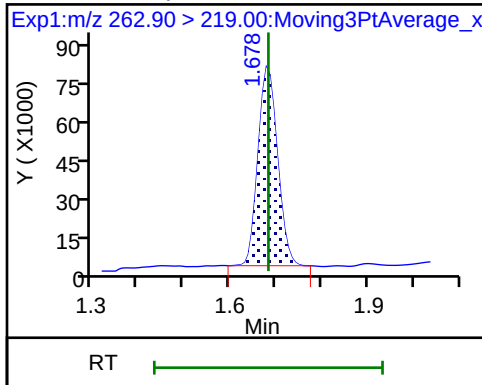
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

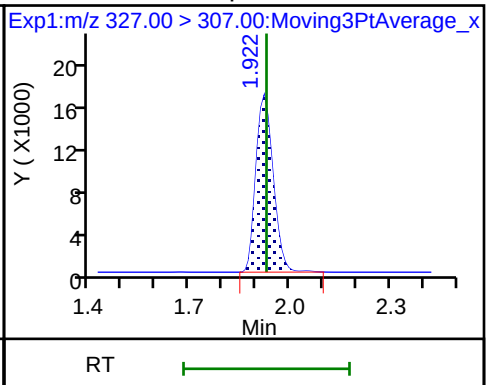
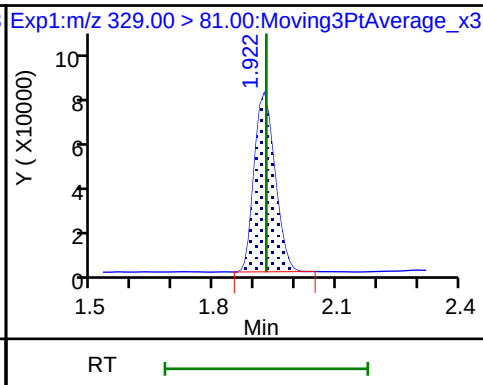
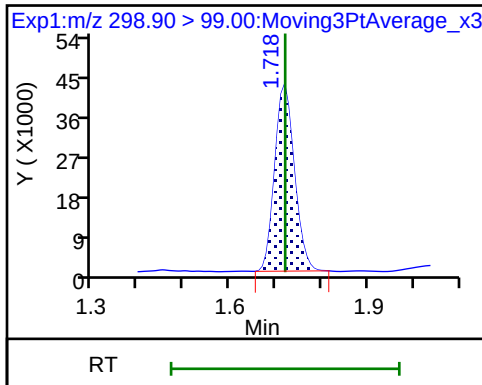
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

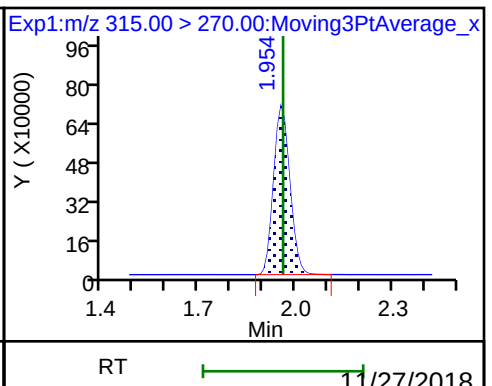
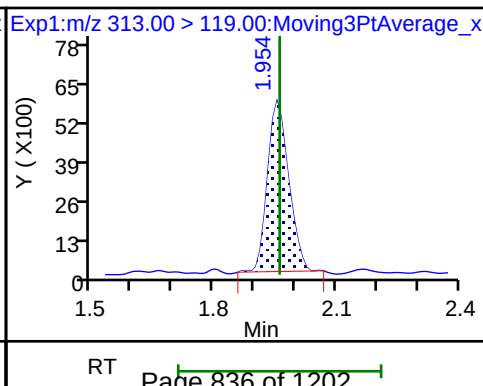
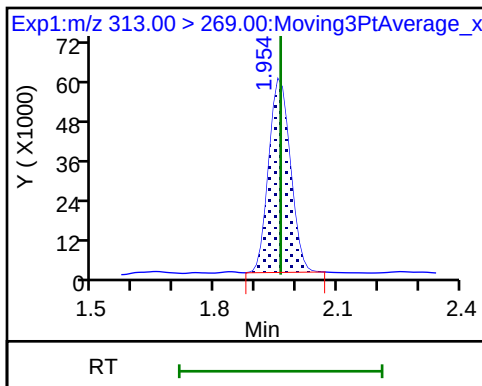
61 1H,1H,2H,2H-perfluorohexanesulfoni

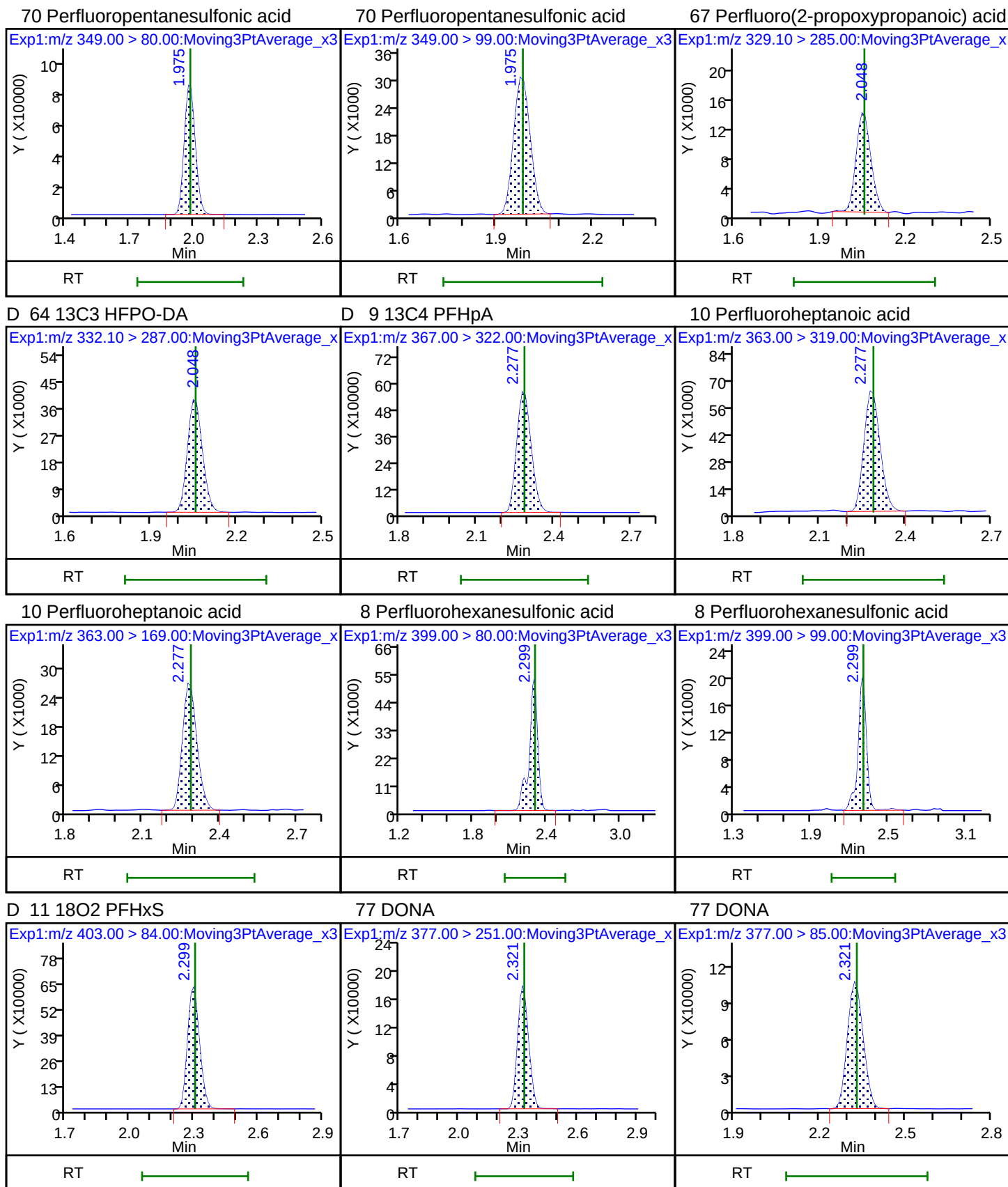


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

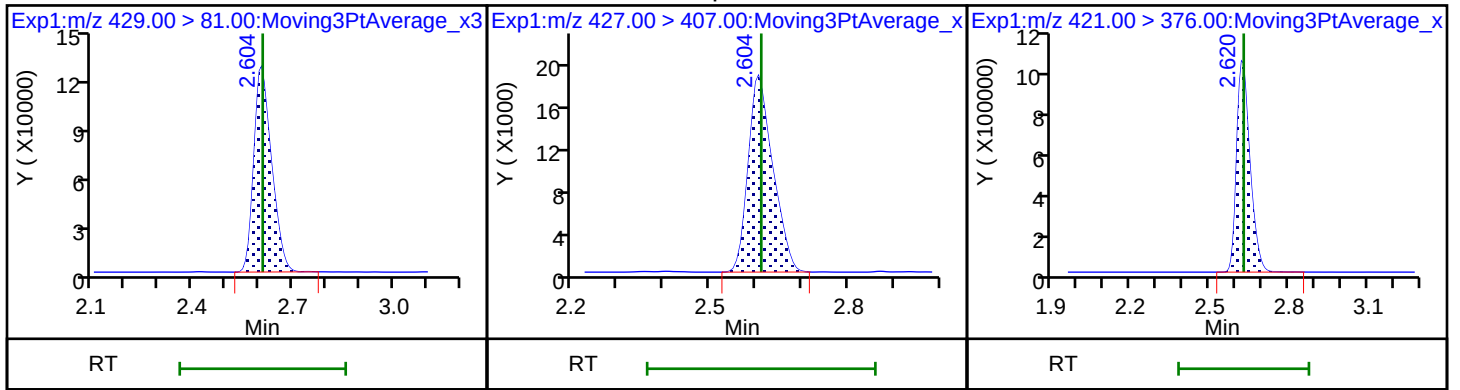
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

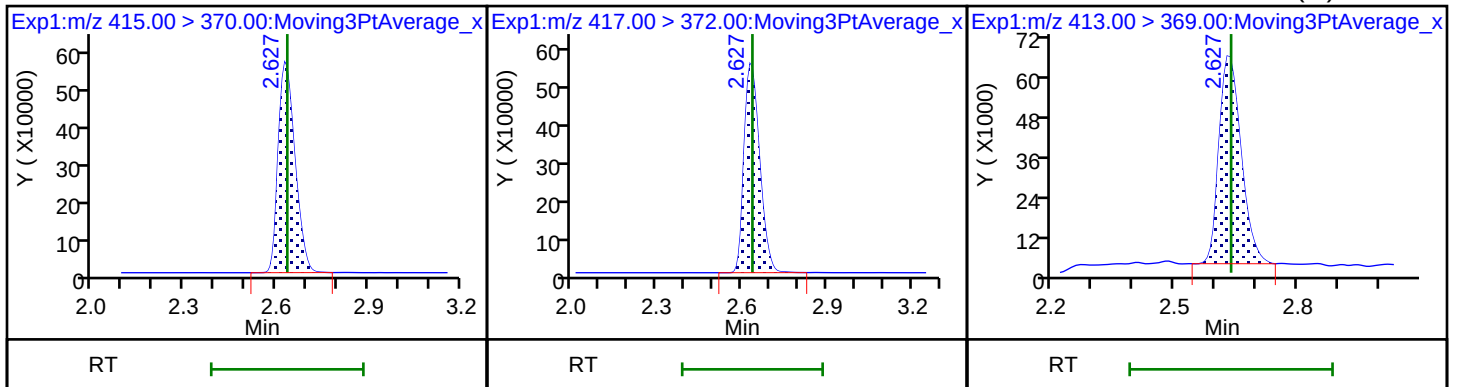
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



* 62 13C2 PFOA

D 14 13C4 PFOA

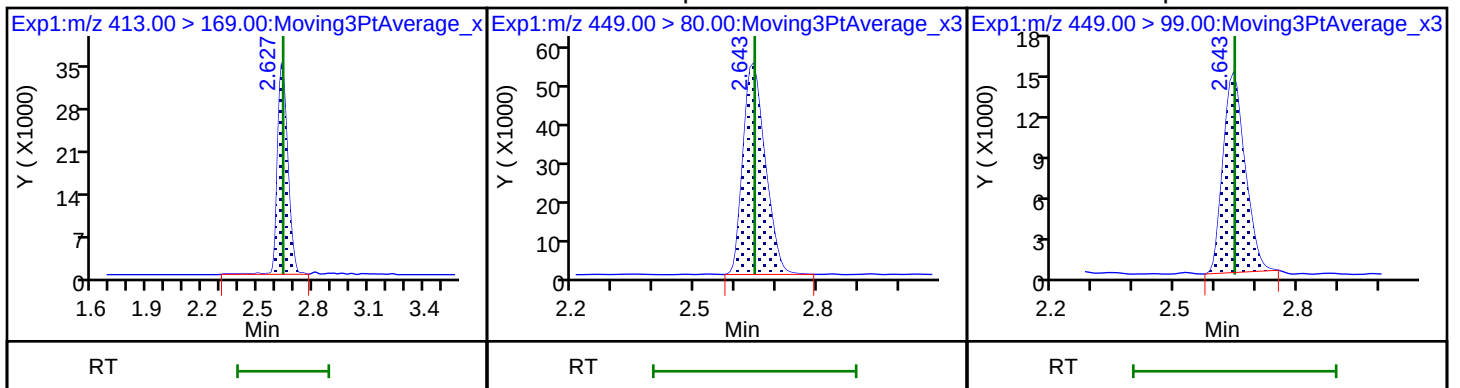
15 Perfluorooctanoic acid (M)



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

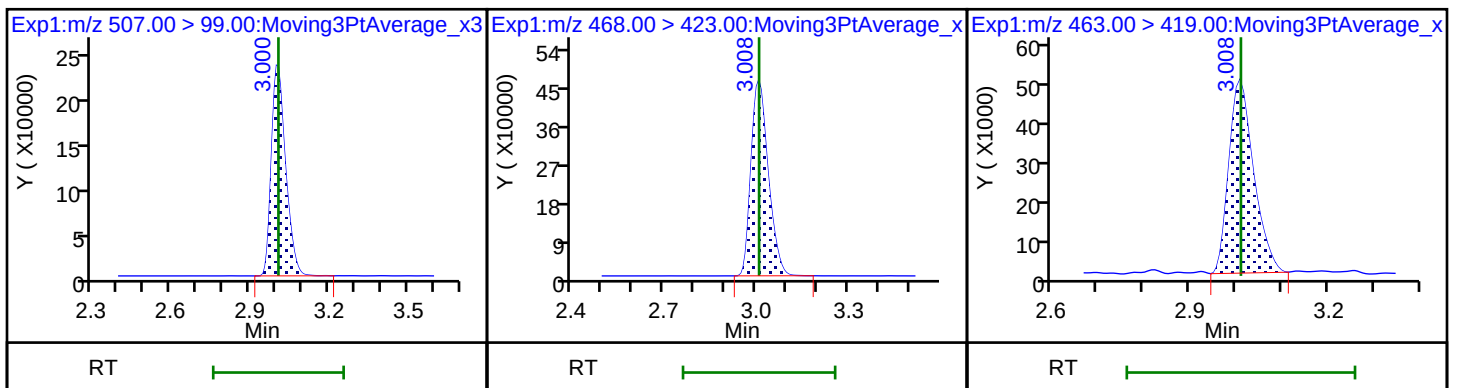
16 Perfluoroheptanesulfonic acid

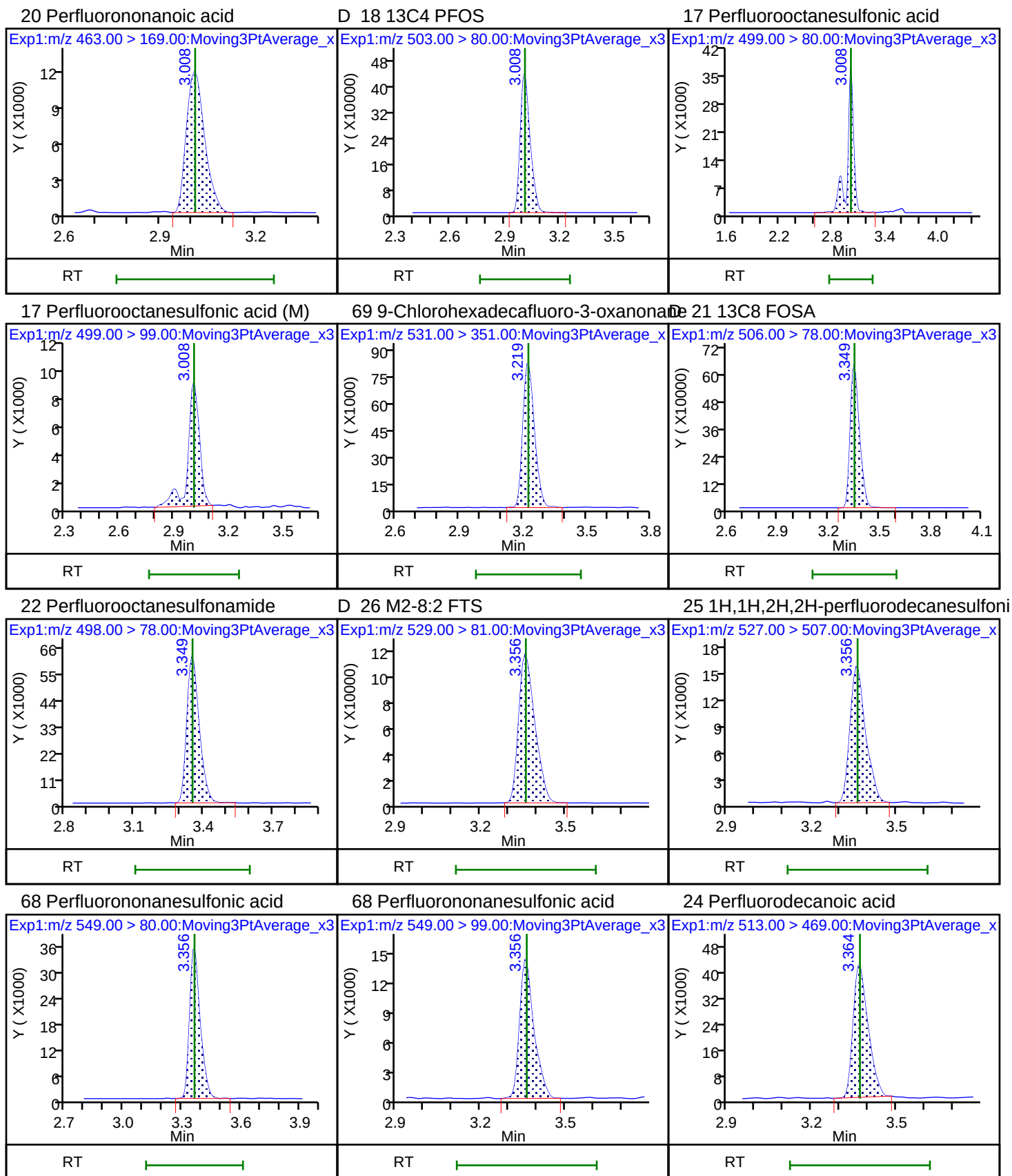


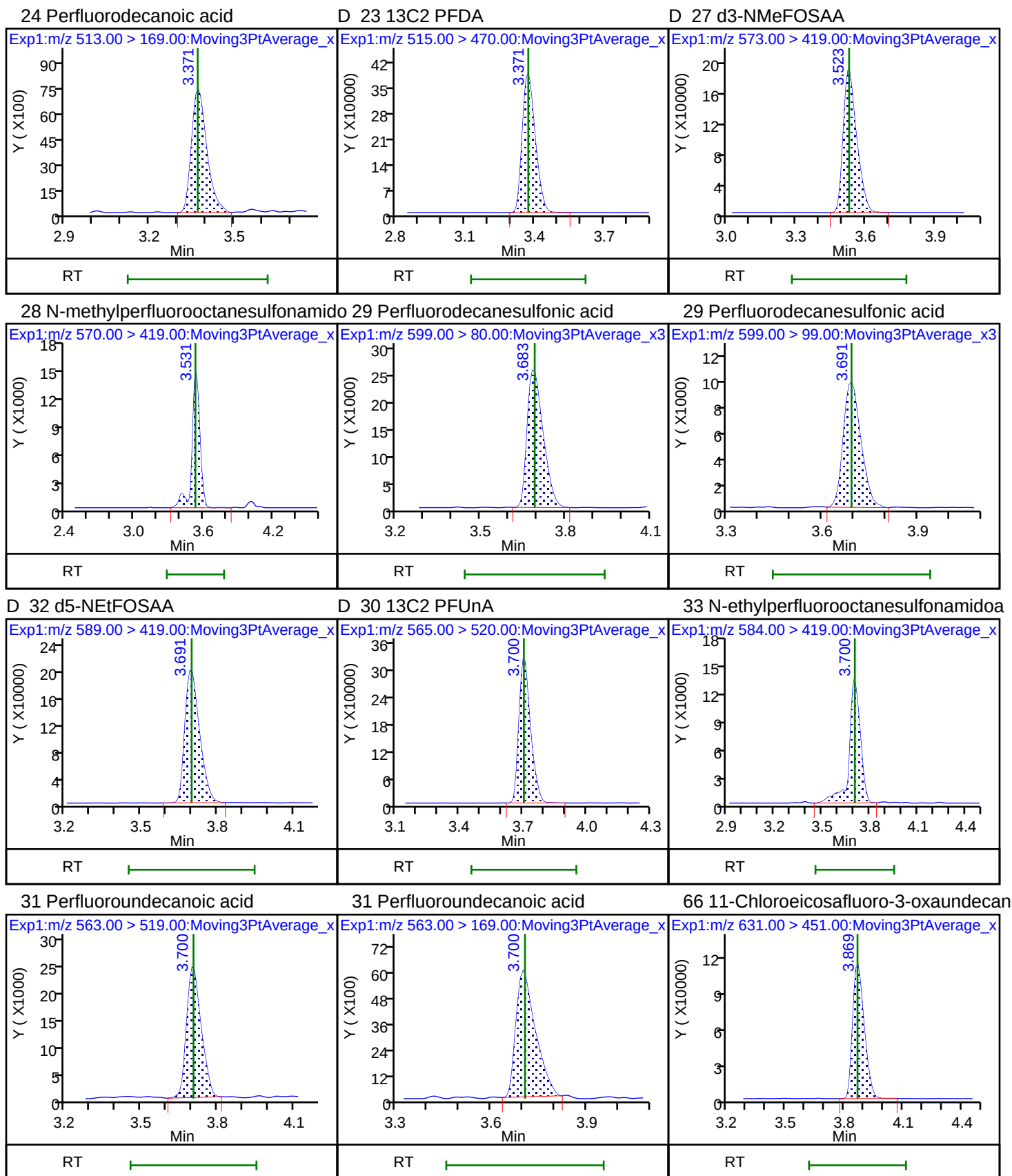
D 72 13C8 PFOS

D 19 13C5 PFNA

20 Perfluorononanoic acid



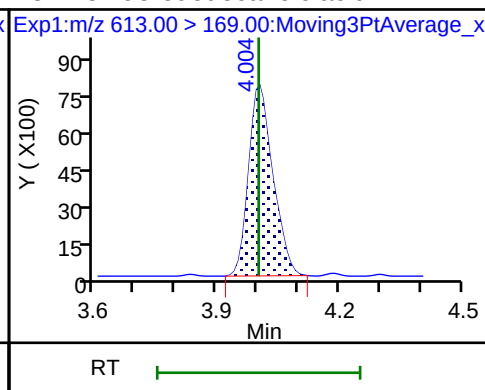
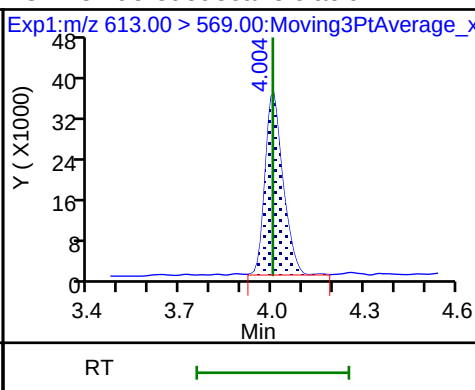
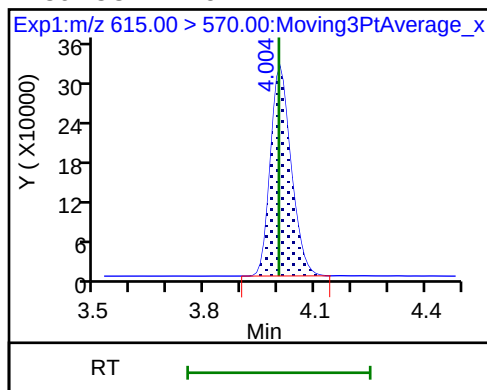




D 36 13C2 PFDaA

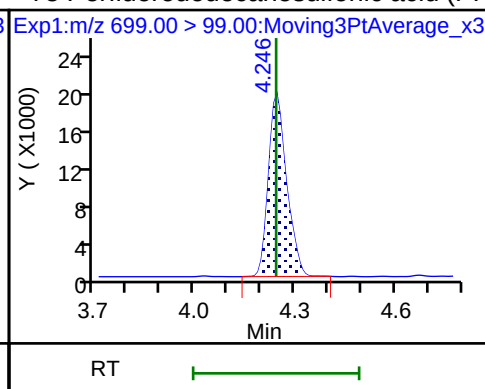
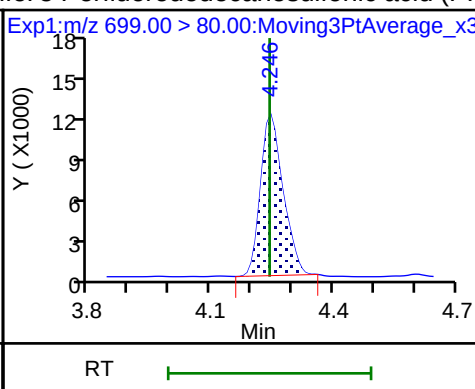
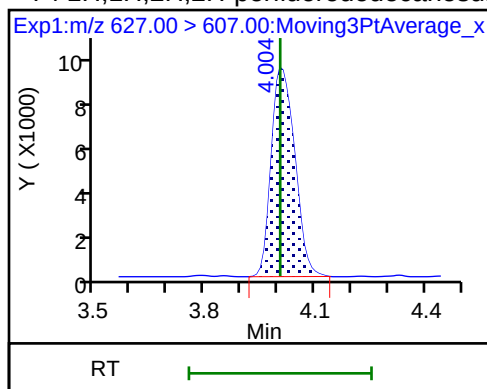
37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



74 1H,1H,2H,2H-perfluorododecanesulfonate 75 Perfluorododecanesulfonic acid (PF

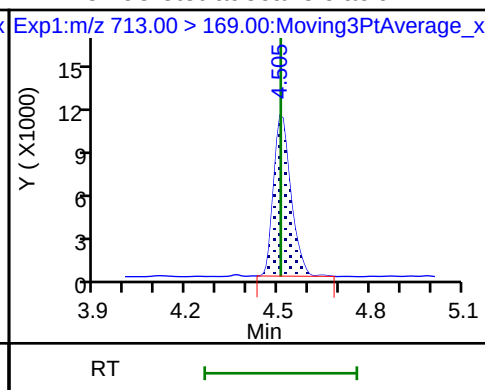
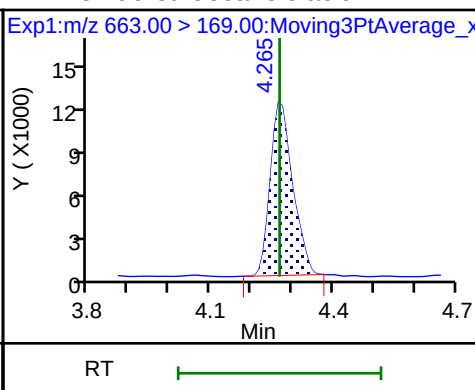
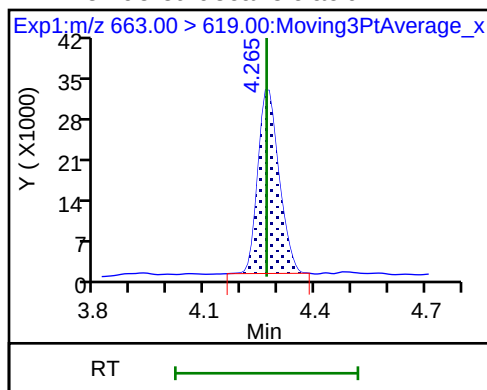
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

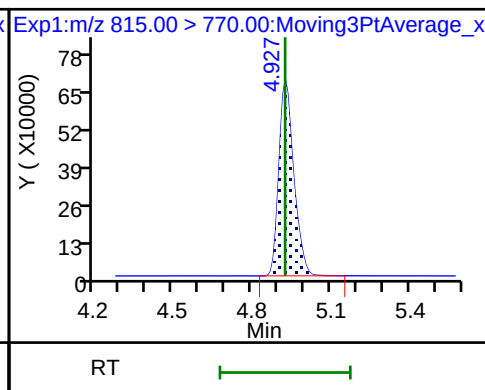
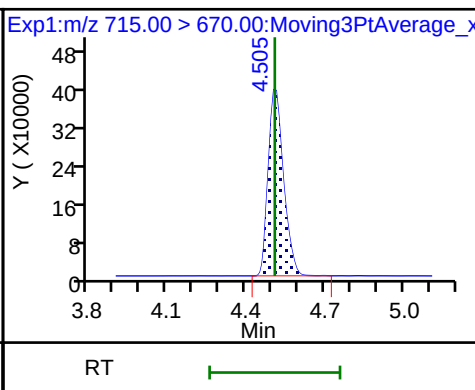
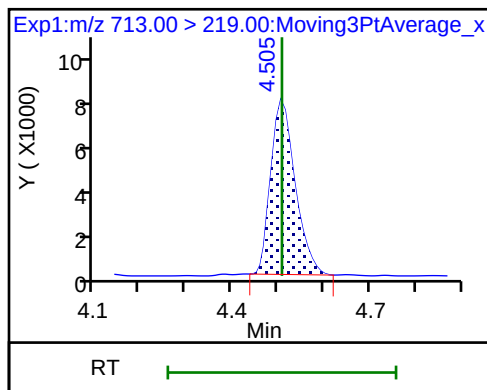
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

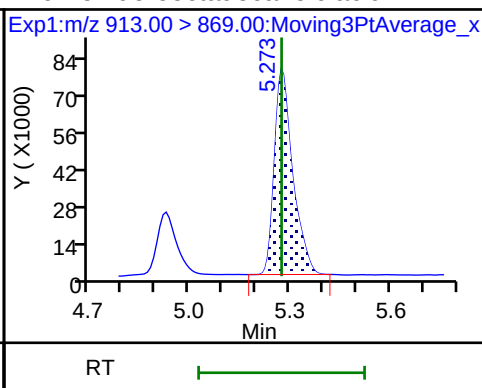
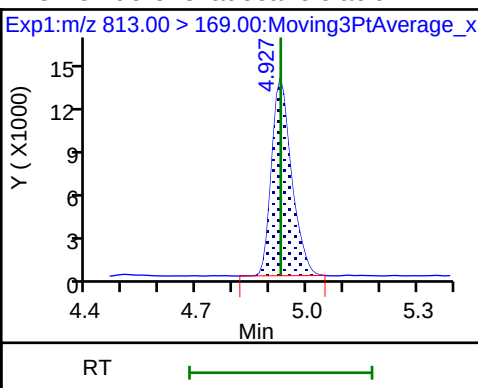
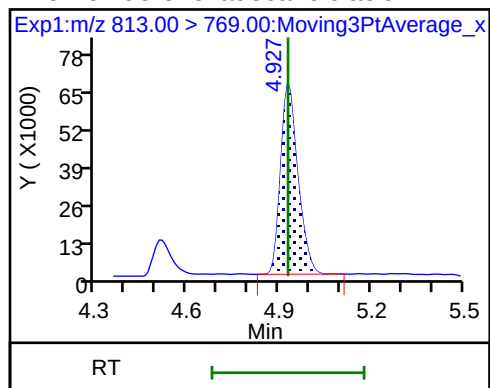
D 44 13C2 PFHxDA



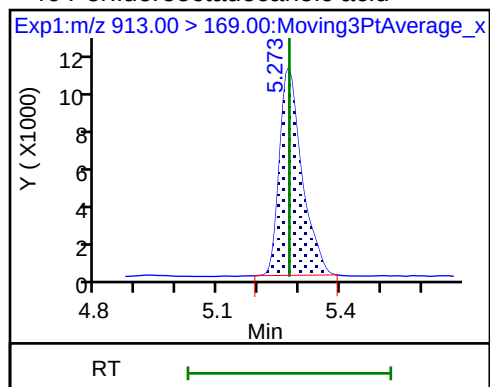
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_007.d

Injection Date: 05-Nov-2018 15:52:20

Instrument ID: A8_N

Lims ID: IC L3 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

12

Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

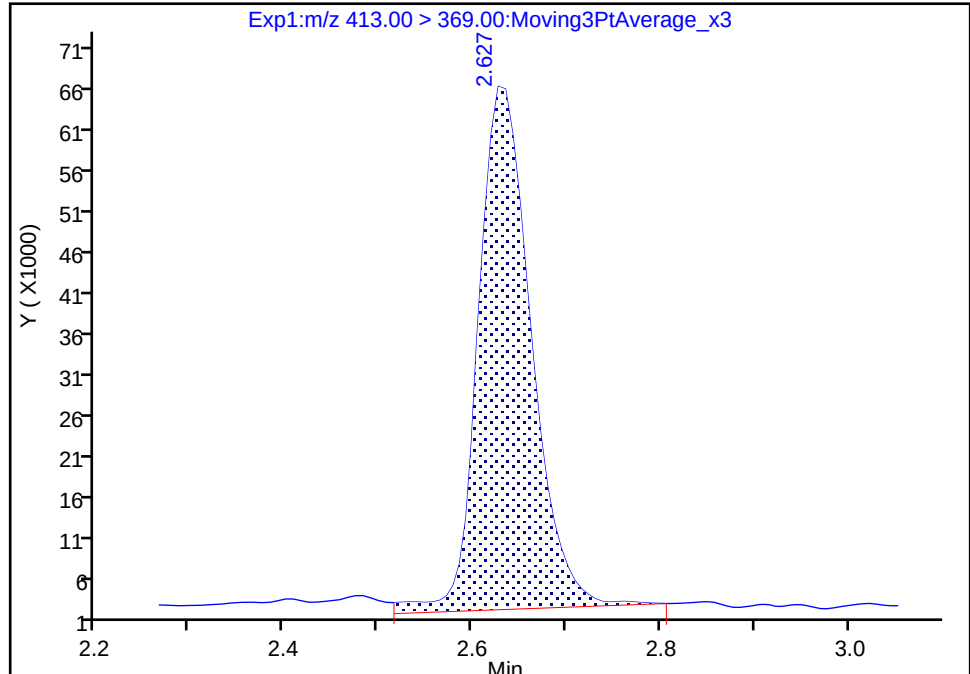
Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

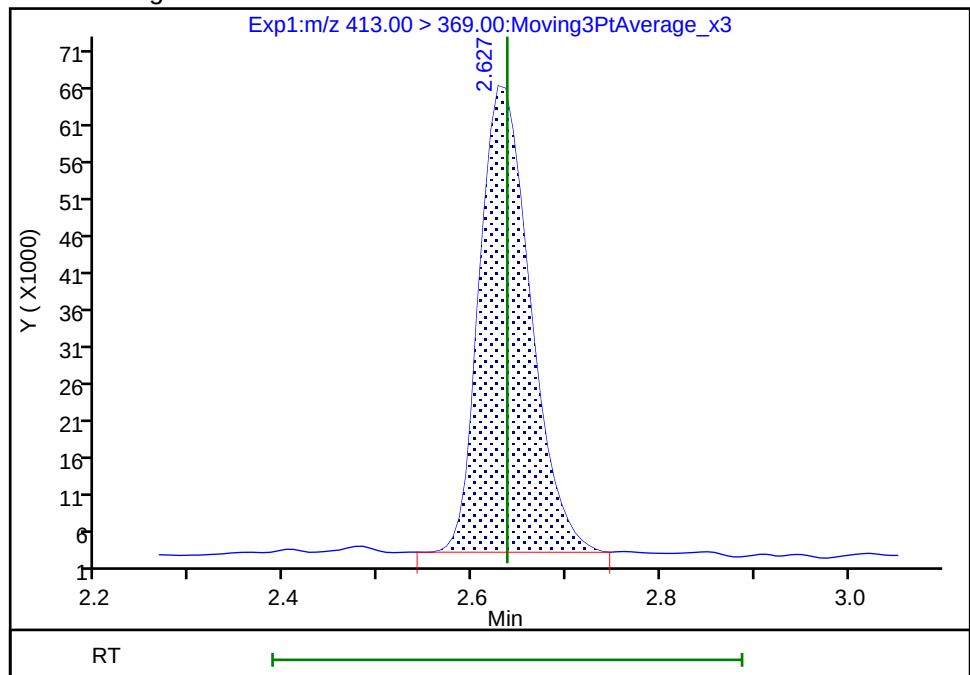
RT: 2.63
Area: 250653
Amount: 0.256376
Amount Units: ng/ml

Processing Integration Results



RT: 2.63
Area: 237151
Amount: 0.247206
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:29:30

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_007.d

Injection Date: 05-Nov-2018 15:52:20

Instrument ID: A8_N

Lims ID: IC L3 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

12

Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

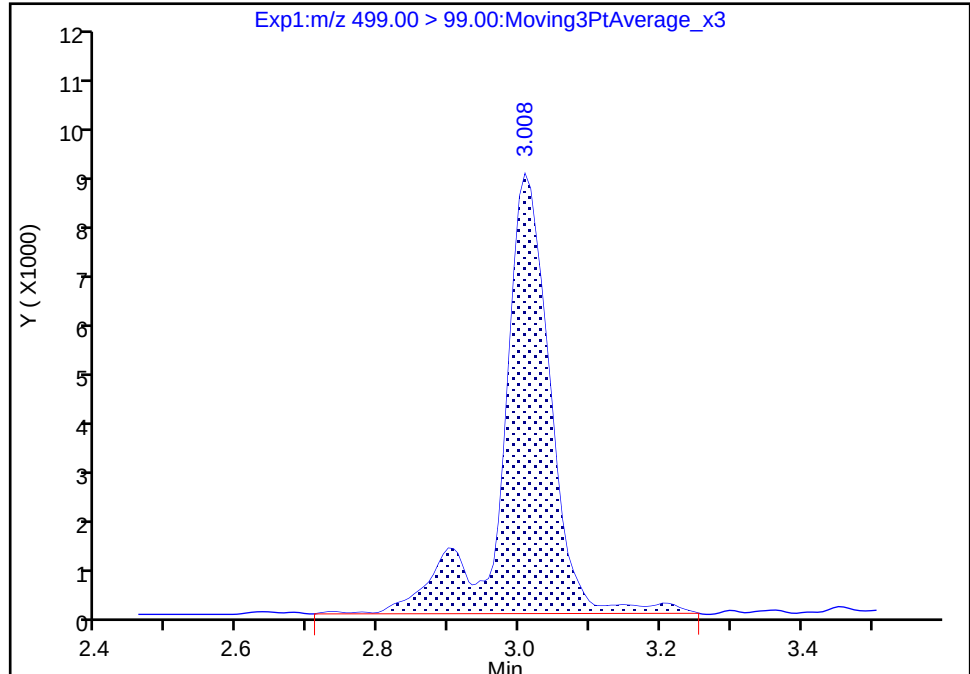
Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

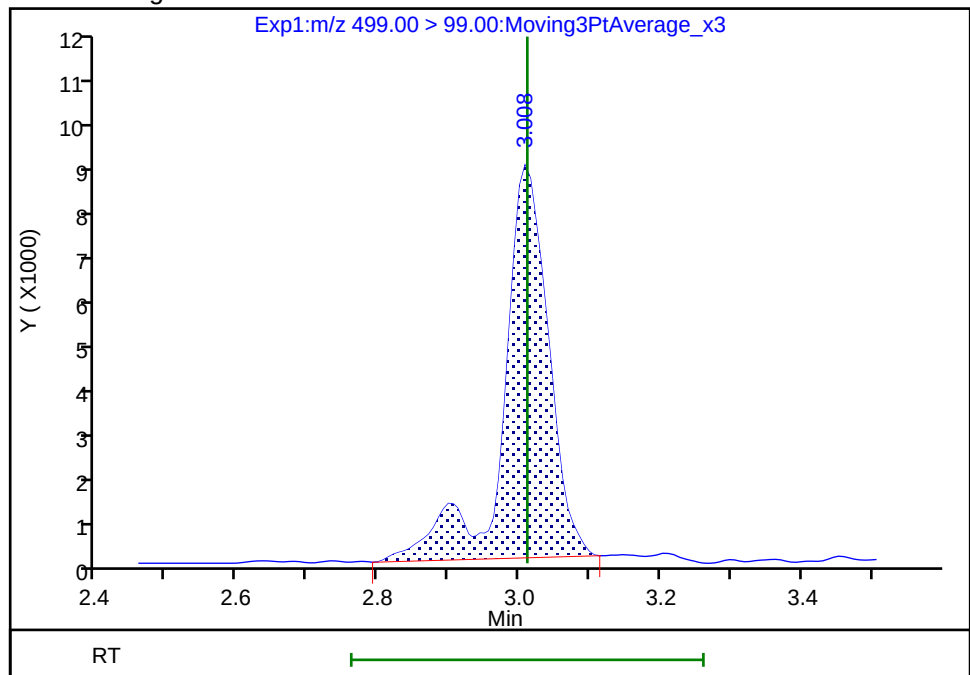
RT: 3.01
Area: 40716
Amount: 0.227702
Amount Units: ng/ml

Processing Integration Results



RT: 3.01
Area: 37951
Amount: 0.230358
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 05-Nov-2018 16:29:43

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_008.d
 Lims ID: IC L4 Full
 Client ID:
 Sample Type: ICIS Calib Level: 4
 Inject. Date: 05-Nov-2018 15:59:46 ALS Bottle#: 13 Worklist Smp#: 5
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 4
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub37
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 05-Nov-2018 16:59:04 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0305

First Level Reviewer: roycea

Date: 05-Nov-2018 16:32:13

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	1.414	1.413	0.001	0.536	3190775	2.49		99.7	8509	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.418	1.415	0.003	1.004	1213788	1.00		100	176	
D 3 13C5 PFPeA										
267.90 > 223.00	1.684	1.681	0.003	0.638	2159677	2.56		102	8889	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.684	1.682	0.002	1.000	916539	0.9466		94.7	145	
D 47 13C3 PFBS										
301.90 > 83.00	1.716	1.716	0.0	0.650	40275	2.25		96.9	230	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.724	1.719	0.005	1.005	1227851	0.9040		102	512	
298.90 > 99.00	1.724	1.719	0.005	1.005	531856		2.31(1.25-3.74)	102	353	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.928	1.928	0.0	0.731	268526	2.29		98.0	265	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.928	1.929	-0.001	1.124	253075	0.9808		105	1997	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.960	1.960	0.0	1.000	902432	0.9833		98.3	386	
313.00 > 119.00	1.960	1.960	0.0	1.000	78023		11.57(5.03-15.10)	98.3	306	
D 7 13C2 PFHxA										
315.00 > 270.00	1.960	1.960	0.0	0.742	2256270	2.43		97.2	8473	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.991	1.983	0.008	1.160	1179089	1.01		107	2890	
349.00 > 99.00	1.991	1.983	0.008	1.160	430154		2.74(1.36-4.07)	107	1571	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.064	2.056	0.008	1.000	172554	0.8459		84.6	155	

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	2.064	2.056	0.008	0.782	151615	2.58		103	839	
D 9 13C4 PFHpA										
367.00 > 322.00	2.292	2.285	0.007	0.868	2134715	2.49		99.6	5124	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.292	2.288	0.004	1.000	909372	0.9591		95.9	269	
363.00 > 169.00	2.292	2.288	0.004	1.000	389580		2.33(1.13-3.40)	95.9	619	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.303	2.305	-0.002	1.000	998869	0.8247		90.6	801	
399.00 > 99.00	2.303	2.305	-0.002	1.000	342852		2.91(1.50-4.49)	90.6	583	
D 11 18O2 PFHxS										
403.00 > 84.00	2.303	2.305	-0.002	0.872	2511444	2.39		101	4806	
77 DONA										
377.00 > 251.00	2.336	2.329	0.007	0.775	2730298	0.9525		101	5288	
377.00 > 85.00	2.336	2.329	0.007	0.775	1545047		1.77(0.85-2.54)	101	3731	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.616	2.609	0.007	0.991	458750	2.47		104	1327	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.616	2.611	0.005	1.000	271006	0.8874		93.6	1067	
D 73 13C8 PFOA										
421.00 > 376.00	2.631	2.628	0.003	0.997	3443086	2.37		96.7	6482	
* 62 13C2 PFOA										
415.00 > 370.00	2.639	2.636	0.003		2156265	2.50			5015	
D 14 13C4 PFOA										
417.00 > 372.00	2.639	2.636	0.003	1.000	2089403	2.49		99.5	4298	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.639	2.637	0.002	1.000	968056	1.02		102	118	
413.00 > 169.00	2.639	2.637	0.002	1.000	516337		1.87(0.84-2.52)	102	851	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.647	2.646	0.001	0.879	887409	0.9425		99.0	2329	
449.00 > 99.00	2.647	2.646	0.001	0.879	226377		3.92(1.94-5.82)	99.0	735	
D 72 13C8 PFOS										
507.00 > 99.00	3.013	3.008	0.005	1.141	901122	2.43		102	2348	
D 19 13C5 PFNA										
468.00 > 423.00	3.013	3.009	0.004	1.141	1718987	2.46		98.5	4542	
20 Perfluorononanoic acid										
463.00 > 419.00	3.013	3.010	0.003	1.000	749501	1.02		102	213	
463.00 > 169.00	3.013	3.010	0.003	1.000	196222		3.82(1.90-5.69)	102	966	
D 18 13C4 PFOS										
503.00 > 80.00	3.013	3.010	0.003	1.141	1698658	2.47		103	3032	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.013	3.011	0.002	1.000	727964	0.8872		95.6	414	
499.00 > 99.00	3.013	3.011	0.002	1.000	155860		4.67(2.31-6.93)	95.6	444	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.224	3.225	-0.001	1.070	1254849	0.8833		94.8	2039	
D 21 13C8 FOSA										
506.00 > 78.00	3.355	3.351	0.004	1.271	2411284	2.50		100	4145	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.355	3.352	0.003	1.000	940445	0.9768		97.7	2845	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.362	3.360	0.002	1.274	475074	2.41		101	1672	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.362	3.362	0.0	1.000	231938	0.9045		94.4	793	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.362	3.363	-0.001	1.116	532168	0.9358		97.5	1354	
549.00 > 99.00	3.362	3.363	-0.001	1.116	186883		2.85(1.33-3.97)	97.5	1086	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.377	3.370	0.007	1.000	594214	0.9436		94.4	523	
513.00 > 169.00	3.377	3.370	0.007	1.000	114836		5.17(2.36-7.09)	94.4	235	
D 23 13C2 PFDA										
515.00 > 470.00	3.377	3.372	0.005	1.279	1534784	2.54		102	2726	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.529	3.527	0.002	1.337	735735	2.50		100.0	2925	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.537	3.530	0.007	1.002	271276	0.9851		98.5	1484	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.699	3.691	0.008	1.228	418125	0.9158		95.0	1350	
599.00 > 99.00	3.690	3.691	-0.001	1.225	139288		3.00(1.39-4.16)	95.0	1026	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.699	3.698	0.001	1.401	794063	2.53		101	773	
D 30 13C2 PFUnA										
565.00 > 520.00	3.707	3.703	0.004	1.405	1164806	2.44		97.8	2027	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.707	3.703	0.004	1.002	281640	1.05		105	1111	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.707	3.706	0.001	1.000	399664	0.9554		95.5	318	
563.00 > 169.00	3.707	3.706	0.001	1.000	107983		3.70(2.12-6.36)	95.5	460	
35 MeFOSA										
512.00 > 169.00	3.868	3.866	0.002		273579	NC			374	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.868	3.866	0.002	1.284	1820731	0.8973		95.3	2915	
D 36 13C2 PFDaA										
615.00 > 570.00	4.004	4.001	0.003	1.517	1301600	2.58		103	2577	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.004	4.001	0.003	1.000	512231	0.9101		91.0	330	
613.00 > 169.00	4.004	4.001	0.003	1.000	149841		3.42(2.13-6.40)	91.0	663	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.004	4.005	-0.001	1.191	168534	0.9339		96.9	1112	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.244	4.243	0.001	1.409	197574	0.9559		98.7	1183	
699.00 > 99.00	4.244	4.243	0.001	1.409	302683		0.65(0.00-0.00)	98.7	1541	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.273	4.268	0.005	1.067	557204	1.02		102	314	
663.00 > 169.00	4.273	4.268	0.005	1.067	186226		2.99(1.25-3.76)	102	880	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.513	4.508	0.005	1.000	170019	0.9684		96.8	1608	
713.00 > 219.00	4.503	4.508	-0.005	0.998	114892		1.48(0.71-2.13)	96.8	836	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.513	4.509	0.004	1.710	1592014	2.53		101	3118	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.927	4.926	0.001	1.867	2868904	2.58		103	3781	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.935	4.928	0.007	1.002	1024380	0.9758		97.6	170	
813.00 > 169.00	4.935	4.928	0.007	1.002	200763		5.10(2.86-8.58)	97.6	1171	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.280	5.275	0.005	1.072	1230663	0.9808		98.1	188	
913.00 > 169.00	5.273	5.275	-0.002	1.070	170492		7.22(3.83-11.48)	98.1	1077	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL4_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_008.d

Injection Date: 05-Nov-2018 15:59:46

Instrument ID: A8_N

Lims ID: IC L4 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 13

Worklist Smp#: 5

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

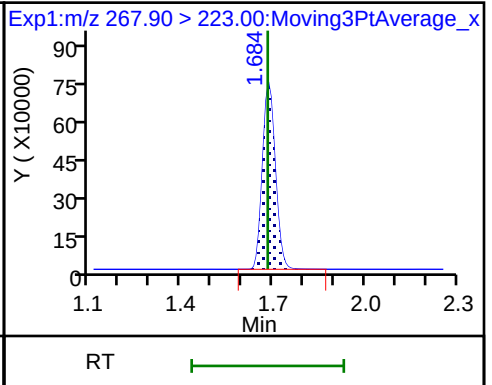
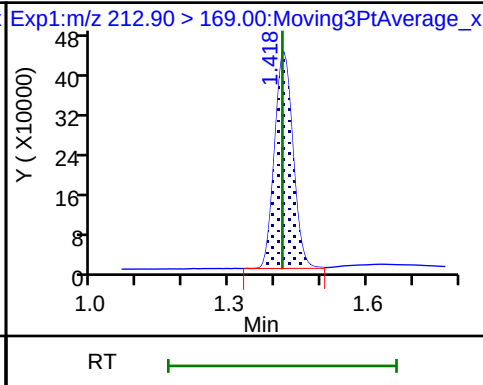
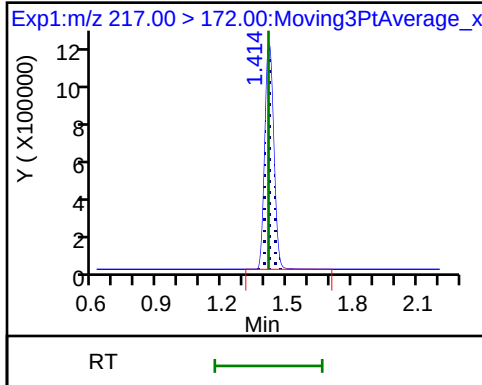
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

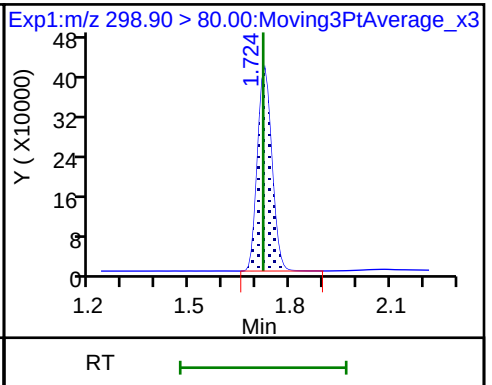
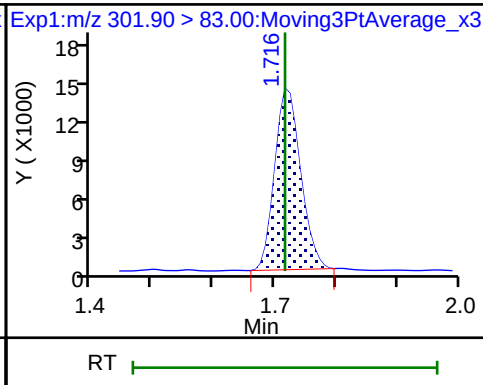
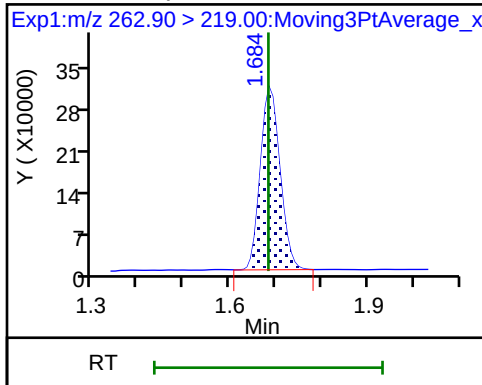
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

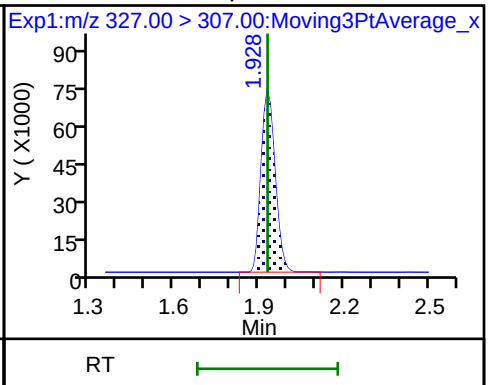
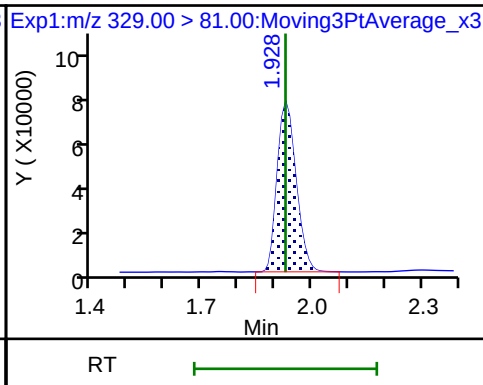
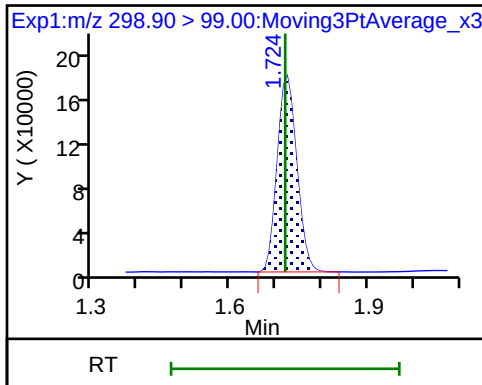
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

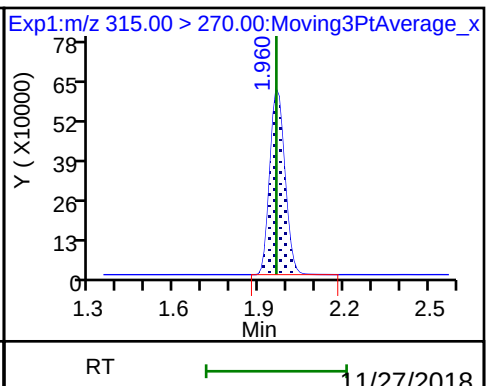
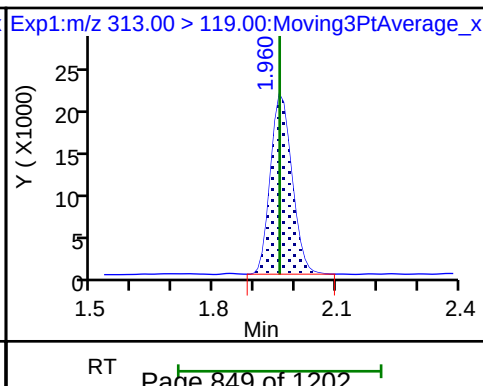
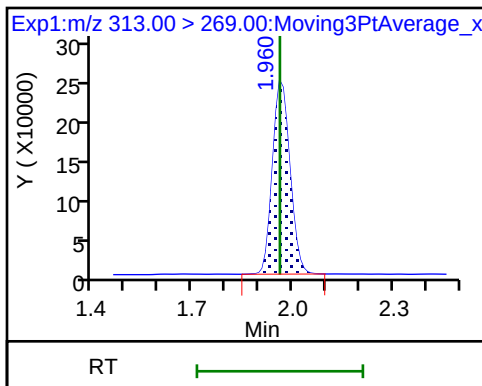
61 1H,1H,2H,2H-perfluorohexanesulfoni

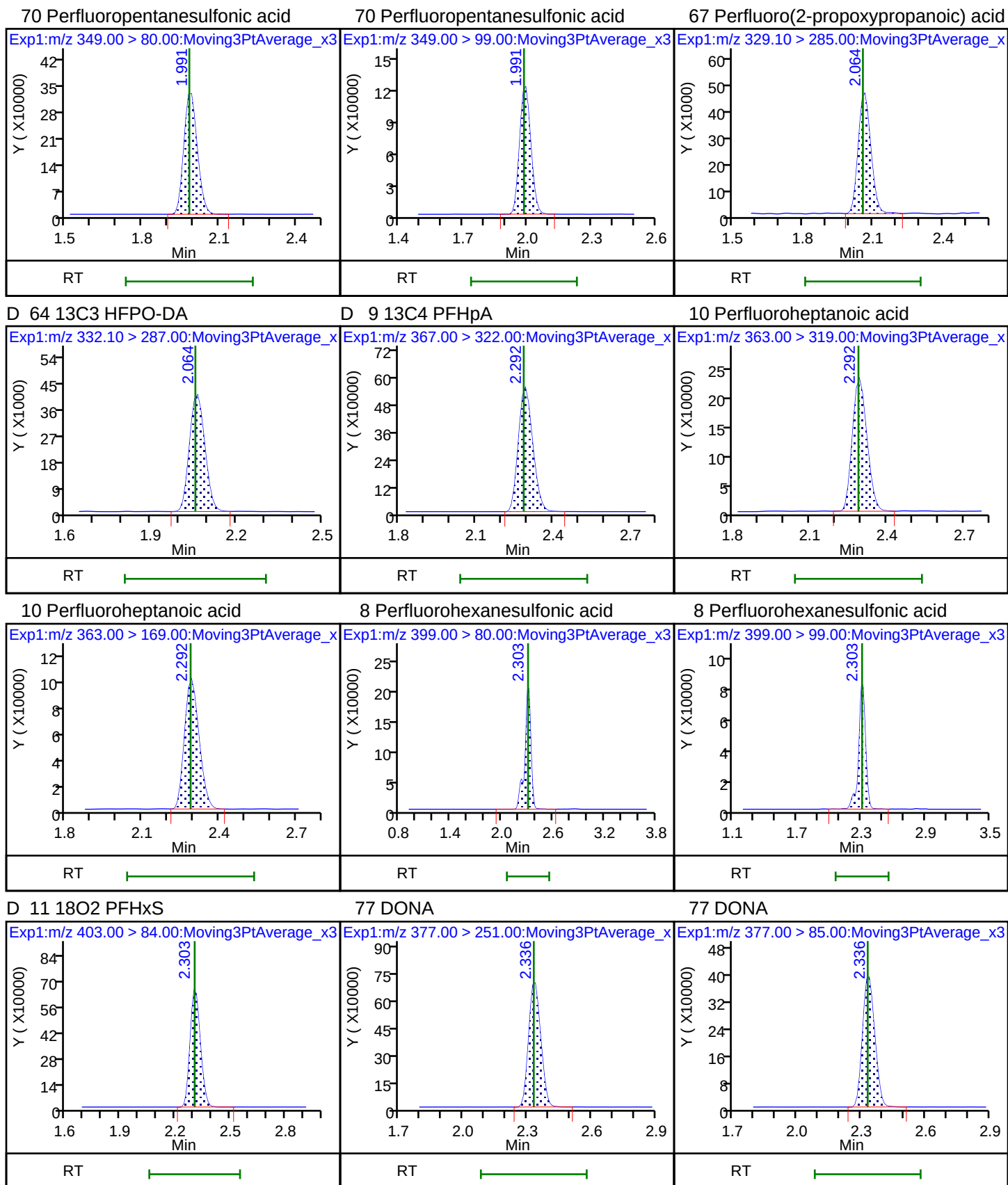


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

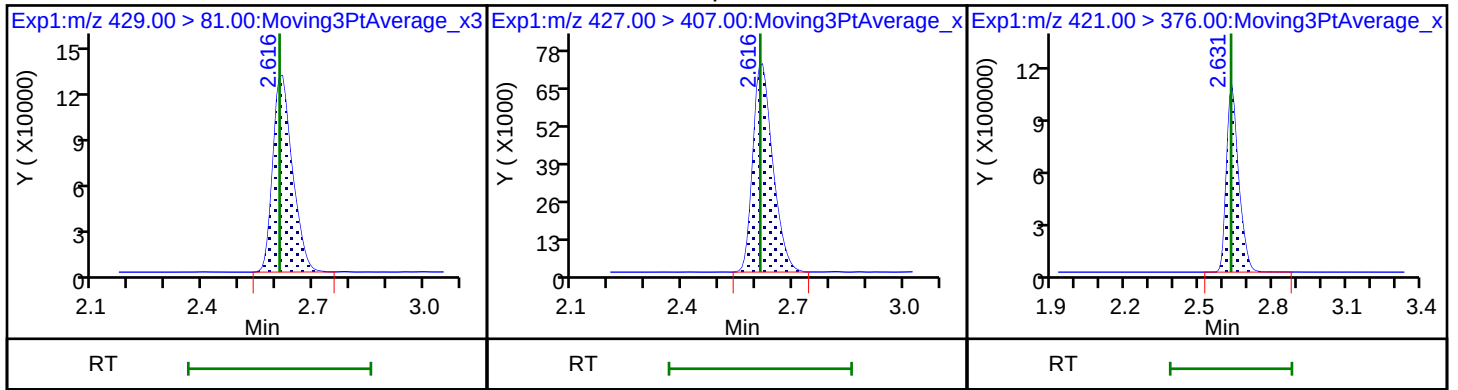
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

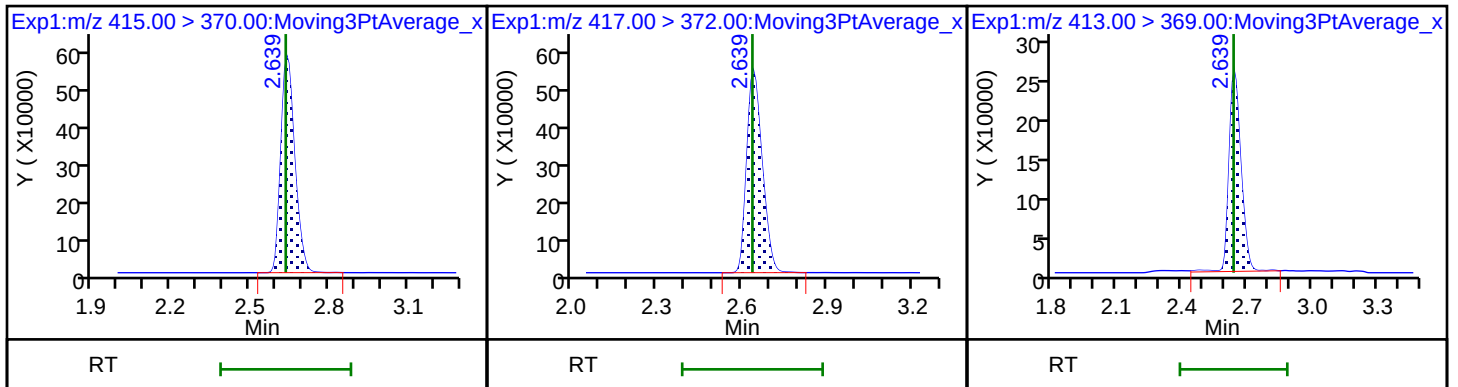
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



* 62 13C2 PFOA

D 14 13C4 PFOA

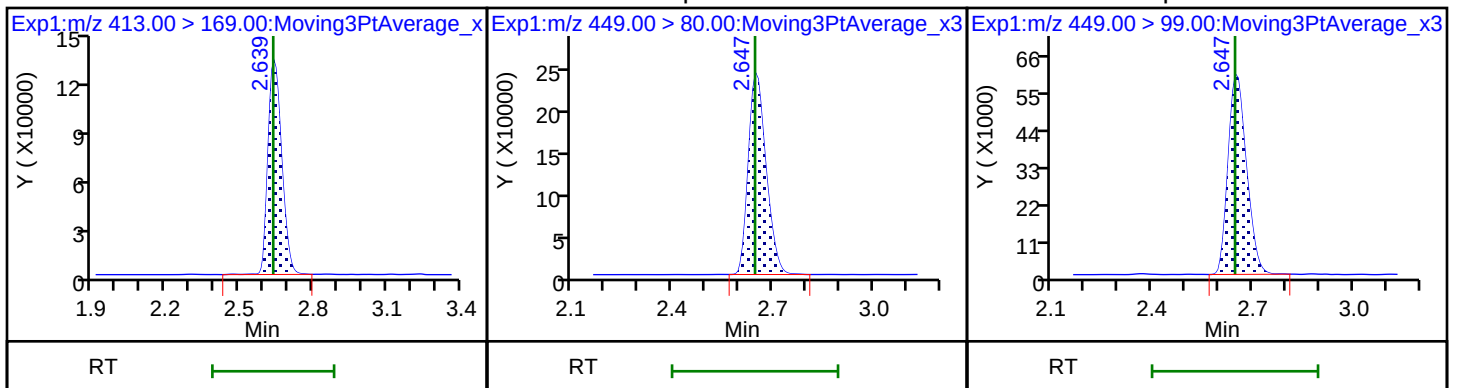
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

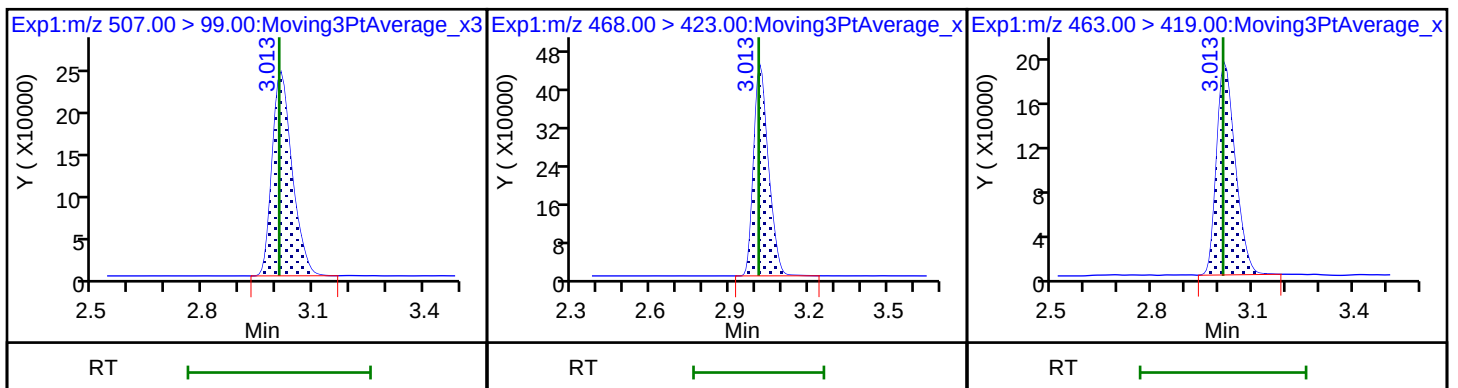
16 Perfluoroheptanesulfonic acid

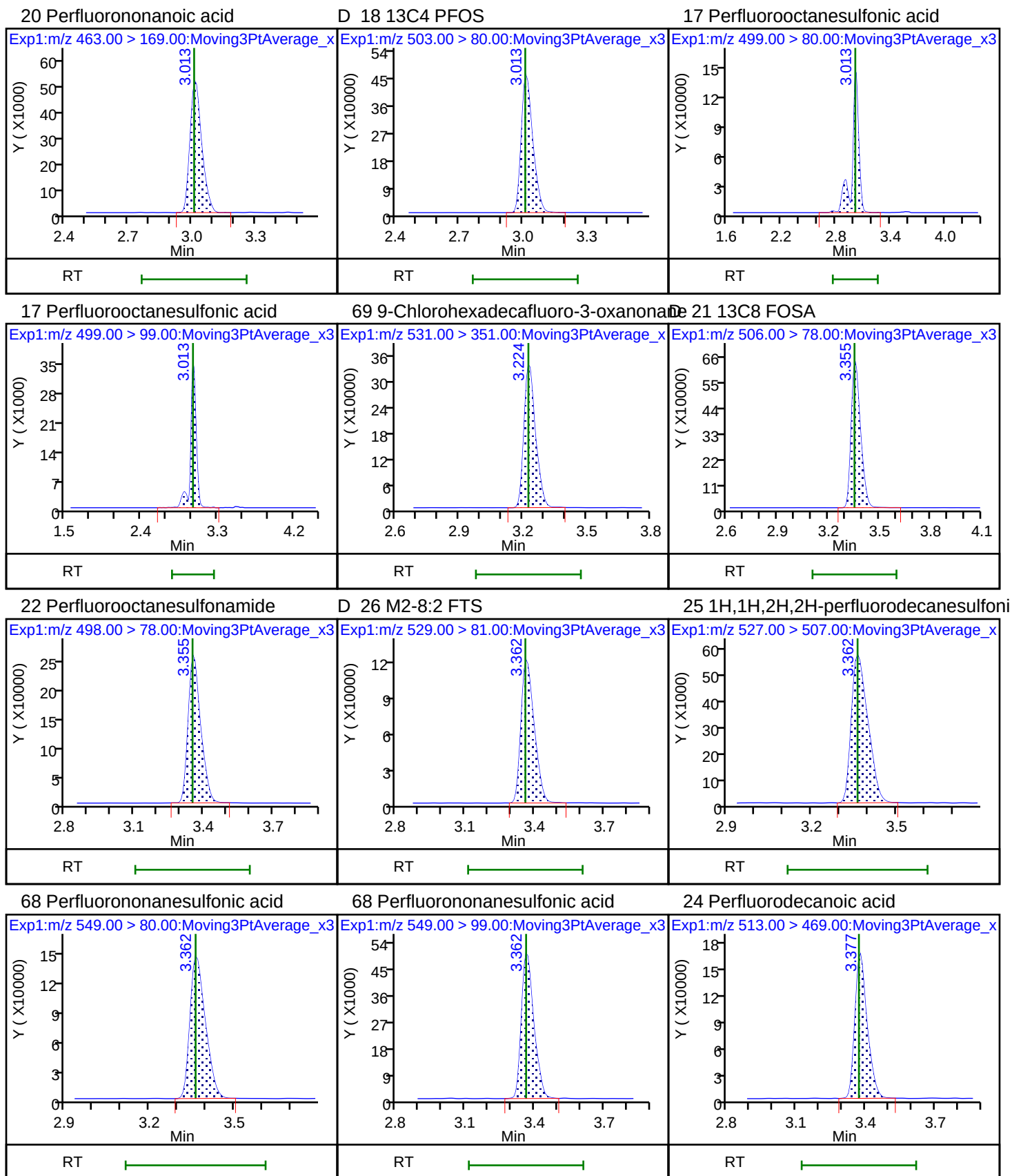


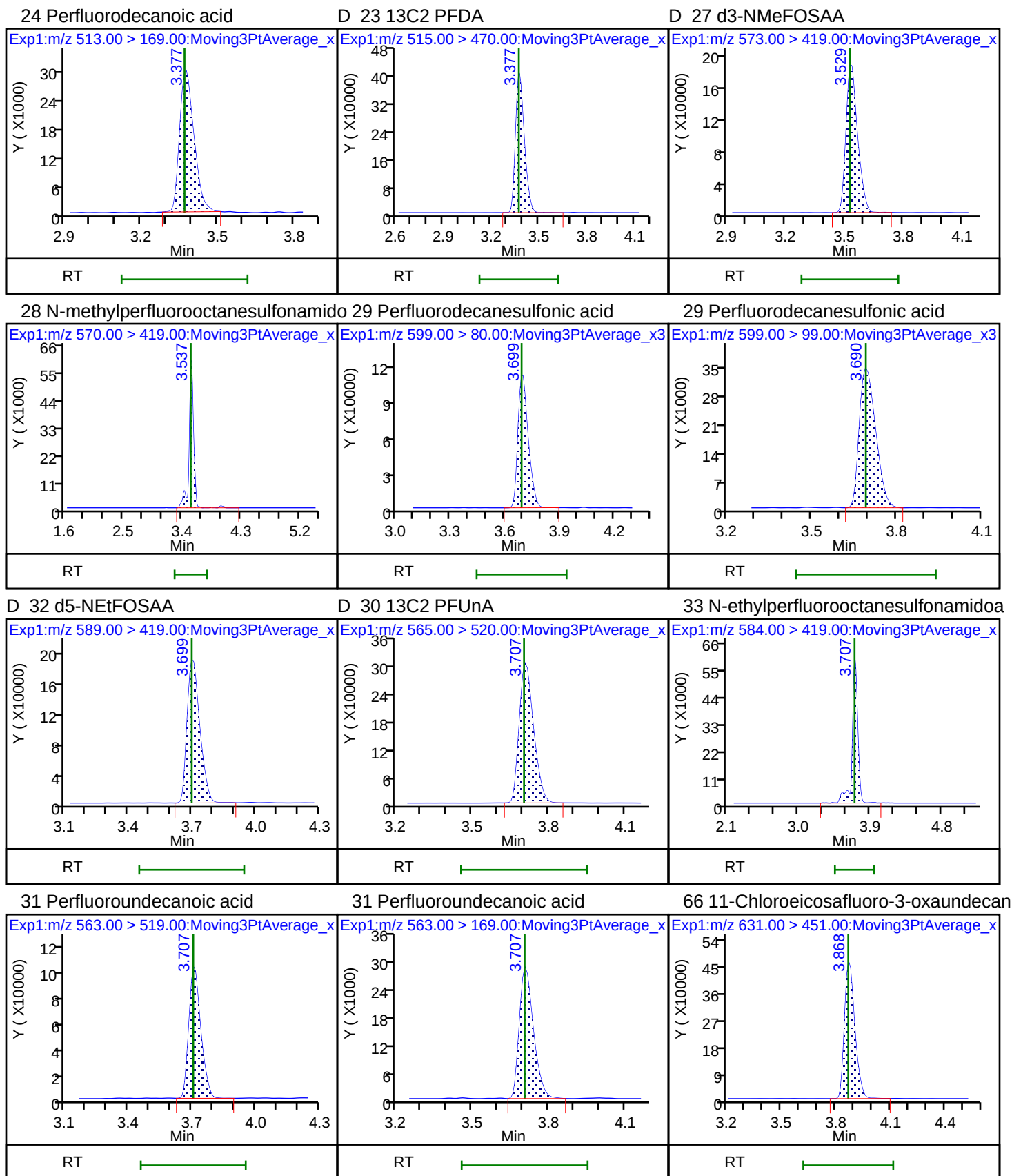
D 72 13C8 PFOS

D 19 13C5 PFNA

20 Perfluorononanoic acid



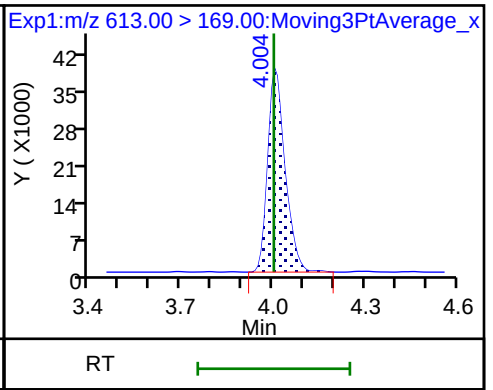
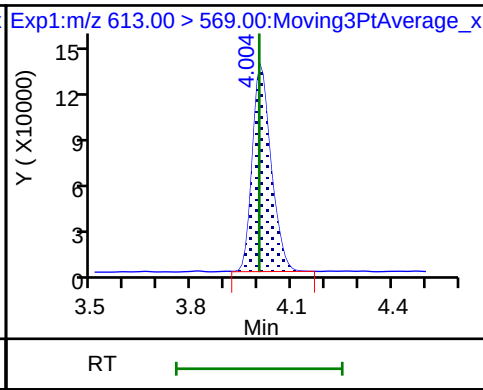
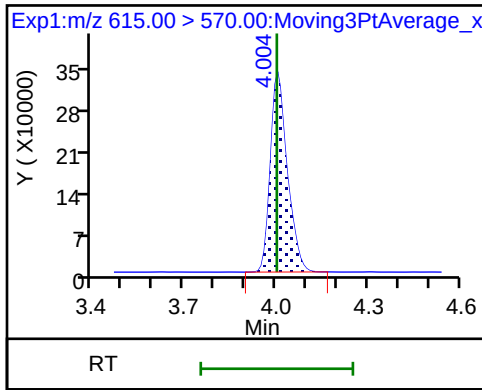




D 36 13C2 PFDaA

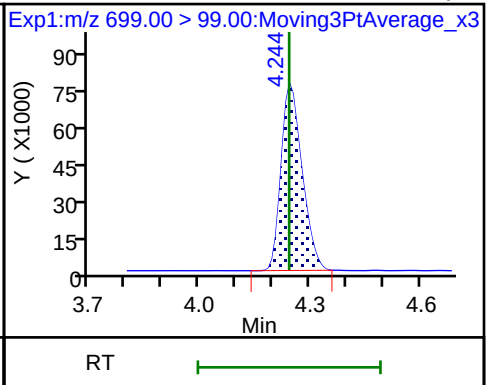
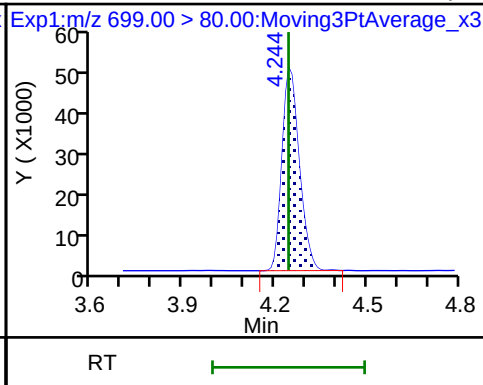
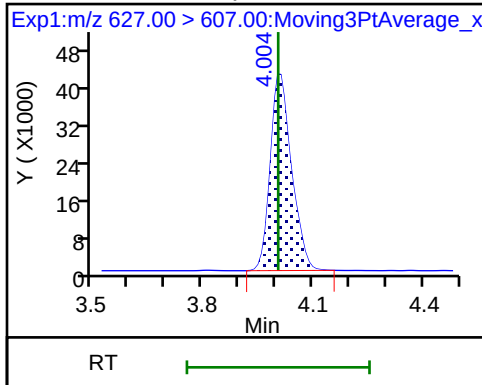
37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



74 1H,1H,2H,2H-perfluorododecanesulfonate 75 Perfluorododecanesulfonic acid (PF

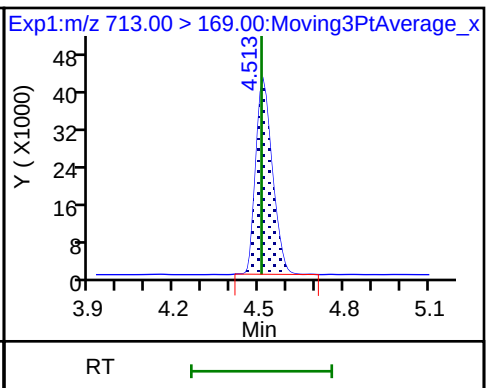
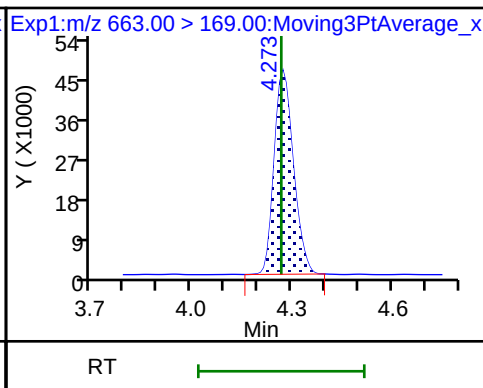
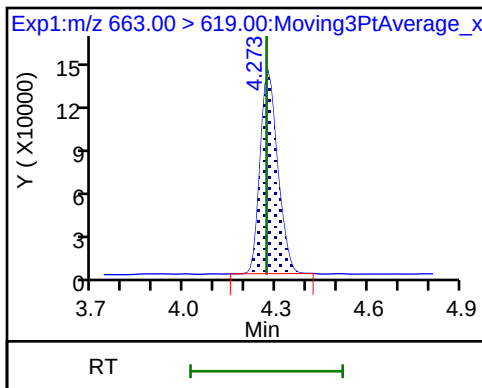
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

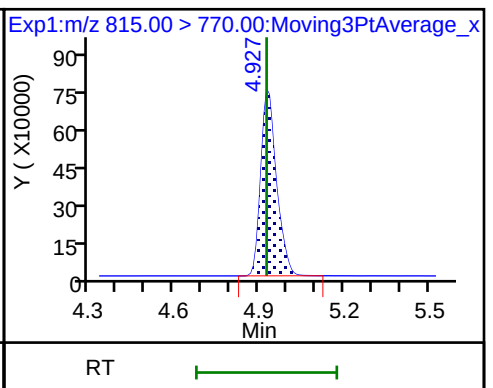
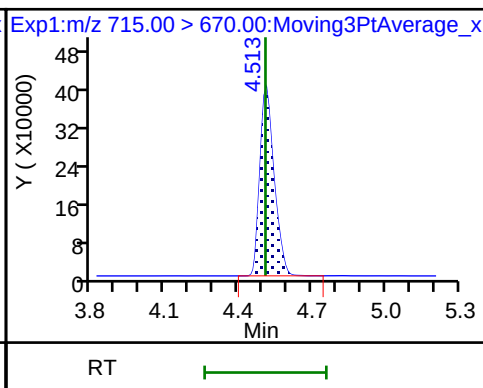
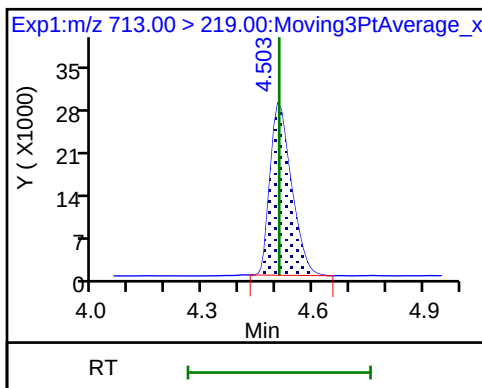
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

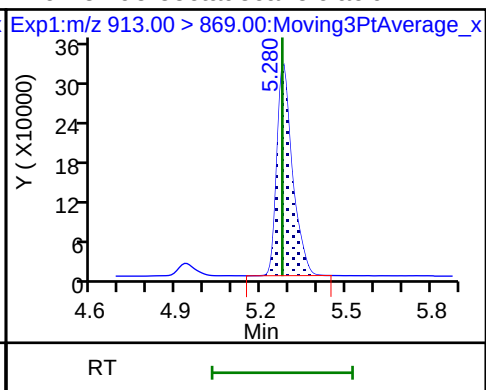
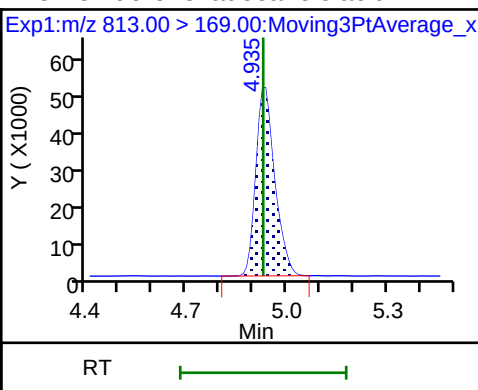
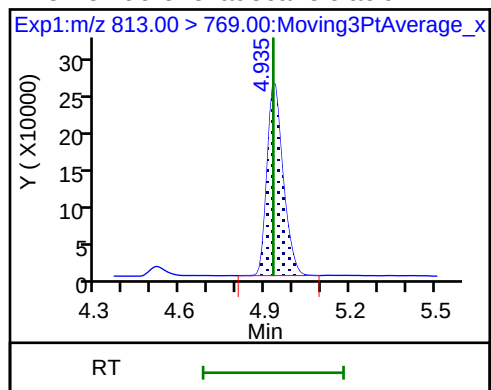
D 44 13C2 PFHxDA



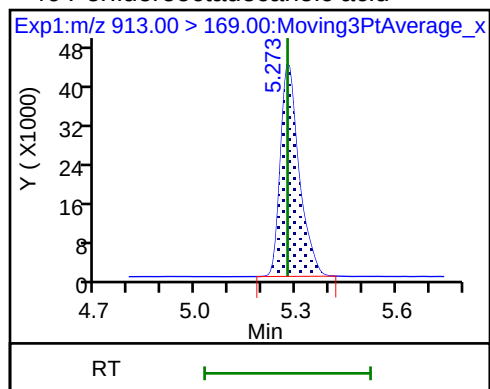
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_009.d
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 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 05-Nov-2018 16:07:10 ALS Bottle#: 14 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 5
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub37
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 05-Nov-2018 16:59:09 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0305

First Level Reviewer: roycea

Date: 05-Nov-2018 16:34:58

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	1.416	1.413	0.003	0.536	3134324	2.49		99.6	8960	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.421	1.415	0.006	1.004	2946412	2.48		99.2	423	
D 3 13C5 PFPeA										
267.90 > 223.00	1.688	1.681	0.007	0.638	2056403	2.48		99.0	6442	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.688	1.682	0.006	1.000	2290428	2.48		99.4	359	
D 47 13C3 PFBS										
301.90 > 83.00	1.720	1.716	0.004	0.650	41388	2.35		101	301	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.728	1.719	0.009	1.005	3070423	2.20		99.5	1213	
298.90 > 99.00	1.720	1.719	0.001	1.000	1237539		2.48(1.25-3.74)	99.5	744	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.935	1.928	0.007	0.732	268917	2.33		99.8	275	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.935	1.929	0.006	1.125	626019	2.36		101	7366	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.966	1.960	0.006	1.000	2240195	2.46		98.3	893	
313.00 > 119.00	1.966	1.960	0.006	1.000	190828		11.74(5.03-15.10)	98.3	509	
D 7 13C2 PFHxA										
315.00 > 270.00	1.966	1.960	0.006	0.743	2241434	2.46		98.2	6251	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.987	1.983	0.004	1.155	2791292	2.32		99.0	5476	
349.00 > 99.00	1.987	1.983	0.004	1.155	1047703		2.66(1.36-4.07)	99.0	3034	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.060	2.056	0.004	1.000	434907	2.51		100	373	

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	2.060	2.056	0.004	0.779	128847	2.23		89.2	448	
D 9 13C4 PFHpA										
367.00 > 322.00	2.290	2.285	0.005	0.866	2112589	2.51		100	4325	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.301	2.288	0.013	1.005	2324560	2.48		99.1	697	
363.00 > 169.00	2.301	2.288	0.013	1.005	958190		2.43(1.13-3.40)	99.1	1340	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.312	2.305	0.007	1.000	2402003	2.08		91.4	1730	
399.00 > 99.00	2.312	2.305	0.007	1.000	825665		2.91(1.50-4.49)	91.4	1127	
D 11 18O2 PFHxS										
403.00 > 84.00	2.312	2.305	0.007	0.874	2394139	2.32		98.2	4042	
77 DONA										
377.00 > 251.00	2.334	2.329	0.005	0.773	6504093	2.41		102	7210	
377.00 > 85.00	2.334	2.329	0.005	0.773	3682021		1.77(0.85-2.54)	102	5936	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.614	2.609	0.005	0.988	435535	2.39		100	1751	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.614	2.611	0.003	1.000	661841	2.28		96.3	2611	
D 73 13C8 PFOA										
421.00 > 376.00	2.637	2.628	0.009	0.997	3400623	2.38		97.1	4340	
* 62 13C2 PFOA										
415.00 > 370.00	2.644	2.636	0.008		2119507	2.50			5630	
D 14 13C4 PFOA										
417.00 > 372.00	2.644	2.636	0.008	1.000	2064386	2.50		100	4185	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.644	2.637	0.007	1.000	2220566	2.36		94.5	275	
413.00 > 169.00	2.644	2.637	0.007	1.000	1261322		1.76(0.84-2.52)	94.5	2149	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.652	2.646	0.006	0.879	2129477	2.41		101	3323	
449.00 > 99.00	2.652	2.646	0.006	0.879	559225		3.81(1.94-5.82)	101	1635	
D 72 13C8 PFOS										
507.00 > 99.00	3.011	3.008	0.003	1.139	856418	2.35		98.5	2497	
D 19 13C5 PFNA										
468.00 > 423.00	3.011	3.009	0.002	1.139	1706492	2.49		99.4	3574	
20 Perfluorononanoic acid										
463.00 > 419.00	3.019	3.010	0.009	1.003	1795148	2.46		98.6	451	
463.00 > 169.00	3.019	3.010	0.009	1.003	457488		3.92(1.90-5.69)	98.6	2212	
D 18 13C4 PFOS										
503.00 > 80.00	3.019	3.010	0.009	1.142	1597250	2.36		98.8	2591	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.019	3.011	0.008	1.000	1751860	2.27		97.9	799	
499.00 > 99.00	3.019	3.011	0.008	1.000	368393		4.76(2.31-6.93)	97.9	734	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.231	3.225	0.006	1.070	3117286	2.33		100	4317	
D 21 13C8 FOSA										
506.00 > 78.00	3.359	3.351	0.008	1.270	2362355	2.49		99.7	3820	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.359	3.352	0.007	1.000	2308339	2.45		97.9	2618	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.367	3.360	0.007	1.273	440986	2.28		95.2	1459	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.367	3.362	0.005	1.000	543721	2.28		95.4	1806	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.367	3.363	0.004	1.115	1297646	2.43		101	2755	
549.00 > 99.00	3.367	3.363	0.004	1.115	452245		2.87(1.33-3.97)	101	1239	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.374	3.370	0.004	1.000	1527073	2.61		104	1197	
513.00 > 169.00	3.374	3.370	0.004	1.000	292708		5.22(2.36-7.09)	104	359	
D 23 13C2 PFDA										
515.00 > 470.00	3.374	3.372	0.002	1.276	1427858	2.41		96.3	4646	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.534	3.527	0.007	1.336	723064	2.50		100.0	2186	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.534	3.530	0.004	1.000	687298	2.54		102	581	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.697	3.691	0.006	1.225	1033631	2.41		99.9	2917	
599.00 > 99.00	3.697	3.691	0.006	1.225	339180		3.05(1.39-4.16)	99.9	1170	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.706	3.698	0.008	1.401	775302	2.51		101	812	
D 30 13C2 PFUnA										
565.00 > 520.00	3.706	3.703	0.003	1.401	1190624	2.54		102	3179	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.714	3.703	0.011	1.002	634430	2.43		97.3	2207	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.714	3.706	0.008	1.002	997833	2.33		93.3	762	
563.00 > 169.00	3.706	3.706	0.0	1.000	258040		3.87(2.12-6.36)	93.3	1257	
35 MeFOSA										
512.00 > 169.00	3.876	3.866	0.010		691742	NC			453	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.866	3.866	0.0	1.281	4676041	2.45		104	6339	
D 36 13C2 PFDaA										
615.00 > 570.00	4.003	4.001	0.002	1.514	1255462	2.53		101	3685	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.003	4.001	0.002	1.000	1344674	2.48		99.1	816	
613.00 > 169.00	4.011	4.001	0.010	1.002	337256		3.99(2.13-6.40)	99.1	1700	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.011	4.005	0.006	1.191	414364	2.47		103	1470	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.243	4.243	0.0	1.406	461063	2.37		98.0	1906	
699.00 > 99.00	4.243	4.243	0.0	1.406	714298		0.65(0.00-0.00)	98.0	2730	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.272	4.268	0.004	1.067	1328758	2.52		101	670	
663.00 > 169.00	4.272	4.268	0.004	1.067	461911		2.88(1.25-3.76)	101	3282	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.514	4.508	0.006	1.000	404255	2.44		97.5	1771	
713.00 > 219.00	4.504	4.508	-0.004	0.998	271967		1.49(0.71-2.13)	97.5	1200	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.514	4.509	0.005	1.707	1503990	2.44		97.4	2866	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.935	4.926	0.009	1.866	2590229	2.37		94.8	4005	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.935	4.928	0.007	1.000	2386140	2.55		102	406	
813.00 > 169.00	4.935	4.928	0.007	1.000	459716		5.19(2.86-8.58)	102	1949	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.280	5.275	0.005	1.070	2874878	2.54		102	399	
913.00 > 169.00	5.280	5.275	0.005	1.070	395416		7.27(3.83-11.48)	102	1602	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL5_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_009.d

Injection Date: 05-Nov-2018 16:07:10

Instrument ID: A8_N

Lims ID: IC L5 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 14

Worklist Smp#: 6

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

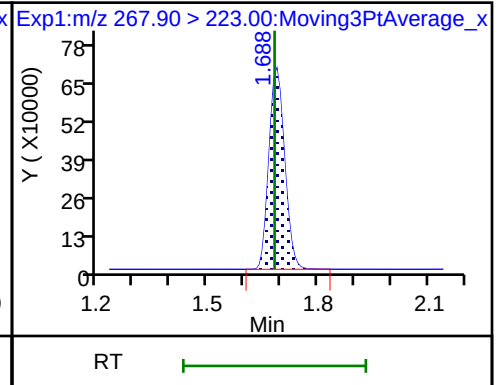
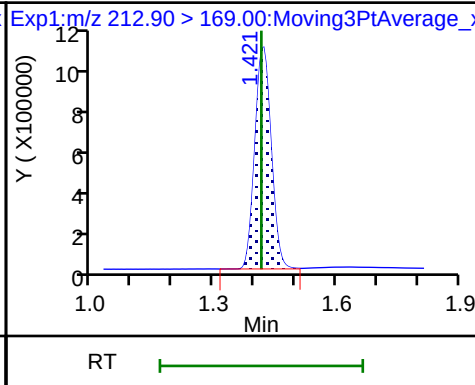
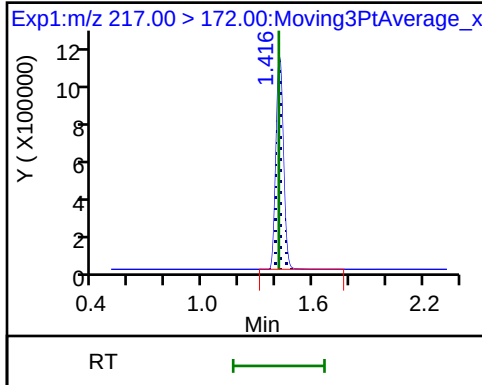
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

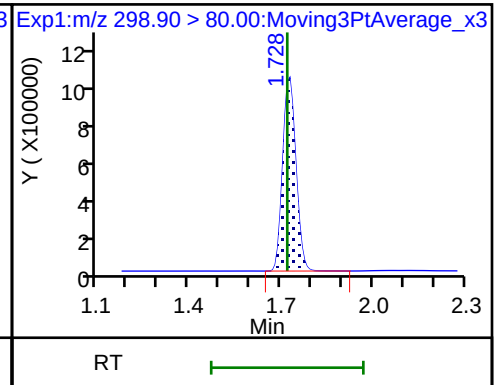
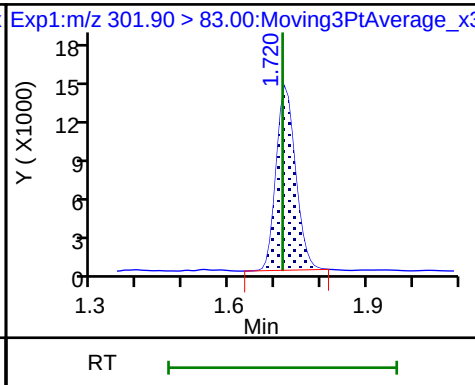
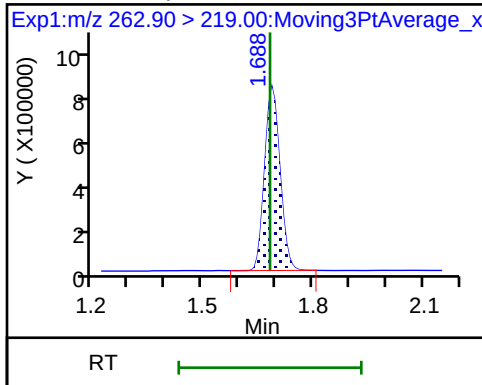
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

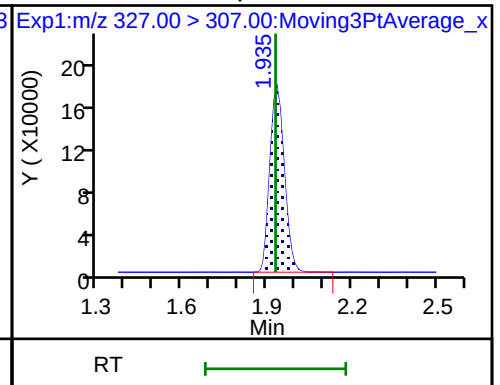
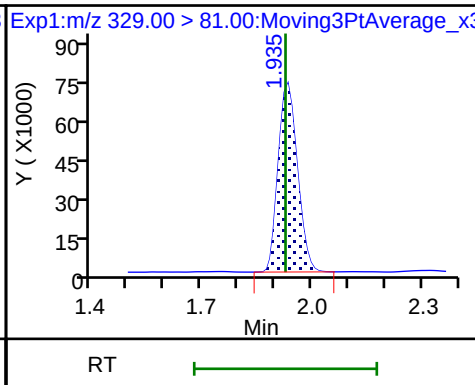
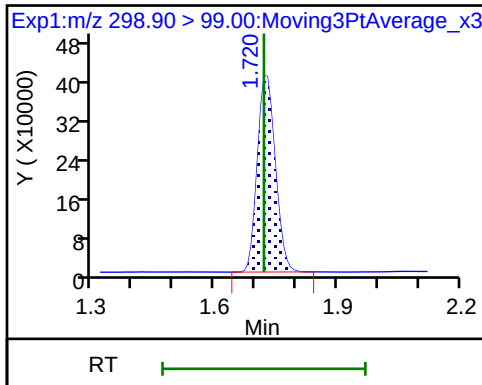
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

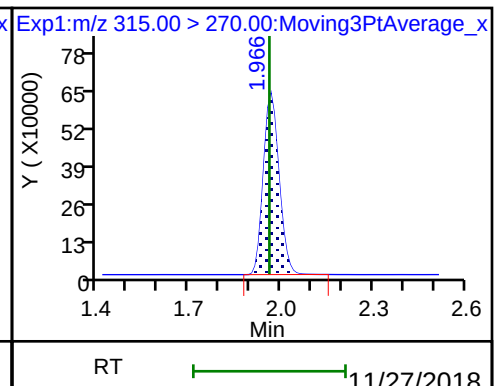
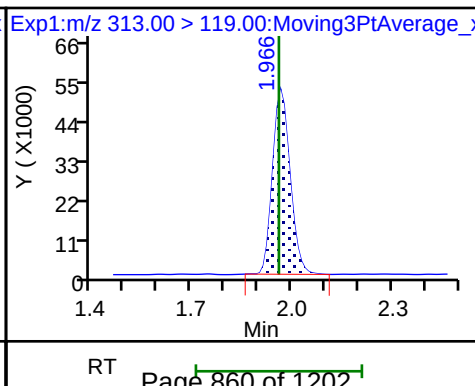
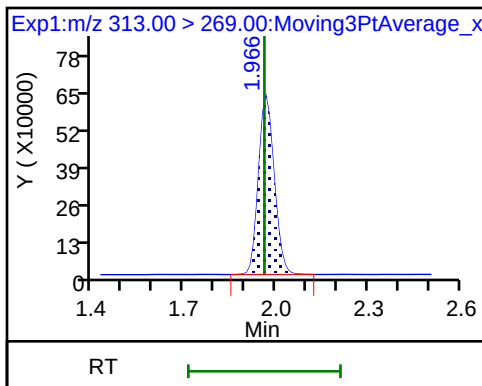
61 1H,1H,2H,2H-perfluorohexanesulfoni

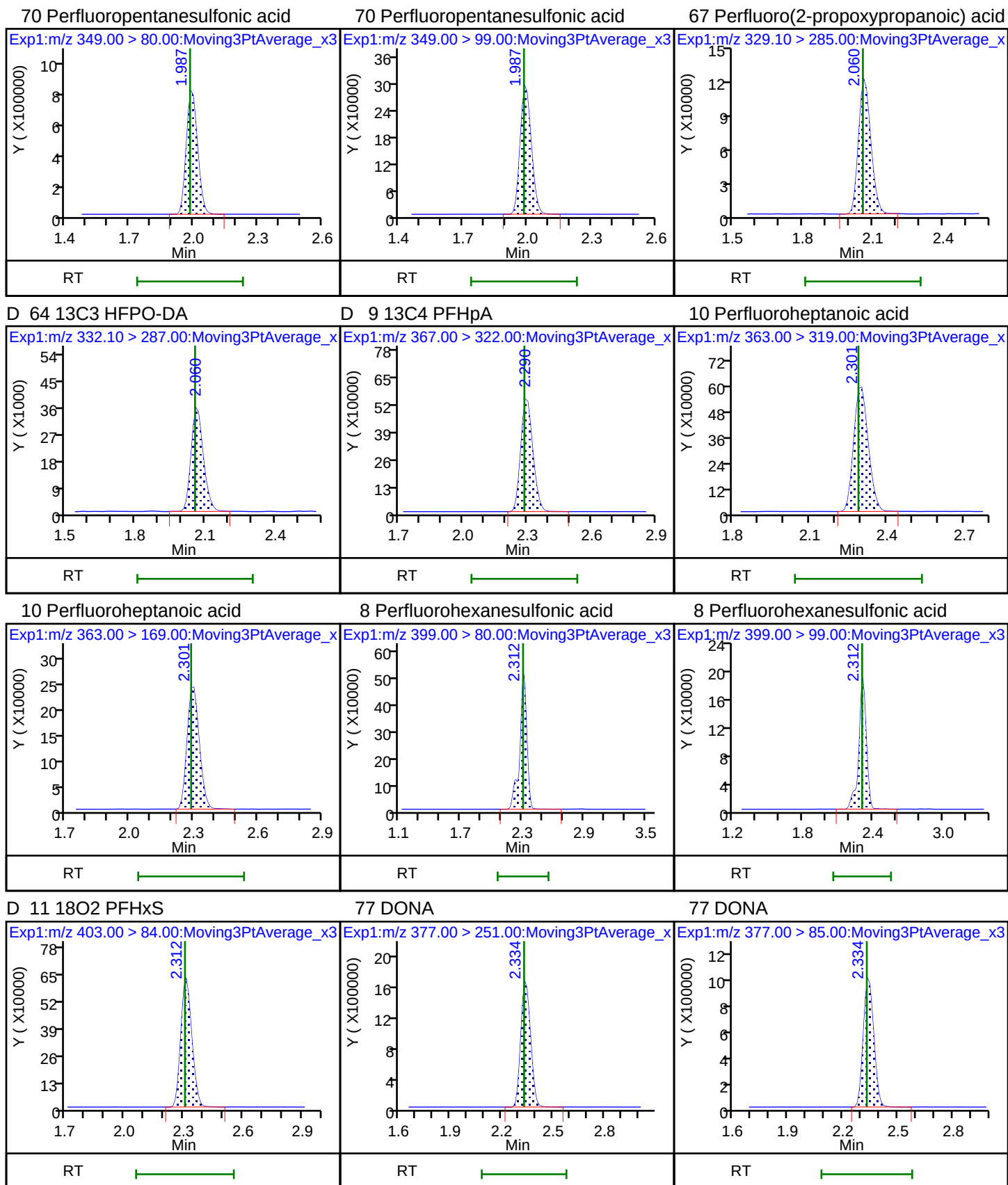


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

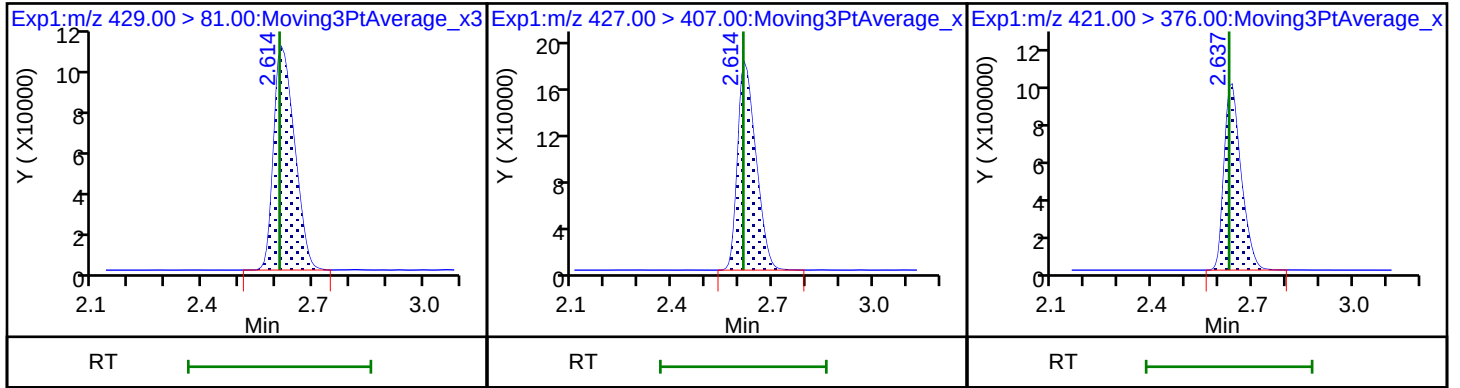
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

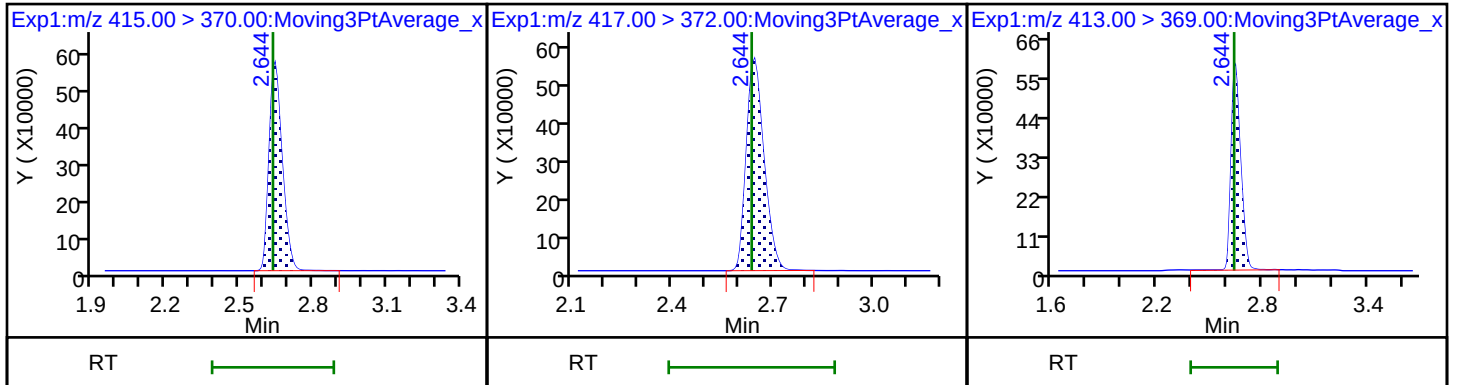
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



* 62 13C2 PFOA

D 14 13C4 PFOA

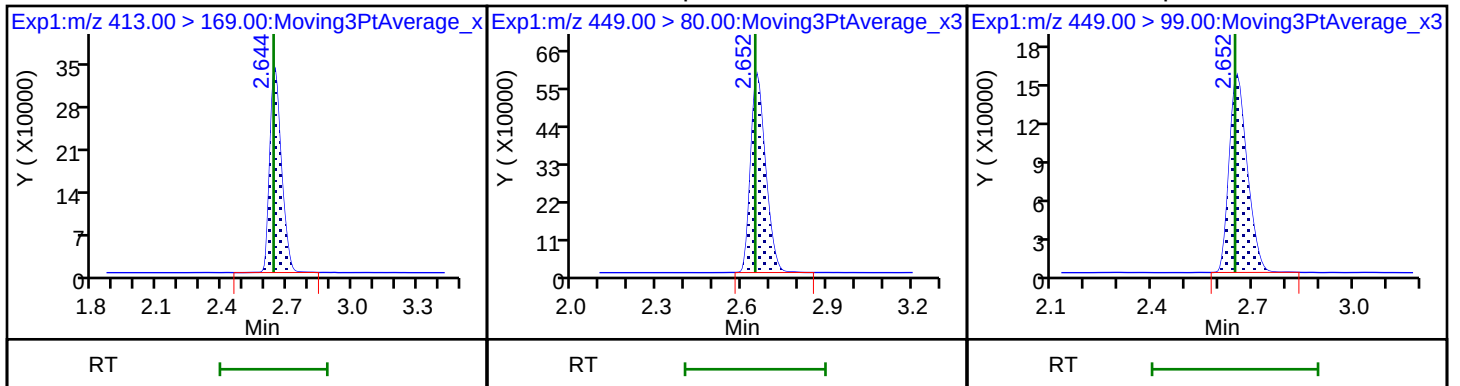
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

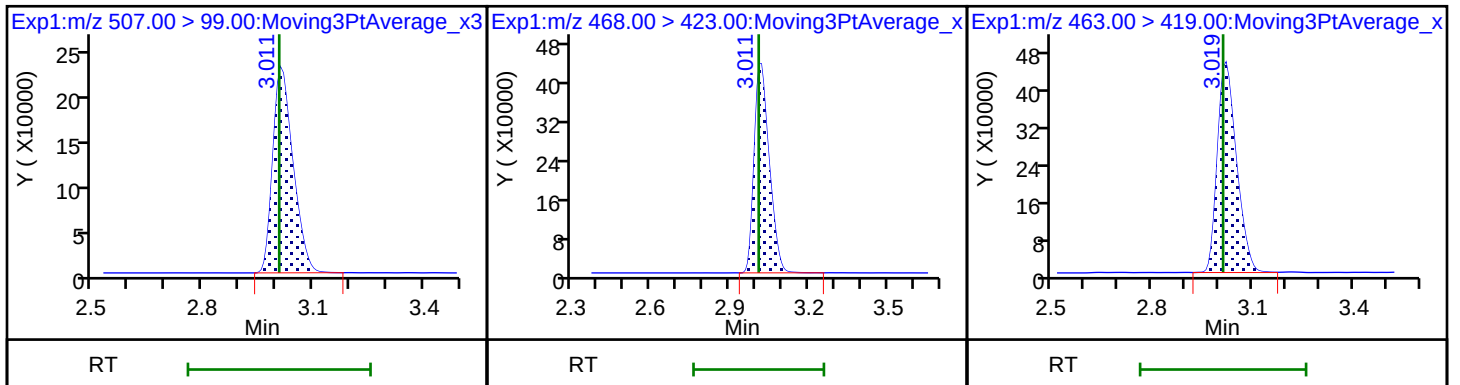
16 Perfluoroheptanesulfonic acid

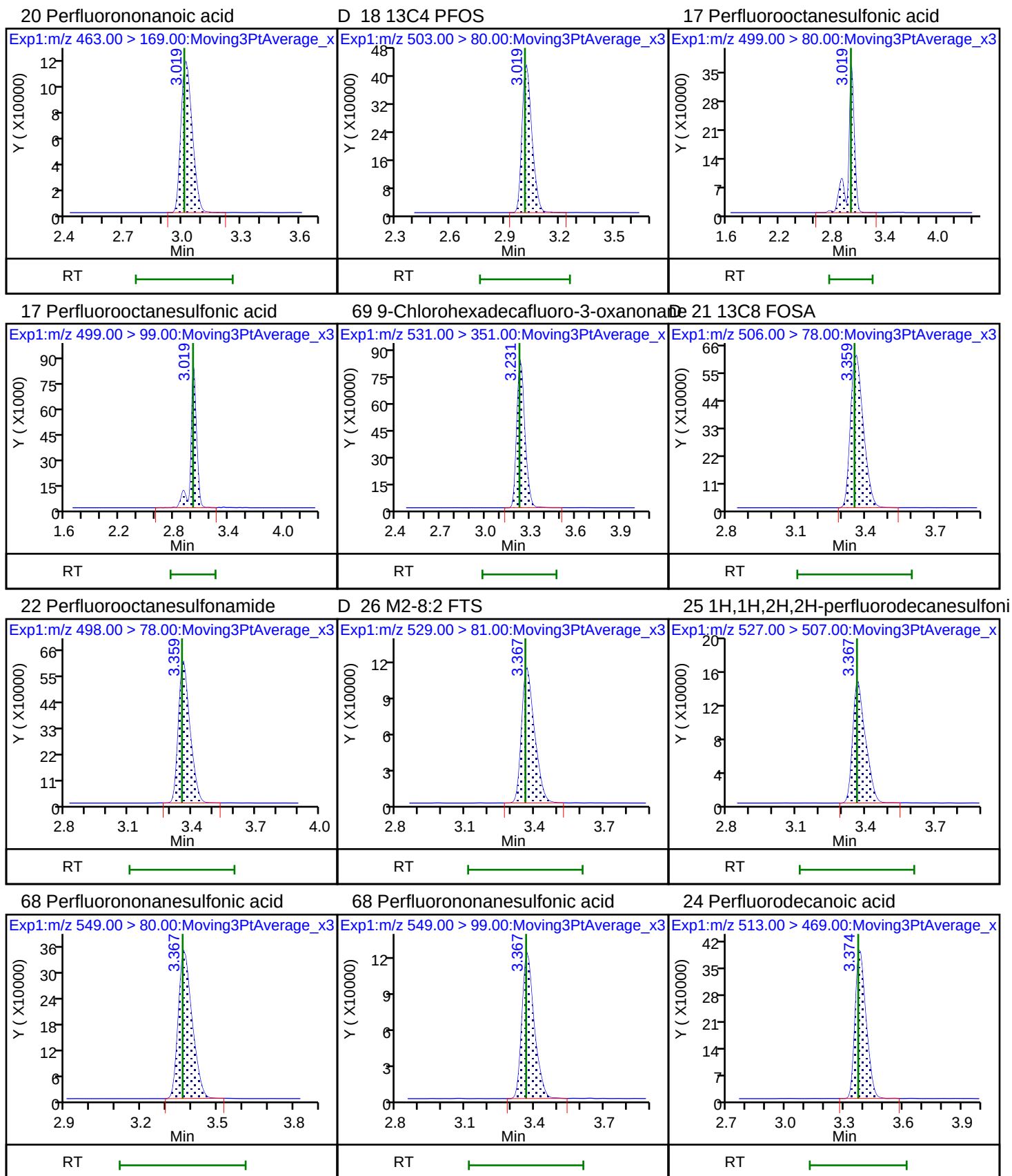


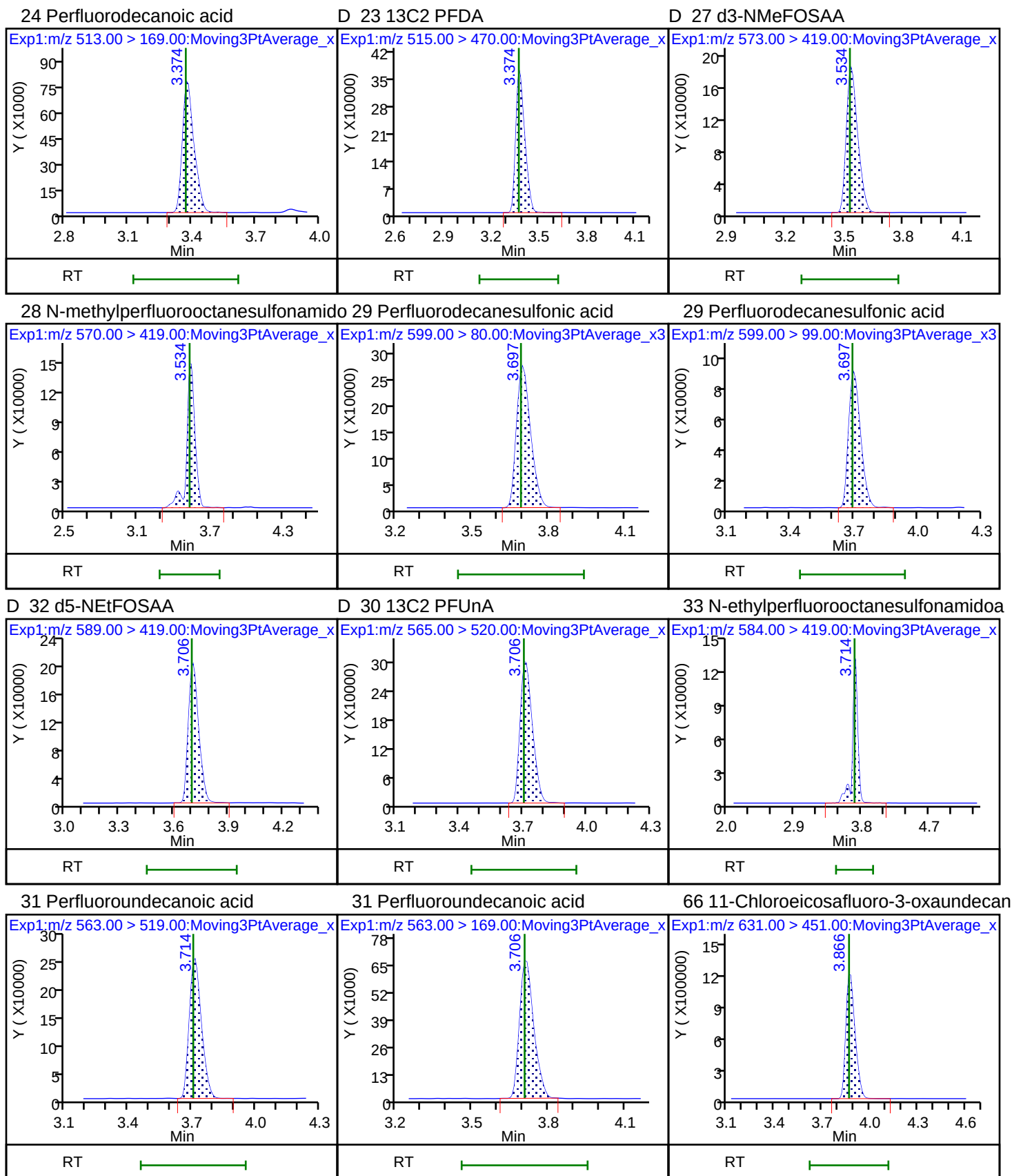
D 72 13C8 PFOS

D 19 13C5 PFNA

20 Perfluorononanoic acid



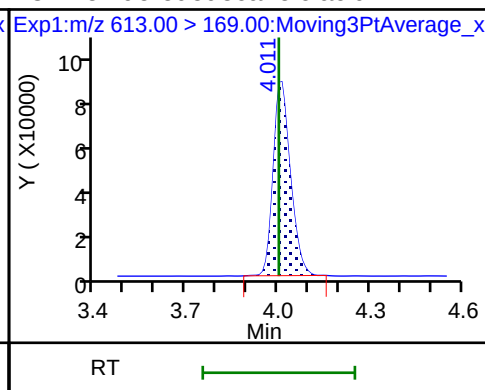
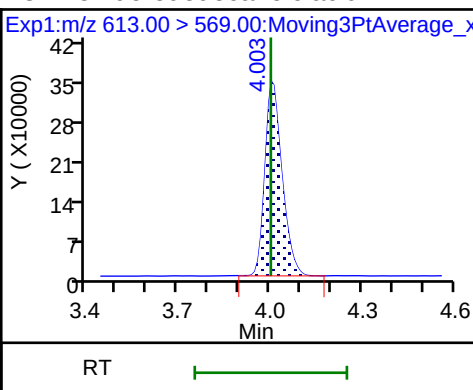
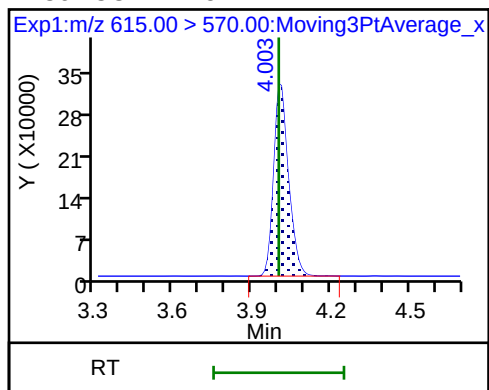




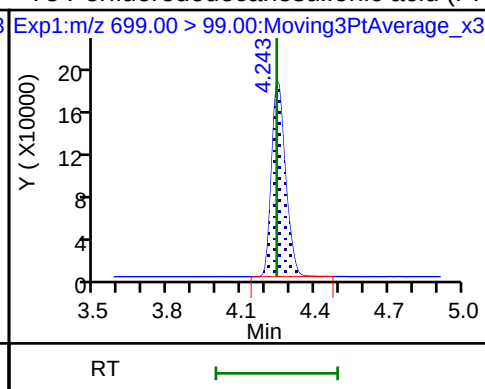
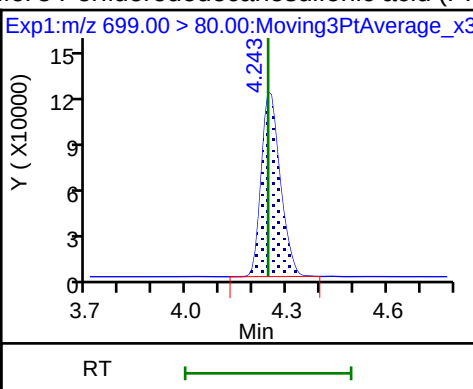
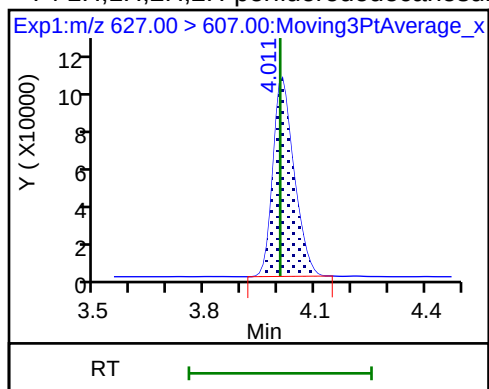
D 36 13C2 PFDaA

37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



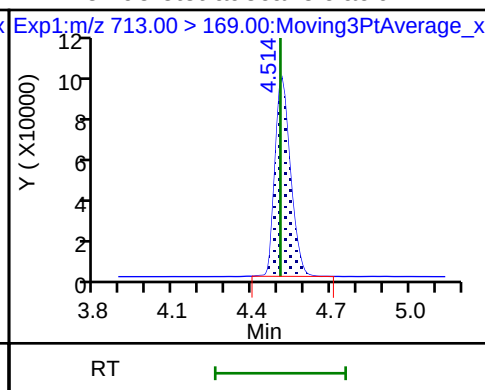
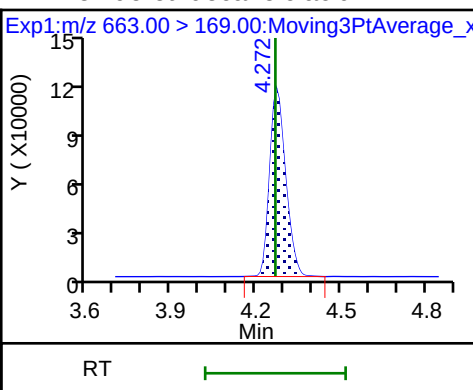
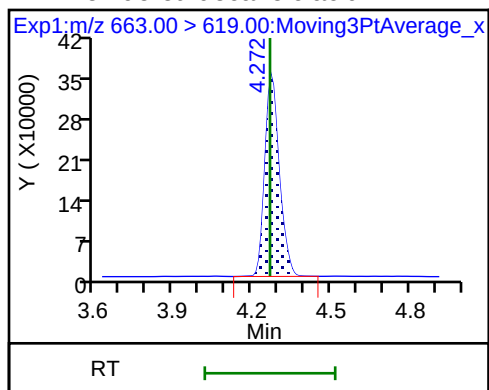
74 1H,1H,2H,2H-perfluorododecanesulfo75 Perfluorododecanesulfonic acid (PF 75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

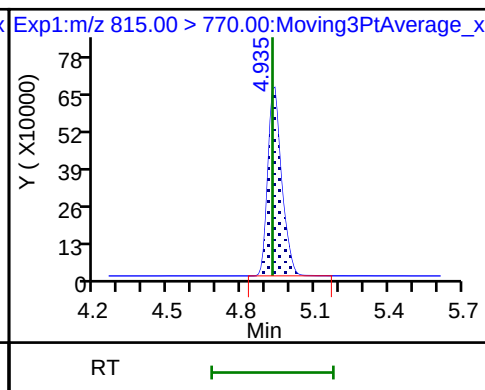
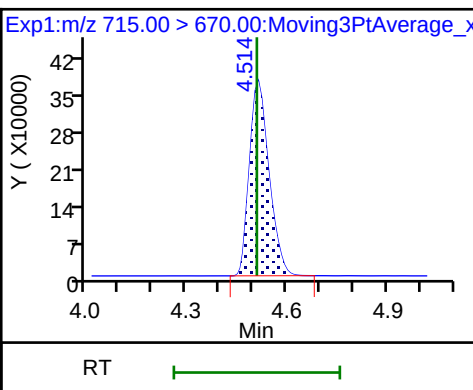
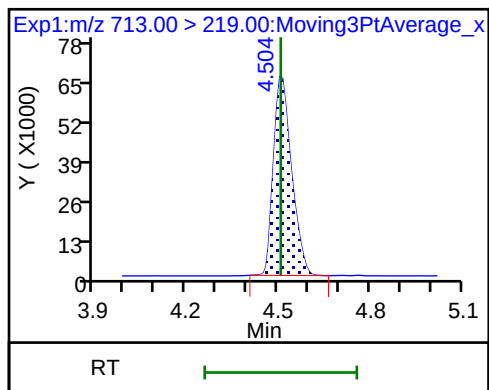
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

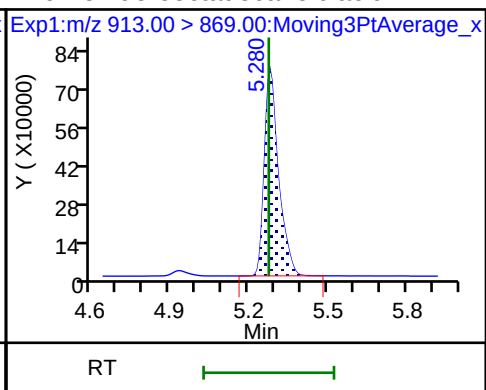
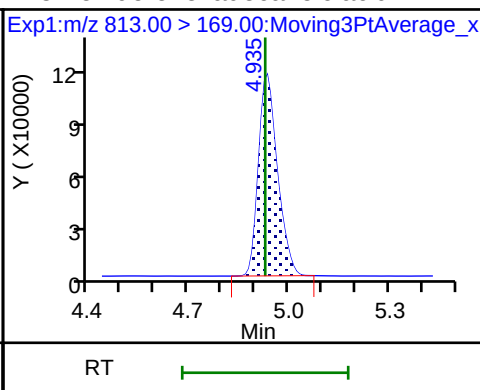
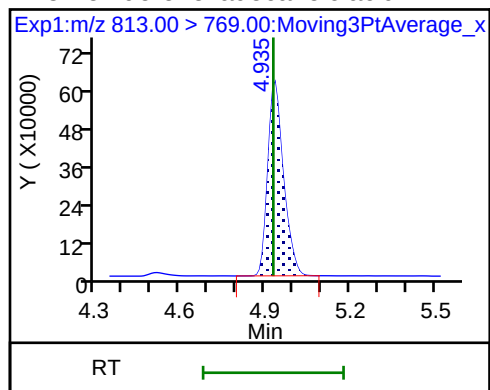
D 44 13C2 PFHxDA



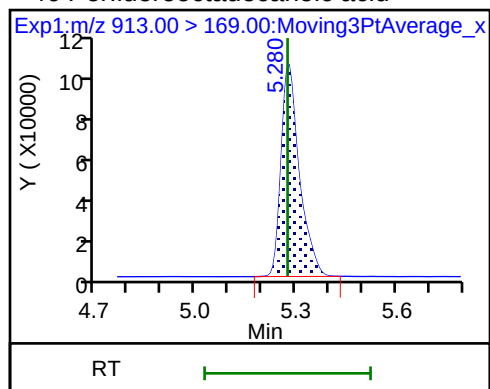
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_010.d
 Lims ID: IC L6 Full
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 05-Nov-2018 16:14:34 ALS Bottle#: 15 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 6
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub37
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 05-Nov-2018 16:59:14 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0305

First Level Reviewer: roycea

Date: 05-Nov-2018 16:35:47

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	1.409	1.413	-0.005	0.535	3205790	2.48		99.0	8049	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.409	1.415	-0.007	1.000	6235306	5.13		103	901	
D 3 13C5 PFPeA										
267.90 > 223.00	1.676	1.681	-0.005	0.637	2190350	2.56		103	7114	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.676	1.682	-0.006	1.000	4688474	4.77		95.5	668	
D 47 13C3 PFBS										
301.90 > 83.00	1.716	1.716	0.0	0.652	40639	2.25		96.7	343	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.716	1.719	-0.003	1.000	6440039	4.70		106	2478	
298.90 > 99.00	1.716	1.719	-0.003	1.000	2588196		2.49(1.25-3.74)	106	1614	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.918	1.928	-0.010	0.729	266697	2.25		96.2	257	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.928	1.929	-0.001	1.124	1283836	4.93		106	7123	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.960	1.960	0.0	1.000	4551027	4.89		97.8	1557	
313.00 > 119.00	1.960	1.960	0.0	1.000	415518		10.95(5.03-15.10)	97.8	917	
D 7 13C2 PFHxA										
315.00 > 270.00	1.960	1.960	0.0	0.745	2288974	2.44		97.5	5991	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.980	1.983	-0.003	1.154	5689362	4.82		103	7491	
349.00 > 99.00	1.980	1.983	-0.003	1.154	2167276		2.63(1.36-4.07)	103	4703	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.054	2.056	-0.002	1.000	924219	4.86		97.2	742	

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	2.054	2.056	-0.002	0.780	141297	2.38		95.1	572	
D 9 13C4 PFHpA										
367.00 > 322.00	2.281	2.285	-0.004	0.867	2148184	2.48		99.2	5811	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.292	2.288	0.004	1.005	4967049	5.21		104	1552	
363.00 > 169.00	2.292	2.288	0.004	1.005	1948154		2.55(1.13-3.40)	104	2899	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.303	2.305	-0.002	1.000	5176506	4.26		93.5	4165	
399.00 > 99.00	2.303	2.305	-0.002	1.000	1682439		3.08(1.50-4.49)	93.5	1734	
D 11 18O2 PFHxS										
403.00 > 84.00	2.303	2.305	-0.002	0.875	2521778	2.38		101	5596	
77 DONA										
377.00 > 251.00	2.325	2.329	-0.004	0.773	13382545	4.72		100	9905	
377.00 > 85.00	2.325	2.329	-0.004	0.773	7822171		1.71(0.85-2.54)	100	7876	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.609	2.609	0.0	0.991	418263	2.23		93.8	1242	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.609	2.611	-0.002	1.000	1287846	4.63		97.6	2250	
D 73 13C8 PFOA										
421.00 > 376.00	2.624	2.628	-0.004	0.997	3607690	2.45		100	7709	
* 62 13C2 PFOA										
415.00 > 370.00	2.631	2.636	-0.005		2179779	2.50			5133	
D 14 13C4 PFOA										
417.00 > 372.00	2.631	2.636	-0.005	1.000	2143725	2.52		101	5749	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.639	2.637	0.002	1.003	4690078	4.81		96.1	532	
413.00 > 169.00	2.631	2.637	-0.006	1.000	2521894		1.86(0.84-2.52)	96.1	3087	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.647	2.646	0.001	0.880	4612380	4.95		104	4183	
449.00 > 99.00	2.647	2.646	0.001	0.880	1171434		3.94(1.94-5.82)	104	2198	
D 72 13C8 PFOS										
507.00 > 99.00	3.007	3.008	-0.001	1.143	900175	2.41		101	3776	
D 19 13C5 PFNA										
468.00 > 423.00	3.007	3.009	-0.002	1.143	1682623	2.38		95.3	4712	
20 Perfluorononanoic acid										
463.00 > 419.00	3.007	3.010	-0.003	1.000	3757576	5.23		105	917	
463.00 > 169.00	3.007	3.010	-0.003	1.000	954827		3.94(1.90-5.69)	105	3078	
D 18 13C4 PFOS										
503.00 > 80.00	3.007	3.010	-0.003	1.143	1680035	2.41		101	3825	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.007	3.011	-0.004	1.000	3564476	4.39		94.7	1361	
499.00 > 99.00	3.007	3.011	-0.004	1.000	762050		4.68(2.31-6.93)	94.7	1435	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.227	3.225	0.002	1.073	6544285	4.66		100.0	3642	
D 21 13C8 FOSA										
506.00 > 78.00	3.349	3.351	-0.002	1.273	2368357	2.43		97.2	4694	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.349	3.352	-0.003	1.000	4860477	5.14		103	3032	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.363	3.360	0.003	1.278	467005	2.35		98.0	2087	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.363	3.362	0.001	1.000	1146670	4.55		95.0	1818	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.363	3.363	0.0	1.118	2696677	4.79		99.9	3723	
549.00 > 99.00	3.363	3.363	0.0	1.118	951407		2.83(1.33-3.97)	99.9	2886	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.371	3.370	0.001	1.000	3060002	4.94		98.8	1857	
513.00 > 169.00	3.371	3.370	0.001	1.000	586448		5.22(2.36-7.09)	98.8	365	
D 23 13C2 PFDA										
515.00 > 470.00	3.371	3.372	-0.001	1.281	1510201	2.47		99.0	4493	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.530	3.527	0.003	1.342	720713	2.42		96.9	2044	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.530	3.530	0.0	1.000	1372332	5.09		102	1506	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.691	3.691	0.0	1.227	2232842	4.94		103	4527	
599.00 > 99.00	3.691	3.691	0.0	1.227	711985		3.14(1.39-4.16)	103	2163	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.700	3.698	0.002	1.406	770491	2.43		97.2	688	
D 30 13C2 PFUnA										
565.00 > 520.00	3.700	3.703	-0.003	1.406	1208490	2.51		100	2468	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.708	3.703	0.005	1.002	1309515	5.05		101	1802	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.708	3.706	0.002	1.002	2067599	4.76		95.3	1545	
563.00 > 169.00	3.700	3.706	-0.006	1.000	510774		4.05(2.12-6.36)	95.3	2560	
35 MeFOSA										
512.00 > 169.00	3.869	3.866	0.003		1502768	NC			536	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.869	3.866	0.003	1.287	9739121	4.85		103	9783	
D 36 13C2 PFDaA										
615.00 > 570.00	4.005	4.001	0.004	1.522	1205545	2.36		94.4	2293	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.005	4.001	0.004	1.000	2675528	5.13		103	1311	
613.00 > 169.00	4.005	4.001	0.004	1.000	722165		3.70(2.13-6.40)	103	2458	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.005	4.005	0.0	1.191	861695	4.86		101	2161	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.246	4.243	0.003	1.412	992955	4.86		100	3287	
699.00 > 99.00	4.246	4.243	0.003	1.412	1504824		0.66(0.00-0.00)	100	2591	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.265	4.268	-0.003	1.065	2731257	5.39		108	1237	
663.00 > 169.00	4.265	4.268	-0.003	1.065	946256		2.89(1.25-3.76)	108	2900	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.507	4.508	-0.001	1.000	848636	4.96		99.3	2095	
713.00 > 219.00	4.507	4.508	-0.001	1.000	580586		1.46(0.71-2.13)	99.3	2140	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.507	4.509	-0.002	1.713	1550035	2.44		97.6	3041	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.928	4.926	0.002	1.873	2790916	2.48		99.4	3236	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.928	4.928	0.0	1.000	5147498	5.13		103	811	
813.00 > 169.00	4.928	4.928	0.0	1.000	968143		5.32(2.86-8.58)	103	2561	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.275	5.275	0.0	1.070	6138474	5.03		101	638	
913.00 > 169.00	5.275	5.275	0.0	1.070	842333		7.29(3.83-11.48)	101	2228	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL6_00010

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_010.d

Injection Date: 05-Nov-2018 16:14:34

Instrument ID: A8_N

Lims ID: IC L6 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 15

Worklist Smp#: 7

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

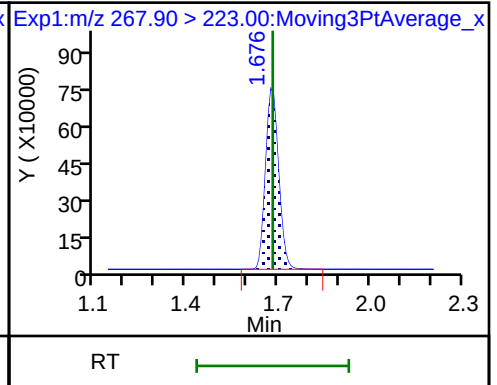
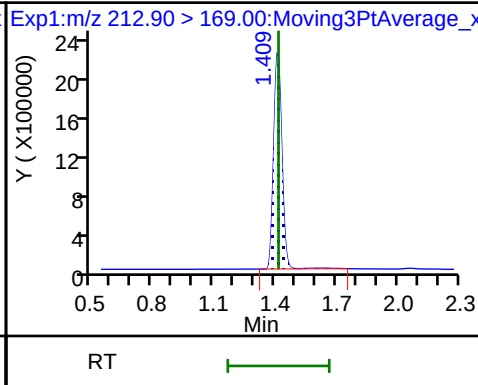
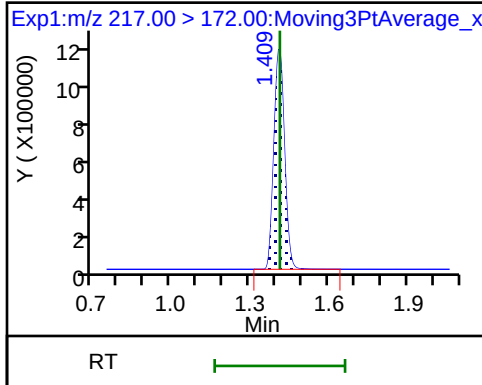
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

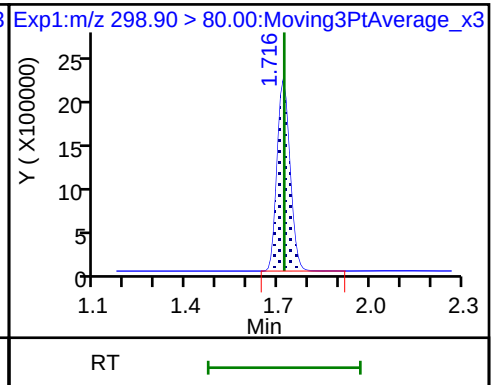
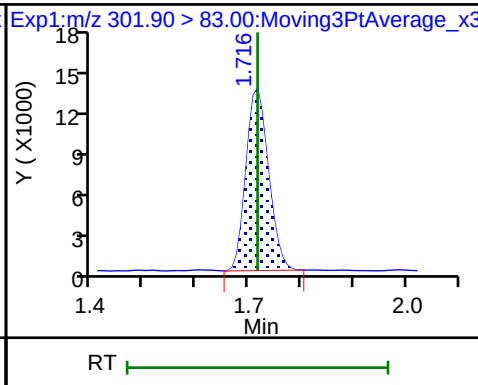
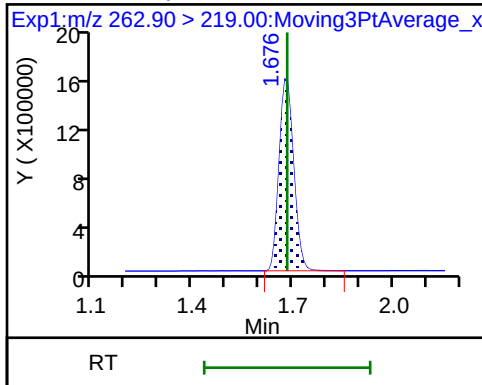
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

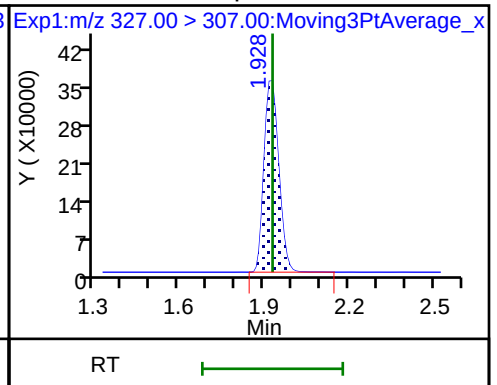
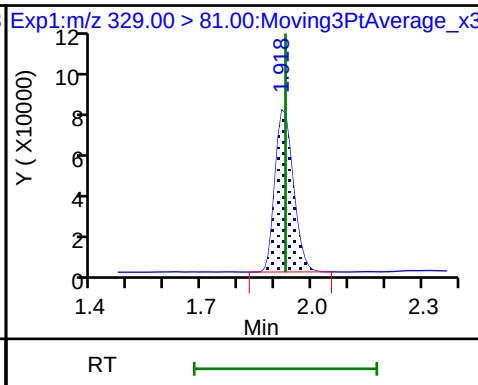
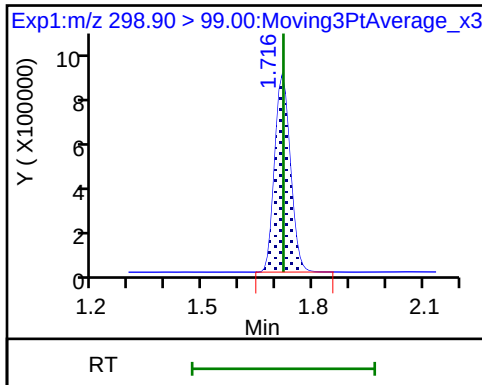
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

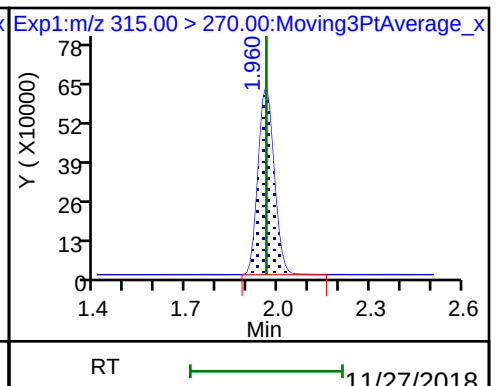
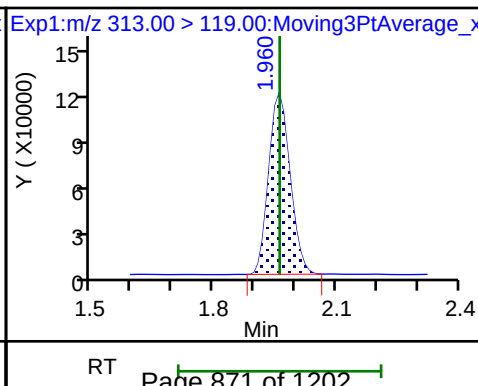
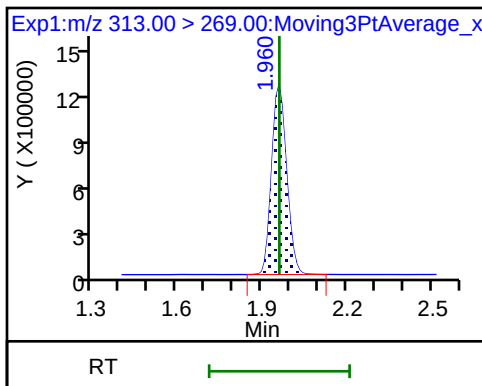
61 1H,1H,2H,2H-perfluorohexanesulfoni

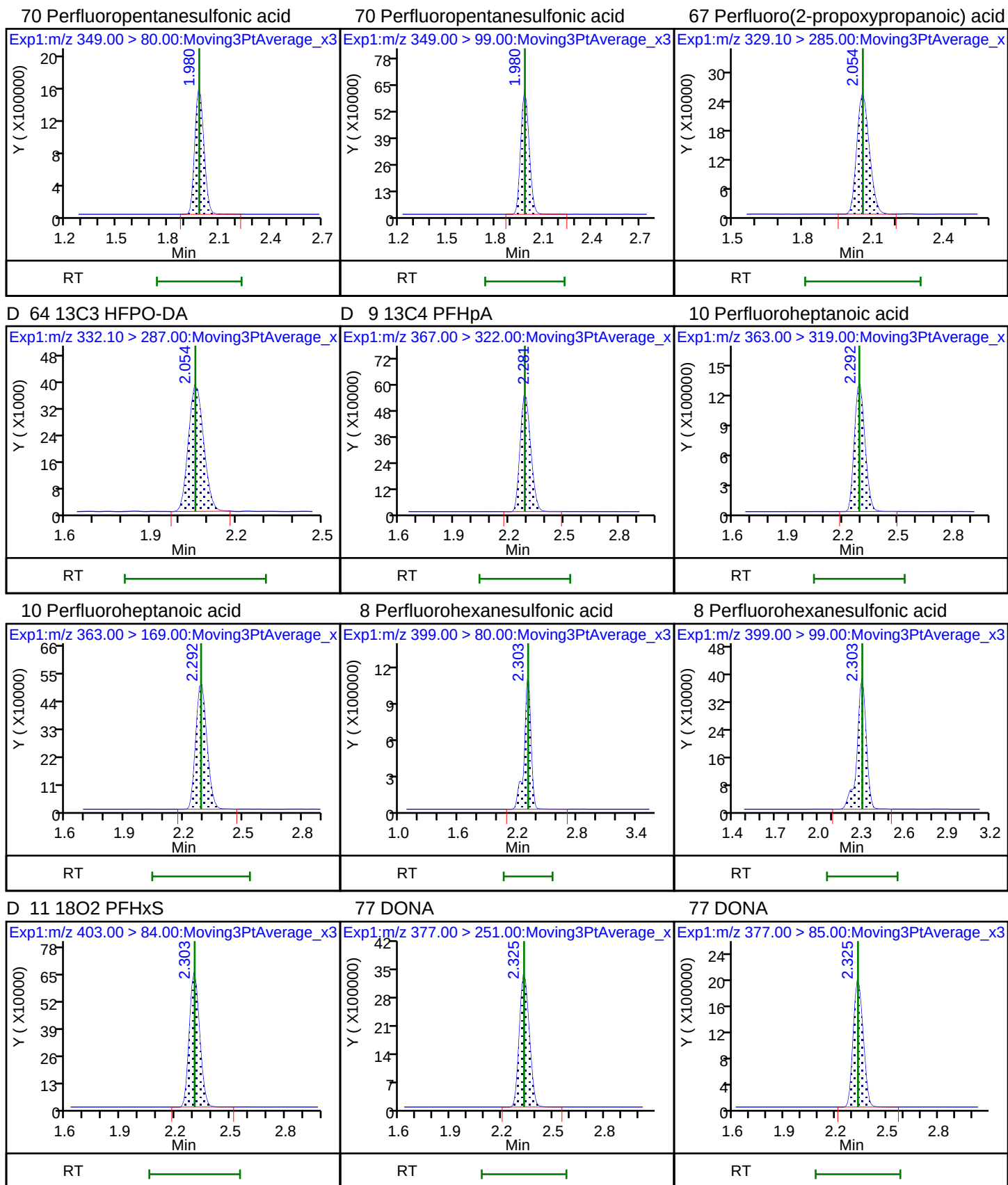


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

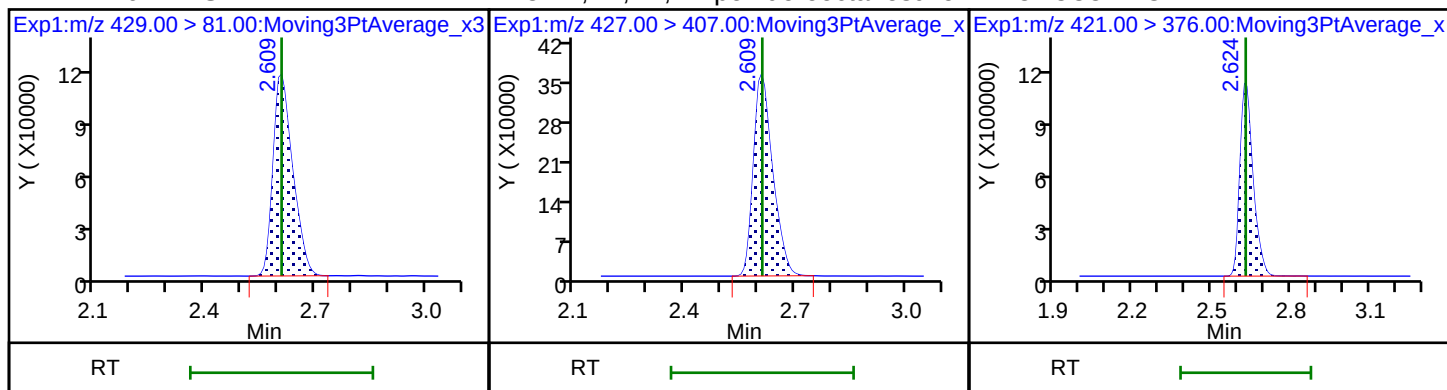
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

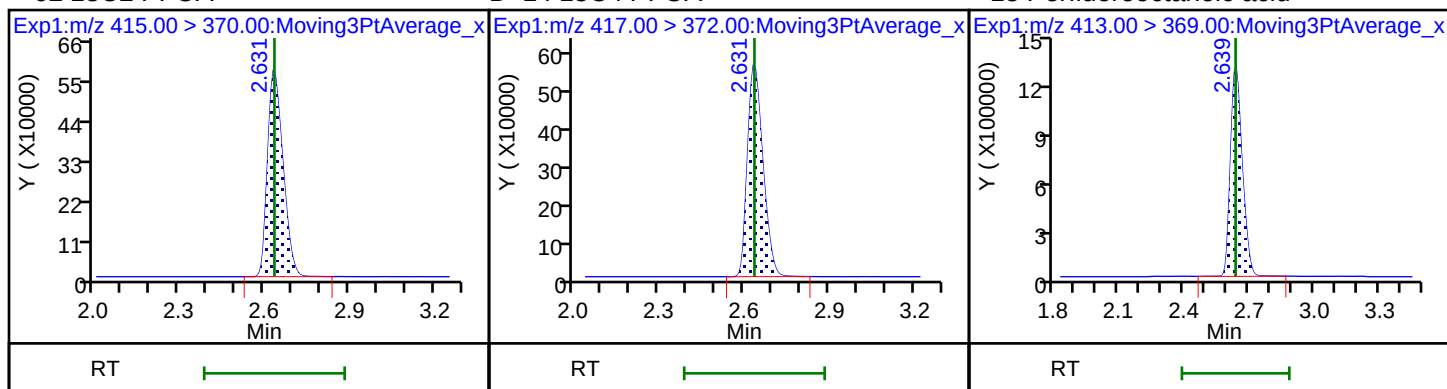
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



* 62 13C2 PFOA

D 14 13C4 PFOA

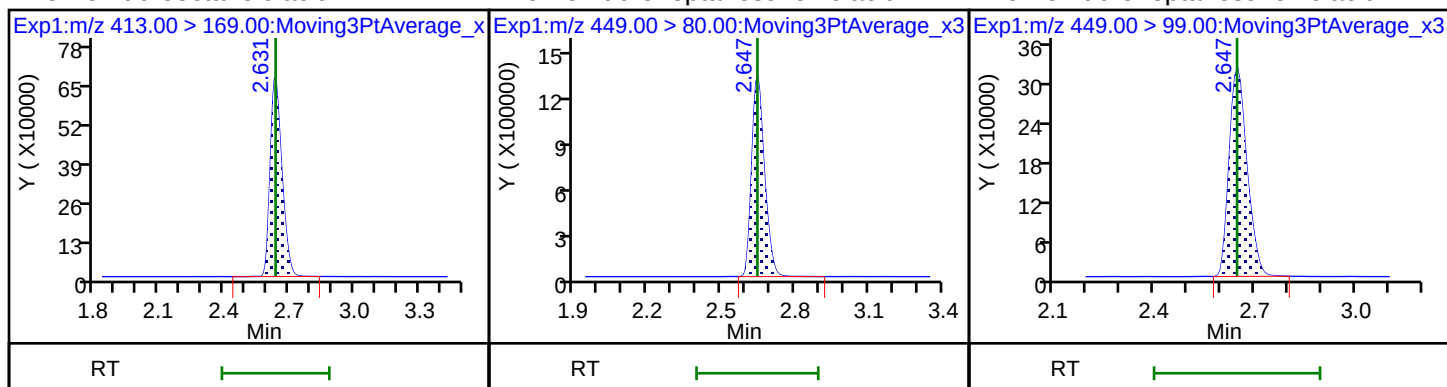
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

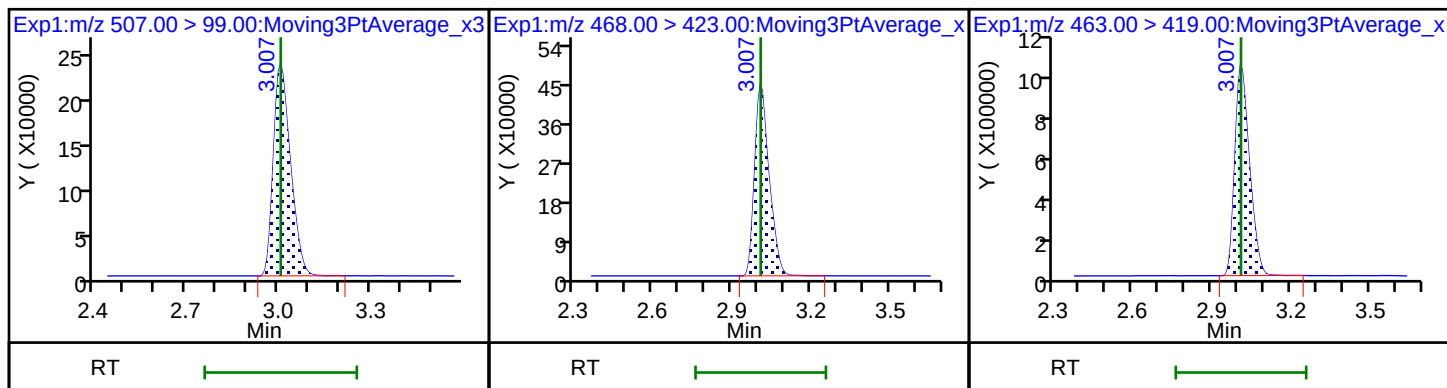
16 Perfluoroheptanesulfonic acid

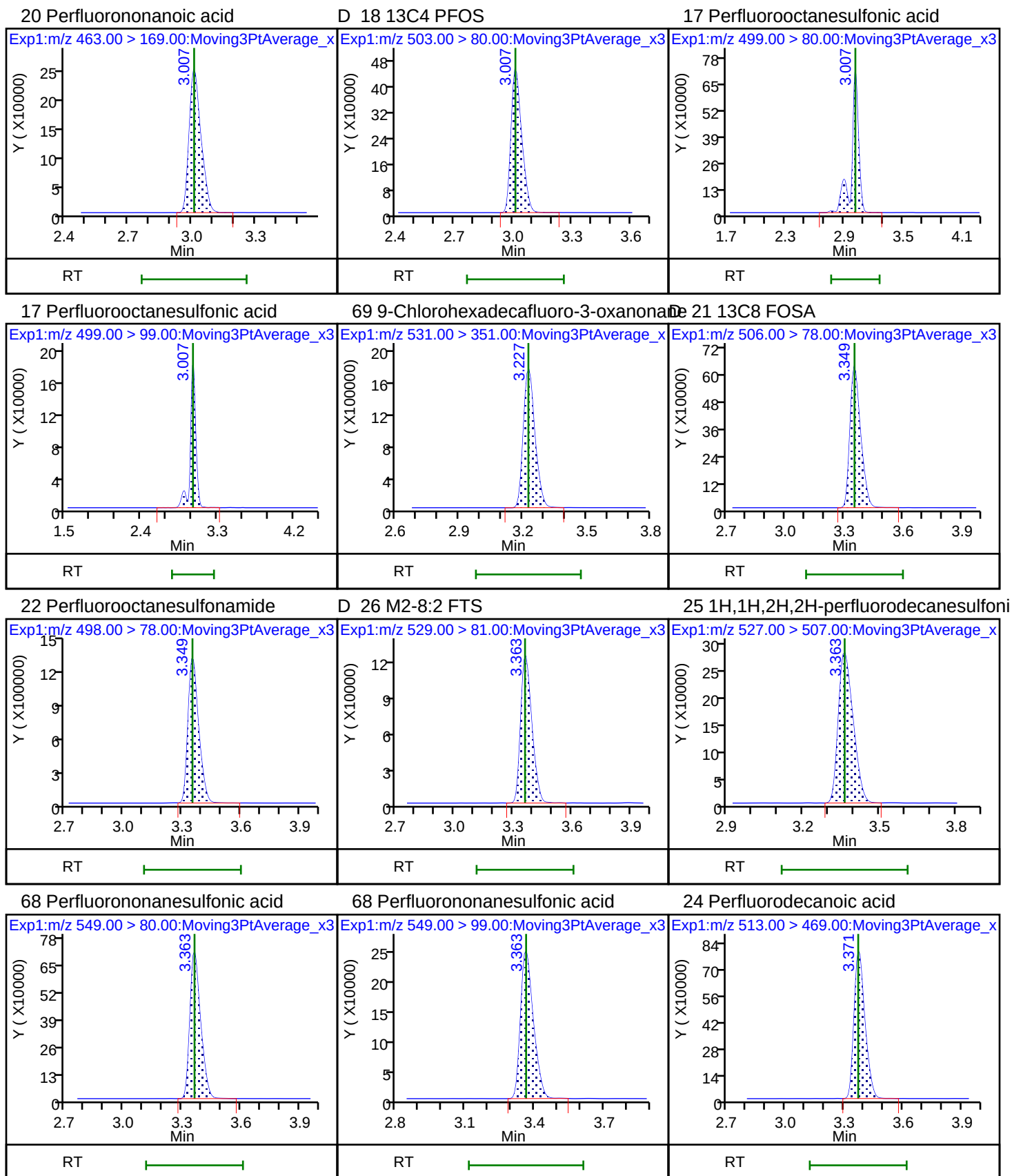


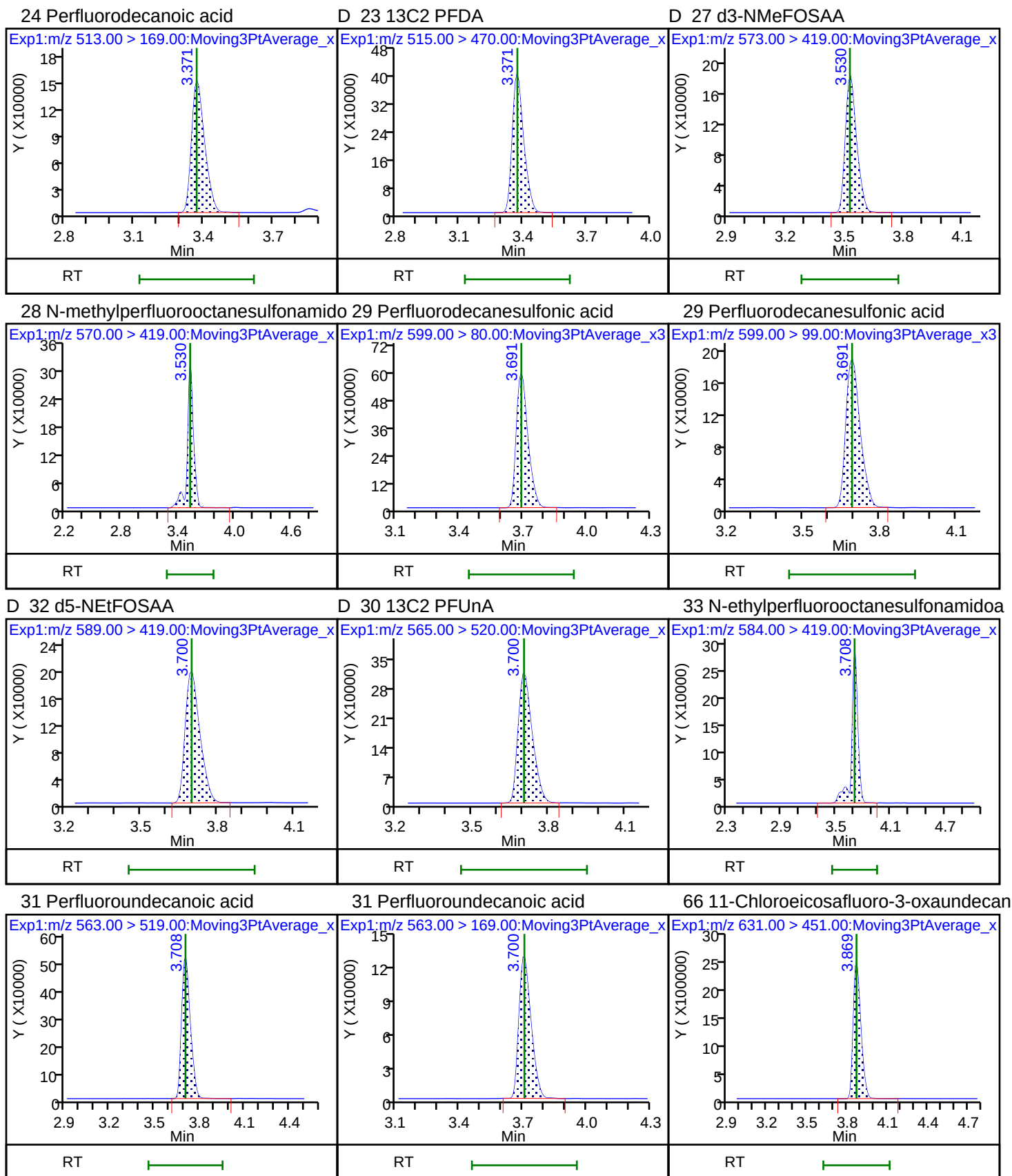
D 72 13C8 PFOS

D 19 13C5 PFNA

20 Perfluorononanoic acid



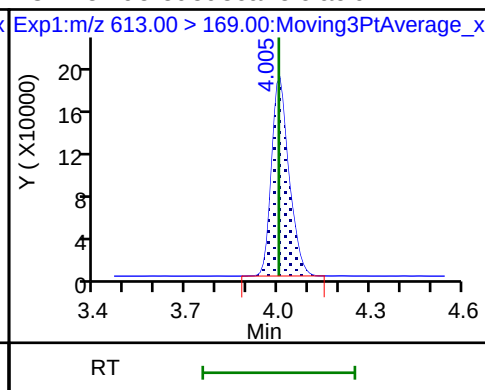
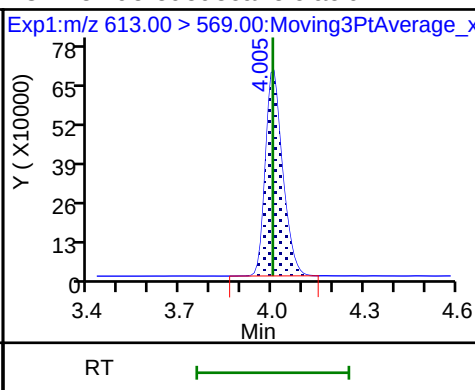
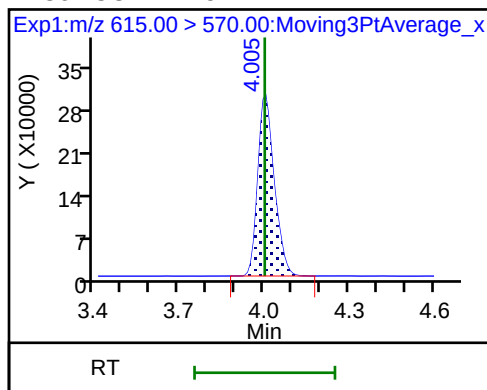




D 36 13C2 PFDaA

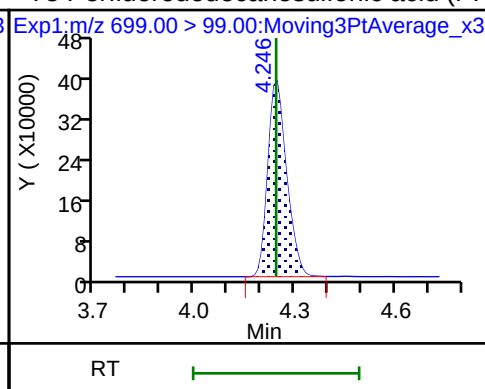
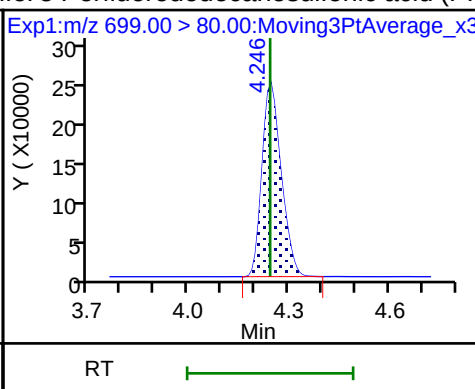
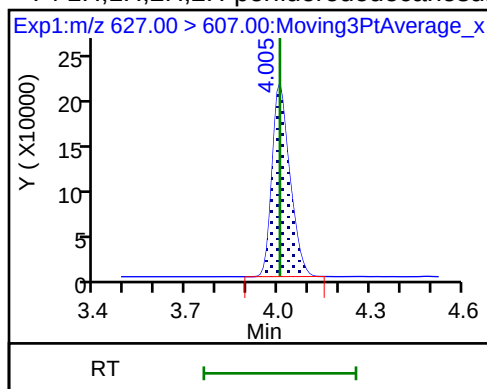
37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



74 1H,1H,2H,2H-perfluorododecanesulfonate 75 Perfluorododecanesulfonic acid (PF

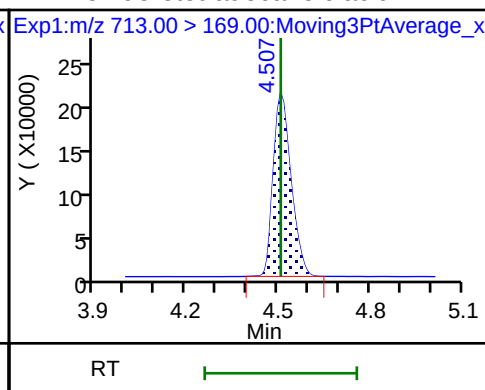
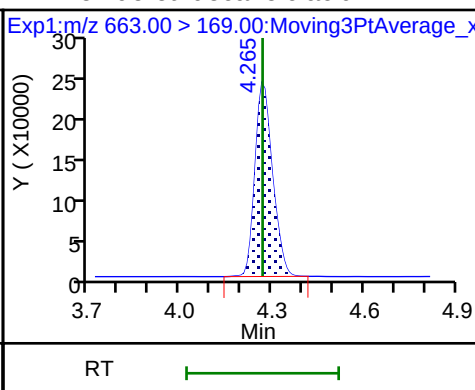
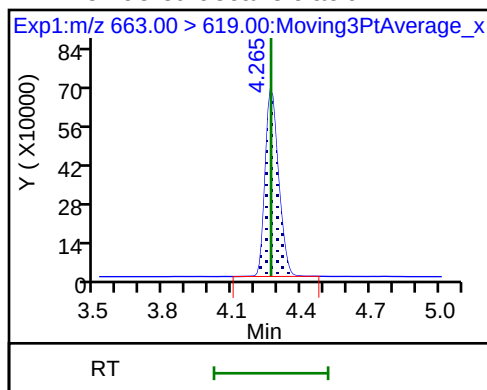
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

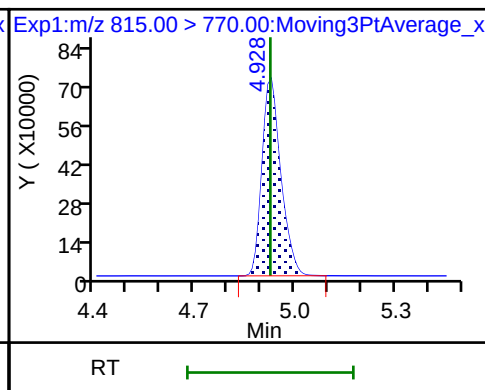
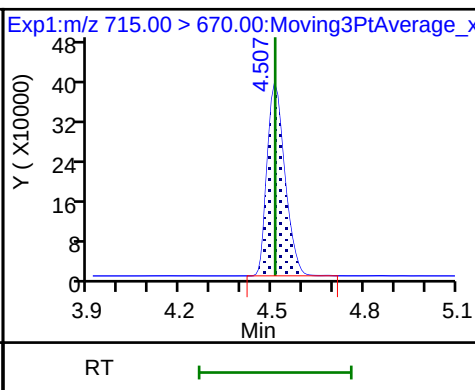
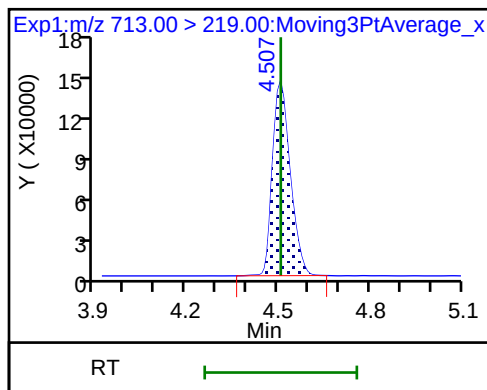
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

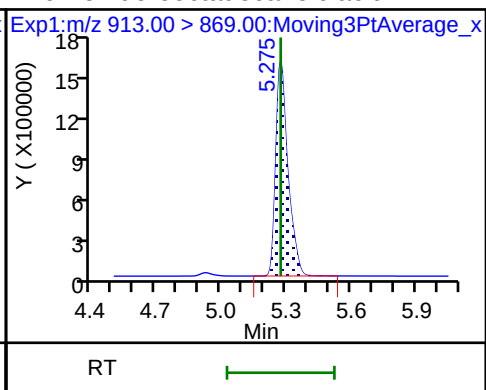
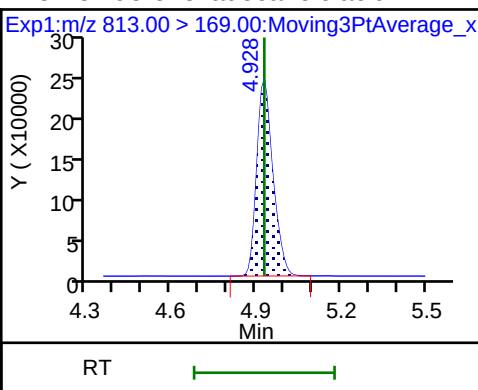
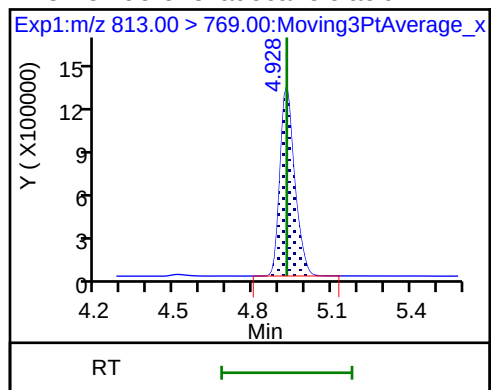
D 44 13C2 PFHxDA



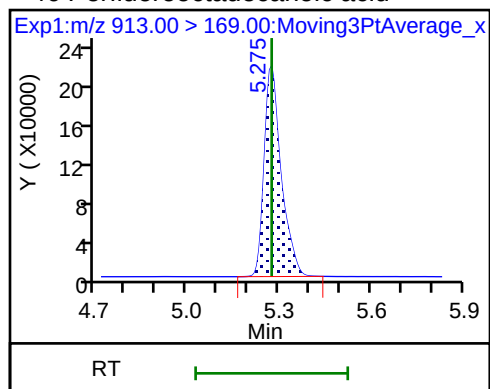
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_011.d
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 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 05-Nov-2018 16:22:00 ALS Bottle#: 16 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC STD 7
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub37
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 05-Nov-2018 16:59:19 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0305

First Level Reviewer: roycea

Date: 05-Nov-2018 16:36:37

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	1.416	1.413	0.003	0.536	3174189	2.60		104	8629	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.416	1.415	0.001	1.000	11919889	9.91		99.1	1602	
D 3 13C5 PFPeA										
267.90 > 223.00	1.686	1.681	0.005	0.638	2065249	2.56		102	8448	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.686	1.682	0.004	1.000	9023931	9.75		97.5	1391	
D 47 13C3 PFBS										
301.90 > 83.00	1.718	1.716	0.002	0.650	42217	2.47		106	320	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.718	1.719	-0.001	1.000	11725282	8.24		93.2	3871	
298.90 > 99.00	1.718	1.719	-0.001	1.000	5190760		2.26(1.25-3.74)	93.2	2777	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.933	1.928	0.005	0.731	275788	2.46		105	280	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.933	1.929	0.004	1.125	2538578	9.39		100	14455	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.964	1.960	0.004	1.000	8790631	9.58		95.8	2697	
313.00 > 119.00	1.964	1.960	0.004	1.000	807561		10.89(5.03-15.10)	95.8	1877	
D 7 13C2 PFHxA										
315.00 > 270.00	1.964	1.960	0.004	0.743	2256153	2.55		102	9471	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.985	1.983	0.002	1.155	11297139	9.21		98.2	7060	
349.00 > 99.00	1.985	1.983	0.002	1.155	4295162		2.63(1.36-4.07)	98.2	5049	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.058	2.056	0.002	1.000	1812448	8.02		80.2	1462	

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	2.058	2.056	0.002	0.779	168057	2.99		120	657	
D 9 13C4 PFHpA										
367.00 > 322.00	2.288	2.285	0.003	0.866	2093651	2.56		102	5620	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.288	2.288	0.0	1.000	8613122	9.26		92.6	2022	
363.00 > 169.00	2.288	2.288	0.0	1.000	3747592		2.30(1.13-3.40)	92.6	3265	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.310	2.305	0.005	1.000	9672973	8.43		92.6	4412	
399.00 > 99.00	2.310	2.305	0.005	1.000	3298912		2.93(1.50-4.49)	92.6	2647	
D 11 18O2 PFHxS										
403.00 > 84.00	2.310	2.305	0.005	0.874	2380566	2.38		101	4024	
77 DONA										
377.00 > 251.00	2.332	2.329	0.003	0.774	23940159	8.68		92.2	15197	
377.00 > 85.00	2.332	2.329	0.003	0.774	15055566		1.59(0.85-2.54)	92.2	8651	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.612	2.609	0.003	0.988	403235	2.27		95.8	1636	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.612	2.611	0.001	1.000	2516126	9.37		98.9	5275	
D 73 13C8 PFOA										
421.00 > 376.00	2.635	2.628	0.007	0.997	3468098	2.50		102	6435	
* 62 13C2 PFOA										
415.00 > 370.00	2.643	2.636	0.007		2057756	2.50			4771	
D 14 13C4 PFOA										
417.00 > 372.00	2.643	2.636	0.007	1.000	1959232	2.44		97.8	4390	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.643	2.637	0.006	1.000	8924431	10.0		100	907	
413.00 > 169.00	2.643	2.637	0.006	1.000	5236057		1.70(0.84-2.52)	100	5129	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.651	2.646	0.005	0.880	8542271	9.43		99.1	4518	
449.00 > 99.00	2.651	2.646	0.005	0.880	2232931		3.83(1.94-5.82)	99.1	3047	
D 72 13C8 PFOS										
507.00 > 99.00	3.013	3.008	0.005	1.140	867215	2.45		103	3091	
D 19 13C5 PFNA										
468.00 > 423.00	3.013	3.009	0.004	1.140	1742009	2.61		105	3816	
20 Perfluorononanoic acid										
463.00 > 419.00	3.013	3.010	0.003	1.000	7373753	9.92		99.2	1881	
463.00 > 169.00	3.013	3.010	0.003	1.000	1870289		3.94(1.90-5.69)	99.2	3367	
D 18 13C4 PFOS										
503.00 > 80.00	3.013	3.010	0.003	1.140	1633772	2.49		104	2669	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.013	3.011	0.002	1.000	7287004	9.23		99.5	1762	
499.00 > 99.00	3.013	3.011	0.002	1.000	1554703		4.69(2.31-6.93)	99.5	1947	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.233	3.225	0.008	1.073	13270063	9.71		104	8855	
D 21 13C8 FOSA										
506.00 > 78.00	3.353	3.351	0.002	1.269	2350223	2.55		102	3614	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.361	3.352	0.009	1.002	9468467	10.1		101	3201	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.361	3.360	0.001	1.272	444904	2.37		98.9	1721	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.368	3.362	0.006	1.002	2181704	9.09		94.8	4001	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.368	3.363	0.005	1.118	5321823	9.73		101	5476	
549.00 > 99.00	3.368	3.363	0.005	1.118	1874616		2.84(1.33-3.97)	101	2987	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.375	3.370	0.005	1.000	6063707	10.2		102	3459	
513.00 > 169.00	3.375	3.370	0.005	1.000	1179659		5.14(2.36-7.09)	102	355	
D 23 13C2 PFDA										
515.00 > 470.00	3.375	3.372	0.003	1.277	1452019	2.52		101	3920	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.535	3.527	0.008	1.338	729728	2.60		104	1684	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.535	3.530	0.005	1.000	2743554	10.0		100	1666	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.697	3.691	0.006	1.227	4314774	9.83		102	7869	
599.00 > 99.00	3.697	3.691	0.006	1.227	1408877		3.06(1.39-4.16)	102	3521	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.706	3.698	0.008	1.402	740834	2.47		99.0	795	
D 30 13C2 PFUnA										
565.00 > 520.00	3.714	3.703	0.011	1.405	1135961	2.50		99.9	3001	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.714	3.703	0.011	1.002	2576478	10.3		103	3127	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.714	3.706	0.008	1.000	3960522	9.71		97.1	2444	
563.00 > 169.00	3.706	3.706	0.0	0.998	1042216		3.80(2.12-6.36)	97.1	2392	
35 MeFOSA										
512.00 > 169.00	3.868	3.866	0.002		2926877	NC			578	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.868	3.866	0.002	1.284	18476169	9.47		101	13191	
D 36 13C2 PFDaA										
615.00 > 570.00	4.003	4.001	0.002	1.515	1218482	2.53		101	3104	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.003	4.001	0.002	1.000	5255919	9.98		99.8	2905	
613.00 > 169.00	4.003	4.001	0.002	1.000	1390849		3.78(2.13-6.40)	99.8	2649	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.011	4.005	0.006	1.194	1628299	9.63		99.9	3604	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.243	4.243	0.0	1.408	1912167	9.62		99.4	5658	
699.00 > 99.00	4.243	4.243	0.0	1.408	3016878		0.63(0.00-0.00)	99.4	4159	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.272	4.268	0.004	1.067	5225888	10.2		102	1694	
663.00 > 169.00	4.272	4.268	0.004	1.067	1886437		2.77(1.25-3.76)	102	3706	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.515	4.508	0.007	1.000	1634920	9.73		97.3	3149	
713.00 > 219.00	4.505	4.508	-0.003	0.998	1167065		1.40(0.71-2.13)	97.3	1865	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.515	4.509	0.006	1.708	1523530	2.54		102	2875	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.927	4.926	0.001	1.864	2799335	2.64		106	3717	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.927	4.928	-0.001	1.000	9877680	9.84		98.4	1286	
813.00 > 169.00	4.927	4.928	-0.001	1.000	1922921		5.14(2.86-8.58)	98.4	3111	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.281	5.275	0.005	1.072	11858619	9.69		96.9	1159	
913.00 > 169.00	5.281	5.275	0.005	1.072	1609562		7.37(3.83-11.48)	96.9	2626	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL7_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_011.d

Injection Date: 05-Nov-2018 16:22:00

Instrument ID: A8_N

Lims ID: IC L7 Full

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 16

Worklist Smp#: 8

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

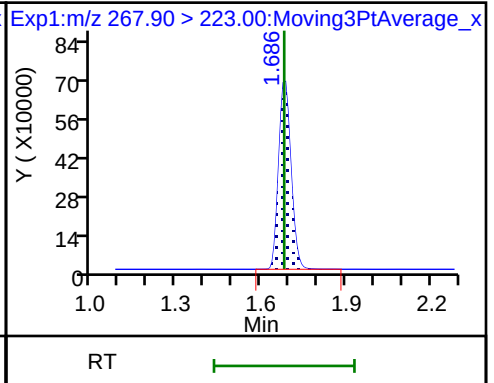
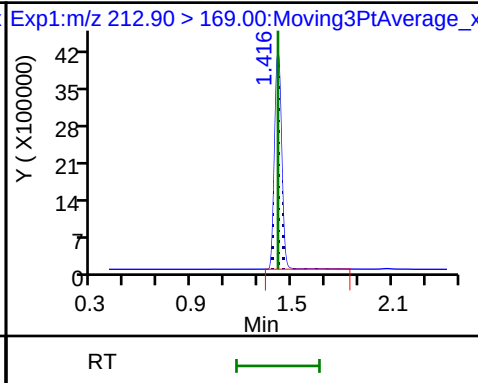
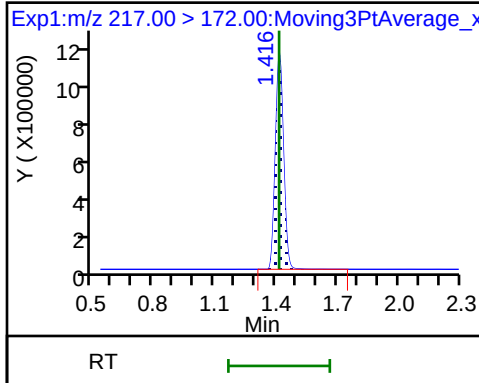
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

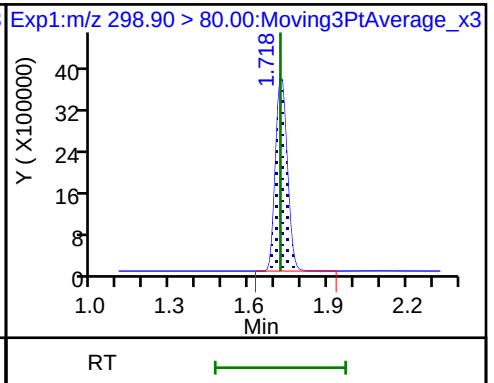
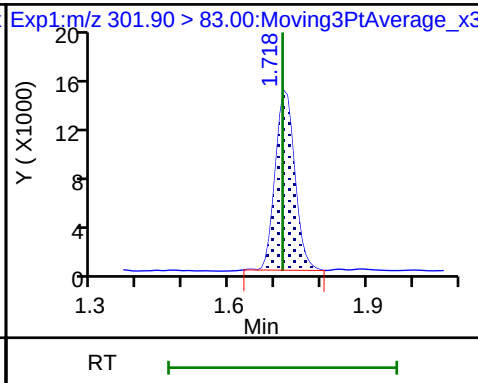
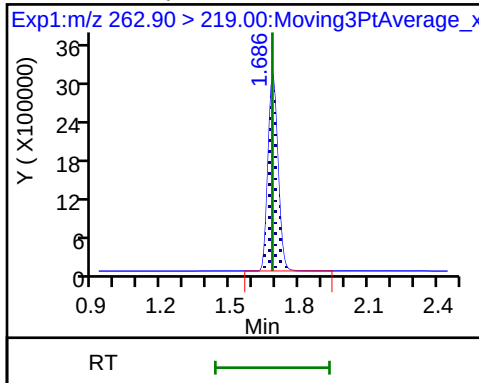
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

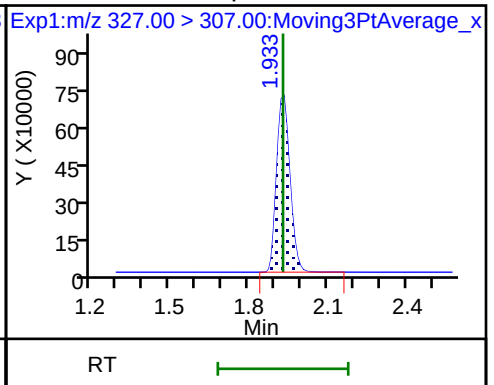
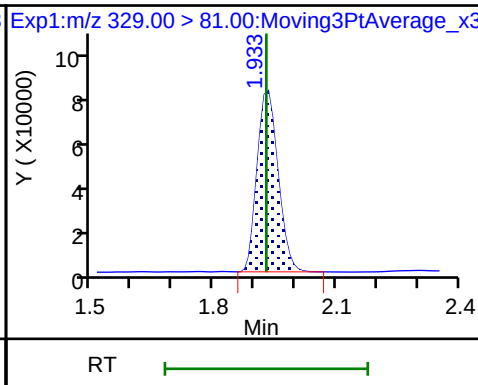
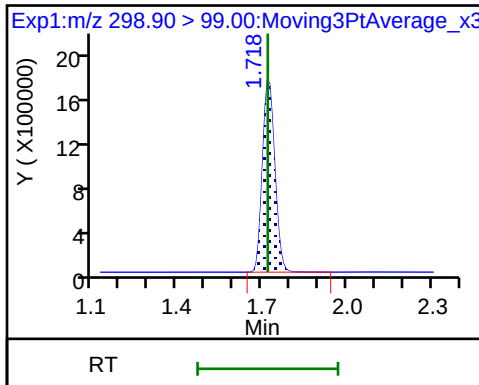
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

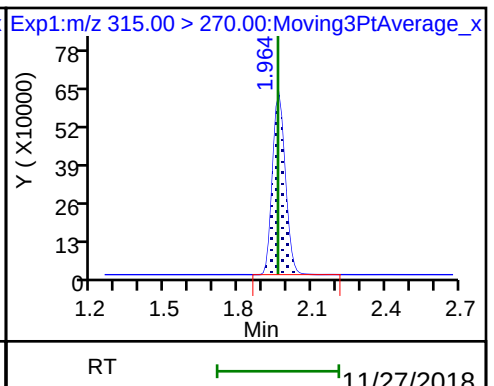
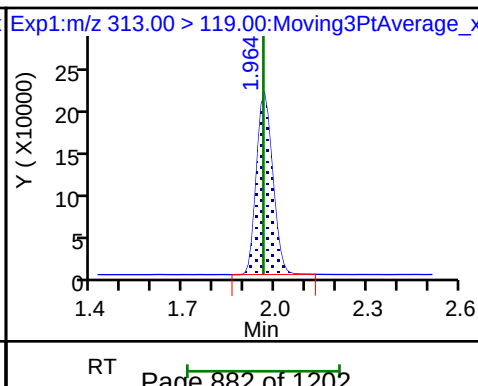
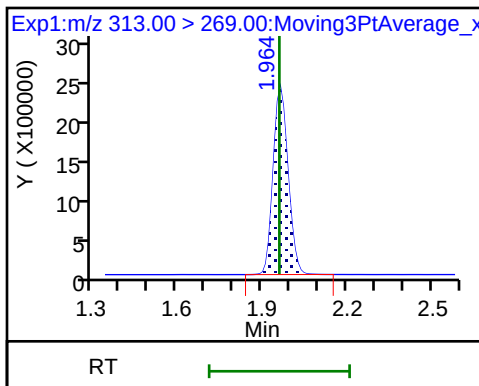
61 1H,1H,2H,2H-perfluorohexanesulfoni

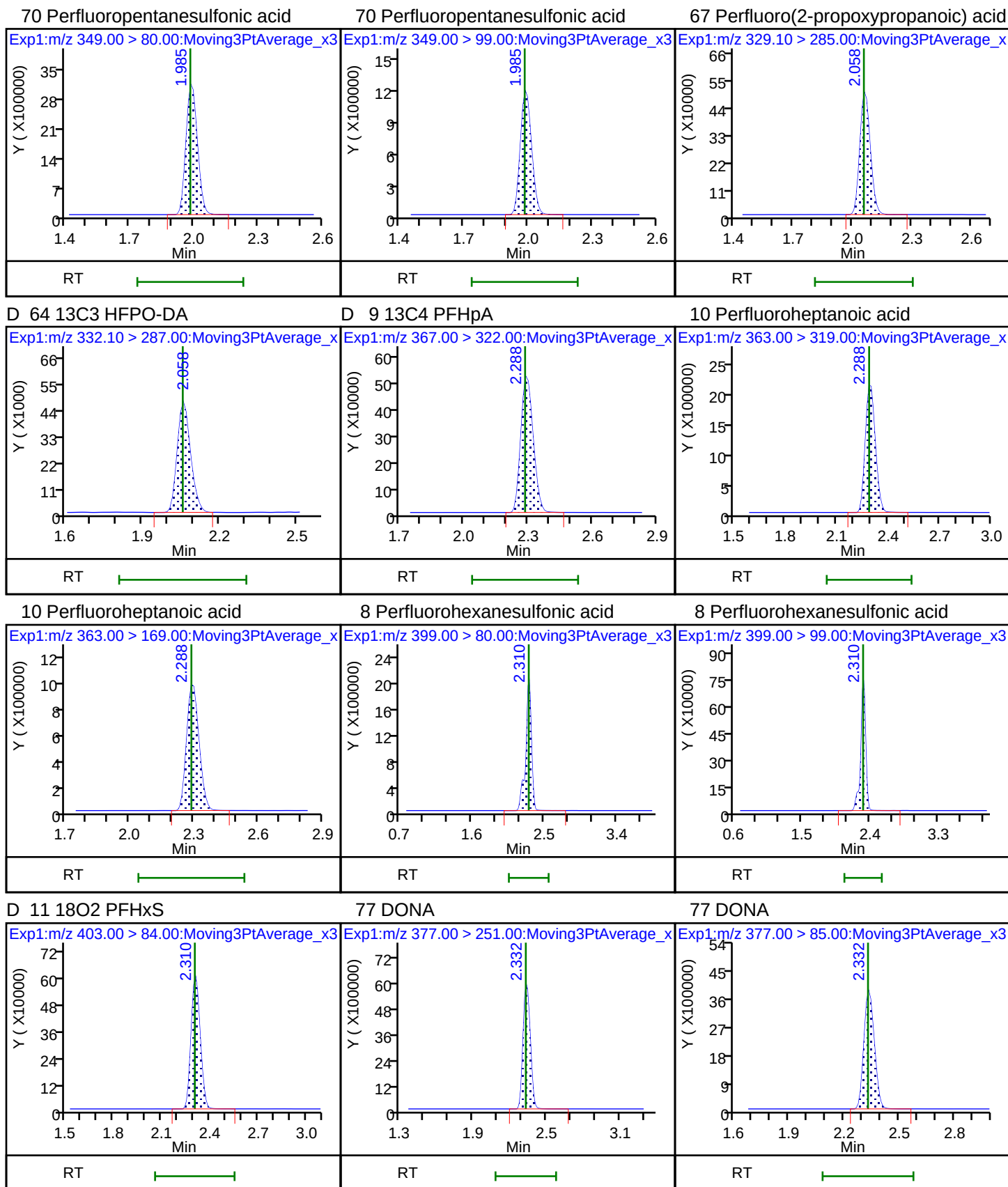


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

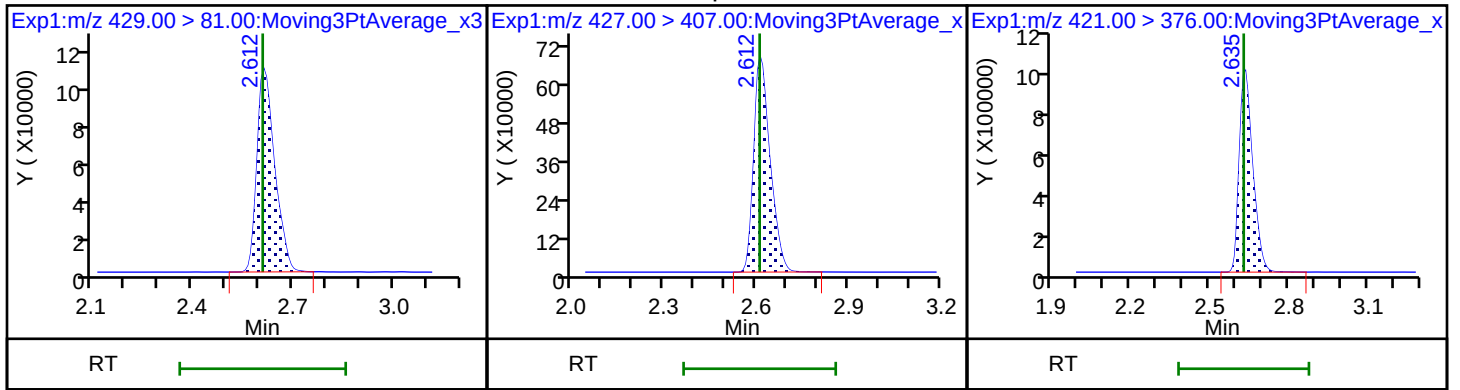
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

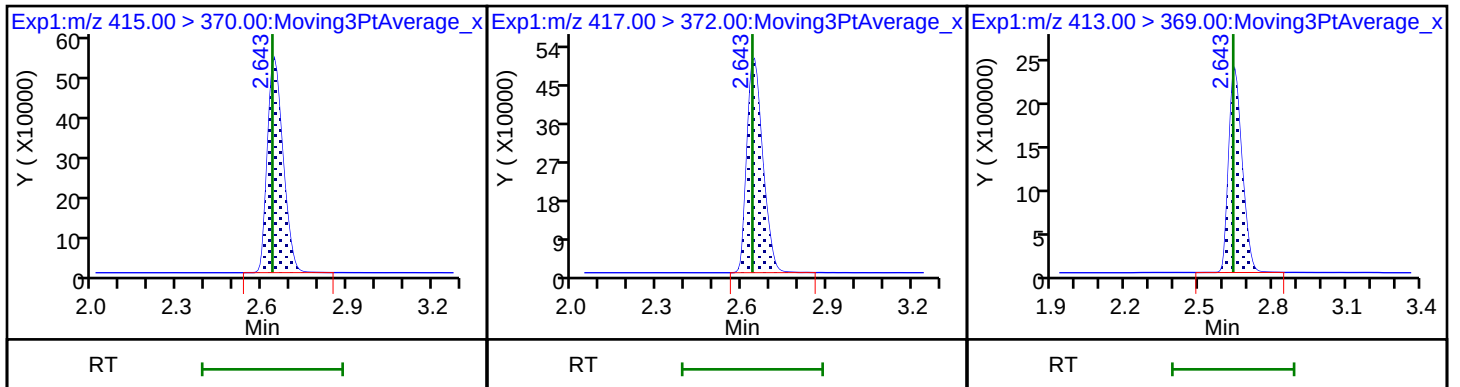
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



* 62 13C2 PFOA

D 14 13C4 PFOA

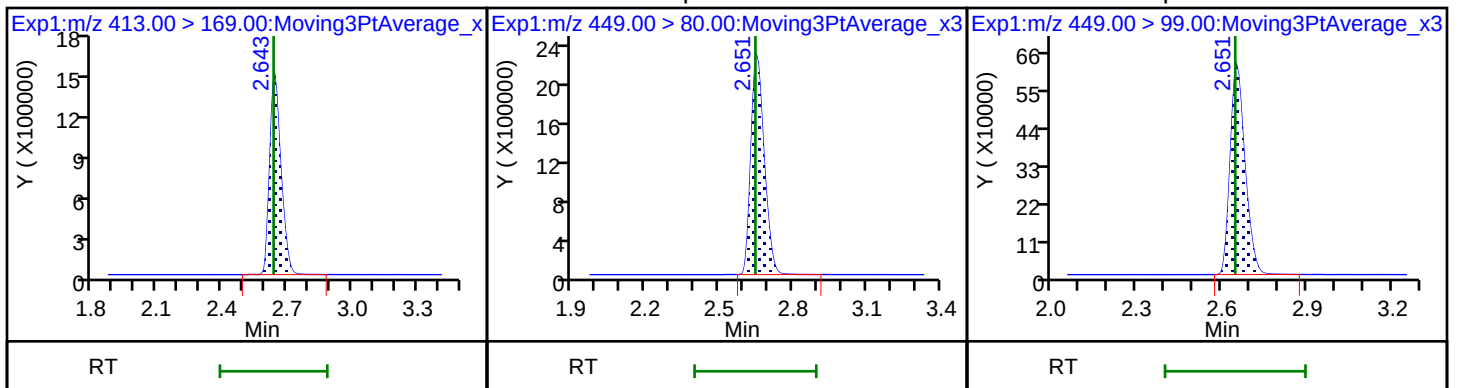
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

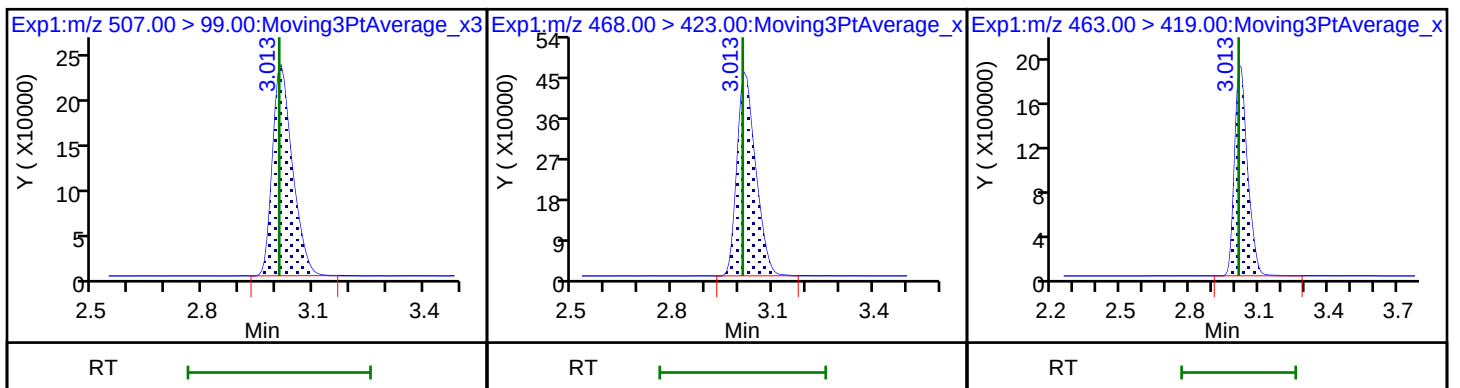
16 Perfluoroheptanesulfonic acid

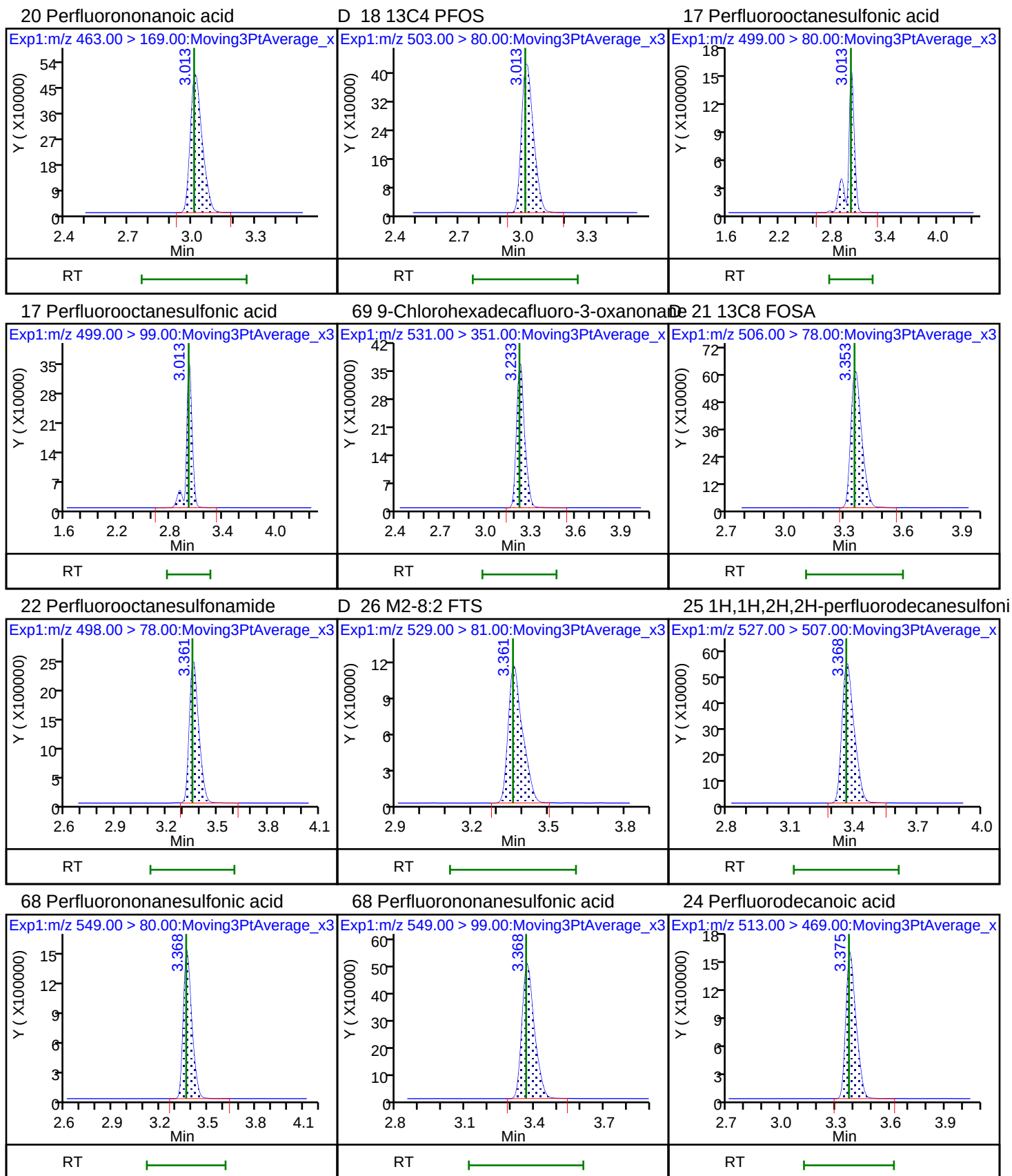


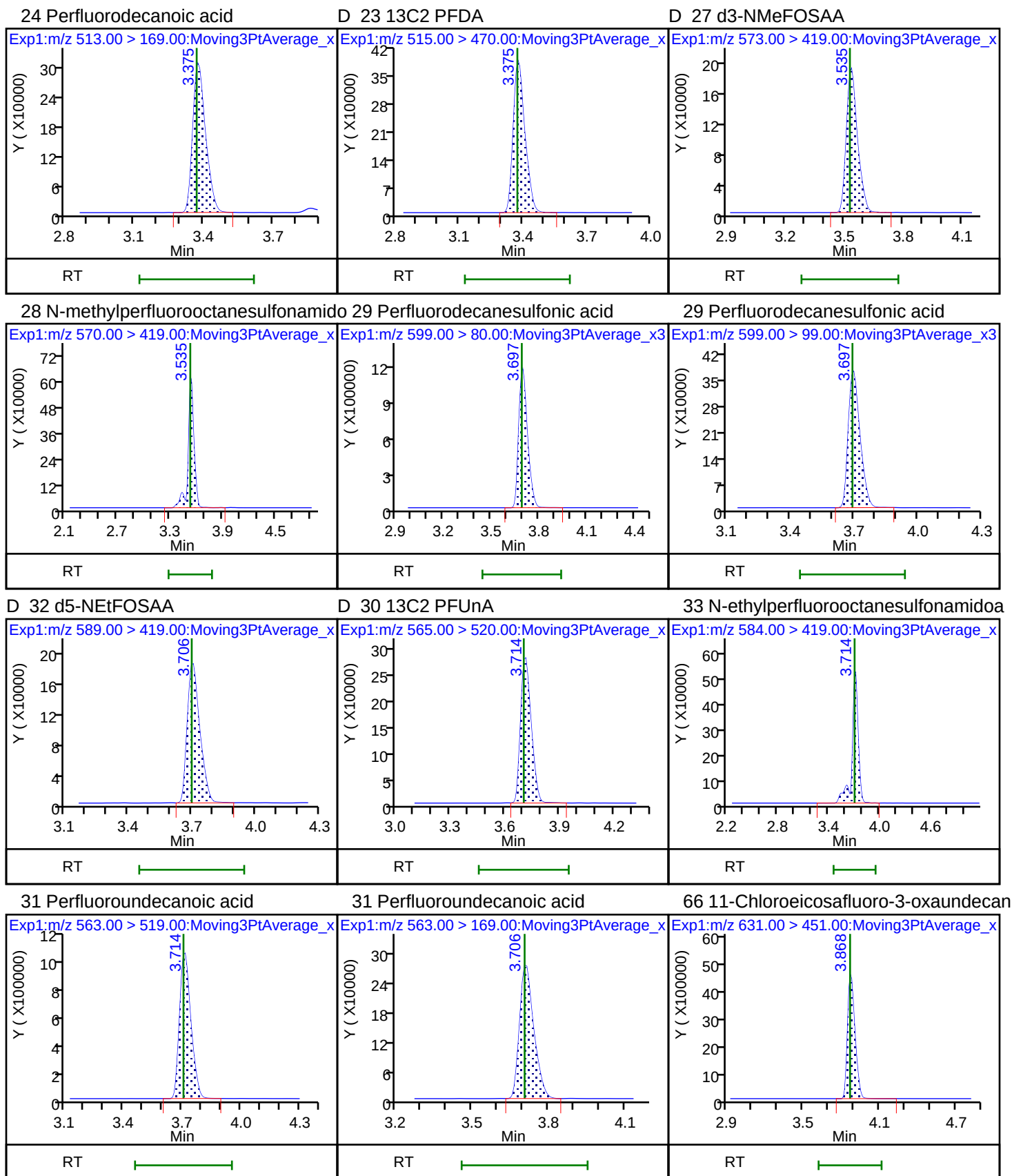
D 72 13C8 PFOS

D 19 13C5 PFNA

20 Perfluorononanoic acid



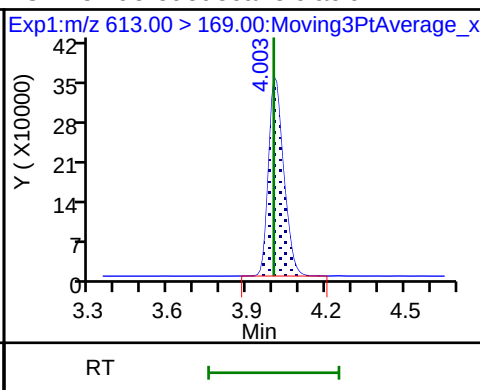
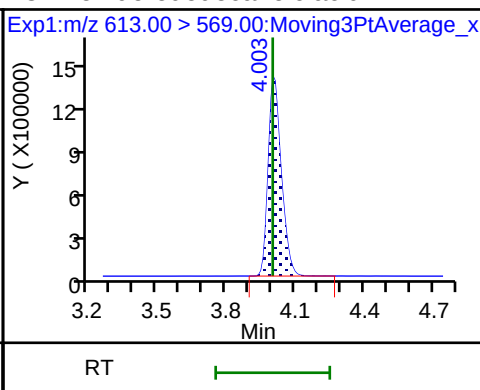
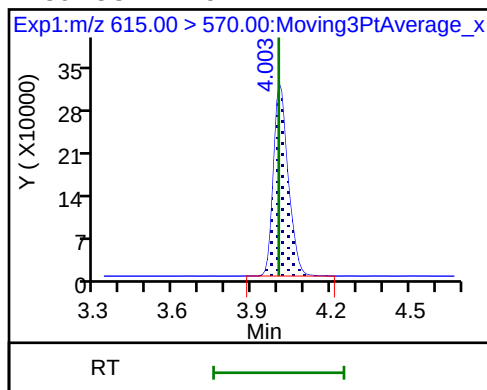




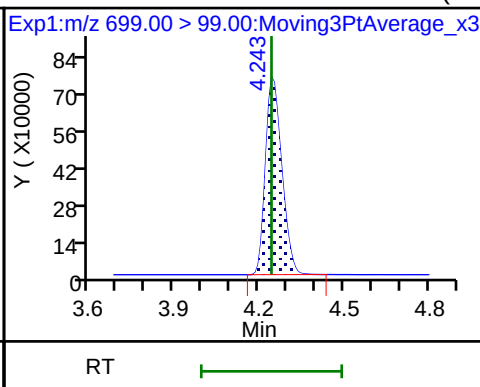
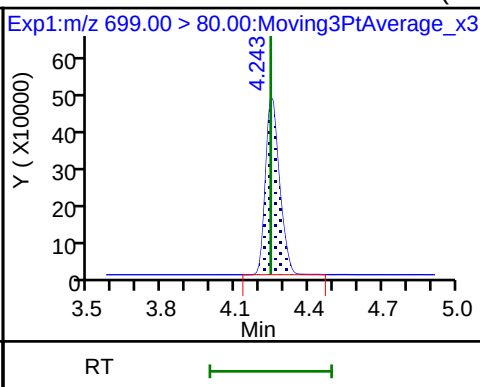
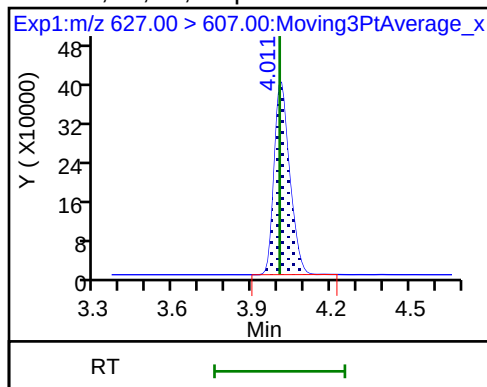
D 36 13C2 PFDaA

37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



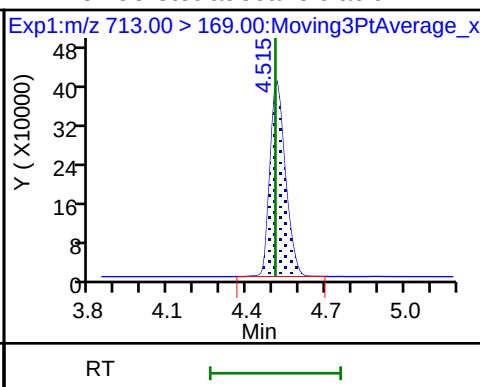
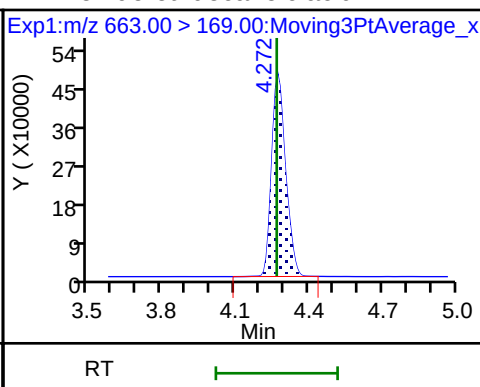
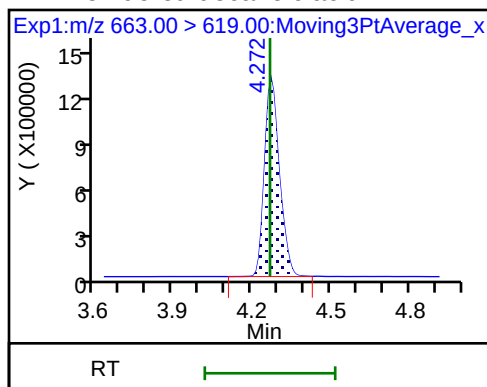
74 1H,1H,2H,2H-perfluorododecanesulfo75 Perfluorododecanesulfonic acid (PF 75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

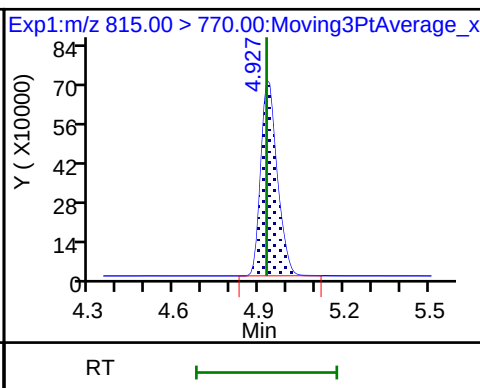
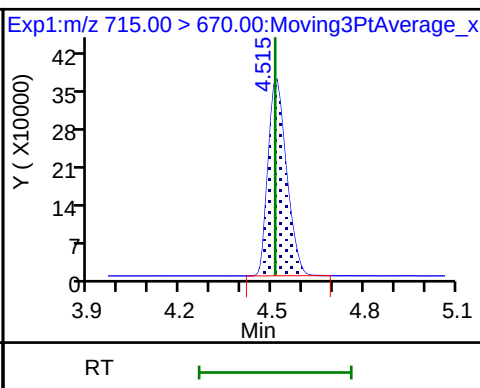
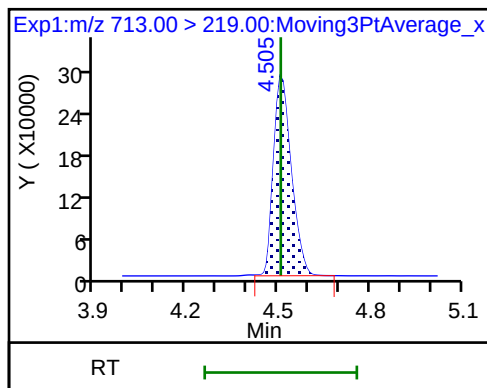
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

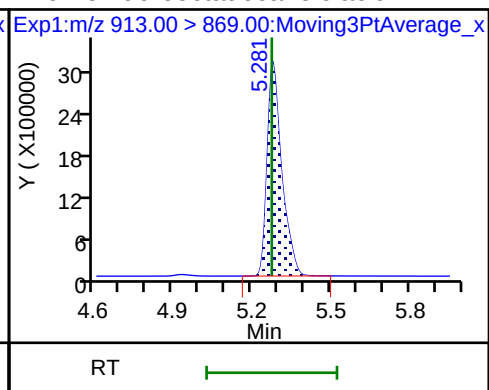
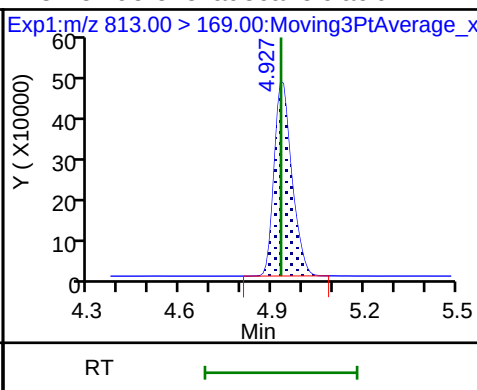
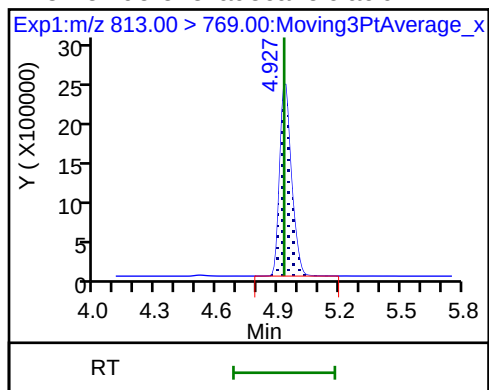
D 44 13C2 PFHxDA



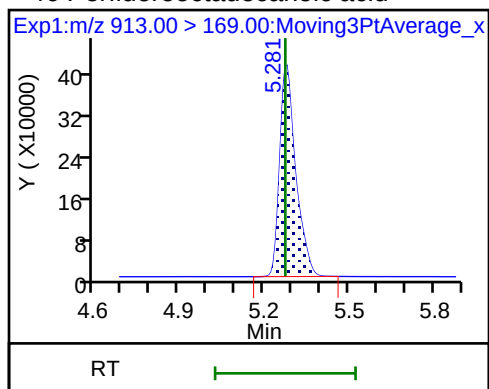
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 255834

SDG No.: _____

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/30/2018 13:12 Calibration End Date: 10/30/2018 13:57 Calibration ID: 41944

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-255834/2	2018.10.30ICALA_002.d
Level 2	IC 320-255834/3	2018.10.30ICALA_003.d
Level 3	IC 320-255834/4	2018.10.30ICALA_004.d
Level 4	IC 320-255834/5	2018.10.30ICALA_005.d
Level 5	IC 320-255834/6	2018.10.30ICALA_006.d
Level 6	IC 320-255834/7	2018.10.30ICALA_007.d
Level 7	IC 320-255834/8	2018.10.30ICALA_008.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
Perfluorobutanoic acid (PFBA)	1.323	1.327	1.323	1.323	1.328	1.323	1.319				1.074 - 1.574	1.324
Perfluoropentanoic acid (PFPeA)	1.572	1.579	1.572	1.572	1.579	1.572	1.565				1.323 - 1.823	1.573
Perfluorobutanesulfonic acid (PFBS)	1.607	1.614	1.607	1.607	1.607	1.607	1.600				1.357 - 1.857	1.607
4:2 FTS	1.805	1.805	1.805	1.805	1.814	1.805	1.797				1.555 - 2.055	1.805
Perfluorohexanoic acid (PFHxA)	1.839	1.838	1.839	1.830	1.839	1.839	1.830				1.586 - 2.086	1.836
Perfluoropentanesulfonic acid (PFPeS)	1.865	1.864	1.855	1.855	1.865	1.855	1.855				1.609 - 2.109	1.859
HFPO-DA (GenX)	1.925	1.935	1.925	1.925	1.935	1.925	1.925				1.678 - 2.178	1.928
Perfluoroheptanoic acid (PFHpA)	2.150	2.149	2.150	2.150	2.150	2.150	2.140				1.898 - 2.398	2.148
Perfluorohexanesulfonic acid (PFHxS)	2.170	2.170	2.160	2.160	2.170	2.160	2.160				1.914 - 2.414	2.164
DONA	2.191	2.201	2.191	2.191	2.201	2.191	2.191				1.944 - 2.444	2.194
6:2 FTS	2.491	2.491	2.478	2.478	2.478	2.478	2.478				2.232 - 2.732	2.482
Perfluorooctanoic acid (PFOA)	2.504	2.504	2.504	2.504	2.504	2.504	2.504				2.254 - 2.754	2.504
Perfluoroheptanesulfonic Acid (PFHpS)	2.517	2.517	2.518	2.504	2.517	2.518	2.504				2.264 - 2.764	2.514
Perfluorooctanesulfonic acid (PFOS)	2.877	2.877	2.878	2.878	2.877	2.878	2.878				2.627 - 3.127	2.878
Perfluorononanoic acid (PFNA)	2.877	2.893	2.878	2.878	2.877	2.878	2.878				2.630 - 3.130	2.880
F-53B Major	3.098	3.098	3.098	3.080	3.080	3.098	3.080				2.841 - 3.341	3.090
Perfluorooctanesulfonamide (FOSA)	3.224	3.224	3.224	3.207	3.224	3.224	3.207				2.969 - 3.469	3.219
8:2 FTS	3.224	3.241	3.224	3.224	3.224	3.224	3.224				2.976 - 3.476	3.226
Perfluorononanesulfonic acid (PFNS)	3.224	3.241	3.224	3.224	3.224	3.224	3.224				2.976 - 3.476	3.226
Perfluorotetradecanoic acid (PFDA)	3.241	3.241	3.241	3.241	3.241	3.241	3.241				2.991 - 3.491	3.241
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	3.399	3.399	3.400	3.400	3.399	3.400	3.400				3.149 - 3.649	3.400
Perfluorodecanesulfonic acid (PFDS)	3.556	3.555	3.556	3.542	3.556	3.556	3.541				3.302 - 3.802	3.552
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	3.570	3.570	3.570	3.556	3.570	3.570	3.556				3.316 - 3.816	3.566
Perfluoroundecanoic acid (PFUnA)	3.570	3.570	3.570	3.570	3.570	3.570	3.570				3.320 - 3.820	3.570
F-53B Minor	3.728	3.728	3.728	3.728	3.728	3.728	3.728				3.478 - 3.978	3.728
Perfluorododecanoic acid (PFDoA)	3.869	3.869	3.855	3.854	3.854	3.869	3.854				3.611 - 4.111	3.861
10:2 FTS	3.869	3.869	3.869	3.854	3.869	3.869	3.854				3.615 - 4.115	3.865
Perfluorododecanesulfonic acid (PFDoS)	4.106	4.105	4.106	4.089	4.106	4.106	4.089				3.851 - 4.351	4.101
Perfluorotridecanoic acid (PFTriA)	4.122	4.138	4.122	4.122	4.122	4.122	4.122				3.875 - 4.375	4.124
Perfluorotetradecanoic acid (PFTeA)	4.373	4.372	4.357	4.357	4.357	4.373	4.357				4.114 - 4.614	4.364
Perfluoro-n-hexadecanoic acid (PFHxDA)	+++++	4.784	4.784	4.769	4.784	4.784	+++++				4.530 - 5.030	4.781
Perfluoro-n-octadecanoic acid (PFODA)	5.125	5.141	5.125	5.125	5.125	5.125	5.125				4.877 - 5.377	5.127

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 255834

SDG No.: _____

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/30/2018 13:12 Calibration End Date: 10/30/2018 13:57 Calibration ID: 41944

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
13C4 PFBA	1.323	1.327	1.323	1.319	1.328	1.323	1.319				1.073 - 1.573	1.323
13C5-PFPeA DNU	1.572	1.572	1.572	1.572	1.572	1.572	1.565				1.321 - 1.821	1.571
13C3 PFBS	1.600	1.606	1.600	1.600	1.607	1.607	1.600				1.353 - 1.853	1.603
M2-4:2 FTS	1.805	1.805	1.805	1.805	1.805	1.805	1.797				1.554 - 2.054	1.804
13C2 PFHxA	1.839	1.838	1.839	1.830	1.839	1.839	1.830				1.586 - 2.086	1.836
13C3 HFPO-DA	1.925	1.935	1.925	1.925	1.935	1.925	1.925				1.678 - 2.178	1.928
13C4 PFHpA	2.150	2.149	2.150	2.150	2.150	2.150	2.140				1.898 - 2.398	2.148
18O2 PFHxS	2.170	2.170	2.160	2.160	2.170	2.160	2.160				1.914 - 2.414	2.164
M2-6:2 FTS	2.478	2.478	2.478	2.478	2.478	2.478	2.478				2.228 - 2.728	2.478
13C8 PFOA	2.504	2.504	2.504	2.491	2.504	2.504	2.491				2.251 - 2.751	2.500
13C4 PFOA	2.504	2.504	2.504	2.504	2.504	2.504	2.504				2.254 - 2.754	2.504
13C4 PFOS	2.877	2.877	2.878	2.878	2.877	2.878	2.878				2.627 - 3.127	2.878
13C5 PFNA	2.877	2.877	2.878	2.878	2.877	2.878	2.878				2.627 - 3.127	2.878
13C8 PFOS	2.877	2.877	2.878	2.878	2.877	2.878	2.878				2.627 - 3.127	2.878
13C8 FOSA	3.224	3.224	3.224	3.207	3.207	3.224	3.207				2.967 - 3.467	3.217
M2-8:2 FTS	3.224	3.241	3.224	3.224	3.224	3.224	3.224				2.976 - 3.476	3.226
13C2 PFDA	3.241	3.241	3.241	3.241	3.241	3.241	3.241				2.991 - 3.491	3.241
d3-NMeFOSAA	3.399	3.399	3.400	3.383	3.383	3.400	3.383				3.142 - 3.642	3.392
d5-NEtFOSAA	3.556	3.570	3.556	3.556	3.556	3.556	3.556				3.308 - 3.808	3.558
13C2 PFUnA	3.570	3.570	3.570	3.556	3.570	3.570	3.570				3.318 - 3.818	3.568
13C2 PFDoA	3.869	3.869	3.855	3.854	3.854	3.854	3.854				3.609 - 4.109	3.858
13C2 PFTeDA	4.373	4.372	4.357	4.357	4.357	4.373	4.357				4.114 - 4.614	4.364
13C2 PFHxDA	4.784	4.784	4.784	4.769	4.784	4.784	4.769				4.530 - 5.030	4.780

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 255834

SDG No.: _____

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/30/2018 13:12 Calibration End Date: 10/30/2018 13:57 Calibration ID: 41944

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-255834/2	2018.10.30ICALA_002.d
Level 2	IC 320-255834/3	2018.10.30ICALA_003.d
Level 3	IC 320-255834/4	2018.10.30ICALA_004.d
Level 4	IC 320-255834/5	2018.10.30ICALA_005.d
Level 5	IC 320-255834/6	2018.10.30ICALA_006.d
Level 6	IC 320-255834/7	2018.10.30ICALA_007.d
Level 7	IC 320-255834/8	2018.10.30ICALA_008.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
13C8 PFOA	3463371 3297012	3482711 3545571	3540463 3237673	3518168	Ave		3440709.65				3.6		50.0			
13C8 PFOS	488549 478843	514667 490012	497777 467079	521280	Ave		494029.528				3.9		50.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 255834
SDG No.: _____
Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N
Calibration Start Date: 10/30/2018 13:12 Calibration End Date: 10/30/2018 13:57 Calibration ID: 41944

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	0.8865 0.9532	0.9512 0.8800	0.9433	0.9586	0.9773	AveID		0.9357				4.0		35.0			
Perfluoropentanoic acid (PFPeA)	1.1338 0.9403	1.0102 0.8909	1.0181	0.9871	1.0271	AveID		1.0011				7.6		35.0			
Perfluorobutanesulfonic acid (PFBS)	112.04 98.621	107.32 92.319	97.591	110.25	104.68	AveID		103.26				7.0		50.0			
4:2 FTS	21.757 20.115	22.323 18.952	20.116	20.685	19.899	AveID		20.550				5.6		50.0			
Perfluorohexanoic acid (PFHxA)	0.9492 0.8413	1.0111 0.7697	0.8923	0.9074	0.9269	AveID		0.8997				8.6		35.0			
Perfluoropentanesulfonic acid (PFPeS)	48.749 48.358	45.565 44.950	47.503	51.092	48.698	AveID		47.845				4.4		50.0			
HFPO-DA (GenX)	1.8372 1.6721	1.4972 1.5827	1.6183	1.5600	1.8696	AveID		1.6625				8.5		35.0			
Perfluoroheptanoic acid (PFHpA)	1.2113 0.9674	1.0693 0.8707	1.1146	1.1166	1.0754	AveID		1.0607				10.5		35.0			
Perfluorohexanesulfonic acid (PFHxS)	1.5367 1.1897	1.3869 1.1337	1.1384	1.2043	1.2283	AveID		1.2597				11.8		35.0			
DONA	2.8473 2.4729	2.9238 2.1826	2.8784	2.9940	2.7237	AveID		2.7175				10.7		50.0			
6:2 FTS	2.3915 2.1109	2.3082 2.0493	2.2399	2.0761	2.0983	AveID		2.1820				6.0		35.0			
Perfluorooctanoic acid (PFOA)	1.3059 0.9454	1.1844 0.8244	1.1873	1.0947	1.0256	AveID		1.0811				15.1		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	0.9940 1.0274	1.0895 0.9780	1.0702	1.0998	1.0281	AveID		1.0410				4.5		50.0			
Perfluorooctanesulfonic acid (PFOS)	1.1030 1.0886	1.0668 1.0360	1.0342	1.1649	1.0450	AveID		1.0769				4.3		35.0			
Perfluorononanoic acid (PFNA)	1.0058 0.9593	1.0430 0.8658	1.0871	1.0186	1.0282	AveID		1.0011				7.1		35.0			
F-53B Major	1.0201 1.1260	1.0927 1.0682	1.0553	1.1847	1.2074	AveID		1.1078				6.2		50.0			
Perfluorooctanesulfonamide (FOSA)	2.9875 2.7995	3.2501 2.5727	3.1923	3.2190	3.0111	AveID		3.0046				8.3		35.0			
8:2 FTS	14.260 15.518	13.091 14.709	13.091	14.680	14.587	AveID		14.277				6.3		35.0			
Perfluorononanesulfonic acid (PFNS)	0.5695 0.6218	0.6295 0.5628	0.6252	0.6613	0.6244	AveID		0.6135				5.7		50.0			

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: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 255834
SDG No.: _____
Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N
Calibration Start Date: 10/30/2018 13:12 Calibration End Date: 10/30/2018 13:57 Calibration ID: 41944

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorodecanoic acid (PFDA)	1.1711 0.9708	1.1851 0.9510	1.1120	1.0961	1.1128	AveID		1.0855				8.4		35.0			
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.0825 0.9853	0.9531 0.9672	1.0121	1.0001	1.0002	AveID		1.0001				4.2		35.0			
Perfluorodecanesulfonic acid (PFDS)	0.8197 0.9027	0.9162 0.7951	0.9052	0.8434	0.8758	AveID		0.8654				5.4		50.0			
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.8100 0.9315	0.9219 0.9375	0.9254	0.9245	0.9489	AveID		0.9143				5.1		35.0			
Perfluoroundecanoic acid (PFUnA)	1.3990 1.0002	1.2856 0.8689	1.1686	1.1625	1.0741	AveID		1.1370				15.5		35.0			
F-53B Minor	1.4246 1.2751	1.5859 1.1182	1.4733	1.5084	1.3209	AveID		1.3866				11.5		50.0			
Perfluorododecanoic acid (PFDoA)	1.1654 0.8990	1.0275 0.7820	1.1472	1.0695	1.0310	AveID		1.0174				13.4		35.0			
10:2 FTS	10.862 10.986	8.1600 10.878	8.7944	9.8768	11.228	AveID		10.112				11.9		50.0			
Perfluorododecanesulfonic acid (PFDoS)	0.0879 0.1019	0.0993 0.1009	0.0876	0.1015	0.0953	AveID		0.0963				6.5		50.0			
Perfluorotridecanoic acid (PFTriA)	0.8962 0.7411	0.8540 0.6160	0.9271	0.8730	0.8154	AveID		0.8175				13.1		50.0			
Perfluorotetradecanoic acid (PFTeA)	0.2180 0.1623	0.2183 0.1684	0.1686	0.1820	0.1622	AveID		0.1828				13.7		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	++++ 0.9067	1.3741 ++++	0.9989	0.9450	0.8892	L2ID	0.0237	0.9015							1.0000		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	0.5044 0.5263	0.4870 0.4628	0.4749	0.5071	0.4992	AveID		0.4945				4.3		50.0			
13C4 PFBA	0.8689 0.9279	0.9157 0.9614	0.9165	0.8851	0.8969	Ave		0.9103				3.3		50.0			
13C5-PFPeA DNU	0.8296 0.9000	0.8760 0.8815	0.8626	0.8651	0.8504	Ave		0.8665				2.6		50.0			
13C3 PFBS	0.0111 0.0124	0.0121 0.0123	0.0125	0.0113	0.0120	Ave		0.0120				4.6		50.0			
M2-4:2 FTS	0.0916 0.0975	0.0992 0.0937	0.1008	0.0922	0.0983	Ave		0.0962				3.8		50.0			
13C2 PFHxA	0.8852 0.9485	0.9012 0.9448	0.9318	0.8829	0.9005	Ave		0.9136				3.0		50.0			
13C3 HFPO-DA	0.1173 0.1187	0.1199 0.1296	0.1150	0.1233	0.1026	Ave		0.1181				7.0		50.0			
13C4 PFHpA	1.0397 1.1061	1.1027 1.0636	1.1119	1.0252	1.0690	Ave		1.0740				3.2		50.0			

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: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 255834

SDG No.: _____

Instrument ID: A9 GC Column: Acquity ID: 2.1 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/30/2018 13:12 Calibration End Date: 10/30/2018 13:57 Calibration ID: 41944

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
18O2 PFHxS	0.6877 0.7254	0.6816 0.7069	0.7362	0.6763	0.6771	Ave		0.6988				3.5		50.0			
M2-6:2 FTS	0.0948 0.1032	0.1029 0.0961	0.1014	0.0976	0.0956	Ave		0.0988				3.6		50.0			
13C4 PFOA	0.9680 0.9898	1.0313 0.9703	0.9733	0.9604	0.9926	Ave		0.9837				2.4		50.0			
13C4 PFOS	0.7125 0.7011	0.6993 0.6935	0.7336	0.6899	0.7148	Ave		0.7064				2.1		50.0			
13C5 PFNA	0.9336 0.8844	0.9251 0.8888	0.9097	0.9435	0.8814	Ave		0.9095				2.8		50.0			
13C8 FOSA	0.3871 0.3920	0.4049 0.3724	0.3903	0.3905	0.4000	Ave		0.3910				2.6		50.0			
M2-8:2 FTS	0.0127 0.0113	0.0140 0.0107	0.0138	0.0117	0.0115	Ave		0.0122				10.6		50.0			
13C2 PFDA	0.9310 0.9208	1.0129 0.8558	0.9719	0.9308	0.9335	Ave		0.9367				5.1		50.0			
d3-NMeFOSAA	0.3746 0.4108	0.4320 0.4125	0.3909	0.4123	0.4013	Ave		0.4049				4.5		50.0			
d5-NEtFOSAA	0.3530 0.3168	0.3492 0.2973	0.3520	0.3272	0.3128	Ave		0.3298				6.7		50.0			
13C2 PFUnA	0.7766 0.7867	0.8249 0.7450	0.8041	0.7690	0.7698	Ave		0.7823				3.3		50.0			
13C2 PFDoA	0.9480 0.9677	1.0005 0.9944	0.9579	0.9419	0.9340	Ave		0.9635				2.7		50.0			
13C2 PFTeDA	0.7212 0.7282	0.7214 0.7125	0.6780	0.7153	0.7635	Ave		0.7200				3.5		50.0			
13C2 PFHxDA	0.6609 0.7178	0.7302 0.7524	0.7210	0.7230	0.7025	Ave		0.7154				4.0		50.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 255834

SDG No.: _____

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/30/2018 13:12 Calibration End Date: 10/30/2018 13:57 Calibration ID: 41944

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-255834/2	2018.10.30ICALA_002.d
Level 2	IC 320-255834/3	2018.10.30ICALA_003.d
Level 3	IC 320-255834/4	2018.10.30ICALA_004.d
Level 4	IC 320-255834/5	2018.10.30ICALA_005.d
Level 5	IC 320-255834/6	2018.10.30ICALA_006.d
Level 6	IC 320-255834/7	2018.10.30ICALA_007.d
Level 7	IC 320-255834/8	2018.10.30ICALA_008.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C8 PFOA	Ave	8476601 8677785	8523934 7924204	8665283	8610715	8069436	2.45 2.45	2.45 2.45	2.45	2.45	2.45
13C8 PFOS	Ave	1167633 1171128	1230054 1116319	1189687	1245859	1144434	2.39 2.39	2.39 2.39	2.39	2.39	2.39

Curve Type Legend:

Ave = Average

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 255834

SDG No.: _____

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/30/2018 13:12 Calibration End Date: 10/30/2018 13:57 Calibration ID: 41944

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-255834/2	2018.10.30ICALA_002.d
Level 2	IC 320-255834/3	2018.10.30ICALA_003.d
Level 3	IC 320-255834/4	2018.10.30ICALA_004.d
Level 4	IC 320-255834/5	2018.10.30ICALA_005.d
Level 5	IC 320-255834/6	2018.10.30ICALA_006.d
Level 6	IC 320-255834/7	2018.10.30ICALA_007.d
Level 7	IC 320-255834/8	2018.10.30ICALA_008.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	63699 14536769	137562 26118757	700086	2770322	6935084	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanoic acid (PFPeA)		AveID	77788 13910441	139761 24242637	711130	2788574	6910293	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorobutanesulfonic acid (PFBS)		AveID	90908 17754525	182019 31022231	875621	3599778	8813587	0.0221 4.42	0.0442 8.84	0.221	0.884	2.21
4:2 FTS		AveID	18652 3826151	40003 6728832	190700	713550	1770078	0.0234 4.67	0.0467 9.34	0.234	0.934	2.34
Perfluorohexanoic acid (PFHxA)		AveID	69481 13116869	143915 22451312	673371	2615815	6603393	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoropentanesulfonic acid (PFPeS)		AveID	41971 9237581	82003 16027538	452249	1770049	4350475	0.0235 4.69	0.0469 9.38	0.235	0.938	2.35
HFPO-DA (GenX)		AveID	17818 3262119	28359 6332723	150748	628181	1517762	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroheptanoic acid (PFHpA)		AveID	104145 17588052	186215 28591245	1003607	3737932	9095717	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorohexanesulfonic acid (PFHxS)		AveID	79526 12909524	135870 22514172	617668	2420284	5988235	0.0228 4.55	0.0455 9.10	0.228	0.910	2.28
DONA		AveID	158028 26844361	304181 44019792	1610812	6353925	14510088	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
6:2 FTS		AveID	17771 3393467	35556 5762757	174352	627518	1504047	0.0237 4.74	0.0474 9.48	0.237	0.948	2.37
Perfluorooctanoic acid (PFOA)		AveID	104643 15396289	193091 24719818	936788	3436748	8061840	0.0250 5.01	0.0501 10.0	0.250	1.00	2.50
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	55753 11271034	114547 19934173	605272	2358852	5535119	0.0238 4.76	0.0476 9.52	0.238	0.952	2.38
Perfluorooctanesulfonic acid (PFOS)		AveID	60306 11641776	109342 20584711	570169	2435322	5484091	0.0232 4.64	0.0464 9.28	0.232	0.928	2.32
Perfluorononanoic acid (PFNA)		AveID	77652 13944627	152381 23756934	800817	3138021	7169818	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 255834

SDG No.: _____

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/30/2018 13:12 Calibration End Date: 10/30/2018 13:57 Calibration ID: 41944

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
F-53B Major		AveID	56016 12093836	112471 21315966	584281	2487534	6364125	0.0233 4.66	0.0466 9.32	0.233	0.932	2.33
Perfluorooctanesulfonamide (FOSA)		AveID	95634 18036052	207817 29580681	1009046	4105177	9528139	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
8:2 FTS		AveID	14369 2752003	27693 4634743	140552	538370	1276920	0.0240 4.79	0.0479 9.58	0.240	0.958	2.40
Perfluorononanesulfonic acid (PFNS)		AveID	32210 6878433	66744 11567897	356556	1430137	3390136	0.0240 4.80	0.0480 9.60	0.240	0.960	2.40
Perfluorodecanoic acid (PFDA)		AveID	90162 14692738	189575 25123980	875209	3331267	8218144	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)		AveID	33534 6652620	65035 12317657	320374	1346384	3175990	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorodecanesulfonic acid (PFDS)		AveID	46555 10027931	97541 16411334	518365	1831725	4774486	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)		AveID	23647 4850297	50850 8605918	263775	987763	2348124	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoroundecanoic acid (PFUnA)		AveID	89842 12933591	167491 19985454	760964	2919106	6541446	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
F-53B Minor		AveID	79065 13842083	164988 22552443	824463	3201198	7036758	0.0236 4.71	0.0471 9.42	0.236	0.942	2.36
Perfluorododecanoic acid (PFDoA)		AveID	91368 14298498	162362 24007518	889955	3289422	7618201	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
10:2 FTS		AveID	11013 1960545	17370 3448893	95016	364481	989043	0.0241 4.82	0.0482 9.64	0.241	0.964	2.41
Perfluorododecanesulfonic acid (PFDoS)		AveID	5012 1136910	10616 2091110	50383	221273	521826	0.0242 4.84	0.0484 9.68	0.242	0.968	2.42
Perfluorotridecanoic acid (PFTriA)		AveID	70257 11788226	134935 18912174	719231	2684945	6025241	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluorotetradecanoic acid (PFTeA)		AveID	13001 1942558	24878 3705066	92576	425136	979697	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	++++ 10698193	158462 ++++	583218	2230933	4941811	++++ 5.00	0.0500 ++++	0.250	1.00	2.50
Perfluoro-n-octadecanoic acid (PFODA)		AveID	27565 6209643	56154 10749622	277253	1197202	2774364	0.0250 5.00	0.0500 10.0	0.250	1.00	2.50
13C4 PFBA	13PF OA	Ave	7185608 7625617	7230801 7420348	7421636	7225198	7096057	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C5-PFPeA DNU	13PF OA	Ave	6860597 7396747	6917794 6803099	6985179	7062557	6728064	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 PFBS	13PF OA	Ave	85362 94698	89218 88380	94392	85872	88574	2.33 2.33	2.33 2.33	2.33	2.33	2.33
M2-4:2 FTS	13PF OA	Ave	707347 748516	731492 675449	762392	702950	726046	2.34 2.34	2.34 2.34	2.34	2.34	2.34

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1 Analy Batch No.: 255834

SDG No.: _____

Instrument ID: A9 GC Column: Acquity ID: 2.1 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/30/2018 13:12 Calibration End Date: 10/30/2018 13:57 Calibration ID: 41944

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C2 PFHxA	13PF OA	Ave	7319913 7795361	7116724 7292358	7546229	7207236	7124163	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C3 HFPO-DA	13PF OA	Ave	969846 975432	947049 1000289	931505	1006689	811818	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFHpA	13PF OA	Ave	8598024 9090699	8707536 8209283	9004593	8369358	8457730	2.50 2.50	2.50 2.50	2.50	2.50	2.50
18O2 PFHxS	13PF OA	Ave	5379790 5640005	5091979 5161381	5640195	5223113	5068038	2.37 2.37	2.37 2.37	2.37	2.37	2.37
M2-6:2 FTS	13PF OA	Ave	744658 805491	771843 704483	780038	757242	718321	2.38 2.38	2.38 2.38	2.38	2.38	2.38
13C4 PFOA	13PF OA	Ave	8005125 8134347	8143608 7488473	7882113	7840609	7852766	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C4 PFOS	13PF OA	Ave	5632640 5508335	5279158 5117088	5679290	5384373	5406507	2.39 2.39	2.39 2.39	2.39	2.39	2.39
13C5 PFNA	13PF OA	Ave	7720308 7268142	7305198 6859744	7366826	7702032	6973212	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C8 FOSA	13PF OA	Ave	3201088 3221281	3197106 2874497	3160835	3188250	3164375	2.50 2.50	2.50 2.50	2.50	2.50	2.50
M2-8:2 FTS	13PF OA	Ave	100761 88674	105771 78772	107369	91683	87541	2.40 2.40	2.40 2.40	2.40	2.40	2.40
13C2 PFDA	13PF OA	Ave	7699079 7567635	7998581 6604968	7870335	7598205	7385145	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d3-NMeFOSAA	13PF OA	Ave	3097827 3376031	3411732 3183764	3165312	3365714	3175263	2.50 2.50	2.50 2.50	2.50	2.50	2.50
d5-NEtFOSAA	13PF OA	Ave	2919486 2603455	2757818 2294813	2850484	2670966	2474486	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFUnA	13PF OA	Ave	6421843 6465285	6514241 5750238	6511694	6277796	6090025	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFDoA	13PF OA	Ave	7839780 7952822	7900454 7675120	7757539	7689053	7389170	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFTeDA	13PF OA	Ave	5964438 5984835	5697043 5499047	5490624	5839511	6040135	2.50 2.50	2.50 2.50	2.50	2.50	2.50
13C2 PFHxDA	13PF OA	Ave	5465421 5899292	5765824 5807381	5838380	5901989	5557826	2.50 2.50	2.50 2.50	2.50	2.50	2.50

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_002.d
 Lims ID: IC L1 Full
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 30-Oct-2018 13:12:49 ALS Bottle#: 10 Worklist Smp#: 2
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CAL STD1
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist: chrom-PFAS_A9*sub5
 Method: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 30-Oct-2018 15:07:49 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: roycea

Date: 30-Oct-2018 14:12:32

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	1.323	1.323	0.0	0.528	7185608	2.39		95.5	11761	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.323	1.324	-0.001	1.000	63699	0.0237		94.7	4.0	M
D 3 13C5 PFPeA										
267.90 > 223.00	1.572	1.571	0.001	0.628	6860597	2.39		95.7	12499	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.572	1.573	-0.001	1.000	77788	0.0283		113	8.5	
D 47 13C3 PFBS										
301.90 > 83.00	1.600	1.603	-0.003	0.639	85362	2.15		92.7	400	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.607	1.607	0.0	1.004	90908	0.0240		109	48.8	
298.90 > 99.00	1.607	1.607	0.0	1.004	32119		2.83(1.35-4.05)	109	18.1	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.805	1.804	0.001	0.721	707347	2.22		95.2	719	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.805	1.805	0.0	1.128	18652	0.0247		106	189	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.839	1.836	0.003	1.000	69481	0.0264		106	16.7	
313.00 > 119.00	1.839	1.836	0.003	1.000	6093		11.40(6.96-20.87)	106	18.5	
D 7 13C2 PFHxA										
315.00 > 270.00	1.839	1.836	0.003	0.734	7319913	2.42		96.9	16795	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.865	1.859	0.005	1.165	41971	0.0239		102	125	
349.00 > 99.00	1.865	1.859	0.005	1.165	19895		2.11(1.15-3.45)	102	49.6	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.925	1.928	-0.003	0.769	969846	2.48		99.3	4037	

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	1.925	1.928	-0.003	1.000	17818	0.0276		111	16.1	
D 9 13C4 PFHpA										
367.00 > 322.00	2.150	2.148	0.002	0.858	8598024	2.42		96.8	12791	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.150	2.148	0.002	1.000	104145	0.0285		114	28.0	
363.00 > 169.00	2.140	2.148	-0.008	0.995	21521		4.84(2.17-6.52)	114	76.2	
D 11 18O2 PFHxS										
403.00 > 84.00	2.170	2.164	0.006	0.867	5379790	2.33		98.4	8165	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.170	2.164	0.006	1.000	79526	0.0278		122	90.4	
399.00 > 99.00	2.160	2.164	-0.004	0.995	24910		3.19(1.90-5.70)	122	38.3	
76 DONA										
377.00 > 251.00	2.191	2.194	-0.003	0.761	158028	0.0247		105	749	
377.00 > 85.00	2.191	2.194	-0.003	0.761	64102		2.47(1.13-3.39)	105	158	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.478	2.478	0.0	0.990	744658	2.28		95.9	1078	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.491	2.482	0.009	1.005	17771	0.0260		110	31.6	
D 73 13C8 PFOA										
421.00 > 376.00	2.504	2.501	0.003		8476601	2.46		101	8840	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.504	2.504	0.0	1.000	104643	0.0302		121	12.7	M
413.00 > 169.00	2.504	2.504	0.0	1.000	39299		2.66(1.36-4.08)	121	109	
* 62 13C2 PFOA										
415.00 > 370.00	2.504	2.504	0.0		8269614	2.50			8202	
D 14 13C4 PFOA										
417.00 > 372.00	2.504	2.504	0.0	1.000	8005125	2.46		98.4	6672	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.517	2.514	0.003	0.875	55753	0.0227		95.5	90.4	
449.00 > 99.00	2.517	2.514	0.003	0.875	12117		4.60(1.84-5.53)	95.5	57.9	
D 72 13C8 PFOS										
507.00 > 99.00	2.877	2.877	0.0		1167633	2.36		98.9	4185	
D 18 13C4 PFOS										
503.00 > 80.00	2.877	2.877	0.0	1.149	5632640	2.41		101	4123	
D 19 13C5 PFNA										
468.00 > 423.00	2.877	2.877	0.0	1.149	7720308	2.57		103	7548	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.877	2.877	0.0	1.000	60306	0.0238		102	27.7	
499.00 > 99.00	2.877	2.877	0.0	1.000	15803		3.82(2.04-6.12)	102	56.3	
20 Perfluorononanoic acid										M
463.00 > 419.00	2.877	2.880	-0.003	1.000	77652	0.0251		100	6.3	M
463.00 > 169.00	2.877	2.880	-0.003	1.000	10831		7.17(2.68-8.03)	100	33.8	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.098	3.091	0.007	1.077	56016	0.0215		92.1	62.7	
D 21 13C8 FOSA										
506.00 > 78.00	3.224	3.217	0.007	1.287	3201088	2.47		99.0	4675	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.224	3.219	0.005	1.000	95634	0.0249		99.4	193	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.224	3.226	-0.002	1.287	100761	2.49		104	375	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.224	3.226	-0.002	1.000	14369	0.0239		99.9	110	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.224	3.226	-0.002	1.120	32210	0.0223		92.8	138	
549.00 > 99.00	3.224	3.226	-0.002	1.120	7487		4.30(3.02-9.05)	92.8	59.4	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.241	3.241	0.0	1.000	90162	0.0270		108	19.5	
513.00 > 169.00	3.241	3.241	0.0	1.000	8547		10.55(7.12-21.35)	108	15.5	
D 23 13C2 PFDA										
515.00 > 470.00	3.241	3.241	0.0	1.294	7699079	2.48		99.4	7749	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.399	3.392	0.007	1.357	3097827	2.31		92.5	4881	
28 N-methylperfluorooctanesulfonamido										M
570.00 > 419.00	3.399	3.399	0.0	1.000	33534	0.0271		108	10.9	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.556	3.552	0.004	1.236	46555	0.0228		94.7	68.6	
599.00 > 99.00	3.556	3.552	0.004	1.236	8148		5.71(2.14-6.43)	94.7	28.6	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.556	3.558	-0.002	1.420	2919486	2.68		107	3541	
33 N-ethylperfluorooctanesulfonamidoa										M
584.00 > 419.00	3.570	3.566	0.004	1.004	23647	0.0221		88.6	58.6	M
D 30 13C2 PFUnA										
565.00 > 520.00	3.570	3.568	0.002	1.426	6421843	2.48		99.3	6577	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.570	3.570	0.0	1.000	89842	0.0308		123	31.2	
563.00 > 169.00	3.570	3.570	0.0	1.000	8276		10.86(5.24-15.72)	123	36.5	
35 MeFOSA										
512.00 > 169.00	3.712	3.724	-0.012		14977	NC			104	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.728	3.728	0.0	1.296	79065	0.0242		103	498	
D 36 13C2 PFDaA										
615.00 > 570.00	3.869	3.859	0.010	1.545	7839780	2.46		98.4	10531	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.869	3.861	0.008	1.000	91368	0.0286		115	35.3	
613.00 > 169.00	3.869	3.861	0.008	1.000	8580		10.65(4.68-14.05)	115	13.1	
74 1H,1H,2H,2H-perfluorododecanesulfo										M
627.00 > 607.00	3.869	3.865	0.004	1.200	11013	0.0259		107	22.1	M
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	3.912	3.912	0.0		14997	NC			76.7	
75 Perfluorododecanesulfonic acid (PF										M
699.00 > 80.00	4.106	4.101	0.005	1.427	5012	0.0221		91.2	17.8	M
699.00 > 99.00	4.106	4.101	0.005	1.427	7990		0.63(0.28-0.83)	91.2	26.0	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.122	4.125	-0.003	1.065	70257	0.0274		110	60.3	
663.00 > 169.00	4.122	4.125	-0.003	1.065	12101		5.81(3.09-9.27)	110	47.6	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.373	4.364	0.009	1.000	13001	0.0298		119	52.7	
713.00 > 219.00	4.373	4.364	0.009	1.000	8517		1.53(0.70-2.09)	119	24.7	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.373	4.364	0.009	1.746	5964438	2.50		100	10549	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.784	4.780	0.004	1.000	112559	0.0308		123	271	
813.00 > 169.00	4.784	4.780	0.004	1.000	21447		5.25(2.77-8.32)	123	63.0	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.784	4.780	0.004	1.910	5465421	2.31		92.4	10787	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.125	5.127	-0.002	1.071	27565	0.0255		102	73.6	
913.00 > 169.00	5.125	5.127	-0.002	1.071	4826		5.71(2.55-7.64)	102	27.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL1_00010

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_002.d

Injection Date: 30-Oct-2018 13:12:49

Instrument ID: A9

Lims ID: IC L1 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

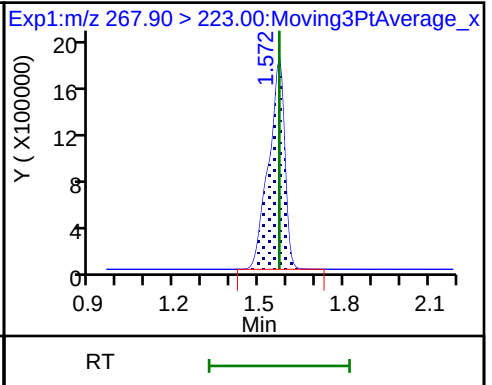
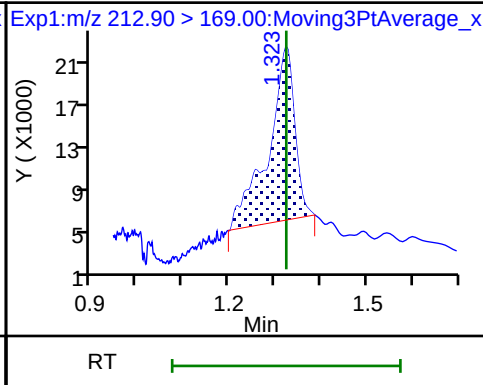
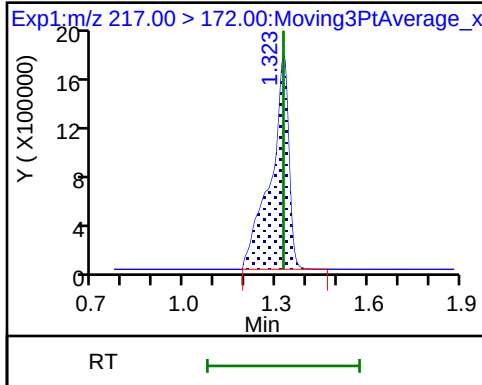
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

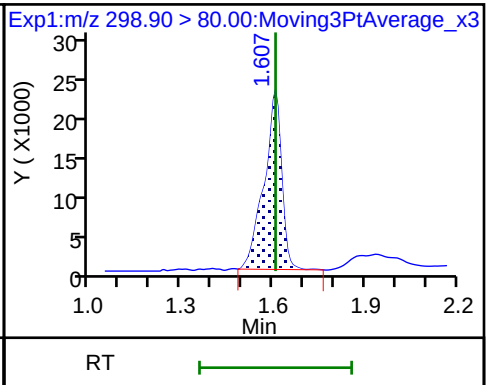
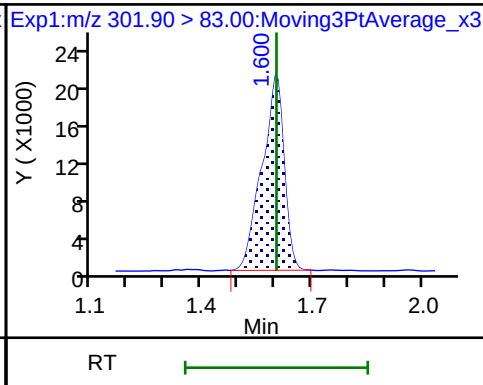
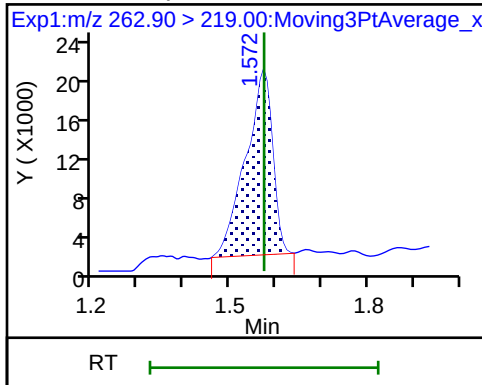
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

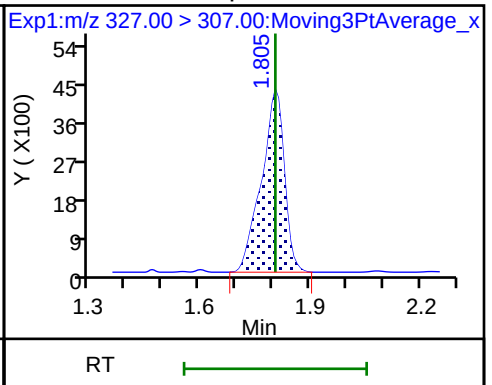
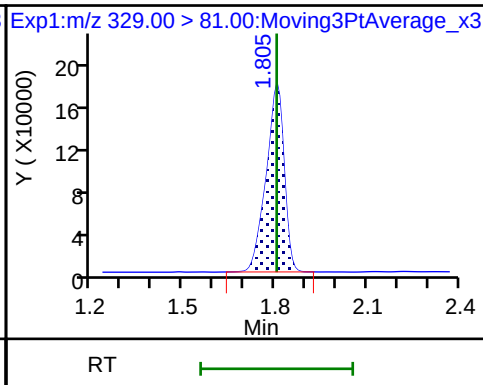
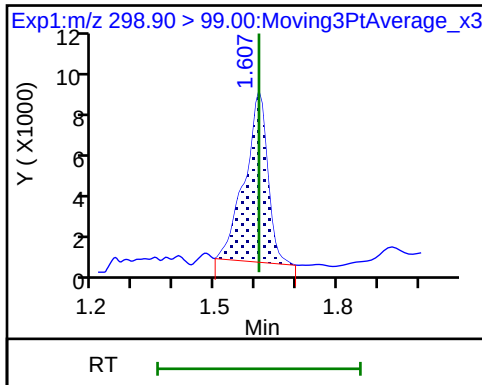
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

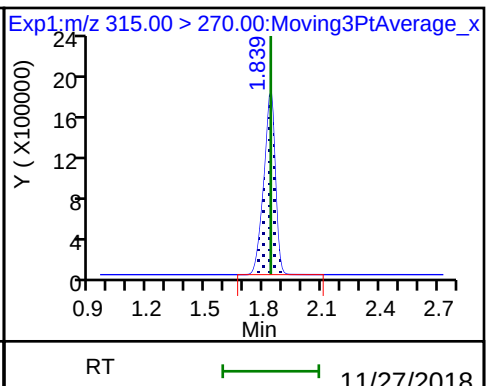
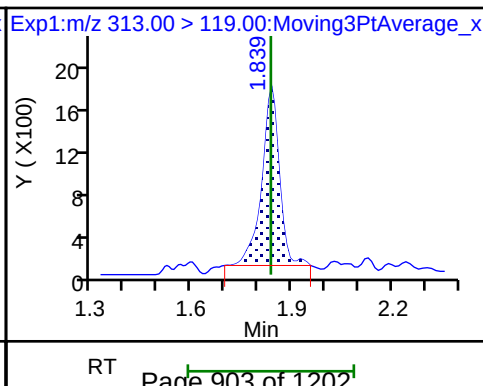
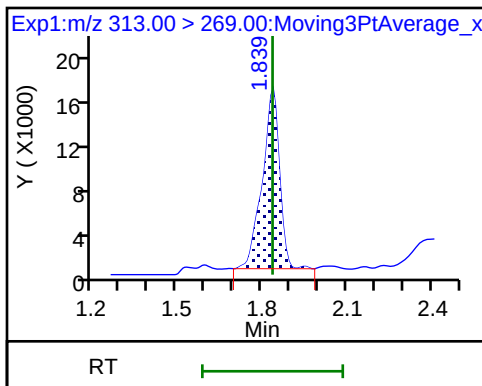
61 1H,1H,2H,2H-perfluorohexanesulfoni

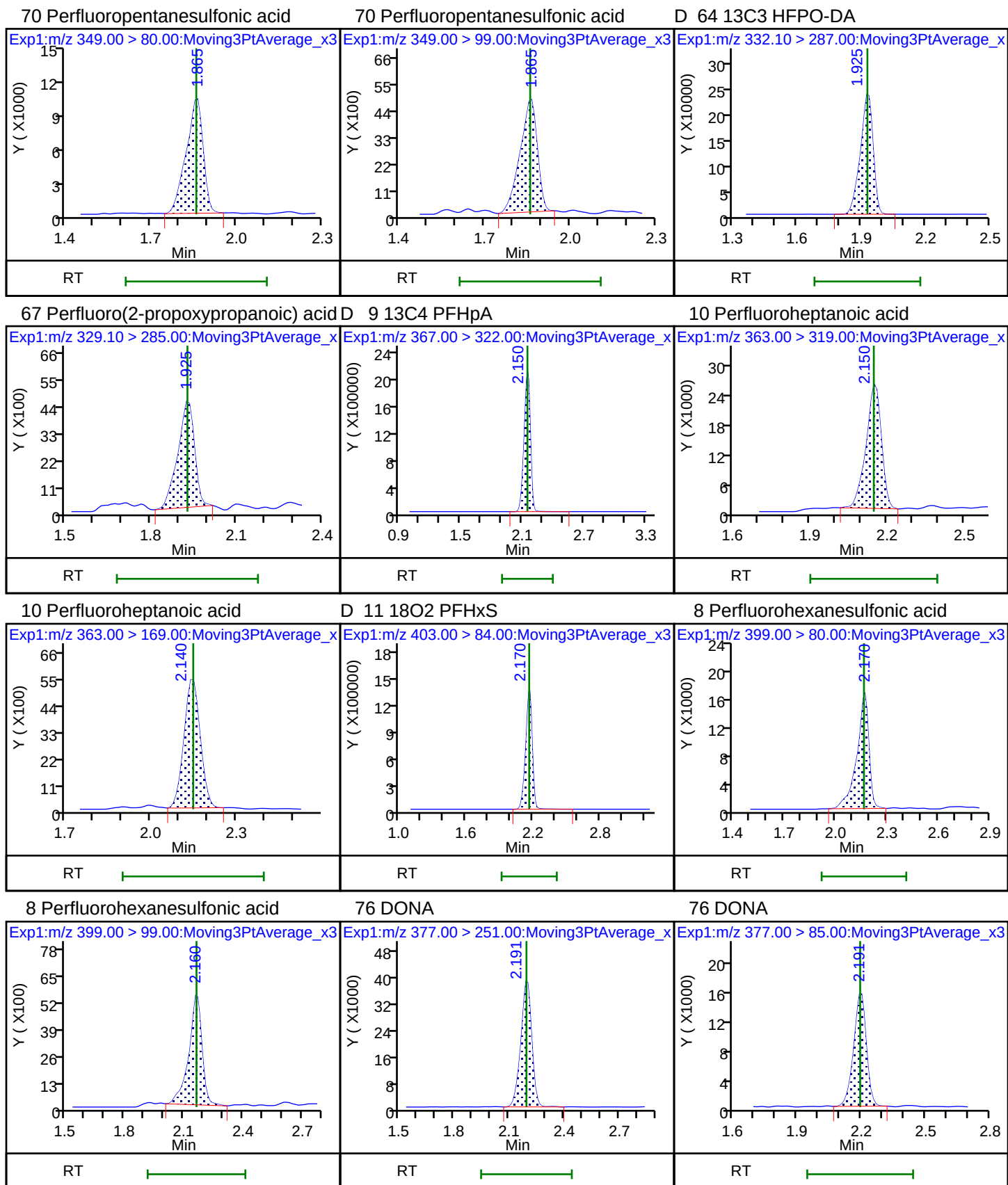


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

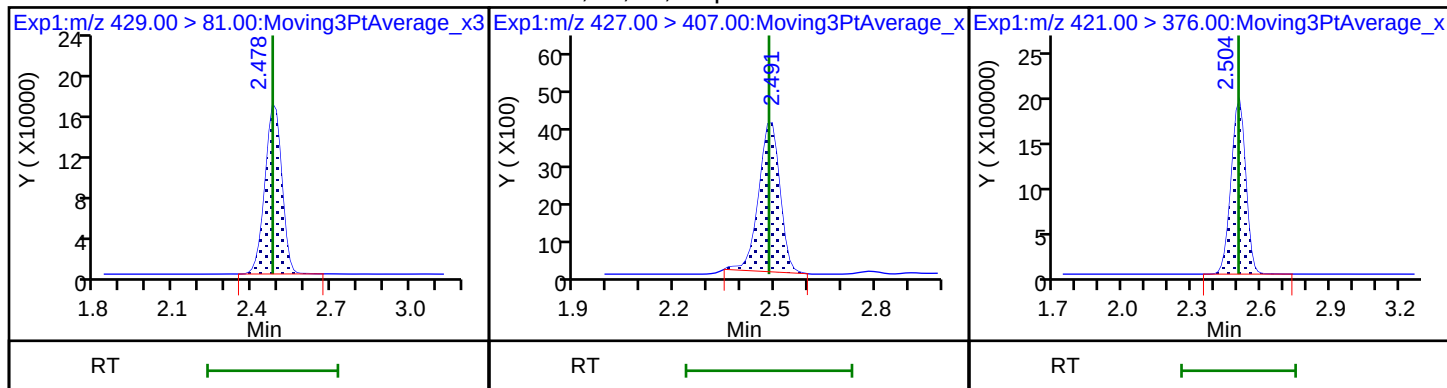
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

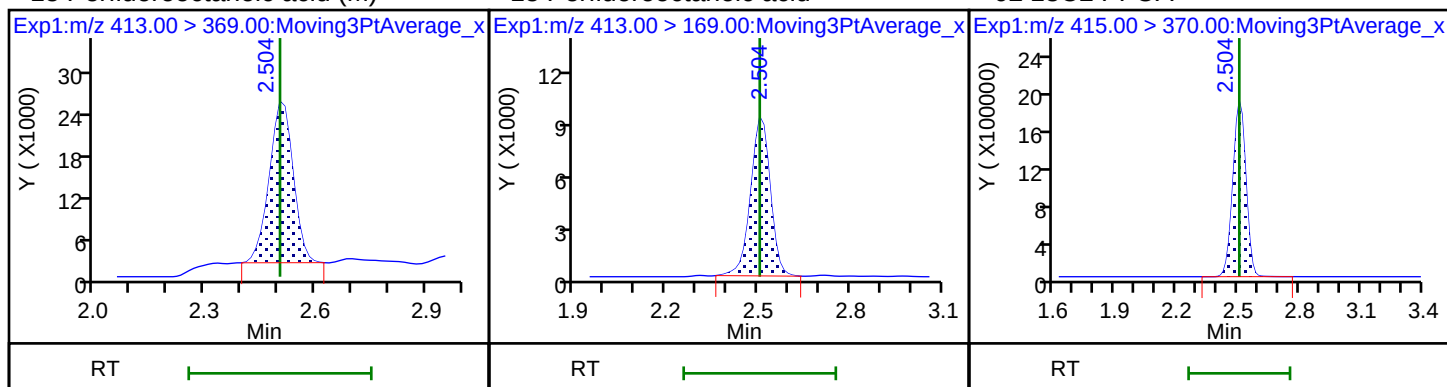
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



15 Perfluorooctanoic acid (M)

15 Perfluorooctanoic acid

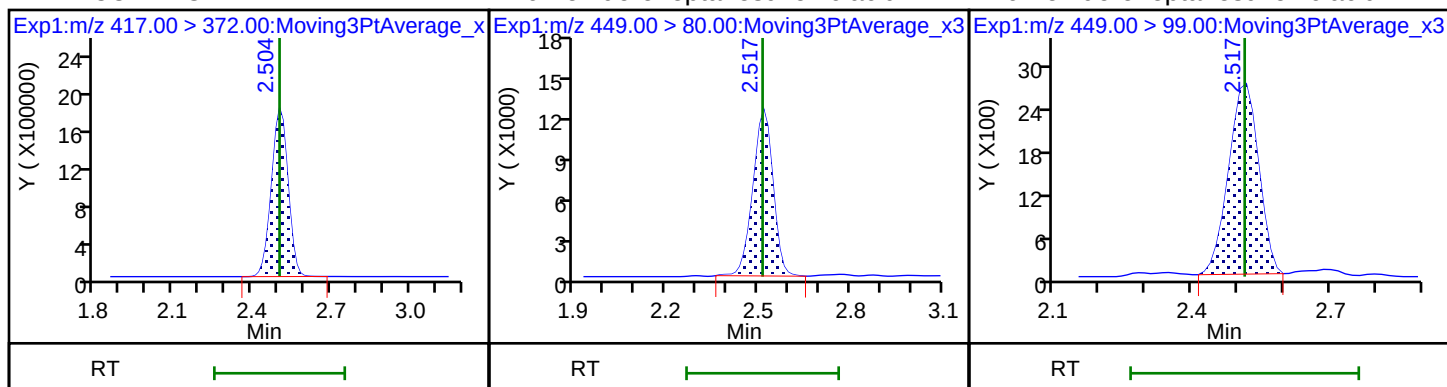
* 62 13C2 PFOA



D 14 13C4 PFOA

16 Perfluoroheptanesulfonic acid

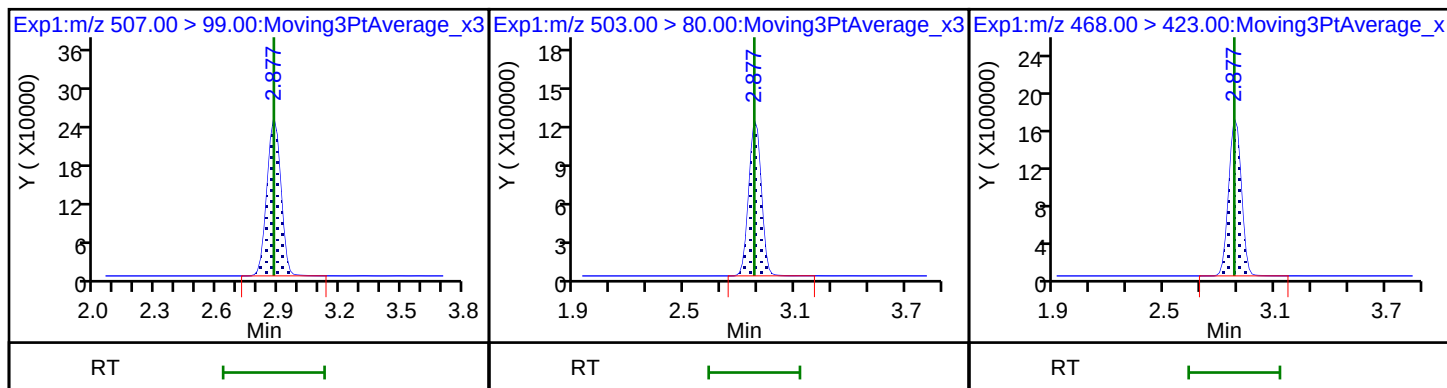
16 Perfluoroheptanesulfonic acid

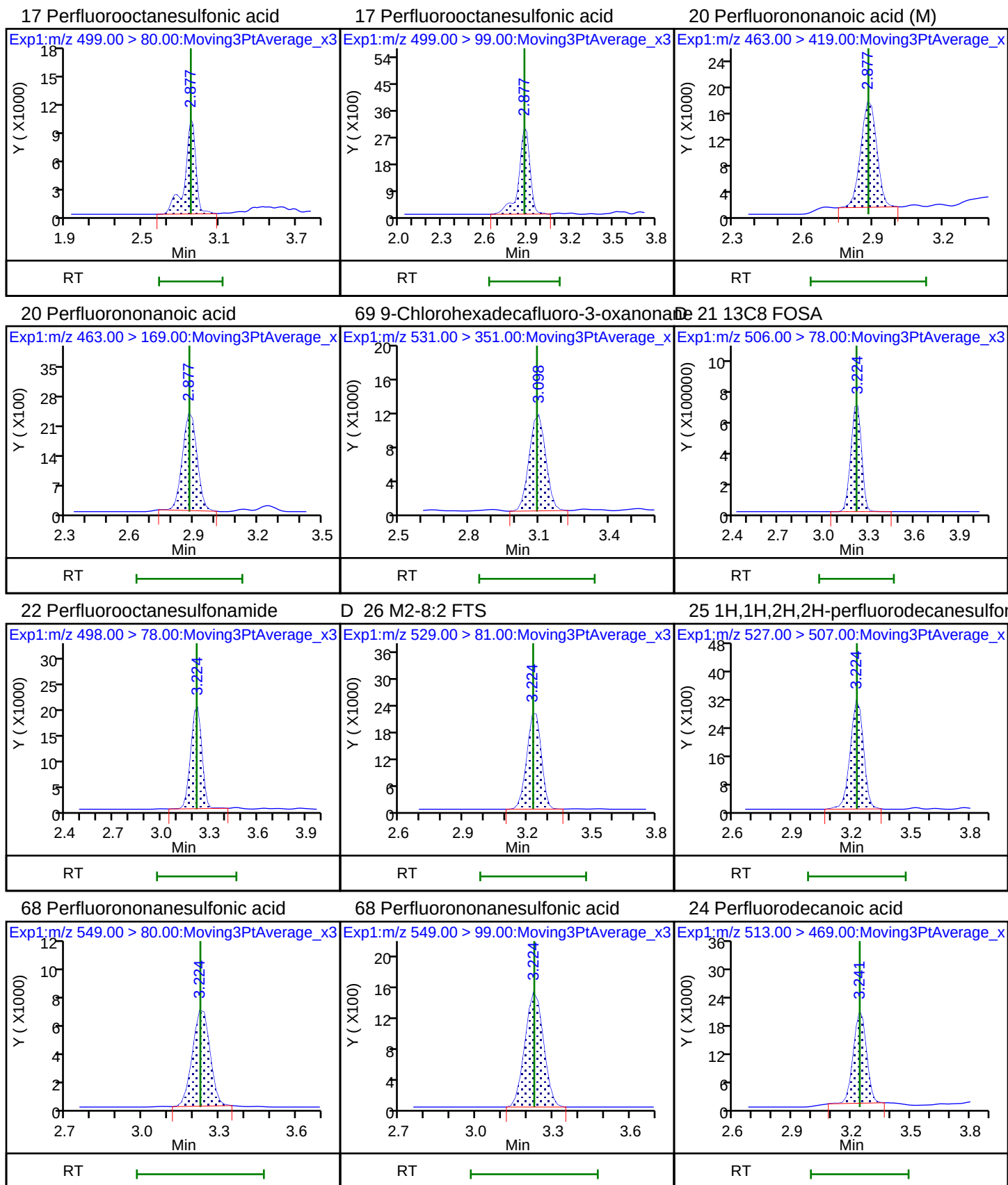


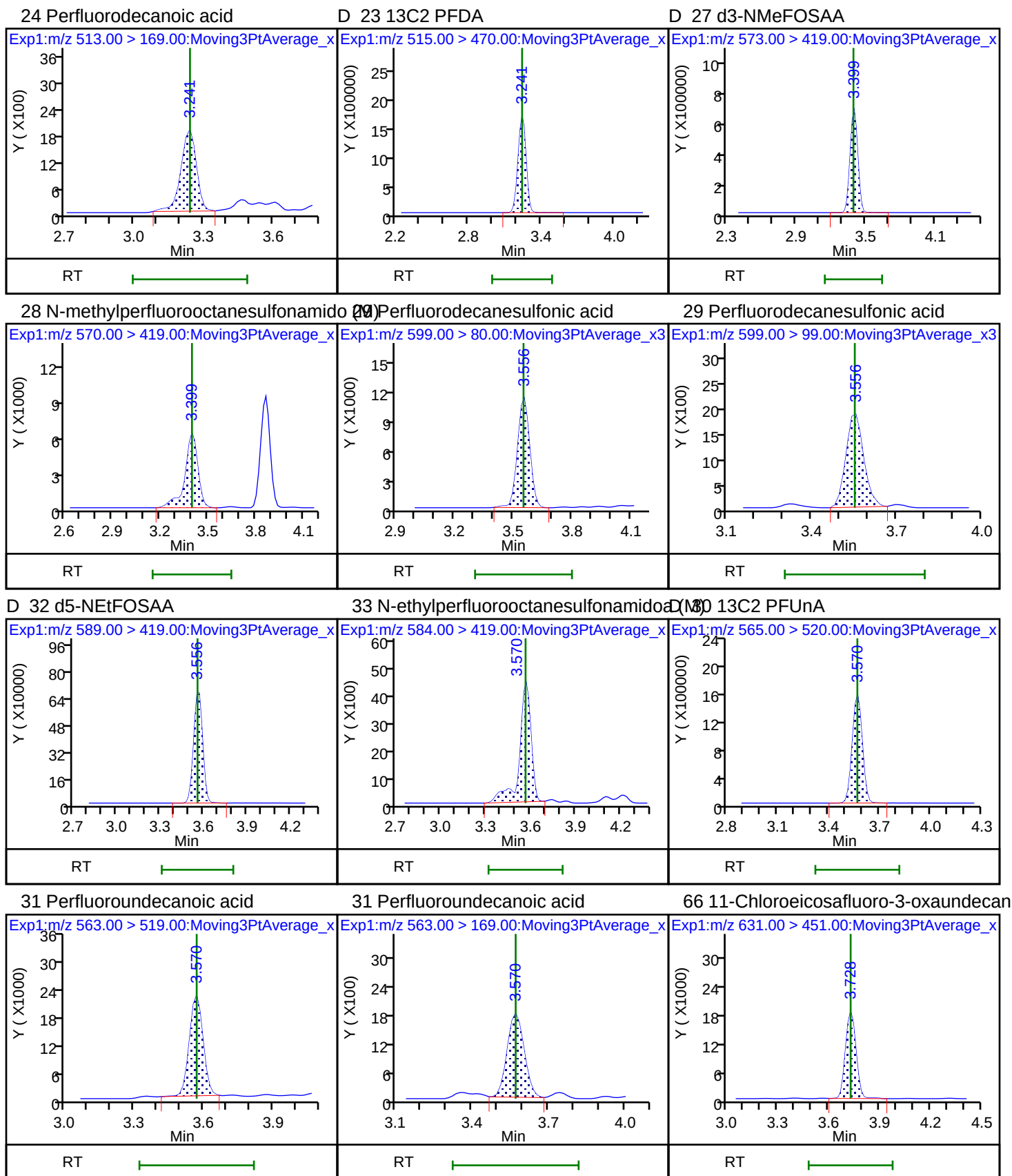
D 72 13C8 PFOS

D 18 13C4 PFOS

D 19 13C5 PFNA



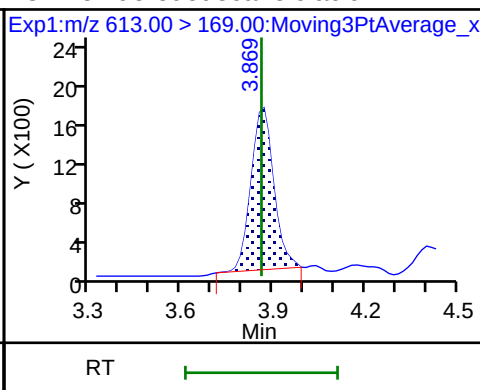
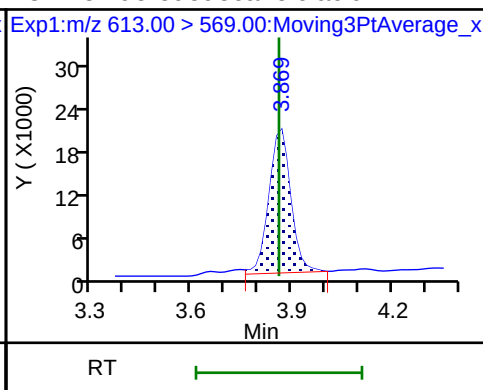
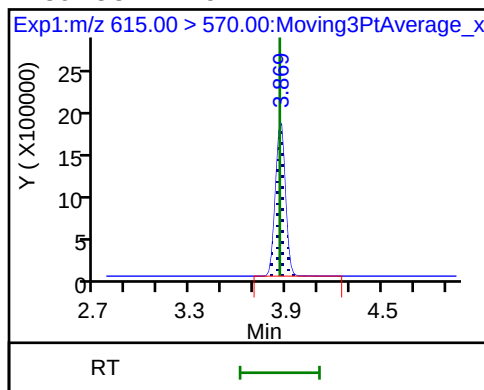




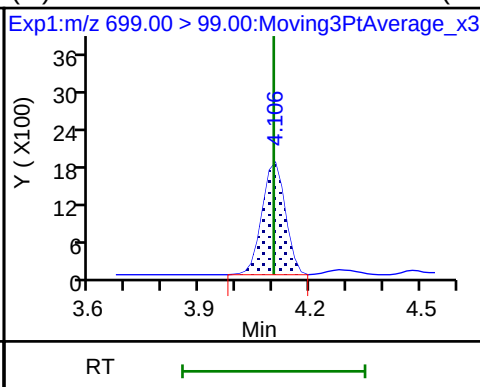
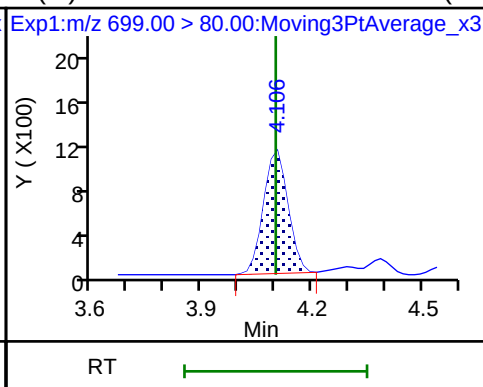
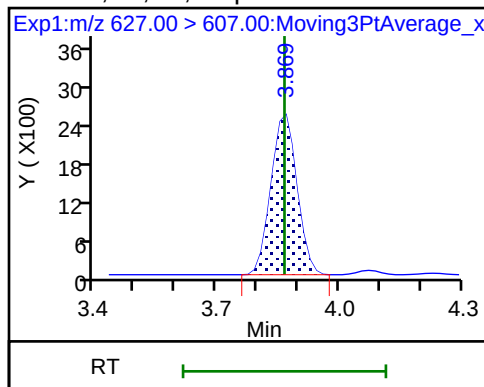
D 36 13C2 PFDaA

37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



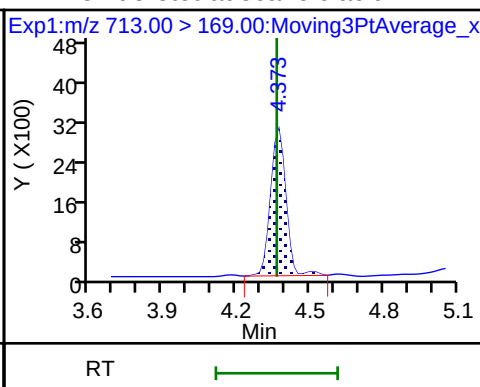
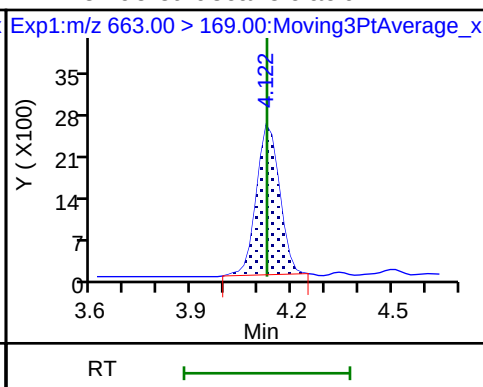
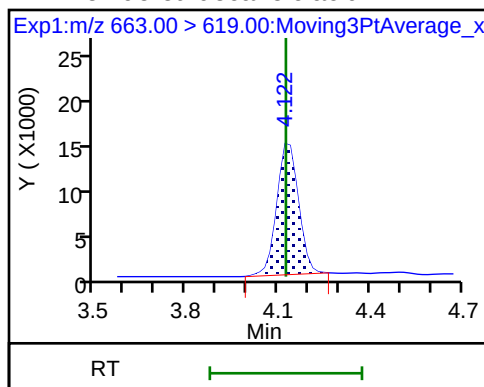
74 1H,1H,2H,2H-perfluorododecanesulfonic acid (PF) (M) 37 Perfluorododecanesulfonic acid (PF) (M) 37 Perfluorododecanesulfonic acid (PF) (M)



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

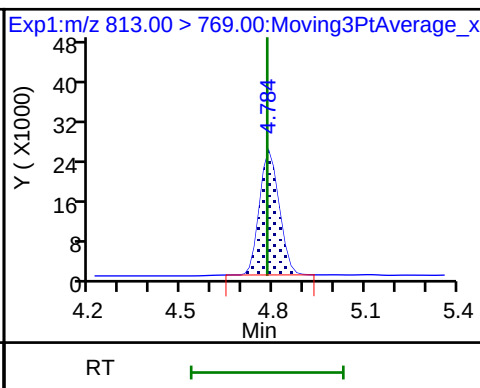
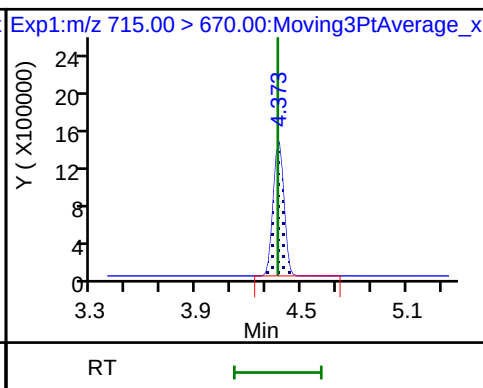
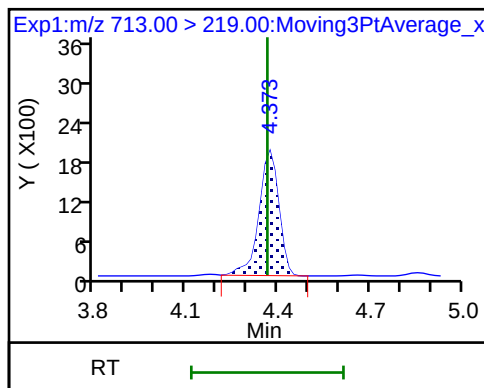
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

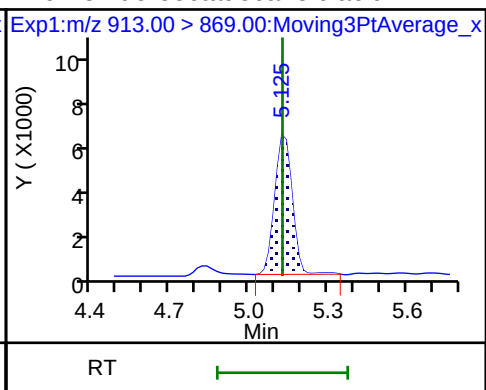
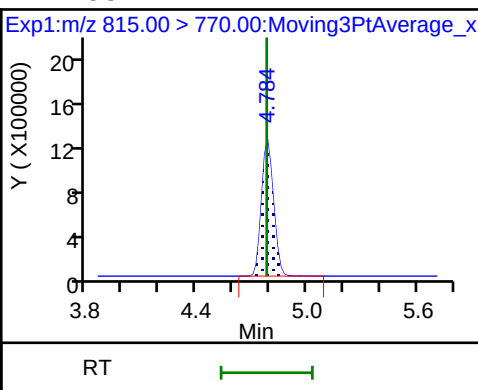
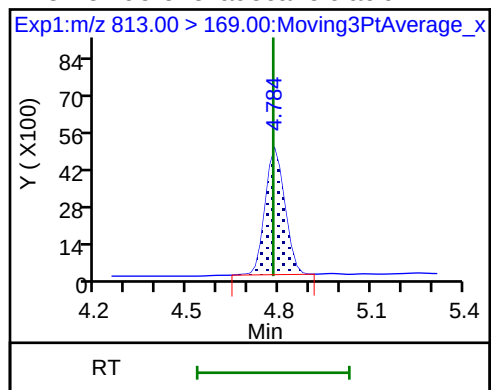
45 Perfluorohexadecanoic acid



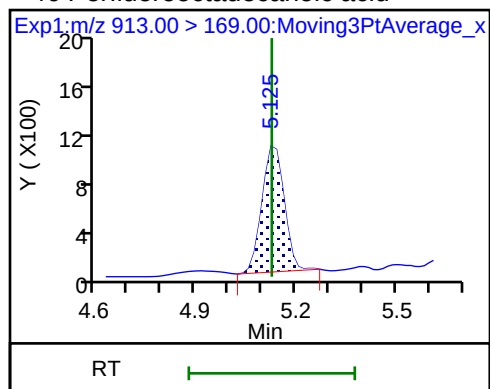
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_002.d

Injection Date: 30-Oct-2018 13:12:49

Instrument ID: A9

Lims ID: IC L1 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#:

10

Worklist Smp#: 2

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

Method: PFAS_A9

Limit Group: LC PFC ICAL

Column:

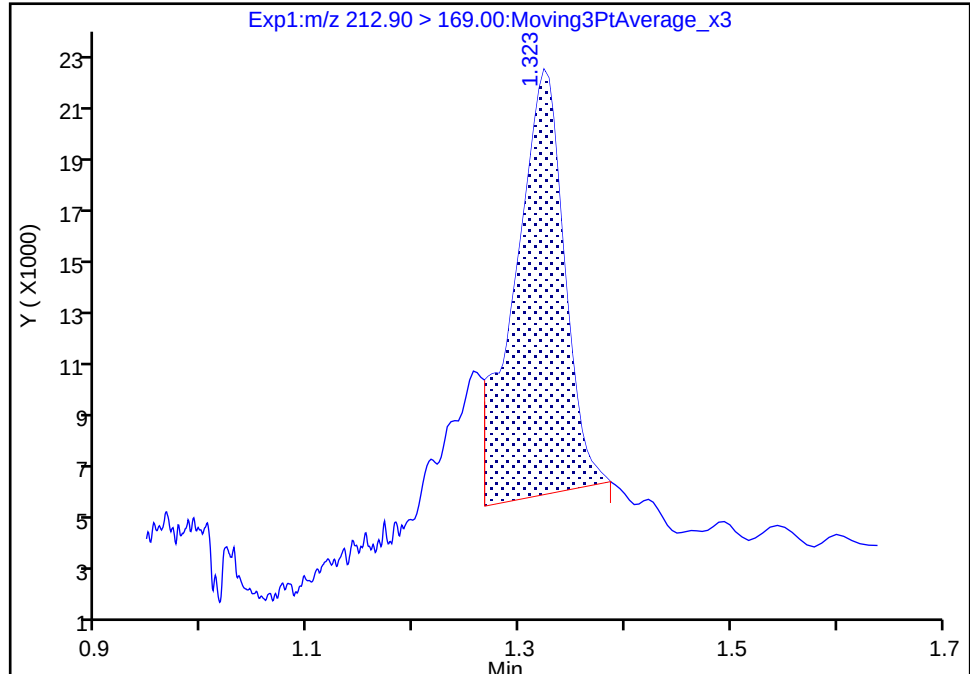
Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

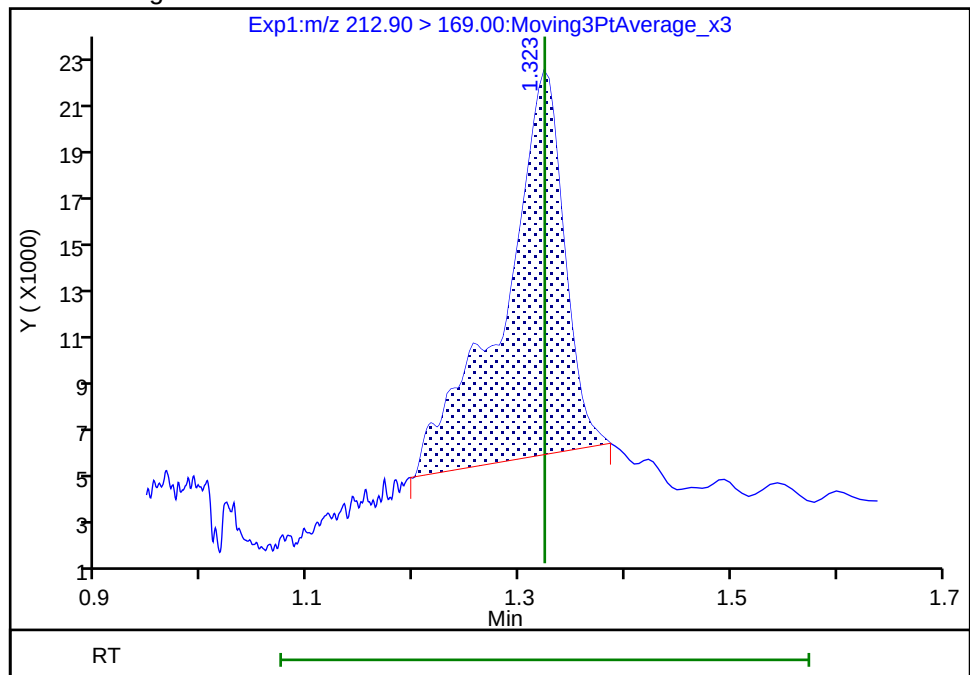
RT: 1.32
Area: 51738
Amount: 0.019645
Amount Units: ng/ml

Processing Integration Results



RT: 1.32
Area: 63699
Amount: 0.023685
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:33:34

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

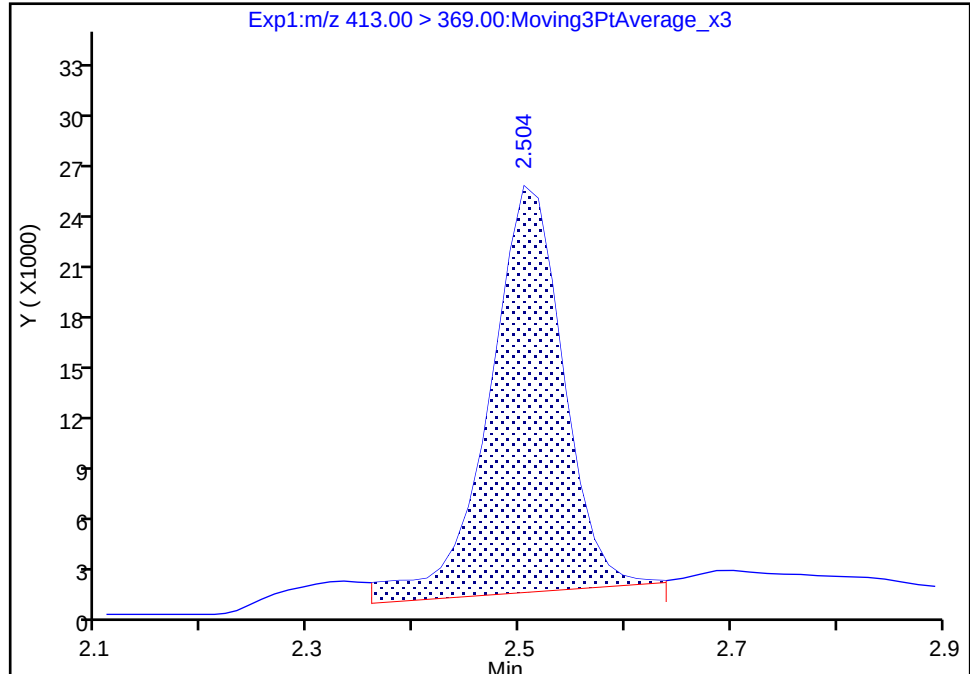
Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_002.d
Injection Date: 30-Oct-2018 13:12:49 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

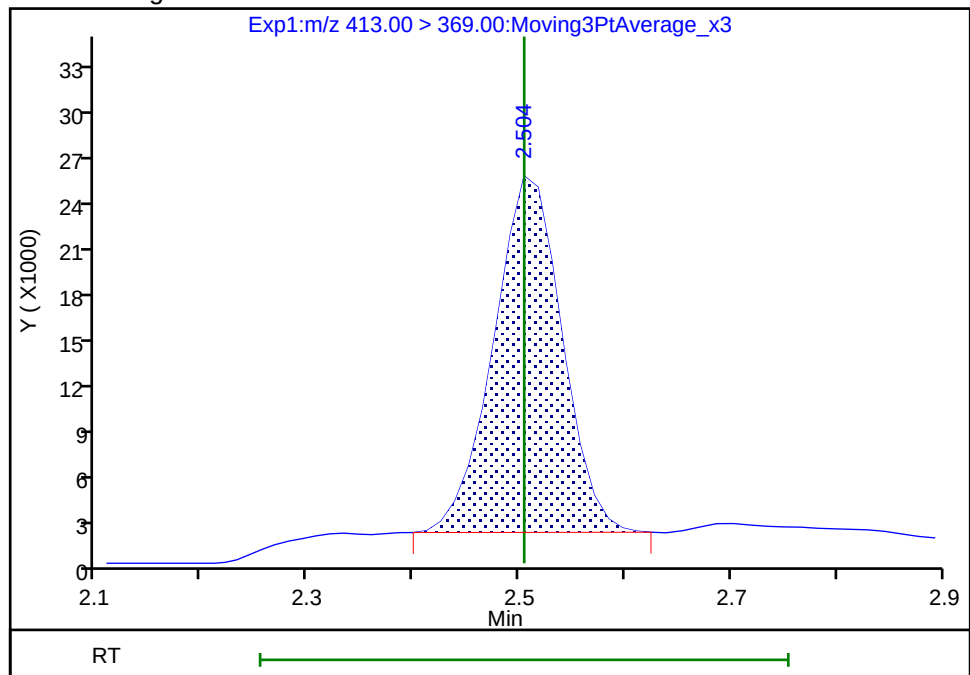
RT: 2.50
Area: 117004
Amount: 0.032768
Amount Units: ng/ml

Processing Integration Results



RT: 2.50
Area: 104643
Amount: 0.030228
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:33:48
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

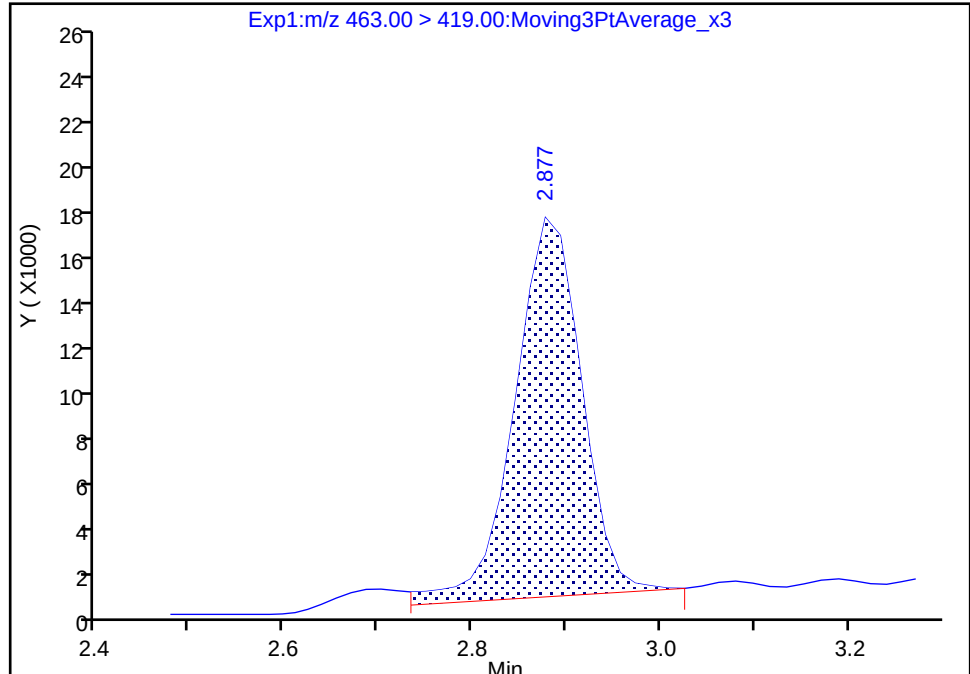
Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_002.d
Injection Date: 30-Oct-2018 13:12:49 Instrument ID: A9
Lims ID: IC L1 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 10 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

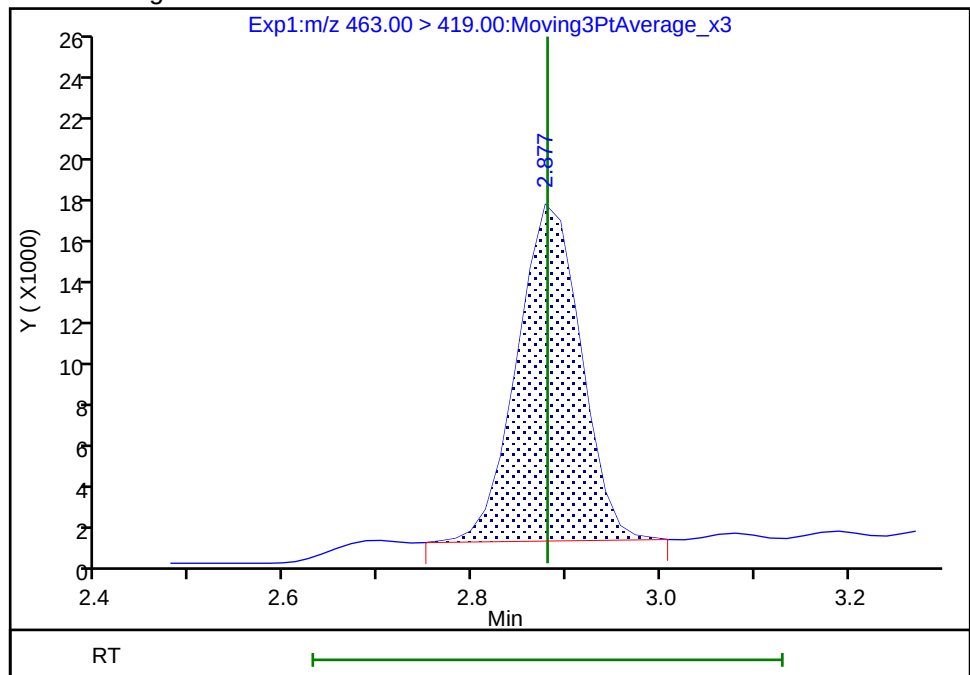
RT: 2.88
Area: 82981
Amount: 0.026580
Amount Units: ng/ml

Processing Integration Results



RT: 2.88
Area: 77652
Amount: 0.025118
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:33:59
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_002.d

Injection Date: 30-Oct-2018 13:12:49

Instrument ID: A9

Lims ID: IC L1 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

Method: PFAS_A9

Limit Group: LC PFC ICAL

Column:

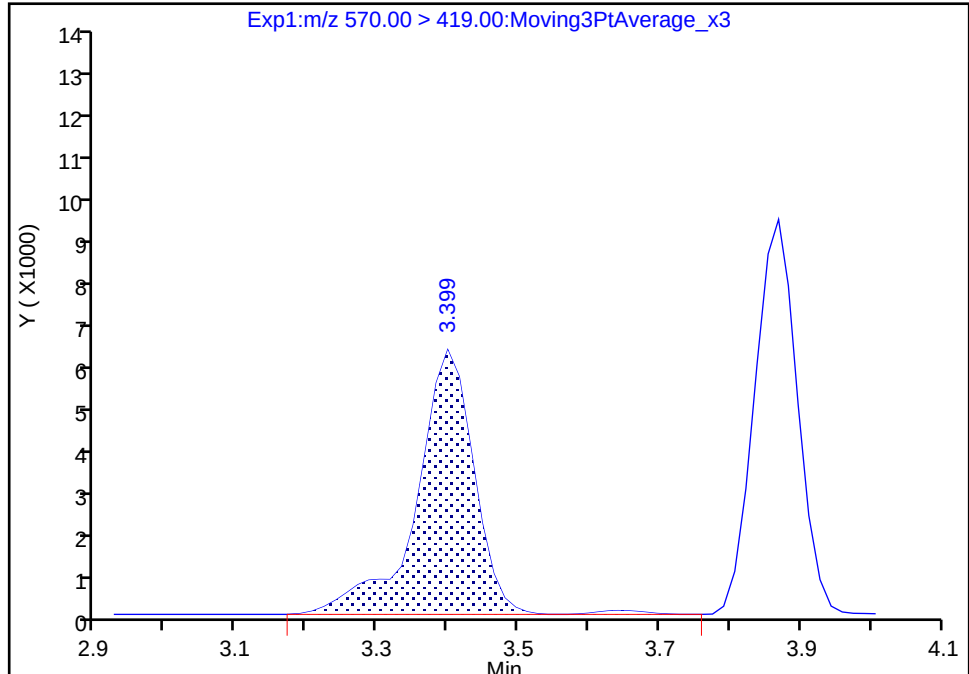
Detector EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

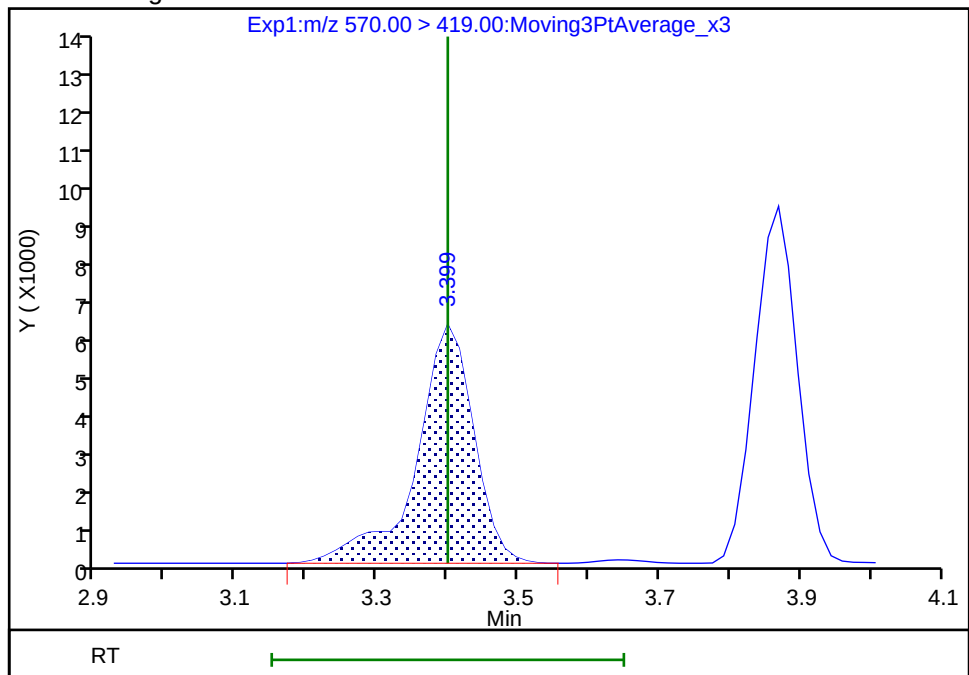
RT: 3.40
Area: 33917
Amount: 0.027321
Amount Units: ng/ml

Processing Integration Results



RT: 3.40
Area: 33534
Amount: 0.027060
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:34:33

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_002.d

Injection Date: 30-Oct-2018 13:12:49

Instrument ID: A9

Lims ID: IC L1 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

Method: PFAS_A9

Limit Group: LC PFC ICAL

Column:

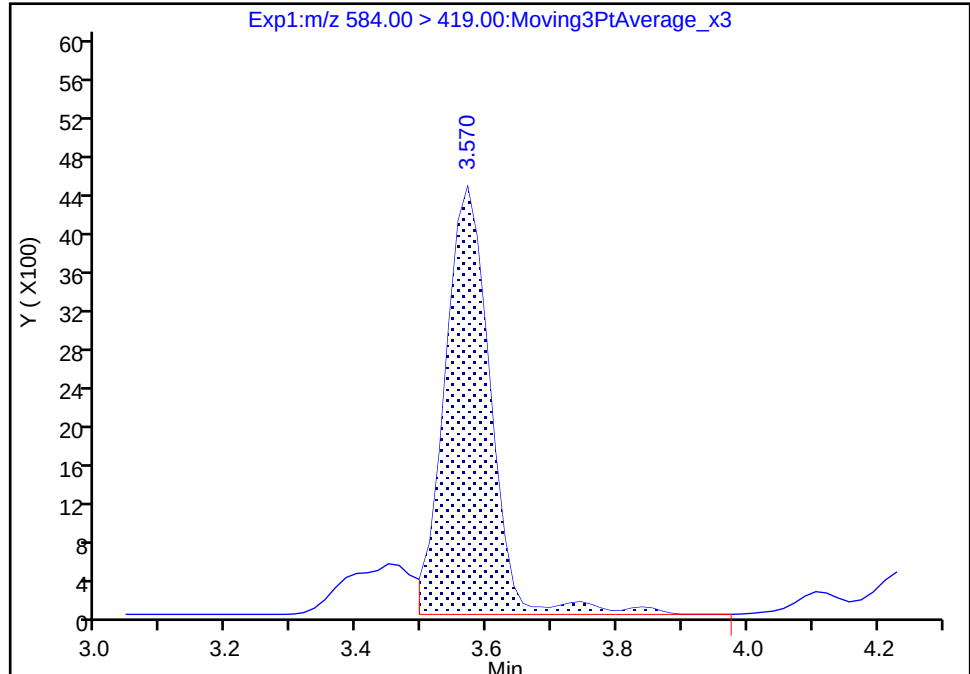
Detector EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

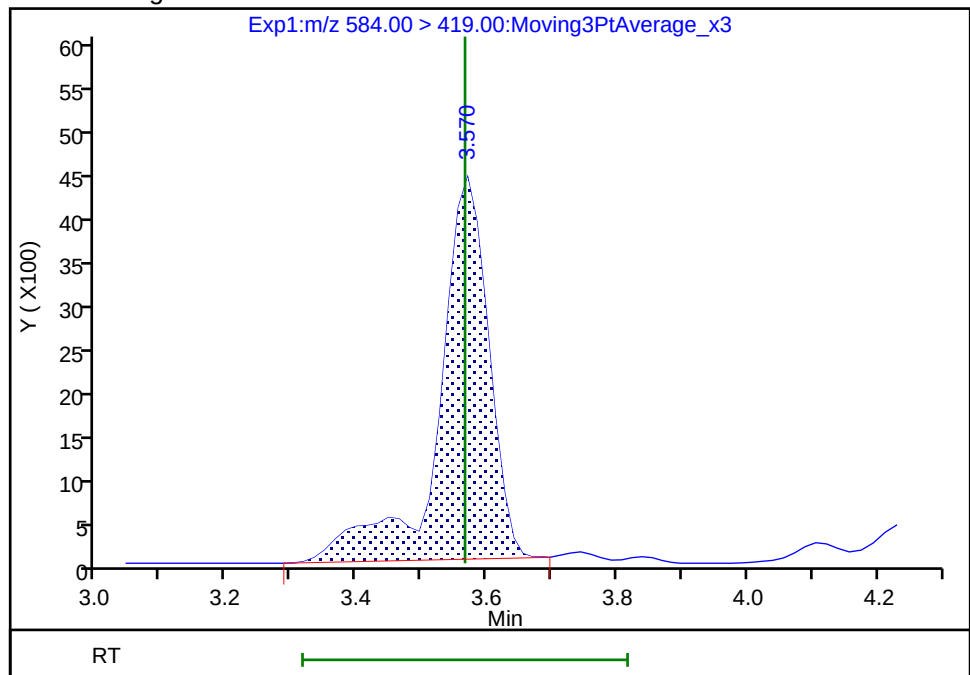
RT: 3.57
Area: 21569
Amount: 0.020429
Amount Units: ng/ml

Processing Integration Results



RT: 3.57
Area: 23647
Amount: 0.022148
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:34:43

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_002.d

Injection Date: 30-Oct-2018 13:12:49

Instrument ID: A9

Lims ID: IC L1 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

Method: PFAS_A9

Limit Group: LC PFC ICAL

Column:

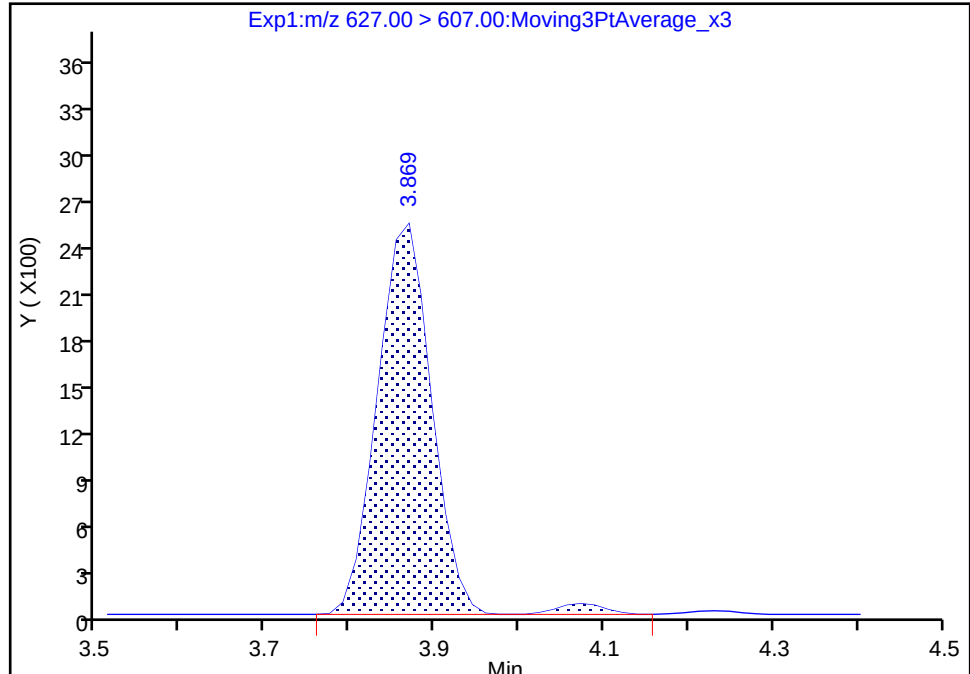
Detector EXP1

74 1H,1H,2H,2H-perfluorododecanesulfonic acid (, CAS: 120226-60-0

Signal: 1

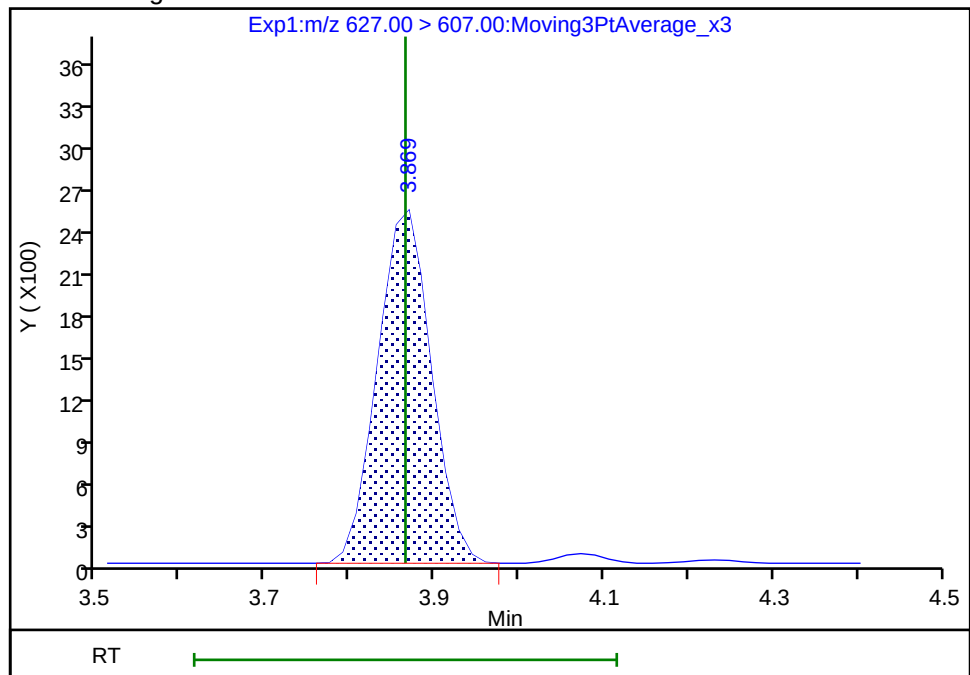
RT: 3.87
Area: 11274
Amount: 0.026404
Amount Units: ng/ml

Processing Integration Results



RT: 3.87
Area: 11013
Amount: 0.025887
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:35:01

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_002.d

Injection Date: 30-Oct-2018 13:12:49

Instrument ID: A9

Lims ID: IC L1 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 10

Worklist Smp#: 2

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

Method: PFAS_A9

Limit Group: LC PFC ICAL

Column:

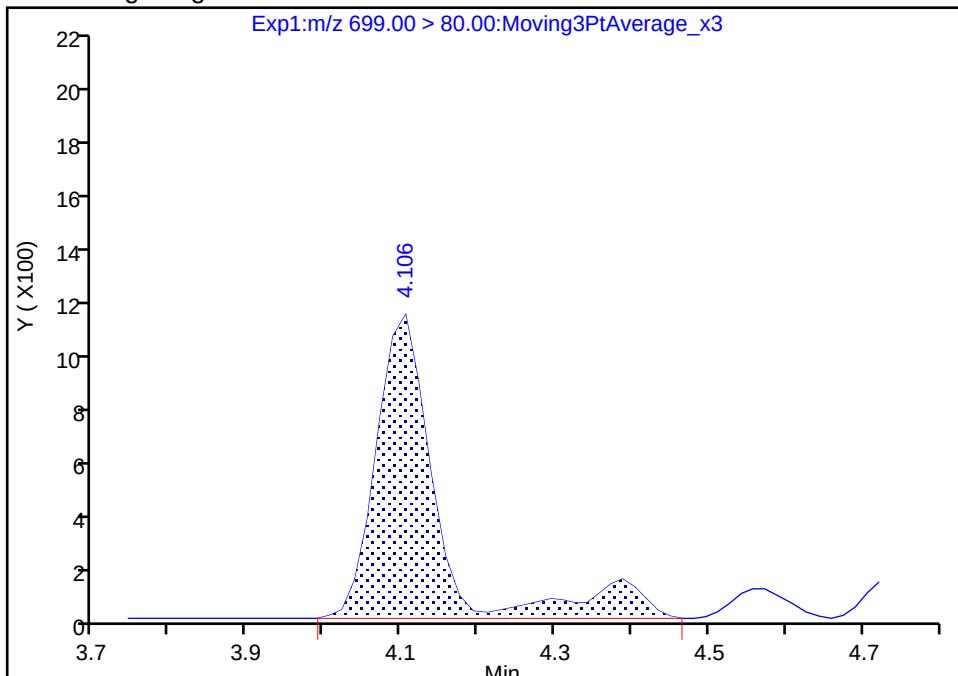
Detector EXP1

75 Perfluorododecanesulfonic acid (PFDoS), CAS: 79780-39-5

Signal: 1

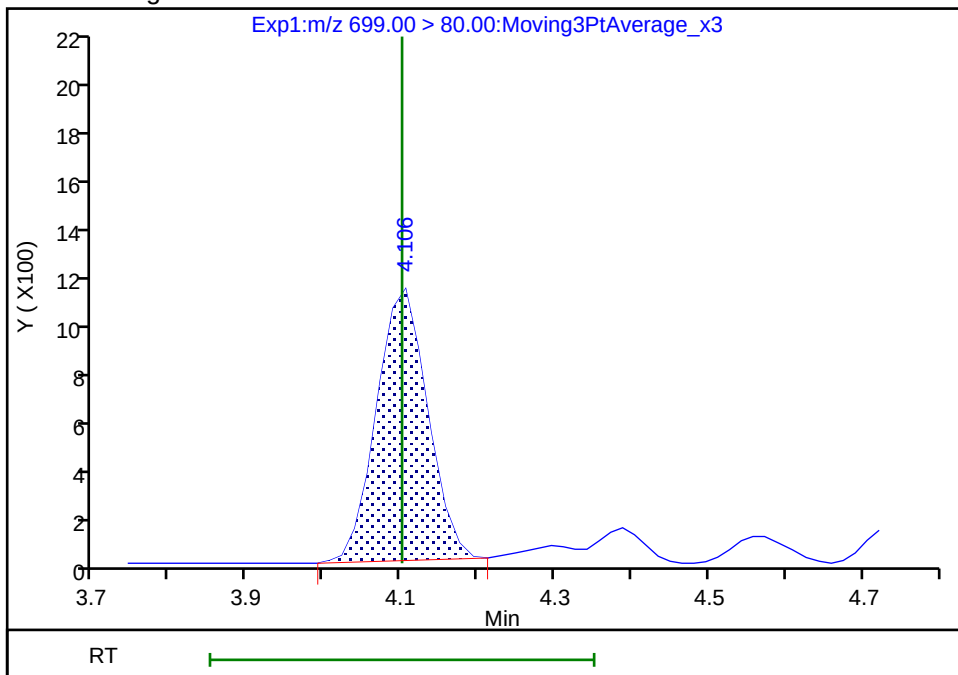
RT: 4.11
Area: 6108
Amount: 0.026156
Amount Units: ng/ml

Processing Integration Results



RT: 4.11
Area: 5012
Amount: 0.022074
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:35:10

Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_003.d
 Lims ID: IC L2 Full
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 30-Oct-2018 13:20:21 ALS Bottle#: 11 Worklist Smp#: 3
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CAL STD2
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist: chrom-PFAS_A9*sub5
 Method: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 30-Oct-2018 15:08:03 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: roycea

Date: 30-Oct-2018 14:13:23

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	1.327	1.323	0.004	0.530	7230801	2.51		101	12776	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.327	1.324	0.003	1.000	137562	0.0508		102	9.3	M
D 3 13C5 PFPeA										
267.90 > 223.00	1.572	1.571	0.001	0.628	6917794	2.53		101	10227	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.579	1.573	0.006	1.004	139761	0.0505		101	15.7	
D 47 13C3 PFBS										
301.90 > 83.00	1.606	1.603	0.003	0.642	89218	2.36		101	405	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.614	1.607	0.007	1.005	182019	0.0459		104	88.7	
298.90 > 99.00	1.606	1.607	-0.001	1.000	61223		2.97(1.35-4.05)	104	31.7	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.805	1.804	0.001	0.721	731492	2.41		103	755	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.805	1.805	0.0	1.124	40003	0.0507		109	433	
6 Perfluorohexanoic acid										M
313.00 > 269.00	1.838	1.836	0.002	1.000	143915	0.0562		112	31.3	
313.00 > 119.00	1.838	1.836	0.002	1.000	10128		14.21(6.96-20.87)	112	27.3	M
D 7 13C2 PFHxA										
315.00 > 270.00	1.838	1.836	0.002	0.734	7116724	2.47		98.7	12840	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.864	1.859	0.005	1.160	82003	0.0447		95.2	231	
349.00 > 99.00	1.864	1.859	0.005	1.160	37268		2.20(1.15-3.45)	95.2	89.0	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.935	1.928	0.007	0.773	947049	2.54		102	4650	

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	1.935	1.928	0.007	1.000	28359	0.0450		90.1	26.9	
D 9 13C4 PFHpA										
367.00 > 322.00	2.149	2.148	0.001	0.858	8707536	2.57		103	11304	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.149	2.148	0.001	1.000	186215	0.0504		101	52.7	
363.00 > 169.00	2.149	2.148	0.001	1.000	43419		4.29(2.17-6.52)	101	117	
D 11 18O2 PFHxS										
403.00 > 84.00	2.170	2.164	0.006	0.867	5091979	2.31		97.5	4807	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.170	2.164	0.006	1.000	135870	0.0501		110	173	
399.00 > 99.00	2.170	2.164	0.006	1.000	41858		3.25(1.90-5.70)	110	59.8	
76 DONA										
377.00 > 251.00	2.201	2.194	0.007	0.765	304181	0.0507		108	1352	
377.00 > 85.00	2.201	2.194	0.007	0.765	129371		2.35(1.13-3.39)	108	287	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.478	2.478	0.0	0.990	771843	2.47		104	1131	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.491	2.482	0.009	1.005	35556	0.0501		106	49.0	
D 73 13C8 PFOA										
421.00 > 376.00	2.504	2.501	0.003		8523934	2.48		101	11873	
15 Perfluorooctanoic acid										M
413.00 > 369.00	2.504	2.504	0.0	1.000	193091	0.0548		110	24.6	M
413.00 > 169.00	2.504	2.504	0.0	1.000	69751		2.77(1.36-4.08)	110	163	
* 62 13C2 PFOA										
415.00 > 370.00	2.504	2.504	0.0		7896676	2.50			7287	
D 14 13C4 PFOA										
417.00 > 372.00	2.504	2.504	0.0	1.000	8143608	2.62		105	9713	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.517	2.514	0.003	0.875	114547	0.0498		105	231	
449.00 > 99.00	2.517	2.514	0.003	0.875	21804		5.25(1.84-5.53)	105	96.5	
D 72 13C8 PFOS										
507.00 > 99.00	2.877	2.877	0.0		1230054	2.49		104	4758	
D 18 13C4 PFOS										
503.00 > 80.00	2.877	2.877	0.0	1.149	5279158	2.37		99.0	3945	
D 19 13C5 PFNA										
468.00 > 423.00	2.877	2.877	0.0	1.149	7305198	2.54		102	8116	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	2.877	2.877	0.0	1.000	109342	0.0460		99.1	41.7	M
499.00 > 99.00	2.893	2.877	0.016	1.006	27968		3.91(2.04-6.12)	99.1	85.1	M
20 Perfluorononanoic acid										
463.00 > 419.00	2.893	2.880	0.013	1.006	152381	0.0521		104	11.0	
463.00 > 169.00	2.893	2.880	0.013	1.006	23275		6.55(2.68-8.03)	104	73.2	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.098	3.091	0.007	1.077	112471	0.0460		98.6	121	
D 21 13C8 FOSA										
506.00 > 78.00	3.224	3.217	0.007	1.287	3197106	2.59		104	6139	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.224	3.219	0.005	1.000	207817	0.0541		108	434	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.241	3.226	0.015	1.294	105771	2.73		114	452	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.241	3.226	0.015	1.000	27693	0.0439		91.7	290	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.241	3.226	0.015	1.126	66744	0.0493		103	238	
549.00 > 99.00	3.241	3.226	0.015	1.126	10224		6.53(3.02-9.05)	103	307	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.241	3.241	0.0	1.000	189575	0.0546		109	37.1	
513.00 > 169.00	3.241	3.241	0.0	1.000	13398		14.15(7.12-21.35)	109	29.7	
D 23 13C2 PFDA										
515.00 > 470.00	3.241	3.241	0.0	1.294	7998581	2.70		108	9402	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.399	3.392	0.007	1.357	3411732	2.67		107	4330	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.399	3.399	0.0	1.000	65035	0.0477		95.3	20.2	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.555	3.552	0.003	1.236	97541	0.0510		106	163	
599.00 > 99.00	3.555	3.552	0.003	1.236	22551		4.33(2.14-6.43)	106	77.9	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.570	3.558	0.012	1.426	2757818	2.65		106	3862	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.570	3.566	0.004	1.000	50850	0.0504		101	247	
D 30 13C2 PFUnA										
565.00 > 520.00	3.570	3.568	0.002	1.426	6514241	2.64		105	7940	
31 Perfluoroundecanoic acid										R
563.00 > 519.00	3.570	3.570	0.0	1.000	167491	0.0565		113	55.8	R
563.00 > 169.00	3.570	3.570	0.0	1.000	8203		20.42(5.24-15.72)	113	41.1	
35 MeFOSA										
512.00 > 169.00	3.728	3.724	0.004		34033	NC			149	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.728	3.728	0.0	1.296	164988	0.0539		114	824	
D 36 13C2 PFDaA										
615.00 > 570.00	3.869	3.859	0.010	1.545	7900454	2.60		104	11130	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.869	3.861	0.008	1.000	162362	0.0505		101	77.2	
613.00 > 169.00	3.869	3.861	0.008	1.000	16791		9.67(4.68-14.05)	101	36.7	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.869	3.865	0.004	1.194	17370	0.0389		80.7	26.4	
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	3.912	3.912	0.0		43300	NC			206	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.105	4.101	0.004	1.427	10616	0.0499		103	50.0	
699.00 > 99.00	4.105	4.101	0.004	1.427	18211		0.58(0.28-0.83)	103	51.4	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.138	4.125	0.013	1.070	134935	0.0522		104	146	
663.00 > 169.00	4.138	4.125	0.013	1.070	25185		5.36(3.09-9.27)	104	79.9	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.372	4.364	0.008	1.000	24878	0.0597		119	92.7	
713.00 > 219.00	4.372	4.364	0.008	1.000	14708		1.69(0.70-2.09)	119	46.3	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.372	4.364	0.008	1.746	5697043	2.50		100	7990	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.784	4.780	0.004	1.000	158462	0.0499		99.9	310	
813.00 > 169.00	4.784	4.780	0.004	1.000	33761		4.69(2.77-8.32)	99.9	112	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.784	4.780	0.004	1.910	5765824	2.55		102	13057	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.141	5.127	0.014	1.075	56154	0.0492		98.5	155	
913.00 > 169.00	5.124	5.127	-0.003	1.071	11160		5.03(2.55-7.64)	98.5	74.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_003.d

Injection Date: 30-Oct-2018 13:20:21

Instrument ID: A9

Lims ID: IC L2 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 11

Worklist Smp#: 3

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

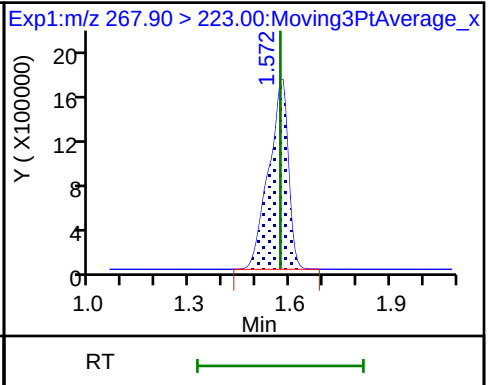
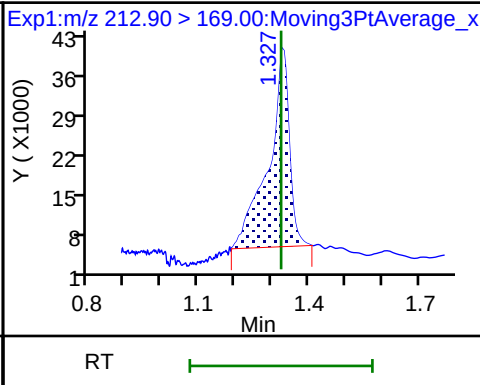
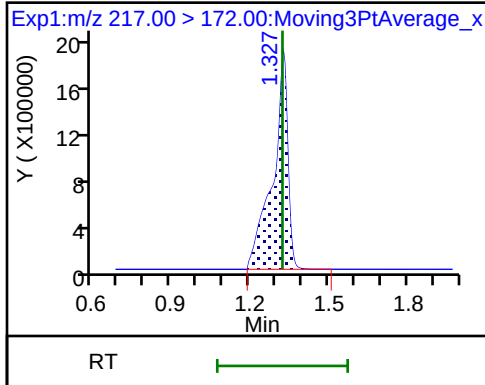
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

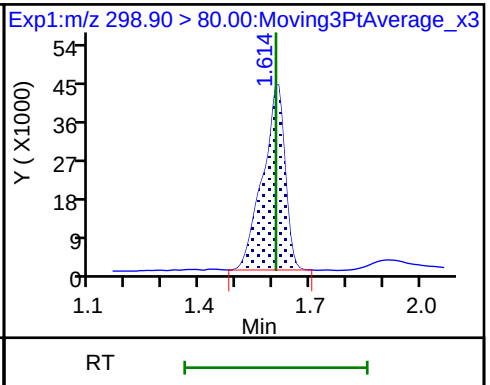
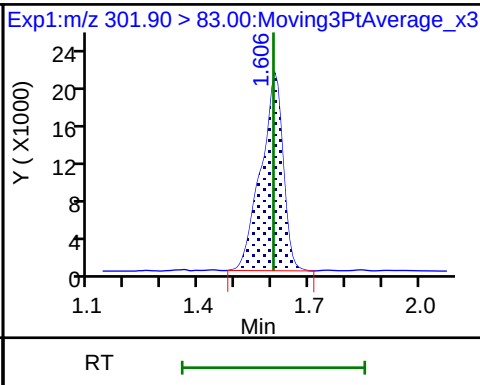
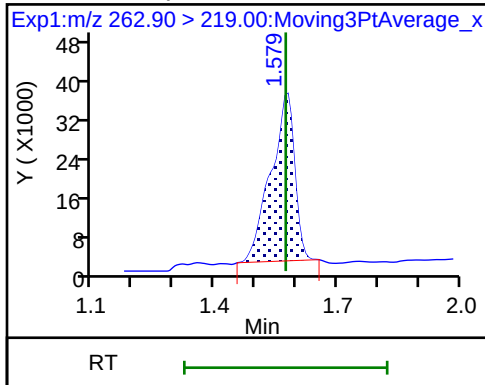
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

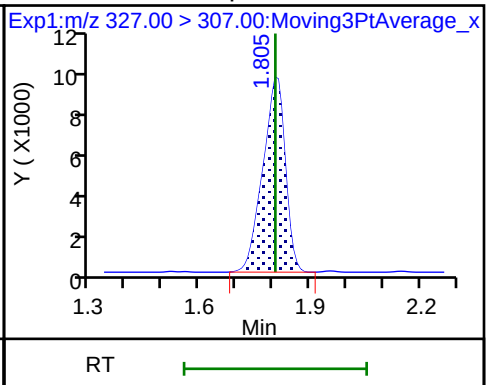
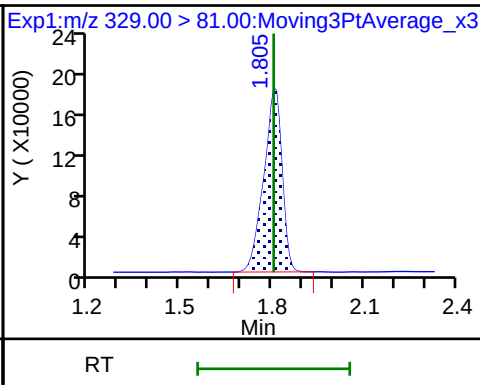
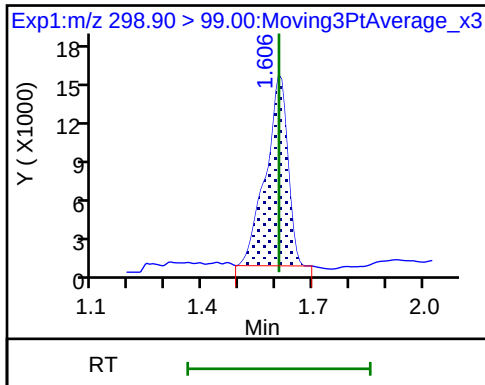
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

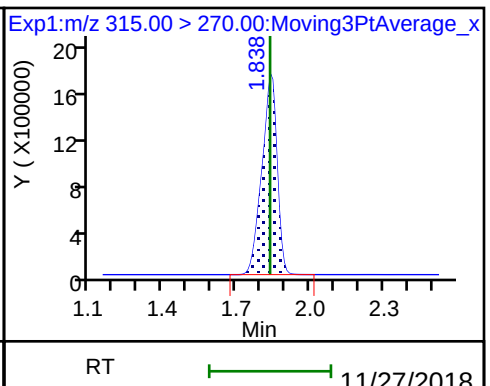
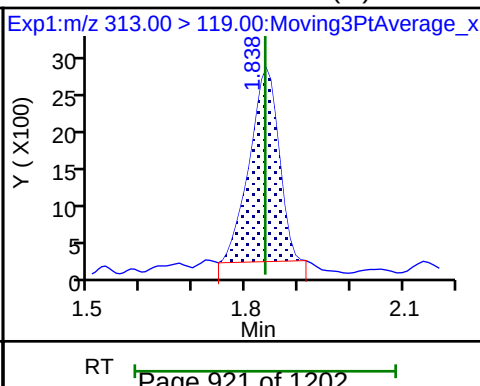
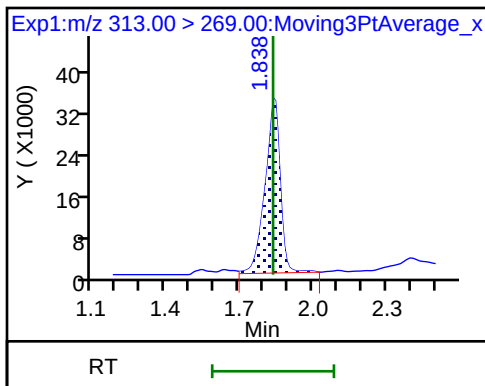
61 1H,1H,2H,2H-perfluorohexanesulfoni

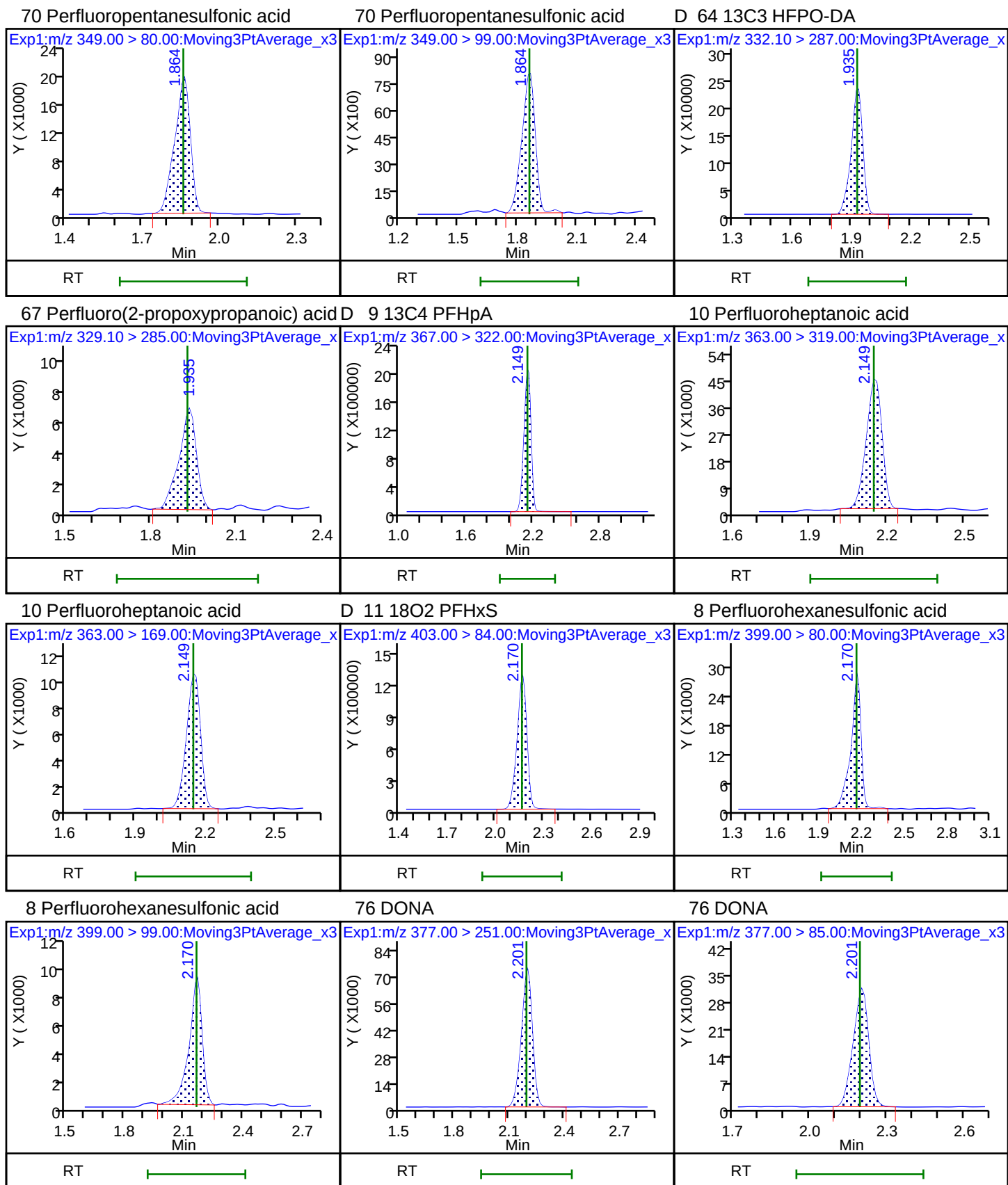


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid (M)

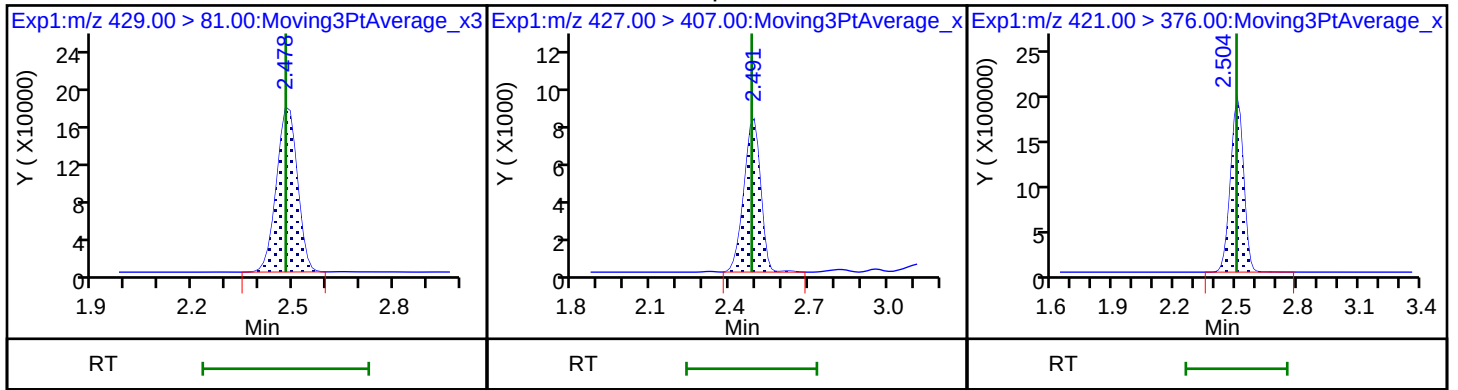
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

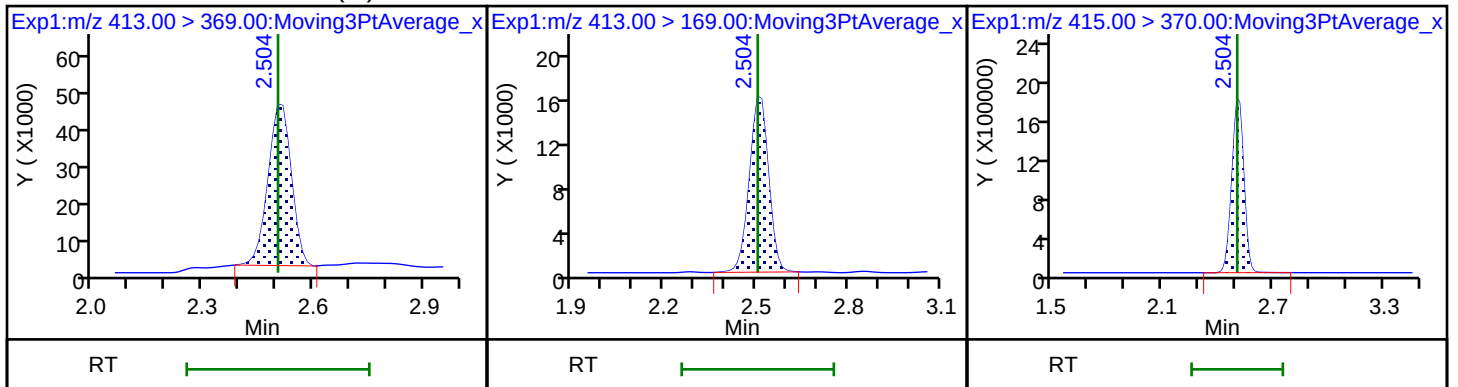
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



15 Perfluorooctanoic acid (M)

15 Perfluorooctanoic acid

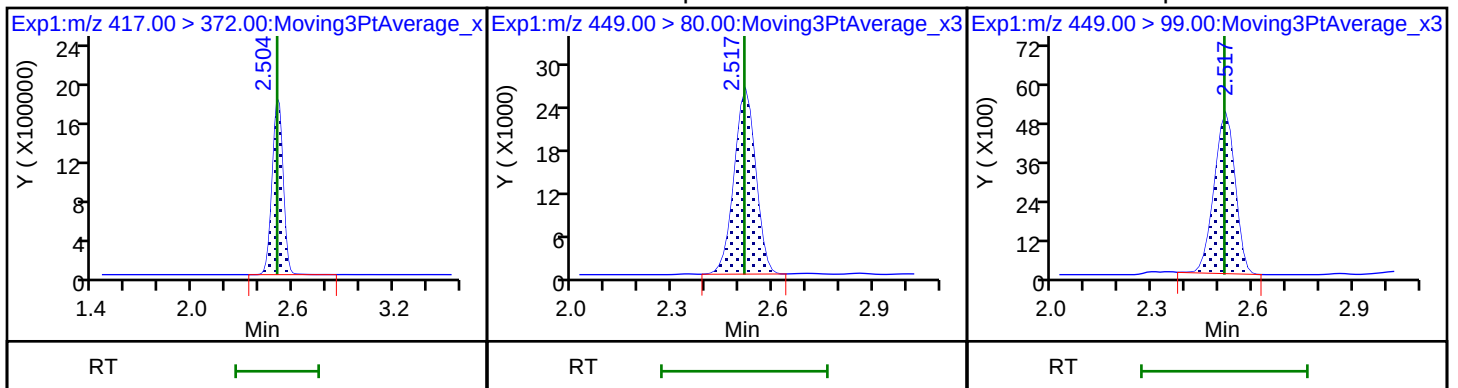
* 62 13C2 PFOA



D 14 13C4 PFOA

16 Perfluoroheptanesulfonic acid

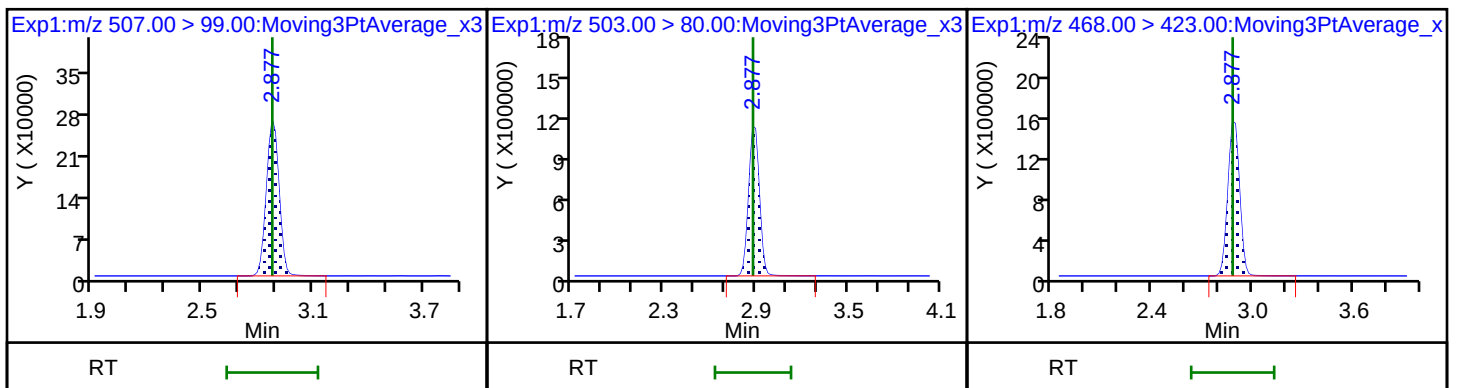
16 Perfluoroheptanesulfonic acid

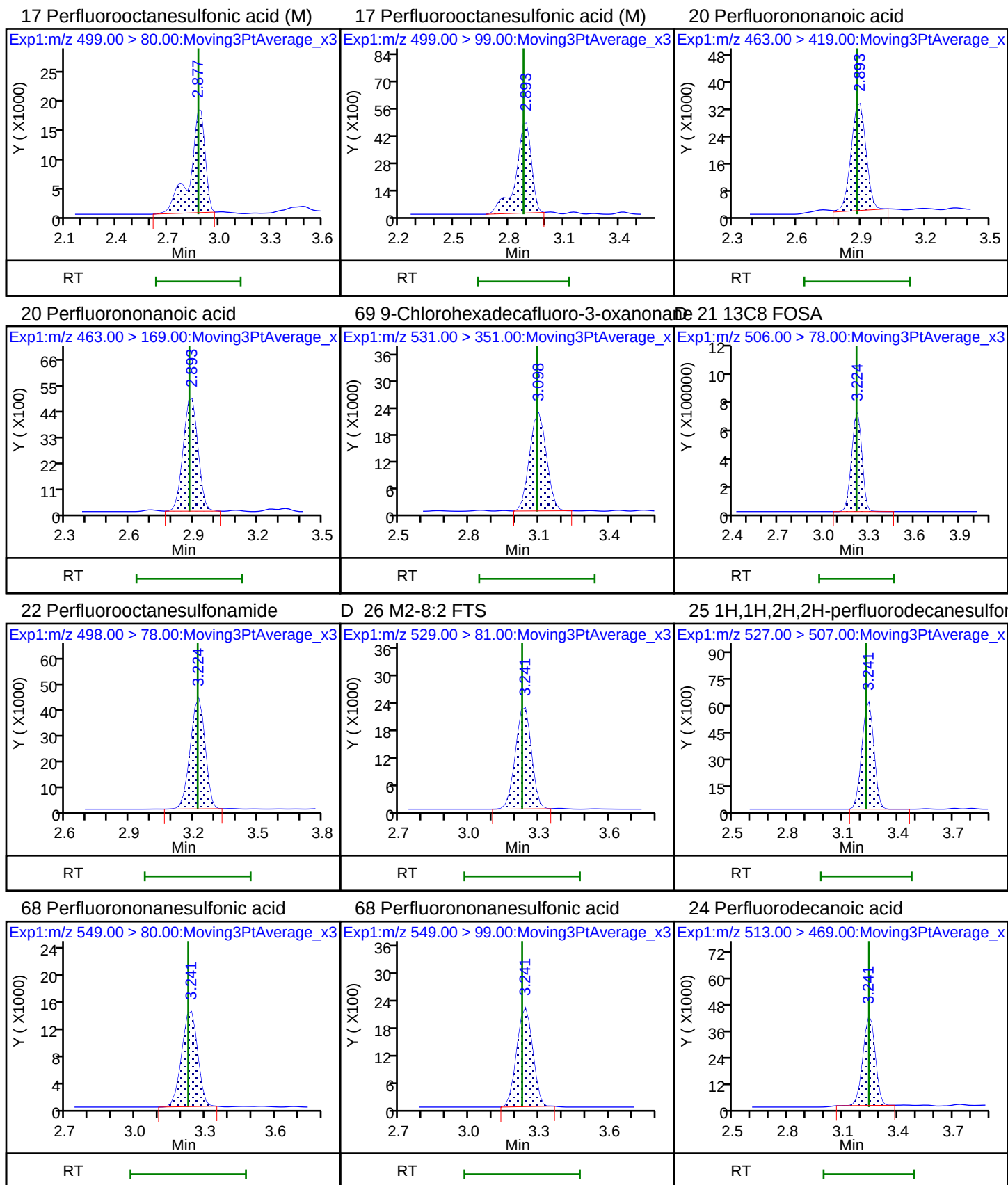


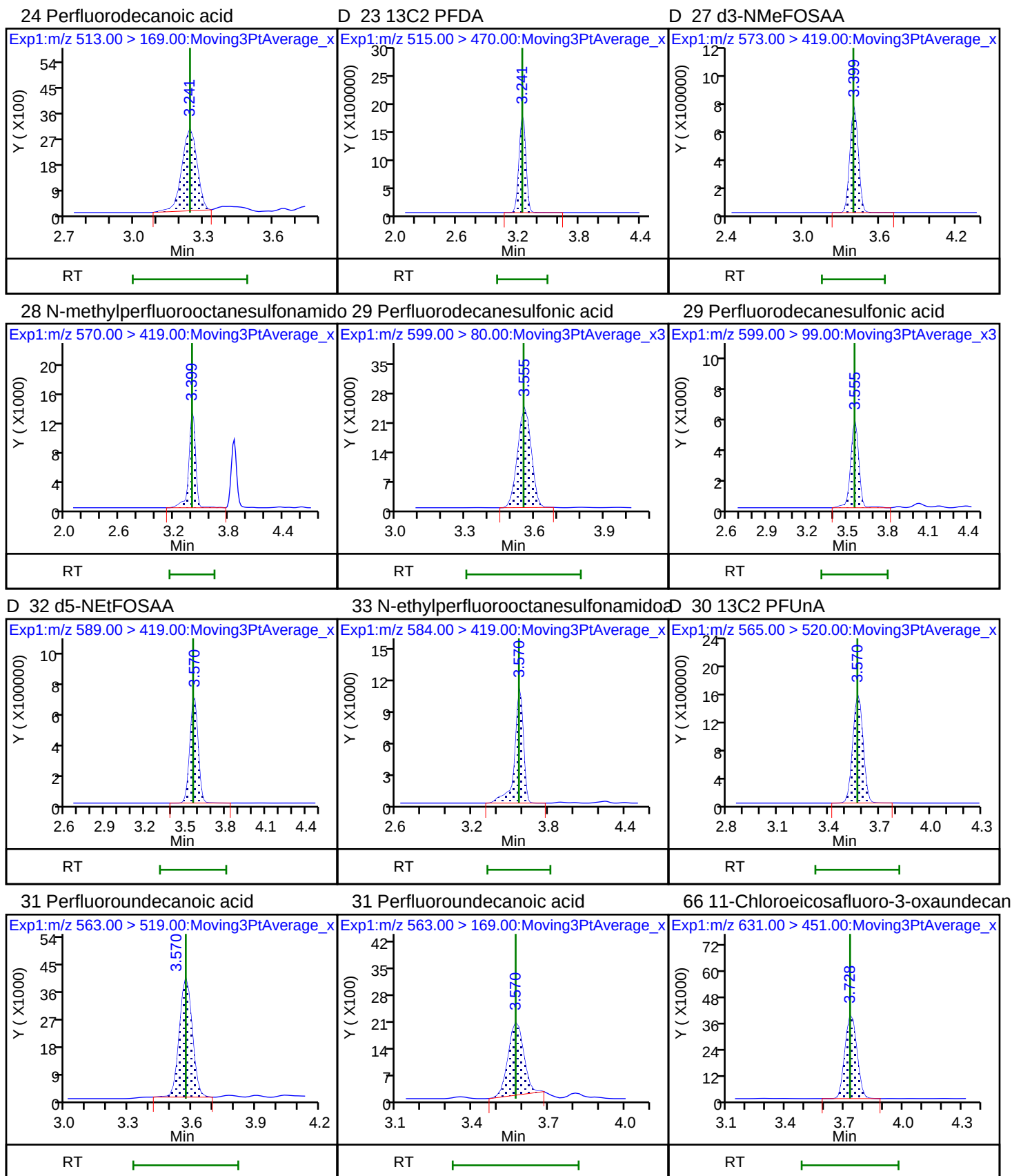
D 72 13C8 PFOS

D 18 13C4 PFOS

D 19 13C5 PFNA



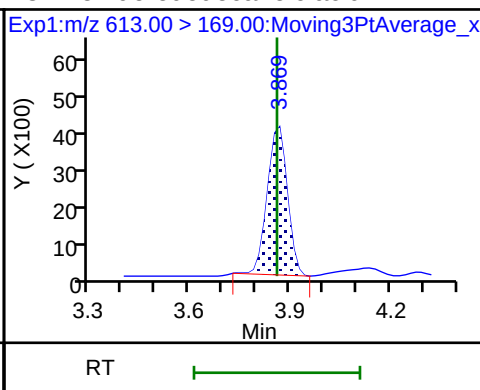
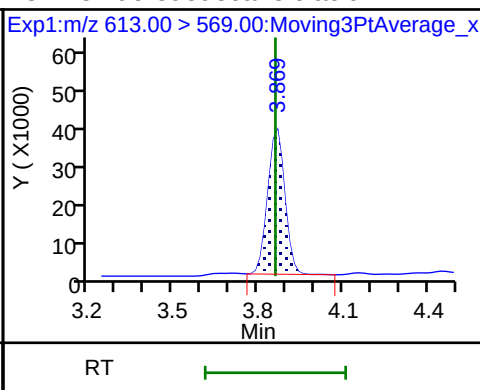
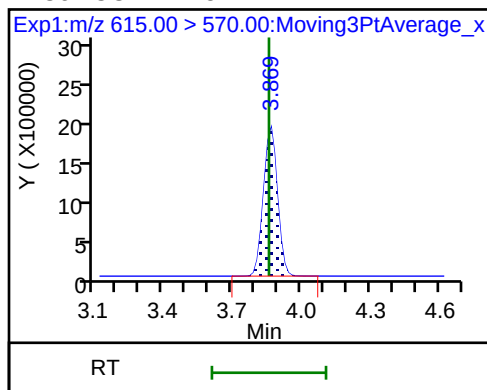




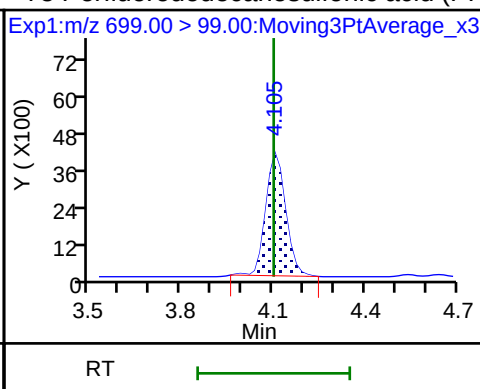
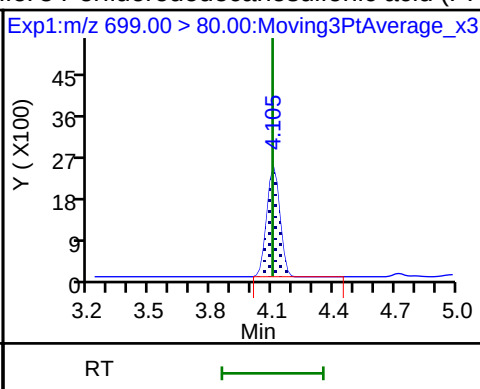
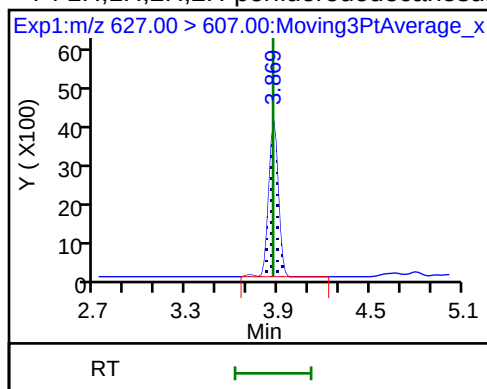
D 36 13C2 PFDaA

37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



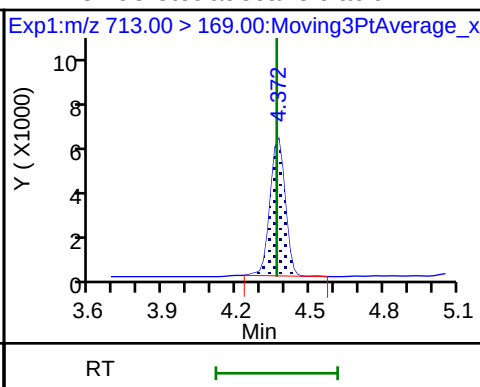
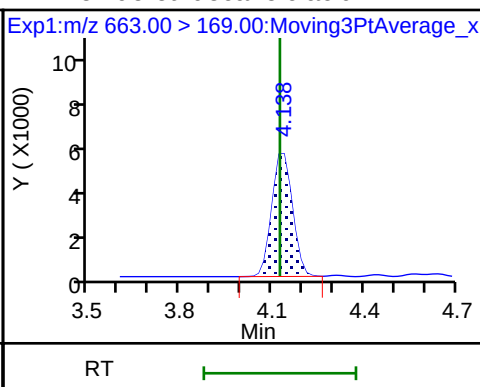
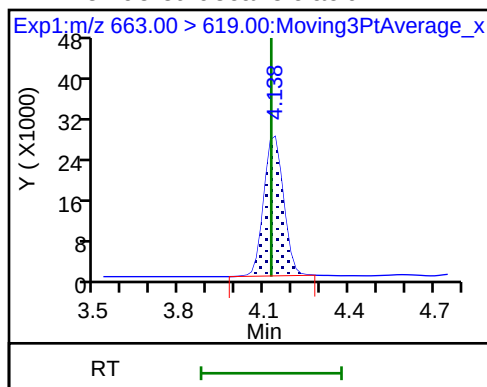
74 1H,1H,2H,2H-perfluorododecanesulfo75 Perfluorododecanesulfonic acid (PF 75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

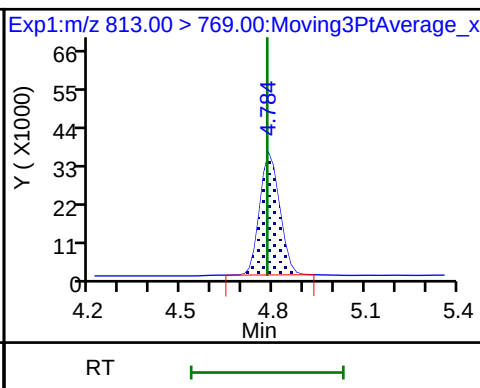
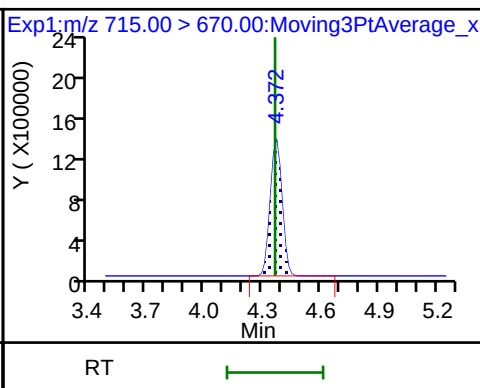
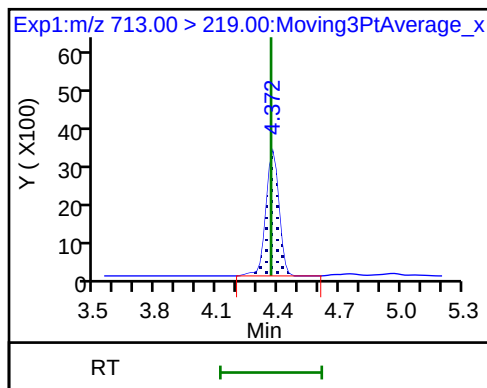
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

45 Perfluorohexadecanoic acid

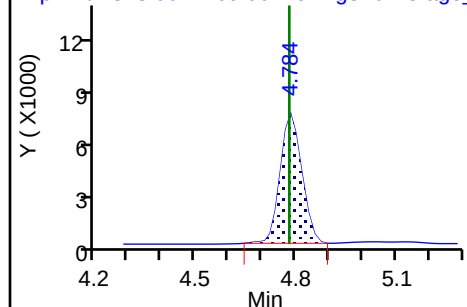


45 Perfluorohexadecanoic acid

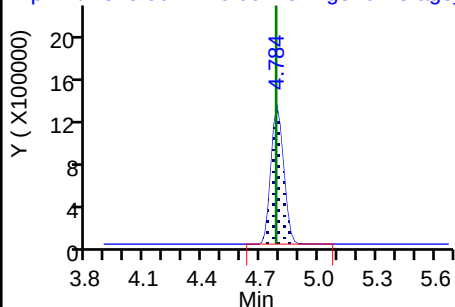
D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid

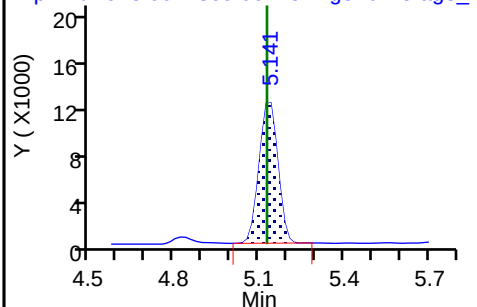
Exp1:m/z 813.00 > 169.00:Moving3PtAverage_x



Exp1:m/z 815.00 > 770.00:Moving3PtAverage_x

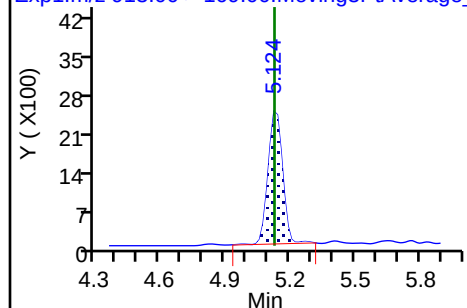


Exp1:m/z 913.00 > 869.00:Moving3PtAverage_x



46 Perfluorooctadecanoic acid

Exp1:m/z 913.00 > 169.00:Moving3PtAverage_x



TestAmerica Sacramento

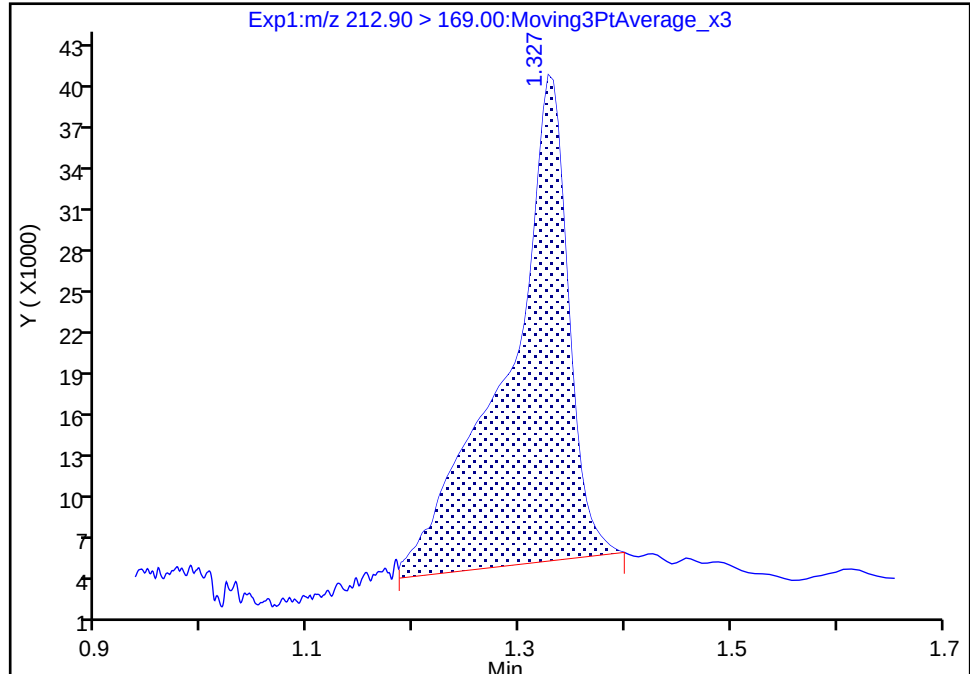
Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_003.d
Injection Date: 30-Oct-2018 13:20:21 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

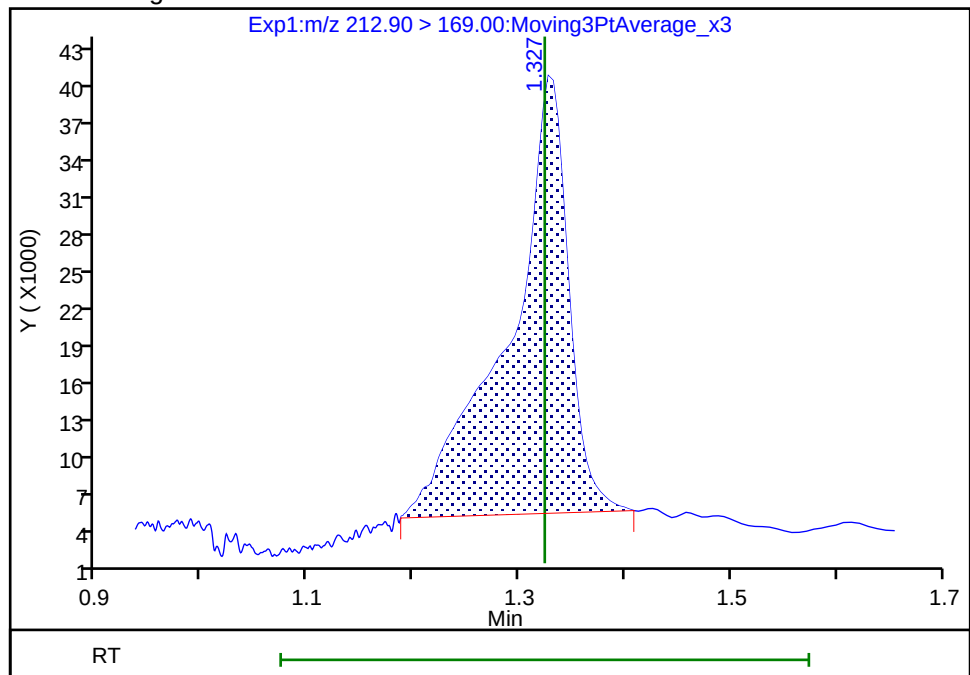
RT: 1.33
Area: 141971
Amount: 0.052215
Amount Units: ng/ml

Processing Integration Results



RT: 1.33
Area: 137562
Amount: 0.050829
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:38:24
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

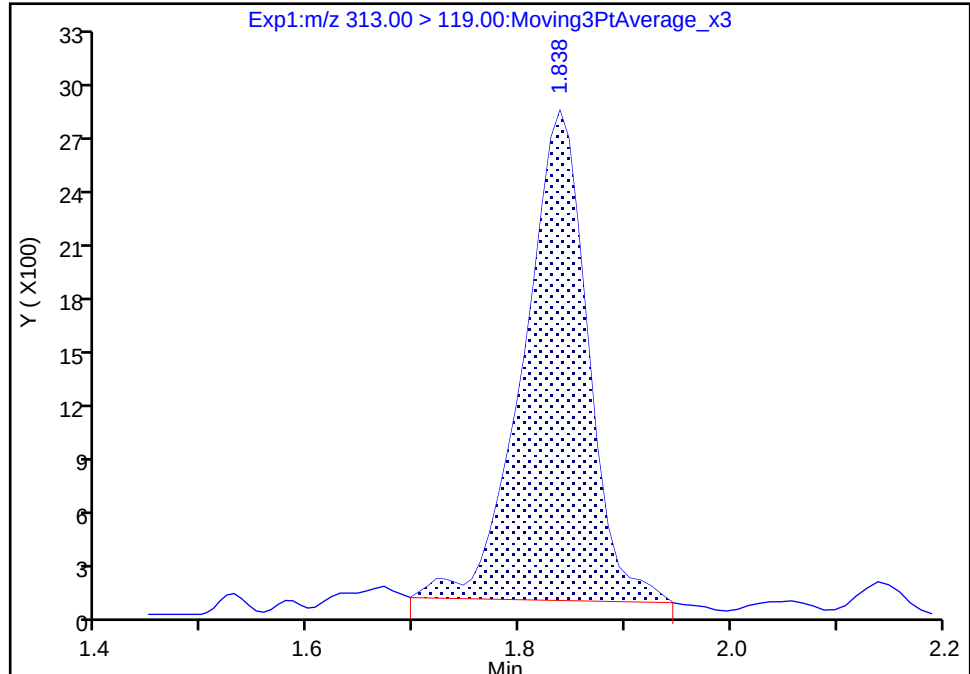
Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_003.d
Injection Date: 30-Oct-2018 13:20:21 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

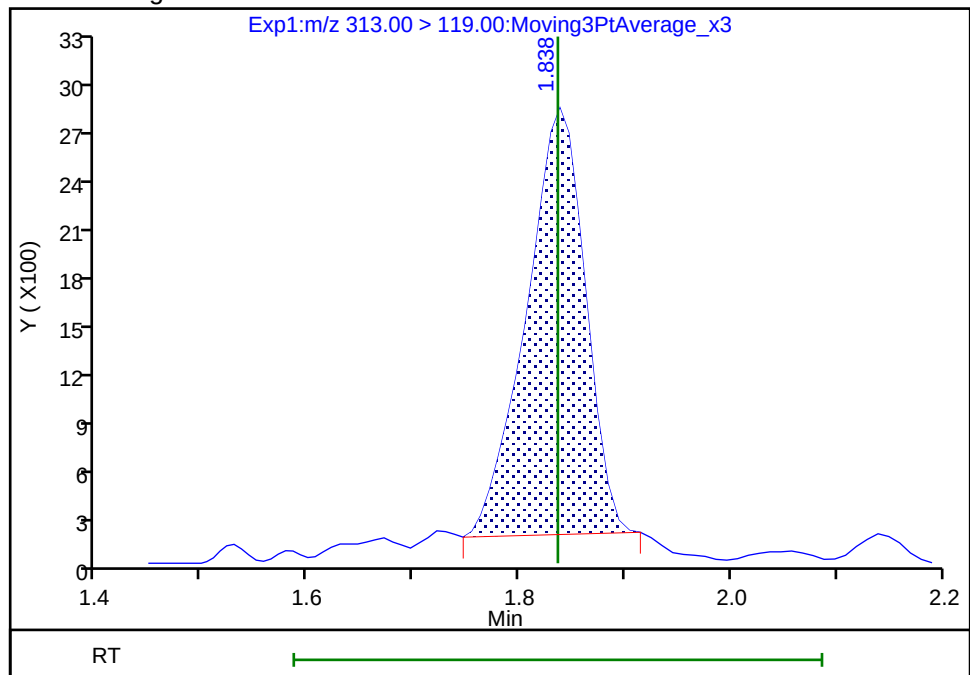
RT: 1.84
Area: 11442
Amount: 0.056191
Amount Units: ng/ml

Processing Integration Results



RT: 1.84
Area: 10128
Amount: 0.056191
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:38:37
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

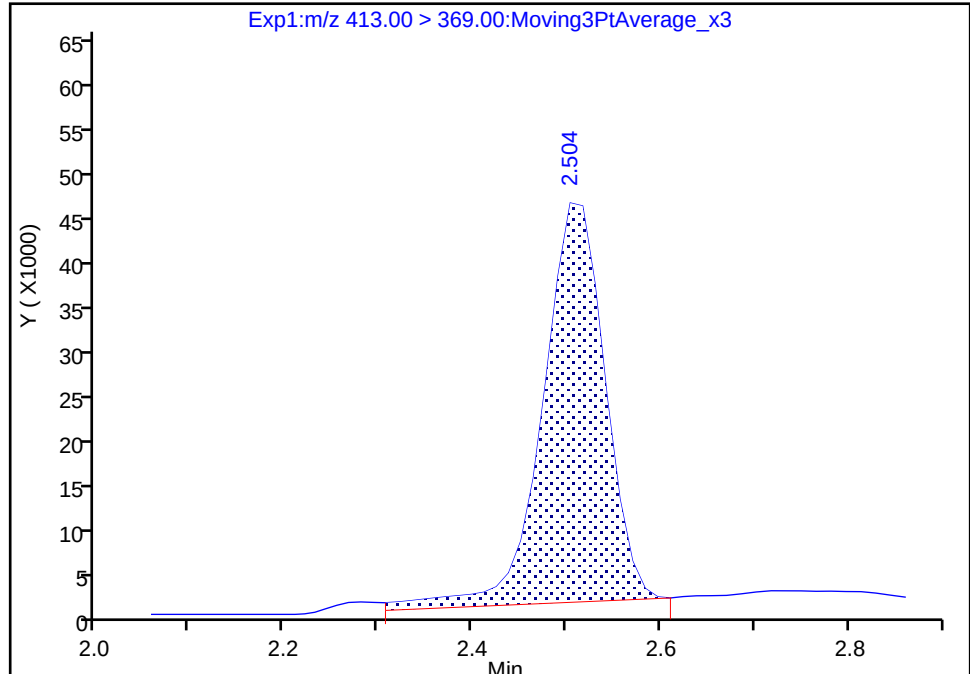
Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_003.d
Injection Date: 30-Oct-2018 13:20:21 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

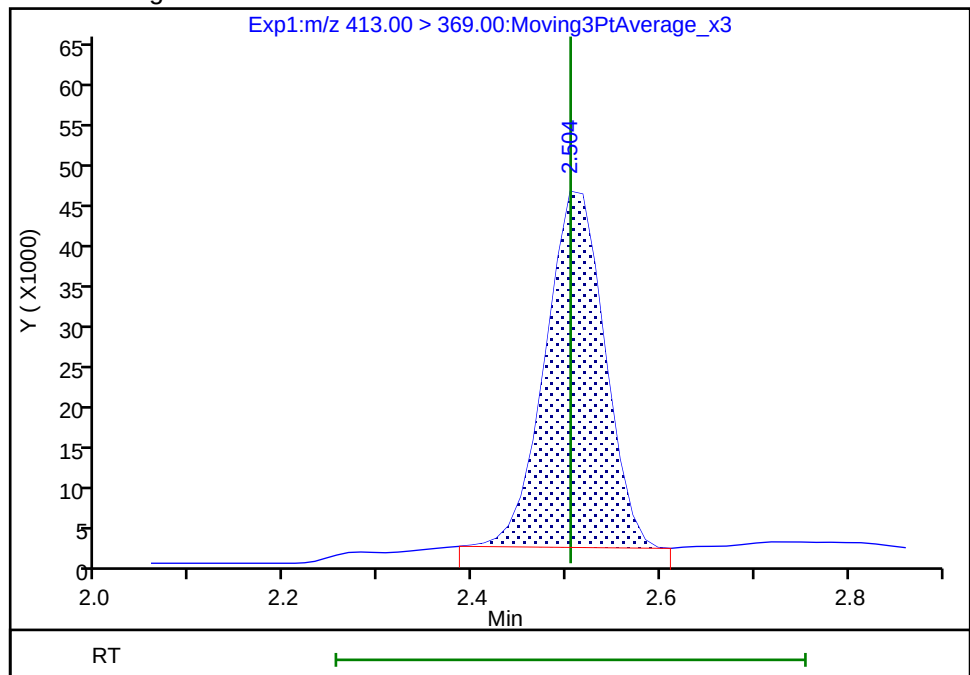
RT: 2.50
Area: 206749
Amount: 0.058065
Amount Units: ng/ml

Processing Integration Results



RT: 2.50
Area: 193091
Amount: 0.054830
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:38:51
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

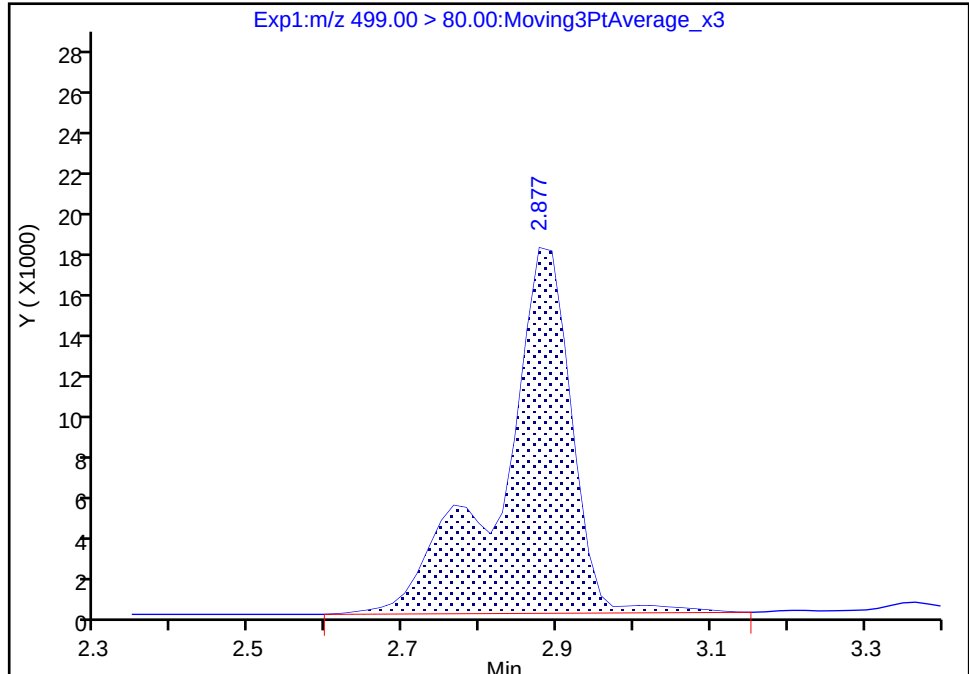
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Injection Date: 30-Oct-2018 13:20:21 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

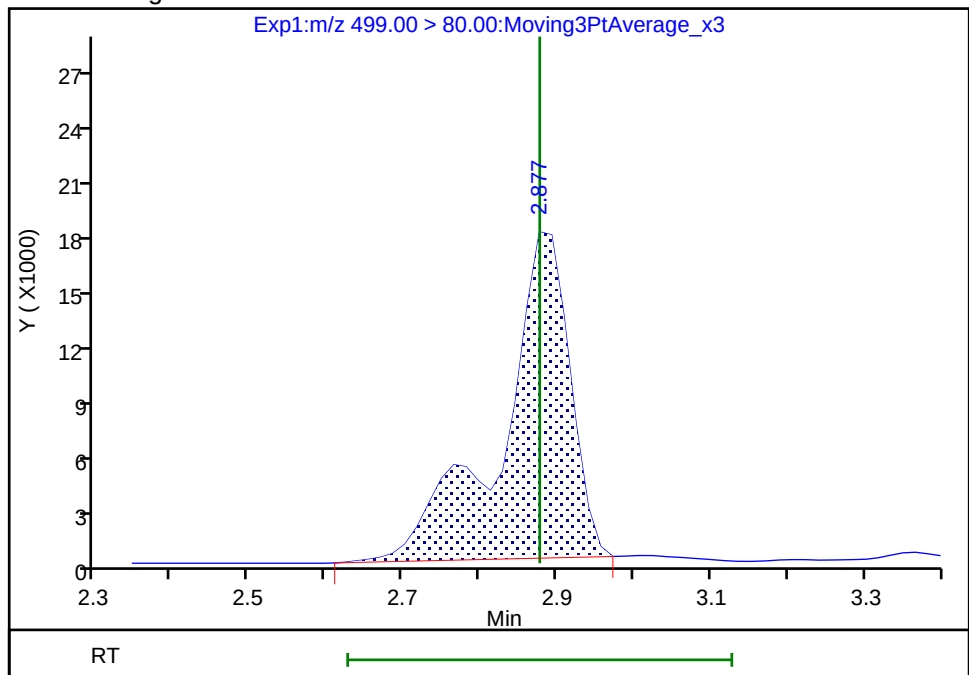
RT: 2.88
Area: 114874
Amount: 0.047948
Amount Units: ng/ml

Processing Integration Results



RT: 2.88
Area: 109342
Amount: 0.045966
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:39:01
Audit Action: Manually Integrated

Audit Reason: Baseline

TestAmerica Sacramento

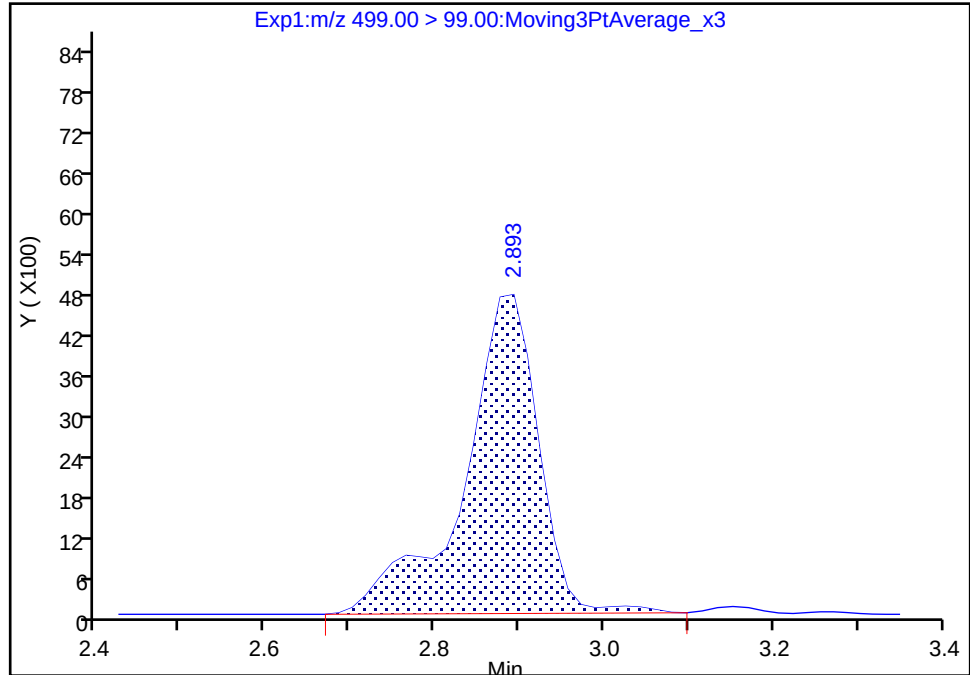
Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_003.d
Injection Date: 30-Oct-2018 13:20:21 Instrument ID: A9
Lims ID: IC L2 Full
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 11 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

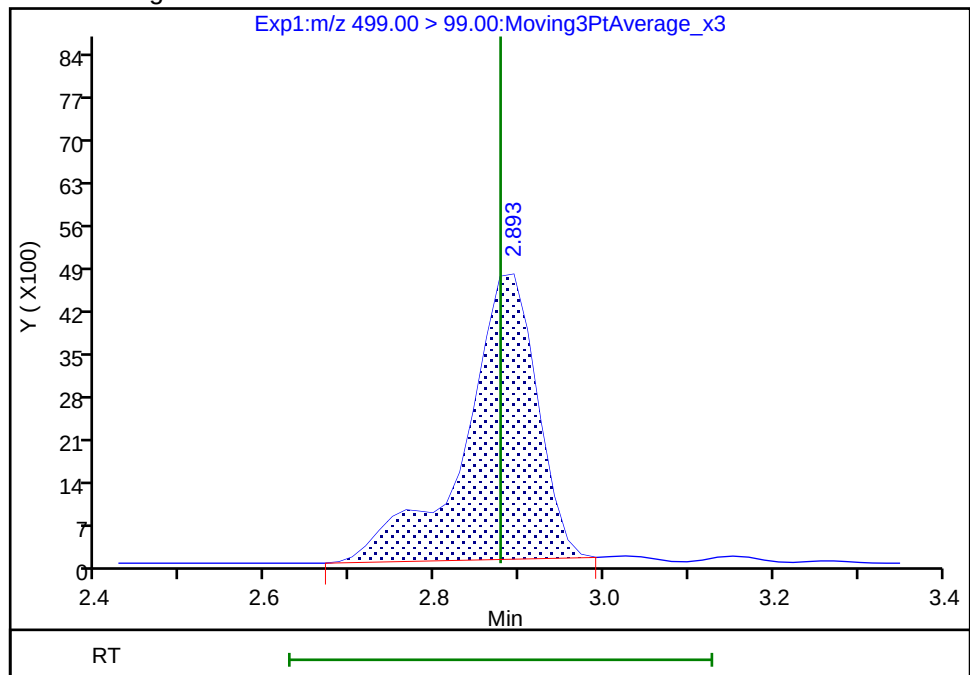
RT: 2.89
Area: 29098
Amount: 0.047948
Amount Units: ng/ml

Processing Integration Results



RT: 2.89
Area: 27968
Amount: 0.045966
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 30-Oct-2018 14:39:08

Audit Action: Manually Integrated

Audit Reason: Baseline

Page 932 of 1202

11/27/2018

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_004.d
 Lims ID: IC L3 Full
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 30-Oct-2018 13:27:52 ALS Bottle#: 12 Worklist Smp#: 4
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CAL STD3
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist: chrom-PFAS_A9*sub5
 Method: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 30-Oct-2018 15:08:13 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: roycea

Date: 30-Oct-2018 14:40:49

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	1.323	1.323	0.0	0.528	7421636	2.52		101	14431	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.323	1.324	-0.001	1.000	700086	0.2520		101	46.0	
D 3 13C5 PFPeA										
267.90 > 223.00	1.572	1.571	0.001	0.628	6985179	2.49		99.6	13655	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.572	1.573	-0.001	1.000	711130	0.2542		102	78.5	
D 47 13C3 PFBS										
301.90 > 83.00	1.600	1.603	-0.003	0.639	94392	2.43		105	530	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.607	1.607	0.0	1.004	875621	0.2089		94.5	416	
298.90 > 99.00	1.607	1.607	0.0	1.004	312689		2.80(1.35-4.05)	94.5	176	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.805	1.804	0.001	0.721	762392	2.45		105	867	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.805	1.805	0.0	1.128	190700	0.2286		97.9	1531	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.839	1.836	0.003	1.000	673371	0.2480		99.2	155	
313.00 > 119.00	1.839	1.836	0.003	1.000	52640		12.79(6.96-20.87)	99.2	147	
D 7 13C2 PFHxA										
315.00 > 270.00	1.839	1.836	0.003	0.734	7546229	2.55		102	10324	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.855	1.859	-0.004	1.160	452249	0.2328		99.3	1314	
349.00 > 99.00	1.855	1.859	-0.004	1.160	209687		2.16(1.15-3.45)	99.3	493	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.925	1.928	-0.003	0.769	931505	2.44		97.4	3333	

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	1.925	1.928	-0.003	1.000	150748	0.2434		97.3	140	
D 9 13C4 PFHpA										
367.00 > 322.00	2.150	2.148	0.002	0.858	9004593	2.59		104	11634	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.150	2.148	0.002	1.000	1003607	0.2627		105	278	
363.00 > 169.00	2.150	2.148	0.002	1.000	210553		4.77(2.17-6.52)	105	727	
D 11 18O2 PFHxS										
403.00 > 84.00	2.160	2.164	-0.004	0.863	5640195	2.49		105	7625	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.160	2.164	-0.004	1.000	617668	0.2056		90.4	595	
399.00 > 99.00	2.160	2.164	-0.004	1.000	169801		3.64(1.90-5.70)	90.4	247	
76 DONA										
377.00 > 251.00	2.191	2.194	-0.003	0.761	1610812	0.2494		106	4932	
377.00 > 85.00	2.191	2.194	-0.003	0.761	677905		2.38(1.13-3.39)	106	1400	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.478	2.478	0.0	0.990	780038	2.44		103	1563	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.478	2.482	-0.004	1.000	174352	0.2433		103	336	
D 73 13C8 PFOA										
421.00 > 376.00	2.504	2.501	0.003		8665283	2.52		103	9844	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.504	2.504	0.0	1.000	936788	0.2748		110	115	
413.00 > 169.00	2.504	2.504	0.0	1.000	327138		2.86(1.36-4.08)	110	655	
* 62 13C2 PFOA										
415.00 > 370.00	2.504	2.504	0.0		8098148	2.50			8764	
D 14 13C4 PFOA										
417.00 > 372.00	2.504	2.504	0.0	1.000	7882113	2.47		98.9	8010	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.518	2.514	0.004	0.875	605272	0.2447		103	735	
449.00 > 99.00	2.518	2.514	0.004	0.875	135478		4.47(1.84-5.53)	103	613	
D 72 13C8 PFOS										
507.00 > 99.00	2.878	2.877	0.001		1189687	2.41		101	3708	
D 18 13C4 PFOS										
503.00 > 80.00	2.878	2.877	0.001	1.149	5679290	2.48		104	4012	
D 19 13C5 PFNA										
468.00 > 423.00	2.878	2.877	0.001	1.149	7366826	2.50		100	7343	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.878	2.877	0.001	1.000	570169	0.2228		96.0	177	
499.00 > 99.00	2.878	2.877	0.001	1.000	129513		4.40(2.04-6.12)	96.0	513	
20 Perfluorononanoic acid										
463.00 > 419.00	2.878	2.880	-0.002	1.000	800817	0.2715		109	51.0	
463.00 > 169.00	2.878	2.880	-0.002	1.000	146792		5.46(2.68-8.03)	109	649	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.098	3.091	0.007	1.077	584281	0.2220		95.3	576	
D 21 13C8 FOSA										
506.00 > 78.00	3.224	3.217	0.007	1.287	3160835	2.50		99.8	4883	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.224	3.219	0.005	1.000	1009046	0.2656		106	1319	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.224	3.226	-0.002	1.287	107369	2.71		113	446	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.224	3.226	-0.002	1.000	140552	0.2196		91.7	930	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.224	3.226	-0.002	1.120	356556	0.2446		102	1269	
549.00 > 99.00	3.224	3.226	-0.002	1.120	64396		5.54(3.02-9.05)	102	562	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.241	3.241	0.0	1.000	875209	0.2561		102	176	
513.00 > 169.00	3.241	3.241	0.0	1.000	59551		14.70(7.12-21.35)	102	116	
D 23 13C2 PFDA										
515.00 > 470.00	3.241	3.241	0.0	1.294	7870335	2.59		104	6400	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.400	3.392	0.008	1.357	3165312	2.41		96.5	4632	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.400	3.399	0.001	1.000	320374	0.2530		101	106	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.556	3.552	0.004	1.236	518365	0.2521		105	658	
599.00 > 99.00	3.556	3.552	0.004	1.236	105825		4.90(2.14-6.43)	105	745	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.556	3.558	-0.002	1.420	2850484	2.67		107	4038	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.570	3.566	0.004	1.004	263775	0.2530		101	718	
D 30 13C2 PFUnA										
565.00 > 520.00	3.570	3.568	0.002	1.426	6511694	2.57		103	7227	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.570	3.570	0.0	1.000	760964	0.2570		103	240	
563.00 > 169.00	3.570	3.570	0.0	1.000	58179		13.08(5.24-15.72)	103	343	
35 MeFOSA										
512.00 > 169.00	3.728	3.724	0.004		183549	NC			702	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.728	3.728	0.0	1.296	824463	0.2502		106	2100	
D 36 13C2 PFDaA										
615.00 > 570.00	3.855	3.859	-0.004	1.539	7757539	2.49		99.4	8735	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.855	3.861	-0.006	1.000	889955	0.2819		113	380	
613.00 > 169.00	3.855	3.861	-0.006	1.000	90031		9.88(4.68-14.05)	113	182	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.869	3.865	0.004	1.200	95016	0.2096		87.0	203	
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	3.912	3.912	0.0		195597	NC			1342	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.106	4.101	0.005	1.427	50383	0.2201		90.9	245	
699.00 > 99.00	4.106	4.101	0.005	1.427	100846		0.50(0.28-0.83)	90.9	418	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.122	4.125	-0.003	1.069	719231	0.2835		113	629	
663.00 > 169.00	4.122	4.125	-0.003	1.069	115085		6.25(3.09-9.27)	113	359	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.357	4.364	-0.007	1.000	92576	0.2305		92.2	352	
713.00 > 219.00	4.357	4.364	-0.007	1.000	71060		1.30(0.70-2.09)	92.2	275	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.357	4.364	-0.007	1.740	5490624	2.35		94.2	9377	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.784	4.780	0.004	1.000	583218	0.2507		100	1005	
813.00 > 169.00	4.784	4.780	0.004	1.000	107247		5.44(2.77-8.32)	100	269	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.784	4.780	0.004	1.910	5838380	2.52		101	11976	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.125	5.127	-0.002	1.071	277253	0.2401		96.0	762	
913.00 > 169.00	5.125	5.127	-0.002	1.071	54814		5.06(2.55-7.64)	96.0	393	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL3_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_004.d

Injection Date: 30-Oct-2018 13:27:52

Instrument ID: A9

Lims ID: IC L3 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 12

Worklist Smp#: 4

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

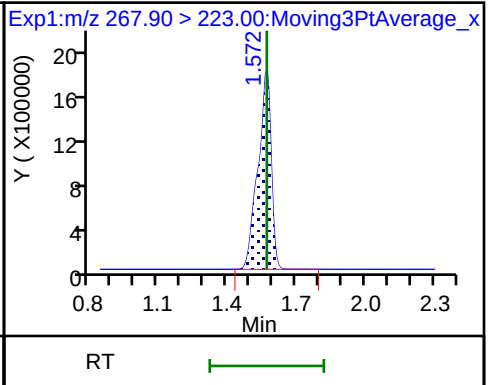
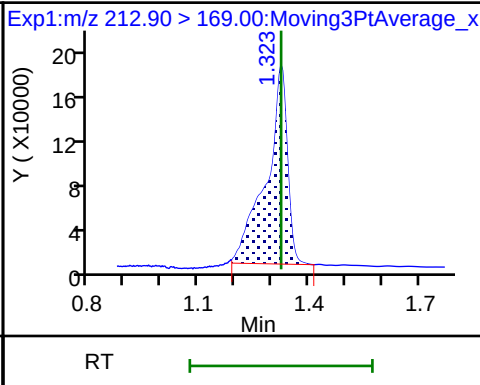
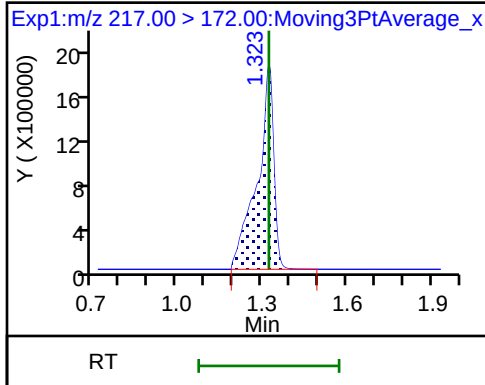
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

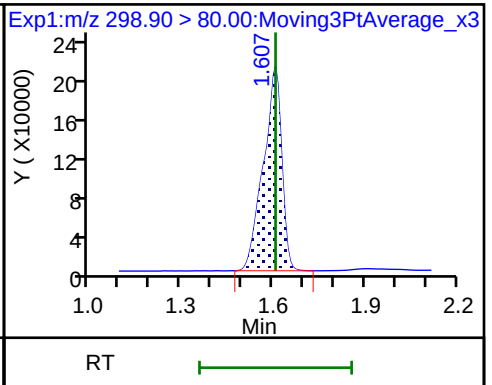
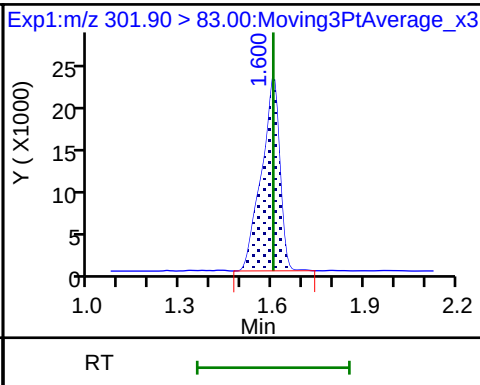
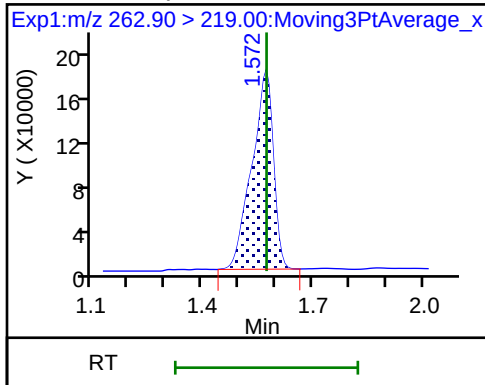
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

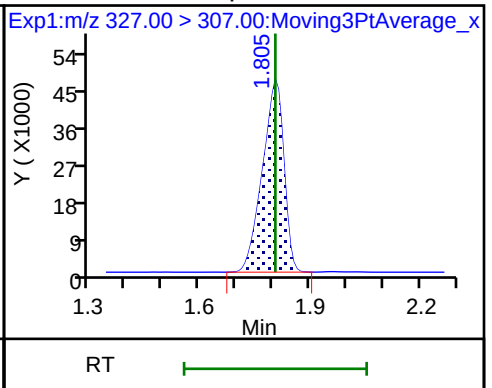
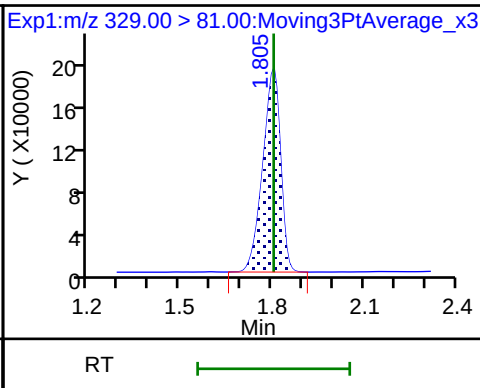
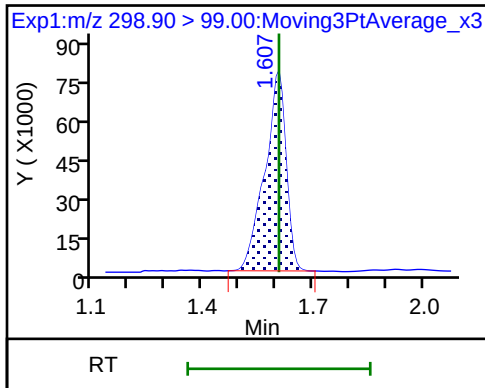
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

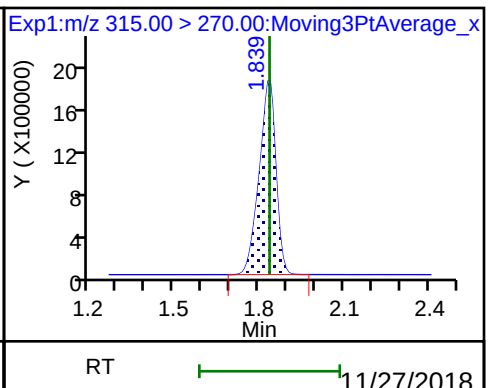
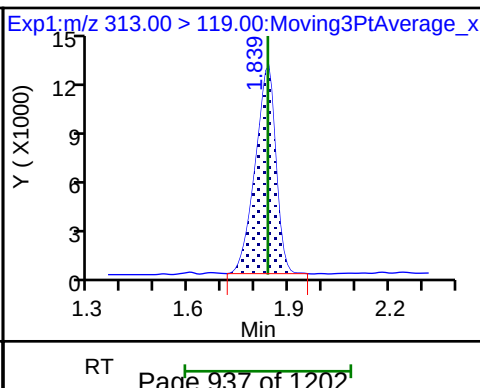
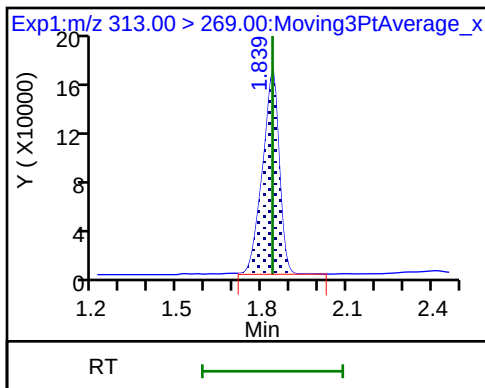
61 1H,1H,2H,2H-perfluorohexanesulfoni

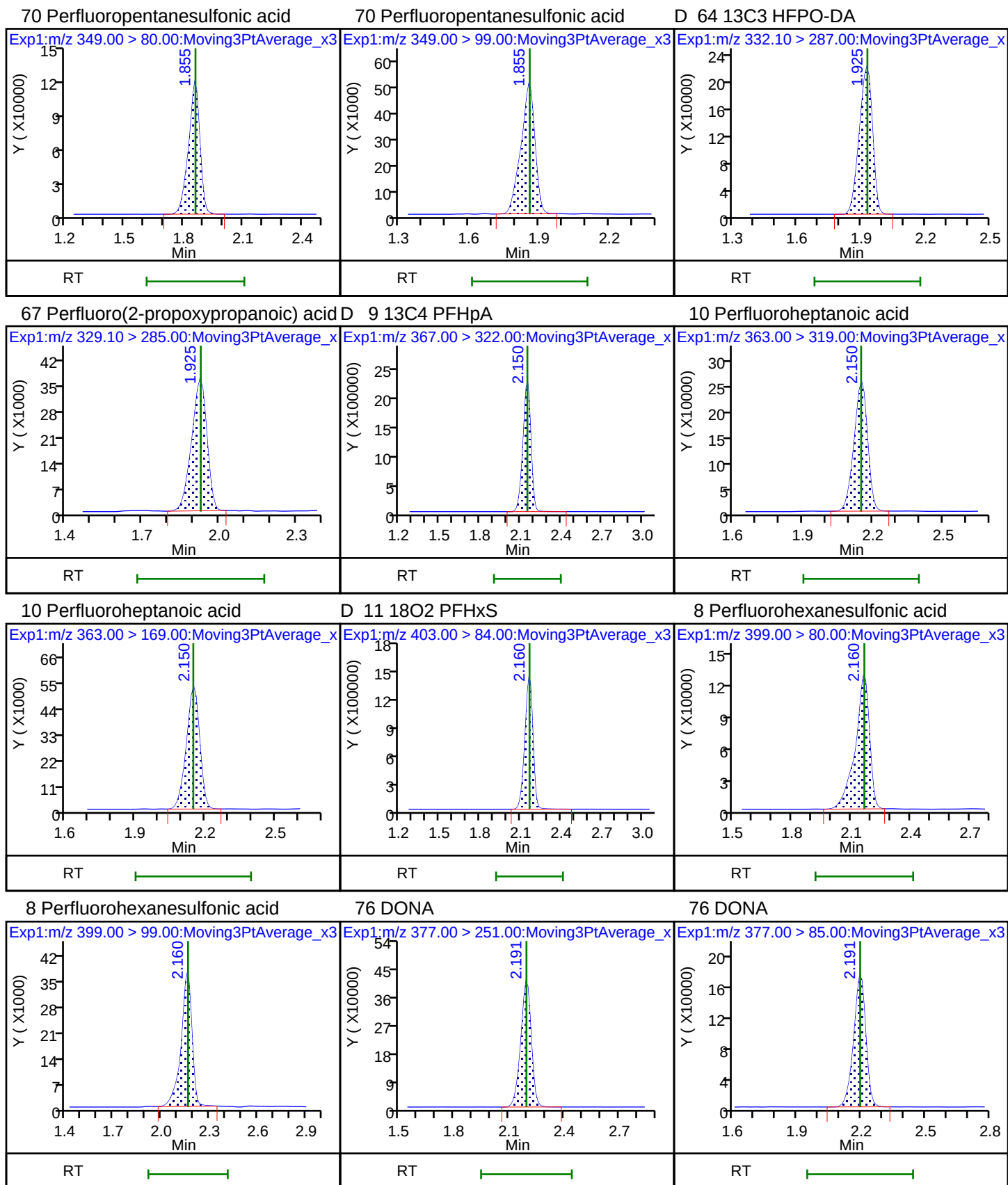


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

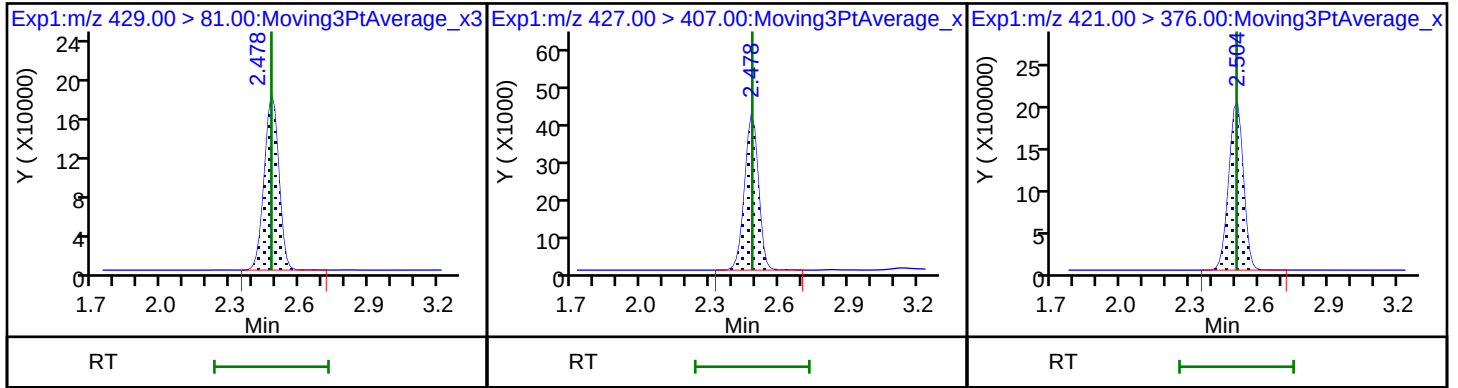
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

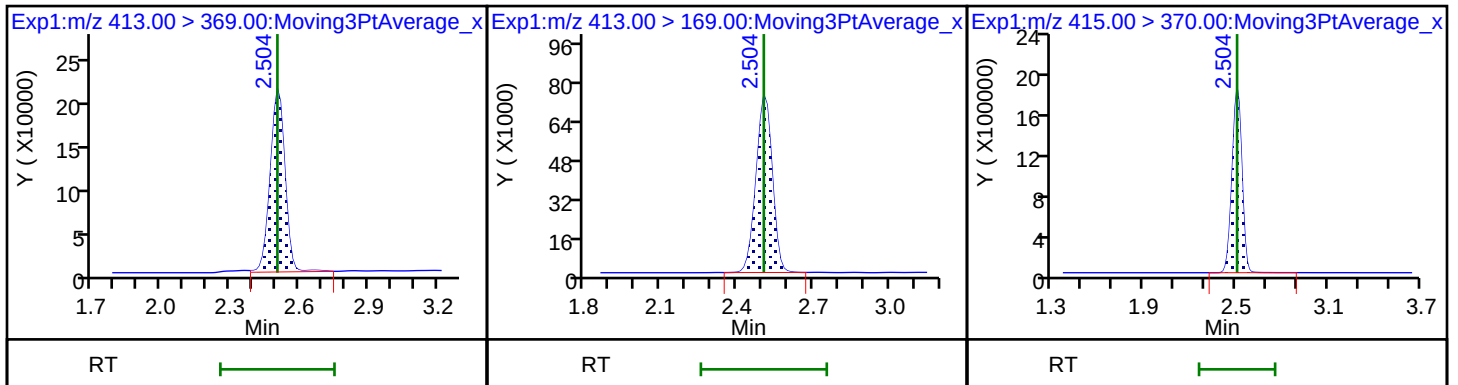
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



15 Perfluorooctanoic acid

15 Perfluorooctanoic acid

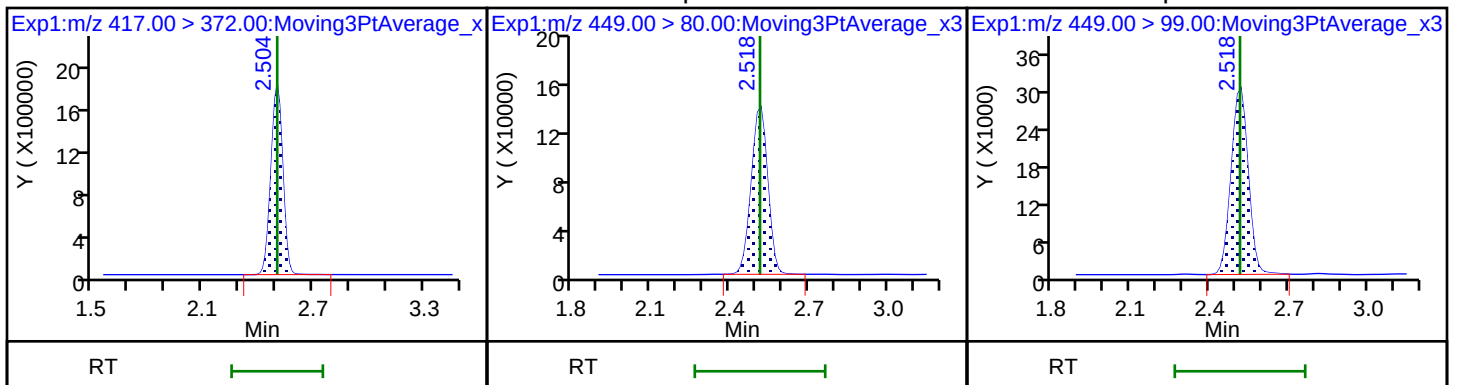
* 62 13C2 PFOA



D 14 13C4 PFOA

16 Perfluoroheptanesulfonic acid

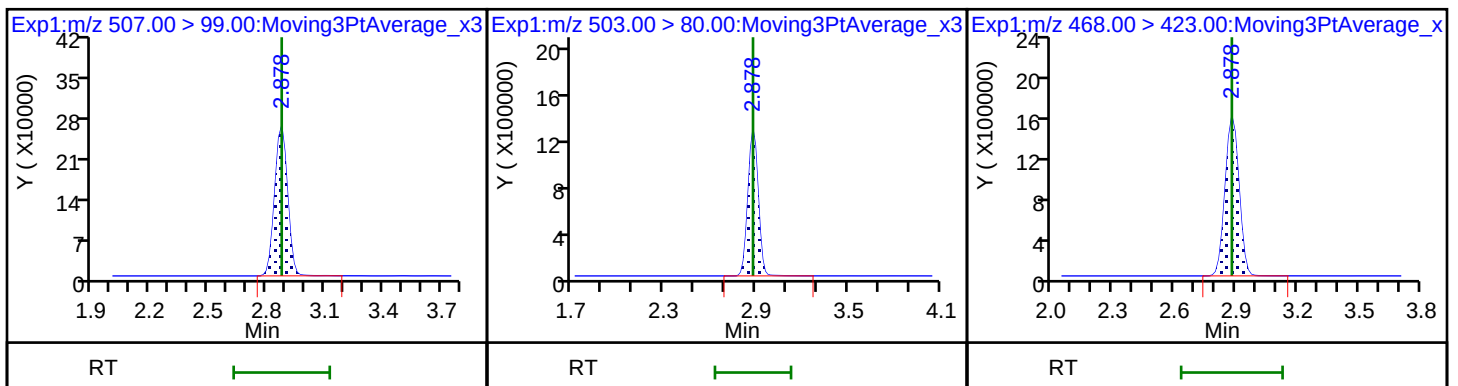
16 Perfluoroheptanesulfonic acid

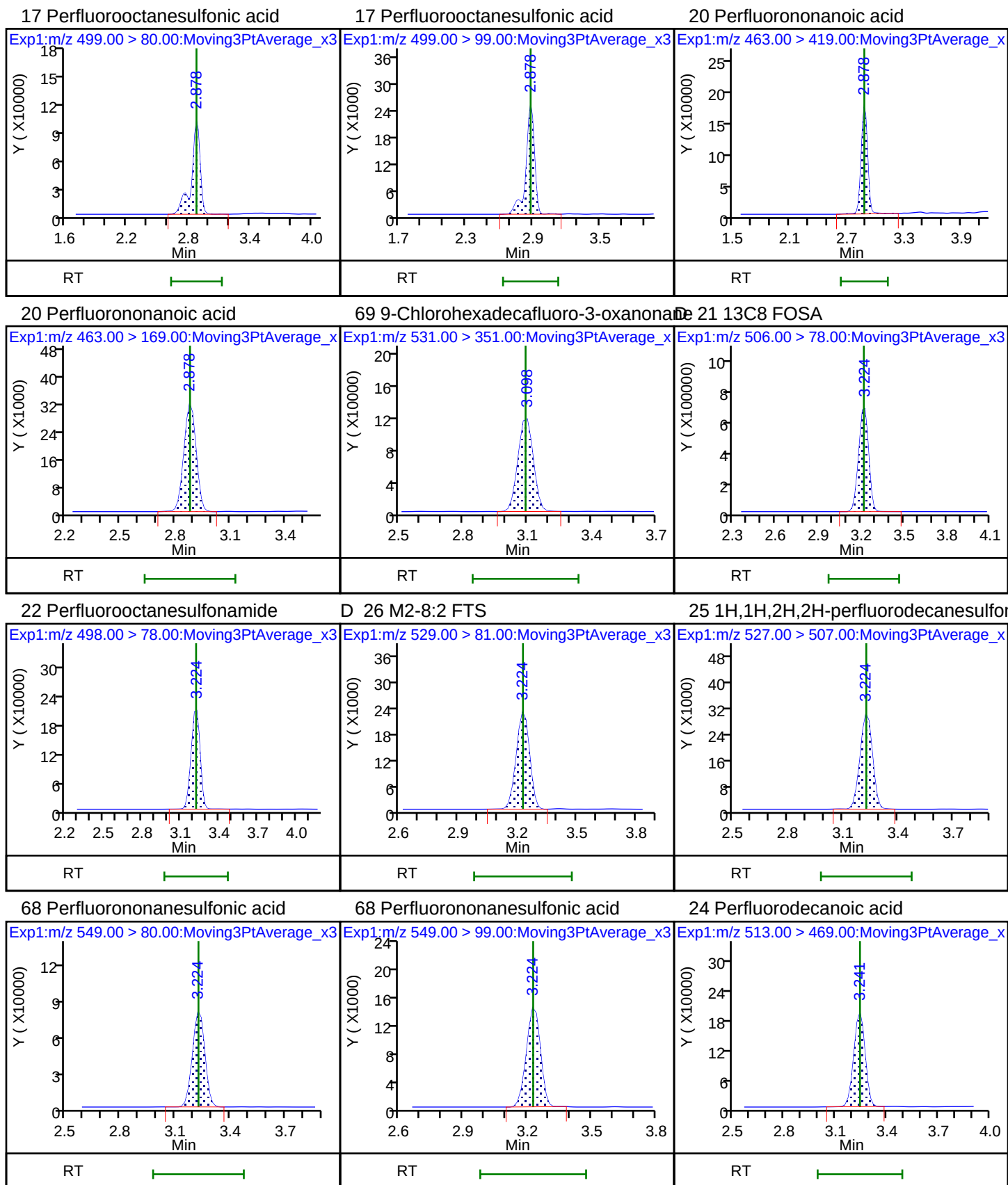


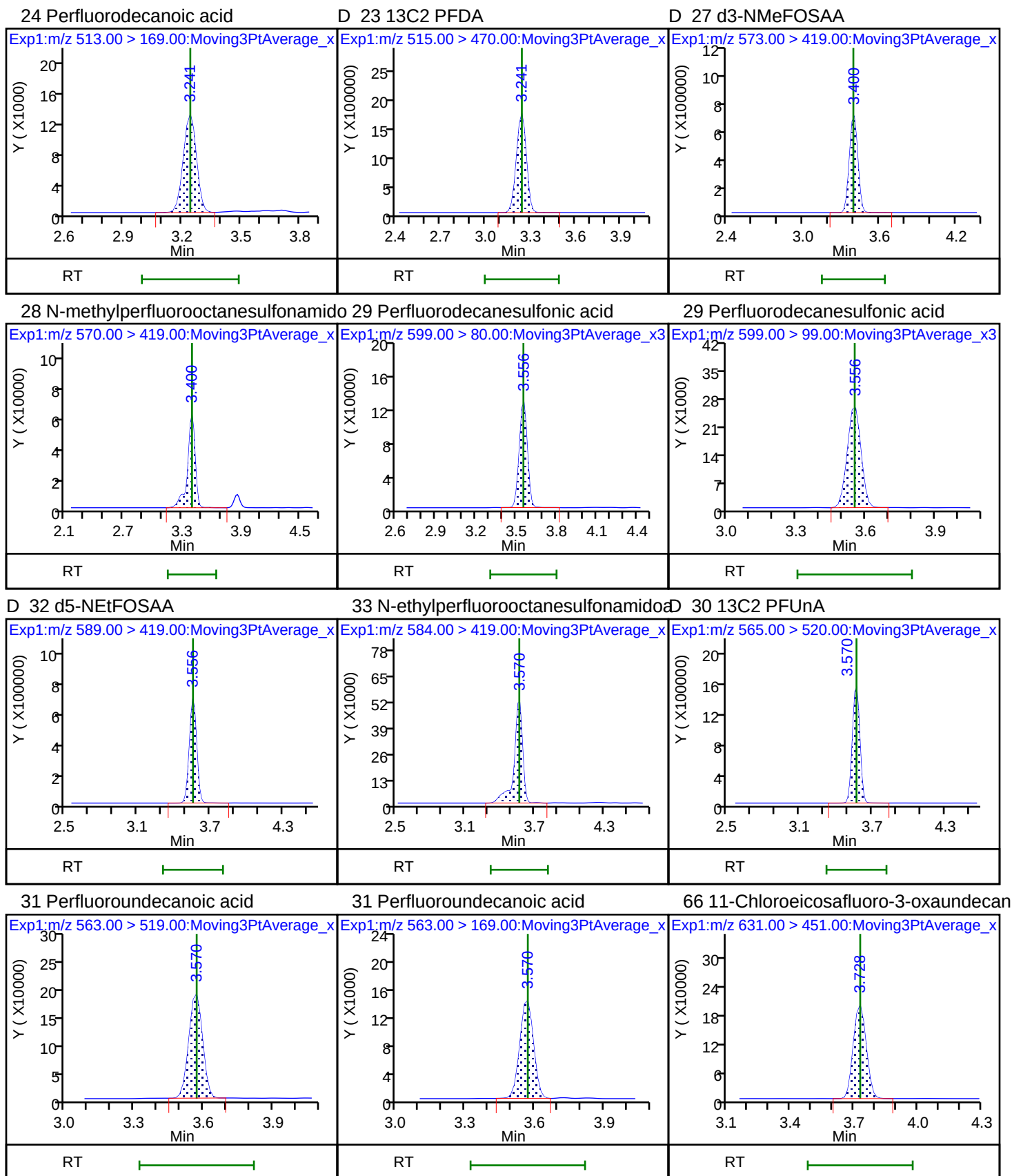
D 72 13C8 PFOS

D 18 13C4 PFOS

D 19 13C5 PFNA



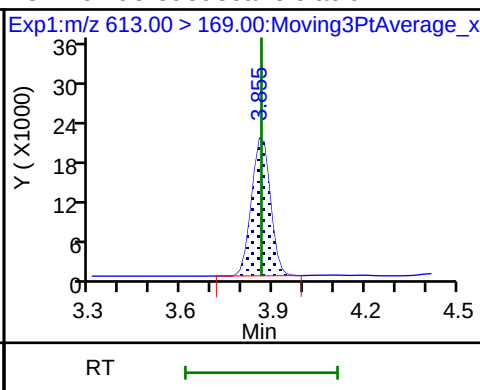
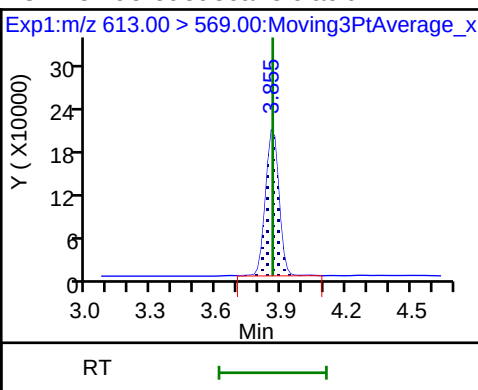
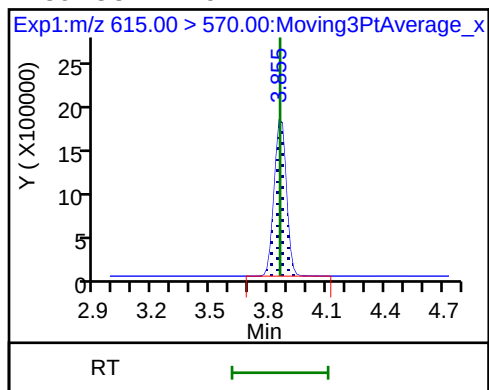




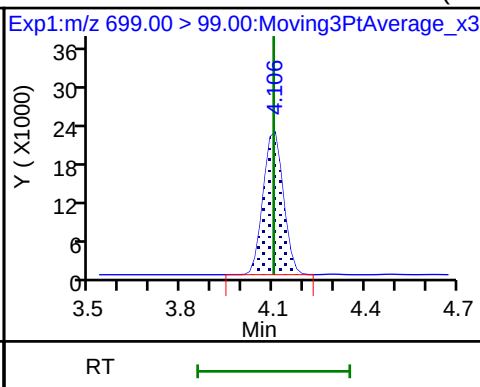
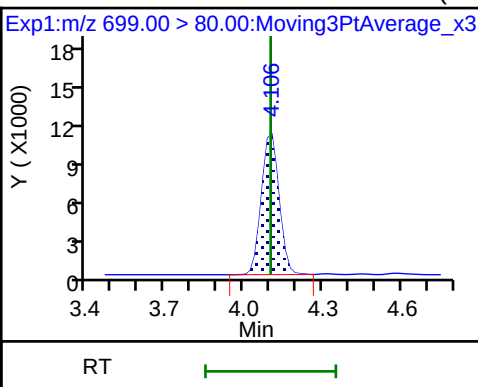
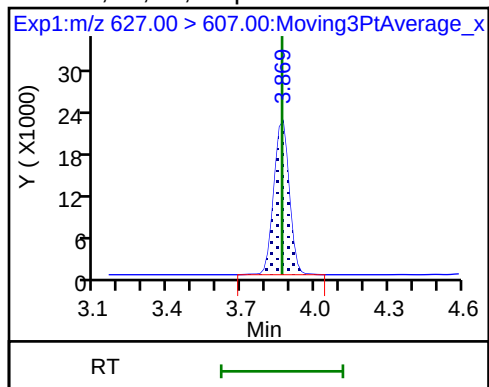
D 36 13C2 PFDaA

37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



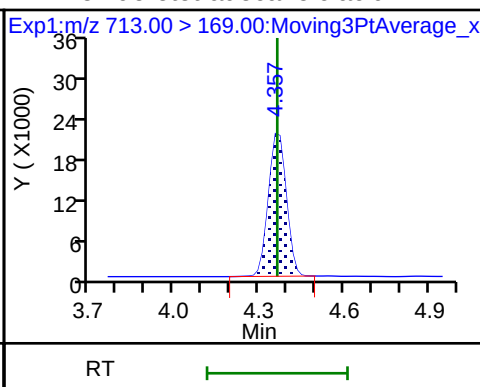
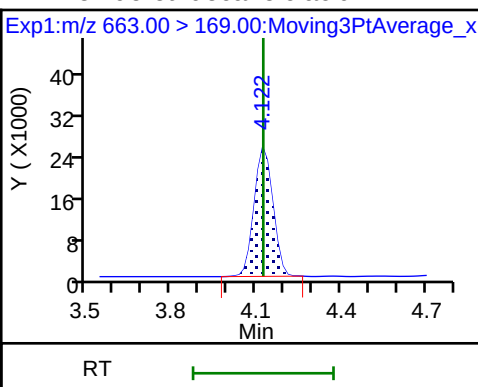
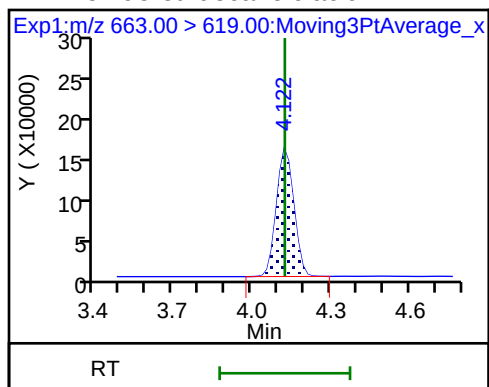
74 1H,1H,2H,2H-perfluorododecanesulfo75 Perfluorododecanesulfonic acid (PF 75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

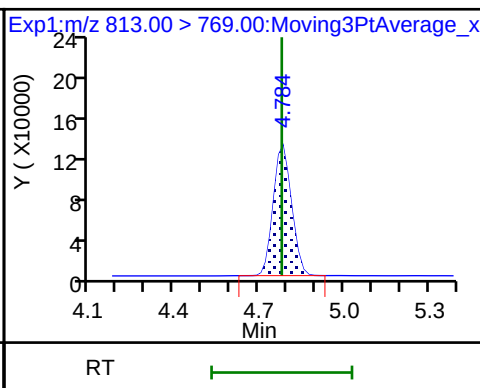
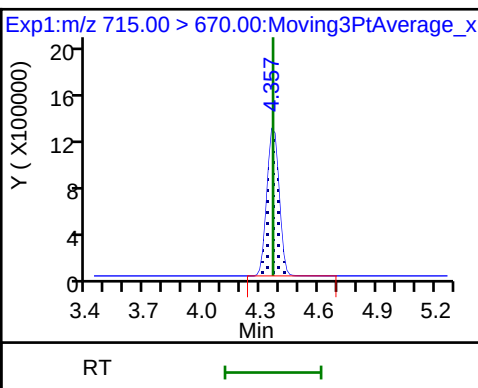
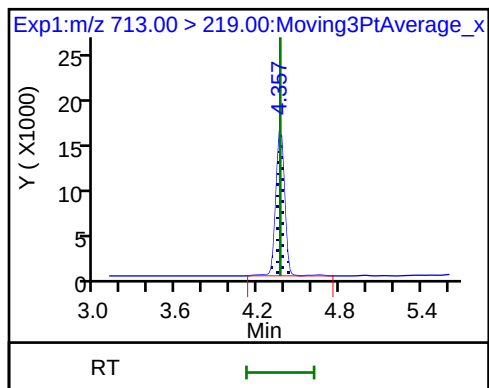
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

45 Perfluorohexadecanoic acid

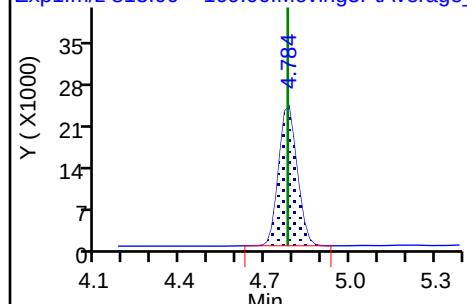


45 Perfluorohexadecanoic acid

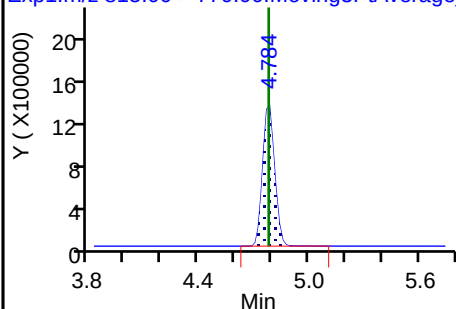
D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid

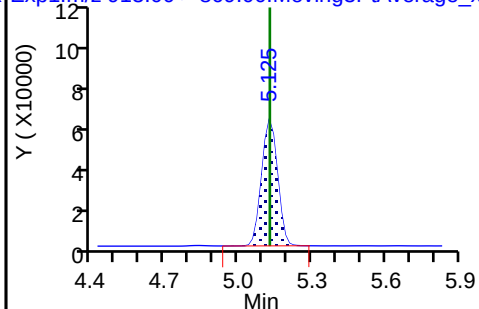
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Exp1:m/z 815.00 > 770.00:Moving3PtAverage_x

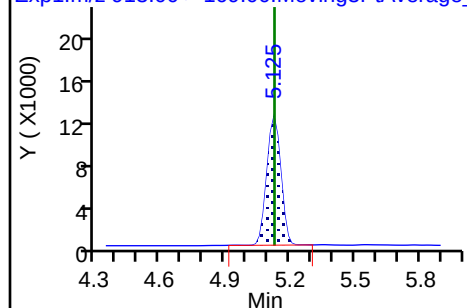


Exp1:m/z 913.00 > 869.00:Moving3PtAverage_x



46 Perfluorooctadecanoic acid

Exp1:m/z 913.00 > 169.00:Moving3PtAverage_x



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_005.d
 Lims ID: IC L4 Full
 Client ID:
 Sample Type: ICIS Calib Level: 4
 Inject. Date: 30-Oct-2018 13:35:22 ALS Bottle#: 13 Worklist Smp#: 5
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CAL STD4
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist: chrom-PFAS_A9*sub5
 Method: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 30-Oct-2018 15:08:21 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: roycea

Date: 30-Oct-2018 14:37:39

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	1.319	1.323	-0.004	0.527	7225198	2.43		97.2	15494	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.323	1.324	-0.001	1.003	2770322	1.02		102	185	
D 3 13C5 PFPeA										
267.90 > 223.00	1.572	1.571	0.001	0.628	7062557	2.50		99.8	9553	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.572	1.573	-0.001	1.000	2788574	0.9861		98.6	311	
D 47 13C3 PFBS										
301.90 > 83.00	1.600	1.603	-0.003	0.639	85872	2.20		94.4	385	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.607	1.607	0.0	1.004	3599778	0.9439		107	1597	
298.90 > 99.00	1.600	1.607	-0.007	1.000	1240024		2.90(1.35-4.05)	107	624	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.805	1.804	0.001	0.721	702950	2.24		95.9	855	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.805	1.805	0.0	1.128	713550	0.9401		101	5955	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.830	1.836	-0.006	1.000	2615815	1.01		101	604	
313.00 > 119.00	1.830	1.836	-0.006	1.000	196555		13.31(6.96-20.87)	101	512	
D 7 13C2 PFHxA										
315.00 > 270.00	1.830	1.836	-0.006	0.731	7207236	2.42		96.6	14086	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.855	1.859	-0.004	1.160	1770049	1.00		107	3929	
349.00 > 99.00	1.855	1.859	-0.004	1.160	815148		2.17(1.15-3.45)	107	1566	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.925	1.928	-0.003	0.769	1006689	2.61		104	4793	

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	1.925	1.928	-0.003	1.000	628181	0.9384		93.8	525	
D 9 13C4 PFHpA										
367.00 > 322.00	2.150	2.148	0.002	0.858	8369358	2.39		95.5	11413	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.150	2.148	0.002	1.000	3737932	1.05		105	996	
363.00 > 169.00	2.150	2.148	0.002	1.000	815941		4.58(2.17-6.52)	105	2033	
D 11 18O2 PFHxS										
403.00 > 84.00	2.160	2.164	-0.004	0.863	5223113	2.29		96.8	7916	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.160	2.164	-0.004	1.000	2420284	0.8699		95.6	1913	
399.00 > 99.00	2.160	2.164	-0.004	1.000	666953		3.63(1.90-5.70)	95.6	823	
76 DONA										
377.00 > 251.00	2.191	2.194	-0.003	0.761	6353925	1.04		110	9116	
377.00 > 85.00	2.191	2.194	-0.003	0.761	2657968		2.39(1.13-3.39)	110	4064	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.478	2.478	0.0	0.990	757242	2.35		98.8	1131	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.478	2.482	-0.004	1.000	627518	0.9020		95.1	1034	
D 73 13C8 PFOA										
421.00 > 376.00	2.491	2.501	-0.010		8610715	2.50		102	9591	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.504	2.504	0.0	1.000	3436748	1.01		101	459	
413.00 > 169.00	2.504	2.504	0.0	1.000	1230692		2.79(1.36-4.08)	101	2034	
* 62 13C2 PFOA										
415.00 > 370.00	2.504	2.504	0.0		8163503	2.50			8411	
D 14 13C4 PFOA										
417.00 > 372.00	2.504	2.504	0.0	1.000	7840609	2.44		97.6	9460	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.504	2.514	-0.010	0.870	2358852	1.01		106	2205	
449.00 > 99.00	2.504	2.514	-0.010	0.870	569127		4.14(1.84-5.53)	106	1750	
D 72 13C8 PFOS										
507.00 > 99.00	2.878	2.877	0.001		1245859	2.52		106	3961	
D 18 13C4 PFOS										
503.00 > 80.00	2.878	2.877	0.001	1.149	5384373	2.33		97.7	4069	
D 19 13C5 PFNA										
468.00 > 423.00	2.878	2.877	0.001	1.149	7702032	2.59		104	8635	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.878	2.877	0.001	1.000	2435322	1.00		108	775	
499.00 > 99.00	2.878	2.877	0.001	1.000	508953		4.78(2.04-6.12)	108	1415	
20 Perfluorononanoic acid										
463.00 > 419.00	2.878	2.880	-0.002	1.000	3138021	1.02		102	214	
463.00 > 169.00	2.878	2.880	-0.002	1.000	586140		5.35(2.68-8.03)	102	1797	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.080	3.091	-0.011	1.070	2487534	1.00		107	1894	
D 21 13C8 FOSA										
506.00 > 78.00	3.207	3.217	-0.010	1.280	3188250	2.50		99.9	6891	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.207	3.219	-0.012	1.000	4105177	1.07		107	4332	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.224	3.226	-0.002	1.287	91683	2.29		95.7	394	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.224	3.226	-0.002	1.000	538370	0.9851		103	2789	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.224	3.226	-0.002	1.120	1430137	1.03		108	3030	
549.00 > 99.00	3.224	3.226	-0.002	1.120	218929		6.53(3.02-9.05)	108	1386	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.241	3.241	0.0	1.000	3331267	1.01		101	593	
513.00 > 169.00	3.241	3.241	0.0	1.000	234867		14.18(7.12-21.35)	101	280	
D 23 13C2 PFDA										
515.00 > 470.00	3.241	3.241	0.0	1.294	7598205	2.48		99.4	7920	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.383	3.392	-0.009	1.351	3365714	2.55		102	4323	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.400	3.399	0.001	1.005	1346384	1.00		100	458	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.542	3.552	-0.010	1.231	1831725	0.9395		97.5	2183	
599.00 > 99.00	3.542	3.552	-0.010	1.231	429378		4.27(2.14-6.43)	97.5	1285	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.556	3.558	-0.002	1.420	2670966	2.48		99.2	4123	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.556	3.566	-0.010	1.000	987763	1.01		101	2796	
D 30 13C2 PFUnA										
565.00 > 520.00	3.556	3.568	-0.012	1.420	6277796	2.46		98.3	10332	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.570	3.570	0.0	1.004	2919106	1.02		102	791	
563.00 > 169.00	3.570	3.570	0.0	1.004	217685		13.41(5.24-15.72)	102	1087	
35 MeFOSA										
512.00 > 169.00	3.712	3.724	-0.012		723251	NC			1785	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.728	3.728	0.0	1.296	3201198	1.02		109	6571	
D 36 13C2 PFDaA										
615.00 > 570.00	3.854	3.859	-0.005	1.539	7689053	2.44		97.8	9636	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.854	3.861	-0.007	1.000	3289422	1.05		105	1188	
613.00 > 169.00	3.854	3.861	-0.007	1.000	343902		9.56(4.68-14.05)	105	742	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.854	3.865	-0.011	1.196	364481	0.9416		97.7	848	
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	3.912	3.912	0.0		798393	NC			2485	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.089	4.101	-0.012	1.421	221273	1.02		105	894	
699.00 > 99.00	4.089	4.101	-0.012	1.421	410858		0.54(0.28-0.83)	105	1348	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.122	4.125	-0.003	1.069	2684945	1.07		107	1979	
663.00 > 169.00	4.122	4.125	-0.003	1.069	456392		5.88(3.09-9.27)	107	1276	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.357	4.364	-0.007	1.000	425136	1.00		99.5	1803	
713.00 > 219.00	4.357	4.364	-0.007	1.000	284209		1.50(0.70-2.09)	99.5	1191	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.357	4.364	-0.007	1.740	5839511	2.48		99.3	9125	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.769	4.780	-0.011	1.000	2230933	1.02		102	3694	
813.00 > 169.00	4.769	4.780	-0.011	1.000	407295		5.48(2.77-8.32)	102	1042	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.769	4.780	-0.011	1.904	5901989	2.53		101	10892	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.125	5.127	-0.002	1.075	1197202	1.03		103	2758	
913.00 > 169.00	5.125	5.127	-0.002	1.075	234000		5.12(2.55-7.64)	103	1485	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL4_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_005.d

Injection Date: 30-Oct-2018 13:35:22

Instrument ID: A9

Lims ID: IC L4 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 13

Worklist Smp#: 5

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

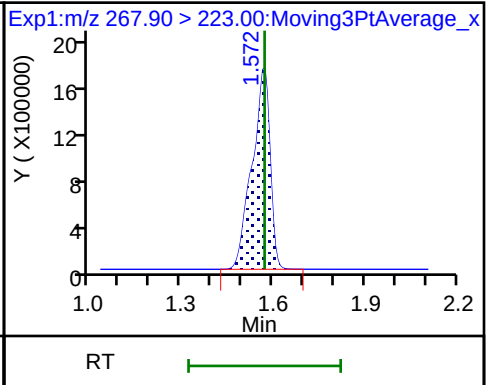
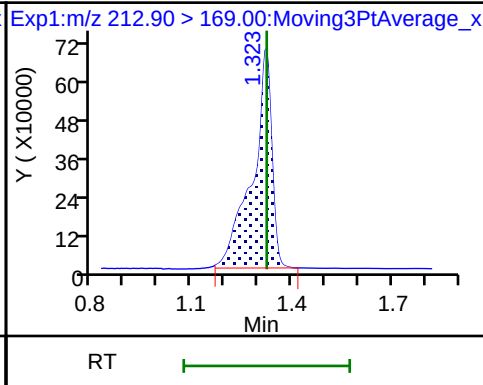
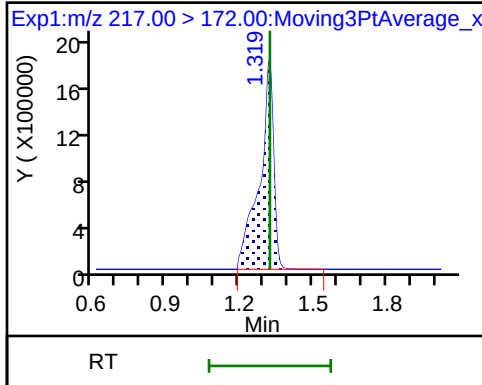
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

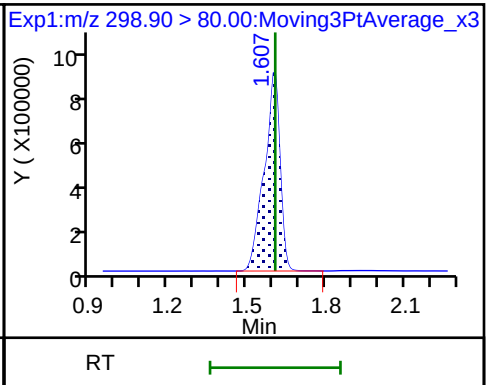
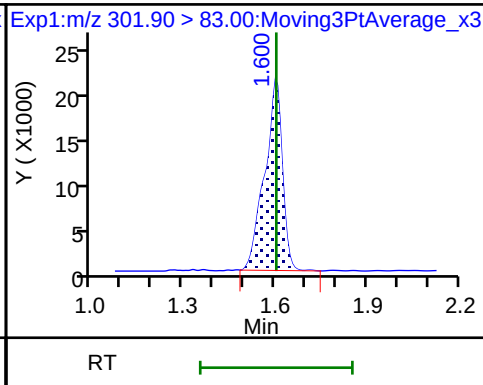
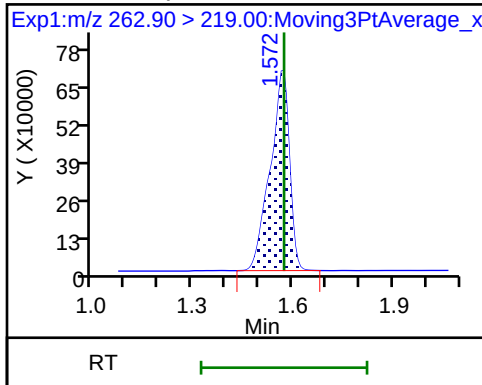
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

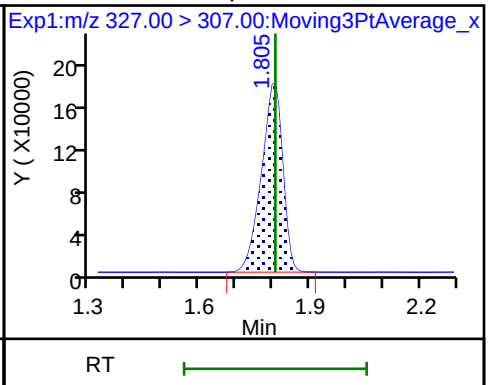
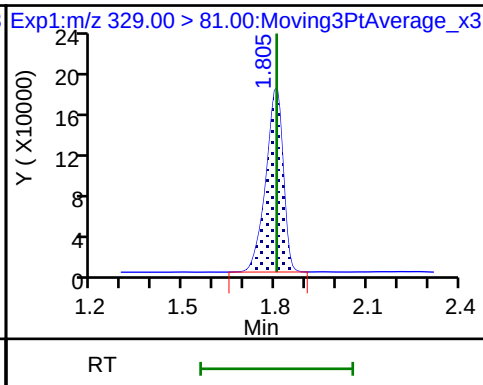
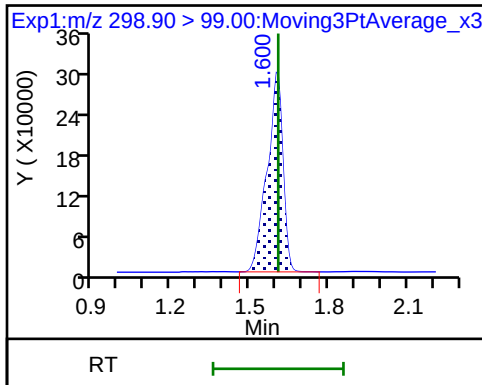
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

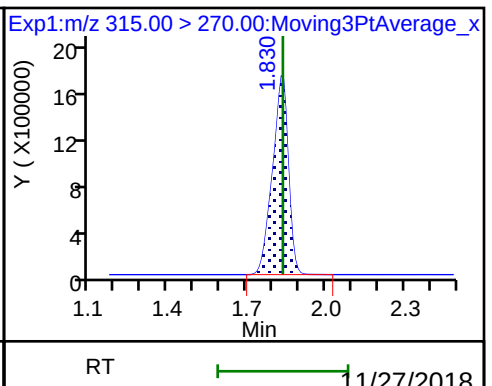
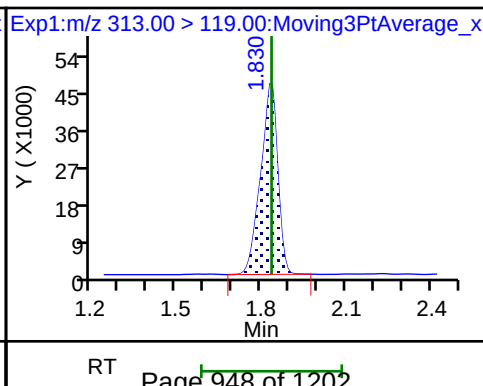
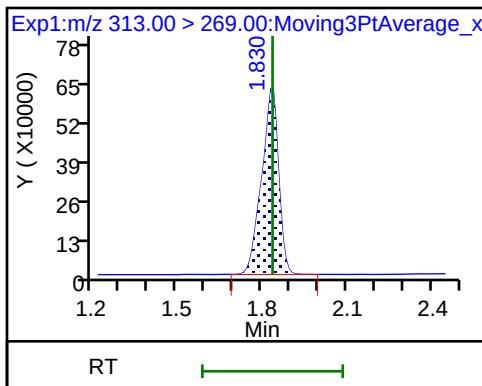
61 1H,1H,2H,2H-perfluorohexanesulfoni

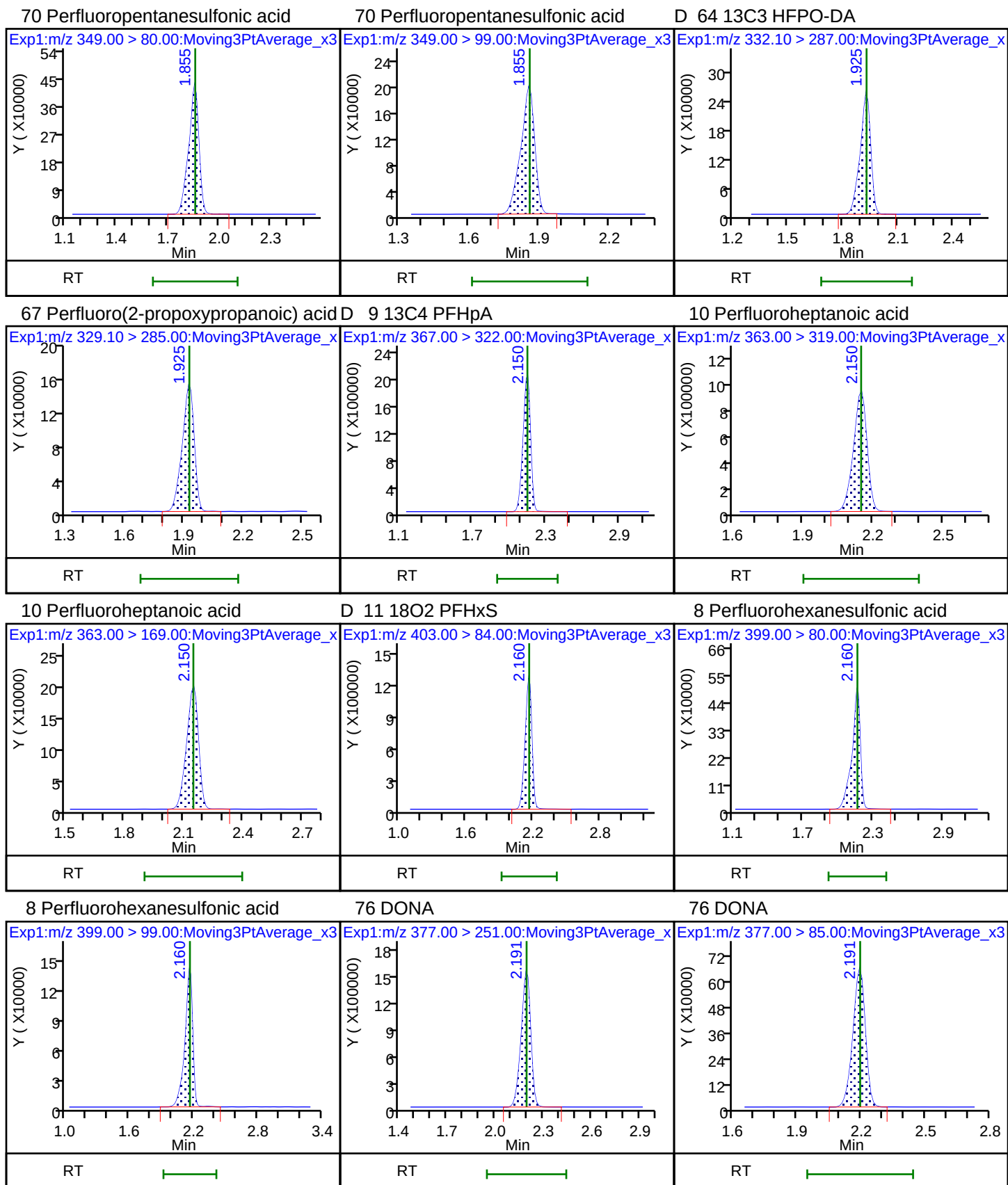


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

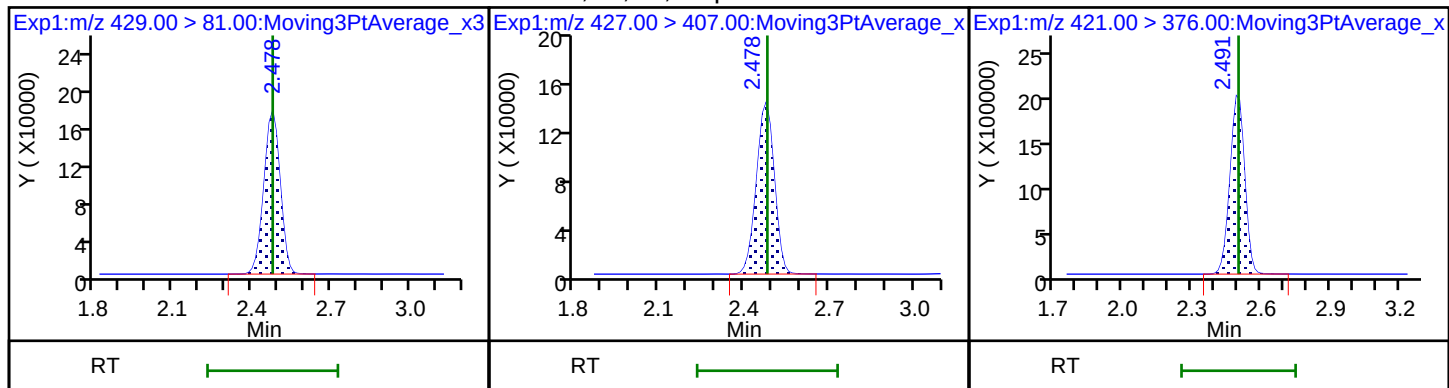
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

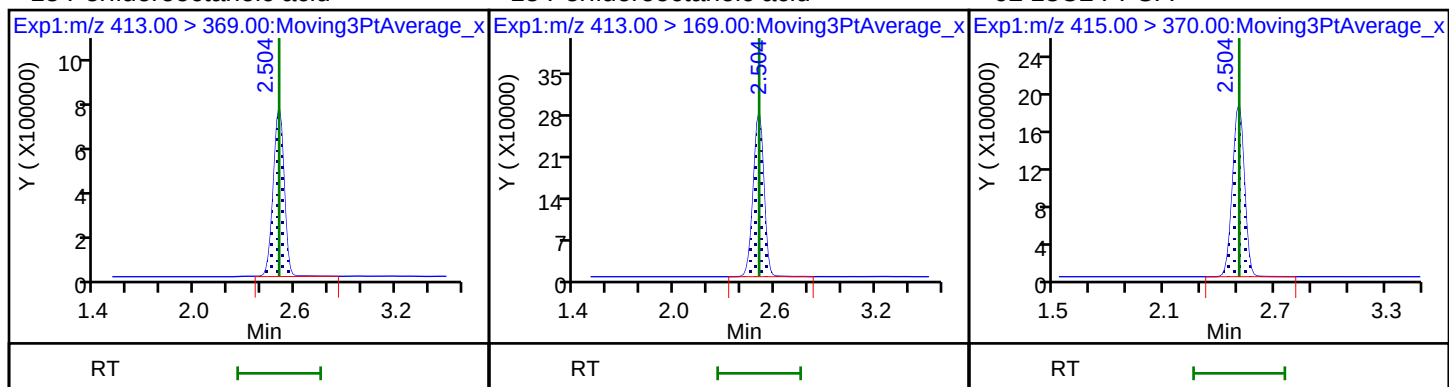
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



15 Perfluorooctanoic acid

15 Perfluorooctanoic acid

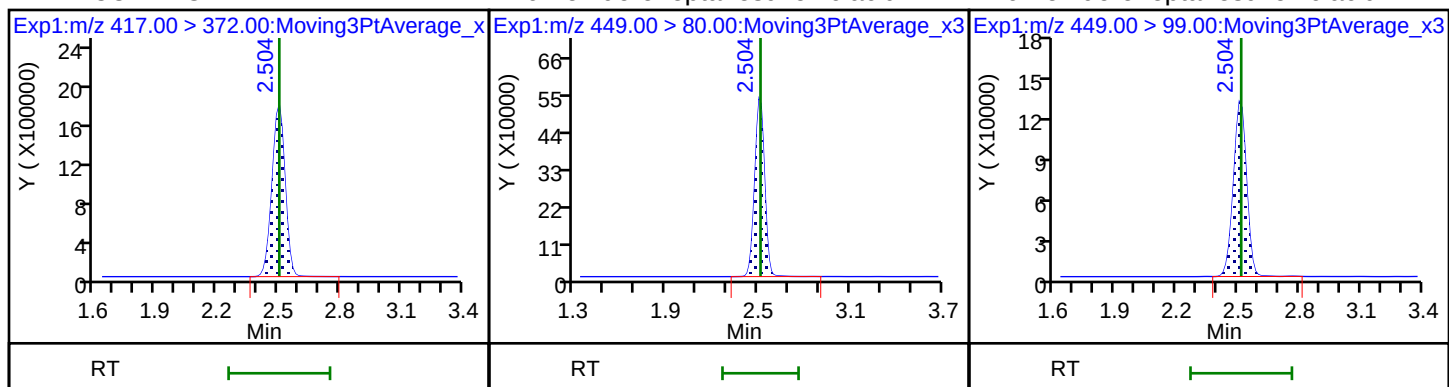
* 62 13C2 PFOA



D 14 13C4 PFOA

16 Perfluoroheptanesulfonic acid

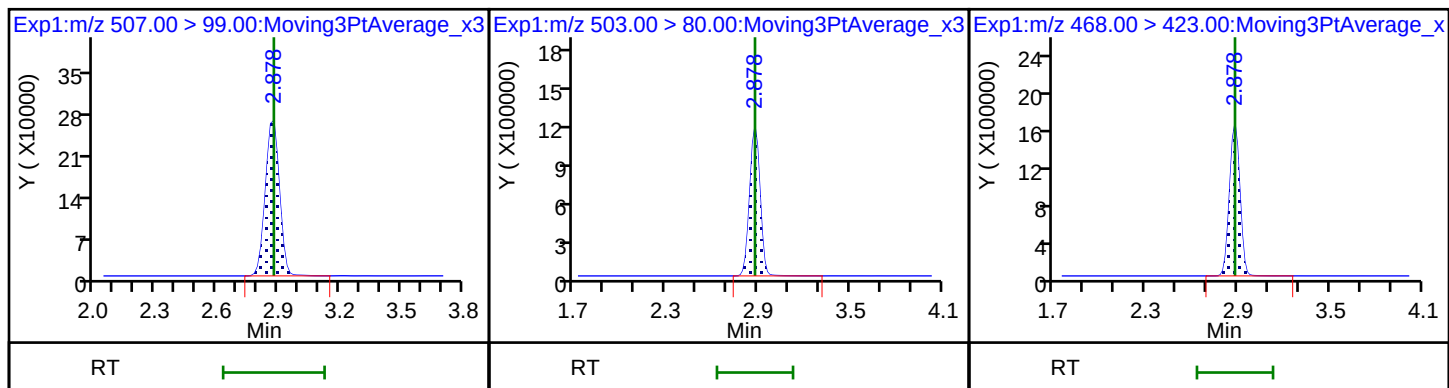
16 Perfluoroheptanesulfonic acid

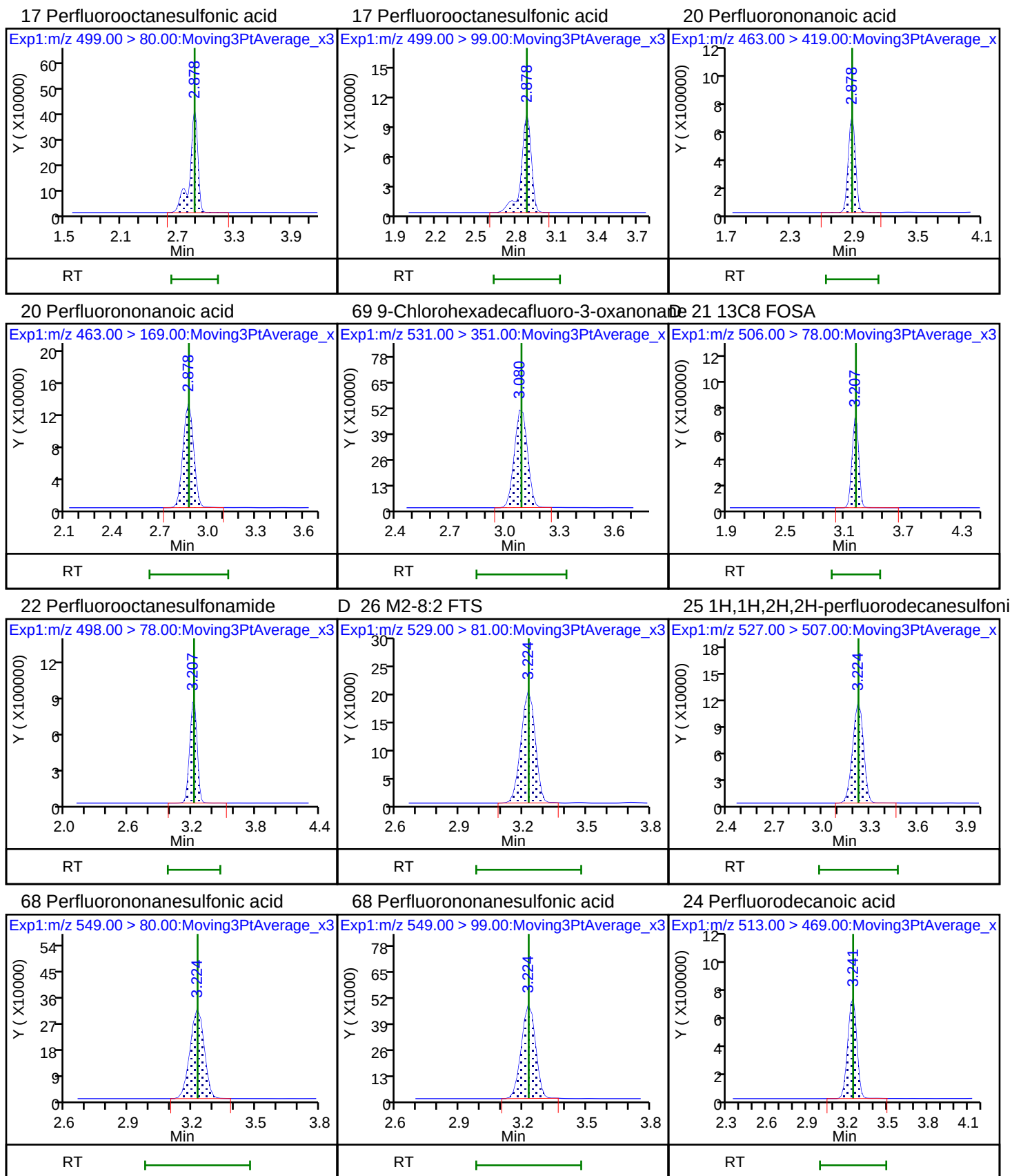


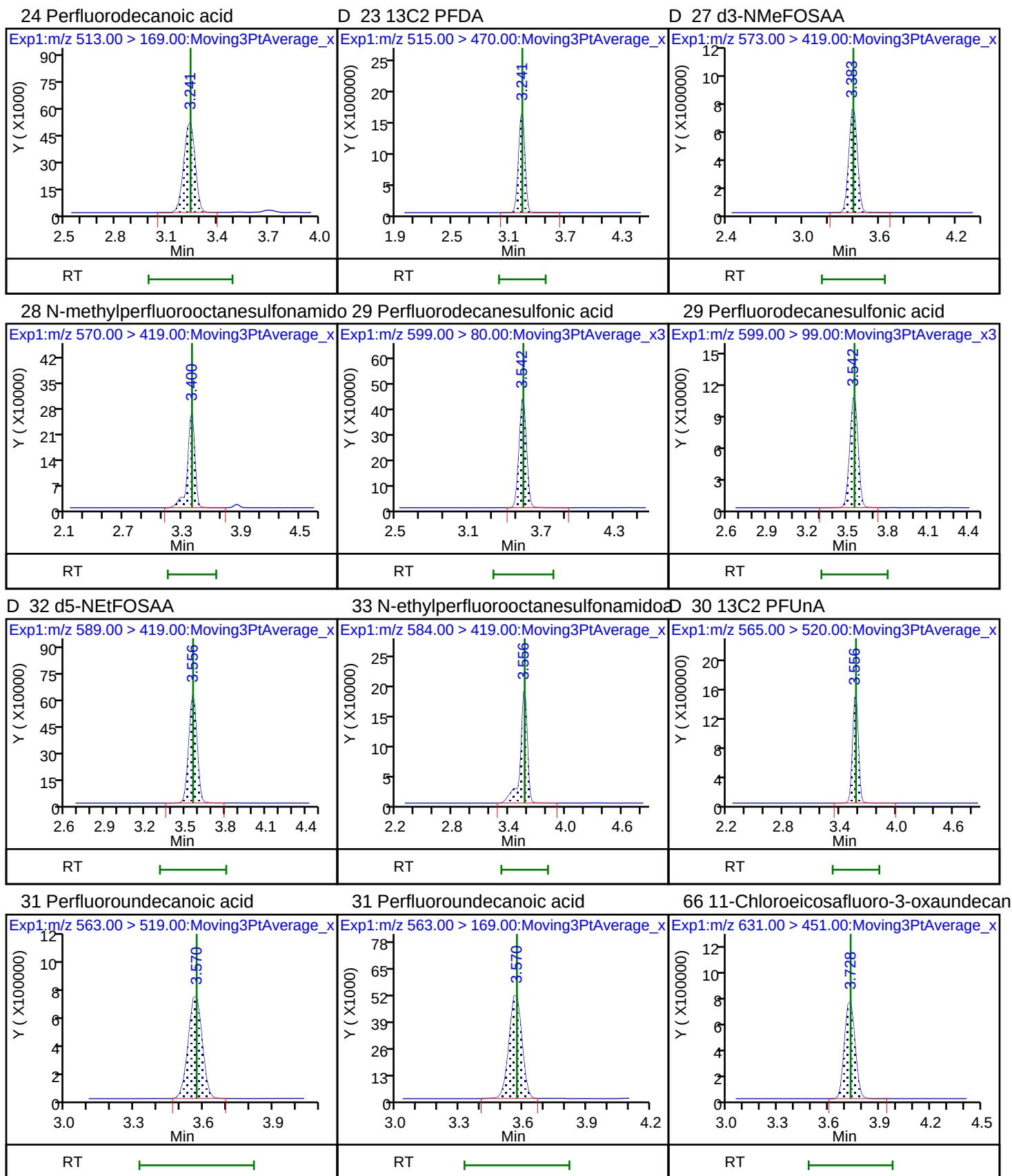
D 72 13C8 PFOS

D 18 13C4 PFOS

D 19 13C5 PFNA



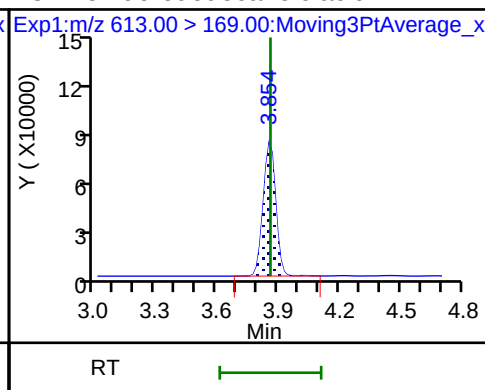
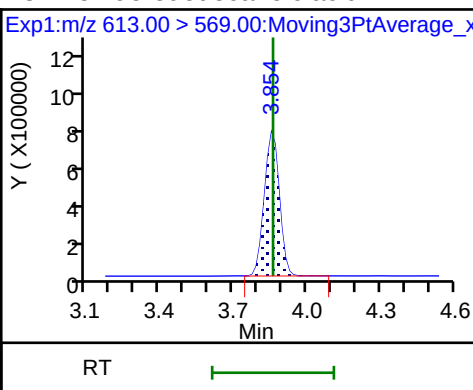
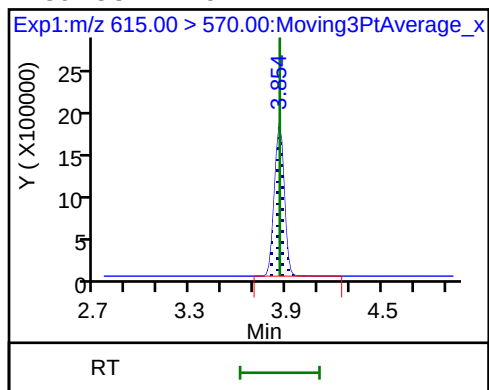




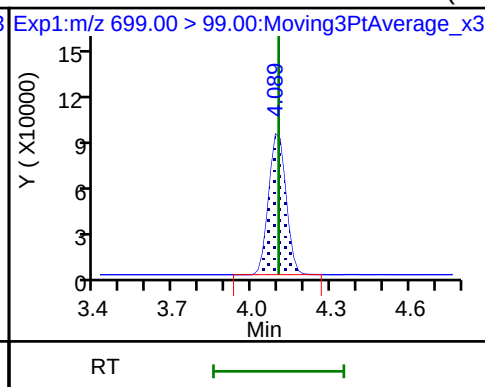
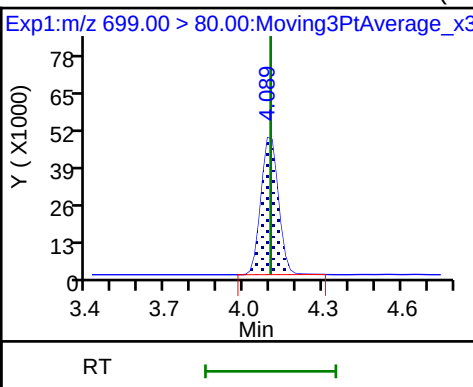
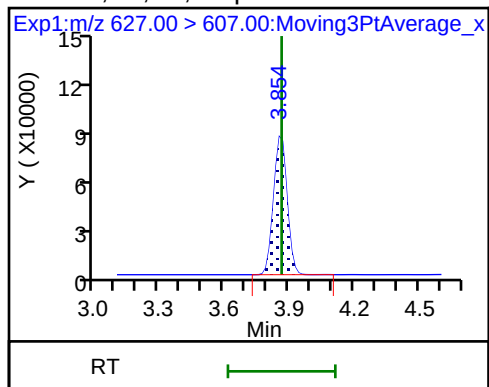
D 36 13C2 PFDaA

37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



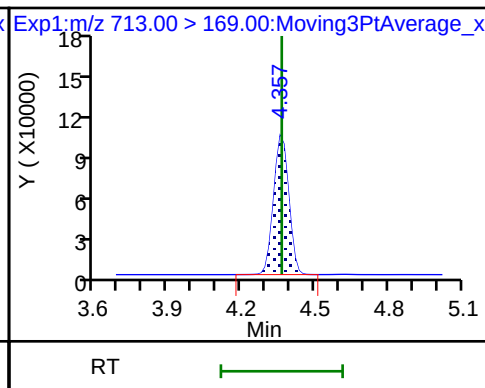
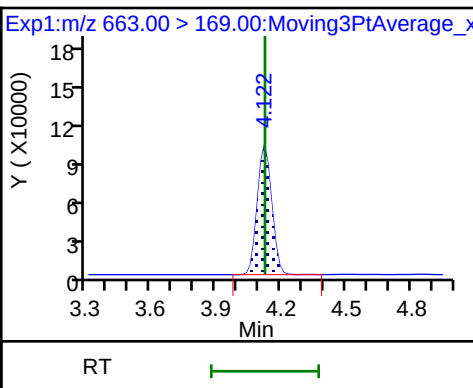
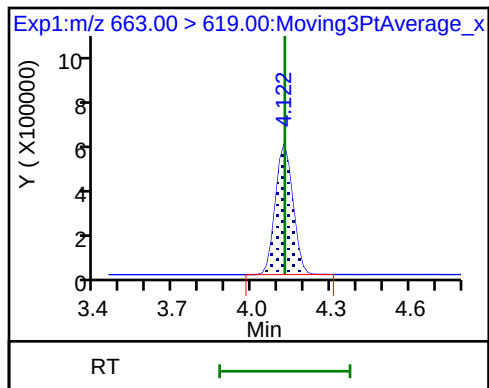
74 1H,1H,2H,2H-perfluorododecanesulfonate 75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

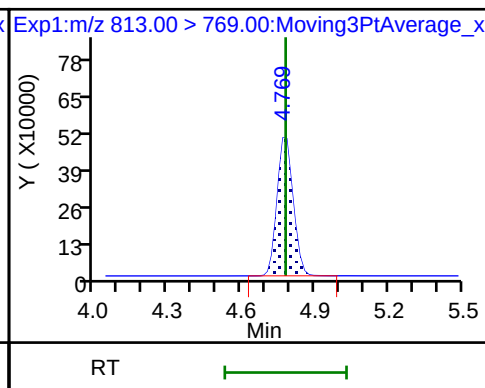
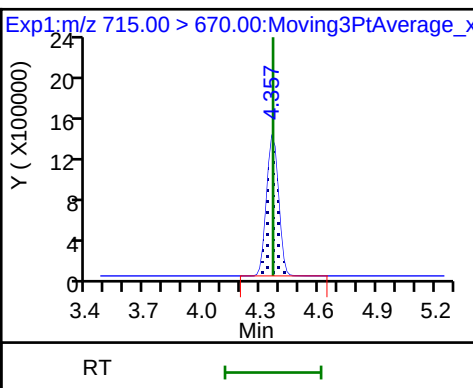
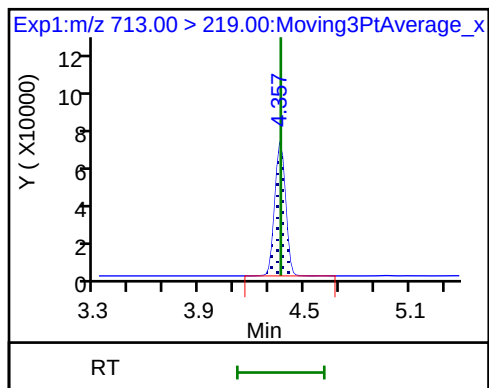
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

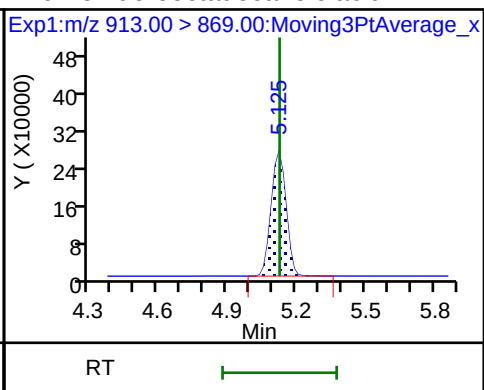
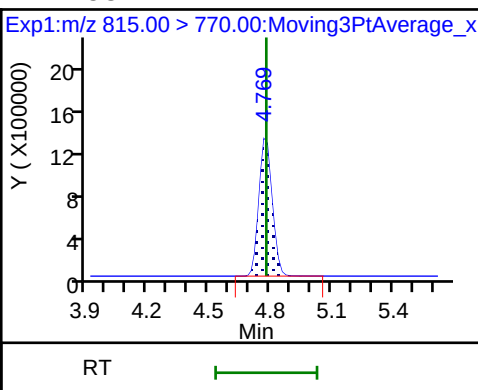
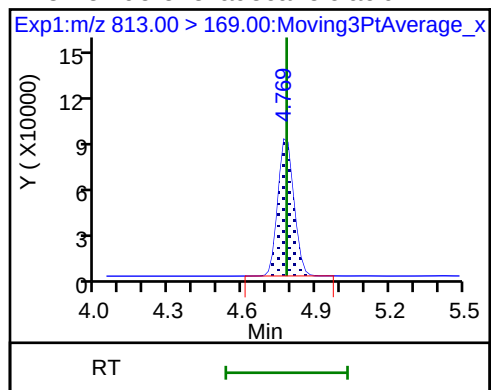
45 Perfluorohexadecanoic acid



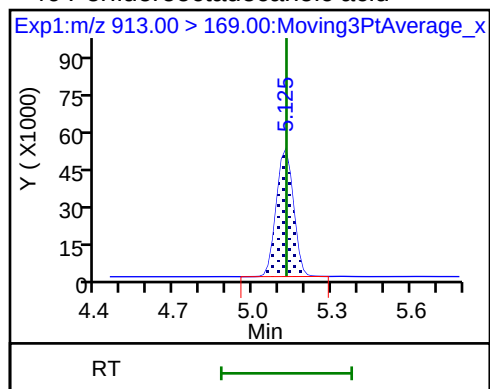
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_006.d
 Lims ID: IC L5 Full
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 30-Oct-2018 13:42:50 ALS Bottle#: 14 Worklist Smp#: 6
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CAL STD5
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist: chrom-PFAS_A9*sub5
 Method: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 30-Oct-2018 15:08:28 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: roycea

Date: 30-Oct-2018 14:44:30

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	1.328	1.323	0.005	0.530	7096057	2.46		98.5	13340	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.328	1.324	0.004	1.000	6935084	2.61		104	448	
D 3 13C5 PFPeA										
267.90 > 223.00	1.572	1.571	0.001	0.628	6728064	2.45		98.1	10658	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.579	1.573	0.006	1.004	6910293	2.56		103	723	
D 47 13C3 PFBS										
301.90 > 83.00	1.607	1.603	0.004	0.642	88574	2.34		101	382	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.607	1.607	0.0	1.000	8813587	2.24		101	3348	
298.90 > 99.00	1.607	1.607	0.0	1.000	3084113		2.86(1.35-4.05)	101	1464	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.805	1.804	0.001	0.721	726046	2.39		102	805	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.814	1.805	0.009	1.129	1770078	2.26		96.8	7462	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.839	1.836	0.003	1.000	6603393	2.58		103	1408	
313.00 > 119.00	1.839	1.836	0.003	1.000	479882		13.76(6.96-20.87)	103	1478	
D 7 13C2 PFHxA										
315.00 > 270.00	1.839	1.836	0.003	0.734	7124163	2.46		98.6	11800	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.865	1.859	0.006	1.160	4350475	2.39		102	5669	
349.00 > 99.00	1.865	1.859	0.006	1.160	2022101		2.15(1.15-3.45)	102	3392	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.935	1.928	0.007	0.773	811818	2.17		86.9	3564	

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	1.935	1.928	0.007	1.000	1517762	2.81		112	1260	
D 9 13C4 PFHpA										
367.00 > 322.00	2.150	2.148	0.002	0.858	8457730	2.49		99.5	10271	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.150	2.148	0.002	1.000	9095717	2.53		101	1989	
363.00 > 169.00	2.150	2.148	0.002	1.000	1981726		4.59(2.17-6.52)	101	4509	
D 11 18O2 PFHxS										
403.00 > 84.00	2.170	2.164	0.006	0.867	5068038	2.29		96.9	5870	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.170	2.164	0.006	1.000	5988235	2.22		97.5	3542	
399.00 > 99.00	2.170	2.164	0.006	1.000	1619653		3.70(1.90-5.70)	97.5	1628	
76 DONA										
377.00 > 251.00	2.201	2.194	0.007	0.765	14510088	2.36		100	13157	
377.00 > 85.00	2.201	2.194	0.007	0.765	6805149		2.13(1.13-3.39)	100	8971	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.478	2.478	0.0	0.990	718321	2.30		96.7	1180	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.478	2.482	-0.004	1.000	1504047	2.28		96.2	2446	
D 73 13C8 PFOA										
421.00 > 376.00	2.504	2.501	0.003		8069436	2.35		95.8	8750	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.504	2.504	0.0	1.000	8061840	2.37		94.9	915	
413.00 > 169.00	2.504	2.504	0.0	1.000	2917072		2.76(1.36-4.08)	94.9	3573	
* 62 13C2 PFOA										
415.00 > 370.00	2.504	2.504	0.0		7911622	2.50			6704	
D 14 13C4 PFOA										
417.00 > 372.00	2.504	2.504	0.0	1.000	7852766	2.52		101	8052	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.517	2.514	0.003	0.875	5535119	2.35		98.8	3593	
449.00 > 99.00	2.517	2.514	0.003	0.875	1378689		4.01(1.84-5.53)	98.8	3101	
D 72 13C8 PFOS										
507.00 > 99.00	2.877	2.877	0.0		1144434	2.32		96.9	2983	
D 18 13C4 PFOS										
503.00 > 80.00	2.877	2.877	0.0	1.149	5406507	2.42		101	4175	
D 19 13C5 PFNA										
468.00 > 423.00	2.877	2.877	0.0	1.149	6973212	2.42		96.9	7195	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.877	2.877	0.0	1.000	5484091	2.25		97.0	1440	
499.00 > 99.00	2.877	2.877	0.0	1.000	1333379		4.11(2.04-6.12)	97.0	3648	
20 Perfluorononanoic acid										
463.00 > 419.00	2.877	2.880	-0.003	1.000	7169818	2.57		103	493	
463.00 > 169.00	2.877	2.880	-0.003	1.000	1349849		5.31(2.68-8.03)	103	3745	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.080	3.091	-0.011	1.070	6364125	2.54		109	3438	
D 21 13C8 FOSA										
506.00 > 78.00	3.207	3.217	-0.010	1.281	3164375	2.56		102	4819	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.224	3.219	0.005	1.005	9528139	2.51		100	5957	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.224	3.226	-0.002	1.287	87541	2.26		94.3	549	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.224	3.226	-0.002	1.000	1276920	2.45		102	6003	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.224	3.226	-0.002	1.120	3390136	2.44		102	4410	
549.00 > 99.00	3.224	3.226	-0.002	1.120	553807		6.12(3.02-9.05)	102	3025	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.241	3.241	0.0	1.000	8218144	2.56		103	1279	
513.00 > 169.00	3.241	3.241	0.0	1.000	546145		15.05(7.12-21.35)	103	407	
D 23 13C2 PFDA										
515.00 > 470.00	3.241	3.241	0.0	1.294	7385145	2.49		99.7	6468	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.383	3.392	-0.009	1.351	3175263	2.48		99.1	4556	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.399	3.399	0.0	1.005	3175990	2.50		100	1037	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.556	3.552	0.004	1.236	4774486	2.44		101	3676	
599.00 > 99.00	3.556	3.552	0.004	1.236	966121		4.94(2.14-6.43)	101	2738	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.556	3.558	-0.002	1.420	2474486	2.37		94.8	2973	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.570	3.566	0.004	1.004	2348124	2.59		104	4211	
D 30 13C2 PFUnA										
565.00 > 520.00	3.570	3.568	0.002	1.426	6090025	2.46		98.4	9250	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.570	3.570	0.0	1.000	6541446	2.36		94.5	1719	
563.00 > 169.00	3.570	3.570	0.0	1.000	544277		12.02(5.24-15.72)	94.5	2146	
35 MeFOSA										
512.00 > 169.00	3.728	3.724	0.004		1842581	NC			4316	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.728	3.728	0.0	1.296	7036758	2.24		95.3	9725	
D 36 13C2 PFDaA										
615.00 > 570.00	3.854	3.859	-0.005	1.539	7389170	2.42		96.9	10802	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.854	3.861	-0.007	1.000	7618201	2.53		101	2372	
613.00 > 169.00	3.854	3.861	-0.007	1.000	869449		8.76(4.68-14.05)	101	1249	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.869	3.865	0.004	1.200	989043	2.68		111	2180	
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	3.912	3.912	0.0		1952472	NC			3798	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.106	4.101	0.005	1.427	521826	2.39		98.9	2164	
699.00 > 99.00	4.106	4.101	0.005	1.427	977782		0.53(0.28-0.83)	98.9	2617	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.122	4.125	-0.003	1.069	6025241	2.49		99.7	3585	
663.00 > 169.00	4.122	4.125	-0.003	1.069	1031783		5.84(3.09-9.27)	99.7	3430	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.357	4.364	-0.007	1.000	979697	2.22		88.7	3175	
713.00 > 219.00	4.357	4.364	-0.007	1.000	713446		1.37(0.70-2.09)	88.7	2142	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.357	4.364	-0.007	1.740	6040135	2.65		106	8237	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.784	4.780	0.004	1.000	4941811	2.44		97.6	5621	
813.00 > 169.00	4.784	4.780	0.004	1.000	911676		5.42(2.77-8.32)	97.6	2309	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.784	4.780	0.004	1.910	5557826	2.45		98.2	13785	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.125	5.127	-0.002	1.071	2774364	2.52		101	5259	
913.00 > 169.00	5.125	5.127	-0.002	1.071	537476		5.16(2.55-7.64)	101	2105	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL5_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_006.d

Injection Date: 30-Oct-2018 13:42:50

Instrument ID: A9

Lims ID: IC L5 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 14

Worklist Smp#: 6

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

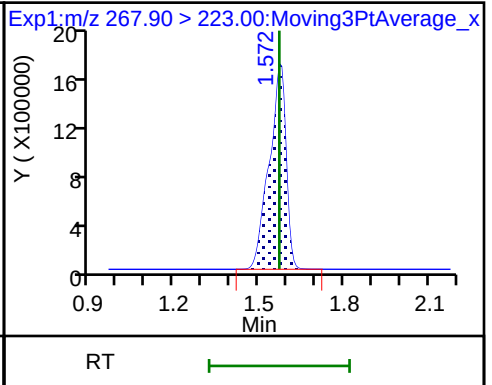
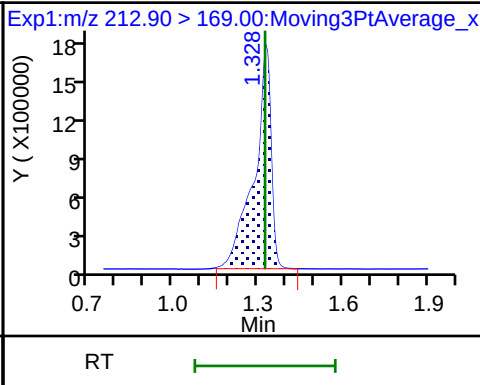
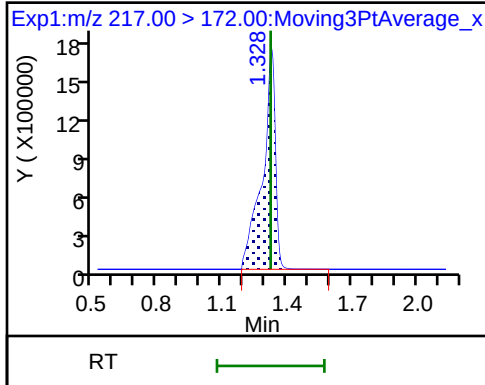
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

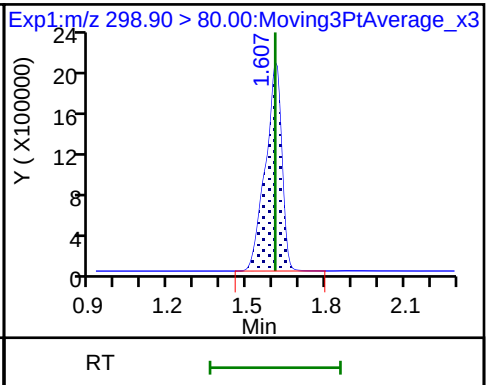
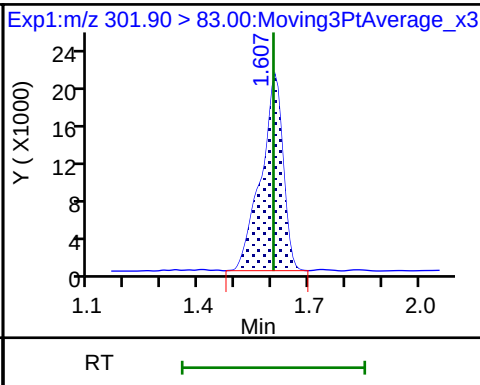
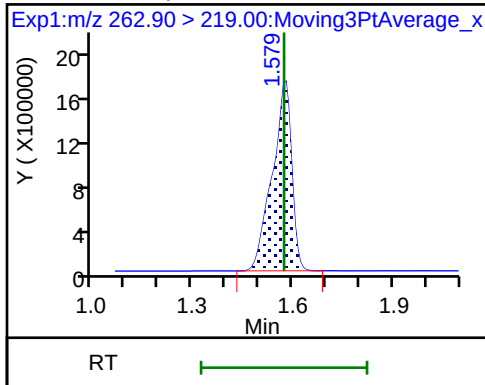
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

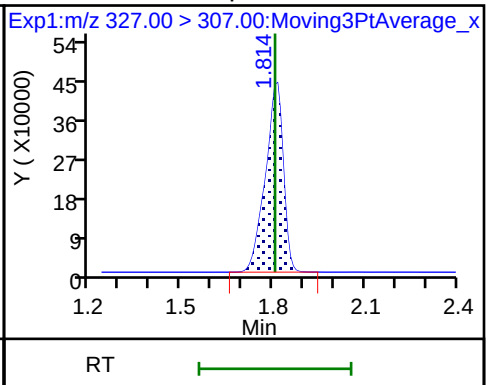
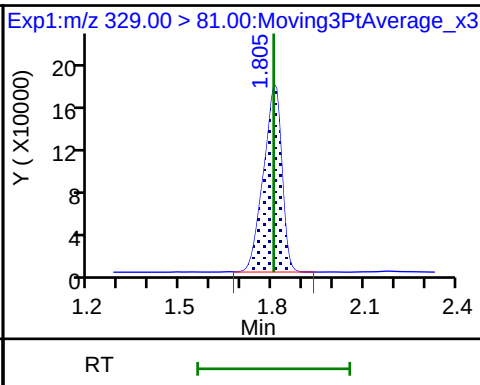
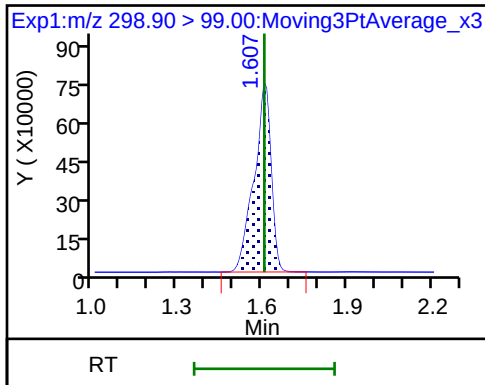
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

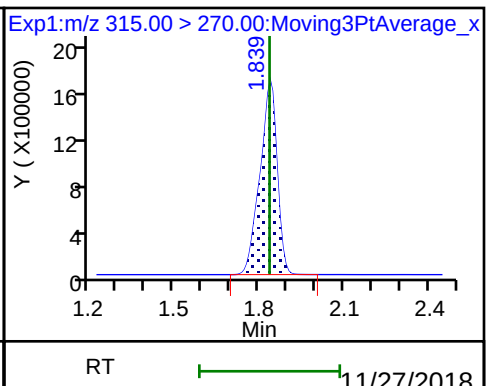
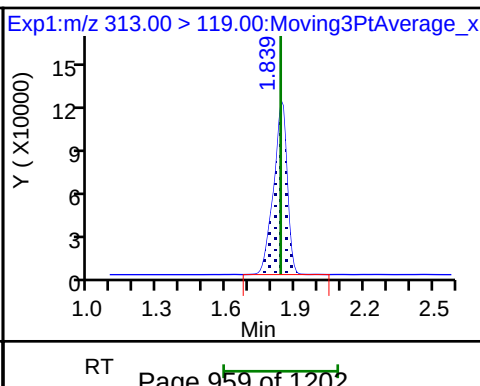
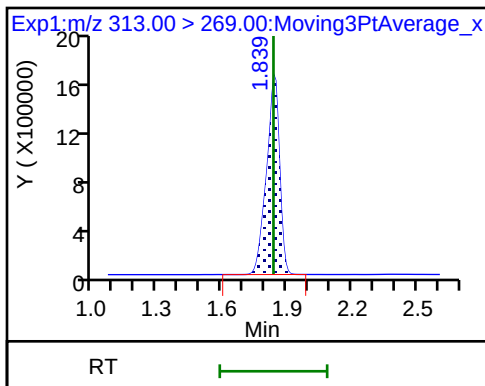
61 1H,1H,2H,2H-perfluorohexanesulfoni

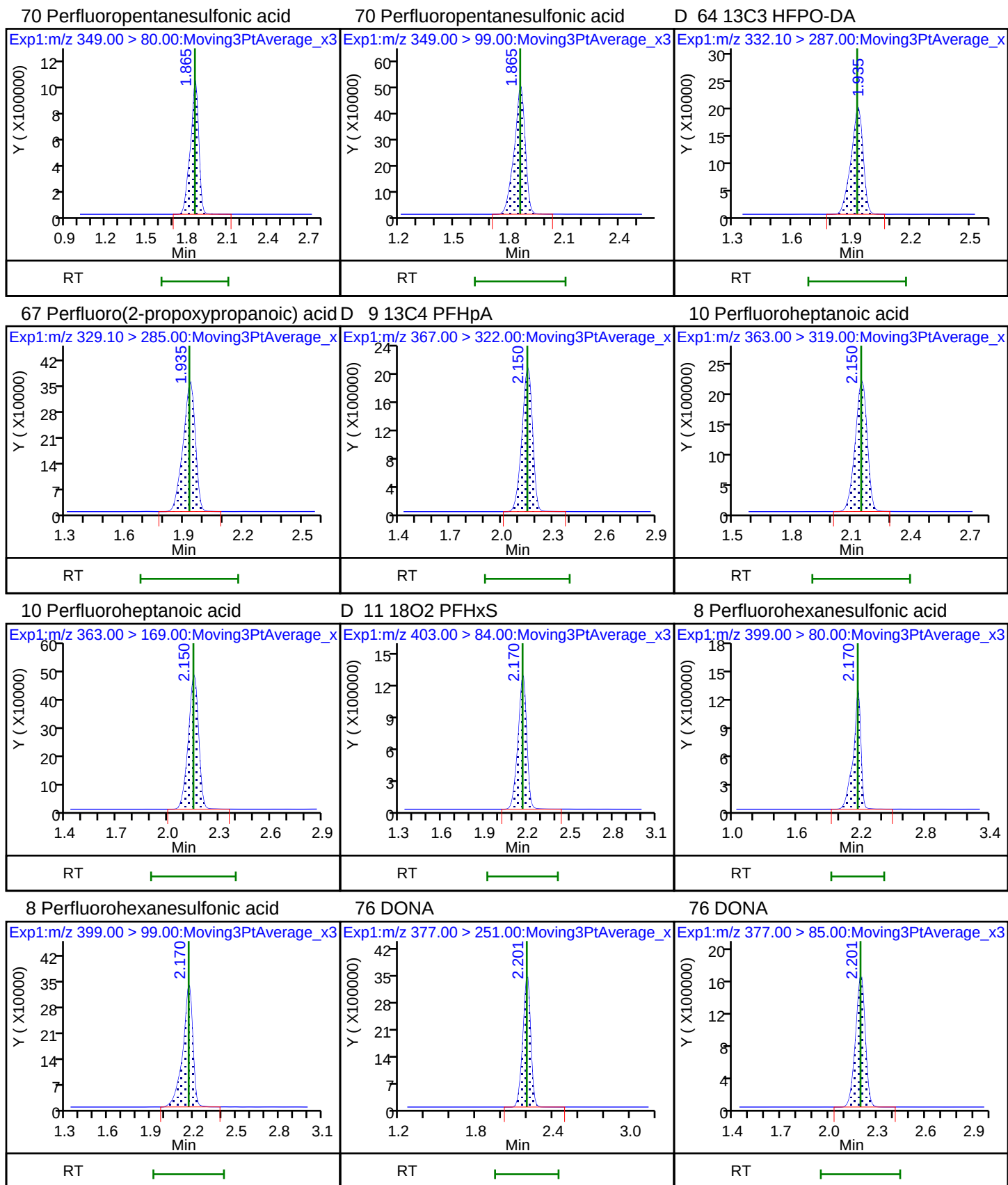


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

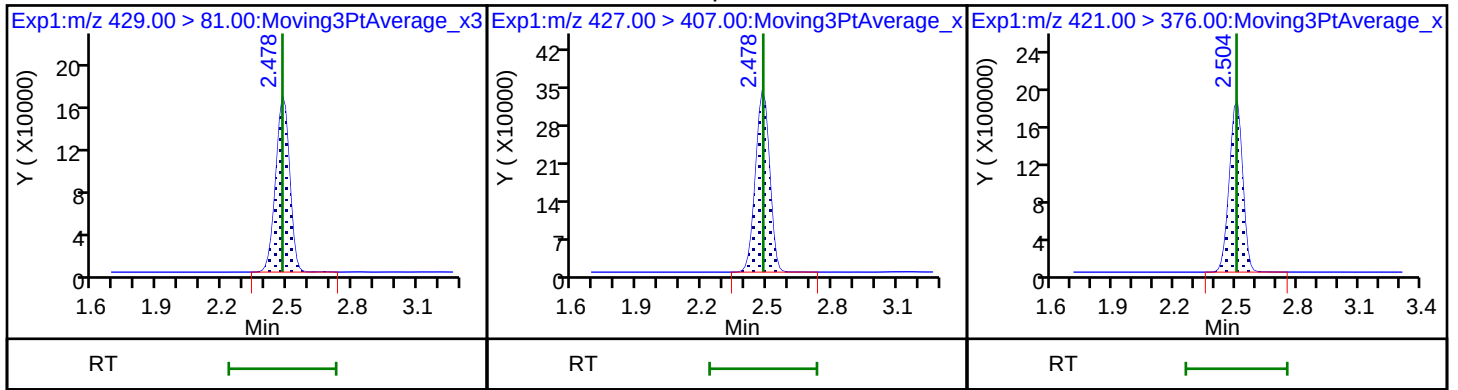
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

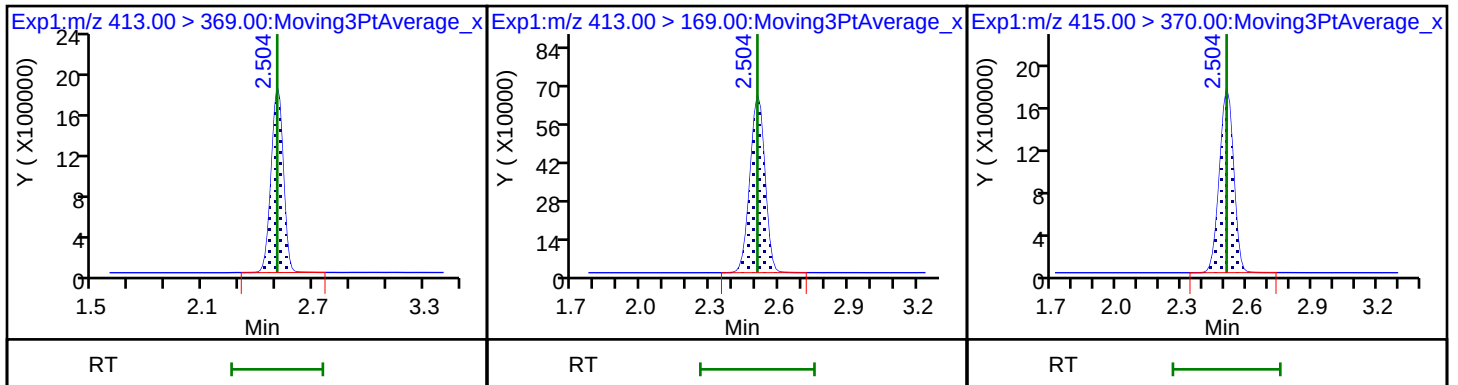
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



15 Perfluorooctanoic acid

15 Perfluorooctanoic acid

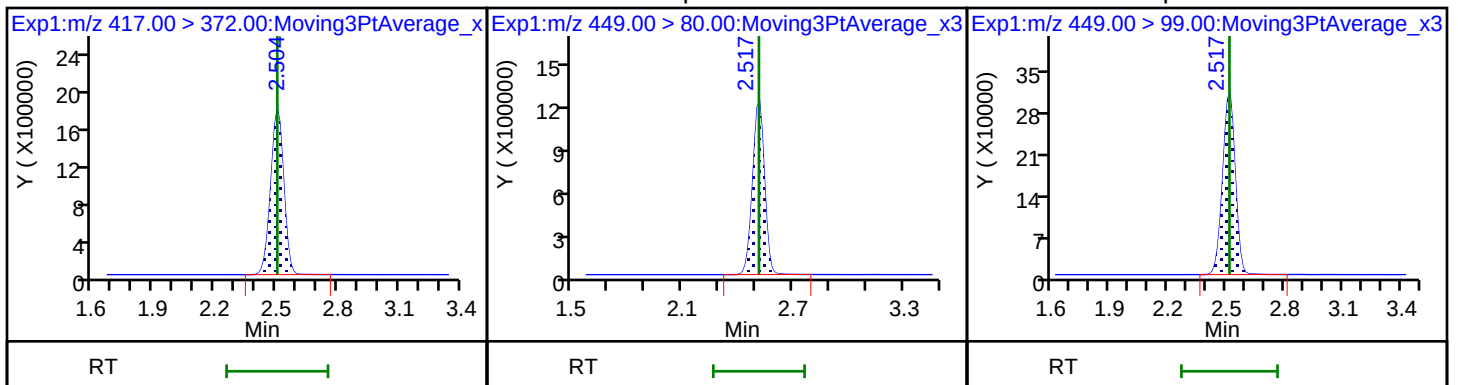
* 62 13C2 PFOA



D 14 13C4 PFOA

16 Perfluoroheptanesulfonic acid

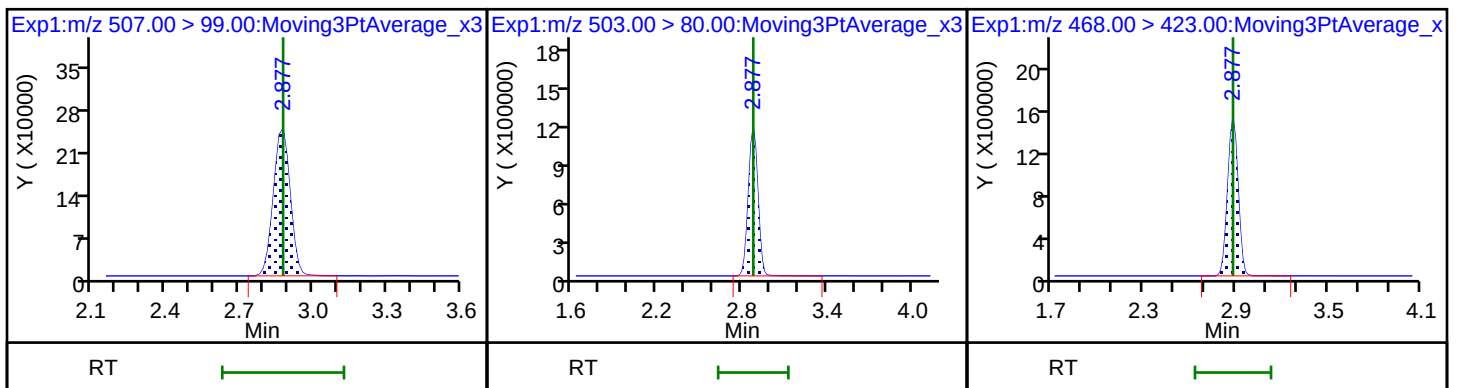
16 Perfluoroheptanesulfonic acid

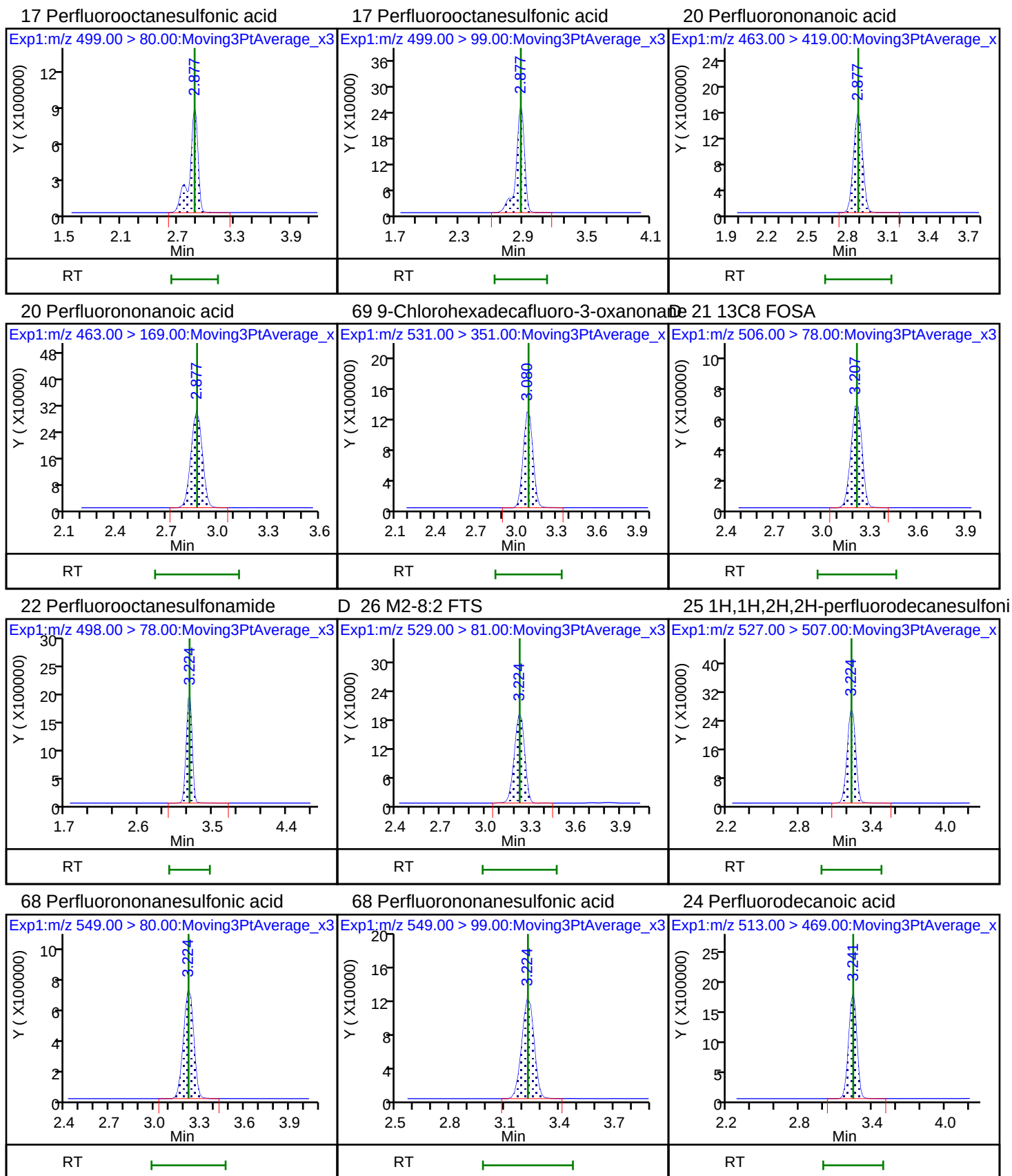


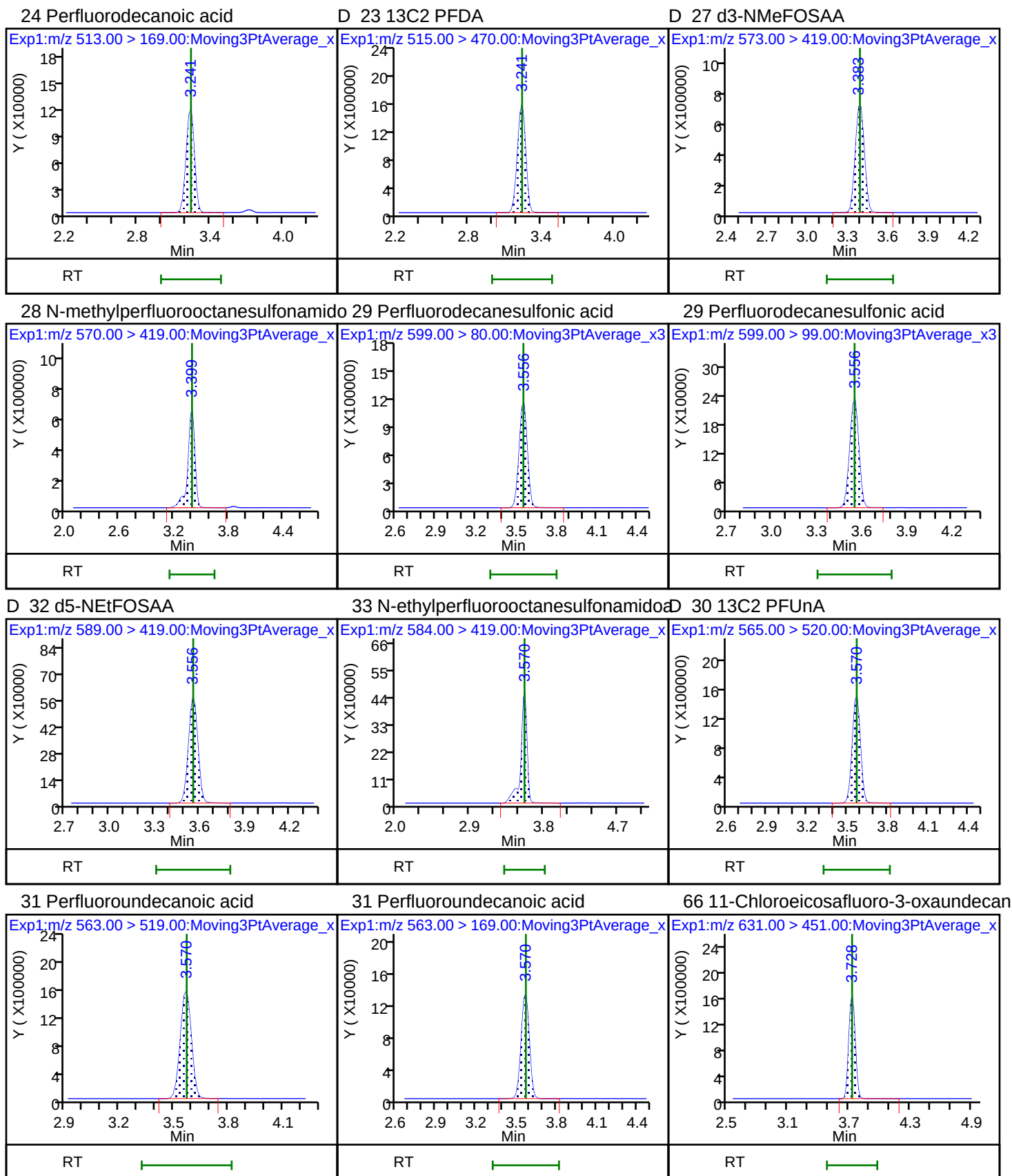
D 72 13C8 PFOS

D 18 13C4 PFOS

D 19 13C5 PFNA



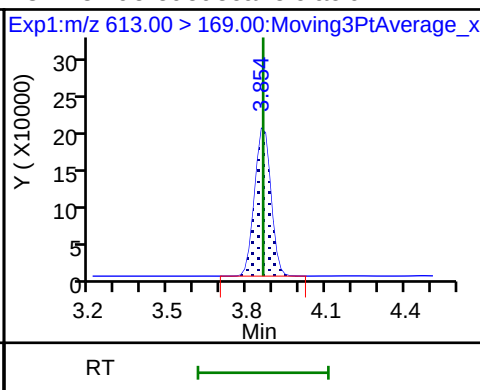
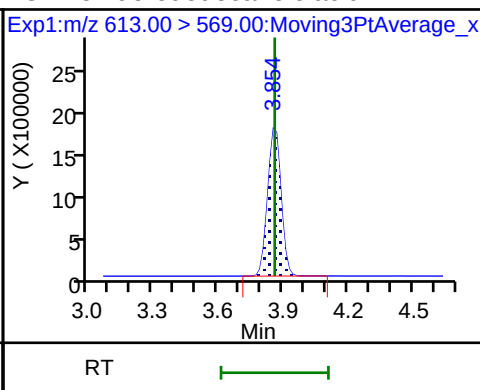
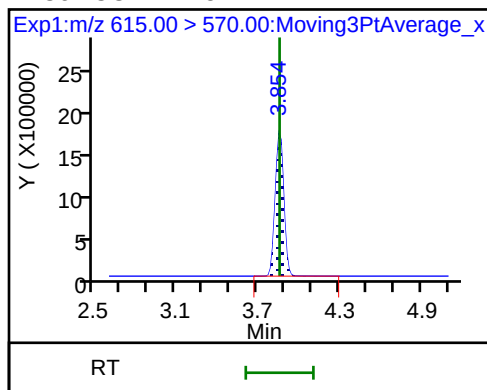




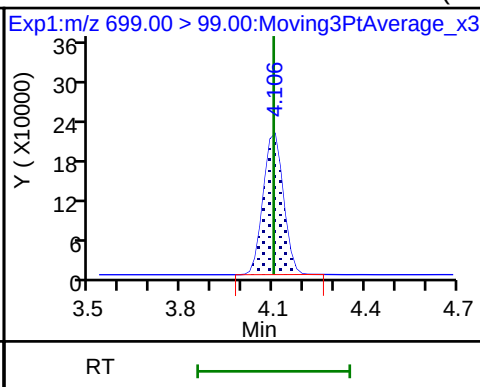
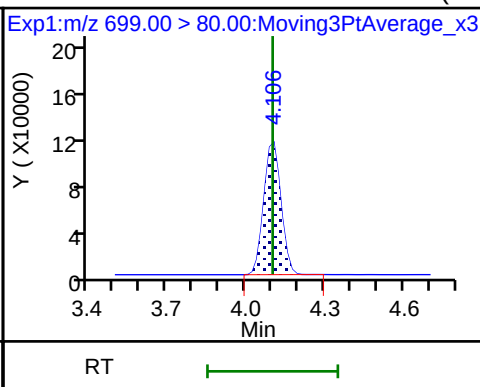
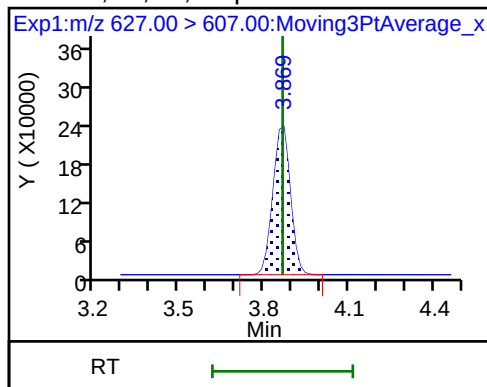
D 36 13C2 PFDaA

37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



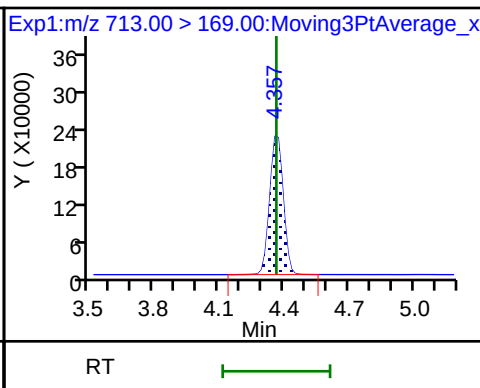
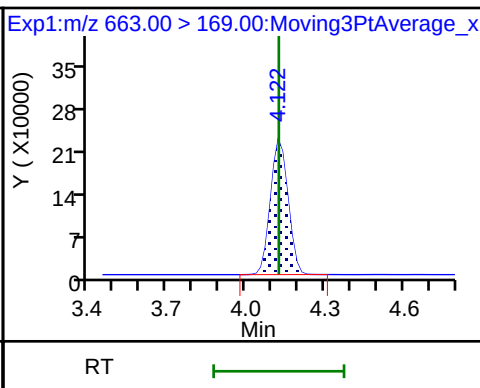
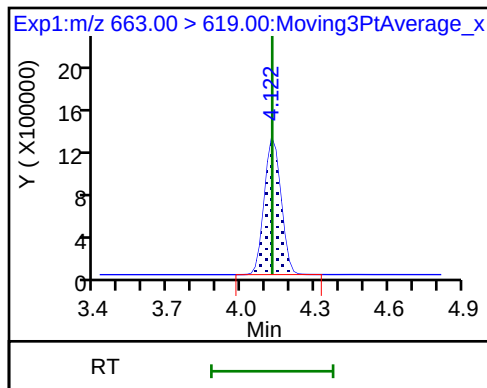
74 1H,1H,2H,2H-perfluorododecanesulfo75 Perfluorododecanesulfonic acid (PF 75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

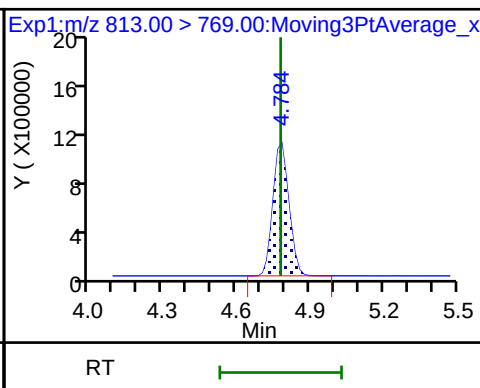
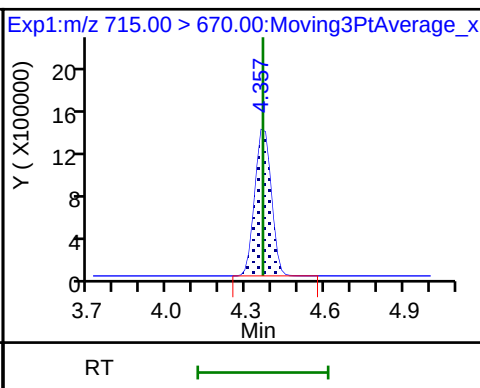
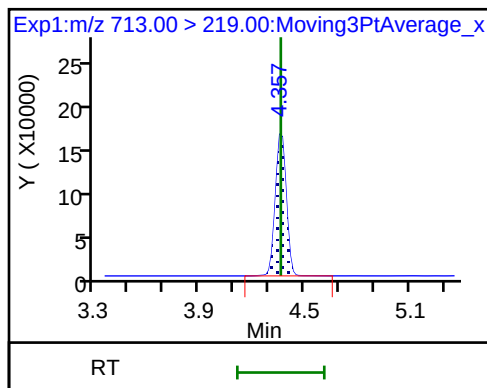
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

45 Perfluorohexadecanoic acid

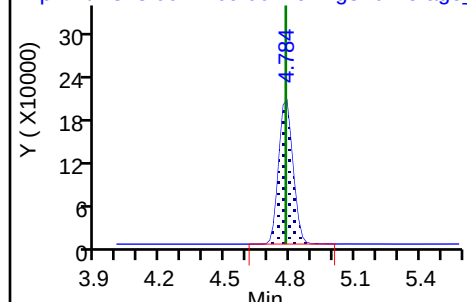


45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

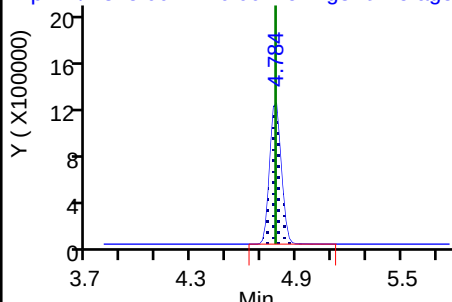
46 Perfluorooctadecanoic acid

Exp1:m/z 813.00 > 169.00:Moving3PtAverage_x



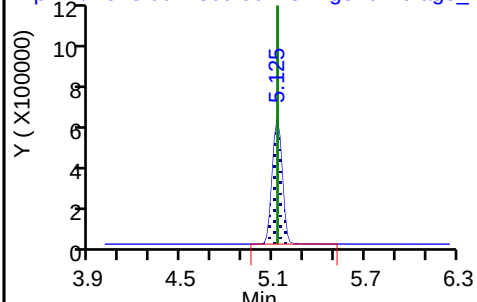
RT

Exp1:m/z 815.00 > 770.00:Moving3PtAverage_x



RT

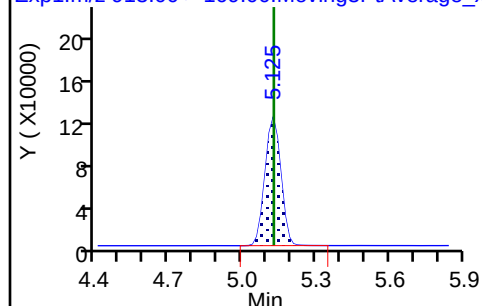
Exp1:m/z 913.00 > 869.00:Moving3PtAverage_x



RT

46 Perfluorooctadecanoic acid

Exp1:m/z 913.00 > 169.00:Moving3PtAverage_x



RT

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_007.d
 Lims ID: IC L6 Full
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 30-Oct-2018 13:50:20 ALS Bottle#: 15 Worklist Smp#: 7
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CAL STD6
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist: chrom-PFAS_A9*sub5
 Method: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 30-Oct-2018 15:08:37 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: roycea

Date: 30-Oct-2018 14:45:32

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	1.323	1.323	0.0	0.528	7625617	2.55		102	15193	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.323	1.324	-0.001	1.000	14536769	5.09		102	789	
D 3 13C5 PFPeA										
267.90 > 223.00	1.572	1.571	0.001	0.628	7396747	2.60		104	12456	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.572	1.573	-0.001	1.000	13910441	4.70		93.9	1454	
D 47 13C3 PFBS										
301.90 > 83.00	1.607	1.603	0.004	0.642	94698	2.41		103	471	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.607	1.607	0.0	1.000	17754525	4.22		95.5	6015	
298.90 > 99.00	1.607	1.607	0.0	1.000	6710342		2.65(1.35-4.05)	95.5	3249	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.805	1.804	0.001	0.721	748516	2.37		101	1036	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.805	1.805	0.0	1.123	3826151	4.57		97.9	15597	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.839	1.836	0.003	1.000	13116869	4.68		93.5	2594	
313.00 > 119.00	1.839	1.836	0.003	1.000	1046166		12.54(6.96-20.87)	93.5	2426	
D 7 13C2 PFHxA										
315.00 > 270.00	1.839	1.836	0.003	0.734	7795361	2.60		104	19654	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.855	1.859	-0.004	1.155	9237581	4.74		101	8417	
349.00 > 99.00	1.865	1.859	0.006	1.160	4428064		2.09(1.15-3.45)	101	5975	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.925	1.928	-0.003	0.769	975432	2.51		101	4347	

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	1.925	1.928	-0.003	1.000	3262119	5.03		101	2514	
D 9 13C4 PFHpA										
367.00 > 322.00	2.150	2.148	0.002	0.858	9090699	2.57		103	14089	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.150	2.148	0.002	1.000	17588052	4.56		91.2	3374	
363.00 > 169.00	2.150	2.148	0.002	1.000	4320471		4.07(2.17-6.52)	91.2	7270	
D 11 18O2 PFHxS										
403.00 > 84.00	2.160	2.164	-0.004	0.863	5640005	2.46		104	6306	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.160	2.164	-0.004	1.000	12909524	4.30		94.4	4435	
399.00 > 99.00	2.160	2.164	-0.004	1.000	3508220		3.68(1.90-5.70)	94.4	3859	
76 DONA										
377.00 > 251.00	2.191	2.194	-0.003	0.761	26844361	4.29		91.0	17630	
377.00 > 85.00	2.191	2.194	-0.003	0.761	13142538		2.04(1.13-3.39)	91.0	14561	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.478	2.478	0.0	0.990	805491	2.48		104	1648	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.478	2.482	-0.004	1.000	3393467	4.59		96.7	4627	
D 73 13C8 PFOA										
421.00 > 376.00	2.504	2.501	0.003		8677785	2.52		103	12390	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.504	2.504	0.0	1.000	15396289	4.38		87.5	1664	
413.00 > 169.00	2.504	2.504	0.0	1.000	6080012		2.53(1.36-4.08)	87.5	7137	
* 62 13C2 PFOA										
415.00 > 370.00	2.504	2.504	0.0		8218514	2.50			7976	
D 14 13C4 PFOA										
417.00 > 372.00	2.504	2.504	0.0	1.000	8134347	2.52		101	9658	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.518	2.514	0.004	0.875	11271034	4.70		98.7	4597	
449.00 > 99.00	2.518	2.514	0.004	0.875	2909055		3.87(1.84-5.53)	98.7	4283	
D 72 13C8 PFOS										
507.00 > 99.00	2.878	2.877	0.001		1171128	2.37		99.2	3380	
D 18 13C4 PFOS										
503.00 > 80.00	2.878	2.877	0.001	1.149	5508335	2.37		99.2	4758	
D 19 13C5 PFNA										
468.00 > 423.00	2.878	2.877	0.001	1.149	7268142	2.43		97.2	6950	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.878	2.877	0.001	1.000	11641776	4.69		101	4146	
499.00 > 99.00	2.878	2.877	0.001	1.000	2831269		4.11(2.04-6.12)	101	3325	
20 Perfluorononanoic acid										
463.00 > 419.00	2.878	2.880	-0.002	1.000	13944627	4.79		95.8	917	
463.00 > 169.00	2.878	2.880	-0.002	1.000	2850644		4.89(2.68-8.03)	95.8	5796	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.098	3.091	0.007	1.077	12093836	4.74		102	4449	
D 21 13C8 FOSA										
506.00 > 78.00	3.224	3.217	0.007	1.287	3221281	2.51		100	4263	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.224	3.219	0.005	1.000	18036052	4.66		93.2	5402	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.224	3.226	-0.002	1.287	88674	2.20		92.0	439	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.224	3.226	-0.002	1.000	2752003	5.21		109	7593	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.224	3.226	-0.002	1.120	6878433	4.86		101	6040	
549.00 > 99.00	3.224	3.226	-0.002	1.120	1151048		5.98(3.02-9.05)	101	3599	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.241	3.241	0.0	1.000	14692738	4.47		89.4	1933	
513.00 > 169.00	3.241	3.241	0.0	1.000	1144871		12.83(7.12-21.35)	89.4	549	
D 23 13C2 PFDA										
515.00 > 470.00	3.241	3.241	0.0	1.294	7567635	2.46		98.3	8007	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.400	3.392	0.008	1.357	3376031	2.54		101	4692	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.400	3.399	0.001	1.000	6652620	4.93		98.5	1839	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.556	3.552	0.004	1.236	10027931	5.03		104	6403	
599.00 > 99.00	3.556	3.552	0.004	1.236	2164244		4.63(2.14-6.43)	104	4069	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.556	3.558	-0.002	1.420	2603455	2.40		96.1	4637	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.570	3.566	0.004	1.004	4850297	5.09		102	7176	
D 30 13C2 PFUnA										
565.00 > 520.00	3.570	3.568	0.002	1.426	6465285	2.51		101	10824	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.570	3.570	0.0	1.000	12933591	4.40		88.0	2957	
563.00 > 169.00	3.570	3.570	0.0	1.000	1123709		11.51(5.24-15.72)	88.0	3359	
35 MeFOSA										
512.00 > 169.00	3.728	3.724	0.004		3856756	NC			3403	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.728	3.728	0.0	1.296	13842083	4.33		92.0	7836	
D 36 13C2 PFDaA										
615.00 > 570.00	3.854	3.859	-0.005	1.539	7952822	2.51		100	10156	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.869	3.861	0.008	1.004	14298498	4.42		88.4	3592	
613.00 > 169.00	3.854	3.861	-0.007	1.000	1759344		8.13(4.68-14.05)	88.4	2501	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.869	3.865	0.004	1.200	1960545	5.24		109	2950	
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	3.912	3.912	0.0		4191806	NC			5253	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.106	4.101	0.005	1.427	1136910	5.12		106	3423	
699.00 > 99.00	4.106	4.101	0.005	1.427	2165299		0.53(0.28-0.83)	106	6071	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.122	4.125	-0.003	1.069	11788226	4.53		90.7	6499	
663.00 > 169.00	4.122	4.125	-0.003	1.069	2239518		5.26(3.09-9.27)	90.7	5466	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.373	4.364	0.009	1.000	1942558	4.44		88.8	5168	
713.00 > 219.00	4.373	4.364	0.009	1.000	1357900		1.43(0.70-2.09)	88.8	4662	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.373	4.364	0.009	1.746	5984835	2.53		101	8326	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.784	4.780	0.004	1.000	10698193	5.00		100	9809	
813.00 > 169.00	4.784	4.780	0.004	1.000	2135265		5.01(2.77-8.32)	100	4186	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.784	4.780	0.004	1.910	5899292	2.51		100	11981	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.125	5.127	-0.002	1.071	6209643	5.32		106	7552	
913.00 > 169.00	5.125	5.127	-0.002	1.071	1291956		4.81(2.55-7.64)	106	5082	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL6_00010

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_007.d

Injection Date: 30-Oct-2018 13:50:20

Instrument ID: A9

Lims ID: IC L6 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 15

Worklist Smp#: 7

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

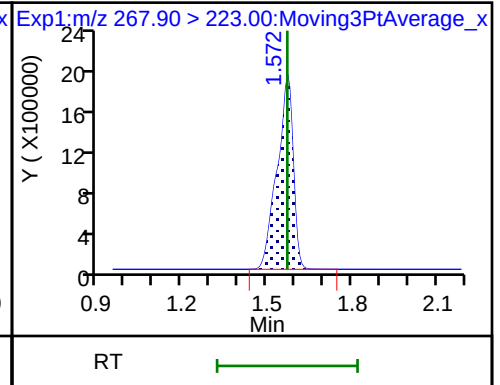
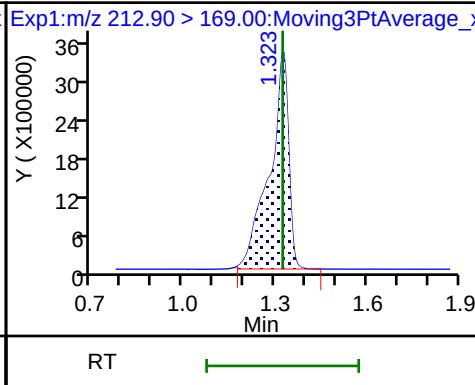
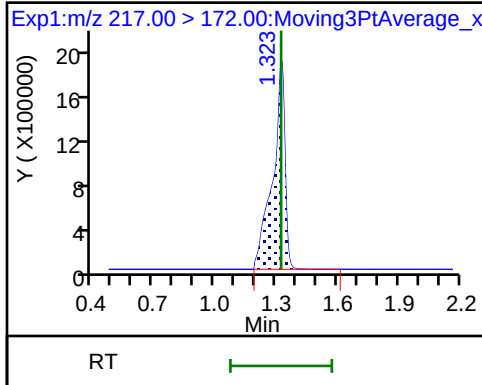
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

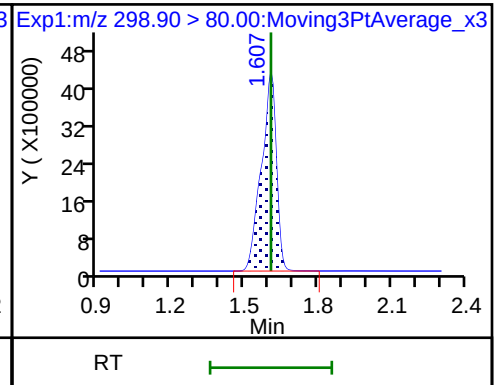
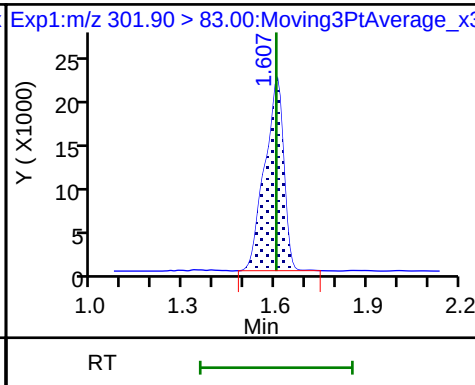
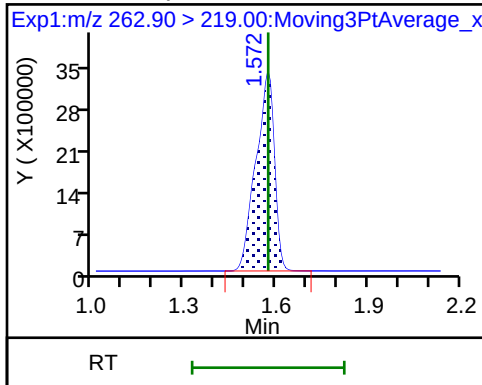
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

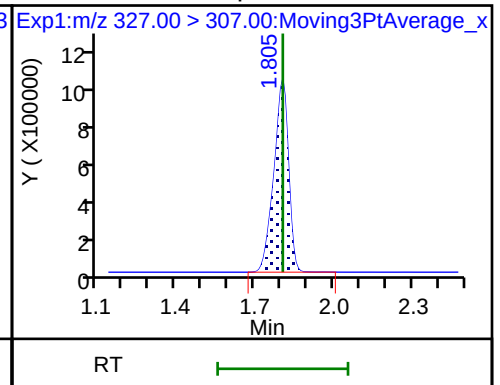
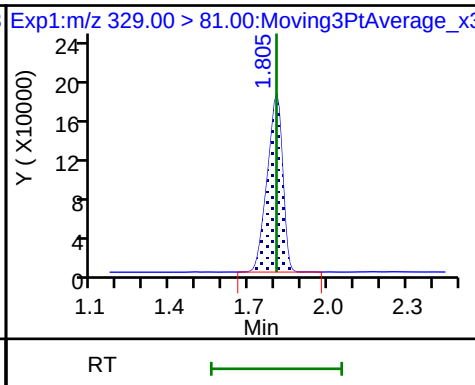
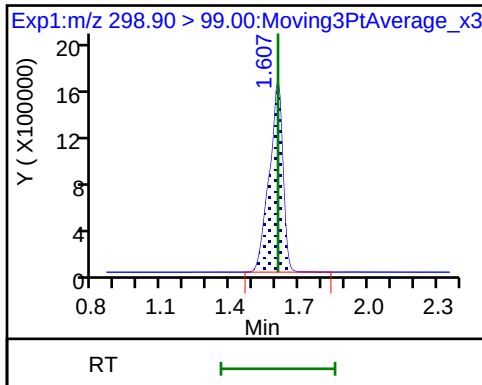
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

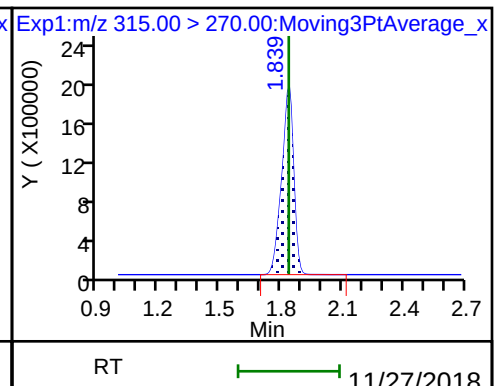
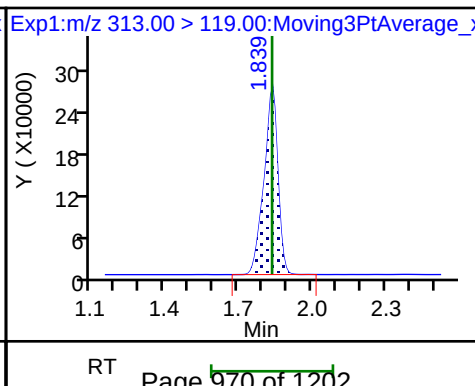
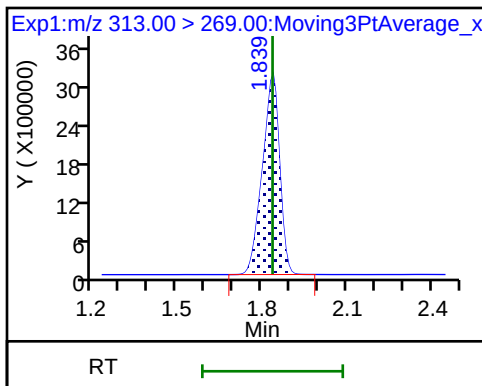
61 1H,1H,2H,2H-perfluorohexanesulfoni

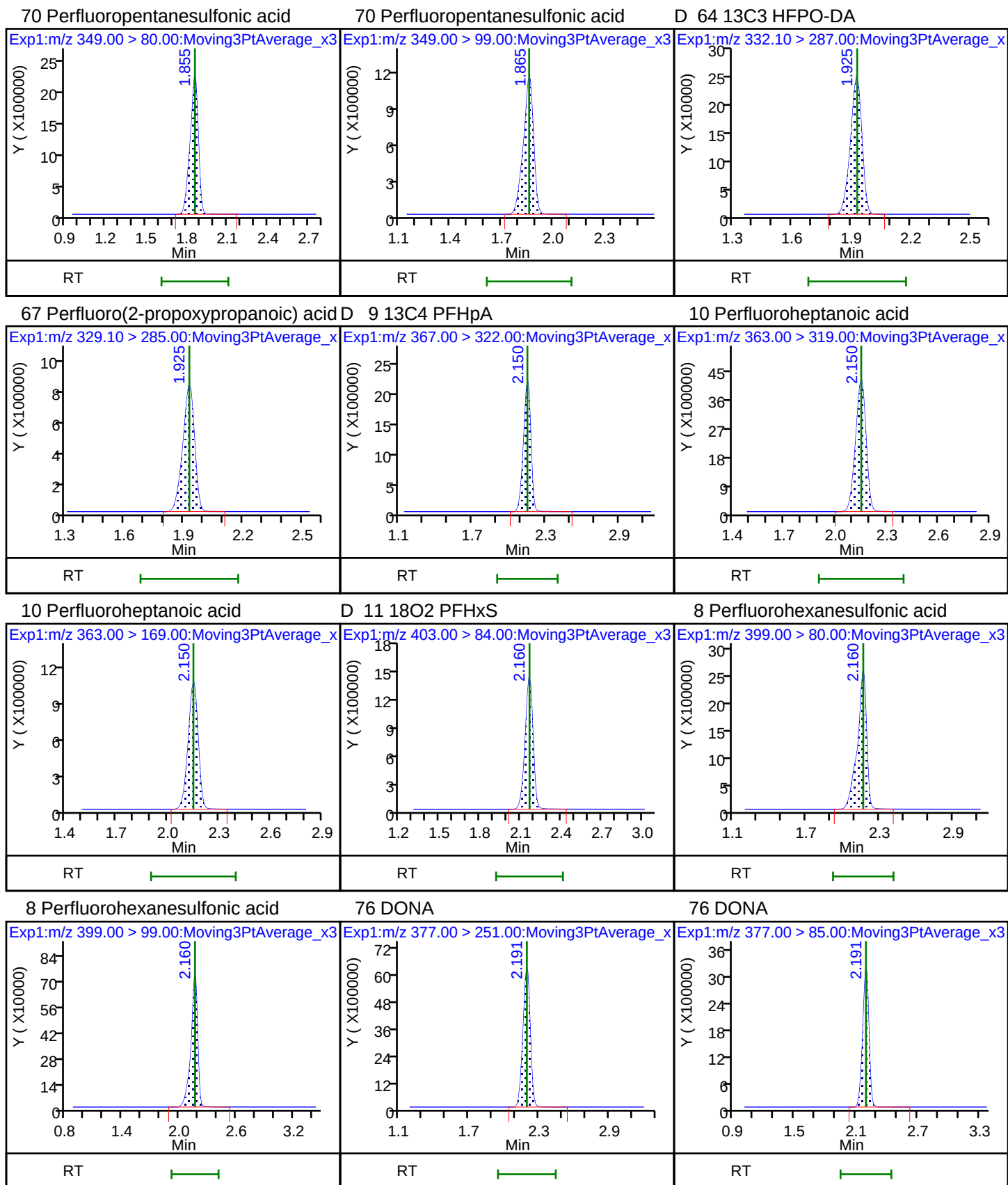


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

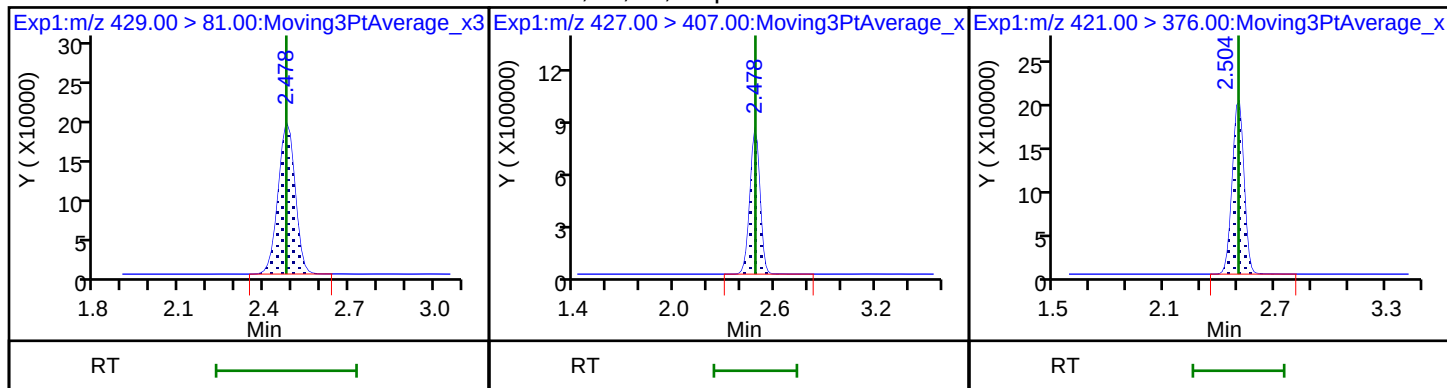
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

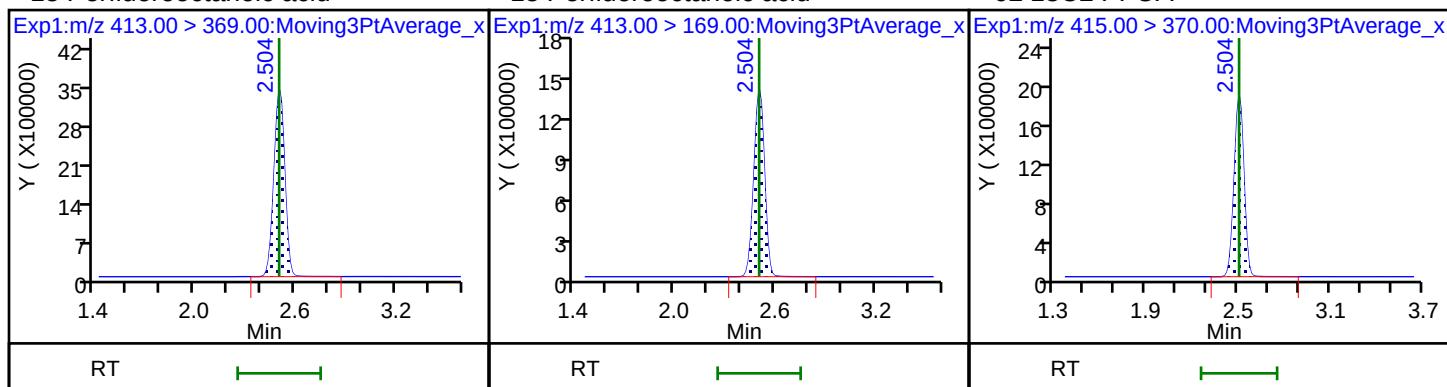
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



15 Perfluorooctanoic acid

15 Perfluorooctanoic acid

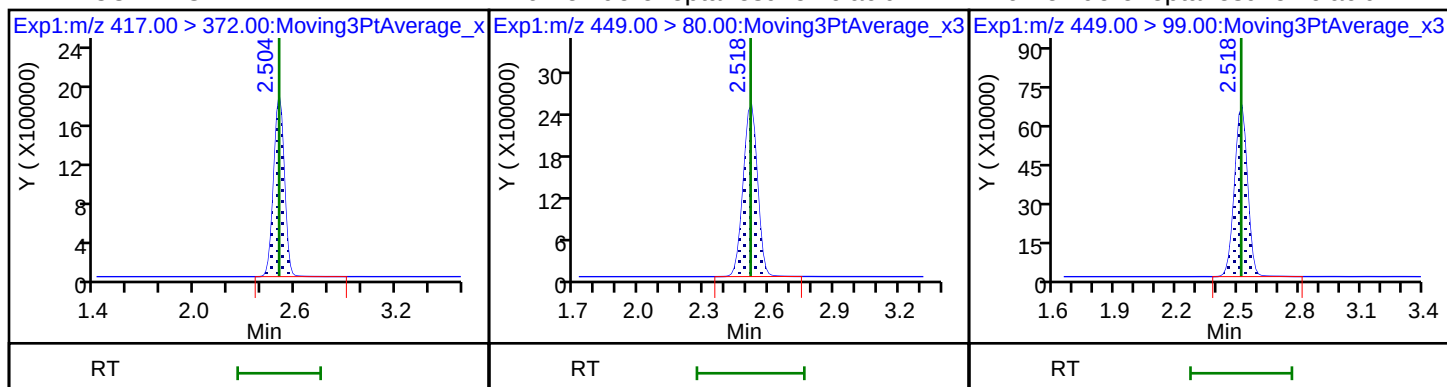
* 62 13C2 PFOA



D 14 13C4 PFOA

16 Perfluoroheptanesulfonic acid

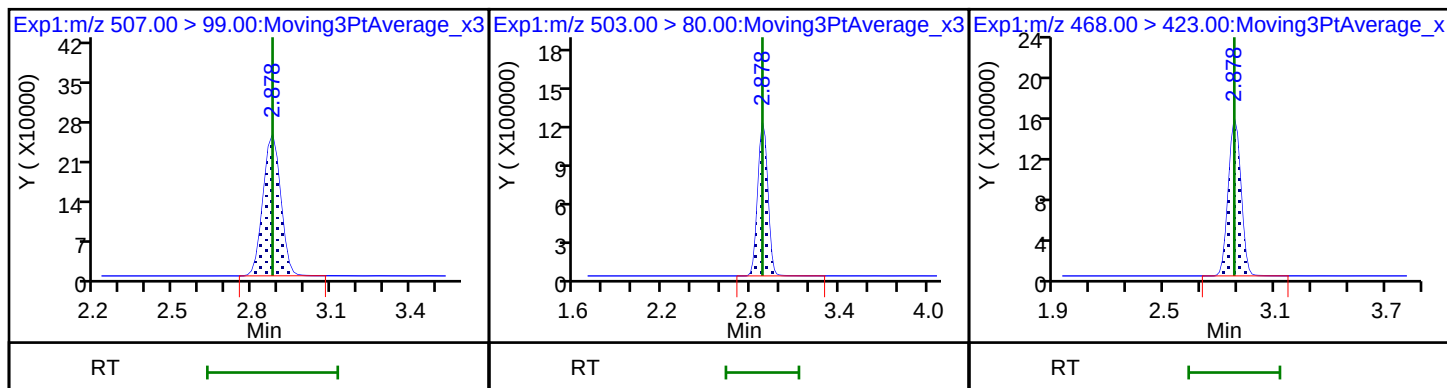
16 Perfluoroheptanesulfonic acid

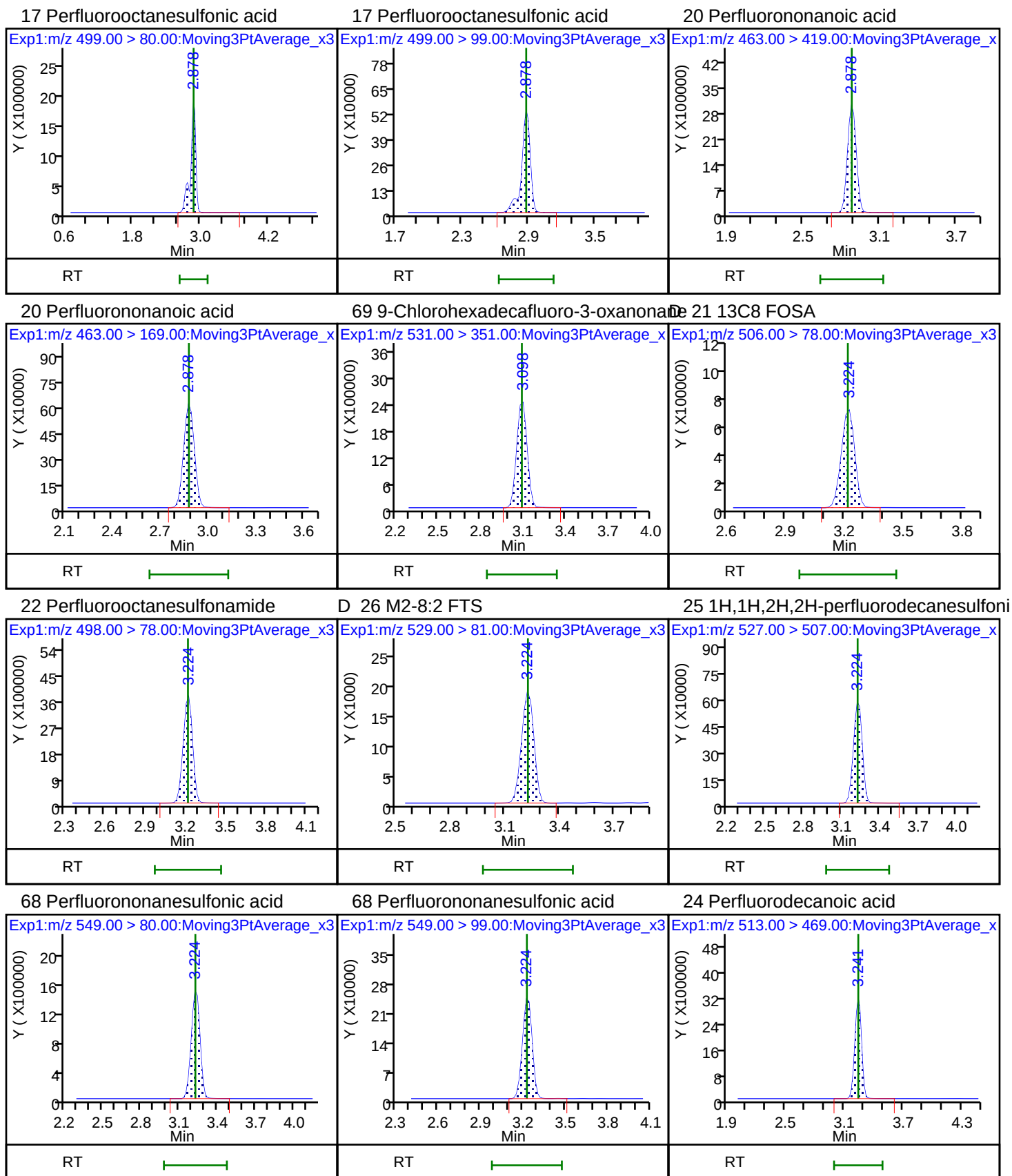


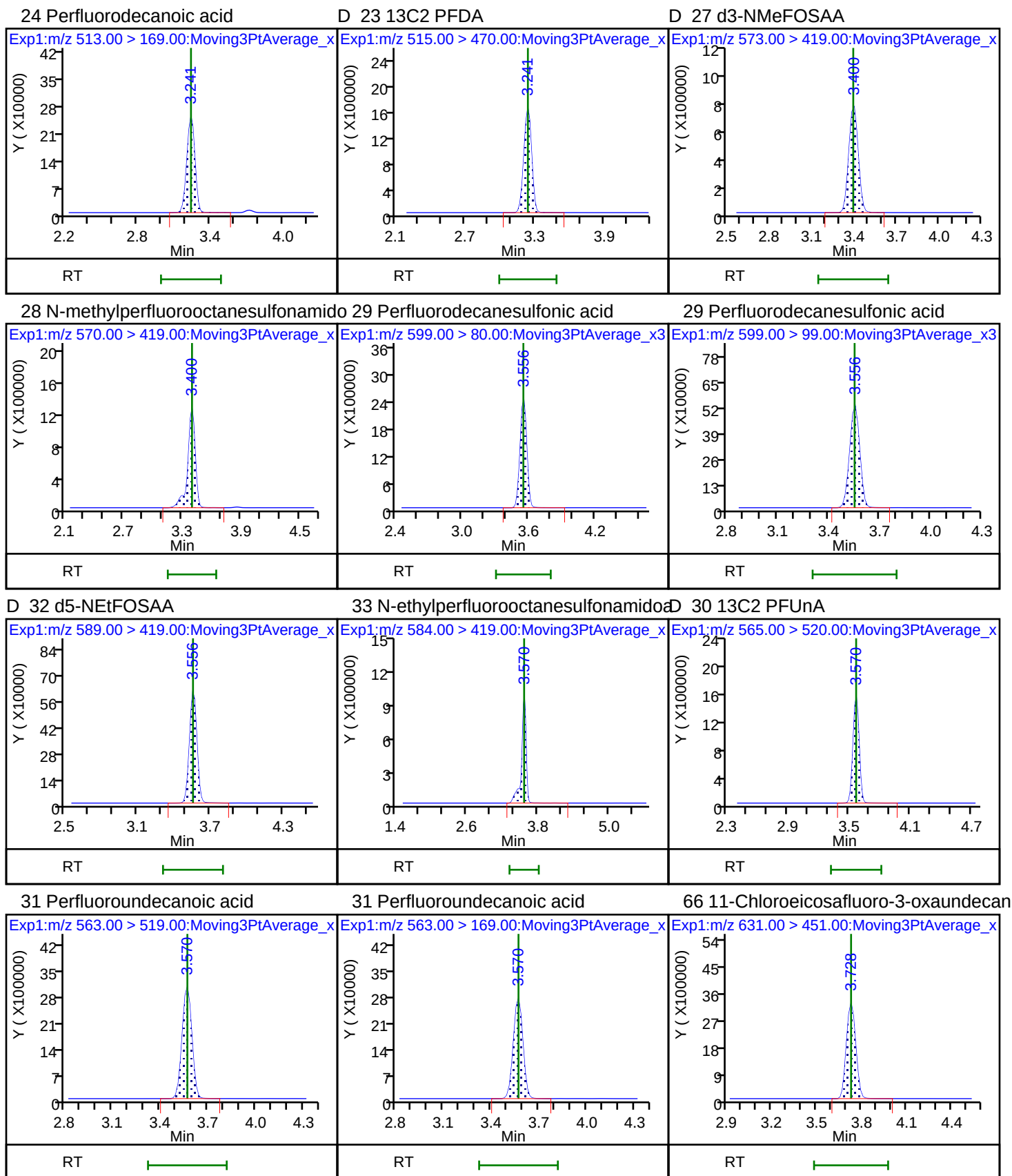
D 72 13C8 PFOS

D 18 13C4 PFOS

D 19 13C5 PFNA



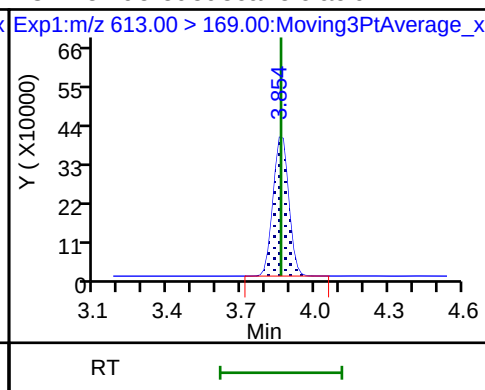
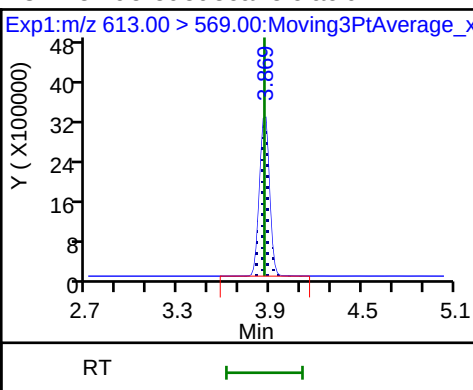
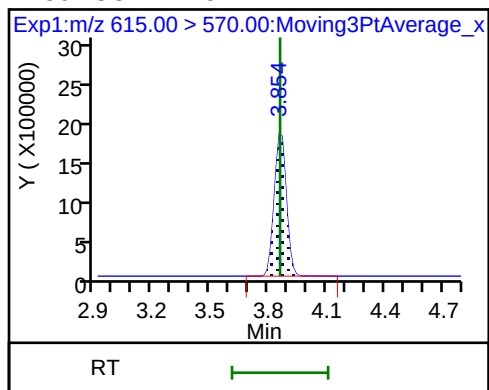




D 36 13C2 PFDaA

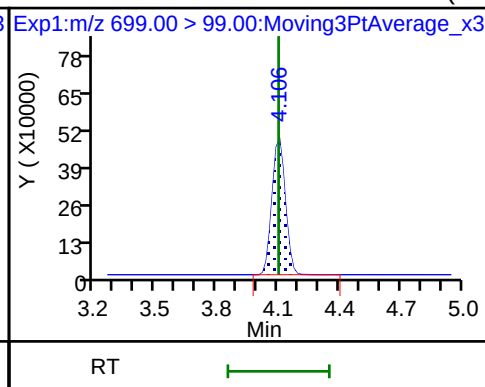
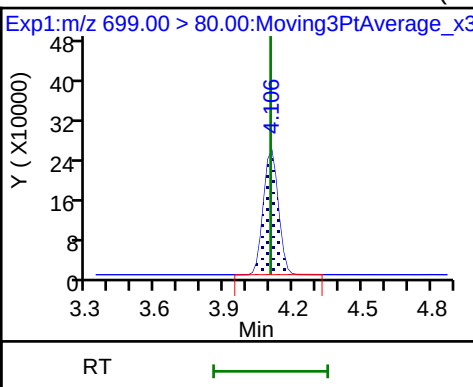
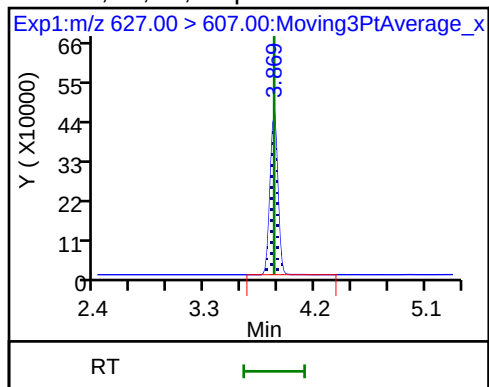
37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



74 1H,1H,2H,2H-perfluorododecanesulfonate 75 Perfluorododecanesulfonic acid (PF

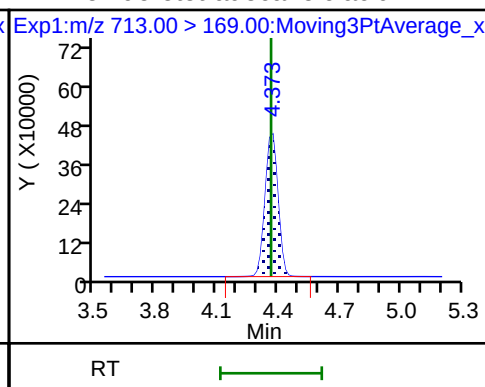
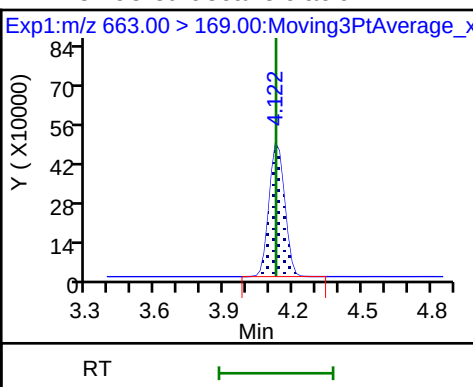
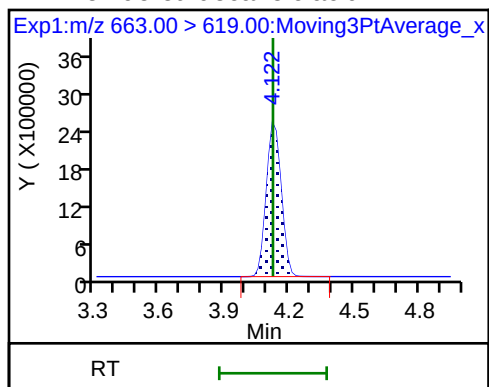
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

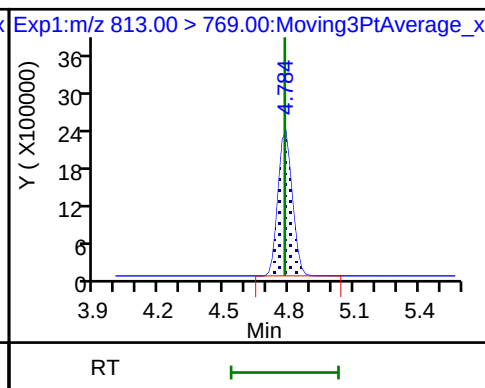
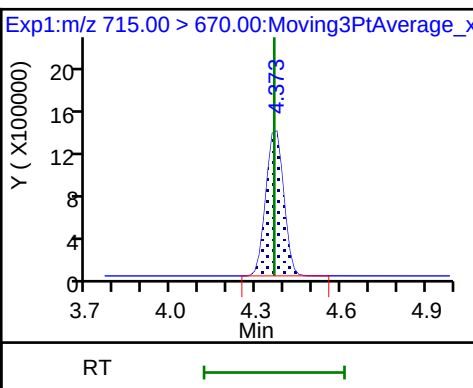
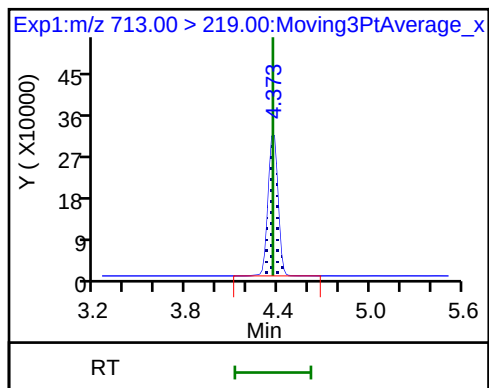
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

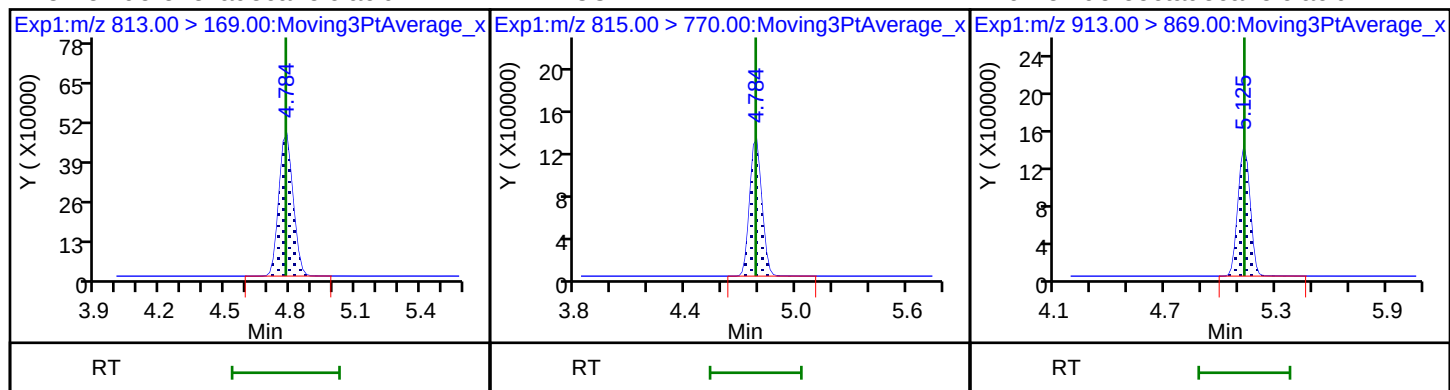
45 Perfluorohexadecanoic acid



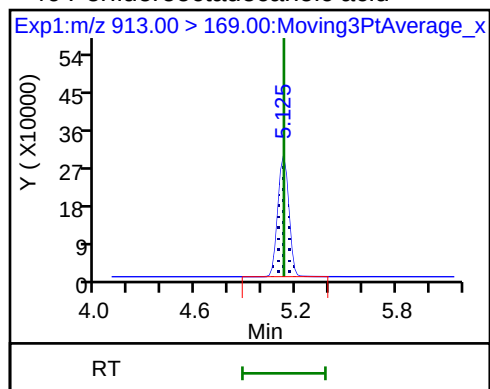
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_008.d
 Lims ID: IC L7 Full
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 30-Oct-2018 13:57:50 ALS Bottle#: 16 Worklist Smp#: 8
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CAL STD7
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist: chrom-PFAS_A9*sub5
 Method: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 30-Oct-2018 15:08:44 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: roycea

Date: 30-Oct-2018 14:46:34

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	1.319	1.323	-0.004	0.527	7420348	2.64		106	13917	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.319	1.324	-0.005	1.000	26118757	9.40		94.0	1457	
D 3 13C5 PFPeA										
267.90 > 223.00	1.565	1.571	-0.006	0.625	6803099	2.54		102	10573	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.565	1.573	-0.008	1.000	24242637	8.90		89.0	2261	
D 47 13C3 PFBS										
301.90 > 83.00	1.600	1.603	-0.003	0.639	88380	2.39		103	542	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.600	1.607	-0.007	1.000	31022231	7.90		89.4	8278	
298.90 > 99.00	1.600	1.607	-0.007	1.000	12524798		2.48(1.35-4.05)	89.4	5408	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.797	1.804	-0.007	0.718	675449	2.27		97.4	760	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.797	1.805	-0.008	1.123	6728832	8.61		92.2	18722	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.830	1.836	-0.006	1.000	22451312	8.55		85.5	3907	
313.00 > 119.00	1.830	1.836	-0.006	1.000	1942616		11.56(6.96-20.87)	85.5	3423	
D 7 13C2 PFHxA										
315.00 > 270.00	1.830	1.836	-0.006	0.731	7292358	2.59		103	17877	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.855	1.859	-0.004	1.160	16027538	8.81		93.9	11891	
349.00 > 99.00	1.855	1.859	-0.004	1.160	8265650		1.94(1.15-3.45)	93.9	6888	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.925	1.928	-0.003	0.769	1000289	2.74		110	3943	

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	1.925	1.928	-0.003	1.000	6332723	9.52		95.2	4953	
D 9 13C4 PFHpA										
367.00 > 322.00	2.140	2.148	-0.008	0.854	8209283	2.48		99.0	15448	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.140	2.148	-0.008	1.000	28591245	8.21		82.1	3999	
363.00 > 169.00	2.140	2.148	-0.008	1.000	7970989		3.59(2.17-6.52)	82.1	10879	
D 11 18O2 PFHxS										
403.00 > 84.00	2.160	2.164	-0.004	0.863	5161381	2.39		101	8324	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.160	2.164	-0.004	1.000	22514172	8.19		90.0	5819	
399.00 > 99.00	2.160	2.164	-0.004	1.000	6910135		3.26(1.90-5.70)	90.0	3940	
76 DONA										
377.00 > 251.00	2.191	2.194	-0.003	0.761	44019792	7.57		80.3	23051	
377.00 > 85.00	2.191	2.194	-0.003	0.761	24016879		1.83(1.13-3.39)	80.3	14481	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.478	2.478	0.0	0.990	704483	2.31		97.3	1366	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.478	2.482	-0.004	1.000	5762757	8.90		93.9	6174	
D 73 13C8 PFOA										
421.00 > 376.00	2.491	2.501	-0.010		7924204	2.30		94.1	12322	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.504	2.504	0.0	1.000	24719818	7.63		76.3	2201	
413.00 > 169.00	2.504	2.504	0.0	1.000	10963798		2.25(1.36-4.08)	76.3	7930	
* 62 13C2 PFOA										
415.00 > 370.00	2.504	2.504	0.0		7718059	2.50			10184	
D 14 13C4 PFOA										
417.00 > 372.00	2.504	2.504	0.0	1.000	7488473	2.47		98.6	10314	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.504	2.514	-0.010	0.870	19934173	8.94		93.9	4680	
449.00 > 99.00	2.504	2.514	-0.010	0.870	5509730		3.62(1.84-5.53)	93.9	7852	
D 72 13C8 PFOS										
507.00 > 99.00	2.878	2.877	0.001		1116319	2.26		94.5	3225	
D 18 13C4 PFOS										
503.00 > 80.00	2.878	2.877	0.001	1.149	5117088	2.35		98.2	3899	
D 19 13C5 PFNA										
468.00 > 423.00	2.878	2.877	0.001	1.149	6859744	2.44		97.7	7004	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.878	2.877	0.001	1.000	20584711	8.93		96.2	4341	
499.00 > 99.00	2.878	2.877	0.001	1.000	5462179		3.77(2.04-6.12)	96.2	4411	
20 Perfluorononanoic acid										
463.00 > 419.00	2.878	2.880	-0.002	1.000	23756934	8.65		86.5	1304	
463.00 > 169.00	2.878	2.880	-0.002	1.000	5159376		4.60(2.68-8.03)	86.5	5882	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.080	3.091	-0.011	1.070	21315966	8.99		96.4	4607	
D 21 13C8 FOSA										
506.00 > 78.00	3.207	3.217	-0.010	1.280	2874497	2.38		95.2	4518	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.207	3.219	-0.012	1.000	29580681	8.56		85.6	5202	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.224	3.226	-0.002	1.287	78772	2.08		87.0	283	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.224	3.226	-0.002	1.000	4634743	9.87		103	7323	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.224	3.226	-0.002	1.120	11567897	8.81		91.7	5051	
549.00 > 99.00	3.224	3.226	-0.002	1.120	2031868		5.69(3.02-9.05)	91.7	3463	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.241	3.241	0.0	1.000	25123980	8.76		87.6	2712	
513.00 > 169.00	3.241	3.241	0.0	1.000	2190345		11.47(7.12-21.35)	87.6	584	
D 23 13C2 PFDA										
515.00 > 470.00	3.241	3.241	0.0	1.294	6604968	2.28		91.4	6298	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.383	3.392	-0.009	1.351	3183764	2.55		102	4586	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.400	3.399	0.001	1.005	12317657	9.67		96.7	2680	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.541	3.552	-0.011	1.231	16411334	8.86		91.9	5298	
599.00 > 99.00	3.541	3.552	-0.011	1.231	3929895		4.18(2.14-6.43)	91.9	5596	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.556	3.558	-0.002	1.420	2294813	2.25		90.2	3961	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.556	3.566	-0.010	1.000	8605918	10.3		103	6817	
D 30 13C2 PFUnA										
565.00 > 520.00	3.570	3.568	0.002	1.426	5750238	2.38		95.2	9377	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.570	3.570	0.0	1.000	19985454	7.64		76.4	3363	
563.00 > 169.00	3.570	3.570	0.0	1.000	2048599		9.76(5.24-15.72)	76.4	4880	
35 MeFOSA										
512.00 > 169.00	3.728	3.724	0.004		7044541	NC			4363	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.728	3.728	0.0	1.296	22552443	7.60		80.6	7084	
D 36 13C2 PFDaA										
615.00 > 570.00	3.854	3.859	-0.005	1.539	7675120	2.58		103	9071	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.854	3.861	-0.007	1.000	24007518	7.69		76.9	5093	
613.00 > 169.00	3.854	3.861	-0.007	1.000	3584267		6.70(4.68-14.05)	76.9	4679	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.854	3.865	-0.011	1.196	3448893	10.4		108	4156	
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	3.912	3.912	0.0		7719048	NC			5453	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.089	4.101	-0.012	1.421	2091110	10.1		105	5261	
699.00 > 99.00	4.089	4.101	-0.012	1.421	3980084		0.53(0.28-0.83)	105	5808	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.122	4.125	-0.003	1.069	18912174	7.54		75.4	6810	
663.00 > 169.00	4.122	4.125	-0.003	1.069	3882213		4.87(3.09-9.27)	75.4	6221	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.357	4.364	-0.007	1.000	3705066	9.21		92.1	9397	
713.00 > 219.00	4.357	4.364	-0.007	1.000	2643931		1.40(0.70-2.09)	92.1	9741	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.357	4.364	-0.007	1.740	5499047	2.47		99.0	11144	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.769	4.780	-0.011	1.000	16448922	7.83		78.3	11394	
813.00 > 169.00	4.769	4.780	-0.011	1.000	3969694		4.14(2.77-8.32)	78.3	8413	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.769	4.780	-0.011	1.904	5807381	2.63		105	14018	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.125	5.127	-0.002	1.075	10749622	9.36		93.6	10899	
913.00 > 169.00	5.125	5.127	-0.002	1.075	2318686		4.64(2.55-7.64)	93.6	5648	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL7_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_008.d

Injection Date: 30-Oct-2018 13:57:50

Instrument ID: A9

Lims ID: IC L7 Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 16

Worklist Smp#: 8

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

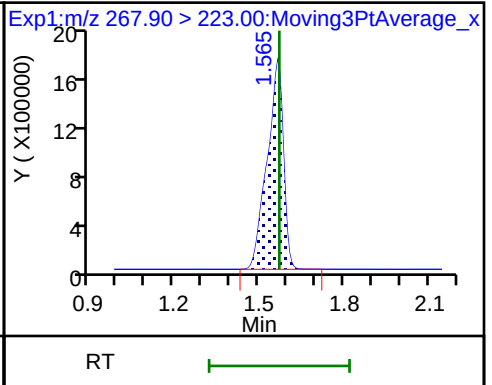
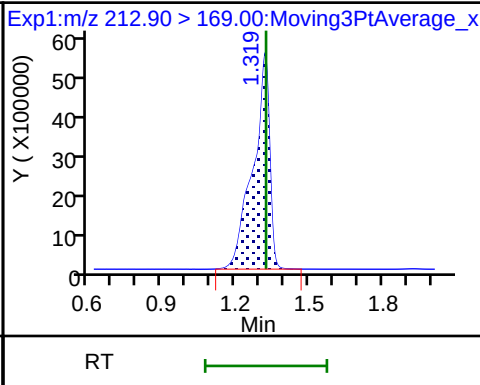
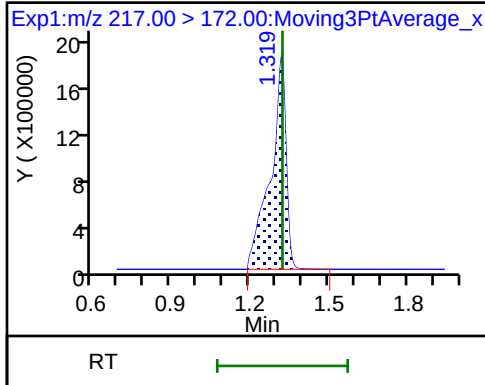
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

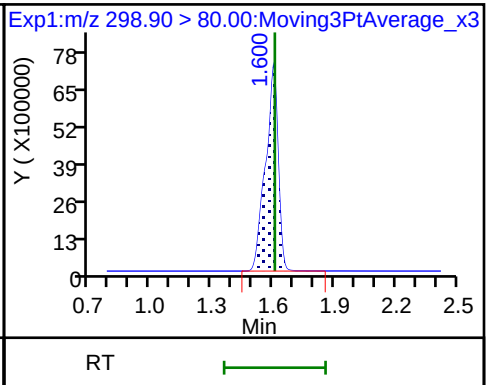
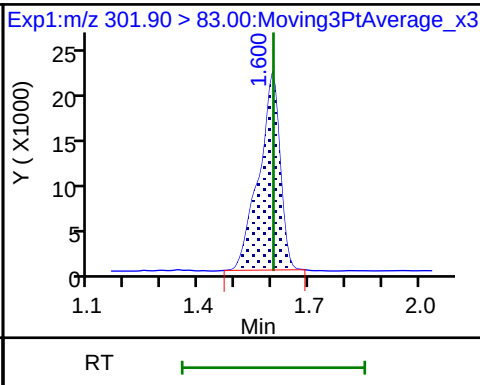
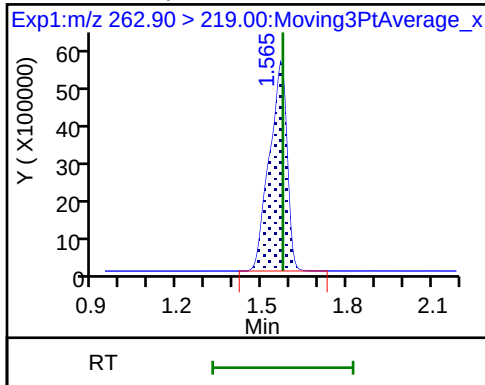
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

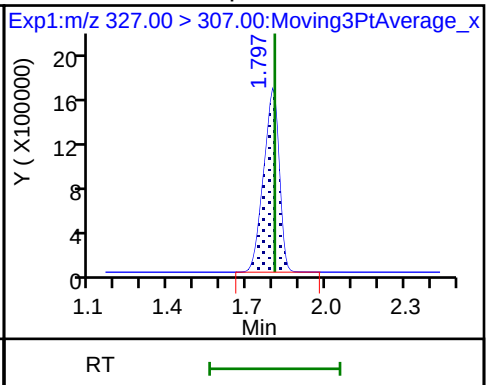
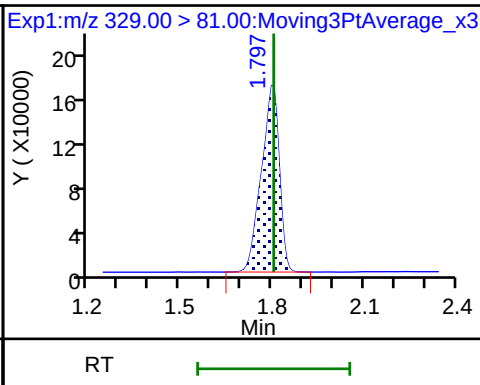
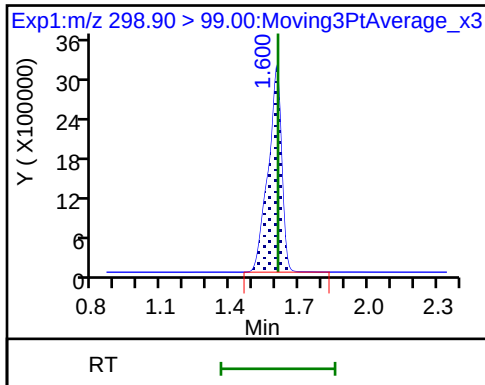
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

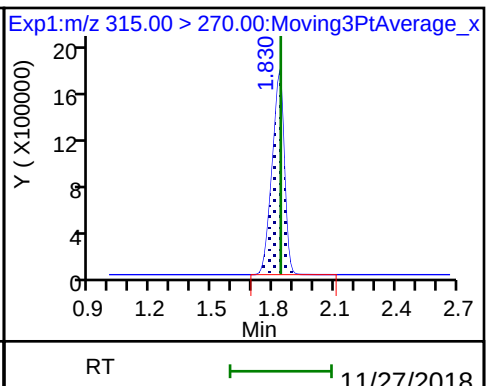
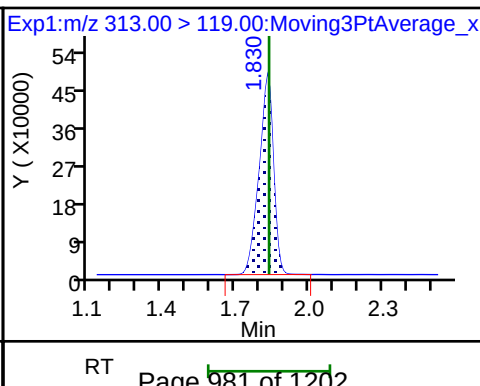
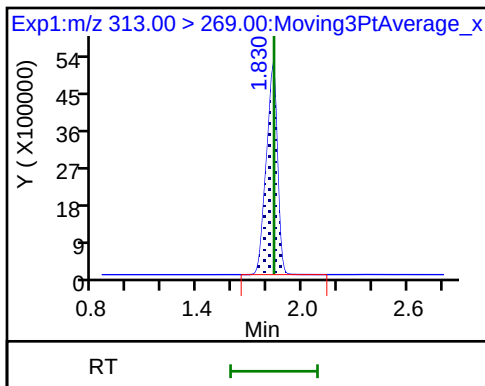
61 1H,1H,2H,2H-perfluorohexanesulfoni

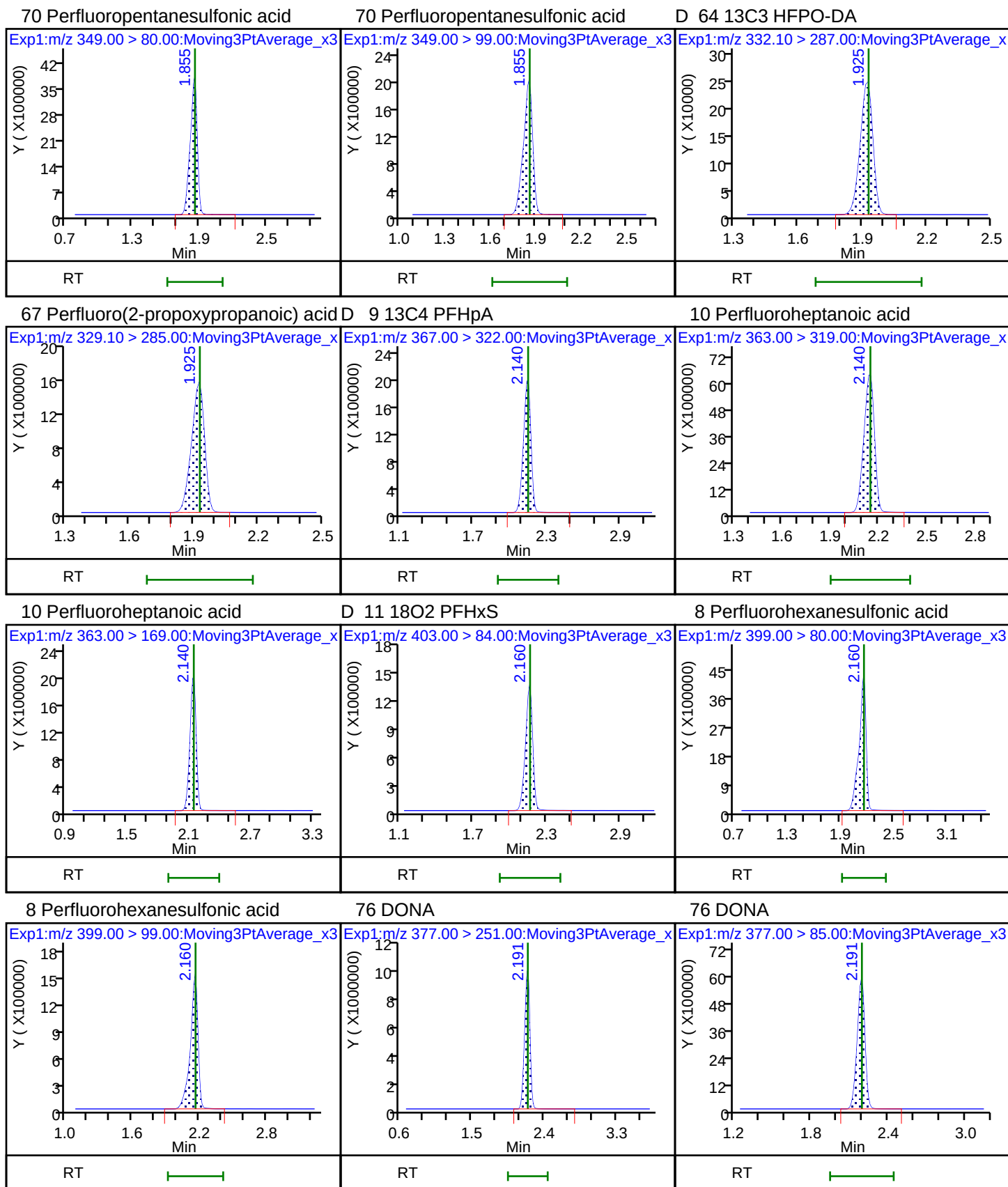


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

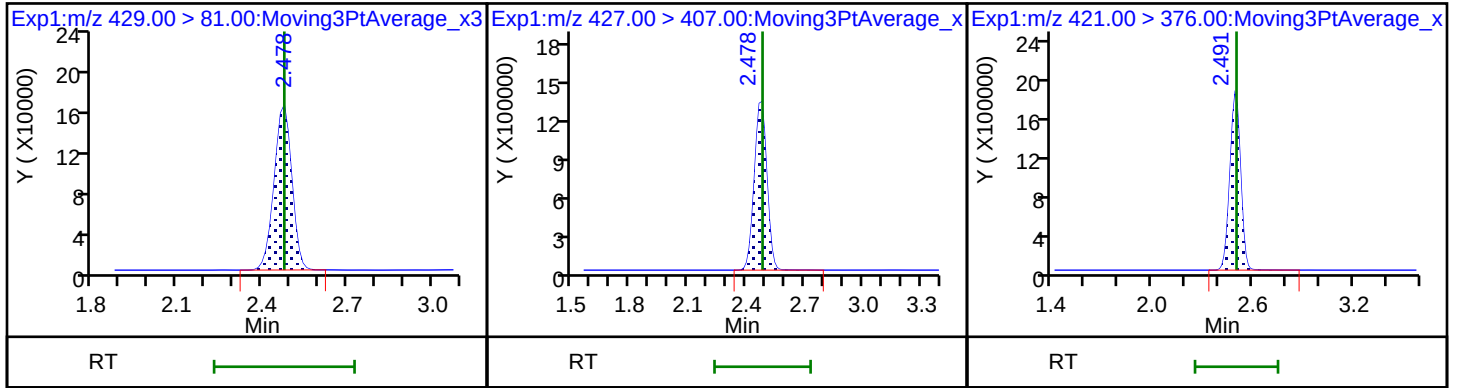
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

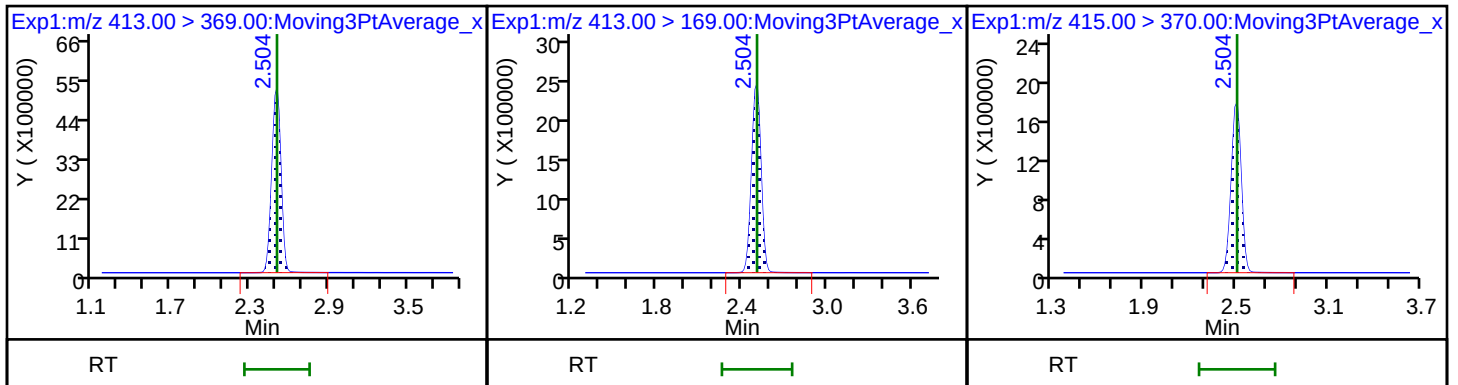
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



15 Perfluorooctanoic acid

15 Perfluorooctanoic acid

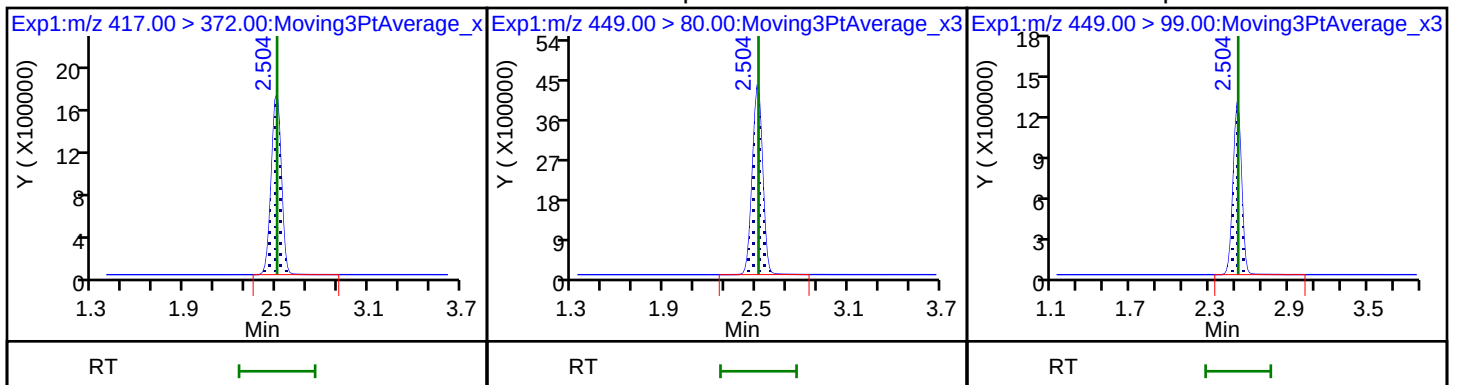
* 62 13C2 PFOA



D 14 13C4 PFOA

16 Perfluoroheptanesulfonic acid

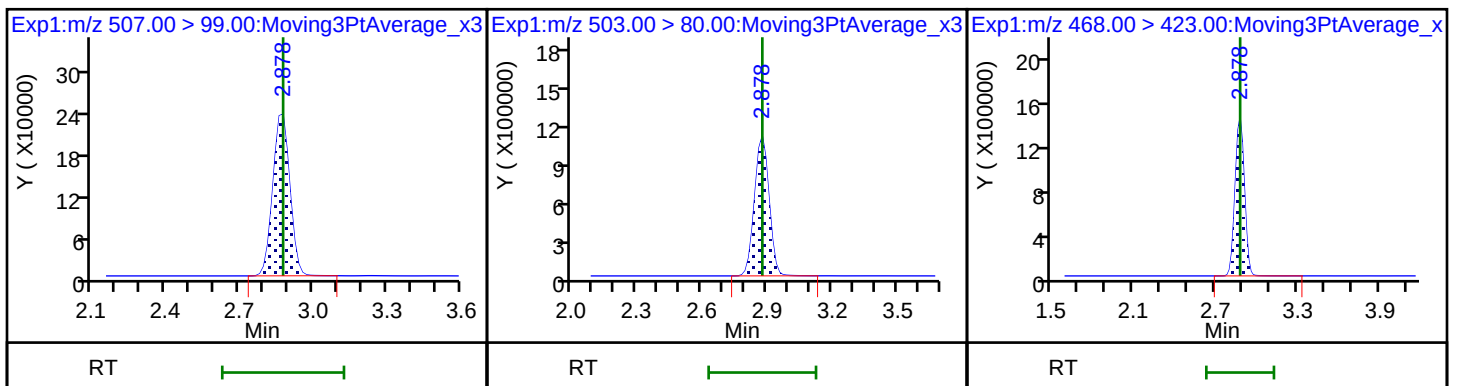
16 Perfluoroheptanesulfonic acid

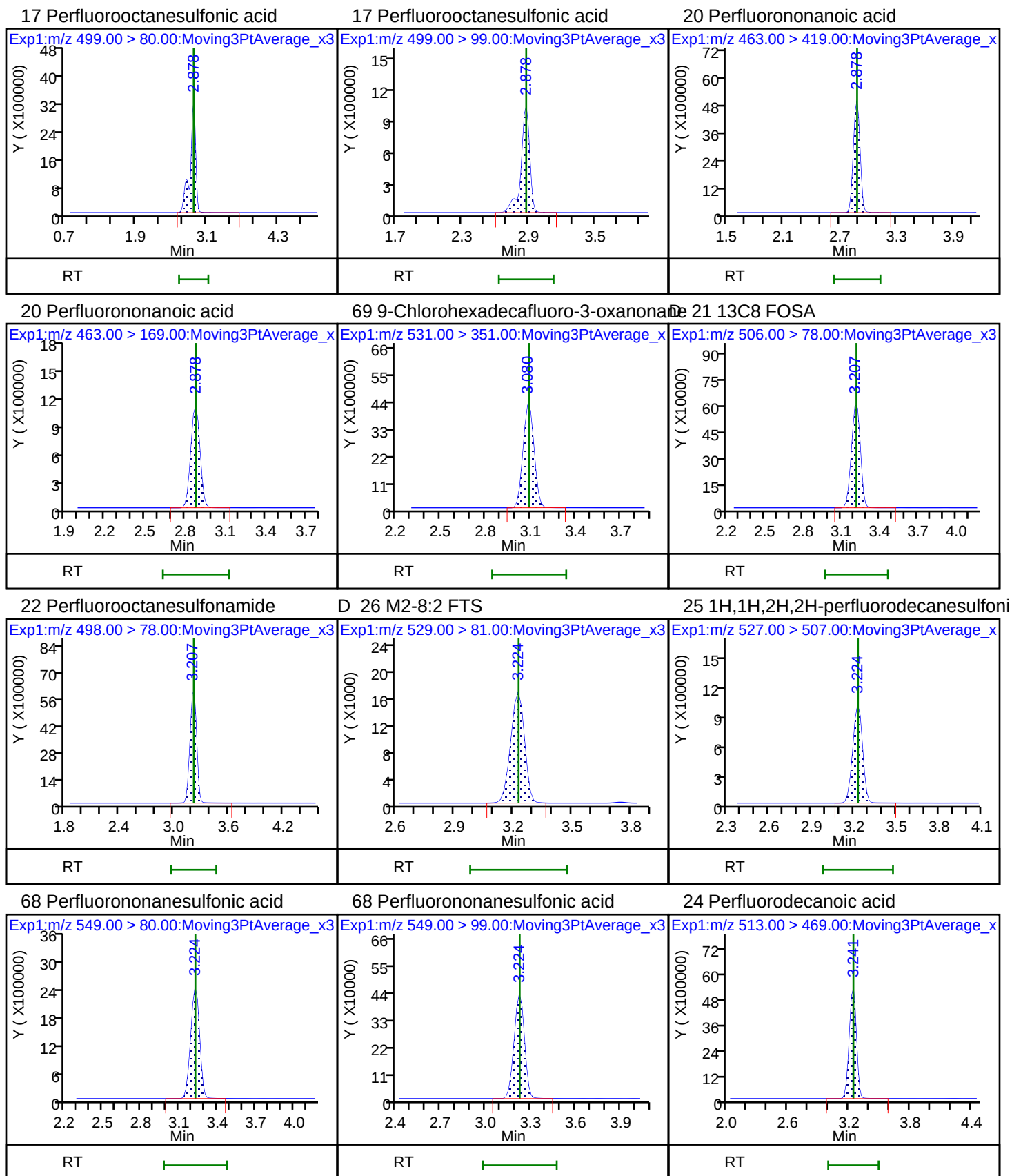


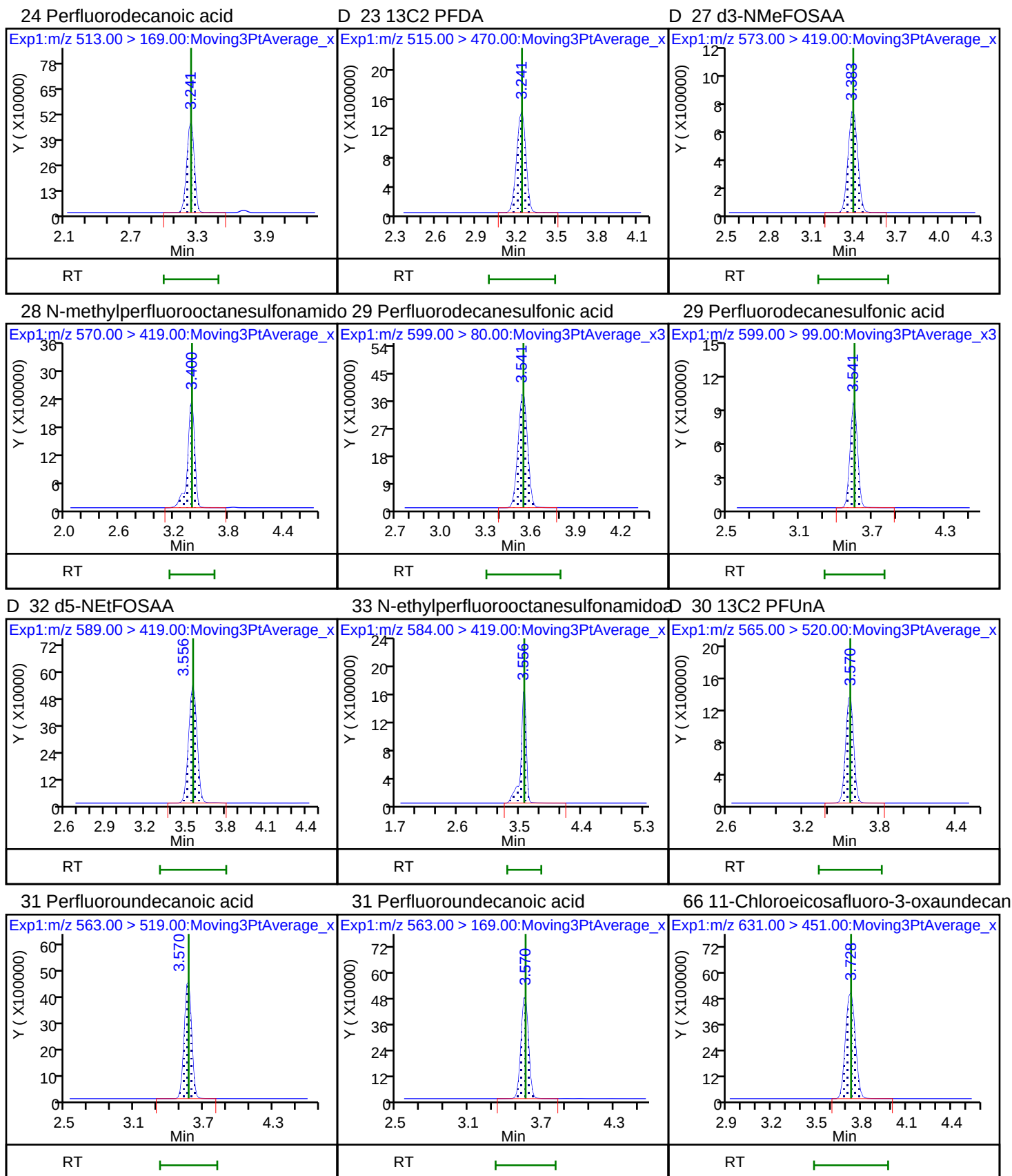
D 72 13C8 PFOS

D 18 13C4 PFOS

D 19 13C5 PFNA



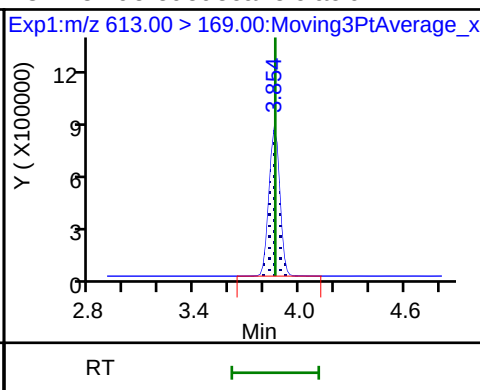
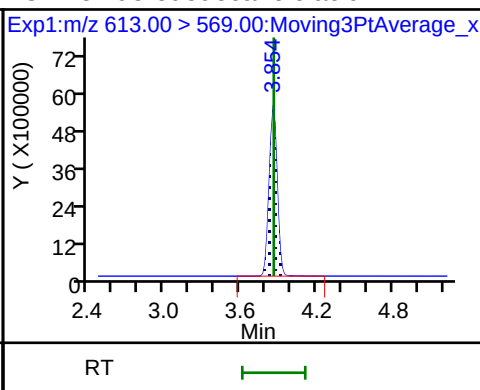
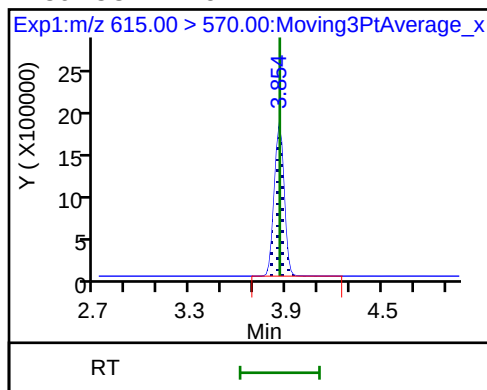




D 36 13C2 PFDaA

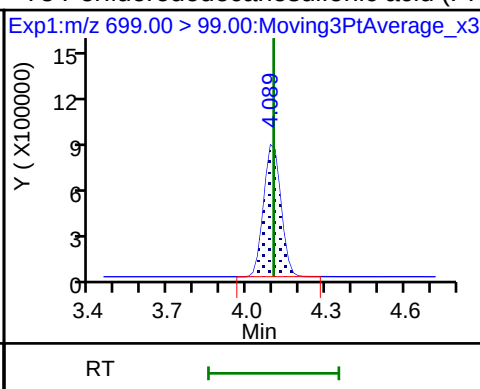
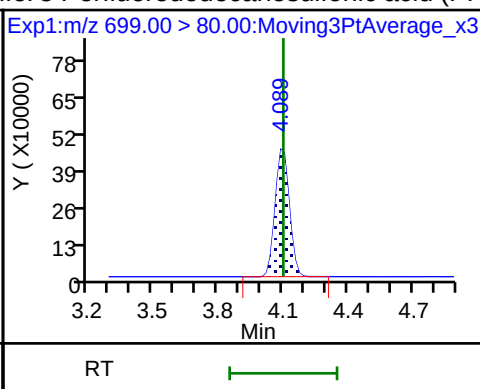
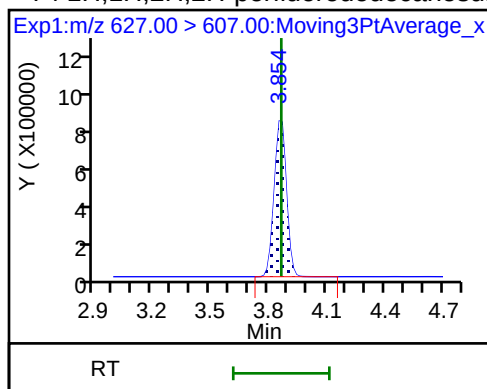
37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



74 1H,1H,2H,2H-perfluorododecanesulfonate 75 Perfluorododecanesulfonic acid (PF

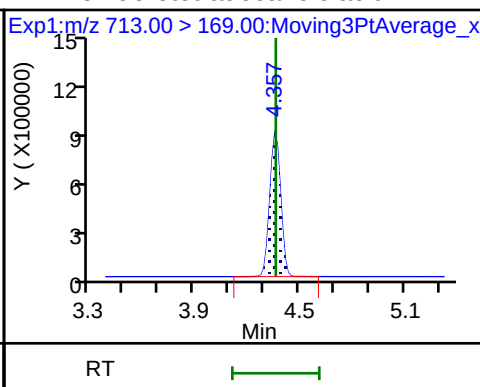
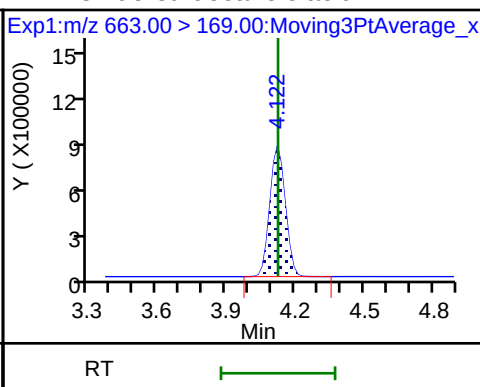
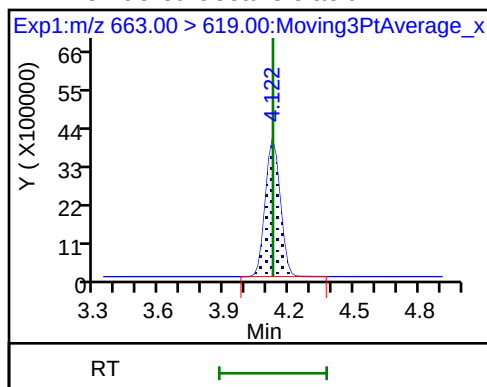
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

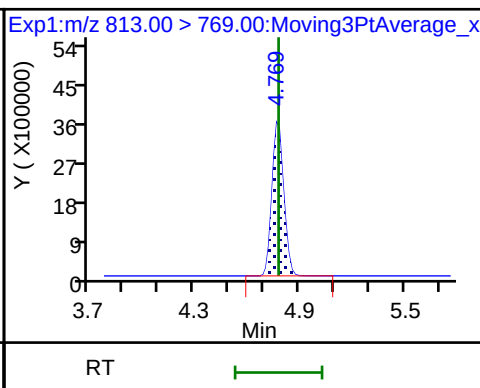
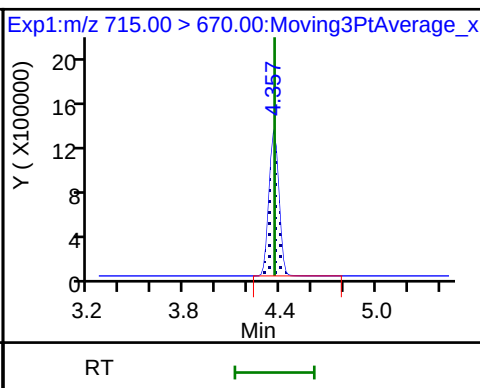
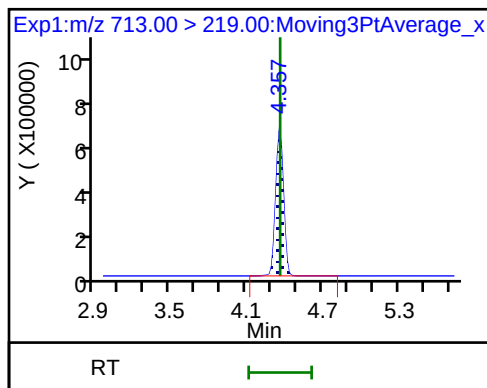
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

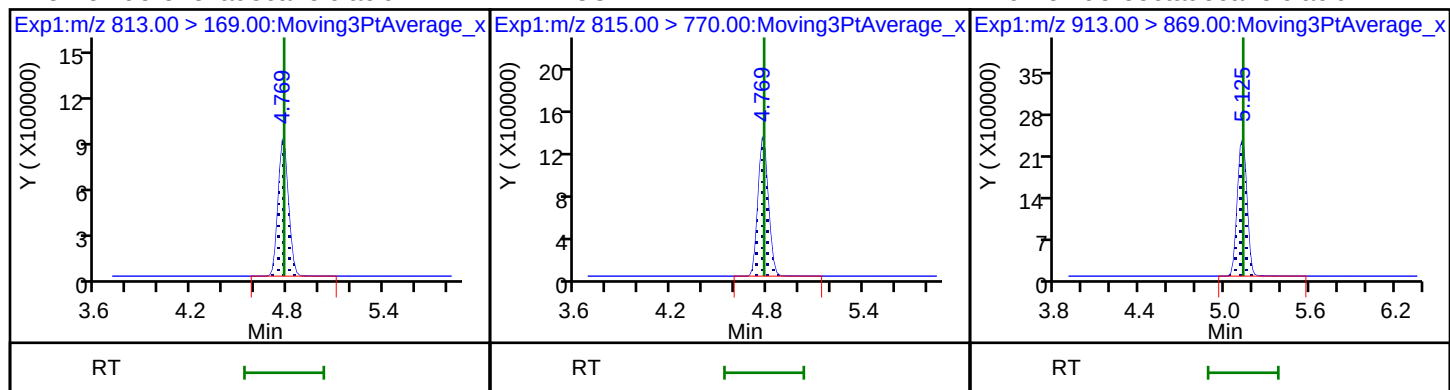
45 Perfluorohexadecanoic acid



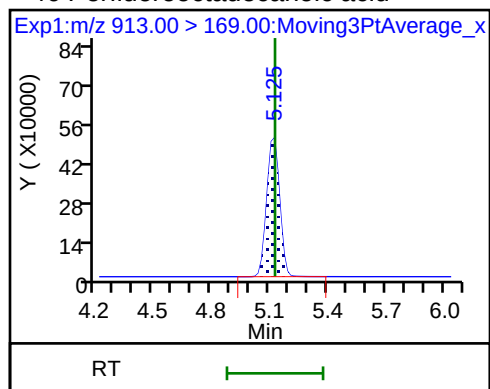
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: ICV 320-257055/10 Calibration Date: 11/05/2018 16:36

Instrument ID: A8_N Calib Start Date: 11/05/2018 15:37

GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 11/05/2018 16:22

Lab File ID: 2018.11.05ICAL_013.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9476	0.9435		2.49	2.50	-0.4	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.121	1.151		2.57	2.50	2.7	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.41	78.15		2.21	2.21	-0.3	50.0
4:2 FTS	AveID	14.89	15.04		2.36	2.34	1.0	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.017	1.011		2.49	2.50	-0.5	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	67.54	63.68		2.22	2.35	-5.7	50.0
HFPO-DA (GenX)	AveID	3.364	3.149		2.34	2.50	-6.4	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.110	1.075		2.42	2.50	-3.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.141	1.028		2.06	2.28	-9.8	40.0
DONA	AveID	4.033	4.283		2.50	2.36	6.2	50.0
6:2 FTS	AveID	1.581	1.607		2.41	2.38	1.7	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.138	1.119		2.46	2.50	-1.6	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.325	1.409		2.53	2.38	6.4	50.0
Perfluorononanoic acid (PFNA)	AveID	1.067	0.998		2.34	2.50	-6.5	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.154	1.189		2.38	2.31	3.0	40.0
F-53B Major	AveID	1.999	2.048		2.39	2.33	2.5	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.998	1.024		2.56	2.50	2.5	40.0
8:2 FTS	AveID	1.293	1.245		2.31	2.40	-3.7	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.8001	0.8492		2.55	2.40	6.1	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.026	1.015		2.47	2.50	-1.1	40.0
N-methylperfluorooctanesulfo namidoacetic acid (NMeFOSAA)	AveID	0.9358	0.9822		2.62	2.50	5.0	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6424	0.6779		2.55	2.41	5.5	50.0
N-ethylperfluorooctanesulfon amidoacetic acid (NEtFOSAA)	AveID	0.8407	0.9295		2.76	2.50	10.6	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8979	0.8200		2.28	2.50	-8.7	40.0
F-53B Minor	AveID	2.855	3.135		2.59	2.36	9.8	50.0
10:2 FTS	AveID	0.9098	0.9640		2.55	2.41	6.0	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.081	1.080		2.50	2.50	-0.0	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2908	0.3079		2.56	2.42	5.9	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	1.051	1.033		2.46	2.50	-1.7	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2757	0.2620		2.38	2.50	-5.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9289		2.57	2.50	3.0	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: ICV 320-257055/10 Calibration Date: 11/05/2018 16:36
 Instrument ID: A8_N Calib Start Date: 11/05/2018 15:37
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 11/05/2018 16:22
 Lab File ID: 2018.11.05ICAL_013.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.093	1.096		2.51	2.50	0.2	50.0
13C4 PFBA	Ave	1.485	1.492		2.51	2.50	0.5	50.0
13C5-PFPeA DNU	Ave	0.9800	0.9563		2.44	2.50	-2.4	50.0
13C3 PFBS	Ave	0.0207	0.0210		2.36	2.33	1.4	50.0
M2-4:2 FTS	Ave	0.1361	0.1434		2.46	2.34	5.4	50.0
13C2 PFHxA	Ave	1.077	1.093		2.54	2.50	1.5	50.0
13C3 HFPO-DA	Ave	0.0682	0.0655		2.40	2.50	-4.0	50.0
13C4 PFHpA	Ave	0.9937	0.9905		2.49	2.50	-0.3	50.0
18O2 PFHxS	Ave	1.216	1.218		2.37	2.37	0.2	50.0
M2-6:2 FTS	Ave	0.2154	0.2098		2.31	2.38	-2.6	40.0
13C8 PFOA	Ave	1.687	1.668		2.42	2.45	-1.1	50.0
13C4 PFOA	Ave	0.9738	0.9476		2.43	2.50	-2.7	50.0
13C8 PFOS	Ave	0.4292	0.4271		2.38	2.39	-0.5	50.0
13C4 PFOS	Ave	0.7981	0.7708		2.31	2.39	-3.4	50.0
13C5 PFNA	Ave	0.8097	0.8323		2.57	2.50	2.8	50.0
13C8 FOSA	Ave	1.118	1.101		2.46	2.50	-1.5	50.0
M2-8:2 FTS	Ave	0.2282	0.2237		2.35	2.40	-2.0	40.0
13C2 PFDA	Ave	0.6999	0.6810		2.43	2.50	-2.7	50.0
d3-NMeFOSAA	Ave	0.3413	0.3499		2.56	2.50	2.5	50.0
d5-NEtFOSAA	Ave	0.3637	0.3612		2.48	2.50	-0.7	50.0
13C2 PFUnA	Ave	0.5526	0.5395		2.44	2.50	-2.4	50.0
13C2 PFDoA	Ave	0.5857	0.5916		2.53	2.50	1.0	50.0
13C2 PFTeDA	Ave	0.7283	0.7090		2.43	2.50	-2.7	50.0
13C2 PFHxDA	Ave	1.288	1.251		2.43	2.50	-2.9	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_013.d
 Lims ID: ICV FULL
 Client ID:
 Sample Type: ICV
 Inject. Date: 05-Nov-2018 16:36:51 ALS Bottle#: 17 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist:
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 05-Nov-2018 16:57:17 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_011.d

Column 1 : Det: EXP1
 Process Host: CTX0305

First Level Reviewer: roycea

Date: 05-Nov-2018 16:48:21

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	1.421	1.413	0.008	0.539	3086714	2.51		100	8166	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.421	1.415	0.006	1.000	2912316	2.49			373	
D 3 13C5 PFPeA										
267.90 > 223.00	1.686	1.681	0.005	0.640	1977989	2.44		97.6	7205	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.686	1.682	0.004	1.000	2276930	2.57			340	
D 47 13C3 PFBS										
301.90 > 83.00	1.727	1.716	0.011	0.655	40439	2.36		101	194	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.727	1.719	0.008	1.000	3007575	2.21			1219	
298.90 > 99.00	1.727	1.719	0.008	1.000	1206867		2.49(1.25-3.74)		756	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.935	1.928	0.007	0.734	277045	2.46		105	286	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.935	1.929	0.006	1.121	611576	2.36			4001	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.966	1.960	0.006	1.000	2285997	2.49			787	
313.00 > 119.00	1.966	1.960	0.006	1.000	204490		11.18(5.03-15.10)		575	
D 7 13C2 PFHxA										
315.00 > 270.00	1.966	1.960	0.006	0.746	2260361	2.54		101	6584	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.995	1.983	0.012	1.156	2602809	2.22			4887	
349.00 > 99.00	1.995	1.983	0.012	1.156	963736		2.70(1.36-4.07)		2193	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.058	2.056	0.002	1.000	426424	2.34			338	

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	2.058	2.056	0.002	0.781	135414	2.40		96.0	463	
D 9 13C4 PFHpA										
367.00 > 322.00	2.288	2.285	0.003	0.868	2048646	2.49		99.7	6358	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.288	2.288	0.0	1.000	2201669	2.42			657	
363.00 > 169.00	2.288	2.288	0.0	1.000	895273		2.46(1.13-3.40)		1447	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.310	2.305	0.005	1.000	2363154	2.06			1563	
399.00 > 99.00	2.310	2.305	0.005	1.000	766956		3.08(1.50-4.49)		909	
D 11 18O2 PFHxS										
403.00 > 84.00	2.310	2.305	0.005	0.877	2383767	2.37		100	4429	
77 DONA										
377.00 > 251.00	2.332	2.329	0.003	0.775	6432154	2.50			7840	
377.00 > 85.00	2.332	2.329	0.003	0.775	3674076		1.75(0.85-2.54)		7005	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.612	2.609	0.003	0.991	412244	2.31		97.4	1364	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.612	2.611	0.001	1.000	662680	2.41			1972	
D 73 13C8 PFOA										
421.00 > 376.00	2.627	2.628	-0.001	0.997	3377422	2.42		98.9	8830	
* 62 13C2 PFOA										
415.00 > 370.00	2.635	2.636	-0.001		2068327	2.50			5071	
D 14 13C4 PFOA										
417.00 > 372.00	2.635	2.636	-0.001	1.000	1960000	2.43		97.3	4435	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.635	2.637	-0.002	1.000	2194110	2.46			245	
413.00 > 169.00	2.635	2.637	-0.002	1.000	1252118		1.75(0.84-2.52)		1530	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.643	2.646	-0.003	0.878	2134739	2.53			2576	
449.00 > 99.00	2.643	2.646	-0.003	0.878	550871		3.88(1.94-5.82)		1524	
D 72 13C8 PFOS										
507.00 > 99.00	3.002	3.008	-0.006	1.140	844429	2.38		99.5	2907	
D 19 13C5 PFNA										
468.00 > 423.00	3.010	3.009	0.001	1.142	1721379	2.57		103	3737	
20 Perfluorononanoic acid										
463.00 > 419.00	3.010	3.010	0.0	1.000	1717639	2.34			434	
463.00 > 169.00	3.010	3.010	0.0	1.000	433630		3.96(1.90-5.69)		1678	
D 18 13C4 PFOS										
503.00 > 80.00	3.010	3.010	0.0	1.142	1524185	2.31		96.6	2052	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.010	3.011	-0.001	1.000	1754122	2.38			757	
499.00 > 99.00	3.010	3.011	-0.001	1.000	377772		4.64(2.31-6.93)		841	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.221	3.225	-0.004	1.070	3043586	2.39			3023	
D 21 13C8 FOSA										
506.00 > 78.00	3.351	3.351	0.0	1.272	2276638	2.46		98.5	3692	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide	498.00 > 78.00	3.351	3.352	-0.001	1.000	2330424	2.56		2661	
D 26 M2-8:2 FTS	529.00 > 81.00	3.359	3.360	-0.002	1.275	443233	2.35	98.0	1538	
25 1H,1H,2H,2H-perfluorodecanesulfoni	527.00 > 507.00	3.359	3.362	-0.004	1.000	553053	2.31		1161	
68 Perfluorononanesulfonic acid	549.00 > 80.00	3.359	3.363	-0.005	1.116	1299777	2.55		3547	
	549.00 > 99.00	3.359	3.363	-0.005	1.116	471627	2.76(1.33-3.97)		1204	
24 Perfluorodecanoic acid	513.00 > 469.00	3.373	3.370	0.003	1.002	1429515	2.47		1103	
	513.00 > 169.00	3.373	3.370	0.003	1.002	270491	5.28(2.36-7.09)		666	
D 23 13C2 PFDA	515.00 > 470.00	3.366	3.372	-0.006	1.278	1408543	2.43	97.3	2643	
D 27 d3-NMeFOSAA	573.00 > 419.00	3.525	3.527	-0.002	1.338	723717	2.56	103	1785	
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	3.533	3.530	0.003	1.002	710815	2.62		585	
29 Perfluorodecanesulfonic acid	599.00 > 80.00	3.688	3.691	-0.003	1.225	1042894	2.55		1910	
	599.00 > 99.00	3.688	3.691	-0.003	1.225	356225	2.93(1.39-4.16)		1497	
D 32 d5-NEtFOSAA	589.00 > 419.00	3.696	3.698	-0.002	1.403	746967	2.48	99.3	731	
D 30 13C2 PFUnA	565.00 > 520.00	3.705	3.703	0.002	1.406	1115882	2.44	97.6	2558	
33 N-ethylperfluorooctanesulfonamidoa	584.00 > 419.00	3.705	3.703	0.002	1.002	694281	2.76		1259	
31 Perfluoroundecanoic acid	563.00 > 519.00	3.705	3.706	-0.001	1.000	914983	2.28		764	
	563.00 > 169.00	3.705	3.706	-0.001	1.000	238495	3.84(2.12-6.36)		889	
66 11-Chloroeicosafuoro-3-oxaundecan	631.00 > 451.00	3.865	3.866	-0.001	1.284	4707851	2.59		5163	
D 36 13C2 PFDaA	615.00 > 570.00	4.002	4.001	0.001	1.519	1223676	2.53	101	3174	
37 Perfluorododecanoic acid	613.00 > 569.00	4.002	4.001	0.001	1.000	1321711	2.50		940	
	613.00 > 169.00	4.002	4.001	0.001	1.000	339672	3.89(2.13-6.40)		1390	
74 1H,1H,2H,2H-perfluorododecanesulfo	627.00 > 607.00	4.002	4.005	-0.003	1.192	429971	2.55		2079	
75 Perfluorododecanesulfonic acid (PF	699.00 > 80.00	4.242	4.243	-0.001	1.409	475169	2.56		2191	
	699.00 > 99.00	4.242	4.243	-0.001	1.409	699557	0.68(0.00-0.00)		2372	
41 Perfluorotridecanoic acid	663.00 > 619.00	4.271	4.268	0.003	1.067	1264432	2.46		582	
	663.00 > 169.00	4.271	4.268	0.003	1.067	462471	2.73(1.25-3.76)		1778	
42 Perfluorotetradecanoic acid	713.00 > 169.00	4.513	4.508	0.005	1.000	384130	2.38		1405	
	713.00 > 219.00	4.503	4.508	-0.005	0.998	274242	1.40(0.71-2.13)		1409	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2 PFTeDA										
715.00 > 670.00	4.513	4.509	0.004	1.713	1466440	2.43		97.3	2625	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.926	4.926	0.0	1.870	2588317	2.43		97.1	3377	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.935	4.928	0.007	1.002	2404321	2.57			378	
813.00 > 169.00	4.935	4.928	0.007	1.002	466349		5.16(2.86-8.58)		2028	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.280	5.275	0.005	1.072	2836253	2.51			370	
913.00 > 169.00	5.280	5.275	0.005	1.072	387022		7.33(3.83-11.48)		1459	

Reagents:

LCPFCIC_FULL_00016

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05\ICAL_013.d

Injection Date: 05-Nov-2018 16:36:51

Instrument ID: A8_N

Lims ID: ICV FULL

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 17

Worklist Smp#: 10

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

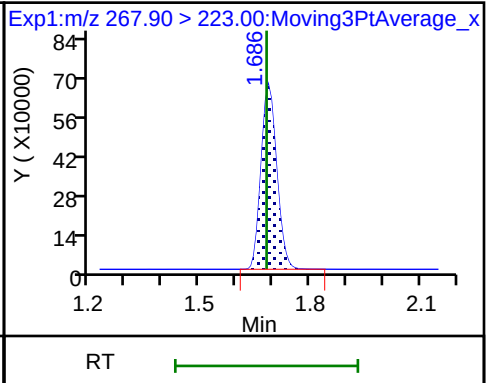
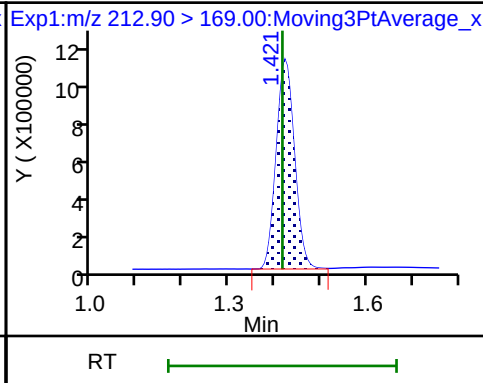
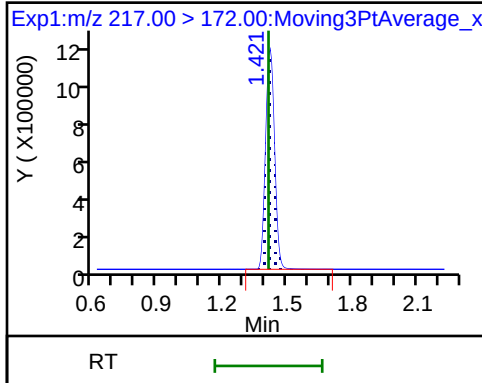
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

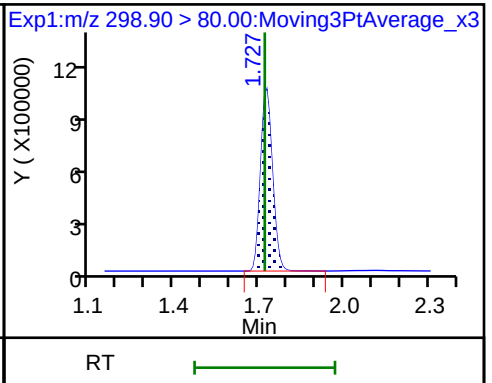
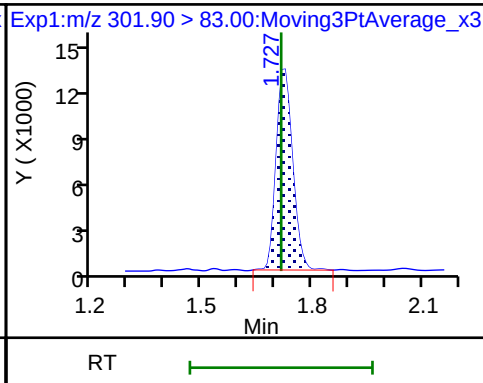
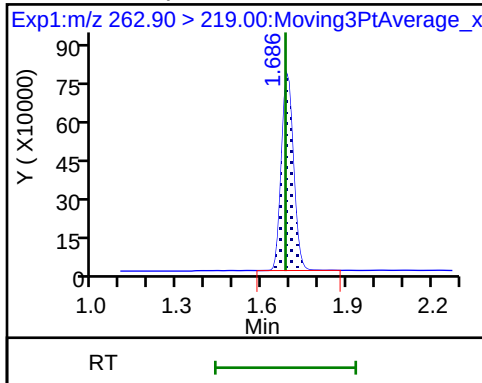
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

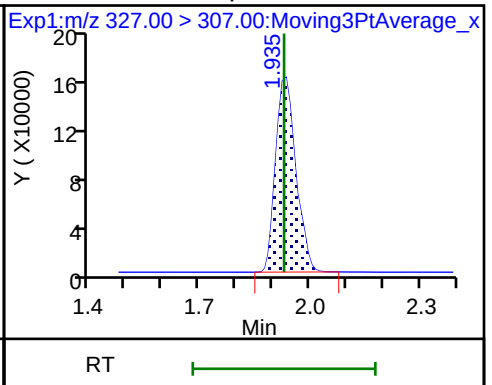
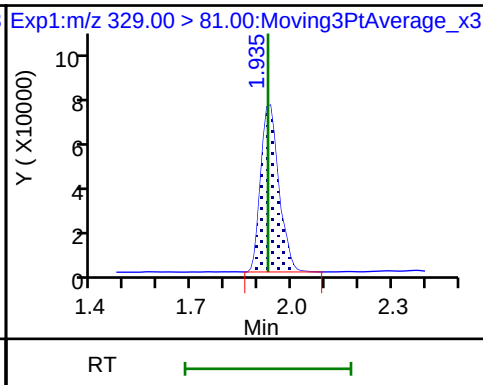
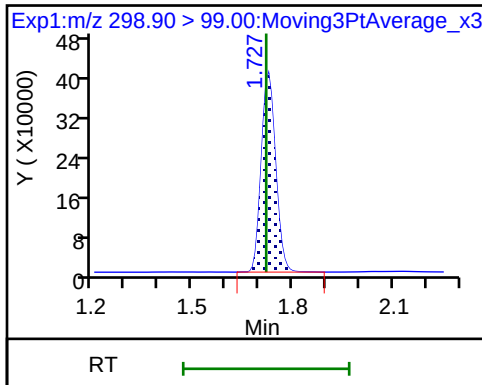
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

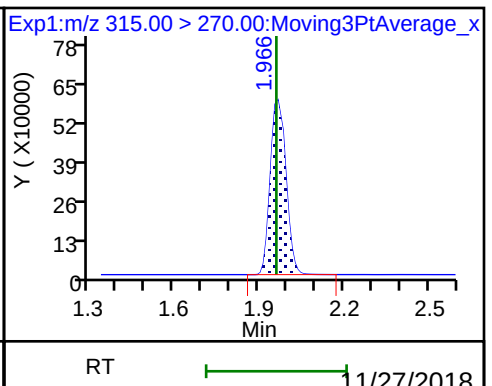
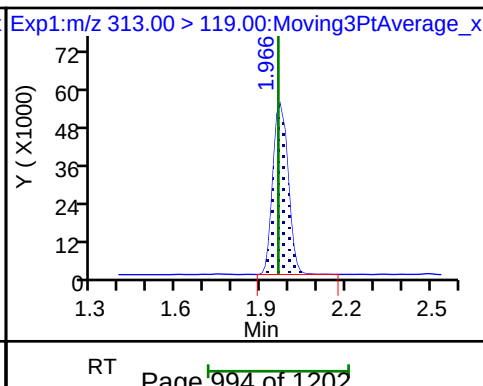
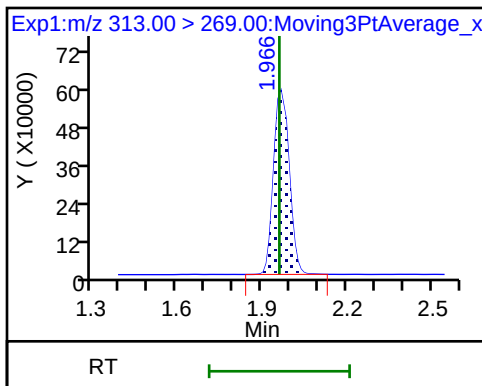
61 1H,1H,2H,2H-perfluorohexanesulfoni

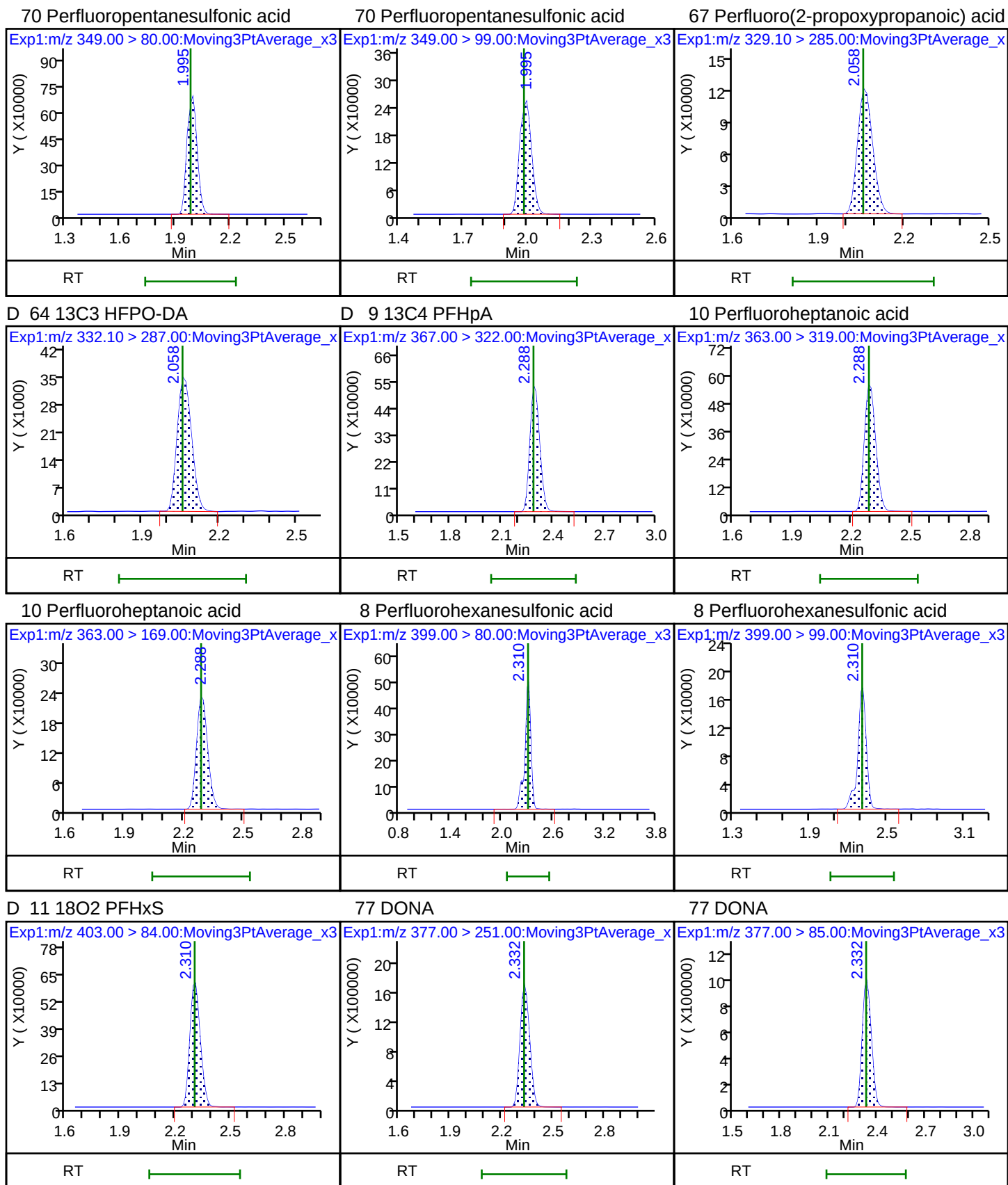


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

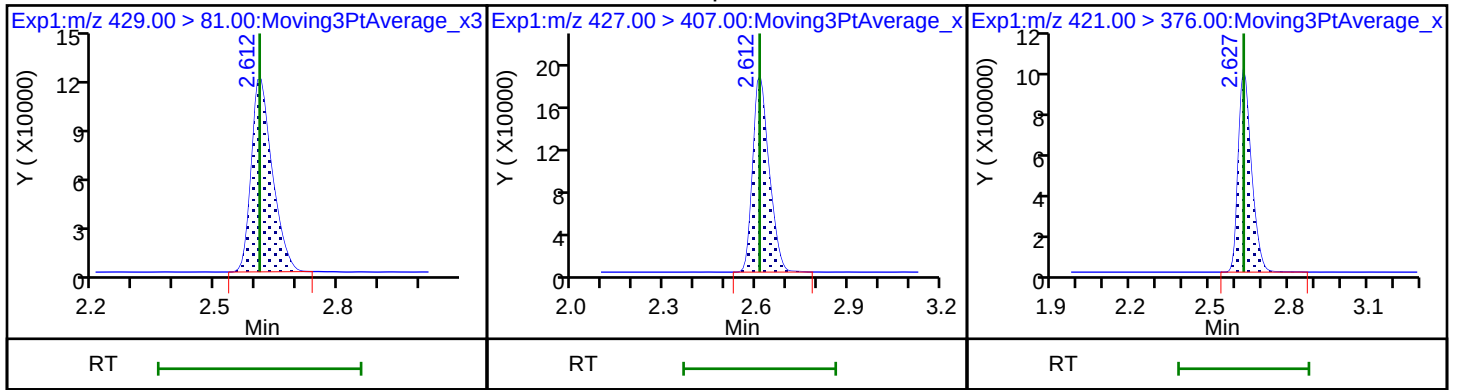
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

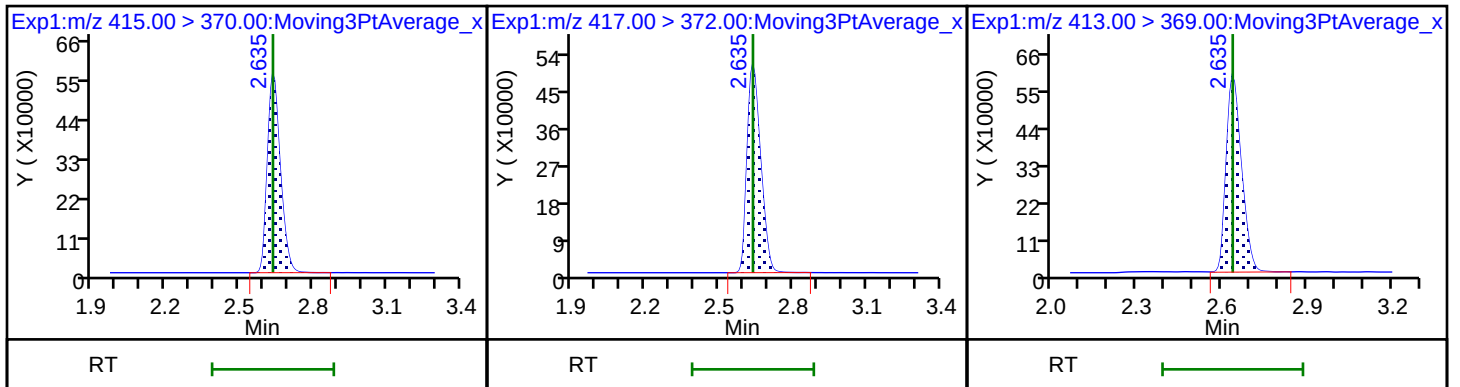
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



* 62 13C2 PFOA

D 14 13C4 PFOA

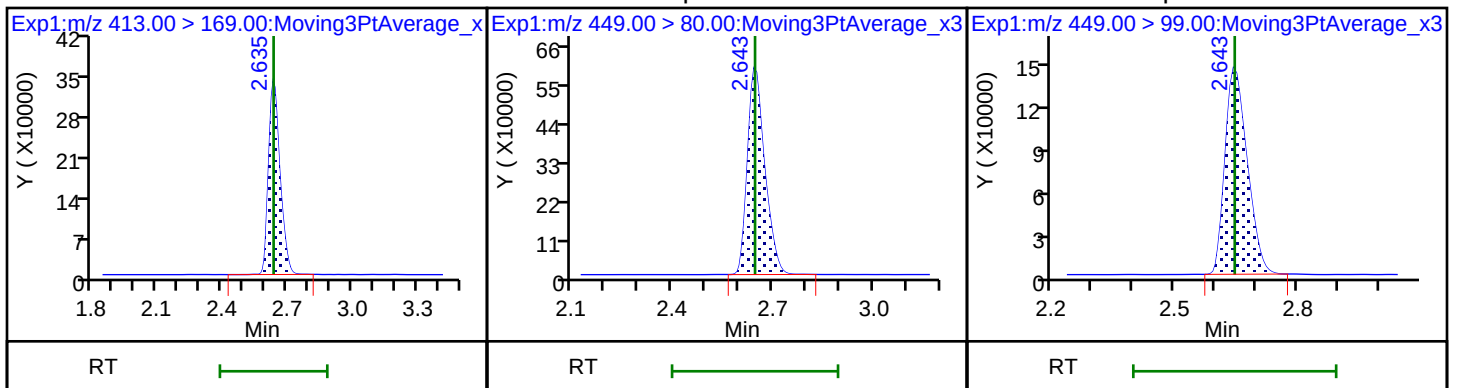
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

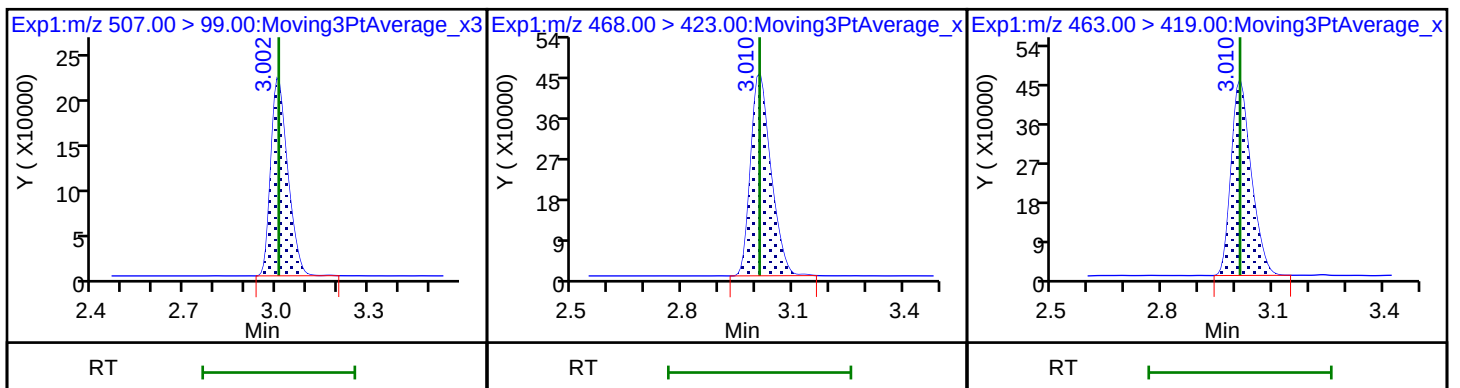
16 Perfluoroheptanesulfonic acid

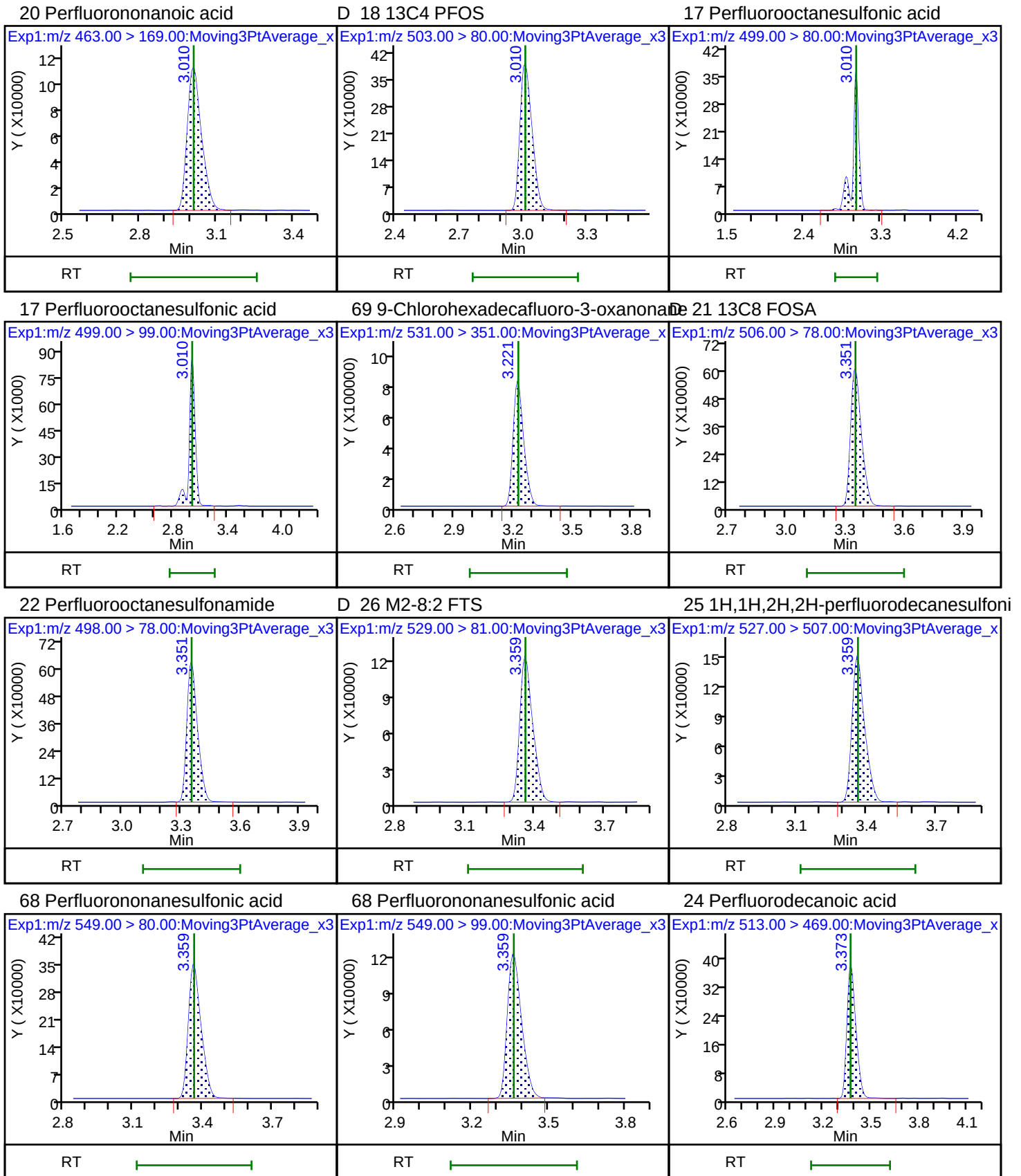


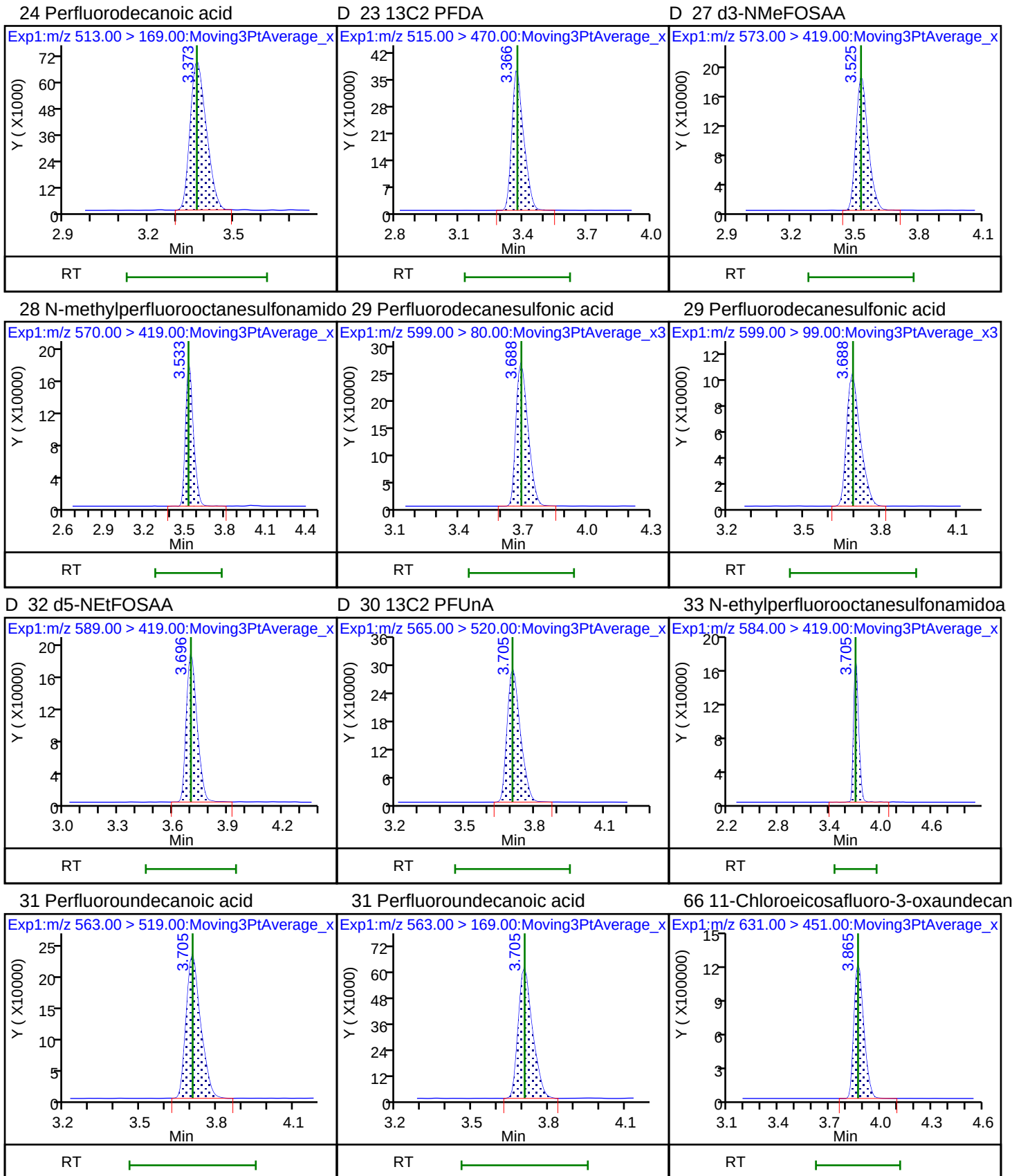
D 72 13C8 PFOS

D 19 13C5 PFNA

20 Perfluorononanoic acid



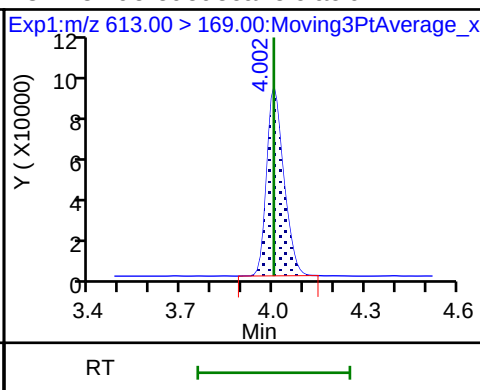
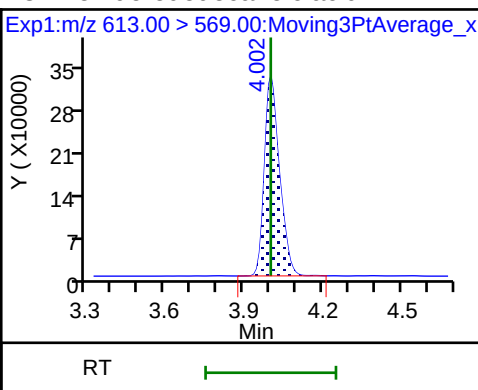
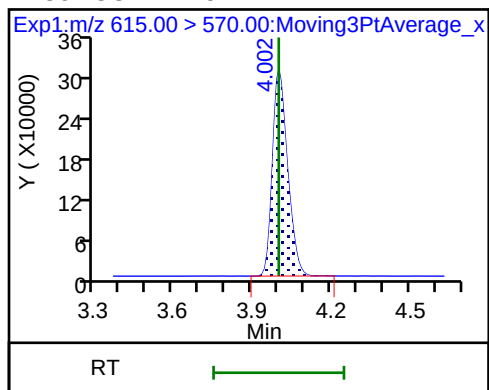




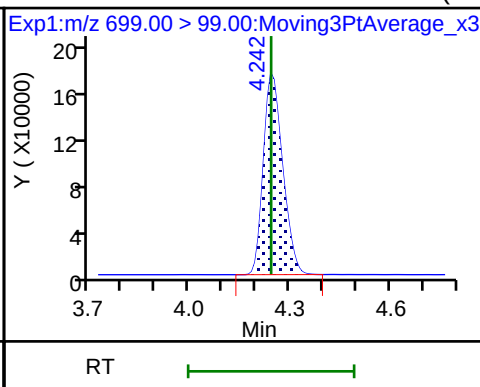
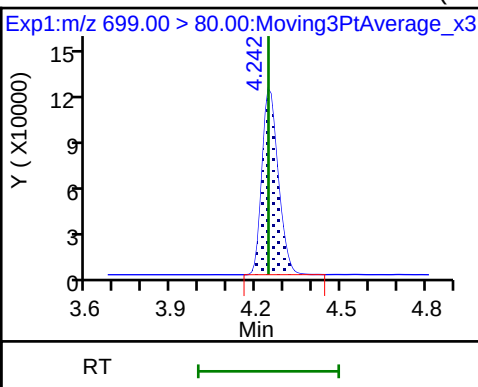
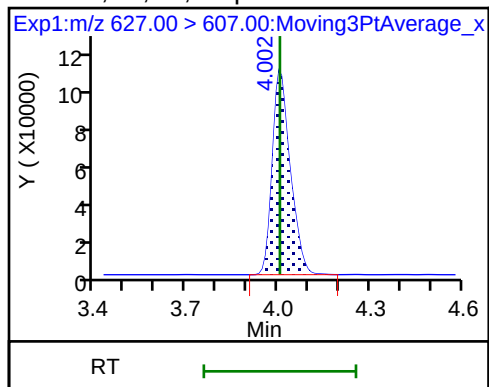
D 36 13C2 PFDaA

37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



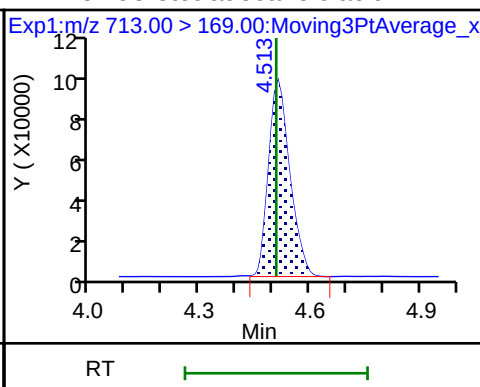
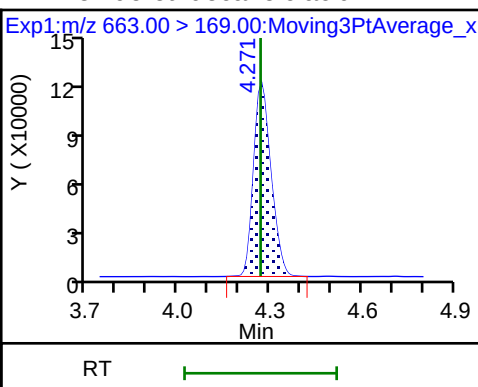
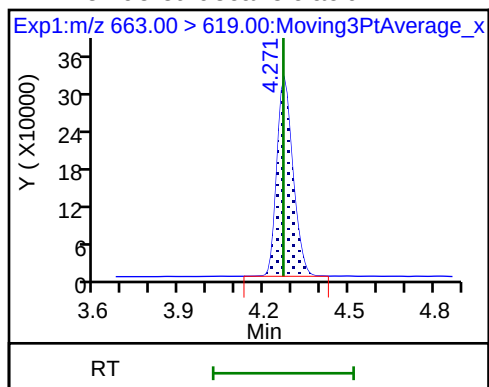
74 1H,1H,2H,2H-perfluorododecanesulfo75 Perfluorododecanesulfonic acid (PF 75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

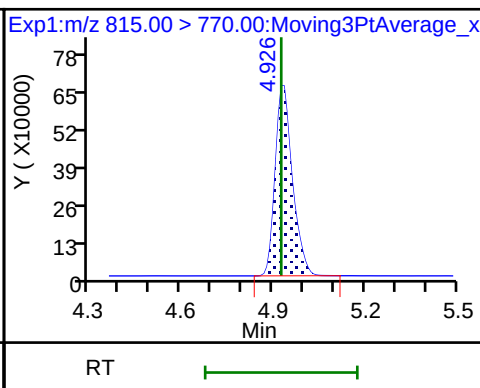
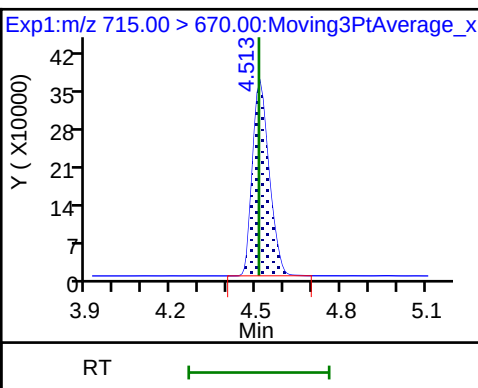
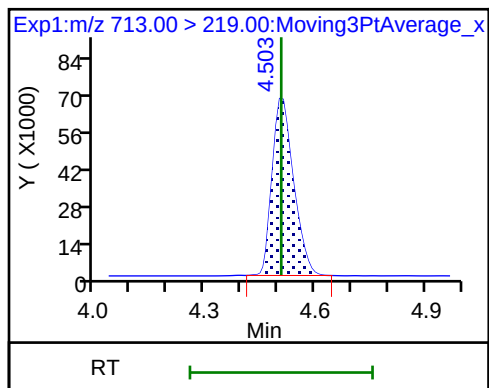
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

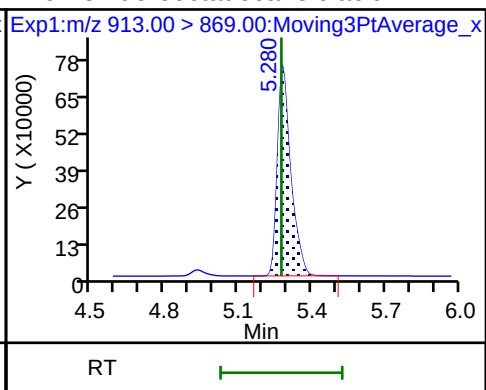
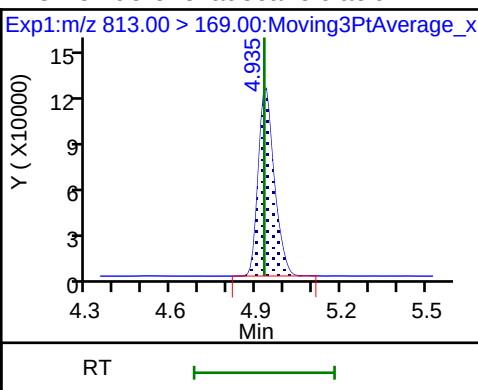
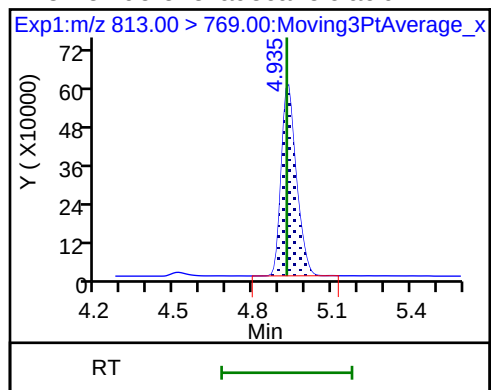
D 44 13C2 PFHxDA



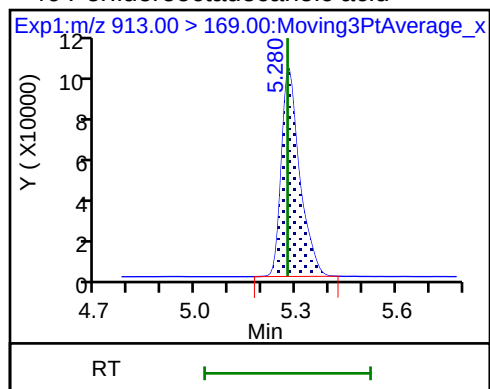
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCVL 320-258995/2 Calibration Date: 11/14/2018 00:07

Instrument ID: A8_N Calib Start Date: 11/05/2018 15:37

GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 11/05/2018 16:22

Lab File ID: 2018.11.13LLAAA_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9476	1.038		0.0548	0.0500	9.6	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.121	1.121		0.0500	0.0500	-0.0	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.41	74.99		0.0423	0.0442	-4.4	50.0
4:2 FTS	AveID	14.89	14.12		0.443	0.467	-5.2	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.017	1.018		0.0500	0.0500	0.0	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	67.54	64.56		0.0448	0.0469	-4.4	50.0
HFPO-DA (GenX)	AveID	3.364	3.375		0.0502	0.0500	0.3	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.110	1.105		0.0498	0.0500	-0.5	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.141	1.125		0.0449	0.0455	-1.4	50.0
DONA	AveID	4.033	4.003		0.0467	0.0471	-0.8	50.0
6:2 FTS	AveID	1.581	1.638		0.491	0.474	3.6	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.138	1.207		0.0531	0.0501	6.1	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.325	1.407		0.0505	0.0476	6.2	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.154	1.371		0.0551	0.0464	18.7	50.0
Perfluorononanoic acid (PFNA)	AveID	1.067	0.9903		0.0464	0.0500	-7.2	50.0
F-53B Major	AveID	1.999	1.832		0.0427	0.0466	-8.3	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.998	0.9417		0.0472	0.0500	-5.7	50.0
8:2 FTS	AveID	1.293	1.269		0.470	0.479	-1.8	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.8001	0.7419		0.0445	0.0480	-7.3	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.026	0.9906		0.0483	0.0500	-3.4	50.0
N-methylperfluorooctanesulfo namidoacetic acid (NMeFOSAA)	AveID	0.9358	0.9352		0.500	0.500	-0.0	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6424	0.5800		0.0435	0.0482	-9.7	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8979	1.147		0.0639	0.0500	27.7	50.0
N-ethylperfluorooctanesulfon amidoacetic acid (NEtFOSAA)	AveID	0.8407	0.7923		0.471	0.500	-5.8	50.0
F-53B Minor	AveID	2.855	2.806		0.0463	0.0471	-1.7	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.081	1.118		0.0517	0.0500	3.4	50.0
10:2 FTS	AveID	0.9098	0.8619		0.0457	0.0482	-5.3	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2908	0.3618		0.0602	0.0484	24.4	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	1.051	1.070		0.0509	0.0500	1.7	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2757	0.2841		0.0515	0.0500	3.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		1.301		0.0507	0.0500	1.4	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCVL 320-258995/2 Calibration Date: 11/14/2018 00:07
 Instrument ID: A8_N Calib Start Date: 11/05/2018 15:37
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 11/05/2018 16:22
 Lab File ID: 2018.11.13LLAAA_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.093	1.121		0.0513	0.0500	2.5	50.0
13C4 PFBA	Ave	1.485	1.488		2.50	2.50	0.2	50.0
13C5-PFPeA DNU	Ave	0.9800	0.9874		2.52	2.50	0.7	50.0
13C3 PFBS	Ave	0.0207	0.0208		2.33	2.33	0.3	50.0
M2-4:2 FTS	Ave	0.1361	0.1155		1.98	2.34	-15.1	50.0
13C2 PFHxA	Ave	1.077	1.062		2.47	2.50	-1.4	50.0
13C3 HFPO-DA	Ave	0.0682	0.0700		2.57	2.50	2.7	50.0
13C4 PFHpA	Ave	0.9937	0.9702		2.44	2.50	-2.4	50.0
18O2 PFHxS	Ave	1.216	1.240		2.41	2.37	1.9	50.0
M2-6:2 FTS	Ave	0.2154	0.1699		1.87	2.38	-21.1	50.0
13C8 PFOA	Ave	1.687	1.981		2.87	2.45	17.4	50.0
13C4 PFOA	Ave	0.9738	1.015		2.61	2.50	4.3	50.0
13C4 PFOS	Ave	0.7981	0.7828		2.34	2.39	-1.9	50.0
13C8 PFOS	Ave	0.4292	0.4082		2.27	2.39	-4.9	50.0
13C5 PFNA	Ave	0.8097	0.7839		2.42	2.50	-3.2	50.0
13C8 FOSA	Ave	1.118	1.041		2.33	2.50	-6.9	50.0
M2-8:2 FTS	Ave	0.2282	0.1736		1.82	2.40	-24.0	50.0
13C2 PFDA	Ave	0.6999	0.6588		2.35	2.50	-5.9	50.0
d3-NMeFOSAA	Ave	0.3413	0.3063		2.24	2.50	-10.2	50.0
d5-NEtFOSAA	Ave	0.3637	0.3605		2.48	2.50	-0.9	50.0
13C2 PFUnA	Ave	0.5526	0.5388		2.44	2.50	-2.5	50.0
13C2 PFDoA	Ave	0.5857	0.5470		2.33	2.50	-6.6	50.0
13C2 PFTeDA	Ave	0.7283	0.6484		2.23	2.50	-11.0	50.0
13C2 PFHxDA	Ave	1.288	1.139		2.21	2.50	-11.6	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67652.b\2018.11.13LLAAA_005.d
 Lims ID: CCVL
 Client ID:
 Sample Type: CCVL
 Inject. Date: 14-Nov-2018 00:07:40 ALS Bottle#: 21 Worklist Smp#: 2
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: CCVL
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub38
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67652.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 14-Nov-2018 11:03:07 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0313

First Level Reviewer: yuj

Date: 14-Nov-2018 09:41:07

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	1.403	1.401	0.002	1.000	69301	0.0548		110	3.6	
D 1 13C4 PFBA										
217.00 > 172.00	1.403	1.407	-0.004	0.540	3337184	2.50		100	5733	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.668	1.662	0.006	1.000	49638	0.0500		100.0	4.0	
D 3 13C5 PFPeA										
267.90 > 223.00	1.668	1.672	-0.004	0.641	2214591	2.52		101	4229	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.700	1.702	-0.002	1.000	61806	0.0423		95.6	14.2	
298.90 > 99.00	1.700	1.702	-0.002	1.000	27067		2.28(1.25-3.74)		9.6	
D 47 13C3 PFBS										
301.90 > 83.00	1.700	1.704	-0.004	0.654	43353	2.33		100	193	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.907	1.901	0.006	1.122	122970	0.4428		94.8	1853	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.907	1.914	-0.007	0.733	242056	1.98		84.9	238	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.939	1.933	0.006	1.000	48474	0.0500		100	7.3	
313.00 > 119.00	1.939	1.933	0.006	1.000	3780		12.82(5.03-15.10)		4.6	
D 7 13C2 PFHxA										
315.00 > 270.00	1.939	1.945	-0.006	0.745	2381621	2.47		98.6	5769	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.960	1.954	0.006	1.153	56462	0.0448		95.6	191	
349.00 > 99.00	1.960	1.954	0.006	1.153	21075		2.68(1.36-4.07)		25.0	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.033	2.027	0.006	1.000	10597	0.0502		100	6.5	

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	2.033	2.039	-0.006	0.782	156980	2.57		103	627	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.258	2.254	0.004	1.000	48086	0.0498		99.5	9.2	
363.00 > 169.00	2.258	2.254	0.004	1.000	19053		2.52(1.13-3.40)		20.1	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.280	2.265	0.015	1.000	56919	0.0449		98.6	47.0	
399.00 > 99.00	2.280	2.265	0.015	1.000	23226		2.45(1.50-4.49)		16.9	
D 9 13C4 PFHpA										
367.00 > 322.00	2.258	2.268	-0.010	0.868	2176120	2.44		97.6	4935	
D 11 18O2 PFHxS										
403.00 > 84.00	2.280	2.279	0.001	0.877	2630815	2.41		102	4220	
77 DONA										
377.00 > 251.00	2.303	2.299	0.004	0.777	132411	0.0467		99.2	264	
377.00 > 85.00	2.303	2.299	0.004	0.777	69648		1.90(0.85-2.54)		103	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.581	2.572	0.009	1.000	118344	0.4911		104	154	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.581	2.581	0.0	0.993	361970	1.87		78.9	798	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.601	2.598	0.003	1.000	55022	0.0531		106	6.3	M
413.00 > 169.00	2.601	2.598	0.003	1.000	28319		1.94(0.84-2.52)		26.8	M
* 62 13C2 PFOA										
415.00 > 370.00	2.601	2.598	0.003		2242955	2.50			4476	
D 14 13C4 PFOA										
417.00 > 372.00	2.601	2.600	0.001	1.000	2277492	2.61		104	4349	
D 73 13C8 PFOA										
421.00 > 376.00	2.595	2.600	-0.005	0.998	4351044	2.87		117	7199	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.607	2.604	0.003	0.879	47027	0.0505		106	198	
449.00 > 99.00	2.607	2.604	0.003	0.879	13915		3.38(1.94-5.82)		27.1	
D 19 13C5 PFNA										
468.00 > 423.00	2.972	2.964	0.008	1.143	1758323	2.42		96.8	2713	
20 Perfluorononanoic acid										
463.00 > 419.00	2.972	2.968	0.004	1.000	34824	0.0464		92.8	11.8	
463.00 > 169.00	2.958	2.968	-0.010	0.995	8643		4.03(1.90-5.69)		37.3	
D 18 13C4 PFOS										
503.00 > 80.00	2.965	2.971	-0.006	1.140	1678526	2.34		98.1	2440	
D 72 13C8 PFOS										
507.00 > 99.00	2.965	2.971	-0.006	1.140	875312	2.27		95.1	2606	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.965	2.975	-0.010	1.000	44664	0.0551		119	47.5	
499.00 > 99.00	2.972	2.975	-0.003	1.002	11495		3.89(2.31-6.93)		16.4	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.189	3.184	0.005	1.075	59970	0.0427		91.7	181	
D 21 13C8 FOSA										
506.00 > 78.00	3.315	3.313	0.002	1.274	2335508	2.33		93.1	2873	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.315	3.317	-0.002	1.000	43987	0.0472		94.3	186	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.322	3.317	0.005	1.000	94665	0.4703		98.2	470	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.322	3.320	0.002	1.277	372928	1.82		76.0	954	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.322	3.324	-0.002	1.120	25010	0.0445		92.7	158	
549.00 > 99.00	3.315	3.324	-0.009	1.118	10059		2.49(1.33-3.97)		31.4	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.329	3.331	-0.002	1.000	29272	0.0483		96.6	16.6	
513.00 > 169.00	3.329	3.331	-0.002	1.000	4425		6.62(2.36-7.09)		17.1	
D 23 13C2 PFDA										
515.00 > 470.00	3.329	3.334	-0.005	1.280	1477552	2.35		94.1	4559	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.493	3.488	0.005	1.002	128507	0.4997		99.9	122	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.485	3.491	-0.006	1.340	687070	2.24		89.8	1259	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.644	3.645	-0.001	1.229	19632	0.0435		90.3	113	
599.00 > 99.00	3.650	3.645	0.005	1.231	5708		3.44(1.39-4.16)		21.9	
D 30 13C2 PFUnA										
565.00 > 520.00	3.664	3.661	0.003	1.409	1208436	2.44		97.5	2944	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.657	3.661	-0.004	1.406	808684	2.48		99.1	1060	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.664	3.665	-0.001	1.002	128144	0.4712		94.2	610	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.657	3.665	-0.008	0.998	27721	0.0639		128	18.9	
563.00 > 169.00	3.657	3.665	-0.008	0.998	4594		6.03(2.12-6.36)		21.0	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.828	3.822	0.006	1.291	92827	0.0463		98.3	238	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.957	3.959	-0.002	1.000	27439	0.0517		103	13.7	
613.00 > 169.00	3.957	3.959	-0.002	1.000	8397		3.27(2.13-6.40)		45.9	
D 36 13C2 PFDaA										
615.00 > 570.00	3.957	3.961	-0.004	1.521	1226869	2.33		93.4	3177	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.975	3.968	0.007	1.197	6469	0.0457		94.7	66.9	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.203	4.205	-0.002	1.417	12299	0.0602		124	71.4	
699.00 > 99.00	4.203	4.205	-0.002	1.417	15411		0.80(0.00-0.00)		84.2	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.212	4.234	-0.022	1.065	26246	0.0509		102	16.1	
663.00 > 169.00	4.222	4.234	-0.012	1.067	9803		2.68(1.25-3.76)		63.3	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.464	4.466	-0.002	1.000	8262	0.0515		103	63.4	
713.00 > 219.00	4.464	4.466	-0.002	1.000	5242		1.58(0.71-2.13)		42.2	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2 PFTeDA										
715.00 > 670.00	4.464	4.468	-0.004	1.716	1454294	2.23		89.0	2458	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.889	4.888	0.001	1.000	66472	0.0507		101	22.9	
813.00 > 169.00	4.889	4.888	0.001	1.000	12510		5.31(2.86-8.58)		111	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.889	4.890	-0.001	1.880	2553920	2.21		88.4	3865	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.238	5.237	0.001	1.071	57274	0.0513		103	12.9	
913.00 > 169.00	5.238	5.237	0.001	1.071	7489		7.65(3.83-11.48)		75.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL2_00010

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67652.b\2018.11.13LLAAA_005.d

Injection Date: 14-Nov-2018 00:07:40

Instrument ID: A8_N

Lims ID: CCVL

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 21

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

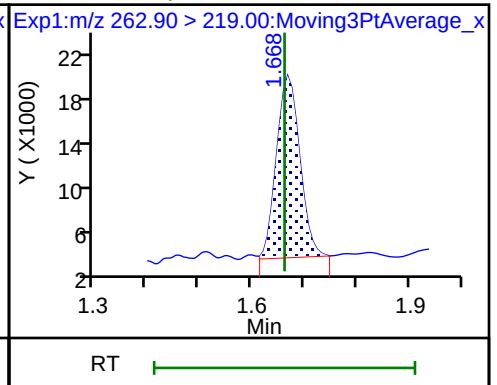
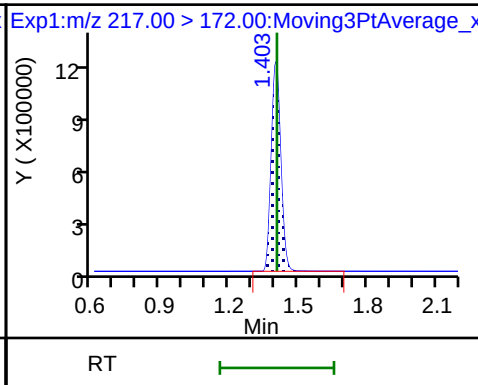
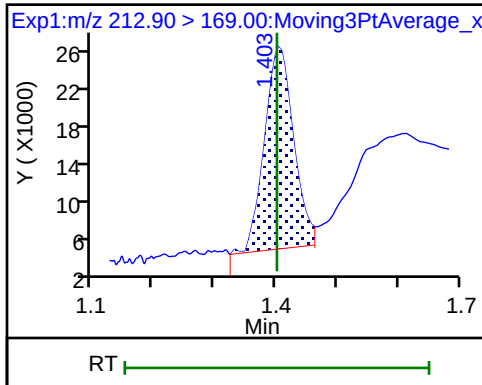
Method: A8_N

Limit Group: LC PFC ICAL

2 Perfluorobutanoic acid

D 1 13C4 PFBA

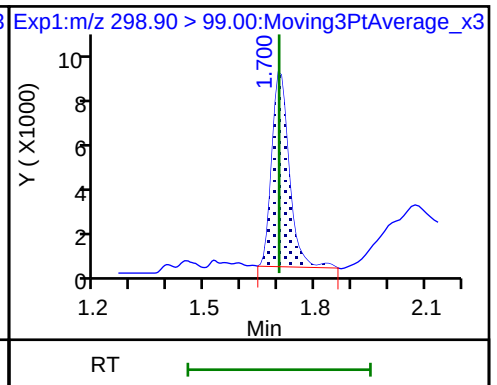
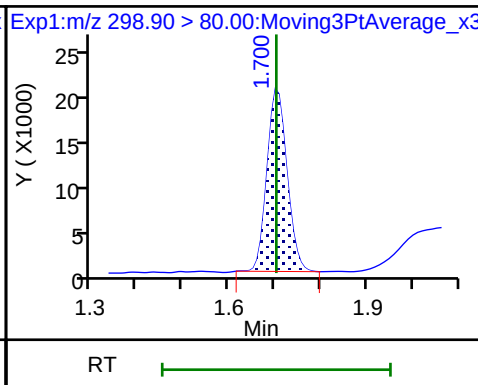
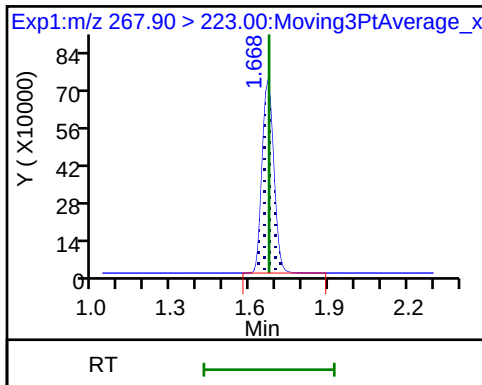
4 Perfluoropentanoic acid



D 3 13C5 PFPeA

5 Perfluorobutanesulfonic acid

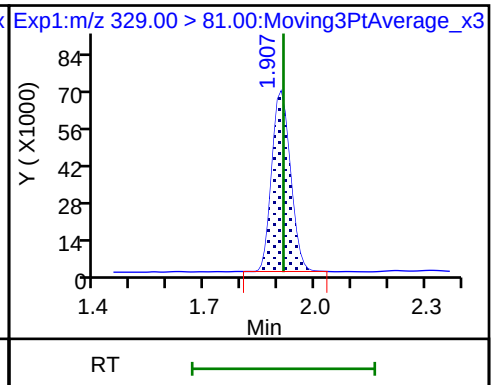
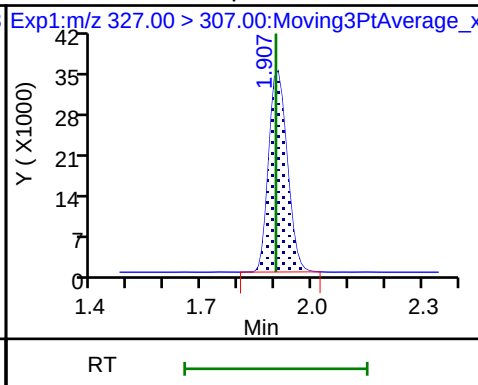
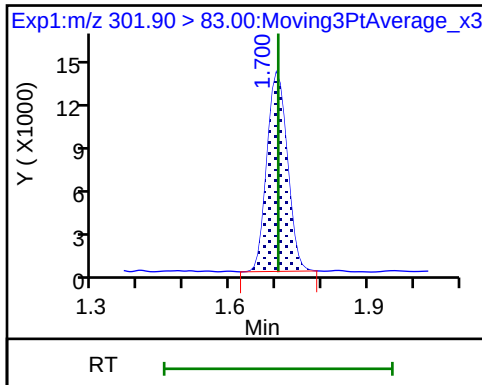
5 Perfluorobutanesulfonic acid



D 47 13C3 PFBS

61 1H,1H,2H,2H-perfluorohexanesulfonate

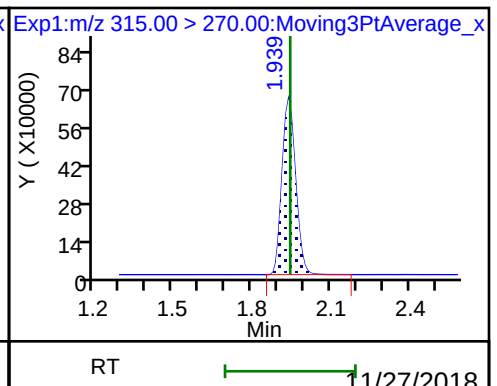
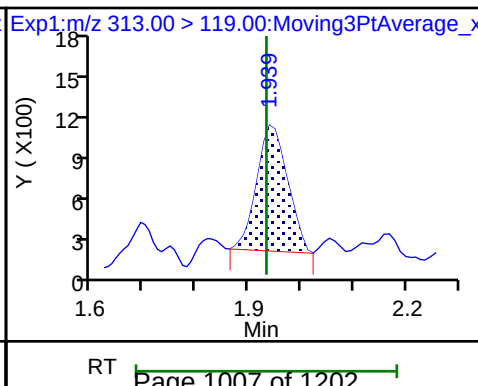
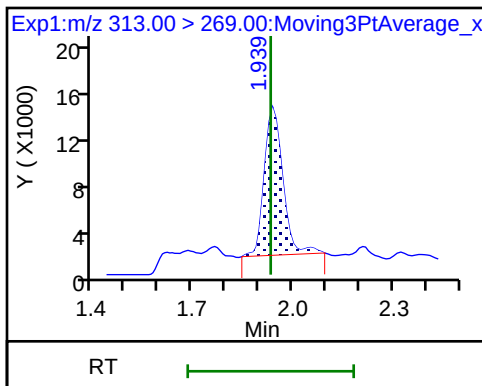
D 60 M2-4:2 FTS

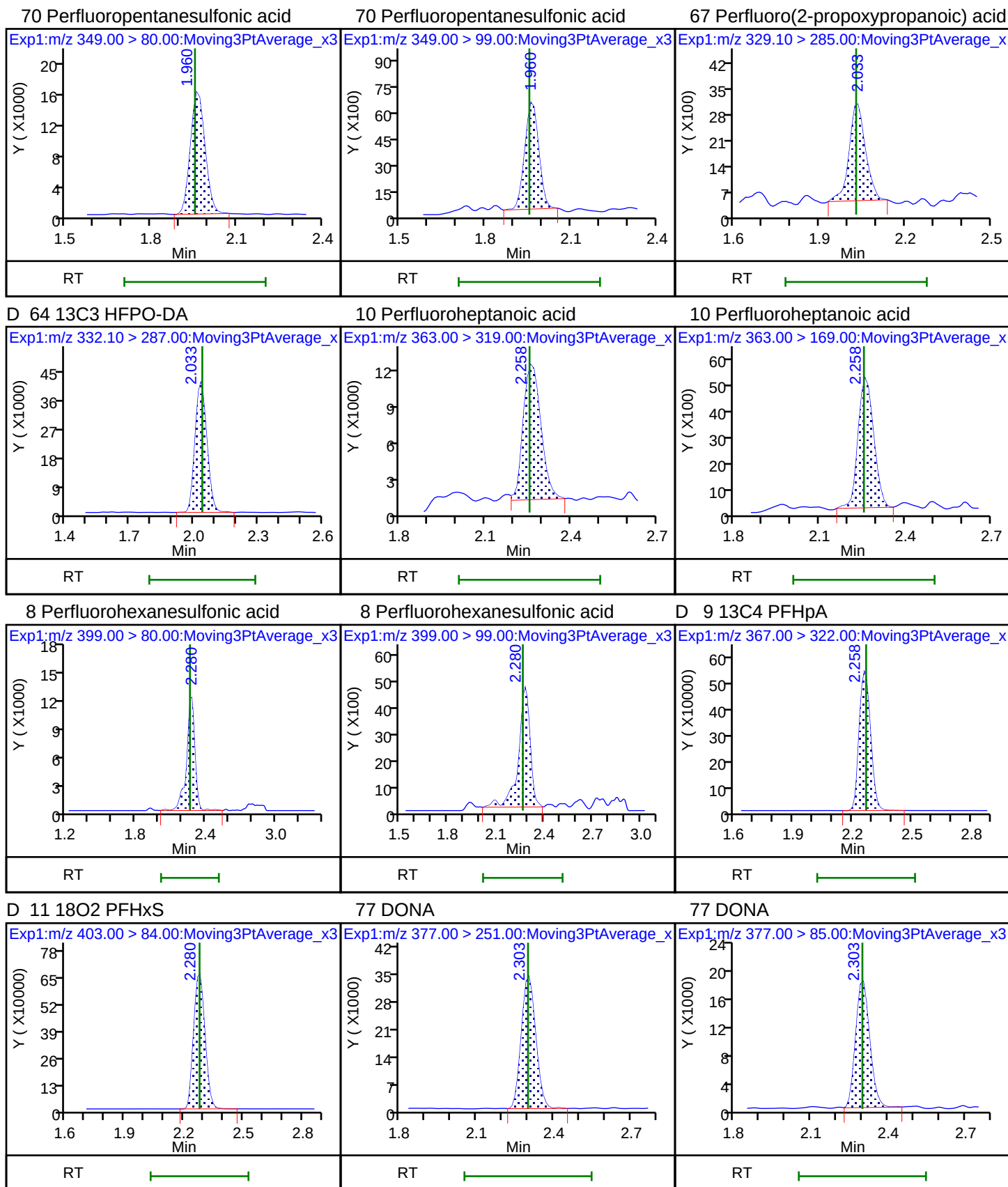


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

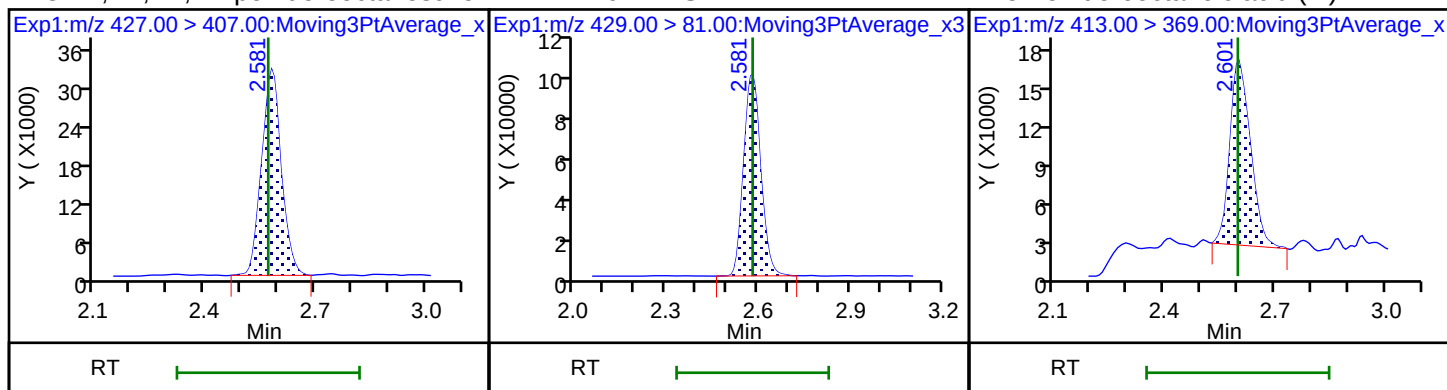
D 7 13C2 PFHxA





13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2 FTS

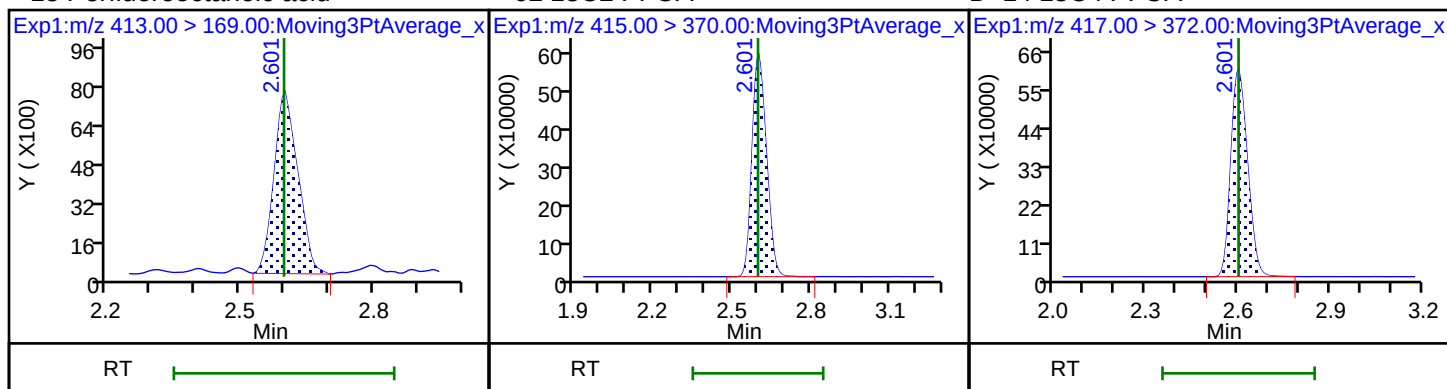
15 Perfluorooctanoic acid (M)



15 Perfluorooctanoic acid

* 62 13C2 PFOA

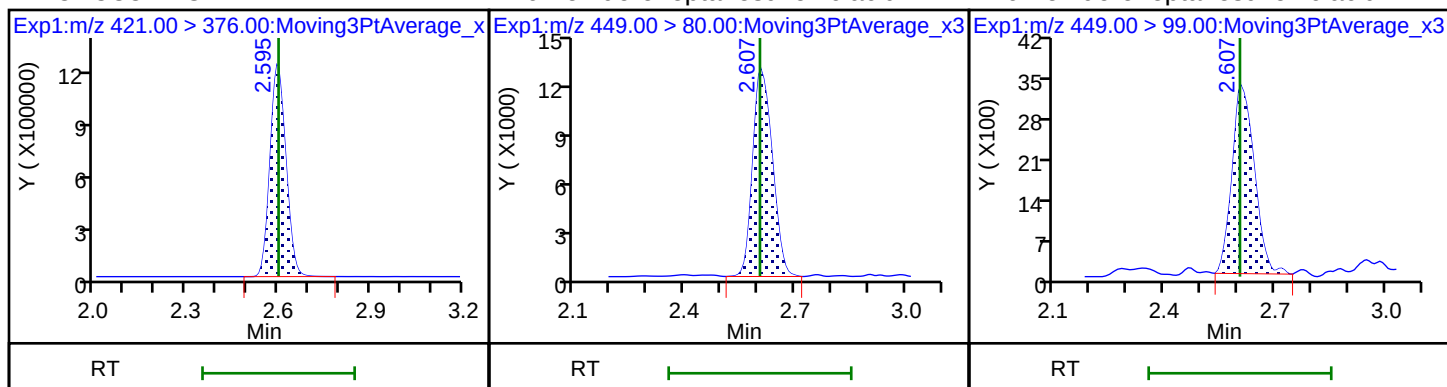
D 14 13C4 PFOA



D 73 13C8 PFOA

16 Perfluoroheptanesulfonic acid

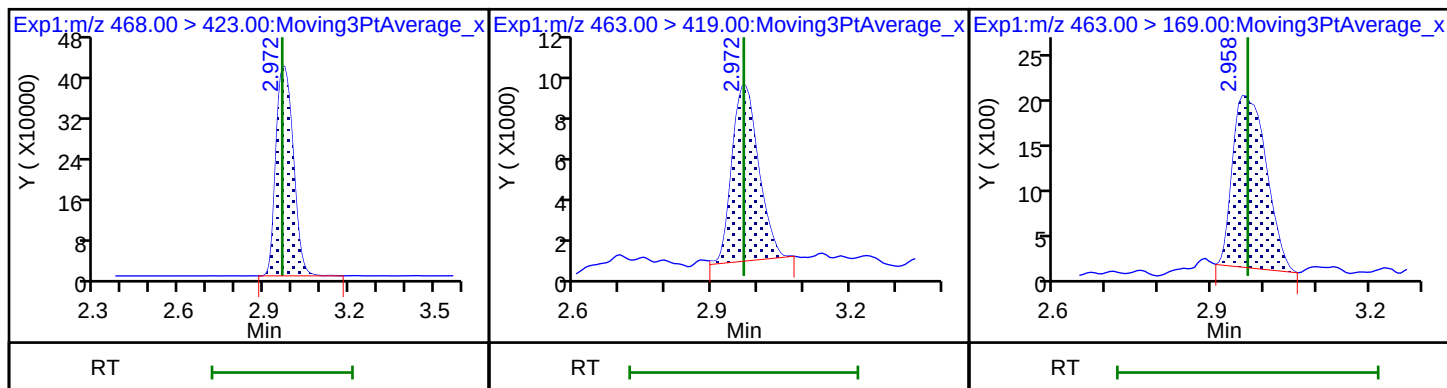
16 Perfluoroheptanesulfonic acid



D 19 13C5 PFNA

20 Perfluorononanoic acid

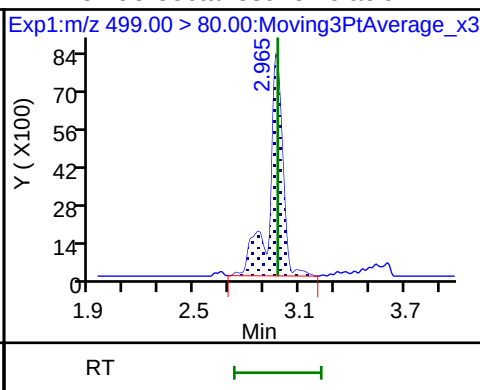
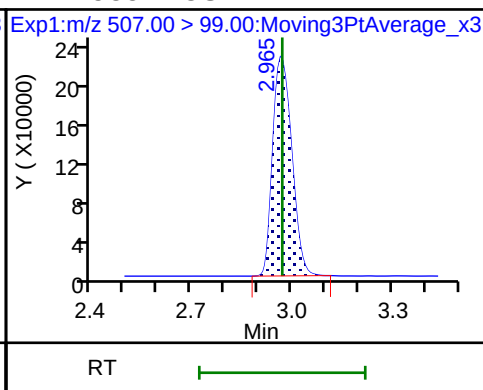
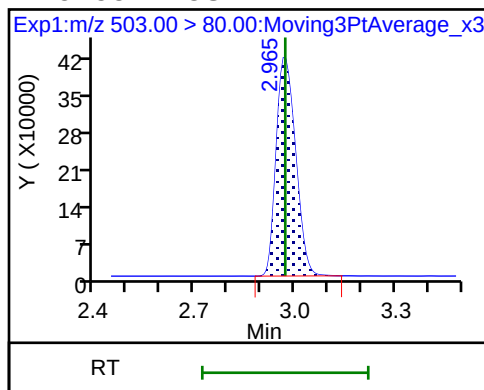
20 Perfluorononanoic acid



D 18 13C4 PFOS

D 72 13C8 PFOS

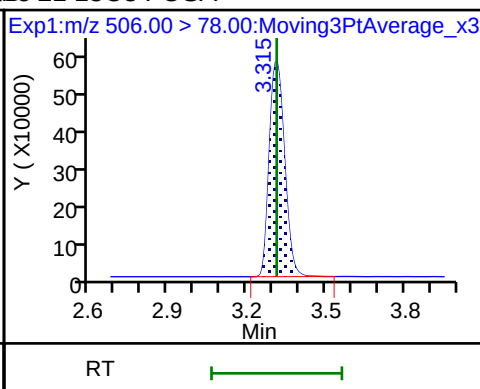
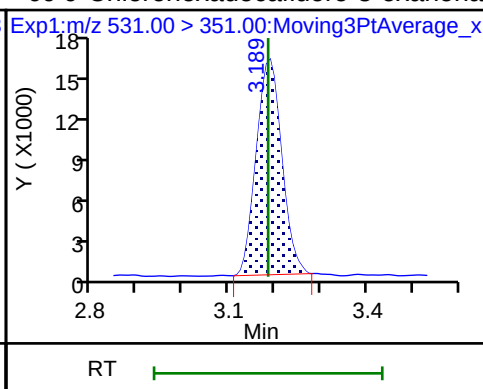
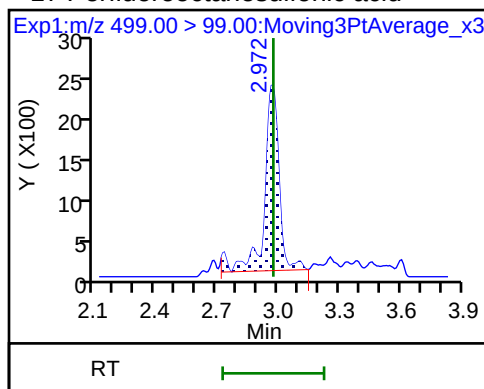
17 Perfluorooctanesulfonic acid



17 Perfluorooctanesulfonic acid

69 9-Chlorohexadecafluoro-3-oxanonane

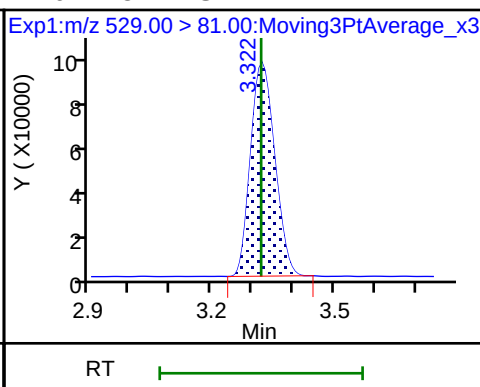
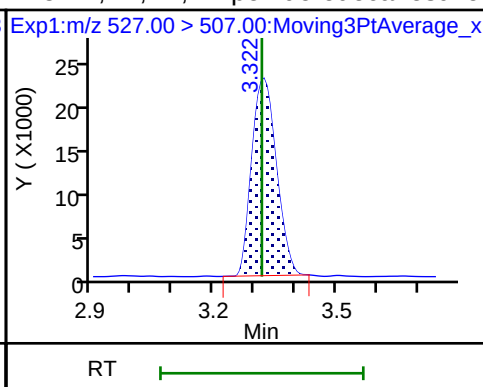
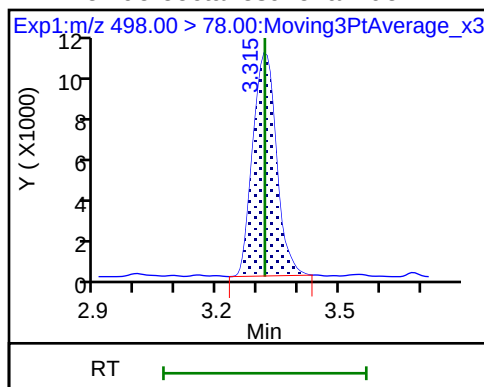
De 21 13C8 FOSA



22 Perfluorooctanesulfonamide

25 1H,1H,2H,2H-perfluorodecanesulfonamide

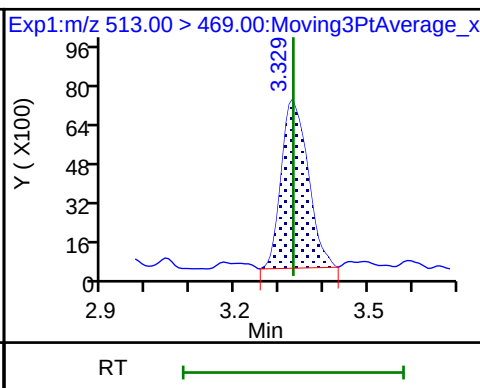
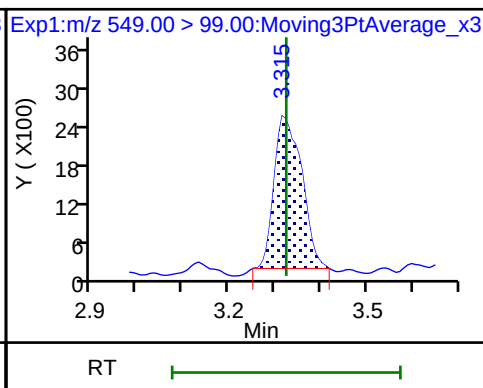
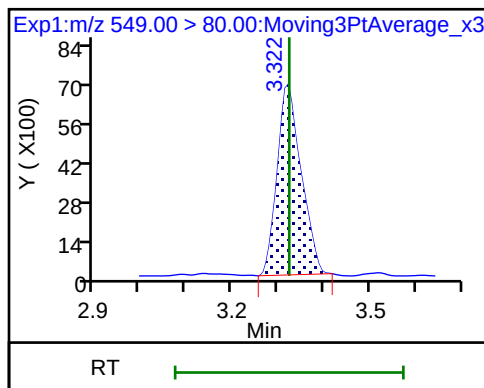
D 26 M2-8:2 FTS

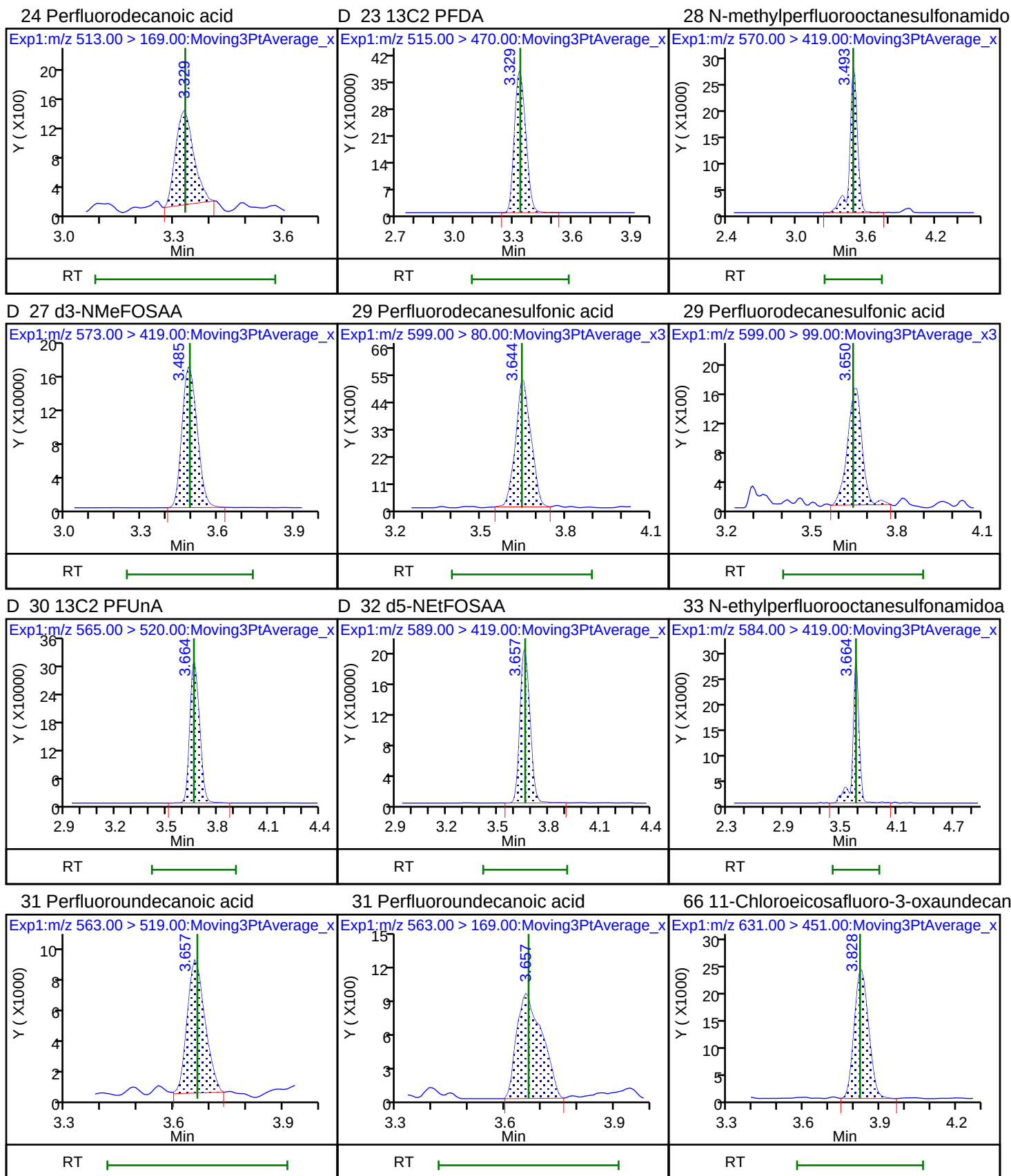


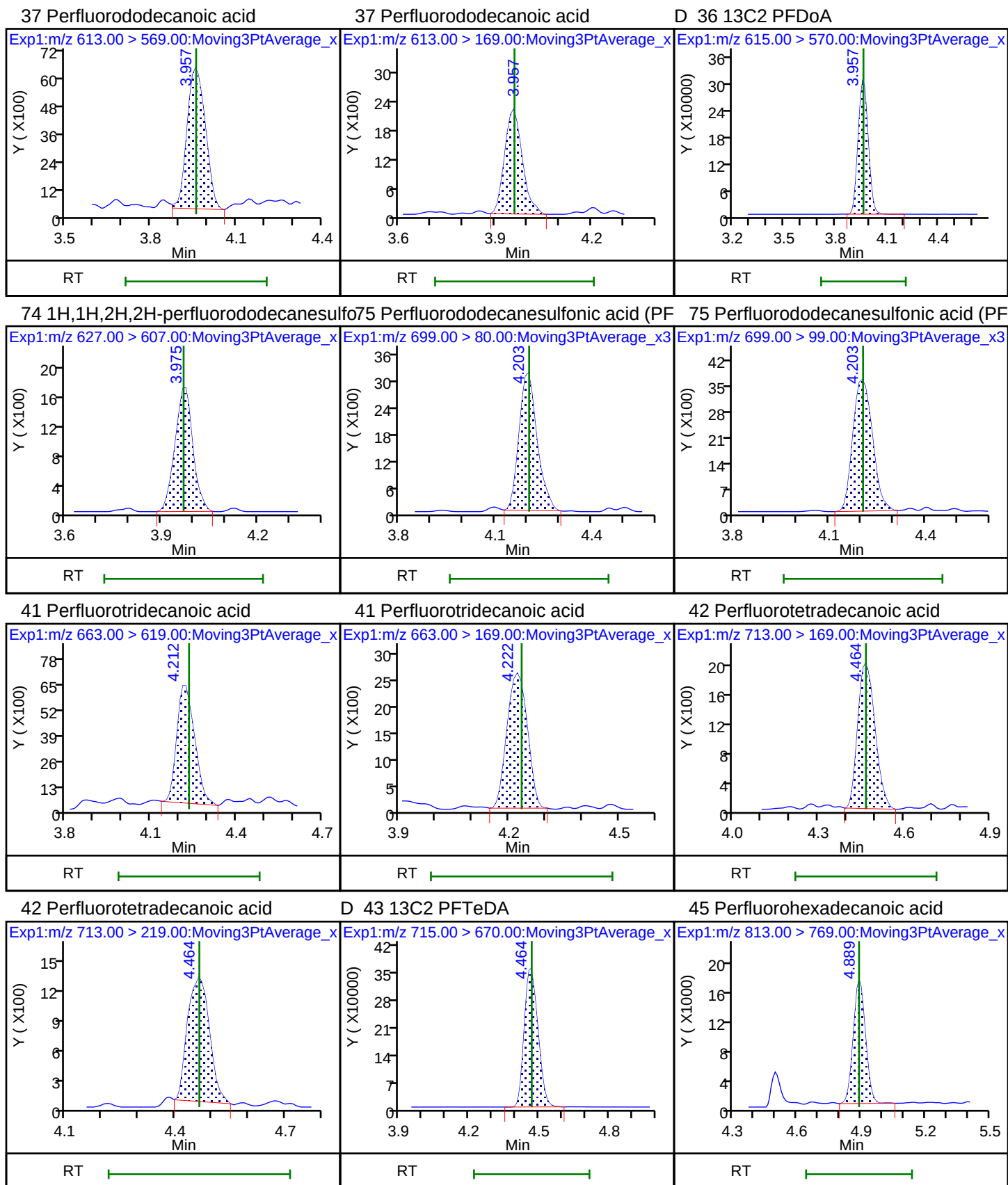
68 Perfluorononanesulfonic acid

68 Perfluorononanesulfonic acid

24 Perfluorodecanoic acid



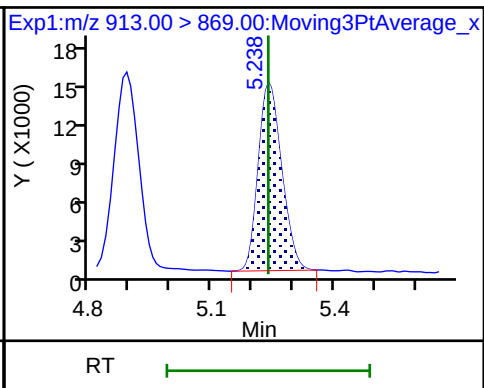
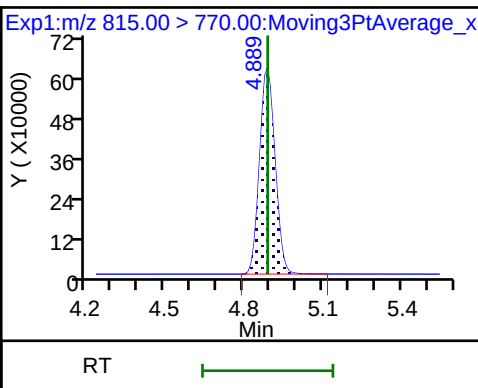
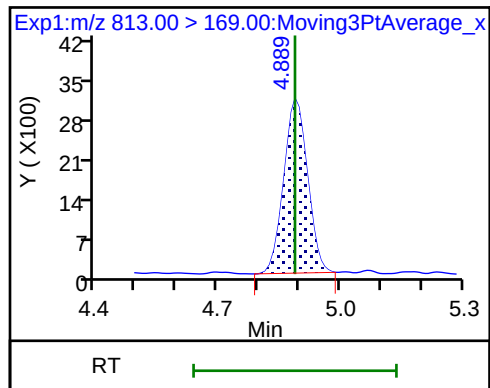




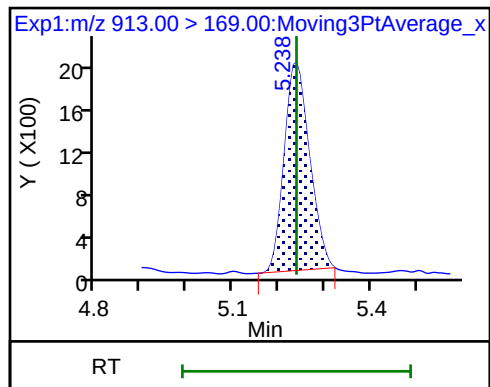
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67652.b\2018.11.13LLAAA_005.d

Injection Date: 14-Nov-2018 00:07:40

Instrument ID: A8_N

Lims ID: CCVL

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#:

21

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: A8_N

Limit Group: LC PFC ICAL

Column:

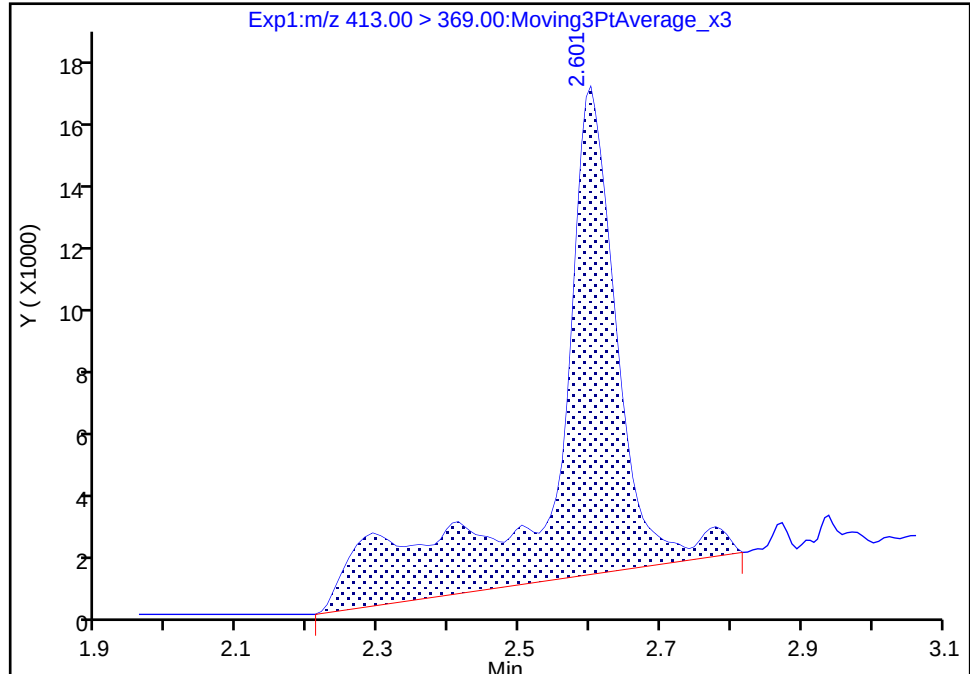
Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

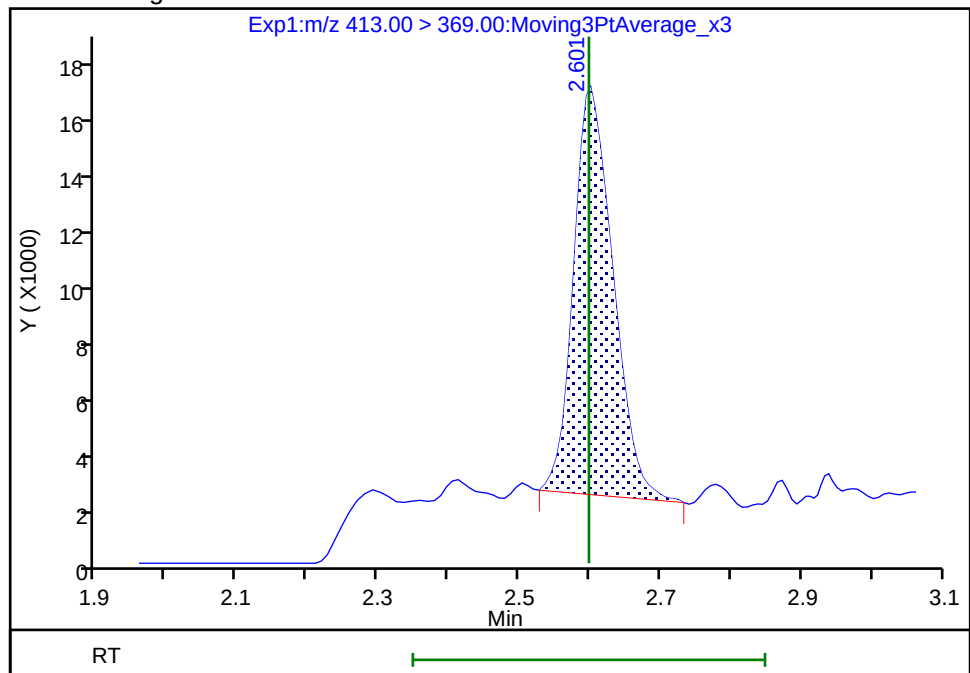
RT: 2.60
Area: 101298
Amount: 0.097742
Amount Units: ng/ml

Processing Integration Results



RT: 2.60
Area: 55022
Amount: 0.053090
Amount Units: ng/ml

Manual Integration Results



Reviewer: yuj, 14-Nov-2018 09:40:42

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCV 320-258995/3 Calibration Date: 11/14/2018 00:15

Instrument ID: A8_N Calib Start Date: 11/05/2018 15:37

GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 11/05/2018 16:22

Lab File ID: 2018.11.13LLAAA_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9476	0.9223		0.973	1.00	-2.7	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.121	1.028		0.917	1.00	-8.3	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.41	77.71		0.876	0.884	-0.9	50.0
4:2 FTS	AveID	14.89	13.18		0.827	0.934	-11.5	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.017	0.9591		0.943	1.00	-5.7	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	67.54	64.79		0.900	0.938	-4.1	50.0
HFPO-DA (GenX)	AveID	3.364	2.904		0.863	1.00	-13.7	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.110	1.144		1.03	1.00	3.1	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.141	1.056		0.842	0.910	-7.4	40.0
DONA	AveID	4.033	4.204		0.982	0.942	4.2	50.0
6:2 FTS	AveID	1.581	1.659		0.995	0.948	5.0	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.138	1.144		1.01	1.00	0.5	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.325	1.345		0.967	0.952	1.6	50.0
Perfluorononanoic acid (PFNA)	AveID	1.067	1.058		0.992	1.00	-0.8	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.154	1.130		0.908	0.928	-2.2	40.0
F-53B Major	AveID	1.999	1.810		0.844	0.932	-9.5	50.0
8:2 FTS	AveID	1.293	1.285		0.952	0.958	-0.6	40.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.998	1.003		1.01	1.00	0.5	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.8001	0.7527		0.903	0.960	-5.9	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.026	0.9390		0.915	1.00	-8.5	40.0
N-methylperfluorooctanesulfo namidoacetic acid (NMeFOSAA)	AveID	0.9358	0.9076		0.970	1.00	-3.0	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6424	0.6578		0.987	0.964	2.4	50.0
N-ethylperfluorooctanesulfon amidoacetic acid (NEtFOSAA)	AveID	0.8407	0.8012		0.953	1.00	-4.7	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8979	0.9781		1.09	1.00	8.9	40.0
F-53B Minor	AveID	2.855	2.868		0.946	0.942	0.5	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.081	1.061		0.981	1.00	-1.9	40.0
10:2 FTS	AveID	0.9098	0.9308		0.986	0.964	2.3	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2908	0.2826		0.941	0.968	-2.8	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	1.051	1.035		0.985	1.00	-1.5	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2757	0.2520		0.914	1.00	-8.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9070		0.992	1.00	-0.8	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCV 320-258995/3 Calibration Date: 11/14/2018 00:15
 Instrument ID: A8_N Calib Start Date: 11/05/2018 15:37
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 11/05/2018 16:22
 Lab File ID: 2018.11.13LLAAA_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.093	1.099		1.00	1.00	0.5	50.0
13C4 PFBA	Ave	1.485	1.424		2.40	2.50	-4.1	50.0
13C5-PFPeA DNU	Ave	0.9800	1.018		2.60	2.50	3.8	50.0
13C3 PFBS	Ave	0.0207	0.0210		2.36	2.33	1.3	50.0
M2-4:2 FTS	Ave	0.1361	0.1226		2.10	2.34	-9.9	50.0
13C2 PFHxA	Ave	1.077	1.041		2.42	2.50	-3.4	50.0
13C3 HFPO-DA	Ave	0.0682	0.0735		2.69	2.50	7.8	50.0
13C4 PFHpA	Ave	0.9937	0.9742		2.45	2.50	-2.0	50.0
18O2 PFHxS	Ave	1.216	1.200		2.33	2.37	-1.3	50.0
M2-6:2 FTS	Ave	0.2154	0.1632		1.80	2.38	-24.2	40.0
13C8 PFOA	Ave	1.687	1.866		2.71	2.45	10.6	50.0
13C4 PFOA	Ave	0.9738	0.9367		2.40	2.50	-3.8	50.0
13C4 PFOS	Ave	0.7981	0.7708		2.31	2.39	-3.4	50.0
13C5 PFNA	Ave	0.8097	0.7474		2.31	2.50	-7.7	50.0
13C8 PFOS	Ave	0.4292	0.4013		2.23	2.39	-6.5	50.0
13C8 FOSA	Ave	1.118	0.9788		2.19	2.50	-12.4	50.0
M2-8:2 FTS	Ave	0.2282	0.1732		1.82	2.40	-24.1	40.0
13C2 PFDA	Ave	0.6999	0.6545		2.34	2.50	-6.5	50.0
d3-NMeFOSAA	Ave	0.3413	0.3039		2.23	2.50	-11.0	50.0
d5-NEtFOSAA	Ave	0.3637	0.3476		2.39	2.50	-4.4	50.0
13C2 PFUnA	Ave	0.5526	0.5240		2.37	2.50	-5.2	50.0
13C2 PFDoA	Ave	0.5857	0.5291		2.26	2.50	-9.7	50.0
13C2 PFTeDA	Ave	0.7283	0.6195		2.13	2.50	-14.9	50.0
13C2 PFHxDA	Ave	1.288	1.077		2.09	2.50	-16.4	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67652.b\2018.11.13LLAAA_006.d
 Lims ID: CCV L4
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 14-Nov-2018 00:15:06 ALS Bottle#: 13 Worklist Smp#: 3
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L4
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub37
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67652.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 14-Nov-2018 11:03:13 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0313

First Level Reviewer: yuj

Date: 14-Nov-2018 09:42:41

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	1.401	1.401	0.0	1.000	1325754	0.9733		97.3	72.1	
D 1 13C4 PFBA										
217.00 > 172.00	1.401	1.407	-0.006	0.539	3593549	2.40		95.9	5827	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.662	1.662	0.0	1.000	1056405	0.9173		91.7	87.1	
D 3 13C5 PFPeA										
267.90 > 223.00	1.662	1.672	-0.010	0.640	2568664	2.60		104	5830	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.702	1.702	0.0	1.000	1456641	0.8761		99.1	315	
298.90 > 99.00	1.702	1.702	0.0	1.000	618623		2.35(1.25-3.74)		203	
D 47 13C3 PFBS										
301.90 > 83.00	1.702	1.704	-0.002	0.655	49301	2.36		101	198	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.901	1.901	0.0	1.117	261073	0.8266		88.5	2394	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.901	1.914	-0.013	0.732	289105	2.10		90.1	268	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.933	1.933	0.0	1.000	1007676	0.9432		94.3	151	
313.00 > 119.00	1.933	1.933	0.0	1.000	96180		10.48(5.03-15.10)		165	
D 7 13C2 PFHxA										
315.00 > 270.00	1.933	1.945	-0.012	0.744	2626684	2.42		96.6	5620	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.954	1.954	0.0	1.148	1288769	0.8998		95.9	3287	
349.00 > 99.00	1.954	1.954	0.0	1.148	473504		2.72(1.36-4.07)		630	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.027	2.027	0.0	1.000	215403	0.8634		86.3	132	

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	2.027	2.039	-0.012	0.780	185430	2.69		108	617	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.254	2.254	0.0	1.000	1125659	1.03		103	205	
363.00 > 169.00	2.254	2.254	0.0	1.000	447807		2.51(1.13-3.40)		306	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.265	2.265	0.0	1.000	1164337	0.8423		92.6	781	
399.00 > 99.00	2.265	2.265	0.0	1.000	391894		2.97(1.50-4.49)		249	
D 9 13C4 PFHpA										
367.00 > 322.00	2.254	2.268	-0.014	0.868	2458924	2.45		98.0	5255	
D 11 18O2 PFHxS										
403.00 > 84.00	2.265	2.279	-0.014	0.872	2866308	2.33		98.7	4402	
77 DONA										
377.00 > 251.00	2.299	2.299	0.0	0.775	3081675	0.9819		104	4174	
377.00 > 85.00	2.299	2.299	0.0	0.775	1812636		1.70(0.85-2.54)		1593	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.572	2.572	0.0	0.997	259171	0.99		105	383	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.579	2.581	-0.002	0.993	391297	1.80		75.8	861	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.598	2.598	0.0	1.000	1082680	1.01		101	128	
413.00 > 169.00	2.598	2.598	0.0	1.000	590678		1.83(0.84-2.52)		550	
* 62 13C2 PFOA										
415.00 > 370.00	2.598	2.598	0.0		2523993	2.50			4649	
D 14 13C4 PFOA										
417.00 > 372.00	2.598	2.600	-0.002	1.000	2364189	2.40		96.2	5351	
D 73 13C8 PFOA										
421.00 > 376.00	2.593	2.600	-0.007	0.998	4611004	2.71		111	5897	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.604	2.604	0.0	0.877	996694	0.9669		102	2262	
449.00 > 99.00	2.604	2.604	0.0	0.877	280033		3.56(1.94-5.82)		541	
D 19 13C5 PFNA										
468.00 > 423.00	2.968	2.964	0.004	1.142	1886388	2.31		92.3	3942	
20 Perfluorononanoic acid										
463.00 > 419.00	2.968	2.968	0.0	1.000	798407	0.99		99.2	213	
463.00 > 169.00	2.968	2.968	0.0	1.000	199273		4.01(1.90-5.69)		660	
D 18 13C4 PFOS										
503.00 > 80.00	2.968	2.971	-0.003	1.142	1859765	2.31		96.6	2776	
D 72 13C8 PFOS										
507.00 > 99.00	2.968	2.971	-0.003	1.142	968332	2.23		93.5	3054	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.975	2.975	0.0	1.002	815662	0.9080		97.8	558	
499.00 > 99.00	2.968	2.975	-0.007	1.000	187720		4.35(2.31-6.93)		282	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.184	3.184	0.0	1.073	1312554	0.8439		90.5	1834	
D 21 13C8 FOSA										
506.00 > 78.00	3.309	3.313	-0.004	1.274	2470472	2.19		87.6	1910	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide	498.00 > 78.00	3.317	3.317	0.0	1.002	991455	1.01	101	1749	
25 1H,1H,2H,2H-perfluorodecanesulfoni	527.00 > 507.00	3.317	3.317	0.0	0.998	215241	0.9521	99.4	1269	
D 26 M2-8:2 FTS	529.00 > 81.00	3.324	3.320	0.004	1.279	418854	1.82	75.9	956	
68 Perfluorononanesulfonic acid	549.00 > 80.00	3.324	3.324	0.0	1.120	562301	0.9031	94.1	1565	
	549.00 > 99.00	3.317	3.324	-0.007	1.117	199059	2.82(1.33-3.97)		378	
24 Perfluorodecanoic acid	513.00 > 469.00	3.331	3.331	0.0	1.000	620471	0.9154	91.5	384	
	513.00 > 169.00	3.331	3.331	0.0	1.000	121118	5.12(2.36-7.09)		210	
D 23 13C2 PFDA	515.00 > 470.00	3.331	3.334	-0.003	1.282	1651932	2.34	93.5	3727	
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	3.488	3.488	0.0	1.000	278421	0.9699	97.0	299	
D 27 d3-NMeFOSAA	573.00 > 419.00	3.488	3.491	-0.003	1.342	766947	2.23	89.0	1220	
29 Perfluorodecanesulfonic acid	599.00 > 80.00	3.645	3.645	0.0	1.228	493415	0.9871	102	2219	
	599.00 > 99.00	3.651	3.645	0.006	1.230	153696	3.21(1.39-4.16)		594	
D 30 13C2 PFUnA	565.00 > 520.00	3.665	3.661	0.004	1.410	1322659	2.37	94.8	2590	
D 32 d5-NEtFOSAA	589.00 > 419.00	3.658	3.661	-0.003	1.408	877250	2.39	95.6	1025	
33 N-ethylperfluorooctanesulfonamidoa	584.00 > 419.00	3.665	3.665	0.0	1.002	281134	0.9530	95.3	669	
31 Perfluoroundecanoic acid	563.00 > 519.00	3.665	3.665	0.0	1.000	517472	1.09	109	320	
	563.00 > 169.00	3.665	3.665	0.0	1.000	114634	4.51(2.12-6.36)		510	
66 11-Chloroeicosafuoro-3-oxaundecan	631.00 > 451.00	3.822	3.822	0.0	1.288	2102277	0.9463	100	4461	
35 MeFOSA	512.00 > 169.00	3.830	3.830	0.0		292390	NC		519	
37 Perfluorododecanoic acid	613.00 > 569.00	3.959	3.959	0.0	1.000	566543	0.9810	98.1	345	
	613.00 > 169.00	3.959	3.959	0.0	1.000	149509	3.79(2.13-6.40)		667	
D 36 13C2 PFDaA	615.00 > 570.00	3.959	3.961	-0.002	1.523	1335529	2.26	90.3	4006	
74 1H,1H,2H,2H-perfluorododecanesulfo	627.00 > 607.00	3.968	3.968	0.0	1.194	156917	0.9862	102	1095	
75 Perfluorododecanesulfonic acid (PF	699.00 > 80.00	4.205	4.205	0.0	1.417	212899	0.9408	97.2	1404	
	699.00 > 99.00	4.205	4.205	0.0	1.417	305859	0.70(0.00-0.00)		1431	
41 Perfluorotridecanoic acid	663.00 > 619.00	4.234	4.234	0.0	1.069	553115	0.9849	98.5	302	
	663.00 > 169.00	4.224	4.234	-0.010	1.067	181877	3.04(1.25-3.76)		707	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.466	4.466	0.0	1.000	157604	0.9141		91.4	984	
713.00 > 219.00	4.466	4.466	0.0	1.000	108759		1.45(0.71-2.13)		687	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.466	4.468	-0.002	1.719	1563565	2.13		85.1	2973	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.888	4.888	0.0	1.000	986408	0.99		99.2	295	
813.00 > 169.00	4.888	4.888	0.0	1.000	188389		5.24(2.86-8.58)		1139	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.888	4.890	-0.002	1.881	2719036	2.09		83.6	3946	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.237	5.237	0.0	1.071	1195165	1.00		100	229	
913.00 > 169.00	5.237	5.237	0.0	1.071	160370		7.45(3.83-11.48)		1032	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL4_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67652.b\2018.11.13LLAAA_006.d

Injection Date: 14-Nov-2018 00:15:06

Instrument ID: A8_N

Lims ID: CCV L4

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 13

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

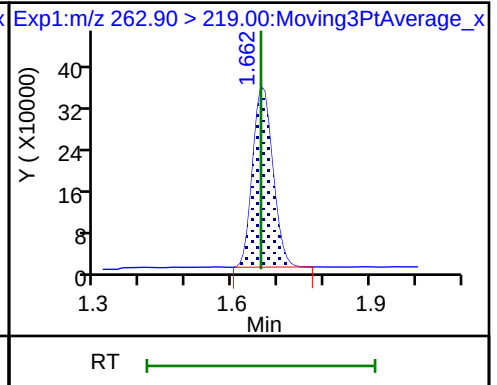
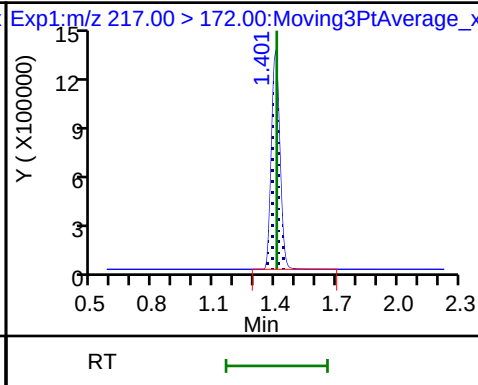
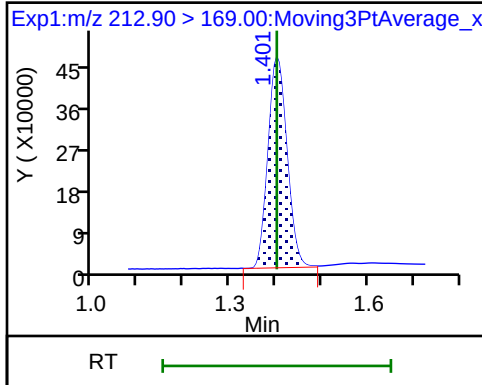
Method: A8_N

Limit Group: LC PFC ICAL

2 Perfluorobutanoic acid

D 1 13C4 PFBA

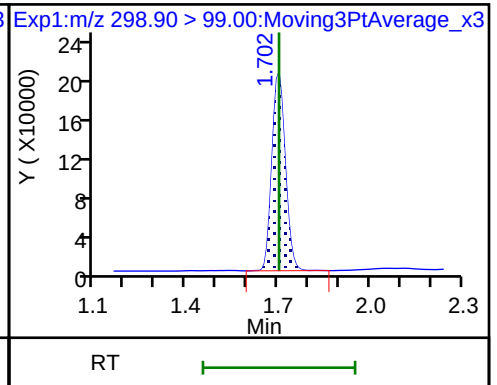
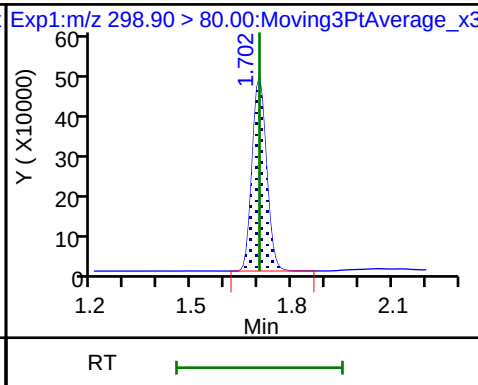
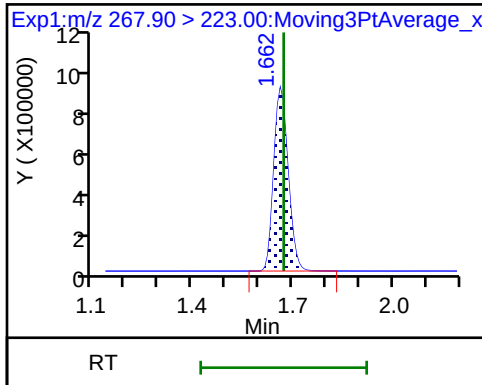
4 Perfluoropentanoic acid



D 3 13C5 PFPeA

5 Perfluorobutanesulfonic acid

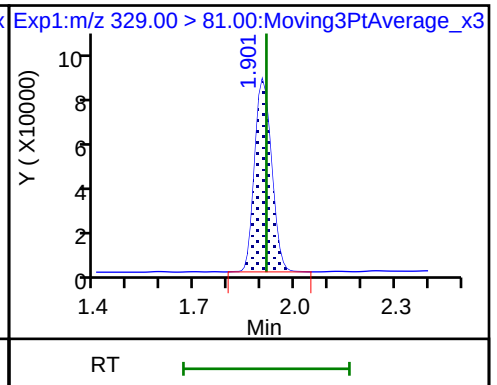
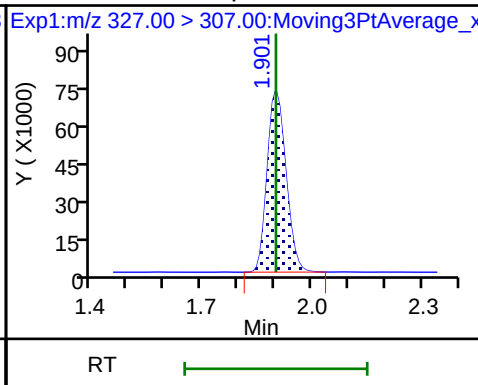
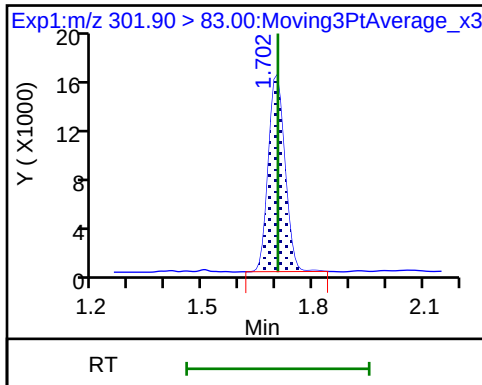
5 Perfluorobutanesulfonic acid



D 47 13C3 PFBS

61 1H,1H,2H,2H-perfluorohexanesulfonate

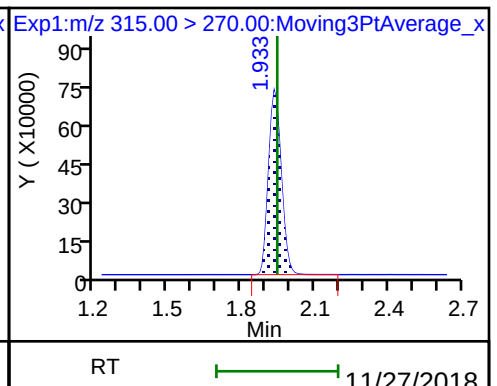
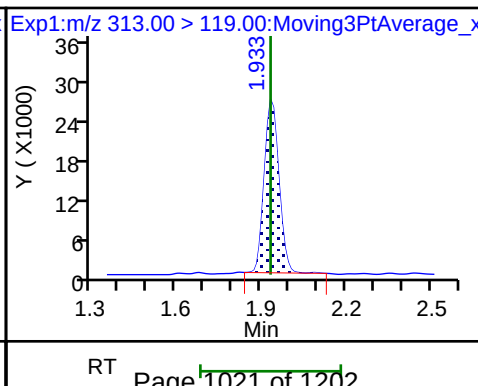
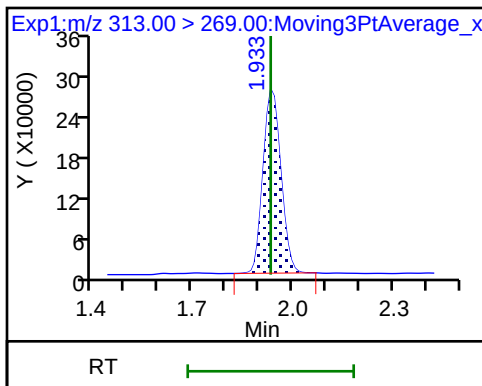
D 60 M2-4:2 FTS

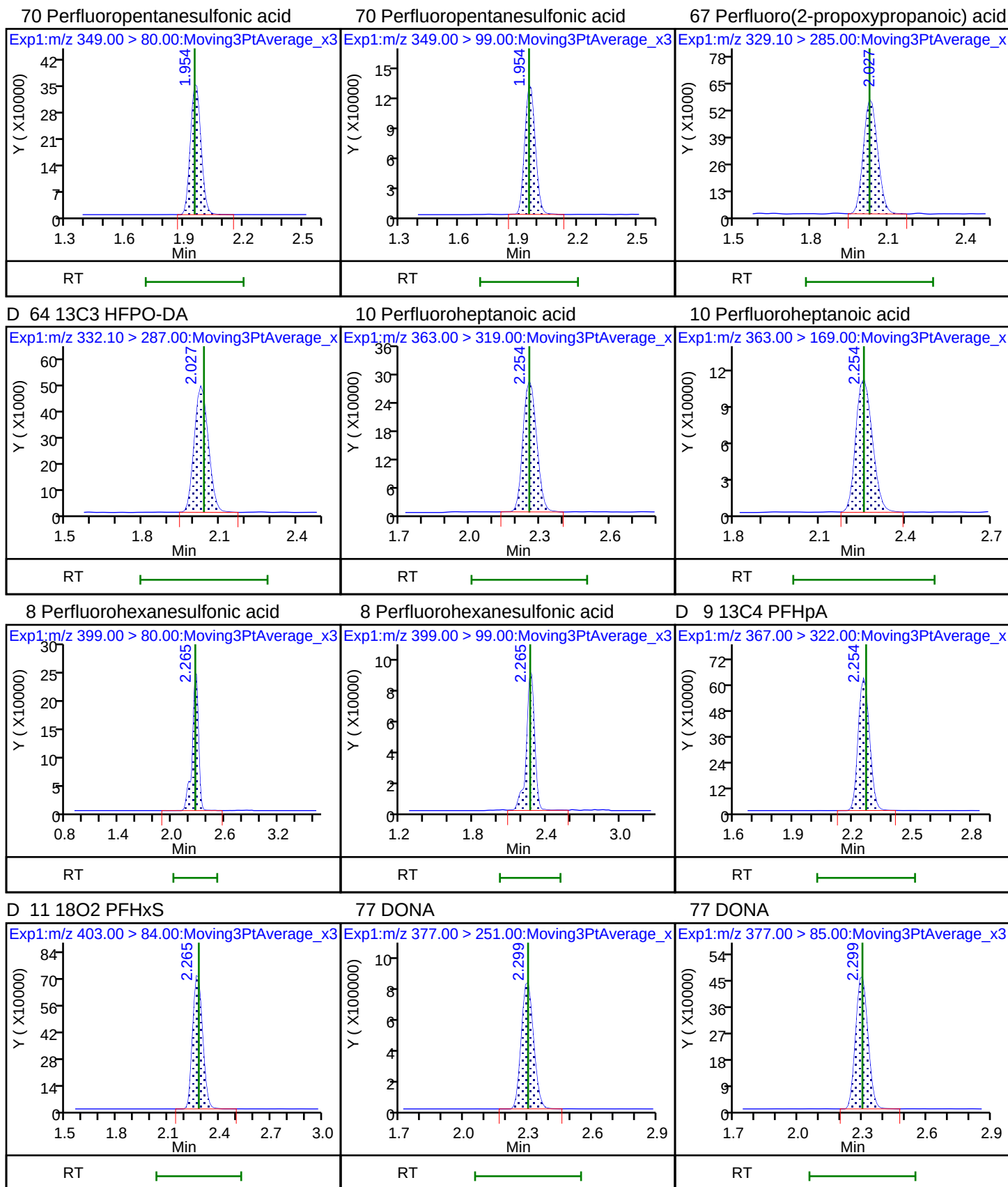


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

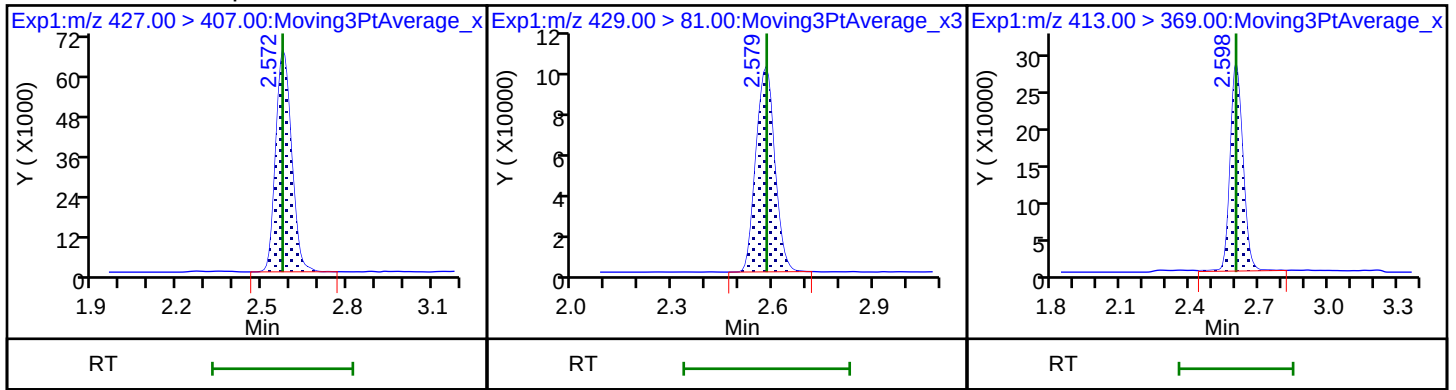
D 7 13C2 PFHxA





13 1H,1H,2H,2H-perfluorooctanesulfonyl fluoride

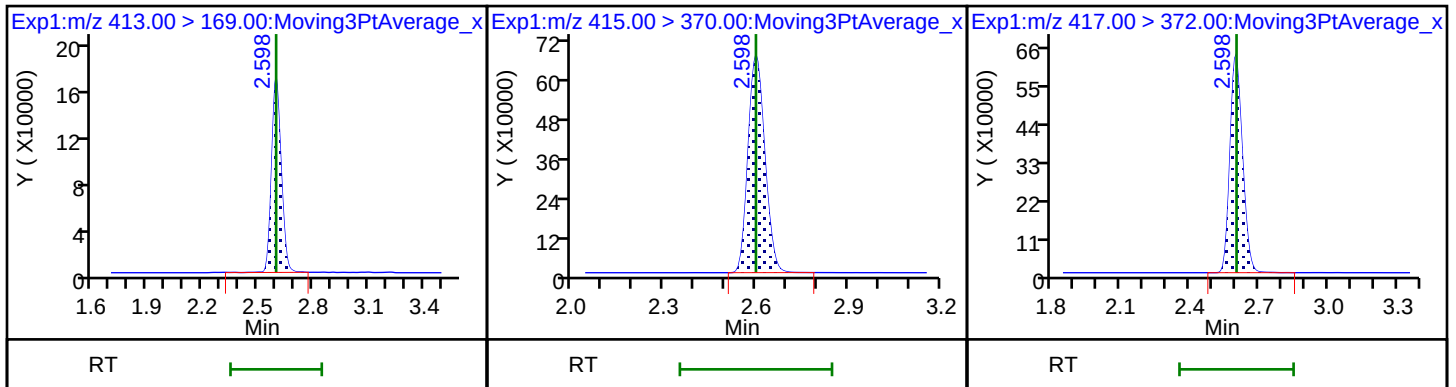
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

* 62 13C2 PFOA

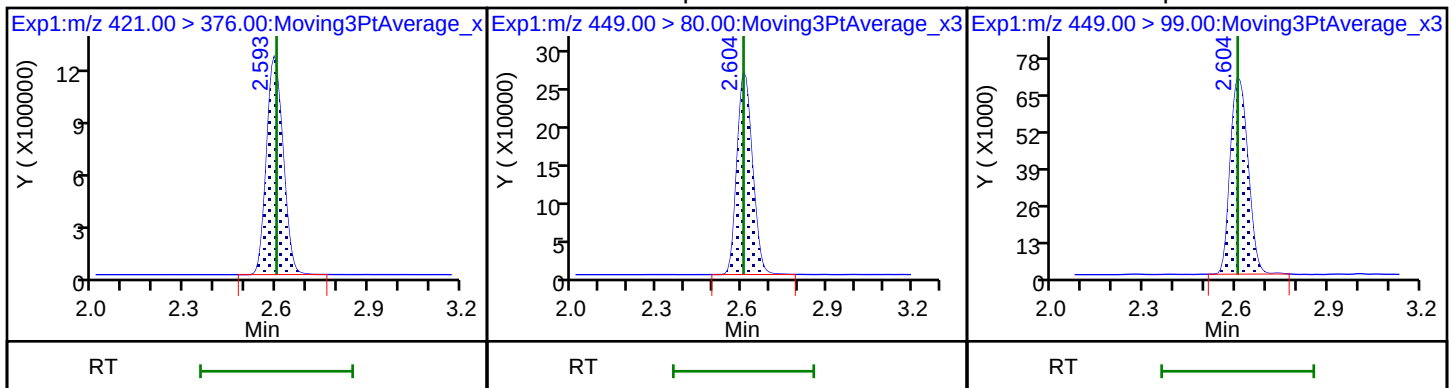
D 14 13C4 PFOA



D 73 13C8 PFOA

16 Perfluoroheptanesulfonic acid

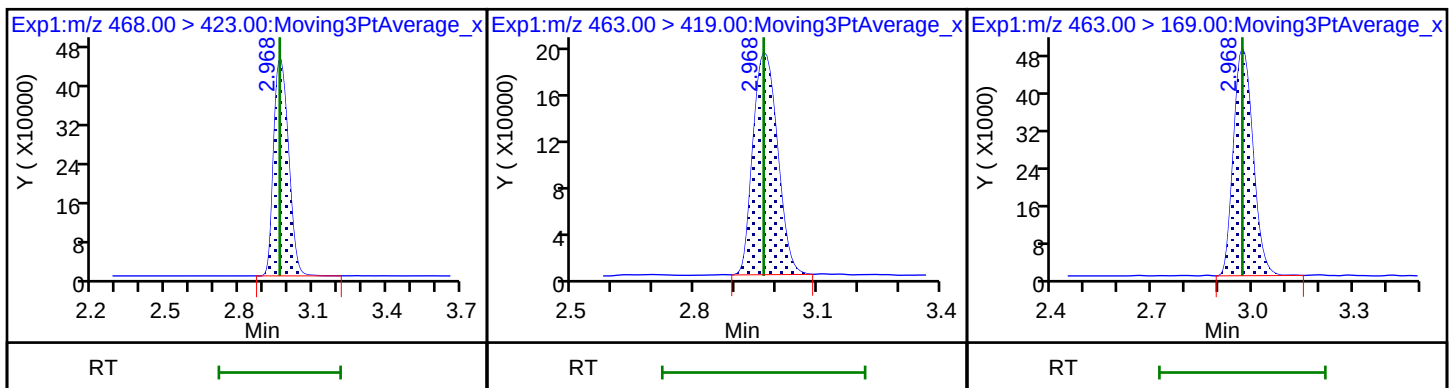
16 Perfluoroheptanesulfonic acid



D 19 13C5 PFNA

20 Perfluorononanoic acid

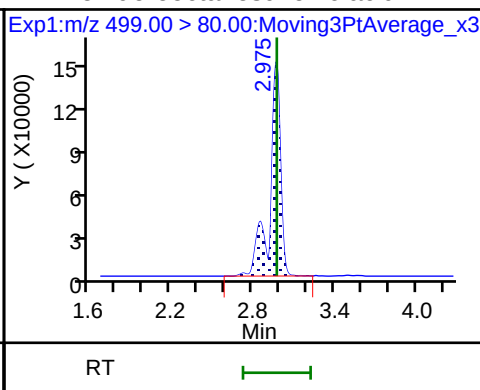
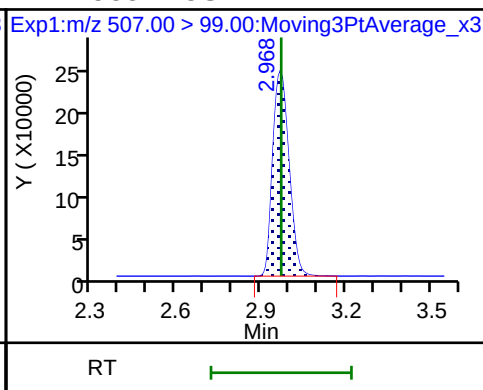
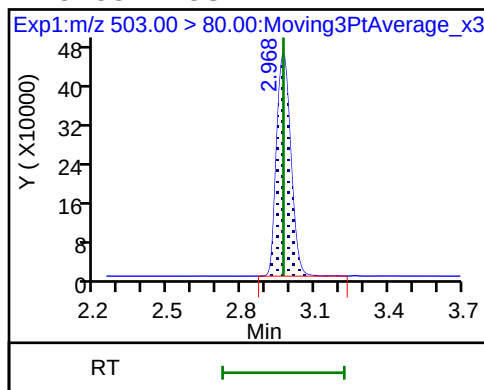
20 Perfluorononanoic acid



D 18 13C4 PFOS

D 72 13C8 PFOS

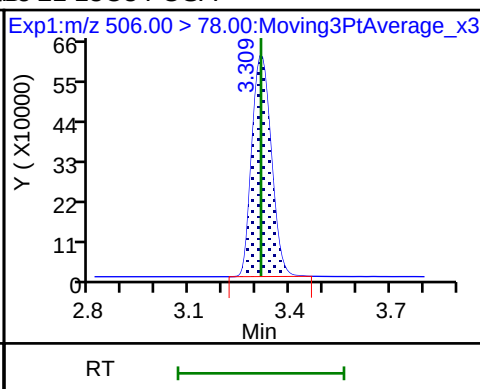
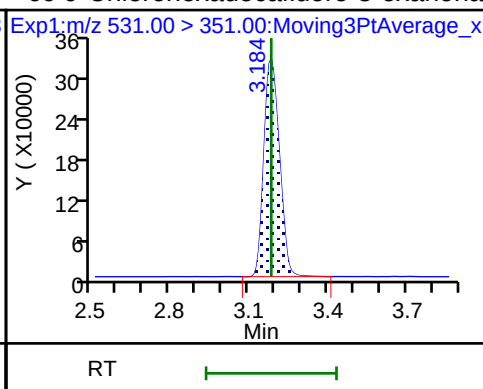
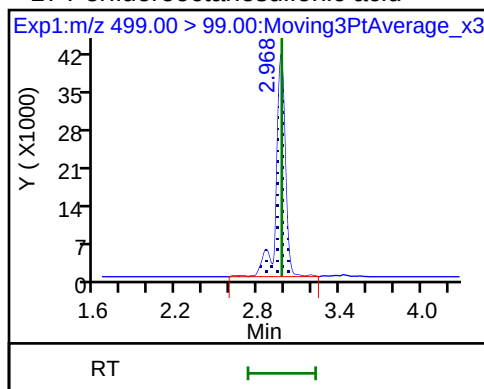
17 Perfluorooctanesulfonic acid



17 Perfluorooctanesulfonic acid

69 9-Chlorohexadecafluoro-3-oxanonane

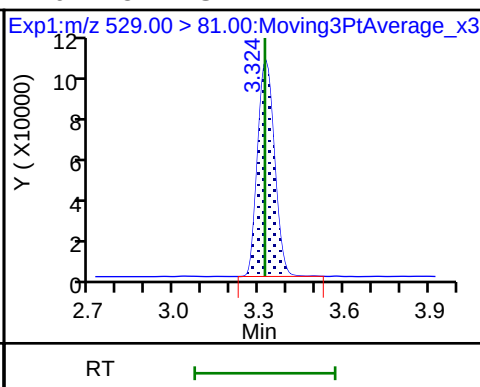
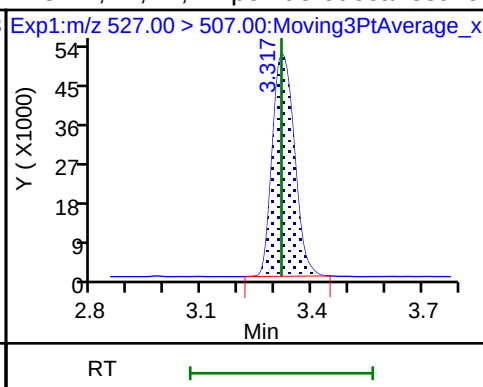
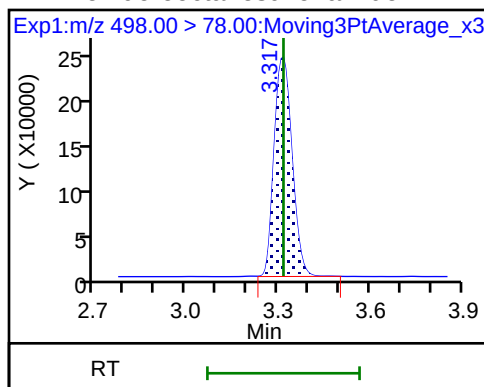
D 21 13C8 FOSA



22 Perfluorooctanesulfonamide

25 1H,1H,2H,2H-perfluorodecanesulfonamide

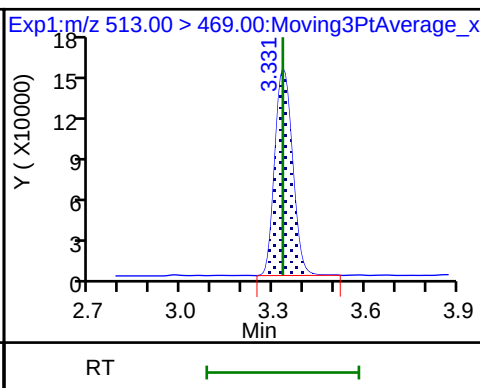
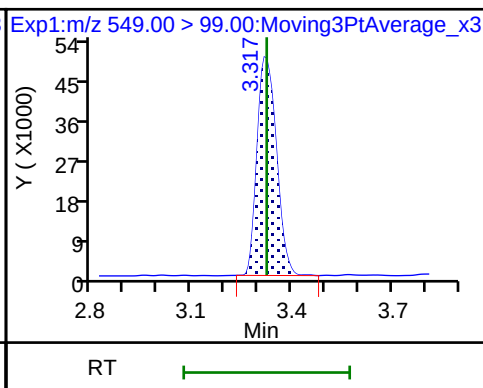
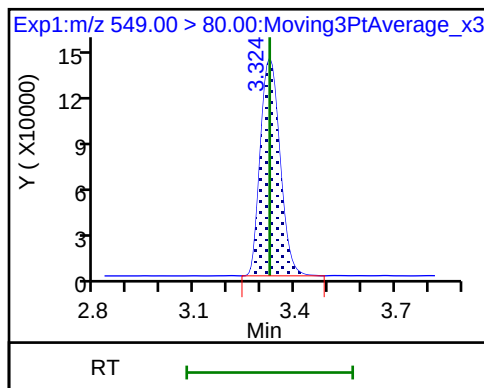
D 26 M2-8:2 FTS

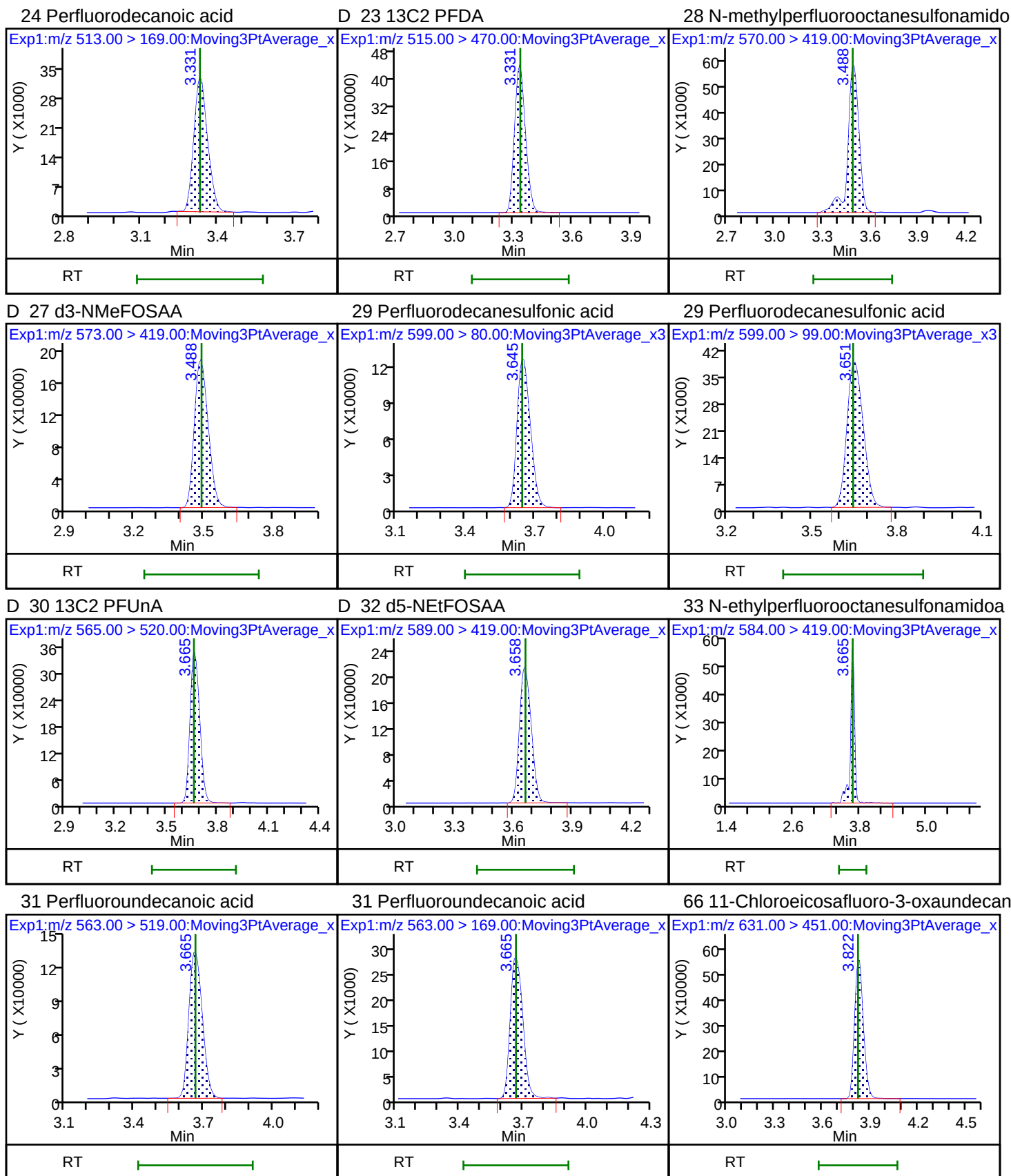


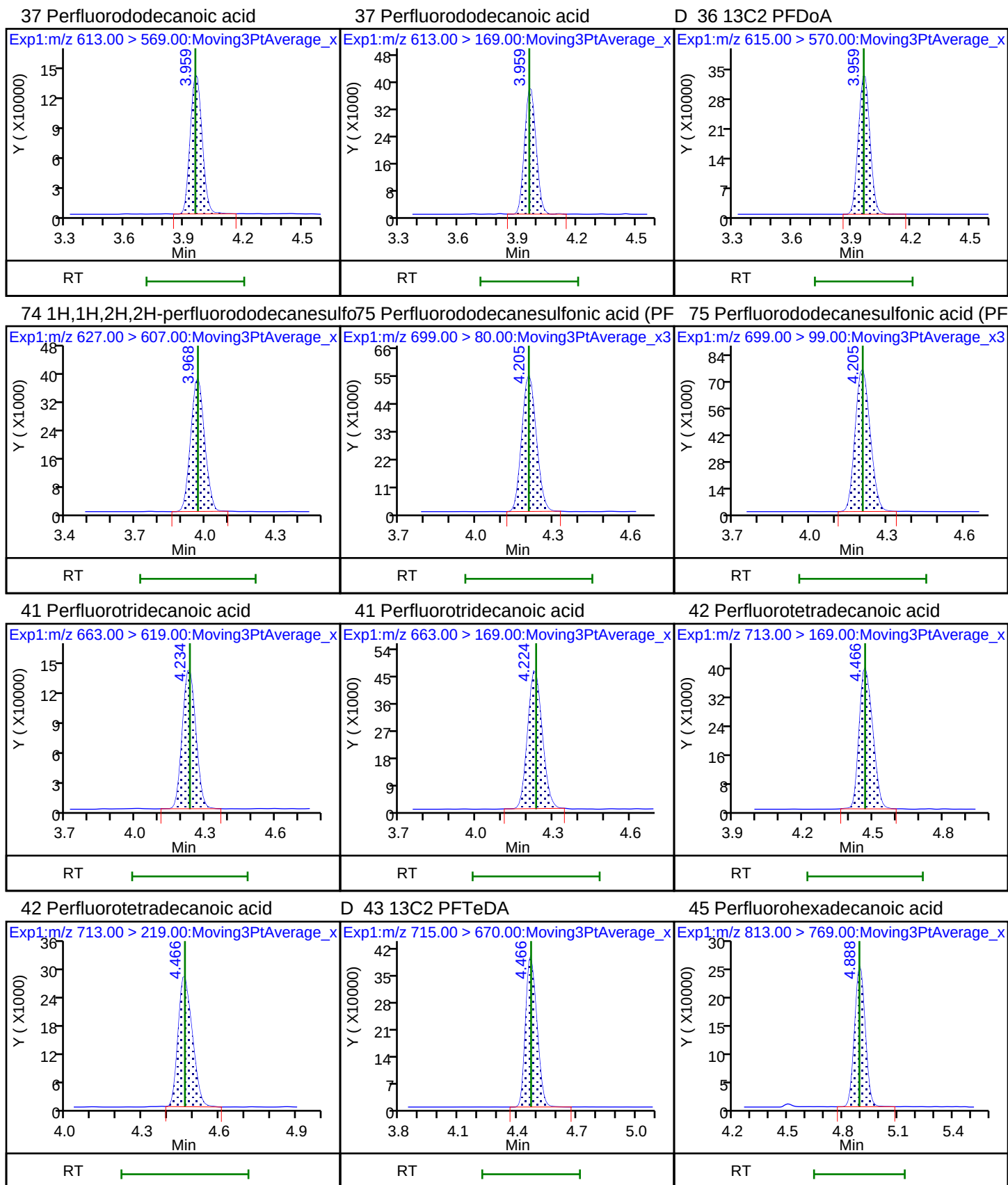
68 Perfluorononanesulfonic acid

68 Perfluorononanesulfonic acid

24 Perfluorodecanoic acid



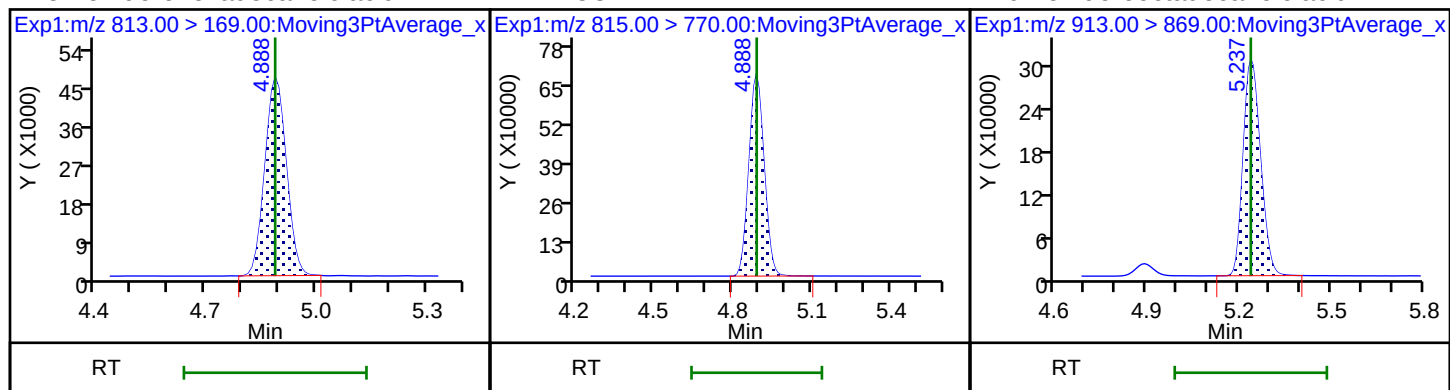




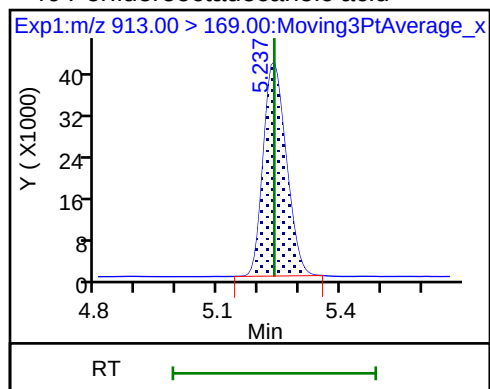
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCV 320-258999/1 Calibration Date: 11/14/2018 01:51

Instrument ID: A8_N Calib Start Date: 11/05/2018 15:37

GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 11/05/2018 16:22

Lab File ID: 2018.11.13LLAAA_019.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9476	0.9314		0.983	1.00	-1.7	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.121	1.094		0.976	1.00	-2.4	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.41	76.93		0.867	0.884	-1.9	50.0
4:2 FTS	AveID	14.89	13.56		0.850	0.934	-9.0	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.017	0.9462		0.930	1.00	-7.0	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	67.54	66.31		0.921	0.938	-1.8	50.0
HFPO-DA (GenX)	AveID	3.364	3.213		0.955	1.00	-4.5	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.110	1.206		1.09	1.00	8.6	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.141	1.020		0.814	0.910	-10.6	40.0
DONA	AveID	4.033	4.086		0.954	0.942	1.3	50.0
6:2 FTS	AveID	1.581	1.582		0.949	0.948	0.0	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.138	1.123		0.989	1.00	-1.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.325	1.346		0.967	0.952	1.6	50.0
Perfluorononanoic acid (PFNA)	AveID	1.067	1.048		0.982	1.00	-1.8	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.154	1.117		0.898	0.928	-3.2	40.0
F-53B Major	AveID	1.999	1.865		0.869	0.932	-6.7	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.998	0.9806		0.982	1.00	-1.8	40.0
8:2 FTS	AveID	1.293	1.169		0.866	0.958	-9.6	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.8001	0.8030		0.963	0.960	0.4	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.026	1.012		0.986	1.00	-1.4	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.9358	0.9867		1.05	1.00	5.4	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6424	0.6197		0.930	0.964	-3.5	50.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.8407	0.8553		1.02	1.00	1.7	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8979	0.9859		1.10	1.00	9.8	40.0
F-53B Minor	AveID	2.855	2.756		0.909	0.942	-3.5	50.0
10:2 FTS	AveID	0.9098	0.8081		0.856	0.964	-11.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.081	1.074		0.994	1.00	-0.6	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2908	0.2815		0.937	0.968	-3.2	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	1.051	1.104		1.05	1.00	5.0	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2757	0.2706		0.982	1.00	-1.8	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9114		0.997	1.00	-0.3	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCV 320-258999/1 Calibration Date: 11/14/2018 01:51
 Instrument ID: A8_N Calib Start Date: 11/05/2018 15:37
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 11/05/2018 16:22
 Lab File ID: 2018.11.13LLAAA_019.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.093	1.087		0.994	1.00	-0.6	50.0
13C4 PFBA	Ave	1.485	1.386		2.33	2.50	-6.7	50.0
13C5-PFPeA DNU	Ave	0.9800	0.9001		2.30	2.50	-8.2	50.0
13C3 PFBS	Ave	0.0207	0.0203		2.28	2.33	-2.0	50.0
M2-4:2 FTS	Ave	0.1361	0.1201		2.06	2.34	-11.8	50.0
13C2 PFHxA	Ave	1.077	1.052		2.44	2.50	-2.3	50.0
13C3 HFPO-DA	Ave	0.0682	0.0629		2.31	2.50	-7.7	50.0
13C4 PFHpA	Ave	0.9937	0.9055		2.28	2.50	-8.9	50.0
18O2 PFHxS	Ave	1.216	1.175		2.29	2.37	-3.4	50.0
M2-6:2 FTS	Ave	0.2154	0.1846		2.04	2.38	-14.3	40.0
13C8 PFOA	Ave	1.687	1.909		2.77	2.45	13.2	50.0
13C4 PFOA	Ave	0.9738	0.9888		2.54	2.50	1.5	50.0
13C8 PFOS	Ave	0.4292	0.4042		2.25	2.39	-5.8	50.0
13C4 PFOS	Ave	0.7981	0.7640		2.29	2.39	-4.3	50.0
13C5 PFNA	Ave	0.8097	0.7773		2.40	2.50	-4.0	50.0
13C8 FOSA	Ave	1.118	0.9551		2.14	2.50	-14.6	50.0
M2-8:2 FTS	Ave	0.2282	0.1783		1.87	2.40	-21.9	40.0
13C2 PFDA	Ave	0.6999	0.6368		2.27	2.50	-9.0	50.0
d3-NMeFOSAA	Ave	0.3413	0.2944		2.16	2.50	-13.7	50.0
d5-NEtFOSAA	Ave	0.3637	0.3353		2.30	2.50	-7.8	50.0
13C2 PFUnA	Ave	0.5526	0.5147		2.33	2.50	-6.9	50.0
13C2 PFDoA	Ave	0.5857	0.5037		2.15	2.50	-14.0	50.0
13C2 PFTeDA	Ave	0.7283	0.6401		2.20	2.50	-12.1	50.0
13C2 PFHxDA	Ave	1.288	1.092		2.12	2.50	-15.3	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\chromdocs2018\q3\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_019.d
 Lims ID: CCV L4
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Nov-2018 01:51:38 ALS Bottle#: 13 Worklist Smp#: 1
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L4
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub37

Method: \\chromdocs2018\q3\Sacramento\ChromData\A8_N\20181113-67653.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 26-Nov-2018 09:32:32 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0324

First Level Reviewer: mongkols

Date: 26-Nov-2018 09:32:32

Ratio Calibration: None

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	1.406	1.406	0.0	1.000	1356882	0.9829		98.3	83.5	
D 1 13C4 PFBA										
217.00 > 172.00	1.406	1.406	0.0	0.541	3642111	2.33		93.3	5662	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.670	1.670	0.0	1.000	1034882	0.9760		97.6	96.7	
D 3 13C5 PFPeA										
267.90 > 223.00	1.670	1.670	0.0	0.643	2365076	2.30		91.8	4836	
D 47 13C3 PFBS										
301.90 > 83.00	1.702	1.702	0.0	0.655	49641	2.28		98.0	288	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.710	1.710	0.0	1.005	1452025	0.8674	Target=2.49	98.1	316	
298.90 > 99.00	1.710	1.710	0.0	1.005	617182		2.35(1.25-3.74)		244	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.912	1.912	0.0	1.123	270438	0.8504		91.0	2854	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.912	1.912	0.0	0.736	294703	2.06		88.2	254	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.943	1.943	0.0	1.000	1046026	0.9305	Target=10.07	93.0	190	
313.00 > 119.00	1.943	1.943	0.0	1.000	104232		10.04(5.03-15.10)		222	
D 7 13C2 PFHxA										
315.00 > 270.00	1.943	1.943	0.0	0.748	2763886	2.44		97.7	4693	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.964	1.964	0.0	1.154	1328084	0.9209	Target=2.71	98.2	3381	
349.00 > 99.00	1.964	1.964	0.0	1.154	503891		2.64(1.36-4.07)		629	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.037	2.037	0.0	1.000	212371	0.9551		95.5	164	

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	2.037	2.037	0.0	0.784	165266	2.31		92.3	766	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.265	2.265	0.0	1.000	1147825	1.09	Target=2.27	109	248	
363.00 > 169.00	2.265	2.265	0.0	1.000	438277		2.62(1.13-3.40)		458	
D 9 13C4 PFHpA										
367.00 > 322.00	2.265	2.265	0.0	0.872	2379252	2.28		91.1	3354	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.277	2.277	0.0	1.000	1146441	0.8136	Target=3.00	89.4	681	
399.00 > 99.00	2.277	2.277	0.0	1.000	395405		2.90(1.50-4.49)		286	
D 11 18O2 PFHxS										
403.00 > 84.00	2.277	2.277	0.0	0.876	2921564	2.29		96.6	6065	
77 DONA										
377.00 > 251.00	2.299	2.299	0.0	0.774	3090670	0.9543	Target=1.69	101	4280	
377.00 > 85.00	2.299	2.299	0.0	0.774	1804344		1.71(0.85-2.54)		2135	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.579	2.579	0.0	1.000	291034	0.9488		100	466	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.579	2.579	0.0	0.993	460792	2.04		85.7	1106	
* 62 13C2 PFOA										
415.00 > 370.00	2.598	2.598	0.0		2627607	2.50			4105	
D 73 13C8 PFOA										
421.00 > 376.00	2.598	2.598	0.0	1.000	4911557	2.77		113	11477	
D 14 13C4 PFOA										
417.00 > 372.00	2.604	2.604	0.0	1.002	2598093	2.54		102	5524	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.604	2.604	0.0	1.000	1168721	0.9885	Target=1.68	98.8	131	
413.00 > 169.00	2.604	2.604	0.0	1.000	630209		1.85(0.84-2.52)		528	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.612	2.612	0.0	0.879	1028643	0.9670	Target=3.88	102	2481	
449.00 > 99.00	2.612	2.612	0.0	0.879	298498		3.45(1.94-5.82)		629	
D 72 13C8 PFOS										
507.00 > 99.00	2.963	2.963	0.0	1.140	1015289	2.25		94.2	2973	
D 19 13C5 PFNA										
468.00 > 423.00	2.970	2.970	0.0	1.143	2042435	2.40		96.0	3799	
20 Perfluorononanoic acid										
463.00 > 419.00	2.970	2.970	0.0	1.000	856274	0.9821	Target=3.79	98.2	269	
463.00 > 169.00	2.970	2.970	0.0	1.000	208515		4.11(1.90-5.69)		733	
D 18 13C4 PFOS										
503.00 > 80.00	2.970	2.970	0.0	1.143	1919200	2.29		95.7	3128	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.970	2.970	0.0	1.000	832434	0.8980	Target=4.62	96.8	550	M
499.00 > 99.00	2.970	2.970	0.0	1.000	194099		4.29(2.31-6.93)		306	M
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.186	3.186	0.0	1.073	1395548	0.8695		93.3	1868	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.312	3.312	0.0	1.000	984392	0.9823		98.2	1537	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 21 13C8 FOSA										
506.00 > 78.00	3.312	3.312	0.0	1.274	2509603	2.14		85.4	2266	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.319	3.319	0.0	1.000	209911	0.8663		90.4	1292	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.319	3.319	0.0	1.117	618999	0.9634	Target=2.65	100	1800	
549.00 > 99.00	3.326	3.319	0.007	1.120	217376		2.85(1.33-3.97)		680	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.319	3.319	0.0	1.277	448932	1.87		78.1	1314	
D 23 13C2 PFDA										
515.00 > 470.00	3.326	3.326	0.0	1.280	1673146	2.27		91.0	3585	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.333	3.333	0.0	1.002	677227	0.9864	Target=4.73	98.6	491	
513.00 > 169.00	3.326	3.333	-0.007	1.000	128750		5.26(2.36-7.09)		205	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.482	3.482	0.0	1.340	773631	2.16		86.3	1356	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.490	3.490	0.0	1.002	305342	1.05		105	335	M
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.646	3.646	0.0	1.228	479705	0.9299	Target=2.77	96.5	1111	
599.00 > 99.00	3.646	3.646	0.0	1.228	164510		2.92(1.39-4.16)		795	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.653	3.653	0.0	1.406	881027	2.30		92.2	973	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.660	3.660	0.0	0.998	533327	1.10	Target=4.24	110	355	
563.00 > 169.00	3.666	3.660	0.006	1.000	114105		4.67(2.12-6.36)		530	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.660	3.660	0.0	1.002	301417	1.02		102	688	
D 30 13C2 PFUnA										
565.00 > 520.00	3.666	3.666	0.0	1.411	1352399	2.33		93.1	3705	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.823	3.823	0.0	1.287	2084588	0.9093		96.5	4291	
35 MeFOSA										
512.00 > 169.00	3.832	3.832	0.0		295387	NC			715	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.960	3.960	0.0	1.000	568787	0.99	Target=4.27	99.4	420	
613.00 > 169.00	3.960	3.960	0.0	1.000	143113		3.97(2.13-6.40)		696	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.960	3.960	0.0	1.193	146026	0.8563		88.8	753	
D 36 13C2 PFDaA										
615.00 > 570.00	3.960	3.960	0.0	1.524	1323603	2.15		86.0	3550	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.205	4.205	0.0	1.416	218846	0.9371	Target=0.00	96.8	1233	
699.00 > 99.00	4.205	4.205	0.0	1.416	332542		0.66(0.00-0.00)		1304	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.224	4.224	0.0	1.067	584499	1.05	Target=2.51	105	300	
663.00 > 169.00	4.224	4.224	0.0	1.067	199685		2.93(1.25-3.76)		865	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.466	4.466	0.0	1.000	182043	0.9815	Target=1.42	98.2	1398	
713.00 > 219.00	4.466	4.466	0.0	1.000	114822		1.59(0.71-2.13)		763	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.466	4.466	0.0	1.719	1681851	2.20		87.9	3781	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.889	4.889	0.0	1.000	1045644	1.00	Target=5.72	99.7	291	
813.00 > 169.00	4.889	4.889	0.0	1.000	196586		5.32(2.86-8.58)		1683	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.889	4.889	0.0	1.882	2868139	2.12		84.7	4318	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.245	5.245	0.0	1.073	1247214	0.99	Target=7.65	99.4	218	
913.00 > 169.00	5.238	5.245	-0.007	1.071	170190		7.33(3.83-11.48)		1005	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL4_00009

Amount Added: 1.00

Units: mL

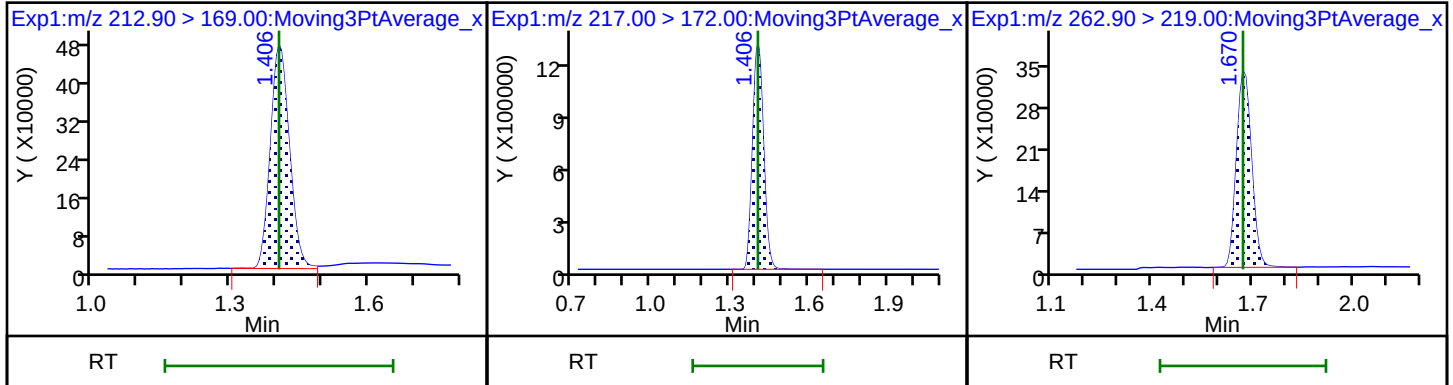
TestAmerica Sacramento

Data File: \\chromdocs2018\q3\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_019.d
Injection Date: 14-Nov-2018 01:51:38 Instrument ID: A8_N
Lims ID: CCV L4
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL

2 Perfluorobutanoic acid

D 1 13C4 PFBA

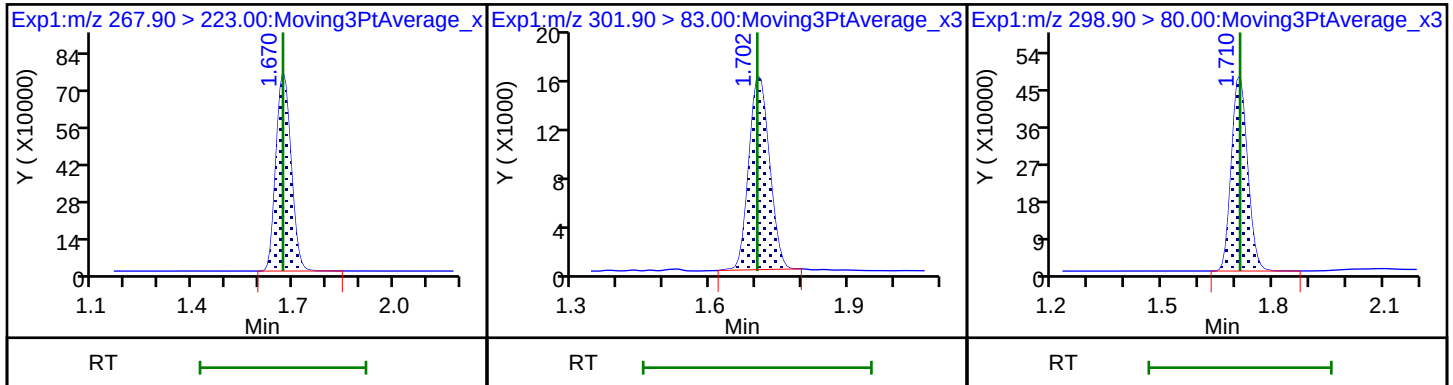
4 Perfluoropentanoic acid



D 3 13C5 PFPeA

D 47 13C3 PFBS

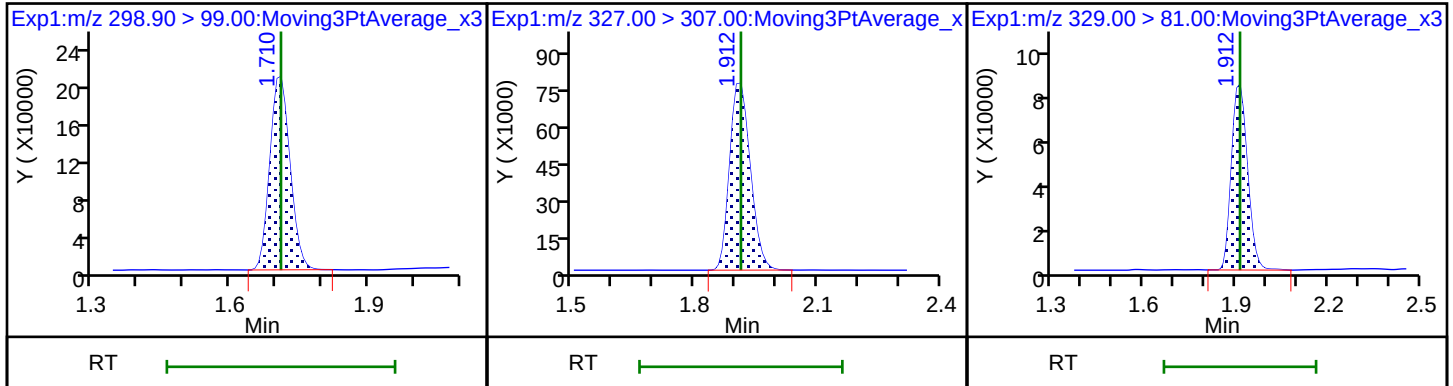
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

61 1H,1H,2H,2H-perfluorohexanesulfonate

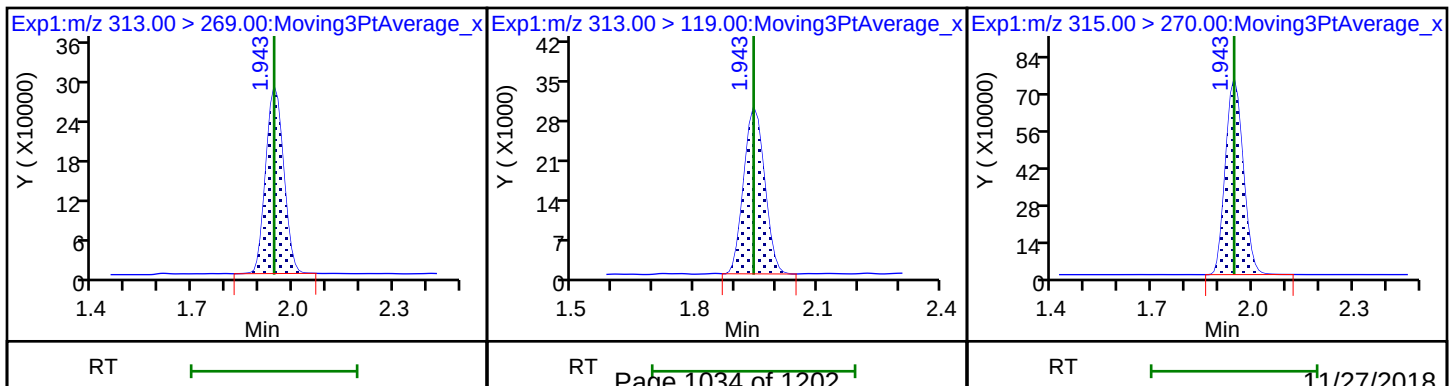
D 60 M2-4:2 FTS

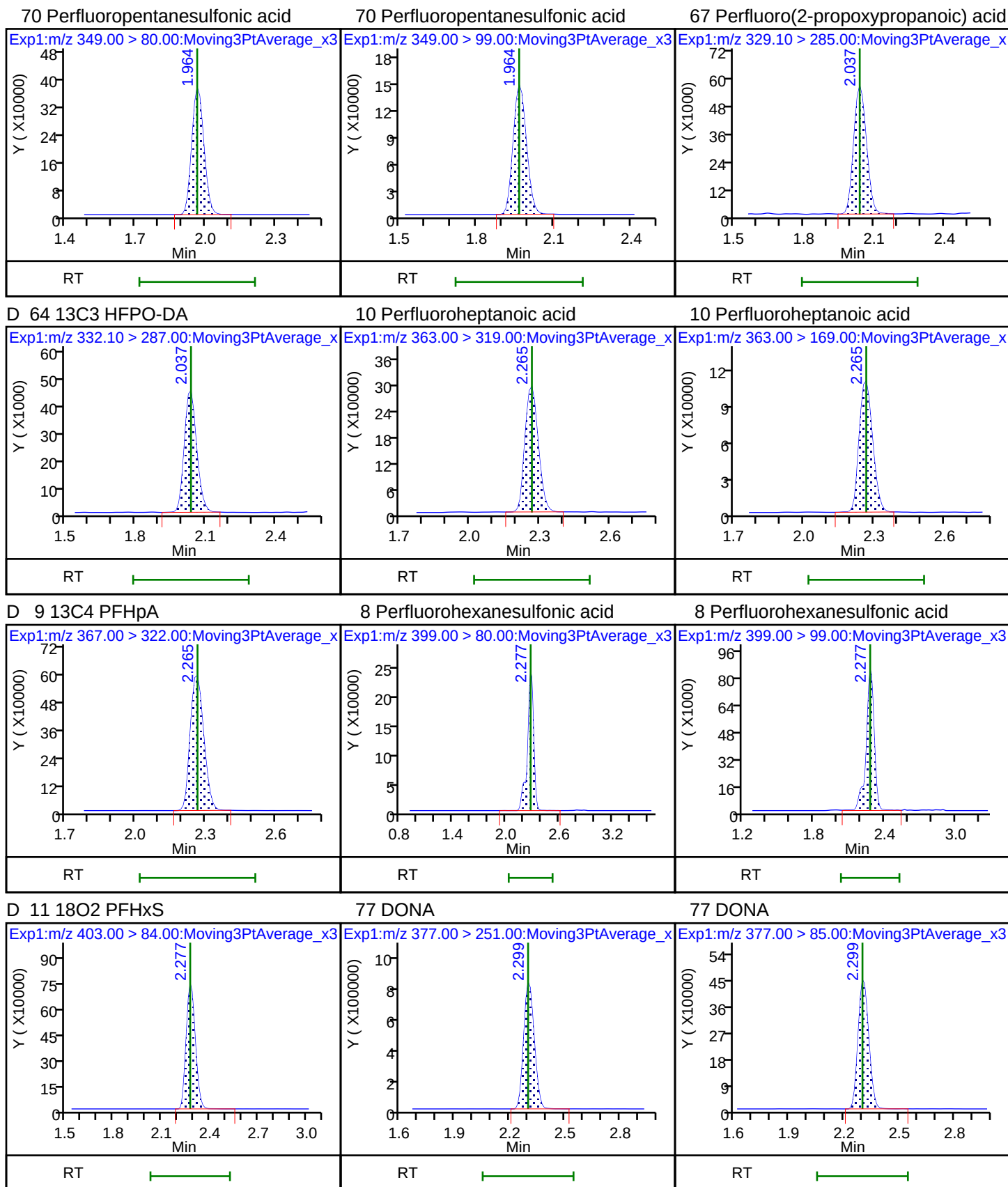


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

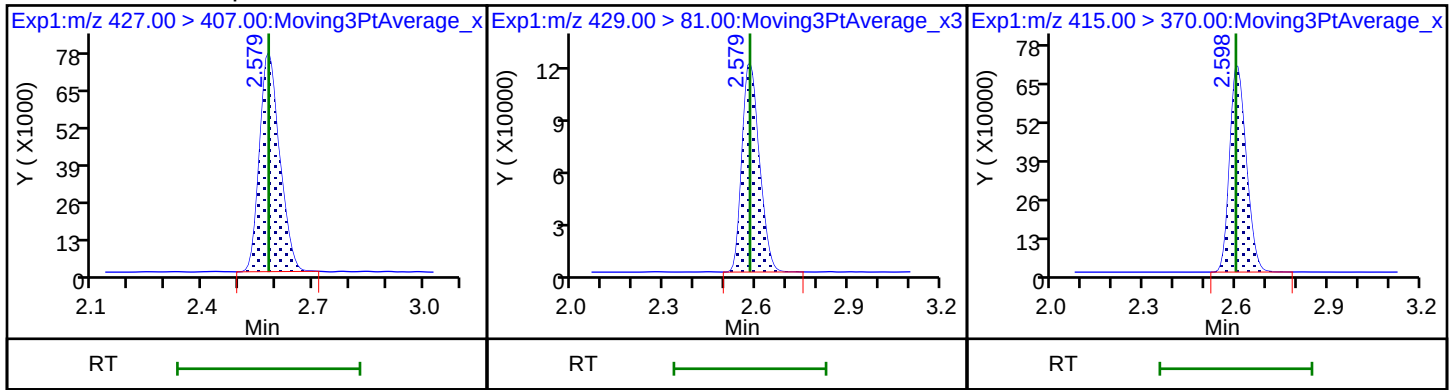
D 7 13C2 PFHxA





13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2 FTS

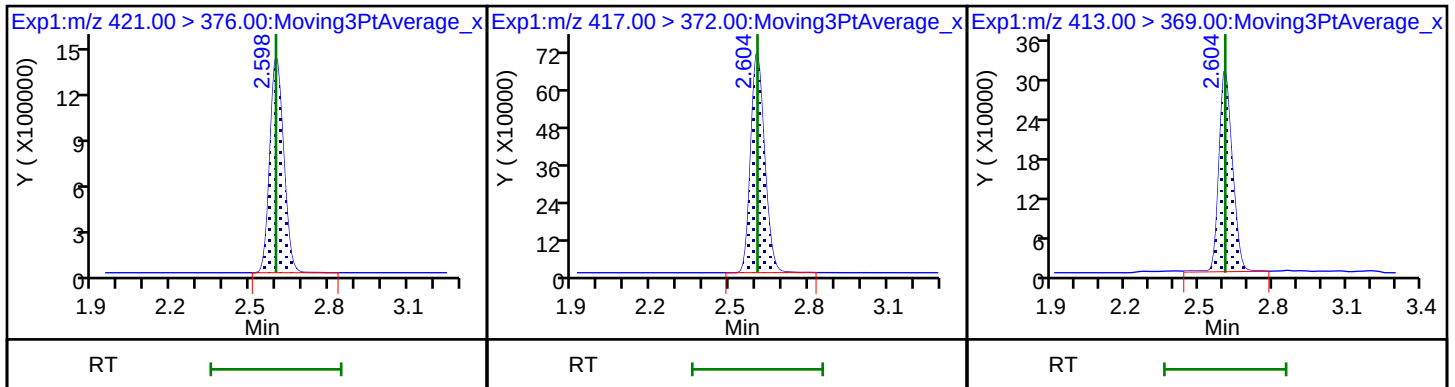
* 62 13C2 PFOA



D 73 13C8 PFOA

D 14 13C4 PFOA

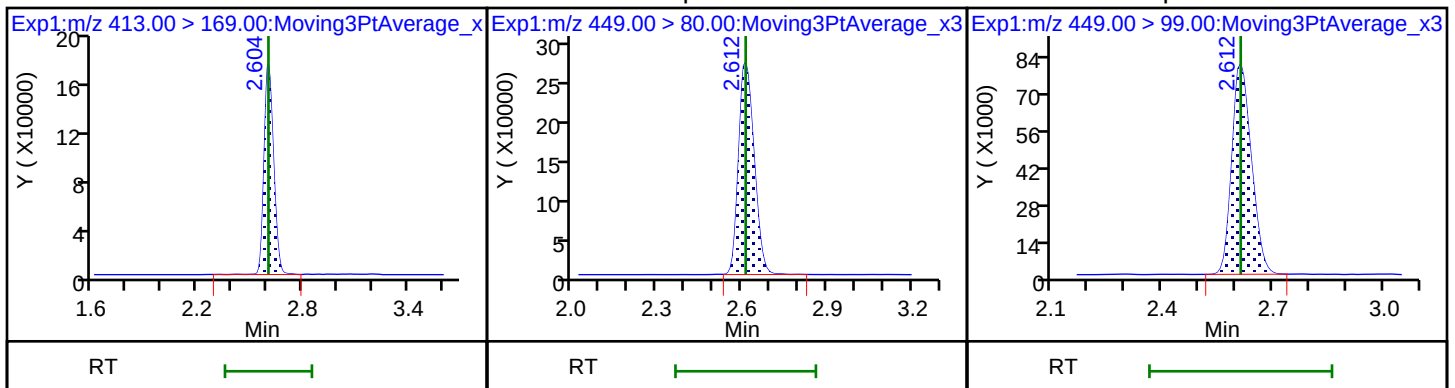
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

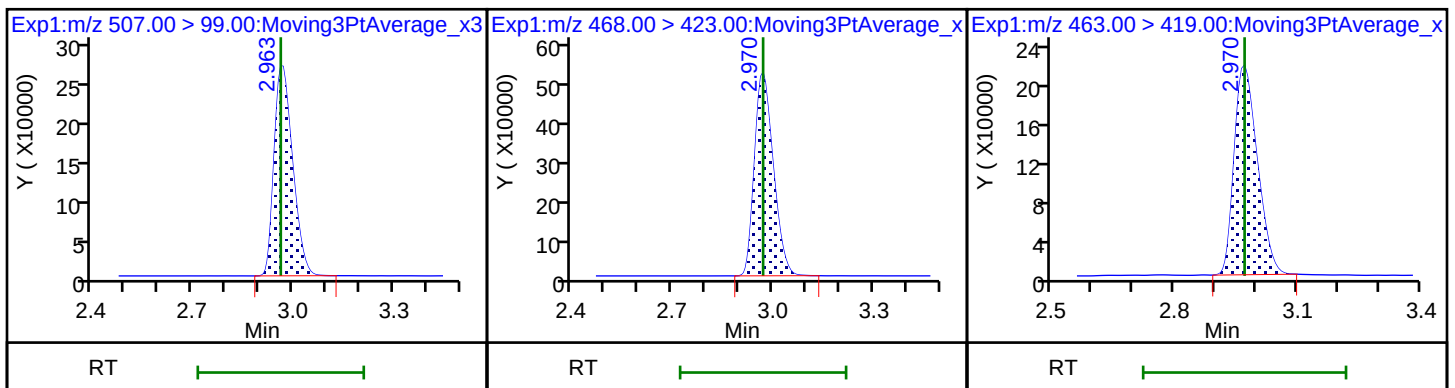
16 Perfluoroheptanesulfonic acid

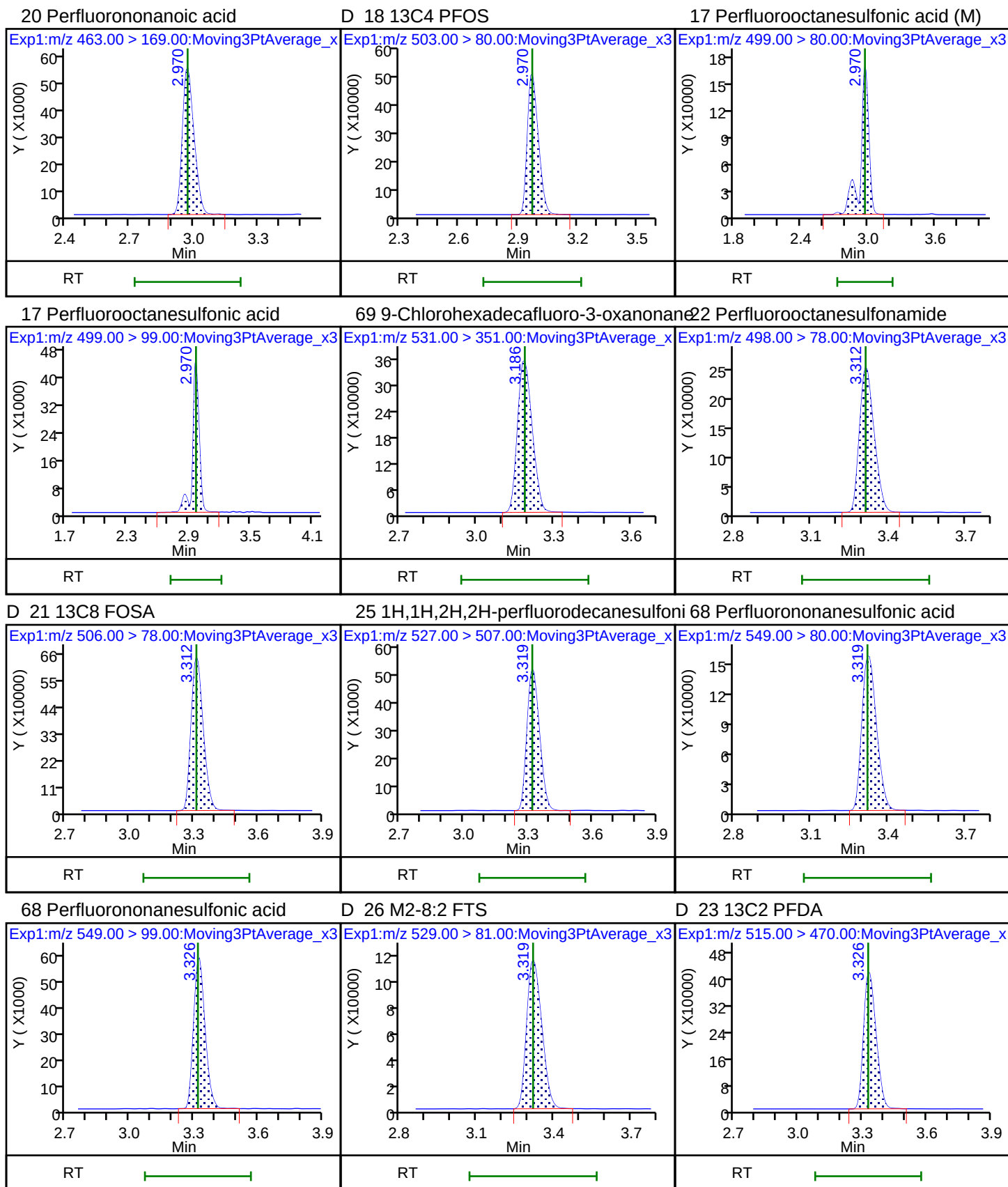


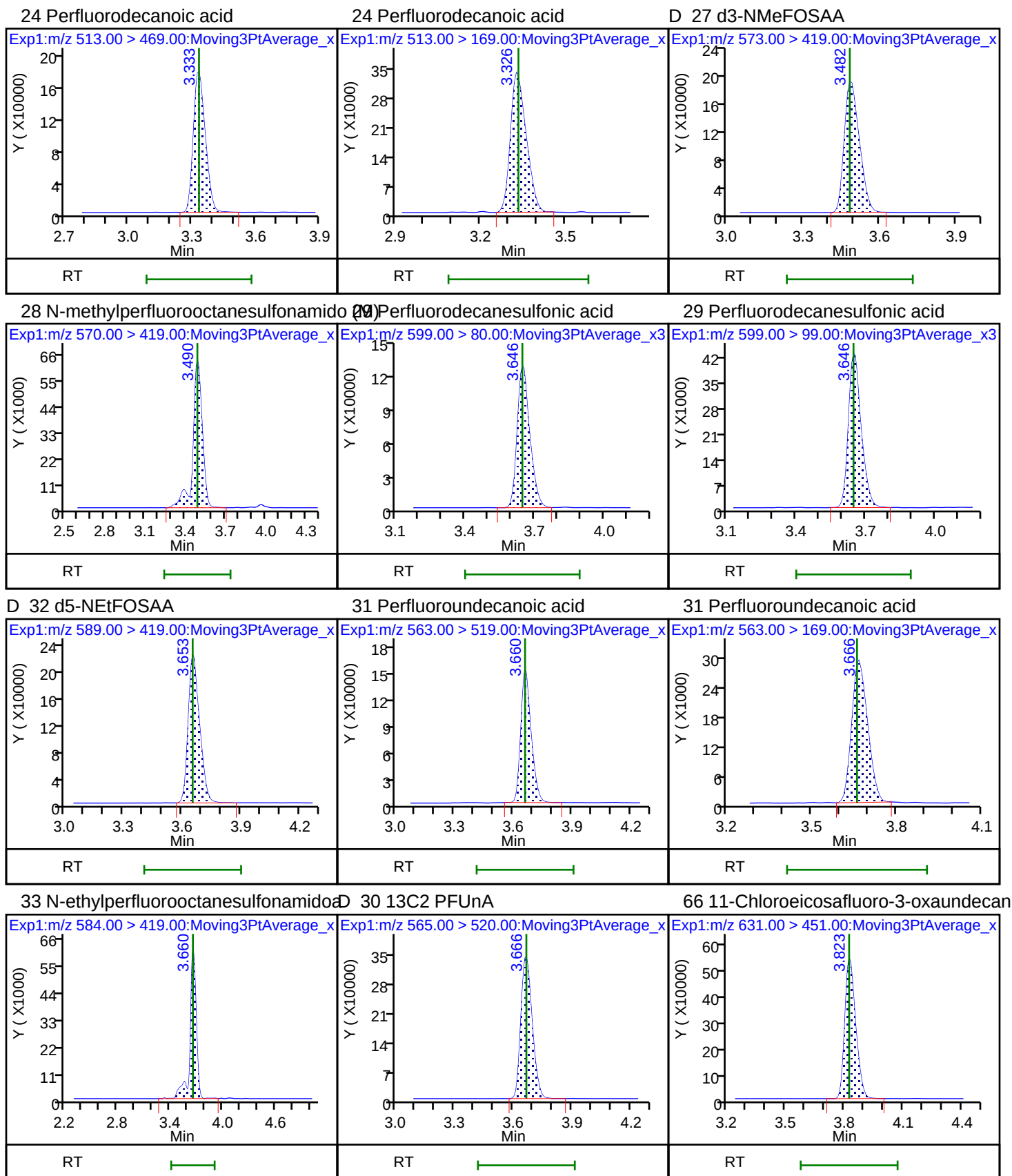
D 72 13C8 PFOS

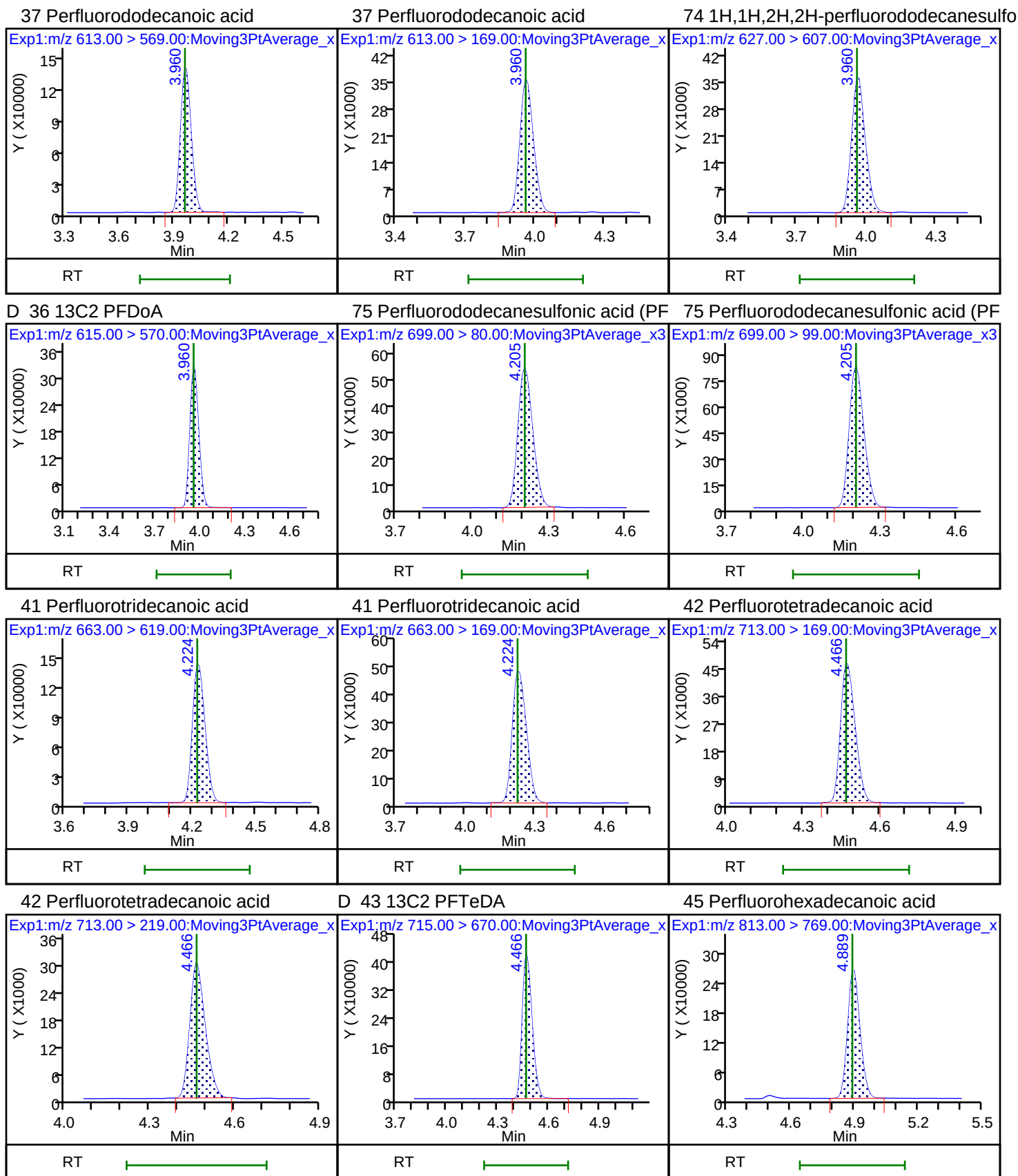
D 19 13C5 PFNA

20 Perfluorononanoic acid





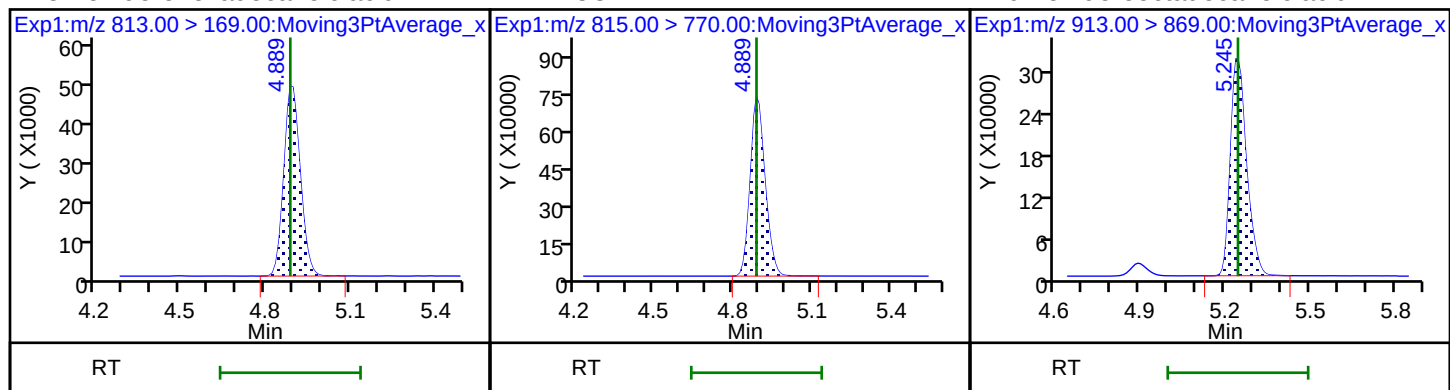




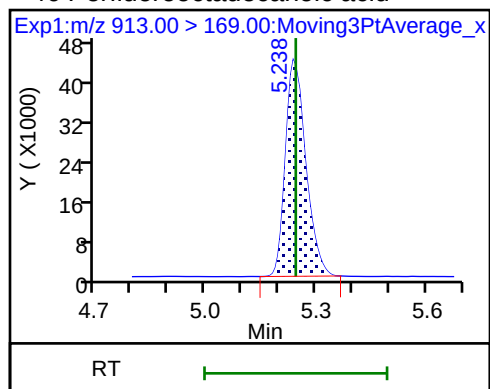
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

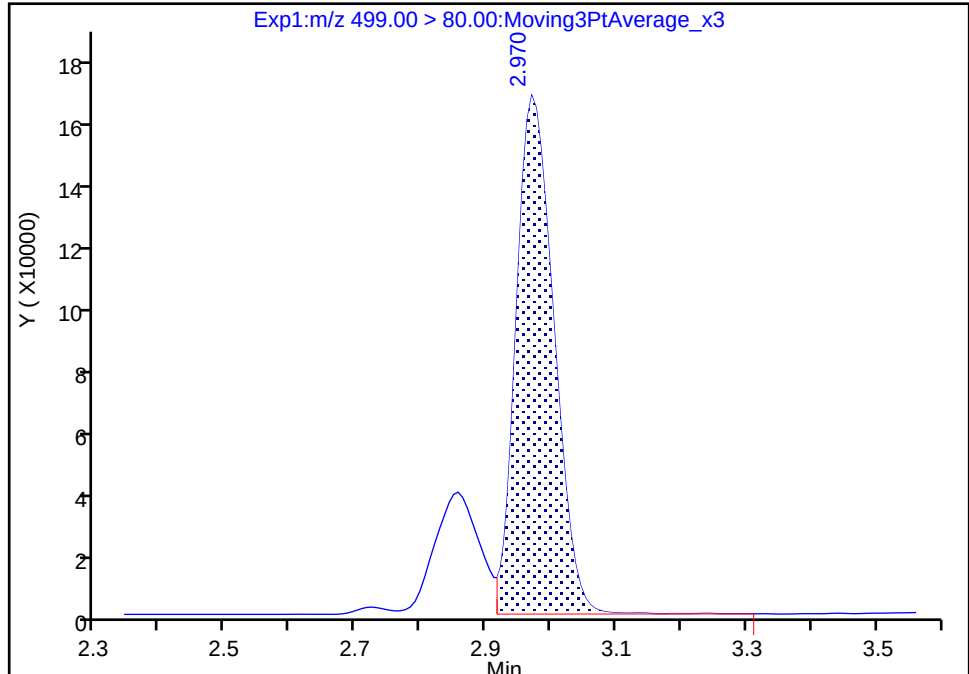
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Injection Date: 14-Nov-2018 01:51:38 Instrument ID: A8_N
Lims ID: CCV L4
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

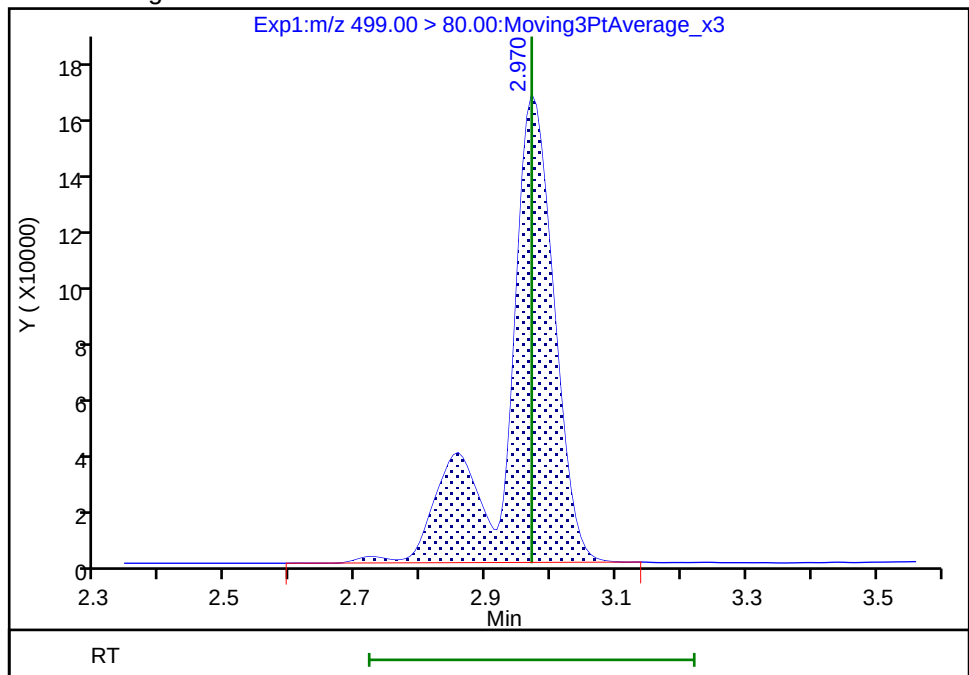
RT: 2.97
Area: 650479
Amount: 0.701681
Amount Units: ng/ml

Processing Integration Results



RT: 2.97
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Amount: 0.897958
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:32:11
Audit Action: Manually Integrated

Audit Reason: Isomers
Page 1041 of 1202

11/27/2018

TestAmerica Sacramento

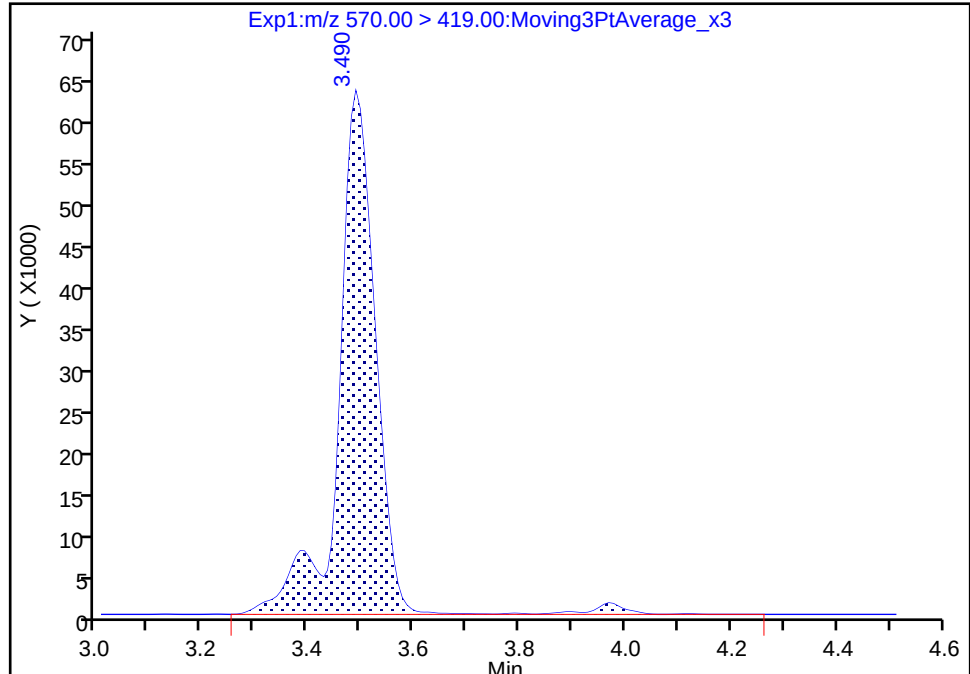
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Injection Date: 14-Nov-2018 01:51:38 Instrument ID: A8_N
Lims ID: CCV L4
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 13 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

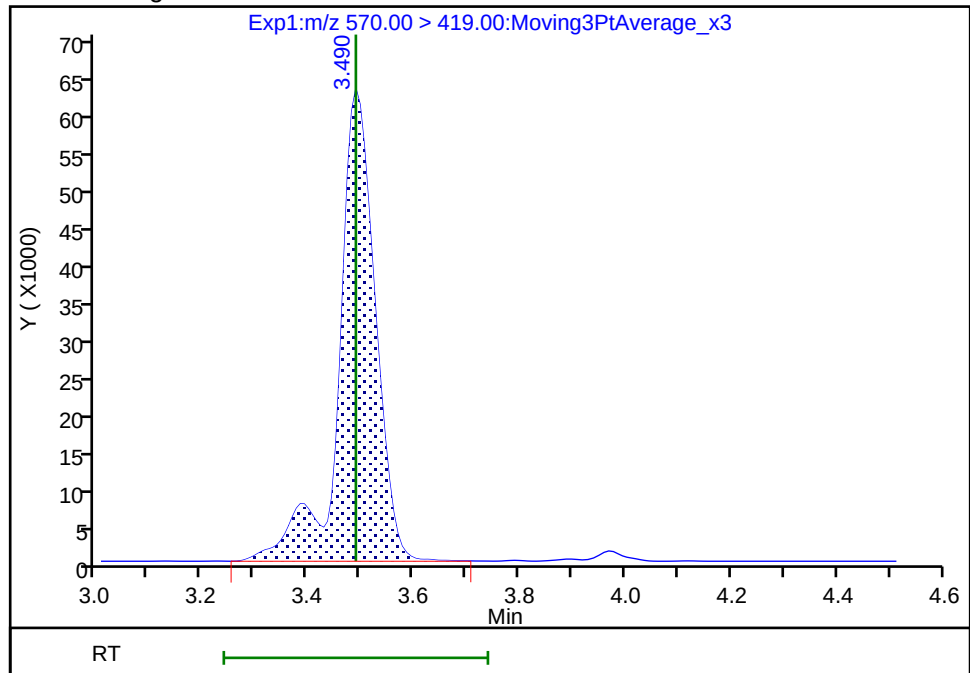
RT: 3.49
Area: 311474
Amount: 1.075621
Amount Units: ng/ml

Processing Integration Results



RT: 3.49
Area: 305342
Amount: 1.054445
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 26-Nov-2018 09:32:24

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCV 320-258999/9 Calibration Date: 11/14/2018 02:58

Instrument ID: A8_N Calib Start Date: 11/05/2018 15:37

GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 11/05/2018 16:22

Lab File ID: 2018.11.13LLAAA_035.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9476	0.9420		2.49	2.50	-0.6	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.121	1.083		2.41	2.50	-3.4	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	78.41	77.78		2.19	2.21	-0.8	50.0
4:2 FTS	AveID	14.89	15.14		2.37	2.34	1.7	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.017	0.9617		2.36	2.50	-5.4	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	67.54	66.37		2.30	2.35	-1.7	50.0
HFPO-DA (GenX)	AveID	3.364	3.358		2.50	2.50	-0.2	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.110	1.098		2.47	2.50	-1.1	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.141	1.033		2.06	2.28	-9.4	40.0
DONA	AveID	4.033	4.066		2.37	2.36	0.8	50.0
6:2 FTS	AveID	1.581	1.512		2.27	2.37	-4.4	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.138	1.038		2.28	2.50	-8.8	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.325	1.345		2.42	2.38	1.5	50.0
Perfluorononanoic acid (PFNA)	AveID	1.067	1.064		2.49	2.50	-0.3	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.154	1.112		2.24	2.32	-3.7	40.0
F-53B Major	AveID	1.999	1.841		2.15	2.33	-7.9	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.998	1.001		2.51	2.50	0.3	40.0
8:2 FTS	AveID	1.293	1.367		2.53	2.40	5.8	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.8001	0.7951		2.38	2.40	-0.6	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.026	0.998		2.43	2.50	-2.7	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.9358	0.9331		2.49	2.50	-0.3	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6424	0.6364		2.39	2.41	-0.9	50.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.8407	0.8562		2.55	2.50	1.8	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8979	1.125		3.13	2.50	25.3	40.0
F-53B Minor	AveID	2.855	2.866		2.36	2.36	0.4	50.0
10:2 FTS	AveID	0.9098	0.9226		2.44	2.41	1.4	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.081	1.078		2.49	2.50	-0.2	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.2908	0.2859		2.38	2.42	-1.7	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	1.051	1.138		2.71	2.50	8.3	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.2757	0.2511		2.28	2.50	-8.9	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9267		2.57	2.50	2.7	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCV 320-258999/9 Calibration Date: 11/14/2018 02:58
 Instrument ID: A8_N Calib Start Date: 11/05/2018 15:37
 GC Column: GeminiC18 3x100 ID: 3.00 (mm) Calib End Date: 11/05/2018 16:22
 Lab File ID: 2018.11.13LLAAA_035.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	1.093	1.049		2.40	2.50	-4.0	50.0
13C4 PFBA	Ave	1.485	1.451		2.44	2.50	-2.3	50.0
13C5-PFPeA DNU	Ave	0.9800	0.9730		2.48	2.50	-0.7	50.0
13C3 PFBS	Ave	0.0207	0.0208		2.33	2.33	0.0	50.0
M2-4:2 FTS	Ave	0.1361	0.1323		2.27	2.34	-2.8	50.0
13C2 PFHxA	Ave	1.077	1.094		2.54	2.50	1.6	50.0
13C3 HFPO-DA	Ave	0.0682	0.0624		2.29	2.50	-8.5	50.0
13C4 PFHpA	Ave	0.9937	1.043		2.62	2.50	4.9	50.0
18O2 PFHxS	Ave	1.216	1.246		2.42	2.37	2.5	50.0
M2-6:2 FTS	Ave	0.2154	0.1879		2.07	2.38	-12.8	40.0
13C4 PFOA	Ave	0.9738	1.001		2.57	2.50	2.8	50.0
13C8 PFOA	Ave	1.687	1.974		2.86	2.45	17.0	50.0
13C8 PFOS	Ave	0.4292	0.3979		2.22	2.39	-7.3	50.0
13C4 PFOS	Ave	0.7981	0.7770		2.33	2.39	-2.7	50.0
13C5 PFNA	Ave	0.8097	0.7791		2.41	2.50	-3.8	50.0
13C8 FOSA	Ave	1.118	0.9941		2.22	2.50	-11.1	50.0
M2-8:2 FTS	Ave	0.2282	0.1830		1.92	2.40	-19.8	40.0
13C2 PFDA	Ave	0.6999	0.6621		2.37	2.50	-5.4	50.0
d3-NMeFOSAA	Ave	0.3413	0.3489		2.56	2.50	2.2	50.0
d5-NEtFOSAA	Ave	0.3637	0.3593		2.47	2.50	-1.2	50.0
13C2 PFUnA	Ave	0.5526	0.5162		2.34	2.50	-6.6	50.0
13C2 PFDoA	Ave	0.5857	0.5235		2.23	2.50	-10.6	50.0
13C2 PFTeDA	Ave	0.7283	0.7295		2.50	2.50	0.2	50.0
13C2 PFHxDA	Ave	1.288	1.191		2.31	2.50	-7.6	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_035.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Nov-2018 02:58:32 ALS Bottle#: 14 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: SACINSTLCMS01 Instrument ID: A8_N
 Sublist: chrom-A8_N*sub37
 Method: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\A8_N.m
 Limit Group: LC PFC ICAL
 Last Update: 26-Nov-2018 09:43:01 Calib Date: 05-Nov-2018 16:22:00
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNa\Sacramento\ChromData\A8_N\20181105-67132.b\2018.11.05ICAL_011.d

Column 1 : Det: EXP1

Process Host: CTX0324

First Level Reviewer: mongkols

Date: 26-Nov-2018 09:43:01

Ratio Calibration: None

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	1.403	1.406	-0.003	0.544	4021714	2.44		97.7	5495	
2 Perfluorobutanoic acid										a
212.90 > 169.00	1.403	1.403	0.0	1.000	3788293	2.49		99.4	220	
D 3 13C5 PFPeA										
267.90 > 223.00	1.668	1.670	-0.002	0.646	2696460	2.48		99.3	4790	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.668	1.668	0.0	1.000	2919011	2.41		96.6	275	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.700	1.700	0.0	1.000	3953021	2.19	Target=2.49	99.2	822	
298.90 > 99.00	1.700	1.700	0.0	1.000	1600398		2.47(1.25-3.74)		550	
D 47 13C3 PFBS										
301.90 > 83.00	1.700	1.702	-0.002	0.659	53471	2.33		100	261	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.898	1.898	0.0	1.116	813234	2.37		102	8744	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.898	1.912	-0.014	0.735	342428	2.27		97.2	366	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.928	1.928	0.0	1.000	2916802	2.36	Target=10.07	94.6	528	
313.00 > 119.00	1.928	1.928	0.0	1.000	262550		11.11(5.03-15.10)		481	
D 7 13C2 PFHxA										
315.00 > 270.00	1.928	1.943	-0.015	0.747	3032835	2.54		102	5493	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.949	1.949	0.0	1.147	3579301	2.30	Target=2.71	98.3	5906	
349.00 > 99.00	1.949	1.949	0.0	1.147	1378197		2.60(1.36-4.07)		1735	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.022	2.022	0.0	1.005	580537	2.50		99.8	506	

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	2.012	2.037	-0.025	0.779	172867	2.29		91.5	759	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.236	2.236	0.0	1.000	3171300	2.47	Target=2.27	98.9	673	
363.00 > 169.00	2.236	2.236	0.0	1.000	1186081		2.67(1.13-3.40)		945	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.258	2.258	0.0	1.000	3247421	2.06	Target=3.00	90.6	1461	
399.00 > 99.00	2.258	2.258	0.0	1.000	1077495		3.01(1.50-4.49)		786	
D 9 13C4 PFHpA										
367.00 > 322.00	2.236	2.265	-0.029	0.866	2889247	2.62		105	5397	
D 11 18O2 PFHxS										
403.00 > 84.00	2.258	2.277	-0.018	0.875	3267724	2.42		102	4036	
77 DONA										
377.00 > 251.00	2.280	2.280	0.0	0.771	8246647	2.37	Target=1.69	101	8174	
377.00 > 85.00	2.280	2.280	0.0	0.771	5085042		1.62(0.85-2.54)		5339	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.561	2.561	0.0	1.000	746306	2.27		95.6	1031	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.561	2.579	-0.018	0.992	494661	2.07		87.2	1224	
* 62 13C2 PFOA										
415.00 > 370.00	2.581	2.581	0.0		2771286	2.50			5853	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.595	2.595	0.0	0.878	2756267	2.42	Target=3.88	102	2945	
449.00 > 99.00	2.595	2.595	0.0	0.878	766136		3.60(1.94-5.82)		1186	
D 73 13C8 PFOA										
421.00 > 376.00	2.581	2.598	-0.017	1.000	5356091	2.86		117	8293	
D 14 13C4 PFOA										
417.00 > 372.00	2.581	2.604	-0.023	1.000	2773239	2.57		103	4546	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.581	2.581	0.0	1.000	2880599	2.28	Target=1.68	91.2	341	
413.00 > 169.00	2.581	2.581	0.0	1.000	1500369		1.92(0.84-2.52)		1495	
20 Perfluorononanoic acid										
463.00 > 419.00	2.957	2.957	0.0	1.000	2297185	2.49	Target=3.79	99.7	777	
463.00 > 169.00	2.957	2.957	0.0	1.000	540159		4.25(1.90-5.69)		1357	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.957	2.957	0.0	1.000	2222611	2.24	Target=4.62	96.3	1575	
499.00 > 99.00	2.964	2.957	0.007	1.002	508268		4.37(2.31-6.93)		676	
D 72 13C8 PFOS										
507.00 > 99.00	2.951	2.963	-0.012	1.143	1054158	2.22		92.7	3421	
D 18 13C4 PFOS										
503.00 > 80.00	2.957	2.970	-0.013	1.146	2058526	2.33		97.3	4035	
D 19 13C5 PFNA										
468.00 > 423.00	2.957	2.970	-0.013	1.146	2159083	2.41		96.2	4203	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.172	3.172	0.0	1.073	3694938	2.15		92.1	3556	
D 21 13C8 FOSA										
506.00 > 78.00	3.306	3.312	-0.006	1.281	2755022	2.22		88.9	2619	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.306	3.306	0.0	1.000	2757768	2.51		100	3815	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.313	3.313	0.0	1.000	664512	2.53		106	2560	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.313	3.313	0.0	1.121	1643481	2.38	Target=2.65	99.4	2503	
549.00 > 99.00	3.313	3.313	0.0	1.121	602720		2.73(1.33-3.97)		1464	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.313	3.319	-0.006	1.284	485951	1.92		80.2	1260	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.321	3.321	0.0	1.000	1832150	2.43	Target=4.73	97.3	1196	
513.00 > 169.00	3.321	3.321	0.0	1.000	347900		5.27(2.36-7.09)		344	
D 23 13C2 PFDA										
515.00 > 470.00	3.321	3.326	-0.005	1.286	1834966	2.37		94.6	2874	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.476	3.482	-0.006	1.347	966992	2.56		102	1469	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.484	3.484	0.0	1.002	902335	2.49		99.7	753	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.643	3.643	0.0	1.232	1321008	2.39	Target=2.77	99.1	3929	
599.00 > 99.00	3.643	3.643	0.0	1.232	428457		3.08(1.39-4.16)		2011	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.649	3.653	-0.004	1.414	995805	2.47		98.8	1475	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.656	3.656	0.0	1.000	1608744	3.13	Target=4.24	125	1201	
563.00 > 169.00	3.656	3.656	0.0	1.000	317108		5.07(2.12-6.36)		1458	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.656	3.656	0.0	1.002	852626	2.55		102	1485	
D 30 13C2 PFUnA										
565.00 > 520.00	3.656	3.666	-0.010	1.416	1430438	2.34		93.4	4668	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.818	3.818	0.0	1.291	5813595	2.36		100	6113	
35 MeFOSA										
512.00 > 169.00	3.827	3.827	0.0		813712	NC			623	
D 36 13C2 PFDaA										
615.00 > 570.00	3.965	3.960	0.005	1.536	1450837	2.23		89.4	4004	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.965	3.965	0.0	1.000	1564664	2.49	Target=4.27	99.8	867	
613.00 > 169.00	3.956	3.965	-0.009	0.998	414193		3.78(2.13-6.40)		2058	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.965	3.965	0.0	1.197	451157	2.44		101	1831	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.202	4.202	0.0	1.421	595809	2.38	Target=0.00	98.3	2187	
699.00 > 99.00	4.202	4.202	0.0	1.421	891135		0.67(0.00-0.00)		2659	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.230	4.230	0.0	1.067	1651700	2.71	Target=2.51	108	894	
663.00 > 169.00	4.230	4.230	0.0	1.067	536950		3.08(1.25-3.76)		3085	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.463	4.463	0.0	1.000	507534	2.28	Target=1.42	91.1	2913	
713.00 > 219.00	4.463	4.463	0.0	1.000	349058		1.45(0.71-2.13)		1661	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.463	4.466	-0.003	1.729	2021520	2.50		100	4902	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.888	4.888	0.0	1.000	3057488	2.57	Target=5.72	103	924	
813.00 > 169.00	4.888	4.888	0.0	1.000	559094		5.47(2.86-8.58)		2218	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.888	4.889	-0.001	1.894	3299368	2.31		92.4	5549	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.237	5.237	0.0	1.071	3462576	2.40	Target=7.65	96.0	611	
913.00 > 169.00	5.237	5.237	0.0	1.071	464767		7.45(3.83-11.48)		1599	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

LCPFC_LL5_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_035.d

Injection Date: 14-Nov-2018 02:58:32

Instrument ID: A8_N

Lims ID: CCV L5

Client ID:

Operator ID: SACINSTLCMS01

ALS Bottle#: 14

Worklist Smp#: 9

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

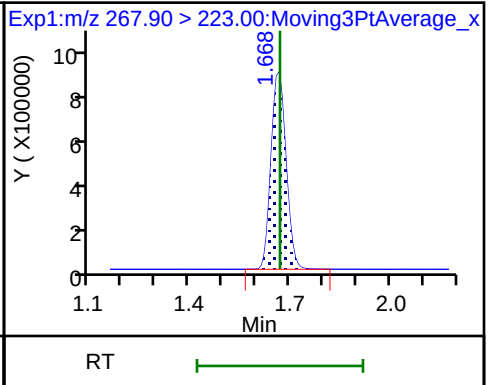
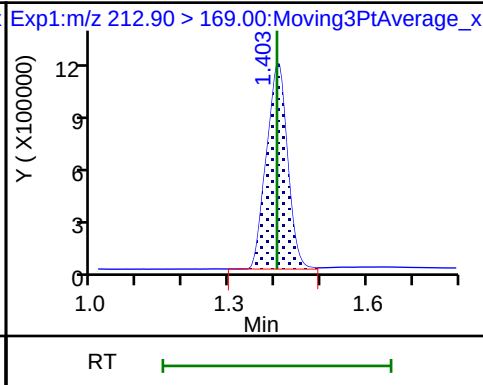
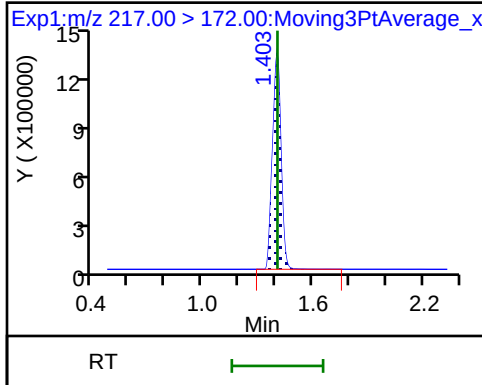
Method: A8_N

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

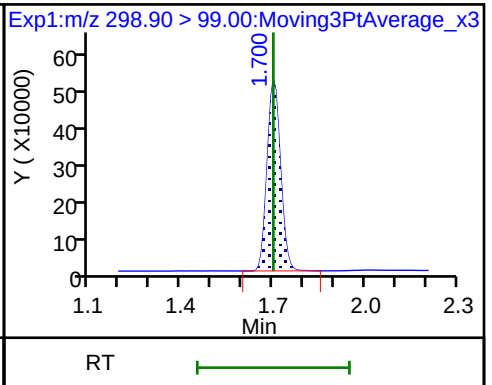
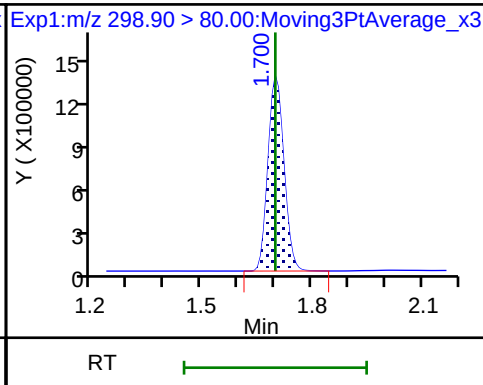
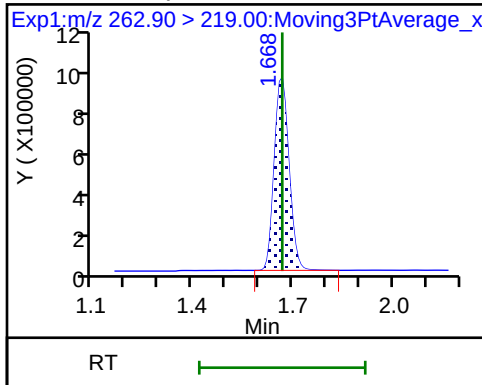
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

5 Perfluorobutanesulfonic acid

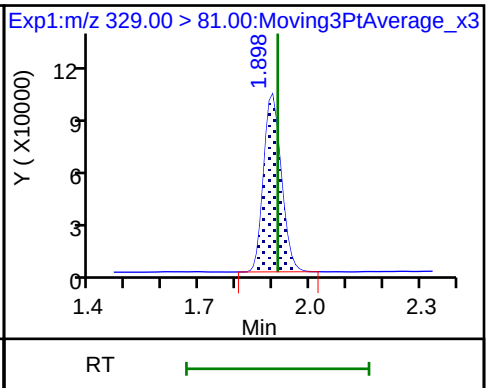
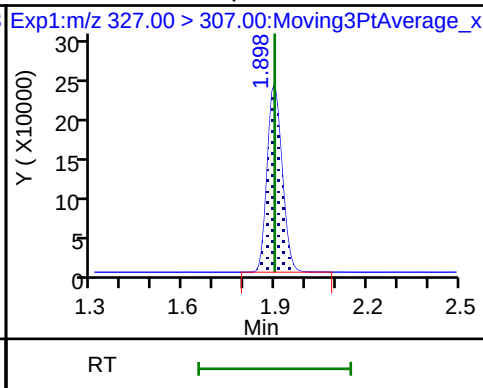
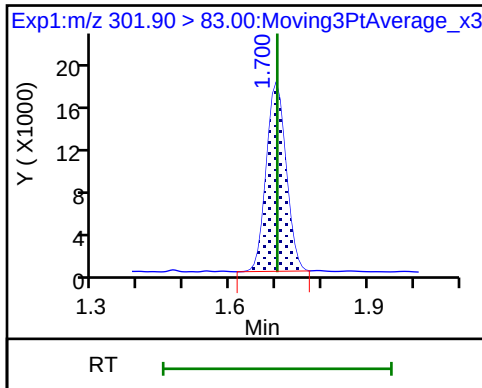
5 Perfluorobutanesulfonic acid



D 47 13C3 PFBS

61 1H,1H,2H,2H-perfluorohexanesulfonate

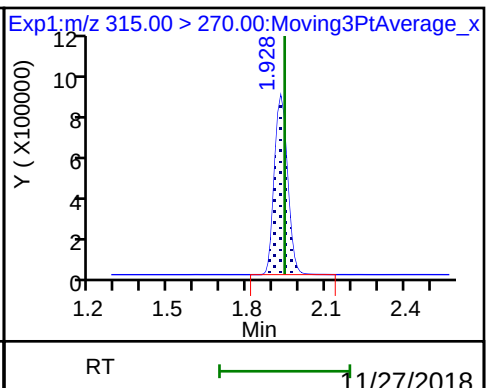
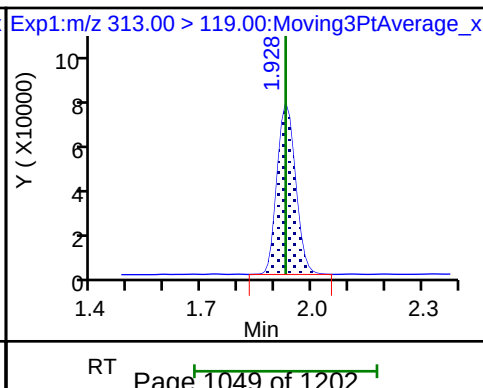
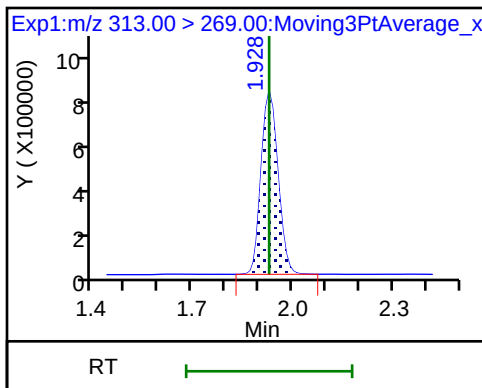
D 60 M2-4:2 FTS

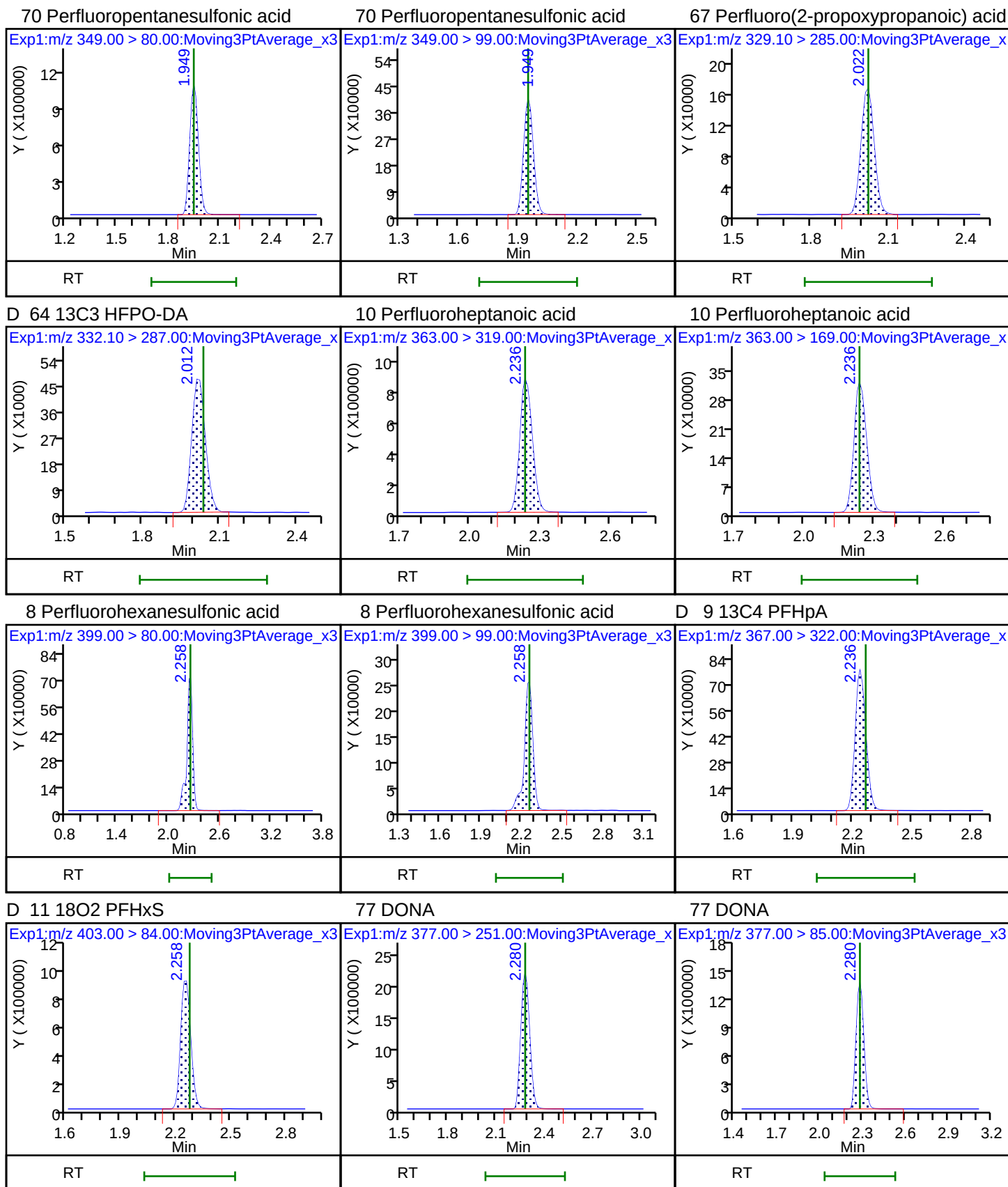


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

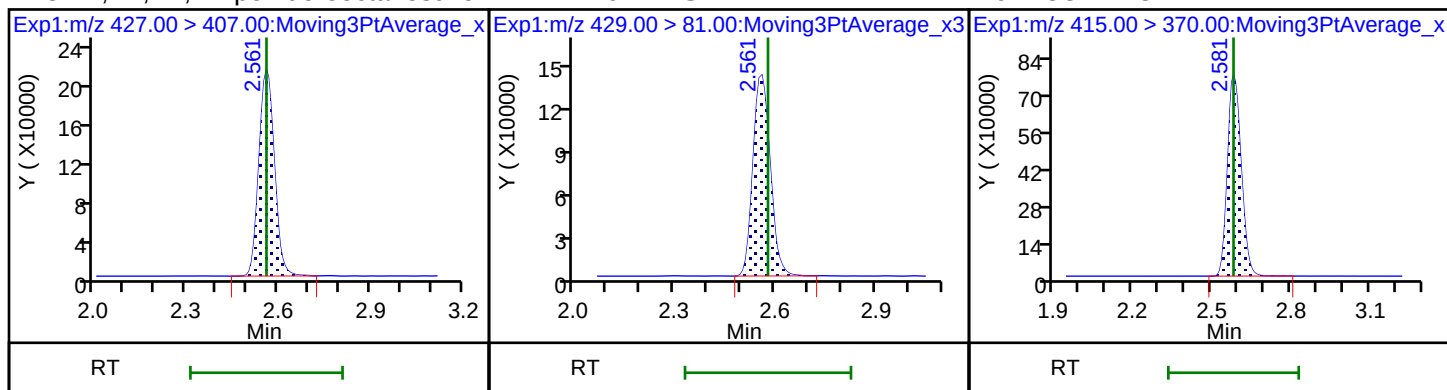
D 7 13C2 PFHxA





13 1H,1H,2H,2H-perfluorooctanesulfonD 12 M2-6:2 FTS

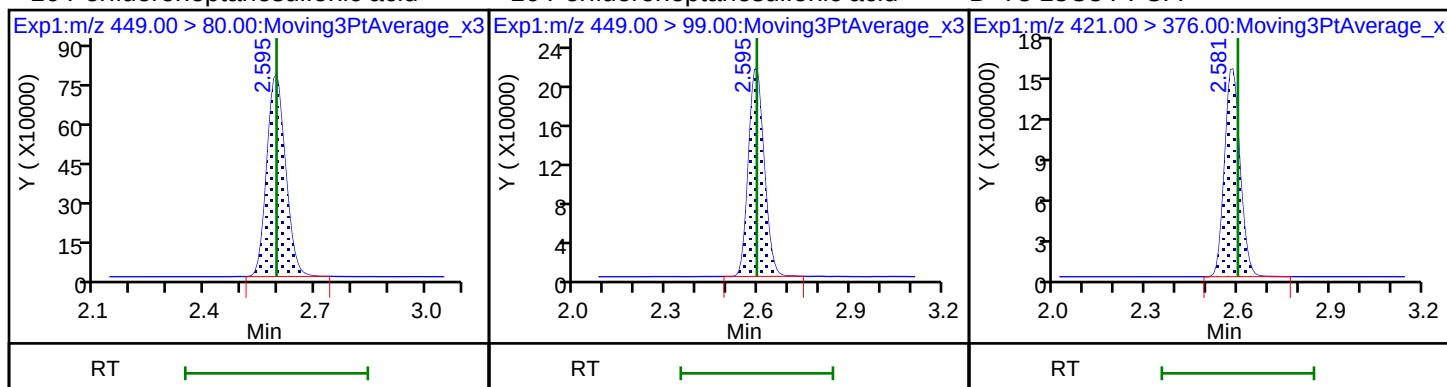
* 62 13C2 PFOA



16 Perfluoroheptanesulfonic acid

16 Perfluoroheptanesulfonic acid

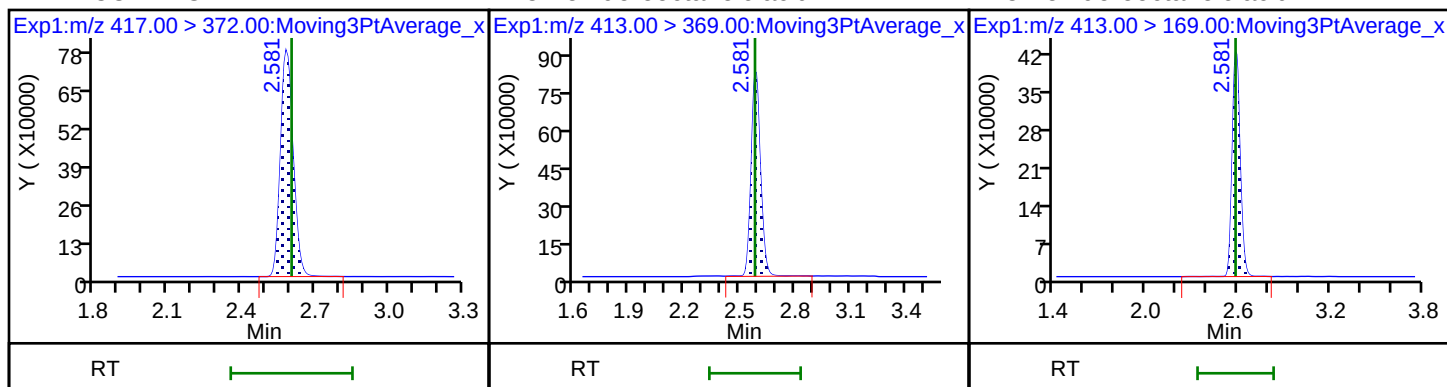
D 73 13C8 PFOA



D 14 13C4 PFOA

15 Perfluorooctanoic acid

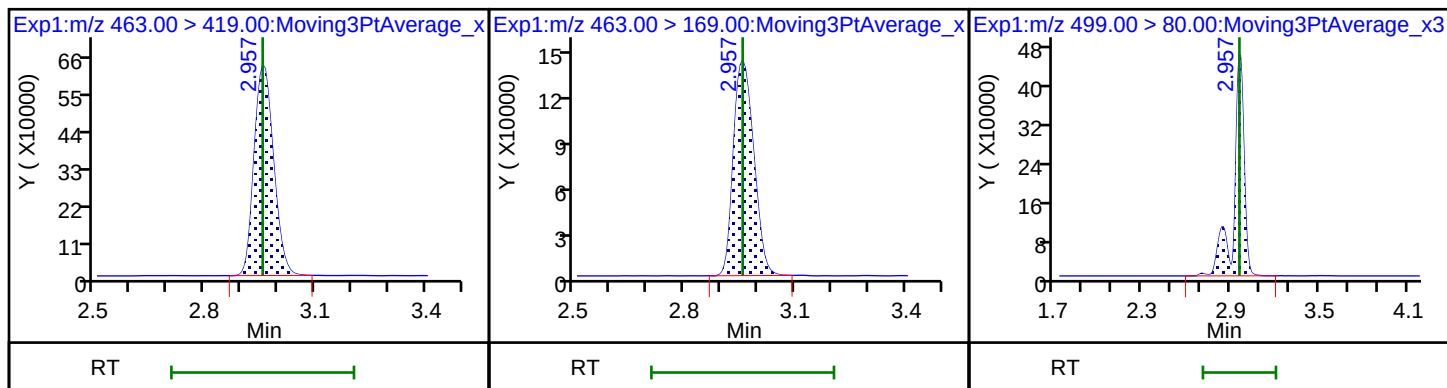
15 Perfluorooctanoic acid



20 Perfluorononanoic acid

20 Perfluorononanoic acid

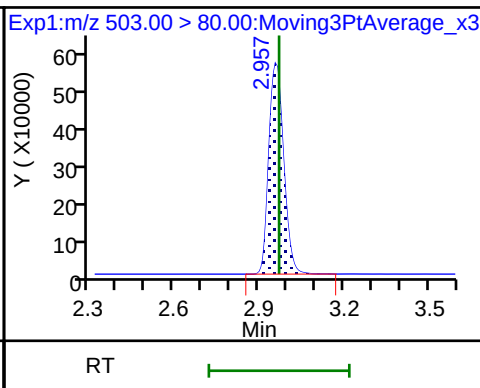
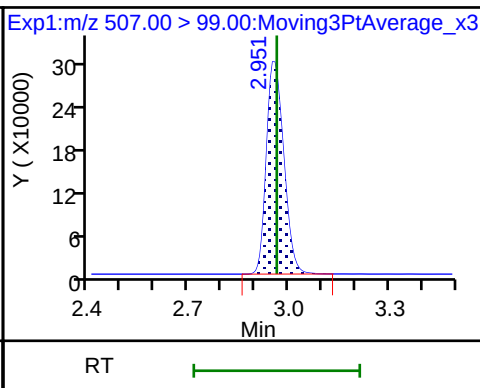
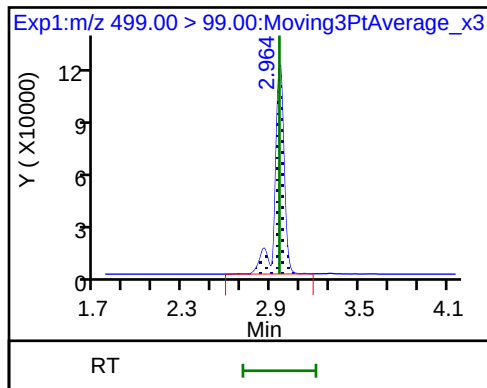
17 Perfluorooctanesulfonic acid



17 Perfluorooctanesulfonic acid

D 72 13C8 PFOS

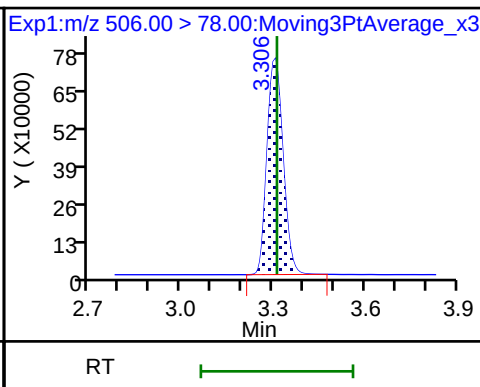
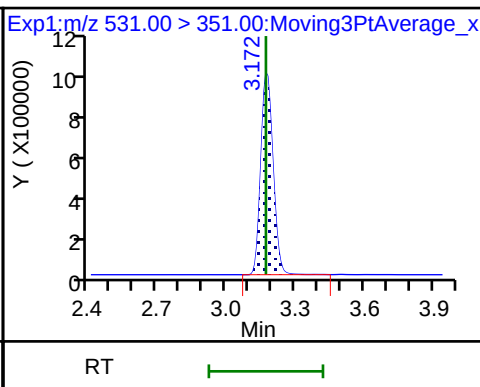
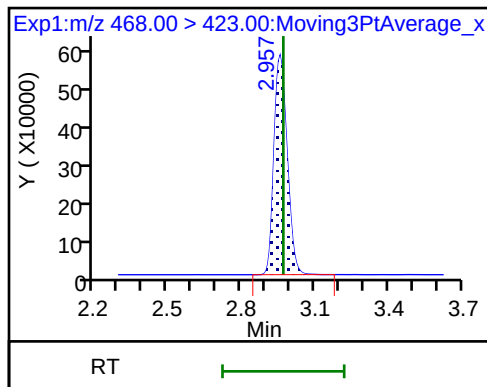
D 18 13C4 PFOS



D 19 13C5 PFNA

69 9-Chlorohexadecafluoro-3-oxanone

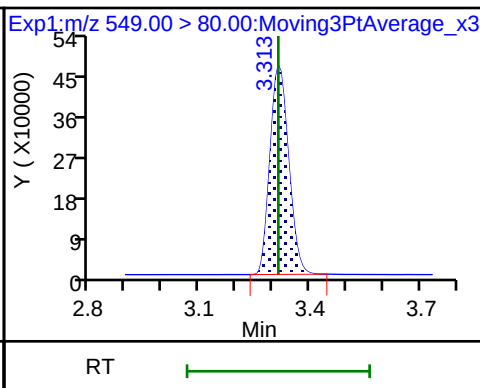
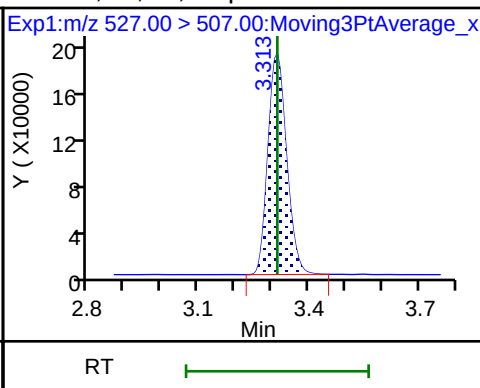
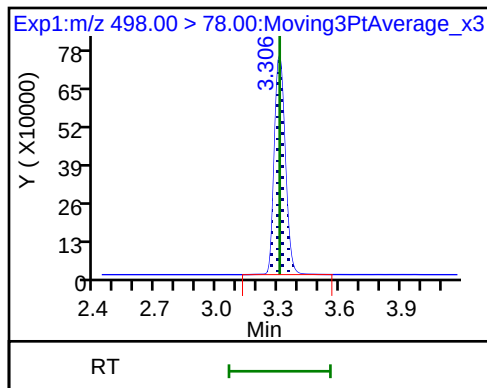
D 21 13C8 FOSA



22 Perfluorooctanesulfonamide

25 1H,1H,2H,2H-perfluorodecanesulfoni

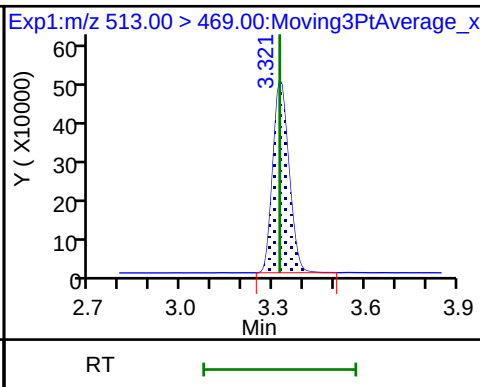
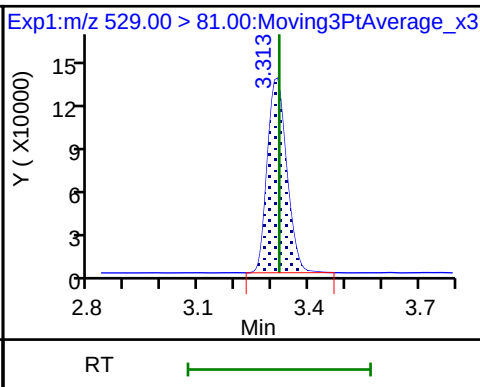
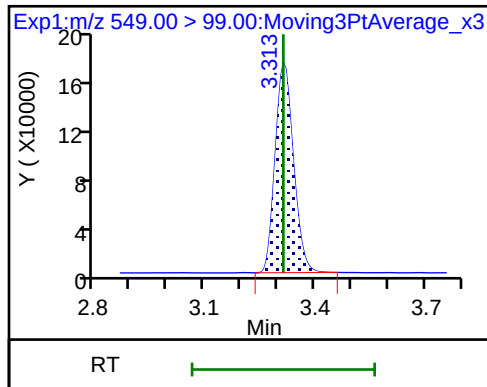
68 Perfluorononanesulfonic acid

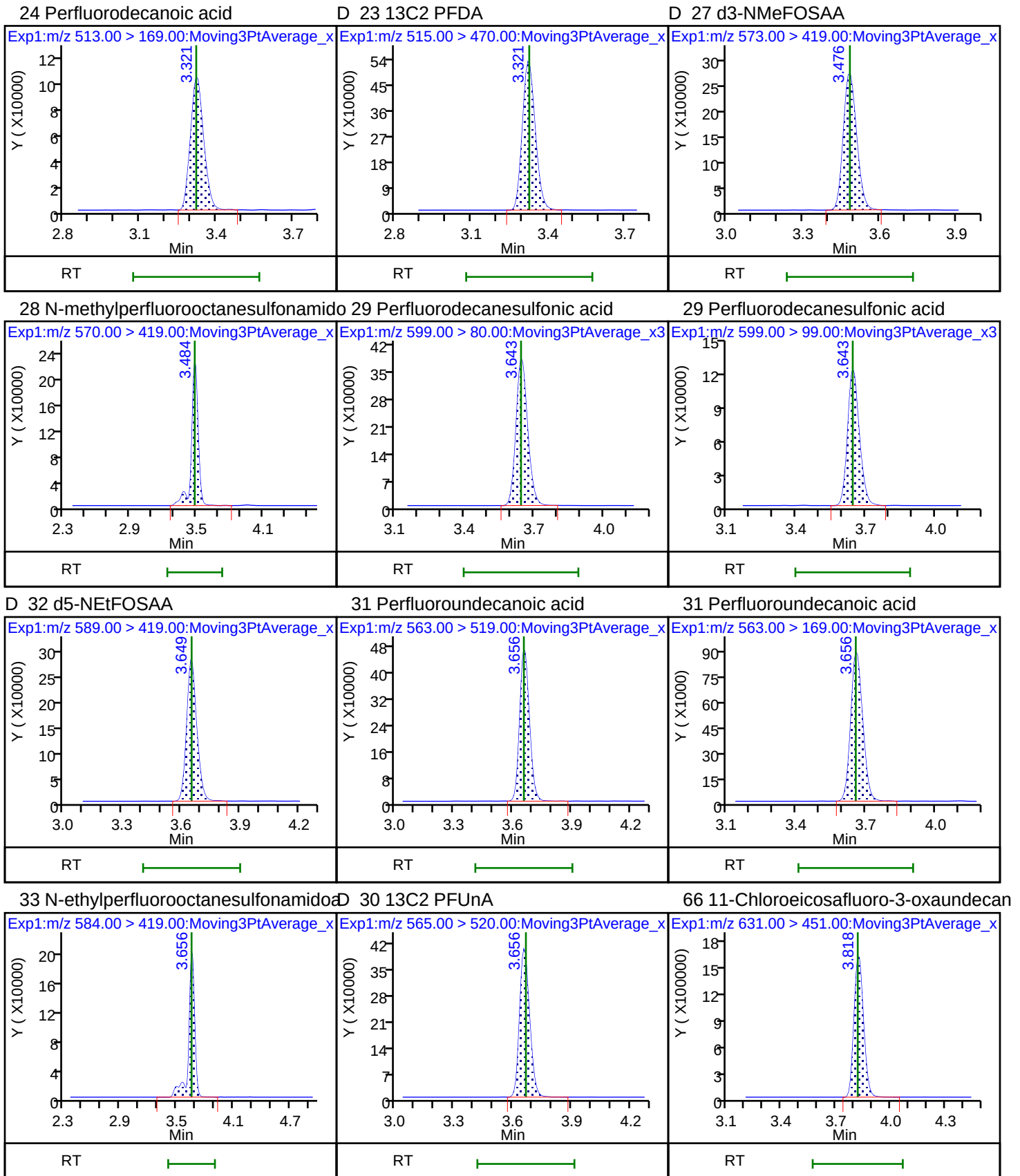


68 Perfluorononanesulfonic acid

D 26 M2-8:2 FTS

24 Perfluorodecanoic acid

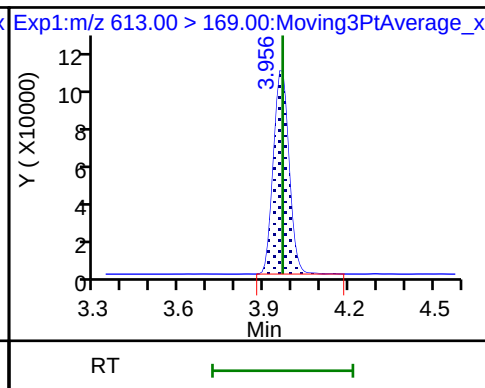
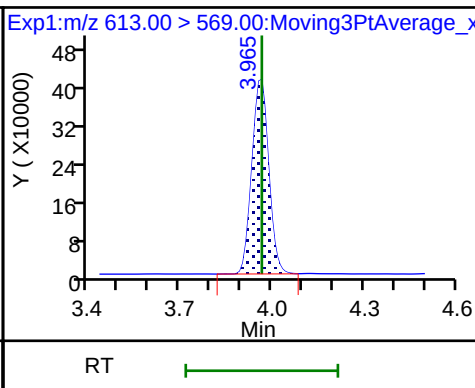
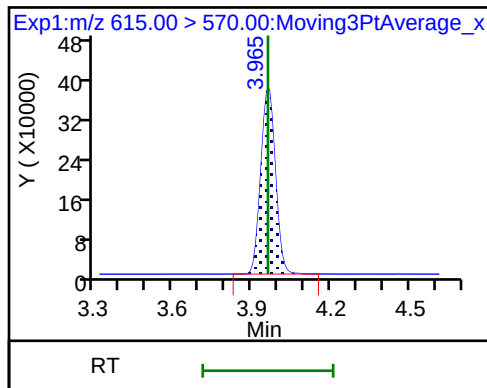




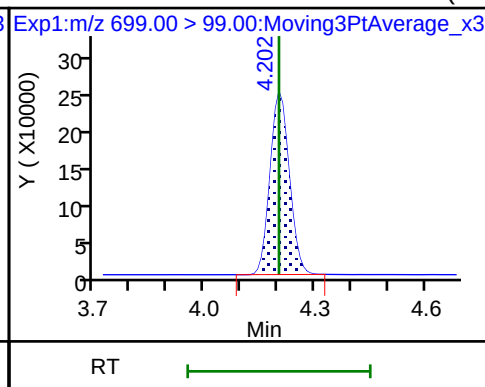
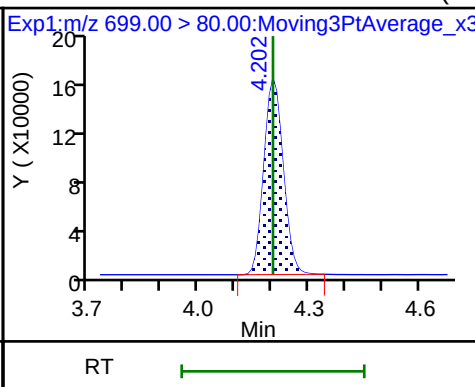
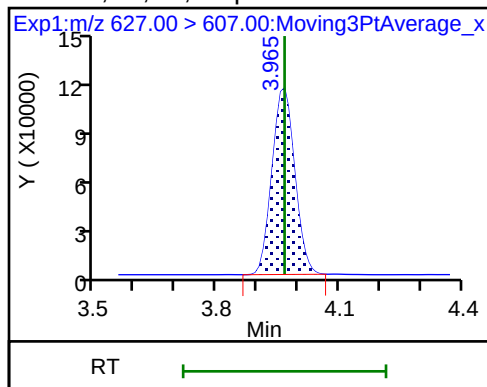
D 36 13C2 PFDaA

37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



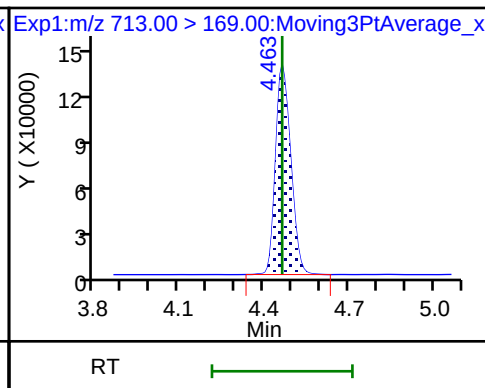
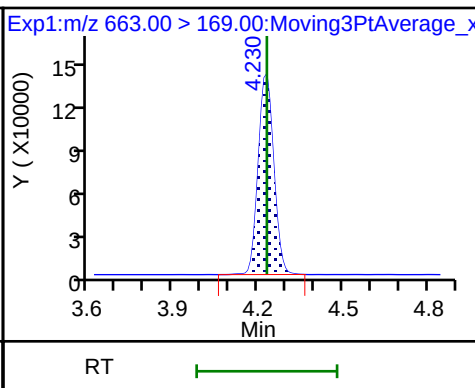
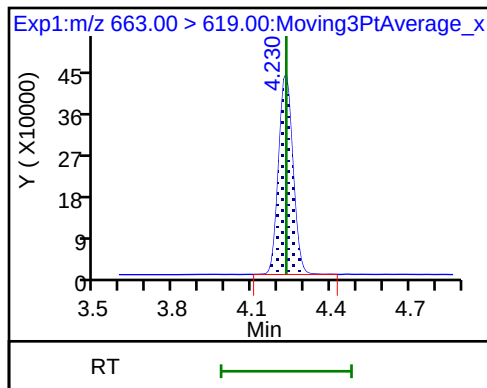
74 1H,1H,2H,2H-perfluorododecanesulfonate 75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

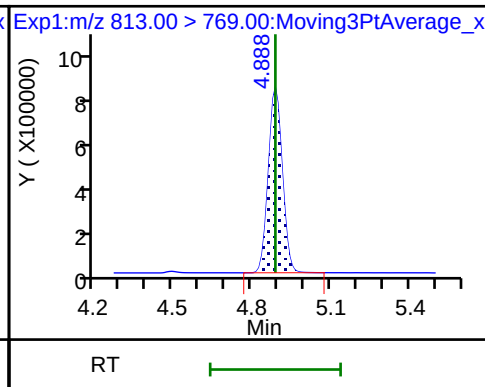
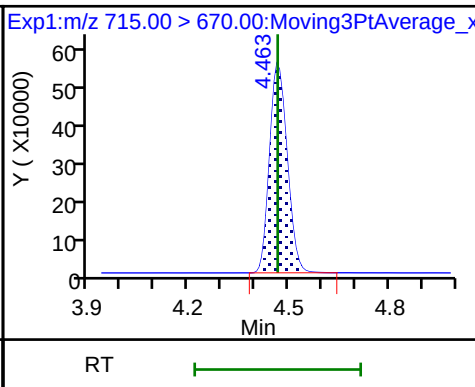
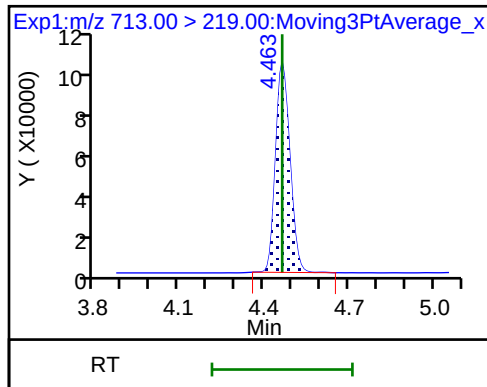
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

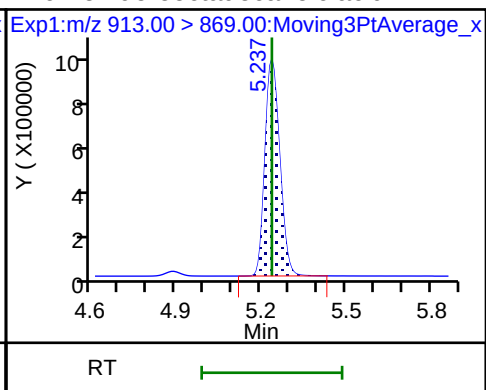
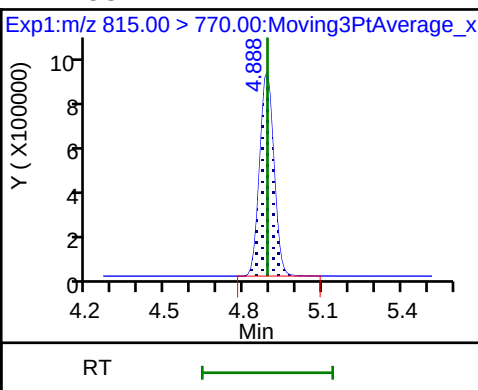
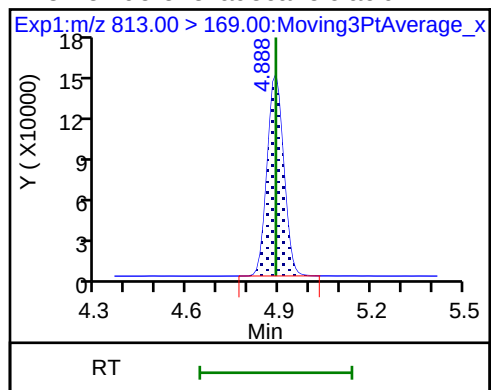
45 Perfluorohexadecanoic acid



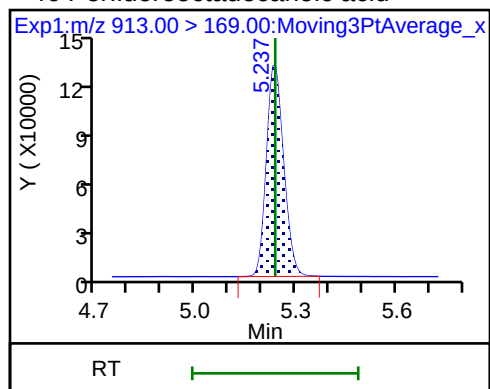
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

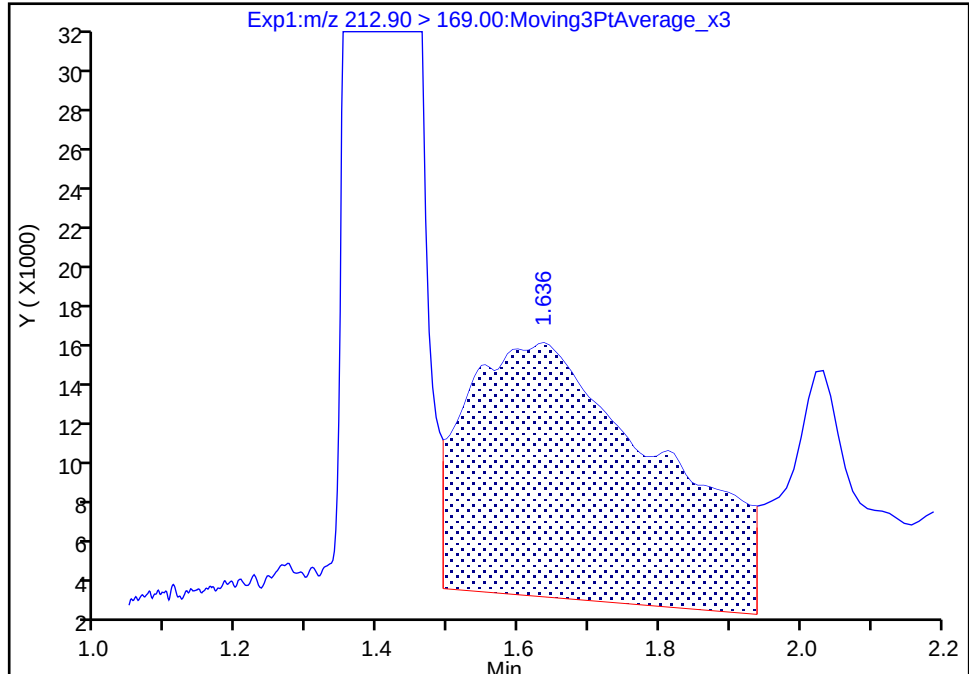
Data File: \\ChromNa\Sacramento\ChromData\A8_N\20181113-67653.b\2018.11.13LLAAA_035.d
Injection Date: 14-Nov-2018 02:58:32 Instrument ID: A8_N
Lims ID: CCV L5
Client ID:
Operator ID: SACINSTLCMS01 ALS Bottle#: 14 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: A8_N Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

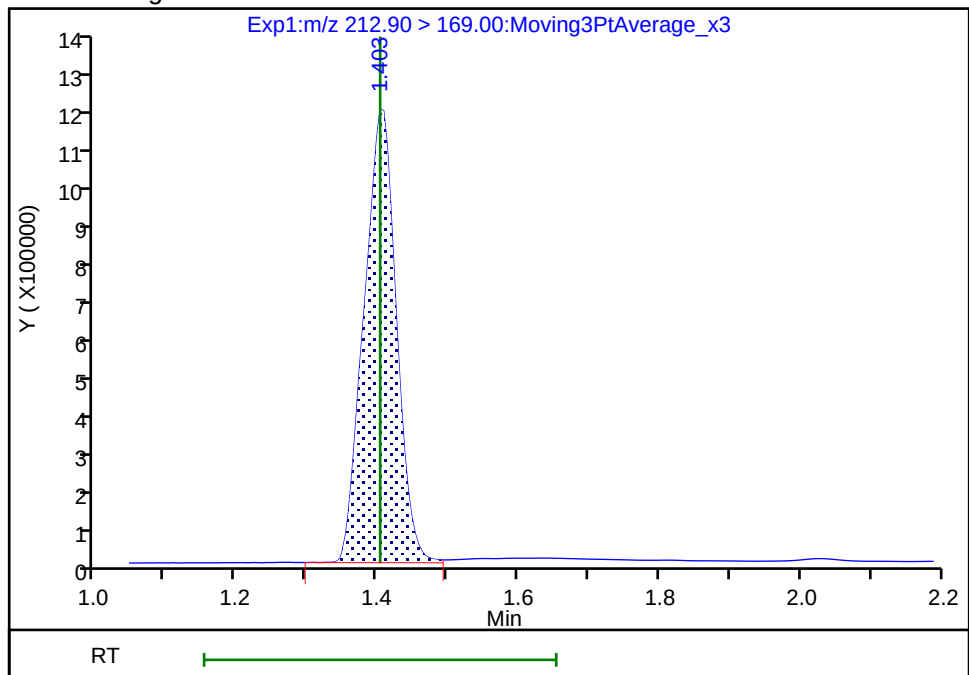
RT: 1.64
Area: 244930
Amount: 0.160670
Amount Units: ng/ml

Processing Integration Results



RT: 1.40
Area: 3788293
Amount: 2.485056
Amount Units: ng/ml

Manual Integration Results



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: ICV 320-255834/10 Calibration Date: 10/30/2018 14:12

Instrument ID: A9 Calib Start Date: 10/30/2018 13:12

GC Column: Acquity ID: 2.10 (mm) Calib End Date: 10/30/2018 13:57

Lab File ID: 2018.10.30ICALA_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9357	0.9559		2.55	2.50	2.2	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.001	1.016		2.54	2.50	1.5	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	103.3	106.9		2.29	2.21	3.5	50.0
4:2 FTS	AveID	20.55	20.14		2.29	2.34	-2.0	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8997	0.9050		2.51	2.50	0.6	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	47.84	49.08		2.41	2.35	2.6	50.0
HFPO-DA (GenX)	AveID	1.662	1.730		2.60	2.50	4.0	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.061	1.084		2.55	2.50	2.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.260	1.195		2.16	2.28	-5.2	40.0
DONA	AveID	2.718	2.715		2.35	2.36	-0.1	50.0
6:2 FTS	AveID	2.182	2.161		2.35	2.38	-1.0	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.081	1.012		2.34	2.50	-6.4	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.041	1.079		2.46	2.38	3.7	50.0
Perfluorononanoic acid (PFNA)	AveID	1.001	1.066		2.66	2.50	6.5	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.077	1.023		2.20	2.31	-5.0	40.0
F-53B Major	AveID	1.108	1.124		2.37	2.33	1.5	50.0
8:2 FTS	AveID	14.28	13.08		2.20	2.40	-8.4	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.6135	0.6081		2.38	2.40	-0.9	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	3.005	2.983		2.48	2.50	-0.7	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.086	1.085		2.50	2.50	-0.0	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	1.000	1.150		2.88	2.50	15.0	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8654	0.8929		2.49	2.41	3.2	50.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.9143	1.022		2.79	2.50	11.8	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.137	1.042		2.29	2.50	-8.4	40.0
F-53B Minor	AveID	1.387	1.454		2.47	2.36	4.8	50.0
10:2 FTS	AveID	10.11	9.662		2.30	2.41	-4.5	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.017	1.054		2.59	2.50	3.6	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0963	0.1009		2.53	2.42	4.7	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.8175	0.7974		2.44	2.50	-2.5	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1828	0.1625		2.22	2.50	-11.1	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9301		2.55	2.50	2.1	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: ICV 320-255834/10 Calibration Date: 10/30/2018 14:12
 Instrument ID: A9 Calib Start Date: 10/30/2018 13:12
 GC Column: Acquity ID: 2.10 (mm) Calib End Date: 10/30/2018 13:57
 Lab File ID: 2018.10.30ICALA_010.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.4945	0.5175		2.62	2.50	4.7	50.0
13C4 PFBA	Ave	0.9103	0.8956		2.46	2.50	-1.6	50.0
13C5-PFPeA DNU	Ave	0.8665	0.8702		2.51	2.50	0.4	50.0
13C3 PFBS	Ave	0.0120	0.0117		2.28	2.33	-2.1	50.0
M2-4:2 FTS	Ave	0.0962	0.0949		2.30	2.34	-1.4	50.0
13C2 PFHxA	Ave	0.9136	0.8922		2.44	2.50	-2.3	50.0
13C3 HFPO-DA	Ave	0.1181	0.1053		2.23	2.50	-10.8	50.0
13C4 PFHpA	Ave	1.074	1.077		2.51	2.50	0.3	50.0
18O2 PFHxS	Ave	0.6988	0.6901		2.34	2.37	-1.2	50.0
M2-6:2 FTS	Ave	0.0988	0.0958		2.30	2.38	-3.0	40.0
13C4 PFOA	Ave	0.9837	0.9874		2.51	2.50	0.4	50.0
13C8 PFOA	Ave	3440710	3383861		2.41	2.45	-1.7	50.0
13C4 PFOS	Ave	0.7064	0.7121		2.41	2.39	0.8	50.0
13C5 PFNA	Ave	0.9095	0.8539		2.35	2.50	-6.1	50.0
13C8 PFOS	Ave	494030	477022		2.31	2.39	-3.4	50.0
13C8 FOSA	Ave	0.3910	0.4001		2.56	2.50	2.3	50.0
M2-8:2 FTS	Ave	0.0122	0.0124		2.42	2.40	1.0	40.0
13C2 PFDA	Ave	0.9367	0.8982		2.40	2.50	-4.1	50.0
d3-NMeFOSAA	Ave	0.4049	0.3854		2.38	2.50	-4.8	50.0
d5-NEtFOSAA	Ave	0.3298	0.3261		2.47	2.50	-1.1	50.0
13C2 PFUnA	Ave	0.7823	0.7763		2.48	2.50	-0.8	50.0
13C2 PFDoA	Ave	0.9635	0.9483		2.46	2.50	-1.6	50.0
13C2 PFTeDA	Ave	0.7200	0.7249		2.52	2.50	0.7	50.0
13C2 PFHxDA	Ave	0.7154	0.7074		2.47	2.50	-1.1	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_010.d
 Lims ID: ICV Full
 Client ID:
 Sample Type: ICV
 Inject. Date: 30-Oct-2018 14:12:50 ALS Bottle#: 17 Worklist Smp#: 10
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist:
 Method: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 30-Oct-2018 15:06:28 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: roycea

Date: 30-Oct-2018 14:56:23

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	1.323	1.323	0.0	0.528	7176600	2.46		98.4	15651	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.328	1.324	0.004	1.003	6860194	2.55			369	
D 3 13C5 PFPeA										
267.90 > 223.00	1.572	1.571	0.001	0.628	6973023	2.51		100	10814	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.572	1.573	-0.001	1.000	7083759	2.54			738	
D 47 13C3 PFBS										
301.90 > 83.00	1.607	1.603	0.004	0.642	87417	2.28		97.9	424	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.607	1.607	0.0	1.000	8894419	2.29			3199	
298.90 > 99.00	1.607	1.607	0.0	1.000	3122663		2.85(1.35-4.05)		1549	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.805	1.804	0.001	0.721	709942	2.30		98.6	744	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.805	1.805	0.0	1.123	1770192	2.29			8809	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.839	1.836	0.003	1.000	6469774	2.51			1322	
313.00 > 119.00	1.839	1.836	0.003	1.000	493366		13.11(6.96-20.87)		1221	
D 7 13C2 PFHxA										
315.00 > 270.00	1.839	1.836	0.003	0.734	7149285	2.44		97.7	13561	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.865	1.859	0.006	1.160	4336162	2.41			5915	
349.00 > 99.00	1.865	1.859	0.006	1.160	2006834		2.16(1.15-3.45)		3231	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.935	1.928	0.007	0.773	843564	2.23		89.2	3641	

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	1.935	1.928	0.007	1.000	1459011	2.60			1147	
D 9 13C4 PFHpA										
367.00 > 322.00	2.150	2.148	0.002	0.858	8631575	2.51		100	7356	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.150	2.148	0.002	1.000	9355670	2.55			2000	
363.00 > 169.00	2.150	2.148	0.002	1.000	2051430		4.56(2.17-6.52)		3852	
D 11 18O2 PFHxS										
403.00 > 84.00	2.170	2.164	0.006	0.867	5230856	2.34		98.8	7241	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.170	2.164	0.006	1.000	6024840	2.16			3171	
399.00 > 99.00	2.160	2.164	-0.004	0.995	1677678		3.59(1.90-5.70)		1416	
76 DONA										
377.00 > 251.00	2.191	2.194	-0.003	0.761	14590474	2.35			15141	
377.00 > 85.00	2.191	2.194	-0.003	0.761	6848476		2.13(1.13-3.39)		10825	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.478	2.478	0.0	0.990	729157	2.30		97.0	1320	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.478	2.482	-0.004	1.000	1575477	2.35			2094	
D 73 13C8 PFOA										
421.00 > 376.00	2.504	2.501	0.003		8281999	2.41		98.3	9995	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.504	2.504	0.0	1.000	8003897	2.34			968	
413.00 > 169.00	2.504	2.504	0.0	1.000	3083496		2.60(1.36-4.08)		4719	
* 62 13C2 PFOA										
415.00 > 370.00	2.504	2.504	0.0		8013101	2.50			11540	
D 14 13C4 PFOA										
417.00 > 372.00	2.504	2.504	0.0	1.000	7912161	2.51		100	7743	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.518	2.514	0.004	0.875	5850054	2.46			3732	
449.00 > 99.00	2.518	2.514	0.004	0.875	1397418		4.19(1.84-5.53)		3075	
D 72 13C8 PFOS										
507.00 > 99.00	2.878	2.877	0.001		1140082	2.31		96.6	3643	
D 18 13C4 PFOS										
503.00 > 80.00	2.878	2.877	0.001	1.149	5454852	2.41		101	4090	
D 19 13C5 PFNA										
468.00 > 423.00	2.878	2.877	0.001	1.149	6842558	2.35		93.9	6084	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.878	2.877	0.001	1.000	5404500	2.20			1174	
499.00 > 99.00	2.878	2.877	0.001	1.000	1341957		4.03(2.04-6.12)		2330	
20 Perfluorononanoic acid										
463.00 > 419.00	2.878	2.880	-0.002	1.000	7295359	2.66			456	
463.00 > 169.00	2.878	2.880	-0.002	1.000	1335295		5.46(2.68-8.03)		2837	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.080	3.091	-0.011	1.070	5979811	2.37			2601	
D 21 13C8 FOSA										
506.00 > 78.00	3.224	3.217	0.007	1.287	3205791	2.56		102	4710	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide	498.00 > 78.00	3.224	3.219	0.005	1.000	9561996	2.48		5171	
D 26 M2-8:2 FTS	529.00 > 81.00	3.224	3.226	-0.002	1.287	94931	2.42	101	463	
25 1H,1H,2H,2H-perfluorodecanesulfoni	527.00 > 507.00	3.224	3.226	-0.002	1.000	1244250	2.20		3828	
68 Perfluorononanesulfonic acid	549.00 > 80.00	3.224	3.226	-0.002	1.120	3331065	2.38		3990	
549.00 > 99.00	3.224	3.226	-0.002	1.120	601673		5.54(3.02-9.05)		3877	
24 Perfluorodecanoic acid	513.00 > 469.00	3.241	3.241	0.0	1.000	7807802	2.50		1227	
513.00 > 169.00	3.241	3.241	0.0	1.000	537287		14.53(7.12-21.35)		1410	
D 23 13C2 PFDA	515.00 > 470.00	3.241	3.241	0.0	1.294	7197428	2.40	95.9	7146	
D 27 d3-NMeFOSAA	573.00 > 419.00	3.399	3.392	0.007	1.357	3088149	2.38	95.2	3833	
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	3.399	3.399	0.0	1.000	3552086	2.88		1275	
29 Perfluorodecanesulfonic acid	599.00 > 80.00	3.541	3.552	-0.011	1.231	4916507	2.49		3614	
599.00 > 99.00	3.556	3.552	0.004	1.236	1040104		4.73(2.14-6.43)		2890	
D 32 d5-NEtFOSAA	589.00 > 419.00	3.556	3.558	-0.002	1.420	2613240	2.47	98.9	3755	
33 N-ethylperfluorooctanesulfonamidoa	584.00 > 419.00	3.570	3.566	0.004	1.004	2669909	2.79		6248	
D 30 13C2 PFUnA	565.00 > 520.00	3.570	3.568	0.002	1.426	6220476	2.48	99.2	6141	
31 Perfluoroundecanoic acid	563.00 > 519.00	3.570	3.570	0.0	1.000	6481117	2.29		1564	
563.00 > 169.00	3.570	3.570	0.0	1.000	528252		12.27(5.24-15.72)		2165	
66 11-Chloroeicosafuoro-3-oxaundecan	631.00 > 451.00	3.728	3.728	0.0	1.296	7813677	2.47		7145	
D 36 13C2 PFDaA	615.00 > 570.00	3.854	3.859	-0.005	1.539	7598929	2.46	98.4	8815	
37 Perfluorododecanoic acid	613.00 > 569.00	3.854	3.861	-0.007	1.000	8009187	2.59		2438	
613.00 > 169.00	3.854	3.861	-0.007	1.000	856769		9.35(4.68-14.05)		1905	
74 1H,1H,2H,2H-perfluorododecanesulfo	627.00 > 607.00	3.854	3.865	-0.011	1.196	922967	2.30		1253	
75 Perfluorododecanesulfonic acid (PF	699.00 > 80.00	4.089	4.101	-0.012	1.421	557196	2.53		3374	
699.00 > 99.00	4.089	4.101	-0.012	1.421	1020755		0.55(0.28-0.83)		3235	
41 Perfluorotridecanoic acid	663.00 > 619.00	4.122	4.125	-0.003	1.069	6059296	2.44		3918	
663.00 > 169.00	4.122	4.125	-0.003	1.069	1052269		5.76(3.09-9.27)		3203	
42 Perfluorotetradecanoic acid	713.00 > 169.00	4.357	4.364	-0.007	1.000	943930	2.22		2989	
713.00 > 219.00	4.357	4.364	-0.007	1.000	638691		1.48(0.70-2.09)		4553	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2 PFTeDA										
715.00 > 670.00	4.357	4.364	-0.007	1.740	5809017	2.52		101	10499	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.769	4.780	-0.011	1.000	5271824	2.55			6488	
813.00 > 169.00	4.769	4.780	-0.011	1.000	1027836		5.13(2.77-8.32)		3153	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.769	4.780	-0.011	1.904	5668298	2.47		98.9	14508	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.125	5.127	-0.002	1.075	2933459	2.62			4212	
913.00 > 169.00	5.125	5.127	-0.002	1.075	613383		4.78(2.55-7.64)		3043	

Reagents:

LCPFCIC_FULL_00016

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30\ICALA_010.d

Injection Date: 30-Oct-2018 14:12:50

Instrument ID: A9

Lims ID: ICV Full

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 17

Worklist Smp#: 10

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

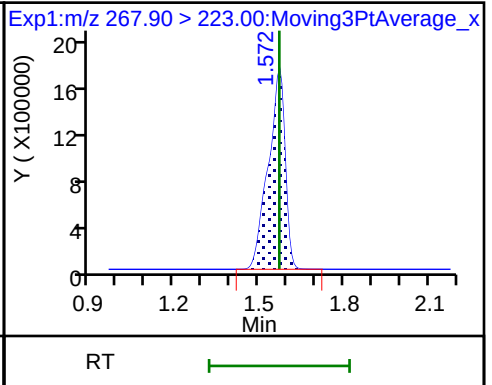
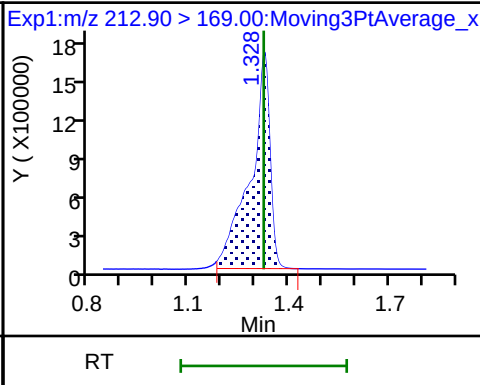
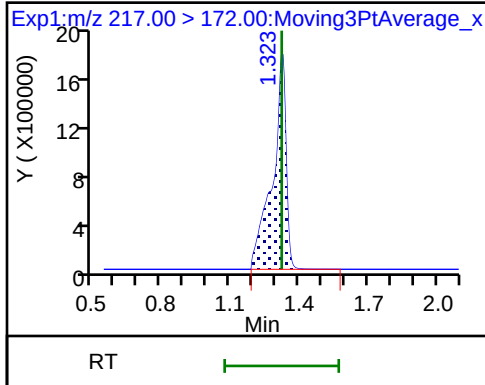
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

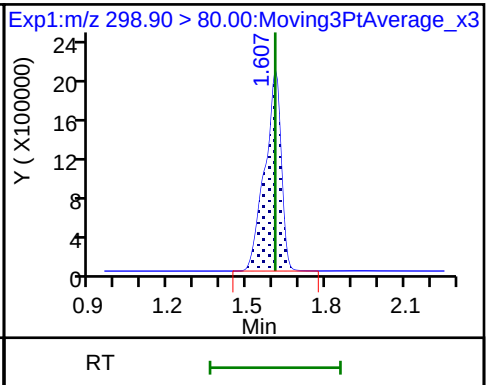
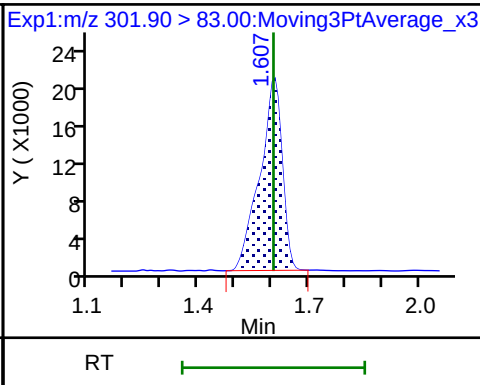
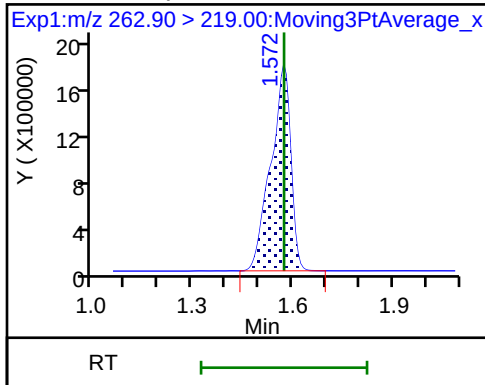
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

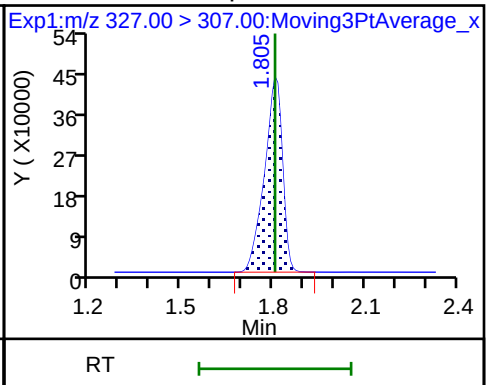
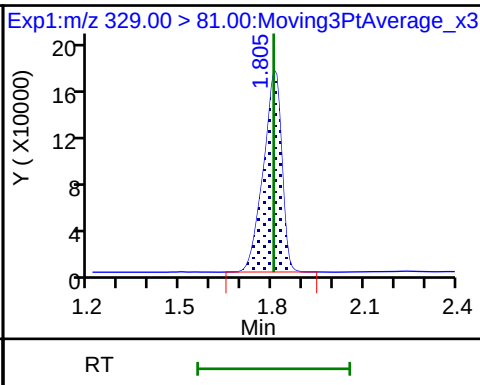
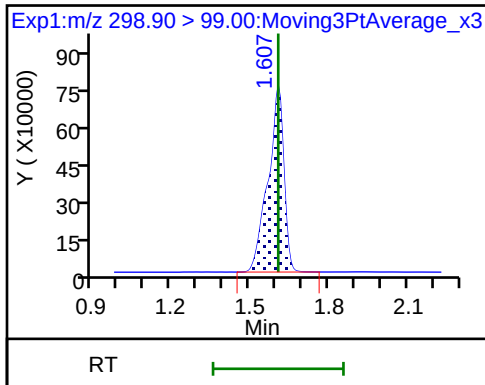
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

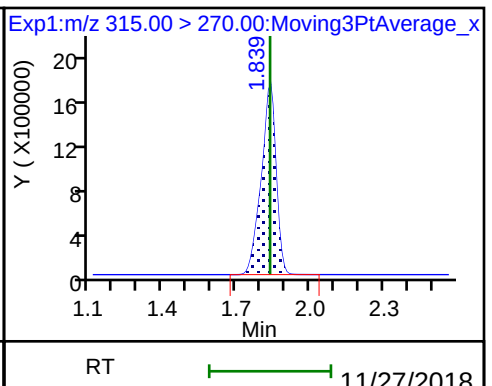
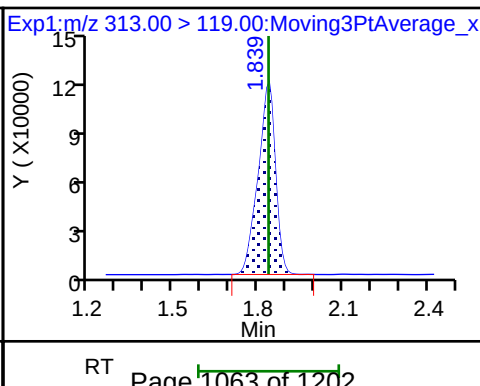
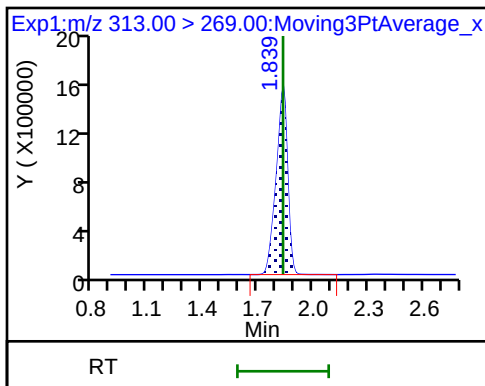
61 1H,1H,2H,2H-perfluorohexanesulfoni

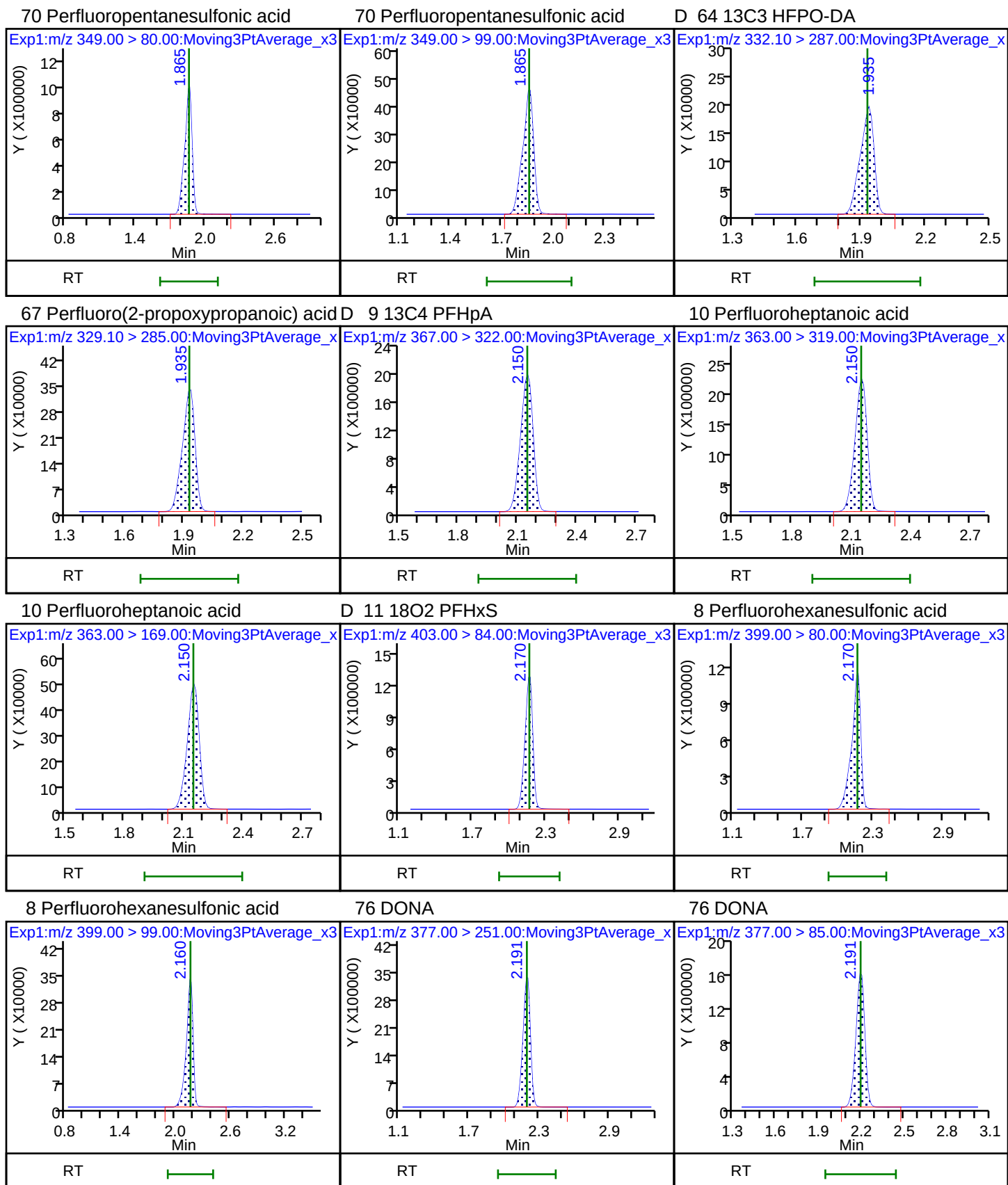


6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

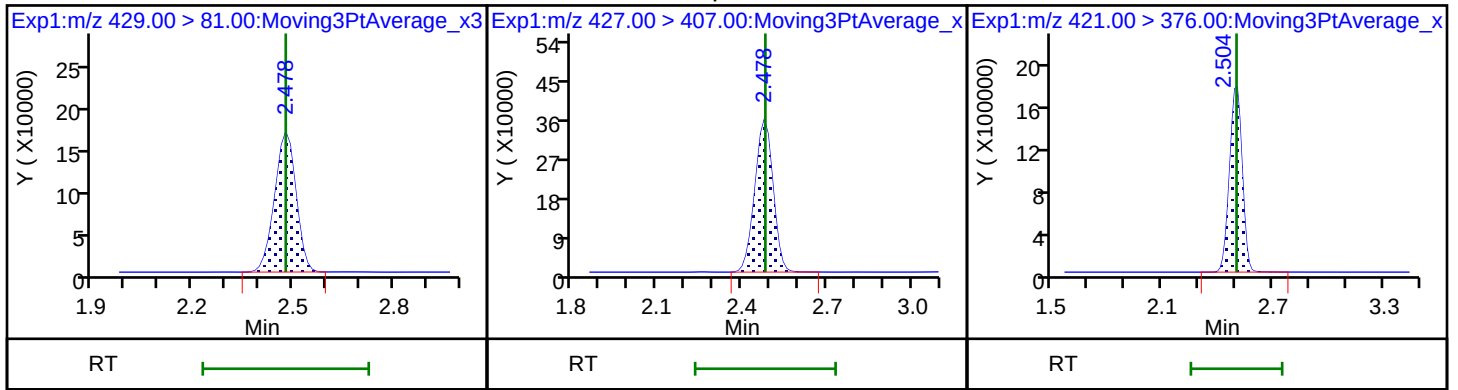
D 7 13C2 PFHxA





D 12 M2-6:2 FTS

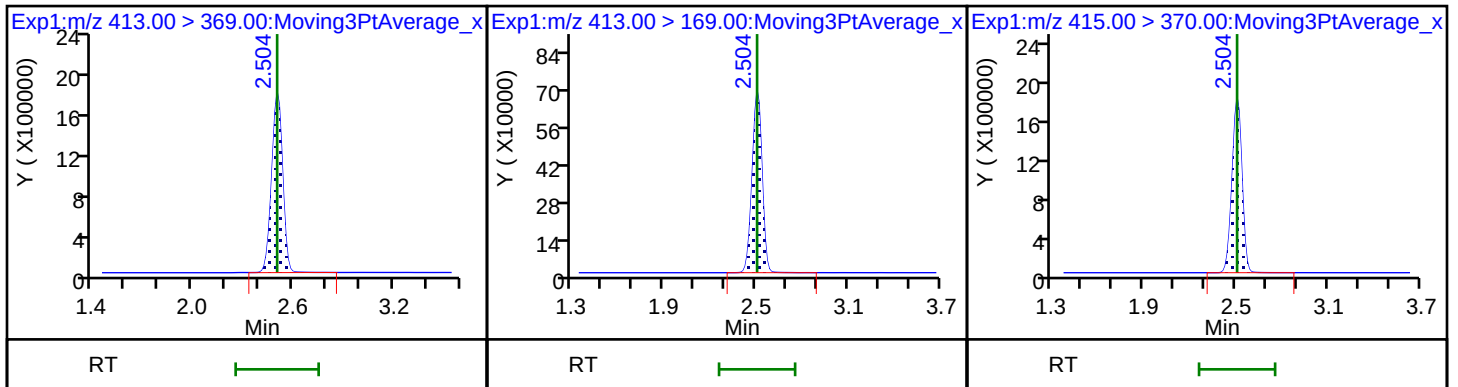
13 1H,1H,2H,2H-perfluorooctanesulfonD 73 13C8 PFOA



15 Perfluorooctanoic acid

15 Perfluorooctanoic acid

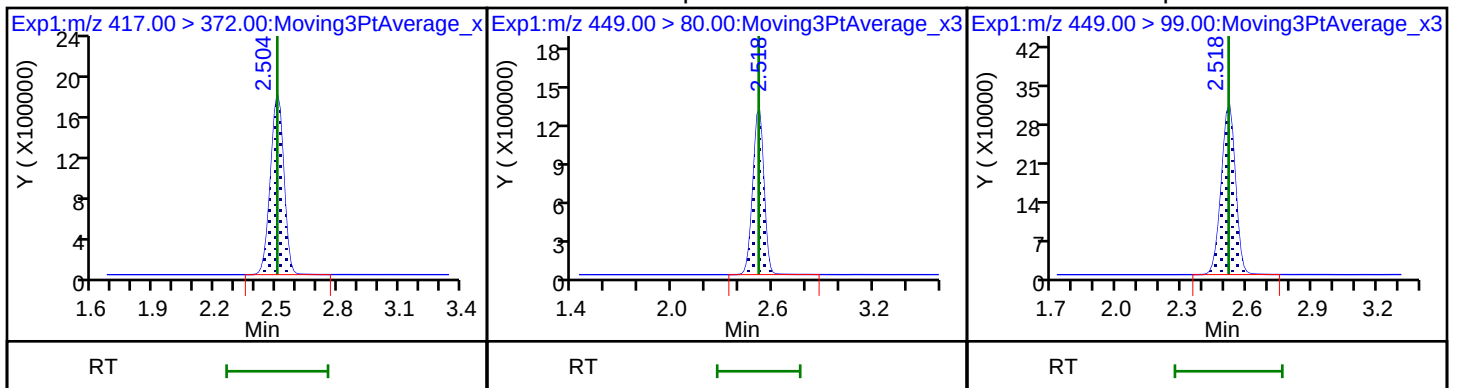
* 62 13C2 PFOA



D 14 13C4 PFOA

16 Perfluoroheptanesulfonic acid

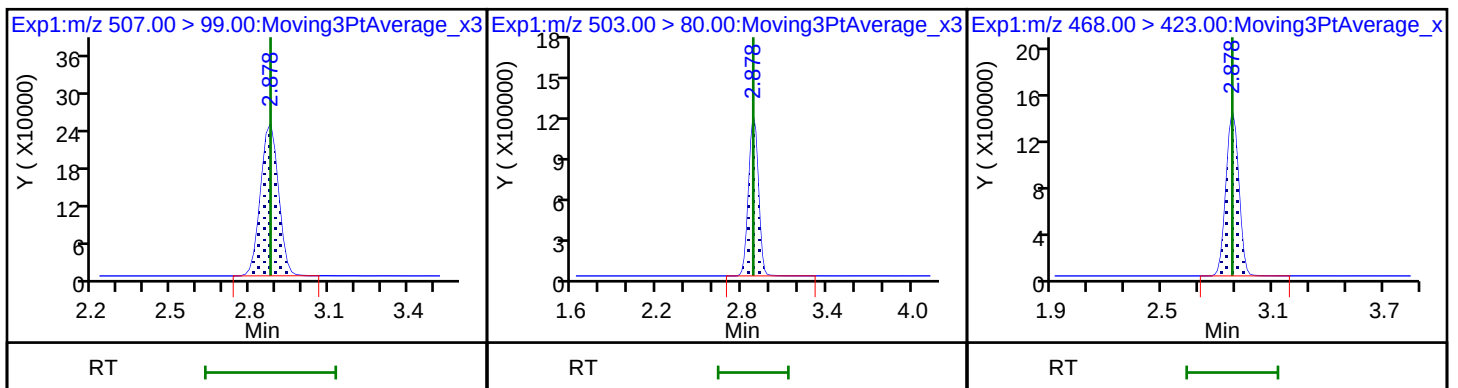
16 Perfluoroheptanesulfonic acid

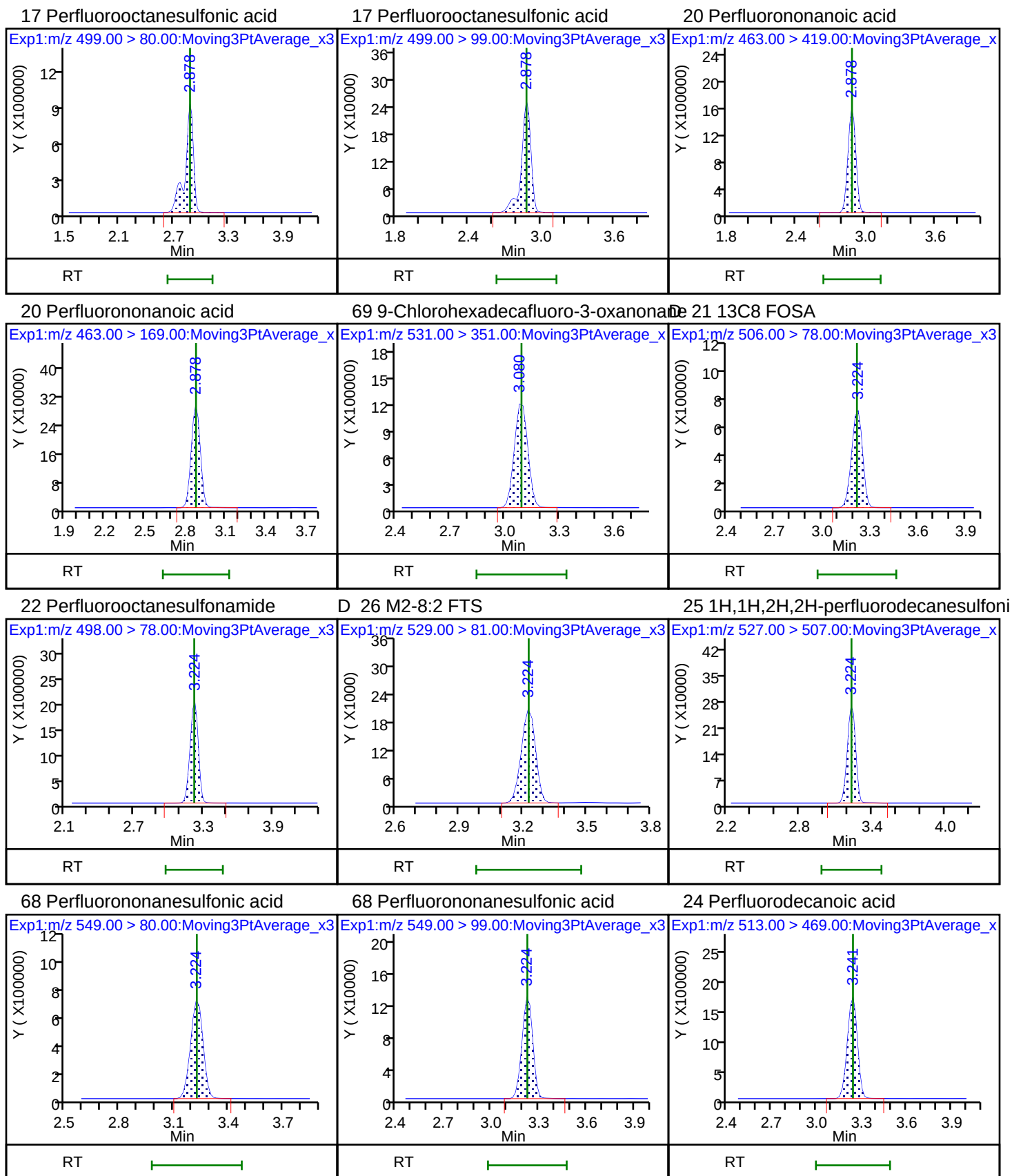


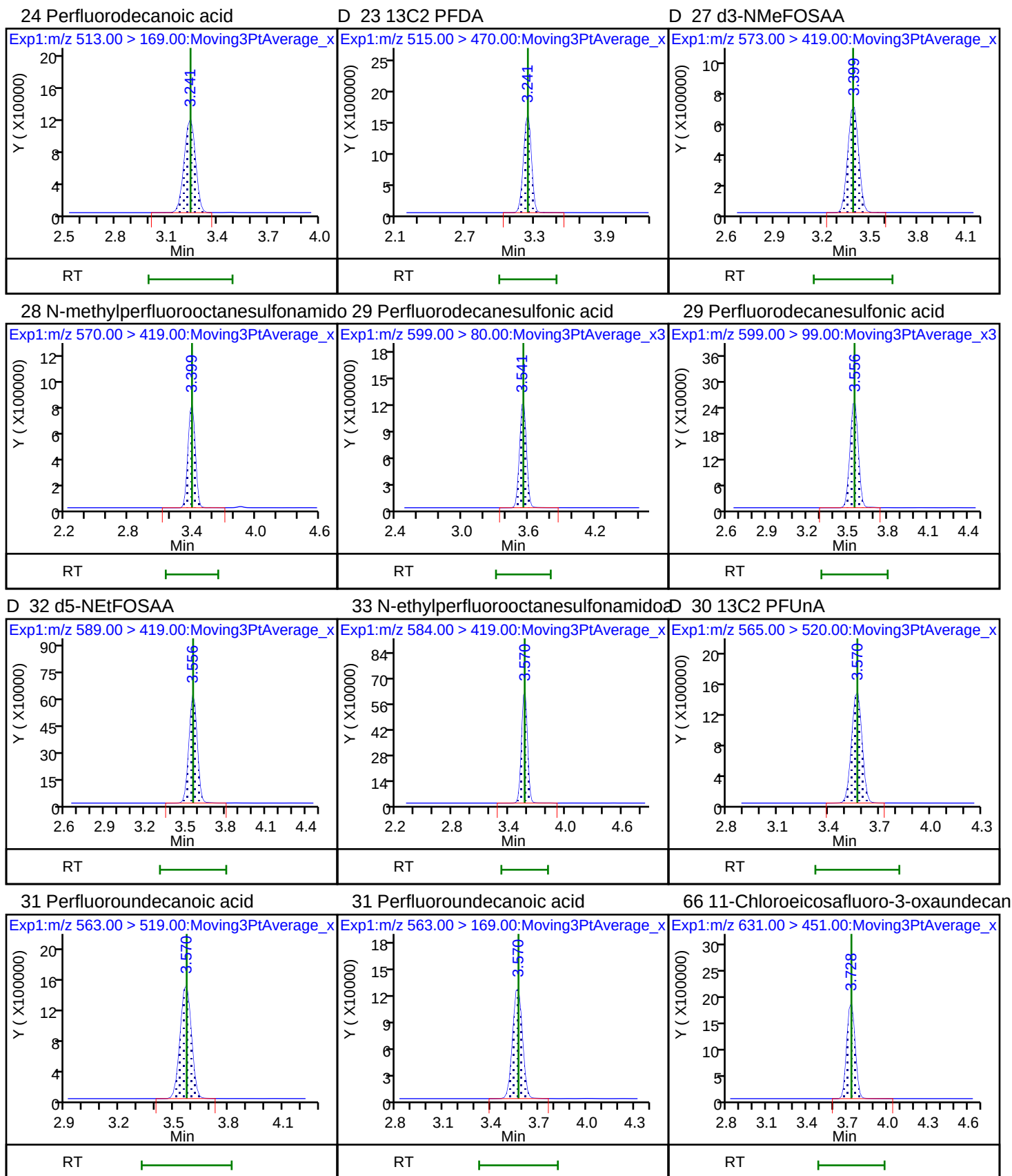
D 72 13C8 PFOS

D 18 13C4 PFOS

D 19 13C5 PFNA



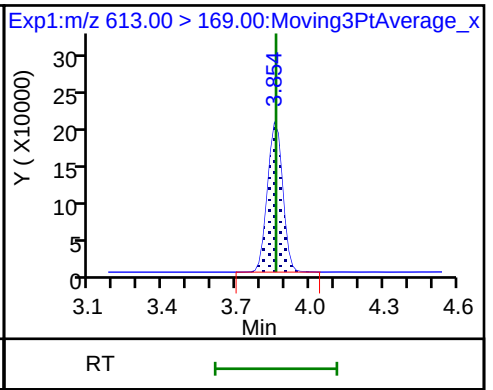
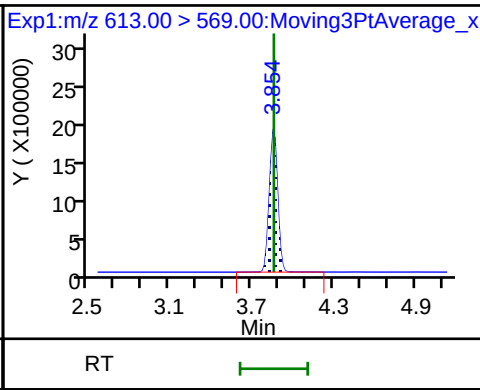
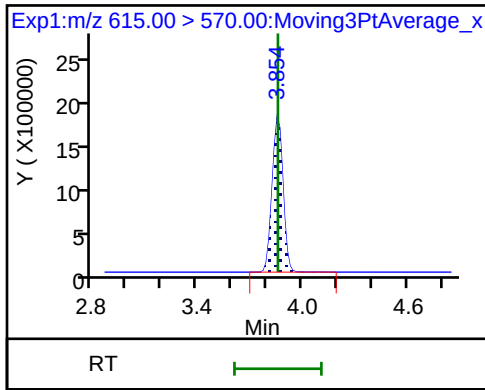




D 36 13C2 PFDaA

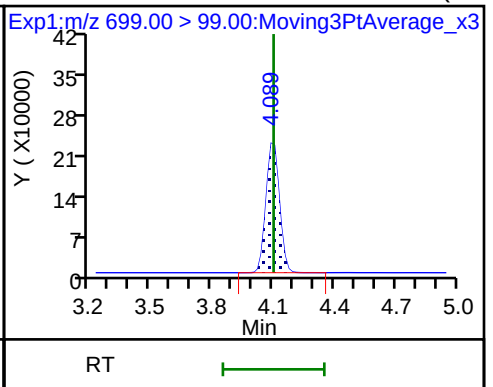
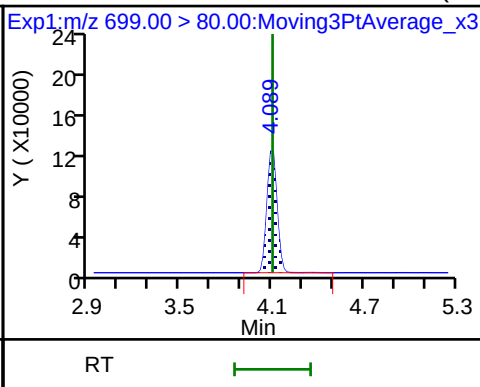
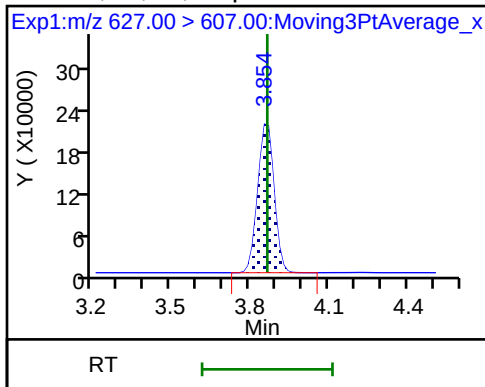
37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



74 1H,1H,2H,2H-perfluorododecanesulfonate 75 Perfluorododecanesulfonic acid (PF

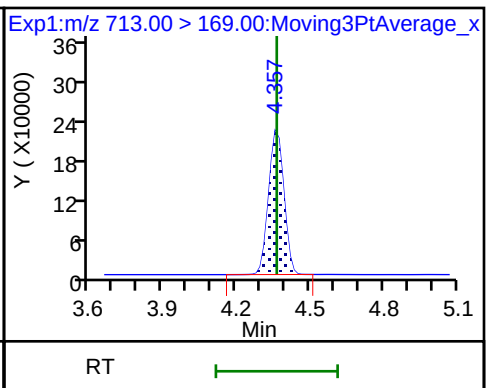
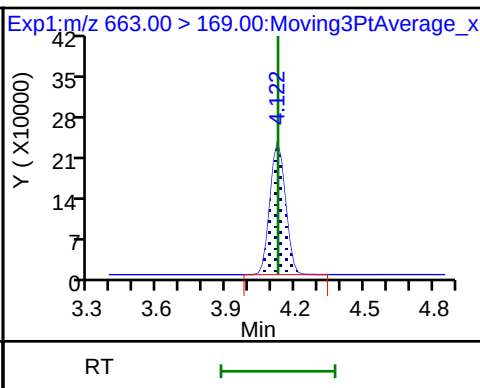
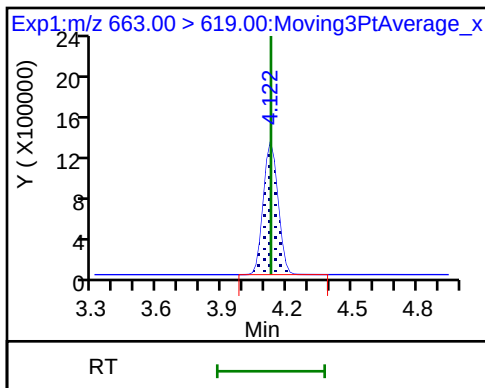
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

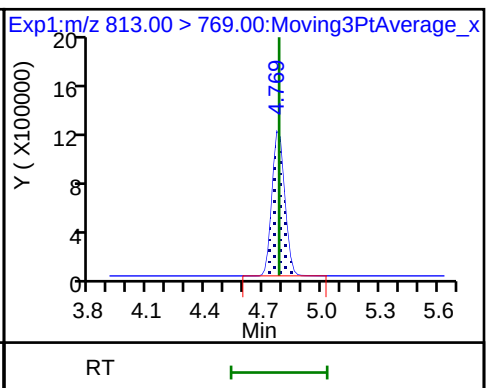
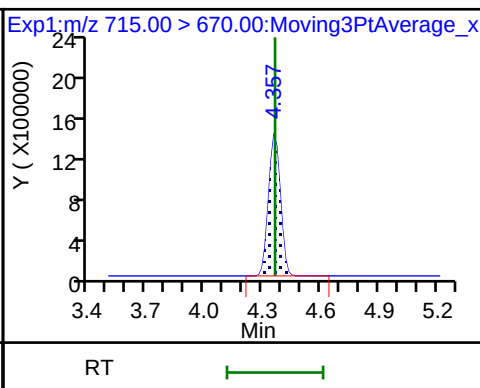
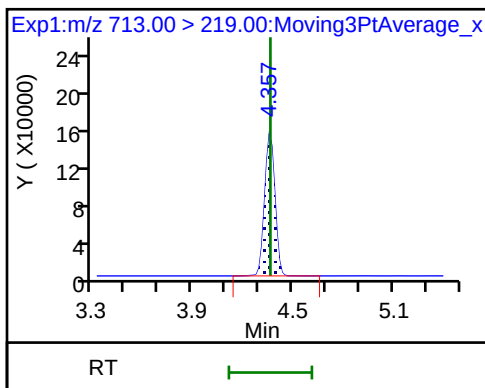
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

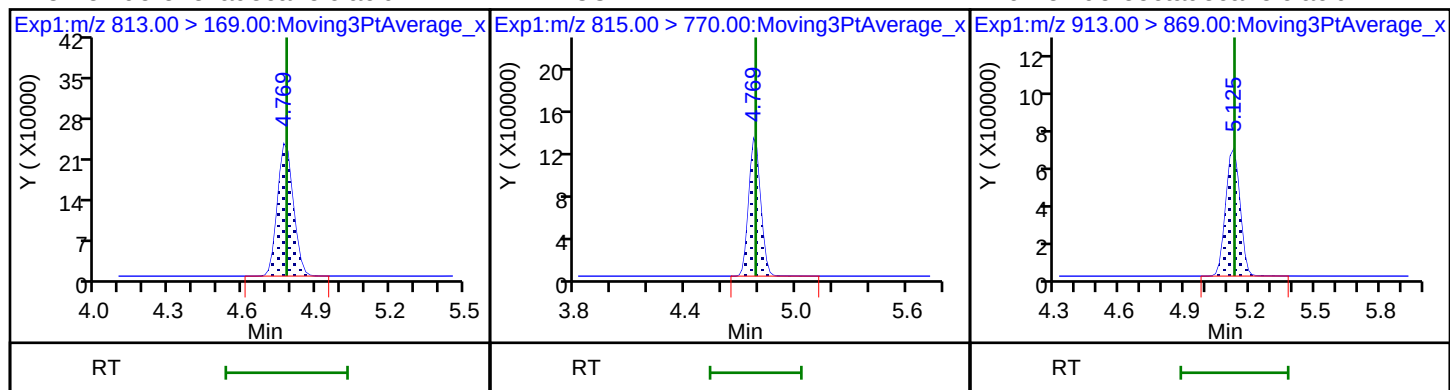
45 Perfluorohexadecanoic acid



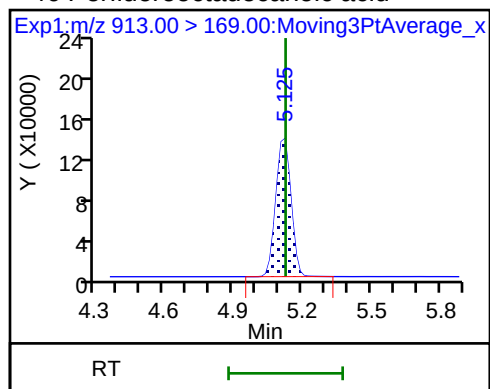
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCVL 320-258039/2 Calibration Date: 11/09/2018 07:40

Instrument ID: A9 Calib Start Date: 10/30/2018 13:12

GC Column: Acquity ID: 2.10 (mm) Calib End Date: 10/30/2018 13:57

Lab File ID: 2018.11.08LLC_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9357	0.8473		0.0453	0.0500	-9.5	50.0
Perfluoropentanoic acid (PFPeA)	AveID	1.001	1.034		0.0516	0.0500	3.3	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	103.3	99.8		0.0427	0.0442	-3.4	50.0
4:2 FTS	AveID	20.55	18.39		0.418	0.467	-10.5	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8997	0.8913		0.0495	0.0500	-0.9	50.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	47.84	49.43		0.0485	0.0469	3.3	50.0
HFPO-DA (GenX)	AveID	1.662	1.537		0.0462	0.0500	-7.5	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.061	1.096		0.0517	0.0500	3.3	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.260	1.218		0.0440	0.0455	-3.3	50.0
DONA	AveID	2.718	2.657		0.0461	0.0471	-2.2	50.0
6:2 FTS	AveID	2.182	2.188		0.475	0.474	0.3	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.081	1.266		0.0586	0.0501	17.1	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.041	0.9436		0.0431	0.0476	-9.4	50.0
Perfluorononanoic acid (PFNA)	AveID	1.001	0.9295		0.0464	0.0500	-7.2	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.077	0.998		0.0430	0.0464	-7.4	50.0
F-53B Major	AveID	1.108	1.145		0.0482	0.0466	3.3	50.0
8:2 FTS	AveID	14.28	14.22		0.477	0.479	-0.4	50.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.6135	0.6025		0.0471	0.0480	-1.8	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	3.005	2.791		0.0464	0.0500	-7.1	50.0
Perfluorodecanoic acid (PFDA)	AveID	1.086	1.137		0.0524	0.0500	4.7	50.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	1.000	1.043		0.521	0.500	4.3	50.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.9143	0.8823		0.483	0.500	-3.5	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8654	0.8157		0.0454	0.0482	-5.7	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.137	1.202		0.0528	0.0500	5.7	50.0
F-53B Minor	AveID	1.387	1.248		0.0424	0.0471	-10.0	50.0
10:2 FTS	AveID	10.11	10.20		0.0486	0.0482	0.9	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.017	1.069		0.0526	0.0500	5.1	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0963	0.0765		0.0384	0.0484	-20.6	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.8175	0.8049		0.0492	0.0500	-1.5	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1828	0.2040		0.0558	0.0500	11.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.446		0.0539	0.0500	7.8	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCVL 320-258039/2 Calibration Date: 11/09/2018 07:40
 Instrument ID: A9 Calib Start Date: 10/30/2018 13:12
 GC Column: Acquity ID: 2.10 (mm) Calib End Date: 10/30/2018 13:57
 Lab File ID: 2018.11.08LLC_005.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.4945	0.6063		0.0613	0.0500	22.6	50.0
13C4 PFBA	Ave	0.9103	0.8761		2.41	2.50	-3.8	50.0
13C5-PFPeA DNU	Ave	0.8665	0.8080		2.33	2.50	-6.7	50.0
13C3 PFBS	Ave	0.0120	0.0110		2.13	2.33	-8.6	50.0
M2-4:2 FTS	Ave	0.0962	0.0795		1.93	2.34	-17.3	50.0
13C2 PFHxA	Ave	0.9136	0.8908		2.44	2.50	-2.5	50.0
13C3 HFPO-DA	Ave	0.1181	0.1020		2.16	2.50	-13.6	50.0
13C4 PFHpA	Ave	1.074	1.052		2.45	2.50	-2.1	50.0
18O2 PFHxS	Ave	0.6988	0.6798		2.30	2.37	-2.7	50.0
M2-6:2 FTS	Ave	0.0988	0.0967		2.32	2.38	-2.1	50.0
13C4 PFOA	Ave	0.9837	0.9548		2.43	2.50	-2.9	50.0
13C8 PFOA	Ave	3440710	2732061		1.94	2.45	-20.6	50.0
13C4 PFOS	Ave	0.7064	0.7065		2.39	2.39	0.0	50.0
13C5 PFNA	Ave	0.9095	0.8920		2.45	2.50	-1.9	50.0
13C8 PFOS	Ave	494030	502362		2.43	2.39	1.7	50.0
13C8 FOSA	Ave	0.3910	0.3883		2.48	2.50	-0.7	50.0
M2-8:2 FTS	Ave	0.0122	0.0096		1.88	2.40	-21.5	50.0
13C2 PFDA	Ave	0.9367	0.8862		2.37	2.50	-5.4	50.0
d3-NMeFOSAA	Ave	0.4049	0.3606		2.23	2.50	-10.9	50.0
13C2 PFUnA	Ave	0.7823	0.7978		2.55	2.50	2.0	50.0
d5-NEtFOSAA	Ave	0.3298	0.3399		2.58	2.50	3.1	50.0
13C2 PFDoA	Ave	0.9635	0.9115		2.37	2.50	-5.4	50.0
13C2 PFTeDA	Ave	0.7200	0.7037		2.44	2.50	-2.3	50.0
13C2 PFHxDA	Ave	0.7154	0.6932		2.42	2.50	-3.1	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_005.d
 Lims ID: CCVL
 Client ID:
 Sample Type: CCVL
 Inject. Date: 09-Nov-2018 07:40:47 ALS Bottle#: 31 Worklist Smp#: 2
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCVL
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist: chrom-PFAS_A9*sub6
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 11:06:06 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: mongkols

Date: 12-Nov-2018 11:06:06

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	1.346	1.346	0.0	0.529	7331354	2.41		96.2	8924	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.346	1.352	-0.006	1.000	124230	0.0453		90.5	6.7	M
D 3 13C5 PFPeA										
267.90 > 223.00	1.602	1.601	0.001	0.630	6761788	2.33		93.3	8602	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.609	1.609	0.0	1.004	139794	0.0516		103	21.9	
D 47 13C3 PFBS										M
301.90 > 83.00	1.636	1.636	0.0	0.643	85235	2.13		91.4	522	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.643	1.643	0.0	1.004	161698	0.0427		96.6	59.1	M
298.90 > 99.00	1.643	1.643	0.0	1.004	59095		2.74(1.35-4.05)		39.5	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.843	1.843	0.0	0.725	621614	1.93		82.7	1125	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.843	1.853	-0.010	1.126	314871	0.4180		89.5	3190	
D 7 13C2 PFHxA										
315.00 > 270.00	1.883	1.873	0.010	0.740	7454958	2.44		97.5	9369	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.883	1.883	0.001	1.000	132888	0.0495		99.1	21.9	
313.00 > 119.00	1.883	1.883	0.001	1.000	8513		15.61(6.96-20.87)		16.1	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.902	1.902	0.0	1.162	84991	0.0485		103	279	
349.00 > 99.00	1.902	1.902	0.0	1.162	40106		2.12(1.15-3.45)		101	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.972	1.971	0.001	0.775	853589	2.16		86.4	3665	

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	1.972	1.972	0.0	1.000	26240	0.0462		92.5	14.7	
D 9 13C4 PFHpA										
367.00 > 322.00	2.191	2.191	0.0	0.862	8802841	2.45		97.9	7686	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.191	2.191	0.0	1.000	193000	0.0517		103	37.5	
363.00 > 169.00	2.191	2.191	0.0	1.000	36536		5.28(2.17-6.52)		57.3	
D 11 18O2 PFHxS										
403.00 > 84.00	2.204	2.203	0.001	0.867	5381918	2.30		97.3	6979	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.216	2.216	0.0	1.006	126070	0.0440		96.7	203	
399.00 > 99.00	2.216	2.216	0.0	1.006	36462		3.46(1.90-5.70)		72.1	
76 DONA										
377.00 > 251.00	2.241	2.241	0.0	0.769	295988	0.0461		97.8	798	
377.00 > 85.00	2.241	2.241	0.0	0.769	120992		2.45(1.13-3.39)		299	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.513	2.513	0.0	0.988	768722	2.32		97.9	1955	
D 73 13C8 PFOA										
421.00 > 376.00	2.543	2.528	0.015		6686720	1.94		79.4	7807	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.528	2.528	0.0	1.006	335702	0.4753		100	1296	
D 14 13C4 PFOA										
417.00 > 372.00	2.543	2.543	0.0	1.000	7990168	2.43		97.1	6640	
* 62 13C2 PFOA										
415.00 > 370.00	2.543	2.543	0.0		8368440	2.50			7046	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.543	2.543	0.0	1.000	202574	0.0586		117	24.5	
413.00 > 169.00	2.543	2.543	0.0	1.000	75024		2.70(1.36-4.08)		148	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.558	2.558	0.0	0.878	106227	0.0431		90.6	213	
449.00 > 99.00	2.558	2.558	0.0	0.878	28344		3.75(1.84-5.53)		129	
D 18 13C4 PFOS										
503.00 > 80.00	2.914	2.914	0.0	1.146	5652349	2.39		100	3566	
D 72 13C8 PFOS										
507.00 > 99.00	2.914	2.914	0.0		1200644	2.43		102	2965	
D 19 13C5 PFNA										
468.00 > 423.00	2.914	2.914	0.0	1.146	7464711	2.45		98.1	5255	
20 Perfluorononanoic acid										
463.00 > 419.00	2.914	2.914	0.0	1.000	138772	0.0464		92.8	20.5	
463.00 > 169.00	2.914	2.914	0.0	1.000	26693		5.20(2.68-8.03)		53.0	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.914	2.914	0.0	1.000	109469	0.0430		92.6	89.5	M
499.00 > 99.00	2.914	2.914	0.0	1.000	24087		4.54(2.04-6.12)		117	M
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.124	3.124	0.0	1.072	126158	0.0482		103	218	
D 21 13C8 FOSA										
506.00 > 78.00	3.264	3.264	0.0	1.284	3249654	2.48		99.3	4997	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.281	3.264	0.017	1.290	7415834	2.37		94.6	6869	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.264	3.264	0.0	1.284	77057	1.88		78.5	417	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.264	3.264	0.0	1.000	219161	0.4771		99.6	993	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.264	3.264	0.0	1.120	68391	0.0471		98.2	289	
549.00 > 99.00	3.264	3.264	0.0	1.120	12167		5.62(3.02-9.05)		74.6	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.264	3.264	0.0	1.000	181382	0.0464		92.9	620	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.281	3.281	0.0	1.000	168594	0.0524		105	34.7	
513.00 > 169.00	3.281	3.281	0.0	1.000	11247		14.99(7.12-21.35)		49.0	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.422	3.422	0.0	1.346	3017951	2.23		89.1	3592	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.437	3.437	0.0	1.004	629361	0.5213		104	249	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.591	3.591	0.0	1.000	501988	0.4825		96.5	2254	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.591	3.591	0.0	1.232	92989	0.0454		94.3	99.2	
599.00 > 99.00	3.591	3.591	0.0	1.232	22725		4.09(2.14-6.43)		127	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.591	3.591	0.0	1.412	2844766	2.58		103	3198	
D 30 13C2 PFUnA										
565.00 > 520.00	3.591	3.591	0.0	1.412	6675899	2.55		102	6354	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.607	3.607	0.0	1.005	160435	0.0528		106	41.4	
563.00 > 169.00	3.591	3.607	-0.016	1.000	11489		13.96(5.24-15.72)		54.0	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.759	3.759	0.0	1.290	138981	0.0424		90.0	448	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.883	3.883	0.0	1.189	15817	0.0486		101	51.8	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.883	3.883	0.0	1.000	163158	0.0526		105	42.0	
613.00 > 169.00	3.883	3.883	0.0	1.000	19922		8.19(4.68-14.05)		63.5	
D 36 13C2 PFDaA										
615.00 > 570.00	3.883	3.883	0.0	1.527	7628178	2.37		94.6	7388	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.129	4.129	0.0	1.417	8756	0.0384		79.4	40.0	
699.00 > 99.00	4.129	4.129	0.0	1.417	24056		0.36(0.28-0.83)		87.8	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.145	4.145	0.0	1.067	122805	0.0492		98.5	52.5	
663.00 > 169.00	4.145	4.145	0.0	1.067	18851		6.51(3.09-9.27)		58.2	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.381	4.381	0.0	1.000	24030	0.0558		112	104	
713.00 > 219.00	4.381	4.381	0.0	1.000	14866		1.62(0.70-2.09)		93.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 43 13C2 PFTeDA										
715.00 > 670.00	4.381	4.381	0.0	1.723	5889022	2.44		97.7	6426	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.786	4.786	0.0	1.000	167716	0.0539		108	72.9	
813.00 > 169.00	4.786	4.786	0.0	1.000	31478		5.33(2.77-8.32)		139	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.786	4.786	0.0	1.882	5801110	2.42		96.9	6952	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.114	5.129	-0.015	1.068	70347	0.0613		123	46.8	
913.00 > 169.00	5.114	5.129	-0.015	1.068	15667		4.49(2.55-7.64)		180	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LLCCVL_00001

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_005.d

Injection Date: 09-Nov-2018 07:40:47

Instrument ID: A9

Lims ID: CCVL

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 31

Worklist Smp#: 2

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

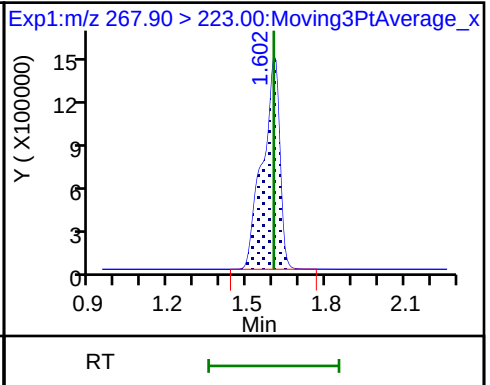
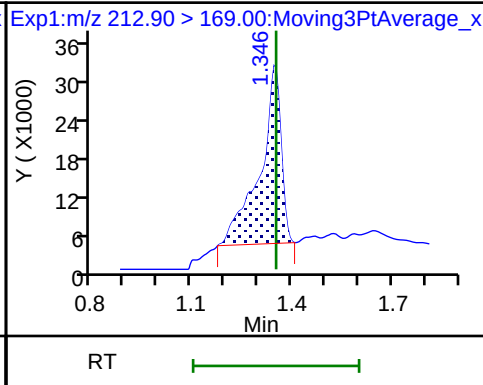
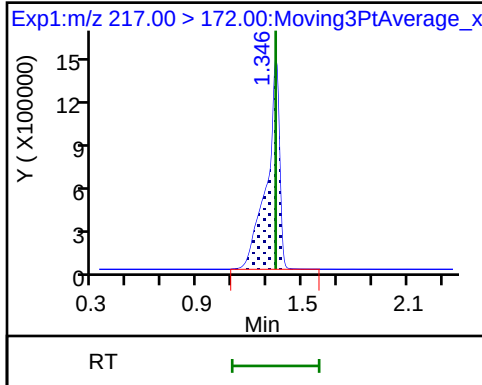
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

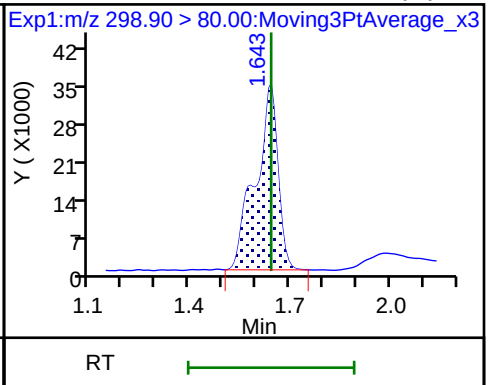
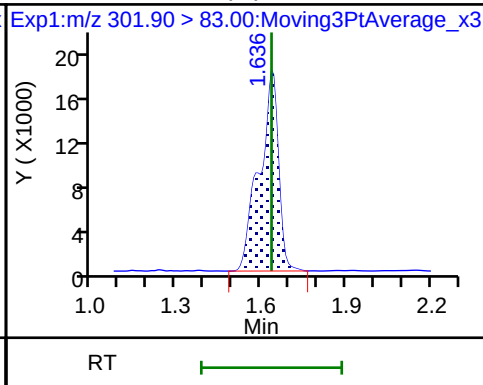
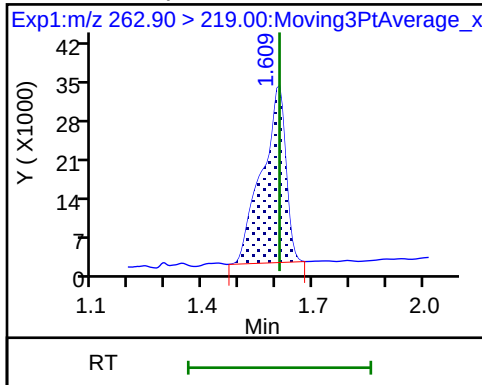
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS (M)

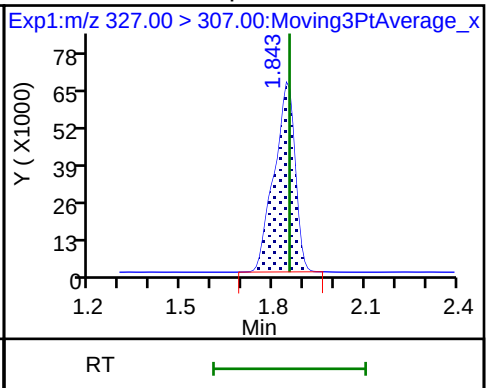
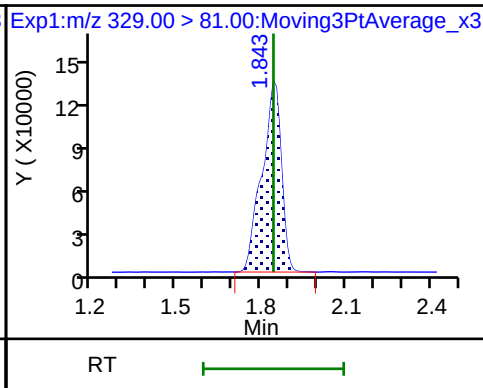
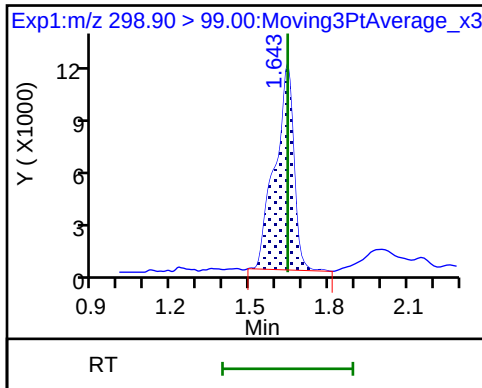
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

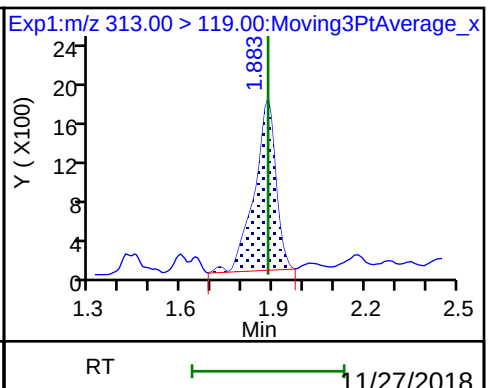
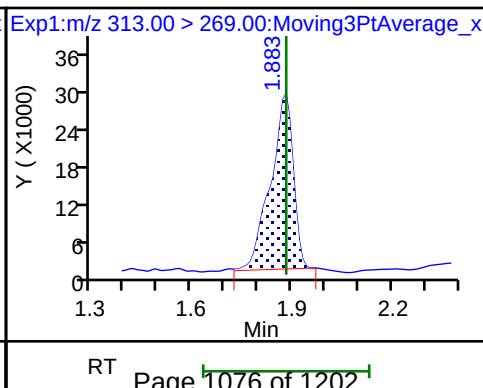
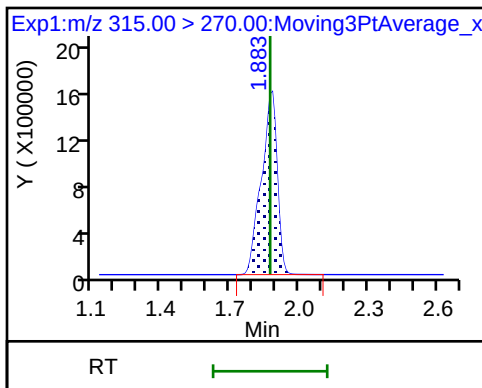
61 1H,1H,2H,2H-perfluorohexanesulfoni

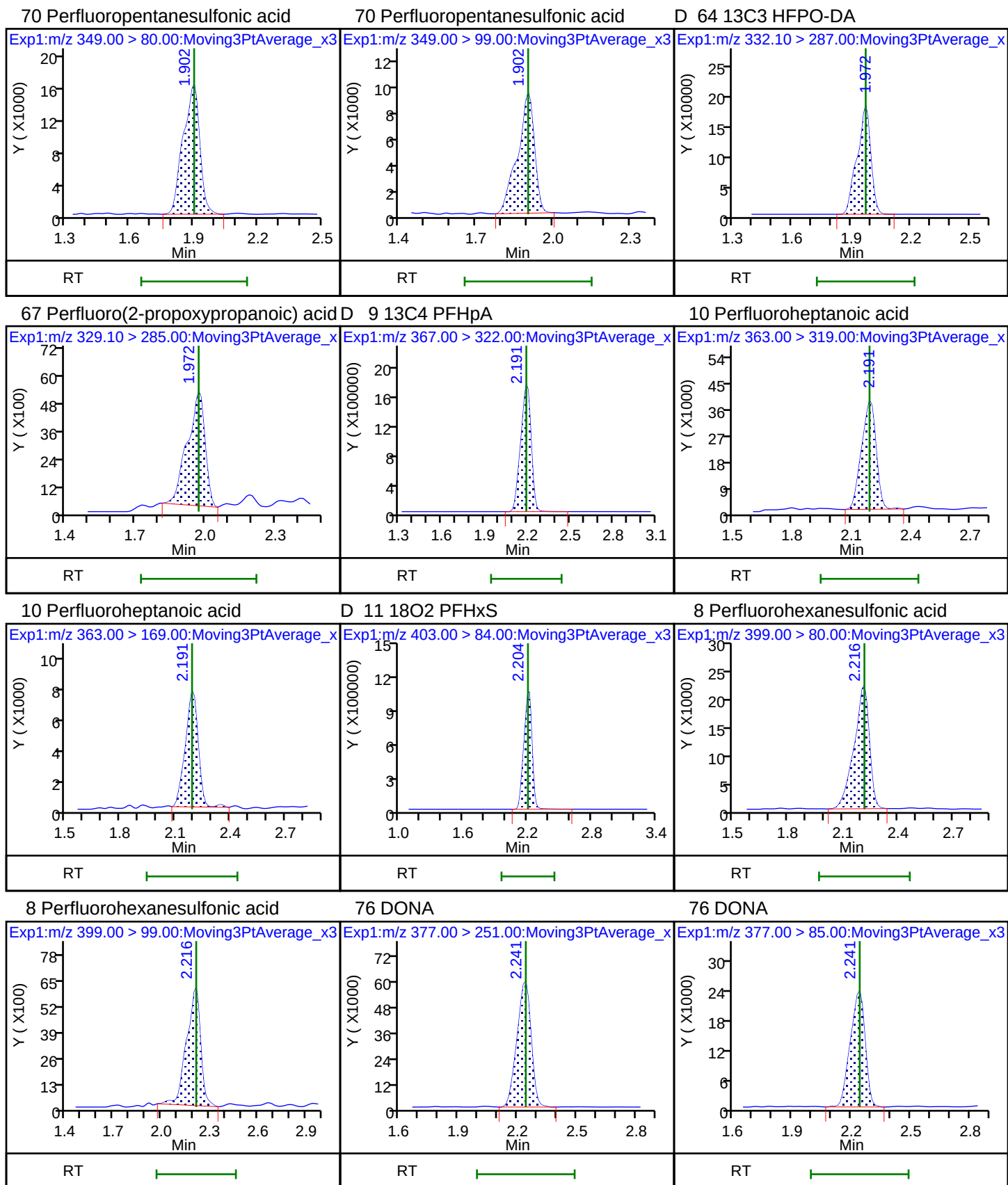


D 7 13C2 PFHxA

6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

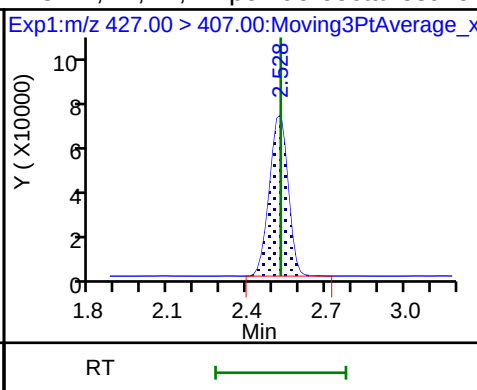
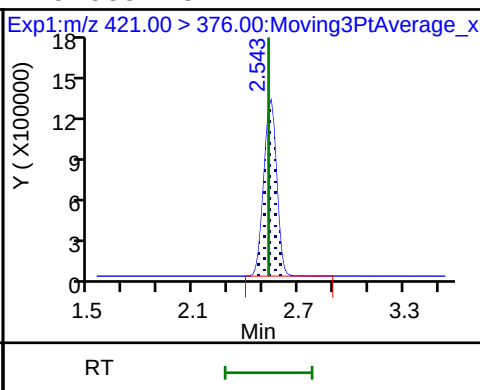
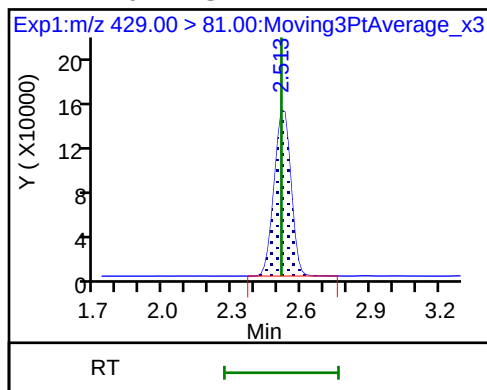




D 12 M2-6:2 FTS

D 73 13C8 PFOA

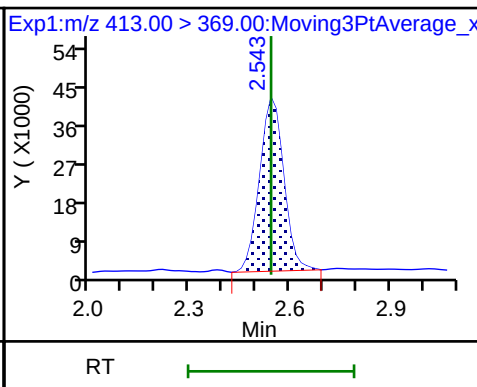
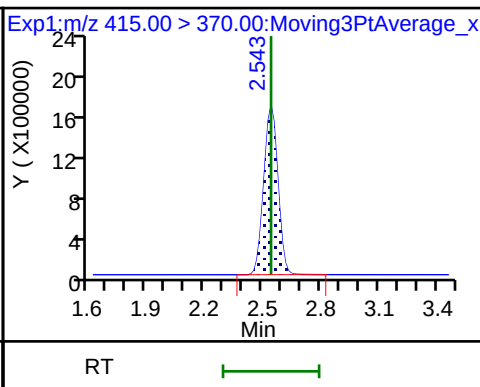
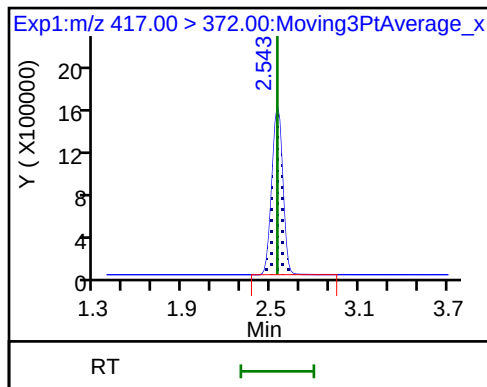
13 1H,1H,2H,2H-perfluorooctanesulfoni



D 14 13C4 PFOA

* 62 13C2 PFOA

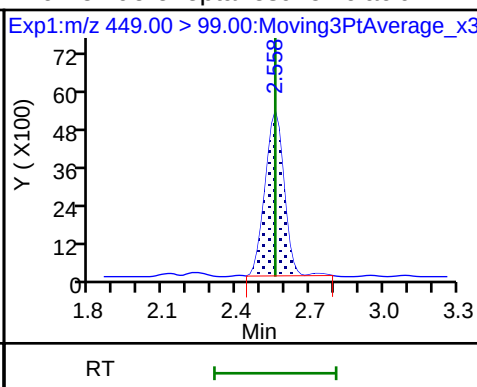
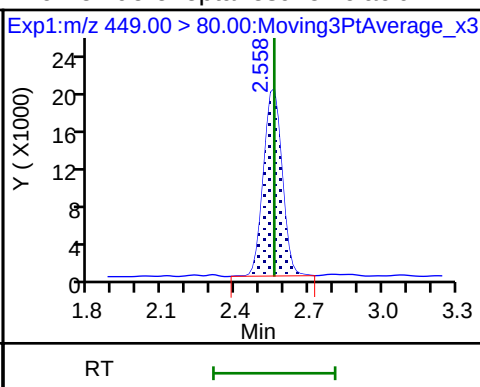
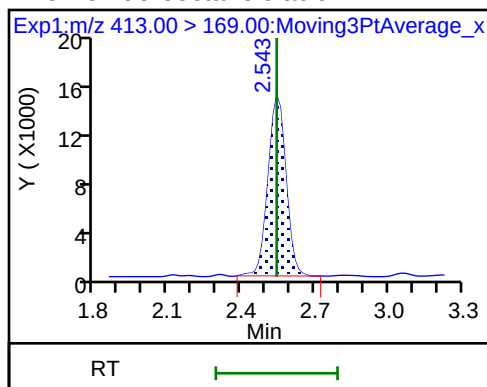
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

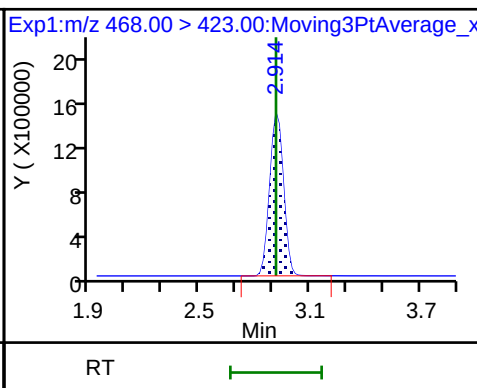
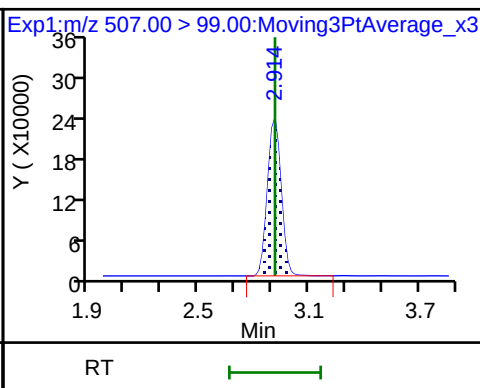
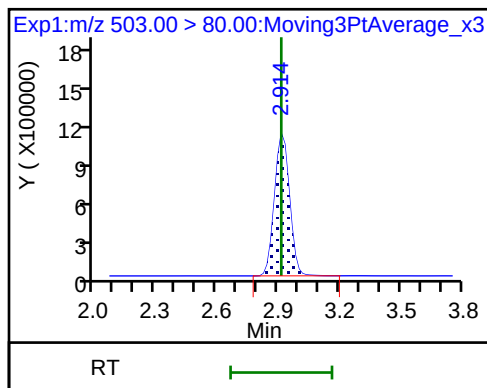
16 Perfluoroheptanesulfonic acid

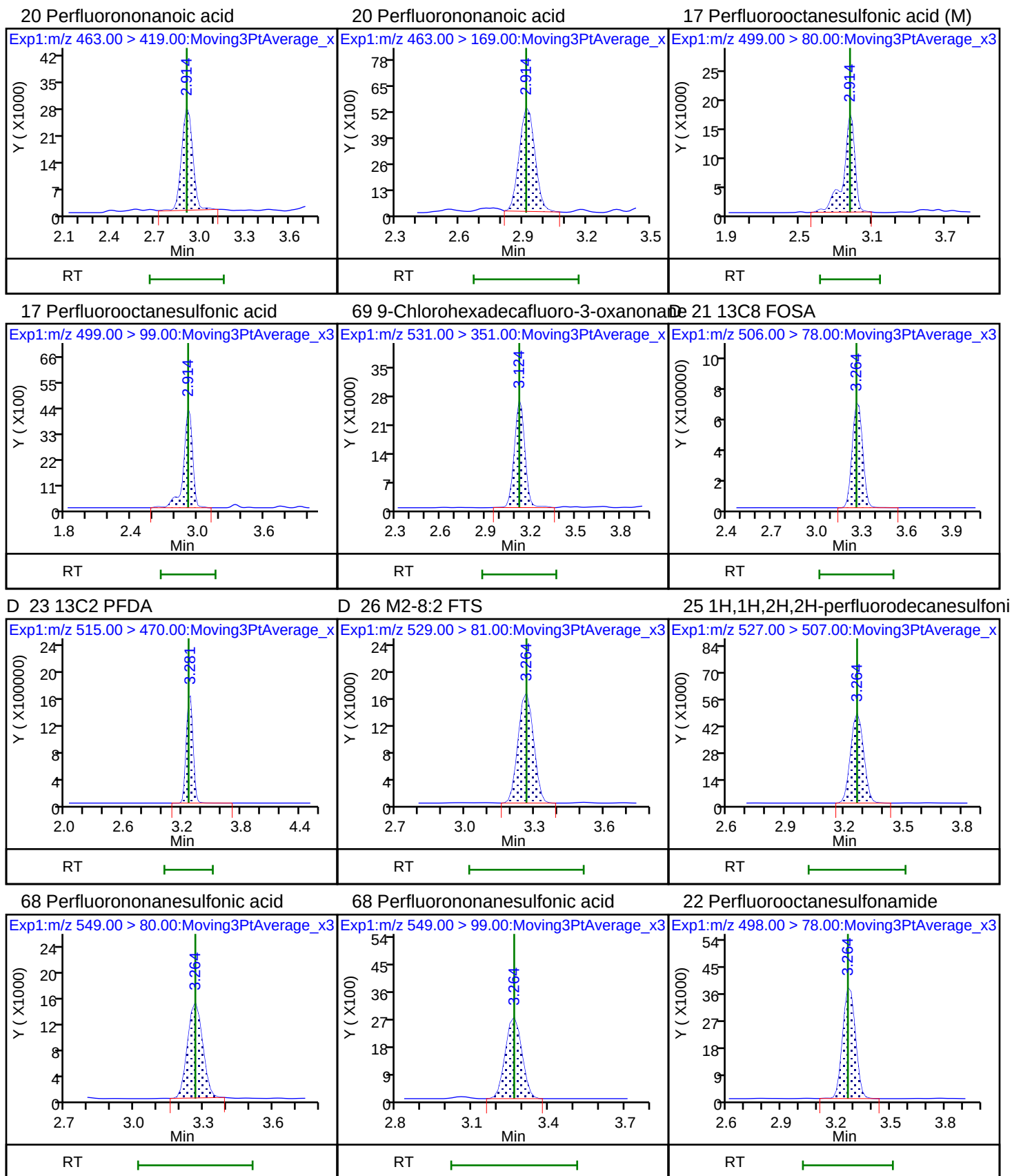


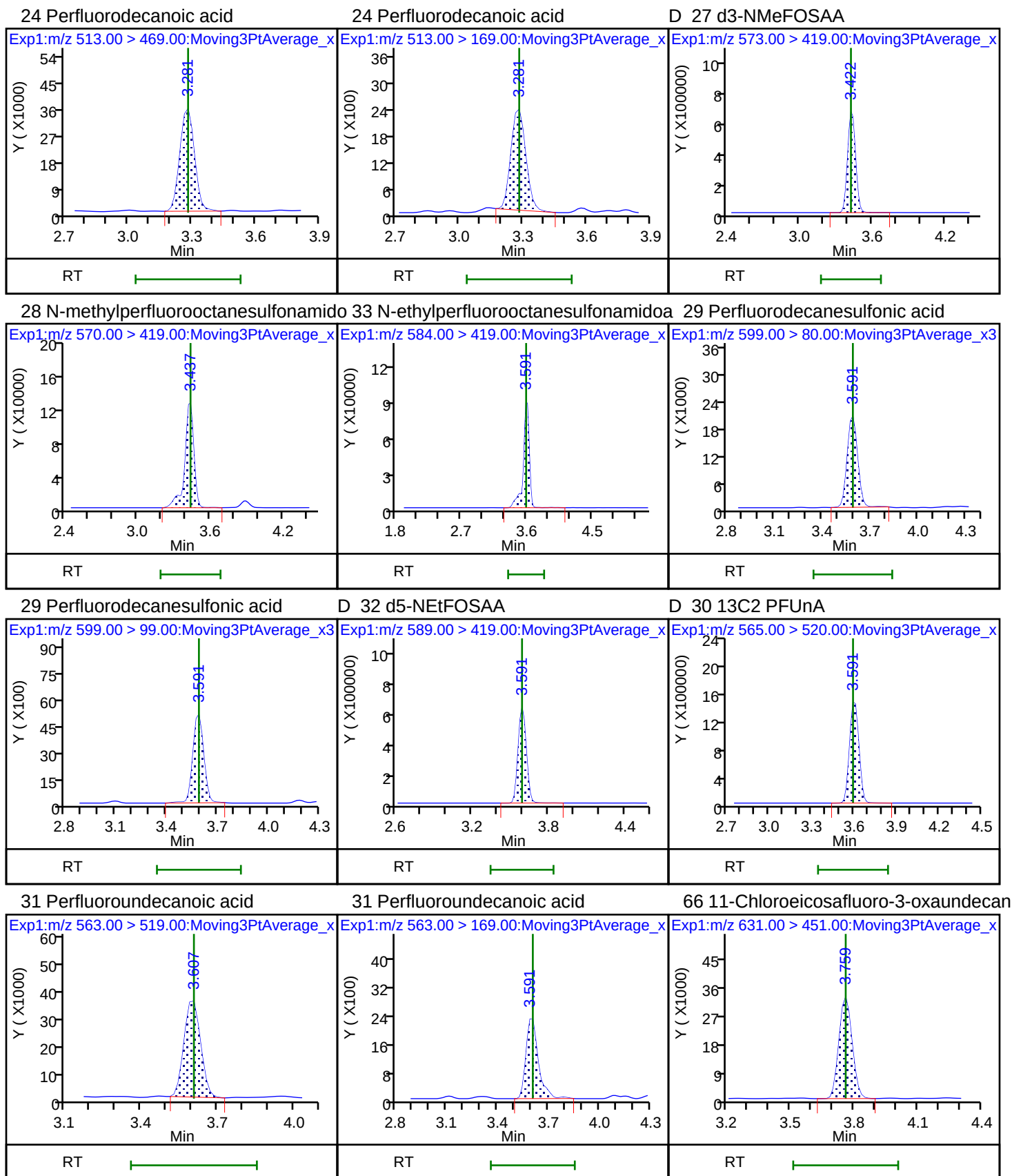
D 18 13C4 PFOS

D 72 13C8 PFOS

D 19 13C5 PFNA

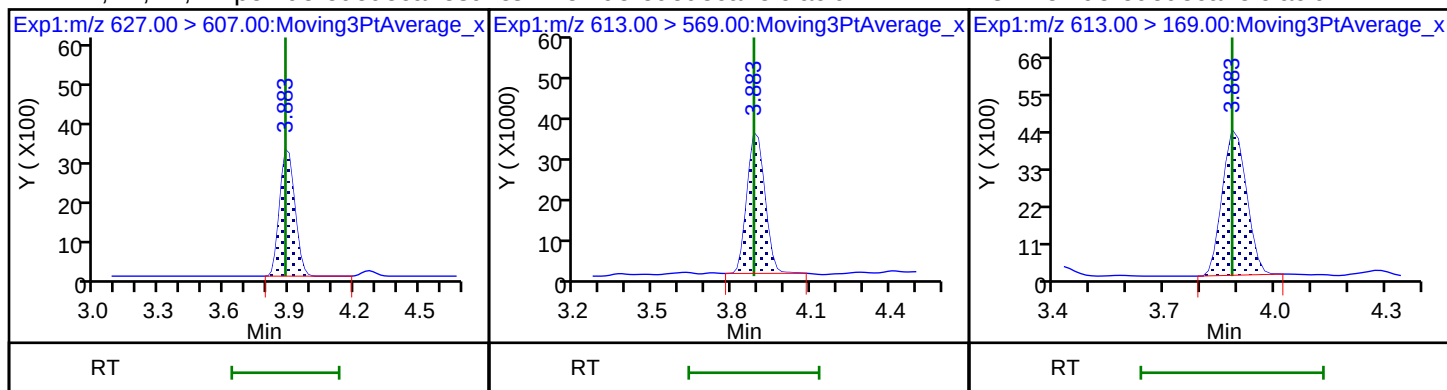






74 1H,1H,2H,2H-perfluorododecanesulfo37 Perfluorododecanoic acid

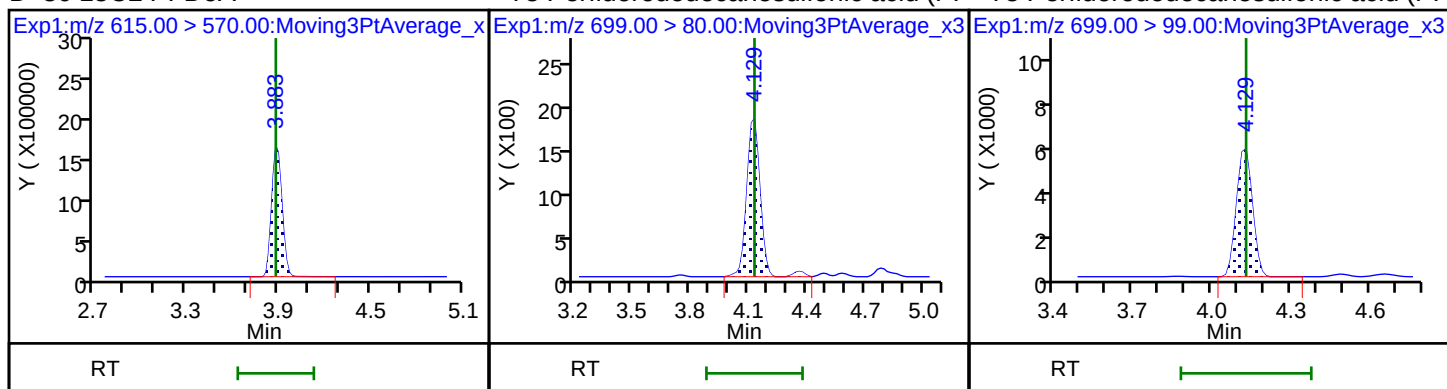
37 Perfluorododecanoic acid



D 36 13C2 PFDa

75 Perfluorododecanesulfonic acid (PF

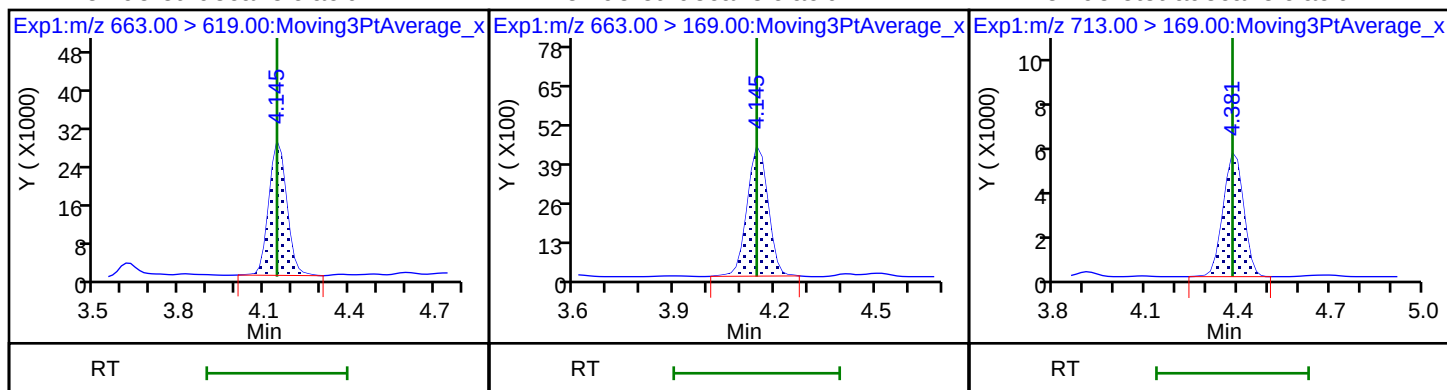
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

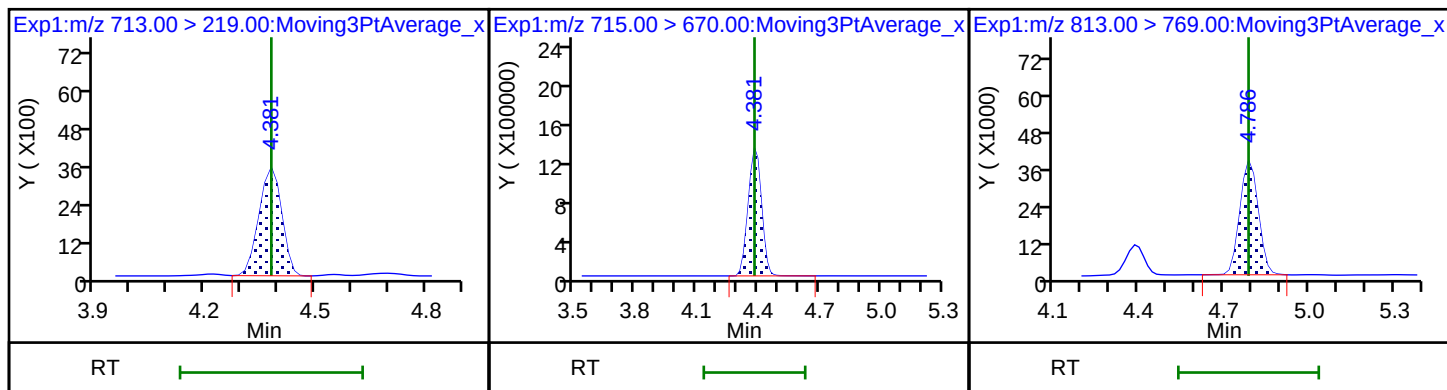
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

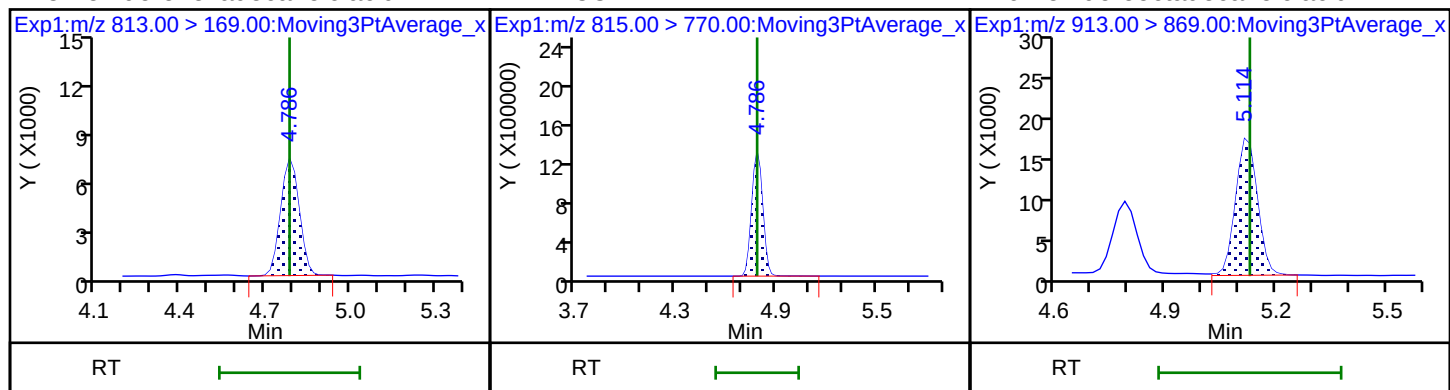
45 Perfluorohexadecanoic acid



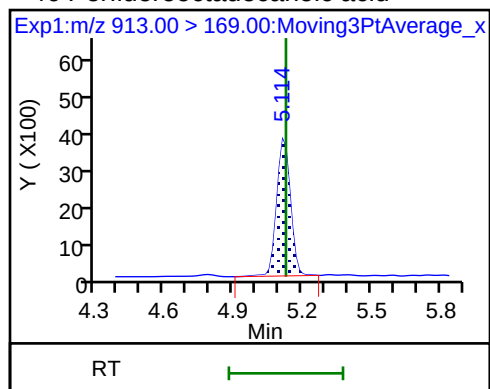
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

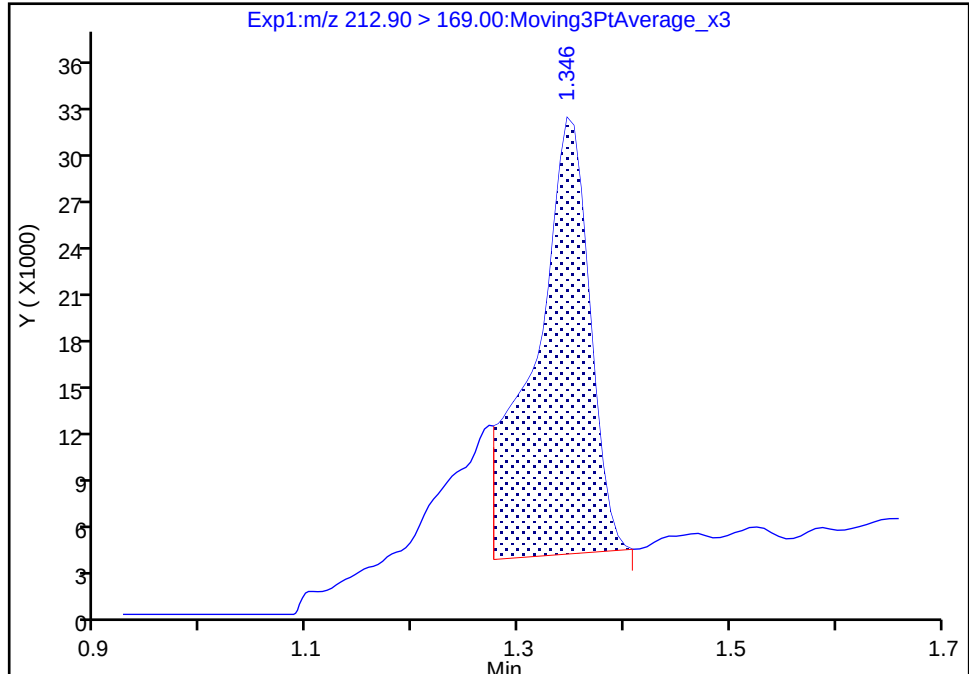
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Injection Date: 09-Nov-2018 07:40:47 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 31 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

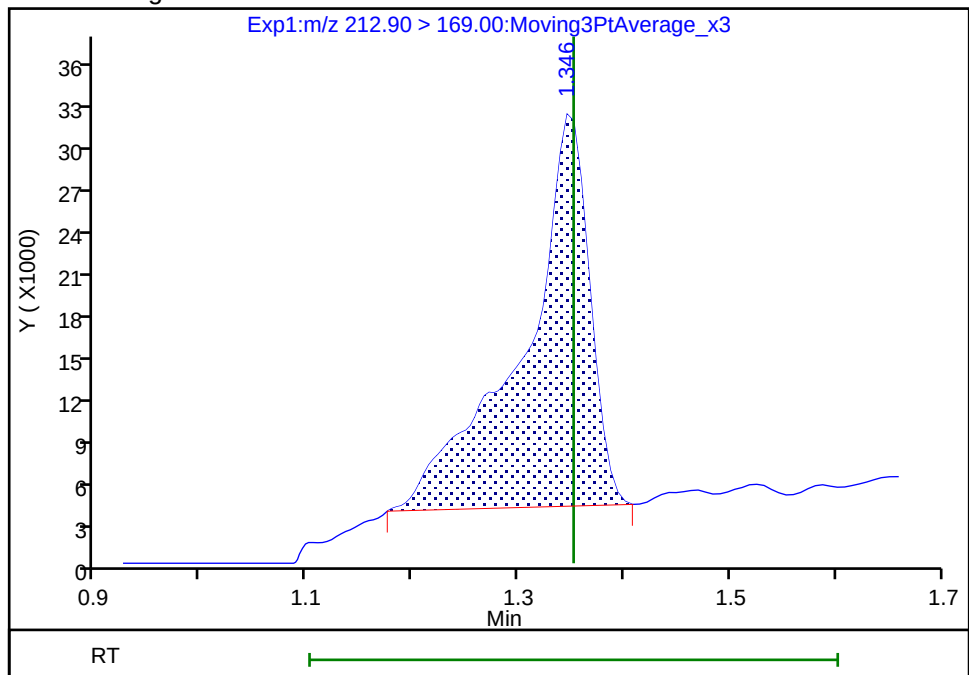
RT: 1.35
Area: 101911
Amount: 0.037139
Amount Units: ng/ml

Processing Integration Results



RT: 1.35
Area: 124230
Amount: 0.045273
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:05:35
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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11/27/2018

TestAmerica Sacramento

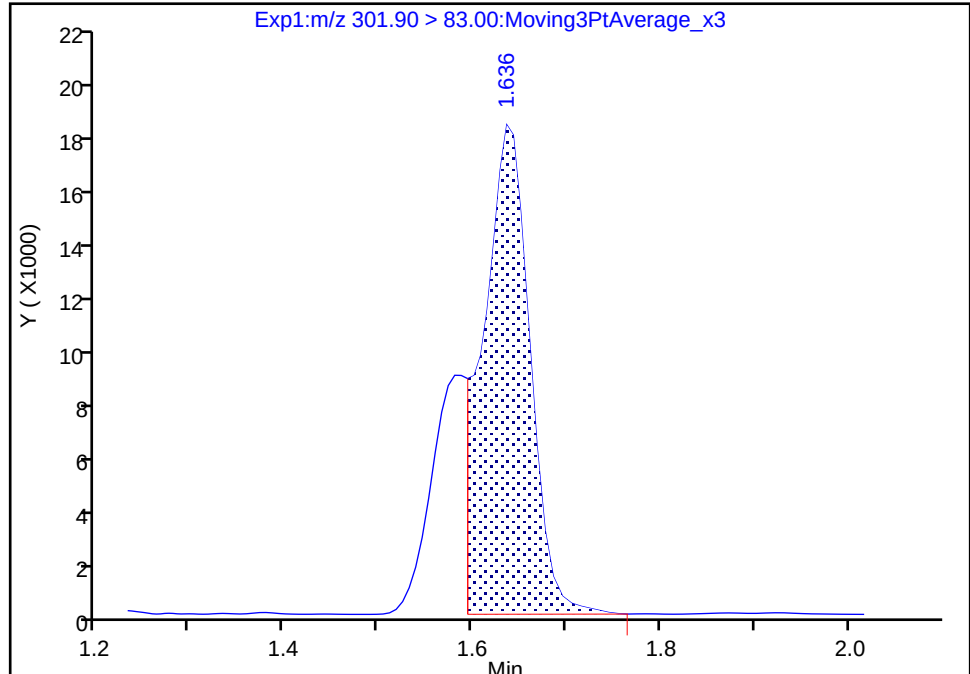
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Injection Date: 09-Nov-2018 07:40:47 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 31 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

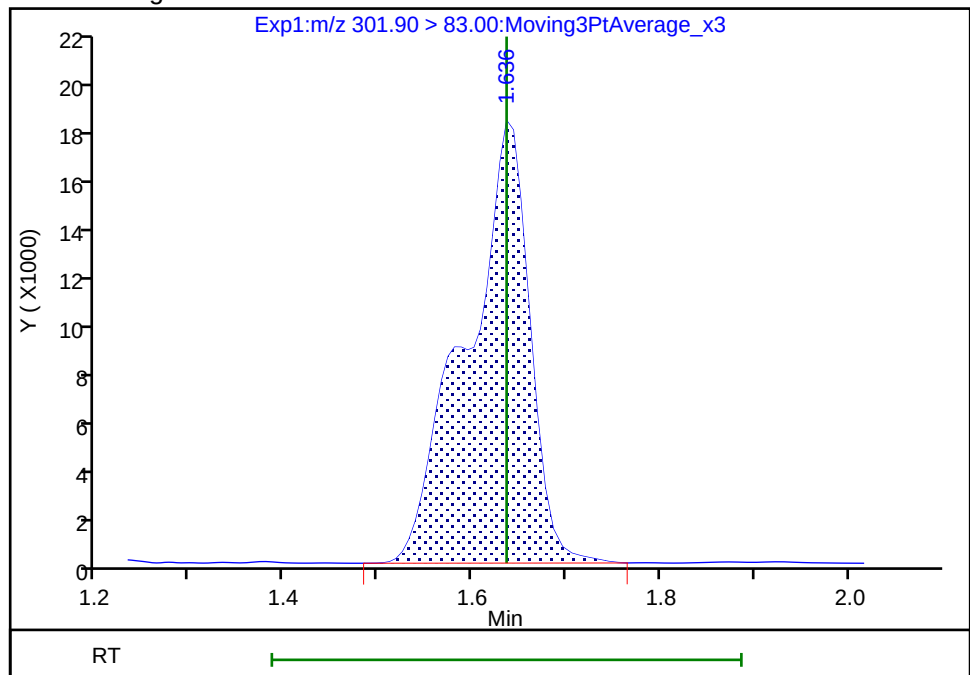
RT: 1.64
Area: 62327
Amount: 1.554732
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 85235
Amount: 2.126166
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 09-Nov-2018 10:33:02

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

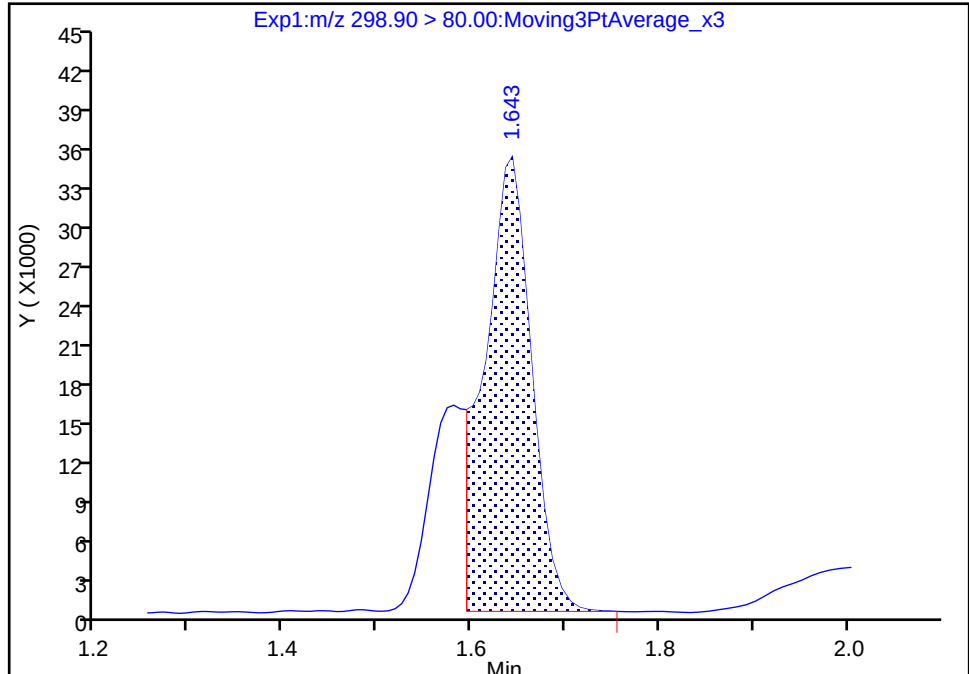
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Injection Date: 09-Nov-2018 07:40:47 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 31 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

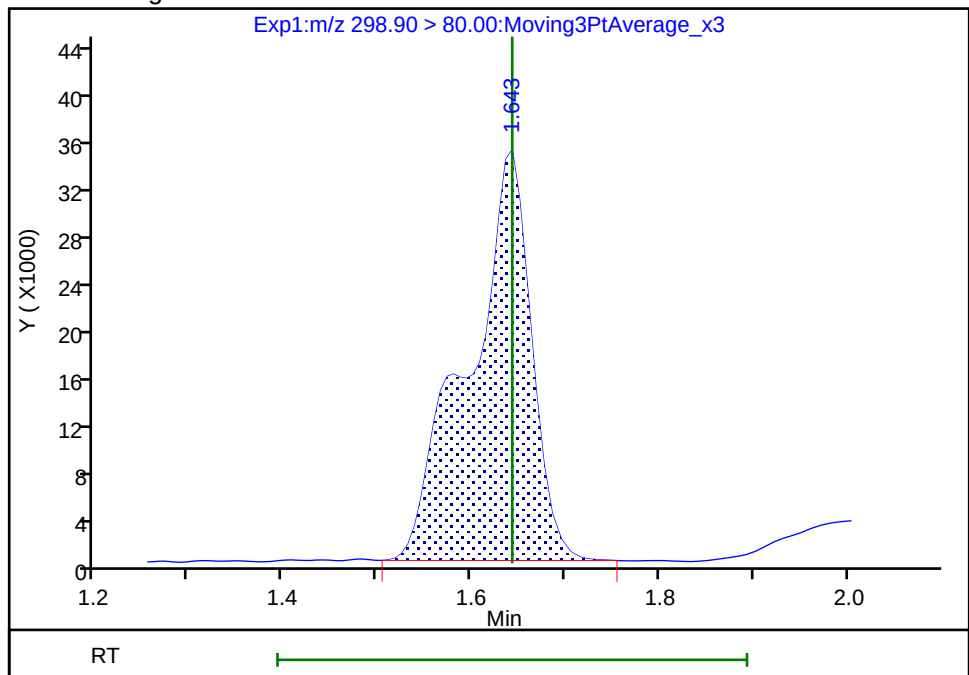
RT: 1.64
Area: 119885
Amount: 0.031669
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 161698
Amount: 0.042715
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:05:43
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 1085 of 1202

11/27/2018

TestAmerica Sacramento

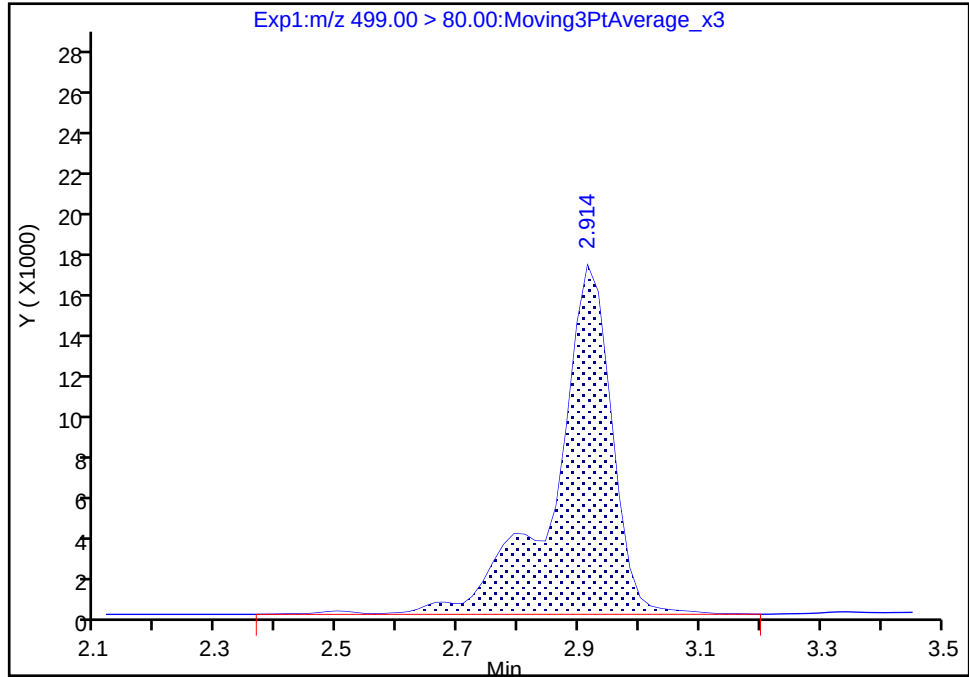
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Injection Date: 09-Nov-2018 07:40:47 Instrument ID: A9
Lims ID: CCVL
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 31 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

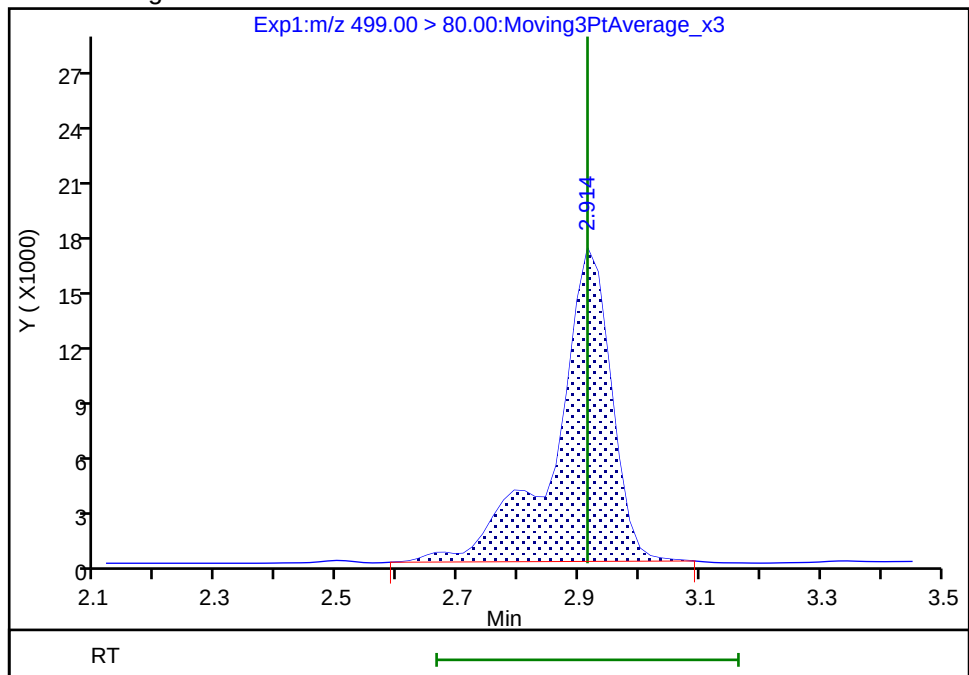
RT: 2.91
Area: 112920
Amount: 0.044336
Amount Units: ng/ml

Processing Integration Results



RT: 2.91
Area: 109469
Amount: 0.042981
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:05:57

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCV 320-258039/3 Calibration Date: 11/09/2018 07:48

Instrument ID: A9 Calib Start Date: 10/30/2018 13:12

GC Column: Acquity ID: 2.10 (mm) Calib End Date: 10/30/2018 13:57

Lab File ID: 2018.11.08LLC_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9357	0.9525		1.02	1.00	1.8	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.001	0.999		0.998	1.00	-0.2	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	103.3	110.6		0.947	0.884	7.1	50.0
4:2 FTS	AveID	20.55	17.91		0.814	0.934	-12.8	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8997	0.8779		0.976	1.00	-2.4	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	47.84	50.81		0.996	0.938	6.2	50.0
HFPO-DA (GenX)	AveID	1.662	1.680		1.01	1.00	1.0	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.061	1.155		1.09	1.00	8.9	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.260	1.213		0.876	0.910	-3.7	40.0
DONA	AveID	2.718	3.128		1.08	0.942	15.1	50.0
6:2 FTS	AveID	2.182	2.032		0.883	0.948	-6.9	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.081	1.081		1.00	1.00	0.0	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.041	1.178		1.08	0.952	13.2	50.0
Perfluorononanoic acid (PFNA)	AveID	1.001	1.007		1.01	1.00	0.6	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.077	1.094		0.943	0.928	1.6	40.0
F-53B Major	AveID	1.108	1.171		0.985	0.932	5.7	50.0
8:2 FTS	AveID	14.28	16.16		1.08	0.958	13.2	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.6135	0.6414		1.00	0.960	4.6	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	3.005	3.234		1.08	1.00	7.6	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.086	1.217		1.12	1.00	12.1	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	1.000	0.9662		0.966	1.00	-3.4	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.9143	0.9202		1.01	1.00	0.7	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8654	0.9014		1.00	0.964	4.2	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.137	1.111		0.977	1.00	-2.3	40.0
F-53B Minor	AveID	1.387	1.511		1.03	0.942	9.0	50.0
10:2 FTS	AveID	10.11	10.55		1.01	0.964	4.3	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.017	1.029		1.01	1.00	1.2	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0963	0.1046		1.05	0.968	8.6	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.8175	0.7690		0.941	1.00	-5.9	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1828	0.1644		0.899	1.00	-10.1	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9400		1.02	1.00	1.6	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCV 320-258039/3 Calibration Date: 11/09/2018 07:48
 Instrument ID: A9 Calib Start Date: 10/30/2018 13:12
 GC Column: Acquity ID: 2.10 (mm) Calib End Date: 10/30/2018 13:57
 Lab File ID: 2018.11.08LLC_006.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.4945	0.6070		1.23	1.00	22.7	50.0
13C4 PFBA	Ave	0.9103	0.9115		2.50	2.50	0.1	50.0
13C5-PFPeA DNU	Ave	0.8665	0.8526		2.46	2.50	-1.6	50.0
13C3 PFBS	Ave	0.0120	0.0117		2.26	2.33	-2.6	50.0
M2-4:2 FTS	Ave	0.0962	0.0822		2.00	2.34	-14.5	50.0
13C2 PFHxA	Ave	0.9136	0.8803		2.41	2.50	-3.6	50.0
13C3 HFPO-DA	Ave	0.1181	0.1006		2.13	2.50	-14.8	50.0
13C4 PFHpA	Ave	1.074	1.031		2.40	2.50	-4.0	50.0
18O2 PFHxS	Ave	0.6988	0.6818		2.31	2.37	-2.4	50.0
M2-6:2 FTS	Ave	0.0988	0.0946		2.27	2.38	-4.2	40.0
13C4 PFOA	Ave	0.9837	0.997		2.53	2.50	1.4	50.0
13C8 PFOA	Ave	3440710	2953201		2.10	2.45	-14.2	50.0
13C4 PFOS	Ave	0.7064	0.6720		2.27	2.39	-4.9	50.0
13C5 PFNA	Ave	0.9095	0.9271		2.55	2.50	1.9	50.0
13C8 PFOS	Ave	494030	523134		2.53	2.39	5.9	50.0
13C8 FOSA	Ave	0.3910	0.4019		2.57	2.50	2.8	50.0
M2-8:2 FTS	Ave	0.0122	0.0101		1.98	2.40	-17.4	40.0
13C2 PFDA	Ave	0.9367	0.8741		2.33	2.50	-6.7	50.0
d3-NMeFOSAA	Ave	0.4049	0.3851		2.38	2.50	-4.9	50.0
13C2 PFUnA	Ave	0.7823	0.8174		2.61	2.50	4.5	50.0
d5-NEtFOSAA	Ave	0.3298	0.3230		2.45	2.50	-2.1	50.0
13C2 PFDoA	Ave	0.9635	0.9889		2.57	2.50	2.6	50.0
13C2 PFTeDA	Ave	0.7200	0.7054		2.45	2.50	-2.0	50.0
13C2 PFHxDA	Ave	0.7154	0.7141		2.50	2.50	-0.2	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_006.d
 Lims ID: CCV L4
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 09-Nov-2018 07:48:15 ALS Bottle#: 32 Worklist Smp#: 3
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L4
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist: chrom-PFAS_A9*sub5
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 11:08:15 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: mongkols

Date: 12-Nov-2018 11:08:15

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	1.352	1.346	0.006	0.532	7640522	2.50		100	7713	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.352	1.352	0.0	1.000	2910883	1.02		102	128	
D 3 13C5 PFPeA										
267.90 > 223.00	1.609	1.601	0.008	0.633	7147182	2.46		98.4	9372	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.609	1.609	0.0	1.000	2856800	1.00		99.8	410	
D 47 13C3 PFBS										M
301.90 > 83.00	1.643	1.636	0.007	0.646	90907	2.26		97.4	554	M
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.643	1.643	0.0	1.000	3821963	0.9466		107	1240	
298.90 > 99.00	1.643	1.643	0.0	1.000	1311429		2.91(1.35-4.05)		844	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.843	1.843	0.0	0.725	643635	2.00		85.5	967	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.853	1.853	0.0	1.128	654075	0.8140		87.2	4158	
D 7 13C2 PFHxA										
315.00 > 270.00	1.883	1.873	0.009	0.740	7379305	2.41		96.4	10118	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.883	1.883	0.0	1.000	2591264	0.9757		97.6	364	
313.00 > 119.00	1.883	1.883	0.0	1.000	200656		12.91(6.96-20.87)		411	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.902	1.902	0.0	1.158	1863582	1.00		106	3063	
349.00 > 99.00	1.902	1.902	0.0	1.158	849757		2.19(1.15-3.45)		1752	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.972	1.971	0.001	0.775	842997	2.13		85.2	2466	

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	1.972	1.972	0.0	1.000	566449	1.01		101	321	
D 9 13C4 PFHpA										
367.00 > 322.00	2.191	2.191	0.0	0.862	8640507	2.40		96.0	7483	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.191	2.191	0.0	1.000	3991287	1.09		109	659	
363.00 > 169.00	2.191	2.191	0.0	1.000	807309		4.94(2.17-6.52)		1286	
D 11 18O2 PFHxS										
403.00 > 84.00	2.216	2.203	0.013	0.871	5406519	2.31		97.6	5780	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.216	2.216	0.0	1.000	2523463	0.8763		96.3	2532	
399.00 > 99.00	2.204	2.216	-0.012	0.994	685964		3.68(1.90-5.70)		902	
76 DONA										
377.00 > 251.00	2.241	2.241	0.0	0.769	6638225	1.08		115	10233	
377.00 > 85.00	2.241	2.241	0.0	0.769	2817534		2.36(1.13-3.39)		4368	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.513	2.513	0.0	0.988	753564	2.27		95.8	1692	
D 73 13C8 PFOA										
421.00 > 376.00	2.543	2.528	0.015		7227959	2.10		85.8	7729	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.528	2.528	0.0	1.006	611083	0.8826		93.1	1210	
D 14 13C4 PFOA										
417.00 > 372.00	2.543	2.543	0.0	1.000	8360310	2.53		101	7577	
* 62 13C2 PFOA										
415.00 > 370.00	2.543	2.543	0.0		8382392	2.50			6586	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.543	2.543	0.0	1.000	3618871	1.00		100	413	
413.00 > 169.00	2.543	2.543	0.0	1.000	1255152		2.88(1.36-4.08)		2400	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.558	2.558	0.0	0.878	2527388	1.08		113	2782	
449.00 > 99.00	2.558	2.558	0.0	0.878	584874		4.32(1.84-5.53)		2112	
D 18 13C4 PFOS										
503.00 > 80.00	2.914	2.914	0.0	1.146	5384770	2.27		95.1	3954	
D 72 13C8 PFOS										
507.00 > 99.00	2.914	2.914	0.0		1250291	2.53		106	3379	
D 19 13C5 PFNA										
468.00 > 423.00	2.914	2.914	0.0	1.146	7771394	2.55		102	6686	
20 Perfluorononanoic acid										
463.00 > 419.00	2.914	2.914	0.0	1.000	3130036	1.01		101	463	
463.00 > 169.00	2.914	2.914	0.0	1.000	568100		5.51(2.68-8.03)		1023	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.914	2.914	0.0	1.000	2287677	0.9428		102	955	
499.00 > 99.00	2.914	2.914	0.0	1.000	539105		4.24(2.04-6.12)		1228	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.124	3.124	0.0	1.072	2458962	0.9852		106	2063	
D 21 13C8 FOSA										
506.00 > 78.00	3.264	3.264	0.0	1.284	3368996	2.57		103	3605	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.281	3.264	0.017	1.290	7326791	2.33		93.3	8052	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.264	3.264	0.0	1.284	81212	1.98		82.6	326	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.264	3.264	0.0	1.000	524898	1.08		113	2709	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.264	3.264	0.0	1.120	1387370	1.00		105	2173	
549.00 > 99.00	3.264	3.264	0.0	1.120	234457		5.92(3.02-9.05)		2191	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.264	3.264	0.0	1.000	4357569	1.08		108	4988	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.281	3.281	0.0	1.000	3565453	1.12		112	639	
513.00 > 169.00	3.281	3.281	0.0	1.000	237756		15.00(7.12-21.35)		353	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.422	3.422	0.0	1.346	3228196	2.38		95.1	2697	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.437	3.437	0.0	1.004	1247676	0.9662		96.6	449	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.591	3.591	0.0	1.000	996628	1.01		101	1906	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.591	3.591	0.0	1.232	1957719	1.00		104	1786	
599.00 > 99.00	3.591	3.591	0.0	1.232	415508		4.71(2.14-6.43)		1133	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.591	3.591	0.0	1.412	2707511	2.45		97.9	2240	
D 30 13C2 PFUnA										
565.00 > 520.00	3.591	3.591	0.0	1.412	6851327	2.61		104	5867	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.607	3.607	0.0	1.005	3044890	0.9772		97.7	796	
563.00 > 169.00	3.607	3.607	0.0	1.005	243524		12.50(5.24-15.72)		1391	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.759	3.759	0.0	1.290	3207549	1.03		109	4717	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.883	3.883	0.0	1.189	344805	1.01		104	910	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.883	3.883	0.0	1.000	3413407	1.01		101	951	
613.00 > 169.00	3.883	3.883	0.0	1.000	369085		9.25(4.68-14.05)		1220	
D 36 13C2 PFDaA										
615.00 > 570.00	3.883	3.883	0.0	1.527	8289415	2.57		103	6765	
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	3.971	3.971	0.0		824616	NC			512	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.129	4.129	0.0	1.417	228082	1.05		109	561	
699.00 > 99.00	4.129	4.129	0.0	1.417	414790		0.55(0.28-0.83)		1584	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.145	4.145	0.0	1.067	2549876	0.9406		94.1	993	
663.00 > 169.00	4.145	4.145	0.0	1.067	446337		5.71(3.09-9.27)		1878	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.381	4.381	0.0	1.000	388905	0.8994		89.9	1369	
713.00 > 219.00	4.381	4.381	0.0	1.000	293814		1.32(0.70-2.09)		1147	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.381	4.381	0.0	1.723	5912746	2.45		98.0	7410	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.786	4.786	0.0	1.000	2250420	1.02		102	819	
813.00 > 169.00	4.786	4.786	0.0	1.000	422995		5.32(2.77-8.32)		1344	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.786	4.786	0.0	1.882	5985406	2.50		99.8	6446	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.129	5.129	0.0	1.072	1453187	1.23		123	894	
913.00 > 169.00	5.129	5.129	0.0	1.072	310976		4.67(2.55-7.64)		1946	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC_LL4_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_006.d

Injection Date: 09-Nov-2018 07:48:15

Instrument ID: A9

Lims ID: CCV L4

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 32

Worklist Smp#: 3

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

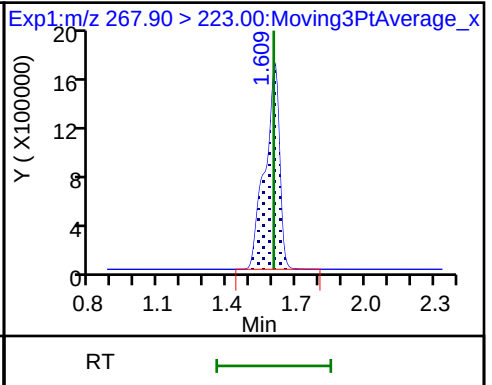
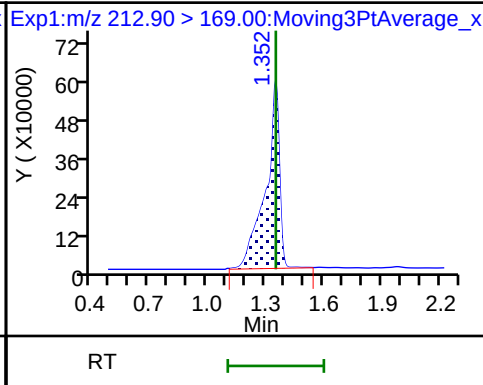
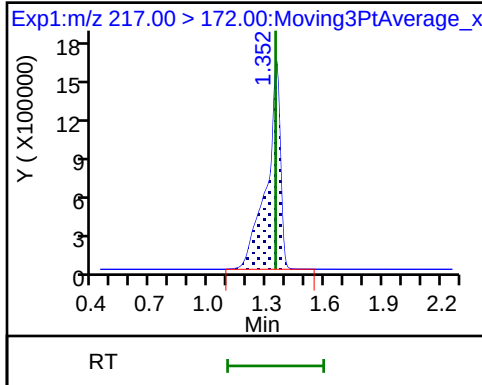
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

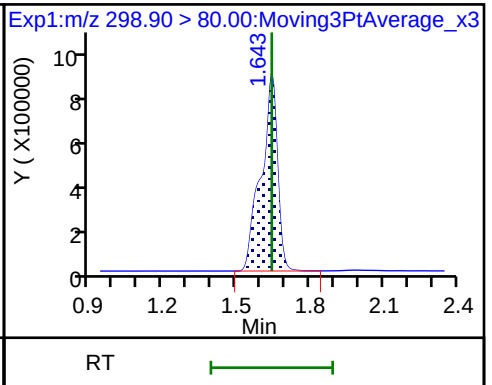
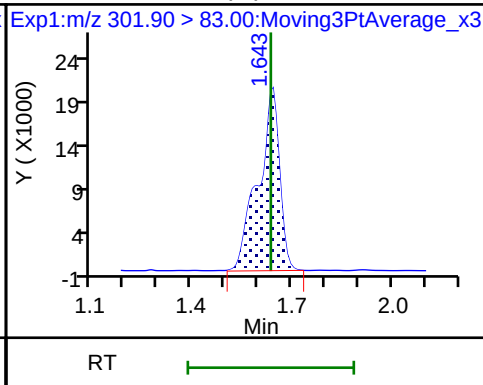
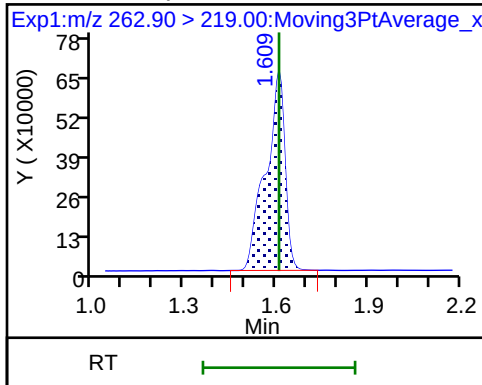
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS (M)

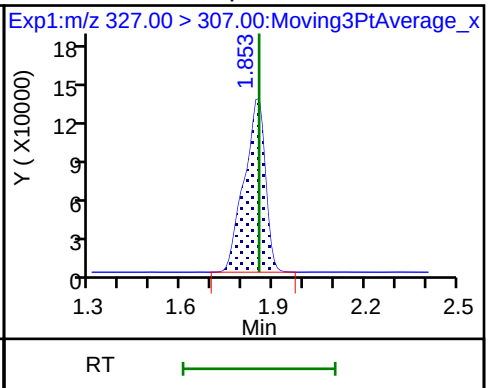
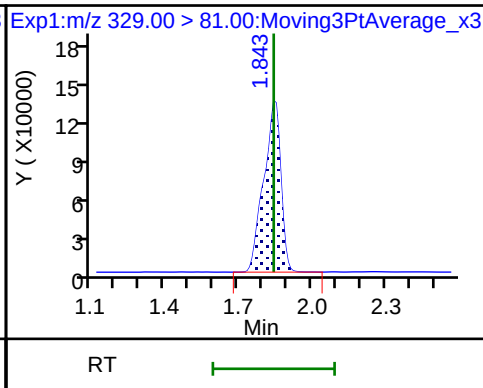
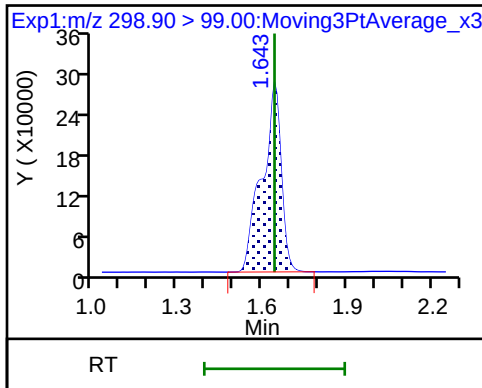
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

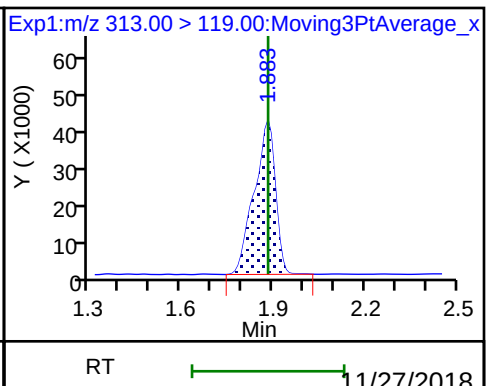
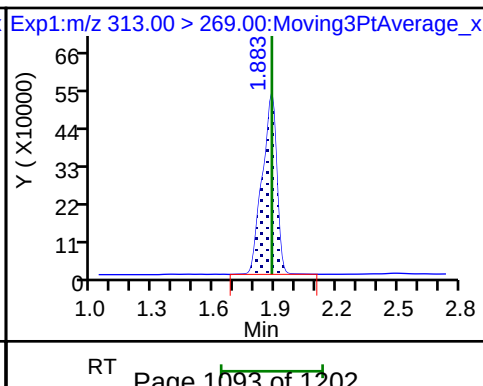
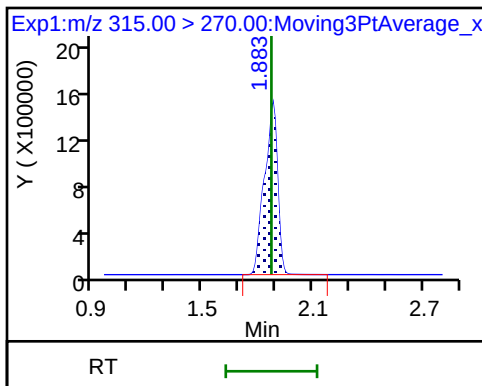
61 1H,1H,2H,2H-perfluorohexanesulfoni

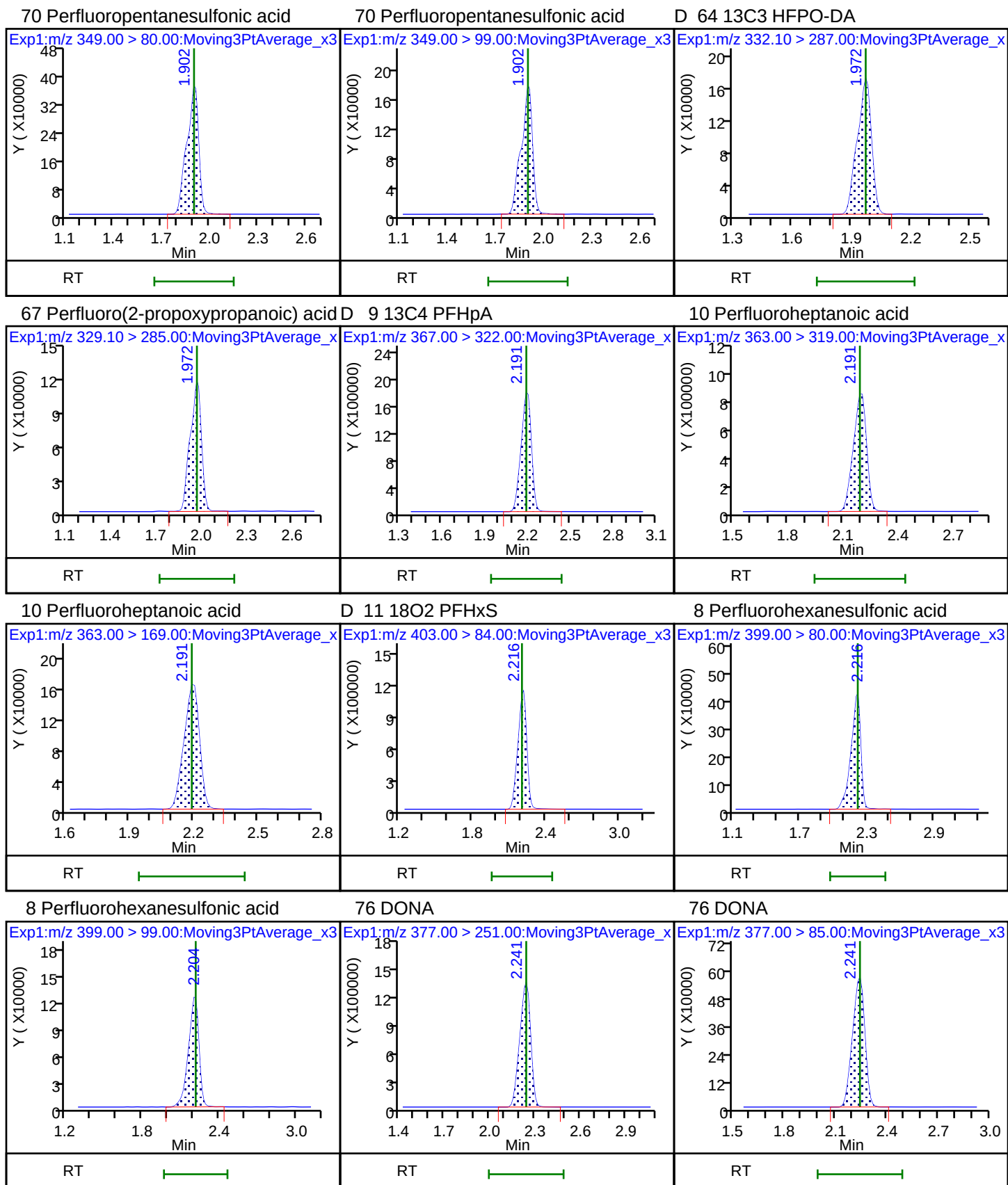


D 7 13C2 PFHxA

6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

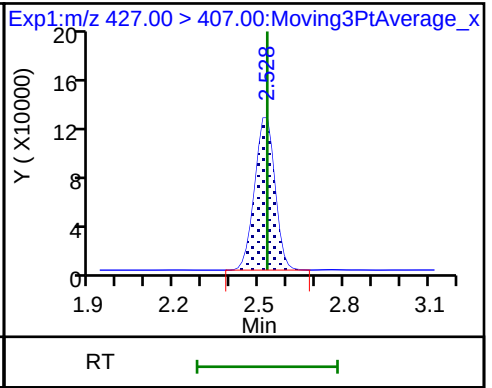
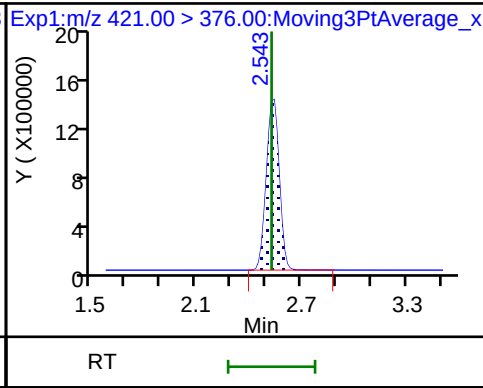
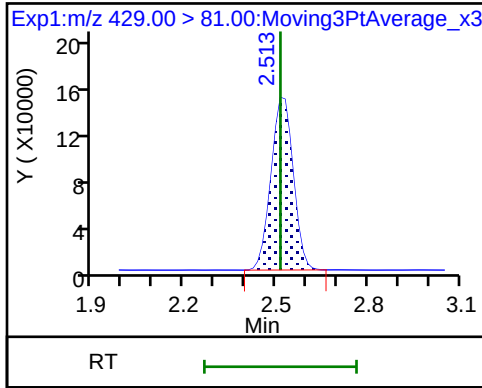




D 12 M2-6:2 FTS

D 73 13C8 PFOA

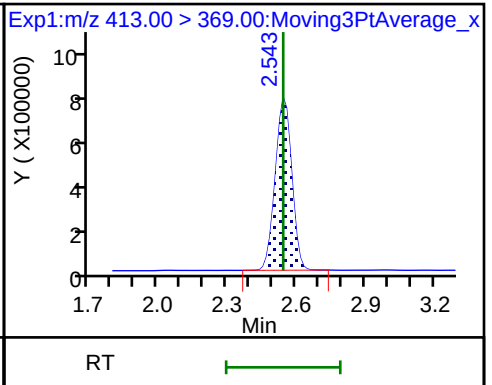
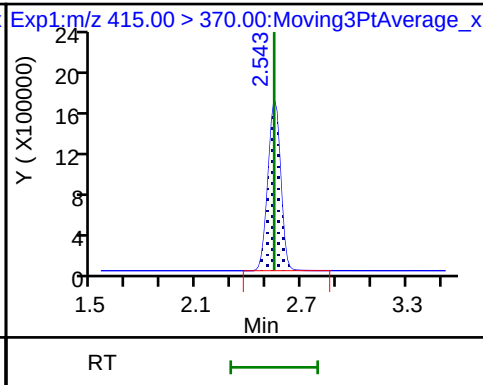
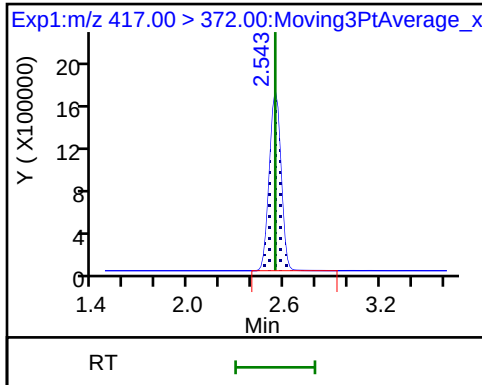
13 1H,1H,2H,2H-perfluorooctanesulfoni



D 14 13C4 PFOA

* 62 13C2 PFOA

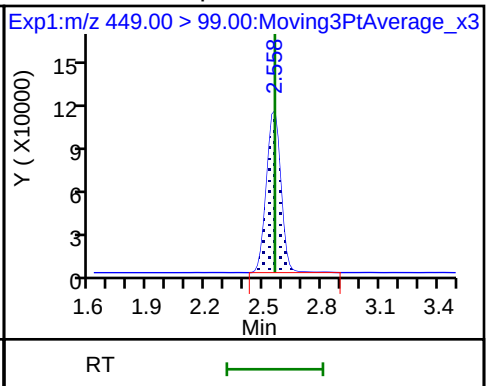
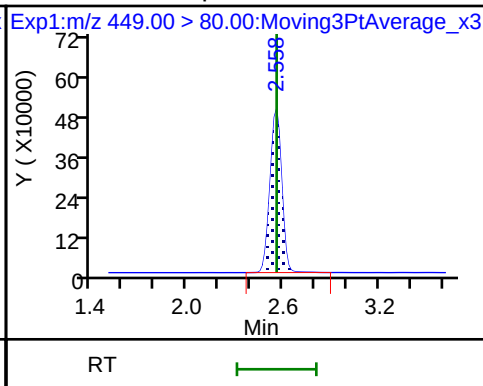
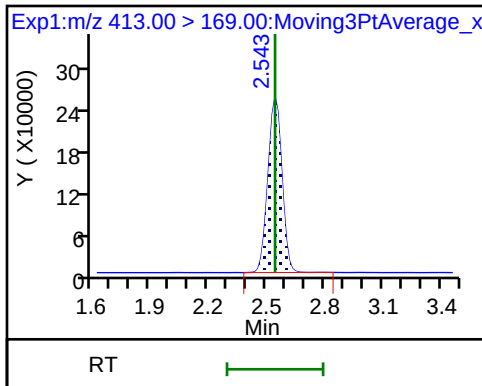
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

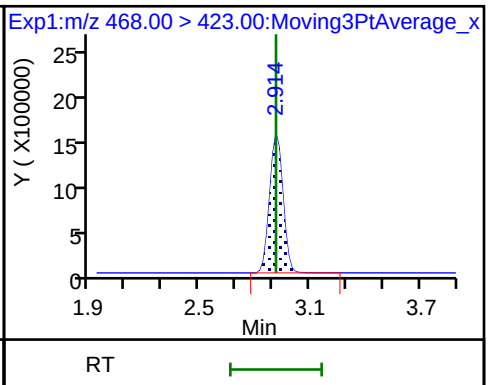
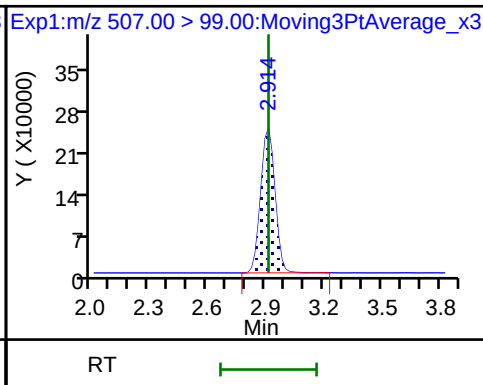
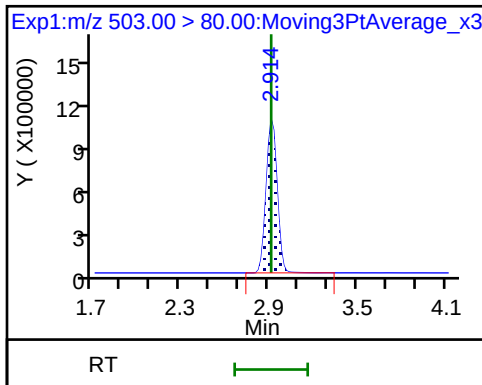
16 Perfluoroheptanesulfonic acid

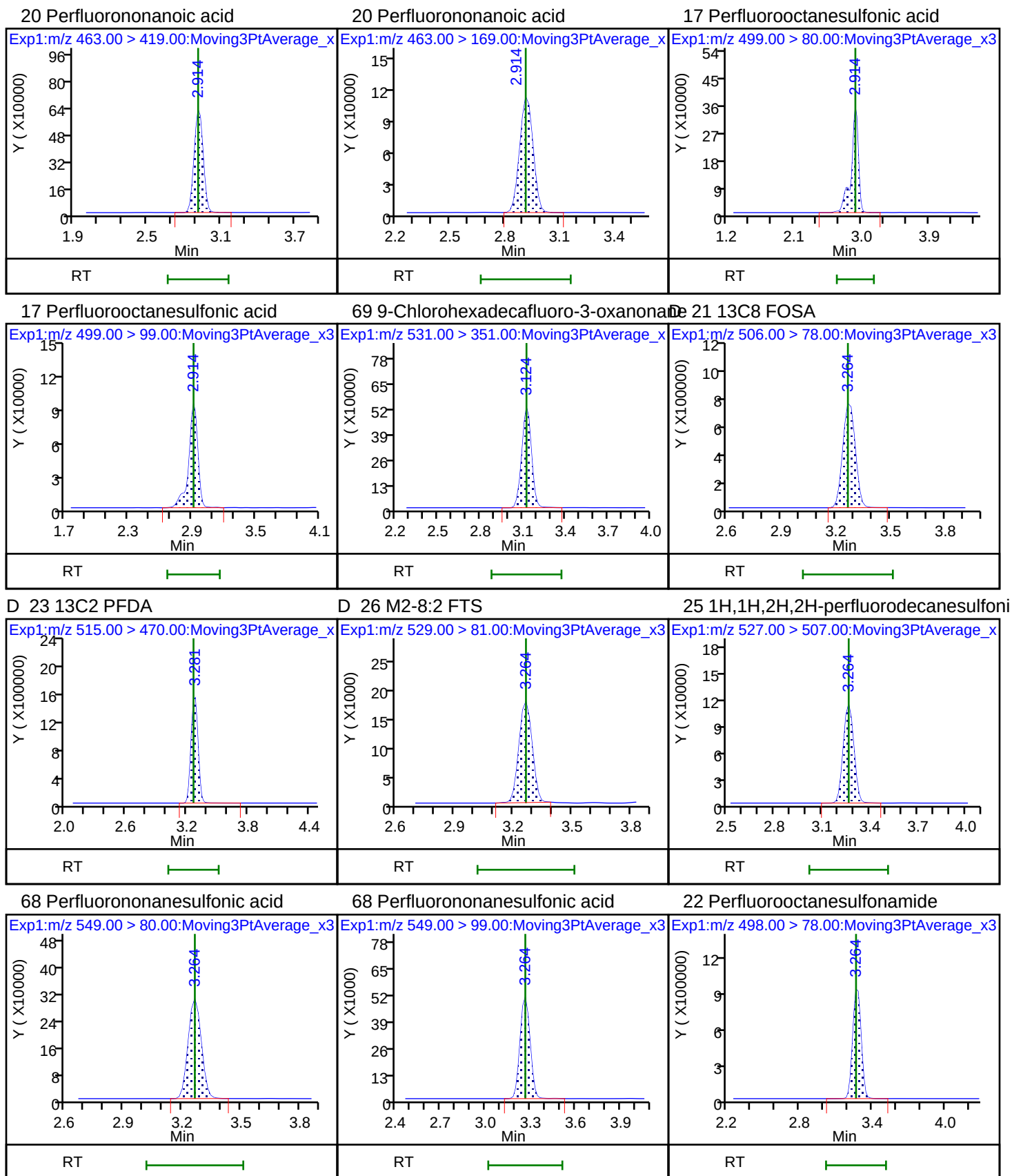


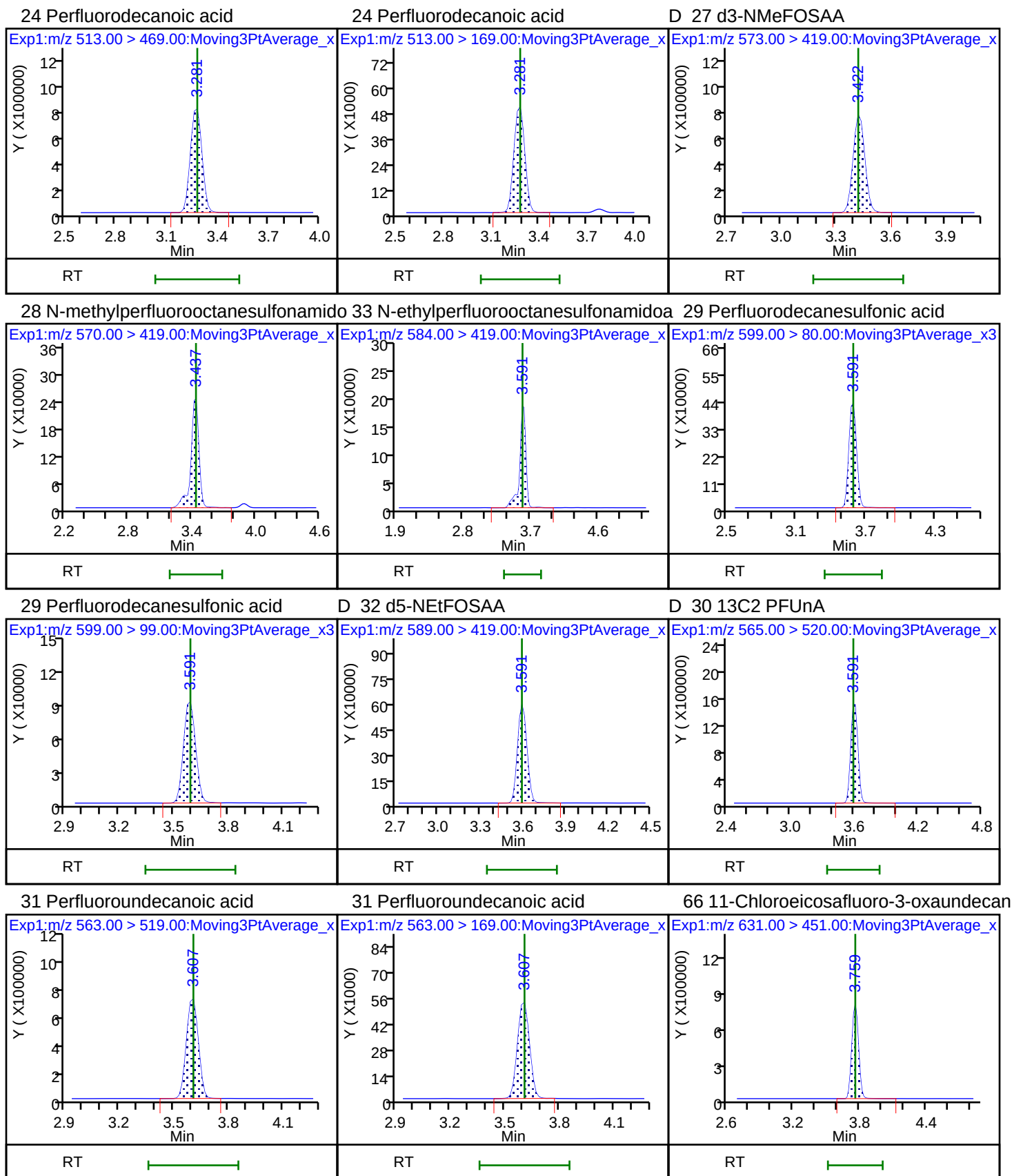
D 18 13C4 PFOS

D 72 13C8 PFOS

D 19 13C5 PFNA

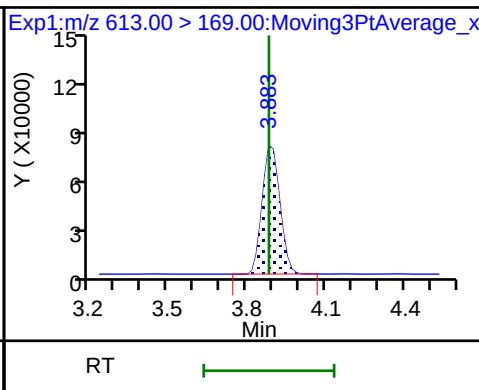
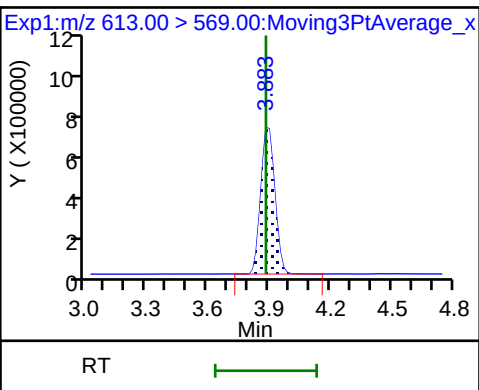
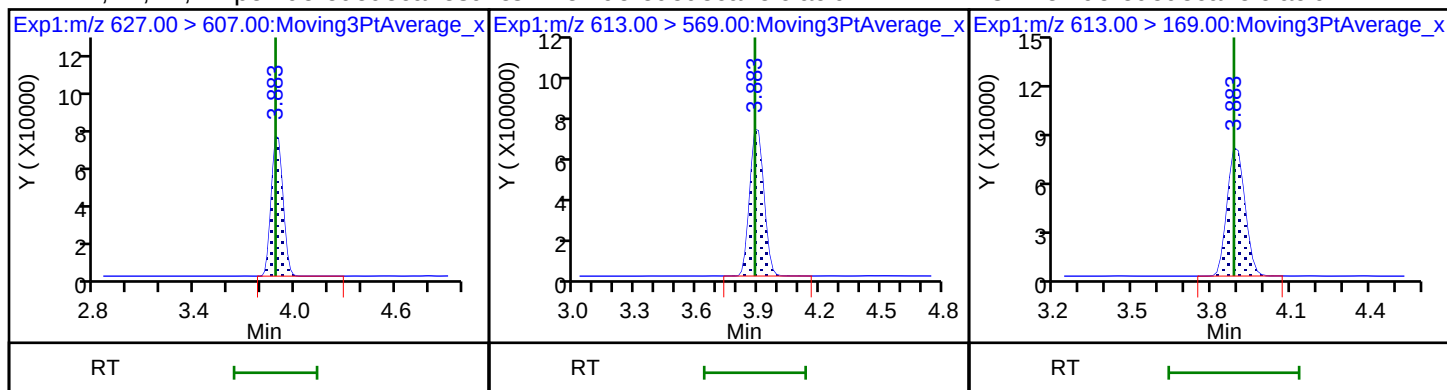






74 1H,1H,2H,2H-perfluorododecanesulfo37 Perfluorododecanoic acid

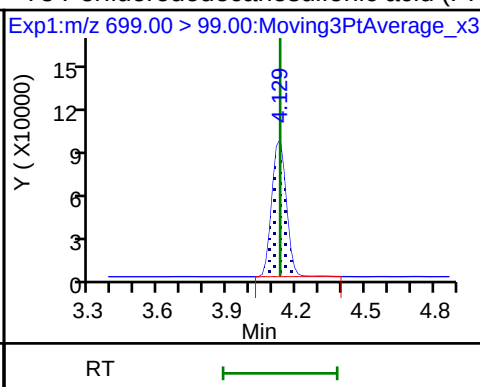
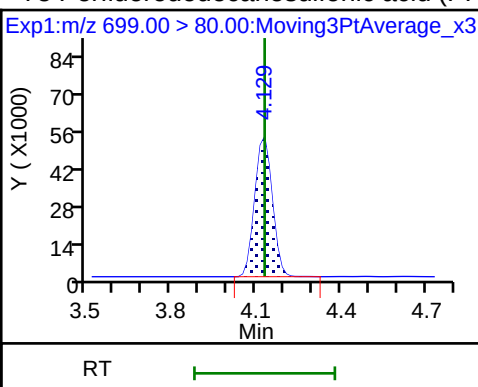
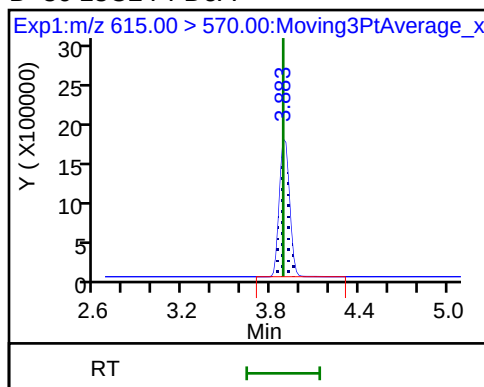
37 Perfluorododecanoic acid



D 36 13C2 PFDa

75 Perfluorododecanesulfonic acid (PF

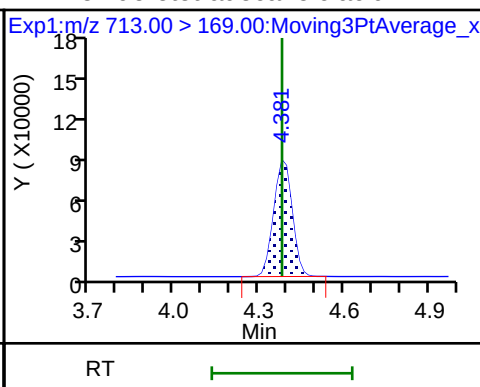
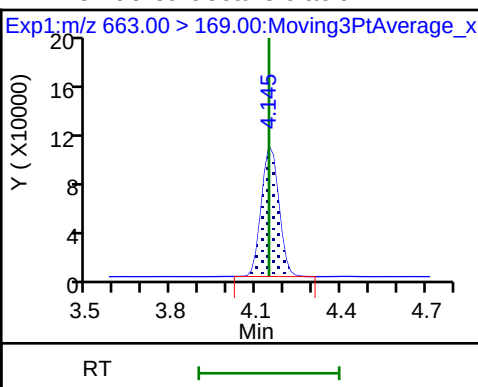
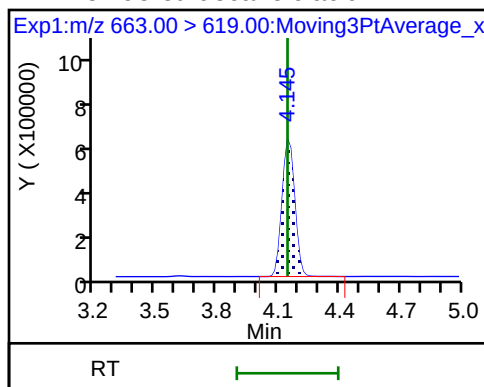
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

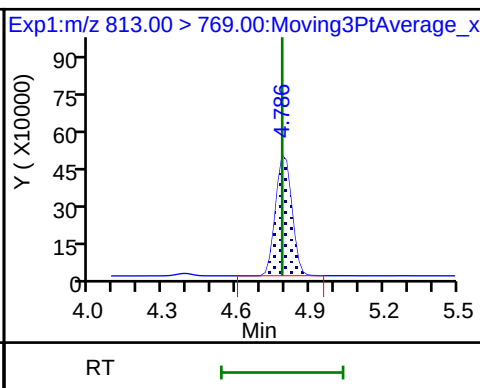
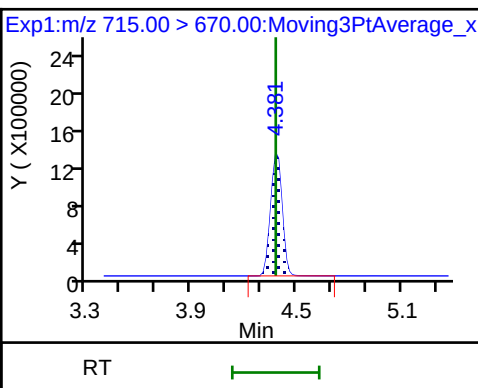
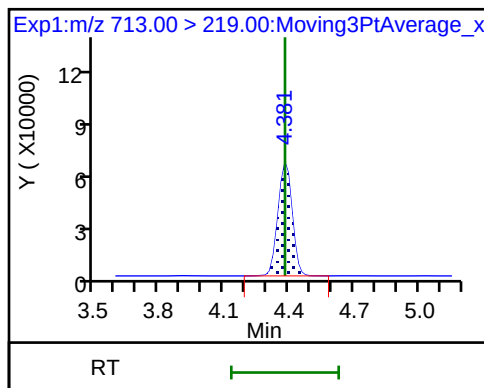
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDa

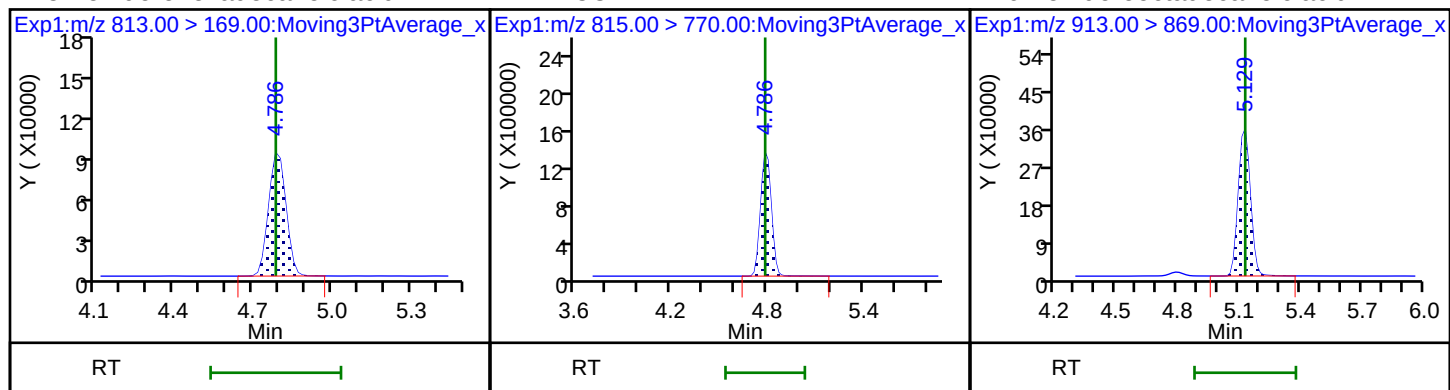
45 Perfluorohexadecanoic acid



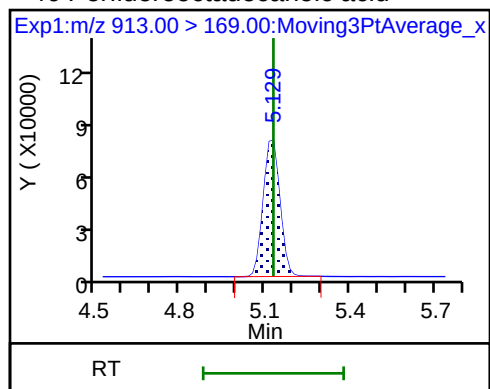
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

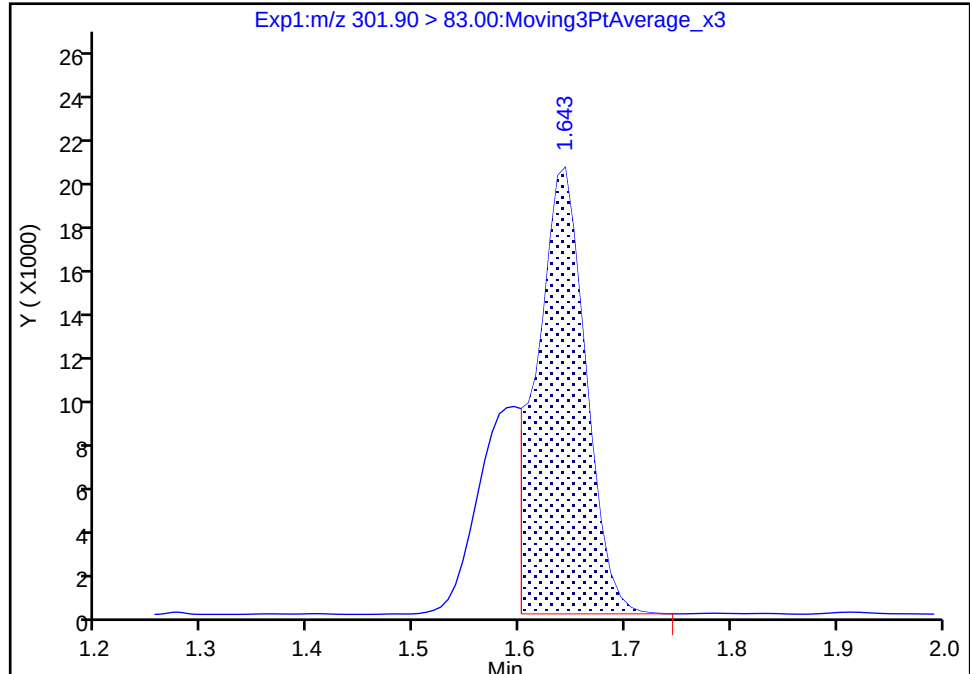
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_006.d
Injection Date: 09-Nov-2018 07:48:15 Instrument ID: A9
Lims ID: CCV L4
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 32 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

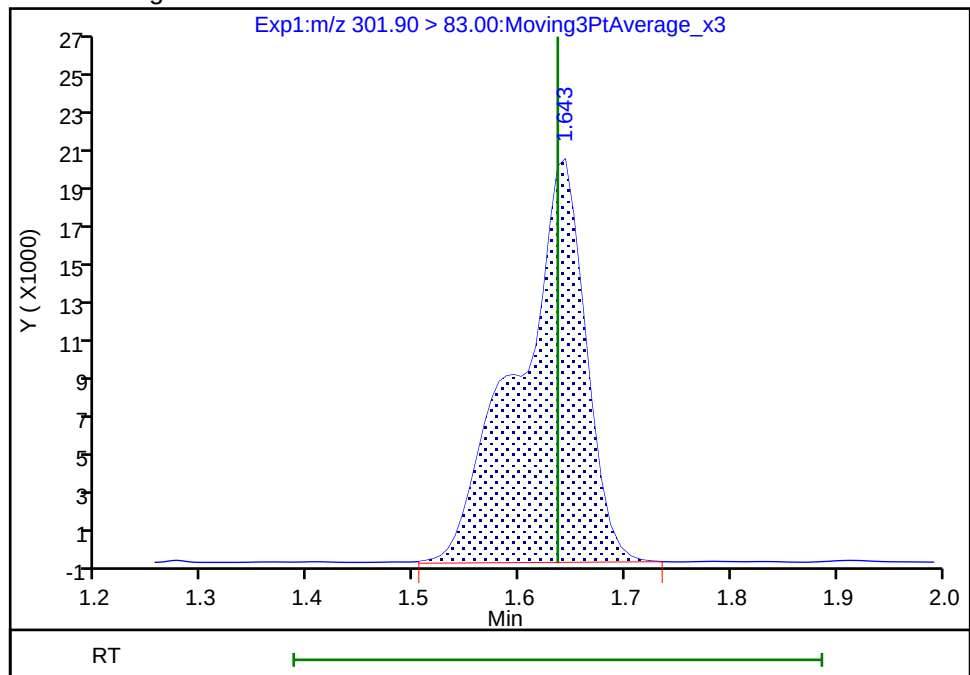
RT: 1.64
Area: 64585
Amount: 1.608375
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 90907
Amount: 2.263878
Amount Units: ng/ml

Manual Integration Results



Reviewer: roycea, 09-Nov-2018 10:33:40

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Lab Sample ID: CCV 320-258039/15 Calibration Date: 11/09/2018 09:11

Instrument ID: A9 Calib Start Date: 10/30/2018 13:12

GC Column: Acquity ID: 2.10 (mm) Calib End Date: 10/30/2018 13:57

Lab File ID: 2018.11.08LLC_017.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9357	0.9451		2.53	2.50	1.0	40.0
Perfluoropentanoic acid (PFPeA)	AveID	1.001	1.015		2.53	2.50	1.4	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	103.3	117.1		2.51	2.21	13.4	50.0
4:2 FTS	AveID	20.55	19.69		2.24	2.34	-4.2	50.0
Perfluorohexanoic acid (PFHxA)	AveID	0.8997	0.8843		2.46	2.50	-1.7	40.0
Perfluoropentanesulfonic acid (PFPeS)	AveID	47.84	52.77		2.59	2.35	10.3	50.0
HFPO-DA (GenX)	AveID	1.662	1.768		2.66	2.50	6.4	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	1.061	1.031		2.43	2.50	-2.8	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.260	1.232		2.23	2.28	-2.2	40.0
DONA	AveID	2.718	2.703		2.34	2.36	-0.5	50.0
6:2 FTS	AveID	2.182	1.913		2.08	2.37	-12.3	40.0
Perfluorooctanoic acid (PFOA)	AveID	1.081	1.023		2.37	2.50	-5.4	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.041	1.108		2.53	2.38	6.5	50.0
Perfluorononanoic acid (PFNA)	AveID	1.001	1.015		2.53	2.50	1.4	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	1.077	1.041		2.24	2.32	-3.4	40.0
F-53B Major	AveID	1.108	1.133		2.38	2.33	2.2	50.0
8:2 FTS	AveID	14.28	13.37		2.24	2.40	-6.4	40.0
Perfluorodecanoic acid (PFDA)	AveID	1.086	1.113		2.56	2.50	2.5	40.0
Perfluorononanesulfonic acid (PFNS)	AveID	0.6135	0.6283		2.46	2.40	2.4	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	3.005	2.958		2.46	2.50	-1.6	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	1.000	1.024		2.56	2.50	2.4	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.8654	0.8990		2.50	2.41	3.9	50.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.9143	0.9350		2.56	2.50	2.3	40.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.137	0.997		2.19	2.50	-12.3	40.0
F-53B Minor	AveID	1.387	1.343		2.28	2.36	-3.2	50.0
10:2 FTS	AveID	10.11	9.439		2.25	2.41	-6.7	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.017	0.9616		2.36	2.50	-5.5	40.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.0963	0.0943		2.37	2.42	-2.2	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.8175	0.8221		2.51	2.50	0.6	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1828	0.1617		2.21	2.50	-11.6	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9227		2.53	2.50	1.3	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1
 SDG No.: _____
 Lab Sample ID: CCV 320-258039/15 Calibration Date: 11/09/2018 09:11
 Instrument ID: A9 Calib Start Date: 10/30/2018 13:12
 GC Column: Acquity ID: 2.10 (mm) Calib End Date: 10/30/2018 13:57
 Lab File ID: 2018.11.08LLC_017.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.4945	0.5970		3.02	2.50	20.7	50.0
13C4 PFBA	Ave	0.9103	0.8892		2.44	2.50	-2.3	50.0
13C5-PFPeA DNU	Ave	0.8665	0.8408		2.43	2.50	-3.0	50.0
13C3 PFBS	Ave	0.0120	0.0111		2.15	2.33	-7.7	50.0
M2-4:2 FTS	Ave	0.0962	0.0868		2.11	2.34	-9.8	50.0
13C2 PFHxA	Ave	0.9136	0.8984		2.46	2.50	-1.7	50.0
13C3 HFPO-DA	Ave	0.1181	0.0965		2.04	2.50	-18.3	50.0
13C4 PFHpA	Ave	1.074	1.051		2.45	2.50	-2.1	50.0
18O2 PFHxS	Ave	0.6988	0.7000		2.37	2.37	0.2	50.0
M2-6:2 FTS	Ave	0.0988	0.0962		2.31	2.38	-2.6	40.0
13C8 PFOA	Ave	3440710	2957937		2.10	2.45	-14.0	50.0
13C4 PFOA	Ave	0.9837	0.9667		2.46	2.50	-1.7	50.0
13C4 PFOS	Ave	0.7064	0.7120		2.41	2.39	0.8	50.0
13C5 PFNA	Ave	0.9095	0.9019		2.48	2.50	-0.8	50.0
13C8 PFOS	Ave	494030	487424		2.36	2.39	-1.3	50.0
13C2 PFDA	Ave	0.9367	0.9034		2.41	2.50	-3.6	50.0
13C8 FOSA	Ave	0.3910	0.3929		2.51	2.50	0.5	50.0
M2-8:2 FTS	Ave	0.0122	0.0115		2.26	2.40	-5.8	40.0
d3-NMeFOSAA	Ave	0.4049	0.3887		2.40	2.50	-4.0	50.0
13C2 PFUnA	Ave	0.7823	0.8042		2.57	2.50	2.8	50.0
d5-NEtFOSAA	Ave	0.3298	0.3279		2.49	2.50	-0.6	50.0
13C2 PFDoA	Ave	0.9635	0.9362		2.43	2.50	-2.8	50.0
13C2 PFTeDA	Ave	0.7200	0.7132		2.48	2.50	-0.9	50.0
13C2 PFHxDA	Ave	0.7154	0.7105		2.48	2.50	-0.7	50.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_017.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-Nov-2018 09:11:00 ALS Bottle#: 33 Worklist Smp#: 15
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: Plate: 1 Rack: 1
 Operator ID: A9\Administrator Instrument ID: A9
 Sublist: chrom-PFAS_A9*sub5
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 12:35:47 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d

Column 1 : Det: EXP1

Process Host: CTX0318

First Level Reviewer: mongkols

Date: 12-Nov-2018 12:35:47

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	1.359	1.346	0.013	0.528	7540002	2.44		97.7	10061	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.359	1.352	0.007	1.000	7126376	2.53		101	282	
D 3 13C5 PFPeA										
267.90 > 223.00	1.623	1.601	0.021	0.631	7129365	2.43		97.0	8989	
4 Perfluoropentanoic acid										
262.90 > 219.00	1.623	1.609	0.013	1.000	7234684	2.53		101	1239	
D 47 13C3 PFBS										
301.90 > 83.00	1.660	1.636	0.024	0.645	87213	2.15		92.3	469	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	1.660	1.643	0.017	1.000	9707554	2.51		113	2418	
298.90 > 99.00	1.660	1.643	0.017	1.000	3192588		3.04(1.35-4.05)		1507	
D 60 M2-4:2 FTS										
329.00 > 81.00	1.873	1.843	0.030	0.728	687298	2.11		90.2	1056	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.873	1.853	0.020	1.128	1724879	2.24		95.8	6866	
D 7 13C2 PFHxA										
315.00 > 270.00	1.902	1.873	0.029	0.739	7617528	2.46		98.3	9051	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.902	1.883	0.020	1.000	6735855	2.46		98.3	857	
313.00 > 119.00	1.902	1.883	0.020	1.000	496550		13.57(6.96-20.87)		726	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.922	1.902	0.020	1.158	4641921	2.59		110	5377	
349.00 > 99.00	1.922	1.902	0.020	1.158	2053074		2.26(1.15-3.45)		2455	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.993	1.971	0.022	0.775	817949	2.04		81.7	2067	

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	1.993	1.972	0.021	1.000	1446475	2.66		106	866	
D 9 13C4 PFHpA										
367.00 > 322.00	2.216	2.191	0.025	0.861	8912793	2.45		97.9	11935	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.216	2.191	0.025	1.000	9185720	2.43		97.2	1260	
363.00 > 169.00	2.216	2.191	0.025	1.000	2122110		4.33(2.17-6.52)		2901	
D 11 18O2 PFHxS										
403.00 > 84.00	2.241	2.203	0.038	0.871	5615186	2.37		100	6152	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.241	2.216	0.025	1.000	6656885	2.23		97.8	3438	
399.00 > 99.00	2.241	2.216	0.025	1.000	1812108		3.67(1.90-5.70)		1755	
76 DONA										
377.00 > 251.00	2.266	2.241	0.025	0.768	15370698	2.34		99.5	10534	
377.00 > 85.00	2.266	2.241	0.025	0.768	7430703		2.07(1.13-3.39)		7199	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.543	2.513	0.030	0.989	775163	2.31		97.4	1527	
D 73 13C8 PFOA										
421.00 > 376.00	2.558	2.528	0.030		7239550	2.10		86.0	9029	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.543	2.528	0.015	1.000	1479729	2.08		87.7	2918	
D 14 13C4 PFOA										
417.00 > 372.00	2.573	2.543	0.030	1.000	8196781	2.46		98.3	6554	
* 62 13C2 PFOA										
415.00 > 370.00	2.573	2.543	0.030		8479401	2.50			7979	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.573	2.543	0.030	1.000	8390272	2.37		94.6	742	
413.00 > 169.00	2.573	2.543	0.030	1.000	3130058		2.68(1.36-4.08)		3406	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.588	2.558	0.030	0.877	6369716	2.53		106	4157	
449.00 > 99.00	2.588	2.558	0.030	0.877	1551423		4.11(1.84-5.53)		3217	
D 18 13C4 PFOS										
503.00 > 80.00	2.949	2.914	0.035	1.146	5771515	2.41		101	3377	
D 72 13C8 PFOS										
507.00 > 99.00	2.949	2.914	0.035		1164944	2.36		98.7	2218	
D 19 13C5 PFNA										
468.00 > 423.00	2.949	2.914	0.035	1.146	7647901	2.48		99.2	7347	
20 Perfluorononanoic acid										
463.00 > 419.00	2.949	2.914	0.035	1.000	7762381	2.53		101	817	
463.00 > 169.00	2.949	2.914	0.035	1.000	1468619		5.29(2.68-8.03)		3024	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.949	2.914	0.035	1.000	5829793	2.24		96.6	2263	
499.00 > 99.00	2.949	2.914	0.035	1.000	1414427		4.12(2.04-6.12)		2411	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.155	3.124	0.031	1.070	6372144	2.38		102	3359	
D 21 13C8 FOSA										
506.00 > 78.00	3.298	3.264	0.034	1.282	3331519	2.51		100	5751	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 23 13C2 PFDA										
515.00 > 470.00	3.298	3.264	0.034	1.282	7660194	2.41		96.4	7437	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.298	3.264	0.034	1.282	93703	2.26		94.2	661	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.298	3.264	0.034	1.000	1252452	2.24		93.6	4668	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.298	3.264	0.034	1.118	3641540	2.46		102	5147	
549.00 > 99.00	3.298	3.264	0.034	1.118	595598		6.11(3.02-9.05)		3709	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.298	3.264	0.034	1.000	9853732	2.46		98.4	5798	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.298	3.281	0.017	1.000	8524787	2.56		103	1102	
513.00 > 169.00	3.298	3.281	0.017	1.000	584283		14.59(7.12-21.35)		429	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.453	3.422	0.031	1.342	3296150	2.40		96.0	3518	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.468	3.437	0.031	1.004	3374410	2.56		102	1058	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.624	3.591	0.033	1.000	2599286	2.56		102	2901	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.608	3.591	0.017	1.223	5231776	2.50		104	3506	
599.00 > 99.00	3.608	3.591	0.017	1.223	1064308		4.92(2.14-6.43)		2375	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.624	3.591	0.033	1.409	2780142	2.49		99.4	3029	
D 30 13C2 PFUnA										
565.00 > 520.00	3.624	3.591	0.033	1.409	6819043	2.57		103	6348	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.624	3.607	0.017	1.000	6796011	2.19		87.7	1391	
563.00 > 169.00	3.624	3.607	0.017	1.000	621912		10.93(5.24-15.72)		2348	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.789	3.759	0.030	1.285	7635317	2.28		96.8	5016	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.918	3.883	0.035	1.188	889977	2.25		93.3	1785	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.918	3.883	0.035	1.000	7632899	2.36		94.5	1535	
613.00 > 169.00	3.918	3.883	0.035	1.000	969412		7.87(4.68-14.05)		2549	
D 36 13C2 PFDaA										
615.00 > 570.00	3.918	3.883	0.035	1.523	7938147	2.43		97.2	5512	
39 N-ethylperfluoro-1-octanesulfonami										
526.00 > 169.00	4.006	3.971	0.035		2027045	NC			585	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.145	4.129	0.016	1.406	550871	2.37		97.8	1597	
699.00 > 99.00	4.145	4.129	0.016	1.406	1017262		0.54(0.28-0.83)		2694	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.176	4.145	0.031	1.066	6526211	2.51		101	1809	
663.00 > 169.00	4.176	4.145	0.031	1.066	1170132		5.58(3.09-9.27)		2656	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.412	4.381	0.031	1.000	977901	2.21		88.4	2371	
713.00 > 219.00	4.412	4.381	0.031	1.000	727462		1.34(0.70-2.09)		2656	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.412	4.381	0.031	1.715	6047727	2.48		99.1	8537	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.820	4.786	0.034	1.000	5559271	2.53		101	1502	
813.00 > 169.00	4.820	4.786	0.034	1.000	1059563		5.25(2.77-8.32)		2740	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.820	4.786	0.034	1.874	6024738	2.48		99.3	8269	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.143	5.129	0.014	1.067	3596714	3.02		121	1796	
913.00 > 169.00	5.143	5.129	0.014	1.067	777288		4.63(2.55-7.64)		4340	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC_LL5_00009

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_017.d

Injection Date: 09-Nov-2018 09:11:00

Instrument ID: A9

Lims ID: CCV L5

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 33

Worklist Smp#: 15

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

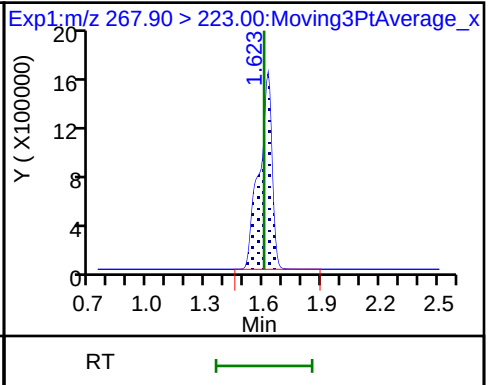
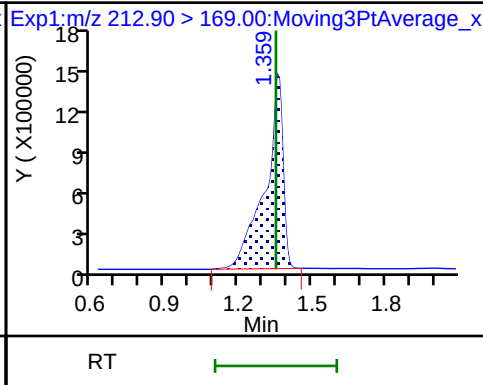
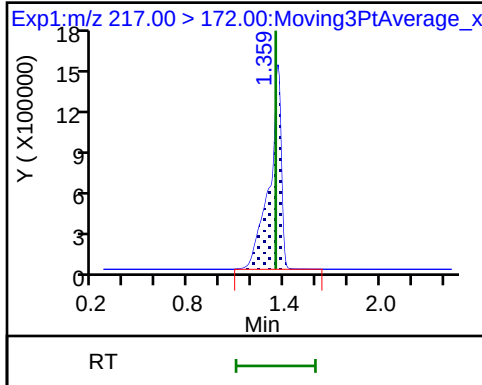
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

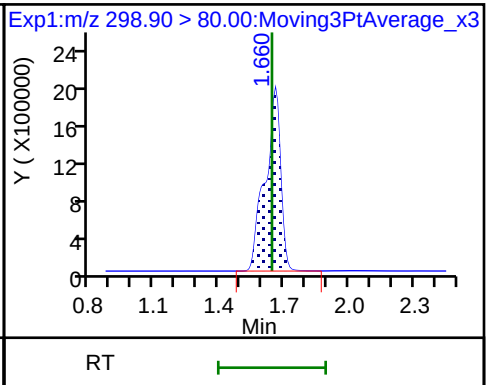
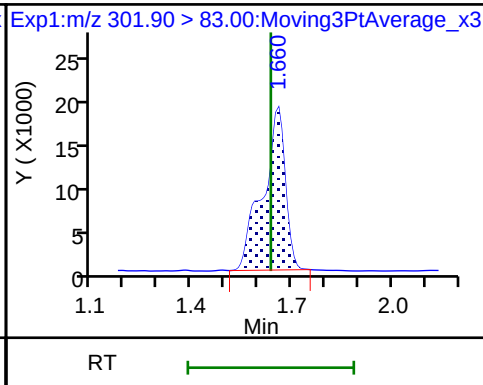
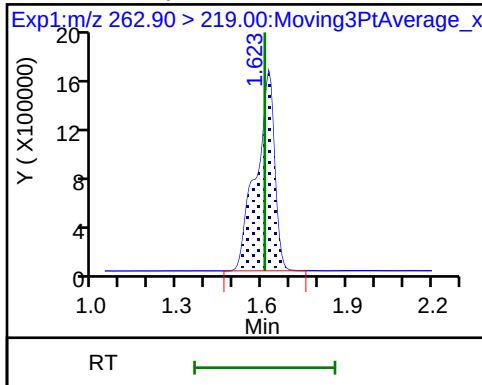
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

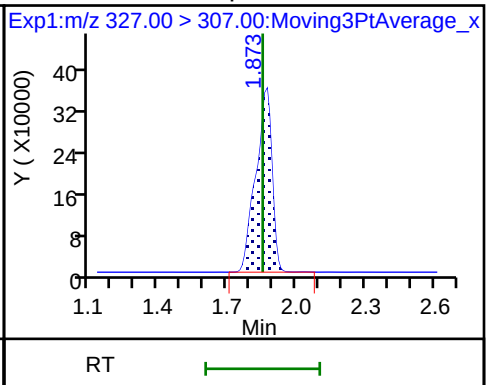
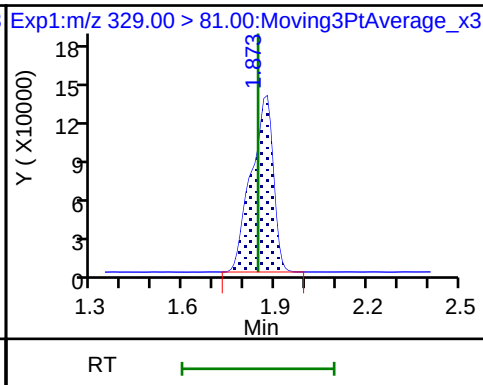
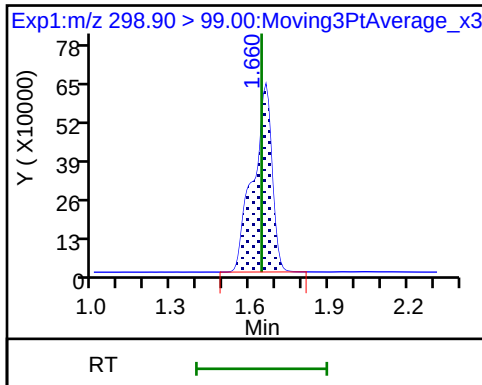
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

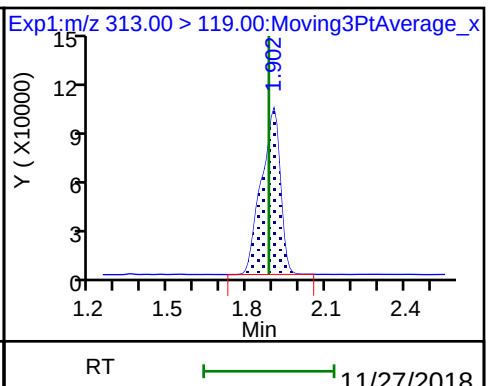
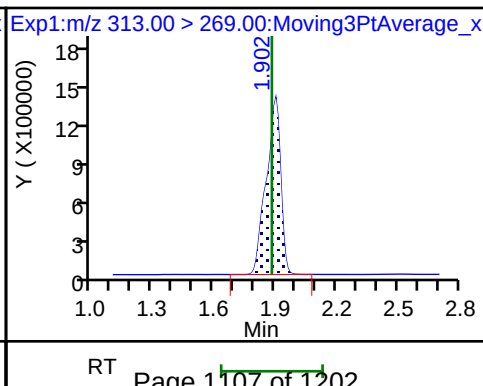
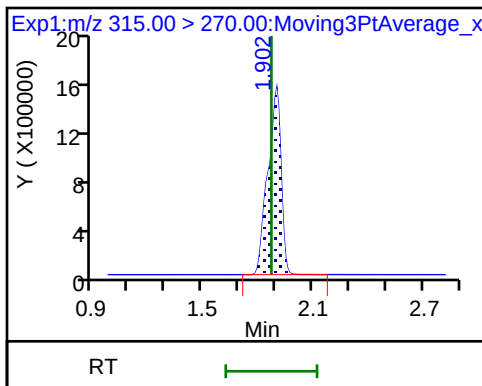
61 1H,1H,2H,2H-perfluorohexanesulfoni

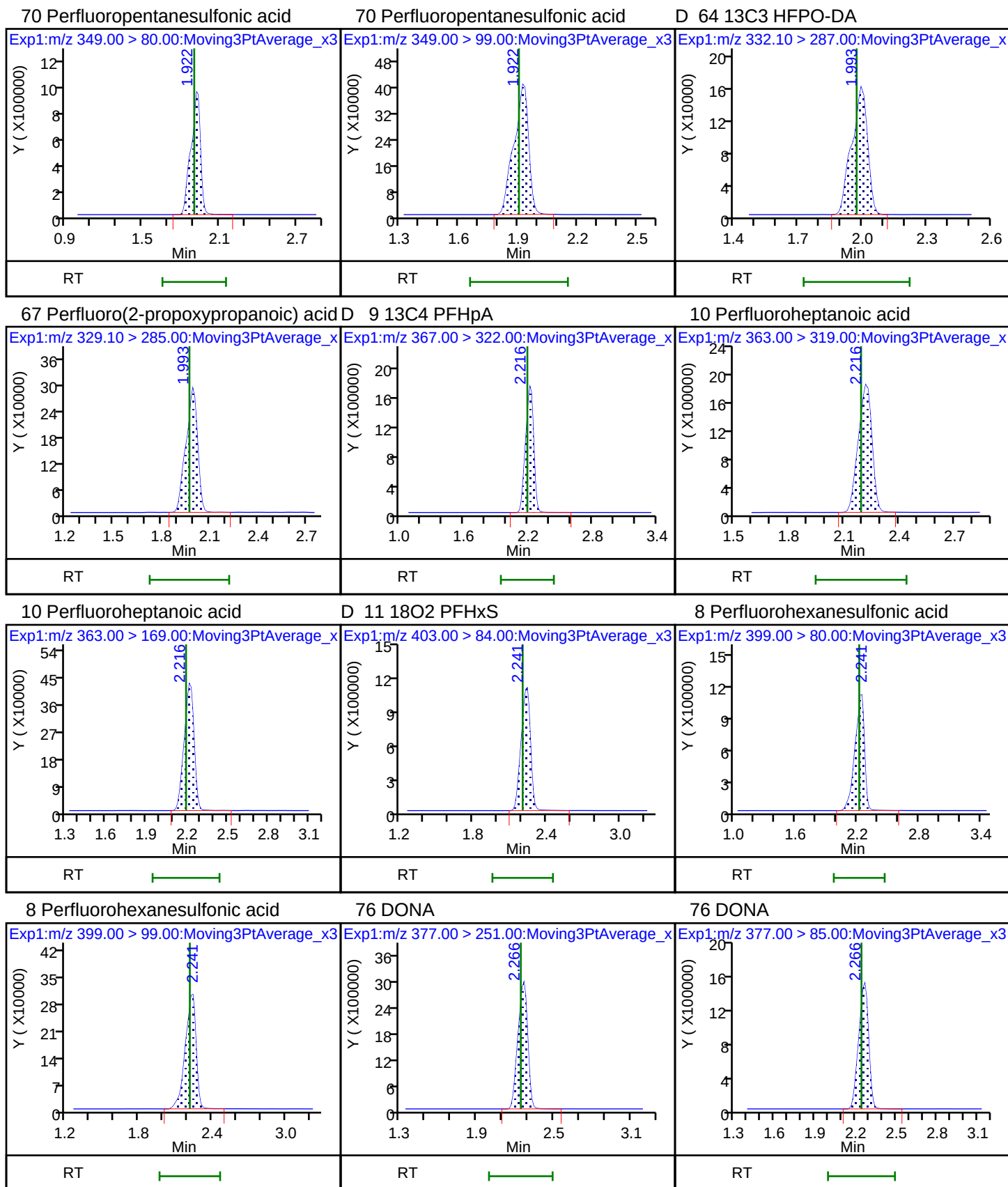


D 7 13C2 PFHxA

6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

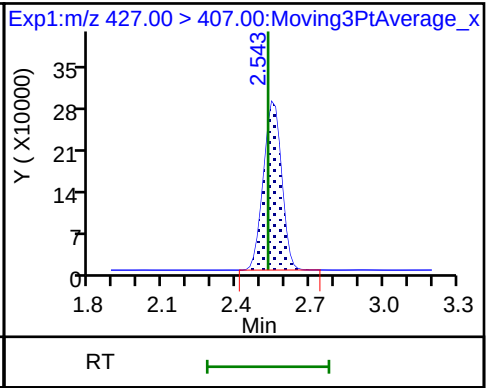
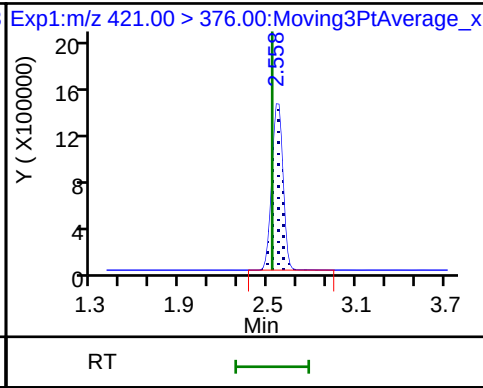
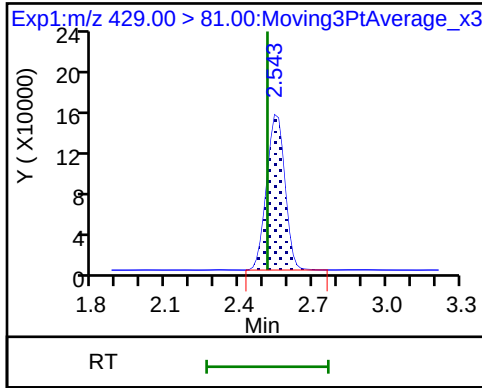




D 12 M2-6:2 FTS

D 73 13C8 PFOA

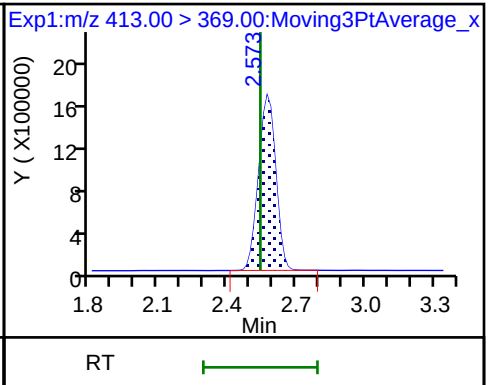
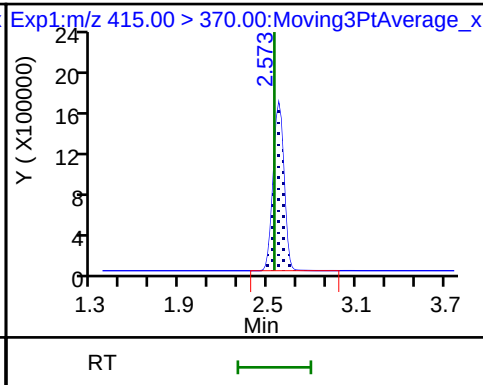
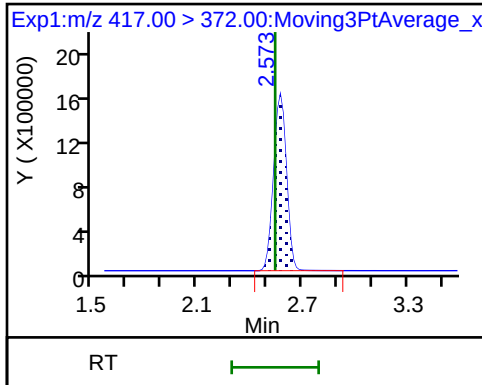
13 1H,1H,2H,2H-perfluorooctanesulfoni



D 14 13C4 PFOA

* 62 13C2 PFOA

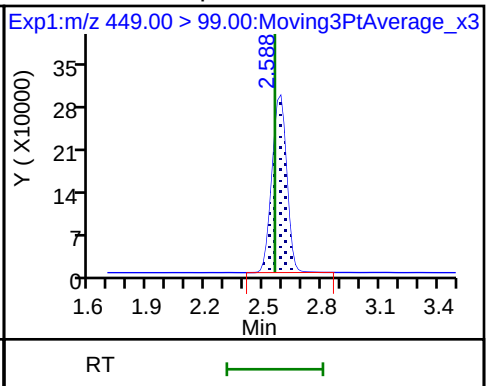
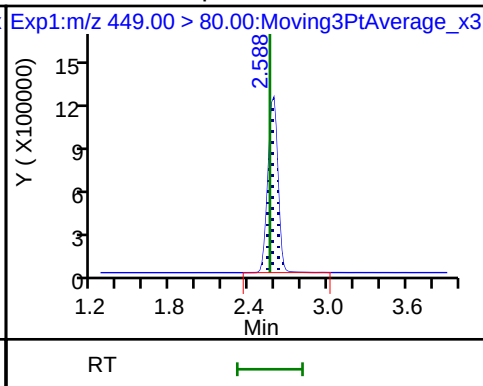
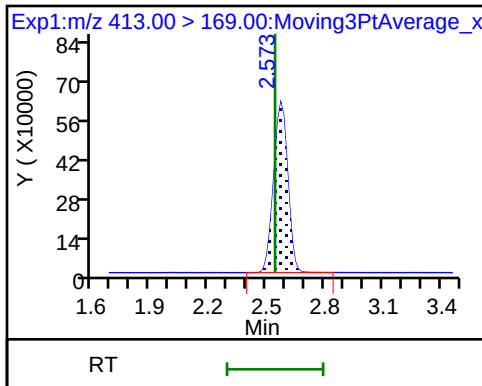
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

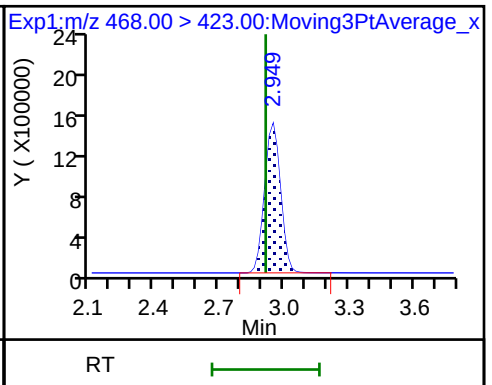
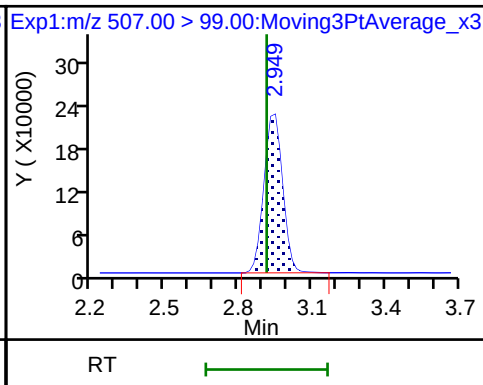
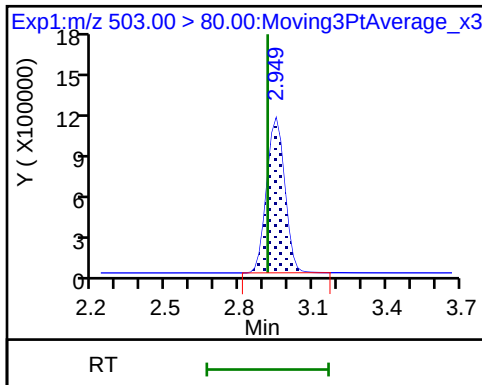
16 Perfluoroheptanesulfonic acid

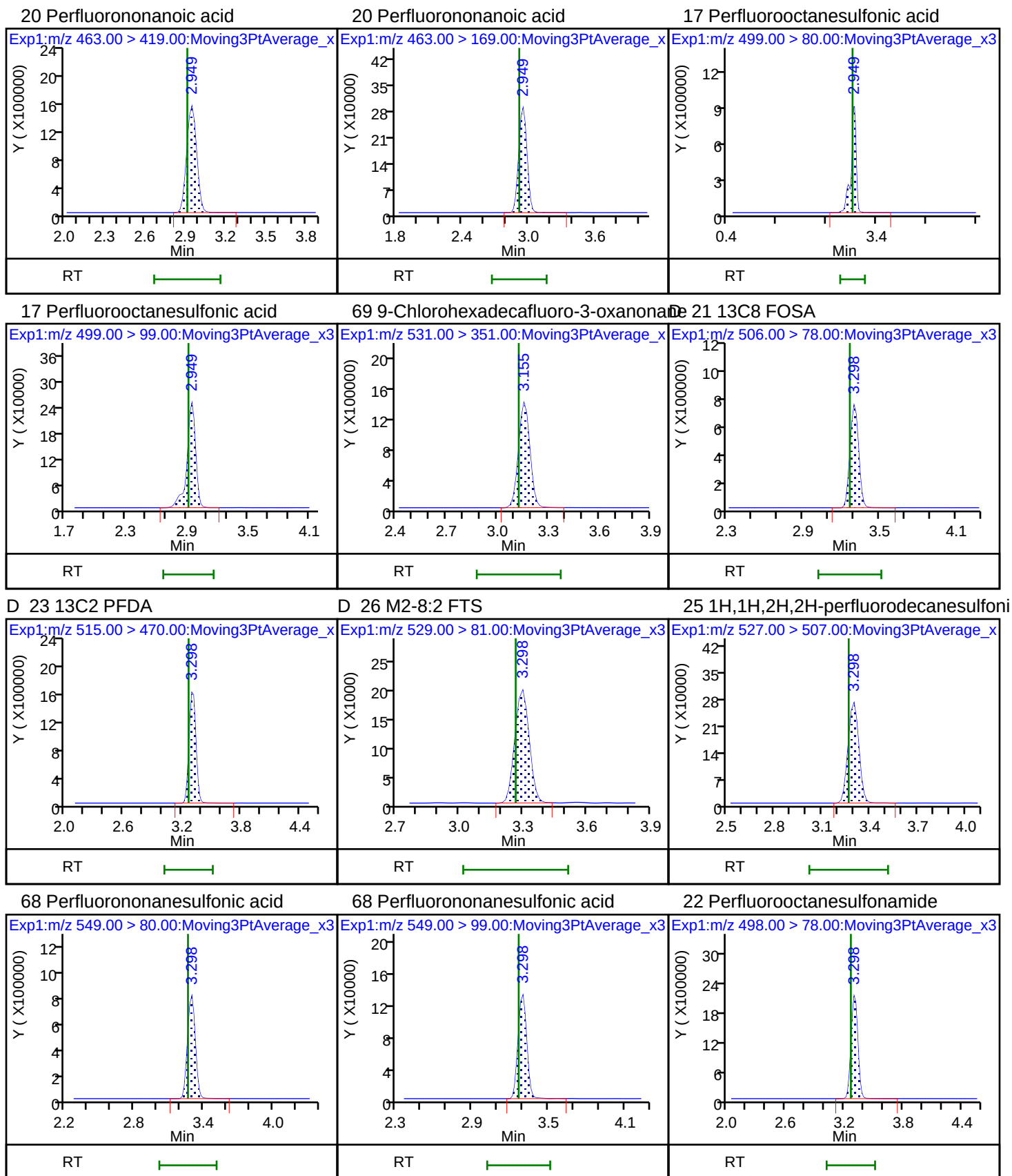


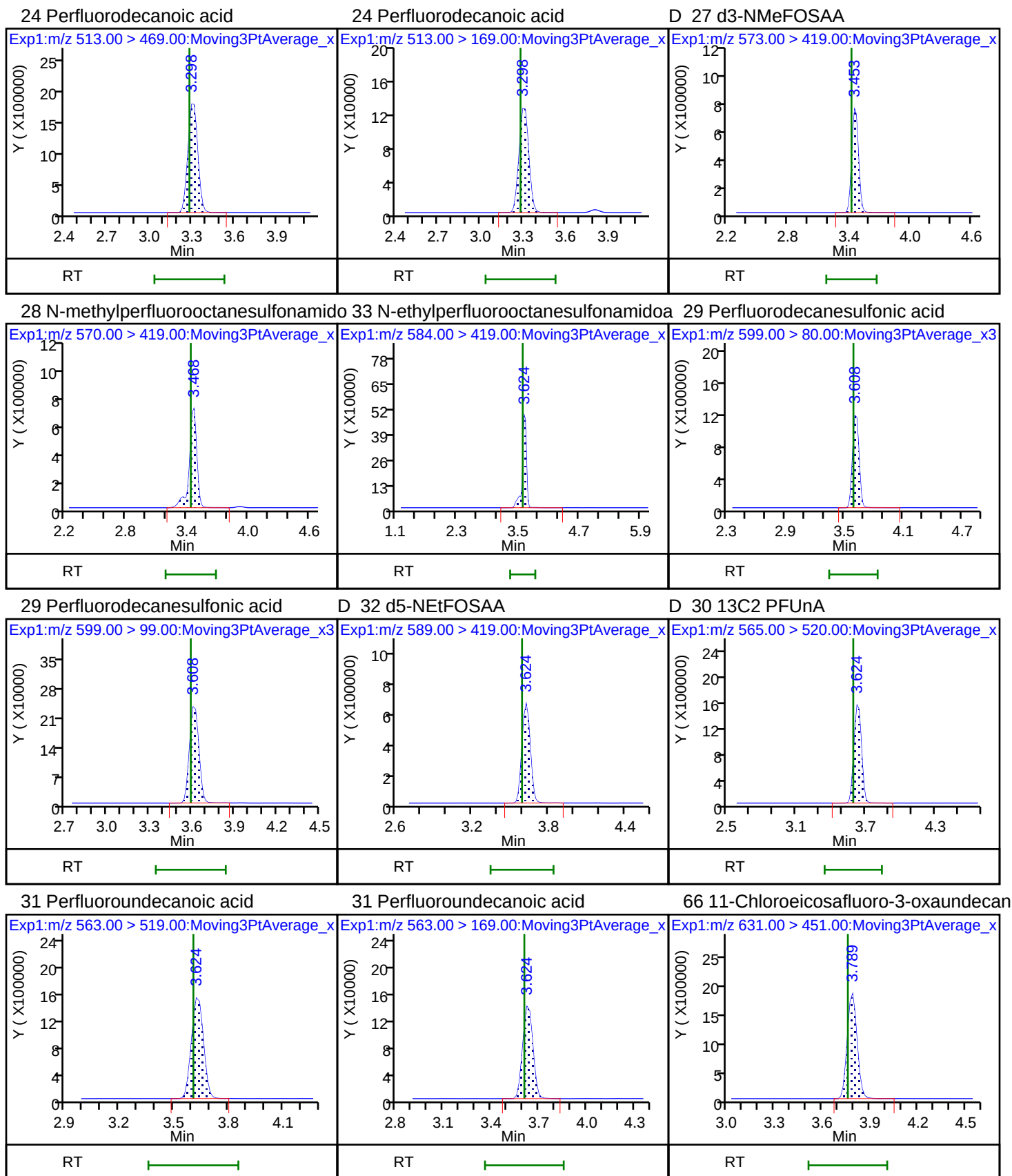
D 18 13C4 PFOS

D 72 13C8 PFOS

D 19 13C5 PFNA

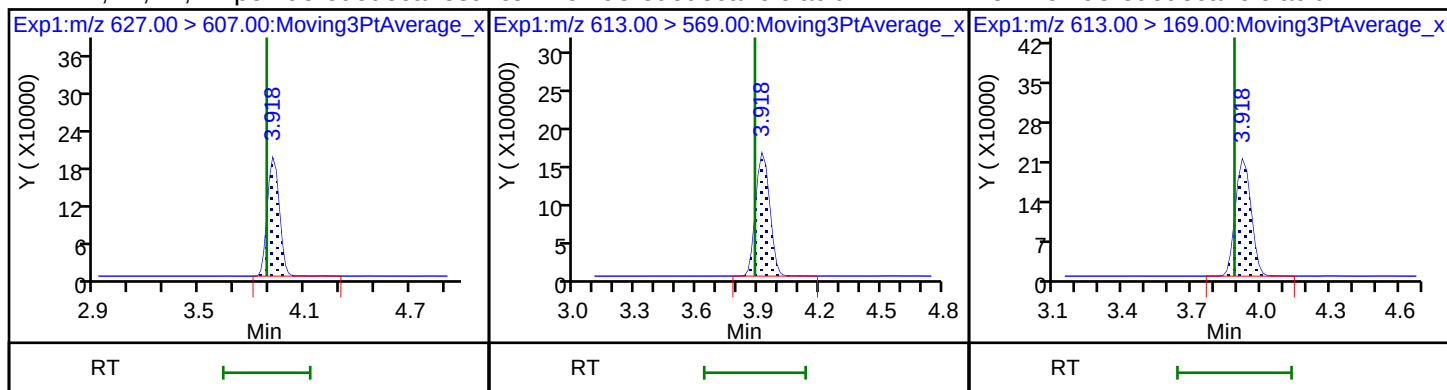






74 1H,1H,2H,2H-perfluorododecanesulfo37 Perfluorododecanoic acid

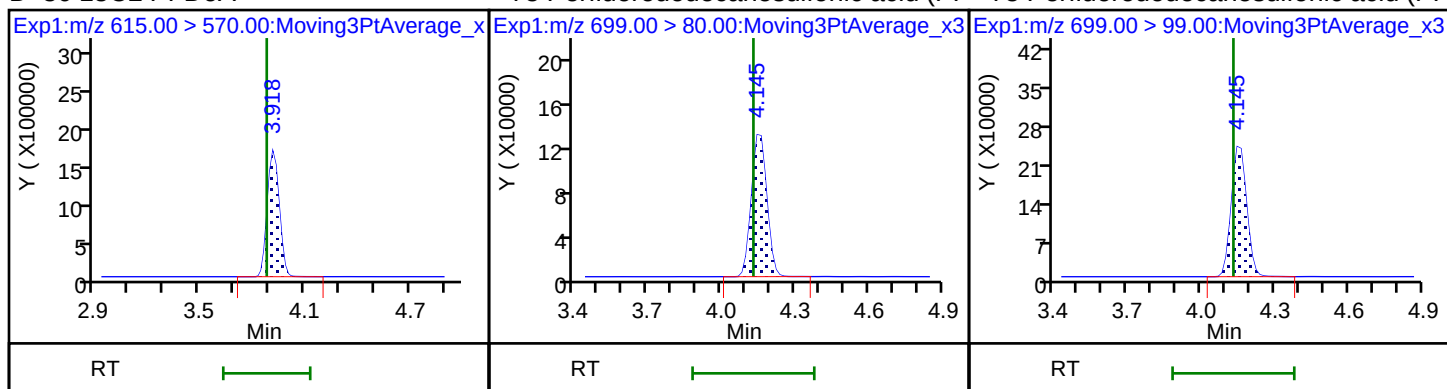
37 Perfluorododecanoic acid



D 36 13C2 PFDa

75 Perfluorododecanesulfonic acid (PF

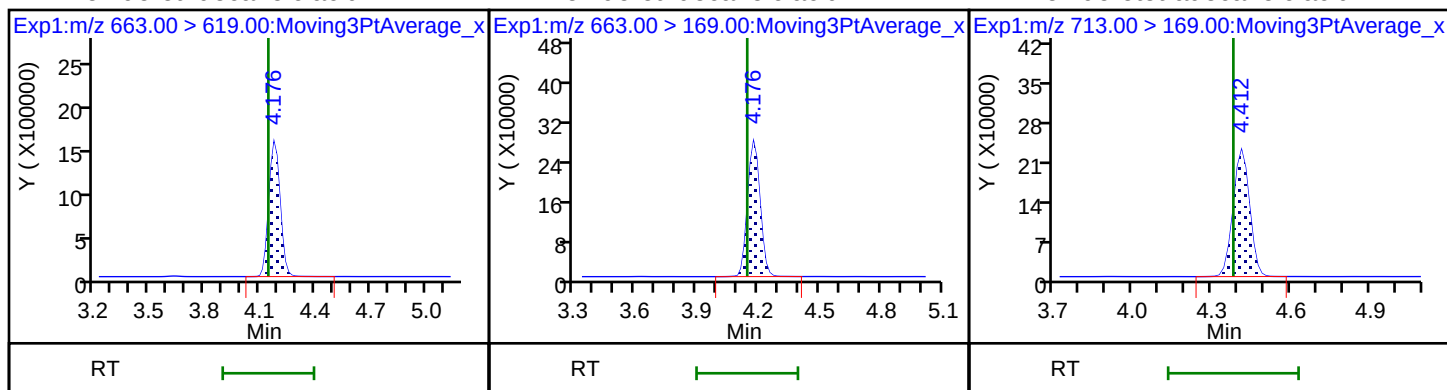
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

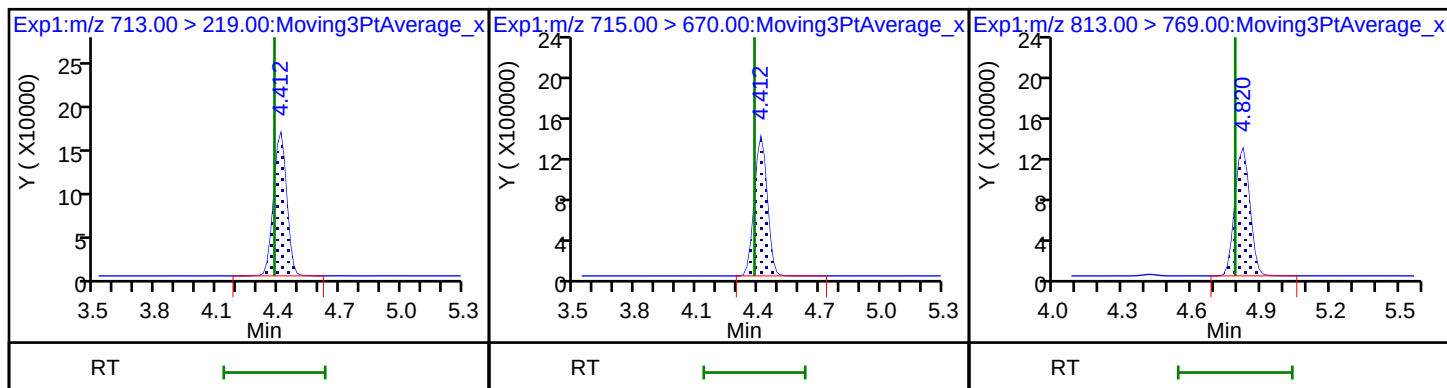
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

45 Perfluorohexadecanoic acid

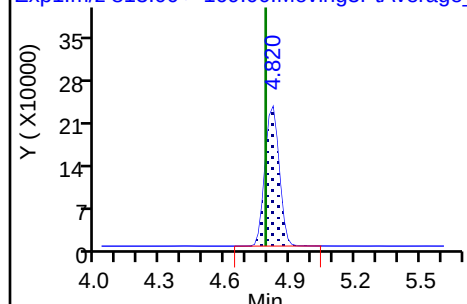


45 Perfluorohexadecanoic acid

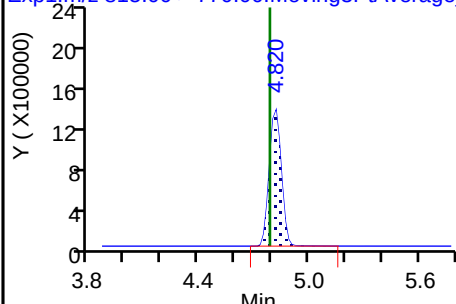
D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid

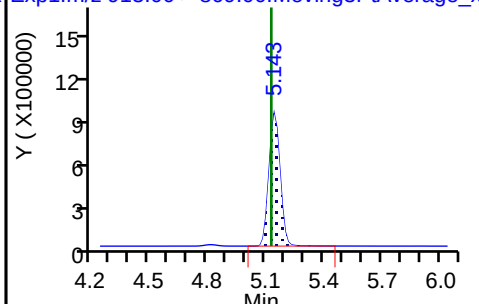
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Exp1:m/z 815.00 > 770.00:Moving3PtAverage_x

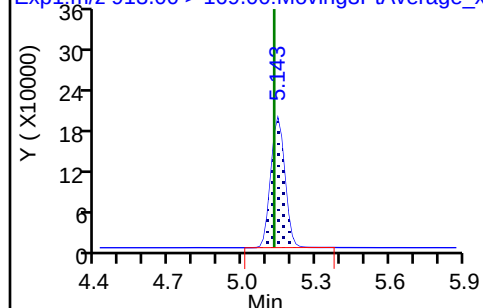


Exp1:m/z 913.00 > 869.00:Moving3PtAverage_x



46 Perfluorooctadecanoic acid

Exp1:m/z 913.00 > 169.00:Moving3PtAverage_x



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: _____	Lab Sample ID: <u>MB 320-257492/1-A</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_007.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: _____
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>250.00 (mL)</u>	Date Analyzed: <u>11/09/2018 07:55</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.285	J	2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.35
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9
27619-97-2	6:2 FTS	ND		20	2.0
39108-34-4	8:2 FTS	ND		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: _____	Lab Sample ID: <u>MB 320-257492/1-A</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_007.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: _____
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>250.00 (mL)</u>	Date Analyzed: <u>11/09/2018 07:55</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	95		25-150
STL01893	13C5-PFPeA DNU	95		25-150
STL00993	13C2 PFHxA	98		25-150
STL01892	13C4 PFHpA	98		25-150
STL00990	13C4 PFOA	97		25-150
STL00995	13C5 PFNA	97		25-150
STL00996	13C2 PFDA	105		25-150
STL00997	13C2 PFUnA	96		25-150
STL00998	13C2 PFDoA	93		25-150
STL02116	13C2 PFTeDA	94		25-150
STL02337	13C3 PFBS	92		25-150
STL00994	18O2 PFHxS	99		25-150
STL00991	13C4 PFOS	99		25-150
STL01056	13C8 FOSA	97		25-150
STL02118	d3-NMeFOSAA	96		25-150
STL02117	d5-NEtFOSAA	100		25-150
STL02279	M2-6:2 FTS	91		25-150
STL02280	M2-8:2 FTS	101		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_007.d
 Lims ID: MB 320-257492/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 09-Nov-2018 07:55:44 ALS Bottle#: 1 Worklist Smp#: 4
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: mb 320-257492/1-a
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: A9\Administrator Instrument ID: A9
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 11:11:21 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d
 Column 1 : Det: EXP1
 Process Host: CTX0318

First Level Reviewer: mongkols

Date: 12-Nov-2018 11:11:21

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	1.346	1.346	0.0	0.529	7570121	2.36	94.5	8498	
D 3 13C5 PFPeA	267.90 > 223.00	1.602	1.601	0.001	0.630	7240877	2.37	95.0	11533	M
D 47 13C3 PFBS	301.90 > 83.00	1.636	1.636	0.0	0.643	90316	2.14	92.2	553	M
D 7 13C2 PFHxA	315.00 > 270.00	1.882	1.873	0.009	0.740	7855020	2.44	97.7	12011	
D 64 13C3 HFPO-DA	332.10 > 287.00	1.972	1.971	0.001	0.775	834552	2.01	80.3	2345	
D 9 13C4 PFHpA	367.00 > 322.00	2.191	2.191	0.0	0.862	9279019	2.46	98.2	16394	
D 11 18O2 PFHxS	403.00 > 84.00	2.203	2.203	0.0	0.867	5751386	2.34	98.9	7666	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.203	2.216	-0.013	1.000	21864	0.007137		36.7	
	399.00 > 99.00	2.203	2.216	-0.013	1.000	7241	3.02(1.90-5.70)		13.8	
D 12 M2-6:2 FTS	429.00 > 81.00	2.528	2.513	0.015	0.994	754628	2.17	91.4	1764	
D 73 13C8 PFOA	421.00 > 376.00	2.543	2.528	0.015		10967	0.003187	0.0	39.2	
D 14 13C4 PFOA	417.00 > 372.00	2.543	2.543	0.0	1.000	8429566	2.44	97.4	10144	
* 62 13C2 PFOA	415.00 > 370.00	2.543	2.543	0.0		8797505	2.50		13532	
15 Perfluorooctanoic acid	413.00 > 369.00	2.543	2.543	0.0	1.000	26246	0.007200		2.6	M
	413.00 > 169.00	2.543	2.543	0.0	1.000	6559	4.00(1.36-4.08)		11.9	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 18 13C4 PFOS										
503.00 > 80.00	2.914	2.914	0.0	1.146	5906982	2.38		99.4	3674	
D 19 13C5 PFNA										
468.00 > 423.00	2.914	2.914	0.0	1.146	7793128	2.43		97.4	8247	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	2.914	2.914	0.0	1.000	5900	0.002217			3.4	M
499.00 > 99.00	2.914	2.914	0.0	1.000	1114		5.30(2.04-6.12)		4.4	M
D 21 13C8 FOSA										
506.00 > 78.00	3.264	3.264	0.0	1.284	3321772	2.41		96.6	6582	
D 23 13C2 PFDA										
515.00 > 470.00	3.281	3.264	0.017	1.290	8689549	2.64		105	5363	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.264	3.264	0.0	1.284	104575	2.43		101	600	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.281	3.264	0.017	1.005	3525	0.000883			14.2	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.422	3.422	0.0	1.346	3424410	2.40		96.1	3128	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.437	3.437	0.0	1.004	6673	0.004871			2.0	
33 N-ethylperfluorooctanesulfonamidoa										M
584.00 > 419.00	3.591	3.591	0.0	1.000	5124	0.004818			11.4	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.591	3.591	0.0	1.412	2908224	2.51		100	2991	
D 30 13C2 PFUnA										
565.00 > 520.00	3.591	3.591	0.0	1.412	6591869	2.39		95.8	4956	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.591	3.607	-0.016	1.000	17525	0.005846			4.0	
563.00 > 169.00	3.591	3.607	-0.016	1.000	1772		9.89(5.24-15.72)		7.9	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.744	3.759	-0.015	1.285	1691	0.000493			5.1	
D 36 13C2 PFDaA										
615.00 > 570.00	3.883	3.883	0.0	1.527	7853925	2.32		92.7	5449	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.381	4.381	0.0	1.723	5962788	2.35		94.1	5601	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.786	4.786	0.0	1.000	61495	0.002211			26.2	
813.00 > 169.00	4.786	4.786	0.0	1.000	11302		5.44(2.77-8.32)		45.7	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.786	4.786	0.0	1.882	5986824	2.38		95.1	8144	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_007.d

Injection Date: 09-Nov-2018 07:55:44

Instrument ID: A9

Lims ID: MB 320-257492/1-A

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 1

Worklist Smp#: 4

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

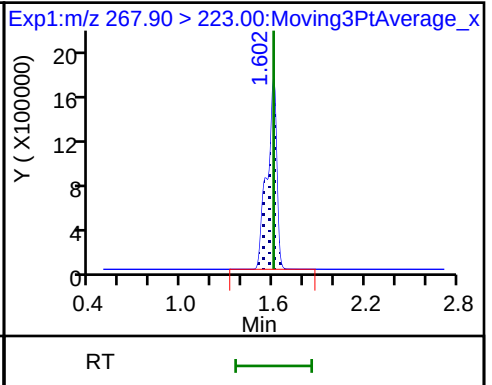
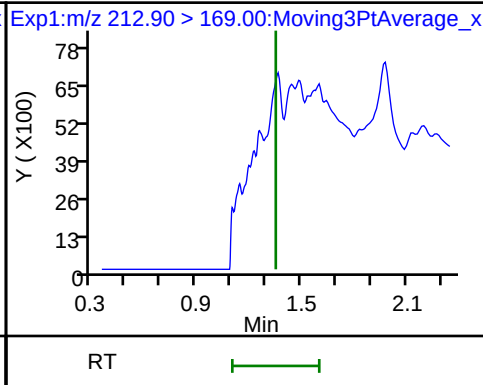
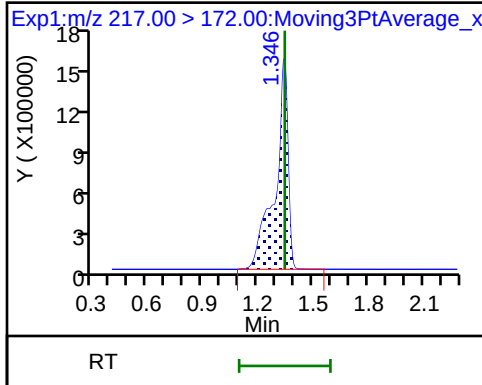
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (ND)

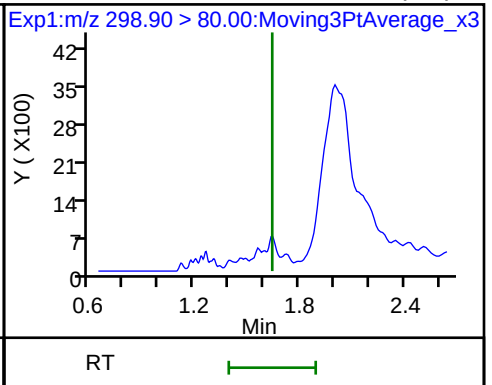
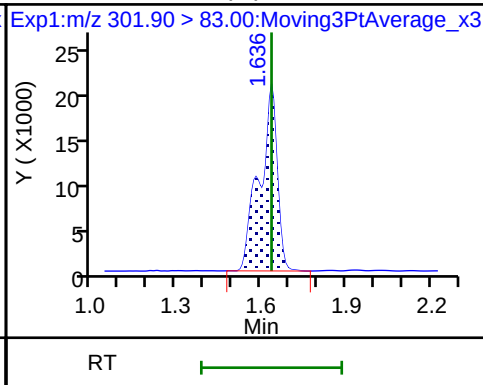
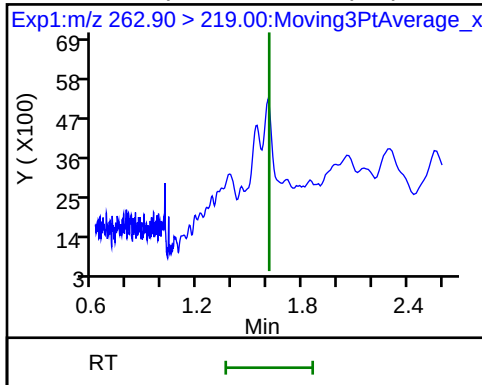
D 3 13C5 PFPeA (M)



4 Perfluoropentanoic acid (ND)

D 47 13C3 PFBS (M)

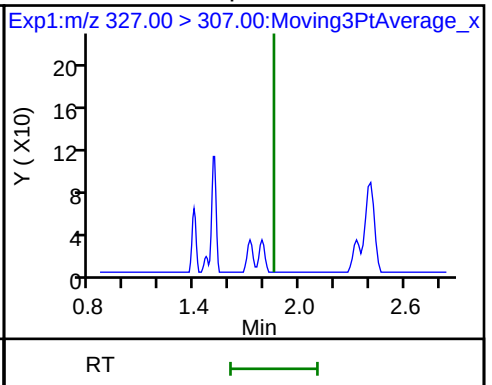
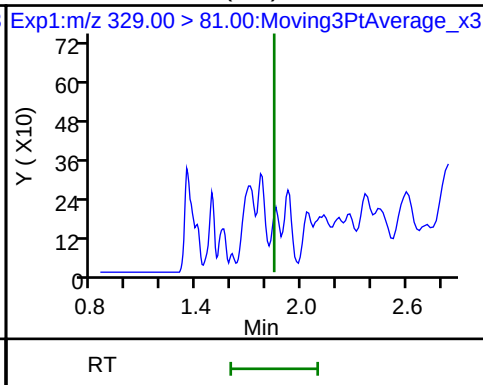
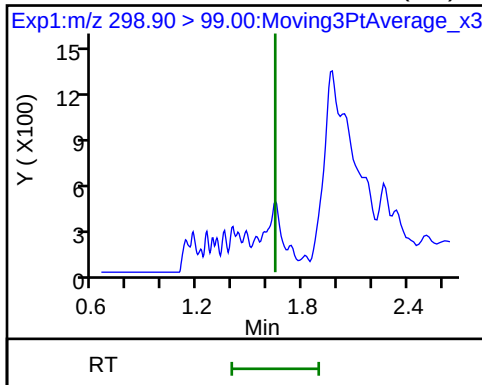
5 Perfluorobutanesulfonic acid (ND)



5 Perfluorobutanesulfonic acid (ND)

D 60 M2-4:2 FTS (ND)

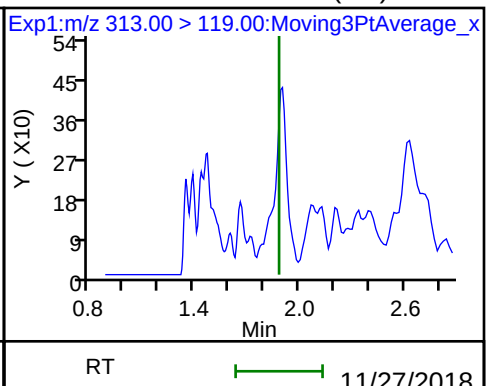
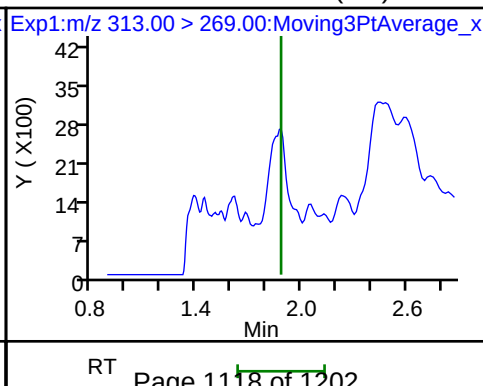
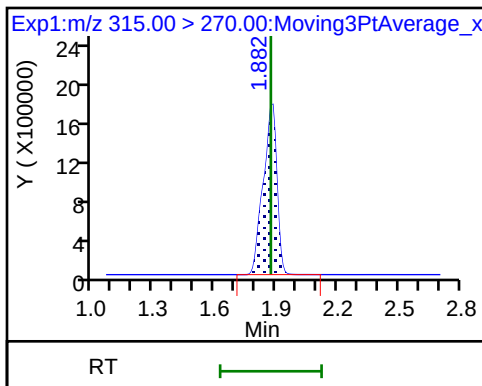
61 1H,1H,2H,2H-perfluorohexanesulfoni (ND)



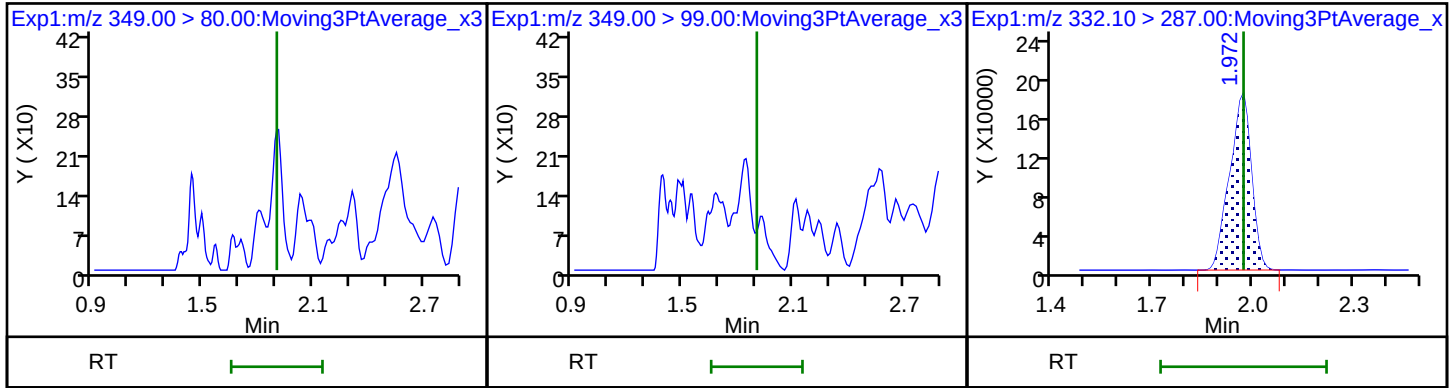
D 7 13C2 PFHxA

6 Perfluorohexanoic acid (ND)

6 Perfluorohexanoic acid (ND)

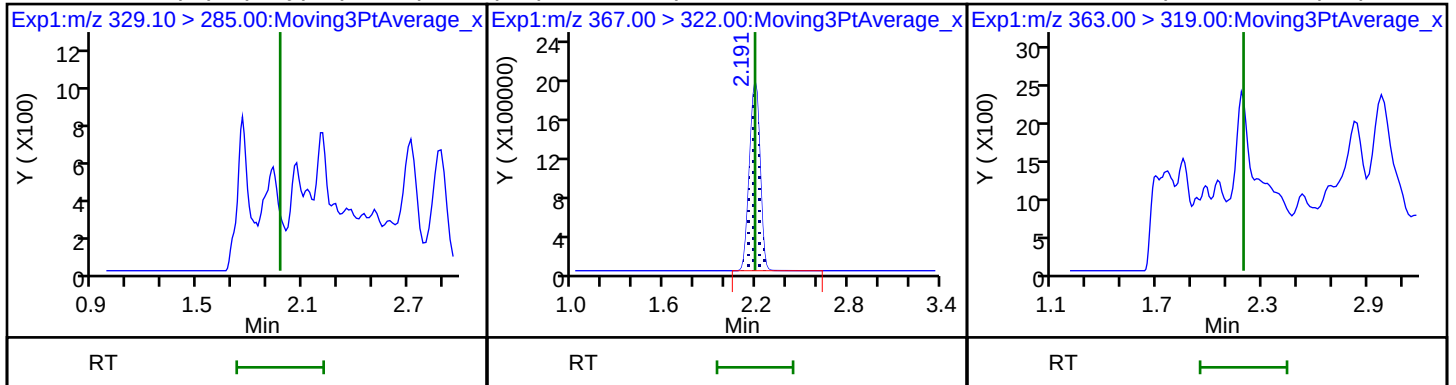


70 Perfluoropentanesulfonic acid (ND) 70 Perfluoropentanesulfonic acid (ND) D 64 13C3 HFPO-DA



67 Perfluoro(2-propoxypropanoic) acid (ND) 13C4 PFHpA

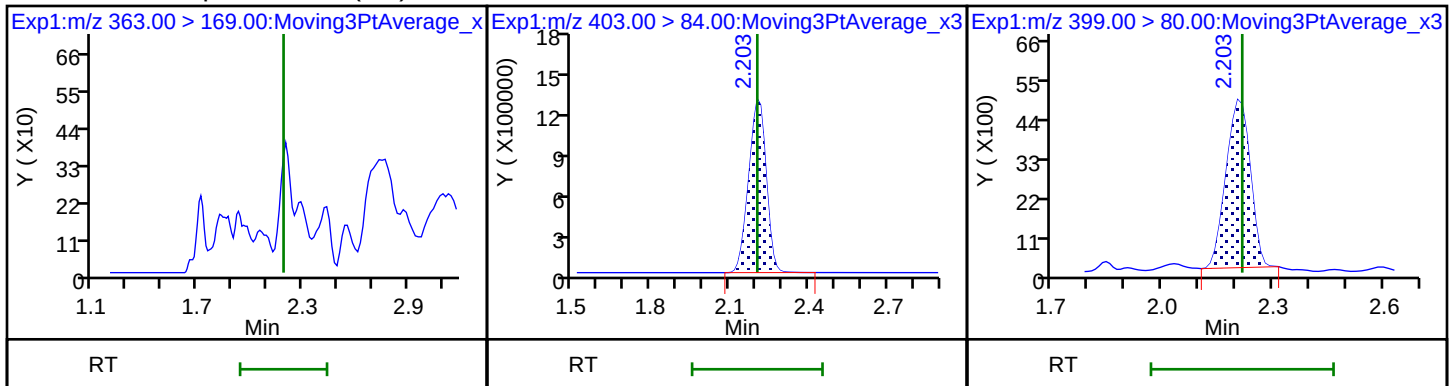
10 Perfluoroheptanoic acid (ND)



10 Perfluoroheptanoic acid (ND)

D 11 18O2 PFHxS

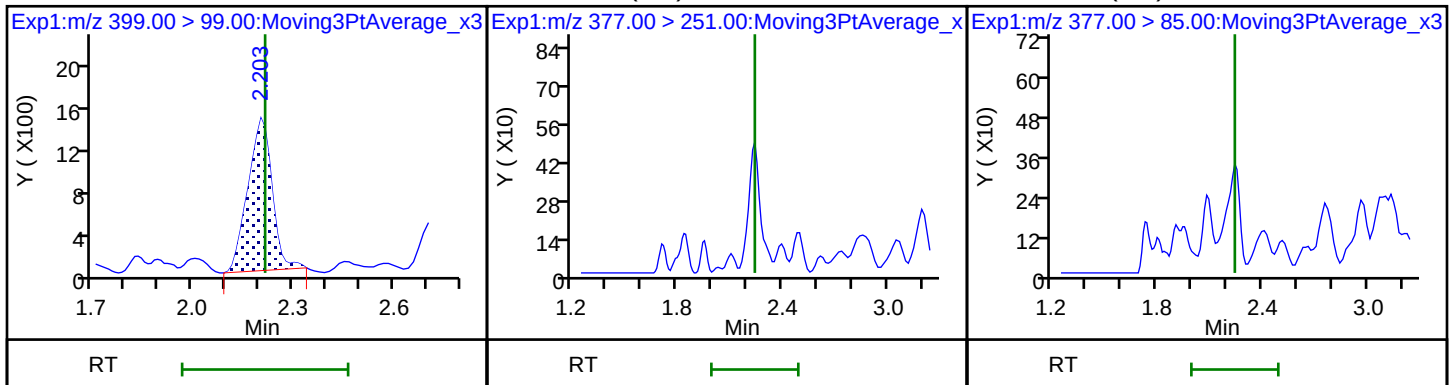
8 Perfluorohexanesulfonic acid



8 Perfluorohexanesulfonic acid

76 DONA (ND)

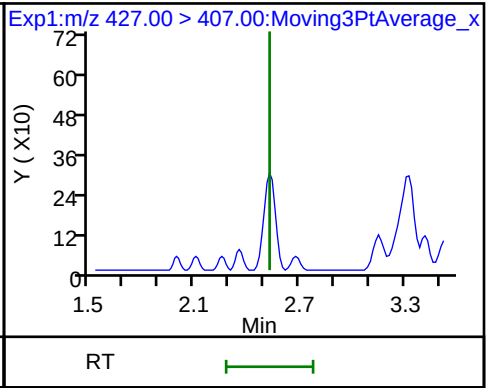
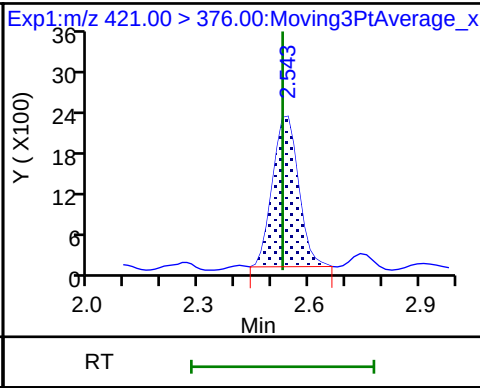
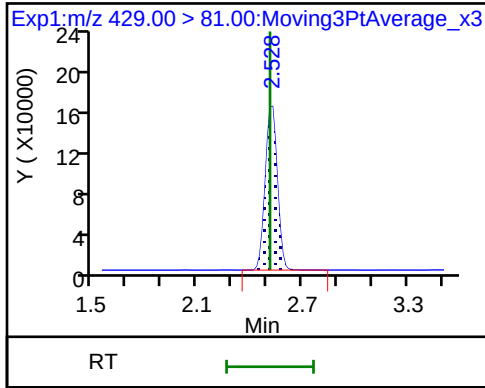
76 DONA (ND)



D 12 M2-6:2 FTS

D 73 13C8 PFOA

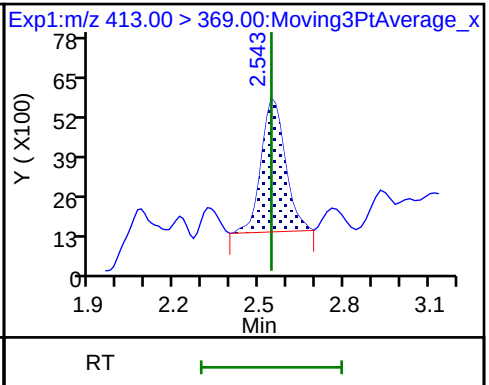
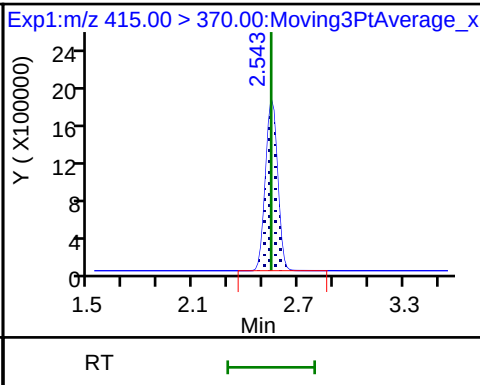
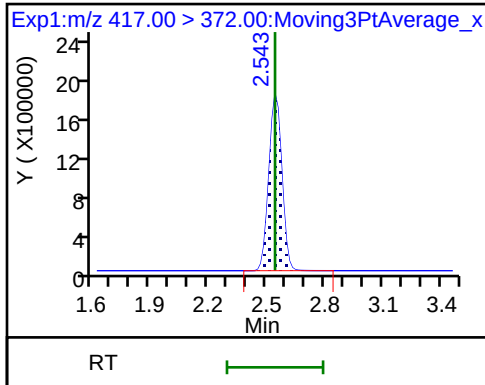
13 1H,1H,2H,2H-perfluorooctanesulfoni (ND)



D 14 13C4 PFOA

* 62 13C2 PFOA

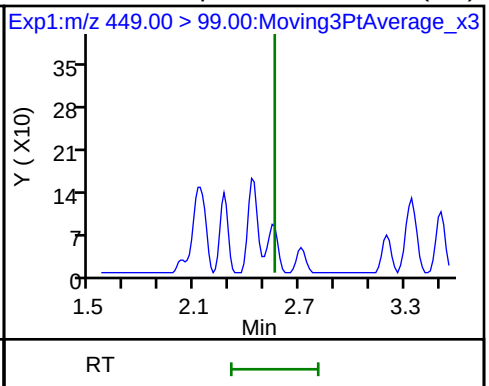
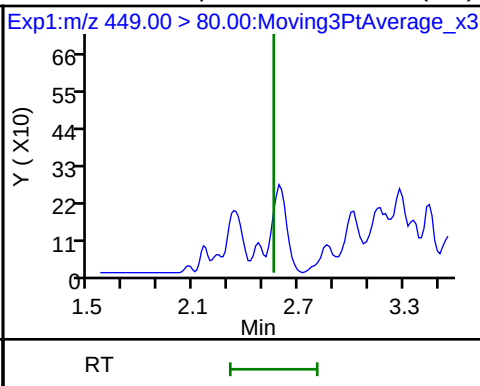
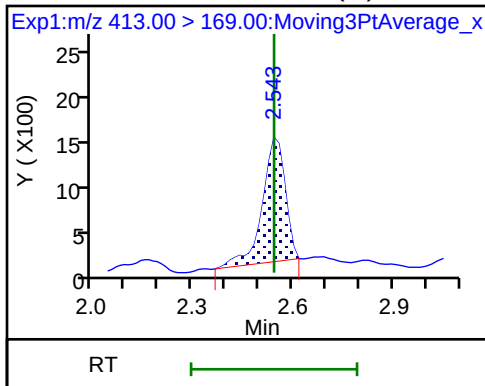
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid (M)

16 Perfluoroheptanesulfonic acid (ND)

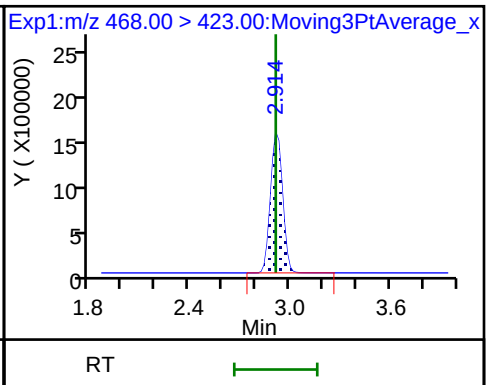
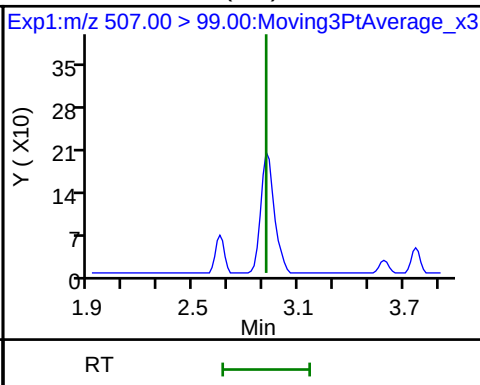
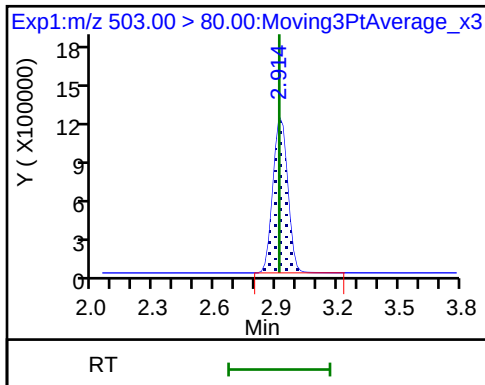
16 Perfluoroheptanesulfonic acid (ND)

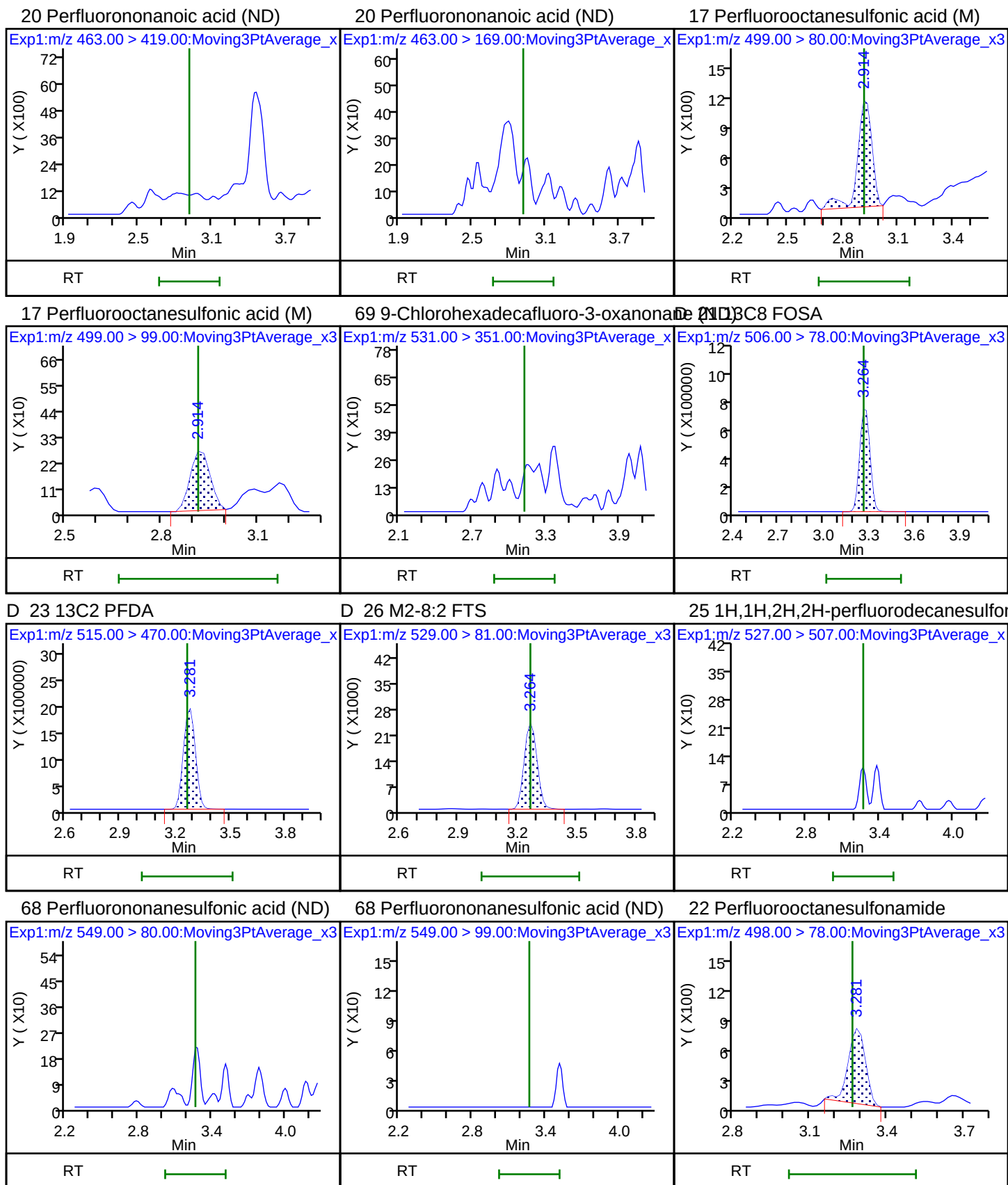


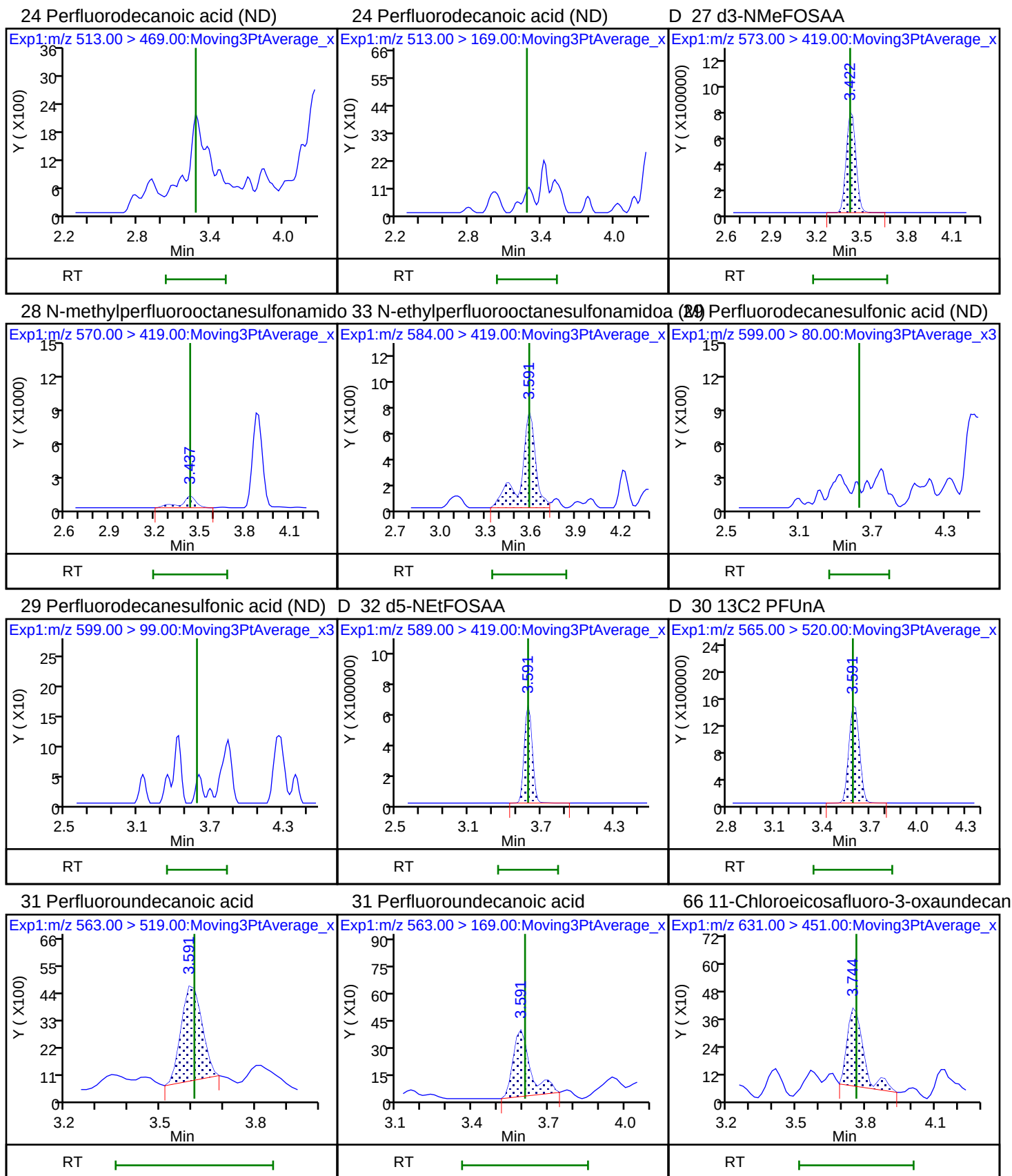
D 18 13C4 PFOS

D 72 13C8 PFOS (ND)

D 19 13C5 PFNA

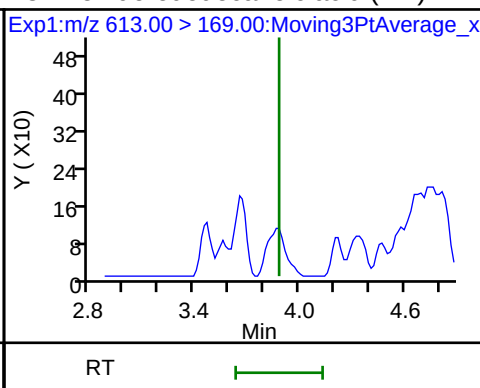
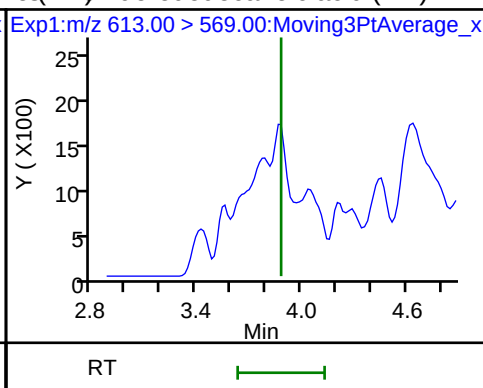
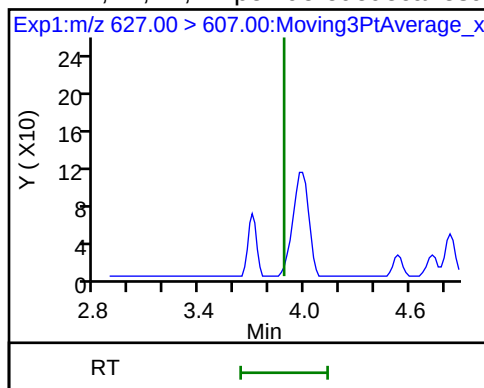






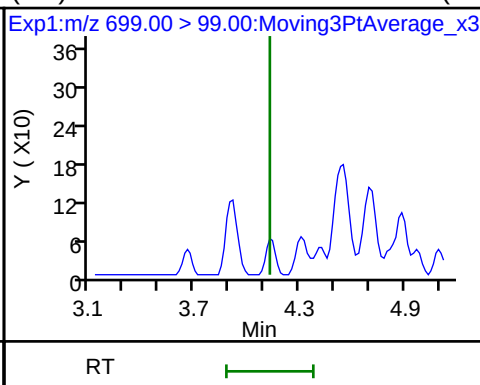
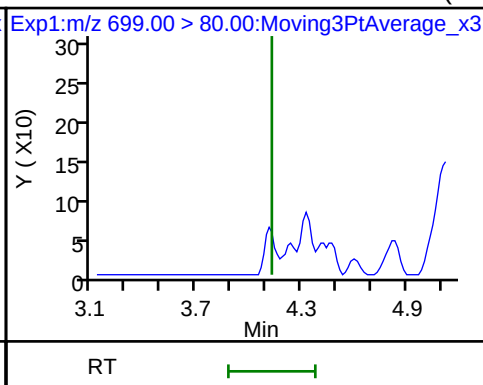
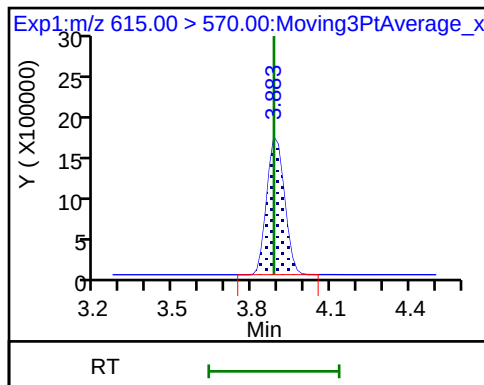
74 1H,1H,2H,2H-perfluorododecanesulfonic acid (ND)

37 Perfluorododecanoic acid (ND)



D 36 13C2 PFDa

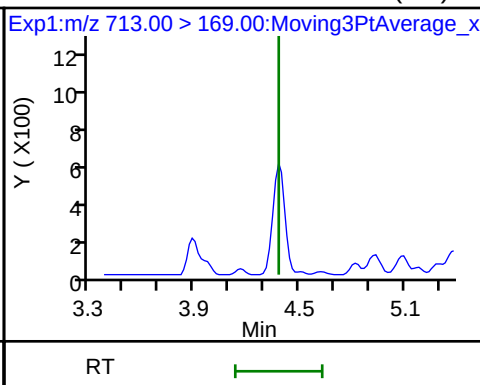
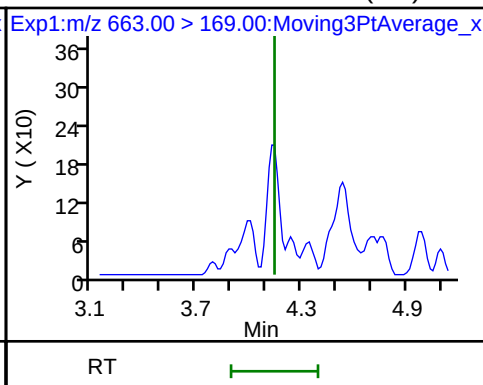
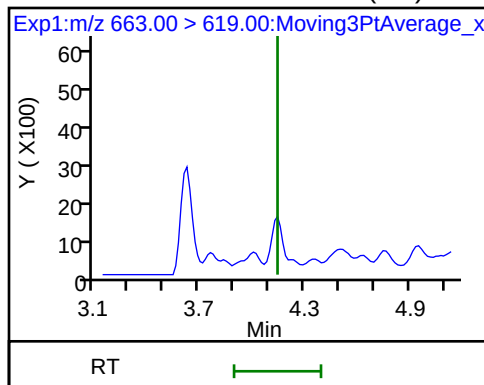
75 Perfluorododecanesulfonic acid (PF (ND))



41 Perfluorotridecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

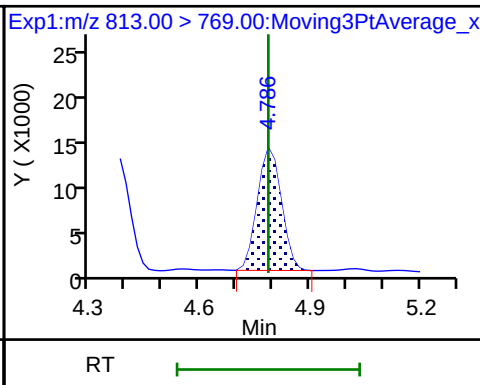
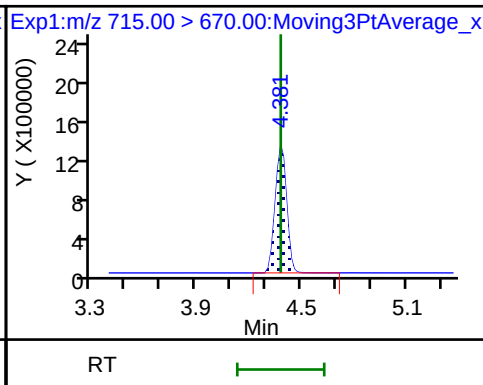
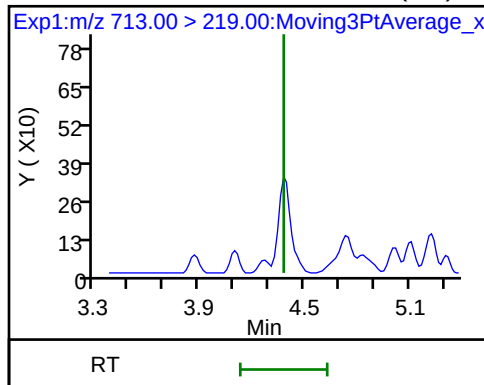
42 Perfluorotetradecanoic acid (ND)



42 Perfluorotetradecanoic acid (ND)

D 43 13C2 PFTeDA

45 Perfluorohexadecanoic acid

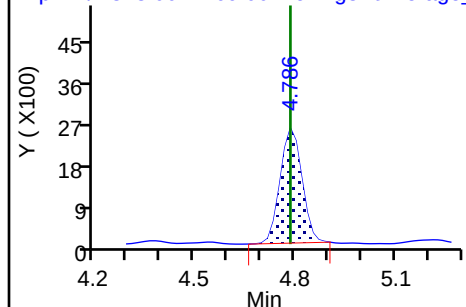


45 Perfluorohexadecanoic acid

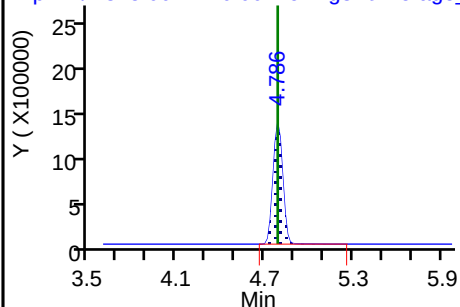
D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid (ND)

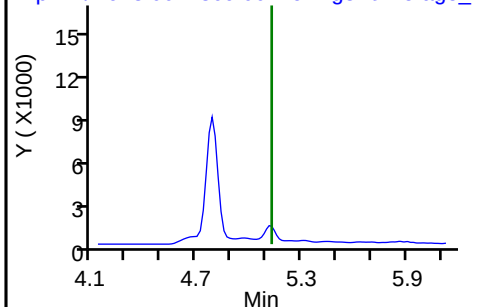
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Exp1:m/z 815.00 > 770.00:Moving3PtAverage_x

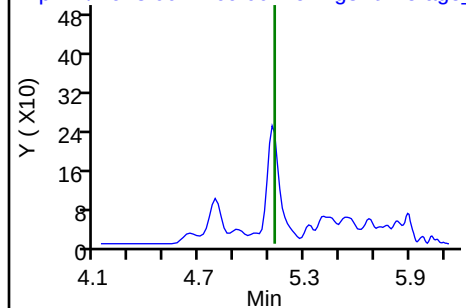


Exp1:m/z 913.00 > 869.00:Moving3PtAverage_x



46 Perfluorooctadecanoic acid (ND)

Exp1:m/z 913.00 > 169.00:Moving3PtAverage_x



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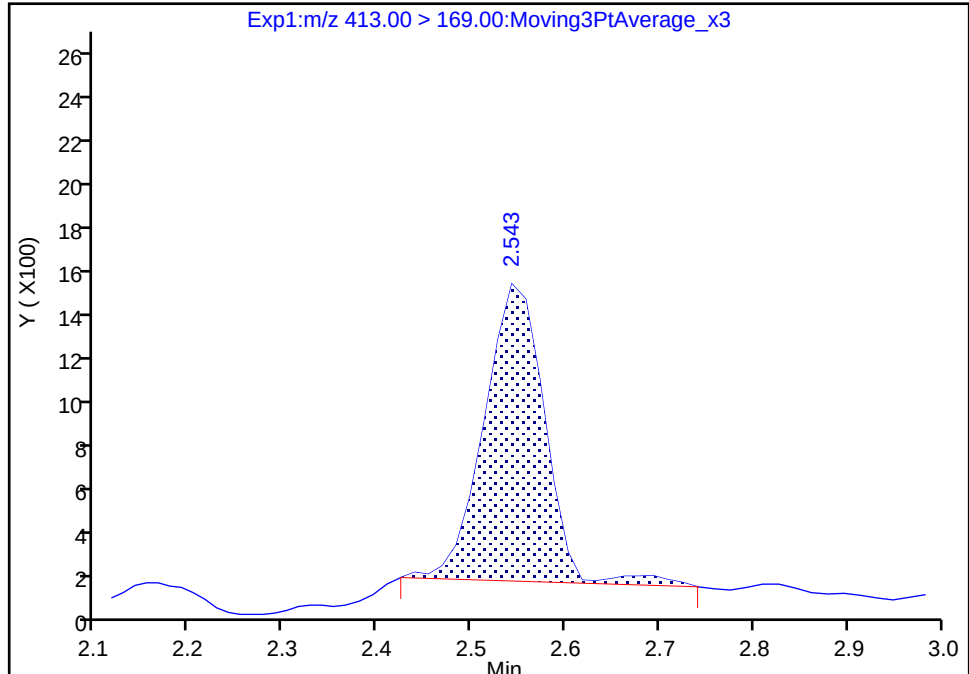
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Injection Date: 09-Nov-2018 07:55:44 Instrument ID: A9
Lims ID: MB 320-257492/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

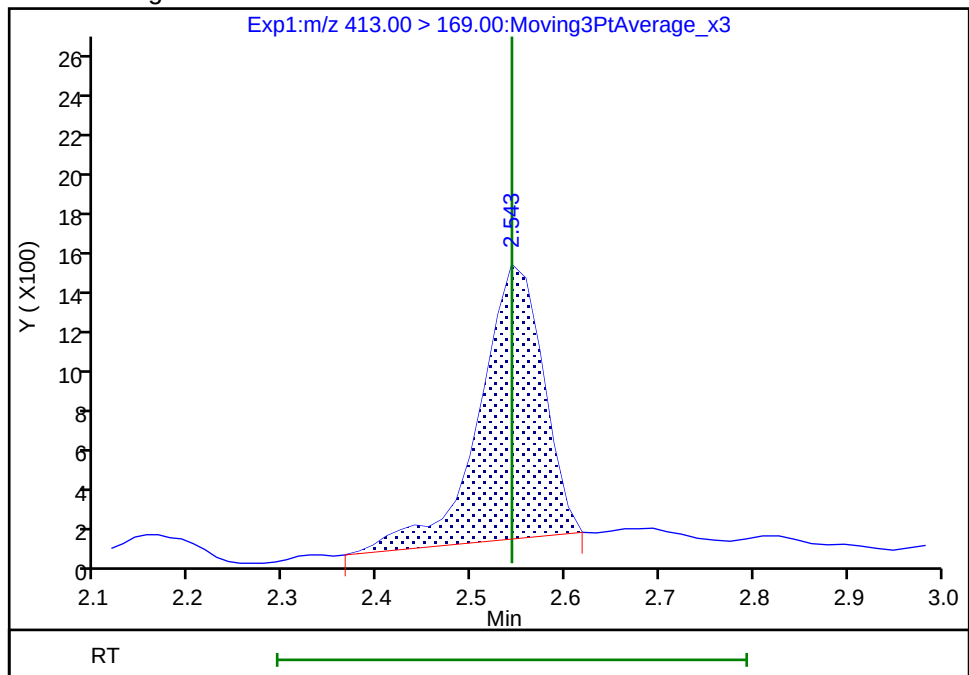
RT: 2.54
Area: 6105
Amount: 0.007200
Amount Units: ng/ml

Processing Integration Results



RT: 2.54
Area: 6559
Amount: 0.007200
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:10:48
Audit Action: Manually Integrated

Audit Reason: Baseline
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TestAmerica Sacramento

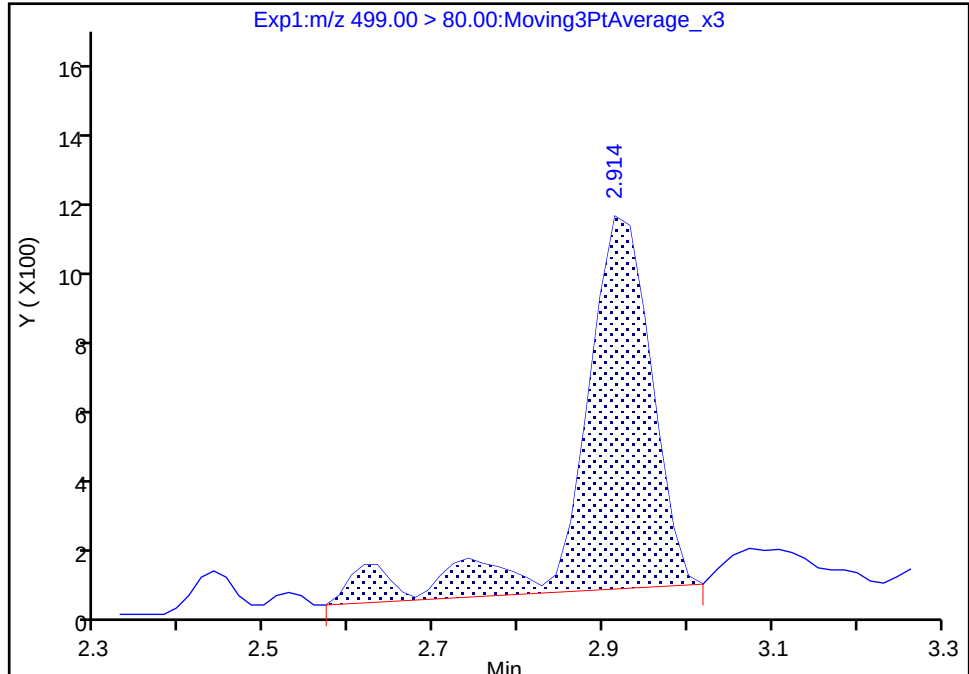
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Injection Date: 09-Nov-2018 07:55:44 Instrument ID: A9
Lims ID: MB 320-257492/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

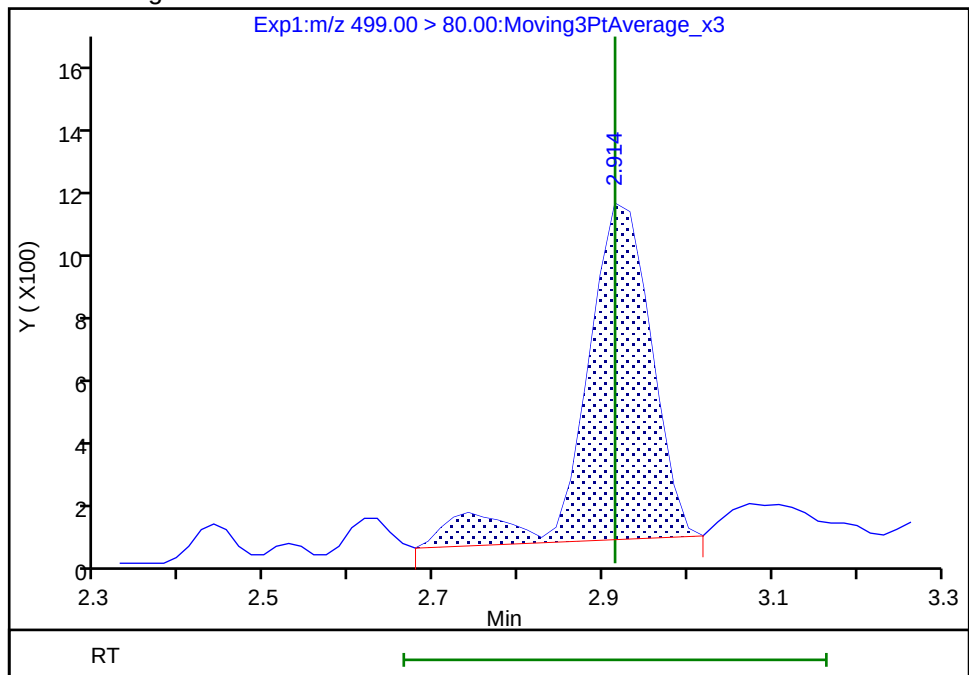
RT: 2.91
Area: 6344
Amount: 0.002383
Amount Units: ng/ml

Processing Integration Results



RT: 2.91
Area: 5900
Amount: 0.002217
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:10:56
Audit Action: Manually Integrated

Audit Reason: Baseline
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TestAmerica Sacramento

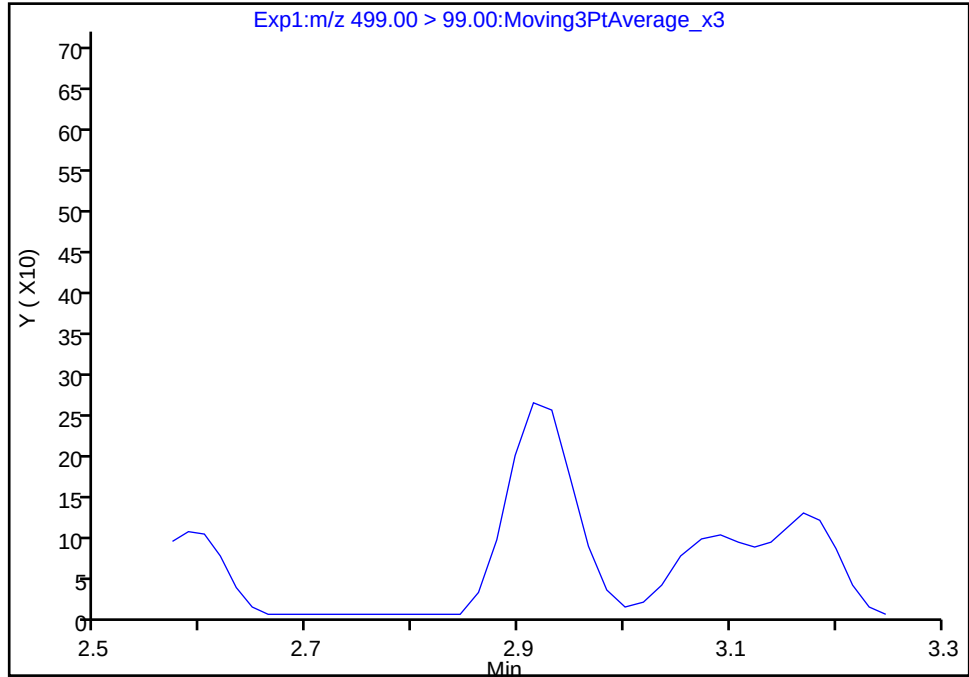
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_007.d
Injection Date: 09-Nov-2018 07:55:44 Instrument ID: A9
Lims ID: MB 320-257492/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

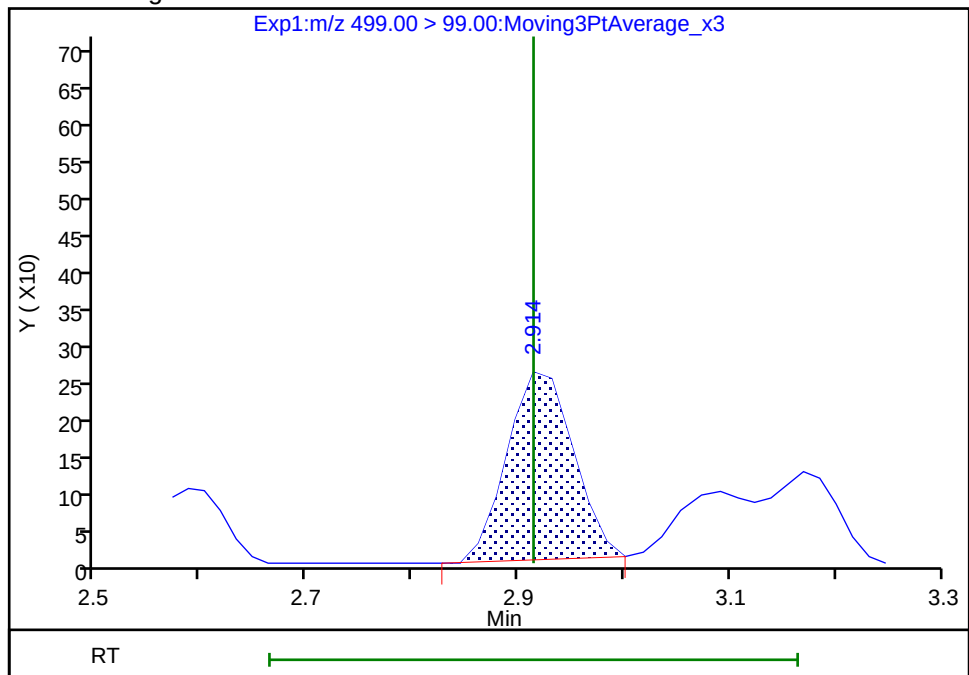
RT: 2.91
Area: 0
Amount: 0.002383
Amount Units: ng/ml

Processing Integration Results



RT: 2.91
Area: 1114
Amount: 0.002217
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:11:00

Audit Action: Manually Integrated

Audit Reason: Baseline

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11/27/2018

TestAmerica Sacramento

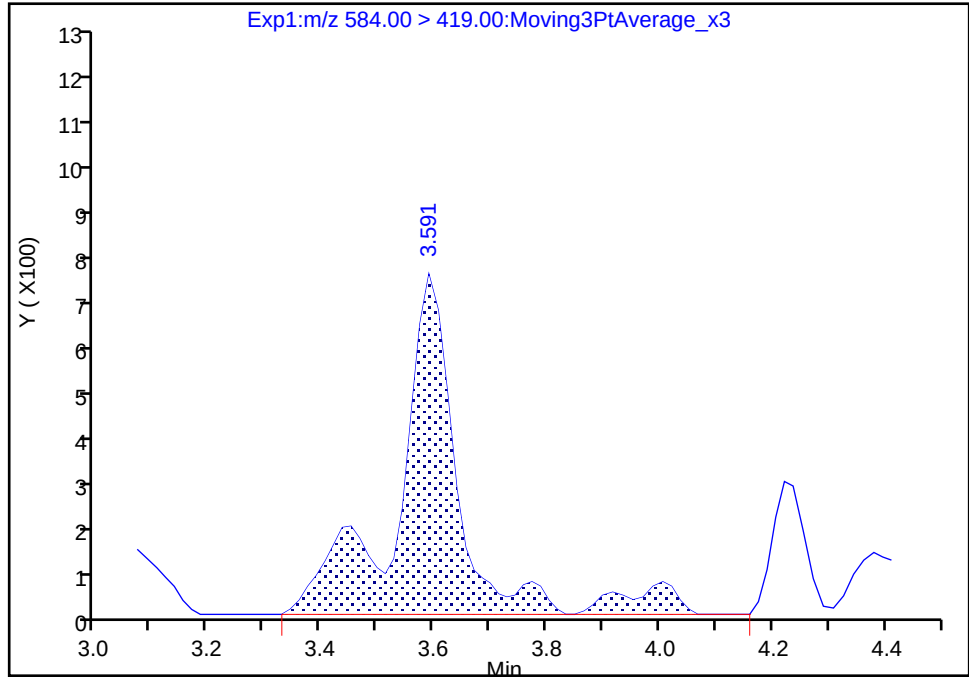
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Injection Date: 09-Nov-2018 07:55:44 Instrument ID: A9
Lims ID: MB 320-257492/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

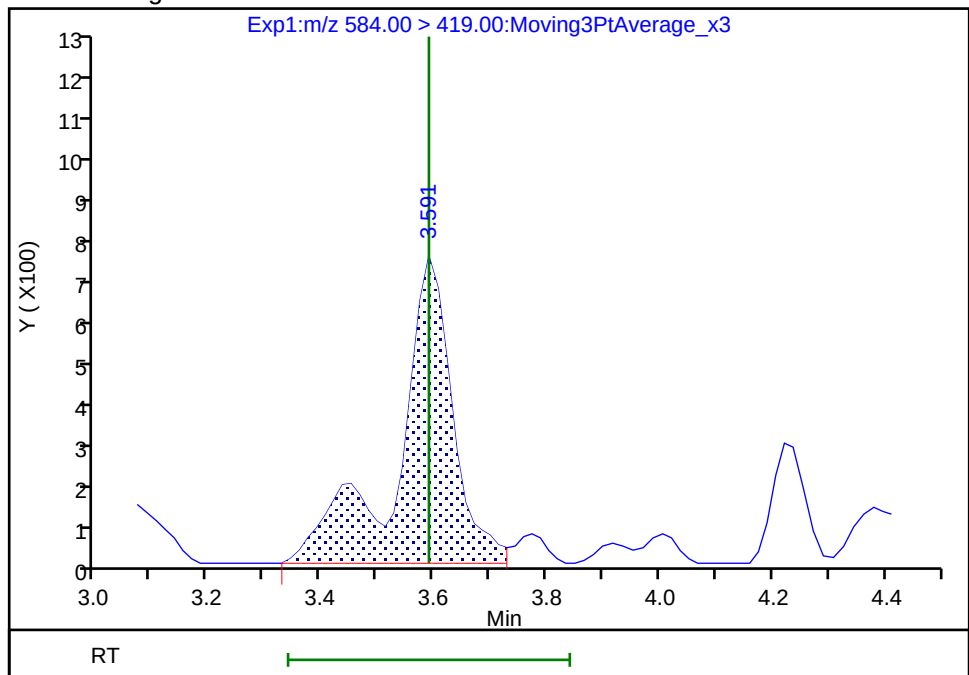
RT: 3.59
Area: 5871
Amount: 0.005520
Amount Units: ng/ml

Processing Integration Results



RT: 3.59
Area: 5124
Amount: 0.004818
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:11:13
Audit Action: Manually Integrated

Audit Reason: Baseline
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11/27/2018

TestAmerica Sacramento

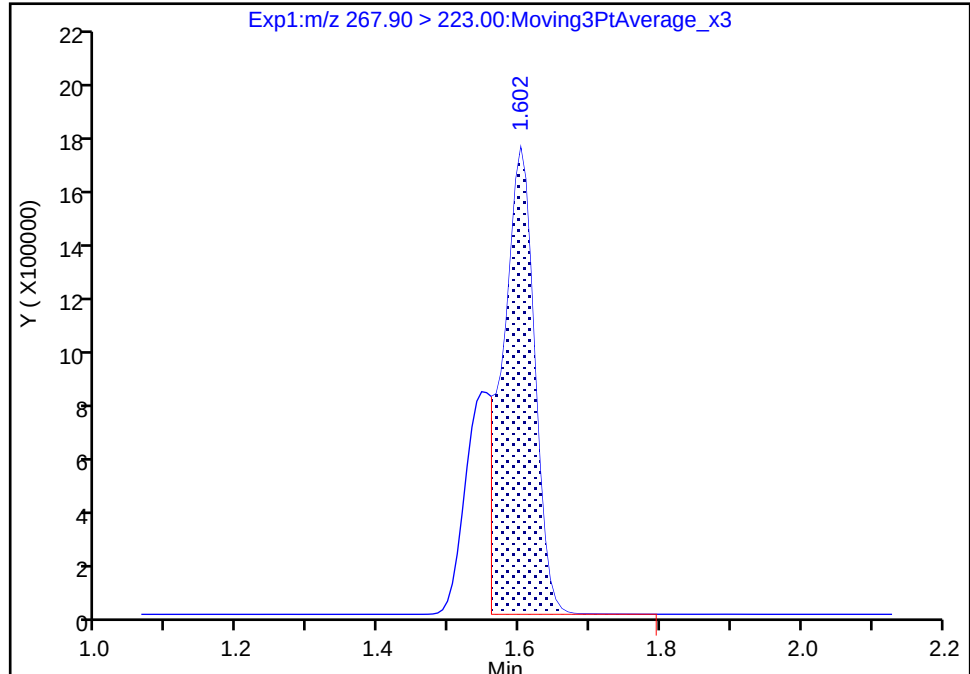
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_007.d
Injection Date: 09-Nov-2018 07:55:44 Instrument ID: A9
Lims ID: MB 320-257492/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

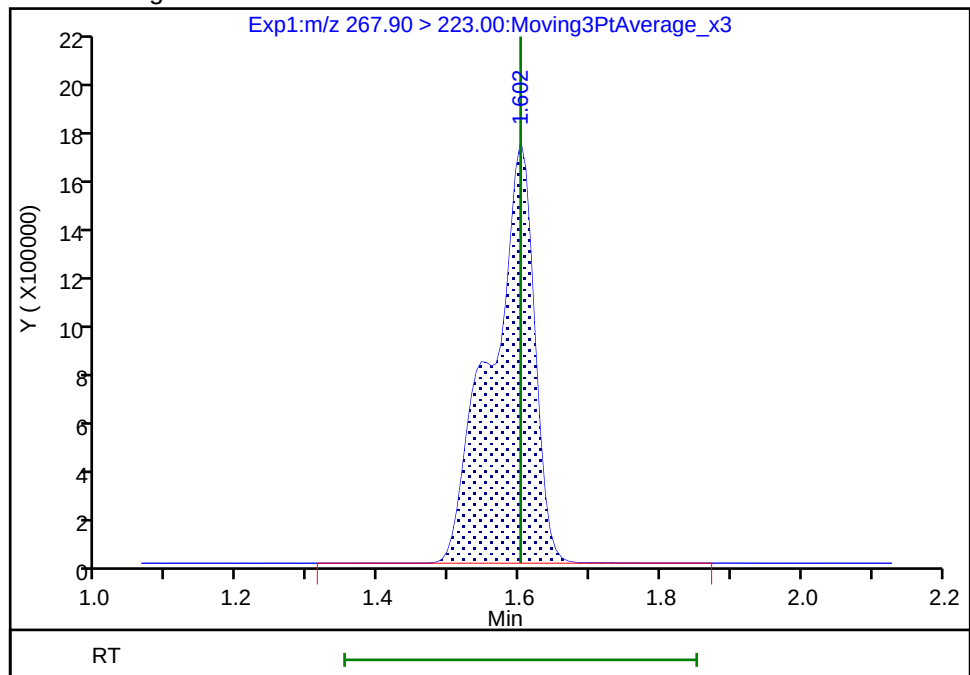
RT: 1.60
Area: 5240236
Amount: 1.718631
Amount Units: ng/ml

Processing Integration Results



RT: 1.60
Area: 7240877
Amount: 2.374778
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:10:14
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 1129 of 1202

11/27/2018

TestAmerica Sacramento

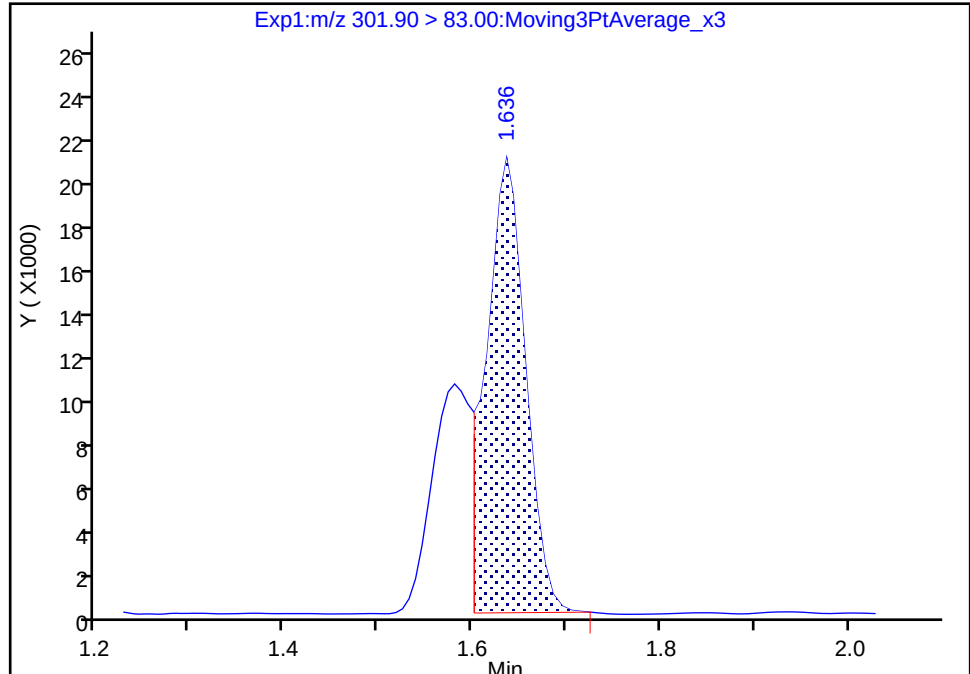
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_007.d
Injection Date: 09-Nov-2018 07:55:44 Instrument ID: A9
Lims ID: MB 320-257492/1-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

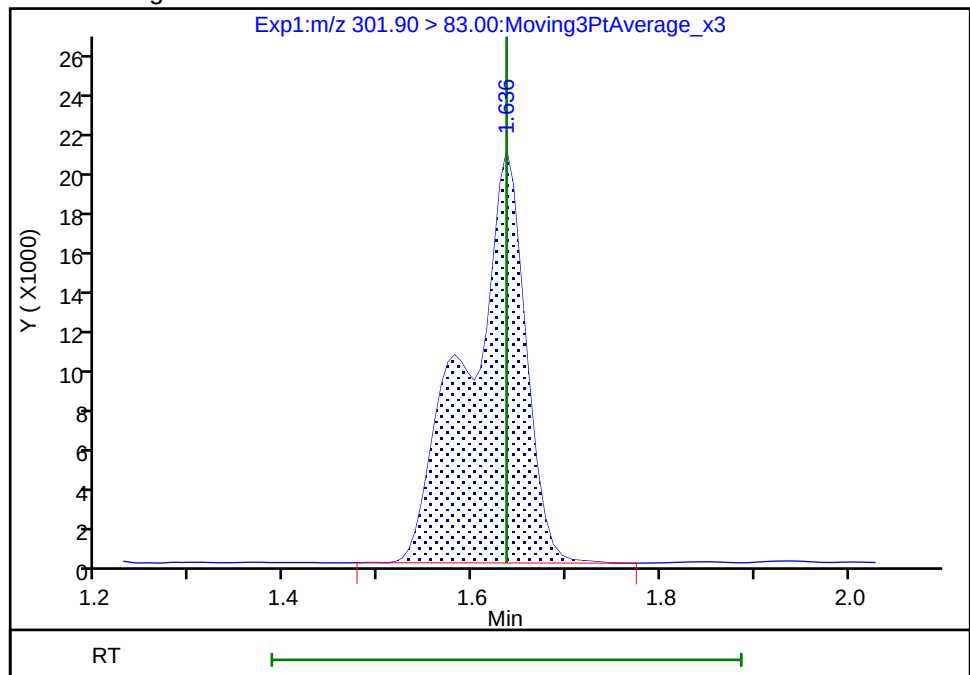
RT: 1.64
Area: 59441
Amount: 1.410426
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 90316
Amount: 2.143033
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:10:27

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: _____	Lab Sample ID: <u>LCS 320-257492/2-A</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_008.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: _____
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>250.00 (mL)</u>	Date Analyzed: <u>11/09/2018 08:03</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	41.2		2.0	0.35
2706-90-3	Perfluoropentanoic acid (PFPeA)	41.2		2.0	0.49
307-24-4	Perfluorohexanoic acid (PFHxA)	39.6		2.0	0.58
375-85-9	Perfluoroheptanoic acid (PFHpA)	38.8		2.0	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	42.6		2.0	0.85
375-95-1	Perfluorononanoic acid (PFNA)	43.7		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	42.5		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	39.3		2.0	1.1
307-55-1	Perfluorododecanoic acid (PFDoA)	40.7		2.0	0.55
72629-94-8	Perfluorotridecanoic acid (PFTriA)	44.9		2.0	1.3
376-06-7	Perfluorotetradecanoic acid (PFTeA)	36.0		2.0	0.29
375-73-5	Perfluorobutanesulfonic acid (PFBS)	38.2		2.0	0.20
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	34.7		2.0	0.17
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	44.9		2.0	0.19
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	36.5		2.0	0.54
335-77-3	Perfluorodecanesulfonic acid (PFDS)	44.6		2.0	0.32
754-91-6	Perfluorooctanesulfonamide (FOSA)	42.8		2.0	0.35
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	37.6		20	3.1
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.9		20	1.9
27619-97-2	6:2 FTS	32.0		20	2.0
39108-34-4	8:2 FTS	36.9		20	2.0

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: _____	Lab Sample ID: <u>LCS 320-257492/2-A</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_008.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: _____
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>250.00 (mL)</u>	Date Analyzed: <u>11/09/2018 08:03</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	94		25-150
STL01893	13C5-PFPeA DNU	93		25-150
STL00993	13C2 PFHxA	92		25-150
STL01892	13C4 PFHpA	95		25-150
STL00990	13C4 PFOA	95		25-150
STL00995	13C5 PFNA	93		25-150
STL00996	13C2 PFDA	95		25-150
STL00997	13C2 PFUnA	95		25-150
STL00998	13C2 PFDoA	87		25-150
STL02116	13C2 PFTeDA	96		25-150
STL02337	13C3 PFBS	90		25-150
STL00994	18O2 PFHxS	96		25-150
STL00991	13C4 PFOS	94		25-150
STL01056	13C8 FOSA	88		25-150
STL02118	d3-NMeFOSAA	95		25-150
STL02117	d5-NEtFOSAA	98		25-150
STL02279	M2-6:2 FTS	92		25-150
STL02280	M2-8:2 FTS	85		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_008.d
 Lims ID: LCS 320-257492/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 09-Nov-2018 08:03:17 ALS Bottle#: 2 Worklist Smp#: 5
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: lcs 320-257492/2-
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: A9\Administrator Instrument ID: A9
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 11:14:16 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d
 Column 1 : Det: EXP1
 Process Host: CTX0318

First Level Reviewer: mongkols

Date: 12-Nov-2018 11:14:16

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	1.346	1.346	0.0	0.526	7808230	2.35		93.9	9101	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.352	1.352	0.0	1.005	3011323	1.03		103	121	
D 3 13C5 PFPeA										M
267.90 > 223.00	1.608	1.601	0.007	0.629	7400418	2.34		93.5	11621	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.608	1.609	-0.001	1.000	3054008	1.03		103	408	M
D 47 13C3 PFBS										M
301.90 > 83.00	1.643	1.636	0.007	0.642	91511	2.09		89.9	512	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.643	1.643	0.0	1.000	3880128	0.9547		108	1358	M
298.90 > 99.00	1.643	1.643	0.0	1.000	1353927		2.87(1.35-4.05)		875	M
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.853	1.853	0.0	1.128	695646	0.8601		92.1	4402	
D 7 13C2 PFHxA										
315.00 > 270.00	1.882	1.873	0.009	0.736	7663903	2.30		91.8	10860	
6 Perfluorohexanoic acid										
313.00 > 269.00	1.882	1.883	0.0	1.000	2731178	0.99		99.0	384	
313.00 > 119.00	1.882	1.883	0.0	1.000	206291		13.24(6.96-20.87)		359	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.912	1.902	0.010	1.164	1879561	1.00		106	4050	
349.00 > 99.00	1.902	1.902	0.0	1.158	885787		2.12(1.15-3.45)		1781	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.982	1.971	0.011	0.775	774954	1.80		71.8	2283	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	1.982	1.972	0.010	1.000	559665	1.09		109	335	
D 9 13C4 PFHpA										
367.00 > 322.00	2.204	2.191	0.013	0.862	9353010	2.38		95.3	17065	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.204	2.191	0.013	1.000	3848656	0.9698		97.0	723	
363.00 > 169.00	2.204	2.191	0.013	1.000	829325		4.64(2.17-6.52)		1132	
D 11 18O2 PFHxS										
403.00 > 84.00	2.216	2.203	0.013	0.866	5826881	2.28		96.5	7172	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.216	2.216	0.0	1.000	2693711	0.8679		95.4	2829	
399.00 > 99.00	2.216	2.216	0.0	1.000	753674		3.57(1.90-5.70)		1067	
76 DONA										
377.00 > 251.00	2.241	2.241	0.0	0.764	6667547	1.01		108	11187	
377.00 > 85.00	2.241	2.241	0.0	0.764	2910154		2.29(1.13-3.39)		4938	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.528	2.513	0.015	0.988	784519	2.17		91.5	1725	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.528	2.528	0.0	1.000	576707	0.8001		84.4	1864	
D 14 13C4 PFOA										
417.00 > 372.00	2.558	2.543	0.015	1.000	8503420	2.37		94.6	11062	
* 62 13C2 PFOA										
415.00 > 370.00	2.558	2.543	0.015		9135595	2.50			12684	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.558	2.543	0.015	1.000	3913713	1.06		106	476	
413.00 > 169.00	2.558	2.543	0.015	1.000	1350555		2.90(1.36-4.08)		2091	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.558	2.558	0.0	0.873	2829234	1.12		118	2758	
449.00 > 99.00	2.558	2.558	0.0	0.873	657490		4.30(1.84-5.53)		2125	
D 18 13C4 PFOS										
503.00 > 80.00	2.931	2.914	0.017	1.146	5781805	2.24		93.7	3847	
D 19 13C5 PFNA										
468.00 > 423.00	2.931	2.914	0.017	1.146	7728153	2.33		93.0	8198	
20 Perfluorononanoic acid										
463.00 > 419.00	2.931	2.914	0.017	1.000	3378822	1.09		109	518	
463.00 > 169.00	2.931	2.914	0.017	1.000	552155		6.12(2.68-8.03)		1678	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.931	2.914	0.017	1.000	2374101	0.9113		98.2	739	
499.00 > 99.00	2.931	2.914	0.017	1.000	567164		4.19(2.04-6.12)		1274	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.139	3.124	0.015	1.071	2520535	0.9405		101	2946	
D 21 13C8 FOSA										
506.00 > 78.00	3.281	3.264	0.017	1.283	3146302	2.20		88.1	6056	
D 23 13C2 PFDA										
515.00 > 470.00	3.281	3.264	0.017	1.283	8111546	2.37		94.8	7337	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.264	3.264	0.0	1.276	91505	2.04		85.4	556	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	3.281	3.264	0.017	1.005	503553	0.9232		96.4	2440	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.264	3.264	0.0	1.114	1422739	0.9586		99.9	2255	
549.00 > 99.00	3.264	3.264	0.0	1.114	252426		5.64(3.02-9.05)		1102	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide										
498.00 > 78.00	3.281	3.264	0.017	1.000	4042146	1.07		107	4264	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.281	3.281	0.0	1.000	3745524	1.06		106	709	
513.00 > 169.00	3.281	3.281	0.0	1.000	239632		15.63(7.12-21.35)		828	
D 27 d3-NMeFOSAA										
573.00 > 419.00	3.437	3.422	0.015	1.344	3513909	2.37		95.0	3752	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	3.437	3.437	0.0	1.000	1319766	0.9389		93.9	474	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	3.607	3.591	0.016	1.004	1107177	1.02		102	2990	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	3.591	3.591	0.0	1.225	2332409	1.11		116	1667	
599.00 > 99.00	3.591	3.591	0.0	1.225	479845		4.86(2.14-6.43)		1450	
D 32 d5-NEtFOSAA										
589.00 > 419.00	3.591	3.591	0.0	1.404	2960404	2.46		98.3	2547	
D 30 13C2 PFUnA										
565.00 > 520.00	3.607	3.591	0.016	1.410	6803693	2.38		95.2	5826	
31 Perfluoroundecanoic acid										
563.00 > 519.00	3.607	3.607	0.0	1.000	3040545	0.9826		98.3	677	
563.00 > 169.00	3.607	3.607	0.0	1.000	237505		12.80(5.24-15.72)		1218	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	3.759	3.759	0.0	1.282	3185972	0.9498		101	4582	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	3.900	3.883	0.017	1.195	371519	0.9616		99.8	1289	
37 Perfluorododecanoic acid										
613.00 > 569.00	3.900	3.883	0.017	1.000	3163672	1.02		102	835	
613.00 > 169.00	3.900	3.883	0.017	1.000	348278		9.08(4.68-14.05)		798	
D 36 13C2 PFDaA										
615.00 > 570.00	3.900	3.883	0.017	1.525	7643979	2.17		86.8	8294	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.130	4.129	0.001	1.409	249970	1.07		111	960	
699.00 > 99.00	4.130	4.129	0.001	1.409	440336		0.57(0.28-0.83)		991	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.161	4.145	0.015	1.067	2807707	1.12		112	1262	
663.00 > 169.00	4.161	4.145	0.015	1.067	490403		5.73(3.09-9.27)		1505	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.396	4.381	0.015	1.000	414445	0.8993		89.9	1469	
713.00 > 219.00	4.381	4.381	0.0	0.996	305953		1.35(0.70-2.09)		1054	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.396	4.381	0.015	1.719	6301280	2.39		95.8	6517	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	4.803	4.786	0.017	1.004	2251381	1.03		103	752	
813.00 > 169.00	4.786	4.786	0.0	1.000	405461		5.55(2.77-8.32)		1115	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.786	4.786	0.0	1.871	5897730	2.26		90.2	5636	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.129	5.129	0.0	1.072	1460168	1.25		125	891	
913.00 > 169.00	5.129	5.129	0.0	1.072	321106		4.55(2.55-7.64)		2528	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_008.d

Injection Date: 09-Nov-2018 08:03:17

Instrument ID: A9

Lims ID: LCS 320-257492/2-A

Client ID:

Operator ID: A9\Administrator

ALS Bottle#: 2

Worklist Smp#: 5

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

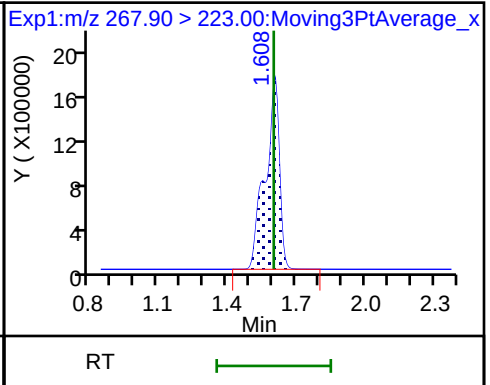
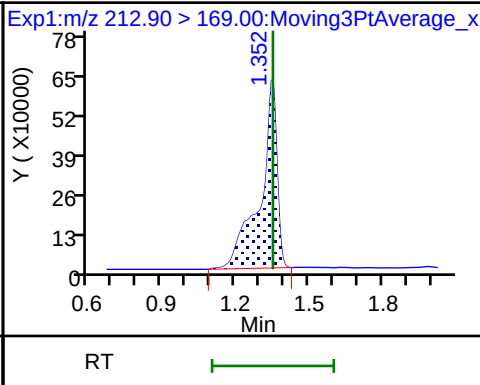
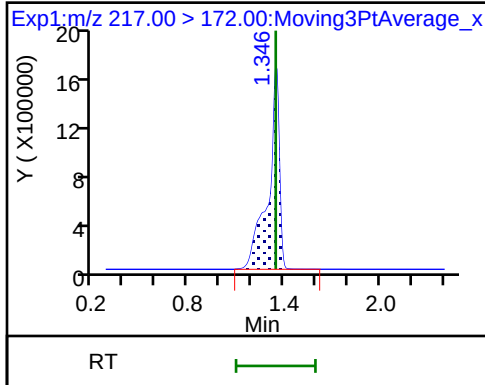
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

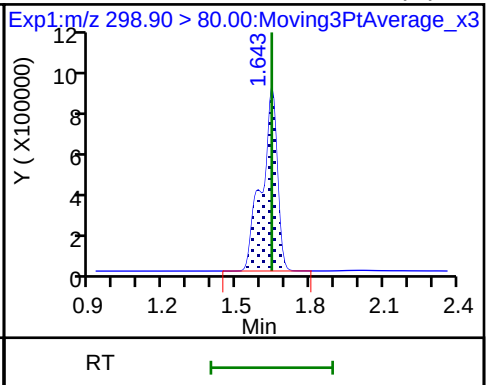
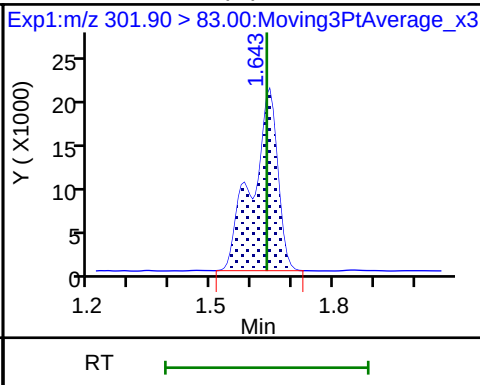
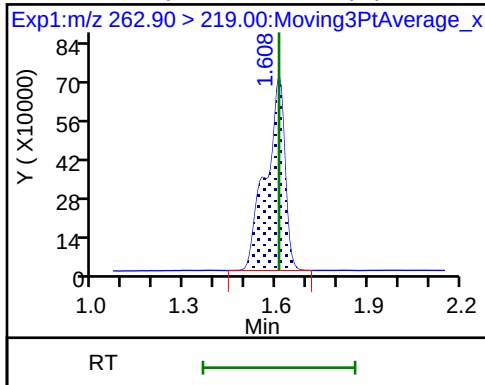
D 3 13C5 PFPeA (M)



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS (M)

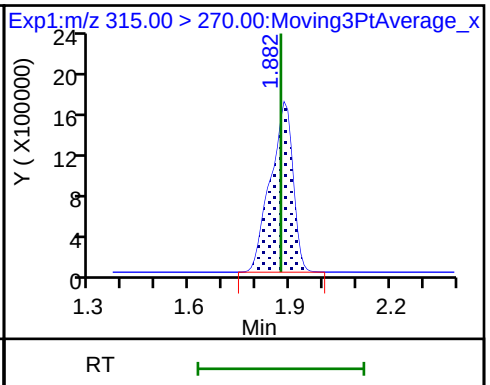
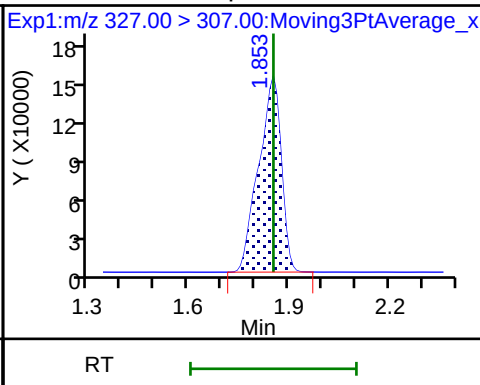
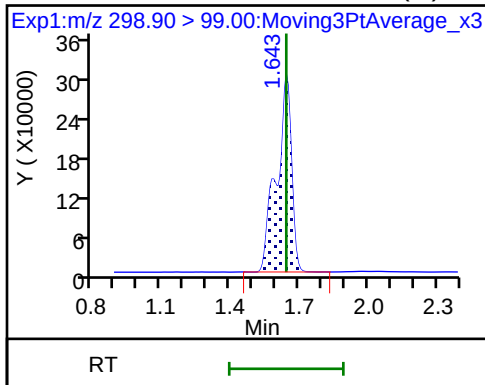
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid (M)

61 1H,1H,2H,2H-perfluorohexanesulfonate

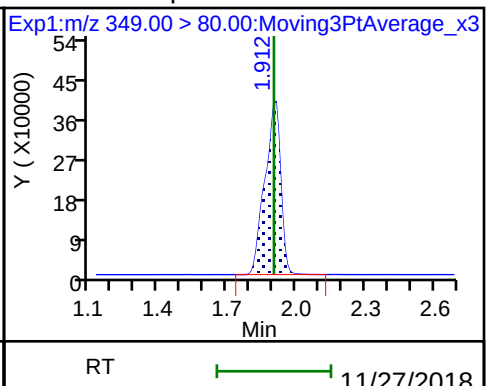
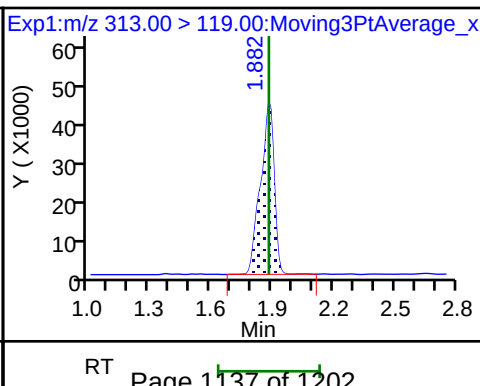
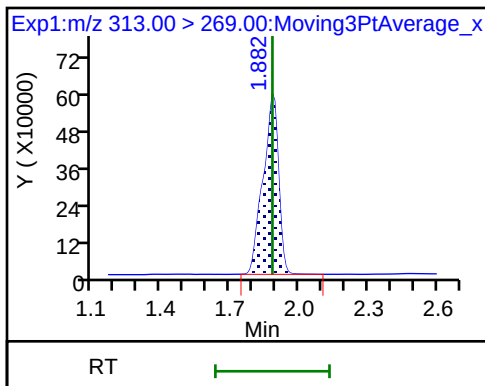
D 7 13C2 PFHxA



6 Perfluorohexanoic acid

6 Perfluorohexanoic acid

70 Perfluoropentanesulfonic acid

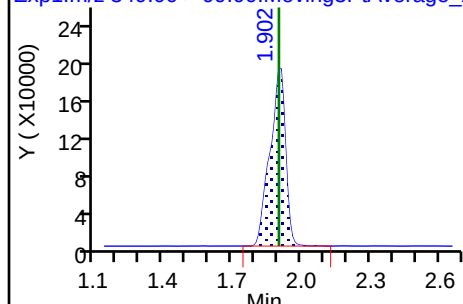


70 Perfluoropentanesulfonic acid

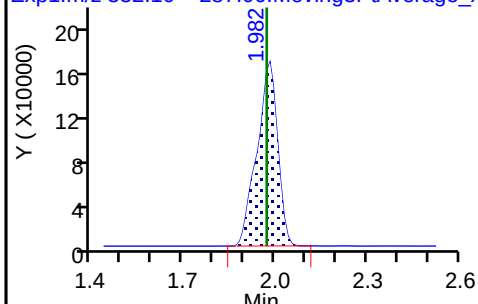
D 64 13C3 HFPO-DA

67 Perfluoro(2-propoxypropanoic) acid

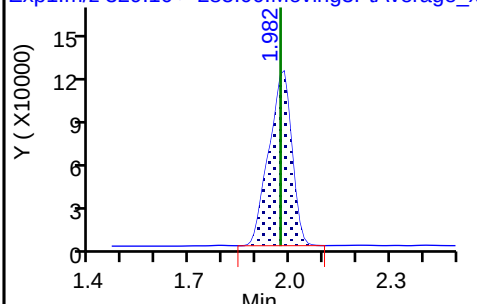
Exp1:m/z 349.00 > 99.00:Moving3PtAverage_x3



Exp1:m/z 332.10 > 287.00:Moving3PtAverage_x3



Exp1:m/z 329.10 > 285.00:Moving3PtAverage_x3

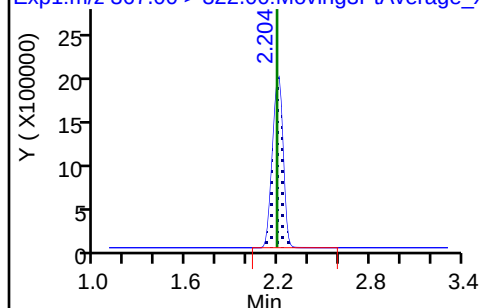


D 9 13C4 PFHpA

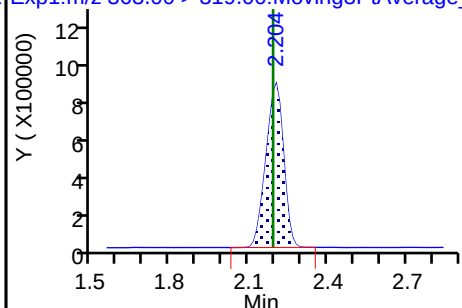
10 Perfluoroheptanoic acid

10 Perfluoroheptanoic acid

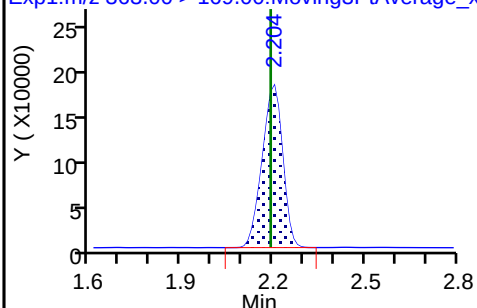
Exp1:m/z 367.00 > 322.00:Moving3PtAverage_x3



Exp1:m/z 363.00 > 319.00:Moving3PtAverage_x3



Exp1:m/z 363.00 > 169.00:Moving3PtAverage_x3

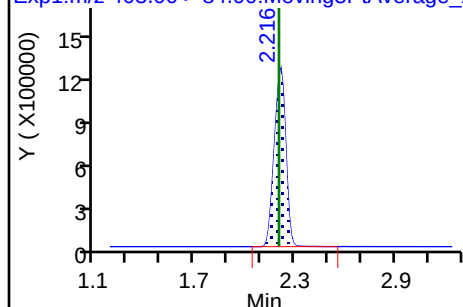


D 11 18O2 PFHxS

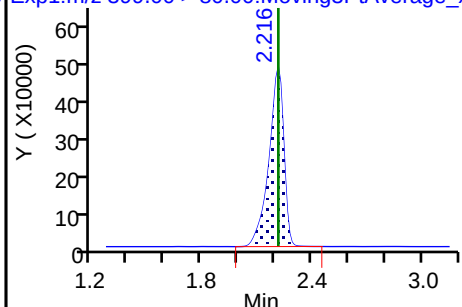
8 Perfluorohexanesulfonic acid

8 Perfluorohexanesulfonic acid

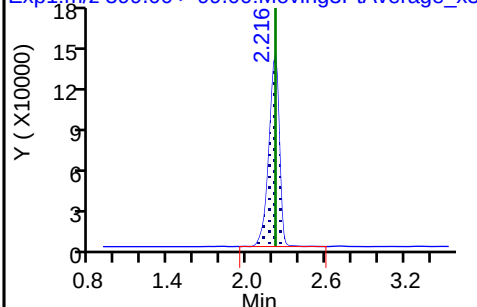
Exp1:m/z 403.00 > 84.00:Moving3PtAverage_x3



Exp1:m/z 399.00 > 80.00:Moving3PtAverage_x3



Exp1:m/z 399.00 > 99.00:Moving3PtAverage_x3

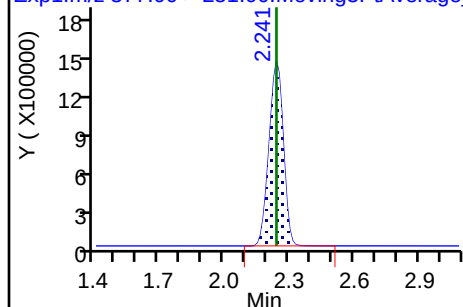


76 DONA

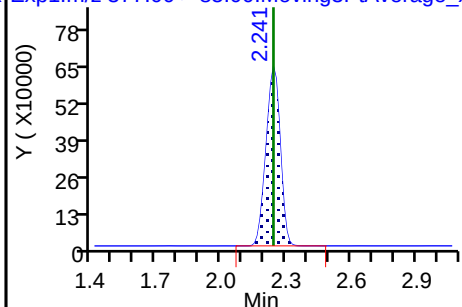
76 DONA

D 12 M2-6:2 FTS

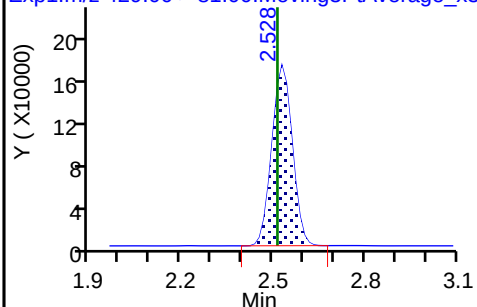
Exp1:m/z 377.00 > 251.00:Moving3PtAverage_x3



Exp1:m/z 377.00 > 85.00:Moving3PtAverage_x3

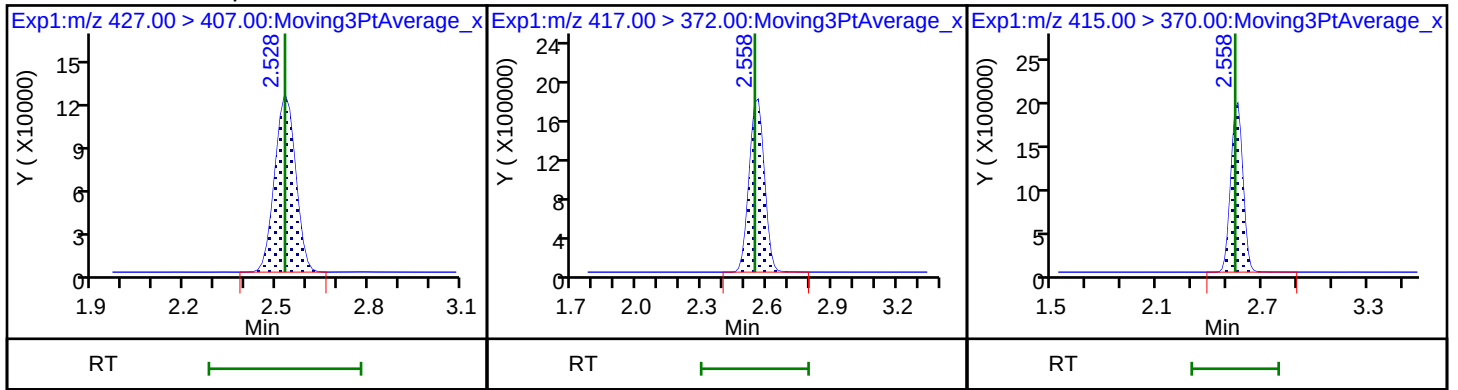


Exp1:m/z 429.00 > 81.00:Moving3PtAverage_x3



13 1H,1H,2H,2H-perfluorooctanesulfonD 14 13C4 PFOA

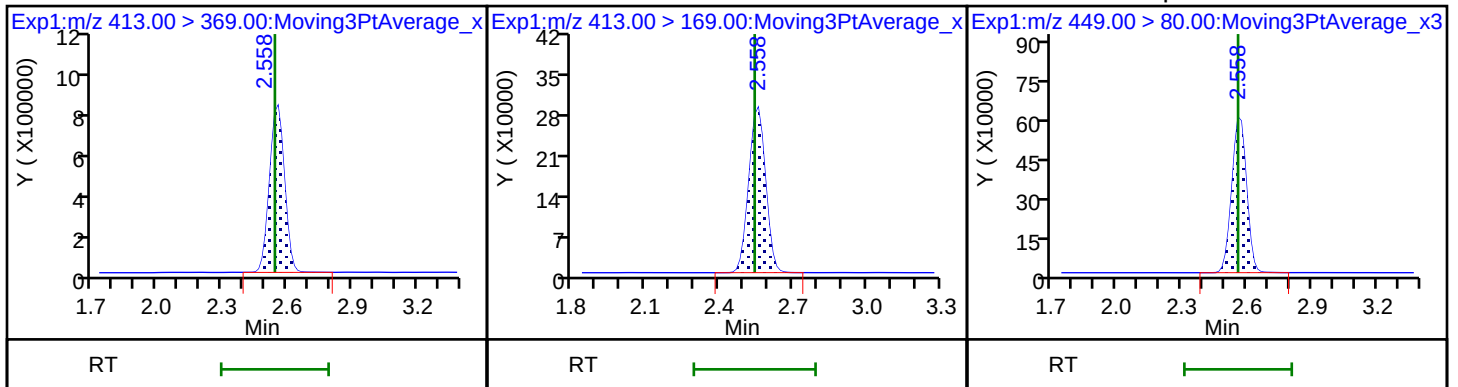
* 62 13C2 PFOA



15 Perfluorooctanoic acid

15 Perfluorooctanoic acid

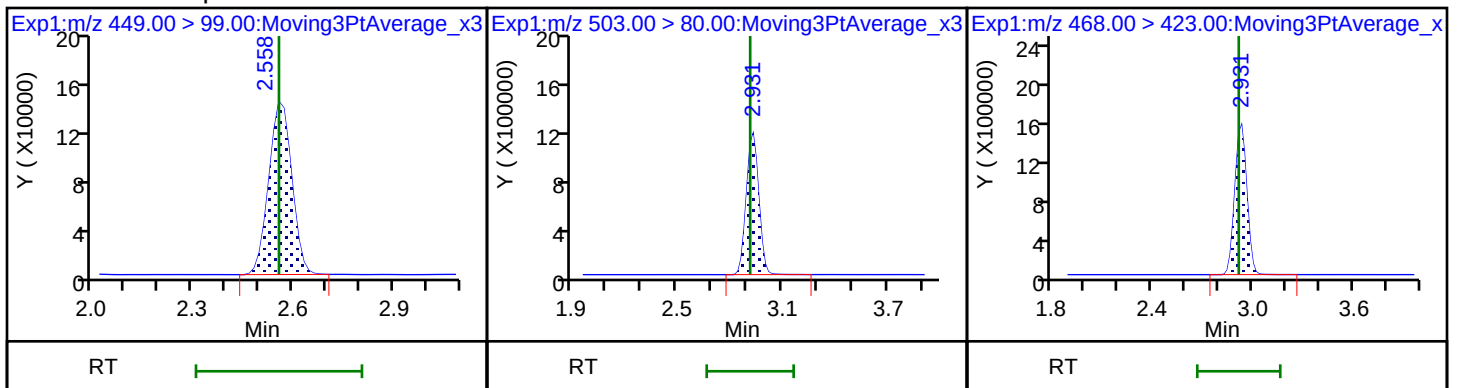
16 Perfluoroheptanesulfonic acid



16 Perfluoroheptanesulfonic acid

D 18 13C4 PFOS

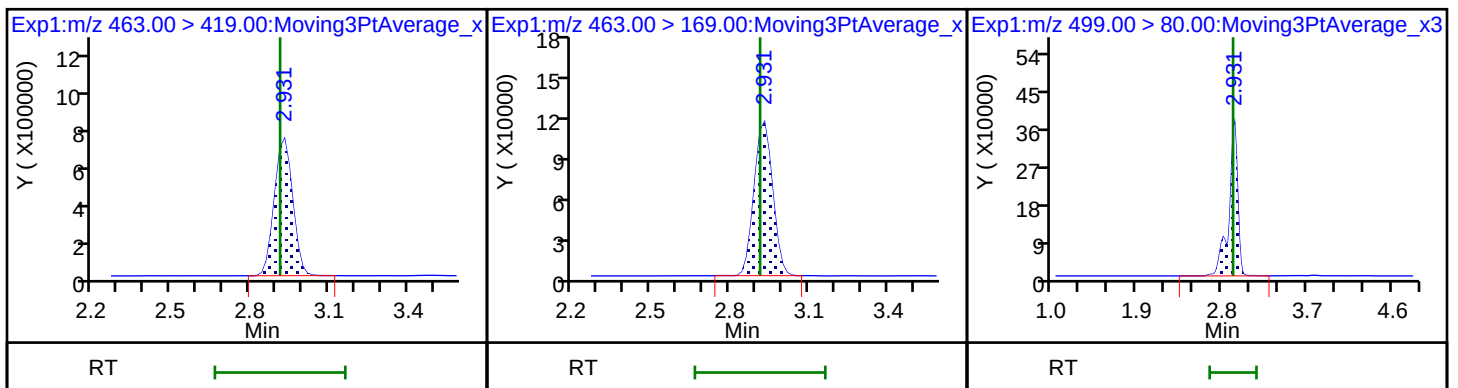
D 19 13C5 PFNA



20 Perfluorononanoic acid

20 Perfluorononanoic acid

17 Perfluorooctanesulfonic acid

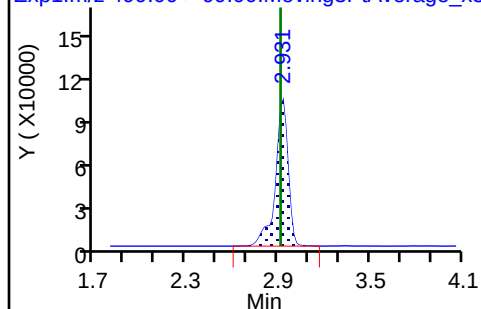


17 Perfluorooctanesulfonic acid

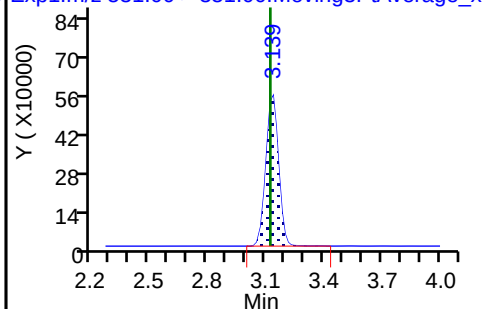
69 9-Chlorohexadecafluoro-3-oxanonadecanoic acid

D 21 13C8 FOSA

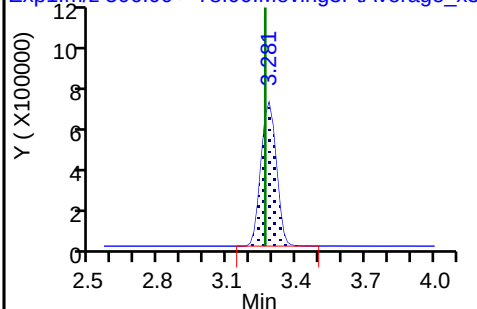
Exp1:m/z 499.00 > 99.00:Moving3PtAverage_x3



Exp1:m/z 531.00 > 351.00:Moving3PtAverage_x3



Exp1:m/z 506.00 > 78.00:Moving3PtAverage_x3

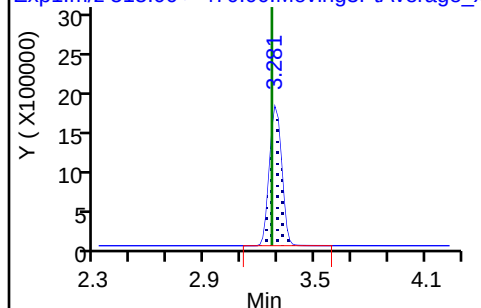


D 23 13C2 PFDA

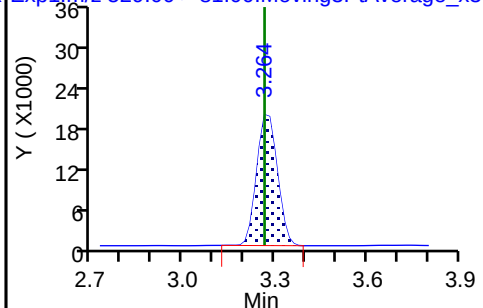
D 26 M2-8:2 FTS

25 1H,1H,2H,2H-perfluorodecanesulfonic acid

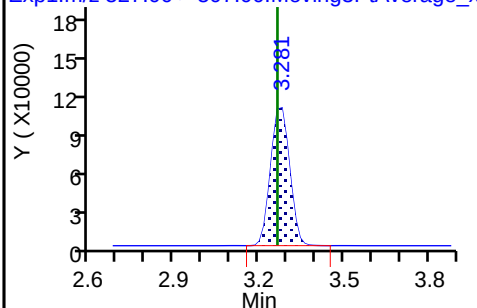
Exp1:m/z 515.00 > 470.00:Moving3PtAverage_x3



Exp1:m/z 529.00 > 81.00:Moving3PtAverage_x3



Exp1:m/z 527.00 > 507.00:Moving3PtAverage_x3

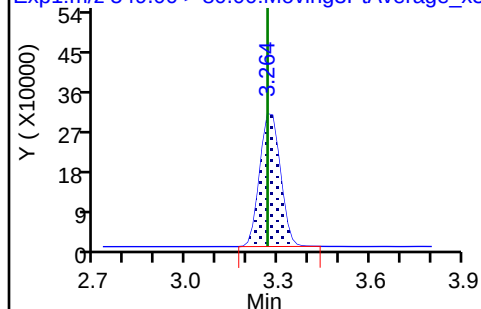


68 Perfluorononanesulfonic acid

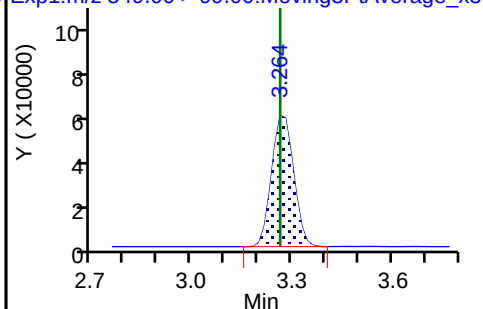
68 Perfluorononanesulfonic acid

22 Perfluorooctanesulfonamide

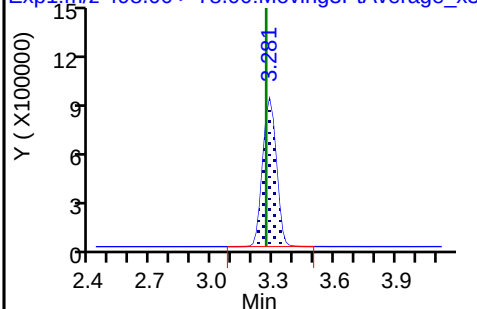
Exp1:m/z 549.00 > 80.00:Moving3PtAverage_x3



Exp1:m/z 549.00 > 99.00:Moving3PtAverage_x3



Exp1:m/z 498.00 > 78.00:Moving3PtAverage_x3

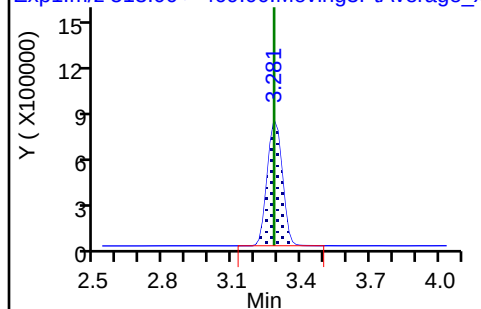


24 Perfluorodecanoic acid

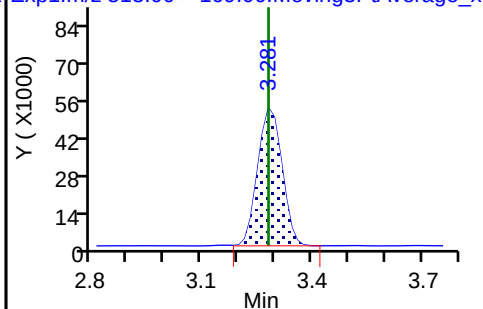
24 Perfluorodecanoic acid

D 27 d3-NMeFOSAA

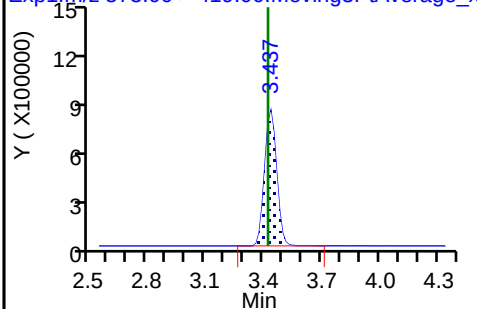
Exp1:m/z 513.00 > 469.00:Moving3PtAverage_x3



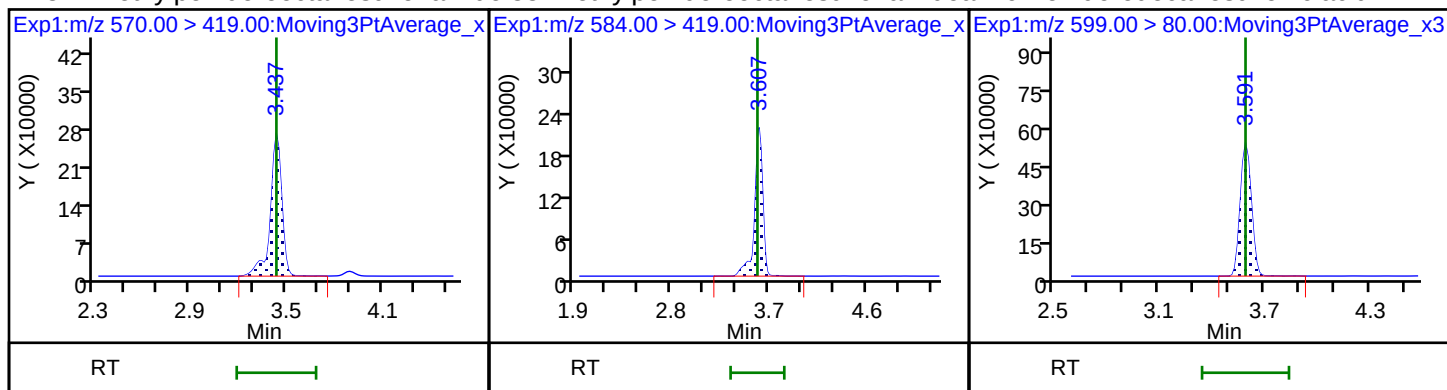
Exp1:m/z 513.00 > 169.00:Moving3PtAverage_x3



Exp1:m/z 573.00 > 419.00:Moving3PtAverage_x3



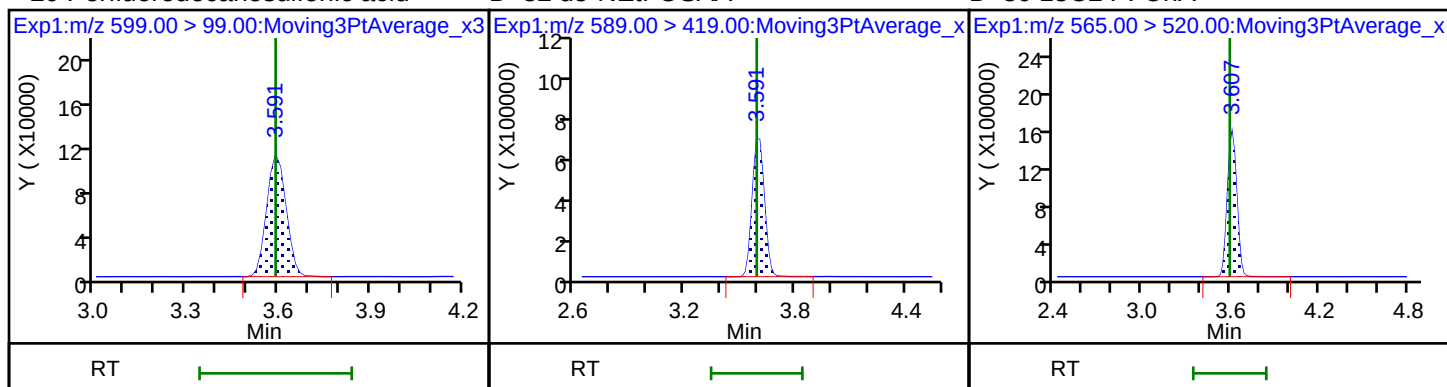
28 N-methylperfluorooctanesulfonamido 33 N-ethylperfluorooctanesulfonamidoa 29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 32 d5-NEtFOSAA

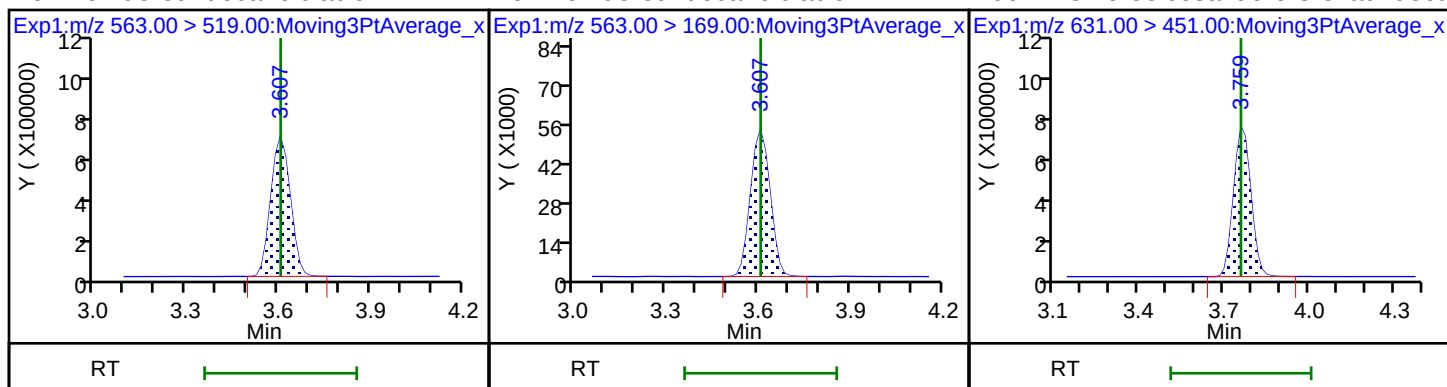
D 30 13C2 PFUnA



31 Perfluoroundecanoic acid

31 Perfluoroundecanoic acid

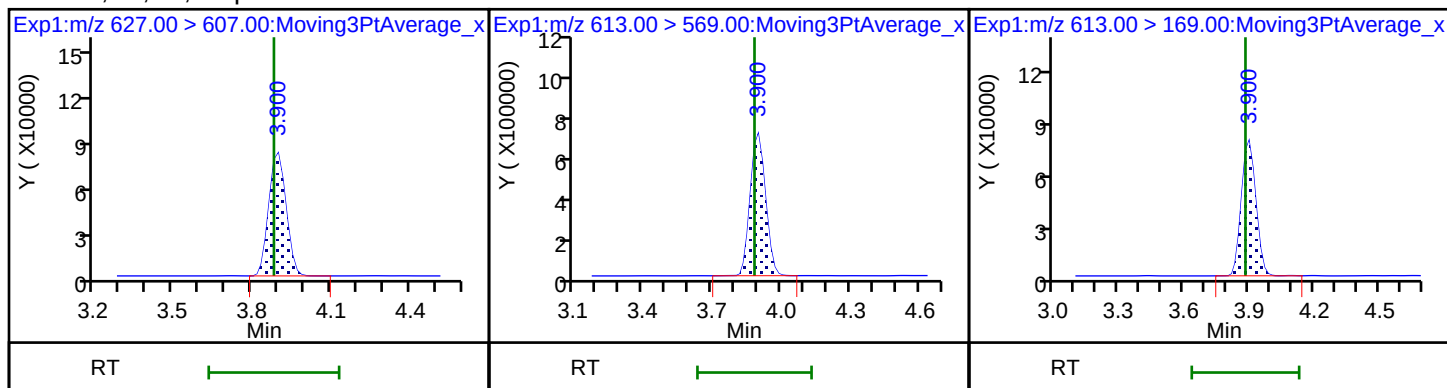
66 11-Chloroeicosafluoro-3-oxaundecan



74 1H,1H,2H,2H-perfluorododecanesulfo

37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



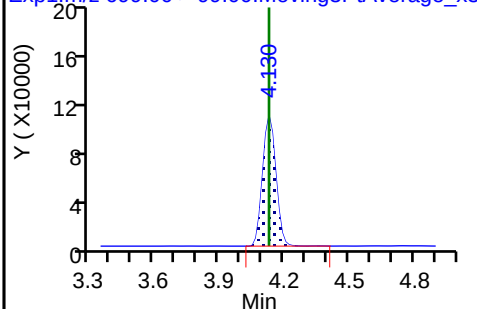
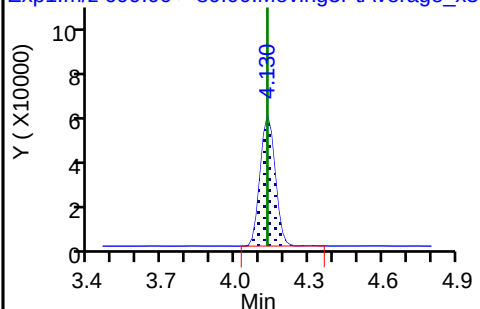
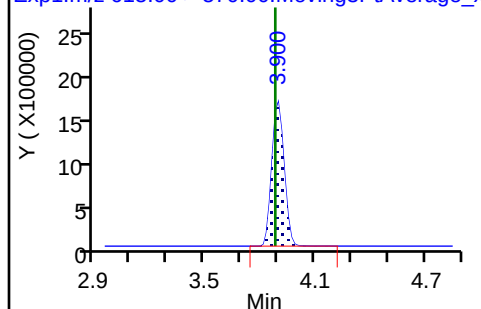
D 36 13C2 PFDaA

75 Perfluorododecanesulfonic acid (PF 75 Perfluorododecanesulfonic acid (PF

Exp1:m/z 615.00 > 570.00:Moving3PtAverage_x

Exp1:m/z 699.00 > 80.00:Moving3PtAverage_x3

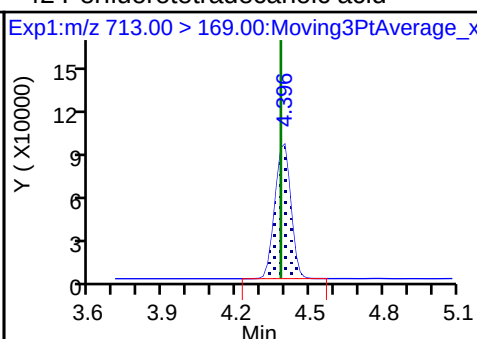
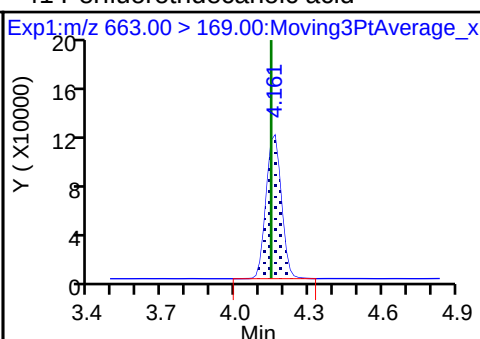
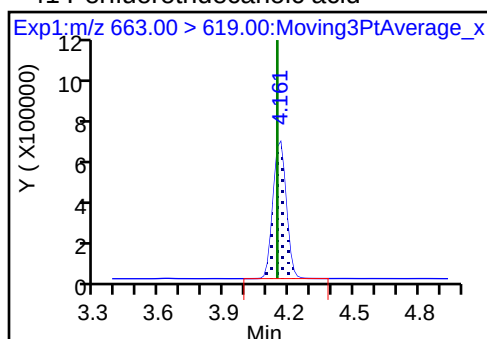
Exp1:m/z 699.00 > 99.00:Moving3PtAverage_x3



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

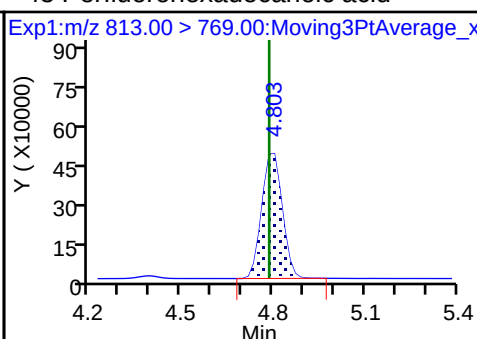
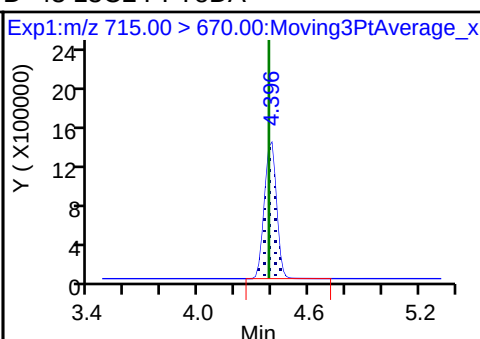
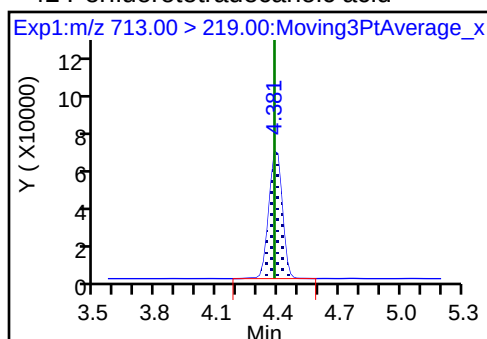
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

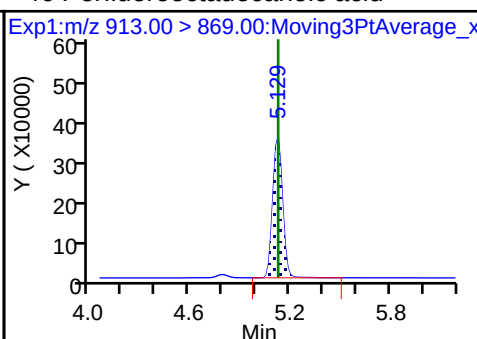
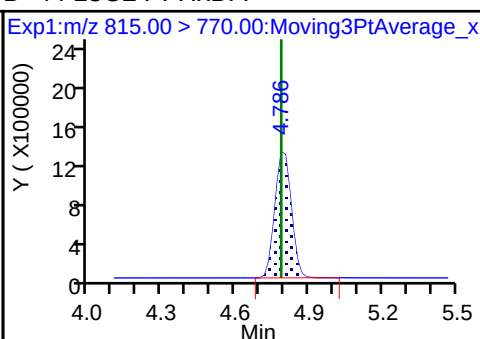
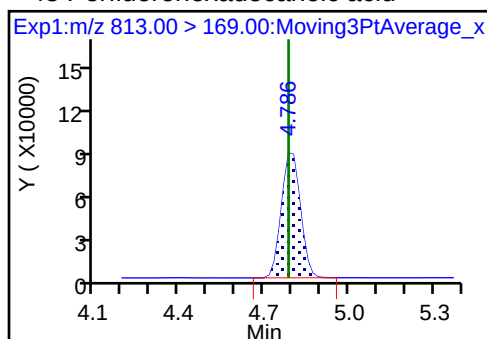
45 Perfluorohexadecanoic acid



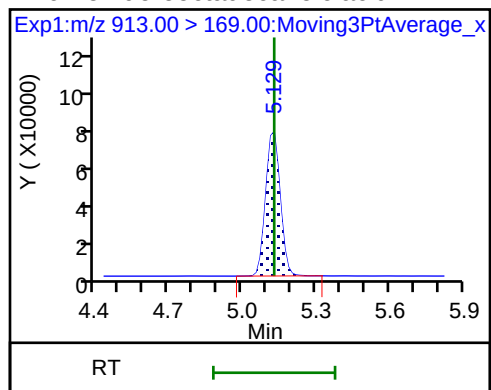
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

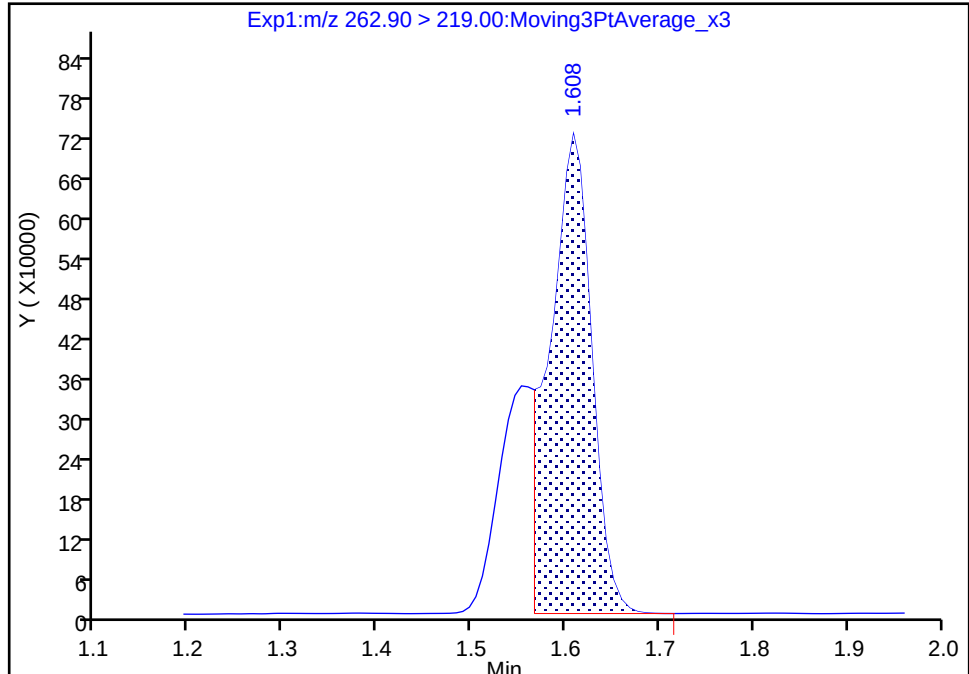
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_008.d
Injection Date: 09-Nov-2018 08:03:17 Instrument ID: A9
Lims ID: LCS 320-257492/2-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

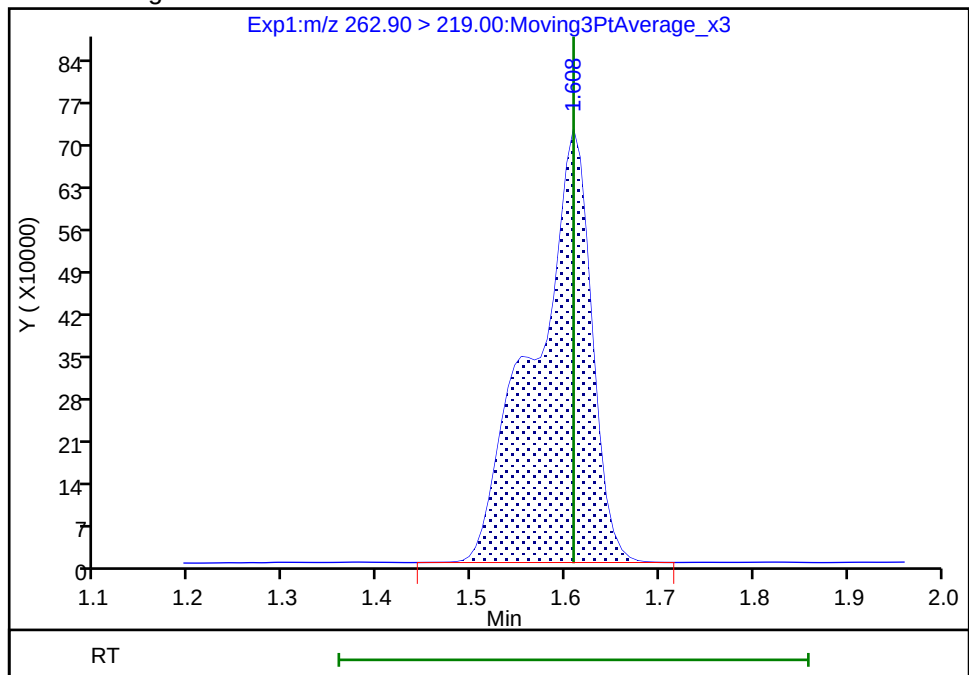
RT: 1.61
Area: 2190340
Amount: 0.739156
Amount Units: ng/ml

Processing Integration Results



RT: 1.61
Area: 3054008
Amount: 1.030611
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:13:56
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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TestAmerica Sacramento

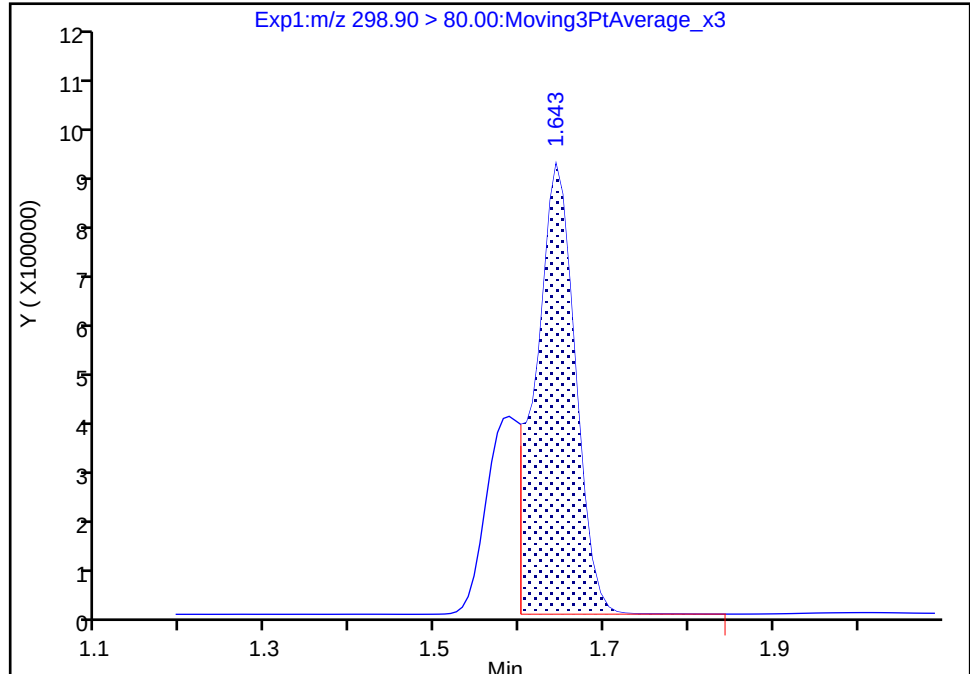
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_008.d
Injection Date: 09-Nov-2018 08:03:17 Instrument ID: A9
Lims ID: LCS 320-257492/2-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

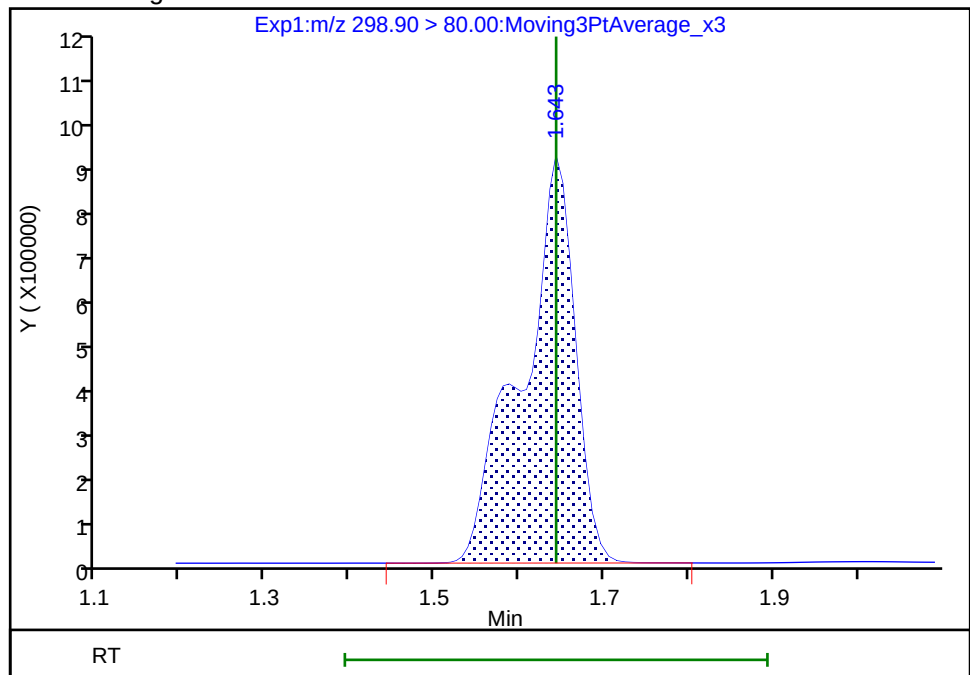
RT: 1.64
Area: 2840127
Amount: 0.698801
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 3880128
Amount: 0.954688
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:13:58
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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TestAmerica Sacramento

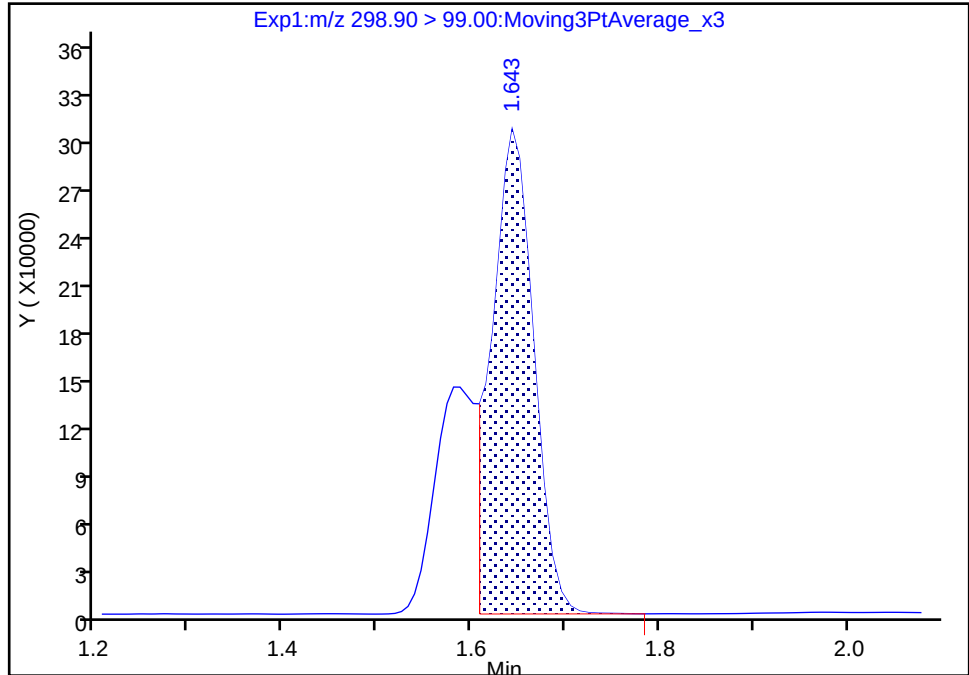
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_008.d
Injection Date: 09-Nov-2018 08:03:17 Instrument ID: A9
Lims ID: LCS 320-257492/2-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

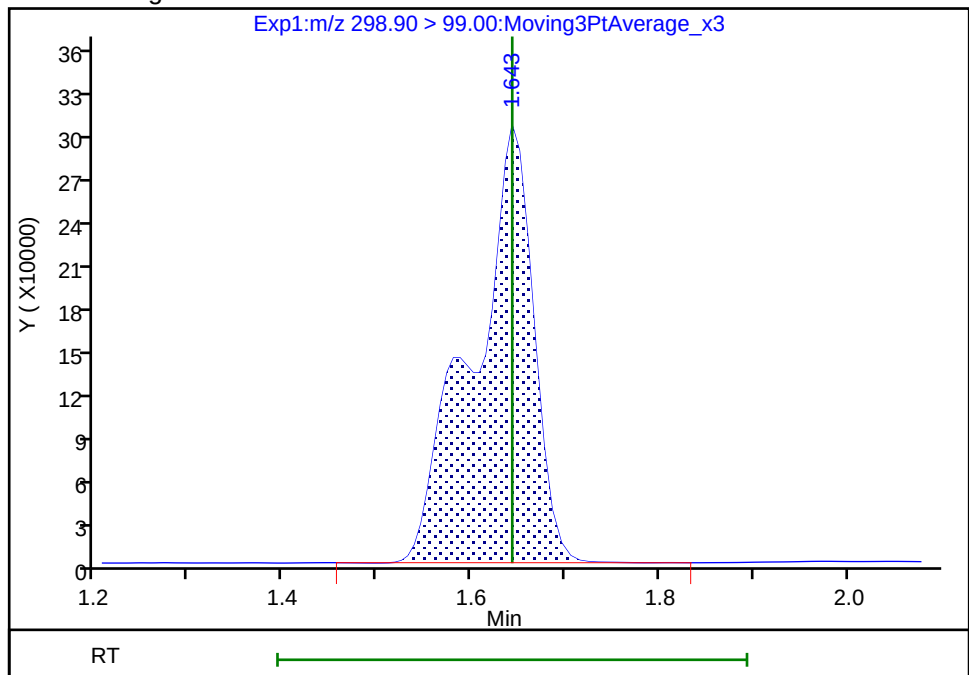
RT: 1.64
Area: 922518
Amount: 0.698801
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 1353927
Amount: 0.954688
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:14:01

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

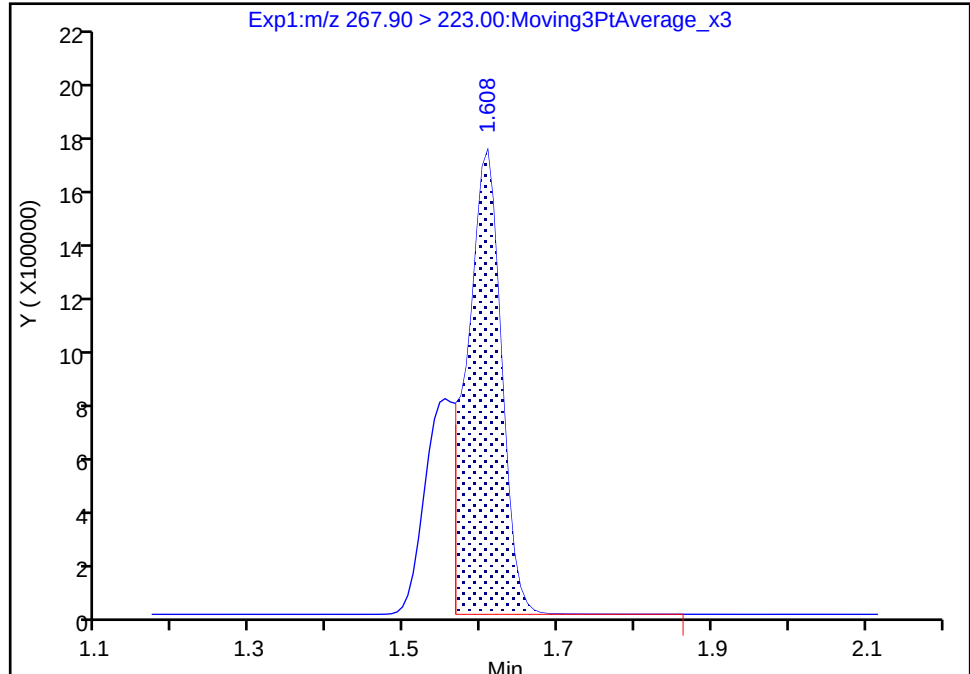
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_008.d
Injection Date: 09-Nov-2018 08:03:17 Instrument ID: A9
Lims ID: LCS 320-257492/2-A
Client ID:
Operator ID: A9\Administrator ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

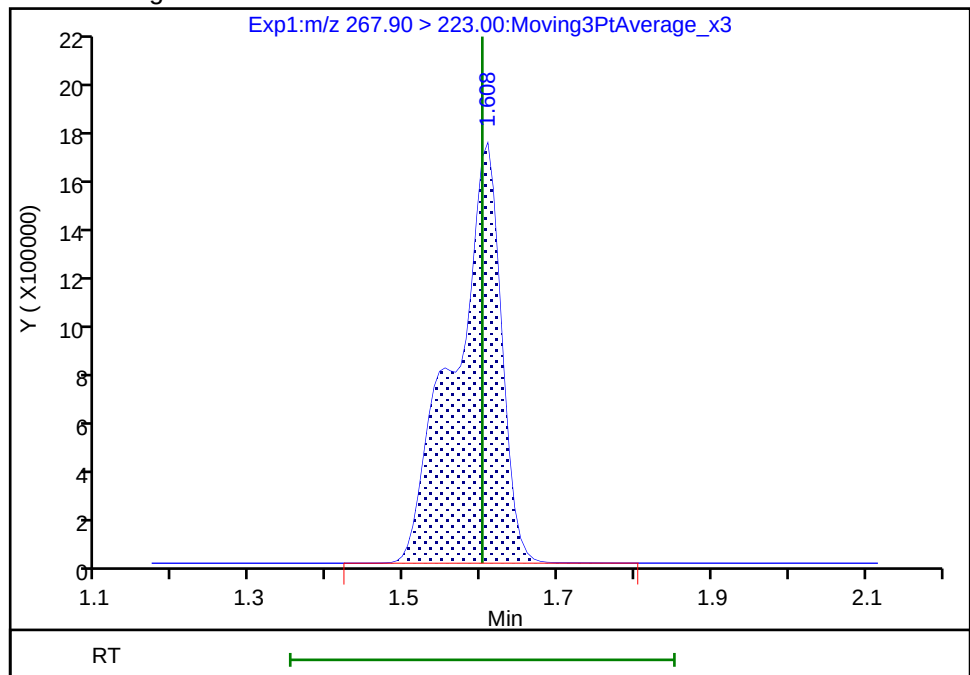
RT: 1.61
Area: 5263414
Amount: 1.662348
Amount Units: ng/ml

Processing Integration Results



RT: 1.61
Area: 7400418
Amount: 2.337280
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:13:39
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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11/27/2018

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_008.d

Injection Date: 09-Nov-2018 08:03:17

Instrument ID: A9

Lims ID: LCS 320-257492/2-A

Client ID:

Operator ID: A9\Administrator

ALS Bottle#:

2

Worklist Smp#:

5

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

Method: PFAS_A9

Limit Group: LC PFC ICAL

Column:

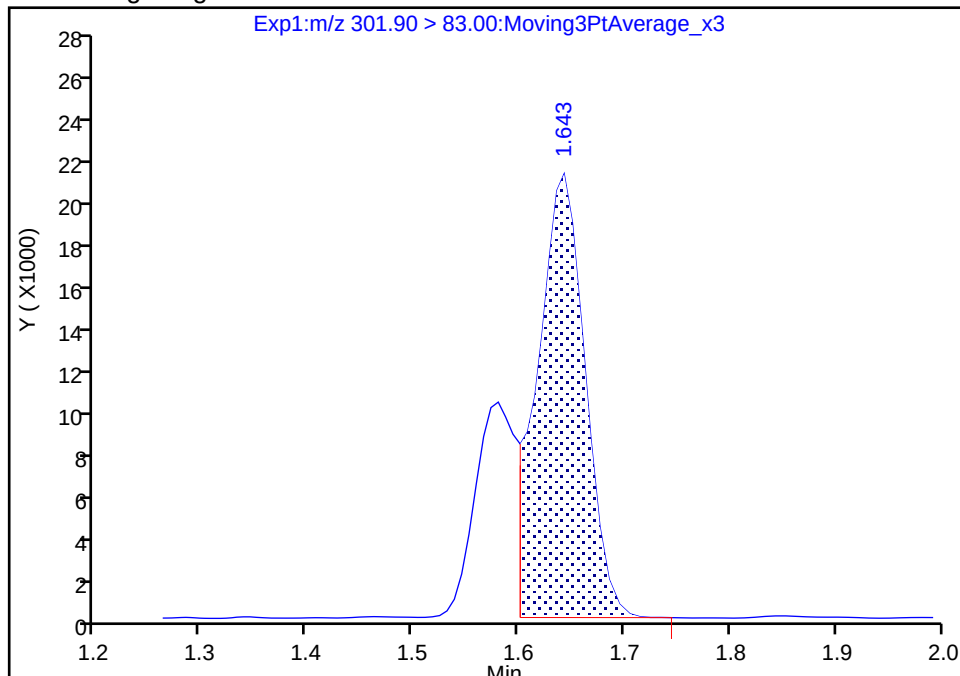
Detector: EXP1

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

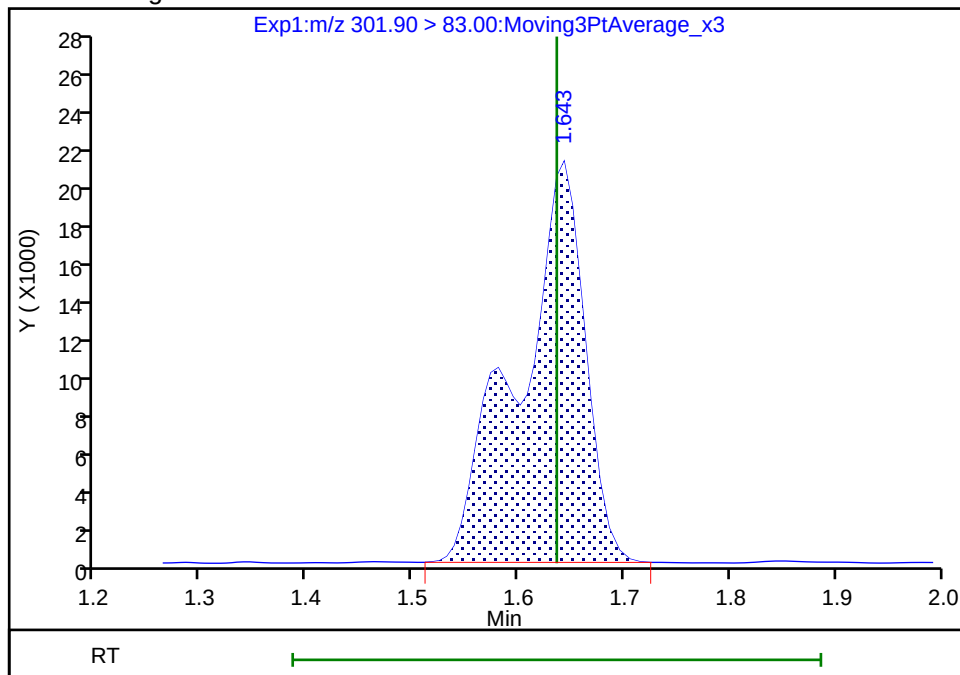
RT: 1.64
Area: 64764
Amount: 1.479860
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 91511
Amount: 2.091030
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 11:13:45

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GMW-2 MS</u>	Lab Sample ID: <u>480-144297-6 MS</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_011.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/24/2018 12:15</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>293.7 (mL)</u>	Date Analyzed: <u>11/09/2018 08:25</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	38.0		1.7	0.30
2706-90-3	Perfluoropentanoic acid (PFPeA)	35.3		1.7	0.42
307-24-4	Perfluorohexanoic acid (PFHxA)	33.4		1.7	0.49
375-85-9	Perfluoroheptanoic acid (PFHpA)	34.4		1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	32.8		1.7	0.72
375-95-1	Perfluorononanoic acid (PFNA)	34.7		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	39.5		1.7	0.26
2058-94-8	Perfluoroundecanoic acid (PFUnA)	33.4		1.7	0.94
307-55-1	Perfluorododecanoic acid (PFDoA)	34.2		1.7	0.47
72629-94-8	Perfluorotridecanoic acid (PFTriA)	32.4		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	31.3		1.7	0.25
375-73-5	Perfluorobutanesulfonic acid (PFBS)	34.6		1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	28.4		1.7	0.14
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	36.7		1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	33.3		1.7	0.46
335-77-3	Perfluorodecanesulfonic acid (PFDS)	28.9		1.7	0.27
754-91-6	Perfluorooctanesulfonamide (FOSA)	33.9		1.7	0.30
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	30.9		17	2.6
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	34.1		17	1.6
27619-97-2	6:2 FTS	30.6		17	1.7
39108-34-4	8:2 FTS	33.9		17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GMW-2 MS</u>	Lab Sample ID: <u>480-144297-6 MS</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_011.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/24/2018 12:15</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>293.7 (mL)</u>	Date Analyzed: <u>11/09/2018 08:25</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	51		25-150
STL01893	13C5-PFPeA DNU	63		25-150
STL00993	13C2 PFHxA	69		25-150
STL01892	13C4 PFHpA	71		25-150
STL00990	13C4 PFOA	76		25-150
STL00995	13C5 PFNA	68		25-150
STL00996	13C2 PFDA	62		25-150
STL00997	13C2 PFUnA	64		25-150
STL00998	13C2 PFDoA	49		25-150
STL02116	13C2 PFTeDA	55		25-150
STL02337	13C3 PFBS	66		25-150
STL00994	18O2 PFHxS	75		25-150
STL00991	13C4 PFOS	68		25-150
STL01056	13C8 FOSA	66		25-150
STL02118	d3-NMeFOSAA	62		25-150
STL02117	d5-NEtFOSAA	57		25-150
STL02279	M2-6:2 FTS	75		25-150
STL02280	M2-8:2 FTS	61		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_011.d
 Lims ID: 480-144297-F-6-A MS
 Client ID: GMW-2
 Sample Type: MS
 Inject. Date: 09-Nov-2018 08:25:48 ALS Bottle#: 5 Worklist Smp#: 8
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 480-144297-f-6-a ms
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: A9\Administrator Instrument ID: A9
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 12:14:49 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d
 Column 1 : Det: EXP1
 Process Host: CTX0318

First Level Reviewer: mongkols

Date: 12-Nov-2018 12:14:49

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	1.352	1.346	0.006	0.529	4333813	1.28		51.2	5878	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.352	1.352	0.0	1.000	1810052	1.12		112	64.4	
D 3 13C5 PFPeA										M
267.90 > 223.00	1.608	1.601	0.007	0.629	5046041	1.56		62.6	3302	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.615	1.609	0.006	1.004	2094186	1.04		104	147	M
D 47 13C3 PFBS										M
301.90 > 83.00	1.643	1.636	0.007	0.642	68433	1.54		66.0	99.6	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.651	1.643	0.008	1.005	3088703	1.02		115	93.4	M
298.90 > 99.00	1.651	1.643	0.008	1.005	1034759		2.98(1.35-4.05)		114	M
D 60 M2-4:2 FTS										
329.00 > 81.00	1.833	1.843	-0.010	0.717	2091	0.005842		0.0	0.3	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.853	1.853	0.0	1.128	907755	1.50		161	2926	
D 7 13C2 PFHxA										
315.00 > 270.00	1.882	1.873	0.009	0.736	5841098	1.72		68.7	6296	
6 Perfluorohexanoic acid										M
313.00 > 269.00	1.892	1.883	0.010	1.005	2063500	0.9816		98.2	33.9	M
313.00 > 119.00	1.892	1.883	0.010	1.005	154393		13.37(6.96-20.87)		114	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.912	1.902	0.010	1.164	1524716	1.08		115	125	
349.00 > 99.00	1.912	1.902	0.010	1.164	696246		2.19(1.15-3.45)		108	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.982	1.971	0.011	0.775	560126	1.27		51.0	1605	
67 Perfluoro(2-propoxypropanoic) acid										M
329.10 > 285.00	1.982	1.972	0.010	1.000	412378	1.11		111	91.4	M

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	2.204	2.191	0.013	0.862	7086273	1.77		70.9	8380	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.204	2.191	0.013	1.000	3041823	1.01		101	74.8	
363.00 > 169.00	2.204	2.191	0.013	1.000	660041		4.61(2.17-6.52)		755	
D 11 18O2 PFHxS										
403.00 > 84.00	2.216	2.203	0.013	0.866	4641379	1.78		75.5	9390	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.216	2.216	0.0	1.000	2065675	0.8355		91.8	238	
399.00 > 99.00	2.216	2.216	0.0	1.000	570490		3.62(1.90-5.70)		323	
76 DONA										
377.00 > 251.00	2.241	2.241	0.0	0.764	5277138	1.08		115	10008	
377.00 > 85.00	2.253	2.241	0.012	0.769	2194292		2.40(1.13-3.39)		1158	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.528	2.513	0.015	0.988	655857	1.78		75.1	594	
D 73 13C8 PFOA										
421.00 > 376.00	2.543	2.528	0.015		5726	0.001664		0.0	23.9	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.528	2.528	0.0	1.000	541732	0.8990		94.8	1445	
D 14 13C4 PFOA										
417.00 > 372.00	2.558	2.543	0.015	1.000	6958410	1.90		76.0	9190	
* 62 13C2 PFOA										
415.00 > 370.00	2.558	2.543	0.015		9304673	2.50			12409	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.558	2.543	0.015	1.000	2899895	0.9637		96.4	164	M
413.00 > 169.00	2.558	2.543	0.015	1.000	1062021		2.73(1.36-4.08)		1563	M
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.573	2.558	0.015	0.878	2016003	1.08		113	982	
449.00 > 99.00	2.573	2.558	0.015	0.878	533569		3.78(1.84-5.53)		1255	
D 18 13C4 PFOS										
503.00 > 80.00	2.932	2.914	0.018	1.146	4290176	1.63		68.3	3345	
D 19 13C5 PFNA										
468.00 > 423.00	2.932	2.914	0.018	1.146	5765164	1.70		68.1	6512	
20 Perfluorononanoic acid										
463.00 > 419.00	2.932	2.914	0.018	1.000	2350081	1.02		102	245	
463.00 > 169.00	2.932	2.914	0.018	1.000	443960		5.29(2.68-8.03)		836	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.932	2.914	0.018	1.000	1889395	0.9774		105	605	
499.00 > 99.00	2.932	2.914	0.018	1.000	448303		4.21(2.04-6.12)		1054	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.139	3.124	0.015	1.071	1780011	0.8951		96.0	1930	
D 21 13C8 FOSA										
506.00 > 78.00	3.281	3.264	0.017	1.283	2392955	1.64		65.8	4418	
D 23 13C2 PFDA										
515.00 > 470.00	3.298	3.264	0.034	1.289	5438441	1.56		62.4	5275	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.281	3.264	0.017	1.283	66443	1.46		60.9	318	

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	3.281	3.264	0.017	1.000	394613	1.00	104	2447	
68 Perfluorononanesulfonic acid	549.00 > 80.00	3.281	3.264	0.017	1.119	950970	0.8635	90.0	1880	
	549.00 > 99.00	3.281	3.264	0.017	1.119	148531	6.40(3.02-9.05)		851	
22 Perfluorooctanesulfonamide	498.00 > 78.00	3.281	3.264	0.017	1.000	2866663	1.00	99.7	4655	
24 Perfluorodecanoic acid	513.00 > 469.00	3.298	3.281	0.017	1.000	2740395	1.16	116	432	
	513.00 > 169.00	3.298	3.281	0.017	1.000	165037	16.60(7.12-21.35)		932	
D 27 d3-NMeFOSAA	573.00 > 419.00	3.437	3.422	0.015	1.344	2353029	1.56	62.5	3109	
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	3.452	3.437	0.015	1.004	853517	0.9068	90.7	484	
33 N-ethylperfluorooctanesulfonamidoa	584.00 > 419.00	3.606	3.591	0.015	1.000	642172	1.00	100	1026	
29 Perfluorodecanesulfonic acid	599.00 > 80.00	3.606	3.591	0.015	1.230	1318652	0.8488	88.1	1124	
	599.00 > 99.00	3.606	3.591	0.015	1.230	289834	4.55(2.14-6.43)		1332	
D 32 d5-NEtFOSAA	589.00 > 419.00	3.606	3.591	0.015	1.410	1754688	1.43	57.2	2239	
D 30 13C2 PFUnA	565.00 > 520.00	3.606	3.591	0.015	1.410	4663927	1.60	64.1	7949	
31 Perfluoroundecanoic acid	563.00 > 519.00	3.606	3.607	-0.001	1.000	2083733	0.9824	98.2	433	
	563.00 > 169.00	3.606	3.607	-0.001	1.000	145877	14.28(5.24-15.72)		632	
66 11-Chloroeicosafuoro-3-oxaundecan	631.00 > 451.00	3.774	3.759	0.015	1.287	1726150	0.6935	73.6	3118	
74 1H,1H,2H,2H-perfluorododecanesulfo	627.00 > 607.00	3.899	3.883	0.016	1.188	202831	0.7230	75.0	503	
37 Perfluorododecanoic acid	613.00 > 569.00	3.899	3.883	0.016	1.000	1804344	1.00	100	428	
	613.00 > 169.00	3.899	3.883	0.016	1.000	184688	9.77(4.68-14.05)		401	
D 36 13C2 PFDaA	615.00 > 570.00	3.899	3.883	0.016	1.524	4412808	1.23	49.2	6102	
75 Perfluorododecanesulfonic acid (PF	699.00 > 80.00	4.129	4.129	0.0	1.409	116507	0.6737	69.6	455	
	699.00 > 99.00	4.129	4.129	0.0	1.409	237654	0.49(0.28-0.83)		763	
41 Perfluorotridecanoic acid	663.00 > 619.00	4.160	4.145	0.015	1.067	1374120	0.9522	95.2	594	
	663.00 > 169.00	4.160	4.145	0.015	1.067	255420	5.38(3.09-9.27)		767	
42 Perfluorotetradecanoic acid	713.00 > 169.00	4.396	4.381	0.015	1.000	247568	0.9204	92.0	995	
	713.00 > 219.00	4.396	4.381	0.015	1.000	161289	1.53(0.70-2.09)		469	
D 43 13C2 PFTeDA	715.00 > 670.00	4.396	4.381	0.015	1.719	3677883	1.37	54.9	6375	

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	4.803	4.786	0.017	1.000	1468194	1.04		104	680	
813.00 > 169.00	4.803	4.786	0.017	1.000	260517		5.64(2.77-8.32)		896	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.803	4.786	0.017	1.878	3829500	1.44		57.5	5773	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.129	5.129	0.0	1.068	888433	1.17		117	637	
913.00 > 169.00	5.129	5.129	0.0	1.068	197447		4.50(2.55-7.64)		2135	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_011.d

Injection Date: 09-Nov-2018 08:25:48

Instrument ID: A9

Lims ID: 480-144297-F-6-A MS

Client ID: GMW-2

Operator ID: A9\Administrator

ALS Bottle#: 5

Worklist Smp#: 8

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

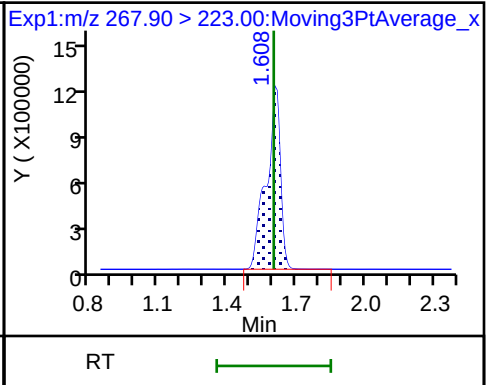
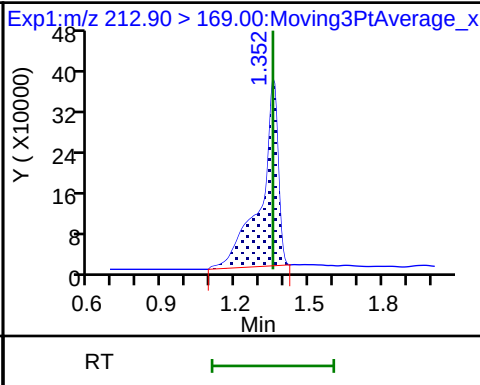
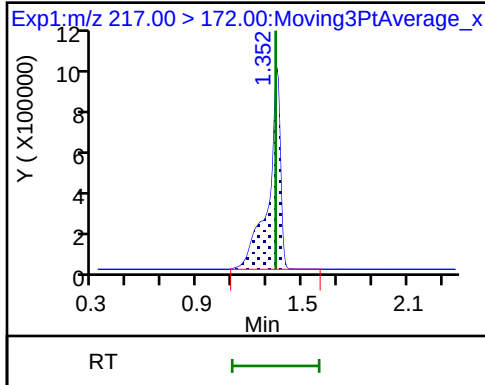
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

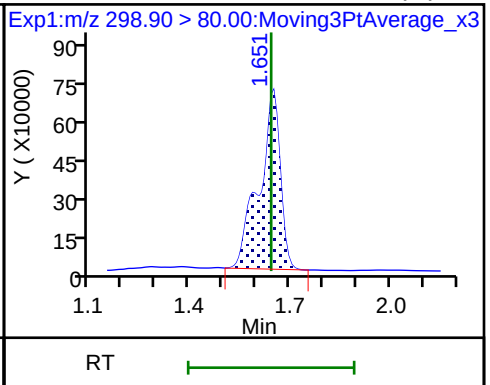
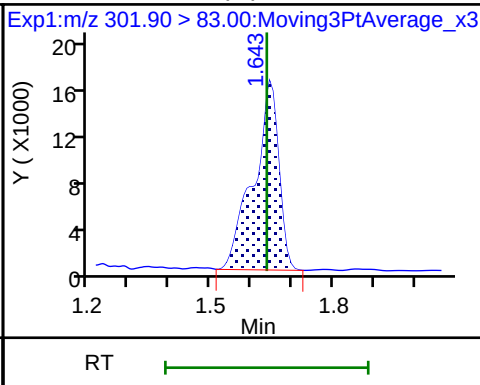
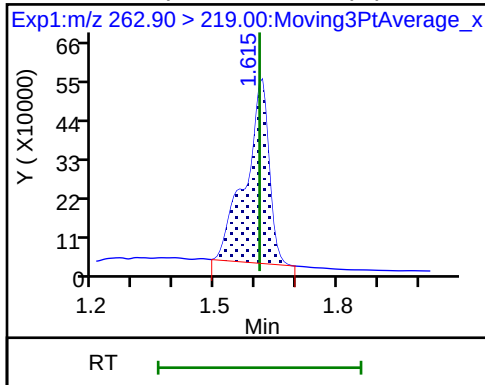
D 3 13C5 PFPeA (M)



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS (M)

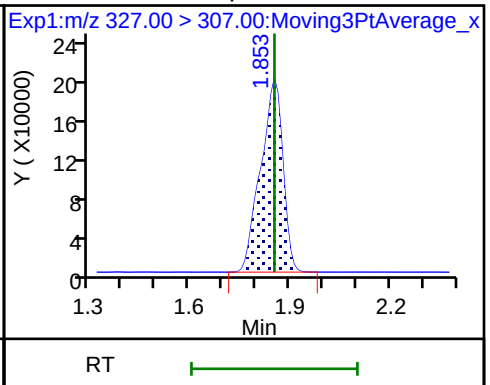
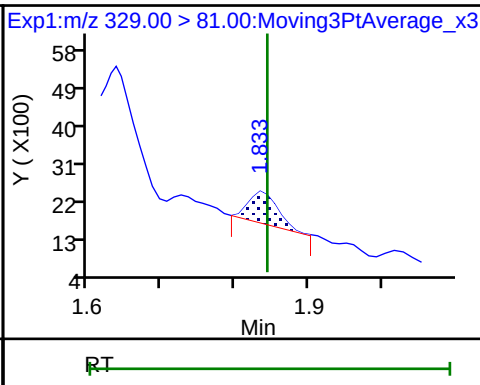
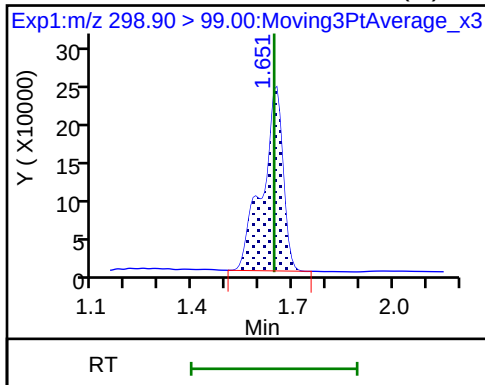
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid (M)

D 60 M2-4:2 FTS

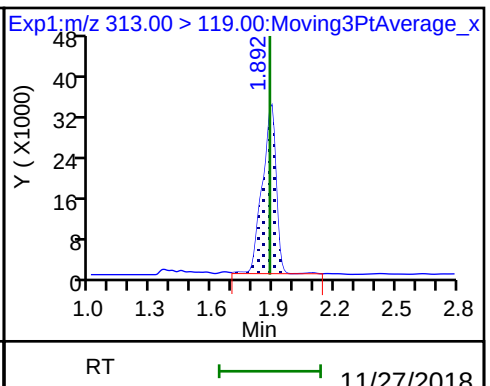
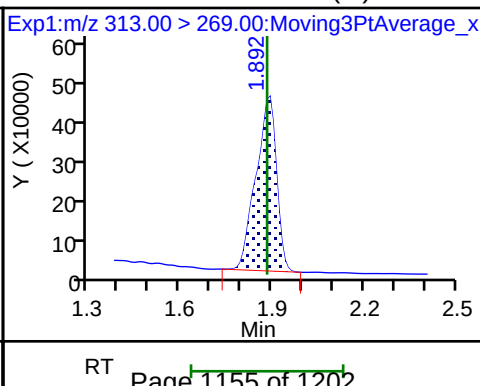
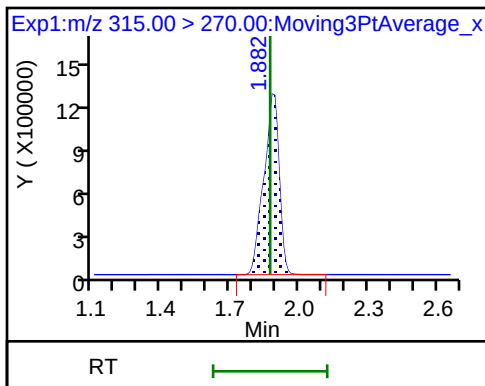
61 1H,1H,2H,2H-perfluorohexanesulfoni

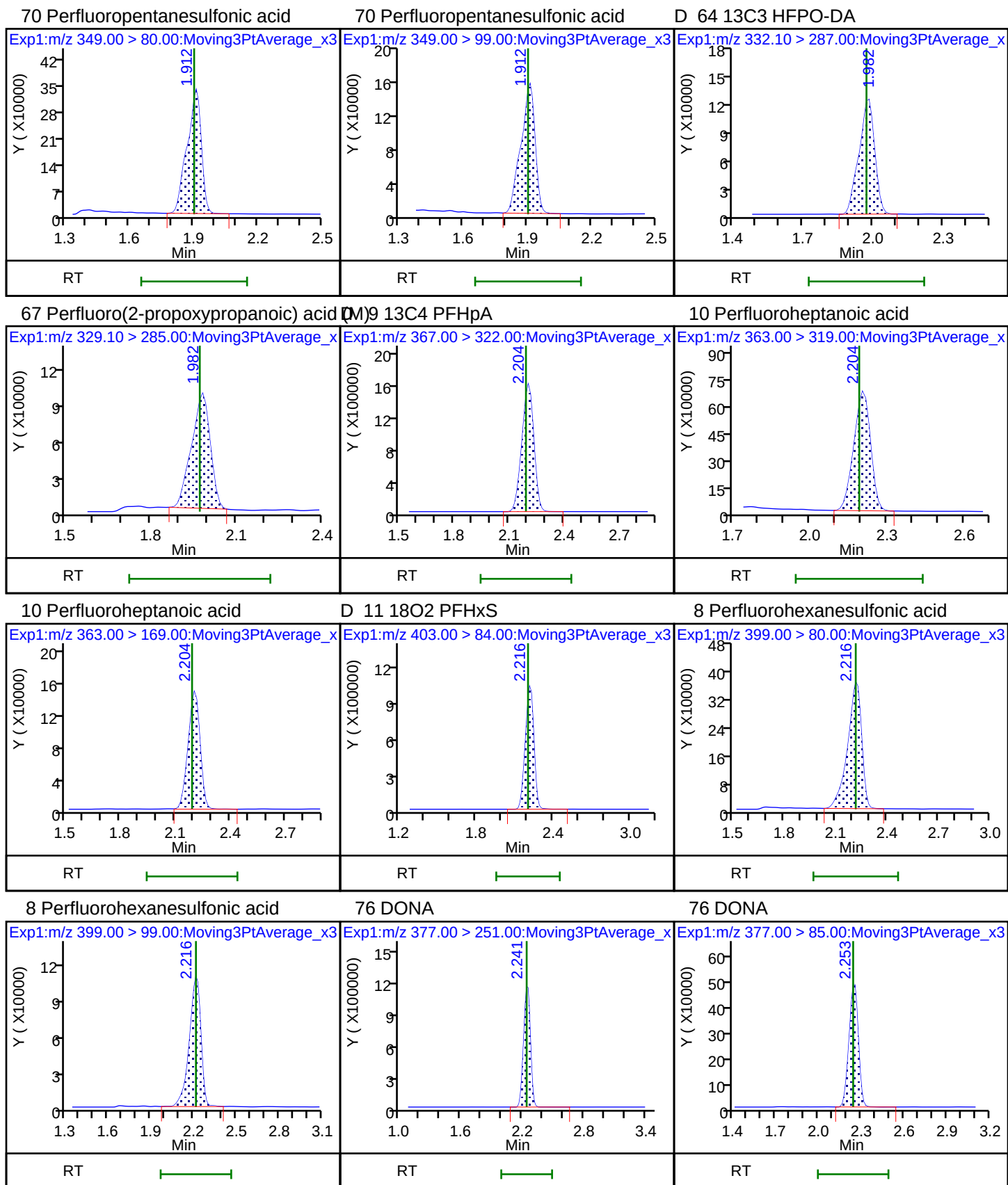


D 7 13C2 PFHxA

6 Perfluorohexanoic acid (M)

6 Perfluorohexanoic acid

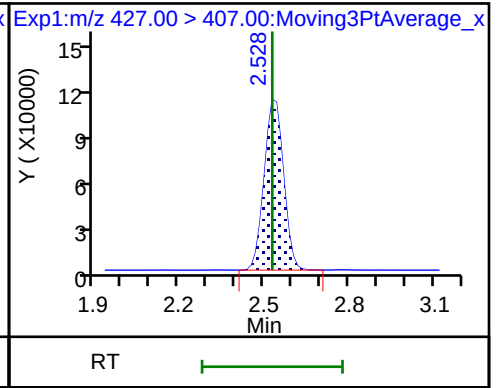
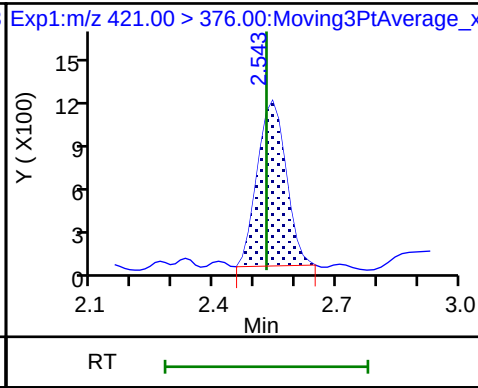
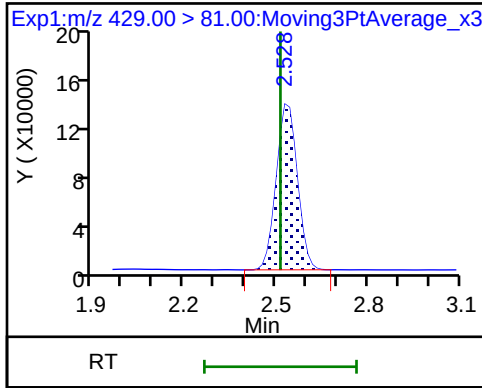




D 12 M2-6:2 FTS

D 73 13C8 PFOA

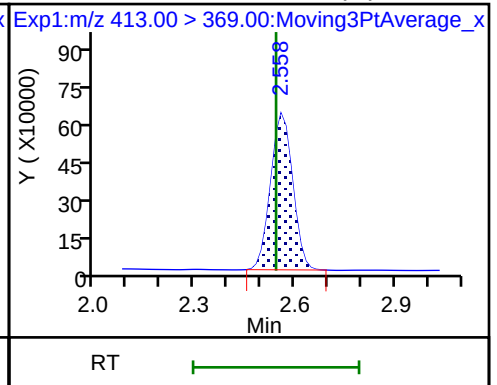
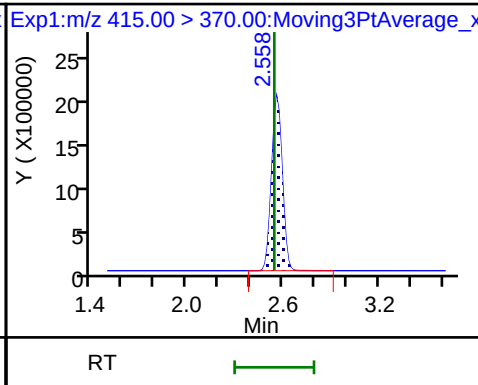
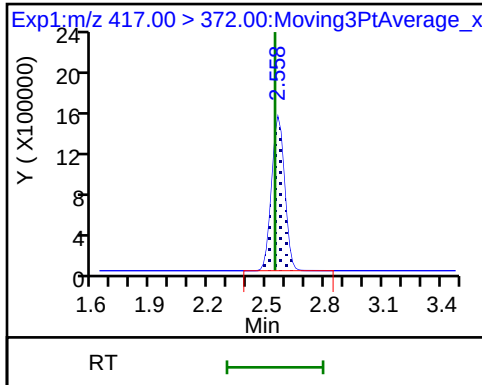
13 1H,1H,2H,2H-perfluorooctanesulfoni



D 14 13C4 PFOA

* 62 13C2 PFOA

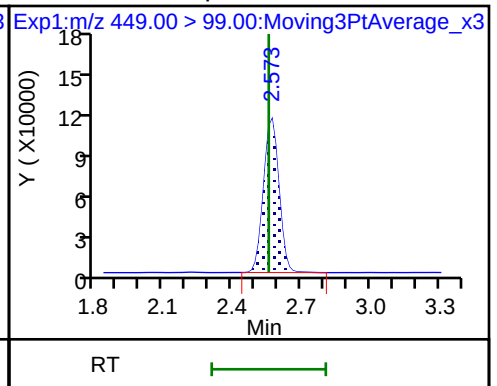
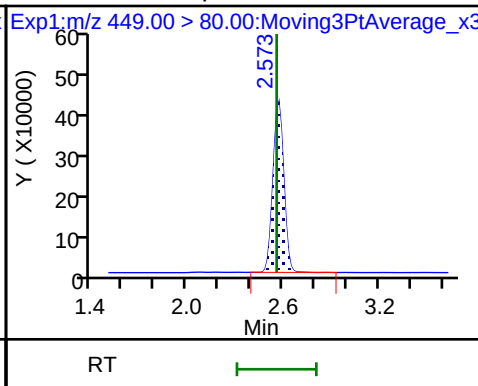
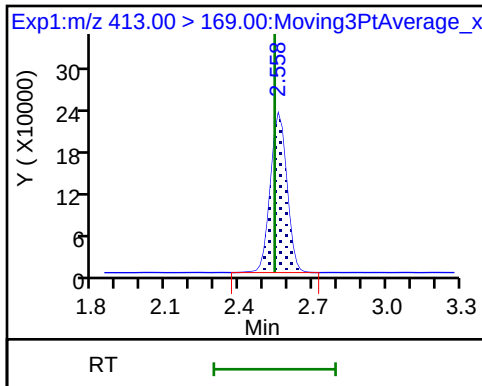
15 Perfluorooctanoic acid (M)



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

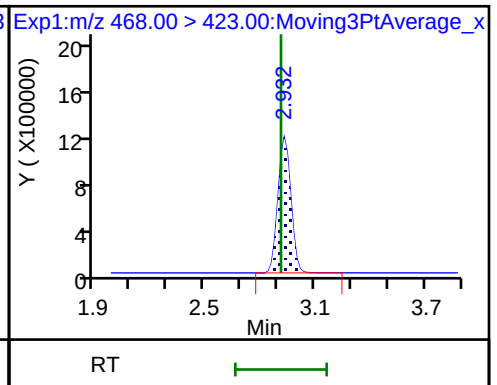
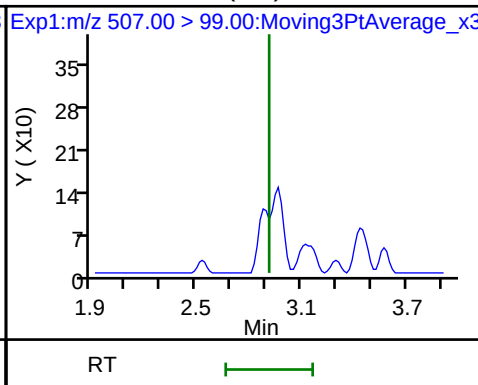
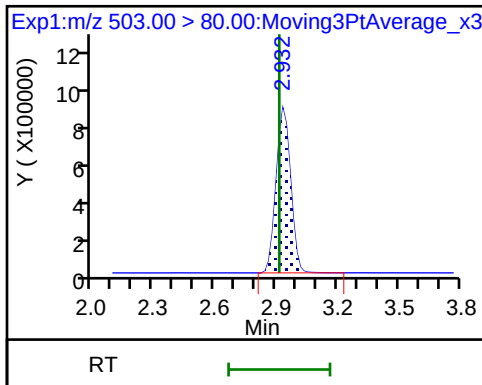
16 Perfluoroheptanesulfonic acid

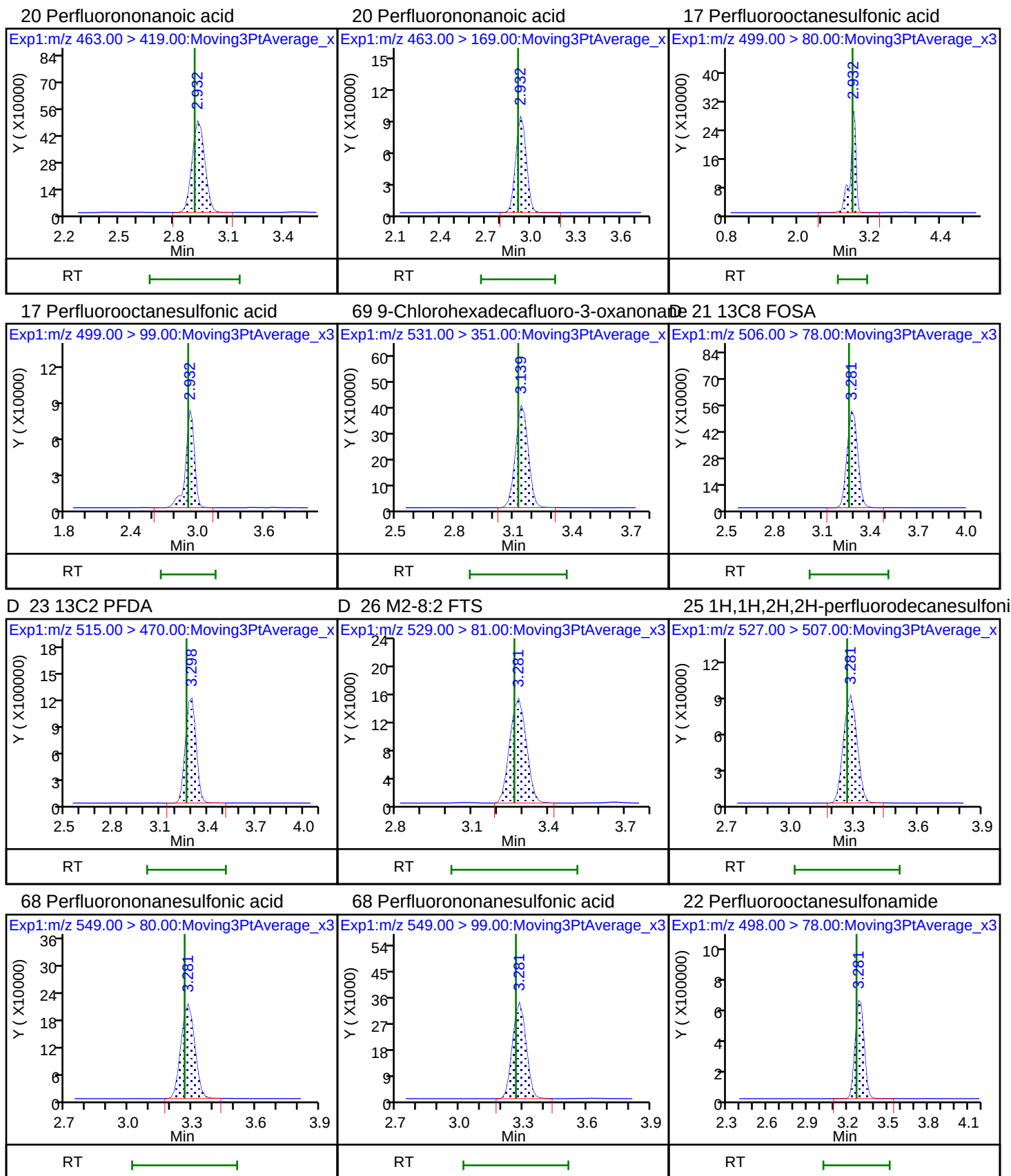


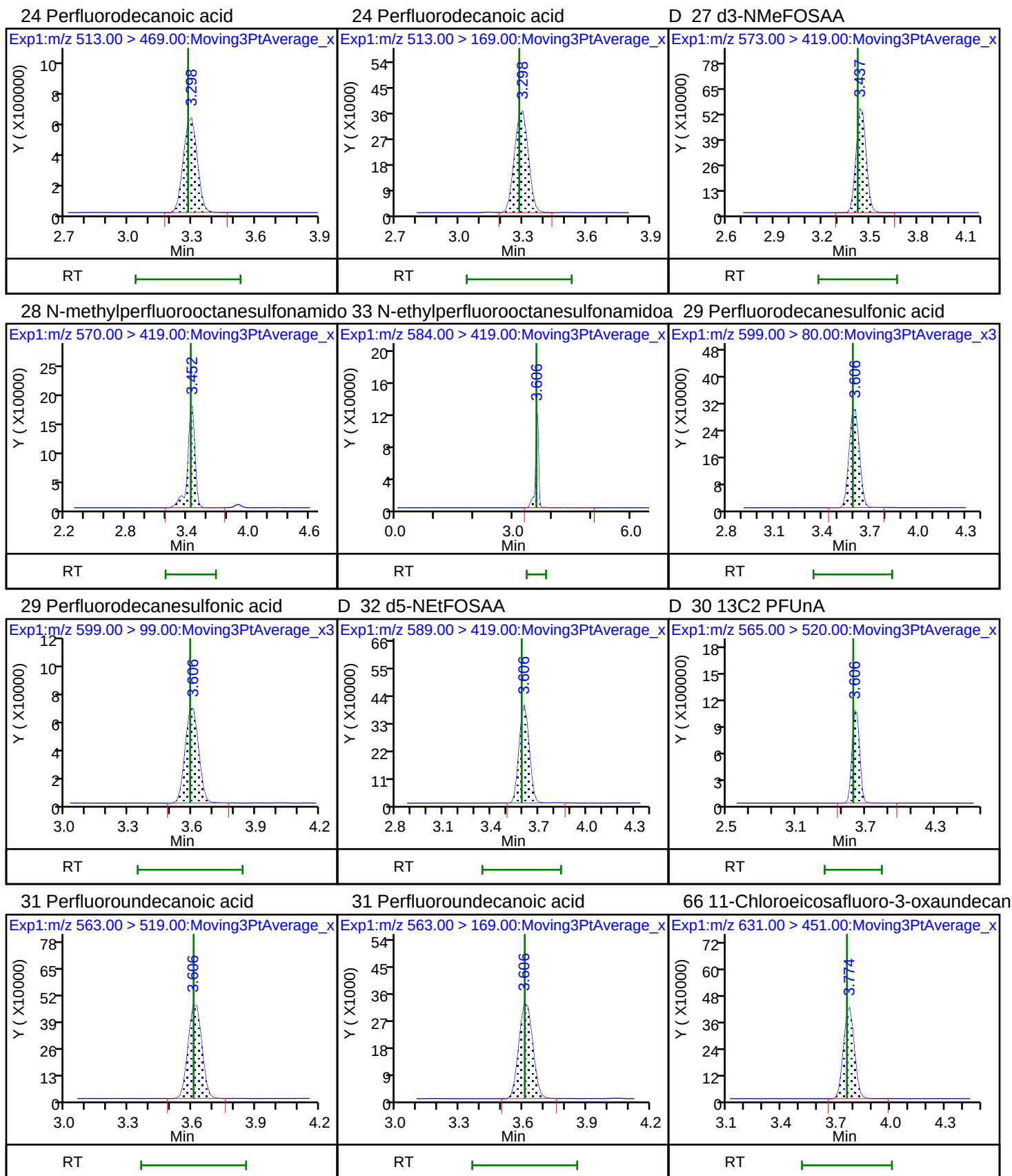
D 18 13C4 PFOS

D 72 13C8 PFOS (ND)

D 19 13C5 PFNA

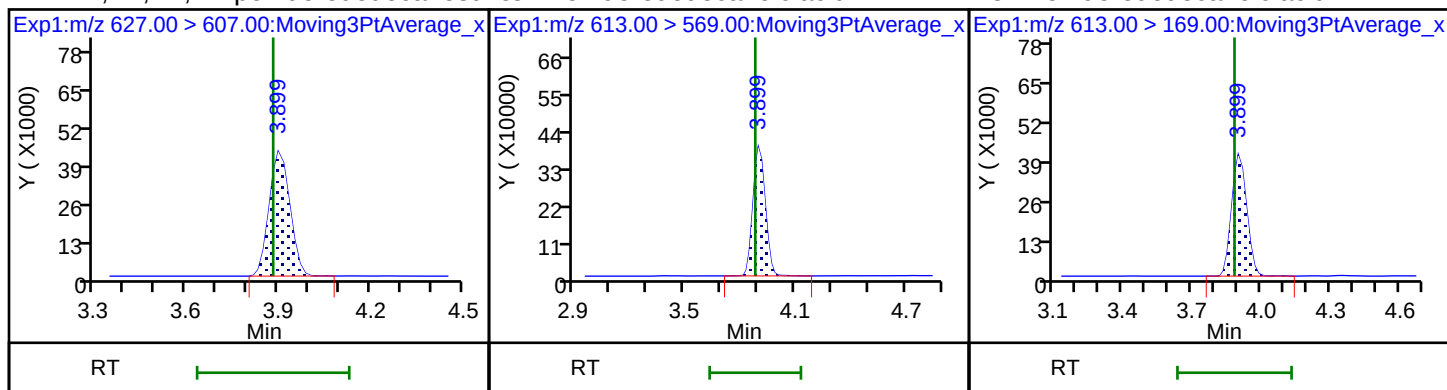






74 1H,1H,2H,2H-perfluorododecanesulfo37 Perfluorododecanoic acid

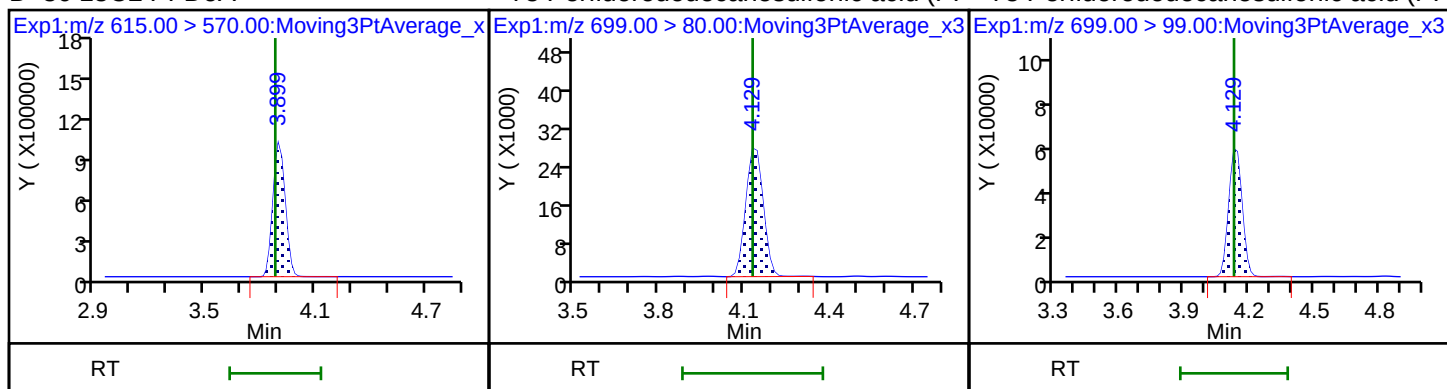
37 Perfluorododecanoic acid



D 36 13C2 PFDa

75 Perfluorododecanesulfonic acid (PF

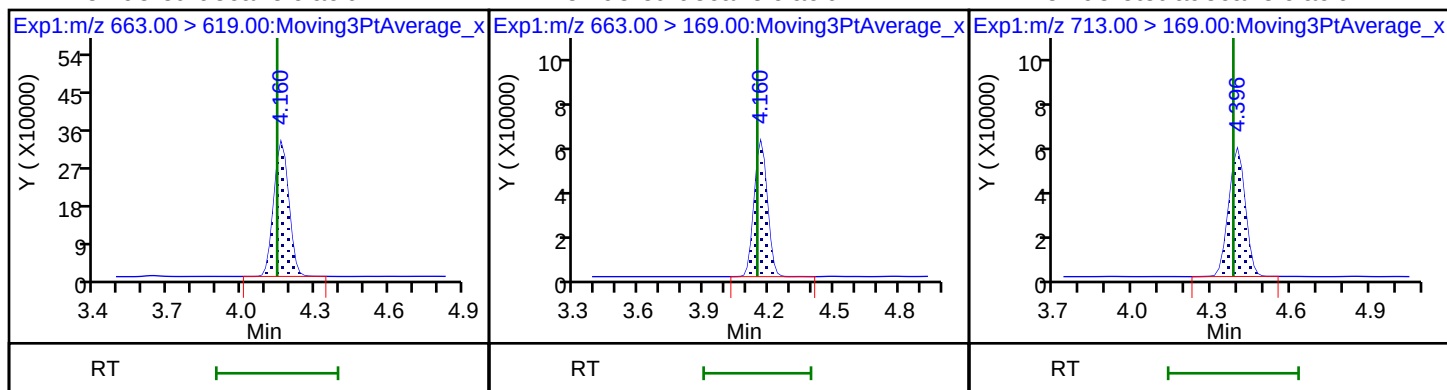
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

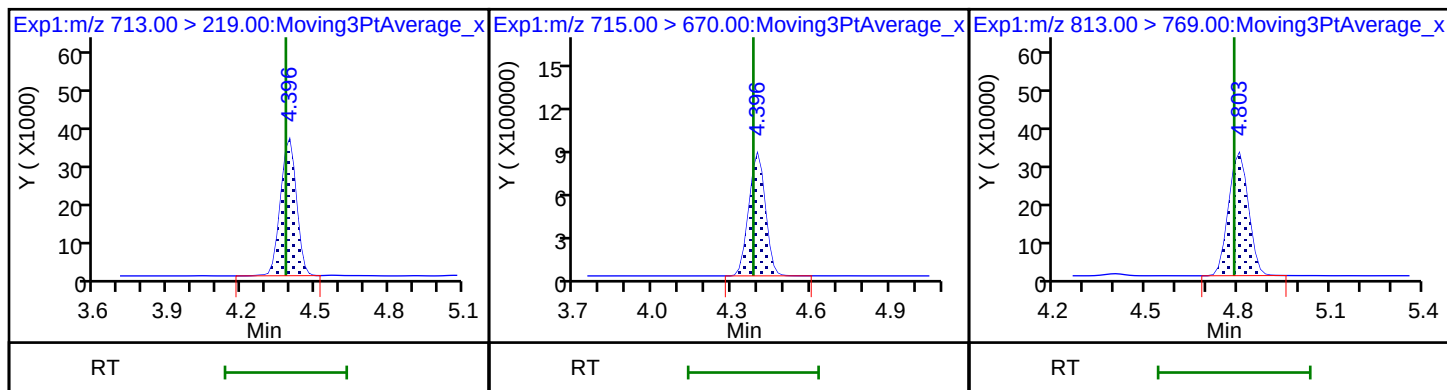
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

45 Perfluorohexadecanoic acid

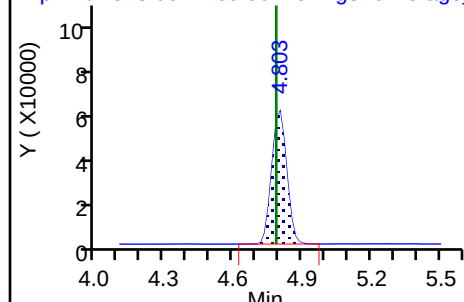


45 Perfluorohexadecanoic acid

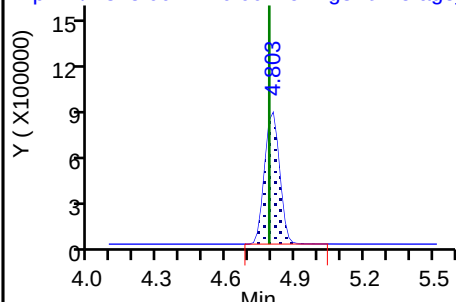
D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid

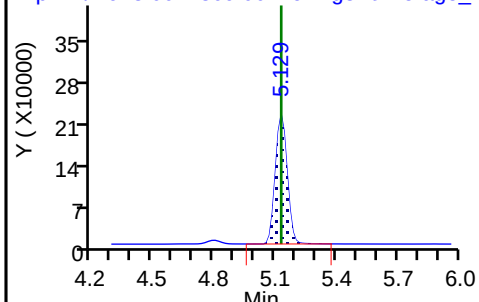
Exp1:m/z 813.00 > 169.00:Moving3PtAverage_x



Exp1:m/z 815.00 > 770.00:Moving3PtAverage_x

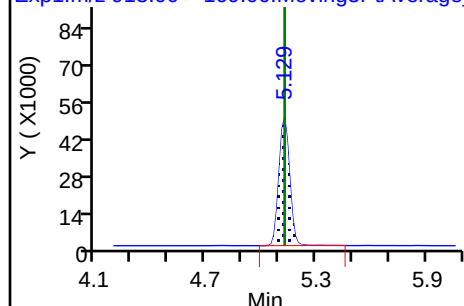


Exp1:m/z 913.00 > 869.00:Moving3PtAverage_x



46 Perfluorooctadecanoic acid

Exp1:m/z 913.00 > 169.00:Moving3PtAverage_x



TestAmerica Sacramento

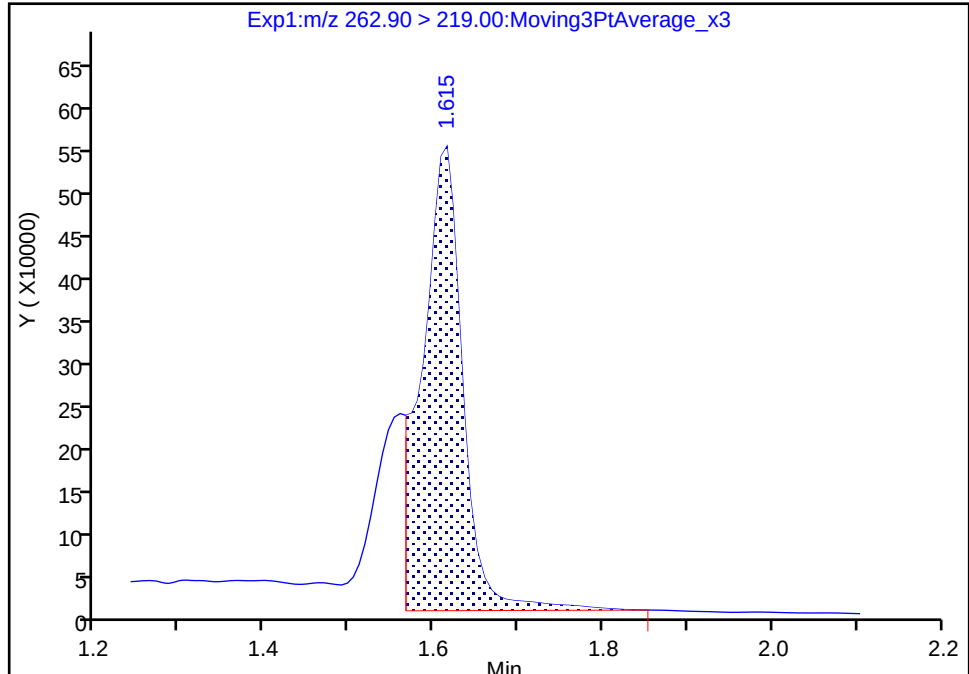
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_011.d
Injection Date: 09-Nov-2018 08:25:48 Instrument ID: A9
Lims ID: 480-144297-F-6-A MS
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

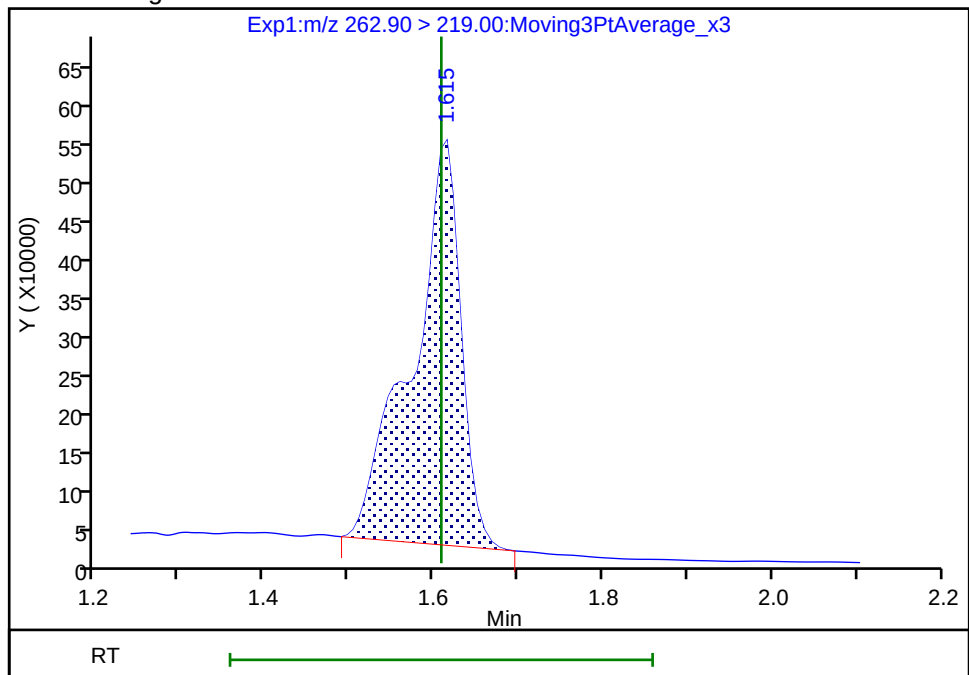
RT: 1.62
Area: 1792874
Amount: 0.887319
Amount Units: ng/ml

Processing Integration Results



RT: 1.62
Area: 2094186
Amount: 1.036442
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:13:57

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

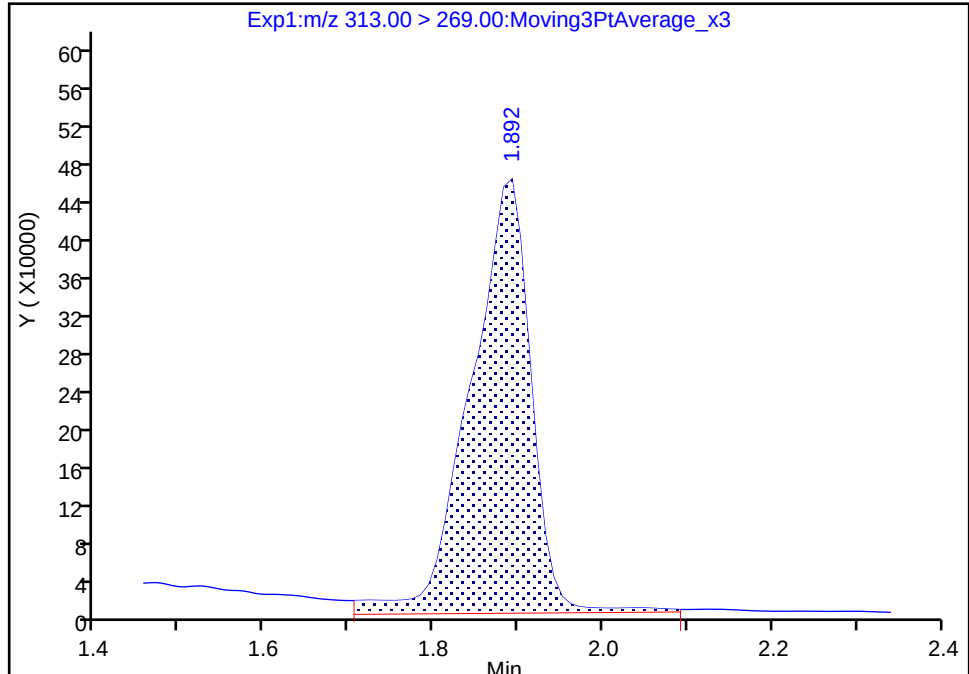
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_011.d
Injection Date: 09-Nov-2018 08:25:48 Instrument ID: A9
Lims ID: 480-144297-F-6-A MS
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

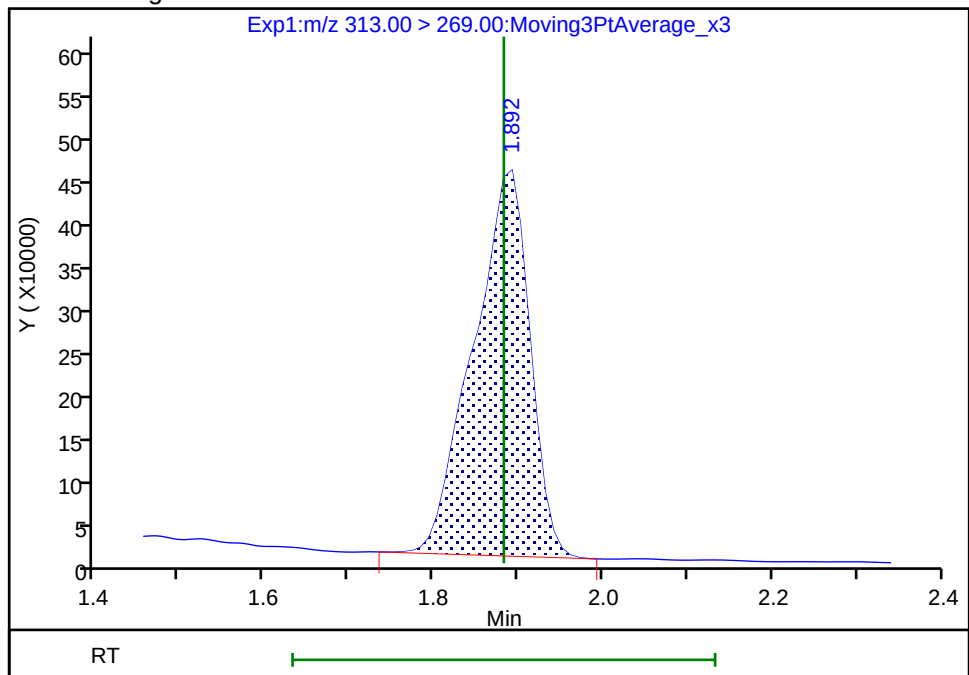
RT: 1.89
Area: 2261144
Amount: 1.075661
Amount Units: ng/ml

Processing Integration Results



RT: 1.89
Area: 2063500
Amount: 0.981639
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:14:16
Audit Action: Manually Integrated

Audit Reason: Baseline
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TestAmerica Sacramento

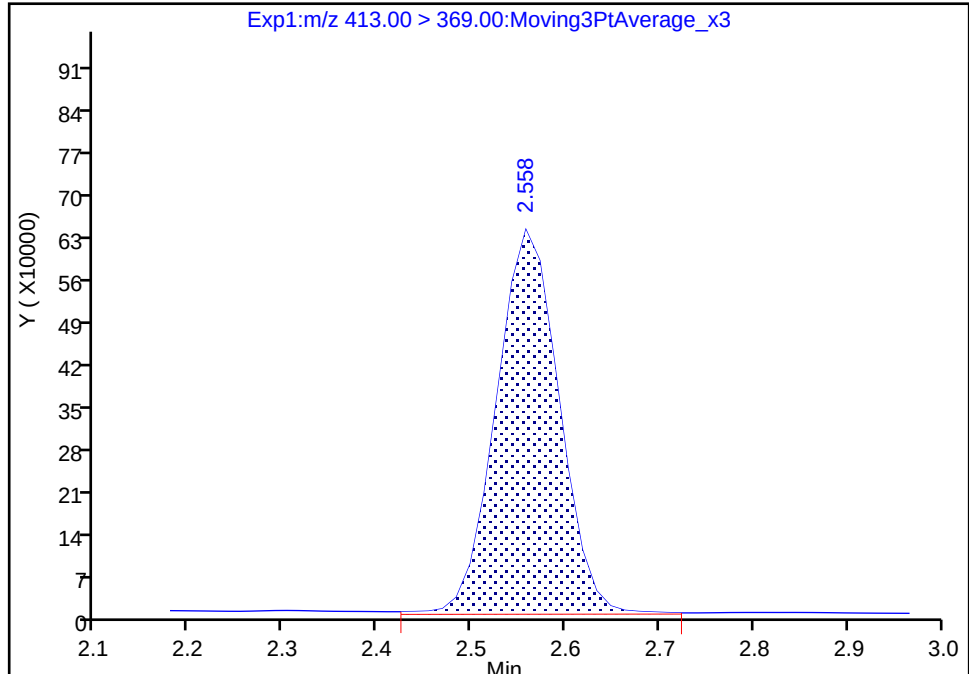
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_011.d
Injection Date: 09-Nov-2018 08:25:48 Instrument ID: A9
Lims ID: 480-144297-F-6-A MS
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

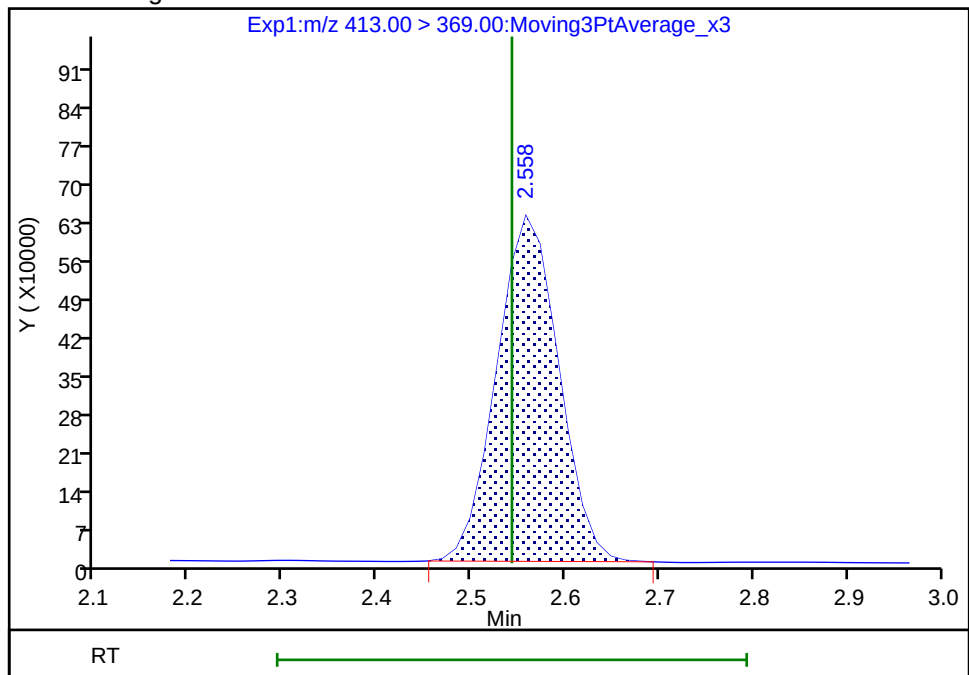
RT: 2.56
Area: 2974550
Amount: 0.988514
Amount Units: ng/ml

Processing Integration Results



RT: 2.56
Area: 2899895
Amount: 0.963704
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:14:34
Audit Action: Manually Integrated

Audit Reason: Baseline
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TestAmerica Sacramento

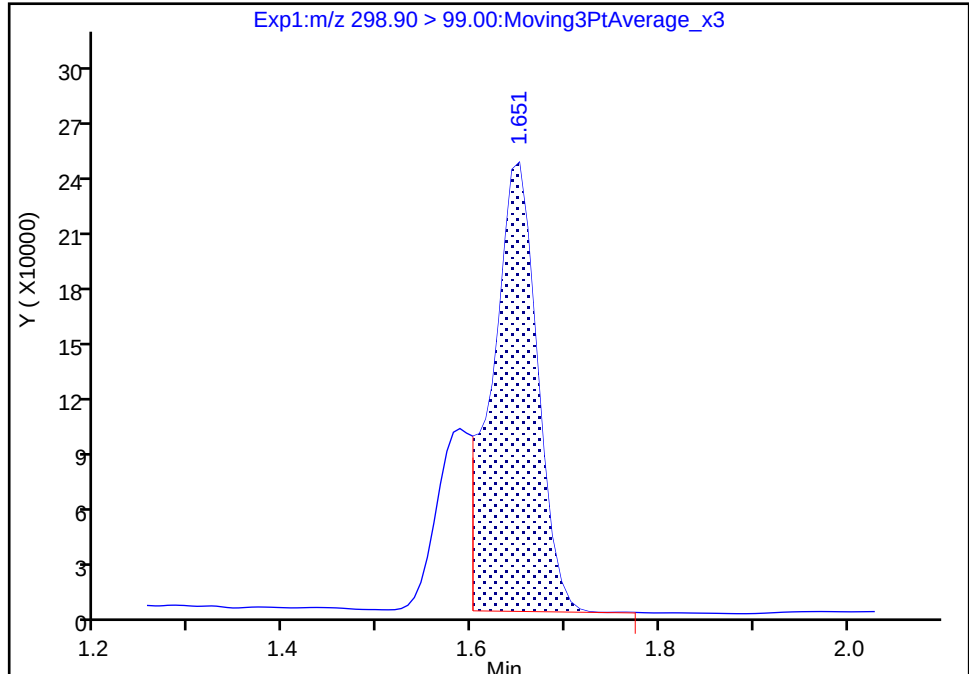
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_011.d
Injection Date: 09-Nov-2018 08:25:48 Instrument ID: A9
Lims ID: 480-144297-F-6-A MS
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

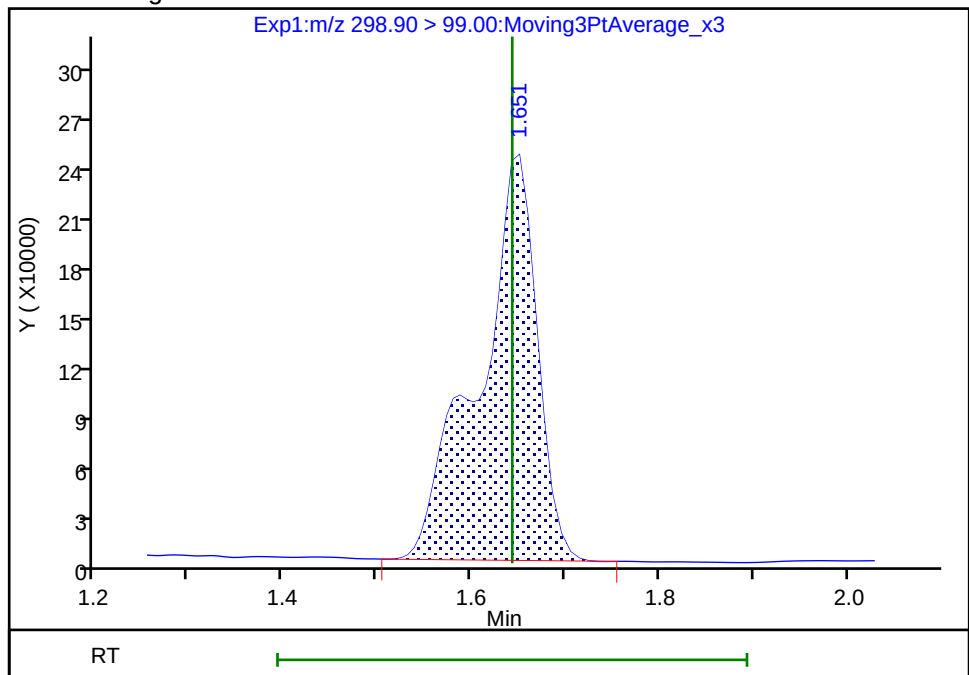
RT: 1.65
Area: 791327
Amount: 0.754156
Amount Units: ng/ml

Processing Integration Results



RT: 1.65
Area: 1034759
Amount: 1.016247
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:14:03
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

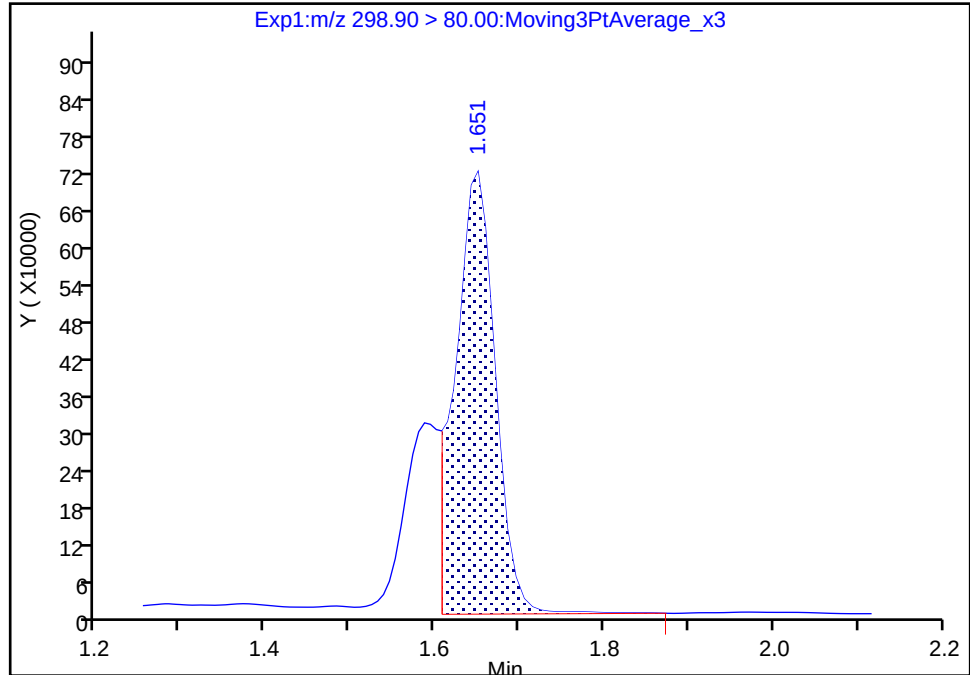
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_011.d
Injection Date: 09-Nov-2018 08:25:48 Instrument ID: A9
Lims ID: 480-144297-F-6-A MS
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

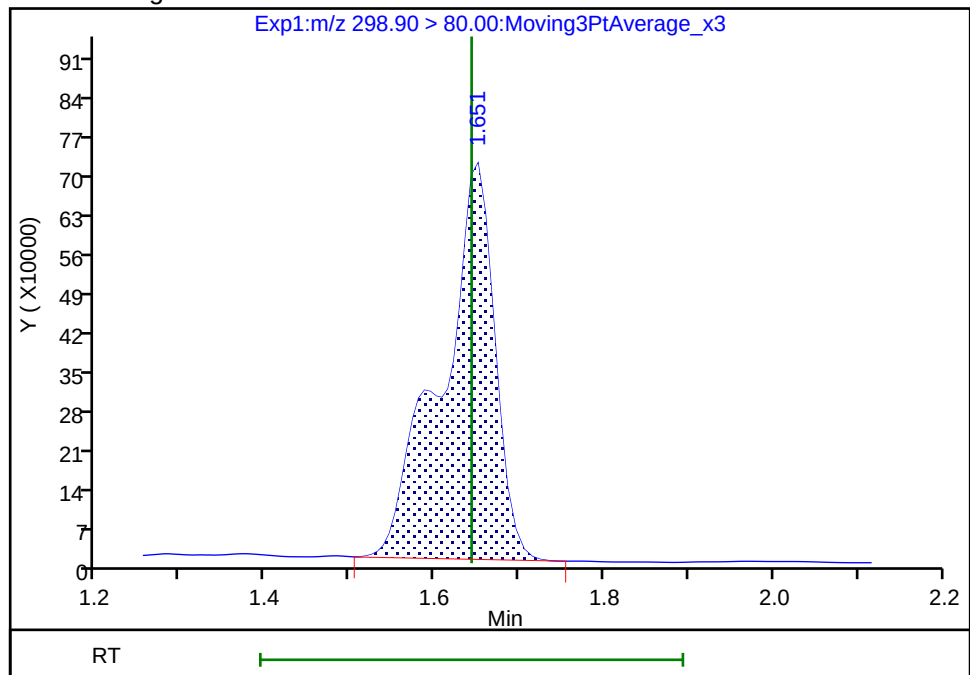
RT: 1.65
Area: 2292124
Amount: 0.754156
Amount Units: ng/ml

Processing Integration Results



RT: 1.65
Area: 3088703
Amount: 1.016247
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:14:06

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

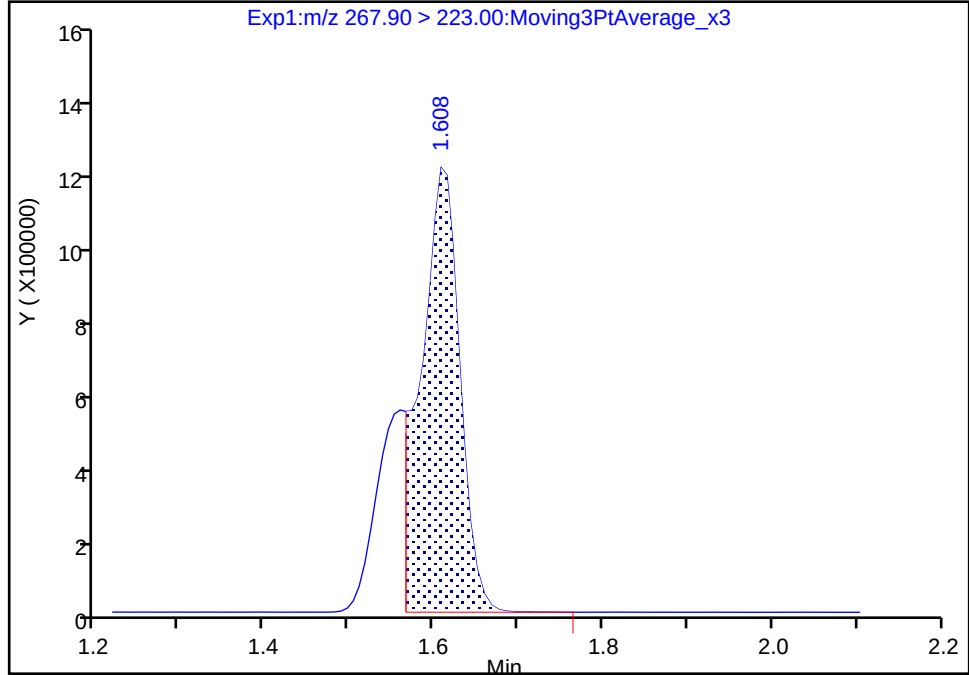
Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_011.d
Injection Date: 09-Nov-2018 08:25:48 Instrument ID: A9
Lims ID: 480-144297-F-6-A MS
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 5 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

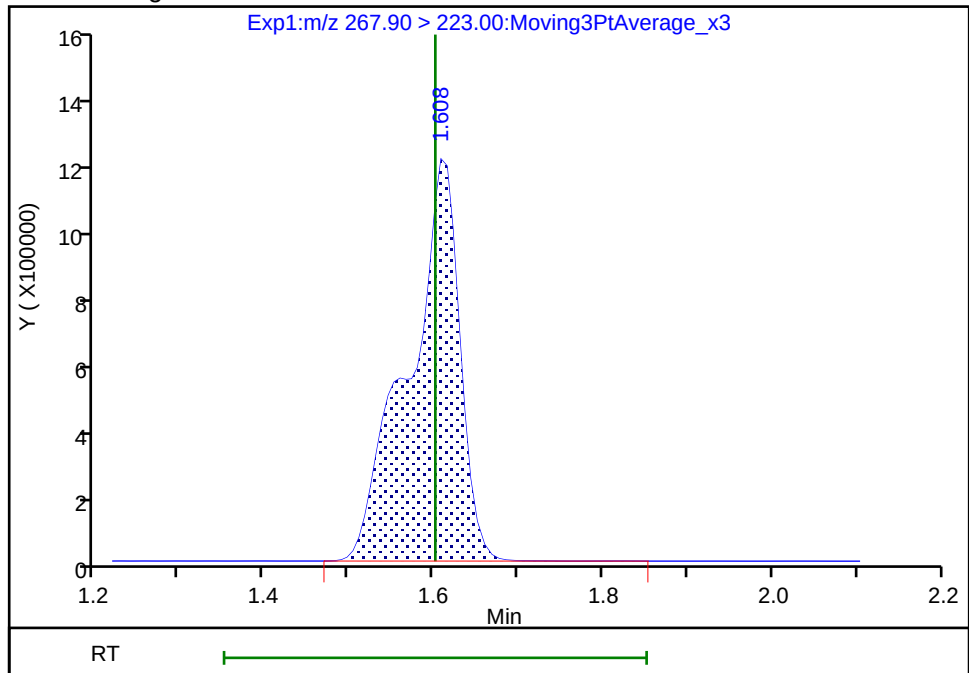
RT: 1.61
Area: 3767989
Amount: 1.168422
Amount Units: ng/ml

Processing Integration Results



RT: 1.61
Area: 5046041
Amount: 1.564736
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:13:33
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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TestAmerica Sacramento

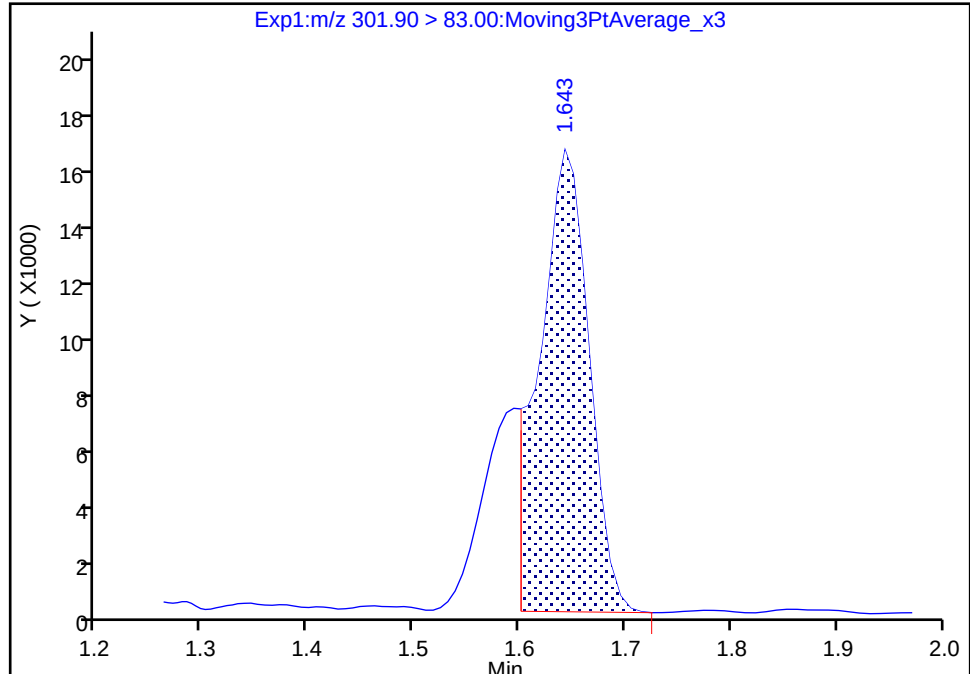
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_011.d		
Injection Date:	09-Nov-2018 08:25:48	Instrument ID:	A9
Lims ID:	480-144297-F-6-A MS		
Client ID:	GMW-2		
Operator ID:	A9\Administrator	ALS Bottle#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000
Method:	PFAS_A9	Limit Group:	LC PFC ICAL
Column:		Detector:	EXP1
		Worklist Smp#:	8

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

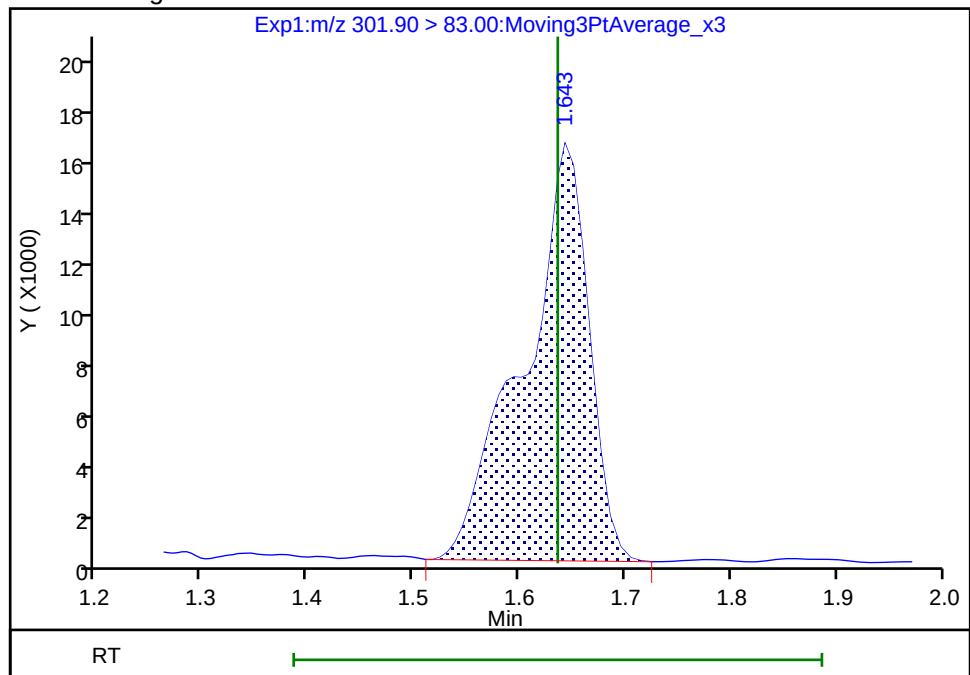
RT: 1.64
Area: 51291
Amount: 1.150704
Amount Units: ng/ml

Processing Integration Results



RT: 1.64
Area: 68433
Amount: 1.535282
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:13:39

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GMW-2 MSD</u>	Lab Sample ID: <u>480-144297-6 MSD</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_012.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/24/2018 12:15</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>298.8 (mL)</u>	Date Analyzed: <u>11/09/2018 08:33</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	38.1		1.7	0.29
2706-90-3	Perfluoropentanoic acid (PFPeA)	34.2		1.7	0.41
307-24-4	Perfluorohexanoic acid (PFHxA)	31.9		1.7	0.49
375-85-9	Perfluoroheptanoic acid (PFHpA)	33.6		1.7	0.21
335-67-1	Perfluorooctanoic acid (PFOA)	36.5		1.7	0.71
375-95-1	Perfluorononanoic acid (PFNA)	32.8		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	35.4		1.7	0.26
2058-94-8	Perfluoroundecanoic acid (PFUnA)	33.5		1.7	0.92
307-55-1	Perfluorododecanoic acid (PFDoA)	31.5		1.7	0.46
72629-94-8	Perfluorotridecanoic acid (PFTriA)	31.1		1.7	1.1
376-06-7	Perfluorotetradecanoic acid (PFTeA)	31.5		1.7	0.24
375-73-5	Perfluorobutanesulfonic acid (PFBS)	33.2		1.7	0.17
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	29.5		1.7	0.14
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	36.9		1.7	0.16
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	29.9		1.7	0.45
335-77-3	Perfluorodecanesulfonic acid (PFDS)	24.9		1.7	0.27
754-91-6	Perfluorooctanesulfonamide (FOSA)	33.3		1.7	0.29
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	32.3		17	2.6
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	34.7		17	1.6
27619-97-2	6:2 FTS	30.8		17	1.7
39108-34-4	8:2 FTS	32.8		17	1.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Sacramento</u>	Job No.: <u>480-144297-1</u>
SDG No.: _____	
Client Sample ID: <u>GMW-2 MSD</u>	Lab Sample ID: <u>480-144297-6 MSD</u>
Matrix: <u>Water</u>	Lab File ID: <u>2018.11.08LLC_012.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>10/24/2018 12:15</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>11/07/2018 07:22</u>
Sample wt/vol: <u>298.8 (mL)</u>	Date Analyzed: <u>11/09/2018 08:33</u>
Con. Extract Vol.: <u>10.00 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>Acquity</u> ID: <u>2.1 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>258039</u>	Units: <u>ng/L</u>

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00992	13C4 PFBA	49		25-150
STL01893	13C5-PFPeA DNU	61		25-150
STL00993	13C2 PFHxA	67		25-150
STL01892	13C4 PFHpA	73		25-150
STL00990	13C4 PFOA	70		25-150
STL00995	13C5 PFNA	69		25-150
STL00996	13C2 PFDA	61		25-150
STL00997	13C2 PFUnA	56		25-150
STL00998	13C2 PFDoA	50		25-150
STL02116	13C2 PFTeDA	49		25-150
STL02337	13C3 PFBS	65		25-150
STL00994	18O2 PFHxS	70		25-150
STL00991	13C4 PFOS	68		25-150
STL01056	13C8 FOSA	63		25-150
STL02118	d3-NMeFOSAA	53		25-150
STL02117	d5-NEtFOSAA	49		25-150
STL02279	M2-6:2 FTS	75		25-150
STL02280	M2-8:2 FTS	58		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_012.d
 Lims ID: 480-144297-F-6-B MSD
 Client ID: GMW-2
 Sample Type: MSD
 Inject. Date: 09-Nov-2018 08:33:22 ALS Bottle#: 6 Worklist Smp#: 9
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 480-144297-f-6-b msd
 Misc. Info.: Plate: 1 Rack: 4
 Operator ID: A9\Administrator Instrument ID: A9
 Method: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\PFAS_A9.m
 Limit Group: LC PFC ICAL
 Last Update: 12-Nov-2018 12:16:41 Calib Date: 30-Oct-2018 13:57:50
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A9\20181030-66806.b\2018.10.30ICALA_008.d
 Column 1 : Det: EXP1
 Process Host: CTX0318

First Level Reviewer: mongkols

Date: 12-Nov-2018 12:16:41

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	1.359	1.346	0.013	0.528	3957046	1.21		48.5	4738	
2 Perfluorobutanoic acid										
212.90 > 169.00	1.366	1.352	0.014	1.005	1686168	1.14		114	59.6	
D 3 13C5 PFPeA										M
267.90 > 223.00	1.623	1.601	0.022	0.631	4705532	1.52		60.6	3562	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	1.623	1.609	0.014	1.000	1927690	1.02		102	143	M
D 47 13C3 PFBS										M
301.90 > 83.00	1.651	1.636	0.015	0.642	65278	1.52		65.4	108	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	1.660	1.643	0.017	1.005	2871990	0.99		112	89.5	M
298.90 > 99.00	1.660	1.643	0.017	1.005	988394		2.91(1.35-4.05)		111	M
D 60 M2-4:2 FTS										
329.00 > 81.00	1.843	1.843	0.0	0.717	2229	0.006468		0.0	0.2	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	1.863	1.853	0.010	1.128	865233	1.50		161	3264	
D 7 13C2 PFHxA										
315.00 > 270.00	1.902	1.873	0.029	0.739	5493798	1.68		67.1	6073	
6 Perfluorohexanoic acid										M
313.00 > 269.00	1.902	1.883	0.020	1.000	1883023	0.9524		95.2	29.7	M
313.00 > 119.00	1.902	1.883	0.020	1.000	148474		12.68(6.96-20.87)		107	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	1.922	1.902	0.020	1.164	1449339	1.08		115	112	
349.00 > 99.00	1.922	1.902	0.020	1.164	665797		2.18(1.15-3.45)		108	
D 64 13C3 HFPO-DA										
332.10 > 287.00	1.993	1.971	0.022	0.775	597685	1.41		56.5	1359	
67 Perfluoro(2-propoxypropanoic) acid										M
329.10 > 285.00	1.993	1.972	0.021	1.000	395771	1.00		99.6	85.0	M

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	2.216	2.191	0.025	0.861	7018142	1.82		72.9	9865	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.216	2.191	0.025	1.000	2992060	1.00		100	69.9	
363.00 > 169.00	2.216	2.191	0.025	1.000	652466		4.59(2.17-6.52)		785	
D 11 18O2 PFHxS										
403.00 > 84.00	2.229	2.203	0.026	0.866	4172250	1.67		70.5	7166	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.229	2.216	0.013	1.000	1959938	0.8819		96.9	212	
399.00 > 99.00	2.229	2.216	0.013	1.000	554867		3.53(1.90-5.70)		284	
76 DONA										
377.00 > 251.00	2.254	2.241	0.013	0.764	4879431	1.04		111	7842	
377.00 > 85.00	2.254	2.241	0.013	0.764	2143593		2.28(1.13-3.39)		1203	
D 12 M2-6:2 FTS										
429.00 > 81.00	2.543	2.513	0.030	0.989	629934	1.78		74.9	532	
D 73 13C8 PFOA										
421.00 > 376.00	2.573	2.528	0.045		4306	0.001251		0.0	12.6	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	2.543	2.528	0.015	1.000	531929	0.9191		97.0	1322	
D 14 13C4 PFOA										
417.00 > 372.00	2.573	2.543	0.030	1.000	6188676	1.76		70.2	10976	
* 62 13C2 PFOA										
415.00 > 370.00	2.573	2.543	0.030		8957665	2.50			10616	
15 Perfluorooctanoic acid										
413.00 > 369.00	2.573	2.543	0.030	1.000	2917636	1.09		109	170	
413.00 > 169.00	2.573	2.543	0.030	1.000	994070		2.94(1.36-4.08)		1954	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	2.573	2.558	0.015	0.872	1975140	1.10		116	1018	
449.00 > 99.00	2.573	2.558	0.015	0.872	465226		4.25(1.84-5.53)		1068	
D 18 13C4 PFOS										
503.00 > 80.00	2.949	2.914	0.035	1.146	4116124	1.63		68.0	2632	
D 19 13C5 PFNA										
468.00 > 423.00	2.949	2.914	0.035	1.146	5602946	1.72		68.8	6277	
20 Perfluorononanoic acid										
463.00 > 419.00	2.949	2.914	0.035	1.000	2196769	0.9791		97.9	226	
463.00 > 169.00	2.949	2.914	0.035	1.000	401760		5.47(2.68-8.03)		821	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	2.949	2.914	0.035	1.000	1659750	0.8949		96.4	534	
499.00 > 99.00	2.949	2.914	0.035	1.000	398103		4.17(2.04-6.12)		1051	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.155	3.124	0.031	1.070	1648112	0.8639		92.7	1375	
D 21 13C8 FOSA										
506.00 > 78.00	3.298	3.264	0.034	1.282	2195172	1.57		62.7	4513	
D 23 13C2 PFDA										
515.00 > 470.00	3.298	3.264	0.034	1.282	5113102	1.52		60.9	6288	
D 26 M2-8:2 FTS										
529.00 > 81.00	3.281	3.264	0.017	1.275	60610	1.38		57.7	309	

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	3.298	3.264	0.034	1.005	354258	0.9805	102	1716	
68 Perfluorononanesulfonic acid	549.00 > 80.00	3.281	3.264	0.017	1.113	825236	0.7811	81.4	1655	
	549.00 > 99.00	3.281	3.264	0.017	1.113	138600	5.95(3.02-9.05)		689	
22 Perfluorooctanesulfonamide	498.00 > 78.00	3.298	3.264	0.034	1.000	2621245	0.99	99.4	3734	
24 Perfluorodecanoic acid	513.00 > 469.00	3.298	3.281	0.017	1.000	2347605	1.06	106	370	
	513.00 > 169.00	3.298	3.281	0.017	1.000	143733	16.33(7.12-21.35)		478	
D 27 d3-NMeFOSAA	573.00 > 419.00	3.452	3.422	0.030	1.342	1918185	1.32	52.9	2961	
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	3.452	3.437	0.015	1.000	739740	0.9640	96.4	641	
33 N-ethylperfluorooctanesulfonamidoa	584.00 > 419.00	3.623	3.591	0.032	1.000	549293	1.04	104	1291	
29 Perfluorodecanesulfonic acid	599.00 > 80.00	3.606	3.591	0.015	1.223	1107511	0.7431	77.1	1059	
	599.00 > 99.00	3.606	3.591	0.015	1.223	230383	4.81(2.14-6.43)		804	
D 32 d5-NEtFOSAA	589.00 > 419.00	3.623	3.591	0.032	1.408	1450184	1.23	49.1	1612	
D 30 13C2 PFUnA	565.00 > 520.00	3.623	3.591	0.032	1.408	3901905	1.39	55.7	4954	
31 Perfluoroundecanoic acid	563.00 > 519.00	3.623	3.607	0.016	1.000	1777731	1.00	100	432	
	563.00 > 169.00	3.623	3.607	0.016	1.000	145694	12.20(5.24-15.72)		607	
66 11-Chloroeicosafluoro-3-oxaundecan	631.00 > 451.00	3.774	3.759	0.015	1.280	1492975	0.6252	66.4	3100	
74 1H,1H,2H,2H-perfluorododecanesulfo	627.00 > 607.00	3.917	3.883	0.034	1.194	191801	0.7495	77.7	457	
37 Perfluorododecanoic acid	613.00 > 569.00	3.917	3.883	0.034	1.000	1649454	0.9413	94.1	408	
	613.00 > 169.00	3.917	3.883	0.034	1.000	170272	9.69(4.68-14.05)		502	
D 36 13C2 PFDaA	615.00 > 570.00	3.917	3.883	0.034	1.523	4305753	1.25	49.9	6343	
75 Perfluorododecanesulfonic acid (PF	699.00 > 80.00	4.145	4.129	0.016	1.406	115966	0.6989	72.2	428	
	699.00 > 99.00	4.145	4.129	0.016	1.406	205481	0.56(0.28-0.83)		710	
41 Perfluorotridecanoic acid	663.00 > 619.00	4.176	4.145	0.031	1.066	1308997	0.9296	93.0	525	
	663.00 > 169.00	4.176	4.145	0.031	1.066	232534	5.63(3.09-9.27)		651	
42 Perfluorotetradecanoic acid	713.00 > 169.00	4.412	4.381	0.031	1.004	217187	0.9409	94.1	830	
	713.00 > 219.00	4.396	4.381	0.015	1.000	147320	1.47(0.70-2.09)		663	
D 43 13C2 PFTeDA	715.00 > 670.00	4.396	4.381	0.015	1.709	3156183	1.22	48.9	5369	

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	4.803	4.786	0.017	1.000	1371427	1.03		103	605	
813.00 > 169.00	4.803	4.786	0.017	1.000	262704		5.22(2.77-8.32)		898	
D 44 13C2 PFHxDA										
815.00 > 770.00	4.803	4.786	0.017	1.867	3599557	1.40		56.2	5563	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.143	5.129	0.014	1.071	895128	1.26		126	630	
913.00 > 169.00	5.129	5.129	0.0	1.068	184170		4.86(2.55-7.64)		1307	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_012.d

Injection Date: 09-Nov-2018 08:33:22

Instrument ID: A9

Lims ID: 480-144297-F-6-B MSD

Client ID: GMW-2

Operator ID: A9\Administrator

ALS Bottle#: 6

Worklist Smp#: 9

Injection Vol: 20.0 ul

Dil. Factor: 1.0000

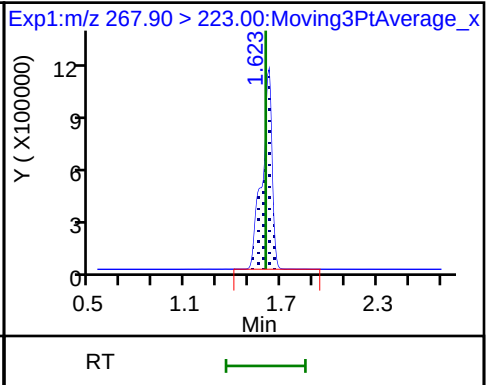
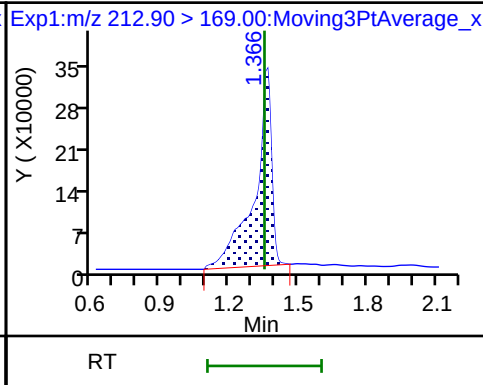
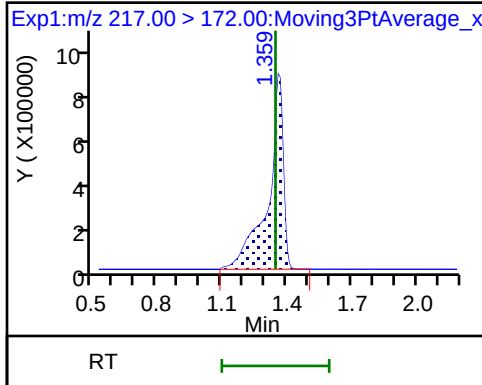
Method: PFAS_A9

Limit Group: LC PFC ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

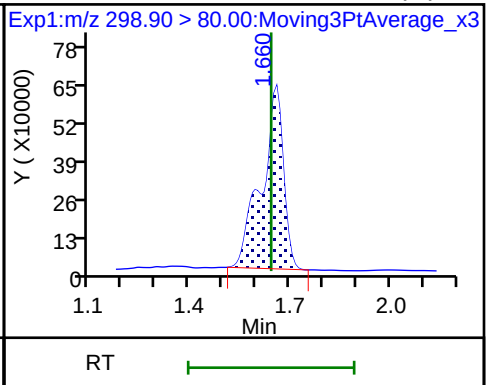
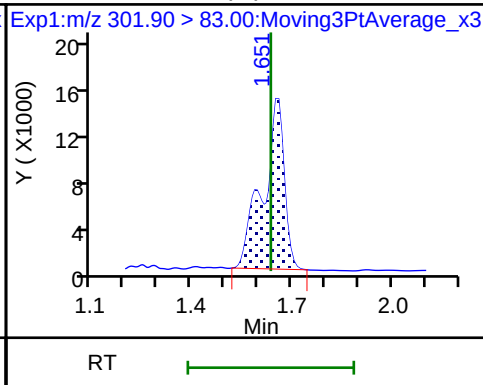
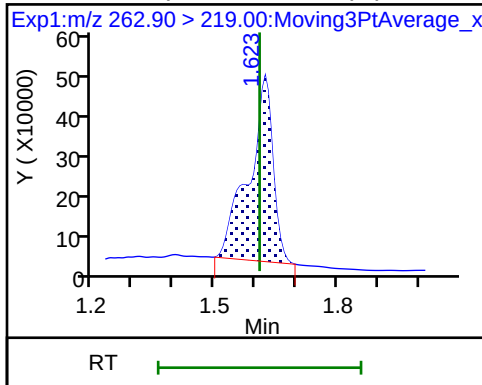
D 3 13C5 PFPeA (M)



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS (M)

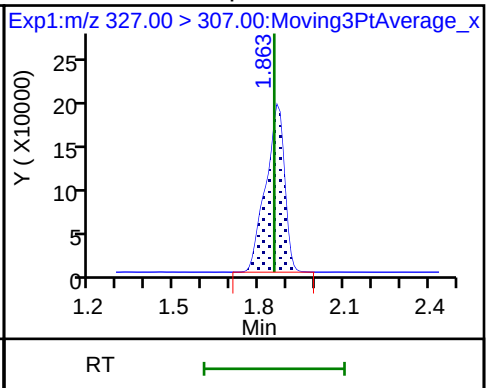
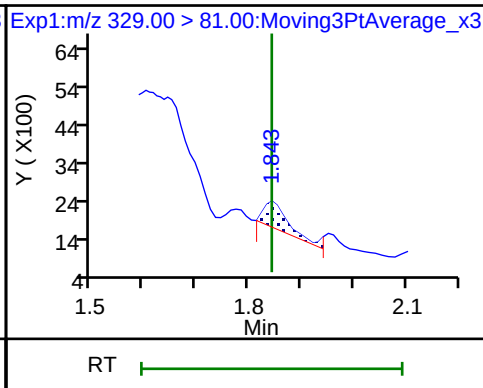
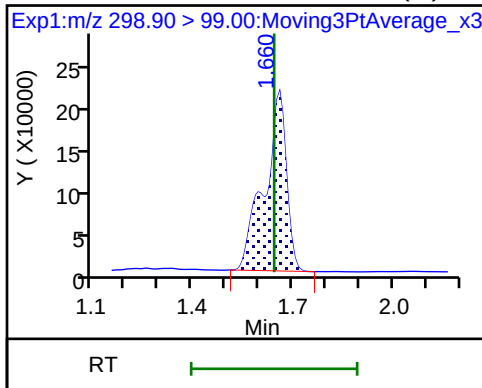
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid (M)

D 60 M2-4:2 FTS

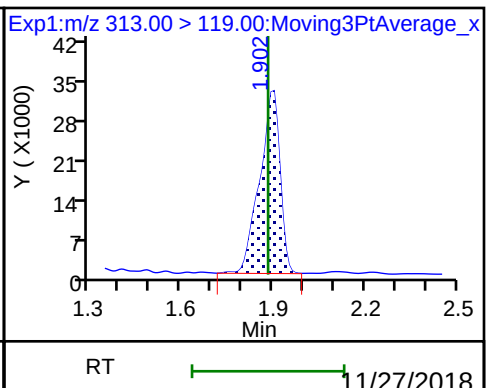
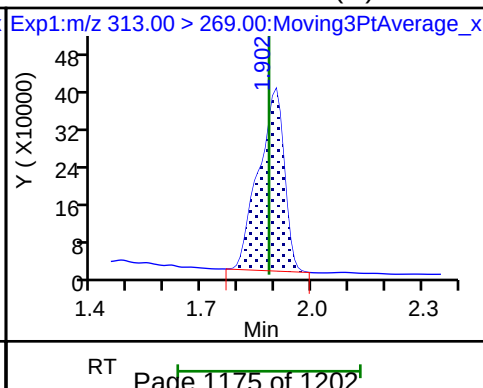
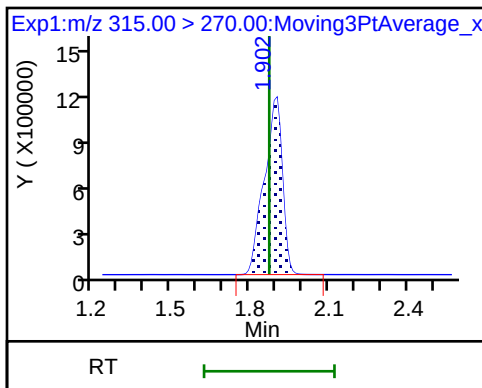
61 1H,1H,2H,2H-perfluorohexanesulfoni

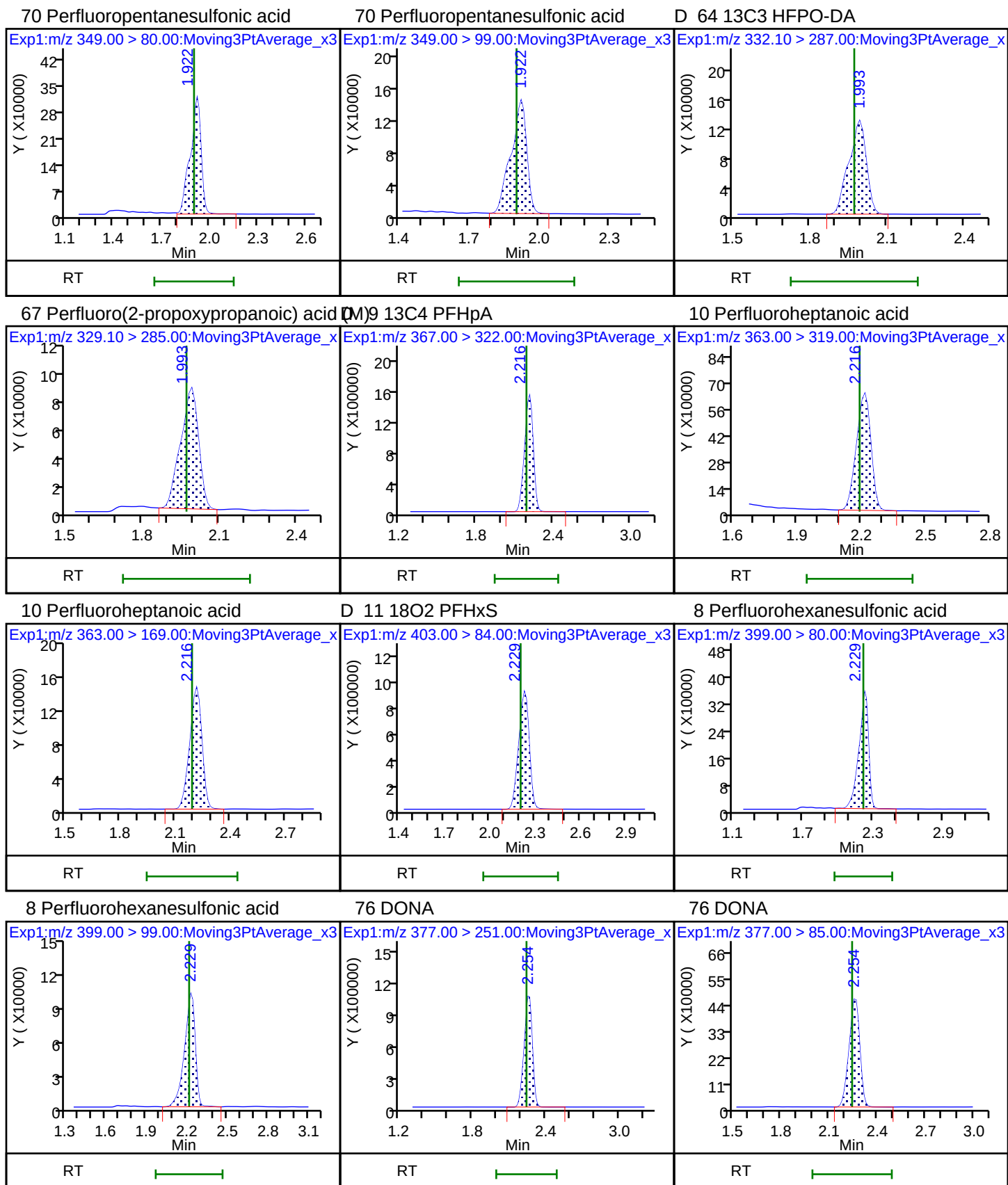


D 7 13C2 PFHxA

6 Perfluorohexanoic acid (M)

6 Perfluorohexanoic acid

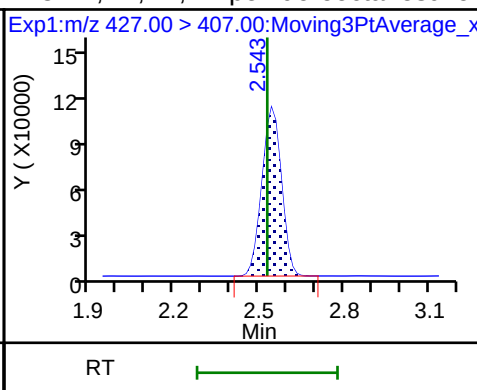
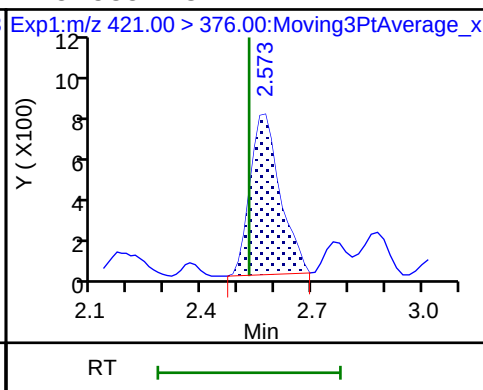
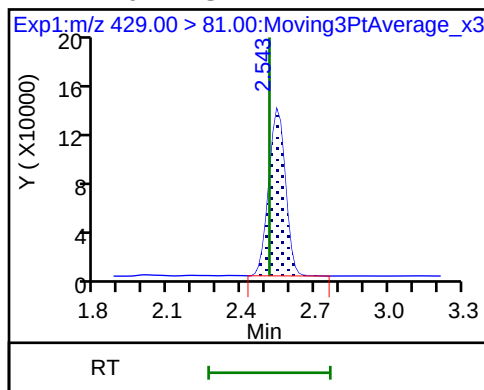




D 12 M2-6:2 FTS

D 73 13C8 PFOA

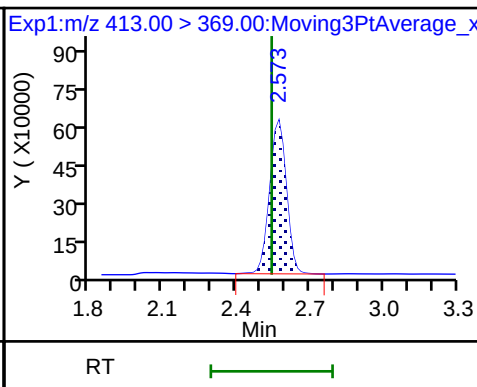
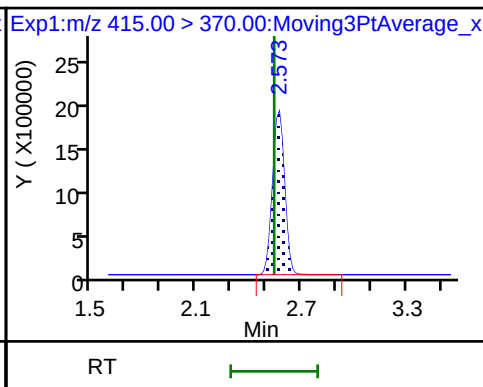
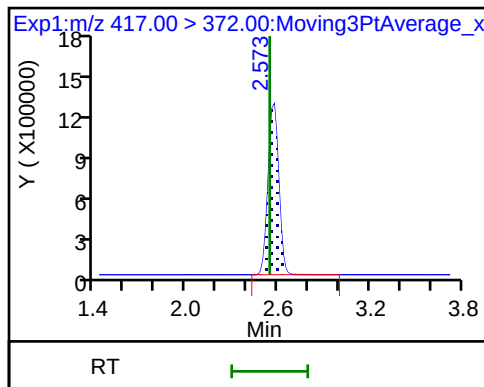
13 1H,1H,2H,2H-perfluorooctanesulfoni



D 14 13C4 PFOA

* 62 13C2 PFOA

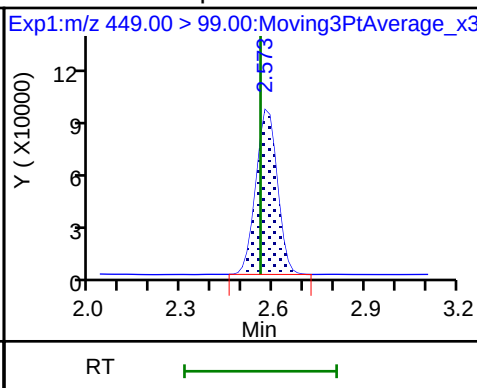
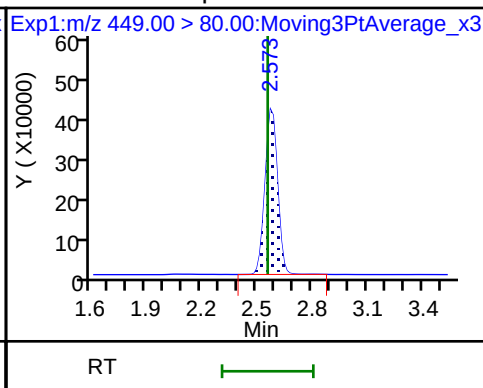
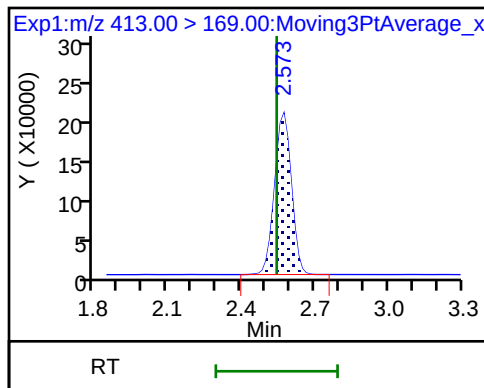
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

16 Perfluoroheptanesulfonic acid

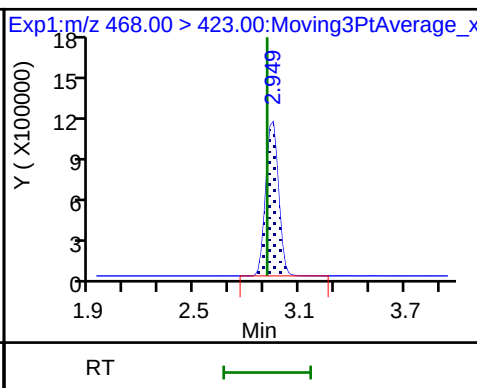
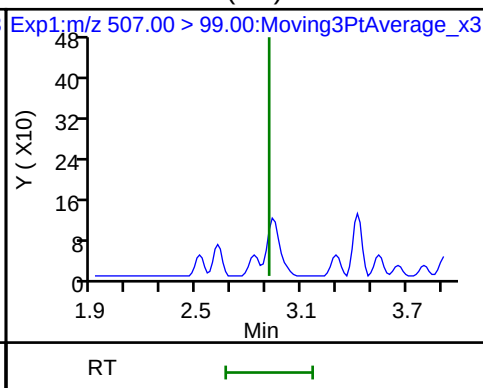
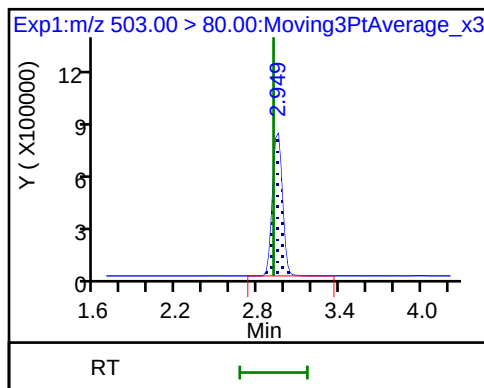
16 Perfluoroheptanesulfonic acid

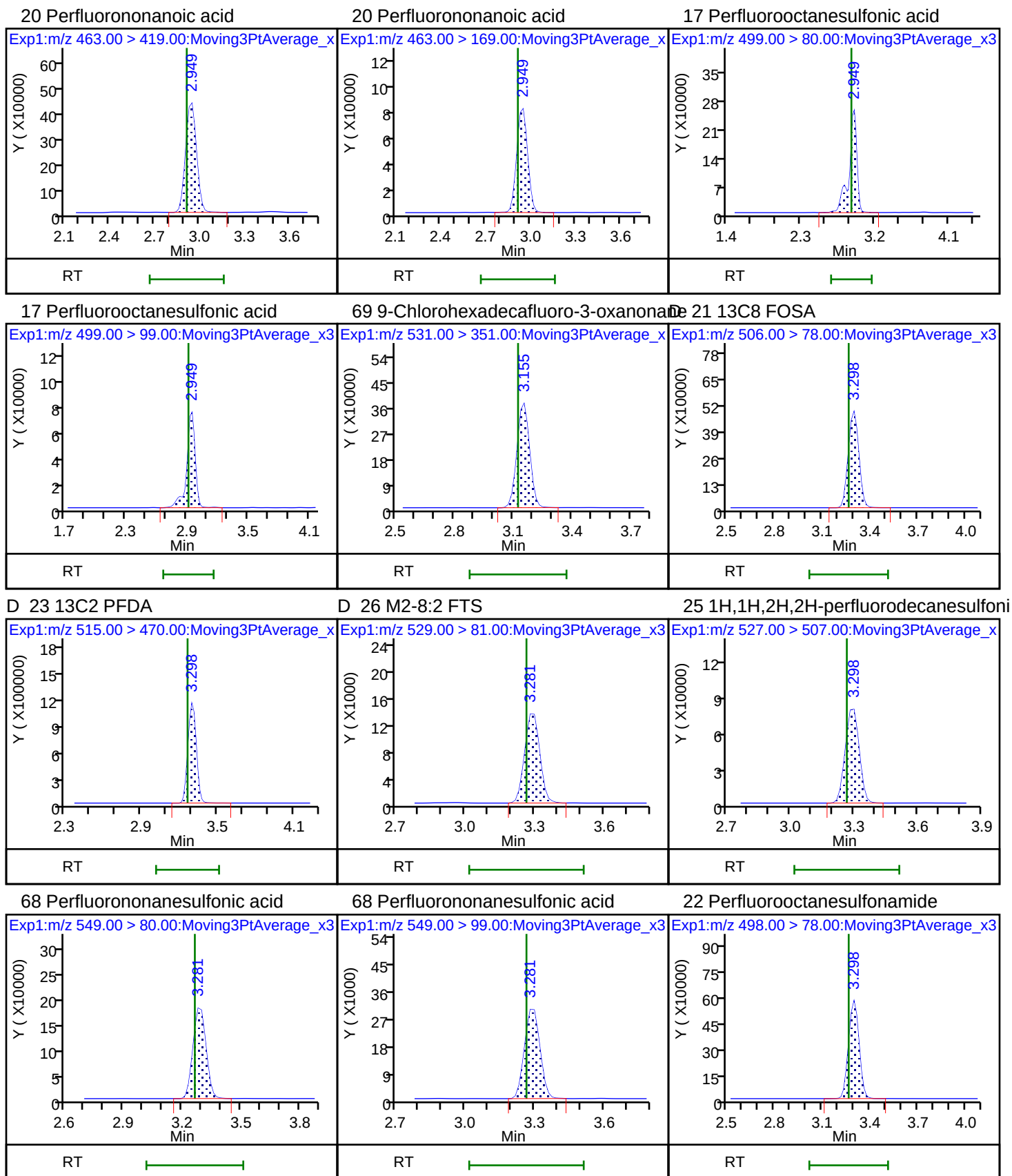


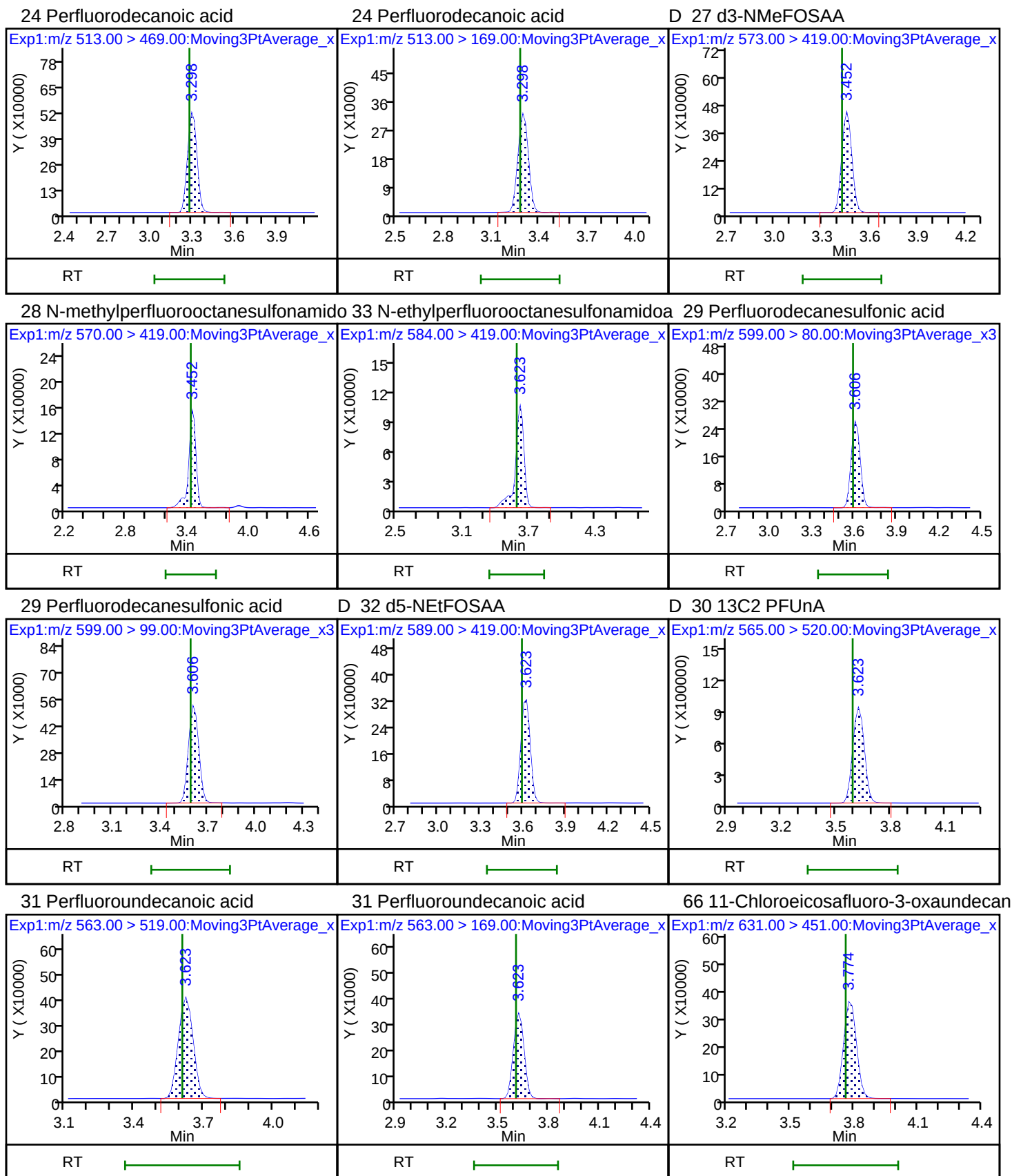
D 18 13C4 PFOS

D 72 13C8 PFOS (ND)

D 19 13C5 PFNA

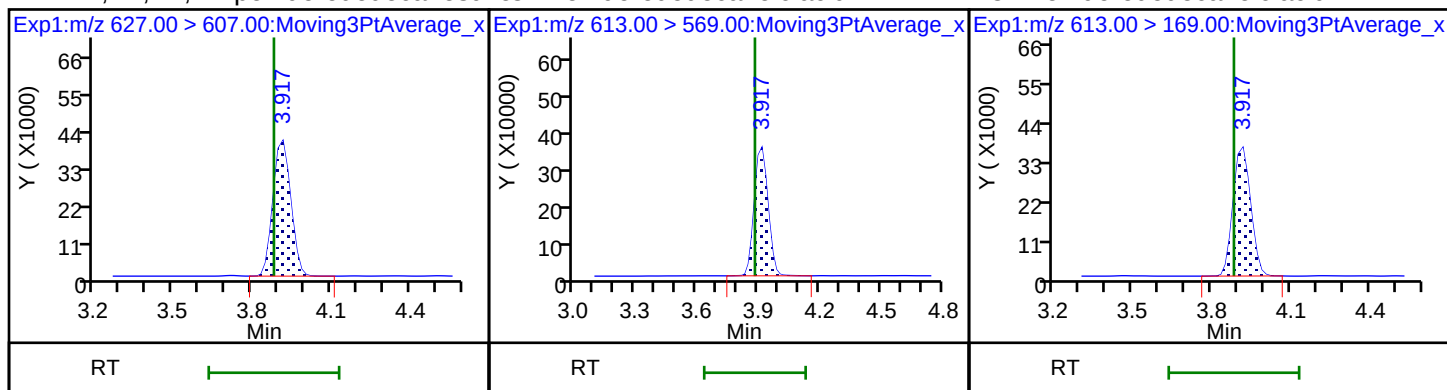






74 1H,1H,2H,2H-perfluorododecanesulfo37 Perfluorododecanoic acid

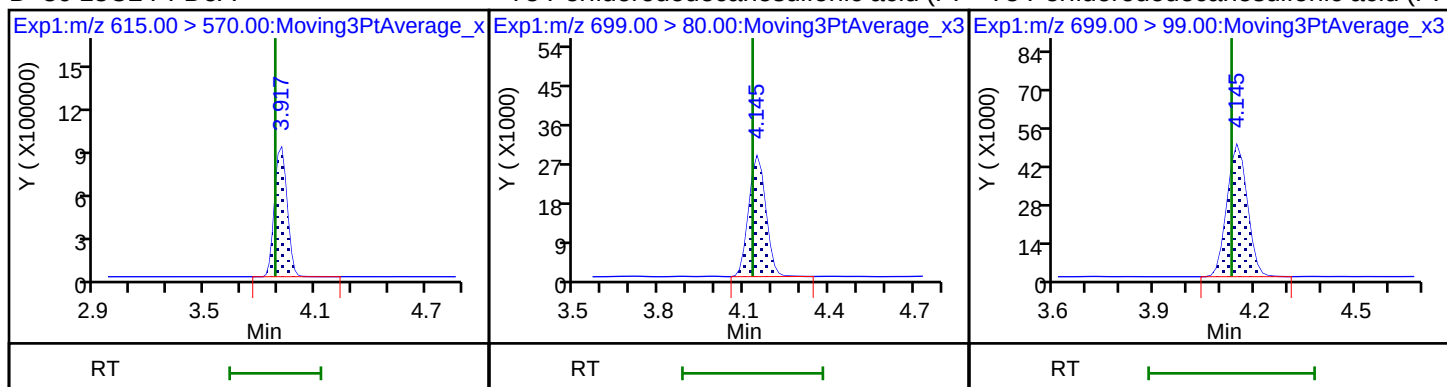
37 Perfluorododecanoic acid



D 36 13C2 PFDa

75 Perfluorododecanesulfonic acid (PF

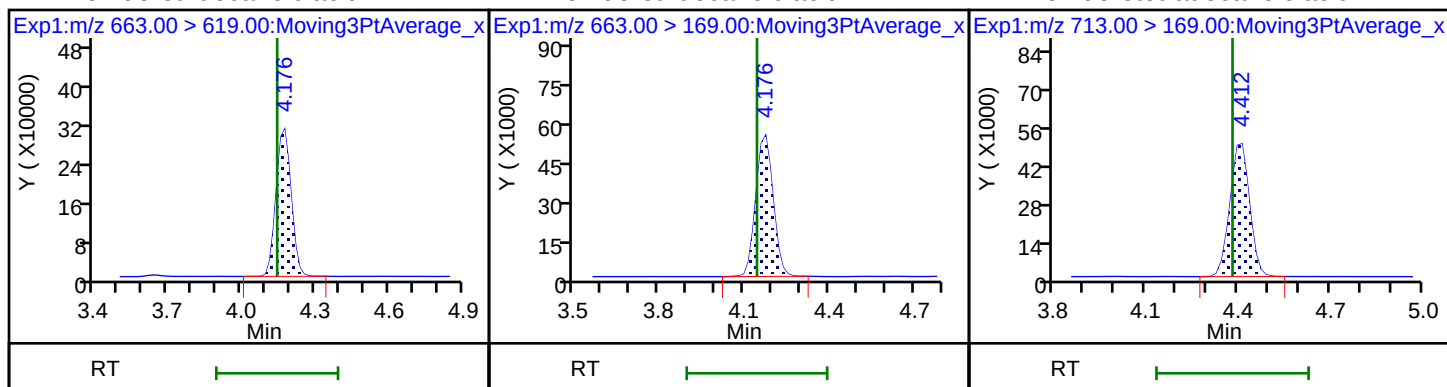
75 Perfluorododecanesulfonic acid (PF



41 Perfluorotridecanoic acid

41 Perfluorotridecanoic acid

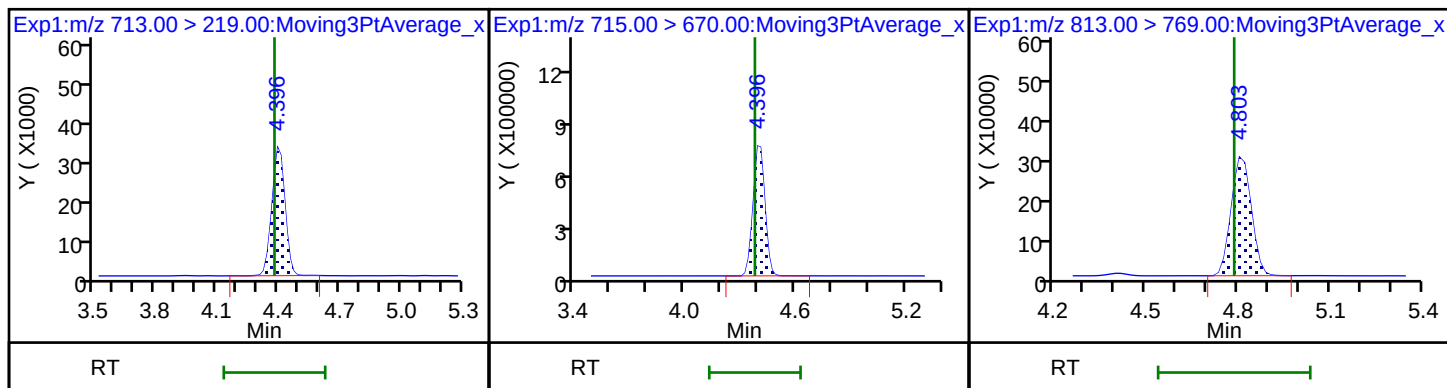
42 Perfluorotetradecanoic acid



42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA

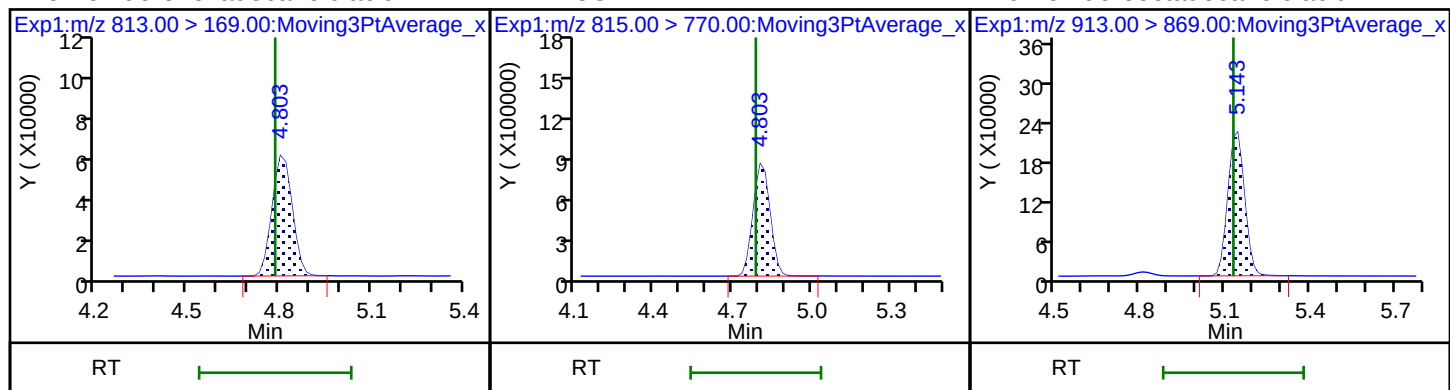
45 Perfluorohexadecanoic acid



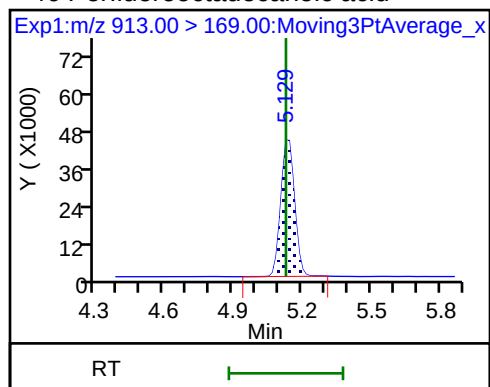
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid



TestAmerica Sacramento

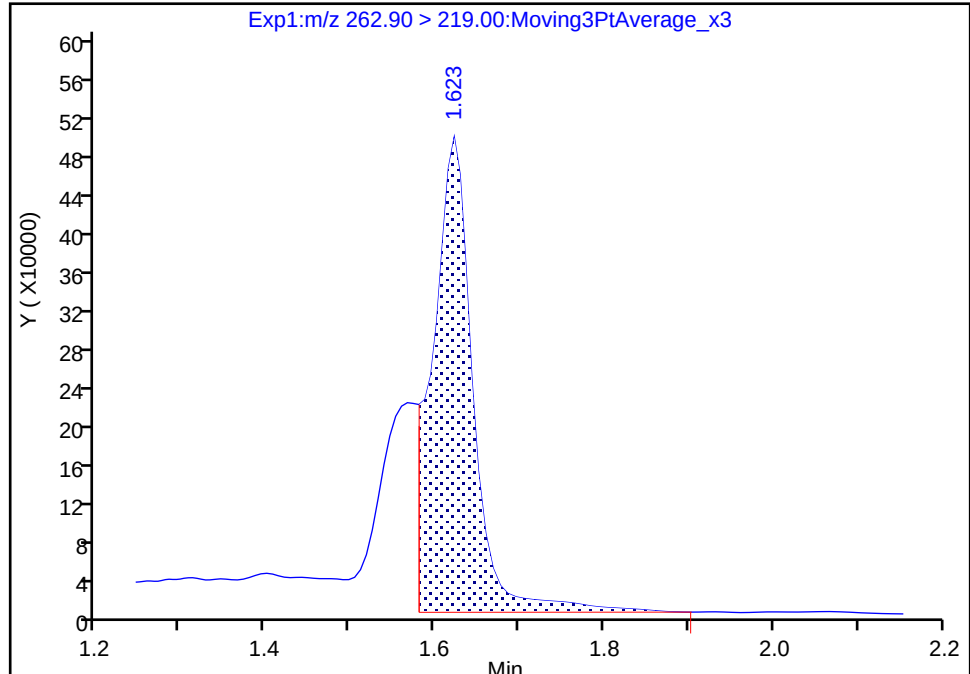
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Injection Date: 09-Nov-2018 08:33:22 Instrument ID: A9
Lims ID: 480-144297-F-6-B MSD
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

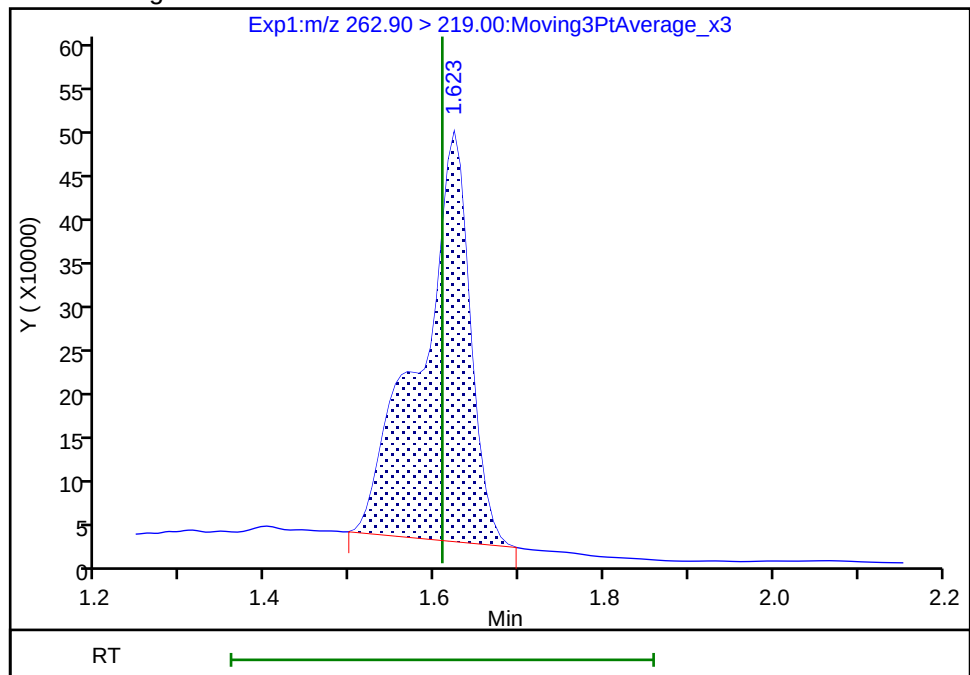
RT: 1.62
Area: 1613094
Amount: 0.856114
Amount Units: ng/ml

Processing Integration Results



RT: 1.62
Area: 1927690
Amount: 1.023079
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:15:54
Audit Action: Manually Integrated

Audit Reason: Baseline
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11/27/2018

TestAmerica Sacramento

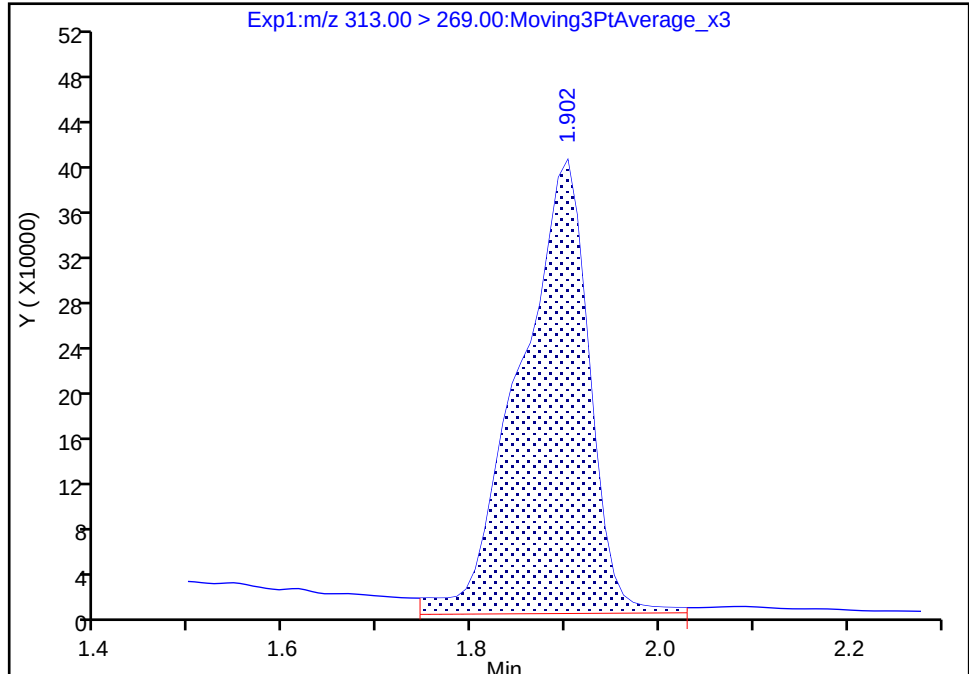
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Injection Date: 09-Nov-2018 08:33:22 Instrument ID: A9
Lims ID: 480-144297-F-6-B MSD
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

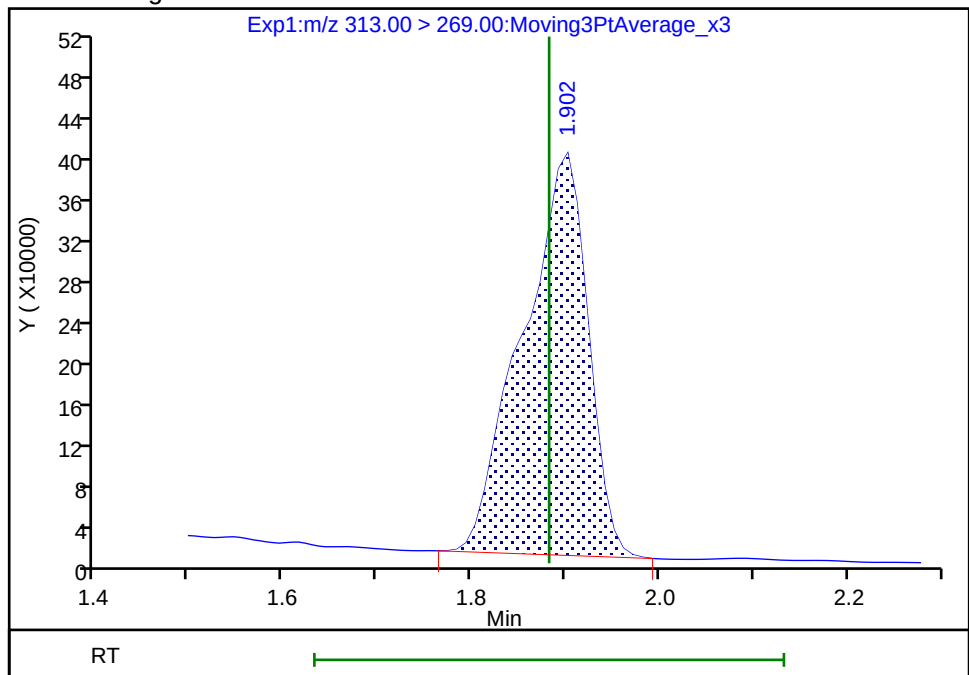
RT: 1.90
Area: 2045348
Amount: 1.034514
Amount Units: ng/ml

Processing Integration Results



RT: 1.90
Area: 1883023
Amount: 0.952412
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:16:17
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 1183 of 1202

11/27/2018

TestAmerica Sacramento

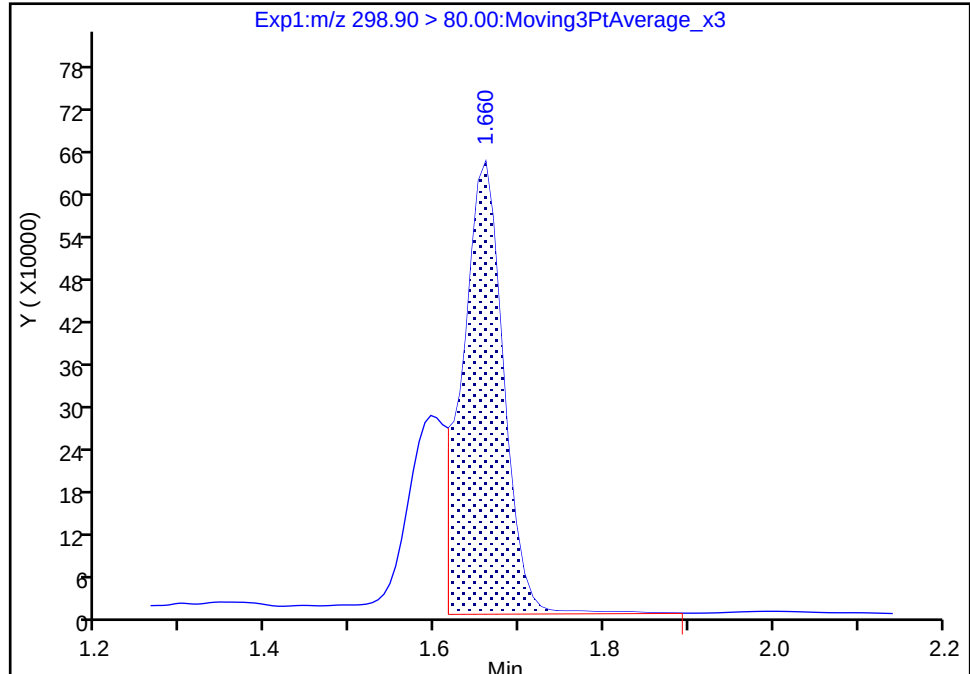
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Injection Date: 09-Nov-2018 08:33:22 Instrument ID: A9
Lims ID: 480-144297-F-6-B MSD
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

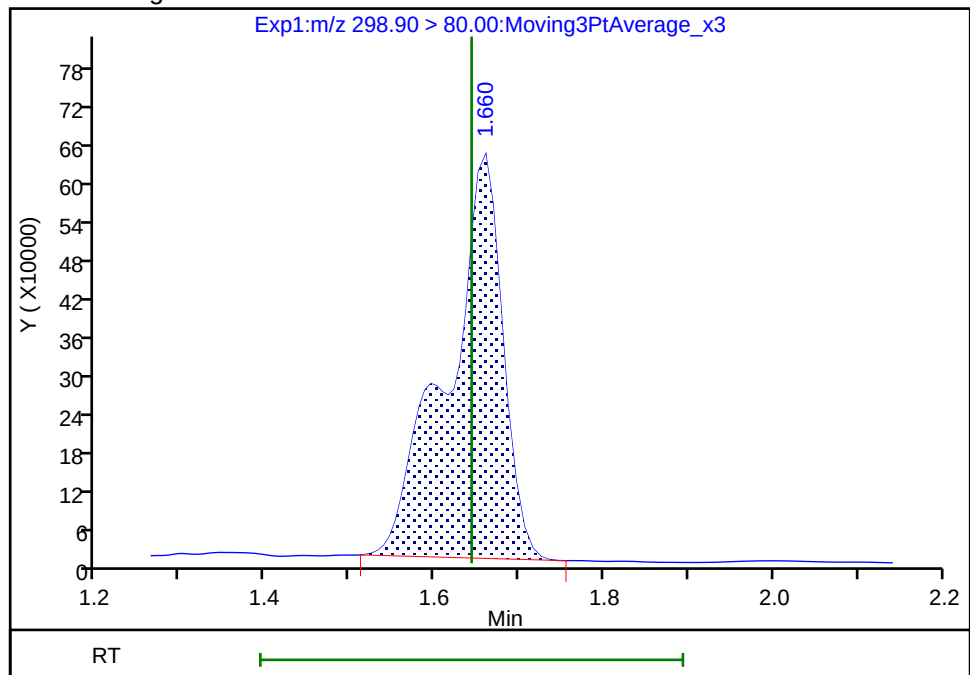
RT: 1.66
Area: 2130376
Amount: 0.734816
Amount Units: ng/ml

Processing Integration Results



RT: 1.66
Area: 2871990
Amount: 0.990615
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:16:02
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 1184 of 1202

11/27/2018

TestAmerica Sacramento

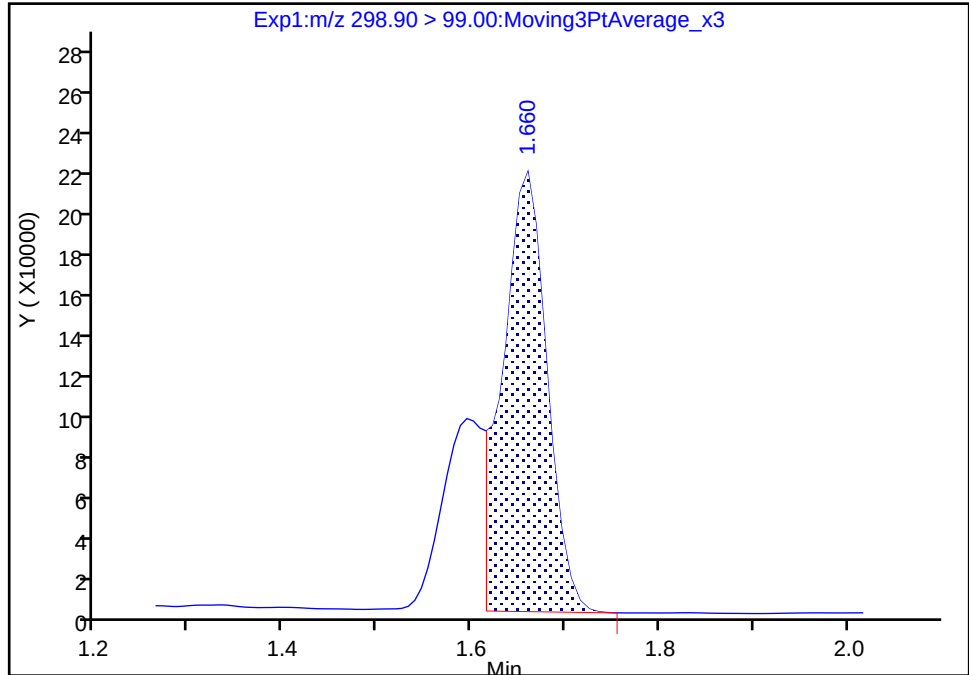
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Lims ID: 480-144297-F-6-B MSD
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

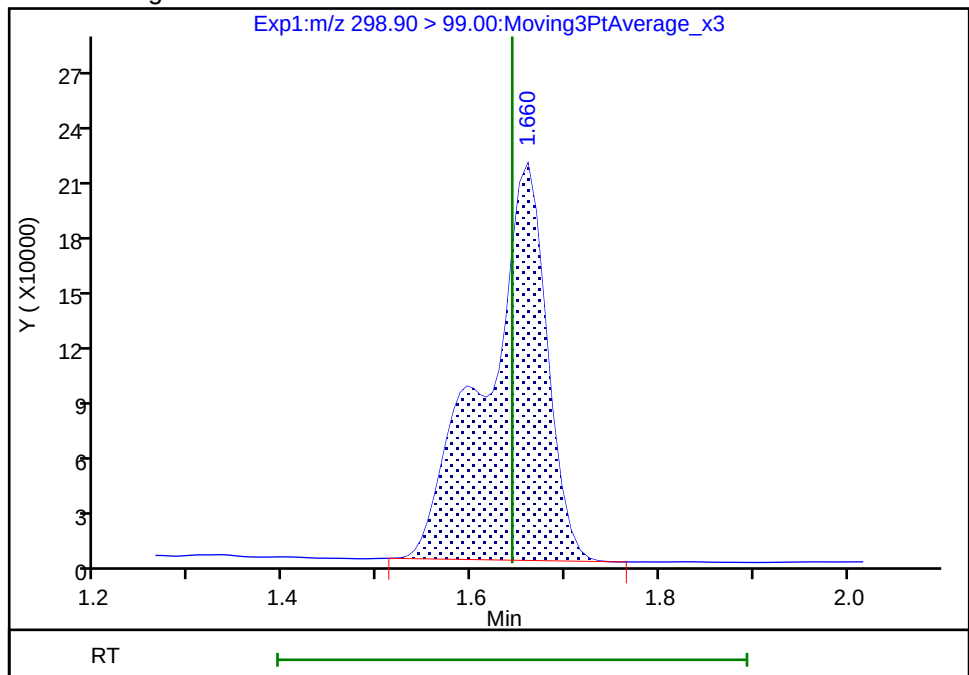
RT: 1.66
Area: 704407
Amount: 0.734816
Amount Units: ng/ml

Processing Integration Results



RT: 1.66
Area: 988394
Amount: 0.990615
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:16:06

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Sacramento

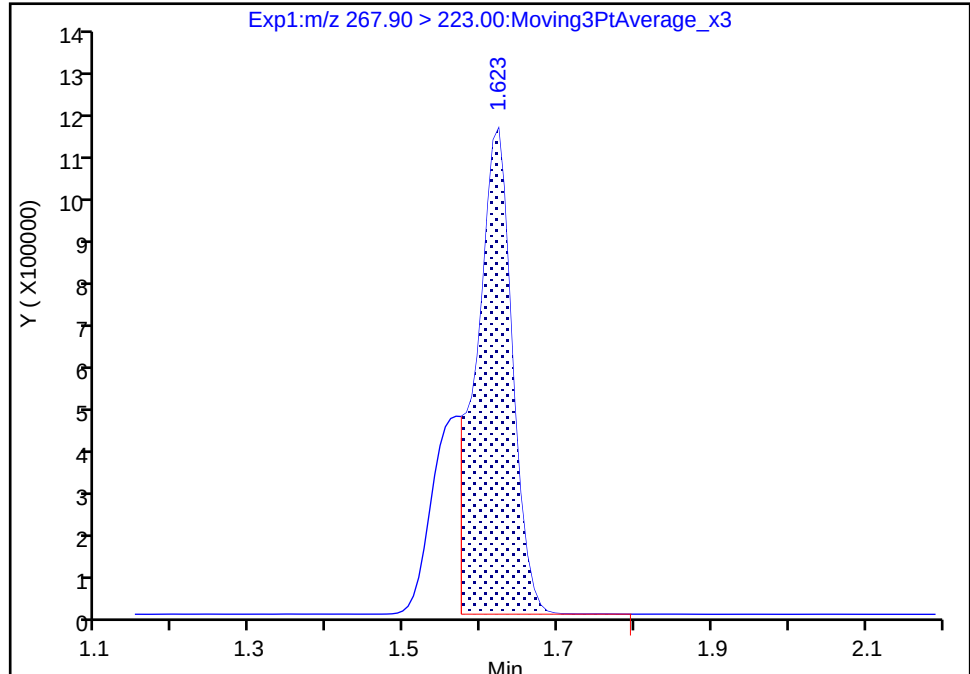
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Injection Date: 09-Nov-2018 08:33:22 Instrument ID: A9
Lims ID: 480-144297-F-6-B MSD
Client ID: GMW-2
Operator ID: A9\Administrator ALS Bottle#: 6 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Method: PFAS_A9 Limit Group: LC PFC ICAL
Column: Detector EXP1

D 3 13C5 PFPeA, CAS: STL01893

Signal: 1

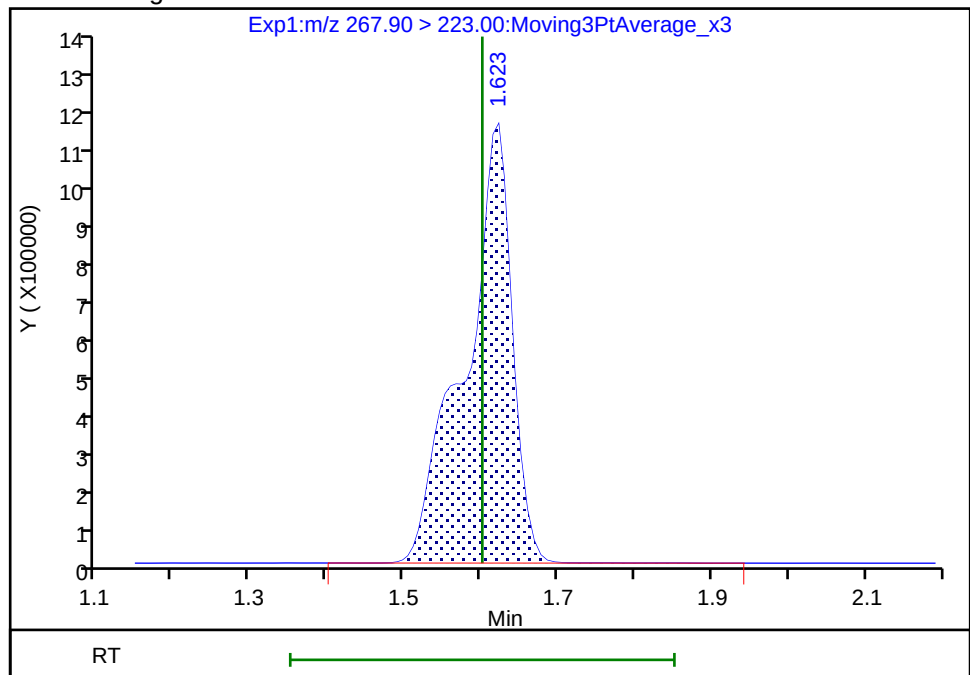
RT: 1.62
Area: 3540075
Amount: 1.140273
Amount Units: ng/ml

Processing Integration Results



RT: 1.62
Area: 4705532
Amount: 1.515672
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:15:23
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 1186 of 1202

11/27/2018

TestAmerica Sacramento

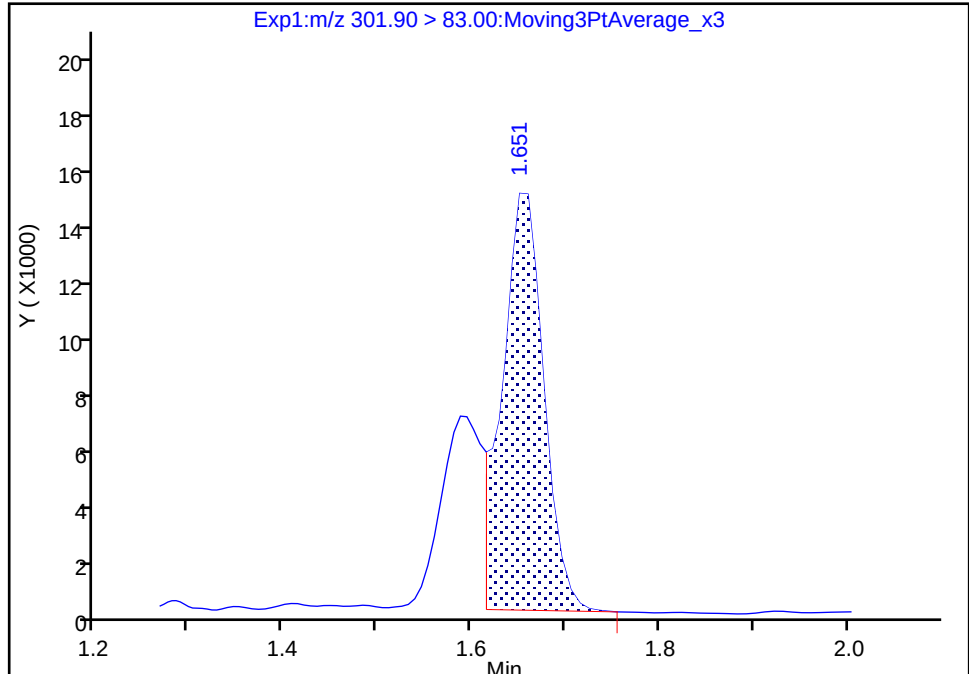
Data File:	\\ChromNA\Sacramento\ChromData\A9\20181108-67401.b\2018.11.08LLC_012.d		
Injection Date:	09-Nov-2018 08:33:22	Instrument ID:	A9
Lims ID:	480-144297-F-6-B MSD		
Client ID:	GMW-2		
Operator ID:	A9\Administrator	ALS Bottle#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000
Method:	PFAS_A9	Limit Group:	LC PFC ICAL
Column:		Detector:	EXP1
		Worklist Smp#:	9

D 47 13C3 PFBS, CAS: STL02337

Signal: 1

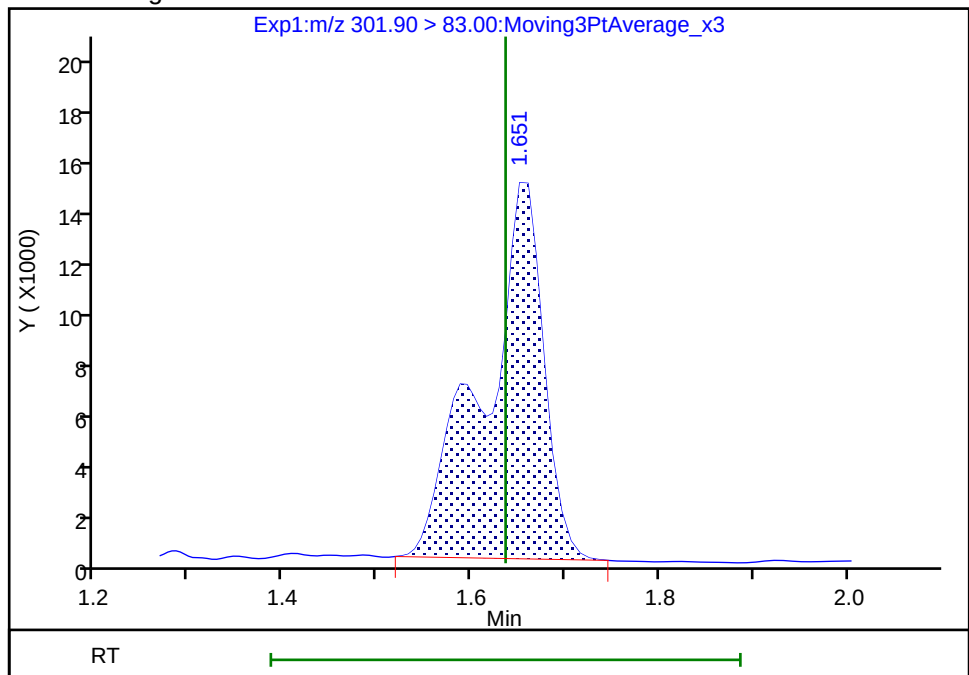
RT: 1.65
Area: 45055
Amount: 1.049958
Amount Units: ng/ml

Processing Integration Results



RT: 1.65
Area: 65278
Amount: 1.521233
Amount Units: ng/ml

Manual Integration Results



Reviewer: mongkols, 12-Nov-2018 12:15:29
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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11/27/2018

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Instrument ID: A8_N Start Date: 11/05/2018 15:37Analysis Batch Number: 257055 End Date: 11/05/2018 16:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-257055/2		11/05/2018 15:37	1	2018.11.05ICAL_ 005.d	GeminiC18 3x100 3(mm)
IC 320-257055/3		11/05/2018 15:44	1	2018.11.05ICAL_ 006.d	GeminiC18 3x100 3(mm)
IC 320-257055/4		11/05/2018 15:52	1	2018.11.05ICAL_ 007.d	GeminiC18 3x100 3(mm)
IC 320-257055/5 ICIS		11/05/2018 15:59	1	2018.11.05ICAL_ 008.d	GeminiC18 3x100 3(mm)
IC 320-257055/6		11/05/2018 16:07	1	2018.11.05ICAL_ 009.d	GeminiC18 3x100 3(mm)
IC 320-257055/7		11/05/2018 16:14	1	2018.11.05ICAL_ 010.d	GeminiC18 3x100 3(mm)
IC 320-257055/8		11/05/2018 16:22	1	2018.11.05ICAL_ 011.d	GeminiC18 3x100 3(mm)
ICB 320-257055/9		11/05/2018 16:29	1	2018.11.05ICAL_ 012.d	GeminiC18 3x100 3(mm)
ICV 320-257055/10		11/05/2018 16:36	1	2018.11.05ICAL_ 013.d	GeminiC18 3x100 3(mm)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Instrument ID: A8_N Start Date: 11/14/2018 00:00Analysis Batch Number: 258995 End Date: 11/14/2018 01:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-258995/1		11/14/2018 00:00	1	2018.11.13LLAA 004.d	GeminiC18 3x100 3(mm)
CCVL 320-258995/2		11/14/2018 00:07	1	2018.11.13LLAA 005.d	GeminiC18 3x100 3(mm)
CCV 320-258995/3 CCVIS		11/14/2018 00:15	1	2018.11.13LLAA 006.d	GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 00:22	100		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 00:29	100		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 00:37	100		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 00:44	20		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 00:52	100		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 00:59	20		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 01:07	100		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 01:14	100		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 01:21	1		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 01:29	1		GeminiC18 3x100 3(mm)
CCV 320-258995/14		11/14/2018 01:36	1		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 01:44	1		GeminiC18 3x100 3(mm)
CCV 320-258995/16		11/14/2018 01:51	1		GeminiC18 3x100 3(mm)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Instrument ID: A8_N Start Date: 11/14/2018 01:51Analysis Batch Number: 258999 End Date: 11/14/2018 02:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 320-258999/1		11/14/2018 01:51	1	2018.11.13LLAA 019.d	GeminiC18 3x100 3(mm)
480-144297-7 DL		11/14/2018 02:06	5	2018.11.13LLAA 028.d	GeminiC18 3x100 3(mm)
480-144297-8		11/14/2018 02:13	1	2018.11.13LLAA 029.d	GeminiC18 3x100 3(mm)
480-144297-10		11/14/2018 02:21	1	2018.11.13LLAA 030.d	GeminiC18 3x100 3(mm)
480-144297-11		11/14/2018 02:28	1	2018.11.13LLAA 031.d	GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 02:36	1		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 02:43	1		GeminiC18 3x100 3(mm)
ZZZZZ		11/14/2018 02:51	1		GeminiC18 3x100 3(mm)
CCV 320-258999/9		11/14/2018 02:58	1	2018.11.13LLAA 035.d	GeminiC18 3x100 3(mm)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Instrument ID: A9 Start Date: 10/30/2018 13:12Analysis Batch Number: 255834 End Date: 10/30/2018 14:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-255834/2		10/30/2018 13:12	1	2018.10.30ICALA 002.d	Acquity 2.1 (mm)
IC 320-255834/3		10/30/2018 13:20	1	2018.10.30ICALA 003.d	Acquity 2.1 (mm)
IC 320-255834/4		10/30/2018 13:27	1	2018.10.30ICALA 004.d	Acquity 2.1 (mm)
IC 320-255834/5 ICIS		10/30/2018 13:35	1	2018.10.30ICALA 005.d	Acquity 2.1 (mm)
IC 320-255834/6		10/30/2018 13:42	1	2018.10.30ICALA 006.d	Acquity 2.1 (mm)
IC 320-255834/7		10/30/2018 13:50	1	2018.10.30ICALA 007.d	Acquity 2.1 (mm)
IC 320-255834/8		10/30/2018 13:57	1	2018.10.30ICALA 008.d	Acquity 2.1 (mm)
ICB 320-255834/9		10/30/2018 14:05	1	2018.10.30ICALA 009.d	Acquity 2.1 (mm)
ICV 320-255834/10		10/30/2018 14:12	1	2018.10.30ICALA 010.d	Acquity 2.1 (mm)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica SacramentoJob No.: 480-144297-1

SDG No.: _____

Instrument ID: A9Start Date: 11/09/2018 07:33Analysis Batch Number: 258039End Date: 11/09/2018 09:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 320-258039/1		11/09/2018 07:33	1	2018.11.08LLC_0 04.d	Acquity 2.1 (mm)
CCVL 320-258039/2		11/09/2018 07:40	1	2018.11.08LLC_0 05.d	Acquity 2.1 (mm)
CCV 320-258039/3 CCVIS		11/09/2018 07:48	1	2018.11.08LLC_0 06.d	Acquity 2.1 (mm)
MB 320-257492/1-A		11/09/2018 07:55	1	2018.11.08LLC_0 07.d	Acquity 2.1 (mm)
LCS 320-257492/2-A		11/09/2018 08:03	1	2018.11.08LLC_0 08.d	Acquity 2.1 (mm)
480-144297-5		11/09/2018 08:10	1	2018.11.08LLC_0 09.d	Acquity 2.1 (mm)
480-144297-6		11/09/2018 08:18	1	2018.11.08LLC_0 10.d	Acquity 2.1 (mm)
480-144297-6 MS		11/09/2018 08:25	1	2018.11.08LLC_0 11.d	Acquity 2.1 (mm)
480-144297-6 MSD		11/09/2018 08:33	1	2018.11.08LLC_0 12.d	Acquity 2.1 (mm)
480-144297-7		11/09/2018 08:40	1	2018.11.08LLC_0 13.d	Acquity 2.1 (mm)
ZZZZZ		11/09/2018 08:48	1		Acquity 2.1 (mm)
480-144297-9		11/09/2018 08:55	1	2018.11.08LLC_0 15.d	Acquity 2.1 (mm)
ZZZZZ		11/09/2018 09:03	1		Acquity 2.1 (mm)
CCV 320-258039/15		11/09/2018 09:11	1	2018.11.08LLC_0 17.d	Acquity 2.1 (mm)

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Batch Number: 257492 Batch Start Date: 11/07/18 07:22 Batch Analyst: Vang, Mai YeeBatch Method: 3535 Batch End Date: 11/07/18 16:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFC ALL_SU 00134	LCPFC-IS 00109
MB 320-257492/1		3535, 537 (modified)				250.00 mL	10.00 mL	500 uL	500 uL
LCS 320-257492/2		3535, 537 (modified)				250.00 mL	10.00 mL	500 uL	500 uL
480-144297-F-5	GPW-20	3535, 537 (modified)	T	314.45 g	32.58 g	281.9 mL	10.00 mL	500 uL	500 uL
480-144297-F-6	GMW-2	3535, 537 (modified)	T	323.62 g	27.85 g	295.8 mL	10.00 mL	500 uL	500 uL
480-144297-F-6 MS	GMW-2	3535, 537 (modified)	T	320.79 g	27.08 g	293.7 mL	10.00 mL	500 uL	500 uL
480-144297-F-6 MSD	GMW-2	3535, 537 (modified)	T	327.21 g	28.40 g	298.8 mL	10.00 mL	500 uL	500 uL
480-144297-F-7	EW-10	3535, 537 (modified)	T	307.40 g	28.31 g	279.1 mL	10.00 mL	500 uL	500 uL
480-144297-F-8	SB-19	3535, 537 (modified)	T	317.47 g	27.64 g	289.8 mL	10.00 mL	500 uL	500 uL
480-144297-F-9	GPW-6	3535, 537 (modified)	T	302.20 g	27.58 g	274.6 mL	10.00 mL	500 uL	500 uL
480-144297-F-10	GPW-5	3535, 537 (modified)	T	309.95 g	29.05 g	280.9 mL	10.00 mL	500 uL	500 uL
480-144297-F-11	DUP	3535, 537 (modified)	T	312.00 g	28.35 g	283.7 mL	10.00 mL	500 uL	500 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00197	AnalysisComment				
MB 320-257492/1		3535, 537 (modified)							
LCS 320-257492/2		3535, 537 (modified)		500 uL					
480-144297-F-5	GPW-20	3535, 537 (modified)	T		71.28 g of sample remaining				
480-144297-F-6	GMW-2	3535, 537 (modified)	T		128.40 g of sample remaining				
480-144297-F-6 MS	GMW-2	3535, 537 (modified)	T	500 uL	63.45 g of sample remaining				
480-144297-F-6 MSD	GMW-2	3535, 537 (modified)	T	500 uL	77.48 g of sample remaining				

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)

Page 1 of 3

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Batch Number: 257492 Batch Start Date: 11/07/18 07:22 Batch Analyst: Vang, Mai YeeBatch Method: 3535 Batch End Date: 11/07/18 16:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSP 00197	AnalysisComment				
480-144297-F-7	EW-10	3535, 537 (modified)	T						
480-144297-F-8	SB-19	3535, 537 (modified)	T						
480-144297-F-9	GPW-6	3535, 537 (modified)	T						
480-144297-F-10	GPW-5	3535, 537 (modified)	T		20.21 g of sample remaining				
480-144297-F-11	DUP	3535, 537 (modified)	T						

Batch Notes	
Balance ID	QA-070
Batch Comment	Client labels Match TA labels, MYV: 11/07/2018.
First End time	11/07/2018 16:30
H2O ID	11-03-18
Hexane ID	1423834
Manifold ID	E and G
Methanol ID	1423735
Sodium Hydroxide ID	1425249
Pipette/Syringe/Dispenser ID	I46162G
Analyst ID - Reagent Drop	SKD
Analyst ID - IS Reagent Drop	SKD: 1404846
Analyst ID - IS Reagent Drop Witness	MYV
Rinse Solvent Lot	1423834
Rinse Solvent Name	HEXANE
Solvent Lot #	1425232
Solvent Name	0.3% NH4OH/MeOH
SPE Cartridge Lot ID	004338233A
SPE Cartridge Type	WAX 500mg
First Start time	11/07/2018 07:12

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)

Page 2 of 3

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 480-144297-1

SDG No.: _____

Batch Number: 257492 Batch Start Date: 11/07/18 07:22 Batch Analyst: Vang, Mai YeeBatch Method: 3535 Batch End Date: 11/07/18 16:30

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.

Sample Dilution Record

Method ID

95c

Analyst (Print Name)

White yu

Reagent ID

LC-PV:20-0018

Date

1112 118

[illegible]

Comments:

Shipping and Receiving Documents



CHAIN OF CUSTODY

Client: New York State Dept. of Environmental Conservation

PAGE 1 OF 1
Bottle Order Control #

NYSDEC Site #915278 - 1542 Main Street, Buffalo NY

CLIENT/REPORTING INFORMATION				PROJECT INFORMATION				BILLING INFORMATION				REQUESTED ANALYSIS (see Test Code sheet)				LAB USE ONLY	
Groundwater & Environmental Services, Inc. 415 Lawrence Bell Drive, Williamsville, NY 14221 Project Manager: Eric D. Popken Phone #: 800-287-7857 PM Email: NERegion@gesonline.com 866-902-2187 fax				Project Name: NYSDEC/Mayville/NY/WestLakeRd/25 Project Address: 25 W Lake Rd, Mayville, NY Project PSID #: 740180 Sampler(s) Name: Dustin Gagliano				Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable Invoice Instructions (Project #/ Phase / Task / Altorg) 0901757///1109				PFA5, Standard list (21 analytes) Via 1,4-Dioxane via 8270D SIM ID TCL VOCs via SW-846 Method 8260				LAB USE ONLY	
Lab Sample #	Field ID / Point of Collection (Sys Loc Code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	NaOH	HNO3	H2SO4	DI Water	ENCORE	Amber	480-144297 COC			
GPW-13	MW-7	-	10/24/18	1545	DG	WG	3	3						X			
EW-16	MW-8	-	10/25/18	1545	DG	WG	3	3						X			
EW-14	MW-9	-	10/26/18	945	DG	WG	3	3						X			
TB	MW-10	-				WG	1	1						X			
GPW-20	MW-11	-	10/24/18	1035	DG	WG	7	3		2				X			
GMW-2	MW-12	-	10/24/18	1215	DG	WG	21	4		6				X			
EW-10	MW-13	-	10/25/18	1155	DG	WG	7	3		2				X			
SB-19	MW-14	-	10/25/18	1350	DG	WG	7	3		2				X			
GPW-6	MW-15	-	10/25/18	1725	DG	WG	6	3		1				X			
GPW-5	MW-16	-	10/25/18	1800	DG	WG	6	3		1				X			
	DUP	-	10/25/18		DG	WG	7	3		2				X			

Laboratory Information				Data Deliverable Information			
Turnaround Time (Business Days)	Approved By (Lab PM) / Date	Lab:	TestAmerica	☐ Commercial 'A' (Level 1) = Results Only			
☒ Standard 14 Days		Address:	15 Hazelwood Drive, Amherst, NY	☐ Commercial 'B' (Level 2) = Results + QC Summary			
☐ 1 day RUSH		Phone:	484-685-0864	☐ FULLT1 (Level 3 & 4)			
☐ Other		Lab PM:	Orlette Johnson	☐ NJ Reduced = Results + QC Summary + Partial Raw Data			
		Lab PM Email:	Orlette.Johnson@testamerica.com	☐ Commercial 'C'			

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Mayville/NY/WestLakeRd/25_LabReport#18343.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.			
Relinquished By / Sampler	Date / Time	Received By	Date / Time
1. Dustin Gagliano	10/24/18 1245	1. GES Field	10/25/18 1615
2. [Signature]	10/24/18 1815	2. [Signature]	
3.		3.	

Custody Seal Number:	Intact ☒ Not Intact ☐
Preserved where applicable	On Ice ☒ Cooler Temp 39.4°C



CHAIN OF CUSTODY

Client: New York State Dept. of Environm

NYSDEC Site #915278 - 1542 Main Street, Buffalo NY

CLIENT/REPORTING INFORMATION		PROJECT INFORMATION		BILLING INFORMATION		REQUESTED ANALYSIS (see Test Code sheet)		LAB USE ONLY
Groundwater & Environmental Services, Inc. 415 Lawrence Bell Drive, Williamsville, NY 14221 Project Manager: Eric D. Popken PM Email: NERegion@gesonline.com Phone #: 800-287-7857 Fax: 866-902-2187		Project Name: NYSDEC/Mayville/NY/WestLakeRd/25 Project Address: 25 W Lake Rd, Mayville, NY Project PSD #: 740180 Invoice Instructions (Project #/ Phase / Task / Altorg) 0901757/11109		Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable		PFA's, Standard list (21 analytes) Via 1,4-Dioxane via 8270D SIM ID TCL VOCs via SW-846 Method 8260		

Sample(s) Name: Dustin Gagliano		Sample(s) Name:			number of preserved bottles										1,4-Dioxane via S		TCL VOCs via S				
Lab Sample #	Field ID / Point of Collection (Sys Loc code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	PFAS, Standard 537(modified)	1,4-Dioxane via S	TCL VOCs via S		
GPW-13	MMW-7	-	10/24/18	1545	DG	WG	3	3										X			
EW-16	MMW-8	-	10/25/18	1545	DG	WG	3	3										X			
EW-14	MMW-9	-	10/26/18	945	DG	WG	3	3										X			
TB	MMW-10	-				WG	1	1										X			
GPW-20	MMW-11	-	10/24/18	1035	DG	WG	7	3				2				2	X	X	X		
GMW-2	MMW-12	-	10/24/18	1215	DG	WG	21	9				6				6	X	X	X		
EW-10	MMW-13	-	10/25/18	1155	DG	WG	7	3				2				2	X	X	X		
SB-19	MMW-14	-	10/25/18	1350	DG	WG	7	3				2				2	X	X	X		
GPW-6	MMW-15	-	10/25/18	1725	DG	WG	6	3				1				2	X	X	X		
GPW-5	MMW-16	-	10/25/18	1800	DG	WG	6	3				1				2	X	X	X		
	DUP	-	10/25/18		DG	WG	7	3				2				2	X	X	X		

* - Note - MS/MSD collected.

Turnaround Time (Business Days) Approved By (Lab PM) / Date		Laboratory Information	
☒ Standard 14 Days		Lab: TestAmerica	
☐ 1 day RUSH		Address: 15 Hazelwood Drive, Amherst, NY	
☐ Other		Phone: 484-685-0864	
		Lab PM: Oriette Johnson	
		Lab PM Email: Johnson, Oriette S. (Oriette.Johnson@testamericainc.com)	

Please Email the EQ EDD Package to ges@equisonline.com
EQEDD Name: NYSDEC/Mayville/NY/WestLakeRd/25_LabReport#18343.EQEDD.zip

Sample Custody must be documented below each time samples change possession. Including courier.	
Relinquished By Sampler: 1 Dustin Gagliano	Received By: 1 [Signature] 10/24/18 1345
Relinquished By: 2 [Signature]	Received By: 2 [Signature] 10/25/18 1815
Relinquished By: 3	Received By: 3
Custody Seal Number: 1 Intact	Preserved where applicable: 1 On Ice
	Cooler Temp: 39.49°C

Data Deliverable Information

- ☐ Commercial 'A' (Level 1) = Results Only
- ☐ Commercial 'B' (Level 2) = Results + QC Summary
- ☐ FULLT1 (Level 3 & 4)
- ☐ NJ Reduced = Results + QC Summary + Partial Raw Data
- ☐ Commercial 'C'
- ☐ NJ Data of Known Quality Protocol Reporting
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☐ Other

NYSDEC EQUIS EDD

Chain of Custody Record

Client Information (Sub Contract Lab) Client Contact: Johnson, Oriette S Shipping/Receiving: oriette.johnson@testamericainc.com Company: NELAP - New York		Lab PM: Johnson, Oriette S E-Mail: oriette.johnson@testamericainc.com Accreditations Required (See note): NELAP - New York		Carrier Tracking No(s): 480-144297-1 State of Origin: New York Page 1 of 1	
Address: 880 Riverside Parkway, City: West Sacramento State, Zip: CA, 95605 Phone: 916-373-5600(Tel) 916-372-1059(Fax) Email:		Due Date Requested: 11/7/2018 TAT Requested (days):		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Project Name: Mayville Site# 907030A Site:		PO #: 48019024 WO #: SSOW#:		Analysis Requested PFC ID/MS/MSD (Yes or No) Perform MS/MSD (Yes or No) Total Number of Containers	
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time	
Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=oil, BT=biological, A=air)		Preservation Code:	
GPW-20 (480-144297-5)		10:35 Eastern		Water	
GPW-2 (480-144297-6)		10:24/18 Eastern		Water	
GPW-2 (480-144297-6MS)		10:24/18 Eastern		Water	
GPW-2 (480-144297-6MSD)		10:24/18 Eastern		Water	
EW-10 (480-144297-7)		10:25/18 Eastern		Water	
SB-19 (480-144297-8)		10:25/18 Eastern		Water	
GPW-5 (480-144297-9)		10:25/18 Eastern		Water	
GPW-5 (480-144297-10)		10:25/18 Eastern		Water	
DUP (480-144297-11)		10:25/18 Eastern		Water	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.		Special Instructions/Note:			
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months			
Empty Kit Relinquished by:		Time:		Method of Shipment:	
Relinquished by:		Date:		Received by:	
Relinquished by:		Date:		Received by:	
Relinquished by:		Date:		Received by:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-144297-1

Login Number: 144297

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth P

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	GES
Samples received within 48 hours of sampling.	True	
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: 480-144297-1

Login Number: 144297

List Number: 2

Creator: Gooch, Mayce

List Source: TestAmerica Sacramento

List Creation: 11/01/18 08:59 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	646372
Sample custody seals, if present, are intact.	N/A	
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	4.0c
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?	False	Received project as a subcontract.
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.	True	
Sample Preservation Verified.	N/A	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	