Data Package

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ANALYTICAL LABORATORY

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

September 24, 2019

Maria Wright
Dvirka And Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797-2015

Project Location: Wall St., Valhalla, NY
Client Job Number:
Project Number: 3150-16
Laboratory Work Order Number: 19H0617

Enclosed are results of analyses for samples received by the laboratory on August 13, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Dvirka And Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797-2015
ATTN: Maria Wright

REPORT DATE: 9/24/2019

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 3150-16

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 19H0617

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Wall St., Valhalla, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Trip Blank- 8/12/19	19H0617-01	Trip Blank Water		SW-846 8260C	
Field Blank	19H0617-02	Ground Water		SOP 434-PFAAS	
				SW-846 8260C	
				SW-846 8270D	
P-15	19H0617-03	Ground Water		SOP 434-PFAAS	
				SW-846 8260C	
				SW-846 8270D	
P-5S	19H0617-04	Ground Water		SOP 434-PFAAS	
				SW-846 8260C	
				SW-846 8270D	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

SOP 434-PFAAS

Qualifications:

S-23

Surrogate recovery outside of control limits in BS/MS spiked sample, all reported analytes are within control criteria, data not significantly affected.

Analyte & Samples(s) Qualified:

13C-PFDA
B238243-BS1

V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:

6:2 Fluorotelomersulfonate (6:2 FT
S039525-CCV1

N-EtFOSAA
S039525-CCV1

V-26

Opening calibration verification was within control criteria. Closing calibration verification was outside of criteria and biased on the low side. Re-analysis yielded similar non-conformance, matrix interference confirmed.

Analyte & Samples(s) Qualified:

6:2 Fluorotelomersulfonate (6:2 FT
S039480-CCV4

Perfluorobutanoic acid (PFBA)
S039480-CCV2, S039480-CCV3

Perfluorooctanesulfonamide (FOS/
S039480-CCV3

V-32

Opening calibration verification was within control criteria. Closing calibration verification was outside of criteria and biased on the high side. Re-analysis yielded similar non-conformance, matrix interference confirmed.

Analyte & Samples(s) Qualified:

13C-PFOS
S039480-CCV2

6:2 Fluorotelomersulfonate (6:2 FT
S039480-CCV2

SW-846 8260C

Qualifications:

L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Methyl Acetate
B237978-BS1, B237978-BSD1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Bromomethane
B237978-BS1, B237978-BSD1, S039197-CCV1

tert-Butyl Alcohol (TBA)
B237978-BS1, B237978-BSD1, S039197-CCV1

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The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Jakub A. Matusik
IT Assistant

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: Trip Blank- 8/12/19 | Sampled: 8/12/2019 00:00

Sample ID: 19H0617-01

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	3.8	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Acrylonitrile	ND	5.0	0.52	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Bromoform	ND	1.0	0.46	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Bromomethane	ND	2.0	0.78	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
2-Butanone (MEK)	ND	20	1.9	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.2	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
n-Butylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Carbon Disulfide	ND	5.0	4.4	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Carbon Tetrachloride	ND	5.0	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Chlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Chlorodibromomethane	ND	0.50	0.21	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Chloroethane	ND	2.0	0.35	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Chloromethane	ND	2.0	0.45	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.53	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.19	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Dibromomethane	ND	1.0	0.37	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,2-Dichlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.26	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,2-Dichloroethane	ND	1.0	0.41	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,1-Dichloroethylene	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,2-Dichloropropane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,3-Dichloropropane	ND	0.50	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
2,2-Dichloropropane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,1-Dichloropropene	ND	2.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
trans-1,3-Dichloropropene	ND	0.50	0.23	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Diethyl Ether	ND	2.0	0.34	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: Trip Blank- 8/12/19 | Sampled: 8/12/2019 00:00

Sample ID: 19H0617-01

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,4-Dioxane	ND	50	22	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.25	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Methyl Cyclohexane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Methylene Chloride	ND	5.0	0.34	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.7	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Naphthalene	ND	2.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.27	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.22	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Tetrachloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Tetrahydrofuran	ND	10	0.51	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Toluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.57	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.40	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,1,1-Trichloroethane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,1,2-Trichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Trichloroethylene	ND	1.0	0.24	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.33	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,2,3-Trichloropropane	ND	2.0	0.25	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
Vinyl Chloride	ND	2.0	0.45	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
m+p Xylene	ND	2.0	0.30	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH
o-Xylene	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:27	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	109	70-130		8/14/19 15:27
Toluene-d8	99.7	70-130		8/14/19 15:27
4-Bromofluorobenzene	90.3	70-130		8/14/19 15:27

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: Trip Blank- 8/12/19 | Sampled: 8/12/2019 00:00

Sample ID: 19H0617-01

Sample Matrix: Trip Blank Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Silane, methoxytrimethyl-	8.5	µg/L	84159	2.501	1	001825-61-2	91	SW-846 8260C	8/14/19	8/14/19 15:27	EEH

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Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: Field Blank | Sampled: 8/12/2019 08:45

Sample ID: 19H0617-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	3.8	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Acrylonitrile	ND	5.0	0.52	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Bromoform	ND	1.0	0.46	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Bromomethane	ND	2.0	0.78	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
2-Butanone (MEK)	ND	20	1.9	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.2	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
n-Butylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Carbon Disulfide	ND	5.0	4.4	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Carbon Tetrachloride	ND	5.0	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Chlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Chlorodibromomethane	ND	0.50	0.21	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Chloroethane	ND	2.0	0.35	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Chloromethane	ND	2.0	0.45	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.53	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.19	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Dibromomethane	ND	1.0	0.37	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,2-Dichlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.26	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,2-Dichloroethane	ND	1.0	0.41	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,1-Dichloroethylene	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,2-Dichloropropane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,3-Dichloropropane	ND	0.50	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
2,2-Dichloropropane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,1-Dichloropropene	ND	2.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
trans-1,3-Dichloropropene	ND	0.50	0.23	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Diethyl Ether	ND	2.0	0.34	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: Field Blank | Sampled: 8/12/2019 08:45

Sample ID: 19H0617-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,4-Dioxane	ND	50	22	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.25	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Methyl Cyclohexane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Methylene Chloride	0.36	5.0	0.34	µg/L	1	J	SW-846 8260C	8/14/19	8/14/19 15:54	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.7	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Naphthalene	ND	2.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.27	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.22	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Tetrachloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Tetrahydrofuran	ND	10	0.51	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Toluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.57	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.40	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,1,1-Trichloroethane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,1,2-Trichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Trichloroethylene	ND	1.0	0.24	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.33	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,2,3-Trichloropropane	ND	2.0	0.25	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
Vinyl Chloride	ND	2.0	0.45	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
m+p Xylene	ND	2.0	0.30	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH
o-Xylene	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 15:54	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	110	70-130		8/14/19 15:54
Toluene-d8	98.1	70-130		8/14/19 15:54
4-Bromofluorobenzene	93.6	70-130		8/14/19 15:54

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY
Sample Description:
Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: Field Blank
Sampled: 8/12/2019 08:45

Sample ID: 19H0617-02

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Silane, methoxytrimethyl-	9.2	µg/L	89138	2.501	1	001825-61-2	83	SW-846 8260C	8/14/19	8/14/19 15:54	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY
Sample Description:
Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: Field Blank
Sampled: 8/12/2019 08:45

Sample ID: 19H0617-02

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270D	8/19/19	8/21/19 16:03	CLA

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	30.0	15-110		8/21/19 16:03

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Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: Field Blank | Sampled: 8/12/2019 08:45

Sample ID: 19H0617-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
6:2 Fluorotelomersulfonate (6:2 FTS A)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
N-EtFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
8:2 Fluorotelomersulfonate (8:2 FTS A)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
N-MeFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 19:57	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	103	70-130		8/21/19 19:57
13C-PFDA	89.9	70-130		8/21/19 19:57
d5-NEtFOSAA	70.4	70-130		8/21/19 19:57

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: P-15 | Sampled: 8/12/2019 09:30

Sample ID: 19H0617-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	3.8	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Acrylonitrile	ND	5.0	0.52	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Bromoform	ND	1.0	0.46	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Bromomethane	ND	2.0	0.78	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
2-Butanone (MEK)	ND	20	1.9	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.2	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
n-Butylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Carbon Disulfide	ND	5.0	4.4	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Carbon Tetrachloride	ND	5.0	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Chlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Chlorodibromomethane	ND	0.50	0.21	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Chloroethane	ND	2.0	0.35	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Chloroform	2.8	2.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Chloromethane	ND	2.0	0.45	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.53	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.19	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Dibromomethane	ND	1.0	0.37	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,2-Dichlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.26	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,2-Dichloroethane	ND	1.0	0.41	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,1-Dichloroethylene	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,2-Dichloropropane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,3-Dichloropropane	ND	0.50	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
2,2-Dichloropropane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,1-Dichloropropene	ND	2.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
trans-1,3-Dichloropropene	ND	0.50	0.23	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Diethyl Ether	ND	2.0	0.34	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: P-15 | Sampled: 8/12/2019 09:30

Sample ID: 19H0617-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,4-Dioxane	ND	50	22	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.25	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Methyl Cyclohexane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Methylene Chloride	ND	5.0	0.34	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.7	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Naphthalene	ND	2.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.27	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.22	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Tetrachloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Tetrahydrofuran	ND	10	0.51	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Toluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.57	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.40	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,1,1-Trichloroethane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,1,2-Trichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Trichloroethylene	ND	1.0	0.24	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.33	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,2,3-Trichloropropane	ND	2.0	0.25	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
Vinyl Chloride	ND	2.0	0.45	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
m+p Xylene	ND	2.0	0.30	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH
o-Xylene	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:20	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	112	70-130		8/14/19 16:20
Toluene-d8	99.4	70-130		8/14/19 16:20
4-Bromofluorobenzene	94.1	70-130		8/14/19 16:20

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY
Sample Description:
Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: P-15
Sampled: 8/12/2019 09:30

Sample ID: 19H0617-03

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Silane, methoxytrimethyl-	18	µg/L	177506	2.501	1	001825-61-2	91	SW-846 8260C	8/14/19	8/14/19 16:20	EEH

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Project Location: Wall St., Valhalla, NY
Sample Description:
Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: P-15
Sampled: 8/12/2019 09:30

Sample ID: 19H0617-03

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.032	µg/L	1		SW-846 8270D	8/19/19	8/21/19 16:23	CLA

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	27.5	15-110		8/21/19 16:23

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Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: P-15 | Sampled: 8/12/2019 09:30

Sample ID: 19H0617-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	10	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluoropentanoic acid (PFPeA)	59	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorohexanoic acid (PFHxA)	33	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluoroheptanoic acid (PFHpA)	18	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorooctanoic acid (PFOA)	12	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
6:2 Fluorotelomersulfonate (6:2 FTS A)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
N-EtFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
8:2 Fluorotelomersulfonate (8:2 FTS A)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
N-MeFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:09	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	108	70-130		8/21/19 20:09
13C-PFDA	97.4	70-130		8/21/19 20:09
d5-NEtFOSAA	71.1	70-130		8/21/19 20:09

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: P-5S | Sampled: 8/12/2019 13:10

Sample ID: 19H0617-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	3.8	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Acrylonitrile	ND	5.0	0.52	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Bromoform	ND	1.0	0.46	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Bromomethane	ND	2.0	0.78	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
2-Butanone (MEK)	ND	20	1.9	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.2	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
n-Butylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Carbon Disulfide	ND	5.0	4.4	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Carbon Tetrachloride	ND	5.0	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Chlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Chlorodibromomethane	ND	0.50	0.21	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Chloroethane	ND	2.0	0.35	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Chloromethane	ND	2.0	0.45	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.53	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.19	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Dibromomethane	ND	1.0	0.37	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,2-Dichlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.26	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,1-Dichloroethane	1.7	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,2-Dichloroethane	ND	1.0	0.41	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,1-Dichloroethylene	0.45	1.0	0.32	µg/L	1	J	SW-846 8260C	8/14/19	8/14/19 16:47	EEH
cis-1,2-Dichloroethylene	23	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,2-Dichloropropane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,3-Dichloropropane	ND	0.50	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
2,2-Dichloropropane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,1-Dichloropropene	ND	2.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
trans-1,3-Dichloropropene	ND	0.50	0.23	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Diethyl Ether	ND	2.0	0.34	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: P-5S | Sampled: 8/12/2019 13:10

Sample ID: 19H0617-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,4-Dioxane	ND	50	22	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.25	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Methyl Cyclohexane	ND	1.0	0.20	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Methylene Chloride	ND	5.0	0.34	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.7	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Naphthalene	ND	2.0	0.31	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.27	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.22	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Tetrachloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Tetrahydrofuran	ND	10	0.51	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Toluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.57	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.40	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,1,1-Trichloroethane	0.86	1.0	0.20	µg/L	1	J	SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,1,2-Trichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Trichloroethylene	25	1.0	0.24	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.33	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,2,3-Trichloropropane	ND	2.0	0.25	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.32	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
Vinyl Chloride	1.1	2.0	0.45	µg/L	1	J	SW-846 8260C	8/14/19	8/14/19 16:47	EEH
m+p Xylene	ND	2.0	0.30	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH
o-Xylene	ND	1.0	0.17	µg/L	1		SW-846 8260C	8/14/19	8/14/19 16:47	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	112	70-130		8/14/19 16:47
Toluene-d8	99.7	70-130		8/14/19 16:47
4-Bromofluorobenzene	95.0	70-130		8/14/19 16:47

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: P-5S | Sampled: 8/12/2019 13:10

Sample ID: 19H0617-04

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260C	8/14/19	8/14/19 16:47	EEH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY
Sample Description:
Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: P-5S
Sampled: 8/12/2019 13:10

Sample ID: 19H0617-04

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	0.47	0.19	0.031	µg/L	1		SW-846 8270D	8/19/19	8/21/19 16:43	CLA

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	24.3	15-110		8/21/19 16:43

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Wall St., Valhalla, NY | Sample Description: | Work Order: 19H0617

Date Received: 8/13/2019

Field Sample #: P-5S | Sampled: 8/12/2019 13:10

Sample ID: 19H0617-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	16	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluoropentanoic acid (PFPeA)	4.6	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorohexanoic acid (PFHxA)	3.5	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorooctanoic acid (PFOA)	4.9	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
6:2 Fluorotelomersulfonate (6:2 FTS A)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
N-EtFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
8:2 Fluorotelomersulfonate (8:2 FTS A)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
N-MeFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 14:13	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	91.2	70-130		8/21/19 14:13
13C-PFDA	94.1	70-130		8/21/19 14:13
d5-NEtFOSAA	70.1	70-130		8/21/19 14:13

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Sample Extraction Data

Prep Method: SOP 434-PFAAS-SOP 434-PFAAS

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19H0617-02 [Field Blank]	B238243	250	1.00	08/19/19
19H0617-03 [P-15]	B238243	250	1.00	08/19/19
19H0617-04 [P-5S]	B238243	250	1.00	08/19/19

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19H0617-01 [Trip Blank- 8/12/19]	B237978	5	5.00	08/14/19
19H0617-02 [Field Blank]	B237978	5	5.00	08/14/19
19H0617-03 [P-15]	B237978	5	5.00	08/14/19
19H0617-04 [P-5S]	B237978	5	5.00	08/14/19

Prep Method: SW-846 3510C-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19H0617-02 [Field Blank]	B238366	950	1.00	08/19/19
19H0617-03 [P-15]	B238366	1020	1.00	08/19/19
19H0617-04 [P-5S]	B238366	1040	1.00	08/19/19

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B237978 - SW-846 5030B										
Blank (B237978-BLK1)				Prepared & Analyzed: 08/14/19						
Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B237978 - SW-846 5030B											
Blank (B237978-BLK1)				Prepared & Analyzed: 08/14/19							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L								
Methyl Cyclohexane	ND	1.0	µg/L								
Methylene Chloride	ND	5.0	µg/L								
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L								
Naphthalene	ND	2.0	µg/L								
n-Propylbenzene	ND	1.0	µg/L								
Styrene	ND	1.0	µg/L								
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L								
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L								
Tetrachloroethylene	ND	1.0	µg/L								
Tetrahydrofuran	ND	10	µg/L								
Toluene	ND	1.0	µg/L								
1,2,3-Trichlorobenzene	ND	5.0	µg/L								
1,2,4-Trichlorobenzene	ND	1.0	µg/L								
1,3,5-Trichlorobenzene	ND	1.0	µg/L								
1,1,1-Trichloroethane	ND	1.0	µg/L								
1,1,2-Trichloroethane	ND	1.0	µg/L								
Trichloroethylene	ND	1.0	µg/L								
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L								
1,2,3-Trichloropropane	ND	2.0	µg/L								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L								
1,2,4-Trimethylbenzene	ND	1.0	µg/L								
1,3,5-Trimethylbenzene	ND	1.0	µg/L								
Vinyl Chloride	ND	2.0	µg/L								
m+p Xylene	ND	2.0	µg/L								
o-Xylene	ND	1.0	µg/L								
Surrogate: 1,2-Dichloroethane-d4	*27.4*		µg/L	25.0		109	70-130				
Surrogate: Toluene-d8	*24.3*		µg/L	25.0		97.2	70-130				
Surrogate: 4-Bromofluorobenzene	*22.7*		µg/L	25.0		90.6	70-130				
LCS (B237978-BS1)				Prepared & Analyzed: 08/14/19							
Acetone	123	50	µg/L	100		123	70-160				†
Acrylonitrile	10.6	5.0	µg/L	10.0		106	70-130				
tert-Amyl Methyl Ether (TAME)	10.9	0.50	µg/L	10.0		109	70-130				
Benzene	11.9	1.0	µg/L	10.0		119	70-130				
Bromobenzene	11.4	1.0	µg/L	10.0		114	70-130				
Bromochloromethane	13.0	1.0	µg/L	10.0		130	70-130				
Bromodichloromethane	12.6	0.50	µg/L	10.0		126	70-130				
Bromoform	10.8	1.0	µg/L	10.0		108	70-130				
Bromomethane	8.20	2.0	µg/L	10.0		82.0	40-160			V-20	†
2-Butanone (MEK)	116	20	µg/L	100		116	40-160				†
tert-Butyl Alcohol (TBA)	121	20	µg/L	100		121	40-160			V-20	†
n-Butylbenzene	11.7	1.0	µg/L	10.0		117	70-130				
sec-Butylbenzene	12.2	1.0	µg/L	10.0		122	70-130				
tert-Butylbenzene	11.4	1.0	µg/L	10.0		114	70-130				
tert-Butyl Ethyl Ether (TBEE)	10.6	0.50	µg/L	10.0		106	70-130				
Carbon Disulfide	12.4	5.0	µg/L	10.0		124	70-130				
Carbon Tetrachloride	11.6	5.0	µg/L	10.0		116	70-130				
Chlorobenzene	11.6	1.0	µg/L	10.0		116	70-130				
Chlorodibromomethane	11.9	0.50	µg/L	10.0		119	70-130				
Chloroethane	11.2	2.0	µg/L	10.0		112	70-130				
Chloroform	12.4	2.0	µg/L	10.0		124	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B237978 - SW-846 5030B												
LCS (B237978-BS1)				Prepared & Analyzed: 08/14/19								
Chloromethane	9.21	2.0	µg/L	10.0		92.1		40-160				†
2-Chlorotoluene	11.8	1.0	µg/L	10.0		118		70-130				
4-Chlorotoluene	11.4	1.0	µg/L	10.0		114		70-130				
1,2-Dibromo-3-chloropropane (DBCP)	12.1	5.0	µg/L	10.0		121		70-130				
1,2-Dibromoethane (EDB)	12.3	0.50	µg/L	10.0		123		70-130				
Dibromomethane	12.0	1.0	µg/L	10.0		120		70-130				
1,2-Dichlorobenzene	11.9	1.0	µg/L	10.0		119		70-130				
1,3-Dichlorobenzene	12.5	1.0	µg/L	10.0		125		70-130				
1,4-Dichlorobenzene	12.1	1.0	µg/L	10.0		121		70-130				
trans-1,4-Dichloro-2-butene	11.8	2.0	µg/L	10.0		118		70-130				
Dichlorodifluoromethane (Freon 12)	7.46	2.0	µg/L	10.0		74.6		40-160				†
1,1-Dichloroethane	12.2	1.0	µg/L	10.0		122		70-130				
1,2-Dichloroethane	12.8	1.0	µg/L	10.0		128		70-130				
1,1-Dichloroethylene	12.3	1.0	µg/L	10.0		123		70-130				
cis-1,2-Dichloroethylene	12.3	1.0	µg/L	10.0		123		70-130				
trans-1,2-Dichloroethylene	11.8	1.0	µg/L	10.0		118		70-130				
1,2-Dichloropropane	12.0	1.0	µg/L	10.0		120		70-130				
1,3-Dichloropropane	11.6	0.50	µg/L	10.0		116		70-130				
2,2-Dichloropropane	10.8	1.0	µg/L	10.0		108		40-130				†
1,1-Dichloropropene	11.8	2.0	µg/L	10.0		118		70-130				
cis-1,3-Dichloropropene	11.5	0.50	µg/L	10.0		115		70-130				
trans-1,3-Dichloropropene	11.5	0.50	µg/L	10.0		115		70-130				
Diethyl Ether	12.1	2.0	µg/L	10.0		121		70-130				
Diisopropyl Ether (DIPE)	11.9	0.50	µg/L	10.0		119		70-130				
1,4-Dioxane	103	50	µg/L	100		103		40-130				†
Ethylbenzene	11.3	1.0	µg/L	10.0		113		70-130				
Hexachlorobutadiene	11.9	0.60	µg/L	10.0		119		70-130				
2-Hexanone (MBK)	118	10	µg/L	100		118		70-160				†
Isopropylbenzene (Cumene)	11.7	1.0	µg/L	10.0		117		70-130				
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114		70-130				
Methyl Acetate	13.5	1.0	µg/L	10.0		**135**	*	70-130			L-02	
Methyl tert-Butyl Ether (MTBE)	11.5	1.0	µg/L	10.0		115		70-130				
Methyl Cyclohexane	11.6	1.0	µg/L	10.0		116		70-130				
Methylene Chloride	12.6	5.0	µg/L	10.0		126		70-130				
4-Methyl-2-pentanone (MIBK)	120	10	µg/L	100		120		70-160				†
Naphthalene	11.3	2.0	µg/L	10.0		113		40-130				†
n-Propylbenzene	11.6	1.0	µg/L	10.0		116		70-130				
Styrene	11.1	1.0	µg/L	10.0		111		70-130				
1,1,1,2-Tetrachloroethane	11.9	1.0	µg/L	10.0		119		70-130				
1,1,2,2-Tetrachloroethane	12.7	0.50	µg/L	10.0		127		70-130				
Tetrachloroethylene	12.2	1.0	µg/L	10.0		122		70-130				
Tetrahydrofuran	12.4	10	µg/L	10.0		124		70-130				
Toluene	12.0	1.0	µg/L	10.0		120		70-130				
1,2,3-Trichlorobenzene	10.9	5.0	µg/L	10.0		109		70-130				
1,2,4-Trichlorobenzene	11.1	1.0	µg/L	10.0		111		70-130				
1,3,5-Trichlorobenzene	11.0	1.0	µg/L	10.0		110		70-130				
1,1,1-Trichloroethane	12.2	1.0	µg/L	10.0		122		70-130				
1,1,2-Trichloroethane	12.6	1.0	µg/L	10.0		126		70-130				
Trichloroethylene	12.1	1.0	µg/L	10.0		121		70-130				
Trichlorofluoromethane (Freon 11)	10.7	2.0	µg/L	10.0		107		70-130				
1,2,3-Trichloropropane	11.9	2.0	µg/L	10.0		119		70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B237978 - SW-846 5030B											
LCS (B237978-BS1)				Prepared & Analyzed: 08/14/19							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.2	1.0	µg/L	10.0		122	70-130				
1,2,4-Trimethylbenzene	11.4	1.0	µg/L	10.0		114	70-130				
1,3,5-Trimethylbenzene	10.9	1.0	µg/L	10.0		109	70-130				
Vinyl Chloride	9.91	2.0	µg/L	10.0		99.1	40-160				†
m+p Xylene	22.9	2.0	µg/L	20.0		115	70-130				
o-Xylene	11.7	1.0	µg/L	10.0		117	70-130				
Surrogate: 1,2-Dichloroethane-d4	*26.6*		µg/L	25.0		107	70-130				
Surrogate: Toluene-d8	*25.4*		µg/L	25.0		102	70-130				
Surrogate: 4-Bromofluorobenzene	*23.7*		µg/L	25.0		94.8	70-130				
LCS Dup (B237978-BSD1)				Prepared & Analyzed: 08/14/19							
Acetone	122	50	µg/L	100		122	70-160	0.619	25		†
Acrylonitrile	11.1	5.0	µg/L	10.0		111	70-130	3.96	25		
tert-Amyl Methyl Ether (TAME)	10.9	0.50	µg/L	10.0		109	70-130	0.643	25		
Benzene	11.7	1.0	µg/L	10.0		117	70-130	1.36	25		
Bromobenzene	11.2	1.0	µg/L	10.0		112	70-130	2.12	25		
Bromochloromethane	12.7	1.0	µg/L	10.0		127	70-130	1.63	25		
Bromodichloromethane	12.1	0.50	µg/L	10.0		121	70-130	3.73	25		
Bromoform	10.7	1.0	µg/L	10.0		107	70-130	0.743	25		
Bromomethane	9.35	2.0	µg/L	10.0		93.5	40-160	13.1	25	V-20	†
2-Butanone (MEK)	117	20	µg/L	100		117	40-160	0.859	25		†
tert-Butyl Alcohol (TBA)	119	20	µg/L	100		119	40-160	1.46	25	V-20	†
n-Butylbenzene	11.2	1.0	µg/L	10.0		112	70-130	4.55	25		
sec-Butylbenzene	11.6	1.0	µg/L	10.0		116	70-130	4.46	25		
tert-Butylbenzene	11.0	1.0	µg/L	10.0		110	70-130	2.68	25		
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0		107	70-130	0.658	25		
Carbon Disulfide	11.7	5.0	µg/L	10.0		117	70-130	6.31	25		
Carbon Tetrachloride	11.2	5.0	µg/L	10.0		112	70-130	2.99	25		
Chlorobenzene	11.4	1.0	µg/L	10.0		114	70-130	1.73	25		
Chlorodibromomethane	11.6	0.50	µg/L	10.0		116	70-130	2.99	25		
Chloroethane	11.4	2.0	µg/L	10.0		114	70-130	1.51	25		
Chloroform	12.3	2.0	µg/L	10.0		123	70-130	0.324	25		
Chloromethane	9.38	2.0	µg/L	10.0		93.8	40-160	1.83	25		†
2-Chlorotoluene	11.2	1.0	µg/L	10.0		112	70-130	4.69	25		
4-Chlorotoluene	11.2	1.0	µg/L	10.0		112	70-130	1.86	25		
1,2-Dibromo-3-chloropropane (DBCP)	12.5	5.0	µg/L	10.0		125	70-130	3.50	25		
1,2-Dibromoethane (EDB)	12.2	0.50	µg/L	10.0		122	70-130	1.06	25		
Dibromomethane	11.9	1.0	µg/L	10.0		119	70-130	0.251	25		
1,2-Dichlorobenzene	11.9	1.0	µg/L	10.0		119	70-130	0.421	25		
1,3-Dichlorobenzene	12.0	1.0	µg/L	10.0		120	70-130	3.76	25		
1,4-Dichlorobenzene	11.7	1.0	µg/L	10.0		117	70-130	3.62	25		
trans-1,4-Dichloro-2-butene	11.2	2.0	µg/L	10.0		112	70-130	5.74	25		
Dichlorodifluoromethane (Freon 12)	7.14	2.0	µg/L	10.0		71.4	40-160	4.38	25		†
1,1-Dichloroethane	11.7	1.0	µg/L	10.0		117	70-130	4.10	25		
1,2-Dichloroethane	12.5	1.0	µg/L	10.0		125	70-130	2.06	25		
1,1-Dichloroethylene	12.4	1.0	µg/L	10.0		124	70-130	0.893	25		
cis-1,2-Dichloroethylene	11.9	1.0	µg/L	10.0		119	70-130	2.98	25		
trans-1,2-Dichloroethylene	11.3	1.0	µg/L	10.0		113	70-130	4.50	25		
1,2-Dichloropropane	12.0	1.0	µg/L	10.0		120	70-130	0.418	25		
1,3-Dichloropropane	11.4	0.50	µg/L	10.0		114	70-130	1.75	25		
2,2-Dichloropropane	10.8	1.0	µg/L	10.0		108	40-130	0.370	25		†
1,1-Dichloropropene	11.5	2.0	µg/L	10.0		115	70-130	2.32	25		

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B237978 - SW-846 5030B												
LCS Dup (B237978-BSD1)				Prepared & Analyzed: 08/14/19								
cis-1,3-Dichloropropene	11.1	0.50	µg/L	10.0		111		70-130	3.80	25		
trans-1,3-Dichloropropene	10.9	0.50	µg/L	10.0		109		70-130	5.36	25		
Diethyl Ether	11.9	2.0	µg/L	10.0		119		70-130	1.75	25		
Diisopropyl Ether (DIPE)	11.8	0.50	µg/L	10.0		118		70-130	0.844	25		
1,4-Dioxane	105	50	µg/L	100		105		40-130	2.09	50		† ‡
Ethylbenzene	11.1	1.0	µg/L	10.0		111		70-130	1.96	25		
Hexachlorobutadiene	11.0	0.60	µg/L	10.0		110		70-130	7.75	25		
2-Hexanone (MBK)	117	10	µg/L	100		117		70-160	1.24	25		†
Isopropylbenzene (Cumene)	11.2	1.0	µg/L	10.0		112		70-130	4.89	25		
p-Isopropyltoluene (p-Cymene)	11.0	1.0	µg/L	10.0		110		70-130	4.02	25		
Methyl Acetate	13.4	1.0	µg/L	10.0		**134**	*	70-130	0.818	25	L-02	
Methyl tert-Butyl Ether (MTBE)	11.5	1.0	µg/L	10.0		115		70-130	0.522	25		
Methyl Cyclohexane	11.2	1.0	µg/L	10.0		112		70-130	4.30	25		
Methylene Chloride	12.3	5.0	µg/L	10.0		123		70-130	2.32	25		
4-Methyl-2-pentanone (MIBK)	119	10	µg/L	100		119		70-160	1.19	25		†
Naphthalene	11.4	2.0	µg/L	10.0		114		40-130	0.972	25		†
n-Propylbenzene	11.3	1.0	µg/L	10.0		113		70-130	2.54	25		
Styrene	11.1	1.0	µg/L	10.0		111		70-130	0.00	25		
1,1,1,2-Tetrachloroethane	11.4	1.0	µg/L	10.0		114		70-130	4.04	25		
1,1,2,2-Tetrachloroethane	12.2	0.50	µg/L	10.0		122		70-130	4.08	25		
Tetrachloroethylene	11.2	1.0	µg/L	10.0		112		70-130	8.64	25		
Tetrahydrofuran	12.4	10	µg/L	10.0		124		70-130	0.322	25		
Toluene	11.6	1.0	µg/L	10.0		116		70-130	3.47	25		
1,2,3-Trichlorobenzene	11.0	5.0	µg/L	10.0		110		70-130	1.01	25		
1,2,4-Trichlorobenzene	11.0	1.0	µg/L	10.0		110		70-130	0.635	25		
1,3,5-Trichlorobenzene	10.2	1.0	µg/L	10.0		102		70-130	6.97	25		
1,1,1-Trichloroethane	12.1	1.0	µg/L	10.0		121		70-130	1.23	25		
1,1,2-Trichloroethane	12.3	1.0	µg/L	10.0		123		70-130	2.09	25		
Trichloroethylene	11.9	1.0	µg/L	10.0		119		70-130	1.75	25		
Trichlorofluoromethane (Freon 11)	10.5	2.0	µg/L	10.0		105		70-130	1.79	25		
1,2,3-Trichloropropane	10.9	2.0	µg/L	10.0		109		70-130	8.67	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.6	1.0	µg/L	10.0		116		70-130	4.80	25		
1,2,4-Trimethylbenzene	11.0	1.0	µg/L	10.0		110		70-130	3.31	25		
1,3,5-Trimethylbenzene	10.7	1.0	µg/L	10.0		107		70-130	1.94	25		
Vinyl Chloride	9.55	2.0	µg/L	10.0		95.5		40-160	3.70	25		†
m+p Xylene	22.7	2.0	µg/L	20.0		114		70-130	0.876	25		
o-Xylene	11.5	1.0	µg/L	10.0		115		70-130	1.55	25		
Surrogate: 1,2-Dichloroethane-d4	*27.5*		µg/L	25.0		110		70-130				
Surrogate: Toluene-d8	*25.3*		µg/L	25.0		101		70-130				
Surrogate: 4-Bromofluorobenzene	*23.5*		µg/L	25.0		94.1		70-130				

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QUALITY CONTROL

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B237978 - SW-846 5030B										
Blank (B237978-BLK1)				Prepared & Analyzed: 08/14/19						
No TICs Found	0.0		µg/L							

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QUALITY CONTROL

1,4-Dioxane by isotope dilution GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B238366 - SW-846 3510C										
Blank (B238366-BLK1)				Prepared: 08/19/19 Analyzed: 08/21/19						
1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	*3.27*		µg/L	10.0		32.7	15-110			
LCS (B238366-BS1)				Prepared: 08/19/19 Analyzed: 08/21/19						
1,4-Dioxane	10.2	0.20	µg/L	10.0		102	40-140			
Surrogate: 1,4-Dioxane-d8	*2.78*		µg/L	10.0		27.8	15-110			
LCS Dup (B238366-BSD1)				Prepared: 08/19/19 Analyzed: 08/21/19						
1,4-Dioxane	9.68	0.20	µg/L	10.0		96.8	40-140	4.84	30	
Surrogate: 1,4-Dioxane-d8	*2.98*		µg/L	10.0		29.8	15-110			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B238243 - SOP 434-PFAAS											
Blank (B238243-BLK1)				Prepared: 08/19/19 Analyzed: 08/21/19							
Perfluorobutanoic acid (PFBA)	ND	2.0	ng/L								
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L								
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L								
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L								
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L								
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L								
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L								
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L								
6:2 Fluorotelomersulfonate (6:2 FTS A)	ND	2.0	ng/L								
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L								
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L								
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L								
N-EtFOSAA	ND	2.0	ng/L								
8:2 Fluorotelomersulfonate (8:2 FTS A)	ND	2.0	ng/L								
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L								
N-MeFOSAA	ND	2.0	ng/L								
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L								
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L								
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L								
Surrogate: 13C-PFHxA	*42.6*		ng/L	40.0		106		70-130			
Surrogate: 13C-PFDA	*34.9*		ng/L	40.0		87.1		70-130			
Surrogate: d5-NEtFOSAA	*113*		ng/L	160		70.4		70-130			
LCS (B238243-BS1)				Prepared: 08/19/19 Analyzed: 08/23/19							
Perfluorobutanoic acid (PFBA)	7.80	2.0	ng/L	10.0		78.0		30-110			
Perfluorobutanesulfonic acid (PFBS)	7.86	2.0	ng/L	8.85		88.8		70-130			
Perfluoropentanoic acid (PFPeA)	11.2	2.0	ng/L	10.0		112		70-130			
Perfluorohexanoic acid (PFHxA)	9.42	2.0	ng/L	10.0		94.2		70-130			
Perfluorohexanesulfonic acid (PFHxS)	6.61	2.0	ng/L	9.10		72.7		70-130			
Perfluoroheptanoic acid (PFHpA)	8.87	2.0	ng/L	10.0		88.7		70-130			
Perfluoroheptanesulfonic acid (PFHpS)	7.48	2.0	ng/L	9.50		78.7		70-130			
Perfluorooctanoic acid (PFOA)	10.4	2.0	ng/L	10.0		104		70-130			
Perfluorooctanesulfonic acid (PFOS)	8.06	2.0	ng/L	9.25		87.2		70-130			
Perfluorooctanesulfonamide (FOSA)	6.03	2.0	ng/L	10.0		60.3		30-110			
6:2 Fluorotelomersulfonate (6:2 FTS A)	11.6	2.0	ng/L	9.50		123		70-130			
Perfluorononanoic acid (PFNA)	9.57	2.0	ng/L	10.0		95.7		70-130			
Perfluorodecanoic acid (PFDA)	10.8	2.0	ng/L	10.0		108		70-130			
Perfluorodecanesulfonic acid (PFDS)	8.07	2.0	ng/L	9.65		83.6		70-130			
N-EtFOSAA	7.99	2.0	ng/L	10.0		79.9		70-130			
8:2 Fluorotelomersulfonate (8:2 FTS A)	10.3	2.0	ng/L	9.60		108		70-130			
Perfluoroundecanoic acid (PFUnA)	11.2	2.0	ng/L	10.0		112		70-130			
N-MeFOSAA	10.5	2.0	ng/L	10.0		105		70-130			
Perfluorododecanoic acid (PFDoA)	9.60	2.0	ng/L	10.0		96.0		70-130			
Perfluorotridecanoic acid (PFTrDA)	10.8	2.0	ng/L	10.0		108		70-130			
Perfluorotetradecanoic acid (PFTA)	10.1	2.0	ng/L	10.0		101		70-130			
Surrogate: 13C-PFHxA	*48.5*		ng/L	40.0		121		70-130			
Surrogate: 13C-PFDA	*55.3*		ng/L	40.0		**138**	*	70-130			S-23
Surrogate: d5-NEtFOSAA	*180*		ng/L	160		112		70-130			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
S-23	Surrogate recovery outside of control limits in BS/MS spiked sample, all reported analytes are within control criteria, data not significantly affected.
V-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-26	Opening calibration verification was within control criteria. Closing calibration verification was outside of criteria and biased on the low side. Re-analysis yielded similar non-conformance, matrix interference confirmed.
V-32	Opening calibration verification was within control criteria. Closing calibration verification was outside of criteria and biased on the high side. Re-analysis yielded similar non-conformance, matrix interference confirmed.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SOP 434-PFAAS in Water	
Perfluorobutanoic acid (PFBA)	NH-P
Perfluorobutanesulfonic acid (PFBS)	NH-P
Perfluoropentanoic acid (PFPeA)	NH-P
Perfluorohexanoic acid (PFHxA)	NH-P
Perfluorohexanesulfonic acid (PFHxS)	NH-P
Perfluoroheptanoic acid (PFHpA)	NH-P
Perfluorooctanoic acid (PFOA)	NH-P
Perfluorooctanesulfonic acid (PFOS)	NH-P
6:2 Fluorotelomersulfonate (6:2 FTS A)	NH-P
Perfluorononanoic acid (PFNA)	NH-P
Perfluorodecanoic acid (PFDA)	NH-P
N-EtFOSAA	NH-P
8:2 Fluorotelomersulfonate (8:2 FTS A)	NH-P
Perfluoroundecanoic acid (PFUnA)	NH-P
N-MeFOSAA	NH-P
Perfluorododecanoic acid (PFDoA)	NH-P
Perfluorotridecanoic acid (PFTrDA)	NH-P
Perfluorotetradecanoic acid (PFTA)	NH-P
SW-846 8260C in Water	
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromobenzene	NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NY
Dibromomethane	ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Water	
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
trans-1,4-Dichloro-2-butene	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
1,3-Dichloropropane	ME,VA,NY
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	NY
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	NY
Ethylbenzene	CT,ME,NH,VA,NY
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Water	
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY
SW-846 8270D in Water	
1,4-Dioxane	NY

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2019
NC	North Carolina Div. of Water Quality	652	12/31/2019
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2019
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test ANALYTICAL LABORATORY

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CHAIN OF CUSTODY RECORD (New York)

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East Longmeadow, MA 01028

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KHF

Company Name:	D+B Engineers + Architects P.C
Address:	330 Crossways Park Drive
Phone:	516 364-9870
Project Name:	Farrand Controls Site
Project Location:	Wallstreet, Valhalla, New York
Project Number:	3150-16C
Project Manager:	Marcia Wright
Con-Test Quote Name/Number:	
Invoice Recipient:	Marcia Wright
Sampled By:	Keith Robins

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date: Standard

Results Approved Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☒ EXCEL ☒
Other: category "B" + EQuIS
CLP Like Data Pkg Required: ☐
Email To: Lab data@dbeng.com
Fax To #:

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	TCL VOCs + TICs (8260)	1,4-Dioxane SIM (8270)	PFAS Analytes (537)	# of Containers	[2] Preservation Code	[3] Container Code
								✓	3	2	2		
								H	none	MeOH			
								✓	6	P			
1	Trip Blank - 8/12/19	8/12/19	8/12/19	—	—	Aqus	C	✓	1	1			
2	Field Blank	0845 8/12/19	0845 8/12/19	—	✓	SW	C	✓	✓	✓			
3	P-15	0930 8/12/19	0930 8/12/19	—	✓	GW	C/L	✓	✓	✓			
4	P-55	1:10 pm 8/12/19	1:10 pm 8/12/19	—	✓	GW	C/L	✓	✓	✓			

ANALYTICAL REQUESTED

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: Please provide category "B" and EQuIS

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Keith Robins	Date/Time: 08/12/19 4:45 pm
Received by: (signature)		Date/Time: 8/13/19 9:25
Relinquished by: (signature)		Date/Time: 8/13/19 2:20
Received by: (signature)		Date/Time: 8/13/19 14:20
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP, LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client D+B

Received By AP Date 8/13/19 Time 14:20

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____

Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 1 Actual Temp - 5.6

By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? N/A Were Samples Tampered with? N/A

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T

Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? F Who was notified? _____

Is there enough Volume? T

Is there Headspace where applicable? T MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? T On COC? T

Do all samples have the proper pH? N/A Acid _____ Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.	6	1 Liter Plastic		16 oz Amb.	
HCL-	11	500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	6	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

Both Tripblanks have headspace

VOA

SAMPLE DATA

1 - FORM I
ANALYSIS DATA SHEET

Trip Blank- 8/12/19

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Trip Blank Water	Laboratory ID:	19H0617-01	File ID:	C1922620.D
Sampled:	08/12/19 00:00	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 15:27
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192	Instrument:	GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone		3.8	50	
107-13-1	Acrylonitrile		0.52	5.0	
994-05-8	tert-Amyl Methyl Ether (TAME)		0.14	0.50	
71-43-2	Benzene		0.18	1.0	
108-86-1	Bromobenzene		0.15	1.0	
74-97-5	Bromochloromethane		0.32	1.0	
75-27-4	Bromodichloromethane		0.16	0.50	
75-25-2	Bromoform		0.46	1.0	
74-83-9	Bromomethane		0.78	2.0	
78-93-3	2-Butanone (MEK)		1.9	20	
75-65-0	tert-Butyl Alcohol (TBA)		4.2	20	
104-51-8	n-Butylbenzene		0.21	1.0	
135-98-8	sec-Butylbenzene		0.16	1.0	
98-06-6	tert-Butylbenzene		0.17	1.0	
637-92-3	tert-Butyl Ethyl Ether (TBEE)		0.16	0.50	
75-15-0	Carbon Disulfide		4.4	5.0	
56-23-5	Carbon Tetrachloride		0.11	5.0	
108-90-7	Chlorobenzene		0.15	1.0	
124-48-1	Chlorodibromomethane		0.21	0.50	
75-00-3	Chloroethane		0.35	2.0	
67-66-3	Chloroform		0.17	2.0	
74-87-3	Chloromethane		0.45	2.0	
95-49-8	2-Chlorotoluene		0.12	1.0	
106-43-4	4-Chlorotoluene		0.14	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		0.53	5.0	
106-93-4	1,2-Dibromoethane (EDB)		0.19	0.50	
74-95-3	Dibromomethane		0.37	1.0	
95-50-1	1,2-Dichlorobenzene		0.16	1.0	
541-73-1	1,3-Dichlorobenzene		0.12	1.0	
106-46-7	1,4-Dichlorobenzene		0.13	1.0	

1 - FORM I
ANALYSIS DATA SHEET

Trip Blank- 8/12/19

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Trip Blank Water	Laboratory ID:	19H0617-01	File ID:	C1922620.D
Sampled:	08/12/19 00:00	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 15:27
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192	Instrument:	GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene		0.31	2.0	
75-71-8	Dichlorodifluoromethane (Freon 12)		0.26	2.0	
75-34-3	1,1-Dichloroethane		0.16	1.0	
107-06-2	1,2-Dichloroethane		0.41	1.0	
75-35-4	1,1-Dichloroethylene		0.32	1.0	
156-59-2	cis-1,2-Dichloroethylene		0.13	1.0	
156-60-5	trans-1,2-Dichloroethylene		0.31	1.0	
78-87-5	1,2-Dichloropropane		0.20	1.0	
142-28-9	1,3-Dichloropropane		0.11	0.50	
594-20-7	2,2-Dichloropropane		0.20	1.0	
563-58-6	1,1-Dichloropropene		0.16	2.0	
10061-01-5	cis-1,3-Dichloropropene		0.13	0.50	
10061-02-6	trans-1,3-Dichloropropene		0.23	0.50	
60-29-7	Diethyl Ether		0.34	2.0	
108-20-3	Diisopropyl Ether (DIPE)		0.17	0.50	
123-91-1	1,4-Dioxane		22	50	
100-41-4	Ethylbenzene		0.13	1.0	
87-68-3	Hexachlorobutadiene		0.47	0.60	
591-78-6	2-Hexanone (MBK)		1.5	10	
98-82-8	Isopropylbenzene (Cumene)		0.17	1.0	
99-87-6	p-Isopropyltoluene (p-Cymene)		0.20	1.0	
79-20-9	Methyl Acetate		0.42	1.0	
1634-04-4	Methyl tert-Butyl Ether (MTBE)		0.25	1.0	
108-87-2	Methyl Cyclohexane		0.20	1.0	
75-09-2	Methylene Chloride		0.34	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)		1.7	10	
91-20-3	Naphthalene		0.31	2.0	
103-65-1	n-Propylbenzene		0.13	1.0	
100-42-5	Styrene		0.11	1.0	
630-20-6	1,1,1,2-Tetrachloroethane		0.27	1.0	

1 - FORM I
ANALYSIS DATA SHEET

Trip Blank- 8/12/19

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Trip Blank Water	Laboratory ID:	19H0617-01	File ID:	C1922620.D
Sampled:	08/12/19 00:00	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 15:27
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane		0.22	0.50	
127-18-4	Tetrachloroethylene		0.18	1.0	
109-99-9	Tetrahydrofuran		0.51	10	
108-88-3	Toluene		0.14	1.0	
87-61-6	1,2,3-Trichlorobenzene		0.57	5.0	
120-82-1	1,2,4-Trichlorobenzene		0.40	1.0	
108-70-3	1,3,5-Trichlorobenzene		0.30	1.0	
71-55-6	1,1,1-Trichloroethane		0.20	1.0	
79-00-5	1,1,2-Trichloroethane		0.16	1.0	
79-01-6	Trichloroethylene		0.24	1.0	
75-69-4	Trichlorofluoromethane (Freon 11)		0.33	2.0	
96-18-4	1,2,3-Trichloropropane		0.25	2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1		0.32	1.0	
95-63-6	1,2,4-Trimethylbenzene		0.18	1.0	
108-67-8	1,3,5-Trimethylbenzene		0.14	1.0	
75-01-4	Vinyl Chloride		0.45	2.0	
108383/106423	m+p Xylene		0.30	2.0	
95-47-6	o-Xylene		0.17	1.0	

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (µg/L)	Q
001825-61-2	Silane, methoxytrimethyl-	8.5	

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB Inst : GCMSVOA3
Misc :
ALS Vial : 20 Sample Multiplier: 1

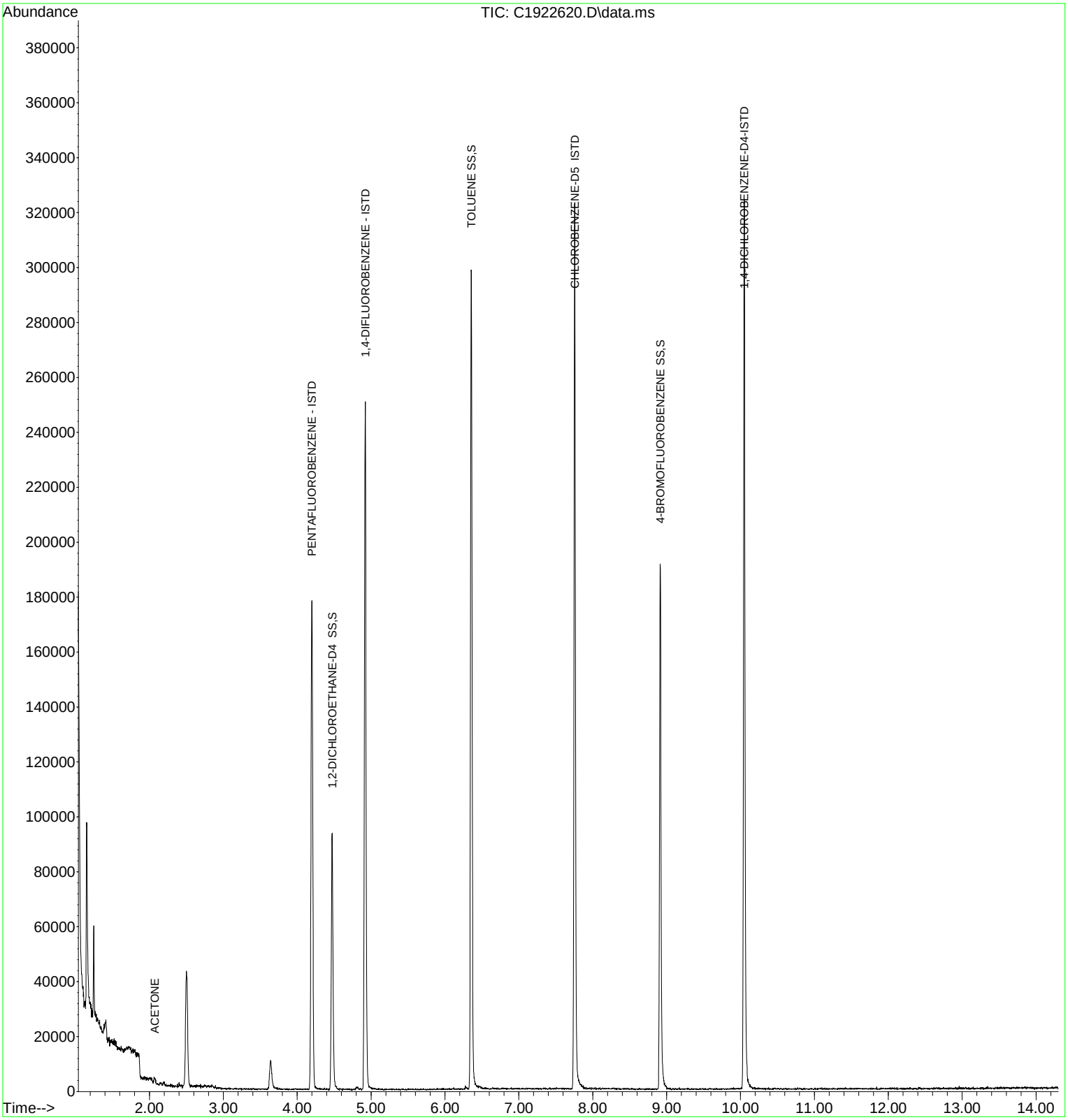
Quant Time: Aug 15 08:35:25 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

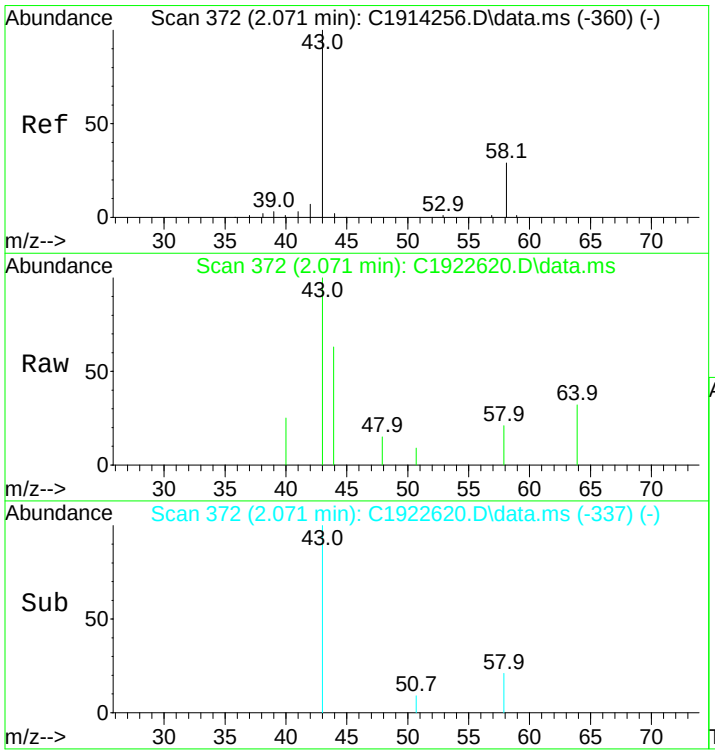
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.199	168	106150	30.00	UG/L	0.00
48) 1,4-DIFLUOROBENZENE - ...	4.921	114	162457	30.00	UG/L	0.00
70) CHLOROBENZENE-D5 ISTD	7.758	82	82523	30.00	UG/L	0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	73601	30.00	UG/L	# 0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.475	65	54232	27.16	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 108.64%			
49) TOLUENE SS	6.358	98	161456	24.92	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 99.68%			
71) 4-BROMOFLUOROBENZENE SS	8.915	95	55280	22.58	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 90.32%			
Target Compounds						Qvalue
14) ACETONE	2.071	43	2160	3.24	UG/L	# 47

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB Inst : GCMSVOA3
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 15 08:35:25 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

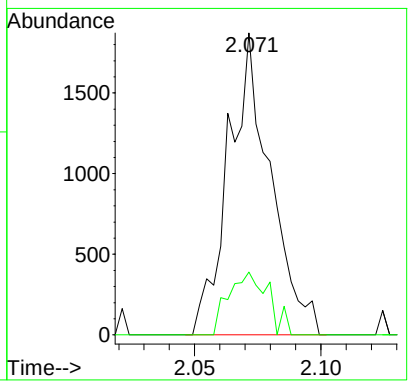




#14
ACETONE
Concen: 3.24 UG/L
RT: 2.071 min Scan# 372
Delta R.T. 0.002 min
Lab File: C1922620.D
Acq: 14 Aug 2019 3:27 pm

Tgt Ion: 43 Resp: 2160

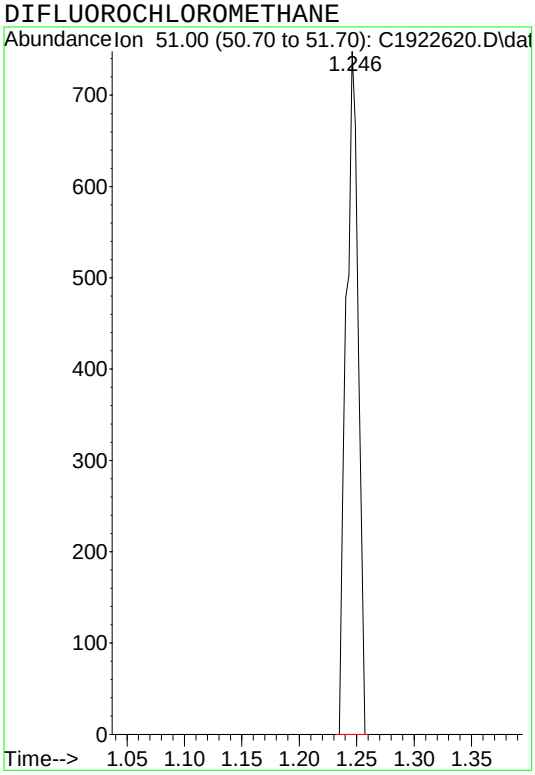
Ion	Ratio	Lower	Upper
43	100		
58	0.0	22.1	33.1#



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB
Misc :

Quant Time : Thu Aug 15 08:35:25 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
DIFLUOROCHLOROMETHANE



Original Int. Results

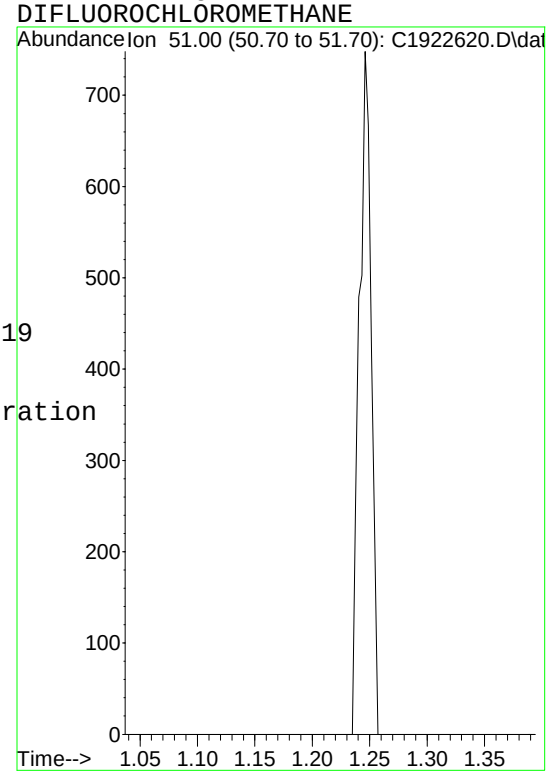
RT : 1.25
Area : 549
Amount: 0.265412

Manual Int. Results

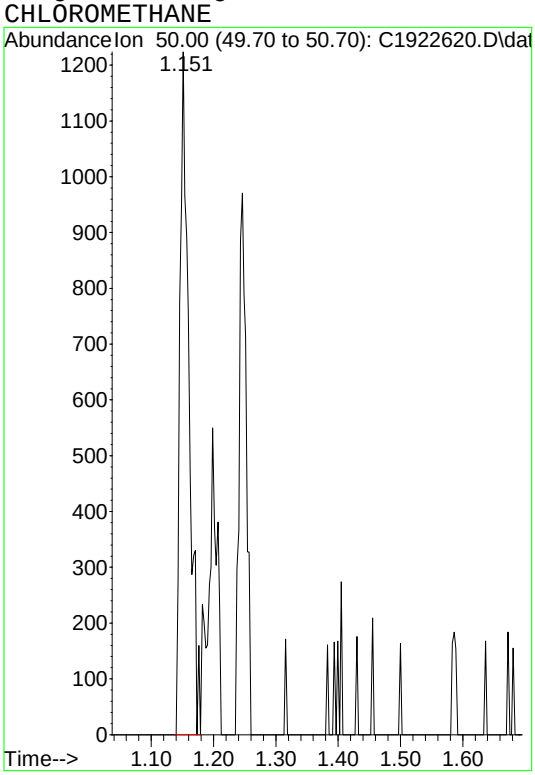
Thu Aug 15 08:34:59 2019

MIuser: EEH
Reason: Incorret Integration
RT : 0.00
Area : 0
Amount: 0

Manual Integration
DIFLUOROCHLOROMETHANE



Original Integration
CHLOROMETHANE



Original Int. Results

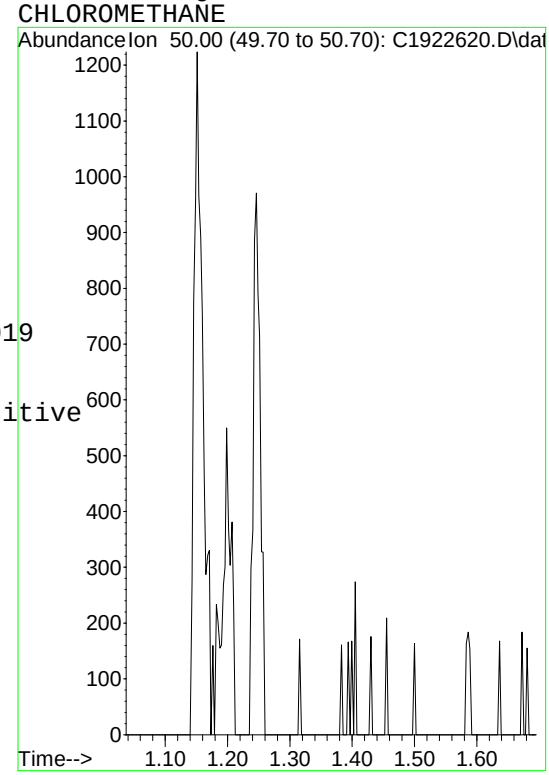
RT : 1.15
Area : 1240
Amount: 0.537055

Manual Int. Results

Thu Aug 15 08:35:01 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

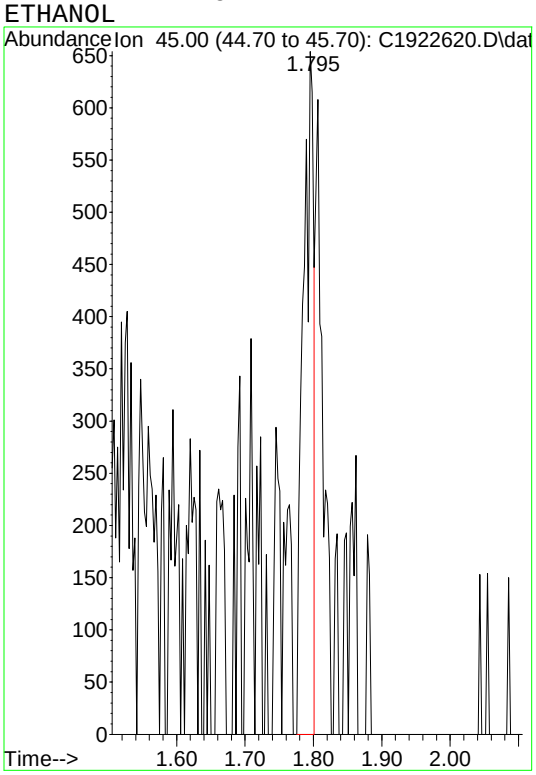
Manual Integration
CHLOROMETHANE



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB
Misc :

Quant Time : Thu Aug 15 08:35:25 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
ETHANOL



Original Int. Results

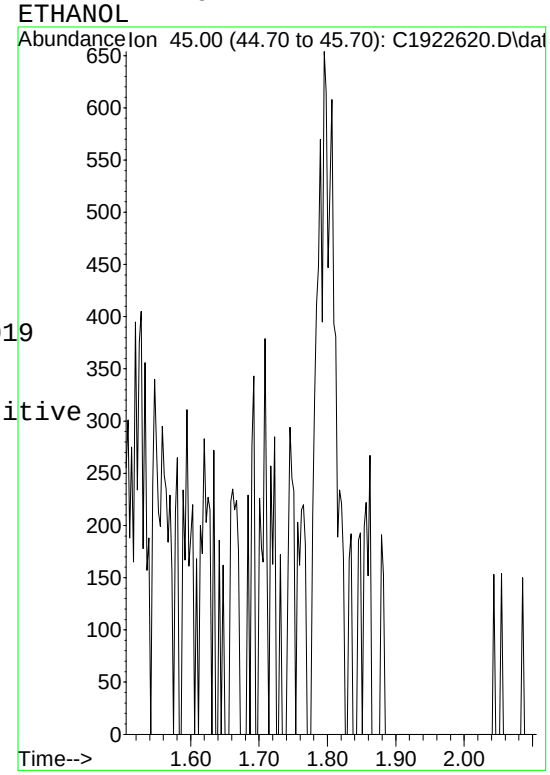
RT : 1.80
Area : 682
Amount: 18.8511

Manual Int. Results

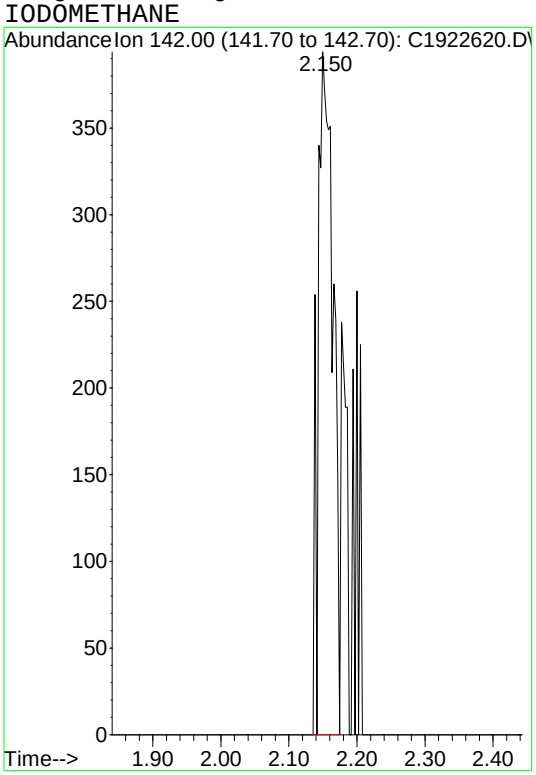
Thu Aug 15 08:35:03 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
ETHANOL



Original Integration
IODOMETHANE



Original Int. Results

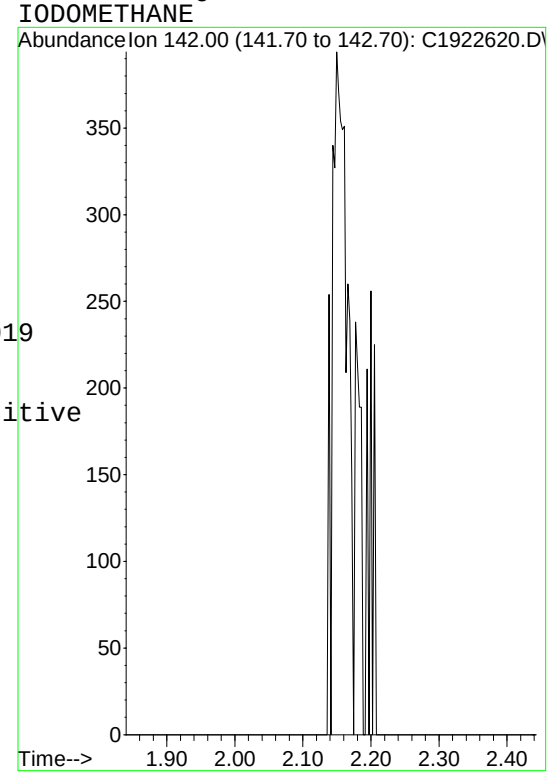
RT : 2.15
Area : 602
Amount: 0.358066

Manual Int. Results

Thu Aug 15 08:35:09 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

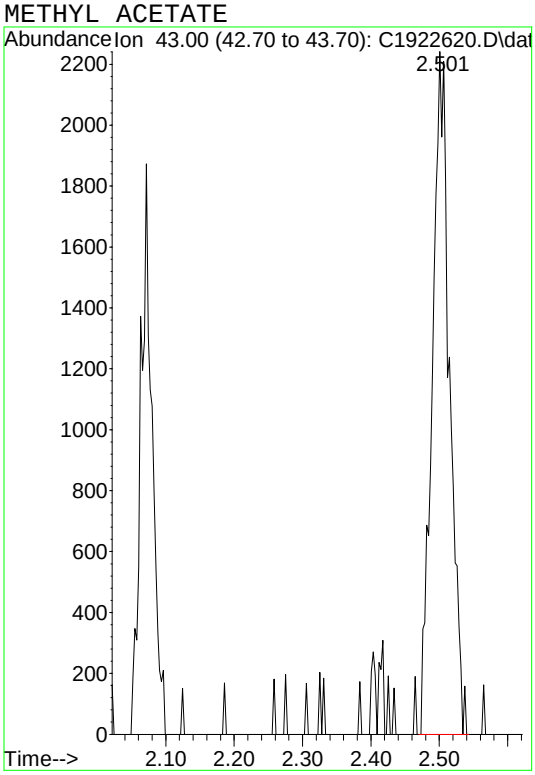
Manual Integration
IODOMETHANE



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB
Misc :

Quant Time : Thu Aug 15 08:35:25 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
METHYL ACETATE



Original Int. Results

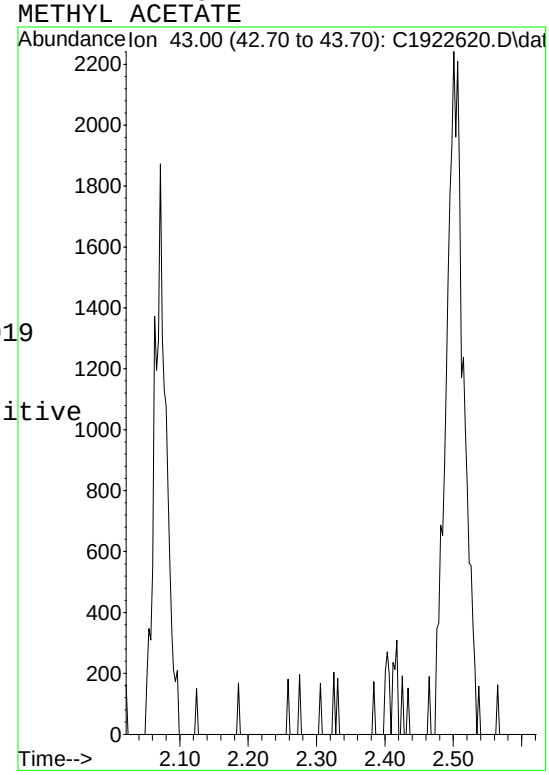
RT : 2.50
Area : 3953
Amount: 1.91692

Manual Int. Results

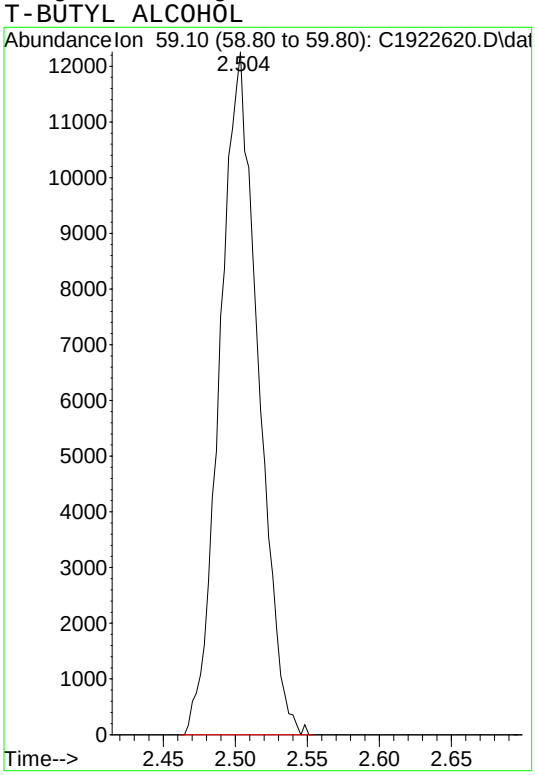
Thu Aug 15 08:35:12 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
METHYL ACETATE



Original Integration
T-BUTYL ALCOHOL



Original Int. Results

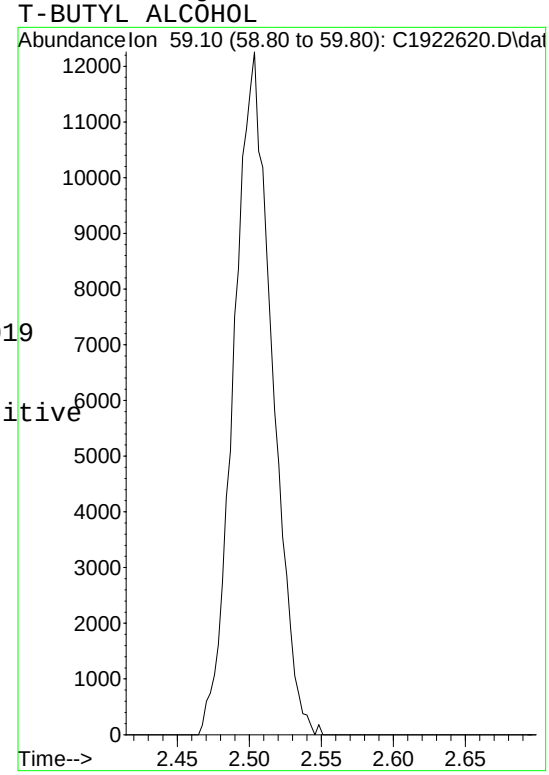
RT : 2.50
Area : 22701
Amount: 88.6292

Manual Int. Results

Thu Aug 15 08:35:15 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

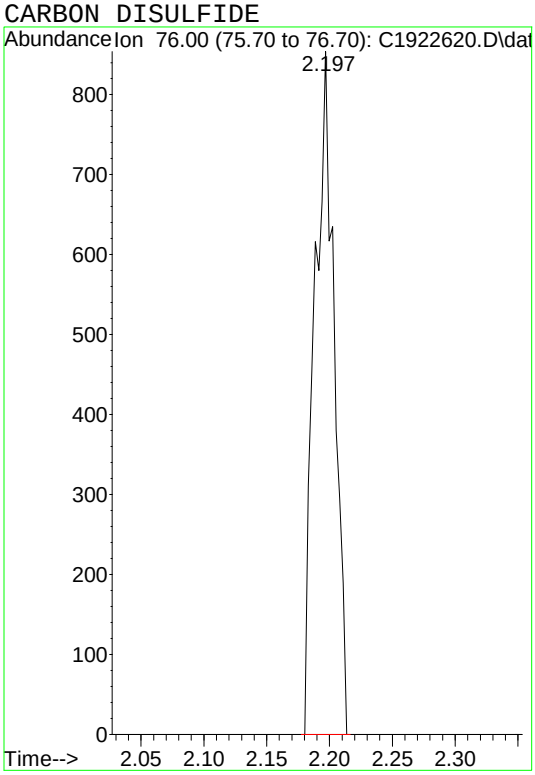
Manual Integration
T-BUTYL ALCOHOL



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB
Misc :

Quant Time : Thu Aug 15 08:35:25 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CARBON DISULFIDE



Original Int. Results

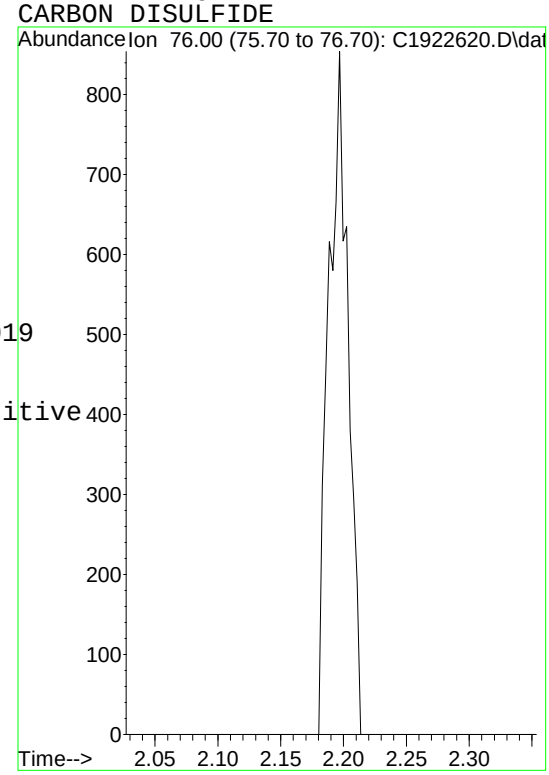
RT : 2.20
Area : 937
Amount: 0.236472

Manual Int. Results

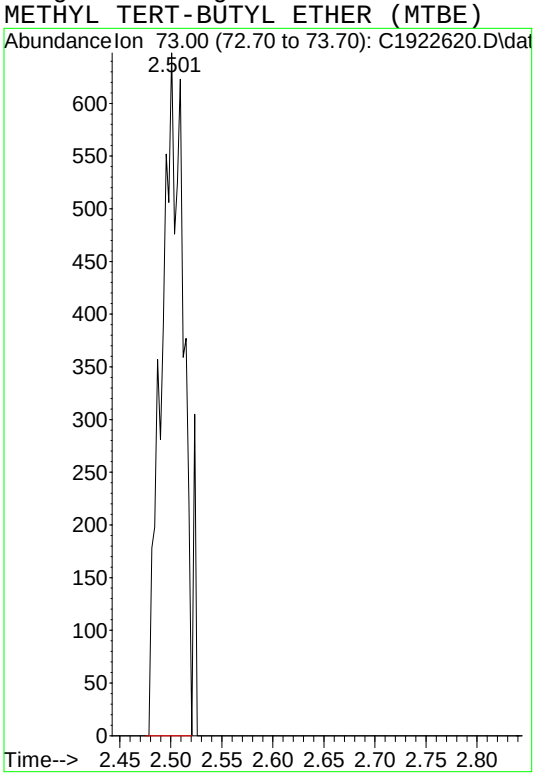
Thu Aug 15 08:35:18 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CARBON DISULFIDE



Original Integration
METHYL TERT-BUTYL ETHER (MTBE)



Original Int. Results

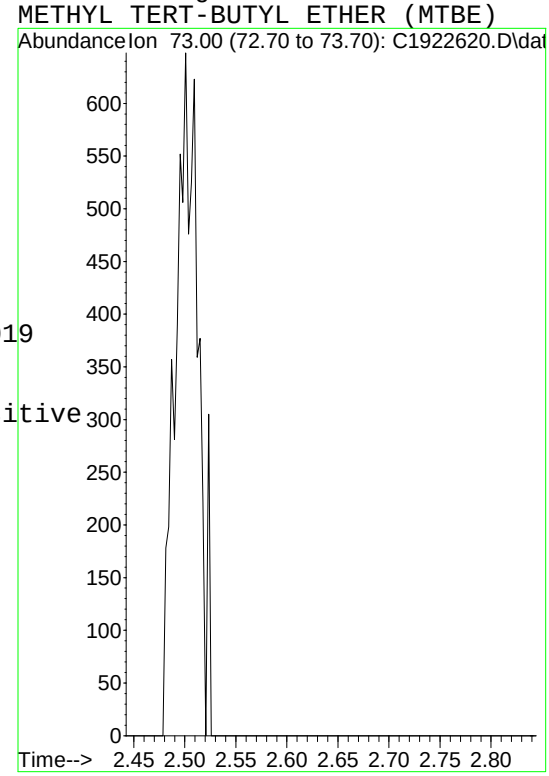
RT : 2.50
Area : 952
Amount: 0.205303

Manual Int. Results

Thu Aug 15 08:35:21 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

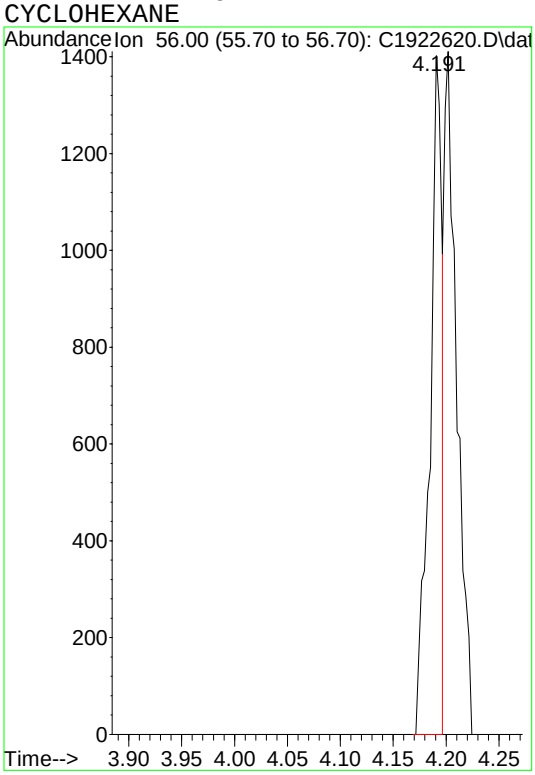
Manual Integration
METHYL TERT-BUTYL ETHER (MTBE)



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB
Misc :

Quant Time : Thu Aug 15 08:35:25 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CYCLOHEXANE



Original Int. Results

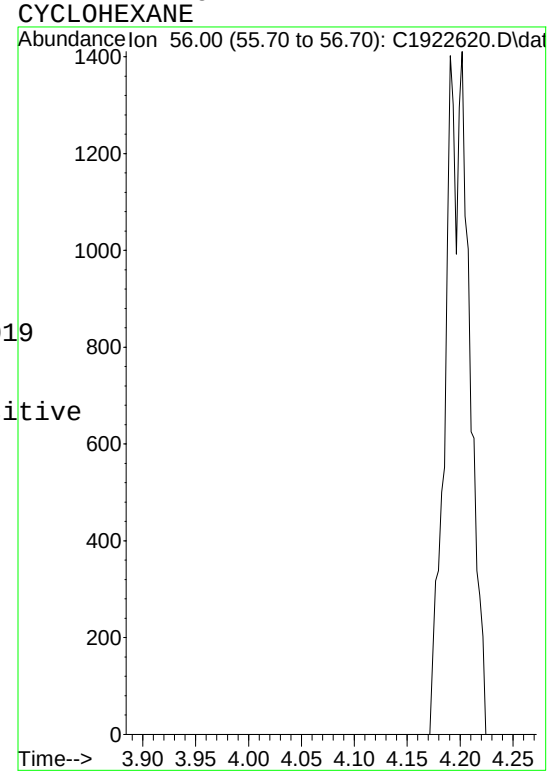
RT : 4.19
Area : 1101
Amount: 0.440749

Manual Int. Results

Thu Aug 15 08:35:24 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CYCLOHEXANE



LSC Area Percent Report

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: 8260B.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 9
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\methods\C051619.M
Title : 8260 WATER 5MLS VOAMS 5973 #3

Signal : TIC: C1922620.D\data.ms

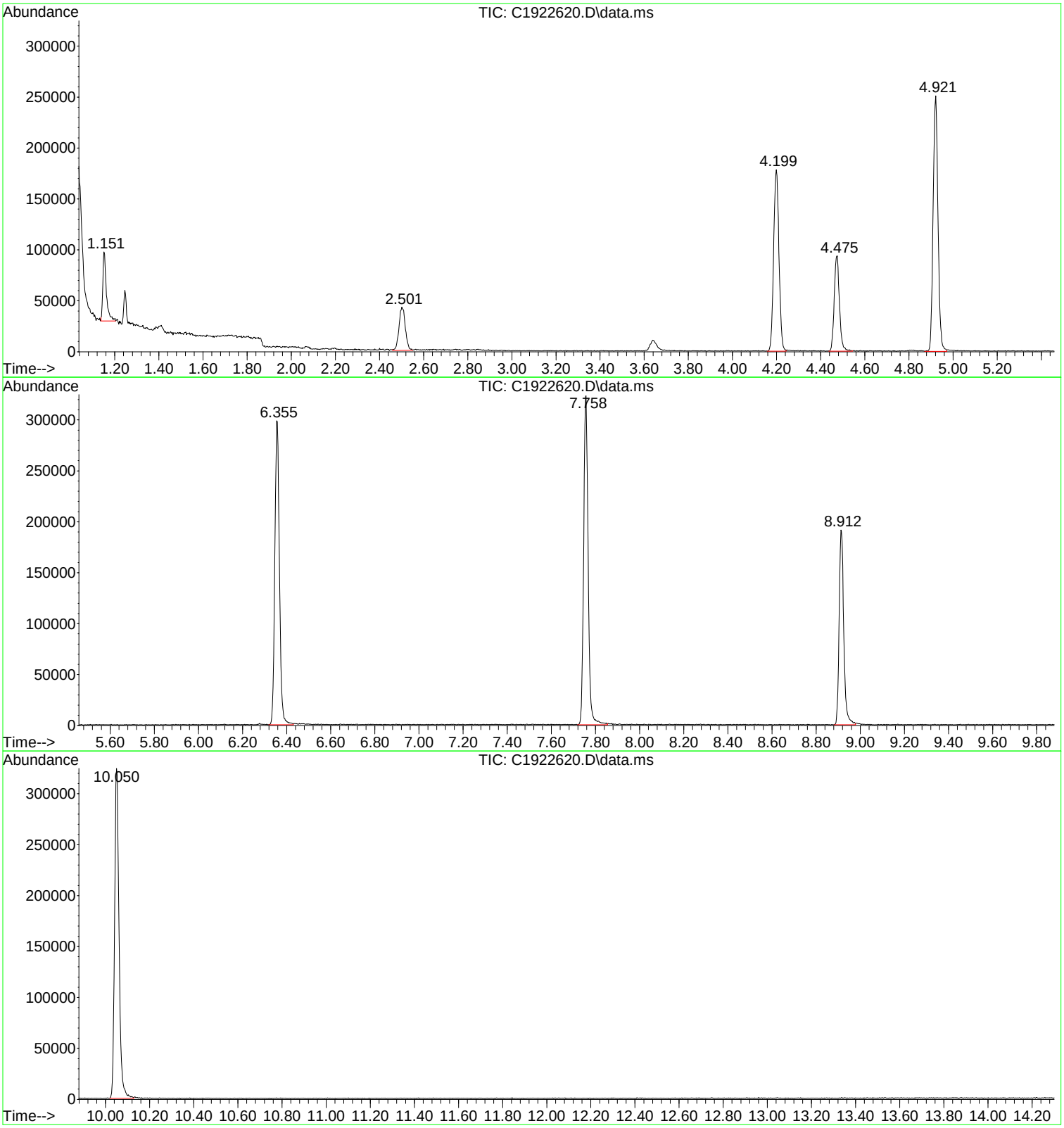
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.151	37	42	61	rVB	67730	75077	16.42%	2.874%
2	2.501	511	526	544	rVB2	42441	84159	18.41%	3.221%
3	4.199	1120	1135	1151	rBV2	178104	296884	64.94%	11.363%
4	4.475	1220	1234	1259	rBV2	93522	154055	33.70%	5.896%
5	4.921	1376	1394	1412	rBV2	250761	381700	83.50%	14.610%
6	6.355	1895	1908	1935	rBV	298339	433658	94.86%	16.598%
7	7.758	2397	2411	2446	rBV	322801	457141	100.00%	17.497%
8	8.912	2814	2825	2849	rBV2	191214	276458	60.48%	10.582%
9	10.050	3222	3233	3261	rBV2	323970	453521	99.21%	17.359%

Sum of corrected areas: 2612653

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P

****

Peak Number 1 Silane, methoxytrimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.501	8.50 UG/L	84159	PENTAFLUOROBENZENE - ISTD	4.199

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Silane, methoxytrimethyl-	104	C4H12OSi	001825-61-2	91
2	Silane, methoxytrimethyl-	104	C4H12OSi	001825-61-2	91
3	Ethyl(dimethyl)methoxysilane	118	C5H14OSi	052686-75-6	74
4	Silane, (2-methoxyethyl)trimethyl-	132	C6H16OSi	018173-63-2	74
5	Thiazole, tetrahydro-	89	C3H7NS	000504-78-9	72

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922620.D
Acq On : 14 Aug 2019 3:27 pm
Operator :
Sample : 19H0617-01 @ TB
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Silane, methoxy...	2.501	8.5	UG/L	84159	1	4.199	296884	30.0

1 - FORM I
ANALYSIS DATA SHEET

Field Blank

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-02	File ID:	C1922621.D
Sampled:	08/12/19 08:45	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 15:54
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192	Instrument:	GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone		3.8	50	
107-13-1	Acrylonitrile		0.52	5.0	
994-05-8	tert-Amyl Methyl Ether (TAME)		0.14	0.50	
71-43-2	Benzene		0.18	1.0	
108-86-1	Bromobenzene		0.15	1.0	
74-97-5	Bromochloromethane		0.32	1.0	
75-27-4	Bromodichloromethane		0.16	0.50	
75-25-2	Bromoform		0.46	1.0	
74-83-9	Bromomethane		0.78	2.0	
78-93-3	2-Butanone (MEK)		1.9	20	
75-65-0	tert-Butyl Alcohol (TBA)		4.2	20	
104-51-8	n-Butylbenzene		0.21	1.0	
135-98-8	sec-Butylbenzene		0.16	1.0	
98-06-6	tert-Butylbenzene		0.17	1.0	
637-92-3	tert-Butyl Ethyl Ether (TBEE)		0.16	0.50	
75-15-0	Carbon Disulfide		4.4	5.0	
56-23-5	Carbon Tetrachloride		0.11	5.0	
108-90-7	Chlorobenzene		0.15	1.0	
124-48-1	Chlorodibromomethane		0.21	0.50	
75-00-3	Chloroethane		0.35	2.0	
67-66-3	Chloroform		0.17	2.0	
74-87-3	Chloromethane		0.45	2.0	
95-49-8	2-Chlorotoluene		0.12	1.0	
106-43-4	4-Chlorotoluene		0.14	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		0.53	5.0	
106-93-4	1,2-Dibromoethane (EDB)		0.19	0.50	
74-95-3	Dibromomethane		0.37	1.0	
95-50-1	1,2-Dichlorobenzene		0.16	1.0	
541-73-1	1,3-Dichlorobenzene		0.12	1.0	
106-46-7	1,4-Dichlorobenzene		0.13	1.0	

1 - FORM I
ANALYSIS DATA SHEET

Field Blank

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-02	File ID:	C1922621.D
Sampled:	08/12/19 08:45	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 15:54
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192	Instrument:	GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene		0.31	2.0	
75-71-8	Dichlorodifluoromethane (Freon 12)		0.26	2.0	
75-34-3	1,1-Dichloroethane		0.16	1.0	
107-06-2	1,2-Dichloroethane		0.41	1.0	
75-35-4	1,1-Dichloroethylene		0.32	1.0	
156-59-2	cis-1,2-Dichloroethylene		0.13	1.0	
156-60-5	trans-1,2-Dichloroethylene		0.31	1.0	
78-87-5	1,2-Dichloropropane		0.20	1.0	
142-28-9	1,3-Dichloropropane		0.11	0.50	
594-20-7	2,2-Dichloropropane		0.20	1.0	
563-58-6	1,1-Dichloropropene		0.16	2.0	
10061-01-5	cis-1,3-Dichloropropene		0.13	0.50	
10061-02-6	trans-1,3-Dichloropropene		0.23	0.50	
60-29-7	Diethyl Ether		0.34	2.0	
108-20-3	Diisopropyl Ether (DIPE)		0.17	0.50	
123-91-1	1,4-Dioxane		22	50	
100-41-4	Ethylbenzene		0.13	1.0	
87-68-3	Hexachlorobutadiene		0.47	0.60	
591-78-6	2-Hexanone (MBK)		1.5	10	
98-82-8	Isopropylbenzene (Cumene)		0.17	1.0	
99-87-6	p-Isopropyltoluene (p-Cymene)		0.20	1.0	
79-20-9	Methyl Acetate		0.42	1.0	
1634-04-4	Methyl tert-Butyl Ether (MTBE)		0.25	1.0	
108-87-2	Methyl Cyclohexane		0.20	1.0	
75-09-2	Methylene Chloride	0.36	0.34	5.0	J
108-10-1	4-Methyl-2-pentanone (MIBK)		1.7	10	
91-20-3	Naphthalene		0.31	2.0	
103-65-1	n-Propylbenzene		0.13	1.0	
100-42-5	Styrene		0.11	1.0	
630-20-6	1,1,1,2-Tetrachloroethane		0.27	1.0	

1 - FORM I
ANALYSIS DATA SHEET

Field Blank

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-02	File ID:	C1922621.D
Sampled:	08/12/19 08:45	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 15:54
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane		0.22	0.50	
127-18-4	Tetrachloroethylene		0.18	1.0	
109-99-9	Tetrahydrofuran		0.51	10	
108-88-3	Toluene		0.14	1.0	
87-61-6	1,2,3-Trichlorobenzene		0.57	5.0	
120-82-1	1,2,4-Trichlorobenzene		0.40	1.0	
108-70-3	1,3,5-Trichlorobenzene		0.30	1.0	
71-55-6	1,1,1-Trichloroethane		0.20	1.0	
79-00-5	1,1,2-Trichloroethane		0.16	1.0	
79-01-6	Trichloroethylene		0.24	1.0	
75-69-4	Trichlorofluoromethane (Freon 11)		0.33	2.0	
96-18-4	1,2,3-Trichloropropane		0.25	2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1		0.32	1.0	
95-63-6	1,2,4-Trimethylbenzene		0.18	1.0	
108-67-8	1,3,5-Trimethylbenzene		0.14	1.0	
75-01-4	Vinyl Chloride		0.45	2.0	
108383/106423	m+p Xylene		0.30	2.0	
95-47-6	o-Xylene		0.17	1.0	

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (µg/L)	Q
001825-61-2	Silane, methoxytrimethyl-	9.2	

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922621.D
Acq On : 14 Aug 2019 3:54 pm
Operator :
Sample : 19H0617-02 @ FB Inst : GCMSVOA3
Misc :
ALS Vial : 21 Sample Multiplier: 1

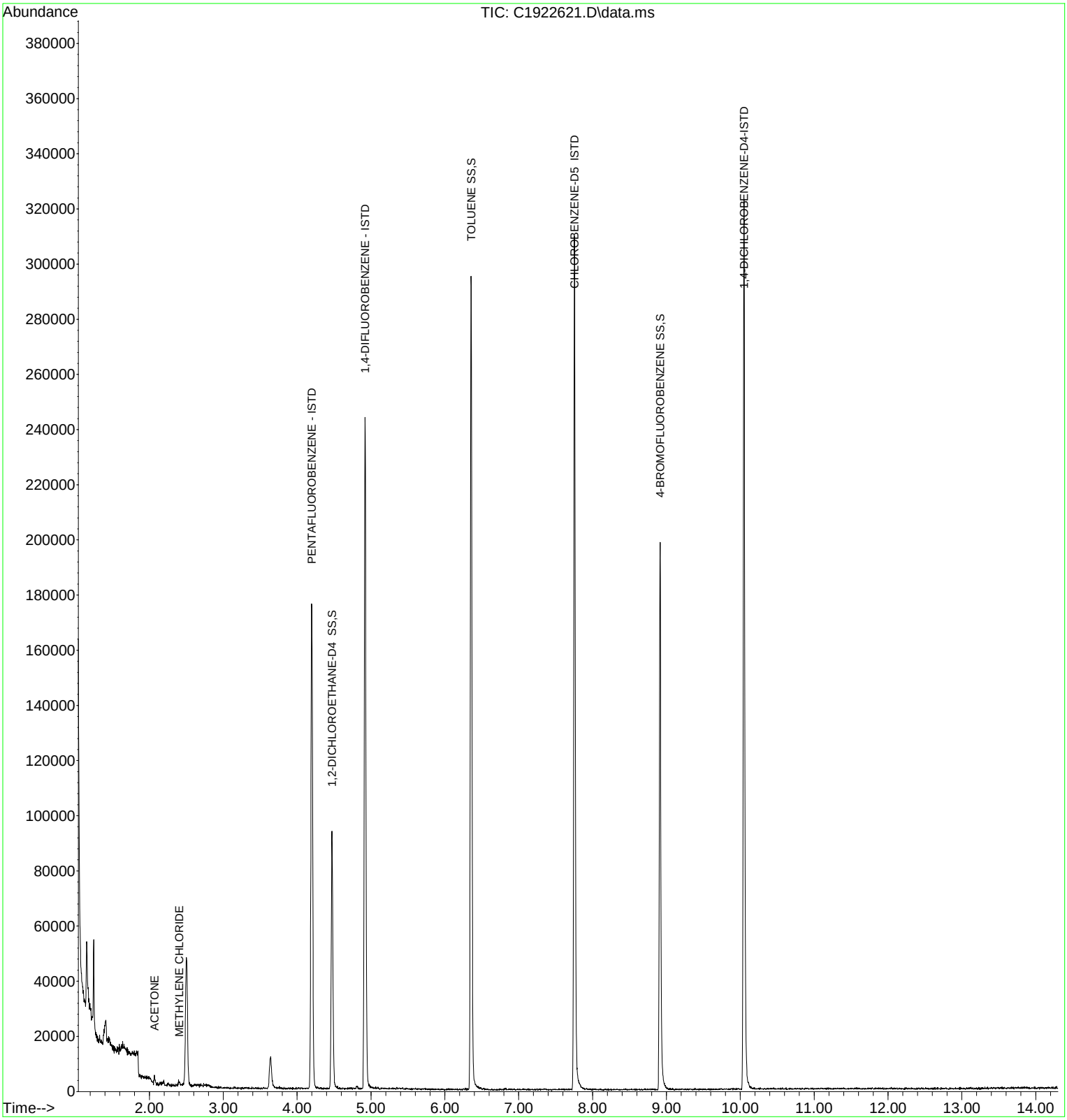
Quant Time: Aug 15 08:35:59 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

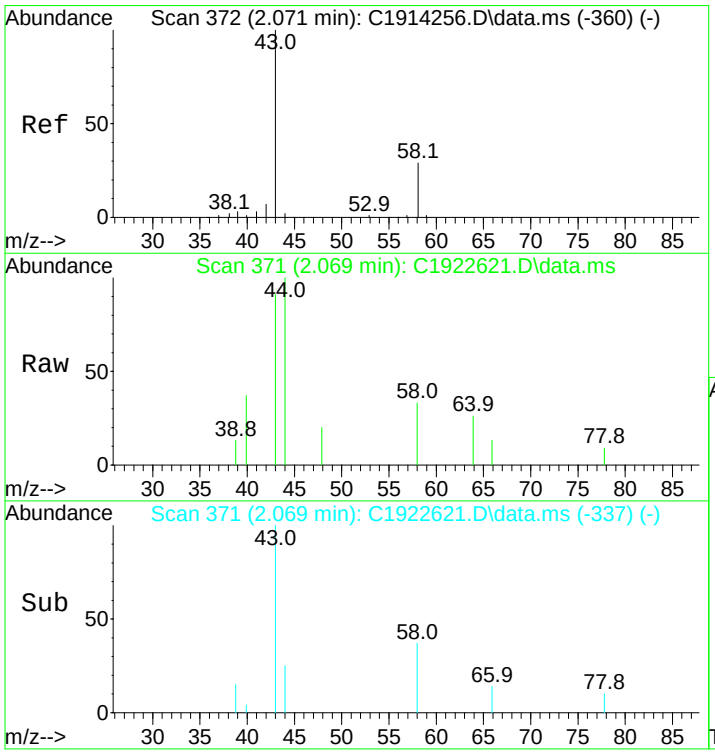
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.199	168	103677	30.00	UG/L	0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	161654	30.00	UG/L	0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	81419	30.00	UG/L	0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	73262	30.00	UG/L	# 0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.472	65	53461	27.41	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 109.64%			
49) TOLUENE SS	6.358	98	158057	24.52	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 98.08%			
71) 4-BROMOFLUOROBENZENE SS	8.915	95	56507	23.40	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 93.60%			
Target Compounds						Qvalue
14) ACETONE	2.069	43	2001	3.08	UG/L #	47
23) METHYLENE CHLORIDE	2.403	49	763	0.36	UG/L #	21

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922621.D
Acq On : 14 Aug 2019 3:54 pm
Operator :
Sample : 19H0617-02 @ FB Inst : GCMSVOA3
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 15 08:35:59 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

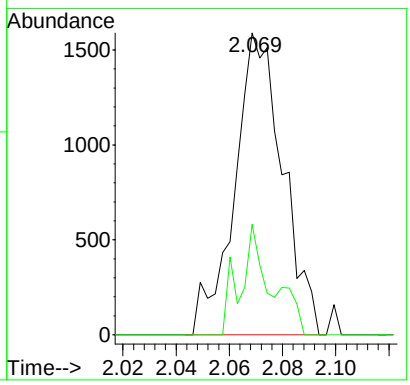


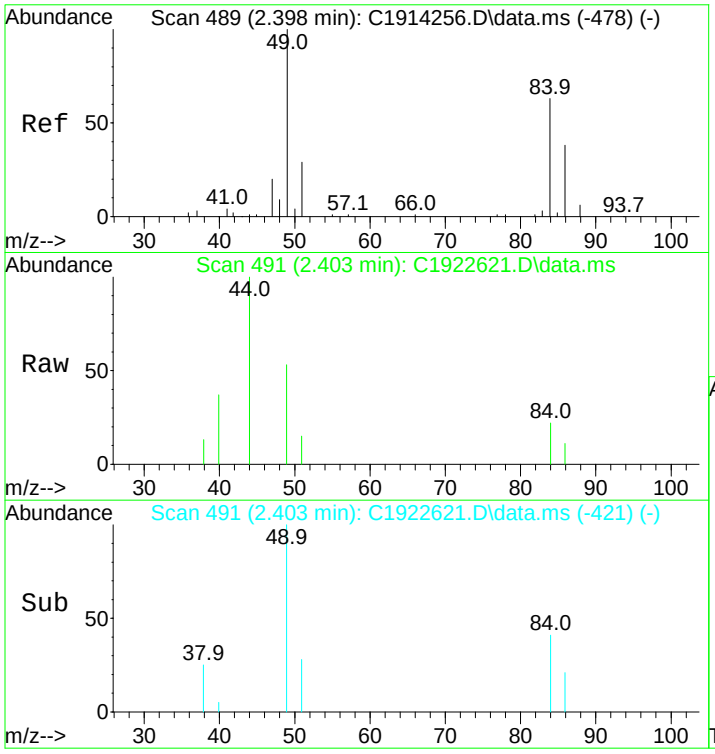


#14
ACETONE
Concen: 3.08 UG/L
RT: 2.069 min Scan# 371
Delta R.T. -0.000 min
Lab File: C1922621.D
Acq: 14 Aug 2019 3:54 pm

Tgt Ion: 43 Resp: 2001

Ion	Ratio	Lower	Upper
43	100		
58	0.0	22.1	33.1#

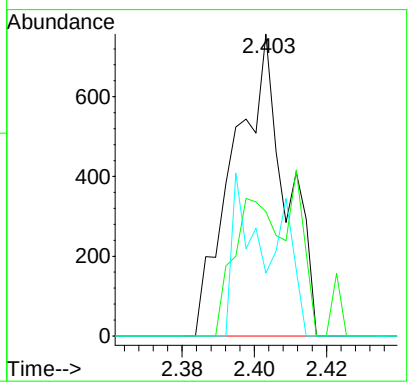




#23
METHYLENE CHLORIDE
Concen: 0.36 UG/L
RT: 2.403 min Scan# 491
Delta R.T. 0.005 min
Lab File: C1922621.D
Acq: 14 Aug 2019 3:54 pm

Tgt Ion: 49 Resp: 763

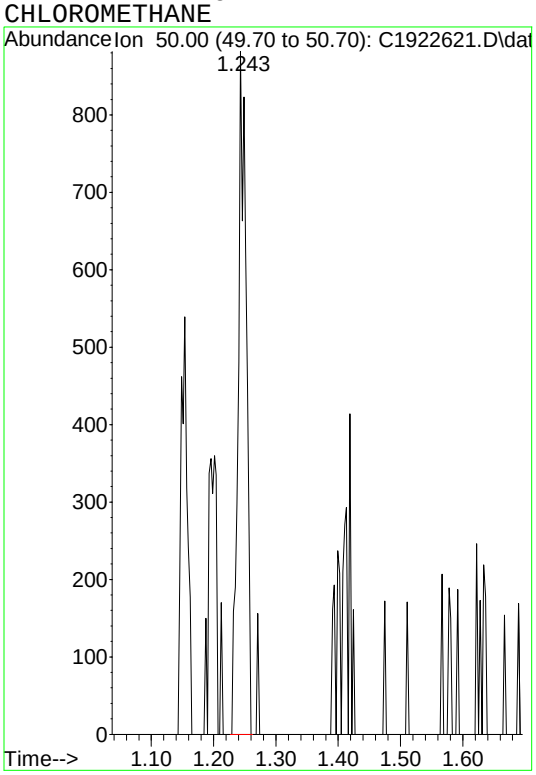
Ion	Ratio	Lower	Upper
49	100		
84	0.0	55.7	83.5#
86	0.0	36.6	54.8#



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922621.D
Acq On : 14 Aug 2019 3:54 pm
Operator :
Sample : 19H0617-02 @ FB
Misc :

Quant Time : Thu Aug 15 08:35:59 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CHLOROMETHANE



Original Int. Results

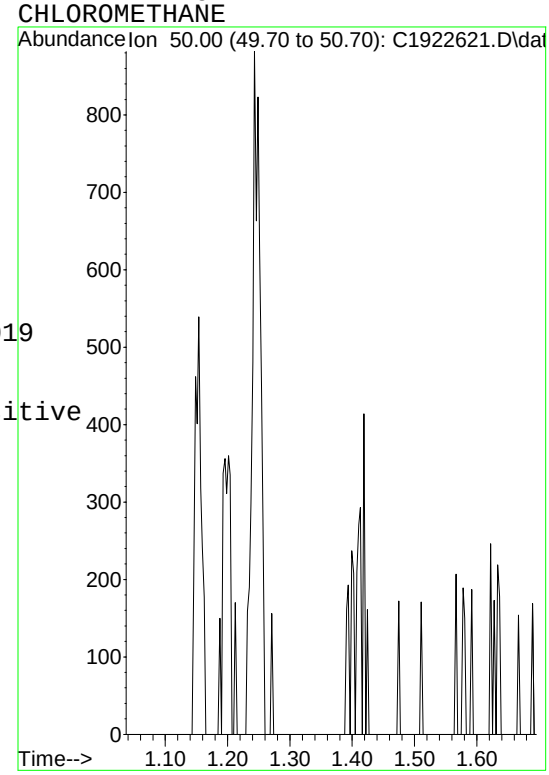
RT : 1.24
Area : 808
Amount: 0.358299

Manual Int. Results

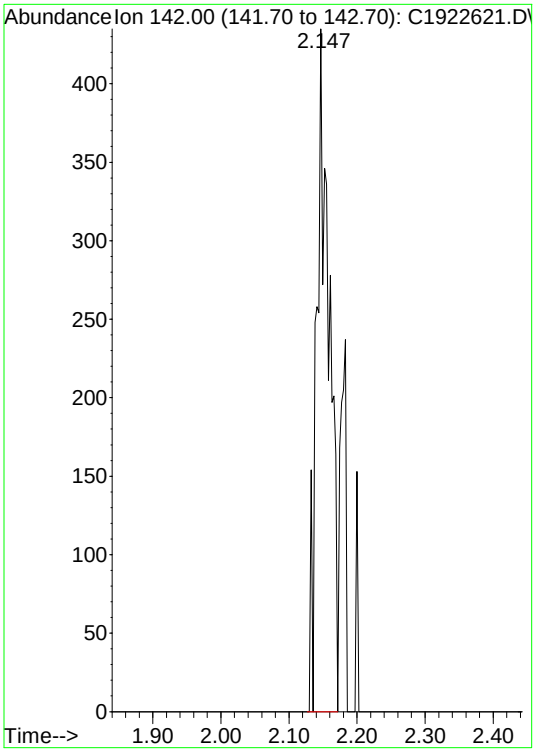
Thu Aug 15 08:35:35 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CHLOROMETHANE



Original Integration
IODOMETHANE



Original Int. Results

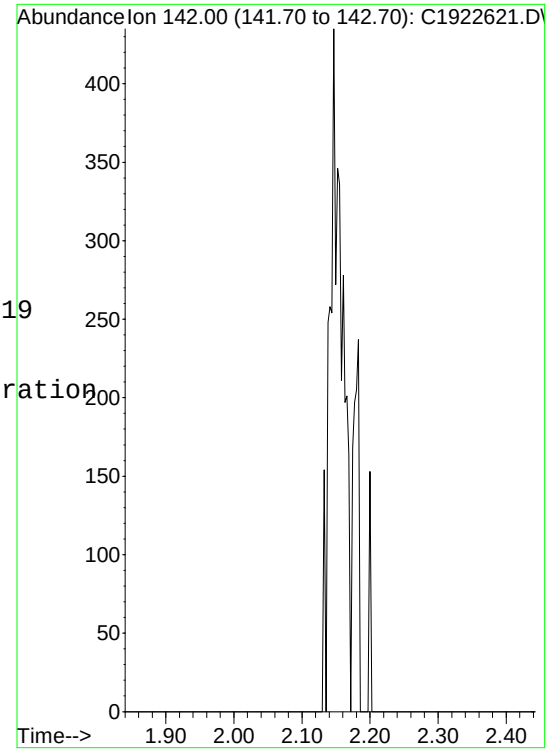
RT : 2.15
Area : 561
Amount: 0.341638

Manual Int. Results

Thu Aug 15 08:35:40 2019

MIuser: EEH
Reason: Incorret Integration
RT : 0.00
Area : 0
Amount: 0

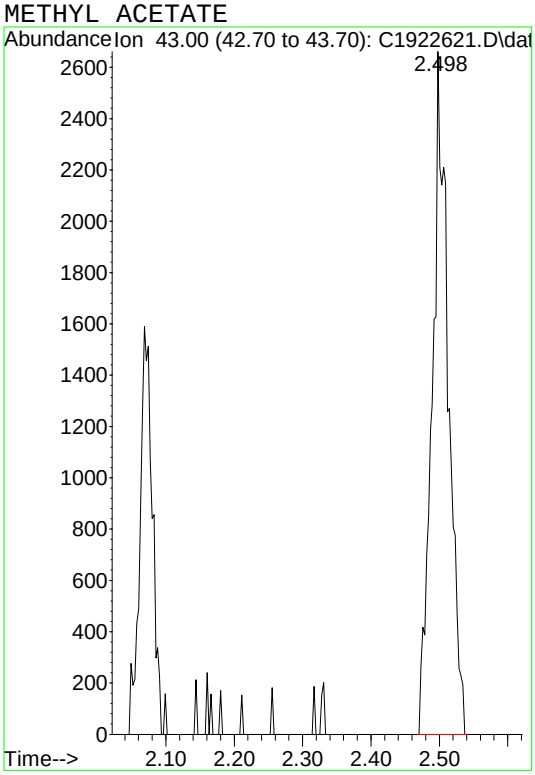
Manual Integration
IODOMETHANE



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922621.D
Acq On : 14 Aug 2019 3:54 pm
Operator :
Sample : 19H0617-02 @ FB
Misc :

Quant Time : Thu Aug 15 08:35:59 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
METHYL ACETATE



Original Int. Results

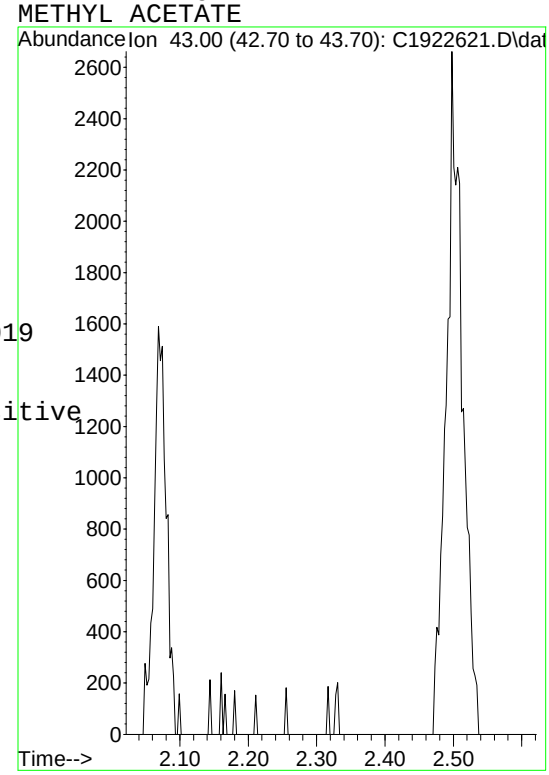
RT : 2.50
Area : 4351
Amount: 2.16025

Manual Int. Results

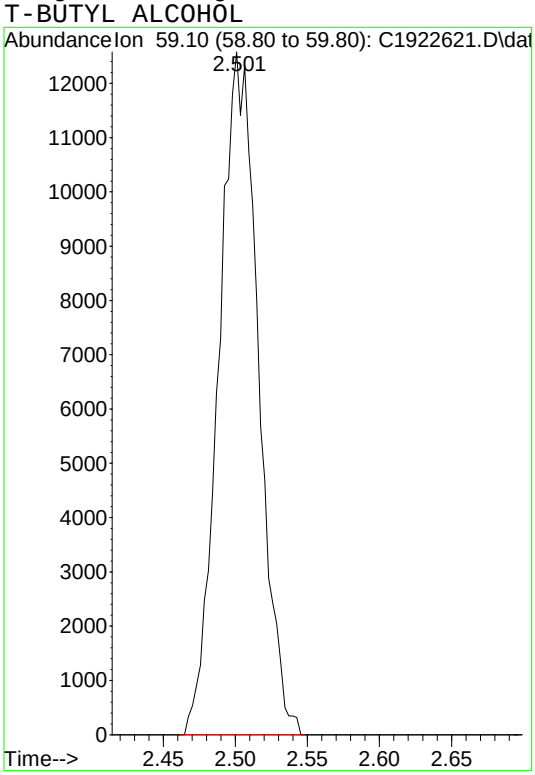
Thu Aug 15 08:35:43 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
METHYL ACETATE



Original Integration
T-BUTYL ALCOHOL



Original Int. Results

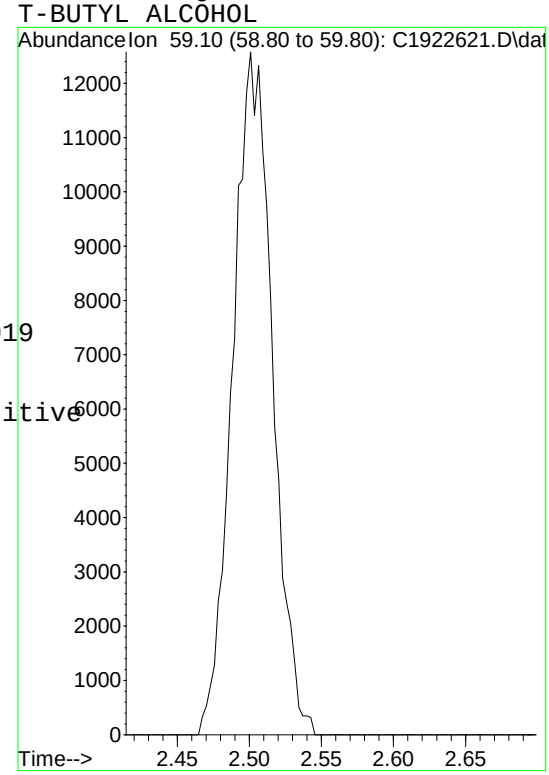
RT : 2.50
Area : 24115
Amount: 96.3955

Manual Int. Results

Thu Aug 15 08:35:46 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

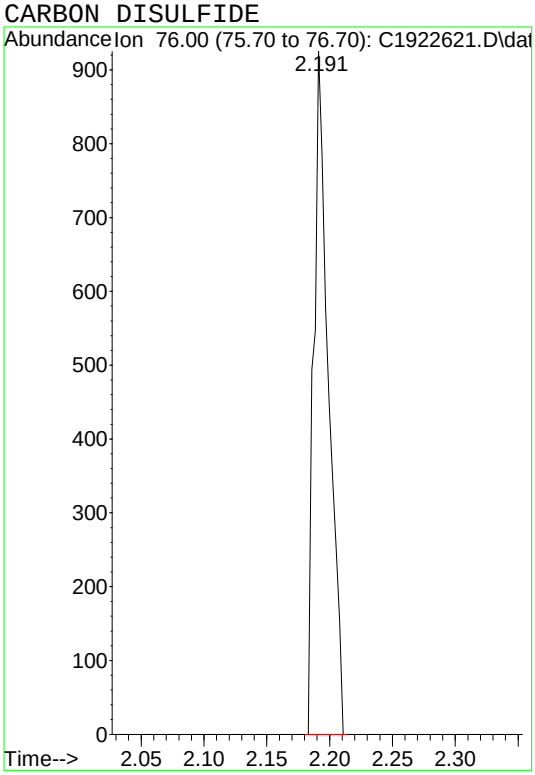
Manual Integration
T-BUTYL ALCOHOL



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922621.D
Acq On : 14 Aug 2019 3:54 pm
Operator :
Sample : 19H0617-02 @ FB
Misc :

Quant Time : Thu Aug 15 08:35:59 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CARBON DISULFIDE



Original Int. Results

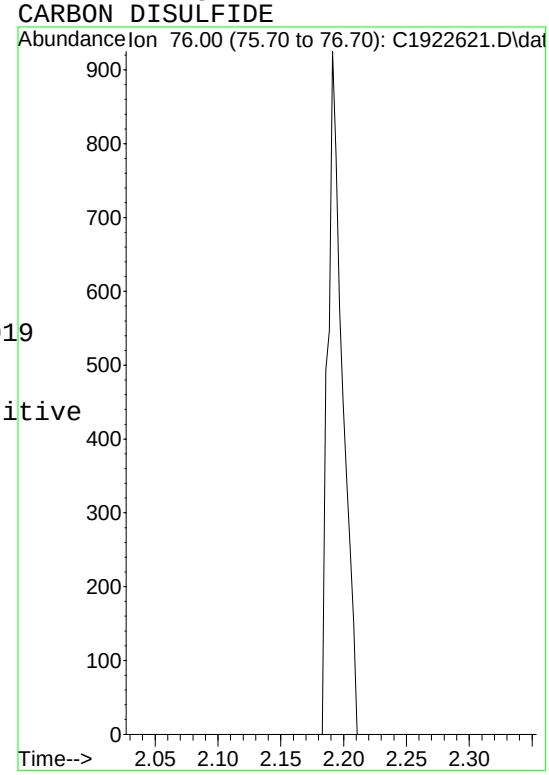
RT : 2.19
Area : 758
Amount: 0.195861

Manual Int. Results

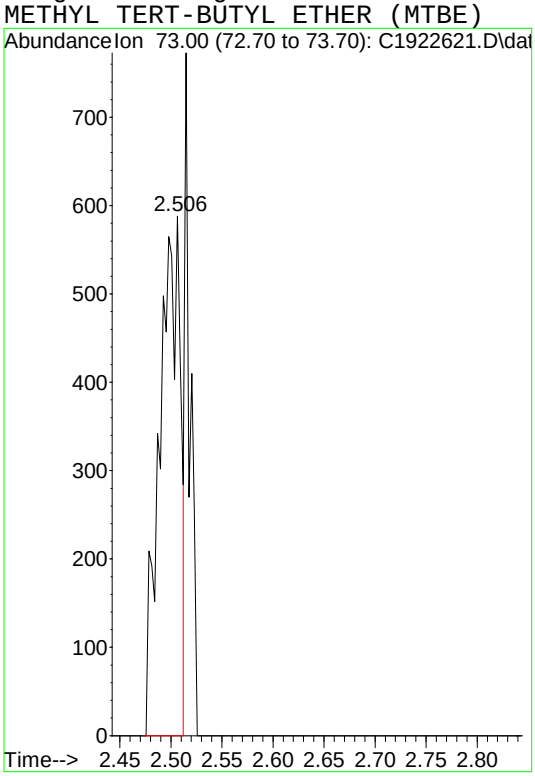
Thu Aug 15 08:35:50 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CARBON DISULFIDE



Original Integration
METHYL TERT-BUTYL ETHER (MTBE)



Original Int. Results

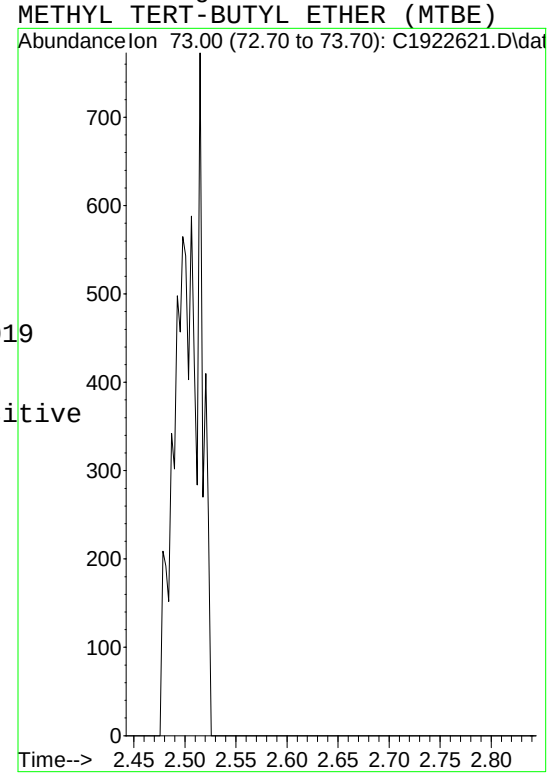
RT : 2.51
Area : 829
Amount: 0.183042

Manual Int. Results

Thu Aug 15 08:35:52 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

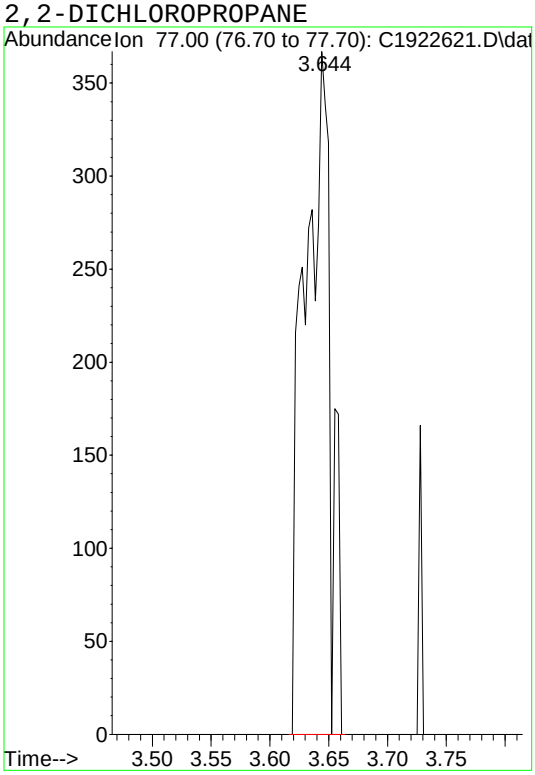
Manual Integration
METHYL TERT-BUTYL ETHER (MTBE)



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922621.D
Acq On : 14 Aug 2019 3:54 pm
Operator :
Sample : 19H0617-02 @ FB
Misc :

Quant Time : Thu Aug 15 08:35:59 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
2,2-DICHLOROPROPANE



Original Int. Results

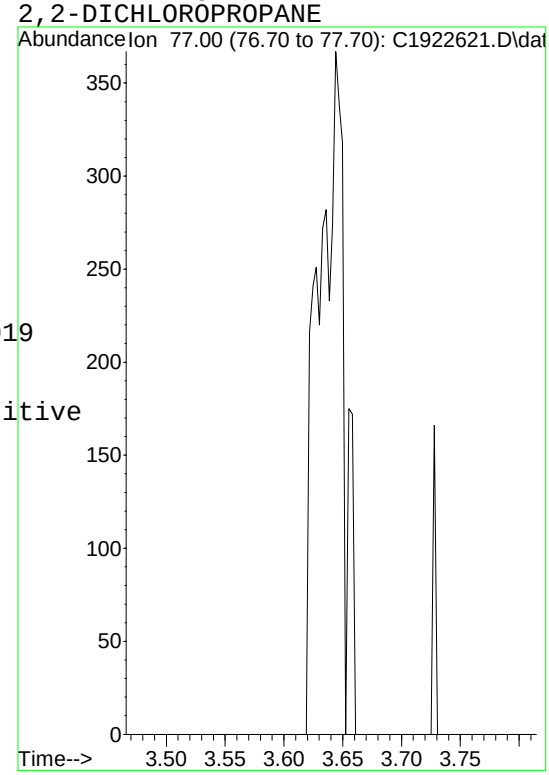
RT : 3.64
Area : 562
Amount: 0.269653

Manual Int. Results

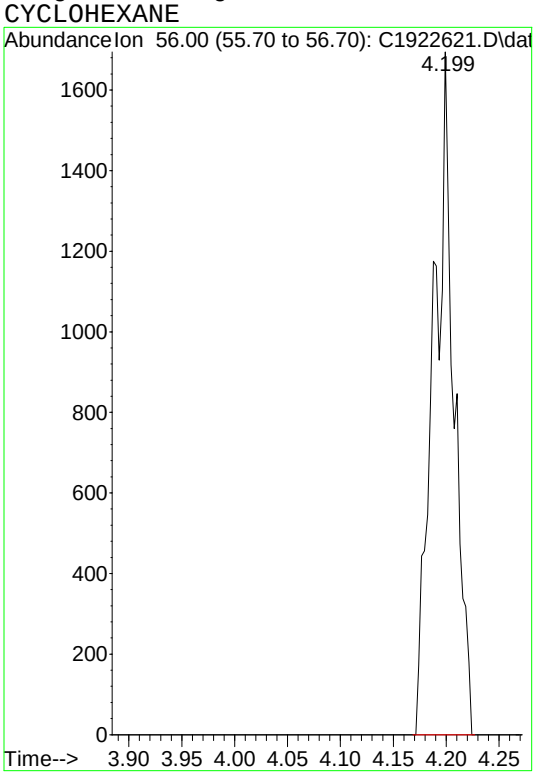
Thu Aug 15 08:35:55 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
2,2-DICHLOROPROPANE



Original Integration
CYCLOHEXANE



Original Int. Results

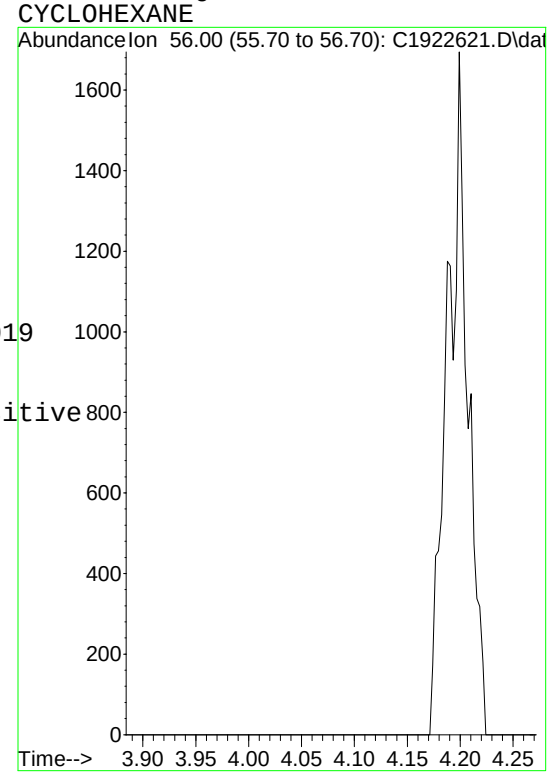
RT : 4.20
Area : 2289
Amount: 0.938183

Manual Int. Results

Thu Aug 15 08:35:59 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CYCLOHEXANE



LSC Area Percent Report

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922621.D
Acq On : 14 Aug 2019 3:54 pm
Operator :
Sample : 19H0617-02 @ FB
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: 8260B.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 9
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\methods\C051619.M
Title : 8260 WATER 5MLS VOAMS 5973 #3

Signal : TIC: C1922621.D\data.ms

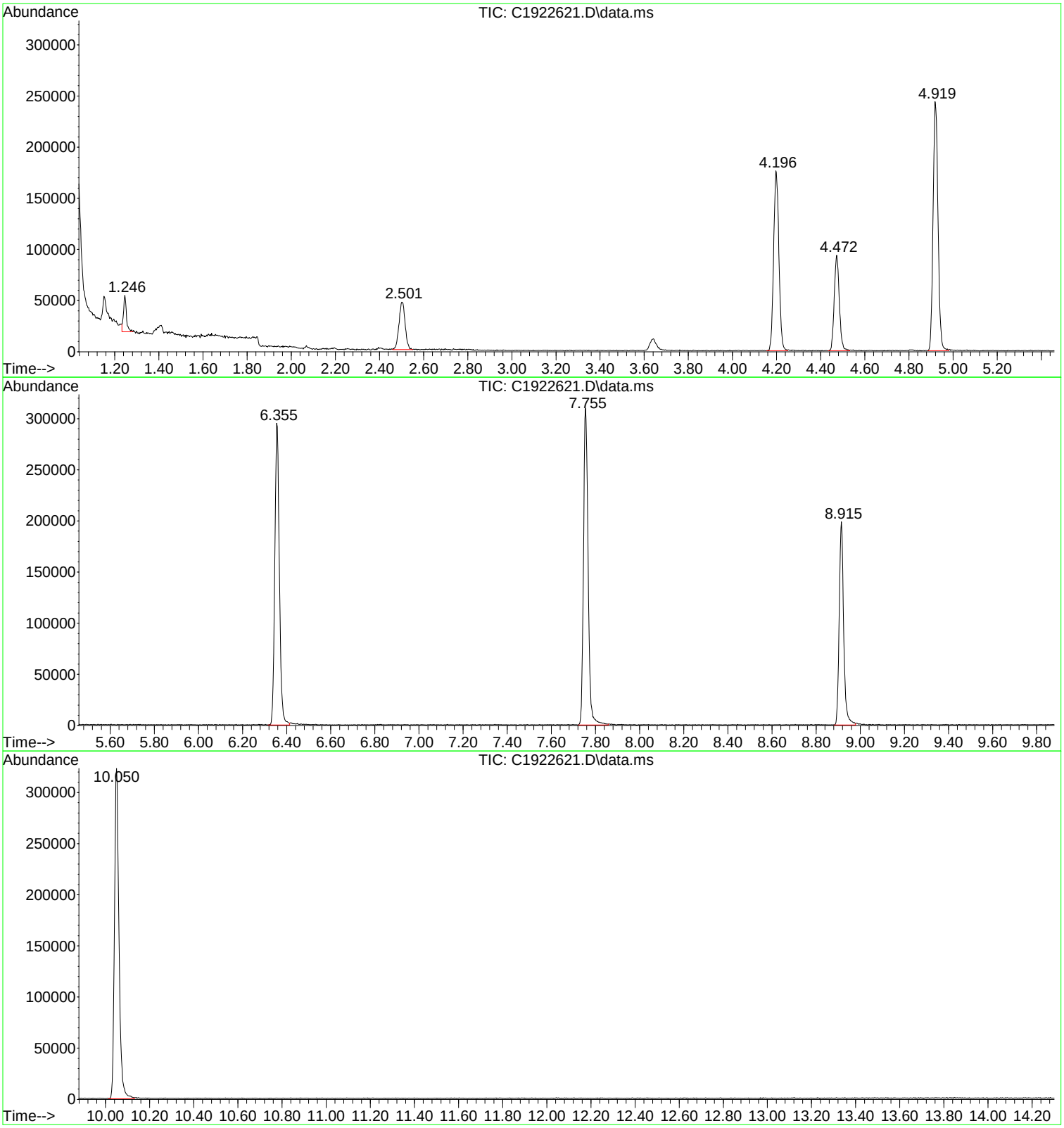
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.246	71	76	89	rVB2	35663	33412	7.31%	1.312%
2	2.501	511	526	544	rVB	46411	89138	19.50%	3.500%
3	4.196	1119	1134	1153	rBV	175762	289136	63.24%	11.353%
4	4.472	1219	1233	1254	rBV3	93487	149987	32.80%	5.889%
5	4.919	1381	1393	1415	rBV2	243351	374331	81.87%	14.698%
6	6.355	1894	1908	1929	rBV	295019	423354	92.59%	16.623%
7	7.755	2398	2410	2447	rBV2	309557	452215	98.90%	17.756%
8	8.915	2814	2826	2849	rBV3	198553	278010	60.80%	10.916%
9	10.050	3220	3233	3262	rBV	322960	457228	100.00%	17.953%

Sum of corrected areas: 2546811

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922621.D
Acq On : 14 Aug 2019 3:54 pm
Operator :
Sample : 19H0617-02 @ FB
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922621.D
Acq On : 14 Aug 2019 3:54 pm
Operator :
Sample : 19H0617-02 @ FB
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P

****

Peak Number 1 Silane, methoxytrimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.501	9.25 UG/L	89138	PENTAFLUOROBENZENE - ISTD	4.199

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Silane, methoxytrimethyl-	104	C4H12OSi	001825-61-2	83
2	Silane, methoxytrimethyl-	104	C4H12OSi	001825-61-2	83
3	Silane, (2-methoxyethyl)trimethyl-	132	C6H16OSi	018173-63-2	78
4	Thiazole, tetrahydro-	89	C3H7NS	000504-78-9	40
5	2-Cyclopentene, 1,4-bis(methoxye...	276	C13H24O6	1000156-00-3	9

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922621.D
Acq On : 14 Aug 2019 3:54 pm
Operator :
Sample : 19H0617-02 @ FB
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Silane, methoxy...	2.501	9.3	UG/L	89138	1	4.199	289136	30.0

1 - FORM I
ANALYSIS DATA SHEET

P-15

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-03	File ID:	C1922622.D
Sampled:	08/12/19 09:30	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 16:20
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192	Instrument:	GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone		3.8	50	
107-13-1	Acrylonitrile		0.52	5.0	
994-05-8	tert-Amyl Methyl Ether (TAME)		0.14	0.50	
71-43-2	Benzene		0.18	1.0	
108-86-1	Bromobenzene		0.15	1.0	
74-97-5	Bromochloromethane		0.32	1.0	
75-27-4	Bromodichloromethane		0.16	0.50	
75-25-2	Bromoform		0.46	1.0	
74-83-9	Bromomethane		0.78	2.0	
78-93-3	2-Butanone (MEK)		1.9	20	
75-65-0	tert-Butyl Alcohol (TBA)		4.2	20	
104-51-8	n-Butylbenzene		0.21	1.0	
135-98-8	sec-Butylbenzene		0.16	1.0	
98-06-6	tert-Butylbenzene		0.17	1.0	
637-92-3	tert-Butyl Ethyl Ether (TBEE)		0.16	0.50	
75-15-0	Carbon Disulfide		4.4	5.0	
56-23-5	Carbon Tetrachloride		0.11	5.0	
108-90-7	Chlorobenzene		0.15	1.0	
124-48-1	Chlorodibromomethane		0.21	0.50	
75-00-3	Chloroethane		0.35	2.0	
67-66-3	Chloroform	2.8	0.17	2.0	
74-87-3	Chloromethane		0.45	2.0	
95-49-8	2-Chlorotoluene		0.12	1.0	
106-43-4	4-Chlorotoluene		0.14	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		0.53	5.0	
106-93-4	1,2-Dibromoethane (EDB)		0.19	0.50	
74-95-3	Dibromomethane		0.37	1.0	
95-50-1	1,2-Dichlorobenzene		0.16	1.0	
541-73-1	1,3-Dichlorobenzene		0.12	1.0	
106-46-7	1,4-Dichlorobenzene		0.13	1.0	

1 - FORM I
ANALYSIS DATA SHEET

P-15

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-03	File ID:	C1922622.D
Sampled:	08/12/19 09:30	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 16:20
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192	Instrument:	GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene		0.31	2.0	
75-71-8	Dichlorodifluoromethane (Freon 12)		0.26	2.0	
75-34-3	1,1-Dichloroethane		0.16	1.0	
107-06-2	1,2-Dichloroethane		0.41	1.0	
75-35-4	1,1-Dichloroethylene		0.32	1.0	
156-59-2	cis-1,2-Dichloroethylene		0.13	1.0	
156-60-5	trans-1,2-Dichloroethylene		0.31	1.0	
78-87-5	1,2-Dichloropropane		0.20	1.0	
142-28-9	1,3-Dichloropropane		0.11	0.50	
594-20-7	2,2-Dichloropropane		0.20	1.0	
563-58-6	1,1-Dichloropropene		0.16	2.0	
10061-01-5	cis-1,3-Dichloropropene		0.13	0.50	
10061-02-6	trans-1,3-Dichloropropene		0.23	0.50	
60-29-7	Diethyl Ether		0.34	2.0	
108-20-3	Diisopropyl Ether (DIPE)		0.17	0.50	
123-91-1	1,4-Dioxane		22	50	
100-41-4	Ethylbenzene		0.13	1.0	
87-68-3	Hexachlorobutadiene		0.47	0.60	
591-78-6	2-Hexanone (MBK)		1.5	10	
98-82-8	Isopropylbenzene (Cumene)		0.17	1.0	
99-87-6	p-Isopropyltoluene (p-Cymene)		0.20	1.0	
79-20-9	Methyl Acetate		0.42	1.0	
1634-04-4	Methyl tert-Butyl Ether (MTBE)		0.25	1.0	
108-87-2	Methyl Cyclohexane		0.20	1.0	
75-09-2	Methylene Chloride		0.34	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)		1.7	10	
91-20-3	Naphthalene		0.31	2.0	
103-65-1	n-Propylbenzene		0.13	1.0	
100-42-5	Styrene		0.11	1.0	
630-20-6	1,1,1,2-Tetrachloroethane		0.27	1.0	

1 - FORM I
ANALYSIS DATA SHEET

P-15

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-03	File ID:	C1922622.D
Sampled:	08/12/19 09:30	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 16:20
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane		0.22	0.50	
127-18-4	Tetrachloroethylene		0.18	1.0	
109-99-9	Tetrahydrofuran		0.51	10	
108-88-3	Toluene		0.14	1.0	
87-61-6	1,2,3-Trichlorobenzene		0.57	5.0	
120-82-1	1,2,4-Trichlorobenzene		0.40	1.0	
108-70-3	1,3,5-Trichlorobenzene		0.30	1.0	
71-55-6	1,1,1-Trichloroethane		0.20	1.0	
79-00-5	1,1,2-Trichloroethane		0.16	1.0	
79-01-6	Trichloroethylene		0.24	1.0	
75-69-4	Trichlorofluoromethane (Freon 11)		0.33	2.0	
96-18-4	1,2,3-Trichloropropane		0.25	2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1		0.32	1.0	
95-63-6	1,2,4-Trimethylbenzene		0.18	1.0	
108-67-8	1,3,5-Trimethylbenzene		0.14	1.0	
75-01-4	Vinyl Chloride		0.45	2.0	
108383/106423	m+p Xylene		0.30	2.0	
95-47-6	o-Xylene		0.17	1.0	

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (µg/L)	Q
001825-61-2	Silane, methoxytrimethyl-	18	

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03 Inst : GCMSVOA3
Misc :
ALS Vial : 22 Sample Multiplier: 1

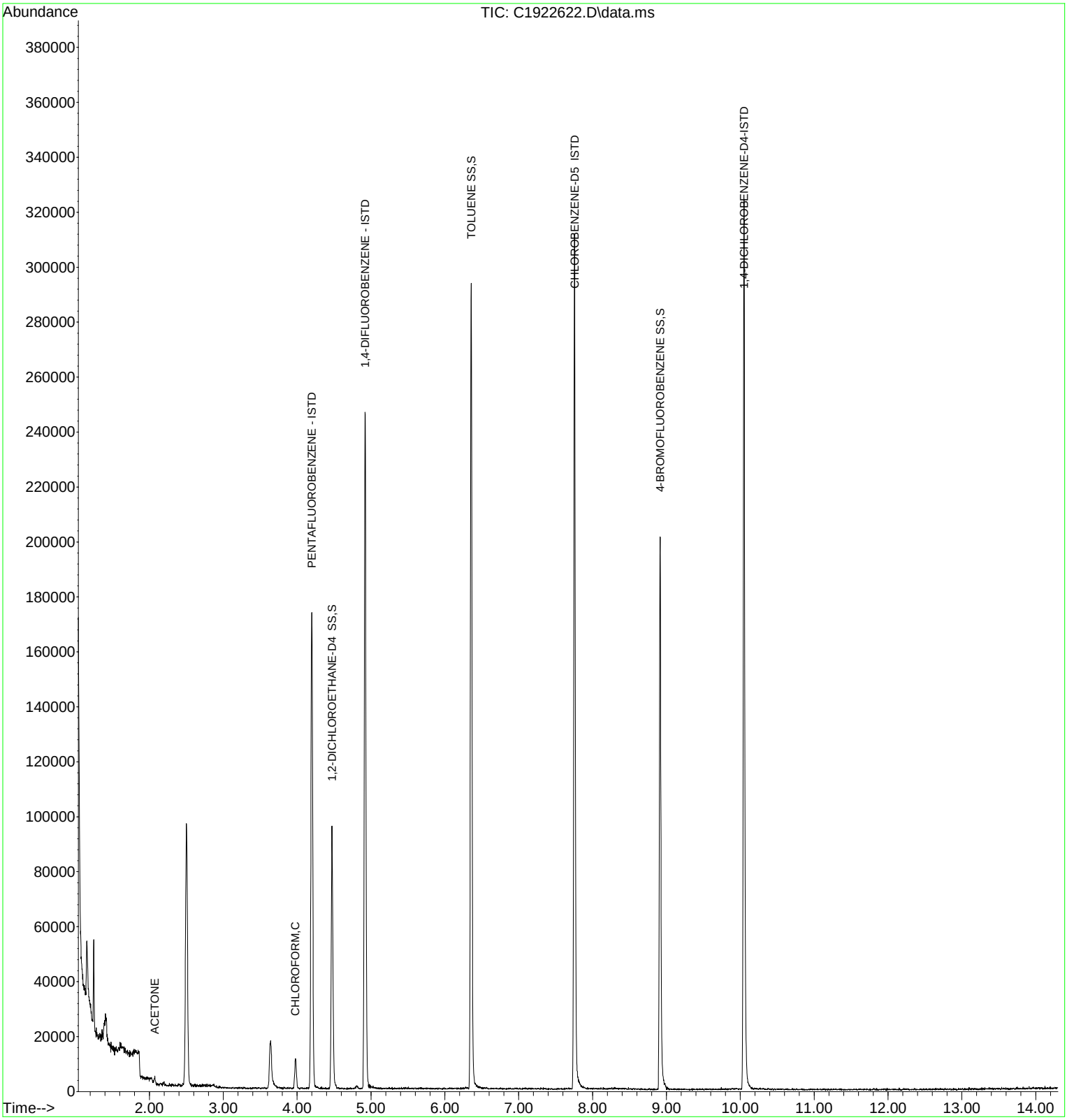
Quant Time: Aug 15 08:36:45 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

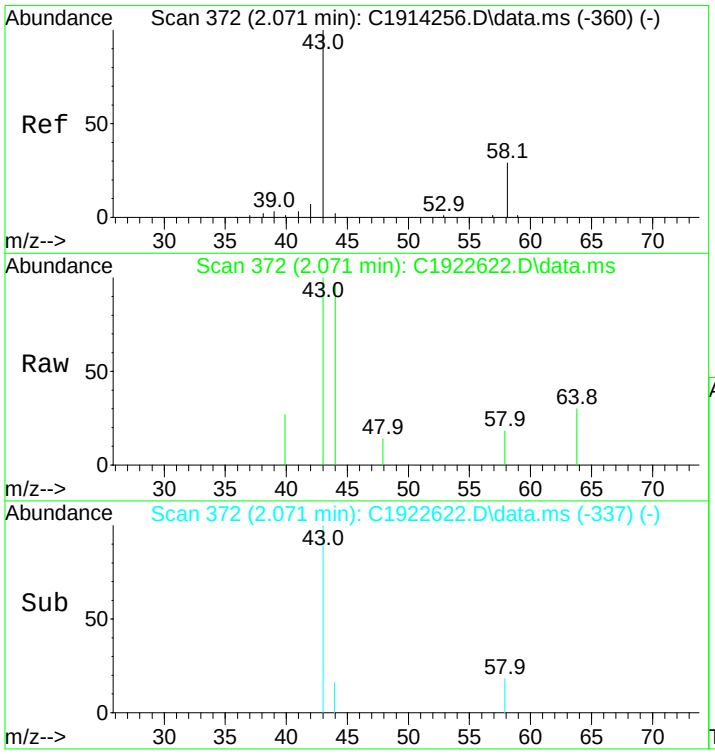
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.199	168	103552	30.00	UG/L	0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	163324	30.00	UG/L	0.00
70) CHLOROBENZENE-D5 ISTD	7.758	82	79557	30.00	UG/L	0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	73203	30.00	UG/L	# 0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.473	65	54385	27.92	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 111.68%			
49) TOLUENE SS	6.358	98	161935	24.86	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 99.44%			
71) 4-BROMOFLUOROBENZENE SS	8.915	95	55532	23.53	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.12%			
Target Compounds						Qvalue
14) ACETONE	2.071	43	1993	3.07	UG/L #	47
40) CHLOROFORM	3.976	83	7348	2.85	UG/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03 Inst : GCMSVOA3
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 15 08:36:45 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

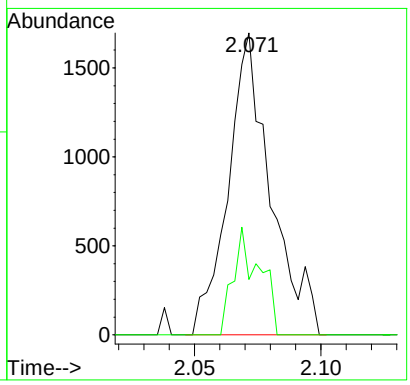


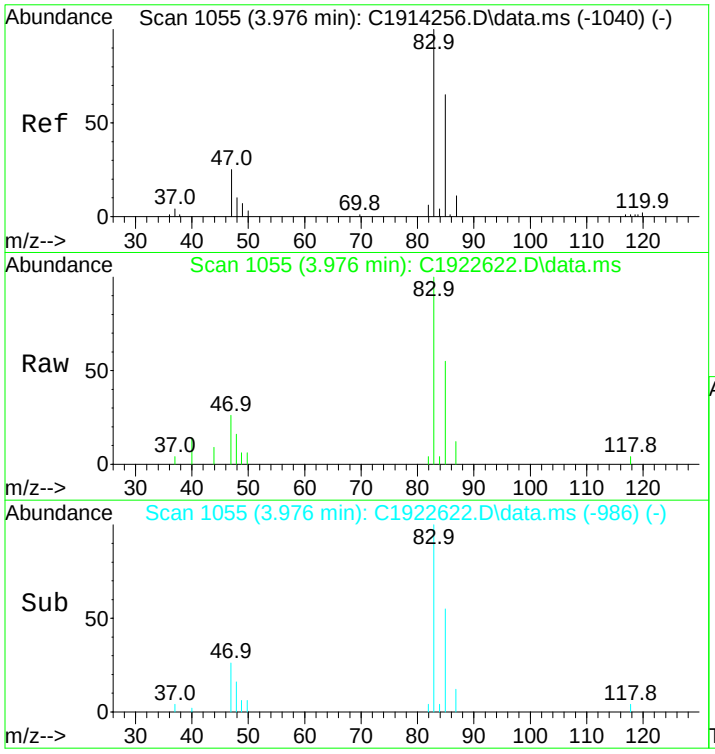


#14
ACETONE
Concen: 3.07 UG/L
RT: 2.071 min Scan# 372
Delta R.T. 0.002 min
Lab File: C1922622.D
Acq: 14 Aug 2019 4:20 pm

Tgt Ion: 43 Resp: 1993

Ion	Ratio	Lower	Upper
43	100		
58	0.0	22.1	33.1#

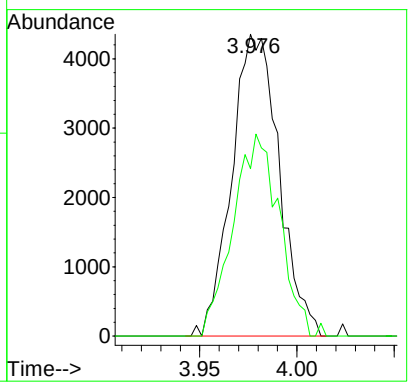




#40
CHLOROFORM
Concen: 2.85 UG/L
RT: 3.976 min Scan# 1055
Delta R.T. 0.003 min
Lab File: C1922622.D
Acq: 14 Aug 2019 4:20 pm

Tgt Ion: 83 Resp: 7348

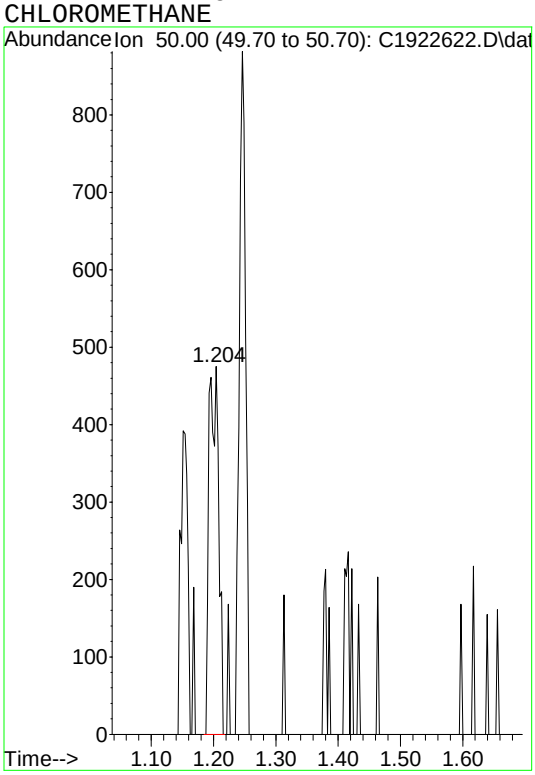
Ion	Ratio	Lower	Upper
83	100		
85	65.3	53.8	80.6



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03
Misc :

Quant Time : Thu Aug 15 08:36:45 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CHLOROMETHANE



Original Int. Results

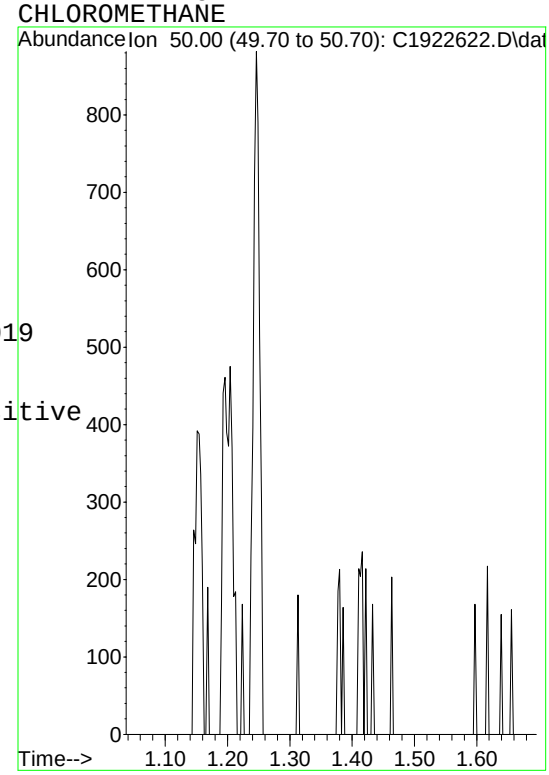
RT : 1.20
Area : 509
Amount: 0.225983

Manual Int. Results

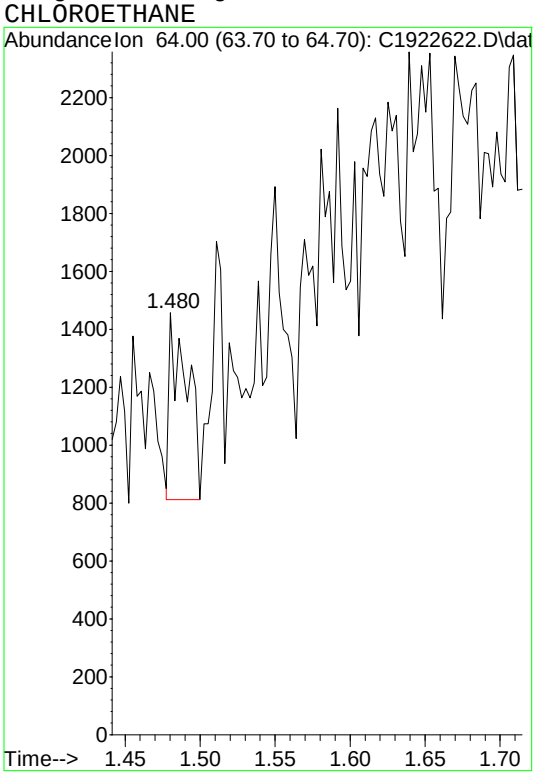
Thu Aug 15 08:36:12 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CHLOROMETHANE



Original Integration
CHLOROETHANE



Original Int. Results

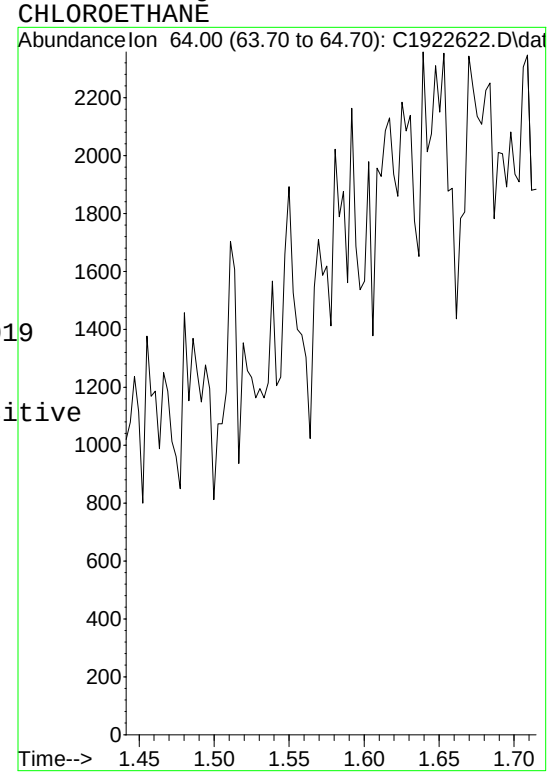
RT : 1.48
Area : 530
Amount: 0.53286

Manual Int. Results

Thu Aug 15 08:36:15 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

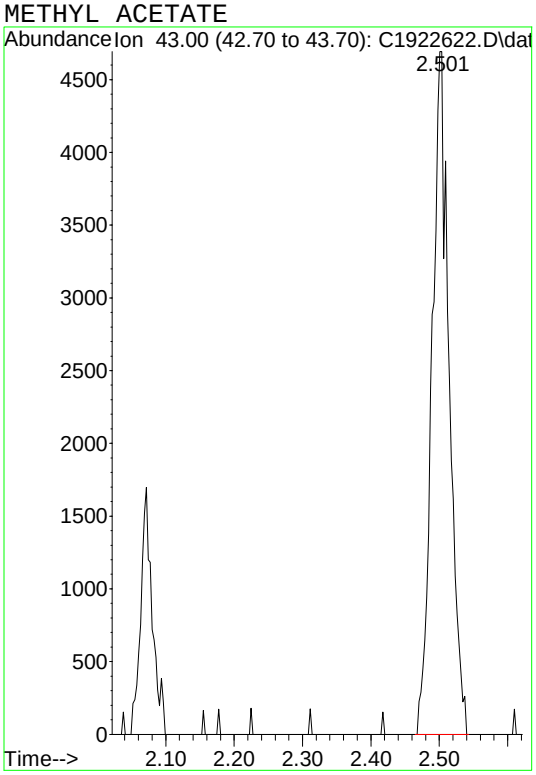
Manual Integration
CHLOROETHANE



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03
Misc :

Quant Time : Thu Aug 15 08:36:45 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
METHYL ACETATE



Original Int. Results

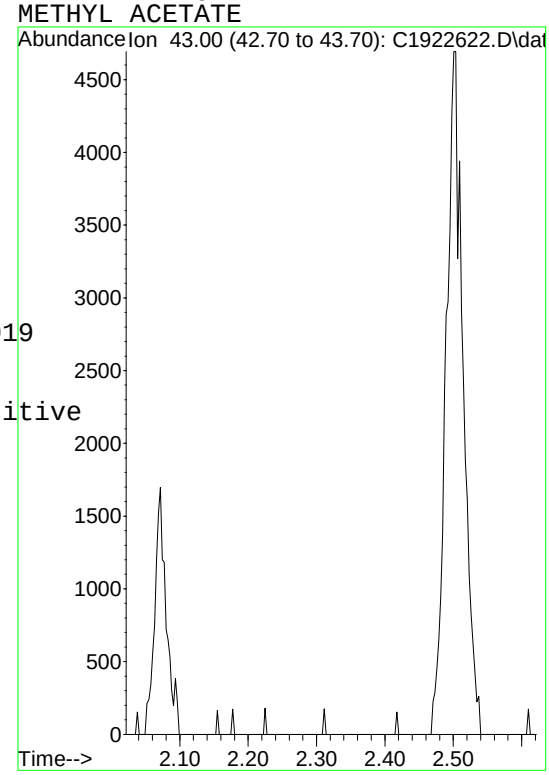
RT : 2.50
Area : 8165
Amount: 4.05877

Manual Int. Results

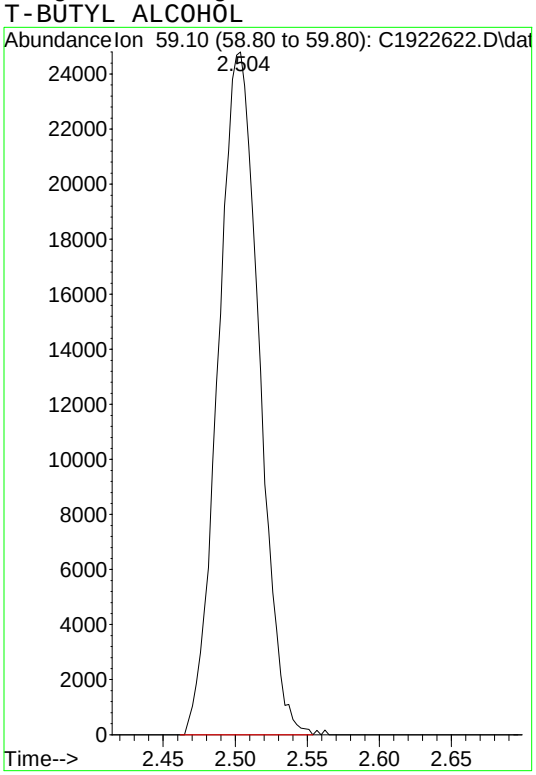
Thu Aug 15 08:36:19 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
METHYL ACETATE



Original Integration
T-BUTYL ALCOHOL



Original Int. Results

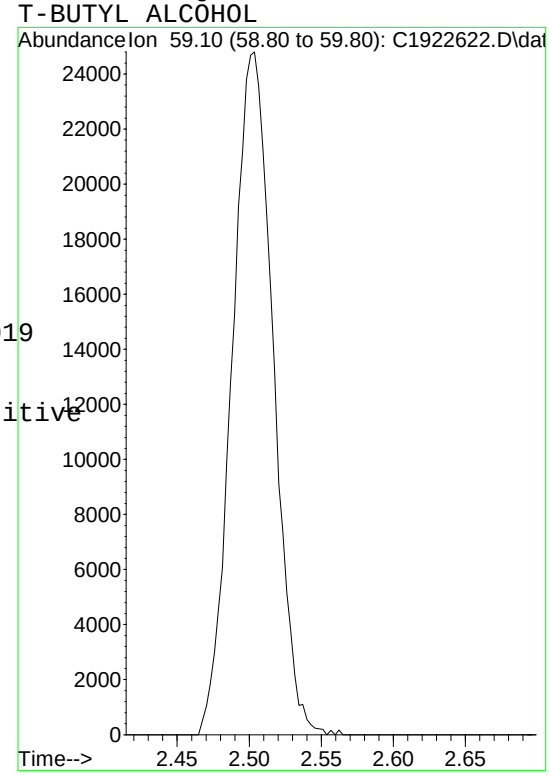
RT : 2.50
Area : 49055
Amount: 196.325

Manual Int. Results

Thu Aug 15 08:36:23 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

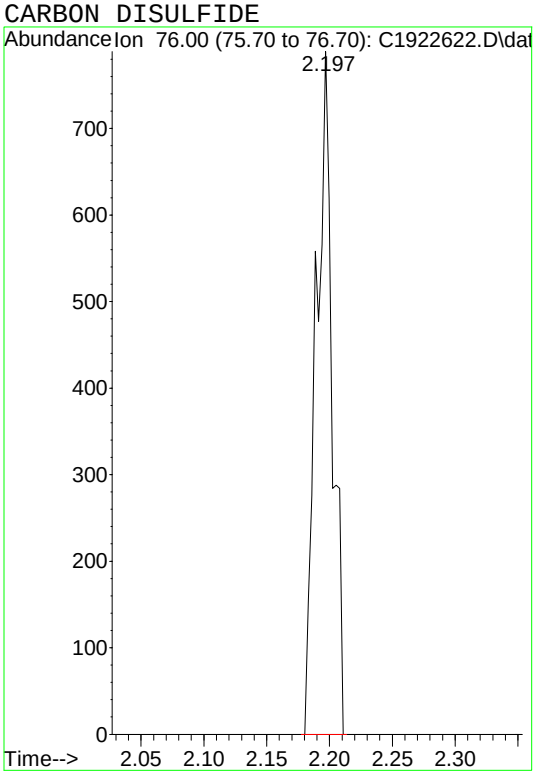
Manual Integration
T-BUTYL ALCOHOL



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03
Misc :

Quant Time : Thu Aug 15 08:36:45 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CARBON DISULFIDE



Original Int. Results

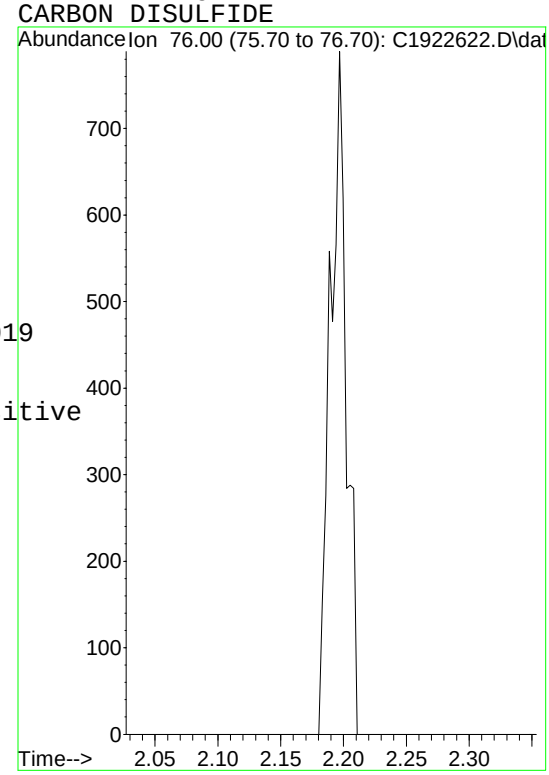
RT : 2.20
Area : 718
Amount: 0.185749

Manual Int. Results

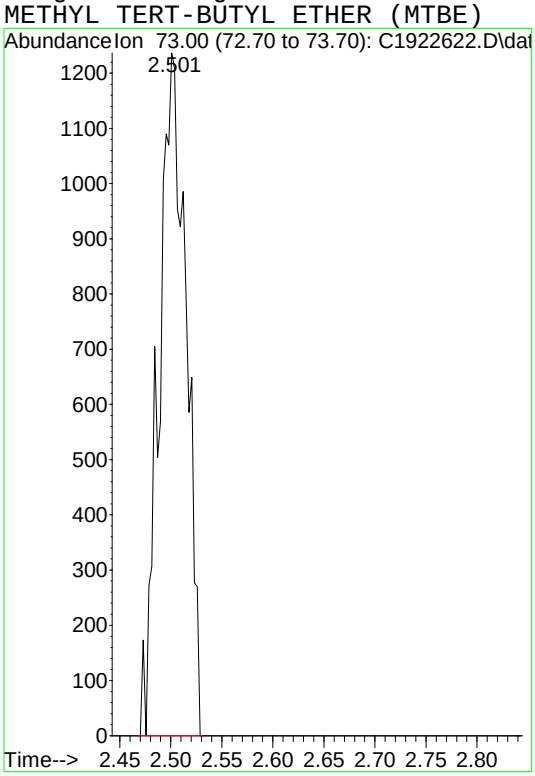
Thu Aug 15 08:36:26 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CARBON DISULFIDE



Original Integration
METHYL TERT-BUTYL ETHER (MTBE)



Original Int. Results

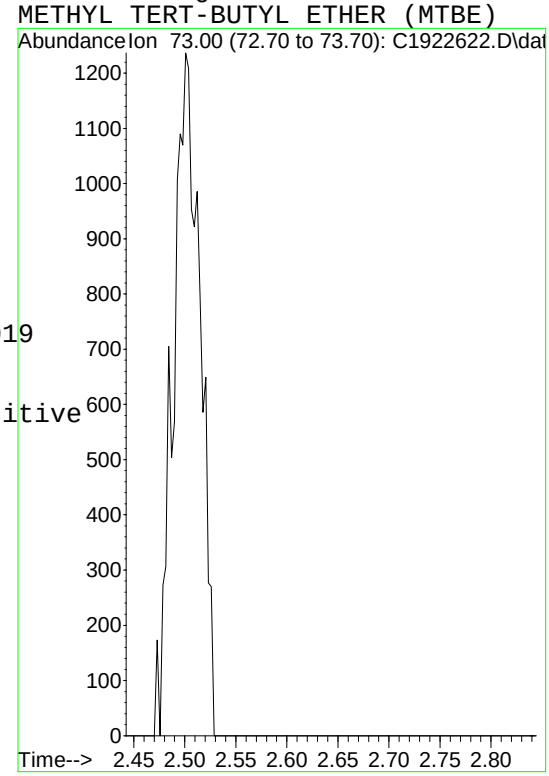
RT : 2.50
Area : 2272
Amount: 0.502259

Manual Int. Results

Thu Aug 15 08:36:29 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

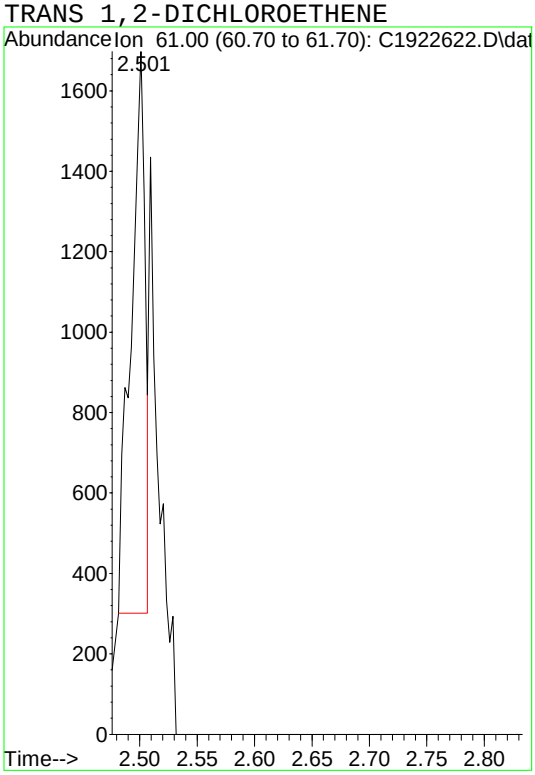
Manual Integration
METHYL TERT-BUTYL ETHER (MTBE)



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03
Misc :

Quant Time : Thu Aug 15 08:36:45 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
TRANS 1,2-DICHLOROETHENE



Original Int. Results

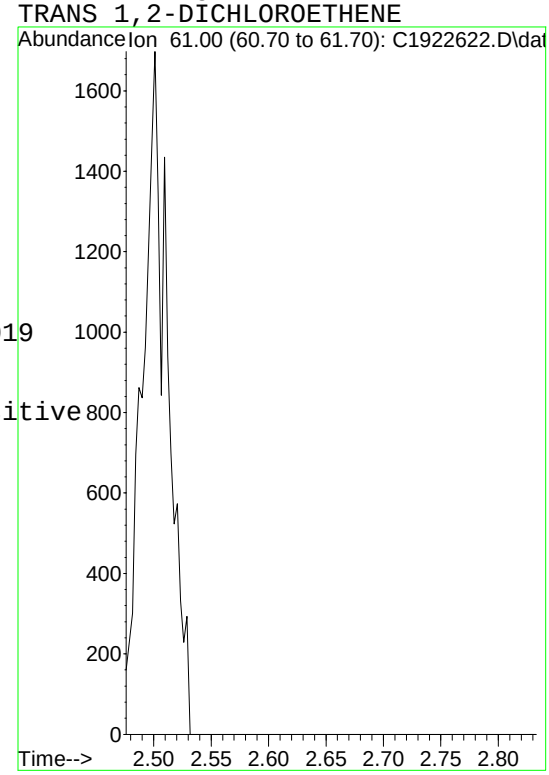
RT : 2.50
Area : 1204
Amount: 0.580098

Manual Int. Results

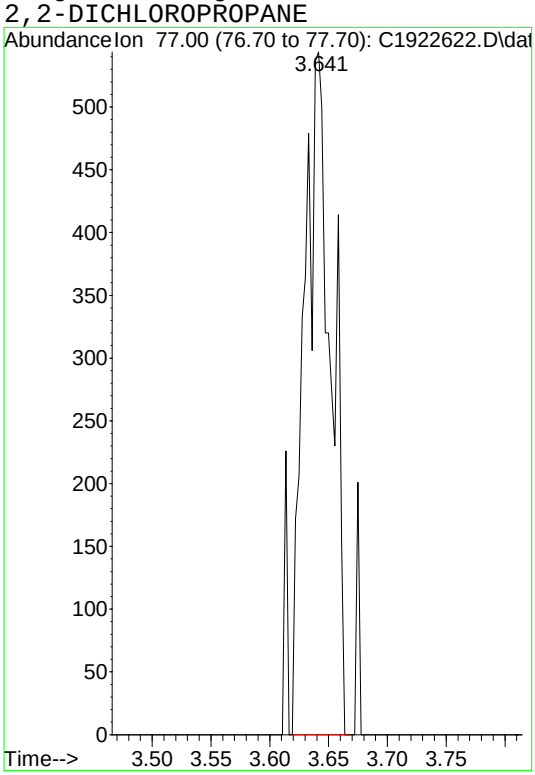
Thu Aug 15 08:36:31 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
TRANS 1,2-DICHLOROETHENE



Original Integration
2,2-DICHLOROPROPANE



Original Int. Results

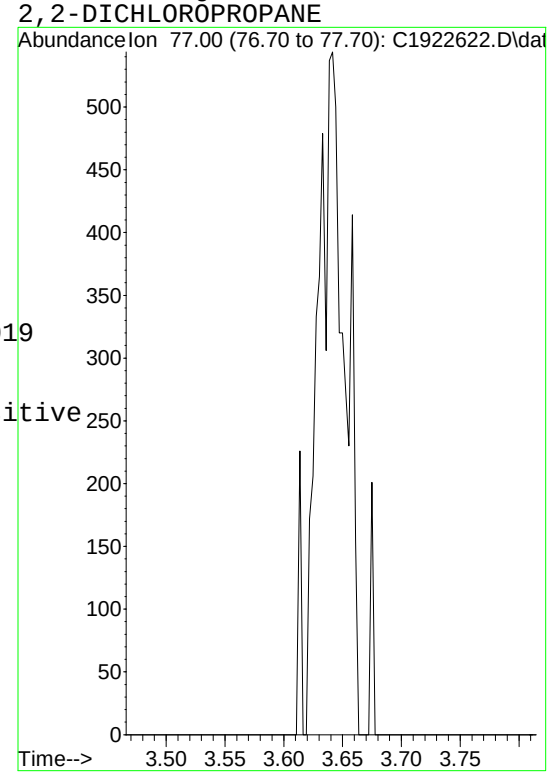
RT : 3.64
Area : 863
Amount: 0.414575

Manual Int. Results

Thu Aug 15 08:36:34 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

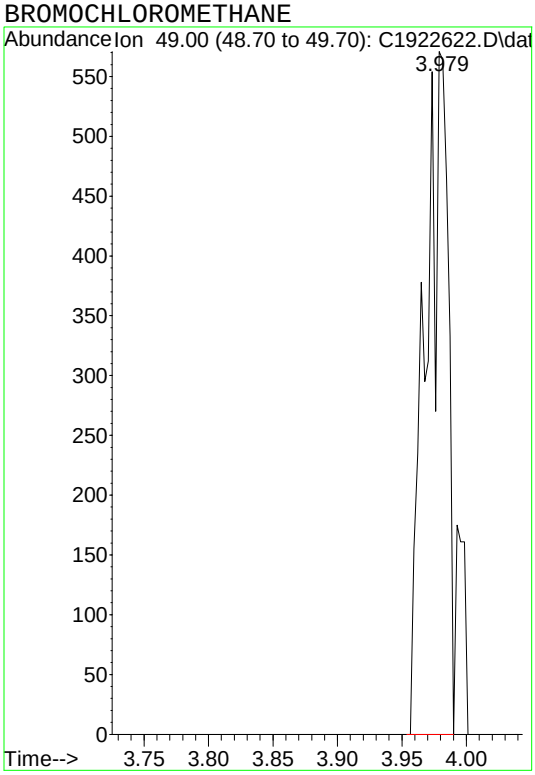
Manual Integration
2,2-DICHLOROPROPANE



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03
Misc :

Quant Time : Thu Aug 15 08:36:45 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
BROMOCHLOROMETHANE



Original Int. Results

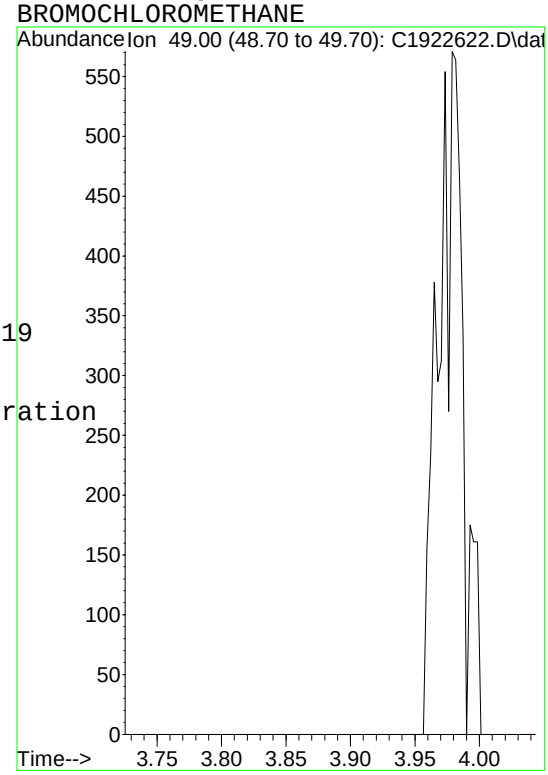
RT : 3.98
Area : 691
Amount: 0.484598

Manual Int. Results

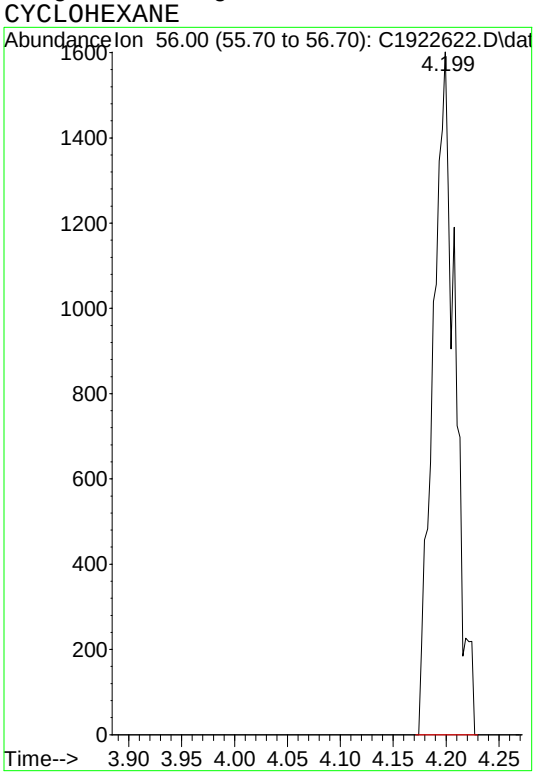
Thu Aug 15 08:36:37 2019

MIuser: EEH
Reason: Incorret Integration
RT : 0.00
Area : 0
Amount: 0

Manual Integration
BROMOCHLOROMETHANE



Original Integration
CYCLOHEXANE



Original Int. Results

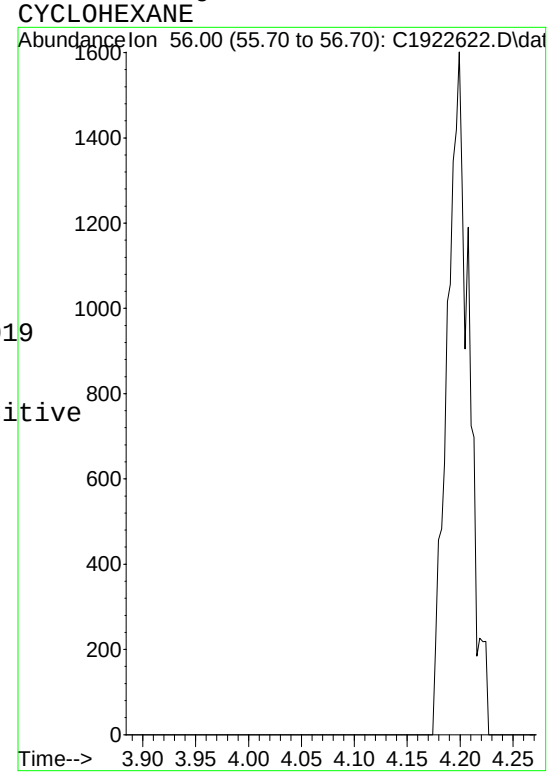
RT : 4.20
Area : 2323
Amount: 0.953268

Manual Int. Results

Thu Aug 15 08:36:43 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CYCLOHEXANE



LSC Area Percent Report

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: 8260B.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 9
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\methods\C051619.M
Title : 8260 WATER 5MLS VOAMS 5973 #3

Signal : TIC: C1922622.D\data.ms

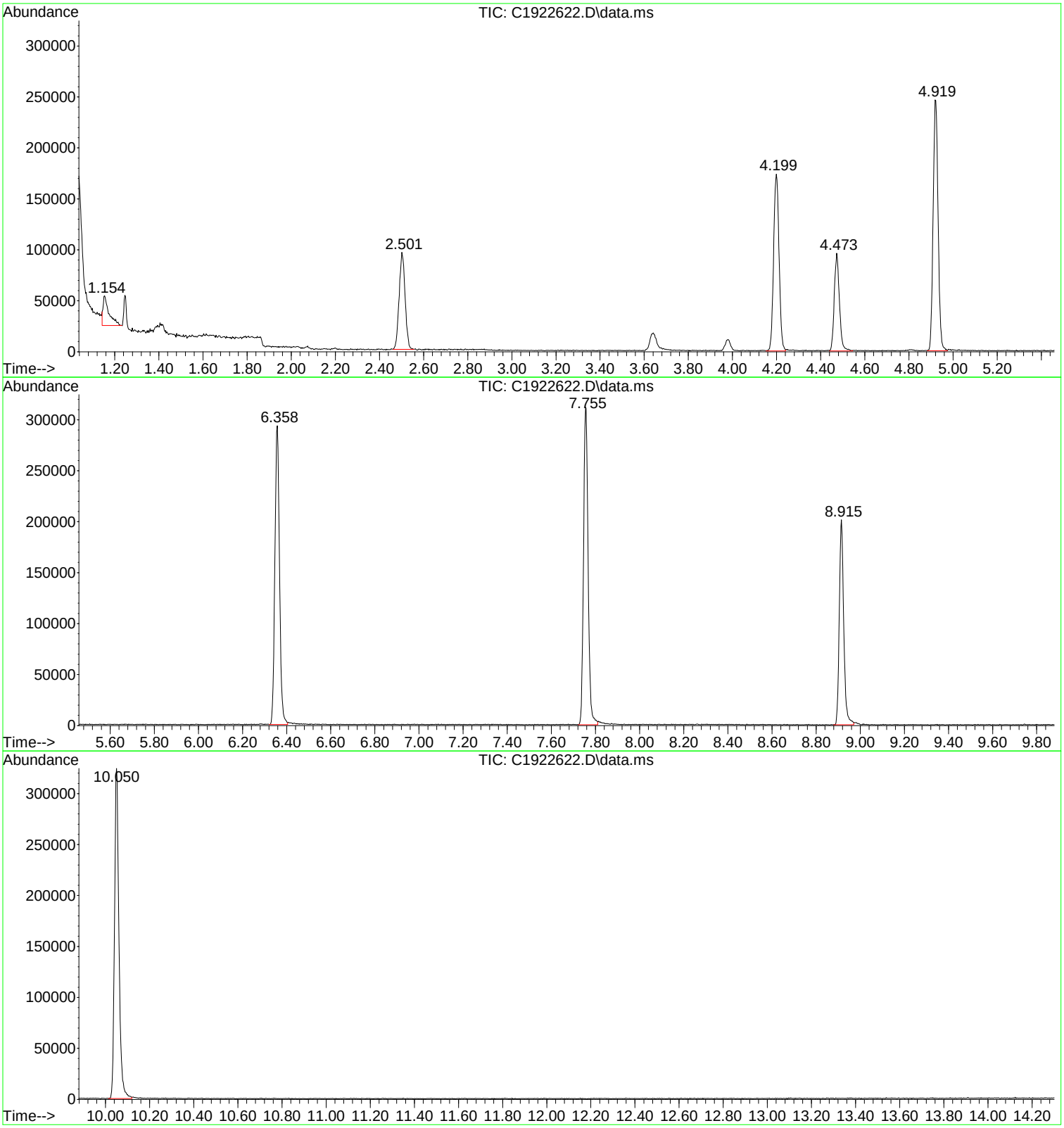
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.154	39	43	71	rVB2	29035	53218	11.76%	1.992%
2	2.501	512	526	546	rVB	95242	177506	39.23%	6.644%
3	4.199	1118	1135	1150	rBV	173464	294281	65.03%	11.016%
4	4.473	1221	1233	1259	rVV2	95818	154563	34.16%	5.786%
5	4.919	1380	1393	1413	rBV2	246182	381731	84.36%	14.289%
6	6.358	1896	1909	1926	rBV2	293250	427243	94.41%	15.993%
7	7.755	2398	2410	2430	rBV	311418	449391	99.31%	16.822%
8	8.915	2813	2826	2846	rBV2	201131	281035	62.10%	10.520%
9	10.050	3220	3233	3258	rBV2	324122	452520	100.00%	16.939%

Sum of corrected areas: 2671488

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P

****

Peak Number 1 Silane, methoxytrimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.501	18.10 UG/L	177506	PENTAFLUOROBENZENE - ISTD	4.199

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Silane, methoxytrimethyl-	104	C4H12OSi	001825-61-2	91
2	Silane, methoxytrimethyl-	104	C4H12OSi	001825-61-2	90
3	Silane, (2-methoxyethyl)trimethyl-	132	C6H16OSi	018173-63-2	78
4	Thiazole, tetrahydro-	89	C3H7NS	000504-78-9	56
5	2-Cyclopentene, 1,4-bis(methoxye...	276	C13H24O6	1000156-00-3	9

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922622.D
Acq On : 14 Aug 2019 4:20 pm
Operator :
Sample : 19H0617-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Silane, methoxy...	2.501	18.1	UG/L	177506	1	4.199	294281	30.0

1 - FORM I
ANALYSIS DATA SHEET

P-5S

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-04	File ID:	C1922623.D
Sampled:	08/12/19 13:10	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 16:47
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192	Instrument:	GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone		3.8	50	
107-13-1	Acrylonitrile		0.52	5.0	
994-05-8	tert-Amyl Methyl Ether (TAME)		0.14	0.50	
71-43-2	Benzene		0.18	1.0	
108-86-1	Bromobenzene		0.15	1.0	
74-97-5	Bromochloromethane		0.32	1.0	
75-27-4	Bromodichloromethane		0.16	0.50	
75-25-2	Bromoform		0.46	1.0	
74-83-9	Bromomethane		0.78	2.0	
78-93-3	2-Butanone (MEK)		1.9	20	
75-65-0	tert-Butyl Alcohol (TBA)		4.2	20	
104-51-8	n-Butylbenzene		0.21	1.0	
135-98-8	sec-Butylbenzene		0.16	1.0	
98-06-6	tert-Butylbenzene		0.17	1.0	
637-92-3	tert-Butyl Ethyl Ether (TBEE)		0.16	0.50	
75-15-0	Carbon Disulfide		4.4	5.0	
56-23-5	Carbon Tetrachloride		0.11	5.0	
108-90-7	Chlorobenzene		0.15	1.0	
124-48-1	Chlorodibromomethane		0.21	0.50	
75-00-3	Chloroethane		0.35	2.0	
67-66-3	Chloroform		0.17	2.0	
74-87-3	Chloromethane		0.45	2.0	
95-49-8	2-Chlorotoluene		0.12	1.0	
106-43-4	4-Chlorotoluene		0.14	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		0.53	5.0	
106-93-4	1,2-Dibromoethane (EDB)		0.19	0.50	
74-95-3	Dibromomethane		0.37	1.0	
95-50-1	1,2-Dichlorobenzene		0.16	1.0	
541-73-1	1,3-Dichlorobenzene		0.12	1.0	
106-46-7	1,4-Dichlorobenzene		0.13	1.0	

1 - FORM I
ANALYSIS DATA SHEET

P-5S

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-04	File ID:	C1922623.D
Sampled:	08/12/19 13:10	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 16:47
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192	Instrument:	GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene		0.31	2.0	
75-71-8	Dichlorodifluoromethane (Freon 12)		0.26	2.0	
75-34-3	1,1-Dichloroethane	1.7	0.16	1.0	
107-06-2	1,2-Dichloroethane		0.41	1.0	
75-35-4	1,1-Dichloroethylene	0.45	0.32	1.0	J
156-59-2	cis-1,2-Dichloroethylene	23	0.13	1.0	
156-60-5	trans-1,2-Dichloroethylene		0.31	1.0	
78-87-5	1,2-Dichloropropane		0.20	1.0	
142-28-9	1,3-Dichloropropane		0.11	0.50	
594-20-7	2,2-Dichloropropane		0.20	1.0	
563-58-6	1,1-Dichloropropene		0.16	2.0	
10061-01-5	cis-1,3-Dichloropropene		0.13	0.50	
10061-02-6	trans-1,3-Dichloropropene		0.23	0.50	
60-29-7	Diethyl Ether		0.34	2.0	
108-20-3	Diisopropyl Ether (DIPE)		0.17	0.50	
123-91-1	1,4-Dioxane		22	50	
100-41-4	Ethylbenzene		0.13	1.0	
87-68-3	Hexachlorobutadiene		0.47	0.60	
591-78-6	2-Hexanone (MBK)		1.5	10	
98-82-8	Isopropylbenzene (Cumene)		0.17	1.0	
99-87-6	p-Isopropyltoluene (p-Cymene)		0.20	1.0	
79-20-9	Methyl Acetate		0.42	1.0	
1634-04-4	Methyl tert-Butyl Ether (MTBE)		0.25	1.0	
108-87-2	Methyl Cyclohexane		0.20	1.0	
75-09-2	Methylene Chloride		0.34	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)		1.7	10	
91-20-3	Naphthalene		0.31	2.0	
103-65-1	n-Propylbenzene		0.13	1.0	
100-42-5	Styrene		0.11	1.0	
630-20-6	1,1,1,2-Tetrachloroethane		0.27	1.0	

1 - FORM I
ANALYSIS DATA SHEET

P-5S

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-04	File ID:	C1922623.D
Sampled:	08/12/19 13:10	Prepared:	08/14/19 07:29	Analyzed:	08/14/19 16:47
Solids:		Preparation:	SW-846 5030B	Dilution:	1
Initial/Final:	5 mL / 5 mL				
Batch:	B237978	Sequence:	S039197	Calibration:	1900192	Instrument:	GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane		0.22	0.50	
127-18-4	Tetrachloroethylene		0.18	1.0	
109-99-9	Tetrahydrofuran		0.51	10	
108-88-3	Toluene		0.14	1.0	
87-61-6	1,2,3-Trichlorobenzene		0.57	5.0	
120-82-1	1,2,4-Trichlorobenzene		0.40	1.0	
108-70-3	1,3,5-Trichlorobenzene		0.30	1.0	
71-55-6	1,1,1-Trichloroethane	0.86	0.20	1.0	J
79-00-5	1,1,2-Trichloroethane		0.16	1.0	
79-01-6	Trichloroethylene	25	0.24	1.0	
75-69-4	Trichlorofluoromethane (Freon 11)		0.33	2.0	
96-18-4	1,2,3-Trichloropropane		0.25	2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1		0.32	1.0	
95-63-6	1,2,4-Trimethylbenzene		0.18	1.0	
108-67-8	1,3,5-Trimethylbenzene		0.14	1.0	
75-01-4	Vinyl Chloride	1.1	0.45	2.0	J
108383/106423	m+p Xylene		0.30	2.0	
95-47-6	o-Xylene		0.17	1.0	
	No TICs Found	0.0			

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04 Inst : GCMSVOA3
Misc :
ALS Vial : 23 Sample Multiplier: 1

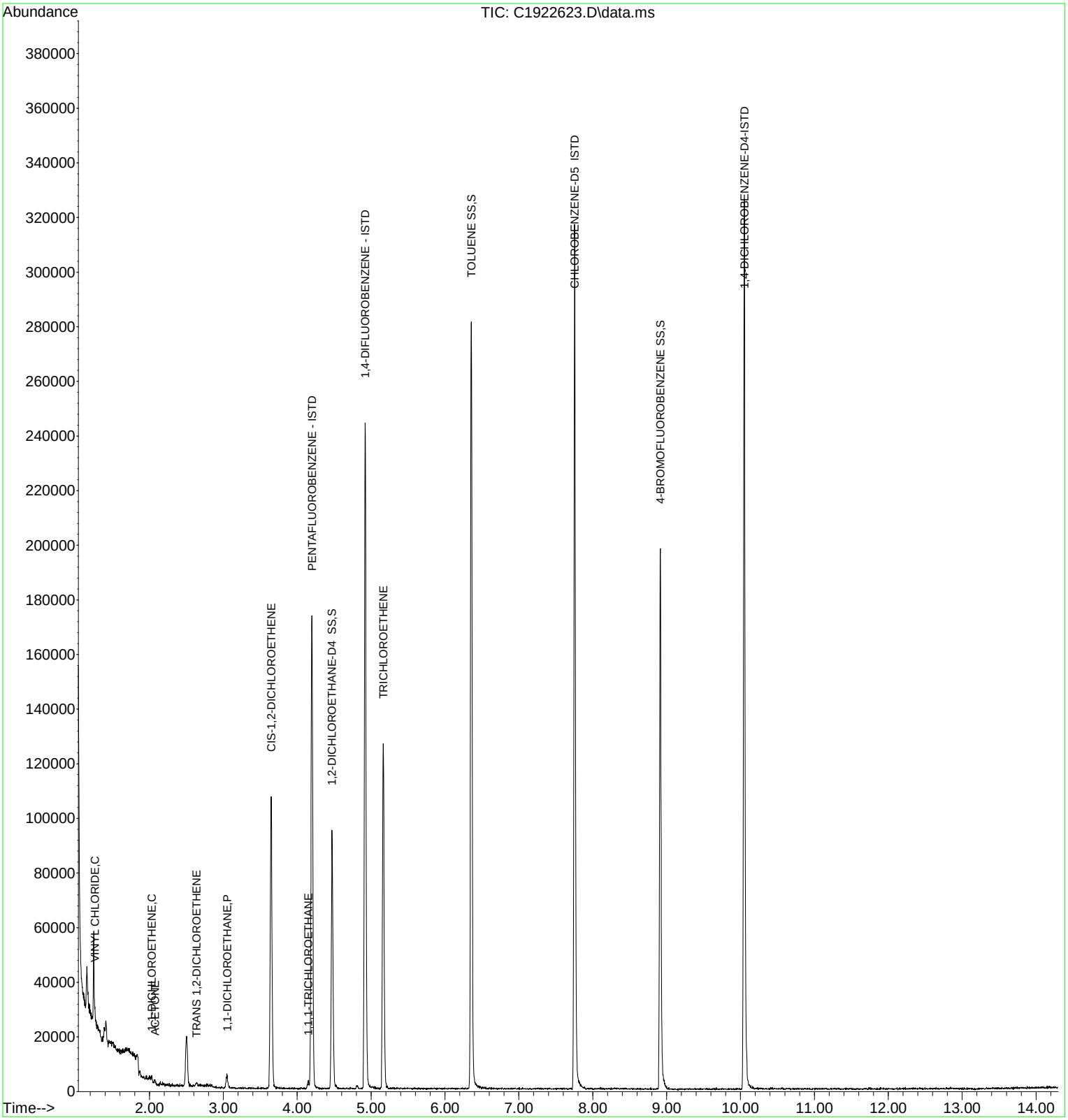
Quant Time: Aug 15 08:37:33 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

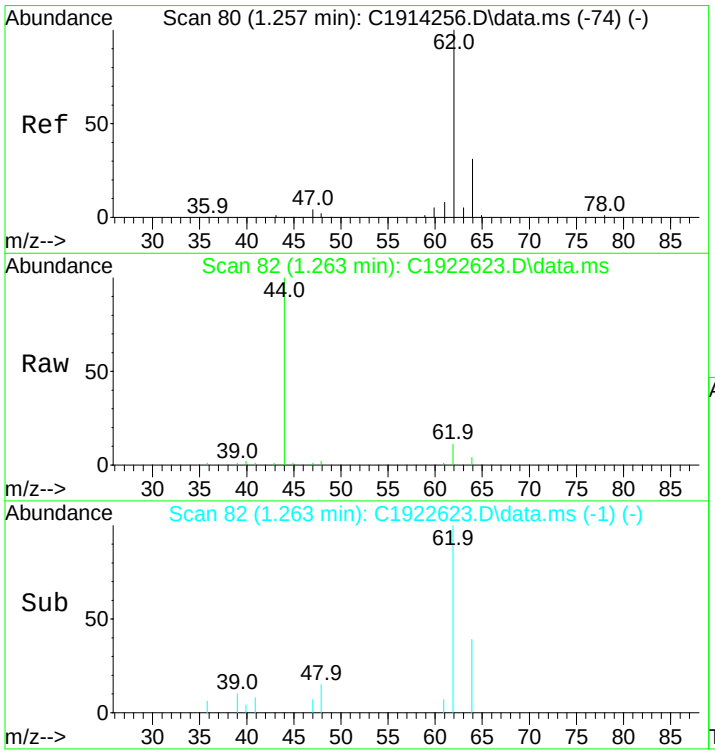
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.199	168	101033	30.00	UG/L	0.00
48) 1,4-DIFLUOROBENZENE - ...	4.918	114	159441	30.00	UG/L	0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	78889	30.00	UG/L	0.00
89) 1,4-DICHLOROBENZENE-D4...	10.052	152	74298	30.00	UG/L	# 0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	53218	28.00	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 112.00%			
49) TOLUENE SS	6.357	98	158422	24.92	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 99.68%			
71) 4-BROMOFLUOROBENZENE SS	8.915	95	55547	23.74	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.96%			
Target Compounds						Qvalue
6) VINYL CHLORIDE	1.263	62	1883	1.07	UG/L #	60
14) ACETONE	2.074	43	1133	1.79	UG/L #	47
15) 1,1-DICHLOROETHENE	2.032	61	872	0.45	UG/L #	28
26) TRANS 1,2-DICHLOROETHENE	2.637	61	592	0.29	UG/L #	20
27) 1,1-DICHLOROETHANE	3.053	63	4604	1.70	UG/L #	90
33) CIS-1,2-DICHLOROETHENE	3.647	61	53868	22.84	UG/L	99
41) 1,1,1-TRICHLOROETHANE	4.152	97	1734	0.86	UG/L #	87
51) TRICHLOROETHENE	5.164	95	35061	24.99	UG/L	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04 Inst : GCMSVOA3
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 15 08:37:33 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

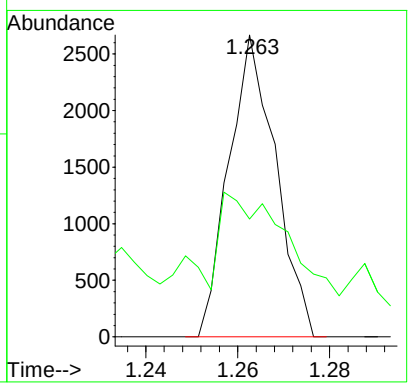


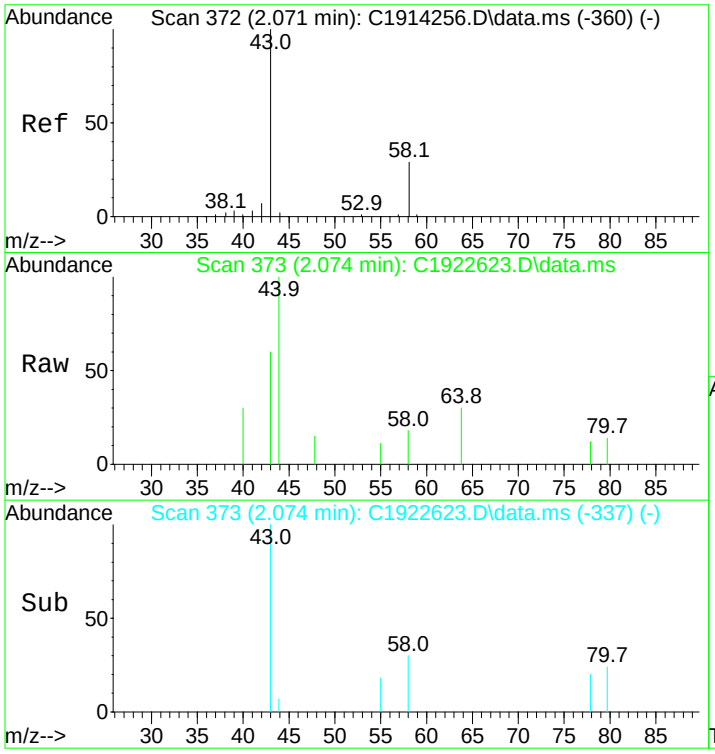


#6
VINYL CHLORIDE
Concen: 1.07 UG/L
RT: 1.263 min Scan# 82
Delta R.T. 0.003 min
Lab File: C1922623.D
Acq: 14 Aug 2019 4:47 pm

Tgt Ion: 62 Resp: 1883

Ion	Ratio	Lower	Upper
62	100		
64	52.7	24.6	36.8#

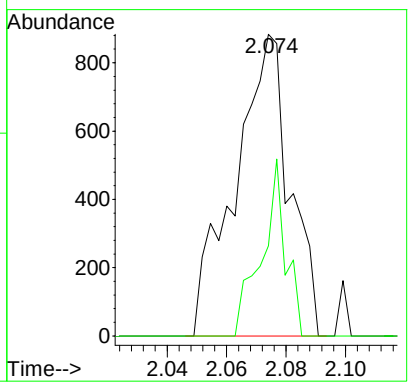


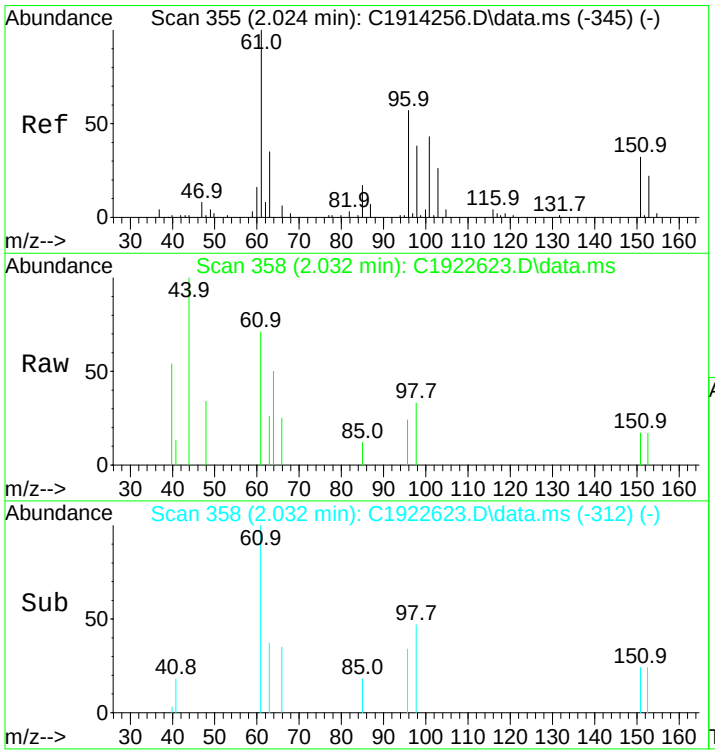


#14
ACETONE
Concen: 1.79 UG/L
RT: 2.074 min Scan# 373
Delta R.T. 0.005 min
Lab File: C1922623.D
Acq: 14 Aug 2019 4:47 pm

Tgt Ion: 43 Resp: 1133

Ion	Ratio	Lower	Upper
43	100		
58	0.0	22.1	33.1#

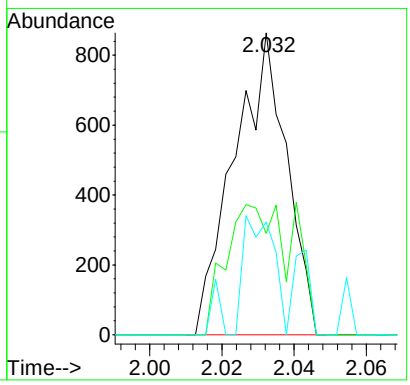


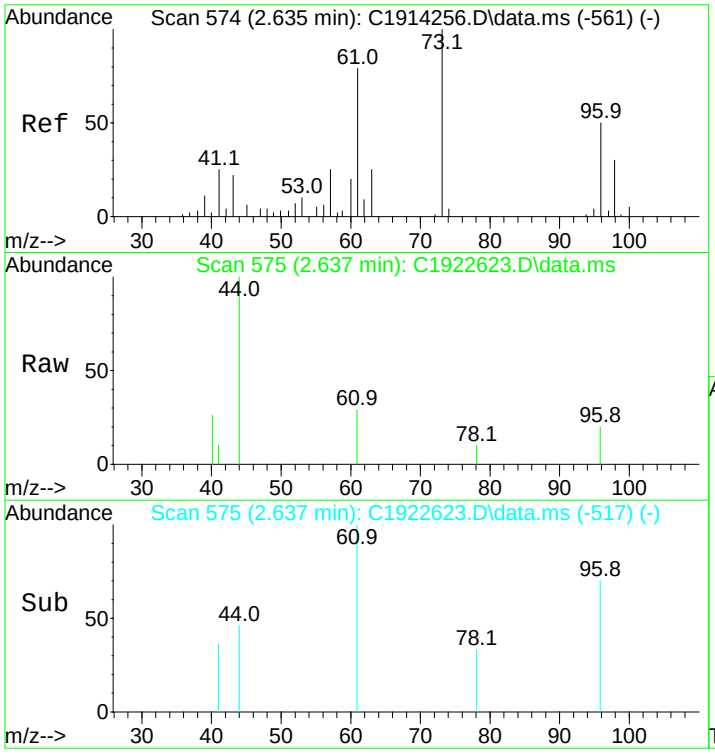


#15
1,1-DICHLOROETHENE
Concen: 0.45 UG/L
RT: 2.032 min Scan# 358
Delta R.T. 0.008 min
Lab File: C1922623.D
Acq: 14 Aug 2019 4:47 pm

Tgt Ion: 61 Resp: 872

Ion	Ratio	Lower	Upper
61	100		
96	0.0	48.0	72.0#
63	0.0	25.0	37.4#

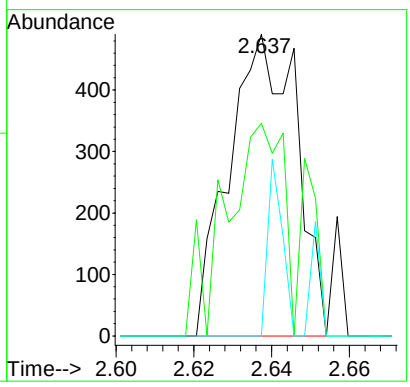


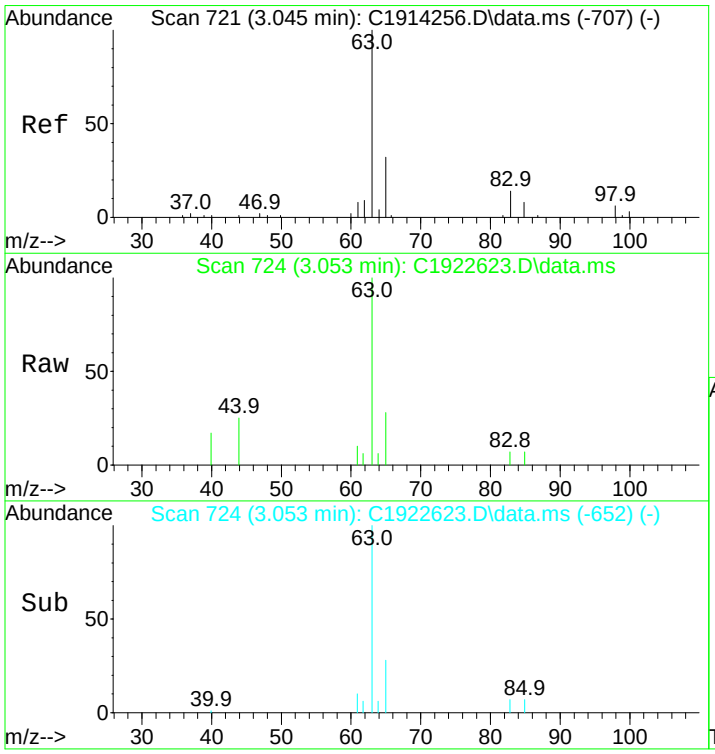


#26
TRANS 1,2-DICHLOROETHENE
Concen: 0.29 UG/L
RT: 2.637 min Scan# 575
Delta R.T. 0.005 min
Lab File: C1922623.D
Acq: 14 Aug 2019 4:47 pm

Tgt Ion: 61 Resp: 592

Ion	Ratio	Lower	Upper
61	100		
96	0.0	57.4	86.2#
98	0.0	36.2	54.4#

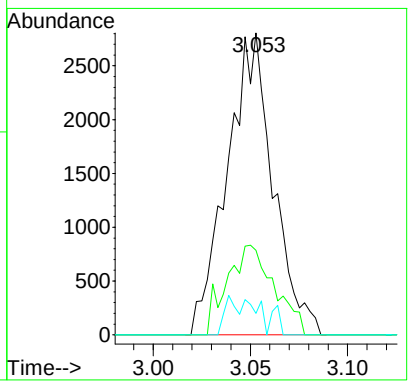


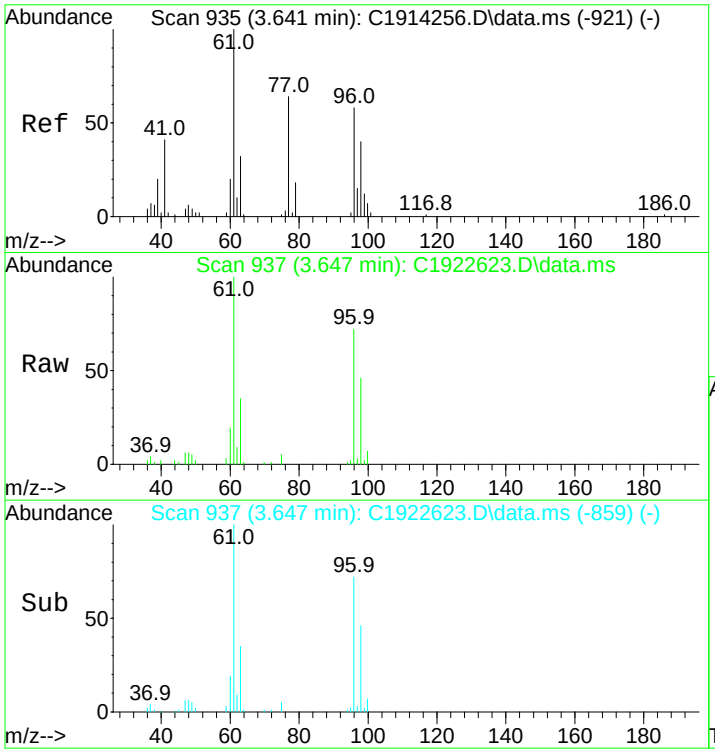


#27
1,1-DICHLOROETHANE
Concen: 1.70 UG/L
RT: 3.053 min Scan# 724
Delta R.T. 0.006 min
Lab File: C1922623.D
Acq: 14 Aug 2019 4:47 pm

Tgt Ion: 63 Resp: 4604

Ion	Ratio	Lower	Upper
63	100		
65	30.6	24.6	36.8
83	0.0	10.4	15.6#

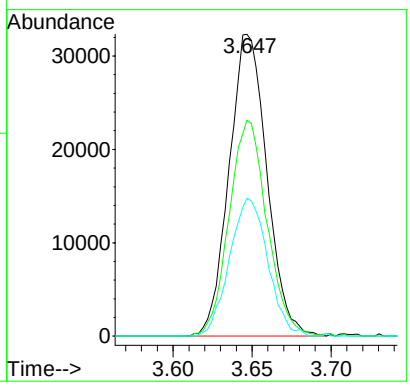


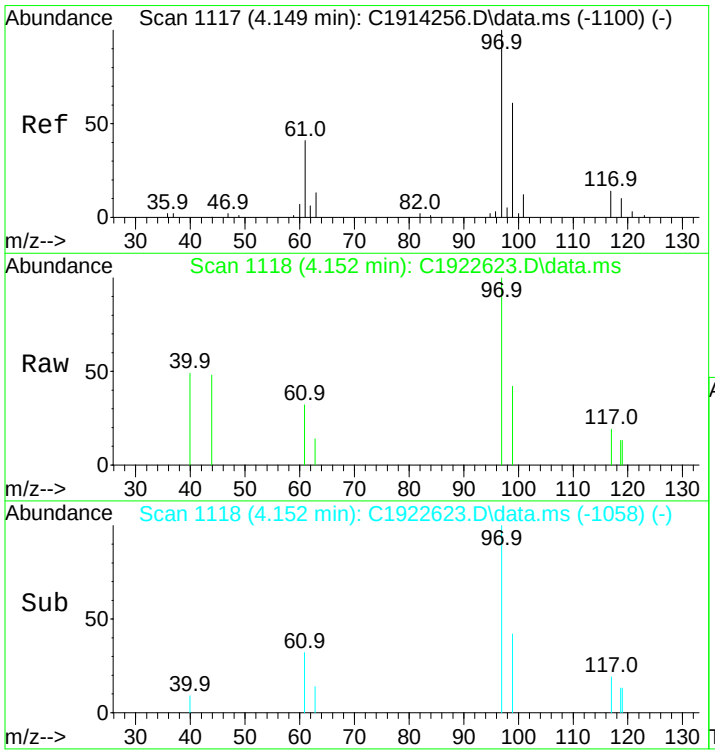


#33
CIS-1,2-DICHLOROETHENE
Concen: 22.84 UG/L
RT: 3.647 min Scan# 937
Delta R.T. 0.003 min
Lab File: C1922623.D
Acq: 14 Aug 2019 4:47 pm

Tgt Ion: 61 Resp: 53868

Ion	Ratio	Lower	Upper
61	100		
96	71.4	58.1	87.1
98	46.1	36.1	54.1

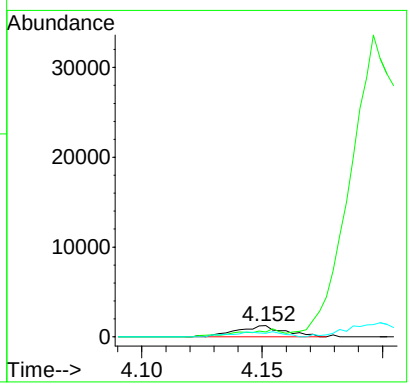


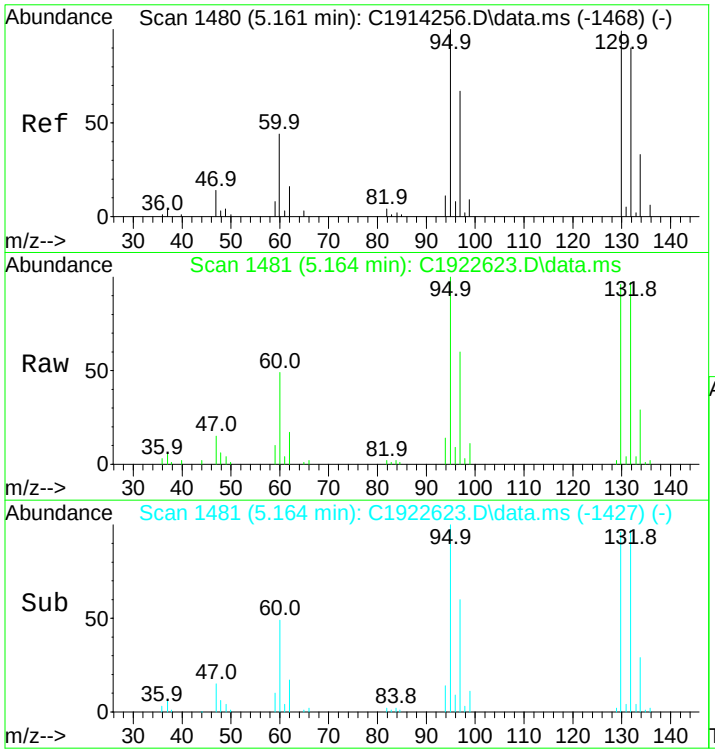


#41
1,1,1-TRICHLOROETHANE
Concen: 0.86 UG/L
RT: 4.152 min Scan# 1118
Delta R.T. 0.006 min
Lab File: C1922623.D
Acq: 14 Aug 2019 4:47 pm

Tgt Ion: 97 Resp: 1734

Ion	Ratio	Lower	Upper
97	100		
99	58.2	52.7	79.1
61	30.6	33.4	50.2#

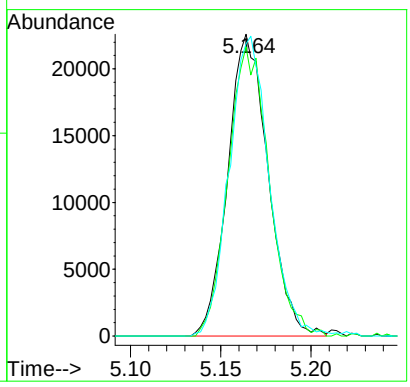




#51
TRICHLOROETHENE
Concen: 24.99 UG/L
RT: 5.164 min Scan# 1481
Delta R.T. -0.000 min
Lab File: C1922623.D
Acq: 14 Aug 2019 4:47 pm

Tgt Ion: 95 Resp: 35061

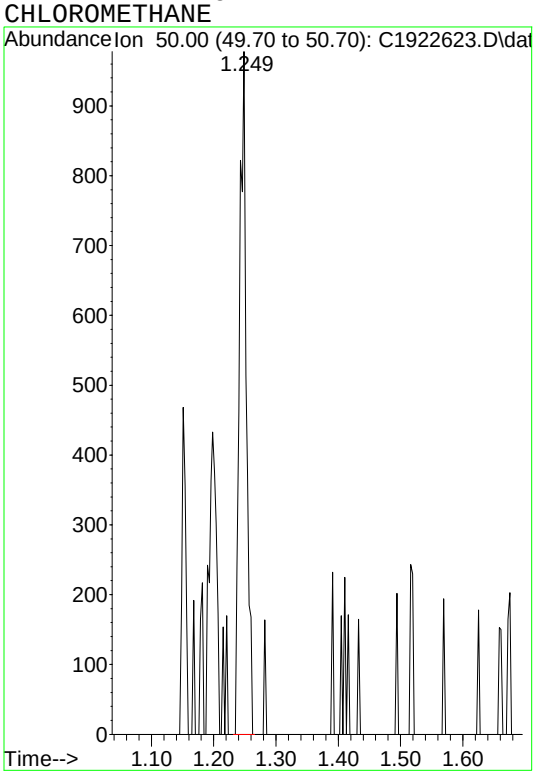
Ion	Ratio	Lower	Upper
95	100		
130	97.4	85.7	128.5
132	99.0	84.7	127.1



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04
Misc :

Quant Time : Thu Aug 15 08:37:33 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CHLOROMETHANE



Original Int. Results

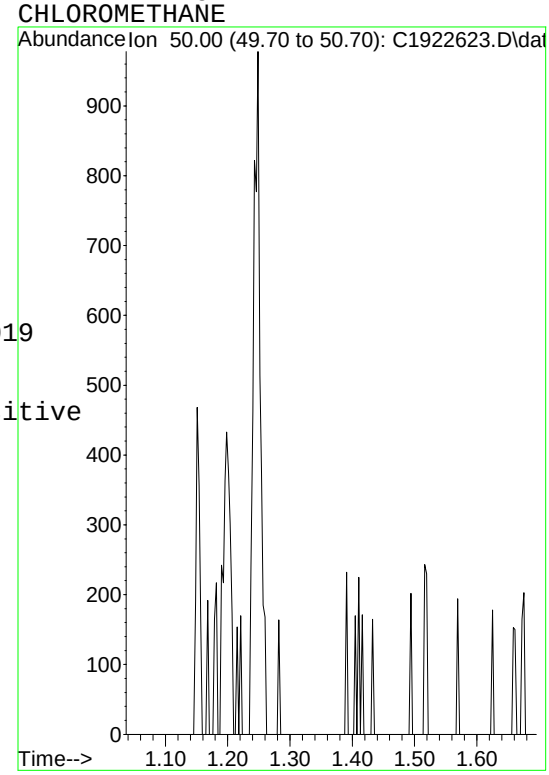
RT : 1.25
Area : 756
Amount: 0.344013

Manual Int. Results

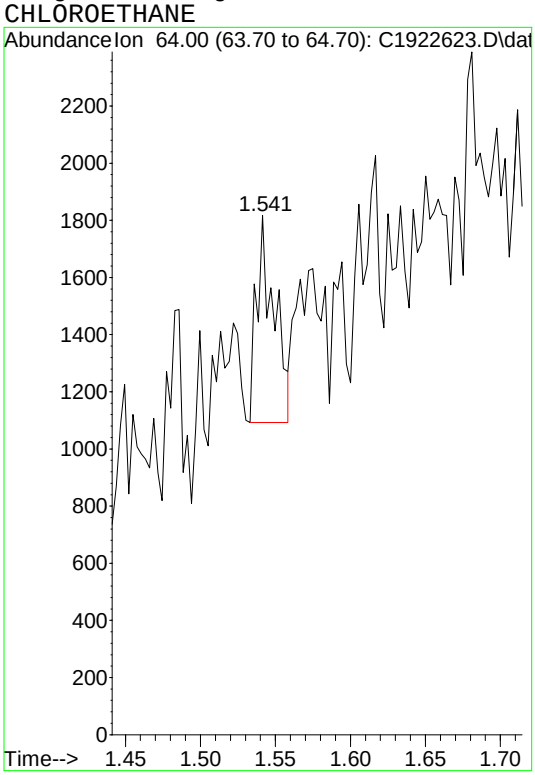
Thu Aug 15 08:37:01 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CHLOROMETHANE



Original Integration
CHLOROETHANE



Original Int. Results

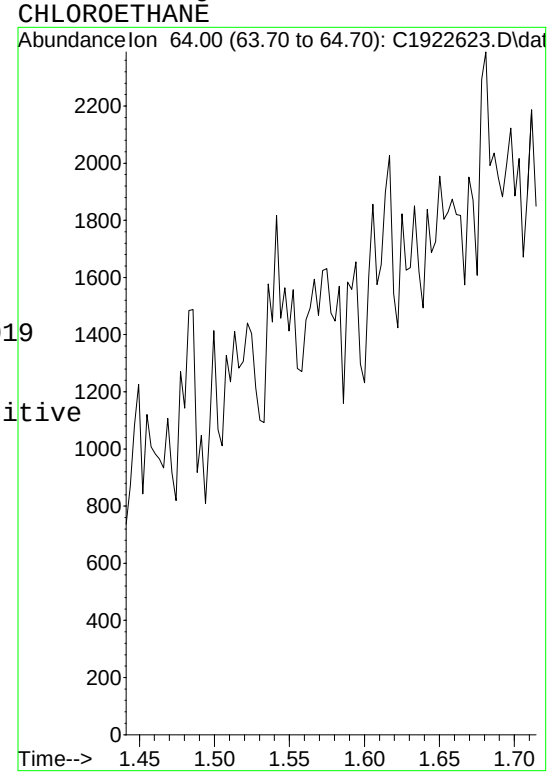
RT : 1.54
Area : 595
Amount: 0.613126

Manual Int. Results

Thu Aug 15 08:37:05 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

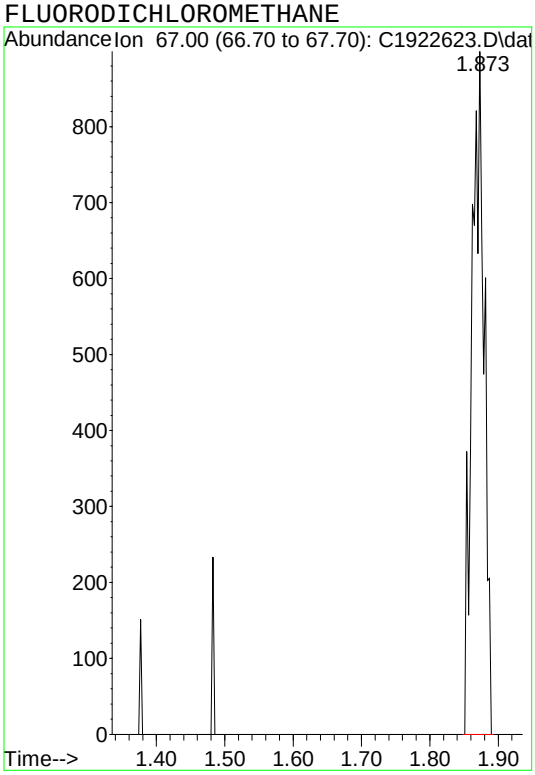
Manual Integration
CHLOROETHANE



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04
Misc :

Quant Time : Thu Aug 15 08:37:33 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
FLUORODICHLOROMETHANE



Original Int. Results

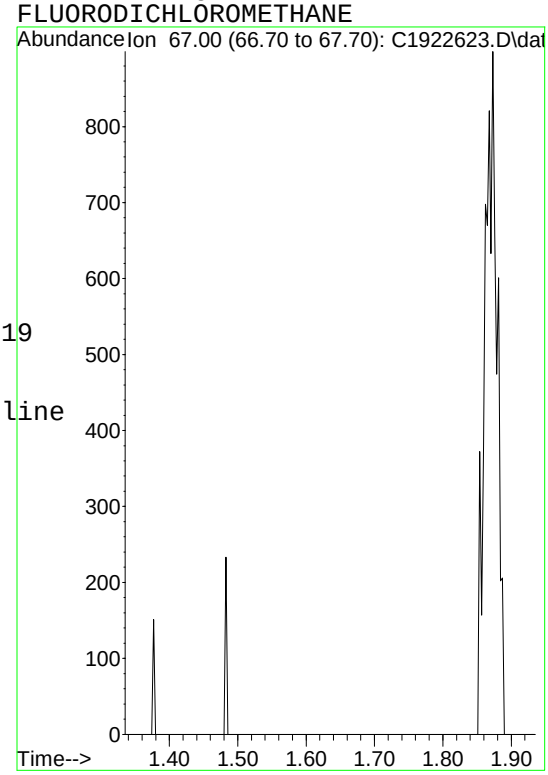
RT : 1.87
Area : 1133
Amount: 0.42669

Manual Int. Results

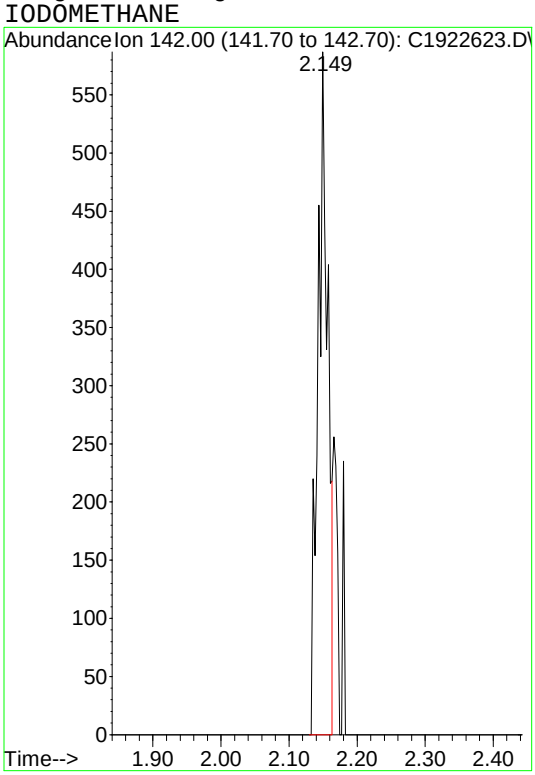
Thu Aug 15 08:37:08 2019

MIuser: EEH
Reason: Incorrect Baseline
RT : 0.00
Area : 0
Amount: 0

Manual Integration
FLUORODICHLOROMETHANE



Original Integration
IODOMETHANE



Original Int. Results

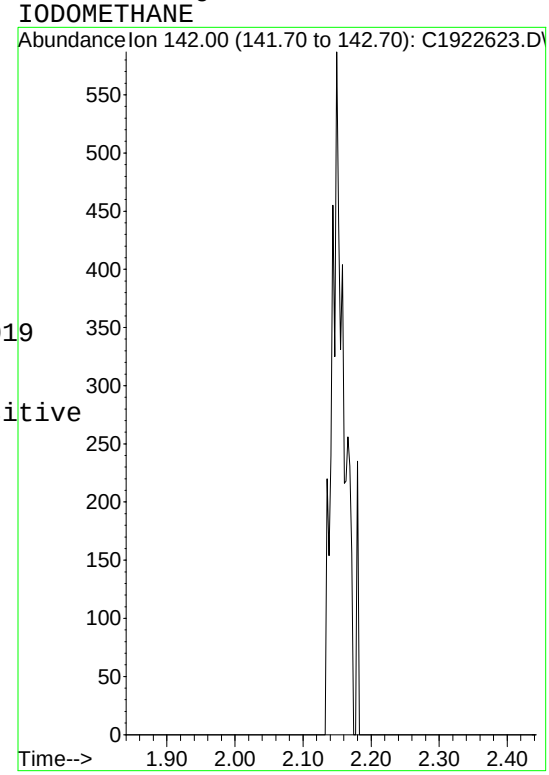
RT : 2.15
Area : 601
Amount: 0.375576

Manual Int. Results

Thu Aug 15 08:37:13 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

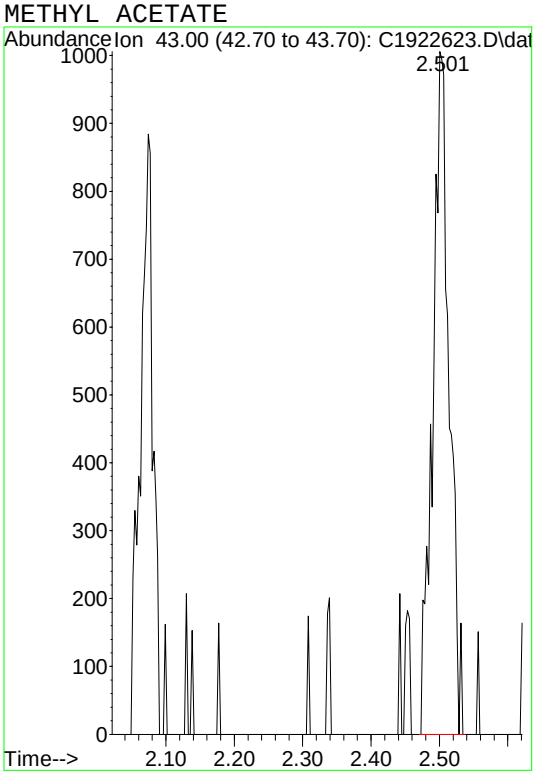
Manual Integration
IODOMETHANE



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04
Misc :

Quant Time : Thu Aug 15 08:37:33 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
METHYL ACETATE



Original Int. Results

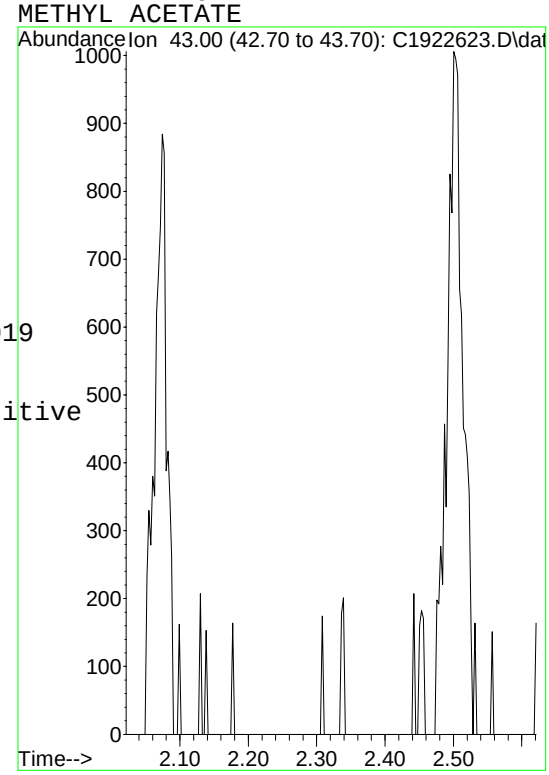
RT : 2.50
Area : 1682
Amount: 0.856957

Manual Int. Results

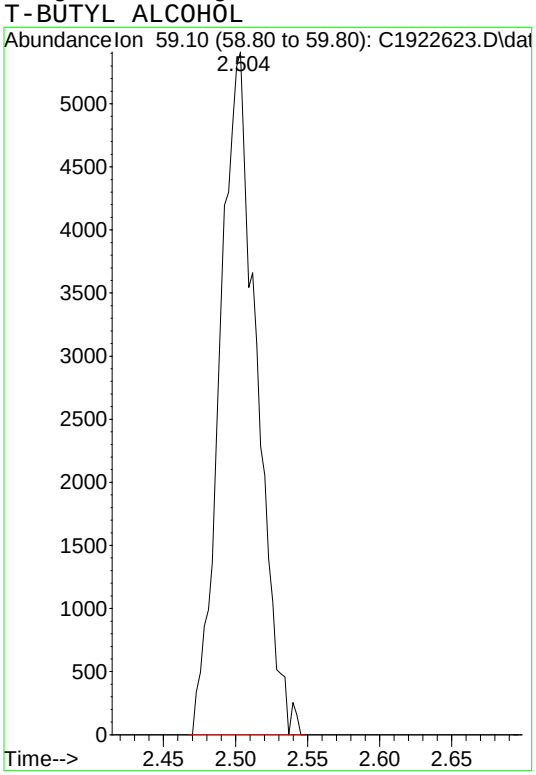
Thu Aug 15 08:37:15 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
METHYL ACETATE



Original Integration
T-BUTYL ALCOHOL



Original Int. Results

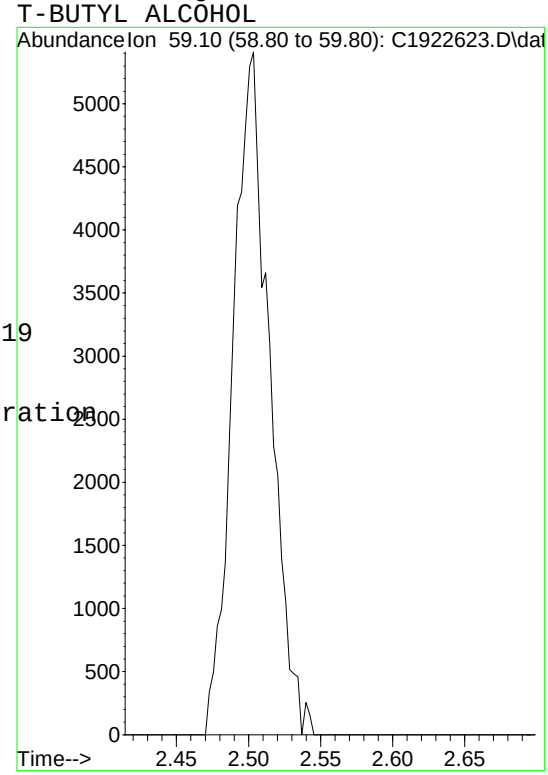
RT : 2.50
Area : 9565
Amount: 39.235

Manual Int. Results

Thu Aug 15 08:37:18 2019

MIuser: EEH
Reason: Incorret Integration
RT : 0.00
Area : 0
Amount: 0

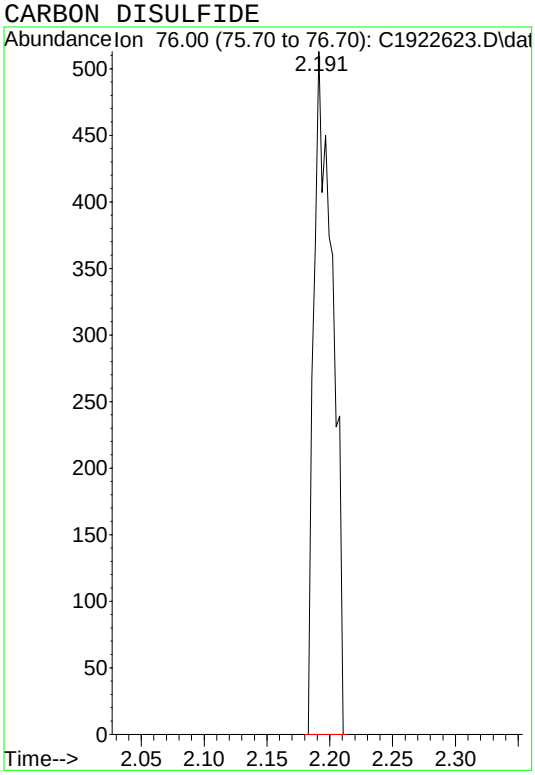
Manual Integration
T-BUTYL ALCOHOL



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04
Misc :

Quant Time : Thu Aug 15 08:37:33 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CARBON DISULFIDE



Original Int. Results

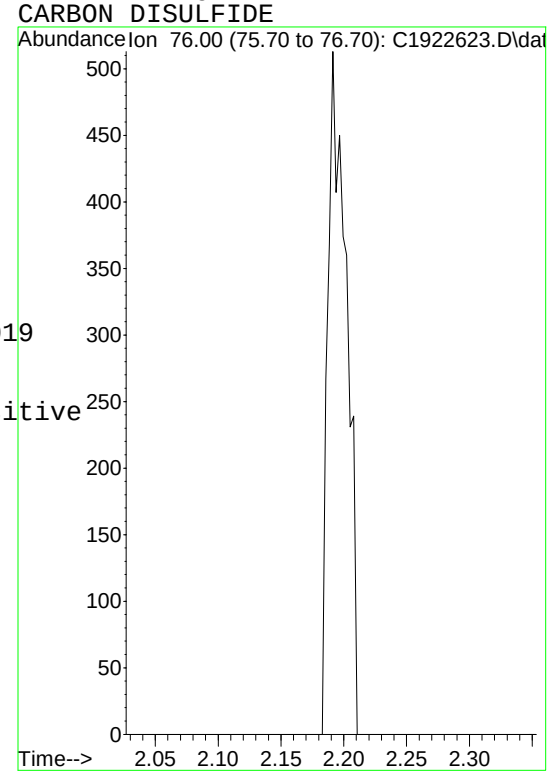
RT : 2.19
Area : 537
Amount: 0.142387

Manual Int. Results

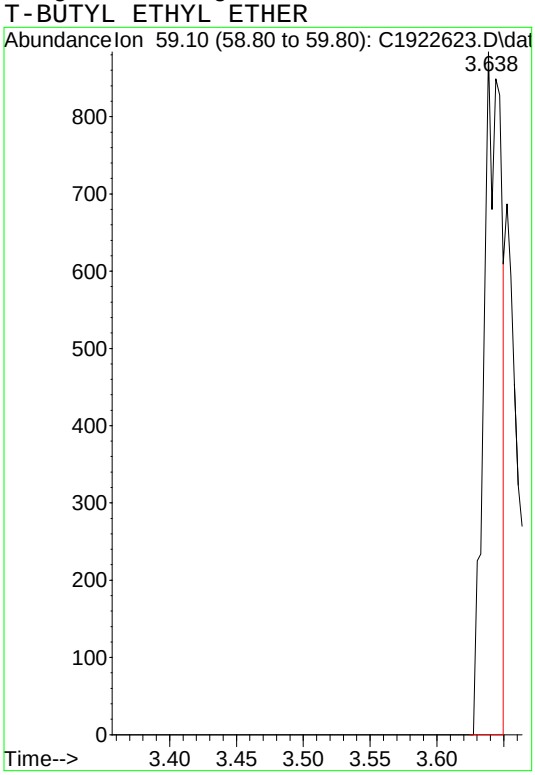
Thu Aug 15 08:37:20 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CARBON DISULFIDE



Original Integration
T-BUTYL ETHYL ETHER



Original Int. Results

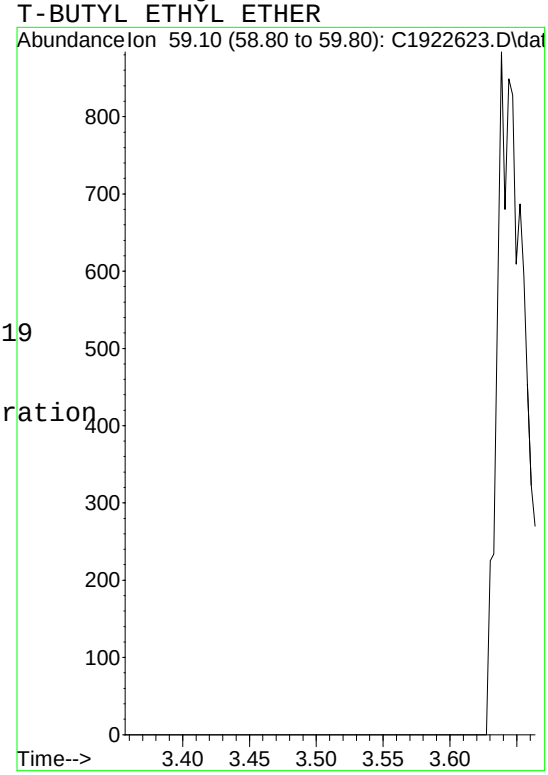
RT : 3.64
Area : 814
Amount: 0.166541

Manual Int. Results

Thu Aug 15 08:37:26 2019

MIuser: EEH
Reason: Incorret Integration
RT : 0.00
Area : 0
Amount: 0

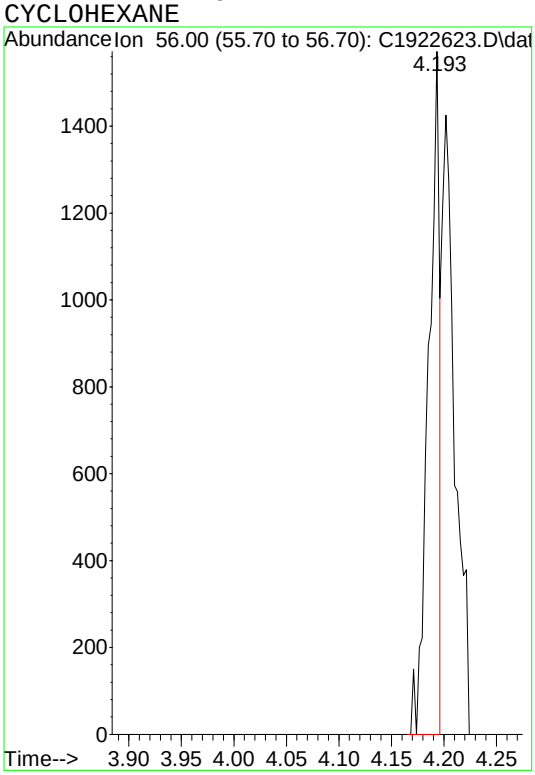
Manual Integration
T-BUTYL ETHYL ETHER



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04
Misc :

Quant Time : Thu Aug 15 08:37:33 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CYCLOHEXANE



Original Int. Results

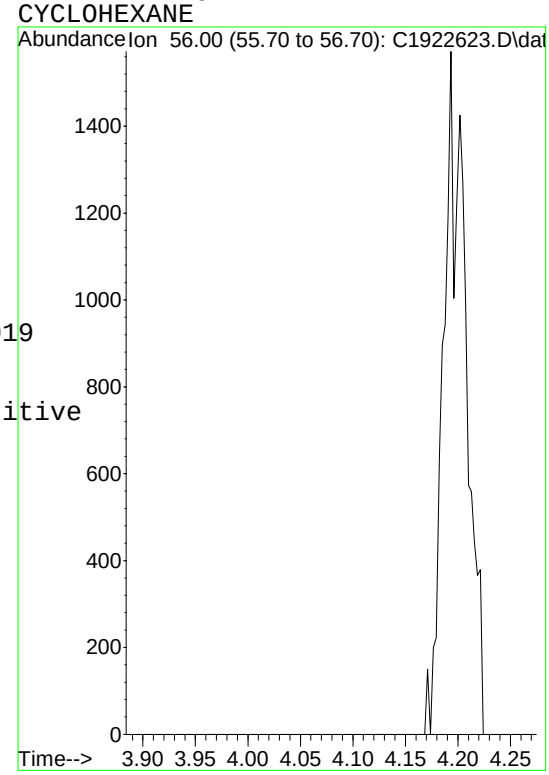
RT : 4.19
Area : 1142
Amount: 0.480316

Manual Int. Results

Thu Aug 15 08:37:32 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CYCLOHEXANE



LSC Area Percent Report

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: 8260B.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 9
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\methods\C051619.M
Title : 8260 WATER 5MLS VOAMS 5973 #3

Signal : TIC: C1922623.D\data.ms

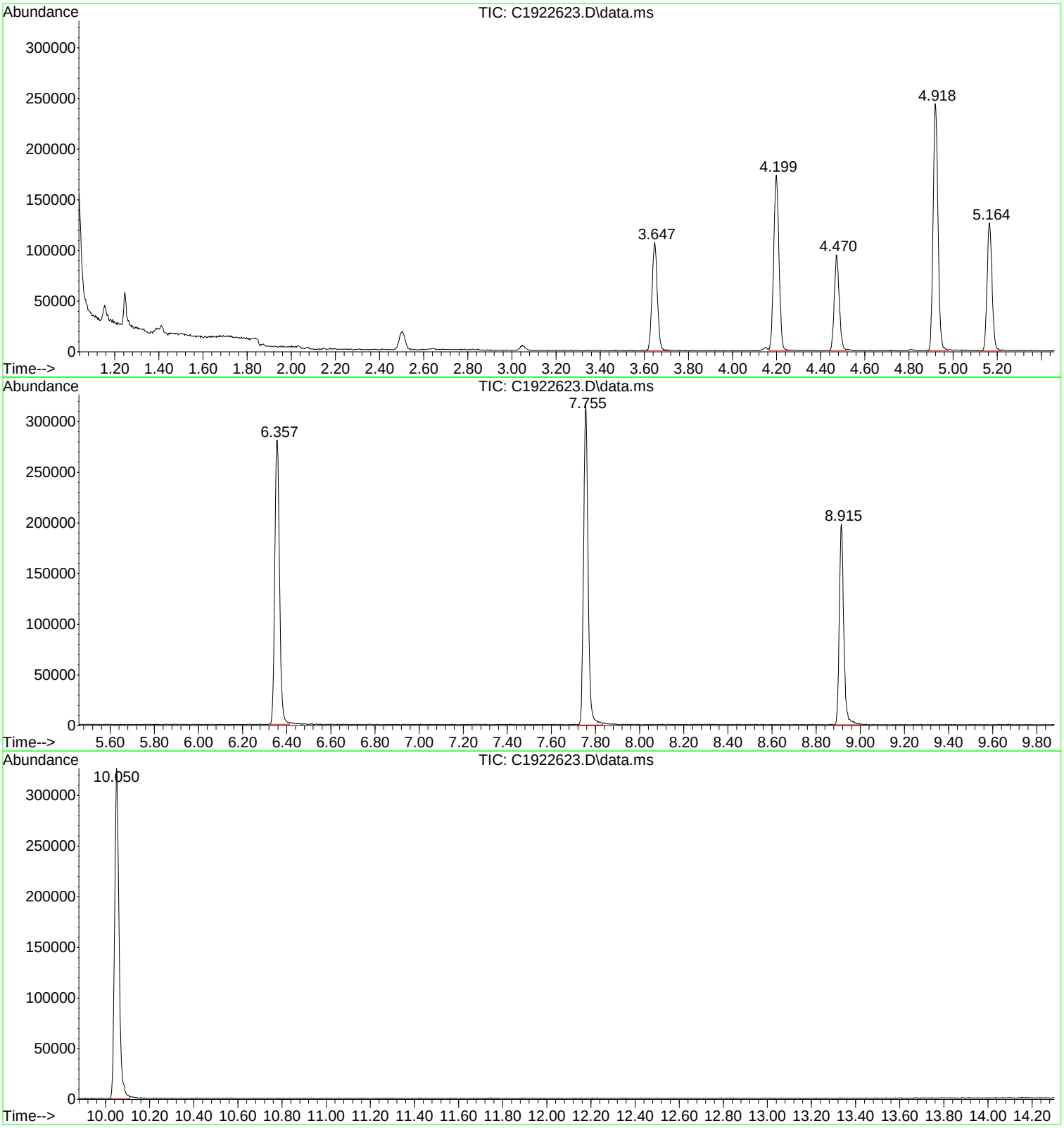
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.647	920	937	960	rVB2	107032	180046	39.70%	6.458%
2	4.199	1123	1135	1156	rVB2	173040	286106	63.08%	10.263%
3	4.470	1220	1232	1249	rBV	94689	148312	32.70%	5.320%
4	4.918	1379	1393	1414	rBV	243822	371491	81.91%	13.326%
5	5.164	1466	1481	1501	rBV2	126579	198855	43.84%	7.133%
6	6.357	1896	1909	1929	rBV2	280614	420525	92.72%	15.084%
7	7.755	2398	2410	2438	rBV	316869	449566	99.12%	16.126%
8	8.915	2813	2826	2856	rBV	197997	279341	61.59%	10.020%
9	10.050	3222	3233	3255	rBV	325860	453555	100.00%	16.269%

Sum of corrected areas: 2787797

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P

No Library Search Compounds Detected

****

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922623.D
Acq On : 14 Aug 2019 4:47 pm
Operator :
Sample : 19H0617-04
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

QC DATA

2 - FORM II

SYSTEM MONITORING COMPOUND SUMMARY

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	SDG:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Instrument:	GCMSVOA3

	1,2-DCA-d4 (70% - 130%)	BFB (70% - 130%)	TOL-d8 (70% - 130%)
19H0617-01	109	90.3	99.7
19H0617-02	110	93.6	98.1
19H0617-03	112	94.1	99.4
19H0617-04	112	95.0	99.7
B237978-BLK1	109	90.6	97.2
B237978-BS1	107	94.8	102
B237978-BSD1	110	94.1	101

3 - FORM III

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Preparation:	SW-846 5030B
Batch:	B237978	Laboratory ID:	B237978-BS1
Column:		Initial/Final:	5 mL / 5 mL

ANALYTE	SPIKE ADDED (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC.	QC LIMITS REC.
Acetone	100	123	123	70 - 160
Acrylonitrile	10.0	10.6	106	70 - 130
tert-Amyl Methyl Ether (TAME)	10.0	10.9	109	70 - 130
Benzene	10.0	11.9	119	70 - 130
Bromobenzene	10.0	11.4	114	70 - 130
Bromochloromethane	10.0	13.0	130	70 - 130
Bromodichloromethane	10.0	12.6	126	70 - 130
Bromoform	10.0	10.8	108	70 - 130
Bromomethane	10.0	8.20	82.0	40 - 160
2-Butanone (MEK)	100	116	116	40 - 160
tert-Butyl Alcohol (TBA)	100	121	121	40 - 160
n-Butylbenzene	10.0	11.7	117	70 - 130
sec-Butylbenzene	10.0	12.2	122	70 - 130
tert-Butylbenzene	10.0	11.4	114	70 - 130
tert-Butyl Ethyl Ether (TBEE)	10.0	10.6	106	70 - 130
Carbon Disulfide	10.0	12.4	124	70 - 130
Carbon Tetrachloride	10.0	11.6	116	70 - 130
Chlorobenzene	10.0	11.6	116	70 - 130
Chlorodibromomethane	10.0	11.9	119	70 - 130
Chloroethane	10.0	11.2	112	70 - 130
Chloroform	10.0	12.4	124	70 - 130
Chloromethane	10.0	9.21	92.1	40 - 160
2-Chlorotoluene	10.0	11.8	118	70 - 130
4-Chlorotoluene	10.0	11.4	114	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	10.0	12.1	121	70 - 130
1,2-Dibromoethane (EDB)	10.0	12.3	123	70 - 130
Dibromomethane	10.0	12.0	120	70 - 130
1,2-Dichlorobenzene	10.0	11.9	119	70 - 130
1,3-Dichlorobenzene	10.0	12.5	125	70 - 130
1,4-Dichlorobenzene	10.0	12.1	121	70 - 130
trans-1,4-Dichloro-2-butene	10.0	11.8	118	70 - 130
Dichlorodifluoromethane (Freon 12)	10.0	7.46	74.6	40 - 160
1,1-Dichloroethane	10.0	12.2	122	70 - 130
1,2-Dichloroethane	10.0	12.8	128	70 - 130
1,1-Dichloroethylene	10.0	12.3	123	70 - 130
cis-1,2-Dichloroethylene	10.0	12.3	123	70 - 130
trans-1,2-Dichloroethylene	10.0	11.8	118	70 - 130

3 - FORM III

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Preparation:	SW-846 5030B
Batch:	B237978	Laboratory ID:	B237978-BS1
Column:		Initial/Final:	5 mL / 5 mL

ANALYTE	SPIKE ADDED (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC.		QC LIMITS REC.
1,2-Dichloropropane	10.0	12.0	120		70 - 130
1,3-Dichloropropane	10.0	11.6	116		70 - 130
2,2-Dichloropropane	10.0	10.8	108		40 - 130
1,1-Dichloropropene	10.0	11.8	118		70 - 130
cis-1,3-Dichloropropene	10.0	11.5	115		70 - 130
trans-1,3-Dichloropropene	10.0	11.5	115		70 - 130
Diethyl Ether	10.0	12.1	121		70 - 130
Diisopropyl Ether (DIPE)	10.0	11.9	119		70 - 130
1,4-Dioxane	100	103	103		40 - 130
Ethylbenzene	10.0	11.3	113		70 - 130
Hexachlorobutadiene	10.0	11.9	119		70 - 130
2-Hexanone (MBK)	100	118	118		70 - 160
Isopropylbenzene (Cumene)	10.0	11.7	117		70 - 130
p-Isopropyltoluene (p-Cymene)	10.0	11.4	114		70 - 130
Methyl Acetate	10.0	13.5	135	*	70 - 130
Methyl tert-Butyl Ether (MTBE)	10.0	11.5	115		70 - 130
Methyl Cyclohexane	10.0	11.6	116		70 - 130
Methylene Chloride	10.0	12.6	126		70 - 130
4-Methyl-2-pentanone (MIBK)	100	120	120		70 - 160
Naphthalene	10.0	11.3	113		40 - 130
n-Propylbenzene	10.0	11.6	116		70 - 130
Styrene	10.0	11.1	111		70 - 130
1,1,1,2-Tetrachloroethane	10.0	11.9	119		70 - 130
1,1,2,2-Tetrachloroethane	10.0	12.7	127		70 - 130
Tetrachloroethylene	10.0	12.2	122		70 - 130
Tetrahydrofuran	10.0	12.4	124		70 - 130
Toluene	10.0	12.0	120		70 - 130
1,2,3-Trichlorobenzene	10.0	10.9	109		70 - 130
1,2,4-Trichlorobenzene	10.0	11.1	111		70 - 130
1,3,5-Trichlorobenzene	10.0	11.0	110		70 - 130
1,1,1-Trichloroethane	10.0	12.2	122		70 - 130
1,1,2-Trichloroethane	10.0	12.6	126		70 - 130
Trichloroethylene	10.0	12.1	121		70 - 130
Trichlorofluoromethane (Freon 11)	10.0	10.7	107		70 - 130
1,2,3-Trichloropropane	10.0	11.9	119		70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	12.2	122		70 - 130

3 - FORM III

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Preparation:	SW-846 5030B
Batch:	B237978	Laboratory ID:	B237978-BS1
Column:		Initial/Final:	5 mL / 5 mL

ANALYTE	SPIKE ADDED (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC.	QC LIMITS REC.
1,2,4-Trimethylbenzene	10.0	11.4	114	70 - 130
1,3,5-Trimethylbenzene	10.0	10.9	109	70 - 130
Vinyl Chloride	10.0	9.91	99.1	40 - 160
m+p Xylene	20.0	22.9	115	70 - 130
o-Xylene	10.0	11.7	117	70 - 130

ANALYTE	SPIKE ADDED (µg/L)	LCSD CONCENTRATION (µg/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Acetone	100	122	122	0.619	25	70 - 160
Acrylonitrile	10.0	11.1	111	3.96	25	70 - 130
tert-Amyl Methyl Ether (TAME)	10.0	10.9	109	0.643	25	70 - 130
Benzene	10.0	11.7	117	1.36	25	70 - 130
Bromobenzene	10.0	11.2	112	2.12	25	70 - 130
Bromochloromethane	10.0	12.7	127	1.63	25	70 - 130
Bromodichloromethane	10.0	12.1	121	3.73	25	70 - 130
Bromoform	10.0	10.7	107	0.743	25	70 - 130
Bromomethane	10.0	9.35	93.5	13.1	25	40 - 160
2-Butanone (MEK)	100	117	117	0.859	25	40 - 160
tert-Butyl Alcohol (TBA)	100	119	119	1.46	25	40 - 160
n-Butylbenzene	10.0	11.2	112	4.55	25	70 - 130
sec-Butylbenzene	10.0	11.6	116	4.46	25	70 - 130
tert-Butylbenzene	10.0	11.0	110	2.68	25	70 - 130
tert-Butyl Ethyl Ether (TBEE)	10.0	10.7	107	0.658	25	70 - 130
Carbon Disulfide	10.0	11.7	117	6.31	25	70 - 130
Carbon Tetrachloride	10.0	11.2	112	2.99	25	70 - 130
Chlorobenzene	10.0	11.4	114	1.73	25	70 - 130
Chlorodibromomethane	10.0	11.6	116	2.99	25	70 - 130
Chloroethane	10.0	11.4	114	1.51	25	70 - 130
Chloroform	10.0	12.3	123	0.324	25	70 - 130
Chloromethane	10.0	9.38	93.8	1.83	25	40 - 160
2-Chlorotoluene	10.0	11.2	112	4.69	25	70 - 130
4-Chlorotoluene	10.0	11.2	112	1.86	25	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	10.0	12.5	125	3.50	25	70 - 130
1,2-Dibromoethane (EDB)	10.0	12.2	122	1.06	25	70 - 130
Dibromomethane	10.0	11.9	119	0.251	25	70 - 130

3 - FORM III

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Preparation:	SW-846 5030B
Batch:	B237978	Laboratory ID:	B237978-BSD1
Column:		Initial/Final:	5 mL / 5 mL

ANALYTE	SPIKE ADDED (µg/L)	LCSD CONCENTRATION (µg/L)	LCSD % REC. #		% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,2-Dichlorobenzene	10.0	11.9	119		0.421	25	70 - 130
1,3-Dichlorobenzene	10.0	12.0	120		3.76	25	70 - 130
1,4-Dichlorobenzene	10.0	11.7	117		3.62	25	70 - 130
trans-1,4-Dichloro-2-butene	10.0	11.2	112		5.74	25	70 - 130
Dichlorodifluoromethane (Freon 12)	10.0	7.14	71.4		4.38	25	40 - 160
1,1-Dichloroethane	10.0	11.7	117		4.10	25	70 - 130
1,2-Dichloroethane	10.0	12.5	125		2.06	25	70 - 130
1,1-Dichloroethylene	10.0	12.4	124		0.893	25	70 - 130
cis-1,2-Dichloroethylene	10.0	11.9	119		2.98	25	70 - 130
trans-1,2-Dichloroethylene	10.0	11.3	113		4.50	25	70 - 130
1,2-Dichloropropane	10.0	12.0	120		0.418	25	70 - 130
1,3-Dichloropropane	10.0	11.4	114		1.75	25	70 - 130
2,2-Dichloropropane	10.0	10.8	108		0.370	25	40 - 130
1,1-Dichloropropene	10.0	11.5	115		2.32	25	70 - 130
cis-1,3-Dichloropropene	10.0	11.1	111		3.80	25	70 - 130
trans-1,3-Dichloropropene	10.0	10.9	109		5.36	25	70 - 130
Diethyl Ether	10.0	11.9	119		1.75	25	70 - 130
Diisopropyl Ether (DIPE)	10.0	11.8	118		0.844	25	70 - 130
1,4-Dioxane	100	105	105		2.09	50	40 - 130
Ethylbenzene	10.0	11.1	111		1.96	25	70 - 130
Hexachlorobutadiene	10.0	11.0	110		7.75	25	70 - 130
2-Hexanone (MBK)	100	117	117		1.24	25	70 - 160
Isopropylbenzene (Cumene)	10.0	11.2	112		4.89	25	70 - 130
p-Isopropyltoluene (p-Cymene)	10.0	11.0	110		4.02	25	70 - 130
Methyl Acetate	10.0	13.4	134	*	0.818	25	70 - 130
Methyl tert-Butyl Ether (MTBE)	10.0	11.5	115		0.522	25	70 - 130
Methyl Cyclohexane	10.0	11.2	112		4.30	25	70 - 130
Methylene Chloride	10.0	12.3	123		2.32	25	70 - 130
4-Methyl-2-pentanone (MIBK)	100	119	119		1.19	25	70 - 160
Naphthalene	10.0	11.4	114		0.972	25	40 - 130
n-Propylbenzene	10.0	11.3	113		2.54	25	70 - 130
Styrene	10.0	11.1	111		0.00	25	70 - 130
1,1,1,2-Tetrachloroethane	10.0	11.4	114		4.04	25	70 - 130
1,1,2,2-Tetrachloroethane	10.0	12.2	122		4.08	25	70 - 130
Tetrachloroethylene	10.0	11.2	112		8.64	25	70 - 130
Tetrahydrofuran	10.0	12.4	124		0.322	25	70 - 130

3 - FORM III

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Preparation:	SW-846 5030B
Batch:	B237978	Laboratory ID:	B237978-BSD1
Column:		Initial/Final:	5 mL / 5 mL

ANALYTE	SPIKE ADDED (µg/L)	LCSD CONCENTRATION (µg/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Toluene	10.0	11.6	116	3.47	25	70 - 130
1,2,3-Trichlorobenzene	10.0	11.0	110	1.01	25	70 - 130
1,2,4-Trichlorobenzene	10.0	11.0	110	0.635	25	70 - 130
1,3,5-Trichlorobenzene	10.0	10.2	102	6.97	25	70 - 130
1,1,1-Trichloroethane	10.0	12.1	121	1.23	25	70 - 130
1,1,2-Trichloroethane	10.0	12.3	123	2.09	25	70 - 130
Trichloroethylene	10.0	11.9	119	1.75	25	70 - 130
Trichlorofluoromethane (Freon 11)	10.0	10.5	105	1.79	25	70 - 130
1,2,3-Trichloropropane	10.0	10.9	109	8.67	25	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	11.6	116	4.80	25	70 - 130
1,2,4-Trimethylbenzene	10.0	11.0	110	3.31	25	70 - 130
1,3,5-Trimethylbenzene	10.0	10.7	107	1.94	25	70 - 130
Vinyl Chloride	10.0	9.55	95.5	3.70	25	40 - 160
m+p Xylene	20.0	22.7	114	0.876	25	70 - 130
o-Xylene	10.0	11.5	115	1.55	25	70 - 130

4 - FORM IV
METHOD BLANK SUMMARY

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Blank ID:	B237978-BLK1 Batch: B237978	Prepared:	08/14/2019 07:29

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
LCS	B237978-BS1	C1922616.D	13:42
LCS Dup	B237978-BSD1	C1922617.D	14:08
Trip Blank- 8/12/19	19H0617-01	C1922620.D	15:27
Field Blank	19H0617-02	C1922621.D	15:54
P-15	19H0617-03	C1922622.D	16:20
P-5S	19H0617-04	C1922623.D	16:47

5 - FORM V
INSTRUMENT PERFORMANCE CHECK

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Lab File ID:	C1922615.D	Injection Date:	08/14/19
Instrument ID:	GCMSVOA3	Injection Time:	13:15
Sequence:	S039197	Lab Sample ID:	S039197-TUN1

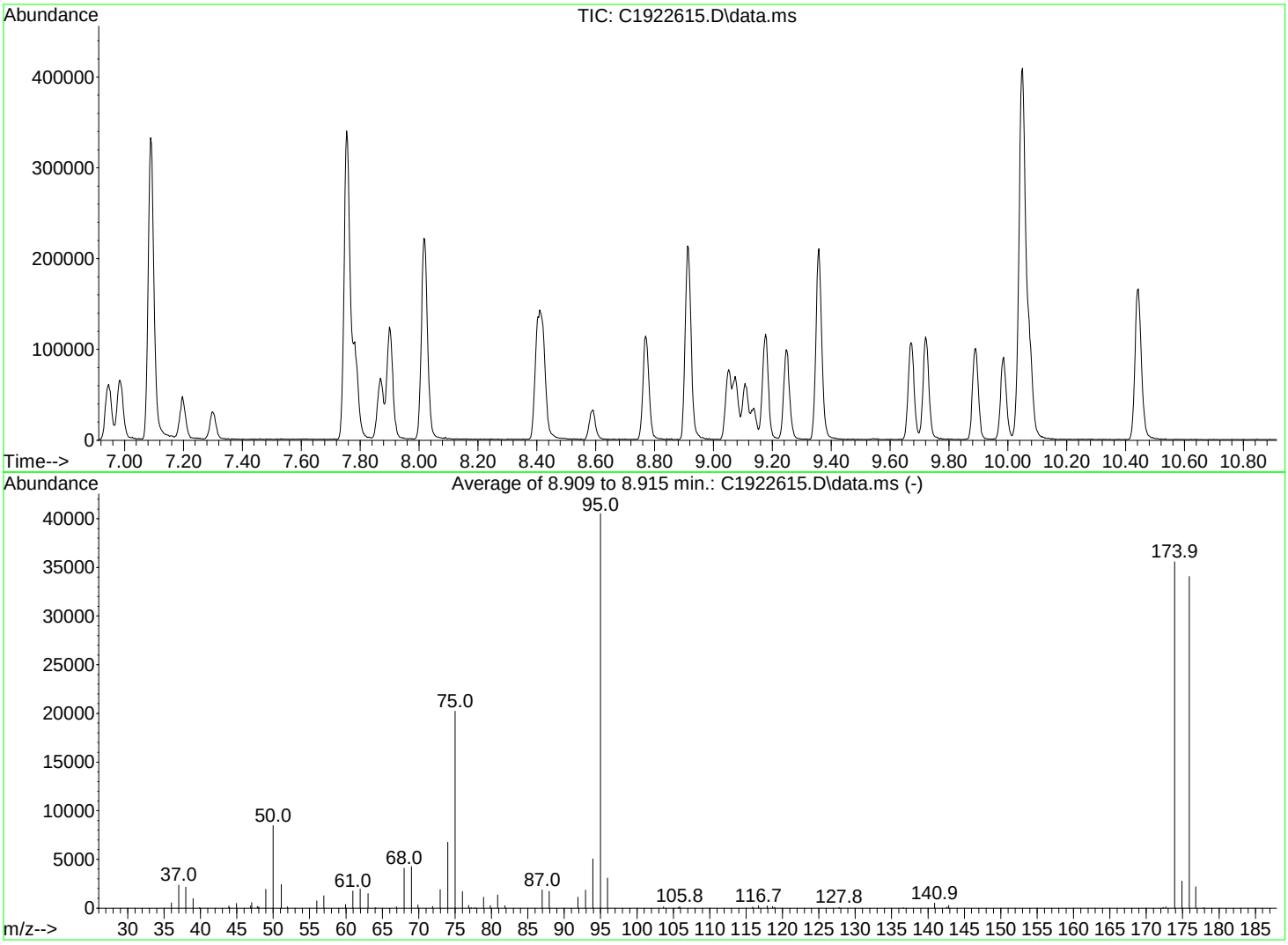
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
50	15 - 40% of 95	20.9	PASS
75	30 - 60% of 95	49.9	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.59	PASS
173	Less than 2% of 174	0.405	PASS
174	50 - 200% of 95	87.7	PASS
175	5 - 9% of 174	7.76	PASS
176	95 - 101% of 174	95.8	PASS
177	5 - 9% of 176	6.45	PASS

Client ID	Sample ID	File ID	Date Analyzed	Time Analyzed
Calibration Check	S039197-CCV1	C1922615.D	08/14/2019	13:15:00
LCS	B237978-BS1	C1922616.D	08/14/2019	13:42:00
LCS Dup	B237978-BSD1	C1922617.D	08/14/2019	14:08:00
Blank	B237978-BLK1	C1922619.D	08/14/2019	15:01:00
Trip Blank- 8/12/19	19H0617-01	C1922620.D	08/14/2019	15:27:00
Trip Blank- 8/12/19	19H0617-01	C1922620.D	08/14/2019	15:27:00
Field Blank	19H0617-02	C1922621.D	08/14/2019	15:54:00
Field Blank	19H0617-02	C1922621.D	08/14/2019	15:54:00
P-15	19H0617-03	C1922622.D	08/14/2019	16:20:00
P-15	19H0617-03	C1922622.D	08/14/2019	16:20:00
P-5S	19H0617-04	C1922623.D	08/14/2019	16:47:00
P-5S	19H0617-04	C1922623.D	08/14/2019	16:47:00

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922615.D
Acq On : 14 Aug 2019 1:15 pm
Operator :
Sample : 8260STD 10PPB 1907138 Inst : GCMSVOA3
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: 8260B.P

Method : C:\msdchem\1\methods\C051619.M
Title : 8260 WATER 5MLS VOAMS 5973 #3
Last Update : Fri May 17 05:29:37 2019



AutoFind: Scans 2824, 2825, 2826; Background Corrected with Scan 2813

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	8468	PASS
75	95	30	60	49.9	20224	PASS
95	95	100	100	100.0	40539	PASS
96	95	5	9	7.6	3075	PASS
173	174	0.00	2	0.4	144	PASS
174	95	50	100	87.7	35571	PASS
175	174	5	9	7.8	2761	PASS
176	174	95	101	95.8	34075	PASS
177	176	5	9	6.4	2197	PASS

CALIBRATION DATA

6 - FORM VI
INITIAL CALIBRATION DATA SHEET

SW-846 8260C

Client: Dvirka And Bartilucci SDG: 19H0617

Project: Farrand Controls Site

Calibration: 1900192 Instrument: GCMSVOA3

Calibration Date: 5/16/2019 9:46:05AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Acetone			5	0.2343166	10	0.2109183	20	0.1875954	50	0.1772948	100	0.1701143
Acrolein	4	0.1190705	5	0.1221437	10	0.1368413	20	0.1116346	50	0.120787	100	0.1156655
Acrylonitrile	0.4	0.3362216	0.5	0.2621143	1	0.2376835	2	0.233249	5	0.2246282	10	0.2295966
tert-Amyl Methyl Ether (TAME)	0.4	1.321831	0.5	1.372134	1	1.316343	2	1.353634	5	1.244188	10	1.209125
Benzene	0.4	1.949605	0.5	1.764173	1	1.790774	2	1.763502	5	1.672326	10	1.634945
Bromobenzene	0.4	1.123833	0.5	1.064559	1	1.076189	2	1.061375	5	1.00113	10	1.004324
Bromochloromethane	0.4	0.402025	0.5	0.4211202	1	0.4380943	2	0.4448692	5	0.4233153	10	0.4241585
Bromodichloromethane	0.4	0.3657921	0.5	0.3475266	1	0.3683766	2	0.3930994	5	0.374199	10	0.368623
Bromoform	0.4	0.3729198	0.5	0.4164803	1	0.4468432	2	0.4492023	5	0.4518461	10	0.4367643
Bromomethane							2	0.3368155	5	0.3206469	10	0.2475247
2-Butanone (MEK)	4	0.3477973	5	0.3488311	10	0.3461863	20	0.3274999	50	0.3297263	100	0.3181691
tert-Butyl Alcohol (TBA)	4	7.862783E-02	5	8.214677E-02	10	7.810403E-02	20	6.826055E-02	50	6.698291E-02	100	6.457769E-02
n-Butylbenzene	0.4	1.763442	0.5	1.665395	1	1.772092	2	1.751265	5	1.710921	10	1.684854
sec-Butylbenzene	0.4	2.352794	0.5	2.287122	1	2.36776	2	2.30858	5	2.275208	10	2.147442
tert-Butylbenzene	0.4	1.693563	0.5	1.644064	1	1.680008	2	1.627744	5	1.588398	10	1.529324
tert-Butyl Ethyl Ether (TBEE)	0.4	1.472651	0.5	1.564377	1	1.51844	2	1.474342	5	1.396692	10	1.363814
Carbon Disulfide	4	1.219428	5	1.195528	10	1.134887	20	1.157225	50	1.124767	100	1.06872
Carbon Tetrachloride	0.4	0.4678284	0.5	0.4883484	1	0.5354902	2	0.5254608	5	0.4962793	10	0.4765006
Chlorobenzene	0.4	1.397181	0.5	1.580935	1	1.51274	2	1.531968	5	1.404592	10	1.388484
Chlorodibromomethane	0.4	0.2784435	0.5	0.3002389	1	0.2997919	2	0.3258164	5	0.3029678	10	0.3036696
Chloroethane			0.5	0.3134796	1	0.3341429	2	0.3656238	5	0.2987614	10	0.2563244
2-Chloroethyl Vinyl Ether	4	0.1609801	5	0.1535722	10	0.1735683	20	0.150309	50	0.1529678	100	0.1548339
Chloroform	0.4	0.6959788	0.5	0.7723685	1	0.7988337	2	0.7833001	5	0.7448757	10	0.7204834
Chloromethane					1	0.7932148	2	0.7891336	5	0.6633621	10	0.6148865
2-Chlorotoluene	0.4	1.881723	0.5	1.823468	1	1.737166	2	1.758046	5	1.59579	10	1.626348
4-Chlorotoluene	0.4	1.85128	0.5	1.979524	1	1.933225	2	2.046996	5	1.864988	10	1.853434
Cyclohexane									5	0.8144052	10	0.6893375
1,2-Dibromo-3-chloropropane (D	0.4	0.1384384	0.5	0.1212237	1	0.172919	2	0.172634	5	0.1610088	10	0.154163
1,2-Dibromoethane (EDB)	0.4	0.2503784	0.5	0.291482	1	0.3258716	2	0.3079537	5	0.2972587	10	0.2986493
Dibromomethane	0.4	0.1813194	0.5	0.1926533	1	0.1897052	2	0.2093513	5	0.1912428	10	0.1959837
1,2-Dichlorobenzene	0.4	1.171453	0.5	1.119108	1	1.199707	2	1.220225	5	1.17947	10	1.176024

6 - FORM VI
INITIAL CALIBRATION DATA SHEET

SW-846 8260C

Client: Dvirka And Bartilucci SDG: 19H0617

Project: Farrand Controls Site

Calibration: 1900192 Instrument: GCMSVOA3

Calibration Date: 5/16/2019 9:46:05AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
1,3-Dichlorobenzene	0.4	1.095641	0.5	1.210676	1	1.209648	2	1.184127	5	1.150063	10	1.15524
1,4-Dichlorobenzene	0.4	1.312528	0.5	1.265305	1	1.269293	2	1.295737	5	1.237276	10	1.17488
trans-1,4-Dichloro-2-butene			0.5	0.1838875	1	0.2229195	2	0.1983061	5	0.2157493	10	0.2080091
Dichlorodifluoromethane (Freon	0.4	0.4865607	0.5	0.5506666	1	0.5581535	2	0.5360508	5	0.5017599	10	0.447308
1,1-Dichloroethane	0.4	0.8717747	0.5	0.8422404	1	0.8061384	2	0.8299679	5	0.780426	10	0.7771888
1,2-Dichloroethane	0.4	0.400164	0.5	0.4258389	1	0.4095024	2	0.428944	5	0.4048162	10	0.3833373
1,1-Dichloroethylene	0.4	0.5960729	0.5	0.6050534	1	0.6017943	2	0.6310017	5	0.5943076	10	0.5418049
cis-1,2-Dichloroethylene	0.4	0.6777268	0.5	0.7040073	1	0.7278471	2	0.7411197	5	0.6903263	10	0.6698028
trans-1,2-Dichloroethylene	0.4	0.6868528	0.5	0.635646	1	0.6004832	2	0.6214887	5	0.5685126	10	0.5681676
Dichlorofluoromethane (Freon 2	0.4	0.8275855	0.5	0.8611247	1	0.8430365	2	0.8321218	5	0.7658844	10	0.7355818
1,2-Dichloropropane	0.4	0.2926337	0.5	0.328011	1	0.3241163	2	0.3173614	5	0.3144341	10	0.3120607
1,3-Dichloropropane	0.4	0.4600782	0.5	0.5351759	1	0.5054207	2	0.5049797	5	0.5133373	10	0.4885369
2,2-Dichloropropane	0.4	0.6854118	0.5	0.6771915	1	0.6332607	2	0.6169117	5	0.5642378	10	0.5429915
1,1-Dichloropropene	0.4	0.5538051	0.5	0.5967443	1	0.5626487	2	0.5605514	5	0.5640916	10	0.518418
cis-1,3-Dichloropropene	0.4	0.4610242	0.5	0.4513592	1	0.4546404	2	0.4948575	5	0.4847918	10	0.4669137
trans-1,3-Dichloropropene	0.4	0.3657921	0.5	0.4100764	1	0.4359583	2	0.4363273	5	0.4230034	10	0.4162324
Diethyl Ether	0.4	0.4519779	0.5	0.3924161	1	0.3684188	2	0.3728932	5	0.3619701	10	0.3490138
Difluorochloromethane (Freon 2	0.4	0.6224903	0.5	0.6118518	1	0.6250195	2	0.615745	5	0.5901424	10	0.5398149
Diisopropyl Ether (DIPE)	0.4	1.803109	0.5	1.732825	1	1.897535	2	1.760271	5	1.669476	10	1.663608
1,4-Dioxane									50	3.743436E-03	100	4.111881E-03
Ethanol							20	1.208874E-02	50	1.012435E-02	100	1.012883E-02
Ethyl Acetate			0.5	0.9072025	1	0.6349464	2	0.6591819	5	0.6711445	10	0.6097199
Ethylbenzene	0.4	2.65737	0.5	2.587347	1	2.531944	2	2.624897	5	2.458215	10	2.418872
Hexachlorobutadiene	0.4	0.2472115	0.5	0.2356838	1	0.2948255	2	0.3274643	5	0.2960404	10	0.2861251
2-Hexanone (MBK)	4	0.3178292	5	0.333015	10	0.3396638	20	0.3138663	50	0.3177247	100	0.3087019
Iodomethane	4	0.4074046	5	0.3608793	10	0.4438257	20	0.438596	50	0.4517629	100	0.4730665
Isopropylbenzene (Cumene)	0.4	2.401147	0.5	2.355251	1	2.371533	2	2.338783	5	2.199191	10	2.190236
p-Isopropyltoluene (p-Cymene)	0.4	2.025156	0.5	2.013978	1	1.946319	2	1.942685	5	1.923026	10	1.857638
Methyl Acetate			0.5	0.6465989	1	0.7686785	2	0.5464613	5	0.5308797	10	0.5410928
Methyl tert-Butyl Ether (MTBE)	0.4	1.306461	0.5	1.441629	1	1.374968	2	1.374904	5	1.256464	10	1.233224
Methyl Cyclohexane	0.4	0.3623234	0.5	0.4123281	1	0.3748966	2	0.3795237	5	0.3493151	10	0.3219938

6 - FORM VI
INITIAL CALIBRATION DATA SHEET

SW-846 8260C

Client: Dvirka And Bartilucci SDG: 19H0617

Project: Farrand Controls Site

Calibration: 1900192 Instrument: GCMSVOA3

Calibration Date: 5/16/2019 9:46:05AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Methylene Chloride	0.4	0.6388211	0.5	0.6900329	1	0.6493685	2	0.630553	5	0.607607	10	0.5806734
4-Methyl-2-pentanone (MIBK)	4	0.4596998	5	0.4655455	10	0.4673292	20	0.4517428	50	0.4518741	100	0.4349869
Naphthalene	0.4	2.103605	0.5	2.255385	1	2.158217	2	2.050366	5	2.179672	10	2.170911
n-Propylbenzene	0.4	2.724597	0.5	2.80503	1	2.738798	2	2.663423	5	2.572131	10	2.573537
Styrene	0.4	1.468847	0.5	1.485016	1	1.531568	2	1.583021	5	1.553519	10	1.590436
1,1,1,2-Tetrachloroethane	0.4	0.5384505	0.5	0.438348	1	0.5339526	2	0.5797912	5	0.5037176	10	0.5007909
1,1,2,2-Tetrachloroethane	0.4	0.7743793	0.5	0.8717261	1	0.919041	2	0.8565688	5	0.8570269	10	0.8260033
Tetrachloroethylene	0.4	0.2412336	0.5	0.272717	1	0.2630545	2	0.2874115	5	0.2693154	10	0.2543629
Tetrahydrofuran	0.4	0.1220004	0.5	0.2292556	1	0.2178297	2	0.2079407	5	0.2029985	10	0.1952557
Toluene	0.4	1.144677	0.5	1.185443	1	1.216972	2	1.21288	5	1.122332	10	1.094992
1,2,3-Trichlorobenzene	0.4	0.7482267	0.5	0.7627207	1	0.7644012	2	0.6943421	5	0.7352837	10	0.7410811
1,2,4-Trichlorobenzene	0.4	0.6921921	0.5	0.7497138	1	0.7160048	2	0.7554884	5	0.740681	10	0.7573153
1,3,5-Trichlorobenzene	0.4	0.7765736	0.5	0.8053831	1	0.7942238	2	0.8217917	5	0.7886003	10	0.7829222
1,1,1-Trichloroethane	0.4	0.5797422	0.5	0.6420667	1	0.5918674	2	0.6209502	5	0.5906174	10	0.5709791
1,1,2-Trichloroethane	0.4	0.2383956	0.5	0.2592063	1	0.2663145	2	0.2877688	5	0.2718688	10	0.2648936
Trichloroethylene	0.4	0.2447023	0.5	0.2539521	1	0.2704521	2	0.2732404	5	0.2709534	10	0.2608415
Trichlorofluoromethane (Freon 1	0.4	0.6609157	0.5	0.635646	1	0.597861	2	0.6247195	5	0.5744681	10	0.5219415
1,2,3-Trichloropropane	0.4	0.7813557	0.5	0.6749168	1	0.7618928	2	0.7460705	5	0.7091977	10	0.6751771
1,1,2-Trichloro-1,2,2-trifluoroeth	0.4	0.3602375	0.5	0.333497	1	0.3399492	2	0.3401361	5	0.3255063	10	0.2886206
1,2,4-Trimethylbenzene	0.4	2.015268	0.5	1.967153	1	2.110605	2	2.040175	5	1.979521	10	1.986915
1,3,5-Trimethylbenzene	0.4	1.995882	0.5	2.04463	1	1.913895	2	1.901989	5	1.78632	10	1.806505
Vinyl Acetate	4	1.590424	5	1.543679	10	1.600908	20	1.553569	50	1.543534	100	1.508011
Vinyl Chloride	0.4	0.5662933	0.5	0.5563319	1	0.5448552	2	0.5467306	5	0.5179091	10	0.4842231
m+p Xylene	0.8	1.966074	1	1.942498	2	1.918288	4	1.986724	10	1.853381	20	1.841857
o-Xylene	0.4	2.006664	0.5	1.909945	1	1.94678	2	2.006933	5	1.939595	10	1.937277
1,2-Dichloroethane-d4	25	0.5699937	25	0.5733429	25	0.5587079	25	0.56641	25	0.5779829	25	0.5714574
Toluene-d8	25	1.180671	25	1.198674	25	1.190135	25	1.218887	25	1.189189	25	1.188912
4-Bromofluorobenzene	25	0.8728251	25	0.8877789	25	0.8939676	25	0.9063463	25	0.8726743	25	0.8812642

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8260C

Client: Dvirka And Bartilucci SDG: 19H0617

Project: Farrand Controls Site

Calibration: 1900192 Instrument: GCMSVOA3

Calibration Date: 5/16/2019 9:46:05AM

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
Acetone	200	0.1922768	500	0.1758965	1000	0.1683566	2000	0.1767291				
Acrolein	200	0.1318111	500	0.1278475	1000	0.1207164	2000	0.128135				
Acrylonitrile	20	0.2496946	50	0.2373409	100	0.2259216	200	0.2477707				
tert-Amyl Methyl Ether (TAME)	20	1.26926	50	1.272682	100	1.204519	200	1.330133				
Benzene	20	1.69583	50	1.71856	100	1.585846	200	1.683844				
Bromobenzene	20	1.034366	50	1.095522	100	1.00631	200	1.102713				
Bromochloromethane	20	0.4266151	50	0.4282346	100	0.3687579	200	0.3538446				
Bromodichloromethane	20	0.3771545	50	0.4017341	100	0.3752757	200	0.4089805				
Bromoform	20	0.4961352	50	0.5237501	100	0.4936735	200	0.5671115				
Bromomethane	20	0.2326362	50	0.2880225	100	0.2660086	200	0.3013471				
2-Butanone (MEK)	200	0.3599387	500	0.333199	1000	0.3194656	2000	0.3477499				
tert-Butyl Alcohol (TBA)	200	7.270564E-02	500	6.754749E-02	1000	6.833996E-02	2000	7.659201E-02				
n-Butylbenzene	20	1.813697	50	1.938443	100	1.755138	200	1.840797				
sec-Butylbenzene	20	2.310187	50	2.421094	100	2.136634	200	2.23335				
tert-Butylbenzene	20	1.640751	50	1.695738	100	1.510105	200	1.578366				
tert-Butyl Ethyl Ether (TBEE)	20	1.432177	50	1.455378	100	1.365669	200	1.469623				
Carbon Disulfide	200	1.136179	500	1.106534	1000	1.02003	2000	1.035234				
Carbon Tetrachloride	20	0.4932168	50	0.5190527	100	0.4803408	200	0.5145791				
Chlorobenzene	20	1.494895	50	1.555554	100	1.400729	200	1.520943				
Chlorodibromomethane	20	0.31675	50	0.3393895	100	0.3171605	200	0.3555367				
Chloroethane	20	0.2632519	50	0.2716233	100	0.2475663	200	0.2426152				
2-Chloroethyl Vinyl Ether	200	0.1696793	500	0.1562356	1000	0.1445139	2000	0.1279245				
Chloroform	20	0.7415073	50	0.7544244	100	0.6991612	200	0.7513962				
Chloromethane	20	0.6265659	50	0.5707083	100	0.5659979	200	0.5964201				
2-Chlorotoluene	20	1.695541	50	1.747142	100	1.598718	200	1.7403				
4-Chlorotoluene	20	1.972457	50	2.076053	100	1.909292	200	2.095314				
Cyclohexane	20	0.7002334	50	0.7090082	100	0.6499673	200	0.6729738				
1,2-Dibromo-3-chloropropane (D	20	0.1847902	50	0.1851511	100	0.1719782	200	0.1826791				
1,2-Dibromoethane (EDB)	20	0.3137402	50	0.3219711	100	0.3022293	200	0.3370807				
Dibromomethane	20	0.199052	50	0.2055406	100	0.1893039	200	0.2084107				
1,2-Dichlorobenzene	20	1.23389	50	1.272773	100	1.150668	200	1.231063				

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8260C

Client: Dvirka And Bartilucci SDG: 19H0617

Project: Farrand Controls Site

Calibration: 1900192 Instrument: GCMSVOA3

Calibration Date: 5/16/2019 9:46:05AM

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
1,3-Dichlorobenzene	20	1.22026	50	1.261229	100	1.147698	200	1.216093				
1,4-Dichlorobenzene	20	1.267958	50	1.298011	100	1.182542	200	1.260015				
trans-1,4-Dichloro-2-butene	20	0.2297755	50	0.2395583	100	0.2310871	200	0.2668073				
Dichlorodifluoromethane (Freon	20	0.4751828	50	0.4698337	100	0.4324328	200	0.4325715				
1,1-Dichloroethane	20	0.797232	50	0.8061549	100	0.7473728	200	0.7920684				
1,2-Dichloroethane	20	0.4096842	50	0.4193351	100	0.3841411	200	0.4200285				
1,1-Dichloroethylene	20	0.567796	50	0.5829587	100	0.5346802	200	0.5507606				
cis-1,2-Dichloroethylene	20	0.700361	50	0.7149265	100	0.6647751	200	0.7127344				
trans-1,2-Dichloroethylene	20	0.5897868	50	0.6000535	100	0.5529189	200	0.5890457				
Dichlorofluoromethane (Freon 2	20	0.7727157	50	0.7842405	100	0.715346	200	0.7468919				
1,2-Dichloropropane	20	0.3065822	50	0.3316003	100	0.3036002	200	0.3320039				
1,3-Dichloropropane	20	0.5213865	50	0.5314715	100	0.4862869	200	0.5409326				
2,2-Dichloropropane	20	0.5461334	50	0.6058969	100	0.5585877	200	0.6001095				
1,1-Dichloropropene	20	0.5475739	50	0.5560321	100	0.5165807	200	0.5513152				
cis-1,3-Dichloropropene	20	0.4822948	50	0.5140672	100	0.4807701	200	0.5323406				
trans-1,3-Dichloropropene	20	0.4462905	50	0.4796145	100	0.4448148	200	0.5018782				
Diethyl Ether	20	0.3589924	50	0.3615247	100	0.333427	200	0.3516705				
Difluorochloromethane (Freon 2	20	0.590653	50	0.578874	100	0.5302223	200	0.5411129				
Diisopropyl Ether (DIPE)	20	1.727485	50	1.761408	100	1.637946	200	1.75854				
1,4-Dioxane	200	5.179833E-03	500	4.944318E-03	1000	4.650206E-03	2000	5.181314E-03				
Ethanol	200	1.035083E-02	500	9.606578E-03	1000	9.977734E-03	2000	9.295583E-03				
Ethyl Acetate	20	0.6899218	50	0.658084	100	0.6236325	200	0.6893449				
Ethylbenzene	20	2.567705	50	2.635251	100	2.391798	200	2.585488				
Hexachlorobutadiene	20	0.3113776	50	0.3229757	100	0.2976984	200	0.3087296				
2-Hexanone (MBK)	200	0.3590803	500	0.3453809	1000	0.3343056	2000	0.3745308				
Iodomethane	200	0.5205412	500	0.5514077	1000	0.526562	2000	0.5775008				
Isopropylbenzene (Cumene)	20	2.303206	50	2.40029	100	2.168419	200	2.331284				
p-Isopropyltoluene (p-Cymene)	20	2.009798	50	2.103029	100	1.877725	200	1.971134				
Methyl Acetate	20	0.5792473	50	0.5543198	100	0.5195348	200	0.5584516				
Methyl tert-Butyl Ether (MTBE)	20	1.294862	50	1.305762	100	1.203826	200	1.313095				
Methyl Cyclohexane	20	0.3402204	50	0.3692778	100	0.3413521	200	0.360888				

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8260C

Client: Dvirka And Bartilucci SDG: 19H0617

Project: Farrand Controls Site

Calibration: 1900192 Instrument: GCMSVOA3

Calibration Date: 5/16/2019 9:46:05AM

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
Methylene Chloride	20	0.5970624	50	0.5945847	100	0.5533994	200	0.6222286				
4-Methyl-2-pentanone (MIBK)	200	0.4921515	500	0.4751553	1000	0.453174	2000	0.5043604				
Naphthalene	20	2.49277	50	2.598144	100	2.402529	200	2.572662				
n-Propylbenzene	20	2.756936	50	2.86728	100	2.600643	200	2.806587				
Styrene	20	1.681525	50	1.74917	100	1.621751	200	1.770542				
1,1,1,2-Tetrachloroethane	20	0.5252165	50	0.5641619	100	0.5224744	200	0.5733137				
1,1,2,2-Tetrachloroethane	20	0.9220841	50	0.9265549	100	0.8649484	200	0.9615527				
Tetrachloroethylene	20	0.2705838	50	0.2846421	100	0.2605703	200	0.2801608				
Tetrahydrofuran	20	0.2183585	50	0.207482	100	0.2000262	200	0.2163203				
Toluene	20	1.150559	50	1.181764	100	1.091359	200	1.193291				
1,2,3-Trichlorobenzene	20	0.7908647	50	0.8298512	100	0.7575378	200	0.8127313				
1,2,4-Trichlorobenzene	20	0.7974749	50	0.8605894	100	0.7815545	200	0.8379062				
1,3,5-Trichlorobenzene	20	0.8353383	50	0.8944632	100	0.8115398	200	0.8521241				
1,1,1-Trichloroethane	20	0.5942361	50	0.6097033	100	0.5635493	200	0.5992169				
1,1,2-Trichloroethane	20	0.2875102	50	0.2896879	100	0.265953	200	0.2978225				
Trichloroethylene	20	0.2654165	50	0.2746738	100	0.2524562	200	0.2734315				
Trichlorofluoromethane (Freon 1	20	0.5608122	50	0.5667271	100	0.5214905	200	0.5403669				
1,2,3-Trichloropropane	20	0.7405468	50	0.7524903	100	0.693723	200	0.7999484				
1,1,2-Trichloro-1,2,2-trifluoroeth	20	0.3063949	50	0.3096016	100	0.2853208	200	0.2903496				
1,2,4-Trimethylbenzene	20	2.109969	50	2.193256	100	1.964436	200	2.082207				
1,3,5-Trimethylbenzene	20	1.934001	50	2.010745	100	1.837713	200	1.998641				
Vinyl Acetate	200	1.605057	500	1.579625	1000	1.46383	2000	1.471634				
Vinyl Chloride	20	0.513138	50	0.5219209	100	0.4719072	200	0.4923401				
m+p Xylene	40	1.943692	100	2.021185	200	1.836456	400	1.981555				
o-Xylene	20	2.020386	50	2.108831	100	1.921487	200	2.077975				
1,2-Dichloroethane-d4	25	0.5647891	25	0.5517513	25	0.5587931	25	0.5499974				
Toluene-d8	25	1.184108	25	1.18915	25	1.198669	25	1.224442				
4-Bromofluorobenzene	25	0.890474	25	0.8892129	25	0.889675	25	0.9153639				

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Calibration:	1900192	Instrument:	GCMSVOA3
		Calibration Date:	5/16/2019 9:46:05AM

COMPOUND	Mean RF	RF RSD	Linear r^2	Quad COD	LIMIT	Q
Acetone	0.1881665	11.6			15	
Acrolein	0.1234653	6.2			15	
Acrylonitrile	0.2484221	13.3			15	
tert-Amyl Methyl Ether (TAME)	1.289385	4.5			15	
Benzene	1.72594	5.8			15	
Bromobenzene	1.057032	4.2			15	
Bromochloromethane	0.4131035	7.2			15	
Bromodichloromethane	0.3780762	4.9			15	
Bromoform	0.4654726	12.0			15	
Bromomethane	0.2847145	13.4			15	
2-Butanone (MEK)	0.3378563	4.2			15	
tert-Butyl Alcohol (TBA)	7.238849E-02	8.4			15	
n-Butylbenzene	1.769604	4.5			15	
sec-Butylbenzene	2.284017	4.0			15	
tert-Butylbenzene	1.618806	4.1			15	
tert-Butyl Ethyl Ether (TBEE)	1.451316	4.4			15	
Carbon Disulfide	1.119853	5.8			15	
Carbon Tetrachloride	0.4997097	4.5			15	
Chlorobenzene	1.478802	5.0			15	
Chlorodibromomethane	0.3139765	7.1			15	
Chloroethane	0.2881543	14.8			15	
2-Chloroethyl Vinyl Ether	0.1544585	8.3			15	
Chloroform	0.7462329	4.5			15	
Chloromethane	0.6525361	13.9			15	
2-Chlorotoluene	1.720424	5.5			15	
4-Chlorotoluene	1.958256	4.7			15	
Cyclohexane	0.7059876	8.1			15	
1,2-Dibromo-3-chloropropane (DBCP)	0.1644986	12.9			15	
1,2-Dibromoethane (EDB)	0.3046615	7.8			15	
Dibromomethane	0.1962563	4.7			15	
1,2-Dichlorobenzene	1.195438	3.8			15	

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Calibration:	1900192	Instrument:	GCMSVOA3
		Calibration Date:	5/16/2019 9:46:05AM

COMPOUND	Mean RF	RF RSD	Linear r^2	Quad COD	LIMIT	Q
1,3-Dichlorobenzene	1.185068	4.1			15	
1,4-Dichlorobenzene	1.256354	3.7			15	
trans-1,4-Dichloro-2-butene	0.2217889	10.9			15	
Dichlorodifluoromethane (Freon 12)	0.489052	9.6			15	
1,1-Dichloroethane	0.8050564	4.4			15	
1,2-Dichloroethane	0.4085792	3.9			15	
1,1-Dichloroethylene	0.580623	5.4			15	
cis-1,2-Dichloroethylene	0.7003627	3.6			15	
trans-1,2-Dichloroethylene	0.6012956	6.5			15	
Dichlorofluoromethane (Freon 21)	0.7884529	6.3			15	
1,2-Dichloropropane	0.3162404	4.1			15	
1,3-Dichloropropane	0.5087606	5.0			15	
2,2-Dichloropropane	0.6030733	8.5			15	
1,1-Dichloropropene	0.5527761	4.2			15	
cis-1,3-Dichloropropene	0.4823059	5.4			15	
trans-1,3-Dichloropropene	0.4359988	8.6			15	
Diethyl Ether	0.3702305	8.8			15	
Difluorochloromethane (Freon 22)	0.5845926	6.2			15	
Diisopropyl Ether (DIPE)	1.74122	4.3			15	
1,4-Dioxane	4.635165E-03	12.8			15	
Ethanol	1.022466E-02	8.8			15	
Ethyl Acetate	0.6825754	13.0			15	
Ethylbenzene	2.545889	3.7			15	
Hexachlorobutadiene	0.2928132	10.3			15	
2-Hexanone (MBK)	0.3344099	6.3			15	
Iodomethane	0.4751547	14.3			15	
Isopropylbenzene (Cumene)	2.305934	3.8			15	
p-Isopropyltoluene (p-Cymene)	1.967049	3.7			15	
Methyl Acetate	0.5828072	13.5			15	
Methyl tert-Butyl Ether (MTBE)	1.31052	5.5			15	
Methyl Cyclohexane	0.3612119	7.0			15	

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Calibration:	1900192	Instrument:	GCMSVOA3
		Calibration Date:	5/16/2019 9:46:05AM

COMPOUND	Mean RF	RF RSD	Linear r^2	Quad COD	LIMIT	Q
Methylene Chloride	0.6164331	6.3			15	
4-Methyl-2-pentanone (MIBK)	0.4656019	4.4			15	
Naphthalene	2.298426	8.8			15	
n-Propylbenzene	2.710896	3.9			15	
Styrene	1.60354	6.4			15	
1,1,1,2-Tetrachloroethane	0.5280217	7.9			15	
1,1,2,2-Tetrachloroethane	0.8779885	6.3			15	
Tetrachloroethylene	0.2684052	5.3			15	
Tetrahydrofuran	0.2017468	14.8			15	
Toluene	1.159427	4.0			15	
1,2,3-Trichlorobenzene	0.763704	5.2			15	
1,2,4-Trichlorobenzene	0.768892	6.8			15	
1,3,5-Trichlorobenzene	0.816296	4.4			15	
1,1,1-Trichloroethane	0.5962929	3.9			15	
1,1,2-Trichloroethane	0.2729421	6.5			15	
Trichloroethylene	0.264012	4.0			15	
Trichlorofluoromethane (Freon 11)	0.5804948	8.3			15	
1,2,3-Trichloropropane	0.7335319	5.9			15	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1	0.3179614	8.1			15	
1,2,4-Trimethylbenzene	2.04495	3.8			15	
1,3,5-Trimethylbenzene	1.923032	4.7			15	
Vinyl Acetate	1.546027	3.3			15	
Vinyl Chloride	0.5215649	6.1			15	
m+p Xylene	1.929171	3.4			15	
o-Xylene	1.987587	3.4			15	
1,2-Dichloroethane-d4	0.5643226	1.7			15	
Toluene-d8	1.196284	1.2			15	
4-Bromofluorobenzene	0.8899582	1.5			15	

INITIAL CALIBRATION STANDARDS

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Sequence:	S036724	Instrument:	GCMSVOA3
Calibration:	1900192		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
1704244	10ppb 8260 Calibration Standard	S036724-TUN1	C1913607.D	05/16/19 09:46
1704239	0.4ppb 8260 Calibration Standard	S036724-CAL1	C1913608.D	05/16/19 10:12
1704240	0.5ppb 8260 Calibration Standard	S036724-CAL2	C1913609.D	05/16/19 10:38
1704241	1ppb 8260 Calibration Standard	S036724-CAL3	C1913610.D	05/16/19 11:05
1704242	2ppb 8260 Calibration Standard	S036724-CAL4	C1913611.D	05/16/19 11:31
1704243	5ppb 8260 Calibration Standard	S036724-CAL5	C1913612.D	05/16/19 11:58
1704244	10ppb 8260 Calibration Standard	S036724-CAL6	C1913613.D	05/16/19 12:24
1704245	20ppb 8260 Calibration Standard	S036724-CAL7	C1913614.D	05/16/19 12:51
1704246	50ppb 8260 Calibration Standard	S036724-CAL8	C1913615.D	05/16/19 13:17
1704247	100ppb 8260 Calibration Standard	S036724-CAL9	C1913616.D	05/16/19 13:43
1704248	200ppb 8260 Calibration Standard	S036724-CALA	C1913617.D	05/16/19 14:10
1704246	50ppb 8260 Calibration Standard	S036724-CAL8	C1913618.D	05/16/19 14:36
1704247	100ppb 8260 Calibration Standard	S036724-CAL9	C1913619.D	05/16/19 15:03
1704248	200ppb 8260 Calibration Standard	S036724-CALA	C1913620.D	05/16/19 15:29

C:\msdchem\1\data\C051619\

Date	Filename	Lab ID	Sample Info
16 May 2019 6:51 am	C1913601.D	BLK	
16 May 2019 7:18 am	C1913602.D	8260STD 10PPB 1904257	
16 May 2019 7:55 am	C1913603.D	8260STD 10PPB 1904258	
16 May 2019 8:26 am	C1913604.D	8260STD 10PPB 1904257	
16 May 2019 8:53 am	C1913605.D	BLK	
16 May 2019 9:19 am	C1913606.D	BLK	
16 May 2019 9:46 am	C1913607.D	BFB	
16 May 2019 10:12 am	C1913608.D	8260STD 0.4PPB 1905273	
16 May 2019 10:38 am	C1913609.D	8260STD 0.5PPB 1905273	
16 May 2019 11:05 am	C1913610.D	8260STD 1.0PPB 1905273	
16 May 2019 11:31 am	C1913611.D	8260STD 2.0PPB 1905273	
16 May 2019 11:58 am	C1913612.D	8260STD 5.0PPB 1905273	
16 May 2019 12:24 pm	C1913613.D	8260STD 10PPB 1905273	
16 May 2019 12:51 pm	C1913614.D	8260STD 20PPB 1905273	
16 May 2019 1:17 pm	C1913615.D	8260STD 50PPB 1905273	
16 May 2019 1:43 pm	C1913616.D	8260STD 100PPB 1905273	
16 May 2019 2:10 pm	C1913617.D	8260STD 200PPB 1905273	
16 May 2019 2:36 pm	C1913618.D	ETOH 500PPB	
16 May 2019 3:03 pm	C1913619.D	ETOH 1000PPB	
16 May 2019 3:29 pm	C1913620.D	ETOH 2000PPB	
16 May 2019 3:56 pm	C1913621.D	BLK	
16 May 2019 4:22 pm	C1913622.D	BLK	
16 May 2019 4:48 pm	C1913623.D	BLK	
16 May 2019 5:15 pm	C1913624.D	BLK	
16 May 2019 5:41 pm	C1913625.D	CHECK	
16 May 2019 6:08 pm	C1913626.D	ICV	
16 May 2019 6:34 pm	C1913627.D	BLK	
16 May 2019 7:00 pm	C1913628.D	19E0608-01 @ 100X	
16 May 2019 7:27 pm	C1913629.D	19E0608-02 @ 200X	
16 May 2019 7:53 pm	C1913630.D	19E0666-05 @ 100X	
16 May 2019 8:19 pm	C1913631.D	19E0687-01 @ 100X	
16 May 2019 8:46 pm	C1913632.D	19E0687-02 @ 100X	
16 May 2019 9:12 pm	C1913633.D	19E0687-03 @ 100X	
16 May 2019 9:39 pm	C1913634.D	19E0687-04 @ 100X	
16 May 2019 10:05 pm	C1913635.D	19E0687-05 @ 100X	
16 May 2019 10:31 pm	C1913636.D	19E0718-01 @ 100X	
16 May 2019 10:58 pm	C1913637.D	19E0739-06 @ 100X	
16 May 2019 11:24 pm	C1913638.D	19E0739-07 @ 100X	
16 May 2019 11:51 pm	C1913639.D	19E0739-08 @ 100X	
17 May 2019 12:17 am	C1913640.D	19E0749-02 @ 100X	
17 May 2019 12:43 am	C1913641.D	19E0885-01 @ 100X	
17 May 2019 1:10 am	C1913642.D	19E0885-03 @ 100X	
17 May 2019 1:36 am	C1913643.D	19E0615-04 @ 100X	
17 May 2019 2:03 am	C1913644.D	19E0615-05 @ 100X	
17 May 2019 2:29 am	C1913645.D	19E0615-01 @ 100X	
17 May 2019 2:55 am	C1913646.D	19E0615-02 @ 100X	
17 May 2019 3:22 am	C1913647.D	19E0615-03 @ 100X	
17 May 2019 3:48 am	C1913648.D	BLK	
17 May 2019 4:27 am	C1913649.D	19E0928-01 @1000X MEOH	

Method Path : C:\msdchem\1\methods\
Method File : C051619.M
Title : 8260 WATER 5MLS VOAMS 5973 #3
Last Update : Fri May 17 05:29:37 2019
Response Via : Initial Calibration

Calibration Files
0.4 =C1913608.D 0.5 =C1913609.D 1.0 =C1913610.D 2.0 =C1913611.D 5.0 =C1913612.D 10 =C1913613.D 20 =C1913614.D
50 =C1913615.D 100 =C1913616.D 200 =C1913617.D

		Compound	0.4	0.5	1.0	2.0	5.0	10	20	50	100	200	Avg	%RSD
1)		PENTAFLUOROBENZENE...	----------ISTD----------											
2)	S	1,2-DICHLOROET...	0.570	0.573	0.559	0.566	0.578	0.571	0.565	0.552	0.559	0.550	0.564	1.65
3)		DICHLORODIFLUO...	0.487	0.551	0.558	0.536	0.502	0.447	0.475	0.470	0.432	0.433	0.489	9.55
4)		DIFLUOROCHLORO...	0.622	0.612	0.625	0.616	0.590	0.540	0.591	0.579	0.530	0.541	0.585	6.18
5)	P	CHLOROMETHANE			0.793	0.789	0.663	0.615	0.627	0.571	0.566	0.596	0.653	13.95
6)	C	VINYL CHLORIDE	0.566	0.556	0.545	0.547	0.518	0.484	0.513	0.522	0.472	0.492	0.522	6.12#
7)		BROMOMETHANE				0.337	0.321	0.248	0.233	0.288	0.266	0.301	0.285	13.40
8)		CHLOROETHANE		0.313	0.334	0.366	0.299	0.256	0.263	0.272	0.248	0.243	0.288	14.77
9)		FLUORODICHLORO...	0.828	0.861	0.843	0.832	0.766	0.736	0.773	0.784	0.715	0.747	0.788	6.32
10)		TRICHLOROFLUOR...	0.661	0.636	0.598	0.625	0.574	0.522	0.561	0.567	0.521	0.540	0.580	8.30
11)		ETHANOL				0.012	0.010	0.010	0.010	0.010	0.010	0.009	0.010	8.76
12)		DI ETHYL ETHER	0.452	0.392	0.368	0.373	0.362	0.349	0.359	0.362	0.333	0.352	0.370	8.82
13)		ACROLEIN	0.119	0.122	0.137	0.112	0.121	0.116	0.132	0.128	0.121	0.128	0.123	6.19
14)		ACETONE		0.234	0.211	0.188	0.177	0.170	0.192	0.176	0.168	0.177	0.188	11.56
15)	C	1,1-DICHLOROET...	0.596	0.605	0.602	0.631	0.594	0.542	0.568	0.583	0.535	0.551	0.581	5.35#
16)		1,1,2-TRICL-1,...	0.360	0.333	0.340	0.340	0.326	0.289	0.306	0.310	0.285	0.290	0.318	8.09
17)		IODOMETHANE	0.407	0.361	0.444	0.439	0.452	0.473	0.521	0.551	0.527	0.578	0.475	14.29
18)		ACETONITRILE											0.000	-1.00
19)		ALLYL CHLORIDE											0.000	-1.00
20)		METHYL ACETATE		0.647	0.769	0.546	0.531	0.541	0.579	0.554	0.520	0.558	0.583	13.54
21)		T-BUTYL ALCOHOL	0.079	0.082	0.078	0.068	0.067	0.065	0.073	0.068	0.068	0.077	0.072	8.39
22)		ACRYLONITRILE	0.336	0.262	0.238	0.233	0.225	0.230	0.250	0.237	0.226	0.248	0.248	13.28
23)		METHYLENE CHLO...	0.639	0.690	0.649	0.631	0.608	0.581	0.597	0.595	0.553	0.622	0.616	6.26
24)		CARBON DISULFIDE	1.219	1.196	1.135	1.157	1.125	1.069	1.136	1.107	1.020	1.035	1.120	5.76
25)		METHYL TERT-BU...	1.306	1.442	1.375	1.375	1.256	1.233	1.295	1.306	1.204	1.313	1.311	5.46
26)		TRANS 1,2-DICH...	0.687	0.636	0.600	0.621	0.569	0.568	0.590	0.600	0.553	0.589	0.601	6.49
27)	P	1,1-DICHLOROET...	0.872	0.842	0.806	0.830	0.780	0.777	0.797	0.806	0.747	0.792	0.805	4.42
28)		VINYL ACETATE	1.590	1.544	1.601	1.554	1.544	1.508	1.605	1.580	1.464	1.472	1.546	3.30
29)		DI ISOPROYL ETHER	1.803	1.733	1.898	1.760	1.669	1.664	1.727	1.761	1.638	1.759	1.741	4.34
30)		CHLOROPRENE											0.000	-1.00
31)		2-BUTANONE	0.348	0.349	0.346	0.327	0.330	0.318	0.360	0.333	0.319	0.348	0.338	4.18
32)		T-BUTYL ETHYL ...	1.473	1.564	1.518	1.474	1.397	1.364	1.432	1.455	1.366	1.470	1.451	4.42
33)		CIS-1,2-DICHLO...	0.678	0.704	0.728	0.741	0.690	0.670	0.700	0.715	0.665	0.713	0.700	3.56
34)		2,2-DICHLOROPR...	0.685	0.677	0.633	0.617	0.564	0.543	0.546	0.606	0.559	0.600	0.603	8.51
35)		ETHYL ACETATE		0.907	0.635	0.659	0.671	0.610	0.690	0.658	0.624	0.689	0.683	12.99
36)		PROPIONITRILE											0.000	-1.00
37)		METHACRYLONITRILE											0.000	-1.00
38)		BROMOCHLOROMET...	0.402	0.421	0.438	0.445	0.423	0.424	0.427	0.428	0.369	0.354	0.413	7.19
39)		TETRAHYDROFURAN	0.122	0.229	0.218	0.208	0.203	0.195	0.218	0.207	0.200	0.216	0.202	14.76
40)	C	CHLOROFORM	0.696	0.772	0.799	0.783	0.745	0.720	0.742	0.754	0.699	0.751	0.746	4.54#
41)		1,1,1-TRICHLOR...	0.580	0.642	0.592	0.621	0.591	0.571	0.594	0.610	0.564	0.599	0.596	3.93
42)		CYCLOHEXANE					0.814	0.689	0.700	0.709	0.650	0.673	0.706	8.09
43)		CARBON TETRACH...	0.468	0.488	0.535	0.525	0.496	0.477	0.493	0.519	0.480	0.515	0.500	4.55

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Title : 8260 WATER 5MLS VOAMS 5973 #3

44)		1,1-DICHLOROPR...	0.554	0.597	0.563	0.561	0.564	0.518	0.548	0.556	0.517	0.551	0.553	4.16
45)		BENZENE	1.950	1.764	1.791	1.764	1.672	1.635	1.696	1.719	1.586	1.684	1.726	5.81
46)		ISOBUTANOL											0.000	-1.00
47)		T-AMYLMETHYL E...	1.322	1.372	1.316	1.354	1.244	1.209	1.269	1.273	1.205	1.330	1.289	4.54
48)		1,4-DIFLUOROBENZEN...	----------ISTD----------											
49)	S	TOLUENE SS	1.181	1.199	1.190	1.219	1.189	1.189	1.184	1.189	1.199	1.224	1.196	1.21
50)		1,2-DICHLOROET...	0.400	0.426	0.410	0.429	0.405	0.383	0.410	0.419	0.384	0.420	0.409	3.90
51)		TRICHLOROETHENE	0.245	0.254	0.270	0.273	0.271	0.261	0.265	0.275	0.252	0.273	0.264	3.99
52)		METHYLCYCLOHEXANE	0.362	0.412	0.375	0.380	0.349	0.322	0.340	0.369	0.341	0.361	0.361	6.98
53)	C	1,2-DICHLOROPR...	0.293	0.328	0.324	0.317	0.314	0.312	0.307	0.332	0.304	0.332	0.316	4.11#
54)		DIBROMOMETHANE	0.181	0.193	0.190	0.209	0.191	0.196	0.199	0.206	0.189	0.208	0.196	4.70
55)		METHYL METHACR...											0.000	-1.00
56)		1,4-DIOXANE					0.004	0.004	0.005	0.005	0.005	0.005	0.005	12.80
57)		BROMODICHLOROM...	0.366	0.348	0.368	0.393	0.374	0.369	0.377	0.402	0.375	0.409	0.378	4.85
58)		2-CHLOROETHYLV...	0.161	0.154	0.174	0.150	0.153	0.155	0.170	0.156	0.145	0.128	0.154	8.26
59)		MIBK	0.460	0.466	0.467	0.452	0.452	0.435	0.492	0.475	0.453	0.504	0.466	4.42
60)		CIS-1,3-DICHLO...	0.461	0.451	0.455	0.495	0.485	0.467	0.482	0.514	0.481	0.532	0.482	5.39
61)	C	TOLUENE	1.145	1.185	1.217	1.213	1.122	1.095	1.151	1.182	1.091	1.193	1.159	3.96#
62)		TRANS-1,3,-DIC...	0.366	0.410	0.436	0.436	0.423	0.416	0.446	0.480	0.445	0.502	0.436	8.58
63)		ETHYL METHACRY...											0.000	-1.00
64)		1,1,2-TRICHLOR...	0.238	0.259	0.266	0.288	0.272	0.265	0.288	0.290	0.266	0.298	0.273	6.55
65)		2-HEXANONE	0.318	0.333	0.340	0.314	0.318	0.309	0.359	0.345	0.334	0.375	0.334	6.31
66)		TETRACHLOROETHENE	0.241	0.273	0.263	0.287	0.269	0.254	0.271	0.285	0.261	0.280	0.268	5.29
67)		1,3-DICHLOROPR...	0.460	0.535	0.505	0.505	0.513	0.489	0.521	0.531	0.486	0.541	0.509	4.96
68)		DIBROMOCHLOROM...	0.278	0.300	0.300	0.326	0.303	0.304	0.317	0.339	0.317	0.356	0.314	7.05
69)		1,2-DIBROMOETHANE	0.250	0.291	0.326	0.308	0.297	0.299	0.314	0.322	0.302	0.337	0.305	7.82
70)		CHLOROBENZENE-D5 ...	----------ISTD----------											
71)	S	4-BROMOFLUOROB...	0.873	0.888	0.894	0.906	0.873	0.881	0.890	0.889	0.890	0.915	0.890	1.50
72)	T	CHLOROBENZENE	1.397	1.581	1.513	1.532	1.405	1.388	1.495	1.556	1.401	1.521	1.479	4.98
73)		1,1,1,2-TETRAC...	0.538	0.438	0.534	0.580	0.504	0.501	0.525	0.564	0.522	0.573	0.528	7.88
74)	C	ETHYLBENZENE	2.657	2.587	2.532	2.625	2.458	2.419	2.568	2.635	2.392	2.585	2.546	3.66#
75)		M/P-XYLENES	1.966	1.942	1.918	1.987	1.853	1.842	1.944	2.021	1.836	1.982	1.929	3.38
76)		0-XYLENE	2.007	1.910	1.947	2.007	1.940	1.937	2.020	2.109	1.921	2.078	1.988	3.42
77)		STYRENE	1.469	1.485	1.532	1.583	1.554	1.590	1.682	1.749	1.622	1.771	1.604	6.44
78)	P	BROMOFORM	0.373	0.416	0.447	0.449	0.452	0.437	0.496	0.524	0.494	0.567	0.465	11.99
79)		ISOPROPYLBENZENE	2.401	2.355	2.372	2.339	2.199	2.190	2.303	2.400	2.168	2.331	2.306	3.83
80)		CIS-1,4-DICHLO...											0.000	-1.00
81)	P	1,1,2,2-TETRAC...	0.774	0.872	0.919	0.857	0.857	0.826	0.922	0.927	0.865	0.962	0.878	6.30
82)		1,4-DICHLORO-2...		0.184	0.223	0.198	0.216	0.208	0.230	0.240	0.231	0.267	0.222	10.94
83)		BROMOBENZENE	1.124	1.065	1.076	1.061	1.001	1.004	1.034	1.096	1.006	1.103	1.057	4.17
84)		1,2,3-TRICHLOR...	0.781	0.675	0.762	0.746	0.709	0.675	0.741	0.752	0.694	0.800	0.734	5.94
85)		N-PROPYLBENZENE	2.725	2.805	2.739	2.663	2.572	2.574	2.757	2.867	2.601	2.807	2.711	3.85
86)		2-CHLOROT0LUENE	1.882	1.823	1.737	1.758	1.596	1.626	1.696	1.747	1.599	1.740	1.720	5.45
87)		1,3,5-TRIMETHY...	1.996	2.045	1.914	1.902	1.786	1.807	1.934	2.011	1.838	1.999	1.923	4.71
88)		4-CHLOROTOLUENE	1.851	1.980	1.933	2.047	1.865	1.853	1.972	2.076	1.909	2.095	1.958	4.67
89)		1,4-DICHLOROBENZEN...	----------ISTD----------											
90)		TERT-BUTYLBENZENE	1.694	1.644	1.680	1.628	1.588	1.529	1.641	1.696	1.510	1.578	1.619	4.06
91)		1,2,4-TRIMETHY...	2.015	1.967	2.111	2.040	1.980	1.987	2.110	2.193	1.964	2.082	2.045	3.75
92)		SEC-BUTYLBENZENE	2.353	2.287	2.368	2.309	2.275	2.147	2.310	2.421	2.137	2.233	2.284	3.99
93)		1,3-DICHLOROBE...	1.096	1.211	1.210	1.184	1.150	1.155	1.220	1.261	1.148	1.216	1.185	4.05

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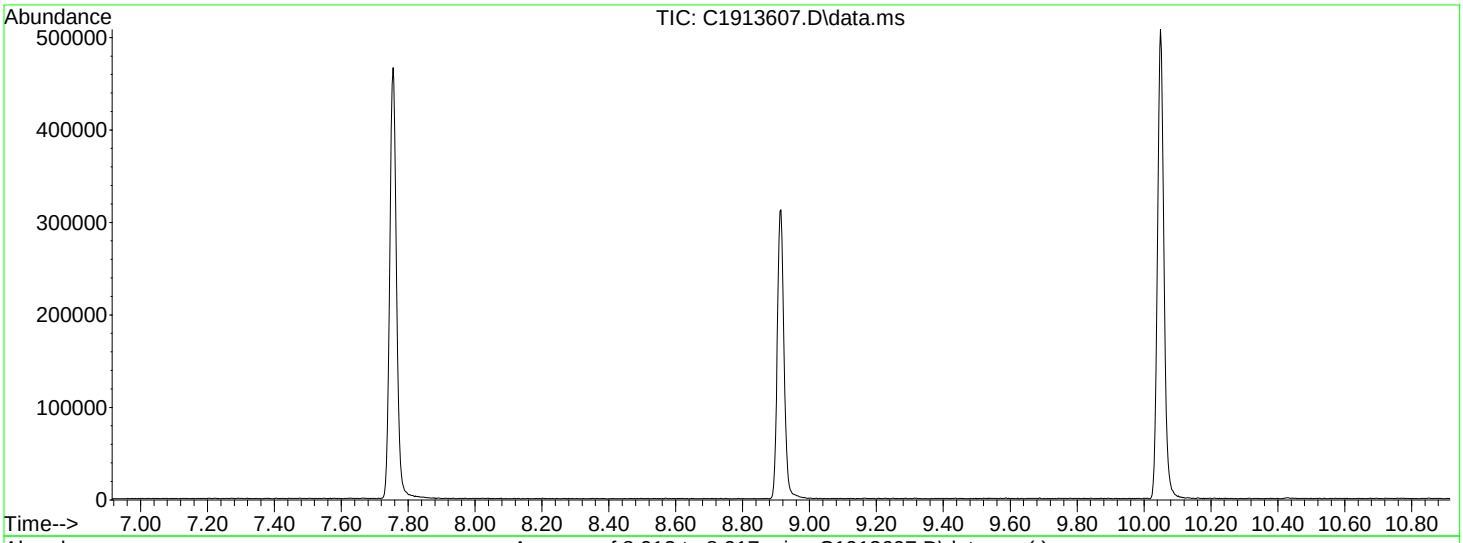
94)	P-ISOPROPYLTOL...	2.025	2.014	1.946	1.943	1.923	1.858	2.010	2.103	1.878	1.971	1.967	3.74
95)	1,4-DICHLOROBE...	1.313	1.265	1.269	1.296	1.237	1.175	1.268	1.298	1.183	1.260	1.256	3.68
96)	N-BUTYLBENZENE	1.763	1.665	1.772	1.751	1.711	1.685	1.814	1.938	1.755	1.841	1.770	4.52
97)	1,2-DICHLOROBE...	1.171	1.119	1.200	1.220	1.179	1.176	1.234	1.273	1.151	1.231	1.195	3.78
98)	1,2-DIBROMO-3-...	0.138	0.121	0.173	0.173	0.161	0.154	0.185	0.185	0.172	0.183	0.164	12.87
99)	1,3,5-TRICHLOR...	0.777	0.805	0.794	0.822	0.789	0.783	0.835	0.894	0.812	0.852	0.816	4.45
100)	1,2,4-TRICHLOR...	0.692	0.750	0.716	0.755	0.741	0.757	0.797	0.861	0.782	0.838	0.769	6.76
101)	HEXACHLOROBUTA...	0.247	0.236	0.295	0.327	0.296	0.286	0.311	0.323	0.298	0.309	0.293	10.27
102)	NAPHTHALENE	2.104	2.255	2.158	2.050	2.180	2.171	2.493	2.598	2.403	2.573	2.298	8.76
103)	1,2,3-TRICHLOR...	0.748	0.763	0.764	0.694	0.735	0.741	0.791	0.830	0.758	0.813	0.764	5.15

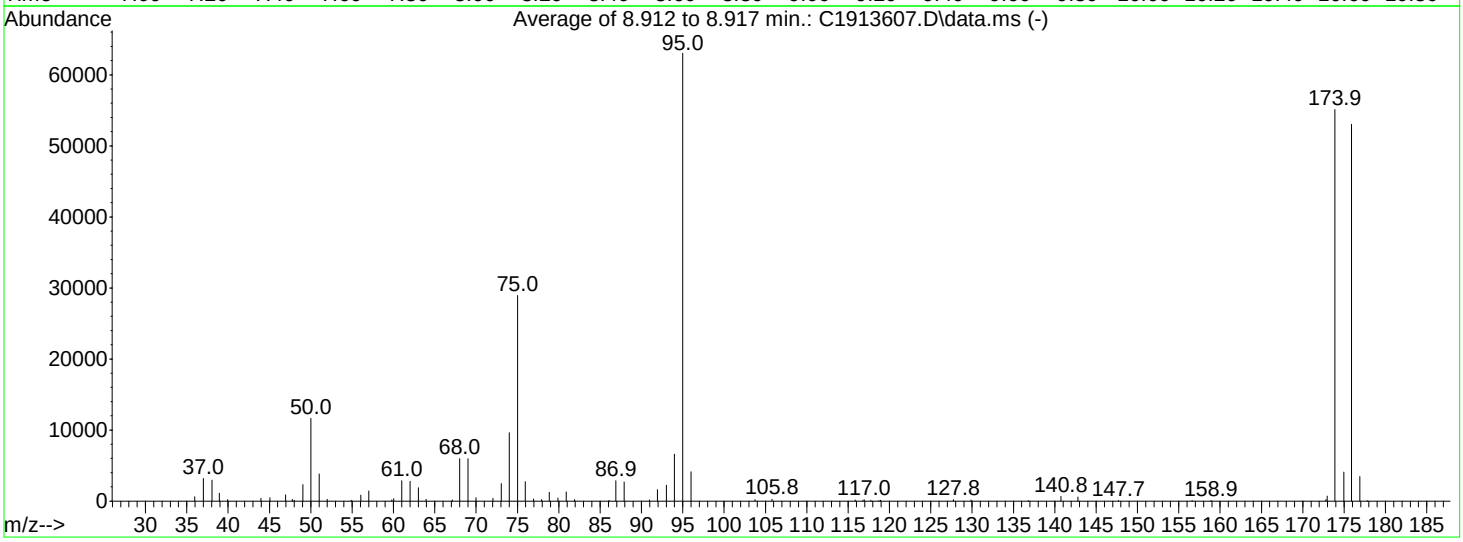
(#) = Out of Range

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913607.D
Acq On : 16 May 2019 9:46 am
Operator :
Sample : BFB Inst : GCMSVOA3
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: 8260B.P

Method : C:\msdchem\1\methods\C053018.M
Title : 8260 WATER 5MLS VOAMS 5973 #3
Last Update : Wed Mar 13 07:34:04 2019





AutoFind: Scans 2825, 2826, 2827; Background Corrected with Scan 2812

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	11656	PASS
75	95	30	60	45.9	28936	PASS
95	95	100	100	100.0	63069	PASS
96	95	5	9	6.5	4113	PASS
173	174	0.00	2	1.3	712	PASS
174	95	50	100	87.4	55112	PASS
175	174	5	9	7.4	4064	PASS
176	174	95	101	96.3	53067	PASS
177	176	5	9	6.5	3436	PASS

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 14:37:18 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.199	168	156147	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	237840	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	118256	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	113769	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	74169	18.52	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 74.08%				
49) TOLUENE SS	6.355	98	234009	23.70	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.80%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	86014	23.24	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 92.96%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	1013	0.32	UG/L	#	43
4) DIFLUOROCHLOROMETHANE	1.093	51	1296	0.34	UG/L	#	100
5) CHLOROMETHANE	1.198	50	1796	0.48	UG/L	#	30
6) VINYL CHLORIDE	1.263	62	1179	0.39	UG/L	#	44
7) BROMOMETHANE	1.461	94	1782	0.53	UG/L		82
8) CHLOROETHANE	1.514	64	1036m	0.55	UG/L		
9) FLUORODICHLOROMETHANE	1.636	67	1723	0.37	UG/L	#	85
10) TRICHLOROFLUOROMETHANE	1.675	101	1376	0.35	UG/L		87
12) DI ETHYL ETHER	1.865	59	941	0.40	UG/L	#	34
13) ACROLEIN	1.963	56	2479	3.85	UG/L	#	53
14) ACETONE	2.069	43	5441	4.50	UG/L		94
15) 1,1-DICHLOROETHENE	2.027	61	1241	0.32	UG/L	#	70
16) 1,1,2-TRICL-1,2,2-TRIF...	2.021	101	750	0.41	UG/L		85
17) IODOMETHANE	2.141	142	8482	6.92	UG/L		99
20) METHYL ACETATE	2.317	43	936m	0.15	UG/L		
21) T-BUTYL ALCOHOL	2.512	59	1637	3.63	UG/L	#	53
22) ACRYLONITRILE	2.612	53	700m	0.48	UG/L		
23) METHYLENE CHLORIDE	2.403	49	1330	0.31	UG/L		96
24) CARBON DISULFIDE	2.191	76	25388	4.28	UG/L		96
25) METHYL TERT-BUTYL ETHE...	2.643	73	2720	0.35	UG/L		92
26) TRANS 1,2-DICHLOROETHENE	2.640	61	1430	0.38	UG/L		90
27) 1,1-DICHLOROETHANE	3.045	63	1815	0.38	UG/L	#	51
28) VINYL ACETATE	3.114	43	33112	4.43	UG/L		99
29) DI ISOPROYL ETHER	3.134	45	3754	0.37	UG/L	#	52
31) 2-BUTANONE	3.683	43	7241	3.68	UG/L	#	95
32) T-BUTYL ETHYL ETHER	3.505	59	3066m	0.33	UG/L		
33) CIS-1,2-DICHLOROETHENE	3.644	61	1411	0.30	UG/L	#	59
34) 2,2-DICHLOROPROPANE	3.639	77	1427m	0.43	UG/L		
35) ETHYL ACETATE	3.756	43	1925m	0.96	UG/L		
38) BROMOCHLOROMETHANE	3.890	49	837	0.35	UG/L	#	64
39) TETRAHYDROFURAN	3.951	42	254m	0.23	UG/L		
40) CHLOROFORM	3.976	83	1449m	0.32	UG/L		
41) 1,1,1-TRICHLOROETHANE	4.146	97	1207	0.31	UG/L	#	1
43) CARBON TETRACHLORIDE	4.313	117	974	0.29	UG/L	#	3
44) 1,1-DICHLOROPROPENE	4.313	75	1153	0.34	UG/L	#	39
45) BENZENE	4.525	78	4059	0.42	UG/L	#	75
47) T-AMYLMETHYL ETHER	4.654	73	2752	0.38	UG/L	#	69
50) 1,2-DICHLOROETHANE	4.548	62	1269	0.28	UG/L	#	74
51) TRICHLOROETHENE	5.169	95	776m	0.33	UG/L		
52) METHYLCYCLOHEXANE	5.331	83	1149	0.39	UG/L	#	77
53) 1,2-DICHLOROPROPANE	5.393	63	928	0.36	UG/L	#	24
54) DIBROMOMETHANE	5.501	93	575	0.35	UG/L	#	1
57) BROMODICHLOROMETHANE	5.663	83	1160	0.35	UG/L	#	90

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 14:37:18 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
58) 2-CHLOROETHYLVINYLETHER	5.981	63	5105	2.33 UG/L	97
59) MIBK	6.274	43	14578	3.86 UG/L #	97
60) CIS-1,3-DICHLOROPROPENE	6.106	75	1462	0.39 UG/L #	51
61) TOLUENE	6.427	91	3630	0.38 UG/L	96
62) TRANS-1,3,-DICHLOROPRO...	6.664	75	1160	0.34 UG/L #	48
64) 1,1,2-TRICHLOROETHANE	6.826	97	756	0.33 UG/L #	67
65) 2-HEXANONE	7.096	43	10079m	3.61 UG/L	
66) TETRACHLOROETHENE	6.946	166	765	0.37 UG/L #	64
67) 1,3-DICHLOROPROPANE	6.993	76	1459	0.35 UG/L #	87
68) DIBROMOCHLOROMETHANE	7.200	129	883	0.36 UG/L	98
69) 1,2-DIBROMOETHANE	7.303	107	794	0.32 UG/L	89
72) CHLOROBENZENE	7.782	112	2203	0.39 UG/L #	86
73) 1,1,1,2-TETRACHLOROETHANE	7.872	131	849	0.44 UG/L #	27
74) ETHYLBENZENE	7.905	91	4190	0.44 UG/L	93
75) M/P-XYLENES	8.025	91	6200	0.79 UG/L	96
76) 0-XYLENE	8.404	91	3164	0.39 UG/L	99
77) STYRENE	8.429	104	2316	0.39 UG/L	98
78) BROMOFORM	8.588	173	588	0.39 UG/L #	36
79) ISOPROPYLBENZENE	8.770	105	3786	0.45 UG/L	93
81) 1,1,2,2-TETRACHLOROETHANE	9.079	83	1221	0.39 UG/L #	90
82) 1,4-DICHLORO-2-BUTENE(...	9.140	53	183m	0.18 UG/L	
83) BROMOBENZENE	9.051	77	1772	0.43 UG/L #	72
84) 1,2,3-TRICHLOROPROPANE	9.113	75	1232	0.36 UG/L #	38
85) N-PROPYLBENZENE	9.180	91	4296	0.39 UG/L	99
86) 2-CHLOROT0LUENE	9.249	91	2967	0.42 UG/L #	84
87) 1,3,5-TRIMETHYLBENZENE	9.358	105	3147	0.42 UG/L	90
88) 4-CHLOROTOLUENE	9.366	91	2919	0.35 UG/L	92
90) TERT-BUTYLBENZENE	9.673	119	2569	0.40 UG/L	99
91) 1,2,4-TRIMETHYLBENZENE	9.729	105	3057	0.37 UG/L	94
92) SEC-BUTYLBENZENE	9.891	105	3569	0.40 UG/L	96
93) 1,3-DICHLOROBENZENE	9.988	146	1662	0.36 UG/L	94
94) P-ISOPROPYLTOLUENE	10.036	119	3072	0.40 UG/L #	87
95) 1,4-DICHLOROBENZENE	10.077	146	1991	0.40 UG/L #	31
96) N-BUTYLBENZENE	10.446	91	2675	0.38 UG/L #	46
97) 1,2-DICHLOROBENZENE	10.443	146	1777	0.38 UG/L #	71
98) 1,2-DIBROMO-3-CHLOROPR...	11.221	75	210m	0.30 UG/L	
99) 1,3,5-TRICHLOROBENZENE	11.419	180	1178	0.40 UG/L	98
100) 1,2,4-TRICHLOROBENZENE	12.038	180	1050	0.36 UG/L	98
101) HEXACHLOROBUTADIENE	12.211	225	375m	0.39 UG/L	
102) NAPHTHALENE	12.275	128	3191	0.35 UG/L #	72
103) 1,2,3-TRICHLOROBENZENE	12.515	180	1135	0.41 UG/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
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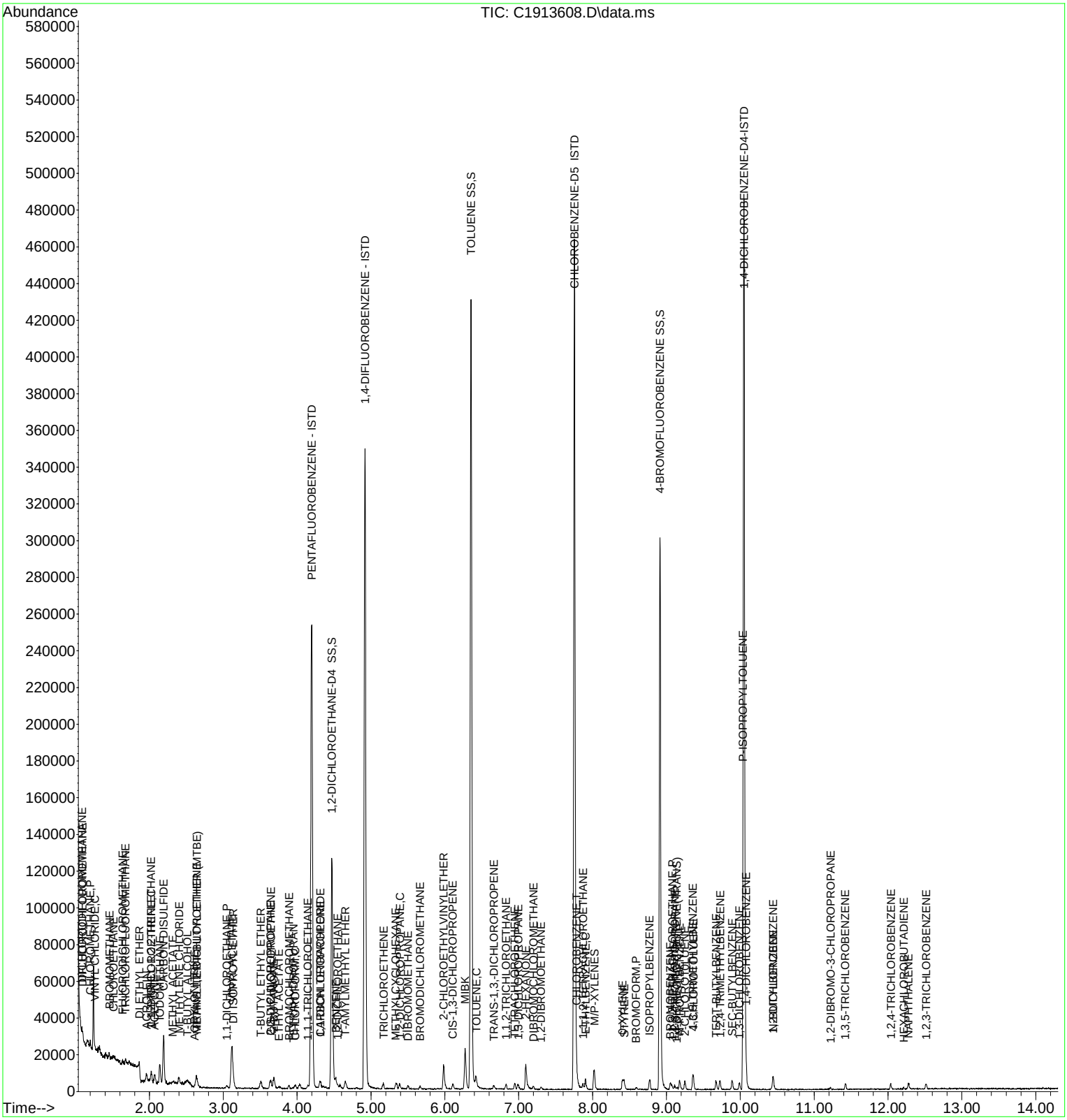
Misc :
ALS Vial : 8 Sample Multiplier: 1

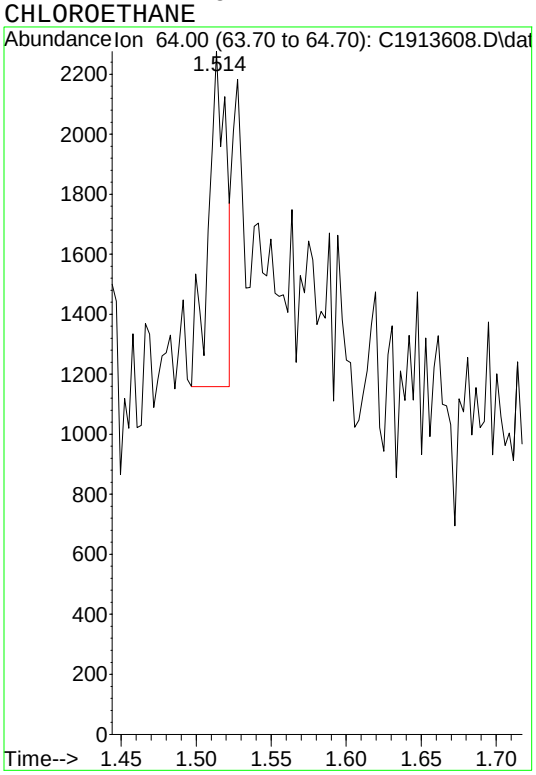
Quant Time: May 16 14:37:18 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

Quant Time : Thu May 16 14:37:18 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
CHLOROETHANE



Original Int. Results

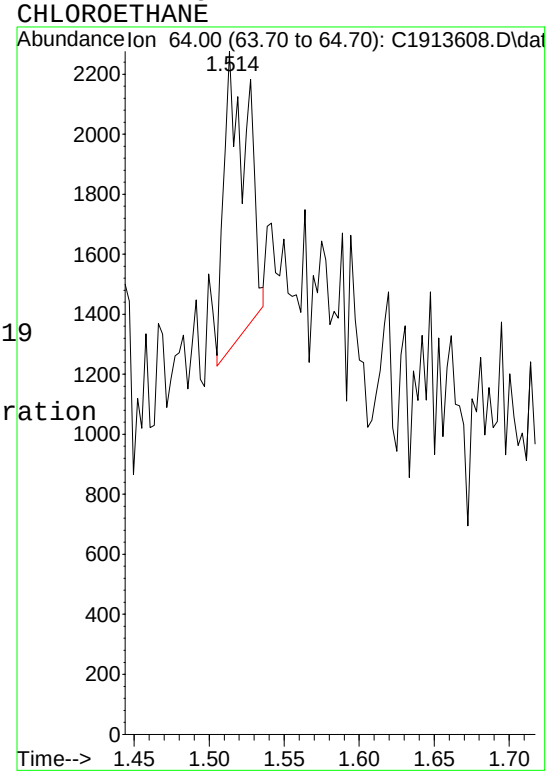
RT : 1.51
Area : 928
Amount: 0.494269

Manual Int. Results

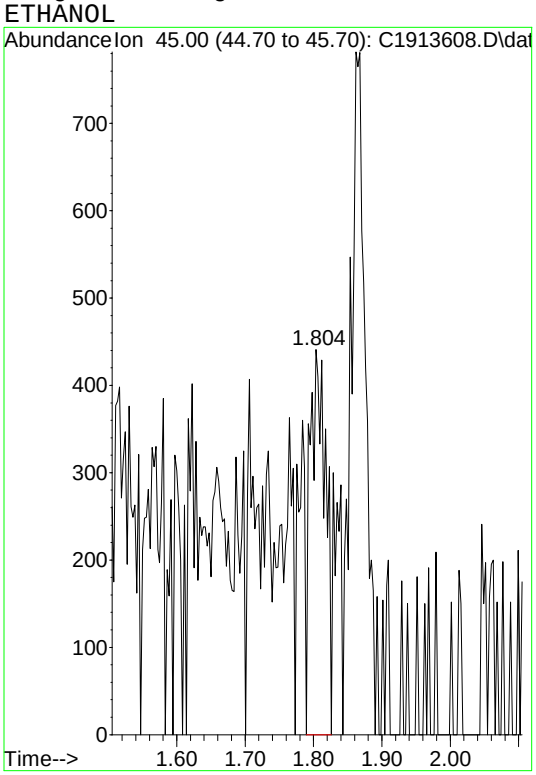
Thu May 16 14:35:50 2019

MIuser: EEH
Reason: Incorret Integration
RT : 1.51
Area : 1036
Amount: 0.551791

Manual Integration
CHLOROETHANE



Original Integration
ETHANOL



Original Int. Results

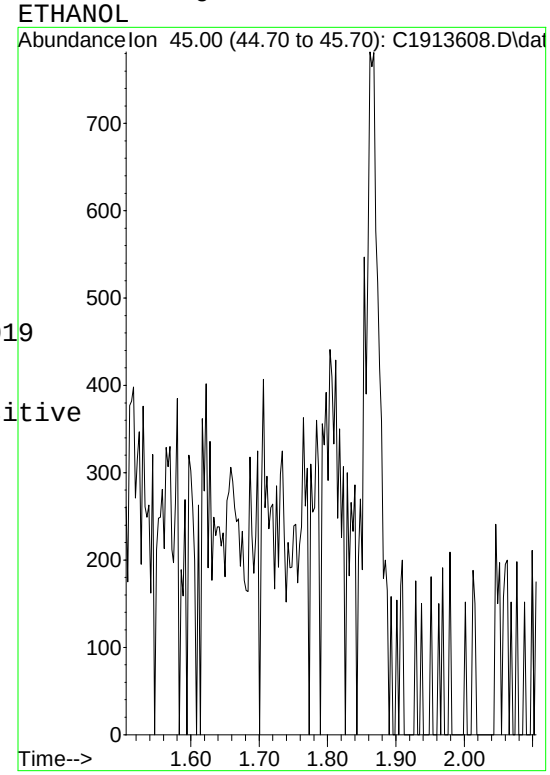
RT : 1.80
Area : 689
Amount: -11.1349

Manual Int. Results

Thu May 16 14:35:56 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

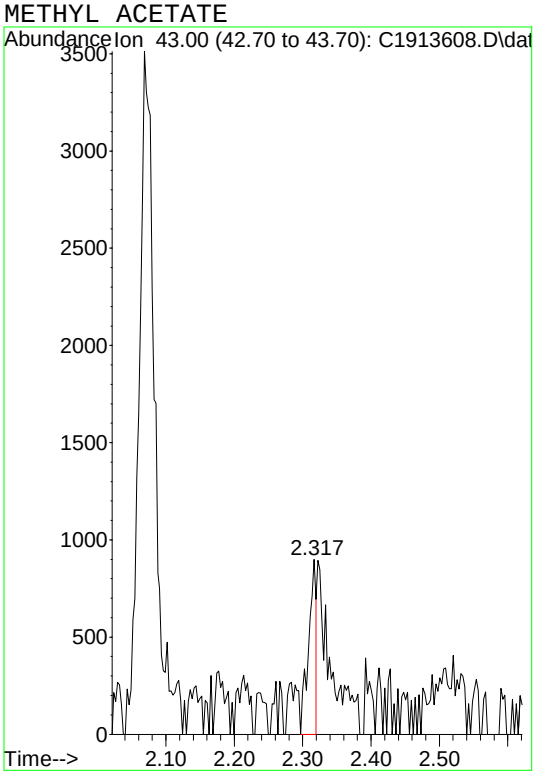
Manual Integration
ETHANOL



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

Quant Time : Thu May 16 14:37:18 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
METHYL ACETATE



Original Int. Results

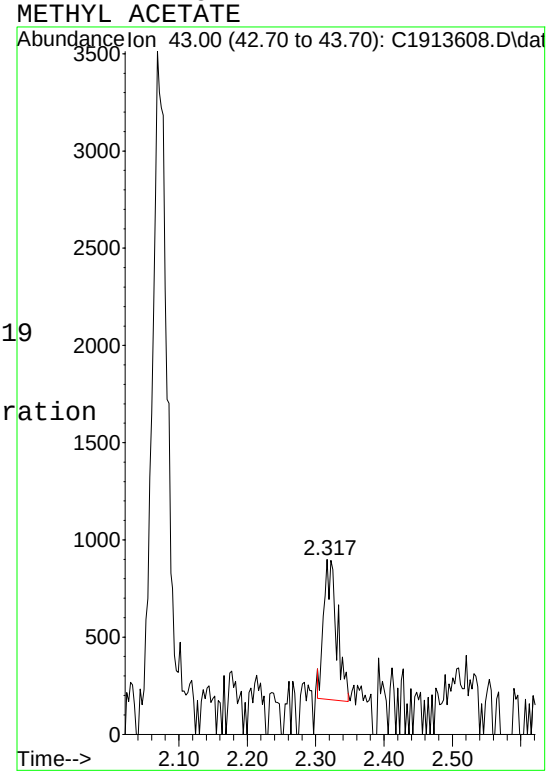
RT : 2.32
Area : 688
Amount: 0.108353

Manual Int. Results

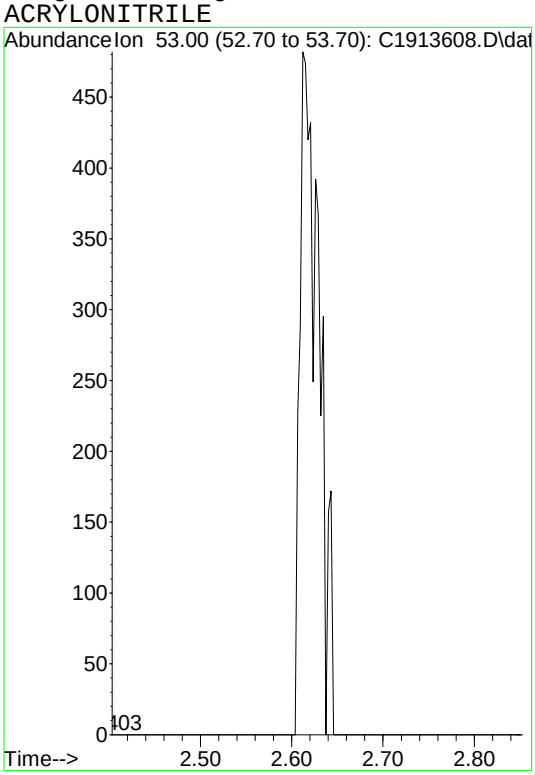
Thu May 16 14:36:05 2019

MIuser: EEH
Reason: Incorret Integration
RT : 2.32
Area : 936
Amount: 0.147411

Manual Integration
METHYL ACETATE



Original Integration
ACRYLONITRILE



Original Int. Results

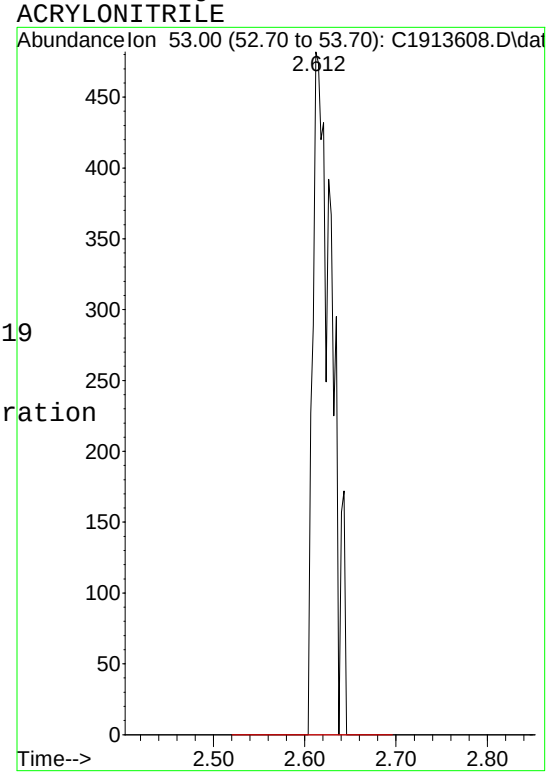
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

Thu May 16 14:36:08 2019

MIuser: EEH
Reason: Incorret Integration
RT : 2.61
Area : 700
Amount: 0.483817

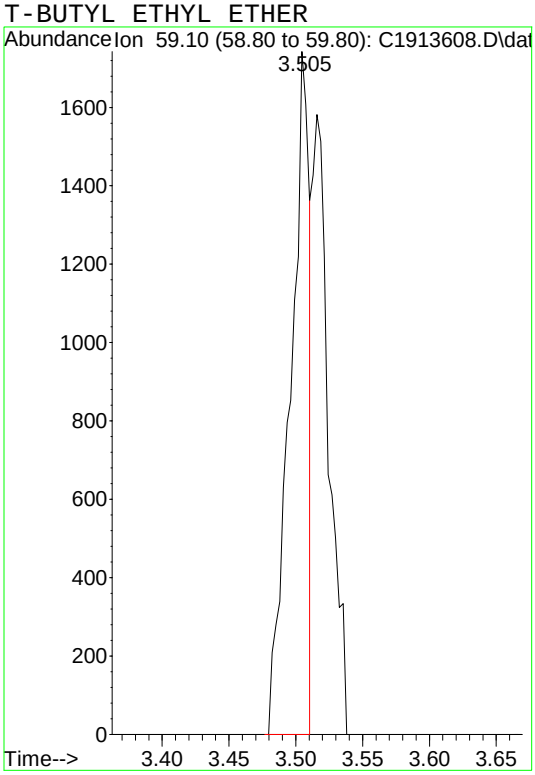
Manual Integration
ACRYLONITRILE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

Quant Time : Thu May 16 14:37:18 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
T-BUTYL ETHYL ETHER



Original Int. Results

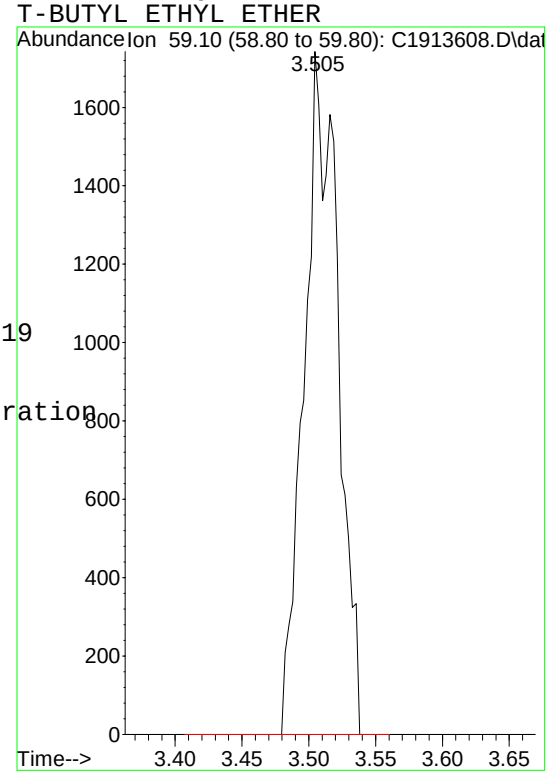
RT : 3.50
Area : 1698
Amount: 0.181217

Manual Int. Results

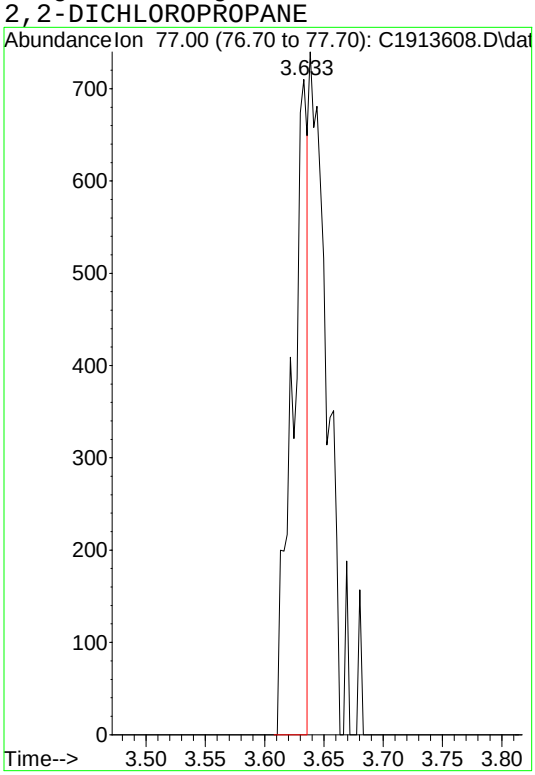
Thu May 16 14:36:16 2019

MIuser: EEH
Reason: Incorret Integration
RT : 3.50
Area : 3066
Amount: 0.327216

Manual Integration
T-BUTYL ETHYL ETHER



Original Integration
2,2-DICHLOROPROPANE



Original Int. Results

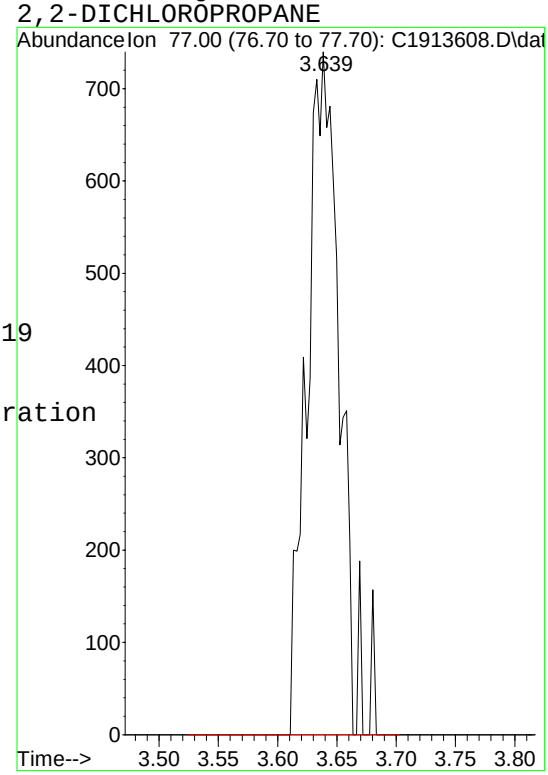
RT : 3.63
Area : 630
Amount: 0.188163

Manual Int. Results

Thu May 16 14:36:20 2019

MIuser: EEH
Reason: Incorret Integration
RT : 3.64
Area : 1427
Amount: 0.426204

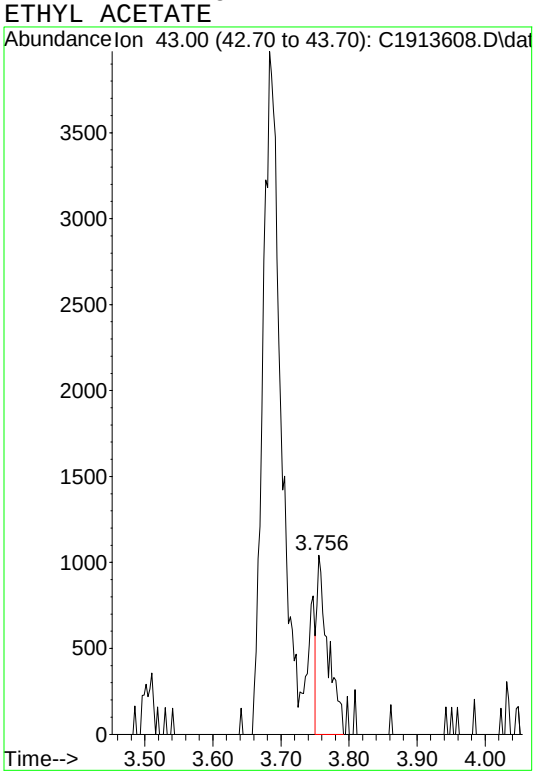
Manual Integration
2,2-DICHLOROPROPANE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

Quant Time : Thu May 16 14:37:18 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
ETHYL ACETATE



Original Int. Results

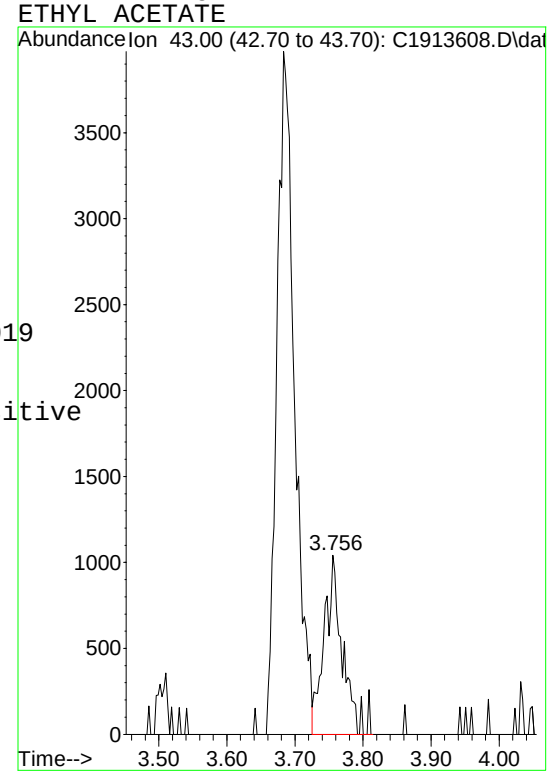
RT : 3.76
Area : 1164
Amount: 0.582562

Manual Int. Results

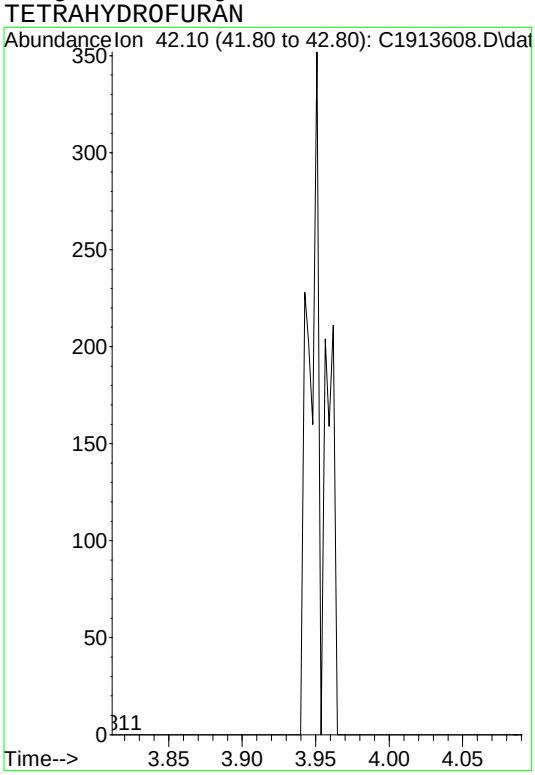
Thu May 16 14:36:23 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 3.76
Area : 1925
Amount: 0.963429

Manual Integration
ETHYL ACETATE



Original Integration
TETRAHYDROFURAN



Original Int. Results

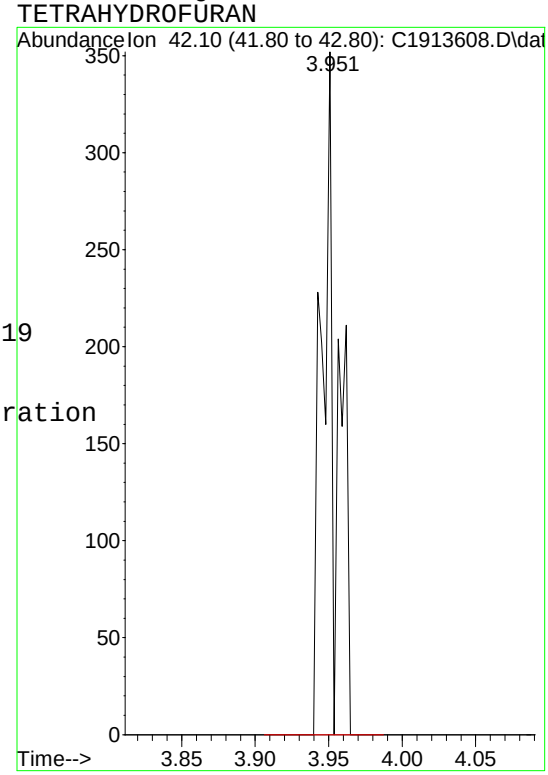
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

Thu May 16 14:36:30 2019

MIuser: EEH
Reason: Incorret Integration
RT : 3.95
Area : 254
Amount: 0.225677

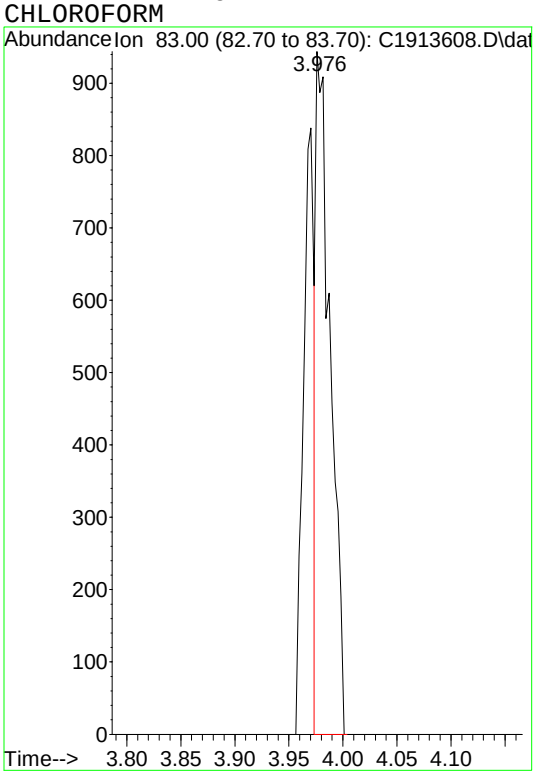
Manual Integration
TETRAHYDROFURAN



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

Quant Time : Thu May 16 14:37:18 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
CHLOROFORM



Original Int. Results

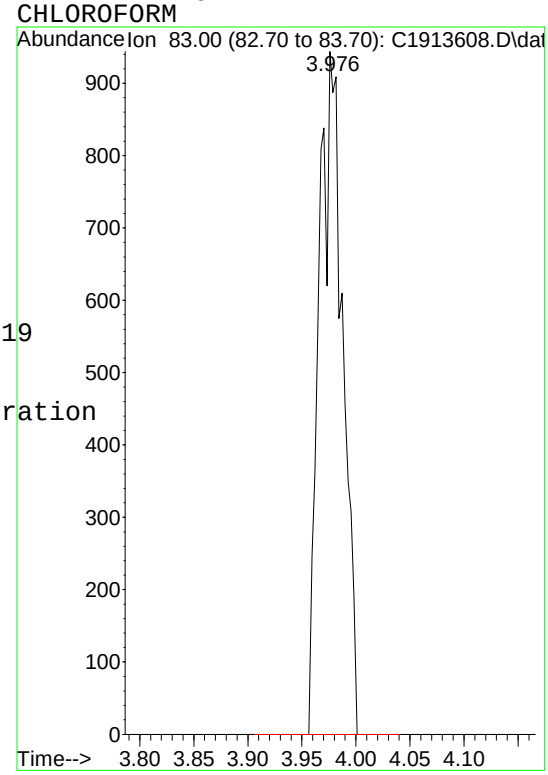
RT : 3.98
Area : 875
Amount: 0.194519

Manual Int. Results

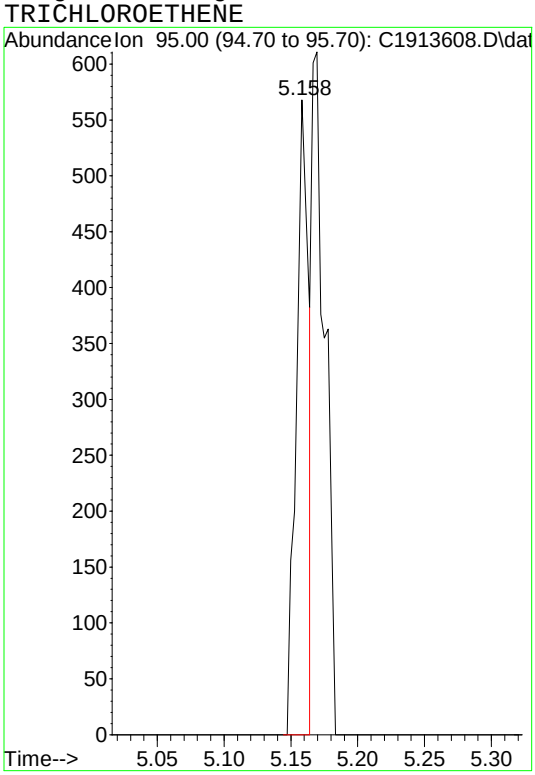
Thu May 16 14:36:32 2019

MIuser: EEH
Reason: Incorret Integration
RT : 3.98
Area : 1449
Amount: 0.322123

Manual Integration
CHLOROFORM



Original Integration
TRICHLOROETHENE



Original Int. Results

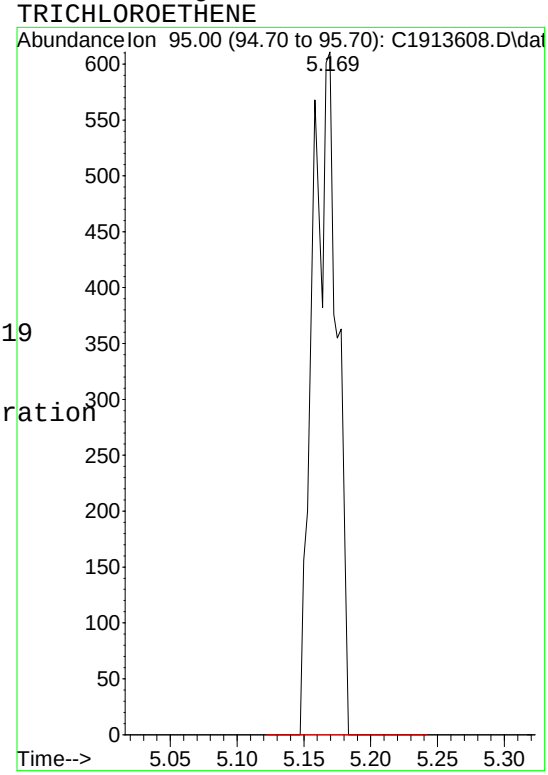
RT : 5.16
Area : 363
Amount: 0.155525

Manual Int. Results

Thu May 16 14:36:41 2019

MIuser: EEH
Reason: Incorret Integration
RT : 5.17
Area : 776
Amount: 0.332473

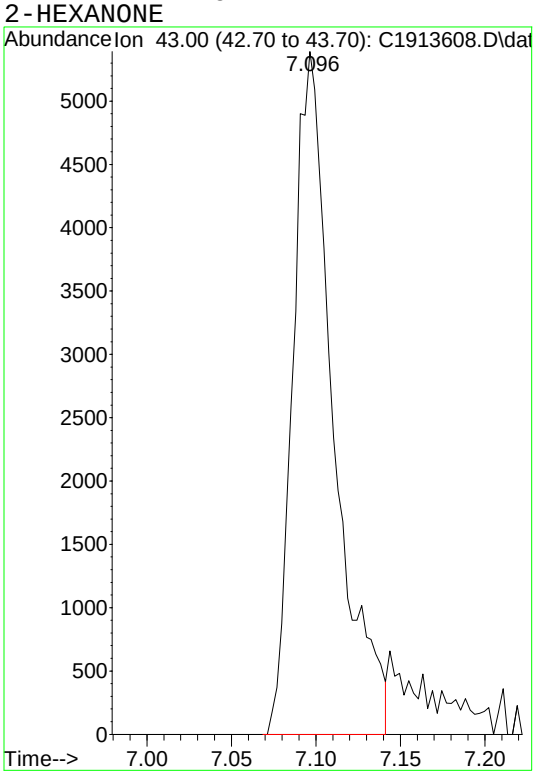
Manual Integration
TRICHLOROETHENE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

Quant Time : Thu May 16 14:37:18 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
2-HEXANONE



Original Int. Results

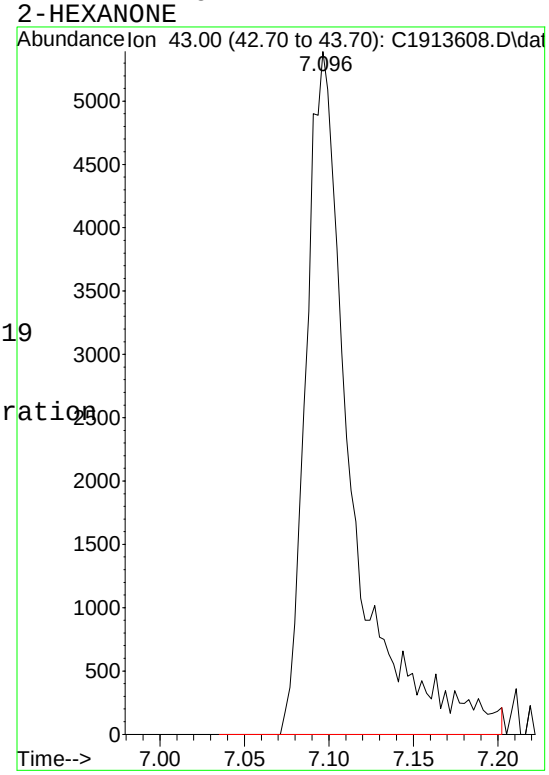
RT : 7.10
Area : 8971
Amount: 3.21701

Manual Int. Results

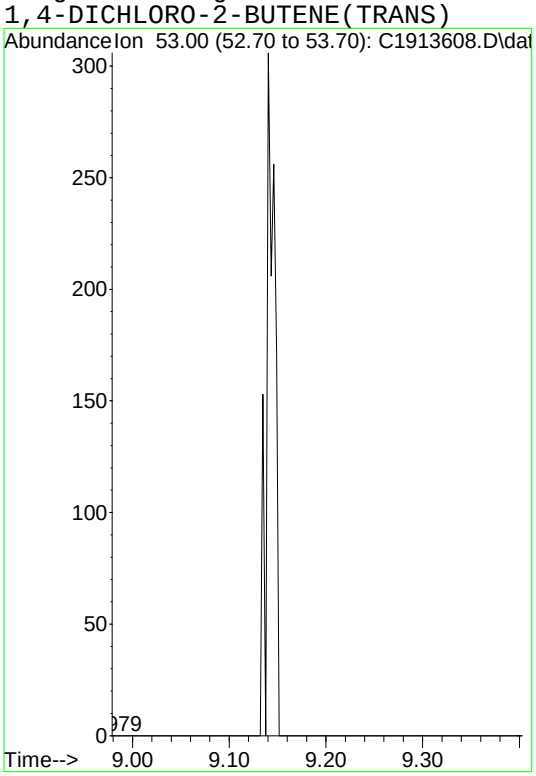
Thu May 16 14:36:53 2019

MIuser: EEH
Reason: Incorret Integration
RT : 7.10
Area : 10079
Amount: 3.61435

Manual Integration
2-HEXANONE



Original Integration
1,4-DICHLORO-2-BUTENE(TRANS)



Original Int. Results

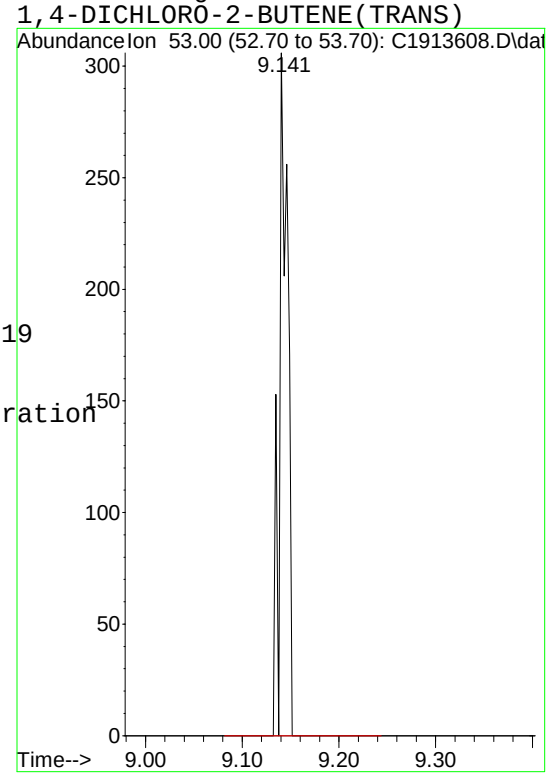
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

Thu May 16 14:37:03 2019

MIuser: EEH
Reason: Incorret Integration
RT : 9.14
Area : 183
Amount: 0.177327

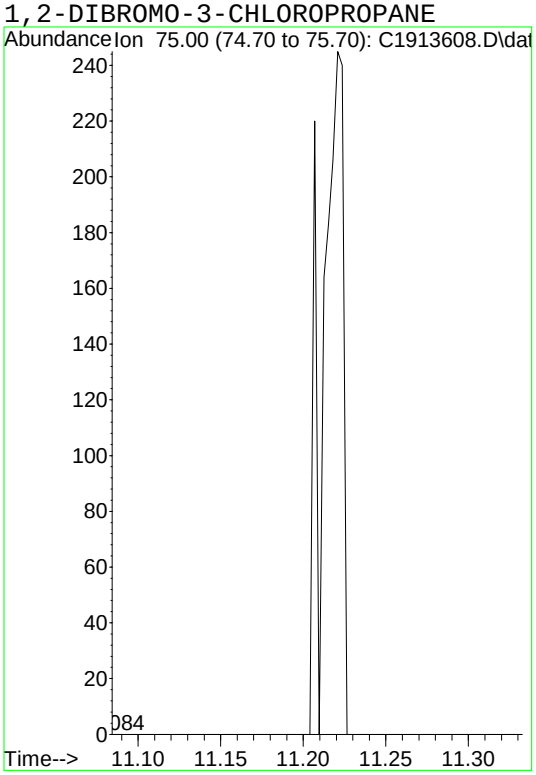
Manual Integration
1,4-DICHLORO-2-BUTENE(TRANS)



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

Quant Time : Thu May 16 14:37:18 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
1,2-DIBROMO-3-CHLOROPROPANE



Original Int. Results

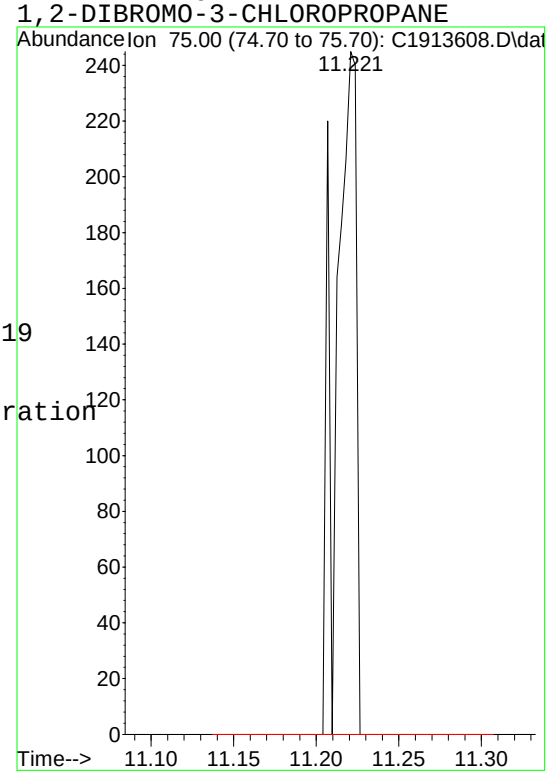
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

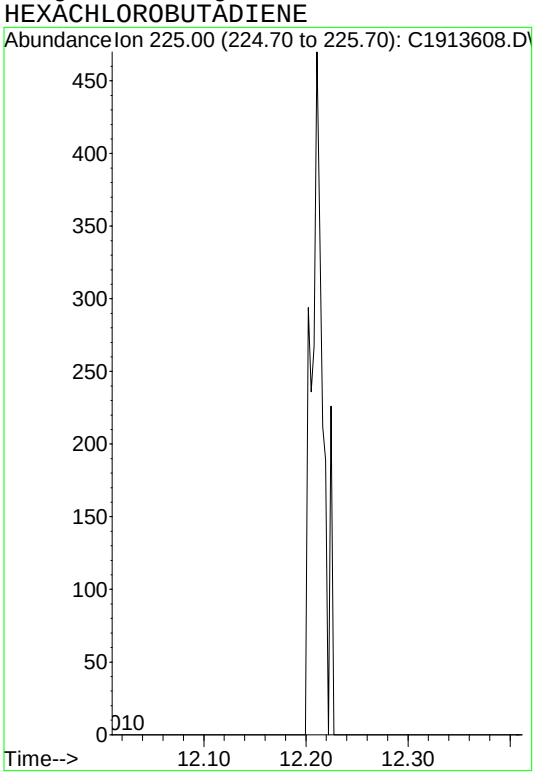
Thu May 16 14:37:14 2019

MIuser: EEH
Reason: Incorret Integration
RT : 11.22
Area : 210
Amount: 0.296071

Manual Integration
1,2-DIBROMO-3-CHLOROPROPANE



Original Integration
HEXACHLOROBUTADIENE



Original Int. Results

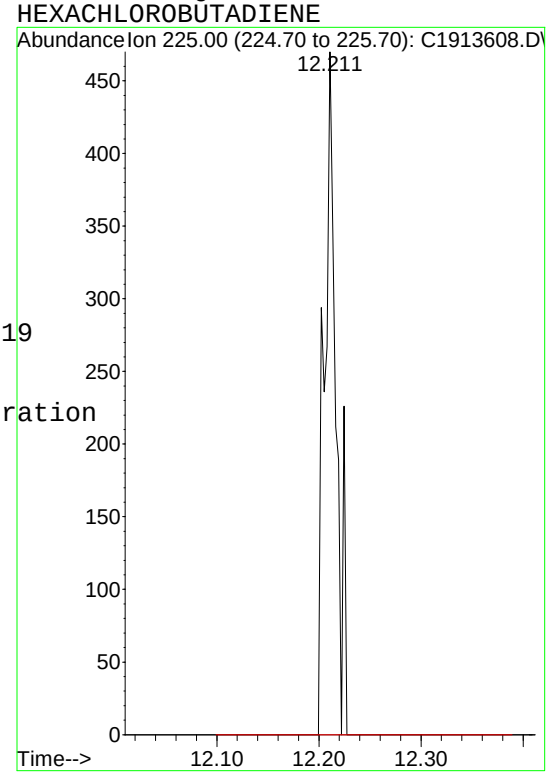
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

Thu May 16 14:37:18 2019

MIuser: EEH
Reason: Incorret Integration
RT : 12.21
Area : 375
Amount: 0.394808

Manual Integration
HEXACHLOROBUTADIENE



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.199	168	158862	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	239809	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	120726	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.053	152	115324	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	75902	18.63	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 74.52%				
49) TOLUENE SS	6.355	98	239544	24.06	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 96.24%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	89315	23.64	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.56%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.090	85	1458	0.45	UG/L	#	43
4) DIFLUOROCHLOROMETHANE	1.093	51	1620	0.41	UG/L	#	100
5) CHLOROMETHANE	1.196	50	2426	0.64	UG/L	#	33
6) VINYL CHLORIDE	1.263	62	1473	0.48	UG/L	#	73
7) BROMOMETHANE	1.452	94	2368	0.96	UG/L	#	63
8) CHLOROETHANE	1.519	64	830m	0.43	UG/L		
9) FLUORODICHLOROMETHANE	1.639	67	2280	0.49	UG/L		94
10) TRICHLOROFLUOROMETHANE	1.673	101	1683	0.42	UG/L		89
12) DI ETHYL ETHER	1.868	59	1039	0.44	UG/L	#	62
13) ACROLEIN	1.960	56	3234	4.94	UG/L		98
14) ACETONE	2.071	43	6204	5.04	UG/L		97
15) 1,1-DICHLOROETHENE	2.024	61	1602	0.41	UG/L		97
16) 1,1,2-TRICL-1,2,2-TRIF...	2.021	101	883m	0.47	UG/L		
17) IODOMETHANE	2.141	142	9555	7.25	UG/L		97
20) METHYL ACETATE	2.322	43	1712	0.27	UG/L	#	64
21) T-BUTYL ALCOHOL	2.512	59	2175	4.74	UG/L	#	89
22) ACRYLONITRILE	2.624	53	694	0.47	UG/L	#	10
23) METHYLENE CHLORIDE	2.398	49	1827	0.42	UG/L		95
24) CARBON DISULFIDE	2.191	76	31654	5.24	UG/L		98
25) METHYL TERT-BUTYL ETHE...	2.643	73	3817	0.48	UG/L	#	86
26) TRANS 1,2-DICHLOROETHENE	2.635	61	1683	0.45	UG/L		96
27) 1,1-DICHLOROETHANE	3.048	63	2230	0.46	UG/L	#	88
28) VINYL ACETATE	3.114	43	40872	5.38	UG/L		99
29) DI ISOPROYL ETHER	3.134	45	4588	0.45	UG/L	#	52
31) 2-BUTANONE	3.686	43	9236	4.61	UG/L	#	78
32) T-BUTYL ETHYL ETHER	3.508	59	4142	0.43	UG/L	#	85
33) CIS-1,2-DICHLOROETHENE	3.644	61	1864	0.39	UG/L		90
34) 2,2-DICHLOROPROPANE	3.633	77	1793m	0.53	UG/L		
35) ETHYL ACETATE	3.756	43	2402	1.18	UG/L	#	71
38) BROMOCHLOROMETHANE	3.887	49	1115	0.46	UG/L	#	18
39) TETRAHYDROFURAN	3.945	42	607	0.53	UG/L	#	40
40) CHLOROFORM	3.976	83	2045	0.45	UG/L		95
41) 1,1,1-TRICHLOROETHANE	4.149	97	1700	0.43	UG/L	#	82
42) CYCLOHEXANE	4.194	56	4823	0.12	UG/L	#	49
43) CARBON TETRACHLORIDE	4.316	117	1293	0.38	UG/L		99
44) 1,1-DICHLOROPROPENE	4.316	75	1580	0.46	UG/L	#	39
45) BENZENE	4.526	78	4671	0.47	UG/L	#	1
47) T-AMYLMETHYL ETHER	4.654	73	3633	0.49	UG/L	#	90
50) 1,2-DICHLOROETHANE	4.551	62	1702m	0.37	UG/L		
51) TRICHLOROETHENE	5.167	95	1015	0.43	UG/L		99
52) METHYLCYCLOHEXANE	5.334	83	1648m	0.55	UG/L		
53) 1,2-DICHLOROPROPANE	5.387	63	1311	0.50	UG/L	#	70
54) DIBROMOMETHANE	5.499	93	770	0.46	UG/L	#	47

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
57) BROMODICHLOROMETHANE	5.663	83	1389	0.41 UG/L #	24
58) 2-CHLOROETHYLVINYLETHER	5.987	63	6138	2.77 UG/L	92
59) MIBK	6.274	43	18607	4.88 UG/L	97
60) CIS-1,3-DICHLOROPROPENE	6.109	75	1804	0.48 UG/L #	51
61) TOLUENE	6.425	91	4738	0.49 UG/L	95
62) TRANS-1,3,-DICHLOROPRO...	6.664	75	1639	0.48 UG/L #	48
64) 1,1,2-TRICHLOROETHANE	6.832	97	1036	0.45 UG/L	93
65) 2-HEXANONE	7.097	43	13310m	4.73 UG/L	
66) TETRACHLOROETHENE	6.946	166	1090m	0.53 UG/L	
67) 1,3-DICHLOROPROPANE	6.988	76	2139	0.51 UG/L #	88
68) DIBROMOCHLOROMETHANE	7.200	129	1200	0.48 UG/L	98
69) 1,2-DIBROMOETHANE	7.303	107	1165	0.47 UG/L	95
72) CHLOROBENZENE	7.783	112	3181	0.56 UG/L	93
73) 1,1,1,2-TETRACHLOROETHANE	7.875	131	882	0.45 UG/L #	85
74) ETHYLBENZENE	7.908	91	5206	0.53 UG/L	93
75) M/P-XYLENES	8.022	91	7817	0.98 UG/L	93
76) 0-XYLENE	8.402	91	3843	0.46 UG/L	99
77) STYRENE	8.430	104	2988	0.50 UG/L #	31
78) BROMOFORM	8.586	173	838	0.54 UG/L #	36
79) ISOPROPYLBENZENE	8.775	105	4739	0.55 UG/L	96
81) 1,1,2,2-TETRACHLOROETHANE	9.077	83	1754	0.54 UG/L #	82
82) 1,4-DICHLORO-2-BUTENE(...	9.141	53	370m	0.35 UG/L	
83) BROMOBENZENE	9.054	77	2142	0.51 UG/L #	85
84) 1,2,3-TRICHLOROPROPANE	9.110	75	1358	0.39 UG/L #	38
85) N-PROPYLBENZENE	9.180	91	5644	0.50 UG/L	96
86) 2-CHLOROT0LUENE	9.247	91	3669	0.51 UG/L	88
87) 1,3,5-TRIMETHYLBENZENE	9.358	105	4114m	0.53 UG/L	
88) 4-CHLOROTOLUENE	9.367	91	3983	0.46 UG/L #	88
90) TERT-BUTYLBENZENE	9.673	119	3160	0.49 UG/L	95
91) 1,2,4-TRIMETHYLBENZENE	9.724	105	3781	0.45 UG/L	98
92) SEC-BUTYLBENZENE	9.891	105	4396	0.49 UG/L	94
93) 1,3-DICHLOROBENZENE	9.991	146	2327	0.50 UG/L #	90
94) P-ISOPROPYLTOLUENE	10.039	119	3871	0.50 UG/L #	92
95) 1,4-DICHLOROBENZENE	10.075	146	2432	0.48 UG/L #	85
96) N-BUTYLBENZENE	10.446	91	3201	0.45 UG/L	92
97) 1,2-DICHLOROBENZENE	10.443	146	2151	0.46 UG/L	95
98) 1,2-DIBROMO-3-CHLOROPR...	11.213	75	233m	0.32 UG/L	
99) 1,3,5-TRICHLOROBENZENE	11.425	180	1548m	0.52 UG/L	
100) 1,2,4-TRICHLOROBENZENE	12.038	180	1441	0.48 UG/L	94
101) HEXACHLOROBUTADIENE	12.211	225	453m	0.47 UG/L	
102) NAPHTHALENE	12.281	128	4335	0.47 UG/L #	72
103) 1,2,3-TRICHLOROBENZENE	12.512	180	1466	0.52 UG/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
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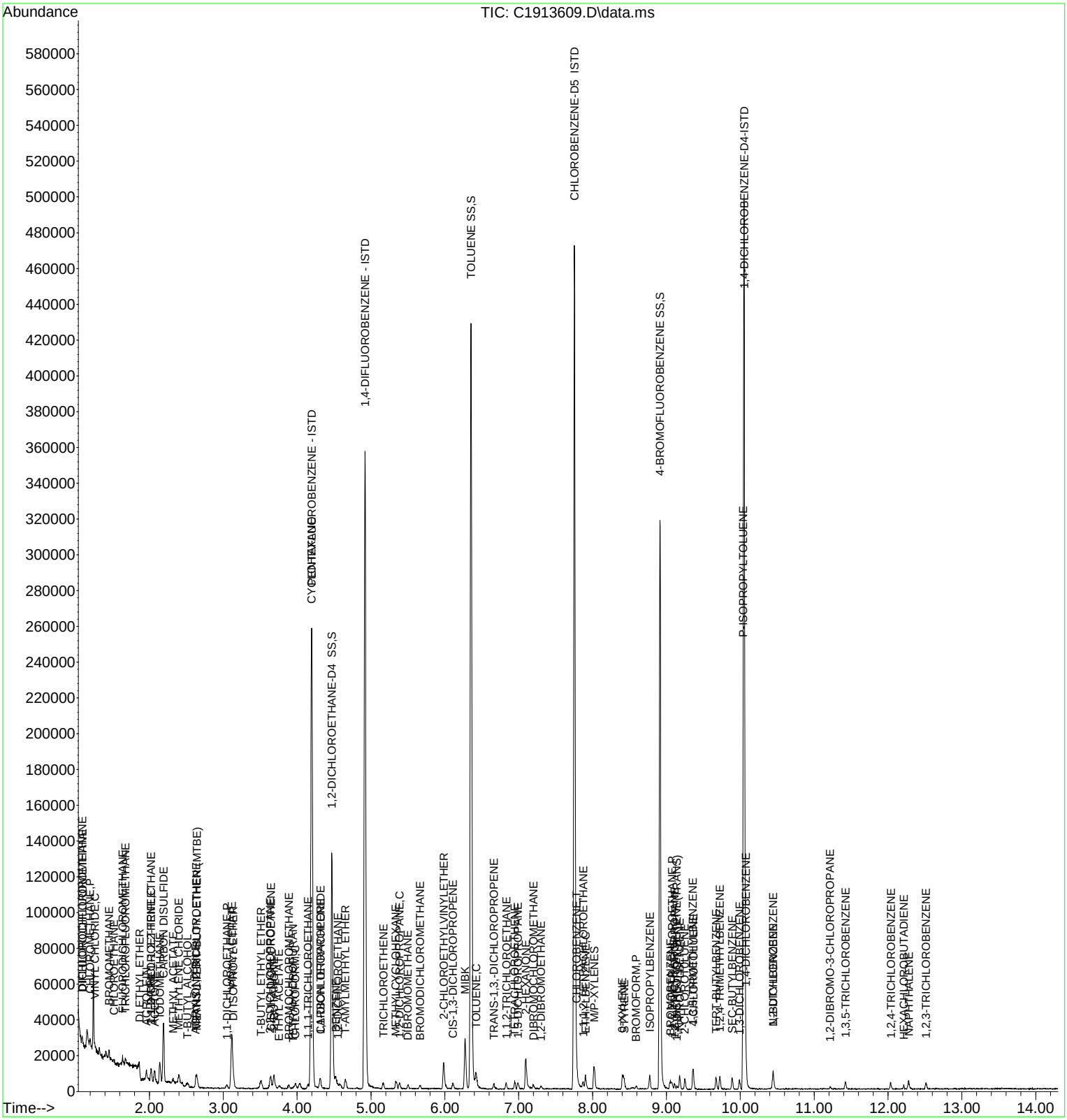
Operator :
Sample : 8260STD 0.5PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 9 Sample Multiplier: 1

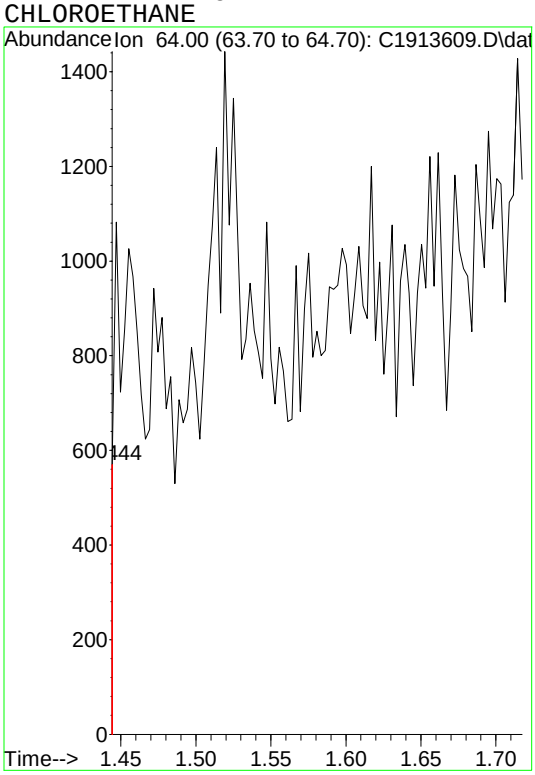
Quant Time: May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

Quant Time : Thu May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
CHLOROETHANE



Original Int. Results

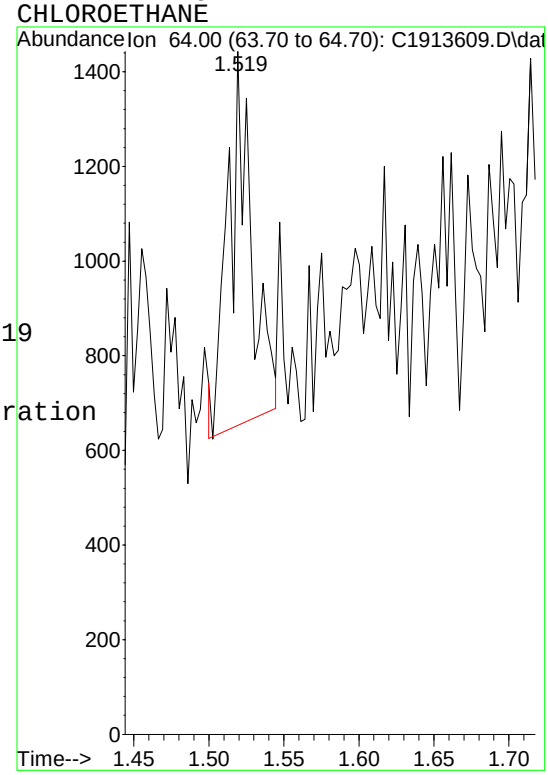
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

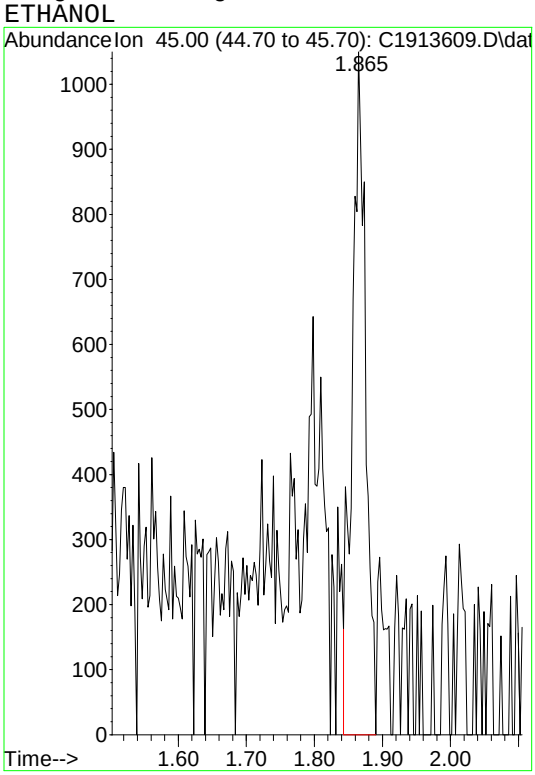
Thu May 16 14:37:45 2019

MIuser: EEH
Reason: Incorret Integration
RT : 1.52
Area : 830
Amount: 0.434517

Manual Integration
CHLOROETHANE



Original Integration
ETHANOL



Original Int. Results

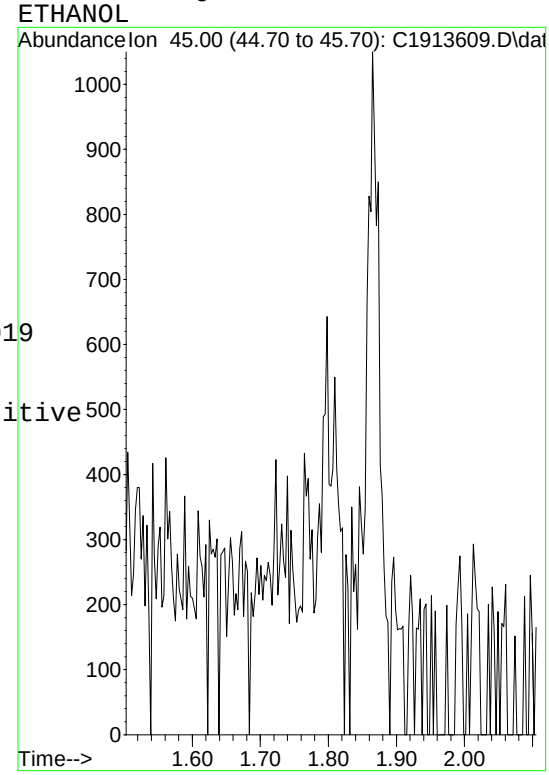
RT : 1.87
Area : 1444
Amount: 3.76042

Manual Int. Results

Thu May 16 14:37:51 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

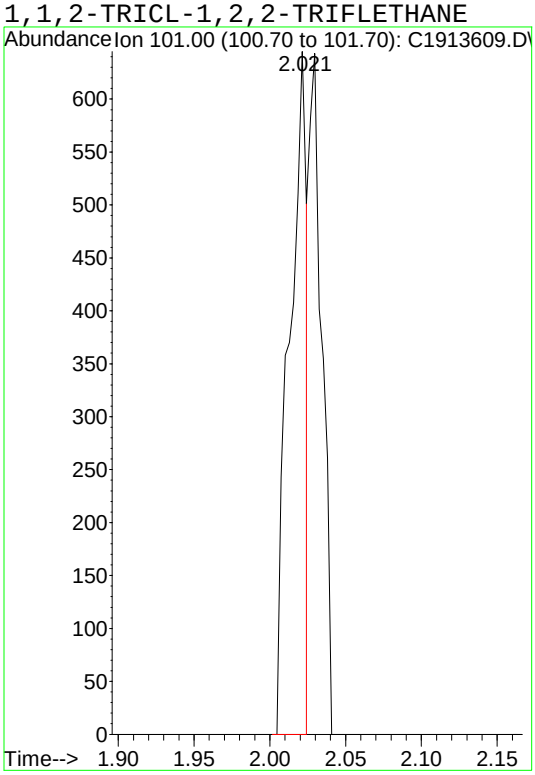
Manual Integration
ETHANOL



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

Quant Time : Thu May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
1,1,2-TRICL-1,2,2-TRIFLETHANE



Original Int. Results

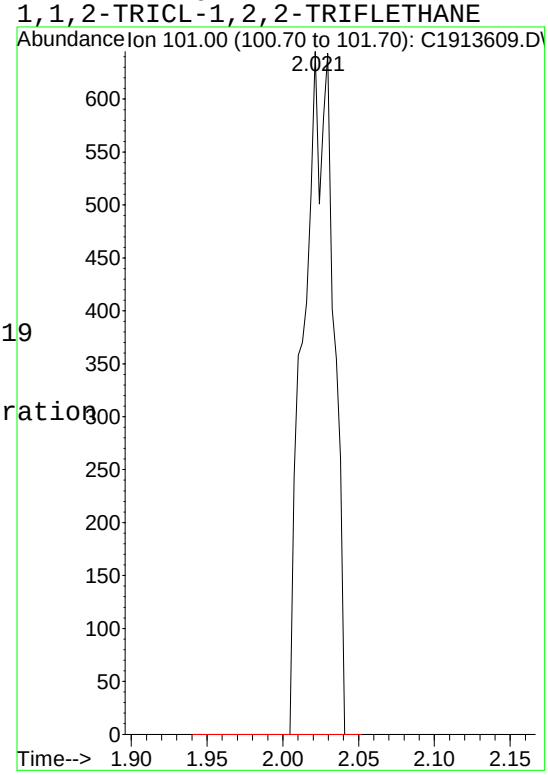
RT : 2.02
Area : 508
Amount: 0.270495

Manual Int. Results

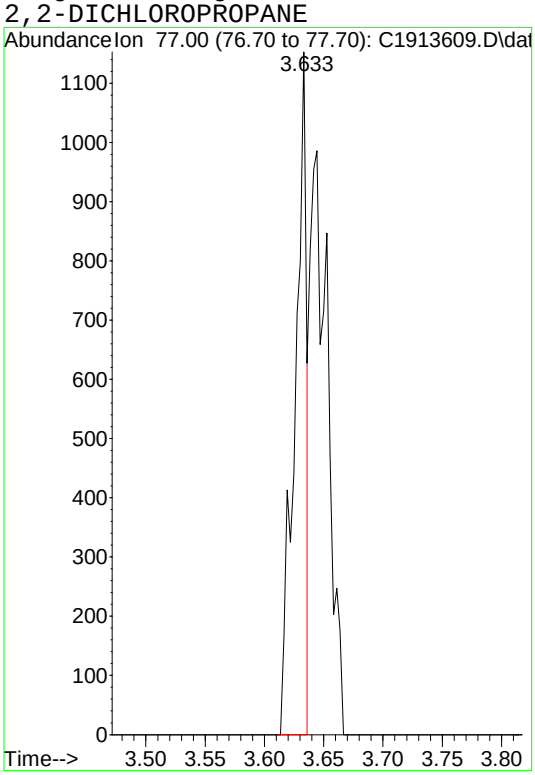
Thu May 16 14:37:56 2019

MIuser: EEH
Reason: Incorret Integration
RT : 2.02
Area : 883
Amount: 0.470171

Manual Integration
1,1,2-TRICL-1,2,2-TRIFLETHANE



Original Integration
2,2-DICHLOROPROPANE



Original Int. Results

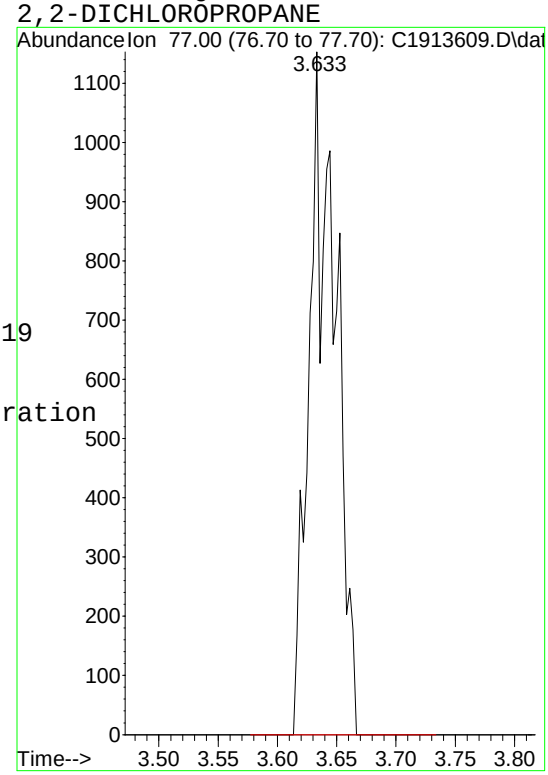
RT : 3.63
Area : 776
Amount: 0.227808

Manual Int. Results

Thu May 16 14:38:06 2019

MIuser: EEH
Reason: Incorret Integration
RT : 3.63
Area : 1793
Amount: 0.526366

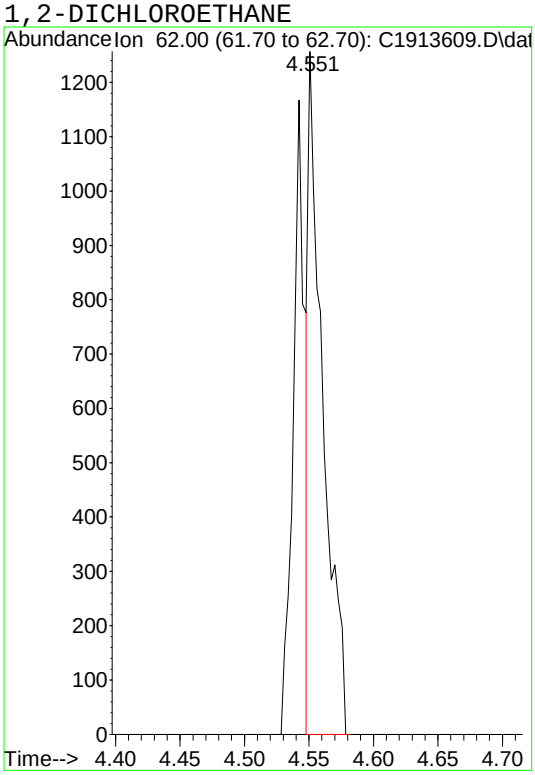
Manual Integration
2,2-DICHLOROPROPANE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

Quant Time : Thu May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
1,2-DICHLOROETHANE



Original Int. Results

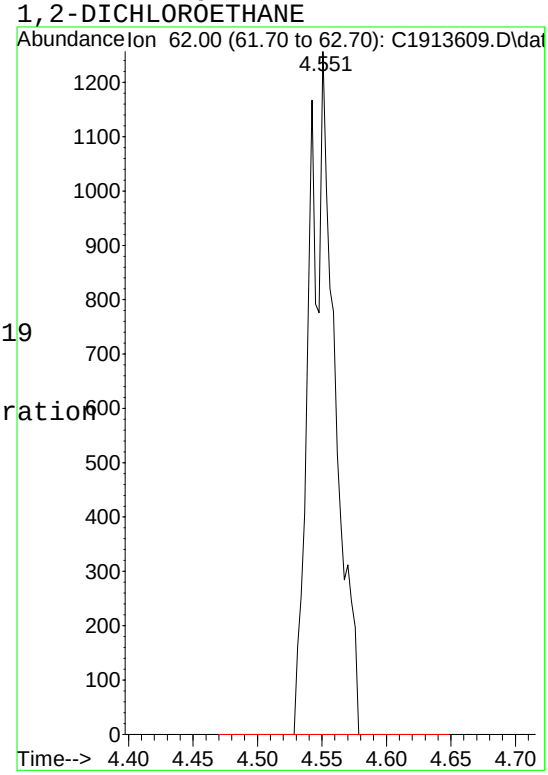
RT : 4.55
Area : 972
Amount: 0.208962

Manual Int. Results

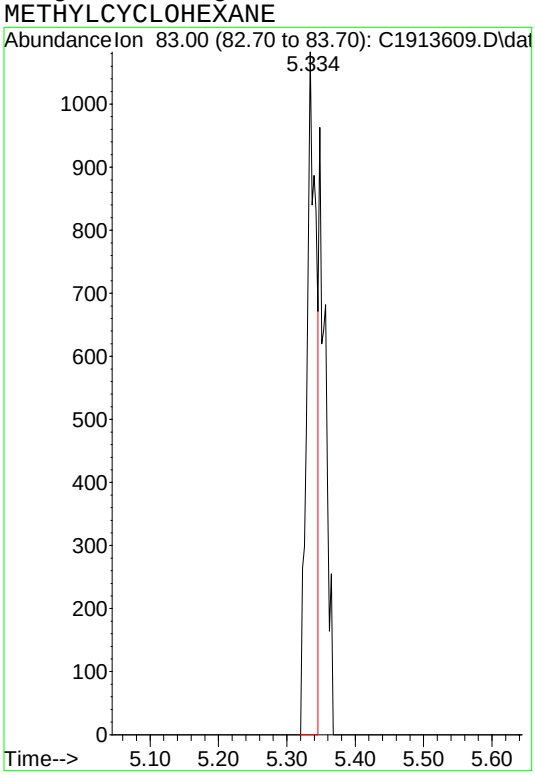
Thu May 16 14:38:16 2019

MIuser: EEH
Reason: Incorret Integration
RT : 4.55
Area : 1702
Amount: 0.365899

Manual Integration
1,2-DICHLOROETHANE



Original Integration
METHYLCYCLOHEXANE



Original Int. Results

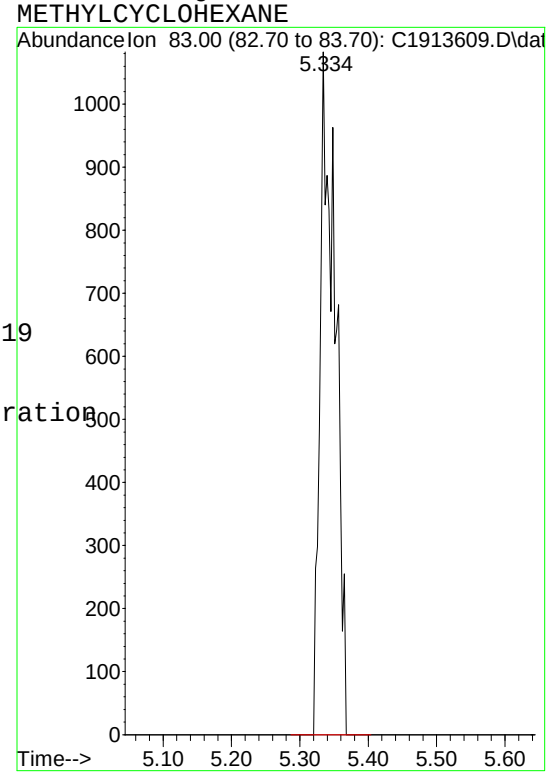
RT : 5.33
Area : 1025
Amount: 0.344971

Manual Int. Results

Thu May 16 14:38:20 2019

MIuser: EEH
Reason: Incorret Integration
RT : 5.33
Area : 1648
Amount: 0.554647

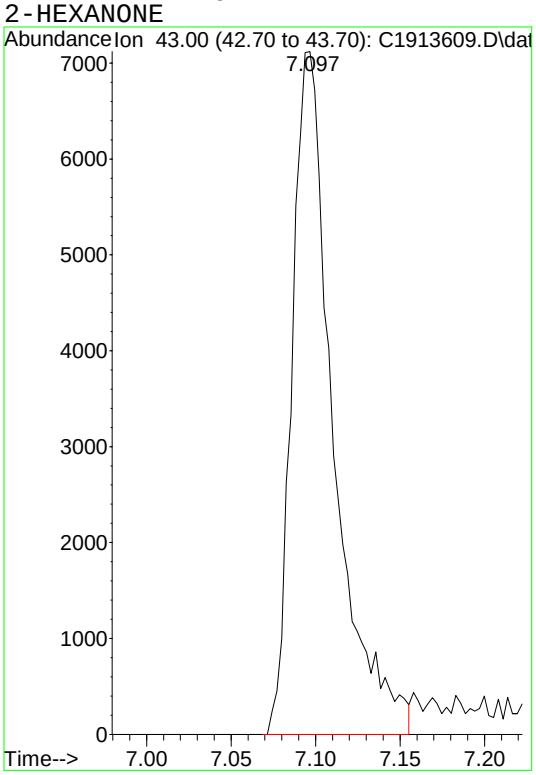
Manual Integration
METHYLCYCLOHEXANE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

Quant Time : Thu May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
2-HEXANONE



Original Int. Results

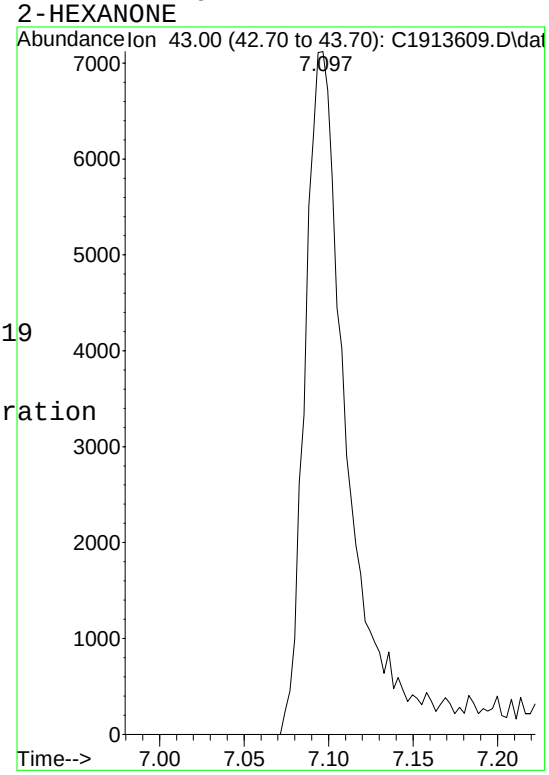
RT : 7.10
Area : 12087
Amount: 4.29883

Manual Int. Results

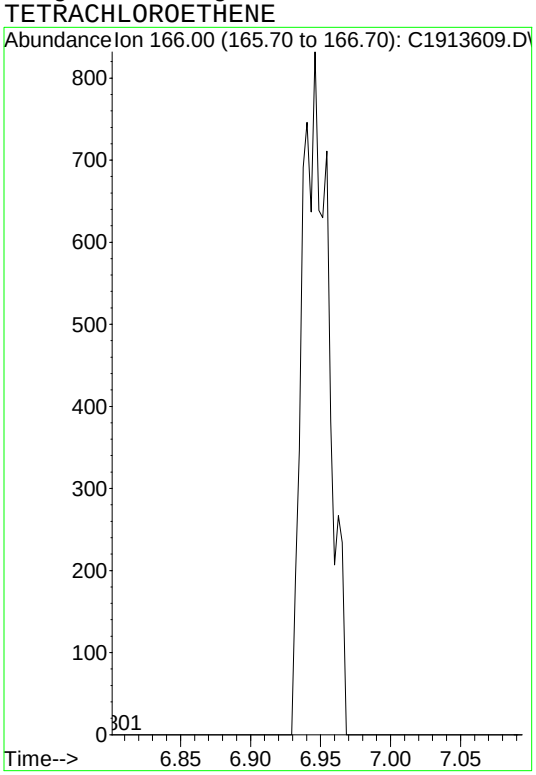
Thu May 16 14:38:32 2019

MIuser: EEH
Reason: Incorret Integration
RT : 7.10
Area : 13310
Amount: 4.7338

Manual Integration
2-HEXANONE



Original Integration
TETRACHLOROETHENE



Original Int. Results

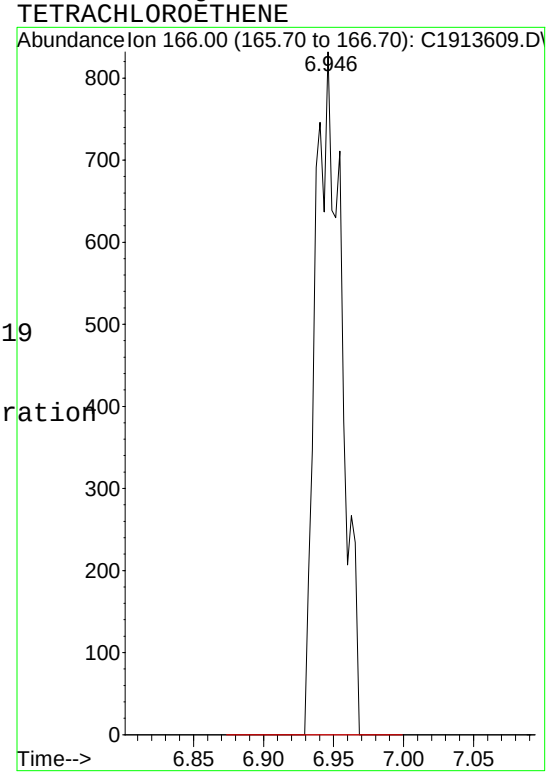
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

Thu May 16 14:38:35 2019

MIuser: EEH
Reason: Incorret Integration
RT : 6.95
Area : 1090
Amount: 0.526856

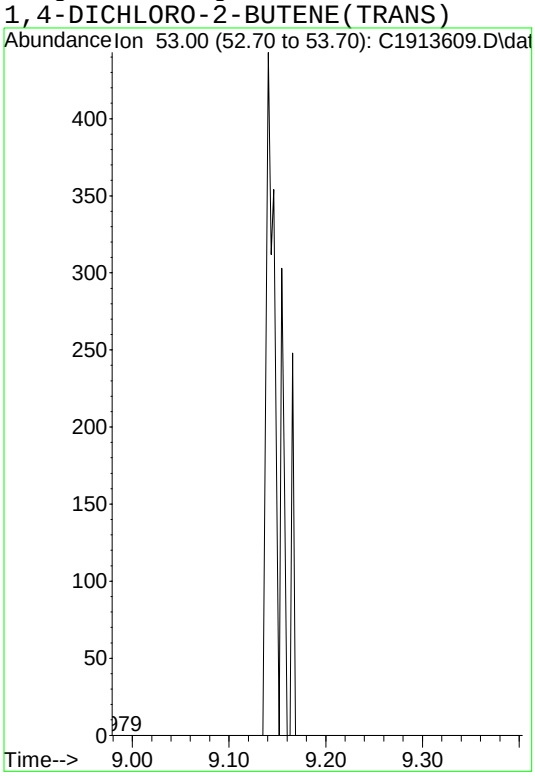
Manual Integration
TETRACHLOROETHENE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

Quant Time : Thu May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
1,4-DICHLORO-2-BUTENE(TRANS)



Original Int. Results

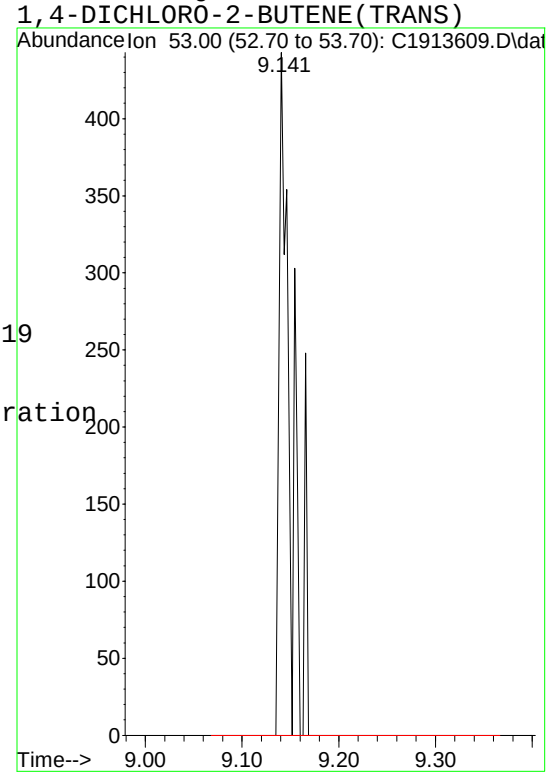
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

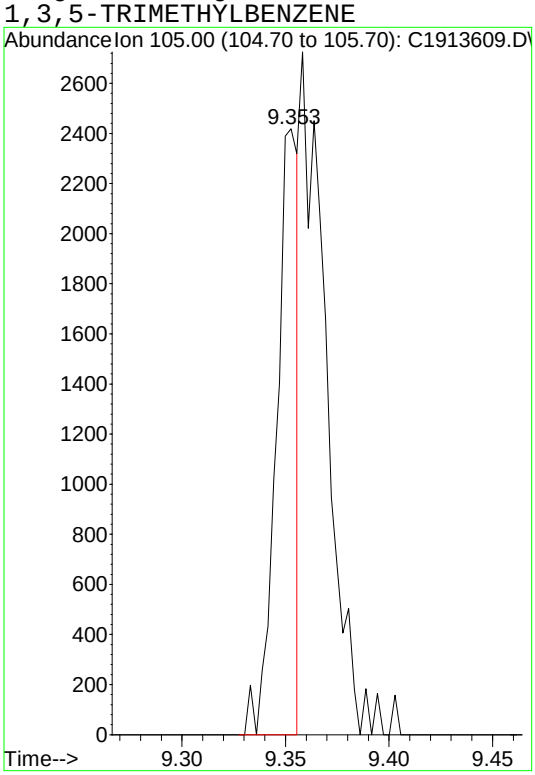
Thu May 16 14:38:46 2019

MIuser: EEH
Reason: Incorret Integration
RT : 9.14
Area : 370
Amount: 0.351195

Manual Integration
1,4-DICHLORO-2-BUTENE(TRANS)



Original Integration
1,3,5-TRIMETHYLBENZENE



Original Int. Results

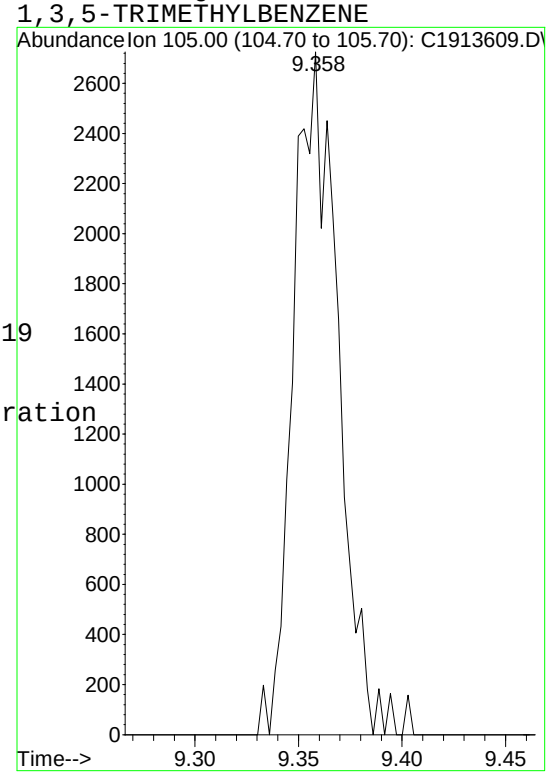
RT : 9.35
Area : 1746
Amount: 0.226029

Manual Int. Results

Thu May 16 14:38:51 2019

MIuser: EEH
Reason: Incorret Integration
RT : 9.36
Area : 4114
Amount: 0.532579

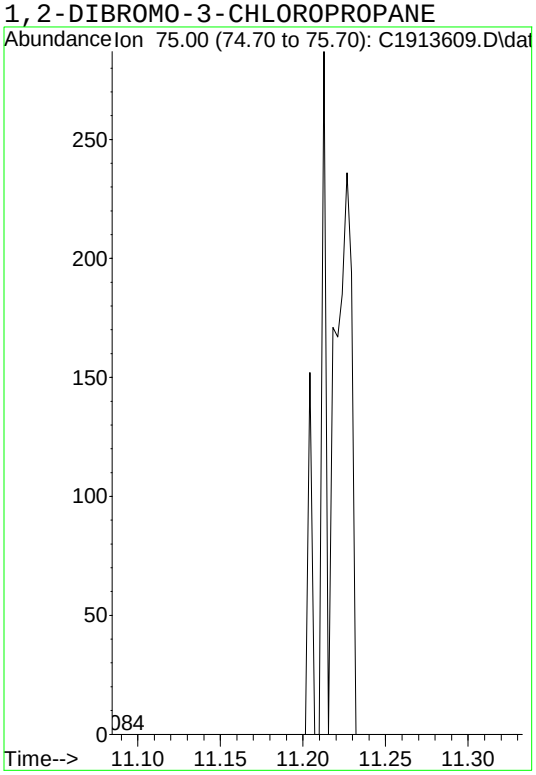
Manual Integration
1,3,5-TRIMETHYLBENZENE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

Quant Time : Thu May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
1,2-DIBROMO-3-CHLOROPROPANE



Original Int. Results

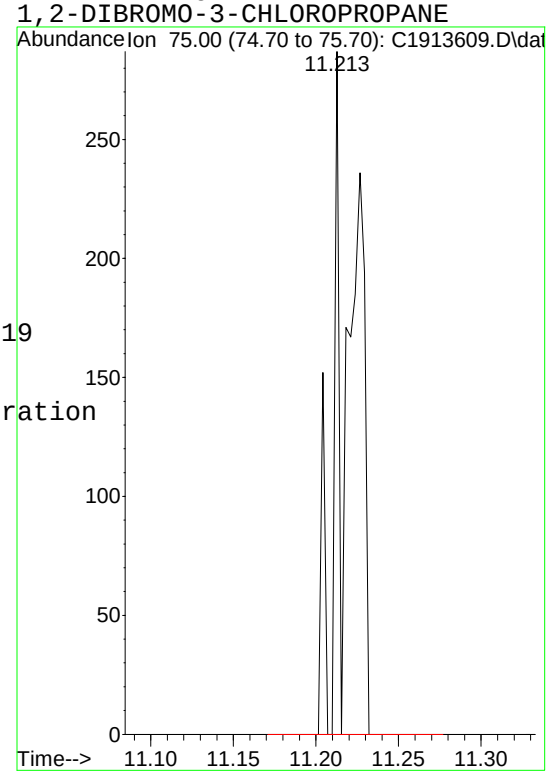
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

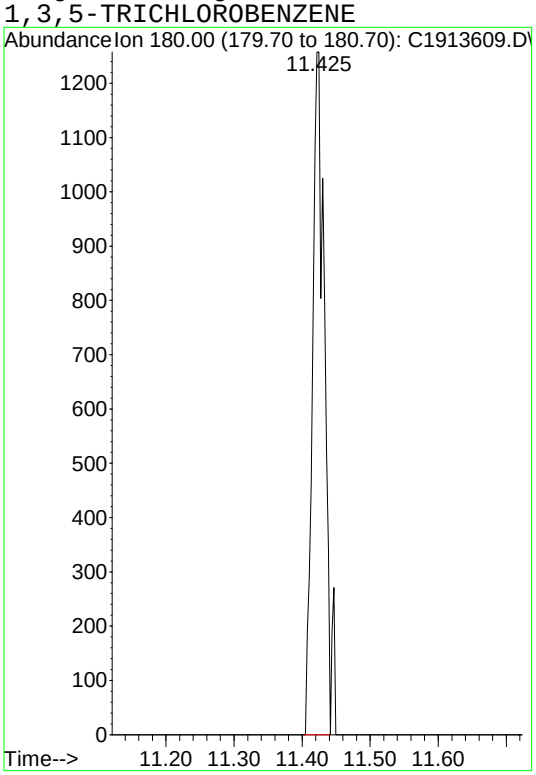
Thu May 16 14:38:58 2019

MIuser: EEH
Reason: Incorret Integration
RT : 11.21
Area : 233
Amount: 0.324069

Manual Integration
1,2-DIBROMO-3-CHLOROPROPANE



Original Integration
1,3,5-TRICHLOROBENZENE



Original Int. Results

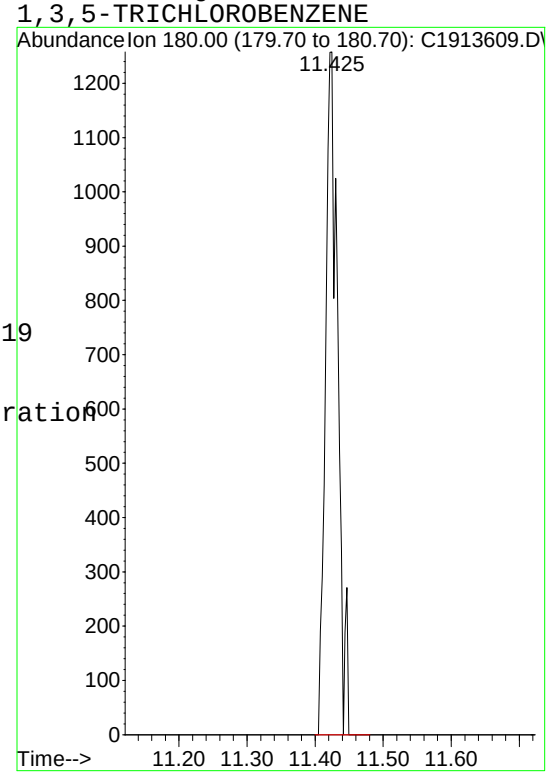
RT : 11.42
Area : 1471
Amount: 0.492718

Manual Int. Results

Thu May 16 14:39:02 2019

MIuser: EEH
Reason: Incorret Integration
RT : 11.42
Area : 1548
Amount: 0.51851

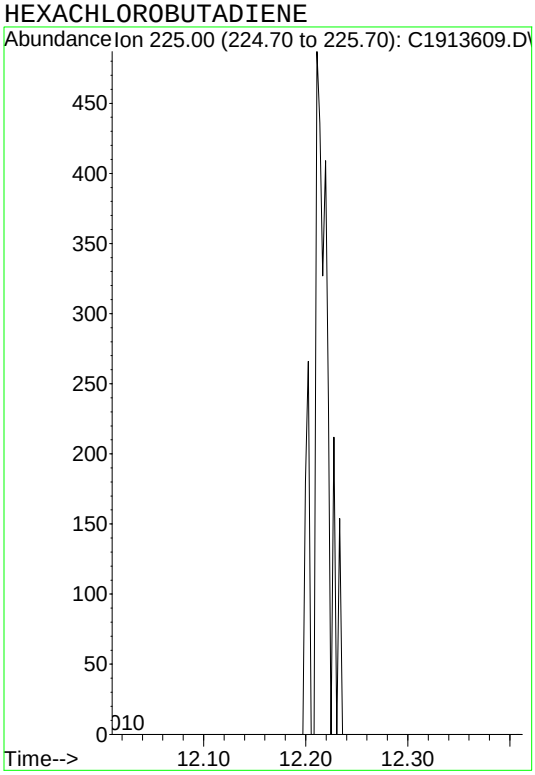
Manual Integration
1,3,5-TRICHLOROBENZENE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

Quant Time : Thu May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
HEXACHLOROBUTADIENE



Original Int. Results

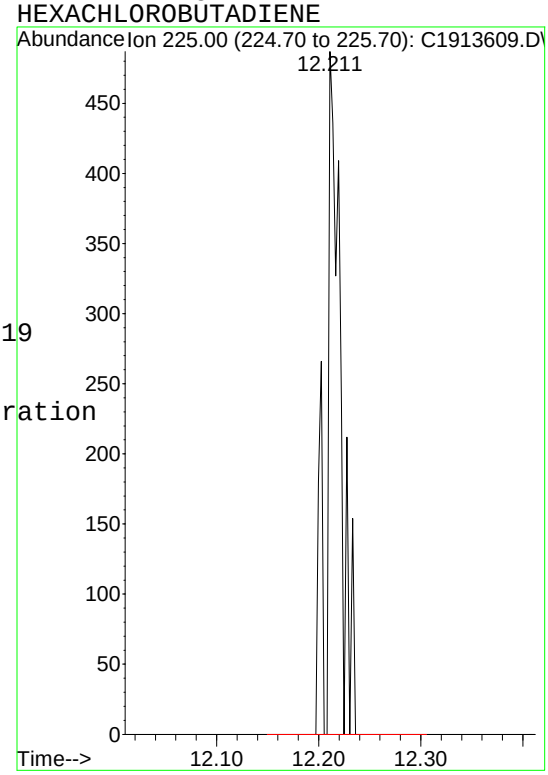
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

Thu May 16 14:39:05 2019

MIuser: EEH
Reason: Incorret Integration
RT : 12.21
Area : 453
Amount: 0.470498

Manual Integration
HEXACHLOROBUTADIENE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913611.D
Acq On : 16 May 2019 11:31 am
Operator :
Sample : 8260STD 2.0PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 16 14:41:20 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.199	168	167139	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	251921	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	126925	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	122166	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	78891	18.40	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 73.60%				
49) TOLUENE SS	6.355	98	255886	24.47	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 97.88%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	95865	24.14	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 96.56%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	5973	1.75	UG/L		100
4) DIFLUOROCHLOROMETHANE	1.095	51	6861	1.66	UG/L	#	100
5) CHLOROMETHANE	1.196	50	8793	2.21	UG/L	#	30
6) VINYL CHLORIDE	1.260	62	6092	1.88	UG/L	#	85
7) BROMOMETHANE	1.450	94	3753	1.90	UG/L		95
8) CHLOROETHANE	1.517	64	4074	2.03	UG/L		100
9) FLUORODICHLOROMETHANE	1.639	67	9272	1.88	UG/L		99
10) TRICHLOROFLUOROMETHANE	1.678	101	6961	1.65	UG/L		96
11) ETHANOL	1.798	45	1347m	0.48	UG/L		
12) DI ETHYL ETHER	1.865	59	4155	1.66	UG/L	#	87
13) ACROLEIN	1.957	56	12439	18.05	UG/L		93
14) ACETONE	2.071	43	20903	16.15	UG/L		96
15) 1,1-DICHLOROETHENE	2.027	61	7031	1.69	UG/L		94
16) 1,1,2-TRICL-1,2,2-TRIF...	2.024	101	3790	1.92	UG/L		82
17) IODOMETHANE	2.141	142	48871	20.62	UG/L		99
20) METHYL ACETATE	2.322	43	6089	0.90	UG/L	#	93
21) T-BUTYL ALCOHOL	2.520	59	7606	15.76	UG/L	#	84
22) ACRYLONITRILE	2.626	53	2599	1.68	UG/L		96
23) METHYLENE CHLORIDE	2.403	49	7026	1.55	UG/L		99
24) CARBON DISULFIDE	2.191	76	128945	20.30	UG/L		100
25) METHYL TERT-BUTYL ETHE...	2.643	73	15320	1.85	UG/L		96
26) TRANS 1,2-DICHLOROETHENE	2.632	61	6925	1.74	UG/L		91
27) 1,1-DICHLOROETHANE	3.047	63	9248	1.80	UG/L		98
28) VINYL ACETATE	3.114	43	173108	21.66	UG/L	#	89
29) DI ISOPROYL ETHER	3.137	45	19614	1.81	UG/L		97
31) 2-BUTANONE	3.683	43	36492	17.31	UG/L		99
32) T-BUTYL ETHYL ETHER	3.510	59	16428	1.64	UG/L		99
33) CIS-1,2-DICHLOROETHENE	3.647	61	8258	1.66	UG/L		90
34) 2,2-DICHLOROPROPANE	3.644	77	6874	1.92	UG/L		93
35) ETHYL ACETATE	3.753	43	7345	3.43	UG/L		96
38) BROMOCHLOROMETHANE	3.884	49	4957	1.92	UG/L		93
39) TETRAHYDROFURAN	3.948	42	2317	1.92	UG/L	#	69
40) CHLOROFORM	3.976	83	8728	1.81	UG/L		97
41) 1,1,1-TRICHLOROETHANE	4.146	97	6919	1.65	UG/L		93
42) CYCLOHEXANE	4.199	56	11500	1.58	UG/L	#	82
43) CARBON TETRACHLORIDE	4.308	117	5855	1.65	UG/L		99
44) 1,1-DICHLOROPROPENE	4.316	75	6246	1.74	UG/L		94
45) BENZENE	4.520	78	19650	1.89	UG/L	#	90
47) T-AMYLMETHYL ETHER	4.654	73	15083	1.94	UG/L		95
50) 1,2-DICHLOROETHANE	4.548	62	7204	1.47	UG/L		97
51) TRICHLOROETHENE	5.170	95	4589	1.86	UG/L		98
52) METHYLCYCLOHEXANE	5.340	83	6374	2.04	UG/L		93
53) 1,2-DICHLOROPROPANE	5.387	63	5330	1.94	UG/L	#	97

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913611.D
Acq On : 16 May 2019 11:31 am
Operator :
Sample : 8260STD 2.0PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 11 Sample Multiplier: 1

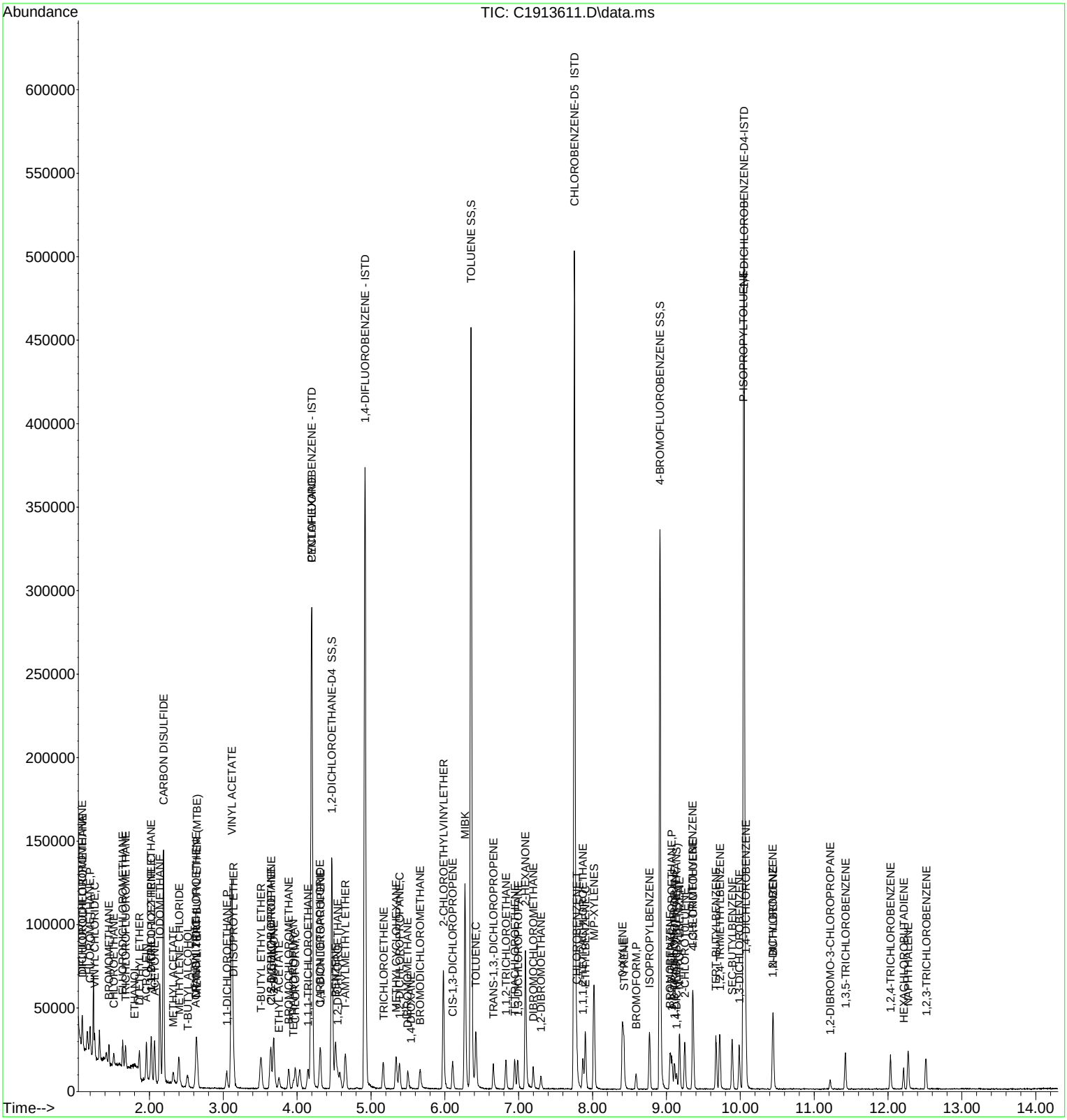
Quant Time: May 16 14:41:20 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
54) DIBROMOMETHANE	5.496	93	3516	1.99	UG/L		88
56) 1,4-DIOXANE	5.541	88	498m	12.39	UG/L		
57) BROMODICHLOROMETHANE	5.663	83	6602	1.86	UG/L		97
58) 2-CHLOROETHYLVINYLETHER	5.981	63	25244	10.86	UG/L		97
59) MIBK	6.271	43	75869	18.95	UG/L		97
60) CIS-1,3-DICHLOROPROPENE	6.107	75	8311	2.09	UG/L		92
61) TOLUENE	6.419	91	20370	2.01	UG/L		96
62) TRANS-1,3,-DICHLOROPRO...	6.656	75	7328	2.04	UG/L		91
64) 1,1,2-TRICHLOROETHANE	6.826	97	4833	1.98	UG/L		96
65) 2-HEXANONE	7.091	43	52713	17.85	UG/L		96
66) TETRACHLOROETHENE	6.949	166	4827	2.22	UG/L		98
67) 1,3-DICHLOROPROPANE	6.991	76	8481	1.91	UG/L		99
68) DIBROMOCHLOROMETHANE	7.197	129	5472	2.09	UG/L		94
69) 1,2-DIBROMOETHANE	7.303	107	5172	1.99	UG/L		99
72) CHLOROBENZENE	7.785	112	12963	2.15	UG/L	#	81
73) 1,1,1,2-TETRACHLOROETHANE	7.869	131	4906	2.36	UG/L		92
74) ETHYLBENZENE	7.902	91	22211	2.16	UG/L		95
75) M/P-XYLENES	8.020	91	33622	4.01	UG/L		95
76) 0-XYLENE	8.404	91	16982	1.94	UG/L		96
77) STYRENE	8.424	104	13395	2.12	UG/L		92
78) BROMOFORM	8.589	173	3801	2.32	UG/L	#	88
79) ISOPROPYLBENZENE	8.770	105	19790	2.19	UG/L		97
81) 1,1,2,2-TETRACHLOROETHANE	9.071	83	7248	2.13	UG/L	#	93
82) 1,4-DICHLORO-2-BUTENE(...	9.138	53	1678	1.51	UG/L		91
83) BROMOBENZENE	9.049	77	8981	2.04	UG/L		90
84) 1,2,3-TRICHLOROPROPANE	9.107	75	6313	1.73	UG/L		96
85) N-PROPYLBENZENE	9.177	91	22537	1.91	UG/L		97
86) 2-CHLOROT0LUENE	9.249	91	14876	1.96	UG/L		95
87) 1,3,5-TRIMETHYLBENZENE	9.355	105	16094	1.98	UG/L		95
88) 4-CHLOROTOLUENE	9.361	91	17321	1.92	UG/L		94
90) TERT-BUTYLBENZENE	9.671	119	13257	1.94	UG/L		93
91) 1,2,4-TRIMETHYLBENZENE	9.723	105	16616	1.85	UG/L		96
92) SEC-BUTYLBENZENE	9.891	105	18802	1.97	UG/L		96
93) 1,3-DICHLOROBENZENE	9.988	146	9644	1.97	UG/L		98
94) P-ISOPROPYLTOLUENE	10.041	119	15822	1.92	UG/L		96
95) 1,4-DICHLOROBENZENE	10.075	146	10553	1.95	UG/L		94
96) N-BUTYLBENZENE	10.446	91	14263	1.90	UG/L		92
97) 1,2-DICHLOROBENZENE	10.437	146	9938	1.99	UG/L		100
98) 1,2-DIBROMO-3-CHLOROPR...	11.215	75	1406	1.85	UG/L	#	76
99) 1,3,5-TRICHLOROBENZENE	11.425	180	6693	2.12	UG/L		98
100) 1,2,4-TRICHLOROBENZENE	12.035	180	6153	1.95	UG/L		97
101) HEXACHLOROBUTADIENE	12.211	225	2667	2.61	UG/L		96
102) NAPHTHALENE	12.272	128	16699	1.70	UG/L		98
103) 1,2,3-TRICHLOROBENZENE	12.518	180	5655	1.88	UG/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913611.D
Acq On : 16 May 2019 11:31 am
Operator :
Sample : 8260STD 2.0PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 11 Sample Multiplier: 1

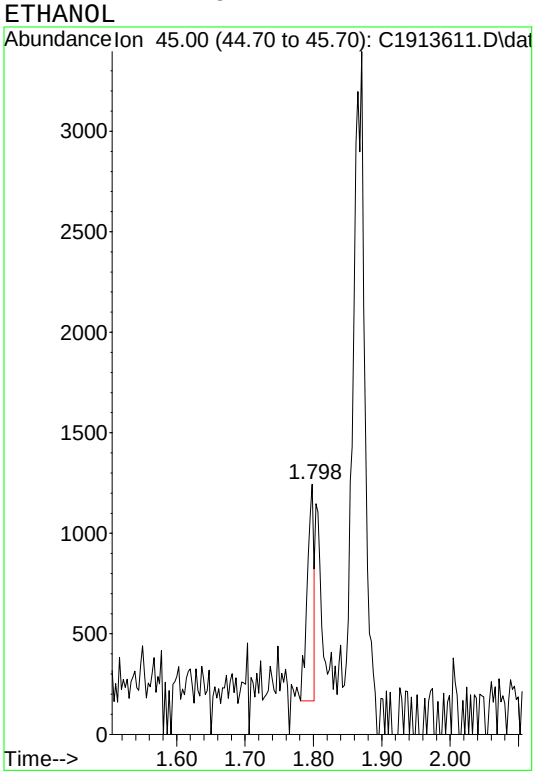
Quant Time: May 16 14:41:20 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913611.D
Acq On : 16 May 2019 11:31 am
Operator :
Sample : 8260STD 2.0PPB 1905273
Misc :

Quant Time : Thu May 16 14:41:20 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
ETHANOL



Original Int. Results

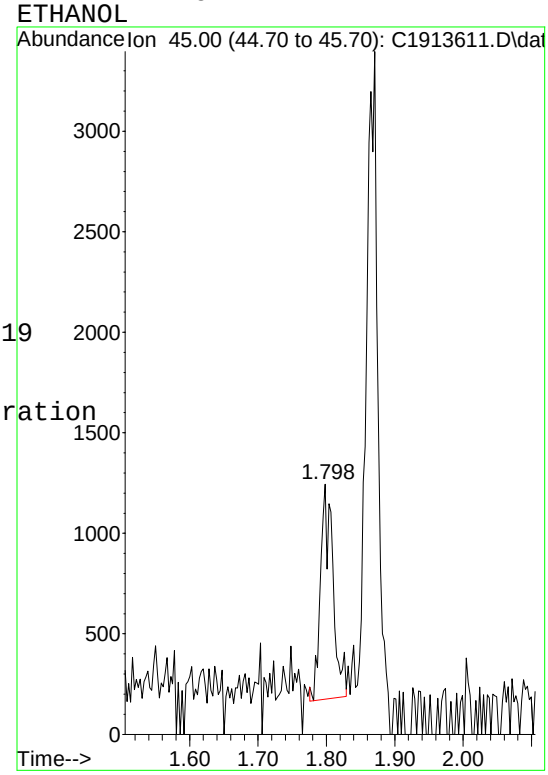
RT : 1.80
Area : 710
Amount: -11.6589

Manual Int. Results

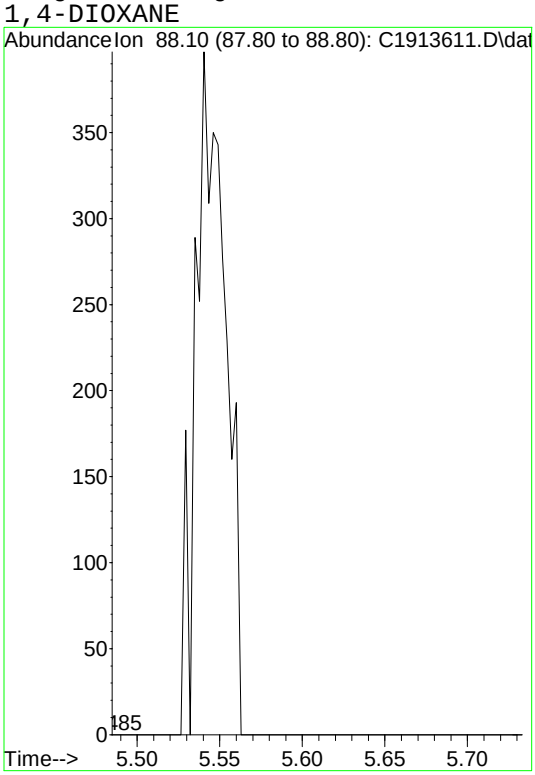
Thu May 16 14:40:55 2019

MIuser: EEH
Reason: Incorret Integration
RT : 1.80
Area : 1347
Amount: 0.478618

Manual Integration
ETHANOL



Original Integration
1,4-DIOXANE



Original Int. Results

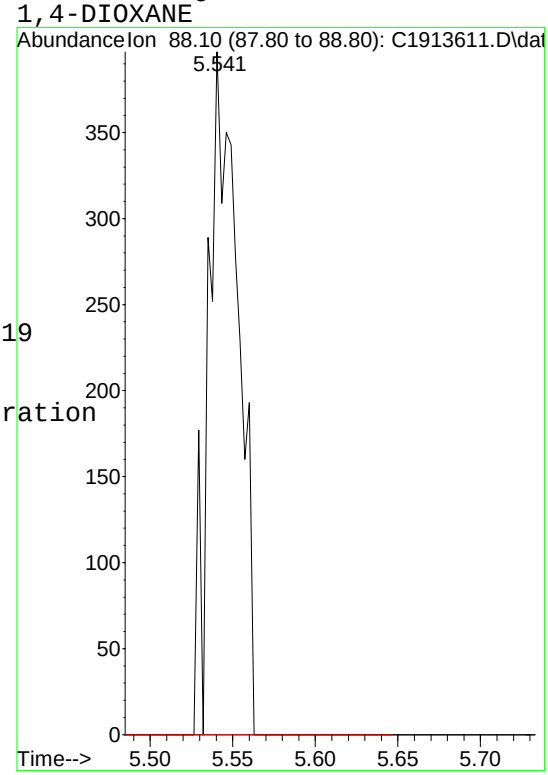
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

Thu May 16 14:41:20 2019

MIuser: EEH
Reason: Incorret Integration
RT : 5.54
Area : 498
Amount: 12.3903

Manual Integration
1,4-DIOXANE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913612.D
Acq On : 16 May 2019 11:58 am
Operator :
Sample : 8260STD 5.0PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 16 14:42:02 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.196	168	164218	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	249076	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	125618	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	118950	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	79096	18.78	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 75.12%				
49) TOLUENE SS	6.355	98	246832	23.87	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 95.48%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	91353	23.24	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 92.96%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	13733	4.10	UG/L		99
4) DIFLUOROCHLOROMETHANE	1.093	51	16152	3.98	UG/L	#	100
5) CHLOROMETHANE	1.196	50	18156	4.64	UG/L	#	21
6) VINYL CHLORIDE	1.260	62	14175	4.44	UG/L		97
7) BROMOMETHANE	1.452	94	8776	5.73	UG/L		86
8) CHLOROETHANE	1.516	64	8177	4.14	UG/L		100
9) FLUORODICHLOROMETHANE	1.639	67	20962	4.33	UG/L		99
10) TRICHLOROFLUOROMETHANE	1.675	101	15723	3.79	UG/L		99
11) ETHANOL	1.801	45	2771	28.55	UG/L	#	83
12) DI ETHYL ETHER	1.868	59	9907	4.04	UG/L		94
13) ACROLEIN	1.957	56	33059	48.83	UG/L		97
14) ACETONE	2.071	43	48525	38.15	UG/L		97
15) 1,1-DICHLOROETHENE	2.027	61	16266	3.98	UG/L		98
16) 1,1,2-TRICL-1,2,2-TRIF...	2.024	101	8909	4.59	UG/L		81
17) IODOMETHANE	2.141	142	123646	47.12	UG/L		100
20) METHYL ACETATE	2.320	43	14530	2.18	UG/L		99
21) T-BUTYL ALCOHOL	2.515	59	18333	38.65	UG/L	#	97
22) ACRYLONITRILE	2.621	53	6148	4.04	UG/L		99
23) METHYLENE CHLORIDE	2.398	49	16630	3.74	UG/L		98
24) CARBON DISULFIDE	2.191	76	307845	49.33	UG/L		99
25) METHYL TERT-BUTYL ETHE...	2.646	73	34389	4.23	UG/L		99
26) TRANS 1,2-DICHLOROETHENE	2.635	61	15560	3.98	UG/L		95
27) 1,1-DICHLOROETHANE	3.047	63	21360	4.24	UG/L		96
28) VINYL ACETATE	3.114	43	422460	53.79	UG/L		99
29) DI ISOPROYL ETHER	3.131	45	45693	4.30	UG/L		99
31) 2-BUTANONE	3.680	43	90245	43.58	UG/L		100
32) T-BUTYL ETHYL ETHER	3.507	59	38227	3.88	UG/L		97
33) CIS-1,2-DICHLOROETHENE	3.647	61	18894	3.85	UG/L		93
34) 2,2-DICHLOROPROPANE	3.641	77	15443	4.39	UG/L		92
35) ETHYL ACETATE	3.750	43	18369	8.74	UG/L	#	92
38) BROMOCHLOROMETHANE	3.884	49	11586	4.58	UG/L		93
39) TETRAHYDROFURAN	3.945	42	5556	4.69	UG/L		100
40) CHLOROFORM	3.976	83	20387	4.31	UG/L		96
41) 1,1,1-TRICHLOROETHANE	4.143	97	16165	3.93	UG/L		95
42) CYCLOHEXANE	4.193	56	22290	4.11	UG/L		94
43) CARBON TETRACHLORIDE	4.313	117	13583	3.89	UG/L		99
44) 1,1-DICHLOROPROPENE	4.313	75	15439	4.38	UG/L		94
45) BENZENE	4.523	78	45771	4.48	UG/L		98
47) T-AMYLMETHYL ETHER	4.651	73	34053	4.47	UG/L		97
50) 1,2-DICHLOROETHANE	4.550	62	16805	3.48	UG/L	#	84
51) TRICHLOROETHENE	5.167	95	11248	4.60	UG/L		91
52) METHYLCYCLOHEXANE	5.340	83	14501	4.70	UG/L		97
53) 1,2-DICHLOROPROPANE	5.384	63	13053	4.82	UG/L	#	97

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913612.D
Acq On : 16 May 2019 11:58 am
Operator :
Sample : 8260STD 5.0PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 12 Sample Multiplier: 1

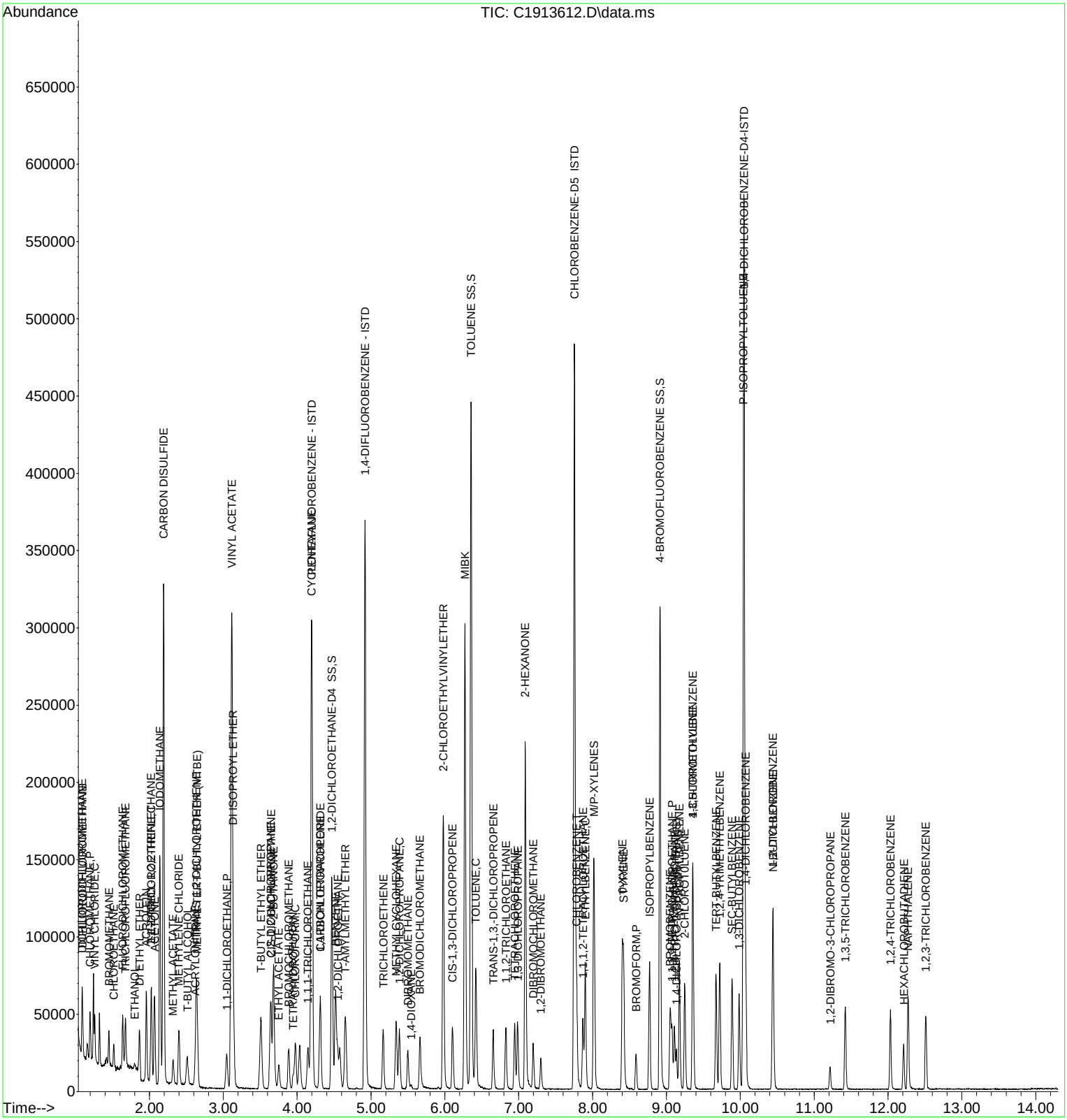
Quant Time: May 16 14:42:02 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
54) DIBROMOMETHANE	5.501	93	7939	4.55	UG/L		93
56) 1,4-DIOXANE	5.543	88	1554	39.11	UG/L	#	54
57) BROMODICHLOROMETHANE	5.660	83	15534	4.42	UG/L		95
58) 2-CHLOROETHYLVINYLETHER	5.978	63	63501	27.62	UG/L		98
59) MIBK	6.271	43	187585	47.38	UG/L		97
60) CIS-1,3-DICHLOROPROPENE	6.104	75	20125	5.12	UG/L		92
61) TOLUENE	6.419	91	46591	4.64	UG/L		97
62) TRANS-1,3,-DICHLOROPRO...	6.656	75	17560	4.94	UG/L		91
64) 1,1,2-TRICHLOROETHANE	6.826	97	11286	4.69	UG/L		95
65) 2-HEXANONE	7.088	43	131896	45.16	UG/L		98
66) TETRACHLOROETHENE	6.949	166	11180	5.20	UG/L		96
67) 1,3-DICHLOROPROPANE	6.988	76	21310	4.85	UG/L		100
68) DIBROMOCHLOROMETHANE	7.197	129	12577	4.86	UG/L		99
69) 1,2-DIBROMOETHANE	7.297	107	12340	4.80	UG/L		99
72) CHLOROBENZENE	7.782	112	29407	4.93	UG/L	#	85
73) 1,1,1,2-TETRACHLOROETHANE	7.872	131	10546	5.12	UG/L		94
74) ETHYLBENZENE	7.902	91	51466	5.05	UG/L		97
75) M/P-XYLENES	8.019	91	77606	9.35	UG/L		98
76) 0-XYLENE	8.404	91	40608	4.68	UG/L		95
77) STYRENE	8.418	104	32525	5.20	UG/L		91
78) BROMOFORM	8.591	173	9460	5.84	UG/L		98
79) ISOPROPYLBENZENE	8.772	105	46043	5.14	UG/L		99
81) 1,1,2,2-TETRACHLOROETHANE	9.076	83	17943	5.33	UG/L		94
82) 1,4-DICHLORO-2-BUTENE(...	9.138	53	4517	4.12	UG/L		92
83) BROMOBENZENE	9.048	77	20960	4.80	UG/L		91
84) 1,2,3-TRICHLOROPROPANE	9.110	75	14848	4.11	UG/L		95
85) N-PROPYLBENZENE	9.177	91	53851	4.62	UG/L		96
86) 2-CHLOROT0LUENE	9.246	91	33410	4.45	UG/L		97
87) 1,3,5-TRIMETHYLBENZENE	9.358	105	37399	4.65	UG/L		96
88) 4-CHLOROTOLUENE	9.358	91	39046	4.38	UG/L		96
90) TERT-BUTYLBENZENE	9.673	119	31490	4.74	UG/L		95
91) 1,2,4-TRIMETHYLBENZENE	9.723	105	39244	4.50	UG/L		99
92) SEC-BUTYLBENZENE	9.888	105	45106	4.86	UG/L		93
93) 1,3-DICHLOROBENZENE	9.985	146	22800	4.78	UG/L		98
94) P-ISOPROPYLTOLUENE	10.041	119	38124	4.75	UG/L		97
95) 1,4-DICHLOROBENZENE	10.072	146	24529	4.66	UG/L	#	91
96) N-BUTYLBENZENE	10.446	91	33919	4.64	UG/L		94
97) 1,2-DICHLOROBENZENE	10.440	146	23383	4.81	UG/L		98
98) 1,2-DIBROMO-3-CHLOROPR...	11.218	75	3192	4.30	UG/L		92
99) 1,3,5-TRICHLOROBENZENE	11.422	180	15634	5.08	UG/L		98
100) 1,2,4-TRICHLOROBENZENE	12.032	180	14684	4.79	UG/L		100
101) HEXACHLOROBUTADIENE	12.216	225	5869	5.91	UG/L		96
102) NAPHTHALENE	12.269	128	43212	4.52	UG/L		98
103) 1,2,3-TRICHLOROBENZENE	12.509	180	14577	4.98	UG/L		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913612.D
Acq On : 16 May 2019 11:58 am
Operator :
Sample : 8260STD 5.0PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 16 14:42:02 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913613.D
Acq On : 16 May 2019 12:24 pm
Operator :
Sample : 8260STD 10PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 16 14:43:39 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.196	168	164323	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	250980	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	125807	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	120671	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	78253	18.57	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 74.28%				
49) TOLUENE SS	6.355	98	248661	23.87	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 95.48%				
71) 4-BROMOFLUOROBENZENE SS	8.915	95	92391	23.47	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 93.88%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	24501	7.32	UG/L		97
4) DIFLUOROCHLOROMETHANE	1.093	51	29568	7.28	UG/L	#	100
5) CHLOROMETHANE	1.196	50	33680	8.60	UG/L	#	26
6) VINYL CHLORIDE	1.260	62	26523	8.31	UG/L		97
7) BROMOMETHANE	1.447	94	13558	9.33	UG/L		94
8) CHLOROETHANE	1.514	64	14040	7.11	UG/L		93
9) FLUORODICHLOROMETHANE	1.636	67	40291	8.32	UG/L		97
10) TRICHLOROFLUOROMETHANE	1.675	101	28589	6.89	UG/L		97
11) ETHANOL	1.804	45	5548	82.34	UG/L	#	81
12) DI ETHYL ETHER	1.868	59	19117	7.78	UG/L		97
13) ACROLEIN	1.957	56	63355	93.53	UG/L		97
14) ACETONE	2.069	43	93179	73.21	UG/L		98
15) 1,1-DICHLOROETHENE	2.024	61	29677	7.26	UG/L		98
16) 1,1,2-TRICL-1,2,2-TRIF...	2.024	101	15809	8.14	UG/L		85
17) IODOMETHANE	2.141	142	259119	94.54	UG/L		100
20) METHYL ACETATE	2.320	43	29638	4.44	UG/L		99
21) T-BUTYL ALCOHOL	2.515	59	35372	74.53	UG/L	#	97
22) ACRYLONITRILE	2.618	53	12576	8.26	UG/L		97
23) METHYLENE CHLORIDE	2.398	49	31806	7.14	UG/L		98
24) CARBON DISULFIDE	2.191	76	585384	93.75	UG/L		99
25) METHYL TERT-BUTYL ETHE...	2.643	73	67549	8.29	UG/L		99
26) TRANS 1,2-DICHLOROETHENE	2.632	61	31121	7.96	UG/L		94
27) 1,1-DICHLOROETHANE	3.047	63	42570	8.45	UG/L		98
28) VINYL ACETATE	3.114	43	826003	105.11	UG/L		99
29) DI ISOPROYL ETHER	3.131	45	91123	8.57	UG/L		99
31) 2-BUTANONE	3.680	43	174275	84.10	UG/L		99
32) T-BUTYL ETHYL ETHER	3.508	59	74702	7.58	UG/L		98
33) CIS-1,2-DICHLOROETHENE	3.644	61	36688	7.48	UG/L		91
34) 2,2-DICHLOROPROPANE	3.639	77	29742	8.44	UG/L		92
35) ETHYL ACETATE	3.753	43	33397	15.88	UG/L		99
38) BROMOCHLOROMETHANE	3.884	49	23233	9.17	UG/L		92
39) TETRAHYDROFURAN	3.951	42	10695	9.03	UG/L		98
40) CHLOROFORM	3.973	83	39464	8.34	UG/L		96
41) 1,1,1-TRICHLOROETHANE	4.146	97	31275	7.59	UG/L		94
42) CYCLOHEXANE	4.196	56	37758	7.67	UG/L		95
43) CARBON TETRACHLORIDE	4.305	117	26100	7.46	UG/L		99
44) 1,1-DICHLOROPROPENE	4.316	75	28396	8.04	UG/L		94
45) BENZENE	4.523	78	89553	8.76	UG/L		99
47) T-AMYLMETHYL ETHER	4.654	73	66229	8.69	UG/L		96
50) 1,2-DICHLOROETHANE	4.548	62	32070	6.59	UG/L		100
51) TRICHLOROETHENE	5.164	95	21822	8.86	UG/L		89
52) METHYLCYCLOHEXANE	5.340	83	26938	8.66	UG/L		97
53) 1,2-DICHLOROPROPANE	5.384	63	26107	9.56	UG/L	#	96

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913613.D
Acq On : 16 May 2019 12:24 pm
Operator :
Sample : 8260STD 10PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 13 Sample Multiplier: 1

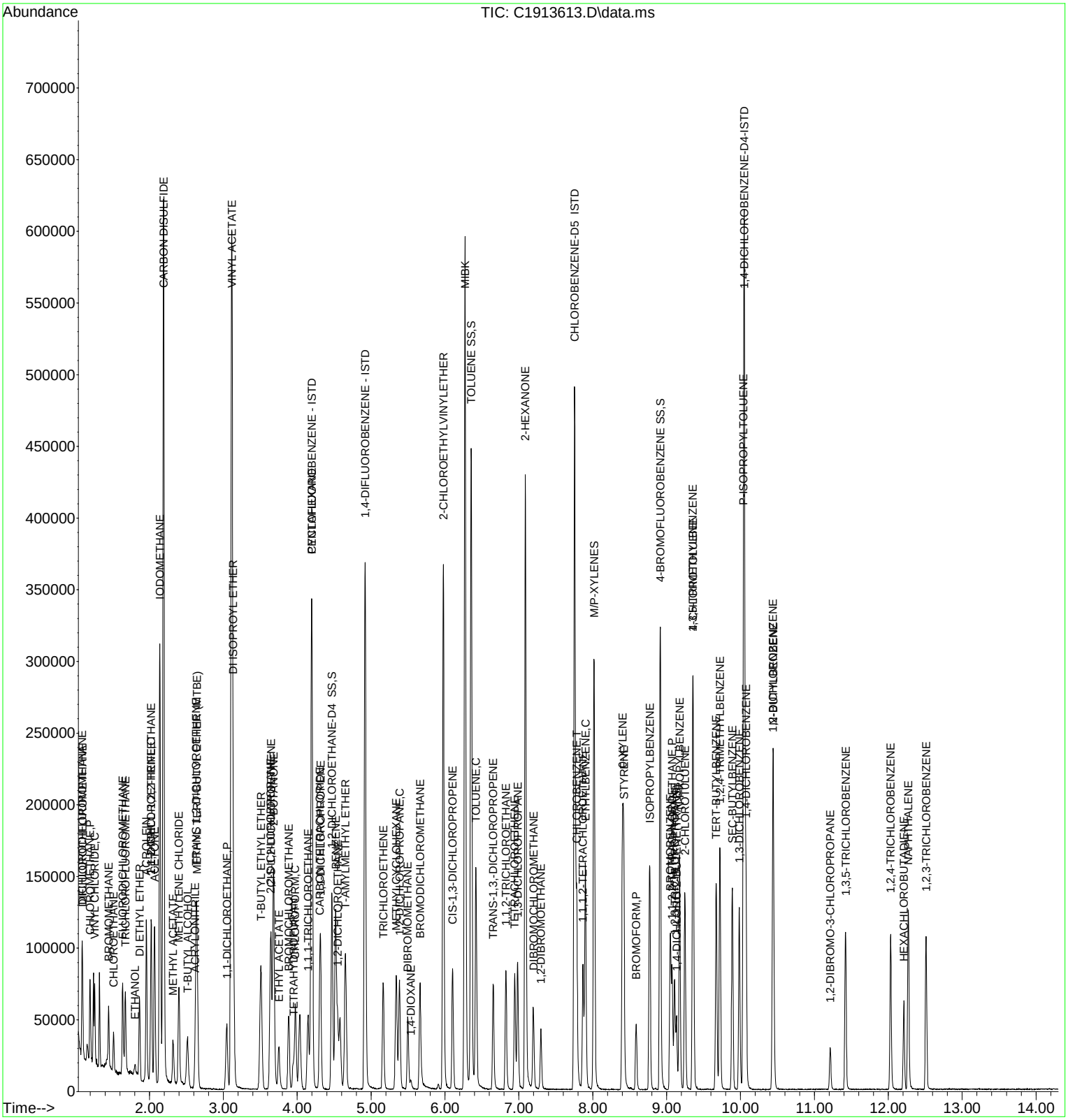
Quant Time: May 16 14:43:39 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
54) DIBROMOMETHANE	5.496	93	16396	9.33	UG/L		90
56) 1,4-DIOXANE	5.538	88	3440	85.91	UG/L	#	69
57) BROMODICHLOROMETHANE	5.663	83	30839	8.71	UG/L		98
58) 2-CHLOROETHYLVINYLETHER	5.978	63	129534	55.92	UG/L		95
59) MIBK	6.271	43	363910	91.22	UG/L		97
60) CIS-1,3-DICHLOROPROPENE	6.104	75	39062	9.86	UG/L		96
61) TOLUENE	6.419	91	91607	9.05	UG/L		98
62) TRANS-1,3,-DICHLOROPRO...	6.650	75	34822	9.72	UG/L		93
64) 1,1,2-TRICHLOROETHANE	6.823	97	22161	9.14	UG/L		95
65) 2-HEXANONE	7.085	43	258260	87.76	UG/L		98
66) TETRACHLOROETHENE	6.943	166	21280	9.83	UG/L		95
67) 1,3-DICHLOROPROPANE	6.985	76	40871	9.23	UG/L		99
68) DIBROMOCHLOROMETHANE	7.200	129	25405	9.75	UG/L		99
69) 1,2-DIBROMOETHANE	7.297	107	24985	9.65	UG/L		98
72) CHLOROBENZENE	7.783	112	58227	9.75	UG/L	#	90
73) 1,1,1,2-TETRACHLOROETHANE	7.866	131	21001	10.17	UG/L		97
74) ETHYLBENZENE	7.902	91	101437	9.93	UG/L		95
75) M/P-XYLENES	8.020	91	154479	18.59	UG/L		98
76) 0-XYLENE	8.404	91	81241	9.36	UG/L		96
77) STYRENE	8.421	104	66696	10.65	UG/L		95
78) BROMOFORM	8.588	173	18316	11.30	UG/L	#	97
79) ISOPROPYLBENZENE	8.772	105	91849	10.24	UG/L		98
81) 1,1,2,2-TETRACHLOROETHANE	9.074	83	34639	10.27	UG/L		96
82) 1,4-DICHLORO-2-BUTENE(...	9.135	53	8723	7.95	UG/L		93
83) BROMOBENZENE	9.049	77	42117	9.63	UG/L		90
84) 1,2,3-TRICHLOROPROPANE	9.110	75	28314	7.83	UG/L		96
85) N-PROPYLBENZENE	9.177	91	107923	9.24	UG/L		96
86) 2-CHLOROT0LUENE	9.249	91	68202	9.07	UG/L		96
87) 1,3,5-TRIMETHYLBENZENE	9.355	105	75757	9.41	UG/L		96
88) 4-CHLOROTOLUENE	9.358	91	77725	8.70	UG/L		97
90) TERT-BUTYLBENZENE	9.670	119	61515	9.13	UG/L		94
91) 1,2,4-TRIMETHYLBENZENE	9.721	105	79921	9.03	UG/L		97
92) SEC-BUTYLBENZENE	9.891	105	86378	9.17	UG/L		97
93) 1,3-DICHLOROBENZENE	9.983	146	46468	9.60	UG/L		98
94) P-ISOPROPYLTOLUENE	10.039	119	74721	9.18	UG/L		97
95) 1,4-DICHLOROBENZENE	10.075	146	47258	8.85	UG/L		93
96) N-BUTYLBENZENE	10.446	91	67771	9.13	UG/L		93
97) 1,2-DICHLOROBENZENE	10.437	146	47304	9.60	UG/L		98
98) 1,2-DIBROMO-3-CHLOROPR...	11.213	75	6201	8.24	UG/L		92
99) 1,3,5-TRICHLOROBENZENE	11.424	180	31492	10.08	UG/L		98
100) 1,2,4-TRICHLOROBENZENE	12.030	180	30462	9.79	UG/L		99
101) HEXACHLOROBUTADIENE	12.208	225	11509	11.42	UG/L		97
102) NAPHTHALENE	12.269	128	87322	9.00	UG/L		99
103) 1,2,3-TRICHLOROBENZENE	12.512	180	29809	10.05	UG/L		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913613.D
Acq On : 16 May 2019 12:24 pm
Operator :
Sample : 8260STD 10PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 16 14:43:39 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913614.D
Acq On : 16 May 2019 12:51 pm
Operator :
Sample : 8260STD 20PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 17 05:16:44 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.196	168	164523	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	251678	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.752	82	125751	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	120948	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	77434	18.35	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 73.40%				
49) TOLUENE SS	6.355	98	248345	23.77	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 95.08%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	93315	23.71	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.84%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	52119	15.55	UG/L		99
4) DIFLUOROCHLOROMETHANE	1.093	51	64784	15.92	UG/L	#	100
5) CHLOROMETHANE	1.196	50	68723m	17.53	UG/L		
6) VINYL CHLORIDE	1.260	62	56282	17.61	UG/L		95
7) BROMOMETHANE	1.444	94	25516	18.32	UG/L		98
8) CHLOROETHANE	1.508	64	28874	14.60	UG/L		100
9) FLUORODICHLOROMETHANE	1.636	67	84753	17.48	UG/L		100
10) TRICHLOROFLUOROMETHANE	1.673	101	61511	14.80	UG/L		95
11) ETHANOL	1.815	45	11353	194.57	UG/L	#	90
12) DI ETHYL ETHER	1.865	59	39375	16.01	UG/L		100
13) ACROLEIN	1.957	56	144573	213.17	UG/L		98
14) ACETONE	2.071	43	210893	165.49	UG/L		98
15) 1,1-DICHLOROETHENE	2.024	61	62277	15.22	UG/L		97
16) 1,1,2-TRICL-1,2,2-TRIF...	2.021	101	33606	17.28	UG/L		83
17) IODOMETHANE	2.138	142	570940	203.51	UG/L		99
20) METHYL ACETATE	2.320	43	63533	9.50	UG/L		99
21) T-BUTYL ALCOHOL	2.518	59	79745	167.82	UG/L		98
22) ACRYLONITRILE	2.618	53	27387	17.97	UG/L		98
23) METHYLENE CHLORIDE	2.398	49	65487	14.69	UG/L		98
24) CARBON DISULFIDE	2.189	76	1246184	199.34	UG/L		99
25) METHYL TERT-BUTYL ETHE...	2.643	73	142023	17.42	UG/L		99
26) TRANS 1,2-DICHLOROETHENE	2.632	61	64689	16.52	UG/L		92
27) 1,1-DICHLOROETHANE	3.045	63	87442	17.33	UG/L		99
28) VINYL ACETATE	3.112	43	1760459	223.75	UG/L		99
29) DI ISOPROYL ETHER	3.131	45	189474	17.80	UG/L		98
31) 2-BUTANONE	3.680	43	394788	190.29	UG/L		100
32) T-BUTYL ETHYL ETHER	3.508	59	157084	15.91	UG/L		98
33) CIS-1,2-DICHLOROETHENE	3.644	61	76817	15.64	UG/L		91
34) 2,2-DICHLOROPROPANE	3.641	77	59901	16.98	UG/L		93
35) ETHYL ACETATE	3.750	43	75672	35.94	UG/L		99
38) BROMOCHLOROMETHANE	3.884	49	46792	18.45	UG/L		93
39) TETRAHYDROFURAN	3.943	42	23950	20.20	UG/L		97
40) CHLOROFORM	3.973	83	81330	17.16	UG/L		97
41) 1,1,1-TRICHLOROETHANE	4.146	97	65177	15.80	UG/L		95
42) CYCLOHEXANE	4.191	56	76803	16.64	UG/L		98
43) CARBON TETRACHLORIDE	4.308	117	54097	15.45	UG/L		97
44) 1,1-DICHLOROPROPENE	4.313	75	60059	16.99	UG/L		94
45) BENZENE	4.520	78	186002	18.17	UG/L		98
47) T-AMYLMETHYL ETHER	4.654	73	139215	18.23	UG/L		95
50) 1,2-DICHLOROETHANE	4.545	62	68739	14.08	UG/L		98
51) TRICHLOROETHENE	5.161	95	44533	18.03	UG/L		92
52) METHYLCYCLOHEXANE	5.340	83	57084	18.31	UG/L		97
53) 1,2-DICHLOROPROPANE	5.384	63	51440	18.79	UG/L	#	99

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913614.D
Acq On : 16 May 2019 12:51 pm
Operator :
Sample : 8260STD 20PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 14 Sample Multiplier: 1

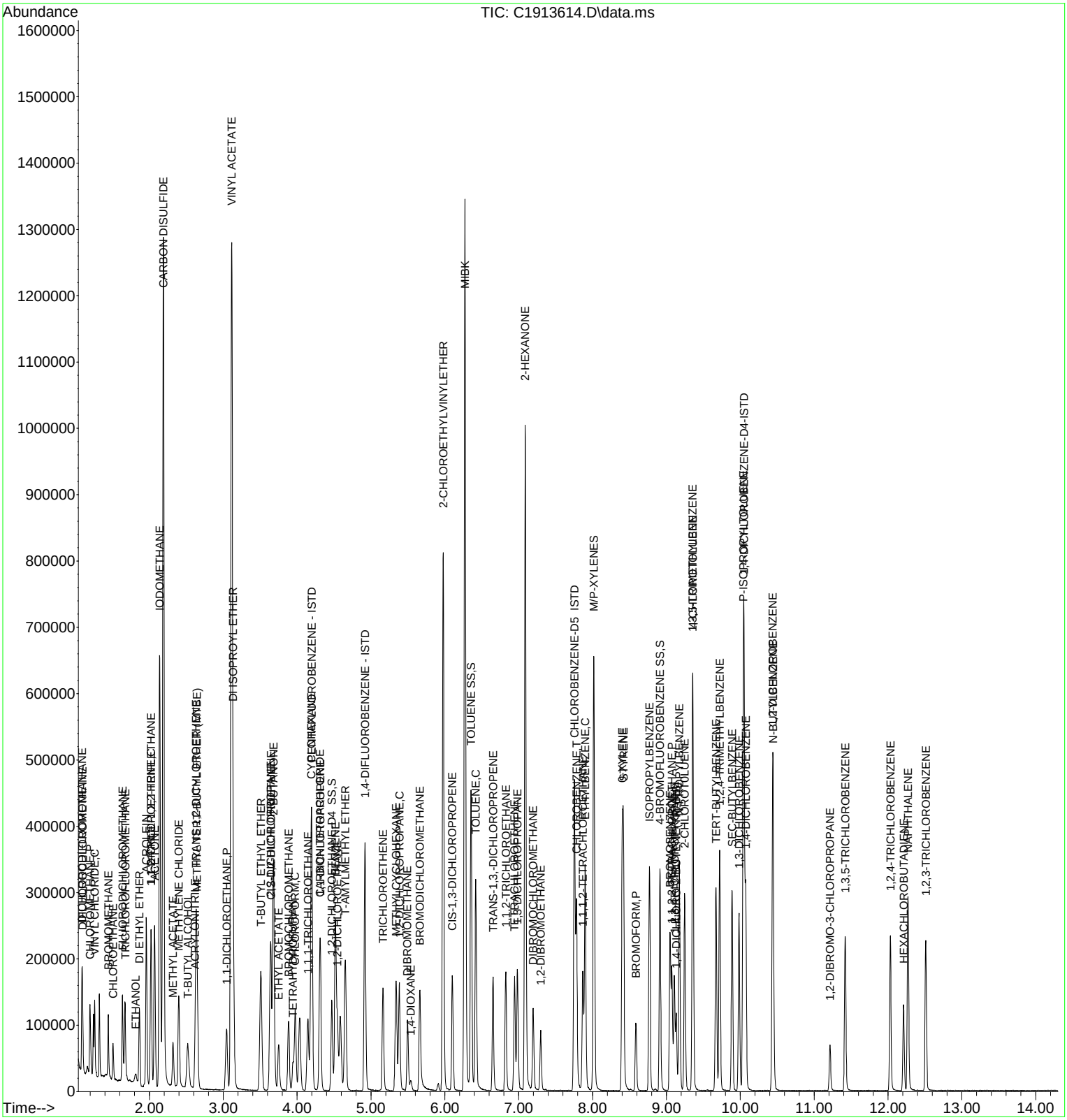
Quant Time: May 17 05:16:44 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
54) DIBROMOMETHANE	5.493	93	33398	18.96	UG/L		93
56) 1,4-DIOXANE	5.538	88	8691	216.44	UG/L	#	64
57) BROMODICHLOROMETHANE	5.660	83	63281	17.81	UG/L		98
58) 2-CHLOROETHYLVINYLETHER	5.978	63	284697	122.56	UG/L		95
59) MIBK	6.271	43	825758	206.42	UG/L		97
60) CIS-1,3-DICHLOROPROPENE	6.101	75	80922	20.37	UG/L		95
61) TOLUENE	6.419	91	193047	19.03	UG/L		98
62) TRANS-1,3,-DICHLOROPRO...	6.653	75	74881	20.85	UG/L		93
64) 1,1,2-TRICHLOROETHANE	6.826	97	48240	19.83	UG/L		95
65) 2-HEXANONE	7.088	43	602484	204.17	UG/L		98
66) TETRACHLOROETHENE	6.943	166	45400	20.91	UG/L		96
67) 1,3-DICHLOROPROPANE	6.982	76	87481	19.69	UG/L		99
68) DIBROMOCHLOROMETHANE	7.194	129	53146	20.34	UG/L		99
69) 1,2-DIBROMOETHANE	7.297	107	52641	20.27	UG/L		100
72) CHLOROBENZENE	7.783	112	125323	21.00	UG/L		94
73) 1,1,1,2-TETRACHLOROETHANE	7.869	131	44031	21.33	UG/L		98
74) ETHYLBENZENE	7.900	91	215261	21.09	UG/L		95
75) M/P-XYLENES	8.017	91	325895	39.23	UG/L		96
76) 0-XYLENE	8.402	91	169377	19.51	UG/L		96
77) STYRENE	8.418	104	140969	22.52	UG/L		93
78) BROMOFORM	8.586	173	41593	25.67	UG/L		99
79) ISOPROPYLBENZENE	8.770	105	193087	21.53	UG/L		98
81) 1,1,2,2-TETRACHLOROETHANE	9.074	83	77302	22.94	UG/L		94
82) 1,4-DICHLORO-2-BUTENE(...	9.132	53	19263	17.55	UG/L	#	86
83) BROMOBENZENE	9.049	77	86715	19.84	UG/L		93
84) 1,2,3-TRICHLOROPROPANE	9.110	75	62083	17.17	UG/L		96
85) N-PROPYLBENZENE	9.174	91	231125	19.80	UG/L		96
86) 2-CHLOROT0LUENE	9.247	91	142144	18.91	UG/L		96
87) 1,3,5-TRIMETHYLBENZENE	9.355	105	162135	20.15	UG/L		96
88) 4-CHLOROTOLUENE	9.358	91	165359	18.52	UG/L		97
90) TERT-BUTYLBENZENE	9.673	119	132297	19.59	UG/L		96
91) 1,2,4-TRIMETHYLBENZENE	9.721	105	170131	19.17	UG/L		98
92) SEC-BUTYLBENZENE	9.891	105	186275	19.74	UG/L		95
93) 1,3-DICHLOROBENZENE	9.983	146	98392	20.28	UG/L		98
94) P-ISOPROPYLTOLUENE	10.041	119	162054	19.86	UG/L		98
95) 1,4-DICHLOROBENZENE	10.075	146	102238	19.09	UG/L		98
96) N-BUTYLBENZENE	10.446	91	146242	19.65	UG/L		94
97) 1,2-DICHLOROBENZENE	10.437	146	99491	20.14	UG/L		98
98) 1,2-DIBROMO-3-CHLOROPR...	11.213	75	14900	19.76	UG/L		89
99) 1,3,5-TRICHLOROBENZENE	11.422	180	67355	21.51	UG/L		98
100) 1,2,4-TRICHLOROBENZENE	12.032	180	64302	20.62	UG/L		99
101) HEXACHLOROBUTADIENE	12.211	225	25107	24.86	UG/L		99
102) NAPHTHALENE	12.269	128	200997	20.67	UG/L		99
103) 1,2,3-TRICHLOROBENZENE	12.512	180	63769	21.44	UG/L		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913614.D
Acq On : 16 May 2019 12:51 pm
Operator :
Sample : 8260STD 20PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 14 Sample Multiplier: 1

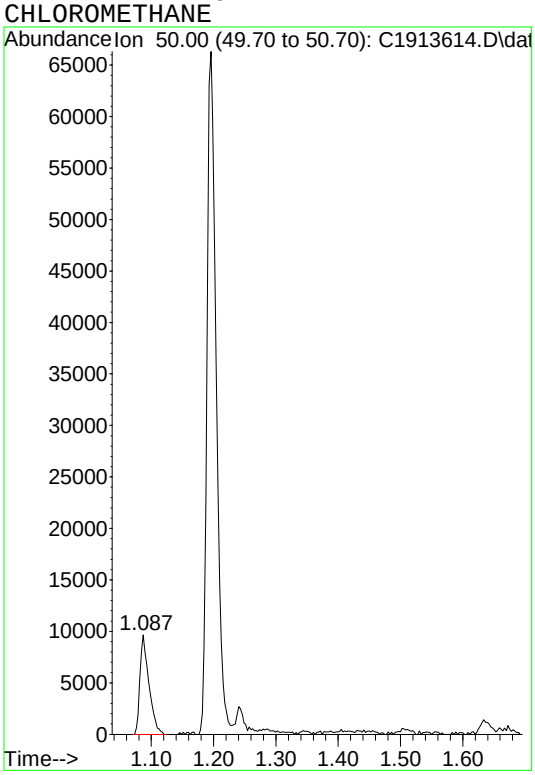
Quant Time: May 17 05:16:44 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913614.D
Acq On : 16 May 2019 12:51 pm
Operator :
Sample : 8260STD 20PPB 1905273
Misc :

Quant Time : Fri May 17 05:16:44 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
CHLOROMETHANE



Original Int. Results

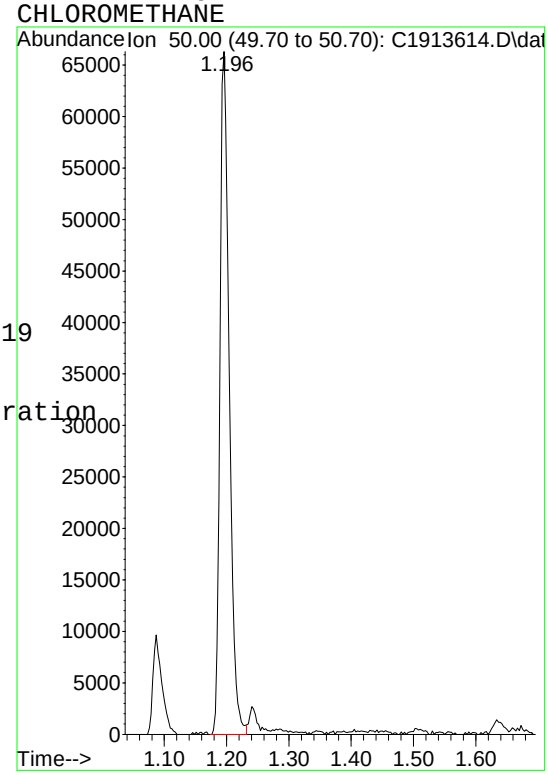
RT : 1.09
Area : 9638
Amount: 2.45887

Manual Int. Results

Fri May 17 05:16:44 2019

MIuser: EEH
Reason: Incorret Integration
RT : 1.20
Area : 68723
Amount: 17.5327

Manual Integration
CHLOROMETHANE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913615.D
Acq On : 16 May 2019 1:17 pm
Operator :
Sample : 8260STD 50PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 17 05:18:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.199	168	168191	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	253042	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	126067	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	121315	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	77333	17.93	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 71.72%				
49) TOLUENE SS	6.355	98	250754	23.87	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 95.48%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	93417	23.68	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.72%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	131703	38.44	UG/L		98
4) DIFLUOROCHLOROMETHANE	1.095	51	162269	39.01	UG/L	#	100
5) CHLOROMETHANE	1.196	50	159980m	39.92	UG/L		
6) VINYL CHLORIDE	1.260	62	146304	44.78	UG/L		100
7) BROMOMETHANE	1.447	94	80738	58.54	UG/L		98
8) CHLOROETHANE	1.514	64	76141	37.65	UG/L		96
9) FLUORODICHLOROMETHANE	1.639	67	219837	44.35	UG/L		100
10) TRICHLOROFLUOROMETHANE	1.675	101	158864	37.39	UG/L		97
12) DI ETHYL ETHER	1.865	59	101342	40.31	UG/L		98
13) ACROLEIN	1.960	56	358380	516.89	UG/L		99
14) ACETONE	2.069	43	493070	378.49	UG/L		97
15) 1,1-DICHLOROETHENE	2.024	61	163414	39.06	UG/L		98
16) 1,1,2-TRICL-1,2,2-TRIF...	2.021	101	86787	43.65	UG/L		85
17) IODOMETHANE	2.141	142	1545697	532.69	UG/L		99
20) METHYL ACETATE	2.320	43	155386	22.72	UG/L		100
21) T-BUTYL ALCOHOL	2.512	59	189348	389.78	UG/L	#	96
22) ACRYLONITRILE	2.618	53	66531	42.69	UG/L		98
23) METHYLENE CHLORIDE	2.398	49	166673	36.56	UG/L		99
24) CARBON DISULFIDE	2.191	76	3101819	485.35	UG/L		100
25) METHYL TERT-BUTYL ETHE...	2.643	73	366029	43.91	UG/L		98
26) TRANS 1,2-DICHLOROETHENE	2.632	61	168206	42.03	UG/L		93
27) 1,1-DICHLOROETHANE	3.047	63	225980	43.81	UG/L		99
28) VINYL ACETATE	3.114	43	4427978	550.50	UG/L		99
29) DI ISOPROYL ETHER	3.134	45	493755	45.38	UG/L		98
31) 2-BUTANONE	3.678	43	934018	440.38	UG/L		99
32) T-BUTYL ETHYL ETHER	3.508	59	407969	40.42	UG/L		98
33) CIS-1,2-DICHLOROETHENE	3.644	61	200407	39.92	UG/L		91
34) 2,2-DICHLOROPROPANE	3.639	77	169844	47.10	UG/L		90
35) ETHYL ACETATE	3.747	43	184473	85.71	UG/L		99
38) BROMOCHLOROMETHANE	3.887	49	120042	46.29	UG/L		91
39) TETRAHYDROFURAN	3.943	42	58161	47.98	UG/L		98
40) CHLOROFORM	3.976	83	211479	43.65	UG/L		97
41) 1,1,1-TRICHLOROETHANE	4.143	97	170911	40.53	UG/L		98
42) CYCLOHEXANE	4.194	56	198748	43.69	UG/L		97
43) CARBON TETRACHLORIDE	4.308	117	145500	40.65	UG/L		97
44) 1,1-DICHLOROPROPENE	4.314	75	155866	43.14	UG/L		94
45) BENZENE	4.520	78	481744	46.03	UG/L		99
47) T-AMYLMETHYL ETHER	4.654	73	356756	45.71	UG/L		95
50) 1,2-DICHLOROETHANE	4.545	62	176849	36.03	UG/L		98
51) TRICHLOROETHENE	5.164	95	115840	46.65	UG/L		93
52) METHYLCYCLOHEXANE	5.343	83	155738	49.67	UG/L		96
53) 1,2-DICHLOROPROPANE	5.384	63	139848	50.80	UG/L	#	97
54) DIBROMOMETHANE	5.493	93	86684	48.94	UG/L		92

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913615.D
Acq On : 16 May 2019 1:17 pm
Operator :
Sample : 8260STD 50PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 15 Sample Multiplier: 1

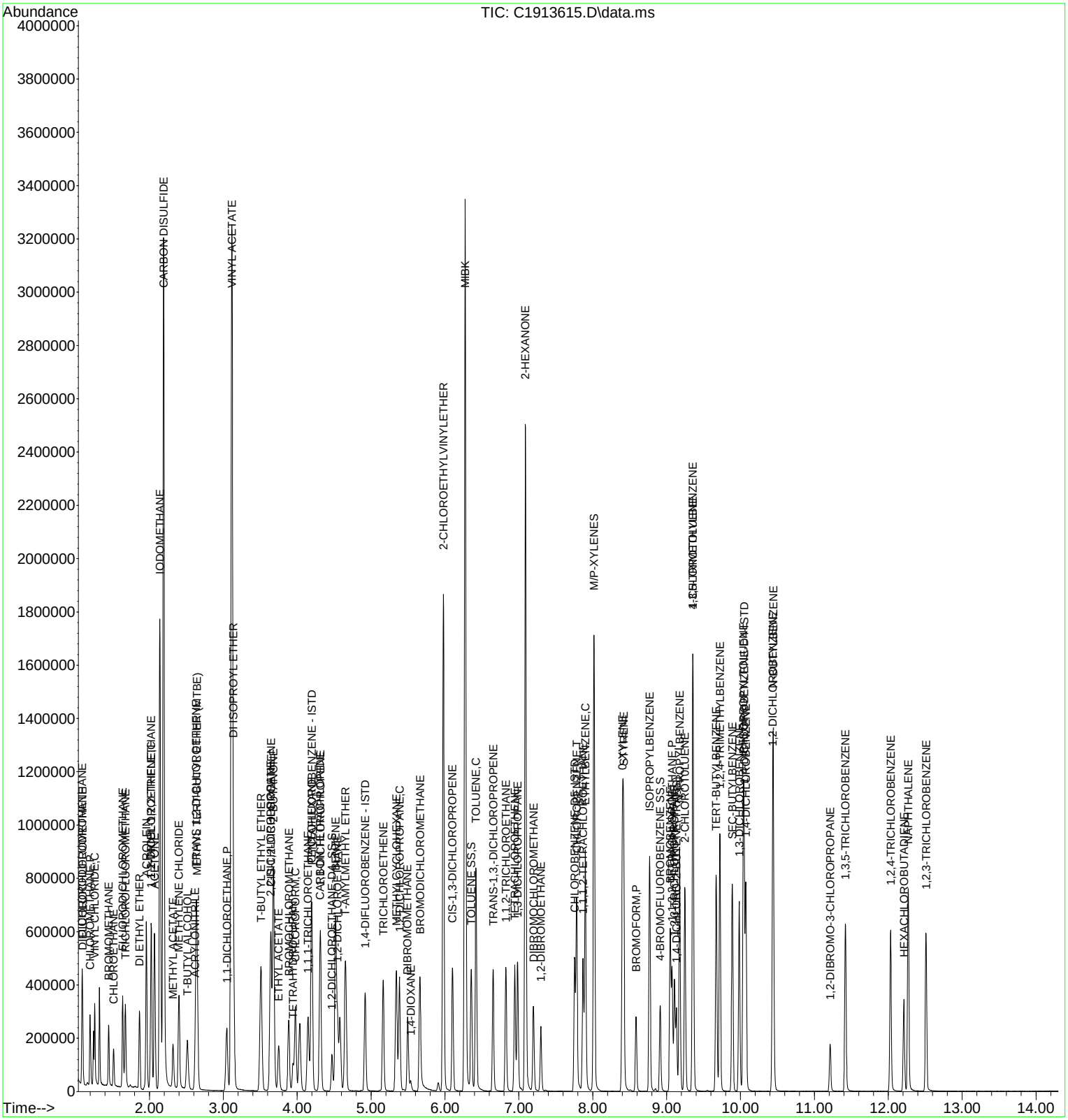
Quant Time: May 17 05:18:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,4-DIOXANE	5.538	88	20852	516.50	UG/L #	65
57) BROMODICHLOROMETHANE	5.663	83	169426	47.44	UG/L	98
58) 2-CHLOROETHYLVINYLETHER	5.978	63	658903	282.13	UG/L	95
59) MIBK	6.274	43	2003904	498.22	UG/L	98
60) CIS-1,3-DICHLOROPROPENE	6.101	75	216801	54.27	UG/L	94
61) TOLUENE	6.419	91	498393	48.86	UG/L	99
62) TRANS-1,3,-DICHLOROPRO...	6.653	75	202271	56.00	UG/L	93
64) 1,1,2-TRICHLOROETHANE	6.823	97	122172	49.96	UG/L	95
65) 2-HEXANONE	7.088	43	1456598	490.96	UG/L	98
66) TETRACHLOROETHENE	6.946	166	120044	54.99	UG/L	97
67) 1,3-DICHLOROPROPANE	6.982	76	224141	50.18	UG/L	99
68) DIBROMOCHLOROMETHANE	7.200	129	143133	54.48	UG/L	97
69) 1,2-DIBROMOETHANE	7.297	107	135787	51.99	UG/L	98
72) CHLOROBENZENE	7.783	112	326840	54.63	UG/L	94
73) 1,1,1,2-TETRACHLOROETHANE	7.869	131	118537	57.29	UG/L	99
74) ETHYLBENZENE	7.900	91	553697	54.12	UG/L	96
75) M/P-XYLENES	8.017	91	849349	102.00	UG/L	96
76) 0-XYLENE	8.402	91	443090	50.92	UG/L	96
77) STYRENE	8.418	104	367521	58.56	UG/L	93
78) BROMOFORM	8.586	173	110046	67.74	UG/L	99
79) ISOPROPYLBENZENE	8.770	105	504329	56.09	UG/L	98
81) 1,1,2,2-TETRACHLOROETHANE	9.074	83	194680	57.63	UG/L	96
82) 1,4-DICHLORO-2-BUTENE(...	9.132	53	50334	45.75	UG/L #	85
83) BROMOBENZENE	9.049	77	230182	52.53	UG/L	90
84) 1,2,3-TRICHLOROPROPANE	9.104	75	158107	43.63	UG/L	95
85) N-PROPYLBENZENE	9.177	91	602449	51.49	UG/L	96
86) 2-CHLOROT0LUENE	9.247	91	367095	48.70	UG/L	97
87) 1,3,5-TRIMETHYLBENZENE	9.355	105	422481	52.38	UG/L	97
88) 4-CHLOROTOLUENE	9.355	91	436203	48.73	UG/L	97
90) TERT-BUTYLBENZENE	9.671	119	342864	50.62	UG/L	95
91) 1,2,4-TRIMETHYLBENZENE	9.721	105	443458	49.82	UG/L	97
92) SEC-BUTYLBENZENE	9.891	105	489525	51.71	UG/L	97
93) 1,3-DICHLOROBENZENE	9.983	146	255010	52.39	UG/L	98
94) P-ISOPROPYLTOLUENE	10.039	119	425215	51.95	UG/L	98
95) 1,4-DICHLOROBENZENE	10.072	146	262447	48.87	UG/L	96
96) N-BUTYLBENZENE	10.443	91	391937	52.51	UG/L	94
97) 1,2-DICHLOROBENZENE	10.435	146	257344	51.93	UG/L	98
98) 1,2-DIBROMO-3-CHLOROPR...	11.213	75	37436	49.50	UG/L	88
99) 1,3,5-TRICHLOROBENZENE	11.419	180	180853	57.59	UG/L	98
100) 1,2,4-TRICHLOROBENZENE	12.032	180	174004	55.63	UG/L	100
101) HEXACHLOROBUTADIENE	12.214	225	65303	64.48	UG/L	97
102) NAPHTHALENE	12.270	128	525323	53.87	UG/L	99
103) 1,2,3-TRICHLOROBENZENE	12.512	180	167789	56.25	UG/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913615.D
Acq On : 16 May 2019 1:17 pm
Operator :
Sample : 8260STD 50PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 15 Sample Multiplier: 1

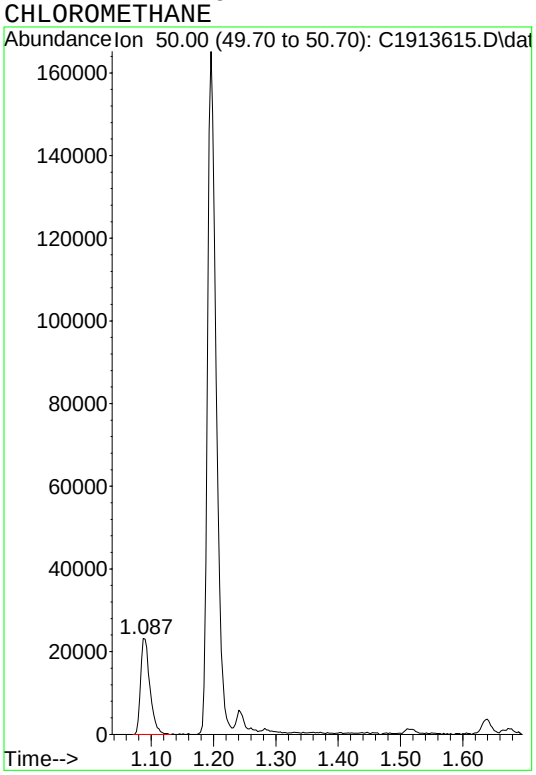
Quant Time: May 17 05:18:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913615.D
Acq On : 16 May 2019 1:17 pm
Operator :
Sample : 8260STD 50PPB 1905273
Misc :

Quant Time : Fri May 17 05:18:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
CHLOROMETHANE



Original Int. Results

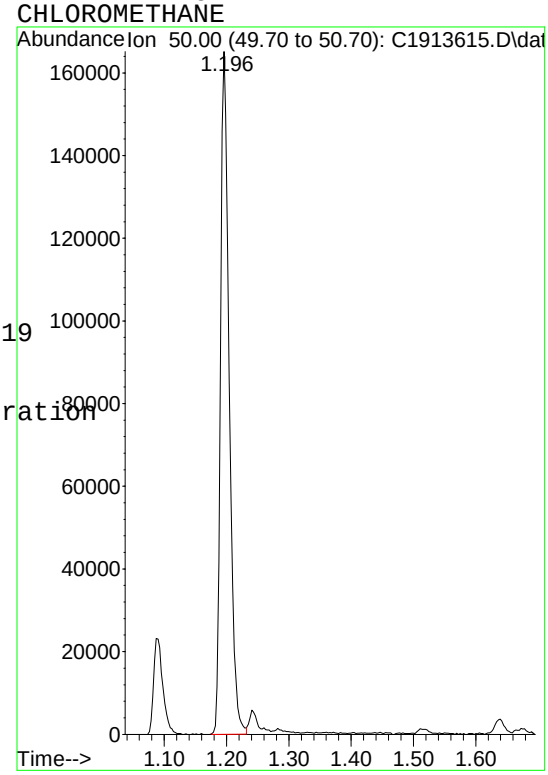
RT : 1.09
Area : 24018
Amount: 5.99389

Manual Int. Results

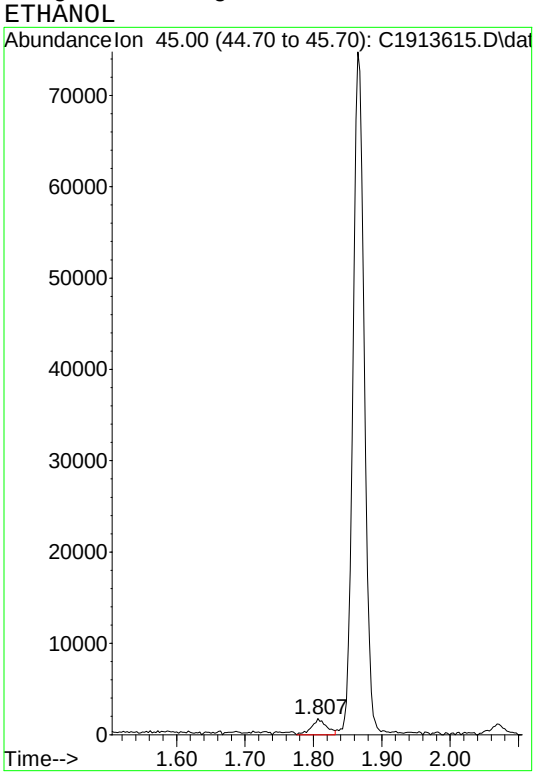
Fri May 17 05:17:57 2019

MIuser: EEH
Reason: Incorret Integration
RT : 1.20
Area : 159980
Amount: 39.9243

Manual Integration
CHLOROMETHANE



Original Integration
ETHANOL



Original Int. Results

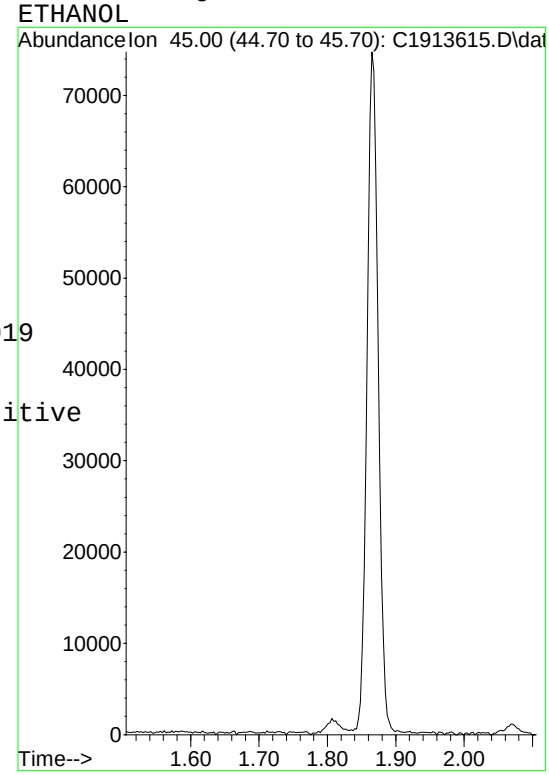
RT : 1.81
Area : 2630
Amount: 24.6117

Manual Int. Results

Fri May 17 05:18:04 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
ETHANOL



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913616.D
Acq On : 16 May 2019 1:43 pm
Operator :
Sample : 8260STD 100PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 17 05:19:29 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.196	168	167972	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	255150	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	129298	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	126562	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	78218	18.16	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 72.64%				
49) TOLUENE SS	6.358	98	254867	24.06	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 96.24%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	95861	23.69	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.76%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	242122	70.75	UG/L		98
4) DIFLUOROCHLOROMETHANE	1.095	51	296875	71.47	UG/L	#	100
5) CHLOROMETHANE	1.196	50	316906m	79.19	UG/L		
6) VINYL CHLORIDE	1.260	62	264224	80.98	UG/L		98
7) BROMOMETHANE	1.444	94	148940	108.88	UG/L		100
8) CHLOROETHANE	1.508	64	138614	68.63	UG/L		97
9) FLUORODICHLOROMETHANE	1.636	67	400527	80.91	UG/L		99
10) TRICHLOROFLUOROMETHANE	1.673	101	291986	68.82	UG/L		97
12) DI ETHYL ETHER	1.865	59	186688	74.35	UG/L		99
13) ACROLEIN	1.960	56	675899	976.12	UG/L		98
14) ACETONE	2.071	43	942640	724.53	UG/L		97
15) 1,1-DICHLOROETHENE	2.024	61	299371	71.65	UG/L		98
16) 1,1,2-TRICL-1,2,2-TRIF...	2.021	101	159753	80.45	UG/L		85
17) IODOMETHANE	2.141	142	2948256	1013.93	UG/L		100
20) METHYL ACETATE	2.320	43	290891	42.59	UG/L		99
21) T-BUTYL ALCOHOL	2.518	59	382640	788.71	UG/L	#	94
22) ACRYLONITRILE	2.621	53	126495	81.27	UG/L		97
23) METHYLENE CHLORIDE	2.398	49	309852	68.06	UG/L		98
24) CARBON DISULFIDE	2.191	76	5711215	894.82	UG/L		100
25) METHYL TERT-BUTYL ETHE...	2.640	73	674030	80.96	UG/L		98
26) TRANS 1,2-DICHLOROETHENE	2.632	61	309583	77.45	UG/L		93
27) 1,1-DICHLOROETHANE	3.045	63	418459	81.24	UG/L		99
28) VINYL ACETATE	3.117	43	8196083	1020.29	UG/L		100
29) DI ISOPROYL ETHER	3.134	45	917097	84.39	UG/L		98
31) 2-BUTANONE	3.680	43	1788709	844.45	UG/L		99
32) T-BUTYL ETHYL ETHER	3.510	59	764647	75.86	UG/L		98
33) CIS-1,2-DICHLOROETHENE	3.644	61	372212	74.25	UG/L		91
34) 2,2-DICHLOROPROPANE	3.636	77	312757	86.84	UG/L		90
35) ETHYL ACETATE	3.747	43	349176	162.45	UG/L		99
38) BROMOCHLOROMETHANE	3.884	49	206470	79.72	UG/L		91
39) TETRAHYDROFURAN	3.943	42	111996	92.50	UG/L		98
40) CHLOROFORM	3.976	83	391465	80.90	UG/L		97
41) 1,1,1-TRICHLOROETHANE	4.146	97	315535	74.92	UG/L		97
42) CYCLOHEXANE	4.194	56	363921	80.97	UG/L		97
43) CARBON TETRACHLORIDE	4.308	117	268946	75.23	UG/L		98
44) 1,1-DICHLOROPROPENE	4.313	75	289237	80.15	UG/L		95
45) BENZENE	4.520	78	887926	84.96	UG/L		98
47) T-AMYLMETHYL ETHER	4.654	73	674418	86.52	UG/L		95
50) 1,2-DICHLOROETHANE	4.548	62	326712	66.01	UG/L		98
51) TRICHLOROETHENE	5.164	95	214714	85.75	UG/L		92
52) METHYLCYCLOHEXANE	5.340	83	290320	91.83	UG/L		97
53) 1,2-DICHLOROPROPANE	5.384	63	258212	93.03	UG/L	#	97
54) DIBROMOMETHANE	5.496	93	161003	90.16	UG/L		93

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913616.D
Acq On : 16 May 2019 1:43 pm
Operator :
Sample : 8260STD 100PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 16 Sample Multiplier: 1

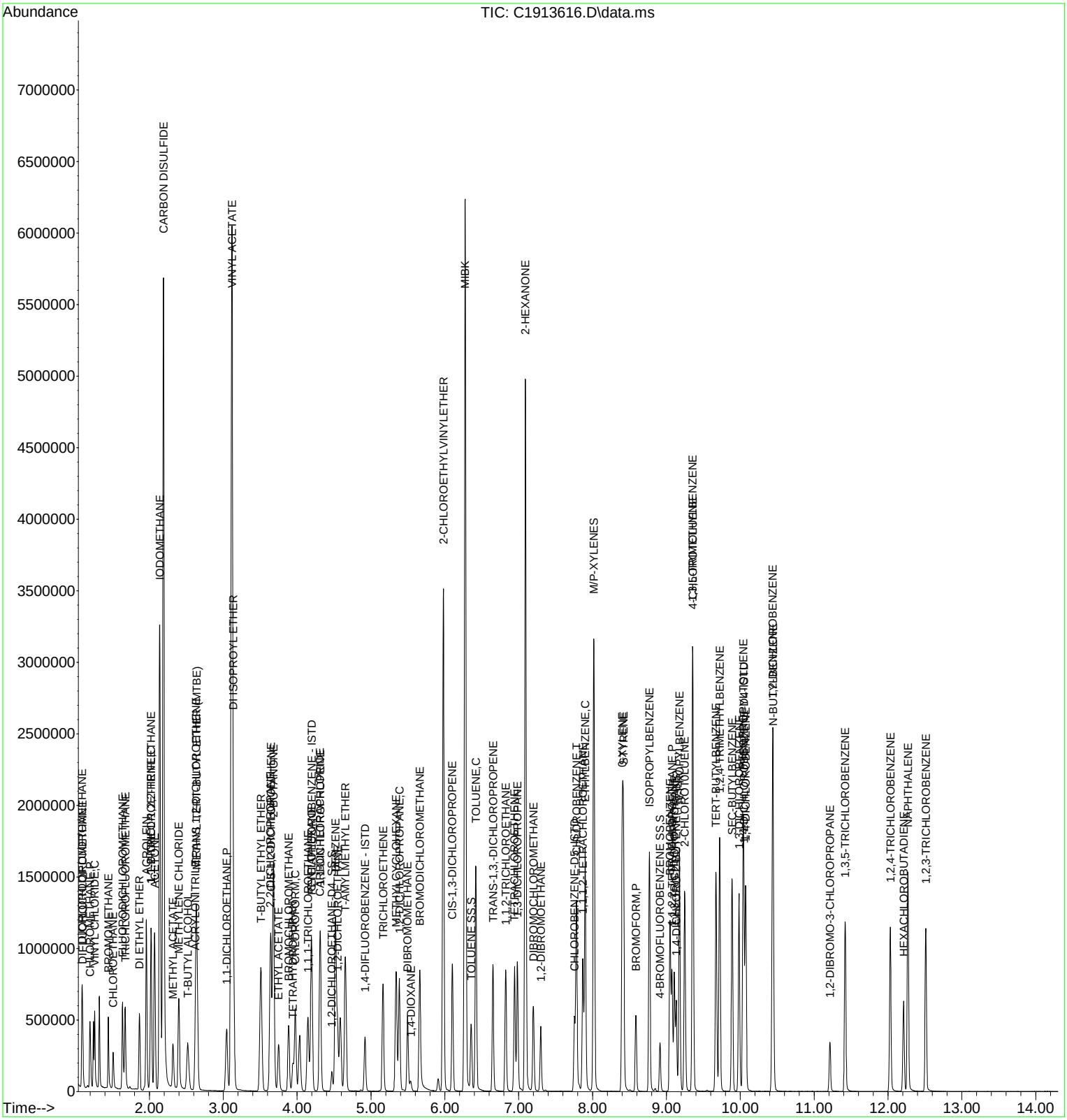
Quant Time: May 17 05:19:29 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
56) 1,4-DIOXANE	5.540	88	39550	971.55 UG/L #	61
57) BROMODICHLOROMETHANE	5.660	83	319172	88.62 UG/L	97
58) 2-CHLOROETHYLVINYLETHER	5.981	63	1229091	521.93 UG/L	95
59) MIBK	6.274	43	3854245	950.35 UG/L	98
60) CIS-1,3-DICHLOROPROPENE	6.101	75	408895	101.51 UG/L	95
61) TOLUENE	6.422	91	928201	90.25 UG/L	99
62) TRANS-1,3,-DICHLOROPRO...	6.653	75	378315	103.88 UG/L	93
64) 1,1,2-TRICHLOROETHANE	6.823	97	226193	91.73 UG/L	95
65) 2-HEXANONE	7.091	43	2843269	950.43 UG/L	99
66) TETRACHLOROETHENE	6.943	166	221615	100.68 UG/L	97
67) 1,3-DICHLOROPROPANE	6.982	76	413587	91.83 UG/L	99
68) DIBROMOCHLOROMETHANE	7.200	129	269745	101.83 UG/L	98
69) 1,2-DIBROMOETHANE	7.300	107	257046	97.61 UG/L	100
72) CHLOROBENZENE	7.783	112	603705	98.38 UG/L	94
73) 1,1,1,2-TETRACHLOROETHANE	7.869	131	225183	106.11 UG/L	98
74) ETHYLBENZENE	7.900	91	1030849	98.23 UG/L	96
75) M/P-XYLENES	8.017	91	1583001	185.35 UG/L	97
76) 0-XYLENE	8.402	91	828148	92.79 UG/L	96
77) STYRENE	8.418	104	698964	108.59 UG/L	94
78) BROMOFORM	8.586	173	212770	127.70 UG/L	99
79) ISOPROPYLBENZENE	8.770	105	934574	101.35 UG/L	98
81) 1,1,2,2-TETRACHLOROETHANE	9.076	83	372787	107.59 UG/L	95
82) 1,4-DICHLORO-2-BUTENE(...	9.132	53	99597	88.27 UG/L #	83
83) BROMOBENZENE	9.049	77	433713	96.51 UG/L	90
84) 1,2,3-TRICHLOROPROPANE	9.107	75	298990	80.44 UG/L	95
85) N-PROPYLBENZENE	9.177	91	1120860	93.40 UG/L	97
86) 2-CHLOROT0LUENE	9.247	91	689037	89.13 UG/L	97
87) 1,3,5-TRIMETHYLBENZENE	9.355	105	792042	95.74 UG/L	97
88) 4-CHLOROTOLUENE	9.358	91	822892	89.63 UG/L	97
90) TERT-BUTYLBENZENE	9.670	119	637073	90.16 UG/L	95
91) 1,2,4-TRIMETHYLBENZENE	9.721	105	828743	89.24 UG/L	97
92) SEC-BUTYLBENZENE	9.891	105	901389	91.26 UG/L	97
93) 1,3-DICHLOROBENZENE	9.983	146	484183	95.35 UG/L	98
94) P-ISOPROPYLTOLUENE	10.041	119	792162	92.76 UG/L	98
95) 1,4-DICHLOROBENZENE	10.072	146	498883	89.04 UG/L	96
96) N-BUTYLBENZENE	10.446	91	740446	95.10 UG/L	94
97) 1,2-DICHLOROBENZENE	10.437	146	485436	93.89 UG/L	98
98) 1,2-DIBROMO-3-CHLOROPR...	11.213	75	72553	91.95 UG/L	89
99) 1,3,5-TRICHLOROBENZENE	11.419	180	342367	104.49 UG/L	98
100) 1,2,4-TRICHLOROBENZENE	12.032	180	329717	101.05 UG/L	99
101) HEXACHLOROBUTADIENE	12.211	225	125591	118.86 UG/L	99
102) NAPHTHALENE	12.269	128	1013563	99.63 UG/L	99
103) 1,2,3-TRICHLOROBENZENE	12.512	180	319585	102.69 UG/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913616.D
Acq On : 16 May 2019 1:43 pm
Operator :
Sample : 8260STD 100PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 16 Sample Multiplier: 1

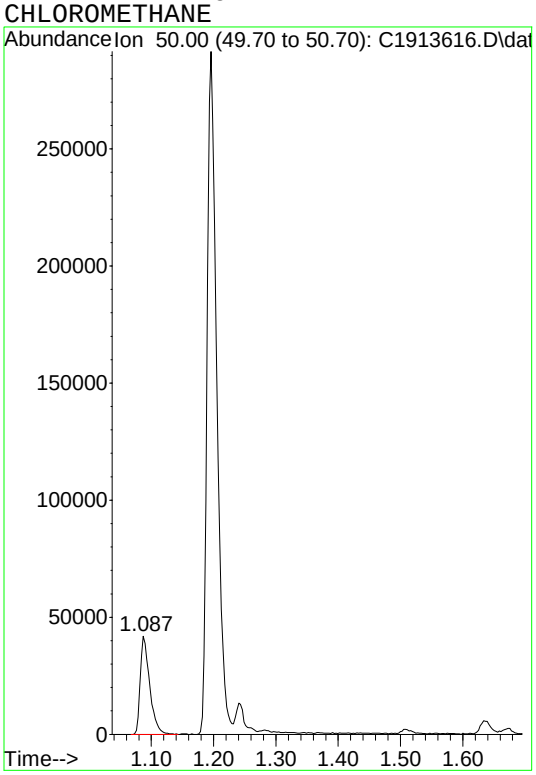
Quant Time: May 17 05:19:29 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913616.D
Acq On : 16 May 2019 1:43 pm
Operator :
Sample : 8260STD 100PPB 1905273
Misc :

Quant Time : Fri May 17 05:19:29 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
CHLOROMETHANE



Original Int. Results

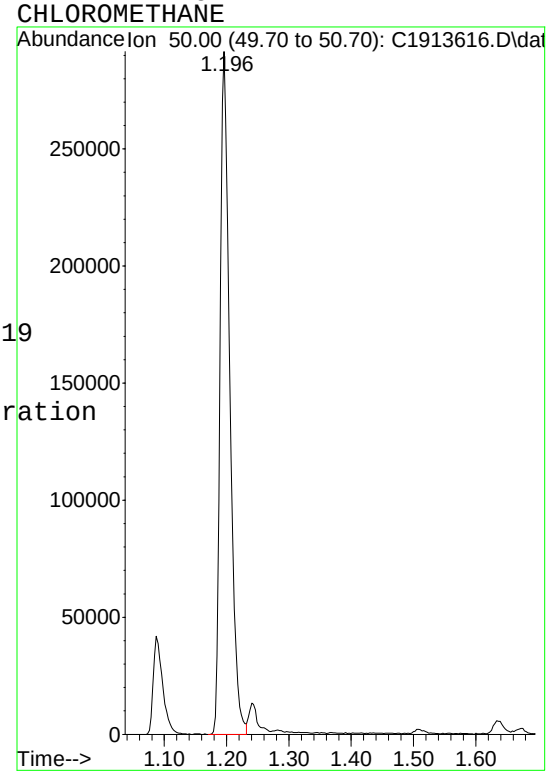
RT : 1.09
Area : 43928
Amount: 10.9769

Manual Int. Results

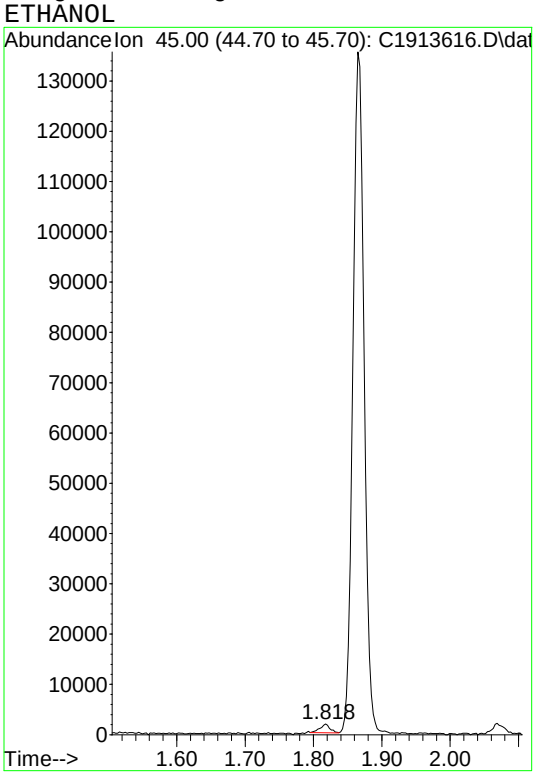
Fri May 17 05:19:20 2019

MIuser: EEH
Reason: Incorret Integration
RT : 1.20
Area : 316906
Amount: 79.1896

Manual Integration
CHLOROMETHANE



Original Integration
ETHANOL



Original Int. Results

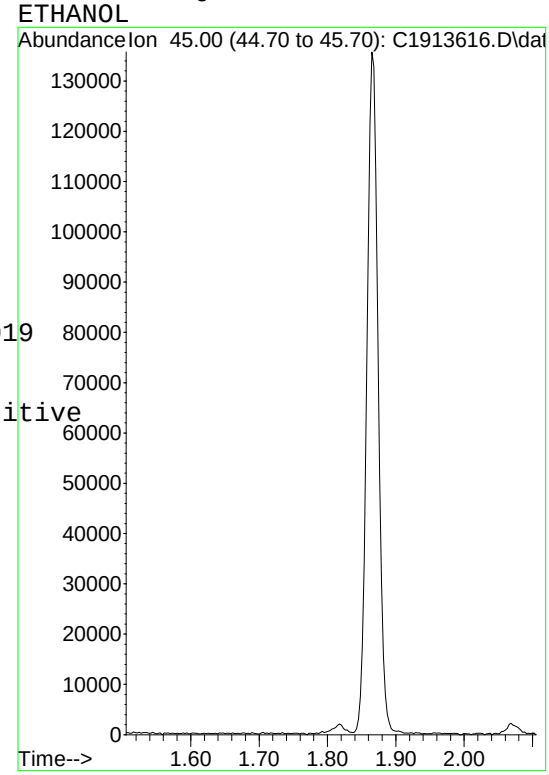
RT : 1.82
Area : 1768
Amount: 8.33336

Manual Int. Results

Fri May 17 05:19:28 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
ETHANOL



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913617.D
Acq On : 16 May 2019 2:10 pm
Operator :
Sample : 8260STD 200PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 17 05:20:56 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.194	168	173931	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.916	114	260598	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	134614	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.052	152	136243	30.00	UG/L		0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	79718	17.87	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 71.48%				
49) TOLUENE SS	6.357	98	265906	24.58	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 98.32%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	102684	24.38	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 97.52%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.084	85	501584	141.55	UG/L		98
4) DIFLUOROCHLOROMETHANE	1.093	51	627442	145.87	UG/L	#	100
5) CHLOROMETHANE	1.193	50	691573m	166.89	UG/L		
6) VINYL CHLORIDE	1.257	62	570888	168.97	UG/L		98
7) BROMOMETHANE	1.441	94	349424	247.81	UG/L		100
8) CHLOROETHANE	1.497	64	281322	134.52	UG/L		96
9) FLUORODICHLOROMETHANE	1.631	67	866051	168.96	UG/L		99
10) TRICHLOROFLUOROMETHANE	1.664	101	626577	142.62	UG/L		97
12) DI ETHYL ETHER	1.865	59	407776	156.84	UG/L		99
13) ACROLEIN	1.960	56	1485777	2072.21	UG/L		100
14) ACETONE	2.074	43	2049245	1521.12	UG/L		97
15) 1,1-DICHLOROETHENE	2.018	61	638629	147.62	UG/L		98
16) 1,1,2-TRICL-1,2,2-TRIF...	2.013	101	336672	163.74	UG/L		85
17) IODOMETHANE	2.136	142	6696353	2219.51	UG/L		100
20) METHYL ACETATE	2.320	43	647547	91.56	UG/L		99
21) T-BUTYL ALCOHOL	2.534	59	888115	1767.89	UG/L	#	94
22) ACRYLONITRILE	2.624	53	287300	178.27	UG/L		98
23) METHYLENE CHLORIDE	2.395	49	721499	153.05	UG/L		99
24) CARBON DISULFIDE	2.183	76	12003947	1816.31	UG/L		99
25) METHYL TERT-BUTYL ETHE...	2.643	73	1522586	176.62	UG/L		98
26) TRANS 1,2-DICHLOROETHENE	2.629	61	683022	165.02	UG/L		93
27) 1,1-DICHLOROETHANE	3.045	63	918435	172.20	UG/L		99
28) VINYL ACETATE	3.114	43	17064184m	2051.46	UG/L		
29) DI ISOPROYL ETHER	3.137	45	2039097	181.21	UG/L		99
31) 2-BUTANONE	3.683	43	4032299	1838.43	UG/L		99
32) T-BUTYL ETHYL ETHER	3.510	59	1704087	163.27	UG/L		97
33) CIS-1,2-DICHLOROETHENE	3.641	61	826444	159.20	UG/L		91
34) 2,2-DICHLOROPROPANE	3.636	77	695851	186.58	UG/L		91
35) ETHYL ACETATE	3.750	43	799323	359.14	UG/L		99
38) BROMOCHLOROMETHANE	3.884	49	410297	152.99	UG/L		92
39) TETRAHYDROFURAN	3.943	42	250832	200.08	UG/L		98
40) CHLOROFORM	3.973	83	871274	173.89	UG/L		97
41) 1,1,1-TRICHLOROETHANE	4.143	97	694816	159.32	UG/L		98
42) CYCLOHEXANE	4.191	56	780340	168.77	UG/L		96
43) CARBON TETRACHLORIDE	4.305	117	596675	161.18	UG/L		97
44) 1,1-DICHLOROPROPENE	4.311	75	639272	171.08	UG/L		95
45) BENZENE	4.517	78	1952485	180.41	UG/L		98
47) T-AMYLMETHYL ETHER	4.654	73	1542342	191.09	UG/L		95
50) 1,2-DICHLOROETHANE	4.545	62	729724	144.36	UG/L		98
51) TRICHLOROETHENE	5.161	95	475038	185.75	UG/L		93
52) METHYLCYCLOHEXANE	5.340	83	626978	194.18	UG/L		97
53) 1,2-DICHLOROPROPANE	5.384	63	576797	203.46	UG/L	#	98
54) DIBROMOMETHANE	5.493	93	362076	198.51	UG/L		93

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913617.D
Acq On : 16 May 2019 2:10 pm
Operator :
Sample : 8260STD 200PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 17 Sample Multiplier: 1

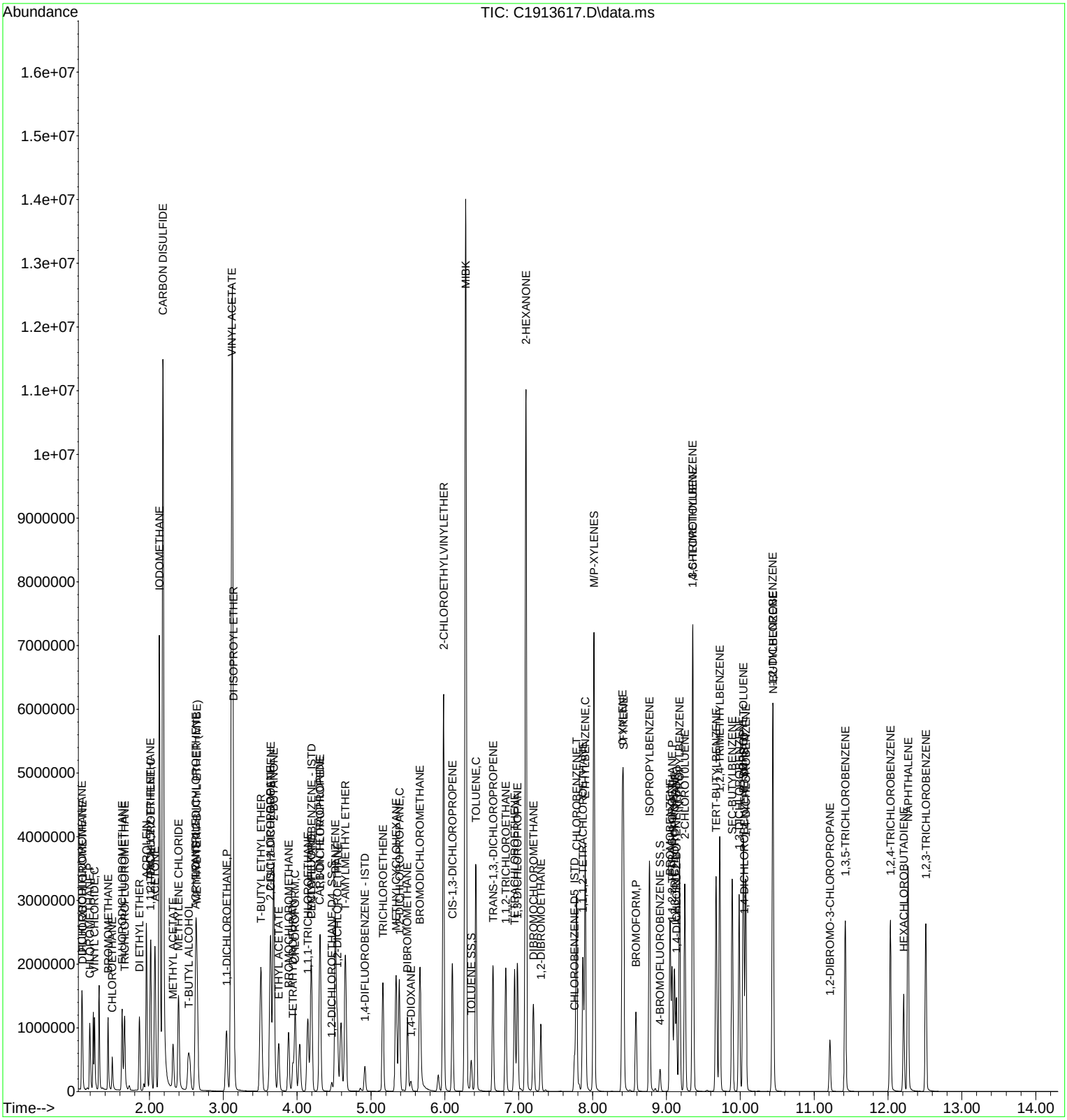
Quant Time: May 17 05:20:56 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
56) 1,4-DIOXANE	5.540	88	90016	2165.03	UG/L	#	62
57) BROMODICHLOROMETHANE	5.660	83	710530	193.16	UG/L		97
58) 2-CHLOROETHYLVINYLETHER	5.984	63	2222458	924.03	UG/L		95
59) MIBK	6.282	43	8762354	2115.39	UG/L		99
60) CIS-1,3-DICHLOROPROPENE	6.104	75	924846	224.81	UG/L		94
61) TOLUENE	6.422	91	2073128	197.35	UG/L		99
62) TRANS-1,3,-DICHLOROPRO...	6.653	75	871923	234.42	UG/L		93
64) 1,1,2-TRICHLOROETHANE	6.823	97	517413	205.43	UG/L		94
65) 2-HEXANONE	7.099	43	6506798	2129.58	UG/L		99
66) TETRACHLOROETHENE	6.946	166	486729	216.49	UG/L		96
67) 1,3-DICHLOROPROPANE	6.982	76	939773	204.30	UG/L		100
68) DIBROMOCHLOROMETHANE	7.200	129	617681	228.31	UG/L		98
69) 1,2-DIBROMOETHANE	7.300	107	585617	217.73	UG/L		99
72) CHLOROBENZENE	7.782	112	1364935	213.65	UG/L		94
73) 1,1,1,2-TETRACHLOROETHANE	7.869	131	514507	232.87	UG/L		98
74) ETHYLBENZENE	7.900	91	2320286	212.38	UG/L		96
75) M/P-XYLENES	8.020	91	3556601	399.98	UG/L		97
76) 0-XYLENE	8.404	91	1864830	200.70	UG/L		96
77) STYRENE	8.418	104	1588932	237.10	UG/L		94
78) BROMOFORM	8.586	173	508941	293.40	UG/L		99
79) ISOPROPYLBENZENE	8.770	105	2092156	217.92	UG/L		98
81) 1,1,2,2-TETRACHLOROETHANE	9.076	83	862923	239.21	UG/L		96
82) 1,4-DICHLORO-2-BUTENE(...	9.135	53	239440	203.82	UG/L	#	85
83) BROMOBENZENE	9.049	77	989604	211.51	UG/L		90
84) 1,2,3-TRICHLOROPROPANE	9.110	75	717895	185.52	UG/L		93
85) N-PROPYLBENZENE	9.177	91	2518706	201.58	UG/L		97
86) 2-CHLOROT0LUENE	9.249	91	1561792	194.06	UG/L		97
87) 1,3,5-TRIMETHYLBENZENE	9.355	105	1793634	208.24	UG/L		97
88) 4-CHLOROTOLUENE	9.358	91	1880391	196.72	UG/L		97
90) TERT-BUTYLBENZENE	9.673	119	1433609	188.47	UG/L		95
91) 1,2,4-TRIMETHYLBENZENE	9.723	105	1891241	189.19	UG/L		98
92) SEC-BUTYLBENZENE	9.891	105	2028522	190.79	UG/L		97
93) 1,3-DICHLOROBENZENE	9.986	146	1104561	202.06	UG/L		99
94) P-ISOPROPYLTOLUENE	10.041	119	1790355	194.76	UG/L		98
95) 1,4-DICHLOROBENZENE	10.075	146	1144455	189.75	UG/L		97
96) N-BUTYLBENZENE	10.446	91	1671971	199.48	UG/L		94
97) 1,2-DICHLOROBENZENE	10.437	146	1118158	200.90	UG/L		98
98) 1,2-DIBROMO-3-CHLOROPR...	11.213	75	165925	195.34	UG/L		91
99) 1,3,5-TRICHLOROBENZENE	11.422	180	773973	219.44	UG/L		98
100) 1,2,4-TRICHLOROBENZENE	12.032	180	761059	216.66	UG/L		100
101) HEXACHLOROBUTADIENE	12.214	225	280415	246.53	UG/L		98
102) NAPHTHALENE	12.272	128	2336715	213.37	UG/L		99
103) 1,2,3-TRICHLOROBENZENE	12.512	180	738193	220.35	UG/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913617.D
Acq On : 16 May 2019 2:10 pm
Operator :
Sample : 8260STD 200PPB 1905273 Inst : GCMSVOA3
Misc :
ALS Vial : 17 Sample Multiplier: 1

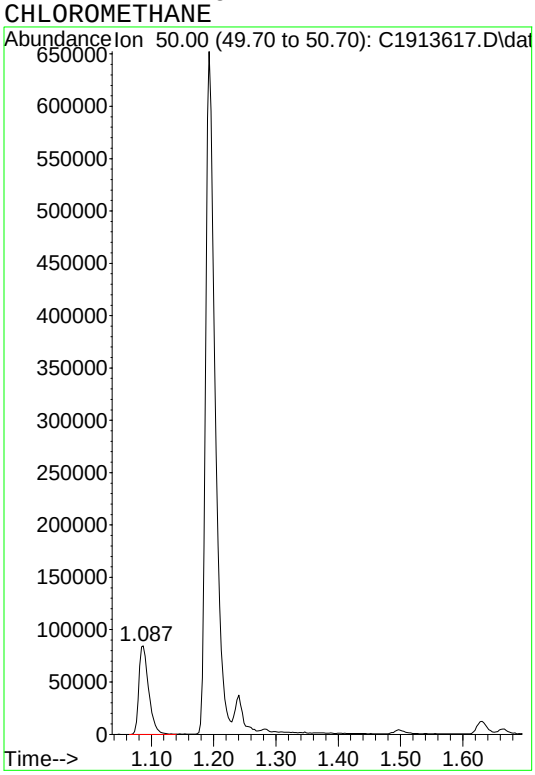
Quant Time: May 17 05:20:56 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913617.D
Acq On : 16 May 2019 2:10 pm
Operator :
Sample : 8260STD 200PPB 1905273
Misc :

Quant Time : Fri May 17 05:20:56 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
CHLOROMETHANE



Original Int. Results

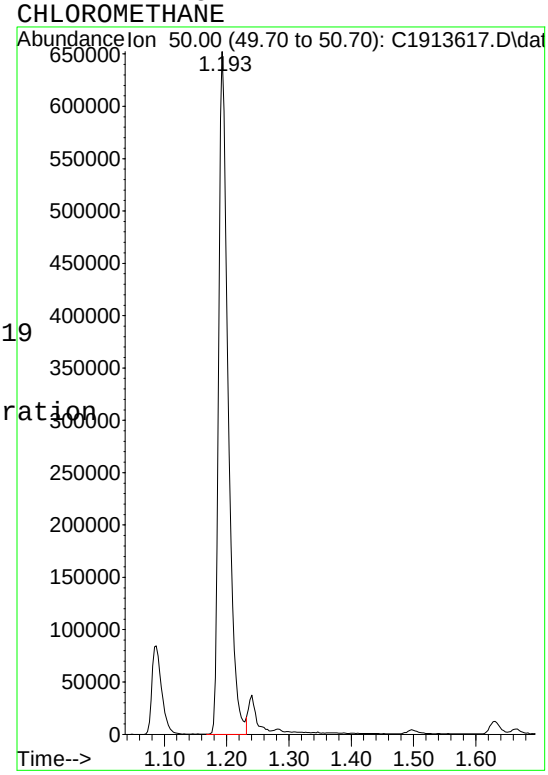
RT : 1.09
Area : 92118
Amount: 22.2301

Manual Int. Results

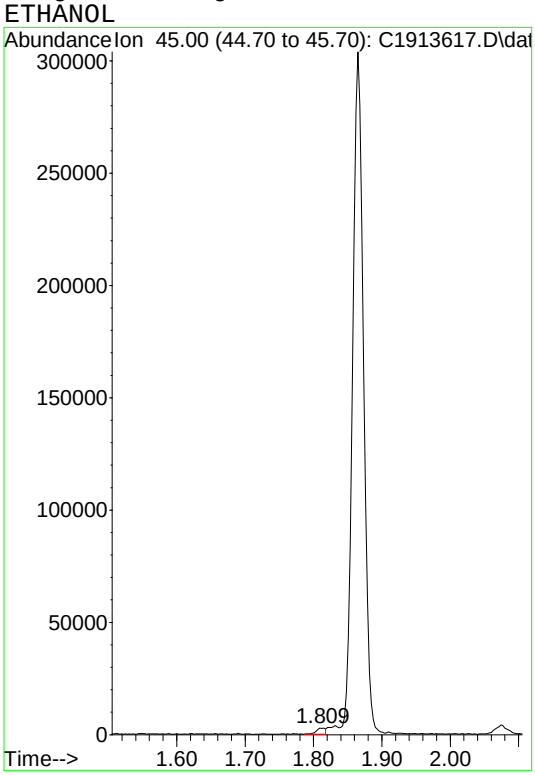
Fri May 17 05:20:37 2019

MIuser: EEH
Reason: Incorret Integration
RT : 1.19
Area : 691573
Amount: 166.892

Manual Integration
CHLOROMETHANE



Original Integration
ETHANOL



Original Int. Results

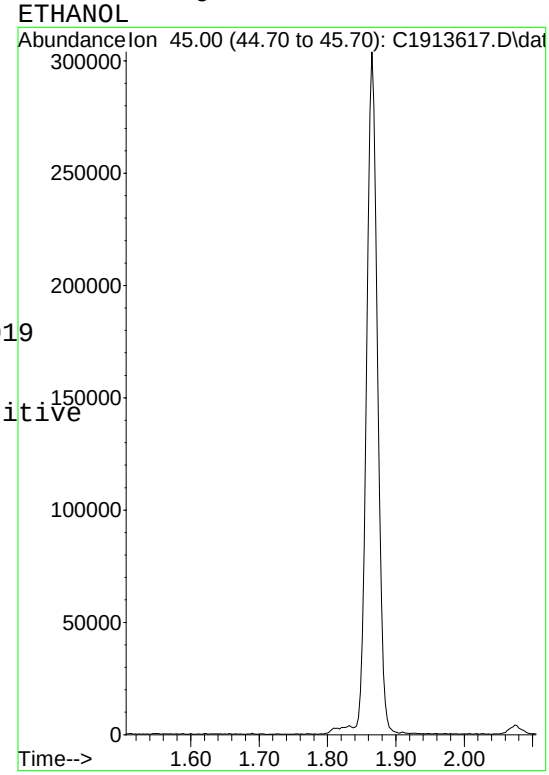
RT : 1.81
Area : 2518
Amount: 20.9175

Manual Int. Results

Fri May 17 05:20:44 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

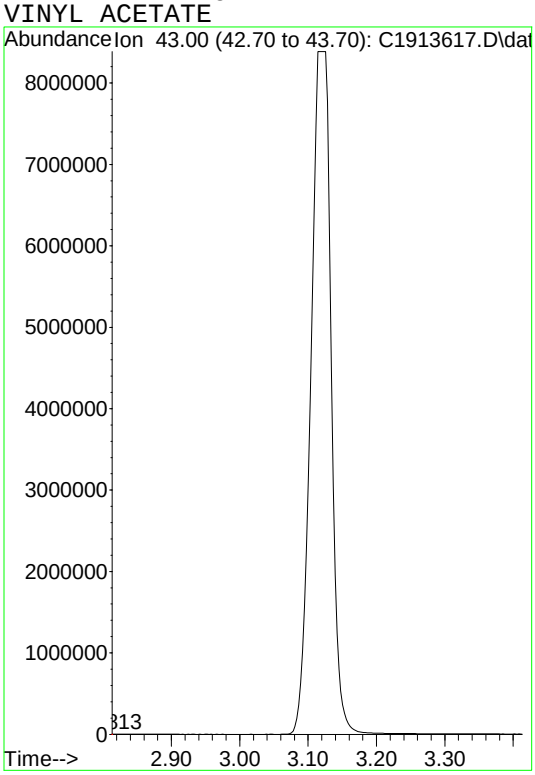
Manual Integration
ETHANOL



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913617.D
Acq On : 16 May 2019 2:10 pm
Operator :
Sample : 8260STD 200PPB 1905273
Misc :

Quant Time : Fri May 17 05:20:56 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Wed Mar 13 07:34:04 2019

Original Integration
VINYL ACETATE



Original Int. Results

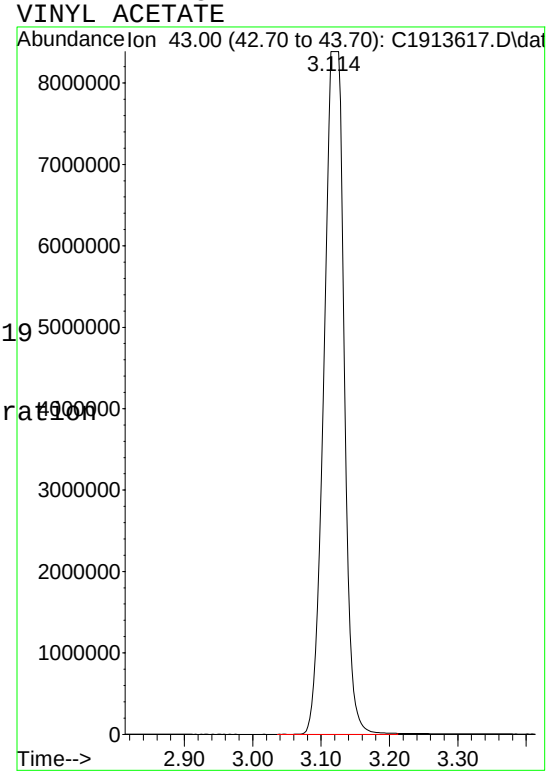
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

Fri May 17 05:20:56 2019

MIuser: EEH
Reason: Incorret Integration
RT : 3.11
Area : 1.70642e+007
Amount: 2051.46

Manual Integration
VINYL ACETATE



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913618.D
Acq On : 16 May 2019 2:36 pm
Operator :
Sample : ETOH 500PPB Inst : GCMSVOA3
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 17 05:24:45 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:24:05 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.199	168	166054	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	250351	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	125869	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	118821	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	78407	18.41	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 73.64%				
49) TOLUENE SS	6.355	98	252069	24.25	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 97.00%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	93034	23.62	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.48%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	1319	0.39	UG/L	#	43
4) DIFLUOROCHLOROMETHANE	1.243	51	894	0.22	UG/L	#	100
5) CHLOROMETHANE	1.196	50	2877	0.73	UG/L	#	26
6) VINYL CHLORIDE	1.260	62	788	0.24	UG/L	#	18
7) BROMOMETHANE	1.452	94	1519	0.25	UG/L	#	79
10) TRICHLOROFLUOROMETHANE	1.675	101	1370	0.33	UG/L		93
11) ETHANOL	1.801	45	26929m	491.28	UG/L		
13) ACROLEIN	1.954	56	1277	1.87	UG/L	#	57
14) ACETONE	2.071	43	2588	2.01	UG/L	#	88
15) 1,1-DICHLOROETHENE	2.024	61	1302	0.32	UG/L	#	79
16) 1,1,2-TRICL-1,2,2-TRIF...	2.027	101	786	0.40	UG/L	#	36
17) IODOMETHANE	2.150	142	8602	6.77	UG/L	#	72
20) METHYL ACETATE	2.322	43	1190	0.18	UG/L	#	64
23) METHYLENE CHLORIDE	2.400	49	749	0.17	UG/L	#	21
24) CARBON DISULFIDE	2.191	76	103382	16.38	UG/L		100
26) TRANS 1,2-DICHLOROETHENE	2.635	61	2087	0.53	UG/L		94
28) VINYL ACETATE	3.117	43	5940	0.75	UG/L	#	78
31) 2-BUTANONE	3.689	43	2387	1.14	UG/L	#	61
33) CIS-1,2-DICHLOROETHENE	3.644	61	814	0.16	UG/L	#	56
35) ETHYL ACETATE	3.689	43	2387	1.12	UG/L	#	59
41) 1,1,1-TRICHLOROETHANE	4.149	97	677	0.16	UG/L	#	1
42) CYCLOHEXANE	4.199	56	7083	0.59	UG/L	#	73
43) CARBON TETRACHLORIDE	4.311	117	626	0.18	UG/L	#	21
44) 1,1-DICHLOROPROPENE	4.314	75	1173	0.33	UG/L	#	58
45) BENZENE	4.523	78	2454	0.24	UG/L	#	1
51) TRICHLOROETHENE	5.167	95	1423	0.58	UG/L		86
52) METHYLCYCLOHEXANE	5.345	83	3401	1.10	UG/L	#	93
58) 2-CHLOROETHYLVINYLETHER	5.992	63	742	0.32	UG/L	#	11
59) MIBK	6.274	43	8156	2.05	UG/L	#	94
60) CIS-1,3-DICHLOROPROPENE	6.118	75	780	0.20	UG/L	#	51
61) TOLUENE	6.422	91	4365	0.43	UG/L	#	59
65) 2-HEXANONE	7.099	43	7522	2.56	UG/L		100
66) TETRACHLOROETHENE	6.949	166	2359	1.09	UG/L	#	80
72) CHLOROBENZENE	7.783	112	3797	0.64	UG/L		94
73) 1,1,1,2-TETRACHLOROETHANE	7.866	131	572	0.28	UG/L	#	62
74) ETHYLBENZENE	7.902	91	9054	0.89	UG/L		95
75) M/P-XYLENES	8.020	91	14761	1.78	UG/L		98
76) 0-XYLENE	8.407	91	6598	0.76	UG/L		99
77) STYRENE	8.424	104	4881	0.78	UG/L		93
79) ISOPROPYLBENZENE	8.770	105	11914	1.33	UG/L		96
81) 1,1,2,2-TETRACHLOROETHANE	9.082	83	748	0.22	UG/L	#	24
83) BROMOBENZENE	9.051	77	3603	0.82	UG/L	#	72
84) 1,2,3-TRICHLOROPROPANE	9.107	75	572	0.16	UG/L	#	38

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913618.D
Acq On : 16 May 2019 2:36 pm
Operator :
Sample : ETOH 500PPB Inst : GCMSVOA3
Misc :
ALS Vial : 18 Sample Multiplier: 1

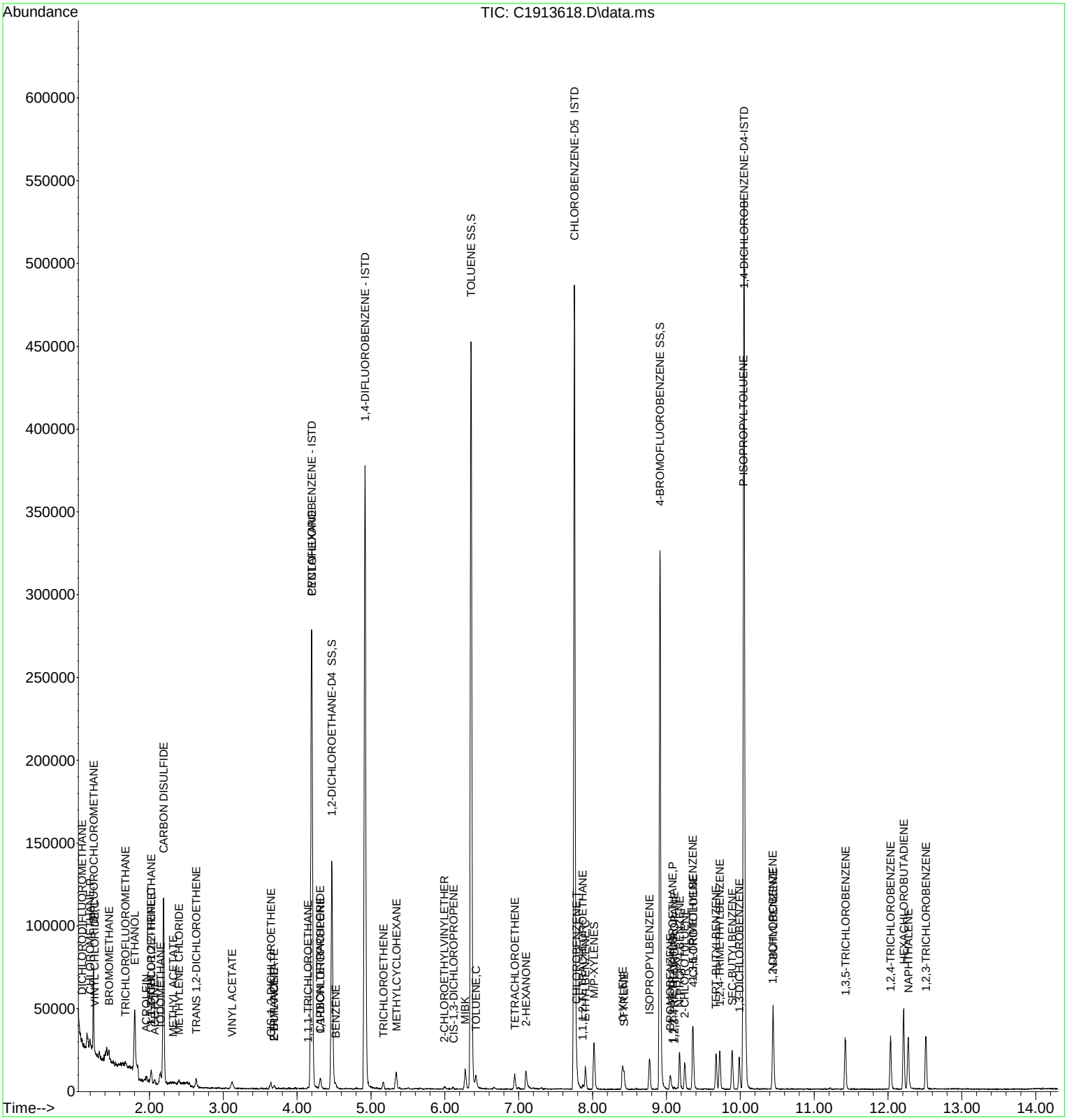
Quant Time: May 17 05:24:45 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:24:05 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
85) N-PROPYLBENZENE	9.180	91	16070	1.38	UG/L	97
86) 2-CHLOROT0LUENE	9.247	91	8678	1.15	UG/L #	71
87) 1,3,5-TRIMETHYLBENZENE	9.358	105	11592	1.44	UG/L	94
88) 4-CHLOROTOLUENE	9.364	91	11063	1.24	UG/L	93
90) TERT-BUTYLBENZENE	9.670	119	10008	1.51	UG/L	98
91) 1,2,4-TRIMETHYLBENZENE	9.721	105	11741	1.35	UG/L	99
92) SEC-BUTYLBENZENE	9.891	105	15704	1.69	UG/L	97
93) 1,3-DICHLOROBENZENE	9.988	146	7870	1.65	UG/L	96
94) P-ISOPROPYLTOLUENE	10.041	119	14827	1.85	UG/L	96
96) N-BUTYLBENZENE	10.448	91	18260	2.50	UG/L	94
97) 1,2-DICHLOROBENZENE	10.437	146	7176	1.48	UG/L	95
99) 1,3,5-TRICHLOROBENZENE	11.425	180	9674	3.14	UG/L	98
100) 1,2,4-TRICHLOROBENZENE	12.035	180	10001	3.26	UG/L	95
101) HEXACHLOROBUTADIENE	12.211	225	9215	9.29	UG/L	100
102) NAPHTHALENE	12.275	128	22703	2.38	UG/L	98
103) 1,2,3-TRICHLOROBENZENE	12.512	180	9979	3.42	UG/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913618.D
Acq On : 16 May 2019 2:36 pm
Operator :
Sample : ETOH 500PPB Inst : GCMSVOA3
Misc :
ALS Vial : 18 Sample Multiplier: 1

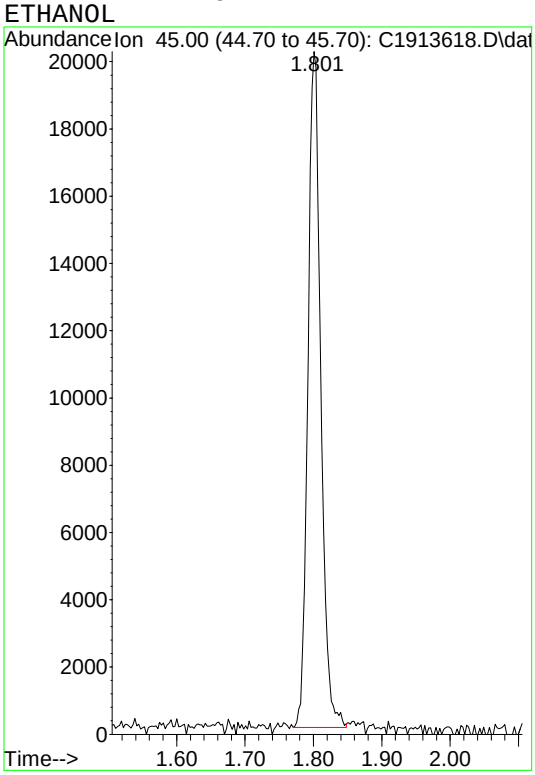
Quant Time: May 17 05:24:45 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:24:05 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913618.D
Acq On : 16 May 2019 2:36 pm
Operator :
Sample : ETOH 500PPB
Misc :

Quant Time : Fri May 17 05:24:45 2019
Quant Method : C:\msdchem\1\methods\C053018.M
QLast Update : Fri May 17 05:24:05 2019

Original Integration
ETHANOL



Original Int. Results

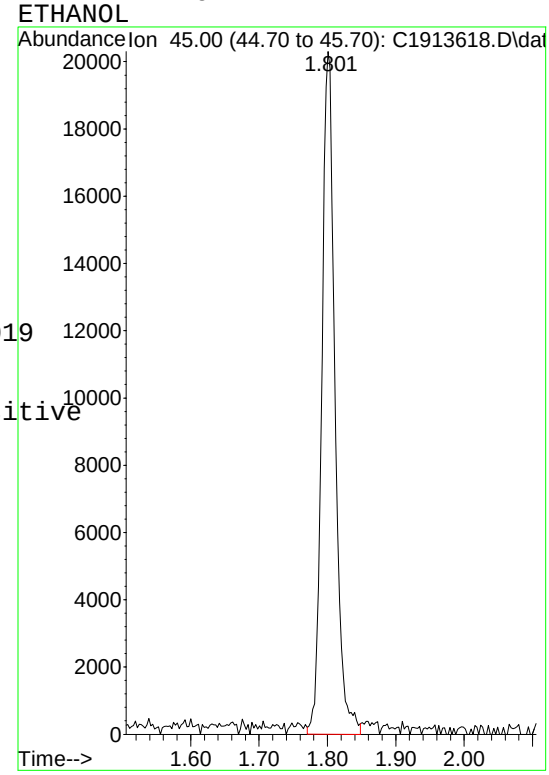
RT : 1.80
Area : 25985
Amount: 473.171

Manual Int. Results

Fri May 17 05:24:45 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 1.80
Area : 26929
Amount: 491.275

Manual Integration
ETHANOL



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913619.D
Acq On : 16 May 2019 3:03 pm
Operator :
Sample : ETOH 1000PPB Inst : GCMSVOA3
Misc :
ALS Vial : 19 Sample Multiplier: 1

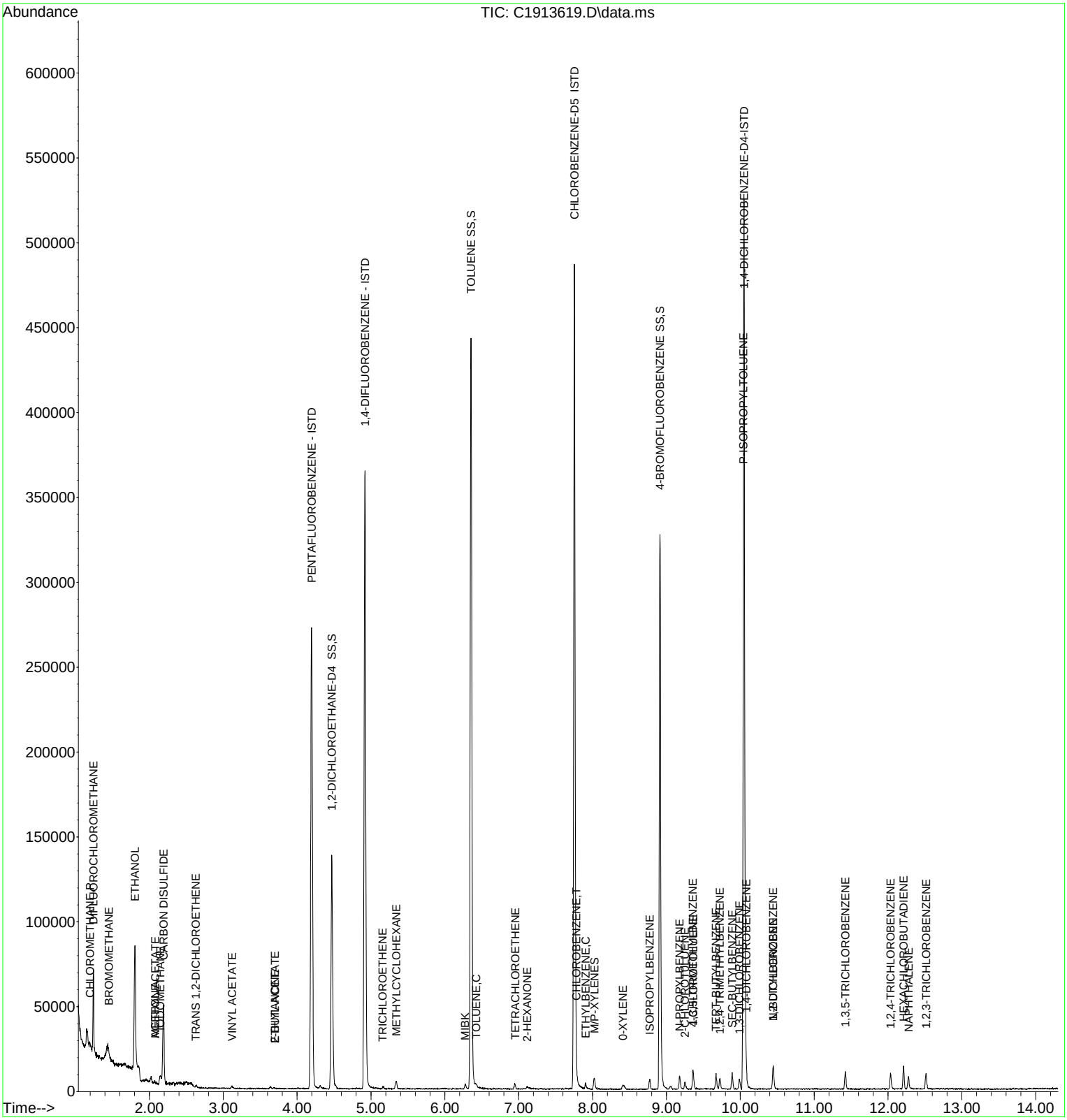
Quant Time: May 17 05:24:59 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:24:05 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.196	168	165781	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	250893	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	123702	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	119148	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	78061	18.36	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 73.44%				
49) TOLUENE SS	6.355	98	248890	23.90	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 95.60%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	93447	24.14	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 96.56%				
Target Compounds							Qvalue
4) DIFLUOROCHLOROMETHANE	1.240	51	870	0.21	UG/L	#	100
5) CHLOROMETHANE	1.196	50	1897	0.48	UG/L	#	40
7) BROMOMETHANE	1.450	94	2427	0.93	UG/L	#	63
11) ETHANOL	1.804	45	55866	1048.01	UG/L	#	85
14) ACETONE	2.077	43	937	0.73	UG/L	#	47
17) IODOMETHANE	2.147	142	6753	6.14	UG/L		98
20) METHYL ACETATE	2.077	43	937	0.14	UG/L	#	64
24) CARBON DISULFIDE	2.191	76	42085	6.68	UG/L		100
26) TRANS 1,2-DICHLOROETHENE	2.626	61	621	0.16	UG/L	#	67
28) VINYL ACETATE	3.120	43	1709	0.22	UG/L	#	78
31) 2-BUTANONE	3.700	43	674	0.32	UG/L	#	61
35) ETHYL ACETATE	3.700	43	674	0.32	UG/L	#	71
51) TRICHLOROETHENE	5.156	95	303	0.12	UG/L	#	1
52) METHYLCYCLOHEXANE	5.343	83	1528	0.49	UG/L	#	74
59) MIBK	6.271	43	880	0.22	UG/L	#	46
61) TOLUENE	6.425	91	1265	0.13	UG/L	#	21
65) 2-HEXANONE	7.113	43	1507	0.51	UG/L	#	26
66) TETRACHLOROETHENE	6.954	166	525	0.24	UG/L	#	33
72) CHLOROBENZENE	7.780	112	980	0.17	UG/L	#	1
74) ETHYLBENZENE	7.905	91	2378	0.24	UG/L		95
75) M/P-XYLENES	8.025	91	4098	0.50	UG/L		96
76) 0-XYLENE	8.410	91	1480	0.17	UG/L	#	78
79) ISOPROPYLBENZENE	8.773	105	3919	0.44	UG/L		93
85) N-PROPYLBENZENE	9.177	91	6193	0.54	UG/L		93
86) 2-CHLOROT0LUENE	9.249	91	2860	0.39	UG/L	#	39
87) 1,3,5-TRIMETHYLBENZENE	9.358	105	3889	0.49	UG/L		99
88) 4-CHLOROTOLUENE	9.364	91	3543	0.40	UG/L		90
90) TERT-BUTYLBENZENE	9.671	119	3848	0.58	UG/L		96
91) 1,2,4-TRIMETHYLBENZENE	9.721	105	3901	0.45	UG/L		97
92) SEC-BUTYLBENZENE	9.891	105	5865	0.63	UG/L		96
93) 1,3-DICHLOROBENZENE	9.988	146	2639	0.55	UG/L		91
94) P-ISOPROPYLTOLUENE	10.041	119	5647	0.70	UG/L	#	90
95) 1,4-DICHLOROBENZENE	10.080	146	2954	0.56	UG/L		96
96) N-BUTYLBENZENE	10.446	91	5684	0.78	UG/L		95
97) 1,2-DICHLOROBENZENE	10.446	146	1976	0.41	UG/L		98
99) 1,3,5-TRICHLOROBENZENE	11.422	180	3178	1.03	UG/L		91
100) 1,2,4-TRICHLOROBENZENE	12.033	180	3336	1.09	UG/L		95
101) HEXACHLOROBUTADIENE	12.208	225	2793	2.81	UG/L		97
102) NAPHTHALENE	12.278	128	6058	0.63	UG/L	#	82
103) 1,2,3-TRICHLOROBENZENE	12.515	180	3060	1.04	UG/L		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913619.D
Acq On : 16 May 2019 3:03 pm
Operator :
Sample : ETOH 1000PPB Inst : GCMSVOA3
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 17 05:24:59 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:24:05 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913620.D
Acq On : 16 May 2019 3:29 pm
Operator :
Sample : ETOH 2000PPB Inst : GCMSVOA3
Misc :
ALS Vial : 20 Sample Multiplier: 1

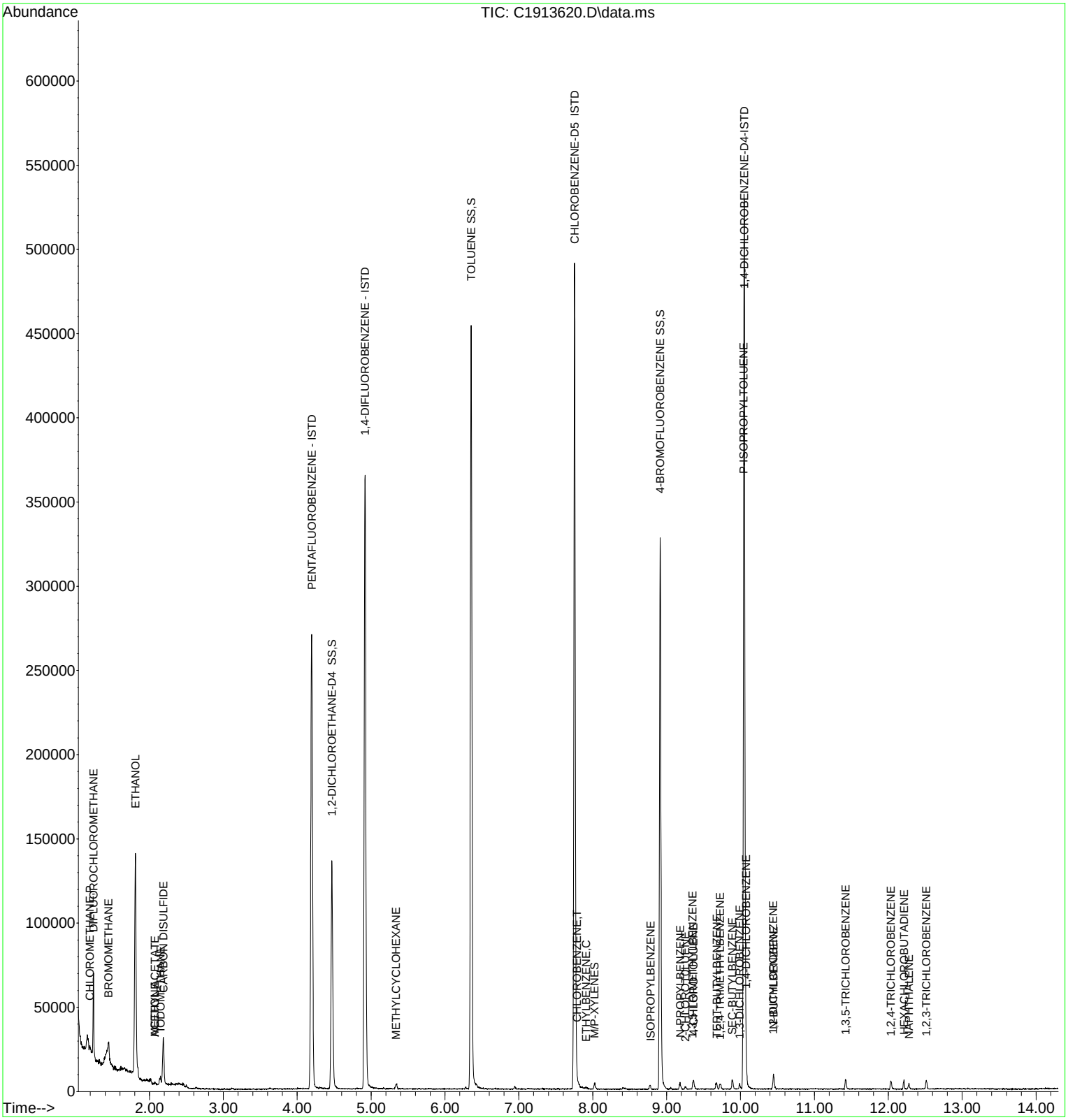
Quant Time: May 17 05:25:19 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:24:05 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.196	168	164974	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.916	114	249404	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.752	82	126113	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	121197	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	77927	18.42	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 73.68%				
49) TOLUENE SS	6.355	98	249537	24.10	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 96.40%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	93661	23.73	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.92%				
Target Compounds							Qvalue
4) DIFLUOROCHLOROMETHANE	1.240	51	800	0.20	UG/L	#	100
5) CHLOROMETHANE	1.193	50	1542	0.39	UG/L	#	81
7) BROMOMETHANE	1.444	94	2253	0.81	UG/L	#	76
11) ETHANOL	1.809	45	107786	2055.54	UG/L	#	86
14) ACETONE	2.071	43	1376	1.08	UG/L	#	47
17) IODOMETHANE	2.149	142	4044	5.20	UG/L		88
20) METHYL ACETATE	2.071	43	1376	0.21	UG/L	#	64
24) CARBON DISULFIDE	2.188	76	25116	4.01	UG/L		96
42) CYCLOHEXANE	4.194	56	4054	Below Cal		#	41
52) METHYLCYCLOHEXANE	5.337	83	564	0.18	UG/L	#	37
72) CHLOROBENZENE	7.785	112	619	0.10	UG/L	#	1
74) ETHYLBENZENE	7.911	91	1127	0.11	UG/L	#	42
75) M/P-XYLENES	8.022	91	2400	0.29	UG/L		87
79) ISOPROPYLBENZENE	8.781	105	2016	0.22	UG/L	#	48
85) N-PROPYLBENZENE	9.182	91	3515	0.30	UG/L		91
86) 2-CHLOROT0LUENE	9.252	91	1544	0.20	UG/L	#	39
87) 1,3,5-TRIMETHYLBENZENE	9.352	105	849	0.11	UG/L	#	1
88) 4-CHLOROTOLUENE	9.364	91	1919	0.21	UG/L	#	42
90) TERT-BUTYLBENZENE	9.679	119	2270	0.34	UG/L		97
91) 1,2,4-TRIMETHYLBENZENE	9.721	105	1336	0.15	UG/L	#	64
92) SEC-BUTYLBENZENE	9.888	105	3925	0.41	UG/L		91
93) 1,3-DICHLOROBENZENE	9.988	146	1320	0.27	UG/L	#	69
94) P-ISOPROPYLTOLUENE	10.041	119	3363	0.41	UG/L	#	88
95) 1,4-DICHLOROBENZENE	10.075	146	1674	0.31	UG/L	#	37
96) N-BUTYLBENZENE	10.448	91	4143	0.56	UG/L	#	83
97) 1,2-DICHLOROBENZENE	10.440	146	955	0.19	UG/L	#	25
99) 1,3,5-TRICHLOROBENZENE	11.422	180	1163	0.37	UG/L	#	13
100) 1,2,4-TRICHLOROBENZENE	12.035	180	1734	0.55	UG/L	#	80
101) HEXACHLOROBUTADIENE	12.214	225	1150	1.14	UG/L	#	43
102) NAPHTHALENE	12.278	128	2742	0.28	UG/L	#	72
103) 1,2,3-TRICHLOROBENZENE	12.512	180	1820	0.61	UG/L		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913620.D
Acq On : 16 May 2019 3:29 pm
Operator :
Sample : ETOH 2000PPB Inst : GCMSVOA3
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 17 05:25:19 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:24:05 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C051619\
Data File : C1913626.D
Acq On : 16 May 2019 6:08 pm
Operator :
Sample : ICV Inst : GCMSVOA3
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 17 05:33:17 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.196	168	164103	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	249680	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	125688	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	119857	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	77147	24.99	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 99.96%				
49) TOLUENE SS	6.355	98	249948	25.10	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 100.40%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	93548	25.09	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 100.36%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	25867	9.67	UG/L		98
4) DIFLUOROCHLOROMETHANE	1.095	51	31303	9.79	UG/L	#	100
5) CHLOROMETHANE	1.196	50	33836	9.48	UG/L	#	24
6) VINYL CHLORIDE	1.260	62	26240	9.20	UG/L		97
7) BROMOMETHANE	1.450	94	13070	8.39	UG/L		99
8) CHLOROETHANE	1.517	64	15980	10.14	UG/L		100
9) FLUORODICHLOROMETHANE	1.636	67	43608	10.11	UG/L		98
10) TRICHLOROFLUOROMETHANE	1.676	101	30581	9.63	UG/L		97
11) ETHANOL	1.801	45	5868	104.92	UG/L	#	80
12) DI ETHYL ETHER	1.865	59	21689	10.71	UG/L		98
13) ACROLEIN	1.957	56	75186	111.33	UG/L		100
14) ACETONE	2.072	43	102846	99.92	UG/L		97
15) 1,1-DICHLOROETHENE	2.021	61	32607	10.27	UG/L		99
16) 1,1,2-TRICL-1,2,2-TRIF...	2.024	101	18995	10.92	UG/L		92
17) IODOMETHANE	2.138	142	20980	8.07	UG/L		99
20) METHYL ACETATE	2.320	43	31269	9.81	UG/L		100
21) T-BUTYL ALCOHOL	2.515	59	34830	87.96	UG/L	#	99
22) ACRYLONITRILE	2.621	53	14239	10.48	UG/L		97
23) METHYLENE CHLORIDE	2.401	49	36319	10.77	UG/L		99
24) CARBON DISULFIDE	2.189	76	68792	11.23	UG/L		100
25) METHYL TERT-BUTYL ETHE...	2.643	73	79001	11.02	UG/L		97
26) TRANS 1,2-DICHLOROETHENE	2.635	61	34444	10.47	UG/L		94
27) 1,1-DICHLOROETHANE	3.048	63	47066	10.69	UG/L		98
28) VINYL ACETATE	3.114	43	803094	94.96	UG/L		99
29) DI ISOPROYL ETHER	3.131	45	101981	10.71	UG/L		98
31) 2-BUTANONE	3.678	43	180022	97.41	UG/L		99
32) T-BUTYL ETHYL ETHER	3.508	59	78758	9.92	UG/L		98
33) CIS-1,2-DICHLOROETHENE	3.642	61	40734	10.63	UG/L		92
34) 2,2-DICHLOROPROPANE	3.636	77	31908	9.67	UG/L		91
35) ETHYL ACETATE	3.753	43	36186	9.69	UG/L	#	96
38) BROMOCHLOROMETHANE	3.884	49	25701	11.37	UG/L		92
39) TETRAHYDROFURAN	3.940	42	12146	11.01	UG/L		99
40) CHLOROFORM	3.976	83	42995	10.53	UG/L		98
41) 1,1,1-TRICHLOROETHANE	4.146	97	35118	10.77	UG/L		98
42) CYCLOHEXANE	4.194	56	42878	11.10	UG/L		95
43) CARBON TETRACHLORIDE	4.308	117	29094	10.64	UG/L		98
44) 1,1-DICHLOROPROPENE	4.316	75	31957	10.57	UG/L		94
45) BENZENE	4.523	78	98990	10.49	UG/L		97
47) T-AMYLMETHYL ETHER	4.654	73	73016	10.35	UG/L		97
50) 1,2-DICHLOROETHANE	4.545	62	35404	10.41	UG/L		97
51) TRICHLOROETHENE	5.161	95	24028	10.94	UG/L		93
52) METHYLCYCLOHEXANE	5.340	83	33343	11.09	UG/L		96
53) 1,2-DICHLOROPROPANE	5.382	63	28122	10.68	UG/L	#	99

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913626.D
Acq On : 16 May 2019 6:08 pm
Operator :
Sample : ICV Inst : GCMSVOA3
Misc :
ALS Vial : 26 Sample Multiplier: 1

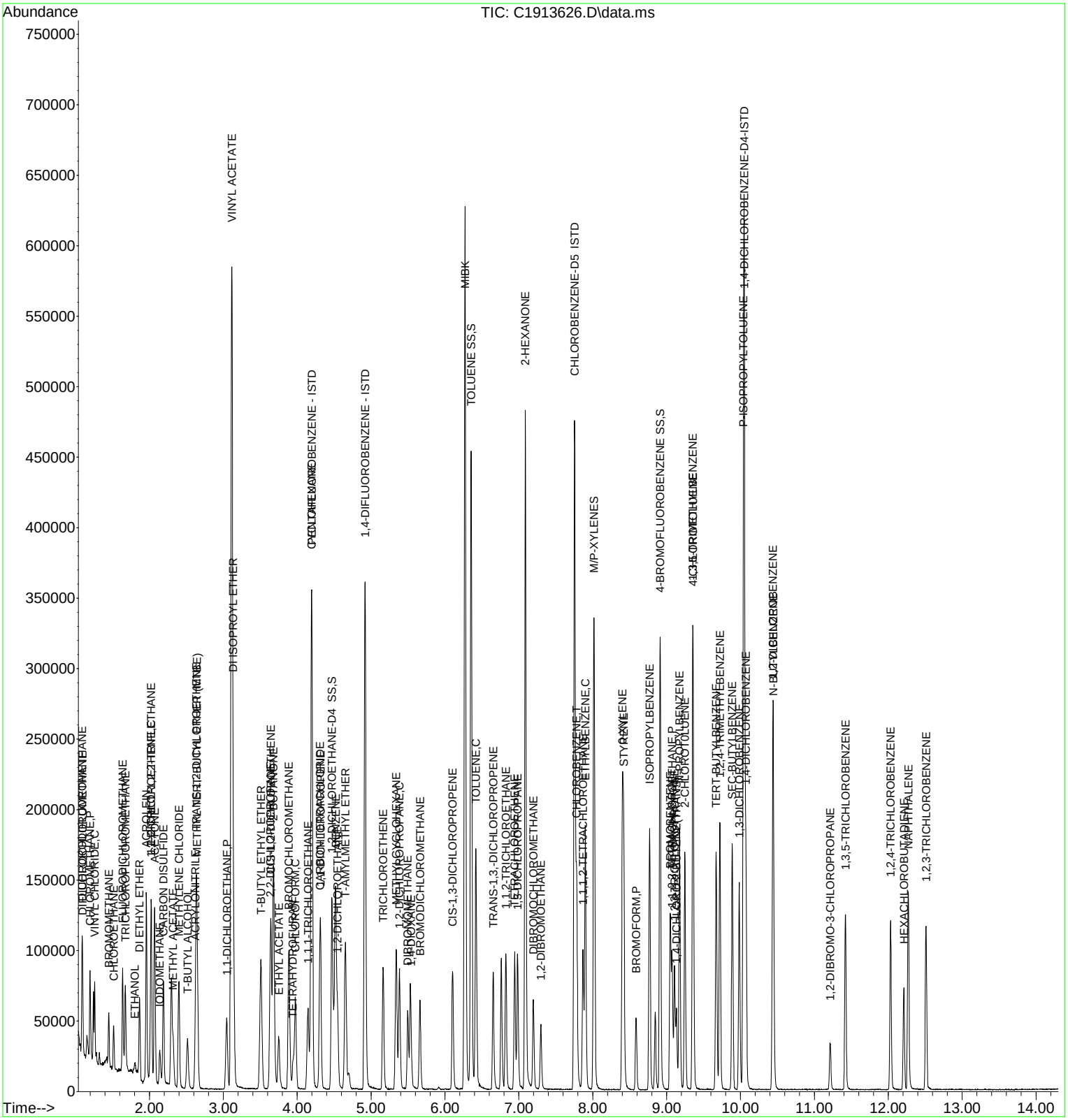
Quant Time: May 17 05:33:17 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
54) DIBROMOMETHANE	5.496	93	17505	10.72	UG/L	92
56) 1,4-DIOXANE	5.541	88	3584	92.91	UG/L #	50
57) BROMODICHLOROMETHANE	5.663	83	34299	10.90	UG/L	97
59) MIBK	6.271	43	386004	99.61	UG/L	98
60) CIS-1,3-DICHLOROPROPENE	6.104	75	41484	10.33	UG/L	95
61) TOLUENE	6.419	91	102459	10.62	UG/L	97
62) TRANS-1,3,-DICHLOROPRO...	6.653	75	37409	10.31	UG/L	94
64) 1,1,2-TRICHLOROETHANE	6.823	97	25277	11.13	UG/L	96
65) 2-HEXANONE	7.088	43	275090	98.84	UG/L	97
66) TETRACHLOROETHENE	6.943	166	24759	11.08	UG/L	96
67) 1,3-DICHLOROPROPANE	6.982	76	45081	10.65	UG/L	100
68) DIBROMOCHLOROMETHANE	7.197	129	27753	10.62	UG/L	99
69) 1,2-DIBROMOETHANE	7.297	107	28495	11.24	UG/L	99
72) CHLOROBENZENE	7.780	112	67088	10.83	UG/L	91
73) 1,1,1,2-TETRACHLOROETHANE	7.869	131	24068	10.88	UG/L	98
74) ETHYLBENZENE	7.900	91	115286	10.81	UG/L	94
75) M/P-XYLENES	8.017	91	173859	21.51	UG/L	98
76) 0-XYLENE	8.402	91	89884	10.79	UG/L	97
77) STYRENE	8.418	104	72277	10.76	UG/L	94
78) BROMOFORM	8.586	173	20650	10.59	UG/L	98
79) ISOPROPYLBENZENE	8.770	105	105061	10.87	UG/L	97
81) 1,1,2,2-TETRACHLOROETHANE	9.074	83	41556	11.30	UG/L #	95
82) 1,4-DICHLORO-2-BUTENE(...	9.132	53	9458	10.18	UG/L	91
83) BROMOBENZENE	9.049	77	46866	10.58	UG/L	90
84) 1,2,3-TRICHLOROPROPANE	9.107	75	32085	10.44	UG/L	95
85) N-PROPYLBENZENE	9.174	91	124187	10.93	UG/L	96
86) 2-CHLOROT0LUENE	9.247	91	78481	10.89	UG/L	95
87) 1,3,5-TRIMETHYLBENZENE	9.355	105	85528	10.62	UG/L	95
88) 4-CHLOROTOLUENE	9.358	91	89749	10.94	UG/L	96
90) TERT-BUTYLBENZENE	9.671	119	70777	10.94	UG/L	95
91) 1,2,4-TRIMETHYLBENZENE	9.721	105	88219	10.80	UG/L	96
92) SEC-BUTYLBENZENE	9.888	105	104460	11.45	UG/L	96
93) 1,3-DICHLOROBENZENE	9.983	146	53326	11.26	UG/L	98
94) P-ISOPROPYLTOLUENE	10.039	119	88158	11.22	UG/L	97
95) 1,4-DICHLOROBENZENE	10.072	146	55801	11.12	UG/L	96
96) N-BUTYLBENZENE	10.446	91	79040	11.18	UG/L	92
97) 1,2-DICHLOROBENZENE	10.437	146	53101	11.12	UG/L	98
98) 1,2-DIBROMO-3-CHLOROPR...	11.213	75	7412	11.28	UG/L	88
99) 1,3,5-TRICHLOROBENZENE	11.422	180	35692	10.94	UG/L	99
100) 1,2,4-TRICHLOROBENZENE	12.030	180	34828	11.34	UG/L	100
101) HEXACHLOROBUTADIENE	12.214	225	13977	11.95	UG/L	97
102) NAPHTHALENE	12.272	128	100960	10.99	UG/L	100
103) 1,2,3-TRICHLOROBENZENE	12.512	180	33428	10.96	UG/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C051619\
Data File : C1913626.D
Acq On : 16 May 2019 6:08 pm
Operator :
Sample : ICV Inst : GCMSVOA3
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 17 05:33:17 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration



CONTINUING CALIBRATION VERIFICATION

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	GCMSVOA3	Calibration:	1900192
Lab File ID:	C1922615.D	Calibration Date:	05/16/19 09:46
Sequence:	S039197	Injection Date:	08/14/19
Lab Sample ID:	S039197-CCV1	Injection Time:	13:15

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Acetone	A	100	112	0.1881665	0.2107051		12.0	20	
Acrylonitrile	A	10.0	10.0	0.2484221	0.2483638		-0.02	20	
tert-Amyl Methyl Ether (TAME)	A	10.0	10.0	1.289385	1.290253		0.07	20	
Benzene	A	10.0	10.5	1.72594	1.80731		4.7	20	
Bromobenzene	A	10.0	9.86	1.057032	1.042319		-1.4	20	
Bromochloromethane	A	10.0	11.1	0.4131035	0.4589578		11.1	20	
Bromodichloromethane	A	10.0	11.1	0.3780762	0.4193835		10.9	20	
Bromoform	A	10.0	9.78	0.4654726	0.4550388		-2.2	20	
Bromomethane	A	10.0	13.5	0.2847145	0.3845014		35.0	20	*
2-Butanone (MEK)	A	100	108	0.3378563	0.3653		8.1	20	
tert-Butyl Alcohol (TBA)	A	100	128	7.238849E-02	9.280801E-02		28.2	20	*
n-Butylbenzene	A	10.0	9.60	1.769604	1.699		-4.0	20	
sec-Butylbenzene	A	10.0	10.1	2.284017	2.310476		1.2	20	
tert-Butylbenzene	A	10.0	10.2	1.618806	1.654069		2.2	20	
tert-Butyl Ethyl Ether (TBEE)	A	10.0	10.1	1.451316	1.471131		1.4	20	
Carbon Disulfide	A	100	88.9	1.119853	0.9957018		-11.1	20	
Carbon Tetrachloride	A	10.0	10.2	0.4997097	0.5122242		2.5	20	
Chlorobenzene	A	10.0	10.2	1.478802	1.513531		2.3	20	
Chlorodibromomethane	A	10.0	10.7	0.3139765	0.3357933		6.9	20	
Chloroethane	A	10.0	10.4	0.2881543	0.2992418		3.8	20	
Chloroform	A	10.0	11.3	0.7462329	0.8403766		12.6	20	
Chloromethane	A	10.0	11.9	0.6525361	0.7793896		19.4	20	
2-Chlorotoluene	A	10.0	9.74	1.720424	1.675159		-2.6	20	
4-Chlorotoluene	A	10.0	10.1	1.958256	1.972058		0.7	20	
1,2-Dibromo-3-chloropropane (DBCP)	A	10.0	11.1	0.1644986	0.1832104		11.4	20	
1,2-Dibromoethane (EDB)	A	10.0	10.6	0.3046615	0.3237897		6.3	20	
Dibromomethane	A	10.0	10.7	0.1962563	0.2104805		7.2	20	
1,2-Dichlorobenzene	A	10.0	10.4	1.195438	1.237092		3.5	20	
1,3-Dichlorobenzene	A	10.0	10.2	1.185068	1.208514		2.0	20	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	GCMSVOA3	Calibration:	1900192
Lab File ID:	C1922615.D	Calibration Date:	05/16/19 09:46
Sequence:	S039197	Injection Date:	08/14/19
Lab Sample ID:	S039197-CCV1	Injection Time:	13:15

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dichlorobenzene	A	10.0	9.97	1.256354	1.253144		-0.3	20
trans-1,4-Dichloro-2-butene	A	10.0	9.80	0.2217889	0.2173009		-2.0	20
Dichlorodifluoromethane (Freon 12)	A	10.0	9.33	0.489052	0.4560418		-6.7	20
1,1-Dichloroethane	A	10.0	10.7	0.8050564	0.8642882		7.4	20
1,2-Dichloroethane	A	10.0	11.0	0.4085792	0.4495558		10.0	20
1,1-Dichloroethylene	A	10.0	11.2	0.580623	0.6510558		12.1	20
cis-1,2-Dichloroethylene	A	10.0	10.7	0.7003627	0.7524509		7.4	20
trans-1,2-Dichloroethylene	A	10.0	9.69	0.6012956	0.5826259		-3.1	20
1,2-Dichloropropane	A	10.0	10.8	0.3162404	0.3408885		7.8	20
1,3-Dichloropropane	A	10.0	10.9	0.5087606	0.5531641		8.7	20
2,2-Dichloropropane	A	10.0	9.85	0.6030733	0.5942346		-1.5	20
1,1-Dichloropropene	A	10.0	10.7	0.5527761	0.5933736		7.3	20
cis-1,3-Dichloropropene	A	10.0	10.1	0.4823059	0.4885766		1.3	20
trans-1,3-Dichloropropene	A	10.0	10.5	0.4359988	0.4593291		5.4	20
Diethyl Ether	A	10.0	10.7	0.3702305	0.3956657		6.9	20
Diisopropyl Ether (DIPE)	A	10.0	10.8	1.74122	1.876656		7.8	20
1,4-Dioxane	A	100	108	4.635165E-03	5.000907E-03		7.9	20
Ethylbenzene	A	10.0	10.2	2.545889	2.604651		2.3	20
Hexachlorobutadiene	A	10.0	9.30	0.2928132	0.2721715		-7.0	20
2-Hexanone (MBK)	A	100	108	0.3344099	0.3615956		8.1	20
Isopropylbenzene (Cumene)	A	10.0	10.1	2.305934	2.324101		0.8	20
p-Isopropyltoluene (p-Cymene)	A	10.0	9.66	1.967049	1.900475		-3.4	20
Methyl Acetate	A	10.0	11.8	0.5828072	0.6884923		18.1	20
Methyl tert-Butyl Ether (MTBE)	A	10.0	10.2	1.31052	1.336965		2.0	20
Methyl Cyclohexane	A	10.0	9.49	0.3612119	0.3426292		-5.1	20
Methylene Chloride	A	10.0	10.9	0.6164331	0.6717736		9.0	20
4-Methyl-2-pentanone (MIBK)	A	100	111	0.4656019	0.5177715		11.2	20
Naphthalene	A	10.0	10.1	2.298426	2.319552		0.9	20
n-Propylbenzene	A	10.0	10.1	2.710896	2.74179		1.1	20

CONTINUING CALIBRATION VERIFICATION

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	GCMSVOA3	Calibration:	1900192
Lab File ID:	C1922615.D	Calibration Date:	05/16/19 09:46
Sequence:	S039197	Injection Date:	08/14/19
Lab Sample ID:	S039197-CCV1	Injection Time:	13:15

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Styrene	A	10.0	10.1	1.60354	1.622692		1.2	20
1,1,1,2-Tetrachloroethane	A	10.0	10.4	0.5280217	0.548062		3.8	20
1,1,2,2-Tetrachloroethane	A	10.0	10.7	0.8779885	0.9381254		6.8	20
Tetrachloroethylene	A	10.0	10.4	0.2684052	0.2789121		3.9	20
Tetrahydrofuran	A	10.0	10.9	0.2017468	0.2206752		9.4	20
Toluene	A	10.0	10.6	1.159427	1.232294		6.3	20
1,2,3-Trichlorobenzene	A	10.0	9.62	0.763704	0.7349419		-3.8	20
1,2,4-Trichlorobenzene	A	10.0	9.53	0.768892	0.7331041		-4.7	20
1,3,5-Trichlorobenzene	A	10.0	9.68	0.816296	0.7897737		-3.2	20
1,1,1-Trichloroethane	A	10.0	11.1	0.5962929	0.6645251		11.4	20
1,1,2-Trichloroethane	A	10.0	11.1	0.2729421	0.3029012		11.0	20
Trichloroethylene	A	10.0	10.6	0.264012	0.2811967		6.5	20
Trichlorofluoromethane (Freon 11)	A	10.0	10.9	0.5804948	0.6328375		9.0	20
1,2,3-Trichloropropane	A	10.0	10.0	0.7335319	0.7367512		0.4	20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	10.7	0.3179614	0.3408719		7.2	20
1,2,4-Trimethylbenzene	A	10.0	10.1	2.04495	2.068684		1.2	20
1,3,5-Trimethylbenzene	A	10.0	9.49	1.923032	1.8253		-5.1	20
Vinyl Chloride	A	10.0	9.83	0.5215649	0.5124742		-1.7	20
m+p Xylene	A	20.0	20.0	1.929171	1.929052		-0.006	20
o-Xylene	A	10.0	10.2	1.987587	2.031748		2.2	20
1,2-Dichloroethane-d4	A	25.0	27.6	0.5643226	0.6231673		10.4	
Toluene-d8	A	25.0	25.4	1.196284	1.217509		1.8	
4-Bromofluorobenzene	A	25.0	23.6	0.8899582	0.8398872		-5.6	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922615.D
Acq On : 14 Aug 2019 1:15 pm
Operator :
Sample : 8260STD 10PPB 1907138 Inst : GCMSVOA3
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 15 08:31:42 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.199	168	108023	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.919	114	165450	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	85140	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	79990	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.473	65	56097	27.61	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 110.44%				
49) TOLUENE SS	6.355	98	167864	25.44	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 101.76%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	59590	23.59	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.36%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	16421	9.33	UG/L		97
4) DIFLUOROCHLOROMETHANE	1.093	51	21730	10.32	UG/L	#	100
5) CHLOROMETHANE	1.196	50	28064m	11.94	UG/L		
6) VINYL CHLORIDE	1.263	62	18453	9.83	UG/L		94
7) BROMOMETHANE	1.450	94	13845	13.50	UG/L		98
8) CHLOROETHANE	1.517	64	10775	10.38	UG/L		96
9) FLUORODICHLOROMETHANE	1.639	67	31570	11.12	UG/L		97
10) TRICHLOROFLUOROMETHANE	1.678	101	22787	10.90	UG/L		96
11) ETHANOL	1.801	45	3985	108.24	UG/L	#	89
12) DI ETHYL ETHER	1.865	59	14247	10.69	UG/L		94
13) ACROLEIN	1.960	56	45688	102.77	UG/L		95
14) ACETONE	2.069	43	75870	111.98	UG/L		98
15) 1,1-DICHLOROETHENE	2.027	61	23443	11.21	UG/L		95
16) 1,1,2-TRICL-1,2,2-TRIF...	2.024	101	12274	10.72	UG/L		81
17) IODOMETHANE	2.144	142	168442	98.45	UG/L		96
20) METHYL ACETATE	2.320	43	24791m	11.81	UG/L		
21) T-BUTYL ALCOHOL	2.509	59	33418	128.21	UG/L	#	75
22) ACRYLONITRILE	2.624	53	8943	10.00	UG/L		98
23) METHYLENE CHLORIDE	2.401	49	24189	10.90	UG/L		98
24) CARBON DISULFIDE	2.191	76	358529	88.91	UG/L		99
25) METHYL TERT-BUTYL ETHE...	2.643	73	48141	10.20	UG/L		100
26) TRANS 1,2-DICHLOROETHENE	2.635	61	20979	9.69	UG/L		95
27) 1,1-DICHLOROETHANE	3.053	63	31121	10.74	UG/L		98
28) VINYL ACETATE	3.114	43	597786	107.38	UG/L		98
29) DI ISOPROYL ETHER	3.134	45	67574	10.78	UG/L		98
31) 2-BUTANONE	3.681	43	131536	108.12	UG/L		98
32) T-BUTYL ETHYL ETHER	3.508	59	52972	10.14	UG/L		98
33) CIS-1,2-DICHLOROETHENE	3.644	61	27094	10.74	UG/L		91
34) 2,2-DICHLOROPROPANE	3.641	77	21397	9.85	UG/L		90
35) ETHYL ACETATE	3.753	43	25007	10.17	UG/L	#	95
38) BROMOCHLOROMETHANE	3.890	49	16526	11.11	UG/L		90
39) TETRAHYDROFURAN	3.948	42	7946	10.94	UG/L	#	83
40) CHLOROFORM	3.979	83	30260	11.26	UG/L		96
41) 1,1,1-TRICHLOROETHANE	4.149	97	23928	11.14	UG/L		92
42) CYCLOHEXANE	4.199	56	25859	10.17	UG/L		92
43) CARBON TETRACHLORIDE	4.308	117	18444	10.25	UG/L		97
44) 1,1-DICHLOROPROPENE	4.311	75	21366	10.73	UG/L		94
45) BENZENE	4.520	78	65077	10.47	UG/L		96
47) T-AMYLMETHYL ETHER	4.651	73	46459	10.01	UG/L		98
50) 1,2-DICHLOROETHANE	4.548	62	24793	11.00	UG/L		96
51) TRICHLOROETHENE	5.161	95	15508	10.65	UG/L		90
52) METHYLCYCLOHEXANE	5.343	83	18896	9.49	UG/L		96
53) 1,2-DICHLOROPROPANE	5.387	63	18800	10.78	UG/L	#	98

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922615.D
Acq On : 14 Aug 2019 1:15 pm
Operator :
Sample : 8260STD 10PPB 1907138 Inst : GCMSVOA3
Misc :
ALS Vial : 15 Sample Multiplier: 1

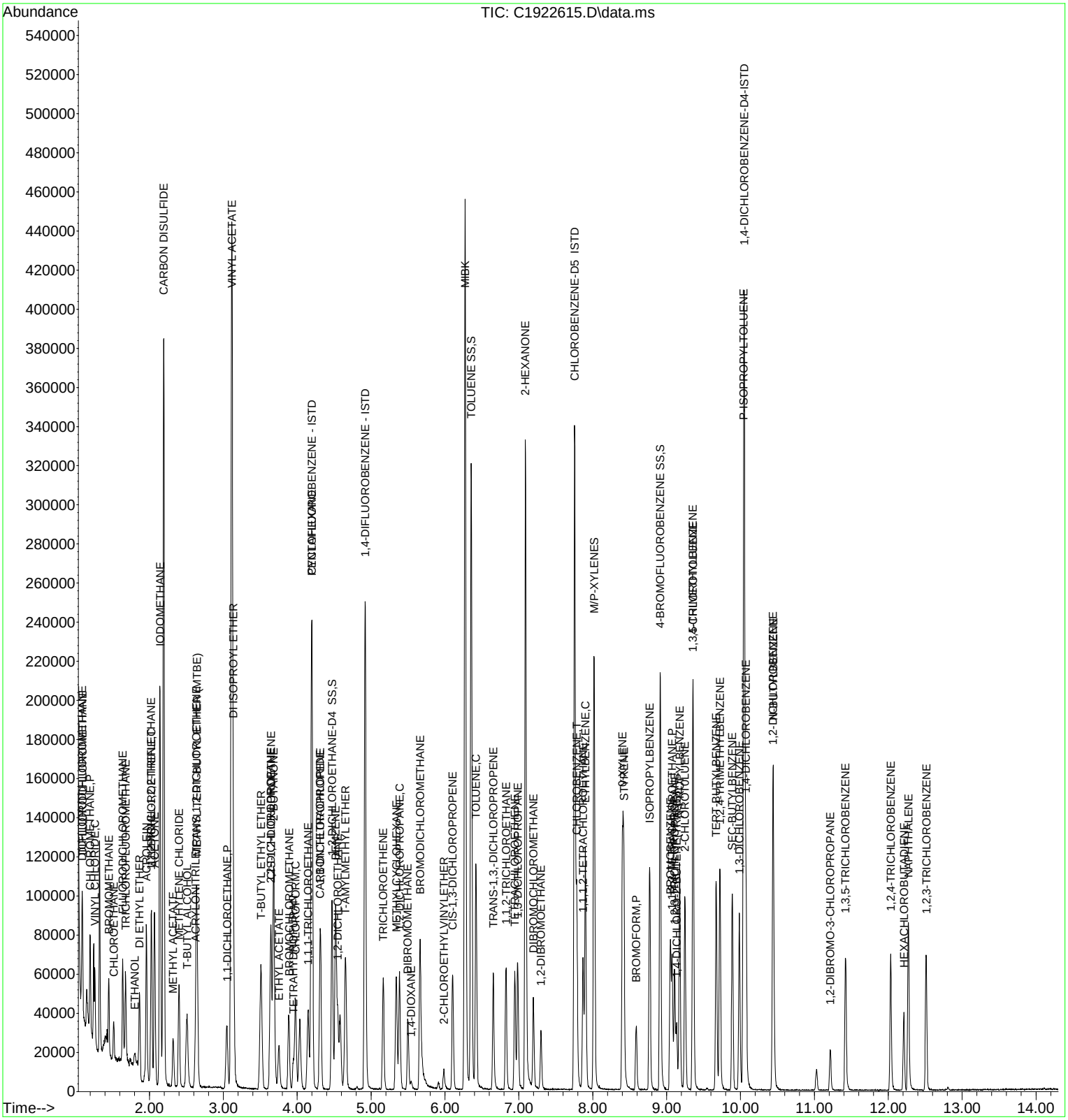
Quant Time: Aug 15 08:31:42 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
54) DIBROMOMETHANE	5.496	93	11608	10.72	UG/L		88
56) 1,4-DIOXANE	5.541	88	2758	107.89	UG/L	#	77
57) BROMODICHLOROMETHANE	5.663	83	23129	11.09	UG/L		99
58) 2-CHLOROETHYLVINYLETHER	5.987	63	4065	4.77	UG/L		99
59) MIBK	6.274	43	285551	111.20	UG/L	#	96
60) CIS-1,3-DICHLOROPROPENE	6.104	75	26945	10.13	UG/L		93
61) TOLUENE	6.419	91	67961	10.63	UG/L		97
62) TRANS-1,3,-DICHLOROPRO...	6.653	75	25332	10.54	UG/L		91
64) 1,1,2-TRICHLOROETHANE	6.826	97	16705	11.10	UG/L		94
65) 2-HEXANONE	7.088	43	199420	108.13	UG/L		95
66) TETRACHLOROETHENE	6.946	166	15382	10.39	UG/L		96
67) 1,3-DICHLOROPROPANE	6.985	76	30507	10.87	UG/L		99
68) DIBROMOCHLOROMETHANE	7.197	129	18519	10.69	UG/L		99
69) 1,2-DIBROMOETHANE	7.297	107	17857	10.63	UG/L		100
72) CHLOROBENZENE	7.783	112	42954	10.23	UG/L		91
73) 1,1,1,2-TETRACHLOROETHANE	7.869	131	15554	10.38	UG/L		96
74) ETHYLBENZENE	7.900	91	73920	10.23	UG/L		97
75) M/P-XYLENES	8.020	91	109493	20.00	UG/L		100
76) 0-XYLENE	8.402	91	57661	10.22	UG/L		97
77) STYRENE	8.421	104	46052	10.12	UG/L		91
78) BROMOFORM	8.589	173	12914	9.78	UG/L	#	93
79) ISOPROPYLBENZENE	8.770	105	65958	10.08	UG/L		99
81) 1,1,2,2-TETRACHLOROETHANE	9.074	83	26624	10.68	UG/L	#	95
82) 1,4-DICHLORO-2-BUTENE(...	9.138	53	6167	9.80	UG/L	#	69
83) BROMOBENZENE	9.051	77	29581	9.86	UG/L		91
84) 1,2,3-TRICHLOROPROPANE	9.107	75	20909	10.04	UG/L		95
85) N-PROPYLBENZENE	9.177	91	77812	10.11	UG/L		96
86) 2-CHLOROT0LUENE	9.247	91	47541	9.74	UG/L		97
87) 1,3,5-TRIMETHYLBENZENE	9.355	105	51802	9.49	UG/L		96
88) 4-CHLOROTOLUENE	9.358	91	55967	10.07	UG/L		98
90) TERT-BUTYLBENZENE	9.671	119	44103	10.22	UG/L		92
91) 1,2,4-TRIMETHYLBENZENE	9.721	105	55158	10.12	UG/L		94
92) SEC-BUTYLBENZENE	9.888	105	61605	10.12	UG/L		96
93) 1,3-DICHLOROBENZENE	9.983	146	32223	10.20	UG/L		98
94) P-ISOPROPYLTOLUENE	10.041	119	50673	9.66	UG/L		97
95) 1,4-DICHLOROBENZENE	10.072	146	33413	9.97	UG/L	#	92
96) N-BUTYLBENZENE	10.443	91	45301	9.60	UG/L		95
97) 1,2-DICHLOROBENZENE	10.437	146	32985	10.35	UG/L		97
98) 1,2-DIBROMO-3-CHLOROPR...	11.213	75	4885	11.14	UG/L		83
99) 1,3,5-TRICHLOROBENZENE	11.419	180	21058	9.68	UG/L		98
100) 1,2,4-TRICHLOROBENZENE	12.035	180	19547	9.53	UG/L		98
101) HEXACHLOROBUTADIENE	12.211	225	7257	9.30	UG/L		99
102) NAPHTHALENE	12.272	128	61847	10.09	UG/L		99
103) 1,2,3-TRICHLOROBENZENE	12.515	180	19596	9.62	UG/L		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922615.D
Acq On : 14 Aug 2019 1:15 pm
Operator :
Sample : 8260STD 10PPB 1907138 Inst : GCMSVOA3
Misc :
ALS Vial : 15 Sample Multiplier: 1

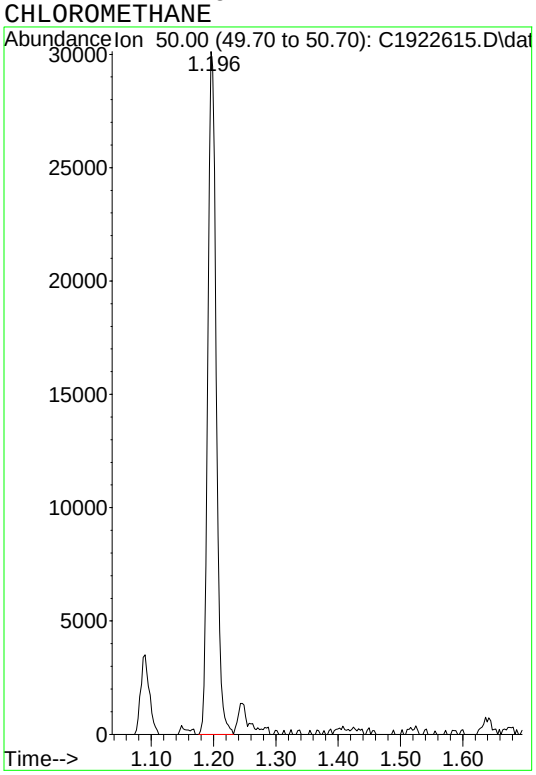
Quant Time: Aug 15 08:31:42 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922615.D
Acq On : 14 Aug 2019 1:15 pm
Operator :
Sample : 8260STD 10PPB 1907138
Misc :

Quant Time : Thu Aug 15 08:31:42 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CHLOROMETHANE



Original Int. Results

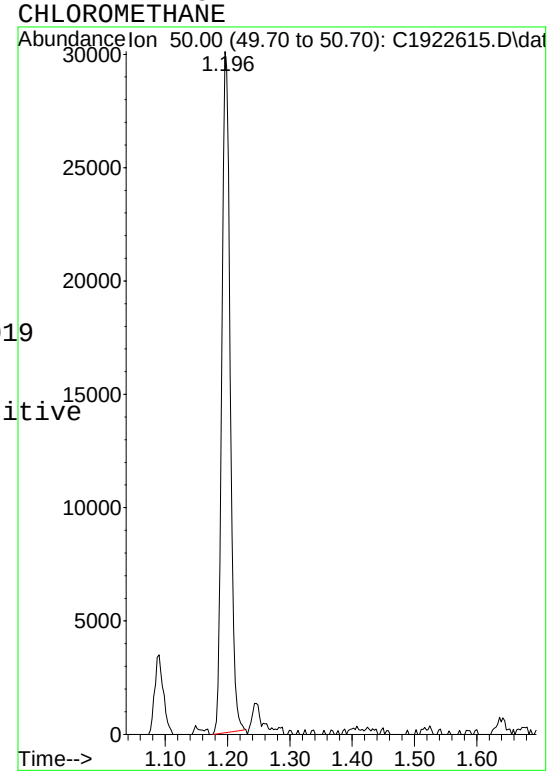
RT : 1.20
Area : 28394
Amount: 12.0845

Manual Int. Results

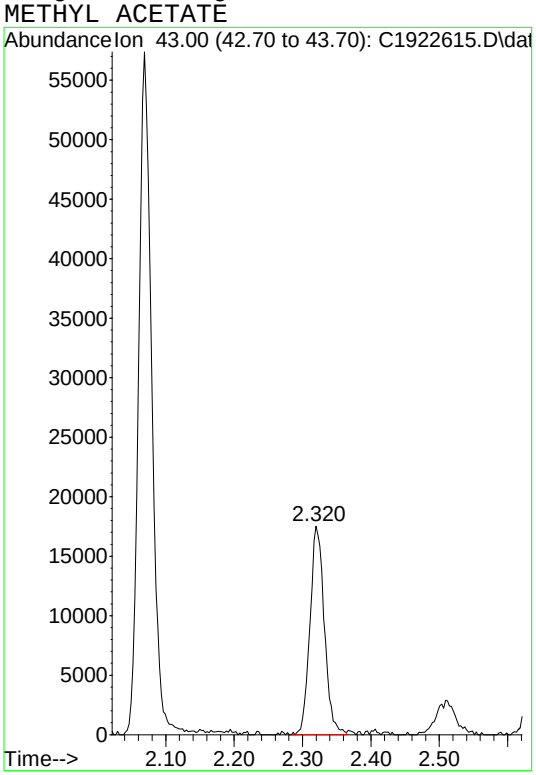
Thu Aug 15 08:31:29 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 1.20
Area : 28064
Amount: 11.944

Manual Integration
CHLOROMETHANE



Original Integration
METHYL ACETATE



Original Int. Results

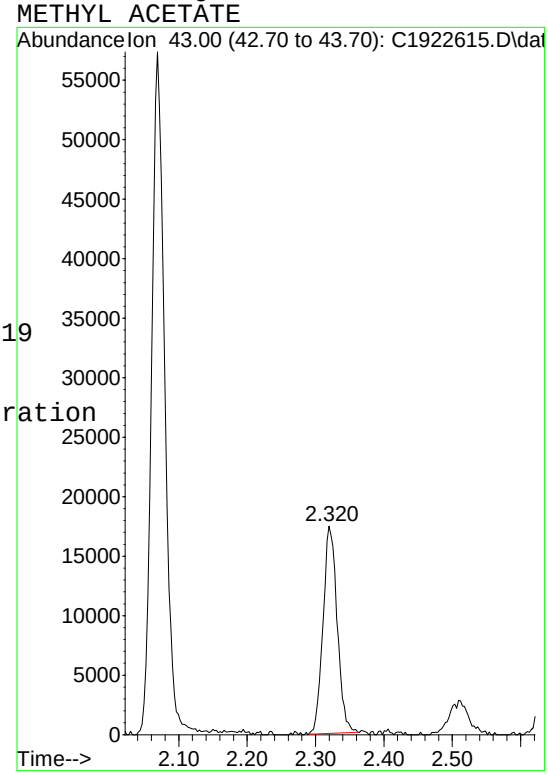
RT : 2.32
Area : 25419
Amount: 12.1126

Manual Int. Results

Thu Aug 15 08:31:42 2019

MIuser: EEH
Reason: Incorret Integration
RT : 2.32
Area : 24791
Amount: 11.8134

Manual Integration
METHYL ACETATE



8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Sequence:	S039197	Instrument:	GCMSVOA3
		Calibration:	1900192

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S039197-CCV1)			*Lab File ID: C1922615.D*			*Analyzed: 08/14/19 13:15*			
Pentafluorobenzene	108023	4.199	164323	4.196	66	50 - 200	0.0030	+/-0.50	
1,4-Difluorobenzene	165450	4.919	250980	4.919	66	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	85140	7.755	125807	7.755	68	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	79990	10.05	120671	10.05	66	50 - 200	0.0000	+/-0.50	
LCS (B237978-BS1)			*Lab File ID: C1922616.D*			*Analyzed: 08/14/19 13:42*			
Pentafluorobenzene	109527	4.199	108023	4.199	101	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	166086	4.918	165450	4.919	100	50 - 200	-0.0010	+/-0.50	
Chlorobenzene-d5	84869	7.755	85140	7.755	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	78509	10.05	79990	10.05	98	50 - 200	0.0000	+/-0.50	
LCS Dup (B237978-BSD1)			*Lab File ID: C1922617.D*			*Analyzed: 08/14/19 14:08*			
Pentafluorobenzene	108824	4.199	108023	4.199	101	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	167557	4.921	165450	4.919	101	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5	85823	7.757	85140	7.755	101	50 - 200	0.0020	+/-0.50	
1,4-Dichlorobenzene-d4	80096	10.05	79990	10.05	100	50 - 200	0.0000	+/-0.50	
Blank (B237978-BLK1)			*Lab File ID: C1922619.D*			*Analyzed: 08/14/19 15:01*			
Pentafluorobenzene	107223	4.199	108023	4.199	99	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	168923	4.922	165450	4.919	102	50 - 200	0.0030	+/-0.50	
Chlorobenzene-d5	83556	7.755	85140	7.755	98	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	75195	10.05	79990	10.05	94	50 - 200	0.0000	+/-0.50	
Trip Blank- 8/12/19 (19H0617-01)			*Lab File ID: C1922620.D*			*Analyzed: 08/14/19 15:27*			
Pentafluorobenzene	106150	4.199	108023	4.199	98	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	162457	4.921	165450	4.919	98	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5	82523	7.758	85140	7.755	97	50 - 200	0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	73601	10.05	79990	10.05	92	50 - 200	0.0000	+/-0.50	
Field Blank (19H0617-02)			*Lab File ID: C1922621.D*			*Analyzed: 08/14/19 15:54*			
Pentafluorobenzene	103677	4.199	108023	4.199	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	161654	4.919	165450	4.919	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	81419	7.755	85140	7.755	96	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	73262	10.05	79990	10.05	92	50 - 200	0.0000	+/-0.50	

8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Sequence:	S039197	Instrument:	GCMSVOA3
		Calibration:	1900192

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
P-15 (19H0617-03)			*Lab File ID: C1922622.D*			*Analyzed: 08/14/19 16:20*			
Pentafluorobenzene	103552	4.199	108023	4.199	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	163324	4.919	165450	4.919	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	79557	7.758	85140	7.755	93	50 - 200	0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	73203	10.05	79990	10.05	92	50 - 200	0.0000	+/-0.50	
P-5S (19H0617-04)			*Lab File ID: C1922623.D*			*Analyzed: 08/14/19 16:47*			
Pentafluorobenzene	101033	4.199	108023	4.199	94	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	159441	4.918	165450	4.919	96	50 - 200	-0.0010	+/-0.50	
Chlorobenzene-d5	78889	7.755	85140	7.755	93	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	74298	10.052	79990	10.05	93	50 - 200	0.0020	+/-0.50	

QC DATA

1 - FORM I
ANALYSIS DATA SHEET

Blank

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B237978-BLK1	File ID:	C1922619.D
Sampled:		Prepared:	08/14/19 07:29	Analyzed:	08/14/19 15:01
Solids:		Preparation:	SW-846 5030B	Dilution:	
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone		3.8	50	
107-13-1	Acrylonitrile		0.52	5.0	
994-05-8	tert-Amyl Methyl Ether (TAME)		0.14	0.50	
71-43-2	Benzene		0.18	1.0	
108-86-1	Bromobenzene		0.15	1.0	
74-97-5	Bromochloromethane		0.32	1.0	
75-27-4	Bromodichloromethane		0.16	0.50	
75-25-2	Bromoform		0.46	1.0	
74-83-9	Bromomethane		0.78	2.0	
78-93-3	2-Butanone (MEK)		1.9	20	
75-65-0	tert-Butyl Alcohol (TBA)		4.2	20	
104-51-8	n-Butylbenzene		0.21	1.0	
135-98-8	sec-Butylbenzene		0.16	1.0	
98-06-6	tert-Butylbenzene		0.17	1.0	
637-92-3	tert-Butyl Ethyl Ether (TBEE)		0.16	0.50	
75-15-0	Carbon Disulfide		4.4	5.0	
56-23-5	Carbon Tetrachloride		0.11	5.0	
108-90-7	Chlorobenzene		0.15	1.0	
124-48-1	Chlorodibromomethane		0.21	0.50	
75-00-3	Chloroethane		0.35	2.0	
67-66-3	Chloroform		0.17	2.0	
74-87-3	Chloromethane		0.45	2.0	
95-49-8	2-Chlorotoluene		0.12	1.0	
106-43-4	4-Chlorotoluene		0.14	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		0.53	5.0	
106-93-4	1,2-Dibromoethane (EDB)		0.19	0.50	
74-95-3	Dibromomethane		0.37	1.0	
95-50-1	1,2-Dichlorobenzene		0.16	1.0	
541-73-1	1,3-Dichlorobenzene		0.12	1.0	
106-46-7	1,4-Dichlorobenzene		0.13	1.0	

1 - FORM I
ANALYSIS DATA SHEET

Blank

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B237978-BLK1	File ID:	C1922619.D
Sampled:		Prepared:	08/14/19 07:29	Analyzed:	08/14/19 15:01
Solids:		Preparation:	SW-846 5030B	Dilution:	
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene		0.31	2.0	
75-71-8	Dichlorodifluoromethane (Freon 12)		0.26	2.0	
75-34-3	1,1-Dichloroethane		0.16	1.0	
107-06-2	1,2-Dichloroethane		0.41	1.0	
75-35-4	1,1-Dichloroethylene		0.32	1.0	
156-59-2	cis-1,2-Dichloroethylene		0.13	1.0	
156-60-5	trans-1,2-Dichloroethylene		0.31	1.0	
78-87-5	1,2-Dichloropropane		0.20	1.0	
142-28-9	1,3-Dichloropropane		0.11	0.50	
594-20-7	2,2-Dichloropropane		0.20	1.0	
563-58-6	1,1-Dichloropropene		0.16	2.0	
10061-01-5	cis-1,3-Dichloropropene		0.13	0.50	
10061-02-6	trans-1,3-Dichloropropene		0.23	0.50	
60-29-7	Diethyl Ether		0.34	2.0	
108-20-3	Diisopropyl Ether (DIPE)		0.17	0.50	
123-91-1	1,4-Dioxane		22	50	
100-41-4	Ethylbenzene		0.13	1.0	
87-68-3	Hexachlorobutadiene		0.47	0.60	
591-78-6	2-Hexanone (MBK)		1.5	10	
98-82-8	Isopropylbenzene (Cumene)		0.17	1.0	
99-87-6	p-Isopropyltoluene (p-Cymene)		0.20	1.0	
79-20-9	Methyl Acetate		0.42	1.0	
1634-04-4	Methyl tert-Butyl Ether (MTBE)		0.25	1.0	
108-87-2	Methyl Cyclohexane		0.20	1.0	
75-09-2	Methylene Chloride		0.34	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)		1.7	10	
91-20-3	Naphthalene		0.31	2.0	
103-65-1	n-Propylbenzene		0.13	1.0	
100-42-5	Styrene		0.11	1.0	
630-20-6	1,1,1,2-Tetrachloroethane		0.27	1.0	

1 - FORM I
ANALYSIS DATA SHEET

Blank

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B237978-BLK1	File ID:	C1922619.D
Sampled:		Prepared:	08/14/19 07:29	Analyzed:	08/14/19 15:01
Solids:		Preparation:	SW-846 5030B	Dilution:	
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane		0.22	0.50	
127-18-4	Tetrachloroethylene		0.18	1.0	
109-99-9	Tetrahydrofuran		0.51	10	
108-88-3	Toluene		0.14	1.0	
87-61-6	1,2,3-Trichlorobenzene		0.57	5.0	
120-82-1	1,2,4-Trichlorobenzene		0.40	1.0	
108-70-3	1,3,5-Trichlorobenzene		0.30	1.0	
71-55-6	1,1,1-Trichloroethane		0.20	1.0	
79-00-5	1,1,2-Trichloroethane		0.16	1.0	
79-01-6	Trichloroethylene		0.24	1.0	
75-69-4	Trichlorofluoromethane (Freon 11)		0.33	2.0	
96-18-4	1,2,3-Trichloropropane		0.25	2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1		0.32	1.0	
95-63-6	1,2,4-Trimethylbenzene		0.18	1.0	
108-67-8	1,3,5-Trimethylbenzene		0.14	1.0	
75-01-4	Vinyl Chloride		0.45	2.0	
108383/106423	m+p Xylene		0.30	2.0	
95-47-6	o-Xylene		0.17	1.0	
	No TICs Found	0.0			

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1 Inst : GCMSVOA3
Misc :
ALS Vial : 19 Sample Multiplier: 1

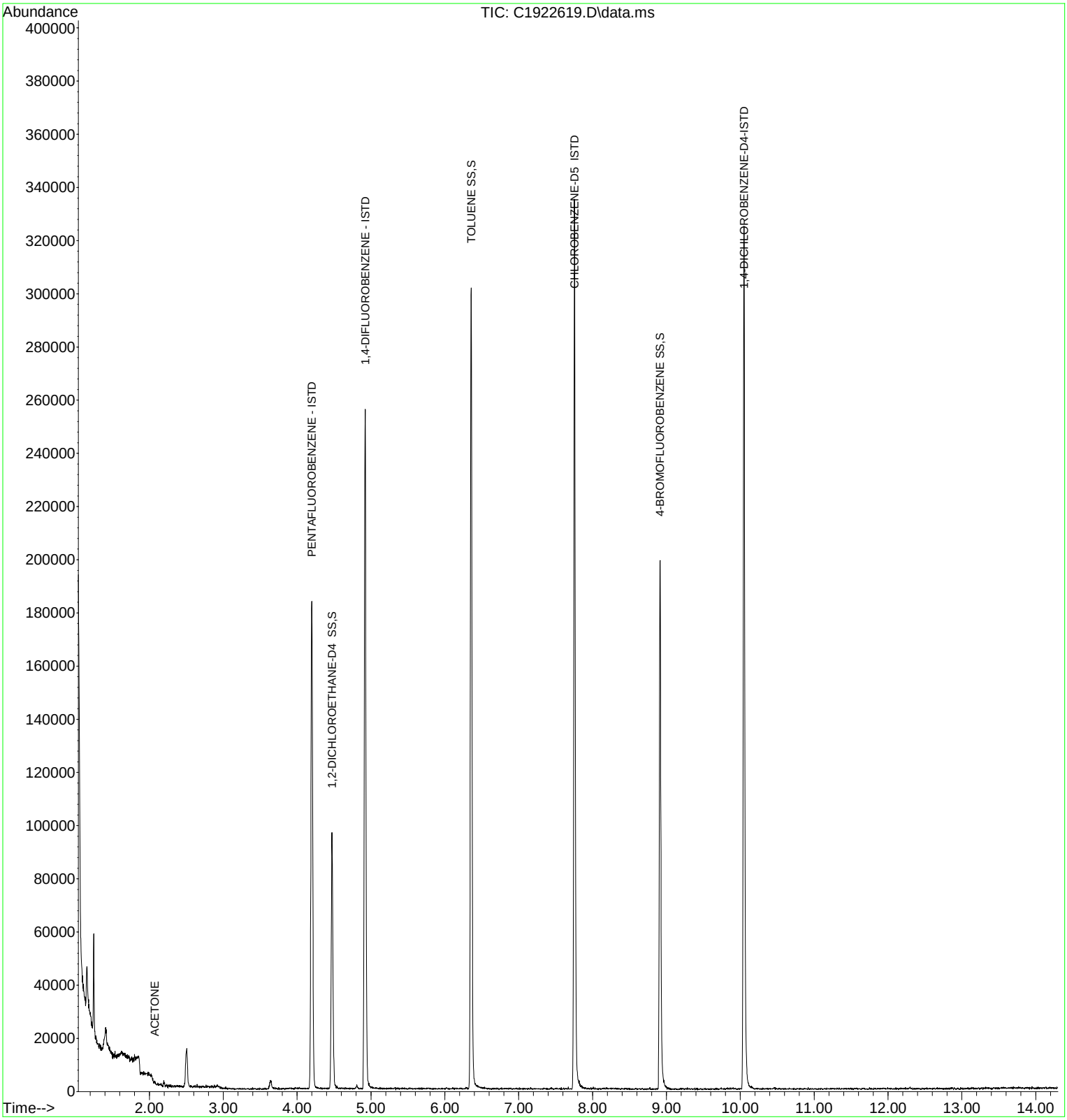
Quant Time: Aug 15 08:34:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

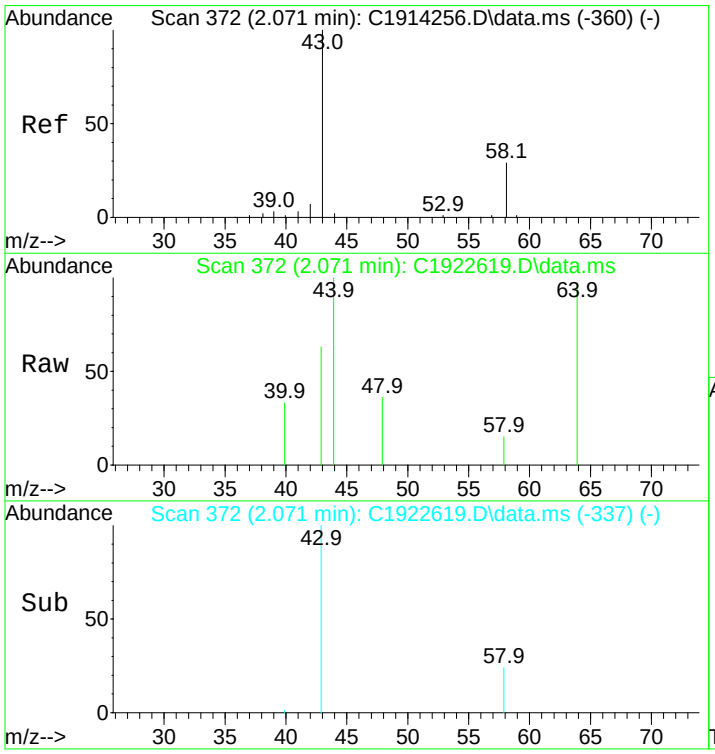
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.199	168	107223	30.00	UG/L	0.00
48) 1,4-DIFLUOROBENZENE - ...	4.922	114	168923	30.00	UG/L	0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	83556	30.00	UG/L	0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	75195	30.00	UG/L	# 0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.473	65	55170	27.35	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 109.40%			
49) TOLUENE SS	6.358	98	163724	24.31	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 97.24%			
71) 4-BROMOFLUOROBENZENE SS	8.912	95	56163	22.66	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 90.64%			
Target Compounds						Qvalue
14) ACETONE	2.071	43	575	0.85	UG/L	# 47

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1 Inst : GCMSVOA3
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 15 08:34:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

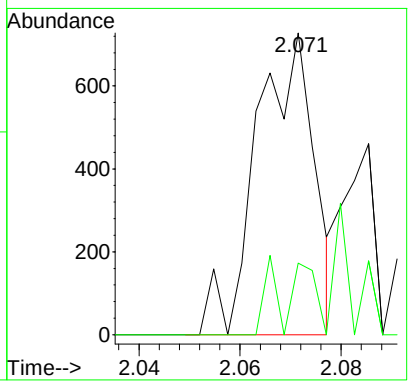




#14
ACETONE
Concen: 0.85 UG/L
RT: 2.071 min Scan# 372
Delta R.T. 0.002 min
Lab File: C1922619.D
Acq: 14 Aug 2019 3:01 pm

Tgt Ion: 43 Resp: 575

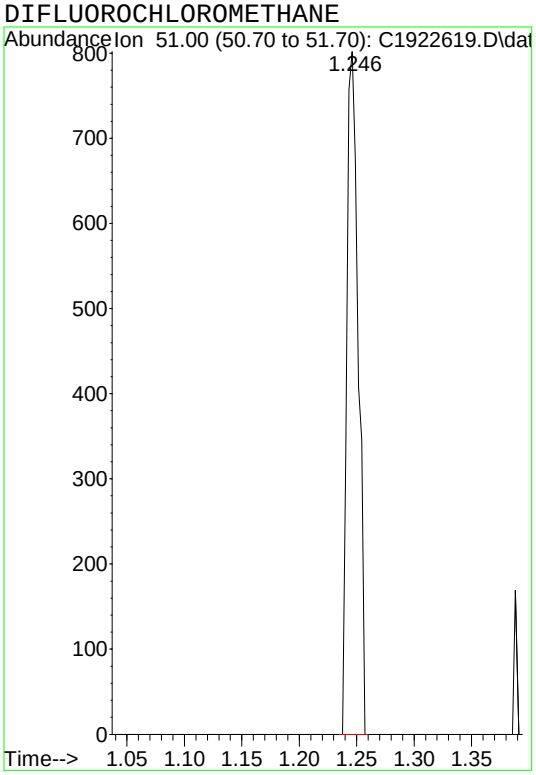
Ion	Ratio	Lower	Upper
43	100		
58	0.0	22.1	33.1#



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1
Misc :

Quant Time : Thu Aug 15 08:34:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
DIFLUOROCHLOROMETHANE



Original Int. Results

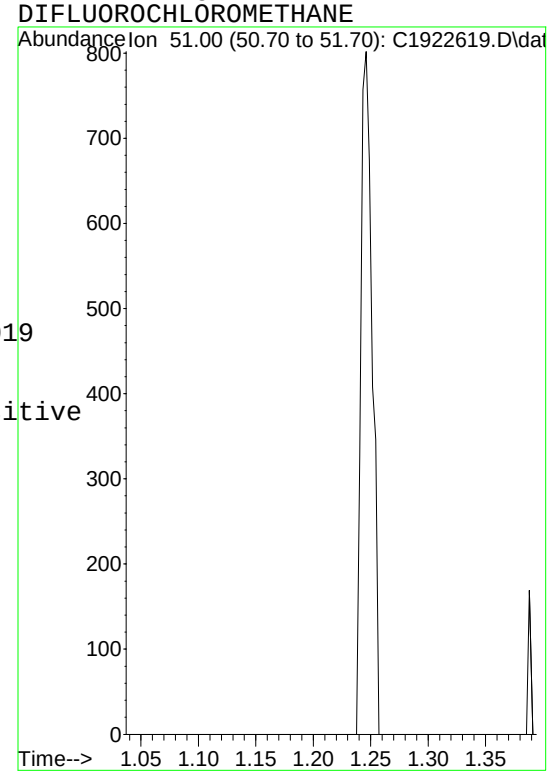
RT : 1.25
Area : 555
Amount: 0.265627

Manual Int. Results

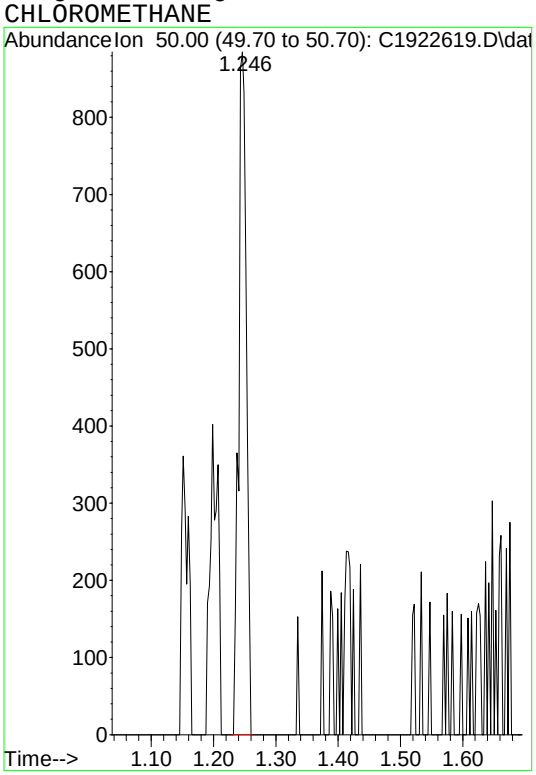
Thu Aug 15 08:34:22 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
DIFLUOROCHLOROMETHANE



Original Integration
CHLOROMETHANE



Original Int. Results

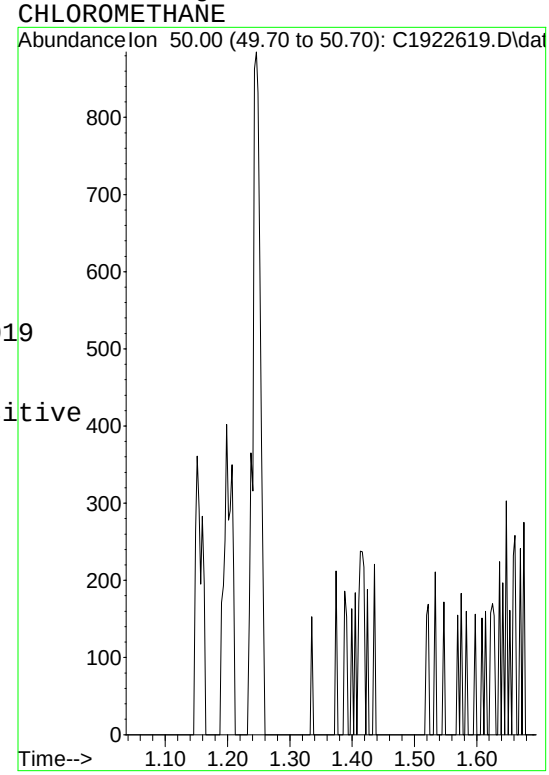
RT : 1.25
Area : 770
Amount: 0.330156

Manual Int. Results

Thu Aug 15 08:34:24 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

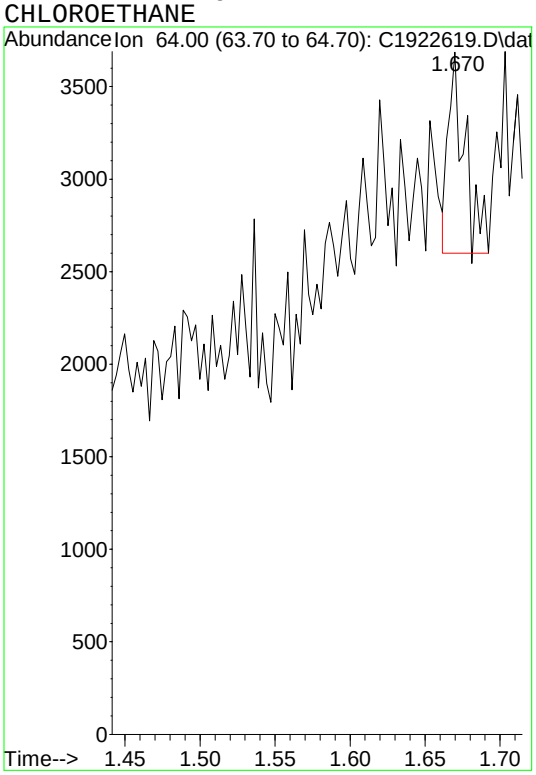
Manual Integration
CHLOROMETHANE



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1
Misc :

Quant Time : Thu Aug 15 08:34:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CHLOROETHANE



Original Int. Results

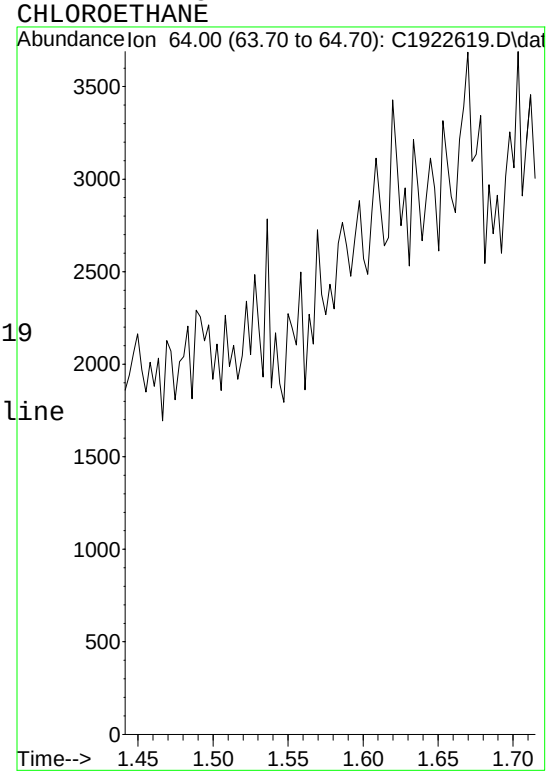
RT : 1.67
Area : 836
Amount: 0.811735

Manual Int. Results

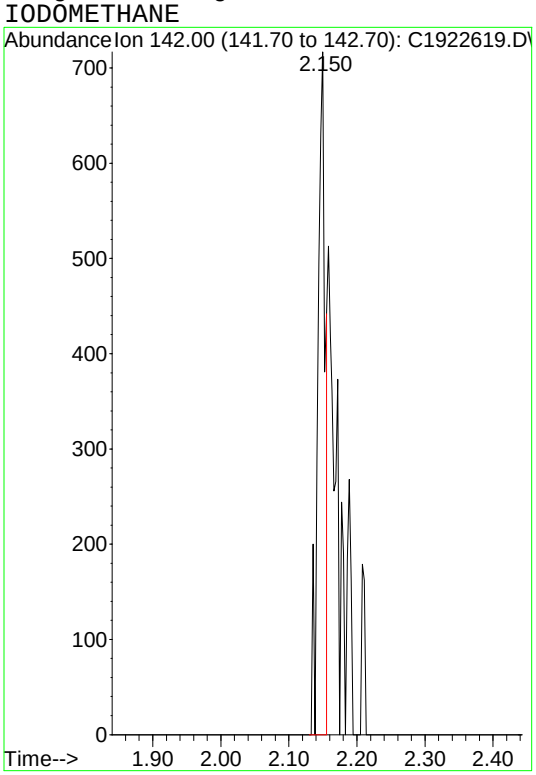
Thu Aug 15 08:34:27 2019

MIuser: EEH
Reason: Incorrect Baseline
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CHLOROETHANE



Original Integration
IODOMETHANE



Original Int. Results

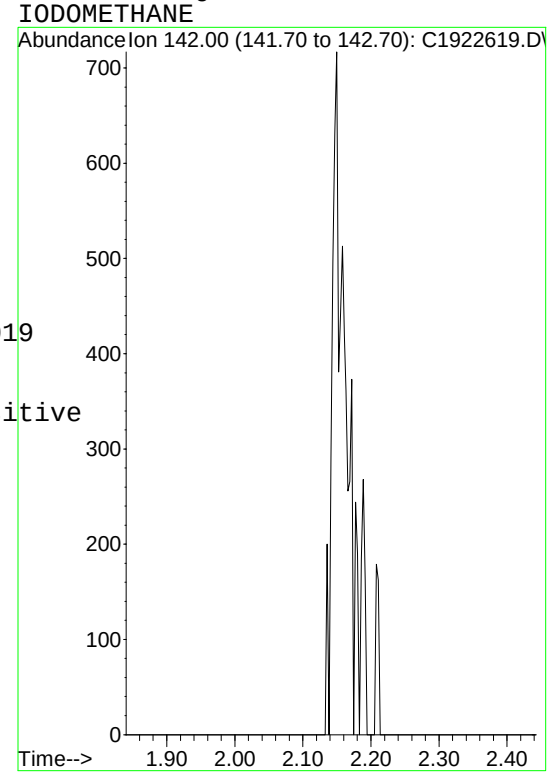
RT : 2.15
Area : 528
Amount: 0.310908

Manual Int. Results

Thu Aug 15 08:34:31 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

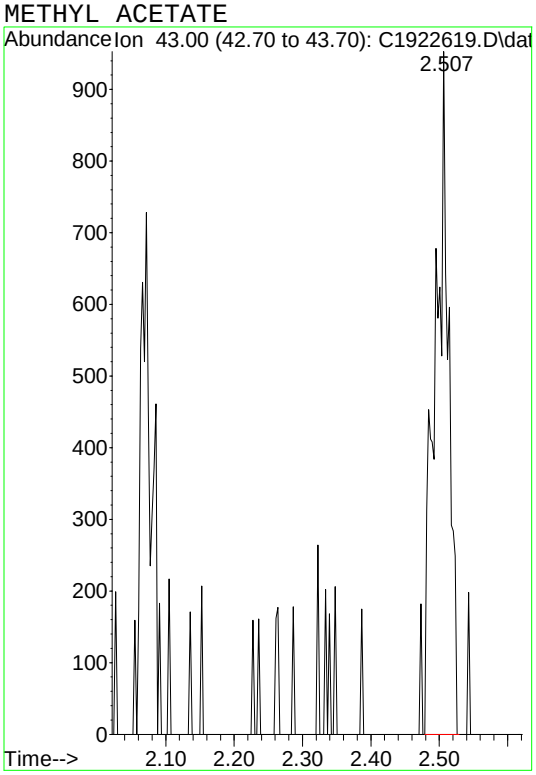
Manual Integration
IODOMETHANE



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1
Misc :

Quant Time : Thu Aug 15 08:34:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
METHYL ACETATE



Original Int. Results

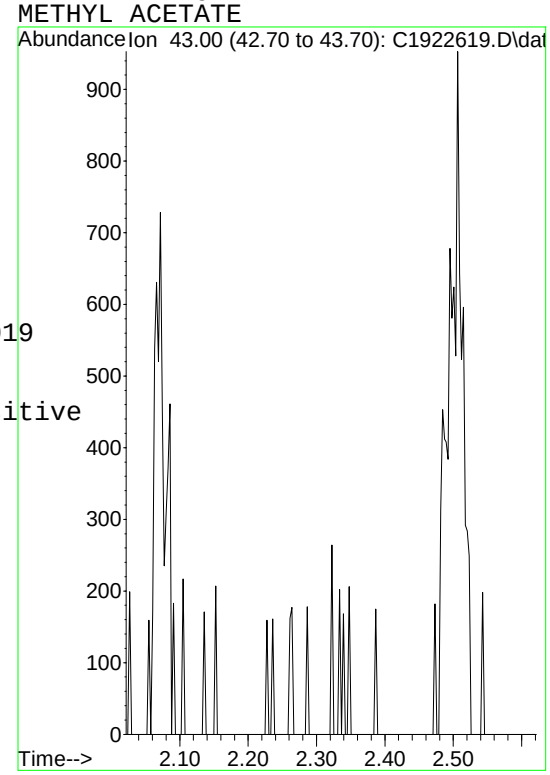
RT : 2.51
Area : 1325
Amount: 0.636098

Manual Int. Results

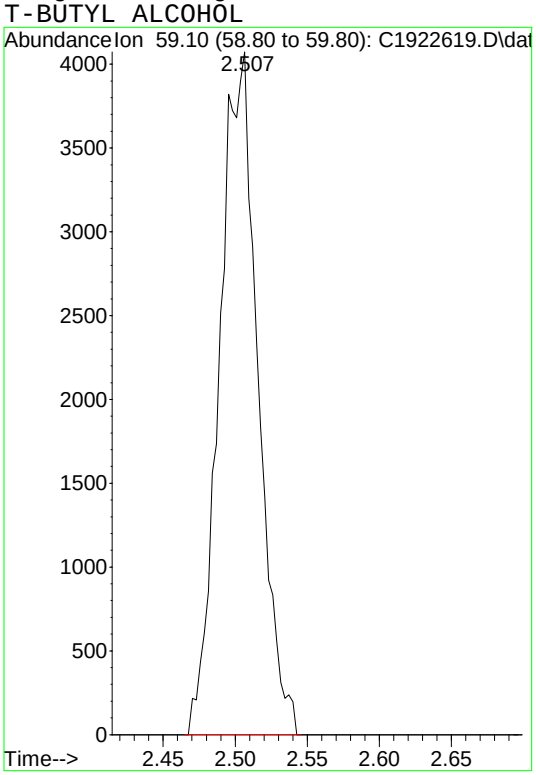
Thu Aug 15 08:34:34 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
METHYL ACETATE



Original Integration
T-BUTYL ALCOHOL



Original Int. Results

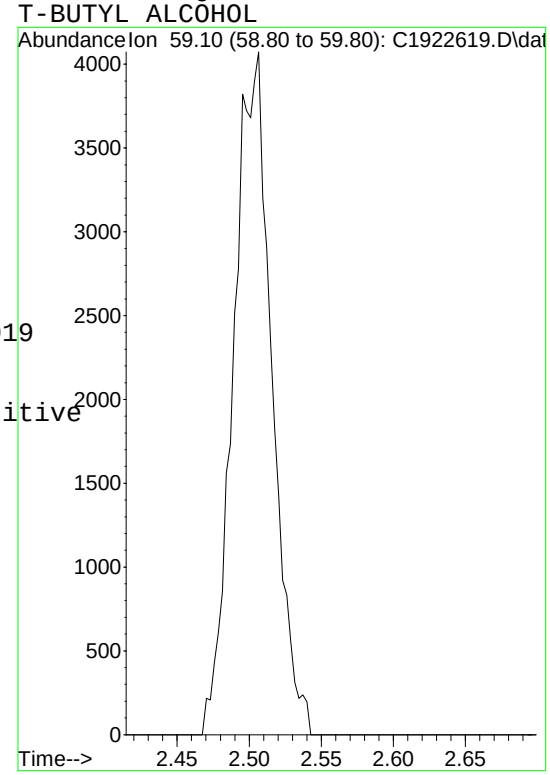
RT : 2.51
Area : 7540
Amount: 29.1431

Manual Int. Results

Thu Aug 15 08:34:37 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

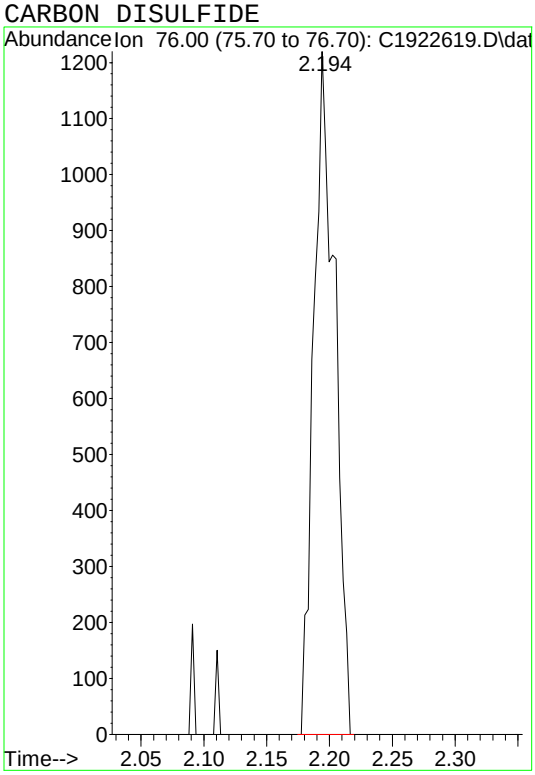
Manual Integration
T-BUTYL ALCOHOL



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1
Misc :

Quant Time : Thu Aug 15 08:34:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CARBON DISULFIDE



Original Int. Results

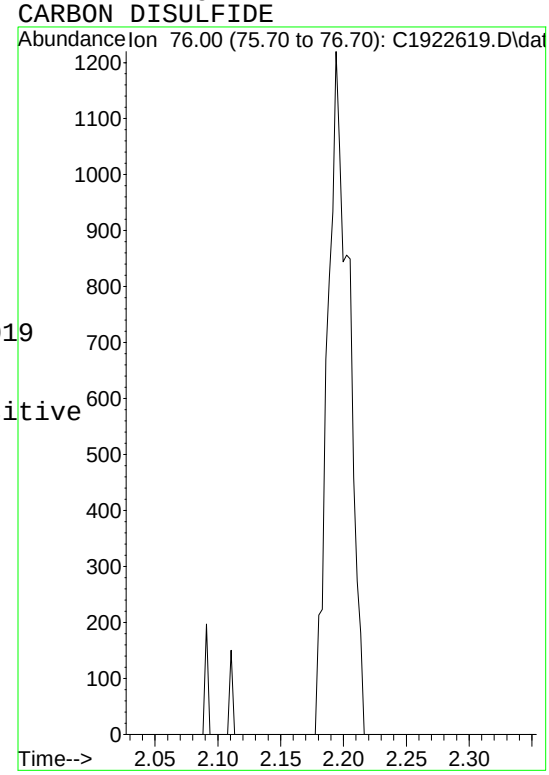
RT : 2.19
Area : 1437
Amount: 0.359029

Manual Int. Results

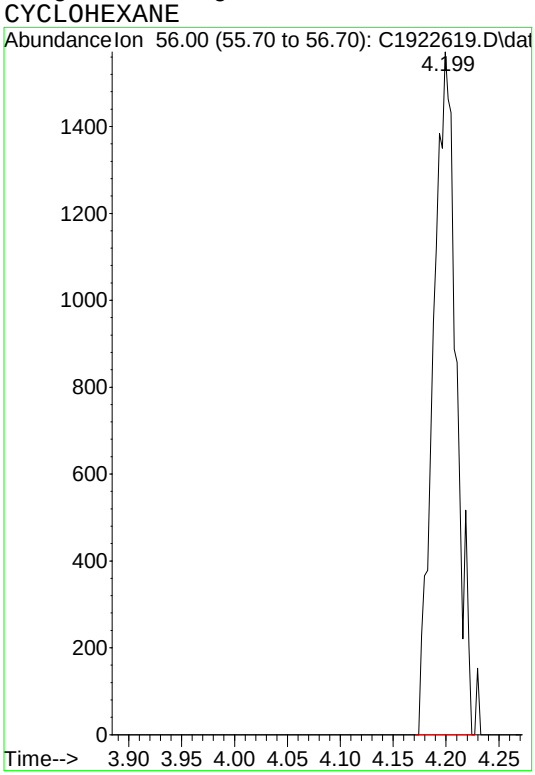
Thu Aug 15 08:34:40 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CARBON DISULFIDE



Original Integration
CYCLOHEXANE



Original Int. Results

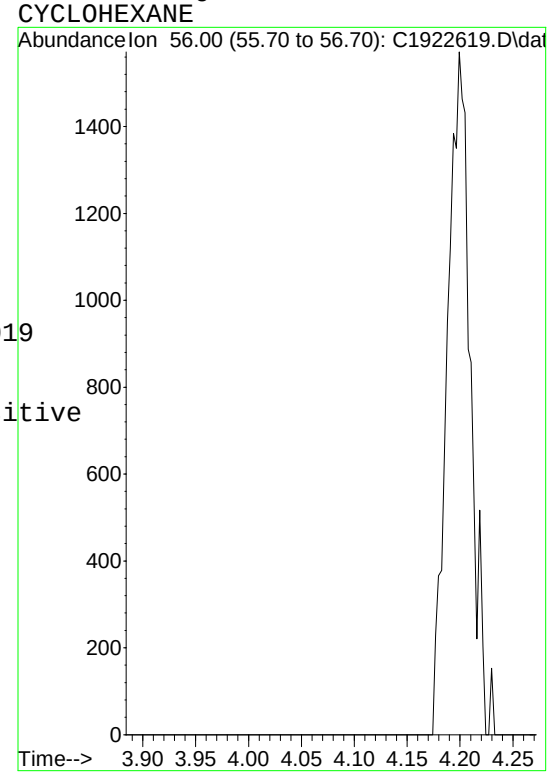
RT : 4.20
Area : 2364
Amount: 0.936879

Manual Int. Results

Thu Aug 15 08:34:45 2019

MIuser: EEH
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CYCLOHEXANE



LSC Area Percent Report

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: 8260B.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 9
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\methods\C051619.M
Title : 8260 WATER 5MLS VOAMS 5973 #3

Signal : TIC: C1922619.D\data.ms

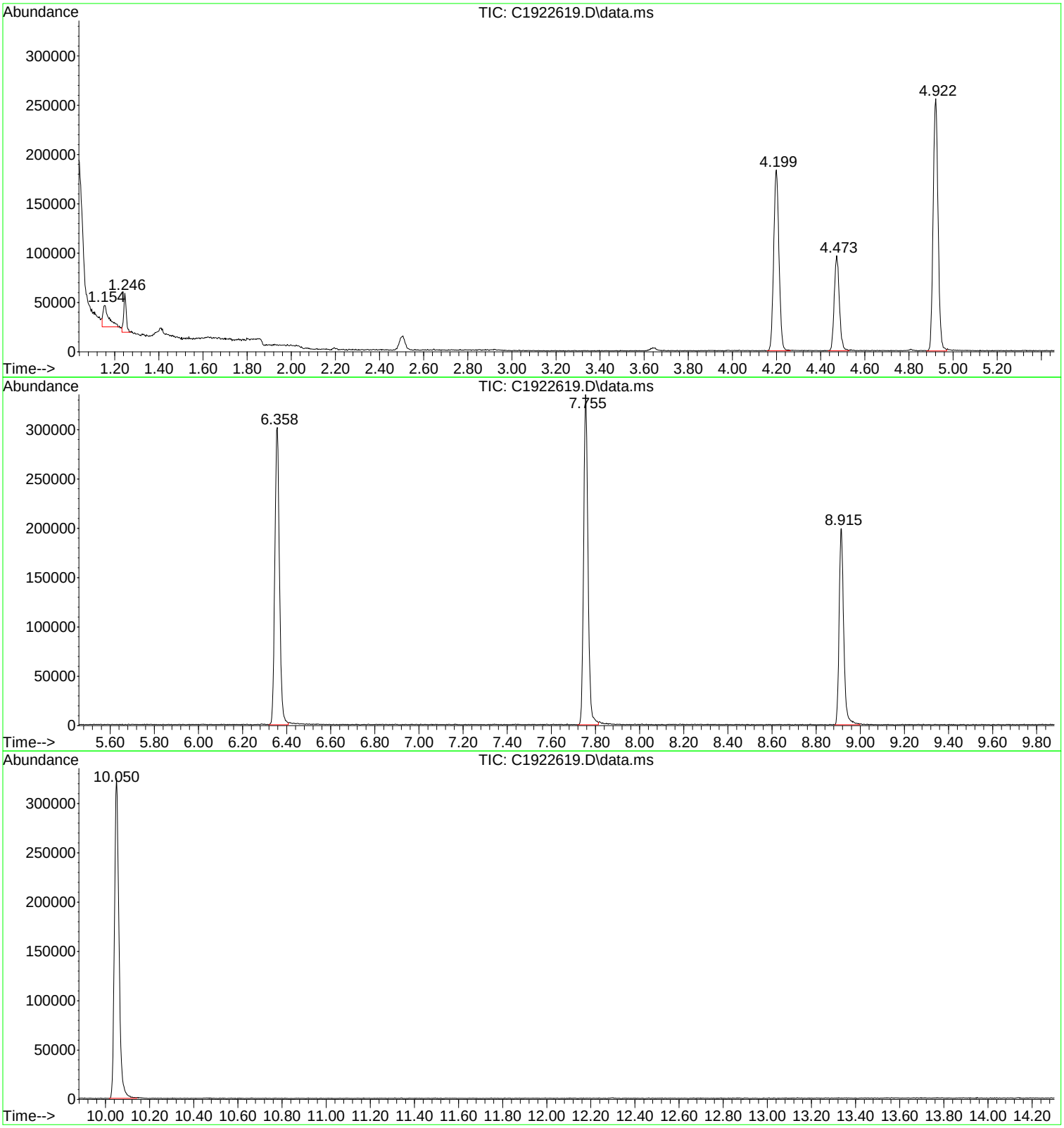
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.154	39	43	66	rVB2	21722	38837	8.39%	1.510%
2	1.246	71	76	85	rVB	39691	31374	6.78%	1.220%
3	4.199	1120	1135	1158	rBV2	183301	303518	65.60%	11.802%
4	4.473	1219	1233	1253	rBV2	96338	155250	33.55%	6.037%
5	4.922	1379	1394	1412	rBV2	255796	394195	85.20%	15.328%
6	6.358	1895	1909	1927	rBV2	301326	439900	95.07%	17.105%
7	7.755	2397	2410	2431	rBV	334822	460824	99.60%	17.919%
8	8.915	2815	2826	2856	rBV	198843	285131	61.62%	11.087%
9	10.050	3221	3233	3266	rBV	324495	462697	100.00%	17.992%

Sum of corrected areas: 2571726

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P

No Library Search Compounds Detected

****

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3

TIC Library : F:\CTAL-Laboratory\Management\DJD\Database\NIST08.L
TIC Integration Parameters: 8260B.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

1 - FORM I
ANALYSIS DATA SHEET

LCS

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B237978-BS1	File ID:	C1922616.D
Sampled:		Prepared:	08/14/19 07:29	Analyzed:	08/14/19 13:42
Solids:		Preparation:	SW-846 5030B	Dilution:	
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone	123	3.8	50	
107-13-1	Acrylonitrile	10.6	0.52	5.0	
994-05-8	tert-Amyl Methyl Ether (TAME)	10.9	0.14	0.50	
71-43-2	Benzene	11.9	0.18	1.0	
108-86-1	Bromobenzene	11.4	0.15	1.0	
74-97-5	Bromochloromethane	13.0	0.32	1.0	
75-27-4	Bromodichloromethane	12.6	0.16	0.50	
75-25-2	Bromoform	10.8	0.46	1.0	
74-83-9	Bromomethane	8.20	0.78	2.0	V-20
78-93-3	2-Butanone (MEK)	116	1.9	20	
75-65-0	tert-Butyl Alcohol (TBA)	121	4.2	20	V-20
104-51-8	n-Butylbenzene	11.7	0.21	1.0	
135-98-8	sec-Butylbenzene	12.2	0.16	1.0	
98-06-6	tert-Butylbenzene	11.4	0.17	1.0	
637-92-3	tert-Butyl Ethyl Ether (TBEE)	10.6	0.16	0.50	
75-15-0	Carbon Disulfide	12.4	4.4	5.0	
56-23-5	Carbon Tetrachloride	11.6	0.11	5.0	
108-90-7	Chlorobenzene	11.6	0.15	1.0	
124-48-1	Chlorodibromomethane	11.9	0.21	0.50	
75-00-3	Chloroethane	11.2	0.35	2.0	
67-66-3	Chloroform	12.4	0.17	2.0	
74-87-3	Chloromethane	9.21	0.45	2.0	
95-49-8	2-Chlorotoluene	11.8	0.12	1.0	
106-43-4	4-Chlorotoluene	11.4	0.14	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	12.1	0.53	5.0	
106-93-4	1,2-Dibromoethane (EDB)	12.3	0.19	0.50	
74-95-3	Dibromomethane	12.0	0.37	1.0	
95-50-1	1,2-Dichlorobenzene	11.9	0.16	1.0	
541-73-1	1,3-Dichlorobenzene	12.5	0.12	1.0	
106-46-7	1,4-Dichlorobenzene	12.1	0.13	1.0	

1 - FORM I
ANALYSIS DATA SHEET

LCS

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B237978-BS1	File ID:	C1922616.D
Sampled:		Prepared:	08/14/19 07:29	Analyzed:	08/14/19 13:42
Solids:		Preparation:	SW-846 5030B	Dilution:	
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene	11.8	0.31	2.0	
75-71-8	Dichlorodifluoromethane (Freon 12)	7.46	0.26	2.0	
75-34-3	1,1-Dichloroethane	12.2	0.16	1.0	
107-06-2	1,2-Dichloroethane	12.8	0.41	1.0	
75-35-4	1,1-Dichloroethylene	12.3	0.32	1.0	
156-59-2	cis-1,2-Dichloroethylene	12.3	0.13	1.0	
156-60-5	trans-1,2-Dichloroethylene	11.8	0.31	1.0	
78-87-5	1,2-Dichloropropane	12.0	0.20	1.0	
142-28-9	1,3-Dichloropropane	11.6	0.11	0.50	
594-20-7	2,2-Dichloropropane	10.8	0.20	1.0	
563-58-6	1,1-Dichloropropene	11.8	0.16	2.0	
10061-01-5	cis-1,3-Dichloropropene	11.5	0.13	0.50	
10061-02-6	trans-1,3-Dichloropropene	11.5	0.23	0.50	
60-29-7	Diethyl Ether	12.1	0.34	2.0	
108-20-3	Diisopropyl Ether (DIPE)	11.9	0.17	0.50	
123-91-1	1,4-Dioxane	103	22	50	
100-41-4	Ethylbenzene	11.3	0.13	1.0	
87-68-3	Hexachlorobutadiene	11.9	0.47	0.60	
591-78-6	2-Hexanone (MBK)	118	1.5	10	
98-82-8	Isopropylbenzene (Cumene)	11.7	0.17	1.0	
99-87-6	p-Isopropyltoluene (p-Cymene)	11.4	0.20	1.0	
79-20-9	Methyl Acetate	13.5	0.42	1.0	L-02
1634-04-4	Methyl tert-Butyl Ether (MTBE)	11.5	0.25	1.0	
108-87-2	Methyl Cyclohexane	11.6	0.20	1.0	
75-09-2	Methylene Chloride	12.6	0.34	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	120	1.7	10	
91-20-3	Naphthalene	11.3	0.31	2.0	
103-65-1	n-Propylbenzene	11.6	0.13	1.0	
100-42-5	Styrene	11.1	0.11	1.0	
630-20-6	1,1,1,2-Tetrachloroethane	11.9	0.27	1.0	

1 - FORM I
ANALYSIS DATA SHEET

LCS

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B237978-BS1	File ID:	C1922616.D
Sampled:		Prepared:	08/14/19 07:29	Analyzed:	08/14/19 13:42
Solids:		Preparation:	SW-846 5030B	Dilution:	
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane	12.7	0.22	0.50	
127-18-4	Tetrachloroethylene	12.2	0.18	1.0	
109-99-9	Tetrahydrofuran	12.4	0.51	10	
108-88-3	Toluene	12.0	0.14	1.0	
87-61-6	1,2,3-Trichlorobenzene	10.9	0.57	5.0	
120-82-1	1,2,4-Trichlorobenzene	11.1	0.40	1.0	
108-70-3	1,3,5-Trichlorobenzene	11.0	0.30	1.0	
71-55-6	1,1,1-Trichloroethane	12.2	0.20	1.0	
79-00-5	1,1,2-Trichloroethane	12.6	0.16	1.0	
79-01-6	Trichloroethylene	12.1	0.24	1.0	
75-69-4	Trichlorofluoromethane (Freon 11)	10.7	0.33	2.0	
96-18-4	1,2,3-Trichloropropane	11.9	0.25	2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1	12.2	0.32	1.0	
95-63-6	1,2,4-Trimethylbenzene	11.4	0.18	1.0	
108-67-8	1,3,5-Trimethylbenzene	10.9	0.14	1.0	
75-01-4	Vinyl Chloride	9.91	0.45	2.0	
108383/106423	m+p Xylene	22.9	0.30	2.0	
95-47-6	o-Xylene	11.7	0.17	1.0	

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922616.D
Acq On : 14 Aug 2019 1:42 pm
Operator :
Sample : B0-BS1 Inst : GCMSVOA3
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 15 08:32:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.199	168	109527	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.918	114	166086	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	84869	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	78509	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.472	65	54858	26.63	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 106.52%				
49) TOLUENE SS	6.357	98	168482	25.44	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 101.76%				
71) 4-BROMOFLUOROBENZENE SS	8.912	95	59702	23.71	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.84%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.087	85	13317	7.46	UG/L		96
4) DIFLUOROCHLOROMETHANE	1.095	51	18947	8.88	UG/L	#	100
5) CHLOROMETHANE	1.198	50	21932	9.21	UG/L	#	26
6) VINYL CHLORIDE	1.263	62	18873	9.91	UG/L		97
7) BROMOMETHANE	1.452	94	8522	8.20	UG/L		98
8) CHLOROETHANE	1.519	64	11773m	11.19	UG/L		
9) FLUORODICHLOROMETHANE	1.639	67	34071	11.84	UG/L		97
10) TRICHLOROFLUOROMETHANE	1.678	101	22683	10.70	UG/L		95
11) ETHANOL	1.798	45	4454	119.32	UG/L	#	83
12) DI ETHYL ETHER	1.868	59	16381	12.12	UG/L		95
13) ACROLEIN	1.960	56	60141	133.42	UG/L		97
14) ACETONE	2.068	43	84577	123.11	UG/L		100
15) 1,1-DICHLOROETHENE	2.029	61	25992	12.26	UG/L		96
16) 1,1,2-TRICL-1,2,2-TRIF...	2.024	101	14109	12.15	UG/L		86
17) IODOMETHANE	2.144	142	25551	14.73	UG/L		98
20) METHYL ACETATE	2.322	43	28755	13.51	UG/L	#	96
21) T-BUTYL ALCOHOL	2.509	59	31868	120.58	UG/L	#	95
22) ACRYLONITRILE	2.621	53	9647	10.64	UG/L		98
23) METHYLENE CHLORIDE	2.400	49	28409	12.62	UG/L		95
24) CARBON DISULFIDE	2.194	76	50781	12.42	UG/L		99
25) METHYL TERT-BUTYL ETHE...	2.646	73	54881	11.47	UG/L		98
26) TRANS 1,2-DICHLOROETHENE	2.635	61	25928	11.81	UG/L		92
27) 1,1-DICHLOROETHANE	3.050	63	35827	12.19	UG/L		96
28) VINYL ACETATE	3.114	43	608817	107.86	UG/L		98
29) DI ISOPROYL ETHER	3.134	45	75680	11.90	UG/L		96
31) 2-BUTANONE	3.680	43	143041	115.97	UG/L		99
32) T-BUTYL ETHYL ETHER	3.507	59	56243	10.61	UG/L		98
33) CIS-1,2-DICHLOROETHENE	3.647	61	31364	12.27	UG/L	#	80
34) 2,2-DICHLOROPROPANE	3.641	77	23732	10.78	UG/L	#	89
35) ETHYL ACETATE	3.750	43	29502	11.84	UG/L		99
38) BROMOCHLOROMETHANE	3.887	49	19525	12.95	UG/L		88
39) TETRAHYDROFURAN	3.945	42	9133	12.40	UG/L	#	83
40) CHLOROFORM	3.976	83	33696	12.37	UG/L		95
41) 1,1,1-TRICHLOROETHANE	4.146	97	26664	12.25	UG/L		94
42) CYCLOHEXANE	4.196	56	31518	12.23	UG/L		97
43) CARBON TETRACHLORIDE	4.311	117	21093	11.56	UG/L		99
44) 1,1-DICHLOROPROPENE	4.313	75	23734	11.76	UG/L		95
45) BENZENE	4.522	78	74816	11.87	UG/L		96
47) T-AMYLMETHYL ETHER	4.654	73	51121	10.86	UG/L		96
50) 1,2-DICHLOROETHANE	4.548	62	28899	12.78	UG/L		97
51) TRICHLOROETHENE	5.164	95	17690	12.10	UG/L		93
52) METHYLCYCLOHEXANE	5.342	83	23286	11.64	UG/L		96
53) 1,2-DICHLOROPROPANE	5.384	63	21009	12.00	UG/L	#	100

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922616.D
Acq On : 14 Aug 2019 1:42 pm
Operator :
Sample : B0-BS1 Inst : GCMSVOA3
Misc :
ALS Vial : 16 Sample Multiplier: 1

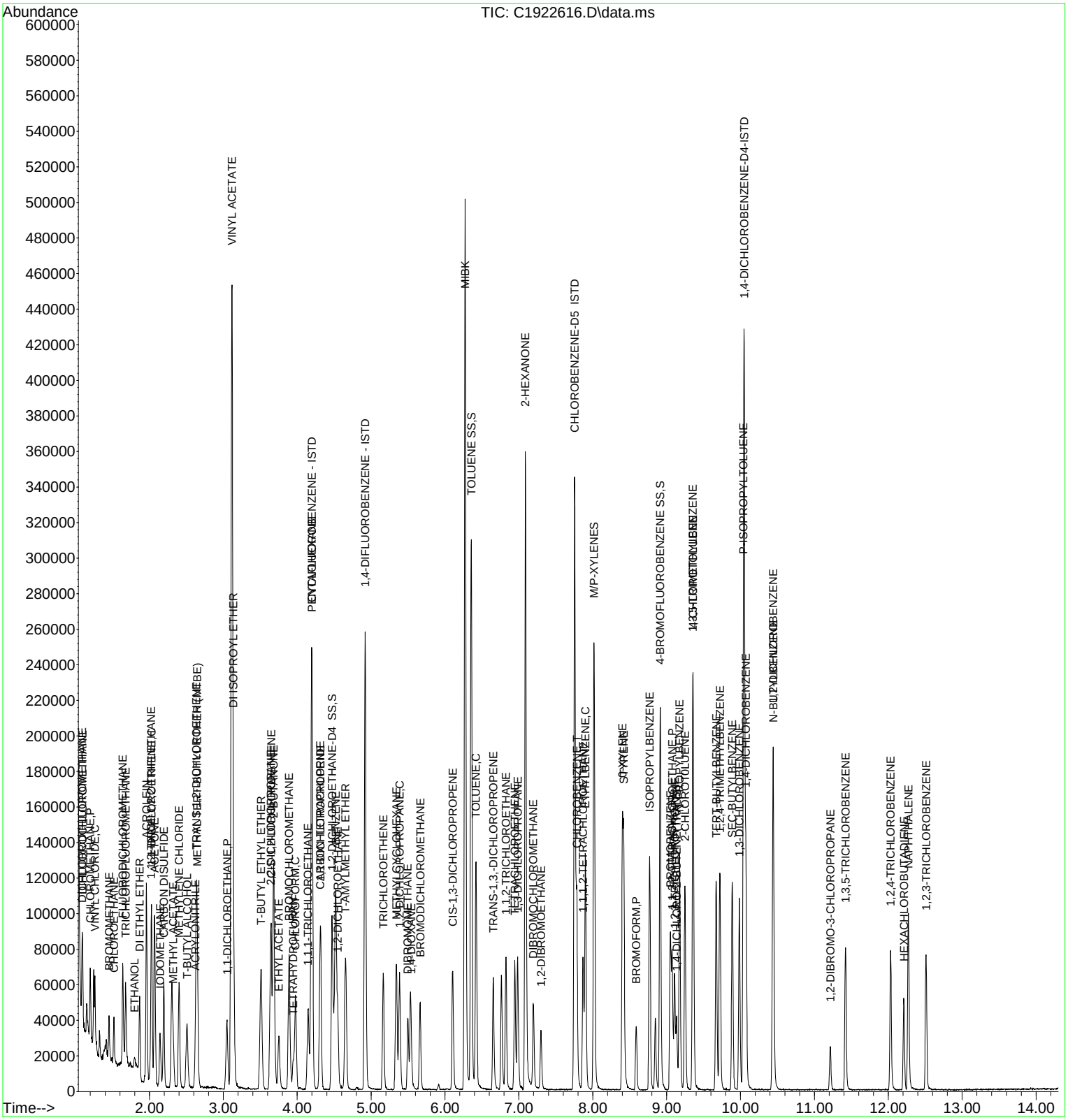
Quant Time: Aug 15 08:32:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
54) DIBROMOMETHANE	5.496	93	12991	11.96	UG/L		89
56) 1,4-DIOXANE	5.543	88	2651	103.31	UG/L	#	47
57) BROMODICHLOROMETHANE	5.666	83	26260	12.55	UG/L		97
59) MIBK	6.271	43	310289	120.38	UG/L	#	95
60) CIS-1,3-DICHLOROPROPENE	6.106	75	30768	11.52	UG/L		94
61) TOLUENE	6.419	91	77150	12.02	UG/L		96
62) TRANS-1,3,-DICHLOROPRO...	6.653	75	27770	11.50	UG/L		94
64) 1,1,2-TRICHLOROETHANE	6.823	97	19044	12.60	UG/L		95
65) 2-HEXANONE	7.088	43	218632	118.09	UG/L		94
66) TETRACHLOROETHENE	6.946	166	18120	12.19	UG/L		97
67) 1,3-DICHLOROPROPANE	6.985	76	32536	11.55	UG/L		98
68) DIBROMOCHLOROMETHANE	7.194	129	20691	11.90	UG/L		95
69) 1,2-DIBROMOETHANE	7.300	107	20818	12.34	UG/L		99
72) CHLOROBENZENE	7.785	112	48753	11.65	UG/L		92
73) 1,1,1,2-TETRACHLOROETHANE	7.869	131	17710	11.86	UG/L		97
74) ETHYLBENZENE	7.900	91	81598	11.33	UG/L		97
75) M/P-XYLENES	8.017	91	125064	22.92	UG/L		97
76) 0-XYLENE	8.401	91	65606	11.67	UG/L		95
77) STYRENE	8.418	104	50342	11.10	UG/L		90
78) BROMOFORM	8.586	173	14238	10.81	UG/L	#	92
79) ISOPROPYLBENZENE	8.770	105	76537	11.73	UG/L		95
81) 1,1,2,2-TETRACHLOROETHANE	9.076	83	31647	12.74	UG/L	#	95
82) 1,4-DICHLORO-2-BUTENE(...	9.135	53	7422	11.83	UG/L		91
83) BROMOBENZENE	9.051	77	34155	11.42	UG/L		90
84) 1,2,3-TRICHLOROPROPANE	9.110	75	24716	11.91	UG/L		90
85) N-PROPYLBENZENE	9.174	91	88552	11.55	UG/L		96
86) 2-CHLOROT0LUENE	9.249	91	57396	11.79	UG/L		94
87) 1,3,5-TRIMETHYLBENZENE	9.355	105	59464	10.93	UG/L		97
88) 4-CHLOROTOLUENE	9.358	91	63241	11.42	UG/L		97
90) TERT-BUTYLBENZENE	9.673	119	48066	11.35	UG/L		92
91) 1,2,4-TRIMETHYLBENZENE	9.723	105	60776	11.36	UG/L		98
92) SEC-BUTYLBENZENE	9.888	105	72659	12.16	UG/L		97
93) 1,3-DICHLOROBENZENE	9.985	146	38643	12.46	UG/L		98
94) P-ISOPROPYLTOLUENE	10.038	119	58780	11.42	UG/L		97
95) 1,4-DICHLOROBENZENE	10.072	146	39755	12.09	UG/L		96
96) N-BUTYLBENZENE	10.446	91	54168	11.70	UG/L		92
97) 1,2-DICHLOROBENZENE	10.440	146	37258	11.91	UG/L		97
98) 1,2-DIBROMO-3-CHLOROPR...	11.215	75	5190	12.06	UG/L		86
99) 1,3,5-TRICHLOROBENZENE	11.422	180	23455	10.98	UG/L		98
100) 1,2,4-TRICHLOROBENZENE	12.029	180	22256	11.06	UG/L		96
101) HEXACHLOROBUTADIENE	12.214	225	9143	11.93	UG/L		95
102) NAPHTHALENE	12.272	128	67721	11.26	UG/L		98
103) 1,2,3-TRICHLOROBENZENE	12.512	180	21731	10.87	UG/L		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922616.D
Acq On : 14 Aug 2019 1:42 pm
Operator :
Sample : B0-BS1 Inst : GCMSVOA3
Misc :
ALS Vial : 16 Sample Multiplier: 1

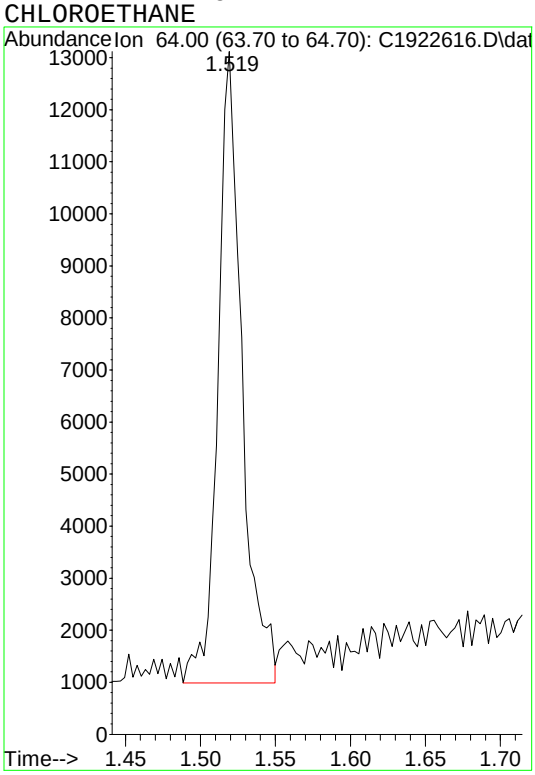
Quant Time: Aug 15 08:32:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922616.D
Acq On : 14 Aug 2019 1:42 pm
Operator :
Sample : B0-BS1
Misc :

Quant Time : Thu Aug 15 08:32:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CHLOROETHANE



Original Int. Results

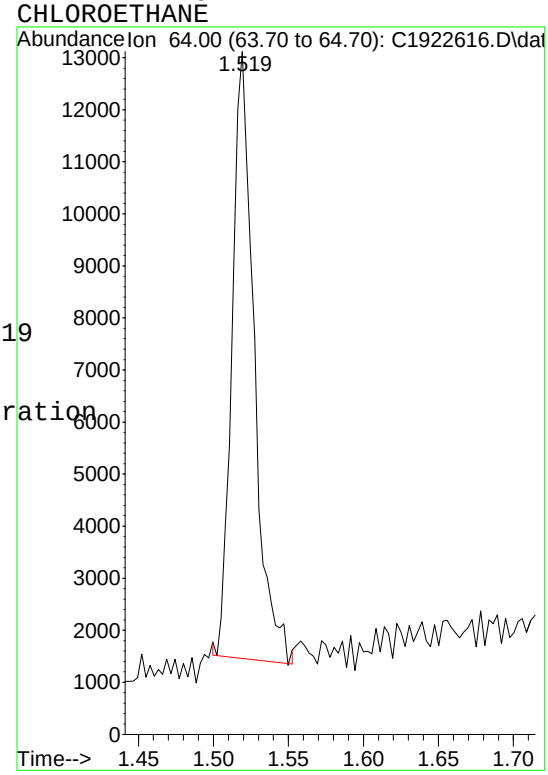
RT : 1.52
Area : 13467
Amount: 12.8011

Manual Int. Results

Thu Aug 15 08:32:46 2019

MIuser: EEH
Reason: Incorret Integration
RT : 1.52
Area : 11773
Amount: 11.1908

Manual Integration
CHLOROETHANE



1 - FORM I
ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B237978-BSD1	File ID:	C1922617.D
Sampled:		Prepared:	08/14/19 07:29	Analyzed:	08/14/19 14:08
Solids:		Preparation:	SW-846 5030B	Dilution:	
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone	122	3.8	50	
107-13-1	Acrylonitrile	11.1	0.52	5.0	
994-05-8	tert-Amyl Methyl Ether (TAME)	10.9	0.14	0.50	
71-43-2	Benzene	11.7	0.18	1.0	
108-86-1	Bromobenzene	11.2	0.15	1.0	
74-97-5	Bromochloromethane	12.7	0.32	1.0	
75-27-4	Bromodichloromethane	12.1	0.16	0.50	
75-25-2	Bromoform	10.7	0.46	1.0	
74-83-9	Bromomethane	9.35	0.78	2.0	V-20
78-93-3	2-Butanone (MEK)	117	1.9	20	
75-65-0	tert-Butyl Alcohol (TBA)	119	4.2	20	V-20
104-51-8	n-Butylbenzene	11.2	0.21	1.0	
135-98-8	sec-Butylbenzene	11.6	0.16	1.0	
98-06-6	tert-Butylbenzene	11.0	0.17	1.0	
637-92-3	tert-Butyl Ethyl Ether (TBEE)	10.7	0.16	0.50	
75-15-0	Carbon Disulfide	11.7	4.4	5.0	
56-23-5	Carbon Tetrachloride	11.2	0.11	5.0	
108-90-7	Chlorobenzene	11.4	0.15	1.0	
124-48-1	Chlorodibromomethane	11.6	0.21	0.50	
75-00-3	Chloroethane	11.4	0.35	2.0	
67-66-3	Chloroform	12.3	0.17	2.0	
74-87-3	Chloromethane	9.38	0.45	2.0	
95-49-8	2-Chlorotoluene	11.2	0.12	1.0	
106-43-4	4-Chlorotoluene	11.2	0.14	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	12.5	0.53	5.0	
106-93-4	1,2-Dibromoethane (EDB)	12.2	0.19	0.50	
74-95-3	Dibromomethane	11.9	0.37	1.0	
95-50-1	1,2-Dichlorobenzene	11.9	0.16	1.0	
541-73-1	1,3-Dichlorobenzene	12.0	0.12	1.0	
106-46-7	1,4-Dichlorobenzene	11.7	0.13	1.0	

1 - FORM I
ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B237978-BSD1	File ID:	C1922617.D
Sampled:		Prepared:	08/14/19 07:29	Analyzed:	08/14/19 14:08
Solids:		Preparation:	SW-846 5030B	Dilution:	
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Column:	1				

Instrument: GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene	11.2	0.31	2.0	
75-71-8	Dichlorodifluoromethane (Freon 12)	7.14	0.26	2.0	
75-34-3	1,1-Dichloroethane	11.7	0.16	1.0	
107-06-2	1,2-Dichloroethane	12.5	0.41	1.0	
75-35-4	1,1-Dichloroethylene	12.4	0.32	1.0	
156-59-2	cis-1,2-Dichloroethylene	11.9	0.13	1.0	
156-60-5	trans-1,2-Dichloroethylene	11.3	0.31	1.0	
78-87-5	1,2-Dichloropropane	12.0	0.20	1.0	
142-28-9	1,3-Dichloropropane	11.4	0.11	0.50	
594-20-7	2,2-Dichloropropane	10.8	0.20	1.0	
563-58-6	1,1-Dichloropropene	11.5	0.16	2.0	
10061-01-5	cis-1,3-Dichloropropene	11.1	0.13	0.50	
10061-02-6	trans-1,3-Dichloropropene	10.9	0.23	0.50	
60-29-7	Diethyl Ether	11.9	0.34	2.0	
108-20-3	Diisopropyl Ether (DIPE)	11.8	0.17	0.50	
123-91-1	1,4-Dioxane	105	22	50	
100-41-4	Ethylbenzene	11.1	0.13	1.0	
87-68-3	Hexachlorobutadiene	11.0	0.47	0.60	
591-78-6	2-Hexanone (MBK)	117	1.5	10	
98-82-8	Isopropylbenzene (Cumene)	11.2	0.17	1.0	
99-87-6	p-Isopropyltoluene (p-Cymene)	11.0	0.20	1.0	
79-20-9	Methyl Acetate	13.4	0.42	1.0	L-02
1634-04-4	Methyl tert-Butyl Ether (MTBE)	11.5	0.25	1.0	
108-87-2	Methyl Cyclohexane	11.2	0.20	1.0	
75-09-2	Methylene Chloride	12.3	0.34	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	119	1.7	10	
91-20-3	Naphthalene	11.4	0.31	2.0	
103-65-1	n-Propylbenzene	11.3	0.13	1.0	
100-42-5	Styrene	11.1	0.11	1.0	
630-20-6	1,1,1,2-Tetrachloroethane	11.4	0.27	1.0	

1 - FORM I
ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B237978-BSD1	File ID:	C1922617.D
Sampled:		Prepared:	08/14/19 07:29	Analyzed:	08/14/19 14:08
Solids:		Preparation:	SW-846 5030B	Dilution:	
Batch:	B237978	Sequence:	S039197	Calibration:	1900192
Instrument:	GCMSVOA3				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane	12.2	0.22	0.50	
127-18-4	Tetrachloroethylene	11.2	0.18	1.0	
109-99-9	Tetrahydrofuran	12.4	0.51	10	
108-88-3	Toluene	11.6	0.14	1.0	
87-61-6	1,2,3-Trichlorobenzene	11.0	0.57	5.0	
120-82-1	1,2,4-Trichlorobenzene	11.0	0.40	1.0	
108-70-3	1,3,5-Trichlorobenzene	10.2	0.30	1.0	
71-55-6	1,1,1-Trichloroethane	12.1	0.20	1.0	
79-00-5	1,1,2-Trichloroethane	12.3	0.16	1.0	
79-01-6	Trichloroethylene	11.9	0.24	1.0	
75-69-4	Trichlorofluoromethane (Freon 11)	10.5	0.33	2.0	
96-18-4	1,2,3-Trichloropropane	10.9	0.25	2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1	11.6	0.32	1.0	
95-63-6	1,2,4-Trimethylbenzene	11.0	0.18	1.0	
108-67-8	1,3,5-Trimethylbenzene	10.7	0.14	1.0	
75-01-4	Vinyl Chloride	9.55	0.45	2.0	
108383/106423	m+p Xylene	22.7	0.30	2.0	
95-47-6	o-Xylene	11.5	0.17	1.0	

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922617.D
Acq On : 14 Aug 2019 2:08 pm
Operator :
Sample : B0-BSD1 Inst : GCMSVOA3
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 15 07:44:15 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) PENTAFLUOROBENZENE - ISTD	4.199	168	108824	30.00	UG/L		0.00
48) 1,4-DIFLUOROBENZENE - ...	4.921	114	167557	30.00	UG/L		0.00
70) CHLOROBENZENE-D5 ISTD	7.757	82	85823	30.00	UG/L		0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	80096	30.00	UG/L	#	0.00
System Monitoring Compounds							
2) 1,2-DICHLOROETHANE-D4 SS	4.472	65	56220	27.46	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 109.84%				
49) TOLUENE SS	6.355	98	169307	25.34	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 101.36%				
71) 4-BROMOFLUOROBENZENE SS	8.915	95	59898	23.53	UG/L		0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 94.12%				
Target Compounds							Qvalue
3) DICHLORODIFLUOROMETHANE	1.090	85	12674	7.14	UG/L		99
4) DIFLUOROCHLOROMETHANE	1.095	51	18857	8.89	UG/L	#	100
5) CHLOROMETHANE	1.198	50	22196	9.38	UG/L	#	28
6) VINYL CHLORIDE	1.263	62	18076	9.55	UG/L		100
7) BROMOMETHANE	1.452	94	9655	9.35	UG/L		100
8) CHLOROETHANE	1.519	64	11874	11.36	UG/L		100
9) FLUORODICHLOROMETHANE	1.642	67	33471	11.70	UG/L		97
10) TRICHLOROFLUOROMETHANE	1.681	101	22126	10.51	UG/L		95
11) ETHANOL	1.801	45	4587	123.67	UG/L	#	84
12) DI ETHYL ETHER	1.868	59	15993	11.91	UG/L		92
13) ACROLEIN	1.960	56	61117	136.46	UG/L		100
14) ACETONE	2.069	43	83513	122.35	UG/L		100
15) 1,1-DICHLOROETHENE	2.027	61	26050	12.37	UG/L		95
16) 1,1,2-TRICL-1,2,2-TRIF...	2.024	101	13358	11.58	UG/L		86
17) IODOMETHANE	2.144	142	22856	13.26	UG/L		95
20) METHYL ACETATE	2.322	43	28331	13.40	UG/L		98
21) T-BUTYL ALCOHOL	2.506	59	31203	118.83	UG/L	#	99
22) ACRYLONITRILE	2.623	53	9980	11.07	UG/L		100
23) METHYLENE CHLORIDE	2.403	49	27582	12.33	UG/L		97
24) CARBON DISULFIDE	2.194	76	47352	11.66	UG/L		99
25) METHYL TERT-BUTYL ETHE...	2.643	73	54810	11.53	UG/L		100
26) TRANS 1,2-DICHLOROETHENE	2.637	61	24615	11.29	UG/L		95
27) 1,1-DICHLOROETHANE	3.053	63	34174	11.70	UG/L	#	93
28) VINYL ACETATE	3.114	43	598276	106.68	UG/L		98
29) DI ISOPROYL ETHER	3.134	45	74544	11.80	UG/L		97
31) 2-BUTANONE	3.683	43	143348	116.97	UG/L		98
32) T-BUTYL ETHYL ETHER	3.510	59	56209	10.68	UG/L		95
33) CIS-1,2-DICHLOROETHENE	3.644	61	30253	11.91	UG/L		91
34) 2,2-DICHLOROPROPANE	3.639	77	23671	10.82	UG/L		89
35) ETHYL ACETATE	3.753	43	28768	11.62	UG/L	#	93
38) BROMOCHLOROMETHANE	3.890	49	19098	12.74	UG/L		88
39) TETRAHYDROFURAN	3.948	42	9105	12.44	UG/L	#	88
40) CHLOROFORM	3.982	83	33389	12.33	UG/L		97
41) 1,1,1-TRICHLOROETHANE	4.152	97	26182	12.10	UG/L		95
42) CYCLOHEXANE	4.199	56	30066	11.74	UG/L		96
43) CARBON TETRACHLORIDE	4.311	117	20338	11.22	UG/L		96
44) 1,1-DICHLOROPROPENE	4.313	75	23039	11.49	UG/L		96
45) BENZENE	4.520	78	73332	11.71	UG/L		96
47) T-AMYLMETHYL ETHER	4.656	73	51142	10.93	UG/L		97
50) 1,2-DICHLOROETHANE	4.548	62	28573	12.52	UG/L		95
51) TRICHLOROETHENE	5.167	95	17537	11.89	UG/L		91
52) METHYLCYCLOHEXANE	5.342	83	22501	11.15	UG/L		95
53) 1,2-DICHLOROPROPANE	5.384	63	21100	11.95	UG/L	#	100

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922617.D
Acq On : 14 Aug 2019 2:08 pm
Operator :
Sample : B0-BSD1 Inst : GCMSVOA3
Misc :
ALS Vial : 17 Sample Multiplier: 1

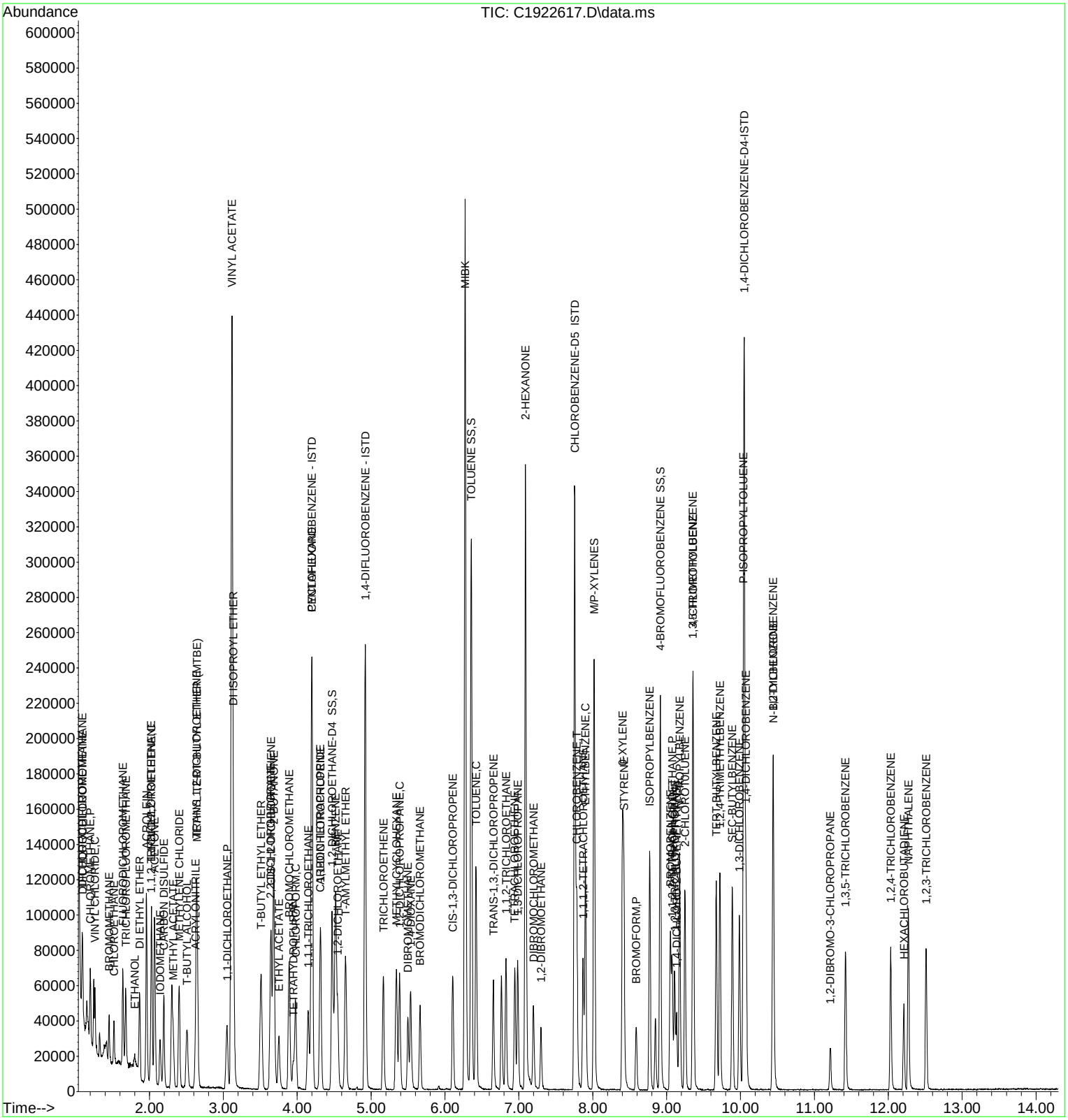
Quant Time: Aug 15 07:44:15 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
54) DIBROMOMETHANE	5.499	93	13081	11.93 UG/L	88
56) 1,4-DIOXANE	5.538	88	2731	105.49 UG/L #	54
57) BROMODICHLOROMETHANE	5.660	83	25538	12.09 UG/L	97
59) MIBK	6.274	43	309347	118.96 UG/L #	95
60) CIS-1,3-DICHLOROPROPENE	6.106	75	29863	11.09 UG/L	96
61) TOLUENE	6.422	91	75171	11.61 UG/L	96
62) TRANS-1,3,-DICHLOROPRO...	6.656	75	26539	10.90 UG/L	95
64) 1,1,2-TRICHLOROETHANE	6.826	97	18806	12.34 UG/L	93
65) 2-HEXANONE	7.091	43	217831	116.63 UG/L	94
66) TETRACHLOROETHENE	6.943	166	16762	11.18 UG/L	92
67) 1,3-DICHLOROPROPANE	6.985	76	32257	11.35 UG/L	97
68) DIBROMOCHLOROMETHANE	7.200	129	20255	11.55 UG/L	99
69) 1,2-DIBROMOETHANE	7.300	107	20782	12.21 UG/L	96
72) CHLOROBENZENE	7.782	112	48445	11.45 UG/L	90
73) 1,1,1,2-TETRACHLOROETHANE	7.872	131	17212	11.39 UG/L	96
74) ETHYLBENZENE	7.900	91	80896	11.11 UG/L	96
75) M/P-XYLENES	8.019	91	125404	22.72 UG/L	95
76) 0-XYLENE	8.404	91	65327	11.49 UG/L	98
77) STYRENE	8.421	104	50926	11.10 UG/L	91
78) BROMOFORM	8.586	173	14282	10.73 UG/L #	94
79) ISOPROPYLBENZENE	8.770	105	73704	11.17 UG/L	97
81) 1,1,2,2-TETRACHLOROETHANE	9.076	83	30719	12.23 UG/L	96
82) 1,4-DICHLORO-2-BUTENE(...	9.135	53	7087	11.17 UG/L #	82
83) BROMOBENZENE	9.051	77	33796	11.18 UG/L	88
84) 1,2,3-TRICHLOROPROPANE	9.110	75	22906	10.92 UG/L	97
85) N-PROPYLBENZENE	9.177	91	87359	11.26 UG/L	96
86) 2-CHLOROT0LUENE	9.249	91	55356	11.25 UG/L	97
87) 1,3,5-TRIMETHYLBENZENE	9.355	105	58952	10.72 UG/L	94
88) 4-CHLOROTOLUENE	9.358	91	62784	11.21 UG/L	97
90) TERT-BUTYLBENZENE	9.673	119	47765	11.05 UG/L	93
91) 1,2,4-TRIMETHYLBENZENE	9.721	105	59991	10.99 UG/L	98
92) SEC-BUTYLBENZENE	9.888	105	70906	11.63 UG/L	97
93) 1,3-DICHLOROBENZENE	9.983	146	37960	12.00 UG/L	99
94) P-ISOPROPYLTOLUENE	10.038	119	57621	10.97 UG/L	97
95) 1,4-DICHLOROBENZENE	10.072	146	39096	11.66 UG/L	93
96) N-BUTYLBENZENE	10.446	91	52818	11.18 UG/L	92
97) 1,2-DICHLOROBENZENE	10.440	146	37845	11.86 UG/L	98
98) 1,2-DIBROMO-3-CHLOROPR...	11.212	75	5485	12.49 UG/L #	79
99) 1,3,5-TRICHLOROBENZENE	11.419	180	22309	10.24 UG/L	97
100) 1,2,4-TRICHLOROBENZENE	12.032	180	22567	10.99 UG/L	99
101) HEXACHLOROBUTADIENE	12.211	225	8633	11.04 UG/L	99
102) NAPHTHALENE	12.272	128	69786	11.37 UG/L	99
103) 1,2,3-TRICHLOROBENZENE	12.512	180	22382	10.98 UG/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922617.D
Acq On : 14 Aug 2019 2:08 pm
Operator :
Sample : B0-BSD1 Inst : GCMSVOA3
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 15 07:44:15 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration



VOC DEPARTMENT | PREPARATION BENCH SHEET | Rev.03

B237978

CON-TEST ANALYTICAL LABORATORY

Printed: 8/15/2019 11:10:13AM

Matrix: Water **Prepared using: VOC - SW-846 5030B** **Surrogate used: 1901276**

Lab Number	Sample Name	Analysis	Due Date	TAT	Initial (mL)	Final (mL)	Spike ID	uL Spike
19H0528-04RE1	MW-22R	8260 Standard	08/23/19 13:30	10	5	5		
19H0617-01	Trip Blank- 8/12/19	8260 Tentatively Iden	08/22/19 13:30	7	5	5		
19H0617-01	Trip Blank- 8/12/19	8260 Standard	08/22/19 13:30	7	5	5		
19H0617-02	Field Blank	8260 Tentatively Iden	08/22/19 13:30	7	5	5		
19H0617-02	Field Blank	8260 Standard	08/22/19 13:30	7	5	5		
19H0617-03	P-15	8260 Tentatively Iden	08/22/19 13:30	7	5	5		
19H0617-03	P-15	8260 Standard	08/22/19 13:30	7	5	5		
19H0617-04	P-5S	8260 Tentatively Iden	08/22/19 13:30	7	5	5		
19H0617-04	P-5S	8260 Standard	08/22/19 13:30	7	5	5		
B237978-BLK1	Blank	QC			5	5		
B237978-BS1	LCS	QC			5	5	1907058	2.5
B237978-BSD1	LCS Dup	QC			5	5	1907058	2.5

8/14/19#3 1ST

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

C:\msdchem\1\data\C081419\

Date	Filename	Lab ID	Sample Info
14 Aug 2019 7:05 am	C1922601.D	CLEAN UP	
14 Aug 2019 7:32 am	C1922602.D	19H0670-11 @ 100X	
14 Aug 2019 7:58 am	C1922603.D	19H0619-01 @ 100X	
14 Aug 2019 8:24 am	C1922604.D	19H0618-01 @ 200X	
14 Aug 2019 8:51 am	C1922605.D	BLK	
14 Aug 2019 9:17 am	C1922606.D	8260LOQ5 0.5PPB	
14 Aug 2019 9:44 am	C1922607.D	8260LOQ6 0.5PPB	
14 Aug 2019 10:10 am	C1922608.D	8260LOQ5 1.0PB	
14 Aug 2019 10:37 am	C1922609.D	8260LOQ6 1.0PPB	
14 Aug 2019 11:03 am	C1922610.D	8260LOQ5 2.0PPB	
14 Aug 2019 11:29 am	C1922611.D	8260LOQ6 2.0PPB	
14 Aug 2019 11:56 am	C1922612.D	8260LOQ5 5.0PPB	
14 Aug 2019 12:22 pm	C1922613.D	8260LOQ6 5.0PPB	
14 Aug 2019 12:49 pm	C1922614.D	8260STD 10PPB 1907138	
14 Aug 2019 1:15 pm	C1922615.D	8260STD 10PPB 1907138	
14 Aug 2019 1:42 pm	C1922616.D	B0-BS1	
14 Aug 2019 2:08 pm	C1922617.D	B0-BSD1	
14 Aug 2019 2:35 pm	C1922618.D	BLK	
14 Aug 2019 3:01 pm	C1922619.D	B0-BLK1	
14 Aug 2019 3:27 pm	C1922620.D	19H0617-01 @ TB	
14 Aug 2019 3:54 pm	C1922621.D	19H0617-02 @ FB	
14 Aug 2019 4:20 pm	C1922622.D	19H0617-03	
14 Aug 2019 4:47 pm	C1922623.D	19H0617-04	
14 Aug 2019 5:13 pm	C1922624.D	19H0528-04RE1 @ 1000X	1000
14 Aug 2019 5:40 pm	C1922625.D	19H0566-02 @ 50X MEOH	50
14 Aug 2019 6:06 pm	C1922626.D	19H0566-03 @ 50X MEOH	50
14 Aug 2019 6:32 pm	C1922627.D	19H0566-04 @ 50X MEOH	50
14 Aug 2019 6:59 pm	C1922628.D	19H0566-05 @ 50X MEOH	50
14 Aug 2019 7:25 pm	C1922629.D	19H0625-02 @ 50X MEOH	50
14 Aug 2019 7:52 pm	C1922630.D	19H0625-05 @ 50X MEOH	50
14 Aug 2019 8:18 pm	C1922631.D	BLK	
14 Aug 2019 8:45 pm	C1922632.D	19H0648-01 @ 50X MEOH	50
14 Aug 2019 9:11 pm	C1922633.D	BLK	
14 Aug 2019 9:37 pm	C1922634.D	19H0525-01 @ 100X MEOH	100
14 Aug 2019 10:04 pm	C1922635.D	BLK	
14 Aug 2019 10:30 pm	C1922636.D	19H0495-06 @ 10000X MEOH	10000
14 Aug 2019 10:57 pm	C1922637.D	19H0512-03 @ 5000X MEOH	5000
14 Aug 2019 11:23 pm	C1922638.D	BLK	
14 Aug 2019 11:50 pm	C1922639.D	19H0659-01 @ 50X MEOH	50
15 Aug 2019 12:16 am	C1922640.D	19H0660-01 @ 50X MEOH	50
15 Aug 2019 12:43 am	C1922641.D	BLK	

SVOA

SAMPLE DATA

1 - FORM I
ANALYSIS DATA SHEET

Field Blank

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-02	File ID:	F1923307.D
Sampled:	08/12/19 08:45	Prepared:	08/19/19 09:23	Analyzed:	08/21/19 16:03
Solids:		Preparation:	SW-846 3510C	Dilution:	1
Initial/Final:	950 mL / 1 mL				
Batch:	B238366	Sequence:	S039436	Calibration:	1900232
Instrument:	GCMSSV6				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane		0.034	0.21	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923307.D
Acq On : 21 Aug 2019 4:03 pm
Operator : CLA
Sample : 19H0617-02 Inst : GCMSSV6
Misc :
ALS Vial : 7 Sample Multiplier: 1

CHECKED
Irina Raducan AUG 2 2 2019

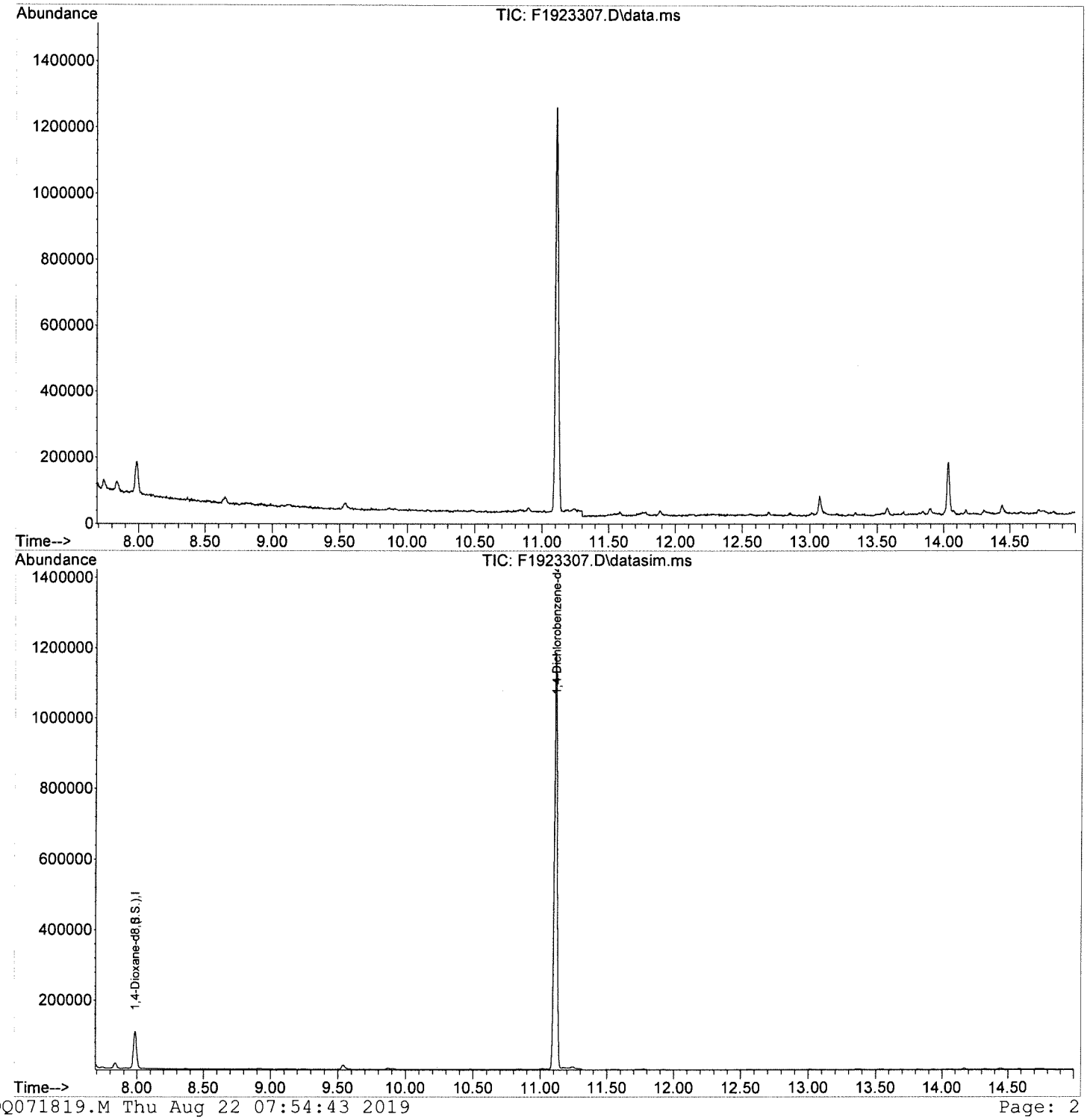
Quant Time: Aug 22 07:54:39 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.113	150	896864	10.000	ug/mL	-0.01
3) 1,4-Dioxane-d8 (I.S.)	7.986	96	88311	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.986	96	88311	2.999	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923307.D
Acq On : 21 Aug 2019 4:03 pm
Operator : CLA
Sample : 19H0617-02 Inst : GCMSSV6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 22 07:54:39 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration



1 - FORM I
ANALYSIS DATA SHEET

P-15

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-03	File ID:	F1923308.D
Sampled:	08/12/19 09:30	Prepared:	08/19/19 09:23	Analyzed:	08/21/19 16:23
Solids:		Preparation:	SW-846 3510C	Dilution:	1
Initial/Final:	1020 mL / 1 mL				
Batch:	B238366	Sequence:	S039436	Calibration:	1900232
Instrument:	GCMSSV6				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane		0.032	0.20	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923308.D
Acq On : 21 Aug 2019 4:23 pm
Operator : CLA
Sample : 19H0617-03 Inst : GCMSSV6
Misc :
ALS Vial : 8 Sample Multiplier: 1

CHECKED BY: Irina Raducan AUG 22 2019

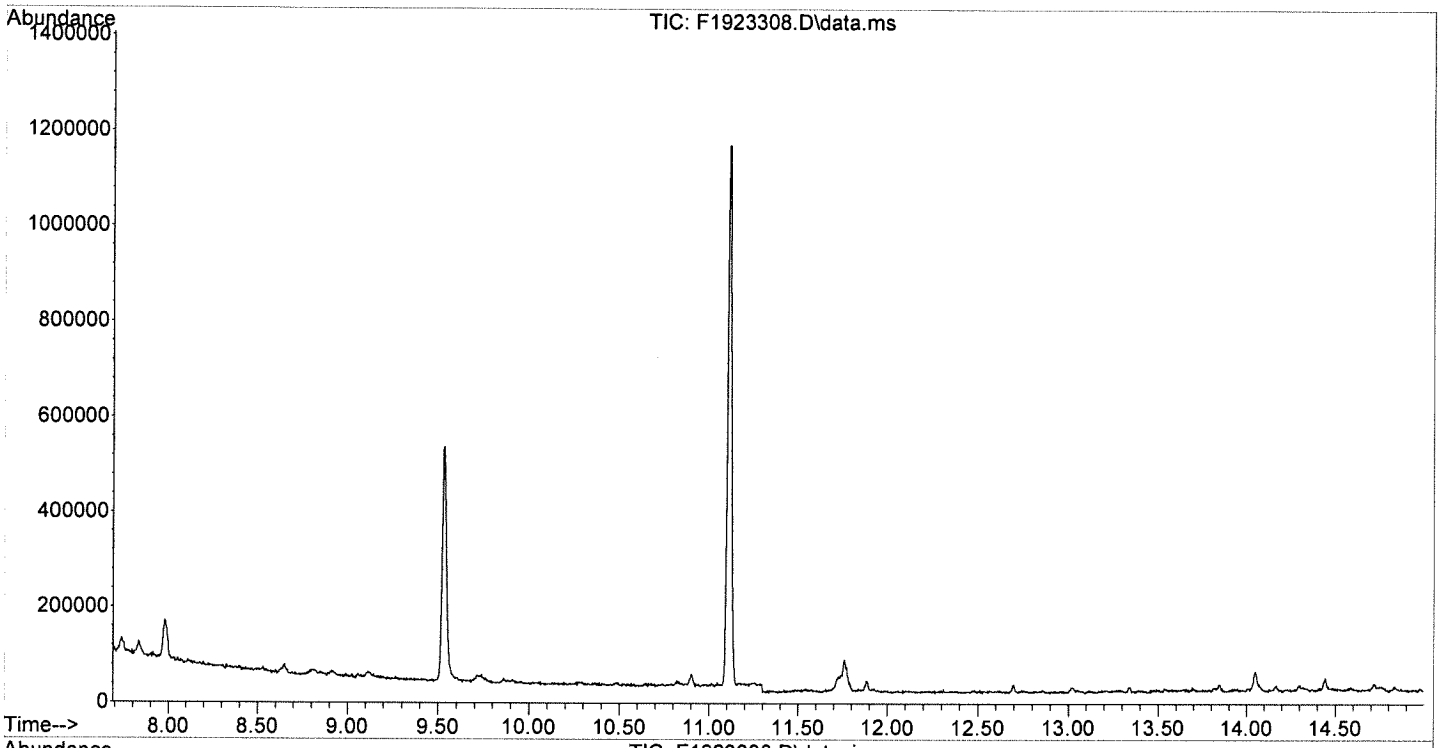
Quant Time: Aug 21 17:05:36 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

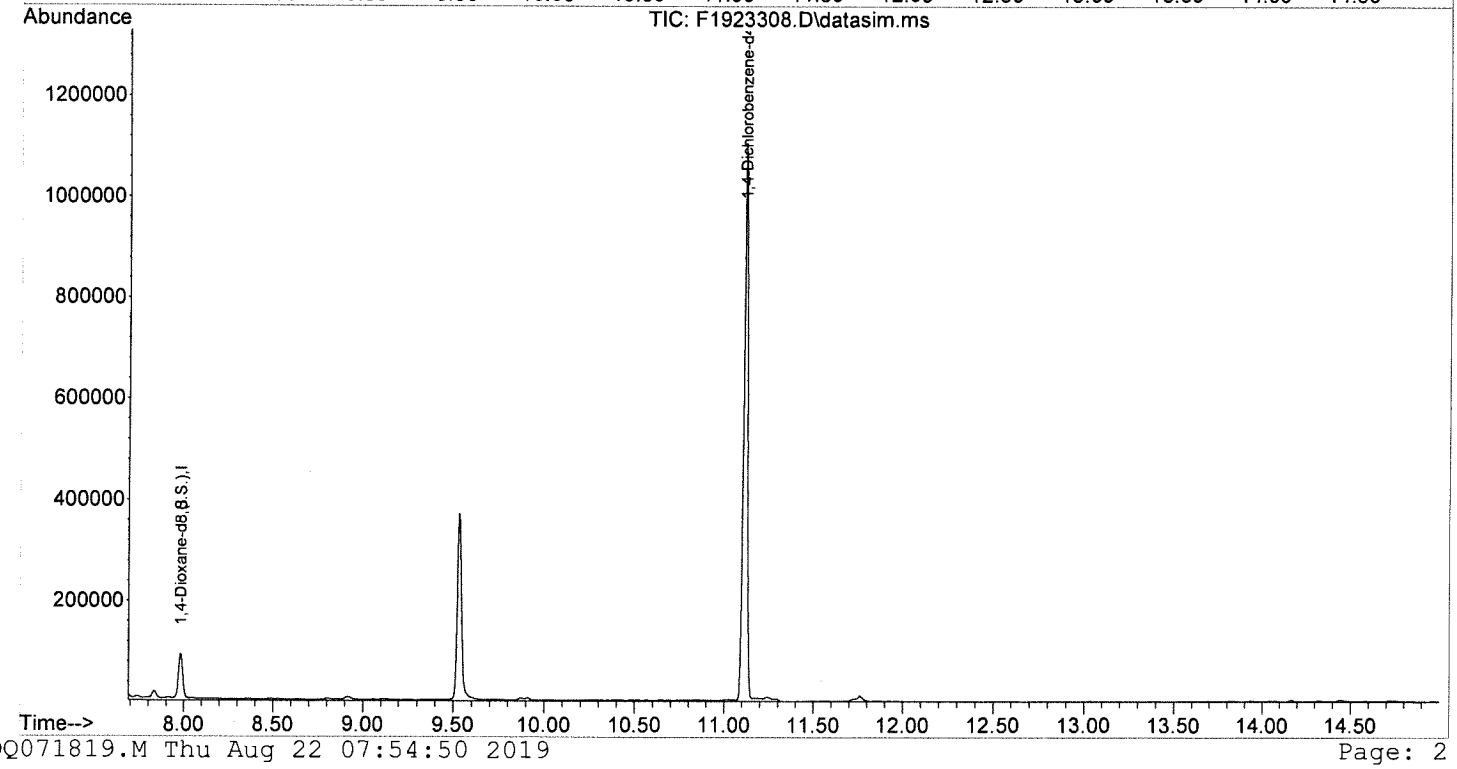
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.113	150	828354	10.000	ug/mL	-0.01
3) 1,4-Dioxane-d8 (I.S.)	7.983	96	74674	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.983	96	74674	2.746	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923308.D
Acq On : 21 Aug 2019 4:23 pm
Operator : CLA
Sample : 19H0617-03 Inst : GCMSSV6
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 21 17:05:36 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration





1 - FORM I
ANALYSIS DATA SHEET

P-5S

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-04	File ID:	F1923309.D
Sampled:	08/12/19 13:10	Prepared:	08/19/19 09:23	Analyzed:	08/21/19 16:43
Solids:		Preparation:	SW-846 3510C	Dilution:	1
Initial/Final:	1040 mL / 1 mL				
Batch:	B238366	Sequence:	S039436	Calibration:	1900232
Instrument:	GCMSSV6				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	0.47	0.031	0.19	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923309.D
Acq On : 21 Aug 2019 4:43 pm
Operator : CLA
Sample : 19H0617-04 Inst : GCMSSV6
Misc :
ALS Vial : 9 Sample Multiplier: 1

CHECKED Irina Radu AUG 2 2 2019

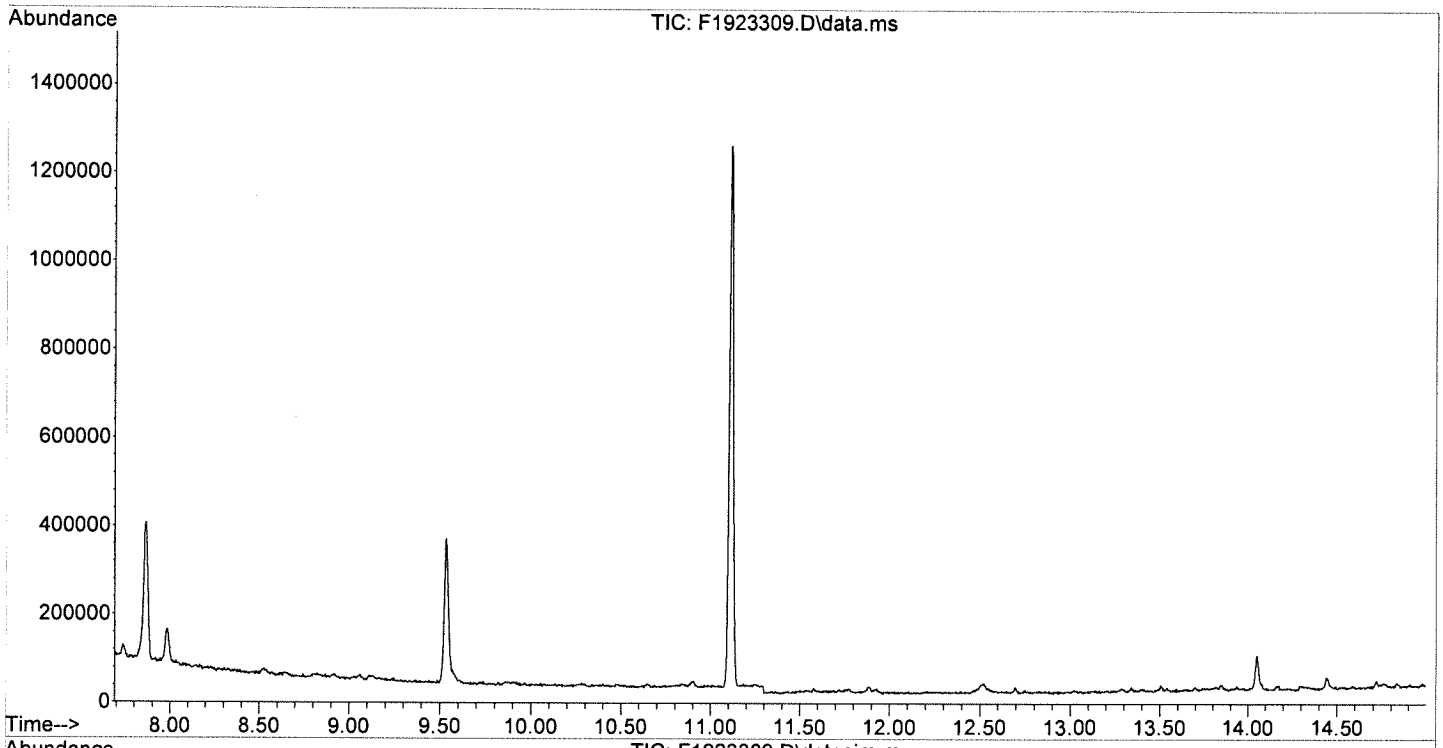
Quant Time: Aug 21 17:05:38 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

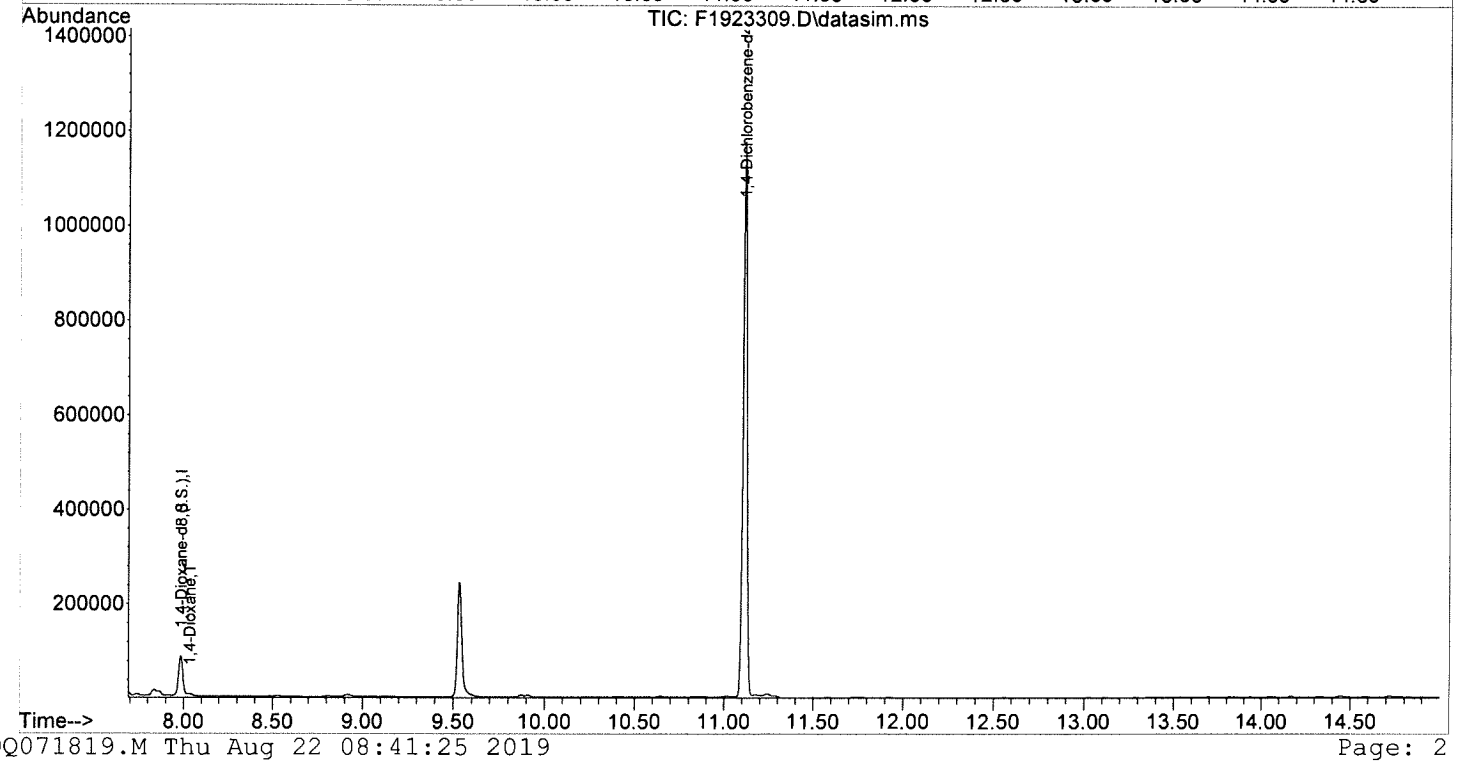
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.113	150	882696	10.000	ug/mL	-0.01
3) 1,4-Dioxane-d8 (I.S.)	7.986	96	70311	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.986	96	70311	2.426	ug/mL	0.00
Target Compounds						Qvalue
4] 1,4-Dioxane	8.033	88	3802	0.485	ug/mL	94

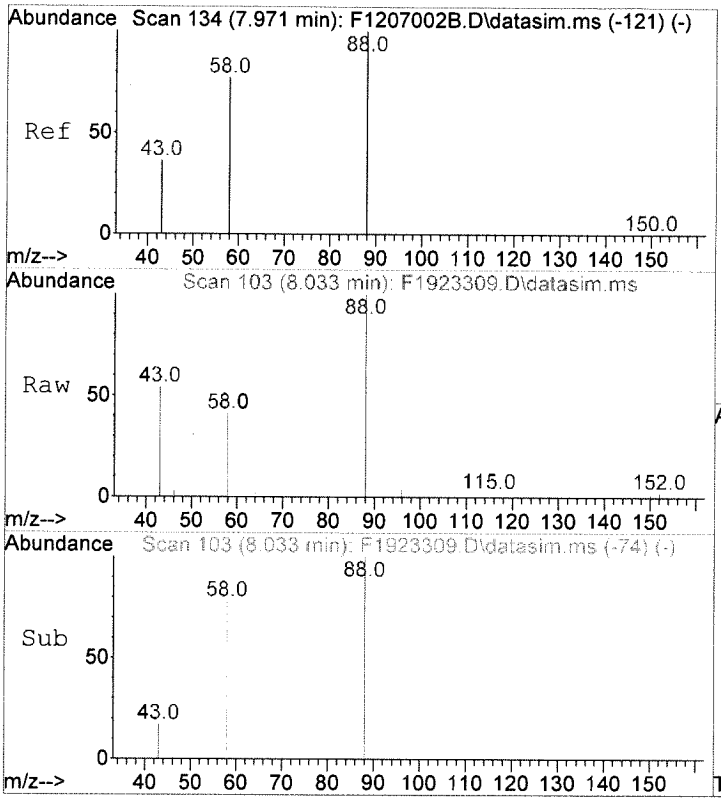
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923309.D
Acq On : 21 Aug 2019 4:43 pm
Operator : CLA
Sample : 19H0617-04 Inst : GCMSSV6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 21 17:05:38 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration



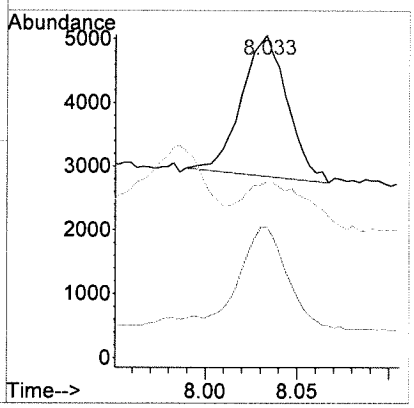




#4
1,4-Dioxane
Concen: 0.49 ug/mL
RT: 8.033 min Scan# 103
Delta R.T. -0.001 min
Lab File: F1923309.D
Acq: 21 Aug 2019 4:43 pm

Tgt Ion: 88 Resp: 3802

Ion	Ratio	Lower	Upper
88	100		
58	65.8	49.4	91.8
43	28.4	22.2	41.2



QC DATA

2 - FORM II

SYSTEM MONITORING COMPOUND SUMMARY

SW-846 8270D

Laboratory:	Con-Test Analytical Laboratory	SDG:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Instrument:	GCMSSV6

	1,4-Dioxane-d8
19H0617-02	30.0
19H0617-03	27.5
19H0617-04	24.3
B238366-BLK1	32.7
B238366-BS1	27.8
B238366-BSD1	29.8

3 - FORM III

LCS / LCS DUPLICATE RECOVERY

SW-846 8270D

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Preparation:	SW-846 3510C
Batch:	B238366	Laboratory ID:	B238366-BS1
Column:		Initial/Final:	1000 mL / 1 mL

ANALYTE	SPIKE ADDED (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC.	QC LIMITS REC.
1,4-Dioxane	10.0	10.2	102	40 - 140

ANALYTE	SPIKE ADDED (µg/L)	LCSD CONCENTRATION (µg/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dioxane	10.0	9.68	96.8	4.84	30	40 - 140

4 - FORM IV
METHOD BLANK SUMMARY

SW-846 8270D

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Blank ID:	B238366-BLK1 Batch: B238366	Prepared:	08/19/2019 09:23

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
LCS	B238366-BS1	F1923304.D	15:04
LCS Dup	B238366-BSD1	F1923305.D	15:24
Field Blank	19H0617-02	F1923307.D	16:03
P-15	19H0617-03	F1923308.D	16:23
P-5S	19H0617-04	F1923309.D	16:43

5 - FORM V
INSTRUMENT PERFORMANCE CHECK

SW-846 8270D

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Lab File ID:	F1923301.D	Injection Date:	08/21/19
Instrument ID:	GCMSSV6	Injection Time:	14:03
Sequence:	S039436	Lab Sample ID:	S039436-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	10 - 80% of 198	43.2	PASS
68	Less than 2% of 69	1.66	PASS
69	Base peak, 100% relative abundance	100	PASS
70	Less than 2% of 69	0.413	PASS
127	10 - 80% of 198	47.9	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.57	PASS
275	10 - 60% of 198	26.1	PASS
365	1 - 100% of 198	3.1	PASS
441	Less than 24% of 442	16.2	PASS
442	50 - 100% of 198	95.7	PASS
443	15 - 24% of 442	20.8	PASS

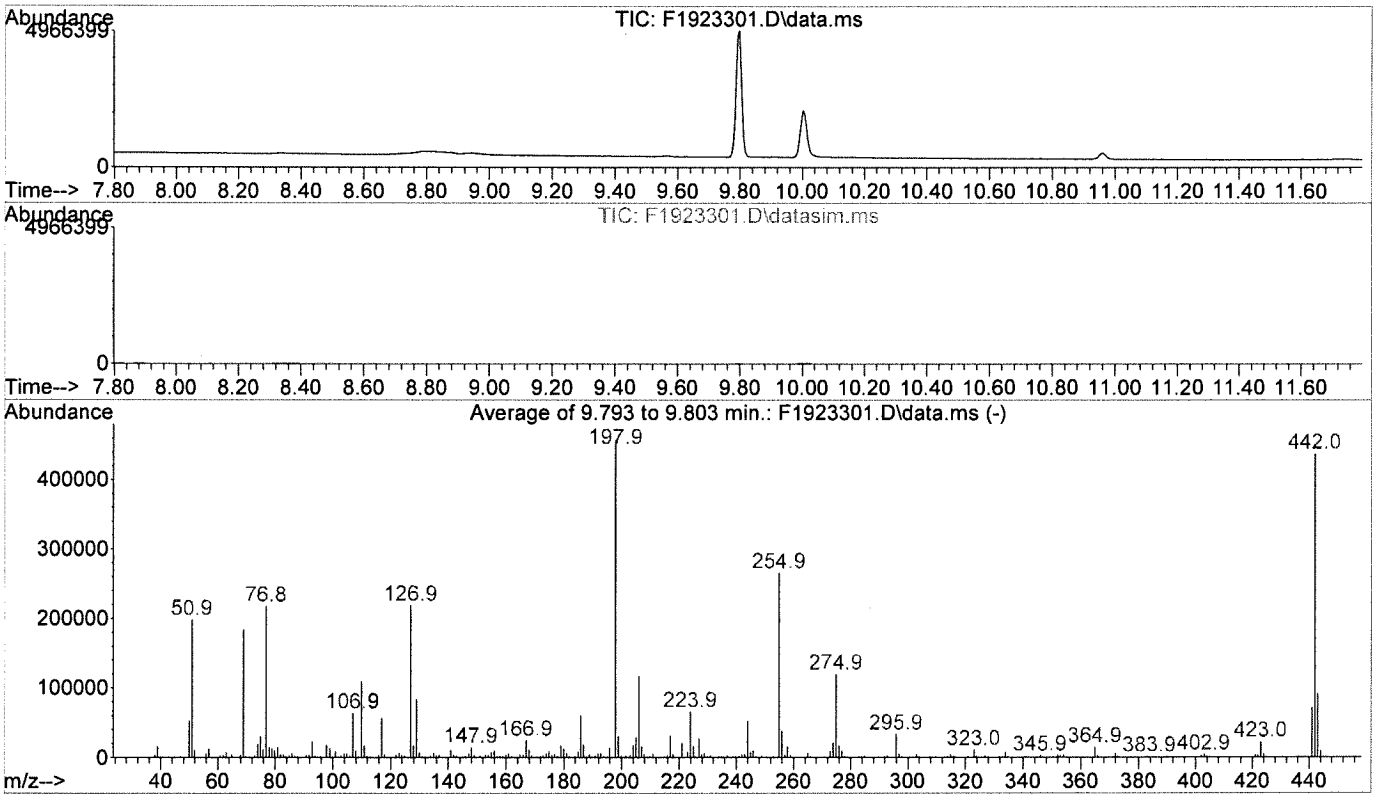
Client ID	Sample ID	File ID	Date Analyzed	Time Analyzed
Calibration Check	S039436-CCV1	F1923302.D	08/21/2019	14:24:00
Calibration Check	S039436-CCV1	F1923303.D	08/21/2019	14:24:00
LCS	B238366-BS1	F1923304.D	08/21/2019	15:04:00
LCS Dup	B238366-BSD1	F1923305.D	08/21/2019	15:24:00
Blank	B238366-BLK1	F1923306.D	08/21/2019	15:44:00
Field Blank	19H0617-02	F1923307.D	08/21/2019	16:03:00
P-15	19H0617-03	F1923308.D	08/21/2019	16:23:00
P-5S	19H0617-04	F1923309.D	08/21/2019	16:43:00

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923301.D
Acq On : 21 Aug 2019 2:03 pm
Operator : CLA
Sample : TUNE 25 ng Inst : GCMSSV6
Misc : 1902259 EXP 093019
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p

CHECKED BY:
Irina Raducan AUG 2 2 2019

Method : C:\msdchem\1\methods\8270D.M
Title : 8270D DFTPP
Last Update : Sat May 12 12:37:13 2012



AutoFind: Scans 442, 443, 444; Background Corrected with Scan 431

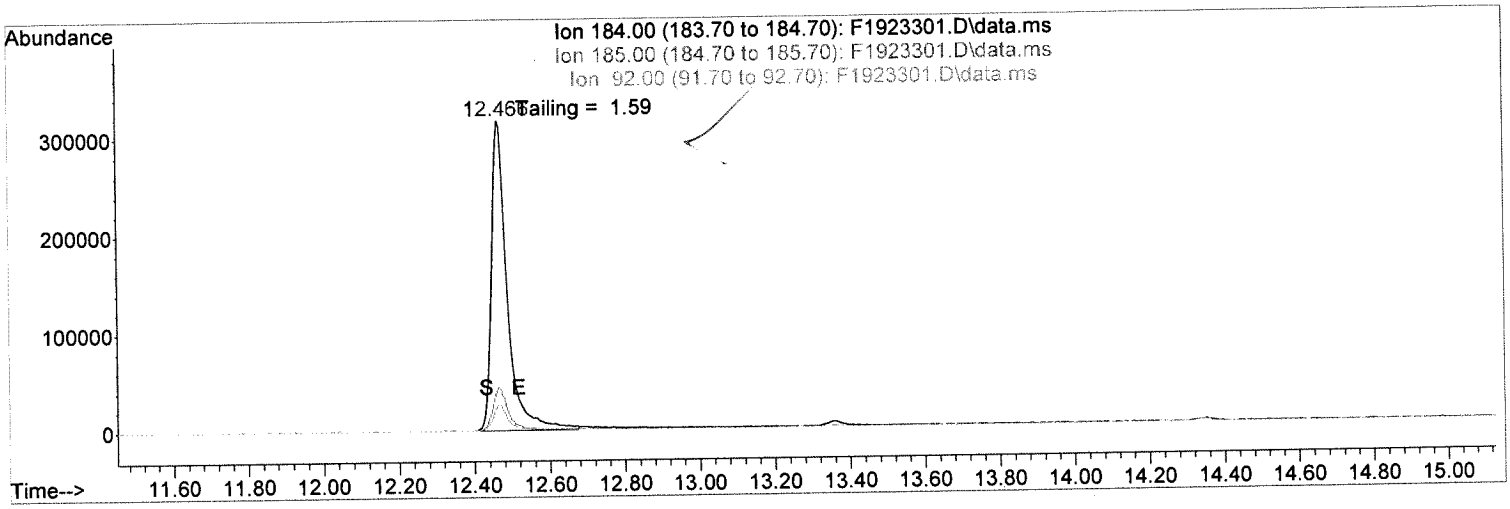
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	43.2	197627	PASS
68	69	0.00	2	1.7	3049	PASS
69	69	100	100	100.0	183827	PASS
70	69	0.00	2	0.4	760	PASS
127	198	10	80	47.9	218731	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	457024	PASS
199	198	5	9	6.6	30013	PASS
275	198	10	60	26.1	119501	PASS
365	198	1	100	3.1	14153	PASS
441	442	0.01	24	16.2	70763	PASS
442	198	50	100	95.7	437547	PASS
443	442	15	24	20.8	90949	PASS

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923301.D
Acq On : 21 Aug 2019 2:03 pm
Operator : CLA
Sample : TUNE 25 ng
Misc : 1902259 EXP 093019
ALS Vial : 1 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 21 18:05:03 2019
DataAcq Meth:DT122215.M
Quant Method : C:\msdchem\1\methods\8270D.M
Quant Title : 8270D DFTPP
QLast Update : Sat May 12 12:37:13 2012
Response via : Initial Calibration



CALIBRATION DATA

6 - FORM VI
INITIAL CALIBRATION DATA SHEET

SW-846 8270D

Client: Dvirka And Bartilucci SDG: 19H0617

Project: Farrand Controls Site

Calibration: 1900232 Instrument: GCMSSV6

Calibration Date: 7/19/2019 2:13:16PM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
1,4-Dioxane	0.2	0.9197164	1	1.024818	2.5	1.113445	5	1.214251	10	1.273129	25	1.169152
1,4-Dioxane-d8	0.2	0.2970566	1	0.3211922	2.5	0.307653	5	0.3501261	10	0.2915975	25	0.3683082

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8270D

Client: Dvirka And Bartilucci SDG: 19H0617

Project: Farrand Controls Site

Calibration: 1900232 Instrument: GCMSSV6

Calibration Date: 7/19/2019 2:13:16PM

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
1,4-Dioxane	50	1.099122	100	1.099937								
1,4-Dioxane-d8	50	0.3399167	100	0.350495								

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8270D

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0617

Client: Dvirka And Bartilucci Project: Farrand Controls Site

Calibration: 1900232 Instrument: GCMSSV6

Calibration Date: 7/19/2019 2:13:16PM

COMPOUND	Mean RF	RF RSD	Linear r^2	Quad COD	LIMIT	Q
1,4-Dioxane	1.114196	9.9			20	
1,4-Dioxane-d8	0.3282932	8.5			20	

INITIAL CALIBRATION STANDARDS

SW-846 8270D

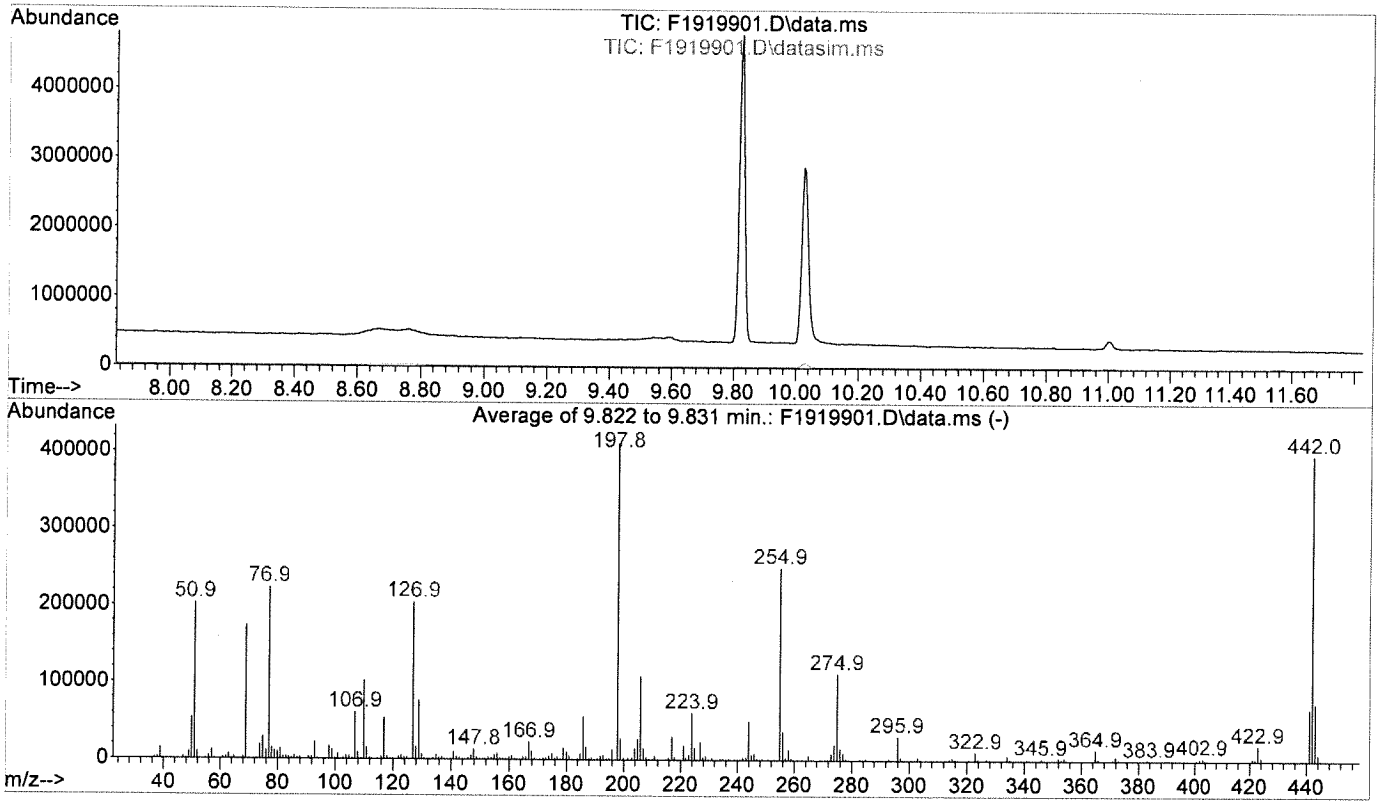
Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Sequence:	S038265	Instrument:	GCMSSV6
Calibration:	1900232		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
1902259	1,4-Dioxane Tune - 25 ng/uL	S038265-TUN1	F1919901.D	07/18/19 09:05
1810183	Diox 0.2	S038265-CAL1	F1919905.D	07/18/19 10:31
1810184	Diox 1.0	S038265-CAL2	F1919906.D	07/18/19 10:51
1810185	Diox 2.5	S038265-CAL3	F1919907.D	07/18/19 11:11
1810186	Diox 5.0	S038265-CAL4	F1919908.D	07/18/19 11:31
1810187	Diox 10	S038265-CAL5	F1919909.D	07/18/19 11:50
1810188	Diox 25	S038265-CAL6	F1919910.D	07/18/19 12:10
1810189	Diox 50	S038265-CAL7	F1919911.D	07/18/19 12:30
1810190	Diox 100	S038265-CAL8	F1919912.D	07/18/19 12:50
1810183	Diox 0.2	S038265-CAL1	F1919913.D	07/18/19 13:09
1810184	Diox 1.0	S038265-CAL2	F1919914.D	07/18/19 13:29
1810185	Diox 2.5	S038265-CAL3	F1919915.D	07/18/19 13:49
1810186	Diox 5.0	S038265-CAL4	F1919916.D	07/18/19 14:09
1810187	Diox 10	S038265-CAL5	F1919917.D	07/18/19 15:07
1810188	Diox 25	S038265-CAL6	F1919918.D	07/18/19 15:27
1810189	Diox 50	S038265-CAL7	F1919919.D	07/18/19 15:47
1810190	Diox 100	S038265-CAL8	F1919920.D	07/18/19 16:07

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919901.D
Acq On : 18 Jul 2019 9:05 am
Operator : CLA
Sample : TUNE 25 ng Inst : GCMSSV6
Misc : 1902259 EXP 093019
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p

Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant meth
... ods\8270D.M
Title : 8270D DFTPP
Last Update : Sat May 12 12:37:13 2012

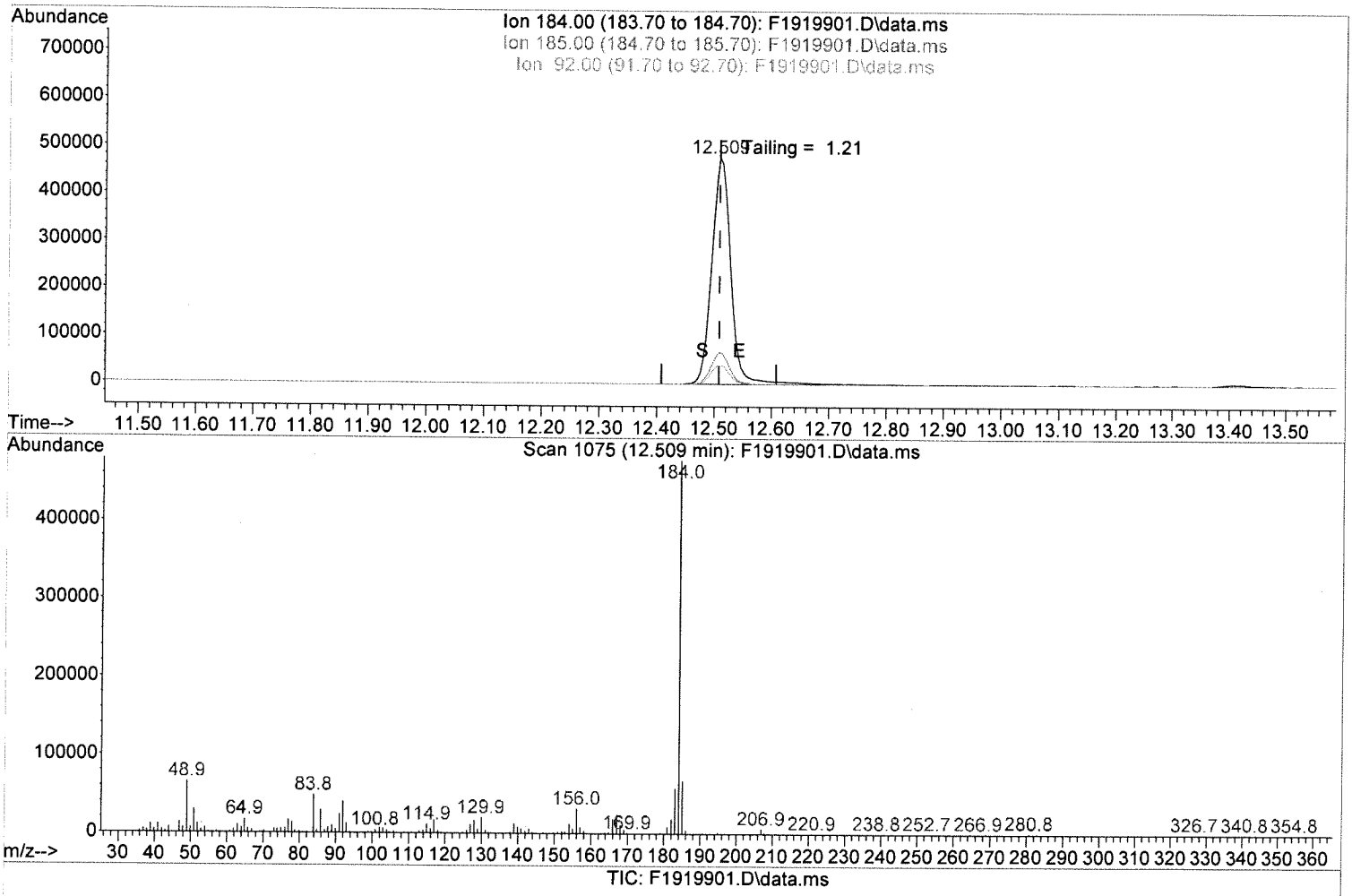


AutoFind: Scans 511, 512, 513; Background Corrected with Scan 502

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	49.2	202659	PASS
68	69	0.00	2	1.7	3015	PASS
69	69	100	100	100.0	174126	PASS
70	69	0.00	2	0.6	994	PASS
127	198	10	80	49.6	204288	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	411947	PASS
199	198	5	9	6.7	27629	PASS
275	198	10	60	27.2	112093	PASS
365	198	1	100	3.3	13637	PASS
441	442	0.01	24	16.9	67173	PASS
442	198	50	100	96.5	397675	PASS
443	442	15	24	18.6	74115	PASS

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919901.D
Acq On : 18 Jul 2019 9:05 am
Operator : CLA
Sample : TUNE 25 ng Inst : GCMSSV6
Misc : 1902259 EXP 093019
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 18 13:57:26 2019
DataAcq Meth:DT122215.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\8270D.M
Quant Title : 8270D DFTPP
QLast Update : Sat May 12 12:37:13 2012
Response via : Initial Calibration



(3) Benzidine

12.509min (0.000) 0.000 ng/uL

response 1075970

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	14.10	13.88
92.00	8.30	8.53
0.00	0.00	0.00

Method Path : C:\msdchem\1\methods\
Method File : DQ071819.M
Title :
Last Update : Thu Jul 18 16:35:04 2019
Response Via : Initial Calibration

Calibration Files
0.2 =F1919913.D 1.0 =F1919914.D 2.5 =F1919915.D 5.0 =F1919916.D 10 =F1919917.D 25 =F1919918.D 50 =F1919919.D
100 =F1919920.D

		Compound	0.2	1.0	2.5	5.0	10	25	50	100	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------									
2)	S	1,4-Dioxane-d8	0.297	0.321	0.308	0.350	0.292	0.368	0.340	0.350	0.328	8.54
3)	I	1,4-Dioxane-d8 (I.S.)	----------ISTD----------									
4)	T	1,4-Dioxane	0.920	1.025	1.113	1.214	1.273	1.169	1.099	1.100	1.114	9.86

(#) = Out of Range

DATA ANALYSIS PARAMETERS

Method Name: C:\msdchem\1\methods\DQ071819.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: No
File: No

Integration Events: Meth Default

Generate Report During Run Method: Yes

Signal Correlation Window: 0.020

Qualitative Report Settings

Peak Location of Unknown: Apex

Library to Search	Minimum Quality
C:\Database\NIST08.L	0

Integration Events: Meth Default

Report Type: Summary

Output Destination
Screen: No
Printer: No
File: No

Generate Report During Run Method: Yes

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: No
Printer: No
File: No

Generate Report During Run Method: Yes

Calibration Last Updated: Thu Jul 18 16:35:04 2019

Reference Window: 2.00 Minutes
Non-Reference Window: 1.00 Minutes
Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

---

1) 1,4-Dichlorobenzene-d4 (ISTD)

Ret. Time 11.128 min., Extract & Integrate from 11.028 to 11.228 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt -150.00			*** METH DEFAULT ***
Q1 152.00	64.20	30.0	*** METH DEFAULT ***
Q2 115.00	36.10	30.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/mL)	Response
0.2	10.000	916492
1.0	10.000	864716
2.5	10.000	885504
5.0	10.000	790024
10	10.000	989590 ✓
25	10.000	847398
50	10.000	884049
100	10.000	840950

Qualifier Peak Analysis ON ISTD conc: 10.000 ug/mL
Curve Fit: Avg. RF
---

2) 1,4-Dioxane-d8 ( )

Ret. Time 7.990 min., Extract & Integrate from 7.890 to 8.090 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt -96.00			*** METH DEFAULT ***
Q1 64.00	70.80	30.0	*** METH DEFAULT ***
Q2 46.00	24.00	30.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/mL)	Response
0.2	0.200	5445
1.0	1.000	27774
2.5	2.500	68107
5.0	5.000	138304
10	10.000	288562 ✓
25	25.000	780259
50	50.000	1502515
100	100.000	2947488

Qualifier Peak Analysis ON
Curve Fit: Avg. RF
---

3) 1,4-Dioxane-d8 (I.S.) (ISTD)

Ret. Time 7.990 min., Extract & Integrate from 7.890 to 8.090 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt -96.00			*** METH DEFAULT ***
Q1 64.00	71.40	30.0	*** METH DEFAULT ***
Q2 46.00	24.00	30.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/mL)	Response
0.2	10.000	307921
1.0	10.000	299175

2.5	10.000	286861
5.0	10.000	260073
10	10.000	251852
25	10.000	285307
50	10.000	292805
100	10.000	290373

Qualifier Peak Analysis ON ISTD conc: 10.000 ug/mL
Curve Fit: Avg. RF

---

4) 1,4-Dioxane ( )

Ret. Time 8.034 min., Extract & Integrate from 7.934 to 8.134 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt -88.00			*** METH DEFAULT ***
Q1 58.00	70.60	30.0	*** METH DEFAULT ***
Q2 43.00	31.70	30.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/mL)	Response
0.2	0.200	5664
1.0	1.000	30660
2.5	2.500	79851
5.0	5.000	157897
10	10.000	320640
25	25.000	833918
50	50.000	1609142
100	100.000	3193920

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Fri Jul 19 13:21:38 2019

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919905.D
Acq On : 18 Jul 2019 10:31 am
Operator : CLA
Sample : DIOX 0.2 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 5 Sample Multiplier: 1

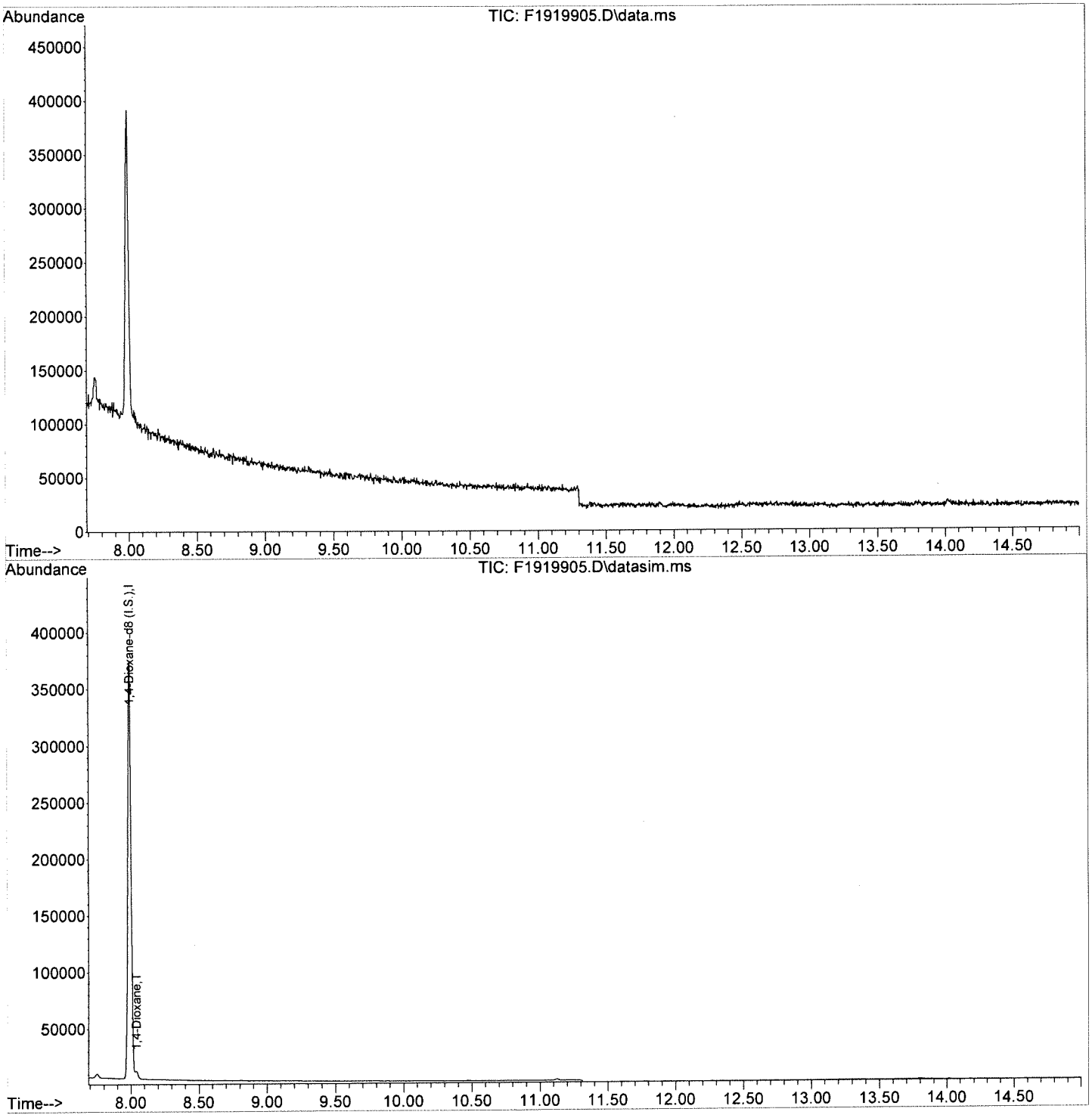
Quant Time: Jul 18 10:57:58 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.993	96	307921	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						Qvalue
4] 1,4-Dioxane	8.040	88	5664	0.173	ug/mL	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919905.D
Acq On : 18 Jul 2019 10:31 am
Operator : CLA
Sample : DIOX 0.2 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 18 10:57:58 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919906.D
Acq On : 18 Jul 2019 10:51 am
Operator : CLA
Sample : DIOX 1.0 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 6 Sample Multiplier: 1

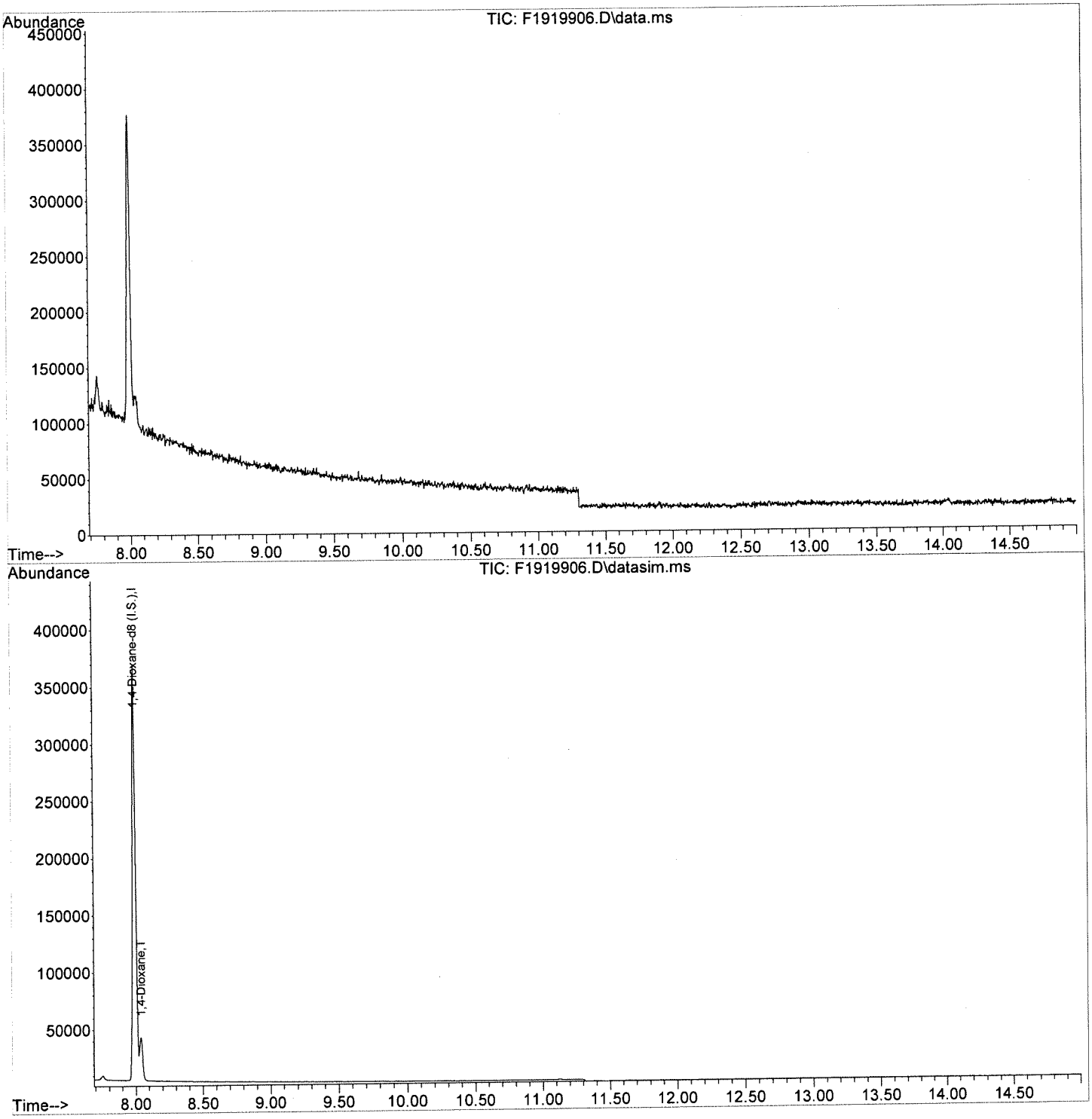
Quant Time: Jul 18 11:18:27 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.993	96	299175	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						Qvalue
4] 1,4-Dioxane	8.040	88	30660	0.963	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919906.D
Acq On : 18 Jul 2019 10:51 am
Operator : CLA
Sample : DIOX 1.0 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 18 11:18:27 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919907.D
Acq On : 18 Jul 2019 11:11 am
Operator : CLA
Sample : DIOX 2.5 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 7 Sample Multiplier: 1

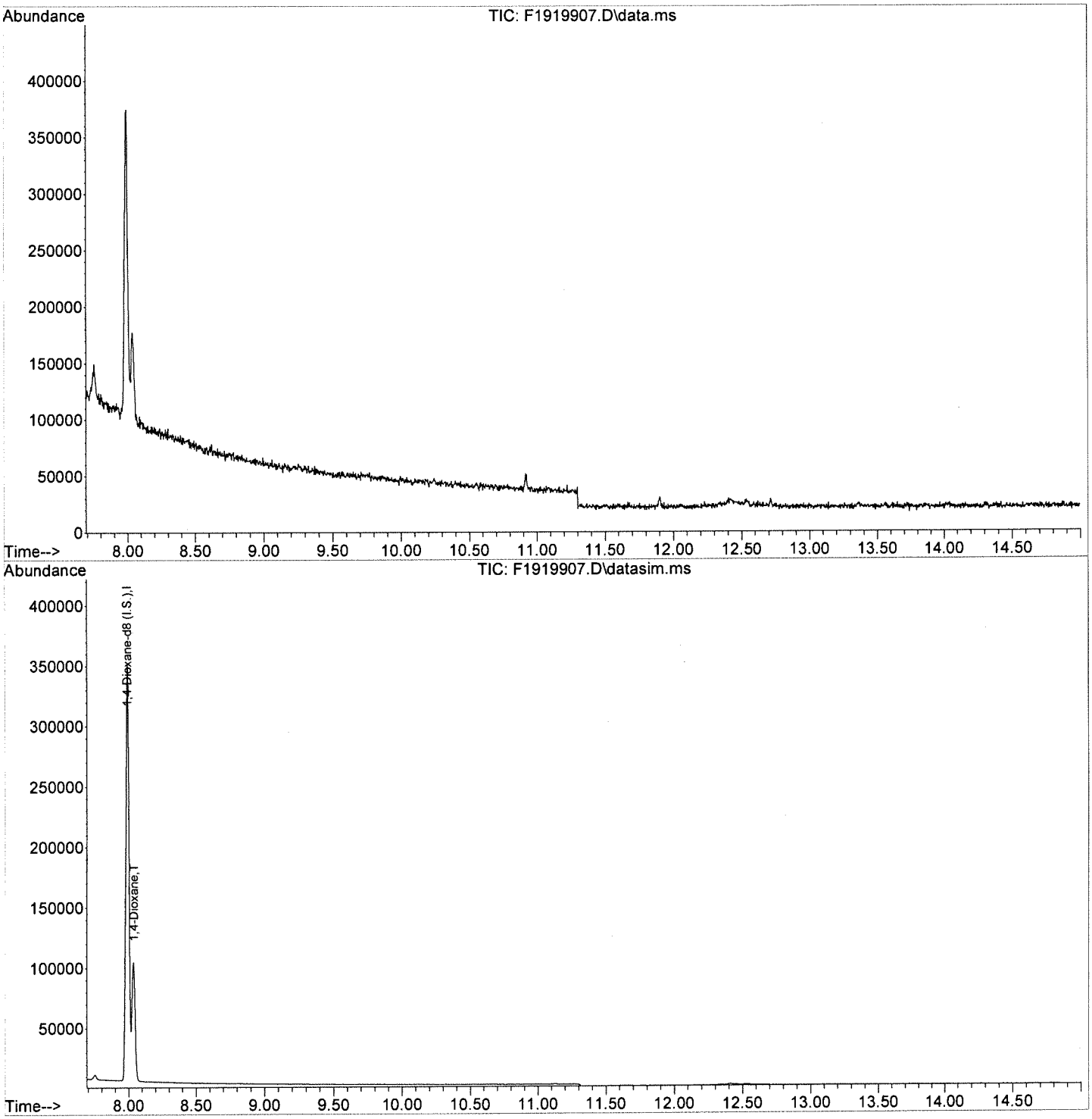
Quant Time: Jul 18 14:03:09 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	286861	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						Qvalue
4] 1,4-Dioxane	8.037	88	79851	2.615	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919907.D
Acq On : 18 Jul 2019 11:11 am
Operator : CLA
Sample : DIOX 2.5 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 18 14:03:09 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919908.D
Acq On : 18 Jul 2019 11:31 am
Operator : CLA
Sample : DIOX 5.0 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 8 Sample Multiplier: 1

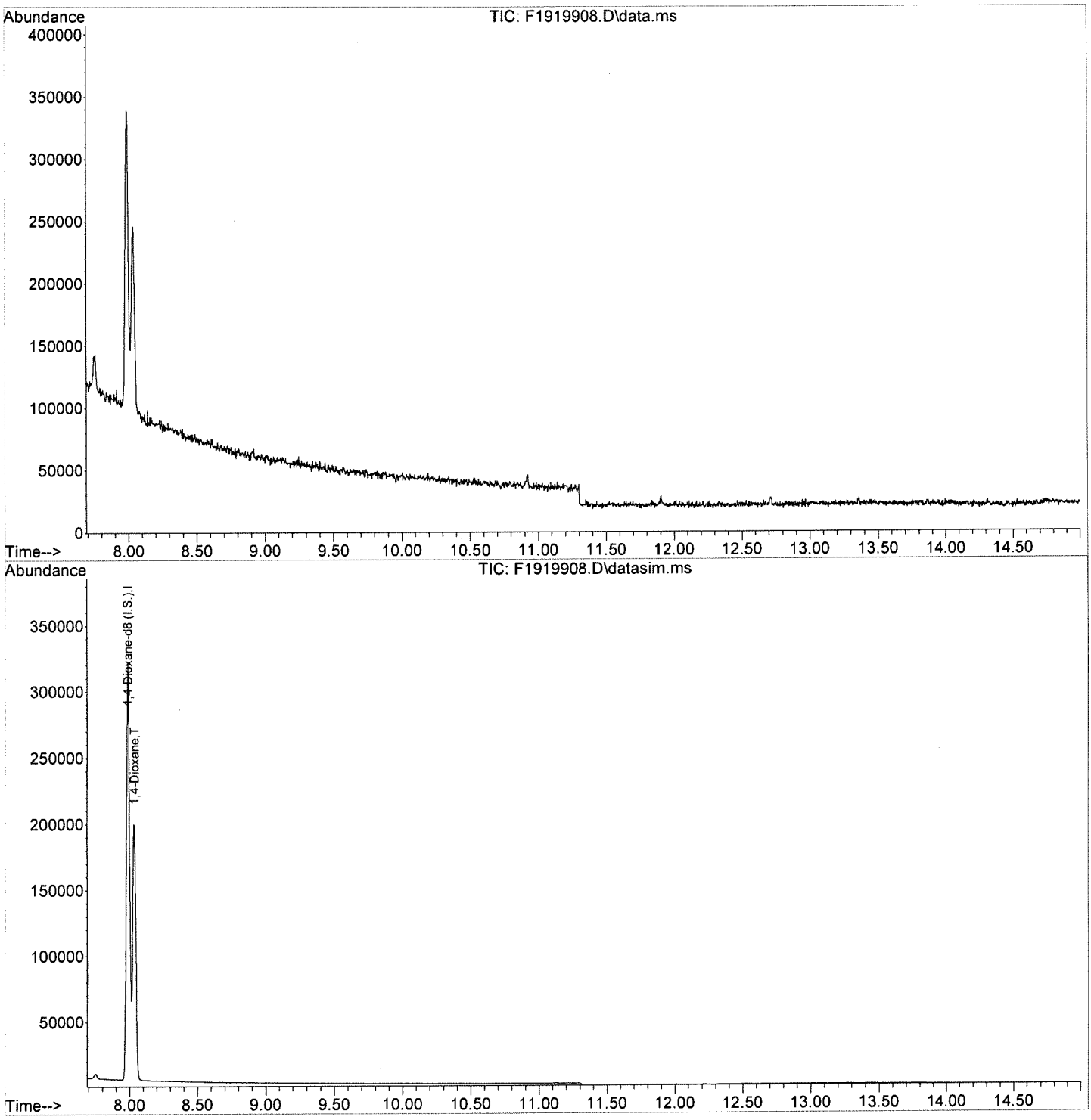
Quant Time: Jul 18 14:03:39 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	260073	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						Qvalue
4] 1,4-Dioxane	8.037	88	157897	5.704	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919908.D
Acq On : 18 Jul 2019 11:31 am
Operator : CLA
Sample : DIOX 5.0 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 18 14:03:39 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\F071819\
Data File : F1919909.D
Acq On : 18 Jul 2019 11:50 am
Operator : CLA
Sample : DIOX 10 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 9 Sample Multiplier: 1

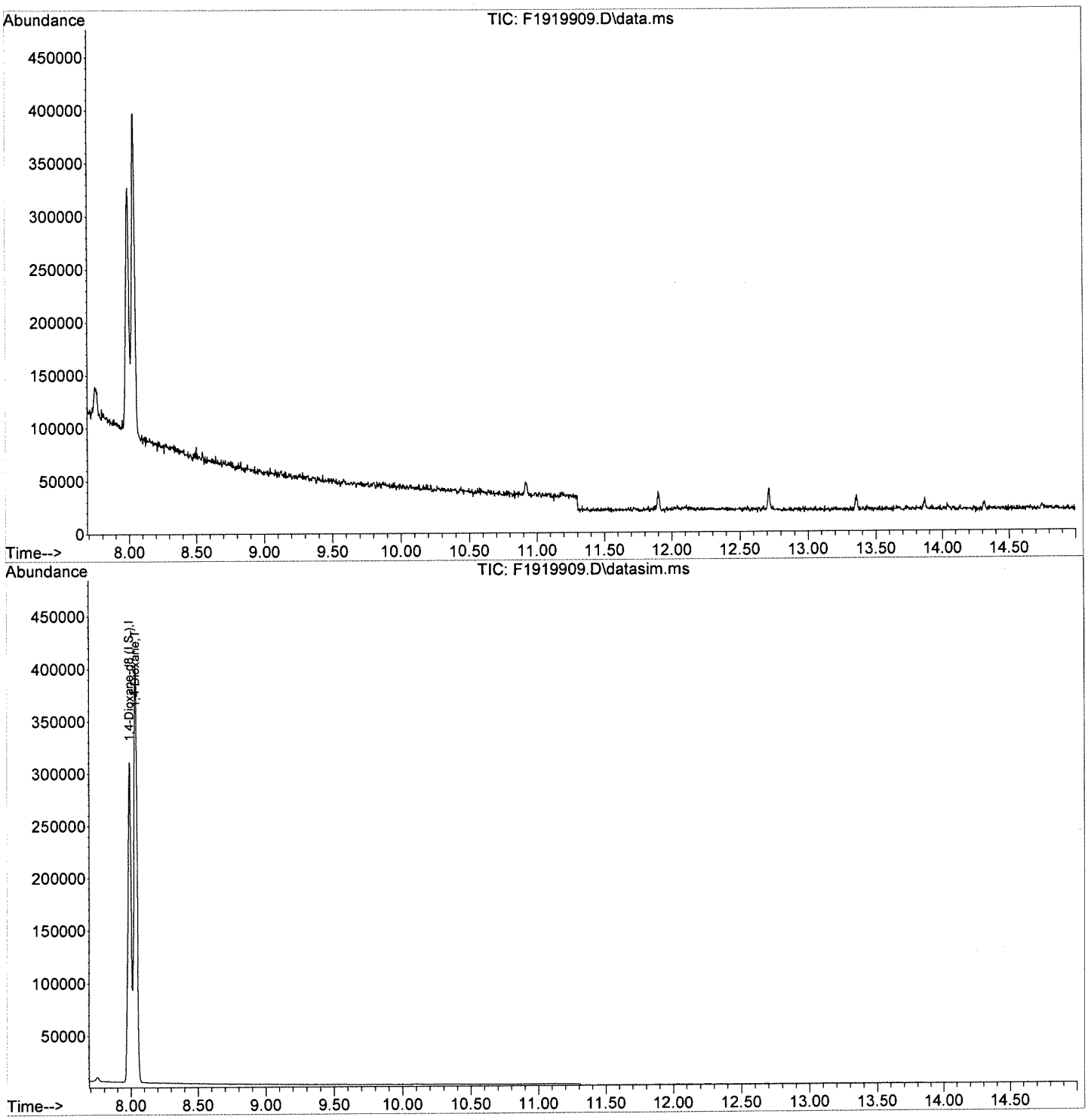
Quant Time: Jul 18 14:04:05 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	251852	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						Qvalue
4] 1,4-Dioxane	8.033	88	320640	11.960	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919909.D
Acq On : 18 Jul 2019 11:50 am
Operator : CLA
Sample : DIOX 10 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 18 14:04:05 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\F071819\
Data File : F1919910.D
Acq On : 18 Jul 2019 12:10 pm
Operator : CLA
Sample : DIOX 25 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 10 Sample Multiplier: 1

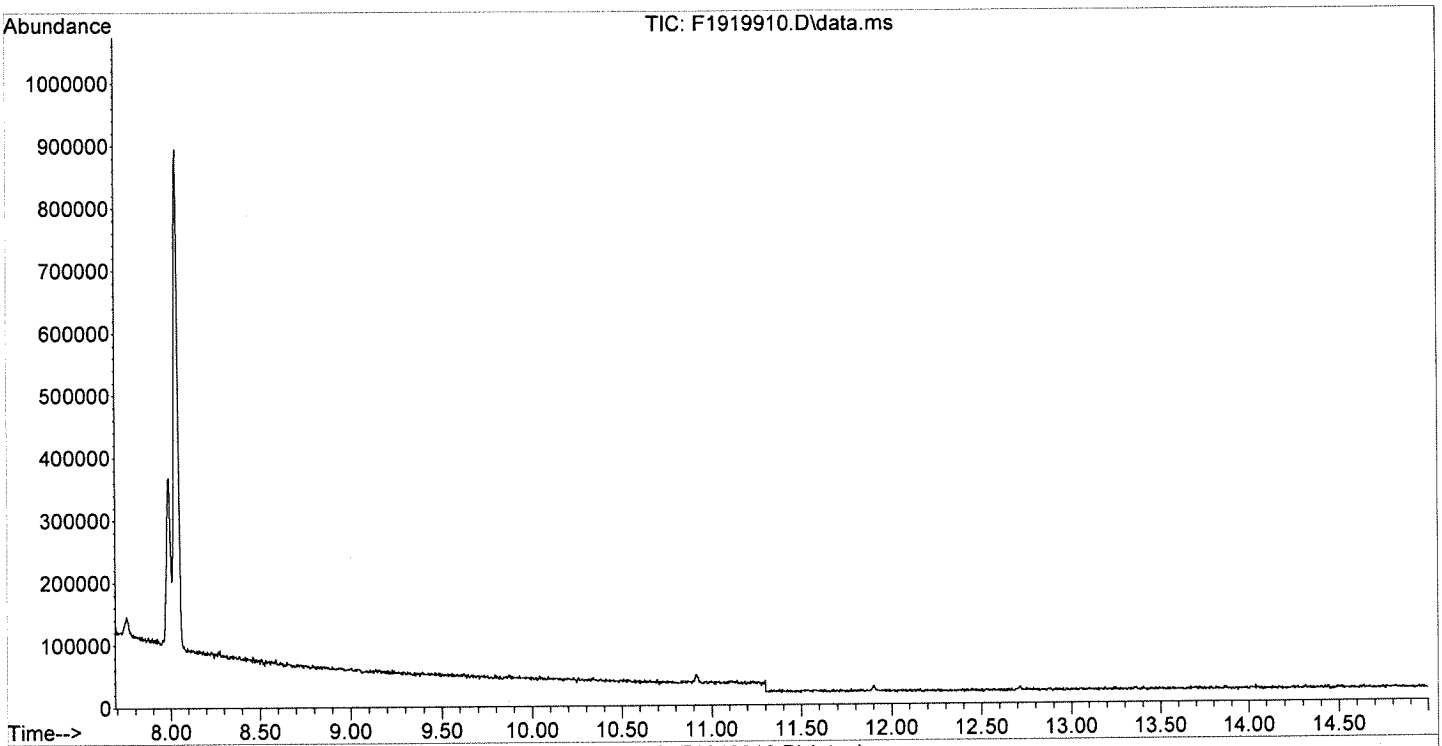
Quant Time: Jul 18 14:04:47 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

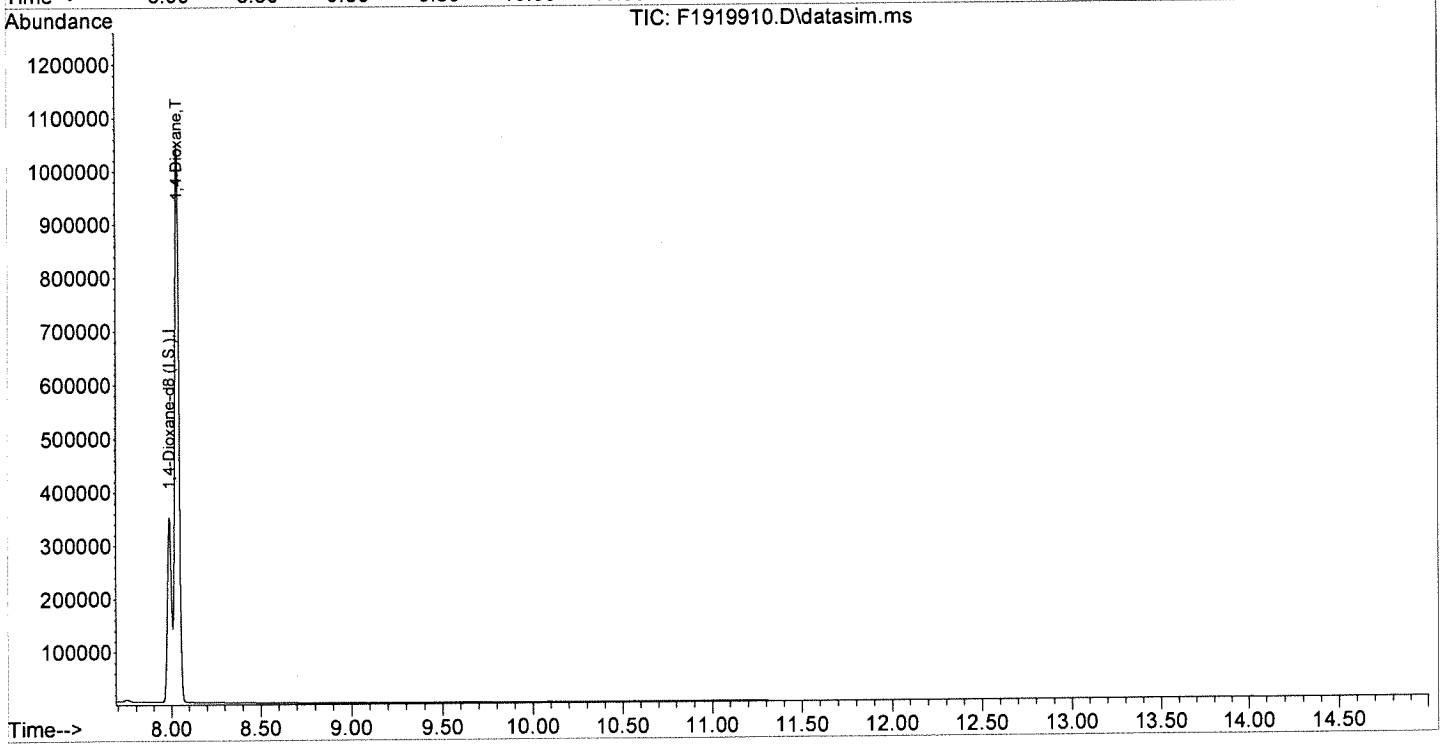
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	285307	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						Qvalue
4] 1,4-Dioxane	8.033	88	833918	27.459	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919910.D
Acq On : 18 Jul 2019 12:10 pm
Operator : CLA
Sample : DIOX 25 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 18 14:04:47 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration





Data Path : C:\msdchem\1\data\F071819\
Data File : F1919911.D
Acq On : 18 Jul 2019 12:30 pm
Operator : CLA
Sample : DIOX 50 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 11 Sample Multiplier: 1

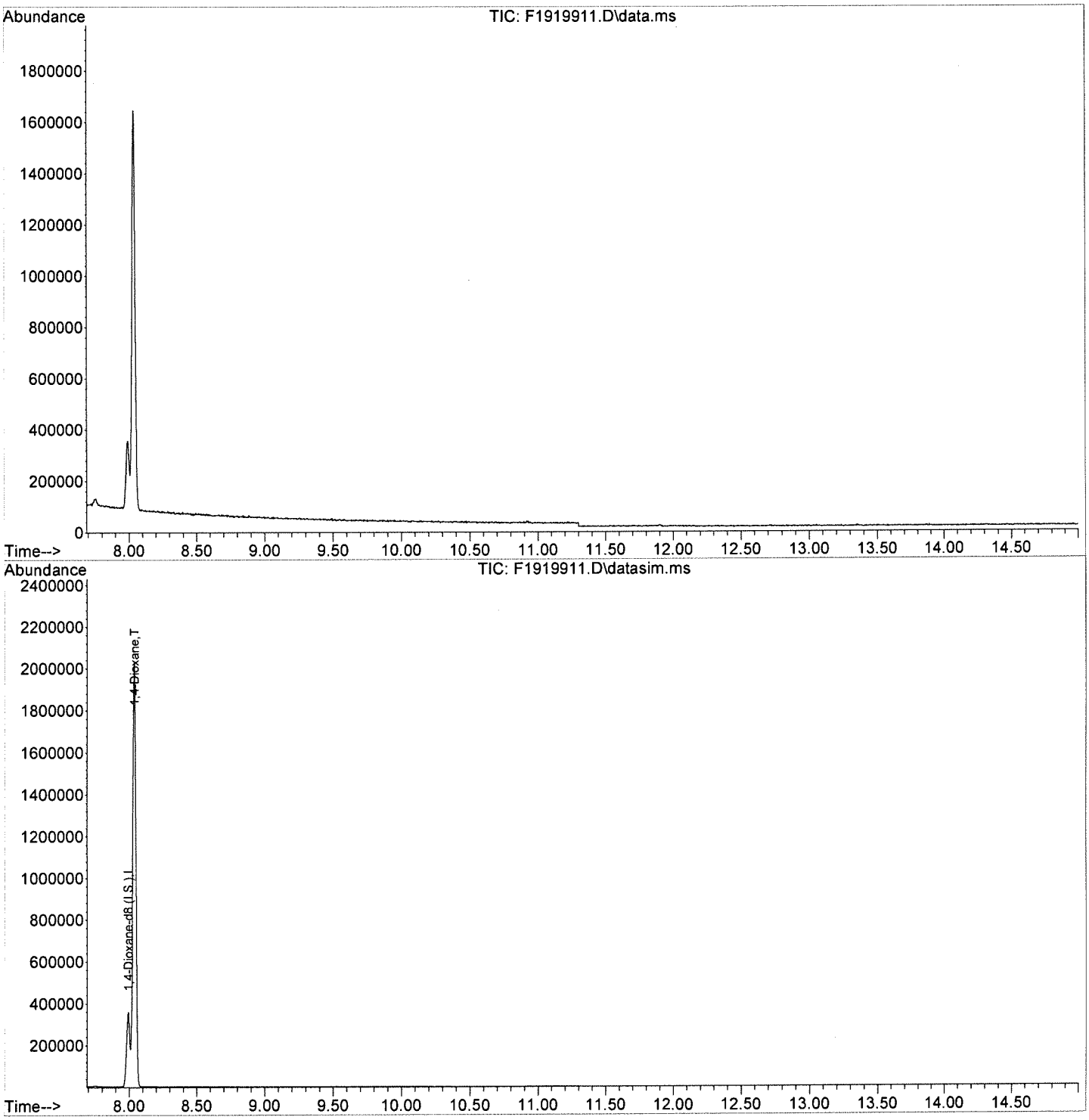
Quant Time: Jul 18 14:05:11 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.993	96	292805	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						Qvalue
4] 1,4-Dioxane	8.037	88	1609142	51.628	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919911.D
Acq On : 18 Jul 2019 12:30 pm
Operator : CLA
Sample : DIOX 50 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 14:05:11 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919912.D
Acq On : 18 Jul 2019 12:50 pm
Operator : CLA
Sample : DIOX 100 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 12 Sample Multiplier: 1

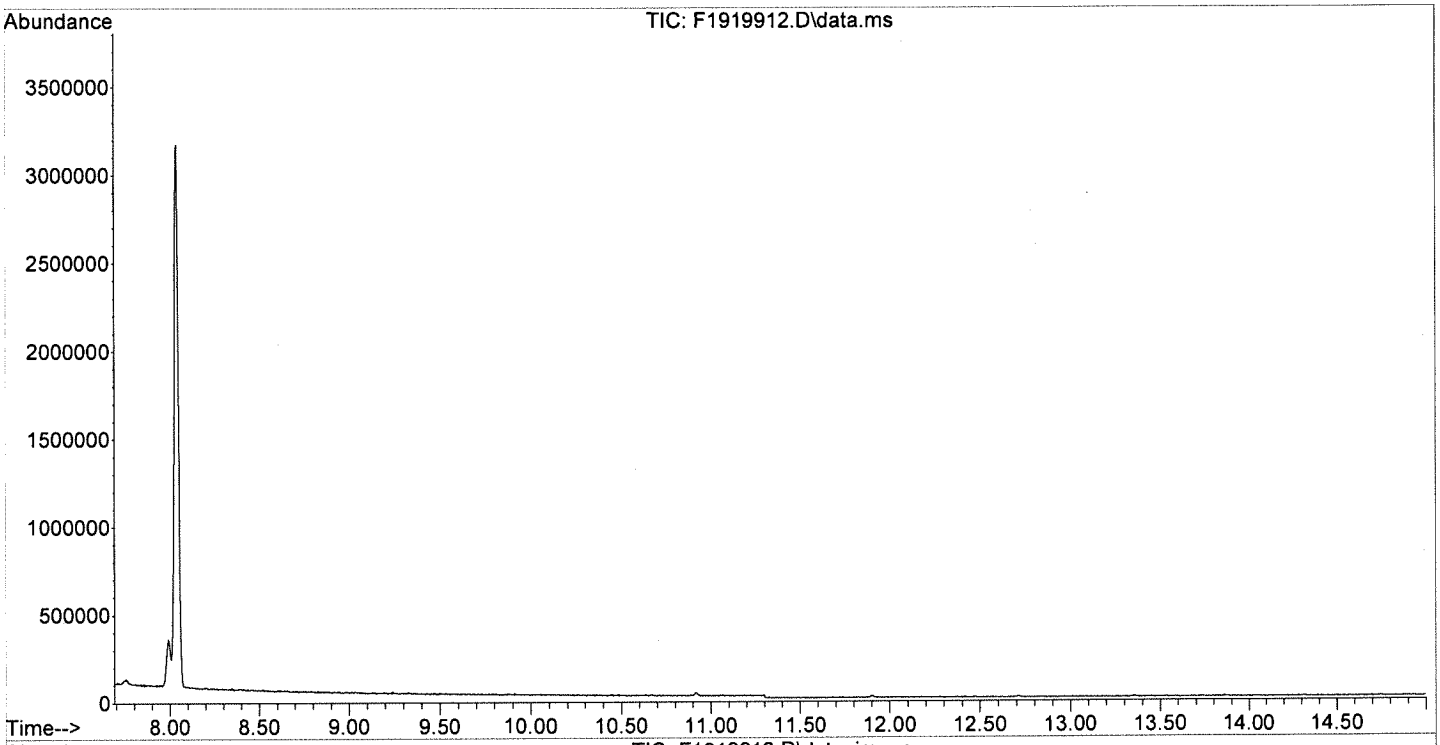
Quant Time: Jul 18 14:05:34 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

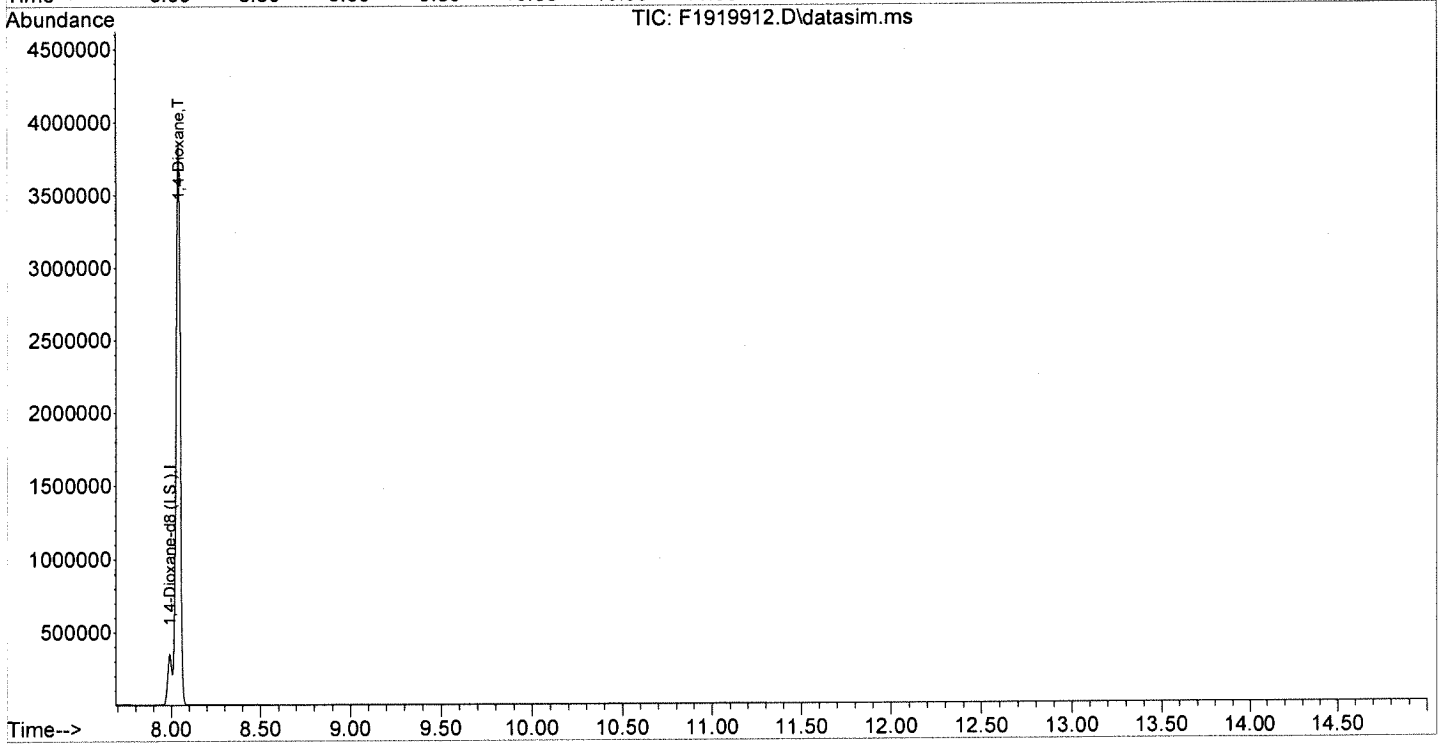
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.993	96	290373	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						Qvalue
4] 1,4-Dioxane	8.040	88	3193920	103.332	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919912.D
Acq On : 18 Jul 2019 12:50 pm
Operator : CLA
Sample : DIOX 100 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 18 14:05:34 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919913.D
Acq On : 18 Jul 2019 1:09 pm
Operator : CLA
Sample : DIOX-D8 0.2 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 13 Sample Multiplier: 1

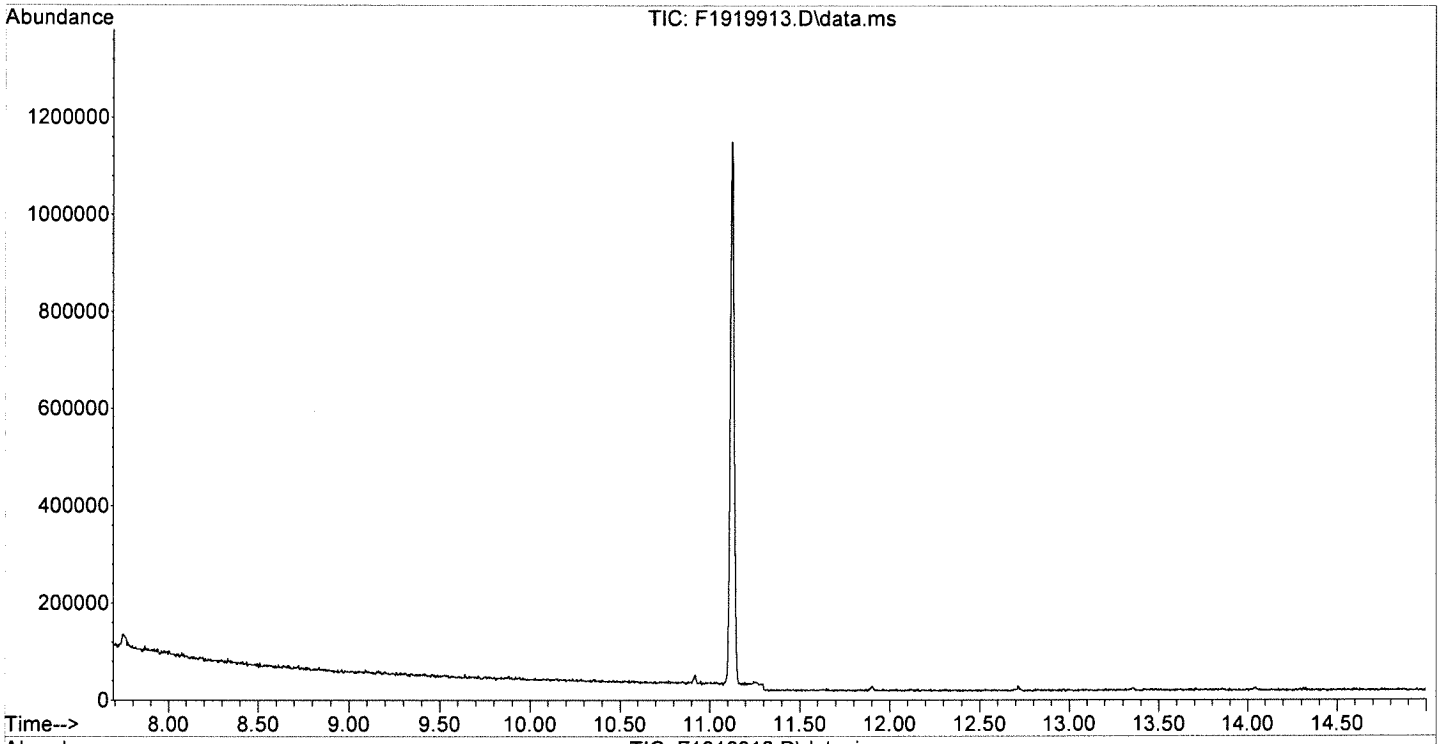
Quant Time: Jul 18 14:06:25 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

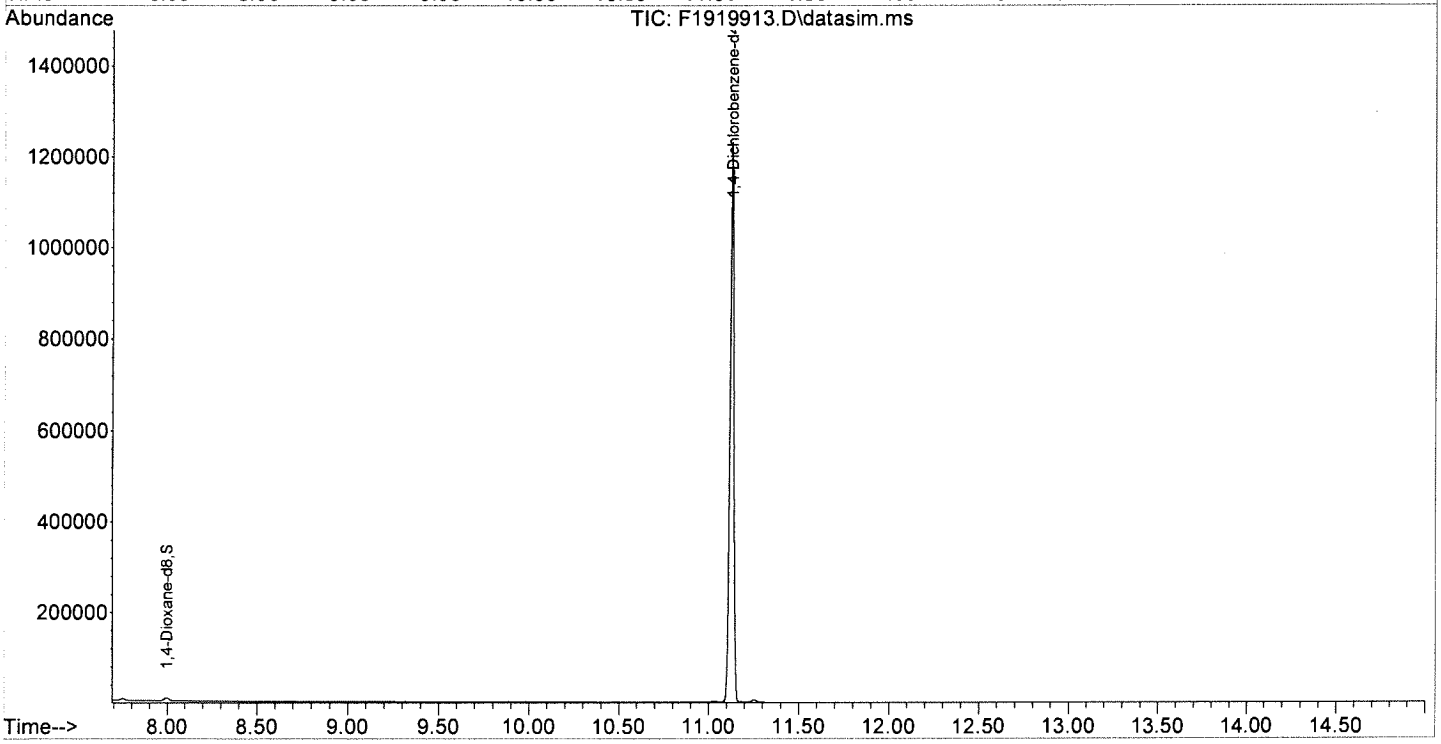
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	916492	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.996	96	5445	0.192	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919913.D
Acq On : 18 Jul 2019 1:09 pm
Operator : CLA
Sample : DIOX-D8 0.2 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 18 14:06:25 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919914.D
Acq On : 18 Jul 2019 1:29 pm
Operator : CLA
Sample : DIOX-D8 1.0 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 14 Sample Multiplier: 1

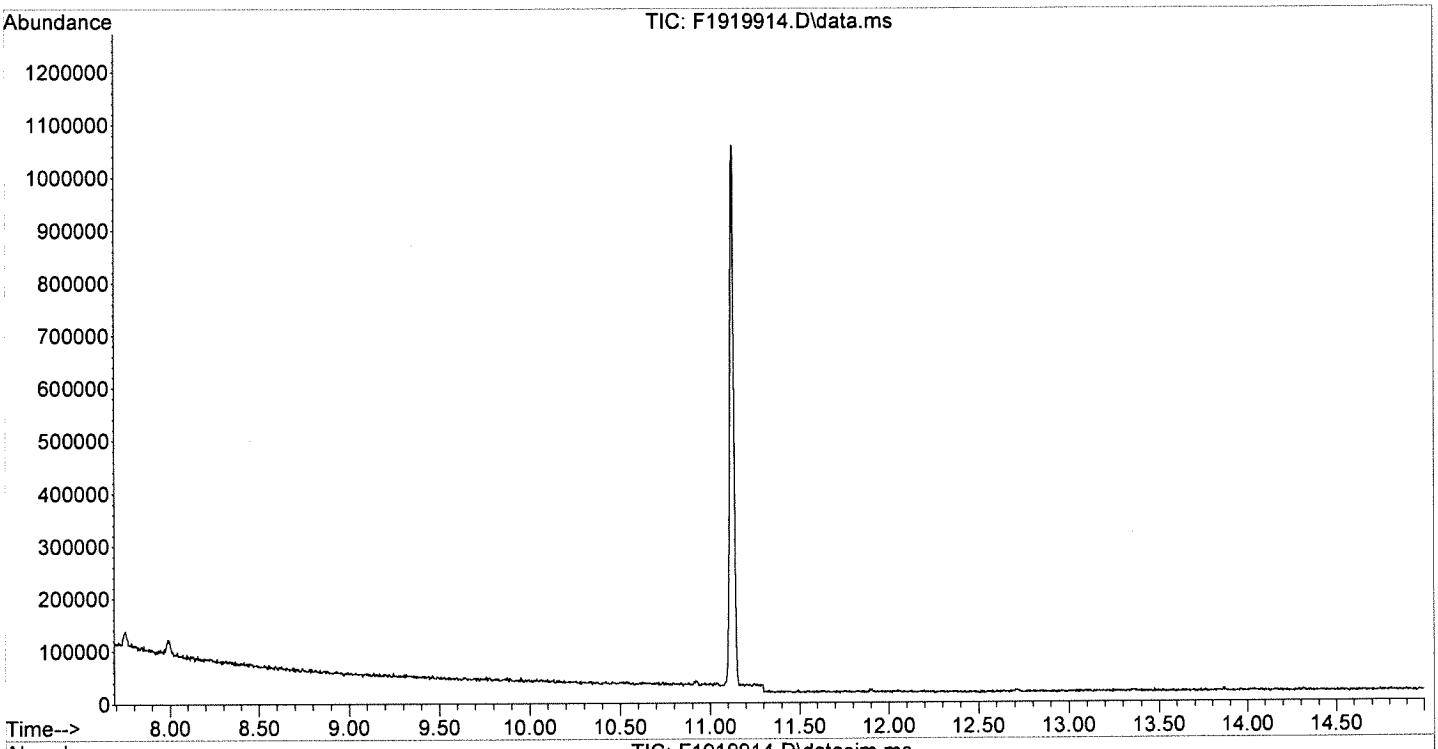
Quant Time: Jul 18 14:07:19 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

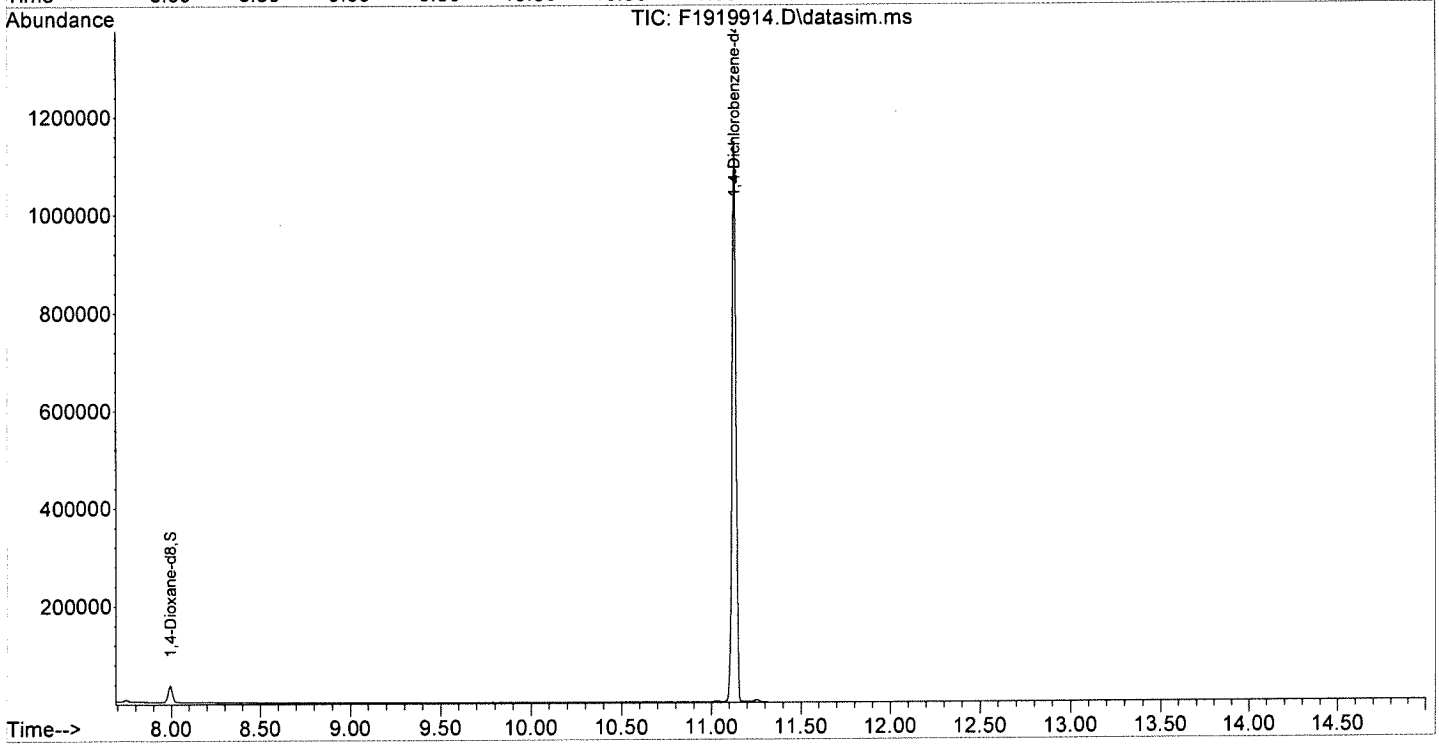
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	864716	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.993	96	27774	1.040	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919914.D
Acq On : 18 Jul 2019 1:29 pm
Operator : CLA
Sample : DIOX-D8 1.0 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 18 14:07:19 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919915.D
Acq On : 18 Jul 2019 1:49 pm
Operator : CLA
Sample : DIOX-D8 2.5 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 15 Sample Multiplier: 1

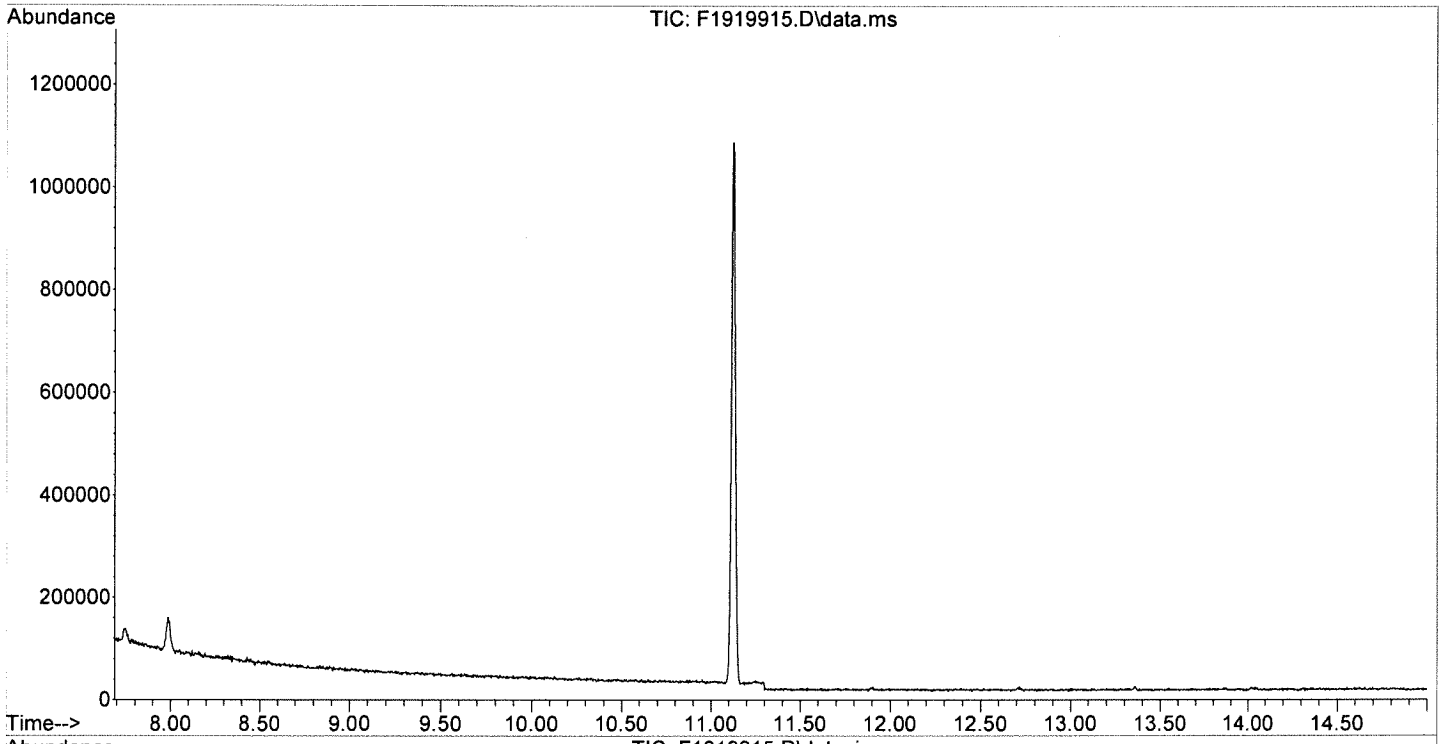
Quant Time: Jul 18 14:07:45 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

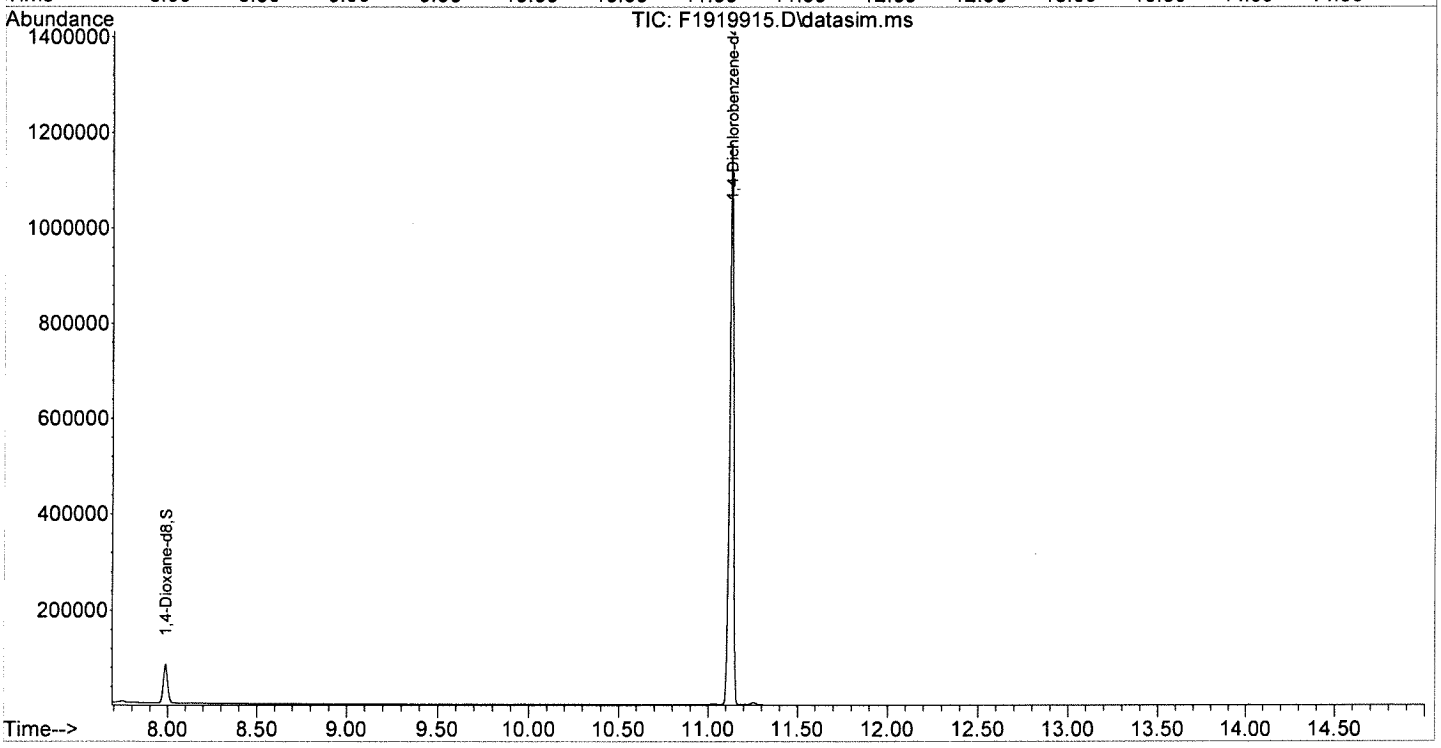
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	885504	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.989	96	68107	2.491	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919915.D
Acq On : 18 Jul 2019 1:49 pm
Operator : CLA
Sample : DIOX-D8 2.5 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 18 14:07:45 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919916.D
Acq On : 18 Jul 2019 2:09 pm
Operator : CLA
Sample : DIOX-D8 5.0 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 16 Sample Multiplier: 1

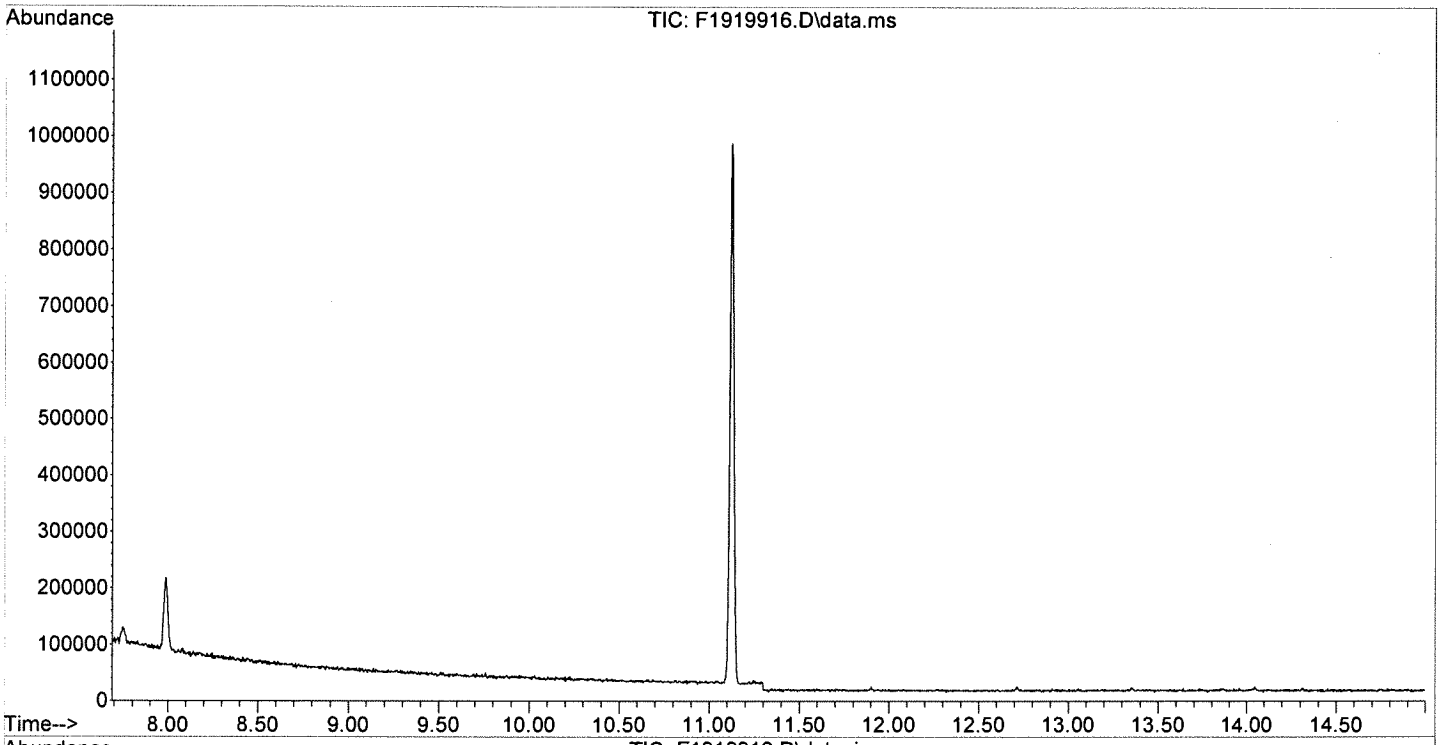
Quant Time: Jul 18 14:30:15 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

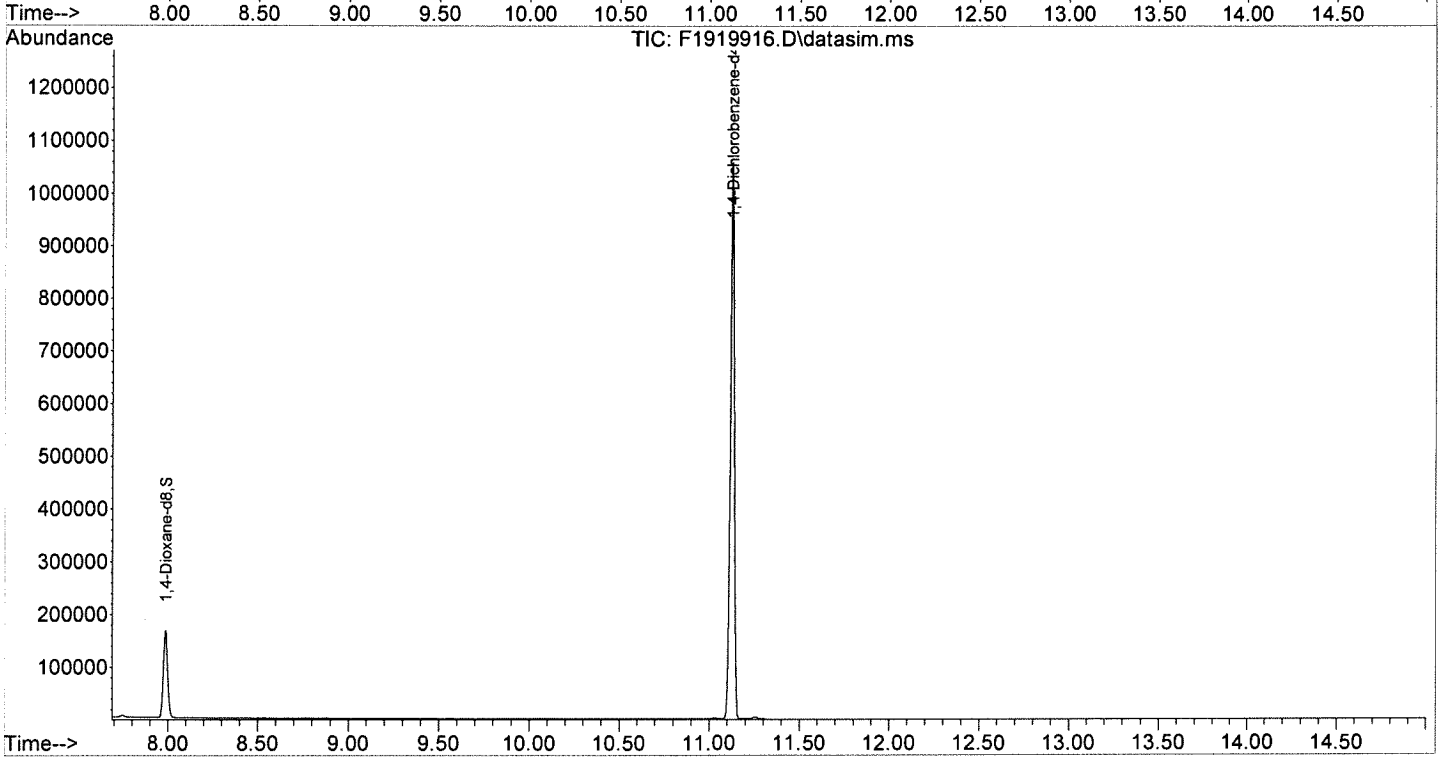
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	790024	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.989	96	138304	5.669	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919916.D
Acq On : 18 Jul 2019 2:09 pm
Operator : CLA
Sample : DIOX-D8 5.0 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 18 14:30:15 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919917.D
Acq On : 18 Jul 2019 3:07 pm
Operator : CLA
Sample : DIOX-D8 10 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 17 Sample Multiplier: 1

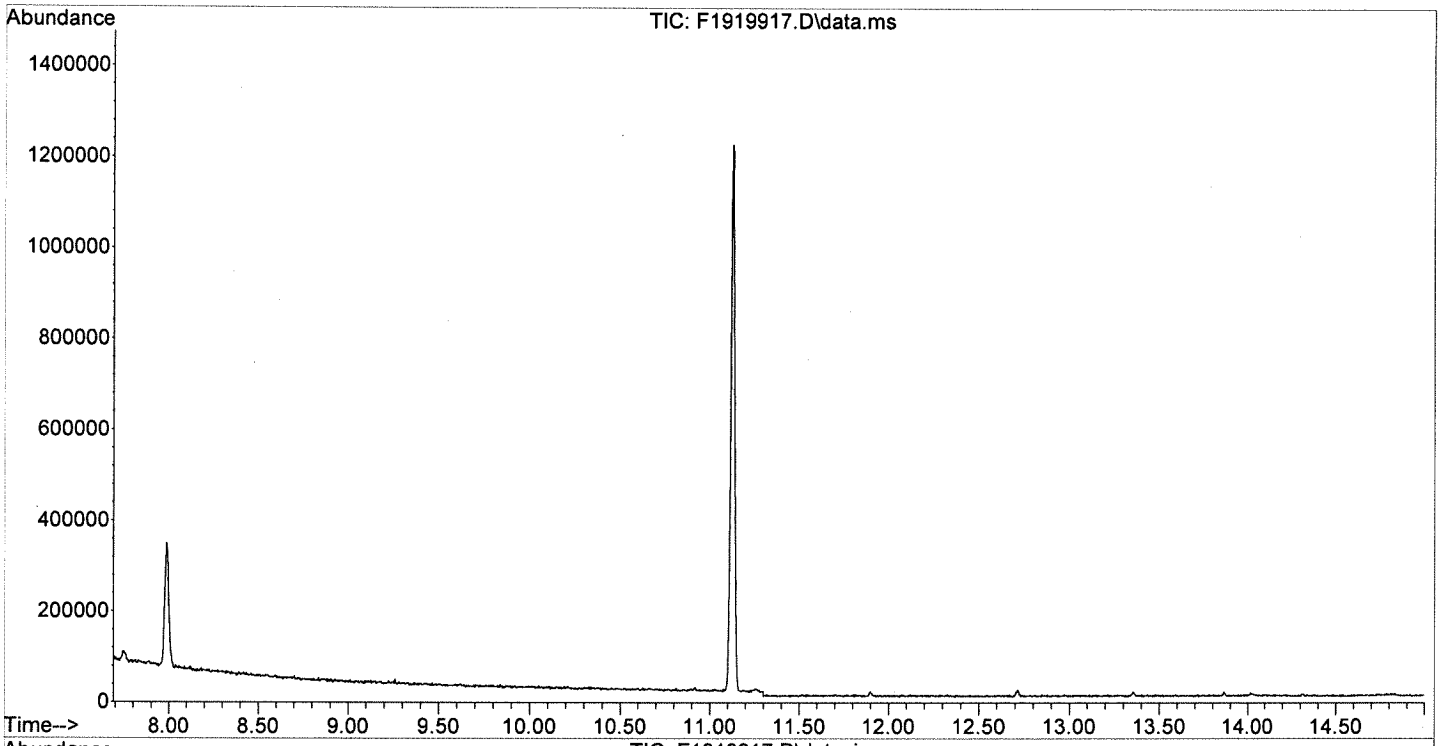
Quant Time: Jul 18 15:47:31 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

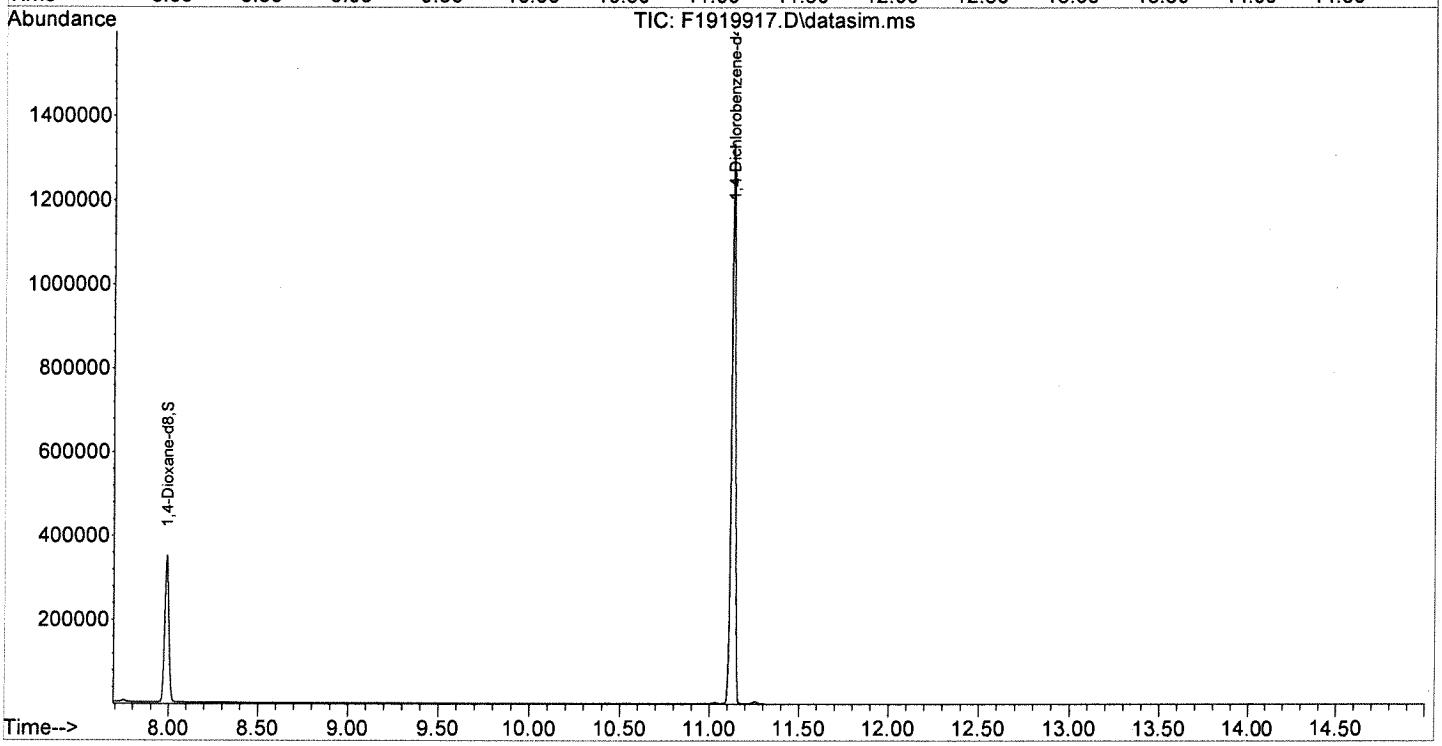
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	989590	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.989	96	288562	9.443	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919917.D
Acq On : 18 Jul 2019 3:07 pm
Operator : CLA
Sample : DIOX-D8 10 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 18 15:47:31 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919918.D
Acq On : 18 Jul 2019 3:27 pm
Operator : CLA
Sample : DIOX-D8 25 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 18 Sample Multiplier: 1

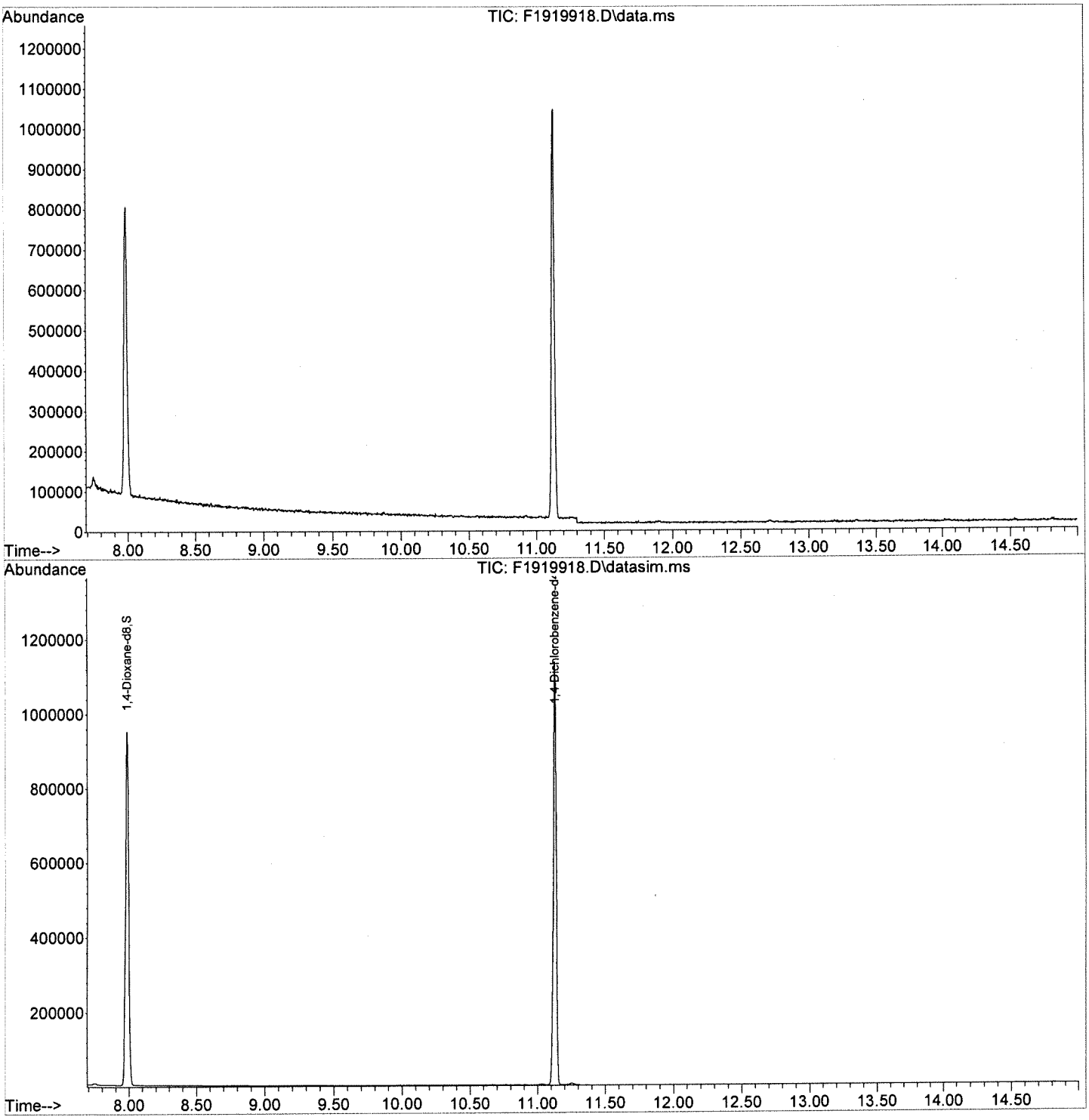
Quant Time: Jul 18 15:47:56 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	847398	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.986	96	780259	29.818	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919918.D
Acq On : 18 Jul 2019 3:27 pm
Operator : CLA
Sample : DIOX-D8 25 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 18 15:47:56 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919919.D
Acq On : 18 Jul 2019 3:47 pm
Operator : CLA
Sample : DIOX-D8 50 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 18 16:07:04 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

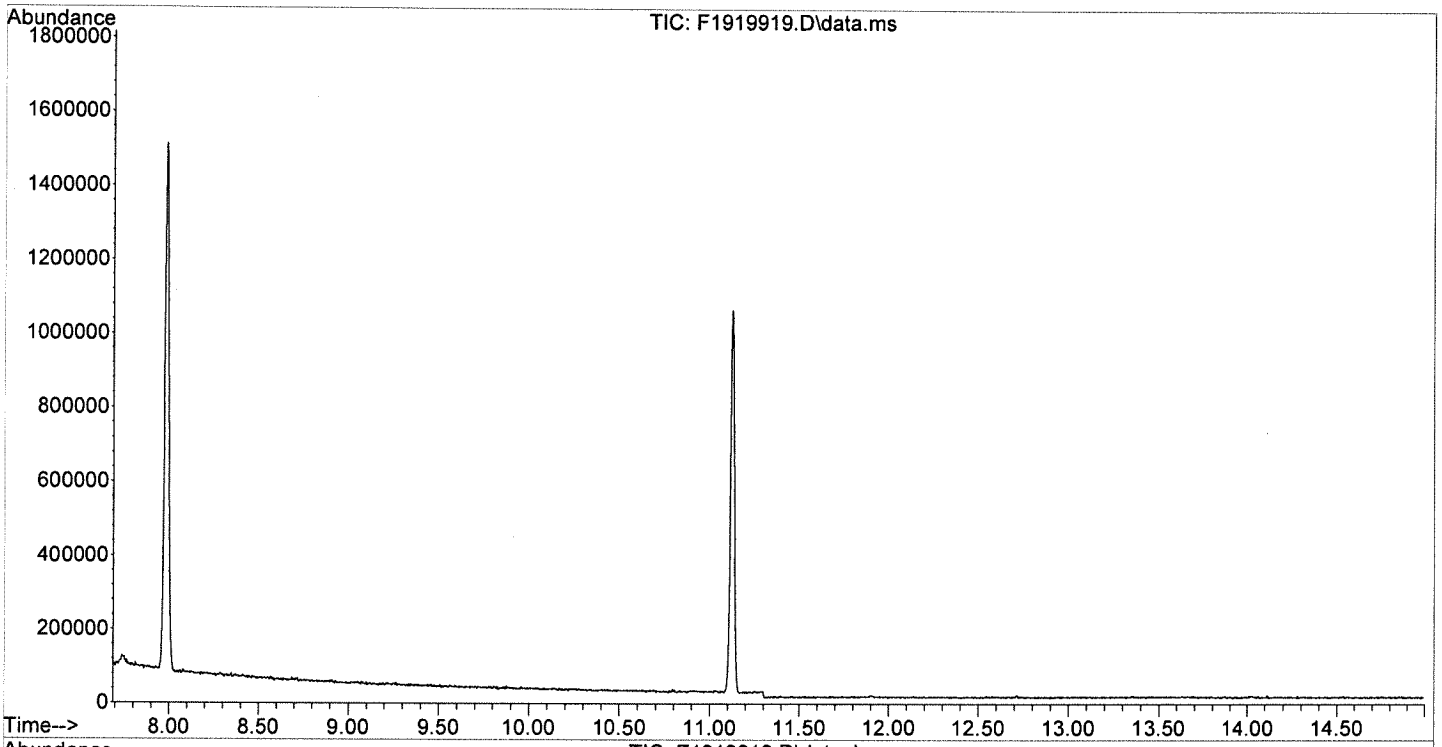
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	884049	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.986	96	1502515	55.039	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.	d	

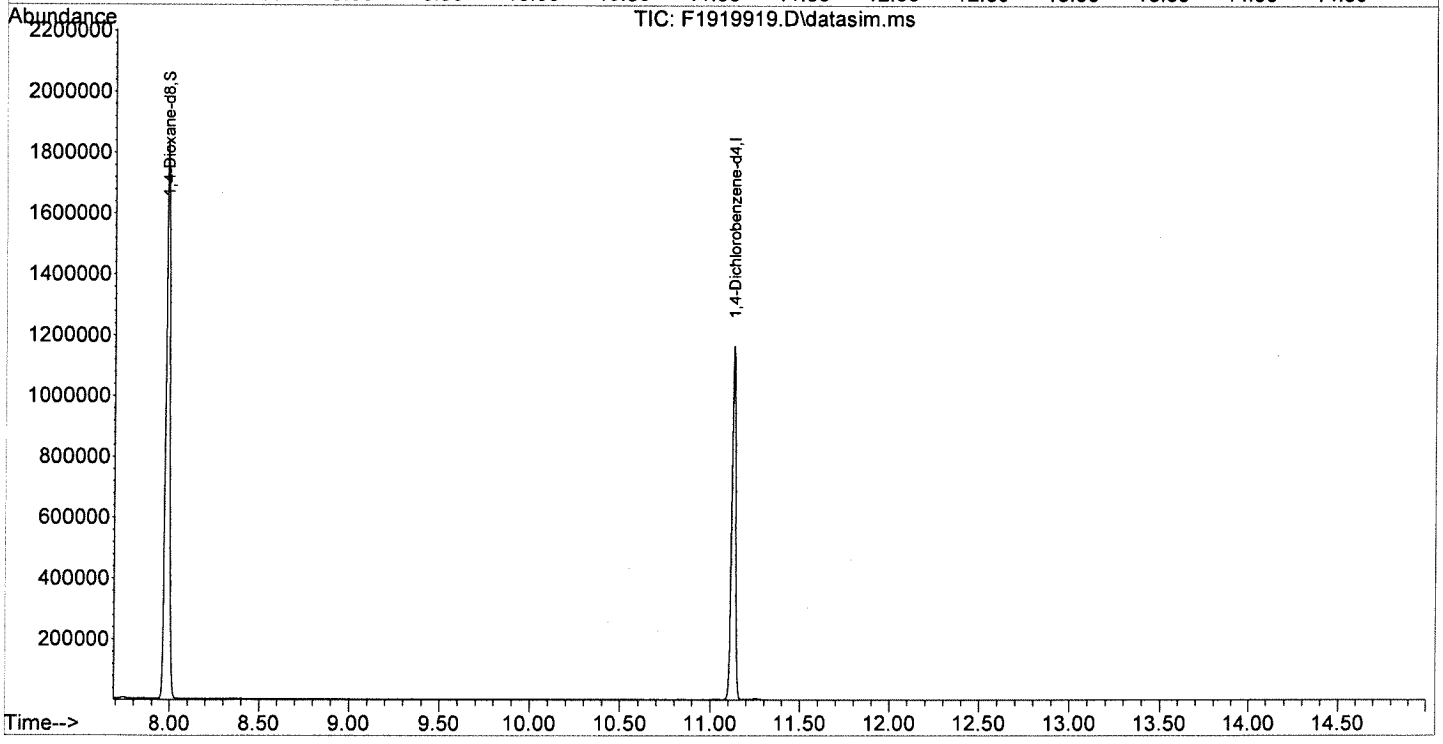
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919919.D
Acq On : 18 Jul 2019 3:47 pm
Operator : CLA
Sample : DIOX-D8 50 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 18 16:07:04 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919920.D
Acq On : 18 Jul 2019 4:07 pm
Operator : CLA
Sample : DIOX-D8 100 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 20 Sample Multiplier: 1

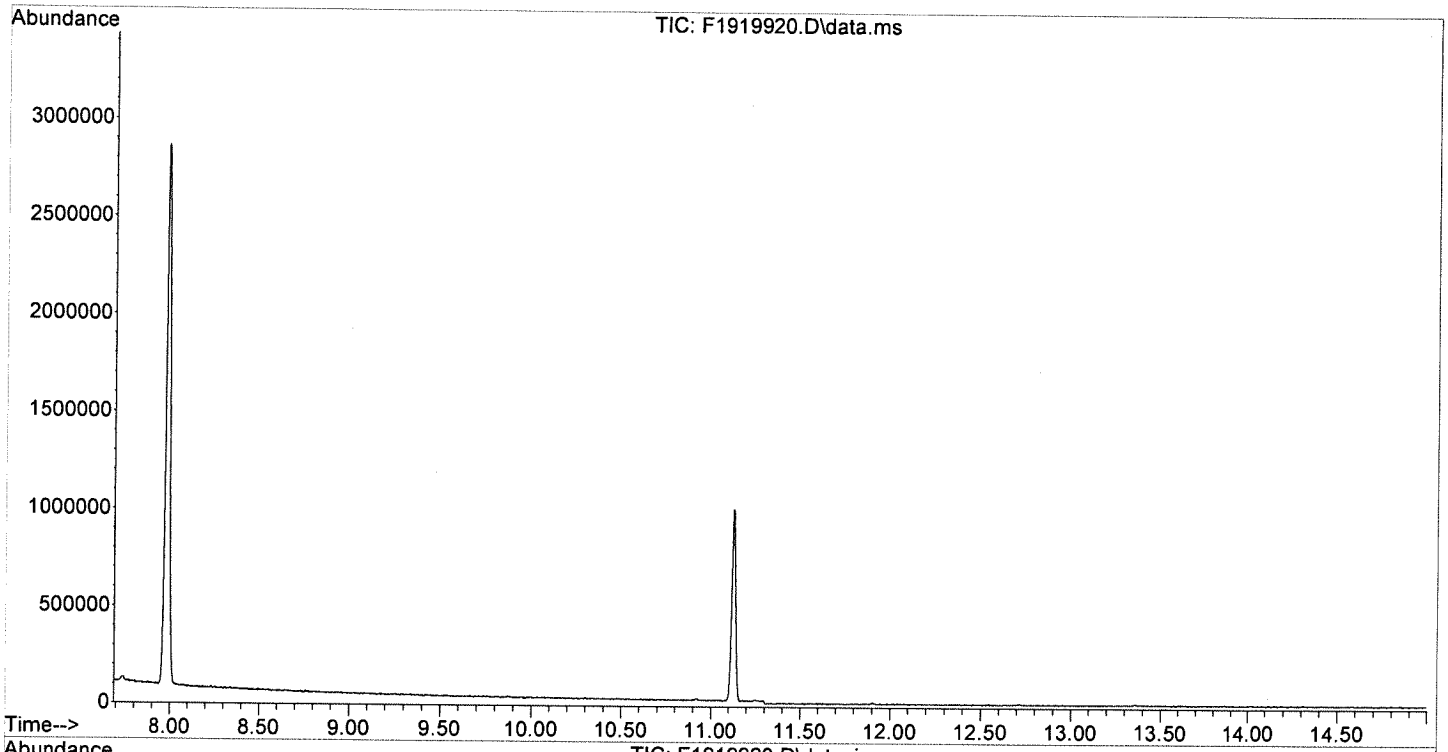
Quant Time: Jul 18 16:24:11 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration

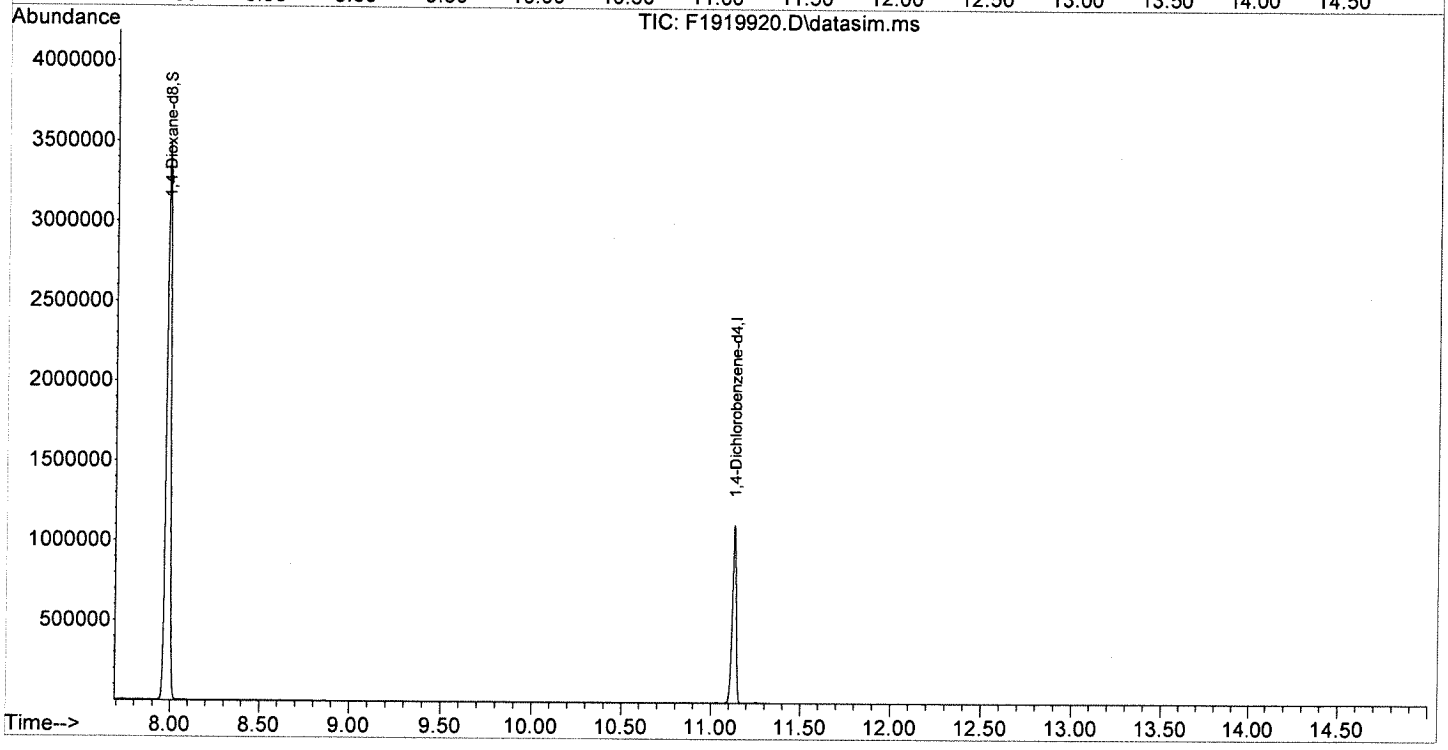
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	840950	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.983	96	2947488	113.503	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919920.D
Acq On : 18 Jul 2019 4:07 pm
Operator : CLA
Sample : DIOX-D8 100 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 18 16:24:11 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ100818.M
Quant Title :
QLast Update : Mon Oct 08 17:21:05 2018
Response via : Initial Calibration





Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919921.D
Acq On : 18 Jul 2019 4:26 pm
Operator : CLA
Sample : DIOX-ICV 10 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 19 13:25:10 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	10.000	10.000	0.0	0	-11.13#
2 S	1,4-Dioxane-d8	10.000	0.000	100.0#	0	-7.99#
3 I	1,4-Dioxane-d8 (I.S.)	10.000	10.000	0.0	109	0.02
4 T	1,4-Dioxane	10.000	10.059	-0.6	96	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919921.D
Acq On : 18 Jul 2019 4:26 pm
Operator : CLA
Sample : DIOX-ICV 10 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 21 Sample Multiplier: 1

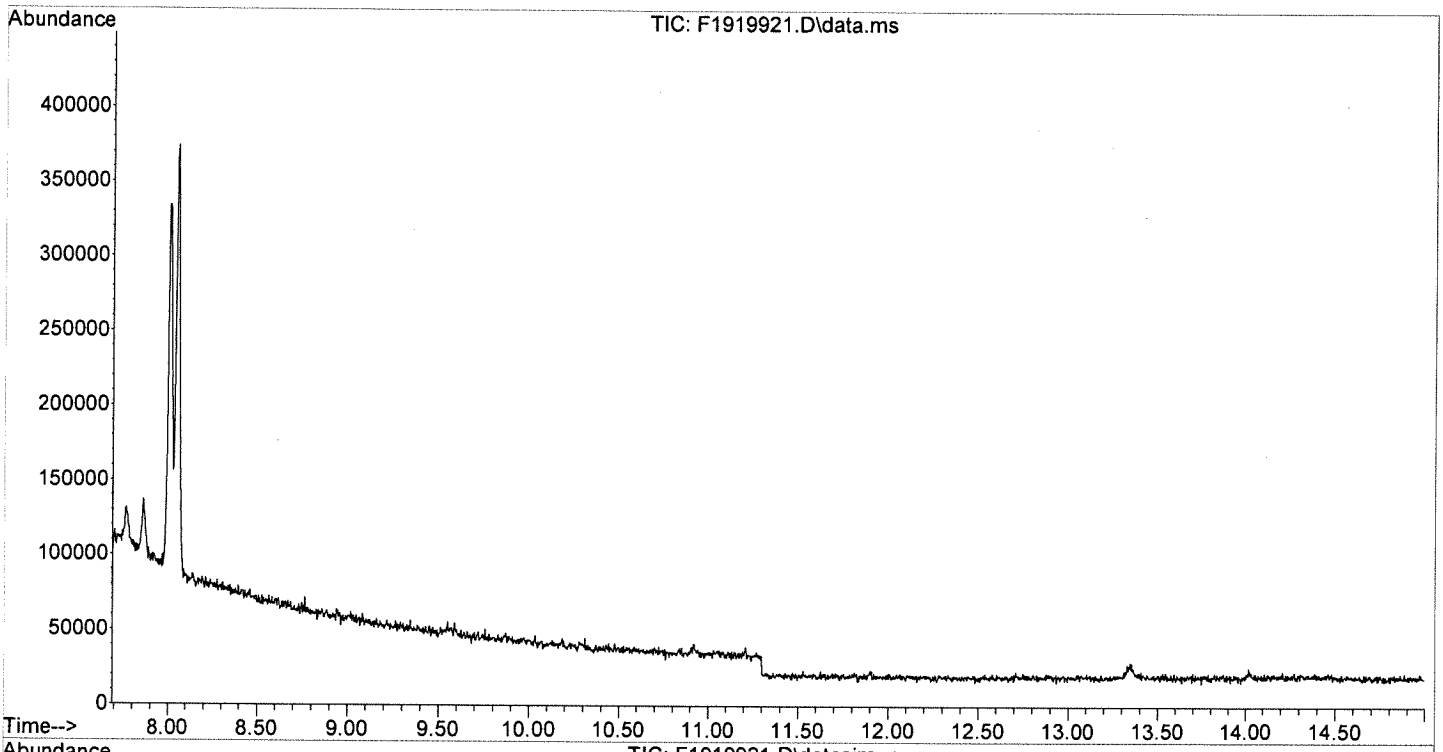
Quant Time: Jul 19 13:25:10 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

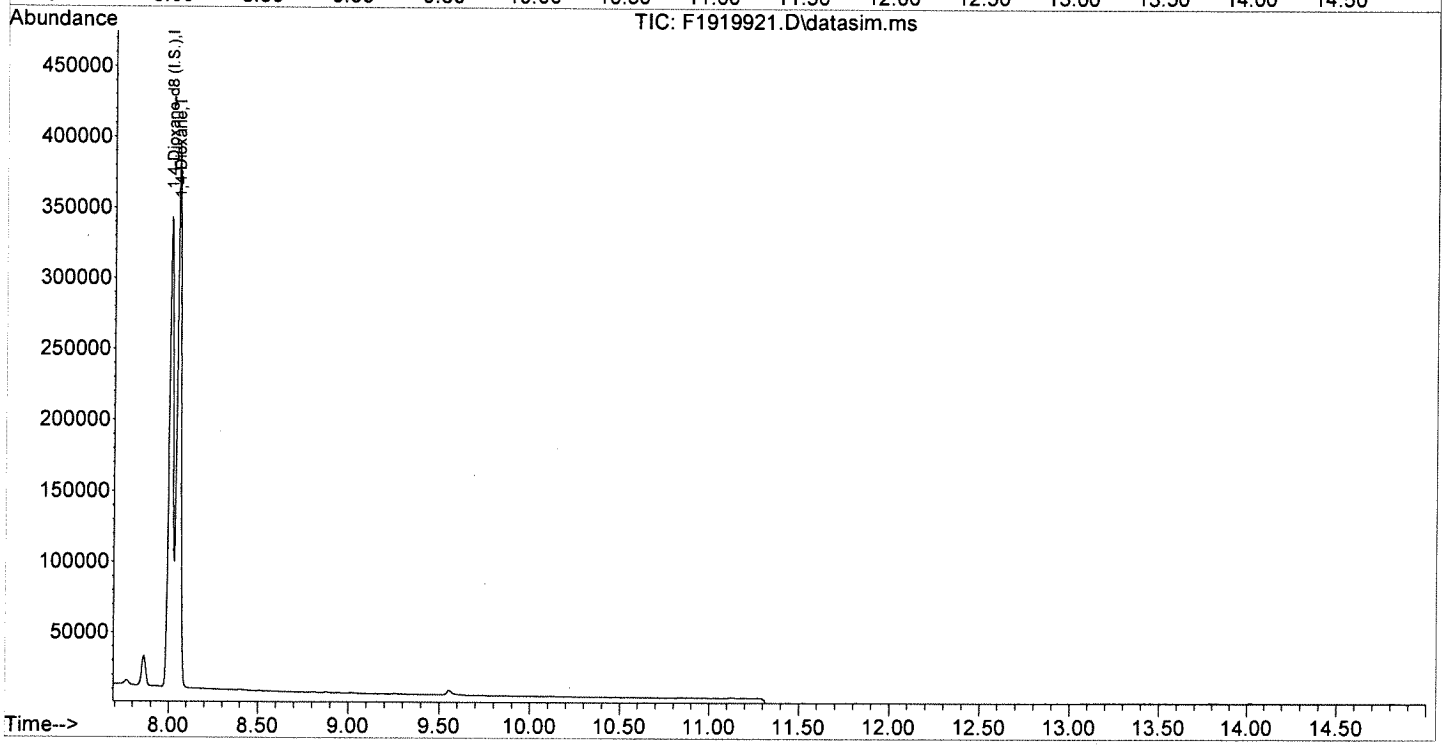
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	8.006	96	275491	10.000	ug/mL	0.02
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						Qvalue
4] 1,4-Dioxane	8.050	88	308750	10.059	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919921.D
Acq On : 18 Jul 2019 4:26 pm
Operator : CLA
Sample : DIOX-ICV 10 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 19 13:25:10 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration





Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919922.D
Acq On : 18 Jul 2019 4:46 pm
Operator : CLA
Sample : DIOX-D8-ICV 10 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 19 13:26:03 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	80	0.00
2	S	1,4-Dioxane-d8	0.328	0.364	-11.0	100	0.02
3	I	1,4-Dioxane-d8 (I.S.)	1.000	1.000	0.0	0#	-7.99#
4	T	1,4-Dioxane	1.114	0.000	100.0#	0#	-8.03#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919922.D
Acq On : 18 Jul 2019 4:46 pm
Operator : CLA
Sample : DIOX-D8-ICV 10 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 22 Sample Multiplier: 1

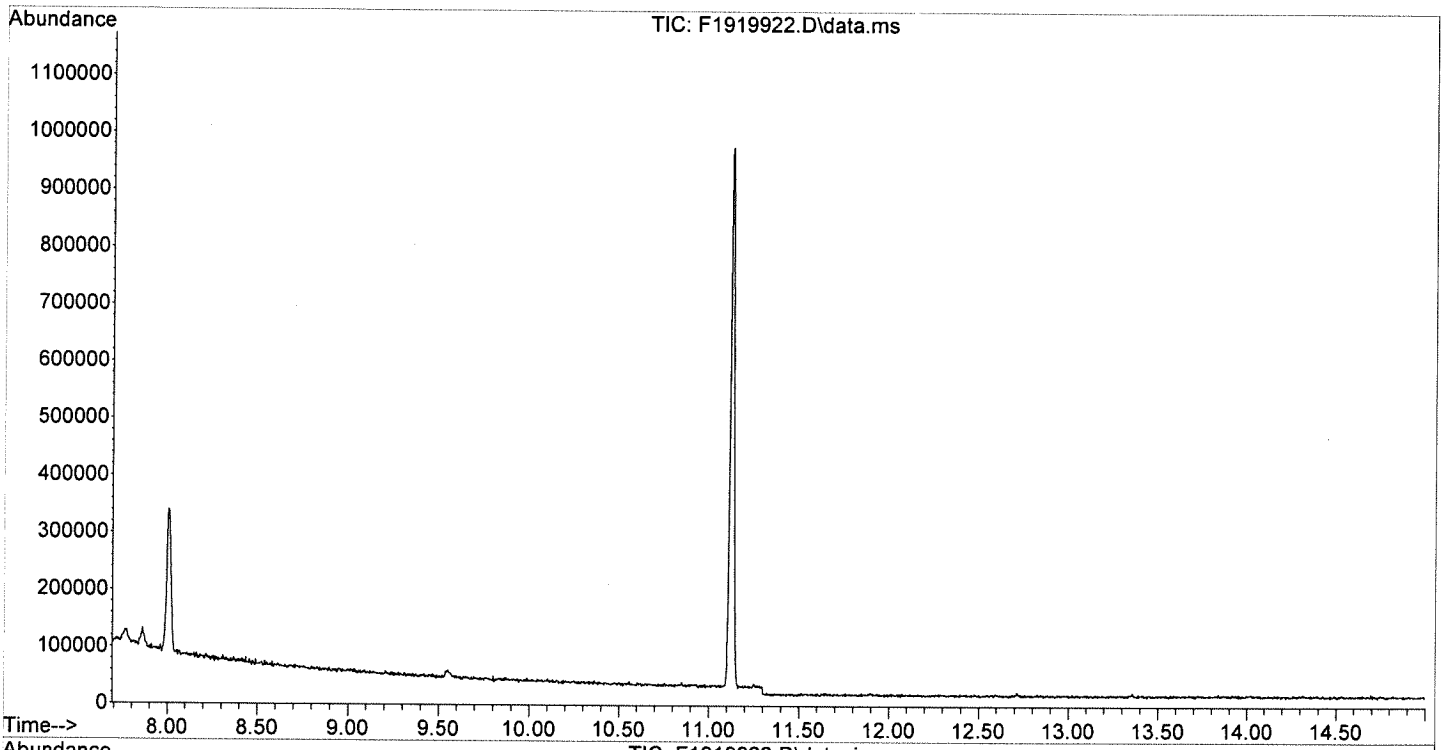
Quant Time: Jul 19 13:26:03 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

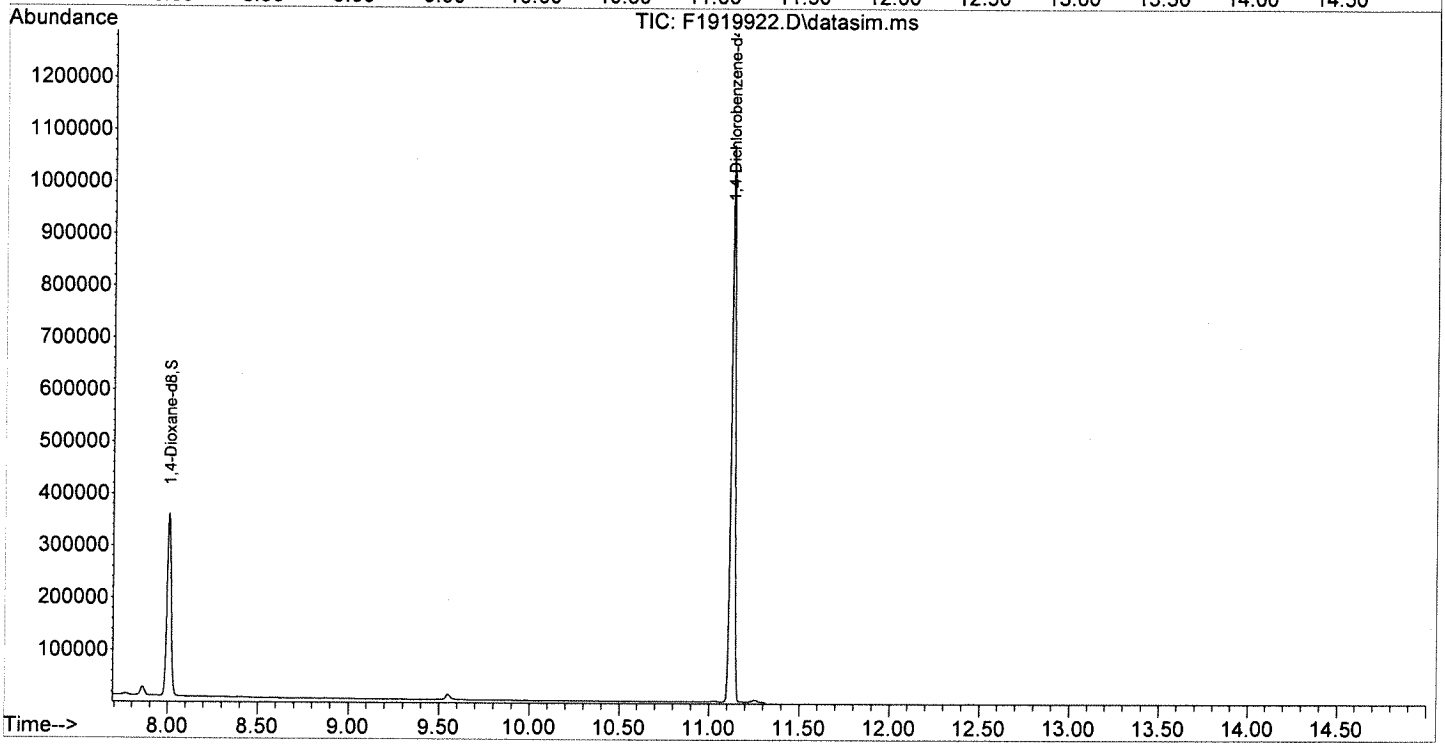
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.123	150	793751	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	8.006	96	288901	11.087	ug/mL	0.02
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F071819\
Data File : F1919922.D
Acq On : 18 Jul 2019 4:46 pm
Operator : CLA
Sample : DIOX-D8-ICV 10 ug/ml Inst : GCMSSV6
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 19 13:26:03 2019
DataAcq Meth:D051518.M
Quant Method : C:\msdchem\1\methods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration





CONTINUING CALIBRATION VERIFICATION

SW-846 8270D

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	GCMSSV6	Calibration:	1900232
Lab File ID:	F1923302.D	Calibration Date:	07/19/19 14:13
Sequence:	S039436	Injection Date:	08/21/19
Lab Sample ID:	S039436-CCV1	Injection Time:	14:24

		CONC. (µg/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dioxane	A	10.0	9.39	1.114196	1.046421		-6.1	
1,4-Dioxane-d8	A	10.0	9.44	0.3282932	0.3097805		-5.6	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923302.D
Acq On : 21 Aug 2019 2:24 pm
Operator : CLA
Sample : DIOX 10 ug/mL Inst : GCMSSV6
Misc : 1902462 EXP 050719
ALS Vial : 2 Sample Multiplier: 1

CHECKED BY: Irina Radu AUG 2 2 2019

Quant Time: Aug 21 18:05:43 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	10.000	10.000	0.0	0	-11.13#
2 S	1,4-Dioxane-d8	10.000	0.000	100.0#	0	-7.99#
3 I	1,4-Dioxane-d8 (I.S.)	10.000	10.000	0.0	112	0.00
4 T	1,4-Dioxane	10.000	9.392	6.1	92	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923302.D
Acq On : 21 Aug 2019 2:24 pm
Operator : CLA
Sample : DIOX 10 ug/mL Inst : GCMSSV6
Misc : 1902462 EXP 050719
ALS Vial : 2 Sample Multiplier: 1

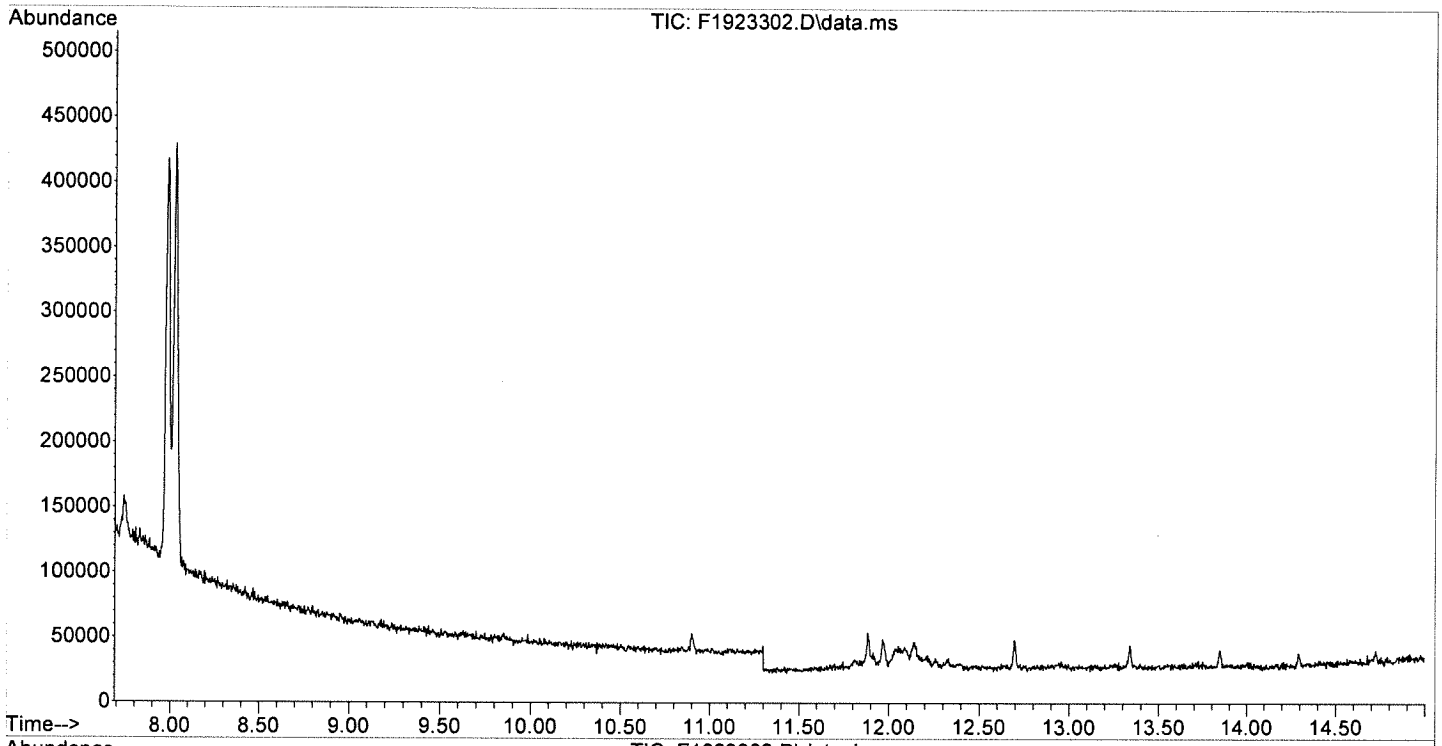
Quant Time: Aug 21 18:05:43 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

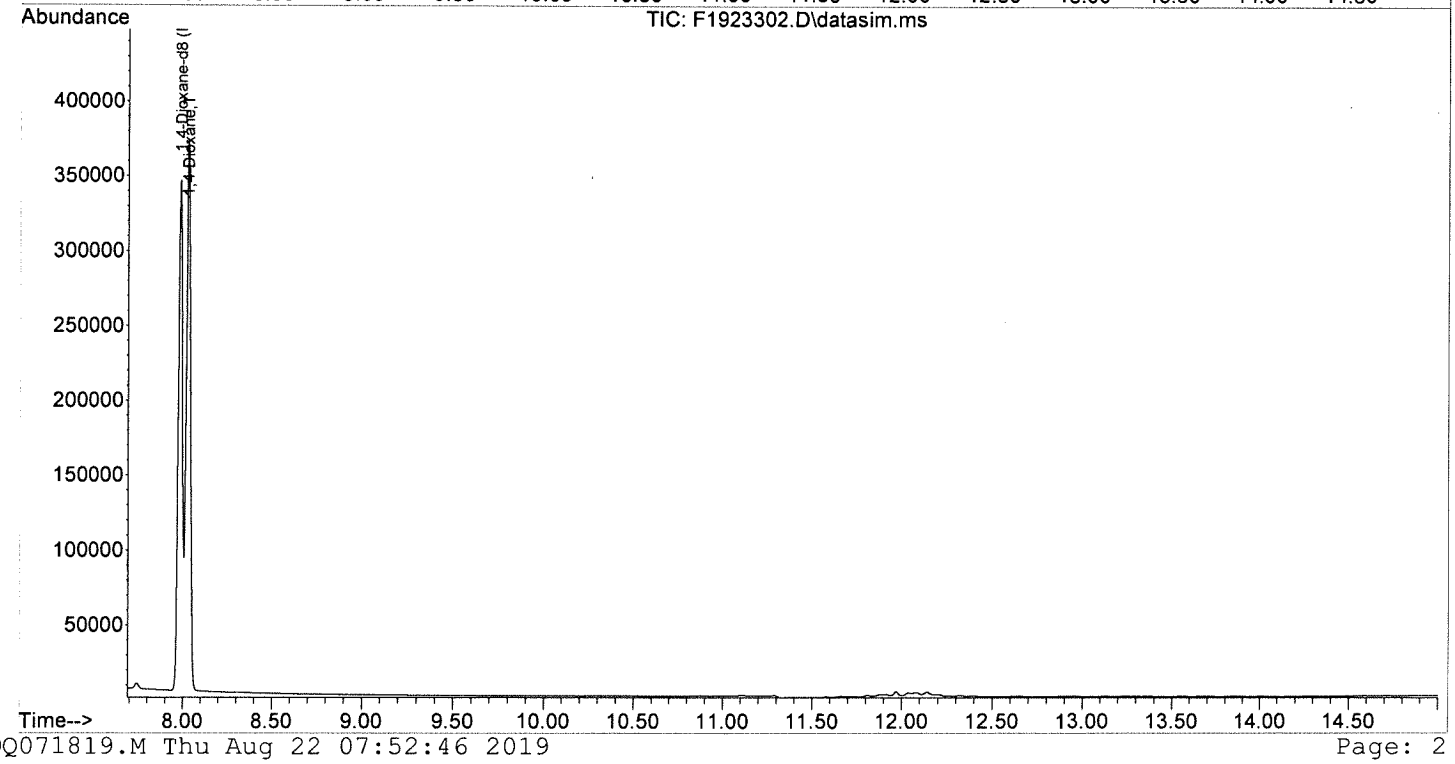
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.986	96	281423	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						Qvalue
4] 1,4-Dioxane	8.027	88	294487	9.392	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923302.D
Acq On : 21 Aug 2019 2:24 pm
Operator : CLA
Sample : DIOX 10 ug/mL Inst : GCMSSV6
Misc : 1902462 EXP 050719
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 18:05:43 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration





Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923303.D
Acq On : 21 Aug 2019 2:44 pm
Operator : CLA
Sample : DIOX-D8 10 ug/mL Inst : GCMSSV6
Misc : 1902463 EXP 090519
ALS Vial : 3 Sample Multiplier: 1

AUG 2 2 2019

Quant Time: Aug 22 07:52:52 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	10.000	10.000	0.0	85	-0.01
2 S	1,4-Dioxane-d8	10.000	9.436	5.6	90	-0.01
3 I	1,4-Dioxane-d8 (I.S.)	10.000	10.000	0.0	0	-7.99#
4 T	1,4-Dioxane	10.000	0.000	100.0#	0	-8.03#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923303.D
Acq On : 21 Aug 2019 2:44 pm
Operator : CLA
Sample : DIOX-D8 10 ug/mL Inst : GCMSSV6
Misc : 1902463 EXP 090519
ALS Vial : 3 Sample Multiplier: 1

CHECKED BY:
Irina Raducan AUG 2 2 2019

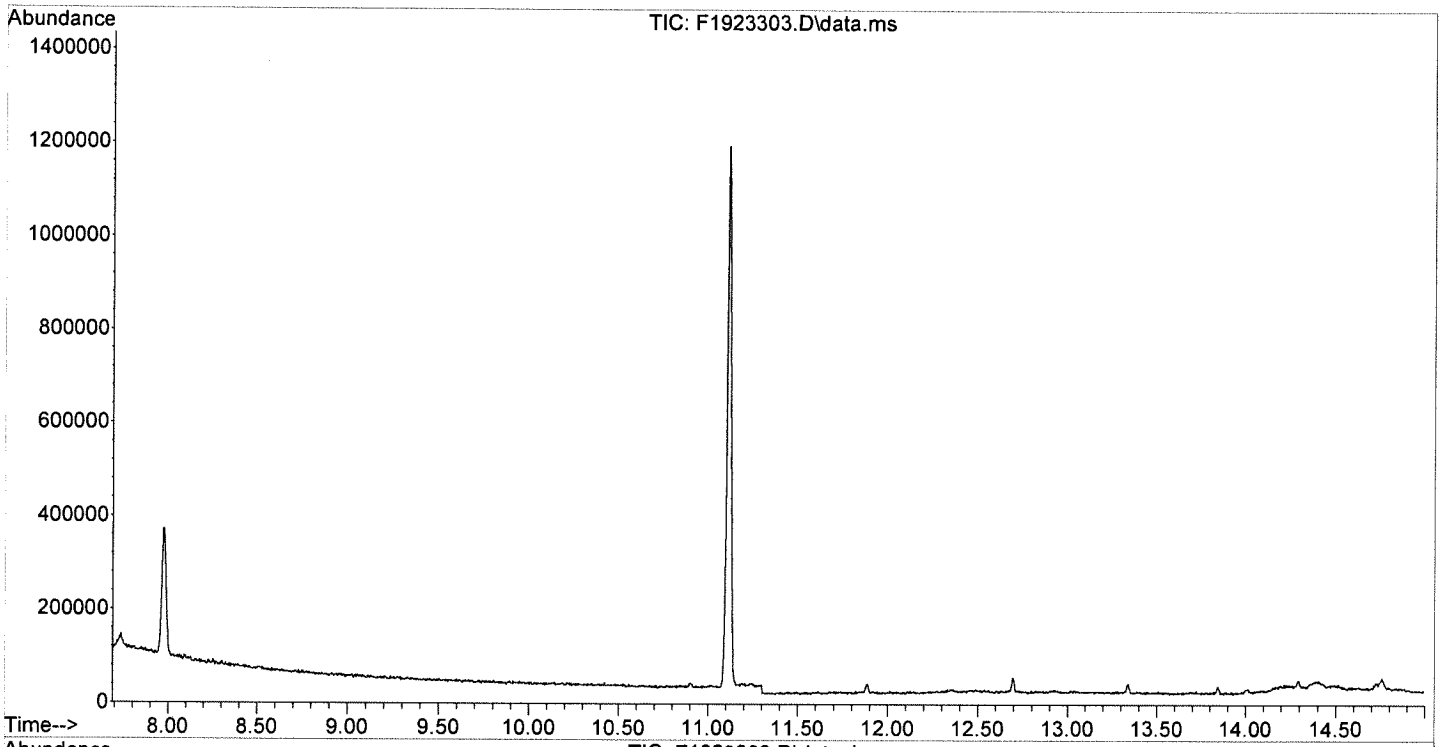
Quant Time: Aug 22 07:52:52 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

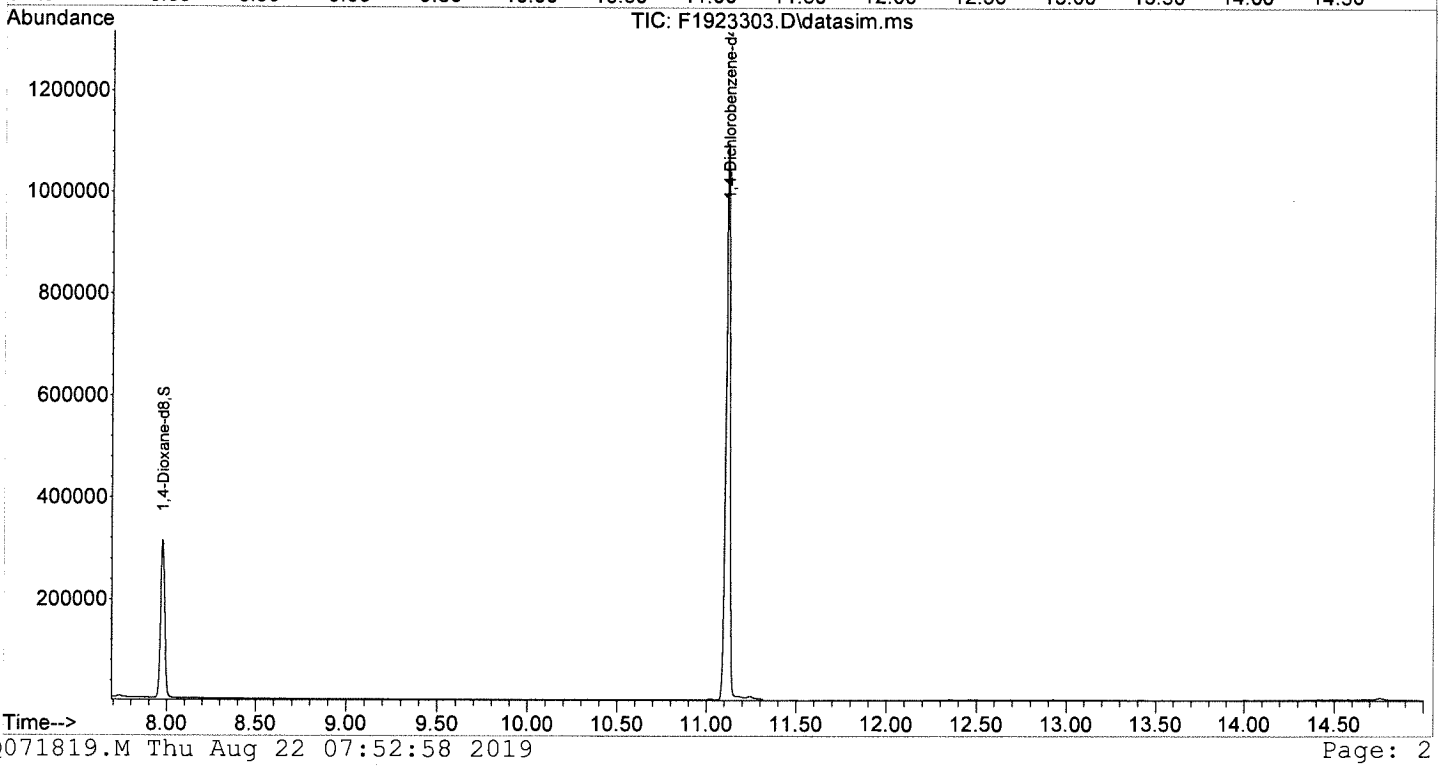
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.116	150	838171	10.000	ug/mL	-0.01
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.976	96	259649	9.436	ug/mL	-0.01
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923303.D
Acq On : 21 Aug 2019 2:44 pm
Operator : CLA
Sample : DIOX-D8 10 ug/mL Inst : GCMSSV6
Misc : 1902463 EXP 090519
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 07:52:52 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration





8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY

SW-846 8270D

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Sequence:	S039436	Instrument:	GCMSSV6
		Calibration:	1900232

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S039436-CCV1)			*Lab File ID: F1923303.D*			*Analyzed: 08/21/19 14:24*			
1,4-Dichlorobenzene-d4	838171	11.116	989590	11.127	85	50 - 200	-0.0110	+/-0.50	
LCS (B238366-BS1)			*Lab File ID: F1923304.D*			*Analyzed: 08/21/19 15:04*			
1,4-Dichlorobenzene-d4	915601	11.113	838171	11.116	109	50 - 200	-0.0030	+/-0.50	
LCS Dup (B238366-BSD1)			*Lab File ID: F1923305.D*			*Analyzed: 08/21/19 15:24*			
1,4-Dichlorobenzene-d4	878643	11.113	838171	11.116	105	50 - 200	-0.0030	+/-0.50	
Blank (B238366-BLK1)			*Lab File ID: F1923306.D*			*Analyzed: 08/21/19 15:44*			
1,4-Dichlorobenzene-d4	793100	11.113	838171	11.116	95	50 - 200	-0.0030	+/-0.50	
Field Blank (19H0617-02)			*Lab File ID: F1923307.D*			*Analyzed: 08/21/19 16:03*			
1,4-Dichlorobenzene-d4	896864	11.113	838171	11.116	107	50 - 200	-0.0030	+/-0.50	
P-15 (19H0617-03)			*Lab File ID: F1923308.D*			*Analyzed: 08/21/19 16:23*			
1,4-Dichlorobenzene-d4	828354	11.113	838171	11.116	99	50 - 200	-0.0030	+/-0.50	
P-5S (19H0617-04)			*Lab File ID: F1923309.D*			*Analyzed: 08/21/19 16:43*			
1,4-Dichlorobenzene-d4	882696	11.113	838171	11.116	105	50 - 200	-0.0030	+/-0.50	

QC DATA

1 - FORM I
ANALYSIS DATA SHEET

Blank

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B238366-BLK1	File ID:	F1923306.D
Sampled:		Prepared:	08/19/19 09:23	Analyzed:	08/21/19 15:44
Solids:		Preparation:	SW-846 3510C	Dilution:	
Batch:	B238366	Sequence:	S039436	Calibration:	1900232
Instrument:	GCMSSV6				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane		0.033	0.20	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923306.D
Acq On : 21 Aug 2019 3:44 pm
Operator : CLA
Sample : B238366-BLK1 Inst : GCMSSV6
Misc :
ALS Vial : 6 Sample Multiplier: 1

CHECKED Irina Radu AUG 2 2 2019

Quant Time: Aug 22 07:54:19 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

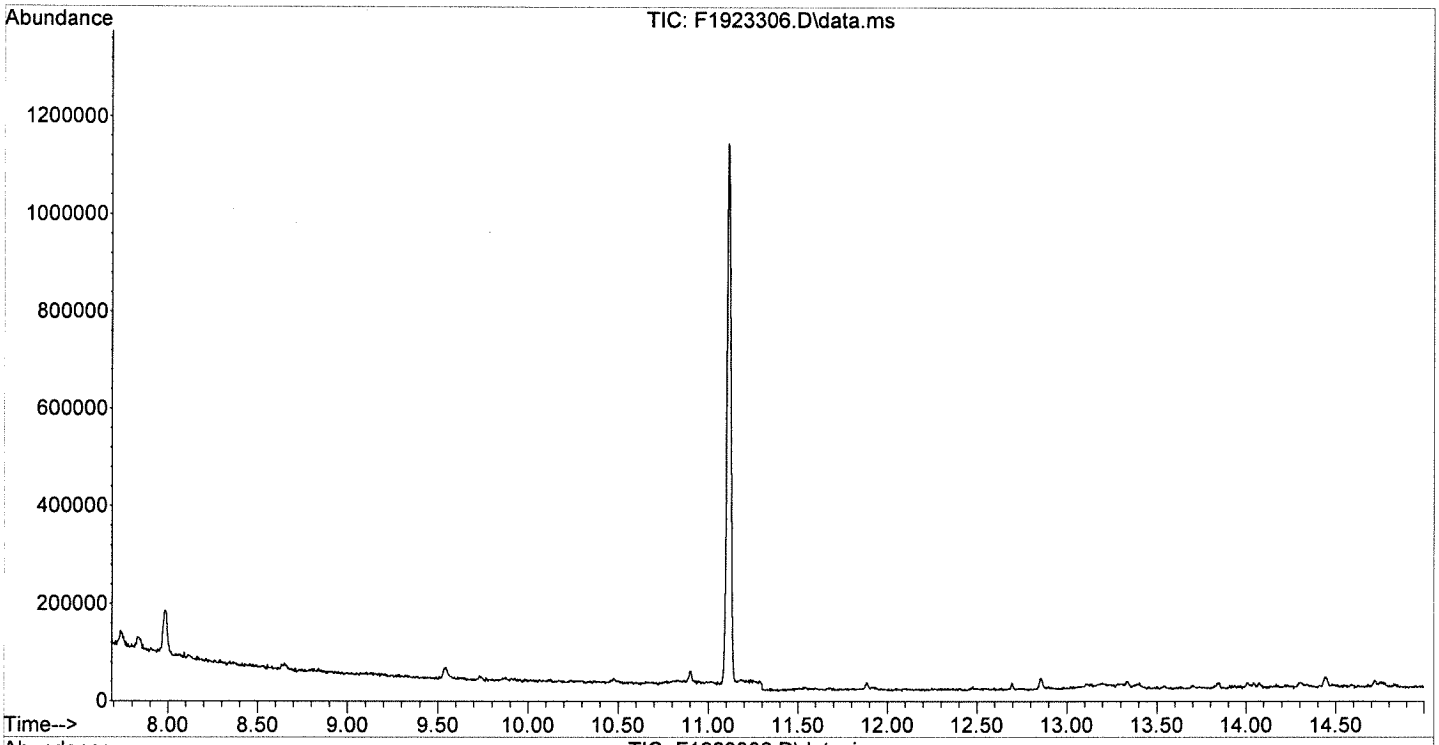
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.113	150	793100	10.000	ug/mL	-0.01
3) 1,4-Dioxane-d8 (I.S.)	7.986	96	85158	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.986	96	85158	3.271	ug/mL	0.00
Target Compounds						Qvalue
4) 1,4-Dioxane	0.000		0	N.D.	d	

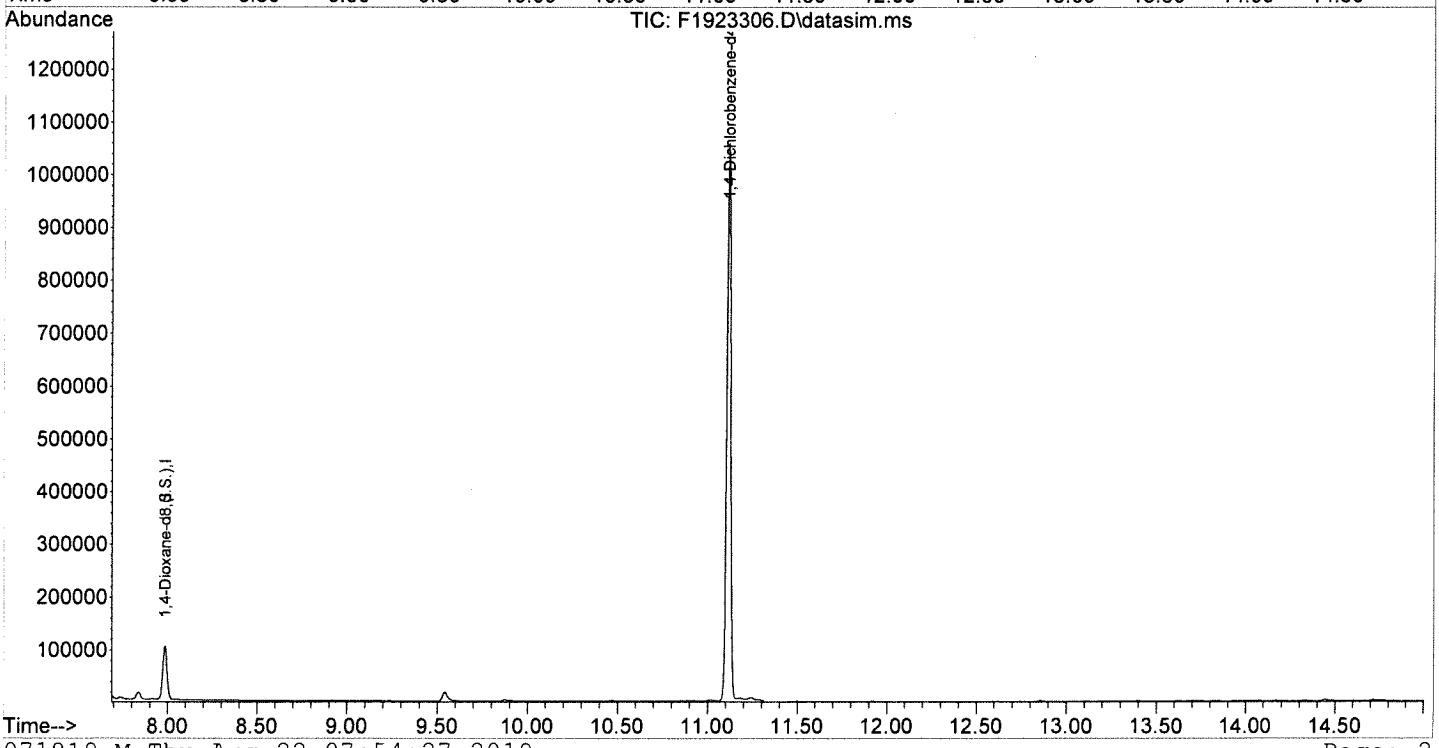
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923306.D
Acq On : 21 Aug 2019 3:44 pm
Operator : CLA
Sample : B238366-BLK1 Inst : GCMSSV6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 07:54:19 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration





1 - FORM I
ANALYSIS DATA SHEET

LCS

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B238366-BS1	File ID:	F1923304.D
Sampled:		Prepared:	08/19/19 09:23	Analyzed:	08/21/19 15:04
Solids:		Preparation:	SW-846 3510C	Dilution:	
Batch:	B238366	Sequence:	S039436	Calibration:	1900232
Instrument:	GCMSSV6				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	10.2	0.033	0.20	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923304.D
Acq On : 21 Aug 2019 3:04 pm
Operator : CLA
Sample : B238366-BS1 Inst : GCMSSV6
Misc :
ALS Vial : 4 Sample Multiplier: 1

CHECKED BY: Irina Raducan AUG 2 2 2019

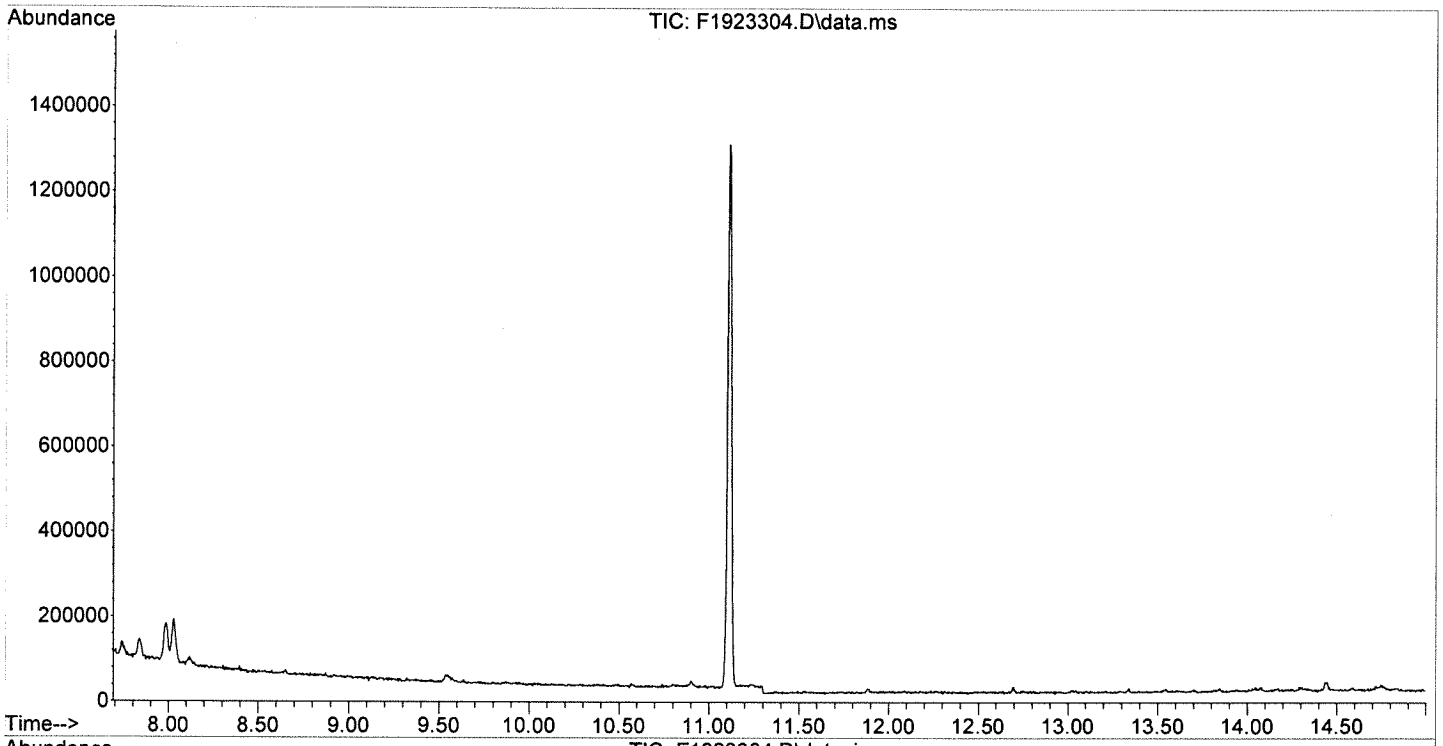
Quant Time: Aug 21 17:05:28 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

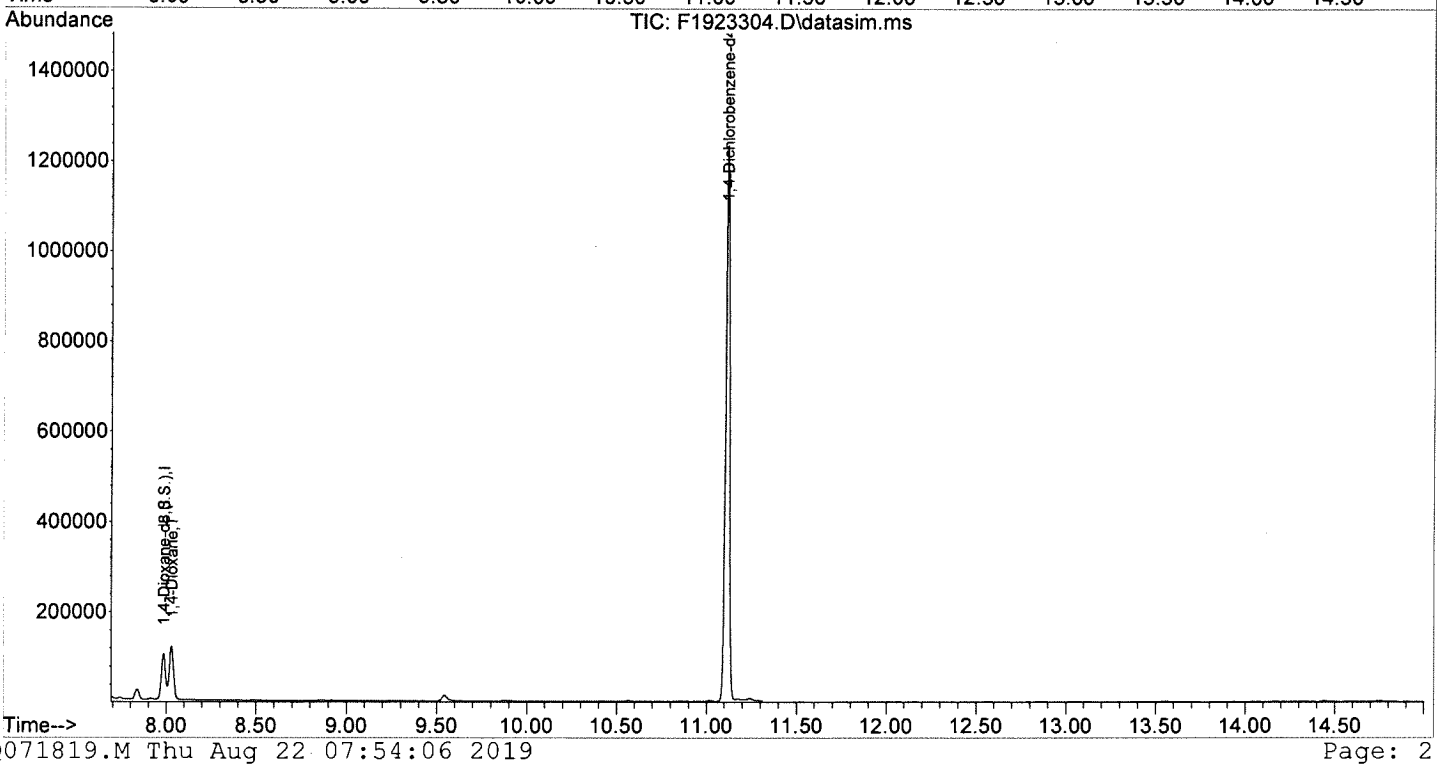
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.113	150	915601	10.000	ug/mL	-0.01
3) 1,4-Dioxane-d8 (I.S.)	7.986	96	83656	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.986	96	83656	2.783	ug/mL	0.00
Target Compounds						Qvalue
4] 1,4-Dioxane	8.030	88	94708	10.161	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923304.D
Acq On : 21 Aug 2019 3:04 pm
Operator : CLA
Sample : B238366-BS1 Inst : GCMSSV6
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 21 17:05:28 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration





1 - FORM I
ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B238366-BSD1	File ID:	F1923305.D
Sampled:		Prepared:	08/19/19 09:23	Analyzed:	08/21/19 15:24
Solids:		Preparation:	SW-846 3510C	Dilution:	
Batch:	B238366	Sequence:	S039436	Calibration:	1900232
Instrument:	GCMSSV6				
Column:	1				

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	9.68	0.033	0.20	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923305.D
Acq On : 21 Aug 2019 3:24 pm
Operator : CLA
Sample : B238366-BSD1 Inst : GCMSSV6
Misc :
ALS Vial : 5 Sample Multiplier: 1

CHECK
Irina Raducan AUG 2 2 2019

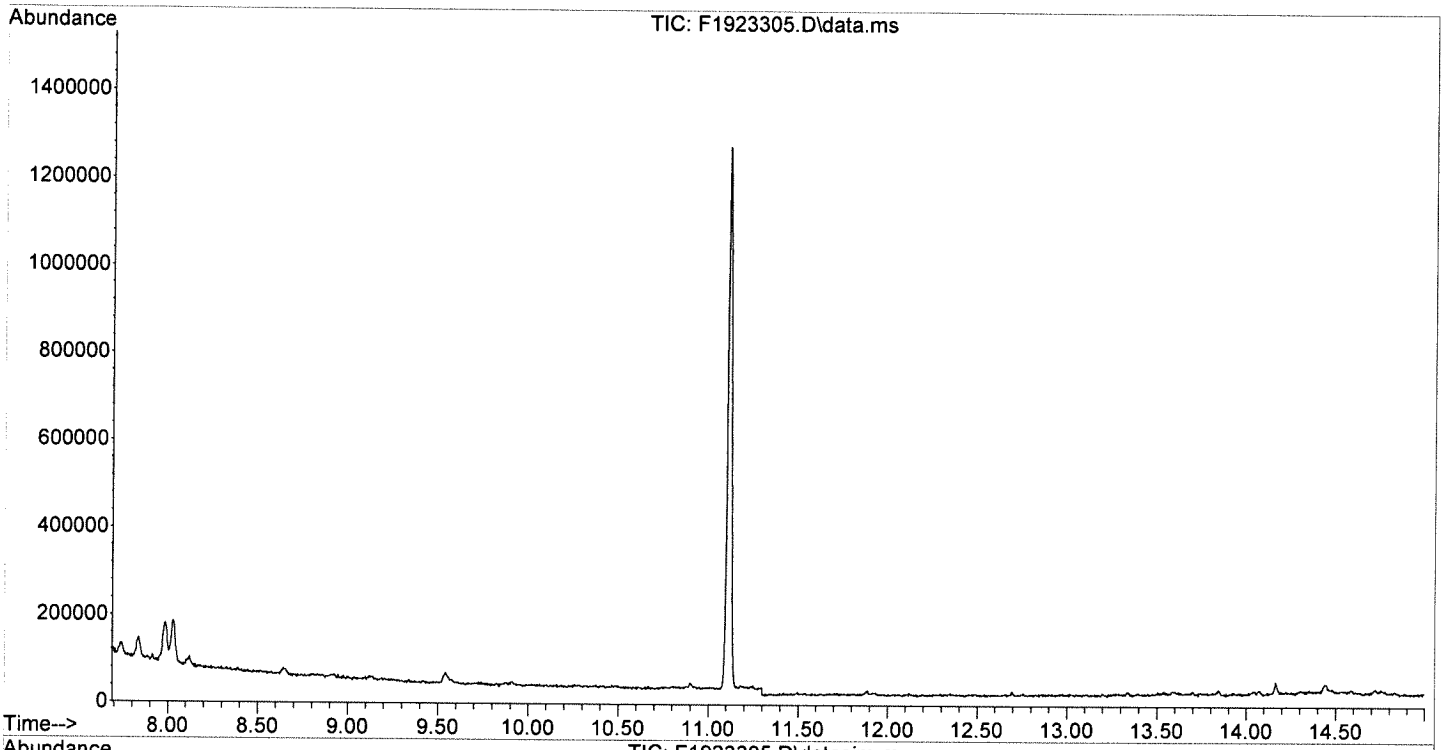
Quant Time: Aug 21 17:05:30 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration

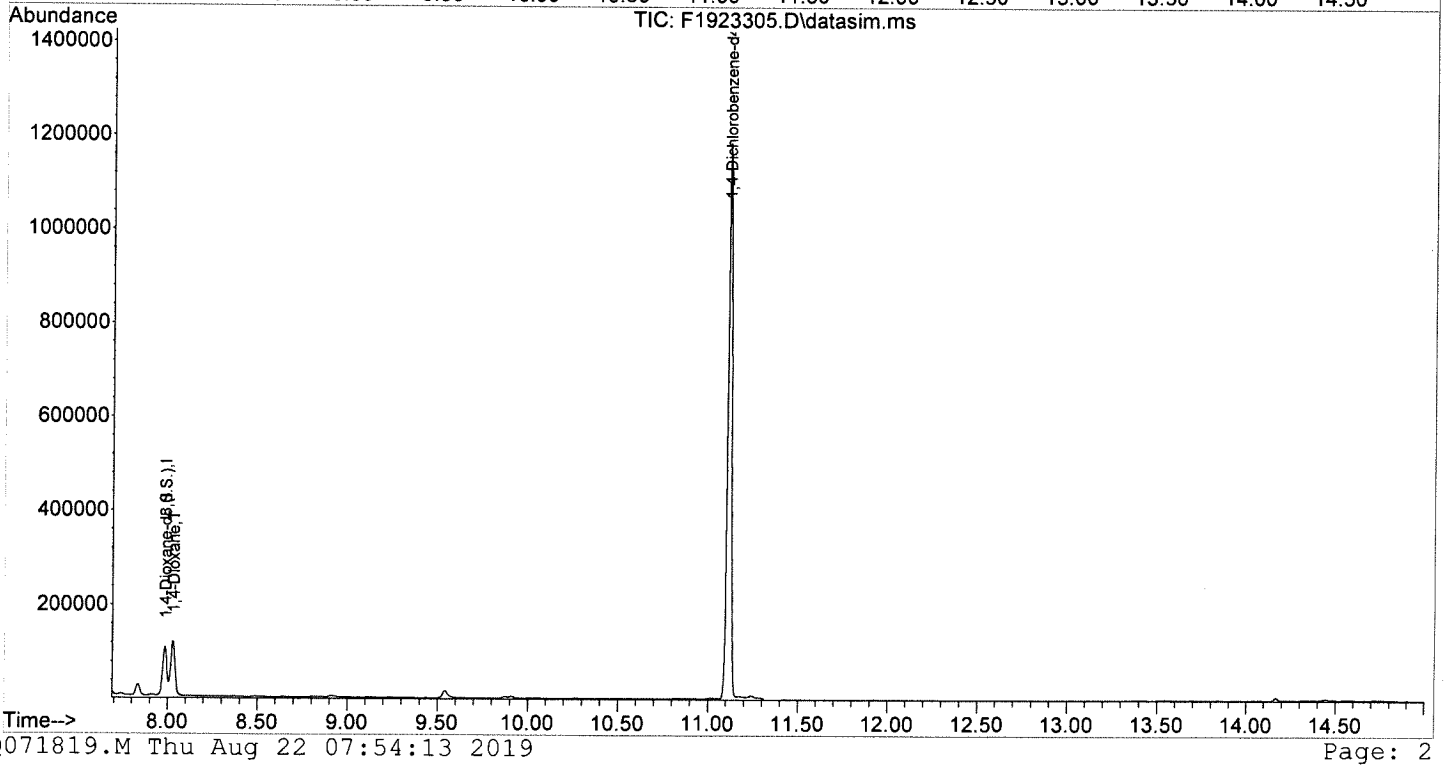
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.113	150	878643	10.000	ug/mL	-0.01
3) 1,4-Dioxane-d8 (I.S.)	7.986	96	85920	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.986	96	85920	2.979	ug/mL	0.00
Target Compounds						Qvalue
4] 1,4-Dioxane	8.030	88	92680	9.681	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\F082119B\
Data File : F1923305.D
Acq On : 21 Aug 2019 3:24 pm
Operator : CLA
Sample : B238366-BSD1 Inst : GCMSSV6
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 21 17:05:30 2019
DataAcq Meth:D051518.M
Quant Method : F:\CTAL-Laboratory\Organics\SVOA\Staff\CLA\METHODS - BACKUP & COPIES\Quant m
... ethods\DQ071819.M
Quant Title :
QLast Update : Thu Jul 18 16:35:04 2019
Response via : Initial Calibration





PREPARATION BENCH SHEET

Printed: 8/19/2019 9:23:48AM

Analysis
1,4-Dioxane SIM

B238366

Con-Test Analytical Laboratory

Prepared using: SW-846 3510C

Matrix: Water

Surrogate Solution
1907351 1,4-Dioxane Surrogate - 100 ug/mL

Spiking Solution
1904541 1,4-Dioxane Spike - 100 ug/mL

Lab Number	Sample ID and Source Sample	Due Date	Expires	Concentrated	pH	Initial (mL)	Final (mL)	ul Spike	ul Surrogate	Extraction Comments
B238366-BLK1	Blank			ATF 8/21/19	7	1000	1.0		100	
B238366-BS1	LCS			"	"	1000	"	100	100	
B238366-BSD1	LCS Dup			"	"	1000	"	100	100	
19H0617-02	Field Blank 6C	08/22/19	08/19/19	"	"	950	"		100	
19H0617-03	P-15 "	08/22/19	08/19/19	"	"	1020	"		100	
19H0617-04	P-5S "	08/22/19	08/19/19	"	"	1040	"		100	

Start Date/Time _____

StopDate/Time _____

Standard ID#	Description	Manufacture Lot#
1907472	Filter Paper (VWR 121) 15.0cm	16964231
1908124	Acetone	DW741-US
1908219	Sodium Sulfate (Baked)	Sodium Sulfate/1
1908292	Methylene Chloride (200 L Drum)	DX144-US

QPP WCT

ALR HRZ 8/19/19
Spikedby/Witnessed By Date

HRZ 8/19/19
Extracted By Date

C:\ELMNT\Print\bch_DEF_EXT.rpt

Injection Log

C:\msdchem\1\data\F082119B\

Date	Filename	Lab ID	Sample Info
21 Aug 2019 2:03 pm	F1923301.D	TUNE 25 ng	1902259 EXP 093019
21 Aug 2019 2:24 pm	F1923302.D	DIOX 10 ug/mL	1902462 EXP 050719
21 Aug 2019 2:44 pm	F1923303.D	DIOX-D8 10 ug/mL	1902463 EXP 090519
21 Aug 2019 3:04 pm	F1923304.D	B238366-BS1	
21 Aug 2019 3:24 pm	F1923305.D	B238366-BSD1	
21 Aug 2019 3:44 pm	F1923306.D	B238366-BLK1	
21 Aug 2019 4:03 pm	F1923307.D	19H0617-02	
21 Aug 2019 4:23 pm	F1923308.D	19H0617-03	
21 Aug 2019 4:43 pm	F1923309.D	19H0617-04	

SO39436

HPLC

SAMPLE DATA

1 - FORM I
ANALYSIS DATA SHEET

Field Blank

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-02	File ID:	19H0617-02R.d
Sampled:	08/12/19 08:45	Prepared:	08/19/19 00:00	Analyzed:	08/21/19 19:57
Solids:		Preparation:	SOP 434-PFAAS	Dilution:	1
Initial/Final:	250 mL / 1 mL				
Batch:	B238243	Sequence:	S039480	Calibration:	1900263
Instrument:	HPLC1				

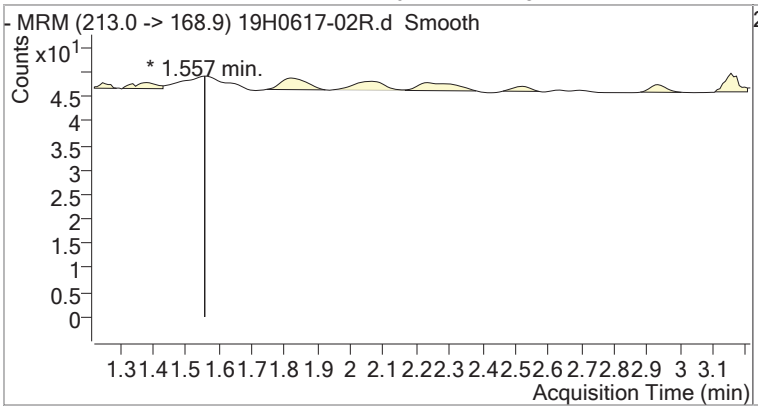
CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-73-5	Perfluorobutanesulfonic acid (PFBS)		2.0	2.0	
307-24-4	Perfluorohexanoic acid (PFHxA)		2.0	2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)		2.0	2.0	
375-22-4	Perfluorobutanoic acid (PFBA)		2.0	2.0	
335-77-3	Perfluorodecanesulfonic acid (PFDS)		2.0	2.0	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)		2.0	2.0	
75491-6	Perfluorooctanesulfonamide (FOSA)		2.0	2.0	
2706-90-3	Perfluoropentanoic acid (PFPeA)		2.0	2.0	
	6:2 Fluorotelomersulfonate (6:2 FTS A)		2.0	2.0	
	8:2 Fluorotelomersulfonate (8:2 FTS A)		2.0	2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)		2.0	2.0	
335-67-1	Perfluorooctanoic acid (PFOA)		2.0	2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)		2.0	2.0	
375-95-1	Perfluorononanoic acid (PFNA)		2.0	2.0	
335-76-2	Perfluorodecanoic acid (PFDA)		2.0	2.0	
	N-MeFOSAA		2.0	2.0	
2058-94-8	Perfluoroundecanoic acid (PFUnA)		2.0	2.0	
	N-EtFOSAA		2.0	2.0	
307-55-1	Perfluorododecanoic acid (PFDoA)		2.0	2.0	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)		2.0	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)		2.0	2.0	

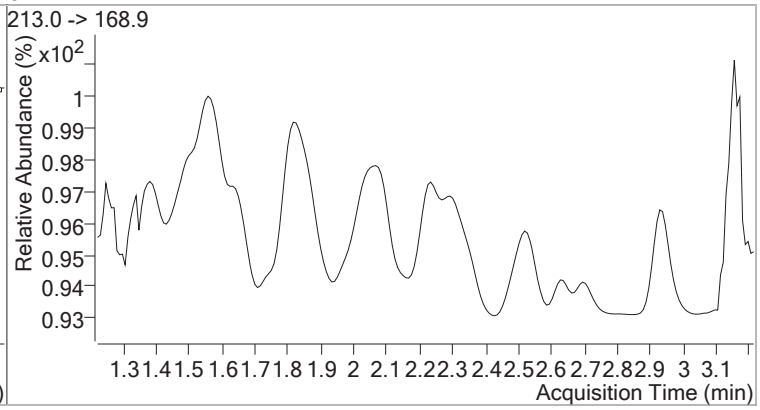
Data File	19H0617-02R.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 7:57:13 PM
Sample Name	19H0617-02	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	B238243.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.844	416.9 -> 371.9	17633	10000.0000	pg/ml		0.067
M PFOS C13	8.060	502.9 -> 80.0	23583	28700.0000	pg/ml		0.067
M d3-N-MeFOSAA	8.319	573.2 -> 419.0	11704	40000.0000	pg/ml	m	0.059
System Monitoring Compounds							
S PFHxA C13	7.138	314.9 -> 269.9	13012	10345.4406	pg/ml		0.050
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 103.45%			
S PFDA C13	8.245	514.9 -> 469.9	16501	8988.4005	pg/ml		0.067
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 89.88%			
S d5-N-MeFOSAA	8.403	589.2 -> 419.0	7793	28156.2171	pg/ml	m	0.067
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 70.39%			
Target Compounds							QValue
T PFBA	1.557	213.0 -> 168.9	0	0.0000	pg/ml	md	1
T PFPeA	5.735	263.0 -> 219.0	0	0.0000	pg/ml	md	1
T PFBS	7.467	298.9 -> 80.0	0	0.0000	pg/ml	md	1
T PFHxA	7.946	312.9 -> 268.9	0	0.0000	pg/ml	md	1
T PFHpA	7.315	362.9 -> 319.0	0	0.0000	pg/ml	md	1
T PFHxS-Total	7.971	398.9 -> 80.0	0	0.0000	pg/ml	md	1
T 6.2 FTS	7.414	427.0 -> 406.8	0	0.0000	pg/ml	md	1
T PFOA-Total	7.844	412.9 -> 368.9	555	239.7637	pg/ml		100
T PFHpS	8.667	449.0 -> 79.7	0	0.0000	pg/ml	md	1
T PFOS-Total	8.060	498.9 -> 80.0	0	0.0000	pg/ml	md	1
T PFNA	8.734	462.9 -> 418.9	0	0.0000	pg/ml	md	1
T 8.2 FTS	8.757	527.0 -> 81.0	0	0.0000	pg/ml	md	1
T PFDA	8.632	513.1 -> 469.0	0	0.0000	pg/ml	md	1
T N-MeFOSAA	9.152	570.2 -> 419.1	0	0.0000	pg/ml	md	1
T FOSA	7.346	497.9 -> 77.9	0	0.0000	pg/ml	md	1
T PFDS	9.150	599.0 -> 80.0	0	0.0000	pg/ml	md	1
T PFUnA	8.706	563.1 -> 519.0	0	0.0000	pg/ml	md	1
T N-EtFOSAA	8.773	584.2 -> 419.0	0	0.0000	pg/ml	md	1
T PFDoA	9.243	613.1 -> 569.0	0	0.0000	pg/ml	md	1
T PFTrDA	8.982	663.1 -> 619.0	0	0.0000	pg/ml	md	1
T PFTA	9.352	713.1 -> 669.1	0	0.0000	pg/ml	md	1

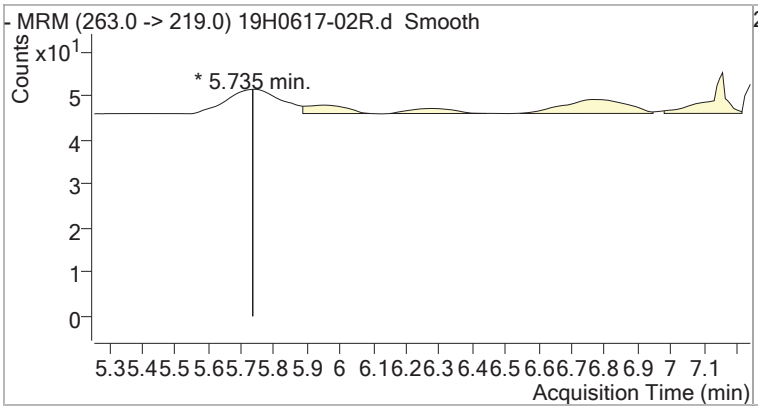
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

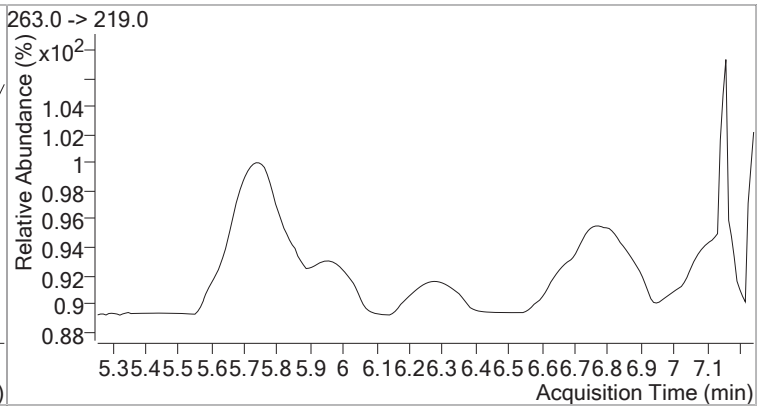
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	d	0		0				



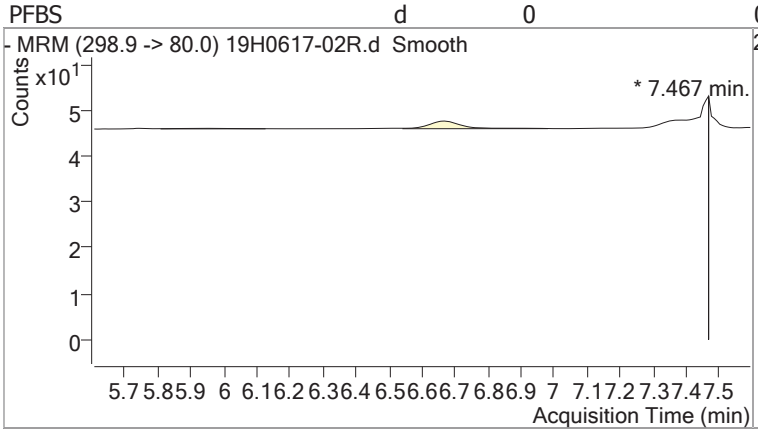


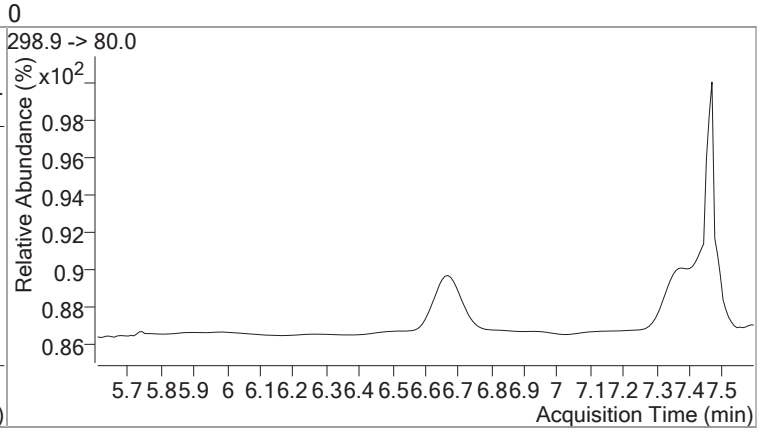
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	d	0		0				



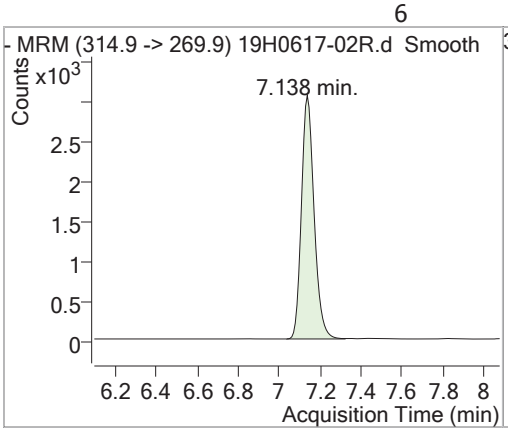


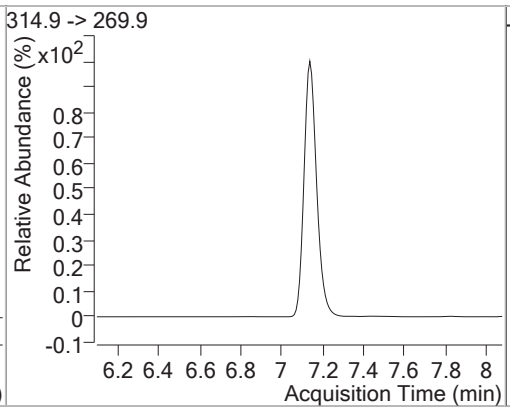
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	d	0		0				

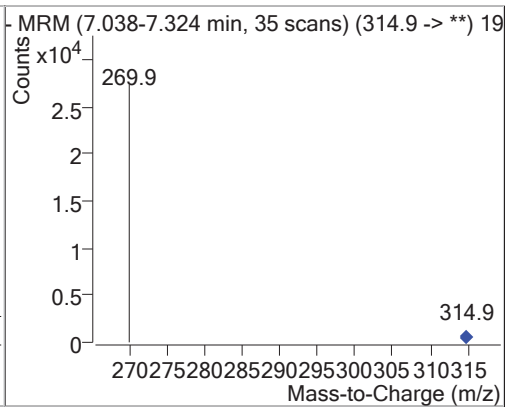




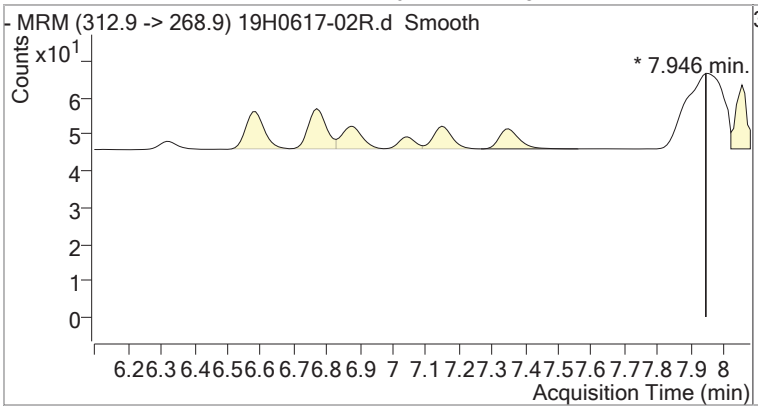
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	10345.4406	7.14	0.05	13012				

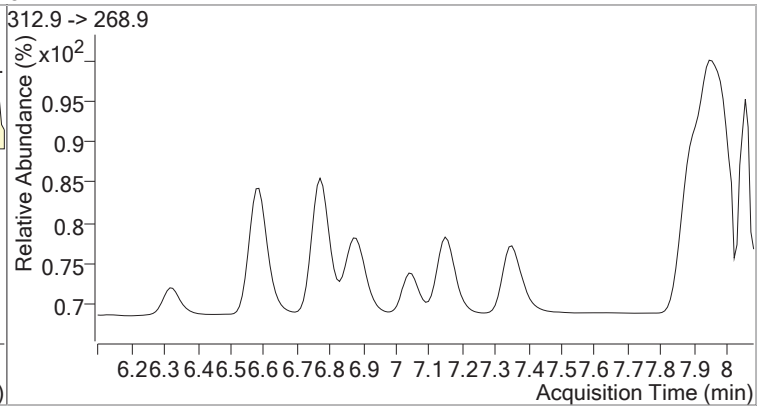




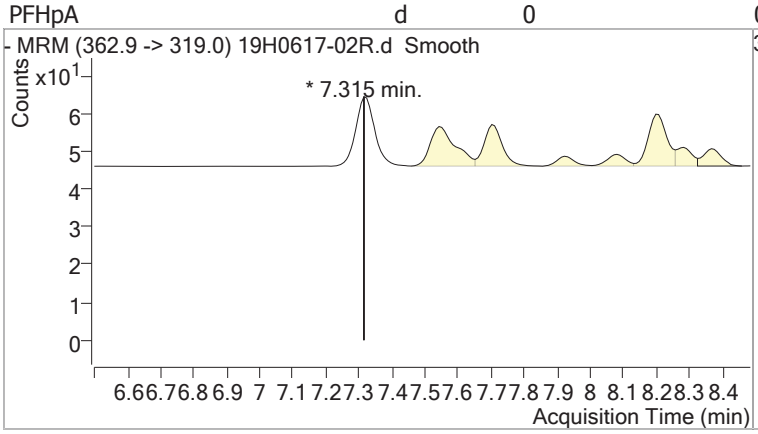


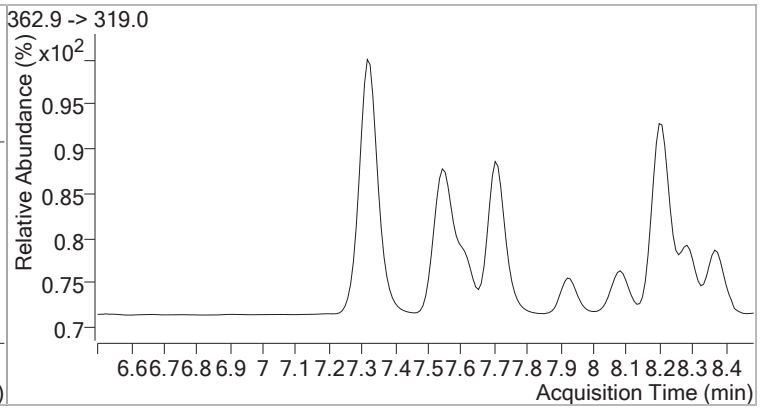
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	d	0		0				



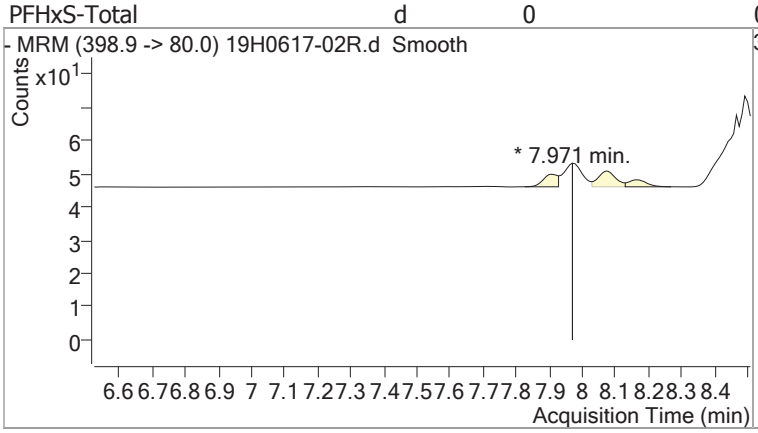


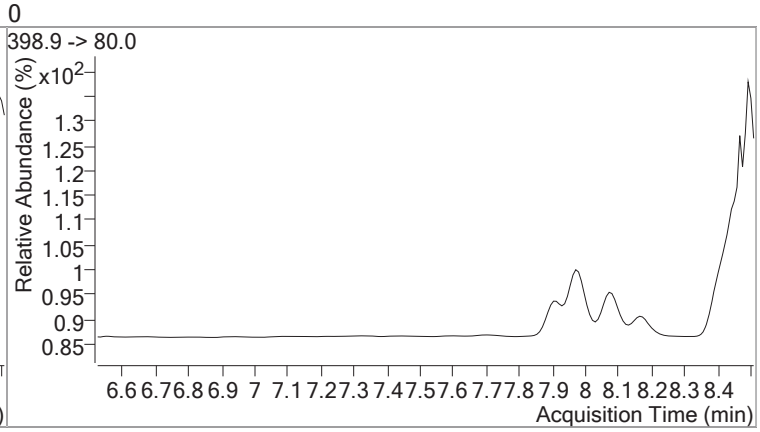
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	d	0		0				



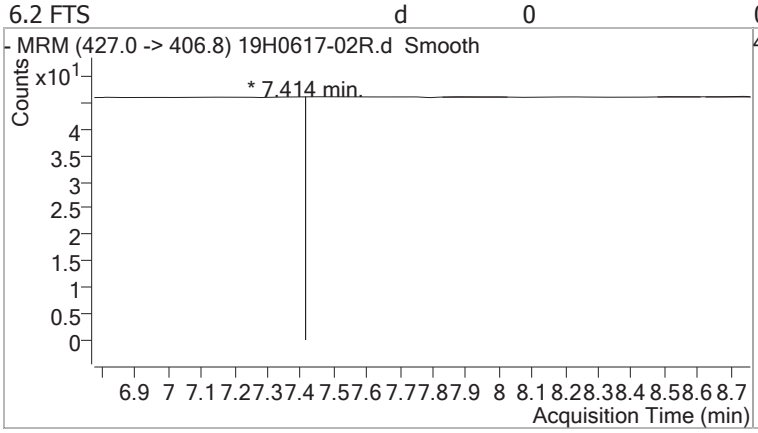


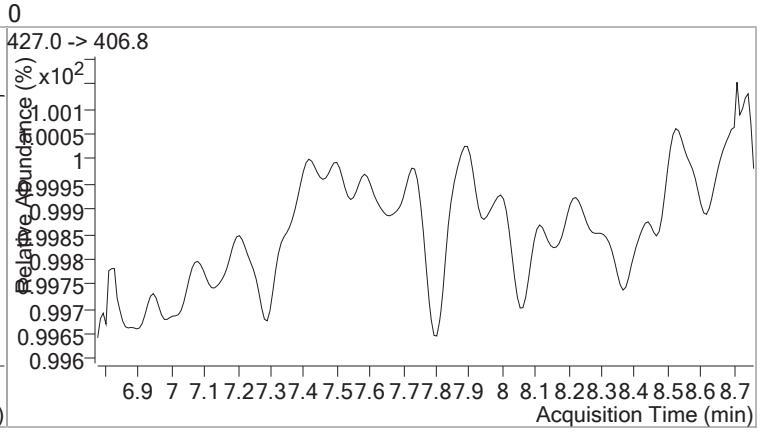
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	d	0		0				



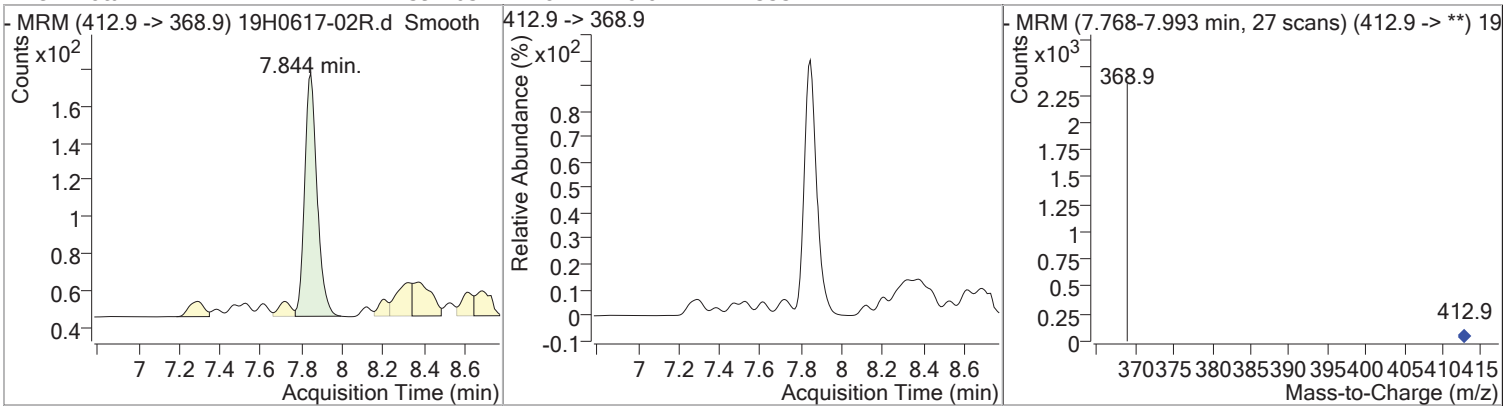


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	d	0		0				

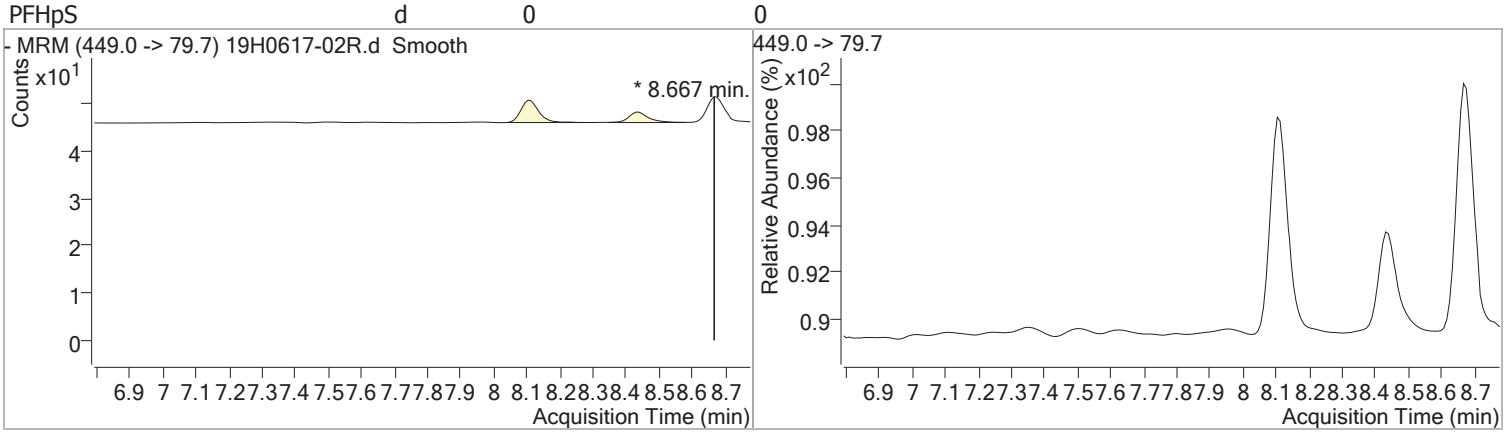




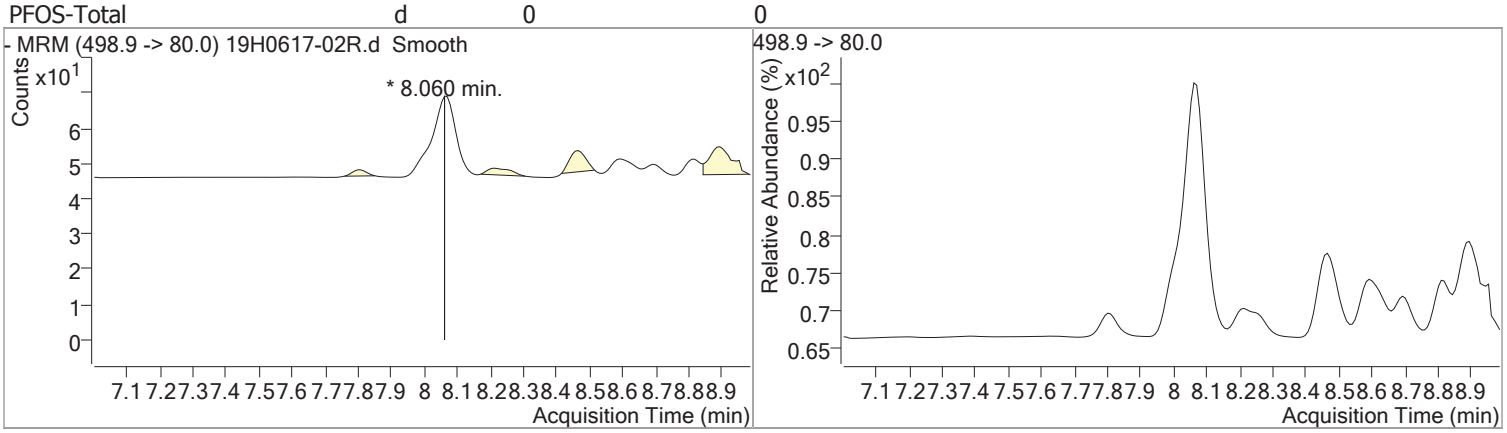
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	239.7637	7.84	0.07	555				



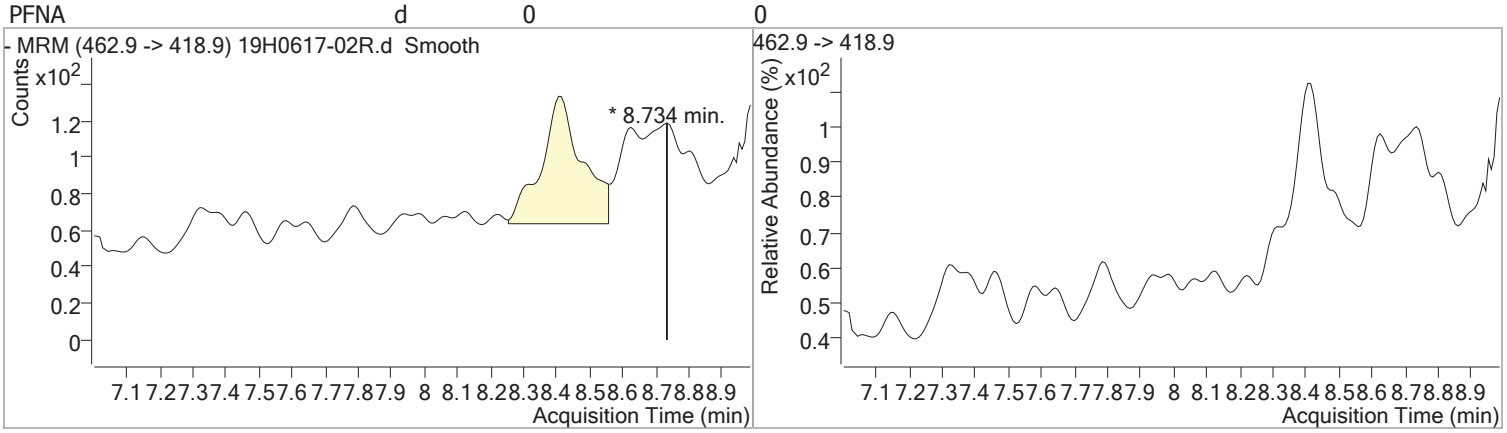
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	d	0		0				



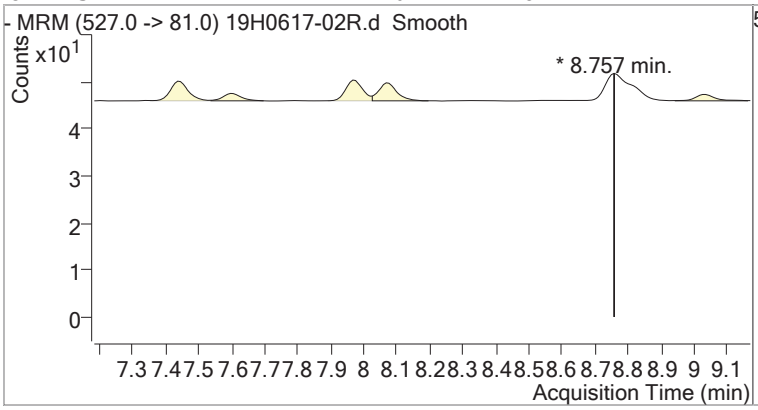
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	d	0		0				

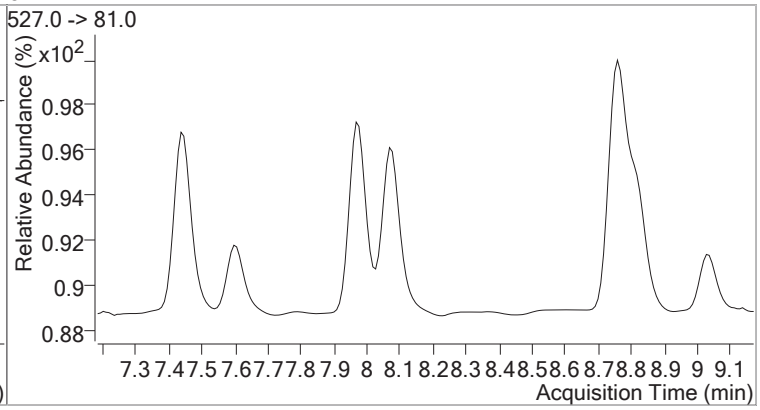


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	d	0		0				

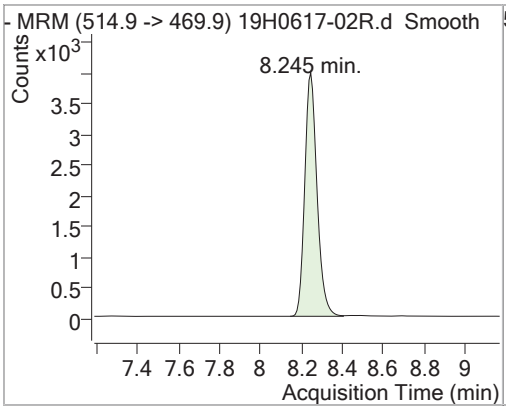


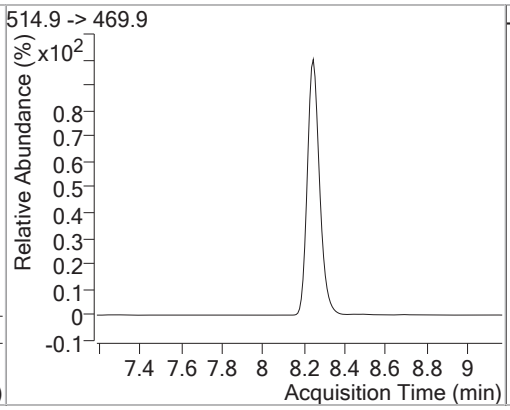
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	d	0		0				

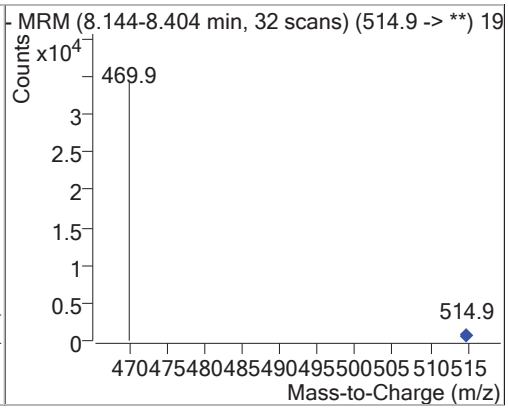




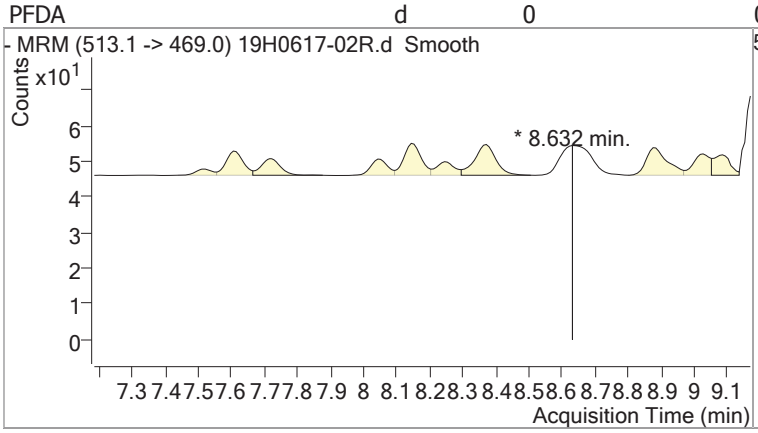
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	8988.4005	8.24	0.07	16501				

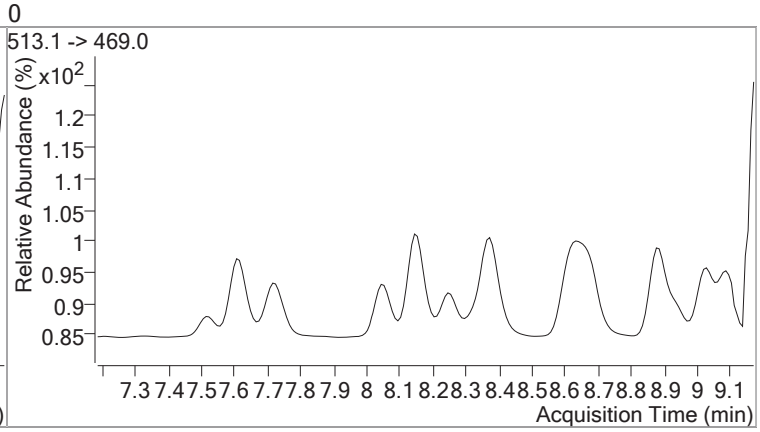




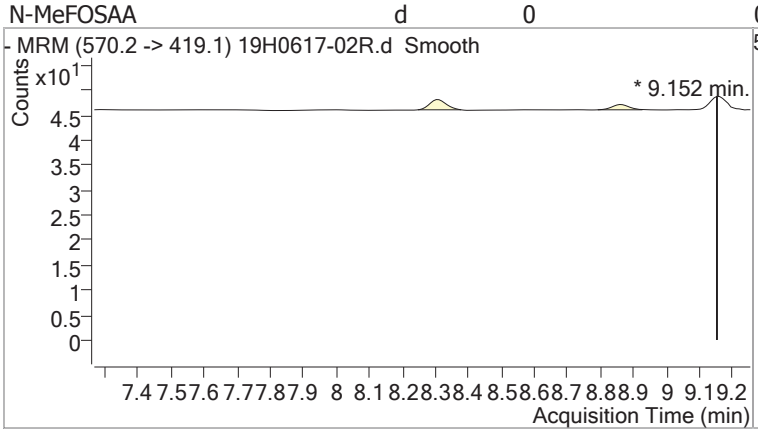


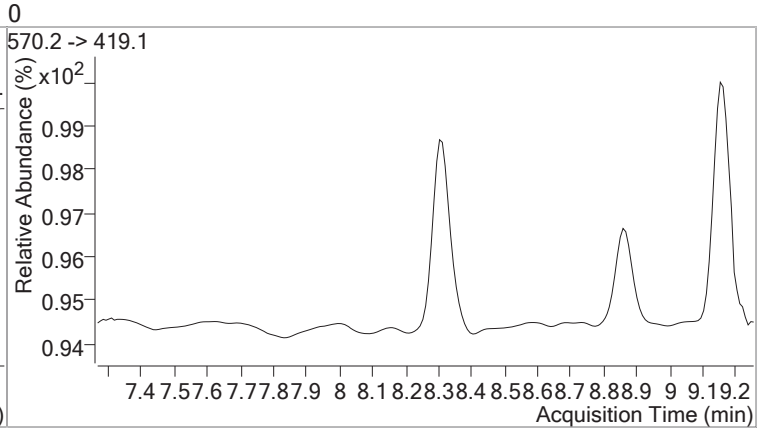
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	d	0		0				



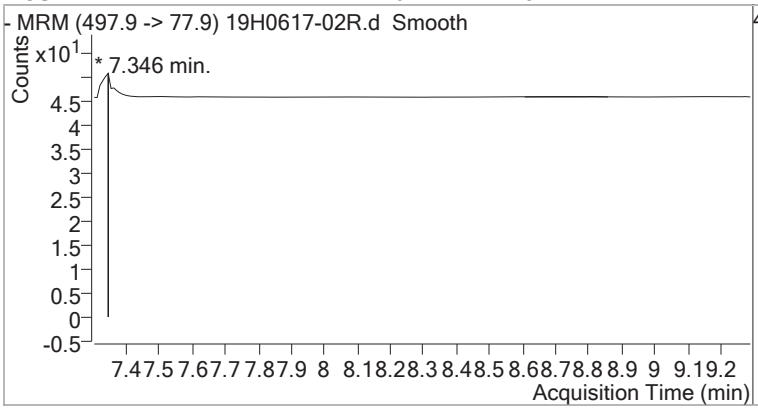


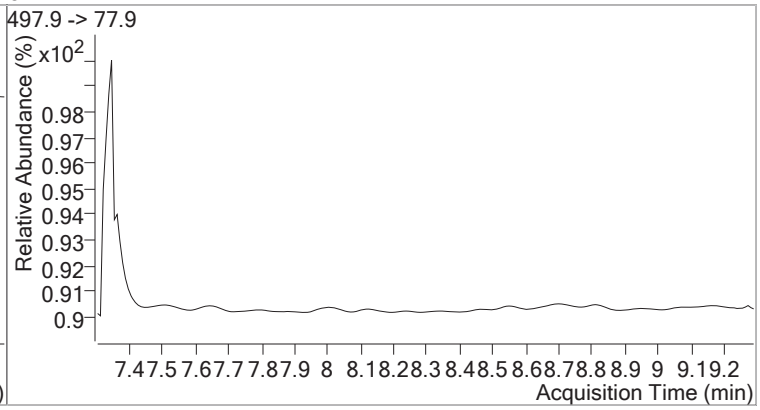
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	d	0		0				



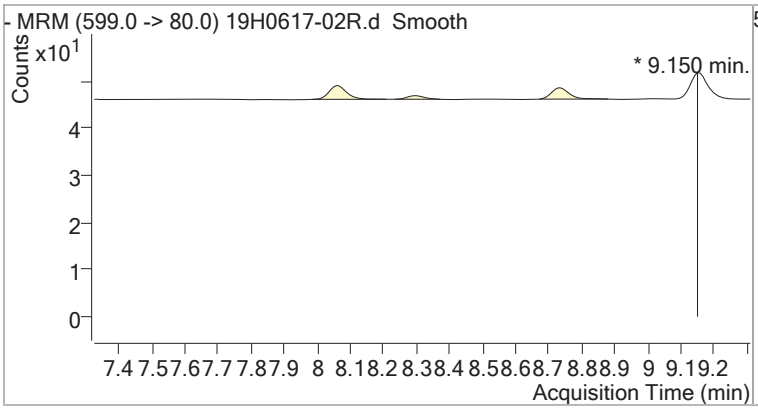


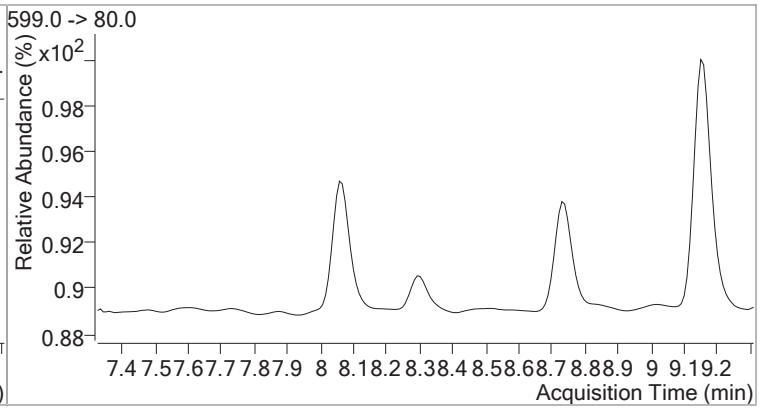
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	d	0		0				



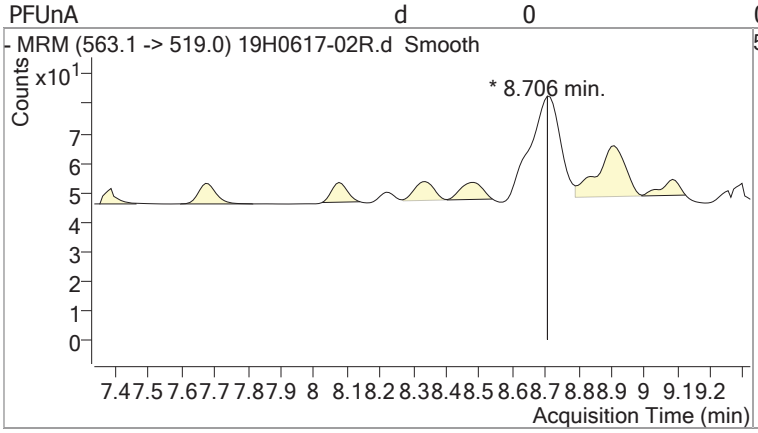


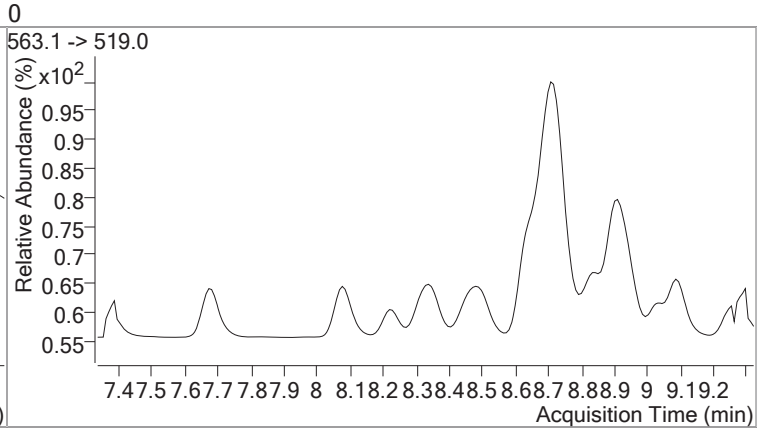
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	d	0		0				



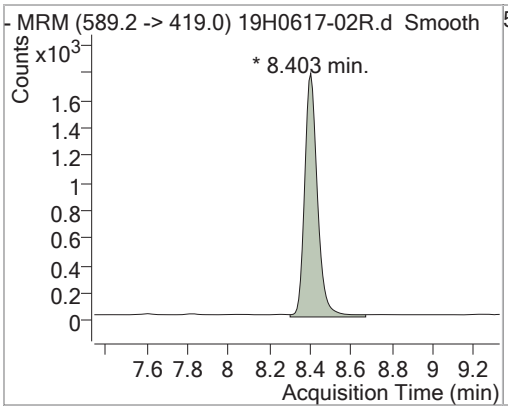


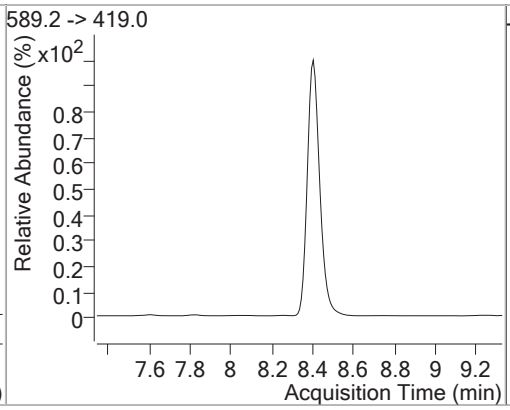
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	d	0		0				

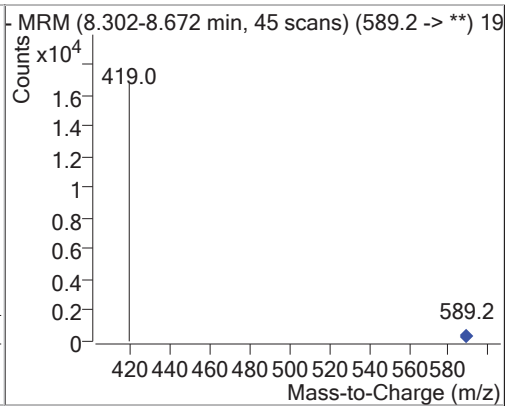




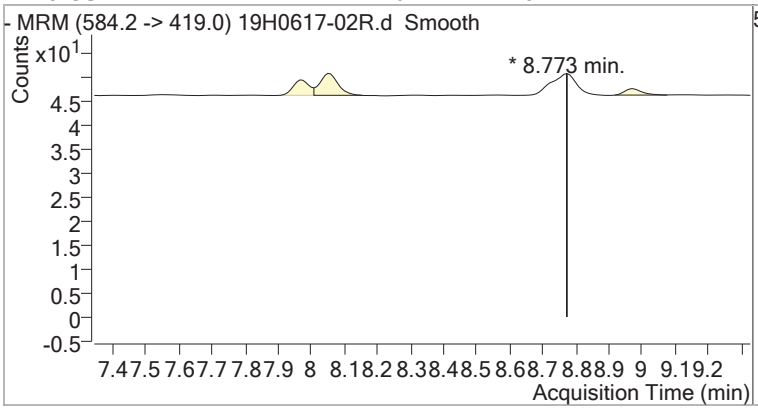
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	28156.2171	8.40	0.07	7793 (m)				

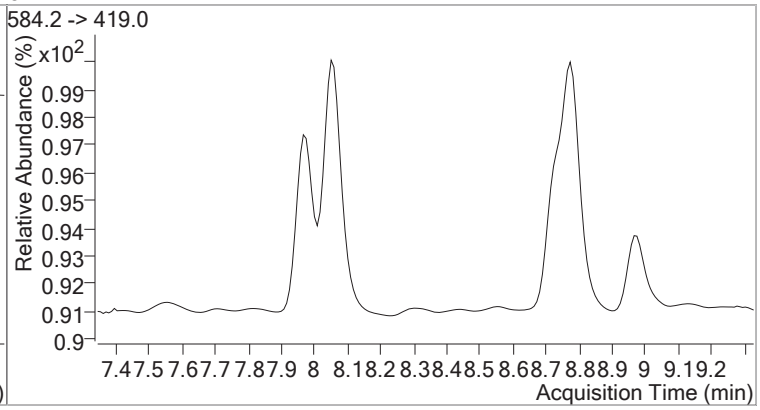




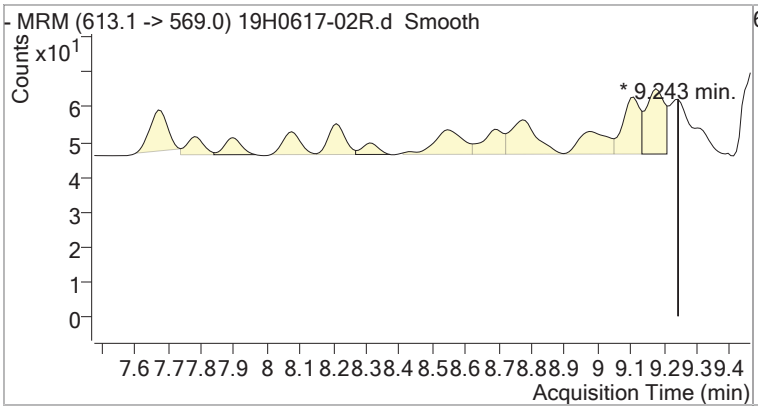


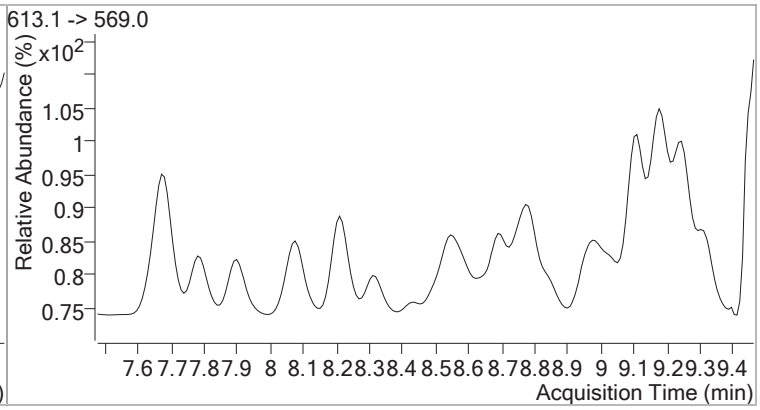
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	d	0		0				



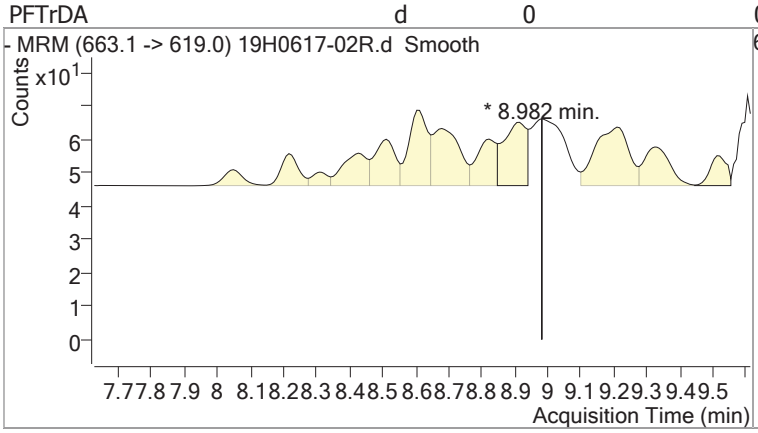


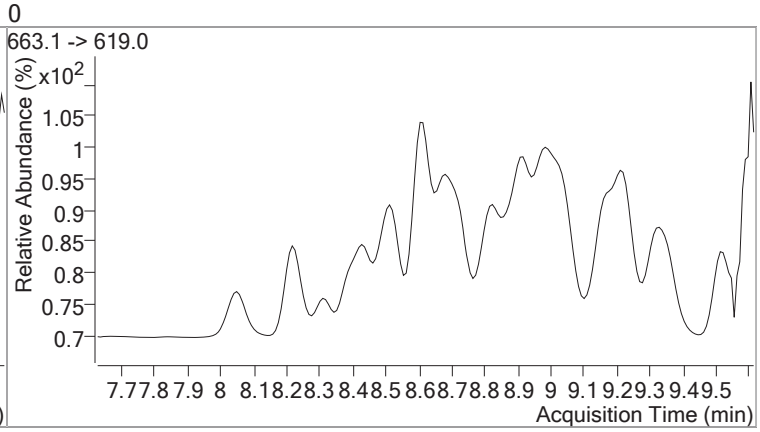
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	d	0		0				



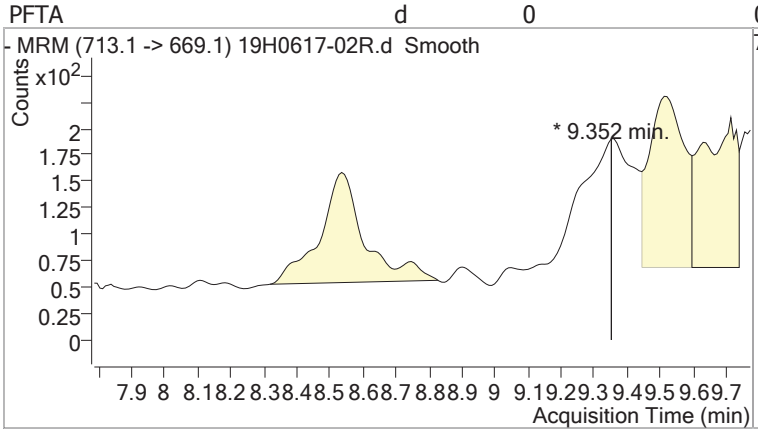


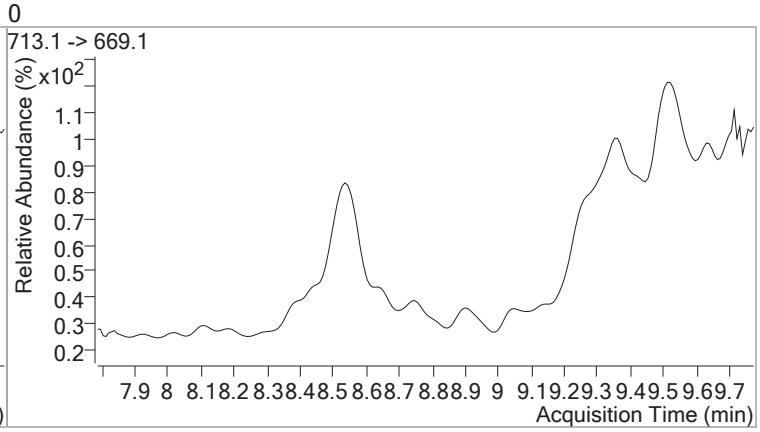
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	d	0		0				





Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	d	0		0				





1 - FORM I
ANALYSIS DATA SHEET

P-15

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-03	File ID:	19H0617-03R.d
Sampled:	08/12/19 09:30	Prepared:	08/19/19 00:00	Analyzed:	08/21/19 20:09
Solids:		Preparation:	SOP 434-PFAAS	Dilution:	1
Initial/Final:	250 mL / 1 mL				
Batch:	B238243	Sequence:	S039480	Calibration:	1900263
Instrument:	HPLC1				

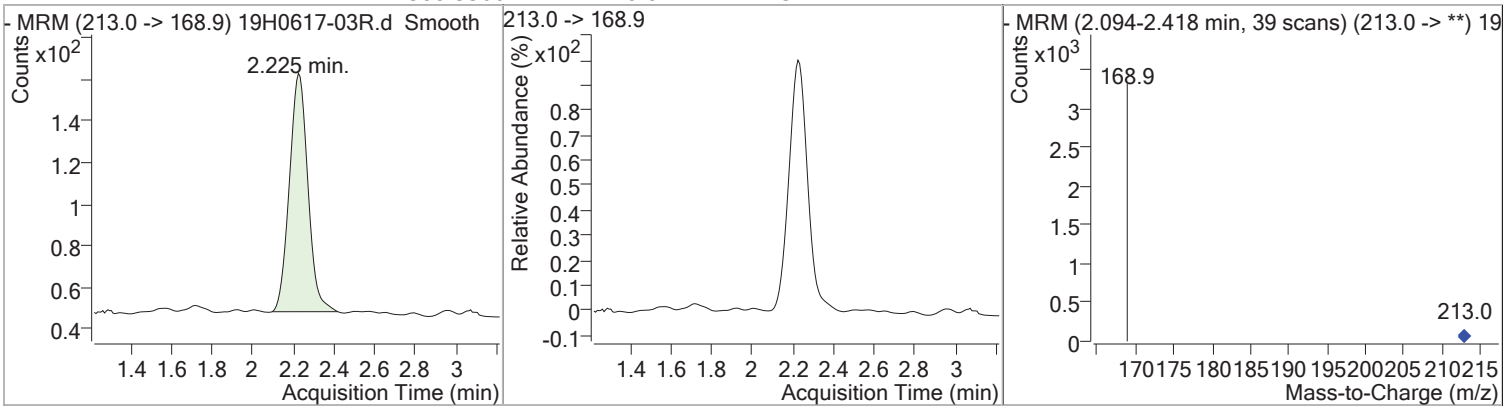
CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-73-5	Perfluorobutanesulfonic acid (PFBS)		2.0	2.0	
307-24-4	Perfluorohexanoic acid (PFHxA)	33	2.0	2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	18	2.0	2.0	
375-22-4	Perfluorobutanoic acid (PFBA)	10	2.0	2.0	
335-77-3	Perfluorodecanesulfonic acid (PFDS)		2.0	2.0	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)		2.0	2.0	
75491-6	Perfluorooctanesulfonamide (FOSA)		2.0	2.0	
2706-90-3	Perfluoropentanoic acid (PFPeA)	59	2.0	2.0	
	6:2 Fluorotelomersulfonate (6:2 FTS A)		2.0	2.0	
	8:2 Fluorotelomersulfonate (8:2 FTS A)		2.0	2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)		2.0	2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	12	2.0	2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)		2.0	2.0	
375-95-1	Perfluorononanoic acid (PFNA)		2.0	2.0	
335-76-2	Perfluorodecanoic acid (PFDA)		2.0	2.0	
	N-MeFOSAA		2.0	2.0	
2058-94-8	Perfluoroundecanoic acid (PFUnA)		2.0	2.0	
	N-EtFOSAA		2.0	2.0	
307-55-1	Perfluorododecanoic acid (PFDoA)		2.0	2.0	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)		2.0	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)		2.0	2.0	

Data File	19H0617-03R.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 8:09:51 PM
Sample Name	19H0617-03	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	B238243.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

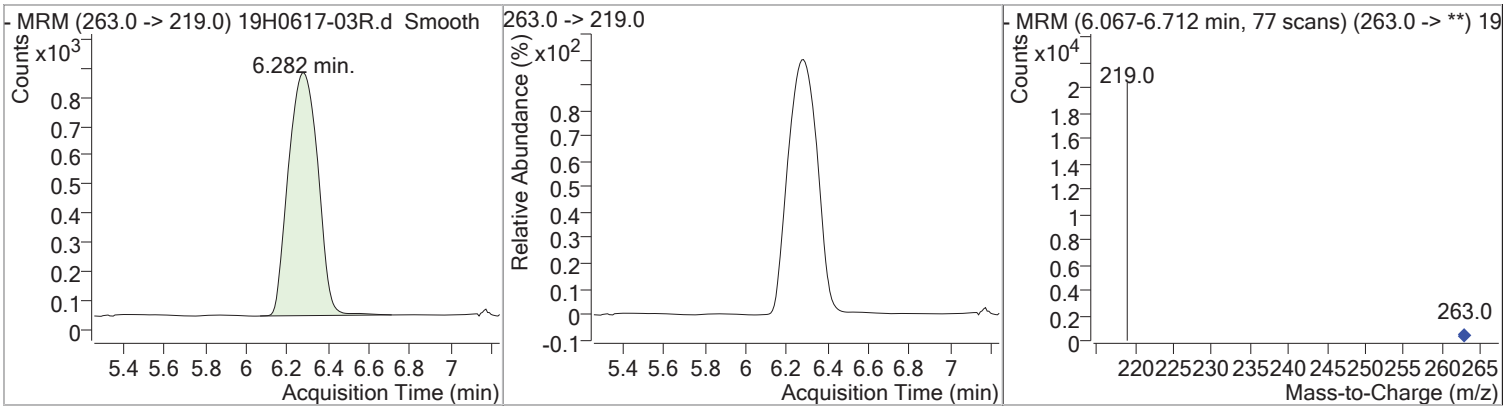
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.835	416.9 -> 371.9	17291	10000.0000	pg/ml		0.059
M PFOS C13	8.060	502.9 -> 80.0	21407	28700.0000	pg/ml		0.067
M d3-N-MeFOSAA	8.319	573.2 -> 419.0	11587	40000.0000	pg/ml	m	0.059
System Monitoring Compounds							
S PFHxA C13	7.139	314.9 -> 269.9	13295	10780.1052	pg/ml		0.050
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 107.80%			
S PFDA C13	8.245	514.9 -> 469.9	17540	9743.5059	pg/ml		0.067
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 97.44%			
S d5-N-MeFOSAA	8.403	589.2 -> 419.0	7795	28444.6621	pg/ml	m	0.067
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 71.11%			
Target Compounds							QValue
T PFBA	2.225	213.0 -> 168.9	725	2588.5566	pg/ml		100
T PFPeA	6.282	263.0 -> 219.0	8384	14753.7124	pg/ml		100
T PFBS	6.651	298.9 -> 80.0	95	219.3248	pg/ml		100
T PFHxA	7.139	312.9 -> 268.9	10011	8345.6709	pg/ml		100
T PFHpA	7.559	362.9 -> 319.0	8225	4602.4215	pg/ml		100
T PFHxS-Total	7.575	398.9 -> 80.0	170	249.2071	pg/ml		100
T 6.2 FTS	7.835	427.0 -> 406.8	0	0.0000	pg/ml	md	1
T PFOA-Total	7.836	412.9 -> 368.9	7062	3110.8027	pg/ml		100
T PFHpS	8.574	449.0 -> 79.7	0	0.0000	pg/ml	md	1
T PFOS-Total	7.993	498.9 -> 80.0	502	453.4299	pg/ml		100
T PFNA	8.801	462.9 -> 418.9	0	0.0000	pg/ml	md	1
T 8.2 FTS	7.714	527.0 -> 81.0	0	0.0000	pg/ml	md	1
T PFDA	7.665	513.1 -> 469.0	0	0.0000	pg/ml	md	1
T N-MeFOSAA	7.310	570.2 -> 419.1	0	0.0000	pg/ml	md	1
T FOSA	9.036	497.9 -> 77.9	0	0.0000	pg/ml	md	1
T PFDS	8.057	599.0 -> 80.0	0	0.0000	pg/ml	md	1
T PFUnA	7.495	563.1 -> 519.0	0	0.0000	pg/ml	md	1
T N-EtFOSAA	7.898	584.2 -> 419.0	0	0.0000	pg/ml	md	1
T PFDoA	8.461	613.1 -> 569.0	0	0.0000	pg/ml	md	1
T PFTrDA	9.032	663.1 -> 619.0	0	0.0000	pg/ml	md	1
T PFTA	9.486	713.1 -> 669.1	0	0.0000	pg/ml	md	1

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

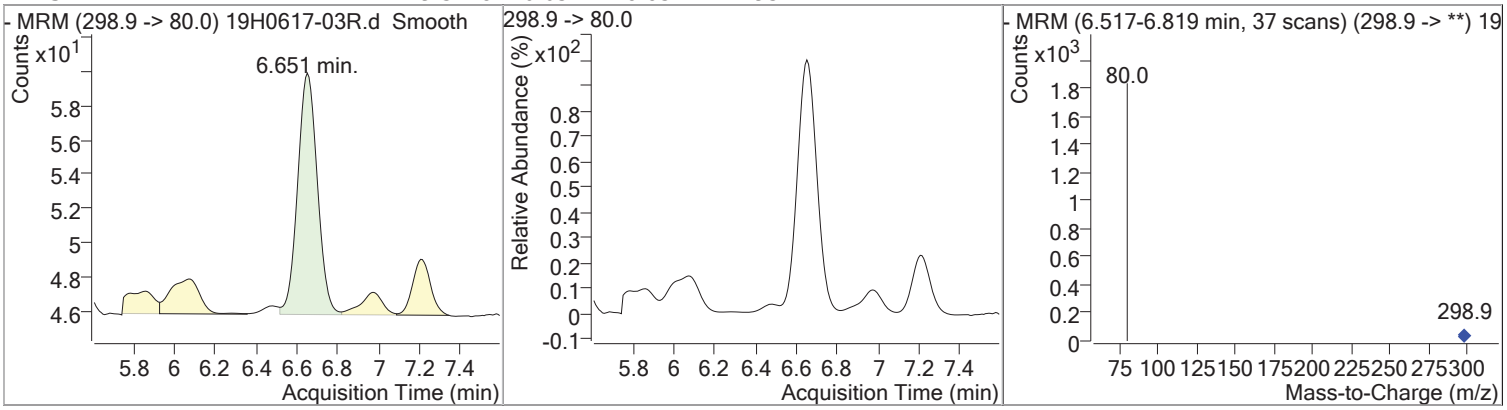
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	2588.5566	2.22	0.01	725				



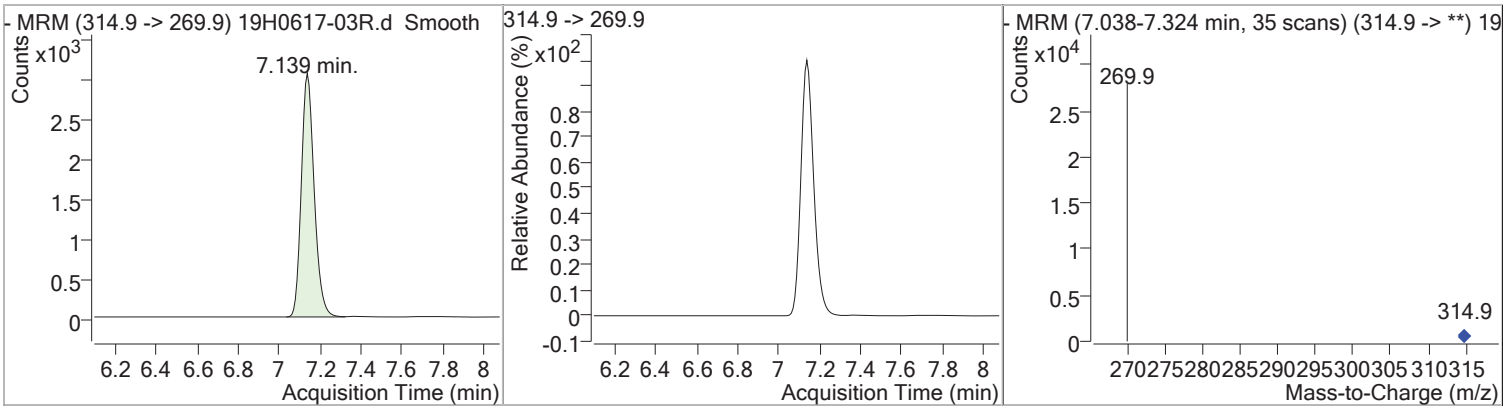
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	14753.7124	6.28	0.03	8384				



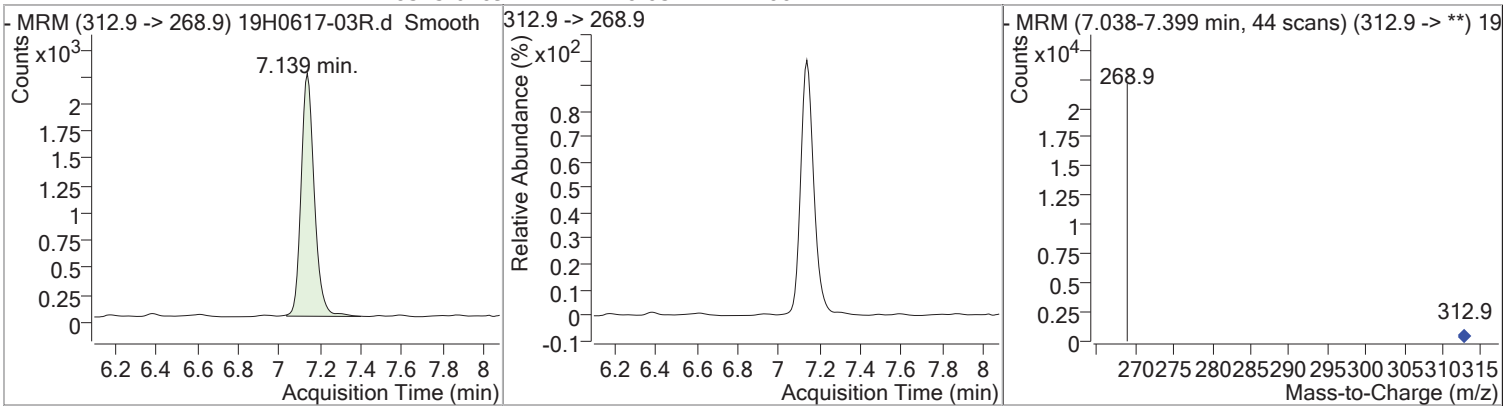
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	219.3248	6.65	0.05	95				



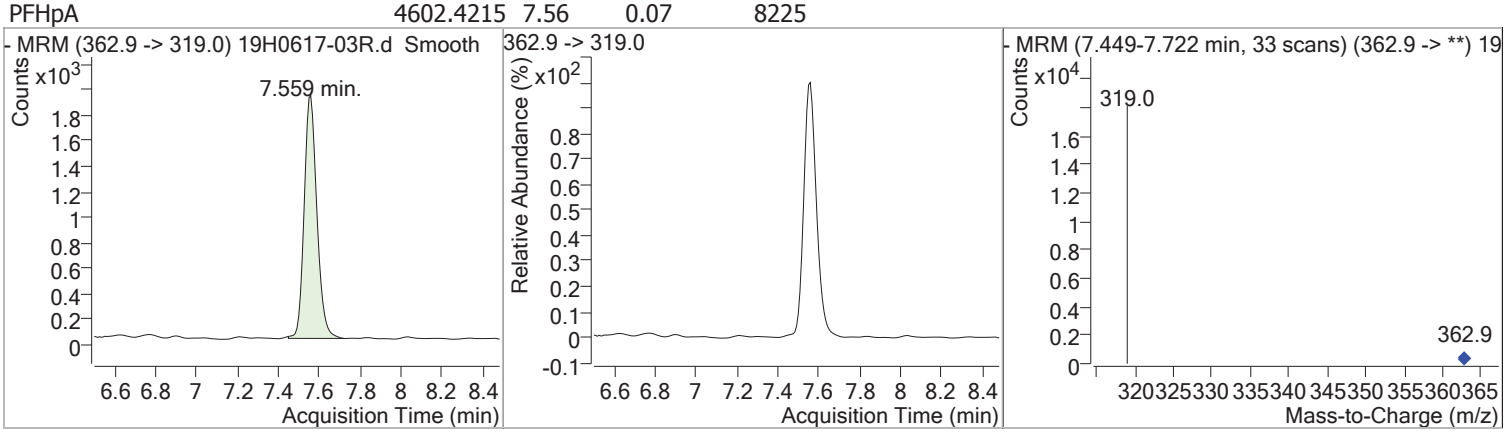
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	10780.1052	7.14	0.05	13295				



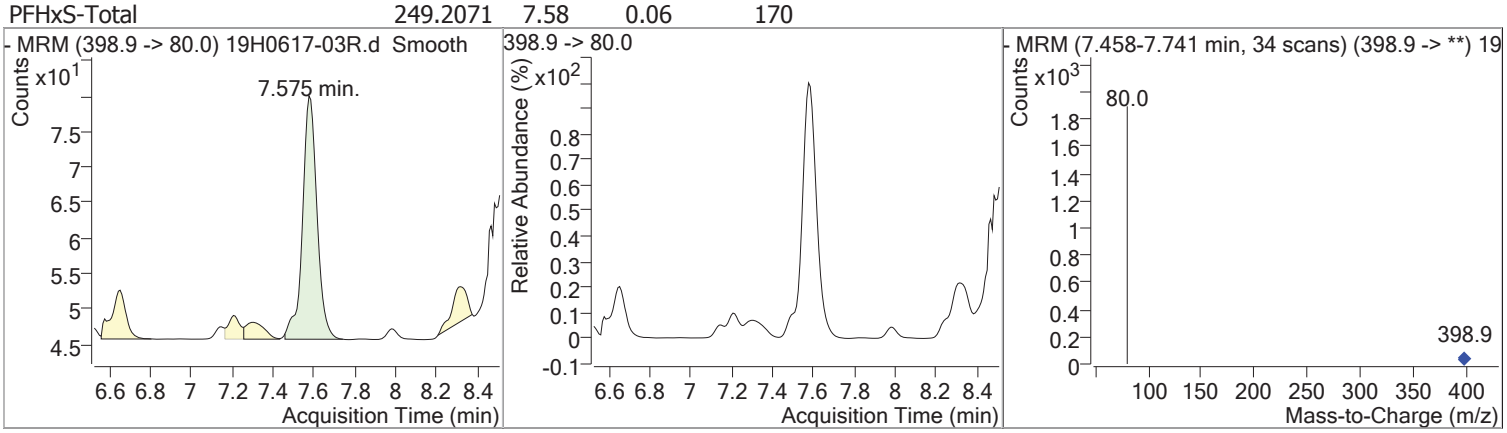
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	8345.6709	7.14	0.05	10011				



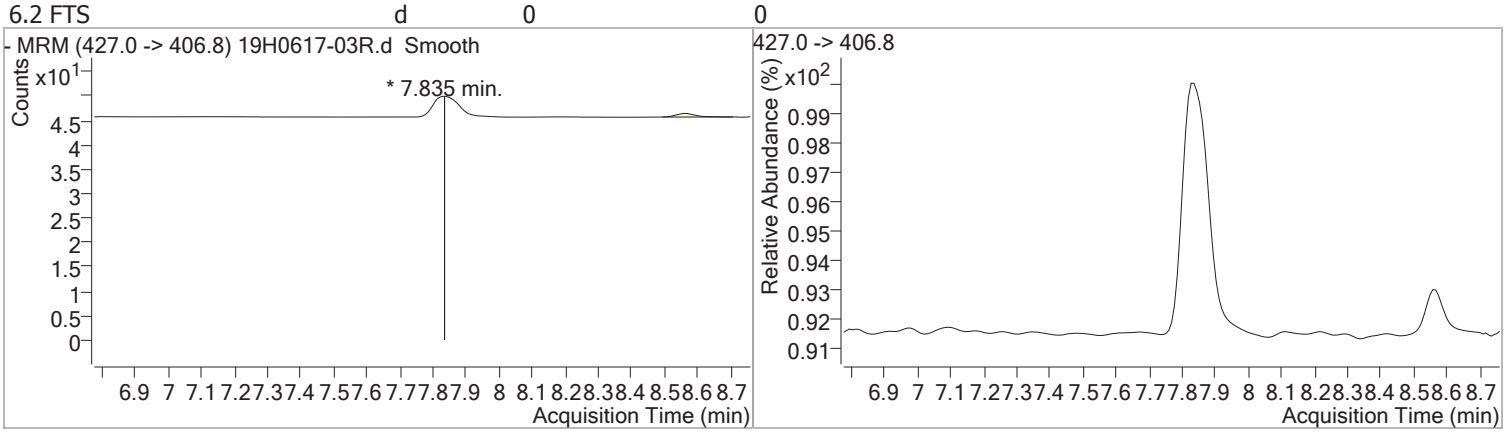
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	4602.4215	7.56	0.07	8225				



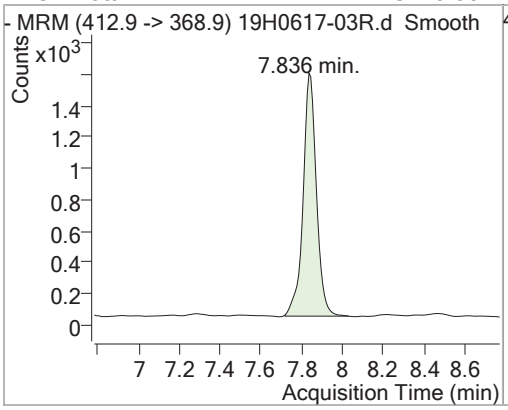
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	249.2071	7.58	0.06	170				

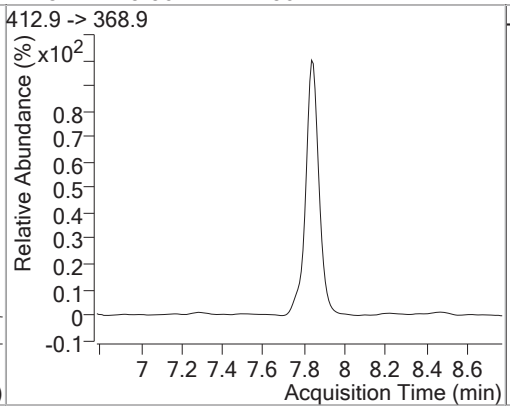


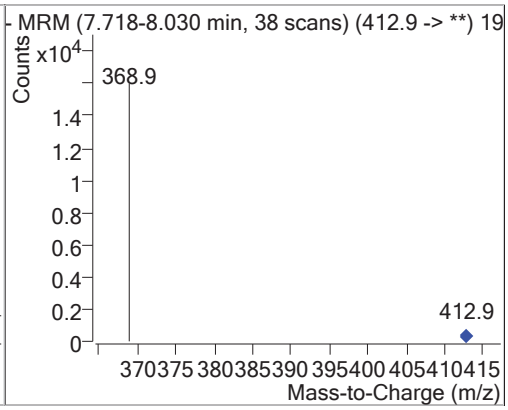
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	d	0		0				



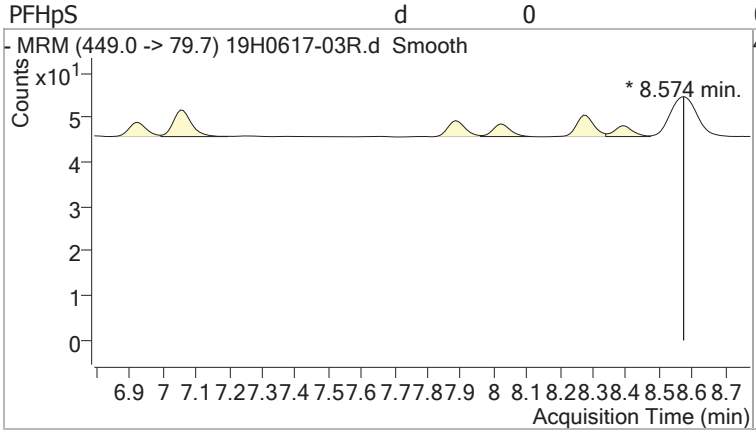
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	3110.8027	7.84	0.06	7062				

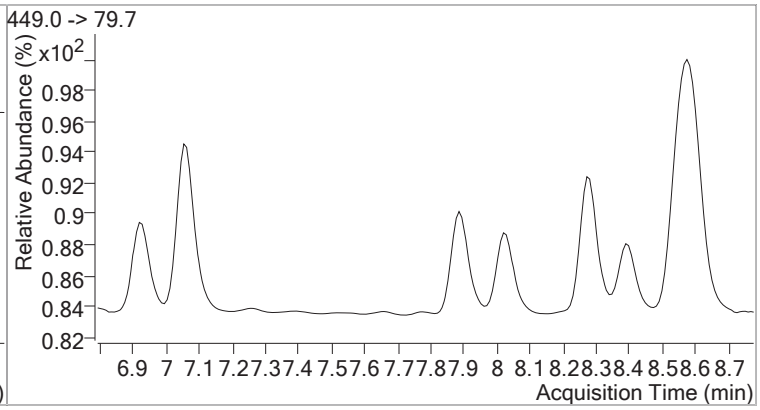




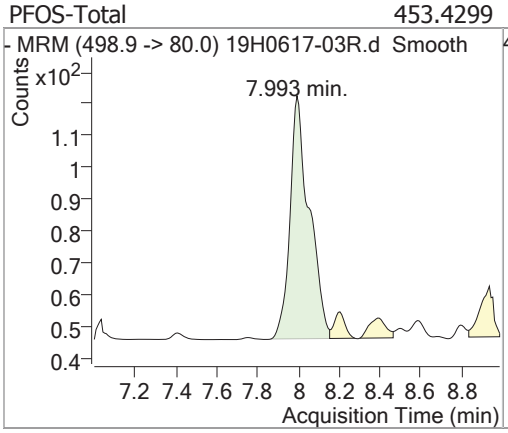


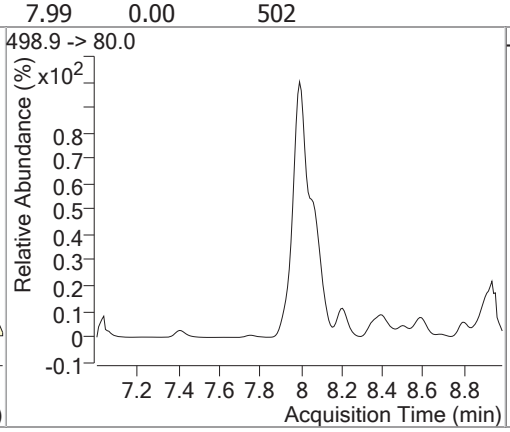
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	d	0		0				

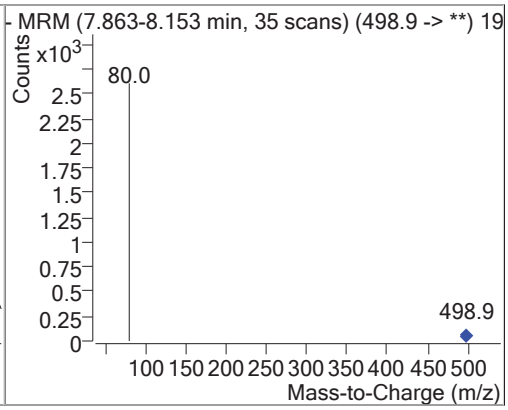




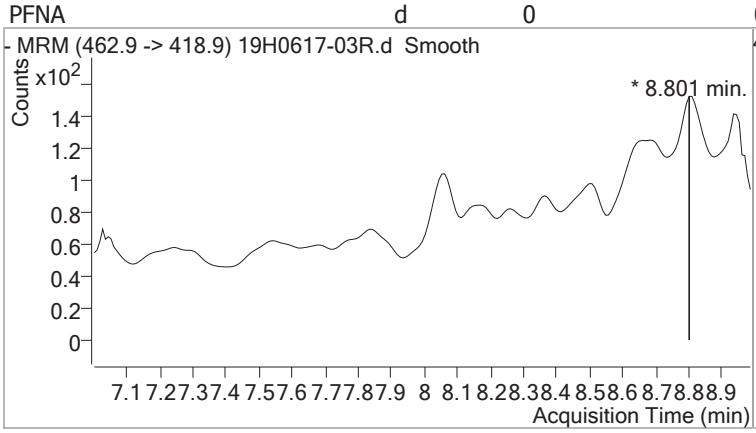
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	453.4299	7.99	0.00	502				

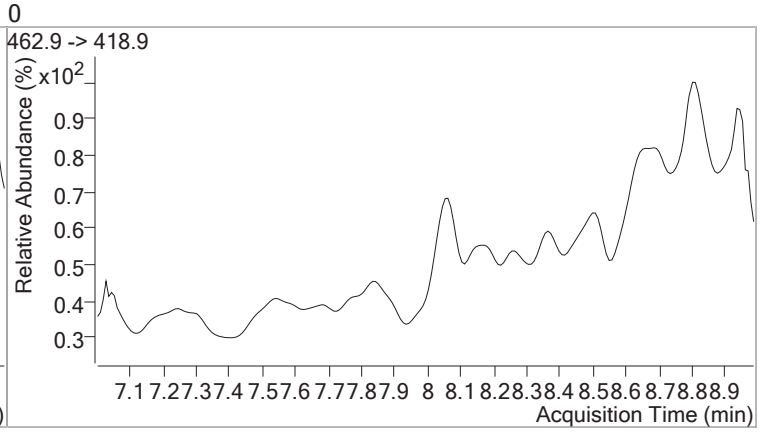




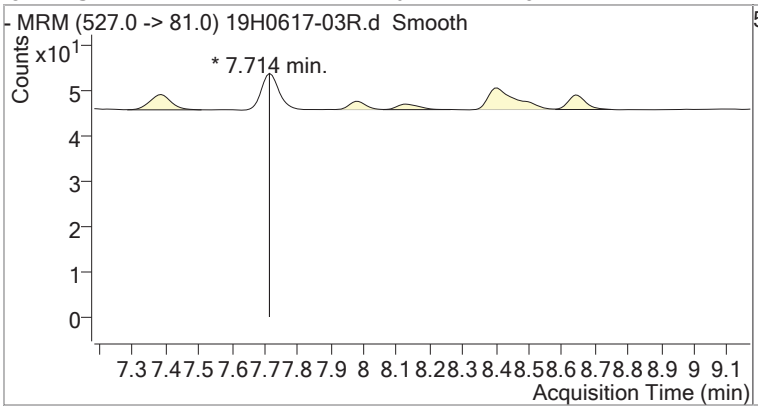


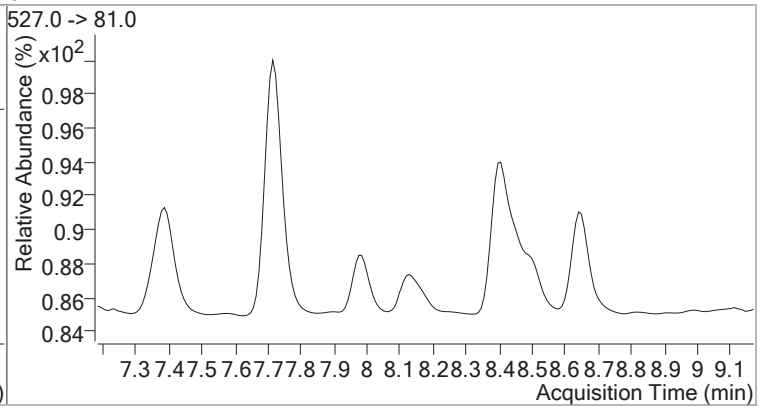
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	d	0		0				



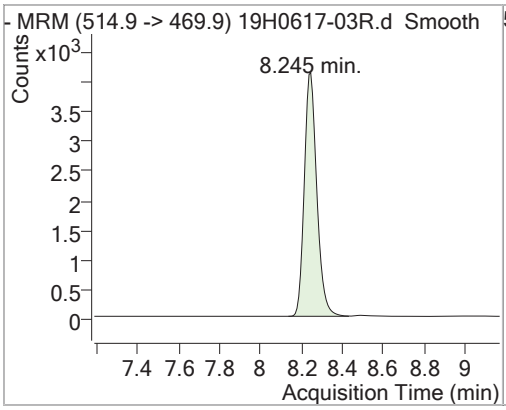


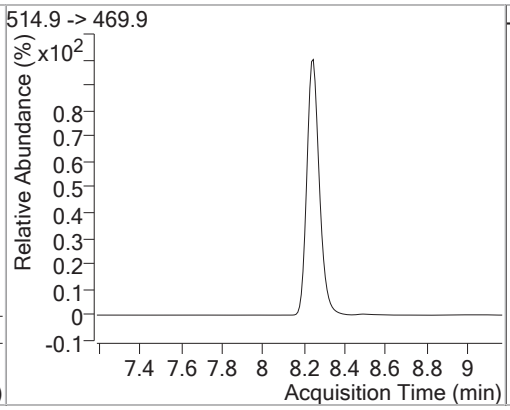
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	d	0		0				

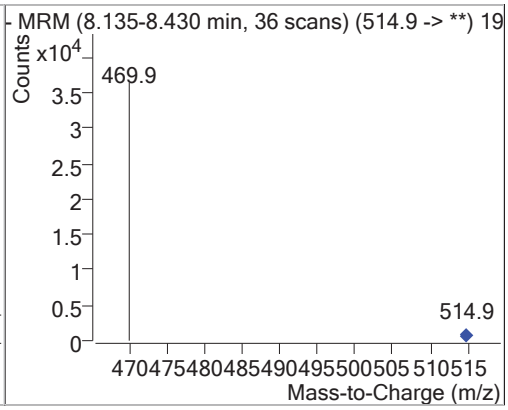




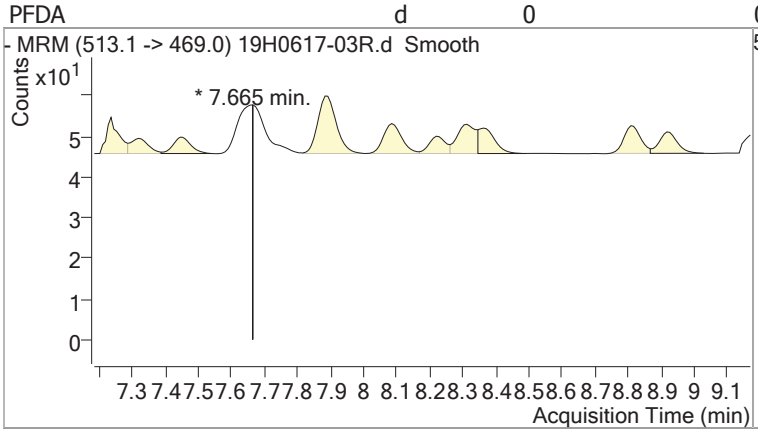
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	9743.5059	8.24	0.07	17540				

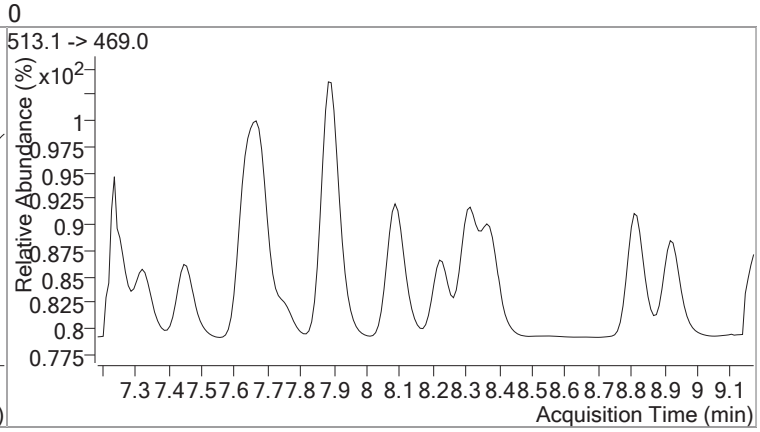




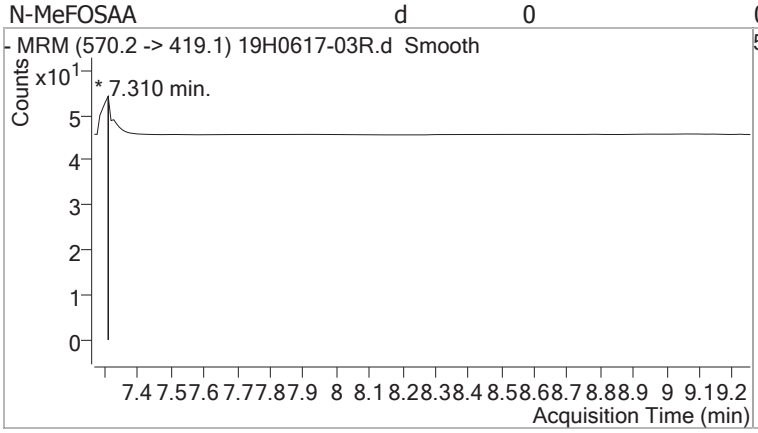


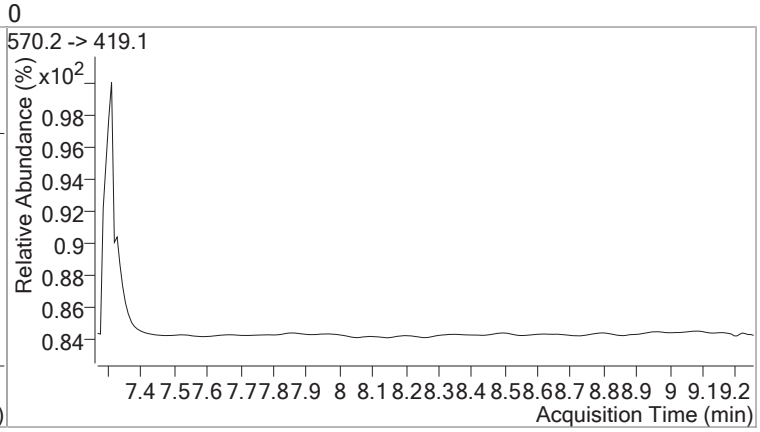
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	d	0		0				



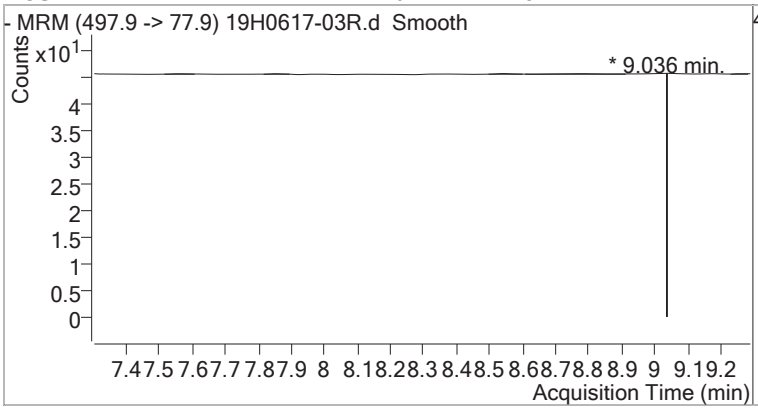


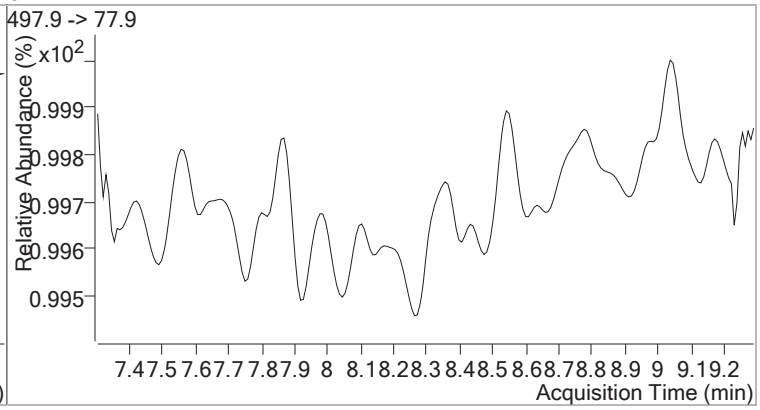
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	d	0		0				



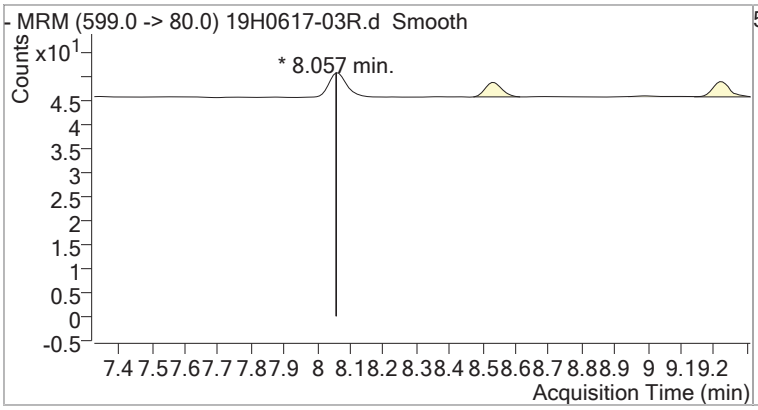


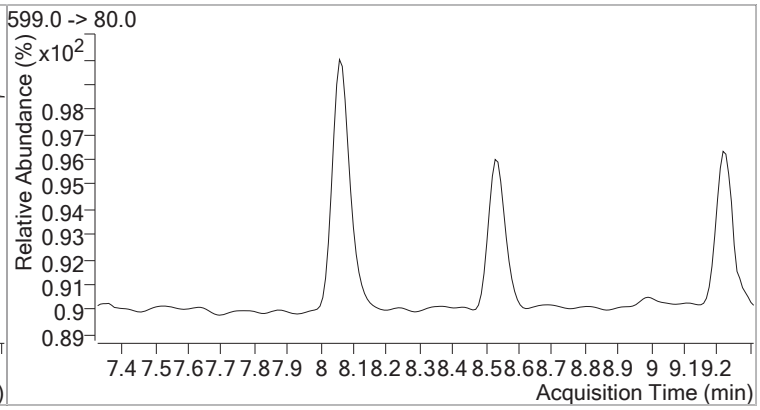
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	d	0		0				



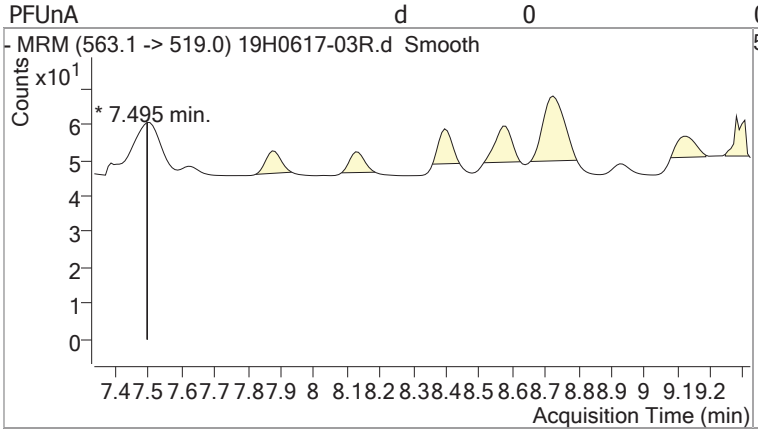


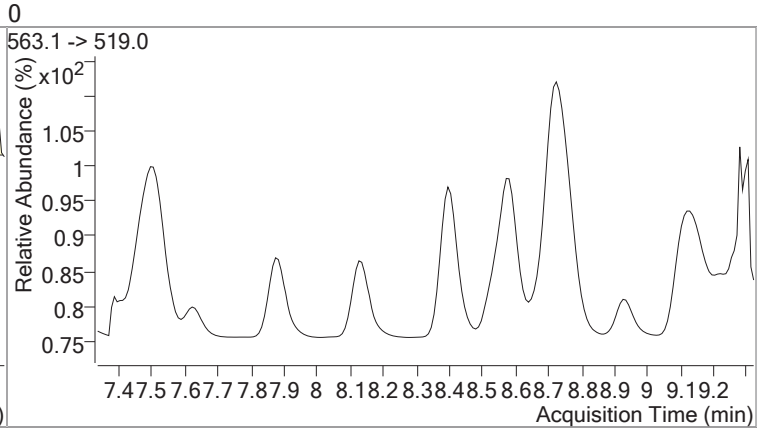
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	d	0		0				



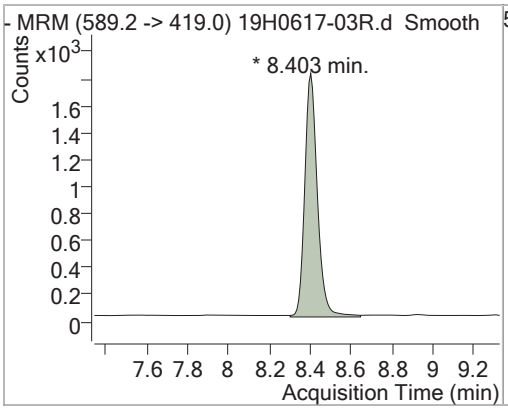


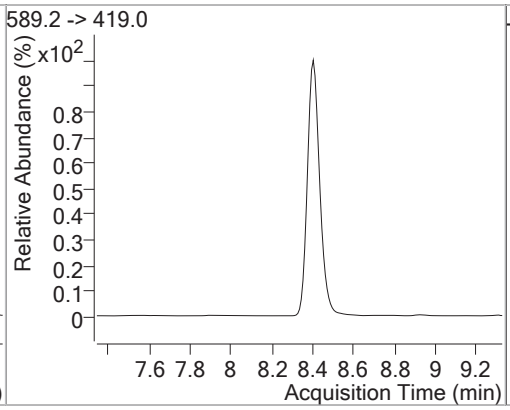
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	d	0		0				

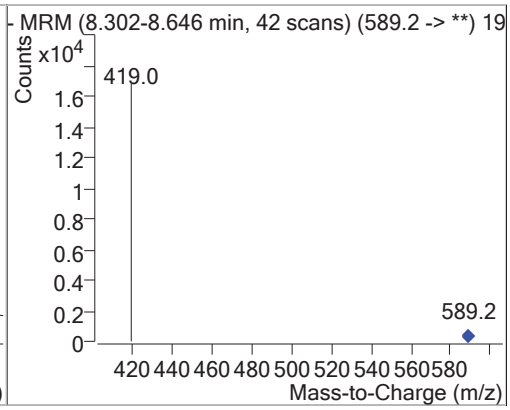




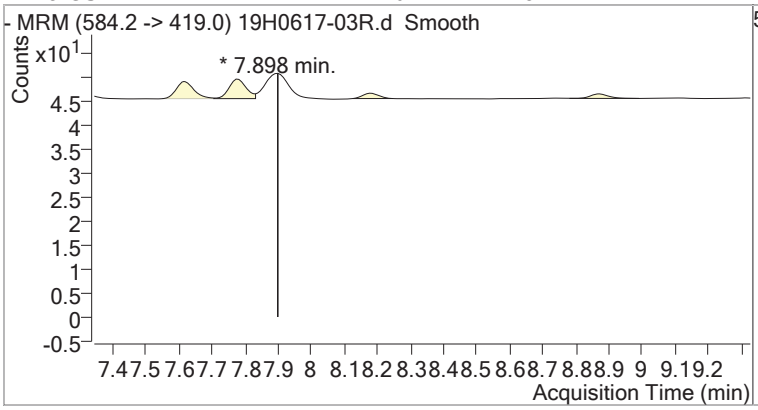
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	28444.6621	8.40	0.07	7795 (m)				

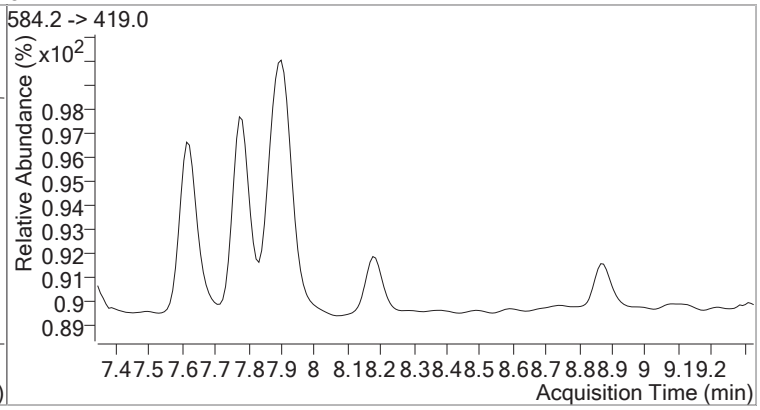




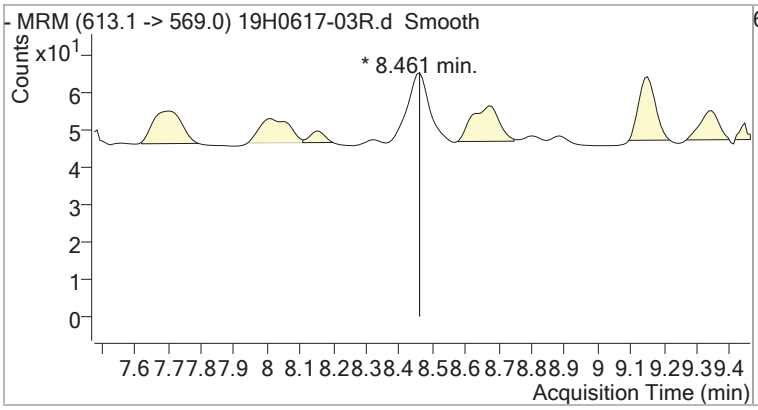


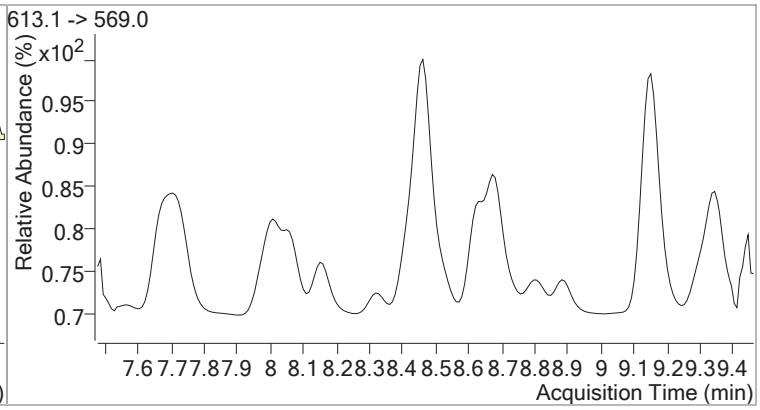
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	d	0		0				



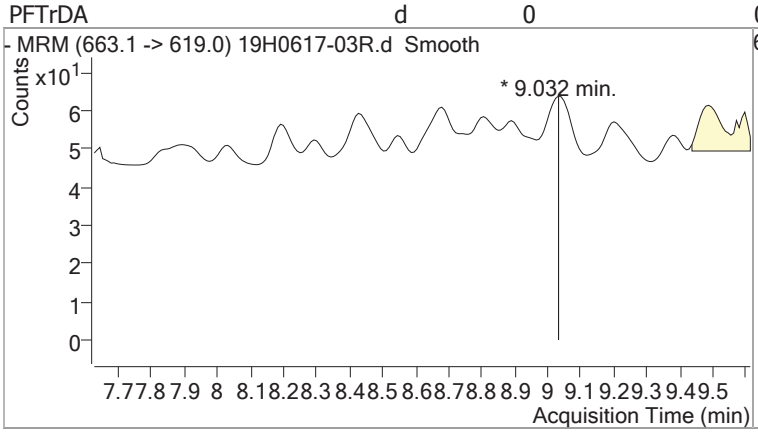


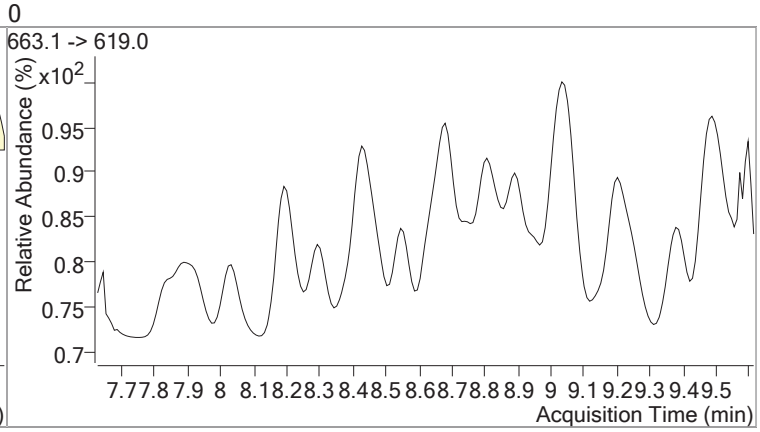
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	d	0		0				



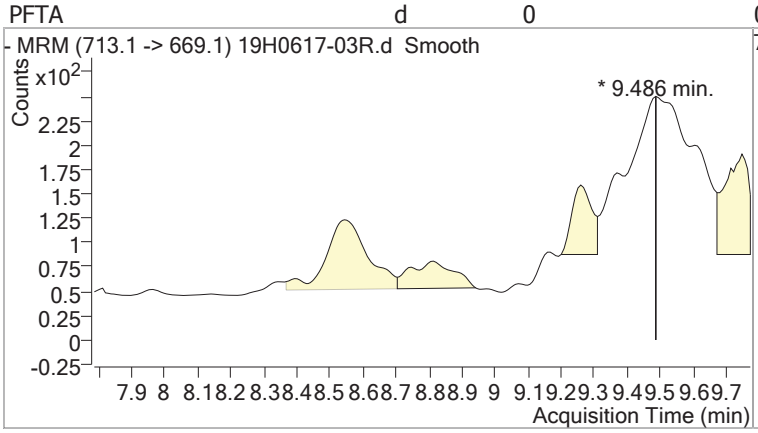


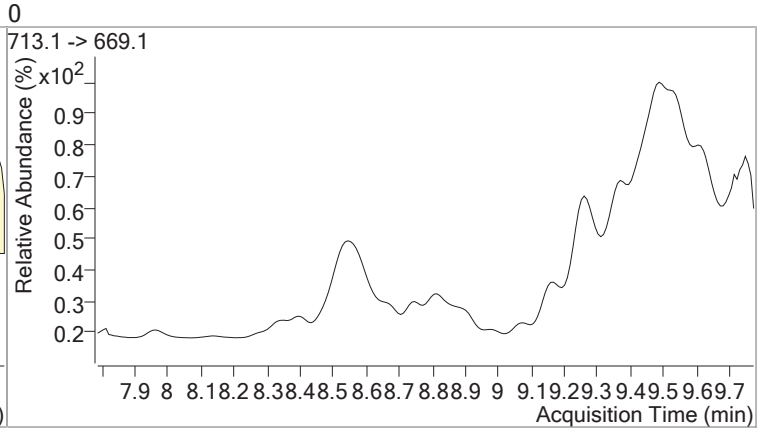
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	d	0		0				





Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	d	0		0				





1 - FORM I
ANALYSIS DATA SHEET

P-5S

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0617-04	File ID:	19H0617-04.d
Sampled:	08/12/19 13:10	Prepared:	08/19/19 00:00	Analyzed:	08/21/19 14:13
Solids:		Preparation:	SOP 434-PFAAS	Dilution:	1
Initial/Final:	250 mL / 1 mL				
Batch:	B238243	Sequence:	S039480	Calibration:	1900263
Instrument:	HPLC1				

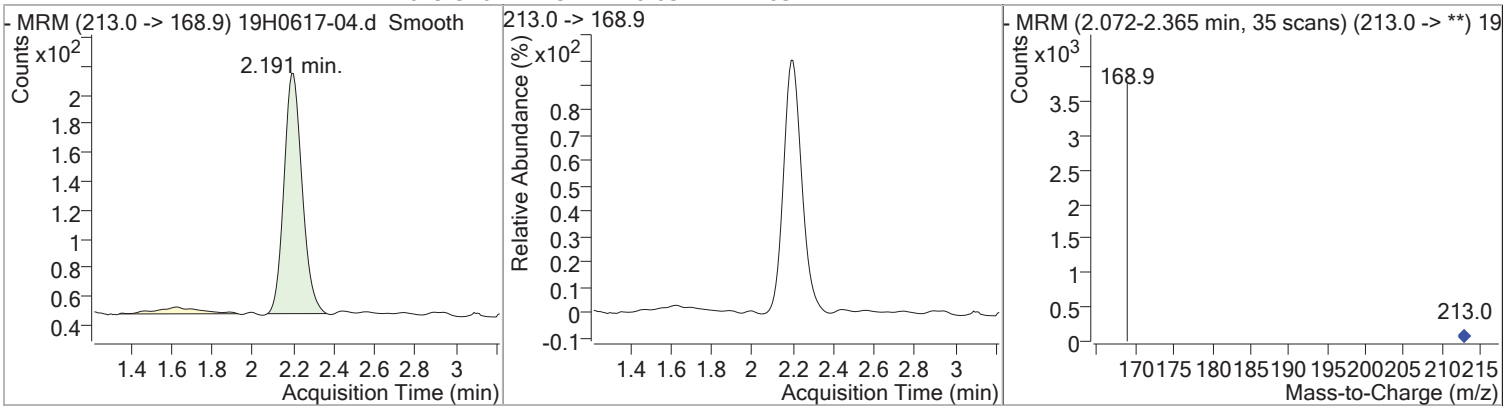
CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-73-5	Perfluorobutanesulfonic acid (PFBS)		2.0	2.0	
307-24-4	Perfluorohexanoic acid (PFHxA)	3.5	2.0	2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)		2.0	2.0	
375-22-4	Perfluorobutanoic acid (PFBA)	16	2.0	2.0	
335-77-3	Perfluorodecanesulfonic acid (PFDS)		2.0	2.0	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)		2.0	2.0	
75491-6	Perfluorooctanesulfonamide (FOSA)		2.0	2.0	
2706-90-3	Perfluoropentanoic acid (PFPeA)	4.6	2.0	2.0	
	6:2 Fluorotelomersulfonate (6:2 FTS A)		2.0	2.0	
	8:2 Fluorotelomersulfonate (8:2 FTS A)		2.0	2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)		2.0	2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	4.9	2.0	2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)		2.0	2.0	
375-95-1	Perfluorononanoic acid (PFNA)		2.0	2.0	
335-76-2	Perfluorodecanoic acid (PFDA)		2.0	2.0	
	N-MeFOSAA		2.0	2.0	
2058-94-8	Perfluoroundecanoic acid (PFUnA)		2.0	2.0	
	N-EtFOSAA		2.0	2.0	
307-55-1	Perfluorododecanoic acid (PFDoA)		2.0	2.0	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)		2.0	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)		2.0	2.0	

Data File	19H0617-04.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 2:13:53 PM
Sample Name	19H0617-04	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	B238243.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

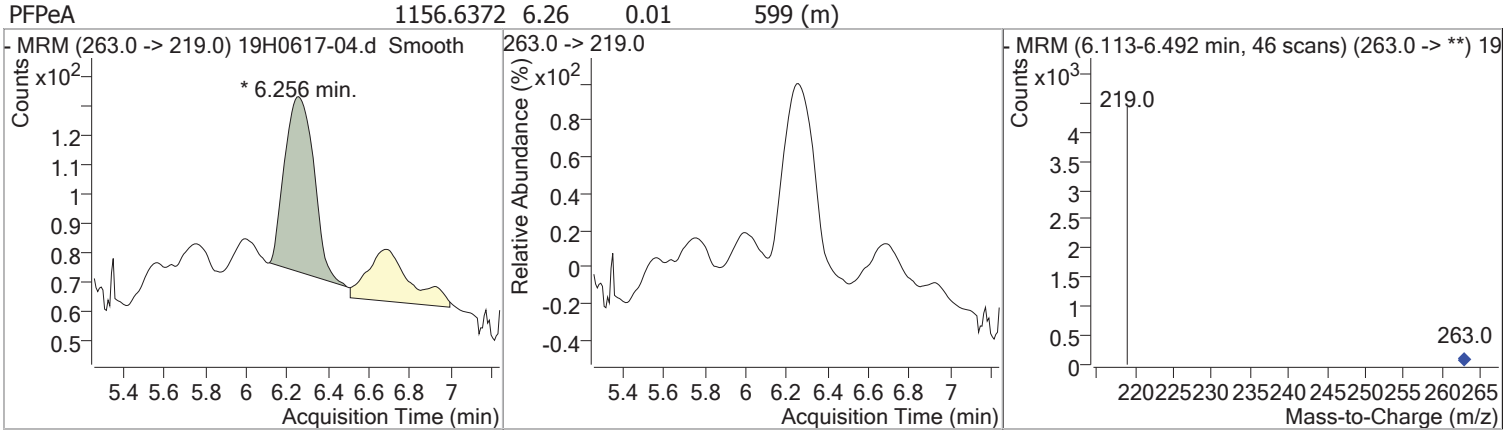
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.827	416.9 -> 371.9	15761	10000.0000	pg/ml		0.050
M PFOS C13	8.052	502.9 -> 80.0	22370	28700.0000	pg/ml		0.059
M d3-N-MeFOSAA	8.319	573.2 -> 419.0	11593	40000.0000	pg/ml	m	0.059
System Monitoring Compounds							
S PFHxA C13	7.122	314.9 -> 269.9	10248	9116.3205	pg/ml		0.034
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 91.16%			
S PFDA C13	8.236	514.9 -> 469.9	15444	9412.3044	pg/ml		0.059
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 94.12%			
S d5-N-MeFOSAA	8.394	589.2 -> 419.0	7689	28045.5821	pg/ml	m	0.059
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 70.11%			
Target Compounds							QValue
T PFBA	2.191	213.0 -> 168.9	1034	4049.3762	pg/ml		100
T PFPeA	6.256	263.0 -> 219.0	599	1156.6372	pg/ml	m	100
T PFBS	6.626	298.9 -> 80.0	116	256.4750	pg/ml		100
T PFHxA	7.122	312.9 -> 268.9	969	886.0495	pg/ml		100
T PFHpA	7.542	362.9 -> 319.0	787	483.2878	pg/ml		100
T PFHxS-Total	7.567	398.9 -> 80.0	0	0.0000	pg/ml	md	1
T 6.2 FTS	8.516	427.0 -> 406.8	0	0.0000	pg/ml	md	1
T PFOA-Total	7.827	412.9 -> 368.9	2519	1217.2986	pg/ml		100
T PFHpS	8.549	449.0 -> 79.7	0	0.0000	pg/ml	md	1
T PFOS-Total	8.044	498.9 -> 80.0	530	457.9868	pg/ml		100
T PFNA	8.070	462.9 -> 418.9	0	0.0000	pg/ml	md	1
T 8.2 FTS	7.521	527.0 -> 81.0	0	0.0000	pg/ml	md	1
T PFDA	7.606	513.1 -> 469.0	0	0.0000	pg/ml	md	1
T N-MeFOSAA	7.689	570.2 -> 419.1	0	0.0000	pg/ml	md	1
T FOSA	7.850	497.9 -> 77.9	0	0.0000	pg/ml	md	1
T PFDS	8.873	599.0 -> 80.0	0	0.0000	pg/ml	md	1
T PFUnA	8.732	563.1 -> 519.0	0	0.0000	pg/ml	md	1
T N-EtFOSAA	8.874	584.2 -> 419.0	0	0.0000	pg/ml	md	1
T PFDoA	9.369	613.1 -> 569.0	0	0.0000	pg/ml	md	1
T PFTrDA	8.814	663.1 -> 619.0	0	0.0000	pg/ml	md	1
T PFTA	9.587	713.1 -> 669.1	0	0.0000	pg/ml	md	1

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

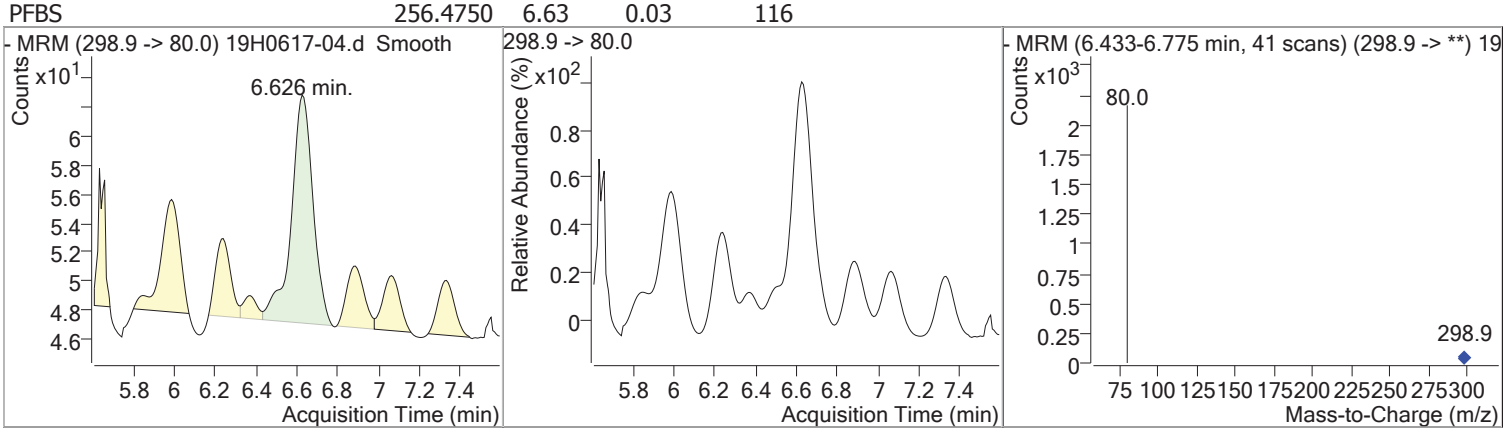
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	4049.3762	2.19	-0.03	1034				



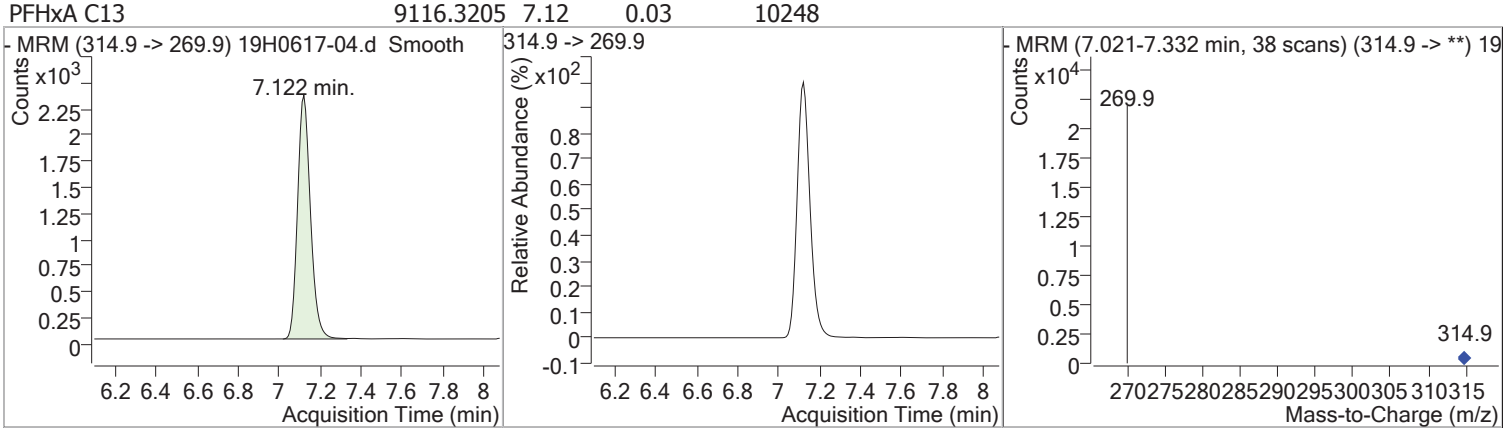
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	1156.6372	6.26	0.01	599 (m)				



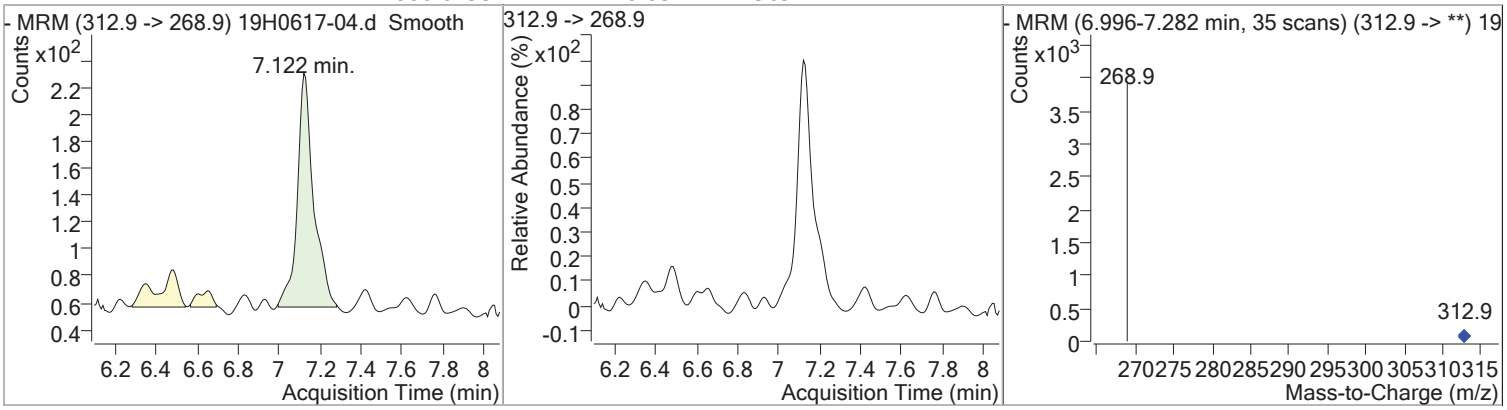
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	256.4750	6.63	0.03	116				



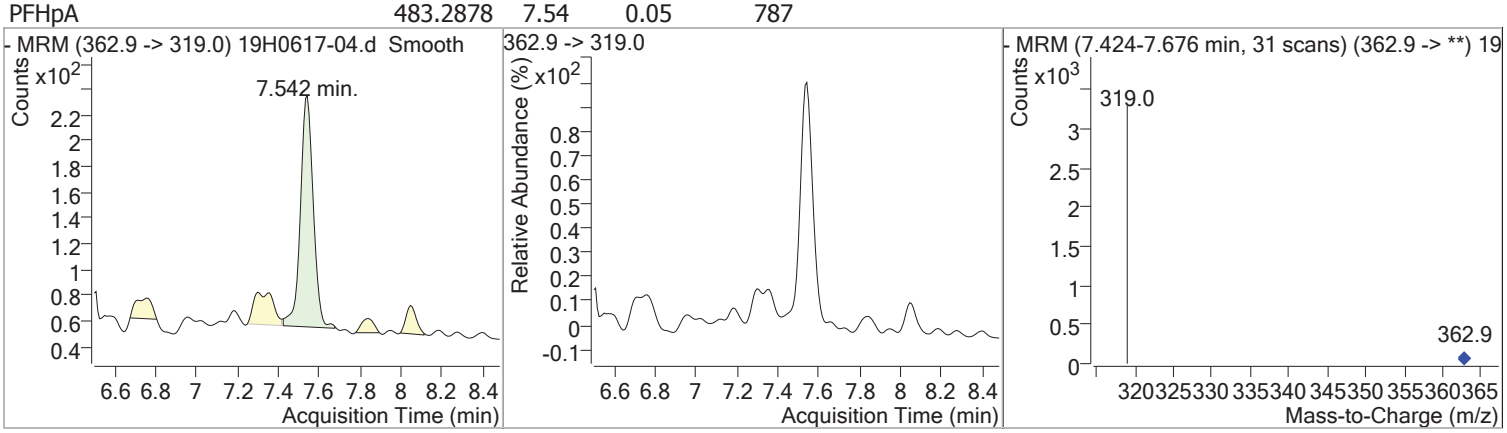
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	9116.3205	7.12	0.03	10248				



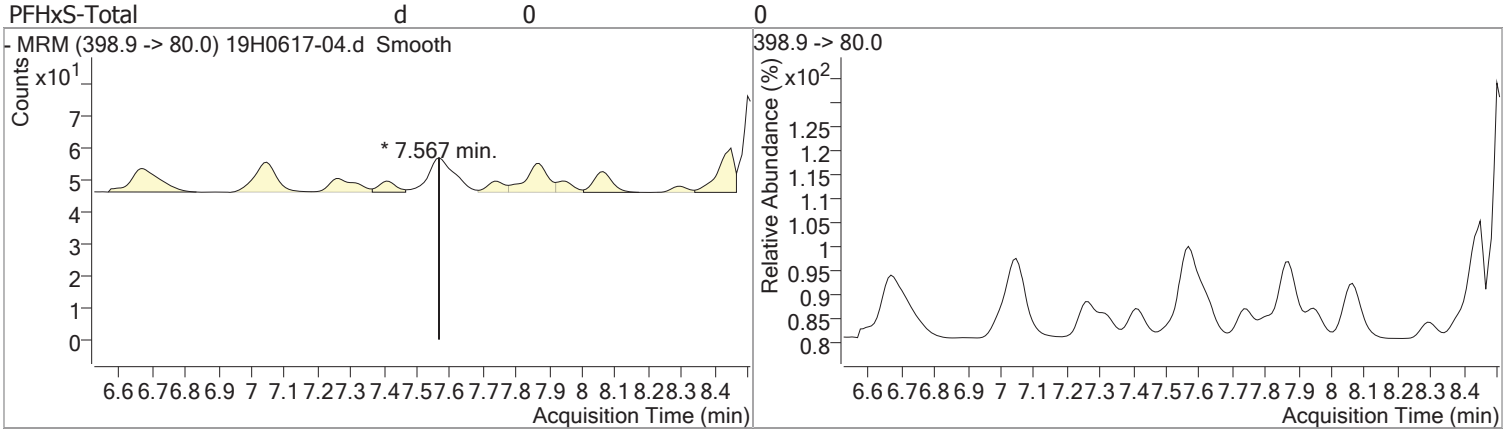
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	886.0495	7.12	0.03	969				



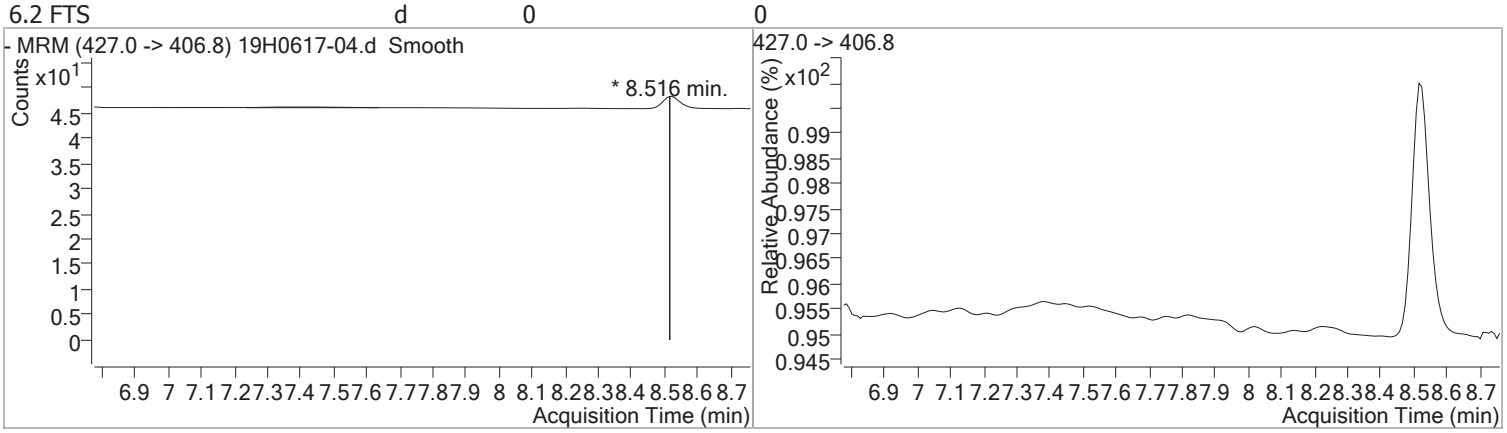
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	483.2878	7.54	0.05	787				



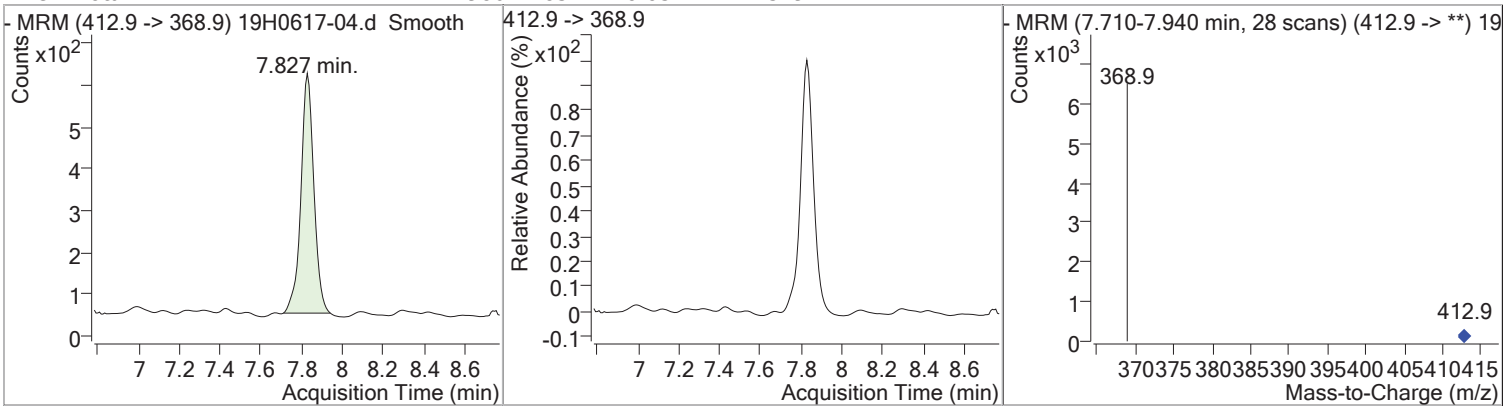
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	d	0		0				



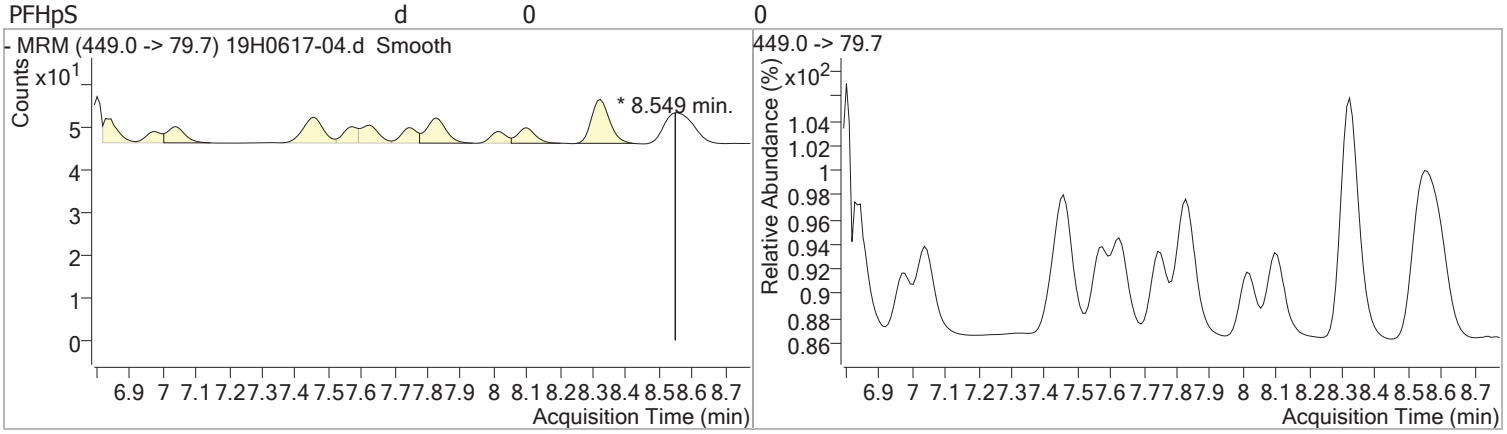
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	d	0		0				



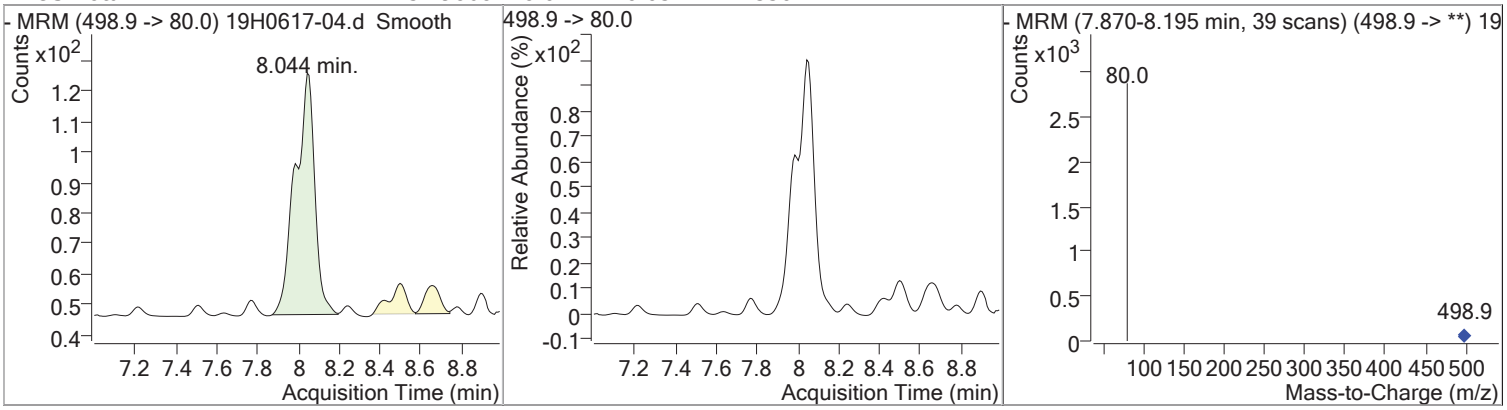
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	1217.2986	7.83	0.05	2519				



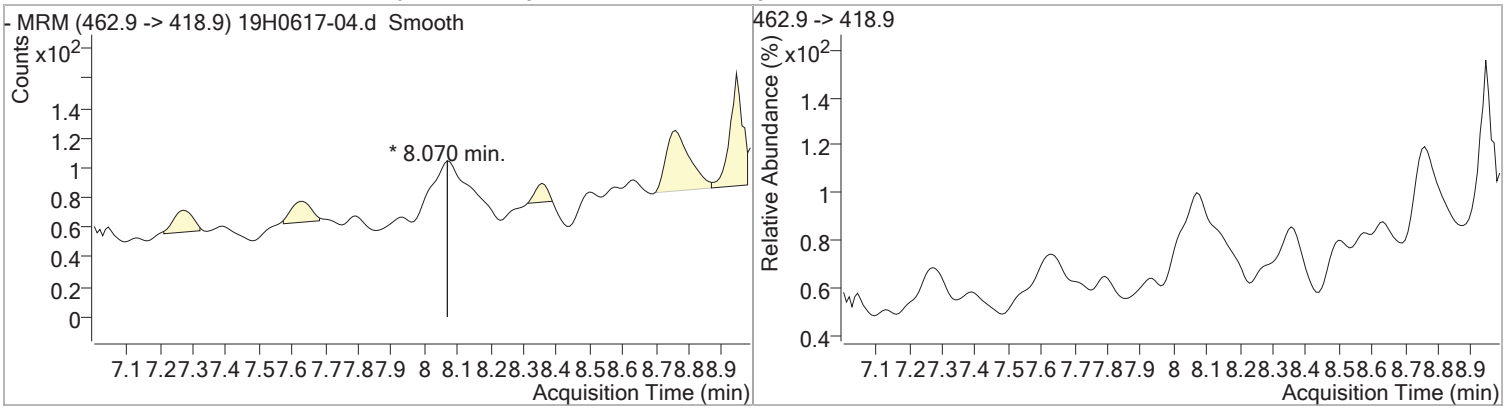
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	d	0		0				



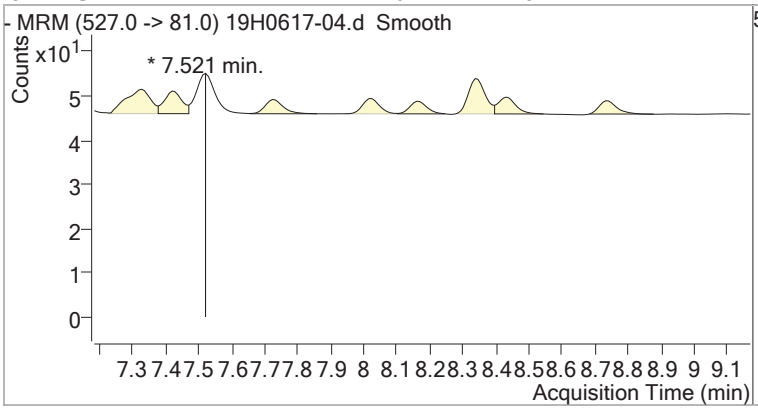
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	457.9868	8.04	0.05	530				

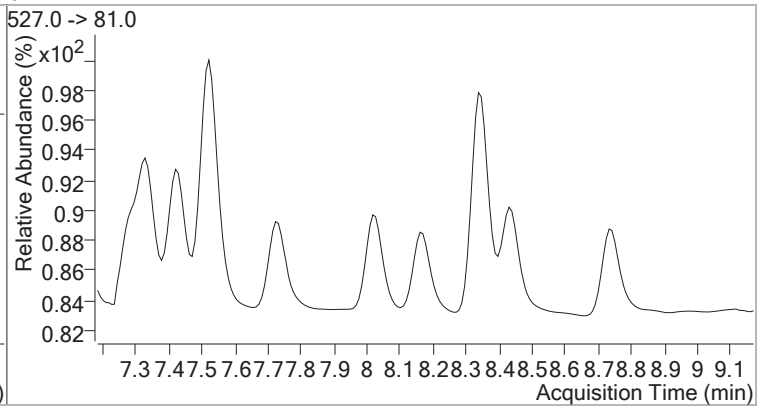


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	d	0		0				

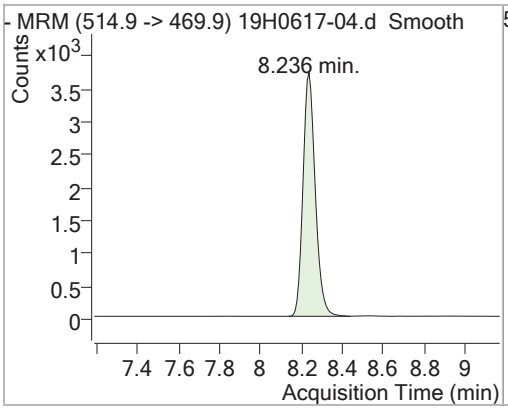


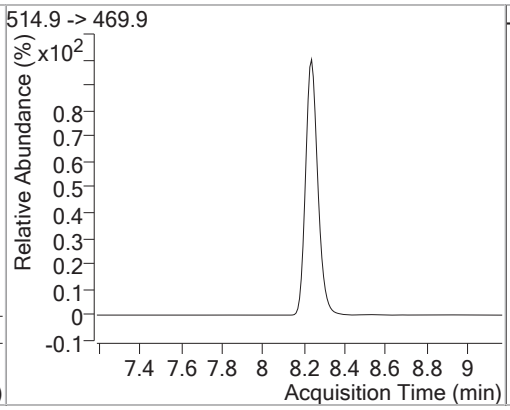
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	d	0		0				

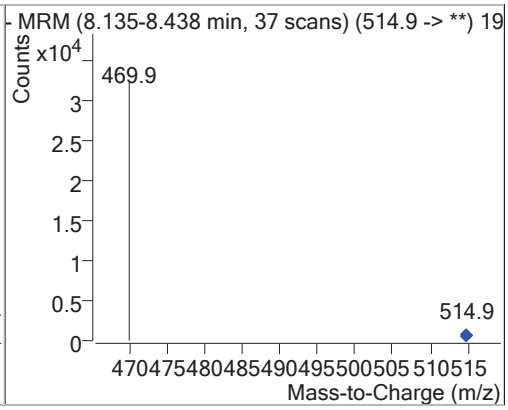




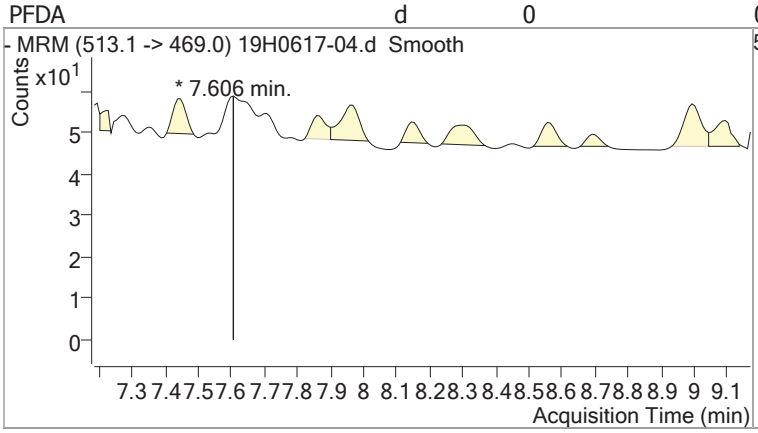
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	9412.3044	8.24	0.06	15444				

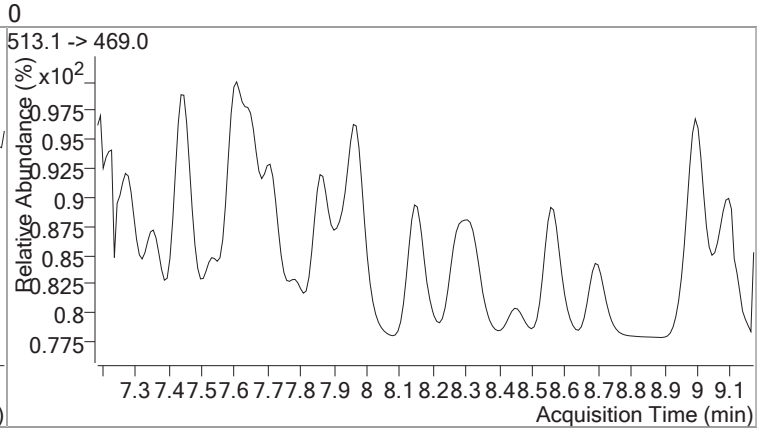




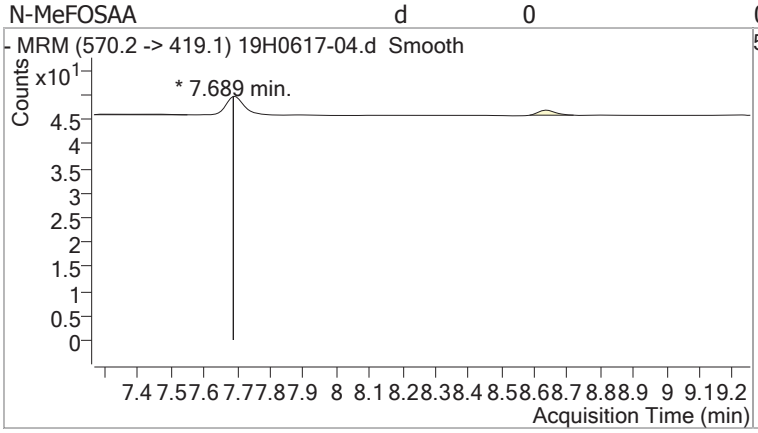


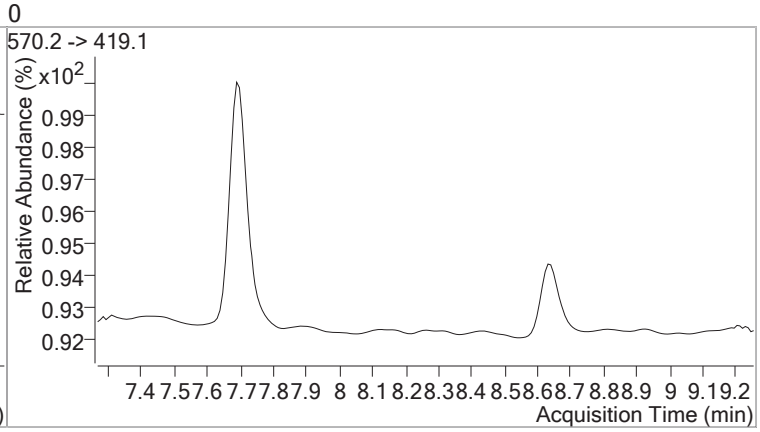
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	d	0		0				



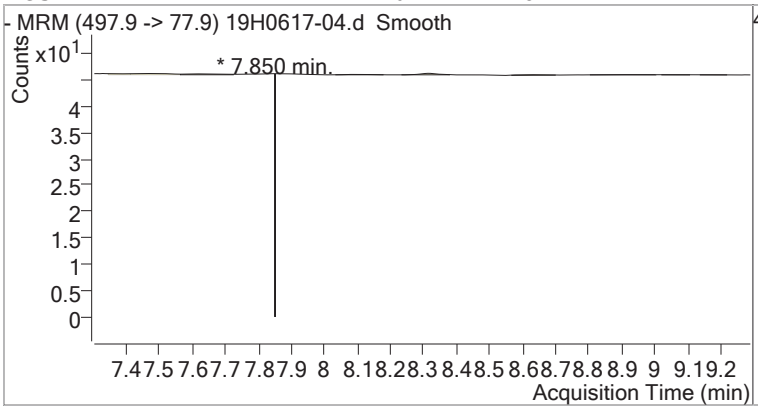


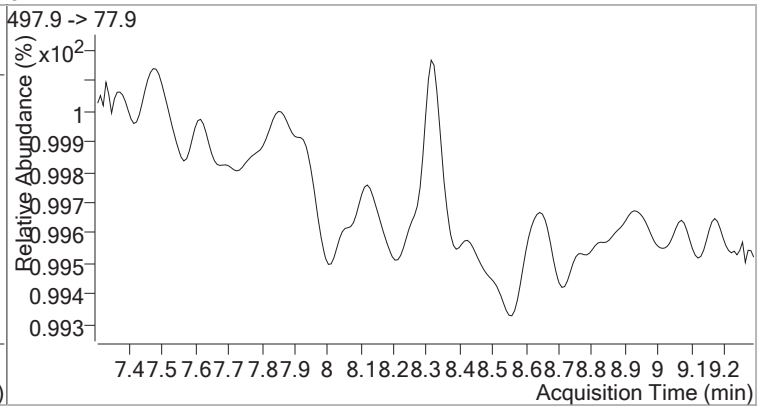
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	d	0		0				



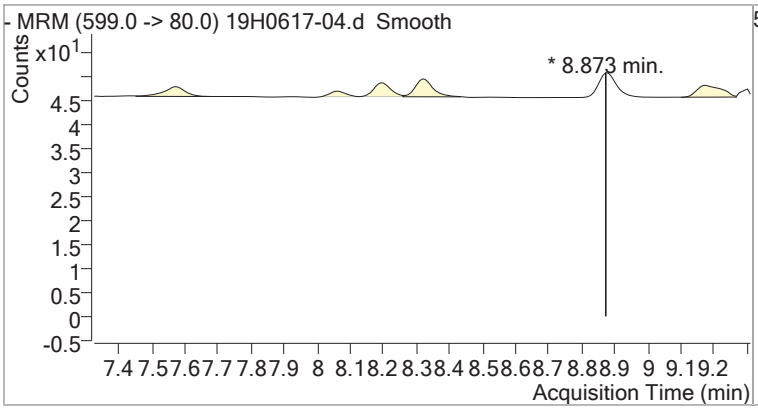


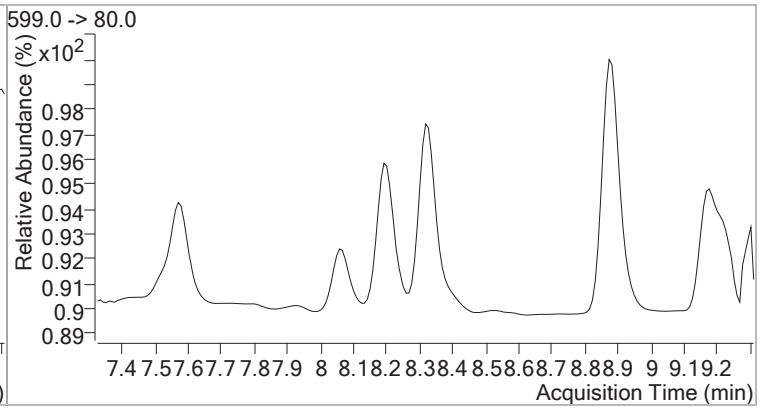
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	d	0		0				



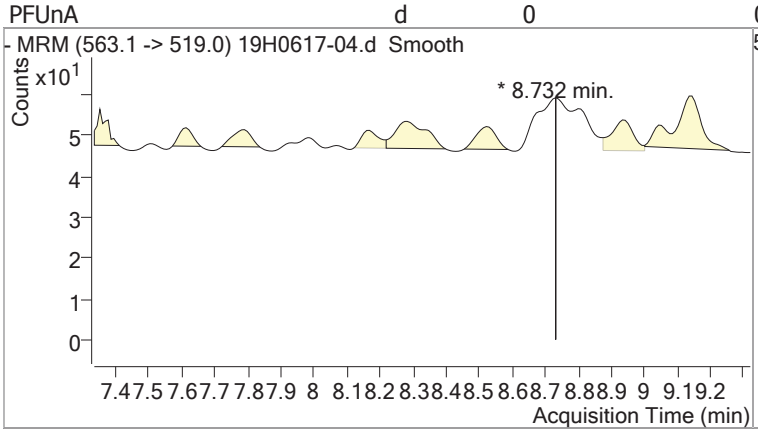


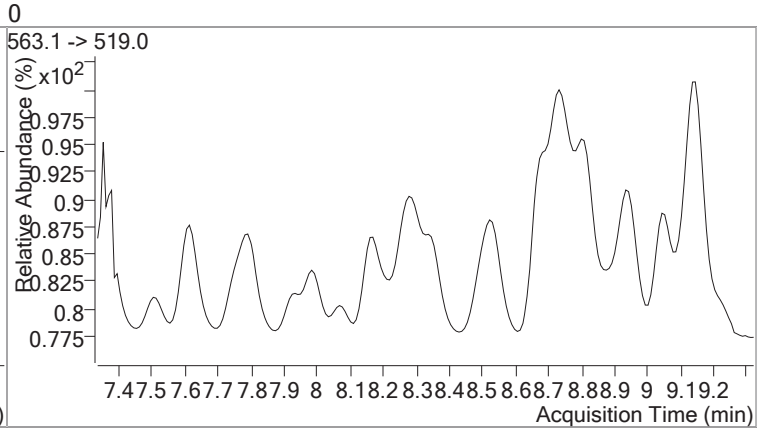
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	d	0		0				



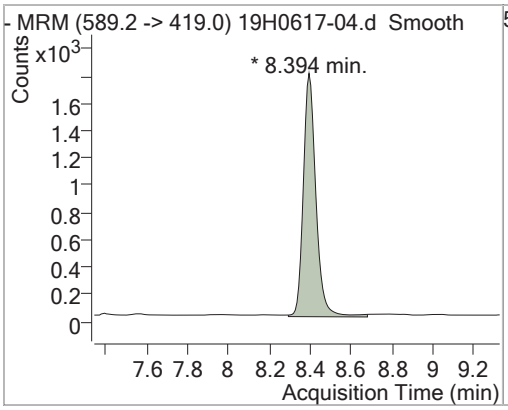


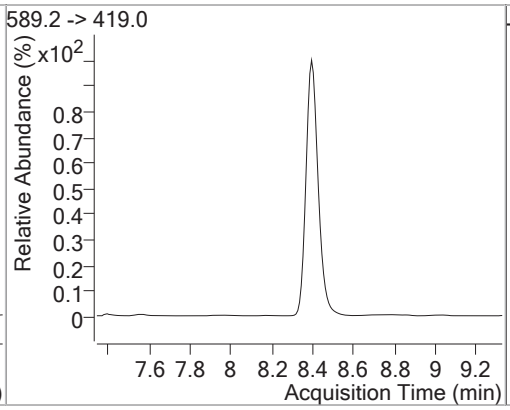
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	d	0		0				

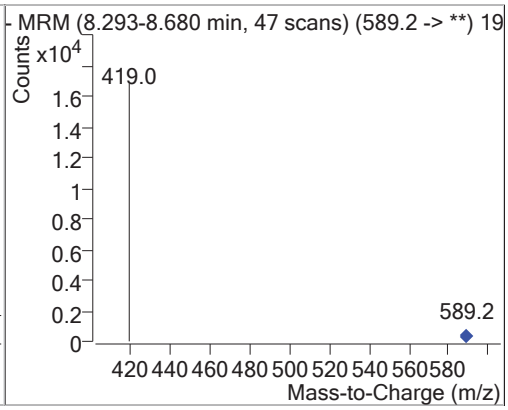




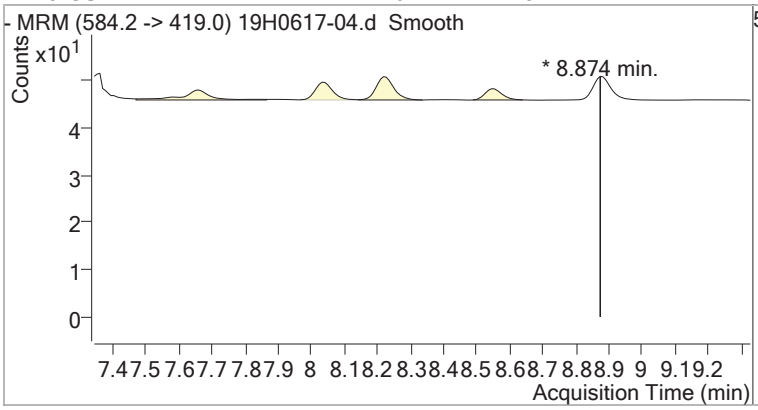
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	28045.5821	8.39	0.06	7689 (m)				

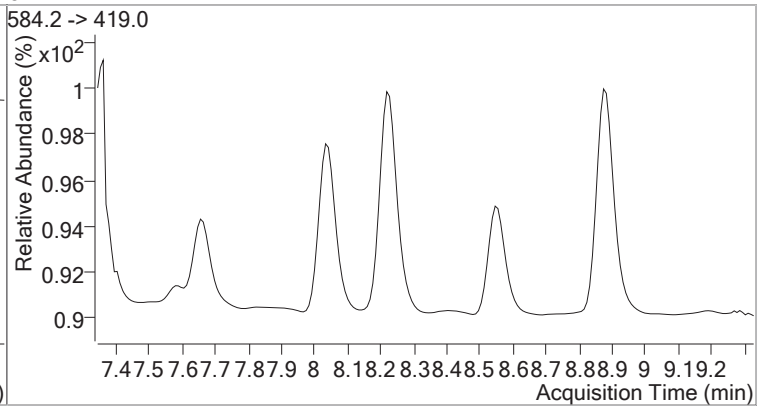




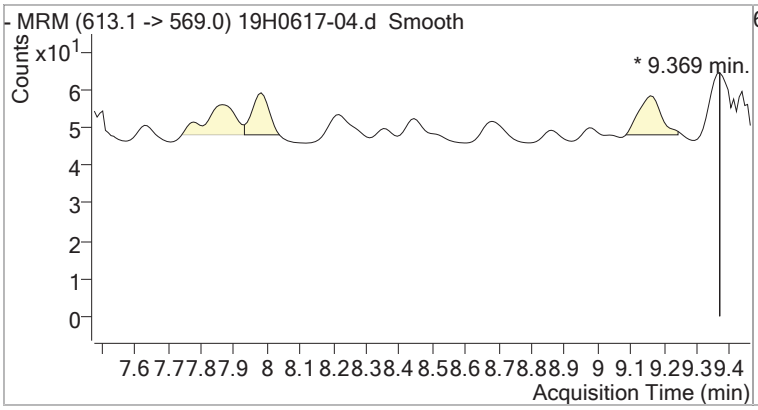


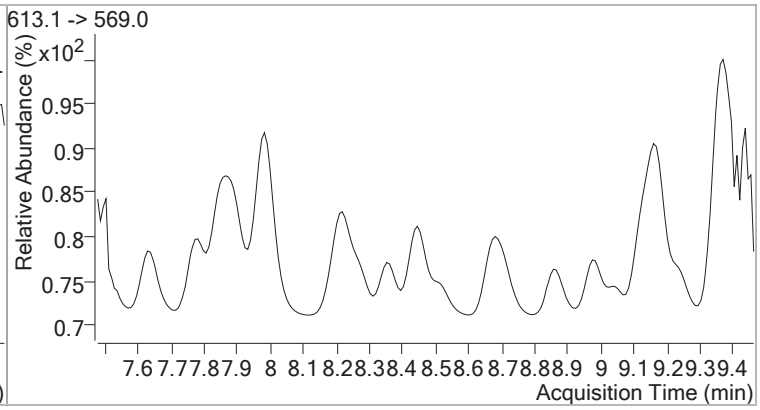
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	d	0		0				



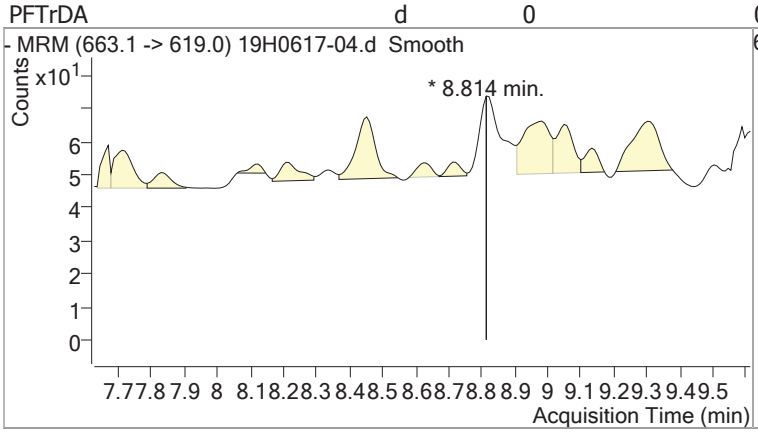


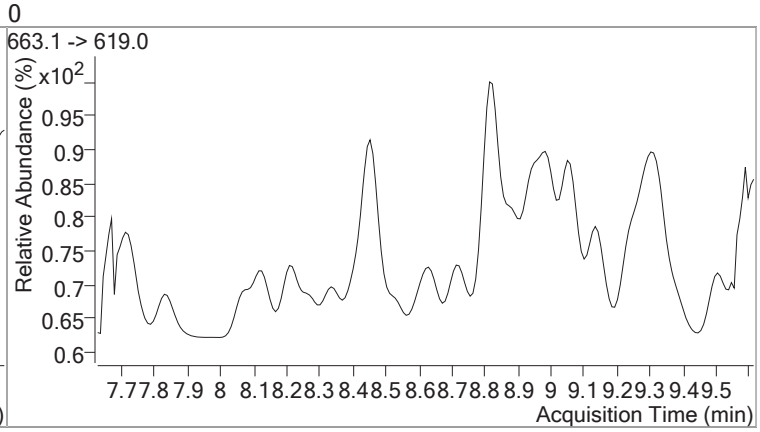
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	d	0		0				



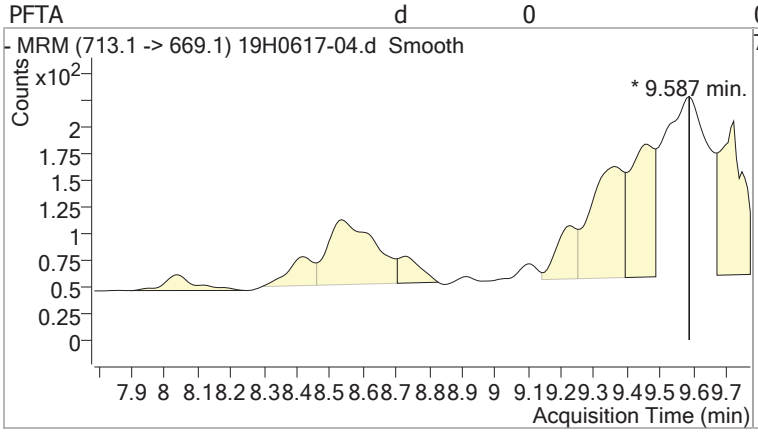


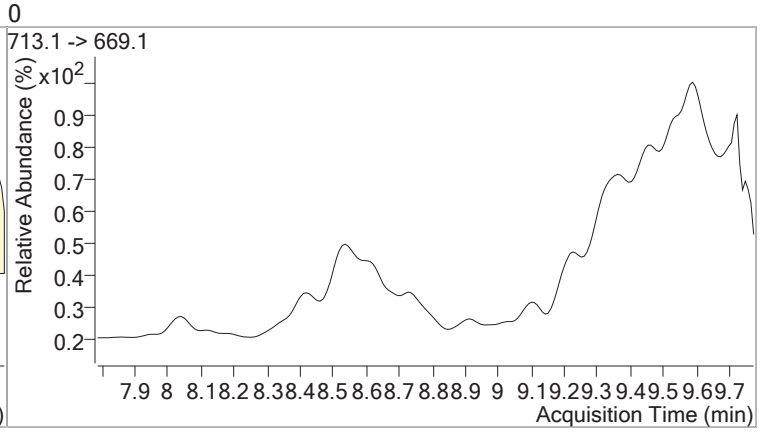
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	d	0		0				





Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	d	0		0				





QC DATA

2 - FORM II

SYSTEM MONITORING COMPOUND SUMMARY

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	SDG:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Instrument:	HPLC1

	13C-PFDA (70% - 130%)	13C-PFHxA (70% - 130%)	d5-NEtFOSA (70% - 130%)
19H0617-02	89.9	103	70.4
19H0617-03	97.4	108	71.1
19H0617-04	94.1	91.2	70.1
B238243-BLK1	87.1	106	70.4
B238243-BS1	138*	121	112

3 - FORM III

LCS / LCS DUPLICATE RECOVERY

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Preparation:	SOP 434-PFAAS
Batch:	B238243	Laboratory ID:	B238243-BS1
Column:		Initial/Final:	250 mL / 1 mL

ANALYTE	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC.	QC LIMITS REC.
Perfluorobutanesulfonic acid (PFBS)	8.85	7.86	88.8	70 - 130
Perfluorohexanoic acid (PFHxA)	10.0	9.42	94.2	70 - 130
Perfluoroheptanoic acid (PFHpA)	10.0	8.87	88.7	70 - 130
Perfluorobutanoic acid (PFBA)	10.0	7.80	78.0	30 - 110
Perfluorodecanesulfonic acid (PFDS)	9.65	8.07	83.6	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	9.50	7.48	78.7	70 - 130
Perfluorooctanesulfonamide (FOSA)	10.0	6.03	60.3	30 - 110
Perfluoropentanoic acid (PFPeA)	10.0	11.2	112	70 - 130
6:2 Fluorotelomersulfonate (6:2 FTS A)	9.50	11.6	123	70 - 130
8:2 Fluorotelomersulfonate (8:2 FTS A)	9.60	10.3	108	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	9.10	6.61	72.7	70 - 130
Perfluorooctanoic acid (PFOA)	10.0	10.4	104	70 - 130
Perfluorooctanesulfonic acid (PFOS)	9.25	8.06	87.2	70 - 130
Perfluorononanoic acid (PFNA)	10.0	9.57	95.7	70 - 130
Perfluorodecanoic acid (PFDA)	10.0	10.8	108	70 - 130
N-MeFOSAA	10.0	10.5	105	70 - 130
Perfluoroundecanoic acid (PFUnA)	10.0	11.2	112	70 - 130
N-EtFOSAA	10.0	7.99	79.9	70 - 130
Perfluorododecanoic acid (PFDoA)	10.0	9.60	96.0	70 - 130
Perfluorotridecanoic acid (PFTrDA)	10.0	10.8	108	70 - 130
Perfluorotetradecanoic acid (PFTA)	10.0	10.1	101	70 - 130

4 - FORM IV
METHOD BLANK SUMMARY

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Blank ID:	B238243-BLK1 Batch: B238243	Prepared:	08/19/2019 00:00

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
P-5S	19H0617-04	19H0617-04.d	14:13
Field Blank	19H0617-02	19H0617-02R.d	19:57
P-15	19H0617-03	19H0617-03R.d	20:09
LCS	B238243-BS1	B238243-BS1.d	14:13

CALIBRATION DATA

6 - FORM VI
INITIAL CALIBRATION DATA SHEET

SOP 434-PFAAS

Client: Dvirka And Bartilucci SDG: 19H0617

Project: Farrand Controls Site

Calibration: 1900263 Instrument: HPLC1

Calibration Date: 8/14/2019 2:37:35PM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Perfluorobutanesulfonic acid (PI	221	~~8.439533E-02~~	442	0.4991385	885	0.5730152	2210	0.4226602	4420	0.6540457	8850	0.5312481
Perfluorohexanoic acid (PFHxA)	250	0.7235054	500	0.520037	1000	0.7944675	2500	0.5848564	5000	0.7505984	10000	0.6092428
Perfluoroheptanoic acid (PFHpA	250	1.056019	500	1.272811	1000	1.125421	2500	0.9441065	5000	1.05081	10000	0.8977462
Perfluorobutanoic acid (PFBA)	250	0.1467923	500	0.1340986	1000	0.1773303	2500	0.1534281	5000	0.1550704	10000	0.1425
Perfluorodecanesulfonic acid (P	241	~~1.732655~~	482	1.088221	965	0.9232948	2410	0.7812951	4820	0.9710502	9650	0.7901414
Perfluoroheptanesulfonic acid (F	238	0.6557665	475	0.5513387	950	0.5168276	2380	0.4452865	4750	0.5025686	9500	0.49212
Perfluorooctanesulfonamide (FC	250	6.385427	500	7.183201	1000	6.937475	2500	6.282061	5000	7.512707	10000	7.410237
Perfluoropentanoic acid (PFPeA	250	0.2700983	500	0.320225	1000	0.297416	2500	0.2647637	5000	0.3220564	10000	0.2807829
6:2 Fluorotelomersulfonate (6:2	238	~~0.3636571~~	475	0.1207109	950	0.248925	2380	0.3043812	4750	0.229421	9500	0.2541806
8:2 Fluorotelomersulfonate (8:2	240	~~0.5160146~~	480	0.2170268	960	0.5034566	2400	0.3894073	4800	0.3242357	9600	0.3906011
Perfluorohexanesulfonic acid (P	228	~~1.560163~~	455	0.877106	910	0.7600803	2280	0.7718038	4550	0.7683247	9100	0.7773168
Perfluorooctanoic acid (PFOA)	250	1.349661	500	1.624887	1000	1.488339	2500	1.023899	5000	1.328938	10000	1.125052
Perfluorooctanesulfonic acid (PF	231	1.793609	462	1.814649	925	1.113003	2310	1.078466	4620	1.342785	9250	1.37972
Perfluorononanoic acid (PFNA)	250	~~0.4686885~~	500	1.180274	1000	0.8848152	2500	0.6780141	5000	0.8885147	10000	0.6784017
Perfluorodecanoic acid (PFDA)	250	1.474773	500	1.670343	1000	1.424684	2500	1.325957	5000	1.550024	10000	1.369813
N-MeFOSAA	250	0.8375252	500	1.264971	1000	1.454663	2500	0.9914274	5000	1.241824	10000	1.031828
Perfluoroundecanoic acid (PFUr	250	1.847979	500	1.973647	1000	1.776792	2500	1.577122	5000	1.717666	10000	1.671343
N-EtFOSAA	250	~~0.371859~~	500	0.8707431	1000	1.172006	2500	0.8241852	5000	1.247234	10000	0.8645435
Perfluorododecanoic acid (PFDo	250	2.059933	500	2.356638	1000	2.404284	2500	2.00084	5000	2.208807	10000	2.0774
Perfluorotridecanoic acid (PFTrI	250	2.558654	500	2.780253	1000	2.491909	2500	2.217594	5000	2.863112	10000	2.307985
Perfluorotetradecanoic acid (PF	250	2.757721	500	2.722134	1000	1.989584	2500	2.09717	5000	2.035052	10000	1.923721
13C-PFHxA	2000	~~0.4484715~~	4000	0.6234017	6000	0.7090772	8000	0.67324	10000	0.7126525	15000	0.6666028
13C-PFDA	2000	~~0.6687796~~	4000	1.111567	6000	0.9778198	8000	1.120732	10000	1.034066	15000	1.081012
d5-NEtFOSAA	8000	0.6195758	16000	0.843037	24000	0.8606734	32000	0.9248429	40000	0.9844204	60000	0.9616783

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SOP 434-PFAAS

Client: Dvirka And Bartilucci SDG: 19H0617

Project: Farrand Controls Site

Calibration: 1900263 Instrument: HPLC1

Calibration Date: 8/14/2019 2:37:35PM

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
Perfluorobutanesulfonic acid (PI	22100	0.5897236	44200	0.5878146								
Perfluorohexanoic acid (PFHxA)	25000	0.664538	50000	0.7246015								
Perfluoroheptanoic acid (PFHpA	25000	1.012852	50000	1.069559								
Perfluorobutanoic acid (PFBA)	25000	0.155852	50000	0.1700532								
Perfluorodecanesulfonic acid (P	24100	0.8870023	48200	~~0.9789127~~								
Perfluoroheptanesulfonic acid (F	23800	0.4483712	47500	0.4817227								
Perfluorooctanesulfonamide (FC	25000	7.415508	50000	7.844119								
Perfluoropentanoic acid (PFPeA	25000	0.3396383	50000	0.3375767								
6:2 Fluorotelomersulfonate (6:2	23800	0.2429459	47500	0.2354187								
8:2 Fluorotelomersulfonate (8:2	24000	0.3919645	48000	0.3942908								
Perfluorohexanesulfonic acid (P	22800	0.932042	45500	0.9569146								
Perfluorooctanoic acid (PFOA)	25000	1.38283	50000	1.321524								
Perfluorooctanesulfonic acid (PI	23100	1.385017	46200	1.59718								
Perfluorononanoic acid (PFNA)	25000	0.7559321	50000	0.8314502								
Perfluorodecanoic acid (PFDA)	25000	1.421676	50000	1.511158								
N-MeFOSAA	25000	1.147788	50000	1.205478								
Perfluoroundecanoic acid (PFUr	25000	1.624082	50000	1.729151								
N-EtFOSAA	25000	0.9650055	50000	0.99337								
Perfluorododecanoic acid (PFDo	25000	2.250963	50000	2.524343								
Perfluorotridecanoic acid (PFTrI	25000	2.556851	50000	2.868739								
Perfluorotetradecanoic acid (PF	25000	2.150999	50000	2.425367								
13C-PFHxA	20000	0.7178286	25000	0.7660379								
13C-PFDA	20000	1.065773	25000	1.00572								
d5-NEtFOSAA	80000	~~0.8113444~~	100000	~~0.8019632~~								

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Calibration:	1900263	Instrument:	HPLC1
		Calibration Date:	8/14/2019 2:37:35PM

COMPOUND	Mean RF	RF RSD	Linear r^2	Quad COD	LIMIT	Q
Perfluorobutanesulfonic acid (PFBS)	0.5510923	13.6				
Perfluorohexanoic acid (PFHxA)	0.6714809	13.9				
Perfluoroheptanoic acid (PFHpA)	1.053666	10.8				
Perfluorobutanoic acid (PFBA)	0.1543906	9.1				
Perfluorodecanesulfonic acid (PFDS)	0.9068341	12.8				
Perfluoroheptanesulfonic acid (PFHpS)	0.5117502	13.2				
Perfluorooctanesulfonamide (FOSA)	7.121342	7.7				
Perfluoropentanoic acid (PFPeA)	0.3040697	9.8				
6:2 Fluorotelomersulfonate (6:2 FTS A)	0.2337119	23.8				
8:2 Fluorotelomersulfonate (8:2 FTS A)	0.3729975	23.2				
Perfluorohexanesulfonic acid (PFHxS)	0.8347983	10.2				
Perfluorooctanoic acid (PFOA)	1.330641	14.2				
Perfluorooctanesulfonic acid (PFOS)	1.438054	19.4				
Perfluorononanoic acid (PFNA)	0.842486	20.5				
Perfluorodecanoic acid (PFDA)	1.468554	7.4				
N-MeFOSAA	1.146938	16.6				
Perfluoroundecanoic acid (PFUnA)	1.739723	7.3				
N-EtFOSAA	0.9910125	16.3				
Perfluorododecanoic acid (PFDoA)	2.235401	8.3				
Perfluorotridecanoic acid (PFTrDA)	2.580637	9.5				
Perfluorotetradecanoic acid (PFTA)	2.262719	14.6				
13C-PFHxA	0.6955487	6.6				
13C-PFDA	1.05667	5.1				
d5-NEtFOSAA	0.8657046	15.3				

INITIAL CALIBRATION STANDARDS

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Sequence:	S039175	Instrument:	HPLC1
Calibration:	1900263		

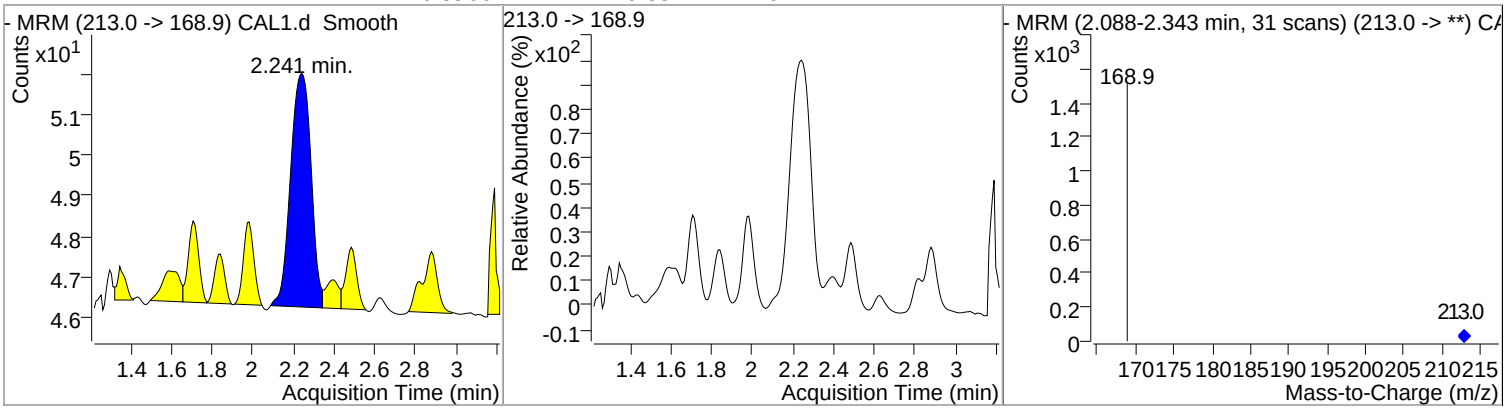
Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
1908223	0.25 ppb PFAS 537.1	S039175-CAL1	CAL1.d	08/13/19 18:20
1908224	0.5 ppb PFAS 537.1	S039175-CAL2	CAL2.d	08/13/19 18:33
1908225	1.0 ppb PFAS 537.1	S039175-CAL3	CAL3.d	08/13/19 18:45
1908226	2.5 ppb PFAS 537.1	S039175-CAL4	CAL4.d	08/13/19 18:58
1908227	5.0 ppb PFAS 537.1	S039175-CAL5	CAL5.d	08/13/19 19:10
1908229	10.0 ppb PFAS 537.1	S039175-CAL6	CAL6.d	08/13/19 19:23
1908230	25.0 ppb PFAS 537.1	S039175-CAL7	CAL7.d	08/13/19 19:36
1908231	50.0 ppb PFAS 537.1	S039175-CAL8	CAL8.d	08/13/19 19:48

Data File	CAL1.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/13/2019 6:20:28 PM
Sample Name	CAL1	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	CAL.batch.bin	Last Calib Update	8/14/2019 2:32:16 PM
Ref Library			

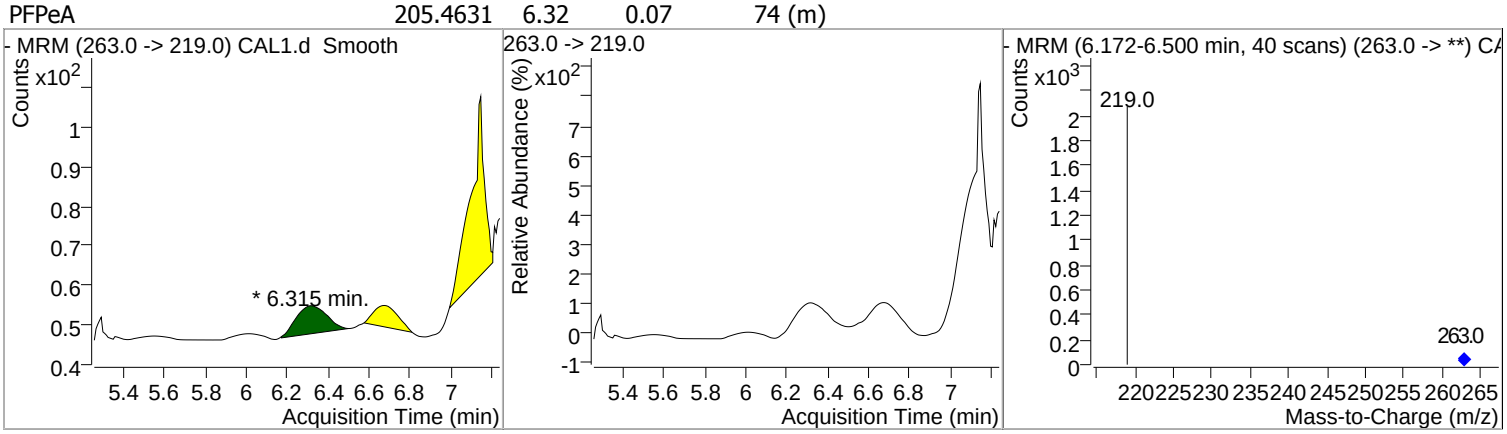
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.768	416.9 -> 371.9	10951	10000.0000	pg/ml	m	-0.008
M PFOS C13	7.976	502.9 -> 80.0	17044	28700.0000	pg/ml		-0.017
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	9609	40000.0000	pg/ml		-0.042
System Monitoring Compounds							
S PFHxA C13	7.113	314.9 -> 269.9	982	1257.5227	pg/ml		0.025
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 12.58%		*	
S PFDA C13	8.144	514.9 -> 469.9	1465	1284.7731	pg/ml		-0.034
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 12.85%		*	
S d5-N-MeFOSAA	8.293	589.2 -> 419.0	1191	5239.6557	pg/ml		-0.042
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 13.10%		*	
Target Compounds							**QValue**
T PFBA	2.241	213.0 -> 168.9	40	226.5988	pg/ml		100
T PFPeA	6.315	263.0 -> 219.0	74	205.4631	pg/ml	m	100
T PFBS	6.643	298.9 -> 80.0	11	32.1453	pg/ml	m	100
T PFHxA	7.114	312.9 -> 268.9	198	260.7207	pg/ml	m	100
T PFHpA	7.500	362.9 -> 319.0	289	255.4224	pg/ml	m	100
T PFHxS-Total	7.525	398.9 -> 80.0	211	389.9105	pg/ml	m	100
T 6.2 FTS	7.759	427.0 -> 406.8	51	364.2390	pg/ml		100
T PFOA-Total	7.760	412.9 -> 368.9	370	257.0015	pg/ml	m	100
T PFHpS	7.784	449.0 -> 79.7	93	328.1585	pg/ml	m	100
T PFOS-Total	7.976	498.9 -> 80.0	246	279.0296	pg/ml	m	100
T PFNA	7.969	462.9 -> 418.9	128	147.1159	pg/ml	m	100
T 8.2 FTS	8.126	527.0 -> 81.0	74	314.9601	pg/ml		100
T PFDA	8.152	513.1 -> 469.0	404	250.9132	pg/ml		100
T N-MeFOSAA	8.235	570.2 -> 419.1	50	176.0956	pg/ml		100
T FOSA	8.288	497.9 -> 77.9	383	209.8155	pg/ml		100
T PFDS	8.284	599.0 -> 80.0	248	450.0468	pg/ml		100
T PFUnA	8.294	563.1 -> 519.0	506	272.9460	pg/ml		100
T N-EtFOSAA	8.285	584.2 -> 419.0	22	94.6328	pg/ml		100
T PFDoA	8.435	613.1 -> 569.0	564	217.2571	pg/ml		100
T PFTrDA	8.587	663.1 -> 619.0	701	236.5924	pg/ml		100
T PFTA	8.754	713.1 -> 669.1	755	304.0104	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

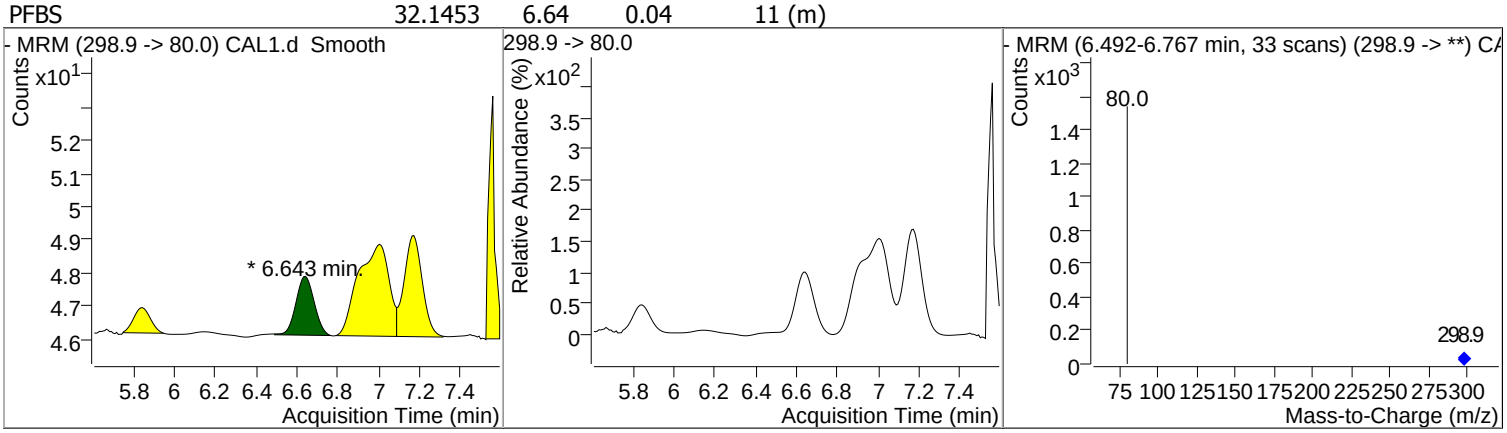
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	226.5988	2.24	0.03	40				



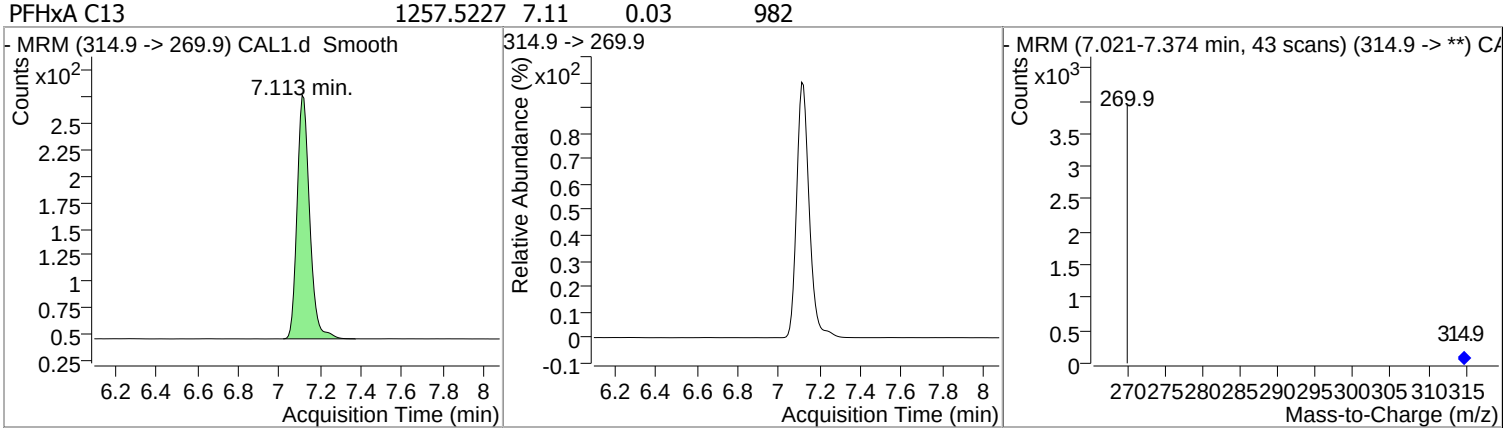
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	205.4631	6.32	0.07	74 (m)				



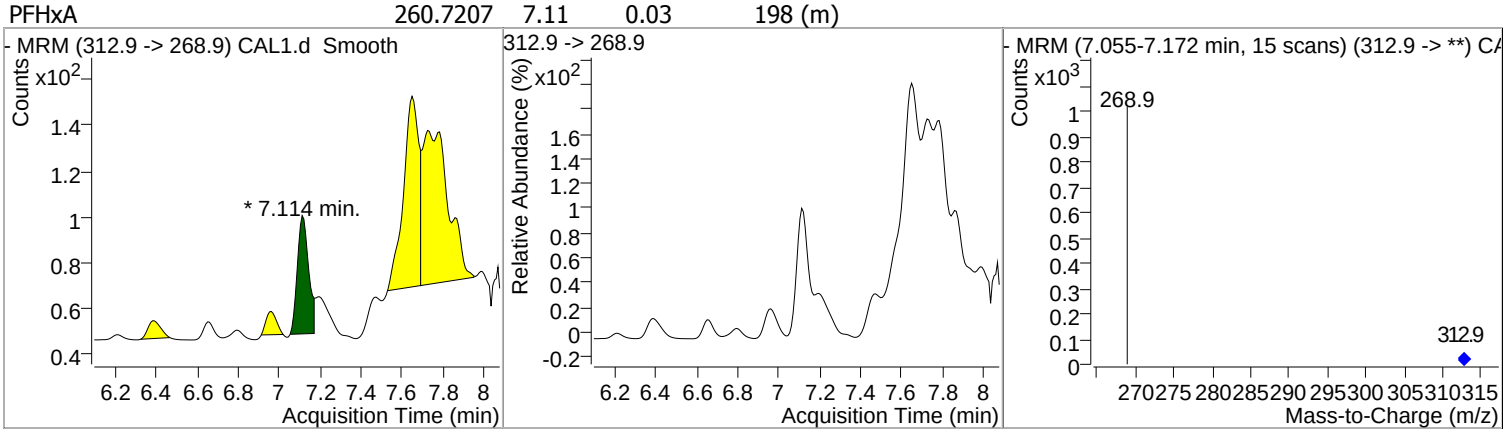
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	32.1453	6.64	0.04	11 (m)				



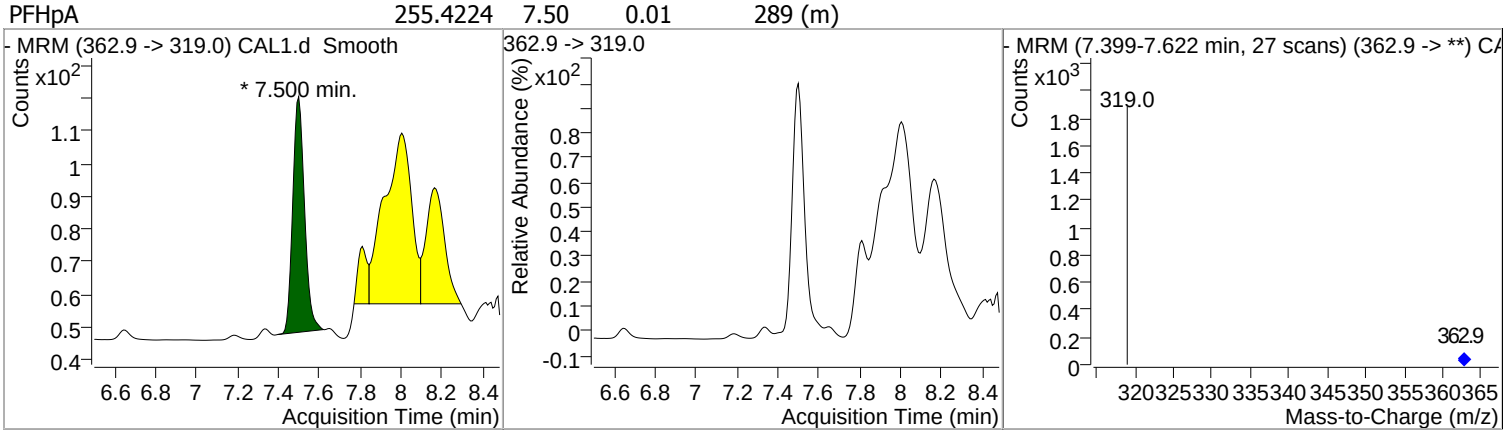
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	1257.5227	7.11	0.03	982				



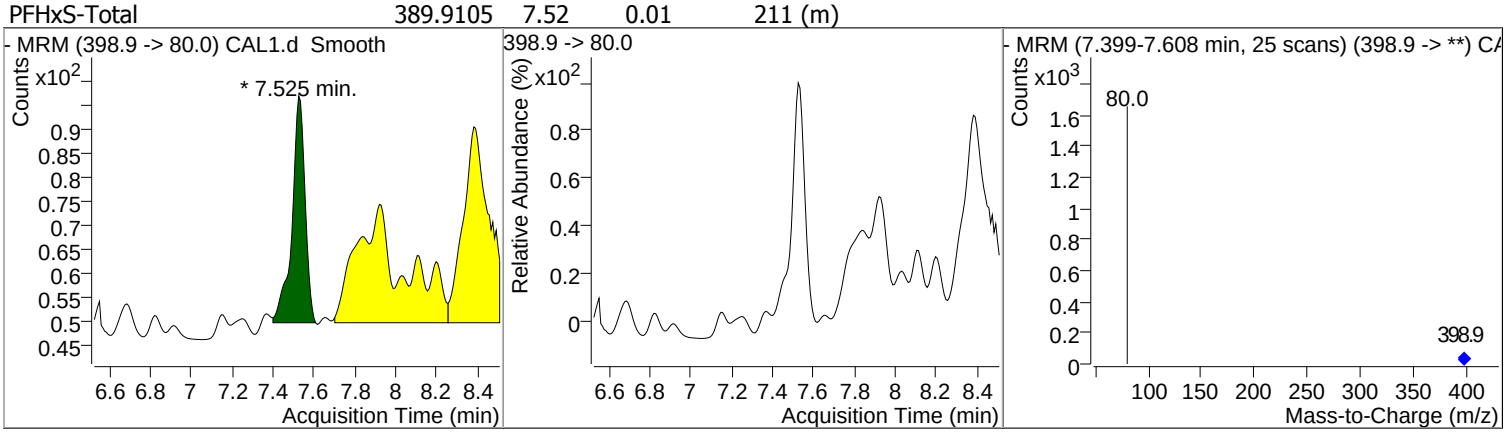
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	260.7207	7.11	0.03	198 (m)				



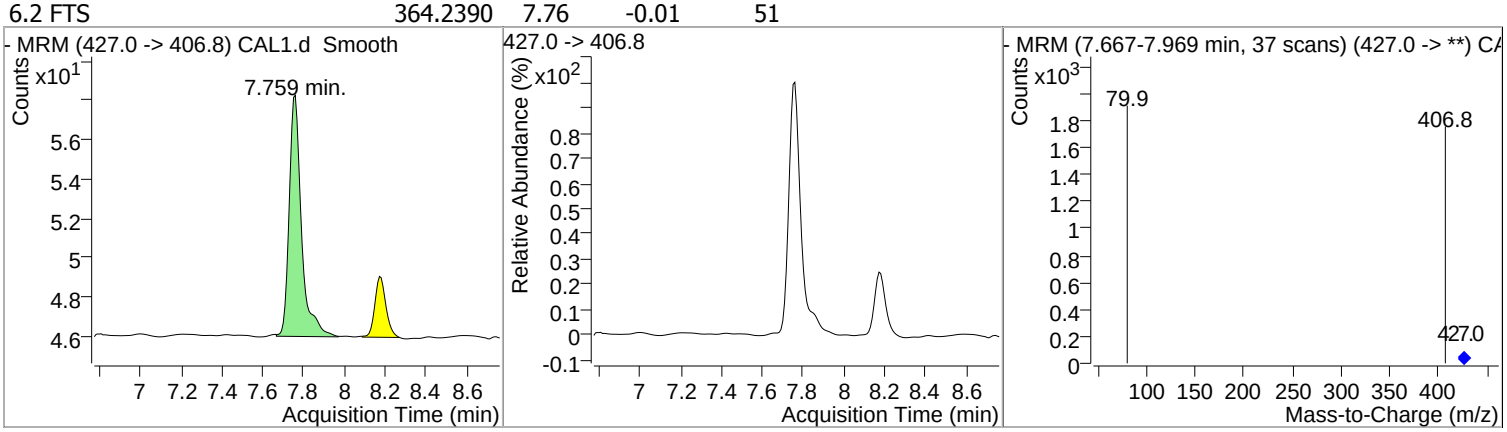
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	255.4224	7.50	0.01	289 (m)				



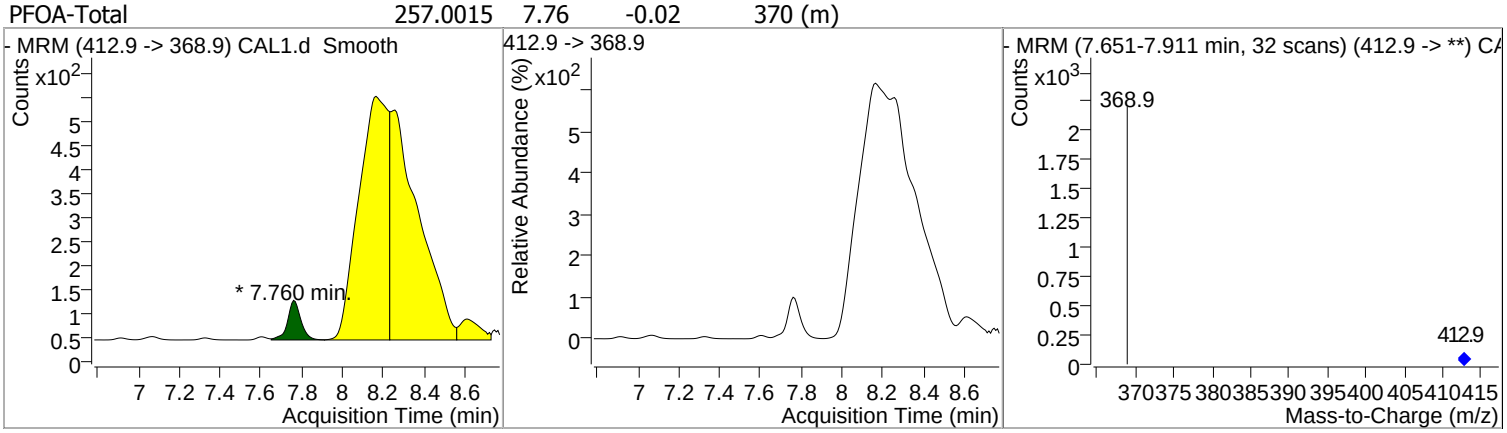
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	389.9105	7.52	0.01	211 (m)				



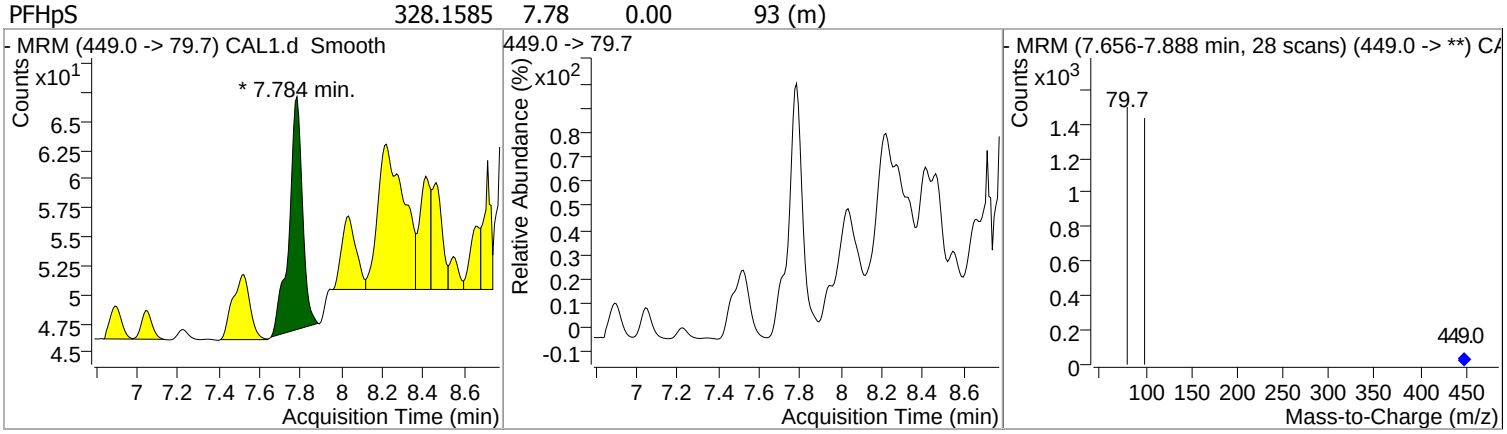
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	364.2390	7.76	-0.01	51				



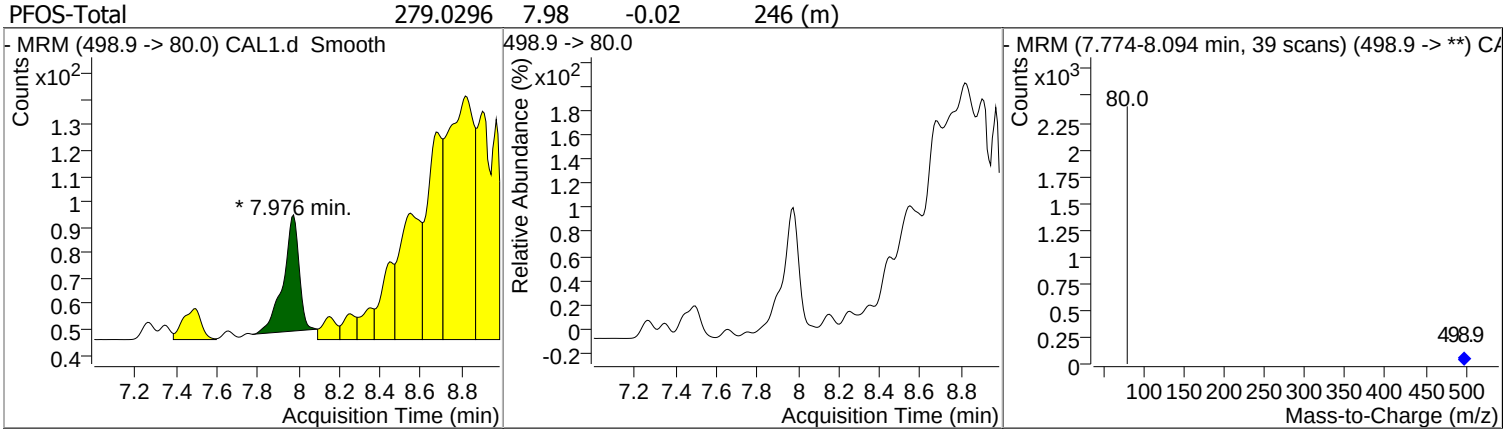
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	257.0015	7.76	-0.02	370 (m)				



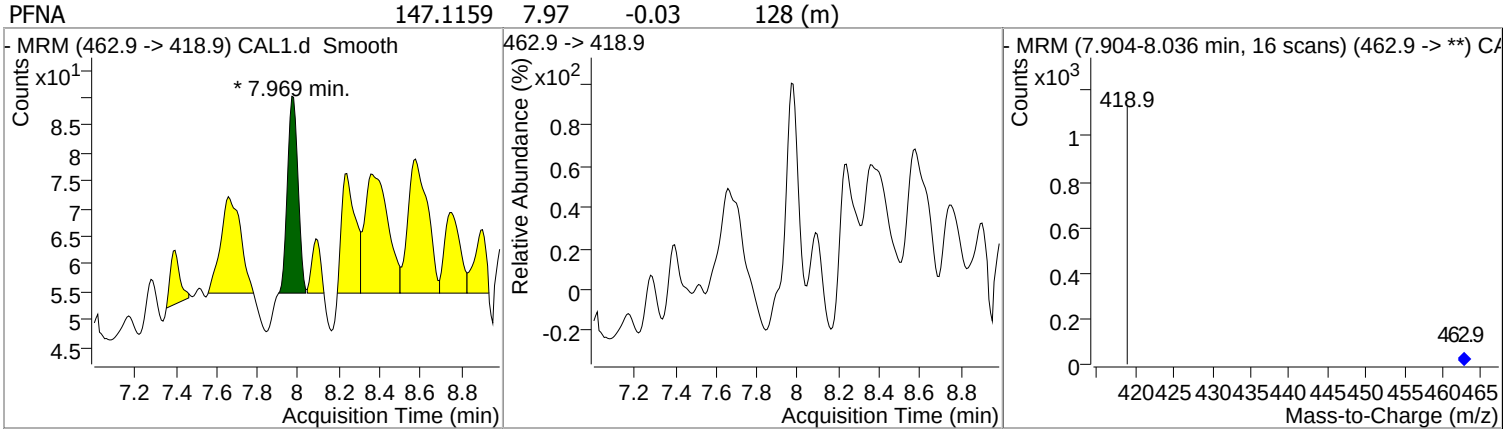
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	328.1585	7.78	0.00	93 (m)				



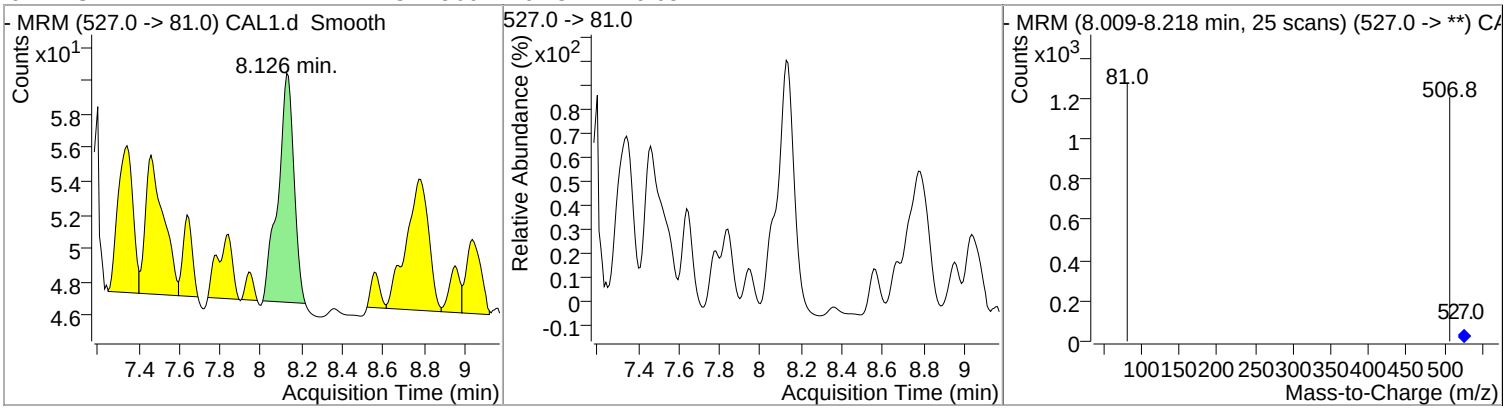
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	279.0296	7.98	-0.02	246 (m)				



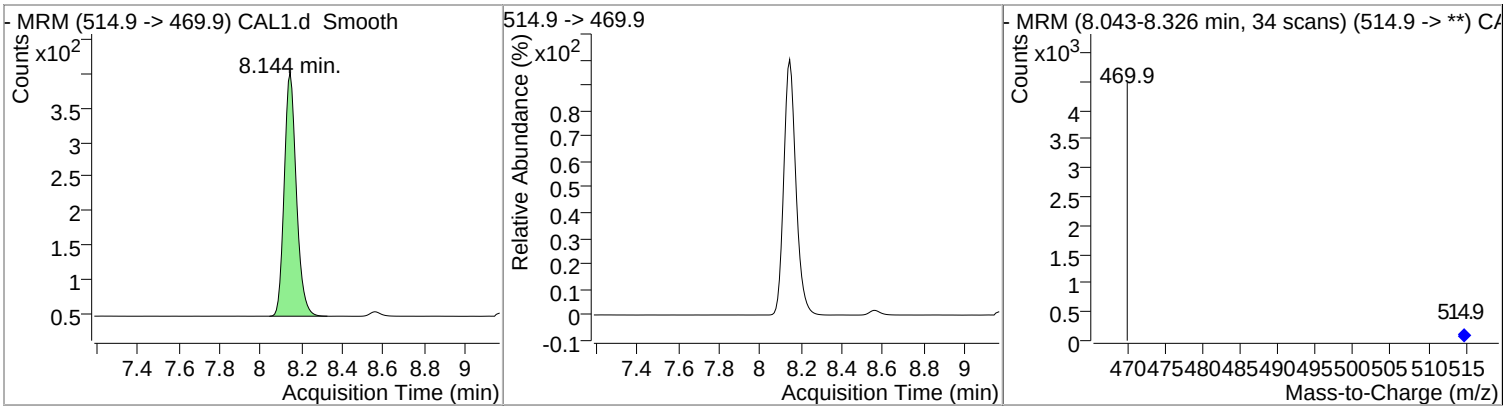
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	147.1159	7.97	-0.03	128 (m)				



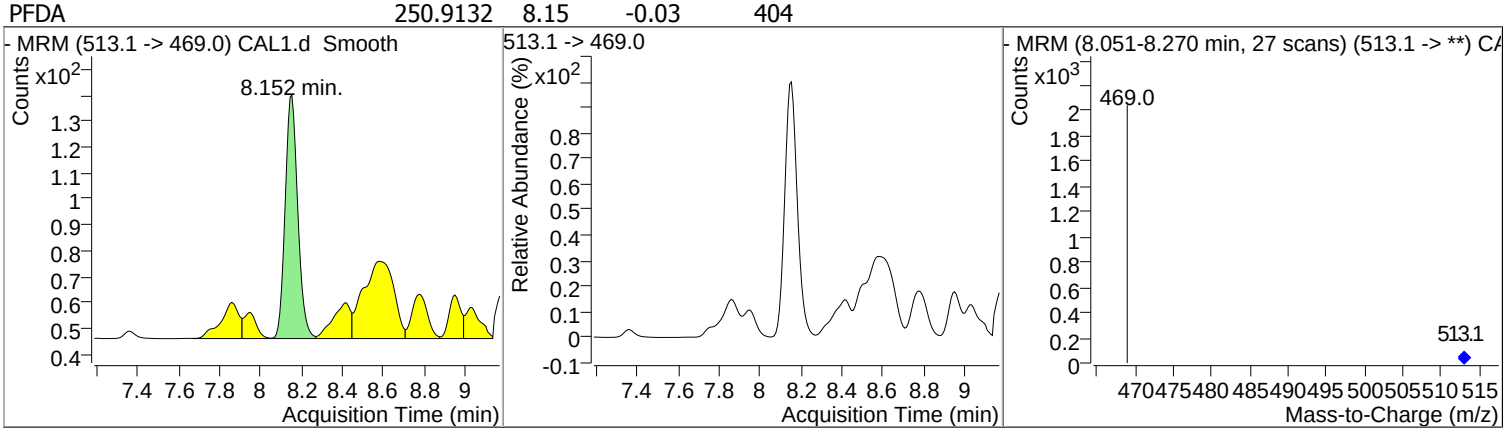
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	314.9601	8.13	-0.05	74				



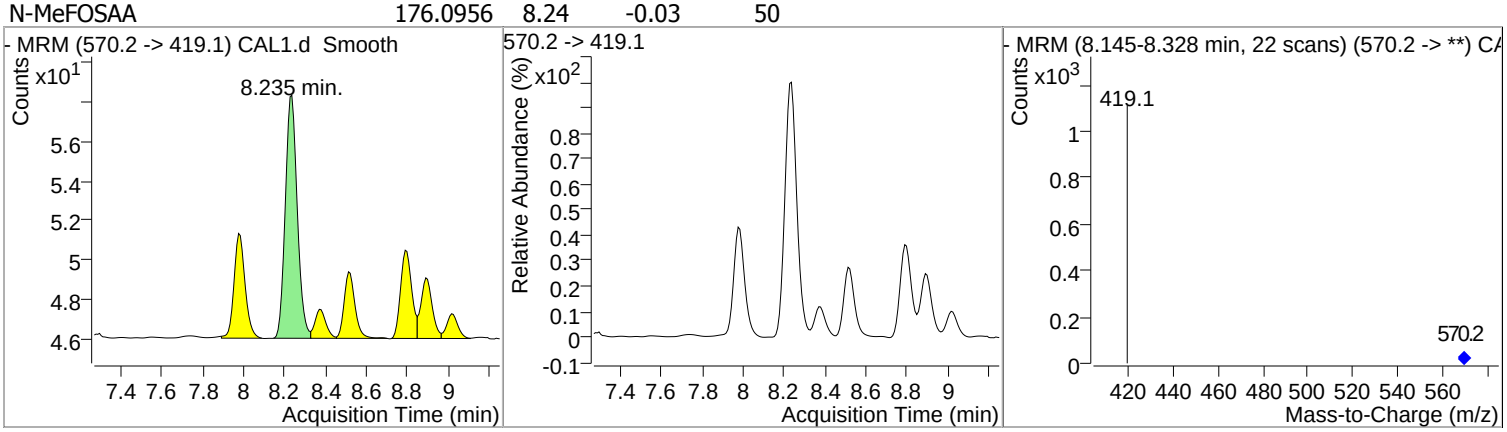
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	1284.7731	8.14	-0.03	1465				



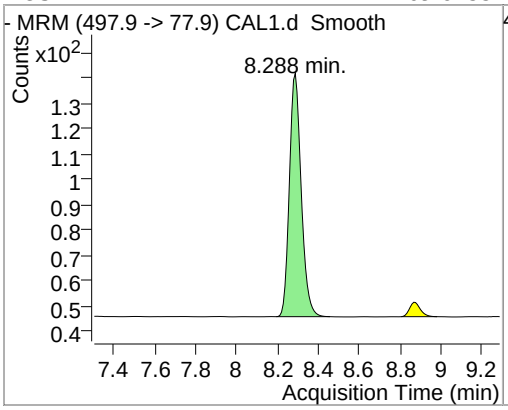
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	250.9132	8.15	-0.03	404				

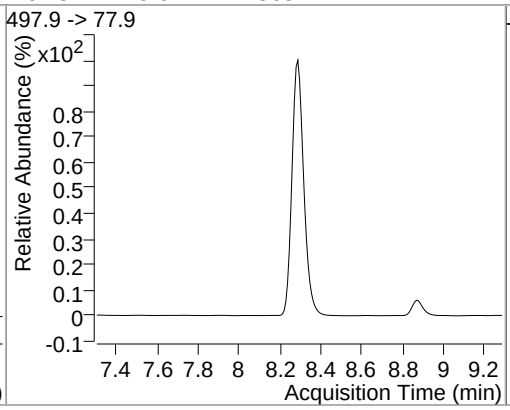


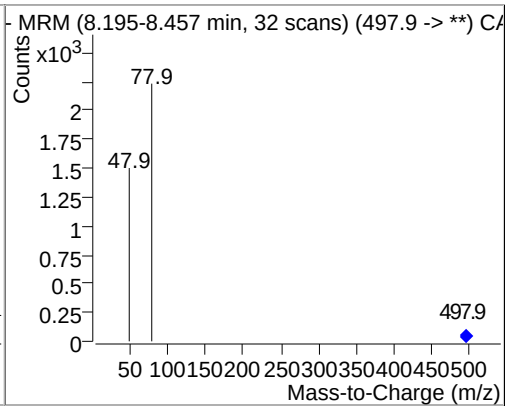
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	176.0956	8.24	-0.03	50				



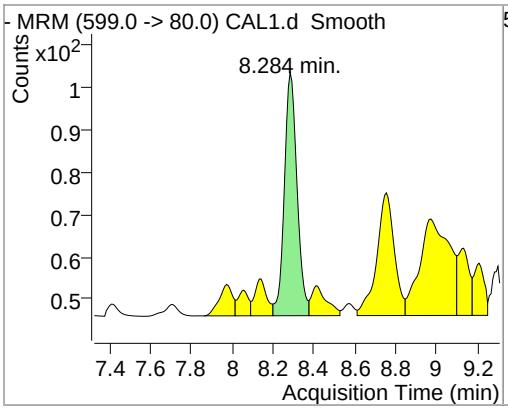
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	209.8155	8.29	-0.01	383				

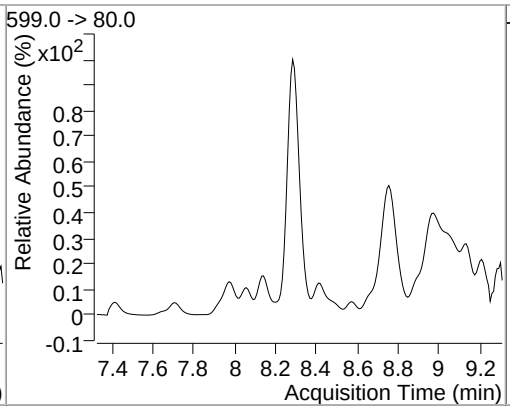


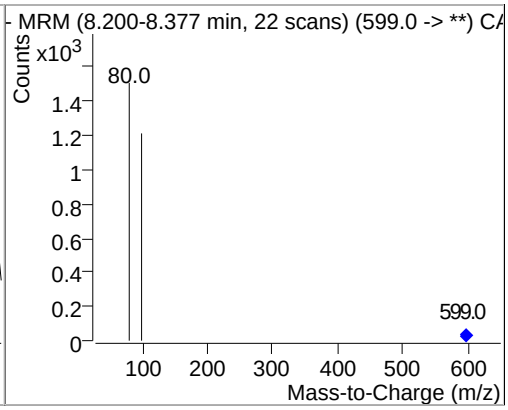




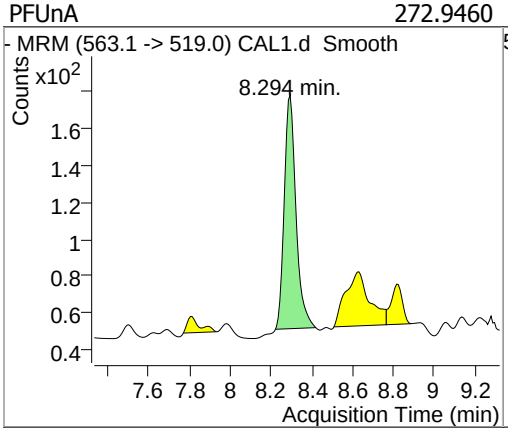
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	450.0468	8.28	-0.03	248				

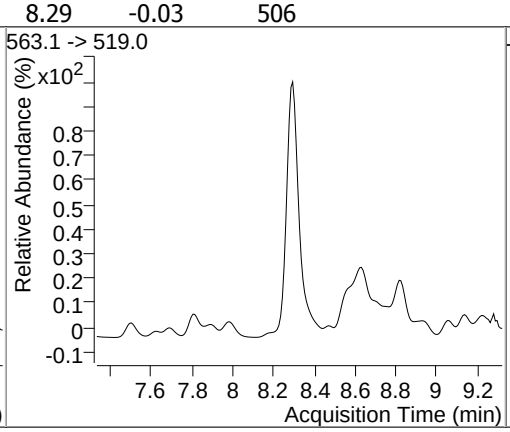


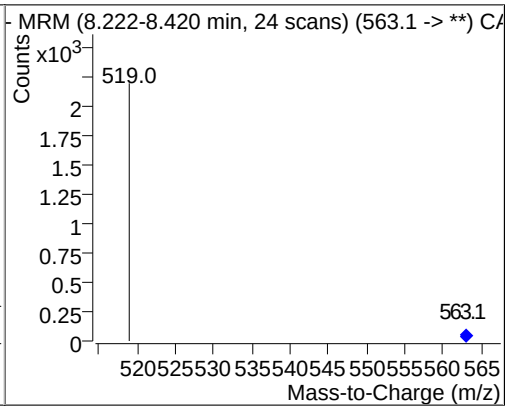




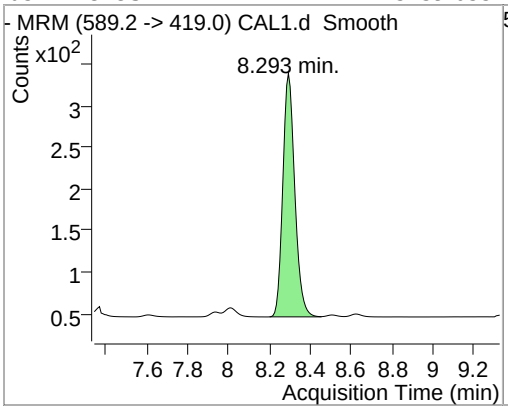
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	272.9460	8.29	-0.03	506				

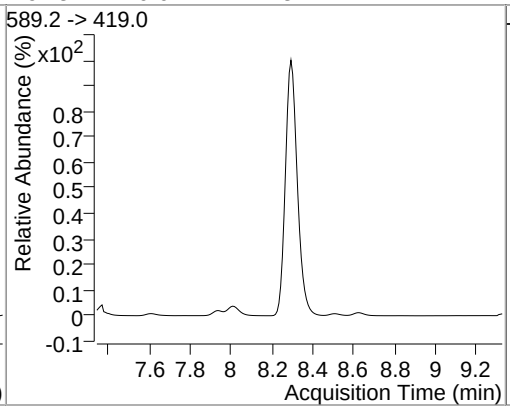


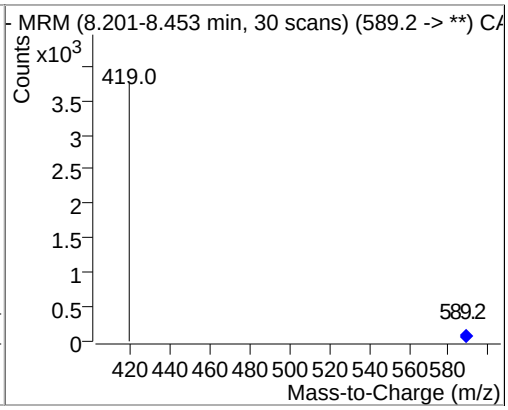




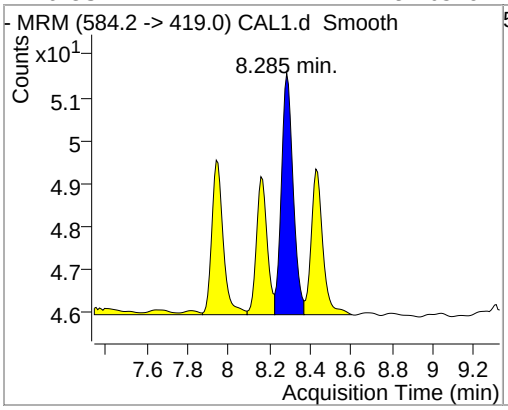
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	5239.6557	8.29	-0.04	1191				

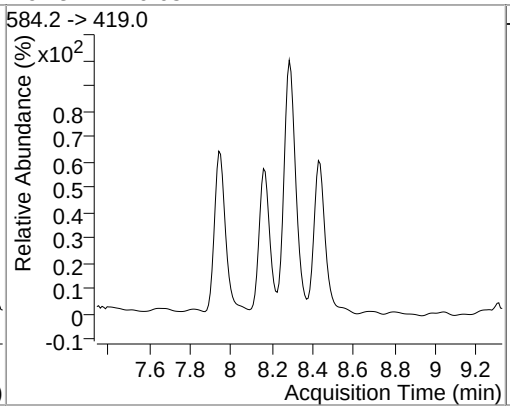


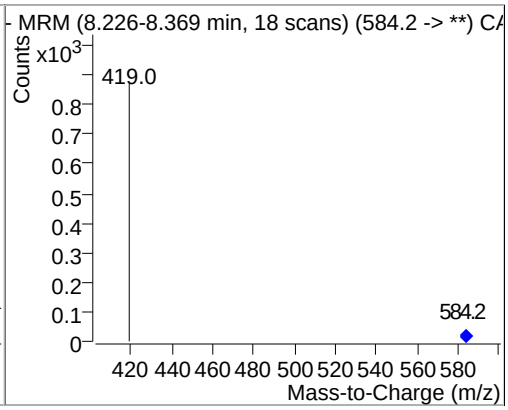




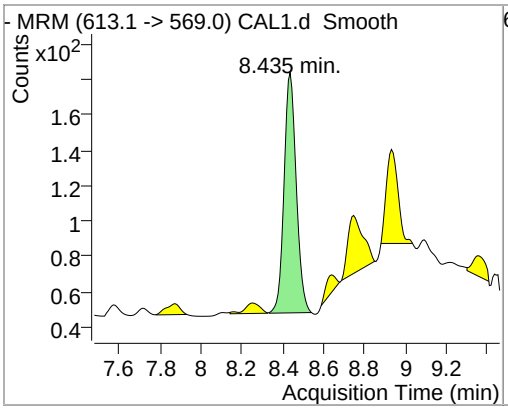
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	94.6328	8.29	-0.05	22				

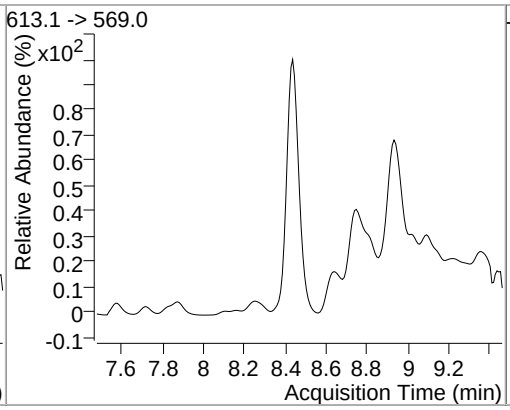


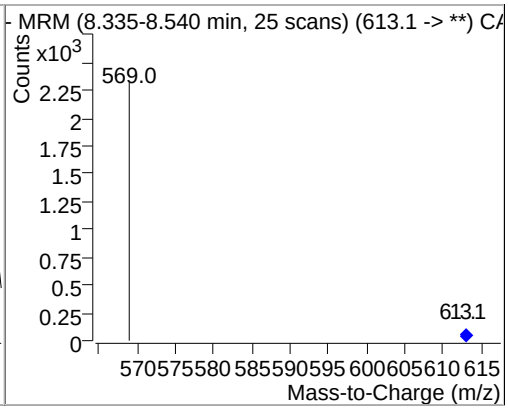




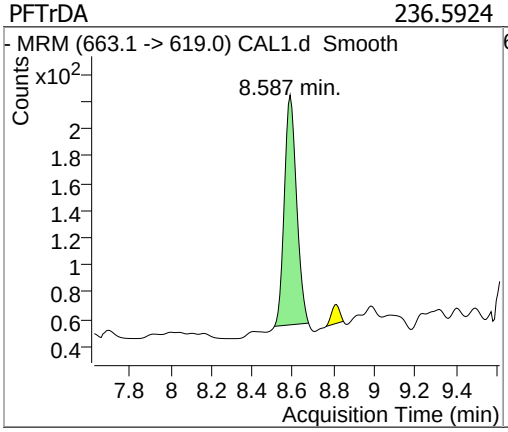
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	217.2571	8.44	-0.03	564				

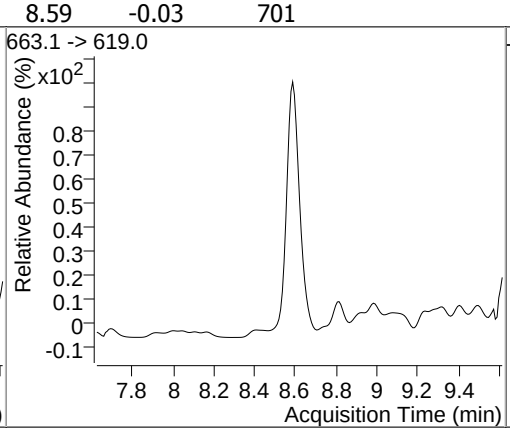


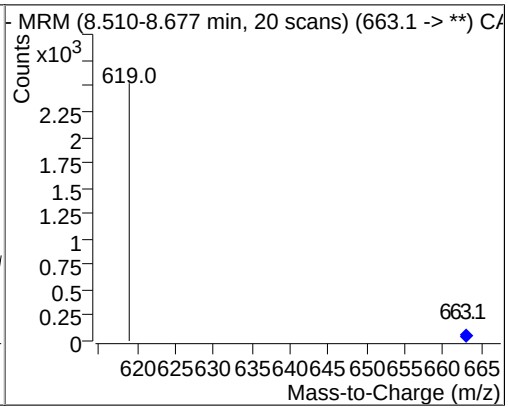




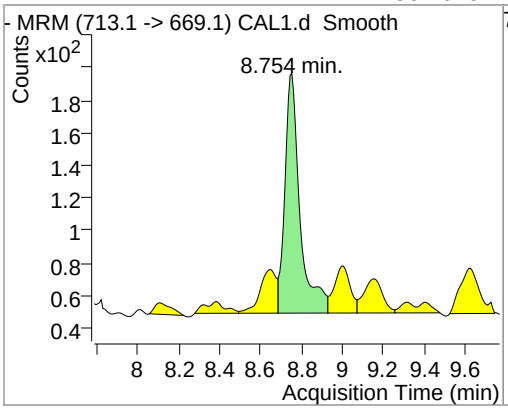
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	236.5924	8.59	-0.03	701				

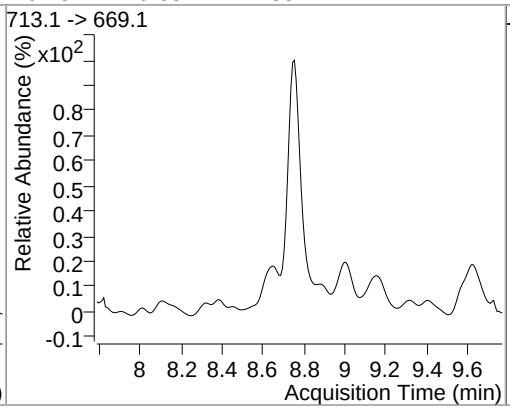


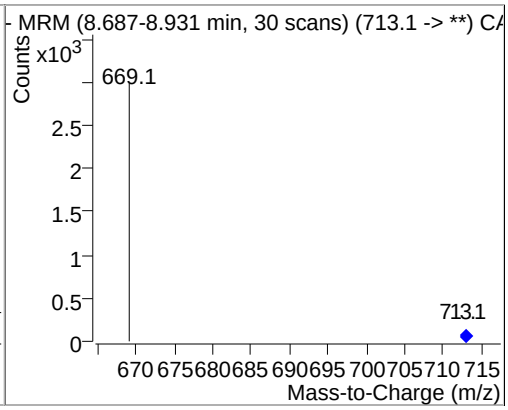




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	304.0104	8.75	-0.03	755				





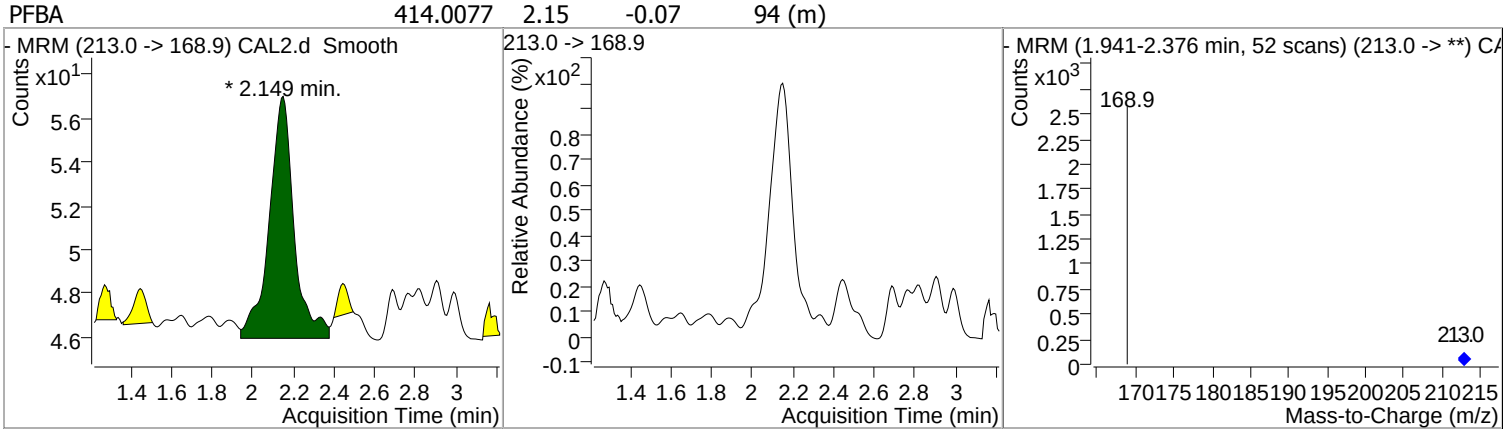


Data File	CAL2.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/13/2019 6:33:07 PM
Sample Name	CAL2	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	CAL.batch.bin	Last Calib Update	8/14/2019 2:32:16 PM
Ref Library			

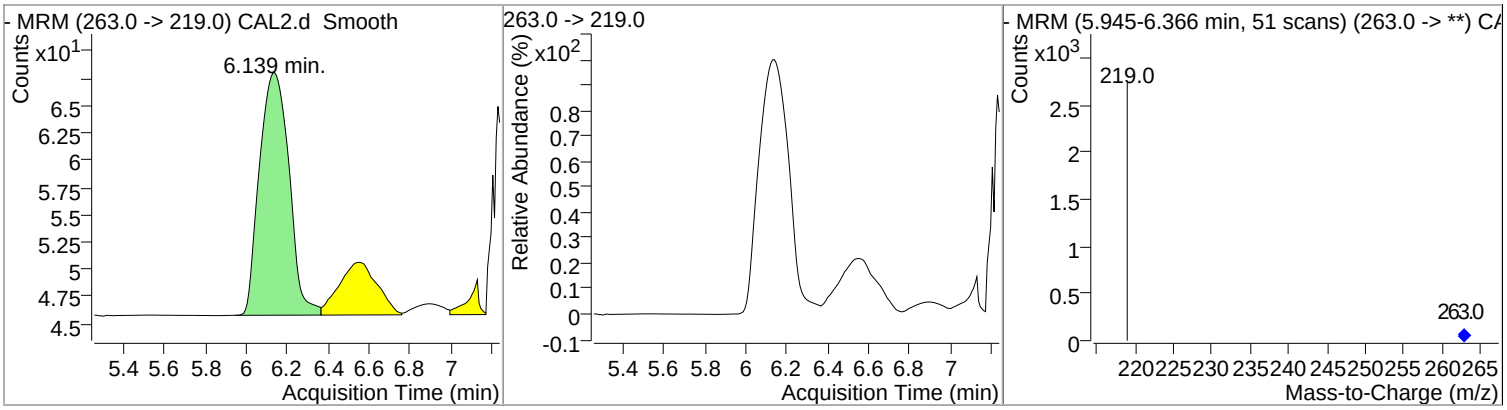
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.701	416.9 -> 371.9	14023	10000.0000	pg/ml	m	-0.076
M PFOS C13	7.934	502.9 -> 80.0	18678	28700.0000	pg/ml	m	-0.059
M d3-N-MeFOSAA	8.201	573.2 -> 419.0	11637	40000.0000	pg/ml	m	-0.059
System Monitoring Compounds							
S PFHxA C13	6.987	314.9 -> 269.9	3497	3496.0592	pg/ml	m	-0.101
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 34.96%		*	
S PFDA C13	8.118	514.9 -> 469.9	6235	4270.7978	pg/ml		-0.059
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 42.71%		*	
S d5-N-MeFOSAA	8.276	589.2 -> 419.0	3924	14258.8670	pg/ml	m	-0.059
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 35.65%		*	
Target Compounds							QValue
T PFBA	2.149	213.0 -> 168.9	94	414.0077	pg/ml	m	100
T PFPeA	6.139	263.0 -> 219.0	225	487.1886	pg/ml		100
T PFBS	6.491	298.9 -> 80.0	144	380.2333	pg/ml		100
T PFHxA	6.987	312.9 -> 268.9	365	374.7985	pg/ml		100
T PFHpA	7.407	362.9 -> 319.0	892	615.7173	pg/ml	m	100
T PFHxS-Total	7.441	398.9 -> 80.0	260	437.4448	pg/ml	m	100
T 6.2 FTS	7.692	427.0 -> 406.8	37	241.3002	pg/ml	m	100
T PFOA-Total	7.701	412.9 -> 368.9	1139	618.8194	pg/ml		100
T PFHpS	7.717	449.0 -> 79.7	170	550.6419	pg/ml	m	100
T PFOS-Total	7.926	498.9 -> 80.0	546	564.6053	pg/ml		100
T PFNA	7.927	462.9 -> 418.9	828	740.9481	pg/ml		100
T 8.2 FTS	8.118	527.0 -> 81.0	68	264.9334	pg/ml		100
T PFDA	8.119	513.1 -> 469.0	1171	568.3735	pg/ml		100
T N-MeFOSAA	8.202	570.2 -> 419.1	184	531.9382	pg/ml		100
T FOSA	8.271	497.9 -> 77.9	1045	472.0585	pg/ml		100
T PFDS	8.267	599.0 -> 80.0	341	565.3174	pg/ml		100
T PFUnA	8.277	563.1 -> 519.0	1384	583.0140	pg/ml		100
T N-EtFOSAA	8.285	584.2 -> 419.0	127	443.1835	pg/ml		100
T PFDoA	8.419	613.1 -> 569.0	1652	497.0999	pg/ml		100
T PFTrDA	8.578	663.1 -> 619.0	1949	514.1660	pg/ml		100
T PFTA	8.754	713.1 -> 669.1	1909	600.1744	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

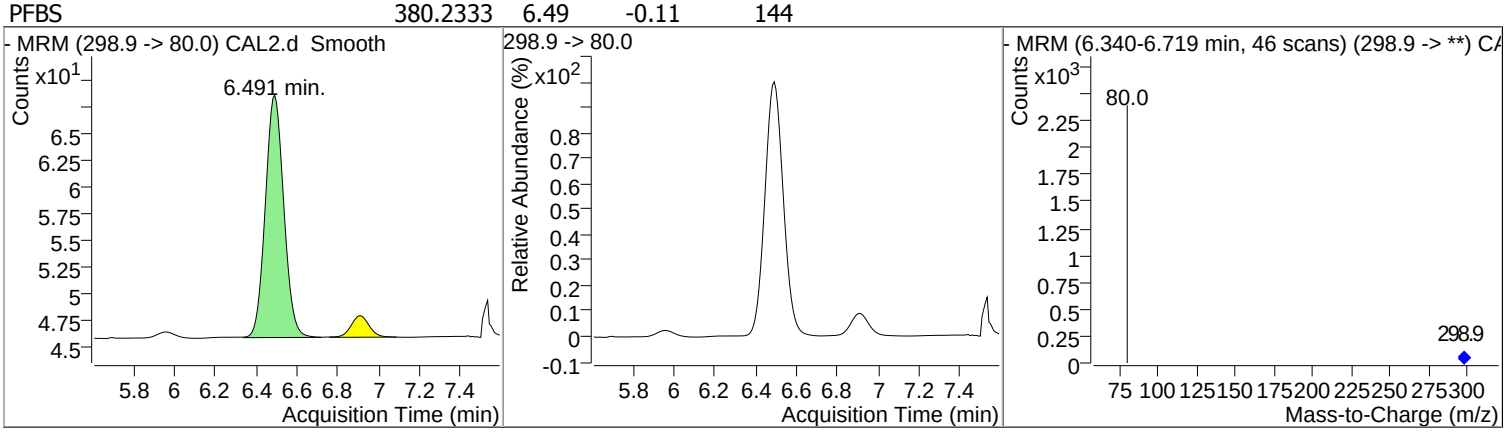
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	414.0077	2.15	-0.07	94 (m)				



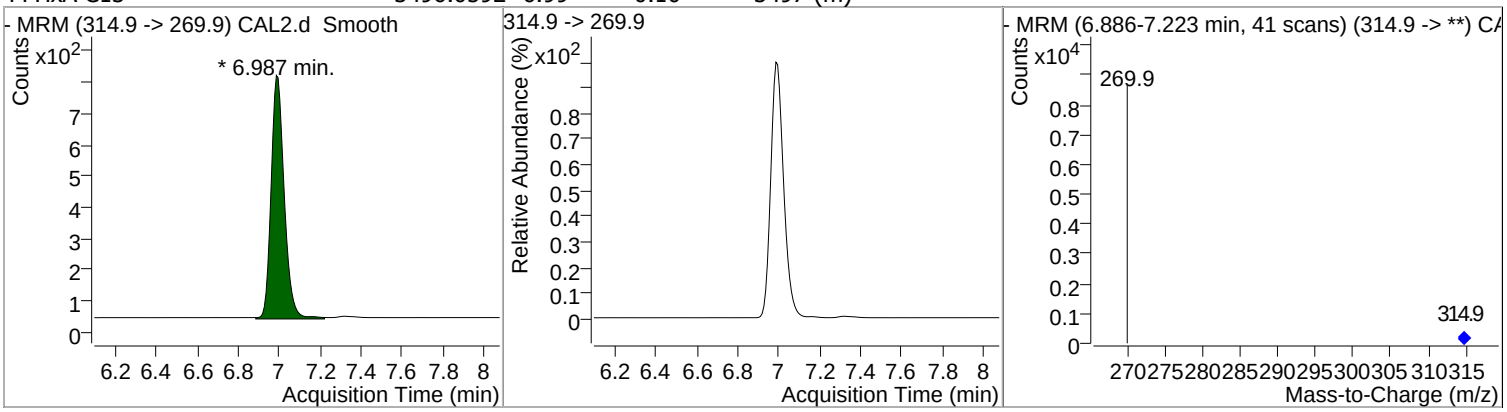
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	487.1886	6.14	-0.11	225				



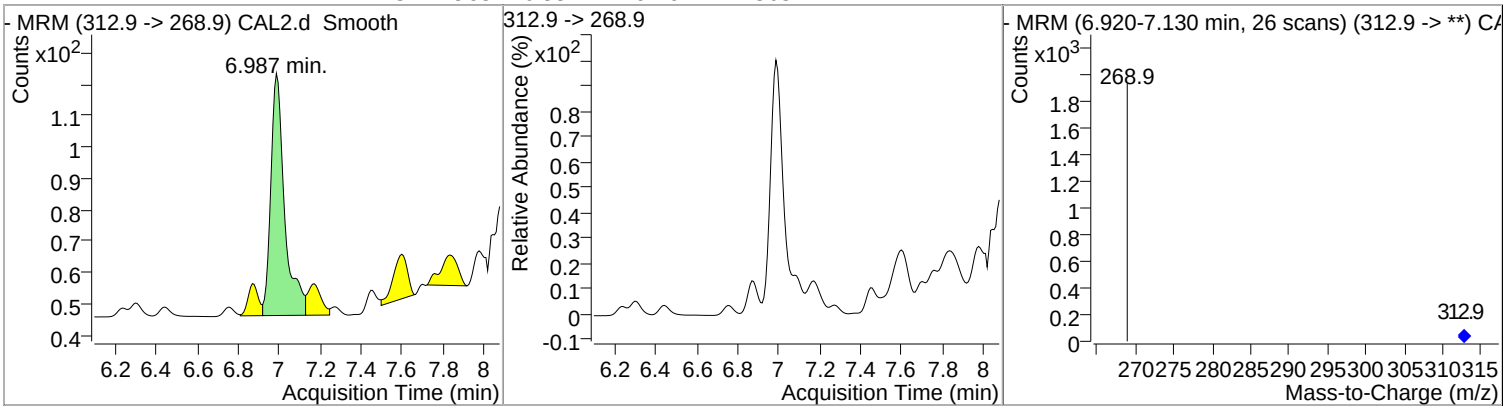
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	380.2333	6.49	-0.11	144				



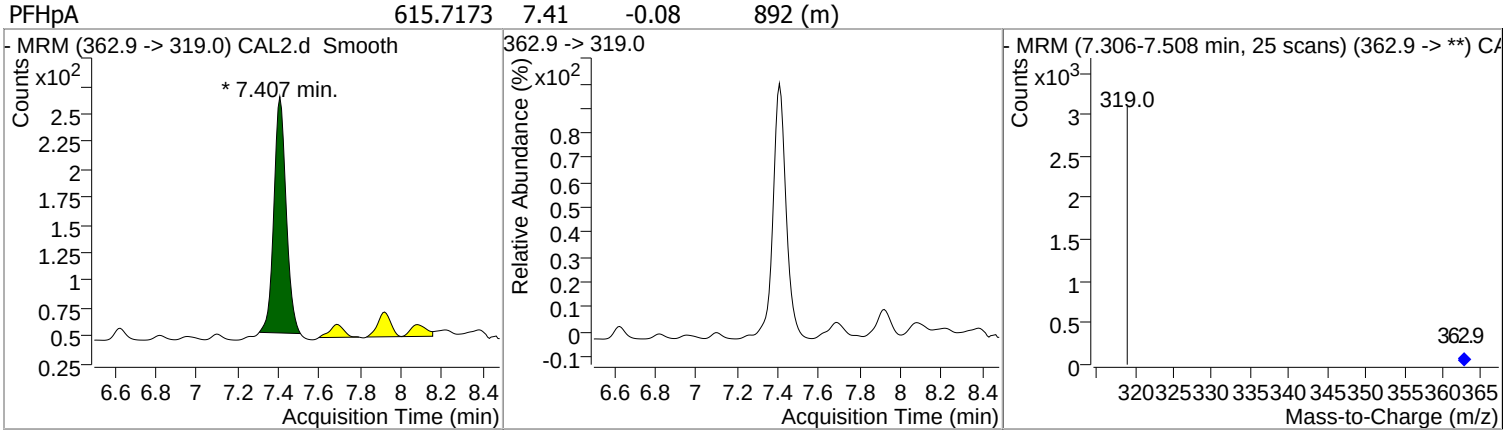
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	3496.0592	6.99	-0.10	3497 (m)				



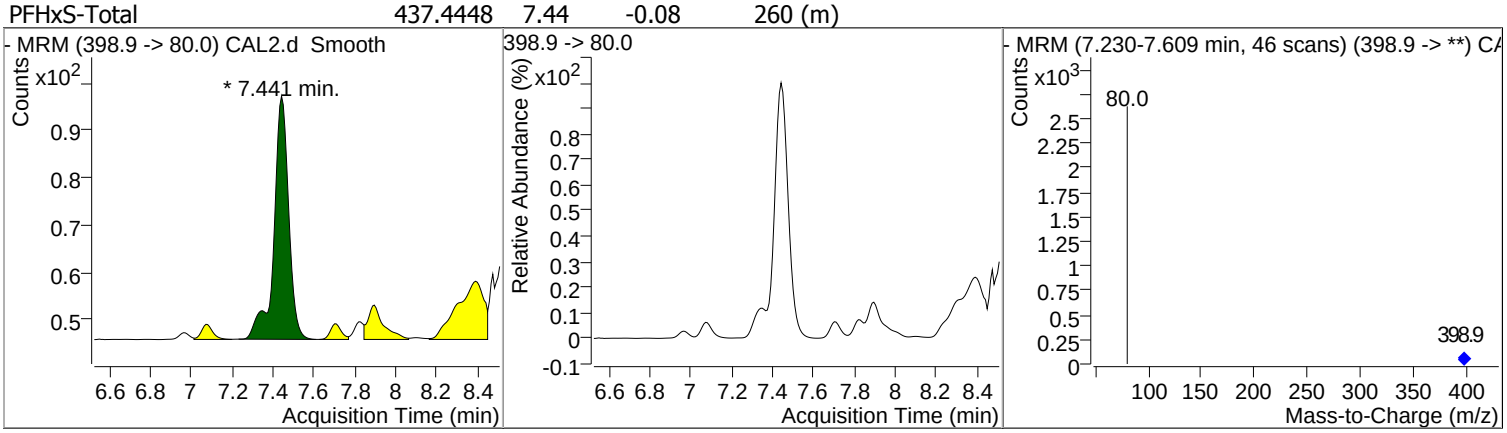
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	374.7985	6.99	-0.10	365				



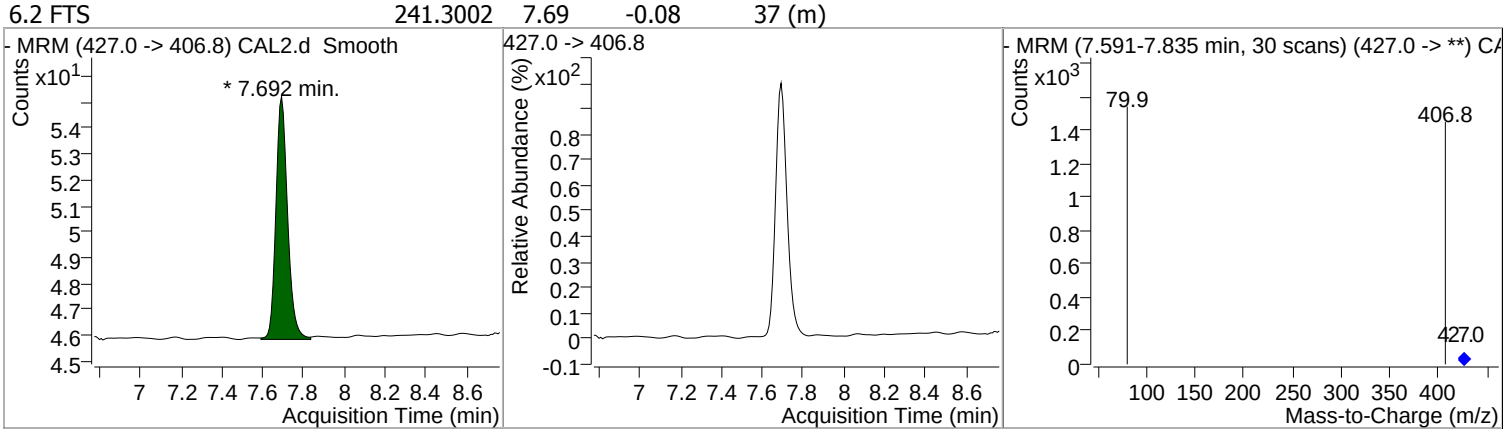
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	615.7173	7.41	-0.08	892 (m)				



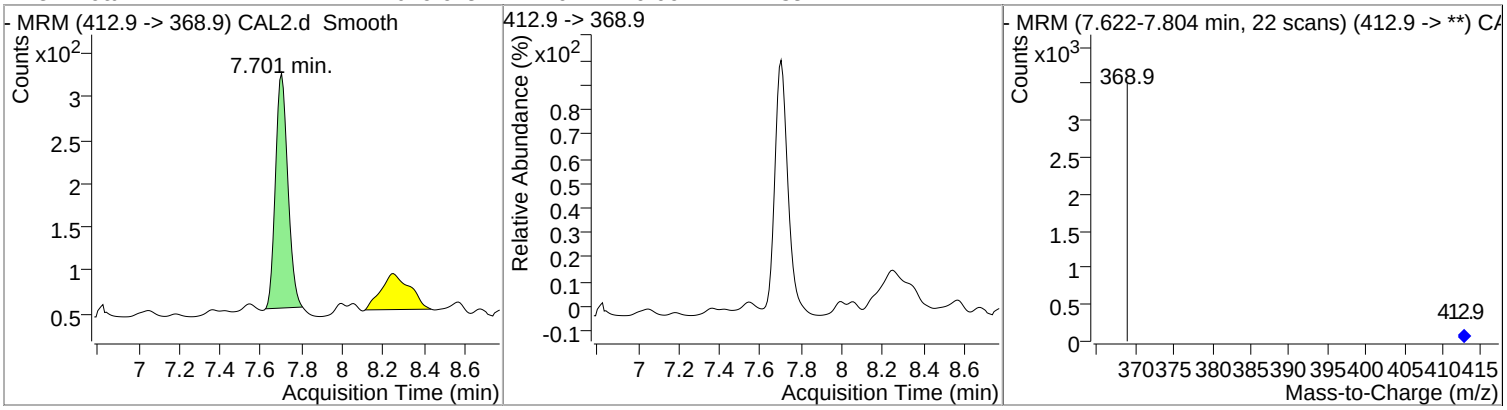
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	437.4448	7.44	-0.08	260 (m)				



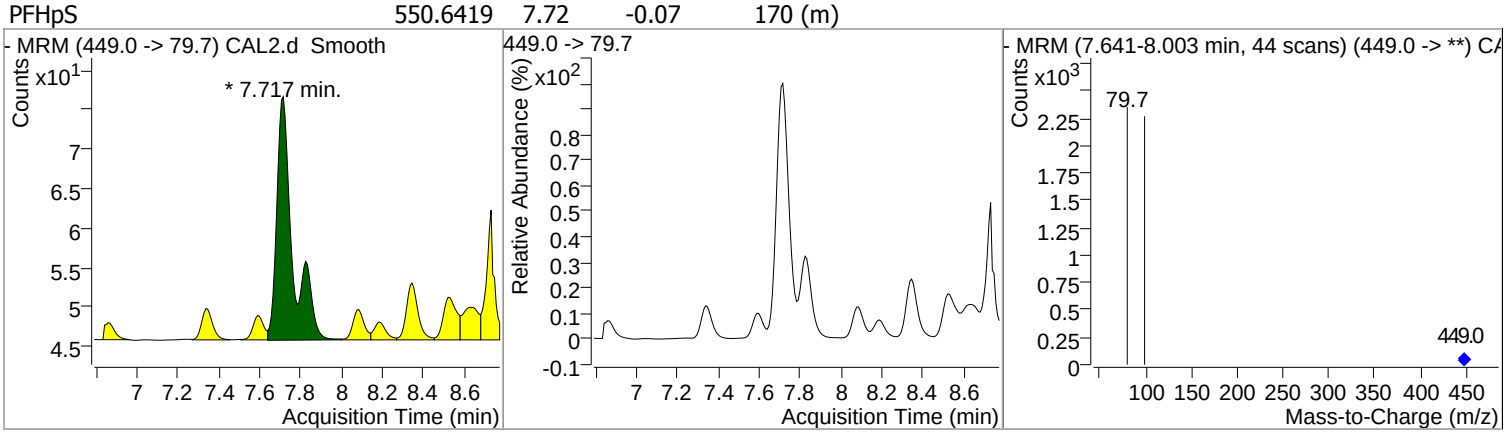
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	241.3002	7.69	-0.08	37 (m)				



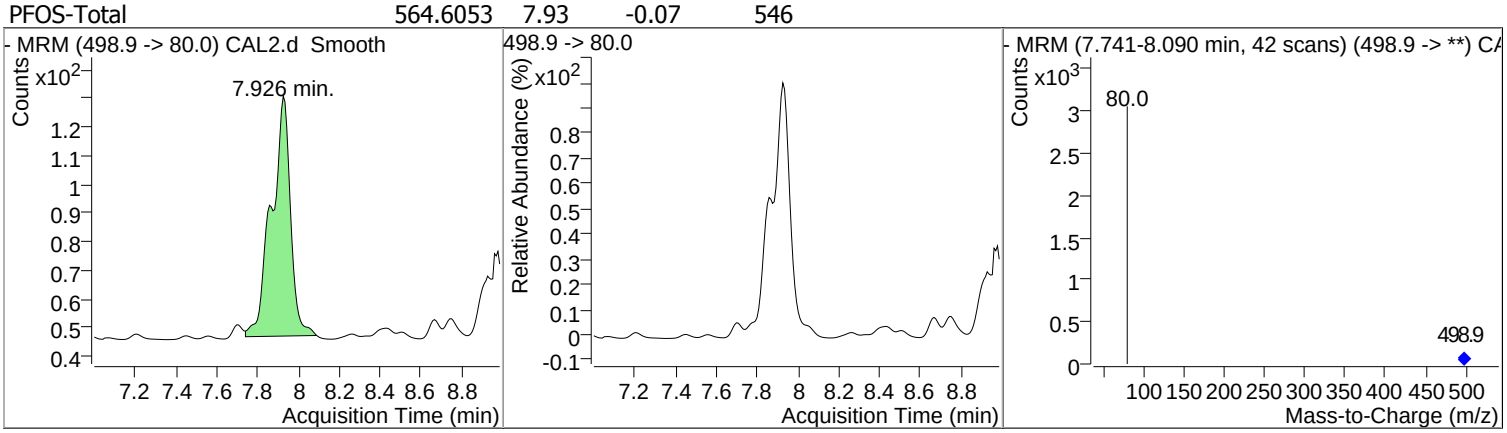
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	618.8194	7.70	-0.08	1139				



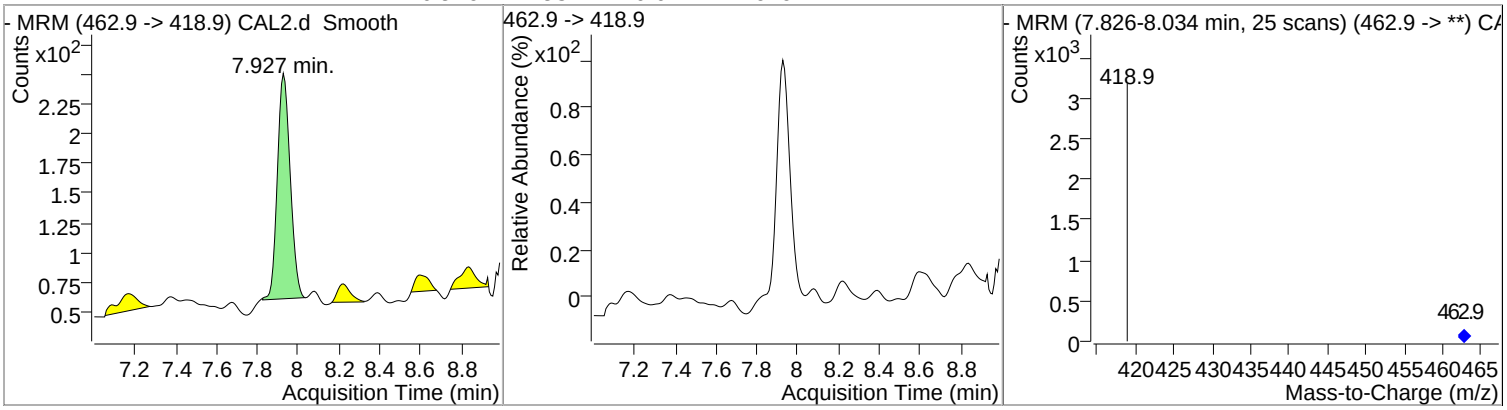
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	550.6419	7.72	-0.07	170 (m)				



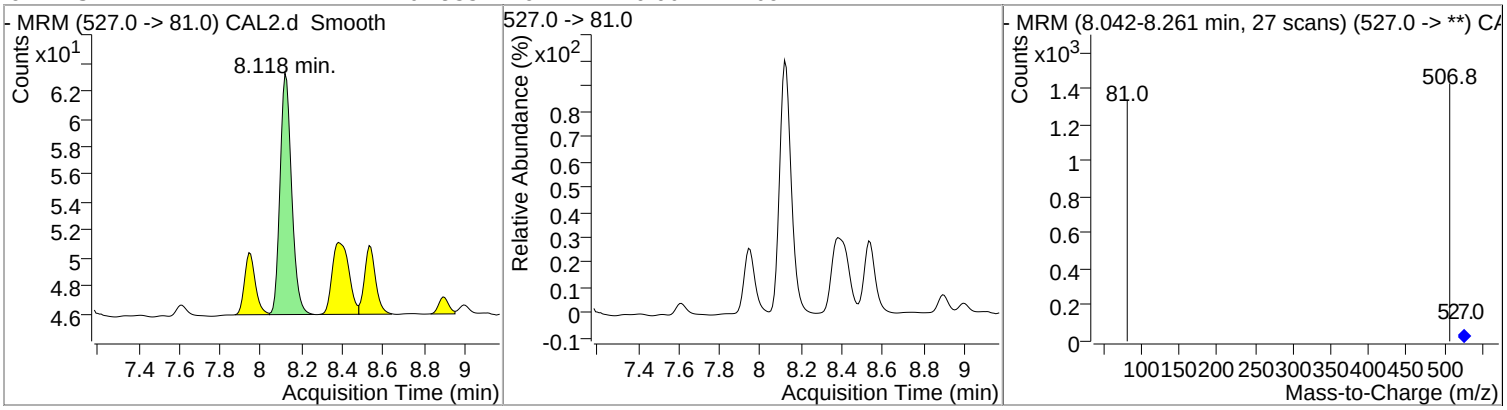
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	564.6053	7.93	-0.07	546				



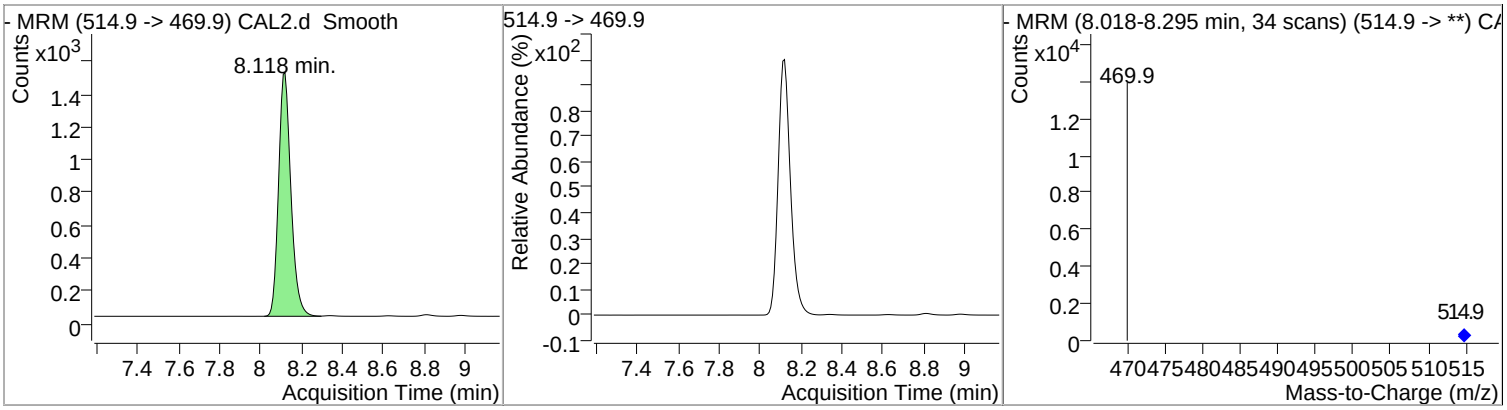
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	740.9481	7.93	-0.07	828				



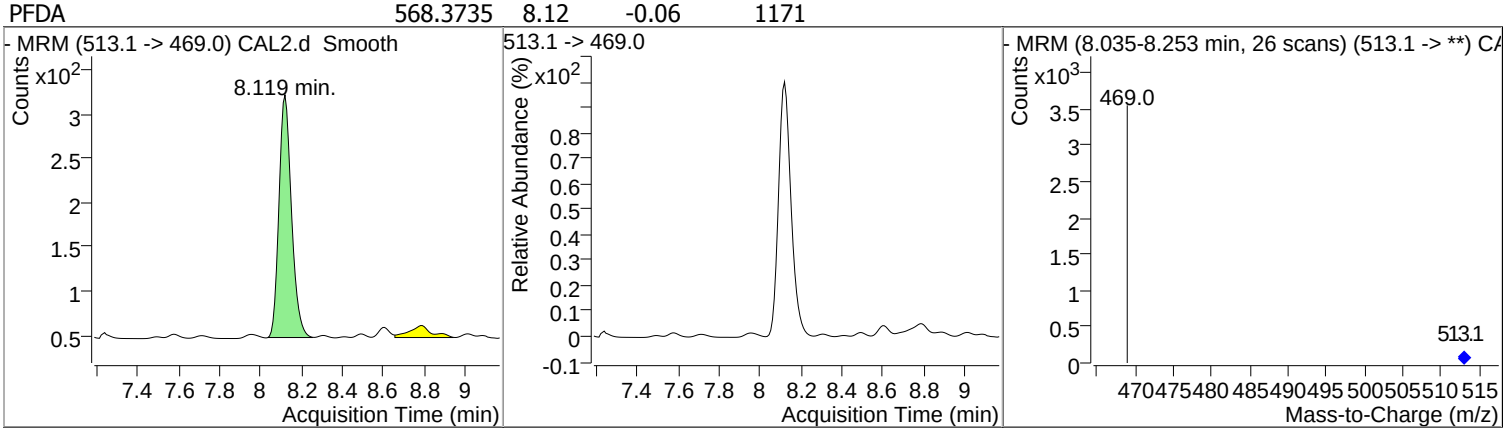
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	264.9334	8.12	-0.06	68				



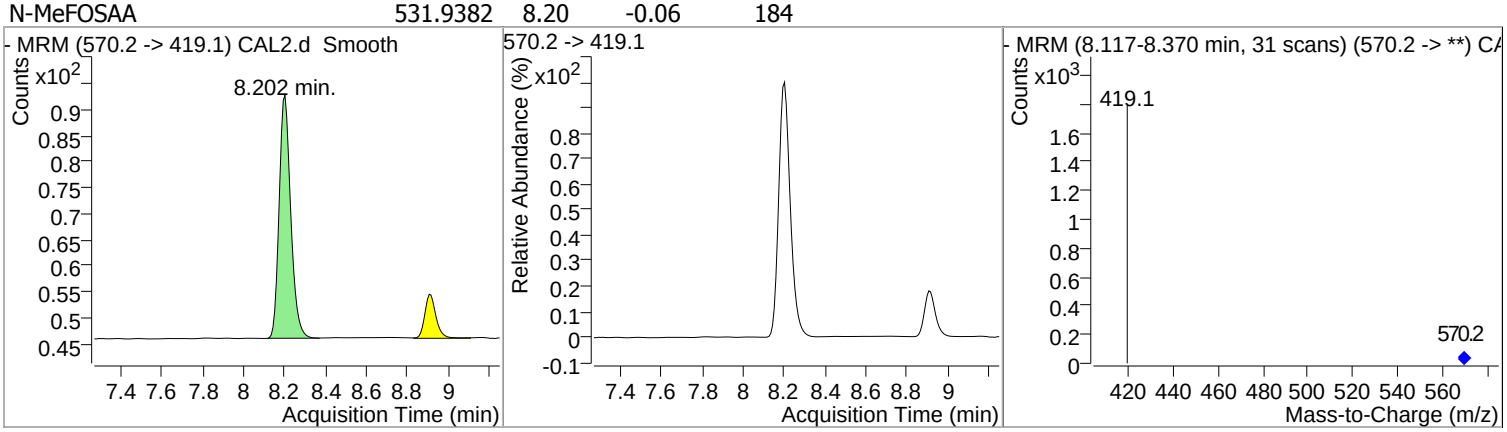
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	4270.7978	8.12	-0.06	6235				



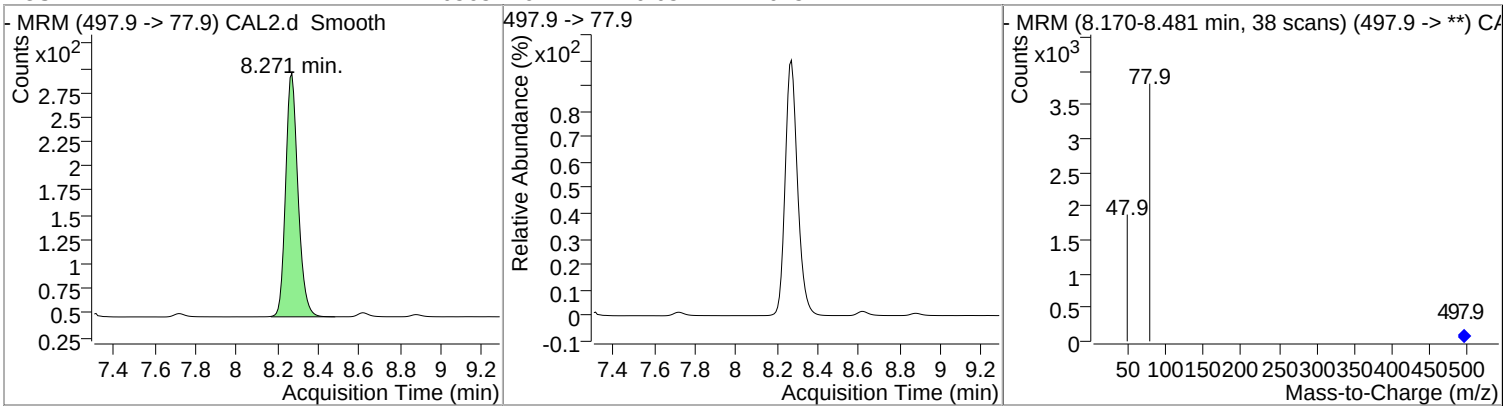
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	568.3735	8.12	-0.06	1171				



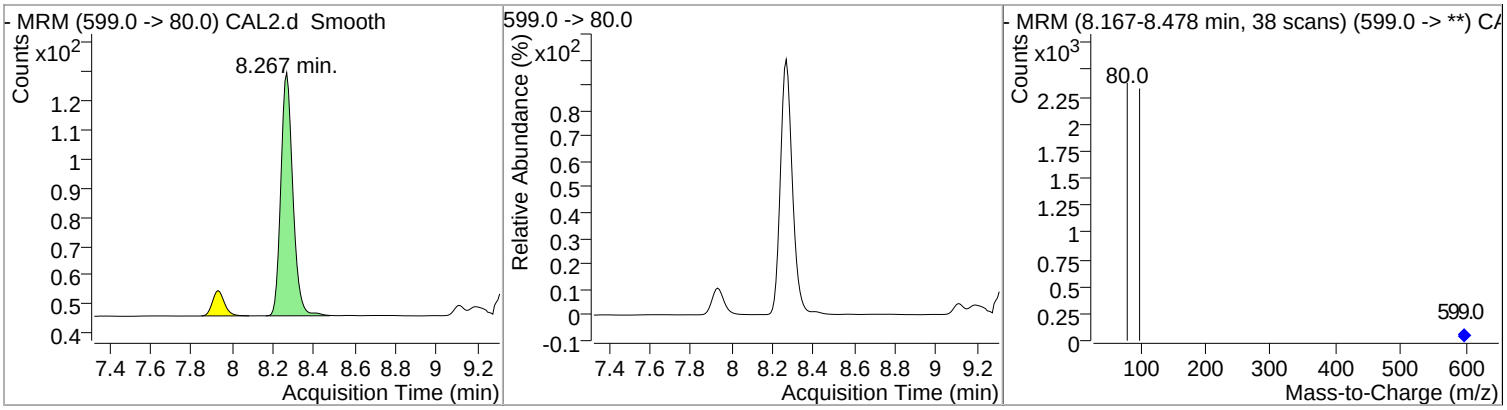
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	531.9382	8.20	-0.06	184				



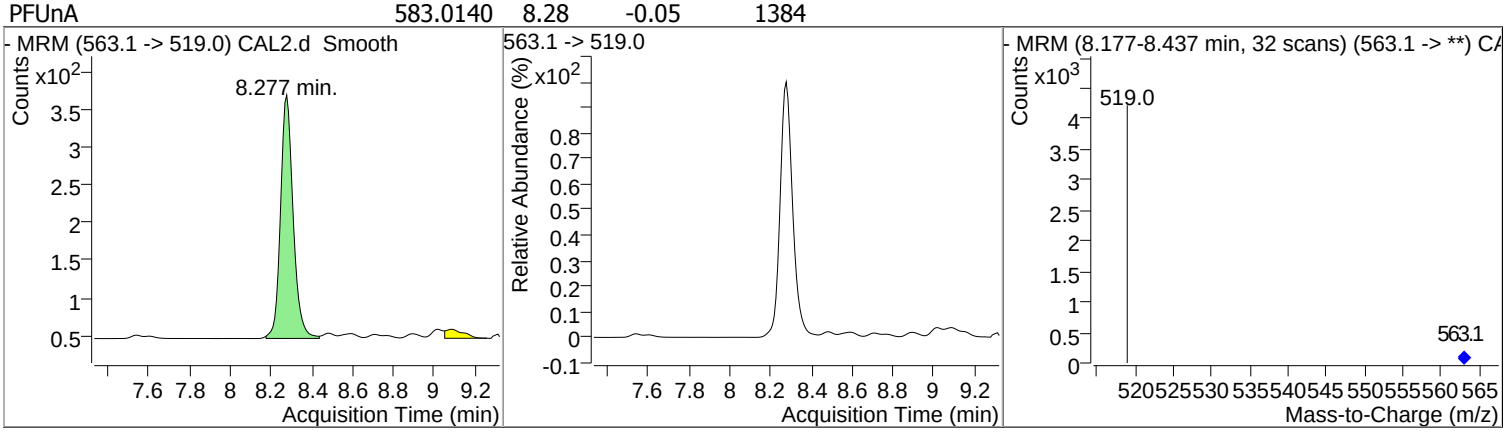
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	472.0585	8.27	-0.03	1045				



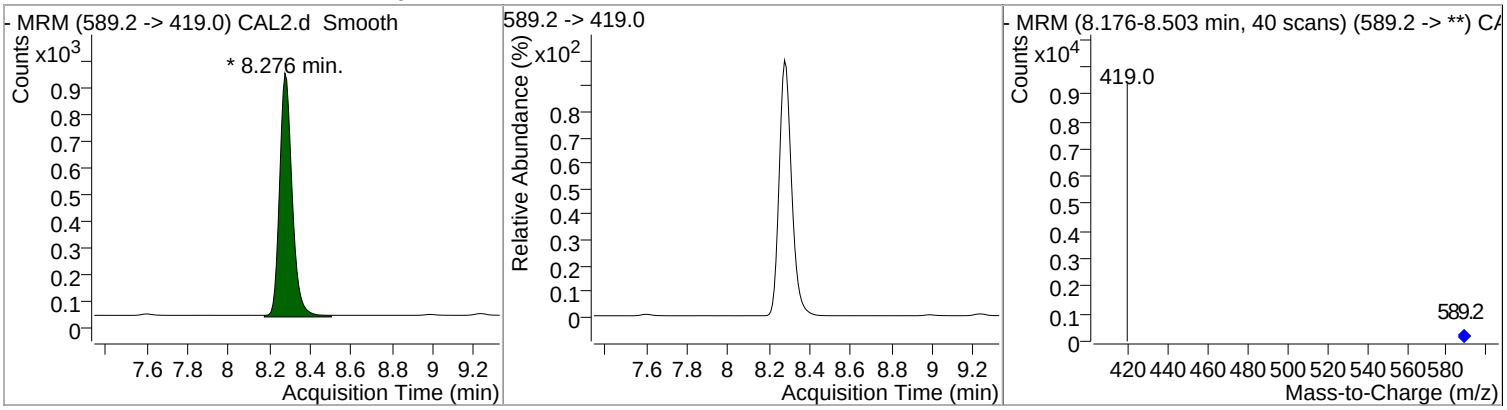
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	565.3174	8.27	-0.05	341				



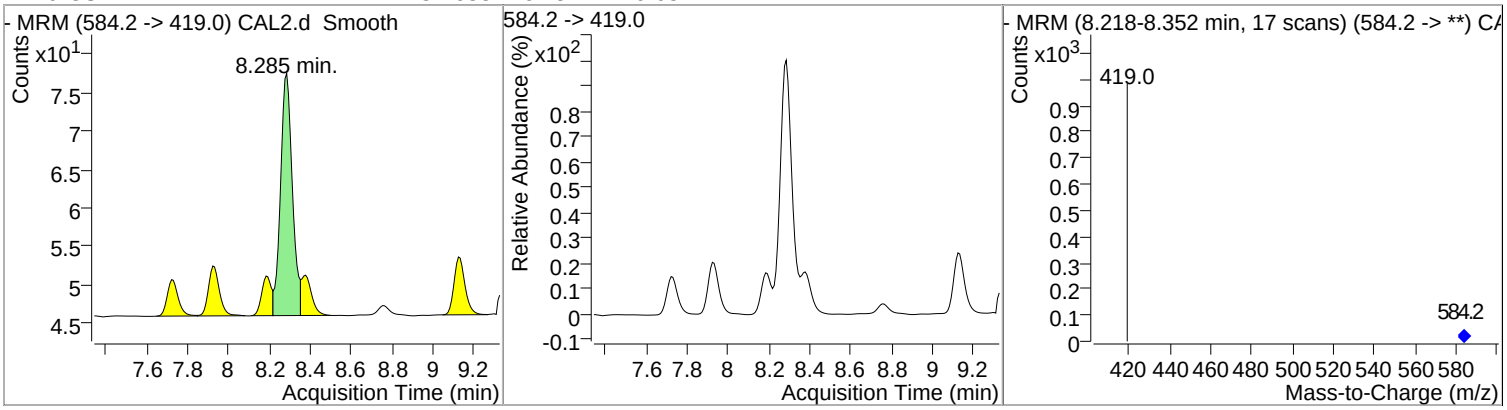
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	583.0140	8.28	-0.05	1384				



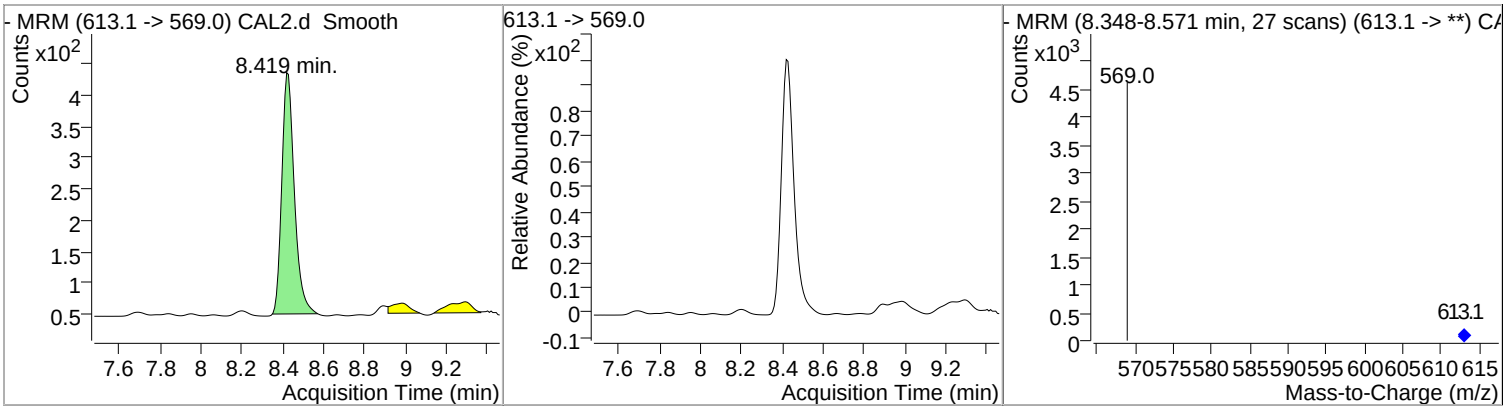
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	14258.8670	8.28	-0.06	3924 (m)				



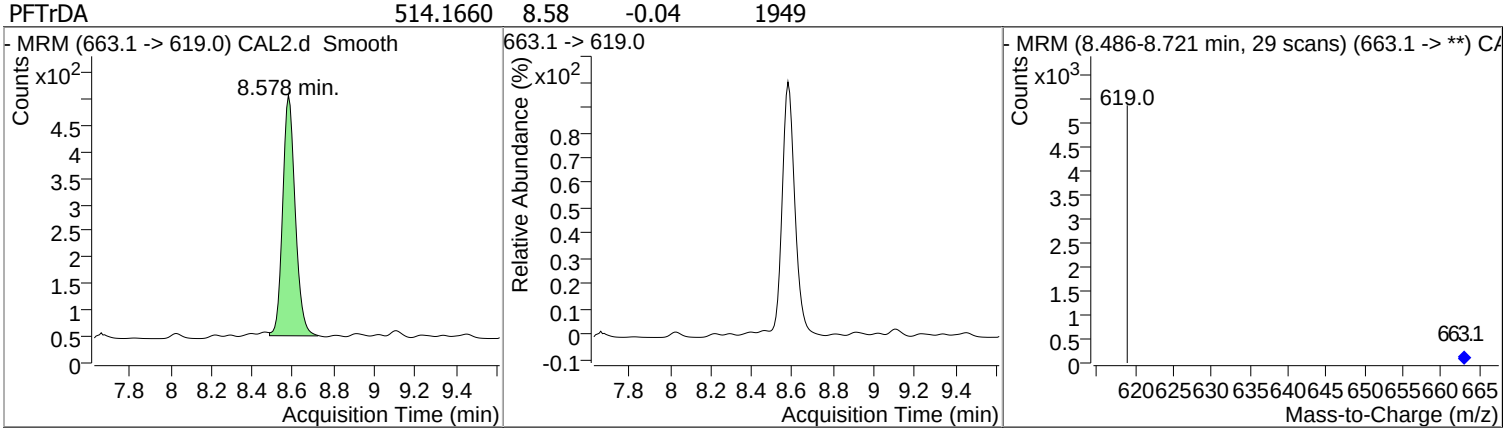
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	443.1835	8.29	-0.05	127				



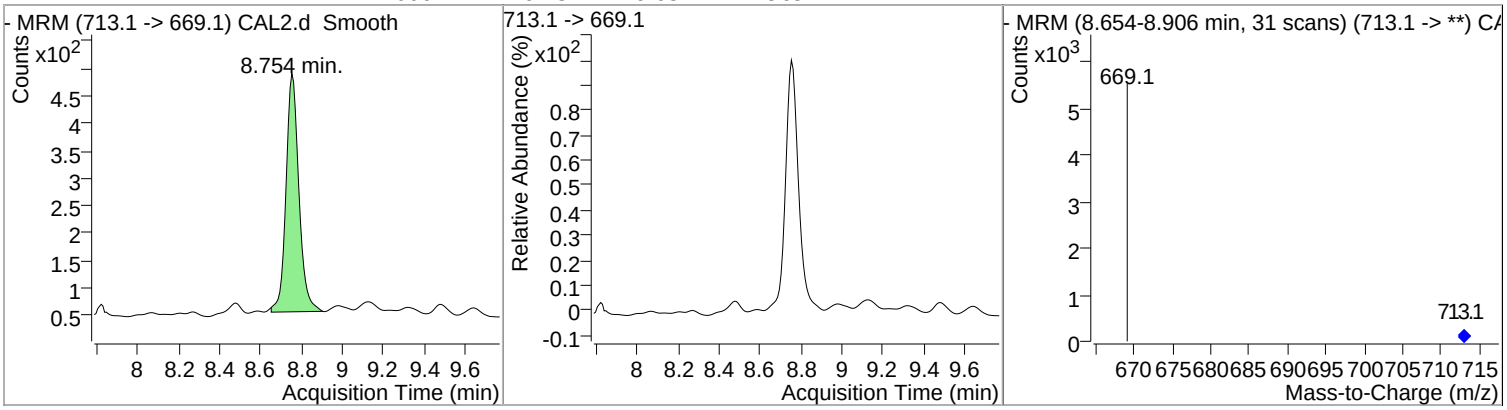
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	497.0999	8.42	-0.05	1652				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	514.1660	8.58	-0.04	1949				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	600.1744	8.75	-0.03	1909				

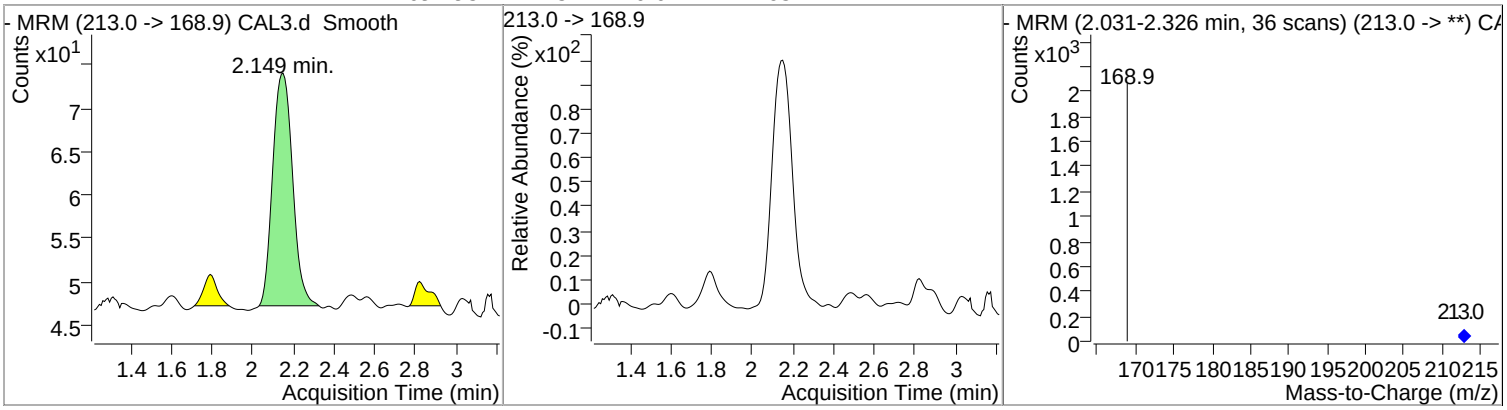


Data File	CAL3.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/13/2019 6:45:45 PM
Sample Name	CAL3	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	CAL.batch.bin	Last Calib Update	8/14/2019 2:32:16 PM
Ref Library			

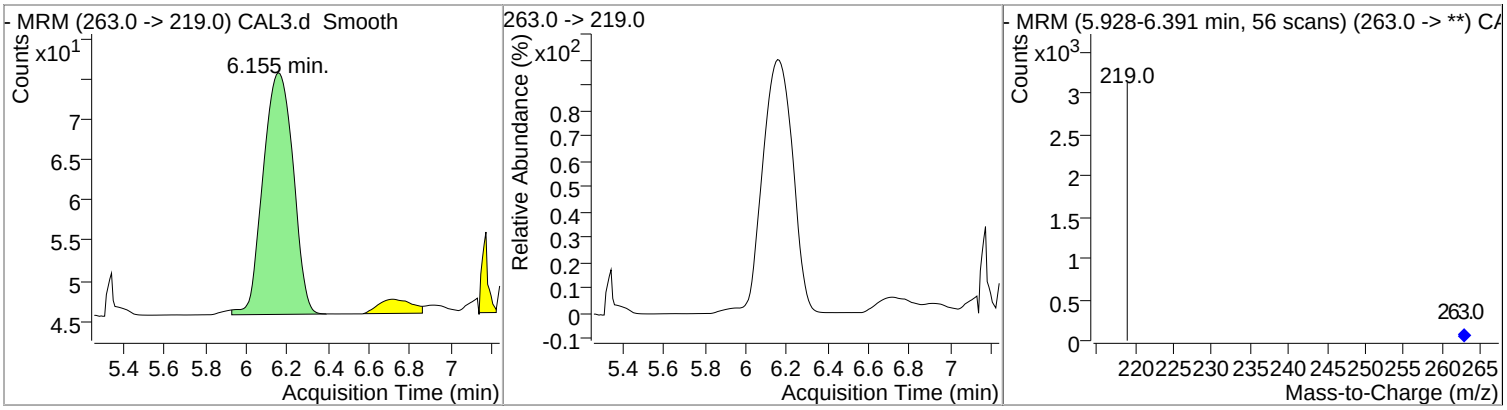
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.726	416.9 -> 371.9	10303	10000.0000	pg/ml		-0.050
M PFOS C13	7.951	502.9 -> 80.0	17510	28700.0000	pg/ml	m	-0.042
M d3-N-MeFOSAA	8.226	573.2 -> 419.0	6682	40000.0000	pg/ml	m	-0.034
System Monitoring Compounds							
S PFHxA C13	7.012	314.9 -> 269.9	4383	5964.7966	pg/ml	m	-0.076
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 59.65%		*	
S PFDA C13	8.144	514.9 -> 469.9	6045	5635.3842	pg/ml		-0.034
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 56.35%		*	
S d5-N-MeFOSAA	8.302	589.2 -> 419.0	3451	21835.7431	pg/ml		-0.034
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 54.59%		*	
Target Compounds							**QValue**
T PFBA	2.149	213.0 -> 168.9	183	1094.9571	pg/ml		100
T PFPeA	6.155	263.0 -> 219.0	306	904.9745	pg/ml		100
T PFBS	6.508	298.9 -> 80.0	309	874.0103	pg/ml		100
T PFHxA	7.004	312.9 -> 268.9	819	1145.1693	pg/ml		100
T PFHpA	7.433	362.9 -> 319.0	1159	1088.8357	pg/ml		100
T PFHxS-Total	7.458	398.9 -> 80.0	422	758.1599	pg/ml		100
T 6.2 FTS	7.717	427.0 -> 406.8	144	995.1980	pg/ml		100
T PFOA-Total	7.718	412.9 -> 368.9	1533	1133.6340	pg/ml		100
T PFHpS	7.733	449.0 -> 79.7	300	1032.3494	pg/ml		100
T PFOS-Total	7.951	498.9 -> 80.0	628	693.3437	pg/ml		100
T PFNA	7.952	462.9 -> 418.9	912	1110.9327	pg/ml		100
T 8.2 FTS	8.143	527.0 -> 81.0	295	1229.1800	pg/ml	m	100
T PFDA	8.144	513.1 -> 469.0	1468	969.5649	pg/ml		100
T N-MeFOSAA	8.235	570.2 -> 419.1	243	1223.4124	pg/ml		100
T FOSA	8.262	497.9 -> 77.9	1159	911.8199	pg/ml		100
T PFDS	8.293	599.0 -> 80.0	544	960.2763	pg/ml		100
T PFUnA	8.303	563.1 -> 519.0	1831	1049.7271	pg/ml		100
T N-EtFOSAA	8.310	584.2 -> 419.0	196	1193.0356	pg/ml		100
T PFDoA	8.452	613.1 -> 569.0	2477	1014.3004	pg/ml		100
T PFTrDA	8.612	663.1 -> 619.0	2567	921.6824	pg/ml		100
T PFTA	8.797	713.1 -> 669.1	2050	877.3246	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

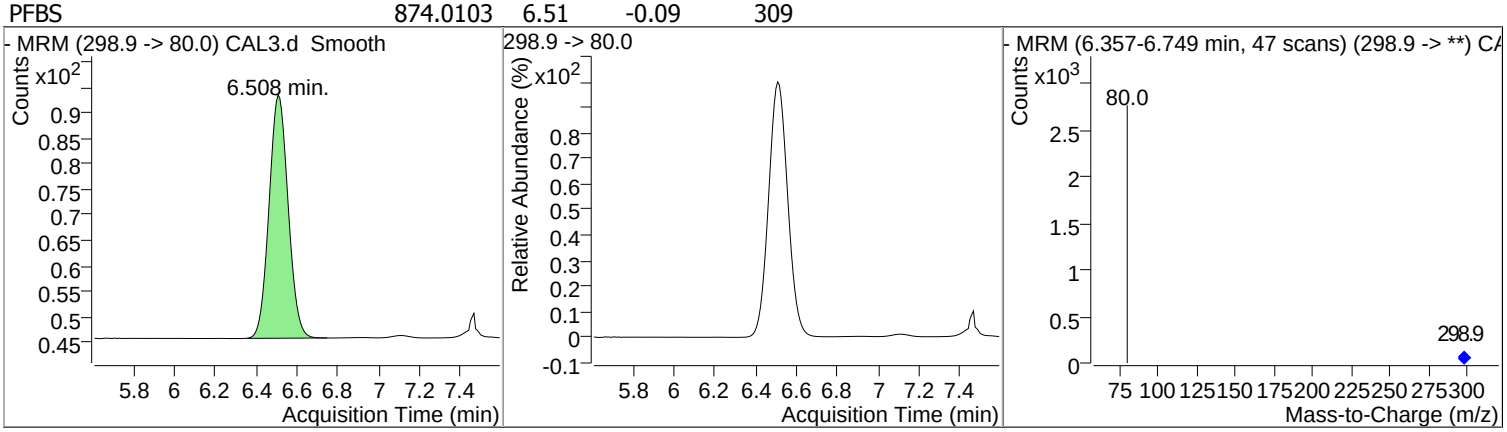
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	1094.9571	2.15	-0.07	183				



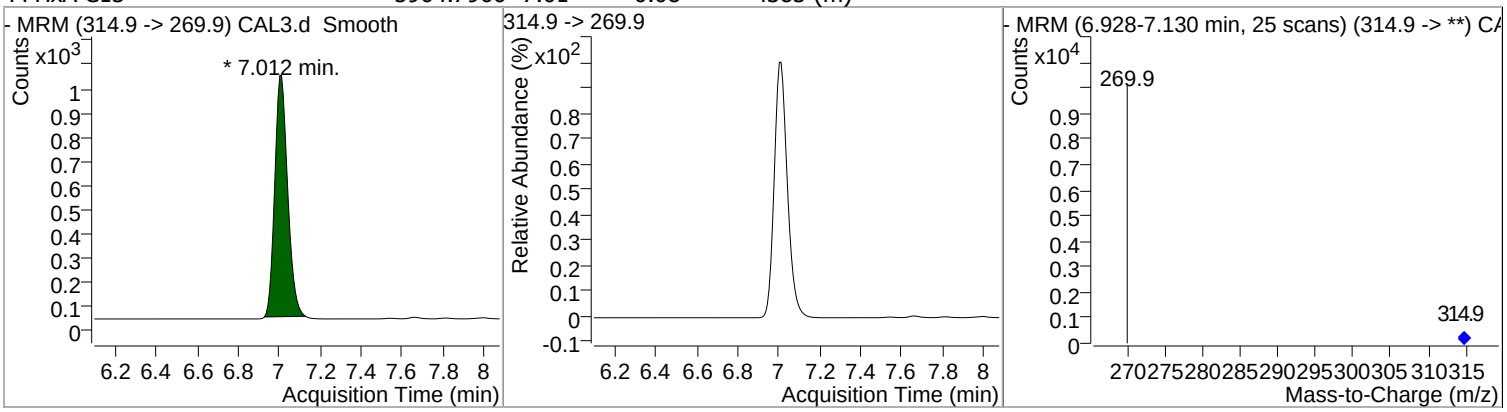
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	904.9745	6.16	-0.09	306				



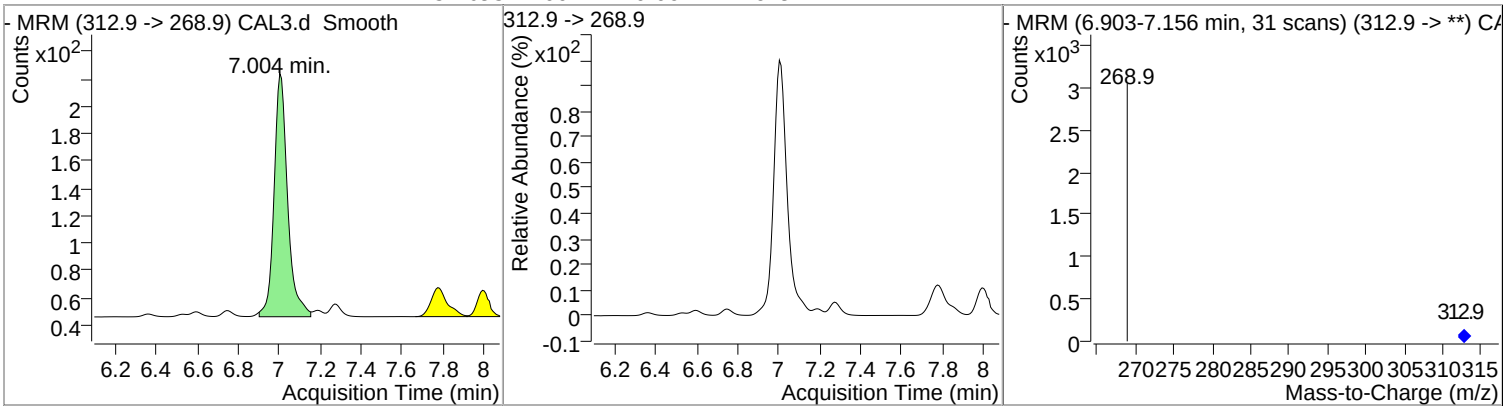
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	874.0103	6.51	-0.09	309				



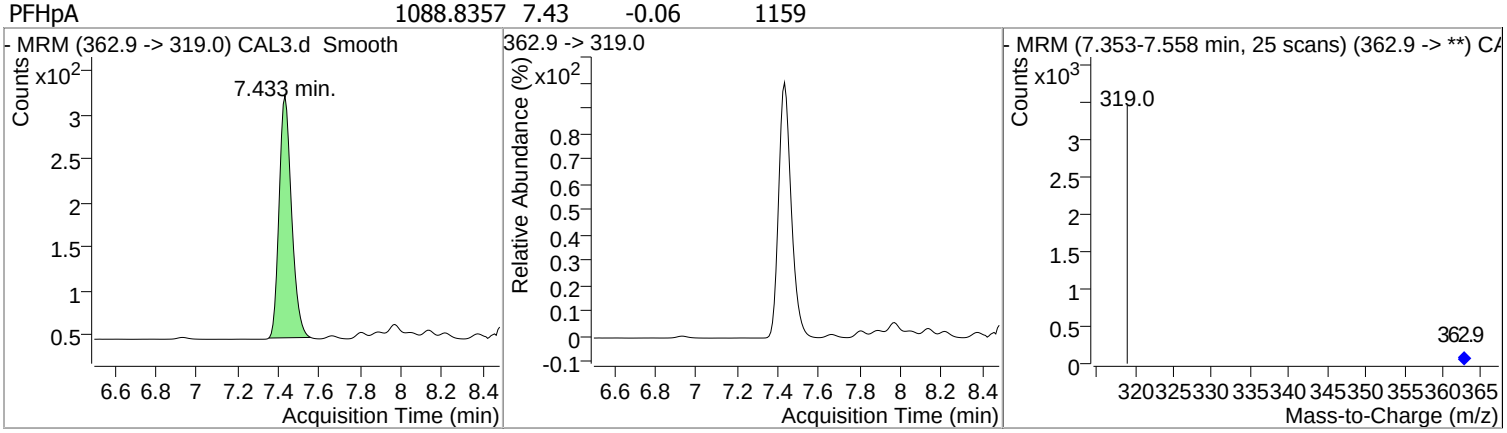
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	5964.7966	7.01	-0.08	4383 (m)				



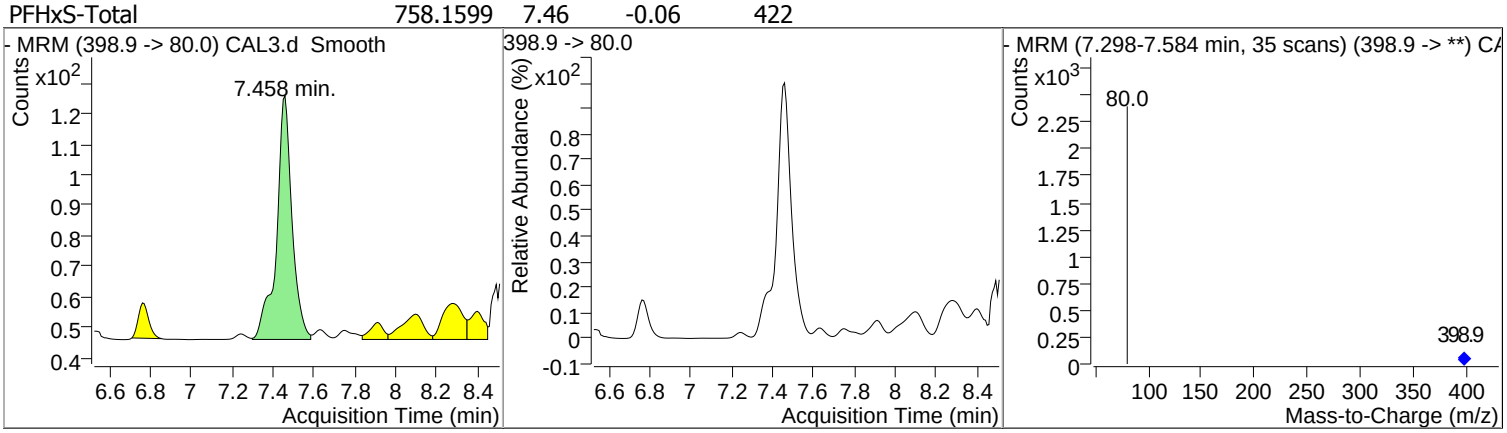
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	1145.1693	7.00	-0.08	819				



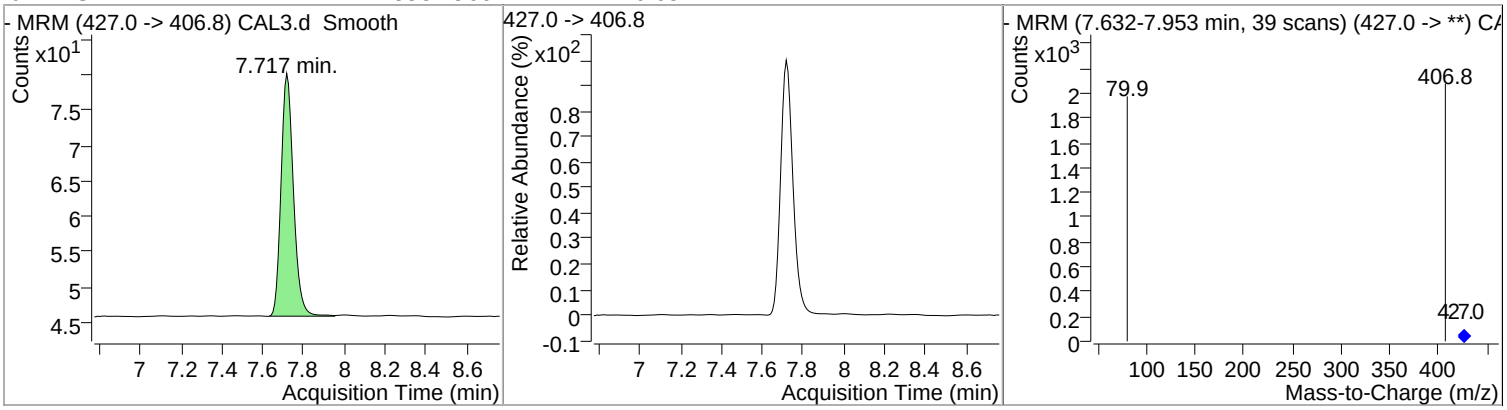
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	1088.8357	7.43	-0.06	1159				



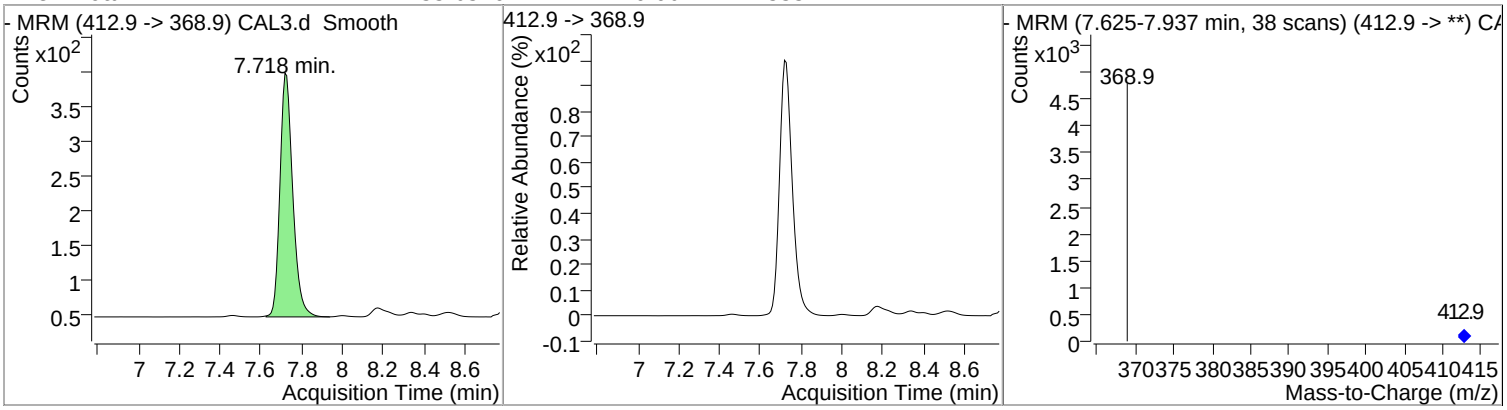
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	758.1599	7.46	-0.06	422				



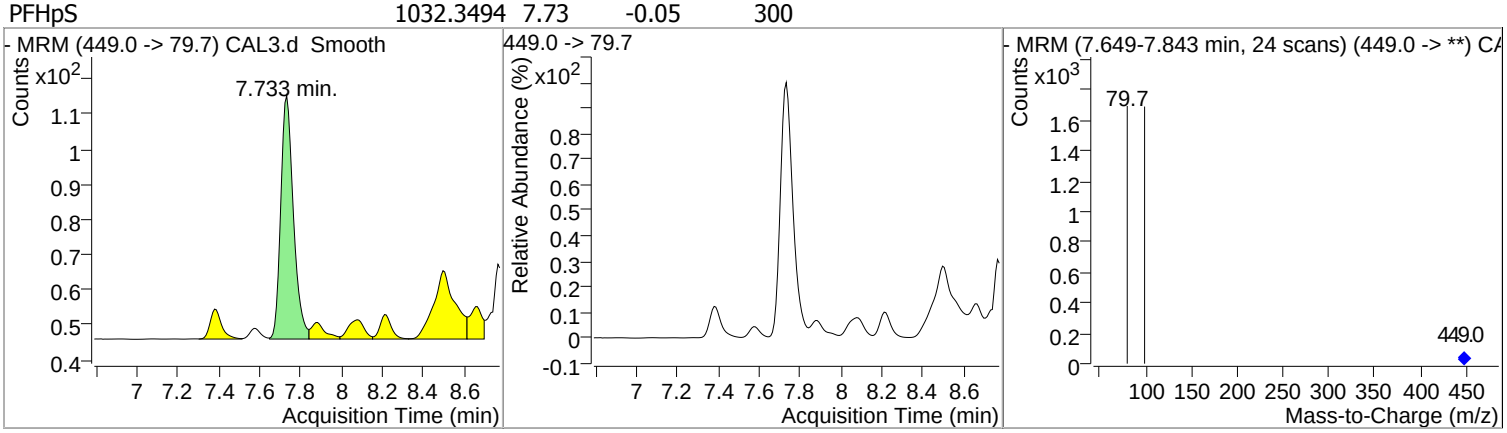
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	995.1980	7.72	-0.05	144				



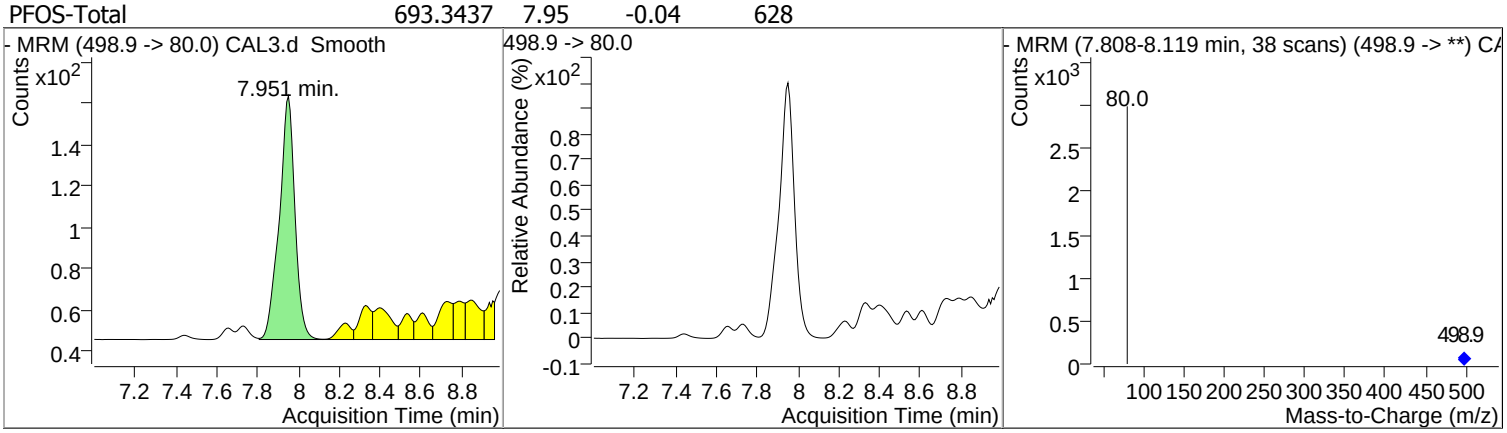
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	1133.6340	7.72	-0.06	1533				



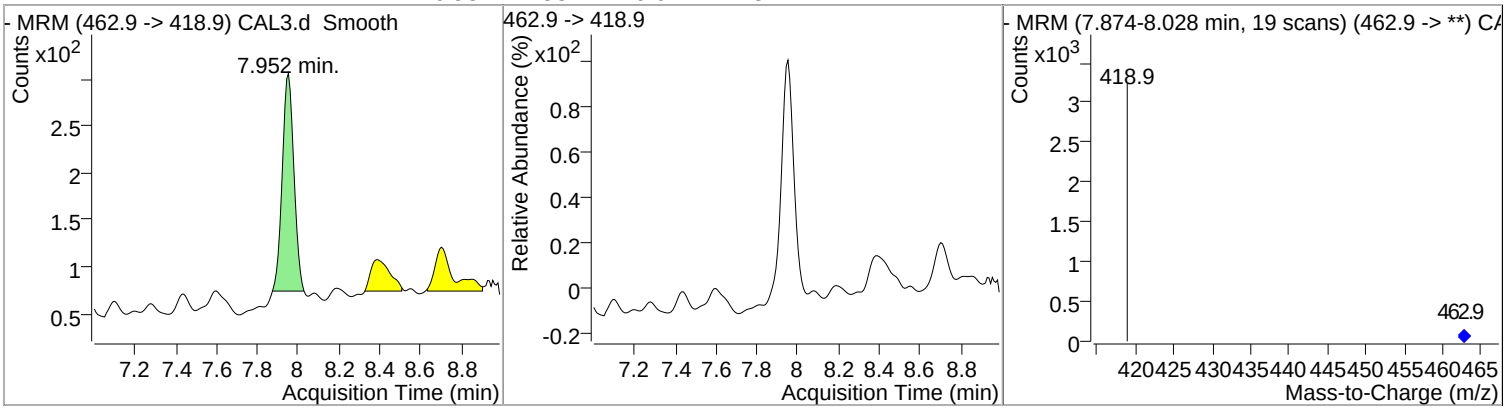
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	1032.3494	7.73	-0.05	300				



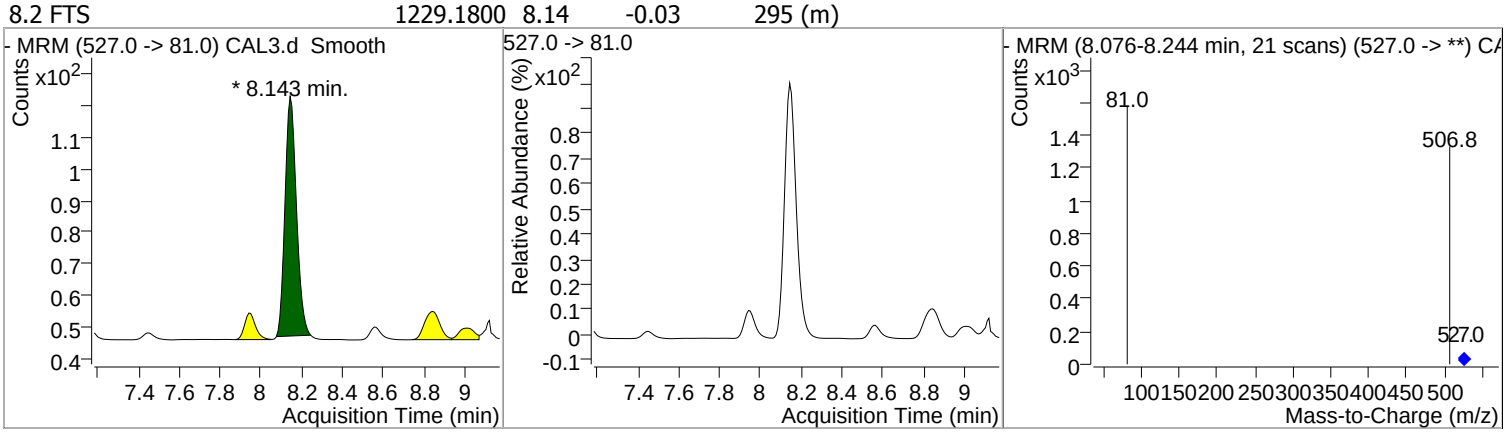
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	693.3437	7.95	-0.04	628				



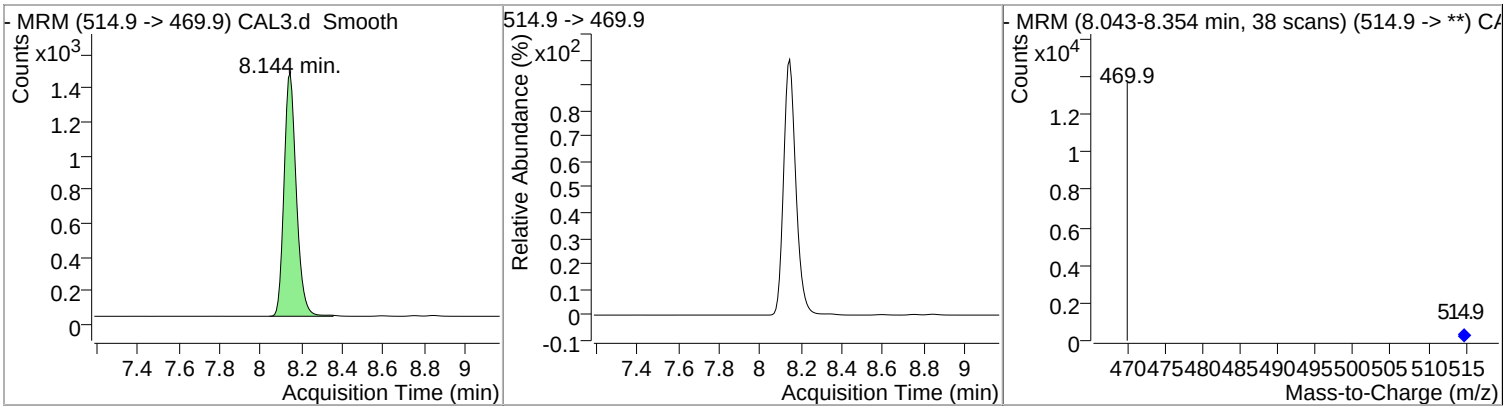
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	1110.9327	7.95	-0.04	912				



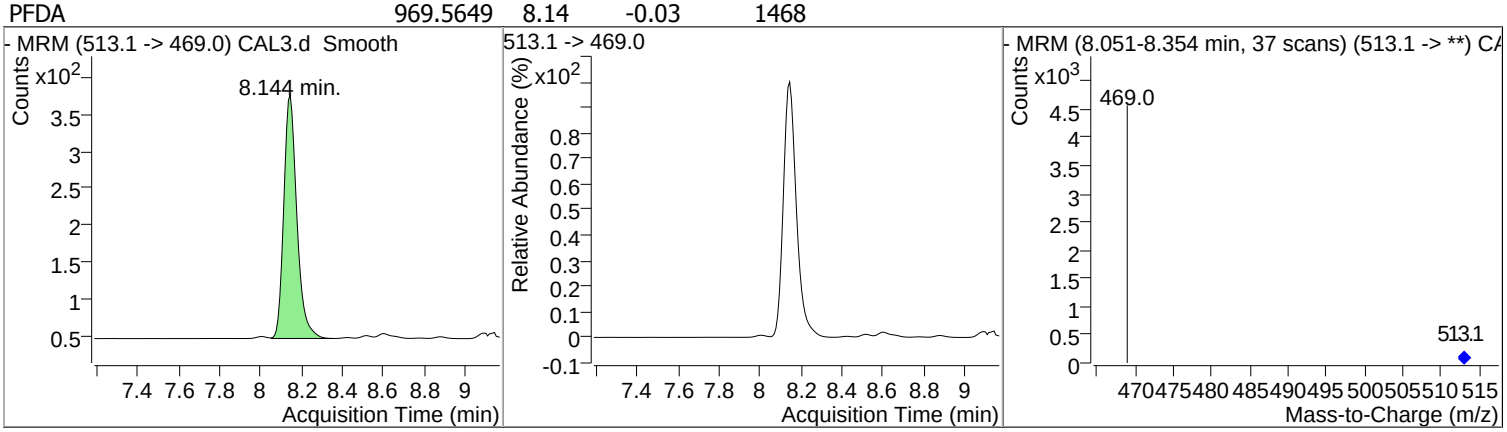
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	1229.1800	8.14	-0.03	295 (m)				



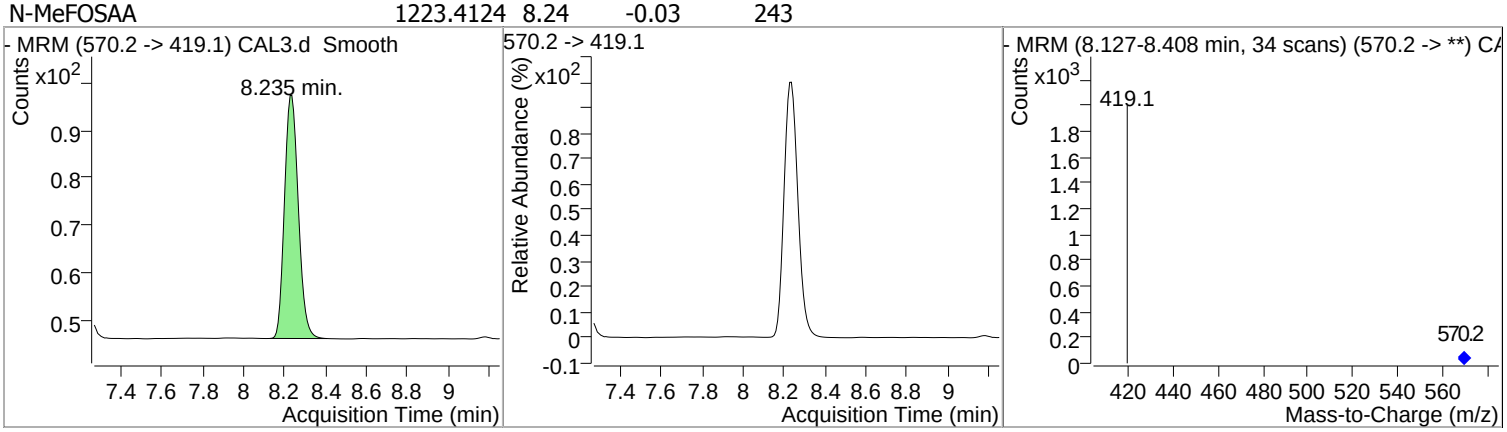
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	5635.3842	8.14	-0.03	6045				



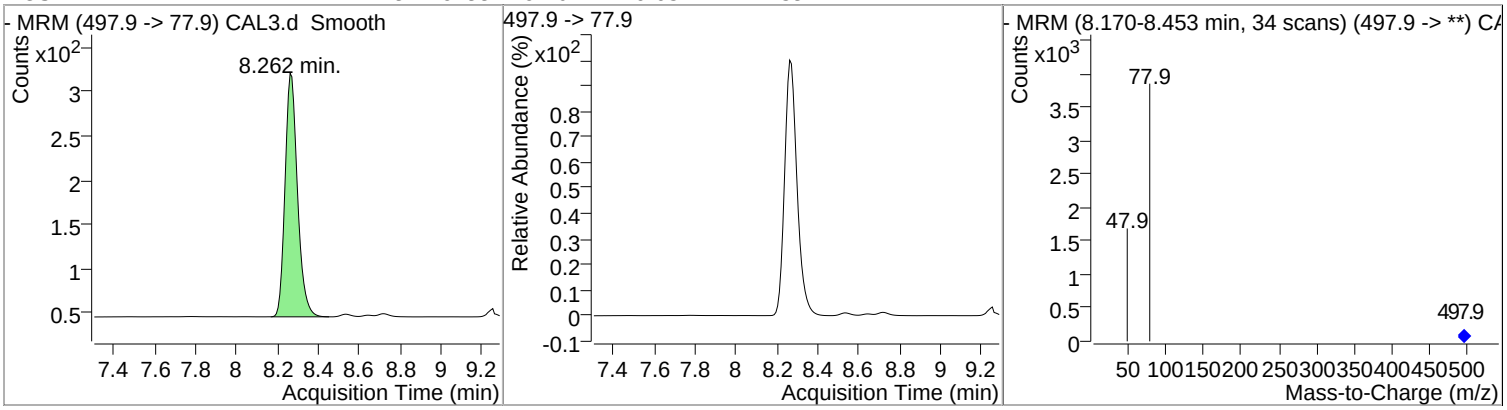
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	969.5649	8.14	-0.03	1468				



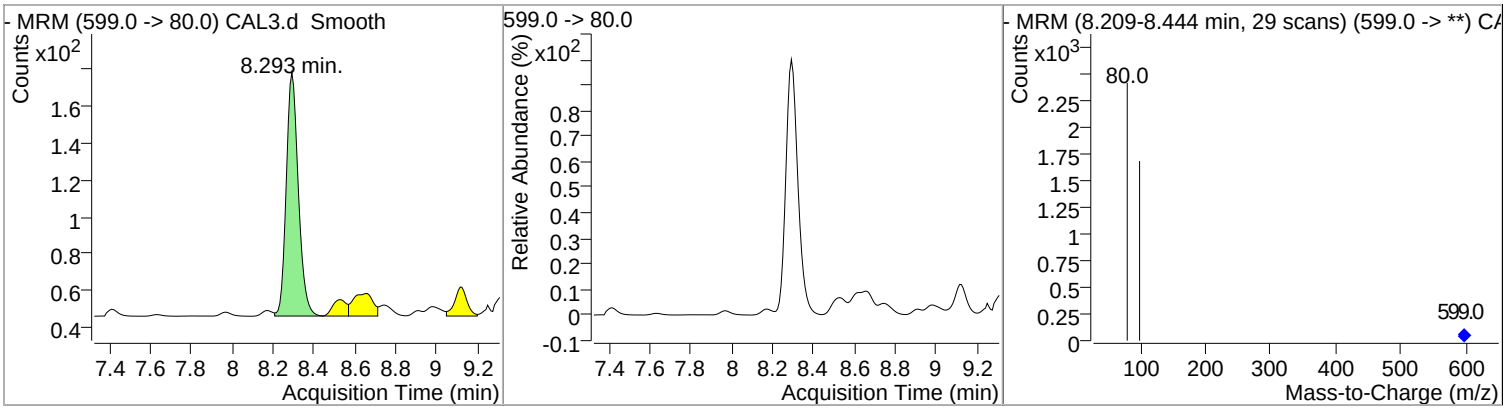
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	1223.4124	8.24	-0.03	243				



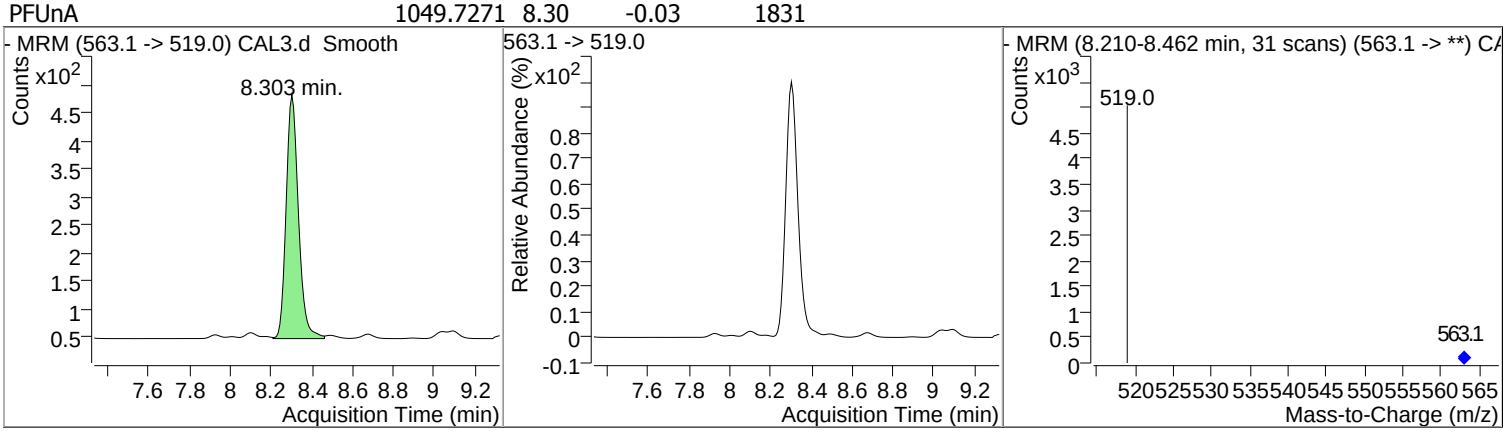
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	911.8199	8.26	-0.03	1159				



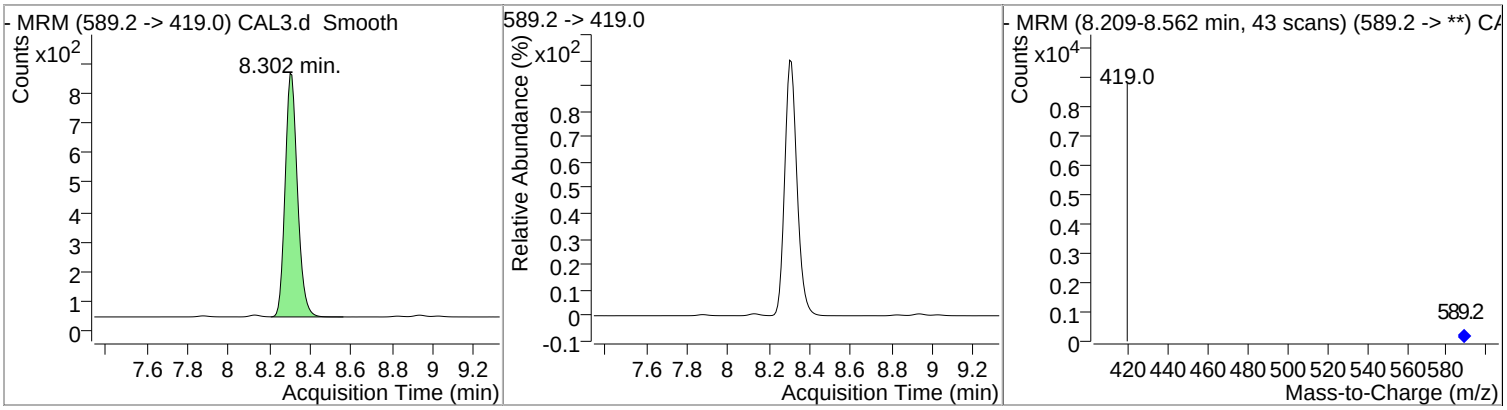
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	960.2763	8.29	-0.03	544				



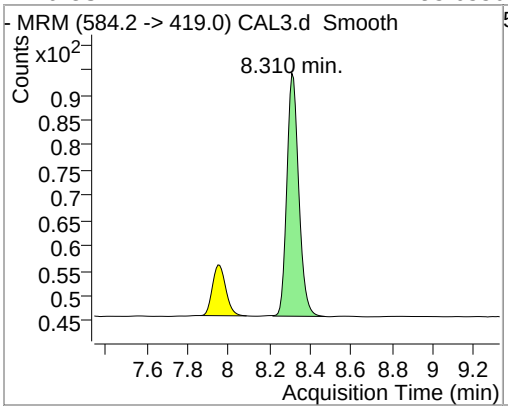
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	1049.7271	8.30	-0.03	1831				

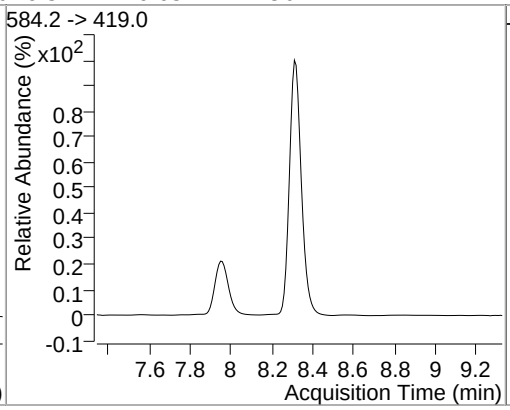


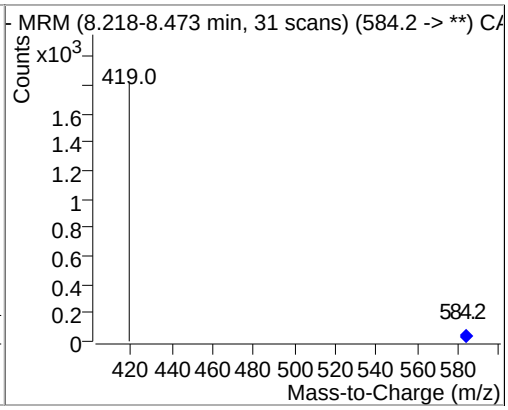
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	21835.7431	8.30	-0.03	3451				



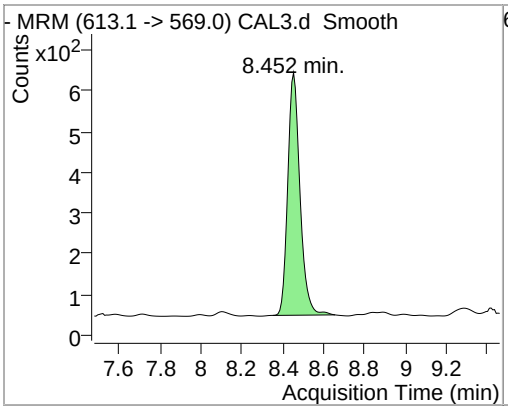
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	1193.0356	8.31	-0.03	196				

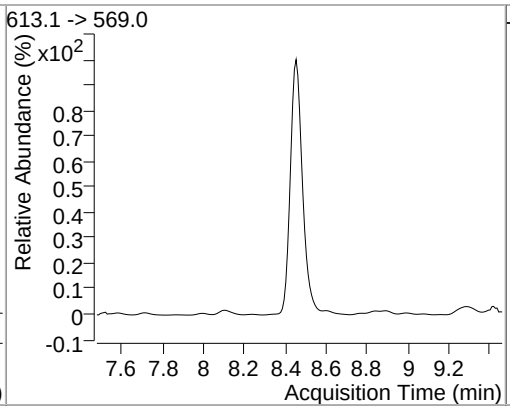


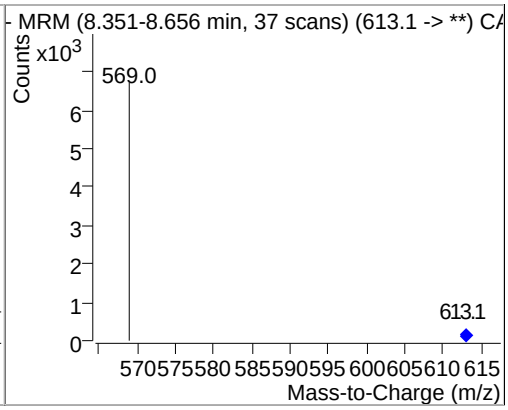




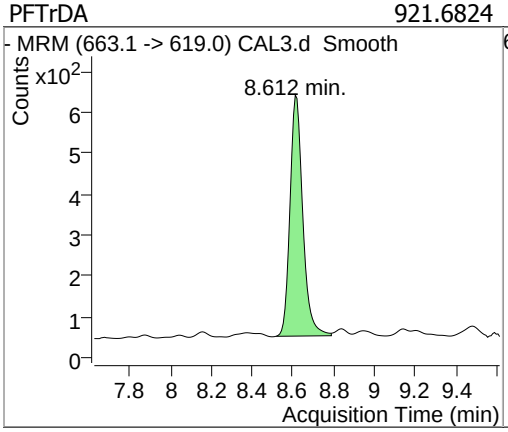
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	1014.3004	8.45	-0.02	2477				

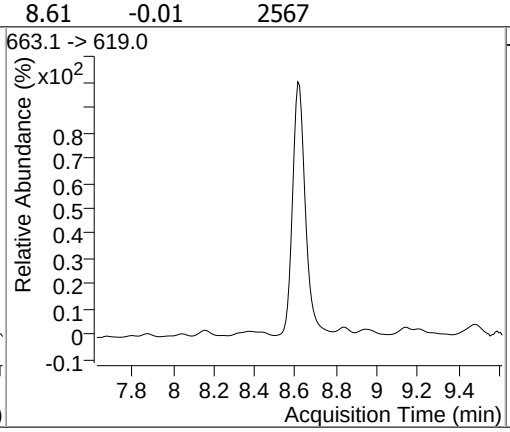


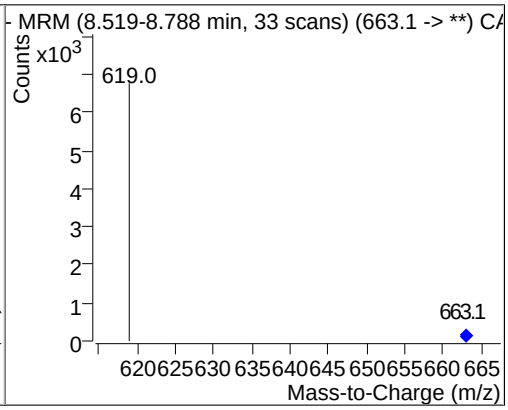




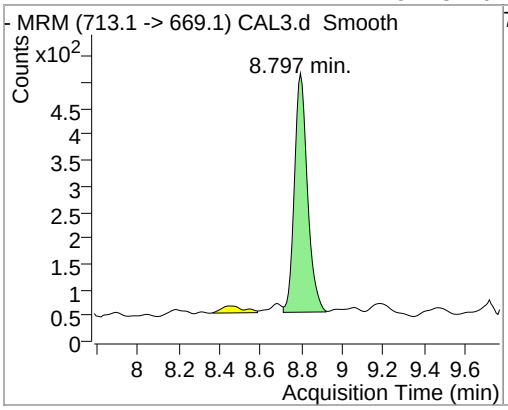
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	921.6824	8.61	-0.01	2567				

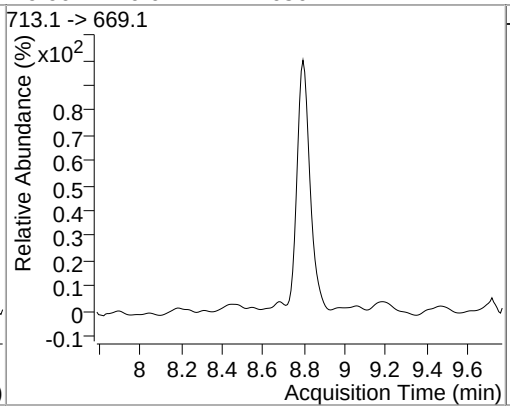


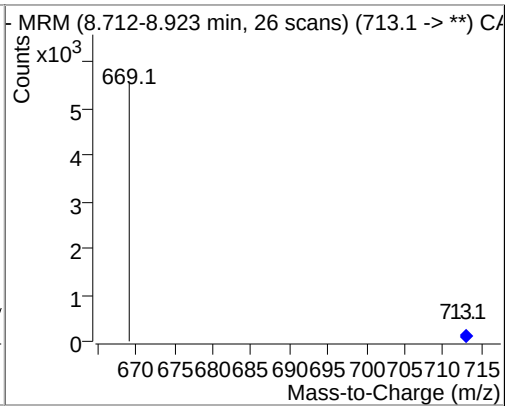




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	877.3246	8.80	0.02	2050				





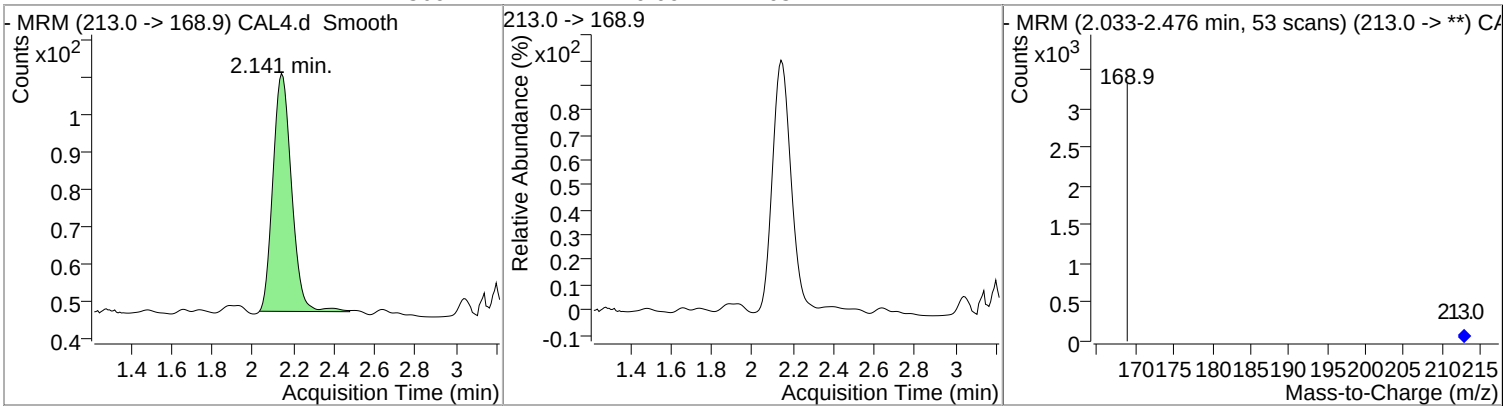


Data File	CAL4.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/13/2019 6:58:21 PM
Sample Name	CAL4	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	CAL.batch.bin	Last Calib Update	8/14/2019 2:32:16 PM
Ref Library			

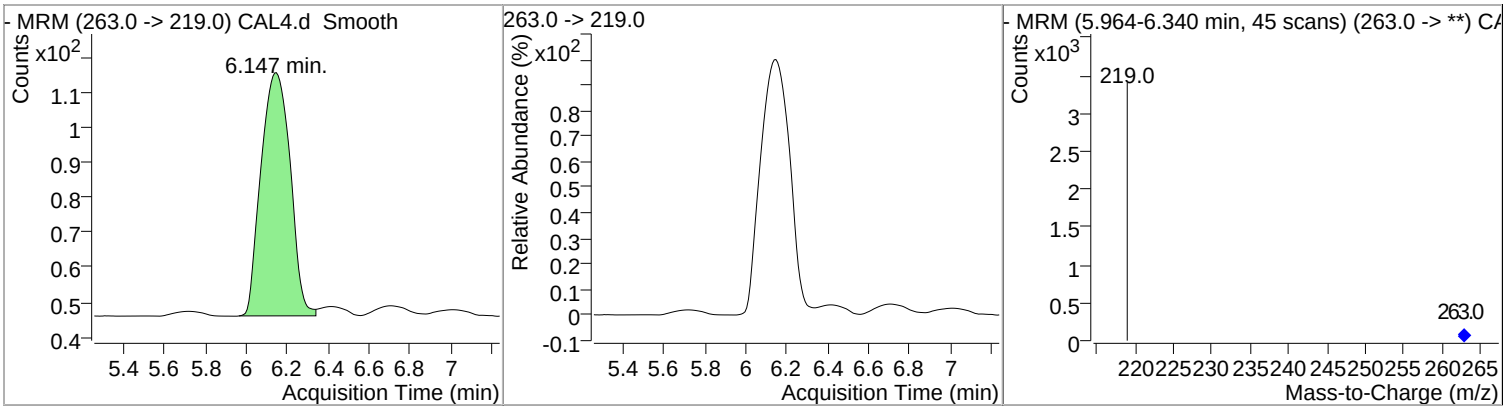
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.726	416.9 -> 371.9	10550	10000.0000	pg/ml	m	-0.050
M PFOS C13	7.959	502.9 -> 80.0	15283	28700.0000	pg/ml		-0.034
M d3-N-MeFOSAA	8.227	573.2 -> 419.0	6671	40000.0000	pg/ml	m	-0.034
System Monitoring Compounds							
S PFHxA C13	7.012	314.9 -> 269.9	5682	7551.1078	pg/ml		-0.076
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 75.51%			
S PFDA C13	8.144	514.9 -> 469.9	9459	8612.0218	pg/ml		-0.034
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 86.12%			
S d5-N-MeFOSAA	8.310	589.2 -> 419.0	4936	31285.0196	pg/ml		-0.025
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 78.21%			
Target Compounds							QValue
T PFBA	2.141	213.0 -> 168.9	405	2368.4214	pg/ml		100
T PFPeA	6.147	263.0 -> 219.0	698	2014.0503	pg/ml		100
T PFBS	6.517	298.9 -> 80.0	497	1609.8693	pg/ml		100
T PFHxA	7.013	312.9 -> 268.9	1543	2107.5738	pg/ml		100
T PFHpA	7.433	362.9 -> 319.0	2490	2283.5378	pg/ml		100
T PFHxS-Total	7.458	398.9 -> 80.0	937	1928.8643	pg/ml	m	100
T 6.2 FTS	7.717	427.0 -> 406.8	386	3048.6821	pg/ml		100
T PFOA-Total	7.726	412.9 -> 368.9	2700	1949.7015	pg/ml		100
T PFHpS	7.733	449.0 -> 79.7	564	2228.3007	pg/ml		100
T PFOS-Total	7.960	498.9 -> 80.0	1327	1677.7547	pg/ml	m	100
T PFNA	7.952	462.9 -> 418.9	1788	2128.2068	pg/ml		100
T 8.2 FTS	8.143	527.0 -> 81.0	498	2376.8267	pg/ml		100
T PFDA	8.144	513.1 -> 469.0	3497	2255.9412	pg/ml		100
T N-MeFOSAA	8.235	570.2 -> 419.1	413	2084.5466	pg/ml		100
T FOSA	8.271	497.9 -> 77.9	2619	2064.1900	pg/ml		100
T PFDS	8.293	599.0 -> 80.0	1003	2029.3657	pg/ml		100
T PFUnA	8.303	563.1 -> 519.0	4160	2329.4036	pg/ml		100
T N-EtFOSAA	8.310	584.2 -> 419.0	344	2097.4341	pg/ml		100
T PFDoA	8.452	613.1 -> 569.0	5277	2110.2464	pg/ml		100
T PFTrDA	8.620	663.1 -> 619.0	5849	2050.5537	pg/ml		100
T PFTA	8.797	713.1 -> 669.1	5531	2311.9135	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

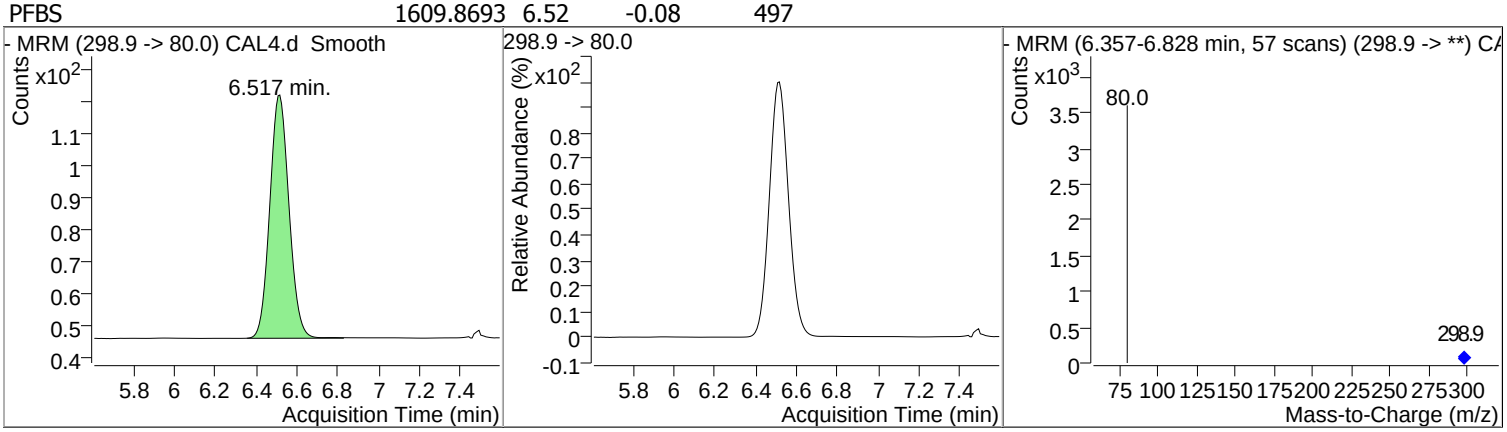
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	2368.4214	2.14	-0.08	405				



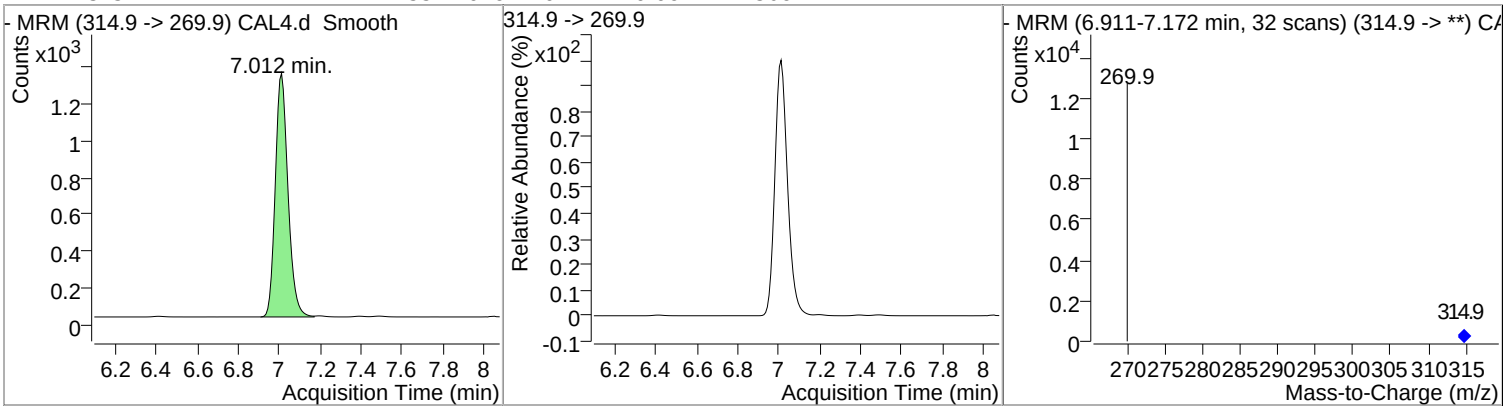
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	2014.0503	6.15	-0.10	698				



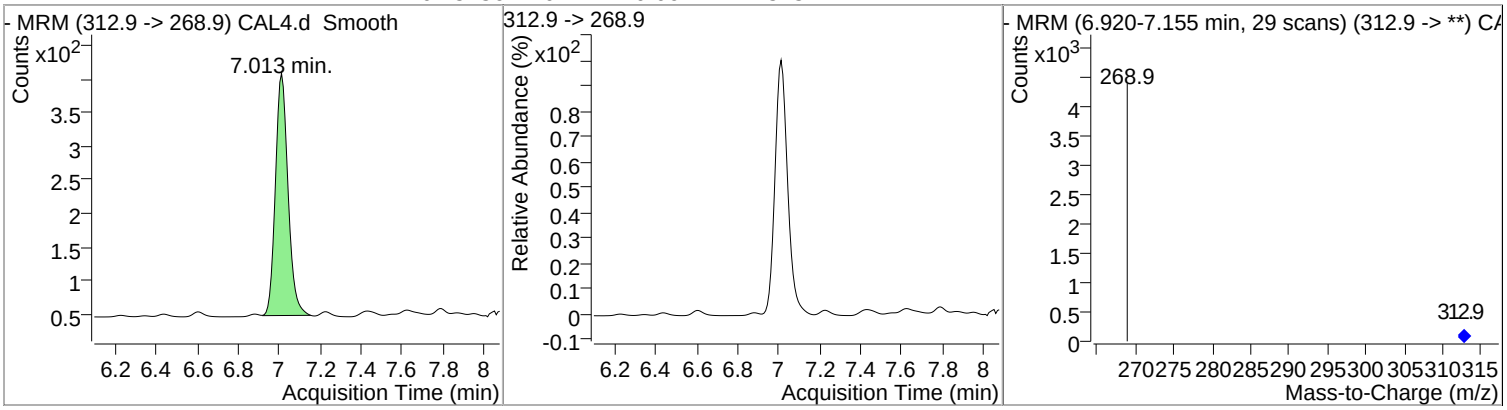
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	1609.8693	6.52	-0.08	497				



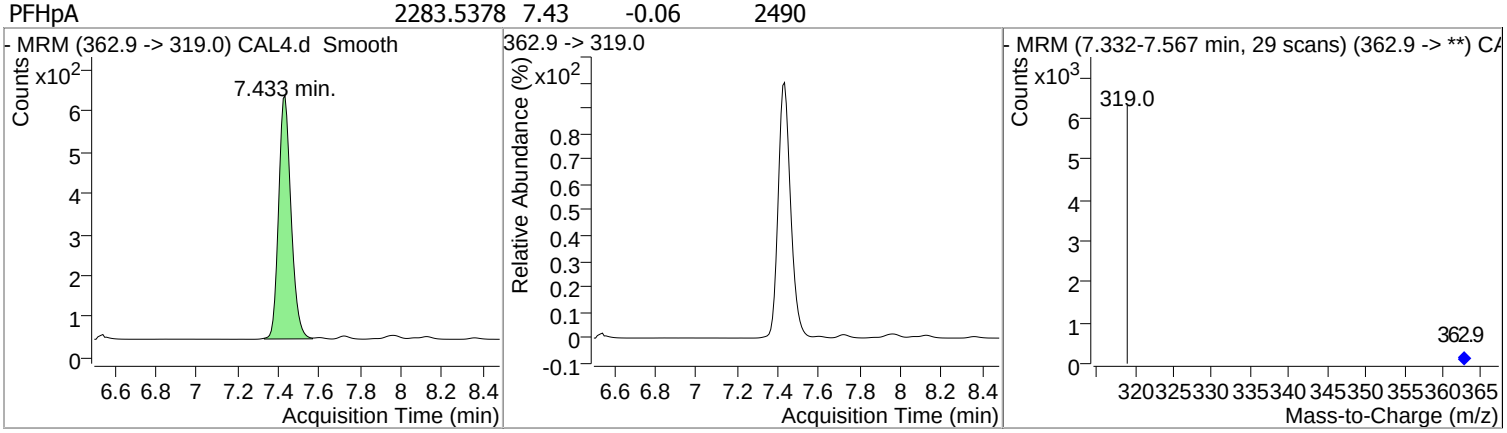
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	7551.1078	7.01	-0.08	5682				



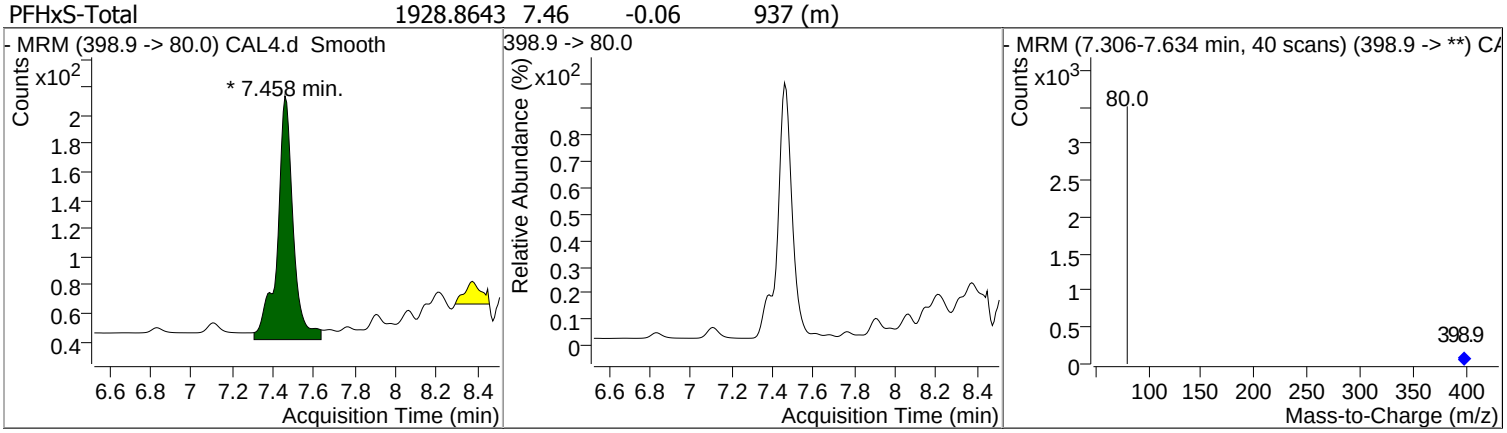
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	2107.5738	7.01	-0.08	1543				



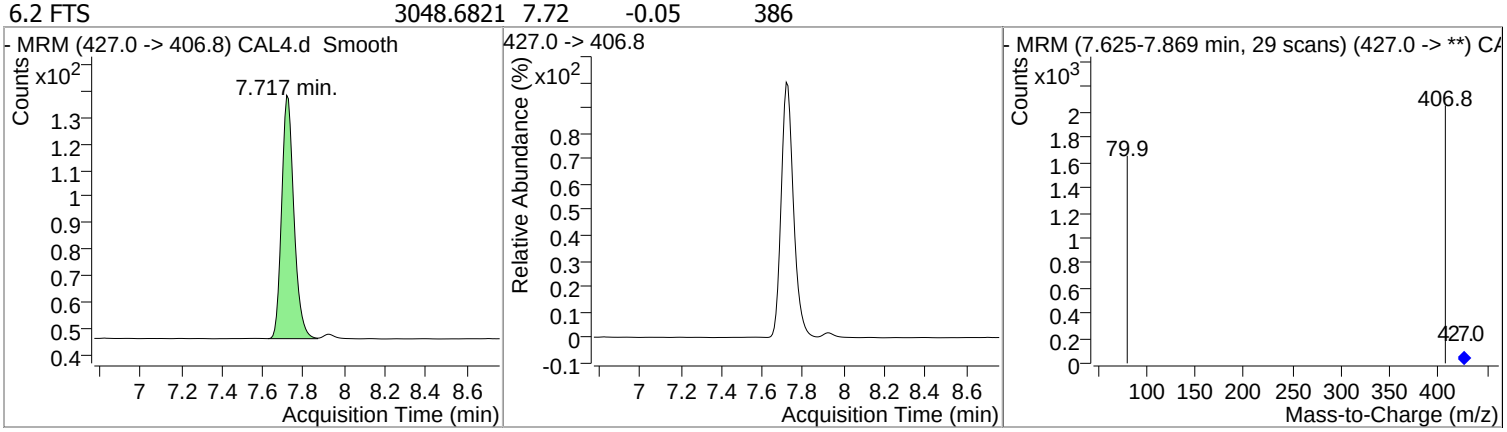
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	2283.5378	7.43	-0.06	2490				



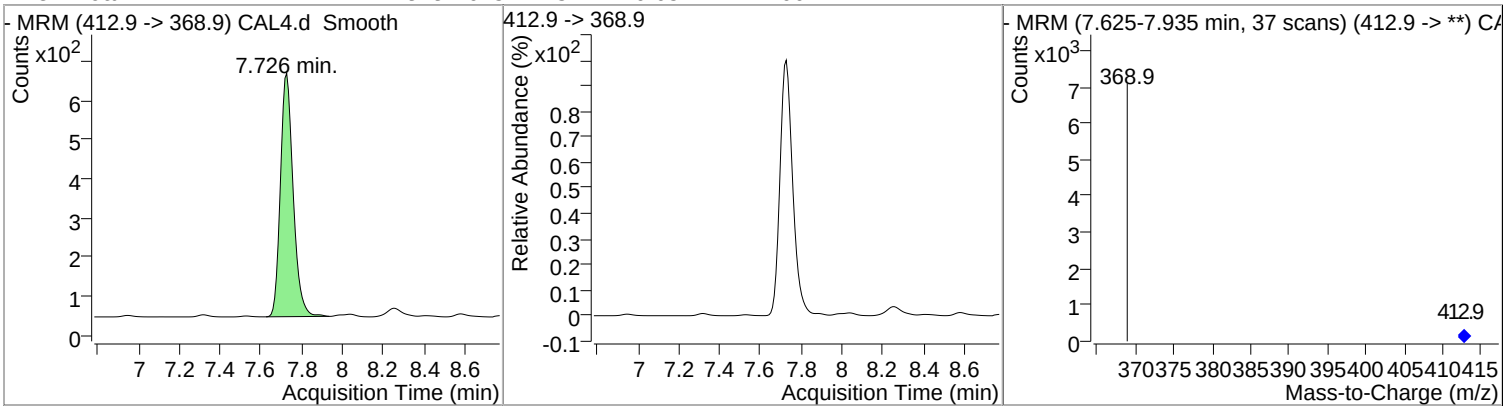
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	1928.8643	7.46	-0.06	937 (m)				



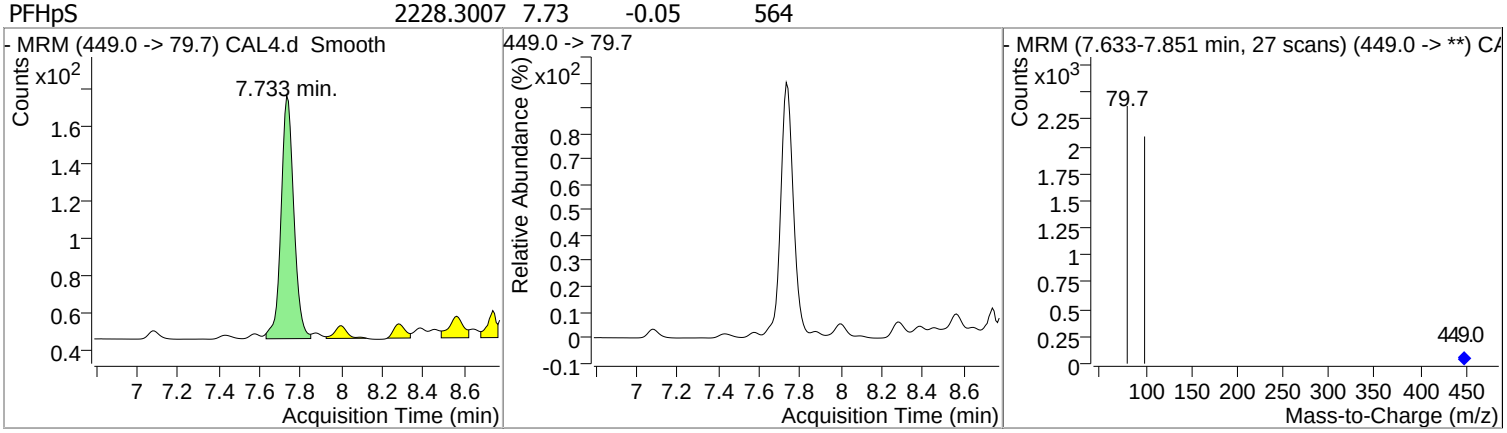
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	3048.6821	7.72	-0.05	386				



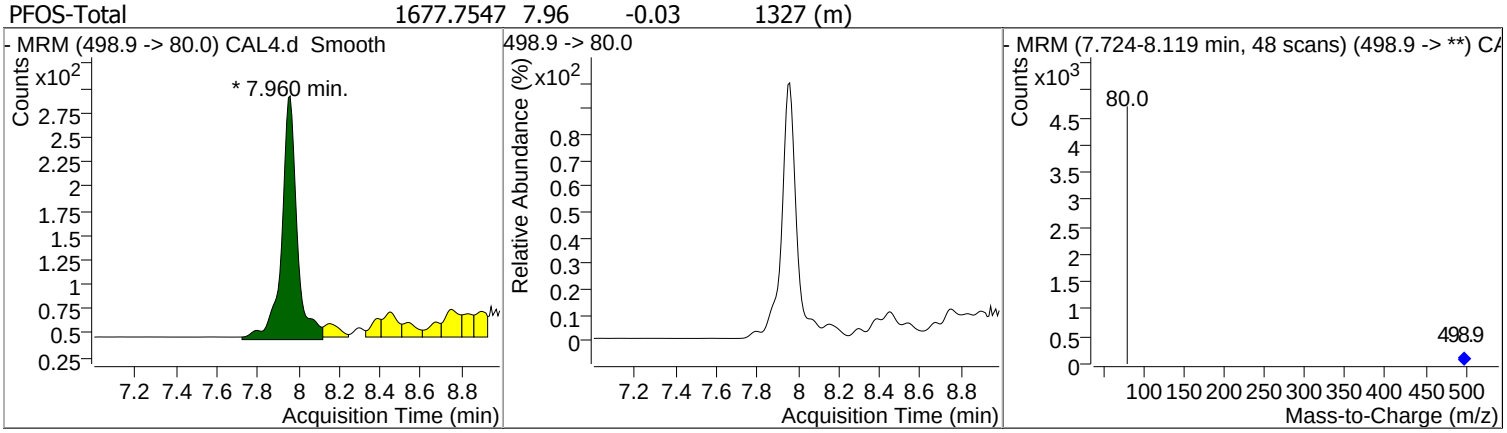
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	1949.7015	7.73	-0.05	2700				



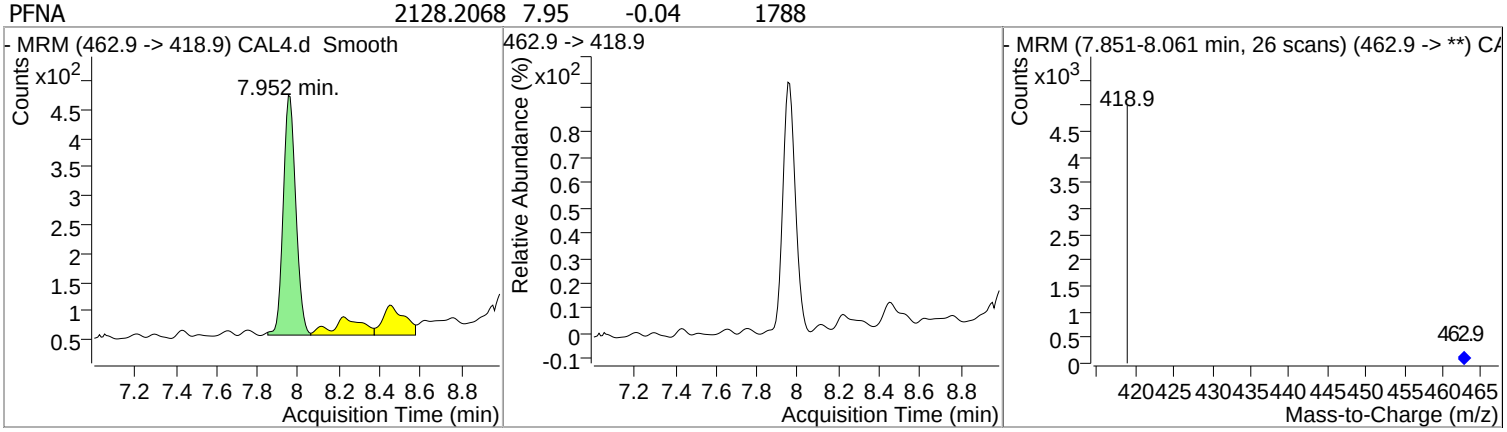
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	2228.3007	7.73	-0.05	564				



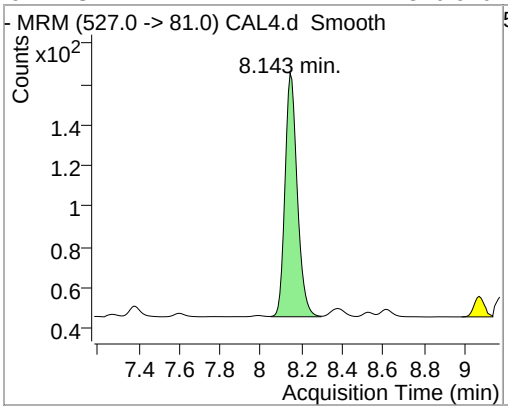
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	1677.7547	7.96	-0.03	1327 (m)				

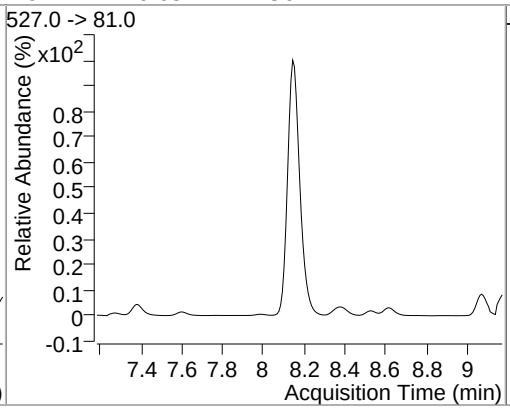


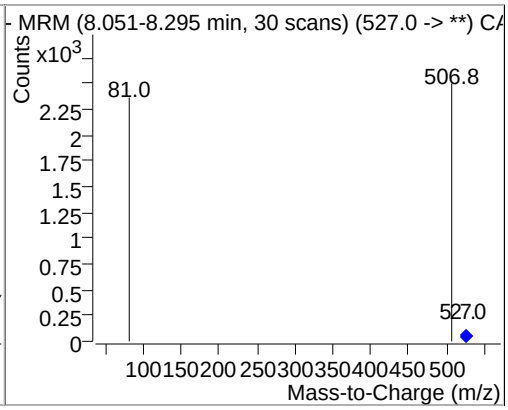
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	2128.2068	7.95	-0.04	1788				



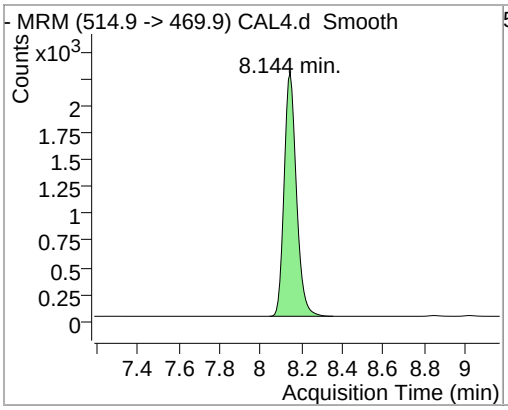
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	2376.8267	8.14	-0.03	498				

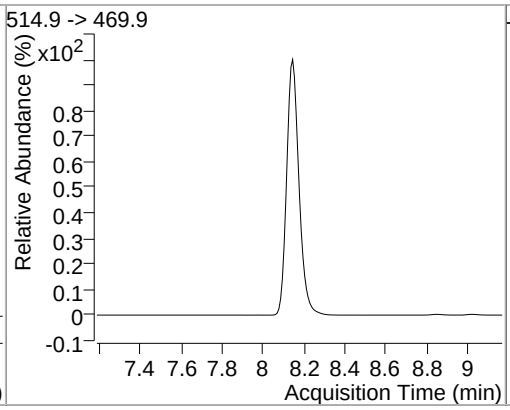


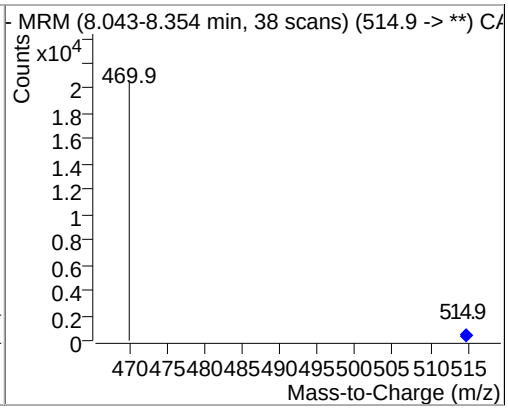




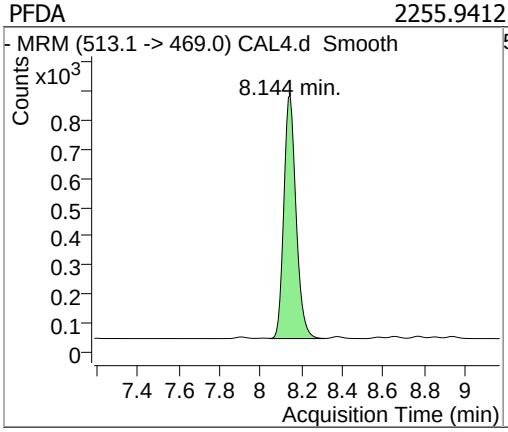
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	8612.0218	8.14	-0.03	9459				

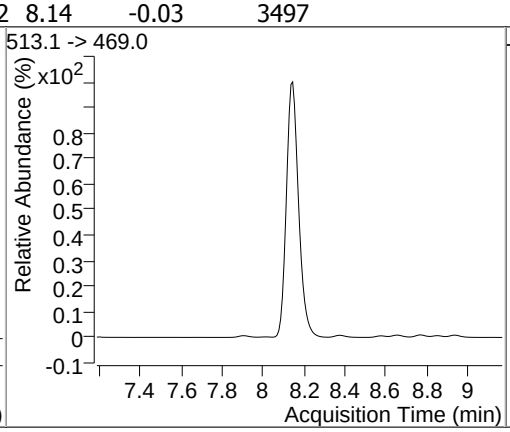


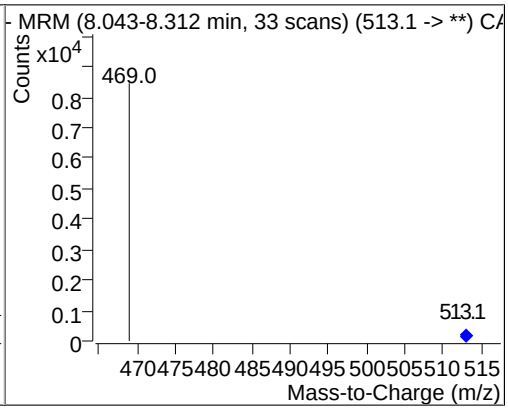




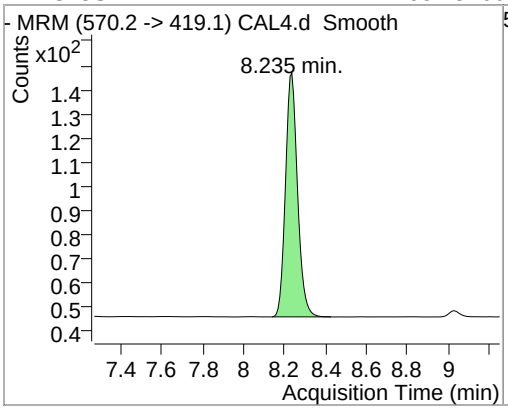
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	2255.9412	8.14	-0.03	3497				

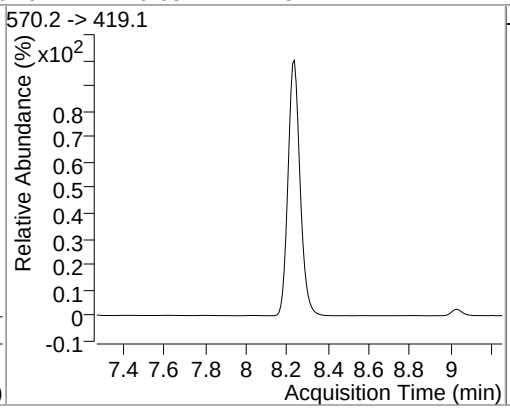


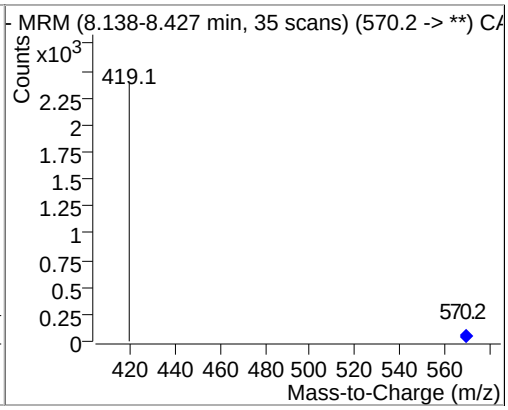




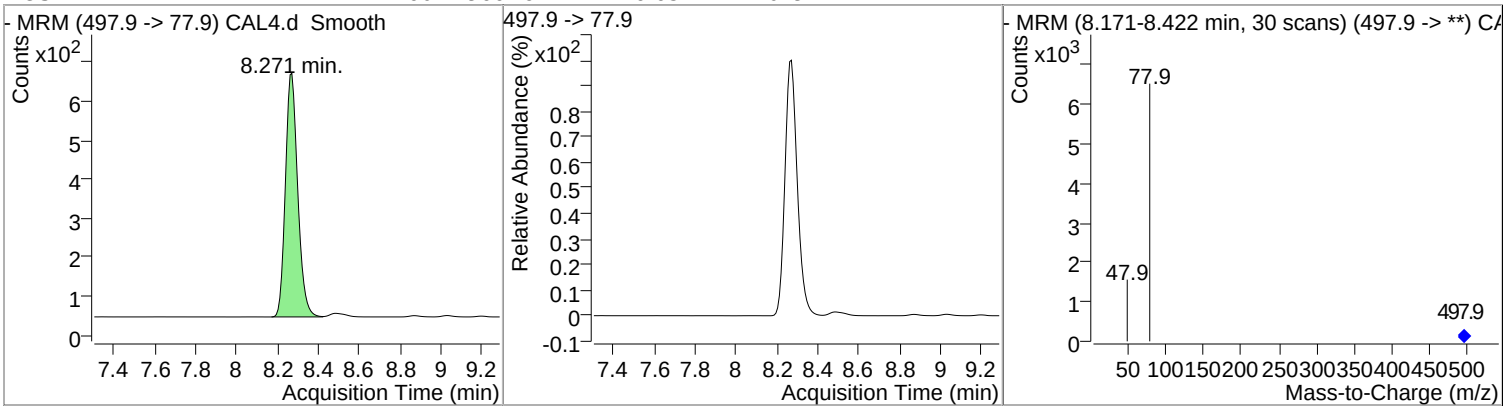
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	2084.5466	8.24	-0.03	413				



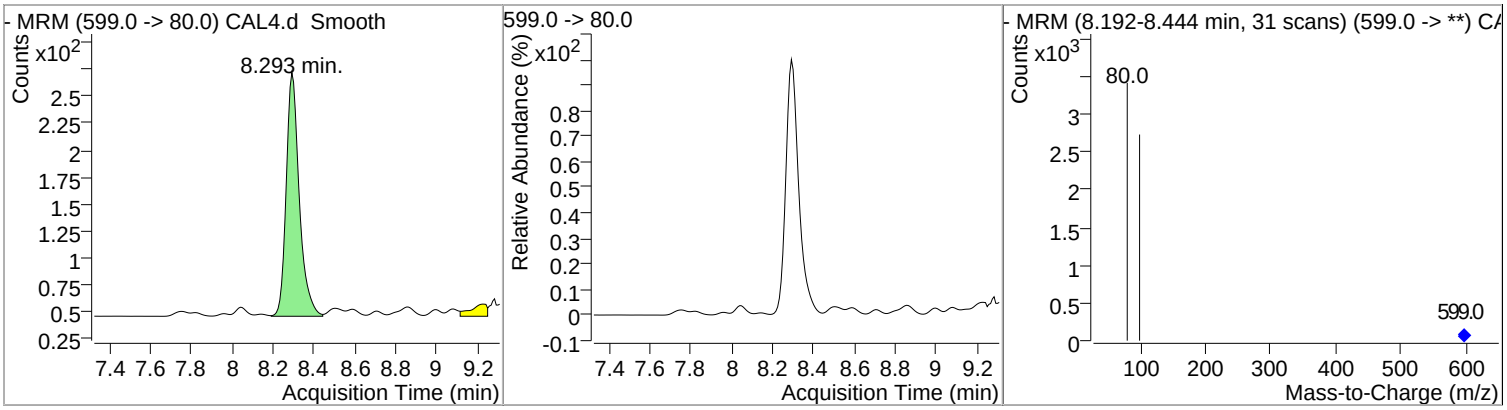




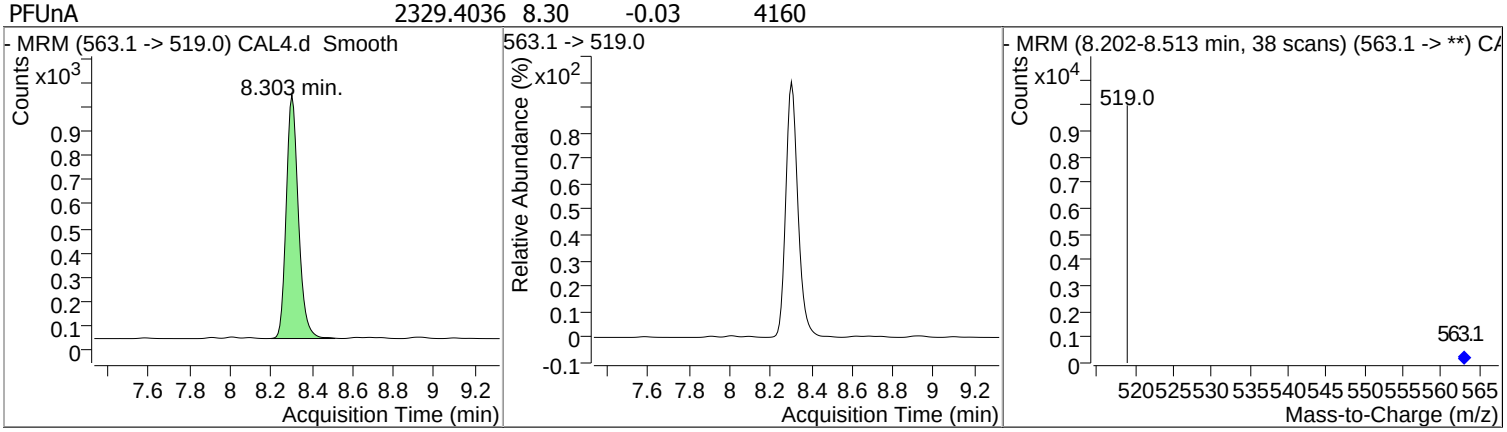
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	2064.1900	8.27	-0.03	2619				



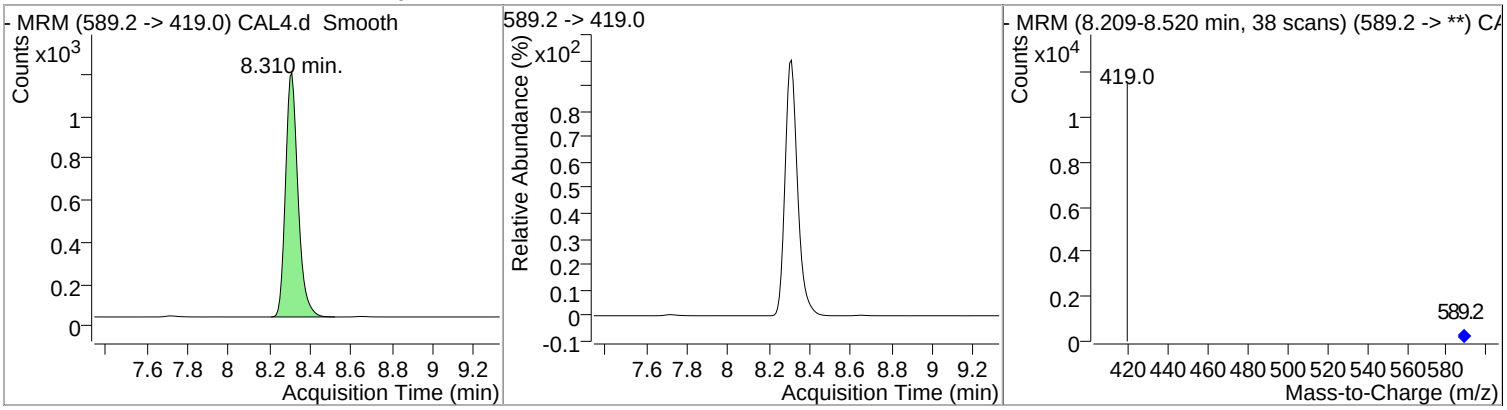
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	2029.3657	8.29	-0.03	1003				



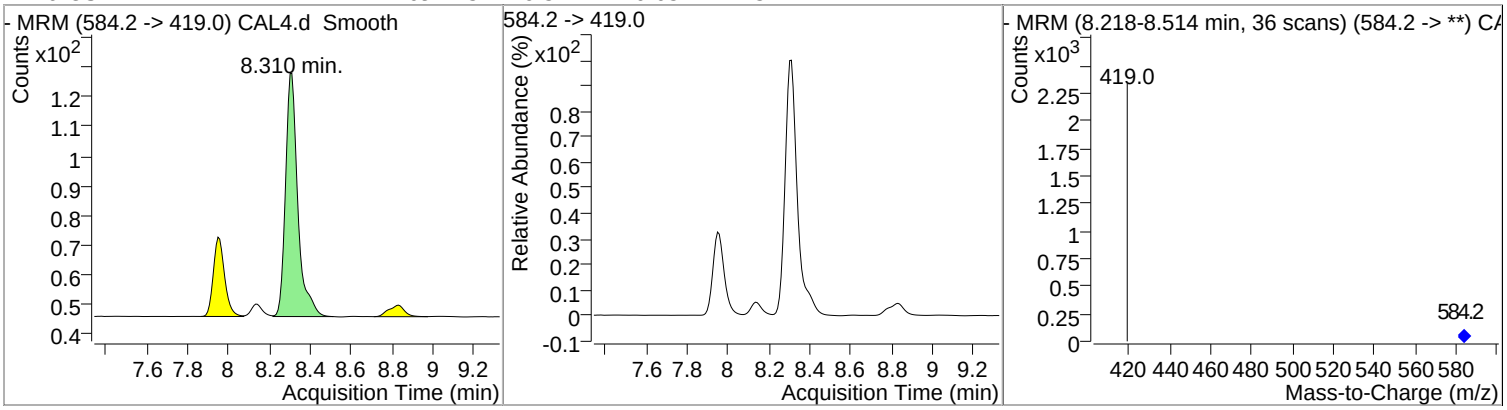
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	2329.4036	8.30	-0.03	4160				



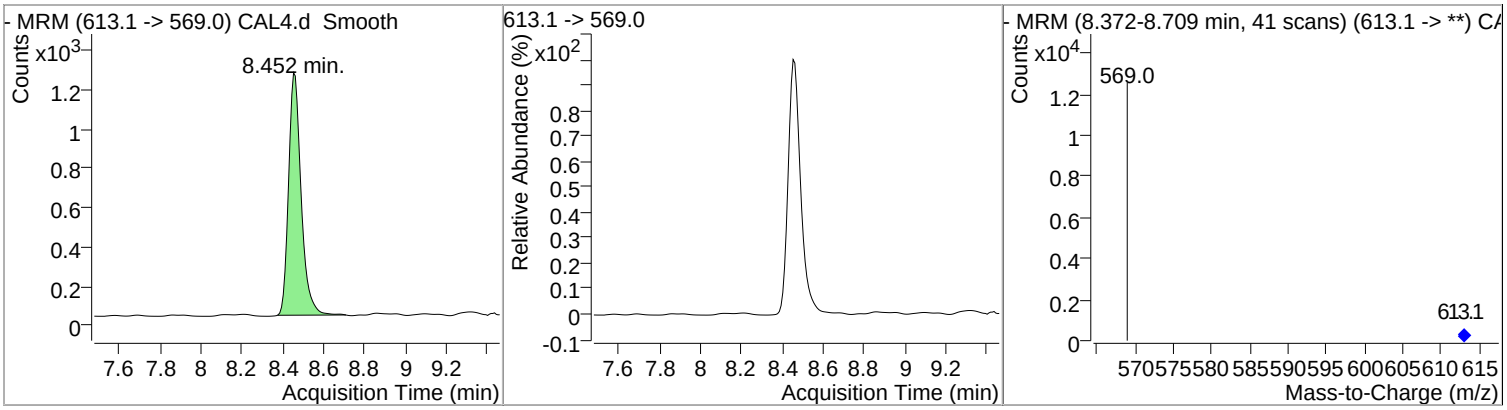
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	31285.0196	8.31	-0.03	4936				



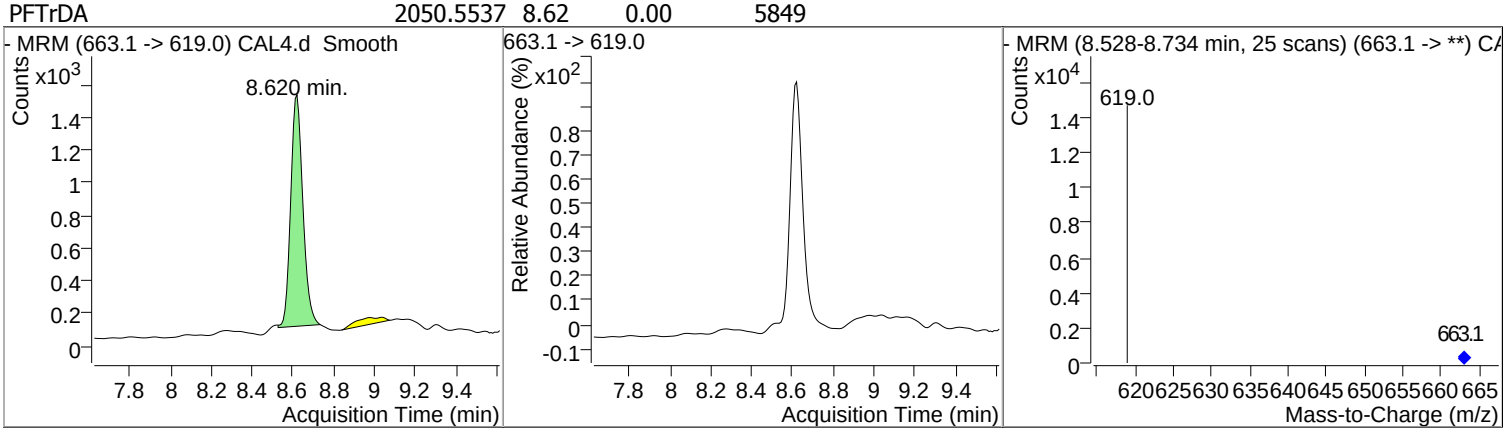
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	2097.4341	8.31	-0.03	344				



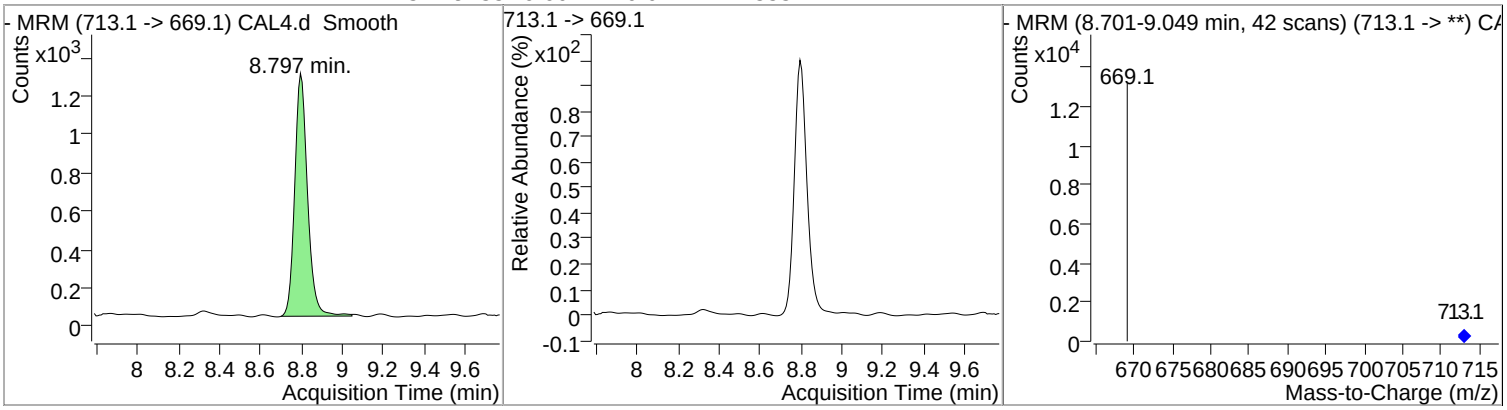
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	2110.2464	8.45	-0.02	5277				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	2050.5537	8.62	0.00	5849				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	2311.9135	8.80	0.02	5531				

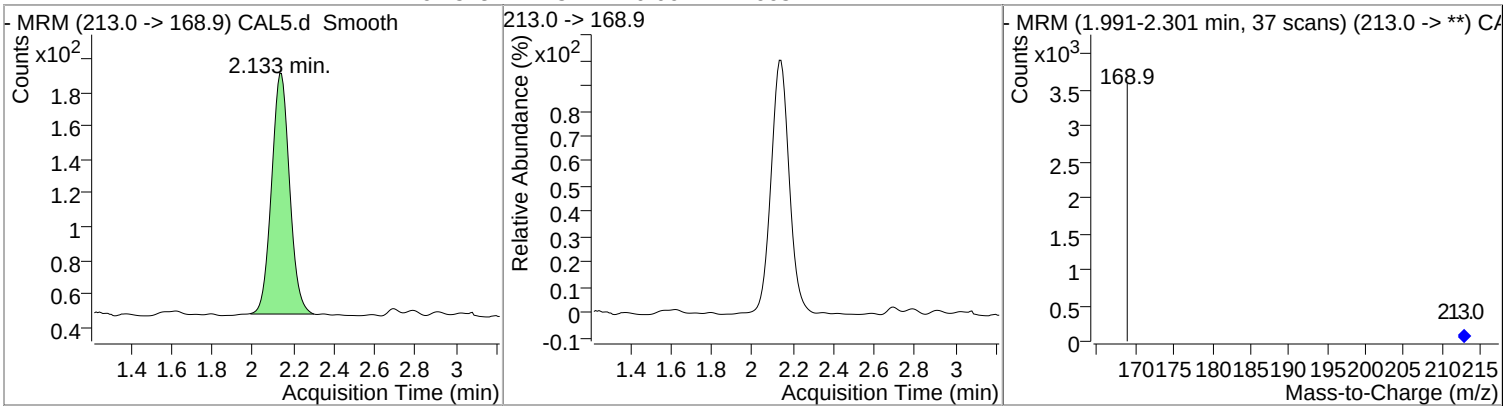


Data File	CAL5.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/13/2019 7:10:56 PM
Sample Name	CAL5	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	CAL.batch.bin	Last Calib Update	8/14/2019 2:32:16 PM
Ref Library			

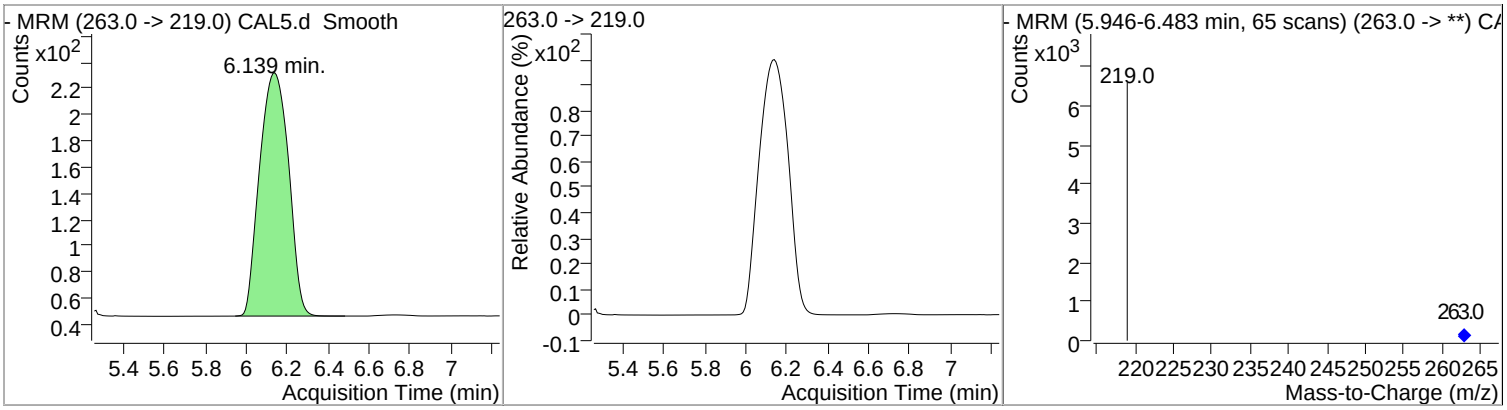
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.718	416.9 -> 371.9	11392	10000.0000	pg/ml		-0.059
M PFOS C13	7.951	502.9 -> 80.0	16652	28700.0000	pg/ml		-0.042
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	6949	40000.0000	pg/ml	m	-0.042
System Monitoring Compounds							
S PFHxA C13	7.004	314.9 -> 269.9	8119	9991.4528	pg/ml	m	-0.084
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 99.91%			
S PFDA C13	8.135	514.9 -> 469.9	11780	9932.5717	pg/ml		-0.042
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 99.33%			
S d5-N-MeFOSAA	8.302	589.2 -> 419.0	6841	41625.4543	pg/ml		-0.034
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 104.06%			
Target Compounds							QValue
T PFBA	2.133	213.0 -> 168.9	883	4787.5494	pg/ml		100
T PFPeA	6.139	263.0 -> 219.0	1834	4899.7507	pg/ml		100
T PFBS	6.500	298.9 -> 80.0	1677	4982.3870	pg/ml		100
T PFHxA	7.004	312.9 -> 268.9	4276	5409.6765	pg/ml		100
T PFHpA	7.424	362.9 -> 319.0	5986	5083.2526	pg/ml		100
T PFHxS-Total	7.449	398.9 -> 80.0	2028	3831.9176	pg/ml	m	100
T 6.2 FTS	7.709	427.0 -> 406.8	632	4586.1077	pg/ml		100
T PFOA-Total	7.718	412.9 -> 368.9	7570	5061.1097	pg/ml		100
T PFHpS	7.725	449.0 -> 79.7	1385	5019.3370	pg/ml		100
T PFOS-Total	7.951	498.9 -> 80.0	3599	4177.9081	pg/ml		100
T PFNA	7.943	462.9 -> 418.9	5061	5577.8884	pg/ml		100
T 8.2 FTS	8.143	527.0 -> 81.0	903	3958.0770	pg/ml		100
T PFDA	8.136	513.1 -> 469.0	8829	5274.3237	pg/ml		100
T N-MeFOSAA	8.218	570.2 -> 419.1	1079	5222.0477	pg/ml		100
T FOSA	8.262	497.9 -> 77.9	6526	4937.1235	pg/ml		100
T PFDS	8.293	599.0 -> 80.0	2716	5044.4891	pg/ml		100
T PFUnA	8.294	563.1 -> 519.0	9784	5073.9773	pg/ml		100
T N-EtFOSAA	8.302	584.2 -> 419.0	1083	6348.0652	pg/ml		100
T PFDoA	8.452	613.1 -> 569.0	12582	4659.1727	pg/ml		100
T PFTrDA	8.612	663.1 -> 619.0	16309	5294.8979	pg/ml		100
T PFTA	8.797	713.1 -> 669.1	11592	4486.8694	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

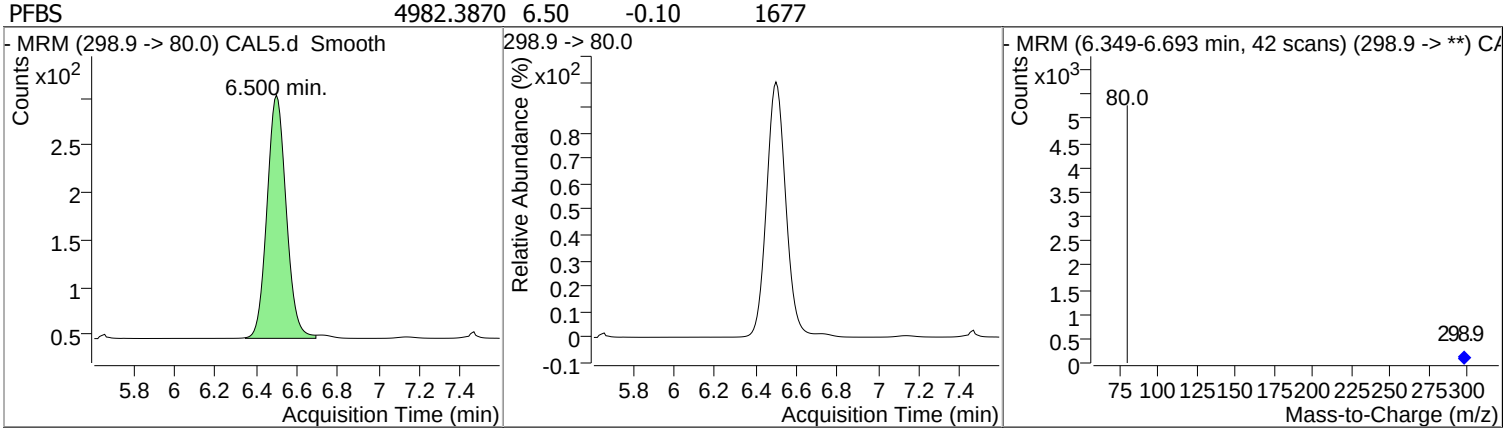
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	4787.5494	2.13	-0.08	883				



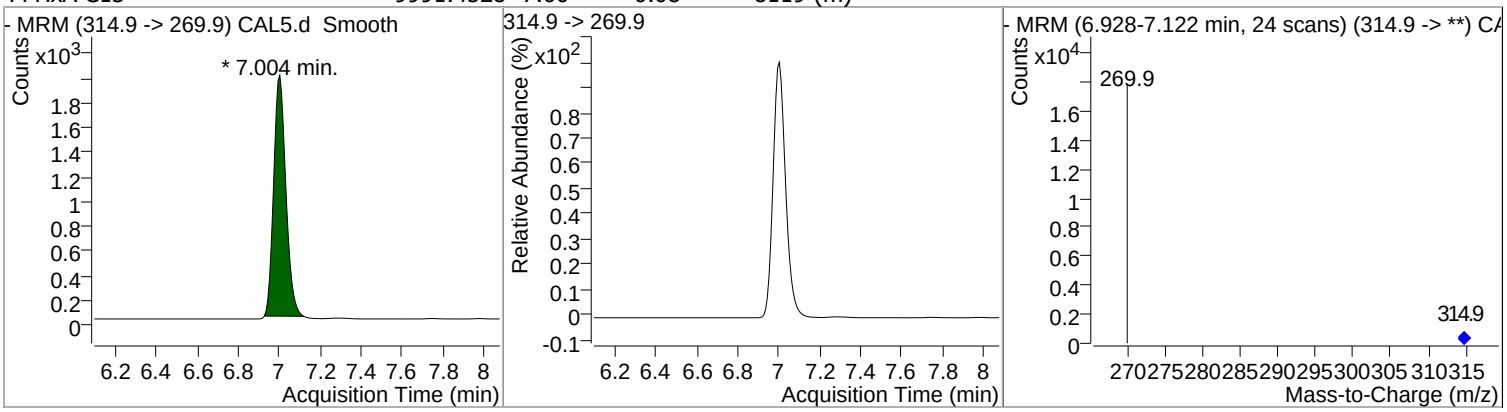
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	4899.7507	6.14	-0.11	1834				



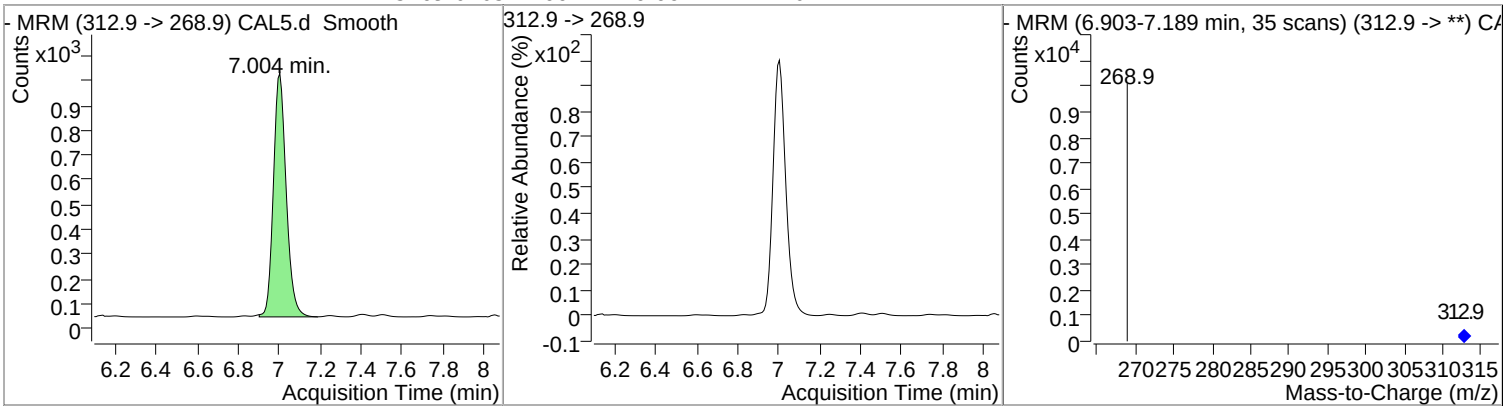
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	4982.3870	6.50	-0.10	1677				



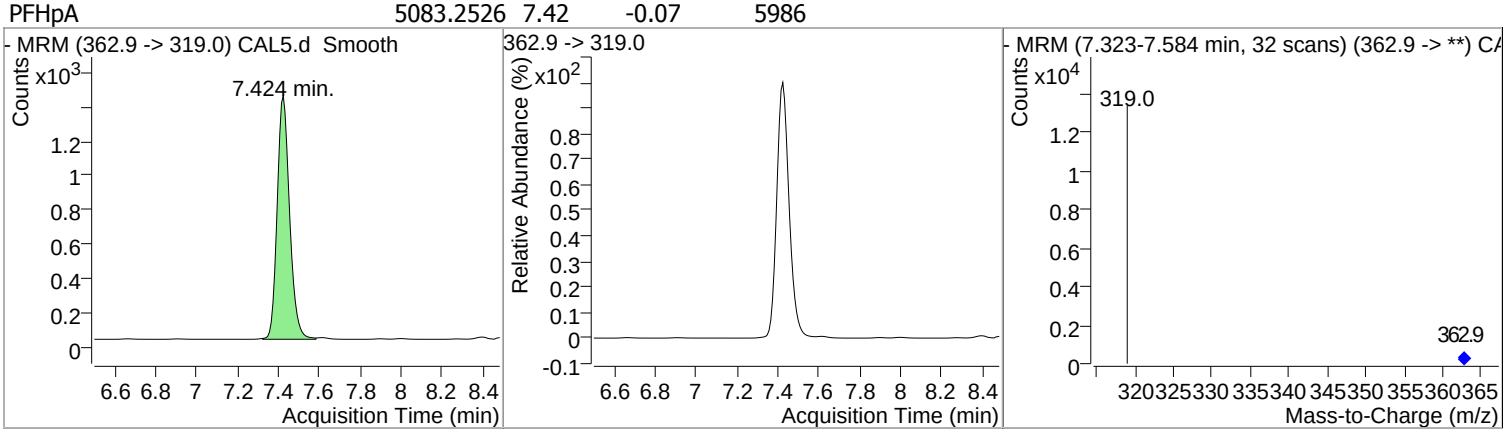
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	9991.4528	7.00	-0.08	8119 (m)				



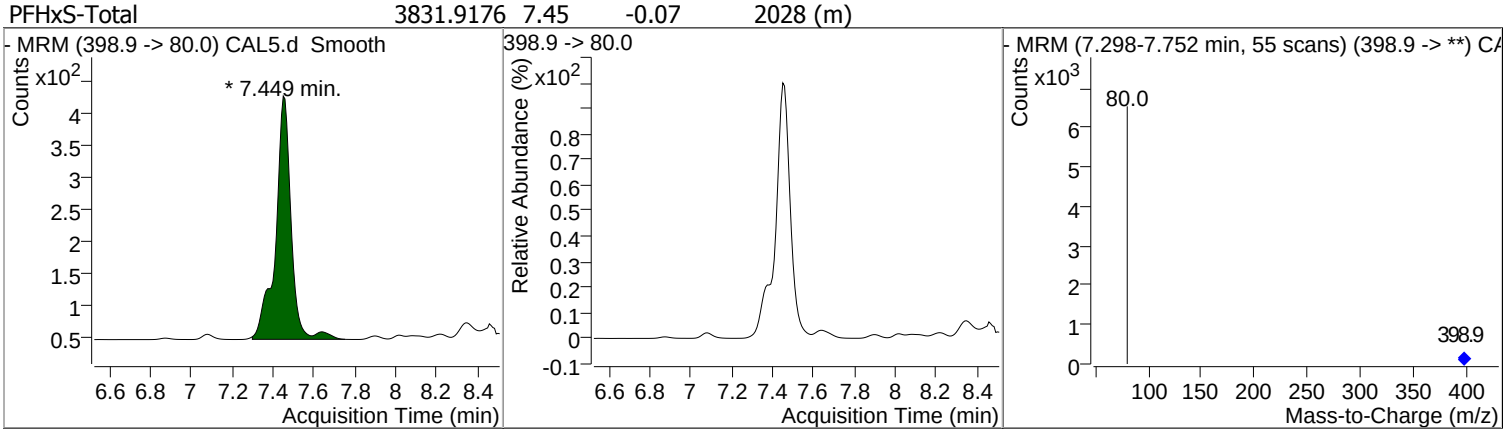
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	5409.6765	7.00	-0.08	4276				



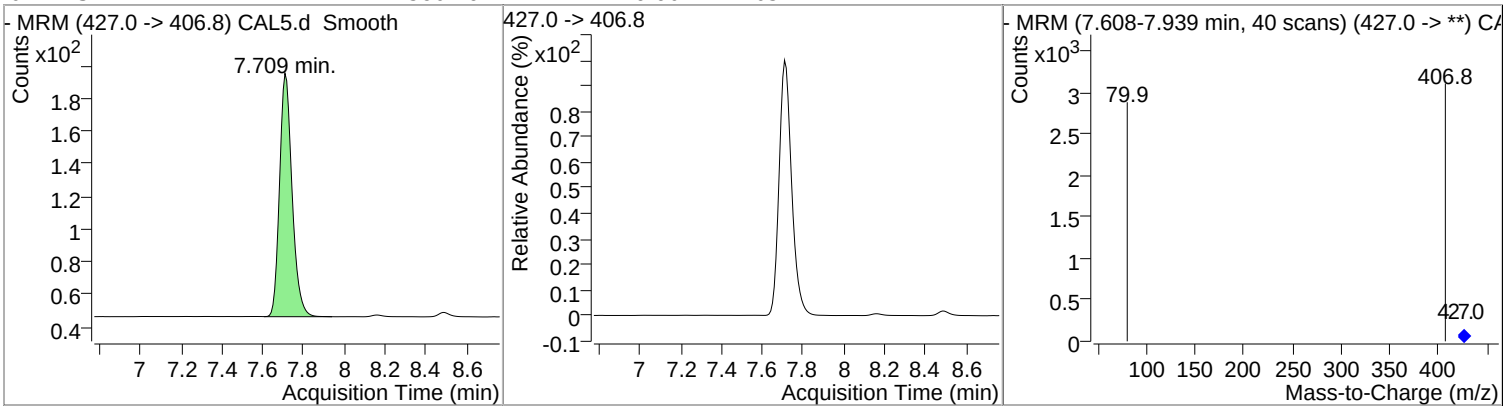
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	5083.2526	7.42	-0.07	5986				



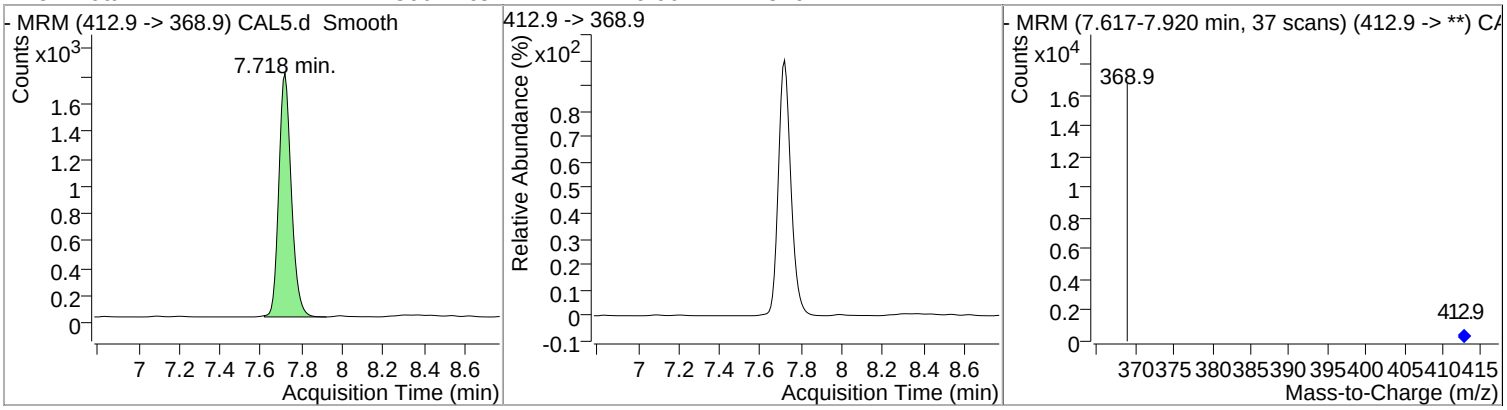
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	3831.9176	7.45	-0.07	2028 (m)				



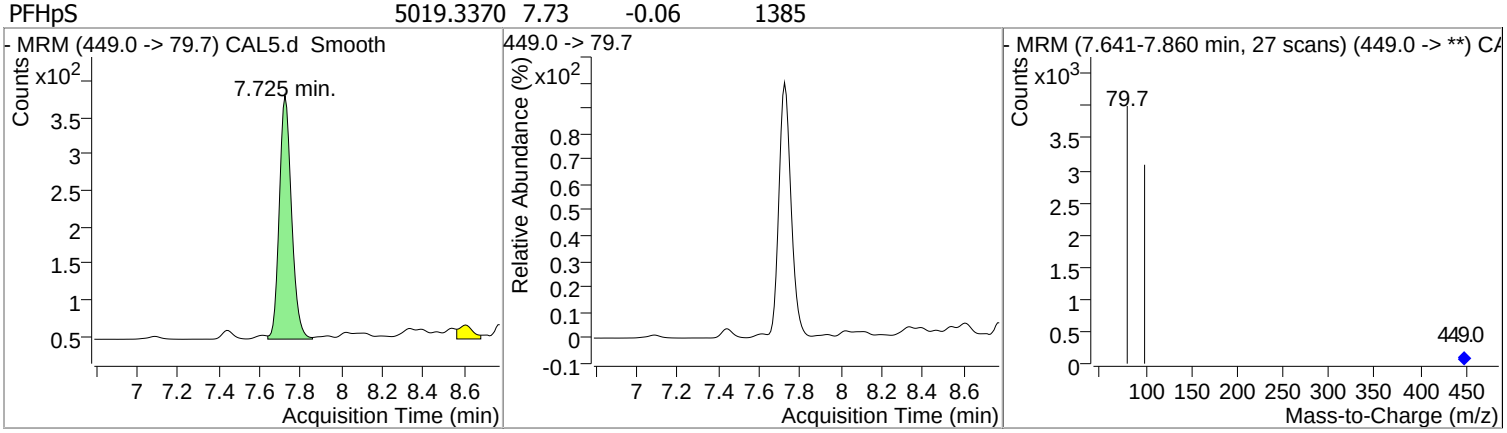
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	4586.1077	7.71	-0.06	632				



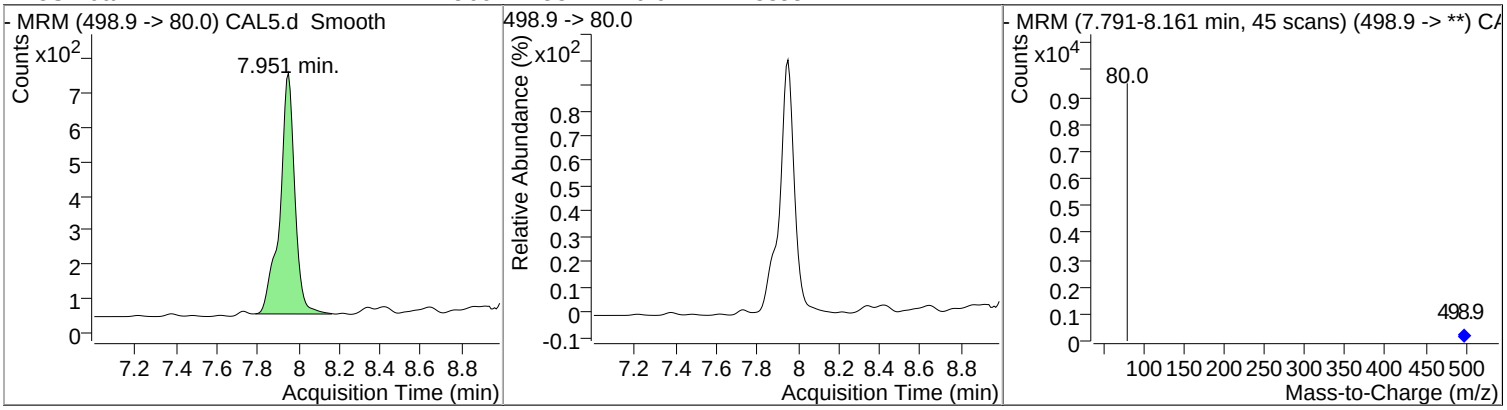
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	5061.1097	7.72	-0.06	7570				



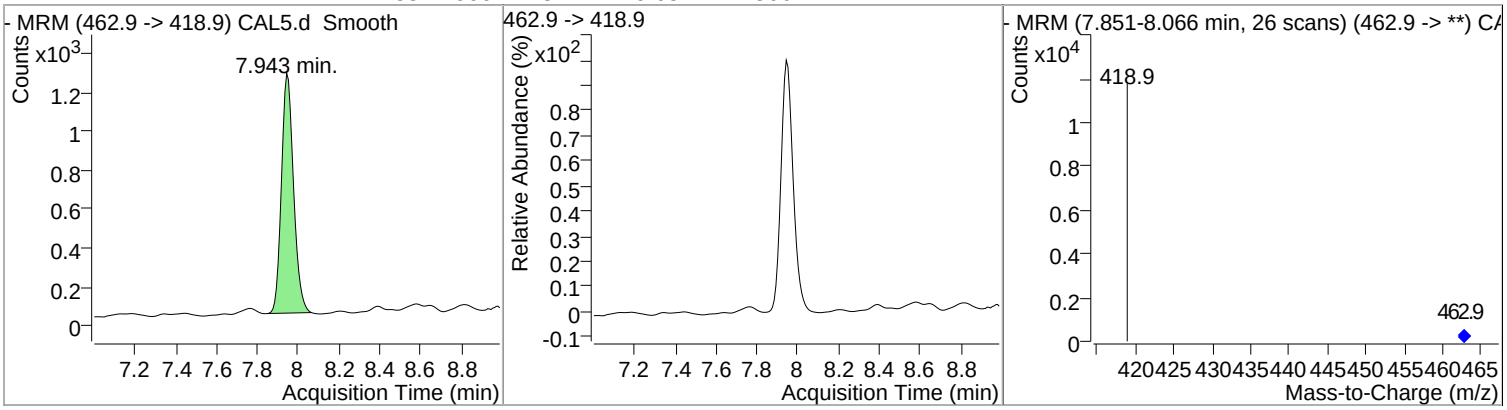
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	5019.3370	7.73	-0.06	1385				



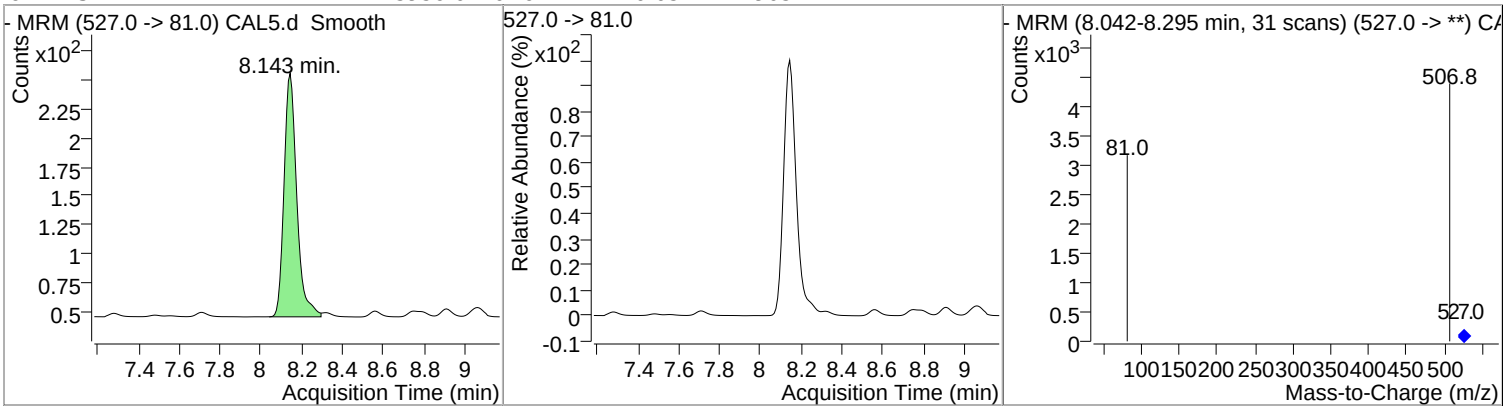
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	4177.9081	7.95	-0.04	3599				



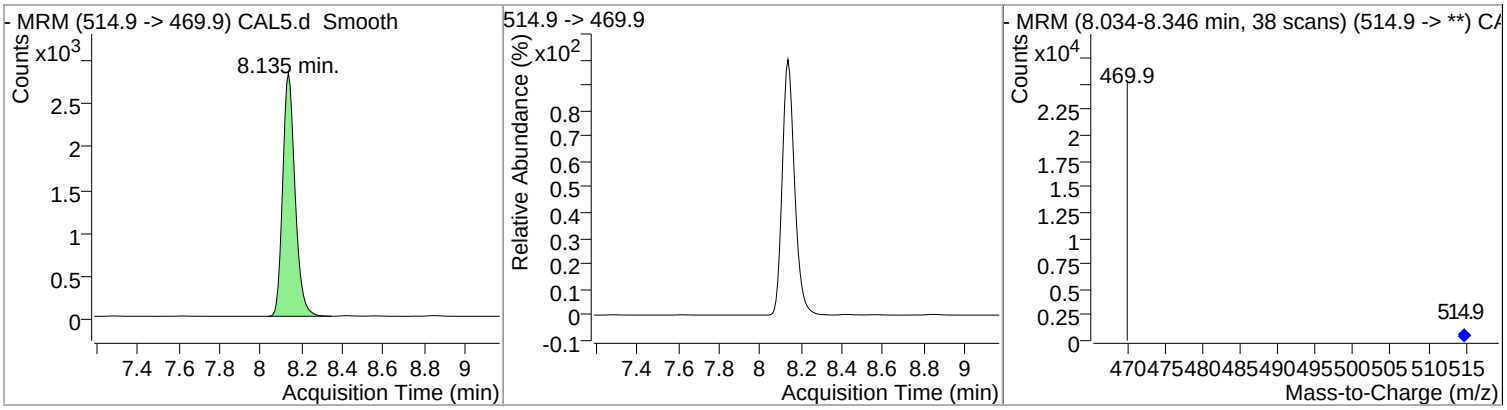
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	5577.8884	7.94	-0.05	5061				



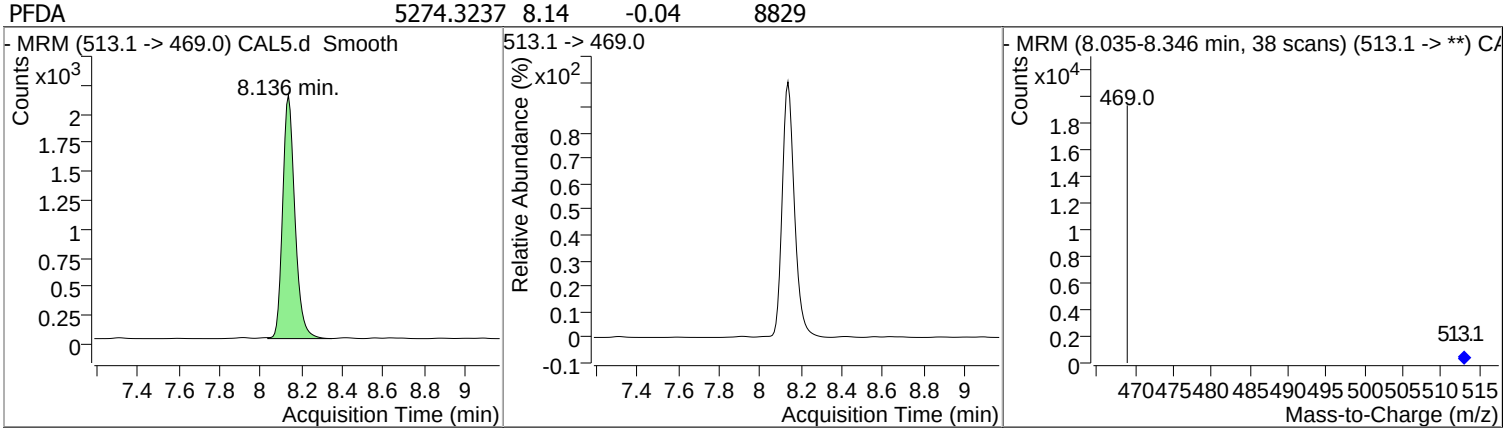
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	3958.0770	8.14	-0.03	903				



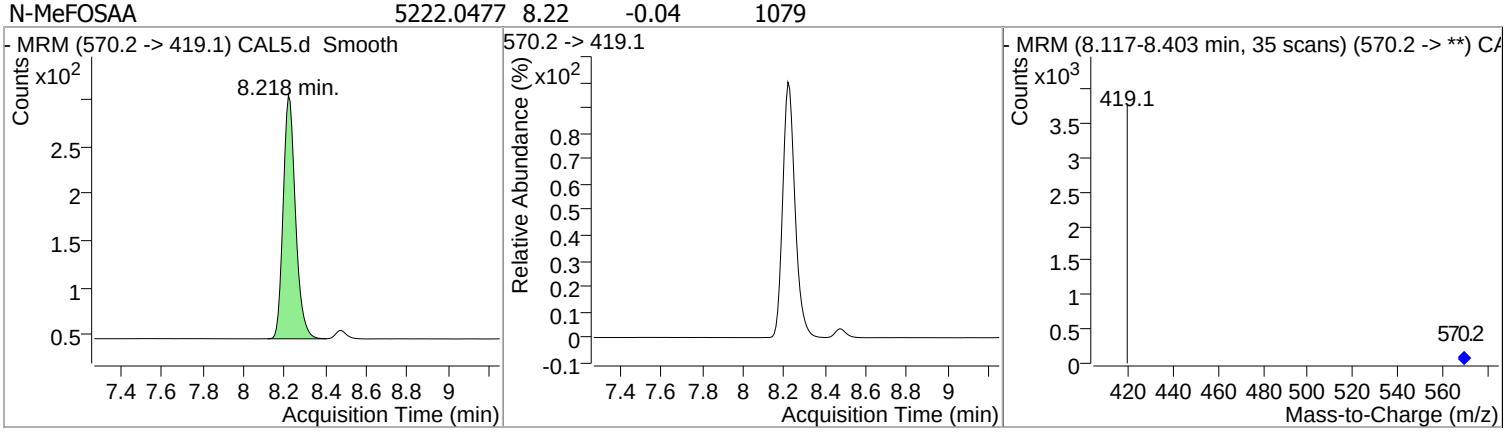
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	9932.5717	8.14	-0.04	11780				



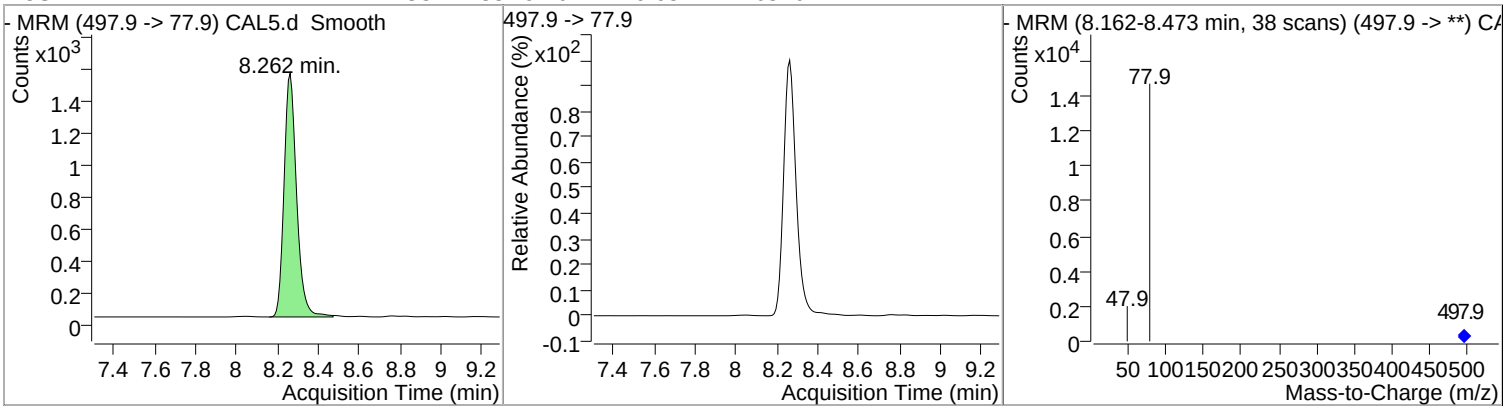
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	5274.3237	8.14	-0.04	8829				



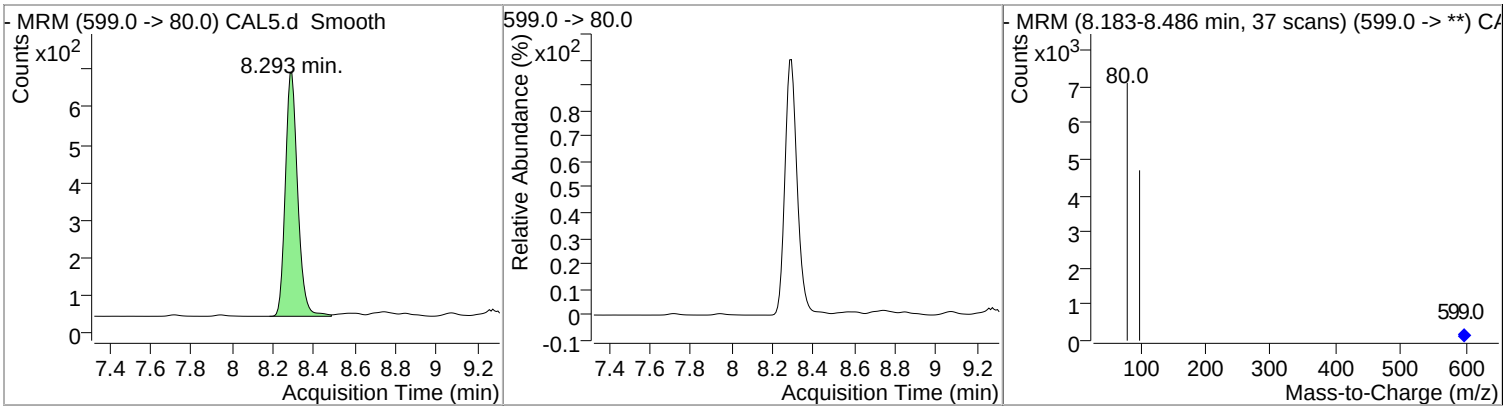
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	5222.0477	8.22	-0.04	1079				



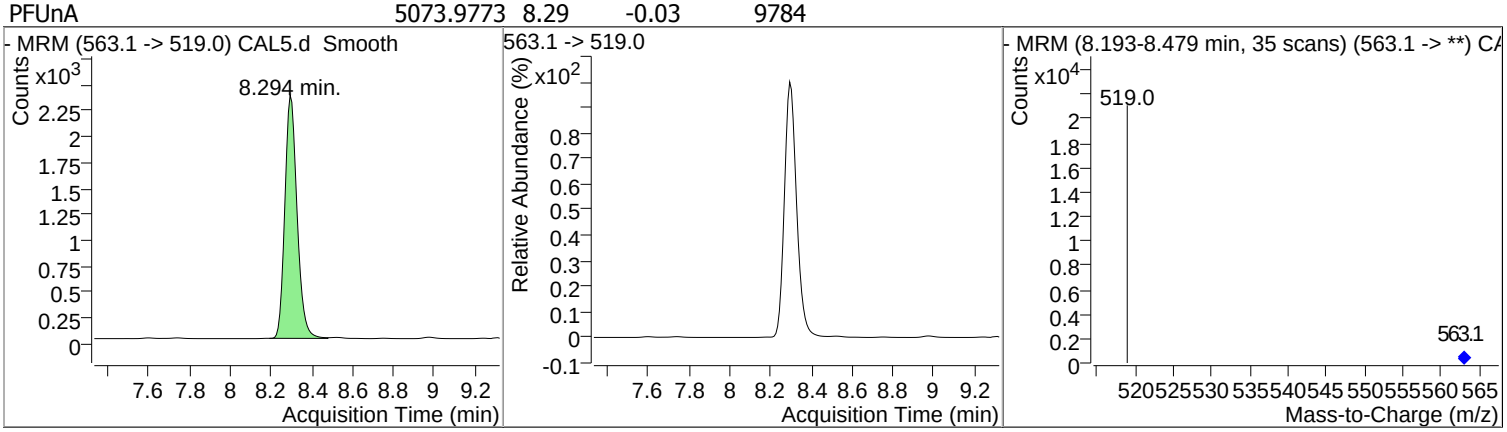
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	4937.1235	8.26	-0.03	6526				



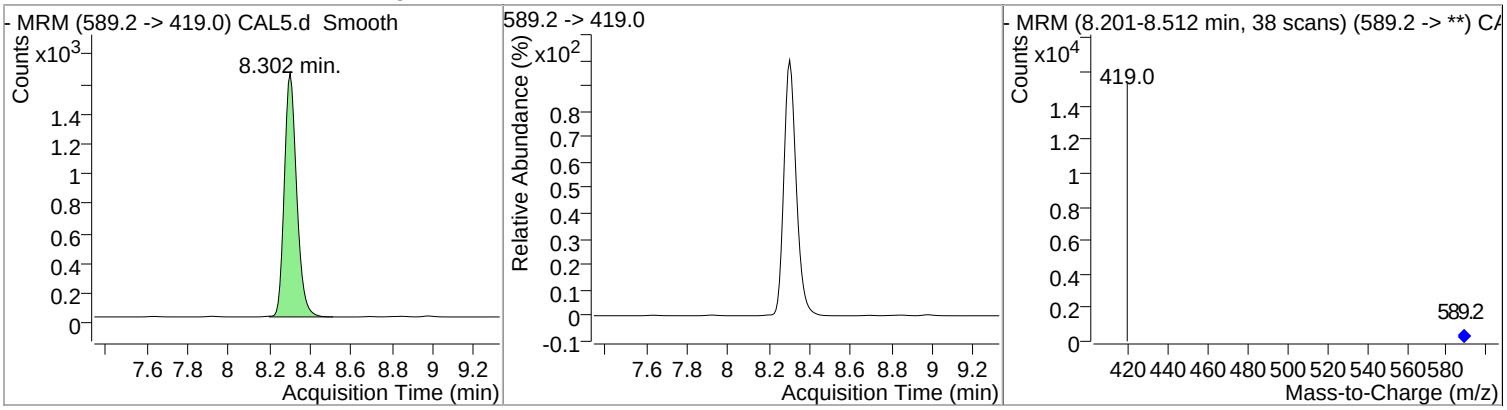
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	5044.4891	8.29	-0.03	2716				



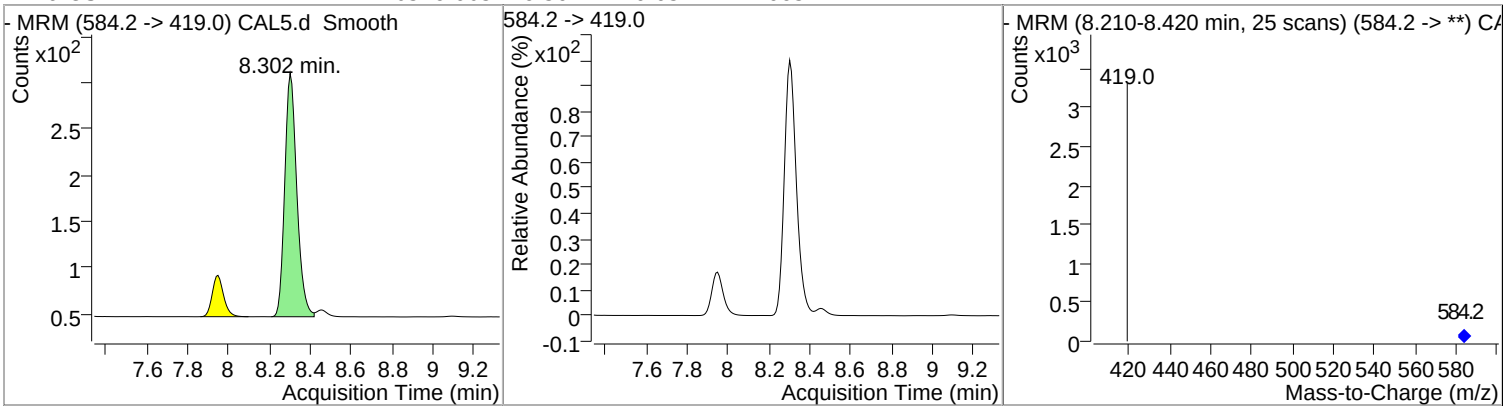
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	5073.9773	8.29	-0.03	9784				



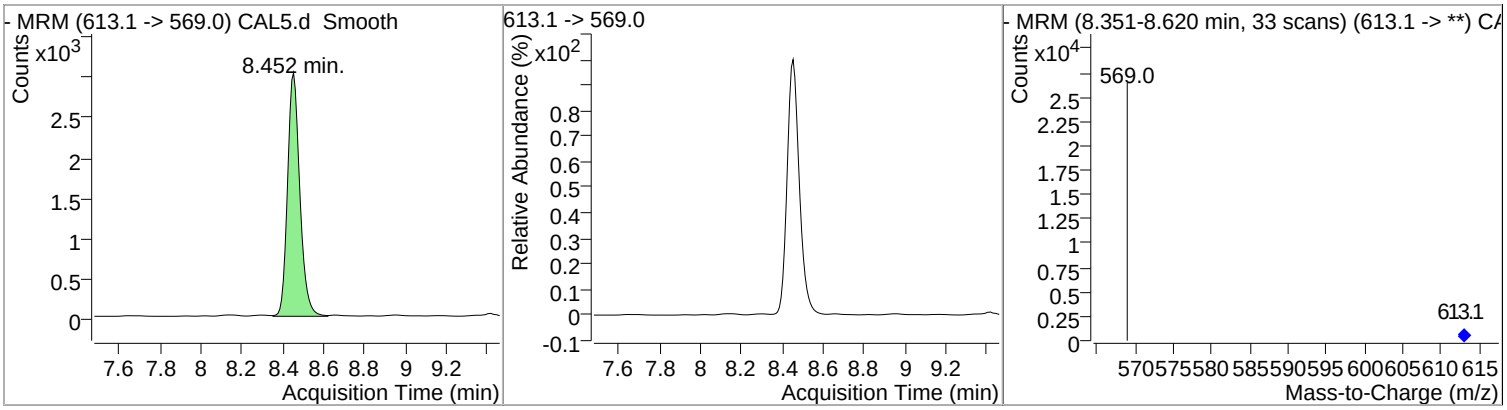
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	41625.4543	8.30	-0.03	6841				



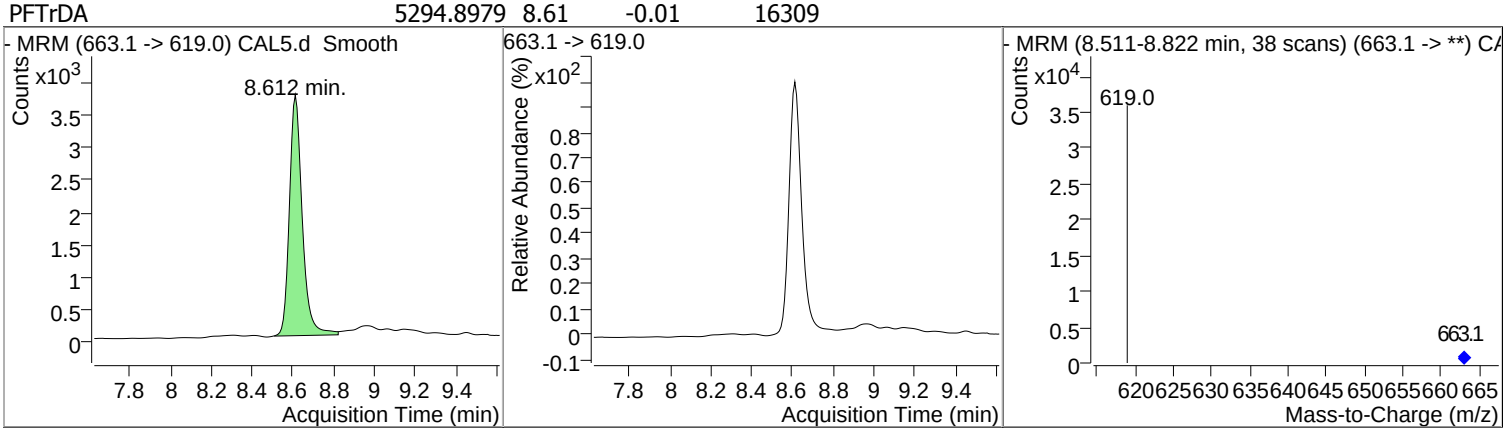
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	6348.0652	8.30	-0.03	1083				



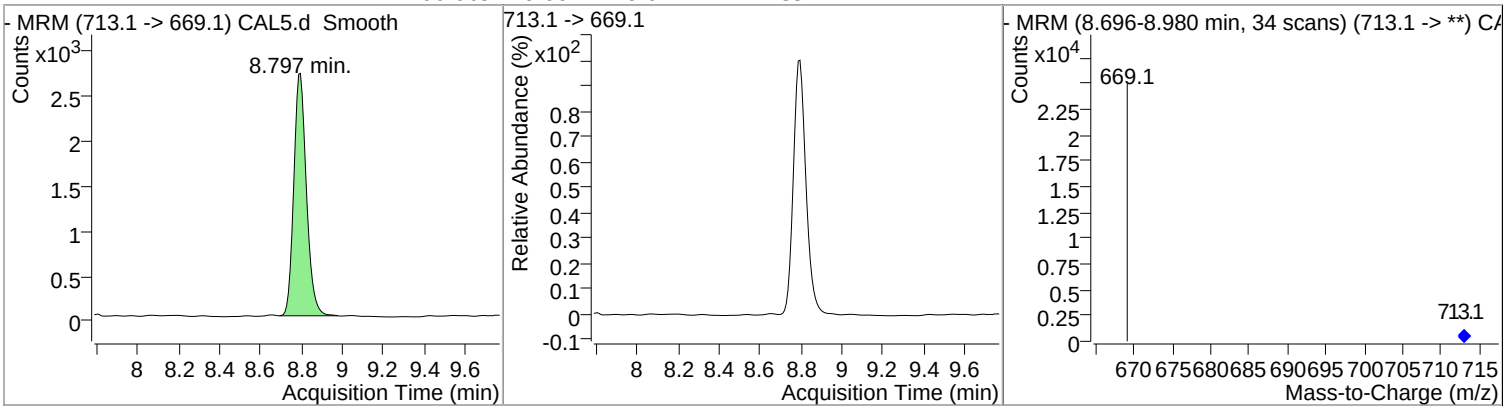
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	4659.1727	8.45	-0.02	12582				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	5294.8979	8.61	-0.01	16309				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	4486.8694	8.80	0.02	11592				

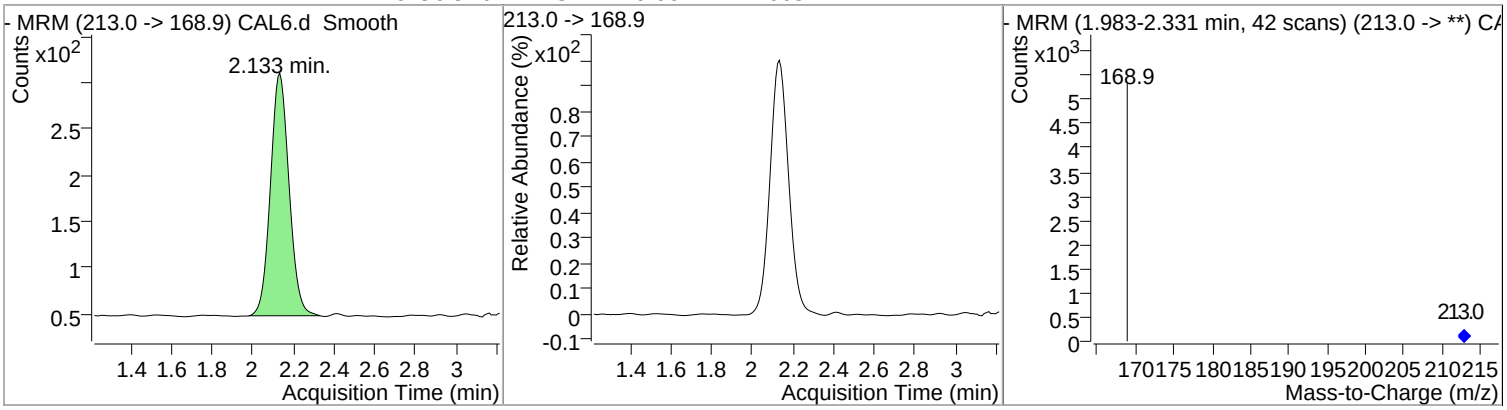


Data File	CAL6.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/13/2019 7:23:32 PM
Sample Name	CAL6	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	CAL.batch.bin	Last Calib Update	8/14/2019 2:32:16 PM
Ref Library			

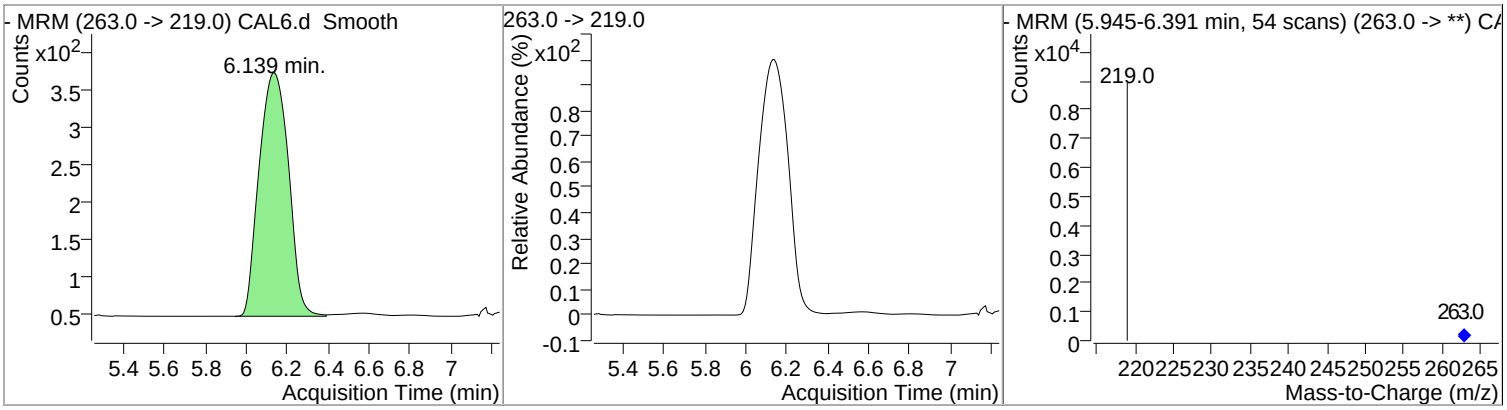
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.718	416.9 -> 371.9	11673	10000.0000	pg/ml	m	-0.059
M PFOS C13	7.951	502.9 -> 80.0	15636	28700.0000	pg/ml		-0.042
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	6739	40000.0000	pg/ml		-0.042
System Monitoring Compounds							
S PFHxA C13	7.004	314.9 -> 269.9	11672	14018.7399	pg/ml	m	-0.084
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 140.19%		*	
S PFDA C13	8.135	514.9 -> 469.9	18928	15575.2584	pg/ml		-0.042
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 155.75%		*	
S d5-N-MeFOSAA	8.302	589.2 -> 419.0	9721	60995.7375	pg/ml		-0.034
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 152.49%		*	
Target Compounds							QValue
T PFBA	2.133	213.0 -> 168.9	1663	8798.9161	pg/ml		100
T PFPeA	6.139	263.0 -> 219.0	3278	8543.6335	pg/ml		100
T PFBS	6.500	298.9 -> 80.0	2561	8103.0304	pg/ml		100
T PFHxA	7.004	312.9 -> 268.9	7112	8781.8089	pg/ml		100
T PFHpA	7.424	362.9 -> 319.0	10479	8685.6185	pg/ml		100
T PFHxS-Total	7.458	398.9 -> 80.0	3854	7753.5257	pg/ml	m	100
T 6.2 FTS	7.717	427.0 -> 406.8	1316	10162.0995	pg/ml		100
T PFOA-Total	7.718	412.9 -> 368.9	13133	8569.2657	pg/ml		100
T PFHpS	7.725	449.0 -> 79.7	2547	9829.9625	pg/ml		100
T PFOS-Total	7.951	498.9 -> 80.0	6953	8594.9414	pg/ml		100
T PFNA	7.952	462.9 -> 418.9	7919	8517.6962	pg/ml		100
T 8.2 FTS	8.143	527.0 -> 81.0	2043	9536.4514	pg/ml		100
T PFDA	8.136	513.1 -> 469.0	15990	9322.2232	pg/ml		100
T N-MeFOSAA	8.227	570.2 -> 419.1	1738	8677.9697	pg/ml		100
T FOSA	8.262	497.9 -> 77.9	12484	9739.5686	pg/ml		100
T PFDS	8.293	599.0 -> 80.0	4154	8217.8896	pg/ml		100
T PFUnA	8.303	563.1 -> 519.0	19510	9874.2718	pg/ml		100
T N-EtFOSAA	8.302	584.2 -> 419.0	1457	8800.5610	pg/ml		100
T PFDoA	8.452	613.1 -> 569.0	24250	8763.9734	pg/ml		100
T PFTrDA	8.612	663.1 -> 619.0	26941	8536.5446	pg/ml		100
T PFTA	8.797	713.1 -> 669.1	22456	8482.8190	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

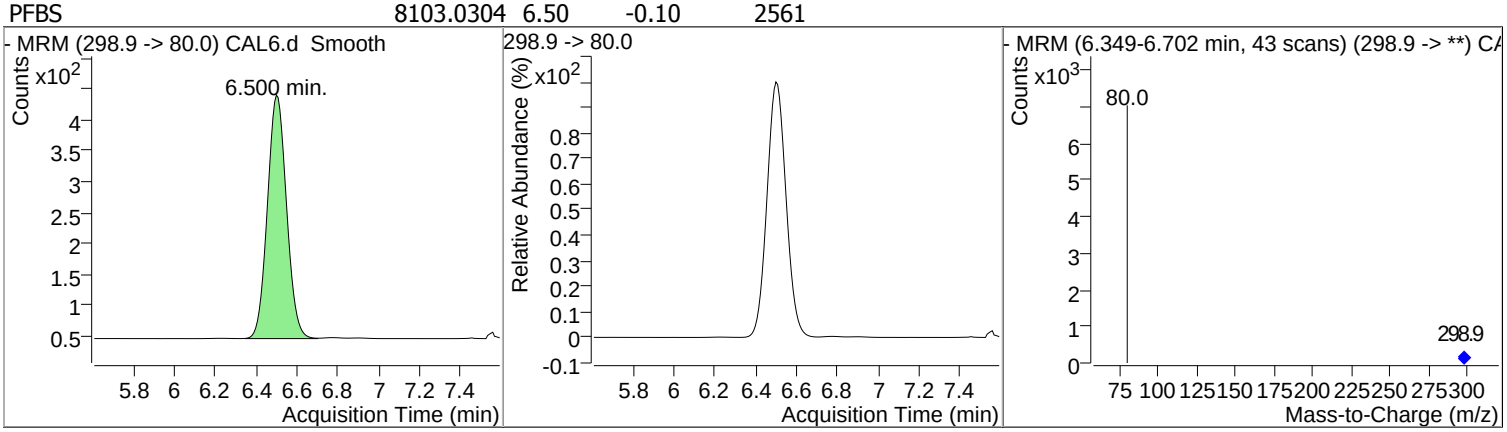
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	8798.9161	2.13	-0.08	1663				



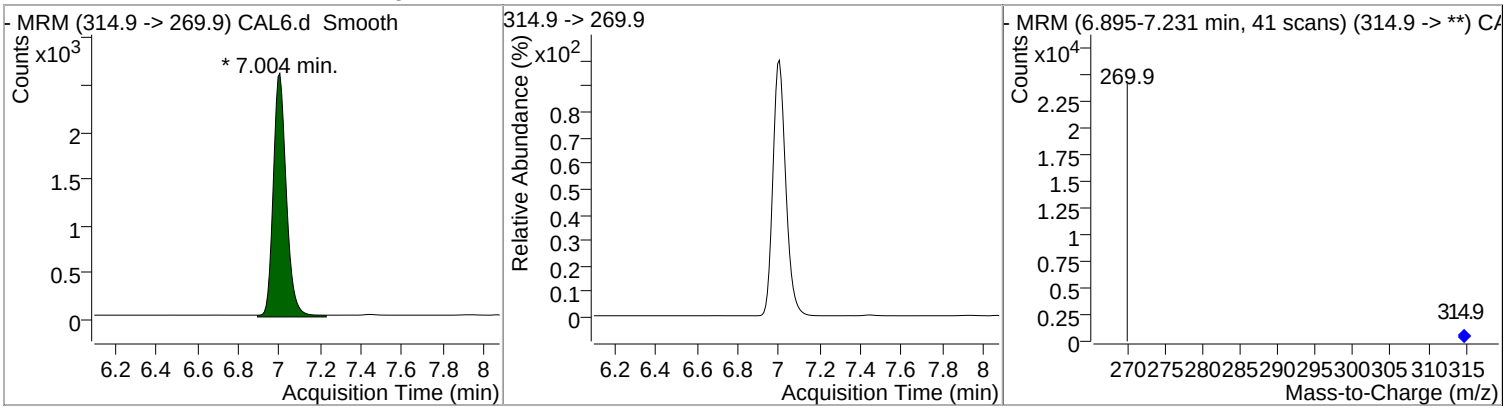
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	8543.6335	6.14	-0.11	3278				



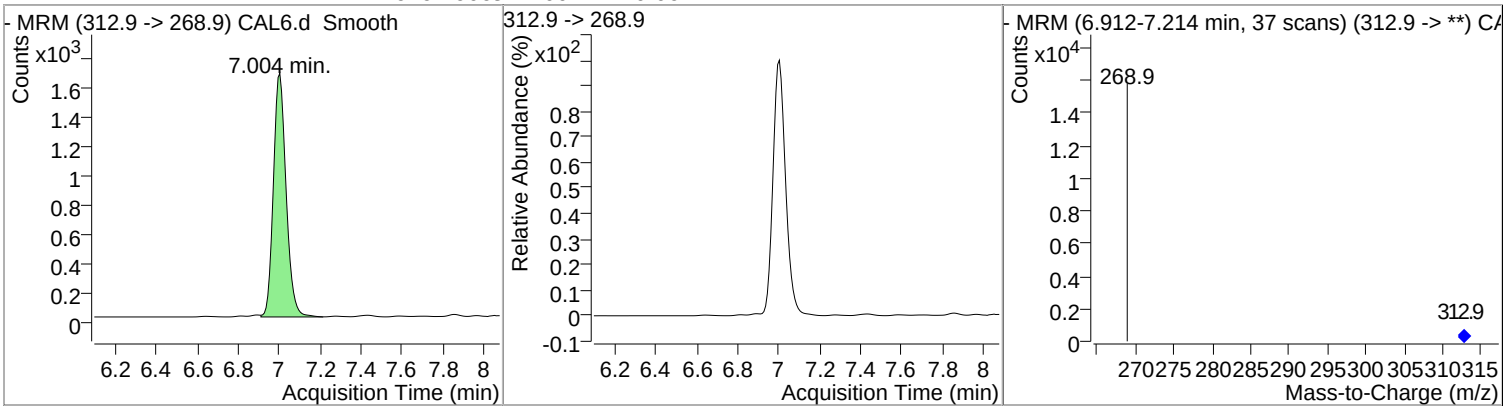
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	8103.0304	6.50	-0.10	2561				



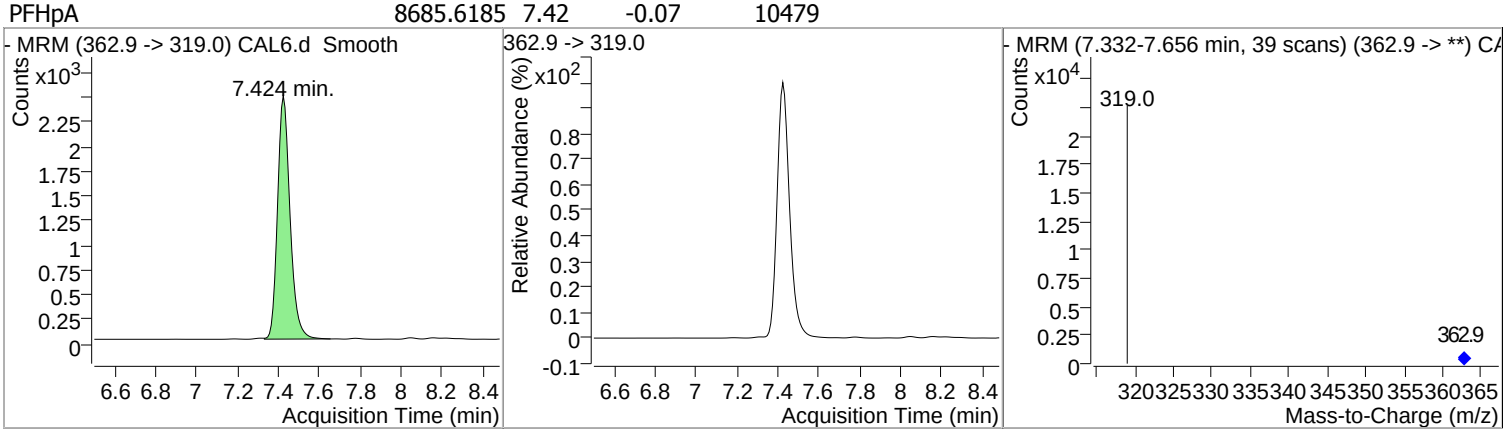
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	14018.7399	7.00	-0.08	11672 (m)				



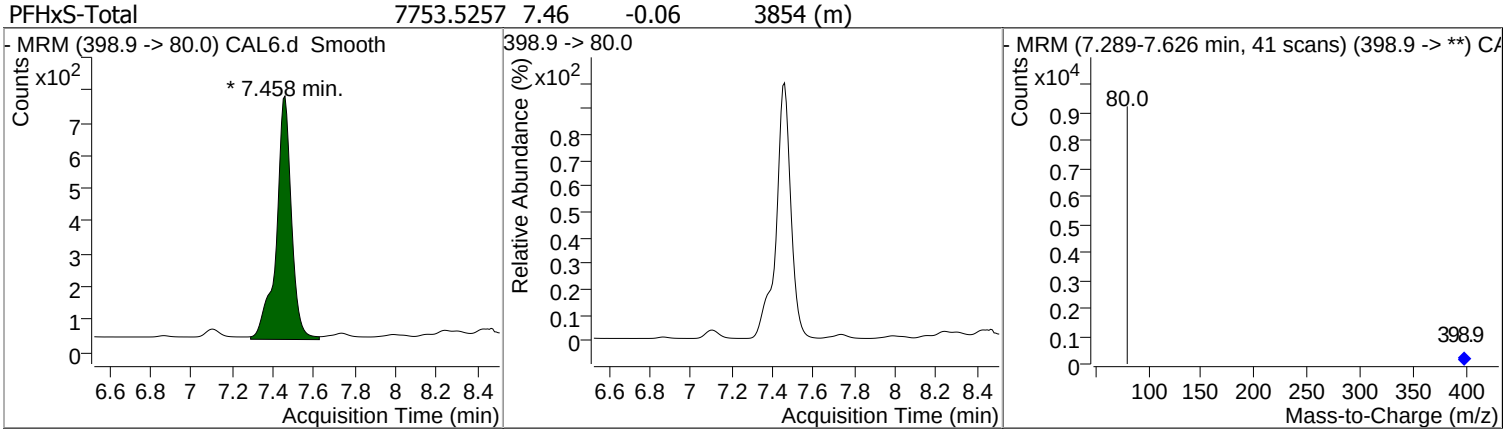
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	8781.8089	7.00	-0.08	7112				



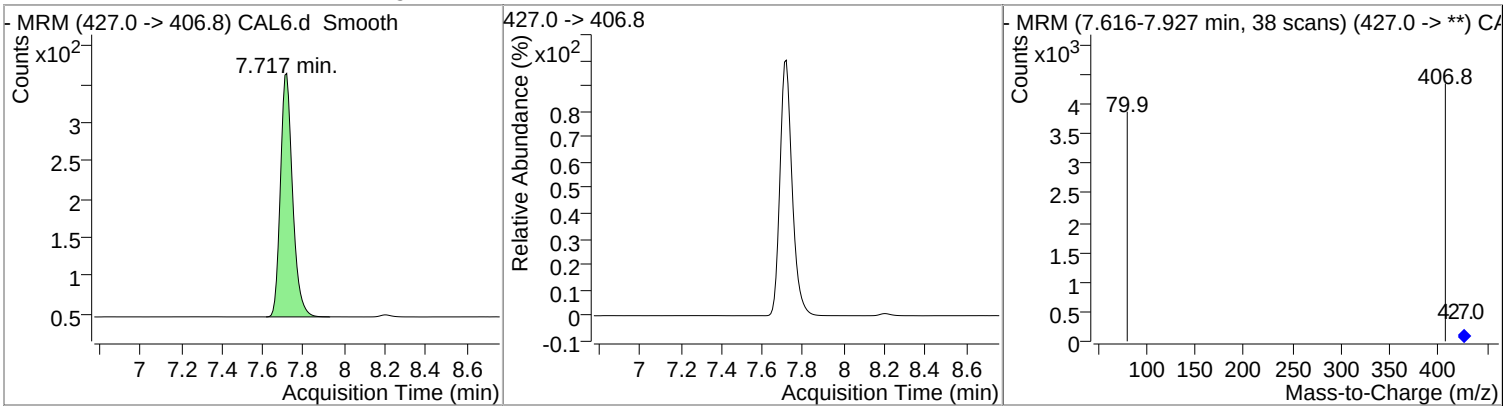
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	8685.6185	7.42	-0.07	10479				



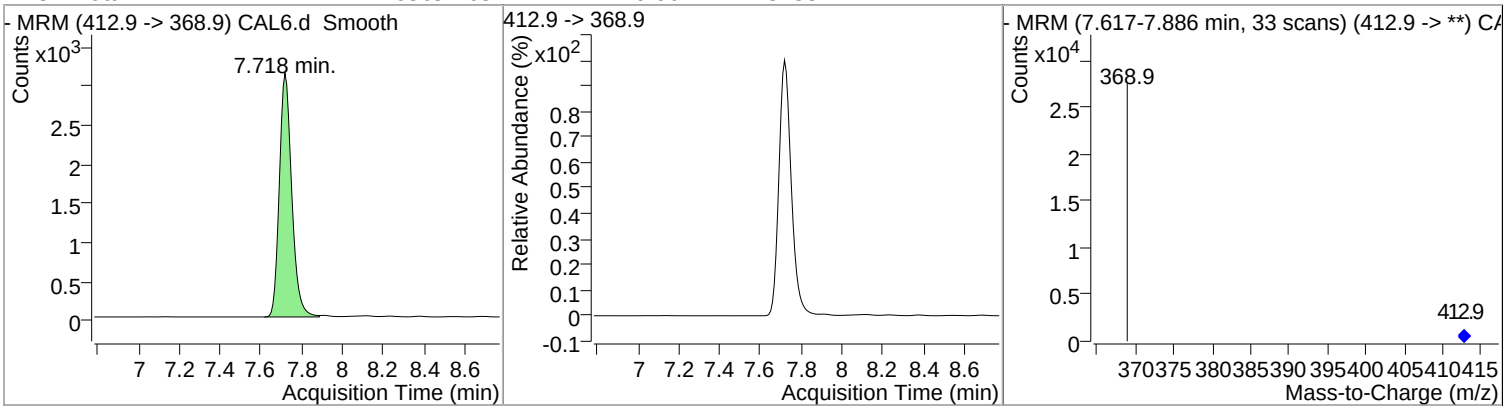
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	7753.5257	7.46	-0.06	3854 (m)				



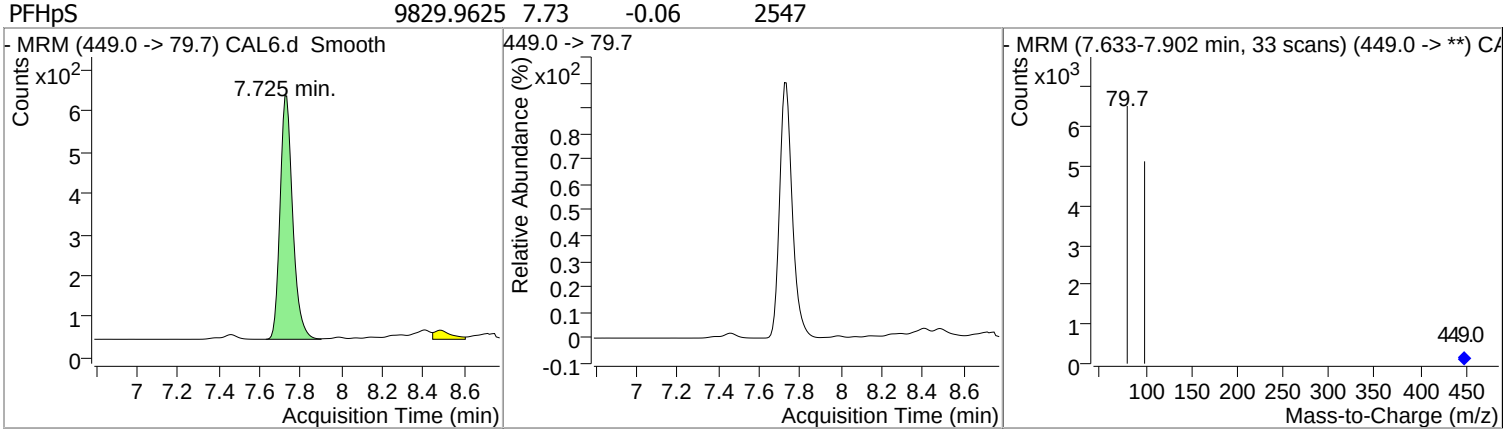
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	10162.0995	7.72	-0.05	1316				



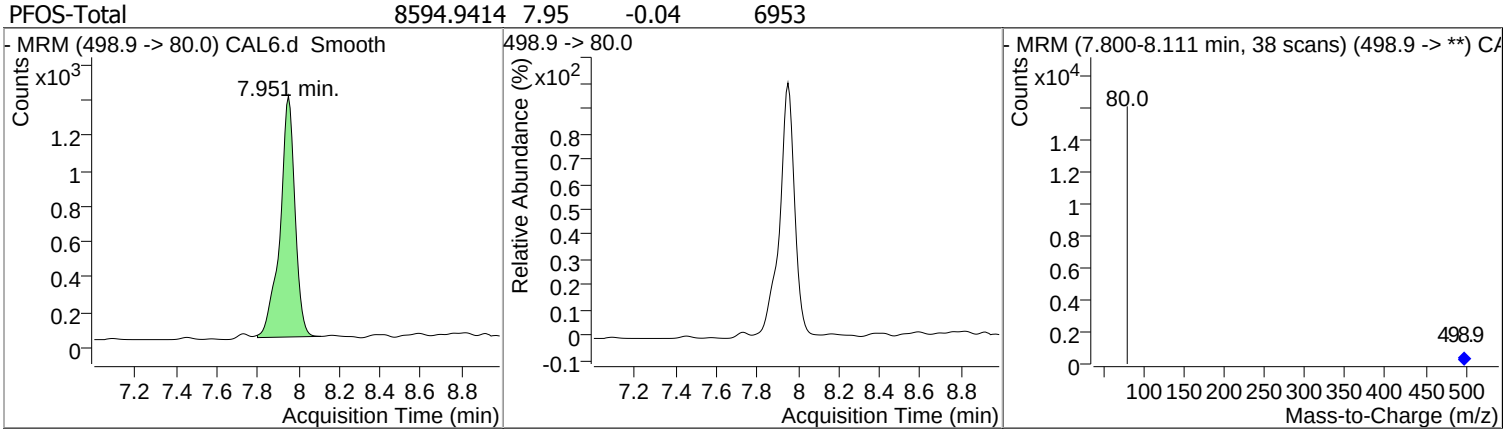
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	8569.2657	7.72	-0.06	13133				



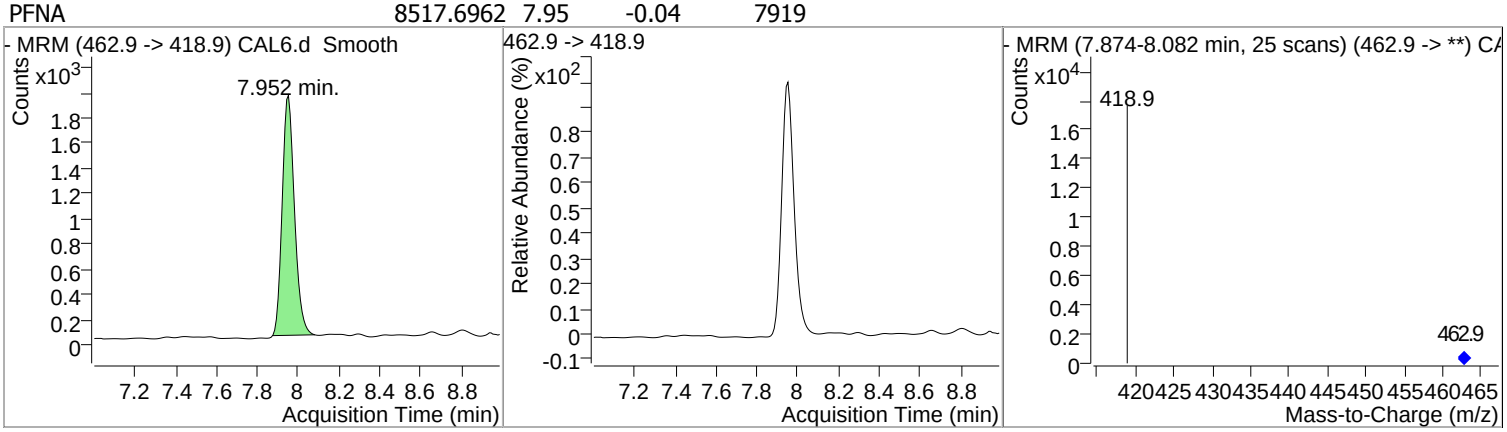
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	9829.9625	7.73	-0.06	2547				



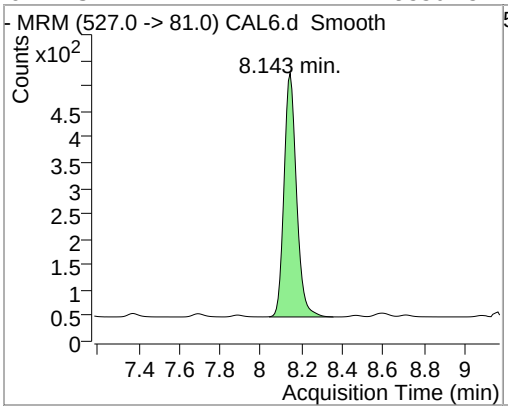
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	8594.9414	7.95	-0.04	6953				

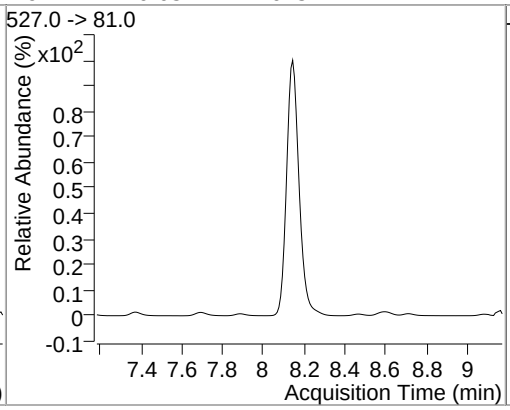


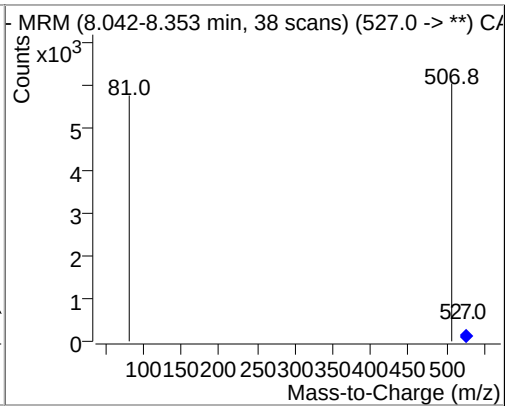
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	8517.6962	7.95	-0.04	7919				



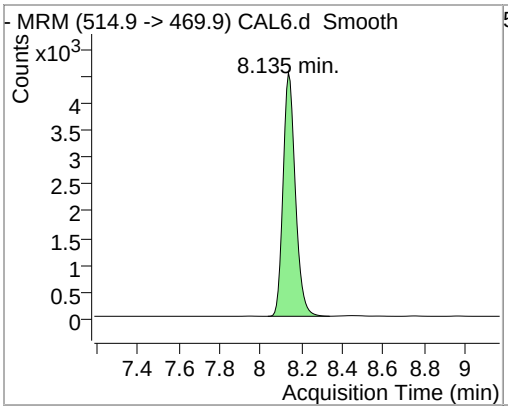
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	9536.4514	8.14	-0.03	2043				

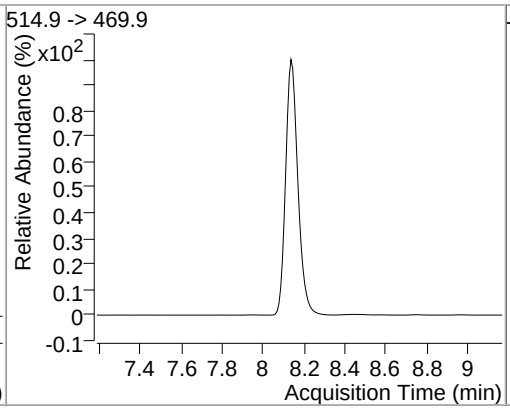


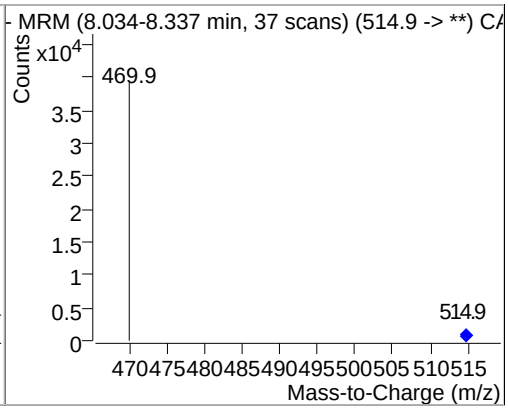




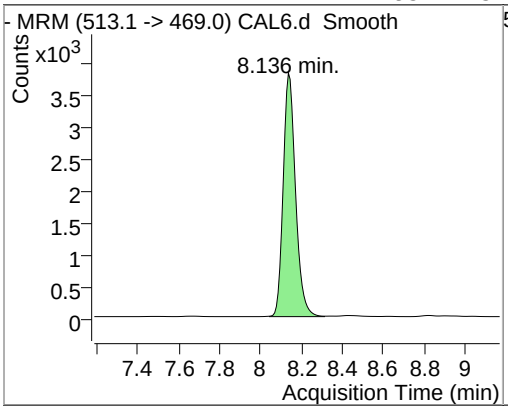
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	15575.2584	8.14	-0.04	18928				

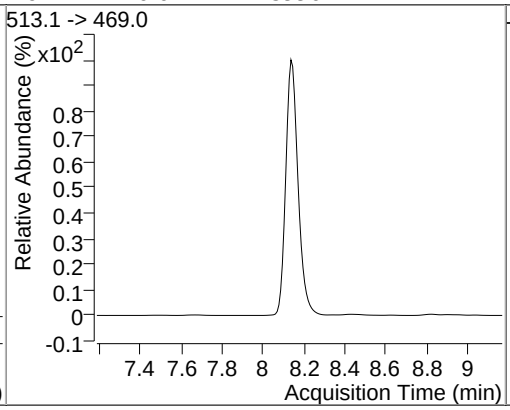


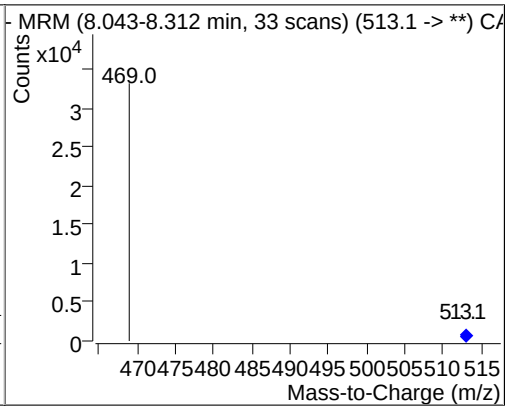




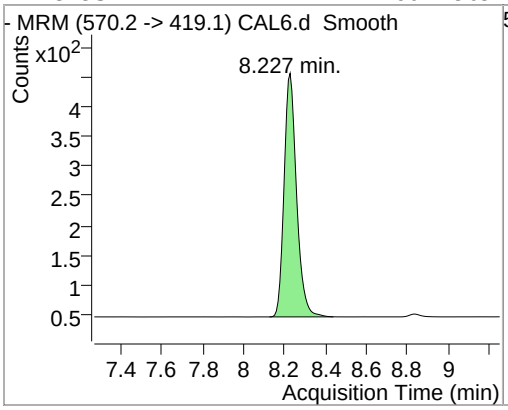
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	9322.2232	8.14	-0.04	15990				

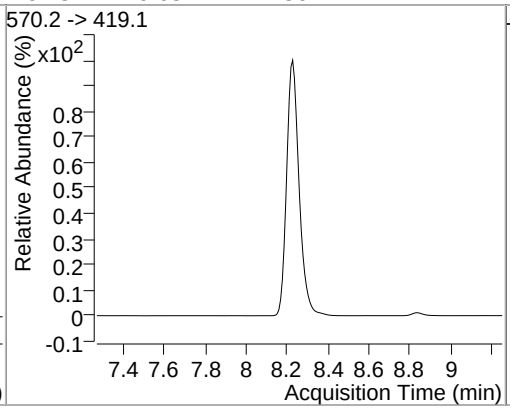


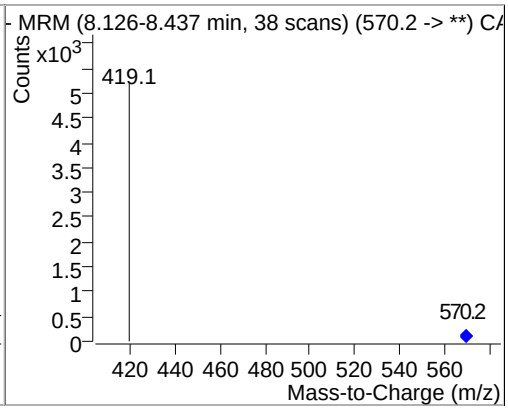




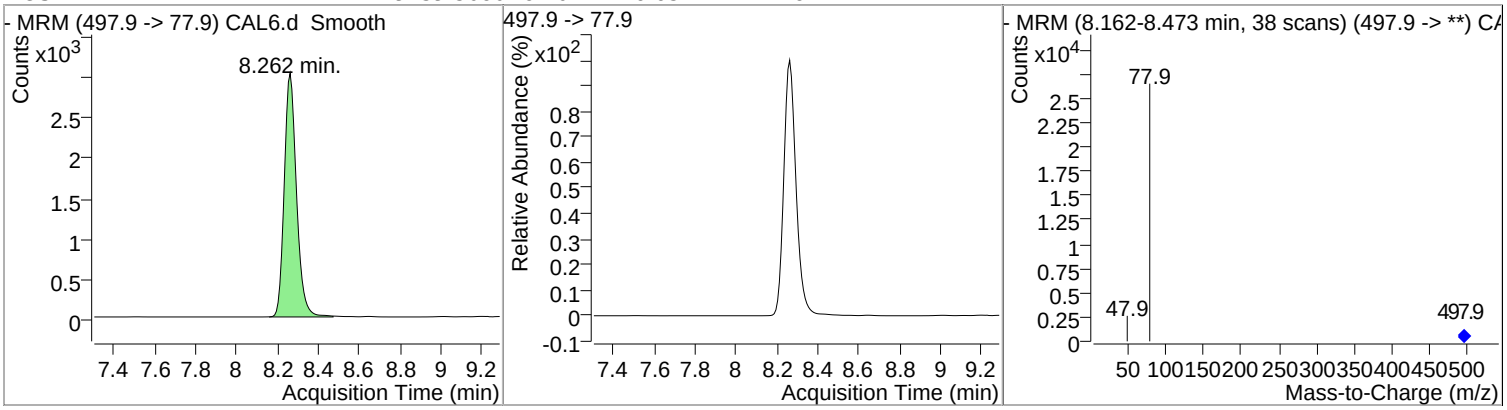
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	8677.9697	8.23	-0.03	1738				



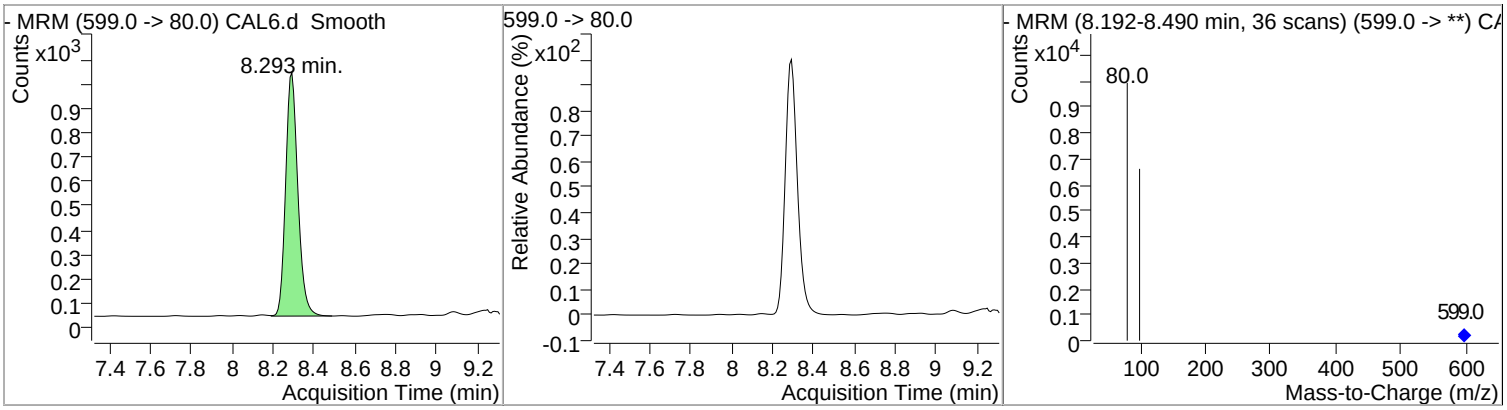




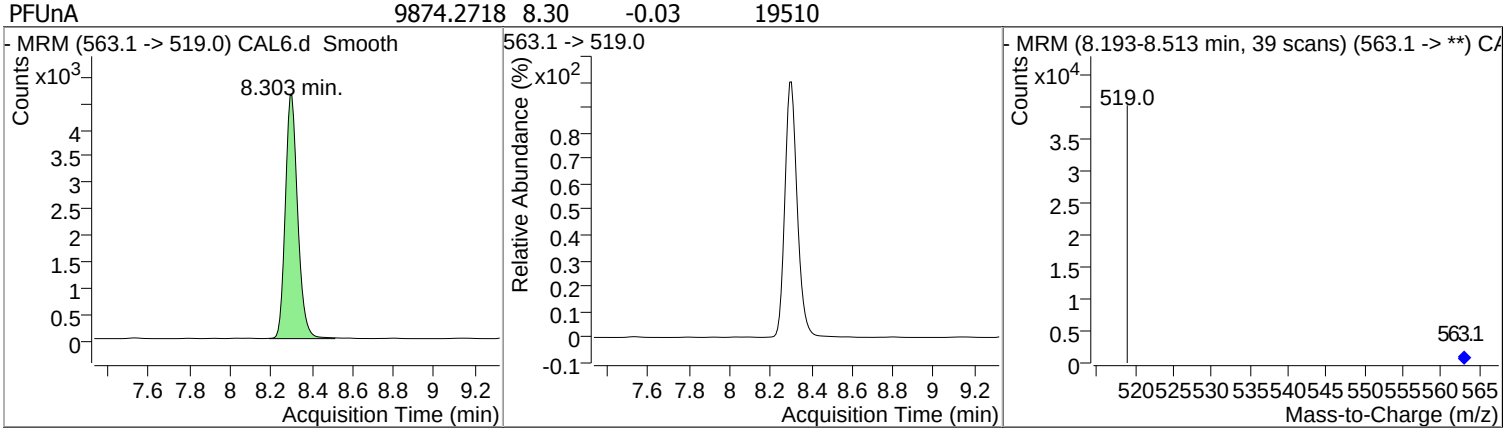
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	9739.5686	8.26	-0.03	12484				



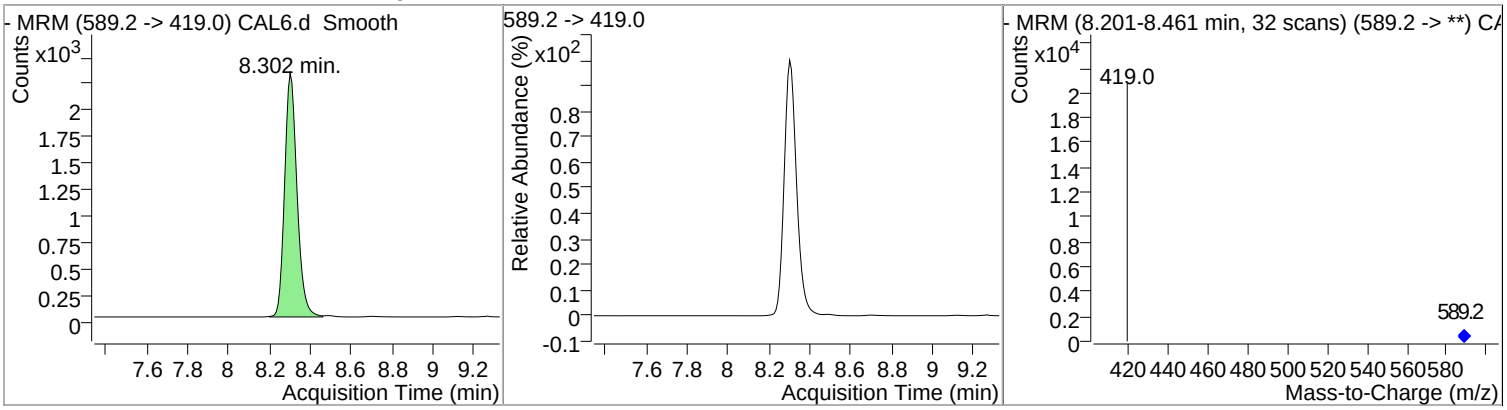
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	8217.8896	8.29	-0.03	4154				



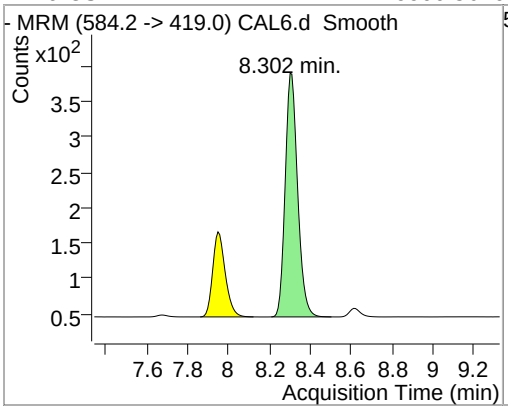
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	9874.2718	8.30	-0.03	19510				

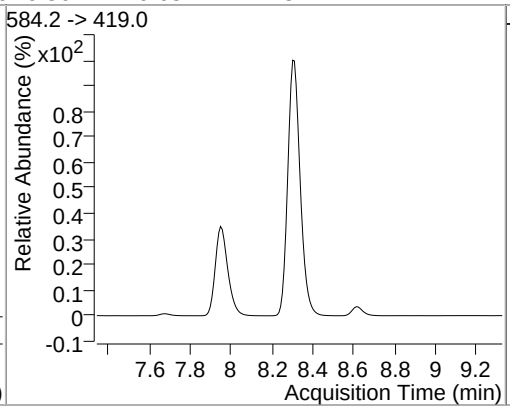


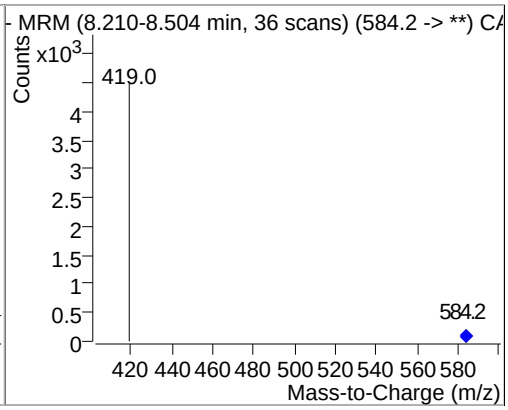
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	60995.7375	8.30	-0.03	9721				



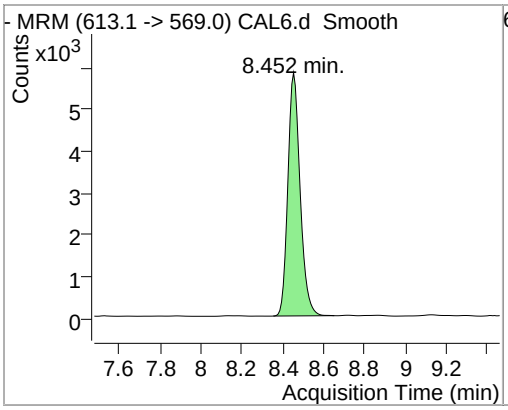
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	8800.5610	8.30	-0.03	1457				

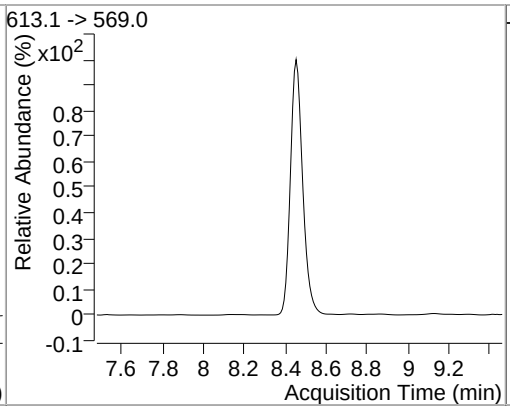


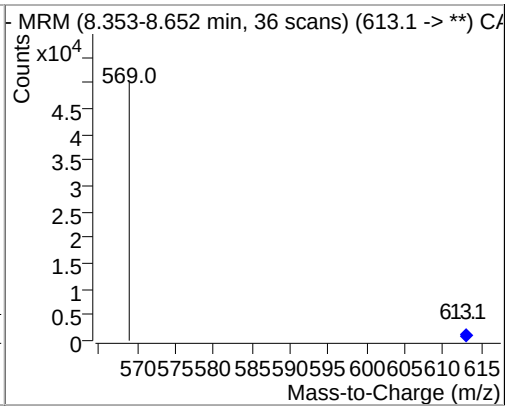




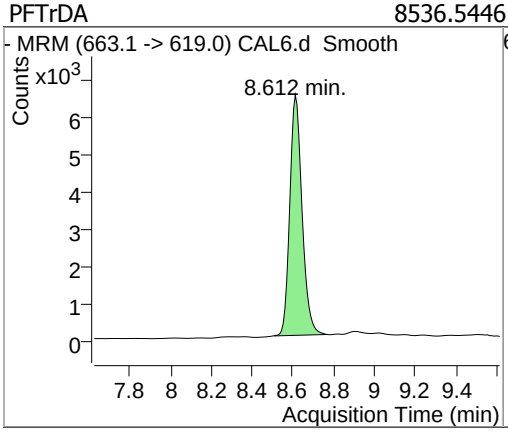
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	8763.9734	8.45	-0.02	24250				

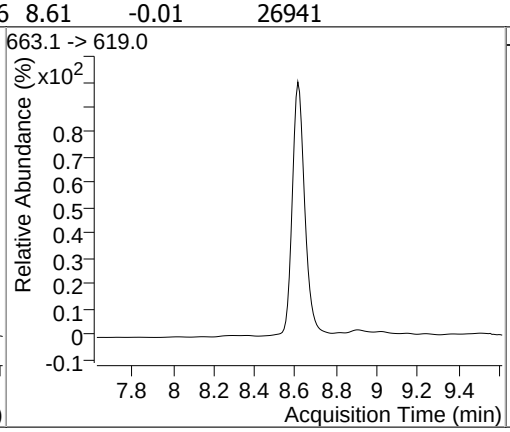


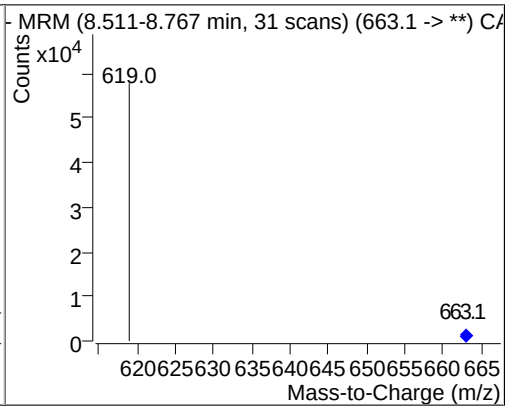




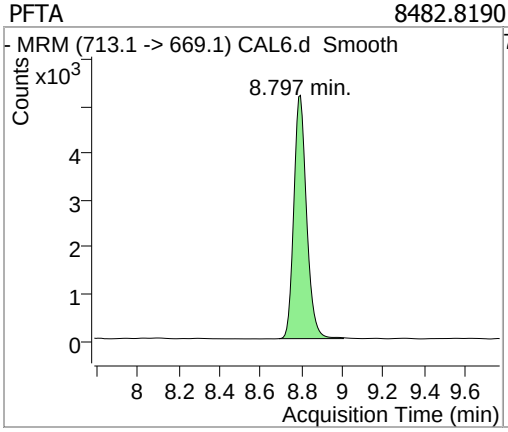
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	8536.5446	8.61	-0.01	26941				

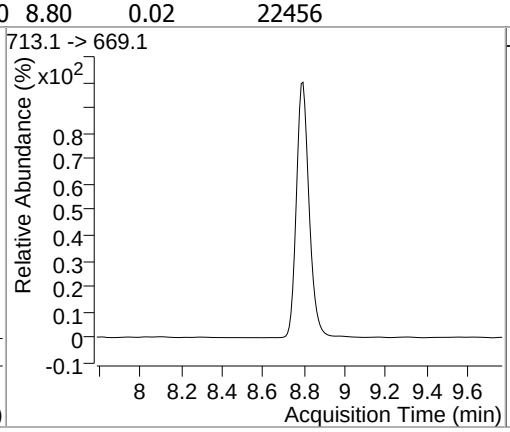


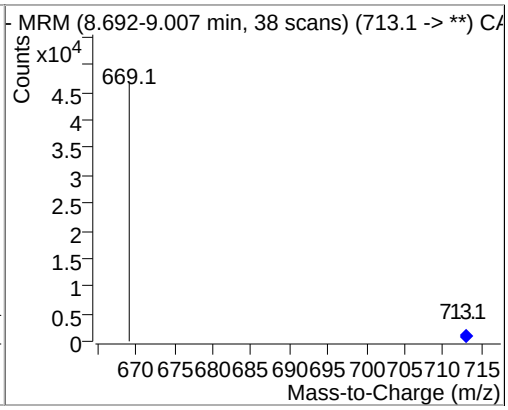




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	8482.8190	8.80	0.02	22456				





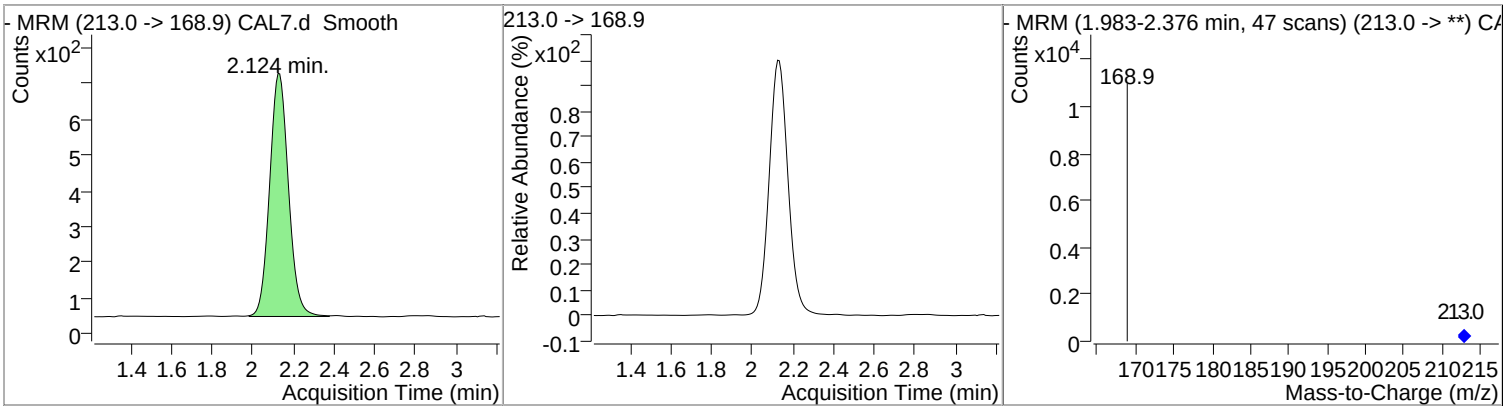


Data File	CAL7.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/13/2019 7:36:07 PM
Sample Name	CAL7	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	CAL.batch.bin	Last Calib Update	8/14/2019 2:32:16 PM
Ref Library			

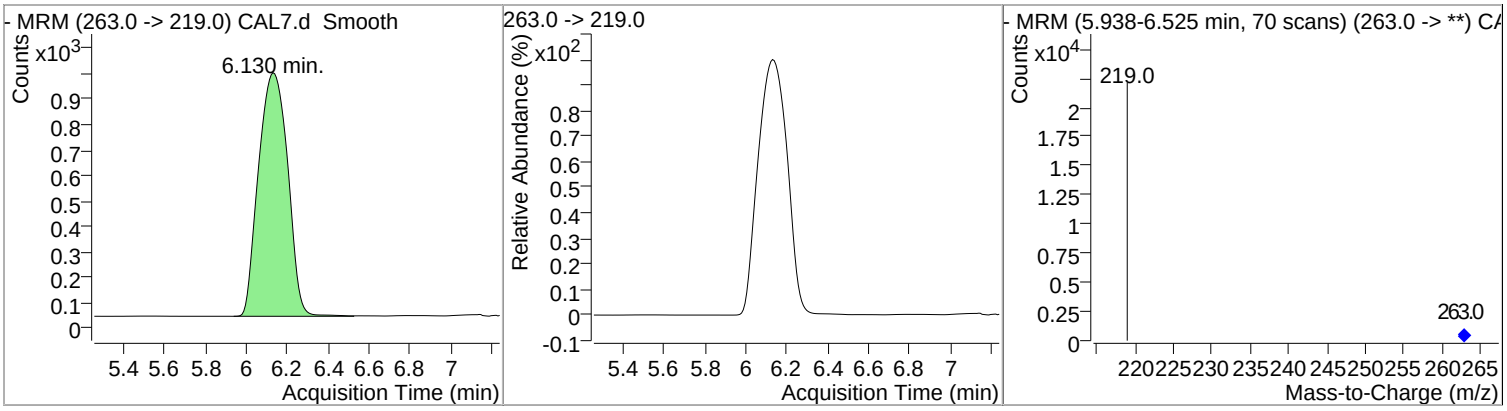
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.709	416.9 -> 371.9	11228	10000.0000	pg/ml		-0.067
M PFOS C13	7.942	502.9 -> 80.0	15697	28700.0000	pg/ml		-0.050
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	6927	40000.0000	pg/ml		-0.042
System Monitoring Compounds							
S PFHxA C13	6.996	314.9 -> 269.9	16120	20128.0438	pg/ml		-0.092
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 201.28%		*	
S PFDA C13	8.135	514.9 -> 469.9	23933	20474.2471	pg/ml		-0.042
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 204.74%		*	
S d5-N-MeFOSAA	8.302	589.2 -> 419.0	11240	68614.1688	pg/ml		-0.034
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 171.54%		*	
Target Compounds							QValue
T PFBA	2.124	213.0 -> 168.9	4375	24058.3782	pg/ml		100
T PFPeA	6.130	263.0 -> 219.0	9534	25836.1886	pg/ml		100
T PFBS	6.500	298.9 -> 80.0	7128	22461.9668	pg/ml		100
T PFHxA	6.996	312.9 -> 268.9	18654	23947.1278	pg/ml		100
T PFHpA	7.416	362.9 -> 319.0	28431	24498.1516	pg/ml		100
T PFHxS-Total	7.449	398.9 -> 80.0	11623	23293.2581	pg/ml		100
T 6.2 FTS	7.709	427.0 -> 406.8	3162	24333.4618	pg/ml		100
T PFOA-Total	7.710	412.9 -> 368.9	38817	26331.7480	pg/ml		100
T PFHpS	7.725	449.0 -> 79.7	5836	22437.3734	pg/ml		100
T PFOS-Total	7.943	498.9 -> 80.0	17498	21546.5362	pg/ml		100
T PFNA	7.943	462.9 -> 418.9	21219	23727.8194	pg/ml		100
T 8.2 FTS	8.135	527.0 -> 81.0	5145	23924.3536	pg/ml		100
T PFDA	8.136	513.1 -> 469.0	39907	24187.9385	pg/ml		100
T N-MeFOSAA	8.218	570.2 -> 419.1	4969	24133.0444	pg/ml		100
T FOSA	8.254	497.9 -> 77.9	32104	24366.2351	pg/ml		100
T PFDS	8.284	599.0 -> 80.0	11692	23039.3492	pg/ml		100
T PFUnA	8.294	563.1 -> 519.0	45589	23987.6423	pg/ml		100
T N-EtFOSAA	8.302	584.2 -> 419.0	4178	24558.0159	pg/ml		100
T PFDoA	8.452	613.1 -> 569.0	63186	23740.4645	pg/ml		100
T PFTrDA	8.612	663.1 -> 619.0	71772	23642.5552	pg/ml		100
T PFTA	8.797	713.1 -> 669.1	60380	23712.5379	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

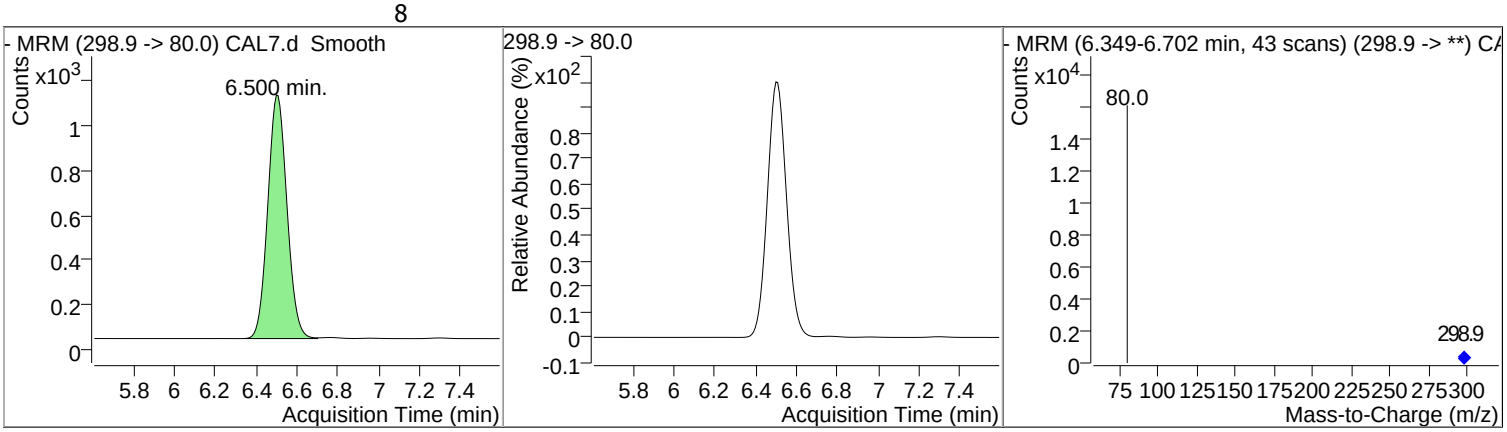
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	24058.3782	2.12	-0.09	4375				



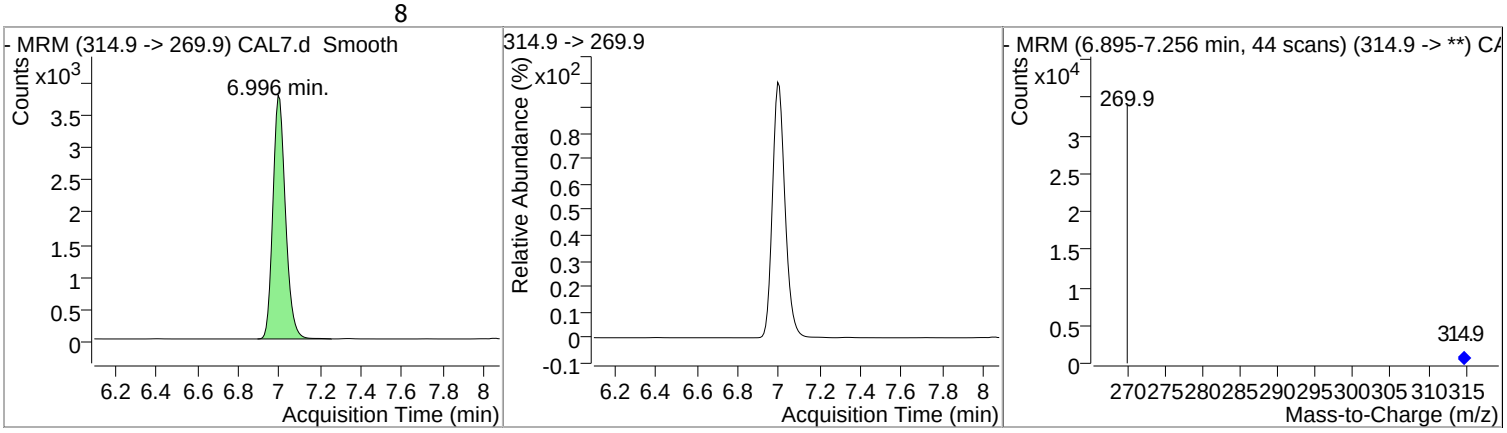
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	25836.1886	6.13	-0.12	9534				



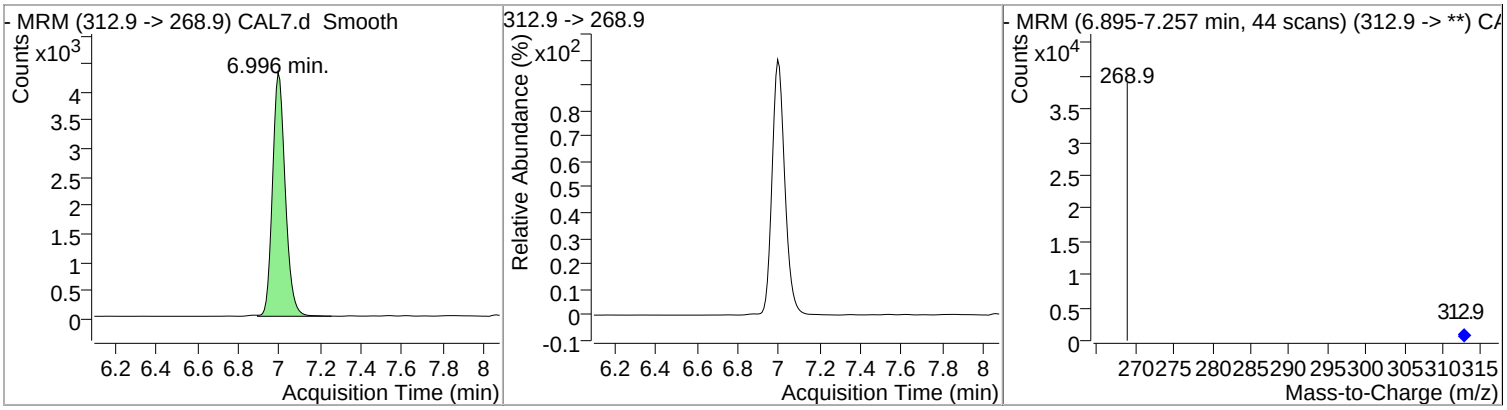
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	22461.9668	6.50	-0.10	7128				



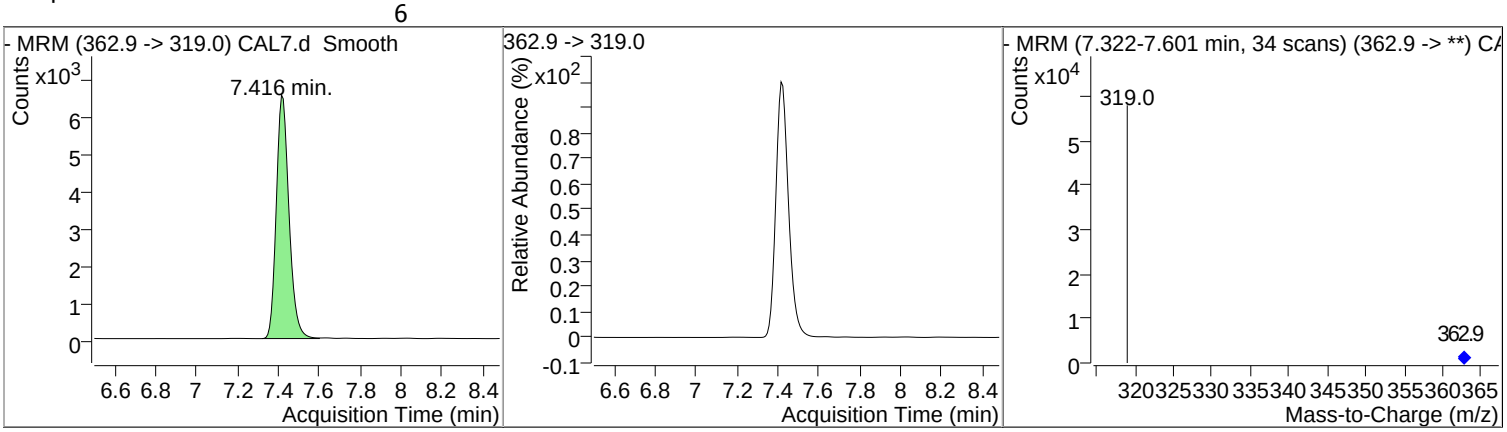
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	20128.0438	7.00	-0.09	16120				



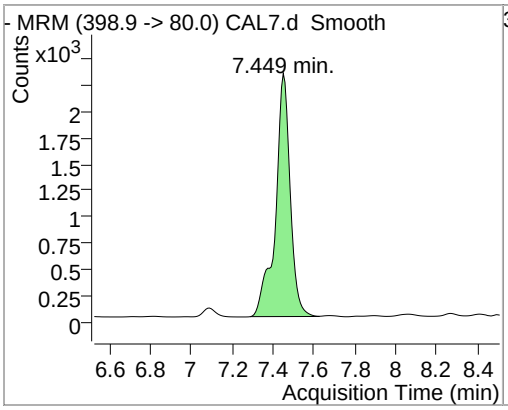
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	23947.1278	7.00	-0.09	18654				

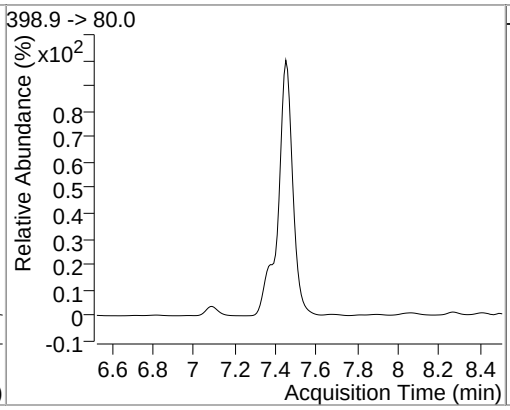


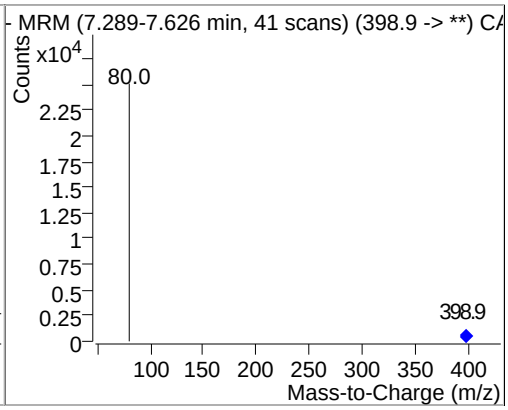
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	24498.1516	7.42	-0.08	28431				



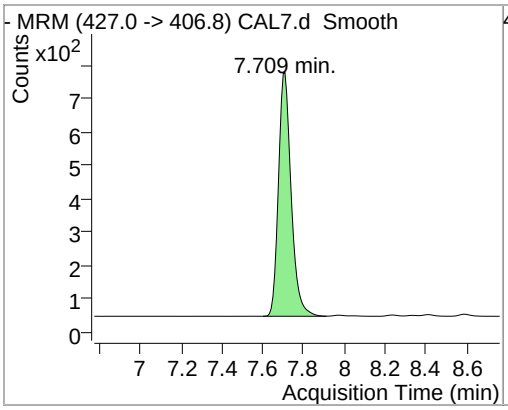
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	23293.2581	7.45	-0.07	11623				

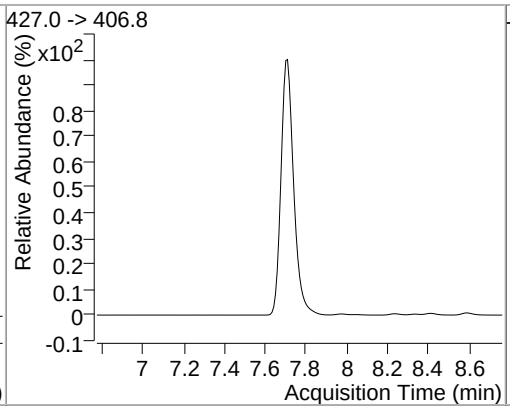


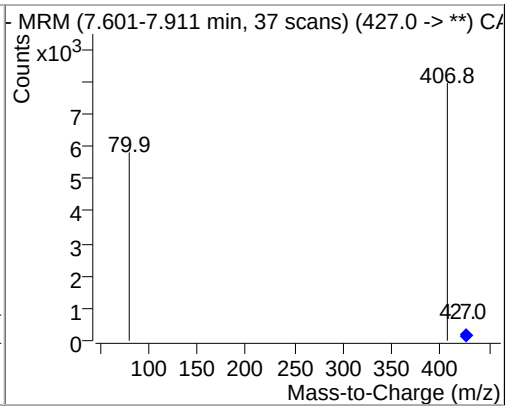




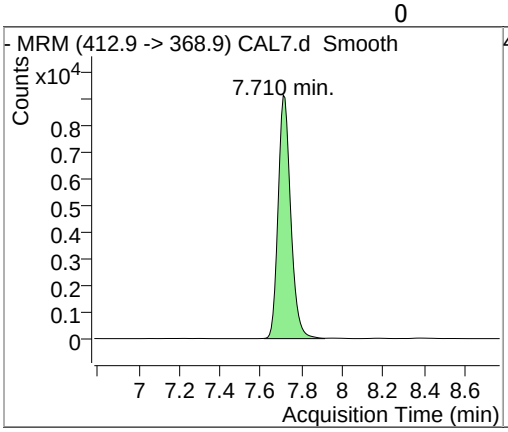
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	24333.4618	7.71	-0.06	3162				

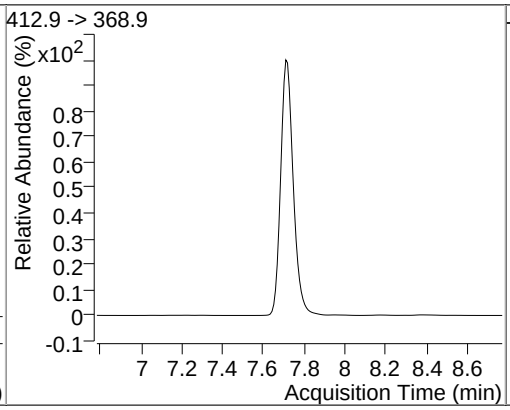


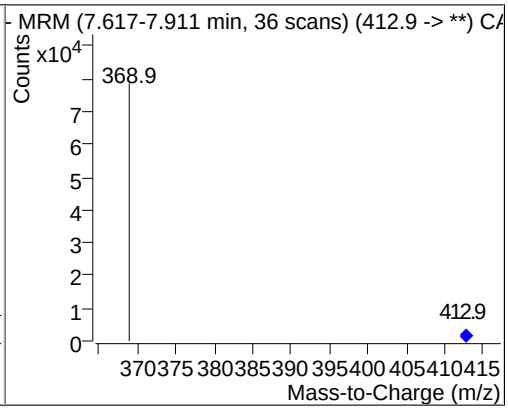




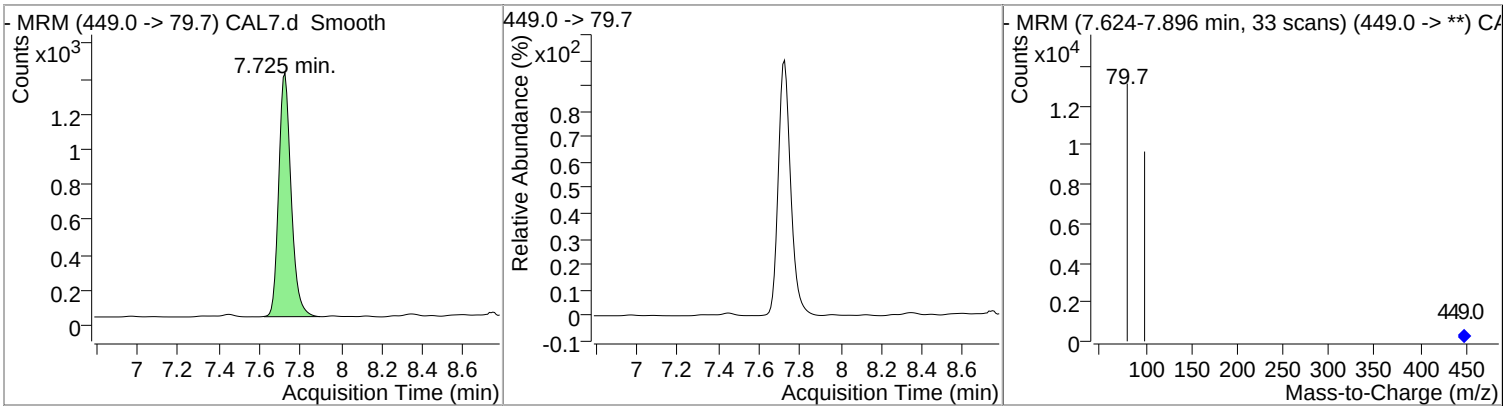
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	26331.7480	7.71	-0.07	38817				



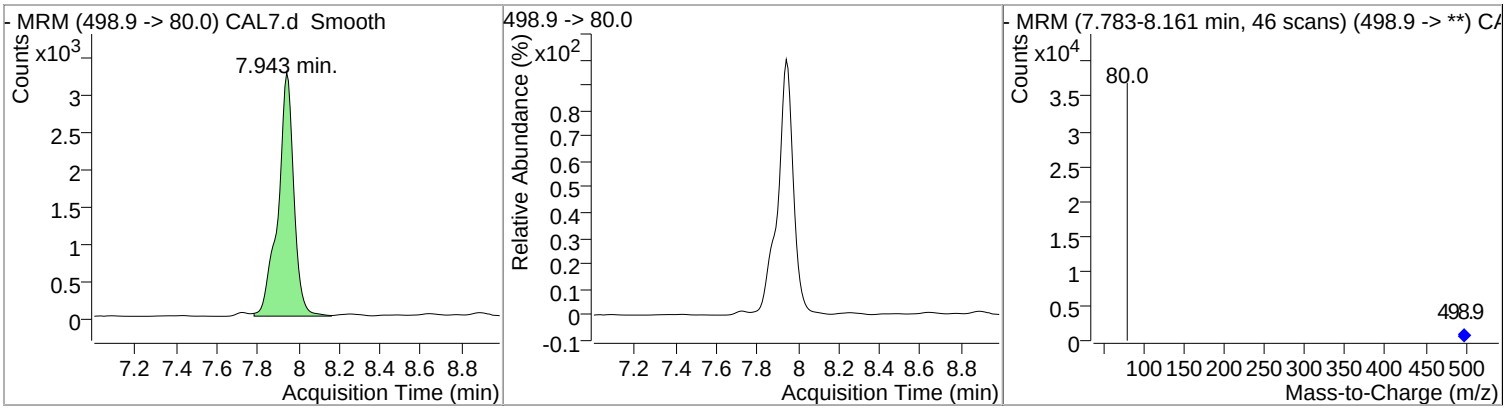




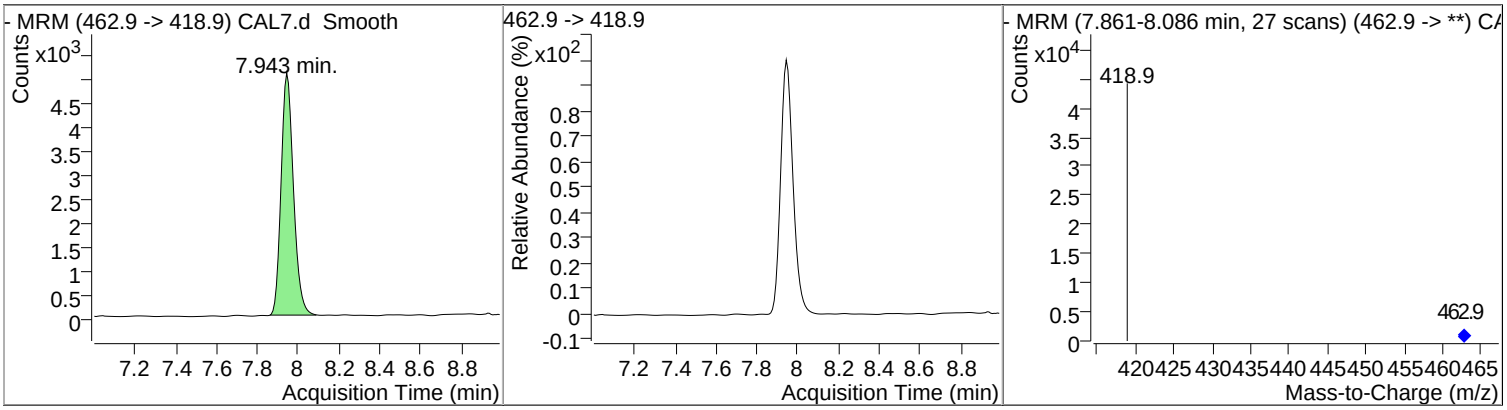
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	22437.3734	7.73	-0.06	5836				



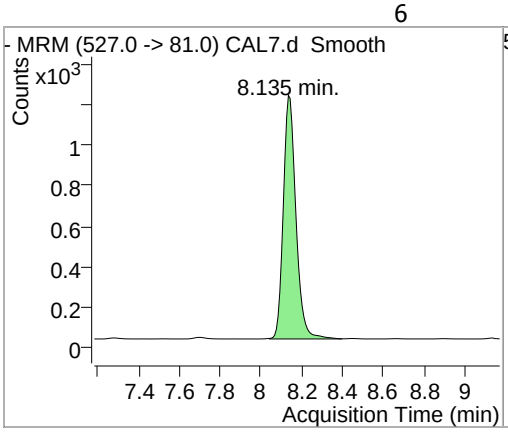
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	21546.5362	7.94	-0.05	17498				

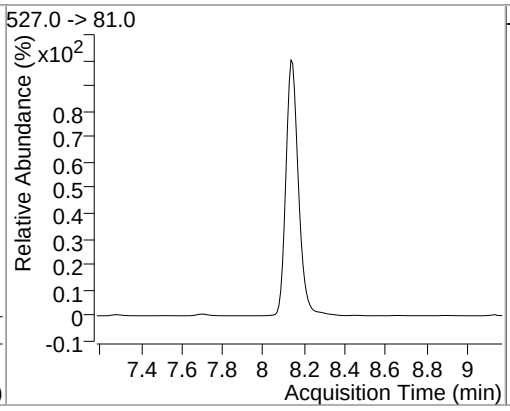


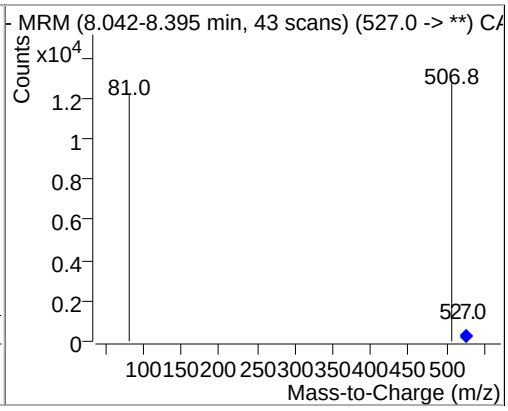
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	23727.8194	7.94	-0.05	21219				



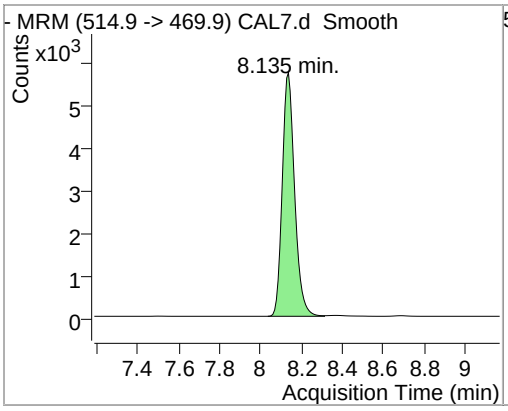
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	23924.3536	8.13	-0.04	5145				

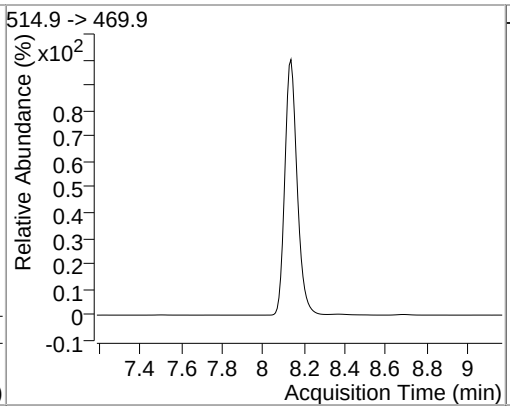


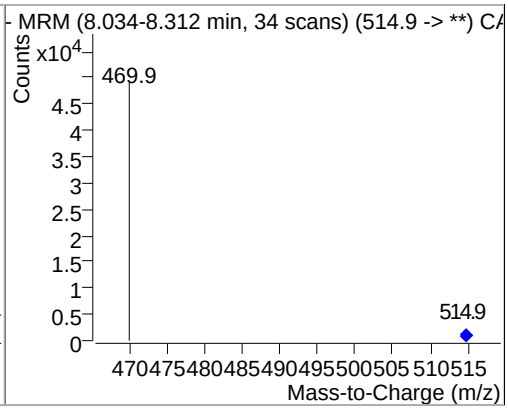




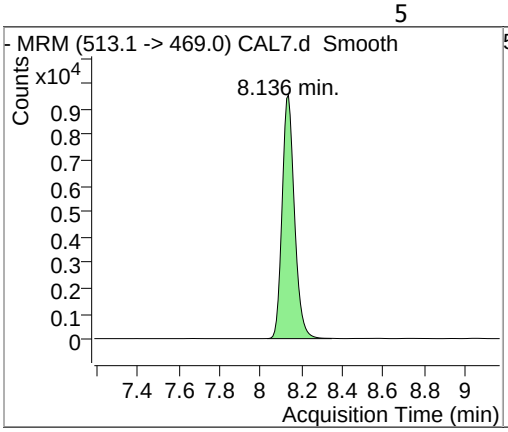
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	20474.2471	8.14	-0.04	23933				

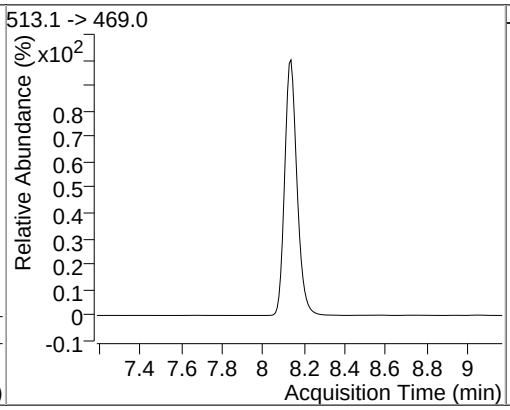


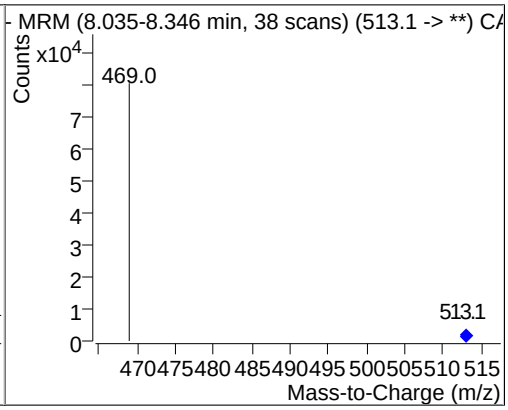




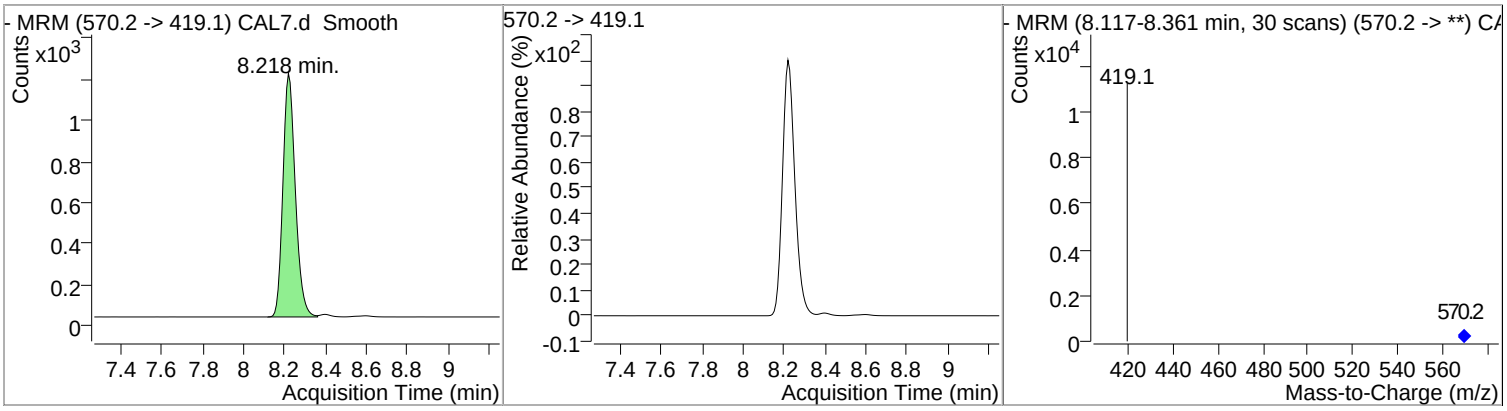
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	24187.9385	8.14	-0.04	39907				



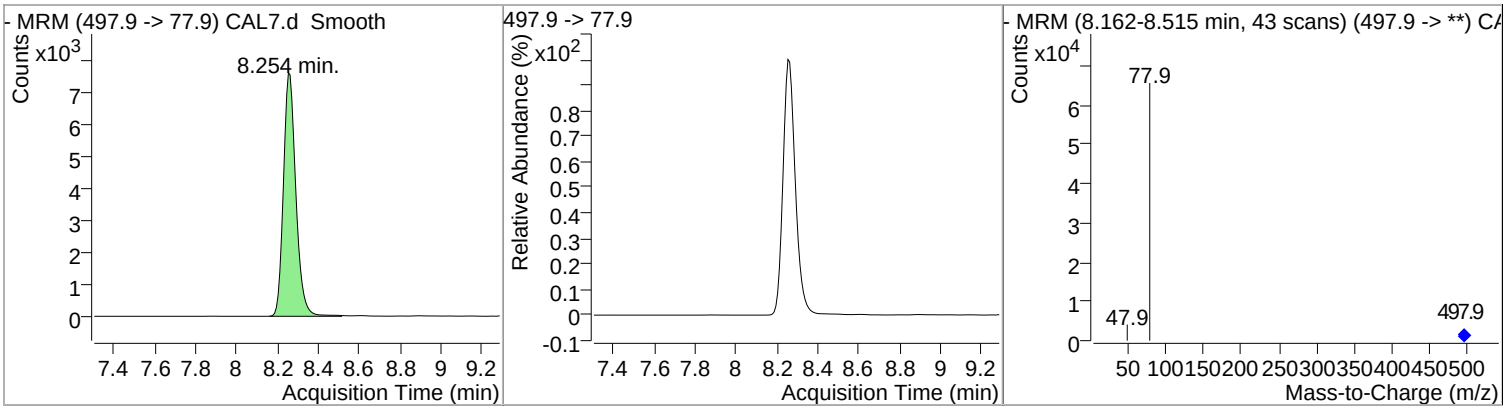




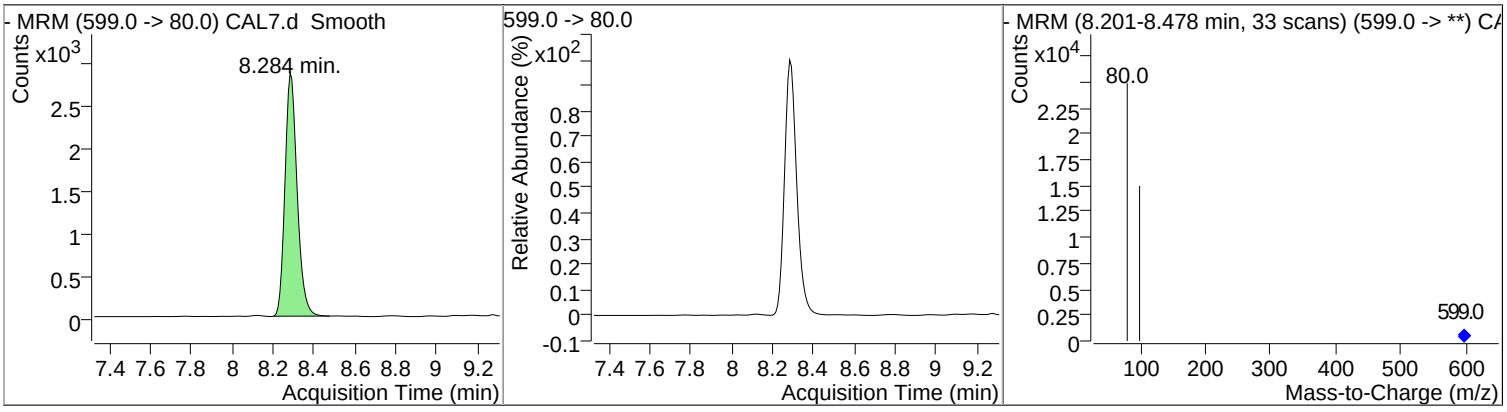
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	24133.0444	8.22	-0.04	4969				



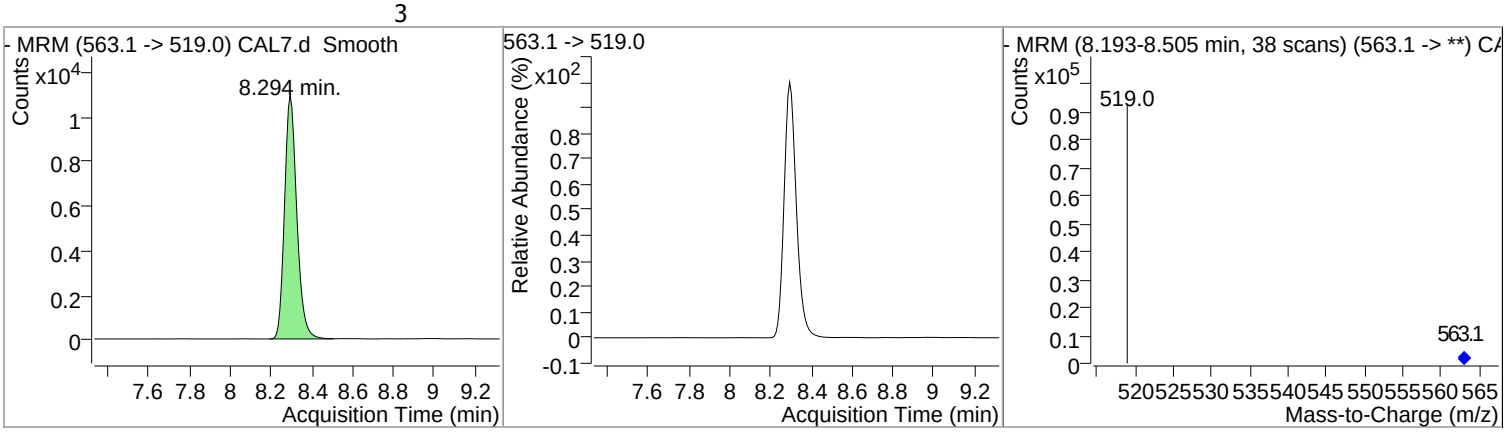
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	24366.2351	8.25	-0.04	32104				



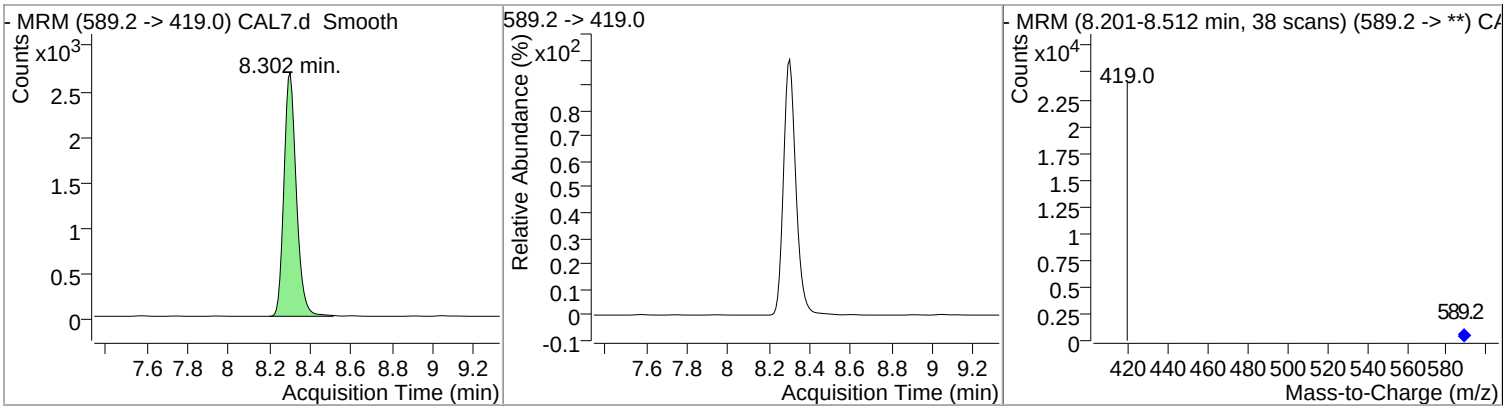
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	23039.3492	8.28	-0.03	11692				



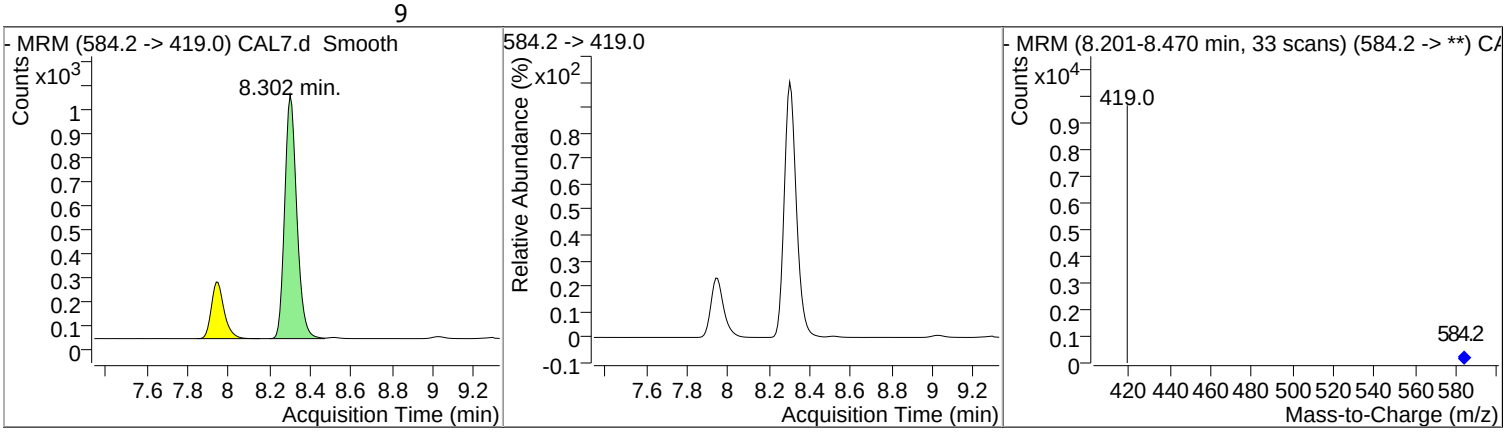
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	23987.6423	8.29	-0.03	45589				



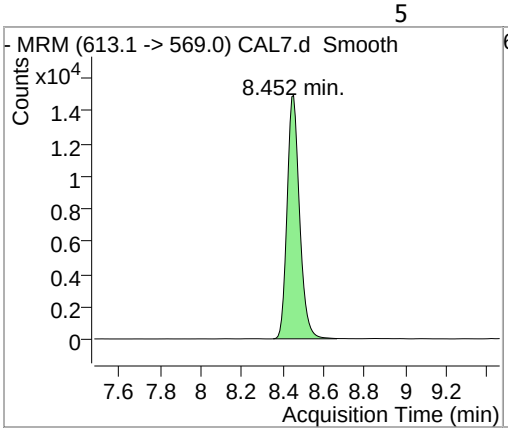
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	68614.1688	8.30	-0.03	11240				

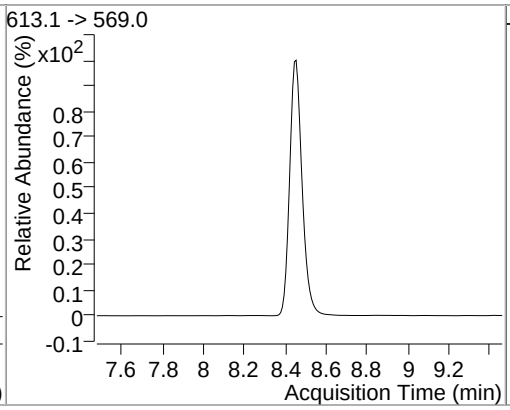


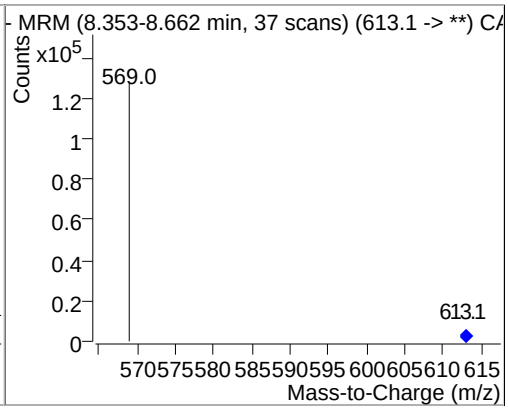
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	24558.0159	8.30	-0.03	4178				



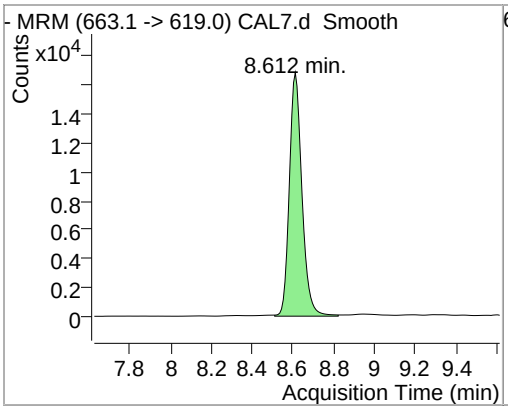
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	23740.4645	8.45	-0.02	63186				

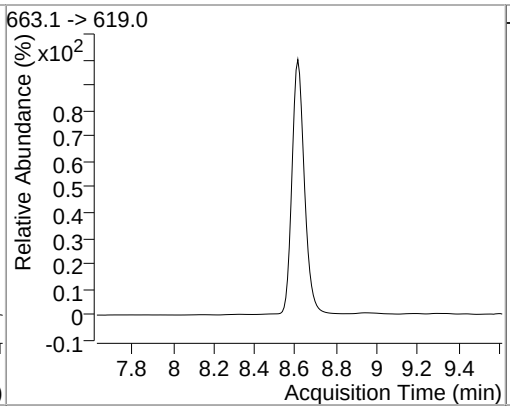


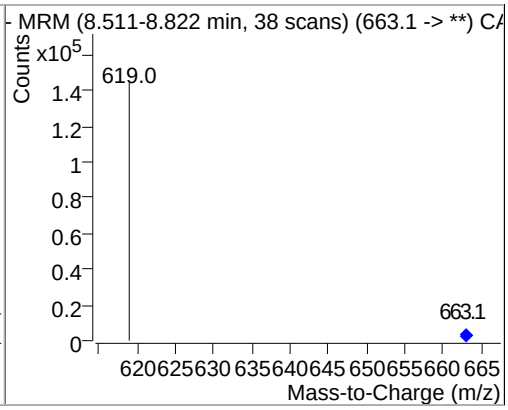




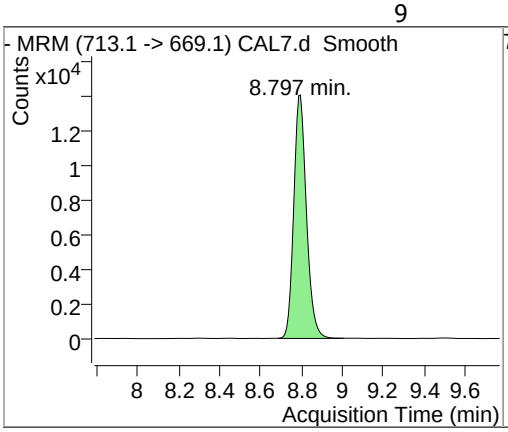
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	23642.5552	8.61	-0.01	71772				

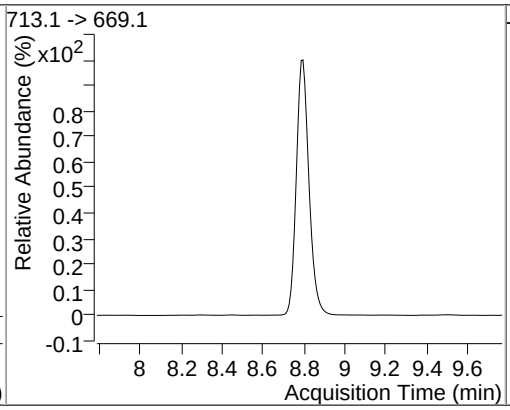


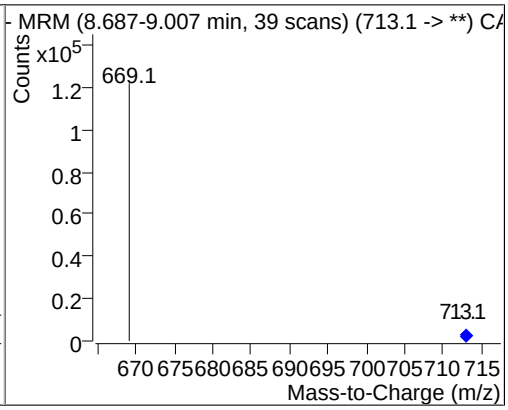




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	23712.5379	8.80	0.02	60380				





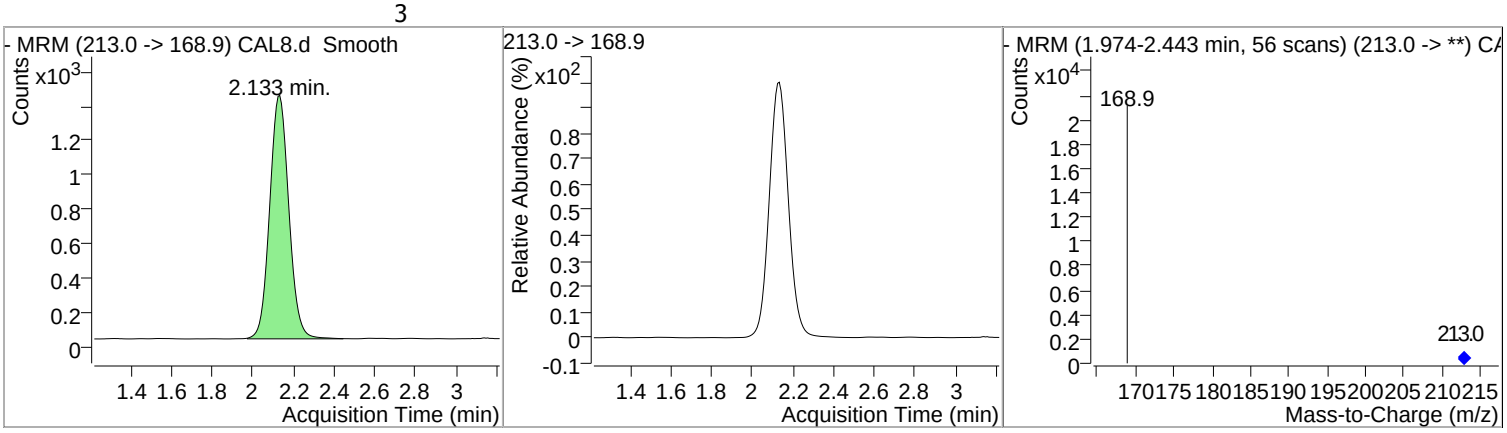


Data File	CAL8.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/13/2019 7:48:42 PM
Sample Name	CAL8	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	CAL.batch.bin	Last Calib Update	8/14/2019 2:32:16 PM
Ref Library			

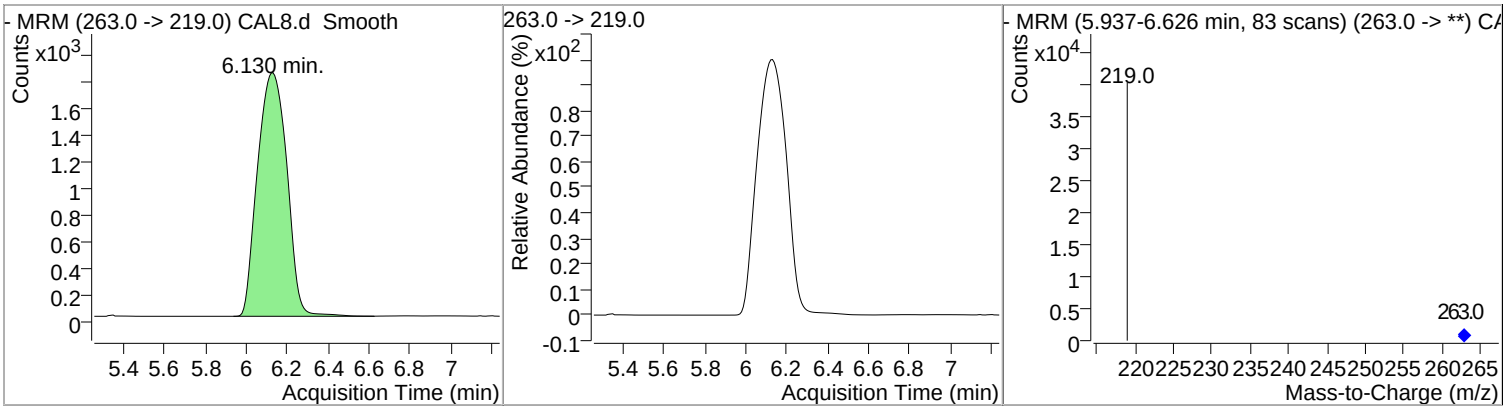
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.709	416.9 -> 371.9	10866	10000.0000	pg/ml		-0.067
M PFOS C13	7.942	502.9 -> 80.0	15569	28700.0000	pg/ml		-0.050
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	6980	40000.0000	pg/ml		-0.042
System Monitoring Compounds							
S PFHxA C13	6.996	314.9 -> 269.9	20810	26849.7999	pg/ml		-0.092
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 268.50%		*	
S PFDA C13	8.127	514.9 -> 469.9	27321	24150.7518	pg/ml		-0.050
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 241.51%		*	
S d5-N-MeFOSAA	8.293	589.2 -> 419.0	13994	84776.0146	pg/ml		-0.042
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 211.94%		*	
Target Compounds							QValue
T PFBA	2.133	213.0 -> 168.9	9239	52501.1713	pg/ml		100
T PFPeA	6.130	263.0 -> 219.0	18341	51358.7507	pg/ml		100
T PFBS	6.492	298.9 -> 80.0	14094	44778.5029	pg/ml		100
T PFHxA	6.996	312.9 -> 268.9	39368	52223.1245	pg/ml		100
T PFHpA	7.416	362.9 -> 319.0	58110	51739.4641	pg/ml		100
T PFHxS-Total	7.449	398.9 -> 80.0	23619	47724.8296	pg/ml		100
T 6.2 FTS	7.700	427.0 -> 406.8	6066	47059.9874	pg/ml		100
T PFOA-Total	7.710	412.9 -> 368.9	71799	50328.7203	pg/ml		100
T PFHpS	7.725	449.0 -> 79.7	12413	48111.3767	pg/ml		100
T PFOS-Total	7.943	498.9 -> 80.0	40029	49694.2561	pg/ml		100
T PFNA	7.943	462.9 -> 418.9	45173	52196.5083	pg/ml		100
T 8.2 FTS	8.135	527.0 -> 81.0	10267	48132.6509	pg/ml		100
T PFDA	8.127	513.1 -> 469.0	82102	51420.7219	pg/ml		100
T N-MeFOSAA	8.218	570.2 -> 419.1	10518	50692.0337	pg/ml		100
T FOSA	8.254	497.9 -> 77.9	68440	51549.1890	pg/ml		100
T PFDS	8.284	599.0 -> 80.0	25596	50853.3125	pg/ml		100
T PFUnA	8.294	563.1 -> 519.0	93946	51079.0178	pg/ml		100
T N-EtFOSAA	8.302	584.2 -> 419.0	8667	50559.7048	pg/ml		100
T PFDoA	8.444	613.1 -> 569.0	137149	53247.4855	pg/ml		100
T PFTrDA	8.612	663.1 -> 619.0	155860	53053.0078	pg/ml		100
T PFTA	8.788	713.1 -> 669.1	131771	53474.3508	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

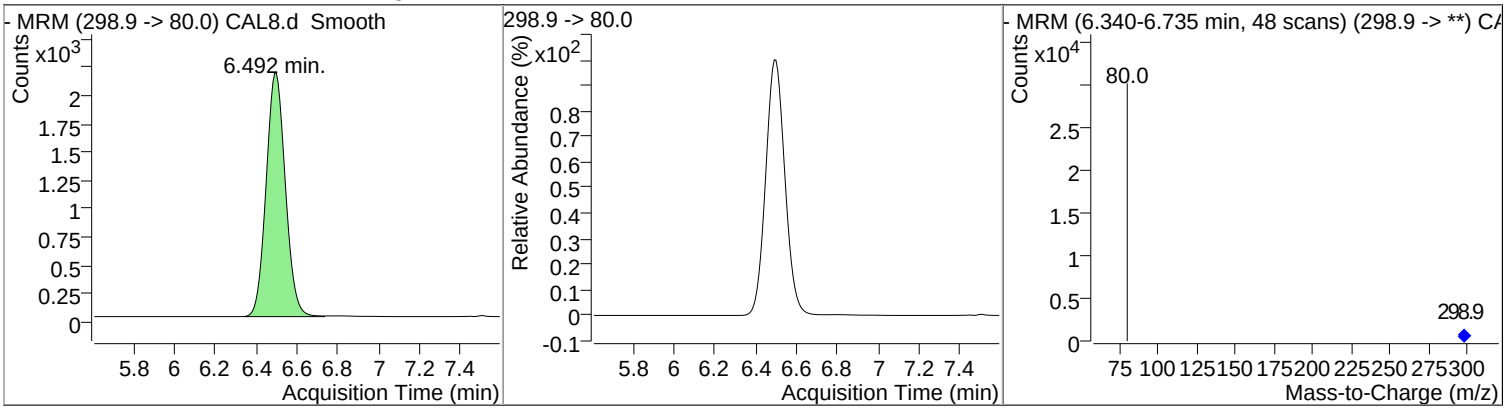
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	52501.1713	2.13	-0.08	9239				



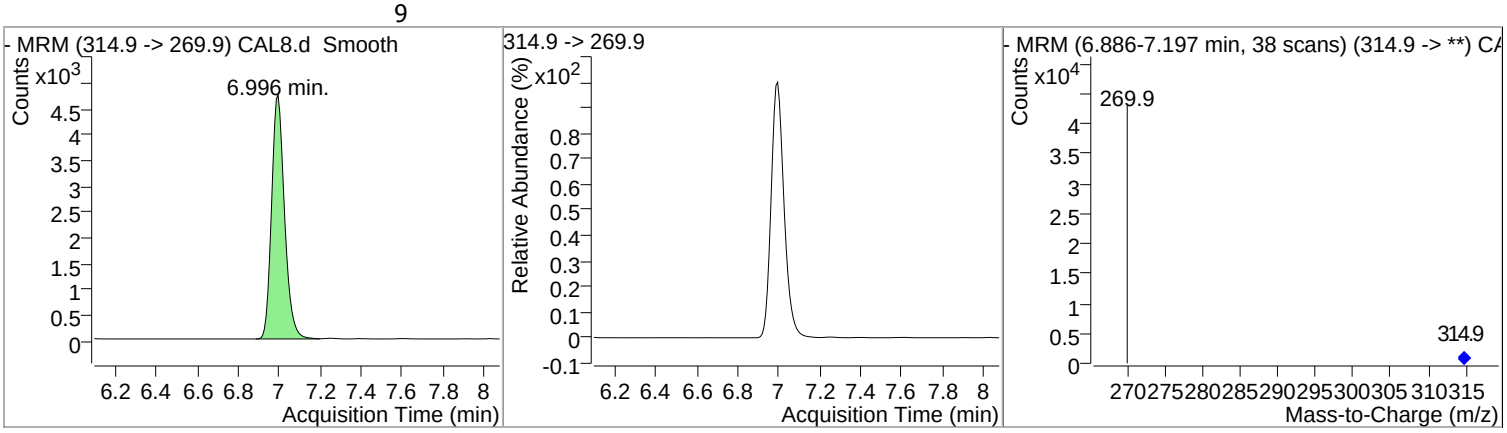
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	51358.7507	6.13	-0.12	18341				



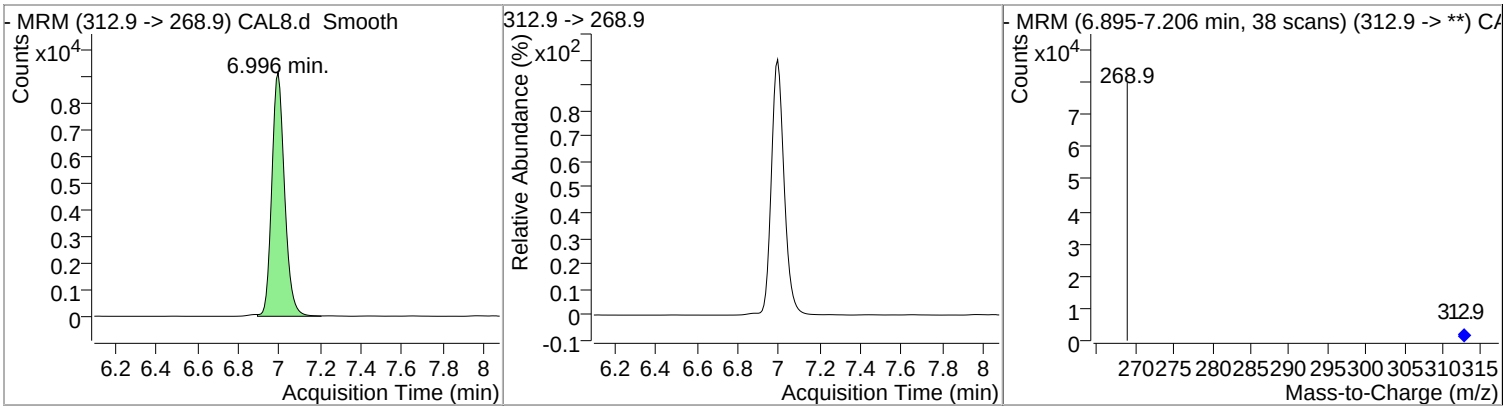
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	44778.5029	6.49	-0.11	14094				



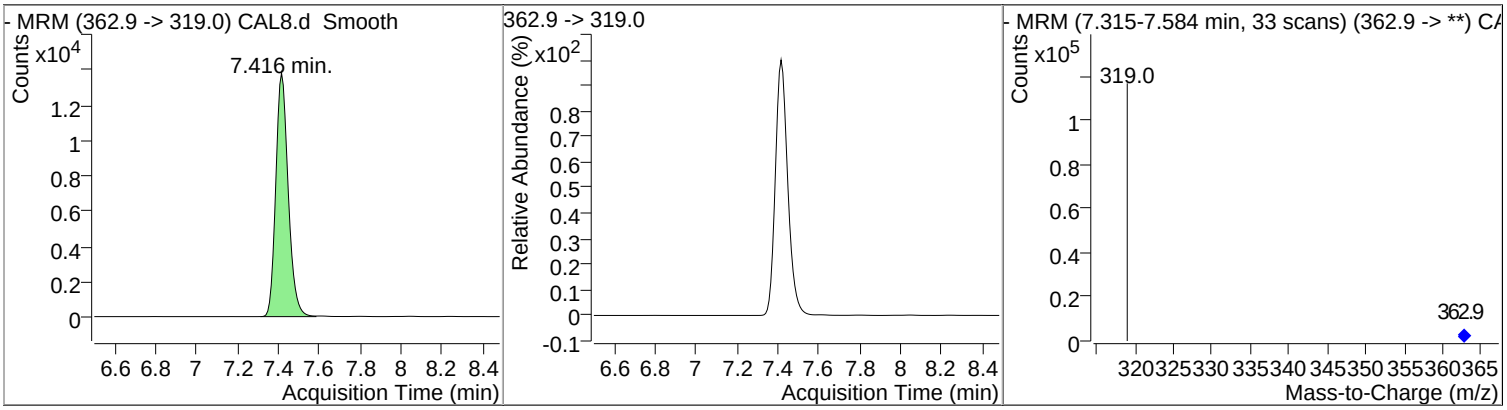
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	26849.7999	7.00	-0.09	20810				



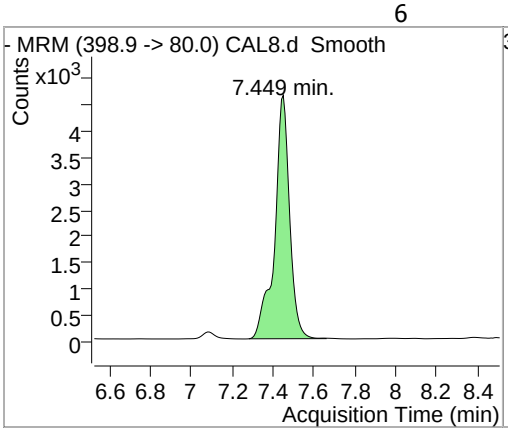
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	52223.1245	7.00	-0.09	39368				

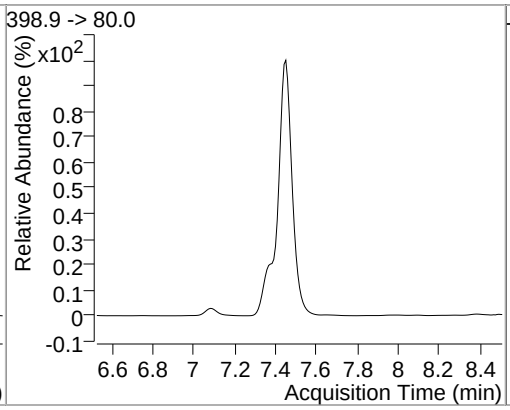


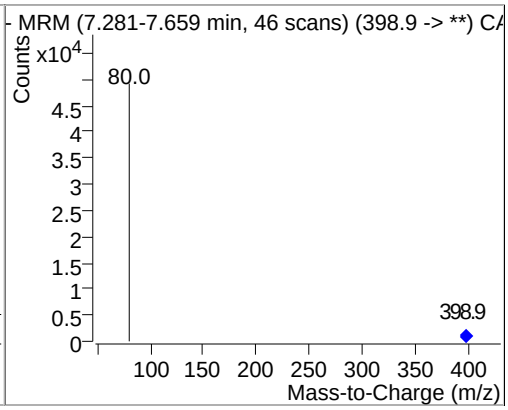
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	51739.4641	7.42	-0.08	58110				



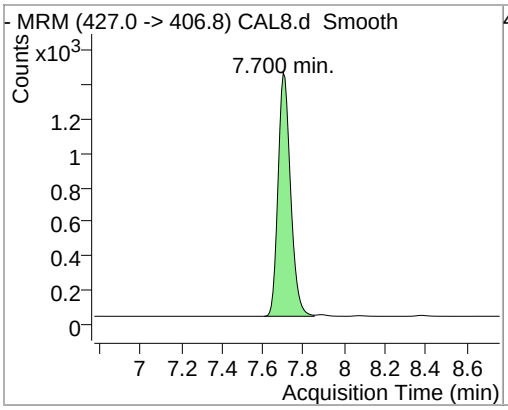
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	47724.8296	7.45	-0.07	23619				

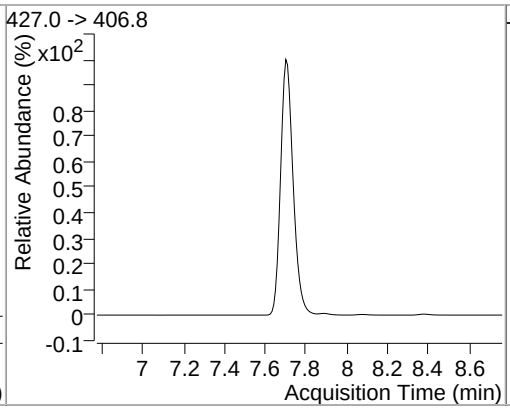


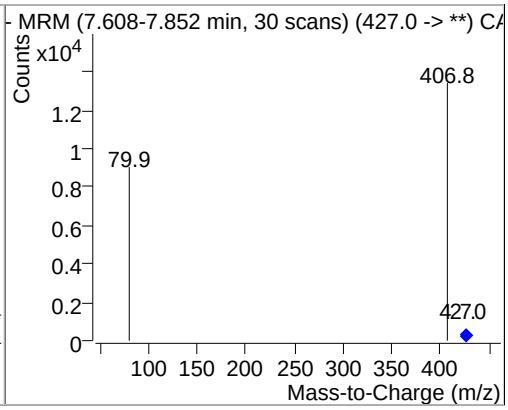




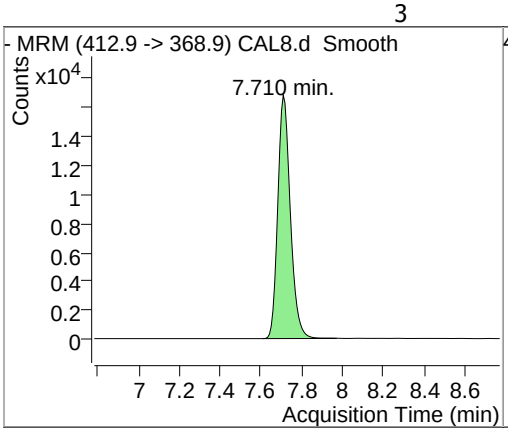
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	47059.9874	7.70	-0.07	6066				

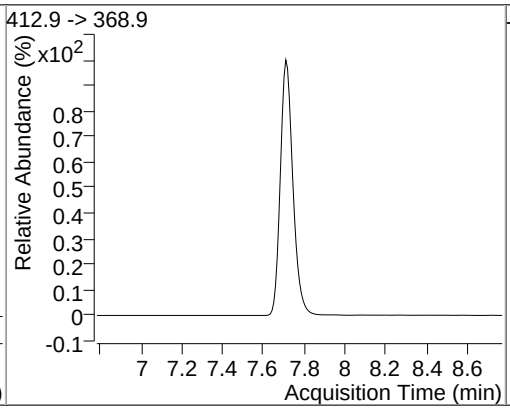


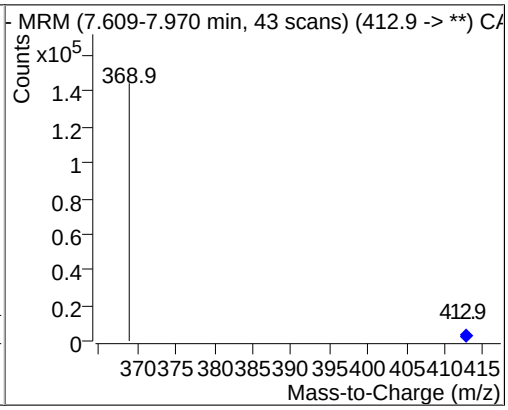




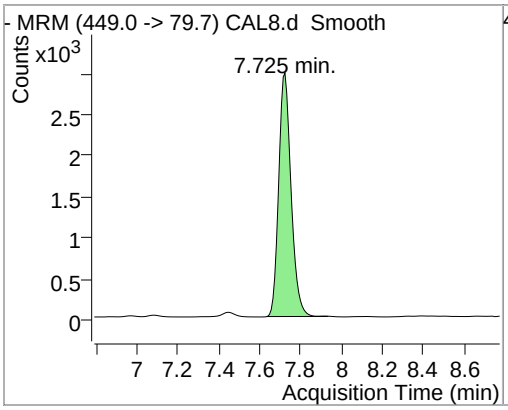
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	50328.7203	7.71	-0.07	71799				

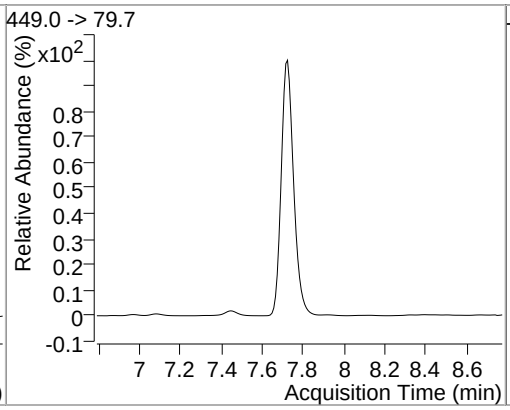


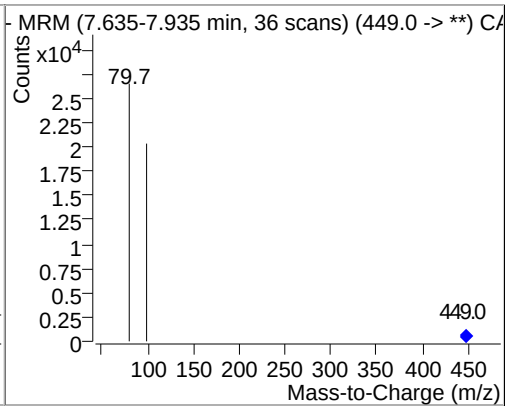




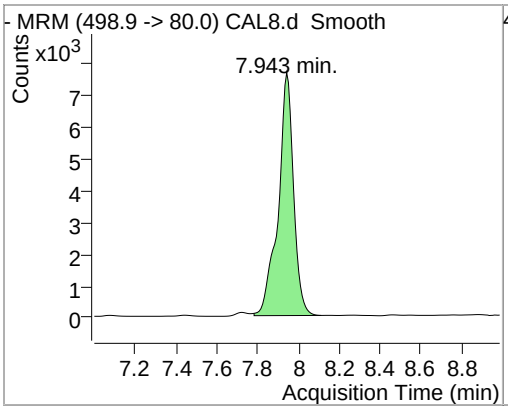
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	48111.3767	7.73	-0.06	12413				

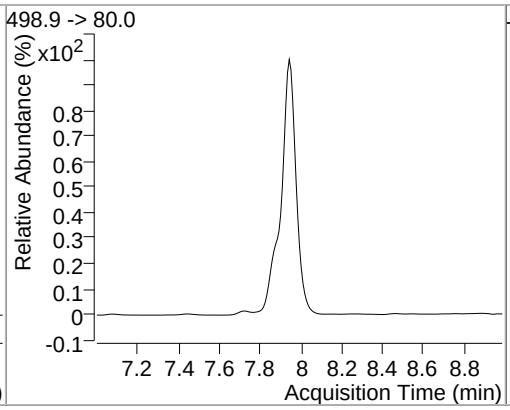


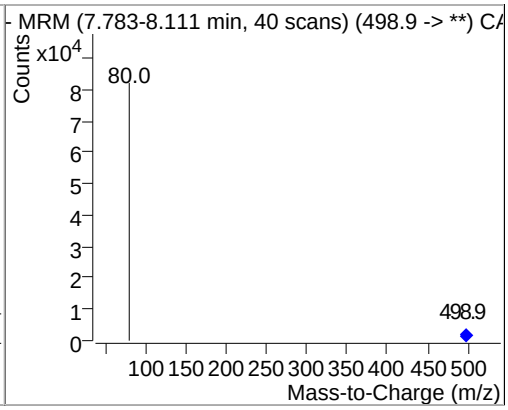




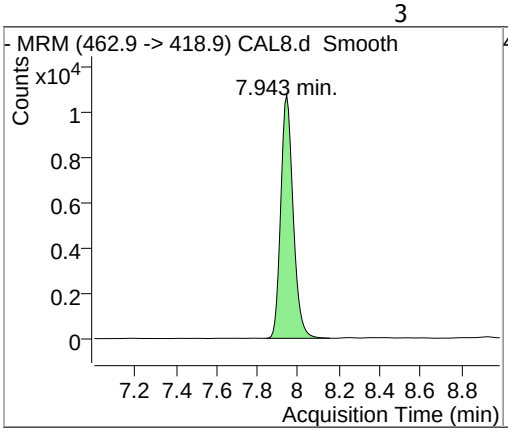
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	49694.2561	7.94	-0.05	40029				

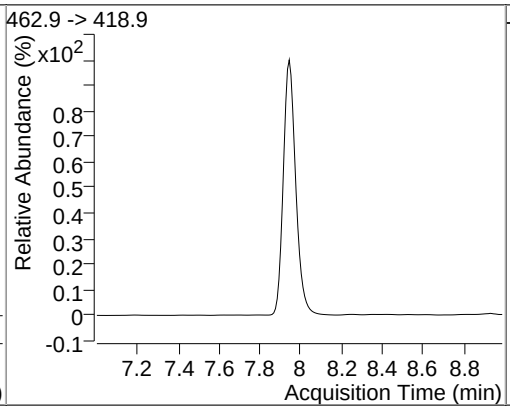


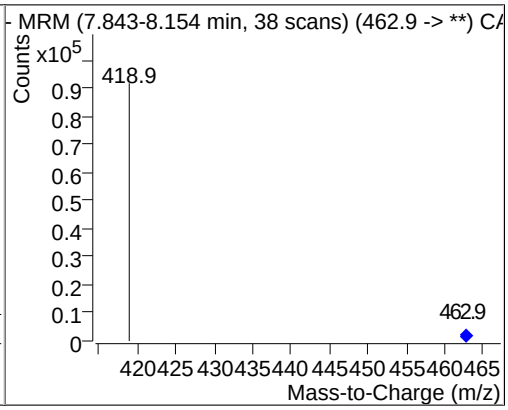




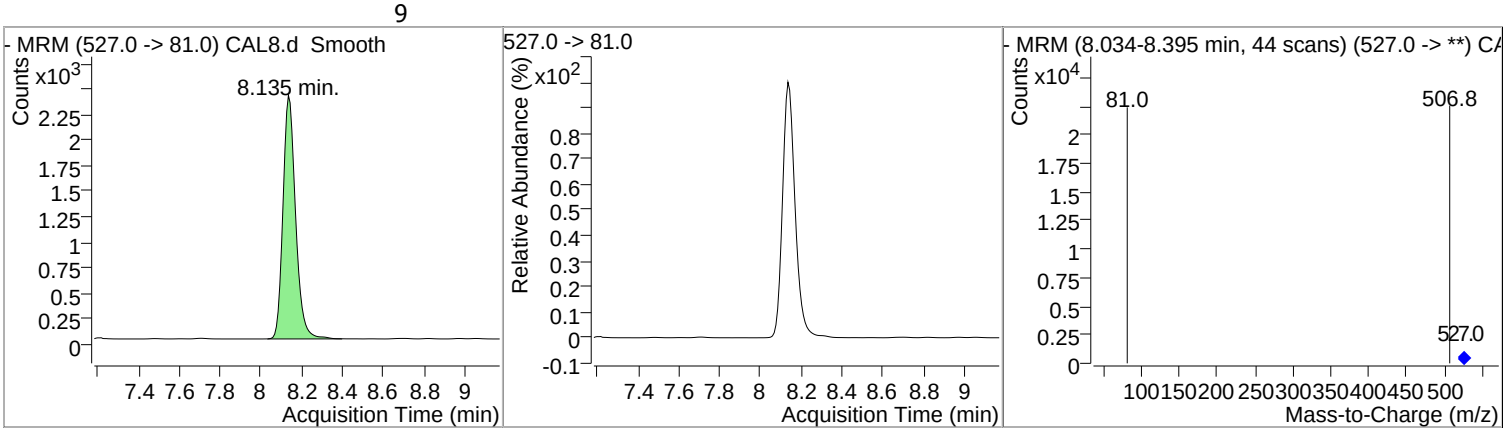
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	52196.5083	7.94	-0.05	45173				



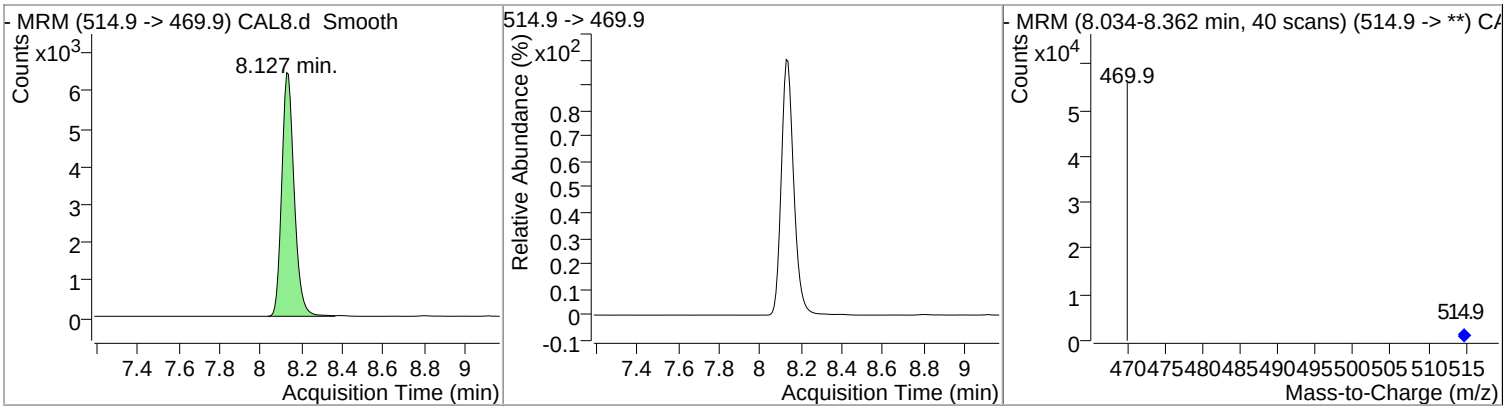




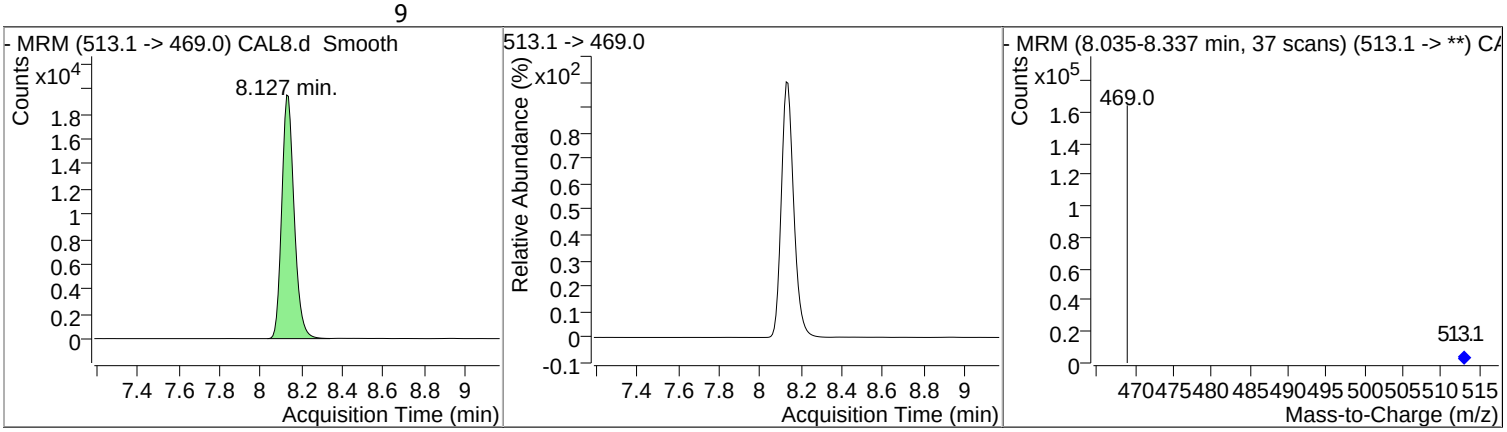
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	48132.6509	8.13	-0.04	10267				



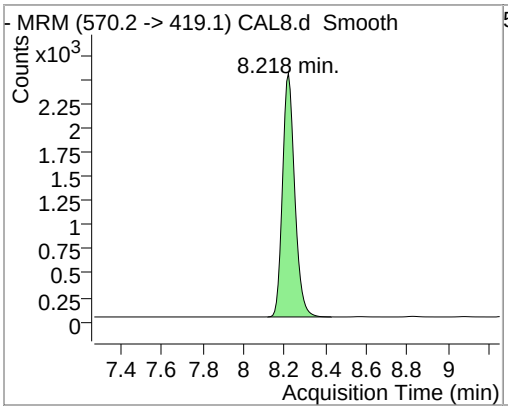
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	24150.7518	8.13	-0.05	27321				

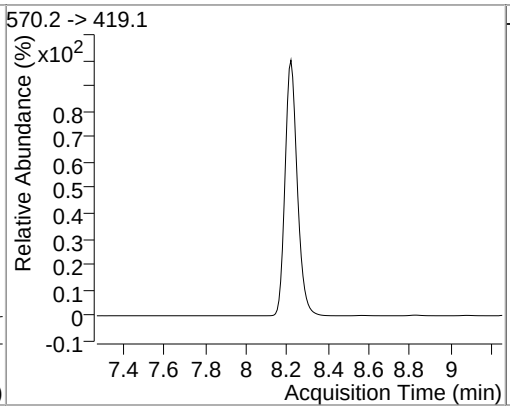


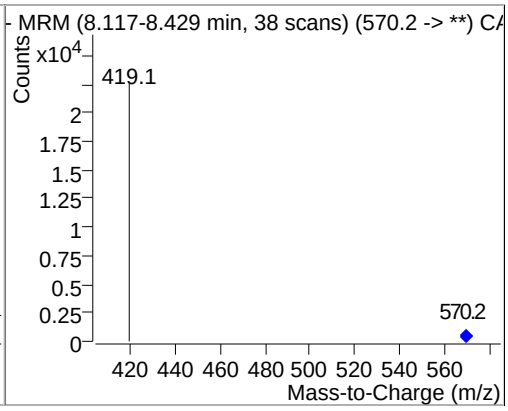
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	51420.7219	8.13	-0.05	82102				



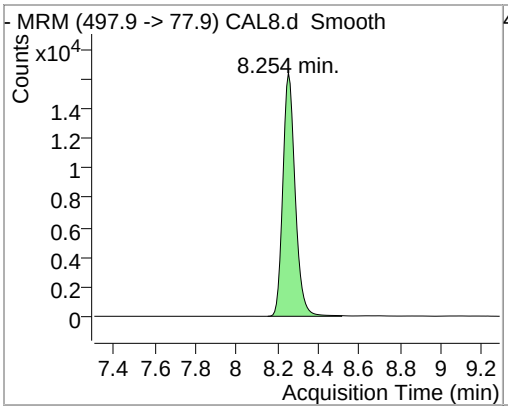
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	50692.0337	8.22	-0.04	10518				

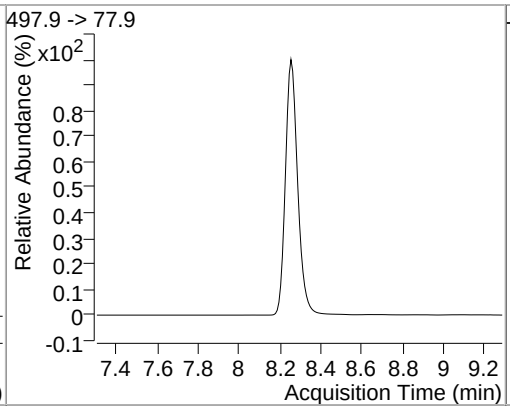


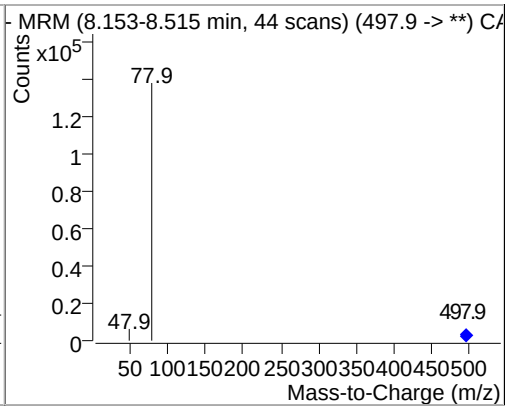




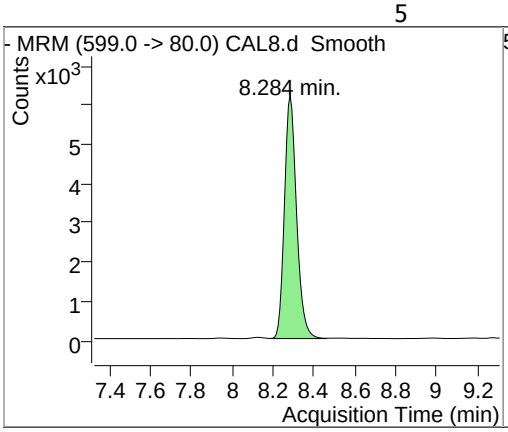
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	51549.1890	8.25	-0.04	68440				

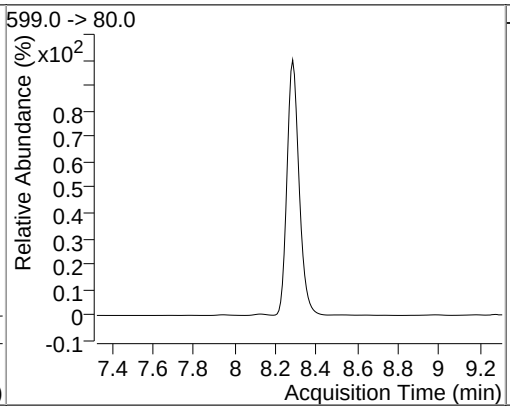


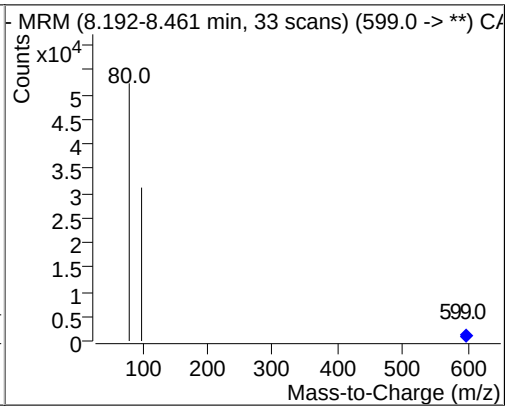




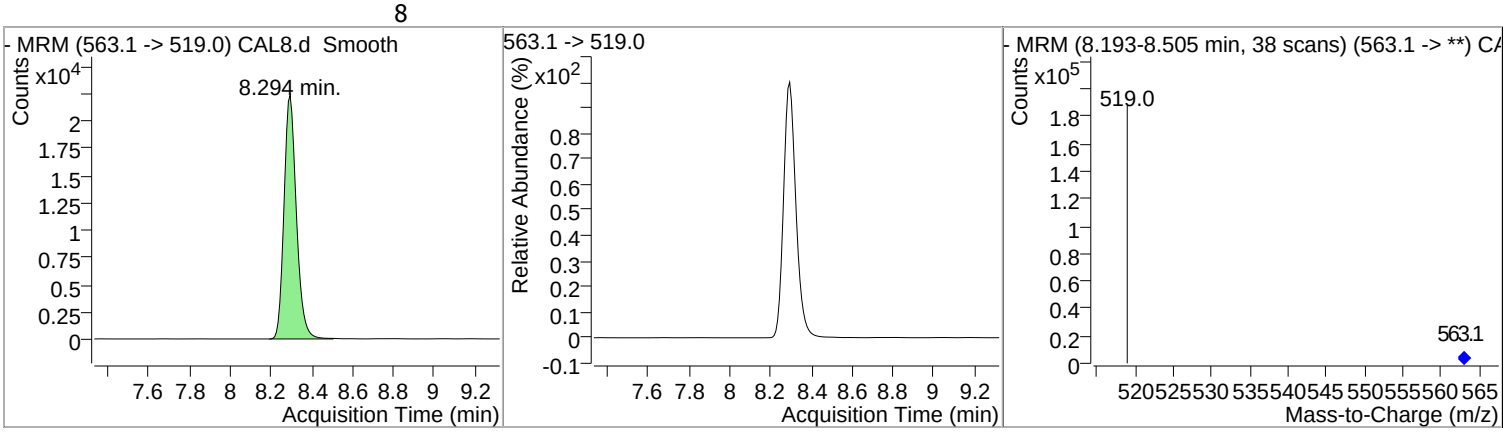
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	50853.3125	8.28	-0.03	25596				



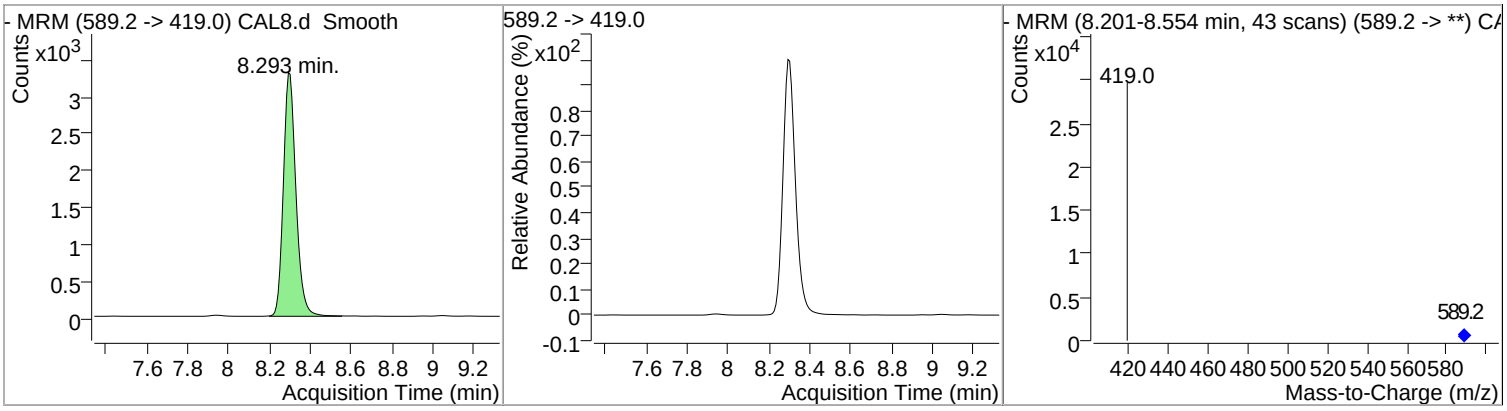




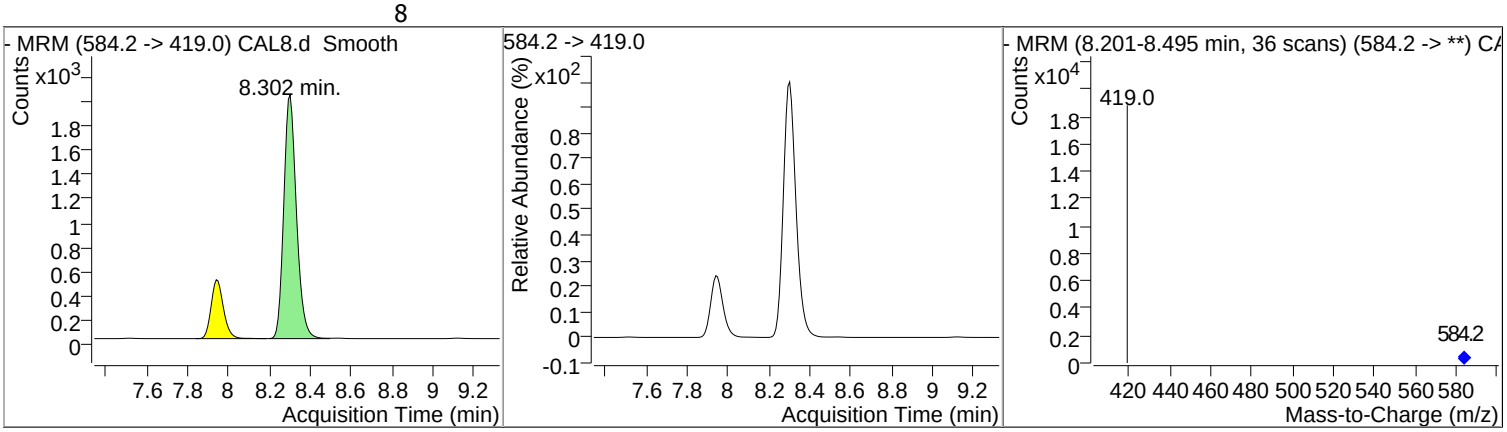
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	51079.0178	8.29	-0.03	93946				



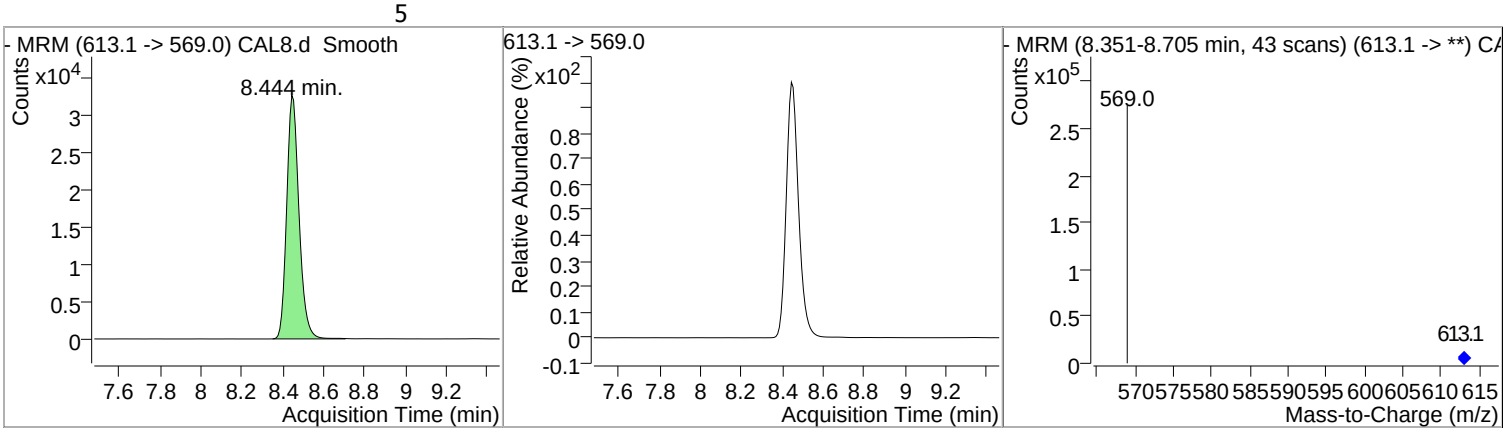
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	84776.0146	8.29	-0.04	13994				



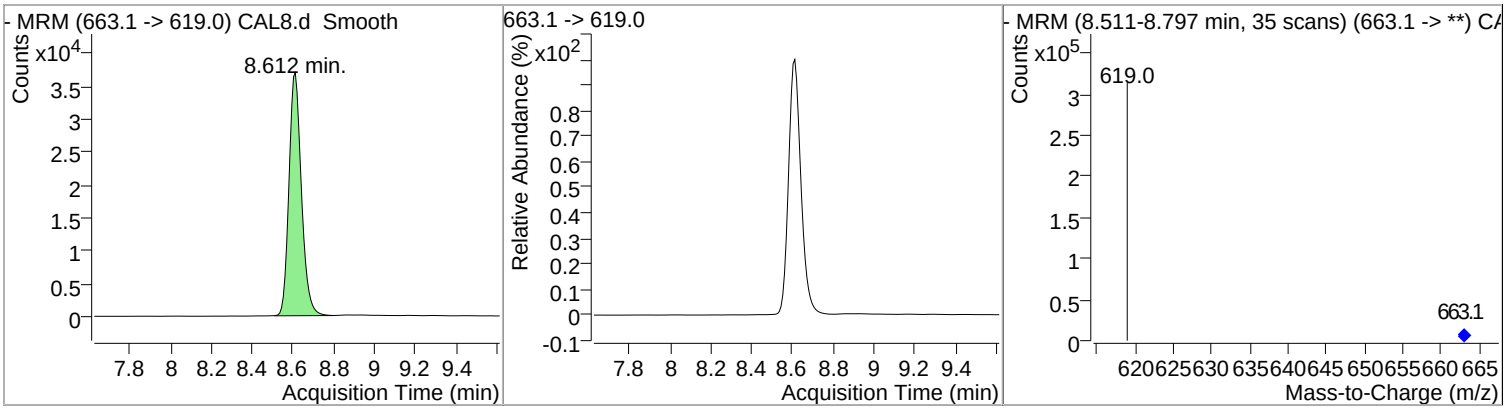
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	50559.7048	8.30	-0.03	8667				



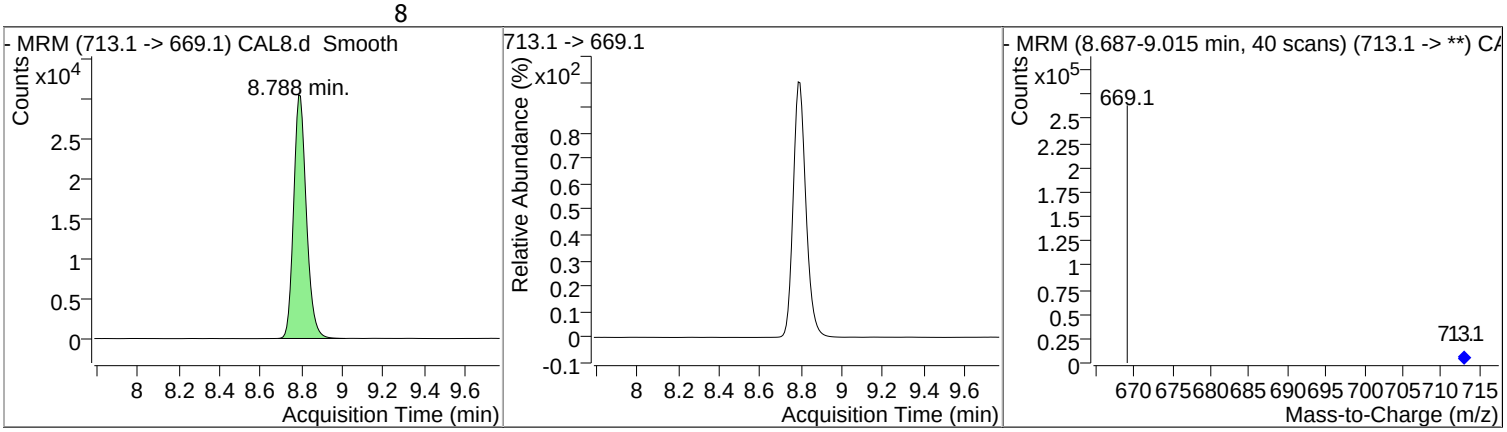
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	53247.4855	8.44	-0.03	137149				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	53053.0078	8.61	-0.01	155860				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	53474.3508	8.79	0.01	131771				

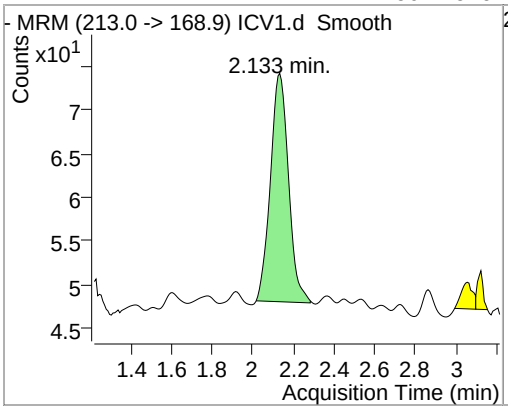


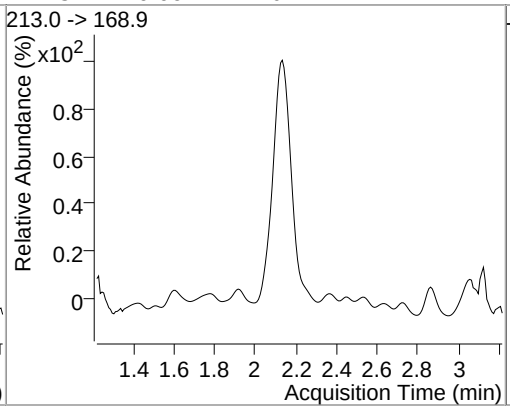
Data File	ICV1.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/13/2019 8:01:20 PM
Sample Name	ICV1	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	C.batch.bin	Last Calib Update	8/14/2019 2:32:16 PM
Ref Library			

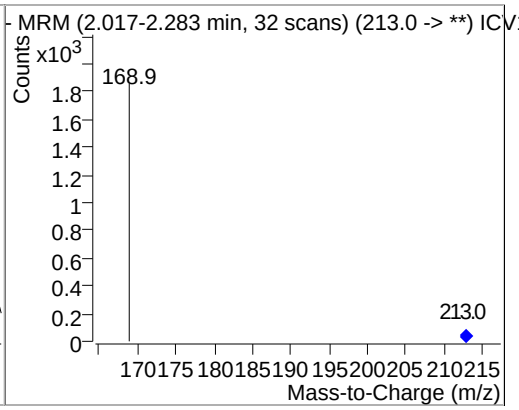
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.709	416.9 -> 371.9	11552	10000.0000	pg/ml		-0.067
M PFOS C13	7.942	502.9 -> 80.0	15398	28700.0000	pg/ml		-0.050
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	6625	40000.0000	pg/ml	m	-0.042
System Monitoring Compounds							
S PFHxA C13	6.987	314.9 -> 269.9	8139	9878.2251	pg/ml		-0.101
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 98.78%			
S PFDA C13	8.127	514.9 -> 469.9	12907	10732.7058	pg/ml		-0.050
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 107.33%			
S d5-N-MeFOSAA	8.293	589.2 -> 419.0	6464	41261.0109	pg/ml		-0.042
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 103.15%			
Target Compounds							QValue
T PFBA	2.133	213.0 -> 168.9	162	864.4810	pg/ml		100
T PFPeA	6.122	263.0 -> 219.0	408	1075.1166	pg/ml		100
T PFBS	6.500	298.9 -> 80.0	262	841.7991	pg/ml		100
T PFHxA	6.996	312.9 -> 268.9	696	869.0233	pg/ml		100
T PFHpA	7.416	362.9 -> 319.0	1061	888.3581	pg/ml		100
T PFHxS-Total	7.441	398.9 -> 80.0	470	959.5416	pg/ml	m	100
T 6.2 FTS	7.709	427.0 -> 406.8	96	751.0824	pg/ml		100
T PFOA-Total	7.710	412.9 -> 368.9	1640	1081.3964	pg/ml		100
T PFHpS	7.717	449.0 -> 79.7	316	1238.7790	pg/ml		100
T PFOS-Total	7.943	498.9 -> 80.0	657	824.0855	pg/ml	m	100
T PFNA	7.943	462.9 -> 418.9	871	946.7696	pg/ml		100
T 8.2 FTS	8.135	527.0 -> 81.0	176	836.4173	pg/ml		100
T PFDA	8.127	513.1 -> 469.0	1661	978.4554	pg/ml		100
T N-MeFOSAA	8.227	570.2 -> 419.1	247	1255.8436	pg/ml	m	100
T FOSA	8.254	497.9 -> 77.9	1285	1020.0888	pg/ml		100
T PFDS	8.284	599.0 -> 80.0	582	1168.4793	pg/ml		100
T PFUnA	8.294	563.1 -> 519.0	2206	1128.4755	pg/ml		100
T N-EtFOSAA	8.302	584.2 -> 419.0	132	810.9697	pg/ml	m	100
T PFDoA	8.444	613.1 -> 569.0	2806	1024.9184	pg/ml		100
T PFTrDA	8.612	663.1 -> 619.0	2657	850.6255	pg/ml		100
T PFTA	8.797	713.1 -> 669.1	2473	943.8673	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

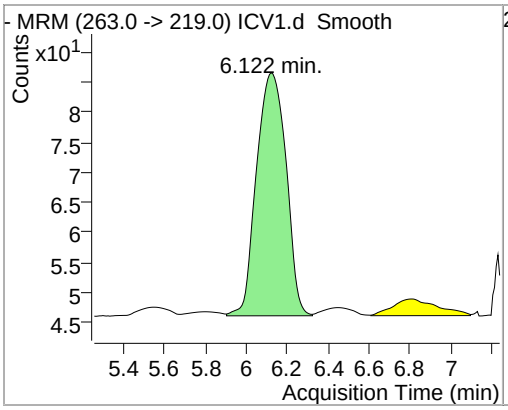
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	864.4810	2.13	-0.08	162				

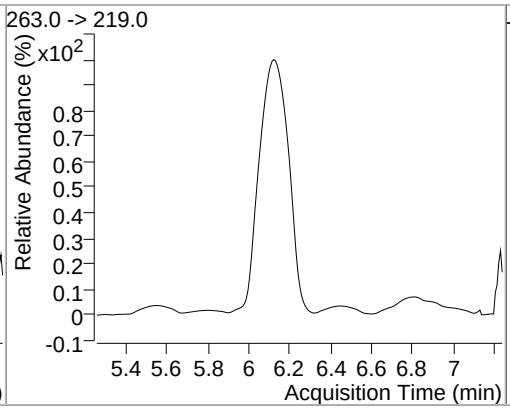


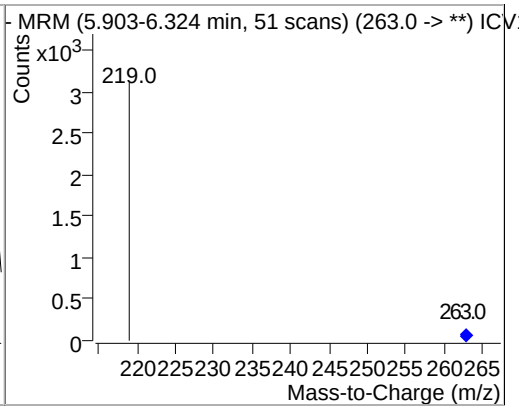




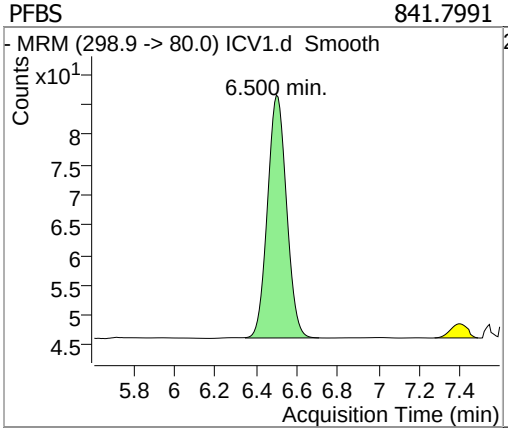
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	1075.1166	6.12	-0.13	408				

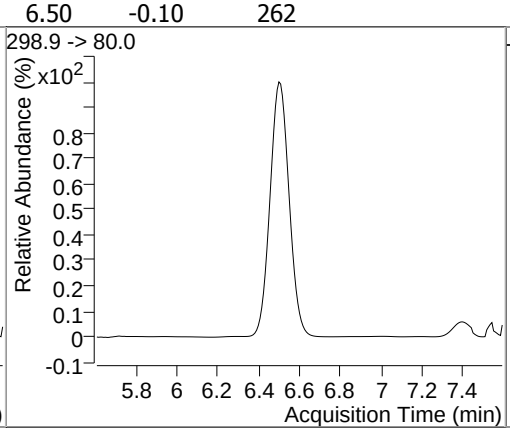


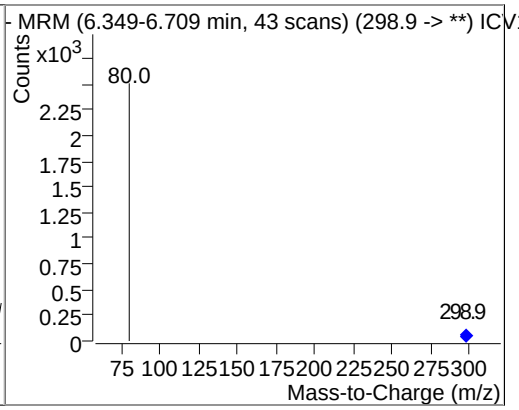




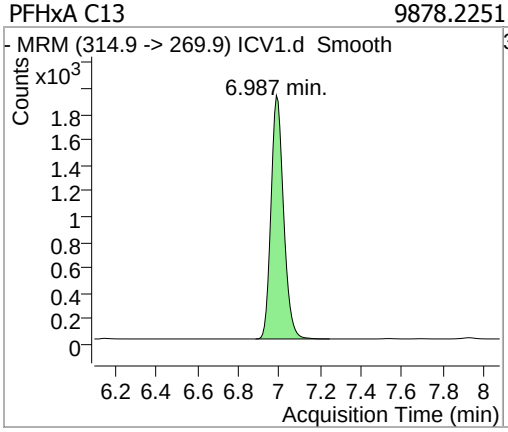
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	841.7991	6.50	-0.10	262				

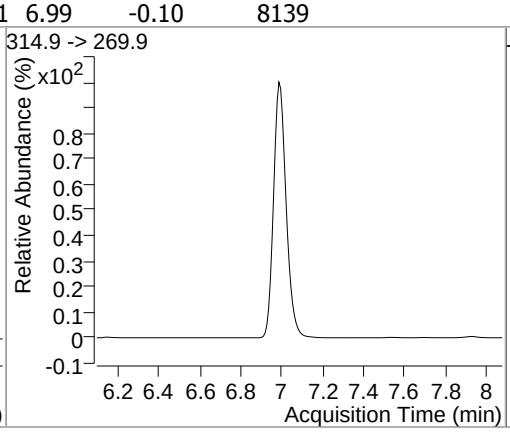


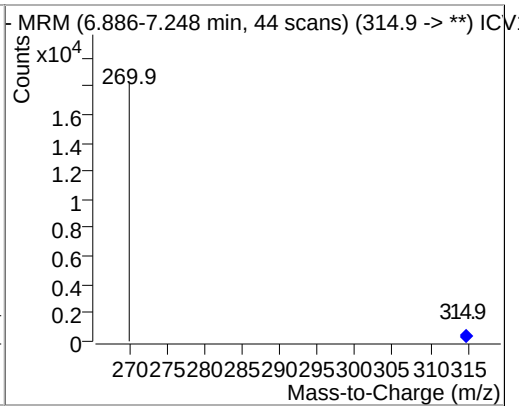




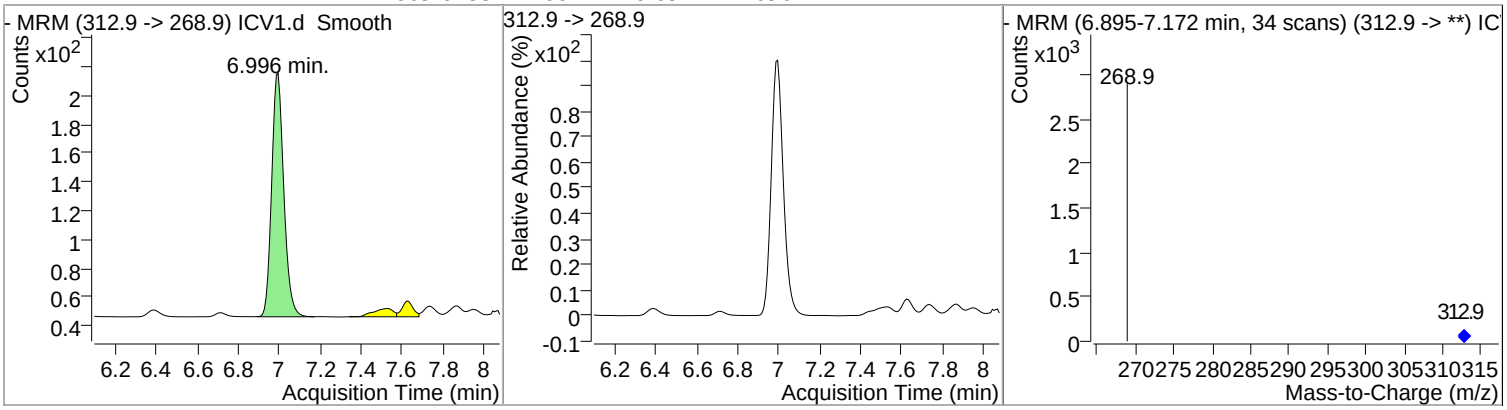
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	9878.2251	6.99	-0.10	8139				



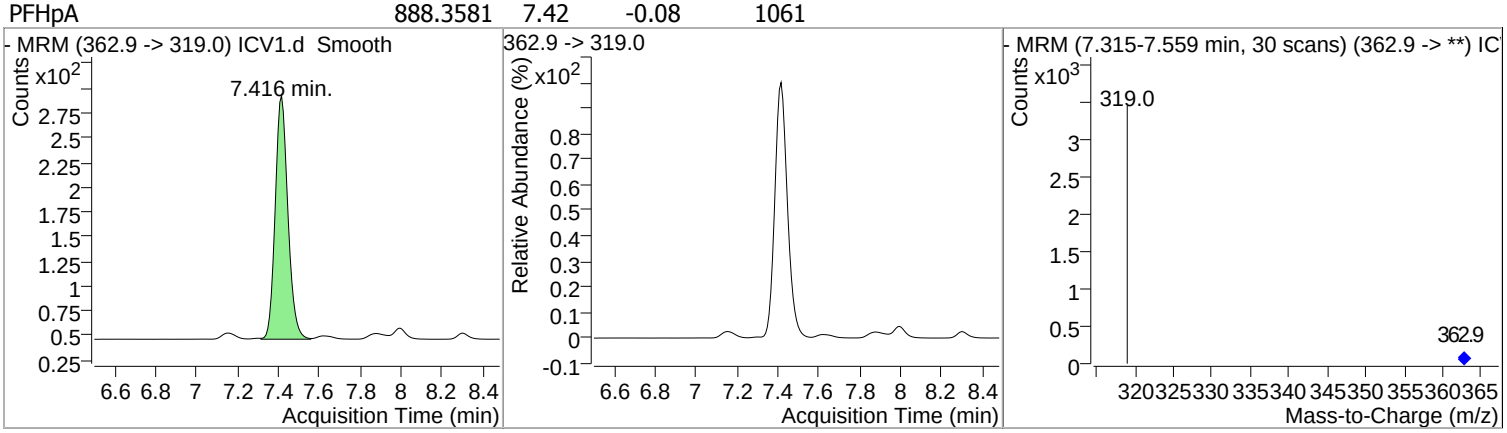




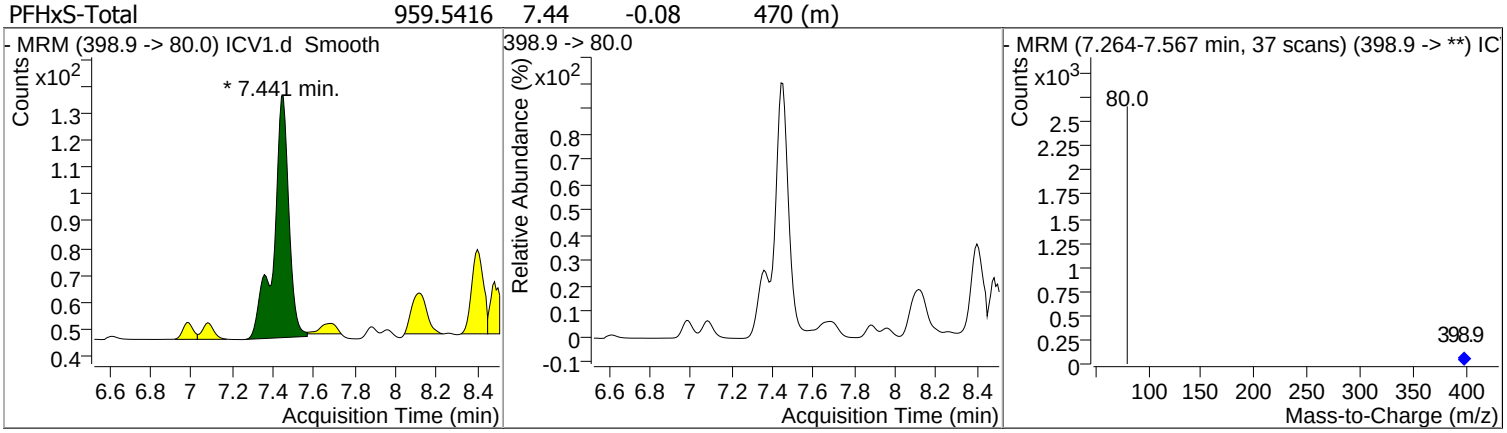
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	869.0233	7.00	-0.09	696				



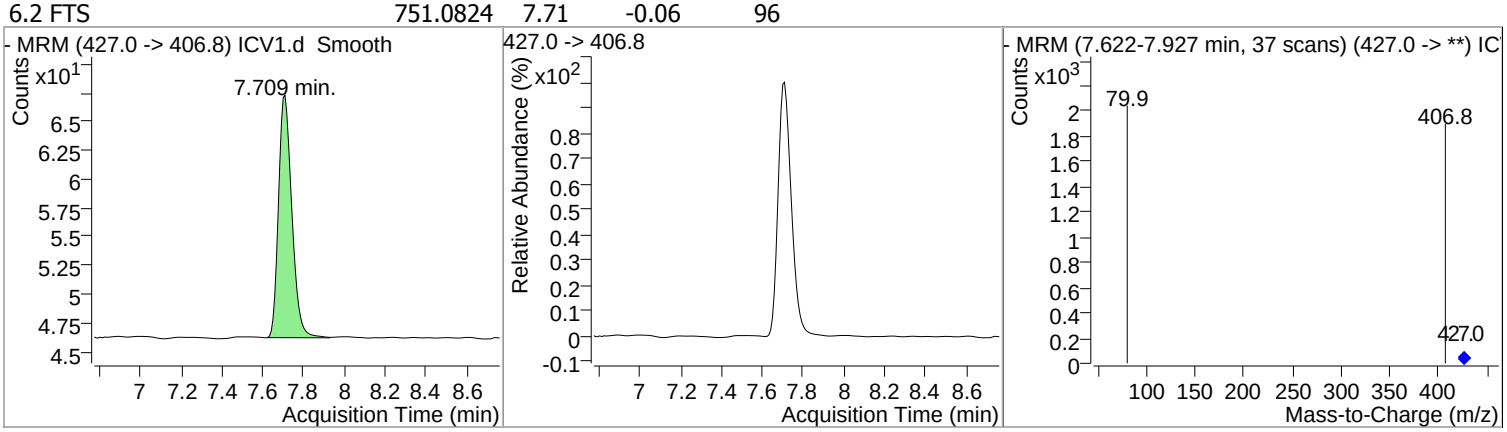
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	888.3581	7.42	-0.08	1061				



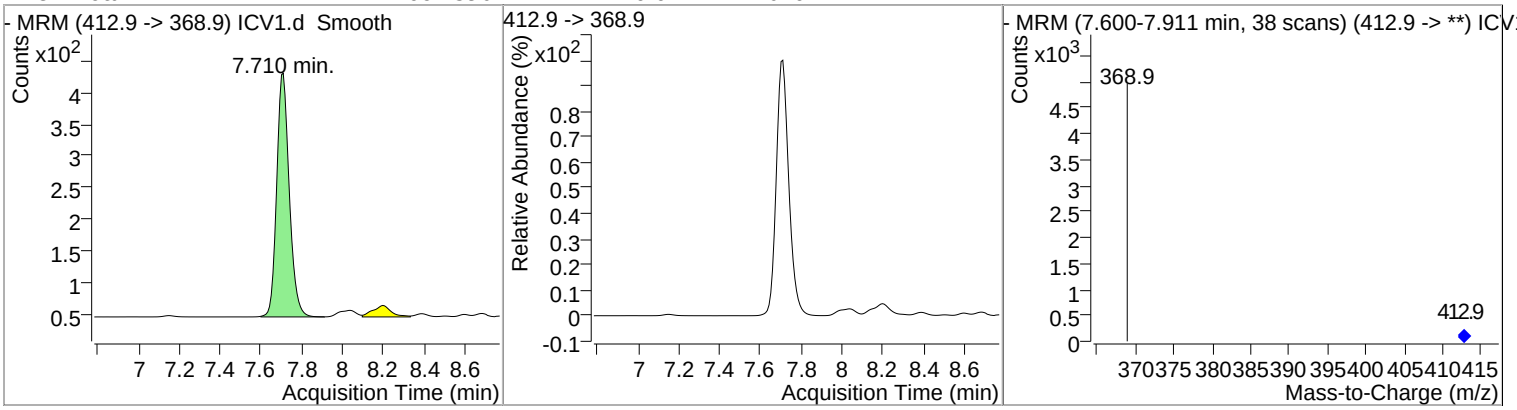
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	959.5416	7.44	-0.08	470 (m)				



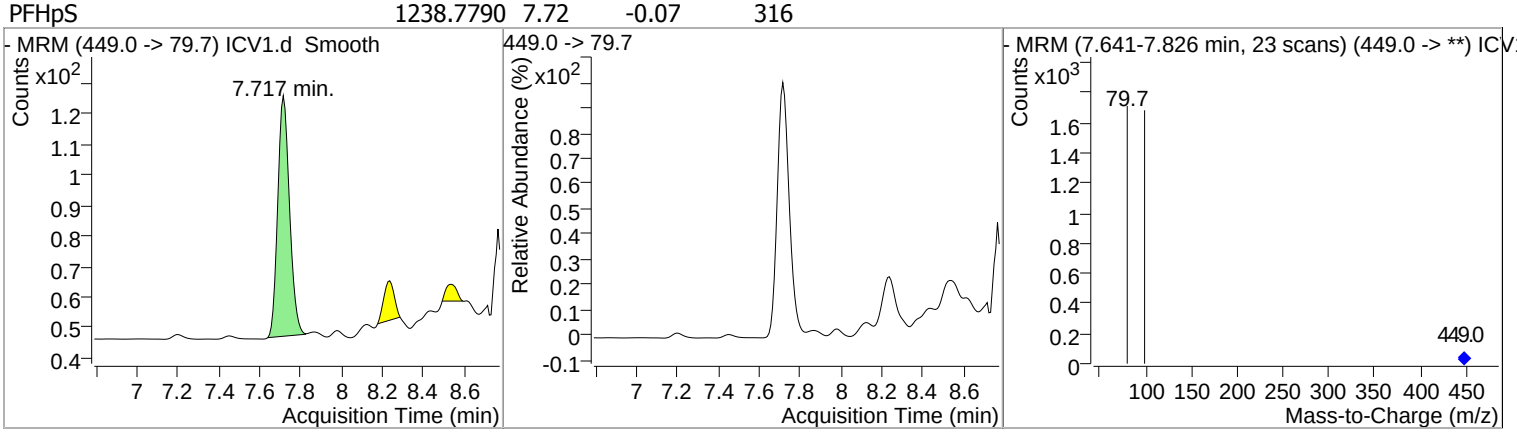
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	751.0824	7.71	-0.06	96				



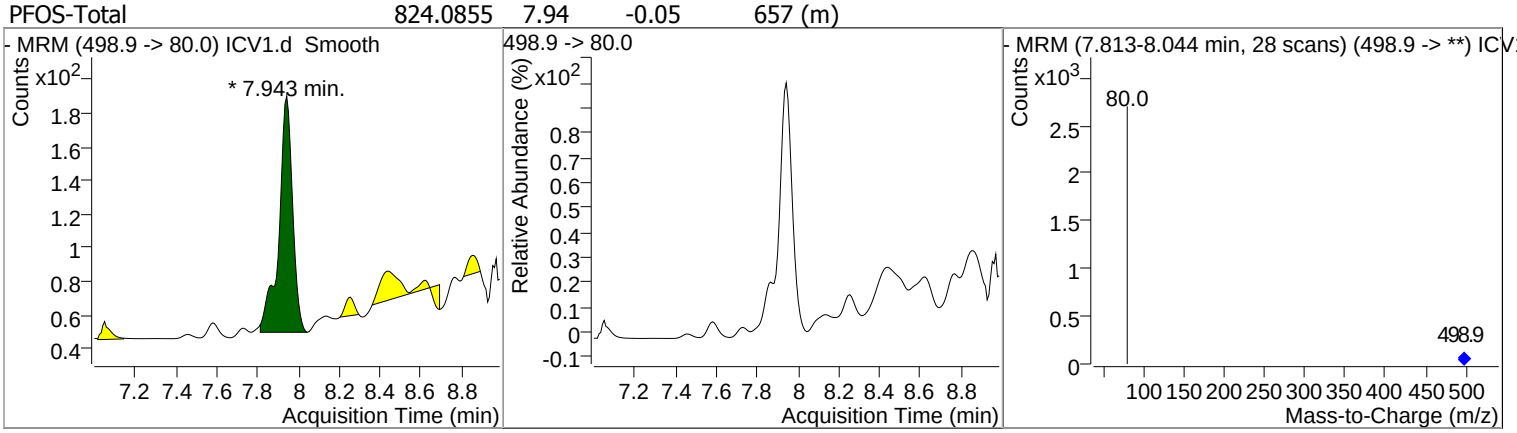
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	1081.3964	7.71	-0.07	1640				



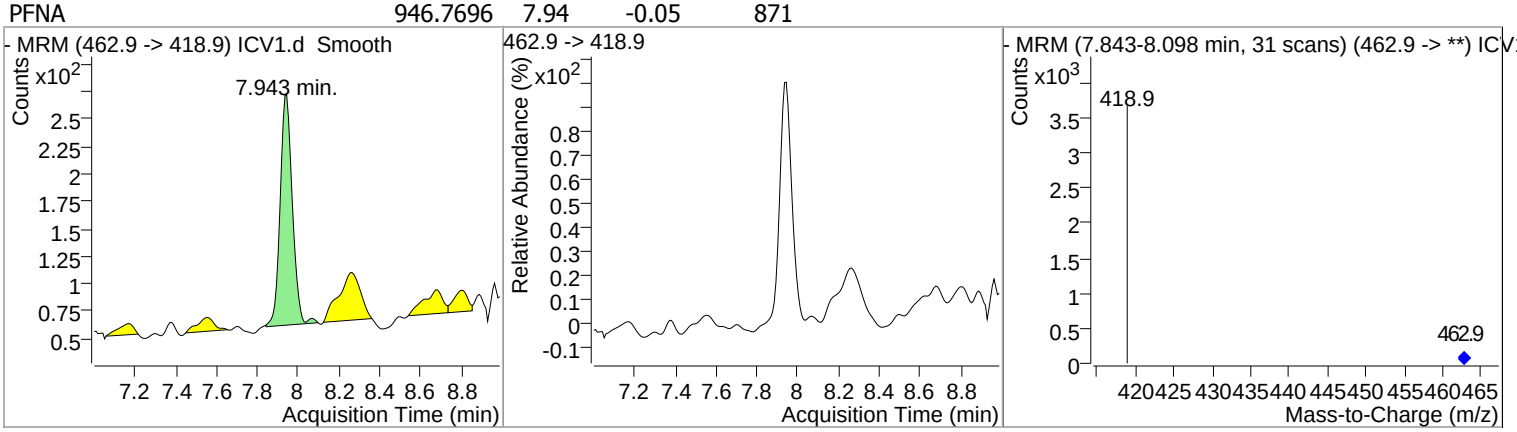
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	1238.7790	7.72	-0.07	316				



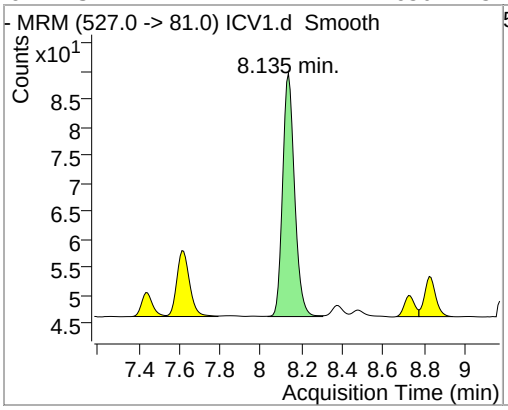
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	824.0855	7.94	-0.05	657 (m)				

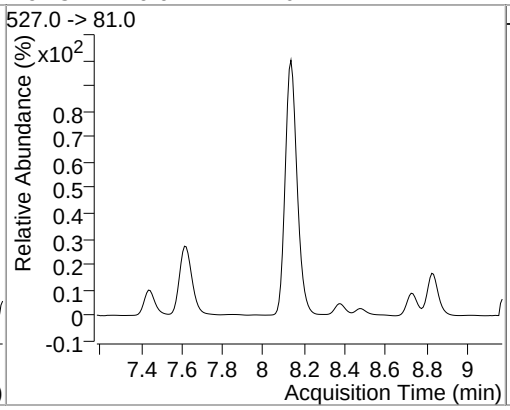


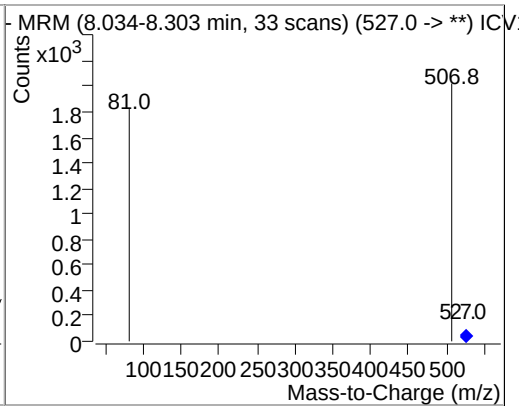
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	946.7696	7.94	-0.05	871				



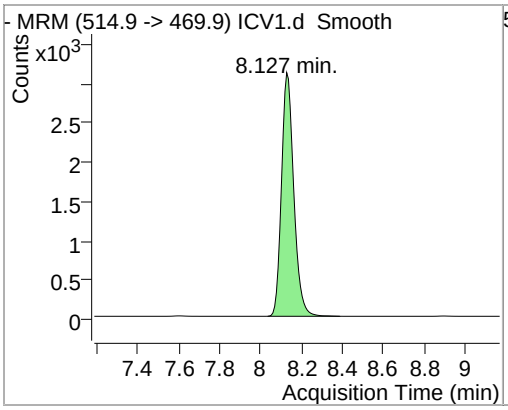
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	836.4173	8.13	-0.04	176				

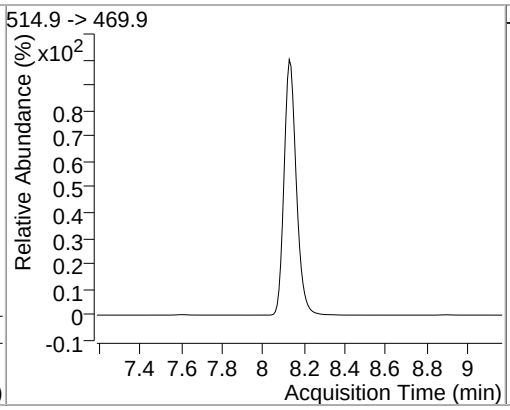


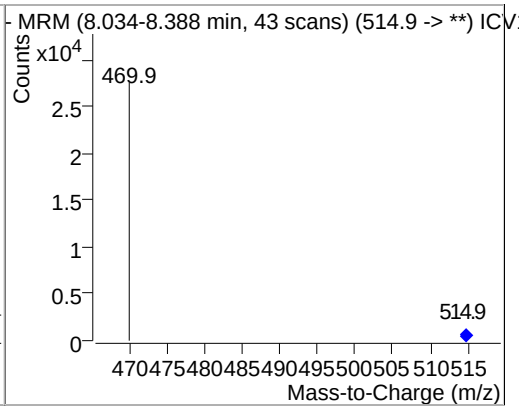




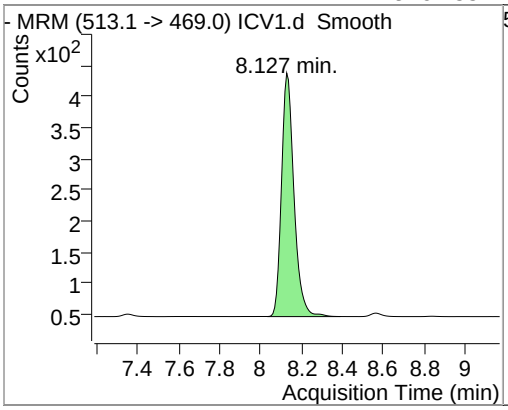
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	10732.7058	8.13	-0.05	12907				

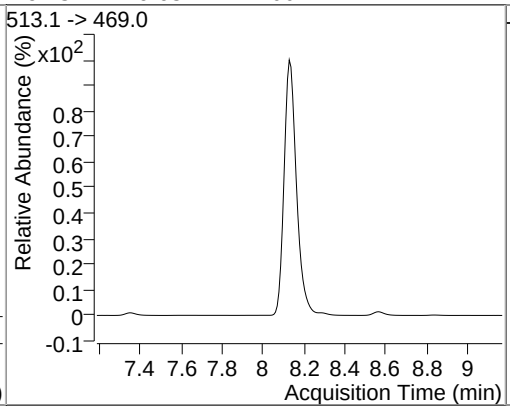


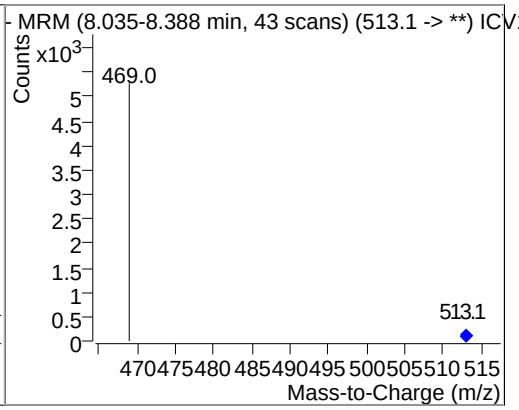




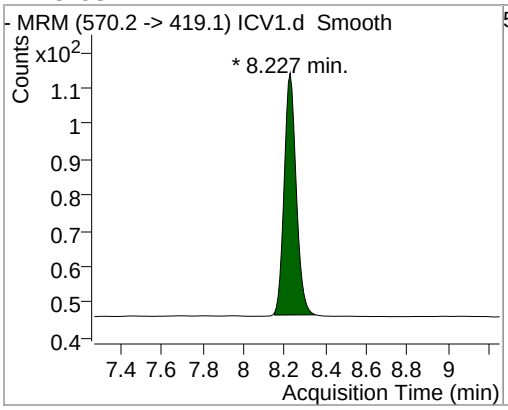
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	978.4554	8.13	-0.05	1661				

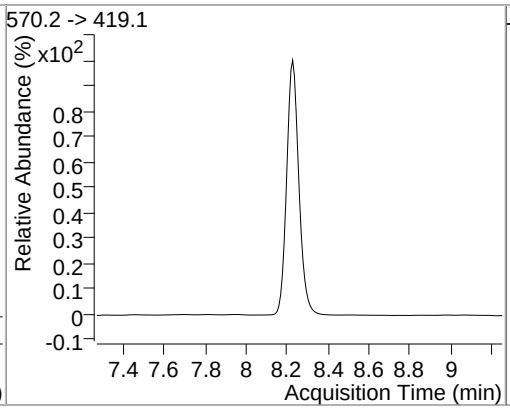


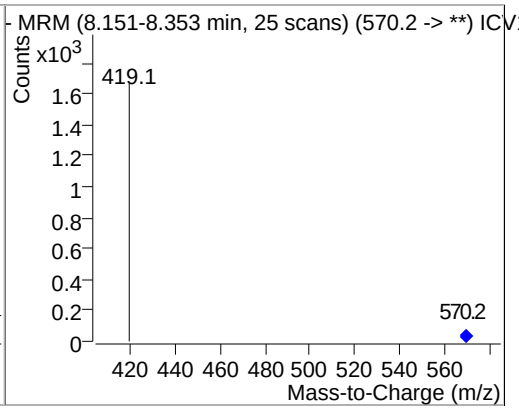




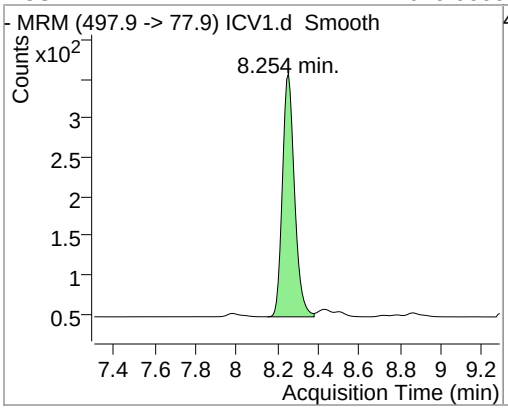
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	1255.8436	8.23	-0.03	247 (m)				

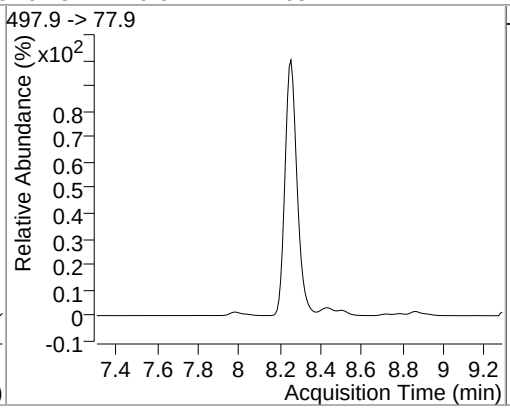


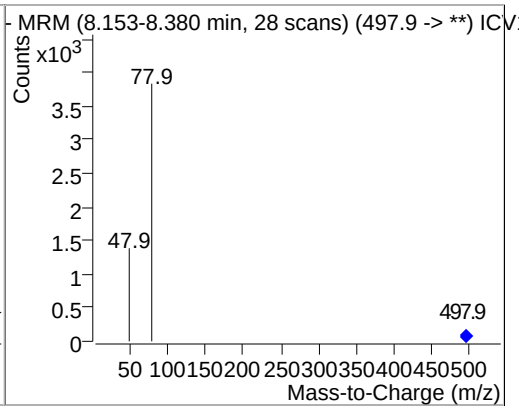




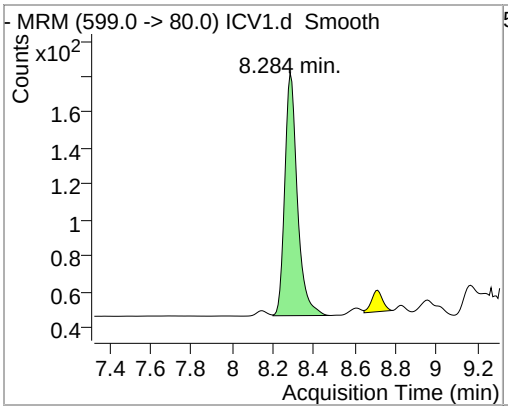
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	1020.0888	8.25	-0.04	1285				

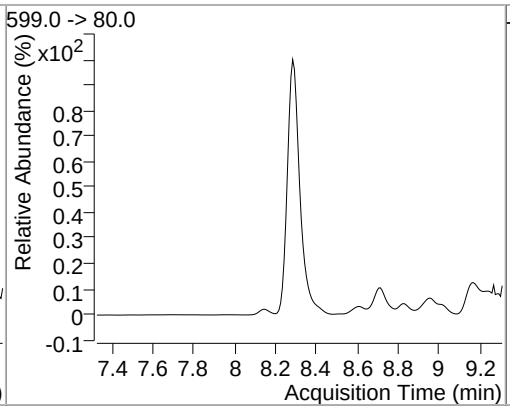


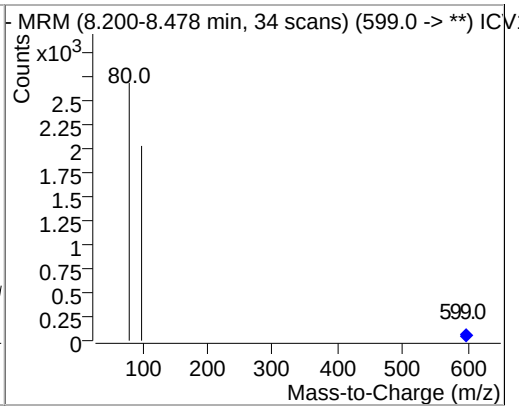




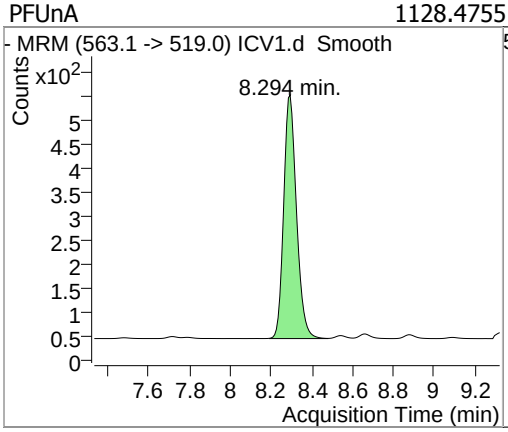
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	1168.4793	8.28	-0.03	582				

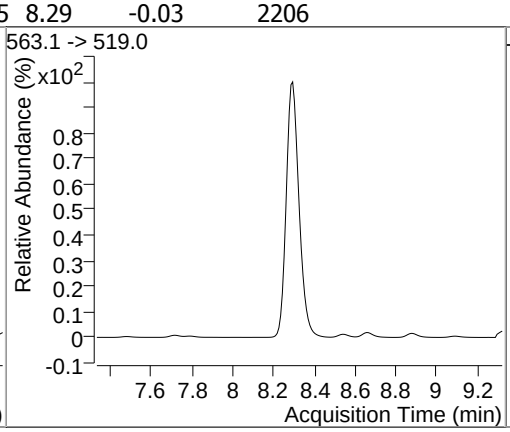


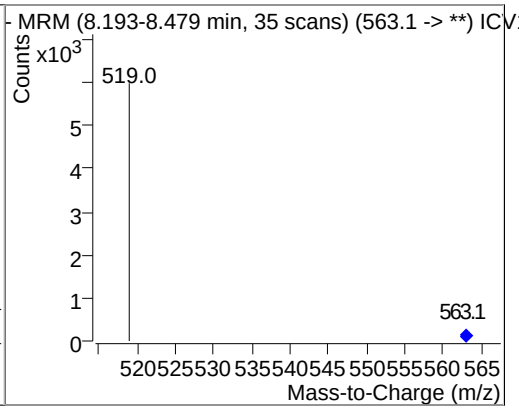




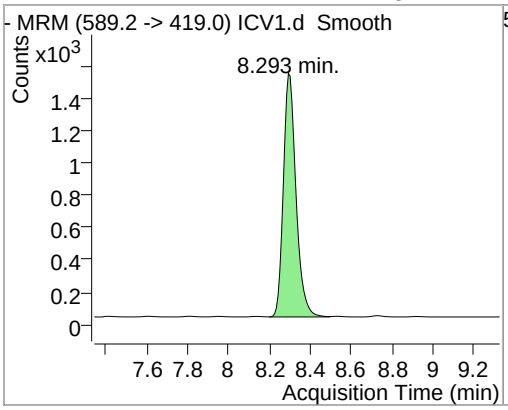
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	1128.4755	8.29	-0.03	2206				

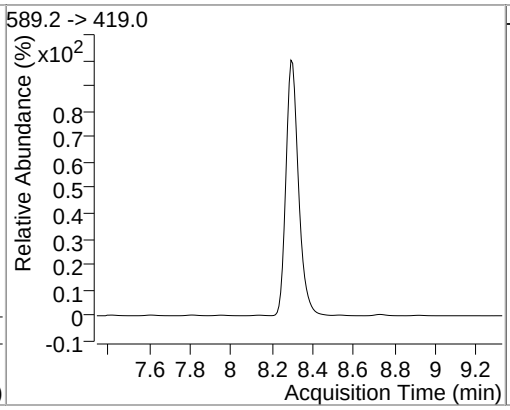


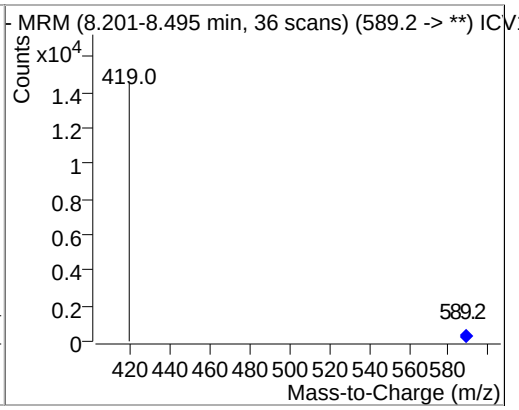




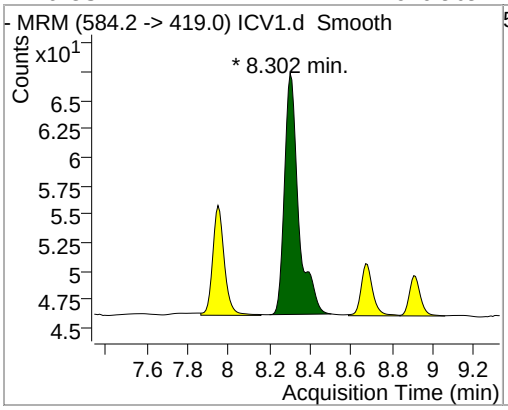
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	41261.0109	8.29	-0.04	6464				

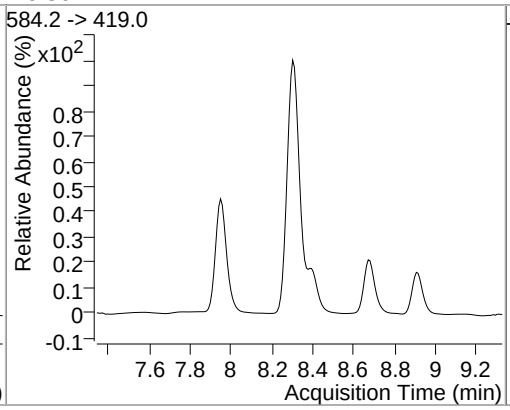


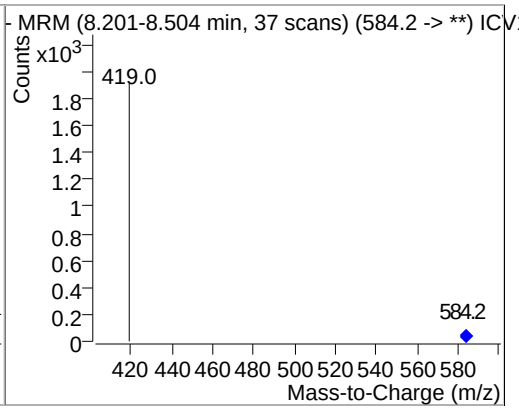




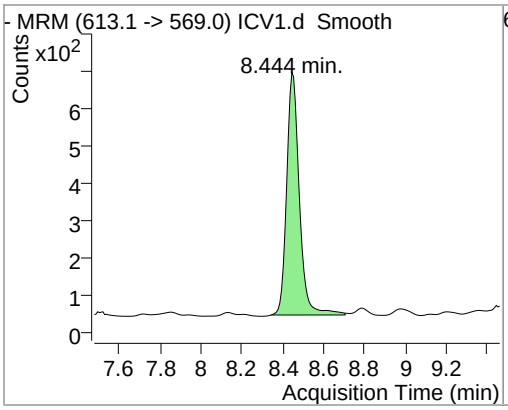
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	810.9697	8.30	-0.03	132 (m)				

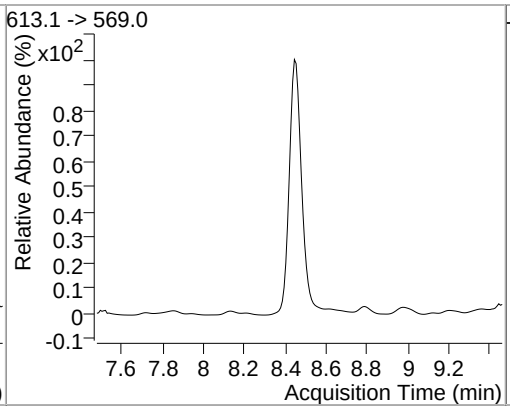


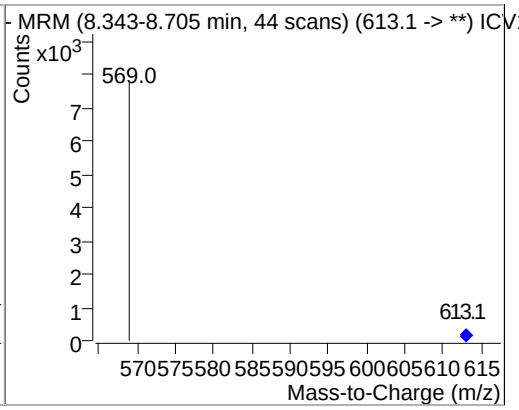




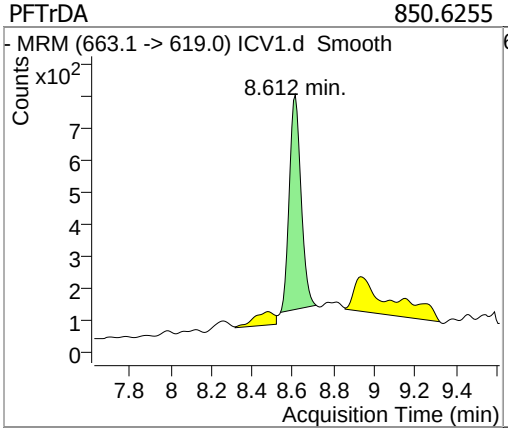
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	1024.9184	8.44	-0.03	2806				

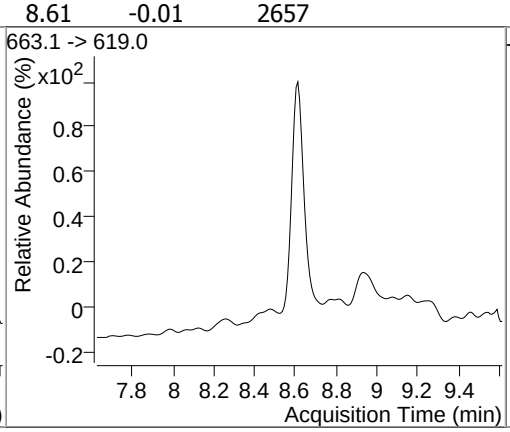


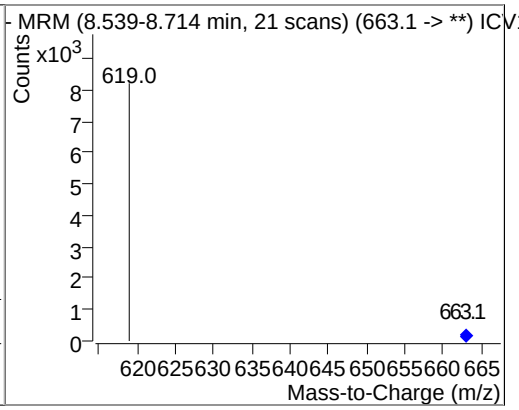




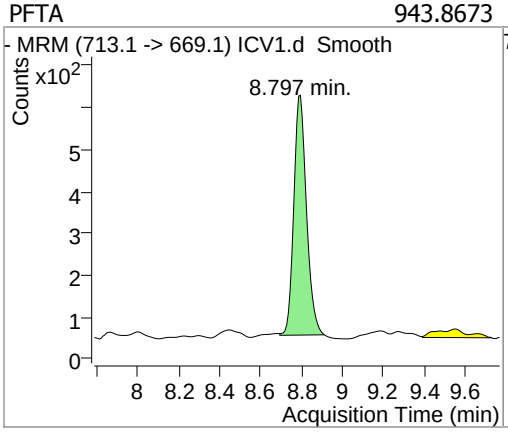
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	850.6255	8.61	-0.01	2657				

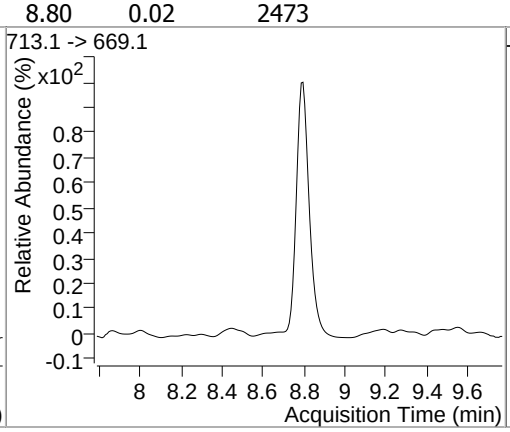


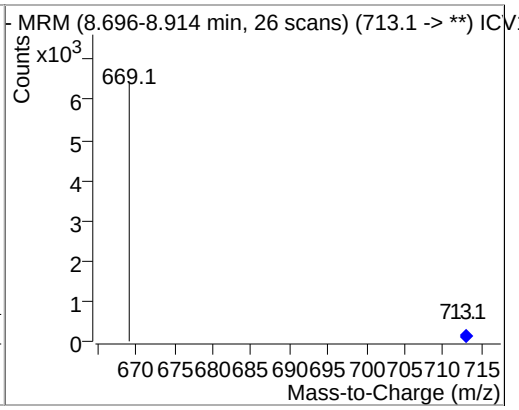




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	943.8673	8.80	0.02	2473				







CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV1082119.d	Calibration Date:	08/14/19 14:37
Sequence:	S039480	Injection Date:	08/21/19
Lab Sample ID:	S039480-CCV1	Injection Time:	12:07

		CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Perfluorobutanoic acid (PFBA)	A	500	534	0.1543906	0.1729387		6.8	
Perfluorobutanesulfonic acid (PFBS)	A	442	583	0.5510923	0.7657721		32.0	
Perfluoropentanoic acid (PFPeA)	A	500	554	0.3040697	0.3642085		10.8	
Perfluorohexanoic acid (PFHxA)	A	500	716	0.6714809	0.9930467		43.1	
Perfluorohexanesulfonic acid (PFHxS)	A	455	498	0.8347983	0.9977494		9.4	
Perfluoroheptanoic acid (PFHpA)	A	500	578	1.053666	1.194462		15.6	
Perfluoroheptanesulfonic acid (PFHpS)	A	475	426	0.5117502	0.4262947		-10.4	
Perfluorooctanoic acid (PFOA)	A	500	597	1.330641	1.567197		19.4	
Perfluorooctanesulfonic acid (PFOS)	A	462	633	1.438054	2.03548		37.1	
Perfluorooctanesulfonamide (FOSA)	A	500	408	7.121342	6.203425		-18.5	
6:2 Fluorotelomersulfonate (6:2 FTS A)	A	475	492	0.2337119	0.2461649		3.6	
Perfluorononanoic acid (PFNA)	A	500	478	0.842486	0.7616763		-4.4	
Perfluorodecanoic acid (PFDA)	A	500	491	1.468554	1.442856		-1.8	
Perfluorodecanesulfonic acid (PFDS)	A	482	466	0.9068341	0.89631		-3.4	
N-EtFOSAA	A	500	557	0.9910125	1.093746		11.3	
8:2 Fluorotelomersulfonate (8:2 FTS A)	A	480	489	0.3729975	0.4009279		2.0	
Perfluoroundecanoic acid (PFUnA)	A	500	489	1.739723	1.655214		-2.2	
N-MeFOSAA	A	500	306	1.146938	0.7272055		-38.8	
Perfluorododecanoic acid (PFDoA)	A	500	420	2.235401	1.993484		-15.9	
Perfluorotridecanoic acid (PFTrDA)	A	500	339	2.580637	1.832341		-32.2	
Perfluorotetradecanoic acid (PFTA)	A	500	660	2.262719	2.992626		32.0	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV1082119.d	Calibration Date:	08/14/19 14:37
Sequence:	S039480	Injection Date:	08/21/19
Lab Sample ID:	S039480-CCV1	Injection Time:	12:07

		CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
13C-PFHxA	A	10000	10900	0.6955487	0.7793255		9.3	
13C-PFDA	A	10000	9480	1.05667	0.9864953		-5.2	
d5-NEtFOSAA	A	40000	28000	0.8657046	0.6632122		-29.9	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

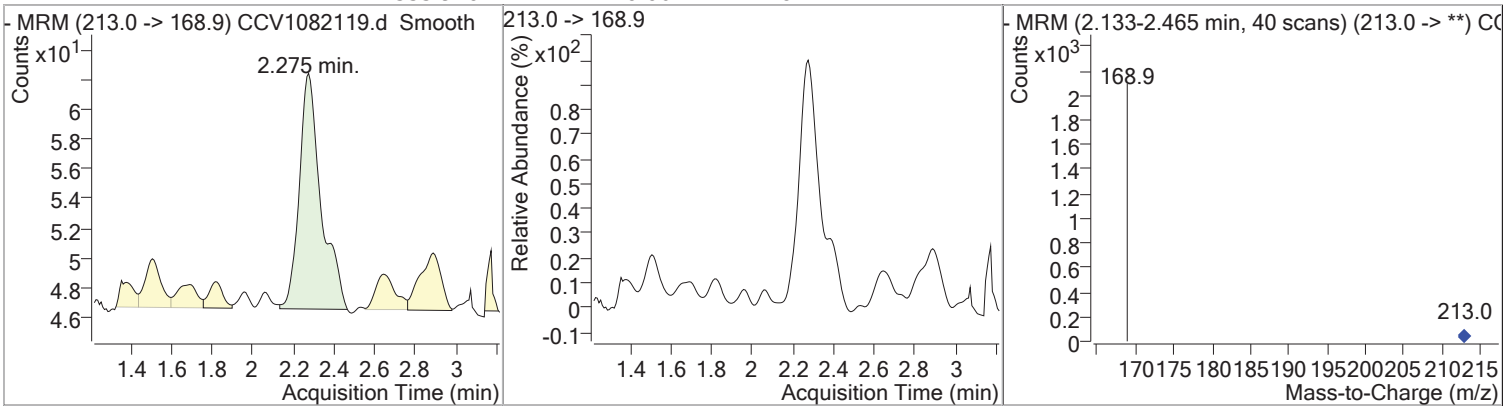
* Values outside of QC limits

Data File	CCV1082119.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 12:07:49 PM
Sample Name	CCV1082119	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	B238243.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

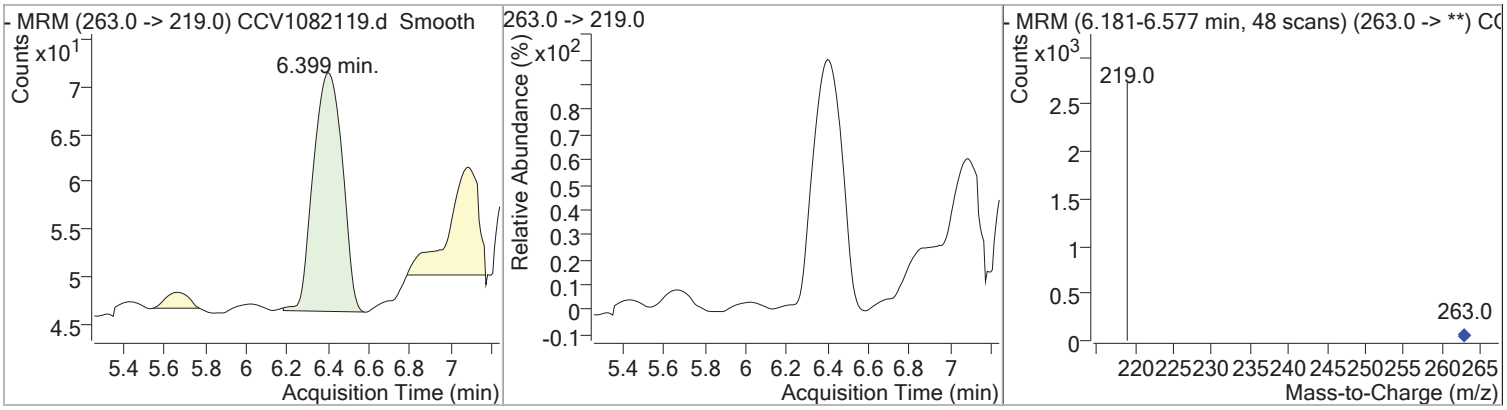
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.877	416.9 -> 371.9	13618	10000.0000	pg/ml		0.101
M PFOS C13	8.077	502.9 -> 80.0	20909	28700.0000	pg/ml		0.084
M d3-N-MeFOSAA	8.319	573.2 -> 419.0	10211	40000.0000	pg/ml	m	0.059
System Monitoring Compounds							
S PFHxA C13	7.223	314.9 -> 269.9	10613	10926.2175	pg/ml		0.135
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 109.26%			
S PFDA C13	8.245	514.9 -> 469.9	13434	9475.6367	pg/ml		0.067
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 94.76%			
S d5-N-MeFOSAA	8.394	589.2 -> 419.0	6772	28043.4205	pg/ml	m	0.059
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 70.11%			
Target Compounds							QValue
T PFBA	2.275	213.0 -> 168.9	118	533.9201	pg/ml		100
T PFPeA	6.399	263.0 -> 219.0	248	554.1049	pg/ml		100
T PFBS	6.761	298.9 -> 80.0	247	583.3493	pg/ml	m	100
T PFHxA	7.223	312.9 -> 268.9	676	715.7035	pg/ml	m	100
T PFHpA	7.609	362.9 -> 319.0	813	577.8161	pg/ml		100
T PFHxS-Total	7.643	398.9 -> 80.0	331	497.6141	pg/ml		100
T 6.2 FTS	7.869	427.0 -> 406.8	85	492.0815	pg/ml		100
T PFOA-Total	7.869	412.9 -> 368.9	1067	596.8487	pg/ml	m	100
T PFHpS	7.885	449.0 -> 79.7	148	425.7561	pg/ml		100
T PFOS-Total	8.069	498.9 -> 80.0	685	633.3140	pg/ml		100
T PFNA	8.086	462.9 -> 418.9	519	478.1626	pg/ml	m	100
T 8.2 FTS	8.244	527.0 -> 81.0	140	489.4288	pg/ml		100
T PFDA	8.245	513.1 -> 469.0	982	490.9658	pg/ml		100
T N-MeFOSAA	8.319	570.2 -> 419.1	93	305.8002	pg/ml		100
T FOSA	8.363	497.9 -> 77.9	792	407.6704	pg/ml		100
T PFDS	8.377	599.0 -> 80.0	315	465.6221	pg/ml		100
T PFUnA	8.387	563.1 -> 519.0	1127	488.9492	pg/ml		100
T N-EtFOSAA	8.403	584.2 -> 419.0	140	556.6858	pg/ml		100
T PFDoA	8.536	613.1 -> 569.0	1357	420.4978	pg/ml		100
T PFTrDA	8.687	663.1 -> 619.0	1248	338.8638	pg/ml		100
T PFTA	8.864	713.1 -> 669.1	1256	406.8079	pg/ml	m	100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

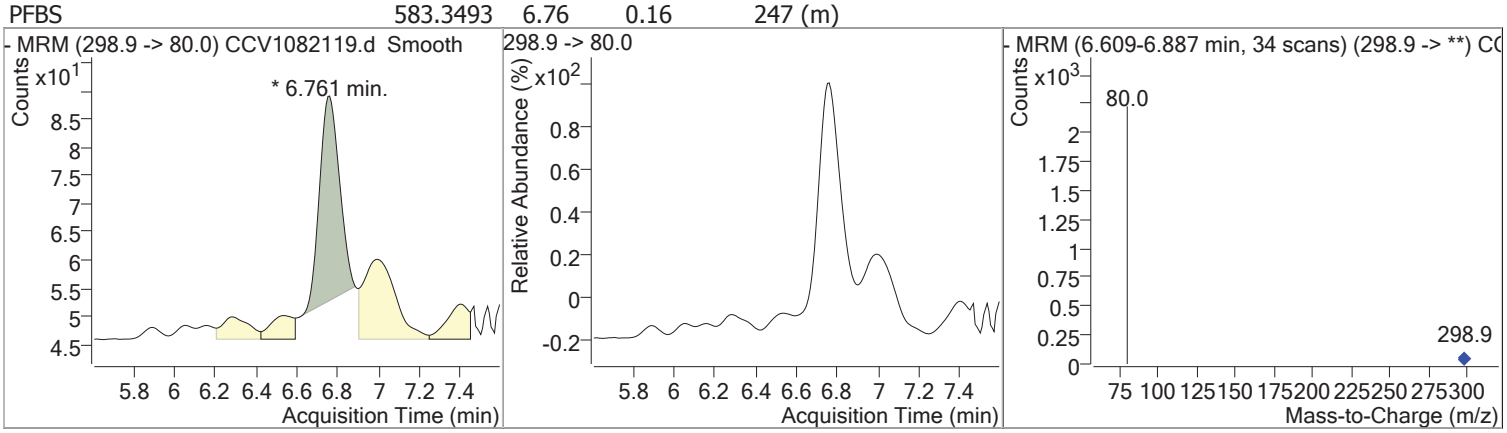
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	533.9201	2.27	0.06	118				



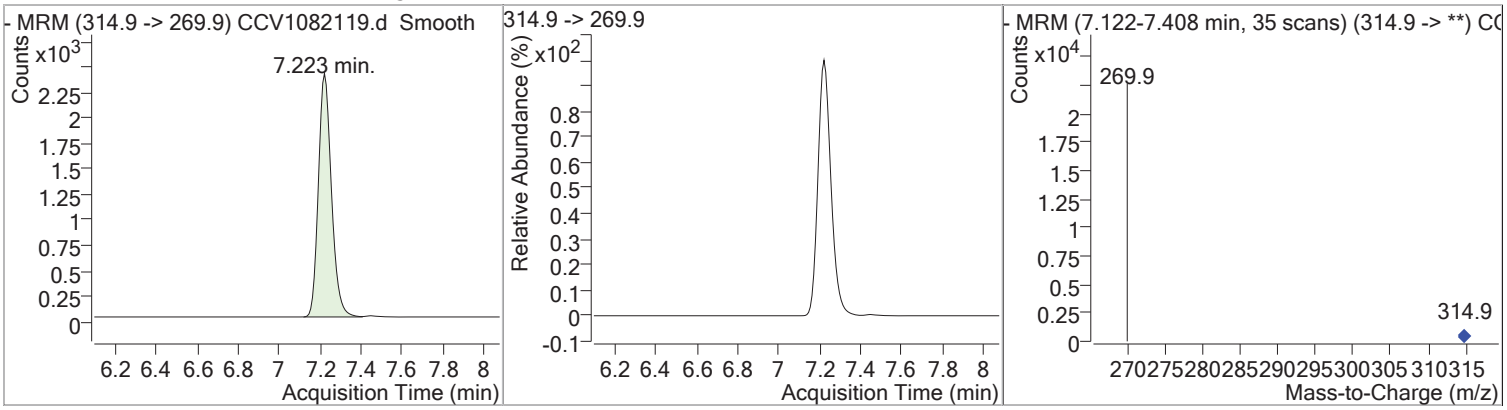
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	554.1049	6.40	0.15	248				



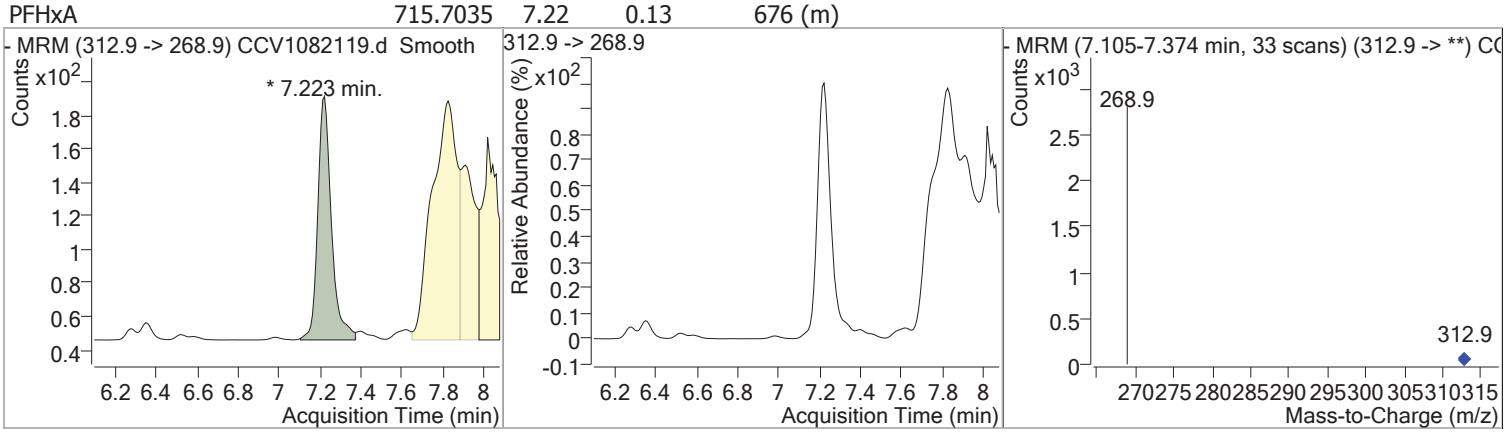
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	583.3493	6.76	0.16	247 (m)				



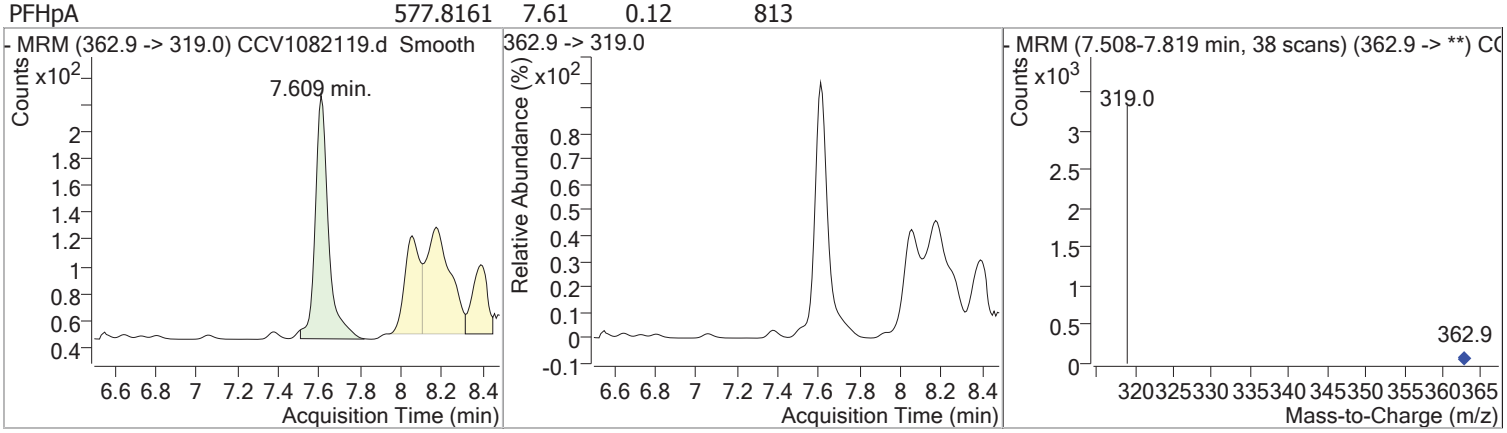
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	10926.2175	7.22	0.13	10613				



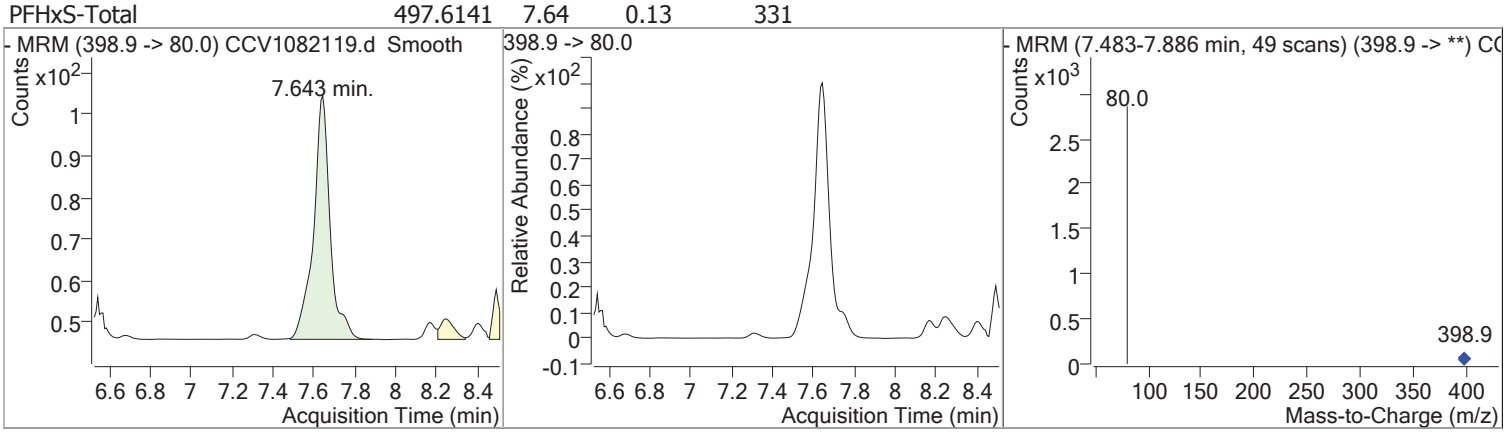
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	715.7035	7.22	0.13	676 (m)				



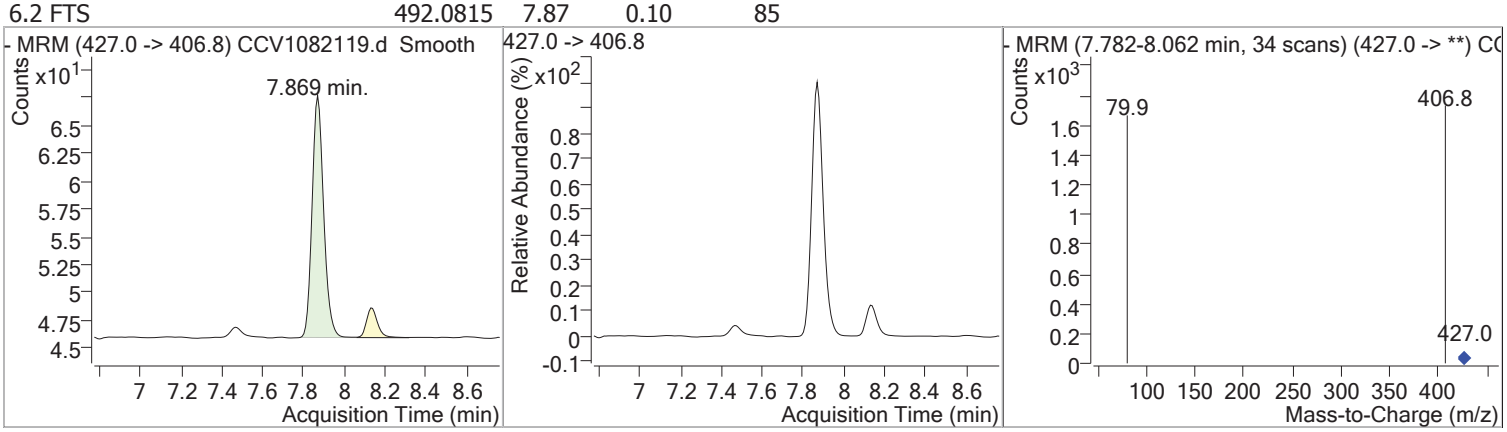
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	577.8161	7.61	0.12	813				



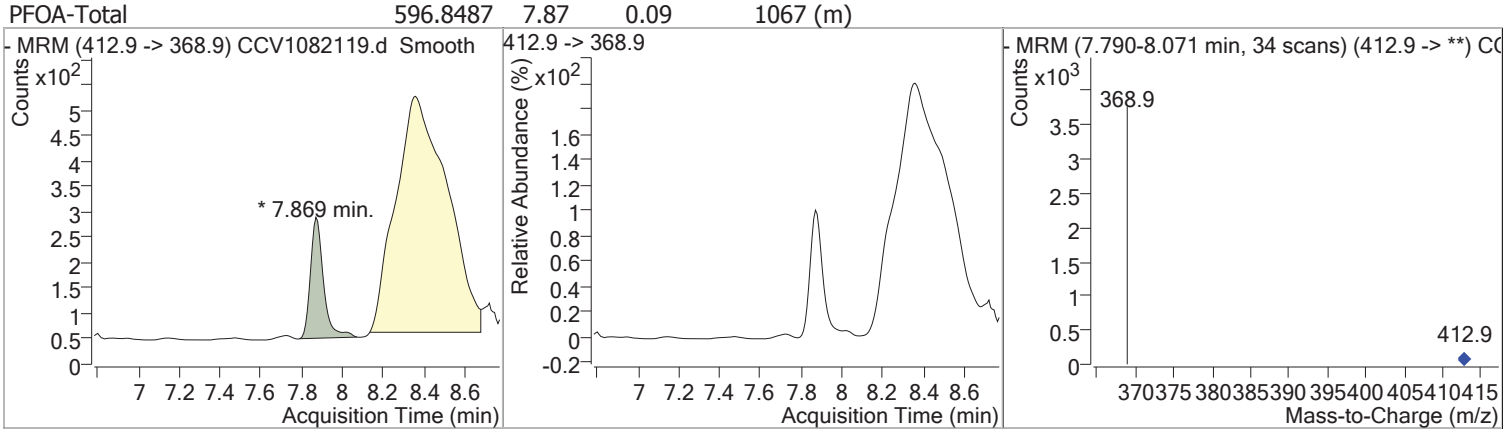
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	497.6141	7.64	0.13	331				



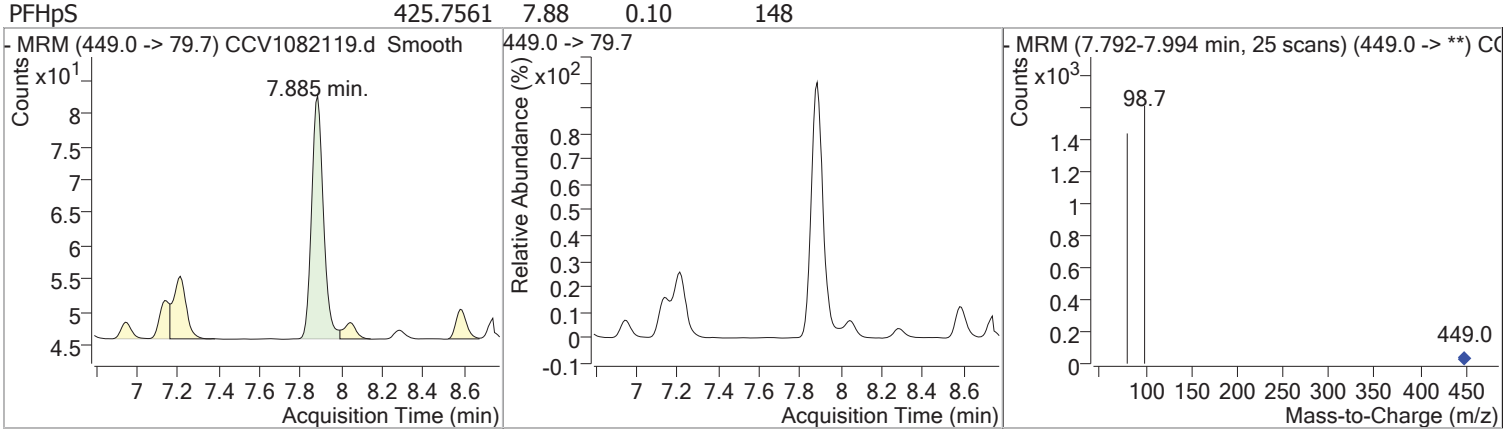
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	492.0815	7.87	0.10	85				



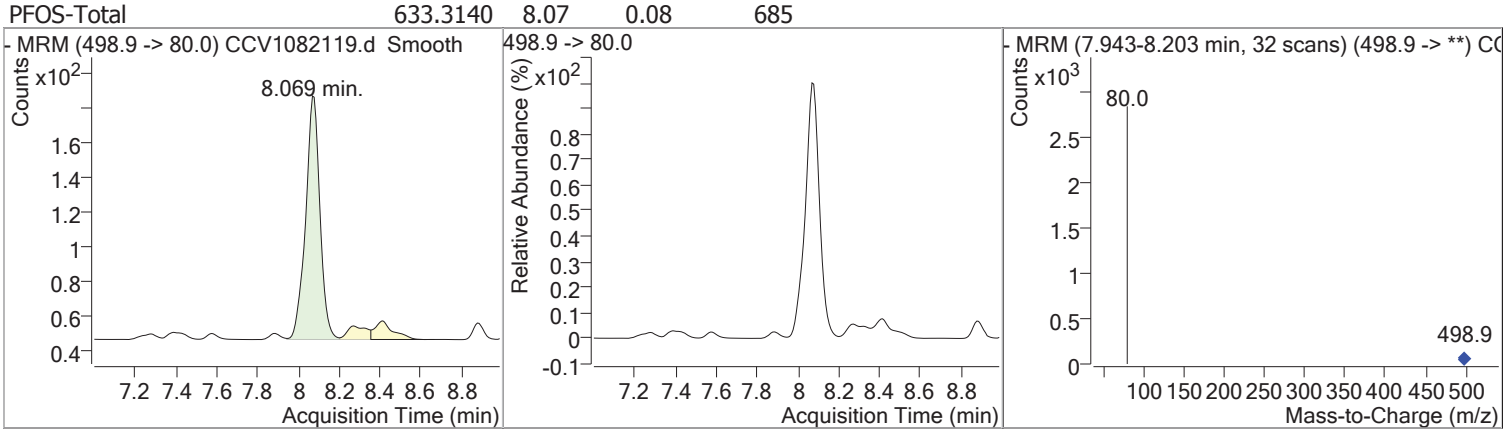
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	596.8487	7.87	0.09	1067 (m)				



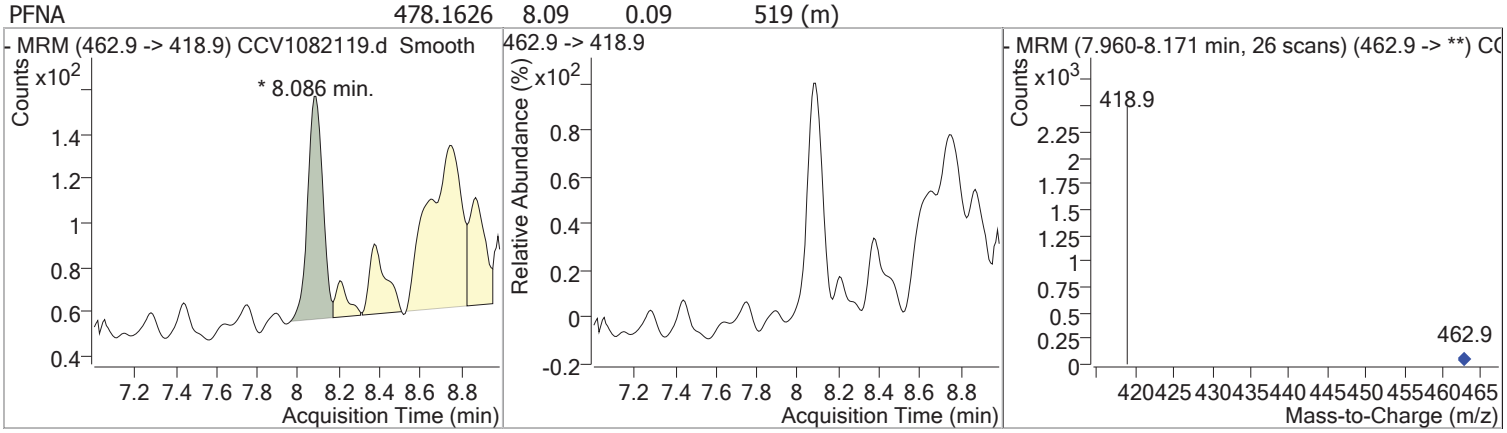
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	425.7561	7.88	0.10	148				



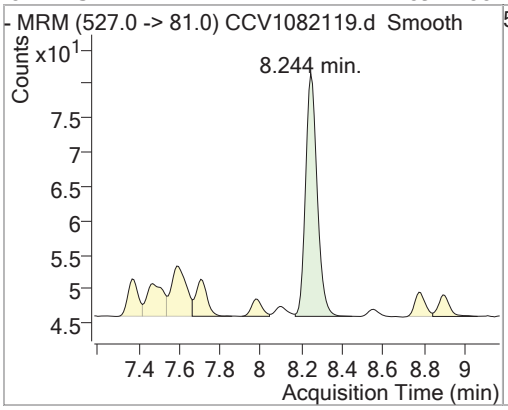
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	633.3140	8.07	0.08	685				

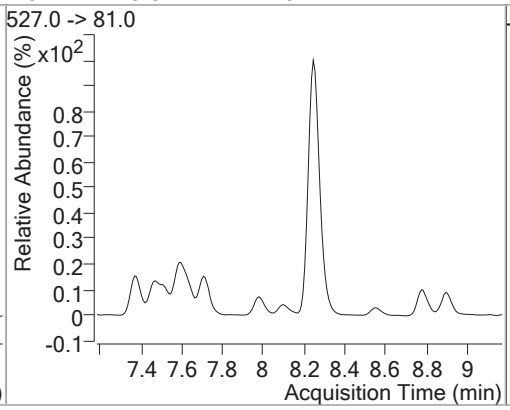


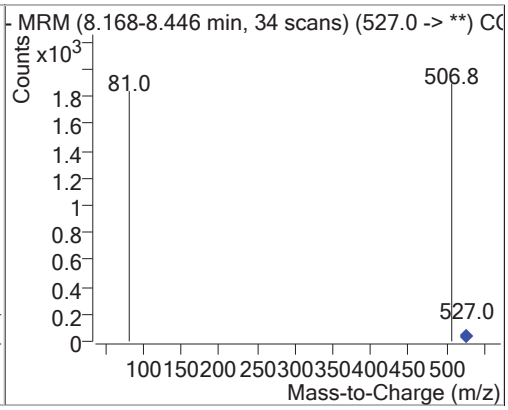
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	478.1626	8.09	0.09	519 (m)				



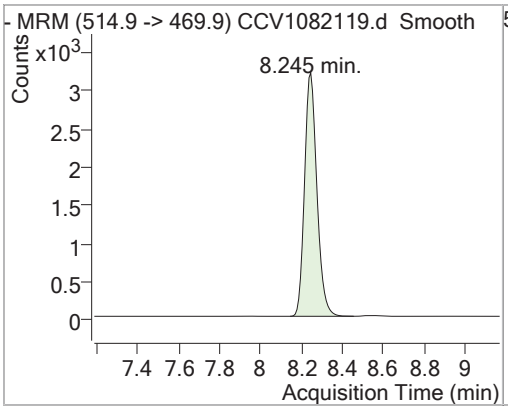
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	489.4288	8.24	0.07	140				

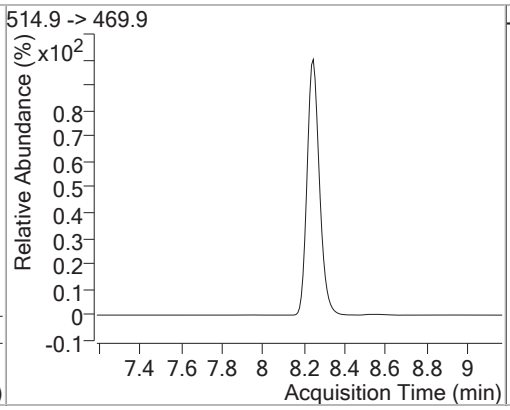


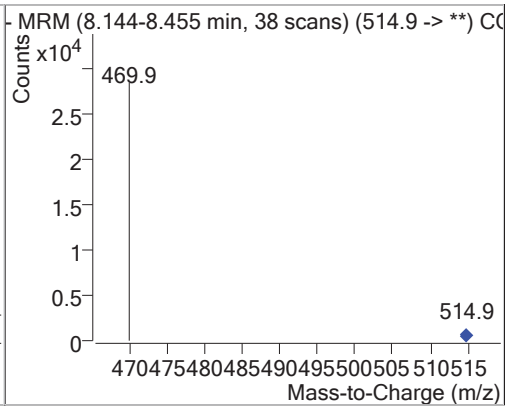




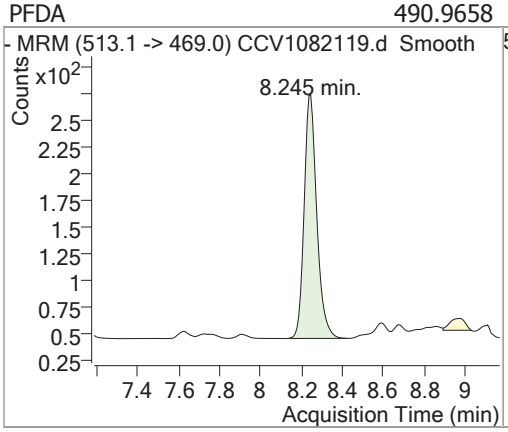
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	9475.6367	8.24	0.07	13434				

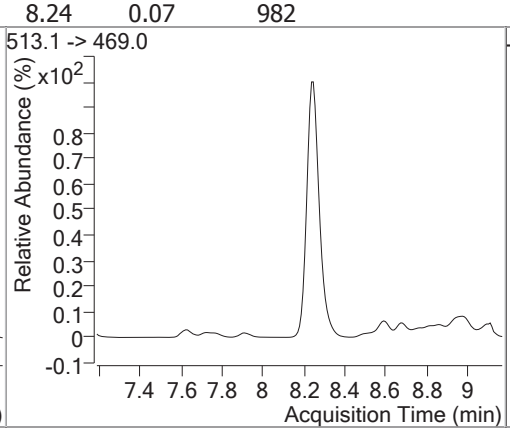


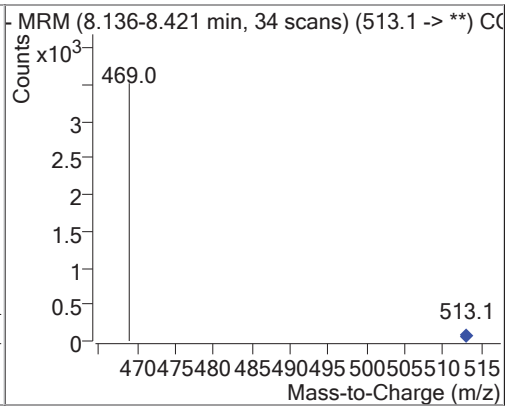




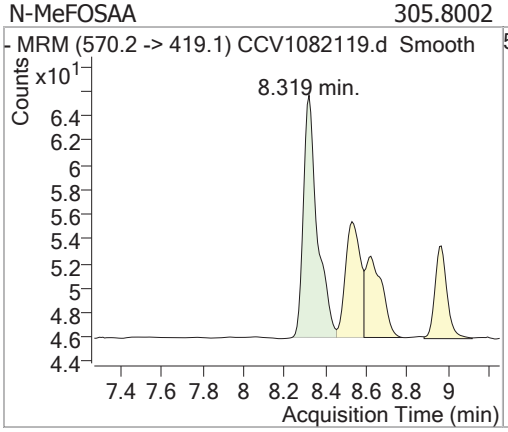
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	490.9658	8.24	0.07	982				

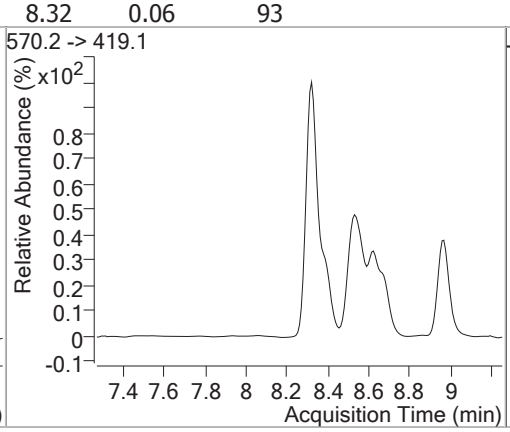


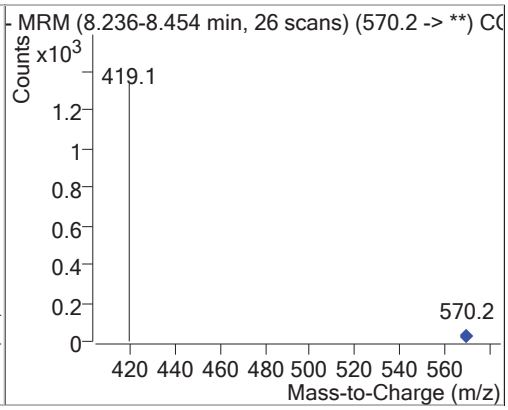




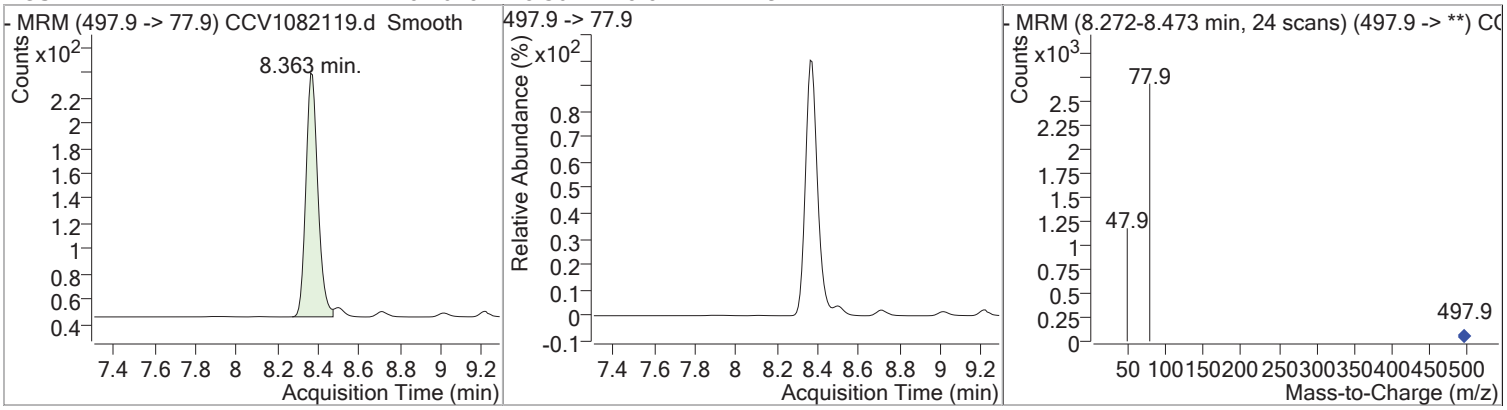
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	305.8002	8.32	0.06	93				



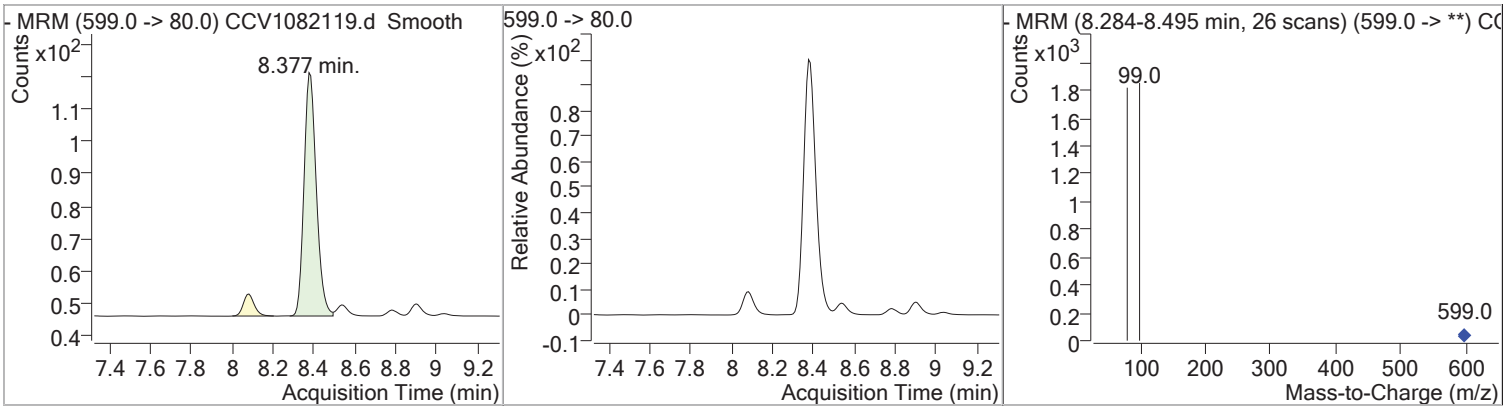




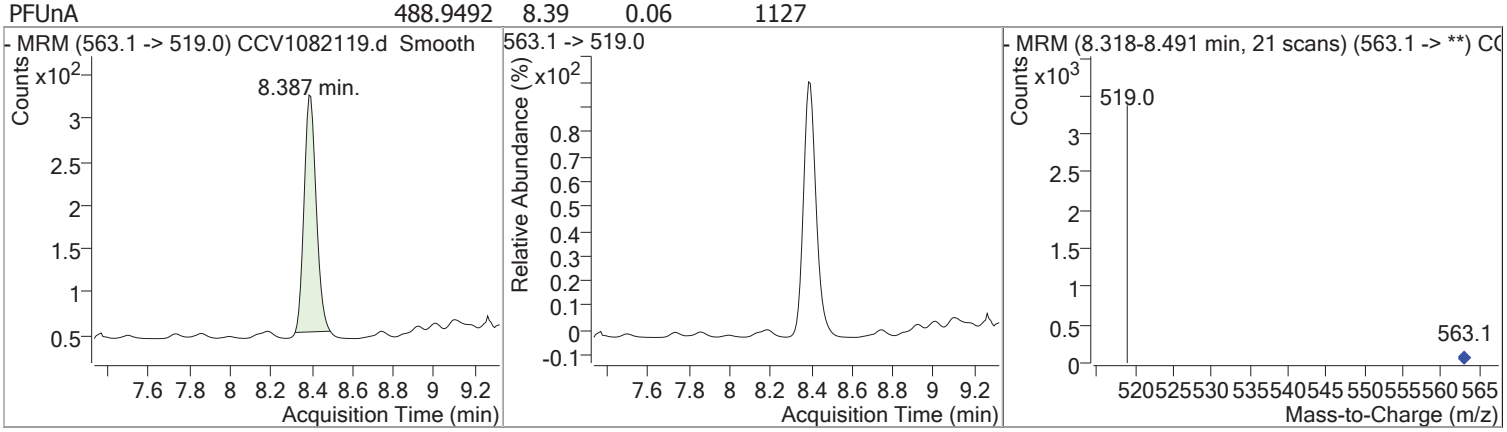
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	407.6704	8.36	0.07	792				



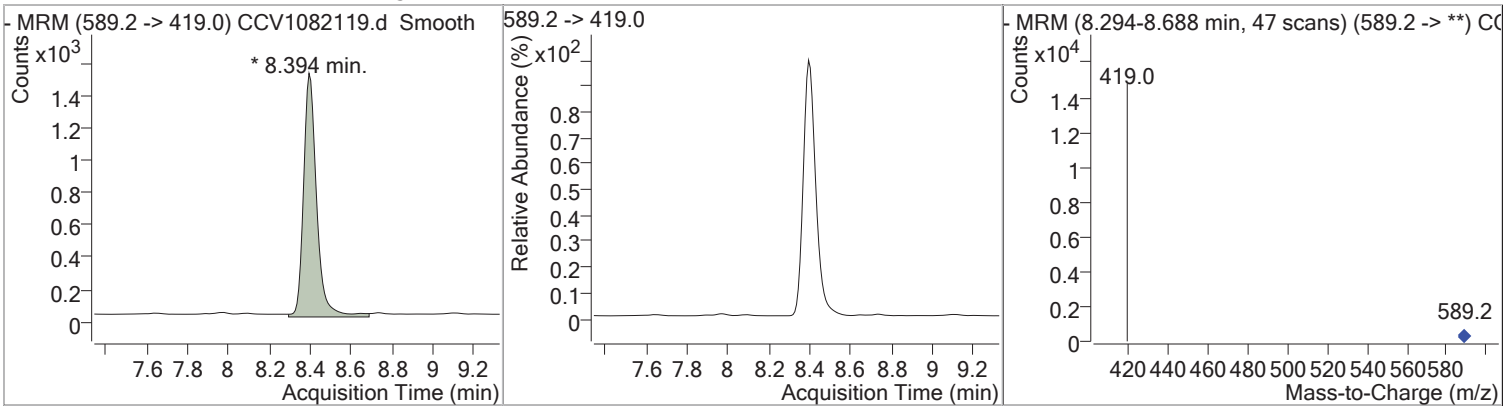
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	465.6221	8.38	0.06	315				



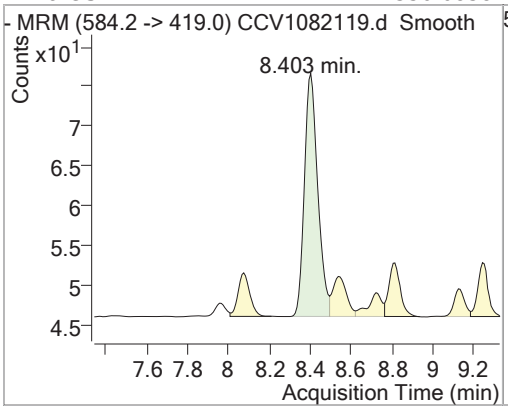
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	488.9492	8.39	0.06	1127				

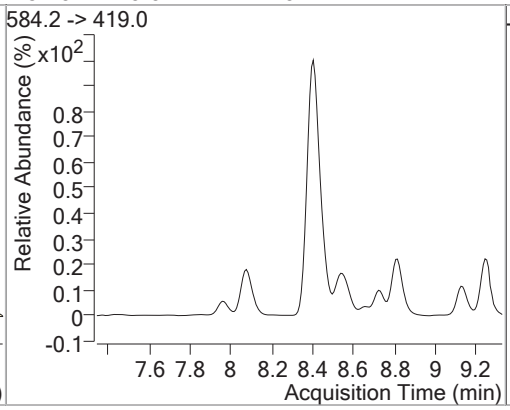


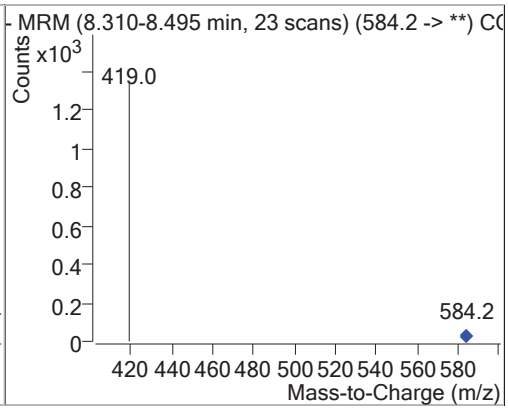
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	28043.4205	8.39	0.06	6772 (m)				



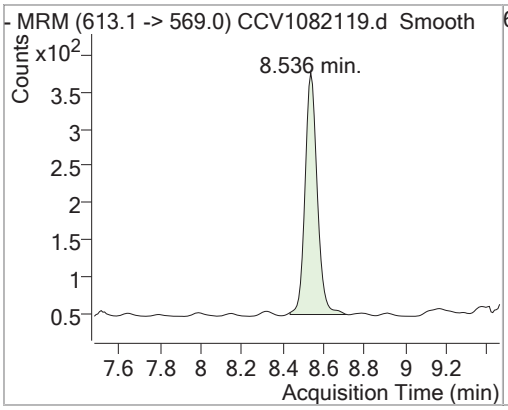
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	556.6858	8.40	0.07	140				

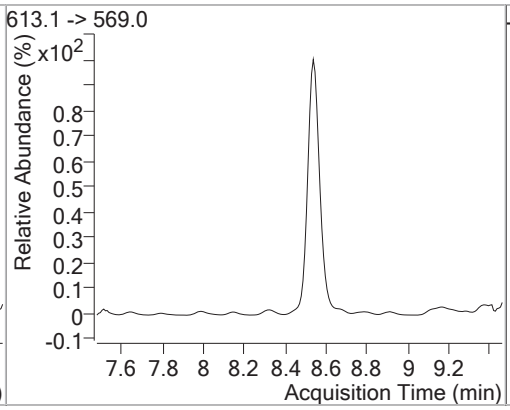


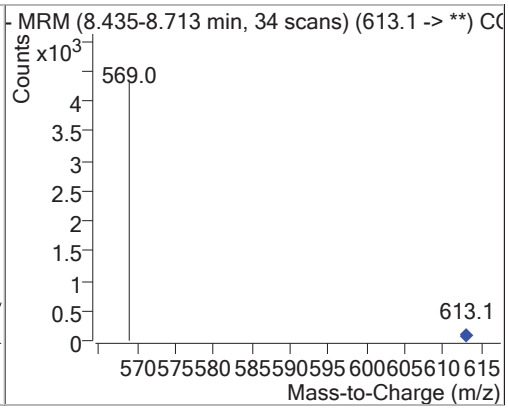




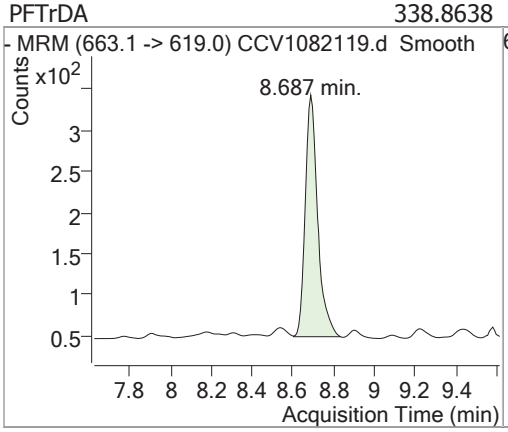
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	420.4978	8.54	0.07	1357				

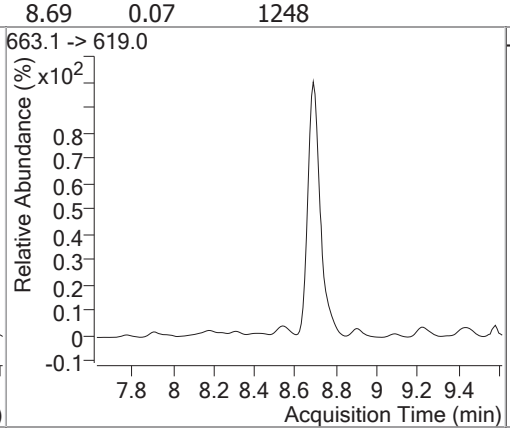


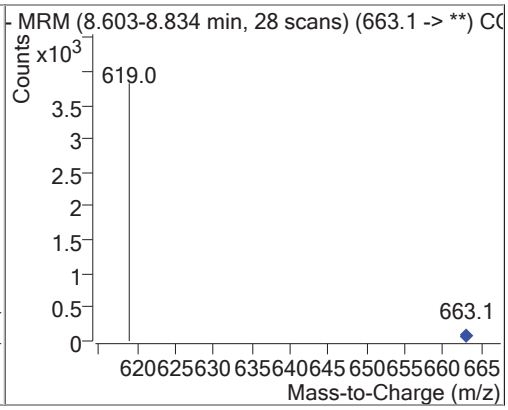




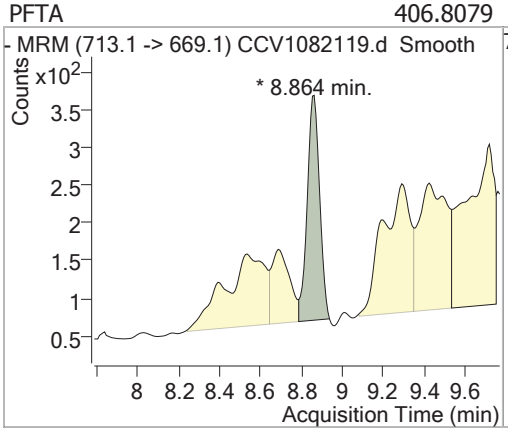
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	338.8638	8.69	0.07	1248				

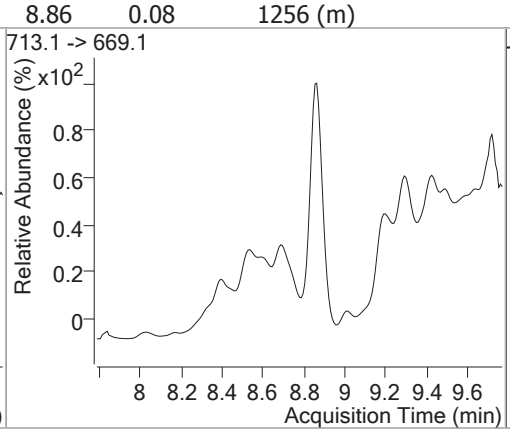


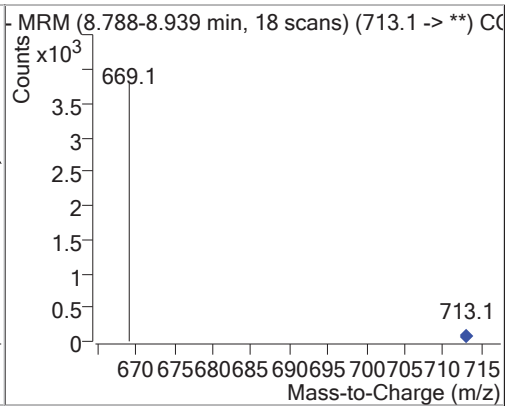




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	406.8079	8.86	0.08	1256 (m)				







CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV2082119.d	Calibration Date:	08/14/19 14:37
Sequence:	S039480	Injection Date:	08/21/19
Lab Sample ID:	S039480-CCV2	Injection Time:	15:16

		CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Perfluorobutanoic acid (PFBA)	A	5000	3070	0.1543906	9.939407E-02		-38.6	
Perfluorobutanesulfonic acid (PFBS)	A	4420	3800	0.5510923	0.4987553		-14.0	
Perfluoropentanoic acid (PFPeA)	A	5000	4010	0.3040697	0.2632933		-19.9	
Perfluorohexanoic acid (PFHxA)	A	5000	4480	0.6714809	0.6217368		-10.4	
Perfluorohexanesulfonic acid (PFHxS)	A	4550	3910	0.8347983	0.7837514		-14.1	
Perfluoroheptanoic acid (PFHpA)	A	5000	4640	1.053666	0.9583748		-7.3	
Perfluoroheptanesulfonic acid (PFHpS)	A	4750	3930	0.5117502	0.3934196		-17.3	
Perfluorooctanoic acid (PFOA)	A	5000	4360	1.330641	1.144977		-12.8	
Perfluorooctanesulfonic acid (PFOS)	A	4620	3770	1.438054	1.212699		-18.3	
Perfluorooctanesulfonamide (FOSA)	A	5000	3630	7.121342	5.517579		-27.5	
6:2 Fluorotelomersulfonate (6:2 FTS A)	A	4750	6300	0.2337119	0.3150161		32.6	
Perfluorononanoic acid (PFNA)	A	5000	5180	0.842486	0.8248384		3.6	
Perfluorodecanoic acid (PFDA)	A	5000	4870	1.468554	1.430763		-2.6	
Perfluorodecanesulfonic acid (PFDS)	A	4820	3950	0.9068341	0.7608367		-18.0	
N-EtFOSAA	A	5000	3870	0.9910125	0.760523		-22.6	
8:2 Fluorotelomersulfonate (8:2 FTS A)	A	4800	5940	0.3729975	0.4864776		23.7	
Perfluoroundecanoic acid (PFUnA)	A	5000	5080	1.739723	1.720971		1.7	
N-MeFOSAA	A	5000	3950	1.146938	0.9382626		-21.1	
Perfluorododecanoic acid (PFDoA)	A	5000	4460	2.235401	2.113468		-10.8	
Perfluorotridecanoic acid (PFTrDA)	A	5000	4500	2.580637	2.4352		-9.9	
Perfluorotetradecanoic acid (PFTA)	A	5000	4990	2.262719	2.261639		-0.3	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV2082119.d	Calibration Date:	08/14/19 14:37
Sequence:	S039480	Injection Date:	08/21/19
Lab Sample ID:	S039480-CCV2	Injection Time:	15:16

		CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
13C-PFHxA	A	10000	9410	0.6955487	0.6711297		-5.9	
13C-PFDA	A	10000	12200	1.05667	1.272235		22.2	
d5-NEtFOSAA	A	40000	38200	0.8657046	0.9024004		-4.6	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

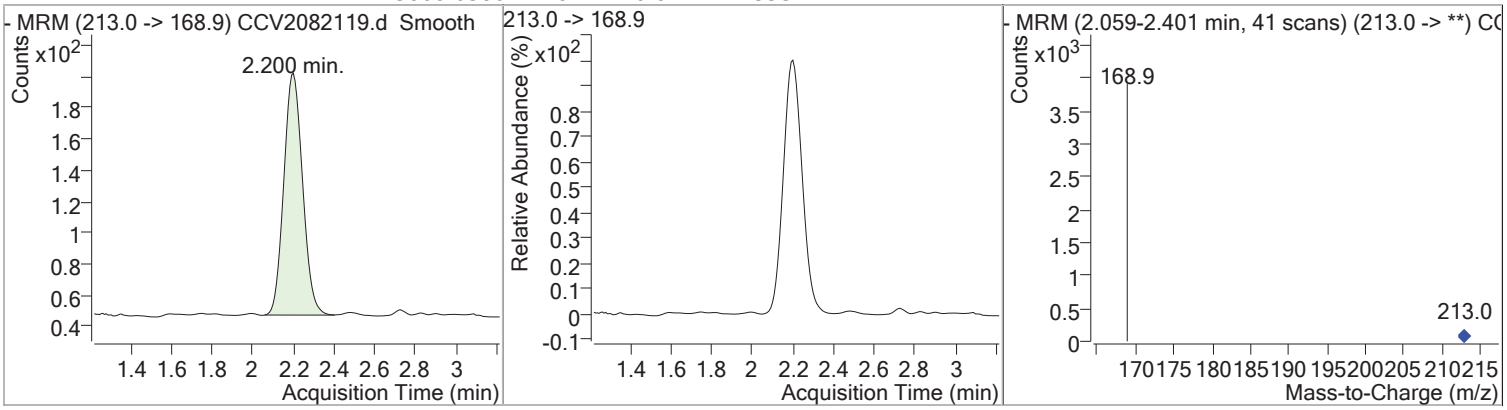
* Values outside of QC limits

Data File	CCV2082119.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 3:16:58 PM
Sample Name	CCV2082119	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	B238243.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

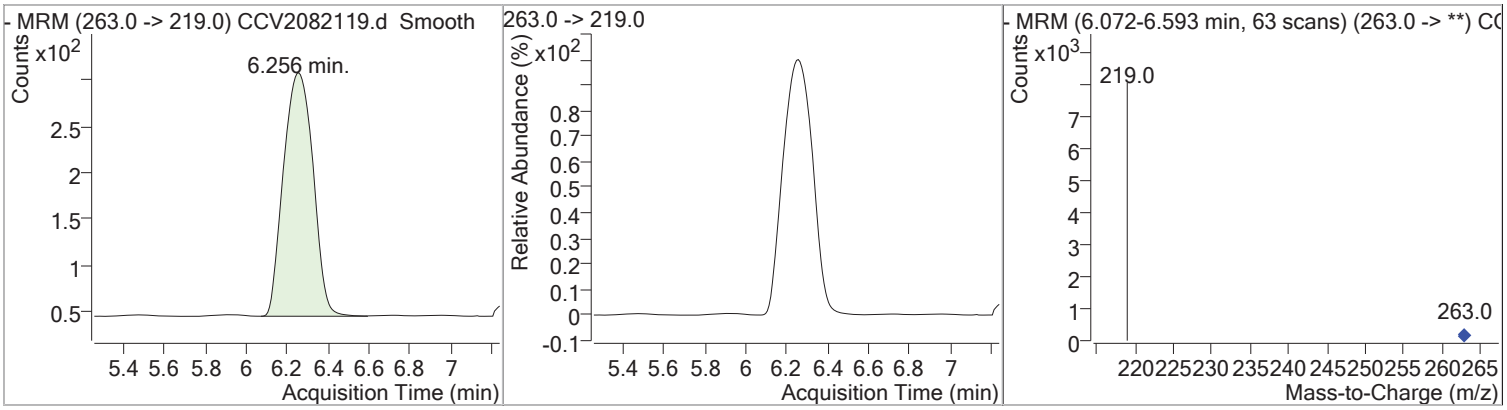
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.819	416.9 -> 371.9	20027	10000.0000	pg/ml		0.042
M PFOS C13	8.043	502.9 -> 80.0	30082	28700.0000	pg/ml		0.050
M d3-N-MeFOSAA	8.302	573.2 -> 419.0	15307	40000.0000	pg/ml	m	0.042
System Monitoring Compounds							
S PFHxA C13	7.113	314.9 -> 269.9	13441	9409.3001	pg/ml		0.025
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 94.09%			
S PFDA C13	8.219	514.9 -> 469.9	25479	12220.2684	pg/ml		0.042
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 122.20%			
S d5-N-MeFOSAA	8.377	589.2 -> 419.0	13813	38157.3085	pg/ml		0.042
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 95.39%			
Target Compounds							QValue
T PFBA	2.200	213.0 -> 168.9	995	3068.6306	pg/ml		100
T PFPeA	6.256	263.0 -> 219.0	2637	4005.7300	pg/ml		100
T PFBS	6.609	298.9 -> 80.0	2311	3799.4157	pg/ml		100
T PFHxA	7.114	312.9 -> 268.9	6226	4480.9502	pg/ml		100
T PFHpA	7.533	362.9 -> 319.0	9597	4636.0984	pg/ml		100
T PFHxS-Total	7.558	398.9 -> 80.0	3738	3908.8553	pg/ml		100
T 6.2 FTS	7.818	427.0 -> 406.8	1568	6297.1451	pg/ml		100
T PFOA-Total	7.819	412.9 -> 368.9	11465	4360.5107	pg/ml		100
T PFHpS	7.826	449.0 -> 79.7	1959	3929.2243	pg/ml		100
T PFOS-Total	8.044	498.9 -> 80.0	5872	3773.1620	pg/ml		100
T PFNA	8.044	462.9 -> 418.9	8260	5178.1426	pg/ml		100
T 8.2 FTS	8.227	527.0 -> 81.0	2448	5938.6305	pg/ml		100
T PFDA	8.220	513.1 -> 469.0	14327	4868.5092	pg/ml		100
T N-MeFOSAA	8.302	570.2 -> 419.1	1795	3945.5264	pg/ml		100
T FOSA	8.347	497.9 -> 77.9	10557	3625.9863	pg/ml		100
T PFDS	8.368	599.0 -> 80.0	3844	3952.4542	pg/ml		100
T PFUnA	8.378	563.1 -> 519.0	17233	5083.7376	pg/ml		100
T N-EtFOSAA	8.378	584.2 -> 419.0	1455	3870.8464	pg/ml		100
T PFDoA	8.520	613.1 -> 569.0	21164	4458.0665	pg/ml		100
T PFTrDA	8.679	663.1 -> 619.0	24385	4503.5378	pg/ml		100
T PFTA	8.847	713.1 -> 669.1	22647	4986.4470	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

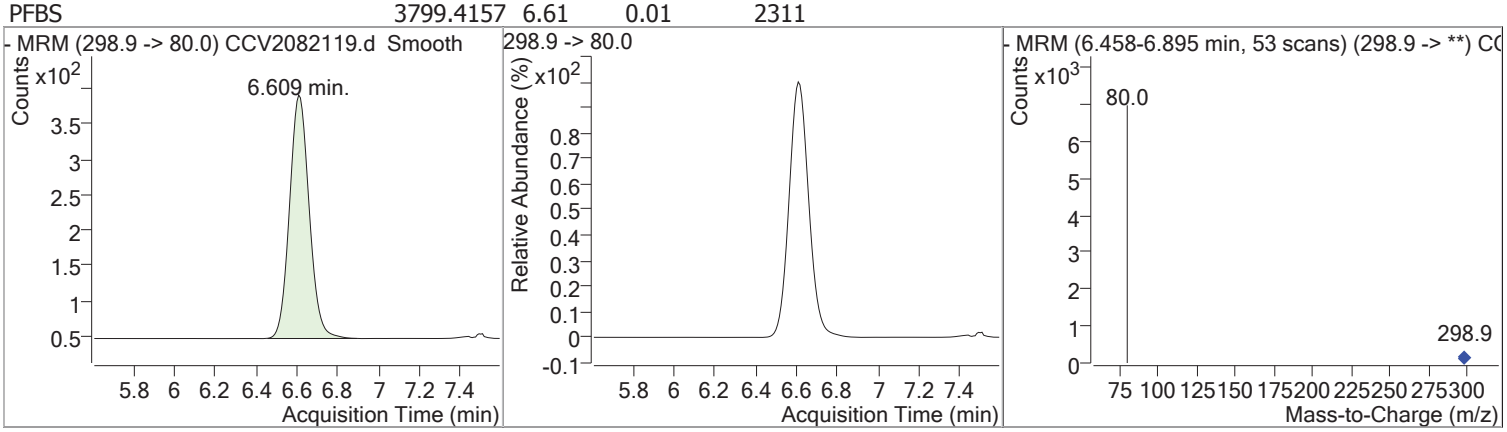
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	3068.6306	2.20	-0.02	995				



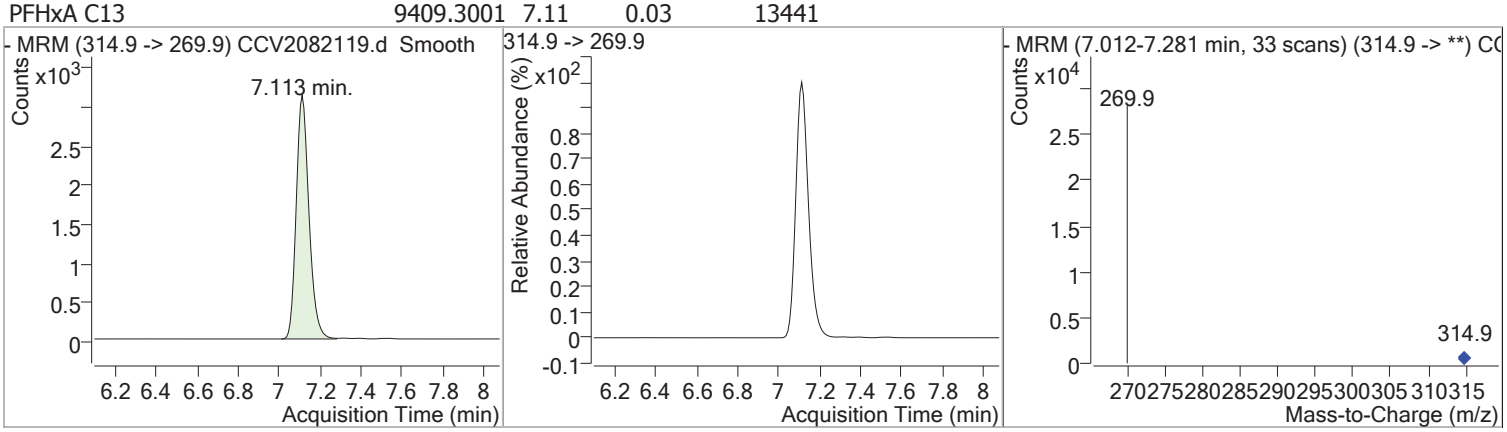
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	4005.7300	6.26	0.01	2637				



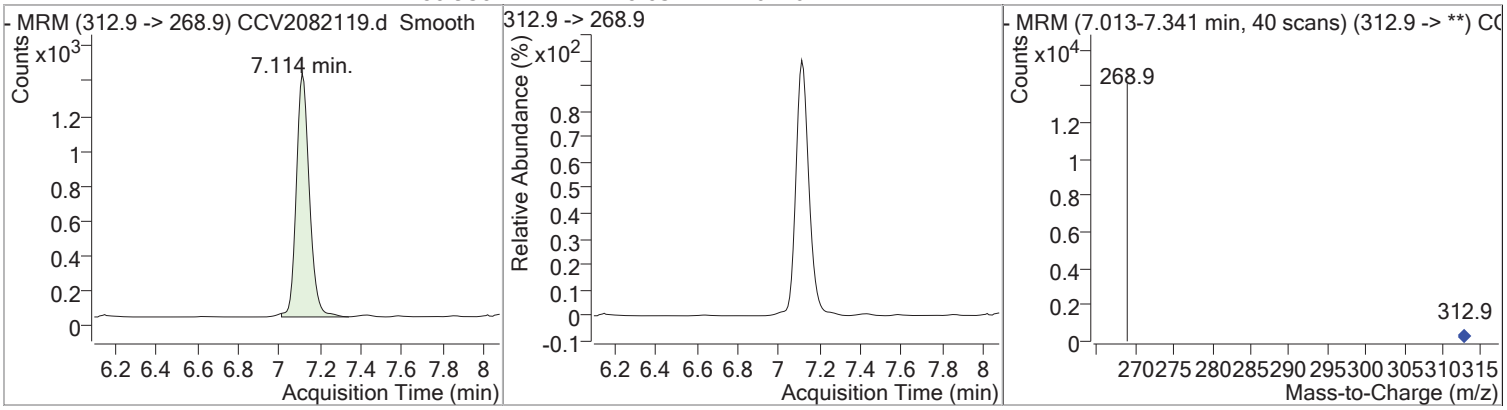
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	3799.4157	6.61	0.01	2311				



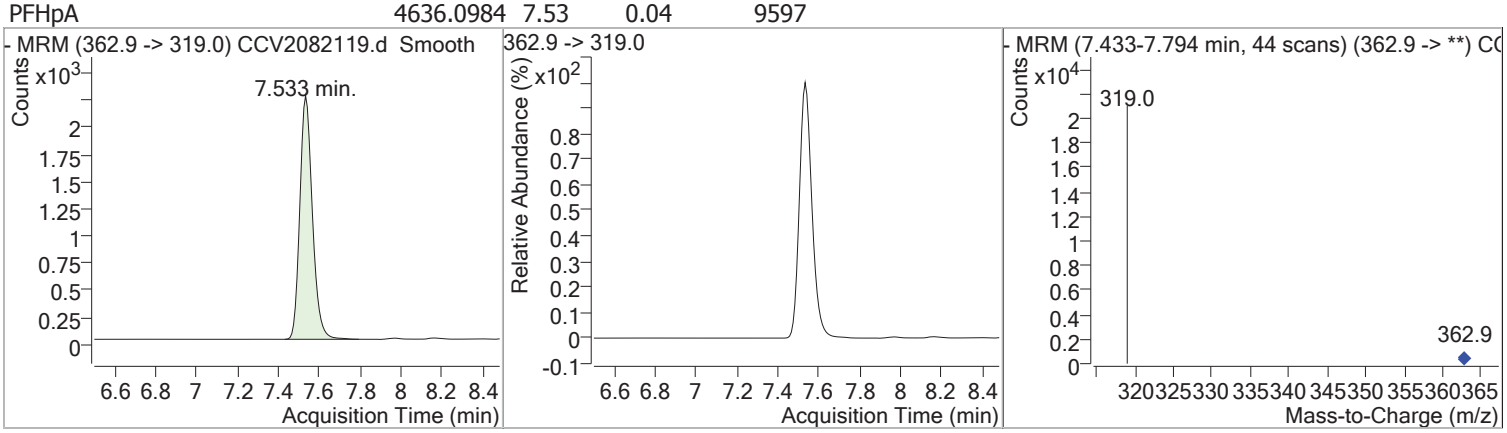
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	9409.3001	7.11	0.03	13441				



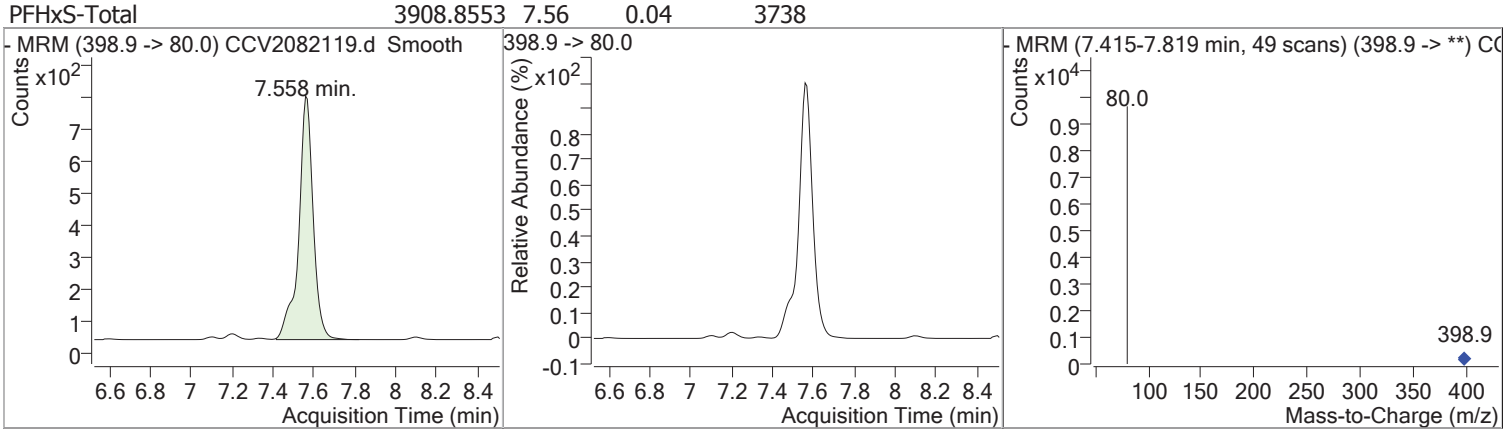
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	4480.9502	7.11	0.03	6226				



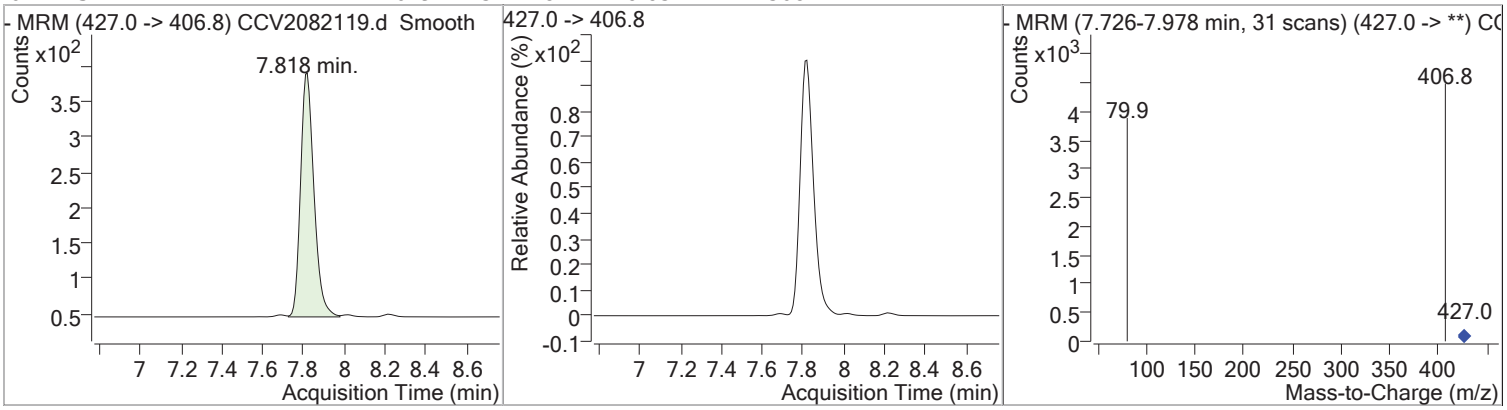
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	4636.0984	7.53	0.04	9597				



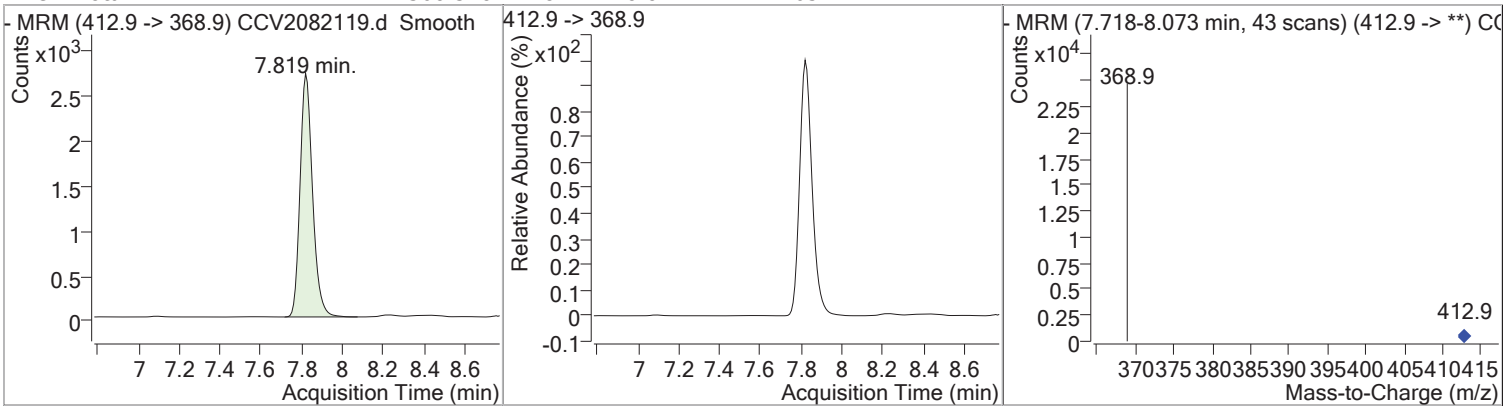
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	3908.8553	7.56	0.04	3738				



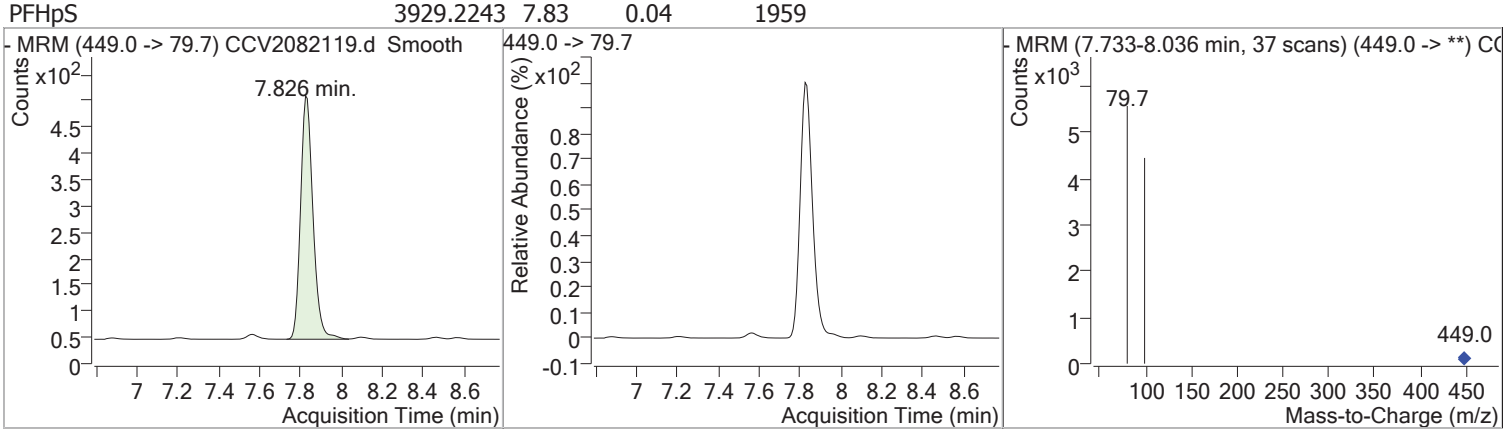
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	6297.1451	7.82	0.05	1568				



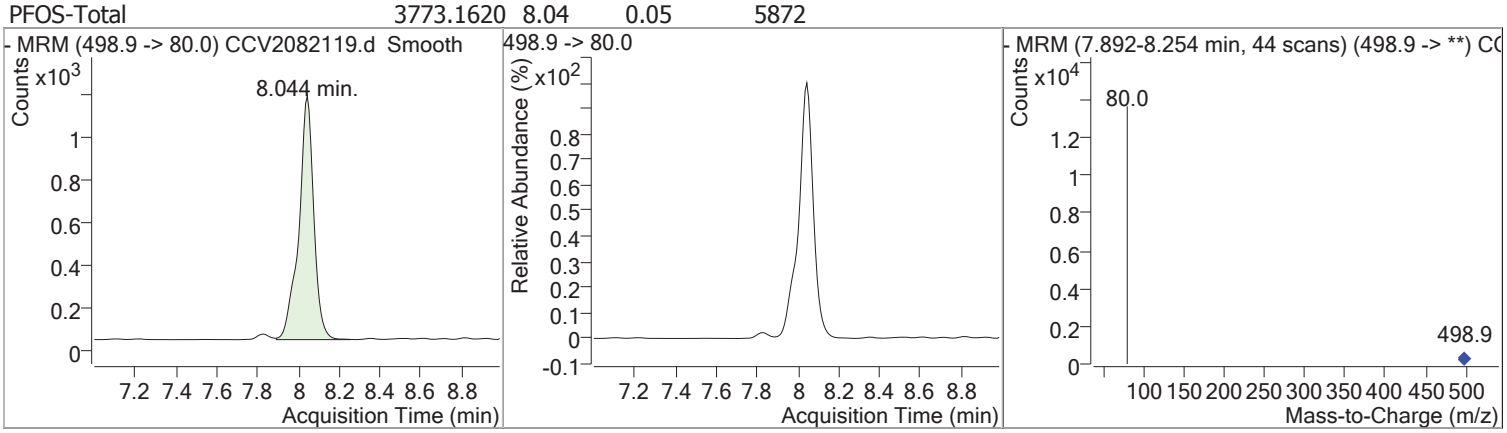
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	4360.5107	7.82	0.04	11465				



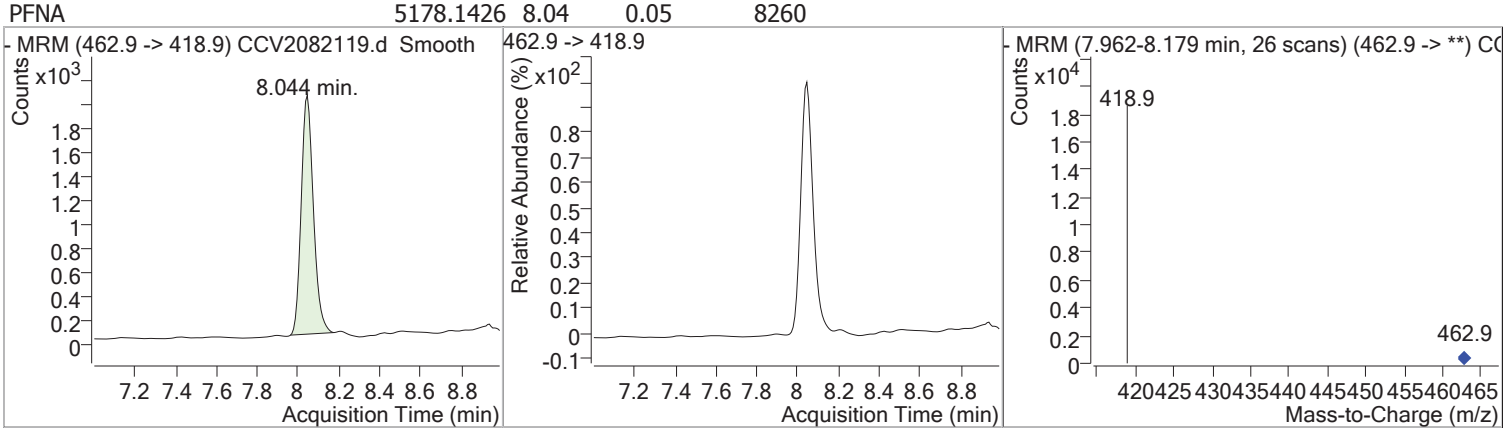
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	3929.2243	7.83	0.04	1959				



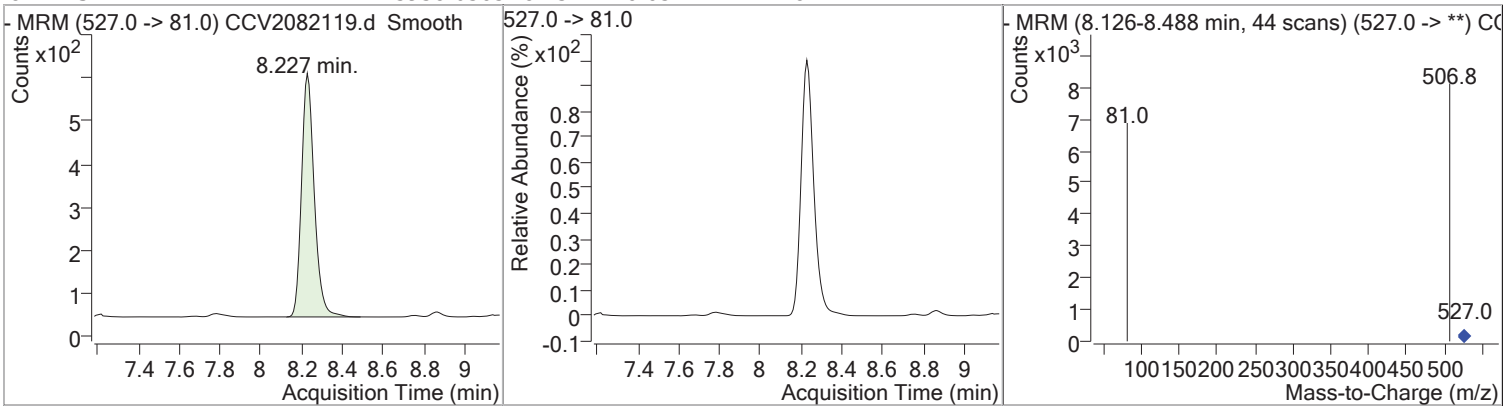
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	3773.1620	8.04	0.05	5872				



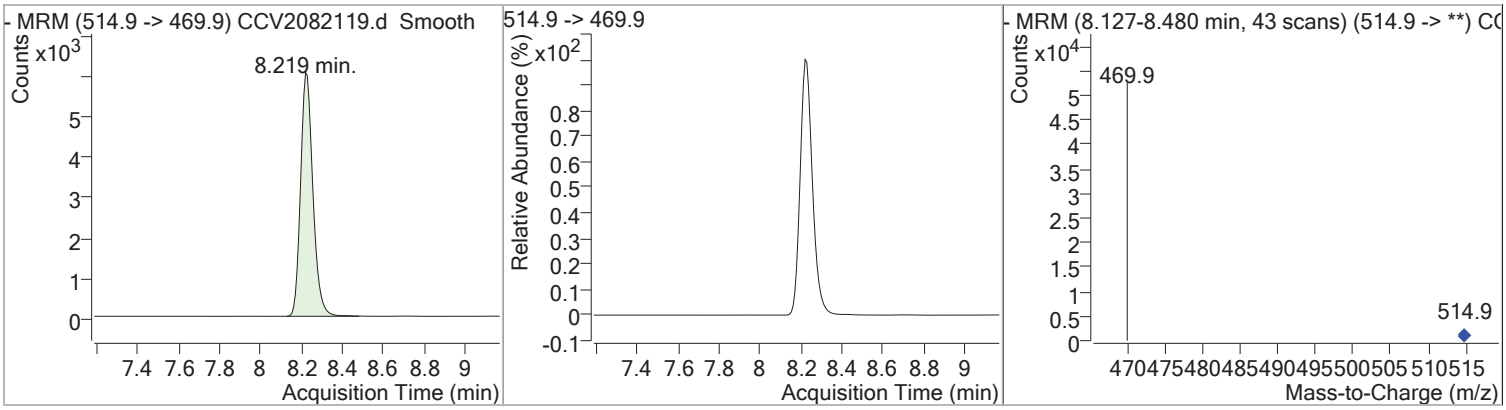
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	5178.1426	8.04	0.05	8260				



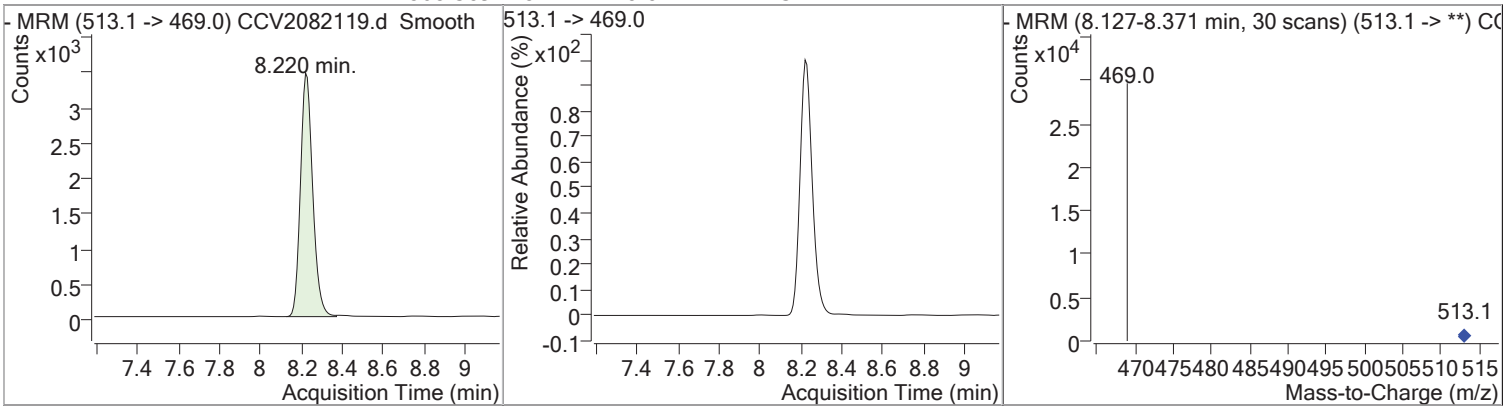
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	5938.6305	8.23	0.05	2448				



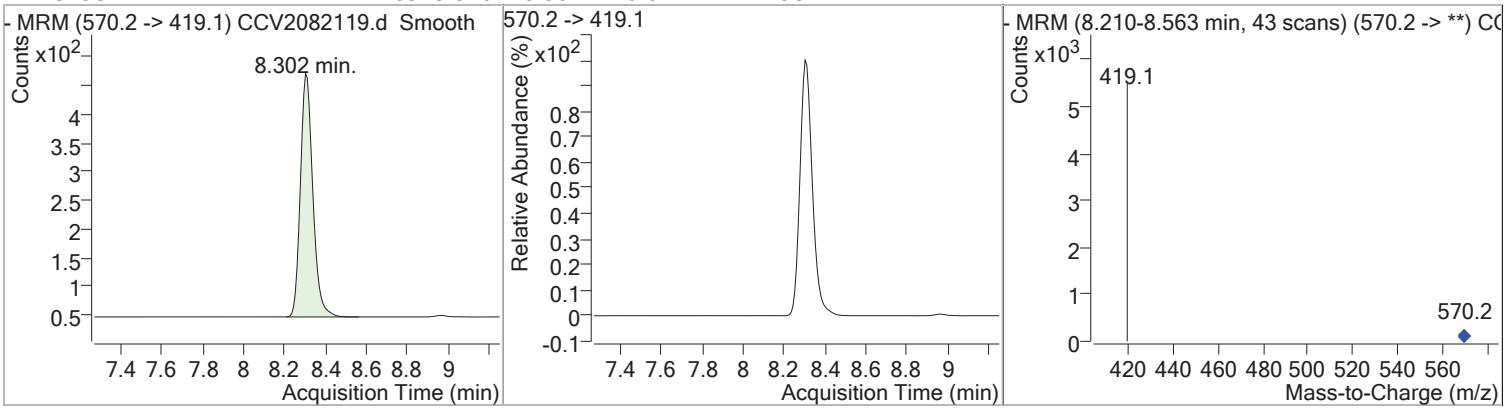
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	12220.2684	8.22	0.04	25479				



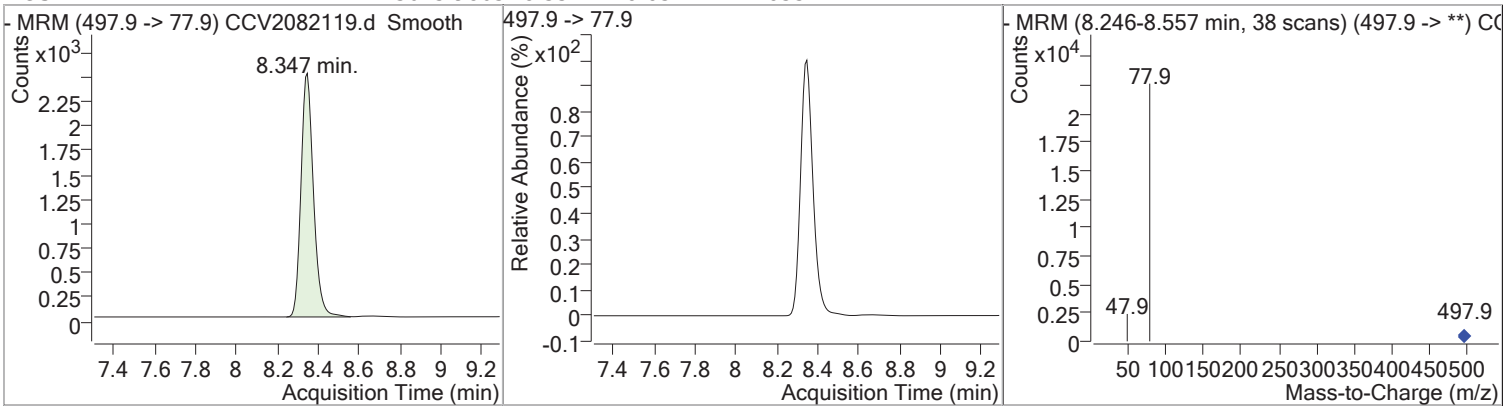
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	4868.5092	8.22	0.04	14327				



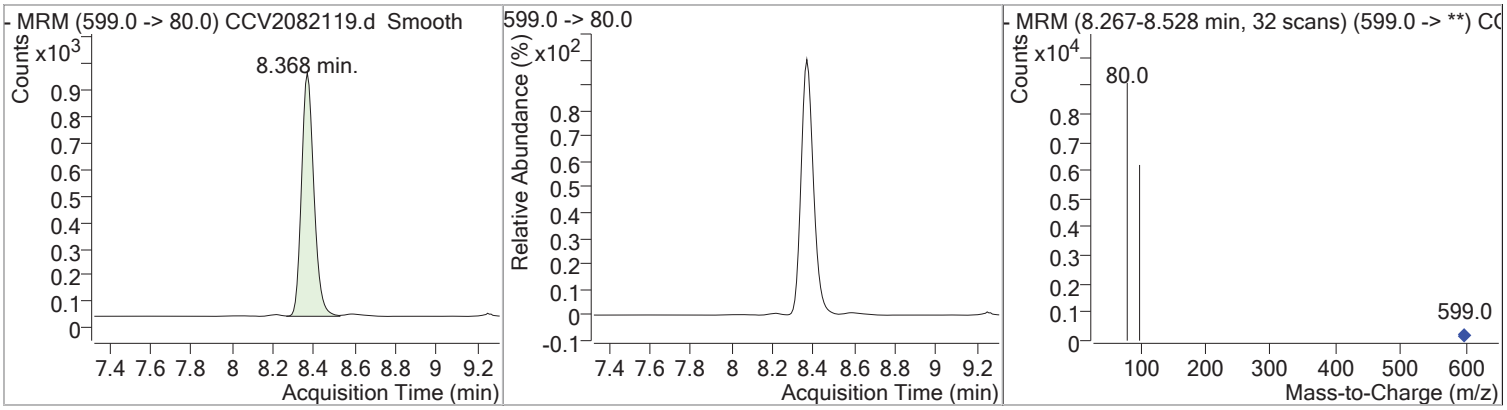
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	3945.5264	8.30	0.04	1795				



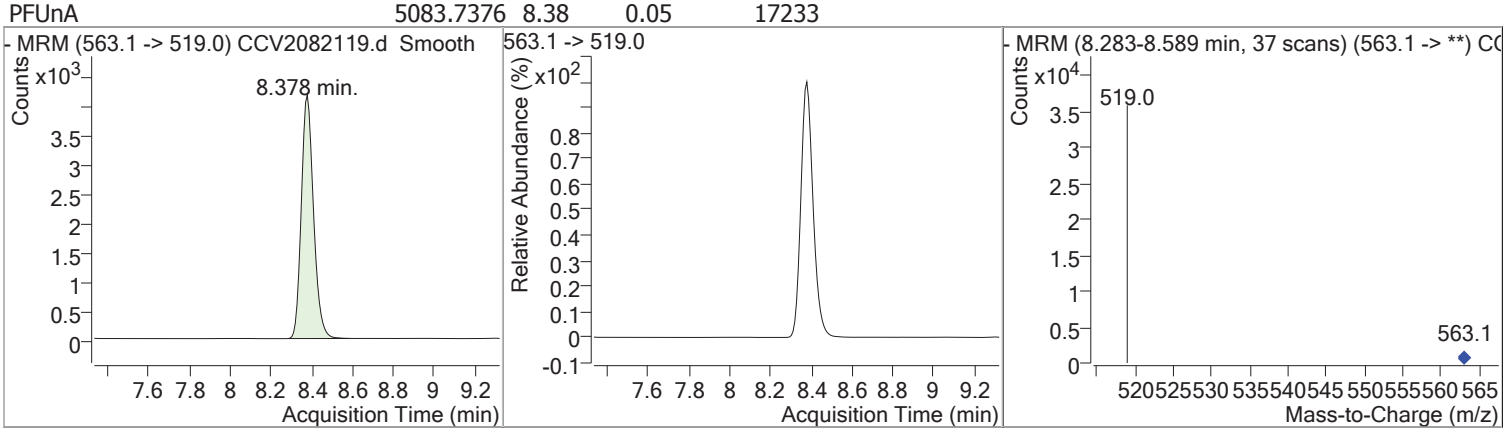
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	3625.9863	8.35	0.05	10557				



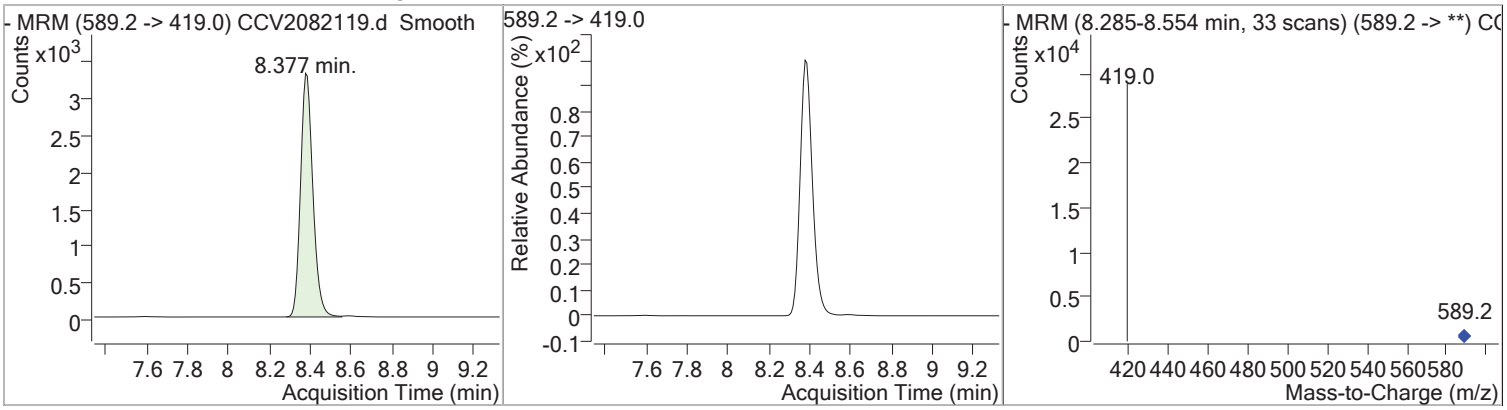
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	3952.4542	8.37	0.05	3844				



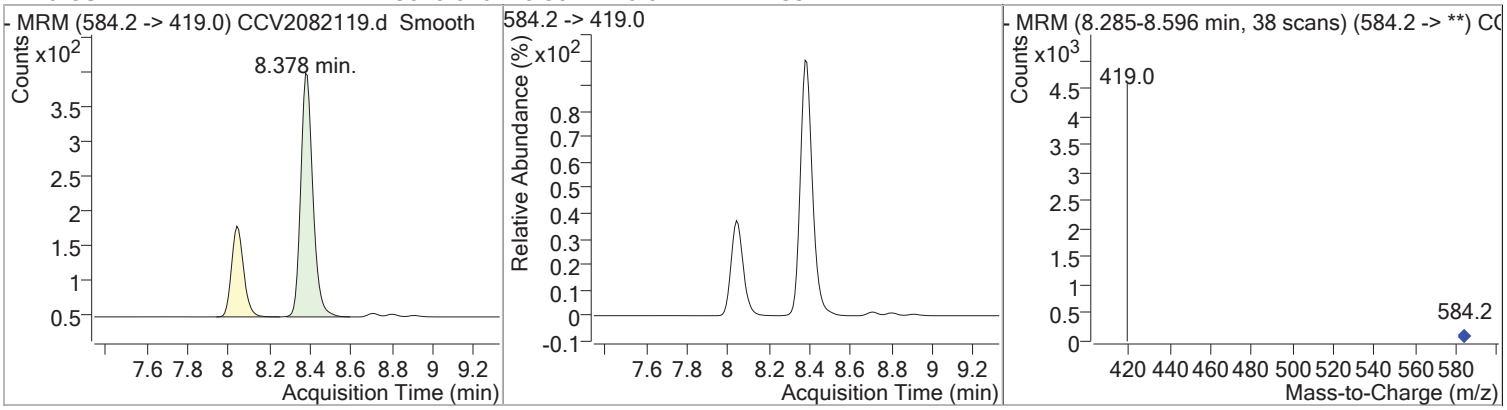
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	5083.7376	8.38	0.05	17233				



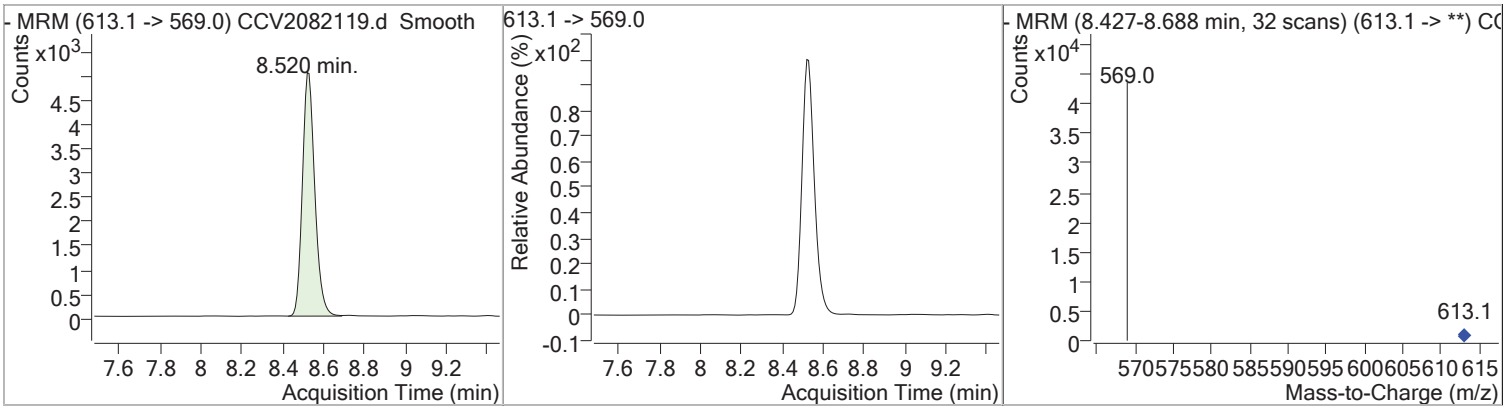
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	38157.3085	8.38	0.04	13813				



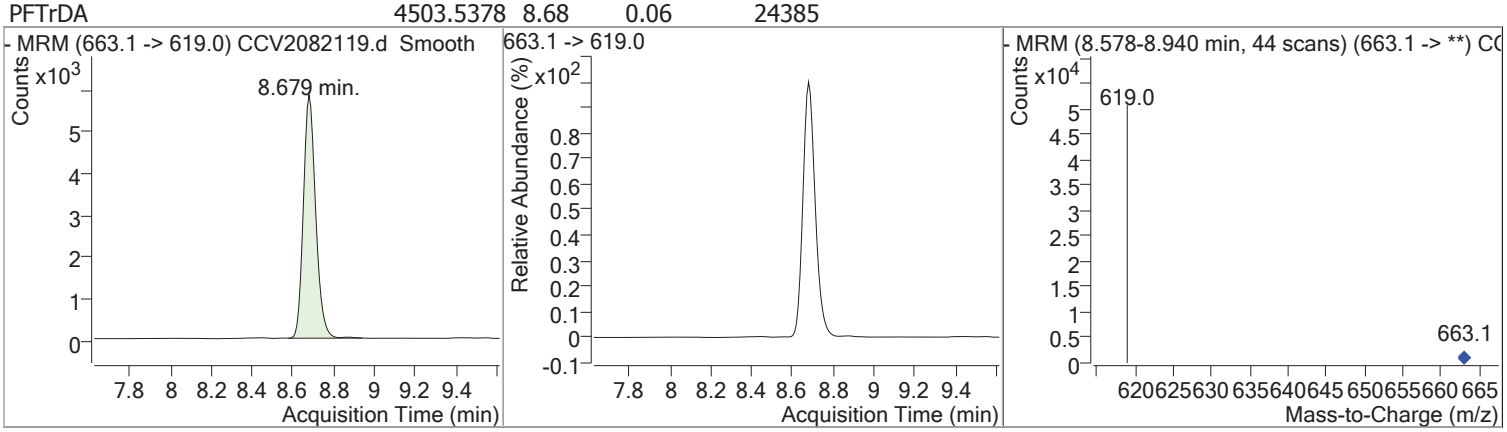
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	3870.8464	8.38	0.04	1455				



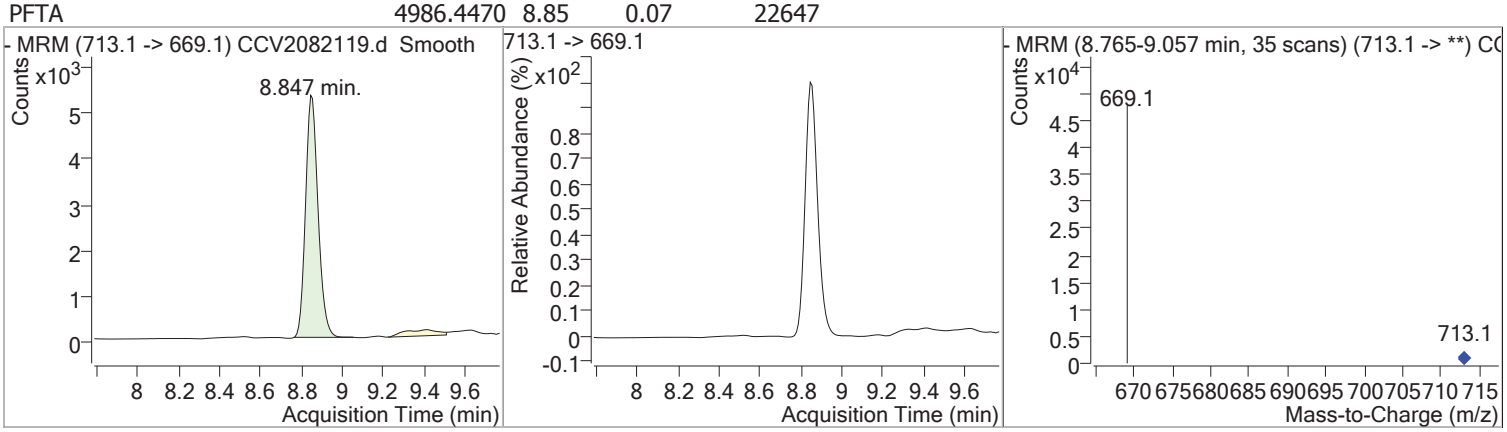
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	4458.0665	8.52	0.05	21164				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	4503.5378	8.68	0.06	24385				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	4986.4470	8.85	0.07	22647				



CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV3082119.d	Calibration Date:	08/14/19 14:37
Sequence:	S039480	Injection Date:	08/21/19
Lab Sample ID:	S039480-CCV3	Injection Time:	17:38

		CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Perfluorobutanoic acid (PFBA)	A	50000	33200	0.1543906	0.1074029		-33.7	
Perfluorobutanesulfonic acid (PFBS)	A	44200	40300	0.5510923	0.5286417		-8.9	
Perfluoropentanoic acid (PFPeA)	A	50000	41900	0.3040697	0.2751619		-16.3	
Perfluorohexanoic acid (PFHxA)	A	50000	50300	0.6714809	0.6974227		0.5	
Perfluorohexanesulfonic acid (PFHxS)	A	45500	40600	0.8347983	0.8145647		-10.7	
Perfluoroheptanoic acid (PFHpA)	A	50000	48200	1.053666	0.9972092		-3.5	
Perfluoroheptanesulfonic acid (PFHpS)	A	47500	46000	0.5117502	0.4604938		-3.2	
Perfluorooctanoic acid (PFOA)	A	50000	46900	1.330641	1.23063		-6.3	
Perfluorooctanesulfonic acid (PFOS)	A	46200	40700	1.438054	1.307942		-11.9	
Perfluorooctanesulfonamide (FOSA)	A	50000	31500	7.121342	4.794152		-37.0	
6:2 Fluorotelomersulfonate (6:2 FTS A)	A	47500	61300	0.2337119	0.3067511		29.1	
Perfluorononanoic acid (PFNA)	A	50000	55100	0.842486	0.878403		10.3	
Perfluorodecanoic acid (PFDA)	A	50000	49200	1.468554	1.446292		-1.6	
Perfluorodecanesulfonic acid (PFDS)	A	48200	41300	0.9068341	0.7947108		-14.3	
N-EtFOSAA	A	50000	35300	0.9910125	0.6929866		-29.5	
8:2 Fluorotelomersulfonate (8:2 FTS A)	A	48000	47300	0.3729975	0.387767		-1.4	
Perfluoroundecanoic acid (PFUnA)	A	50000	50200	1.739723	1.699509		0.4	
N-MeFOSAA	A	50000	38300	1.146938	0.9097072		-23.5	
Perfluorododecanoic acid (PFDoA)	A	50000	51400	2.235401	2.436572		2.8	
Perfluorotridecanoic acid (PFTrDA)	A	50000	52000	2.580637	2.812686		4.0	
Perfluorotetradecanoic acid (PFTA)	A	50000	50900	2.262719	2.310723		1.9	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV3082119.d	Calibration Date:	08/14/19 14:37
Sequence:	S039480	Injection Date:	08/21/19
Lab Sample ID:	S039480-CCV3	Injection Time:	17:38

		CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
13C-PFHxA	A	10000	10000	0.6955487	0.7130204		-0.03	
13C-PFDA	A	10000	10800	1.05667	1.122575		7.8	
d5-NEtFOSAA	A	40000	28600	0.8657046	0.6772673		-28.4	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

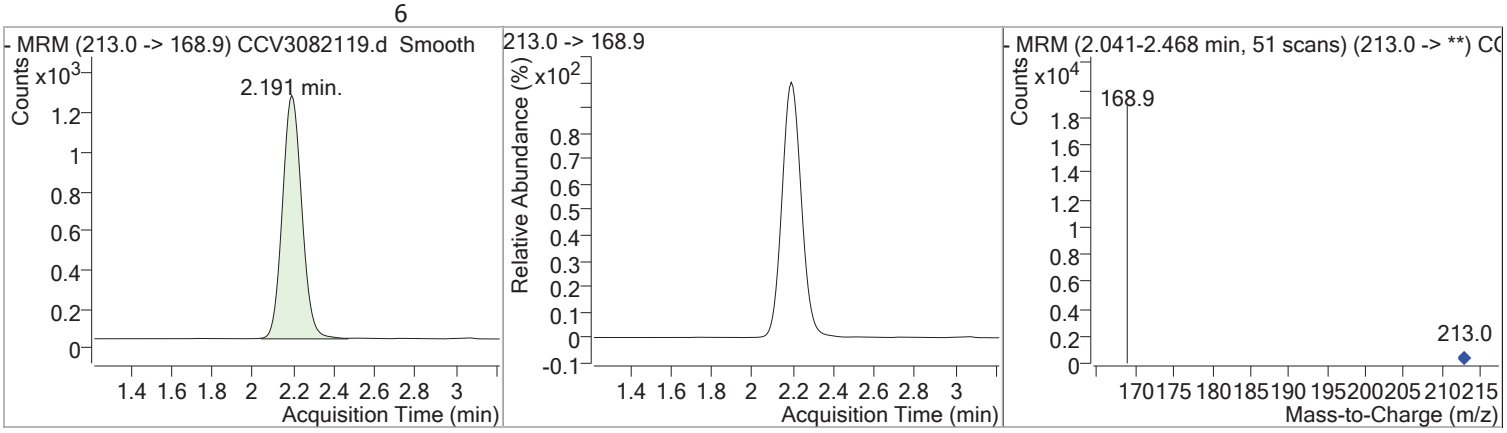
* Values outside of QC limits

Data File	CCV3082119.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 5:38:15 PM
Sample Name	CCV3082119	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	B238243.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

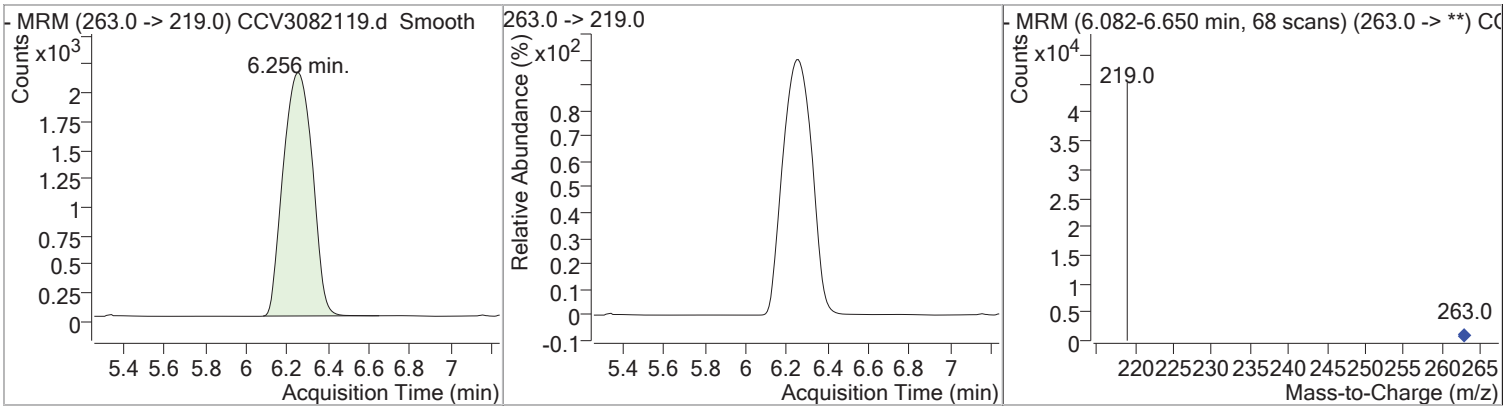
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.827	416.9 -> 371.9	15349	10000.0000	pg/ml	0.050
M PFOS C13	8.052	502.9 -> 80.0	22564	28700.0000	pg/ml	0.059
M d3-N-MeFOSAA	8.319	573.2 -> 419.0	13801	40000.0000	pg/ml	0.059
System Monitoring Compounds						
S PFHxA C13	7.113	314.9 -> 269.9	10944	9996.6073	pg/ml	0.025
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 99.97%		
S PFDA C13	8.236	514.9 -> 469.9	17230	10782.7279	pg/ml	0.059
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 107.83%		
S d5-N-MeFOSAA	8.394	589.2 -> 419.0	9347	28637.7215	pg/ml	0.059
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 71.59%		
Target Compounds						QValue
T PFBA	2.191	213.0 -> 168.9	8243	33158.8996	pg/ml	100
T PFPeA	6.256	263.0 -> 219.0	21117	41862.9764	pg/ml	100
T PFBS	6.609	298.9 -> 80.0	18370	40270.8324	pg/ml	100
T PFHxA	7.114	312.9 -> 268.9	53523	50264.3007	pg/ml	100
T PFHpA	7.533	362.9 -> 319.0	76530	48239.5832	pg/ml	100
T PFHxS-Total	7.567	398.9 -> 80.0	29138	40625.3186	pg/ml	100
T 6.2 FTS	7.818	427.0 -> 406.8	11455	61319.3084	pg/ml	100
T PFOA-Total	7.827	412.9 -> 368.9	94444	46867.1115	pg/ml	100
T PFHpS	7.834	449.0 -> 79.7	17197	45991.1844	pg/ml	100
T PFOS-Total	8.052	498.9 -> 80.0	47507	40694.9804	pg/ml	100
T PFNA	8.053	462.9 -> 418.9	67413	55144.0830	pg/ml	100
T 8.2 FTS	8.236	527.0 -> 81.0	14633	47336.2971	pg/ml	100
T PFDA	8.236	513.1 -> 469.0	110995	49213.5192	pg/ml	100
T N-MeFOSAA	8.319	570.2 -> 419.1	15693	38254.4761	pg/ml	100
T FOSA	8.355	497.9 -> 77.9	82702	31505.7179	pg/ml	100
T PFDS	8.385	599.0 -> 80.0	30115	41284.2607	pg/ml	100
T PFUnA	8.387	563.1 -> 519.0	130428	50203.3954	pg/ml	100
T N-EtFOSAA	8.394	584.2 -> 419.0	11954	35271.0556	pg/ml	100
T PFDoA	8.536	613.1 -> 569.0	186994	51396.0985	pg/ml	100
T PFTrDA	8.696	663.1 -> 619.0	215859	52016.3997	pg/ml	100
T PFTA	8.872	713.1 -> 669.1	177336	50946.6751	pg/ml	100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

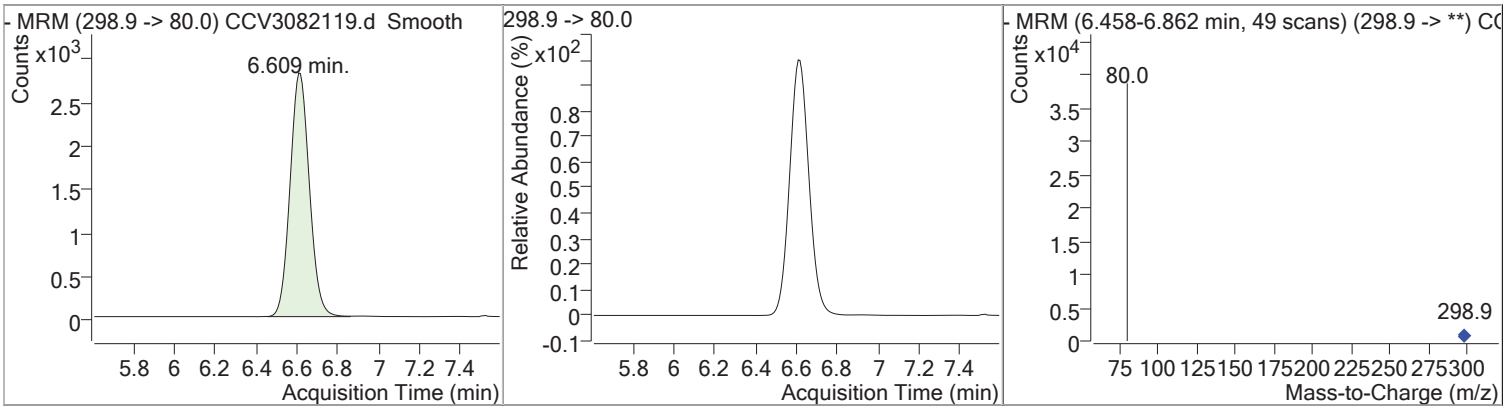
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	33158.8996	2.19	-0.03	8243				



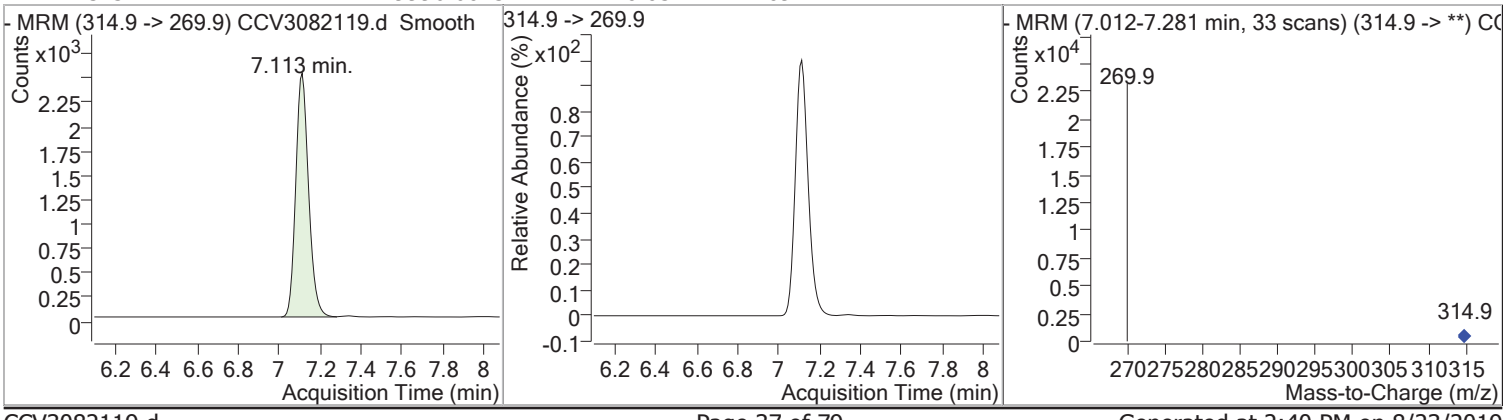
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	41862.9764	6.26	0.01	21117				



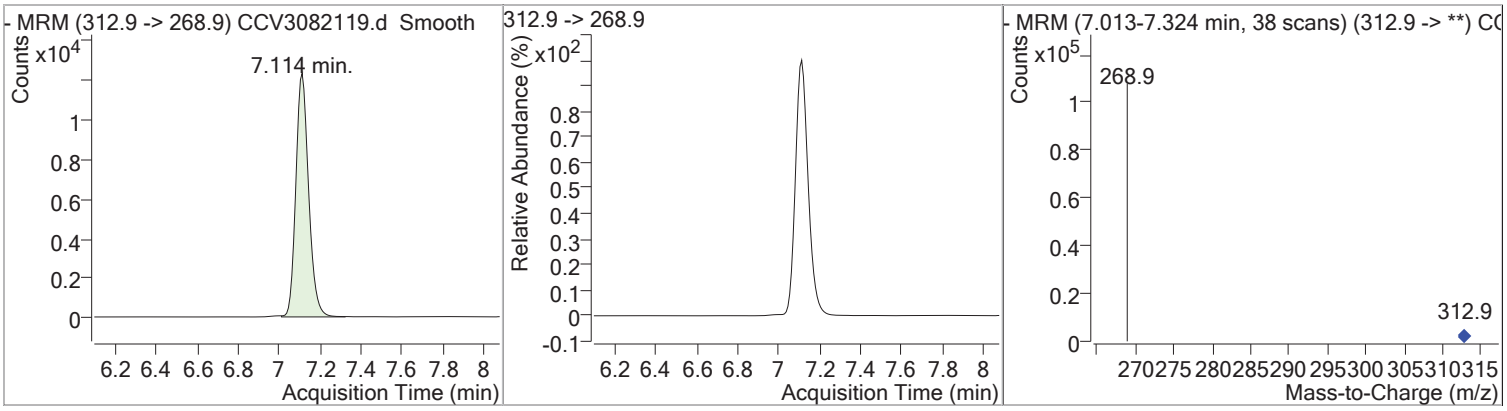
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	40270.8324	6.61	0.01	18370				



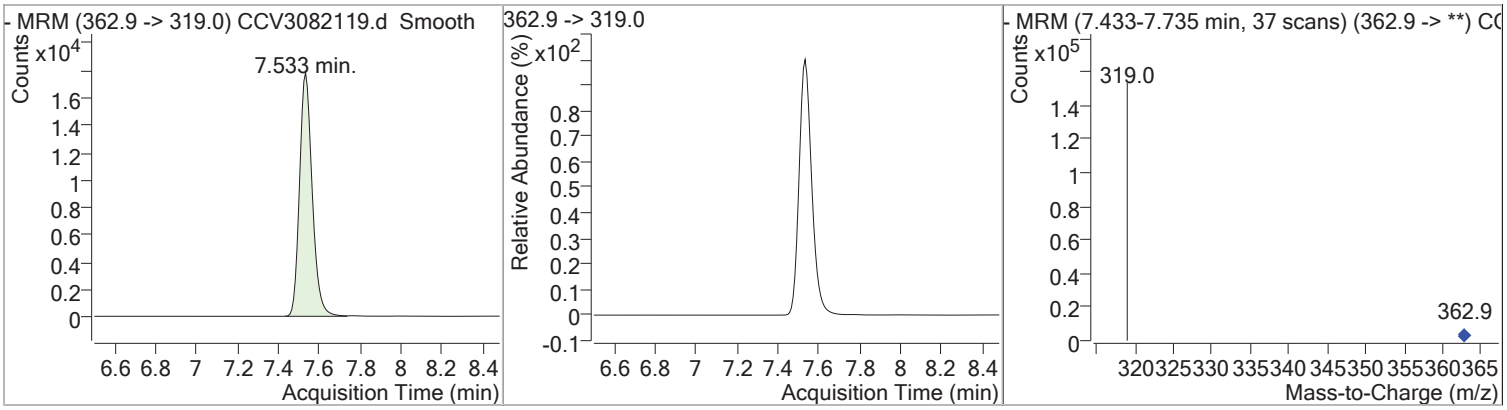
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	9996.6073	7.11	0.03	10944				



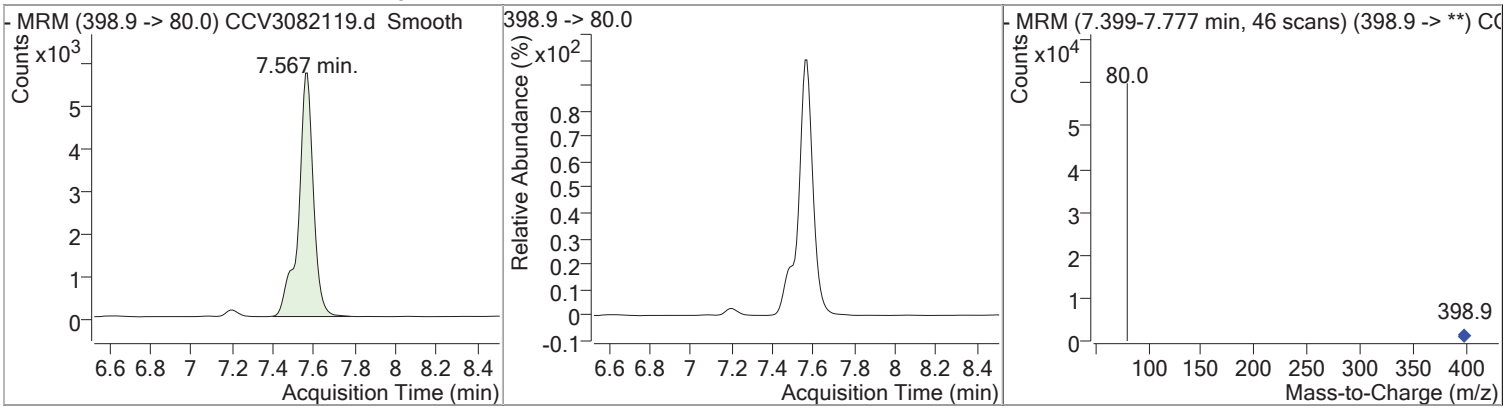
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	50264.3007	7.11	0.03	53523				



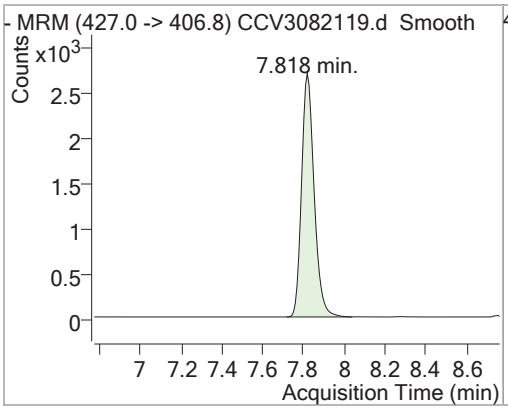
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	48239.5832	7.53	0.04	76530				

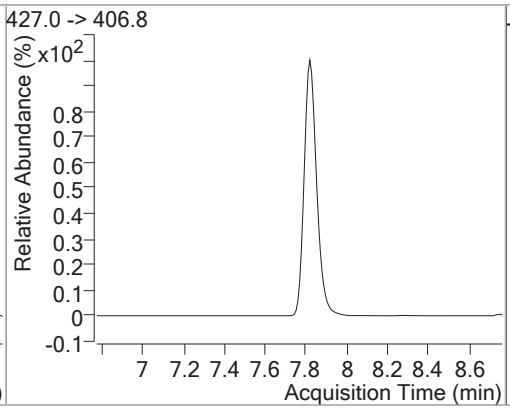


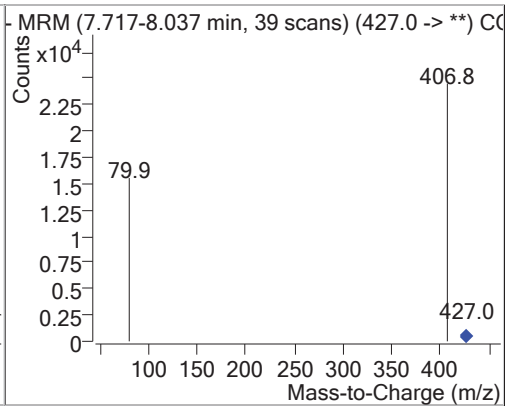
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	40625.3186	7.57	0.05	29138				



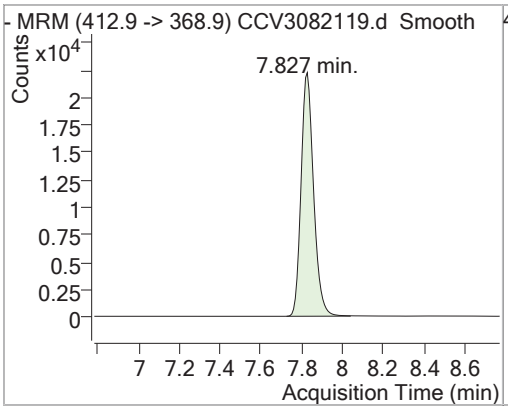
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	61319.3084	7.82	0.05	11455				

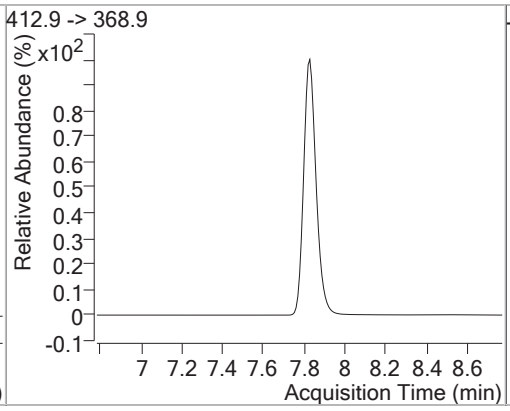


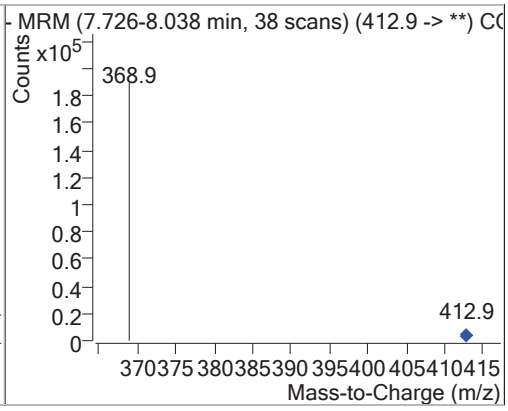




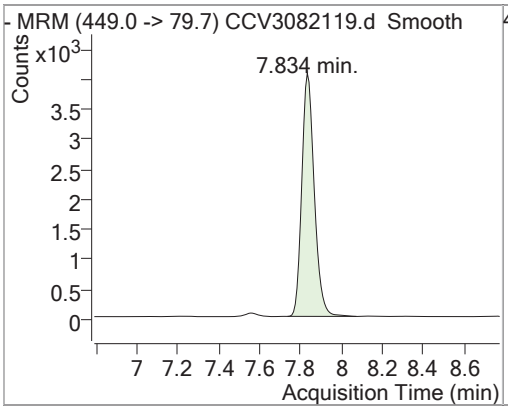
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	46867.1115	7.83	0.05	94444				

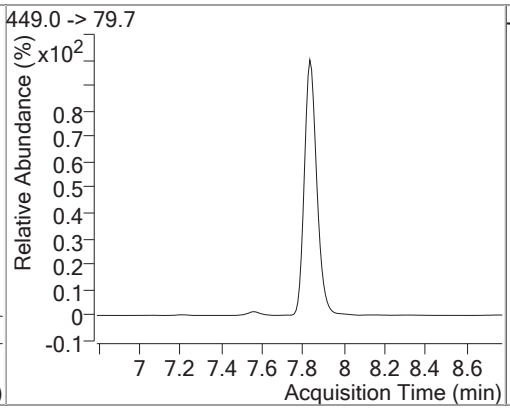


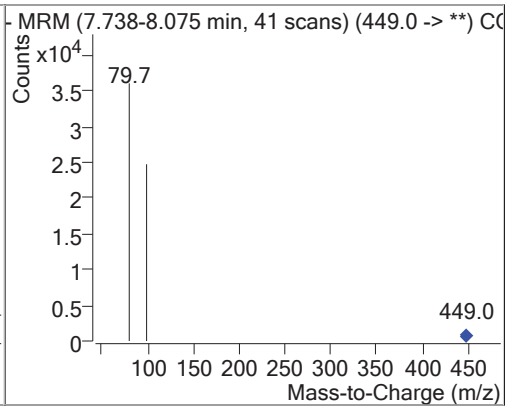




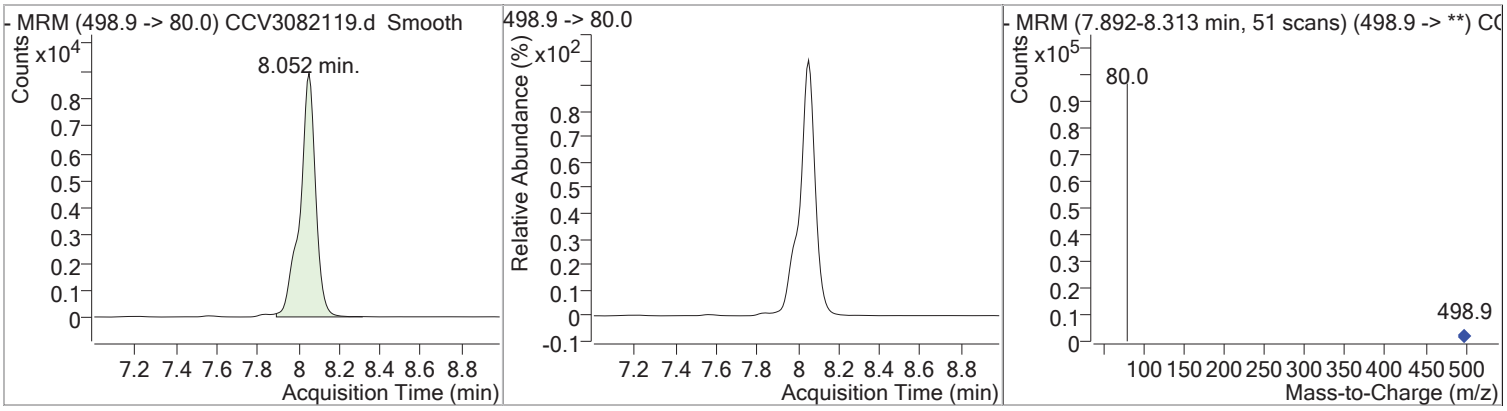
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	45991.1844	7.83	0.05	17197				



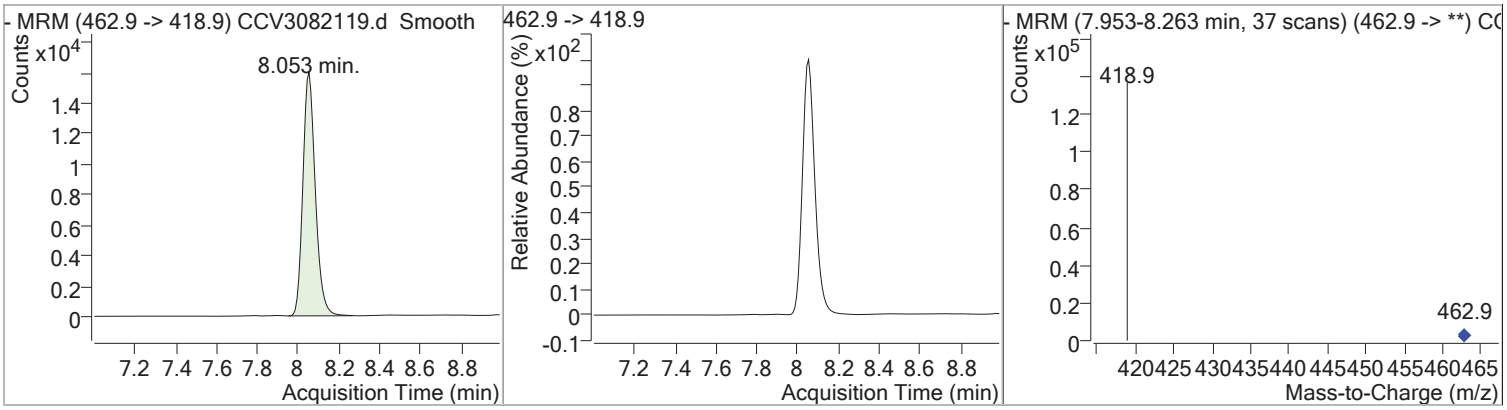




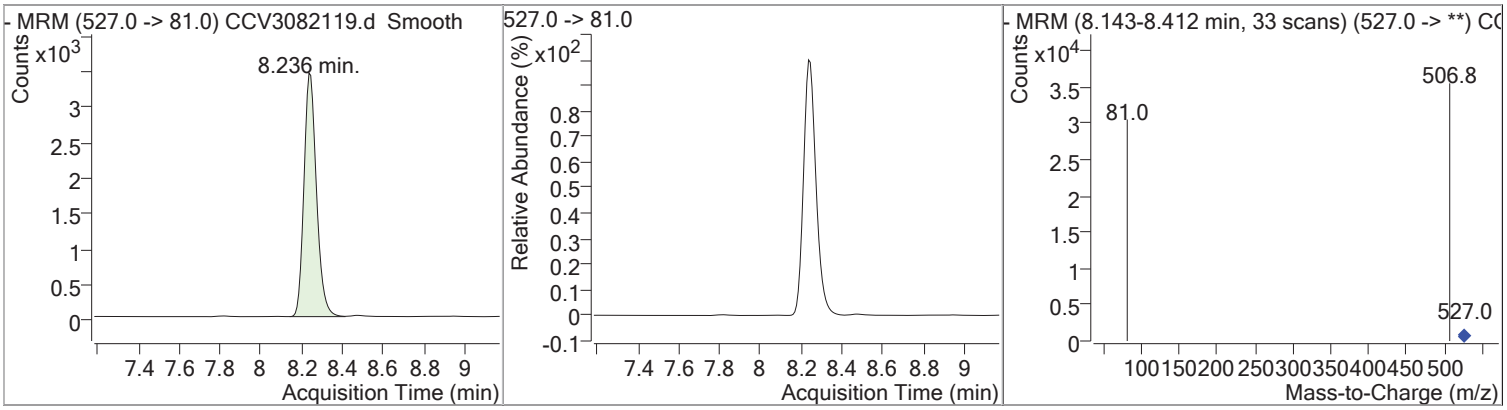
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	40694.9804	8.05	0.06	47507				



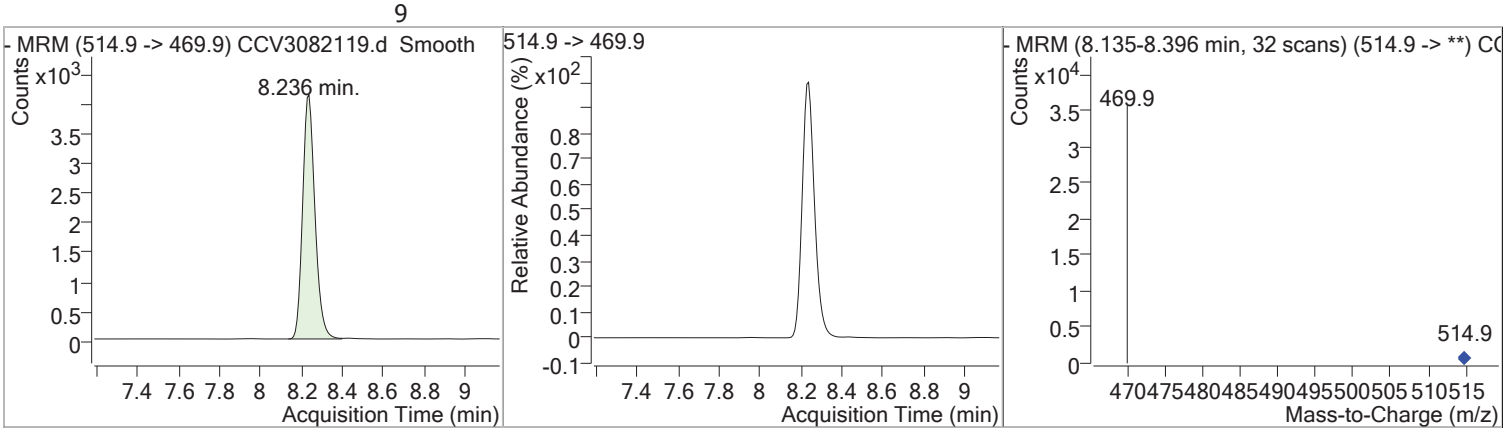
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	55144.0830	8.05	0.06	67413				



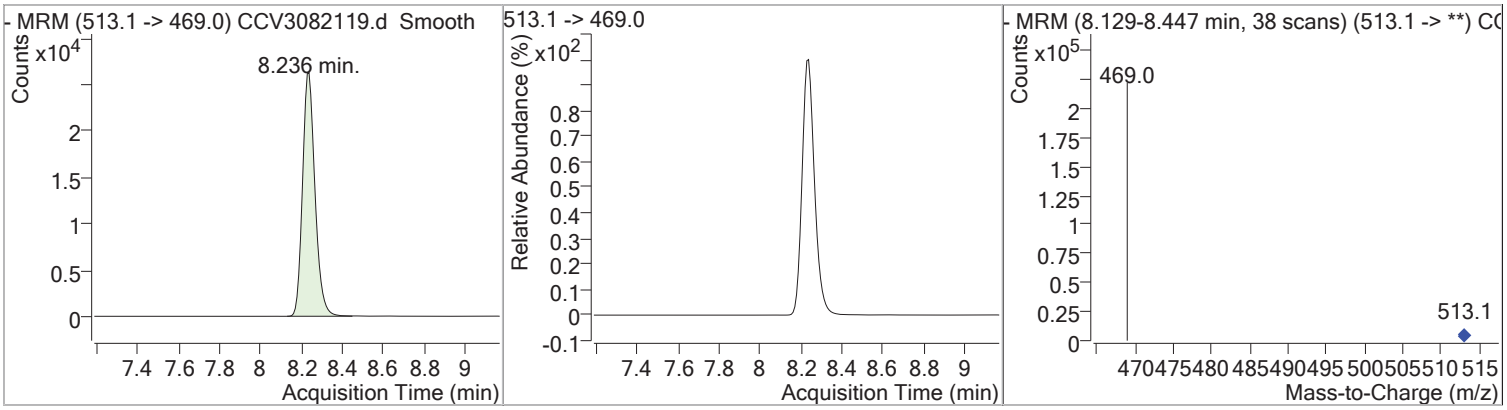
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	47336.2971	8.24	0.06	14633				



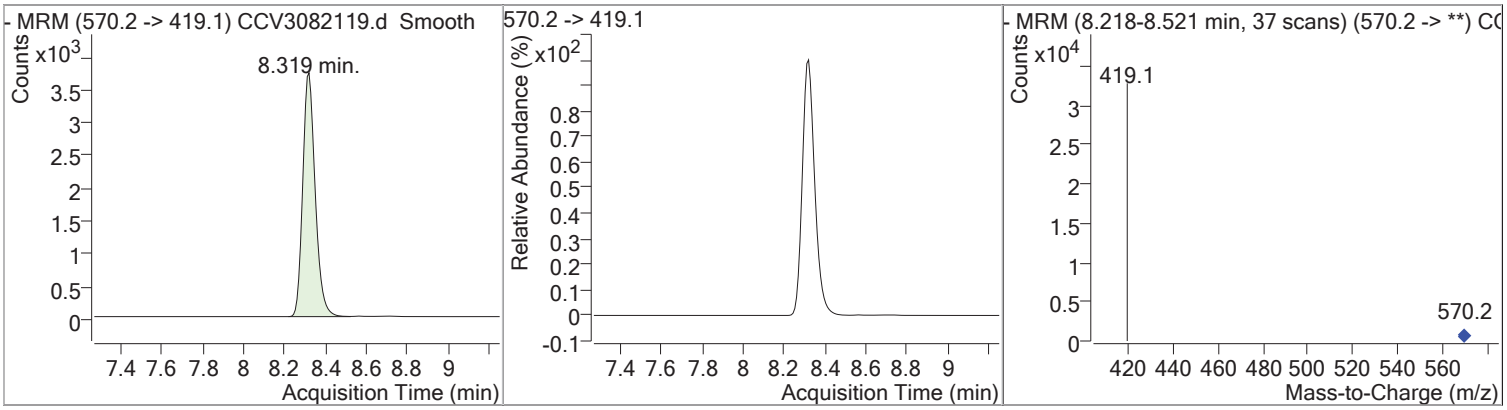
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	10782.7279	8.24	0.06	17230				



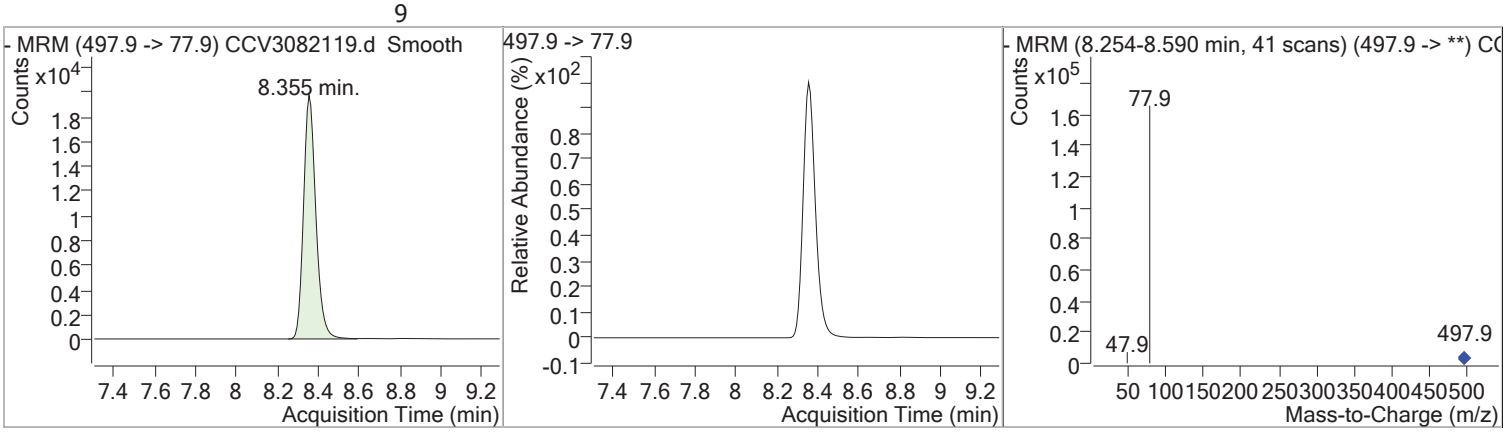
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	49213.5192	8.24	0.06	110995				



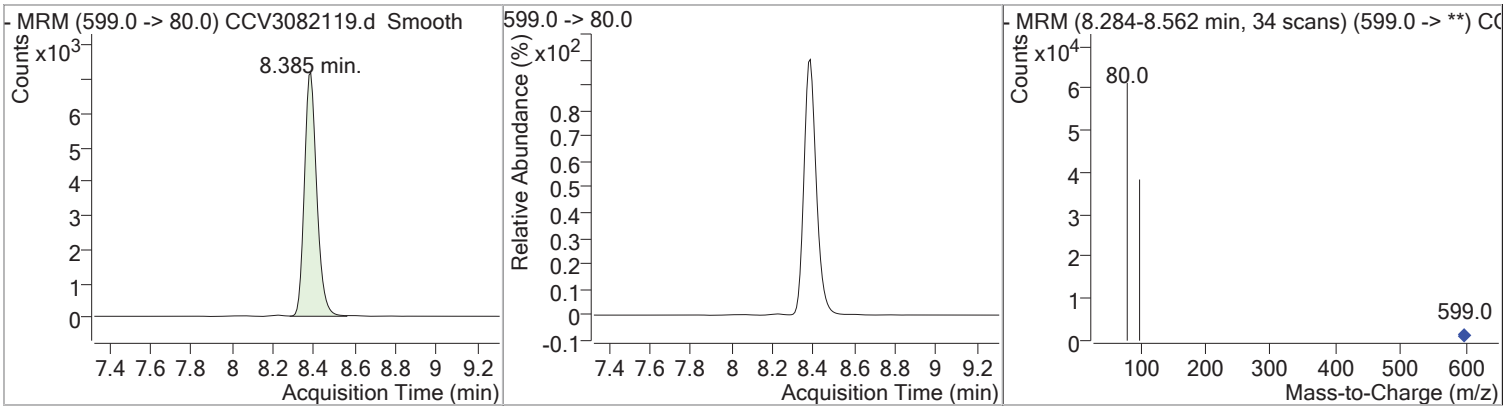
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	38254.4761	8.32	0.06	15693				



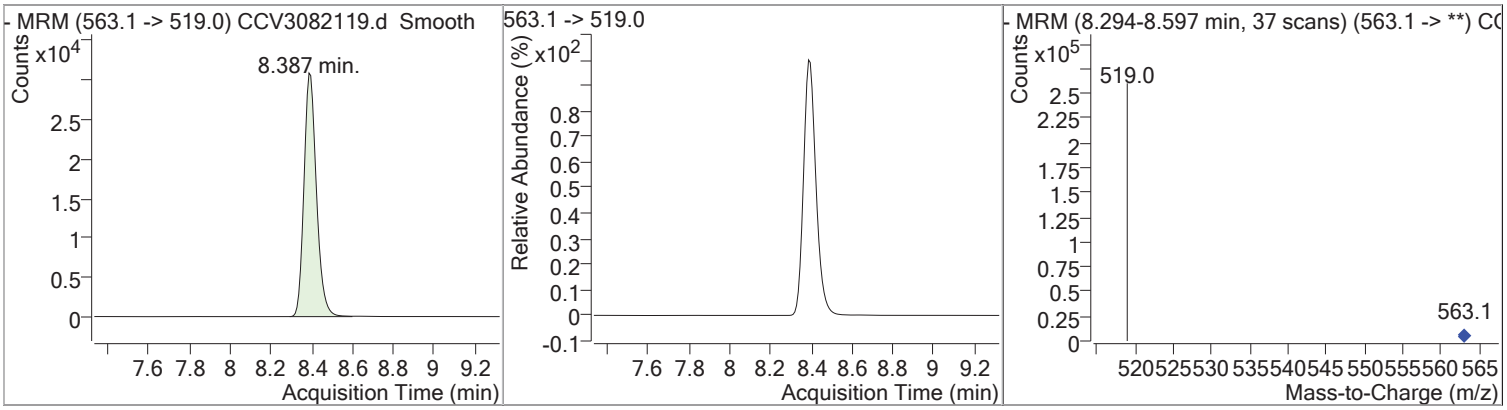
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	31505.7179	8.35	0.06	82702				



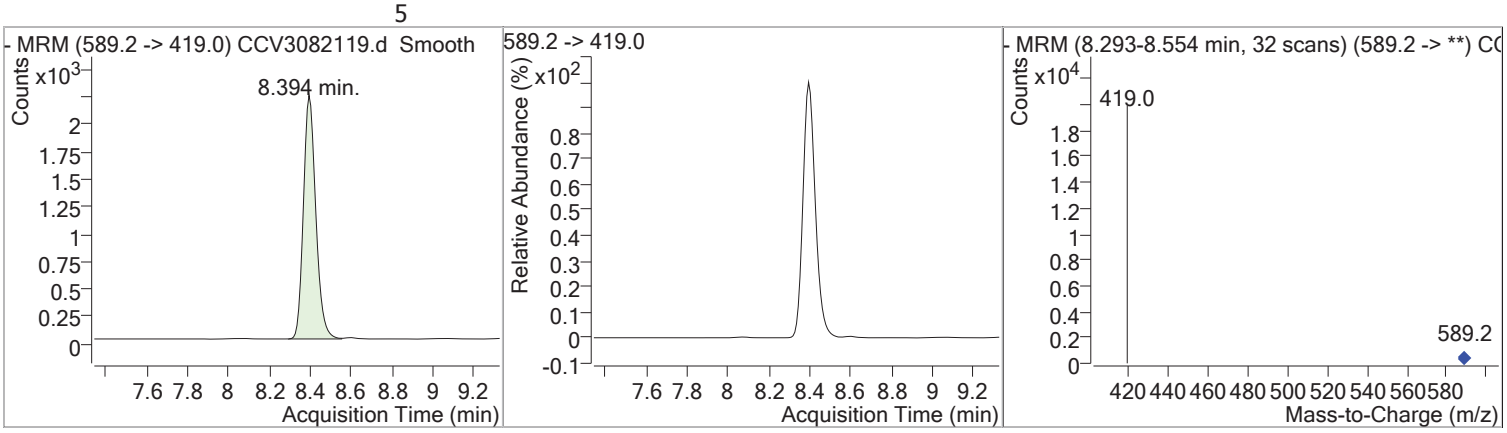
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	41284.2607	8.39	0.07	30115				



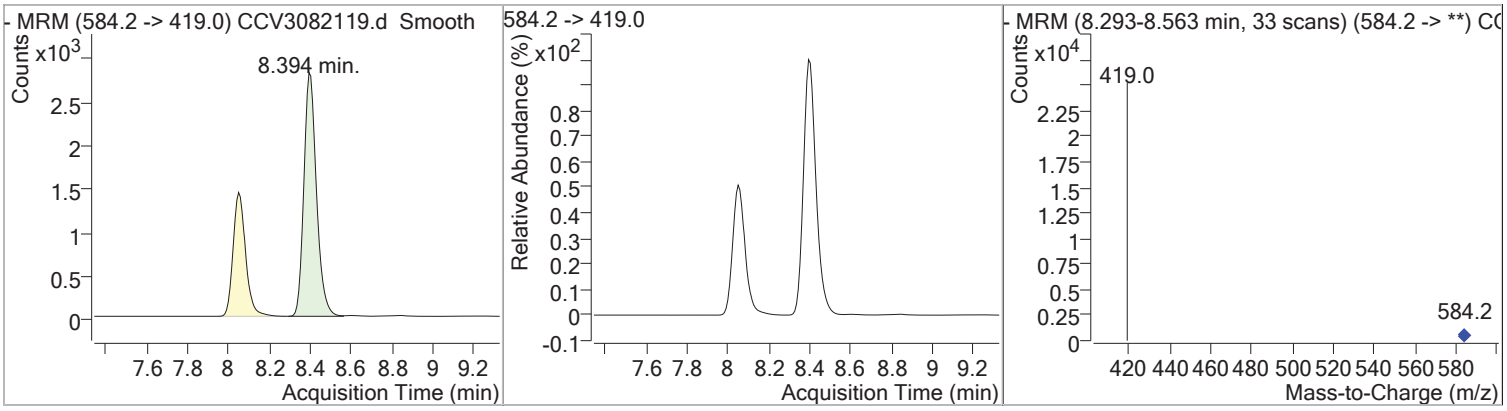
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	50203.3954	8.39	0.06	130428				



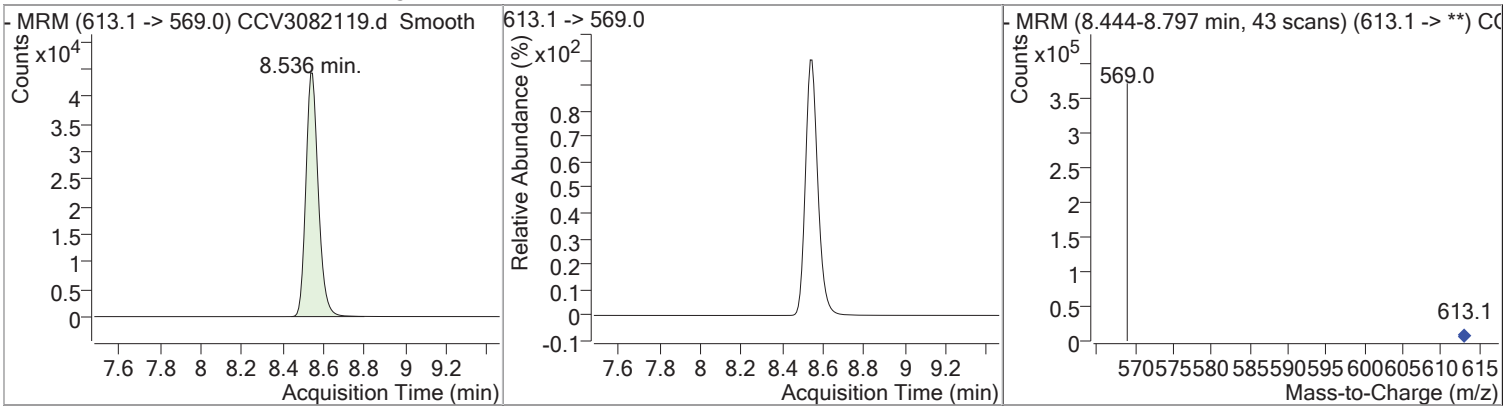
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	28637.7215	8.39	0.06	9347				



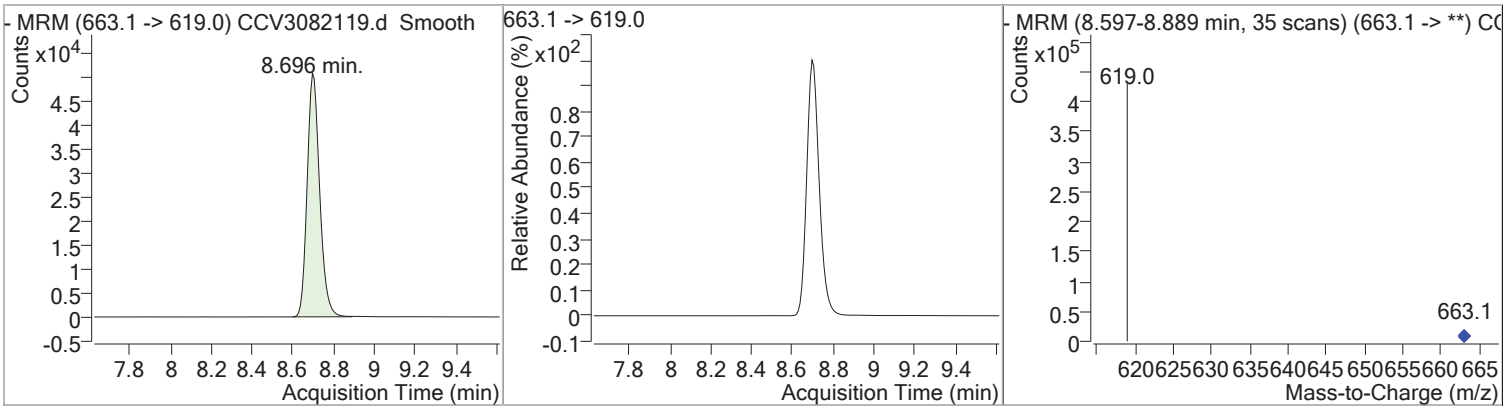
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	35271.0556	8.39	0.06	11954				



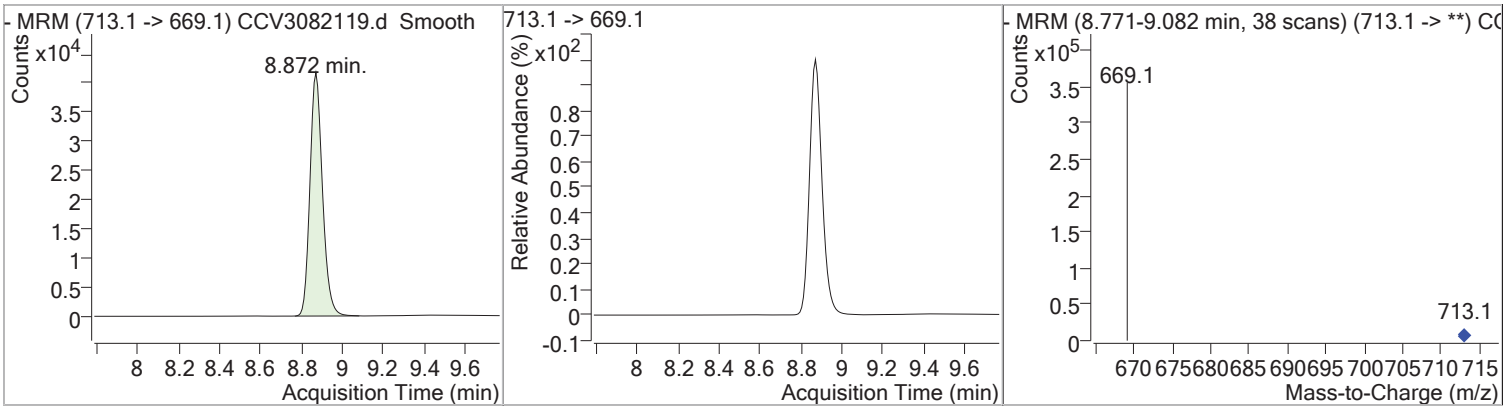
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	51396.0985	8.54	0.07	186994				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	52016.3997	8.70	0.08	215859				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	50946.6751	8.87	0.09	177336				



CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV4082119.d	Calibration Date:	08/14/19 14:37
Sequence:	S039480	Injection Date:	08/21/19
Lab Sample ID:	S039480-CCV4	Injection Time:	21:00

		CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Perfluorobutanoic acid (PFBA)	A	500	376	0.1543906	0.1218642		-24.8	
Perfluorobutanesulfonic acid (PFBS)	A	442	515	0.5510923	0.6765637		16.6	
Perfluoropentanoic acid (PFPeA)	A	500	317	0.3040697	0.2086306		-36.5	
Perfluorohexanoic acid (PFHxA)	A	500	514	0.6714809	0.7129493		2.8	
Perfluorohexanesulfonic acid (PFHxS)	A	455	622	0.8347983	1.247869		36.8	
Perfluoroheptanoic acid (PFHpA)	A	500	403	1.053666	0.8337273		-19.3	
Perfluoroheptanesulfonic acid (PFHpS)	A	475	387	0.5117502	0.3877315		-18.5	
Perfluorooctanoic acid (PFOA)	A	500	422	1.330641	1.107853		-15.6	
Perfluorooctanesulfonic acid (PFOS)	A	462	486	1.438054	1.560407		5.1	
Perfluorooctanesulfonamide (FOSA)	A	500	260	7.121342	3.956786		-48.0	
6:2 Fluorotelomersulfonate (6:2 FTS A)	A	475	791	0.2337119	0.3957242		66.5	
Perfluorononanoic acid (PFNA)	A	500	690	0.842486	1.098577		37.9	
Perfluorodecanoic acid (PFDA)	A	500	575	1.468554	1.69094		15.1	
Perfluorodecanesulfonic acid (PFDS)	A	482	560	0.9068341	1.077687		16.2	
N-EtFOSAA	A	500	495	0.9910125	0.9724411		-1.0	
8:2 Fluorotelomersulfonate (8:2 FTS A)	A	480	510	0.3729975	0.4181119		6.3	
Perfluoroundecanoic acid (PFUnA)	A	500	469	1.739723	1.587698		-6.2	
N-MeFOSAA	A	500	275	1.146938	0.6536726		-45.0	
Perfluorododecanoic acid (PFDoA)	A	500	530	2.235401	2.512607		6.0	
Perfluorotridecanoic acid (PFTrDA)	A	500	554	2.580637	2.996452		10.8	
Perfluorotetradecanoic acid (PFTA)	A	500	345	2.262719	1.566658		-30.9	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV4082119.d	Calibration Date:	08/14/19 14:37
Sequence:	S039480	Injection Date:	08/21/19
Lab Sample ID:	S039480-CCV4	Injection Time:	21:00

		CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
13C-PFHxA	A	10000	8010	0.6955487	0.5715302		-19.9	
13C-PFDA	A	10000	11100	1.05667	1.150715		10.5	
d5-NEtFOSAA	A	40000	34600	0.8657046	0.8176016		-13.6	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

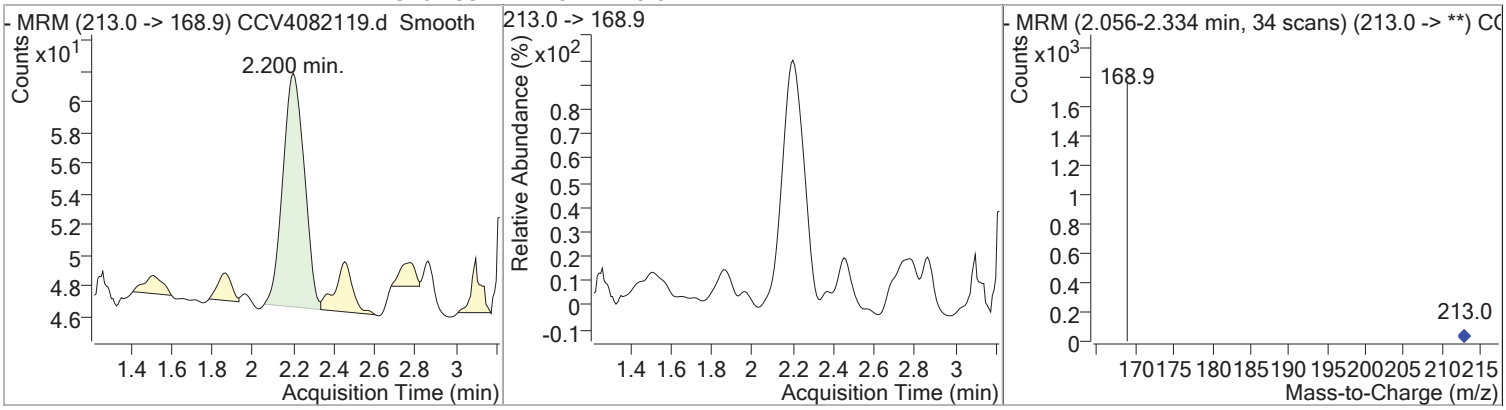
* Values outside of QC limits

Data File	CCV4082119.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 9:00:19 PM
Sample Name	CCV4082119	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	B238243.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

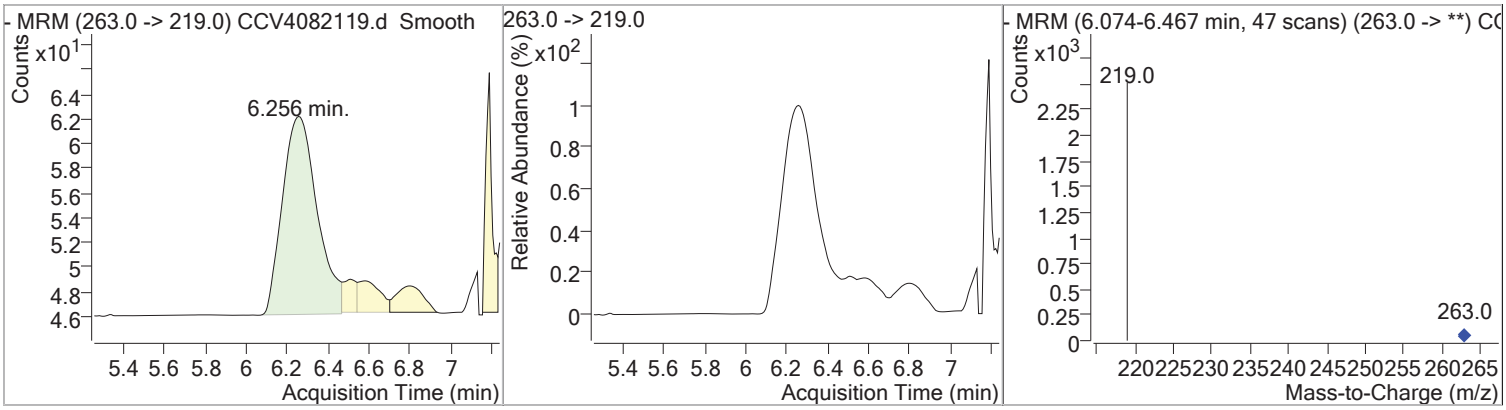
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.827	416.9 -> 371.9	18247	10000.0000	pg/ml		0.050
M PFOS C13	8.052	502.9 -> 80.0	22911	28700.0000	pg/ml		0.059
M d3-N-MeFOSAA	8.311	573.2 -> 419.0	14289	40000.0000	pg/ml		0.050
System Monitoring Compounds							
S PFHxA C13	7.130	314.9 -> 269.9	10429	8012.9055	pg/ml		0.042
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 80.13%			
S PFDA C13	8.228	514.9 -> 469.9	20997	11053.0220	pg/ml		0.050
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 110.53%			
S d5-N-MeFOSAA	8.386	589.2 -> 419.0	11683	34571.6623	pg/ml		0.050
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 86.43%			
Target Compounds							QValue
T PFBA	2.200	213.0 -> 168.9	111	376.2357	pg/ml		100
T PFPeA	6.256	263.0 -> 219.0	190	317.4095	pg/ml		100
T PFBS	6.634	298.9 -> 80.0	239	515.3924	pg/ml		100
T PFHxA	7.122	312.9 -> 268.9	650	513.8333	pg/ml		100
T PFHpA	7.542	362.9 -> 319.0	761	403.3121	pg/ml		100
T PFHxS-Total	7.575	398.9 -> 80.0	453	622.3580	pg/ml		100
T 6.2 FTS	7.818	427.0 -> 406.8	150	791.0494	pg/ml		100
T PFOA-Total	7.827	412.9 -> 368.9	1011	421.9127	pg/ml		100
T PFHpS	7.843	449.0 -> 79.7	147	387.2414	pg/ml		100
T PFOS-Total	8.052	498.9 -> 80.0	576	485.5010	pg/ml		100
T PFNA	8.053	462.9 -> 418.9	1002	689.6609	pg/ml		100
T 8.2 FTS	8.244	527.0 -> 81.0	160	510.4062	pg/ml		100
T PFDA	8.228	513.1 -> 469.0	1543	575.3822	pg/ml		100
T N-MeFOSAA	8.311	570.2 -> 419.1	117	274.8785	pg/ml		100
T FOSA	8.355	497.9 -> 77.9	707	260.0281	pg/ml		100
T PFDS	8.377	599.0 -> 80.0	415	559.8455	pg/ml		100
T PFUnA	8.387	563.1 -> 519.0	1449	469.0052	pg/ml		100
T N-EtFOSAA	8.394	584.2 -> 419.0	174	494.9451	pg/ml		100
T PFDoA	8.536	613.1 -> 569.0	2292	529.9995	pg/ml		100
T PFTrDA	8.696	663.1 -> 619.0	2734	554.1488	pg/ml		100
T PFTA	8.864	713.1 -> 669.1	1429	345.4158	pg/ml	m	100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

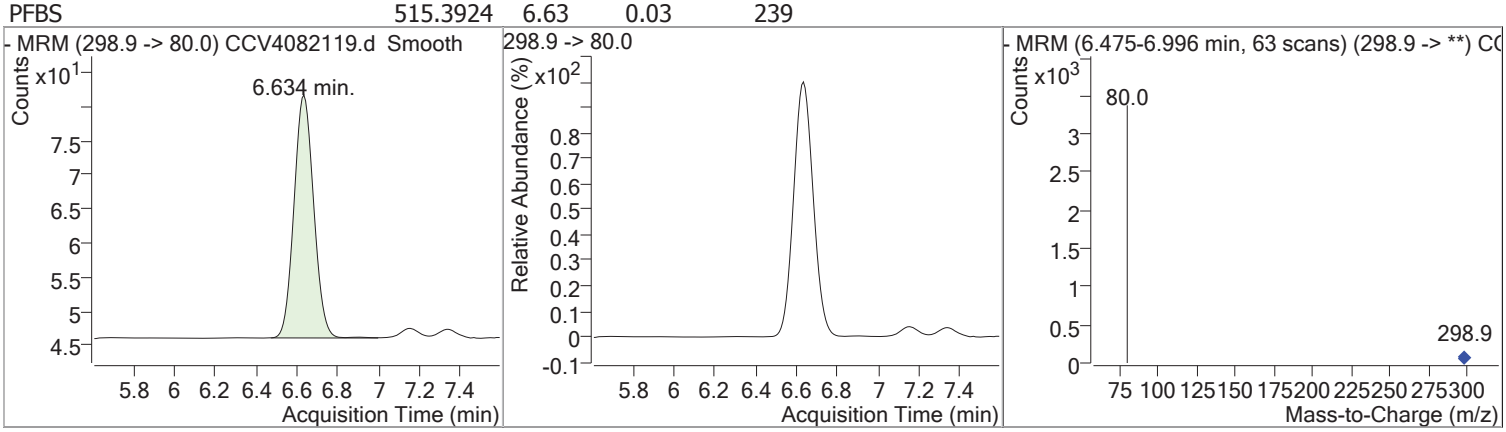
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	376.2357	2.20	-0.02	111				



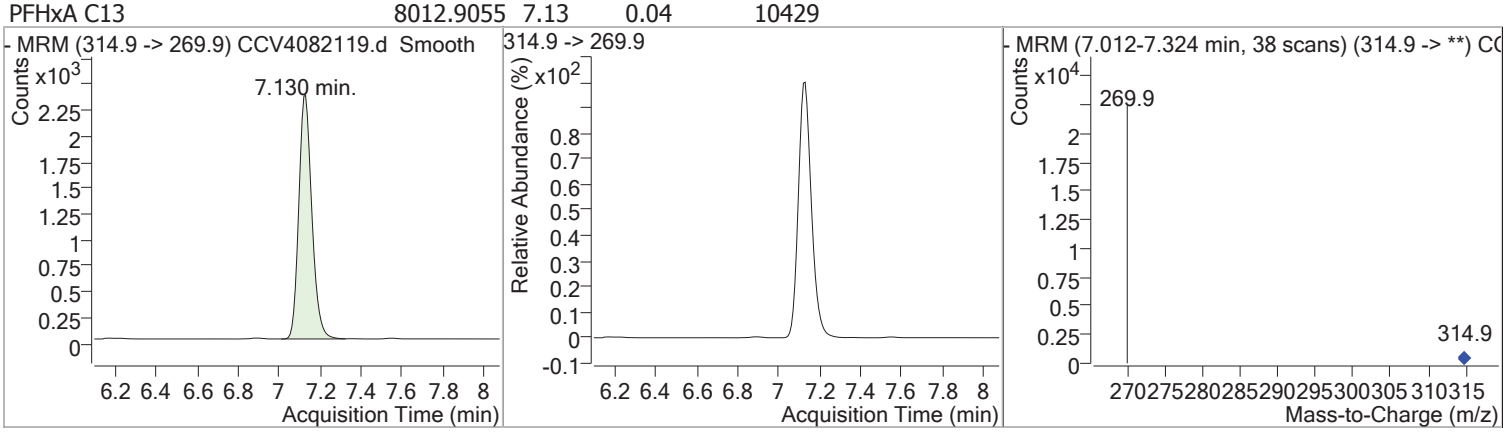
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	317.4095	6.26	0.01	190				



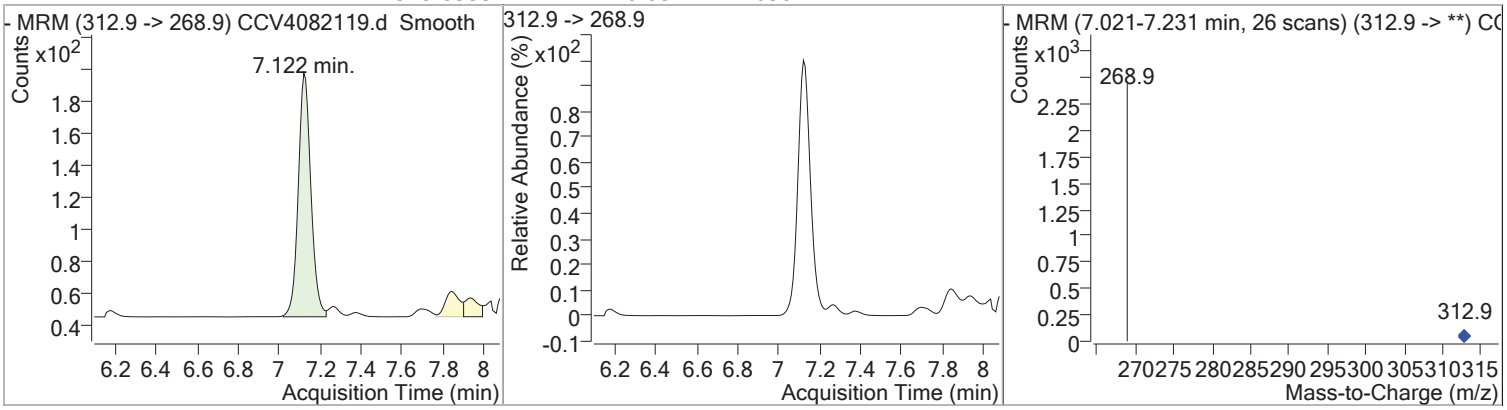
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	515.3924	6.63	0.03	239				



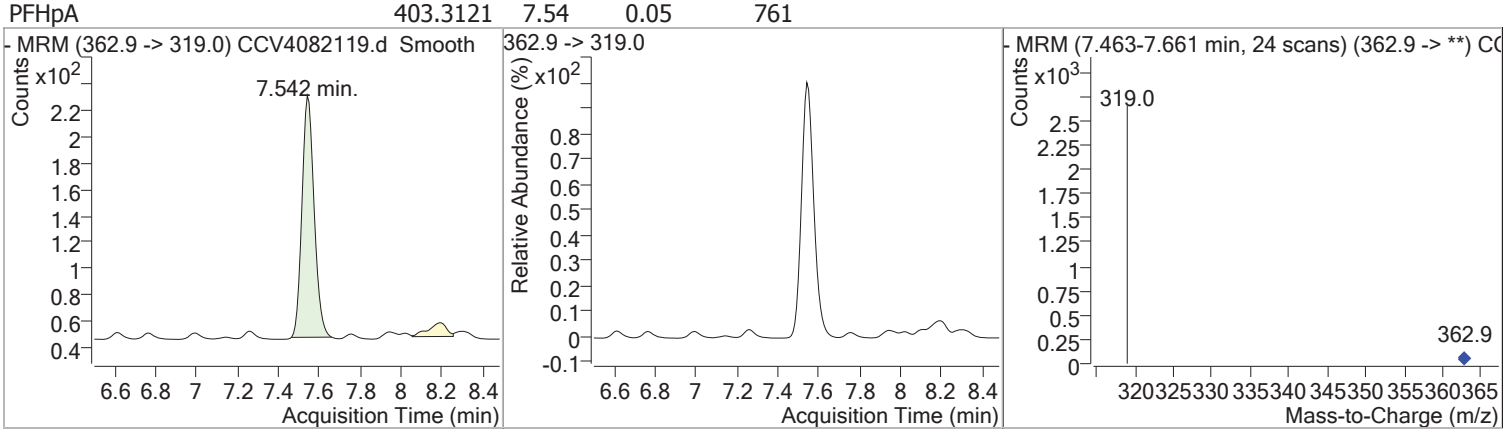
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	8012.9055	7.13	0.04	10429				



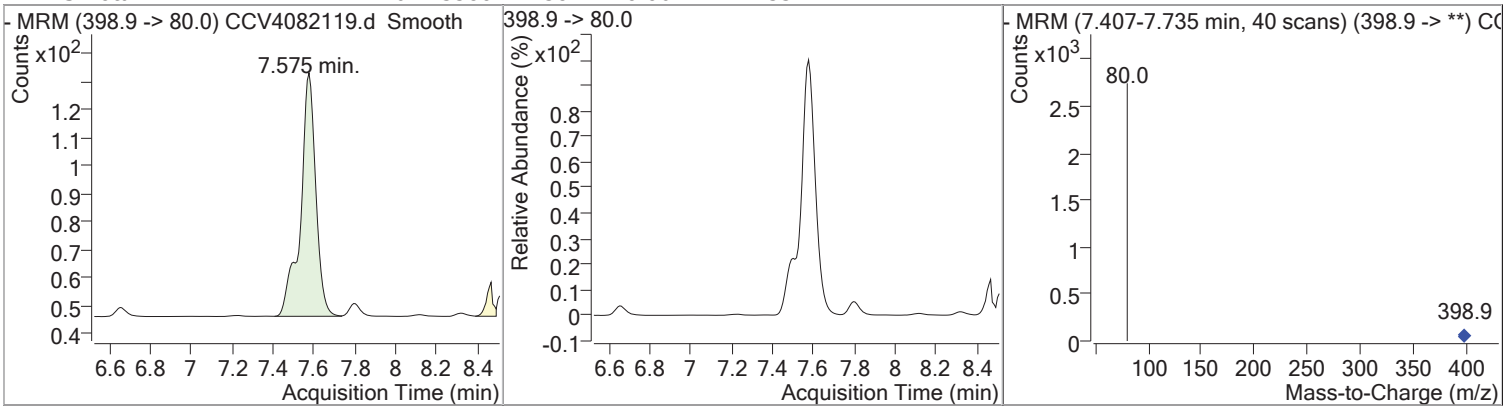
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	513.8333	7.12	0.03	650				



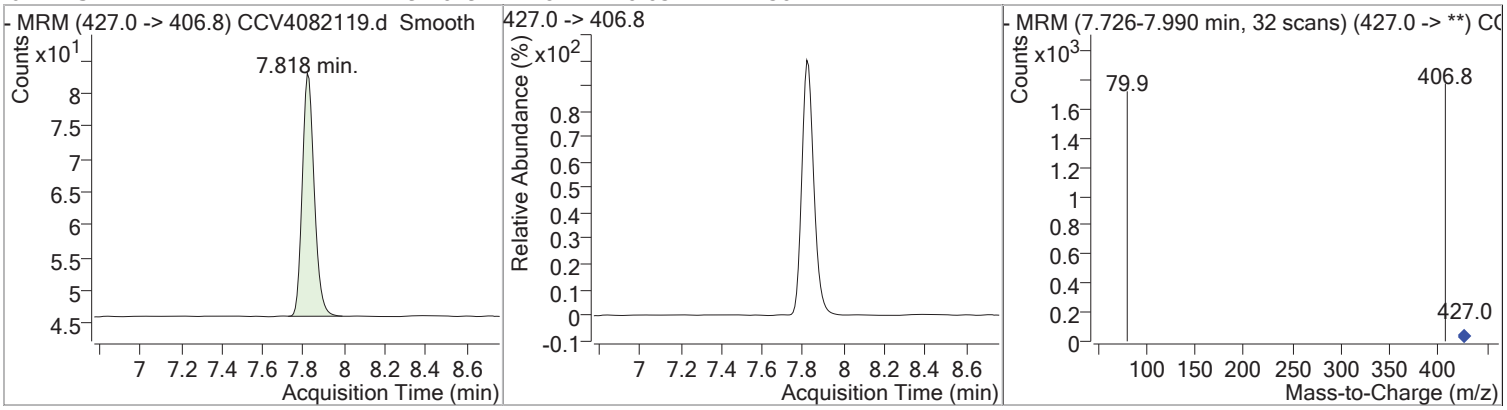
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	403.3121	7.54	0.05	761				



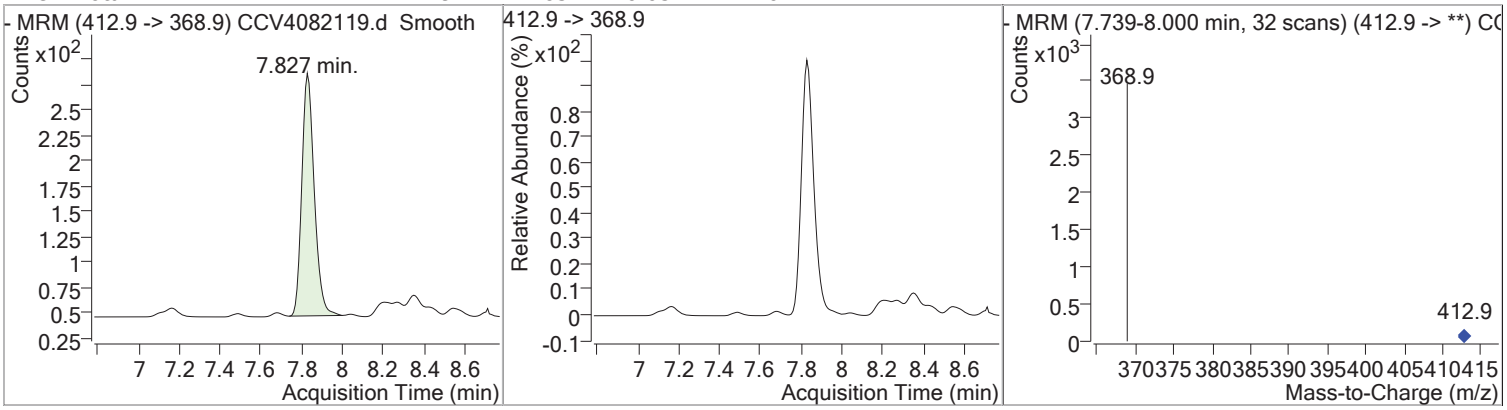
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	622.3580	7.58	0.06	453				



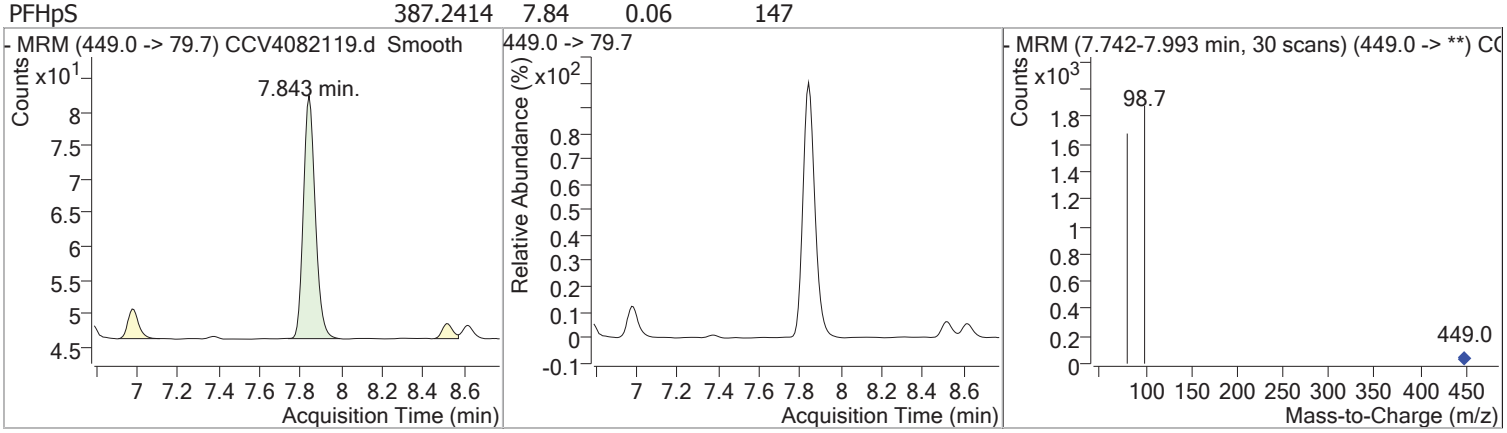
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	791.0494	7.82	0.05	150				



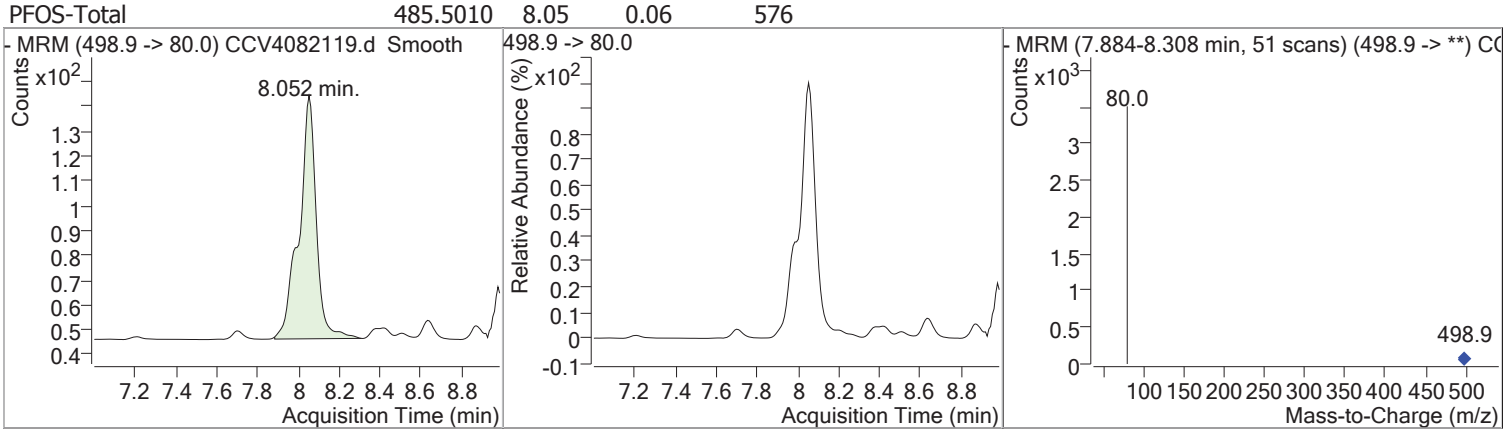
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	421.9127	7.83	0.05	1011				



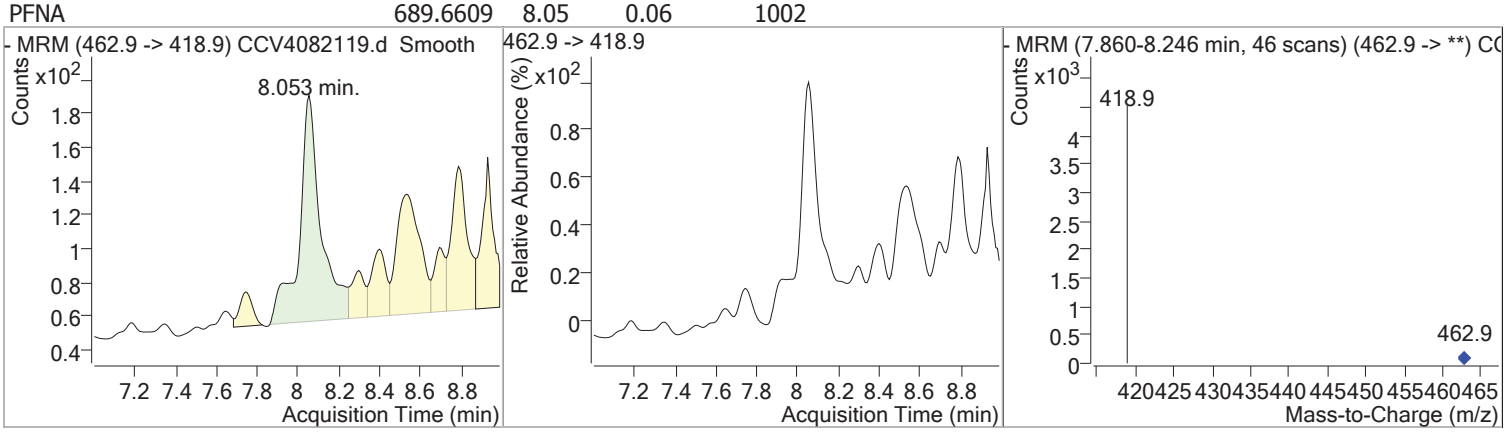
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	387.2414	7.84	0.06	147				



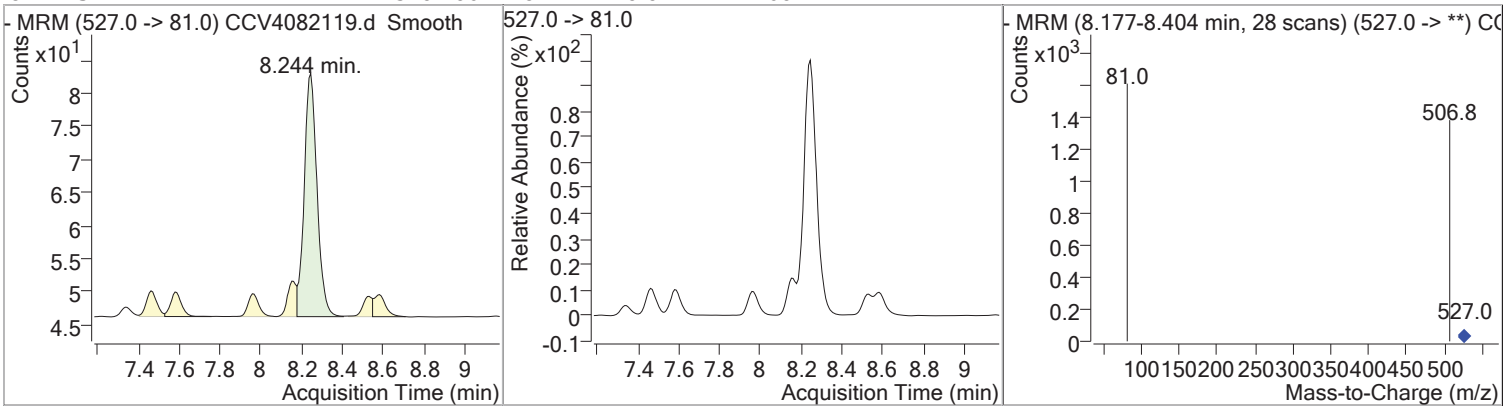
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	485.5010	8.05	0.06	576				



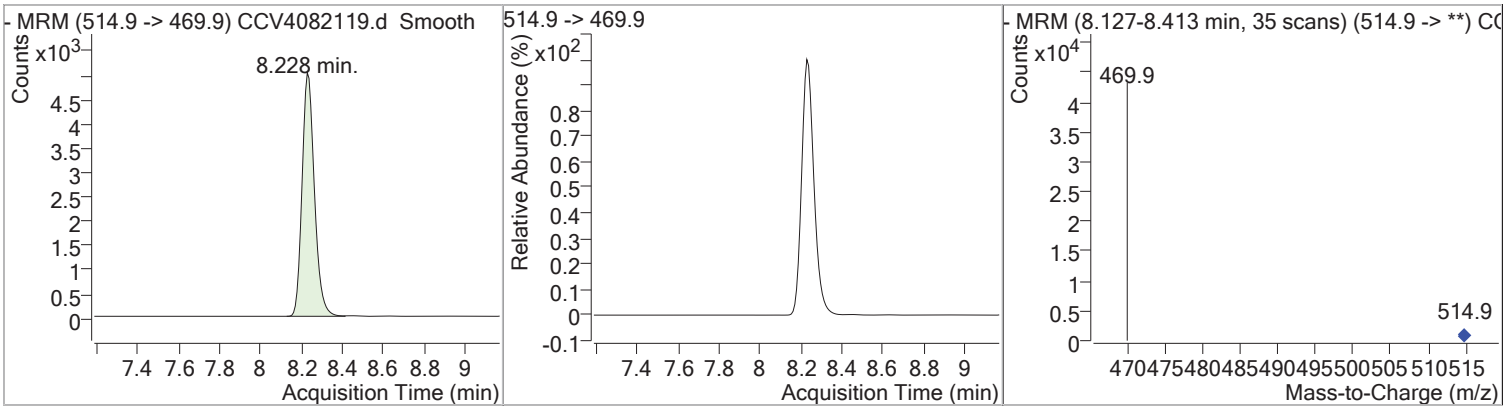
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	689.6609	8.05	0.06	1002				



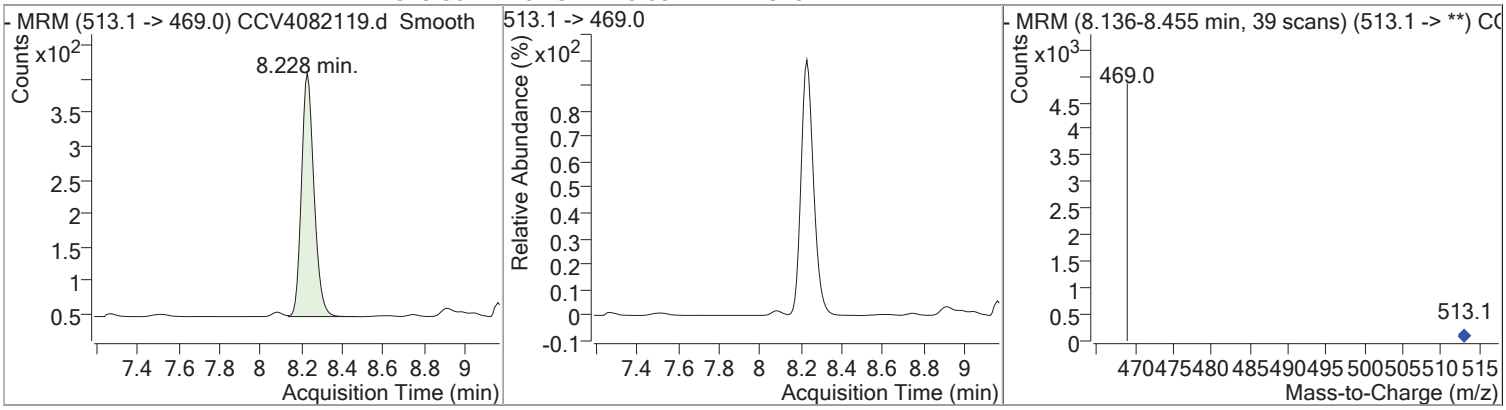
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	510.4062	8.24	0.07	160				



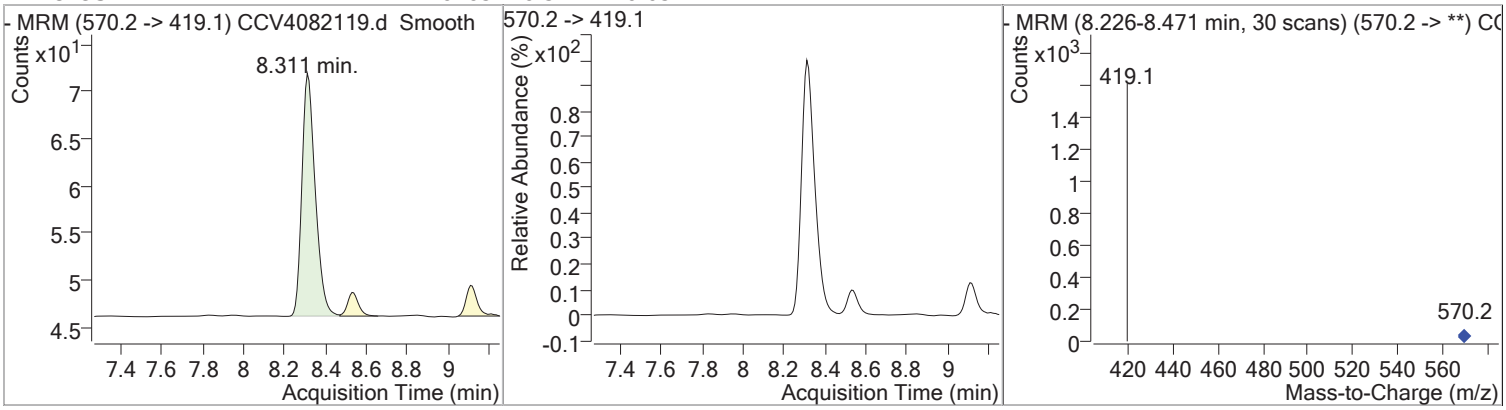
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	11053.0220	8.23	0.05	20997				



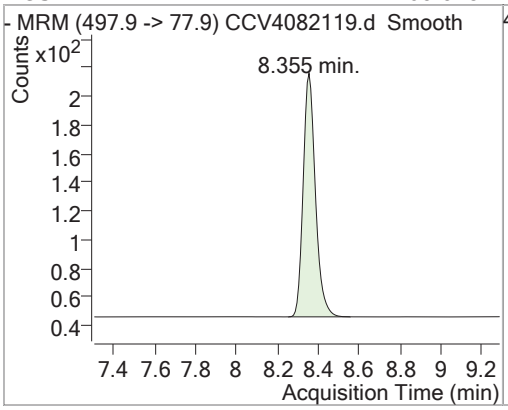
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	575.3822	8.23	0.05	1543				

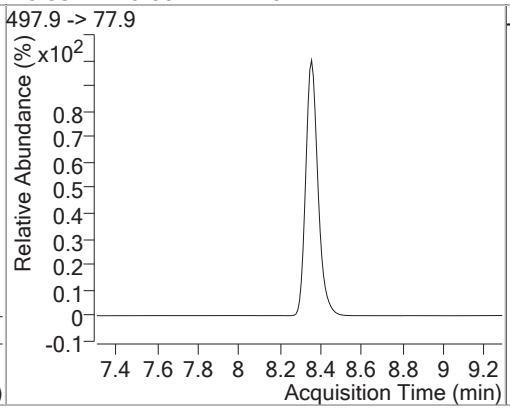


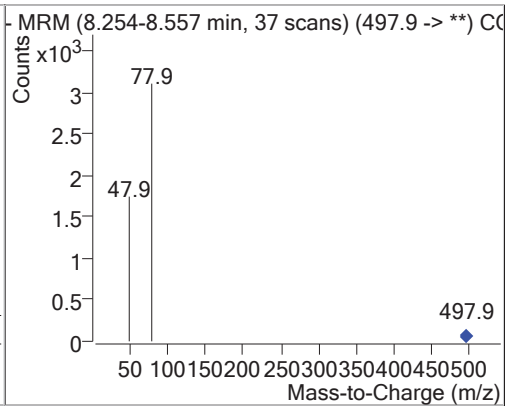
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	274.8785	8.31	0.05	117				



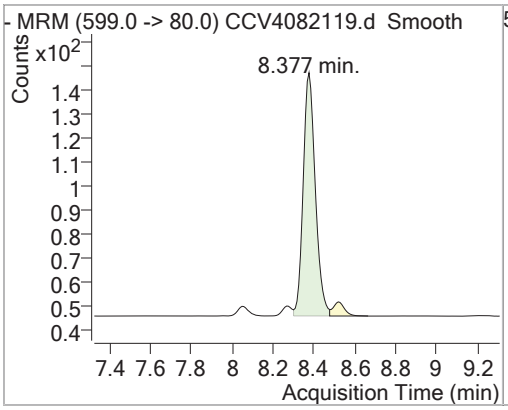
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	260.0281	8.35	0.06	707				

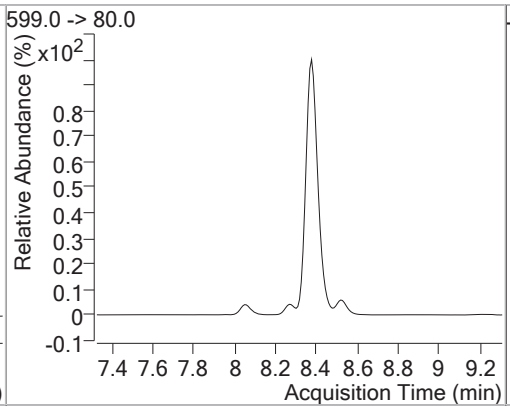


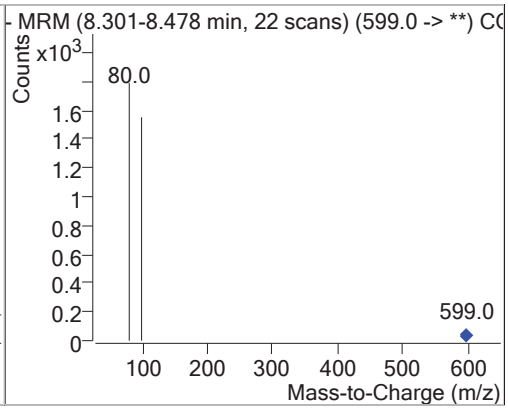




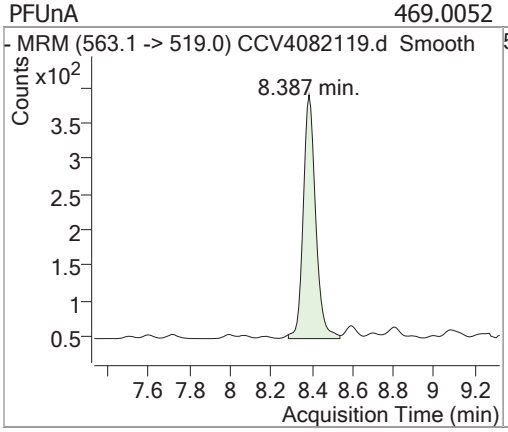
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	559.8455	8.38	0.06	415				

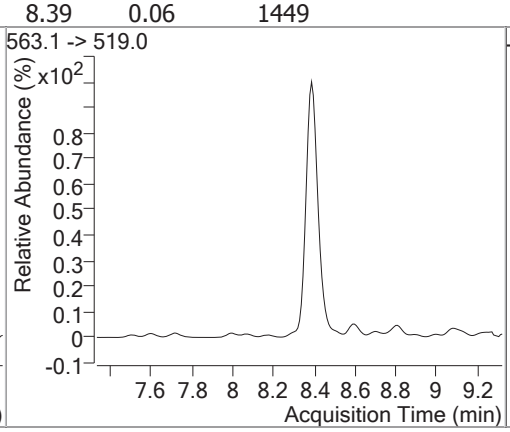


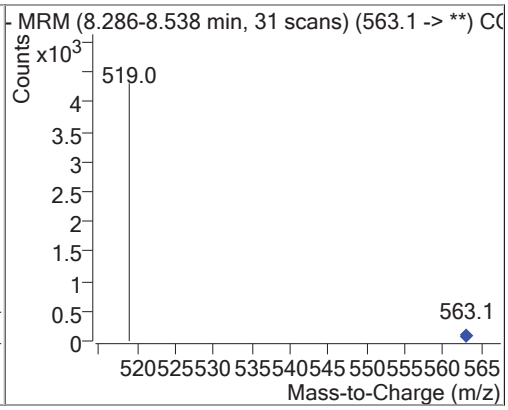




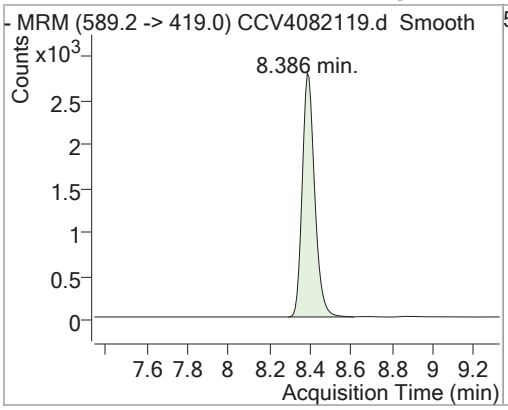
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	469.0052	8.39	0.06	1449				

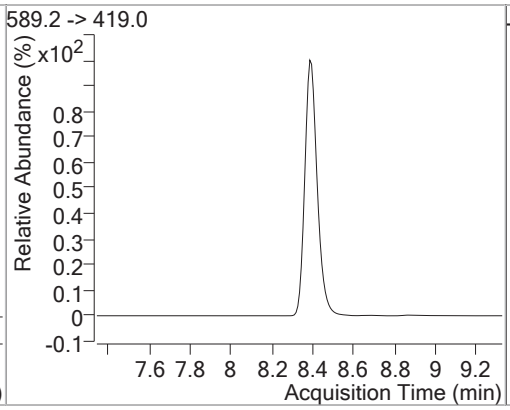


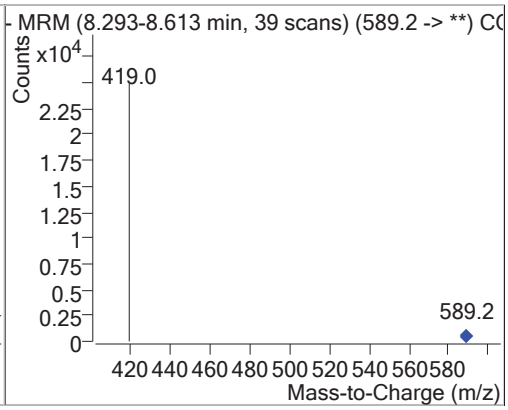




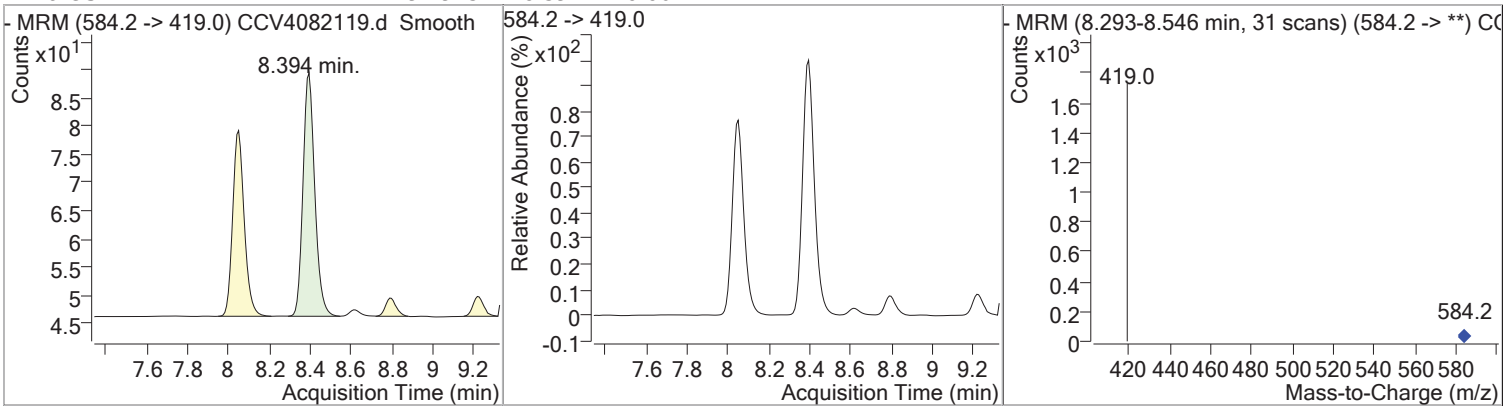
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	34571.6623	8.39	0.05	11683				



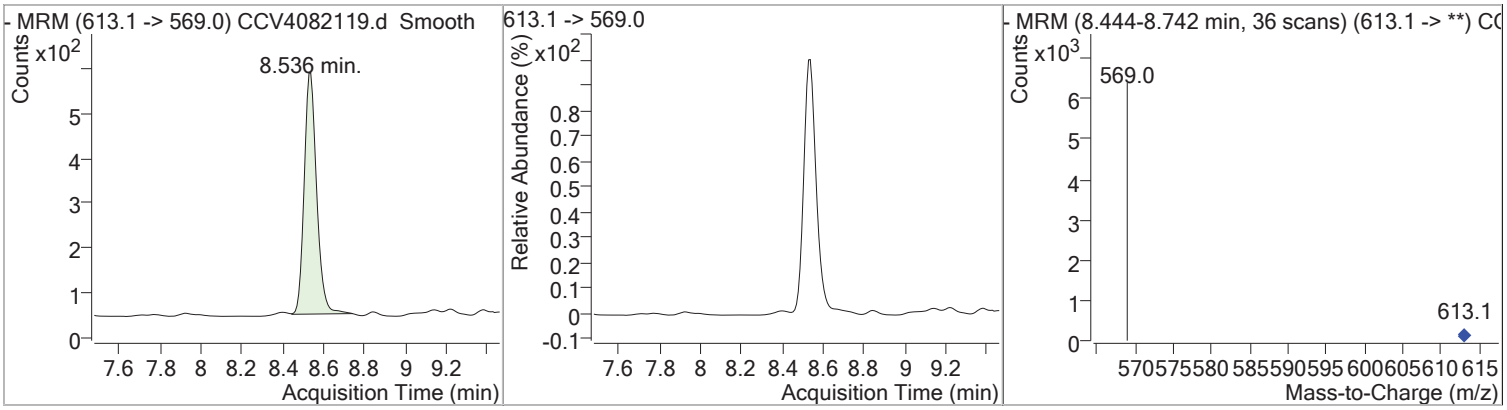




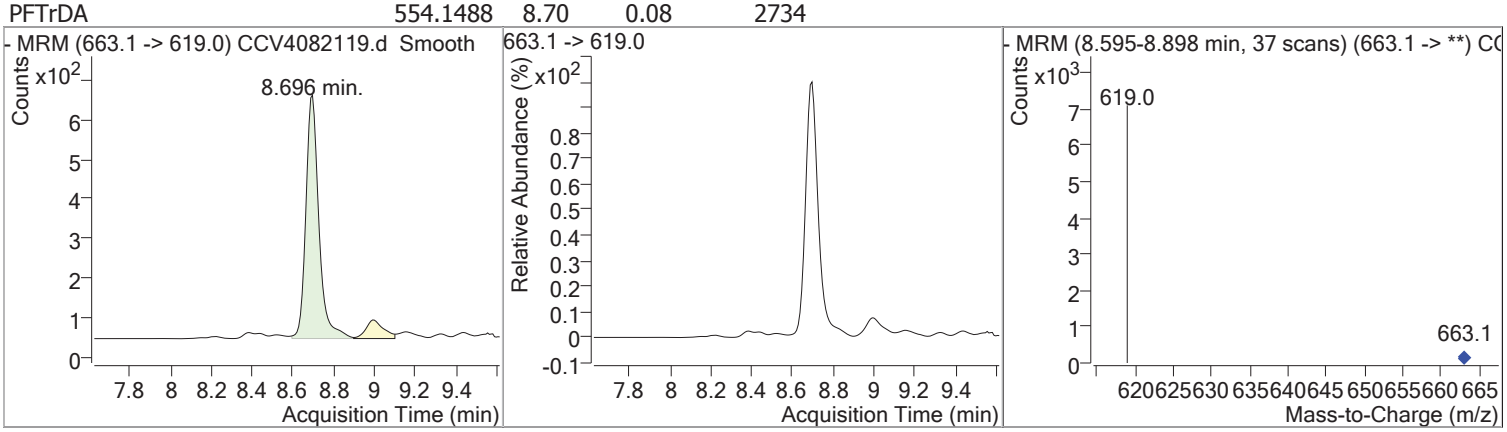
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	494.9451	8.39	0.06	174				



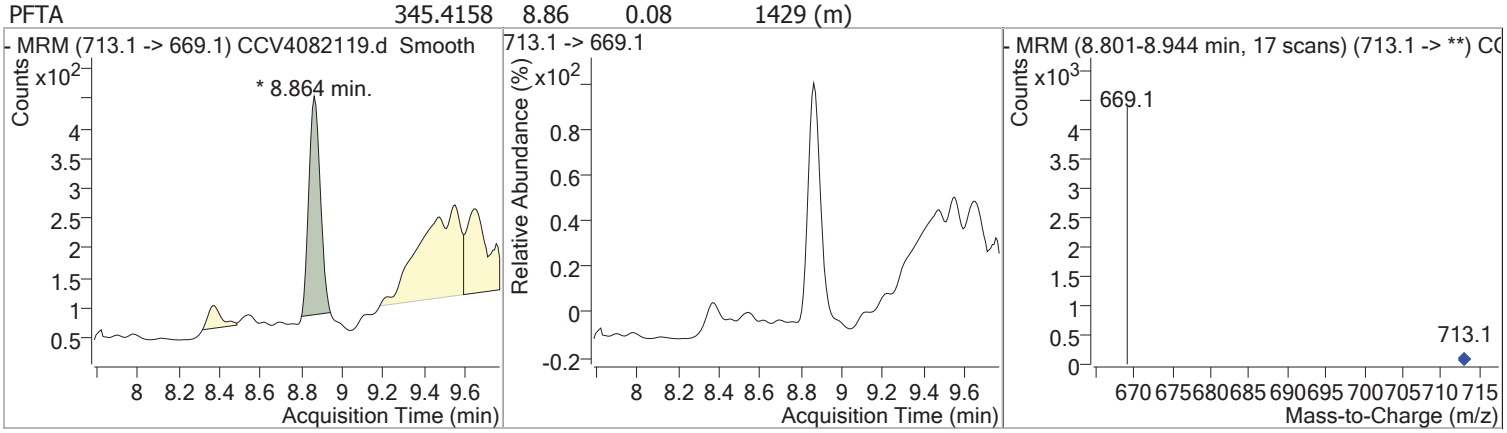
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	529.9995	8.54	0.07	2292				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	554.1488	8.70	0.08	2734				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	345.4158	8.86	0.08	1429 (m)				



CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV1082319.d	Calibration Date:	08/14/19 14:37
Sequence:	S039525	Injection Date:	08/23/19
Lab Sample ID:	S039525-CCV1	Injection Time:	13:54

		CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Perfluorobutanoic acid (PFBA)	A	500	509	0.1543906	0.1648856		1.8	
Perfluorobutanesulfonic acid (PFBS)	A	442	625	0.5510923	0.8210034		41.5	
Perfluoropentanoic acid (PFPeA)	A	500	474	0.3040697	0.3113215		-5.3	
Perfluorohexanoic acid (PFHxA)	A	500	667	0.6714809	0.9252651		33.4	
Perfluorohexanesulfonic acid (PFHxS)	A	455	387	0.8347983	0.776173		-14.9	
Perfluoroheptanoic acid (PFHpA)	A	500	743	1.053666	1.53497		48.5	
Perfluoroheptanesulfonic acid (PFHpS)	A	475	614	0.5117502	0.6150133		29.3	
Perfluorooctanoic acid (PFOA)	A	500	421	1.330641	1.104305		-15.9	
Perfluorooctanesulfonic acid (PFOS)	A	462	415	1.438054	1.334308		-10.1	
Perfluorooctanesulfonamide (FOSA)	A	500	413	7.121342	6.282936		-17.4	
6:2 Fluorotelomersulfonate (6:2 FTS A)	A	475	784	0.2337119	0.3920206		65.0	
Perfluorononanoic acid (PFNA)	A	500	497	0.842486	0.7911983		-0.7	
Perfluorodecanoic acid (PFDA)	A	500	534	1.468554	1.568465		6.7	
Perfluorodecanesulfonic acid (PFDS)	A	482	421	0.9068341	0.8110223		-12.6	
N-EtFOSAA	A	500	1100	0.9910125	2.170808		121	
8:2 Fluorotelomersulfonate (8:2 FTS A)	A	480	707	0.3729975	0.5793618		47.3	
Perfluoroundecanoic acid (PFUnA)	A	500	678	1.739723	2.295294		35.6	
N-MeFOSAA	A	500	611	1.146938	1.452143		22.1	
Perfluorododecanoic acid (PFDoA)	A	500	638	2.235401	3.022584		27.5	
Perfluorotridecanoic acid (PFTrDA)	A	500	474	2.580637	2.560773		-5.3	
Perfluorotetradecanoic acid (PFTA)	A	500	531	2.262719	2.407474		6.2	

CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV1082319.d	Calibration Date:	08/14/19 14:37
Sequence:	S039525	Injection Date:	08/23/19
Lab Sample ID:	S039525-CCV1	Injection Time:	13:54

		CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
13C-PFHxA	A	10000	12900	0.6955487	0.9214335		29.2	
13C-PFDA	A	10000	11000	1.05667	1.141226		9.6	
d5-NEtFOSAA	A	40000	34800	0.8657046	0.8232092		-13.0	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

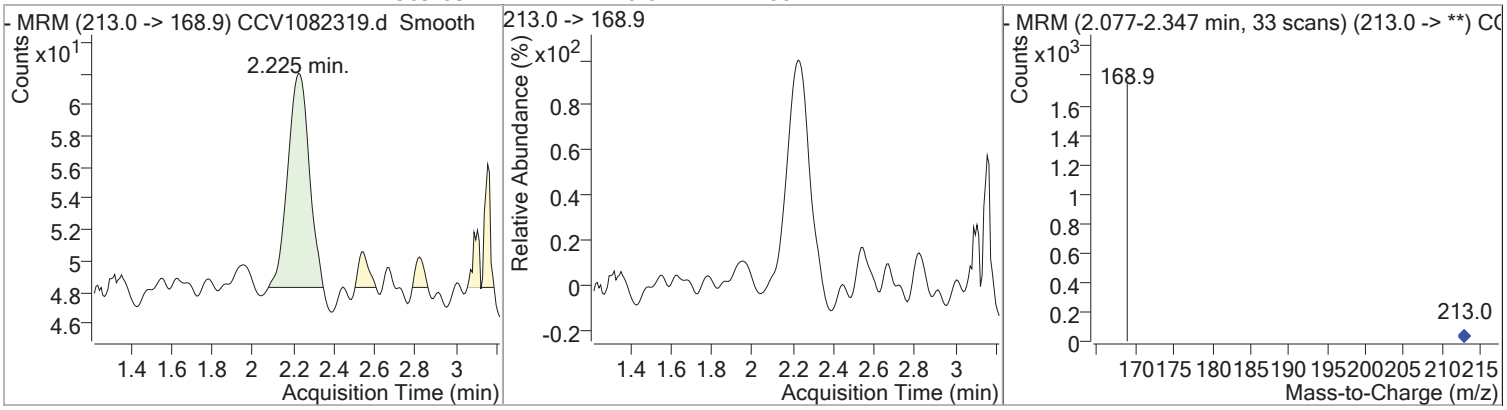
* Values outside of QC limits

Data File	CCV1082319.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/23/2019 1:54:08 PM
Sample Name	CCV1082219	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	1.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

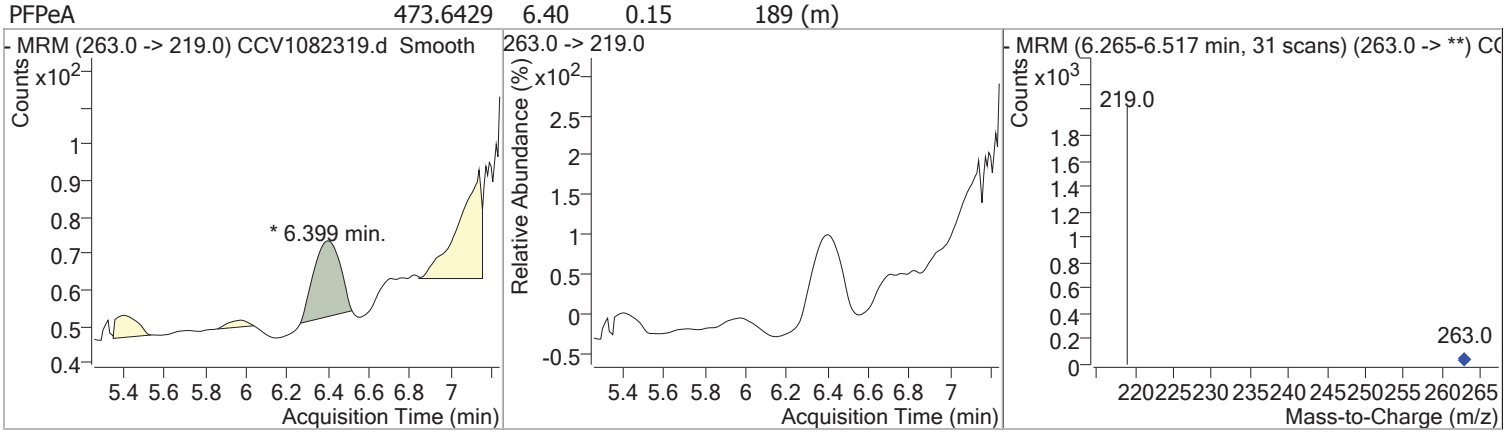
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.877	416.9 -> 371.9	12117	10000.0000	pg/ml		0.101
M PFOS C13	8.077	502.9 -> 80.0	20854	28700.0000	pg/ml		0.084
M d3-N-MeFOSAA	8.327	573.2 -> 419.0	8894	40000.0000	pg/ml		0.067
System Monitoring Compounds							
S PFHxA C13	7.223	314.9 -> 269.9	11165	12918.5787	pg/ml		0.135
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 129.19%			
S PFDA C13	8.253	514.9 -> 469.9	13828	10961.8859	pg/ml		0.076
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 109.62%			
S d5-N-MeFOSAA	8.403	589.2 -> 419.0	7322	34808.7620	pg/ml		0.067
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 87.02%			
Target Compounds							QValue
T PFBA	2.225	213.0 -> 168.9	100	509.0574	pg/ml		100
T PFPeA	6.399	263.0 -> 219.0	189	473.6429	pg/ml	m	100
T PFBS	6.752	298.9 -> 80.0	264	625.4236	pg/ml	m	100
T PFHxA	7.223	312.9 -> 268.9	561	666.8524	pg/ml	m	100
T PFHpA	7.609	362.9 -> 319.0	930	742.5353	pg/ml	m	100
T PFHxS-Total	7.643	398.9 -> 80.0	257	387.1060	pg/ml		100
T 6.2 FTS	7.877	427.0 -> 406.8	135	783.6458	pg/ml		100
T PFOA-Total	7.878	412.9 -> 368.9	669	420.5620	pg/ml	m	100
T PFHpS	7.885	449.0 -> 79.7	212	614.2363	pg/ml		100
T PFOS-Total	8.077	498.9 -> 80.0	448	415.1532	pg/ml		100
T PFNA	8.078	462.9 -> 418.9	479	496.6959	pg/ml		100
T 8.2 FTS	8.261	527.0 -> 81.0	202	707.2506	pg/ml		100
T PFDA	8.253	513.1 -> 469.0	950	533.7075	pg/ml		100
T N-MeFOSAA	8.328	570.2 -> 419.1	161	610.6467	pg/ml		100
T FOSA	8.372	497.9 -> 77.9	699	412.8956	pg/ml		100
T PFDS	8.385	599.0 -> 80.0	284	421.3163	pg/ml		100
T PFUnA	8.404	563.1 -> 519.0	1391	678.0286	pg/ml		100
T N-EtFOSAA	8.411	584.2 -> 419.0	241	1104.8795	pg/ml		100
T PFDoA	8.545	613.1 -> 569.0	1831	637.5720	pg/ml		100
T PFTrDA	8.704	663.1 -> 619.0	1551	473.5767	pg/ml		100
T PFTA	8.872	713.1 -> 669.1	1459	530.7983	pg/ml	m	100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

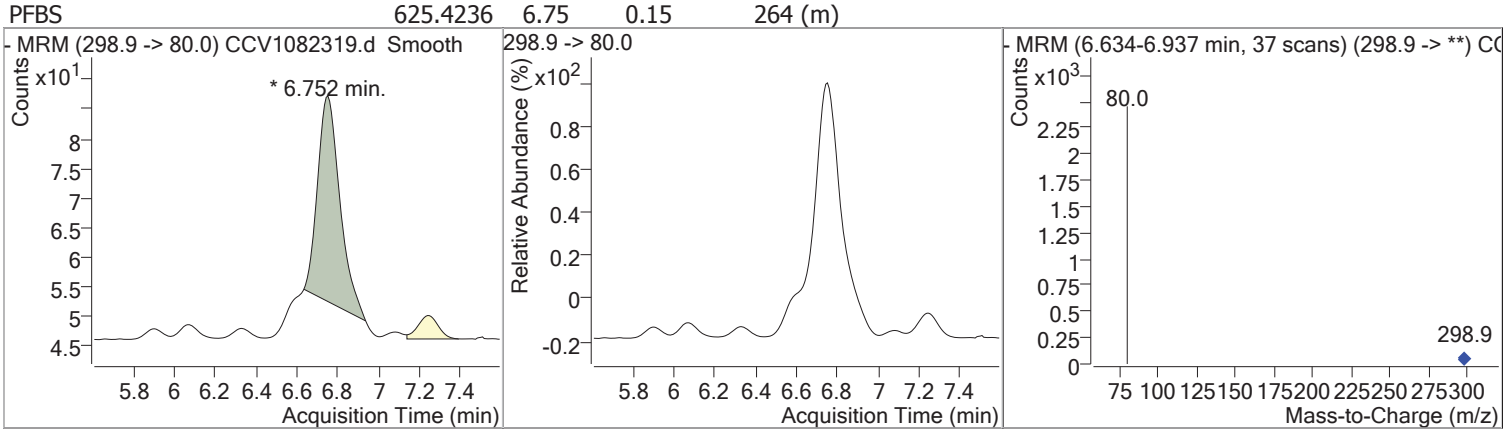
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	509.0574	2.22	0.01	100				



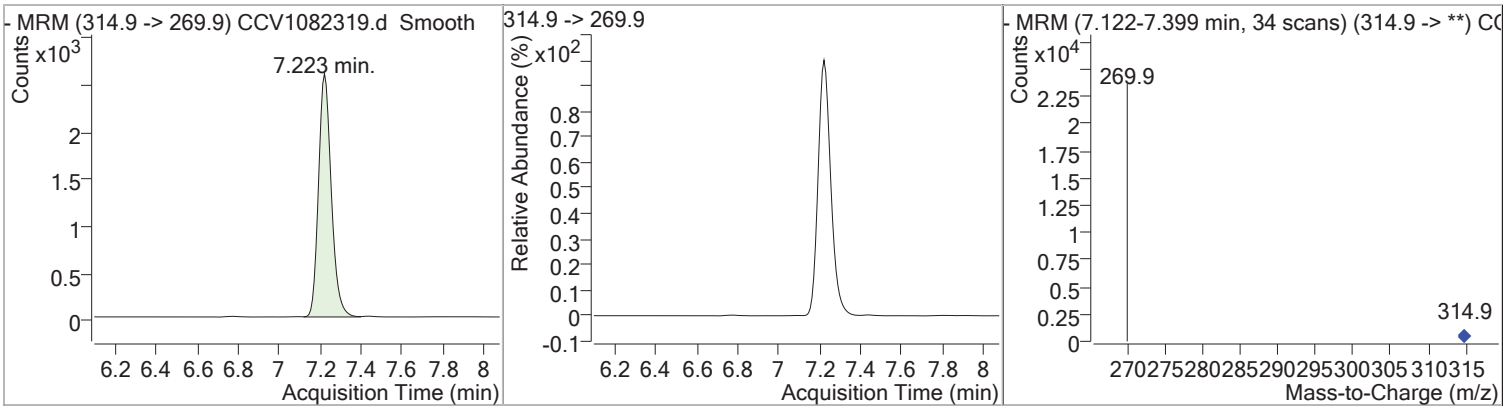
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	473.6429	6.40	0.15	189 (m)				



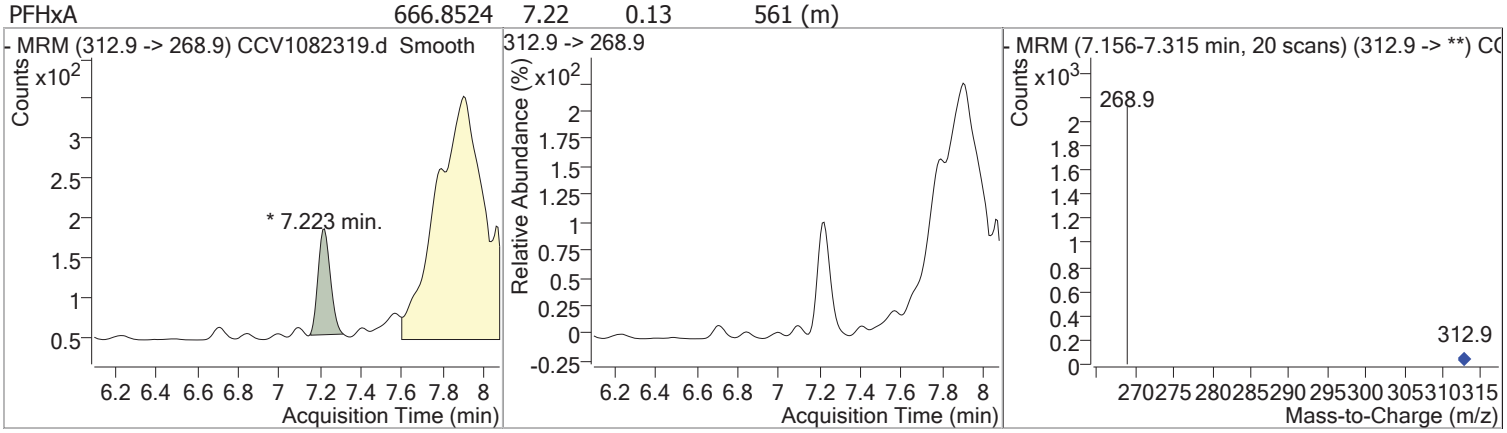
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	625.4236	6.75	0.15	264 (m)				



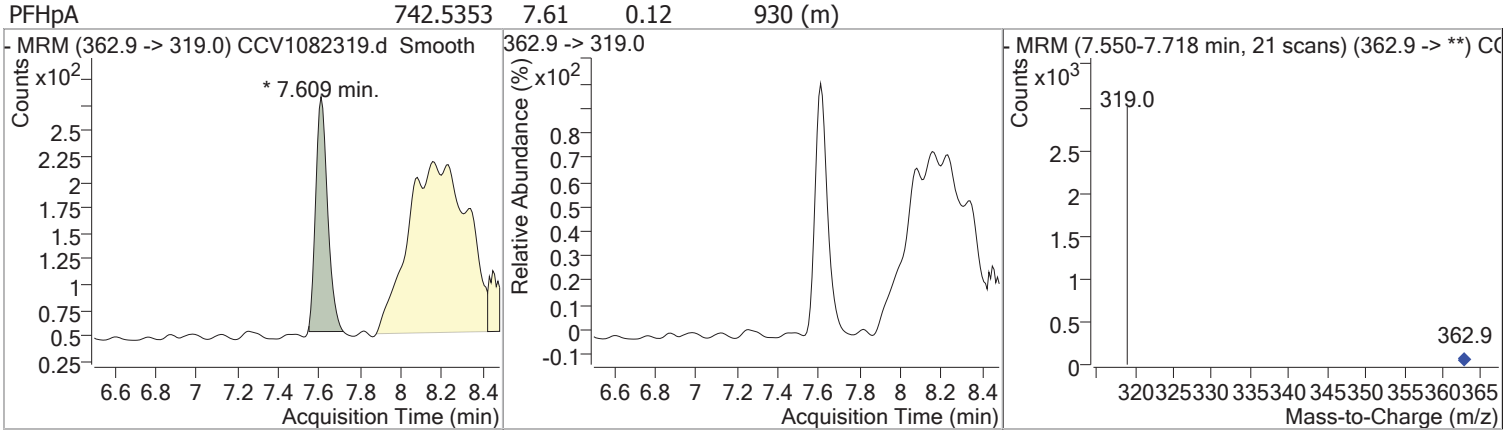
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	12918.5787	7.22	0.13	11165				



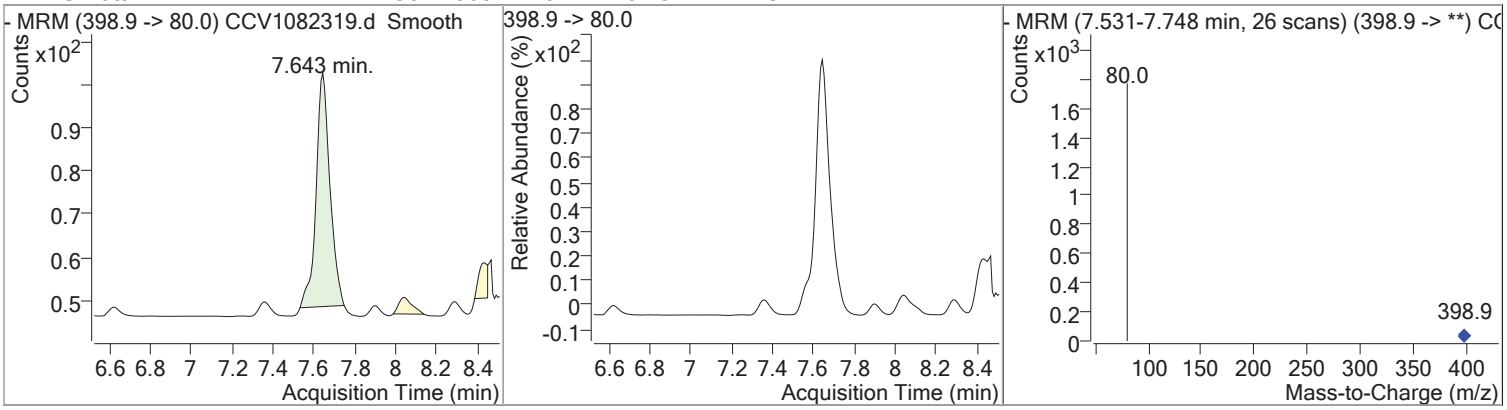
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	666.8524	7.22	0.13	561 (m)				



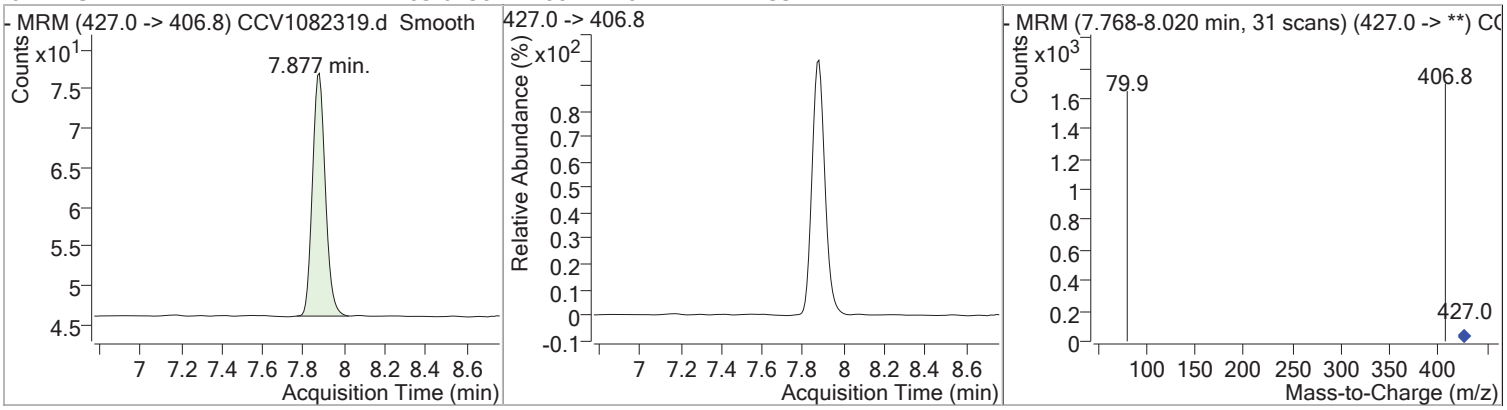
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	742.5353	7.61	0.12	930 (m)				



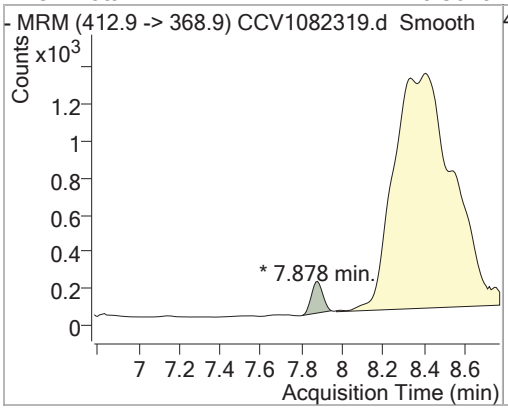
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	387.1060	7.64	0.13	257				

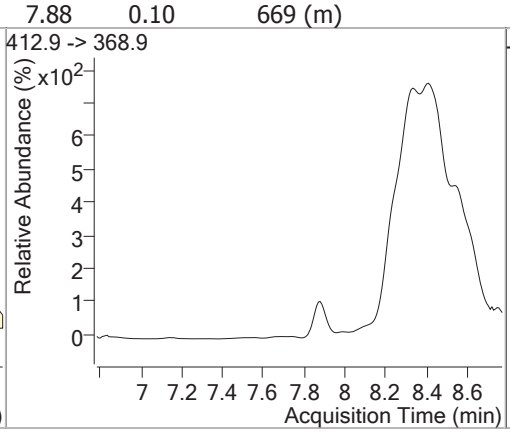


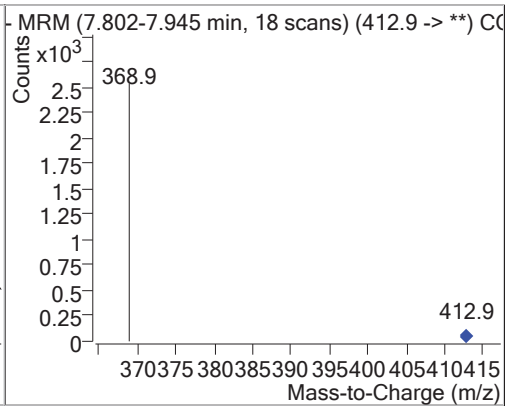
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	783.6458	7.88	0.11	135				



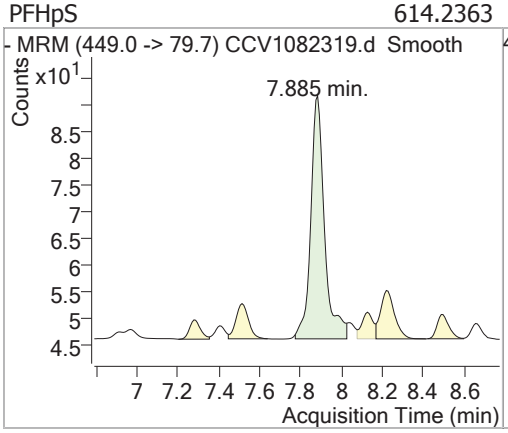
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	420.5620	7.88	0.10	669 (m)				

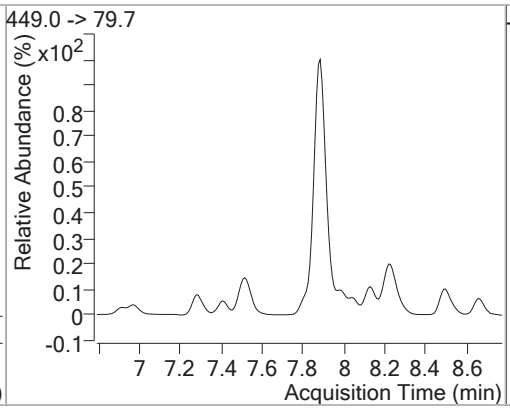


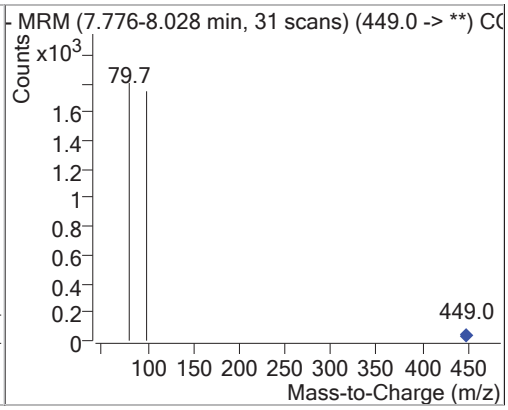




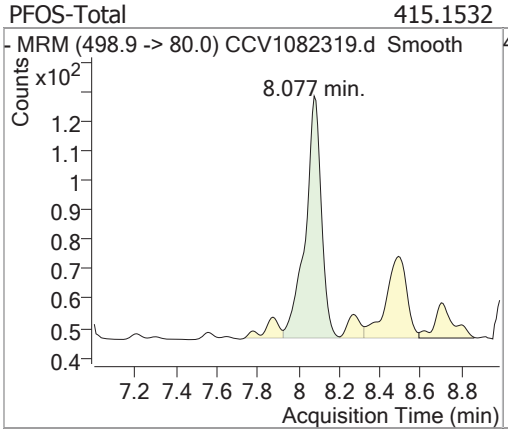
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	614.2363	7.88	0.10	212				

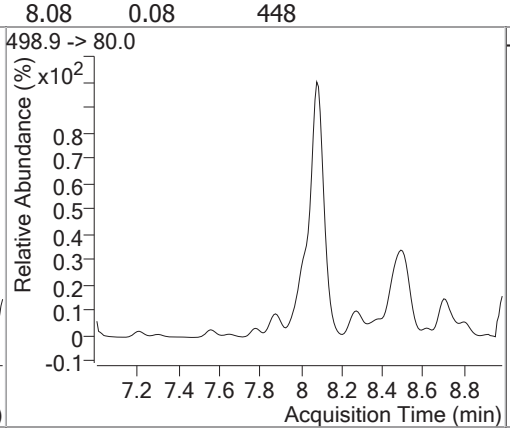


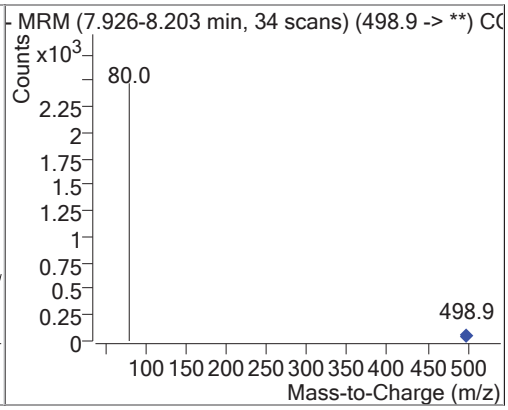




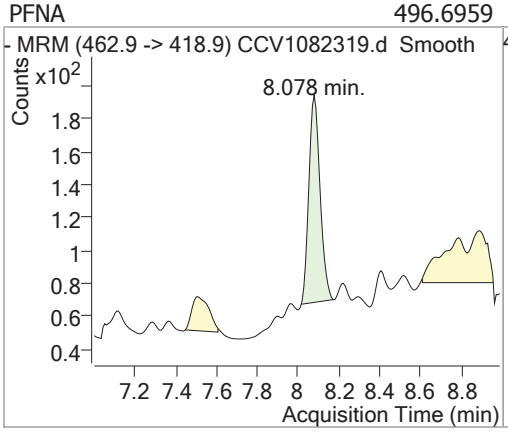
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	415.1532	8.08	0.08	448				

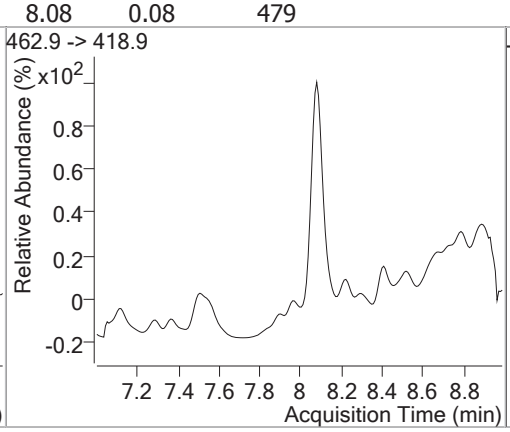


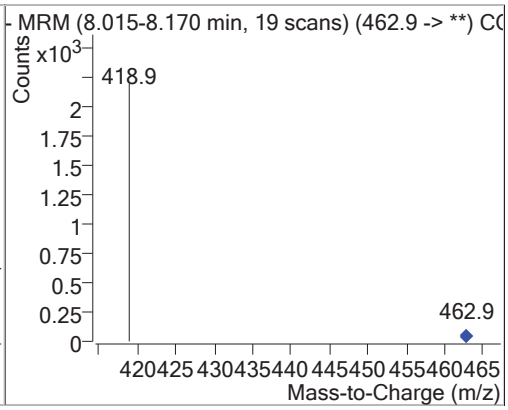




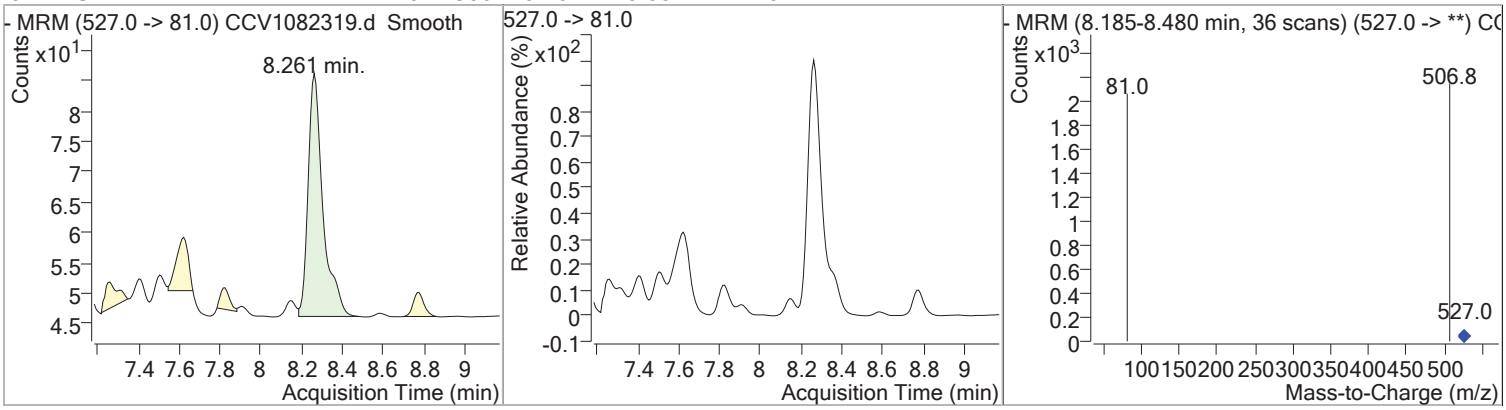
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	496.6959	8.08	0.08	479				



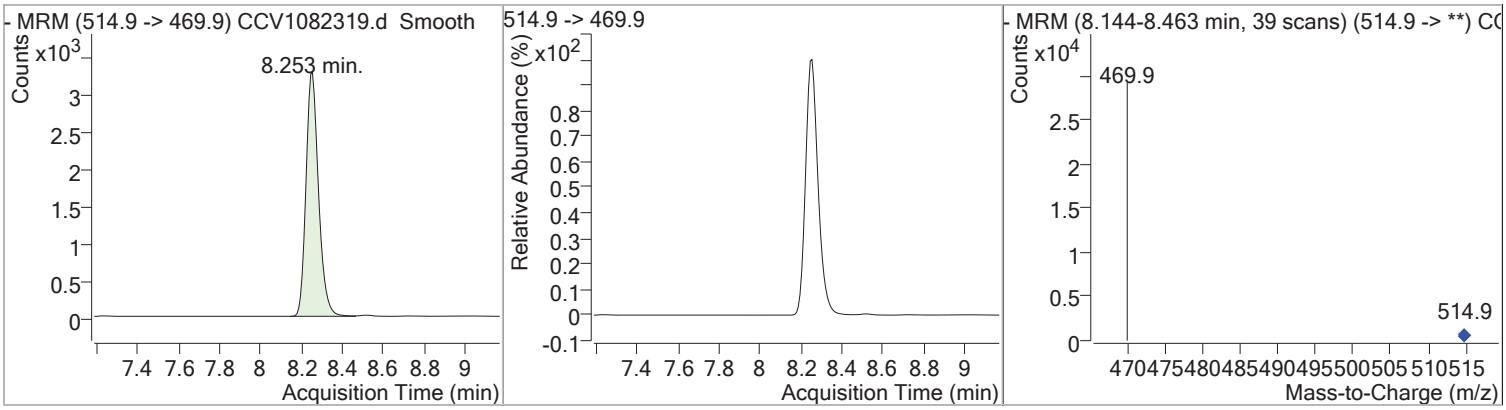




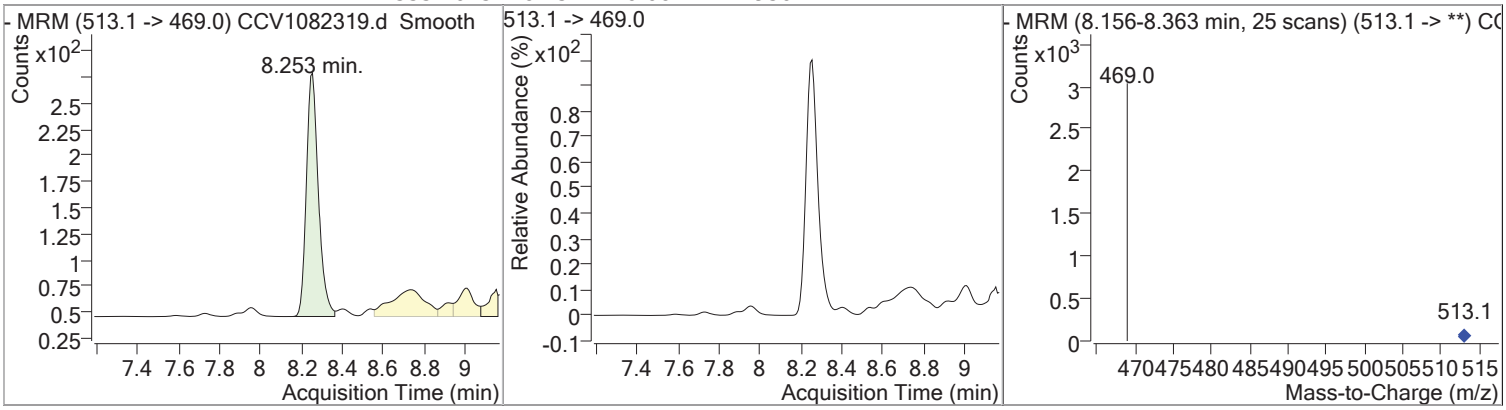
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	707.2506	8.26	0.08	202				



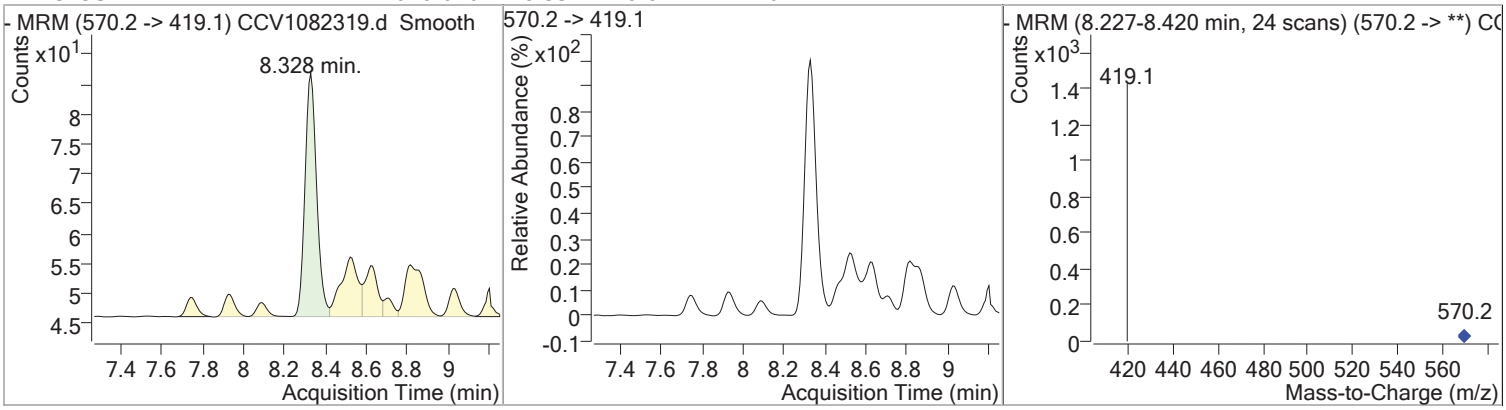
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	10961.8859	8.25	0.08	13828				



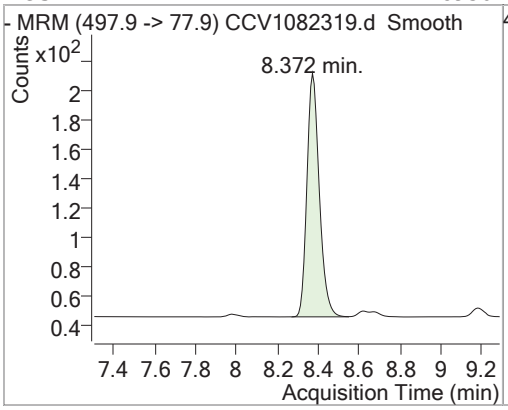
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	533.7075	8.25	0.08	950				

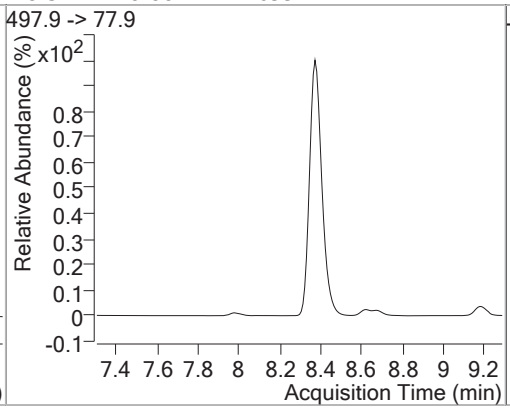


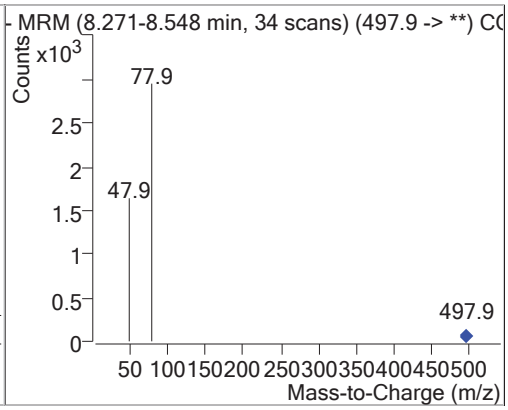
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	610.6467	8.33	0.07	161				



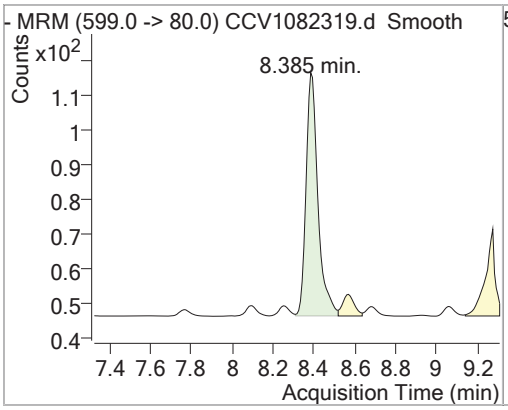
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	412.8956	8.37	0.08	699				

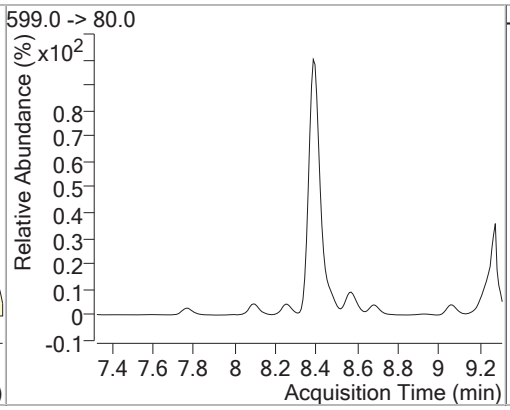


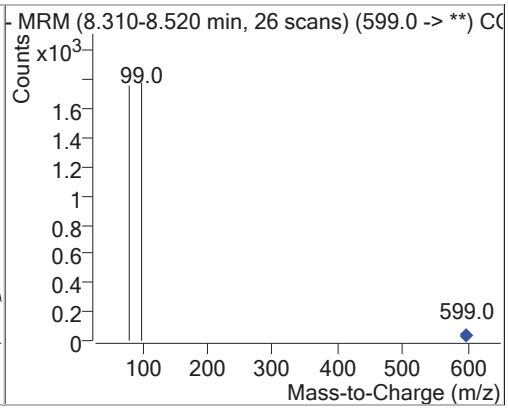




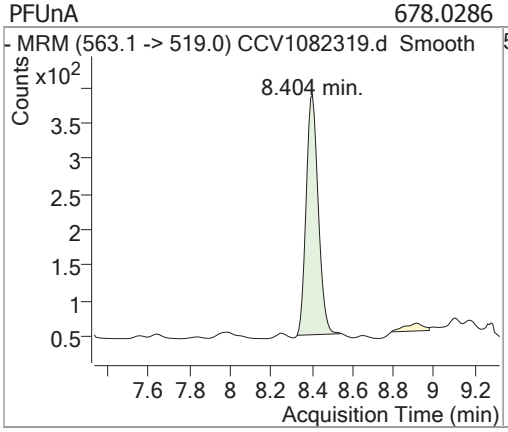
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	421.3163	8.39	0.07	284				

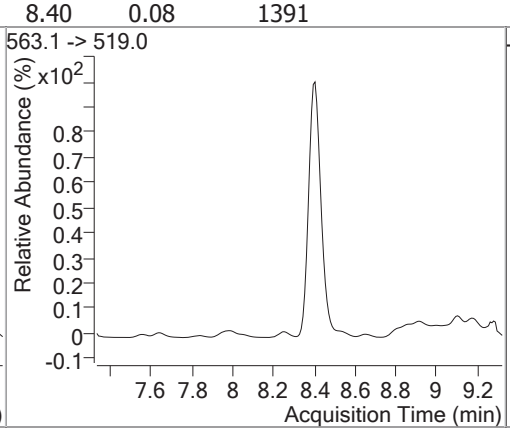


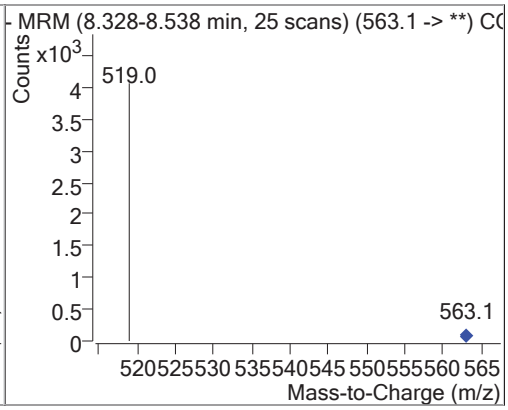




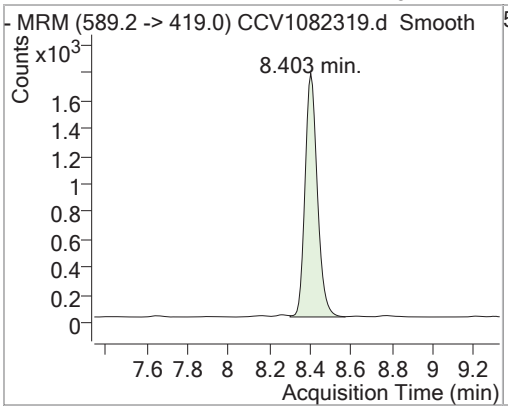
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	678.0286	8.40	0.08	1391				

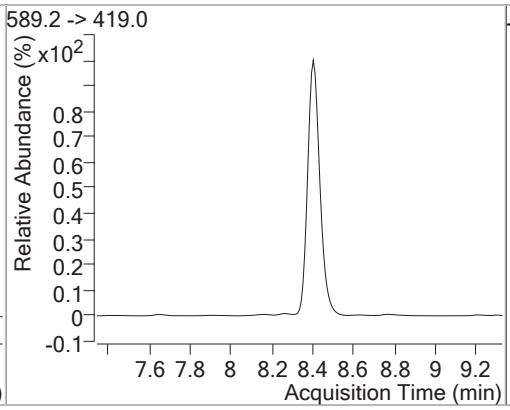


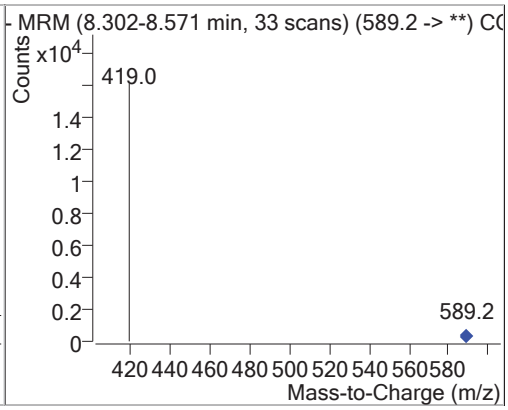




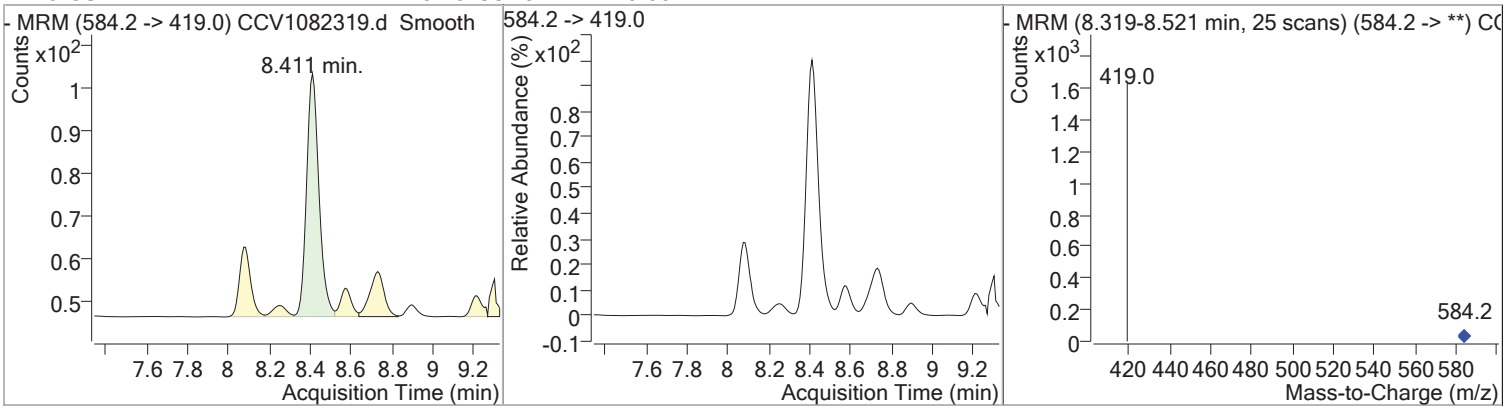
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	34808.7620	8.40	0.07	7322				



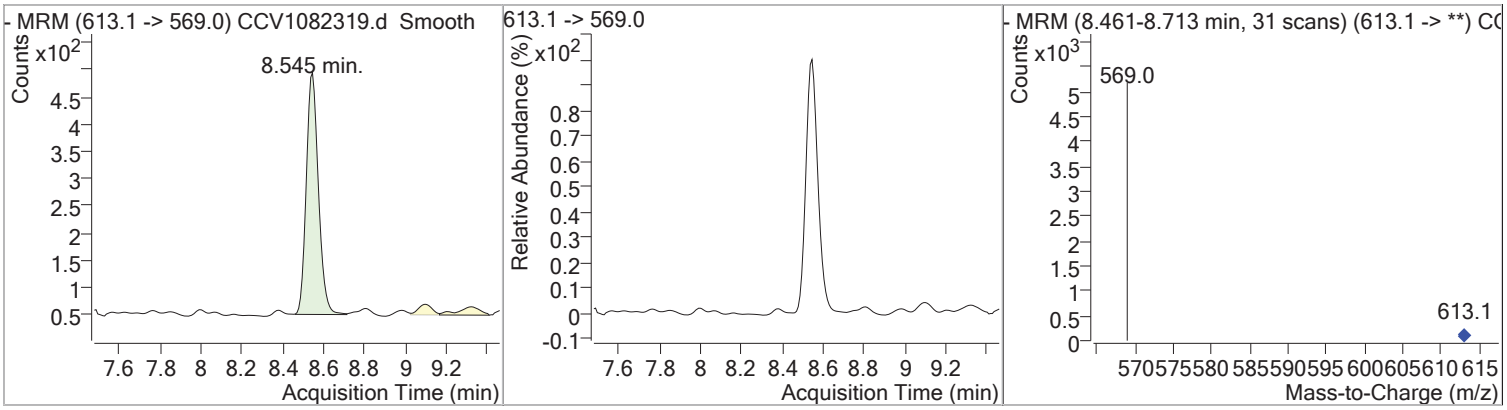




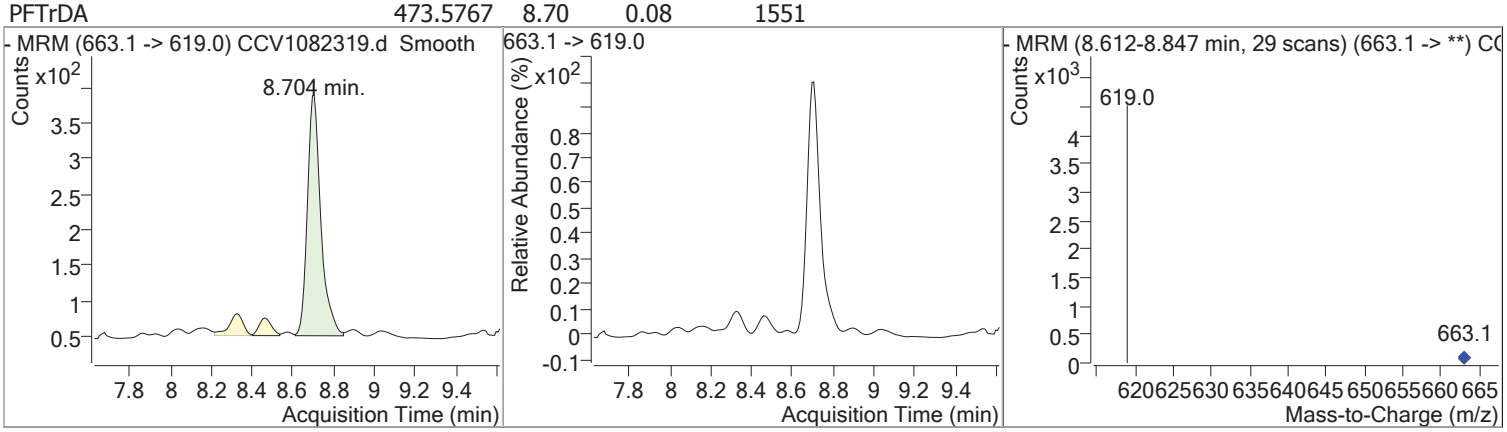
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	1104.8795	8.41	0.08	241				



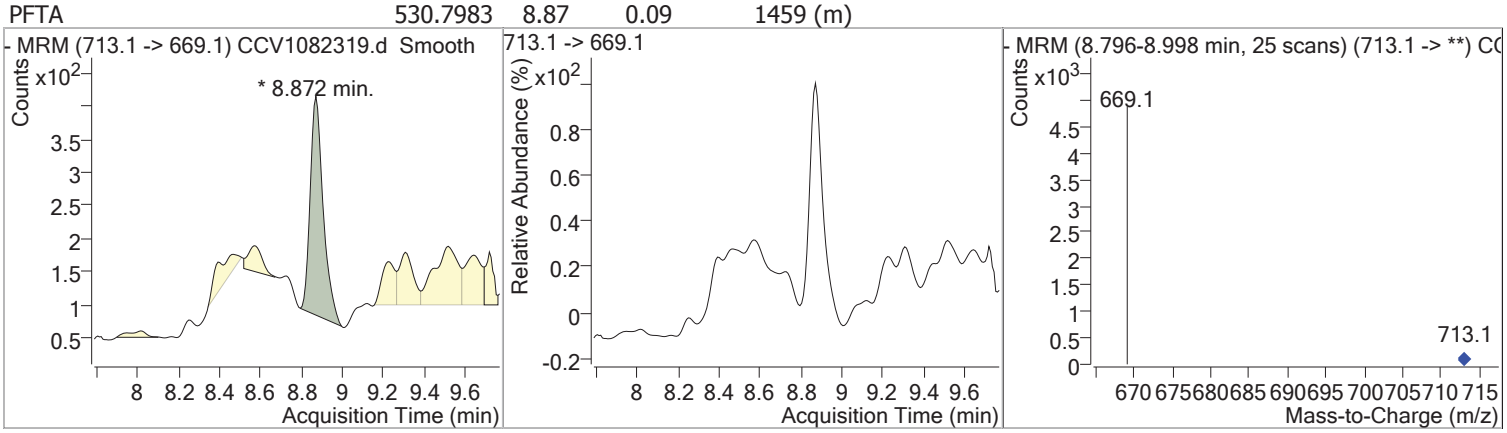
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	637.5720	8.54	0.08	1831				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	473.5767	8.70	0.08	1551				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	530.7983	8.87	0.09	1459 (m)				



8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Sequence:	S039480	Instrument:	HPLC1
		Calibration:	1900263

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S039480-CCV1)			*Lab File ID: CCV1082119.d*			*Analyzed: 08/21/19 12:07*			
13C-PFOA	13618.2	7.877483	14022.56	7.700883	97	50 - 150	0.1766	+/-0.50	
13C-PFOS	20908.88	8.07695	18678.12	7.933983	112	50 - 150	0.1430	+/-0.50	
d3-NMeFOSAA	10211	8.318983	11636.93	8.20125	88	50 - 150	0.1177	+/-0.50	
P-5S (19H0617-04)			*Lab File ID: 19H0617-04.d*			*Analyzed: 08/21/19 14:13*			
13C-PFOA	15761.24	7.827017	13618.2	7.877483	116	50 - 150	-0.0505	+/-0.50	
13C-PFOS	22370.06	8.051717	20908.88	8.07695	107	50 - 150	-0.0252	+/-0.50	
d3-NMeFOSAA	11592.89	8.318983	10211	8.318983	114	50 - 150	0.0000	+/-0.50	
Calibration Check (S039480-CCV2)			*Lab File ID: CCV2082119.d*			*Analyzed: 08/21/19 15:16*			
13C-PFOA	20027.29	7.818617	13618.2	7.877483	147	50 - 150	-0.0589	+/-0.50	
13C-PFOS	30081.89	8.0433	20908.88	8.07695	144	50 - 150	-0.0336	+/-0.50	
d3-NMeFOSAA	15306.93	8.302167	10211	8.318983	150	50 - 150	-0.0168	+/-0.50	
Calibration Check (S039480-CCV3)			*Lab File ID: CCV3082119.d*			*Analyzed: 08/21/19 17:38*			
13C-PFOA	15348.93	7.827017	20027.29	7.818617	77	50 - 150	0.0084	+/-0.50	
13C-PFOS	22563.73	8.051717	30081.89	8.0433	75	50 - 150	0.0084	+/-0.50	
d3-NMeFOSAA	13800.51	8.318983	15306.93	8.302167	90	50 - 150	0.0168	+/-0.50	
Blank (B238243-BLK1)			*Lab File ID: B238243-BLK1R.d*			*Analyzed: 08/21/19 19:19*			
13C-PFOA	17361.18	7.827017	15348.93	7.827017	113	50 - 150	0.0000	+/-0.50	
13C-PFOS	23374.38	8.051717	22563.73	8.051717	104	50 - 150	0.0000	+/-0.50	
d3-NMeFOSAA	12048.32	8.310567	13800.51	8.318983	87	50 - 150	-0.0084	+/-0.50	
Field Blank (19H0617-02)			*Lab File ID: 19H0617-02R.d*			*Analyzed: 08/21/19 19:57*			
13C-PFOA	17633.49	7.843833	15348.93	7.827017	115	50 - 150	0.0168	+/-0.50	
13C-PFOS	23582.55	8.060117	22563.73	8.051717	105	50 - 150	0.0084	+/-0.50	
d3-NMeFOSAA	11703.74	8.318983	13800.51	8.318983	85	50 - 150	0.0000	+/-0.50	
P-15 (19H0617-03)			*Lab File ID: 19H0617-03R.d*			*Analyzed: 08/21/19 20:09*			
13C-PFOA	17290.86	7.835433	15348.93	7.827017	113	50 - 150	0.0084	+/-0.50	
13C-PFOS	21406.82	8.060117	22563.73	8.051717	95	50 - 150	0.0084	+/-0.50	
d3-NMeFOSAA	11586.89	8.318983	13800.51	8.318983	84	50 - 150	0.0000	+/-0.50	
Calibration Check (S039480-CCV4)			*Lab File ID: CCV4082119.d*			*Analyzed: 08/21/19 21:00*			
13C-PFOA	18247.12	7.827017	15348.93	7.827017	119	50 - 150	0.0000	+/-0.50	
13C-PFOS	22911.31	8.051717	22563.73	8.051717	102	50 - 150	0.0000	+/-0.50	
d3-NMeFOSAA	14288.94	8.310567	13800.51	8.318983	104	50 - 150	-0.0084	+/-0.50	

8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0617
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Sequence:	S039525	Instrument:	HPLC1
		Calibration:	1900263

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S039525-CCV1)			*Lab File ID: CCV1082319.d*			*Analyzed: 08/23/19 13:54*			
13C-PFOA	12116.99	7.877483	14022.56	7.700883	86	50 - 150	0.1766	+/-0.50	
13C-PFOS	20853.97	8.07695	18678.12	7.933983	112	50 - 150	0.1430	+/-0.50	
d3-NMeFOSAA	8894.45	8.327383	11636.93	8.20125	76	50 - 150	0.1261	+/-0.50	
LCS (B238243-BS1)			*Lab File ID: B238243-BS1.d*			*Analyzed: 08/23/19 14:13*			
13C-PFOA	12333.03	7.869067	12116.99	7.877483	102	50 - 150	-0.0084	+/-0.50	
13C-PFOS	19407.51	8.07695	20853.97	8.07695	93	50 - 150	0.0000	+/-0.50	
d3-NMeFOSAA	10708.08	8.327383	8894.45	8.327383	120	50 - 150	0.0000	+/-0.50	

QC DATA

1 - FORM I
ANALYSIS DATA SHEET

Blank

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B238243-BLK1	File ID:	B238243-BLK1R.d
Sampled:		Prepared:	08/19/19 00:00	Analyzed:	08/21/19 19:19
Solids:		Preparation:	SOP 434-PFAAS	Dilution:	
Batch:	B238243	Sequence:	S039480	Calibration:	1900263
Instrument:	HPLC1				
Column:	1				

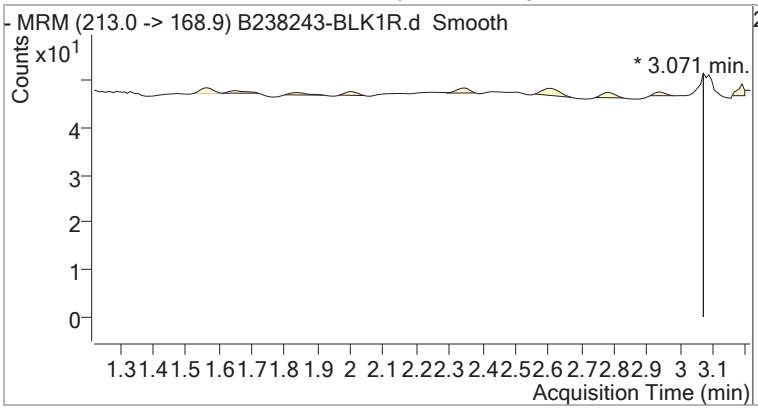
CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-73-5	Perfluorobutanesulfonic acid (PFBS)		2.0	2.0	
307-24-4	Perfluorohexanoic acid (PFHxA)		2.0	2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)		2.0	2.0	
375-22-4	Perfluorobutanoic acid (PFBA)		2.0	2.0	
335-77-3	Perfluorodecanesulfonic acid (PFDS)		2.0	2.0	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)		2.0	2.0	
75491-6	Perfluorooctanesulfonamide (FOSA)		2.0	2.0	
2706-90-3	Perfluoropentanoic acid (PFPeA)		2.0	2.0	
	6:2 Fluorotelomersulfonate (6:2 FTS A)		2.0	2.0	
	8:2 Fluorotelomersulfonate (8:2 FTS A)		2.0	2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)		2.0	2.0	
335-67-1	Perfluorooctanoic acid (PFOA)		2.0	2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)		2.0	2.0	
375-95-1	Perfluorononanoic acid (PFNA)		2.0	2.0	
335-76-2	Perfluorodecanoic acid (PFDA)		2.0	2.0	
	N-MeFOSAA		2.0	2.0	
2058-94-8	Perfluoroundecanoic acid (PFUnA)		2.0	2.0	
	N-EtFOSAA		2.0	2.0	
307-55-1	Perfluorododecanoic acid (PFDoA)		2.0	2.0	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)		2.0	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)		2.0	2.0	

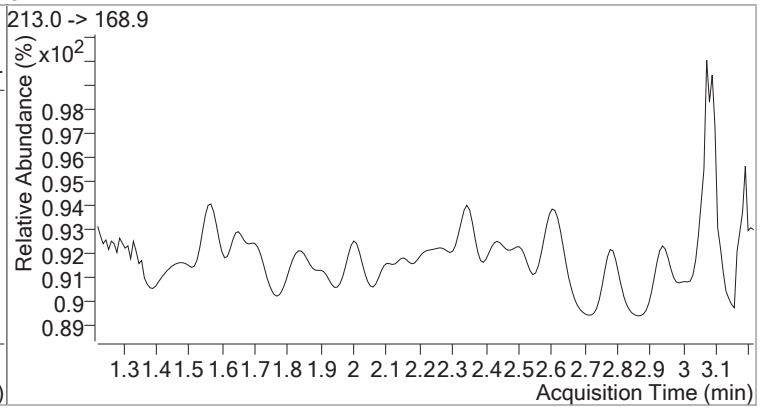
Data File	B238243-BLK1R.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 7:19:15 PM
Sample Name	B238243-BLK1	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	B238243.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.827	416.9 -> 371.9	17361	10000.0000	pg/ml		0.050
M PFOS C13	8.052	502.9 -> 80.0	23374	28700.0000	pg/ml		0.059
M d3-N-MeFOSAA	8.311	573.2 -> 419.0	12048	40000.0000	pg/ml	m	0.050
System Monitoring Compounds							
S PFHxA C13	7.122	314.9 -> 269.9	13178	10642.2913	pg/ml		0.034
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 106.42%			
S PFDA C13	8.228	514.9 -> 469.9	15750	8714.0225	pg/ml		0.050
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 87.14%			
S d5-N-MeFOSAA	8.386	589.2 -> 419.0	8025	28164.4992	pg/ml	m	0.050
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 70.41%			
Target Compounds							QValue
T PFBA	3.071	213.0 -> 168.9	0	0.0000	pg/ml	md	1
T PFPeA	6.332	263.0 -> 219.0	0	0.0000	pg/ml	md	1
T PFBS	7.097	298.9 -> 80.0	0	0.0000	pg/ml	md	1
T PFHxA	7.114	312.9 -> 268.9	0	0.0000	pg/ml	md	1
T PFHpA	7.306	362.9 -> 319.0	0	0.0000	pg/ml	md	1
T PFHxS-Total	8.189	398.9 -> 80.0	0	0.0000	pg/ml	md	1
T 6.2 FTS	8.617	427.0 -> 406.8	0	0.0000	pg/ml	md	1
T PFOA-Total	7.827	412.9 -> 368.9	390	171.3157	pg/ml		100
T PFHpS	8.331	449.0 -> 79.7	0	0.0000	pg/ml	md	1
T PFOS-Total	8.573	498.9 -> 80.0	0	0.0000	pg/ml	md	1
T PFNA	8.566	462.9 -> 418.9	691	499.3859	pg/ml		100
T 8.2 FTS	7.512	527.0 -> 81.0	0	0.0000	pg/ml	md	1
T PFDA	8.884	513.1 -> 469.0	0	0.0000	pg/ml	md	1
T N-MeFOSAA	7.546	570.2 -> 419.1	0	0.0000	pg/ml	md	1
T FOSA	8.548	497.9 -> 77.9	0	0.0000	pg/ml	md	1
T PFDS	8.806	599.0 -> 80.0	0	0.0000	pg/ml	md	1
T PFUnA	8.076	563.1 -> 519.0	0	0.0000	pg/ml	md	1
T N-EtFOSAA	7.436	584.2 -> 419.0	0	0.0000	pg/ml	md	1
T PFDoA	9.049	613.1 -> 569.0	0	0.0000	pg/ml	md	1
T PFTrDA	9.209	663.1 -> 619.0	0	0.0000	pg/ml	md	1
T PFTA	9.579	713.1 -> 669.1	847	215.1304	pg/ml		100

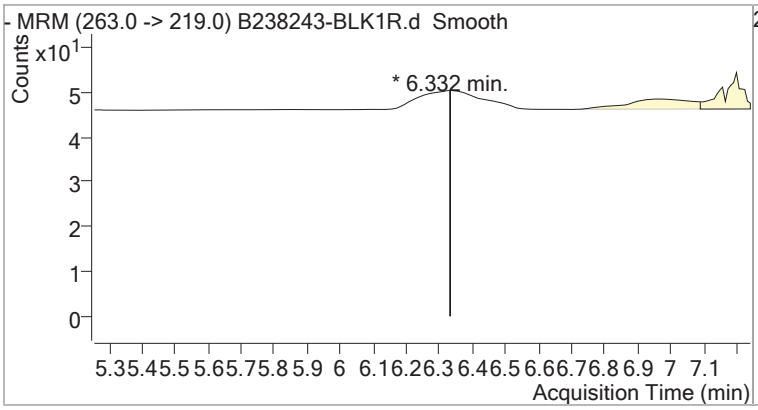
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

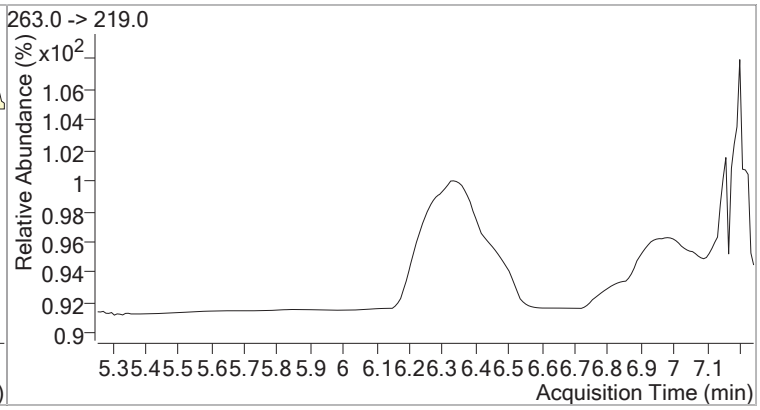
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	d	0		0				



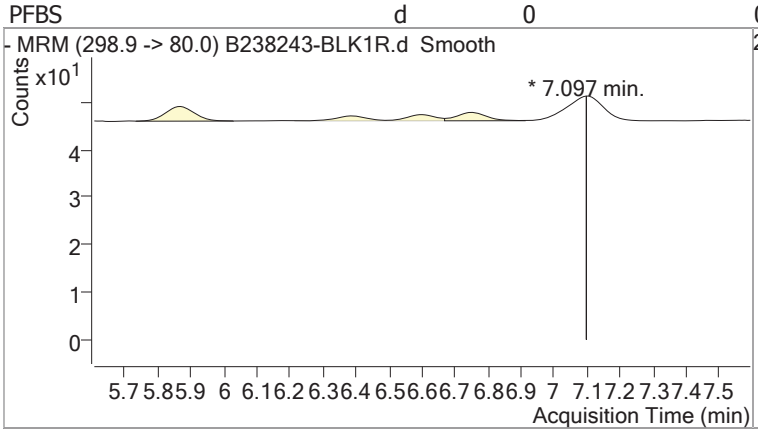


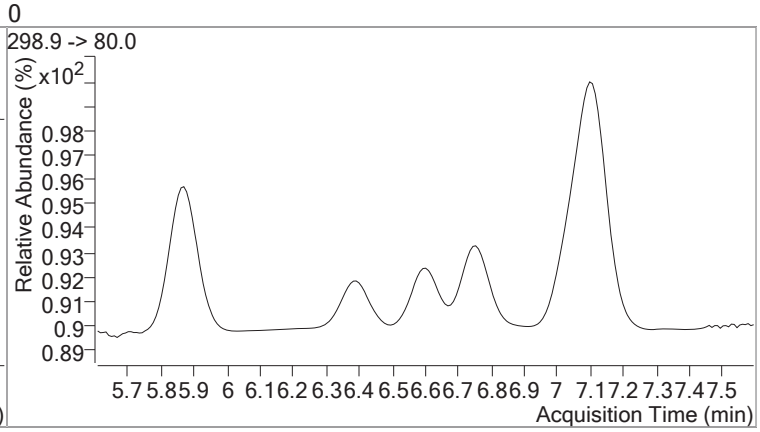
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	d	0		0				



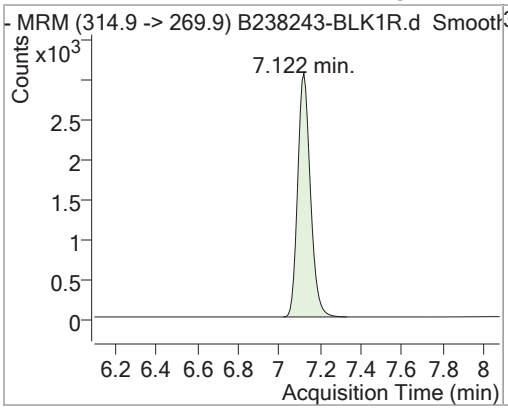


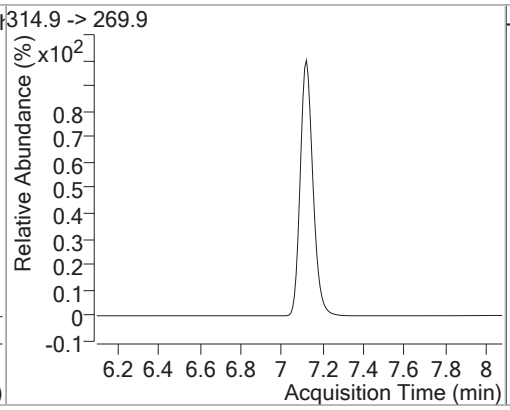
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	d	0		0				

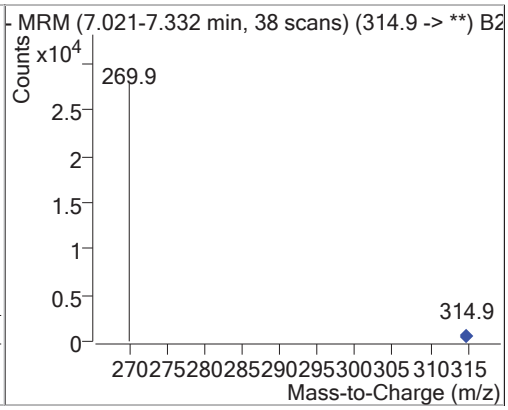




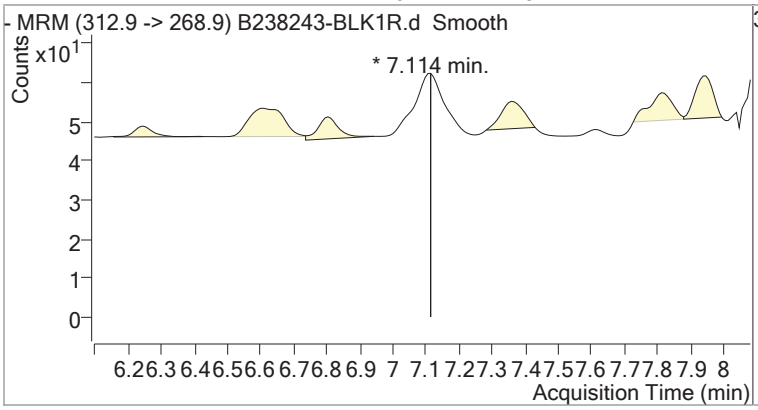
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	10642.2913	7.12	0.03	13178				

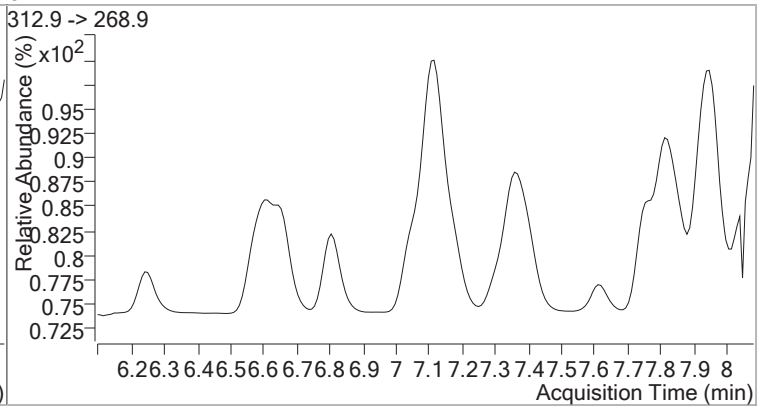




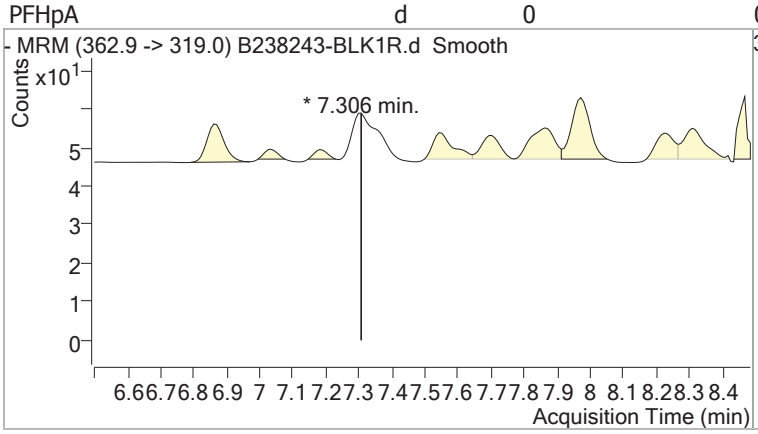


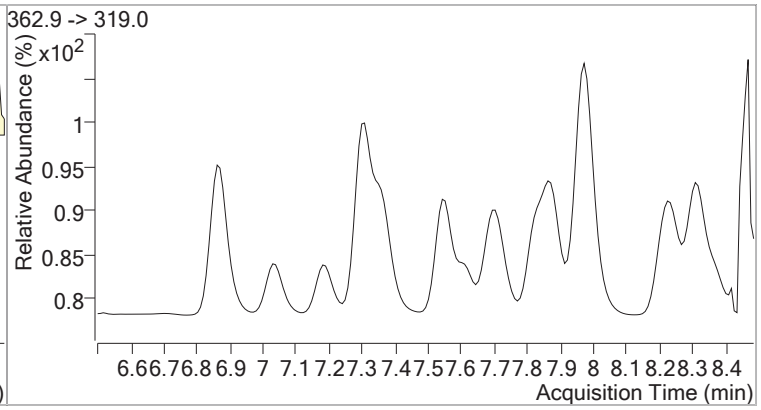
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	d	0		0				



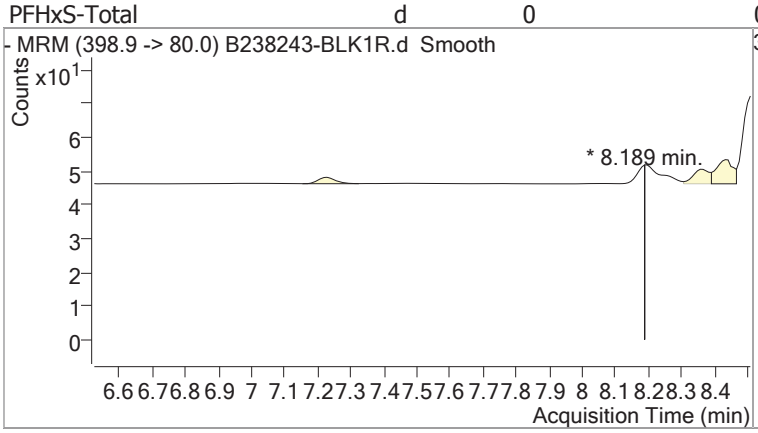


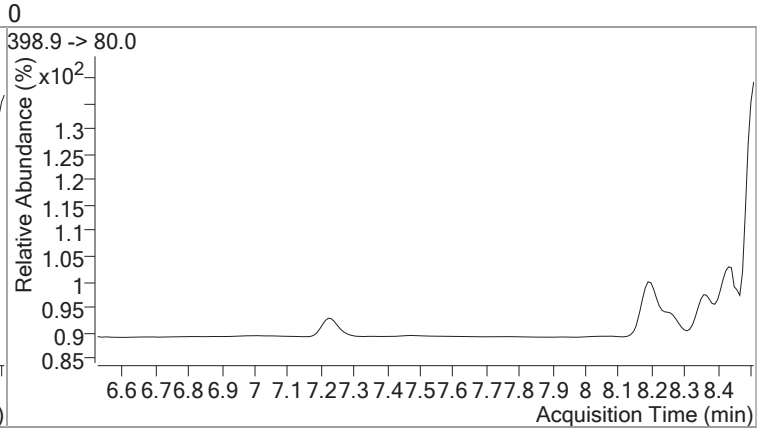
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	d	0		0				



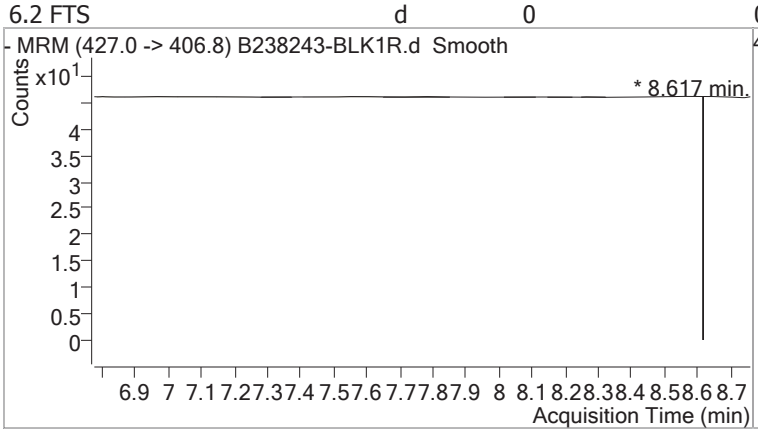


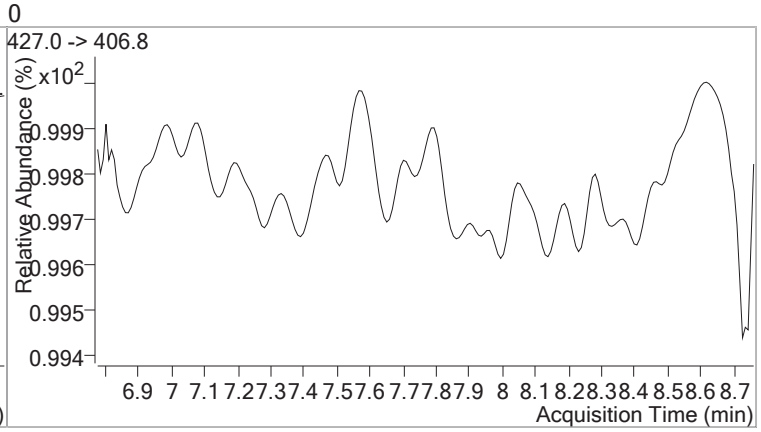
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	d	0		0				



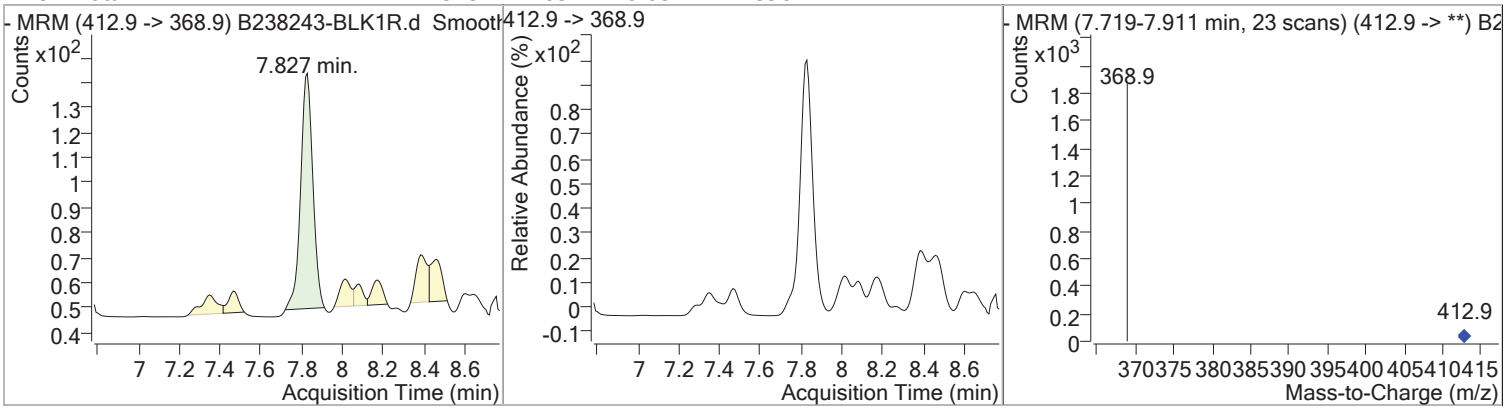


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	d	0		0				

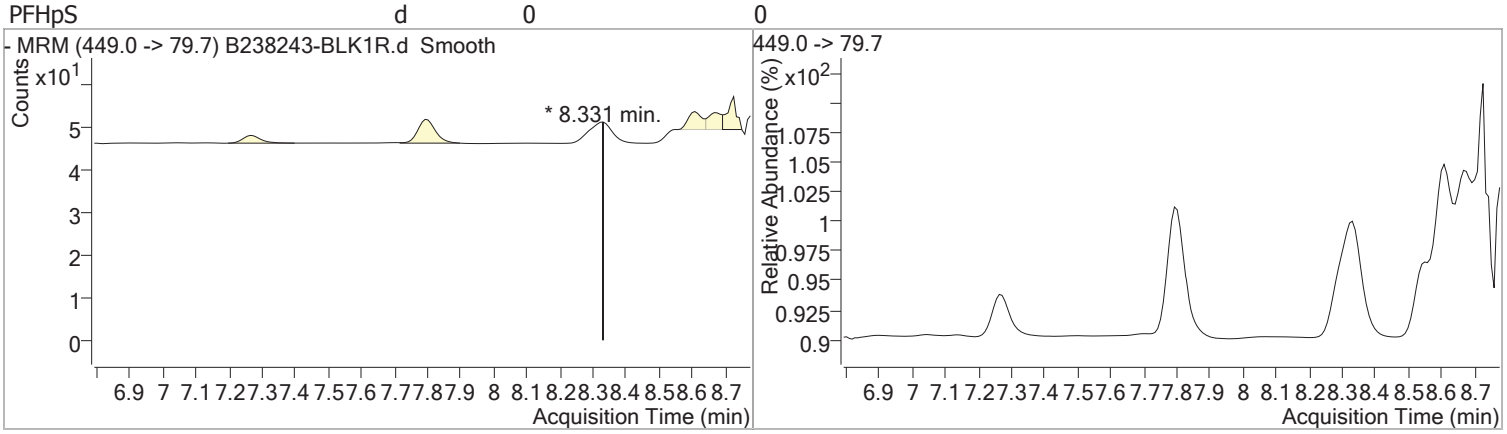




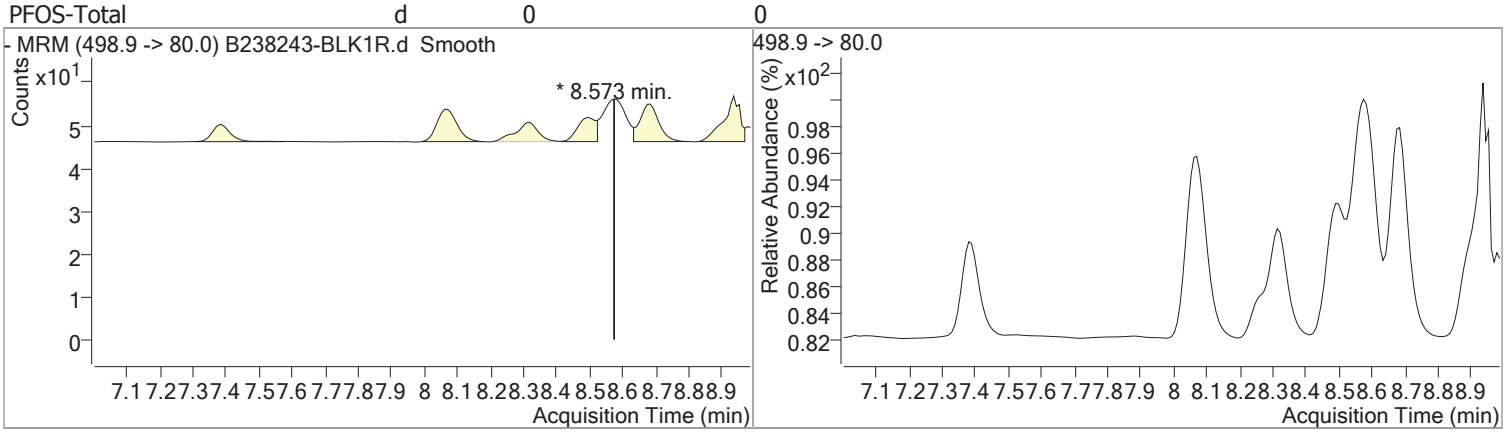
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	171.3157	7.83	0.05	390				



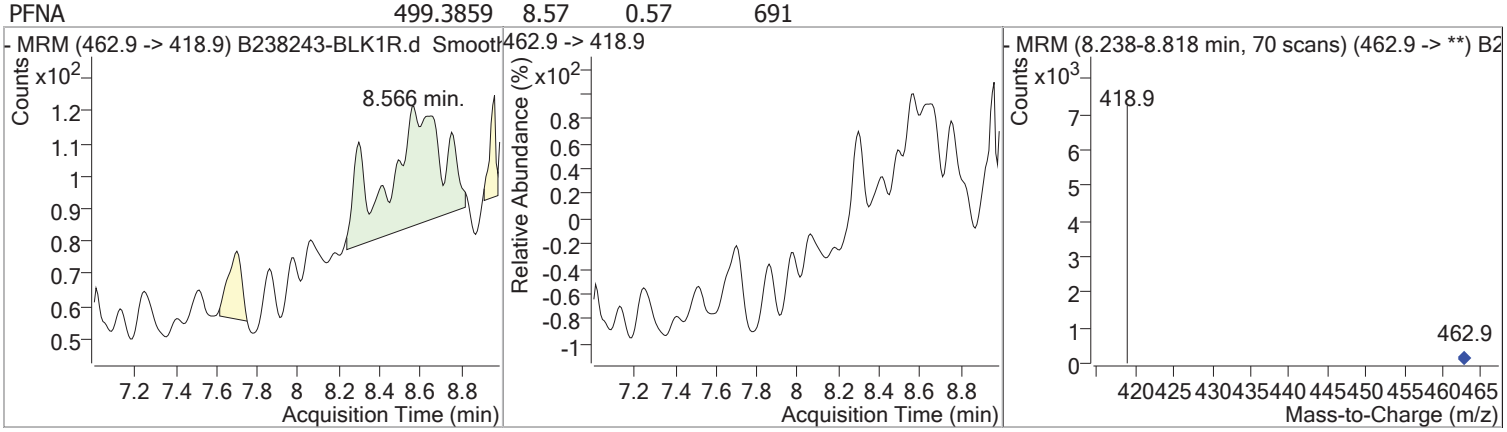
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	d	0		0				



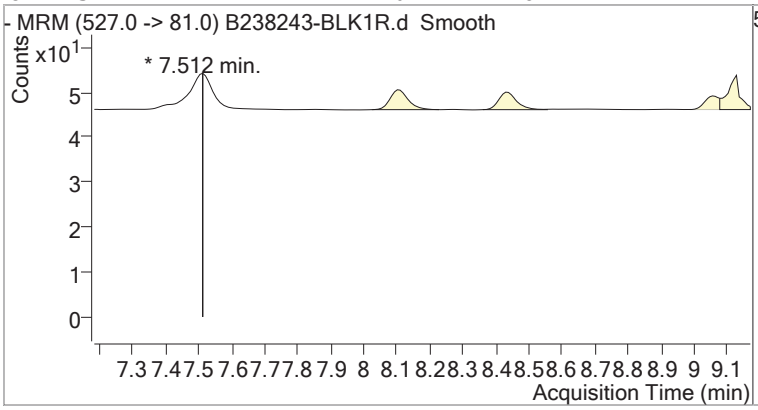
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	d	0		0				

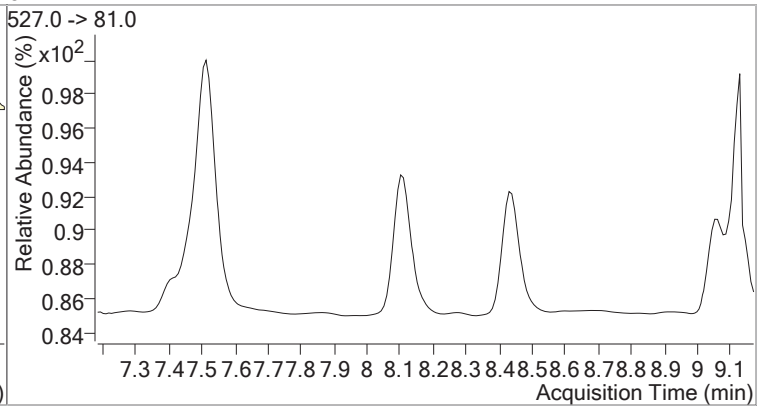


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	499.3859	8.57	0.57	691				

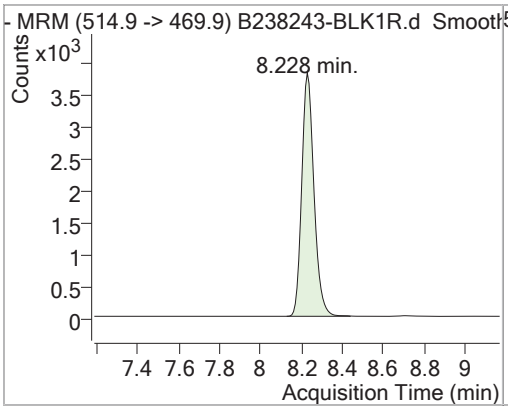


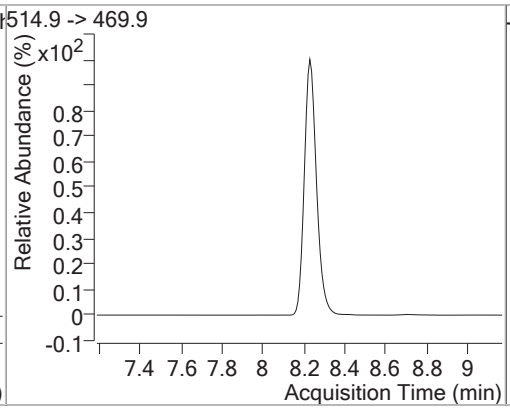
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	d	0		0				

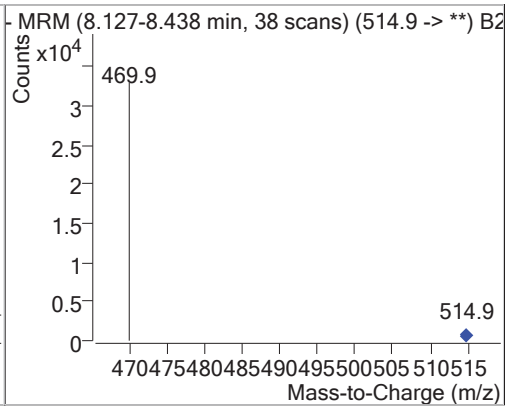




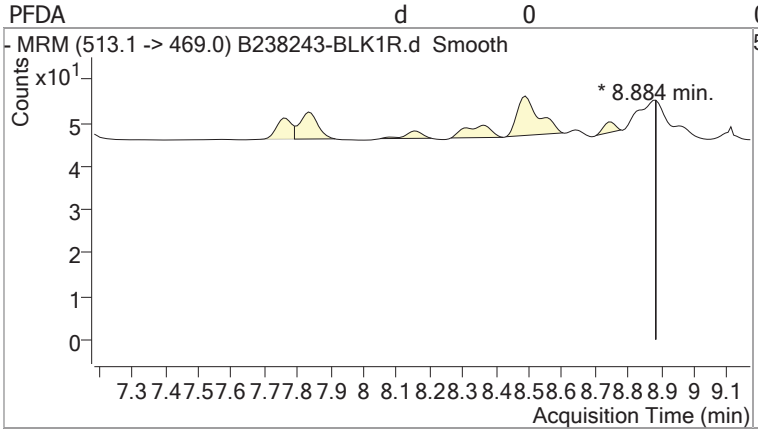
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	8714.0225	8.23	0.05	15750				

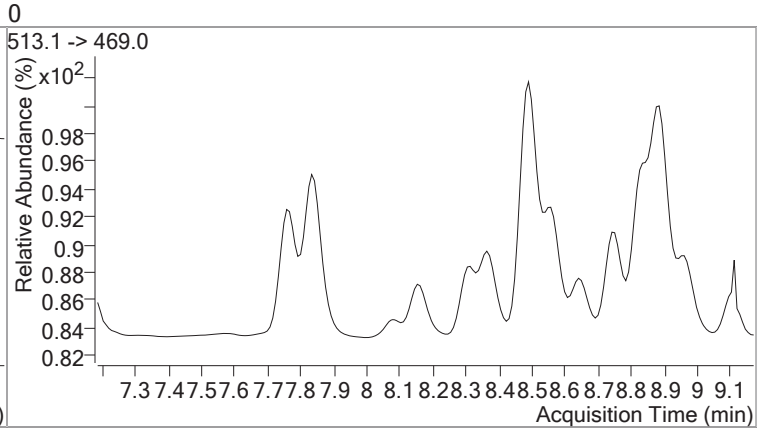




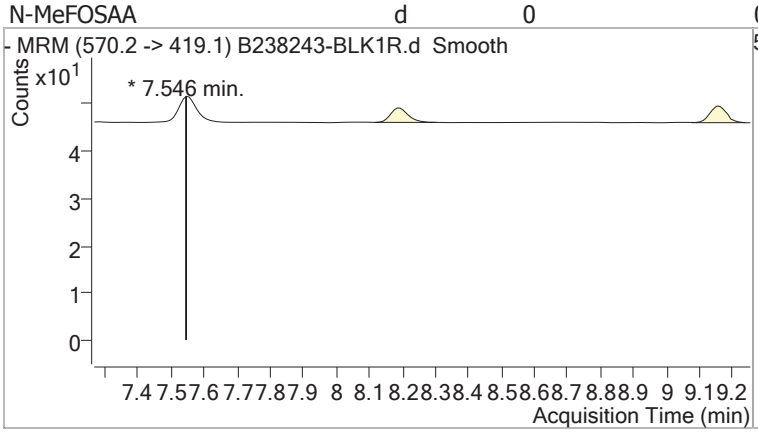


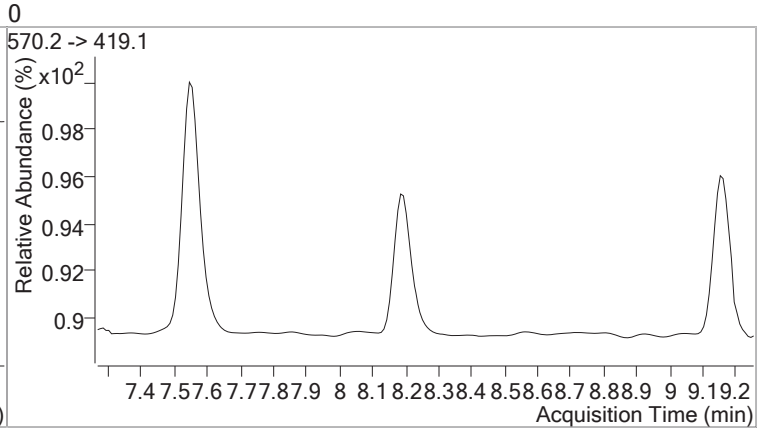
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	d	0		0				



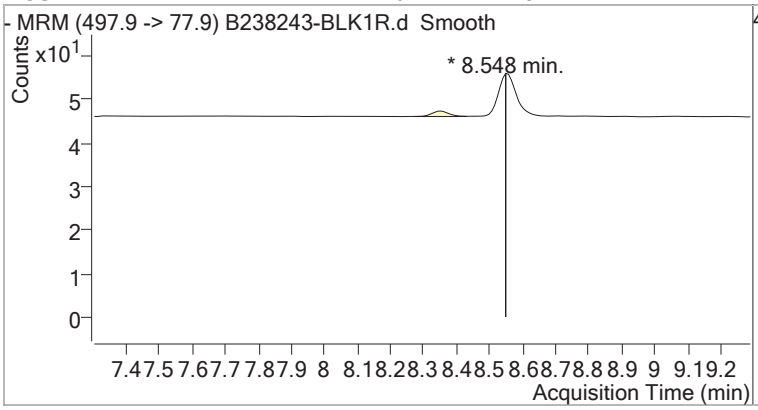


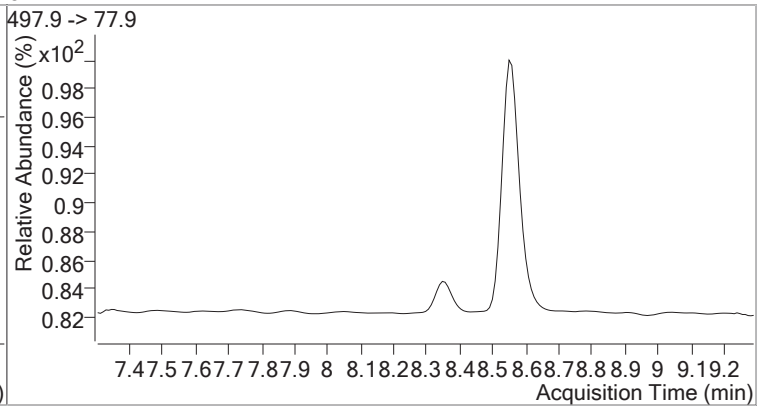
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	d	0		0				



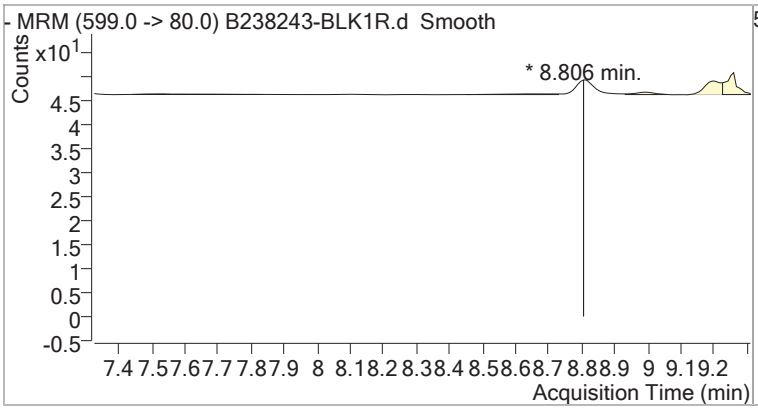


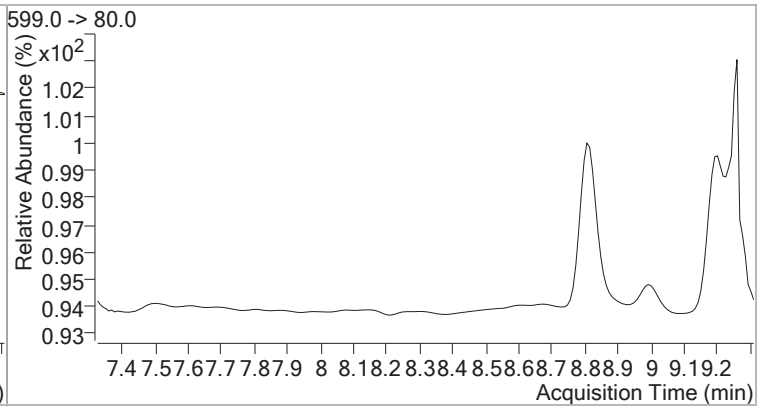
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	d	0		0				



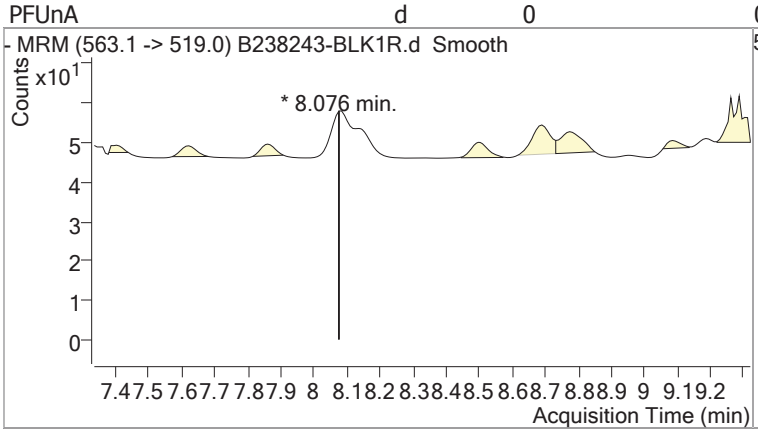


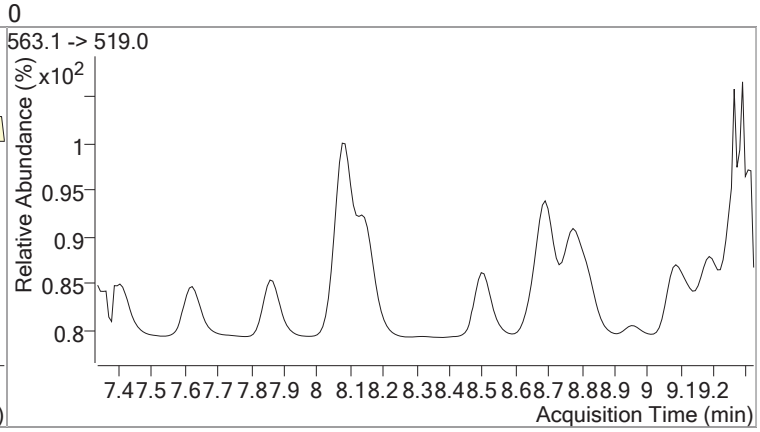
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	d	0		0				



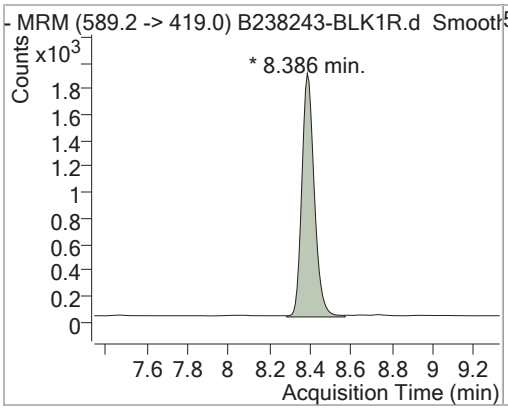


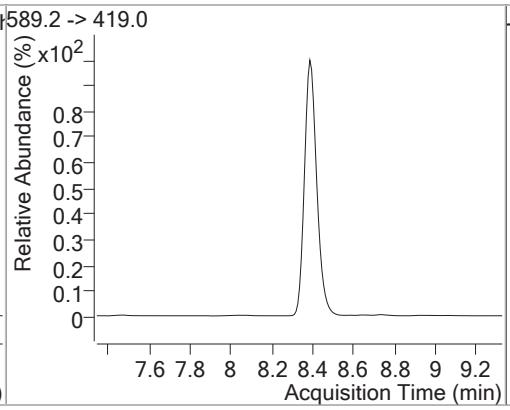
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	d	0		0				

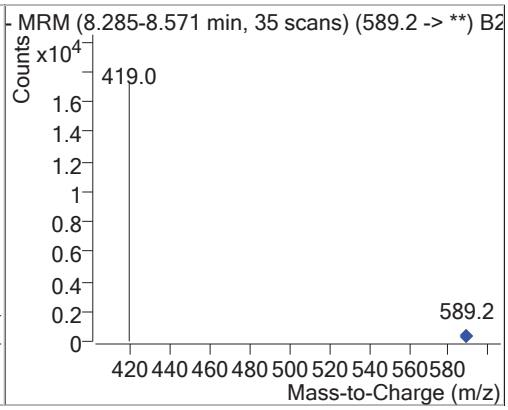




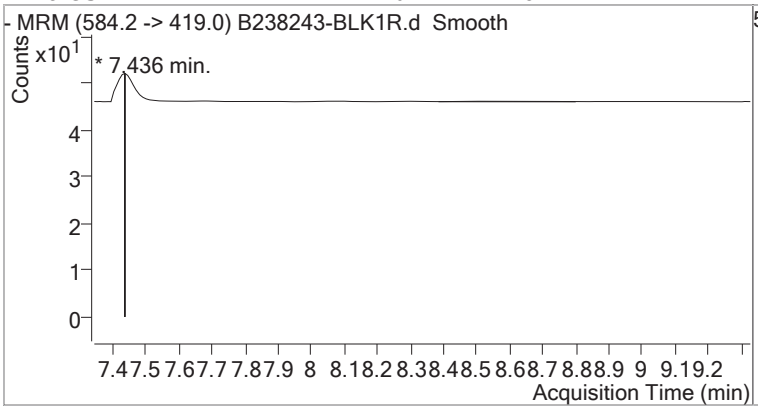
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	28164.4992	8.39	0.05	8025 (m)				

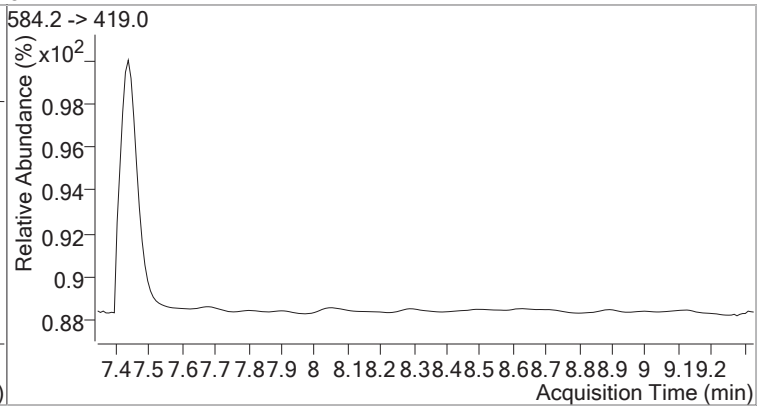




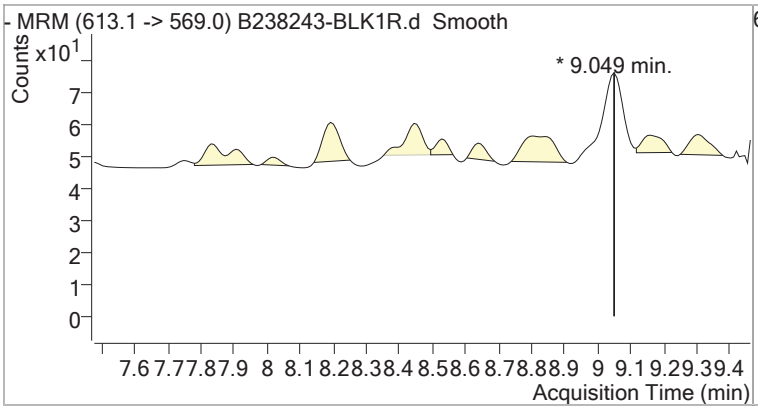


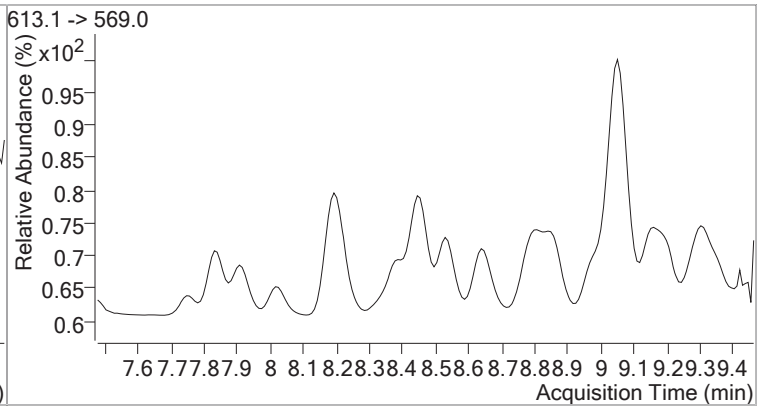
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	d	0		0				



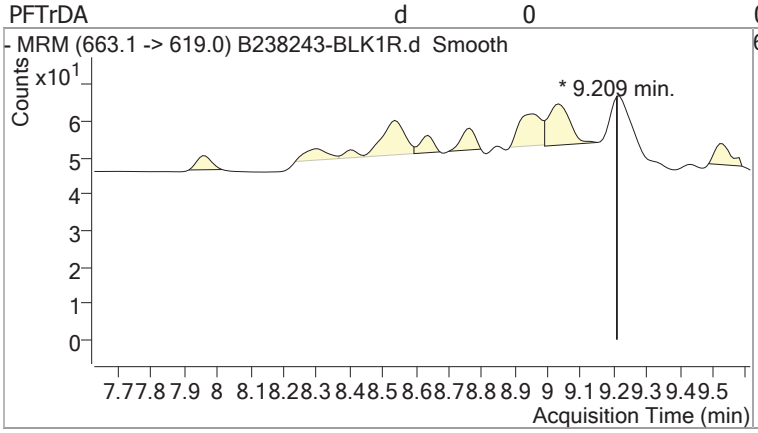


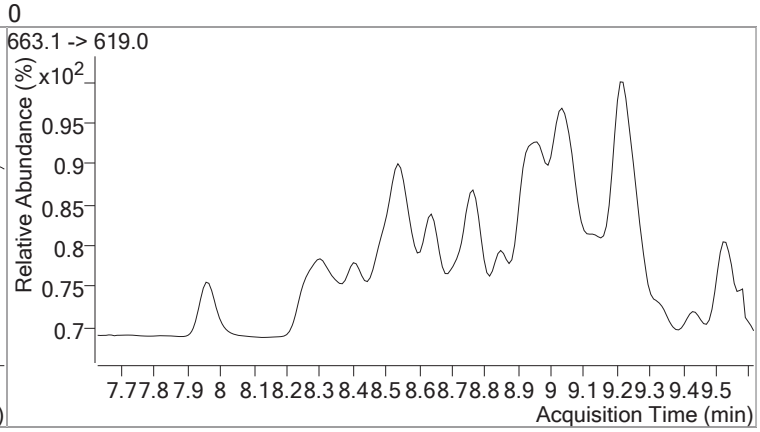
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	d	0		0				



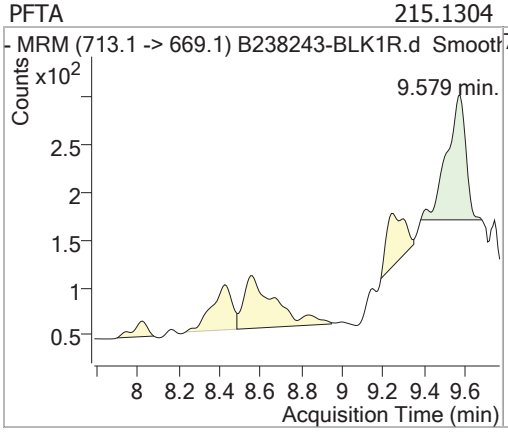


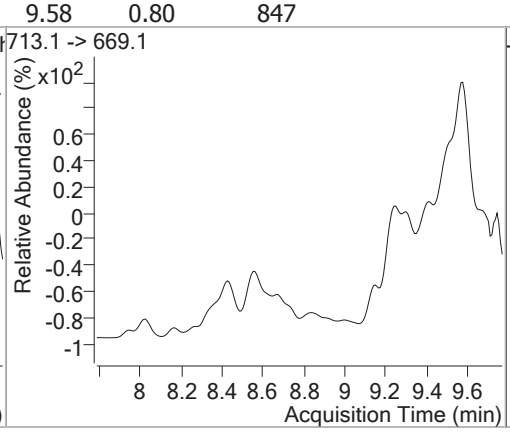
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	d	0		0				

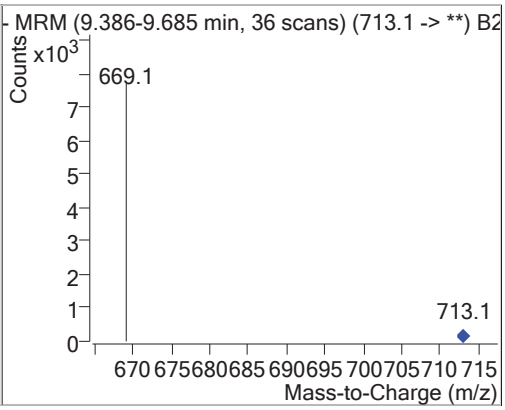




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	215.1304	9.58	0.80	847				







1 - FORM I
ANALYSIS DATA SHEET

LCS

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0617
Client:	Dvirka And Bartilucci		Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B238243-BS1	File ID:	B238243-BS1.d
Sampled:		Prepared:	08/19/19 00:00	Analyzed:	08/23/19 14:13
Solids:		Preparation:	SOP 434-PFAAS	Dilution:	
Batch:	B238243	Sequence:	S039525	Calibration:	1900263
Instrument:	HPLC1				
Column:	1				

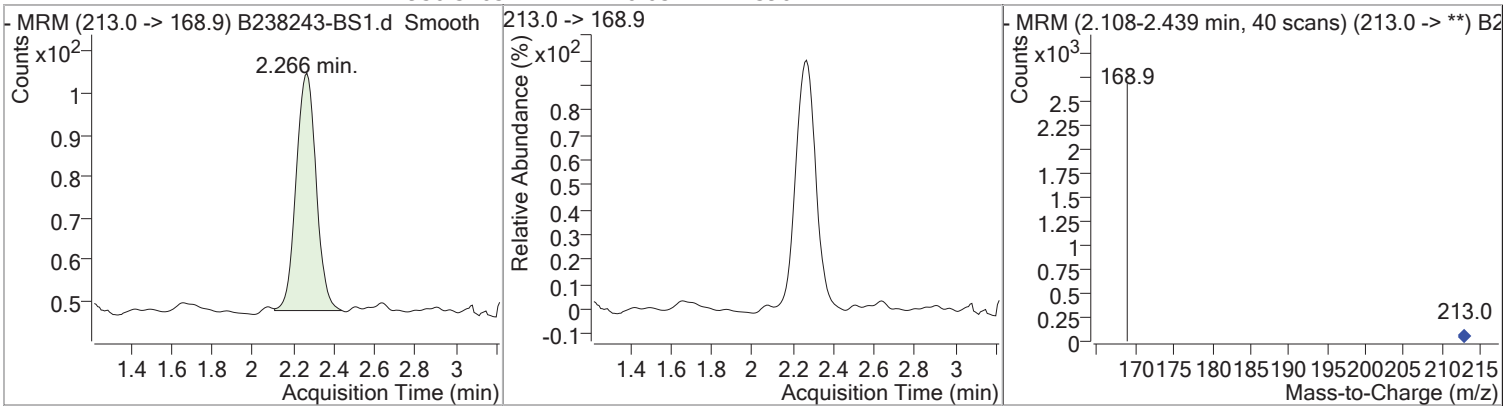
CAS NO.	COMPOUND	CONC. (ng/L)	MDL	RL	Q
375-73-5	Perfluorobutanesulfonic acid (PFBS)	7.86	2.0	2.0	
307-24-4	Perfluorohexanoic acid (PFHxA)	9.42	2.0	2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.87	2.0	2.0	
375-22-4	Perfluorobutanoic acid (PFBA)	7.80	2.0	2.0	
335-77-3	Perfluorodecanesulfonic acid (PFDS)	8.07	2.0	2.0	
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	7.48	2.0	2.0	
75491-6	Perfluorooctanesulfonamide (FOSA)	6.03	2.0	2.0	
2706-90-3	Perfluoropentanoic acid (PFPeA)	11.2	2.0	2.0	
	6:2 Fluorotelomersulfonate (6:2 FTS A)	11.6	2.0	2.0	
	8:2 Fluorotelomersulfonate (8:2 FTS A)	10.3	2.0	2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	6.61	2.0	2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	10.4	2.0	2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	8.06	2.0	2.0	
375-95-1	Perfluorononanoic acid (PFNA)	9.57	2.0	2.0	
335-76-2	Perfluorodecanoic acid (PFDA)	10.8	2.0	2.0	
	N-MeFOSAA	10.5	2.0	2.0	
2058-94-8	Perfluoroundecanoic acid (PFUnA)	11.2	2.0	2.0	
	N-EtFOSAA	7.99	2.0	2.0	
307-55-1	Perfluorododecanoic acid (PFDoA)	9.60	2.0	2.0	
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	10.8	2.0	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)	10.1	2.0	2.0	

Data File	B238243-BS1.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/23/2019 2:13:56 PM
Sample Name	B238243-BS1	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	1.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

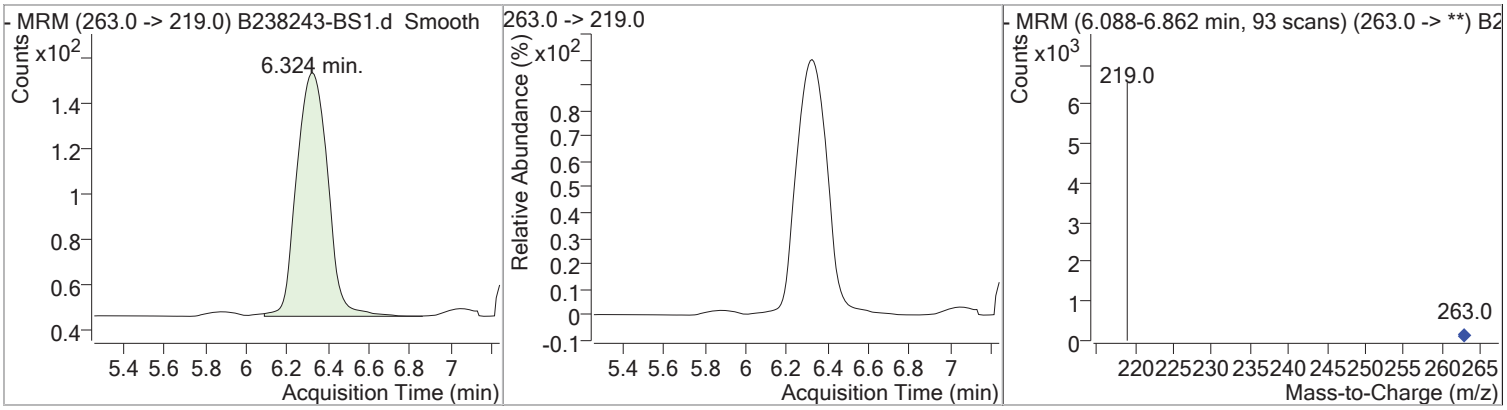
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.869	416.9 -> 371.9	12333	10000.0000	pg/ml		0.093
M PFOS C13	8.077	502.9 -> 80.0	18637	28700.0000	pg/ml	m	0.084
M d3-N-MeFOSAA	8.327	573.2 -> 419.0	10708	40000.0000	pg/ml		0.067
System Monitoring Compounds							
S PFHxA C13	7.197	314.9 -> 269.9	10674	12134.0716	pg/ml		0.109
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 121.34%			
S PFDA C13	8.245	514.9 -> 469.9	17736	13813.3263	pg/ml	m	0.067
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 138.13%		*	
S d5-N-MeFOSAA	8.394	589.2 -> 419.0	11394	44992.5726	pg/ml		0.059
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 112.48%			
Target Compounds							QValue
T PFBA	2.266	213.0 -> 168.9	390	1950.3105	pg/ml		100
T PFPeA	6.324	263.0 -> 219.0	1139	2809.3937	pg/ml		100
T PFBS	6.685	298.9 -> 80.0	771	2045.7497	pg/ml		100
T PFHxA	7.198	312.9 -> 268.9	2015	2354.5472	pg/ml		100
T PFHpA	7.601	362.9 -> 319.0	2825	2216.5222	pg/ml		100
T PFHxS-Total	7.634	398.9 -> 80.0	1020	1722.0067	pg/ml		100
T 6.2 FTS	7.869	427.0 -> 406.8	468	3032.0360	pg/ml		100
T PFOA-Total	7.869	412.9 -> 368.9	4193	2589.7478	pg/ml		100
T PFHpS	7.885	449.0 -> 79.7	601	1947.2553	pg/ml		100
T PFOS-Total	8.077	498.9 -> 80.0	2161	2240.6888	pg/ml	m	100
T PFNA	8.078	462.9 -> 418.9	2351	2393.0857	pg/ml		100
T 8.2 FTS	8.253	527.0 -> 81.0	686	2687.7823	pg/ml		100
T PFDA	8.245	513.1 -> 469.0	4893	2699.8166	pg/ml		100
T N-MeFOSAA	8.328	570.2 -> 419.1	832	2614.6716	pg/ml		100
T FOSA	8.363	497.9 -> 77.9	3070	1507.1315	pg/ml		100
T PFDS	8.385	599.0 -> 80.0	1266	2101.4194	pg/ml		100
T PFUnA	8.395	563.1 -> 519.0	5844	2799.4711	pg/ml		100
T N-EtFOSAA	8.403	584.2 -> 419.0	526	1998.6881	pg/ml		100
T PFDoA	8.536	613.1 -> 569.0	7016	2399.8951	pg/ml		100
T PFTrDA	8.696	663.1 -> 619.0	8968	2689.6448	pg/ml		100
T PFTA	8.864	713.1 -> 669.1	7095	2536.7963	pg/ml		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

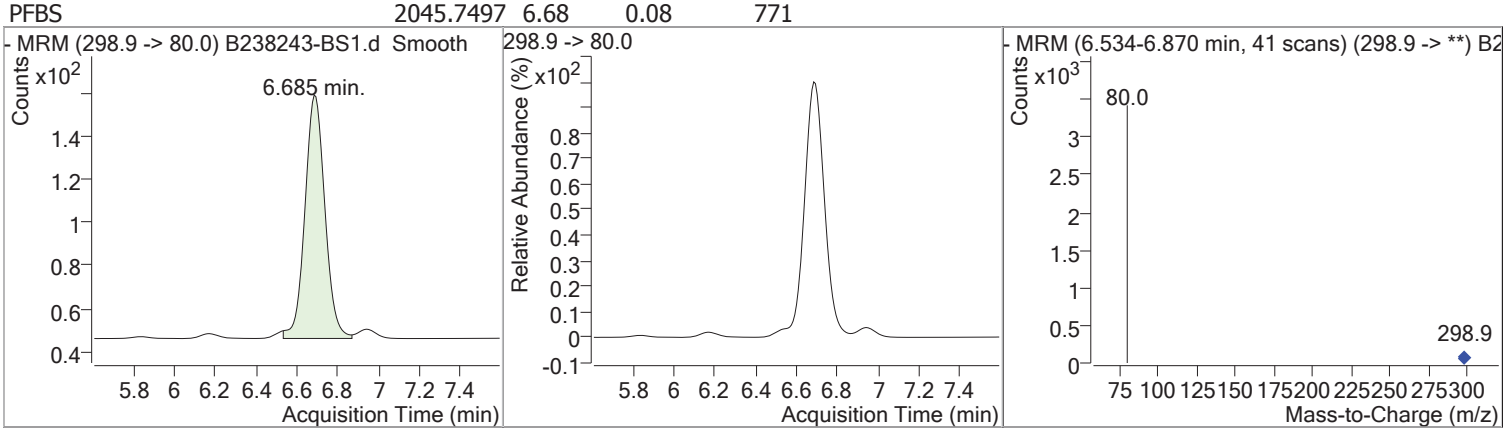
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBA	1950.3105	2.27	0.05	390				



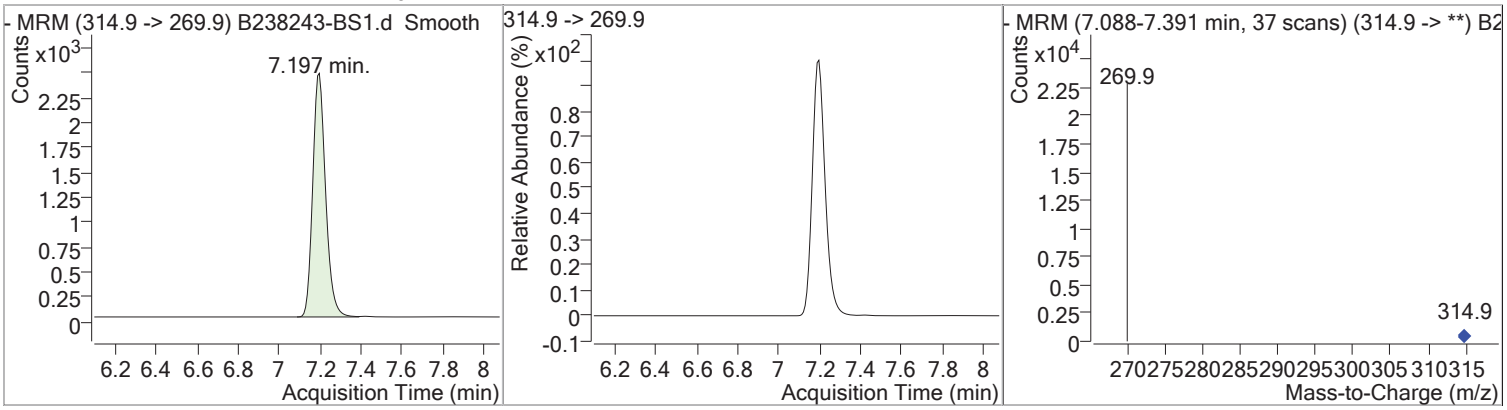
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFPeA	2809.3937	6.32	0.08	1139				



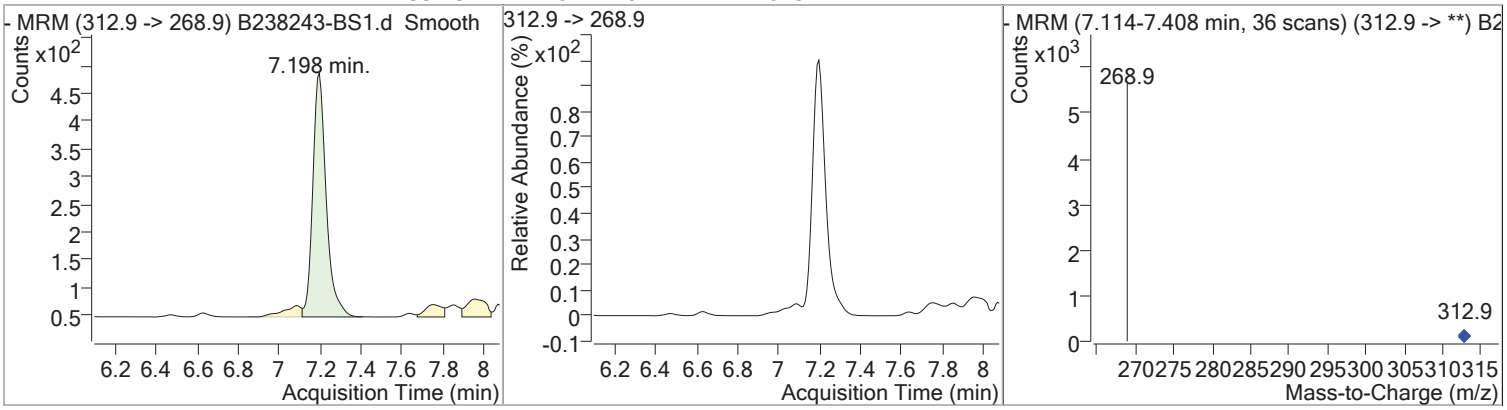
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFBS	2045.7497	6.68	0.08	771				



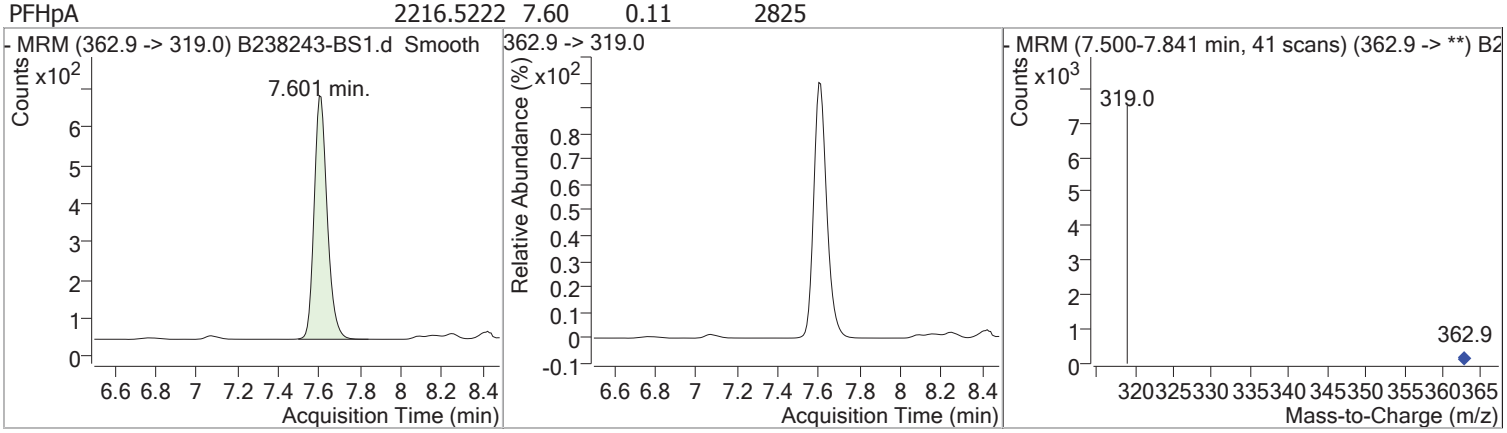
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA C13	12134.0716	7.20	0.11	10674				



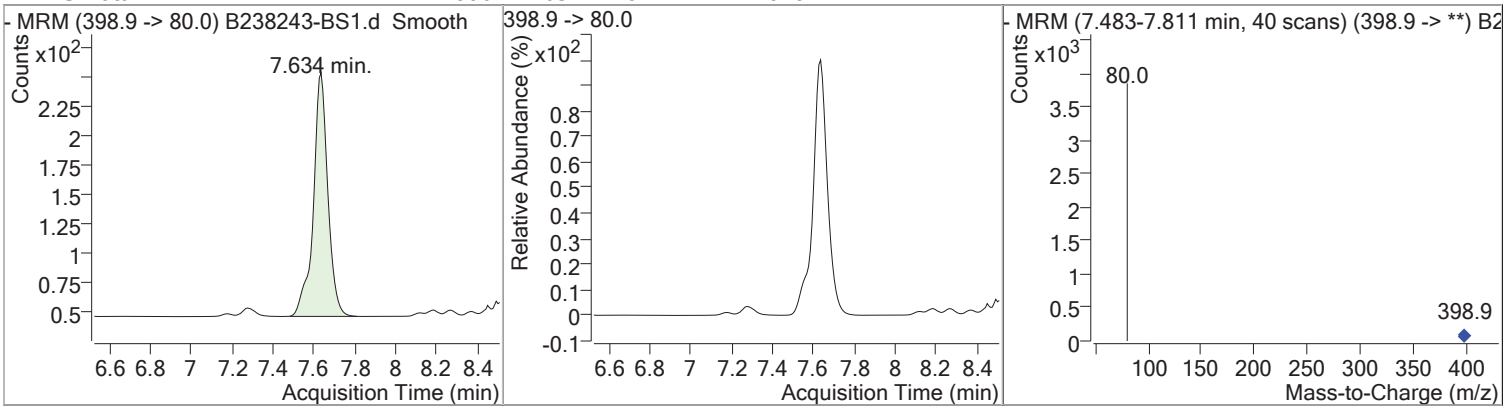
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxA	2354.5472	7.20	0.11	2015				



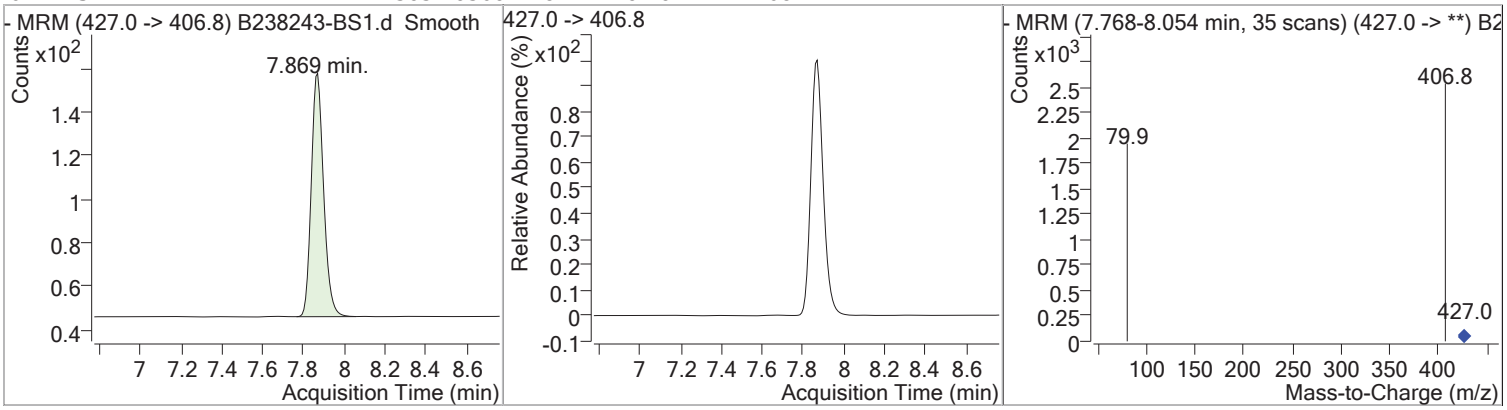
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpA	2216.5222	7.60	0.11	2825				



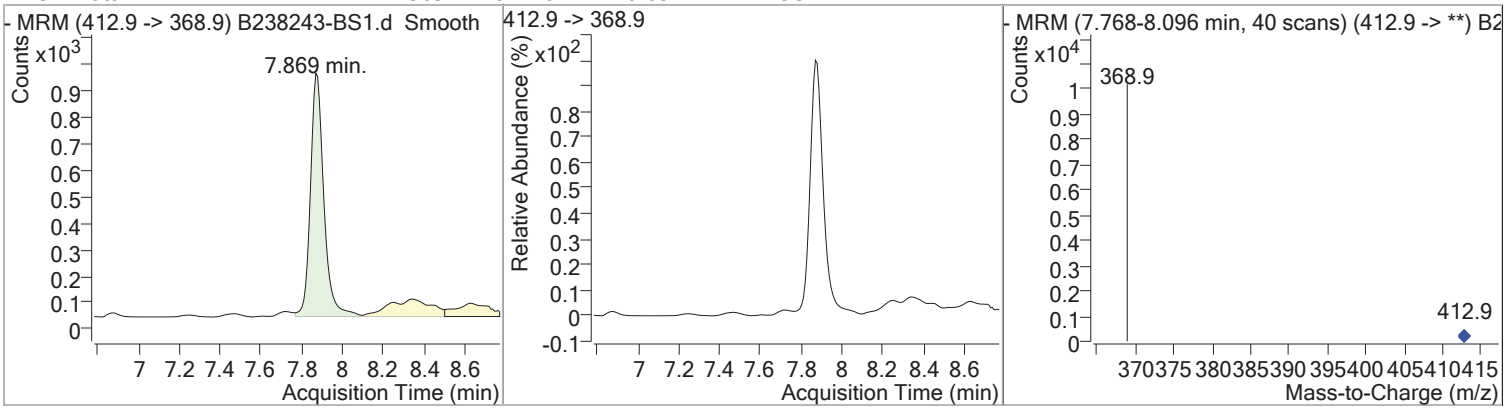
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHxS-Total	1722.0067	7.63	0.12	1020				



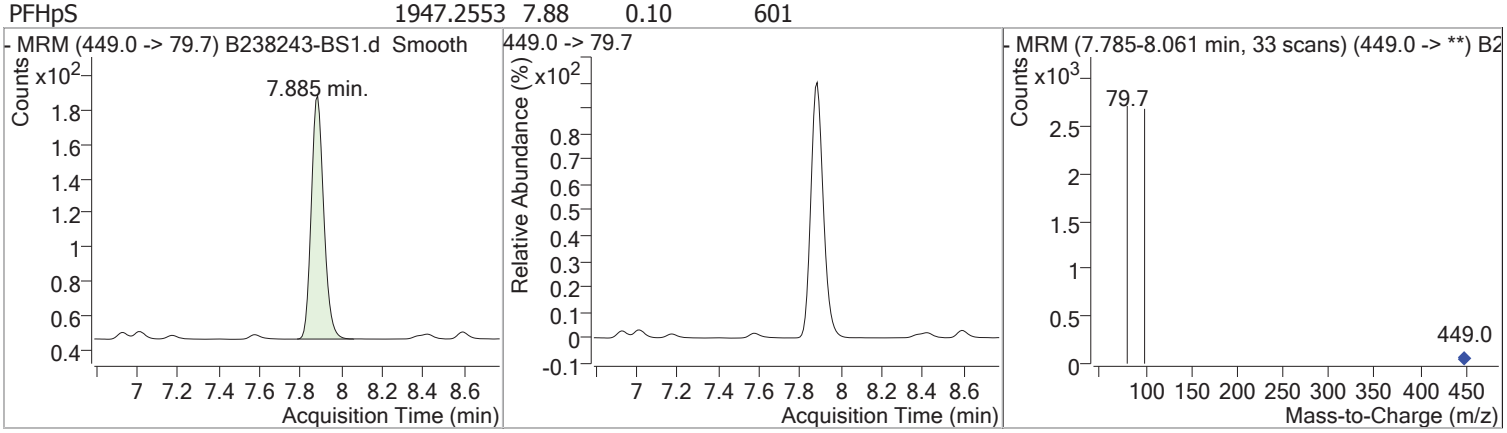
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
6.2 FTS	3032.0360	7.87	0.10	468				



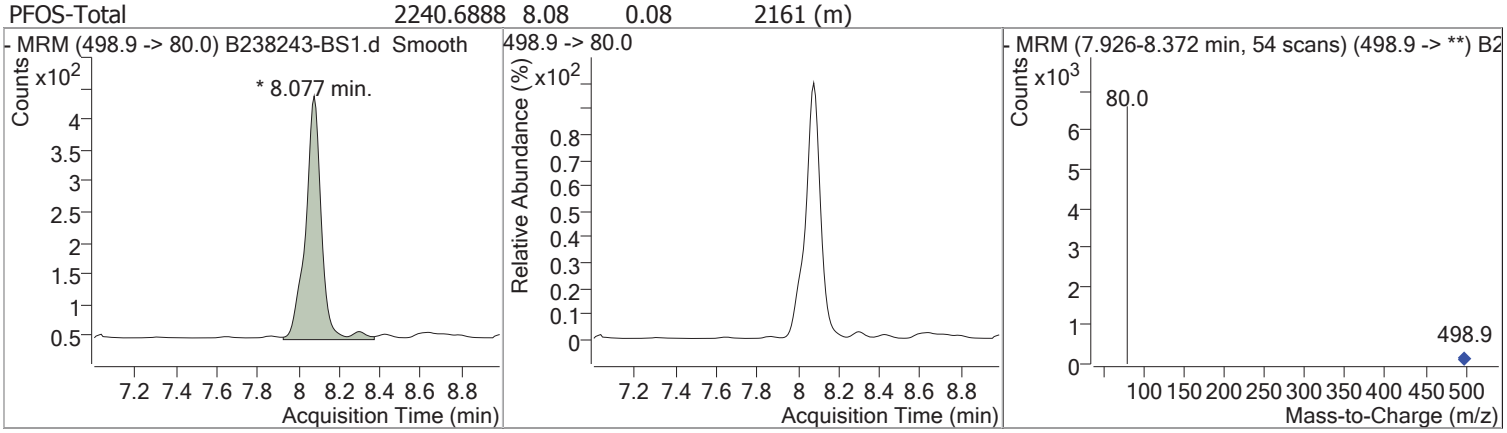
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOA-Total	2589.7478	7.87	0.09	4193				



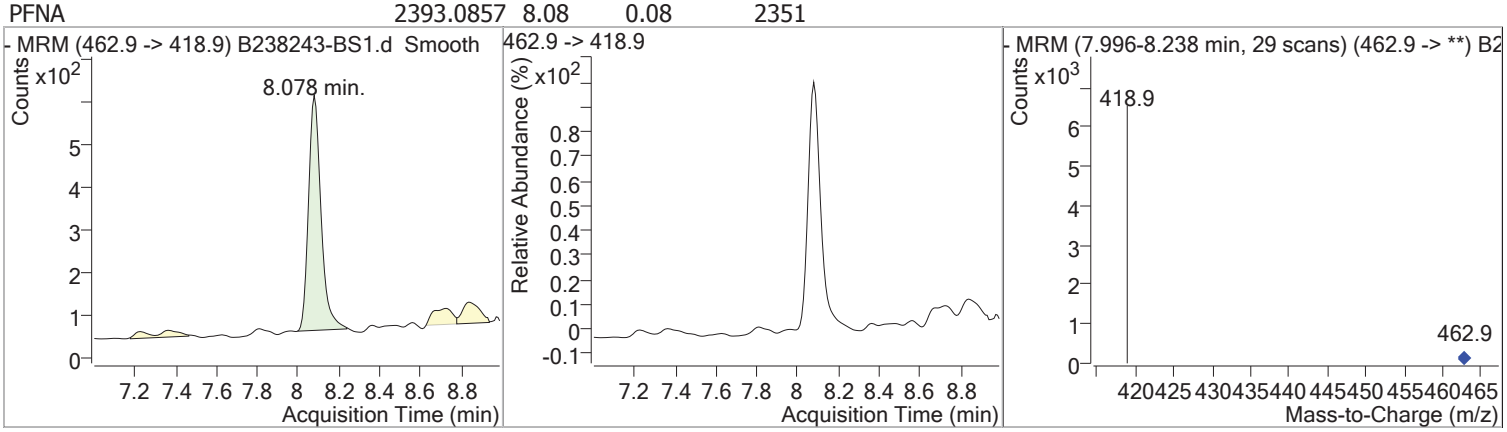
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFHpS	1947.2553	7.88	0.10	601				



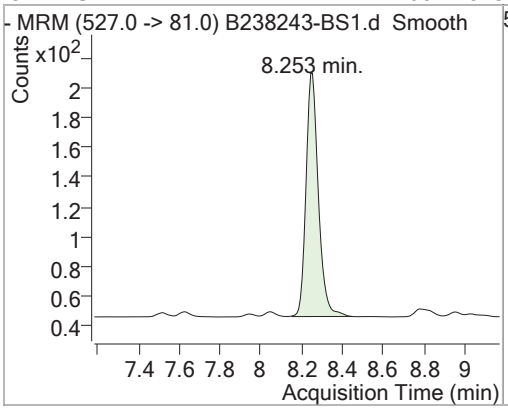
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFOS-Total	2240.6888	8.08	0.08	2161 (m)				

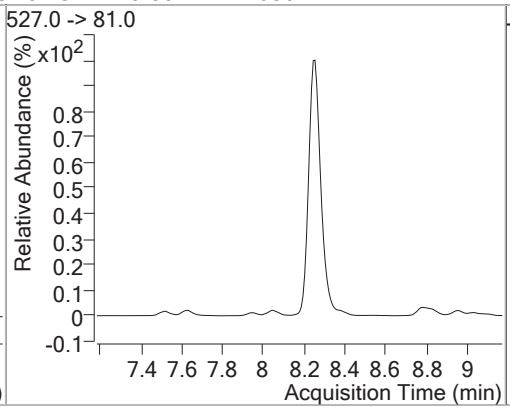


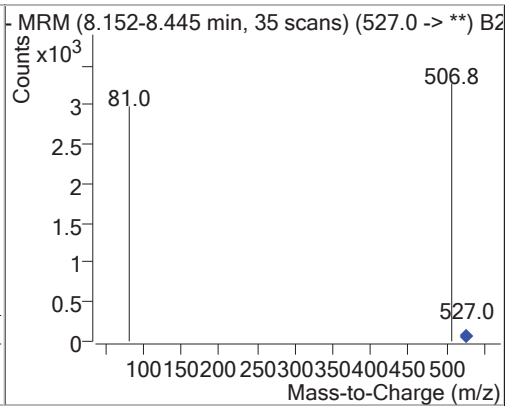
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFNA	2393.0857	8.08	0.08	2351				



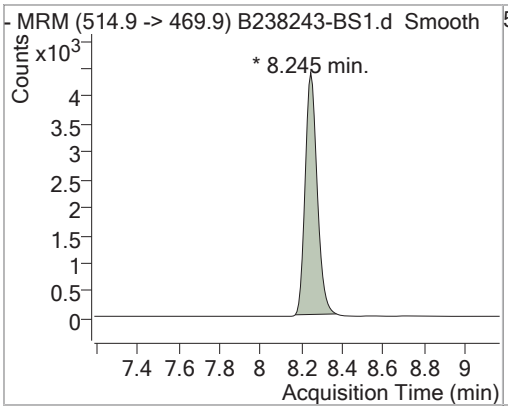
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
8.2 FTS	2687.7823	8.25	0.08	686				

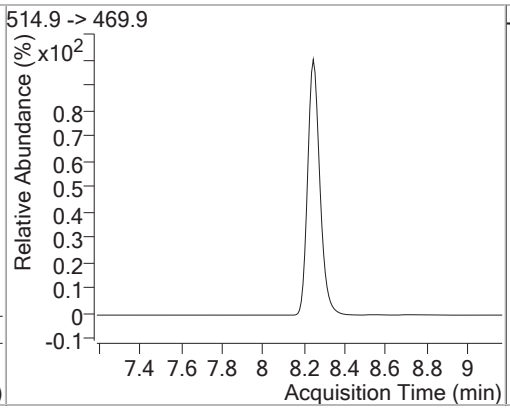


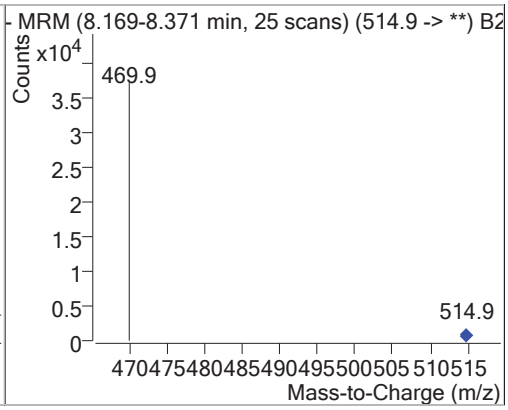




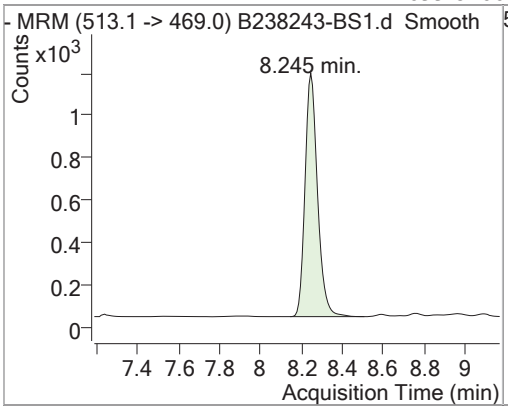
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA C13	13813.3263	8.24	0.07	17736 (m)				

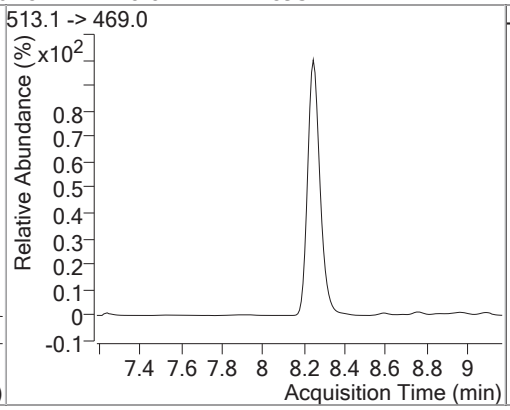


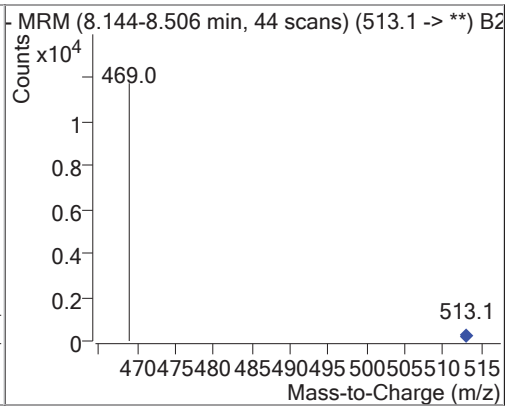




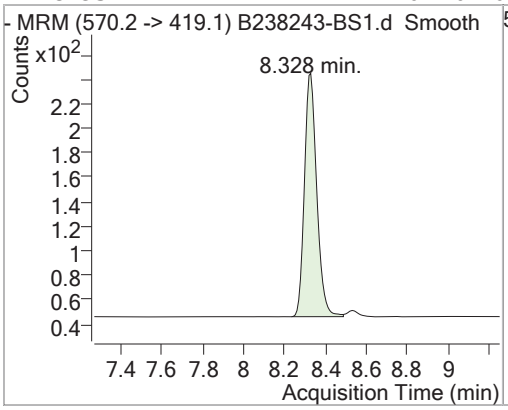
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDA	2699.8166	8.24	0.07	4893				

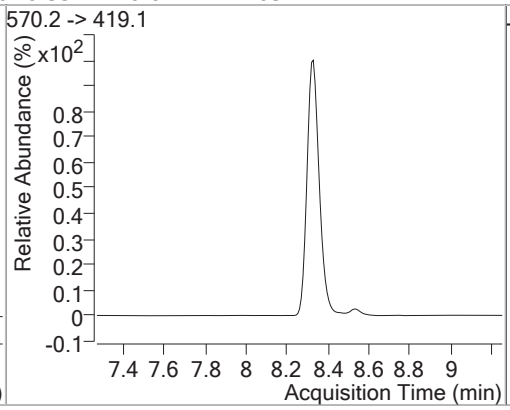


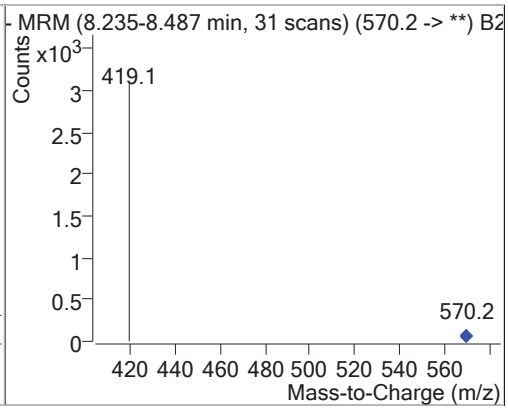




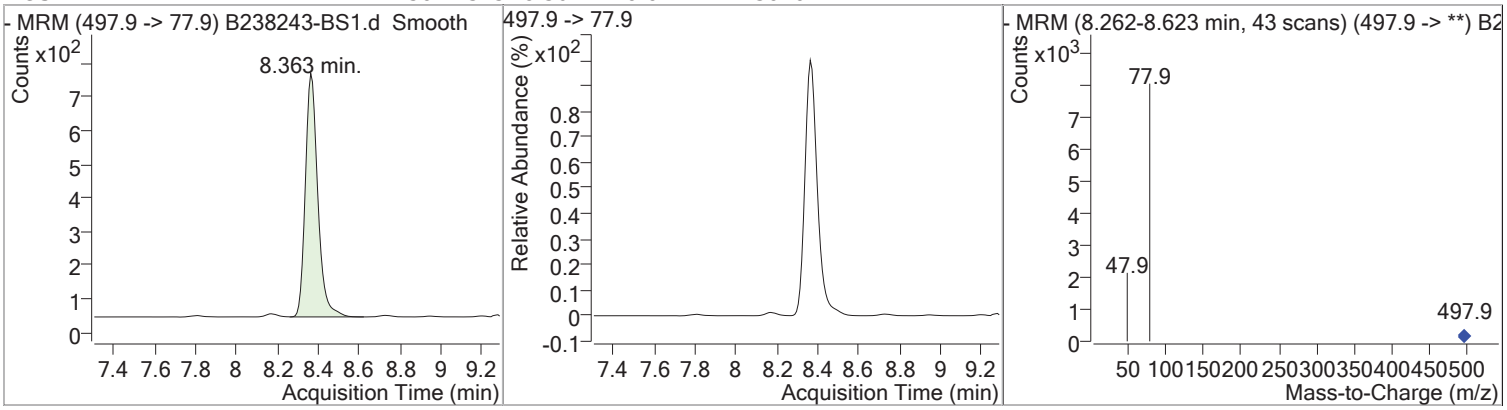
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-MeFOSAA	2614.6716	8.33	0.07	832				



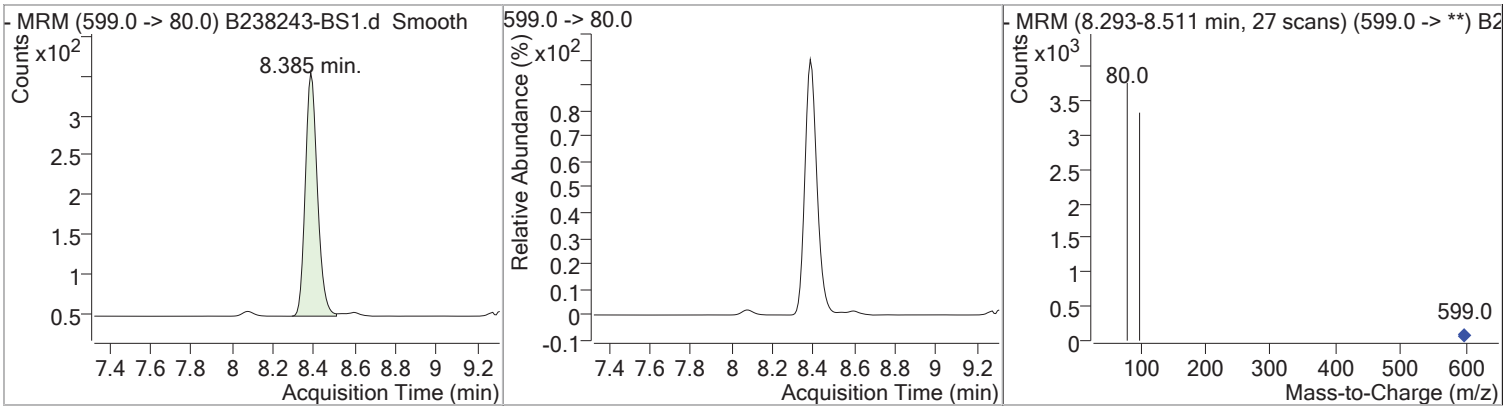




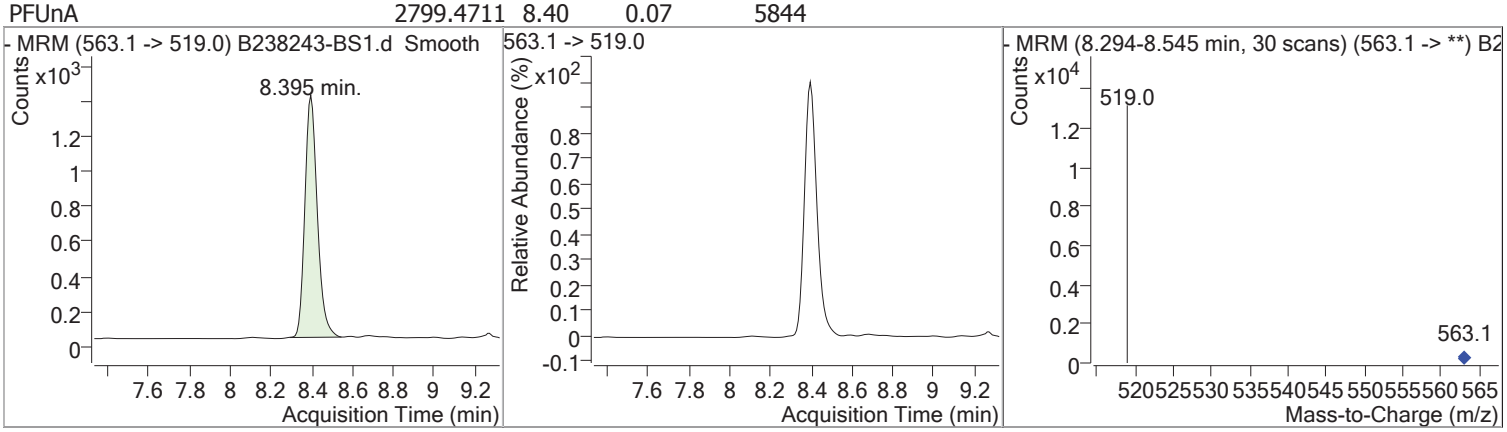
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
FOSA	1507.1315	8.36	0.07	3070				



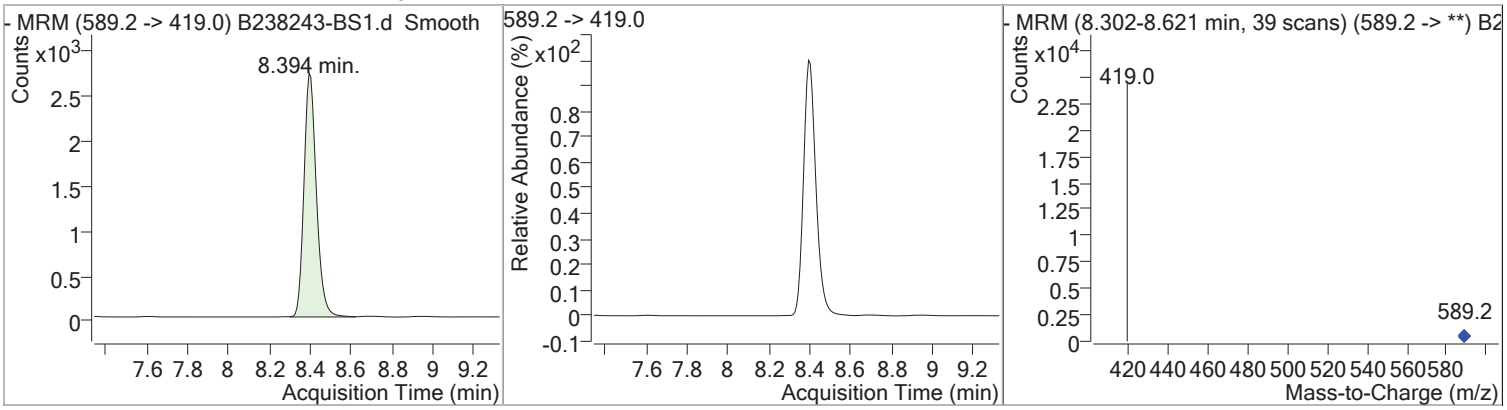
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDS	2101.4194	8.39	0.07	1266				



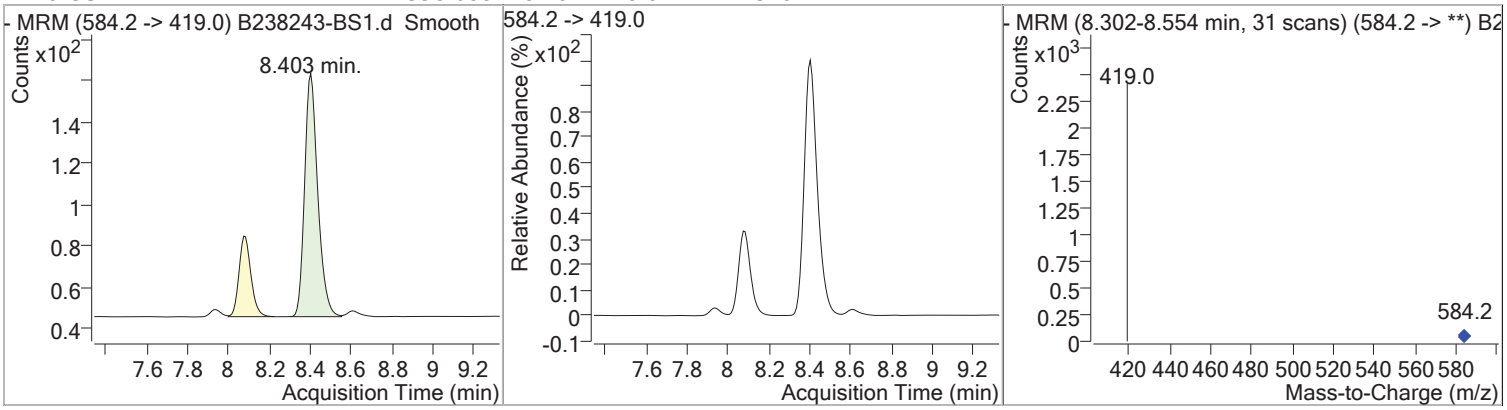
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFUnA	2799.4711	8.40	0.07	5844				



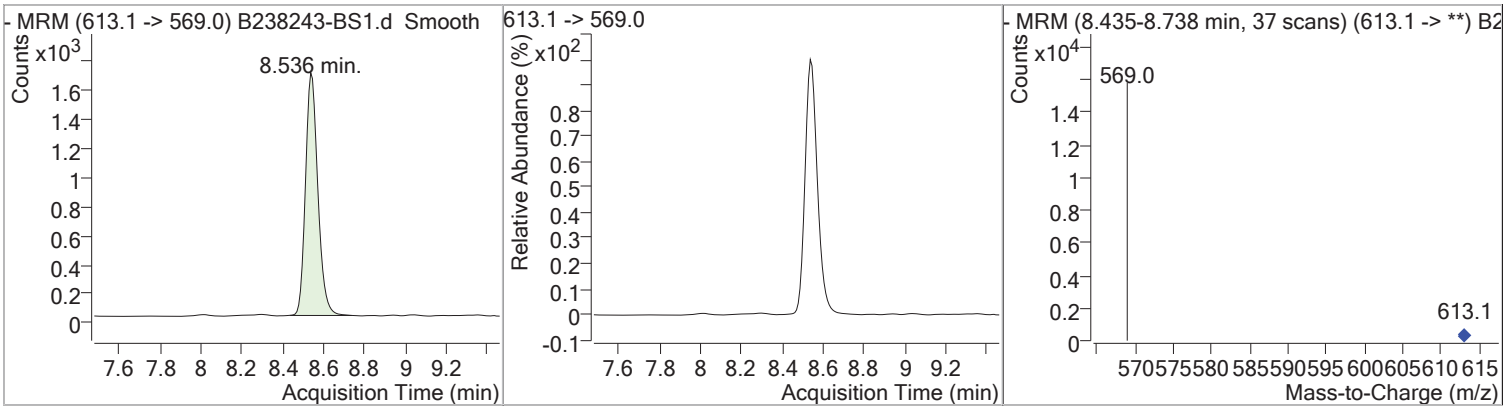
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
d5-N-MeFOSAA	44992.5726	8.39	0.06	11394				



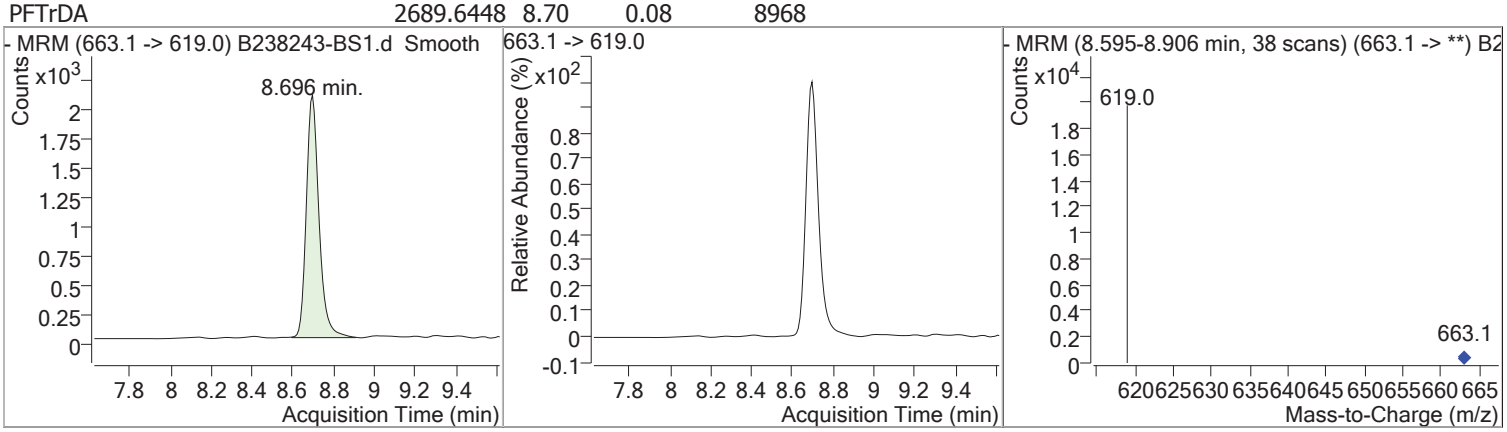
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
N-EtFOSAA	1998.6881	8.40	0.07	526				



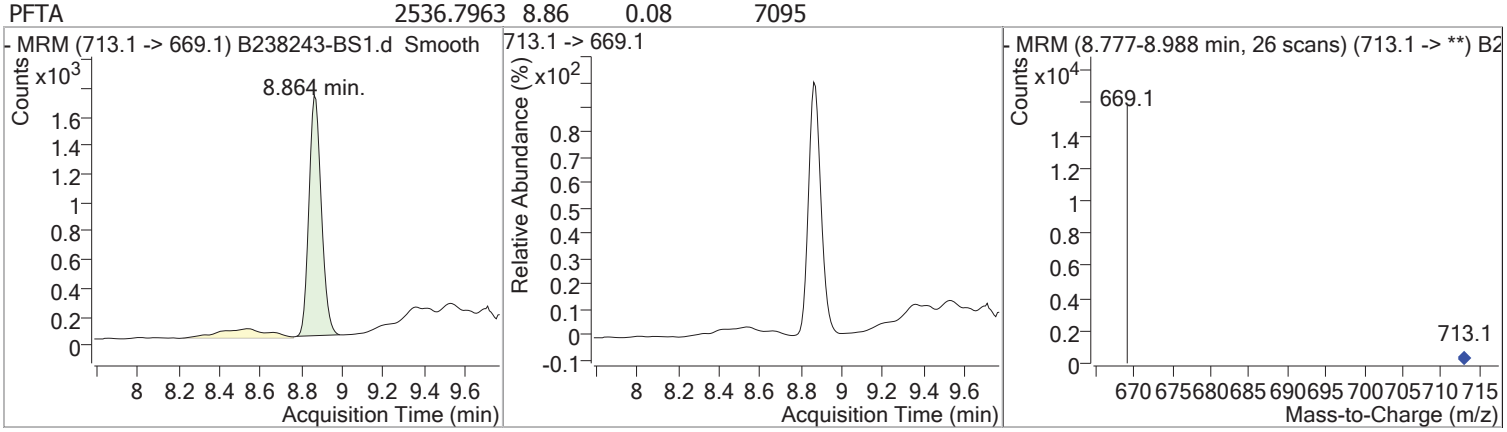
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFDoA	2399.8951	8.54	0.07	7016				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTrDA	2689.6448	8.70	0.08	8968				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Uppper
PFTA	2536.7963	8.86	0.08	7095				



PREPARATION BENCH SHEET

Printed: 8/29/2019 12:21:32PM

Analysis
PFAS trace

B238243

Con-Test Analytical Laboratory

Prepared using: SOP 434-PFAAS

Surrogate Solution
1908171 Surr 537 R1

Spiking Solution
1907465 Low 537 LCS

Matrix: Water

Lab Number	Sample ID and Source Sample	Due Date	Expires	Concentrated	Add'l Notes	Initial (mL)	Final (mL)	ul Spike	ul Surrogate	Extraction Comments
B238243-BLK1	Blank								10	
B238243-BS1	LCS							25	10	
B238243-MS1	Matrix Spike [19H0528-04]							25	10	
B238243-MSD1	Matrix Spike Dup [19H0528-04]							25	10	
19H0528-04	MW-22R	08/23/19	08/22/19						10	MS/MSD
19H0528-06	MW-22S	08/23/19	08/22/19						10	
19H0528-07	Blind Duplicate	08/23/19	08/22/19						10	
19H0576-03	MW-21R	08/26/19	08/23/19						10	
19H0576-05	MW-21S	08/26/19	08/23/19						10	
19H0617-02	Field Blank	08/22/19	08/26/19						10	
19H0617-03	P-15	08/22/19	08/26/19						10	
19H0617-04	P-5S	08/22/19	08/26/19						10	
19H0955-06	E Blank	08/27/19	08/30/19						10	

SPE Cartridges E#1902050

Start Date/Time _____

StopDate/Time _____

Standard ID#	Description	Manufacture Lot#
1705357	Ammonium Acetate	NA
1808012	SenSafe pH Strips	N/A
1907441	Methanol-LC/MS Grade	0000223946
1908032	Trizma pre-set crystals	SLBZ6597

SLS

JFC 8/19/19
Spikedby/Witnessed By Date

JFC 8/19/19
Extracted By Date

ANALYSIS SEQUENCE

S039480

Instrument: HPLC1

Calibnration ID: 1900263

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
S039480-CCV1	QC		1		1905418	1907362	
19H0528-04	PFAS trace	A	2			1907362	
B238243-MS1	QC		3			1907362	
B238243-MSD1	QC		4			1907362	
19H0576-03	PFAS trace	A	5			1907362	
19H0617-04	PFAS trace	A	6			1907362	
S039480-CCV2	QC		7		1905419	1907362	
19H0955-06	PFAS trace	A	8			1907362	
S039480-CCV3	QC		9		1905420	1907362	
B238243-BLK1	QC		10			1907362	
19H0576-05	PFAS trace	A	11			1907362	
19H0617-02	PFAS trace	A	12			1907362	
19H0617-03	PFAS trace	A	13			1907362	
19H0528-06	PFAS trace	A	14			1907362	
S039480-CCV4	QC		15		1905418	1907362	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

S039525

Instrument: HPLC1

Calibnration ID: 1900263

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
S039525-CCV1	QC		1		1905418	1907362	
B238243-BS1	QC		2			1907362	

Samples Loaded By Date

Data Processed By Date