

Data Package



con-test[®]
ANALYTICAL LABORATORY

August 27, 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: 19H0528

Enclosed are results of analyses for samples received by the laboratory on August 9, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Kaitlyn", written in a cursive, flowing style.

Kaitlyn A. Feliciano
Project Manager

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

REPORT DATE: 8/27/2019

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 3150-16

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 19H0528

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-8/8/19	19H0528-01	Trip Blank Water		SW-846 8260C	
OC-17D	19H0528-02	Ground Water		SW-846 8260C	
OC-17S	19H0528-03	Ground Water		SW-846 8260C	
MW-22R	19H0528-04	Ground Water		SOP 434-PFAAS	
				SW-846 8260C	
				SW-846 8270D	
MW-27	19H0528-05	Ground Water		SW-846 8260C	
MW-22S	19H0528-06	Ground Water		SOP 434-PFAAS	
				SW-846 8260C	
				SW-846 8270D	
Blind Duplicate	19H0528-07	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.

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EPA 537

Qualifications:**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

SOP 434-PFAAS

Qualifications:**MS-07A**

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.

Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:**Perfluorodecanesulfonic acid (PFD**

B238243-MS1, B238243-MSD1

Perfluorododecanoic acid (PFDoA)

B238243-MS1, B238243-MSD1

Perfluorooctanesulfonamide (FOS/

B238243-MS1, B238243-MSD1

Perfluorotetradecanoic acid (PFTA

B238243-MS1, B238243-MSD1

Perfluorotridecanoic acid (PFTrDA

B238243-MS1, B238243-MSD1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:**Perfluoroundecanoic acid (PFUnA)**

B238243-MS1

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:**6:2 Fluorotelomersulfonate (6:2 FT)**

B238243-MS1, B238243-MSD1

N-EtFOSAA

B238243-MS1, B238243-MSD1

N-MeFOSAA

B238243-MSD1

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:**Perfluorobutanesulfonic acid (PFB**

B238243-MSD1

Perfluoropentanoic acid (PFPeA)

B238243-MSD1

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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

Z-01

Surrogate outside of conformance. Extraction of MS and source confirmed surrogate out of conformance due to matrix effects.

Analyte & Samples(s) Qualified:**d5-NEtFOSAA**B238243-MSD1

Z-01a

Surrogate outside of conformance. Extraction of MS/MSD confirmed surrogate out of conformance due to matrix effects.

Analyte & Samples(s) Qualified:**d5-NEtFOSAA**19H0528-04[MW-22R]

Z-01b

Surrogate outside of conformance. Extraction of MSD and source confirmed surrogate out of conformance due to matrix effects.

Analyte & Samples(s) Qualified:**d5-NEtFOSAA**B238243-MS1

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

MS-09

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:**Bromomethane**

B237875-MS1, B237875-MSD1

ChloromethaneB237875-MS1, B237875-MSD1

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:**1,1,2-Trichloro-1,2,2-trifluoroethane**B237875-MS1, B237875-MSD1

MS-24

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

Analyte & Samples(s) Qualified:**1,1,1-Trichloroethane**

B237875-MS1

TrichloroethyleneB237875-MS1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

19H0528-02[OC-17D], 19H0528-04[MW-22R], 19H0528-05[MW-27], 19H0528-06[MW-22S], 19H0528-07[Blind Duplicate]

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V-05

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

Analyte & Samples(s) Qualified:**Chloromethane**

19H0528-01[Trip Blank-8/8/19], 19H0528-02[OC-17D], 19H0528-03[OC-17S], 19H0528-04[MW-22R], 19H0528-05[MW-27], 19H0528-06[MW-22S], 19H0528-07[Blind Duplicate], B237875-BLK1, B237875-BS1, B237875-BSD1, B237875-MS1, B237875-MSD1, S039168-CCV1

n-Butylbenzene

19H0528-01[Trip Blank-8/8/19], 19H0528-02[OC-17D], 19H0528-03[OC-17S], 19H0528-04[MW-22R], 19H0528-05[MW-27], 19H0528-06[MW-22S], 19H0528-07[Blind Duplicate], B237875-BLK1, B237875-BS1, B237875-BSD1, B237875-MS1, B237875-MSD1, S039168-CCV1

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**

B237875-BS1, B237875-BSD1, B237978-BS1, B237978-BSD1, S039168-CCV1, S039197-CCV1

tert-Butyl Alcohol (TBA)

B237978-BS1, B237978-BSD1, S039197-CCV1

V-36

Initial calibration verification (ICV) 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:**Carbon Disulfide**

B237875-BS1, B237875-BSD1, S039168-CCV1

EPA 537

If more than the compound list from method EPA 537 has been reported, prep and analysis has been conducted by method SOP 434-PFAAS.

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.



Lisa A. Worthington
Technical Representative

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: 19H0528

Date Received: 8/9/2019

Field Sample #: Trip Blank-8/8/19

Sampled: 8/8/2019 00:00

Sample ID: 19H0528-01

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
n-Butylbenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C	8/13/19	8/13/19 23:04	BRF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	8/13/19	8/13/19 23:04	BRF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF

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Project Location: Wall St., Valhalla, NY

Sample Description:

Work Order: 19H0528

Date Received: 8/9/2019

Field Sample #: Trip Blank-8/8/19

Sampled: 8/8/2019 00:00

Sample ID: 19H0528-01

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:04	BRF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	110	70-130							
Toluene-d8	110	70-130							
4-Bromofluorobenzene	99.2	70-130							

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Project Location: Wall St., Valhalla, NY

Sample Description:

Work Order: 19H0528

Date Received: 8/9/2019

Field Sample #: OC-17D

Sampled: 8/8/2019 09:35

Sample ID: 19H0528-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Acrylonitrile	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
tert-Amyl Methyl Ether (TAME)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Benzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Bromobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Bromochloromethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Bromodichloromethane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Bromoform	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Bromomethane	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
2-Butanone (MEK)	ND	400	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
tert-Butyl Alcohol (TBA)	ND	400	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
n-Butylbenzene	ND	20	µg/L	20	V-05	SW-846 8260C	8/13/19	8/14/19 0:05	BRF
sec-Butylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
tert-Butylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
tert-Butyl Ethyl Ether (TBEE)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Carbon Disulfide	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Carbon Tetrachloride	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Chlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Chlorodibromomethane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Chloroethane	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Chloroform	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Chloromethane	ND	40	µg/L	20	V-05	SW-846 8260C	8/13/19	8/14/19 0:05	BRF
2-Chlorotoluene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
4-Chlorotoluene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,2-Dibromoethane (EDB)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Dibromomethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,2-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,3-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,4-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
trans-1,4-Dichloro-2-butene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Dichlorodifluoromethane (Freon 12)	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,1-Dichloroethane	49	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,2-Dichloroethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,1-Dichloroethylene	24	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
cis-1,2-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
trans-1,2-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,2-Dichloropropane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,3-Dichloropropane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
2,2-Dichloropropane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,1-Dichloropropene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
cis-1,3-Dichloropropene	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
trans-1,3-Dichloropropene	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Diethyl Ether	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF

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: 19H0528

Date Received: 8/9/2019

Field Sample #: OC-17D

Sampled: 8/8/2019 09:35

Sample ID: 19H0528-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,4-Dioxane	ND	1000	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Ethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Hexachlorobutadiene	ND	12	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
2-Hexanone (MBK)	ND	200	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Isopropylbenzene (Cumene)	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
p-Isopropyltoluene (p-Cymene)	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Methyl Acetate	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Methyl tert-Butyl Ether (MTBE)	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Methyl Cyclohexane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Methylene Chloride	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
4-Methyl-2-pentanone (MIBK)	ND	200	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Naphthalene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
n-Propylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Styrene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,1,1,2-Tetrachloroethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,1,2,2-Tetrachloroethane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Tetrachloroethylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Tetrahydrofuran	ND	200	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Toluene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,2,3-Trichlorobenzene	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,2,4-Trichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,3,5-Trichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,1,1-Trichloroethane	340	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,1,2-Trichloroethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Trichloroethylene	210	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Trichlorofluoromethane (Freon 11)	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,2,3-Trichloropropane	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	980	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,2,4-Trimethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
1,3,5-Trimethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Vinyl Chloride	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
m+p Xylene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
o-Xylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 0:05	BRF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	104	70-130							
Toluene-d8	113	70-130							
4-Bromofluorobenzene	99.8	70-130							

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: 19H0528

Date Received: 8/9/2019

Field Sample #: OC-17S

Sampled: 8/8/2019 10:35

Sample ID: 19H0528-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
n-Butylbenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C	8/13/19	8/13/19 23:34	BRF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	8/13/19	8/13/19 23:34	BRF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,1-Dichloroethane	18	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,1-Dichloroethylene	4.6	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
cis-1,2-Dichloroethylene	2.4	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF

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: 19H0528

Date Received: 8/9/2019

Field Sample #: OC-17S

Sampled: 8/8/2019 10:35

Sample ID: 19H0528-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,1,1-Trichloroethane	13	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Trichloroethylene	34	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	49	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/13/19	8/13/19 23:34	BRF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	104	70-130							
Toluene-d8	111	70-130							
4-Bromofluorobenzene	96.7	70-130							

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: 19H0528

Date Received: 8/9/2019

Field Sample #: MW-22R

Sampled: 8/8/2019 11:40

Sample ID: 19H0528-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Acrylonitrile	ND	250	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
tert-Amyl Methyl Ether (TAME)	ND	25	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Benzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Bromobenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Bromochloromethane	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Bromodichloromethane	ND	25	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Bromoform	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Bromomethane	ND	250	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
2-Butanone (MEK)	ND	1000	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
tert-Butyl Alcohol (TBA)	ND	1000	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
n-Butylbenzene	ND	50	µg/L	50	V-05	SW-846 8260C	8/13/19	8/14/19 0:36	BRF
sec-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
tert-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
tert-Butyl Ethyl Ether (TBEE)	ND	25	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Carbon Disulfide	ND	250	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Carbon Tetrachloride	ND	250	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Chlorobenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Chlorodibromomethane	ND	25	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Chloroethane	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Chloroform	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Chloromethane	ND	100	µg/L	50	V-05	SW-846 8260C	8/13/19	8/14/19 0:36	BRF
2-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
4-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,2-Dibromoethane (EDB)	ND	25	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Dibromomethane	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,2-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,3-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,4-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
trans-1,4-Dichloro-2-butene	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Dichlorodifluoromethane (Freon 12)	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,1-Dichloroethane	380	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,2-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,1-Dichloroethylene	330	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
cis-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
trans-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,3-Dichloropropane	ND	25	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
2,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,1-Dichloropropene	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
cis-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
trans-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Diethyl Ether	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF

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: 19H0528

Date Received: 8/9/2019

Field Sample #: MW-22R

Sampled: 8/8/2019 11:40

Sample ID: 19H0528-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	25	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,4-Dioxane	ND	2500	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Ethylbenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Hexachlorobutadiene	ND	30	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
2-Hexanone (MBK)	ND	500	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Isopropylbenzene (Cumene)	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
p-Isopropyltoluene (p-Cymene)	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Methyl Acetate	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Methyl tert-Butyl Ether (MTBE)	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Methyl Cyclohexane	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Methylene Chloride	ND	250	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
4-Methyl-2-pentanone (MIBK)	ND	500	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Naphthalene	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
n-Propylbenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Styrene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,1,1,2-Tetrachloroethane	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,1,2,2-Tetrachloroethane	ND	25	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Tetrachloroethylene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Tetrahydrofuran	ND	500	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Toluene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,2,3-Trichlorobenzene	ND	250	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,2,4-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,3,5-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,1,1-Trichloroethane	4600	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,1,2-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Trichloroethylene	2800	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Trichlorofluoromethane (Freon 11)	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,2,3-Trichloropropane	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	14000	1000	µg/L	1000		SW-846 8260C	8/14/19	8/14/19 17:13	EEH
1,2,4-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
1,3,5-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Vinyl Chloride	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
m+p Xylene	ND	100	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
o-Xylene	ND	50	µg/L	50		SW-846 8260C	8/13/19	8/14/19 0:36	BRF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	109	70-130							
1,2-Dichloroethane-d4	109	70-130							
Toluene-d8	98.4	70-130							
Toluene-d8	110	70-130							
4-Bromofluorobenzene	93.7	70-130							
4-Bromofluorobenzene	97.2	70-130							

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: 19H0528

Date Received: 8/9/2019

Field Sample #: MW-22R

Sampled: 8/8/2019 11:40

Sample ID: 19H0528-04

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	0.98	0.19	µg/L	1		SW-846 8270D	8/13/19	8/16/19 14:55	CLA
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	20.9	15-110						8/16/19 14:55	

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: 19H0528

Date Received: 8/9/2019

Field Sample #: MW-22R

Sampled: 8/8/2019 11:40

Sample ID: 19H0528-04

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)	5.0	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorooctanoic acid (PFOA)	4.2	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
6:2 Fluorotelomersulfonate (6:2 FTS A)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
N-EtFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
8:2 Fluorotelomersulfonate (8:2 FTS A)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
N-MeFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorotridecanoic acid (PFTTrDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 12:20	BLM
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C-PFHxA	96.6	70-130			8/21/19 12:20				
13C-PFDA	77.6	70-130			8/21/19 12:20				
d5-NEtFOSAA	50.4 *	70-130	Z-01a		8/21/19 12:20				

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: 19H0528

Date Received: 8/9/2019

Field Sample #: MW-27

Sampled: 8/8/2019 12:50

Sample ID: 19H0528-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Acrylonitrile	ND	50	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Benzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Bromobenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Bromochloromethane	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Bromodichloromethane	ND	5.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Bromoform	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Bromomethane	ND	50	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
2-Butanone (MEK)	ND	200	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
tert-Butyl Alcohol (TBA)	ND	200	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
n-Butylbenzene	ND	10	µg/L	10	V-05	SW-846 8260C	8/13/19	8/14/19 1:07	BRF
sec-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
tert-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Carbon Disulfide	ND	50	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Carbon Tetrachloride	ND	50	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Chlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Chlorodibromomethane	ND	5.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Chloroethane	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Chloroform	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Chloromethane	ND	20	µg/L	10	V-05	SW-846 8260C	8/13/19	8/14/19 1:07	BRF
2-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
4-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,2-Dibromoethane (EDB)	ND	5.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Dibromomethane	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,2-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,3-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,4-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
trans-1,4-Dichloro-2-butene	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Dichlorodifluoromethane (Freon 12)	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,1-Dichloroethane	19	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,2-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,1-Dichloroethylene	44	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
cis-1,2-Dichloroethylene	15	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
trans-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,3-Dichloropropane	ND	5.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
2,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,1-Dichloropropene	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
cis-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
trans-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Diethyl Ether	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF

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: 19H0528

Date Received: 8/9/2019

Field Sample #: MW-27

Sampled: 8/8/2019 12:50

Sample ID: 19H0528-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	5.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,4-Dioxane	ND	500	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Ethylbenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Hexachlorobutadiene	ND	6.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
2-Hexanone (MBK)	ND	100	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Isopropylbenzene (Cumene)	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
p-Isopropyltoluene (p-Cymene)	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Methyl Acetate	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Methyl Cyclohexane	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Methylene Chloride	ND	50	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
4-Methyl-2-pentanone (MIBK)	ND	100	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Naphthalene	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
n-Propylbenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Styrene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,1,1,2-Tetrachloroethane	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Tetrachloroethylene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Tetrahydrofuran	ND	100	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Toluene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,2,3-Trichlorobenzene	ND	50	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,2,4-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,3,5-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,1,1-Trichloroethane	260	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,1,2-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Trichloroethylene	280	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Trichlorofluoromethane (Freon 11)	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,2,3-Trichloropropane	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	650	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,2,4-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
1,3,5-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Vinyl Chloride	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
m+p Xylene	ND	20	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
o-Xylene	ND	10	µg/L	10		SW-846 8260C	8/13/19	8/14/19 1:07	BRF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	111	70-130							
Toluene-d8	110	70-130							
4-Bromofluorobenzene	103	70-130							

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: 19H0528

Date Received: 8/9/2019

Field Sample #: MW-22S

Sampled: 8/8/2019 14:10

Sample ID: 19H0528-06

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Acrylonitrile	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
tert-Amyl Methyl Ether (TAME)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Benzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Bromobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Bromochloromethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Bromodichloromethane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Bromoform	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Bromomethane	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
2-Butanone (MEK)	ND	400	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
tert-Butyl Alcohol (TBA)	ND	400	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
n-Butylbenzene	ND	20	µg/L	20	V-05	SW-846 8260C	8/13/19	8/14/19 1:37	BRF
sec-Butylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
tert-Butylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
tert-Butyl Ethyl Ether (TBEE)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Carbon Disulfide	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Carbon Tetrachloride	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Chlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Chlorodibromomethane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Chloroethane	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Chloroform	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Chloromethane	ND	40	µg/L	20	V-05	SW-846 8260C	8/13/19	8/14/19 1:37	BRF
2-Chlorotoluene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
4-Chlorotoluene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,2-Dibromoethane (EDB)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Dibromomethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,2-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,3-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,4-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
trans-1,4-Dichloro-2-butene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Dichlorodifluoromethane (Freon 12)	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,1-Dichloroethane	83	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,2-Dichloroethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,1-Dichloroethylene	58	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
cis-1,2-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
trans-1,2-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,2-Dichloropropane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,3-Dichloropropane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
2,2-Dichloropropane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,1-Dichloropropene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
cis-1,3-Dichloropropene	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
trans-1,3-Dichloropropene	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Diethyl Ether	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF

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: 19H0528

Date Received: 8/9/2019

Field Sample #: MW-22S

Sampled: 8/8/2019 14:10

Sample ID: 19H0528-06

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,4-Dioxane	ND	1000	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Ethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Hexachlorobutadiene	ND	12	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
2-Hexanone (MBK)	ND	200	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Isopropylbenzene (Cumene)	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
p-Isopropyltoluene (p-Cymene)	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Methyl Acetate	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Methyl tert-Butyl Ether (MTBE)	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Methyl Cyclohexane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Methylene Chloride	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
4-Methyl-2-pentanone (MIBK)	ND	200	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Naphthalene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
n-Propylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Styrene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,1,1,2-Tetrachloroethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,1,2,2-Tetrachloroethane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Tetrachloroethylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Tetrahydrofuran	ND	200	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Toluene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,2,3-Trichlorobenzene	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,2,4-Trichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,3,5-Trichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,1,1-Trichloroethane	540	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,1,2-Trichloroethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Trichloroethylene	380	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Trichlorofluoromethane (Freon 11)	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,2,3-Trichloropropane	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1200	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,2,4-Trimethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
1,3,5-Trimethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Vinyl Chloride	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
m+p Xylene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
o-Xylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 1:37	BRF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	111	70-130							
Toluene-d8	115	70-130							
4-Bromofluorobenzene	102	70-130							

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: 19H0528

Date Received: 8/9/2019

Field Sample #: MW-22S

Sampled: 8/8/2019 14:10

Sample ID: 19H0528-06

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	0.80	0.19	µg/L	1		SW-846 8270D	8/13/19	8/16/19 15:15	CLA
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
1,4-Dioxane-d8	24.9		15-110					8/16/19 15:15	

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: 19H0528

Date Received: 8/9/2019

Field Sample #: MW-22S

Sampled: 8/8/2019 14:10

Sample ID: 19H0528-06

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)	3.0	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorooctanoic acid (PFOA)	3.6	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
6:2 Fluorotelomersulfonate (6:2 FTS A)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
N-EtFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
8:2 Fluorotelomersulfonate (8:2 FTS A)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
N-MeFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorotridecanoic acid (PFTTrDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/21/19 20:22	BLM
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C-PFHxA	110	70-130							
13C-PFDA	108	70-130							
d5-NEtFOSAA	70.4	70-130							

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: 19H0528

Date Received: 8/9/2019

Field Sample #: Blind Duplicate

Sampled: 8/8/2019 00:00

Sample ID: 19H0528-07

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Acrylonitrile	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
tert-Amyl Methyl Ether (TAME)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Benzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Bromobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Bromochloromethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Bromodichloromethane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Bromoform	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Bromomethane	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
2-Butanone (MEK)	ND	400	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
tert-Butyl Alcohol (TBA)	ND	400	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
n-Butylbenzene	ND	20	µg/L	20	V-05	SW-846 8260C	8/13/19	8/14/19 2:08	BRF
sec-Butylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
tert-Butylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
tert-Butyl Ethyl Ether (TBEE)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Carbon Disulfide	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Carbon Tetrachloride	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Chlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Chlorodibromomethane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Chloroethane	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Chloroform	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Chloromethane	ND	40	µg/L	20	V-05	SW-846 8260C	8/13/19	8/14/19 2:08	BRF
2-Chlorotoluene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
4-Chlorotoluene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,2-Dibromoethane (EDB)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Dibromomethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,2-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,3-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,4-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
trans-1,4-Dichloro-2-butene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Dichlorodifluoromethane (Freon 12)	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,1-Dichloroethane	82	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,2-Dichloroethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,1-Dichloroethylene	56	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
cis-1,2-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
trans-1,2-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,2-Dichloropropane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,3-Dichloropropane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
2,2-Dichloropropane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,1-Dichloropropene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
cis-1,3-Dichloropropene	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
trans-1,3-Dichloropropene	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Diethyl Ether	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF

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Project Location: Wall St., Valhalla, NY

Sample Description:

Work Order: 19H0528

Date Received: 8/9/2019

Field Sample #: Blind Duplicate

Sampled: 8/8/2019 00:00

Sample ID: 19H0528-07

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,4-Dioxane	ND	1000	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Ethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Hexachlorobutadiene	ND	12	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
2-Hexanone (MBK)	ND	200	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Isopropylbenzene (Cumene)	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
p-Isopropyltoluene (p-Cymene)	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Methyl Acetate	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Methyl tert-Butyl Ether (MTBE)	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Methyl Cyclohexane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Methylene Chloride	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
4-Methyl-2-pentanone (MIBK)	ND	200	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Naphthalene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
n-Propylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Styrene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,1,1,2-Tetrachloroethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,1,2,2-Tetrachloroethane	ND	10	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Tetrachloroethylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Tetrahydrofuran	ND	200	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Toluene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,2,3-Trichlorobenzene	ND	100	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,2,4-Trichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,3,5-Trichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,1,1-Trichloroethane	530	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,1,2-Trichloroethane	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Trichloroethylene	370	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Trichlorofluoromethane (Freon 11)	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,2,3-Trichloropropane	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1300	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,2,4-Trimethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
1,3,5-Trimethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Vinyl Chloride	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
m+p Xylene	ND	40	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
o-Xylene	ND	20	µg/L	20		SW-846 8260C	8/13/19	8/14/19 2:08	BRF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	112	70-130							
Toluene-d8	113	70-130							
4-Bromofluorobenzene	100	70-130							

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Project Location: Wall St., Valhalla, NY

Sample Description:

Work Order: 19H0528

Date Received: 8/9/2019

Field Sample #: Blind Duplicate

Sampled: 8/8/2019 00:00

Sample ID: 19H0528-07

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	0.80	0.19	µg/L	1		SW-846 8270D	8/13/19	8/16/19 15:35	CLA
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
1,4-Dioxane-d8	26.8		15-110					8/16/19 15:35	

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Project Location: Wall St., Valhalla, NY

Sample Description:

Work Order: 19H0528

Date Received: 8/9/2019

Field Sample #: Blind Duplicate

Sampled: 8/8/2019 00:00

Sample ID: 19H0528-07

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)	3.4	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluoroheptanoic acid (PFHpA)	5.9	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorooctanoic acid (PFOA)	7.5	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorooctanesulfonic acid (PFOS)	2.4	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
6:2 Fluorotelomersulfonate (6:2 FTS A)	41	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
N-EtFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
8:2 Fluorotelomersulfonate (8:2 FTS A)	5.5	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
N-MeFOSAA	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorotridecanoic acid (PFTTrDA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L	1		SOP 434-PFAAS	8/19/19	8/27/19 10:54	BLM
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C-PFHxA	92.2	70-130							
13C-PFDA	90.9	70-130							
d5-NEtFOSAA	71.5	70-130							

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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
19H0528-04 [MW-22R]	B238243	250	1.00	08/19/19
19H0528-06 [MW-22S]	B238243	250	1.00	08/19/19
19H0528-07 [Blind Duplicate]	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
19H0528-01 [Trip Blank-8/8/19]	B237875	5	5.00	08/13/19
19H0528-02 [OC-17D]	B237875	0.25	5.00	08/13/19
19H0528-03 [OC-17S]	B237875	5	5.00	08/13/19
19H0528-04 [MW-22R]	B237875	0.1	5.00	08/13/19
19H0528-05 [MW-27]	B237875	0.5	5.00	08/13/19
19H0528-06 [MW-22S]	B237875	0.25	5.00	08/13/19
19H0528-07 [Blind Duplicate]	B237875	0.25	5.00	08/13/19

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19H0528-04RE1 [MW-22R]	B237978	0.005	5.00	08/14/19

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19H0528-04 [MW-22R]	B237852	1060	1.00	08/13/19
19H0528-06 [MW-22S]	B237852	1040	1.00	08/13/19
19H0528-07 [Blind Duplicate]	B237852	1040	1.00	08/13/19

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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 B237875 - SW-846 5030B										
Blank (B237875-BLK1)				Prepared & Analyzed: 08/13/19						
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							V-05
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							V-05
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 B237875 - SW-846 5030B										
Blank (B237875-BLK1)										
Prepared & Analyzed: 08/13/19										
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	27.5		µg/L	25.0		110	70-130			
Surrogate: Toluene-d8	27.8		µg/L	25.0		111	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		98.1	70-130			
LCS (B237875-BS1)										
Prepared & Analyzed: 08/13/19										
Acetone	97.2	50	µg/L	100		97.2	70-160			†
Acrylonitrile	10.9	5.0	µg/L	10.0		109	70-130			
tert-Amyl Methyl Ether (TAME)	9.42	0.50	µg/L	10.0		94.2	70-130			
Benzene	9.65	1.0	µg/L	10.0		96.5	70-130			
Bromobenzene	11.0	1.0	µg/L	10.0		110	70-130			
Bromochloromethane	11.7	1.0	µg/L	10.0		117	70-130			
Bromodichloromethane	10.9	0.50	µg/L	10.0		109	70-130			
Bromoform	10.6	1.0	µg/L	10.0		106	70-130			
Bromomethane	4.40	2.0	µg/L	10.0		44.0	40-160		V-20	†
2-Butanone (MEK)	101	20	µg/L	100		101	40-160			†
tert-Butyl Alcohol (TBA)	112	20	µg/L	100		112	40-160			†
n-Butylbenzene	8.39	1.0	µg/L	10.0		83.9	70-130		V-05	
sec-Butylbenzene	9.13	1.0	µg/L	10.0		91.3	70-130			
tert-Butylbenzene	9.92	1.0	µg/L	10.0		99.2	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.1	0.50	µg/L	10.0		101	70-130			
Carbon Disulfide	10.2	5.0	µg/L	10.0		102	70-130			V-36
Carbon Tetrachloride	11.5	5.0	µg/L	10.0		115	70-130			
Chlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
Chlorodibromomethane	12.1	0.50	µg/L	10.0		121	70-130			
Chloroethane	10.0	2.0	µg/L	10.0		100	70-130			
Chloroform	10.2	2.0	µg/L	10.0		102	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 B237875 - SW-846 5030B										
LCS (B237875-BS1)				Prepared & Analyzed: 08/13/19						
Chloromethane	6.36	2.0	µg/L	10.0		63.6	40-160			V-05 †
2-Chlorotoluene	9.95	1.0	µg/L	10.0		99.5	70-130			
4-Chlorotoluene	9.78	1.0	µg/L	10.0		97.8	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	11.6	5.0	µg/L	10.0		116	70-130			
1,2-Dibromoethane (EDB)	10.7	0.50	µg/L	10.0		107	70-130			
Dibromomethane	11.6	1.0	µg/L	10.0		116	70-130			
1,2-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
1,3-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
1,4-Dichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130			
trans-1,4-Dichloro-2-butene	10.8	2.0	µg/L	10.0		108	70-130			
Dichlorodifluoromethane (Freon 12)	10.0	2.0	µg/L	10.0		100	40-160			†
1,1-Dichloroethane	10.6	1.0	µg/L	10.0		106	70-130			
1,2-Dichloroethane	12.1	1.0	µg/L	10.0		121	70-130			
1,1-Dichloroethylene	10.2	1.0	µg/L	10.0		102	70-130			
cis-1,2-Dichloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
trans-1,2-Dichloroethylene	11.0	1.0	µg/L	10.0		110	70-130			
1,2-Dichloropropane	10.6	1.0	µg/L	10.0		106	70-130			
1,3-Dichloropropane	10.3	0.50	µg/L	10.0		103	70-130			
2,2-Dichloropropane	10.1	1.0	µg/L	10.0		101	40-130			†
1,1-Dichloropropene	9.64	2.0	µg/L	10.0		96.4	70-130			
cis-1,3-Dichloropropene	9.93	0.50	µg/L	10.0		99.3	70-130			
trans-1,3-Dichloropropene	10.1	0.50	µg/L	10.0		101	70-130			
Diethyl Ether	9.39	2.0	µg/L	10.0		93.9	70-130			
Diisopropyl Ether (DIPE)	9.84	0.50	µg/L	10.0		98.4	70-130			
1,4-Dioxane	122	50	µg/L	100		122	40-130			†
Ethylbenzene	10.1	1.0	µg/L	10.0		101	70-130			
Hexachlorobutadiene	12.2	0.60	µg/L	10.0		122	70-130			
2-Hexanone (MBK)	111	10	µg/L	100		111	70-160			†
Isopropylbenzene (Cumene)	10.8	1.0	µg/L	10.0		108	70-130			
p-Isopropyltoluene (p-Cymene)	9.98	1.0	µg/L	10.0		99.8	70-130			
Methyl Acetate	9.47	1.0	µg/L	10.0		94.7	70-130			
Methyl tert-Butyl Ether (MTBE)	10.0	1.0	µg/L	10.0		100	70-130			
Methyl Cyclohexane	9.26	1.0	µg/L	10.0		92.6	70-130			
Methylene Chloride	10.1	5.0	µg/L	10.0		101	70-130			
4-Methyl-2-pentanone (MIBK)	111	10	µg/L	100		111	70-160			†
Naphthalene	11.3	2.0	µg/L	10.0		113	40-130			†
n-Propylbenzene	9.26	1.0	µg/L	10.0		92.6	70-130			
Styrene	10.2	1.0	µg/L	10.0		102	70-130			
1,1,1,2-Tetrachloroethane	11.4	1.0	µg/L	10.0		114	70-130			
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0		104	70-130			
Tetrachloroethylene	12.0	1.0	µg/L	10.0		120	70-130			
Tetrahydrofuran	9.65	10	µg/L	10.0		96.5	70-130			
Toluene	10.1	1.0	µg/L	10.0		101	70-130			
1,2,3-Trichlorobenzene	11.3	5.0	µg/L	10.0		113	70-130			
1,2,4-Trichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
1,3,5-Trichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,1,1-Trichloroethane	10.7	1.0	µg/L	10.0		107	70-130			
1,1,2-Trichloroethane	10.5	1.0	µg/L	10.0		105	70-130			
Trichloroethylene	10.9	1.0	µg/L	10.0		109	70-130			
Trichlorofluoromethane (Freon 11)	10.1	2.0	µg/L	10.0		101	70-130			
1,2,3-Trichloropropane	10.9	2.0	µg/L	10.0		109	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 B237875 - SW-846 5030B										
LCS (B237875-BS1)										
Prepared & Analyzed: 08/13/19										
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.8	1.0	µg/L	10.0		108	70-130			
1,2,4-Trimethylbenzene	9.39	1.0	µg/L	10.0		93.9	70-130			
1,3,5-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Vinyl Chloride	9.02	2.0	µg/L	10.0		90.2	40-160			†
m+p Xylene	19.8	2.0	µg/L	20.0		99.0	70-130			
o-Xylene	9.88	1.0	µg/L	10.0		98.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.0		µg/L	25.0		104	70-130			
Surrogate: Toluene-d8	26.3		µg/L	25.0		105	70-130			
Surrogate: 4-Bromofluorobenzene	27.0		µg/L	25.0		108	70-130			
LCS Dup (B237875-BSD1)										
Prepared & Analyzed: 08/13/19										
Acetone	93.9	50	µg/L	100		93.9	70-160	3.47	25	†
Acrylonitrile	11.0	5.0	µg/L	10.0		110	70-130	0.912	25	
tert-Amyl Methyl Ether (TAME)	9.02	0.50	µg/L	10.0		90.2	70-130	4.34	25	
Benzene	9.30	1.0	µg/L	10.0		93.0	70-130	3.69	25	
Bromobenzene	10.5	1.0	µg/L	10.0		105	70-130	5.12	25	
Bromochloromethane	11.0	1.0	µg/L	10.0		110	70-130	5.90	25	
Bromodichloromethane	11.0	0.50	µg/L	10.0		110	70-130	0.274	25	
Bromoform	10.1	1.0	µg/L	10.0		101	70-130	5.00	25	
Bromomethane	4.71	2.0	µg/L	10.0		47.1	40-160	6.81	25	V-20 †
2-Butanone (MEK)	98.8	20	µg/L	100		98.8	40-160	2.36	25	†
tert-Butyl Alcohol (TBA)	109	20	µg/L	100		109	40-160	2.30	25	†
n-Butylbenzene	8.41	1.0	µg/L	10.0		84.1	70-130	0.238	25	V-05
sec-Butylbenzene	9.08	1.0	µg/L	10.0		90.8	70-130	0.549	25	
tert-Butylbenzene	9.79	1.0	µg/L	10.0		97.9	70-130	1.32	25	
tert-Butyl Ethyl Ether (TBEE)	9.89	0.50	µg/L	10.0		98.9	70-130	2.10	25	
Carbon Disulfide	9.92	5.0	µg/L	10.0		99.2	70-130	2.59	25	V-36
Carbon Tetrachloride	11.1	5.0	µg/L	10.0		111	70-130	3.90	25	
Chlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	0.865	25	
Chlorodibromomethane	12.3	0.50	µg/L	10.0		123	70-130	1.23	25	
Chloroethane	9.93	2.0	µg/L	10.0		99.3	70-130	0.802	25	
Chloroform	10.2	2.0	µg/L	10.0		102	70-130	0.0982	25	
Chloromethane	6.25	2.0	µg/L	10.0		62.5	40-160	1.74	25	V-05 †
2-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130	2.68	25	
4-Chlorotoluene	9.82	1.0	µg/L	10.0		98.2	70-130	0.408	25	
1,2-Dibromo-3-chloropropane (DBCP)	11.7	5.0	µg/L	10.0		117	70-130	1.46	25	
1,2-Dibromoethane (EDB)	10.8	0.50	µg/L	10.0		108	70-130	1.02	25	
Dibromomethane	11.6	1.0	µg/L	10.0		116	70-130	0.00	25	
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	1.53	25	
1,3-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	1.94	25	
1,4-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	2.75	25	
trans-1,4-Dichloro-2-butene	10.3	2.0	µg/L	10.0		103	70-130	4.66	25	
Dichlorodifluoromethane (Freon 12)	10.1	2.0	µg/L	10.0		101	40-160	1.09	25	†
1,1-Dichloroethane	10.7	1.0	µg/L	10.0		107	70-130	0.282	25	
1,2-Dichloroethane	12.2	1.0	µg/L	10.0		122	70-130	0.493	25	
1,1-Dichloroethylene	9.97	1.0	µg/L	10.0		99.7	70-130	2.08	25	
cis-1,2-Dichloroethylene	10.3	1.0	µg/L	10.0		103	70-130	0.867	25	
trans-1,2-Dichloroethylene	11.0	1.0	µg/L	10.0		110	70-130	0.909	25	
1,2-Dichloropropane	10.9	1.0	µg/L	10.0		109	70-130	2.79	25	
1,3-Dichloropropane	10.3	0.50	µg/L	10.0		103	70-130	0.777	25	
2,2-Dichloropropane	9.72	1.0	µg/L	10.0		97.2	40-130	3.64	25	†
1,1-Dichloropropene	9.92	2.0	µg/L	10.0		99.2	70-130	2.86	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 B237875 - SW-846 5030B

LCS Dup (B237875-BSD1)

Prepared & Analyzed: 08/13/19

cis-1,3-Dichloropropene	9.93	0.50	µg/L	10.0		99.3	70-130	0.00	25	
trans-1,3-Dichloropropene	10.3	0.50	µg/L	10.0		103	70-130	1.77	25	
Diethyl Ether	9.29	2.0	µg/L	10.0		92.9	70-130	1.07	25	
Diisopropyl Ether (DIPE)	9.82	0.50	µg/L	10.0		98.2	70-130	0.203	25	
1,4-Dioxane	127	50	µg/L	100		127	40-130	3.55	50	† ‡
Ethylbenzene	9.94	1.0	µg/L	10.0		99.4	70-130	1.50	25	
Hexachlorobutadiene	11.6	0.60	µg/L	10.0		116	70-130	4.70	25	
2-Hexanone (MBK)	112	10	µg/L	100		112	70-160	0.876	25	†
Isopropylbenzene (Cumene)	10.8	1.0	µg/L	10.0		108	70-130	0.185	25	
p-Isopropyltoluene (p-Cymene)	9.88	1.0	µg/L	10.0		98.8	70-130	1.01	25	
Methyl Acetate	9.16	1.0	µg/L	10.0		91.6	70-130	3.33	25	
Methyl tert-Butyl Ether (MTBE)	9.98	1.0	µg/L	10.0		99.8	70-130	0.699	25	
Methyl Cyclohexane	9.20	1.0	µg/L	10.0		92.0	70-130	0.650	25	
Methylene Chloride	9.73	5.0	µg/L	10.0		97.3	70-130	3.63	25	
4-Methyl-2-pentanone (MIBK)	111	10	µg/L	100		111	70-160	0.207	25	†
Naphthalene	11.2	2.0	µg/L	10.0		112	40-130	0.887	25	†
n-Propylbenzene	9.27	1.0	µg/L	10.0		92.7	70-130	0.108	25	
Styrene	10.2	1.0	µg/L	10.0		102	70-130	0.293	25	
1,1,1,2-Tetrachloroethane	11.2	1.0	µg/L	10.0		112	70-130	1.86	25	
1,1,2,2-Tetrachloroethane	10.3	0.50	µg/L	10.0		103	70-130	0.776	25	
Tetrachloroethylene	11.5	1.0	µg/L	10.0		115	70-130	3.49	25	
Tetrahydrofuran	9.42	10	µg/L	10.0		94.2	70-130	2.41	25	
Toluene	10.1	1.0	µg/L	10.0		101	70-130	0.00	25	
1,2,3-Trichlorobenzene	11.4	5.0	µg/L	10.0		114	70-130	1.23	25	
1,2,4-Trichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	0.191	25	
1,3,5-Trichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	0.873	25	
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130	0.747	25	
1,1,2-Trichloroethane	10.6	1.0	µg/L	10.0		106	70-130	0.944	25	
Trichloroethylene	11.0	1.0	µg/L	10.0		110	70-130	1.46	25	
Trichlorofluoromethane (Freon 11)	9.73	2.0	µg/L	10.0		97.3	70-130	4.03	25	
1,2,3-Trichloropropane	11.0	2.0	µg/L	10.0		110	70-130	1.00	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.9	1.0	µg/L	10.0		109	70-130	0.184	25	
1,2,4-Trimethylbenzene	9.59	1.0	µg/L	10.0		95.9	70-130	2.11	25	
1,3,5-Trimethylbenzene	10.1	1.0	µg/L	10.0		101	70-130	4.07	25	
Vinyl Chloride	8.74	2.0	µg/L	10.0		87.4	40-160	3.15	25	†
m+p Xylene	19.7	2.0	µg/L	20.0		98.6	70-130	0.456	25	
o-Xylene	9.87	1.0	µg/L	10.0		98.7	70-130	0.101	25	
Surrogate: 1,2-Dichloroethane-d4	26.4		µg/L	25.0		105	70-130			
Surrogate: Toluene-d8	26.9		µg/L	25.0		108	70-130			
Surrogate: 4-Bromofluorobenzene	26.8		µg/L	25.0		107	70-130			

Matrix Spike (B237875-MS1)

Source: 19H0528-04

Prepared: 08/13/19 Analyzed: 08/14/19

Acetone	4000	2500	µg/L	5000	ND	80.0	70-130			
Acrylonitrile	470	250	µg/L	500	ND	94.1	70-130			
tert-Amyl Methyl Ether (TAME)	424	25	µg/L	500	ND	84.7	70-130			
Benzene	472	50	µg/L	500	ND	94.3	70-130			
Bromobenzene	550	50	µg/L	500	ND	110	70-130			
Bromochloromethane	582	50	µg/L	500	ND	116	70-130			
Bromodichloromethane	561	25	µg/L	500	ND	112	70-130			
Bromoform	543	50	µg/L	500	ND	109	70-130			
Bromomethane	242	100	µg/L	500	ND	48.4	* 70-130			
2-Butanone (MEK)	4210	1000	µg/L	5000	ND	84.2	70-130			

MS-09

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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 B237875 - SW-846 5030B										
Matrix Spike (B237875-MS1)	Source: 19H0528-04			Prepared: 08/13/19 Analyzed: 08/14/19						
tert-Butyl Alcohol (TBA)	4330	1000	µg/L	5000	ND	86.7	70-130			
n-Butylbenzene	408	50	µg/L	500	ND	81.7	70-130			V-05
sec-Butylbenzene	446	50	µg/L	500	ND	89.1	70-130			
tert-Butylbenzene	494	50	µg/L	500	ND	98.8	70-130			
tert-Butyl Ethyl Ether (TBEE)	449	25	µg/L	500	ND	89.8	70-130			
Carbon Disulfide	483	250	µg/L	500	ND	96.6	70-130			
Carbon Tetrachloride	608	250	µg/L	500	ND	122	70-130			
Chlorobenzene	558	50	µg/L	500	ND	112	70-130			
Chlorodibromomethane	616	25	µg/L	500	ND	123	70-130			
Chloroethane	476	100	µg/L	500	ND	95.3	70-130			
Chloroform	508	100	µg/L	500	ND	102	70-130			
Chloromethane	272	100	µg/L	500	ND	54.5	* 70-130			MS-09, V-05
2-Chlorotoluene	516	50	µg/L	500	ND	103	70-130			
4-Chlorotoluene	515	50	µg/L	500	ND	103	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	457	250	µg/L	500	ND	91.4	70-130			
1,2-Dibromoethane (EDB)	555	25	µg/L	500	ND	111	70-130			
Dibromomethane	583	50	µg/L	500	ND	117	70-130			
1,2-Dichlorobenzene	507	50	µg/L	500	ND	101	70-130			
1,3-Dichlorobenzene	500	50	µg/L	500	ND	100	70-130			
1,4-Dichlorobenzene	502	50	µg/L	500	ND	100	70-130			
trans-1,4-Dichloro-2-butene	433	100	µg/L	500	ND	86.6	70-130			
Dichlorodifluoromethane (Freon 12)	537	100	µg/L	500	ND	107	70-130			
1,1-Dichloroethane	898	50	µg/L	500	380	104	70-130			
1,2-Dichloroethane	609	50	µg/L	500	ND	122	70-130			
1,1-Dichloroethylene	838	50	µg/L	500	326	102	70-130			
cis-1,2-Dichloroethylene	507	50	µg/L	500	ND	101	70-130			
trans-1,2-Dichloroethylene	526	50	µg/L	500	ND	105	70-130			
1,2-Dichloropropane	544	50	µg/L	500	ND	109	70-130			
1,3-Dichloropropane	514	25	µg/L	500	ND	103	70-130			
2,2-Dichloropropane	386	50	µg/L	500	ND	77.2	70-130			
1,1-Dichloropropene	504	100	µg/L	500	ND	101	70-130			
cis-1,3-Dichloropropene	506	25	µg/L	500	ND	101	70-130			
trans-1,3-Dichloropropene	488	25	µg/L	500	ND	97.6	70-130			
Diethyl Ether	459	100	µg/L	500	ND	91.8	70-130			
Diisopropyl Ether (DIPE)	418	25	µg/L	500	ND	83.7	70-130			
1,4-Dioxane	5710	2500	µg/L	5000	ND	114	70-130			
Ethylbenzene	522	50	µg/L	500	ND	104	70-130			
Hexachlorobutadiene	565	30	µg/L	500	ND	113	70-130			
2-Hexanone (MBK)	4910	500	µg/L	5000	ND	98.2	70-130			
Isopropylbenzene (Cumene)	570	50	µg/L	500	ND	114	70-130			
p-Isopropyltoluene (p-Cymene)	493	50	µg/L	500	ND	98.6	70-130			
Methyl Acetate	421	50	µg/L	500	ND	84.2	70-130			
Methyl tert-Butyl Ether (MTBE)	505	50	µg/L	500	ND	101	70-130			
Methyl Cyclohexane	489	50	µg/L	500	ND	97.8	70-130			
Methylene Chloride	462	250	µg/L	500	ND	92.3	70-130			
4-Methyl-2-pentanone (MIBK)	4890	500	µg/L	5000	ND	97.9	70-130			
Naphthalene	440	100	µg/L	500	ND	87.9	70-130			
n-Propylbenzene	480	50	µg/L	500	ND	96.1	70-130			
Styrene	520	50	µg/L	500	ND	104	70-130			
1,1,1,2-Tetrachloroethane	580	50	µg/L	500	ND	116	70-130			
1,1,2,2-Tetrachloroethane	512	25	µg/L	500	ND	102	70-130			
Tetrachloroethylene	645	50	µg/L	500	ND	129	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 B237875 - SW-846 5030B										
Matrix Spike (B237875-MS1)	Source: 19H0528-04			Prepared: 08/13/19 Analyzed: 08/14/19						
Tetrahydrofuran	397	500	µg/L	500	ND	79.4	70-130			
Toluene	518	50	µg/L	500	ND	104	70-130			
1,2,3-Trichlorobenzene	492	250	µg/L	500	ND	98.3	70-130			
1,2,4-Trichlorobenzene	489	50	µg/L	500	ND	97.8	70-130			
1,3,5-Trichlorobenzene	514	50	µg/L	500	ND	103	70-130			
1,1,1-Trichloroethane	5240	50	µg/L	500	4550	138 *	70-130			MS-24
1,1,2-Trichloroethane	552	50	µg/L	500	ND	110	70-130			
Trichloroethylene	3560	50	µg/L	500	2830	146 *	70-130			MS-24
Trichlorofluoromethane (Freon 11)	508	100	µg/L	500	ND	102	70-130			
1,2,3-Trichloropropane	564	100	µg/L	500	ND	113	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10100	50	µg/L	500	10100	-9.10 *	70-130			MS-19
1,2,4-Trimethylbenzene	474	50	µg/L	500	ND	94.7	70-130			
1,3,5-Trimethylbenzene	537	50	µg/L	500	ND	107	70-130			
Vinyl Chloride	408	100	µg/L	500	ND	81.6	70-130			
m+p Xylene	1050	100	µg/L	1000	ND	105	70-130			
o-Xylene	526	50	µg/L	500	ND	105	70-130			
Surrogate: 1,2-Dichloroethane-d4	25.4		µg/L	25.0		101	70-130			
Surrogate: Toluene-d8	26.7		µg/L	25.0		107	70-130			
Surrogate: 4-Bromofluorobenzene	27.9		µg/L	25.0		111	70-130			
Matrix Spike Dup (B237875-MSD1)	Source: 19H0528-04			Prepared: 08/13/19 Analyzed: 08/14/19						
Acetone	3960	2500	µg/L	5000	ND	79.2	70-130	0.992	30	
Acrylonitrile	494	250	µg/L	500	ND	98.7	70-130	4.77	30	
tert-Amyl Methyl Ether (TAME)	432	25	µg/L	500	ND	86.4	70-130	1.99	30	
Benzene	462	50	µg/L	500	ND	92.3	70-130	2.14	30	
Bromobenzene	510	50	µg/L	500	ND	102	70-130	7.36	30	
Bromochloromethane	550	50	µg/L	500	ND	110	70-130	5.83	30	
Bromodichloromethane	539	25	µg/L	500	ND	108	70-130	4.00	30	
Bromoform	511	50	µg/L	500	ND	102	70-130	6.07	30	
Bromomethane	253	100	µg/L	500	ND	50.6 *	70-130	4.44	30	MS-09
2-Butanone (MEK)	4610	1000	µg/L	5000	ND	92.2	70-130	9.15	30	
tert-Butyl Alcohol (TBA)	4760	1000	µg/L	5000	ND	95.1	70-130	9.32	30	
n-Butylbenzene	393	50	µg/L	500	ND	78.6	70-130	3.87	30	V-05
sec-Butylbenzene	438	50	µg/L	500	ND	87.6	70-130	1.70	30	
tert-Butylbenzene	466	50	µg/L	500	ND	93.2	70-130	5.83	30	
tert-Butyl Ethyl Ether (TBEE)	462	25	µg/L	500	ND	92.5	70-130	2.96	30	
Carbon Disulfide	465	250	µg/L	500	ND	93.0	70-130	3.80	30	
Carbon Tetrachloride	580	250	µg/L	500	ND	116	70-130	4.71	30	
Chlorobenzene	524	50	µg/L	500	ND	105	70-130	6.38	30	
Chlorodibromomethane	582	25	µg/L	500	ND	116	70-130	5.68	30	
Chloroethane	477	100	µg/L	500	ND	95.4	70-130	0.105	30	
Chloroform	498	100	µg/L	500	ND	99.7	70-130	1.89	30	
Chloromethane	293	100	µg/L	500	ND	58.6 *	70-130	7.25	30	MS-09, V-05
2-Chlorotoluene	483	50	µg/L	500	ND	96.6	70-130	6.51	30	
4-Chlorotoluene	481	50	µg/L	500	ND	96.2	70-130	6.83	30	
1,2-Dibromo-3-chloropropane (DBCP)	518	250	µg/L	500	ND	104	70-130	12.4	30	
1,2-Dibromoethane (EDB)	508	25	µg/L	500	ND	102	70-130	8.74	30	
Dibromomethane	551	50	µg/L	500	ND	110	70-130	5.64	30	
1,2-Dichlorobenzene	484	50	µg/L	500	ND	96.8	70-130	4.64	30	
1,3-Dichlorobenzene	479	50	µg/L	500	ND	95.8	70-130	4.29	30	
1,4-Dichlorobenzene	474	50	µg/L	500	ND	94.7	70-130	5.94	30	
trans-1,4-Dichloro-2-butene	438	100	µg/L	500	ND	87.6	70-130	1.15	30	

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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 B237875 - SW-846 5030B										
Matrix Spike Dup (B237875-MSD1)	Source: 19H0528-04			Prepared: 08/13/19 Analyzed: 08/14/19						
Dichlorodifluoromethane (Freon 12)	502	100	µg/L	500	ND	100	70-130	6.84	30	
1,1-Dichloroethane	897	50	µg/L	500	380	104	70-130	0.0557	30	
1,2-Dichloroethane	598	50	µg/L	500	ND	120	70-130	1.74	30	
1,1-Dichloroethylene	812	50	µg/L	500	326	97.1	70-130	3.15	30	
cis-1,2-Dichloroethylene	515	50	µg/L	500	ND	103	70-130	1.57	30	
trans-1,2-Dichloroethylene	542	50	µg/L	500	ND	108	70-130	2.99	30	
1,2-Dichloropropane	536	50	µg/L	500	ND	107	70-130	1.67	30	
1,3-Dichloropropane	494	25	µg/L	500	ND	98.8	70-130	3.97	30	
2,2-Dichloropropane	370	50	µg/L	500	ND	74.1	70-130	4.10	30	
1,1-Dichloropropene	480	100	µg/L	500	ND	95.9	70-130	4.88	30	
cis-1,3-Dichloropropene	486	25	µg/L	500	ND	97.3	70-130	3.83	30	
trans-1,3-Dichloropropene	460	25	µg/L	500	ND	92.1	70-130	5.80	30	
Diethyl Ether	462	100	µg/L	500	ND	92.5	70-130	0.760	30	
Diisopropyl Ether (DIPE)	452	25	µg/L	500	ND	90.4	70-130	7.70	30	
1,4-Dioxane	6060	2500	µg/L	5000	ND	121	70-130	5.98	30	
Ethylbenzene	488	50	µg/L	500	ND	97.6	70-130	6.83	30	
Hexachlorobutadiene	538	30	µg/L	500	ND	108	70-130	4.90	30	
2-Hexanone (MBK)	5220	500	µg/L	5000	ND	104	70-130	6.08	30	
Isopropylbenzene (Cumene)	516	50	µg/L	500	ND	103	70-130	9.85	30	
p-Isopropyltoluene (p-Cymene)	478	50	µg/L	500	ND	95.7	70-130	2.99	30	
Methyl Acetate	401	50	µg/L	500	ND	80.2	70-130	4.87	30	
Methyl tert-Butyl Ether (MTBE)	492	50	µg/L	500	ND	98.3	70-130	2.71	30	
Methyl Cyclohexane	448	50	µg/L	500	ND	89.6	70-130	8.75	30	
Methylene Chloride	463	250	µg/L	500	ND	92.6	70-130	0.324	30	
4-Methyl-2-pentanone (MIBK)	5170	500	µg/L	5000	ND	103	70-130	5.54	30	
Naphthalene	506	100	µg/L	500	ND	101	70-130	14.1	30	
n-Propylbenzene	454	50	µg/L	500	ND	90.9	70-130	5.56	30	
Styrene	478	50	µg/L	500	ND	95.5	70-130	8.62	30	
1,1,1,2-Tetrachloroethane	560	50	µg/L	500	ND	112	70-130	3.33	30	
1,1,2,2-Tetrachloroethane	478	25	µg/L	500	ND	95.6	70-130	6.77	30	
Tetrachloroethylene	578	50	µg/L	500	ND	116	70-130	10.9	30	
Tetrahydrofuran	400	500	µg/L	500	ND	80.1	70-130	0.878	30	
Toluene	496	50	µg/L	500	ND	99.1	70-130	4.44	30	
1,2,3-Trichlorobenzene	500	250	µg/L	500	ND	100	70-130	1.71	30	
1,2,4-Trichlorobenzene	472	50	µg/L	500	ND	94.3	70-130	3.64	30	
1,3,5-Trichlorobenzene	467	50	µg/L	500	ND	93.4	70-130	9.68	30	
1,1,1-Trichloroethane	5180	50	µg/L	500	4550	125	70-130	1.23	30	
1,1,2-Trichloroethane	508	50	µg/L	500	ND	102	70-130	8.31	30	
Trichloroethylene	3450	50	µg/L	500	2830	124	70-130	3.14	30	
Trichlorofluoromethane (Freon 11)	490	100	µg/L	500	ND	97.9	70-130	3.81	30	
1,2,3-Trichloropropane	540	100	µg/L	500	ND	108	70-130	4.26	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9410	50	µg/L	500	10100	-141 *	70-130	6.79	30	MS-19
1,2,4-Trimethylbenzene	442	50	µg/L	500	ND	88.4	70-130	6.88	30	
1,3,5-Trimethylbenzene	489	50	µg/L	500	ND	97.8	70-130	9.36	30	
Vinyl Chloride	422	100	µg/L	500	ND	84.3	70-130	3.25	30	
m+p Xylene	980	100	µg/L	1000	ND	98.0	70-130	6.80	20	
o-Xylene	480	50	µg/L	500	ND	95.9	70-130	9.15	30	
Surrogate: 1,2-Dichloroethane-d4	26.4		µg/L	25.0		106	70-130			
Surrogate: Toluene-d8	26.7		µg/L	25.0		107	70-130			
Surrogate: 4-Bromofluorobenzene	27.3		µg/L	25.0		109	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
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
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 B237852 - SW-846 3510C										
Blank (B237852-BLK1)				Prepared: 08/13/19 Analyzed: 08/16/19						
1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	2.45		µg/L	10.0		24.5	15-110			
LCS (B237852-BS1)				Prepared: 08/13/19 Analyzed: 08/16/19						
1,4-Dioxane	9.75	0.20	µg/L	10.0		97.5	40-140			
Surrogate: 1,4-Dioxane-d8	2.95		µg/L	10.0		29.5	15-110			
LCS Dup (B237852-BSD1)				Prepared: 08/13/19 Analyzed: 08/16/19						
1,4-Dioxane	10.2	0.20	µg/L	10.0		102	40-140	4.16	30	
Surrogate: 1,4-Dioxane-d8	2.76		µg/L	10.0		27.6	15-110			
Matrix Spike (B237852-MS1)				Source: 19H0528-04		Prepared: 08/13/19 Analyzed: 08/16/19				
1,4-Dioxane	10.6	0.19	µg/L	9.48	0.984	101	40-140			
Surrogate: 1,4-Dioxane-d8	2.07		µg/L	9.48		21.8	15-110			
Matrix Spike Dup (B237852-MSD1)				Source: 19H0528-04		Prepared: 08/13/19 Analyzed: 08/16/19				
1,4-Dioxane	10.7	0.19	µg/L	9.52	0.984	102	40-140	1.69	20	
Surrogate: 1,4-Dioxane-d8	2.24		µg/L	9.52		23.5	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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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										
Matrix Spike (B238243-MS1)	Source: 19H0528-04			Prepared: 08/19/19 Analyzed: 08/21/19						
Perfluorobutanoic acid (PFBA)	9.04	2.0	ng/L	10.0	4.96	40.8	30-110			
Perfluorobutanesulfonic acid (PFBS)	10.9	2.0	ng/L	8.85	ND	123	70-130			
Perfluoropentanoic acid (PFPeA)	8.53	2.0	ng/L	10.0	ND	85.3	70-130			
Perfluorohexanoic acid (PFHxA)	10.8	2.0	ng/L	10.0	ND	108	70-130			
Perfluorohexanesulfonic acid (PFHxS)	8.05	2.0	ng/L	9.10	ND	88.5	70-130			
Perfluoroheptanoic acid (PFHpA)	9.96	2.0	ng/L	10.0	ND	99.6	70-130			
Perfluoroheptanesulfonic acid (PFHpS)	9.58	2.0	ng/L	9.50	ND	101	70-130			
Perfluorooctanoic acid (PFOA)	12.4	2.0	ng/L	10.0	4.18	81.7	70-130			
Perfluorooctanesulfonic acid (PFOS)	7.92	2.0	ng/L	9.25	ND	85.7	70-130			
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L	10.0	ND	*	70-130			MS-07A
6:2 Fluorotelomersulfonate (6:2 FTS A)	6.55	2.0	ng/L	9.50	ND	68.9	* 70-130			MS-23
Perfluorononanoic acid (PFNA)	8.06	2.0	ng/L	10.0	ND	80.6	70-130			
Perfluorodecanoic acid (PFDA)	7.45	2.0	ng/L	10.0	ND	74.5	70-130			
Perfluorodecanesulfonic acid (PFDS)	4.04	2.0	ng/L	9.65	ND	41.9	* 70-130			MS-07A
N-EtFOSAA	5.31	2.0	ng/L	10.0	ND	53.1	* 70-130			MS-23
8:2 Fluorotelomersulfonate (8:2 FTS A)	12.3	2.0	ng/L	9.60	ND	128	70-130			
Perfluoroundecanoic acid (PFUnA)	5.56	2.0	ng/L	10.0	ND	55.6	* 70-130			MS-22
N-MeFOSAA	7.11	2.0	ng/L	10.0	ND	71.1	70-130			
Perfluorododecanoic acid (PFDoA)	4.35	2.0	ng/L	10.0	ND	43.5	* 70-130			MS-07A
Perfluorotridecanoic acid (PFTriDA)	3.45	2.0	ng/L	10.0	ND	34.5	* 70-130			MS-07A
Perfluorotetradecanoic acid (PFTA)	3.62	2.0	ng/L	10.0	ND	36.2	* 70-130			MS-07A
Surrogate: 13C-PFHxA	38.3		ng/L	40.0		95.8	70-130			
Surrogate: 13C-PFDA	32.2		ng/L	40.0		80.6	70-130			
Surrogate: d5-NEtFOSAA	86.8		ng/L	160		54.2	* 70-130			Z-01b
Matrix Spike Dup (B238243-MSD1)	Source: 19H0528-04			Prepared: 08/19/19 Analyzed: 08/21/19						
Perfluorobutanoic acid (PFBA)	10.1	2.0	ng/L	10.0	4.96	51.8	30-110	11.5	30	
Perfluorobutanesulfonic acid (PFBS)	7.51	2.0	ng/L	8.85	ND	84.9	70-130	37.1	* 30	R-06
Perfluoropentanoic acid (PFPeA)	12.3	2.0	ng/L	10.0	ND	123	70-130	36.2	* 30	R-06
Perfluorohexanoic acid (PFHxA)	11.8	2.0	ng/L	10.0	ND	118	70-130	9.26	30	
Perfluorohexanesulfonic acid (PFHxS)	8.12	2.0	ng/L	9.10	ND	89.2	70-130	0.772	30	
Perfluoroheptanoic acid (PFHpA)	9.30	2.0	ng/L	10.0	ND	93.0	70-130	6.85	30	
Perfluoroheptanesulfonic acid (PFHpS)	7.86	2.0	ng/L	9.50	ND	82.8	70-130	19.6	30	
Perfluorooctanoic acid (PFOA)	13.1	2.0	ng/L	10.0	4.18	89.6	70-130	6.24	30	
Perfluorooctanesulfonic acid (PFOS)	7.93	2.0	ng/L	9.25	ND	85.7	70-130	0.0316	30	
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L	10.0	ND	*	70-130		30	MS-07A
6:2 Fluorotelomersulfonate (6:2 FTS A)	12.3	2.0	ng/L	9.50	ND	129	70-130	60.8	* 30	MS-23
Perfluorononanoic acid (PFNA)	7.89	2.0	ng/L	10.0	ND	78.9	70-130	2.22	30	
Perfluorodecanoic acid (PFDA)	9.28	2.0	ng/L	10.0	ND	92.8	70-130	21.9	30	
Perfluorodecanesulfonic acid (PFDS)	3.70	2.0	ng/L	9.65	ND	38.3	* 70-130	8.91	30	MS-07A
N-EtFOSAA	7.36	2.0	ng/L	10.0	ND	73.6	70-130	32.3	* 30	MS-23
8:2 Fluorotelomersulfonate (8:2 FTS A)	10.3	2.0	ng/L	9.60	ND	108	70-130	17.3	30	
Perfluoroundecanoic acid (PFUnA)	7.31	2.0	ng/L	10.0	ND	73.1	70-130	27.3	30	
N-MeFOSAA	4.87	2.0	ng/L	10.0	ND	48.7	* 70-130	37.4	* 30	MS-23
Perfluorododecanoic acid (PFDoA)	5.68	2.0	ng/L	10.0	ND	56.8	* 70-130	26.4	30	MS-07A
Perfluorotridecanoic acid (PFTriDA)	4.49	2.0	ng/L	10.0	ND	44.9	* 70-130	26.2	30	MS-07A
Perfluorotetradecanoic acid (PFTA)	4.39	2.0	ng/L	10.0	ND	43.9	* 70-130	19.3	30	MS-07A
Surrogate: 13C-PFHxA	39.9		ng/L	40.0		99.7	70-130			
Surrogate: 13C-PFDA	36.2		ng/L	40.0		90.6	70-130			
Surrogate: d5-NEtFOSAA	90.4		ng/L	160		56.5	* 70-130			Z-01

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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.
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.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-09	Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-19	Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
MS-24	Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
RL-11	Elevated reporting limit due to high concentration of target compounds.
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-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low 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.
V-36	Initial calibration verification (ICV) 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.
Z-01	Surrogate outside of conformance. Extraction of MS and source confirmed surrogate out of conformance due to matrix effects.
Z-01a	Surrogate outside of conformance. Extraction of MS/MSD confirmed surrogate out of conformance due to matrix effects.
Z-01b	Surrogate outside of conformance. Extraction of MSD and source confirmed surrogate out of conformance due to matrix effects.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>EPA 537 in Drinking Water</i>	
Perfluorobutanoic acid (PFBA)	NH
Perfluorobutanesulfonic acid (PFBS)	NH,ME,RI,NJ,CT,PA
Perfluorohexanoic acid (PFHxA)	NH,ME,RI,NJ,CT,PA
Perfluorohexanesulfonic acid (PFHxS)	NH,ME,RI,NJ,CT,PA
Perfluoroheptanoic acid (PFHpA)	NH,ME,RI,NJ,CT,PA
Perfluorooctanoic acid (PFOA)	NH,NY,ME,RI,NJ,CT,PA
Perfluorooctanesulfonic acid (PFOS)	NH,NY,ME,RI,NJ,CT,PA
Perfluorononanoic acid (PFNA)	NH,ME,RI,NJ,CT,PA
Perfluorodecanoic acid (PFDA)	NH,ME,RI,NJ,CT,PA
N-EtFOSAA	NH,RI,NJ,CT,PA
Perfluoroundecanoic acid (PFUnA)	NH,ME,RI,NJ,CT,PA
N-MeFOSAA	NH,RI,NJ,CT,PA
Perfluorododecanoic acid (PFDoA)	NH,ME,RI,NJ,CT,PA
Perfluorotridecanoic acid (PFTrDA)	NH,ME,RI,NJ,CT,PA
Perfluorotetradecanoic acid (PFTA)	ME,RI,NJ,CT,PA
<i>SOP 434-PFAAS in Water</i>	
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
<i>SW-846 8260C in Water</i>	
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

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
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
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

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Water	
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
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 - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Public Health	PH-0567	09/30/2019
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	09/6/2019
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

**Volatiles Target Compound List (TCL) and
Contract Required Quantitation Limits (CRQL)
for Aqueous Samples**

	Volatile Analyte	CAS Number	Trace Water By SIM (µg/L)	Trace Level Water (µg/L)	Low Level Water (µg/L)
1.	Dichlorodifluoromethane	75-71-8		0.50	5.0
2.	Chloromethane	74-87-3		0.50	5.0
3.	Vinyl Chloride	75-01-4		0.50	5.0
4.	Bromomethane	74-83-9		0.50	5.0
5.	Chloroethane	75-00-3		0.50	5.0
6.	Trichlorofluoromethane	75-69-4		0.50	5.0
7.	1,1-Dichloroethene	75-35-4		0.50	5.0
8.	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		0.50	5.0
9.	Acetone	67-64-1		5.0	10.0
10.	Carbon Disulfide	75-15-0		0.50	5.0
11.	Methyl Acetate	79-20-9		0.50	5.0
12.	Methylene chloride	75-09-2		0.50	5.0
13.	trans-1,2-Dichloroethene	156-60-5		0.50	5.0
14.	Methyl tert-Butyl Ether	1634-04-4		0.50	5.0
15.	1,1-Dichloroethane	75-34-3		0.50	5.0
16.	cis-1,2-Dichloroethene	156-59-2		0.50	5.0
17.	2-Butanone	78-93-3		5.0	10.0
18.	Bromochloromethane	74-97-5		0.50	5.0
19.	Chloroform	67-66-3		0.50	5.0
20.	1,1,1-Trichloroethane	71-55-6		0.50	5.0
21.	Cyclohexane	110-82-7		0.50	5.0
22.	Carbon tetrachloride	56-23-5		0.50	5.0
23.	Benzene	71-43-2		0.50	5.0
24.	1,2-Dichloroethane	107-06-2		0.50	5.0
25.	1,4-Dioxane	123-91-1	1.0	25	125
26.	Trichloroethane	79-01-6		0.50	5.0

**Volatiles Target Compound List (TCL) and
Contract Required Quantitation Limits (CRQL)
for Aqueous Samples (Continued)**

	Volatile Analyte	CAS Number	Trace Water By SIM (µg/L)	Trace Level Water (µg/L)	Low Level Water (µg/L)
27.	Methylcyclohexane	108-87-2		0.50	5.0
28.	1,2-Dichloropropane	78-87-5		0.50	5.0
29.	Bromodichloromethane	75-27-4		0.50	5.0
30.	cis-1,3-Dichloropropene	10061-01-5		0.50	5.0
31.	4-methyl-2-pentanone	108-10-1		5.0	10.0
32.	Toluene	108-88-3		0.50	5.0
33.	Trans-1,3-Dichloropropene	10061-02-6		0.50	5.0
34.	1,1,2-Trichloroethane	79-00-5		0.50	5.0
35.	Tetrachloroethene	127-18-4		0.50	5.0
36.	2-Hexanone	591-78-6		5.0	10.0
37.	Dibromochloromethane	124-48-1		0.50	5.0
38.	1,2-Dibromoethane	106-93-4	0.05	0.50	5.0
39.	Chlorobenzene	108-90-7		0.50	5.0
40.	Ethylbenzene	100-41-4		0.50	5.0
41.	Xylenes (Total)	1330-20-7		0.50	5.0
42.	Styrene	100-42-5		0.50	5.0
43.	Bromoform	75-25-2		0.50	5.0
44.	Isopropylbenzene	98-82-8		0.50	5.0
45.	1,1,2,2-Tetrachloroethane	79-34-5		0.50	5.0
46.	1,3-Dichlorobenzene	541-73-1		0.50	5.0
47.	1,4-Dichlorobenzene	106-46-7		0.50	5.0
48.	1,2-Dichlorobenzene	95-50-1		0.50	5.0
49.	1,2-Dibromo-3-chloropropane	96-12-8	0.05	0.50	5.0
50.	1,2,4-Trichlorobenzene	120-82-1		0.50	5.0
51.	1,2,3-Trichlorobenzene	87-61-6		0.50	5.0

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 UX Date 8.9.19 Time 1735

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 # 4 Actual Temp - 3.0
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? NA
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 Client T Analysis T Sampler Name T
pertinent Information? 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? F MS/MSD? T
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? NA Acid _____ Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.	<u>10</u>	1 Liter Plastic		16 oz Amb.	
HCL-	<u>26</u>	500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	<u>10</u>	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:

VOA

SAMPLE DATA

1 - FORM I

ANALYSIS DATA SHEET

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Trip Blank-8/8/19

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Trip Blank Water	Laboratory ID:	19H0528-01
		File ID:	B1922533.D
Sampled:	08/08/19 00:00	Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 23:04
Solids:		Preparation:	SW-846 5030B
		Dilution:	1
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

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	5.0	
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	V-05
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	V-05
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

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Trip Blank-8/8/19

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Trip Blank Water	Laboratory ID:	19H0528-01
		File ID:	B1922533.D
Sampled:	08/08/19 00:00	Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 23:04
Solids:		Preparation:	SW-846 5030B
		Dilution:	1
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

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

58

Trip Blank-8/8/19

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528	
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site	
Matrix:	Trip Blank Water	Laboratory ID:	19H0528-01	File ID: B1922533.D
Sampled:	08/08/19 00:00	Prepared:	08/13/19 07:22	Analyzed: 08/13/19 23:04
Solids:		Preparation:	SW-846 5030B	Dilution: 1
Initial/Final:	5 mL / 5 mL			
Batch:	B237875	Sequence:	S039168	Calibration: 1900126
				Instrument: GCMSVOA2

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 113)		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	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922533.D
 Acq On : 13 Aug 2019 11:04 pm
 Operator :
 Sample : 19H0528-01 @ TB
 Misc :
 ALS Vial : 33 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 11:04:53 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	52560	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	74840	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.845	82	46262	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.135	152	48577	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.579	65	37108	27.40	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	109.60%
45) TOLUENE-D8 SS	6.444	98	80870	27.61	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	110.44%
66) 4-BROMOFLUROBENZENE SS	9.002	95	33781	24.81	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	99.24%

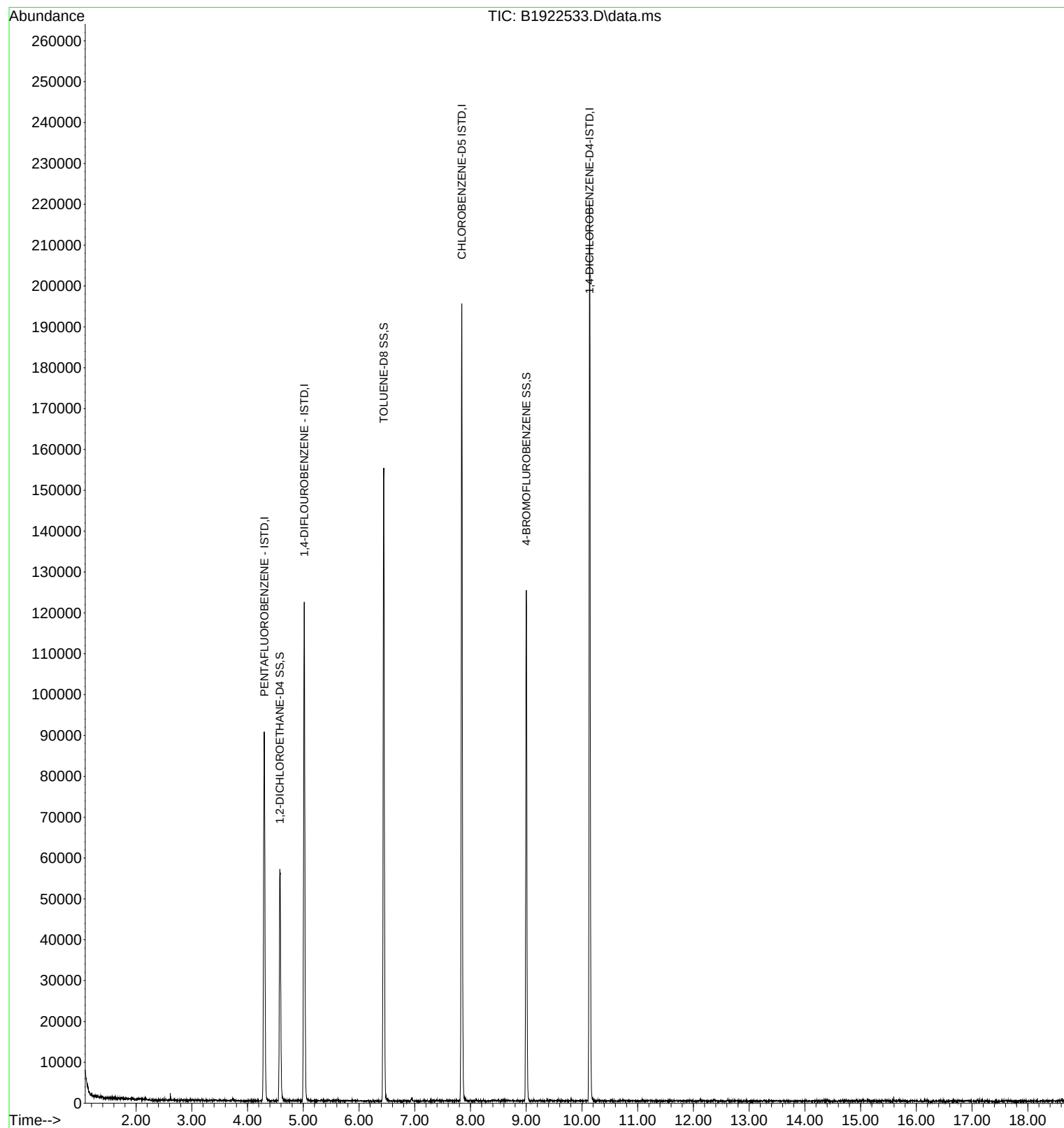
Target Compounds	Qvalue

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

Data Path : Y:\1\DATA\B081319\
Data File : B1922533.D
Acq On : 13 Aug 2019 11:04 pm
Operator :
Sample : 19H0528-01 @ TB
Misc :
ALS Vial : 33 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 11:04:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
Quant Title : 8260 CALIBRATION VOAMS 5973
QLast Update : Fri Apr 19 05:25:51 2019
Response via : Initial Calibration



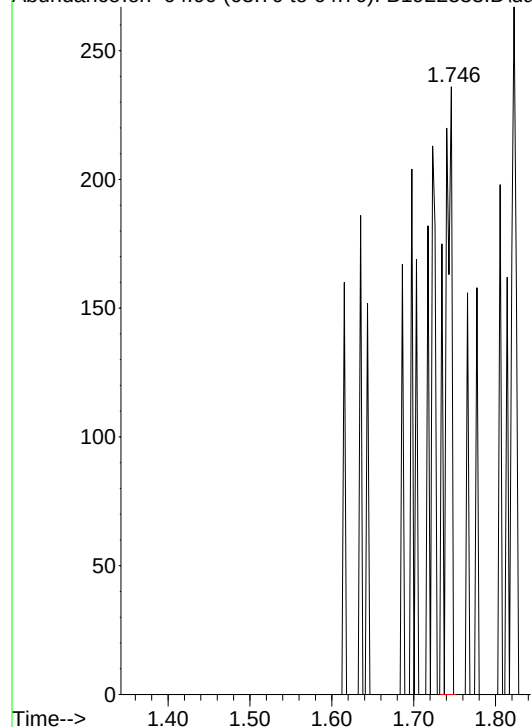
Data Path : Y:\1\DATA\B081319\
Data File : B1922533.D
Acq On : 13 Aug 2019 11:04 pm
Operator :
Sample : 19H0528-01 @ TB
Misc :

Quant Time : Wed Aug 14 11:04:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

CHLOROETHANE

Abundance on 64.00 (63.70 to 64.70): B1922533.D\data



Original Int. Results

RT : 1.75
Area : 135
Amount: 0.174206

Manual Int. Results

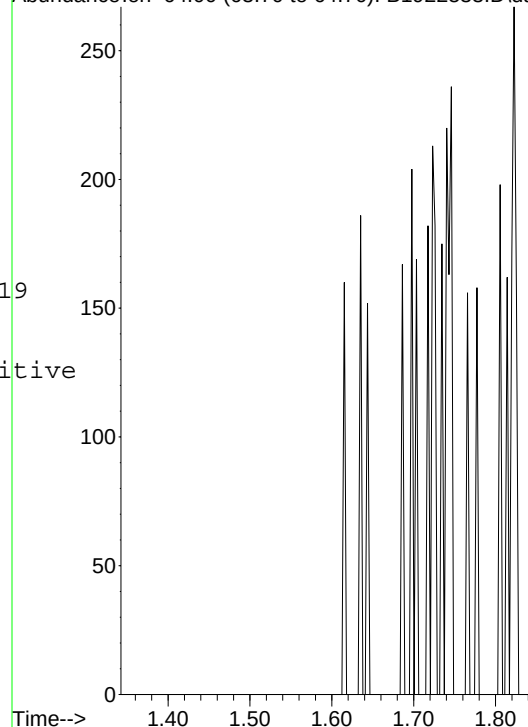
Wed Aug 14 11:04:42 2019

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

Manual Integration

CHLOROETHANE

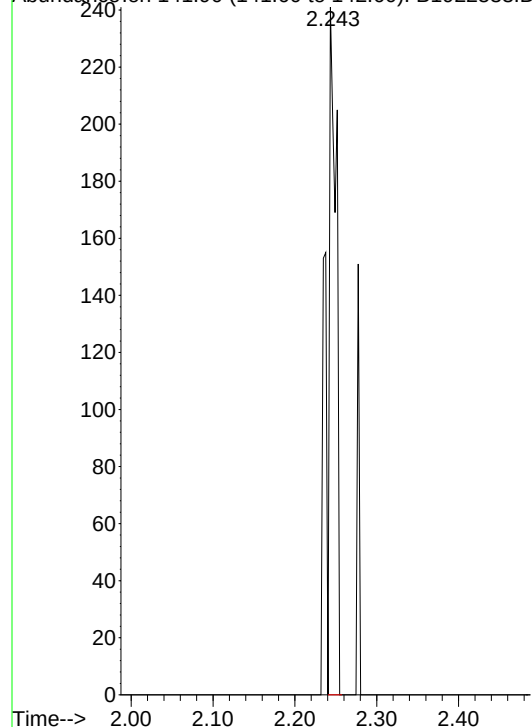
Abundance on 64.00 (63.70 to 64.70): B1922533.D\data



Original Integration

IODOMETHANE

Abundance on 141.90 (141.60 to 142.60): B1922533.D\data



Original Int. Results

RT : 2.24
Area : 139
Amount: 0.109513

Manual Int. Results

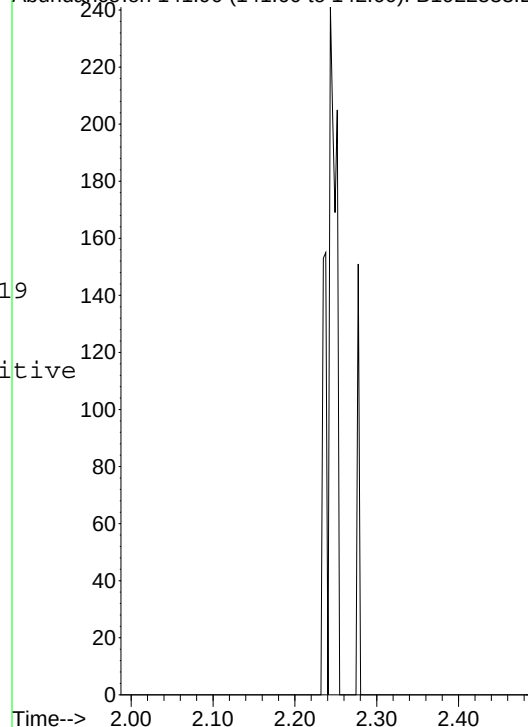
Wed Aug 14 11:04:46 2019

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

Manual Integration

IODOMETHANE

Abundance on 141.90 (141.60 to 142.60): B1922533.D\data



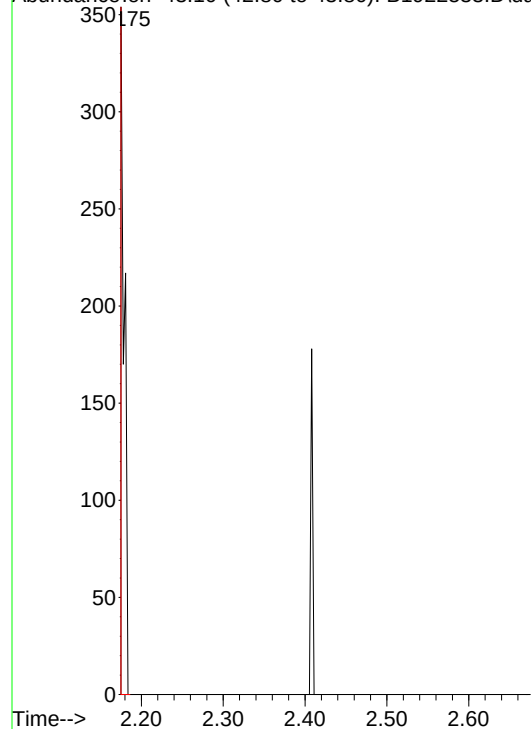
Data Path : Y:\1\DATA\B081319\
Data File : B1922533.D
Acq On : 13 Aug 2019 11:04 pm
Operator :
Sample : 19H0528-01 @ TB
Misc :

Quant Time : Wed Aug 14 11:04:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

METHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): B1922533.D\data



Original Int. Results

RT : 2.18
Area : 209
Amount: 0.136998

Manual Int. Results

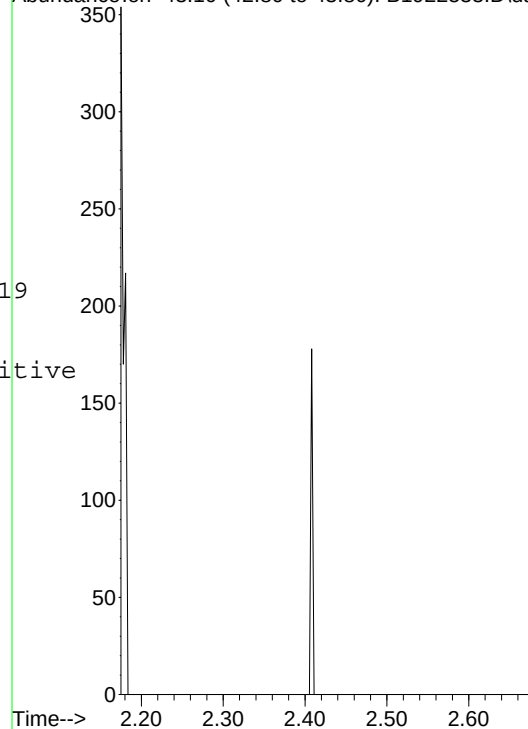
Wed Aug 14 11:04:49 2019

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

Manual Integration

METHYL ACETATE

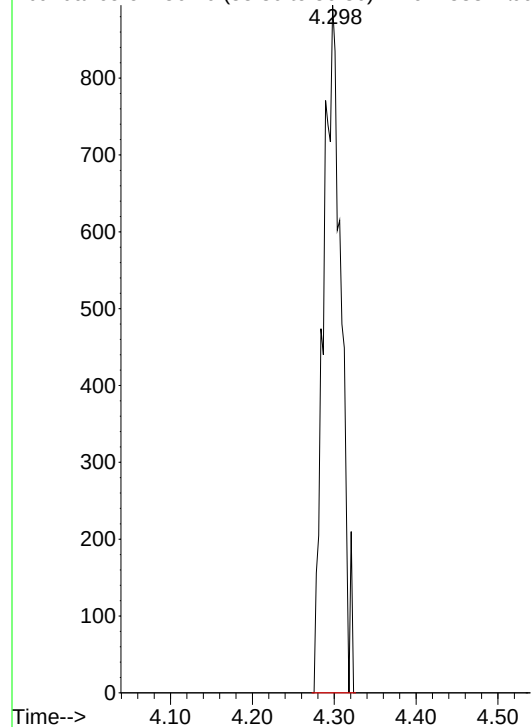
Abundance on 43.10 (42.80 to 43.80): B1922533.D\data



Original Integration

CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922533.D\data



Original Int. Results

RT : 4.30
Area : 1332
Amount: 0.600736

Manual Int. Results

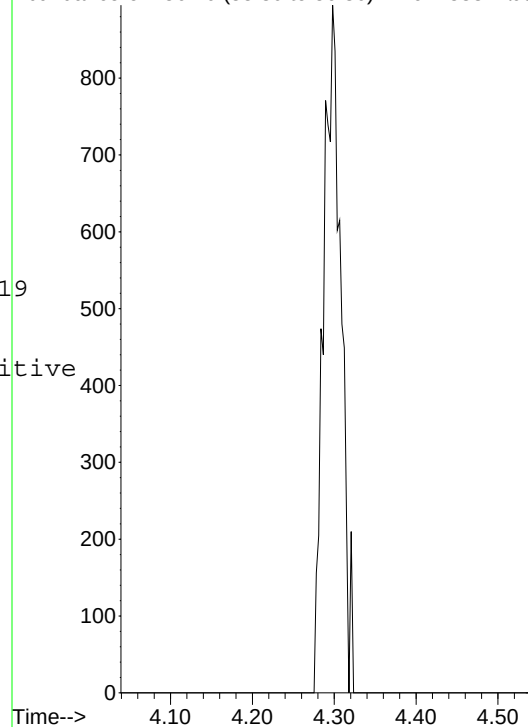
Wed Aug 14 11:04:51 2019

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

Manual Integration

CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922533.D\data



1 - FORM I

ANALYSIS DATA SHEET

63

OC-17D

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528	
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site	
Matrix:	Ground Water	Laboratory ID:	19H0528-02	File ID: B1922535.D
Sampled:	08/08/19 09:35	Prepared:	08/13/19 07:22	Analyzed: 08/14/19 00:05
Solids:		Preparation:	SW-846 5030B	Dilution: 20
Initial/Final:	5 mL / 5 mL			
Batch:	B237875	Sequence:	S039168	Calibration: 1900126
				Instrument: GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone		76	1000	
107-13-1	Acrylonitrile		10	100	
994-05-8	tert-Amyl Methyl Ether (TAME)		2.8	10	
71-43-2	Benzene		3.6	20	
108-86-1	Bromobenzene		3.0	20	
74-97-5	Bromochloromethane		6.4	20	
75-27-4	Bromodichloromethane		3.2	10	
75-25-2	Bromoform		9.2	20	
74-83-9	Bromomethane		16	100	
78-93-3	2-Butanone (MEK)		39	400	
75-65-0	tert-Butyl Alcohol (TBA)		83	400	
104-51-8	n-Butylbenzene		4.2	20	V-05
135-98-8	sec-Butylbenzene		3.2	20	
98-06-6	tert-Butylbenzene		3.4	20	
637-92-3	tert-Butyl Ethyl Ether (TBEE)		3.2	10	
75-15-0	Carbon Disulfide		89	100	
56-23-5	Carbon Tetrachloride		2.2	100	
108-90-7	Chlorobenzene		3.0	20	
124-48-1	Chlorodibromomethane		4.2	10	
75-00-3	Chloroethane		7.0	40	
67-66-3	Chloroform		3.4	40	
74-87-3	Chloromethane		9.0	40	V-05
95-49-8	2-Chlorotoluene		2.4	20	
106-43-4	4-Chlorotoluene		2.8	20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		11	100	
106-93-4	1,2-Dibromoethane (EDB)		3.8	10	
74-95-3	Dibromomethane		7.4	20	
95-50-1	1,2-Dichlorobenzene		3.2	20	
541-73-1	1,3-Dichlorobenzene		2.4	20	
106-46-7	1,4-Dichlorobenzene		2.6	20	

1 - FORM I

ANALYSIS DATA SHEET

64

OC-17D

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-02
		File ID:	B1922535.D
Sampled:	08/08/19 09:35	Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 00:05
Solids:		Preparation:	SW-846 5030B
		Dilution:	20
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene		6.2	40	
75-71-8	Dichlorodifluoromethane (Freon 12)		5.2	40	
75-34-3	1,1-Dichloroethane	49	3.2	20	
107-06-2	1,2-Dichloroethane		8.2	20	
75-35-4	1,1-Dichloroethylene	24	6.4	20	
156-59-2	cis-1,2-Dichloroethylene		2.6	20	
156-60-5	trans-1,2-Dichloroethylene		6.2	20	
78-87-5	1,2-Dichloropropane		4.0	20	
142-28-9	1,3-Dichloropropane		2.2	10	
594-20-7	2,2-Dichloropropane		4.0	20	
563-58-6	1,1-Dichloropropene		3.2	40	
10061-01-5	cis-1,3-Dichloropropene		2.6	10	
10061-02-6	trans-1,3-Dichloropropene		4.6	10	
60-29-7	Diethyl Ether		6.8	40	
108-20-3	Diisopropyl Ether (DIPE)		3.4	10	
123-91-1	1,4-Dioxane		450	1000	
100-41-4	Ethylbenzene		2.6	20	
87-68-3	Hexachlorobutadiene		9.4	12	
591-78-6	2-Hexanone (MBK)		30	200	
98-82-8	Isopropylbenzene (Cumene)		3.4	20	
99-87-6	p-Isopropyltoluene (p-Cymene)		4.0	20	
79-20-9	Methyl Acetate		8.4	20	
1634-04-4	Methyl tert-Butyl Ether (MTBE)		5.0	20	
108-87-2	Methyl Cyclohexane		4.0	20	
75-09-2	Methylene Chloride		6.8	100	
108-10-1	4-Methyl-2-pentanone (MIBK)		33	200	
91-20-3	Naphthalene		6.2	40	
103-65-1	n-Propylbenzene		2.6	20	
100-42-5	Styrene		2.2	20	
630-20-6	1,1,1,2-Tetrachloroethane		5.4	20	

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ANALYSIS DATA SHEET

65

OC-17D

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-02
		File ID:	B1922535.D
Sampled:	08/08/19 09:35	Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 00:05
Solids:		Preparation:	SW-846 5030B
		Dilution:	20
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane		4.4	10	
127-18-4	Tetrachloroethylene		3.6	20	
109-99-9	Tetrahydrofuran		10	200	
108-88-3	Toluene		2.8	20	
87-61-6	1,2,3-Trichlorobenzene		11	100	
120-82-1	1,2,4-Trichlorobenzene		8.0	20	
108-70-3	1,3,5-Trichlorobenzene		6.0	20	
71-55-6	1,1,1-Trichloroethane	340	4.0	20	
79-00-5	1,1,2-Trichloroethane		3.2	20	
79-01-6	Trichloroethylene	210	4.8	20	
75-69-4	Trichlorofluoromethane (Freon 11)		6.6	40	
96-18-4	1,2,3-Trichloropropane		5.0	40	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	980	6.4	20	
95-63-6	1,2,4-Trimethylbenzene		3.6	20	
108-67-8	1,3,5-Trimethylbenzene		2.8	20	
75-01-4	Vinyl Chloride		9.0	40	
108383/106423	m+p Xylene		6.0	40	
95-47-6	o-Xylene		3.4	20	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922535.D
 Acq On : 14 Aug 2019 12:05 am
 Operator :
 Sample : 19H0528-02 @ 20X
 Misc : 20
 ALS Vial : 35 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 11:12:09 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

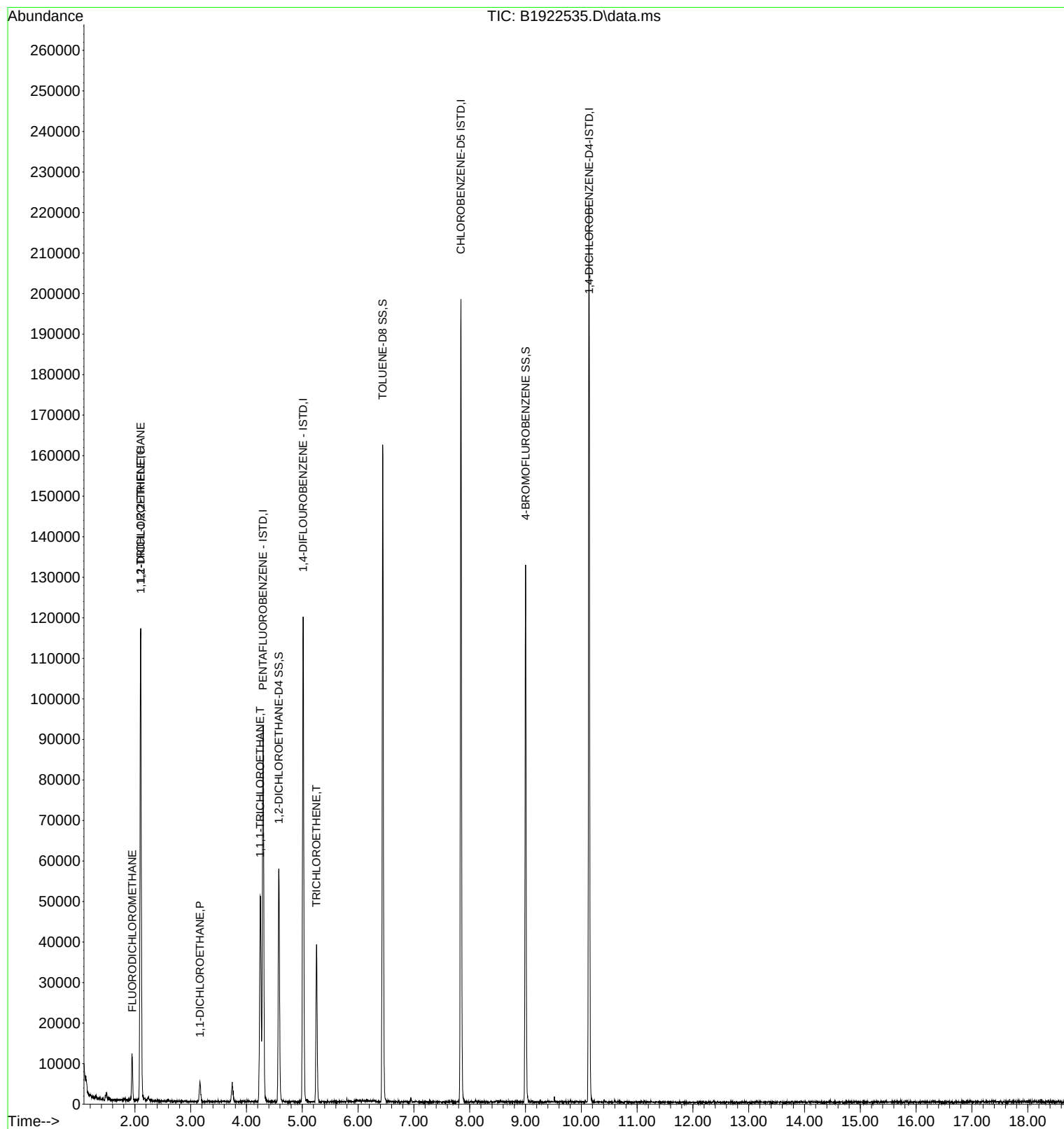
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.295	168	54958	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.015	114	74332	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	47292	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.139	152	48070	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.580	65	36907	26.06	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	104.24%
45) TOLUENE-D8 SS	6.441	98	82136	28.23	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	112.92%
66) 4-BROMOFLUROBENZENE SS	9.002	95	34725	24.95	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	99.80%
Target Compounds						
9) FLUORODICHLOROMETHANE	1.954	67	4546	2.17	UG/L	99
15) 1,1-DICHLOROETHENE	2.104	61	2204	1.18	UG/L	94
16) 1,1,2-TRICL-1,2,2-TRIF...	2.102	101	37976	48.98	UG/L	93
25) 1,1-DICHLOROETHANE	3.167	63	5476	2.45	UG/L #	52
37) 1,1,1-TRICHLOROETHANE	4.244	97	29883	16.79	UG/L	99
47) TRICHLOROETHENE	5.253	95	10018	10.62	UG/L	94

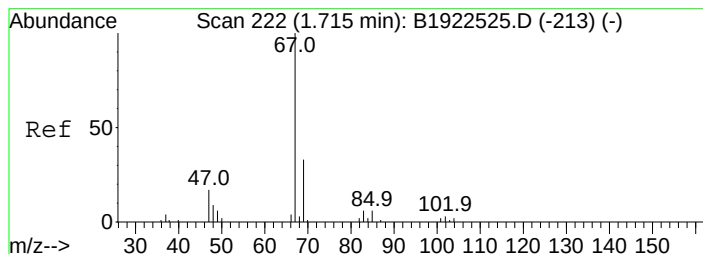
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Y:\1\DATA\B081319\
Data File : B1922535.D
Acq On : 14 Aug 2019 12:05 am
Operator :
Sample : 19H0528-02 @ 20X
Misc : 20
ALS Vial : 35 Sample Multiplier: 1

Inst : GCMSVOA2

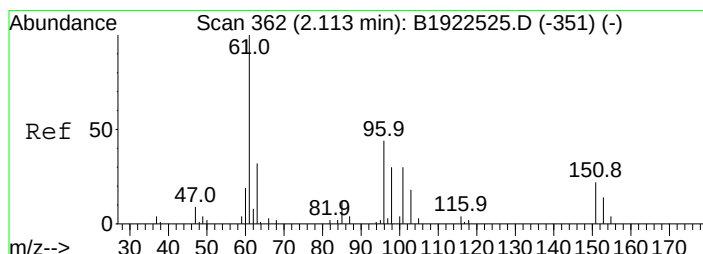
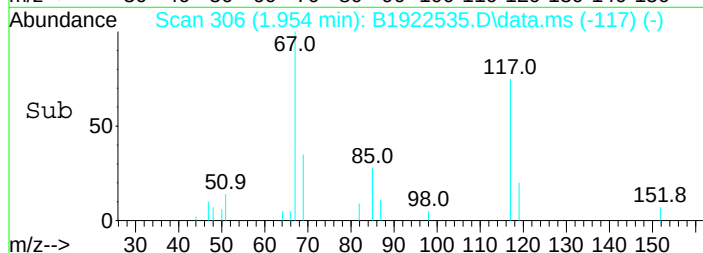
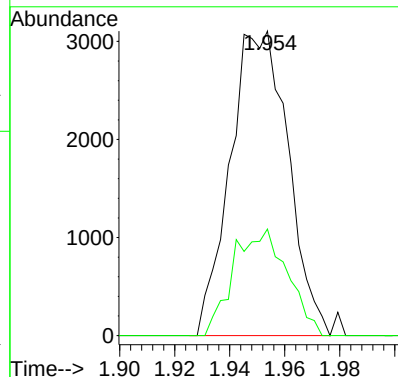
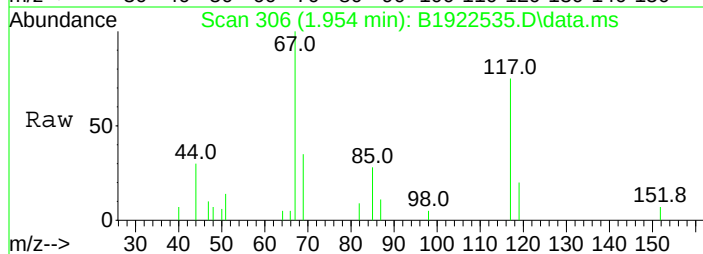
Quant Time: Aug 14 11:12:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
Quant Title : 8260 CALIBRATION VOAMS 5973
QLast Update : Fri Apr 19 05:25:51 2019
Response via : Initial Calibration





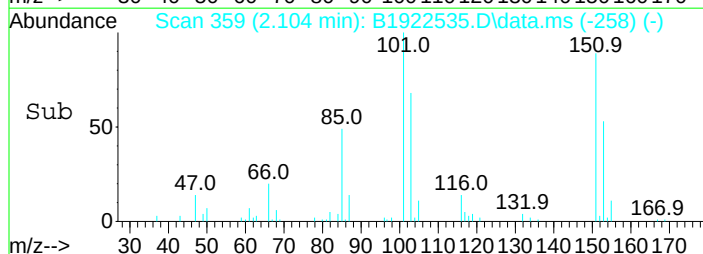
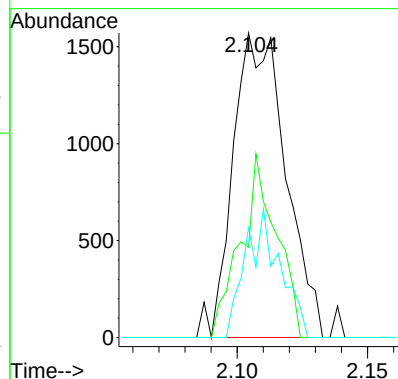
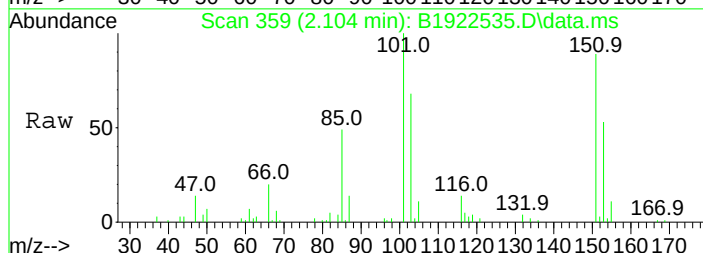
#9
 FLUORODICHLOROMETHANE
 Concen: 2.17 UG/L
 RT: 1.954 min Scan# 306
 Delta R.T. 0.236 min
 Lab File: B1922535.D
 Acq: 14 Aug 2019 12:05 am

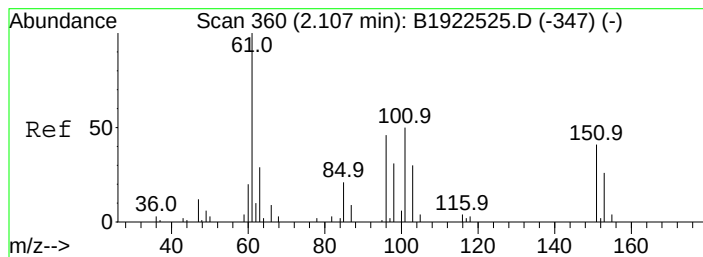
Tgt Ion: 67 Resp: 4546
 Ion Ratio Lower Upper
 67 100
 69 32.5 25.7 38.5



#15
 1,1-DICHLOROETHENE
 Concen: 1.18 UG/L
 RT: 2.104 min Scan# 359
 Delta R.T. -0.012 min
 Lab File: B1922535.D
 Acq: 14 Aug 2019 12:05 am

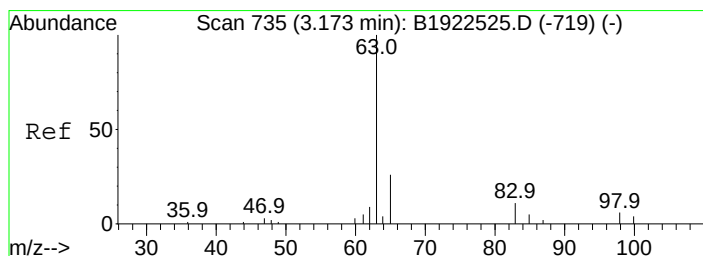
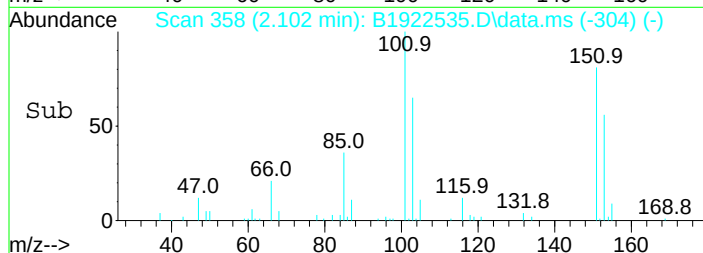
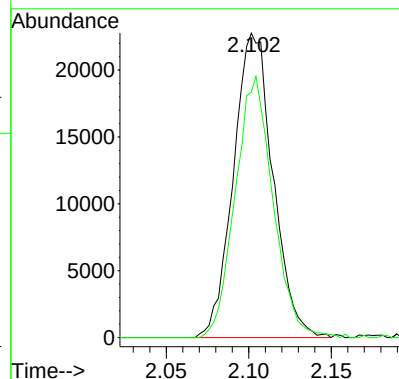
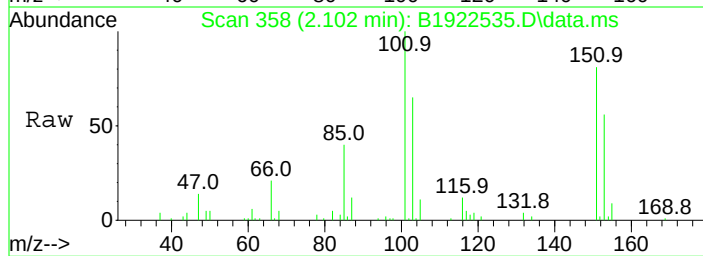
Tgt Ion: 61 Resp: 2204
 Ion Ratio Lower Upper
 61 100
 96 40.9 36.2 54.4
 63 27.7 24.4 36.6





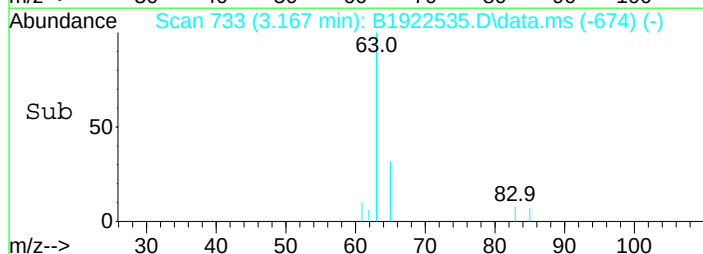
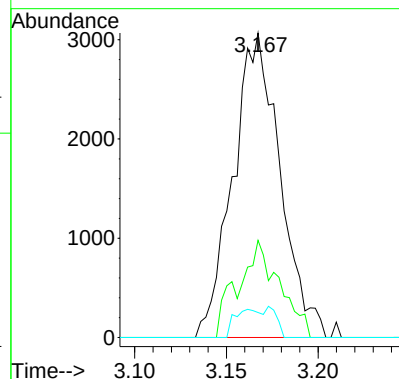
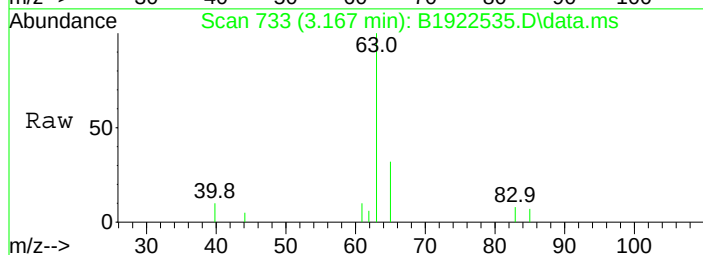
#16
 1,1,2-TRICL-1,2,2-TRIFLETHANE
 Concen: 48.98 UG/L
 RT: 2.102 min Scan# 358
 Delta R.T. -0.002 min
 Lab File: B1922535.D
 Acq: 14 Aug 2019 12:05 am

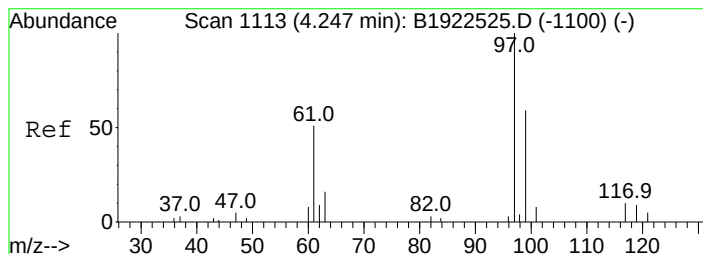
Tgt Ion: 101 Resp: 37976
 Ion Ratio Lower Upper
 101 100
 151 81.6 60.5 90.7



#25
 1,1-DICHLOROETHANE
 Concen: 2.45 UG/L
 RT: 3.167 min Scan# 733
 Delta R.T. -0.003 min
 Lab File: B1922535.D
 Acq: 14 Aug 2019 12:05 am

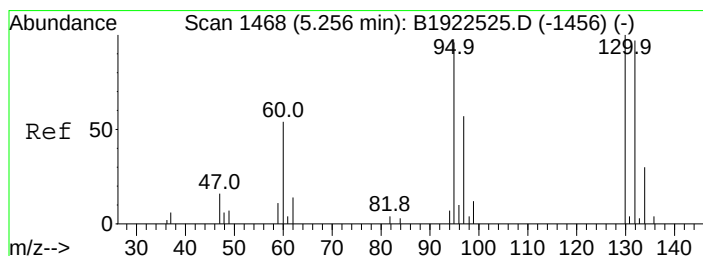
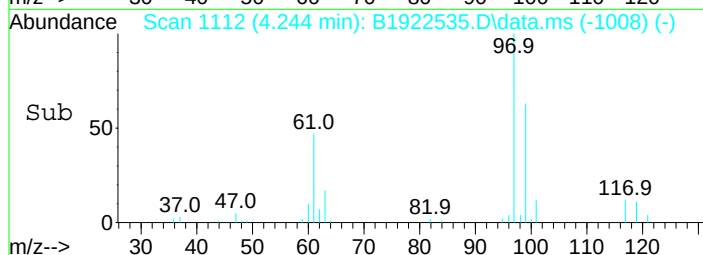
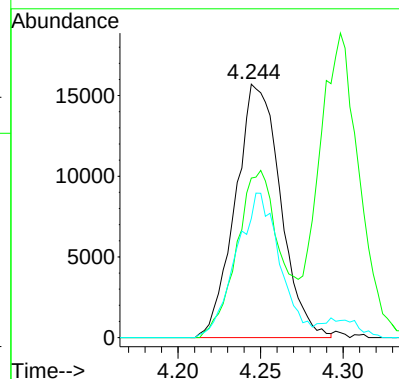
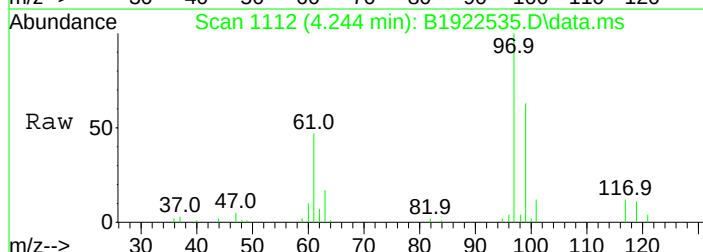
Tgt Ion: 63 Resp: 5476
 Ion Ratio Lower Upper
 63 100
 65 0.0 24.0 36.0#
 83 0.0 9.8 14.6#





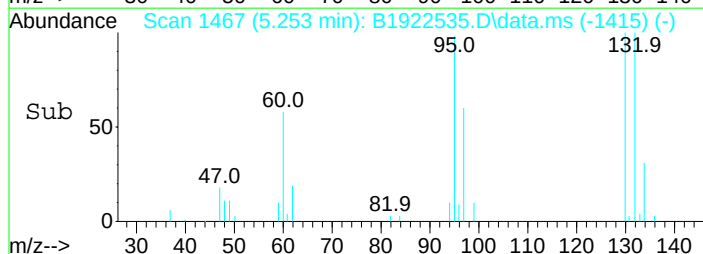
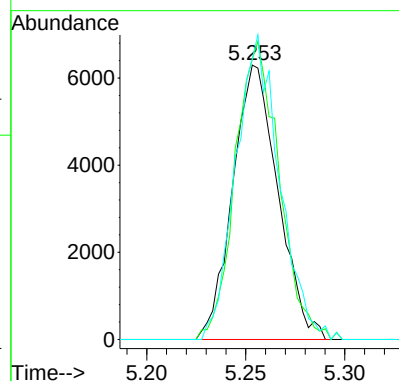
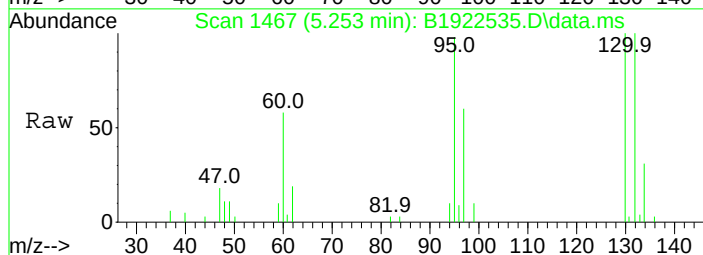
#37
 1,1,1-TRICHLOROETHANE
 Concen: 16.79 UG/L
 RT: 4.244 min Scan# 1112
 Delta R.T. -0.006 min
 Lab File: B1922535.D
 Acq: 14 Aug 2019 12:05 am

Tgt Ion: 97 Resp: 29883
 Ion Ratio Lower Upper
 97 100
 99 63.3 50.8 76.2
 61 55.6 45.1 67.7



#47
 TRICHLOROETHENE
 Concen: 10.62 UG/L
 RT: 5.253 min Scan# 1467
 Delta R.T. -0.003 min
 Lab File: B1922535.D
 Acq: 14 Aug 2019 12:05 am

Tgt Ion: 95 Resp: 10018
 Ion Ratio Lower Upper
 95 100
 130 105.2 79.8 119.6
 132 107.4 80.6 121.0



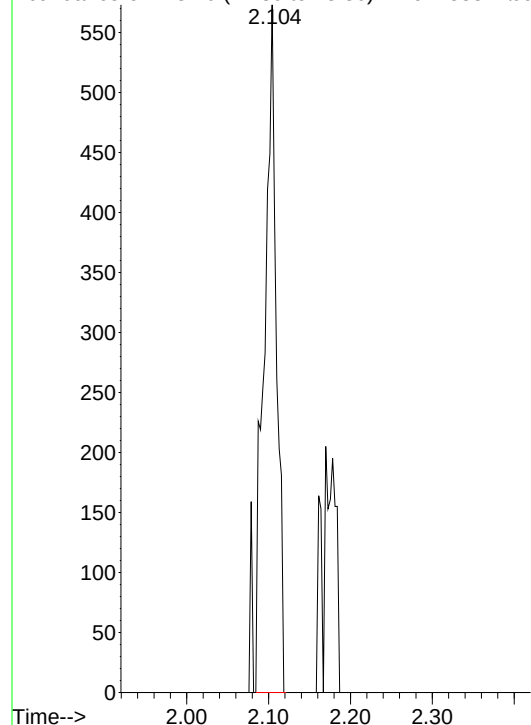
Data Path : Y:\1\DATA\B081319\
Data File : B1922535.D
Acq On : 14 Aug 2019 12:05 am
Operator :
Sample : 19H0528-02 @ 20X
Misc : 20

Quant Time : Wed Aug 14 11:12:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

ACETONE

Abundance on 43.10 (42.80 to 43.80): B1922535.D\data



Original Int. Results

RT : 2.10
Area : 591
Amount: 1.16479

Manual Int. Results

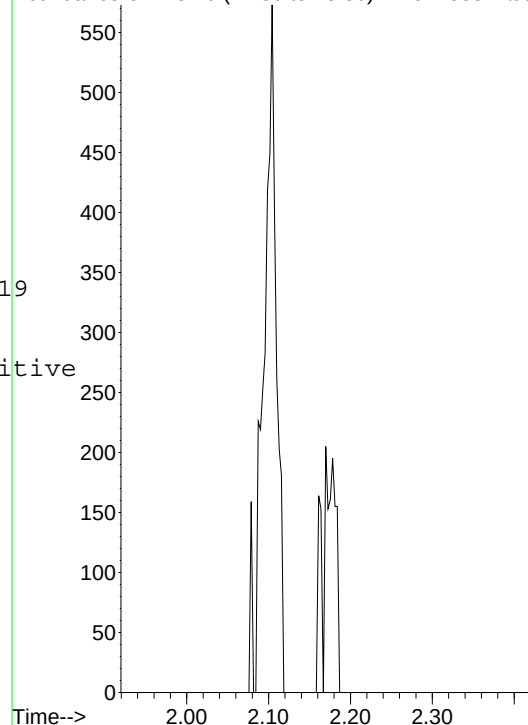
Wed Aug 14 11:11:51 2019

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

Manual Integration

ACETONE

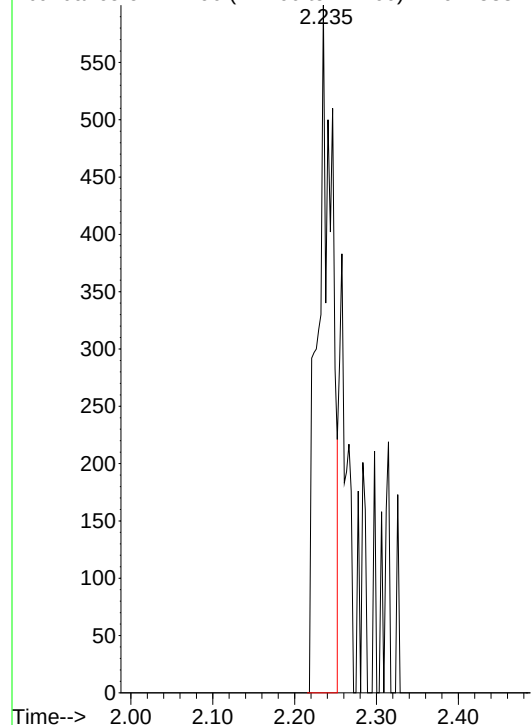
Abundance on 43.10 (42.80 to 43.80): B1922535.D\data



Original Integration

IODOMETHANE

Abundance on 141.90 (141.60 to 142.60): B1922535.D\data



Original Int. Results

RT : 2.24
Area : 749
Amount: 0.564362

Manual Int. Results

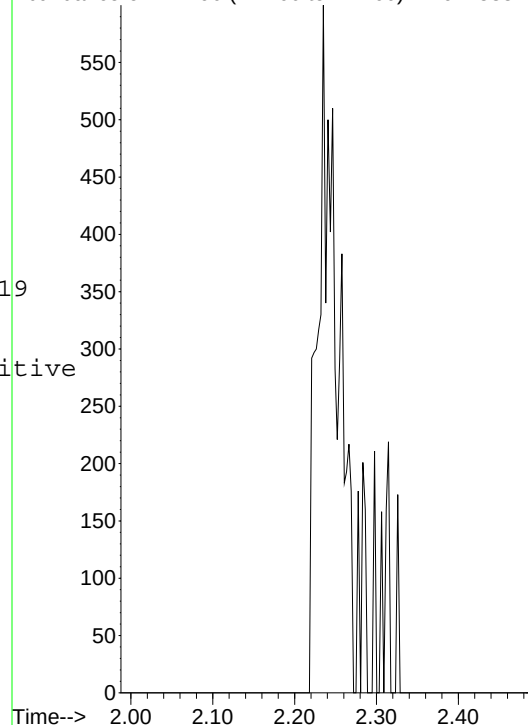
Wed Aug 14 11:11:59 2019

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

Manual Integration

IODOMETHANE

Abundance on 141.90 (141.60 to 142.60): B1922535.D\data

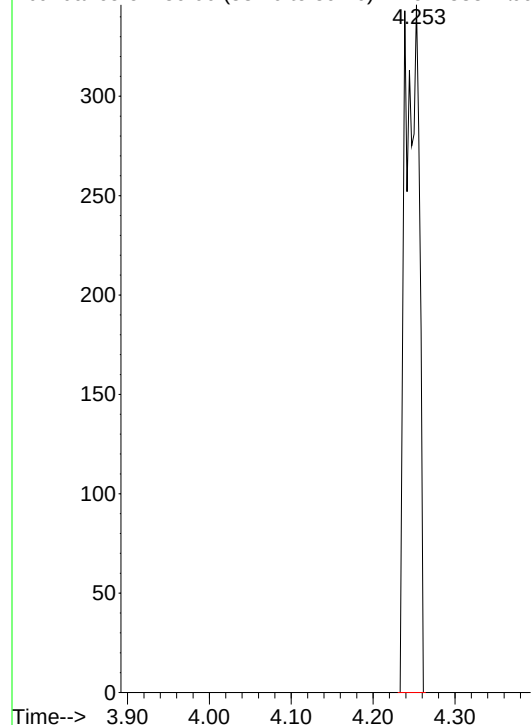


Data Path : Y:\1\DATA\B081319\
Data File : B1922535.D
Acq On : 14 Aug 2019 12:05 am
Operator :
Sample : 19H0528-02 @ 20X
Misc : 20

Quant Time : Wed Aug 14 11:12:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922535.D\data



Original Int. Results

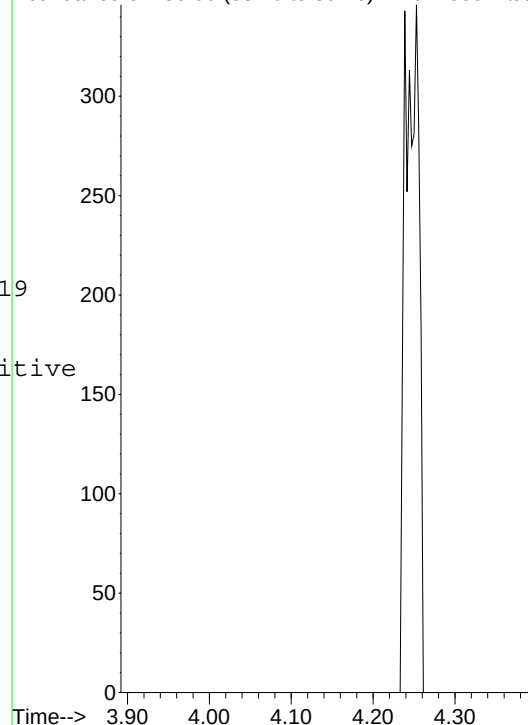
RT : 4.25
Area : 416
Amount: 0.370255

Manual Int. Results

Wed Aug 14 11:12:05 2019
MIuser: BRF
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

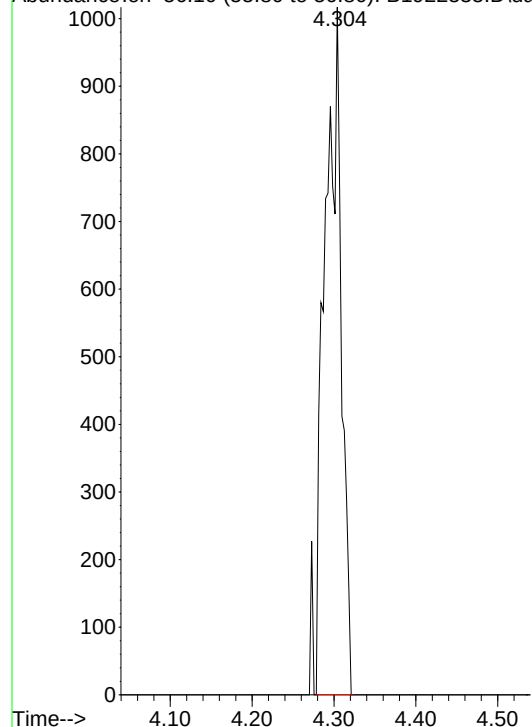
Manual Integration
T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922535.D\data



Original Integration
CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922535.D\data



Original Int. Results

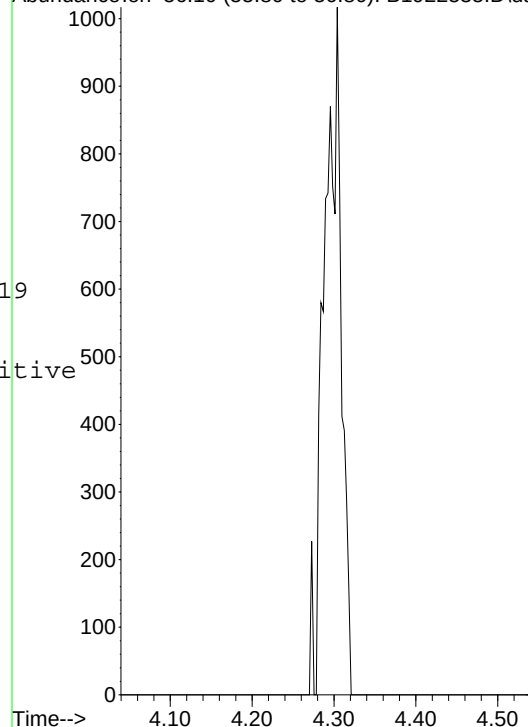
RT : 4.30
Area : 1427
Amount: 0.6155

Manual Int. Results

Wed Aug 14 11:12:08 2019
MIuser: BRF
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922535.D\data



1 - FORM I

ANALYSIS DATA SHEET

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OC-17S

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528	
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site	
Matrix:	Ground Water	Laboratory ID:	19H0528-03	File ID: B1922534.D
Sampled:	08/08/19 10:35	Prepared:	08/13/19 07:22	Analyzed: 08/13/19 23:34
Solids:		Preparation:	SW-846 5030B	Dilution: 1
Initial/Final:	5 mL / 5 mL			
Batch:	B237875	Sequence:	S039168	Calibration: 1900126
				Instrument: GCMSVOA2

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	5.0	
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	V-05
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	V-05
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

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OC-17S

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-03
		File ID:	B1922534.D
Sampled:	08/08/19 10:35	Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 23:34
Solids:		Preparation:	SW-846 5030B
		Dilution:	1
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

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	18	0.16	1.0	
107-06-2	1,2-Dichloroethane		0.41	1.0	
75-35-4	1,1-Dichloroethylene	4.6	0.32	1.0	
156-59-2	cis-1,2-Dichloroethylene	2.4	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

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OC-17S

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-03
		File ID:	B1922534.D
Sampled:	08/08/19 10:35	Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 23:34
Solids:		Preparation:	SW-846 5030B
		Dilution:	1
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

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	13	0.20	1.0	
79-00-5	1,1,2-Trichloroethane		0.16	1.0	
79-01-6	Trichloroethylene	34	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 113)	49	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	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922534.D
 Acq On : 13 Aug 2019 11:34 pm
 Operator :
 Sample : 19H0528-03
 Misc :
 ALS Vial : 34 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 11:09:22 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

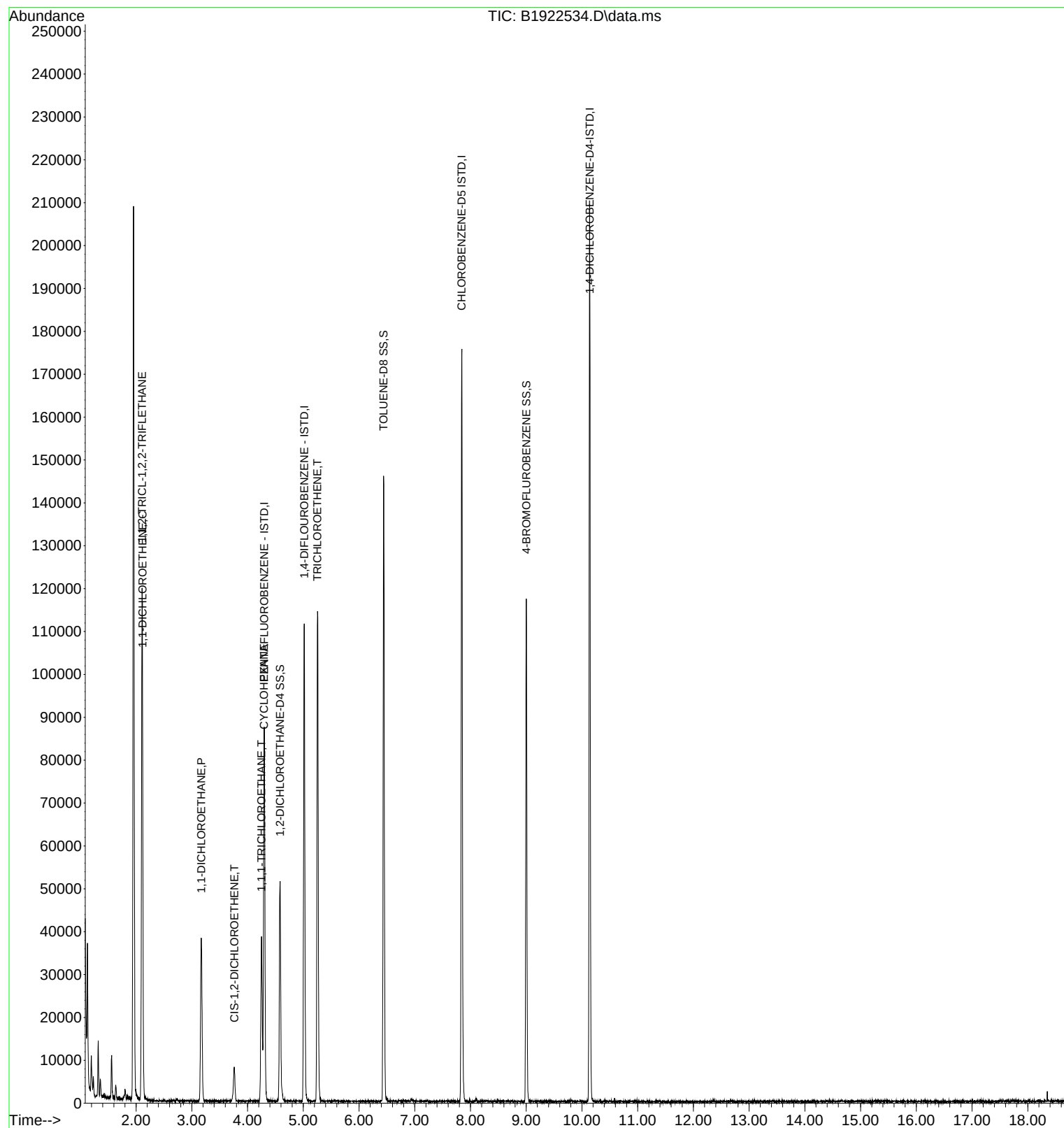
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	51183	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	70711	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	43143	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.138	152	46840	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	34452	26.12	UG/L	0.00
Spiked Amount 25.000	Range 70	- 130	Recovery	=	104.48%	
45) TOLUENE-D8 SS	6.441	98	76619	27.69	UG/L	0.00
Spiked Amount 25.000	Range 70	- 130	Recovery	=	110.76%	
66) 4-BROMOFLUROBENZENE SS	9.001	95	30692	24.17	UG/L	0.00
Spiked Amount 25.000	Range 70	- 130	Recovery	=	96.68%	
Target Compounds						Qvalue
15) 1,1-DICHLOROETHENE	2.115	61	7957	4.59	UG/L	96
16) 1,1,2-TRICL-1,2,2-TRIF...	2.107	101	35395	49.02	UG/L	89
25) 1,1-DICHLOROETHANE	3.170	63	36908	17.74	UG/L	99
30) CIS-1,2-DICHLOROETHENE	3.764	61	4921	2.40	UG/L	96
37) 1,1,1-TRICHLOROETHANE	4.250	97	22260	13.43	UG/L	96
38) CYCLOHEXANE	4.292	56	1352	0.63	UG/L #	54
47) TRICHLOROETHENE	5.253	95	30356	33.84	UG/L	95

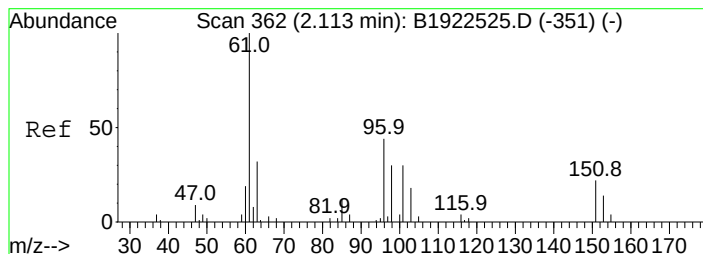
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Y:\1\DATA\B081319\
Data File : B1922534.D
Acq On : 13 Aug 2019 11:34 pm
Operator :
Sample : 19H0528-03
Misc :
ALS Vial : 34 Sample Multiplier: 1

Inst : GCMSVOA2

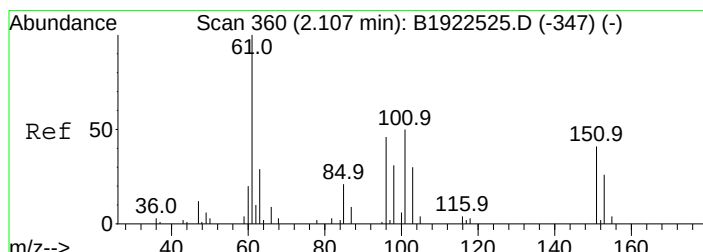
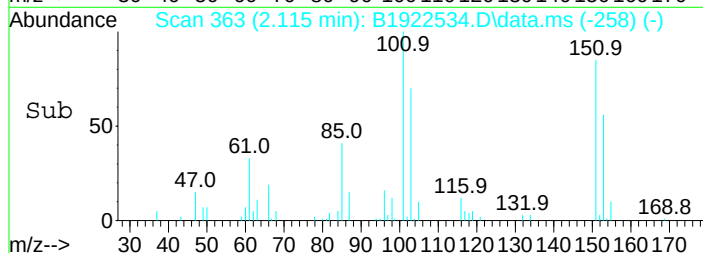
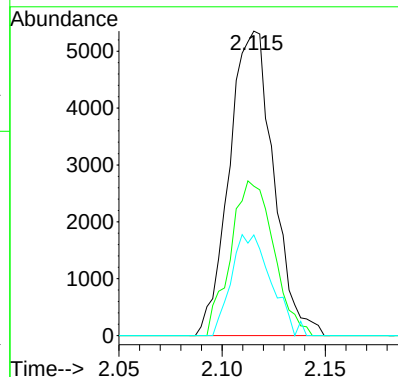
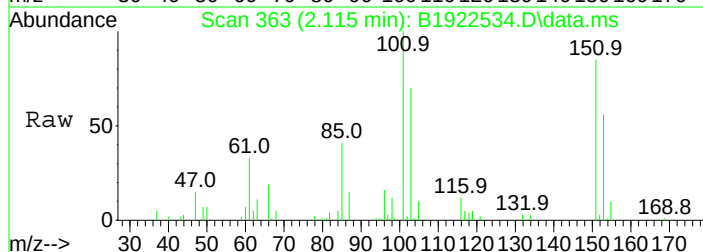
Quant Time: Aug 14 11:09:22 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
Quant Title : 8260 CALIBRATION VOAMS 5973
QLast Update : Fri Apr 19 05:25:51 2019
Response via : Initial Calibration





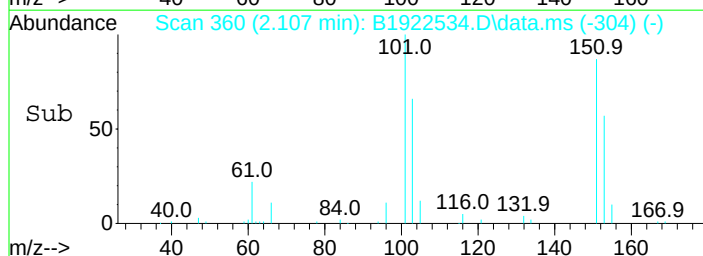
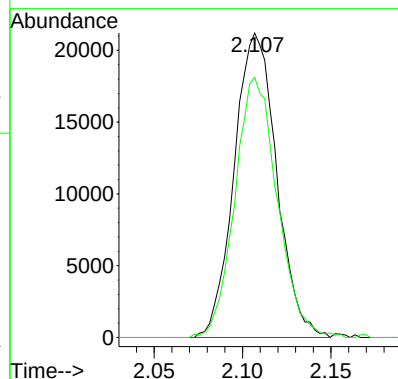
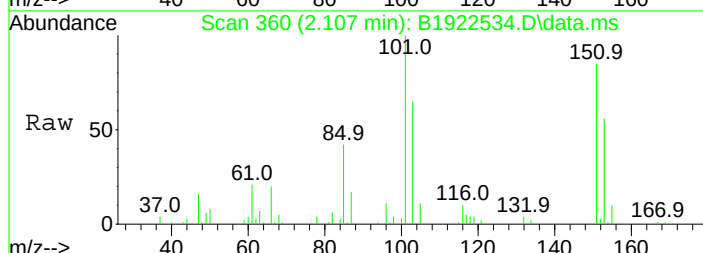
#15
 1,1-DICHLOROETHENE
 Concen: 4.59 UG/L
 RT: 2.115 min Scan# 363
 Delta R.T. -0.001 min
 Lab File: B1922534.D
 Acq: 13 Aug 2019 11:34 pm

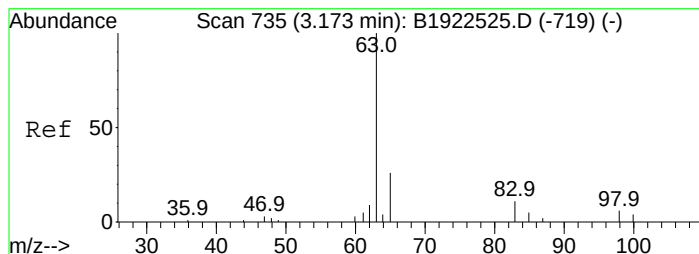
Tgt Ion	Ratio	Lower	Upper
61	100		
96	49.5	36.2	54.4
63	30.0	24.4	36.6



#16
 1,1,2-TRICL-1,2,2-TRIFLETHANE
 Concen: 49.02 UG/L
 RT: 2.107 min Scan# 360
 Delta R.T. 0.003 min
 Lab File: B1922534.D
 Acq: 13 Aug 2019 11:34 pm

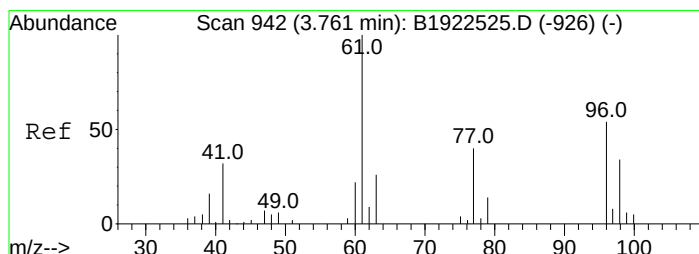
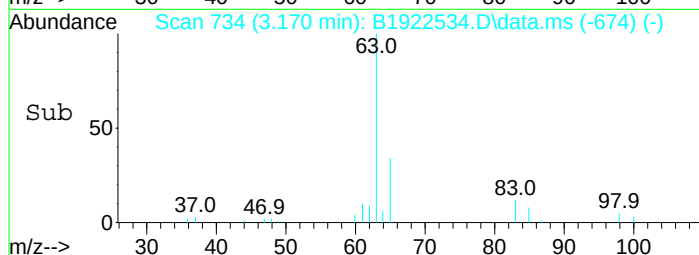
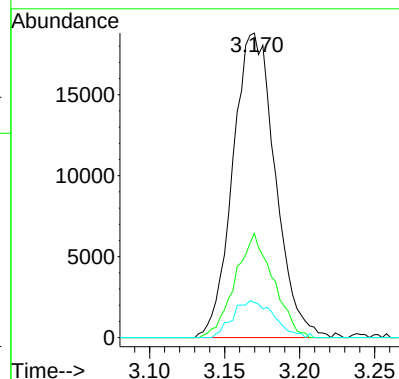
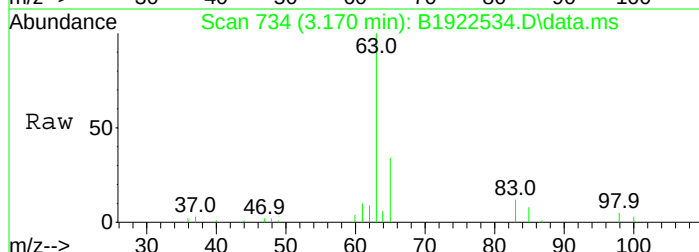
Tgt Ion	Ratio	Lower	Upper
101	100		
151	85.4	60.5	90.7





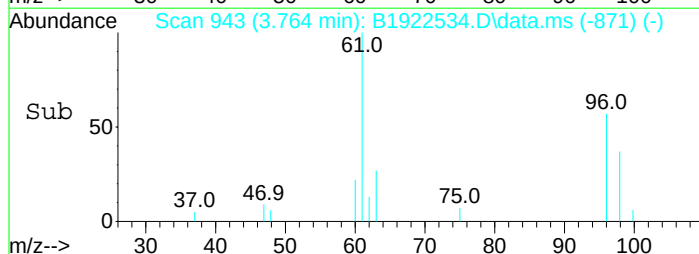
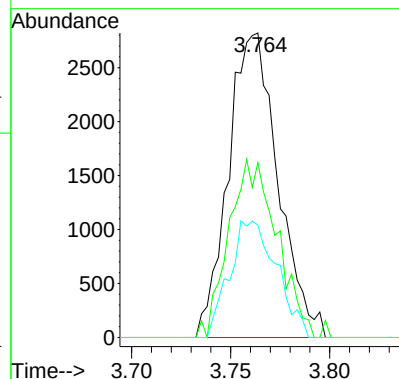
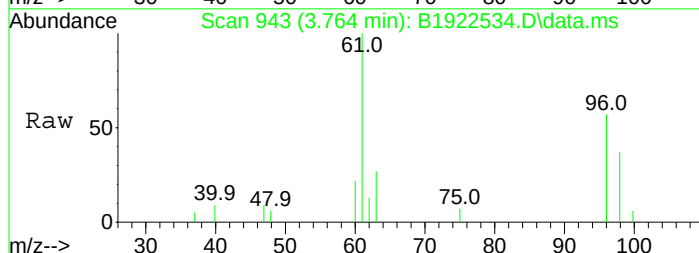
#25
 1,1-DICHLOROETHANE
 Concen: 17.74 UG/L
 RT: 3.170 min Scan# 734
 Delta R.T. -0.000 min
 Lab File: B1922534.D
 Acq: 13 Aug 2019 11:34 pm

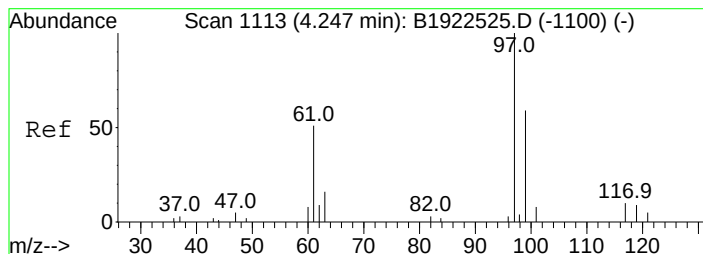
Tgt Ion	63	65	83
Ion Ratio	100	30.8	11.8
Resp	36908	24.0	9.8
Lower			
Upper		36.0	14.6



#30
 CIS-1,2-DICHLOROETHENE
 Concen: 2.40 UG/L
 RT: 3.764 min Scan# 943
 Delta R.T. 0.006 min
 Lab File: B1922534.D
 Acq: 13 Aug 2019 11:34 pm

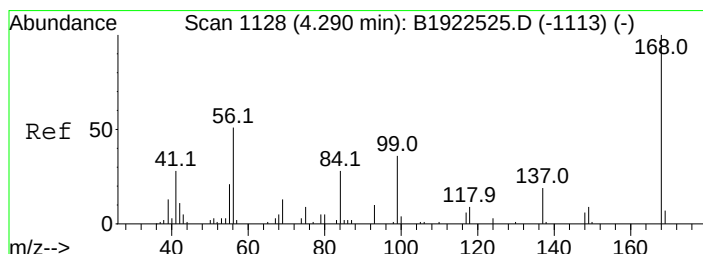
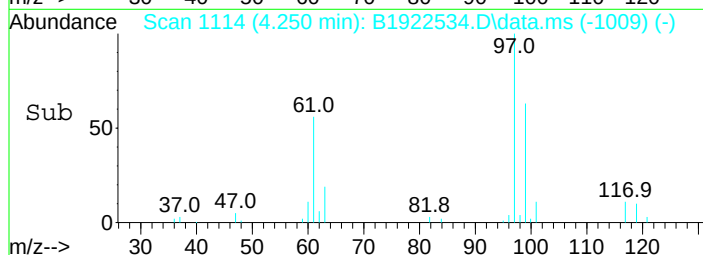
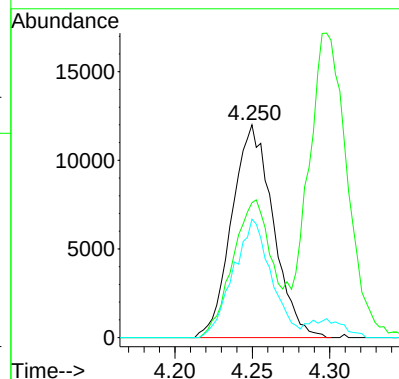
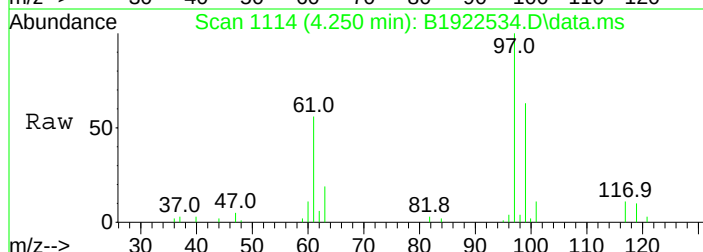
Tgt Ion	61	96	98
Ion Ratio	100	56.5	36.3
Resp	4921	43.0	27.2
Lower			
Upper		64.4	40.8





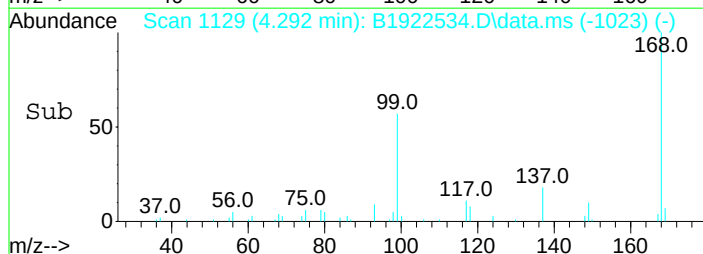
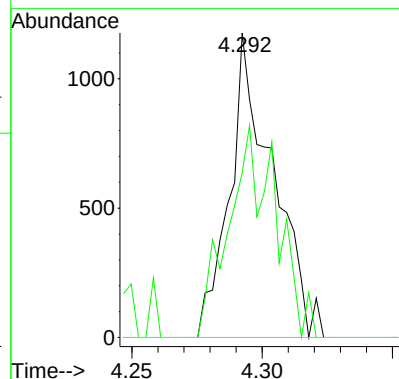
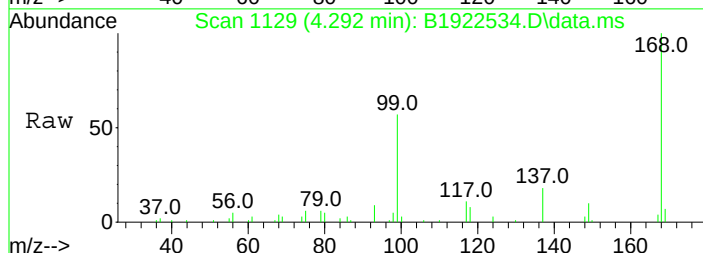
#37
1,1,1-TRICHLOROETHANE
Concen: 13.43 UG/L
RT: 4.250 min Scan# 1114
Delta R.T. -0.000 min
Lab File: B1922534.D
Acq: 13 Aug 2019 11:34 pm

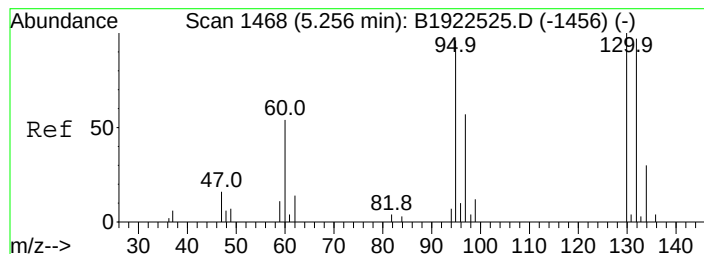
Tgt Ion	97	Resp	22260
Ion Ratio	100	Lower	Upper
99	64.8	50.8	76.2
61	51.0	45.1	67.7



#38
CYCLOHEXANE
Concen: 0.63 UG/L
RT: 4.292 min Scan# 1129
Delta R.T. 0.002 min
Lab File: B1922534.D
Acq: 13 Aug 2019 11:34 pm

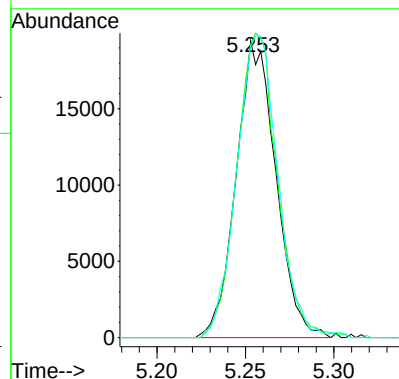
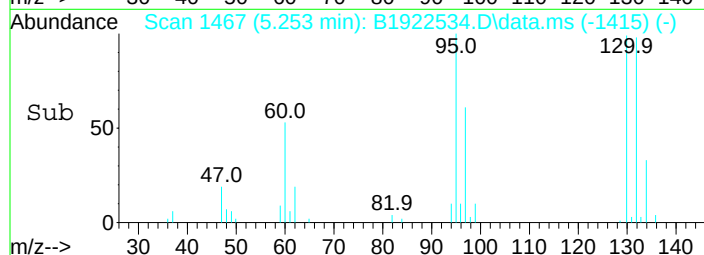
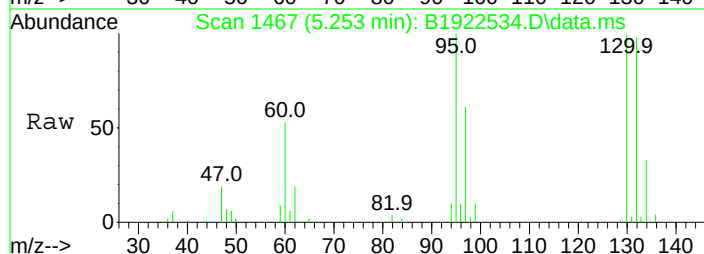
Tgt Ion	56	Resp	1352
Ion Ratio	100	Lower	Upper
84	77.0	53.2	79.8
41	0.0	50.1	75.1#





#47
TRICHLOROETHENE
Concen: 33.84 UG/L
RT: 5.253 min Scan# 1467
Delta R.T. -0.003 min
Lab File: B1922534.D
Acq: 13 Aug 2019 11:34 pm

Tgt Ion	95	Resp	30356
Ion	Ratio	Lower	Upper
95	100		
130	104.9	79.8	119.6
132	106.2	80.6	121.0

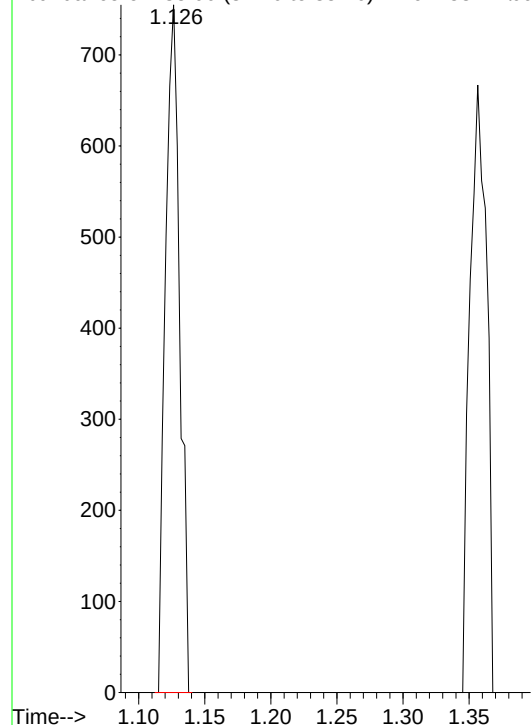


Data Path : Y:\1\DATA\B081319\
Data File : B1922534.D
Acq On : 13 Aug 2019 11:34 pm
Operator :
Sample : 19H0528-03
Misc :

Quant Time : Wed Aug 14 11:09:22 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
DICHLORODIFLOUROMETHANE

Abundance on 85.00 (84.70 to 85.70): B1922534.D\data



Original Int. Results

RT : 1.13
Area : 572
Amount: 0.50606

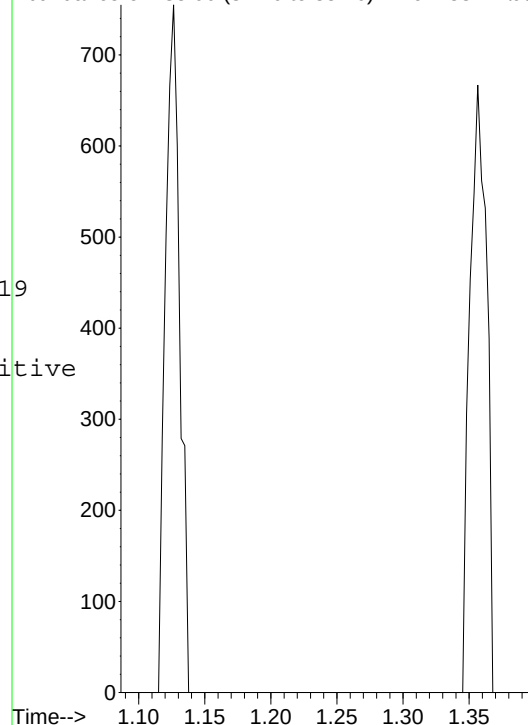
Manual Int. Results

Wed Aug 14 11:05:47 2019

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

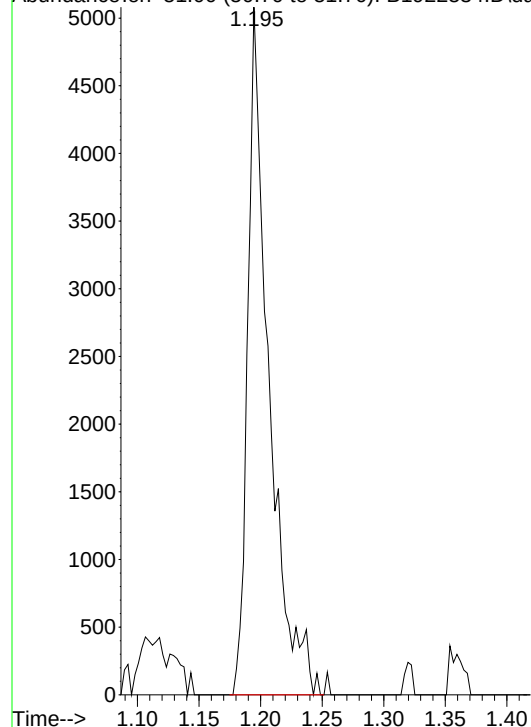
Manual Integration
DICHLORODIFLOUROMETHANE

Abundance on 85.00 (84.70 to 85.70): B1922534.D\data



Original Integration
DIFLUOROCHLOROMETHANE

Abundance on 51.00 (50.70 to 51.70): B1922534.D\data



Original Int. Results

RT : 1.19
Area : 6053
Amount: 3.41501

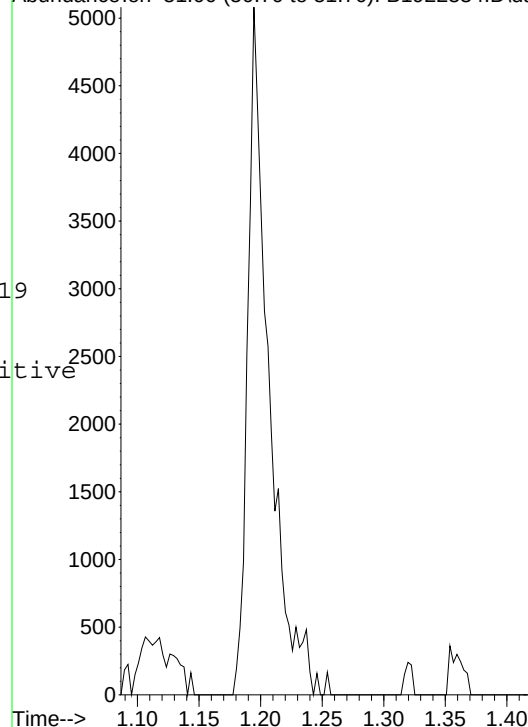
Manual Int. Results

Wed Aug 14 11:05:53 2019

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

Manual Integration
DIFLUOROCHLOROMETHANE

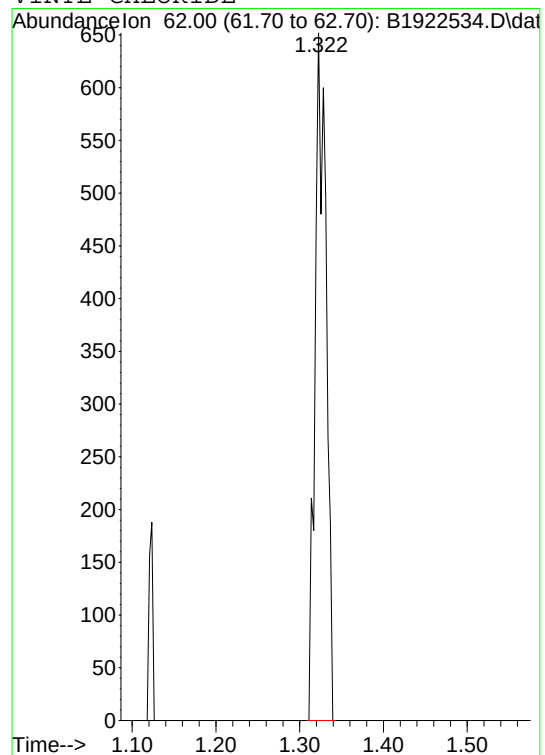
Abundance on 51.00 (50.70 to 51.70): B1922534.D\data



Data Path : Y:\1\DATA\B081319\
Data File : B1922534.D
Acq On : 13 Aug 2019 11:34 pm
Operator :
Sample : 19H0528-03
Misc :

Quant Time : Wed Aug 14 11:09:22 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
VINYL CHLORIDE



Original Int. Results

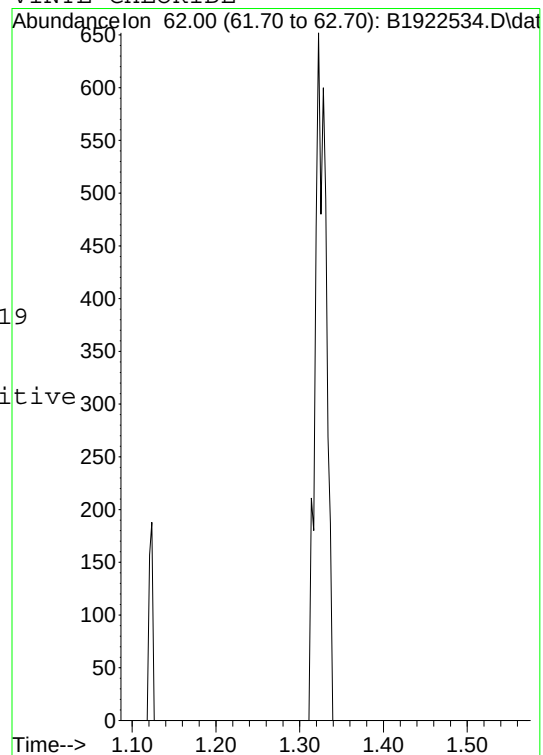
RT : 1.32
Area : 604
Amount: 0.43599

Manual Int. Results

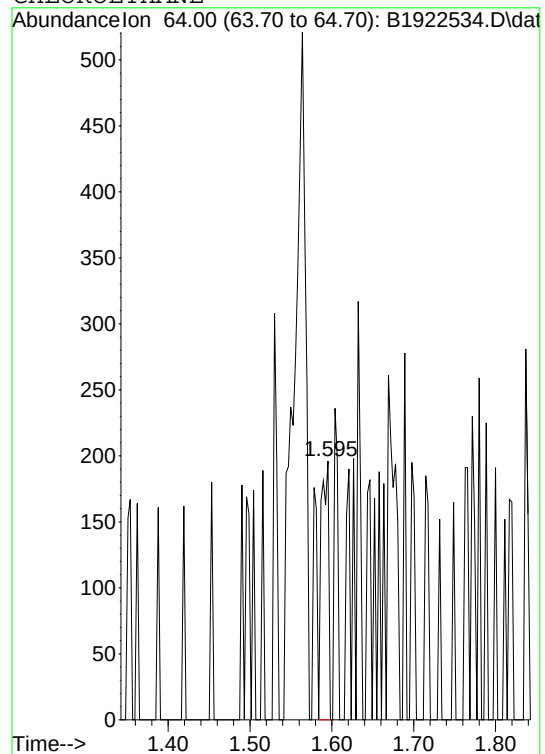
Wed Aug 14 11:05:56 2019

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

Manual Integration
VINYL CHLORIDE



Original Integration
CHLOROETHANE



Original Int. Results

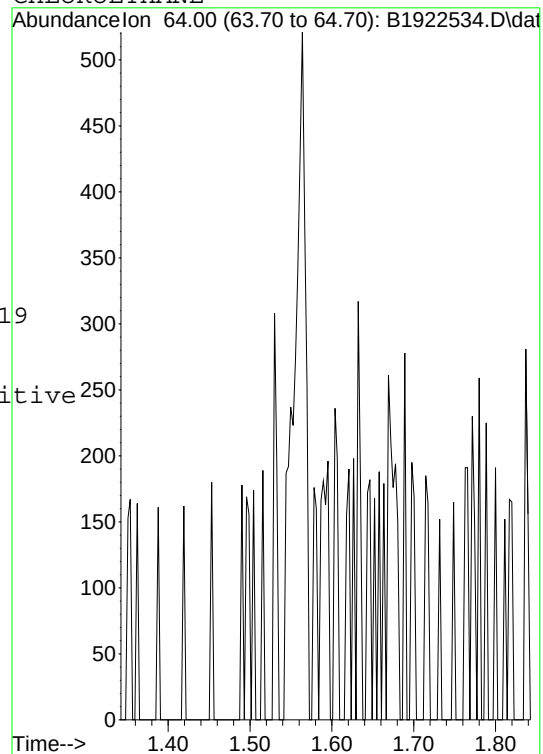
RT : 1.60
Area : 120
Amount: 0.159016

Manual Int. Results

Wed Aug 14 11:05:59 2019

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

Manual Integration
CHLOROETHANE

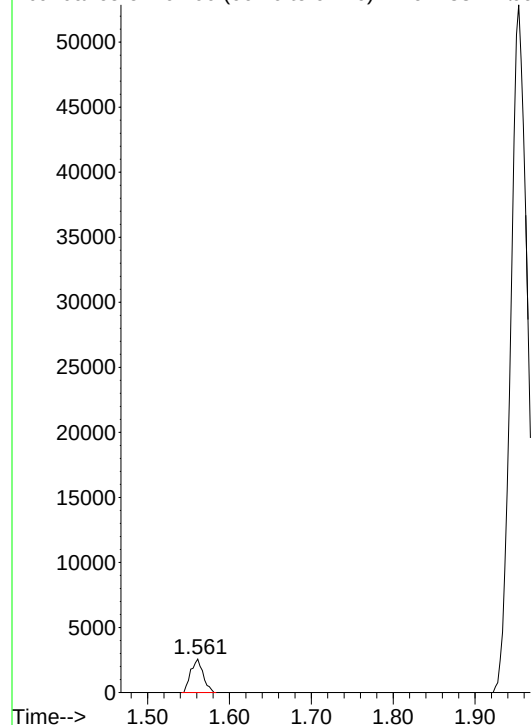


Data Path : Y:\1\DATA\B081319\
Data File : B1922534.D
Acq On : 13 Aug 2019 11:34 pm
Operator :
Sample : 19H0528-03
Misc :

Quant Time : Wed Aug 14 11:09:22 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
FLUORODICHLOROMETHANE

Abundance on 67.00 (66.70 to 67.70): B1922534.D\data



Original Int. Results

RT : 1.56
Area : 2699
Amount: 1.3819

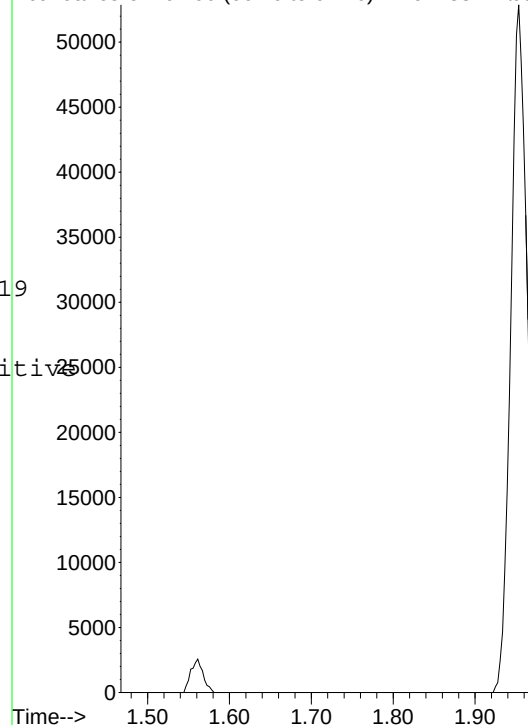
Manual Int. Results

Wed Aug 14 11:06:02 2019

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

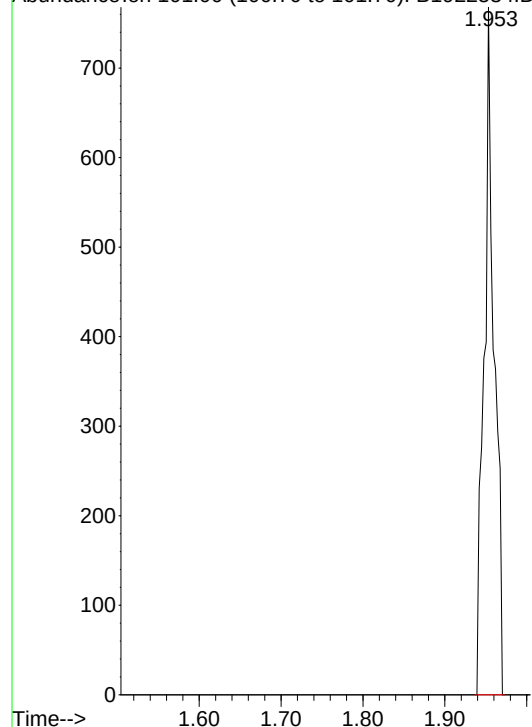
Manual Integration
FLUORODICHLOROMETHANE

Abundance on 67.00 (66.70 to 67.70): B1922534.D\data



Original Integration
TRICHLOROFLUOROMETHANE

Abundance on 101.00 (100.70 to 101.70): B1922534.D\data



Original Int. Results

RT : 1.95
Area : 658
Amount: 0.426134

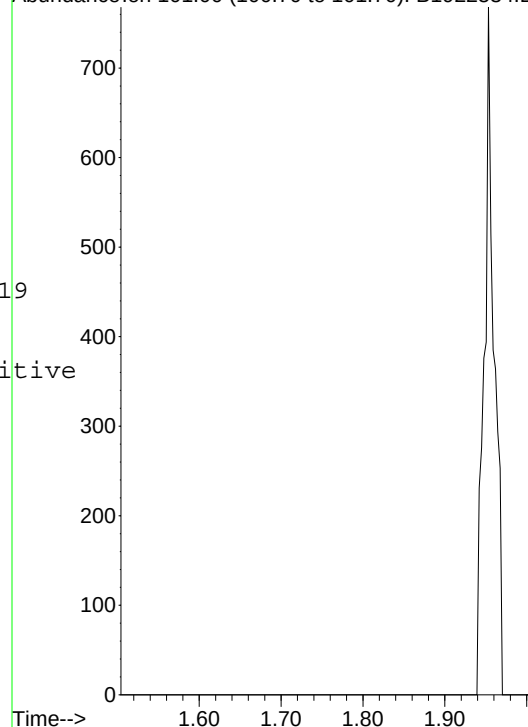
Manual Int. Results

Wed Aug 14 11:06:05 2019

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

Manual Integration
TRICHLOROFLUOROMETHANE

Abundance on 101.00 (100.70 to 101.70): B1922534.D\data



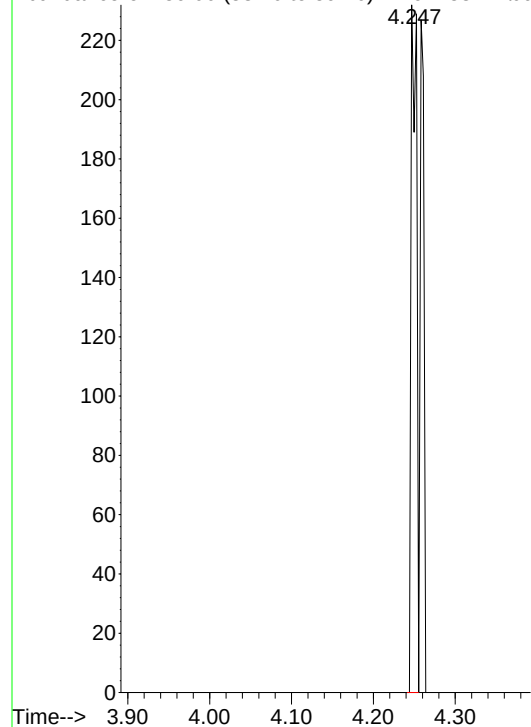
Data Path : Y:\1\DATA\B081319\
Data File : B1922534.D
Acq On : 13 Aug 2019 11:34 pm
Operator :
Sample : 19H0528-03
Misc :

Quant Time : Wed Aug 14 11:09:22 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922534.D\data



Original Int. Results

RT : 4.25
Area : 111
Amount: 0.106081

Manual Int. Results

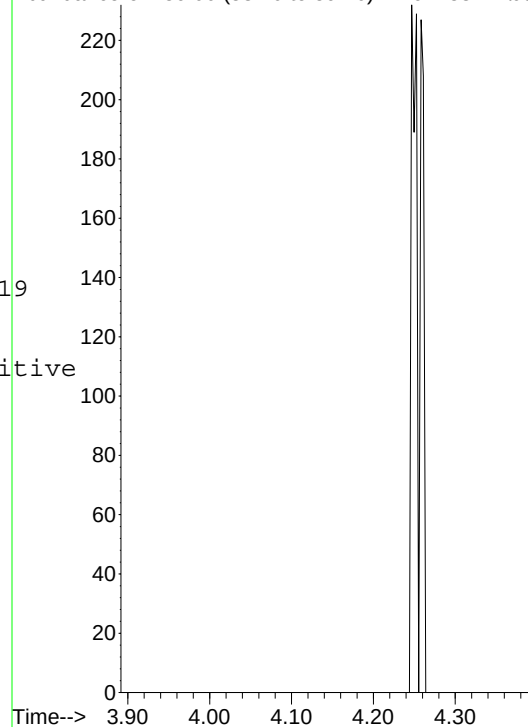
Wed Aug 14 11:09:07 2019

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

Manual Integration

T-BUTYL FORMATE

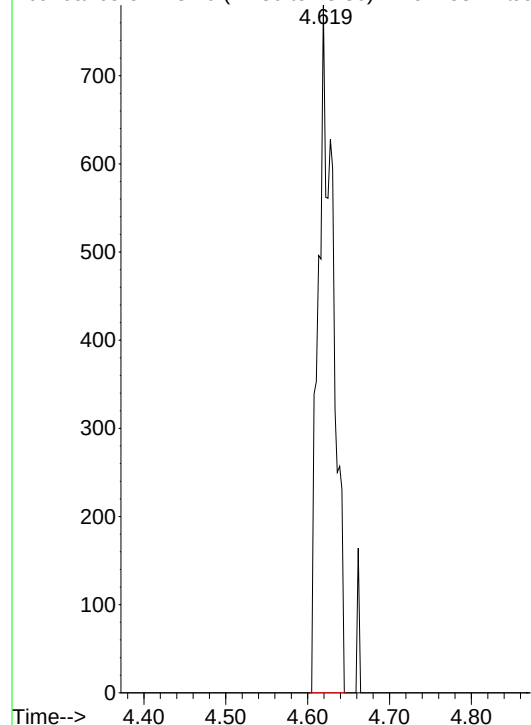
Abundance on 59.00 (58.70 to 59.70): B1922534.D\data



Original Integration

BENZENE

Abundance on 78.10 (77.80 to 78.80): B1922534.D\data



Original Int. Results

RT : 4.62
Area : 1000
Amount: 0.264845

Manual Int. Results

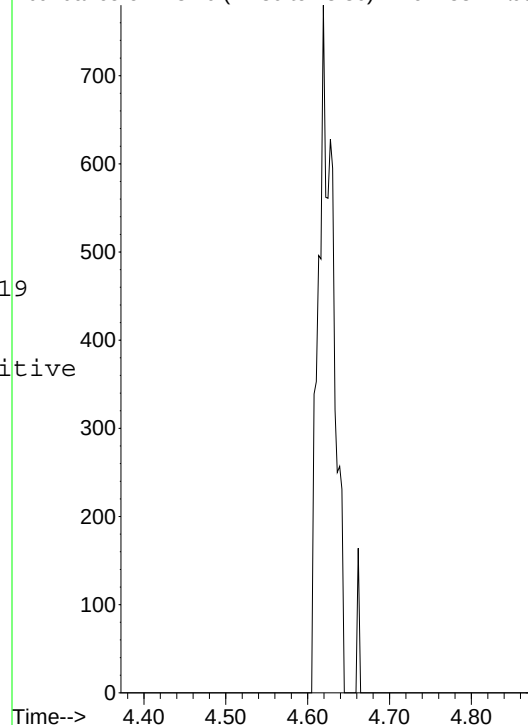
Wed Aug 14 11:09:13 2019

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

Manual Integration

BENZENE

Abundance on 78.10 (77.80 to 78.80): B1922534.D\data



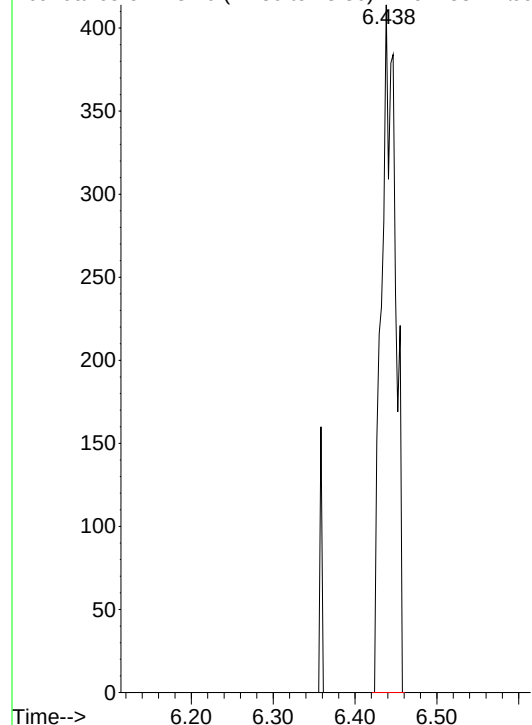
Data Path : Y:\1\DATA\B081319\
Data File : B1922534.D
Acq On : 13 Aug 2019 11:34 pm
Operator :
Sample : 19H0528-03
Misc :

Quant Time : Wed Aug 14 11:09:22 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

MIBK

Abundance on 43.10 (42.80 to 43.80): B1922534.D\data



Original Int. Results

RT : 6.44
Area : 511
Amount: 0.401814

Manual Int. Results

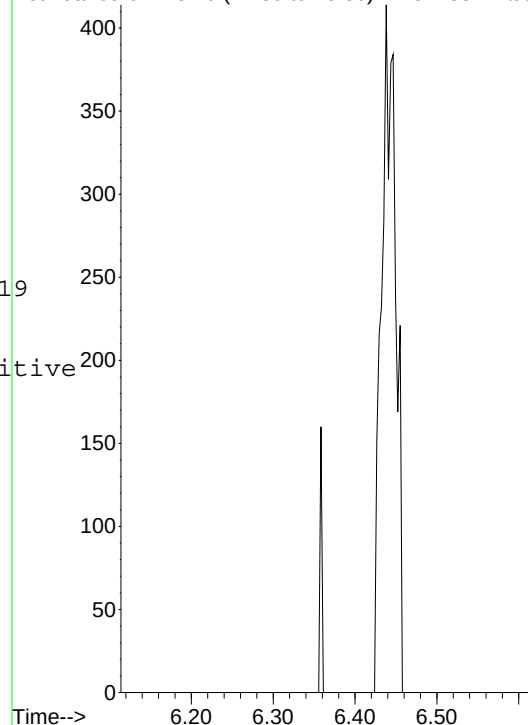
Wed Aug 14 11:09:17 2019

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

Manual Integration

MIBK

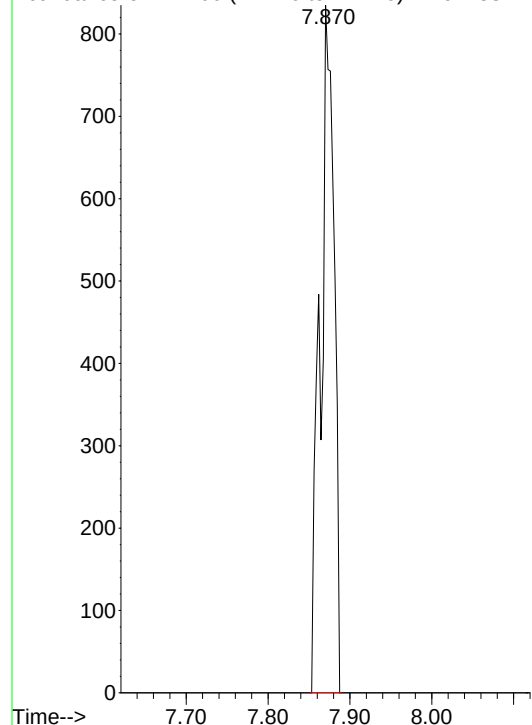
Abundance on 43.10 (42.80 to 43.80): B1922534.D\data



Original Integration

CHLOROBENZENE

Abundance on 112.00 (111.70 to 112.70): B1922534.D\data



Original Int. Results

RT : 7.87
Area : 968
Amount: 0.355677

Manual Int. Results

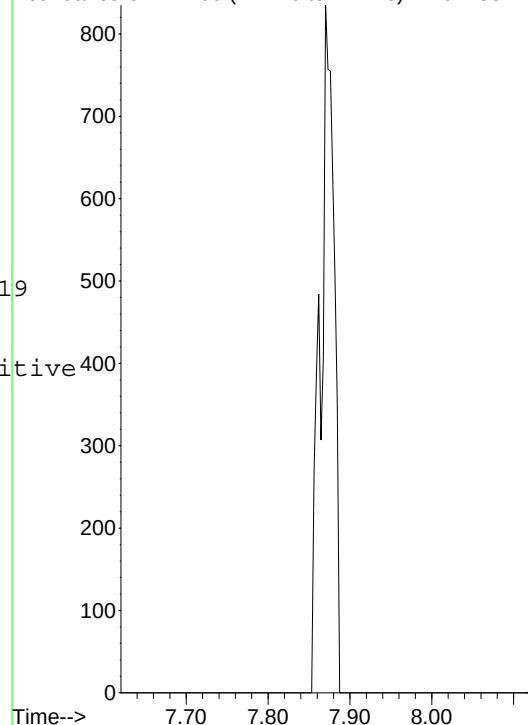
Wed Aug 14 11:09:21 2019

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

Manual Integration

CHLOROBENZENE

Abundance on 112.00 (111.70 to 112.70): B1922534.D\data



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ANALYSIS DATA SHEET

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MW-22R

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528	
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site	
Matrix:	Ground Water	Laboratory ID:	19H0528-04	File ID: B1922536.D
Sampled:	08/08/19 11:40	Prepared:	08/13/19 07:22	Analyzed: 08/14/19 00:36
Solids:		Preparation:	SW-846 5030B	Dilution: 50
Initial/Final:	5 mL / 5 mL			
Batch:	B237875	Sequence:	S039168	Calibration: 1900126
				Instrument: GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone		190	2500	
107-13-1	Acrylonitrile		26	250	
994-05-8	tert-Amyl Methyl Ether (TAME)		7.0	25	
71-43-2	Benzene		9.0	50	
108-86-1	Bromobenzene		7.5	50	
74-97-5	Bromochloromethane		16	50	
75-27-4	Bromodichloromethane		8.0	25	
75-25-2	Bromoform		23	50	
74-83-9	Bromomethane		39	250	
78-93-3	2-Butanone (MEK)		97	1000	
75-65-0	tert-Butyl Alcohol (TBA)		210	1000	
104-51-8	n-Butylbenzene		10	50	V-05
135-98-8	sec-Butylbenzene		8.0	50	
98-06-6	tert-Butylbenzene		8.5	50	
637-92-3	tert-Butyl Ethyl Ether (TBEE)		8.0	25	
75-15-0	Carbon Disulfide		220	250	
56-23-5	Carbon Tetrachloride		5.5	250	
108-90-7	Chlorobenzene		7.5	50	
124-48-1	Chlorodibromomethane		10	25	
75-00-3	Chloroethane		18	100	
67-66-3	Chloroform		8.5	100	
74-87-3	Chloromethane		22	100	V-05
95-49-8	2-Chlorotoluene		6.0	50	
106-43-4	4-Chlorotoluene		7.0	50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		26	250	
106-93-4	1,2-Dibromoethane (EDB)		9.5	25	
74-95-3	Dibromomethane		18	50	
95-50-1	1,2-Dichlorobenzene		8.0	50	
541-73-1	1,3-Dichlorobenzene		6.0	50	
106-46-7	1,4-Dichlorobenzene		6.5	50	

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ANALYSIS DATA SHEET

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MW-22R

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528	
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site	
Matrix:	Ground Water	Laboratory ID:	19H0528-04	File ID: B1922536.D
Sampled:	08/08/19 11:40	Prepared:	08/13/19 07:22	Analyzed: 08/14/19 00:36
Solids:		Preparation:	SW-846 5030B	Dilution: 50
Initial/Final:	5 mL / 5 mL			
Batch:	B237875	Sequence:	S039168	Calibration: 1900126
				Instrument: GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene		16	100	
75-71-8	Dichlorodifluoromethane (Freon 12)		13	100	
75-34-3	1,1-Dichloroethane	380	8.0	50	
107-06-2	1,2-Dichloroethane		20	50	
75-35-4	1,1-Dichloroethylene	330	16	50	
156-59-2	cis-1,2-Dichloroethylene		6.5	50	
156-60-5	trans-1,2-Dichloroethylene		16	50	
78-87-5	1,2-Dichloropropane		10	50	
142-28-9	1,3-Dichloropropane		5.5	25	
594-20-7	2,2-Dichloropropane		10	50	
563-58-6	1,1-Dichloropropene		8.0	100	
10061-01-5	cis-1,3-Dichloropropene		6.5	25	
10061-02-6	trans-1,3-Dichloropropene		12	25	
60-29-7	Diethyl Ether		17	100	
108-20-3	Diisopropyl Ether (DIPE)		8.5	25	
123-91-1	1,4-Dioxane		1100	2500	
100-41-4	Ethylbenzene		6.5	50	
87-68-3	Hexachlorobutadiene		24	30	
591-78-6	2-Hexanone (MBK)		76	500	
98-82-8	Isopropylbenzene (Cumene)		8.5	50	
99-87-6	p-Isopropyltoluene (p-Cymene)		10	50	
79-20-9	Methyl Acetate		21	50	
1634-04-4	Methyl tert-Butyl Ether (MTBE)		12	50	
108-87-2	Methyl Cyclohexane		10	50	
75-09-2	Methylene Chloride		17	250	
108-10-1	4-Methyl-2-pentanone (MIBK)		84	500	
91-20-3	Naphthalene		16	100	
103-65-1	n-Propylbenzene		6.5	50	
100-42-5	Styrene		5.5	50	
630-20-6	1,1,1,2-Tetrachloroethane		14	50	

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ANALYSIS DATA SHEET

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MW-22R

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528	
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site	
Matrix:	Ground Water	Laboratory ID:	19H0528-04	File ID: B1922536.D
Sampled:	08/08/19 11:40	Prepared:	08/13/19 07:22	Analyzed: 08/14/19 00:36
Solids:		Preparation:	SW-846 5030B	Dilution: 50
Initial/Final:	5 mL / 5 mL			
Batch:	B237875	Sequence:	S039168	Calibration: 1900126
				Instrument: GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane		11	25	
127-18-4	Tetrachloroethylene		9.0	50	
109-99-9	Tetrahydrofuran		26	500	
108-88-3	Toluene		7.0	50	
87-61-6	1,2,3-Trichlorobenzene		28	250	
120-82-1	1,2,4-Trichlorobenzene		20	50	
108-70-3	1,3,5-Trichlorobenzene		15	50	
71-55-6	1,1,1-Trichloroethane	4600	10	50	
79-00-5	1,1,2-Trichloroethane		8.0	50	
79-01-6	Trichloroethylene	2800	12	50	
75-69-4	Trichlorofluoromethane (Freon 11)		16	100	
96-18-4	1,2,3-Trichloropropane		12	100	
95-63-6	1,2,4-Trimethylbenzene		9.0	50	
108-67-8	1,3,5-Trimethylbenzene		7.0	50	
75-01-4	Vinyl Chloride		22	100	
108383/106423	m+p Xylene		15	100	
95-47-6	o-Xylene		8.5	50	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922536.D
 Acq On : 14 Aug 2019 12:36 am
 Operator :
 Sample : 19H0528-04 @ 50X
 Misc : 50
 ALS Vial : 36 Sample Multiplier: 1

Inst : GCMSVOA2

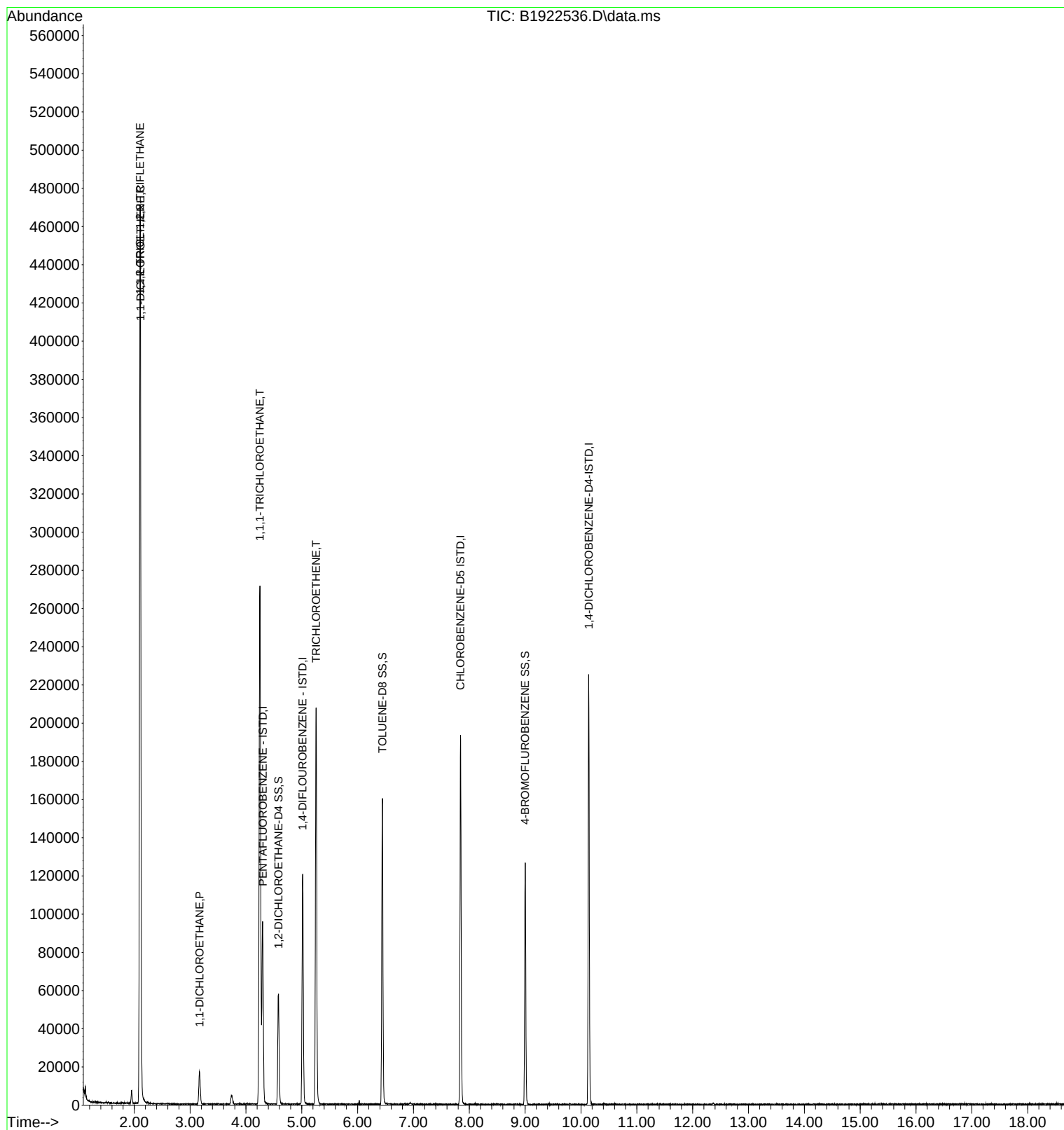
Quant Time: Aug 14 11:13:12 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

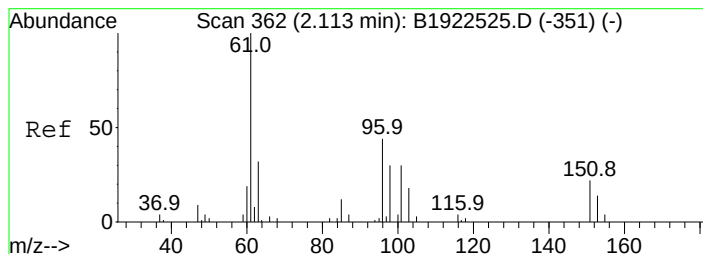
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	54205	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.014	114	75762	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	46582	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.139	152	49919	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	37995	27.20	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	108.80%
45) TOLUENE-D8 SS	6.444	98	81463	27.47	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	109.88%
66) 4-BROMOFLUROBENZENE SS	8.999	95	33303	24.29	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	97.16%
Target Compounds						
15) 1,1-DICHLOROETHENE	2.113	61	11986	6.53	UG/L	99
16) 1,1,2-TRICL-1,2,2-TRIF...	2.104	101	154703	202.30	UG/L	90
25) 1,1-DICHLOROETHANE	3.170	63	16714	7.59	UG/L	98
37) 1,1,1-TRICHLOROETHANE	4.250	97	159828	91.07	UG/L	98
47) TRICHLOROETHENE	5.256	95	54339	56.54	UG/L	97

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

91

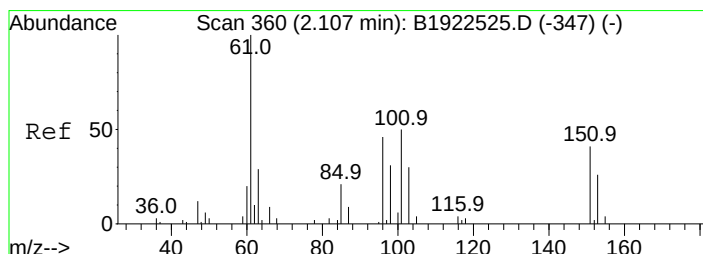
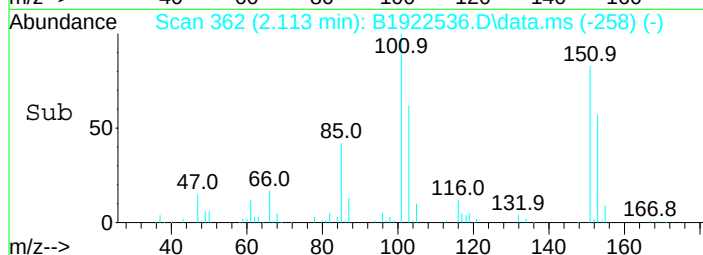
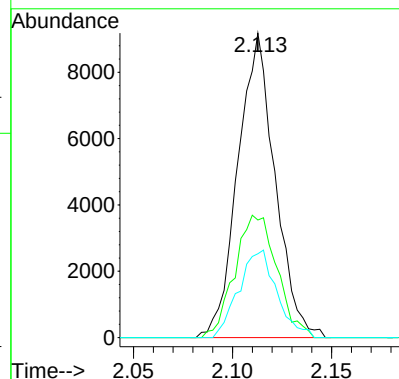
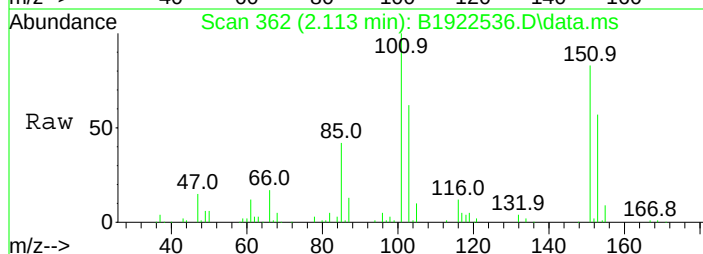
Inst : GCMSVOA2





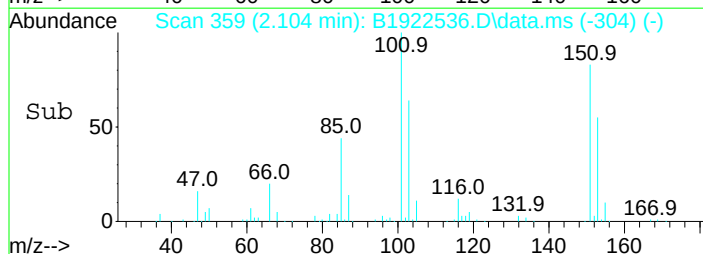
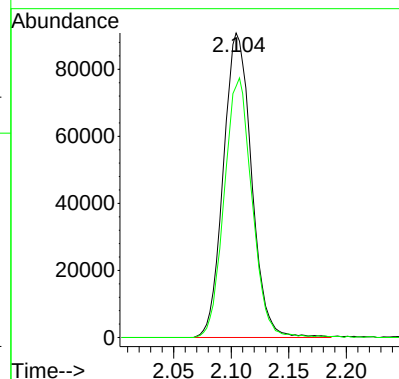
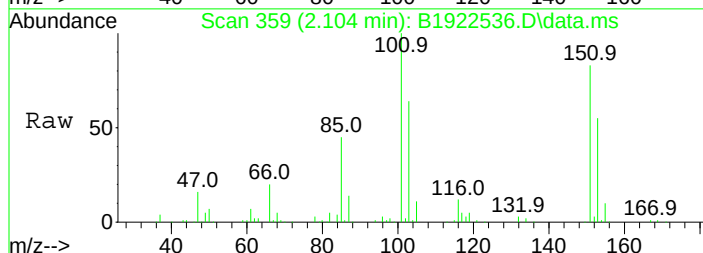
#15
 1,1-DICHLOROETHENE
 Concen: 6.53 UG/L
 RT: 2.113 min Scan# 362
 Delta R.T. -0.003 min
 Lab File: B1922536.D
 Acq: 14 Aug 2019 12:36 am

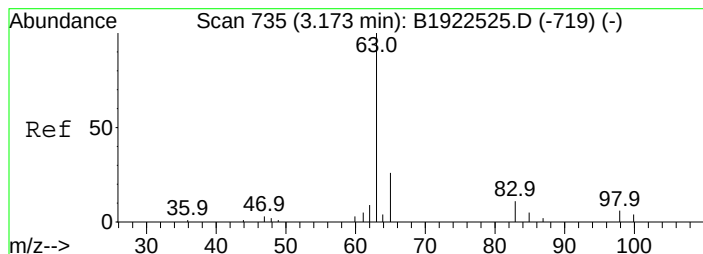
Tgt Ion	61	Resp	11986
Ion Ratio	100	Lower	Upper
61	100		
96	45.7	36.2	54.4
63	29.4	24.4	36.6



#16
 1,1,2-TRICL-1,2,2-TRIFLETHANE
 Concen: 202.30 UG/L
 RT: 2.104 min Scan# 359
 Delta R.T. 0.000 min
 Lab File: B1922536.D
 Acq: 14 Aug 2019 12:36 am

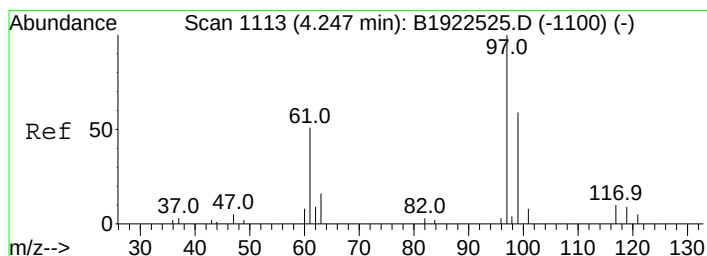
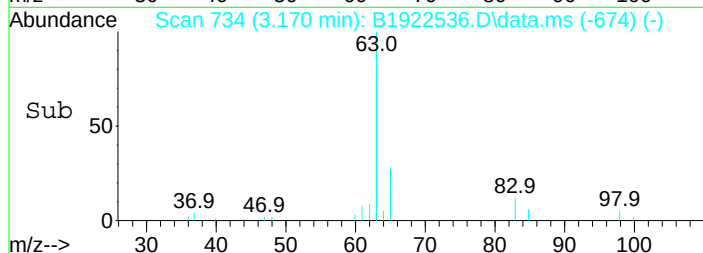
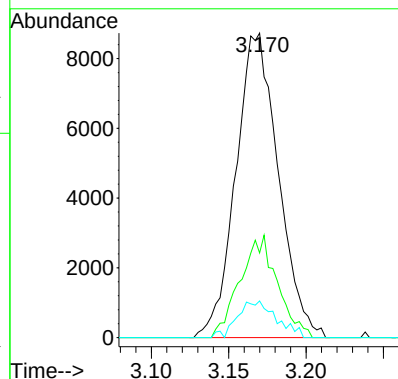
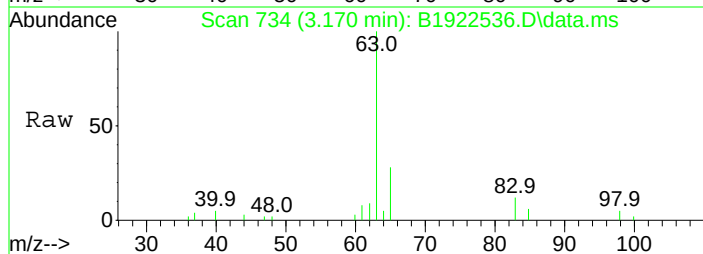
Tgt Ion	101	Resp	154703
Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td>	100	Lower	Upper
101	100		
151	83.8	60.5	90.7





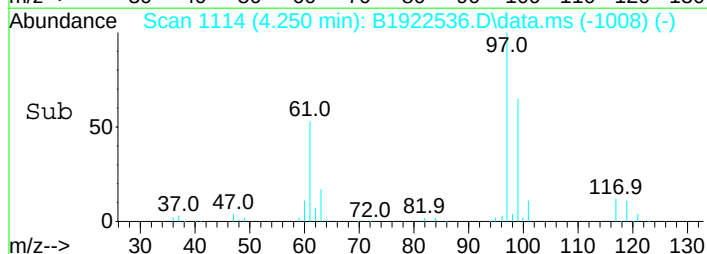
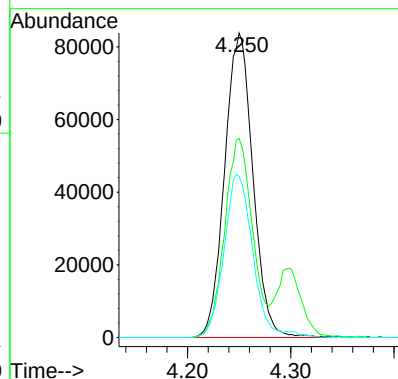
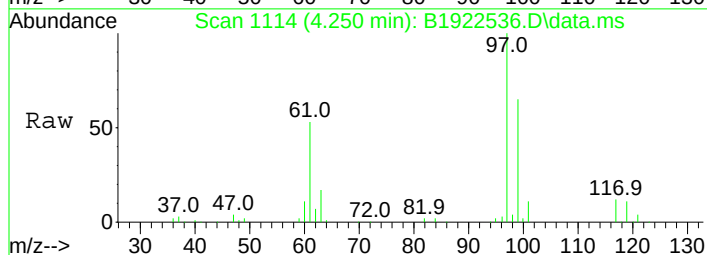
#25
 1,1-DICHLOROETHANE
 Concen: 7.59 UG/L
 RT: 3.170 min Scan# 734
 Delta R.T. -0.000 min
 Lab File: B1922536.D
 Acq: 14 Aug 2019 12:36 am

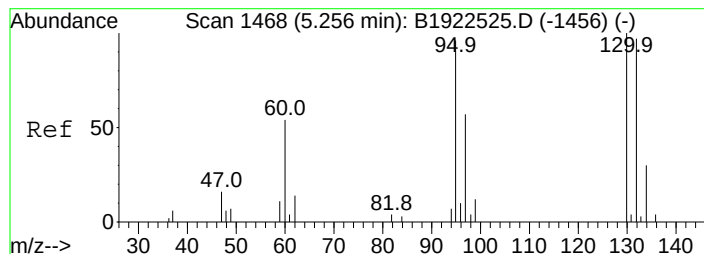
Tgt Ion	Ratio	Lower	Upper
63	100		
65	29.5	24.0	36.0
83	11.0	9.8	14.6



#37
 1,1,1-TRICHLOROETHANE
 Concen: 91.07 UG/L
 RT: 4.250 min Scan# 1114
 Delta R.T. -0.000 min
 Lab File: B1922536.D
 Acq: 14 Aug 2019 12:36 am

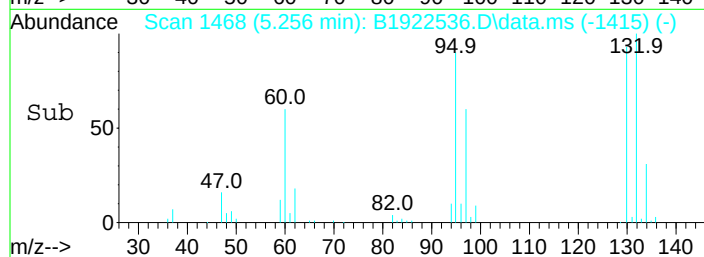
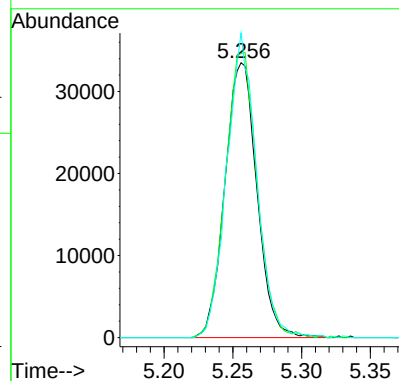
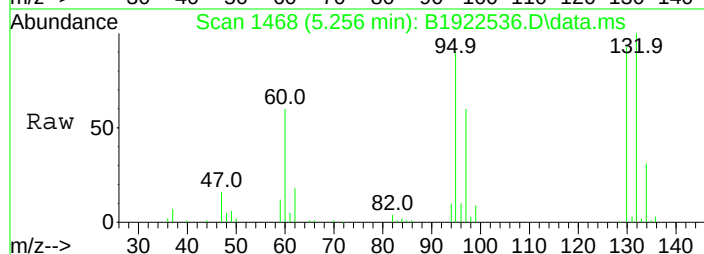
Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.3	50.8	76.2
61	54.8	45.1	67.7





#47
TRICHLOROETHENE
Concen: 56.54 UG/L
RT: 5.256 min Scan# 1468
Delta R.T. 0.000 min
Lab File: B1922536.D
Acq: 14 Aug 2019 12:36 am

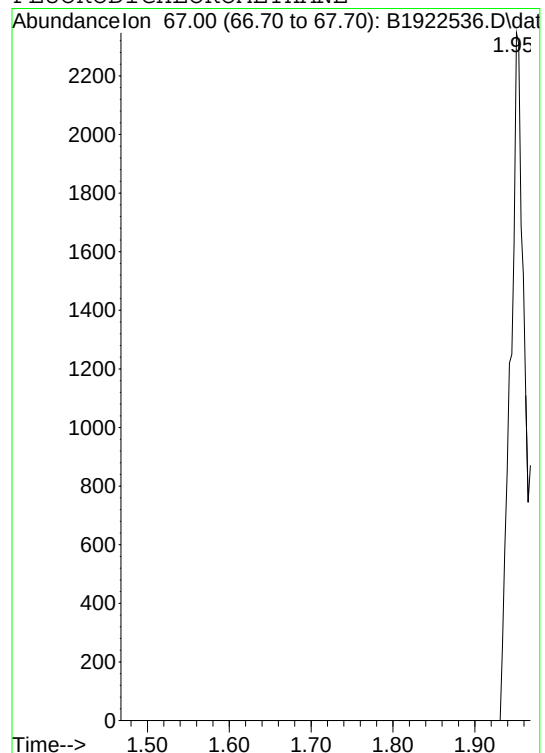
Tgt Ion	95	Resp	54339
Ion Ratio	Lower	Upper	
95	100		
130	103.9	79.8	119.6
132	103.0	80.6	121.0



Data Path : Y:\1\DATA\B081319\
Data File : B1922536.D
Acq On : 14 Aug 2019 12:36 am
Operator :
Sample : 19H0528-04 @ 50X
Misc : 50

Quant Time : Wed Aug 14 11:13:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
FLUORODICHLOROMETHANE



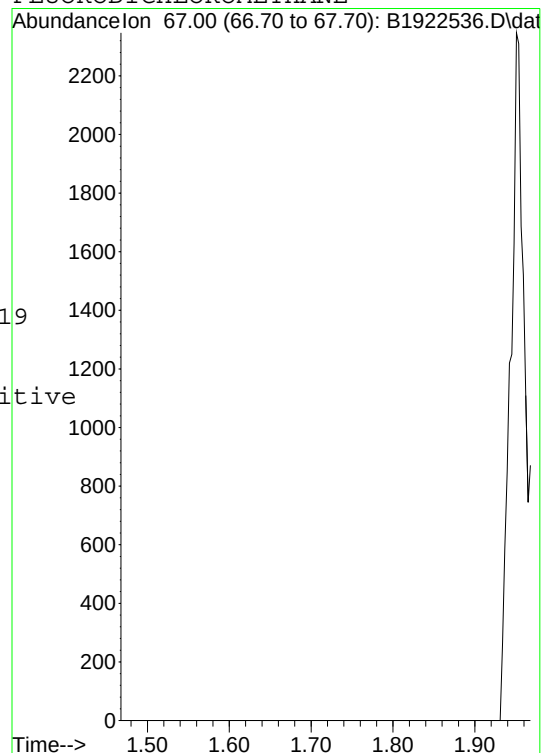
Original Int. Results

RT : 1.95
Area : 2872
Amount: 1.3885

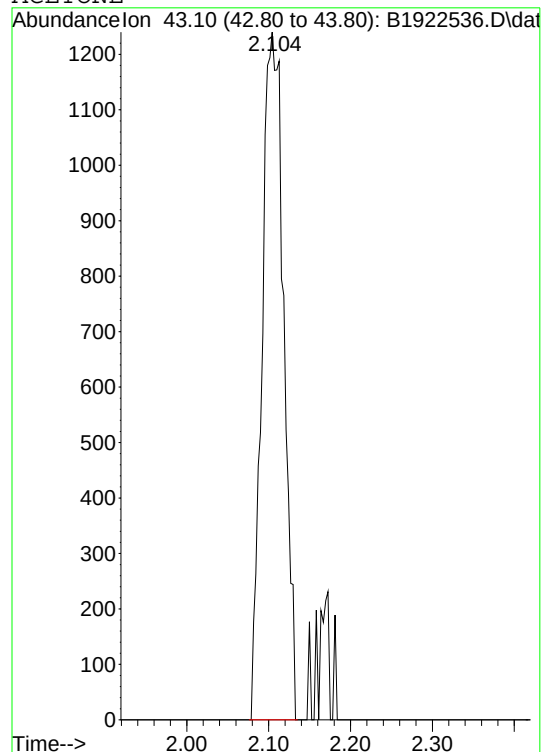
Manual Int. Results

Wed Aug 14 11:12:26 2019
MIuser: BRF
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
FLUORODICHLOROMETHANE



Original Integration
ACETONE



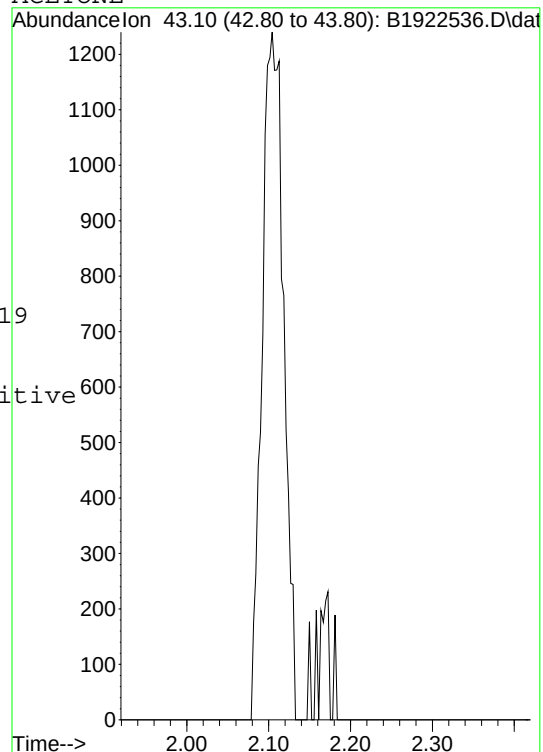
Original Int. Results

RT : 2.10
Area : 2267
Amount: 4.53006

Manual Int. Results

Wed Aug 14 11:12:29 2019
MIuser: BRF
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
ACETONE



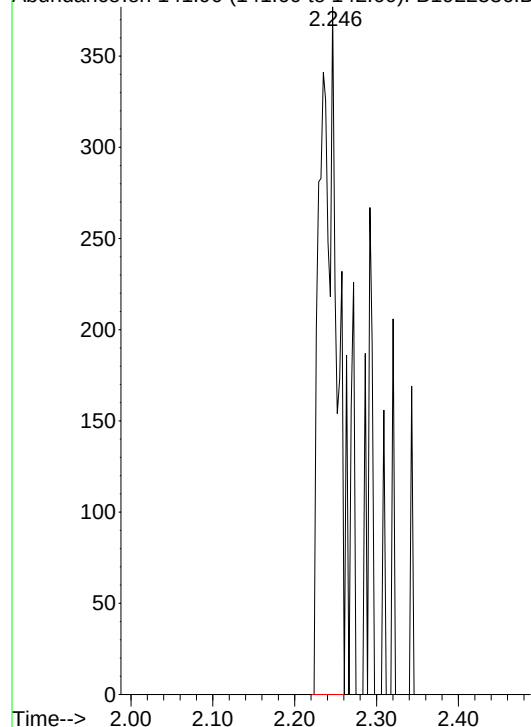
Data Path : Y:\1\DATA\B081319\
Data File : B1922536.D
Acq On : 14 Aug 2019 12:36 am
Operator :
Sample : 19H0528-04 @ 50X
Misc : 50

Quant Time : Wed Aug 14 11:13:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

IODOMETHANE

Abundance on 141.90 (141.60 to 142.60): B1922536.D



Original Int. Results

RT : 2.25
Area : 521
Amount: 0.39802

Manual Int. Results

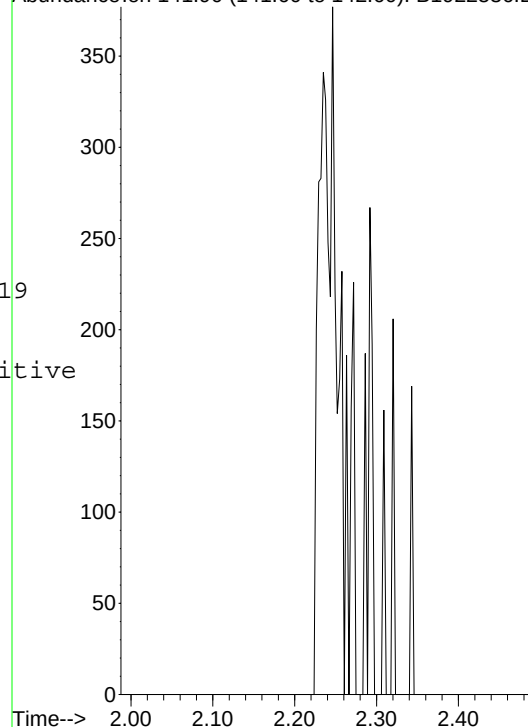
Wed Aug 14 11:12:33 2019

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

Manual Integration

IODOMETHANE

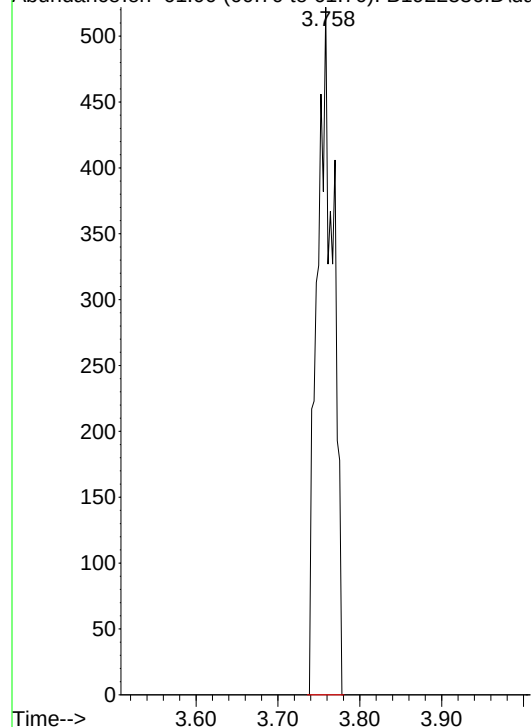
Abundance on 141.90 (141.60 to 142.60): B1922536.D



Original Integration

CIS-1,2-DICHLOROETHENE

Abundance on 61.00 (60.70 to 61.70): B1922536.D\data



Original Int. Results

RT : 3.76
Area : 723
Amount: 0.332766

Manual Int. Results

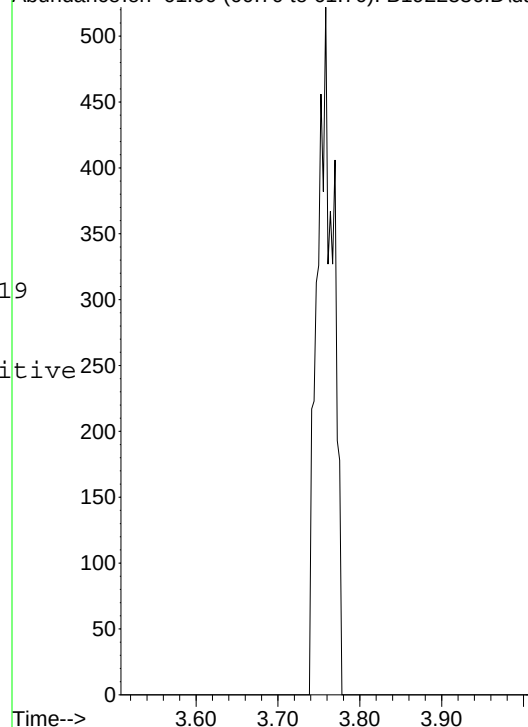
Wed Aug 14 11:12:39 2019

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

Manual Integration

CIS-1,2-DICHLOROETHENE

Abundance on 61.00 (60.70 to 61.70): B1922536.D\data



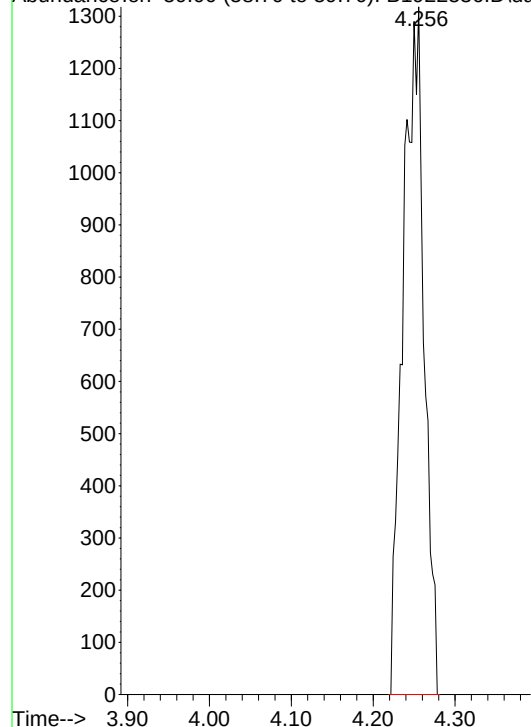
Data Path : Y:\1\DATA\B081319\
Data File : B1922536.D
Acq On : 14 Aug 2019 12:36 am
Operator :
Sample : 19H0528-04 @ 50X
Misc : 50

Quant Time : Wed Aug 14 11:13:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922536.D\data



Original Int. Results

RT : 4.26
Area : 2355
Amount: 2.12515

Manual Int. Results

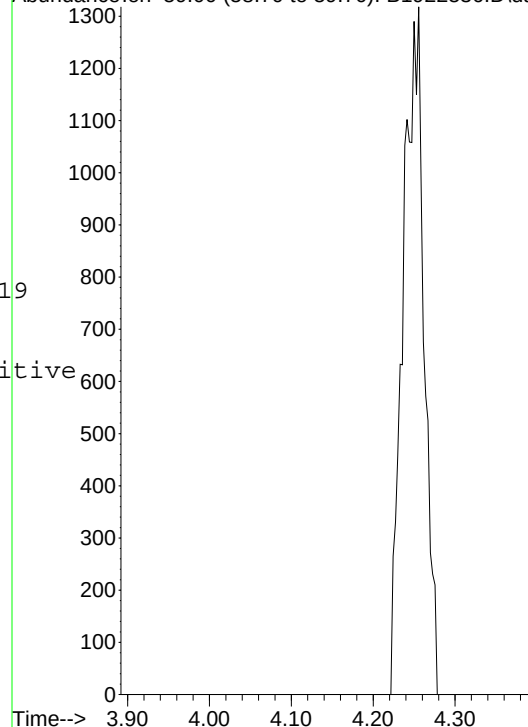
Wed Aug 14 11:12:49 2019

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

Manual Integration

T-BUTYL FORMATE

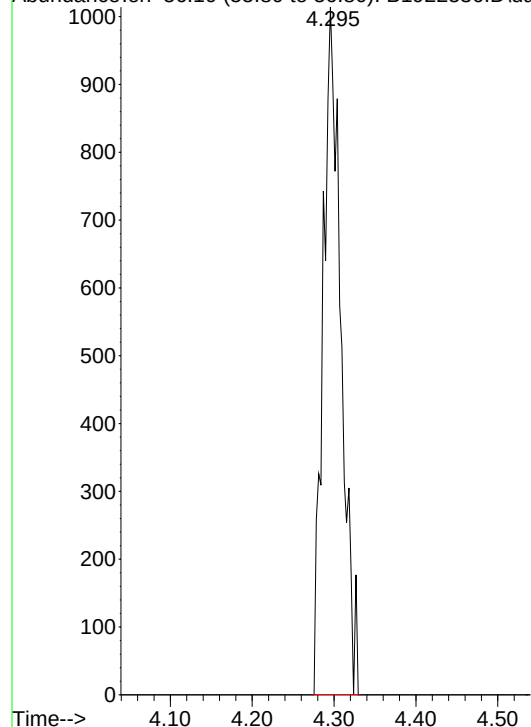
Abundance on 59.00 (58.70 to 59.70): B1922536.D\data



Original Integration

CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922536.D\data



Original Int. Results

RT : 4.30
Area : 1542
Amount: 0.674341

Manual Int. Results

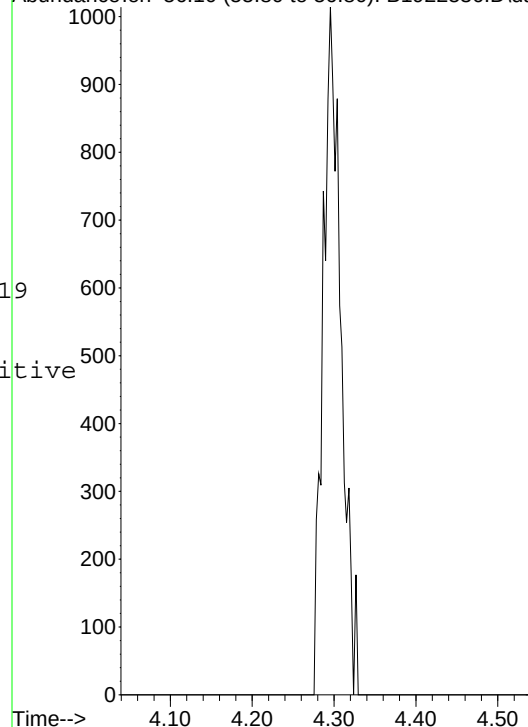
Wed Aug 14 11:13:03 2019

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

Manual Integration

CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922536.D\data



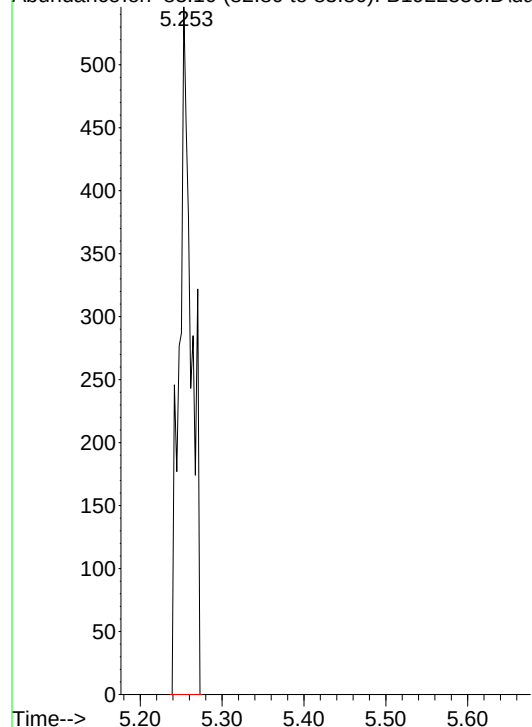
Data Path : Y:\1\DATA\B081319\
Data File : B1922536.D
Acq On : 14 Aug 2019 12:36 am
Operator :
Sample : 19H0528-04 @ 50X
Misc : 50

Quant Time : Wed Aug 14 11:13:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

METHYLCYCLOHEXANE

Abundance on 83.10 (82.80 to 83.80): B1922536.D\data



Original Int. Results

RT : 5.25
Area : 578
Amount: 0.443293

Manual Int. Results

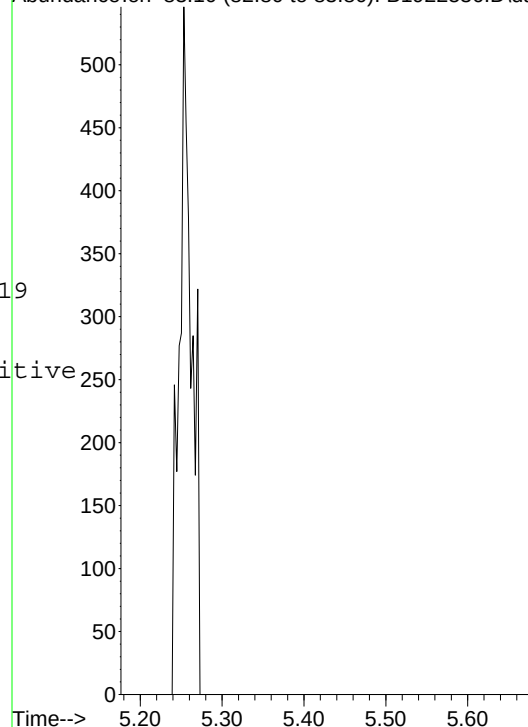
Wed Aug 14 11:13:07 2019

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

Manual Integration

METHYLCYCLOHEXANE

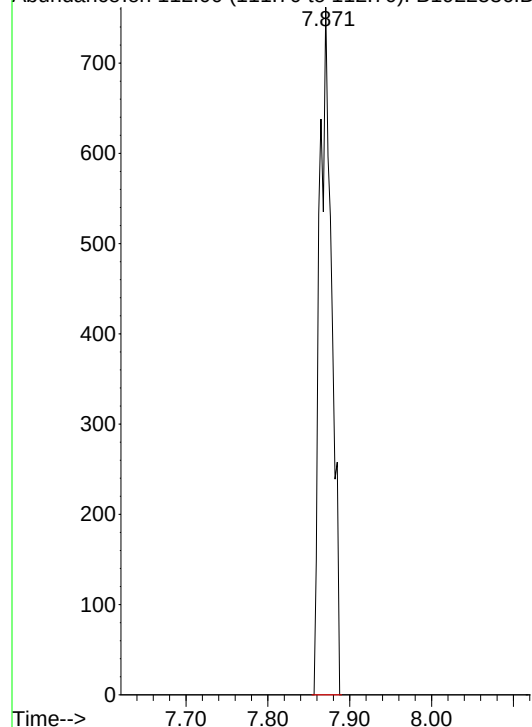
Abundance on 83.10 (82.80 to 83.80): B1922536.D\data



Original Integration

CHLOROBENZENE

Abundance on 112.00 (111.70 to 112.70): B1922536.D\data



Original Int. Results

RT : 7.87
Area : 791
Amount: 0.269184

Manual Int. Results

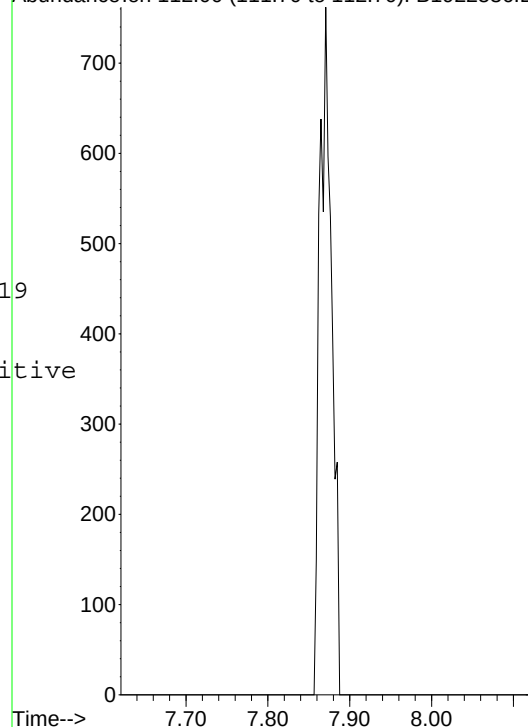
Wed Aug 14 11:13:10 2019

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

Manual Integration

CHLOROBENZENE

Abundance on 112.00 (111.70 to 112.70): B1922536.D\data



1 - FORM I
ANALYSIS DATA SHEET

99

MW-22R

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0528
Client: Dvirka And Bartilucci Project: Farrand Controls Site
Matrix: Ground Water Laboratory ID: 19H0528-04RE1 File ID: C1922624.D
Sampled: 08/08/19 11:40 Prepared: 08/14/19 07:29 Analyzed: 08/14/19 17:13
Solids: Preparation: SW-846 5030B Dilution: 1000
Initial/Final: 5 mL / 5 mL
Batch: B237978 Sequence: S039197 Calibration: 1900192 Instrument: GCMSVOA3

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1	14000	320	1000	

Data Path : C:\msdchem\1\data\C081419\
 Data File : C1922624.D
 Acq On : 14 Aug 2019 5:13 pm
 Operator :
 Sample : 19H0528-04RE1 @ 1000X
 Misc : 1000
 ALS Vial : 24 Sample Multiplier: 1

Inst : GCMSVOA3

Quant Time: Aug 15 08:38:10 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)

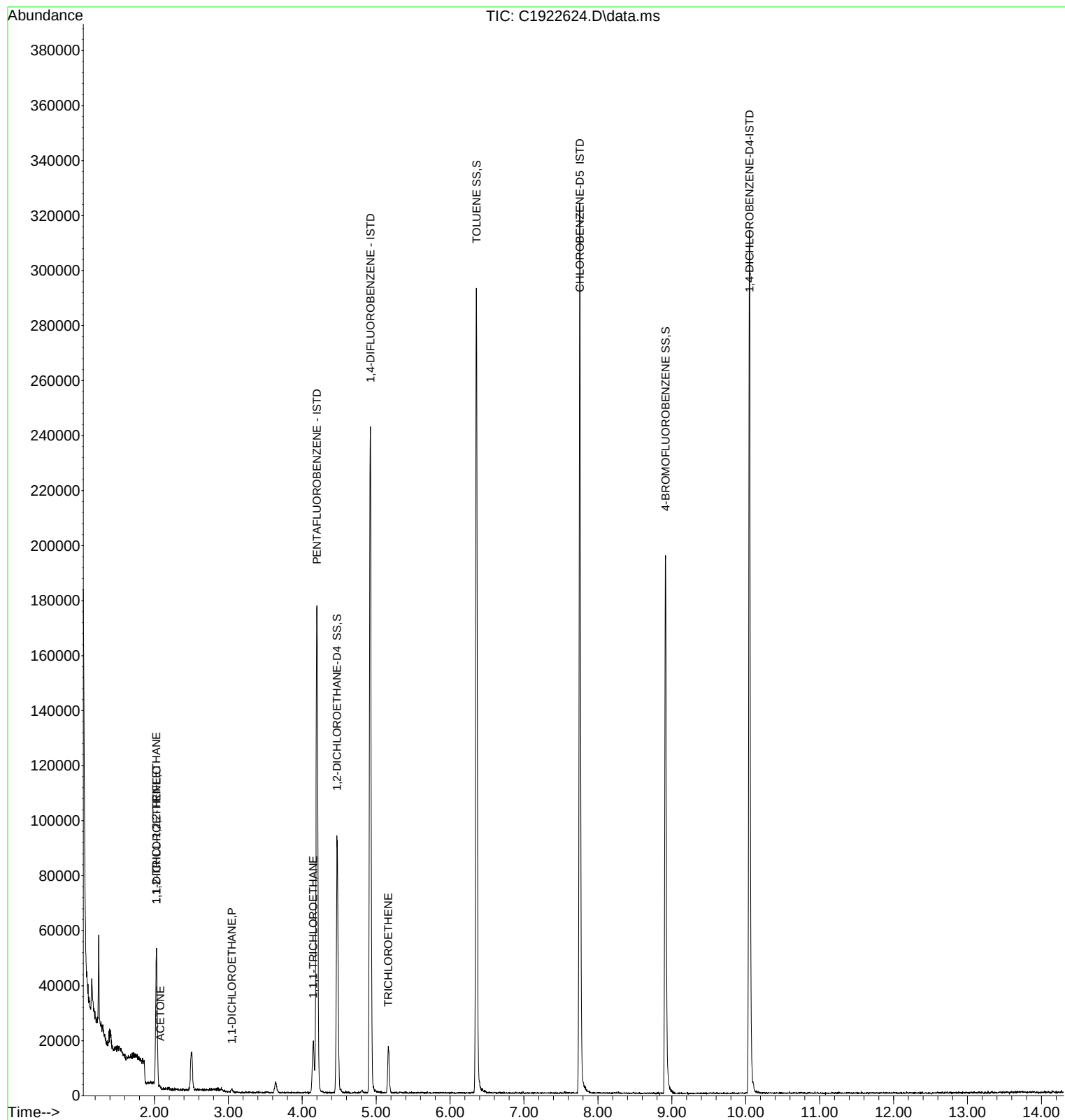
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.196	168	107221	30.00	UG/L	0.00
48) 1,4-DIFLUOROBENZENE - ...	4.921	114	163866	30.00	UG/L	0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	81507	30.00	UG/L	0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	73124	30.00	UG/L	# 0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.470	65	54806	27.17	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery	=	108.68%	
49) TOLUENE SS	6.358	98	160791	24.61	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery	=	98.44%	
71) 4-BROMOFLUOROBENZENE SS	8.915	95	56657	23.43	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery	=	93.72%	
Target Compounds						
						Qvalue
14) ACETONE	2.077	43	957	1.42	UG/L	# 47
15) 1,1-DICHLOROETHENE	2.030	61	866	0.42	UG/L	# 28
16) 1,1,2-TRICL-1,2,2-TRIF...	2.027	101	15674	13.79	UG/L	# 83
27) 1,1-DICHLOROETHANE	3.045	63	1198	0.42	UG/L	# 51
41) 1,1,1-TRICHLOROETHANE	4.149	97	11253	5.28	UG/L	95
51) TRICHLOROETHENE	5.161	95	4757	3.30	UG/L	93

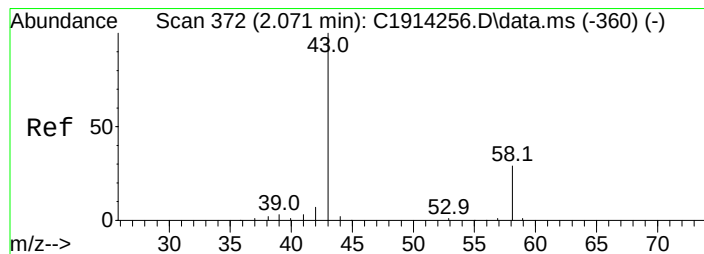
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\C081419\
Data File : C1922624.D
Acq On : 14 Aug 2019 5:13 pm
Operator :
Sample : 19H0528-04RE1 @ 1000X
Misc : 1000
ALS Vial : 24 Sample Multiplier: 1

Inst : GCMSVOA3

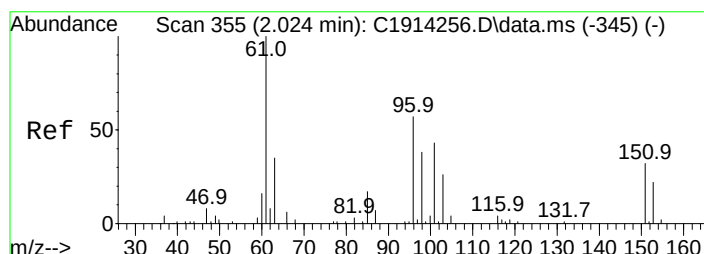
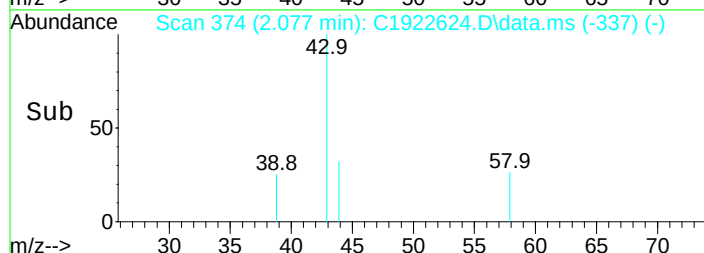
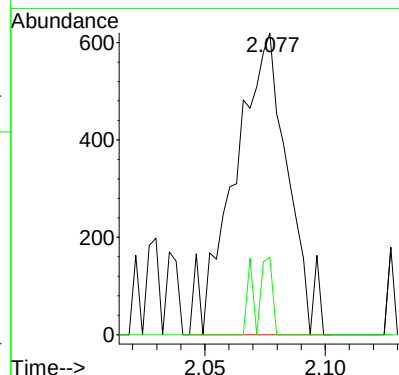
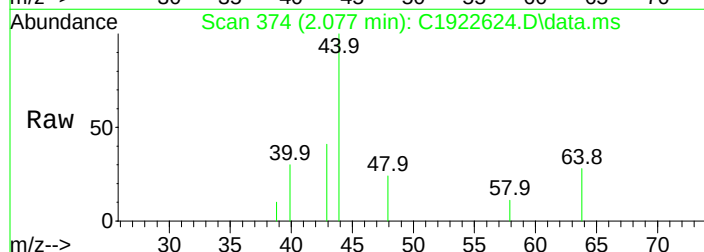
Quant Time: Aug 15 08:38:10 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration





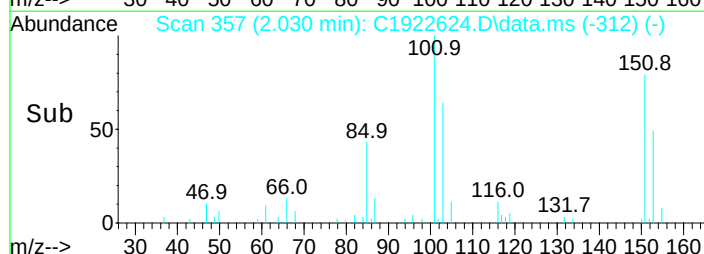
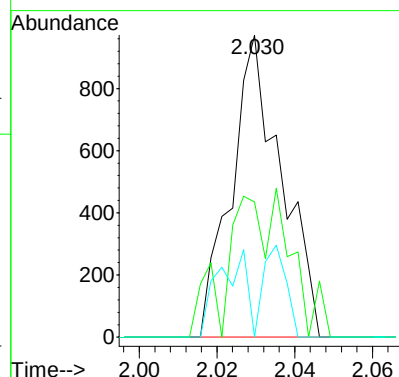
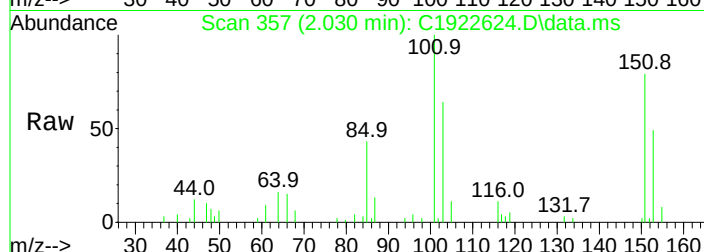
#14
 ACETONE
 Concen: 1.42 UG/L
 RT: 2.077 min Scan# 374
 Delta R.T. 0.008 min
 Lab File: C1922624.D
 Acq: 14 Aug 2019 5:13 pm

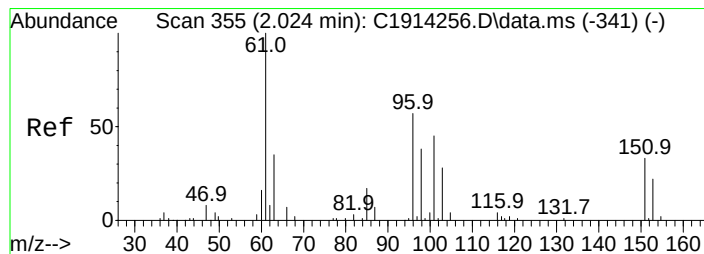
Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	22.1	33.1#



#15
 1,1-DICHLOROETHENE
 Concen: 0.42 UG/L
 RT: 2.030 min Scan# 357
 Delta R.T. 0.006 min
 Lab File: C1922624.D
 Acq: 14 Aug 2019 5:13 pm

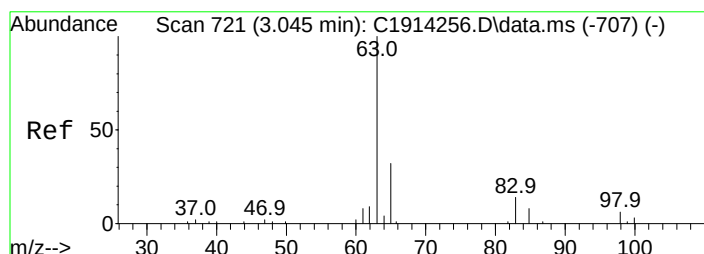
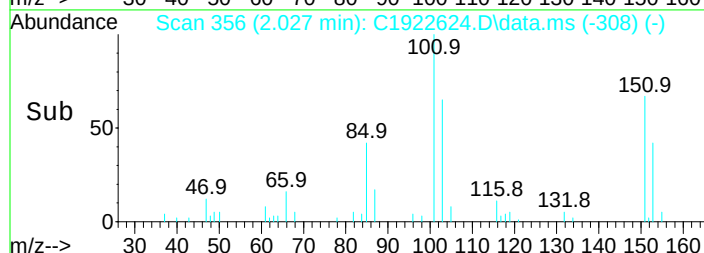
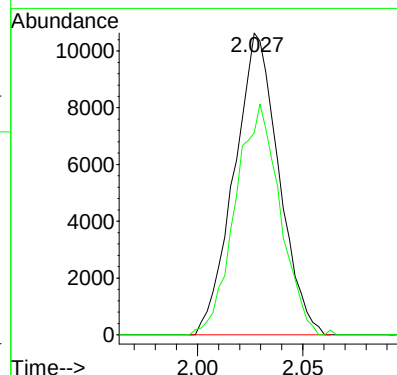
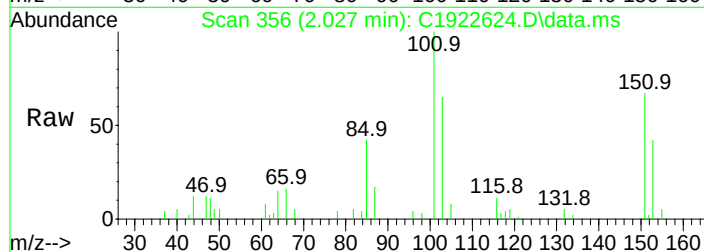
Tgt Ion	Ratio	Lower	Upper
61	100		
96	0.0	48.0	72.0#
63	0.0	25.0	37.4#





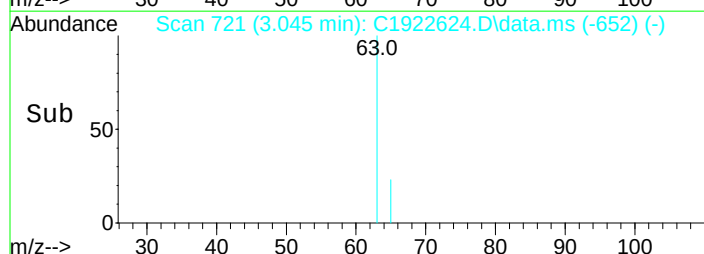
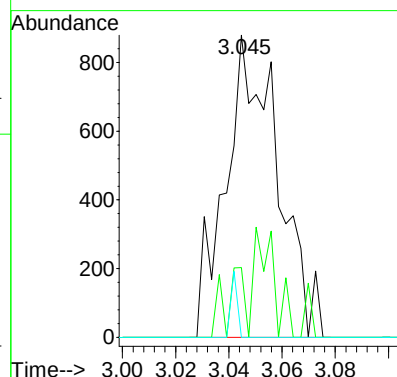
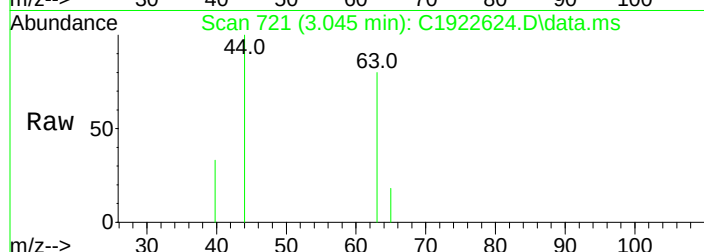
#16
 1,1,2-TRICL-1,2,2-TRIFLETHANE
 Concen: 13.79 UG/L
 RT: 2.027 min Scan# 356
 Delta R.T. 0.003 min
 Lab File: C1922624.D
 Acq: 14 Aug 2019 5:13 pm

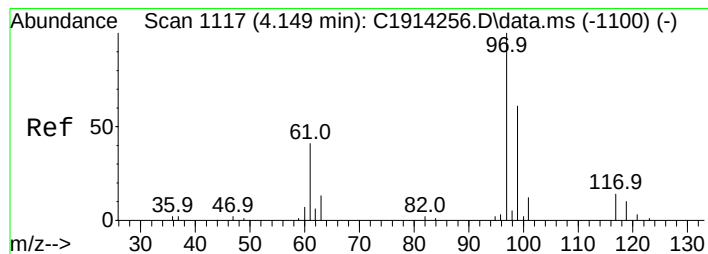
Tgt Ion	Ratio	Lower	Upper
101	100		
151	76.3	73.8	110.8



#27
 1,1-DICHLOROETHANE
 Concen: 0.42 UG/L
 RT: 3.045 min Scan# 721
 Delta R.T. -0.002 min
 Lab File: C1922624.D
 Acq: 14 Aug 2019 5:13 pm

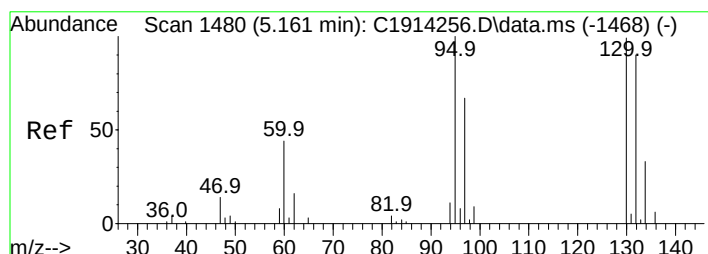
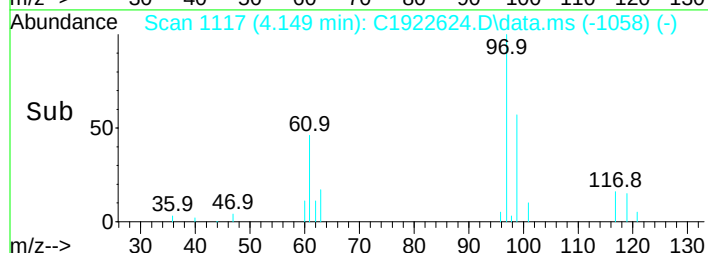
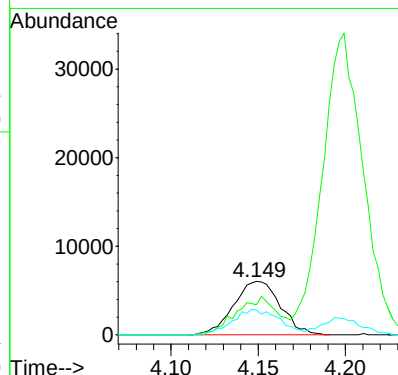
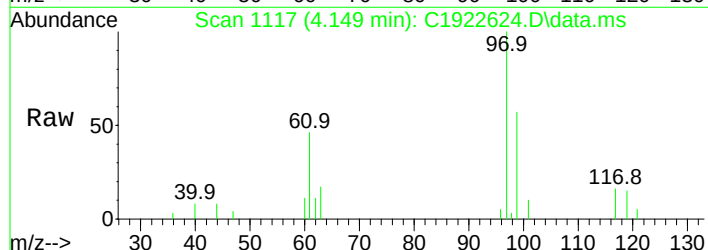
Tgt Ion	Ratio	Lower	Upper
63	100		
65	0.0	24.6	36.8#
83	0.0	10.4	15.6#





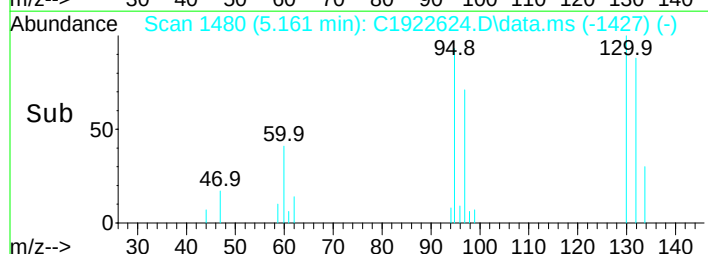
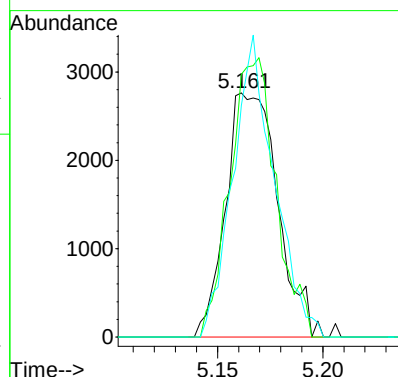
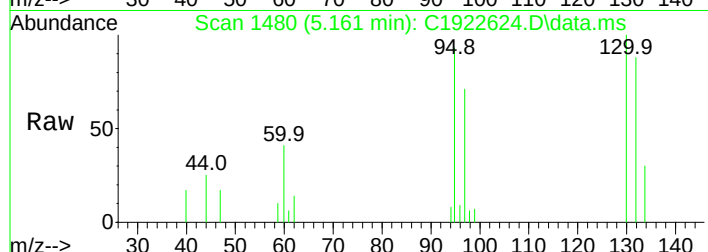
#41
 1,1,1-TRICHLOROETHANE
 Concen: 5.28 UG/L
 RT: 4.149 min Scan# 1117
 Delta R.T. 0.003 min
 Lab File: C1922624.D
 Acq: 14 Aug 2019 5:13 pm

Tgt Ion	Ratio	Lower	Upper
97	100		
99	63.8	52.7	79.1
61	47.6	33.4	50.2



#51
 TRICHLOROETHENE
 Concen: 3.30 UG/L
 RT: 5.161 min Scan# 1480
 Delta R.T. -0.003 min
 Lab File: C1922624.D
 Acq: 14 Aug 2019 5:13 pm

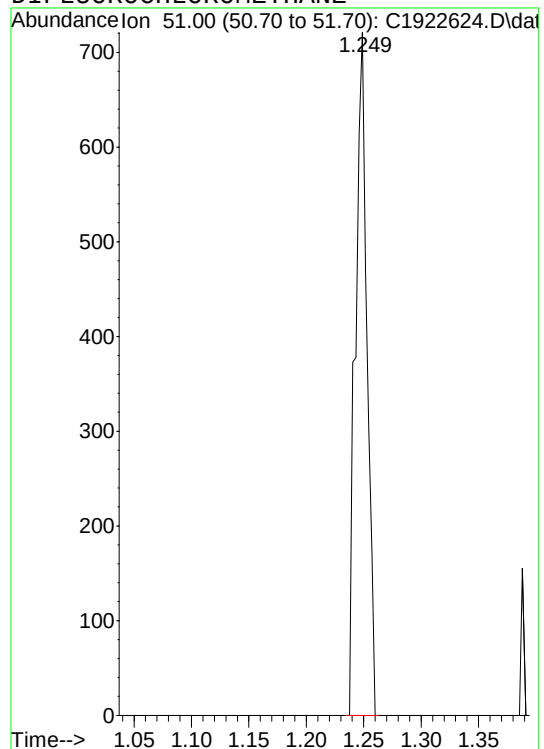
Tgt Ion	Ratio	Lower	Upper
95	100		
130	101.3	85.7	128.5
132	98.1	84.7	127.1



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922624.D
Acq On : 14 Aug 2019 5:13 pm
Operator :
Sample : 19H0528-04RE1 @ 1000X
Misc : 1000

Quant Time : Thu Aug 15 08:38:10 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
DIFLUOROCHLOROMETHANE



Original Int. Results

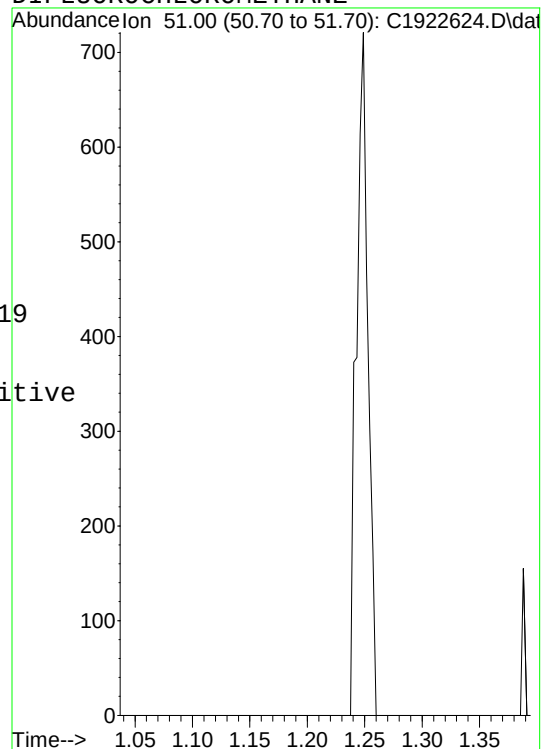
RT : 1.25
Area : 507
Amount: 0.242659

Manual Int. Results

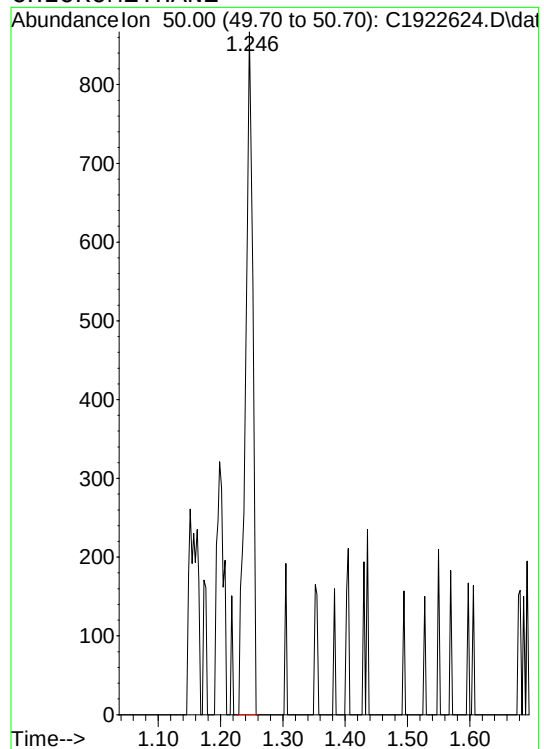
Thu Aug 15 08:37:50 2019

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

Manual Integration
DIFLUOROCHLOROMETHANE



Original Integration
CHLOROMETHANE



Original Int. Results

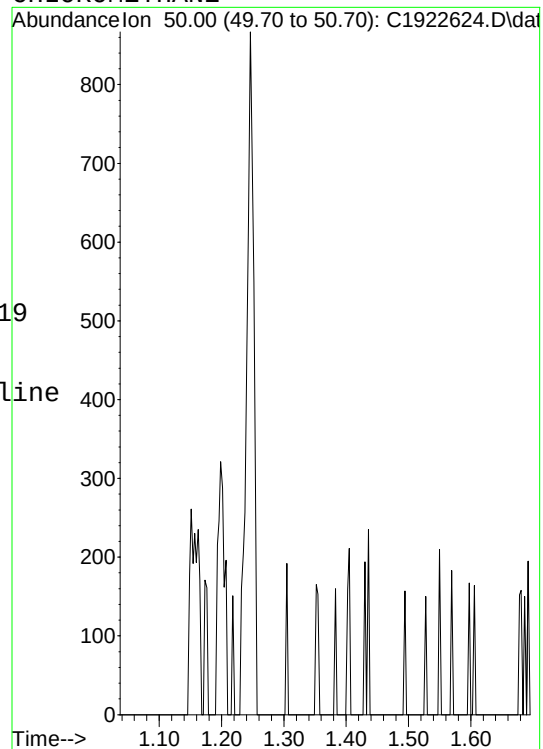
RT : 1.25
Area : 692
Amount: 0.296717

Manual Int. Results

Thu Aug 15 08:37:47 2019

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

Manual Integration
CHLOROMETHANE

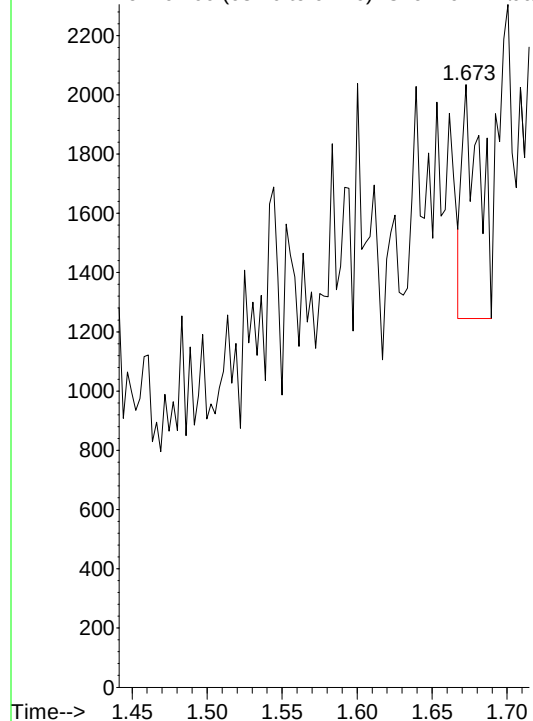


Data Path : C:\msdchem\1\data\C081419\
Data File : C1922624.D
Acq On : 14 Aug 2019 5:13 pm
Operator :
Sample : 19H0528-04RE1 @ 1000X
Misc : 1000

Quant Time : Thu Aug 15 08:38:10 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CHLOROETHANE

Abundance Ion 64.00 (63.70 to 64.70): C1922624.D\data



Original Int. Results

RT : 1.67
Area : 641
Amount: 0.622407

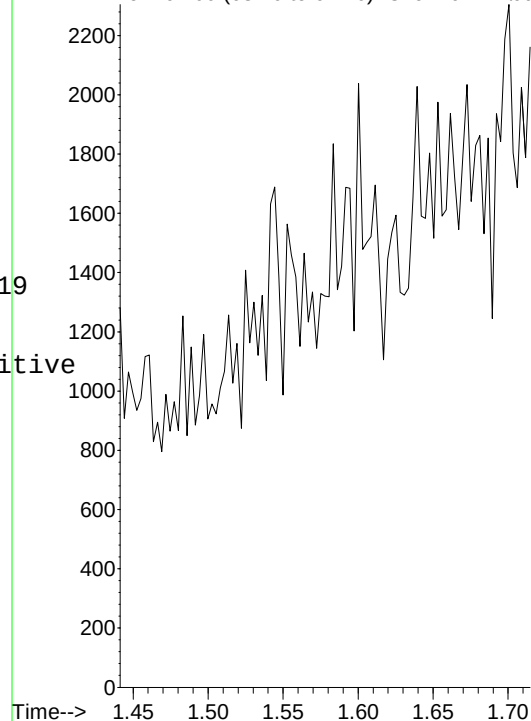
Manual Int. Results

Thu Aug 15 08:37:53 2019

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

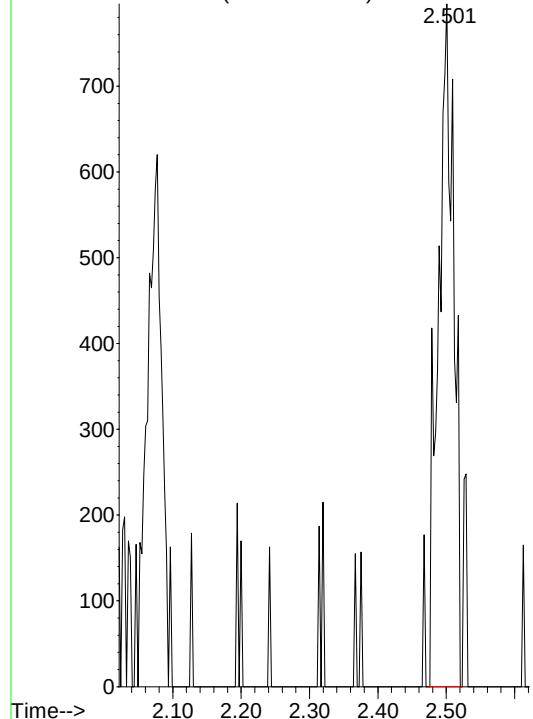
Manual Integration
CHLOROETHANE

Abundance Ion 64.00 (63.70 to 64.70): C1922624.D\data



Original Integration
METHYL ACETATE

Abundance Ion 43.00 (42.70 to 43.70): C1922624.D\data



Original Int. Results

RT : 2.50
Area : 1249
Amount: 0.599624

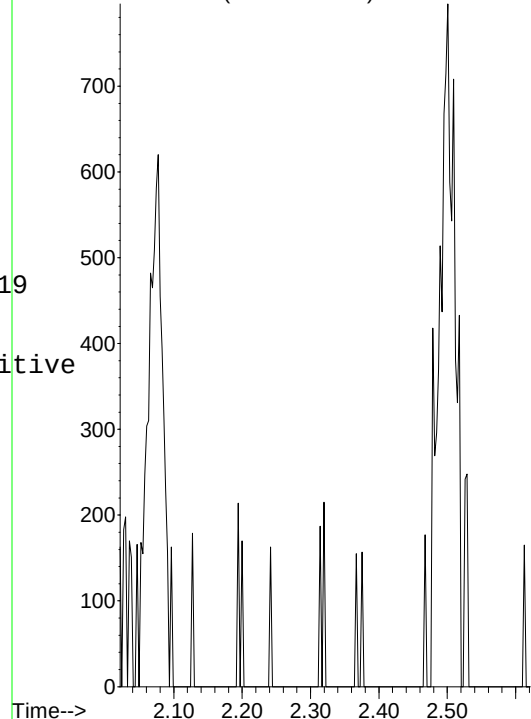
Manual Int. Results

Thu Aug 15 08:37:58 2019

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

Manual Integration
METHYL ACETATE

Abundance Ion 43.00 (42.70 to 43.70): C1922624.D\data

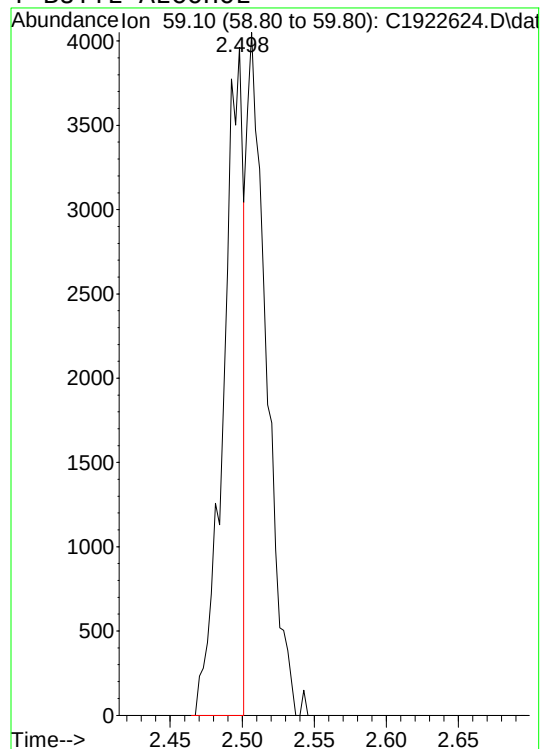


Data Path : C:\msdchem\1\data\C081419\
Data File : C1922624.D
Acq On : 14 Aug 2019 5:13 pm
Operator :
Sample : 19H0528-04RE1 @ 1000X
Misc : 1000

Quant Time : Thu Aug 15 08:38:10 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration

T-BUTYL ALCOHOL



Original Int. Results

RT : 2.50
Area : 3819
Amount: 14.7612

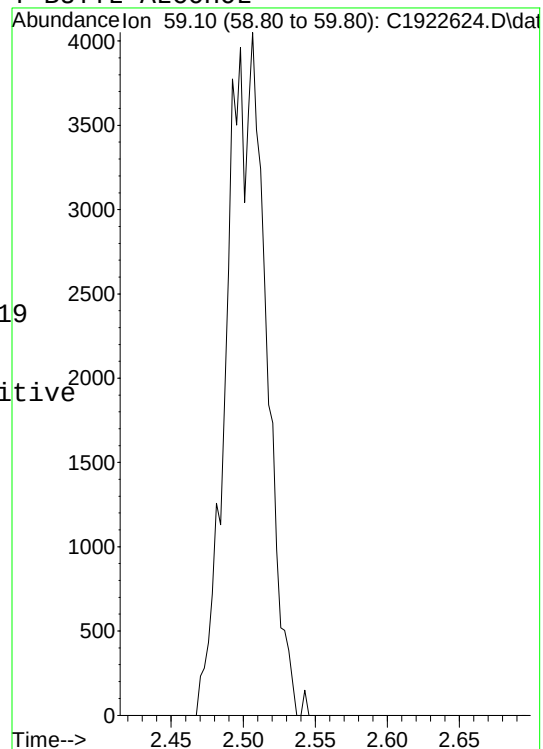
Manual Int. Results

Thu Aug 15 08:38:01 2019

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

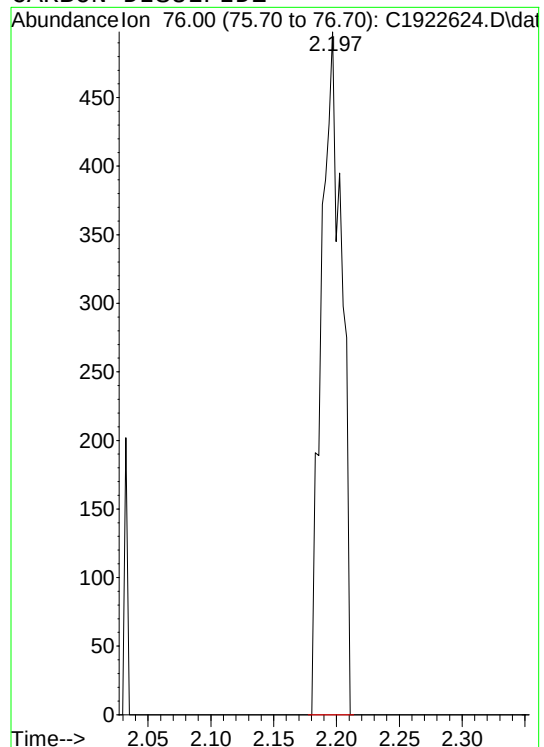
Manual Integration

T-BUTYL ALCOHOL



Original Integration

CARBON DISULFIDE



Original Int. Results

RT : 2.20
Area : 566
Amount: 0.141415

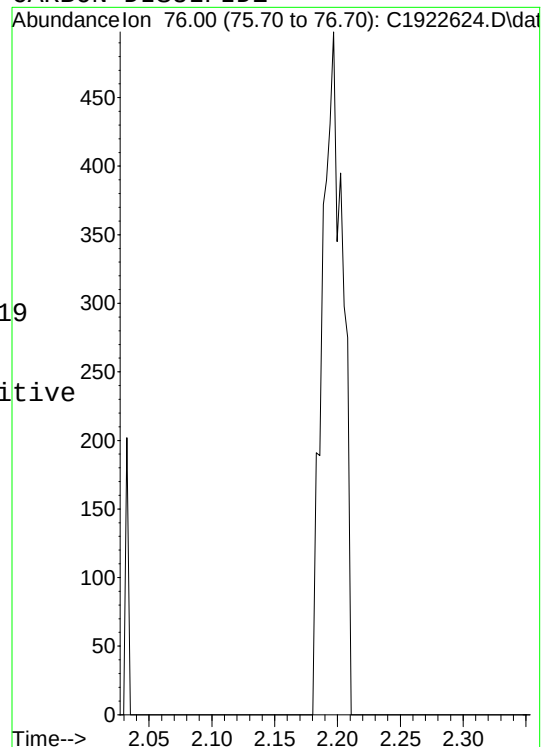
Manual Int. Results

Thu Aug 15 08:38:03 2019

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

Manual Integration

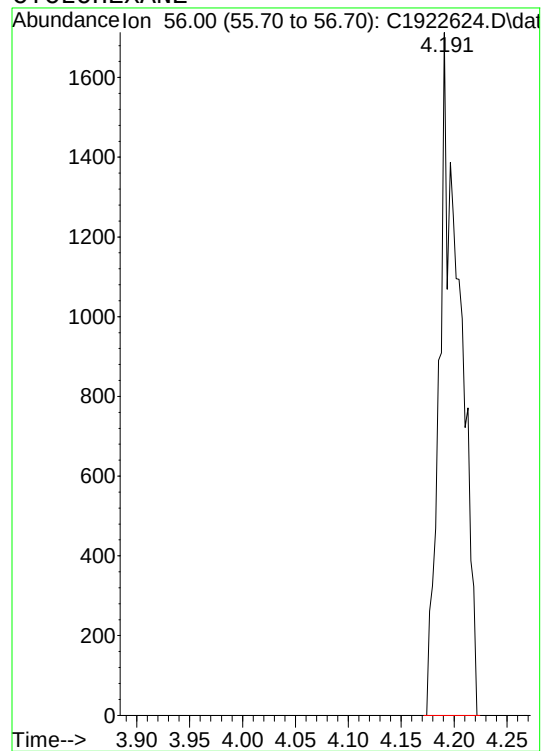
CARBON DISULFIDE



Data Path : C:\msdchem\1\data\C081419\
Data File : C1922624.D
Acq On : 14 Aug 2019 5:13 pm
Operator :
Sample : 19H0528-04RE1 @ 1000X
Misc : 1000

Quant Time : Thu Aug 15 08:38:10 2019
Quant Method : C:\msdchem\1\methods\C051619.M
QLast Update : Fri May 17 05:29:37 2019

Original Integration
CYCLOHEXANE



Original Int. Results

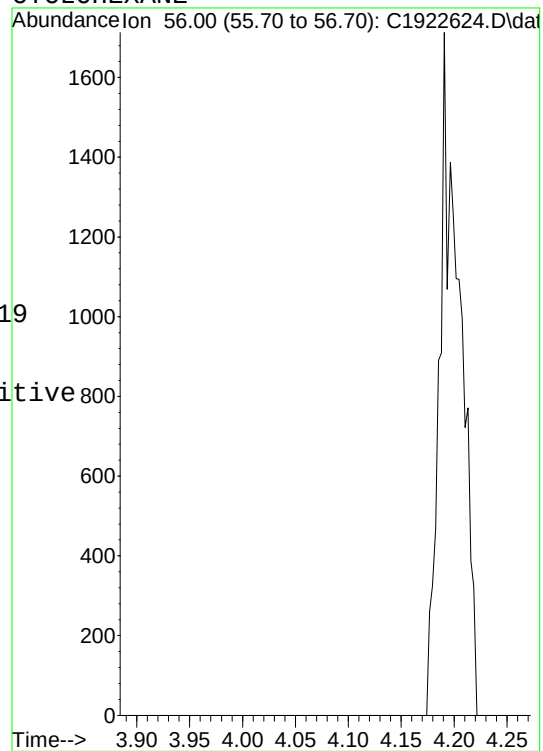
RT : 4.19
Area : 2287
Amount: 0.90638

Manual Int. Results

Thu Aug 15 08:38:09 2019

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

Manual Integration
CYCLOHEXANE



1 - FORM I

ANALYSIS DATA SHEET

109

MW-27

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528	
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site	
Matrix:	Ground Water	Laboratory ID:	19H0528-05	File ID: B1922537.D
Sampled:	08/08/19 12:50	Prepared:	08/13/19 07:22	Analyzed: 08/14/19 01:07
Solids:		Preparation:	SW-846 5030B	Dilution: 10
Initial/Final:	5 mL / 5 mL			
Batch:	B237875	Sequence:	S039168	Calibration: 1900126
				Instrument: GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone		38	500	
107-13-1	Acrylonitrile		5.2	50	
994-05-8	tert-Amyl Methyl Ether (TAME)		1.4	5.0	
71-43-2	Benzene		1.8	10	
108-86-1	Bromobenzene		1.5	10	
74-97-5	Bromochloromethane		3.2	10	
75-27-4	Bromodichloromethane		1.6	5.0	
75-25-2	Bromoform		4.6	10	
74-83-9	Bromomethane		7.8	50	
78-93-3	2-Butanone (MEK)		19	200	
75-65-0	tert-Butyl Alcohol (TBA)		42	200	
104-51-8	n-Butylbenzene		2.1	10	V-05
135-98-8	sec-Butylbenzene		1.6	10	
98-06-6	tert-Butylbenzene		1.7	10	
637-92-3	tert-Butyl Ethyl Ether (TBEE)		1.6	5.0	
75-15-0	Carbon Disulfide		44	50	
56-23-5	Carbon Tetrachloride		1.1	50	
108-90-7	Chlorobenzene		1.5	10	
124-48-1	Chlorodibromomethane		2.1	5.0	
75-00-3	Chloroethane		3.5	20	
67-66-3	Chloroform		1.7	20	
74-87-3	Chloromethane		4.5	20	V-05
95-49-8	2-Chlorotoluene		1.2	10	
106-43-4	4-Chlorotoluene		1.4	10	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		5.3	50	
106-93-4	1,2-Dibromoethane (EDB)		1.9	5.0	
74-95-3	Dibromomethane		3.7	10	
95-50-1	1,2-Dichlorobenzene		1.6	10	
541-73-1	1,3-Dichlorobenzene		1.2	10	
106-46-7	1,4-Dichlorobenzene		1.3	10	

1 - FORM I

ANALYSIS DATA SHEET

110

MW-27

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-05
		File ID:	B1922537.D
Sampled:	08/08/19 12:50	Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 01:07
Solids:		Preparation:	SW-846 5030B
		Dilution:	10
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene		3.1	20	
75-71-8	Dichlorodifluoromethane (Freon 12)		2.6	20	
75-34-3	1,1-Dichloroethane	19	1.6	10	
107-06-2	1,2-Dichloroethane		4.1	10	
75-35-4	1,1-Dichloroethylene	44	3.2	10	
156-59-2	cis-1,2-Dichloroethylene	15	1.3	10	
156-60-5	trans-1,2-Dichloroethylene		3.1	10	
78-87-5	1,2-Dichloropropane		2.0	10	
142-28-9	1,3-Dichloropropane		1.1	5.0	
594-20-7	2,2-Dichloropropane		2.0	10	
563-58-6	1,1-Dichloropropene		1.6	20	
10061-01-5	cis-1,3-Dichloropropene		1.3	5.0	
10061-02-6	trans-1,3-Dichloropropene		2.3	5.0	
60-29-7	Diethyl Ether		3.4	20	
108-20-3	Diisopropyl Ether (DIPE)		1.7	5.0	
123-91-1	1,4-Dioxane		220	500	
100-41-4	Ethylbenzene		1.3	10	
87-68-3	Hexachlorobutadiene		4.7	6.0	
591-78-6	2-Hexanone (MBK)		15	100	
98-82-8	Isopropylbenzene (Cumene)		1.7	10	
99-87-6	p-Isopropyltoluene (p-Cymene)		2.0	10	
79-20-9	Methyl Acetate		4.2	10	
1634-04-4	Methyl tert-Butyl Ether (MTBE)		2.5	10	
108-87-2	Methyl Cyclohexane		2.0	10	
75-09-2	Methylene Chloride		3.4	50	
108-10-1	4-Methyl-2-pentanone (MIBK)		17	100	
91-20-3	Naphthalene		3.1	20	
103-65-1	n-Propylbenzene		1.3	10	
100-42-5	Styrene		1.1	10	
630-20-6	1,1,1,2-Tetrachloroethane		2.7	10	

1 - FORM I

ANALYSIS DATA SHEET

111

MW-27

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528	
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site	
Matrix:	Ground Water	Laboratory ID:	19H0528-05	File ID: B1922537.D
Sampled:	08/08/19 12:50	Prepared:	08/13/19 07:22	Analyzed: 08/14/19 01:07
Solids:		Preparation:	SW-846 5030B	Dilution: 10
Initial/Final:	5 mL / 5 mL			
Batch:	B237875	Sequence:	S039168	Calibration: 1900126
				Instrument: GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane		2.2	5.0	
127-18-4	Tetrachloroethylene		1.8	10	
109-99-9	Tetrahydrofuran		5.1	100	
108-88-3	Toluene		1.4	10	
87-61-6	1,2,3-Trichlorobenzene		5.7	50	
120-82-1	1,2,4-Trichlorobenzene		4.0	10	
108-70-3	1,3,5-Trichlorobenzene		3.0	10	
71-55-6	1,1,1-Trichloroethane	260	2.0	10	
79-00-5	1,1,2-Trichloroethane		1.6	10	
79-01-6	Trichloroethylene	280	2.4	10	
75-69-4	Trichlorofluoromethane (Freon 11)		3.3	20	
96-18-4	1,2,3-Trichloropropane		2.5	20	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	650	3.2	10	
95-63-6	1,2,4-Trimethylbenzene		1.8	10	
108-67-8	1,3,5-Trimethylbenzene		1.4	10	
75-01-4	Vinyl Chloride		4.5	20	
108383/106423	m+p Xylene		3.0	20	
95-47-6	o-Xylene		1.7	10	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922537.D
 Acq On : 14 Aug 2019 1:07 am
 Operator :
 Sample : 19H0528-05 @ 10X
 Misc : 10
 ALS Vial : 37 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 11:14:03 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	52848	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.014	114	74418	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	44246	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.139	152	49203	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.580	65	37744	27.72	UG/L	0.00
Spiked Amount 25.000	Range	70 - 130	Recovery	=	110.88%	
45) TOLUENE-D8 SS	6.444	98	80434	27.62	UG/L	0.00
Spiked Amount 25.000	Range	70 - 130	Recovery	=	110.48%	
66) 4-BROMOFLUROBENZENE SS	8.999	95	33532	25.75	UG/L	0.00
Spiked Amount 25.000	Range	70 - 130	Recovery	=	103.00%	
Target Compounds						Qvalue
15) 1,1-DICHLOROETHENE	2.107	61	7845	4.39	UG/L	98
16) 1,1,2-TRICL-1,2,2-TRIF...	2.101	101	48578	65.15	UG/L	89
25) 1,1-DICHLOROETHANE	3.170	63	3987	1.86	UG/L #	90
30) CIS-1,2-DICHLOROETHENE	3.764	61	3121	1.47	UG/L	97
37) 1,1,1-TRICHLOROETHANE	4.247	97	45285	26.47	UG/L	97
47) TRICHLOROETHENE	5.253	95	26661	28.24	UG/L	99

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

Data Path : Y:\1\DATA\B081319\

Data File : B1922537.D

Acq On : 14 Aug 2019 1:07 am

Operator :

Sample : 19H0528-05 @ 10X

Inst : GCMSVOA2

Misc : 10

ALS Vial : 37 Sample Multiplier: 1

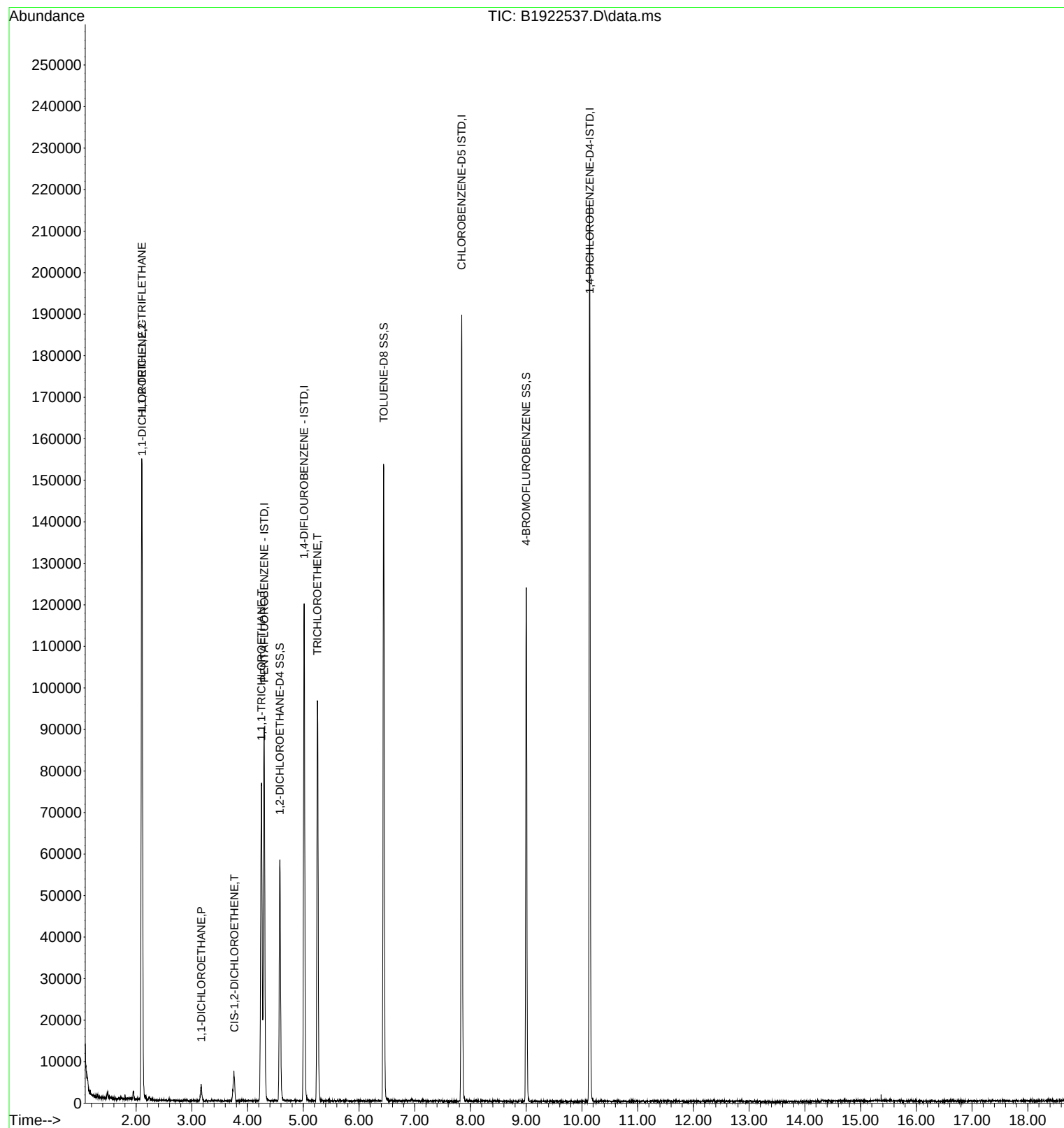
Quant Time: Aug 14 11:14:03 2019

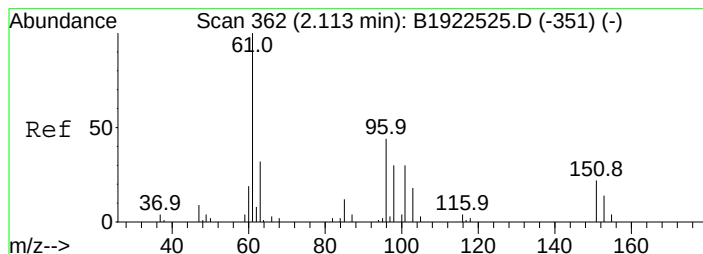
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M

Quant Title : 8260 CALIBRATION VOAMS 5973

QLast Update : Fri Apr 19 05:25:51 2019

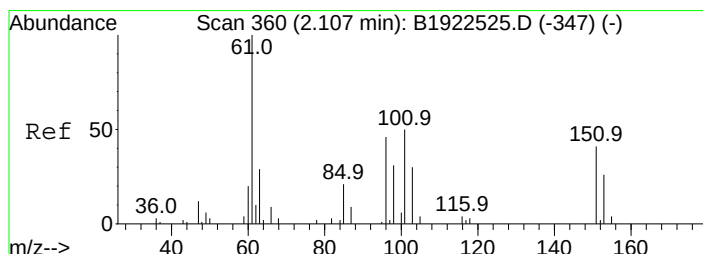
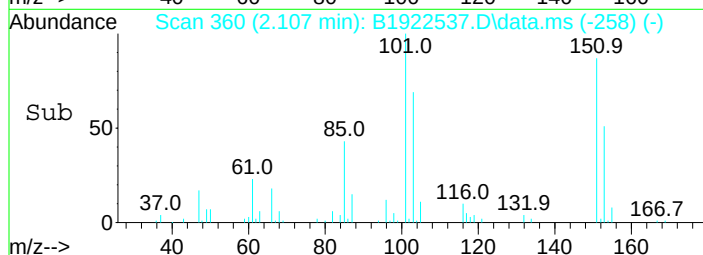
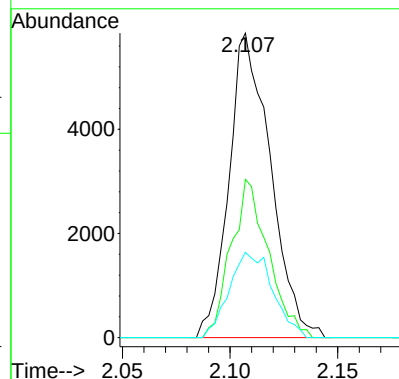
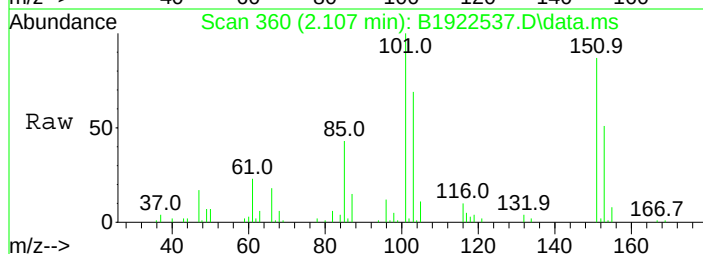
Response via : Initial Calibration





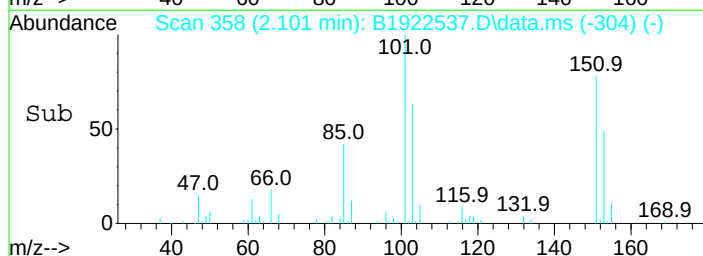
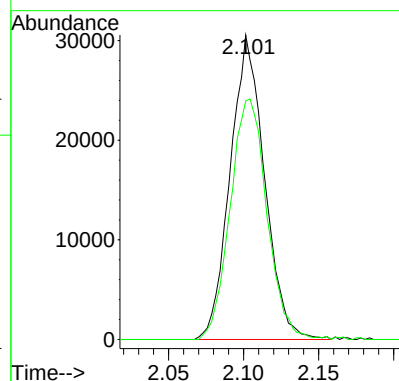
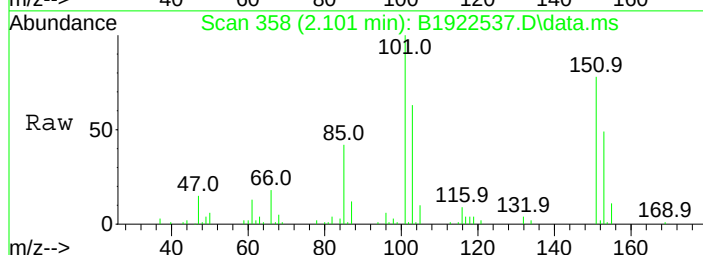
#15
 1,1-DICHLOROETHENE
 Concen: 4.39 UG/L
 RT: 2.107 min Scan# 360
 Delta R.T. -0.009 min
 Lab File: B1922537.D
 Acq: 14 Aug 2019 1:07 am

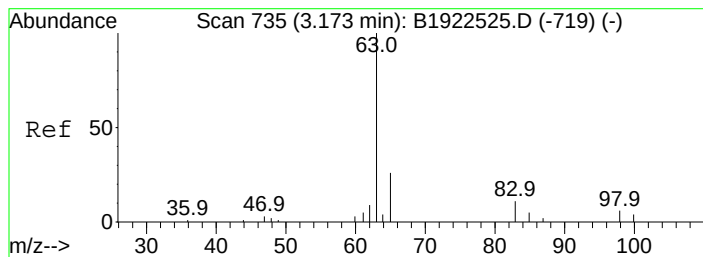
Tgt Ion	Ratio	Lower	Upper
61	100		
96	46.5	36.2	54.4
63	29.4	24.4	36.6



#16
 1,1,2-TRICL-1,2,2-TRIFLETHANE
 Concen: 65.15 UG/L
 RT: 2.101 min Scan# 358
 Delta R.T. -0.003 min
 Lab File: B1922537.D
 Acq: 14 Aug 2019 1:07 am

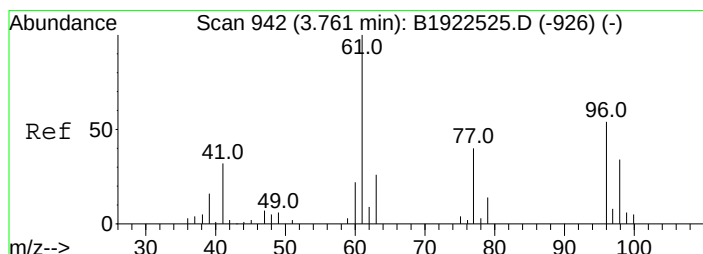
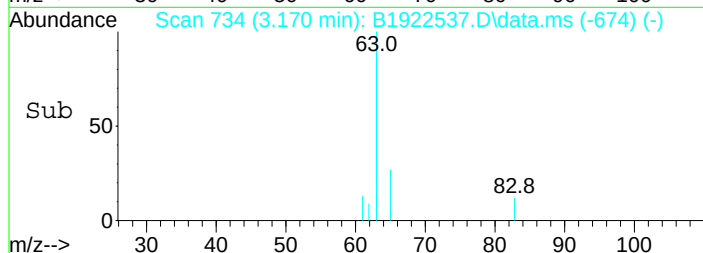
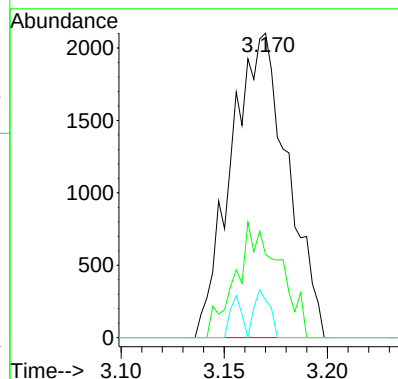
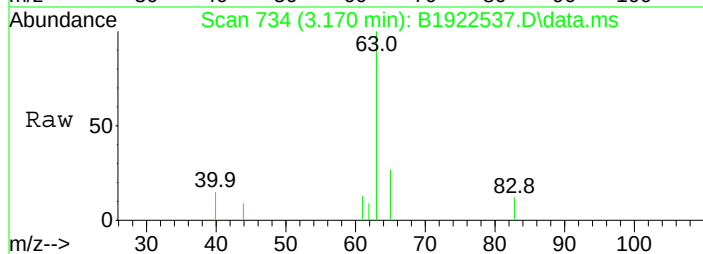
Tgt Ion	Ratio	Lower	Upper
101	100		
151	84.6	60.5	90.7





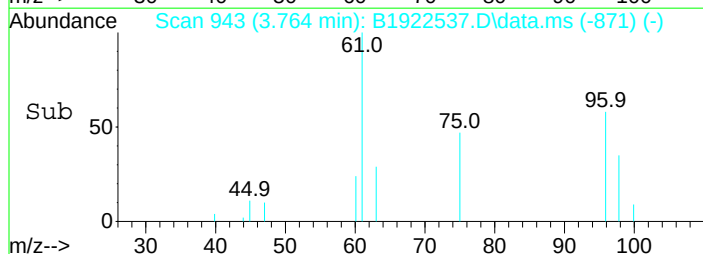
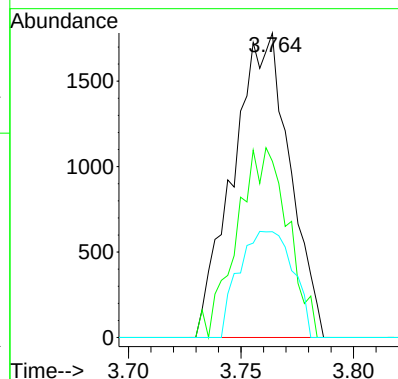
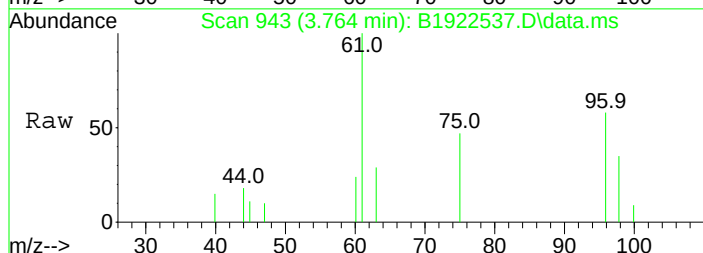
#25
1,1-DICHLOROETHANE
Concen: 1.86 UG/L
RT: 3.170 min Scan# 734
Delta R.T. 0.000 min
Lab File: B1922537.D
Acq: 14 Aug 2019 1:07 am

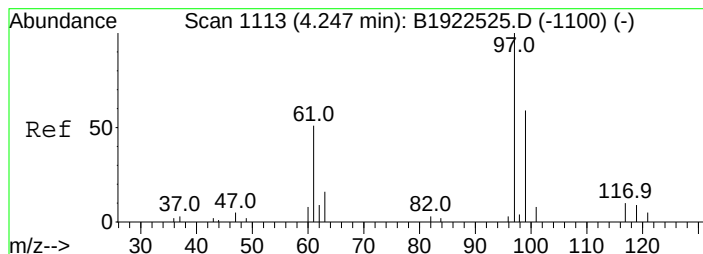
Tgt Ion:	63	Resp:	3987
Ion Ratio	Lower	Upper	
63	100		
65	29.4	24.0	36.0
83	0.0	9.8	14.6#



#30
CIS-1,2-DICHLOROETHENE
Concen: 1.47 UG/L
RT: 3.764 min Scan# 943
Delta R.T. 0.006 min
Lab File: B1922537.D
Acq: 14 Aug 2019 1:07 am

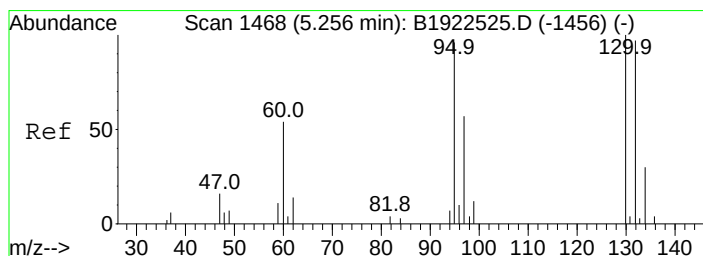
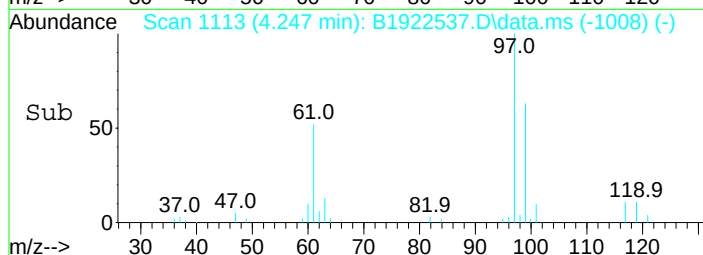
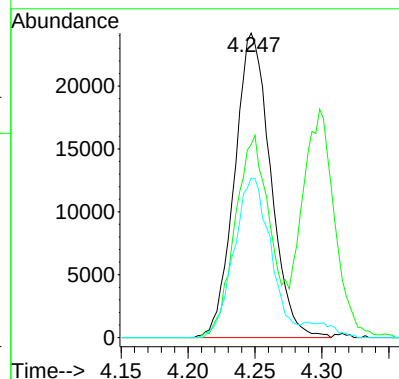
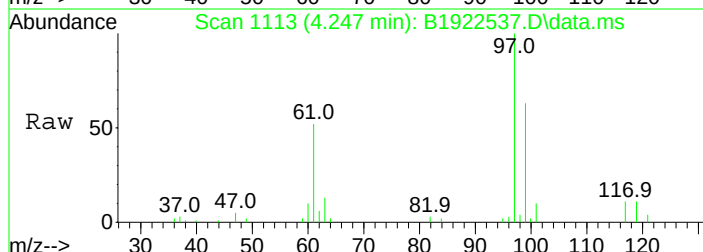
Tgt Ion:	61	Resp:	3121
Ion Ratio	Lower	Upper	
61	100		
96	56.5	43.0	64.4
98	33.2	27.2	40.8





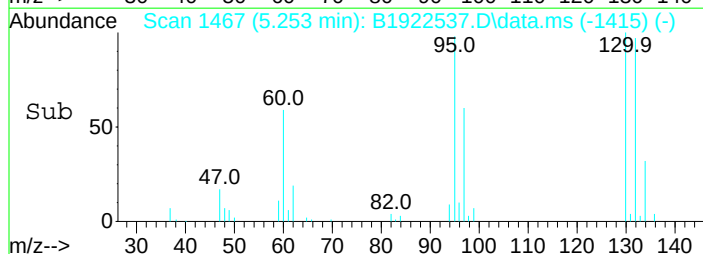
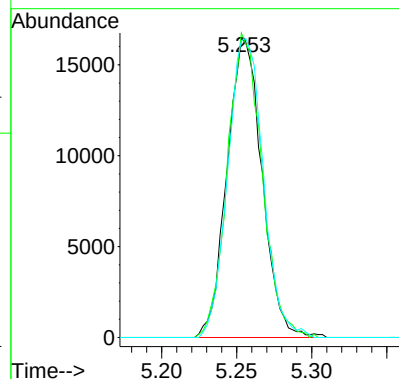
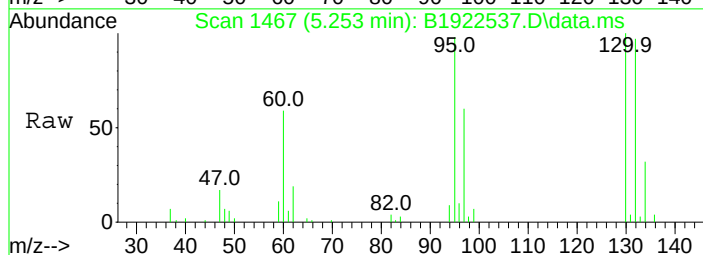
#37
 1,1,1-TRICHLOROETHANE
 Concen: 26.47 UG/L
 RT: 4.247 min Scan# 1113
 Delta R.T. -0.003 min
 Lab File: B1922537.D
 Acq: 14 Aug 2019 1:07 am

Tgt Ion	97	Resp	45285
Ion Ratio	100	Lower	Upper
99	65.7	50.8	76.2
61	53.6	45.1	67.7



#47
 TRICHLOROETHENE
 Concen: 28.24 UG/L
 RT: 5.253 min Scan# 1467
 Delta R.T. -0.003 min
 Lab File: B1922537.D
 Acq: 14 Aug 2019 1:07 am

Tgt Ion	95	Resp	26661
Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td>	100	Lower	Upper
130	100.2	79.8	119.6
132	101.5	80.6	121.0

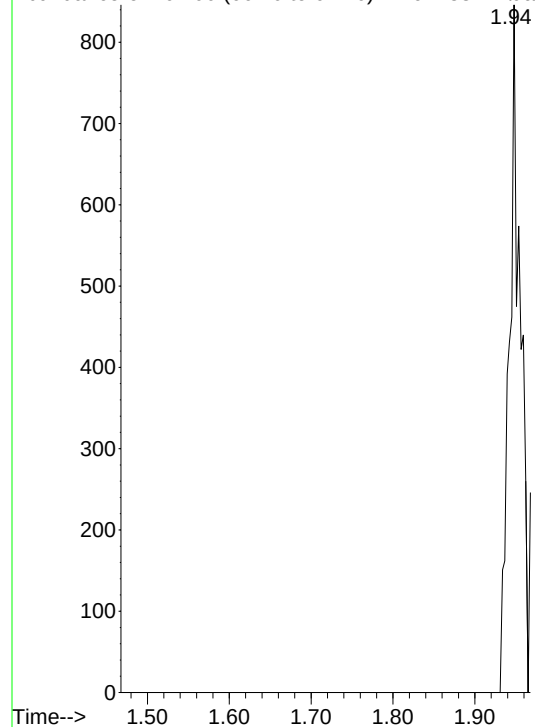


Data Path : Y:\1\DATA\B081319\
Data File : B1922537.D
Acq On : 14 Aug 2019 1:07 am
Operator :
Sample : 19H0528-05 @ 10X
Misc : 10

Quant Time : Wed Aug 14 11:14:03 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
FLUORODICHLOROMETHANE

Abundance on 67.00 (66.70 to 67.70): B1922537.D\data



Original Int. Results

RT : 1.95
Area : 829
Amount: 0.41108

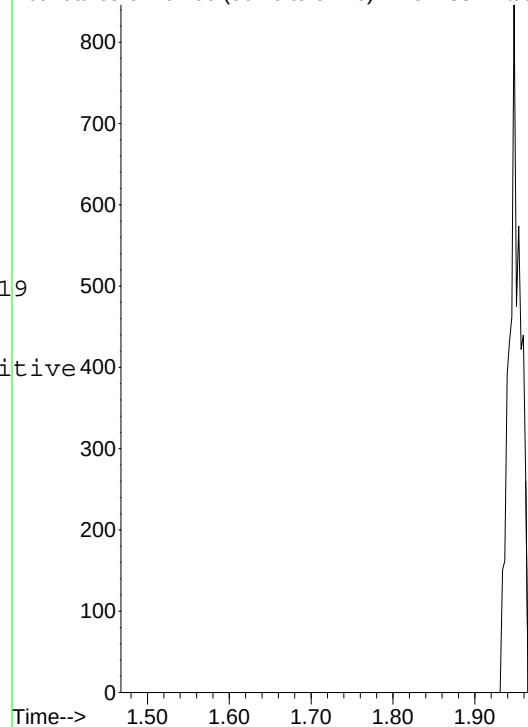
Manual Int. Results

Wed Aug 14 11:13:42 2019

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

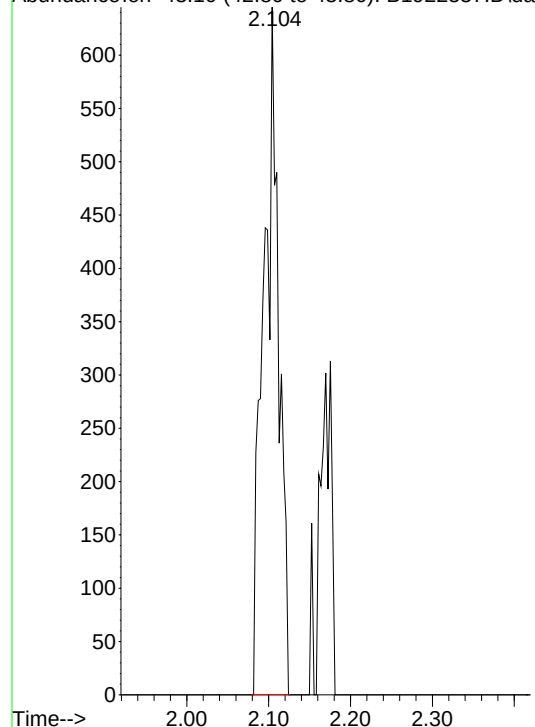
Manual Integration
FLUORODICHLOROMETHANE

Abundance on 67.00 (66.70 to 67.70): B1922537.D\data



Original Integration
ACETONE

Abundance on 43.10 (42.80 to 43.80): B1922537.D\data



Original Int. Results

RT : 2.10
Area : 832
Amount: 1.70524

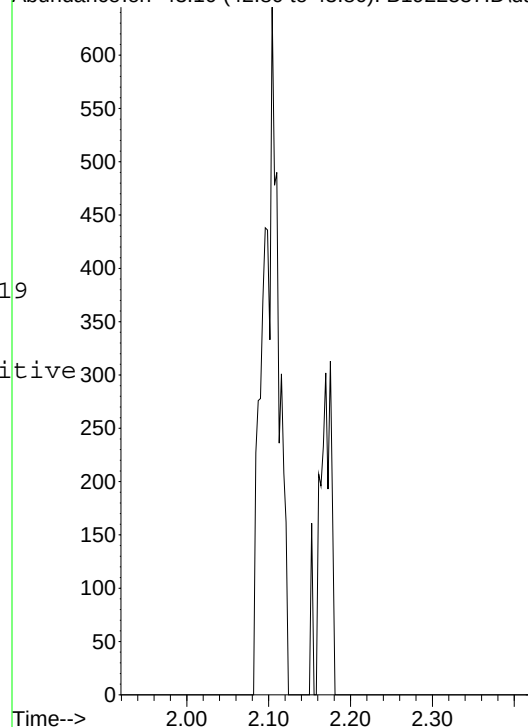
Manual Int. Results

Wed Aug 14 11:13:47 2019

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

Manual Integration
ACETONE

Abundance on 43.10 (42.80 to 43.80): B1922537.D\data



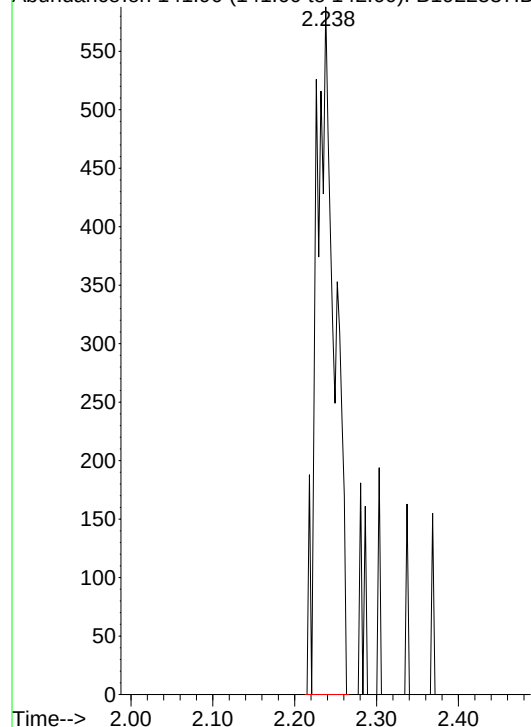
Data Path : Y:\1\DATA\B081319\
Data File : B1922537.D
Acq On : 14 Aug 2019 1:07 am
Operator :
Sample : 19H0528-05 @ 10X
Misc : 10

Quant Time : Wed Aug 14 11:14:03 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

IODOMETHANE

Abundance on 141.90 (141.60 to 142.60): B1922537.D



Original Int. Results

RT : 2.24
Area : 919
Amount: 0.720101

Manual Int. Results

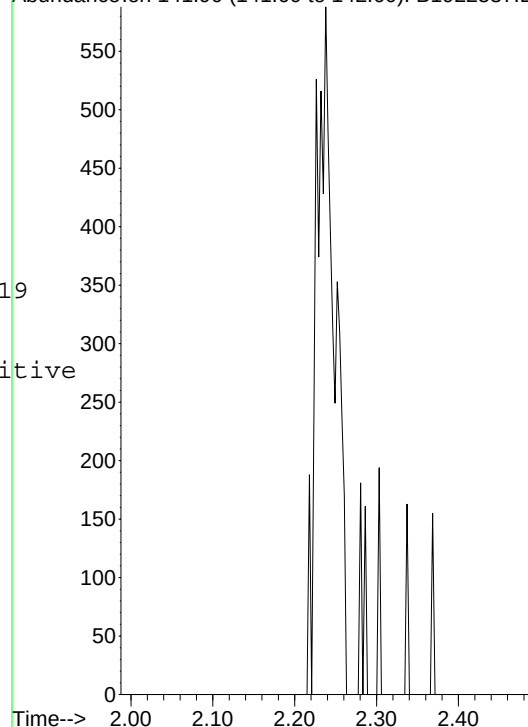
Wed Aug 14 11:13:51 2019

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

Manual Integration

IODOMETHANE

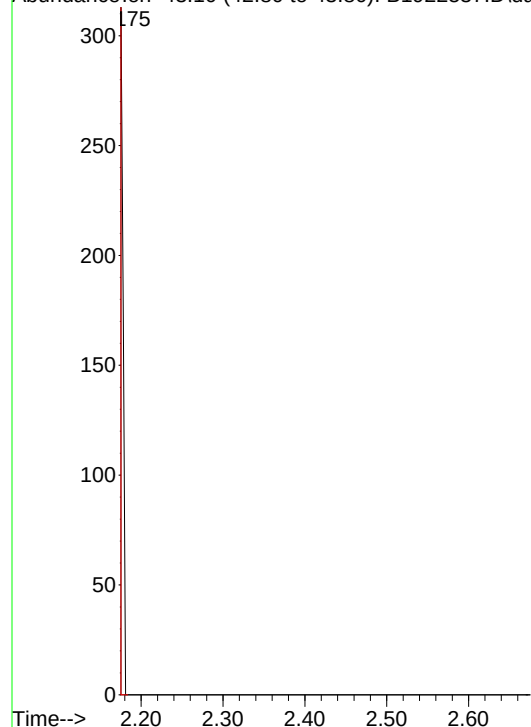
Abundance on 141.90 (141.60 to 142.60): B1922537.D



Original Integration

METHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): B1922537.D\data



Original Int. Results

RT : 2.18
Area : 275
Amount: 0.179279

Manual Int. Results

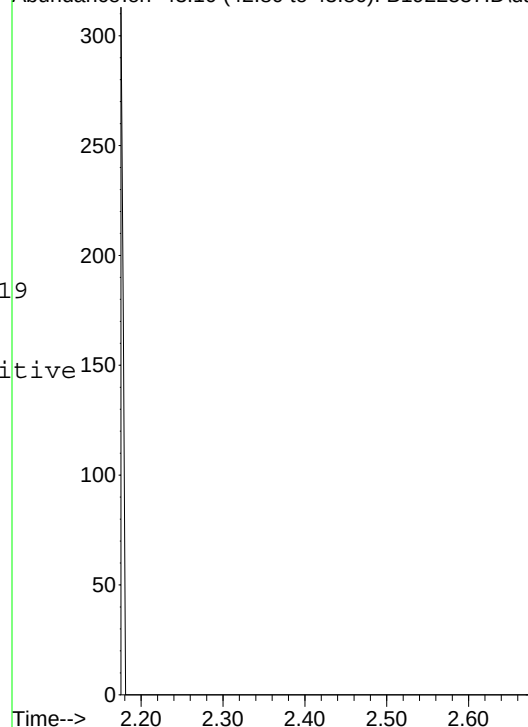
Wed Aug 14 11:13:53 2019

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

Manual Integration

METHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): B1922537.D\data



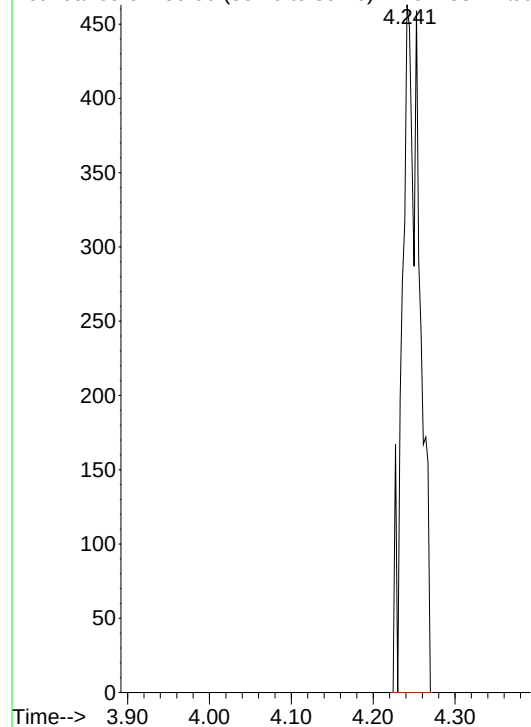
Data Path : Y:\1\DATA\B081319\
Data File : B1922537.D
Acq On : 14 Aug 2019 1:07 am
Operator :
Sample : 19H0528-05 @ 10X
Misc : 10

Quant Time : Wed Aug 14 11:14:03 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922537.D\data



Original Int. Results

RT : 4.24
Area : 684
Amount: 0.633091

Manual Int. Results

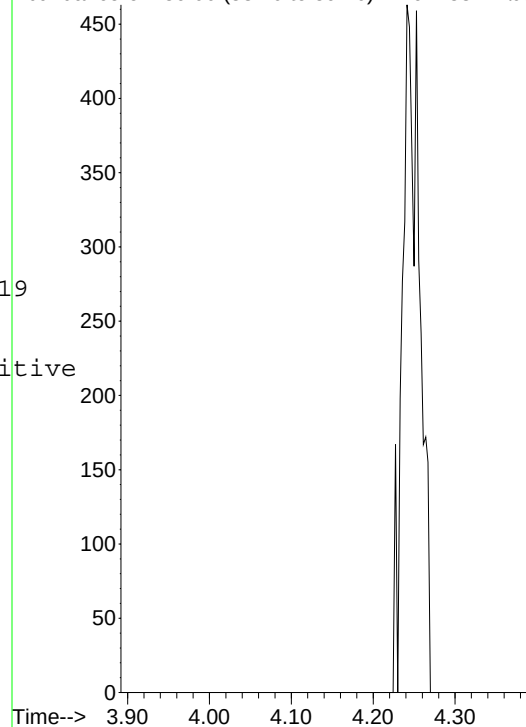
Wed Aug 14 11:13:59 2019

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

Manual Integration

T-BUTYL FORMATE

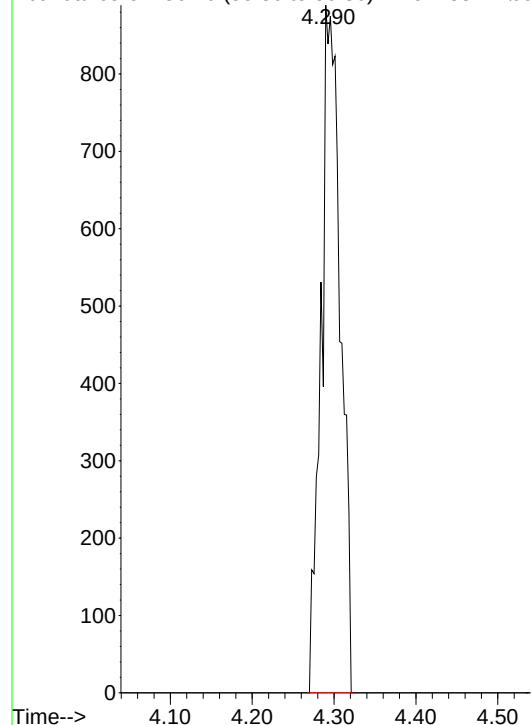
Abundance on 59.00 (58.70 to 59.70): B1922537.D\data



Original Integration

CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922537.D\data



Original Int. Results

RT : 4.29
Area : 1468
Amount: 0.658464

Manual Int. Results

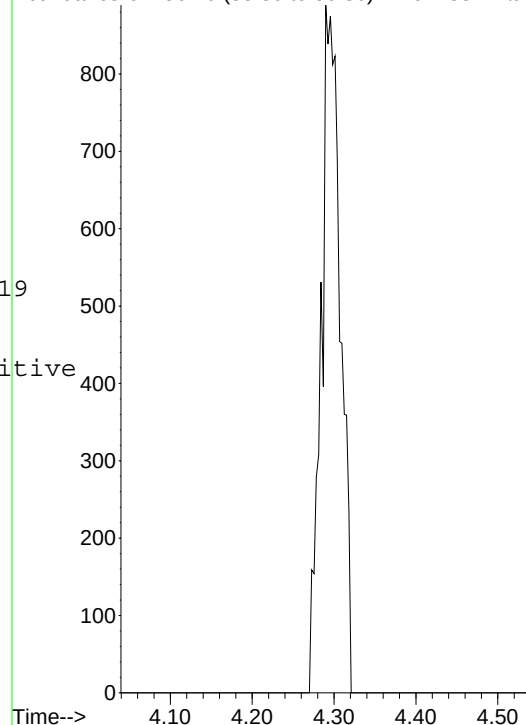
Wed Aug 14 11:14:02 2019

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

Manual Integration

CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922537.D\data



1 - FORM I

ANALYSIS DATA SHEET

120

MW-22S

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528	
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site	
Matrix:	Ground Water	Laboratory ID:	19H0528-06	File ID: B1922538.D
Sampled:	08/08/19 14:10	Prepared:	08/13/19 07:22	Analyzed: 08/14/19 01:37
Solids:		Preparation:	SW-846 5030B	Dilution: 20
Initial/Final:	5 mL / 5 mL			
Batch:	B237875	Sequence:	S039168	Calibration: 1900126
				Instrument: GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone		76	1000	
107-13-1	Acrylonitrile		10	100	
994-05-8	tert-Amyl Methyl Ether (TAME)		2.8	10	
71-43-2	Benzene		3.6	20	
108-86-1	Bromobenzene		3.0	20	
74-97-5	Bromochloromethane		6.4	20	
75-27-4	Bromodichloromethane		3.2	10	
75-25-2	Bromoform		9.2	20	
74-83-9	Bromomethane		16	100	
78-93-3	2-Butanone (MEK)		39	400	
75-65-0	tert-Butyl Alcohol (TBA)		83	400	
104-51-8	n-Butylbenzene		4.2	20	V-05
135-98-8	sec-Butylbenzene		3.2	20	
98-06-6	tert-Butylbenzene		3.4	20	
637-92-3	tert-Butyl Ethyl Ether (TBEE)		3.2	10	
75-15-0	Carbon Disulfide		89	100	
56-23-5	Carbon Tetrachloride		2.2	100	
108-90-7	Chlorobenzene		3.0	20	
124-48-1	Chlorodibromomethane		4.2	10	
75-00-3	Chloroethane		7.0	40	
67-66-3	Chloroform		3.4	40	
74-87-3	Chloromethane		9.0	40	V-05
95-49-8	2-Chlorotoluene		2.4	20	
106-43-4	4-Chlorotoluene		2.8	20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		11	100	
106-93-4	1,2-Dibromoethane (EDB)		3.8	10	
74-95-3	Dibromomethane		7.4	20	
95-50-1	1,2-Dichlorobenzene		3.2	20	
541-73-1	1,3-Dichlorobenzene		2.4	20	
106-46-7	1,4-Dichlorobenzene		2.6	20	

1 - FORM I

ANALYSIS DATA SHEET

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MW-22S

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-06
		File ID:	B1922538.D
Sampled:	08/08/19 14:10	Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 01:37
Solids:		Preparation:	SW-846 5030B
		Dilution:	20
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene		6.2	40	
75-71-8	Dichlorodifluoromethane (Freon 12)		5.2	40	
75-34-3	1,1-Dichloroethane	83	3.2	20	
107-06-2	1,2-Dichloroethane		8.2	20	
75-35-4	1,1-Dichloroethylene	58	6.4	20	
156-59-2	cis-1,2-Dichloroethylene		2.6	20	
156-60-5	trans-1,2-Dichloroethylene		6.2	20	
78-87-5	1,2-Dichloropropane		4.0	20	
142-28-9	1,3-Dichloropropane		2.2	10	
594-20-7	2,2-Dichloropropane		4.0	20	
563-58-6	1,1-Dichloropropene		3.2	40	
10061-01-5	cis-1,3-Dichloropropene		2.6	10	
10061-02-6	trans-1,3-Dichloropropene		4.6	10	
60-29-7	Diethyl Ether		6.8	40	
108-20-3	Diisopropyl Ether (DIPE)		3.4	10	
123-91-1	1,4-Dioxane		450	1000	
100-41-4	Ethylbenzene		2.6	20	
87-68-3	Hexachlorobutadiene		9.4	12	
591-78-6	2-Hexanone (MBK)		30	200	
98-82-8	Isopropylbenzene (Cumene)		3.4	20	
99-87-6	p-Isopropyltoluene (p-Cymene)		4.0	20	
79-20-9	Methyl Acetate		8.4	20	
1634-04-4	Methyl tert-Butyl Ether (MTBE)		5.0	20	
108-87-2	Methyl Cyclohexane		4.0	20	
75-09-2	Methylene Chloride		6.8	100	
108-10-1	4-Methyl-2-pentanone (MIBK)		33	200	
91-20-3	Naphthalene		6.2	40	
103-65-1	n-Propylbenzene		2.6	20	
100-42-5	Styrene		2.2	20	
630-20-6	1,1,1,2-Tetrachloroethane		5.4	20	

1 - FORM I

ANALYSIS DATA SHEET

122

MW-22S

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-06
		File ID:	B1922538.D
Sampled:	08/08/19 14:10	Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 01:37
Solids:		Preparation:	SW-846 5030B
		Dilution:	20
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane		4.4	10	
127-18-4	Tetrachloroethylene		3.6	20	
109-99-9	Tetrahydrofuran		10	200	
108-88-3	Toluene		2.8	20	
87-61-6	1,2,3-Trichlorobenzene		11	100	
120-82-1	1,2,4-Trichlorobenzene		8.0	20	
108-70-3	1,3,5-Trichlorobenzene		6.0	20	
71-55-6	1,1,1-Trichloroethane	540	4.0	20	
79-00-5	1,1,2-Trichloroethane		3.2	20	
79-01-6	Trichloroethylene	380	4.8	20	
75-69-4	Trichlorofluoromethane (Freon 11)		6.6	40	
96-18-4	1,2,3-Trichloropropane		5.0	40	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1200	6.4	20	
95-63-6	1,2,4-Trimethylbenzene		3.6	20	
108-67-8	1,3,5-Trimethylbenzene		2.8	20	
75-01-4	Vinyl Chloride		9.0	40	
108383/106423	m+p Xylene		6.0	40	
95-47-6	o-Xylene		3.4	20	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922538.D
 Acq On : 14 Aug 2019 1:37 am
 Operator :
 Sample : 19H0528-06 @ 20X
 Misc : 20
 ALS Vial : 38 Sample Multiplier: 1

Inst : GCMSVOA2

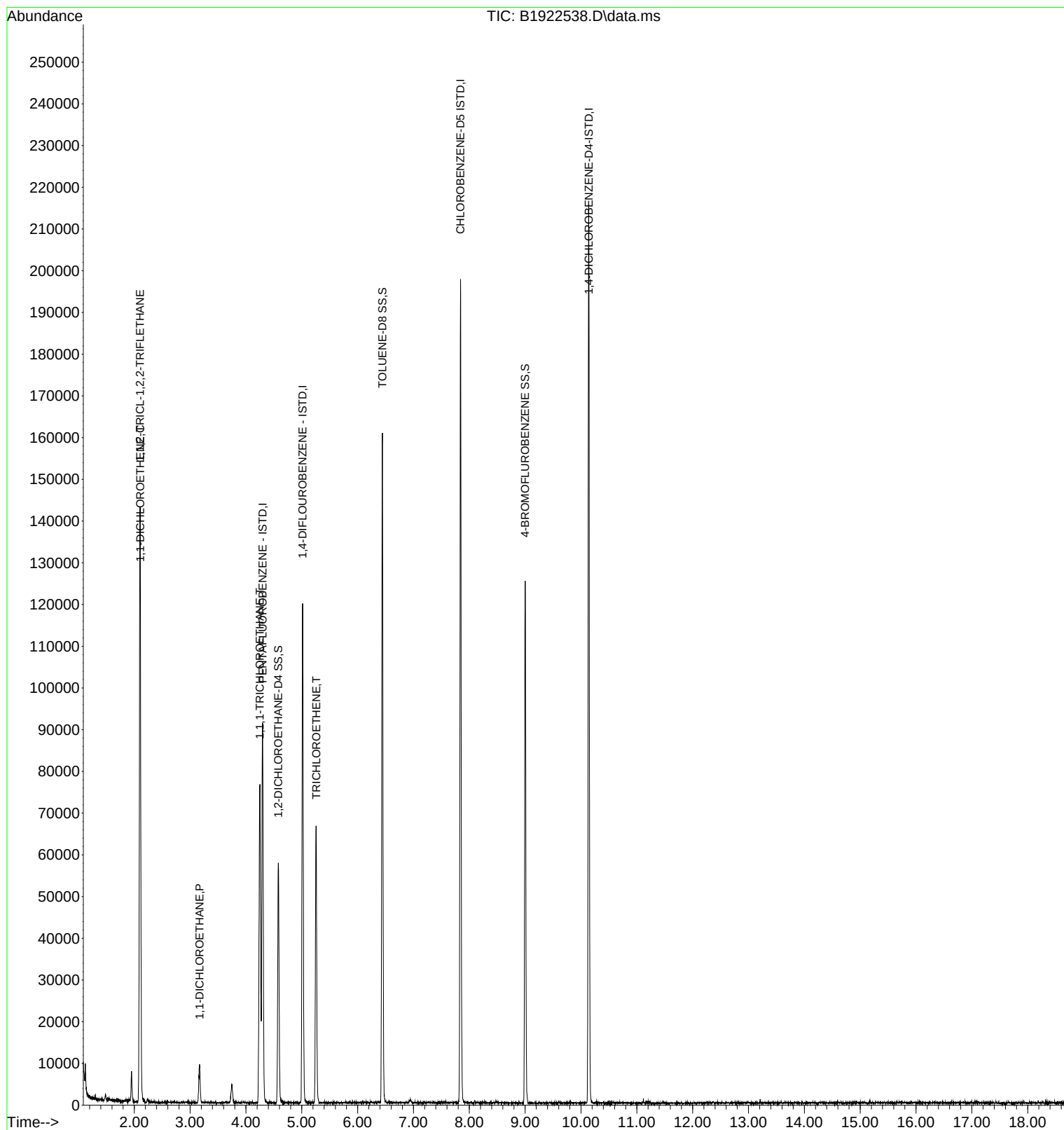
Quant Time: Aug 14 11:14:43 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

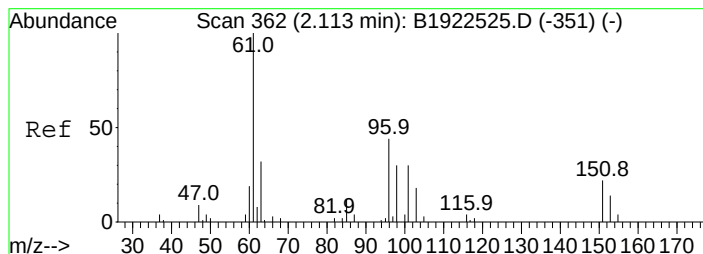
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	52933	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.014	114	72675	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	45828	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.138	152	48998	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.579	65	37699	27.64	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	110.56%
45) TOLUENE-D8 SS	6.444	98	81849	28.78	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	115.12%
66) 4-BROMOFLUROBENZENE SS	8.999	95	34225	25.38	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	101.52%
Target Compounds						
15) 1,1-DICHLOROETHENE	2.110	61	5189	2.90	UG/L	Qvalue 97
16) 1,1,2-TRICL-1,2,2-TRIF...	2.104	101	44927	60.16	UG/L	87
25) 1,1-DICHLOROETHANE	3.170	63	8959	4.16	UG/L #	90
37) 1,1,1-TRICHLOROETHANE	4.250	97	46209	26.96	UG/L	98
47) TRICHLOROETHENE	5.259	95	17524	19.01	UG/L	96

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

124

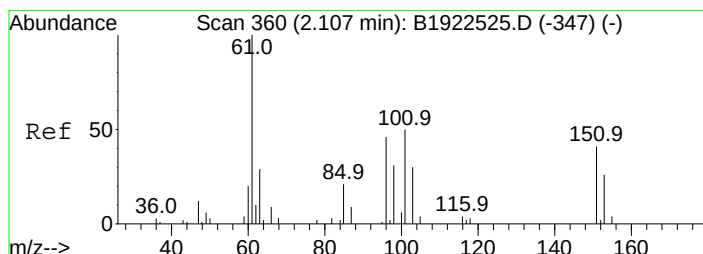
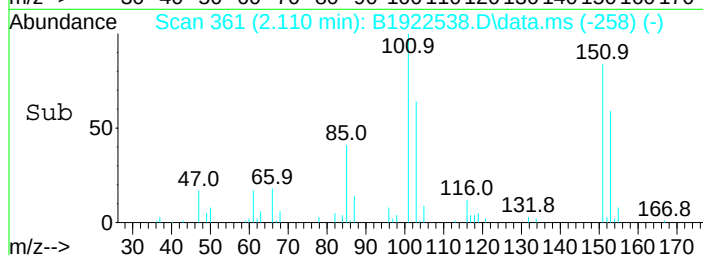
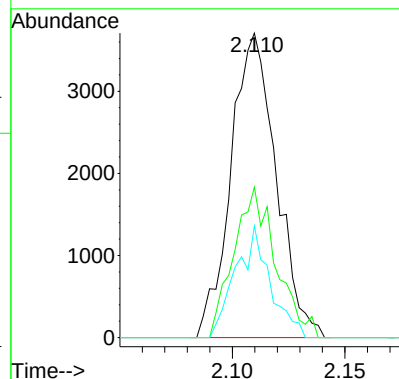
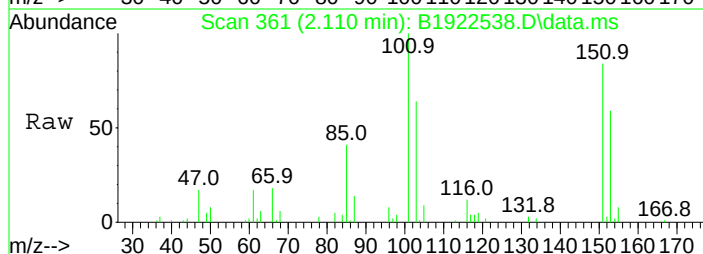
Inst : GCMSVOA2





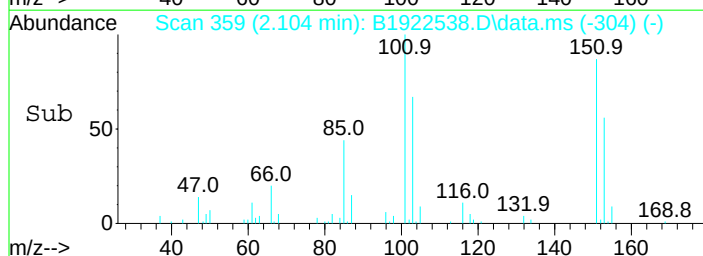
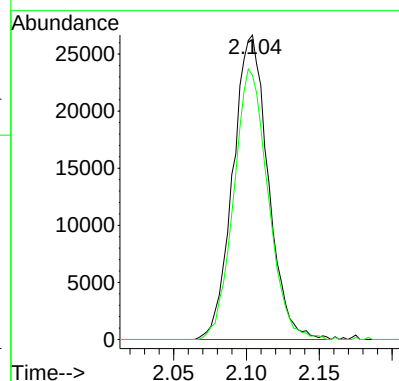
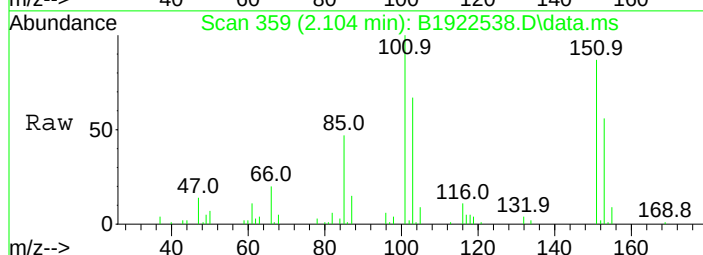
#15
1,1-DICHLOROETHENE
Concen: 2.90 UG/L
RT: 2.110 min Scan# 361
Delta R.T. -0.006 min
Lab File: B1922538.D
Acq: 14 Aug 2019 1:37 am

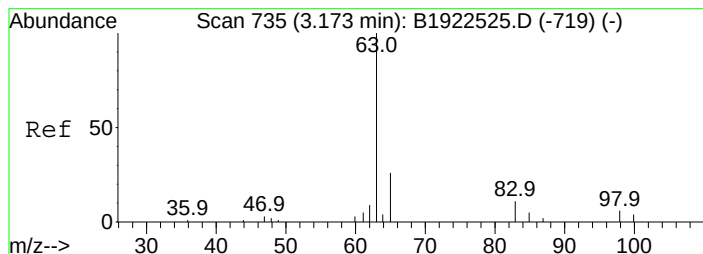
Tgt Ion	Ratio	Lower	Upper
61	100		
96	46.0	36.2	54.4
63	27.9	24.4	36.6



#16
1,1,2-TRICL-1,2,2-TRIFLETHANE
Concen: 60.16 UG/L
RT: 2.104 min Scan# 359
Delta R.T. 0.000 min
Lab File: B1922538.D
Acq: 14 Aug 2019 1:37 am

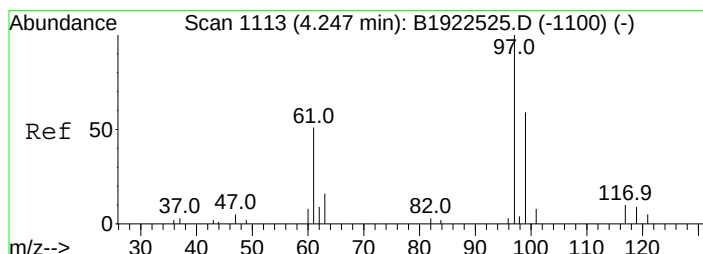
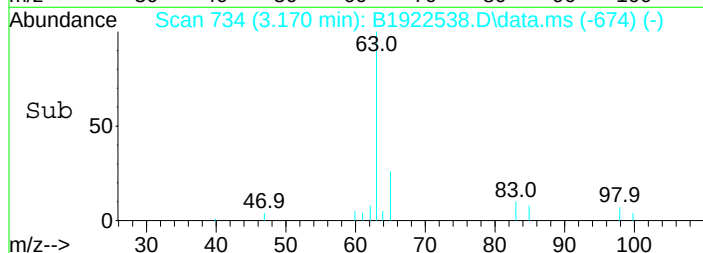
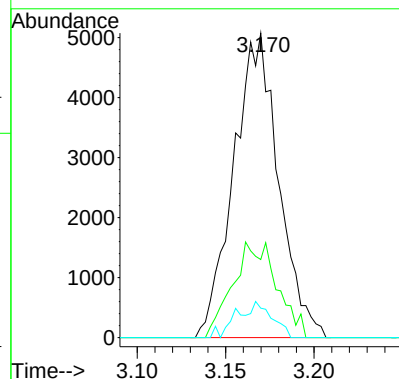
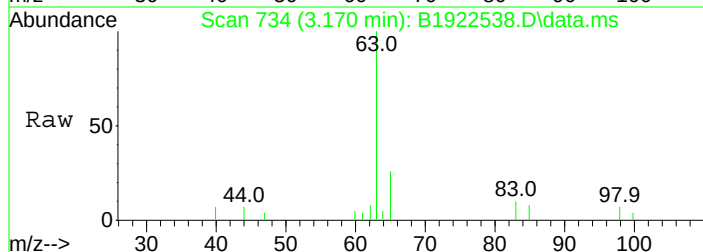
Tgt Ion	Ratio	Lower	Upper
101	100		
151	86.6	60.5	90.7





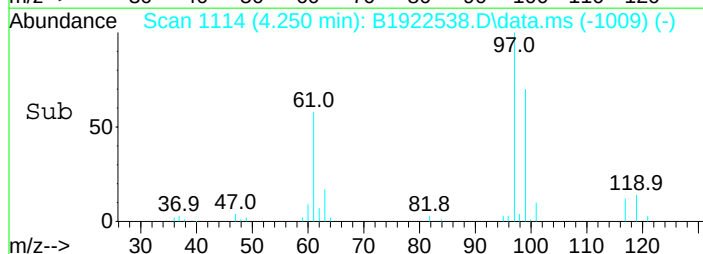
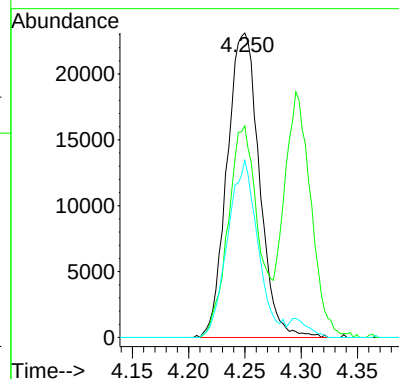
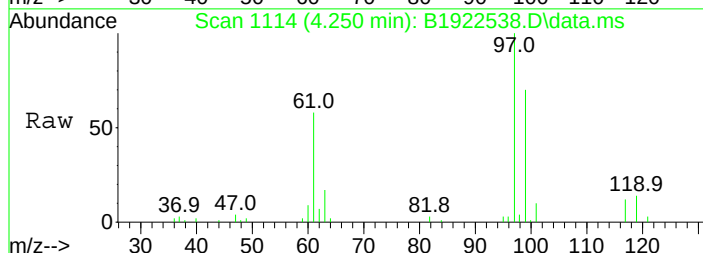
#25
 1,1-DICHLOROETHANE
 Concen: 4.16 UG/L
 RT: 3.170 min Scan# 734
 Delta R.T. -0.000 min
 Lab File: B1922538.D
 Acq: 14 Aug 2019 1:37 am

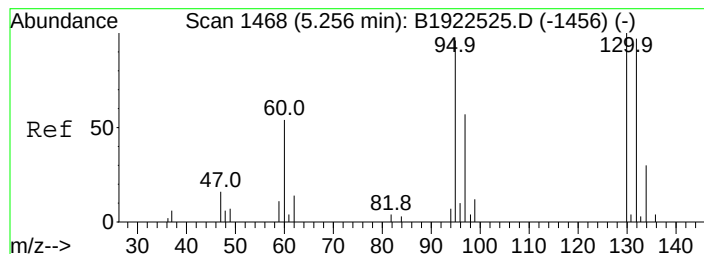
Tgt Ion	Ratio	Resp	Lower	Upper
63	100	8959		
65	30.9	24.0	36.0	
83	0.0	9.8	14.6#	



#37
 1,1,1-TRICHLOROETHANE
 Concen: 26.96 UG/L
 RT: 4.250 min Scan# 1114
 Delta R.T. -0.000 min
 Lab File: B1922538.D
 Acq: 14 Aug 2019 1:37 am

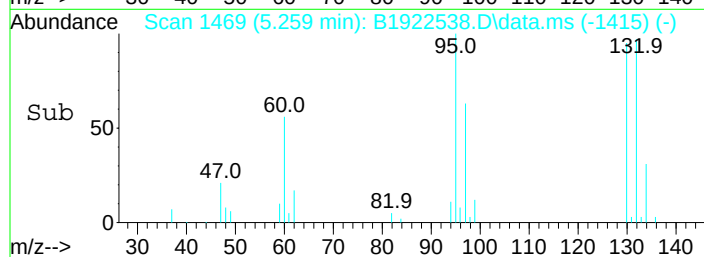
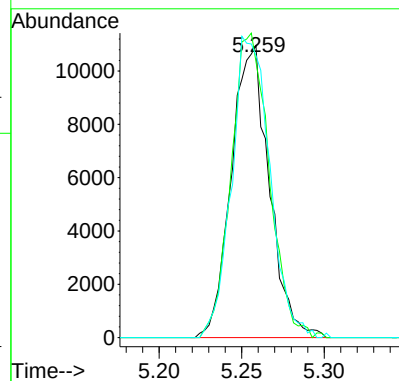
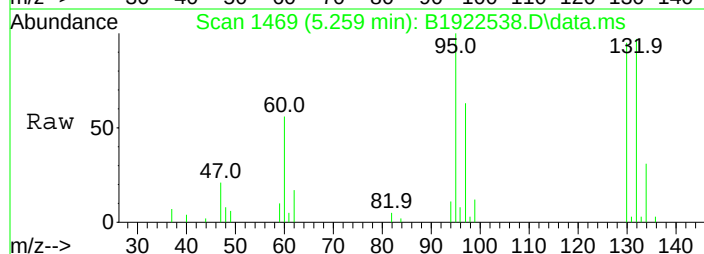
Tgt Ion	Ratio	Resp	Lower	Upper
97	100	46209		
99	64.9	50.8	76.2	
61	54.6	45.1	67.7	





#47
TRICHLOROETHENE
Concen: 19.01 UG/L
RT: 5.259 min Scan# 1469
Delta R.T. 0.003 min
Lab File: B1922538.D
Acq: 14 Aug 2019 1:37 am

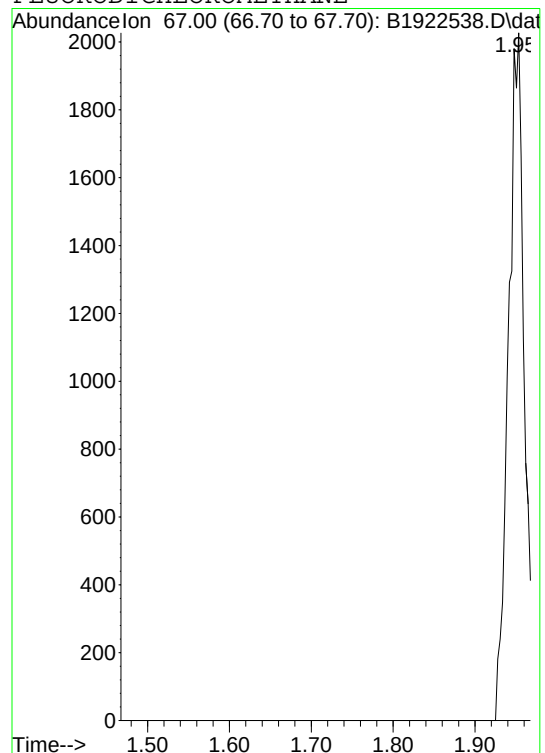
Tgt Ion	95	Resp	17524
Ion	Ratio	Lower	Upper
95	100		
130	104.7	79.8	119.6
132	103.5	80.6	121.0



Data Path : Y:\1\DATA\B081319\
Data File : B1922538.D
Acq On : 14 Aug 2019 1:37 am
Operator :
Sample : 19H0528-06 @ 20X
Misc : 20

Quant Time : Wed Aug 14 11:14:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
FLUORODICHLOROMETHANE



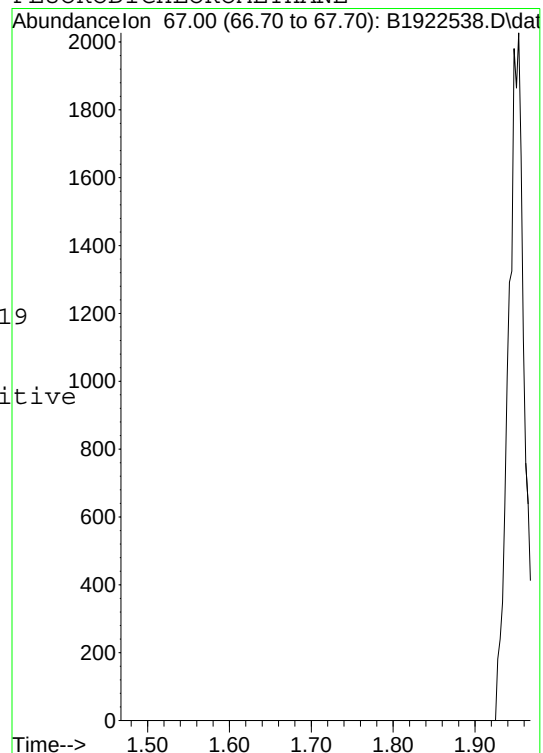
Original Int. Results

RT : 1.95
Area : 2769
Amount: 1.37087

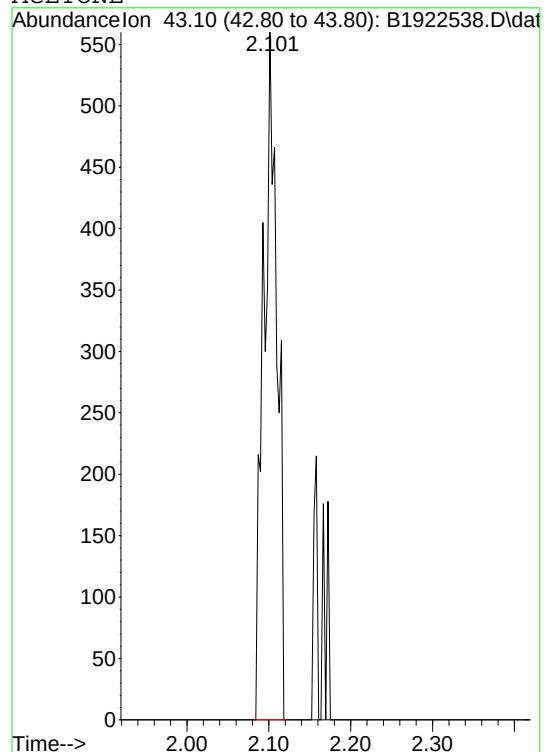
Manual Int. Results

Wed Aug 14 11:14:17 2019
MIuser: BRF
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
FLUORODICHLOROMETHANE



Original Integration
ACETONE



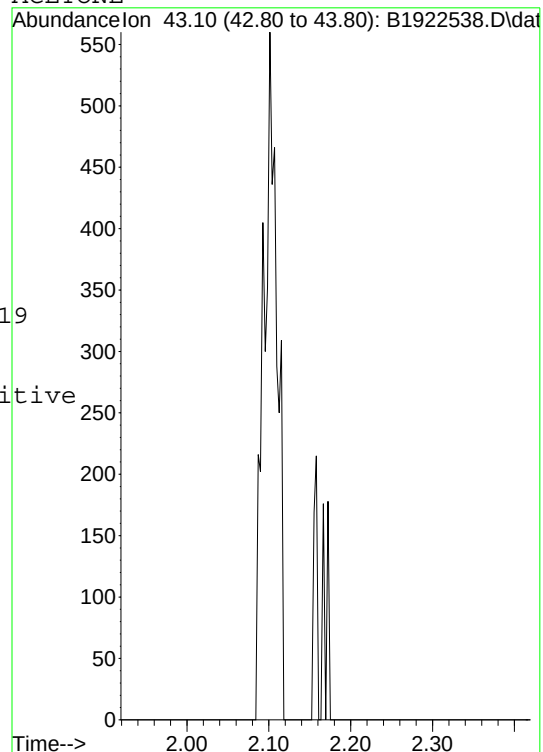
Original Int. Results

RT : 2.10
Area : 645
Amount: 1.31985

Manual Int. Results

Wed Aug 14 11:14:21 2019
MIuser: BRF
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
ACETONE



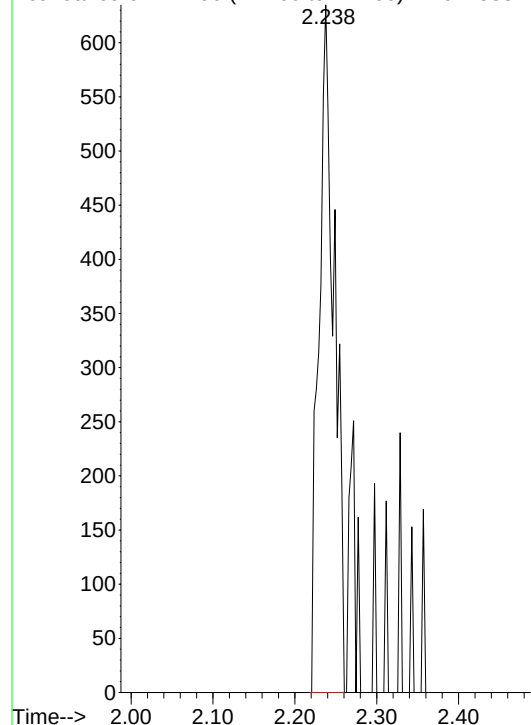
Data Path : Y:\1\DATA\B081319\
Data File : B1922538.D
Acq On : 14 Aug 2019 1:37 am
Operator :
Sample : 19H0528-06 @ 20X
Misc : 20

Quant Time : Wed Aug 14 11:14:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

IODOMETHANE

Abundance on 141.90 (141.60 to 142.60): B1922538.D



Original Int. Results

RT : 2.24
Area : 831
Amount: 0.650101

Manual Int. Results

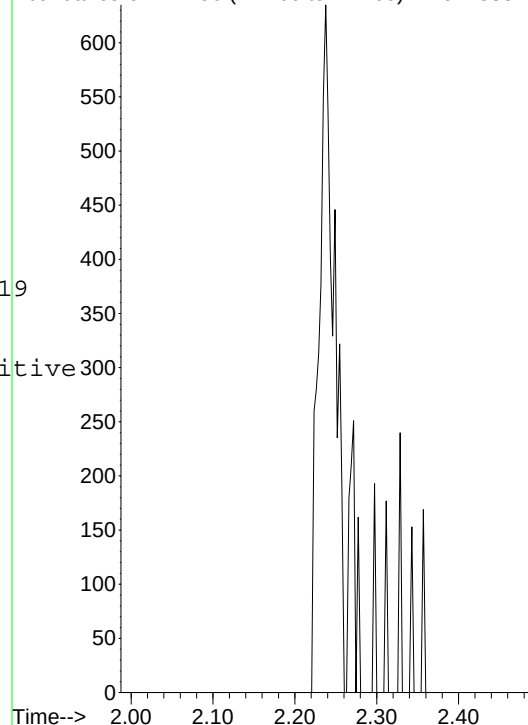
Wed Aug 14 11:14:24 2019

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

Manual Integration

IODOMETHANE

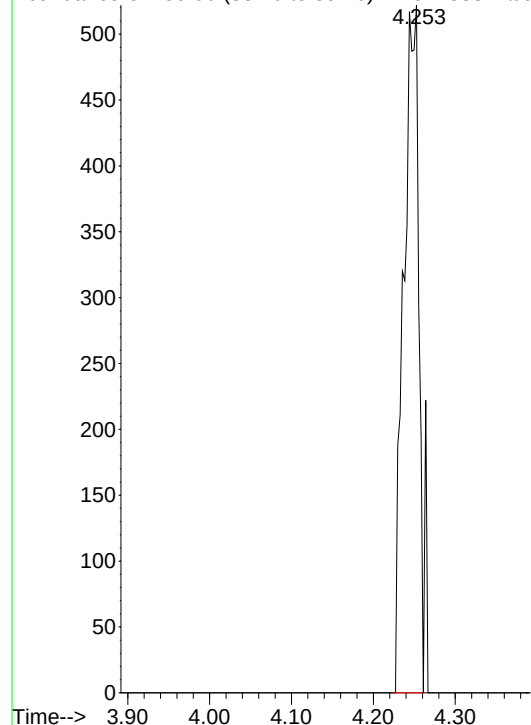
Abundance on 141.90 (141.60 to 142.60): B1922538.D



Original Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922538.D\data



Original Int. Results

RT : 4.25
Area : 663
Amount: 0.612668

Manual Int. Results

Wed Aug 14 11:14:39 2019

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

Manual Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922538.D\data



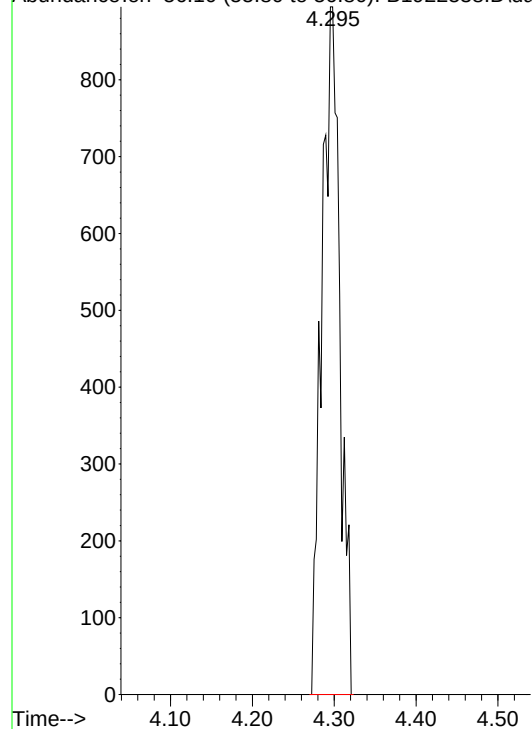
Data Path : Y:\1\DATA\B081319\
Data File : B1922538.D
Acq On : 14 Aug 2019 1:37 am
Operator :
Sample : 19H0528-06 @ 20X
Misc : 20

Quant Time : Wed Aug 14 11:14:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922538.D\data



Original Int. Results

RT : 4.30
Area : 1379
Amount: 0.61755

Manual Int. Results

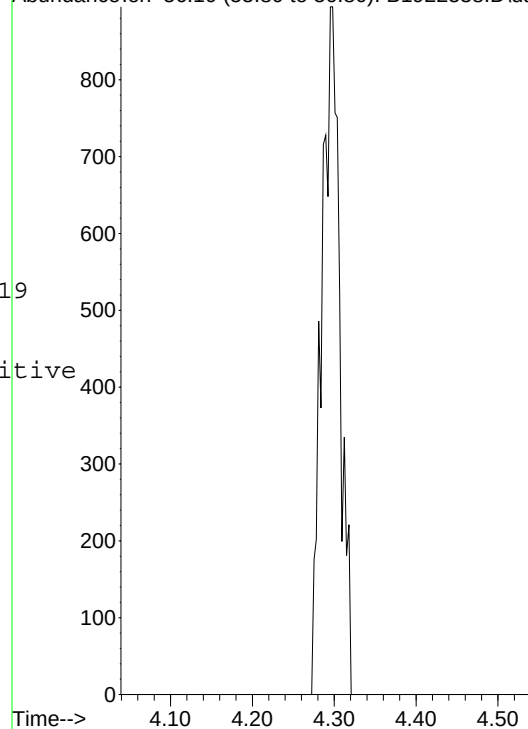
Wed Aug 14 11:14:42 2019

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

Manual Integration

CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922538.D\data



1 - FORM I

ANALYSIS DATA SHEET

131

Blind Duplicate

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-07
		File ID:	B1922539.D
Sampled:	08/08/19 00:00	Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 02:08
Solids:		Preparation:	SW-846 5030B
		Dilution:	20
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone		76	1000	
107-13-1	Acrylonitrile		10	100	
994-05-8	tert-Amyl Methyl Ether (TAME)		2.8	10	
71-43-2	Benzene		3.6	20	
108-86-1	Bromobenzene		3.0	20	
74-97-5	Bromochloromethane		6.4	20	
75-27-4	Bromodichloromethane		3.2	10	
75-25-2	Bromoform		9.2	20	
74-83-9	Bromomethane		16	100	
78-93-3	2-Butanone (MEK)		39	400	
75-65-0	tert-Butyl Alcohol (TBA)		83	400	
104-51-8	n-Butylbenzene		4.2	20	V-05
135-98-8	sec-Butylbenzene		3.2	20	
98-06-6	tert-Butylbenzene		3.4	20	
637-92-3	tert-Butyl Ethyl Ether (TBEE)		3.2	10	
75-15-0	Carbon Disulfide		89	100	
56-23-5	Carbon Tetrachloride		2.2	100	
108-90-7	Chlorobenzene		3.0	20	
124-48-1	Chlorodibromomethane		4.2	10	
75-00-3	Chloroethane		7.0	40	
67-66-3	Chloroform		3.4	40	
74-87-3	Chloromethane		9.0	40	V-05
95-49-8	2-Chlorotoluene		2.4	20	
106-43-4	4-Chlorotoluene		2.8	20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		11	100	
106-93-4	1,2-Dibromoethane (EDB)		3.8	10	
74-95-3	Dibromomethane		7.4	20	
95-50-1	1,2-Dichlorobenzene		3.2	20	
541-73-1	1,3-Dichlorobenzene		2.4	20	
106-46-7	1,4-Dichlorobenzene		2.6	20	

1 - FORM I

ANALYSIS DATA SHEET

132

Blind Duplicate

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-07
		File ID:	B1922539.D
Sampled:	08/08/19 00:00	Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 02:08
Solids:		Preparation:	SW-846 5030B
		Dilution:	20
Initial/Final:	5 mL / 5 mL		
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene		6.2	40	
75-71-8	Dichlorodifluoromethane (Freon 12)		5.2	40	
75-34-3	1,1-Dichloroethane	82	3.2	20	
107-06-2	1,2-Dichloroethane		8.2	20	
75-35-4	1,1-Dichloroethylene	56	6.4	20	
156-59-2	cis-1,2-Dichloroethylene		2.6	20	
156-60-5	trans-1,2-Dichloroethylene		6.2	20	
78-87-5	1,2-Dichloropropane		4.0	20	
142-28-9	1,3-Dichloropropane		2.2	10	
594-20-7	2,2-Dichloropropane		4.0	20	
563-58-6	1,1-Dichloropropene		3.2	40	
10061-01-5	cis-1,3-Dichloropropene		2.6	10	
10061-02-6	trans-1,3-Dichloropropene		4.6	10	
60-29-7	Diethyl Ether		6.8	40	
108-20-3	Diisopropyl Ether (DIPE)		3.4	10	
123-91-1	1,4-Dioxane		450	1000	
100-41-4	Ethylbenzene		2.6	20	
87-68-3	Hexachlorobutadiene		9.4	12	
591-78-6	2-Hexanone (MBK)		30	200	
98-82-8	Isopropylbenzene (Cumene)		3.4	20	
99-87-6	p-Isopropyltoluene (p-Cymene)		4.0	20	
79-20-9	Methyl Acetate		8.4	20	
1634-04-4	Methyl tert-Butyl Ether (MTBE)		5.0	20	
108-87-2	Methyl Cyclohexane		4.0	20	
75-09-2	Methylene Chloride		6.8	100	
108-10-1	4-Methyl-2-pentanone (MIBK)		33	200	
91-20-3	Naphthalene		6.2	40	
103-65-1	n-Propylbenzene		2.6	20	
100-42-5	Styrene		2.2	20	
630-20-6	1,1,1,2-Tetrachloroethane		5.4	20	

1 - FORM I

ANALYSIS DATA SHEET

133

Blind Duplicate

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528	
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site	
Matrix:	Ground Water	Laboratory ID:	19H0528-07	File ID: B1922539.D
Sampled:	08/08/19 00:00	Prepared:	08/13/19 07:22	Analyzed: 08/14/19 02:08
Solids:		Preparation:	SW-846 5030B	Dilution: 20
Initial/Final:	5 mL / 5 mL			
Batch:	B237875	Sequence:	S039168	Calibration: 1900126
				Instrument: GCMSVOA2

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane		4.4	10	
127-18-4	Tetrachloroethylene		3.6	20	
109-99-9	Tetrahydrofuran		10	200	
108-88-3	Toluene		2.8	20	
87-61-6	1,2,3-Trichlorobenzene		11	100	
120-82-1	1,2,4-Trichlorobenzene		8.0	20	
108-70-3	1,3,5-Trichlorobenzene		6.0	20	
71-55-6	1,1,1-Trichloroethane	530	4.0	20	
79-00-5	1,1,2-Trichloroethane		3.2	20	
79-01-6	Trichloroethylene	370	4.8	20	
75-69-4	Trichlorofluoromethane (Freon 11)		6.6	40	
96-18-4	1,2,3-Trichloropropane		5.0	40	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1300	6.4	20	
95-63-6	1,2,4-Trimethylbenzene		3.6	20	
108-67-8	1,3,5-Trimethylbenzene		2.8	20	
75-01-4	Vinyl Chloride		9.0	40	
108383/106423	m+p Xylene		6.0	40	
95-47-6	o-Xylene		3.4	20	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922539.D
 Acq On : 14 Aug 2019 2:08 am
 Operator :
 Sample : 19H0528-07 @ 20X
 Misc : 20
 ALS Vial : 39 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 11:23:49 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.295	168	52569	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.014	114	74204	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	46987	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.141	152	48412	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	38068	28.10	UG/L	0.00
Spiked Amount 25.000	Range	70 - 130	Recovery	=	112.40%	
45) TOLUENE-D8 SS	6.441	98	82252	28.32	UG/L	0.00
Spiked Amount 25.000	Range	70 - 130	Recovery	=	113.28%	
66) 4-BROMOFLUROBENZENE SS	8.999	95	34740	25.12	UG/L	0.00
Spiked Amount 25.000	Range	70 - 130	Recovery	=	100.48%	
Target Compounds						Qvalue
15) 1,1-DICHLOROETHENE	2.110	61	4954	2.78	UG/L	97
16) 1,1,2-TRICL-1,2,2-TRIF...	2.099	101	47194	63.63	UG/L	88
25) 1,1-DICHLOROETHANE	3.164	63	8798	4.12	UG/L #	95
37) 1,1,1-TRICHLOROETHANE	4.244	97	45214	26.57	UG/L	97
47) TRICHLOROETHENE	5.256	95	17359	18.44	UG/L	99

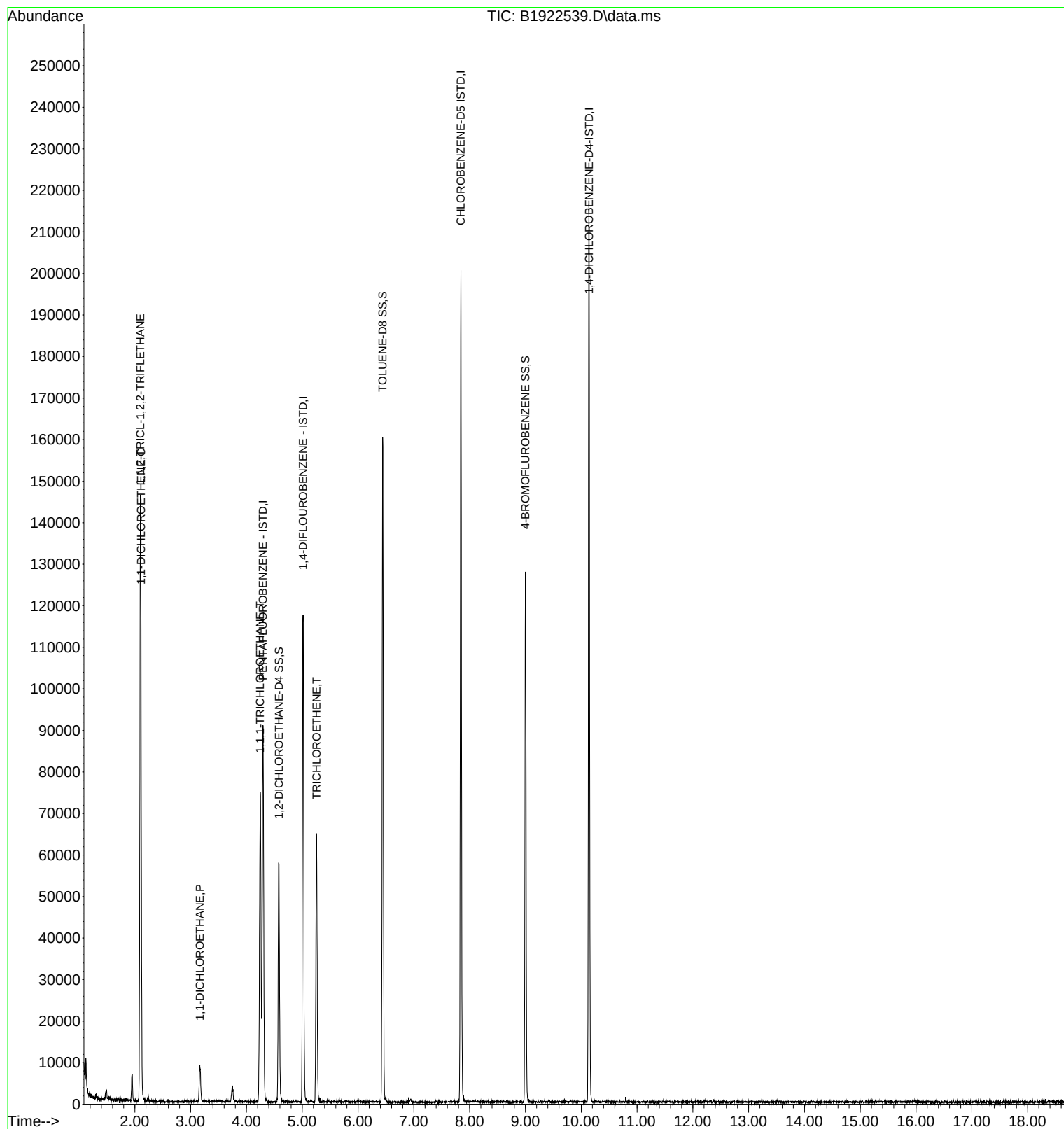
(#) = qualifier out of range (m) = manual integration (+) = signals summed

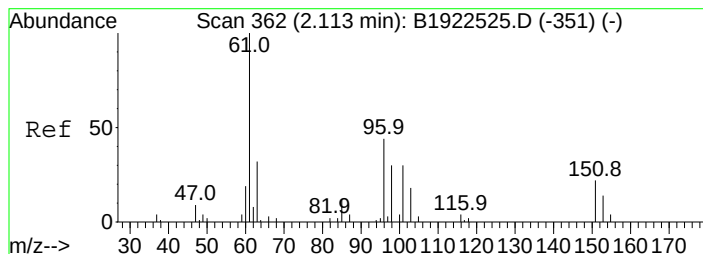
Data Path : Y:\1\DATA\B081319\
Data File : B1922539.D
Acq On : 14 Aug 2019 2:08 am
Operator :
Sample : 19H0528-07 @ 20X
Misc : 20
ALS Vial : 39 Sample Multiplier: 1

135

Inst : GCMSVOA2

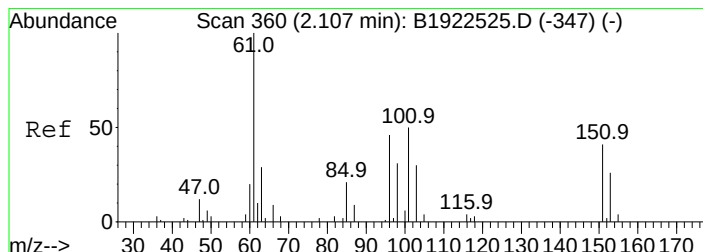
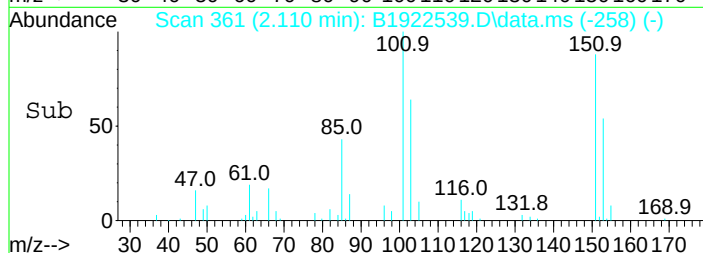
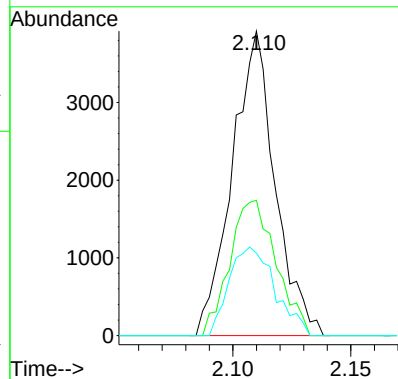
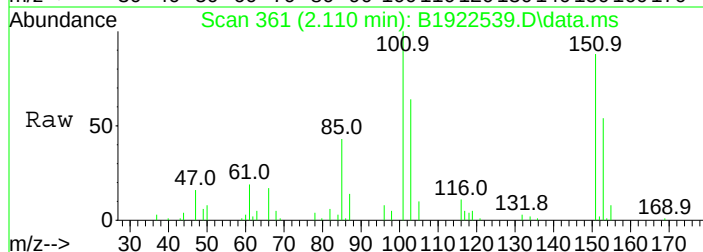
Quant Time: Aug 14 11:23:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
Quant Title : 8260 CALIBRATION VOAMS 5973
QLast Update : Fri Apr 19 05:25:51 2019
Response via : Initial Calibration





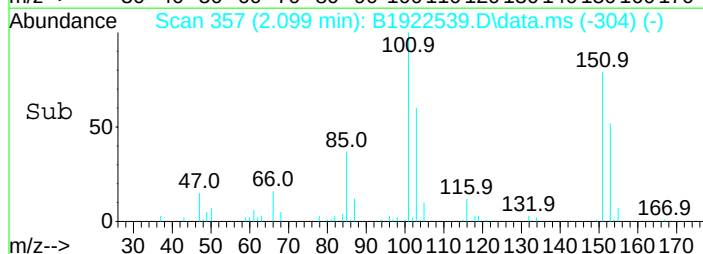
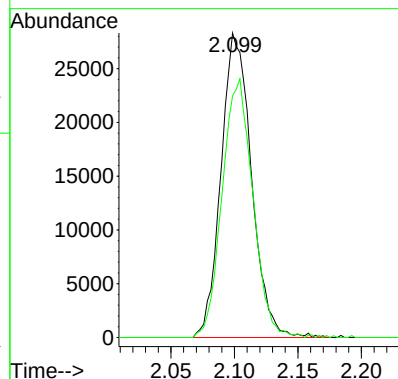
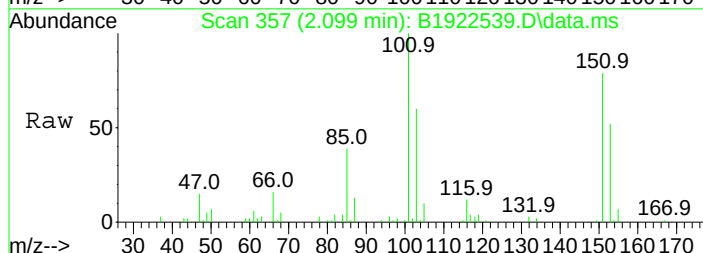
#15
1,1-DICHLOROETHENE
Concen: 2.78 UG/L
RT: 2.110 min Scan# 361
Delta R.T. -0.006 min
Lab File: B1922539.D
Acq: 14 Aug 2019 2:08 am

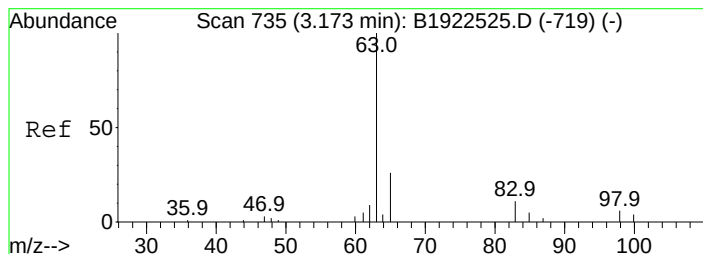
Tgt Ion:	61	Resp:	4954
Ion Ratio	Lower	Upper	
61	100		
96	48.0	36.2	54.4
63	31.2	24.4	36.6



#16
1,1,2-TRICL-1,2,2-TRIFLETHANE
Concen: 63.63 UG/L
RT: 2.099 min Scan# 357
Delta R.T. -0.005 min
Lab File: B1922539.D
Acq: 14 Aug 2019 2:08 am

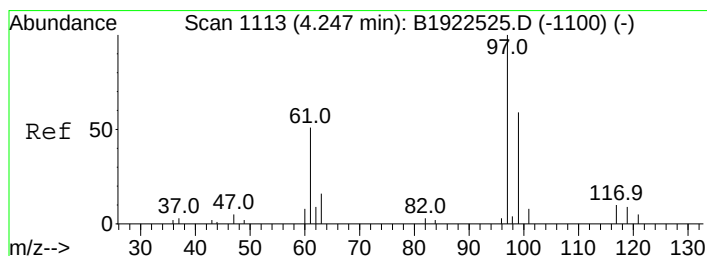
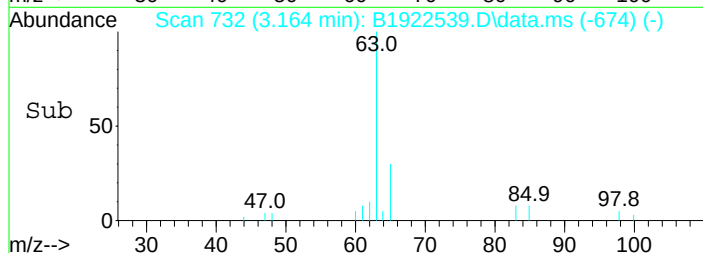
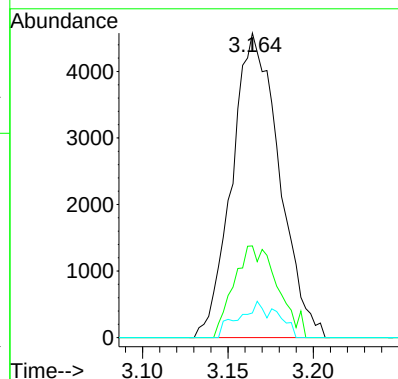
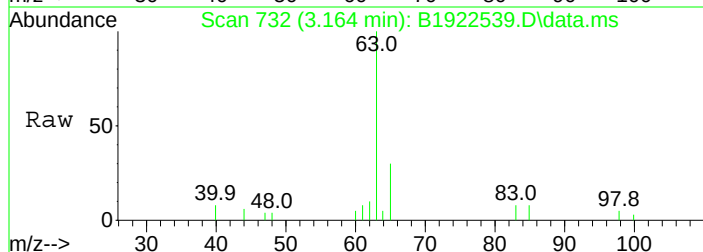
Tgt Ion:	101	Resp:	47194
Ion Ratio	Lower	Upper	
101	100		
151	85.6	60.5	90.7





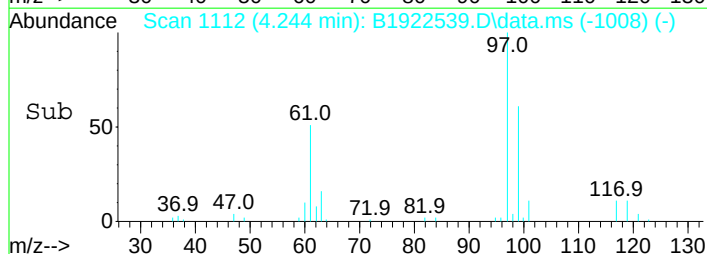
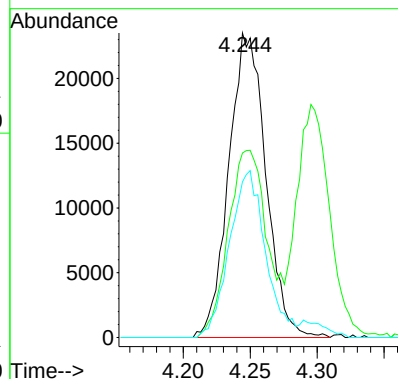
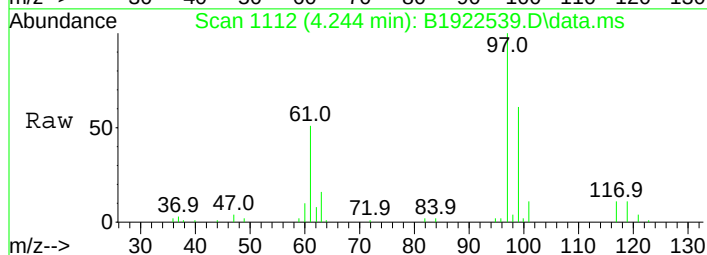
#25
1,1-DICHLOROETHANE
Concen: 4.12 UG/L
RT: 3.164 min Scan# 732
Delta R.T. -0.006 min
Lab File: B1922539.D
Acq: 14 Aug 2019 2:08 am

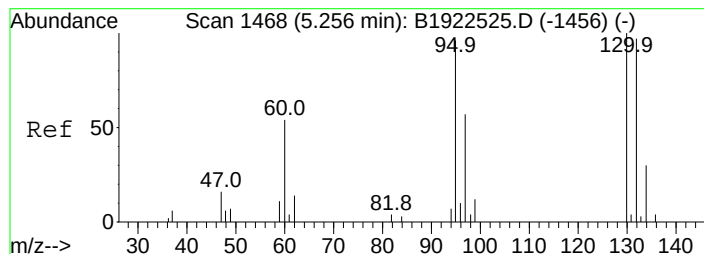
Tgt Ion	63	Resp	8798
Ion Ratio	Lower	Upper	
63	100		
65	27.9	24.0	36.0
83	9.6	9.8	14.6#



#37
1,1,1-TRICHLOROETHANE
Concen: 26.57 UG/L
RT: 4.244 min Scan# 1112
Delta R.T. -0.006 min
Lab File: B1922539.D
Acq: 14 Aug 2019 2:08 am

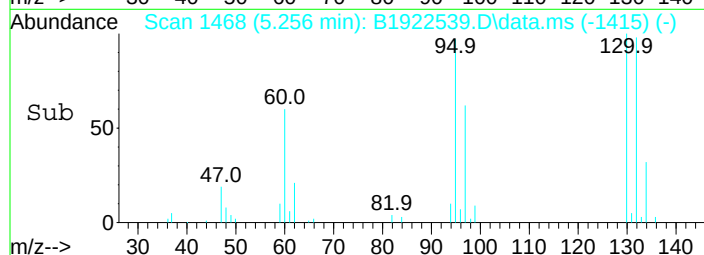
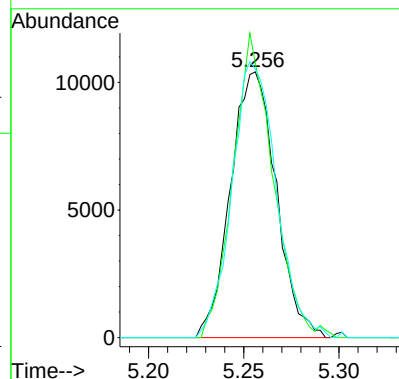
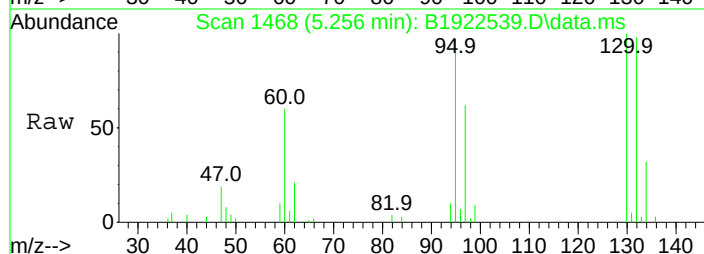
Tgt Ion	97	Resp	45214
Ion Ratio	Lower	Upper	
97	100		
99	65.2	50.8	76.2
61	53.6	45.1	67.7





#47
TRICHLOROETHENE
Concen: 18.44 UG/L
RT: 5.256 min Scan# 1468
Delta R.T. -0.000 min
Lab File: B1922539.D
Acq: 14 Aug 2019 2:08 am

Tgt Ion:	95	Resp:	17359
Ion Ratio	Lower	Upper	
95	100		
130	100.6	79.8	119.6
132	101.0	80.6	121.0

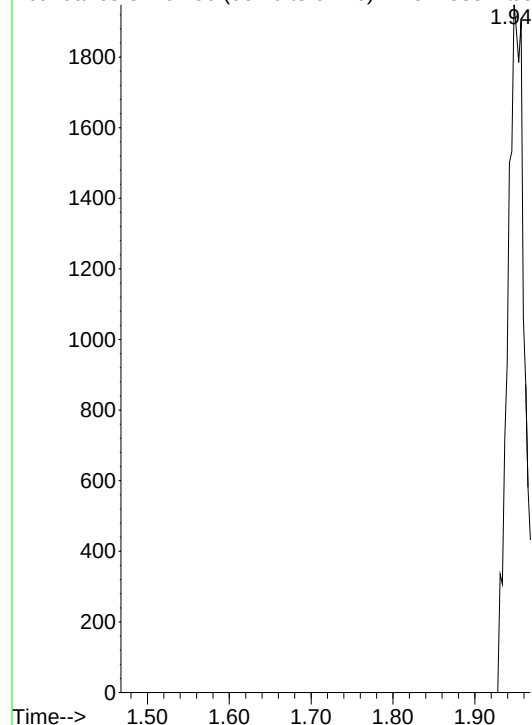


Data Path : Y:\1\DATA\B081319\
Data File : B1922539.D
Acq On : 14 Aug 2019 2:08 am
Operator :
Sample : 19H0528-07 @ 20X
Misc : 20

Quant Time : Wed Aug 14 11:23:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
FLUORODICHLOROMETHANE

Abundance on 67.00 (66.70 to 67.70): B1922539.D\data



Original Int. Results

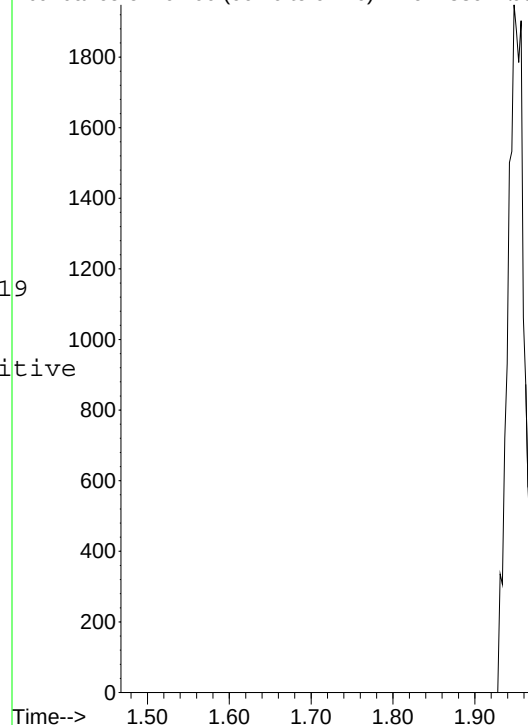
RT : 1.95
Area : 2776
Amount: 1.38385

Manual Int. Results

Wed Aug 14 11:23:20 2019
MIuser: BRF
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

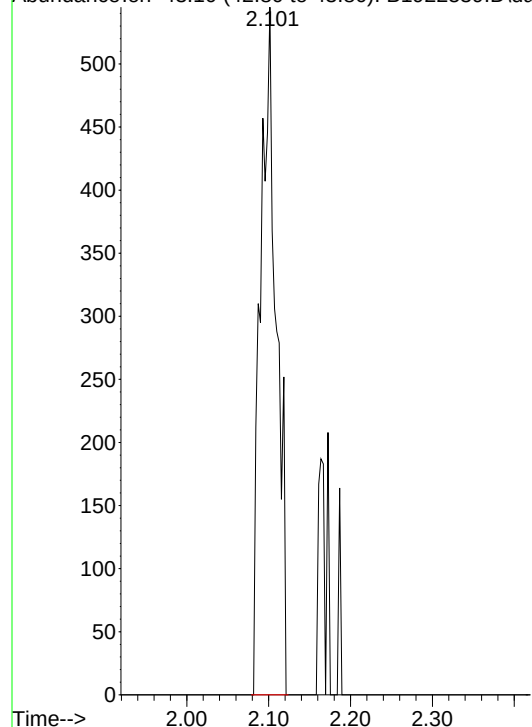
Manual Integration
FLUORODICHLOROMETHANE

Abundance on 67.00 (66.70 to 67.70): B1922539.D\data



Original Integration
ACETONE

Abundance on 43.10 (42.80 to 43.80): B1922539.D\data



Original Int. Results

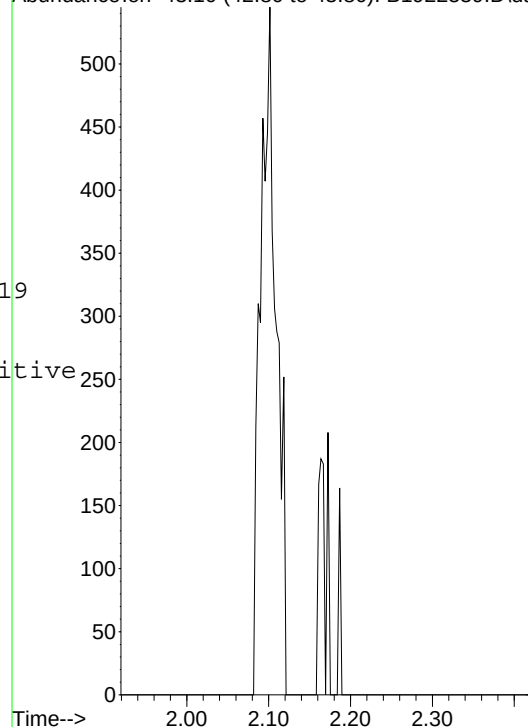
RT : 2.10
Area : 737
Amount: 1.51855

Manual Int. Results

Wed Aug 14 11:23:26 2019
MIuser: BRF
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration
ACETONE

Abundance on 43.10 (42.80 to 43.80): B1922539.D\data



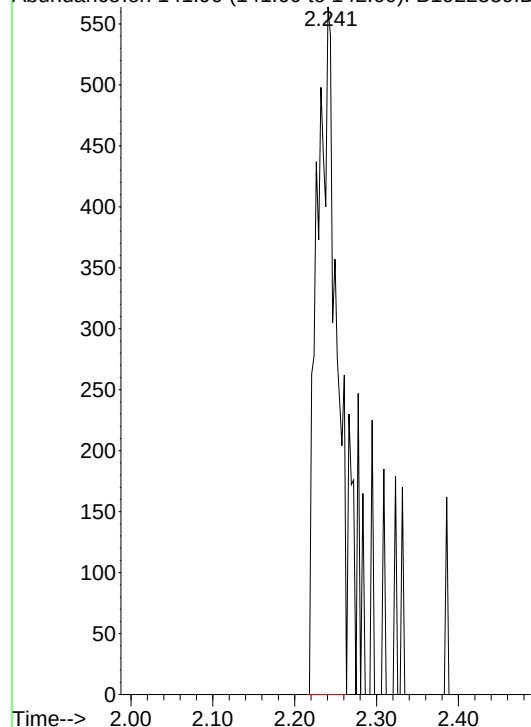
Data Path : Y:\1\DATA\B081319\
Data File : B1922539.D
Acq On : 14 Aug 2019 2:08 am
Operator :
Sample : 19H0528-07 @ 20X
Misc : 20

Quant Time : Wed Aug 14 11:23:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

IODOMETHANE

Abundance on 141.90 (141.60 to 142.60): B1922539.D



Original Int. Results

RT : 2.24
Area : 928
Amount: 0.731013

Manual Int. Results

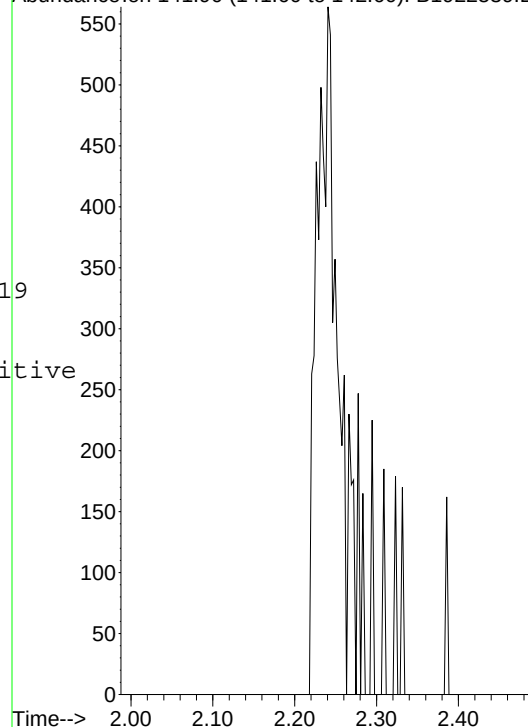
Wed Aug 14 11:23:30 2019

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

Manual Integration

IODOMETHANE

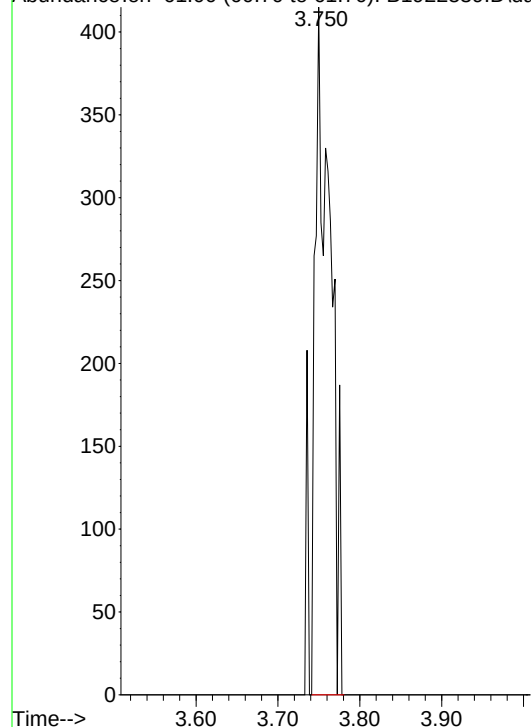
Abundance on 141.90 (141.60 to 142.60): B1922539.D



Original Integration

CIS-1,2-DICHLOROETHENE

Abundance on 61.00 (60.70 to 61.70): B1922539.D\data



Original Int. Results

RT : 3.75
Area : 530
Amount: 0.251528

Manual Int. Results

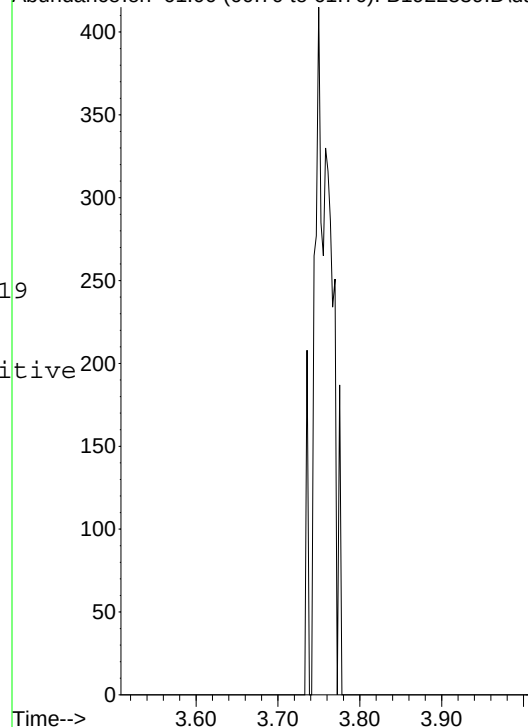
Wed Aug 14 11:23:38 2019

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

Manual Integration

CIS-1,2-DICHLOROETHENE

Abundance on 61.00 (60.70 to 61.70): B1922539.D\data

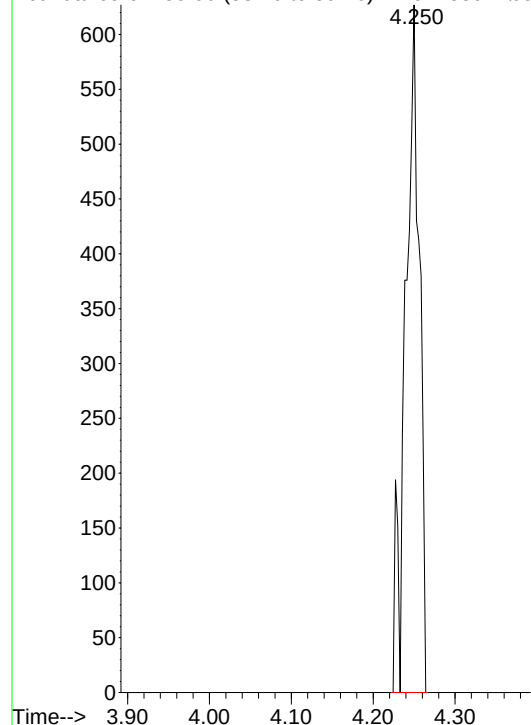


Data Path : Y:\1\DATA\B081319\
Data File : B1922539.D
Acq On : 14 Aug 2019 2:08 am
Operator :
Sample : 19H0528-07 @ 20X
Misc : 20

Quant Time : Wed Aug 14 11:23:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922539.D\data



Original Int. Results

RT : 4.25
Area : 738
Amount: 0.686697

Manual Int. Results

Wed Aug 14 11:23:41 2019

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

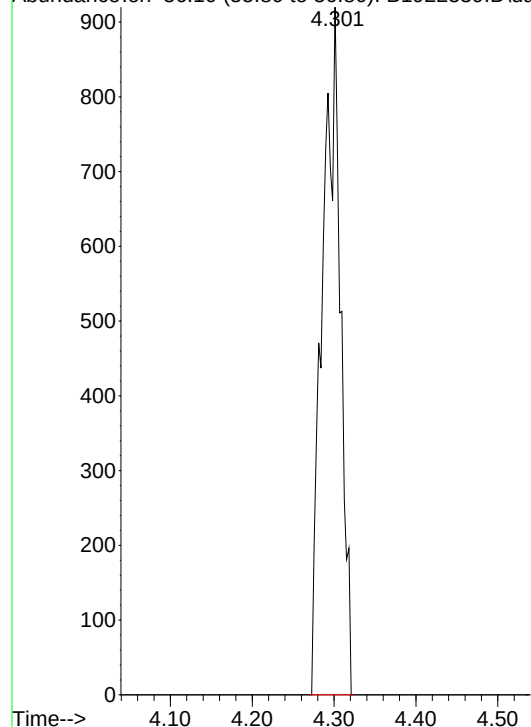
Manual Integration
T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922539.D\data



Original Integration
CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922539.D\data



Original Int. Results

RT : 4.30
Area : 1410
Amount: 0.635805

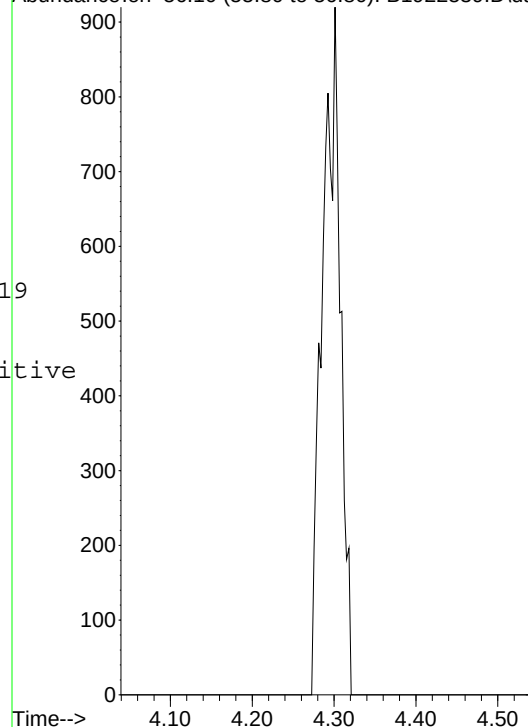
Manual Int. Results

Wed Aug 14 11:23:44 2019

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

Manual Integration
CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922539.D\data



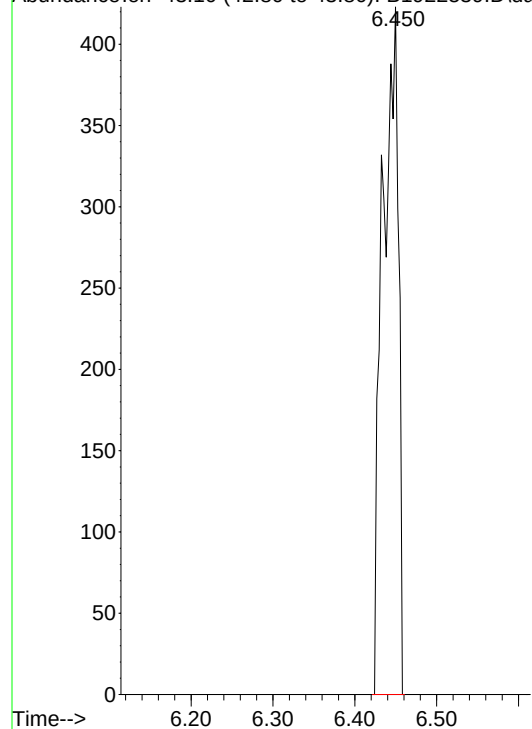
Data Path : Y:\1\DATA\B081319\
Data File : B1922539.D
Acq On : 14 Aug 2019 2:08 am
Operator :
Sample : 19H0528-07 @ 20X
Misc : 20

Quant Time : Wed Aug 14 11:23:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

MIBK

Abundance on 43.10 (42.80 to 43.80): B1922539.D\data



Original Int. Results

RT : 6.45
Area : 568
Amount: 0.42561

Manual Int. Results

Wed Aug 14 11:23:48 2019

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

Manual Integration

MIBK

Abundance on 43.10 (42.80 to 43.80): B1922539.D\data



QC DATA

2 - FORM II
SYSTEM MONITORING COMPOUND SUMMARY
SW-846 8260C

144

Laboratory: Con-Test Analytical Laboratory

SDG: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Instrument: GCMSVOA2

	1,2-DCA-d4 (70% - 130%)	BFB (70% - 130%)	TOL-d8 (70% - 130%)
19H0528-01	110	99.2	110
19H0528-02	104	99.8	113
19H0528-03	104	96.7	111
19H0528-04	109	97.2	110
19H0528-05	111	103	110
19H0528-06	111	102	115
19H0528-07	112	100	113
B237875-BLK1	110	98.1	111
B237875-BS1	104	108	105
B237875-BSD1	105	107	108
B237875-MS1	101	111	107
B237875-MSD1	106	109	107

2 - FORM II
SYSTEM MONITORING COMPOUND SUMMARY
SW-846 8260C

145

Laboratory:	Con-Test Analytical Laboratory	SDG:	19H0528
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%)
19H0528-04RE1	109	93.7	98.4
B237978-BLK1	109	90.6	97.2
B237978-BS1	107	94.8	102
B237978-BSD1	110	94.1	101

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-22R

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Analysis: SW-846 8260C

Batch: B237875

Preparation: SW-846 5030B

% Solids:

Laboratory ID: B237875-MS1

Initial/Final: 5 mL / 5 mL

Sample Lab ID: 19H0528-04

Column:

ANALYTE	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC.	QC LIMITS REC.
Acetone	5000	ND	4000	80.0	70 - 130
Acrylonitrile	500	ND	470	94.1	70 - 130
tert-Amyl Methyl Ether (TAME)	500	ND	424	84.7	70 - 130
Benzene	500	ND	472	94.3	70 - 130
Bromobenzene	500	ND	550	110	70 - 130
Bromochloromethane	500	ND	582	116	70 - 130
Bromodichloromethane	500	ND	561	112	70 - 130
Bromoform	500	ND	543	109	70 - 130
Bromomethane	500	ND	242	48.4	* 70 - 130
2-Butanone (MEK)	5000	ND	4210	84.2	70 - 130
tert-Butyl Alcohol (TBA)	5000	ND	4330	86.7	70 - 130
n-Butylbenzene	500	ND	408	81.7	70 - 130
sec-Butylbenzene	500	ND	446	89.1	70 - 130
tert-Butylbenzene	500	ND	494	98.8	70 - 130
tert-Butyl Ethyl Ether (TBEE)	500	ND	449	89.8	70 - 130
Carbon Disulfide	500	ND	483	96.6	70 - 130
Carbon Tetrachloride	500	ND	608	122	70 - 130
Chlorobenzene	500	ND	558	112	70 - 130
Chlorodibromomethane	500	ND	616	123	70 - 130
Chloroethane	500	ND	476	95.3	70 - 130
Chloroform	500	ND	508	102	70 - 130
Chloromethane	500	ND	272	54.5	* 70 - 130
2-Chlorotoluene	500	ND	516	103	70 - 130
4-Chlorotoluene	500	ND	515	103	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	500	ND	457	91.4	70 - 130
1,2-Dibromoethane (EDB)	500	ND	555	111	70 - 130
Dibromomethane	500	ND	583	117	70 - 130
1,2-Dichlorobenzene	500	ND	507	101	70 - 130
1,3-Dichlorobenzene	500	ND	500	100	70 - 130
1,4-Dichlorobenzene	500	ND	502	100	70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-22R

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Analysis: SW-846 8260C

Batch: B237875

Preparation: SW-846 5030B

% Solids:

Laboratory ID: B237875-MS1

Initial/Final: 5 mL / 5 mL

Sample Lab ID: 19H0528-04

Column:

ANALYTE	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC.	QC LIMITS REC.
trans-1,4-Dichloro-2-butene	500	ND	433	86.6	70 - 130
Dichlorodifluoromethane (Freon 12)	500	ND	537	107	70 - 130
1,1-Dichloroethane	500	380	898	104	70 - 130
1,2-Dichloroethane	500	ND	609	122	70 - 130
1,1-Dichloroethylene	500	326	838	102	70 - 130
cis-1,2-Dichloroethylene	500	ND	507	101	70 - 130
trans-1,2-Dichloroethylene	500	ND	526	105	70 - 130
1,2-Dichloropropane	500	ND	544	109	70 - 130
1,3-Dichloropropane	500	ND	514	103	70 - 130
2,2-Dichloropropane	500	ND	386	77.2	70 - 130
1,1-Dichloropropene	500	ND	504	101	70 - 130
cis-1,3-Dichloropropene	500	ND	506	101	70 - 130
trans-1,3-Dichloropropene	500	ND	488	97.6	70 - 130
Diethyl Ether	500	ND	459	91.8	70 - 130
Diisopropyl Ether (DIPE)	500	ND	418	83.7	70 - 130
1,4-Dioxane	5000	ND	5710	114	70 - 130
Ethylbenzene	500	ND	522	104	70 - 130
Hexachlorobutadiene	500	ND	565	113	70 - 130
2-Hexanone (MBK)	5000	ND	4910	98.2	70 - 130
Isopropylbenzene (Cumene)	500	ND	570	114	70 - 130
p-Isopropyltoluene (p-Cymene)	500	ND	493	98.6	70 - 130
Methyl Acetate	500	ND	421	84.2	70 - 130
Methyl tert-Butyl Ether (MTBE)	500	ND	505	101	70 - 130
Methyl Cyclohexane	500	ND	489	97.8	70 - 130
Methylene Chloride	500	ND	462	92.3	70 - 130
4-Methyl-2-pentanone (MIBK)	5000	ND	4890	97.9	70 - 130
Naphthalene	500	ND	440	87.9	70 - 130
n-Propylbenzene	500	ND	480	96.1	70 - 130
Styrene	500	ND	520	104	70 - 130
1,1,1,2-Tetrachloroethane	500	ND	580	116	70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-22R

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Analysis: SW-846 8260C

Batch: B237875

Preparation: SW-846 5030B

% Solids:

Laboratory ID: B237875-MS1

Initial/Final: 5 mL / 5 mL

Sample Lab ID: 19H0528-04

Column:

ANALYTE	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC.	QC LIMITS REC.
1,1,2,2-Tetrachloroethane	500	ND	512	102	70 - 130
Tetrachloroethylene	500	ND	645	129	70 - 130
Tetrahydrofuran	500	ND	397	79.4	70 - 130
Toluene	500	ND	518	104	70 - 130
1,2,3-Trichlorobenzene	500	ND	492	98.3	70 - 130
1,2,4-Trichlorobenzene	500	ND	489	97.8	70 - 130
1,3,5-Trichlorobenzene	500	ND	514	103	70 - 130
1,1,1-Trichloroethane	500	4550	5240	138	* 70 - 130
1,1,2-Trichloroethane	500	ND	552	110	70 - 130
Trichloroethylene	500	2830	3560	146	* 70 - 130
Trichlorofluoromethane (Freon 11)	500	ND	508	102	70 - 130
1,2,3-Trichloropropane	500	ND	564	113	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	500	10100	10100	-9.10	* 70 - 130
1,2,4-Trimethylbenzene	500	ND	474	94.7	70 - 130
1,3,5-Trimethylbenzene	500	ND	537	107	70 - 130
Vinyl Chloride	500	ND	408	81.6	70 - 130
m+p Xylene	1000	ND	1050	105	70 - 130
o-Xylene	500	ND	526	105	70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-22R

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Analysis: SW-846 8260C

Batch: B237875

Preparation: SW-846 5030B

% Solids:

Laboratory ID: B237875-MSD1

Initial/Final: 5 mL / 5 mL

Sample Lab ID: 19H0528-04

Column:

ANALYTE	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #	% RPD	QC LIMITS	
					RPD	REC.
Acetone	5000	3960	79.2	0.992	30	70 - 130
Acrylonitrile	500	494	98.7	4.77	30	70 - 130
tert-Amyl Methyl Ether (TAME)	500	432	86.4	1.99	30	70 - 130
Benzene	500	462	92.3	2.14	30	70 - 130
Bromobenzene	500	510	102	7.36	30	70 - 130
Bromochloromethane	500	550	110	5.83	30	70 - 130
Bromodichloromethane	500	539	108	4.00	30	70 - 130
Bromoform	500	511	102	6.07	30	70 - 130
Bromomethane	500	253	50.6	*	30	70 - 130
2-Butanone (MEK)	5000	4610	92.2	9.15	30	70 - 130
tert-Butyl Alcohol (TBA)	5000	4760	95.1	9.32	30	70 - 130
n-Butylbenzene	500	393	78.6	3.87	30	70 - 130
sec-Butylbenzene	500	438	87.6	1.70	30	70 - 130
tert-Butylbenzene	500	466	93.2	5.83	30	70 - 130
tert-Butyl Ethyl Ether (TBEE)	500	462	92.5	2.96	30	70 - 130
Carbon Disulfide	500	465	93.0	3.80	30	70 - 130
Carbon Tetrachloride	500	580	116	4.71	30	70 - 130
Chlorobenzene	500	524	105	6.38	30	70 - 130
Chlorodibromomethane	500	582	116	5.68	30	70 - 130
Chloroethane	500	477	95.4	0.105	30	70 - 130
Chloroform	500	498	99.7	1.89	30	70 - 130
Chloromethane	500	293	58.6	*	30	70 - 130
2-Chlorotoluene	500	483	96.6	6.51	30	70 - 130
4-Chlorotoluene	500	481	96.2	6.83	30	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	500	518	104	12.4	30	70 - 130
1,2-Dibromoethane (EDB)	500	508	102	8.74	30	70 - 130
Dibromomethane	500	551	110	5.64	30	70 - 130
1,2-Dichlorobenzene	500	484	96.8	4.64	30	70 - 130
1,3-Dichlorobenzene	500	479	95.8	4.29	30	70 - 130
1,4-Dichlorobenzene	500	474	94.7	5.94	30	70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-22R

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Analysis: SW-846 8260C

Batch: B237875

Preparation: SW-846 5030B

% Solids:

Laboratory ID: B237875-MSD1

Initial/Final: 5 mL / 5 mL

Sample Lab ID: 19H0528-04

Column:

ANALYTE	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #	% RPD	QC LIMITS	
					RPD	REC.
trans-1,4-Dichloro-2-butene	500	438	87.6	1.15	30	70 - 130
Dichlorodifluoromethane (Freon 12)	500	502	100	6.84	30	70 - 130
1,1-Dichloroethane	500	897	104	0.0557	30	70 - 130
1,2-Dichloroethane	500	598	120	1.74	30	70 - 130
1,1-Dichloroethylene	500	812	97.1	3.15	30	70 - 130
cis-1,2-Dichloroethylene	500	515	103	1.57	30	70 - 130
trans-1,2-Dichloroethylene	500	542	108	2.99	30	70 - 130
1,2-Dichloropropane	500	536	107	1.67	30	70 - 130
1,3-Dichloropropane	500	494	98.8	3.97	30	70 - 130
2,2-Dichloropropane	500	370	74.1	4.10	30	70 - 130
1,1-Dichloropropene	500	480	95.9	4.88	30	70 - 130
cis-1,3-Dichloropropene	500	486	97.3	3.83	30	70 - 130
trans-1,3-Dichloropropene	500	460	92.1	5.80	30	70 - 130
Diethyl Ether	500	462	92.5	0.760	30	70 - 130
Diisopropyl Ether (DIPE)	500	452	90.4	7.70	30	70 - 130
1,4-Dioxane	5000	6060	121	5.98	30	70 - 130
Ethylbenzene	500	488	97.6	6.83	30	70 - 130
Hexachlorobutadiene	500	538	108	4.90	30	70 - 130
2-Hexanone (MBK)	5000	5220	104	6.08	30	70 - 130
Isopropylbenzene (Cumene)	500	516	103	9.85	30	70 - 130
p-Isopropyltoluene (p-Cymene)	500	478	95.7	2.99	30	70 - 130
Methyl Acetate	500	401	80.2	4.87	30	70 - 130
Methyl tert-Butyl Ether (MTBE)	500	492	98.3	2.71	30	70 - 130
Methyl Cyclohexane	500	448	89.6	8.75	30	70 - 130
Methylene Chloride	500	463	92.6	0.324	30	70 - 130
4-Methyl-2-pentanone (MIBK)	5000	5170	103	5.54	30	70 - 130
Naphthalene	500	506	101	14.1	30	70 - 130
n-Propylbenzene	500	454	90.9	5.56	30	70 - 130
Styrene	500	478	95.5	8.62	30	70 - 130
1,1,1,2-Tetrachloroethane	500	560	112	3.33	30	70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-22R

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Analysis: SW-846 8260C

Batch: B237875

Preparation: SW-846 5030B

% Solids:

Laboratory ID: B237875-MSD1

Initial/Final: 5 mL / 5 mL

Sample Lab ID: 19H0528-04

Column:

ANALYTE	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #	% RPD	QC LIMITS	
					RPD	REC.
1,1,2,2-Tetrachloroethane	500	478	95.6	6.77	30	70 - 130
Tetrachloroethylene	500	578	116	10.9	30	70 - 130
Tetrahydrofuran	500	400	80.1	0.878	30	70 - 130
Toluene	500	496	99.1	4.44	30	70 - 130
1,2,3-Trichlorobenzene	500	500	100	1.71	30	70 - 130
1,2,4-Trichlorobenzene	500	472	94.3	3.64	30	70 - 130
1,3,5-Trichlorobenzene	500	467	93.4	9.68	30	70 - 130
1,1,1-Trichloroethane	500	5180	125	1.23	30	70 - 130
1,1,2-Trichloroethane	500	508	102	8.31	30	70 - 130
Trichloroethylene	500	3450	124	3.14	30	70 - 130
Trichlorofluoromethane (Freon 11)	500	490	97.9	3.81	30	70 - 130
1,2,3-Trichloropropane	500	540	108	4.26	30	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	500	9410	-141 *	6.79	30	70 - 130
1,2,4-Trimethylbenzene	500	442	88.4	6.88	30	70 - 130
1,3,5-Trimethylbenzene	500	489	97.8	9.36	30	70 - 130
Vinyl Chloride	500	422	84.3	3.25	30	70 - 130
m+p Xylene	1000	980	98.0	6.80	20	70 - 130
o-Xylene	500	480	95.9	9.15	30	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Preparation: SW-846 5030B

Batch: B237875

Laboratory ID: B237875-BS1

Column:

Initial/Final: 5 mL / 5 mL

ANALYTE	SPIKE ADDED (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC.	QC LIMITS REC.
Acetone	100	97.2	97.2	70 - 160
Acrylonitrile	10.0	10.9	109	70 - 130
tert-Amyl Methyl Ether (TAME)	10.0	9.42	94.2	70 - 130
Benzene	10.0	9.65	96.5	70 - 130
Bromobenzene	10.0	11.0	110	70 - 130
Bromochloromethane	10.0	11.7	117	70 - 130
Bromodichloromethane	10.0	10.9	109	70 - 130
Bromoform	10.0	10.6	106	70 - 130
Bromomethane	10.0	4.40	44.0	40 - 160
2-Butanone (MEK)	100	101	101	40 - 160
tert-Butyl Alcohol (TBA)	100	112	112	40 - 160
n-Butylbenzene	10.0	8.39	83.9	70 - 130
sec-Butylbenzene	10.0	9.13	91.3	70 - 130
tert-Butylbenzene	10.0	9.92	99.2	70 - 130
tert-Butyl Ethyl Ether (TBEE)	10.0	10.1	101	70 - 130
Carbon Disulfide	10.0	10.2	102	70 - 130
Carbon Tetrachloride	10.0	11.5	115	70 - 130
Chlorobenzene	10.0	10.4	104	70 - 130
Chlorodibromomethane	10.0	12.1	121	70 - 130
Chloroethane	10.0	10.0	100	70 - 130
Chloroform	10.0	10.2	102	70 - 130
Chloromethane	10.0	6.36	63.6	40 - 160
2-Chlorotoluene	10.0	9.95	99.5	70 - 130
4-Chlorotoluene	10.0	9.78	97.8	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	10.0	11.6	116	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.7	107	70 - 130
Dibromomethane	10.0	11.6	116	70 - 130
1,2-Dichlorobenzene	10.0	10.5	105	70 - 130
1,3-Dichlorobenzene	10.0	10.4	104	70 - 130
1,4-Dichlorobenzene	10.0	10.0	100	70 - 130
trans-1,4-Dichloro-2-butene	10.0	10.8	108	70 - 130
Dichlorodifluoromethane (Freon 12)	10.0	10.0	100	40 - 160
1,1-Dichloroethane	10.0	10.6	106	70 - 130
1,2-Dichloroethane	10.0	12.1	121	70 - 130
1,1-Dichloroethylene	10.0	10.2	102	70 - 130
cis-1,2-Dichloroethylene	10.0	10.4	104	70 - 130
trans-1,2-Dichloroethylene	10.0	11.0	110	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Preparation: SW-846 5030B

Batch: B237875

Laboratory ID: B237875-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	10.6	106	70 - 130
1,3-Dichloropropane	10.0	10.3	103	70 - 130
2,2-Dichloropropane	10.0	10.1	101	40 - 130
1,1-Dichloropropene	10.0	9.64	96.4	70 - 130
cis-1,3-Dichloropropene	10.0	9.93	99.3	70 - 130
trans-1,3-Dichloropropene	10.0	10.1	101	70 - 130
Diethyl Ether	10.0	9.39	93.9	70 - 130
Diisopropyl Ether (DIPE)	10.0	9.84	98.4	70 - 130
1,4-Dioxane	100	122	122	40 - 130
Ethylbenzene	10.0	10.1	101	70 - 130
Hexachlorobutadiene	10.0	12.2	122	70 - 130
2-Hexanone (MBK)	100	111	111	70 - 160
Isopropylbenzene (Cumene)	10.0	10.8	108	70 - 130
p-Isopropyltoluene (p-Cymene)	10.0	9.98	99.8	70 - 130
Methyl Acetate	10.0	9.47	94.7	70 - 130
Methyl tert-Butyl Ether (MTBE)	10.0	10.0	100	70 - 130
Methyl Cyclohexane	10.0	9.26	92.6	70 - 130
Methylene Chloride	10.0	10.1	101	70 - 130
4-Methyl-2-pentanone (MIBK)	100	111	111	70 - 160
Naphthalene	10.0	11.3	113	40 - 130
n-Propylbenzene	10.0	9.26	92.6	70 - 130
Styrene	10.0	10.2	102	70 - 130
1,1,1,2-Tetrachloroethane	10.0	11.4	114	70 - 130
1,1,2,2-Tetrachloroethane	10.0	10.4	104	70 - 130
Tetrachloroethylene	10.0	12.0	120	70 - 130
Tetrahydrofuran	10.0	9.65	96.5	70 - 130
Toluene	10.0	10.1	101	70 - 130
1,2,3-Trichlorobenzene	10.0	11.3	113	70 - 130
1,2,4-Trichlorobenzene	10.0	10.4	104	70 - 130
1,3,5-Trichlorobenzene	10.0	10.3	103	70 - 130
1,1,1-Trichloroethane	10.0	10.7	107	70 - 130
1,1,2-Trichloroethane	10.0	10.5	105	70 - 130
Trichloroethylene	10.0	10.9	109	70 - 130
Trichlorofluoromethane (Freon 11)	10.0	10.1	101	70 - 130
1,2,3-Trichloropropane	10.0	10.9	109	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	10.8	108	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Preparation: SW-846 5030B

Batch: B237875

Laboratory ID: B237875-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	9.39	93.9	70 - 130
1,3,5-Trimethylbenzene	10.0	10.5	105	70 - 130
Vinyl Chloride	10.0	9.02	90.2	40 - 160
m+p Xylene	20.0	19.8	99.0	70 - 130
o-Xylene	10.0	9.88	98.8	70 - 130

ANALYTE	SPIKE ADDED (µg/L)	LCSD CONCENTRATION (µg/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	REC.
Acetone	100	93.9	93.9	3.47	25	70 - 160
Acrylonitrile	10.0	11.0	110	0.912	25	70 - 130
tert-Amyl Methyl Ether (TAME)	10.0	9.02	90.2	4.34	25	70 - 130
Benzene	10.0	9.30	93.0	3.69	25	70 - 130
Bromobenzene	10.0	10.5	105	5.12	25	70 - 130
Bromochloromethane	10.0	11.0	110	5.90	25	70 - 130
Bromodichloromethane	10.0	11.0	110	0.274	25	70 - 130
Bromoform	10.0	10.1	101	5.00	25	70 - 130
Bromomethane	10.0	4.71	47.1	6.81	25	40 - 160
2-Butanone (MEK)	100	98.8	98.8	2.36	25	40 - 160
tert-Butyl Alcohol (TBA)	100	109	109	2.30	25	40 - 160
n-Butylbenzene	10.0	8.41	84.1	0.238	25	70 - 130
sec-Butylbenzene	10.0	9.08	90.8	0.549	25	70 - 130
tert-Butylbenzene	10.0	9.79	97.9	1.32	25	70 - 130
tert-Butyl Ethyl Ether (TBEE)	10.0	9.89	98.9	2.10	25	70 - 130
Carbon Disulfide	10.0	9.92	99.2	2.59	25	70 - 130
Carbon Tetrachloride	10.0	11.1	111	3.90	25	70 - 130
Chlorobenzene	10.0	10.4	104	0.865	25	70 - 130
Chlorodibromomethane	10.0	12.3	123	1.23	25	70 - 130
Chloroethane	10.0	9.93	99.3	0.802	25	70 - 130
Chloroform	10.0	10.2	102	0.0982	25	70 - 130
Chloromethane	10.0	6.25	62.5	1.74	25	40 - 160
2-Chlorotoluene	10.0	10.2	102	2.68	25	70 - 130
4-Chlorotoluene	10.0	9.82	98.2	0.408	25	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	10.0	11.7	117	1.46	25	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.8	108	1.02	25	70 - 130
Dibromomethane	10.0	11.6	116	0.00	25	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Preparation: SW-846 5030B

Batch: B237875

Laboratory ID: B237875-BSD1

Column:

Initial/Final: 5 mL / 5 mL

ANALYTE	SPIKE ADDED (µg/L)	LCSD CONCENTRATION (µg/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,2-Dichlorobenzene	10.0	10.4	104	1.53	25	70 - 130
1,3-Dichlorobenzene	10.0	10.2	102	1.94	25	70 - 130
1,4-Dichlorobenzene	10.0	10.3	103	2.75	25	70 - 130
trans-1,4-Dichloro-2-butene	10.0	10.3	103	4.66	25	70 - 130
Dichlorodifluoromethane (Freon 12)	10.0	10.1	101	1.09	25	40 - 160
1,1-Dichloroethane	10.0	10.7	107	0.282	25	70 - 130
1,2-Dichloroethane	10.0	12.2	122	0.493	25	70 - 130
1,1-Dichloroethylene	10.0	9.97	99.7	2.08	25	70 - 130
cis-1,2-Dichloroethylene	10.0	10.3	103	0.867	25	70 - 130
trans-1,2-Dichloroethylene	10.0	11.0	110	0.909	25	70 - 130
1,2-Dichloropropane	10.0	10.9	109	2.79	25	70 - 130
1,3-Dichloropropane	10.0	10.3	103	0.777	25	70 - 130
2,2-Dichloropropane	10.0	9.72	97.2	3.64	25	40 - 130
1,1-Dichloropropene	10.0	9.92	99.2	2.86	25	70 - 130
cis-1,3-Dichloropropene	10.0	9.93	99.3	0.00	25	70 - 130
trans-1,3-Dichloropropene	10.0	10.3	103	1.77	25	70 - 130
Diethyl Ether	10.0	9.29	92.9	1.07	25	70 - 130
Diisopropyl Ether (DIPE)	10.0	9.82	98.2	0.203	25	70 - 130
1,4-Dioxane	100	127	127	3.55	50	40 - 130
Ethylbenzene	10.0	9.94	99.4	1.50	25	70 - 130
Hexachlorobutadiene	10.0	11.6	116	4.70	25	70 - 130
2-Hexanone (MBK)	100	112	112	0.876	25	70 - 160
Isopropylbenzene (Cumene)	10.0	10.8	108	0.185	25	70 - 130
p-Isopropyltoluene (p-Cymene)	10.0	9.88	98.8	1.01	25	70 - 130
Methyl Acetate	10.0	9.16	91.6	3.33	25	70 - 130
Methyl tert-Butyl Ether (MTBE)	10.0	9.98	99.8	0.699	25	70 - 130
Methyl Cyclohexane	10.0	9.20	92.0	0.650	25	70 - 130
Methylene Chloride	10.0	9.73	97.3	3.63	25	70 - 130
4-Methyl-2-pentanone (MIBK)	100	111	111	0.207	25	70 - 160
Naphthalene	10.0	11.2	112	0.887	25	40 - 130
n-Propylbenzene	10.0	9.27	92.7	0.108	25	70 - 130
Styrene	10.0	10.2	102	0.293	25	70 - 130
1,1,1,2-Tetrachloroethane	10.0	11.2	112	1.86	25	70 - 130
1,1,2,2-Tetrachloroethane	10.0	10.3	103	0.776	25	70 - 130
Tetrachloroethylene	10.0	11.5	115	3.49	25	70 - 130
Tetrahydrofuran	10.0	9.42	94.2	2.41	25	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Preparation: SW-846 5030B

Batch: B237875

Laboratory ID: B237875-BSD1

Column:

Initial/Final: 5 mL / 5 mL

ANALYTE	SPIKE ADDED (µg/L)	LCSD CONCENTRATION (µg/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Toluene	10.0	10.1	101	0.00	25	70 - 130
1,2,3-Trichlorobenzene	10.0	11.4	114	1.23	25	70 - 130
1,2,4-Trichlorobenzene	10.0	10.5	105	0.191	25	70 - 130
1,3,5-Trichlorobenzene	10.0	10.4	104	0.873	25	70 - 130
1,1,1-Trichloroethane	10.0	10.8	108	0.747	25	70 - 130
1,1,2-Trichloroethane	10.0	10.6	106	0.944	25	70 - 130
Trichloroethylene	10.0	11.0	110	1.46	25	70 - 130
Trichlorofluoromethane (Freon 11)	10.0	9.73	97.3	4.03	25	70 - 130
1,2,3-Trichloropropane	10.0	11.0	110	1.00	25	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	10.9	109	0.184	25	70 - 130
1,2,4-Trimethylbenzene	10.0	9.59	95.9	2.11	25	70 - 130
1,3,5-Trimethylbenzene	10.0	10.1	101	4.07	25	70 - 130
Vinyl Chloride	10.0	8.74	87.4	3.15	25	40 - 160
m+p Xylene	20.0	19.7	98.6	0.456	25	70 - 130
o-Xylene	10.0	9.87	98.7	0.101	25	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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	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

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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	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

LCS / LCS DUPLICATE RECOVERY

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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	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

162

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Blank ID: B237875-BLK1

Batch: B237875

Prepared: 08/13/2019 07:22

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
LCS	B237875-BS1	B1922527.D	19:59
LCS Dup	B237875-BSD1	B1922528.D	20:30
Trip Blank-8/8/19	19H0528-01	B1922533.D	23:04
OC-17S	19H0528-03	B1922534.D	23:34
OC-17D	19H0528-02	B1922535.D	00:05
MW-22R	19H0528-04	B1922536.D	00:36
MW-27	19H0528-05	B1922537.D	01:07
MW-22S	19H0528-06	B1922538.D	01:37
Blind Duplicate	19H0528-07	B1922539.D	02:08
Matrix Spike	B237875-MS1	B1922546.D	05:44
Matrix Spike Dup	B237875-MSD1	B1922547.D	06:14

4 - FORM IV
METHOD BLANK SUMMARY

163

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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
MW-22R	19H0528-04RE1	C1922624.D	17:13

5 - FORM V

INSTRUMENT PERFORMANCE CHECK

164

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Lab File ID:	B1922525.D	Injection Date:	08/13/19
Instrument ID:	GCMSVOA2	Injection Time:	18:57
Sequence:	S039168	Lab Sample ID:	S039168-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
50	15 - 40% of 95	28.9	PASS
75	30 - 60% of 95	54.9	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.28	PASS
173	Less than 2% of 174	0	PASS
174	50 - 200% of 95	90.1	PASS
175	5 - 9% of 174	7.82	PASS
176	95 - 101% of 174	95.7	PASS
177	5 - 9% of 176	6.94	PASS

Client ID	Sample ID	File ID	Date Analyzed	Time Analyzed
Calibration Check	S039168-CCV1	B1922525.D	08/13/2019	18:57:00
LCS	B237875-BS1	B1922527.D	08/13/2019	19:59:00
LCS Dup	B237875-BSD1	B1922528.D	08/13/2019	20:30:00
Blank	B237875-BLK1	B1922531.D	08/13/2019	22:02:00
Trip Blank-8/8/19	19H0528-01	B1922533.D	08/13/2019	23:04:00
OC-17S	19H0528-03	B1922534.D	08/13/2019	23:34:00
OC-17D	19H0528-02	B1922535.D	08/14/2019	0:05:00
MW-22R	19H0528-04	B1922536.D	08/14/2019	0:36:00
MW-27	19H0528-05	B1922537.D	08/14/2019	1:07:00
MW-22S	19H0528-06	B1922538.D	08/14/2019	1:37:00
Blind Duplicate	19H0528-07	B1922539.D	08/14/2019	2:08:00
Matrix Spike	B237875-MS1	B1922546.D	08/14/2019	5:44:00
Matrix Spike Dup	B237875-MSD1	B1922547.D	08/14/2019	6:14:00

Data Path : Y:\1\DATA\B081319\

Data File : B1922525.D

Acq On : 13 Aug 2019 6:57 pm

Operator :

Sample : BFB / 8260 STD 10PPB 1906029

Inst : GCMSVOA2

Misc :

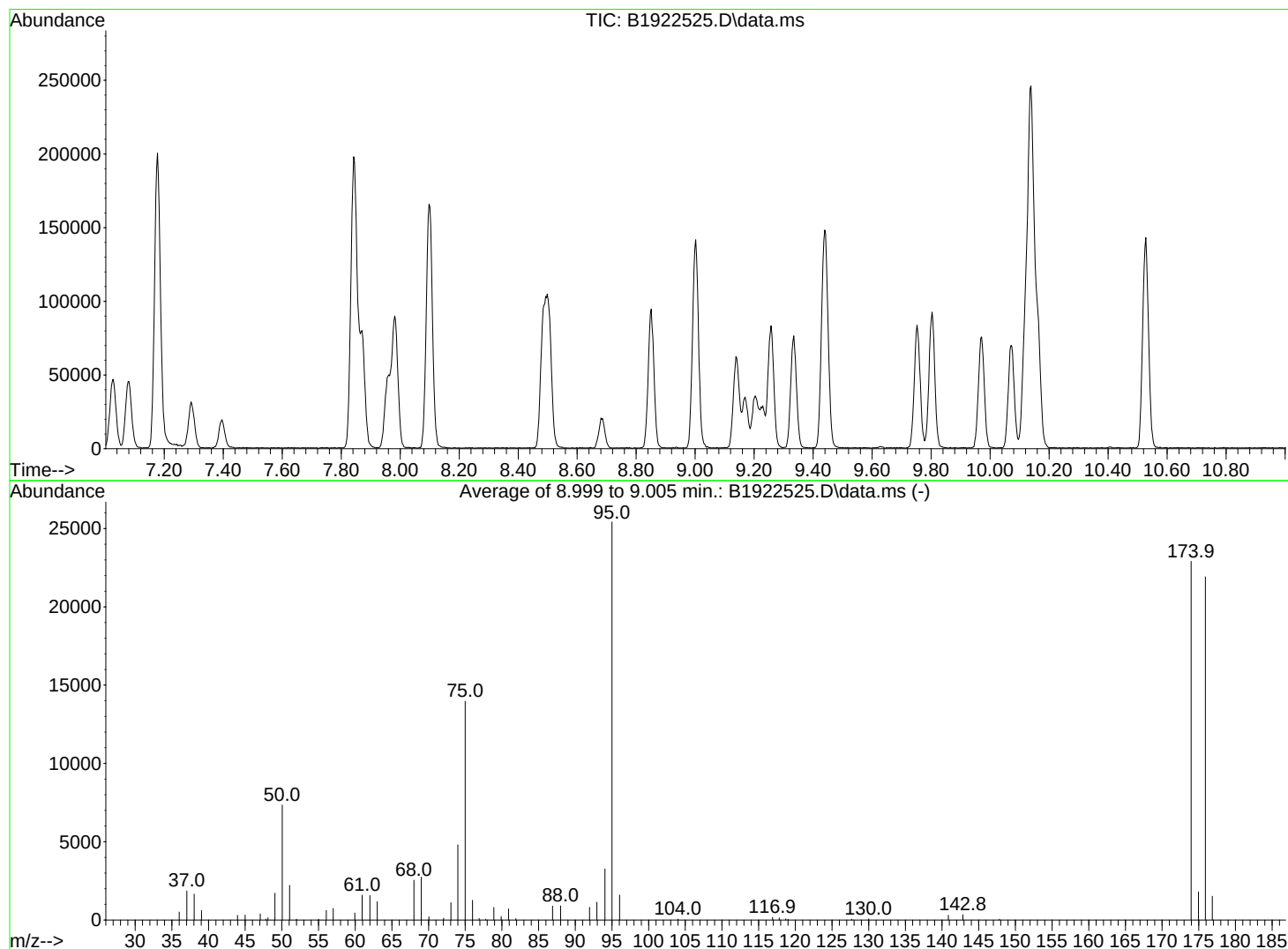
ALS Vial : 25 Sample Multiplier: 1

Integration File: 8260LOW.P

Method : Y:\1\METHODS\B041819W.M

Title : 8260 CALIBRATION VOAMS 5973

Last Update : Fri Apr 19 05:42:51 2019



AutoFind: Scans 2785, 2786, 2787; Background Corrected with Scan 2773

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	28.9	7341	PASS
75	95	30	60	54.9	13966	PASS
95	95	100	100	100.0	25421	PASS
96	95	5	9	6.3	1596	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	90.1	22904	PASS
175	174	5	9	7.8	1790	PASS
176	174	95	101	95.7	21917	PASS
177	176	5	9	6.9	1522	PASS

5 - FORM V
INSTRUMENT PERFORMANCE CHECK

166

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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
MW-22R	19H0528-04RE1	C1922624.D	08/14/2019	17:13:00

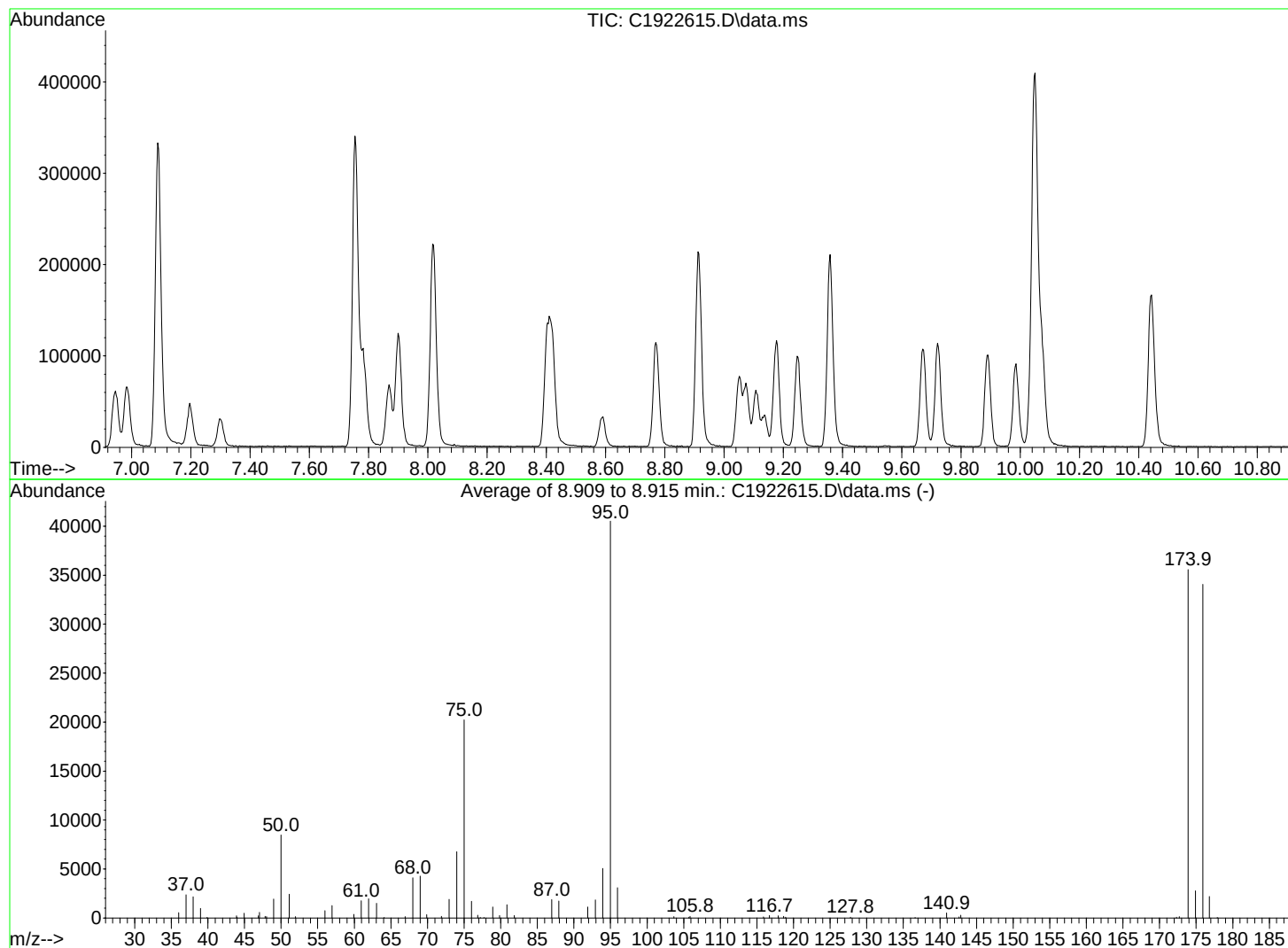
Data Path : C:\msdchem\1\data\C081419\
Data File : C1922615.D
Acq On : 14 Aug 2019 1:15 pm
Operator :
Sample : 8260STD 10PPB 1907138
Misc :
ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSVOA3

167

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

169

SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

Project: Farrand Controls Site

Calibration: 1900126

Instrument: GCMSVOA2

Calibration Date: 4/18/2019 10:04:37AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Acetone					10	0.3554227	20	0.3167215	50	0.2604235	100	0.2709784
Acrolein							20	0.2036672	50	0.1779516	100	0.1807268
Acrylonitrile					1	0.2315594	2	0.306658	5	0.303319	10	0.3117378
tert-Amyl Methyl Ether (TAME)	0.4	1.298043	0.5	1.447822	1	1.516083	2	1.587637	5	1.565961	10	1.619902
Benzene	0.4	2.180179	0.5	2.338915	1	2.217918	2	2.26212	5	2.121221	10	2.292671
Bromobenzene	0.4	1.276931	0.5	1.382589	1	1.368836	2	1.395511	5	1.273864	10	1.333103
Bromochloromethane					1	0.2618727	2	0.3320751	5	0.3105269	10	0.3366536
Bromodichloromethane	0.4	0.4860925	0.5	0.5245991	1	0.5507571	2	0.56234	5	0.54838	10	0.5748657
Bromoform			0.5	0.4353643	1	0.4932699	2	0.5595492	5	0.5366665	10	0.5704558
Bromomethane									5	0.3900654	10	0.3480768
2-Butanone (MEK)	4	0.4185779	5	0.418732	10	0.4191647	20	0.4197743	50	0.4038945	100	0.4274805
tert-Butyl Alcohol (TBA)					10	7.713035E-02	20	8.185124E-02	50	7.626138E-02	100	0.0790064
n-Butylbenzene	0.4	2.429439	0.5	2.692969	1	2.365127	2	2.462072	5	2.257107	10	2.422416
sec-Butylbenzene	0.4	3.11881	0.5	3.423025	1	3.126224	2	3.304028	5	2.952429	10	3.12716
tert-Butylbenzene	0.4	2.230947	0.5	2.374813	1	2.247184	2	2.313534	5	2.103586	10	2.244813
tert-Butyl Ethyl Ether (TBEE)	0.4	1.980954	0.5	2.066682	1	2.148872	2	2.28671	5	2.22297	10	2.344324
Carbon Disulfide	4	1.679241	5	1.773439	10	1.736485	20	1.787544	50	1.571501	100	1.692059
Carbon Tetrachloride	0.4	0.6633987	0.5	0.8052539	1	0.7936174	2	0.9389852	5	0.8160865	10	0.8878235
Chlorobenzene	0.4	1.819925	0.5	1.953001	1	1.89926	2	1.977634	5	1.864043	10	1.937622
Chlorodibromomethane	0.4	0.2977398	0.5	0.3478543	1	0.3720188	2	0.4147934	5	0.4093563	10	0.4413187
Chloroethane	0.4	0.3850999	0.5	0.4381889	1	0.4862748	2	0.4878838	5	0.4399341	10	0.469883
2-Chloroethyl Vinyl Ether	4	0.2600045	5	0.2991854	10	0.2911107	20	0.3052552	50	0.2963355	100	0.3013932
Chloroform	0.4	1.065956	0.5	1.157604	1	1.091277	2	1.199355	5	1.096441	10	1.162767
Chloromethane	0.4	1.408952	0.5	1.392231	1	1.621758	2	1.56718	5	1.812036	10	1.642252
2-Chlorotoluene	0.4	2.508513	0.5	2.629185	1	2.437017	2	2.470181	5	2.217537	10	2.396396
4-Chlorotoluene	0.4	2.861757	0.5	3.141989	1	2.857445	2	2.919982	5	2.714788	10	2.923971
Cyclohexane									5	1.309745	10	1.337592
1,2-Dibromo-3-chloropropane (DBCP)					1	0.1371995	2	0.1747231	5	0.180759	10	0.1983514
1,2-Dibromoethane (EDB)	0.4	0.3631131	0.5	0.3278745	1	0.3839171	2	0.3928857	5	0.3931871	10	0.4078409
Dibromomethane	0.4	0.1650514	0.5	0.2295121	1	0.2490702	2	0.2847993	5	0.273186	10	0.2823254
1,2-Dichlorobenzene	0.4	1.513051	0.5	1.841711	1	1.600661	2	1.588218	5	1.570356	10	1.615522

6 - FORM VI

INITIAL CALIBRATION DATA SHEET

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SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

Project: Farrand Controls Site

Calibration: 1900126

Instrument: GCMSVOA2

Calibration Date: 4/18/2019 10:04:37AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
1,3-Dichlorobenzene	0.4	1.659245	0.5	1.783003	1	1.715235	2	1.689148	5	1.579023	10	1.657159
1,4-Dichlorobenzene	0.4	1.858925	0.5	1.764065	1	1.716198	2	1.803409	5	1.649688	10	1.722355
trans-1,4-Dichloro-2-butene					1	0.361275	2	0.4337106	5	0.3931974	10	0.4134841
Dichlorodifluoromethane (Freon 22)	0.4	0.5648132	0.5	0.7562029	1	0.711194	2	0.7610657	5	0.6790524	10	0.7545941
1,1-Dichloroethane	0.4	0.9868826	0.5	1.299034	1	1.291681	2	1.328714	5	1.221071	10	1.277413
1,2-Dichloroethane	0.4	0.6213699	0.5	0.6834133	1	0.7641325	2	0.7667673	5	0.7178927	10	0.749922
1,1-Dichloroethylene	0.4	0.9725056	0.5	1.103647	1	1.070226	2	1.116078	5	0.9614181	10	1.063062
cis-1,2-Dichloroethylene	0.4	1.086495	0.5	1.199297	1	1.215056	2	1.293584	5	1.200117	10	1.271577
trans-1,2-Dichloroethylene	0.4	0.8646776	0.5	0.9703923	1	1.002021	2	1.083635	5	1.011287	10	1.03736
Dichlorofluoromethane (Freon 21)	0.4	1.176865	0.5	1.297399	1	1.20453	2	1.210927	5	1.08588	10	1.14319
1,2-Dichloropropane	0.4	0.3760583	0.5	0.3770556	1	0.4473745	2	0.477085	5	0.4336102	10	0.4592272
1,3-Dichloropropane	0.4	0.5436987	0.5	0.5491897	1	0.59174	2	0.6503664	5	0.6283807	10	0.6560388
2,2-Dichloropropane	0.4	0.9488861	0.5	0.9924652	1	0.979707	2	0.9912659	5	0.875426	10	0.9273495
1,1-Dichloropropene	0.4	0.7024222	0.5	0.7537504	1	0.7658302	2	0.8100401	5	0.7591775	10	0.8399371
cis-1,3-Dichloropropene	0.4	0.5553494	0.5	0.5645588	1	0.5962349	2	0.6363772	5	0.6396358	10	0.6654999
trans-1,3-Dichloropropene	0.4	0.5605275	0.5	0.5153777	1	0.5671502	2	0.6132818	5	0.6046024	10	0.6272656
Diethyl Ether	0.4	0.5463284	0.5	0.5493712	1	0.5283766	2	0.6007109	5	0.5735319	10	0.5930136
Difluorochloromethane (Freon 21)					1	1.210424	2	1.091901	5	0.9899983	10	1.054909
Diisopropyl Ether (DIPE)	0.4	2.342434	0.5	2.450915	1	2.507578	2	2.683878	5	2.555372	10	2.6876
1,4-Dioxane									50	1.923399E-03	100	2.383469E-03
Ethanol											100	9.126152E-03
Ethylbenzene	0.4	3.3057	0.5	3.524468	1	3.396669	2	3.443749	5	3.133303	10	3.405679
Hexachlorobutadiene	0.4	0.2864455	0.5	0.2717589	1	0.3937867	2	0.3718221	5	0.3579943	10	0.376048
2-Hexanone (MBK)	4	0.4042141	5	0.4286446	10	0.3997814	20	0.4174724	50	0.3868409	100	0.4001551
Iodomethane					10	0.5584372	20	0.6563391	50	0.6803682	100	0.7985238
Isopropylbenzene (Cumene)	0.4	2.952455	0.5	3.223207	1	3.204543	2	3.273483	5	3.017358	10	3.232326
p-Isopropyltoluene (p-Cymene)	0.4	2.791953	0.5	2.758305	1	2.679964	2	2.784143	5	2.55015	10	2.728959
Methyl Acetate					1	1.007494	2	0.912535	5	0.8004973	10	0.7217731
Methyl tert-Butyl Ether (MTBE)	0.4	1.577369	0.5	1.59661	1	1.553132	2	1.71121	5	1.671733	10	1.733803
Methyl Cyclohexane	0.4	0.5016268	0.5	0.5281852	1	0.4939099	2	0.5009722	5	0.4616685	10	0.5156299
Methylene Chloride	0.4	1.241562	0.5	1.276144	1	1.165797	2	1.27726	5	1.185869	10	1.216903

6 - FORM VI INITIAL CALIBRATION DATA SHEET

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SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

Project: Farrand Controls Site

Calibration: 1900126

Instrument: GCMSVOA2

Calibration Date: 4/18/2019 10:04:37AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
4-Methyl-2-pentanone (MIBK)	4	0.5304299	5	0.5367407	10	0.5462093	20	0.5554642	50	0.536549	100	0.5480393
Naphthalene	0.4	2.843061	0.5	2.977038	1	2.677557	2	2.731298	5	2.610054	10	2.688492
n-Propylbenzene	0.4	4.002641	0.5	3.948499	1	3.983313	2	4.000656	5	3.618567	10	3.93099
Styrene	0.4	1.99416	0.5	2.221208	1	2.129518	2	2.219225	5	2.117608	10	2.273151
1,1,1,2-Tetrachloroethane	0.4	0.4857111	0.5	0.615743	1	0.6790405	2	0.6897104	5	0.6931782	10	0.7340282
1,1,2,2-Tetrachloroethane	0.4	0.8771441	0.5	0.7800671	1	0.8926767	2	0.9010423	5	0.8830637	10	0.9155719
Tetrachloroethylene	0.4	0.2258939	0.5	0.3248006	1	0.2739243	2	0.3100062	5	0.2894081	10	0.3135418
Tetrahydrofuran							2	0.2946727	5	0.2732302	10	0.2822692
Toluene	0.4	1.4531	0.5	1.624003	1	1.554177	2	1.672899	5	1.511348	10	1.564564
1,2,3-Trichlorobenzene	0.4	0.9877023	0.5	0.9610984	1	0.8857794	2	0.9850192	5	0.8975096	10	0.9287621
1,2,4-Trichlorobenzene	0.4	1.067336	0.5	1.060522	1	1.064379	2	1.060955	5	1.000936	10	1.036766
1,3,5-Trichlorobenzene	0.4	1.142216	0.5	1.037797	1	1.026349	2	1.079046	5	0.9817939	10	1.045478
1,1,1-Trichloroethane	0.4	0.8872701	0.5	0.9058085	1	1.021809	2	0.9910593	5	0.9663631	10	1.025233
1,1,2-Trichloroethane	0.4	0.3042124	0.5	0.3504158	1	0.3360596	2	0.371506	5	0.3324732	10	0.3625368
Trichloroethylene	0.4	0.2854418	0.5	0.4144538	1	0.3693748	2	0.4046314	5	0.3681935	10	0.4098163
Trichlorofluoromethane (Freon 11)	0.4	0.7876576	0.5	0.8878231	1	0.9089761	2	0.981967	5	0.9145667	10	0.9749462
1,2,3-Trichloropropane			0.5	0.2719846	1	0.2625232	2	0.2963449	5	0.268525	10	0.2842643
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4	0.3255378	0.5	0.3866854	1	0.4197541	2	0.4438689	5	0.3971057	10	0.4449672
1,2,4-Trimethylbenzene	0.4	2.847815	0.5	2.938215	1	2.765172	2	2.870076	5	2.664243	10	2.740293
1,3,5-Trimethylbenzene	0.4	2.699456	0.5	2.836951	1	2.703451	2	2.732665	5	2.492392	10	2.72913
Vinyl Acetate	4	1.948503	5	1.896639	10	1.987833	20	2.029605	50	2.107342	100	2.112466
Vinyl Chloride	0.4	0.705503	0.5	0.9107136	1	0.8534018	2	0.906129	5	0.7771973	10	0.8797114
m+p Xylene	0.8	2.751965	1	2.852061	2	2.698563	4	2.845055	10	2.532335	20	2.698054
o-Xylene	0.4	2.786574	0.5	2.863394	1	2.845713	2	2.849378	5	2.565085	10	2.748595
1,2-Dichloroethane-d4	25	0.7899662	25	0.7912907	25	0.7938868	25	0.7838708	25	0.786467	25	0.7758016
Toluene-d8	25	1.174244	25	1.177346	25	1.175262	25	1.196336	25	1.180491	25	1.168456
4-Bromofluorobenzene	25	0.8961525	25	0.8778493	25	0.8966855	25	0.8987368	25	0.8991177	25	0.8902579

6 - FORM VI

INITIAL CALIBRATION DATA SHEET (Continued)

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SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

Project: Farrand Controls Site

Calibration: 1900126

Instrument: GCMSVOA2

Calibration Date: 4/18/2019 10:04:37AM

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
Acetone	200	0.26474	500	0.258101	1000	0.2530512	2000	0.2363047				
Acrolein	200	0.1827299	500	0.1447897	1000	0.1424612	2000	0.1431627				
Acrylonitrile	20	0.3233385	50	0.3588806	100	0.3604812	200	0.3596863				
tert-Amyl Methyl Ether (TAME)	20	1.62424	50	1.768353	100	1.807387	200	1.748482				
Benzene	20	2.264257	50	2.169122	100	2.182966	200	2.101797				
Bromobenzene	20	1.33055	50	1.241017	100	1.27057	200	1.229612				
Bromochloromethane	20	0.3235553	50	0.297954	100	0.2883061	200	0.2624706				
Bromodichloromethane	20	0.5672935	50	0.5472545	100	0.5496425	200	0.5426642				
Bromoform	20	0.5949988	50	0.595426	100	0.6212688	200	0.6119892				
Bromomethane	20	0.3452504	50	0.3724047	100	0.4129159	200	0.4452956				
2-Butanone (MEK)	200	0.4243619	500	0.4283996	1000	0.4224117	2000	0.4056814				
tert-Butyl Alcohol (TBA)	200	7.696754E-02	500	8.169379E-02	1000	7.955764E-02	2000	8.038085E-02				
n-Butylbenzene	20	2.416441	50	2.372037	100	2.334408	200	2.281176				
sec-Butylbenzene	20	3.127405	50	3.031126	100	2.951205	200	2.843996				
tert-Butylbenzene	20	2.217812	50	2.142195	100	2.104603	200	2.048721				
tert-Butyl Ethyl Ether (TBEE)	20	2.392496	50	2.451124	100	2.487951	200	2.449064				
Carbon Disulfide	200	1.634108	500	1.487228	1000	1.368284	2000	1.135692				
Carbon Tetrachloride	20	0.8802005	50	0.8317479	100	0.8389809	200	0.8166954				
Chlorobenzene	20	1.974069	50	1.863302	100	1.85853	200	1.777361				
Chlorodibromomethane	20	0.4405604	50	0.4330679	100	0.4407412	200	0.4367621				
Chloroethane	20	0.4684852	50	0.4254573	100	0.4184275	200	0.4035625				
2-Chloroethyl Vinyl Ether	200	0.3044818	500	0.3052646	1000	0.2926538	2000	0.2675396				
Chloroform	20	1.145094	50	1.073677	100	1.094821	200	1.072979				
Chloromethane	20	1.4065	50	1.085317								
2-Chlorotoluene	20	2.335413	50	2.164198	100	2.180678	200	2.076568				
4-Chlorotoluene	20	2.852643	50	2.637499	100	2.667838	200	2.525833				
Cyclohexane	20	1.263225	50	1.247554	100	1.240866	200	1.194445				
1,2-Dibromo-3-chloropropane (DBCP)	20	0.1909585	50	0.1978492	100	0.1949682	200	0.1950423				
1,2-Dibromoethane (EDB)	20	0.4132678	50	0.4060478	100	0.401872	200	0.3962882				
Dibromomethane	20	0.2793707	50	0.2657074	100	0.2623016	200	0.2591558				
1,2-Dichlorobenzene	20	1.608777	50	1.546073	100	1.531956	200	1.487162				

6 - FORM VI

INITIAL CALIBRATION DATA SHEET (Continued)

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SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

Project: Farrand Controls Site

Calibration: 1900126

Instrument: GCMSVOA2

Calibration Date: 4/18/2019 10:04:37AM

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
1,3-Dichlorobenzene	20	1.672445	50	1.599237	100	1.569932	200	1.537088				
1,4-Dichlorobenzene	20	1.733168	50	1.668765	100	1.646377	200	1.596977				
trans-1,4-Dichloro-2-butene	20	0.4284849	50	0.4485067	100	0.4573303	200	0.450342				
Dichlorodifluoromethane (Freon 22)	20	0.7232899	50	0.5841689	100	0.5682747	200	0.5216579				
1,1-Dichloroethane	20	1.252663	50	1.172581	100	1.193696	200	1.170235				
1,2-Dichloroethane	20	0.7421171	50	0.698047	100	0.6969168	200	0.6789413				
1,1-Dichloroethylene	20	1.02115	50	0.9679193	100	0.957869	200	0.9191775				
cis-1,2-Dichloroethylene	20	1.251028	50	1.170335	100	1.178955	200	1.158432				
trans-1,2-Dichloroethylene	20	1.03183	50	0.9740838	100	0.9800042	200	0.9503742				
Dichlorofluoromethane (Freon 21)	20	1.117015	50	1.093759	100	1.079454	200	1.03875				
1,2-Dichloropropane	20	0.4526078	50	0.4350621	100	0.4379743	200	0.4296779				
1,3-Dichloropropane	20	0.6448084	50	0.625378	100	0.6247717	200	0.6140571				
2,2-Dichloropropane	20	0.8942107	50	0.8272625	100	0.8158142	200	0.7901785				
1,1-Dichloropropene	20	0.8296179	50	0.7953886	100	0.8071303	200	0.7917261				
cis-1,3-Dichloropropene	20	0.6671803	50	0.6491901	100	0.6486242	200	0.6329637				
trans-1,3-Dichloropropene	20	0.6424286	50	0.6245308	100	0.6288969	200	0.6170411				
Diethyl Ether	20	0.5787147	50	0.6079042	100	0.6028001	200	0.5917068				
Difluorochloromethane (Freon 21)	20	1.009268	50	0.9991655	100	1.009316	200	0.9462267				
Diisopropyl Ether (DIPE)	20	2.746437	50	2.876256	100	2.866651	200	2.736396				
1,4-Dioxane	200	2.744129E-03	500	3.31456E-03	1000	3.391619E-03	2000	3.50979E-03				
Ethanol	200	7.188366E-03	500	7.535077E-03	1000	6.782394E-03	2000	6.896322E-03				
Ethylbenzene	20	3.379521	50	3.191321	100	3.18616	200	2.980872				
Hexachlorobutadiene	20	0.3648642	50	0.3648401	100	0.3736784	200	0.3591927				
2-Hexanone (MBK)	200	0.3944444	500	0.4049426	1000	0.3809477	2000	0.3537869				
Iodomethane	200	0.824601	500	0.8039864	1000	0.7845236	2000	0.6889045				
Isopropylbenzene (Cumene)	20	3.208649	50	2.969635	100	3.014859	200	2.838579				
p-Isopropyltoluene (p-Cymene)	20	2.714578	50	2.659503	100	2.627514	200	2.527712				
Methyl Acetate	20	0.7359602	50	0.871231	100	0.956679	200	0.9598777				
Methyl tert-Butyl Ether (MTBE)	20	1.739218	50	1.867802	100	1.883088	200	1.820325				
Methyl Cyclohexane	20	0.5110848	50	0.5542987	100	0.5536945	200	0.5419826				
Methylene Chloride	20	1.192741	50	1.11853	100	1.130467	200	1.082251				

6 - FORM VI

INITIAL CALIBRATION DATA SHEET (Continued)

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SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

Project: Farrand Controls Site

Calibration: 1900126

Instrument: GCMSVOA2

Calibration Date: 4/18/2019 10:04:37AM

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
4-Methyl-2-pentanone (MIBK)	200	0.5510829	500	0.5705007	1000	0.5339101	2000	0.4865593				
Naphthalene	20	2.705675	50	2.715974	100	2.643712	200	2.543295				
n-Propylbenzene	20	3.925416	50	3.623001	100	3.649072	200	3.421669				
Styrene	20	2.285004	50	2.148928	100	2.13921	200	2.034708				
1,1,1,2-Tetrachloroethane	20	0.7676185	50	0.7386109	100	0.755356	200	0.7340508				
1,1,2,2-Tetrachloroethane	20	0.9458082	50	0.8965586	100	0.9141821	200	0.9100892				
Tetrachloroethylene	20	0.3157112	50	0.3019133	100	0.3080789	200	0.3038403				
Tetrahydrofuran	20	0.2643813	50	0.2891497	100	0.2826728	200	0.2846397				
Toluene	20	1.565282	50	1.503598	100	1.484526	200	1.440518				
1,2,3-Trichlorobenzene	20	0.9236547	50	0.9127392	100	0.9187908	200	0.8947653				
1,2,4-Trichlorobenzene	20	1.029646	50	1.011382	100	1.01098	200	0.9810156				
1,3,5-Trichlorobenzene	20	1.050899	50	1.053644	100	1.054782	200	1.028828				
1,1,1-Trichloroethane	20	1.018923	50	0.9631163	100	0.9769278	200	0.9561114				
1,1,2-Trichloroethane	20	0.3646568	50	0.3532595	100	0.3577801	200	0.3528926				
Trichloroethylene	20	0.3933872	50	0.3902366	100	0.3887716	200	0.3813814				
Trichlorofluoromethane (Freon 11)	20	0.9512762	50	0.905011	100	0.8754922	200	0.8628395				
1,2,3-Trichloropropane	20	0.2861149	50	0.2808687	100	0.2900941	200	0.2869869				
1,1,2-Trichloro-1,2,2-trifluoroethane	20	0.4289177	50	0.471347	100	0.4643226	200	0.4499332				
1,2,4-Trimethylbenzene	20	2.771261	50	2.710005	100	2.666249	200	2.627825				
1,3,5-Trimethylbenzene	20	2.715307	50	2.53506	100	2.597687	200	2.477178				
Vinyl Acetate	200	2.20616	500	1.942278	1000	1.772882	2000	1.590601				
Vinyl Chloride	20	0.8357067	50	0.7706171	100	0.758822	200	0.7222043				
m+p Xylene	40	2.66498	100	2.48399	200	2.443074	400	2.237953				
o-Xylene	20	2.747258	50	2.591785	100	2.590759	200	2.444574				
1,2-Dichloroethane-d4	25	0.7684143	25	0.7395449	25	0.7441217	25	0.7573903				
Toluene-d8	25	1.161111	25	1.161933	25	1.164556	25	1.181214				
4-Bromofluorobenzene	25	0.8867814	25	0.8584447	25	0.8706315	25	0.8537711				

6 - FORM VI

INITIAL CALIBRATION DATA SHEET (Continued)

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SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Calibration: 1900126

Instrument: GCMSVOA2

Calibration Date: 4/18/2019 10:04:37AM

COMPOUND	Mean RF	RF RSD	Linear r ²	Quad COD	LIMIT	Q
Acetone	0.2769679	14.2			15	
Acrolein	0.167927	14.5			15	
Acrylonitrile	0.3194576	13.5			15	
tert-Amyl Methyl Ether (TAME)	1.598391	9.7			15	
Benzene	2.213117	3.4			15	
Bromobenzene	1.310258	4.6			15	
Bromochloromethane	0.3016768	9.7			15	
Bromodichloromethane	0.5453889	4.6			15	
Bromoform	0.5576654	10.9			15	
Bromomethane	0.3856681	10.1			15	
2-Butanone (MEK)	0.4188478	2.0			15	
tert-Butyl Alcohol (TBA)	7.910615E-02	2.7			15	
n-Butylbenzene	2.403319	5.0			15	
sec-Butylbenzene	3.100541	5.5			15	
tert-Butylbenzene	2.202821	4.6			15	
tert-Butyl Ethyl Ether (TBEE)	2.283115	7.6			15	
Carbon Disulfide	1.586558	13.0			15	
Carbon Tetrachloride	0.827279	8.8			15	
Chlorobenzene	1.892475	3.6			15	
Chlorodibromomethane	0.4034213	12.1			15	
Chloroethane	0.4423197	7.9			15	
2-Chloroethyl Vinyl Ether	0.2923224	5.5			15	
Chloroform	1.115997	4.1			15	
Chloromethane	1.492028	14.7			15	
2-Chlorotoluene	2.341569	7.6			15	
4-Chlorotoluene	2.810374	6.3			15	
Cyclohexane	1.265571	4.1			15	
1,2-Dibromo-3-chloropropane (DBCP)	0.1837314	11.2			15	
1,2-Dibromoethane (EDB)	0.3886294	6.6			15	
Dibromomethane	0.255048	14.0			15	
1,2-Dichlorobenzene	1.590349	6.2			15	

6 - FORM VI

INITIAL CALIBRATION DATA SHEET (Continued)

176

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Calibration: 1900126

Instrument: GCMSVOA2

Calibration Date: 4/18/2019 10:04:37AM

COMPOUND	Mean RF	RF RSD	Linear r ²	Quad COD	LIMIT	Q
1,3-Dichlorobenzene	1.646151	4.6			15	
1,4-Dichlorobenzene	1.715993	4.6			15	
trans-1,4-Dichloro-2-butene	0.4232914	7.7			15	
Dichlorodifluoromethane (Freon 12)	0.662506	14.0			15	
1,1-Dichloroethane	1.219397	8.1			15	
1,2-Dichloroethane	0.711952	6.4			15	
1,1-Dichloroethylene	1.015305	6.8			15	
cis-1,2-Dichloroethylene	1.202488	5.0			15	
trans-1,2-Dichloroethylene	0.9905665	6.0			15	
Dichlorofluoromethane (Freon 21)	1.144777	6.8			15	
1,2-Dichloropropane	0.4325733	7.6			15	
1,3-Dichloropropane	0.612843	6.5			15	
2,2-Dichloropropane	0.9042566	8.3			15	
1,1-Dichloropropene	0.785502	5.2			15	
cis-1,3-Dichloropropene	0.6255614	6.4			15	
trans-1,3-Dichloropropene	0.6001103	6.6			15	
Diethyl Ether	0.5772458	4.7			15	
Difluorochloromethane (Freon 22)	1.038901	7.9			15	
Diisopropyl Ether (DIPE)	2.645352	6.7			15	
1,4-Dioxane	2.877828E-03	22.1				
Ethanol	7.505662E-03	12.7			15	
Ethylbenzene	3.294744	5.1			15	
Hexachlorobutadiene	0.3520431	11.3			15	
2-Hexanone (MBK)	0.397123	5.2			15	
Iodomethane	0.7244605	12.9			15	
Isopropylbenzene (Cumene)	3.093509	4.9			15	
p-Isopropyltoluene (p-Cymene)	2.682278	3.4			15	
Methyl Acetate	0.8707559	12.4			15	
Methyl tert-Butyl Ether (MTBE)	1.715429	6.9			15	
Methyl Cyclohexane	0.5163053	5.6			15	
Methylene Chloride	1.188752	5.6			15	

6 - FORM VI

INITIAL CALIBRATION DATA SHEET (Continued)

177

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Calibration: 1900126

Instrument: GCMSVOA2

Calibration Date: 4/18/2019 10:04:37AM

COMPOUND	Mean RF	RF RSD	Linear r ²	Quad COD	LIMIT	Q
4-Methyl-2-pentanone (MIBK)	0.5395485	4.1			15	
Naphthalene	2.713616	4.5			15	
n-Propylbenzene	3.810382	5.5			15	
Styrene	2.156272	4.4			15	
1,1,1,2-Tetrachloroethane	0.6893048	12.2			15	
1,1,2,2-Tetrachloroethane	0.8916204	4.9			15	
Tetrachloroethylene	0.2967119	9.7			15	
Tetrahydrofuran	0.2815737	3.6			15	
Toluene	1.537402	4.8			15	
1,2,3-Trichlorobenzene	0.9295821	3.9			15	
1,2,4-Trichlorobenzene	1.032392	3.0			15	
1,3,5-Trichlorobenzene	1.050083	3.9			15	
1,1,1-Trichloroethane	0.9712622	4.8			15	
1,1,2-Trichloroethane	0.3485793	5.7			15	
Trichloroethylene	0.3805688	9.7			15	
Trichlorofluoromethane (Freon 11)	0.9050556	6.4			15	
1,2,3-Trichloropropane	0.2808563	3.9			15	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1	0.423244	10.3			15	
1,2,4-Trimethylbenzene	2.760115	3.6			15	
1,3,5-Trimethylbenzene	2.651928	4.5			15	
Vinyl Acetate	1.959431	9.1			15	
Vinyl Chloride	0.8120006	9.2			15	
m+p Xylene	2.620803	7.4			15	
o-Xylene	2.703311	5.4			15	
1,2-Dichloroethane-d4	0.7730754	2.6			15	
Toluene-d8	1.174095	0.9			15	
4-Bromofluorobenzene	0.8828428	1.9			15	

6 - FORM VI INITIAL CALIBRATION DATA SHEET

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SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

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 (DBCP)	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

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INITIAL CALIBRATION DATA SHEET

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SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

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 22)	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 21)	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 21)	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

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INITIAL CALIBRATION DATA SHEET

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SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

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 113)	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-trifluoroethane	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)

181

SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

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 (DBCP)	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)

182

SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

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 22)	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 21)	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 21)	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)

183

SW-846 8260C

Client: Dvirka And Bartilucci

SDG: 19H0528

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 11)	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-trifluoroethane	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)

184

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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)

185

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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)

186

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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

187

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Sequence:	S035040	Instrument:	GCMSVOA2
Calibration:	1900126		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
1704244	10ppb 8260 Calibration Standard	S035040-TUN1	VB108006.D	04/18/19 10:04
1704239	0.4ppb 8260 Calibration Standard	S035040-CAL1	VB108007.D	04/18/19 10:35
1704240	0.5ppb 8260 Calibration Standard	S035040-CAL2	VB108008.D	04/18/19 11:06
1704241	1ppb 8260 Calibration Standard	S035040-CAL3	VB108009.D	04/18/19 11:37
1704242	2ppb 8260 Calibration Standard	S035040-CAL4	VB108010.D	04/18/19 12:08
1704243	5ppb 8260 Calibration Standard	S035040-CAL5	VB108011.D	04/18/19 12:38
1704244	10ppb 8260 Calibration Standard	S035040-CAL6	VB108012.D	04/18/19 13:09
1704245	20ppb 8260 Calibration Standard	S035040-CAL7	VB108013.D	04/18/19 13:40
1704246	50ppb 8260 Calibration Standard	S035040-CAL8	VB108014.D	04/18/19 14:11
1704247	100ppb 8260 Calibration Standard	S035040-CAL9	VB108015.D	04/18/19 14:42
1704248	200ppb 8260 Calibration Standard	S035040-CALA	VB108016.D	04/18/19 15:13

Y:\1\DATA\B041819\

Date	Filename	Lab ID	Sample Info
18 Apr 2019	7:18 am	VB108001.D	CLEAN UP
18 Apr 2019	7:49 am	VB108002.D	CLEAN UP
18 Apr 2019	8:20 am	VB108003.D	8260STD 10PPB 1904257
18 Apr 2019	9:02 am	VB108004.D	CLEAN UP
18 Apr 2019	9:33 am	VB108005.D	CLEAN UP
18 Apr 2019	10:04 am	VB108006.D	BFB
18 Apr 2019	10:35 am	VB108007.D	8260 STD 0.4 PPB 1904257
18 Apr 2019	11:06 am	VB108008.D	8260 STD 0.5 PPB 1904257
18 Apr 2019	11:37 am	VB108009.D	8260 STD 1.0 PPB 1904257
18 Apr 2019	12:08 pm	VB108010.D	8260 STD 2.0 PPB 1904257
18 Apr 2019	12:38 pm	VB108011.D	8260 STD 5.0 PPB 1904257
18 Apr 2019	12:38 pm	Copy of VB108011.D	8260 STD 5.0 PPB 1904257
18 Apr 2019	1:09 pm	VB108012.D	8260 STD 10 PPB 1904257
18 Apr 2019	1:40 pm	VB108013.D	8260 STD 20 PPB 1904257
18 Apr 2019	2:11 pm	VB108014.D	8260 STD 50 PPB 1901533
18 Apr 2019	2:42 pm	VB108015.D	8260 STD 100 PPB 1901533
18 Apr 2019	3:13 pm	VB108016.D	8260 STD 200 PPB 1901533
18 Apr 2019	3:43 pm	VB108017.D	8260 ETOH 500 PPB
18 Apr 2019	4:14 pm	VB108018.D	8260 ETOH 1000 PPB
18 Apr 2019	4:45 pm	VB108019.D	8260 ETOH 2000 PPB
18 Apr 2019	5:15 pm	VB108020.D	CLEAN UP
18 Apr 2019	5:46 pm	VB108021.D	CLEAN UP
18 Apr 2019	6:17 pm	VB108022.D	CLEAN UP
18 Apr 2019	6:48 pm	VB108023.D	ICV
18 Apr 2019	7:18 pm	VB108024.D	ICVD
18 Apr 2019	7:49 pm	VB108025.D	CLEAN UP
18 Apr 2019	8:20 pm	VB108026.D	CLEAN UP
18 Apr 2019	8:51 pm	VB108027.D	CLEAN UP
18 Apr 2019	9:21 pm	VB108028.D	CLEAN UP
18 Apr 2019	9:52 pm	VB108029.D	CLEAN UP
18 Apr 2019	10:23 pm	VB108030.D	CLEAN UP
18 Apr 2019	10:54 pm	VB108031.D	CLEAN UP
18 Apr 2019	11:24 pm	VB108032.D	CLEAN UP
18 Apr 2019	11:55 pm	VB108033.D	CLEAN UP
19 Apr 2019	12:26 am	VB108034.D	CLEAN UP
19 Apr 2019	12:56 am	VB108035.D	CLEAN UP

REVIEWED*By Cathy Rouleau at 12:35 pm, Apr 22, 2019*

Method Path : Y:\1\METHODS\
 Method File : B041819W.M
 Title : 8260 CALIBRATION VOAMS 5973
 Last Update : Fri Apr 19 05:42:51 2019
 Response Via : Initial Calibration

Calibration Files

0.4 =VB108007.D 0.5 =VB108008.D 1.0 =VB108009.D 2.0 =VB108010.D 5.0 =VB108011.D 10 =VB108012.D 20 =VB108013.D
 50 =VB108014.D 100 =VB108015.D 200 =VB108016.D

Compound		0.4	0.5	1.0	2.0	5.0	10	20	50	100	200	Avg	%RSD

1) I	PENTAFLUOROBENZENE...	-----ISTD-----											
2) S	1,2-DICHLOROET...	0.790	0.791	0.794	0.784	0.786	0.776	0.768	0.740	0.744	0.757	0.773	2.58
3) T	DICHLORODIFLOU...	0.565	0.756	0.712	0.761	0.679	0.755	0.723	0.584	0.568	0.522	0.663	14.03
4)	DIFLUOROCHLORO...			1.210	1.092	0.990	1.055	1.009	0.999	1.009	0.946	1.039	7.87
5) P	CHLOROMETHANE	1.409	1.392	1.622	1.567	1.812	1.642	1.407	1.085		1.492		14.71
6) C	VINYL CHLORIDE	0.706	0.911	0.853	0.906	0.777	0.880	0.836	0.771	0.759	0.722	0.812	9.24#
7) T	BROMOMETHANE					0.390	0.348	0.345	0.372	0.413	0.445	0.386	10.07
8)	CHLOROETHANE	0.385	0.438	0.486	0.488	0.440	0.470	0.468	0.425	0.418	0.404	0.442	7.94
9)	FLUORODICHLORO...	1.177	1.297	1.205	1.211	1.086	1.143	1.117	1.094	1.079	1.039	1.145	6.81
10) T	TRICHLOROFLUOR...	0.788	0.888	0.909	0.982	0.915	0.975	0.951	0.905	0.875	0.863	0.905	6.36
11)	ETHANOL						0.009	0.007	0.008	0.007	0.007	0.008	12.68
12) T	DI ETHYL ETHER	0.546	0.549	0.528	0.601	0.574	0.593	0.579	0.608	0.603	0.592	0.577	4.74
13)	ACROLEIN				0.204	0.178	0.181	0.183	0.145	0.142	0.143	0.168	14.50
14) T	ACETONE		0.355	0.317	0.260	0.271	0.265	0.258	0.253	0.236	0.277		14.17
15) C	1,1-DICHLOROET...	0.973	1.104	1.070	1.116	0.961	1.063	1.021	0.968	0.958	0.919	1.015	6.79#
16)	1,1,2-TRICL-1,...	0.326	0.387	0.420	0.444	0.397	0.445	0.429	0.471	0.464	0.450	0.423	10.34
17)	IODOMETHANE			0.558	0.656	0.680	0.799	0.825	0.804	0.785	0.689	0.724	12.87
18)	METHYL ACETATE			1.007	0.913	0.800	0.722	0.736	0.871	0.957	0.960	0.871	12.36
19)	T-BUTYL ALCOHOL			0.077	0.082	0.076	0.079	0.077	0.082	0.080	0.080	0.079	2.73
20)	ACRYLONITRILE			0.232	0.307	0.303	0.312	0.323	0.359	0.360	0.360	0.319	13.53
21) T	METHYLENE CHLO...	1.242	1.276	1.166	1.277	1.186	1.217	1.193	1.119	1.130	1.082	1.189	5.56
22)	CARBON DISULFIDE	1.679	1.773	1.736	1.788	1.572	1.692	1.634	1.487	1.368	1.136	1.587	12.96
23) T	METHYL TERT-BU...	1.577	1.597	1.553	1.711	1.672	1.734	1.739	1.868	1.883	1.820	1.715	6.86
24) T	TRANS 1,2-DICH...	0.865	0.970	1.002	1.084	1.011	1.037	1.032	0.974	0.980	0.950	0.991	5.96
25) P	1,1-DICHLOROET...	0.987	1.299	1.292	1.329	1.221	1.277	1.253	1.173	1.194	1.170	1.219	8.08
26)	VINYL ACETATE	1.949	1.897	1.988	2.030	2.107	2.112	2.206	1.942	1.773	1.591	1.959	9.12
27)	DI ISOPROPYL E...	2.342	2.451	2.508	2.684	2.555	2.688	2.746	2.876	2.867	2.736	2.645	6.68
28) T	2-BUTANONE	0.419	0.419	0.419	0.420	0.404	0.427	0.424	0.428	0.422	0.406	0.419	1.96
29)	T-BUTYL ETHYL ...	1.981	2.067	2.149	2.287	2.223	2.344	2.392	2.451	2.488	2.449	2.283	7.63
30) T	CIS-1,2-DICHL...	1.086	1.199	1.215	1.294	1.200	1.272	1.251	1.170	1.179	1.158	1.202	5.00
31)	2,2-DICHLOROPR...	0.949	0.992	0.980	0.991	0.875	0.927	0.894	0.827	0.816	0.790	0.904	8.35
32)	ETHYL ACETATE				1.161	1.087	1.061	1.017	1.031	1.037	1.049	1.063	4.56
33)	BROMOCHLOROMET...			0.262	0.332	0.311	0.337	0.324	0.298	0.288	0.262	0.302	9.72
34) T	TETRAHYDROFURAN				0.295	0.273	0.282	0.264	0.289	0.283	0.285	0.282	3.57
35)	T-BUTYL FORMATE				0.477	0.549	0.552	0.676	0.685	0.701	0.653	0.613	14.10
36) C	CHLOROFORM	1.066	1.158	1.091	1.199	1.096	1.163	1.145	1.074	1.095	1.073	1.116	4.15#
37) T	1,1,1-TRICHLOR...	0.887	0.906	1.022	0.991	0.966	1.025	1.019	0.963	0.977	0.956	0.971	4.83
38)	CYCLOHEXANE					1.310	1.338	1.263	1.248	1.241	1.194	1.266	4.05
39) T	CARBON TETRACH...	0.663	0.805	0.794	0.939	0.816	0.888	0.880	0.832	0.839	0.817	0.827	8.81
40)	1,1-DICHLOROPR...	0.702	0.754	0.766	0.810	0.759	0.840	0.830	0.795	0.807	0.792	0.786	5.22
41) T	BENZENE	2.180	2.339	2.218	2.262	2.121	2.293	2.264	2.169	2.183	2.102	2.213	3.43
42)	T-AMYL ALCOHOL			0.048	0.051	0.053	0.055	0.057	0.061	0.063	0.064	0.057	10.05
43)	T-AMYLMETHYL E...	1.298	1.448	1.516	1.588	1.566	1.620	1.624	1.768	1.807	1.748	1.598	9.72

Method Path : Y:\1\METHODS\
 Method File : B041819W.M
 Title : 8260 CALIBRATION VOAMS 5973

44)	I	1,4-DIFLOUROBENZEN...	-----ISTD-----												
45)	S	TOLUENE-D8 SS	1.174	1.177	1.175	1.196	1.180	1.168	1.161	1.162	1.165	1.181	1.174	0.91	
46)	T	1,2-DICHLOROET...	0.621	0.683	0.764	0.767	0.718	0.750	0.742	0.698	0.697	0.679	0.712	6.39	
47)	T	TRICHLOROETHENE	0.285	0.414	0.369	0.405	0.368	0.410	0.393	0.390	0.389	0.381	0.381	9.69	
48)		METHYLCYCLOHEXANE	0.502	0.528	0.494	0.501	0.462	0.516	0.511	0.554	0.554	0.542	0.516	5.63	
49)	C	1,2-DICHLOROPR...	0.376	0.377	0.447	0.477	0.434	0.459	0.453	0.435	0.438	0.430	0.433	7.56#	
50)	T	DIBROMOMETHANE	0.165	0.230	0.249	0.285	0.273	0.282	0.279	0.266	0.262	0.259	0.255	14.03	
51)		1,4-DIOXANE					0.002	0.002	0.003	0.003	0.003	0.004	0.003	22.13	
52)	T	BROMODICHLOROM...	0.486	0.525	0.551	0.562	0.548	0.575	0.567	0.547	0.550	0.543	0.545	4.59	
53)		2-CHLOROETHYLV...	0.260	0.299	0.291	0.305	0.296	0.301	0.304	0.305	0.293	0.268	0.292	5.45	
54)	T	MIBK	0.530	0.537	0.546	0.555	0.537	0.548	0.551	0.571	0.534	0.487	0.540	4.10	
55)	T	CIS-1,3-DICHL...	0.555	0.565	0.596	0.636	0.640	0.665	0.667	0.649	0.649	0.633	0.626	6.37	
56)	C	TOLUENE	1.453	1.624	1.554	1.673	1.511	1.565	1.565	1.504	1.485	1.441	1.537	4.79#	
57)	T	TRANS-1,3,-DIC...	0.561	0.515	0.567	0.613	0.605	0.627	0.642	0.625	0.629	0.617	0.600	6.63	
58)		ETHYL METHACRY...										0.000		-1.00	
59)	T	1,1,2-TRICHLOR...	0.304	0.350	0.336	0.372	0.332	0.363	0.365	0.353	0.358	0.353	0.349	5.65	
60)		2-HEXANONE	0.404	0.429	0.400	0.417	0.387	0.400	0.394	0.405	0.381	0.354	0.397	5.17	
61)	T	TETRACHLOROETHENE	0.226	0.325	0.274	0.310	0.289	0.314	0.316	0.302	0.308	0.304	0.297	9.67	
62)		1,3-DICHLOROPR...	0.544	0.549	0.592	0.650	0.628	0.656	0.645	0.625	0.625	0.614	0.613	6.46	
63)	T	DIBROMOCHLOROM...	0.298	0.348	0.372	0.415	0.409	0.441	0.441	0.433	0.441	0.437	0.403	12.15	
64)	T	1,2-DIBROMOETHANE	0.363	0.328	0.384	0.393	0.393	0.408	0.413	0.406	0.402	0.396	0.389	6.60	
65)	I	CHLOROBENZENE-D5	ISTD	-----ISTD-----											
66)	S	4-BROMOFLUROBE...	0.896	0.878	0.897	0.899	0.899	0.890	0.887	0.858	0.871	0.854	0.883	1.91	
67)	P	CHLOROBENZENE	1.820	1.953	1.899	1.978	1.864	1.938	1.974	1.863	1.859	1.777	1.892	3.57	
68)	T	1,1,1,2-TETRAC...	0.486	0.616	0.679	0.690	0.693	0.734	0.768	0.739	0.755	0.734	0.689	12.23	
69)	C	ETHYLBENZENE	3.306	3.524	3.397	3.444	3.133	3.406	3.380	3.191	3.186	2.981	3.295	5.08#	
70)	T	M/P-XYLENES	2.752	2.852	2.699	2.845	2.532	2.698	2.665	2.484	2.443	2.238	2.621	7.41	
71)	T	0-XYLENE	2.787	2.863	2.846	2.849	2.565	2.749	2.747	2.592	2.591	2.445	2.703	5.37	
72)	T	STYRENE	1.994	2.221	2.130	2.219	2.118	2.273	2.285	2.149	2.139	2.035	2.156	4.43	
73)	P	BROMOFORM		0.435	0.493	0.560	0.537	0.570	0.595	0.595	0.621	0.612	0.558	10.89	
74)	T	ISOPROPYLBENZENE	2.952	3.223	3.205	3.273	3.017	3.232	3.209	2.970	3.015	2.839	3.094	4.89	
75)		CIS-1,4-DICHL...										0.000		-1.00	
76)	P	1,1,2,2-TETRAC...	0.877	0.780	0.893	0.901	0.883	0.916	0.946	0.897	0.914	0.910	0.892	4.90	
77)		1,4-DICHLORO-2...			0.361	0.434	0.393	0.413	0.428	0.449	0.457	0.450	0.423	7.74	
78)		BROMOBENZENE	1.277	1.383	1.369	1.396	1.274	1.333	1.331	1.241	1.271	1.230	1.310	4.56	
79)	T	1,2,3-TRICHLOR...		0.272	0.263	0.296	0.269	0.284	0.286	0.281	0.290	0.287	0.281	3.92	
80)	T	N-PROPYLBENZENE	4.003	3.948	3.983	4.001	3.619	3.931	3.925	3.623	3.649	3.422	3.810	5.53	
81)	T	2-CHLOROTOLUENE	2.509	2.629	2.437	2.470	2.218	2.396	2.335	2.164	2.181	2.077	2.342	7.56	
82)	T	1,3,5-TRIMETHY...	2.699	2.837	2.703	2.733	2.492	2.729	2.715	2.535	2.598	2.477	2.652	4.50	
83)		4-CHLOROTOLUENE	2.862	3.142	2.857	2.920	2.715	2.924	2.853	2.637	2.668	2.526	2.810	6.30	
84)	I	1,4-DICHLOROBENZEN...	-----ISTD-----												
85)	T	TERT-BUTYLBENZENE	2.231	2.375	2.247	2.314	2.104	2.245	2.218	2.142	2.105	2.049	2.203	4.63	
86)	T	1,2,4-TRIMETHY...	2.848	2.938	2.765	2.870	2.664	2.740	2.771	2.710	2.666	2.628	2.760	3.62	
87)		SEC-BUTYLBENZENE	3.119	3.423	3.126	3.304	2.952	3.127	3.127	3.031	2.951	2.844	3.101	5.51	
88)	T	1,3-DICHLOROB...	1.659	1.783	1.715	1.689	1.579	1.657	1.672	1.599	1.570	1.537	1.646	4.56	
89)	T	P-ISOPROPYLTOL...	2.792	2.758	2.680	2.784	2.550	2.729	2.715	2.660	2.628	2.528	2.682	3.43	
90)	T	1,4-DICHLOROB...	1.859	1.764	1.716	1.803	1.650	1.722	1.733	1.669	1.646	1.597	1.716	4.61	
91)	T	N-BUTYLBENZENE	2.429	2.693	2.365	2.462	2.257	2.422	2.416	2.372	2.334	2.281	2.403	5.04	
92)	T	1,2-DICHLOROB...	1.513	1.842	1.601	1.588	1.570	1.616	1.609	1.546	1.532	1.487	1.590	6.17	
93)		1,2-DIBROMO-3-...			0.137	0.175	0.181	0.198	0.191	0.198	0.195	0.195	0.184	11.22	

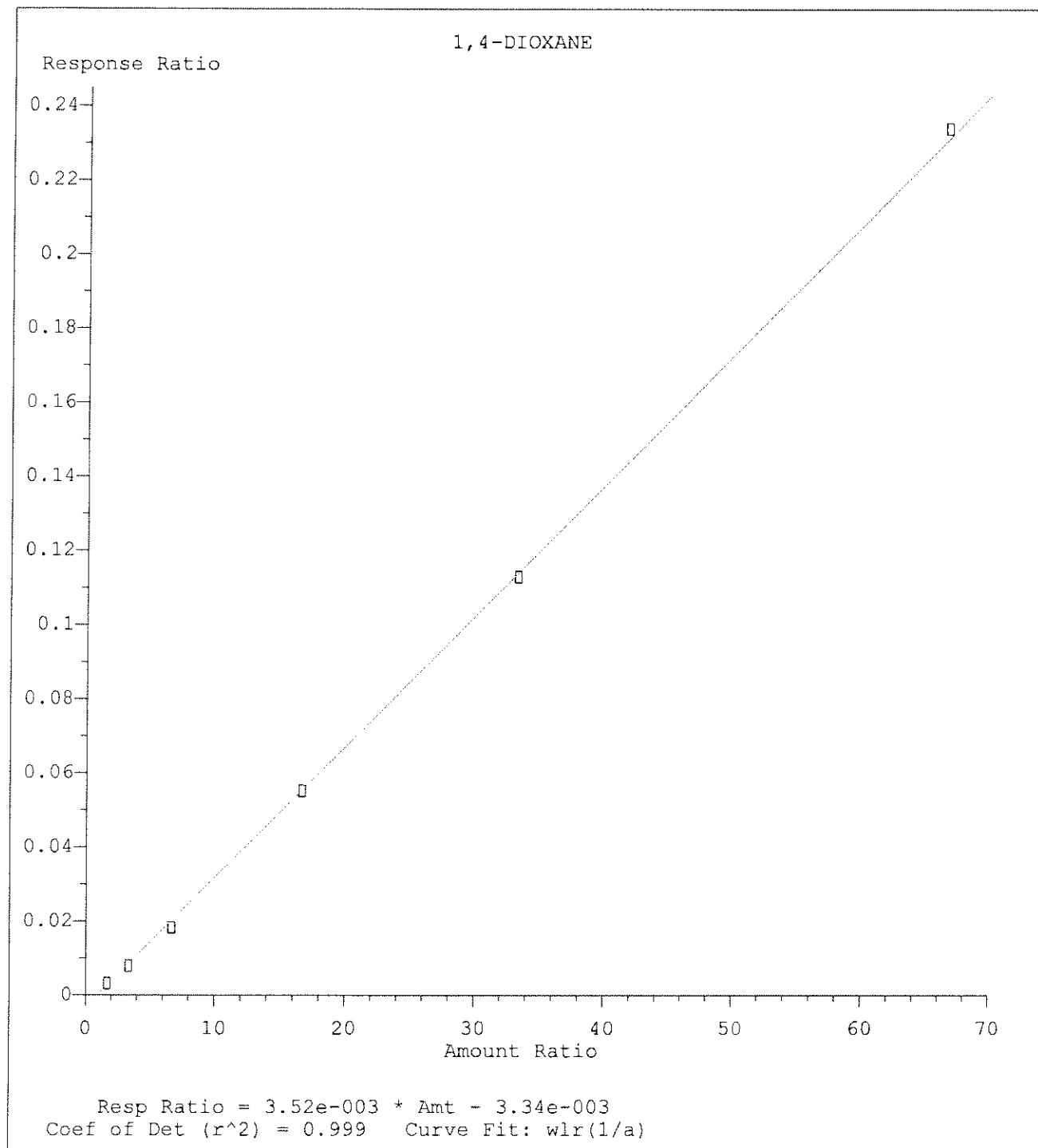
Method Path : Y:\1\METHODS\

Method File : B041819W.M

Title : 8260 CALIBRATION VOAMS 5973

94)	1,3,5-TRICHLOR...	1.142	1.038	1.026	1.079	0.982	1.045	1.051	1.054	1.055	1.029	1.050	3.92
95) T	1,2,4-TRICHLOR...	1.067	1.061	1.064	1.061	1.001	1.037	1.030	1.011	1.011	0.981	1.032	2.96
96) T	HEXACHLOROBUTA...	0.286	0.272	0.394	0.372	0.358	0.376	0.365	0.365	0.374	0.359	0.352	11.34
97) T	NAPHTHALENE	2.843	2.977	2.678	2.731	2.610	2.688	2.706	2.716	2.644	2.543	2.714	4.48
98)	1,2,3-TRICHLOR...	0.988	0.961	0.886	0.985	0.898	0.929	0.924	0.913	0.919	0.895	0.930	3.93

(#) = Out of Range



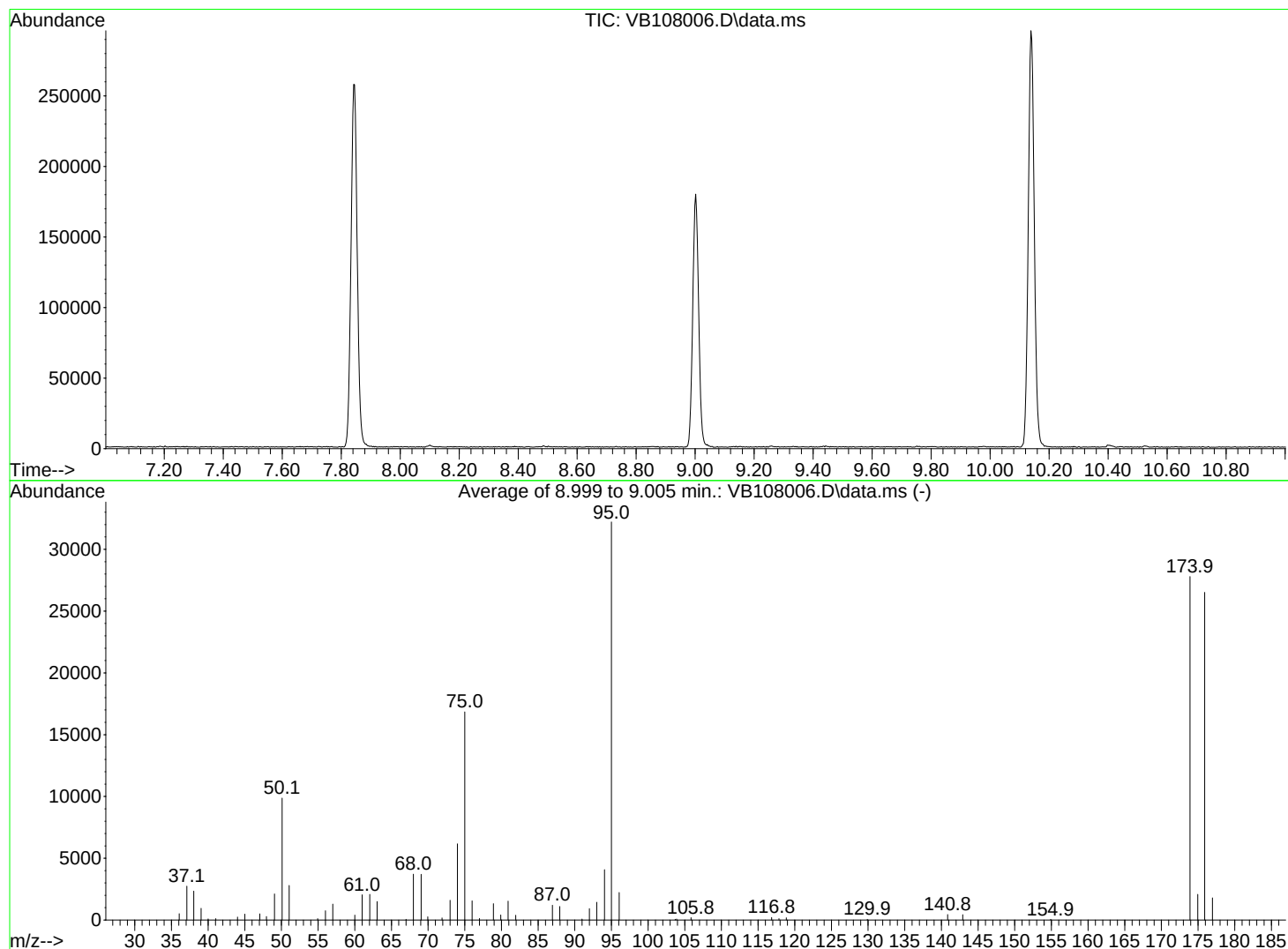
Method Name: C:\MSDCHEM\1\METHODS\B041819W.M
Calibration Table Last Updated: Fri Apr 19 05:25:51 2019

Data Path : Y:\1\DATA\B041819\
 Data File : VB108006.D
 Acq On : 18 Apr 2019 10:04 am
 Operator :
 Sample : BFB
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Inst : GCMSVOA2

Integration File: 8260LOW.P

Method : Y:\1\METHODS\B041819W.M
 Title : 8260 CALIBRATION VOAMS 5973
 Last Update : Fri Apr 19 05:42:51 2019



AutoFind: Scans 2785, 2786, 2787; Background Corrected with Scan 2773

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	30.6	9866	PASS
75	95	30	60	52.3	16848	PASS
95	95	100	100	100.0	32216	PASS
96	95	5	9	6.9	2229	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	86.3	27792	PASS
175	174	5	9	7.5	2084	PASS
176	174	95	101	95.4	26520	PASS
177	176	5	9	6.8	1791	PASS

Data Path : Y:\1\DATA\B041819\
 Data File : VB108007.D
 Acq On : 18 Apr 2019 10:35 am
 Operator :
 Sample : 8260 STD 0.4 PPB 1904257
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 11:27:39 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	73033	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	115873	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	62846	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.138	152	63101	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	48078	34.90	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	139.60%#		
45) TOLUENE-D8 SS	6.444	98	113386	24.87	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	99.48%		
66) 4-BROMOFLUOROBENZENE SS	8.999	95	46933	24.90	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	99.60%		
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.146	85	550	0.38	UG/L #	43
4) DIFLUOROCHLOROMETHANE	0.000		0	N.D.	d	
5) CHLOROMETHANE	1.254	50	1372m	0.62	UG/L	
6) VINYL CHLORIDE	1.328	62	687	0.41	UG/L #	43
7) BROMOMETHANE	1.533	94	1047	1.11	UG/L #	79
8) CHLOROETHANE	1.598	64	375	0.42	UG/L #	44
9) FLUORODICHLOROMETHANE	1.720	67	1146	0.55	UG/L	93
10) TRICHLOROFLUOROMETHANE	1.755	101	767	0.45	UG/L #	18
11) ETHANOL	0.000		0	N.D.	d	
12) DI ETHYL ETHER	1.951	59	532	0.47	UG/L #	4
13) ACROLEIN	2.050	56	2557	7.60	UG/L #	82
14) ACETONE	2.169	43	4373m	9.99	UG/L	
15) 1,1-DICHLOROETHENE	2.115	61	947	0.53	UG/L #	30
16) 1,1,2-TRICL-1,2,2-TRIF...	2.118	101	317m	0.33	UG/L	
17) IODOMETHANE	2.235	142	4476	2.52	UG/L	94
18) METHYL ACETATE	0.000		0	N.D.	d	
19) T-BUTYL ALCOHOL	0.000		0	N.D.	d	
20) ACRYLONITRILE	0.000		0	N.D.		
21) METHYLENE CHLORIDE	2.508	49	1209	0.60	UG/L #	58
22) CARBON DISULFIDE	2.286	76	16352	4.30	UG/L	100
23) METHYL TERT-BUTYL ETHE...	2.744	73	1536	0.42	UG/L #	47
24) TRANS 1,2-DICHLOROETHENE	2.749	61	842	0.43	UG/L #	27
25) 1,1-DICHLOROETHANE	3.176	63	961	0.38	UG/L #	51
26) VINYL ACETATE	3.232	43	18974	5.73	UG/L #	92
27) DI ISOPROPYL ETHER	3.238	45	2281	0.48	UG/L #	52
28) 2-BUTANONE	3.801	43	4076	5.34	UG/L #	61
29) T-BUTYL ETHYL ETHER	3.610	59	1929	0.42	UG/L	91
30) CIS-1,2-DICHLOROETHENE	3.761	61	1058	0.46	UG/L #	26
31) 2,2-DICHLOROPROPANE	3.761	77	924	0.61	UG/L #	47
32) ETHYL ACETATE	0.000		0	N.D.		
33) BROMOCHLOROMETHANE	3.997	128	59m	0.09	UG/L	
34) TETRAHYDROFURAN	0.000		0	N.D.		
35) T-BUTYL FORMATE	4.145	59	194m	0.15	UG/L	
36) CHLOROFORM	4.091	83	1038	0.46	UG/L	86
37) 1,1,1-TRICHLOROETHANE	4.244	97	864	0.47	UG/L #	23
38) CYCLOHEXANE	4.295	56	3384	1.26	UG/L #	89
39) CARBON TETRACHLORIDE	4.406	117	646	0.40	UG/L	92
40) 1,1-DICHLOROPROPENE	4.420	75	684	0.43	UG/L #	40
41) BENZENE	4.622	78	2123	0.41	UG/L #	52
42) T-AMYL ALCOHOL	0.000		0	N.D.	d	
43) T-AMYLMETHYL ETHER	4.739	73	1264	0.36	UG/L #	66
46) 1,2-DICHLOROETHANE	4.653	62	960	0.46	UG/L #	52
47) TRICHLOROETHENE	5.256	95	441m	0.32	UG/L	

Data Path : Y:\1\DATA\B041819\

Data File : VB108007.D

Acq On : 18 Apr 2019 10:35 am

Operator :

Sample : 8260 STD 0.4 PPB 1904257

Inst : GCMSVOA2

Misc :

ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 18 11:27:39 2019

Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M

Quant Title : 8260 CALIBRATION VOAMS 5973

QLast Update : Thu Apr 11 08:23:37 2019

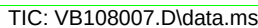
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.429	83	775	0.38	UG/L #	76
49) 1,2-DICHLOROPROPANE	5.489	63	581	0.36	UG/L #	8
50) DIBROMOMETHANE	5.608	93	255m	0.29	UG/L	
51) 1,4-DIOXANE	0.000		0	N.D.		
52) BROMODICHLOROMETHANE	5.762	83	751	0.43	UG/L #	26
53) 2-CHLOROETHYLVINYLEETHER	6.074	63	4017	3.78	UG/L #	60
54) MIBK	6.367	43	8195	4.99	UG/L #	86
55) CIS-1,3-DICHLOROPROPENE	6.202	75	858	0.40	UG/L #	39
56) TOLUENE	6.503	91	2245	0.39	UG/L	97
57) TRANS-1,3,-DICHLOROPRO...	6.751	75	866	0.44	UG/L #	42
58) ETHYL METHACRYLATE	0.000		0	N.D.	d	
59) 1,1,2-TRICHLOROETHANE	6.924	97	470m	0.36	UG/L	
60) 2-HEXANONE	7.177	43	6245	5.45	UG/L #	82
61) TETRACHLOROETHENE	7.029	164	349m	0.31	UG/L	
62) 1,3-DICHLOROPROPANE	7.080	76	840	0.37	UG/L #	31
63) DIBROMOCHLOROMETHANE	7.294	129	460m	0.30	UG/L	
64) 1,2-DIBROMOETHANE	7.399	107	561	0.39	UG/L #	4
67) CHLOROBENZENE	7.870	112	1525	0.37	UG/L #	29
68) 1,1,1,2-TETRACHLOROETHANE	7.961	131	407m	0.26	UG/L	
69) ETHYLBENZENE	7.987	91	2770	0.40	UG/L	93
70) M/P-XYLENES	8.098	91	4612	0.86	UG/L	88
71) O-XYLENE	8.490	91	2335	0.42	UG/L	92
72) STYRENE	8.504	104	1671	0.36	UG/L #	69
73) BROMOFORM	8.683	173	304m	0.25	UG/L	
74) ISOPROPYLBENZENE	8.854	105	2474	0.37	UG/L	95
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.		
76) 1,1,2,2-TETRACHLOROETHANE	9.172	83	735	0.38	UG/L #	26
77) 1,4-DICHLORO-2-BUTENE(...	0.000		0	N.D.		
78) BROMOBENZENE	9.138	77	1070	0.40	UG/L	89
79) 1,2,3-TRICHLOROPROPANE	0.000		0	N.D.		
80) N-PROPYLBENZENE	9.257	91	3354	0.43	UG/L	91
81) 2-CHLOROTOLUENE	9.337	91	2102	0.44	UG/L	89
82) 1,3,5-TRIMETHYLBENZENE	9.434	105	2262	0.40	UG/L	89
83) 4-CHLOROTOLUENE	9.442	91	2398	0.43	UG/L #	88
85) TERT-BUTYLBENZENE	9.752	119	1877	0.40	UG/L #	79
86) 1,2,4-TRIMETHYLBENZENE	9.806	105	2396	0.43	UG/L #	84
87) SEC-BUTYLBENZENE	9.976	105	2624	0.42	UG/L #	55
88) 1,3-DICHLOROBENZENE	10.073	146	1396	0.42	UG/L	98
89) P-ISOPROPYLTOLUENE	10.121	119	2349	0.41	UG/L #	90
90) 1,4-DICHLOROBENZENE	10.161	146	1564	0.44	UG/L #	72
91) N-BUTYLBENZENE	10.528	91	2044	0.46	UG/L #	78
92) 1,2-DICHLOROBENZENE	10.531	146	1273	0.39	UG/L	91
93) 1,2-DIBROMO-3-CHLOROPR...	0.000		0	N.D.		
94) 1,3,5-TRICHLOROBENZENE	11.508	180	961	0.43	UG/L	97
95) 1,2,4-TRICHLOROBENZENE	12.125	180	898	0.43	UG/L #	78
96) HEXACHLOROBUTADIENE	12.295	225	241m	0.33	UG/L	
97) NAPHTHALENE	12.366	128	2392	0.43	UG/L #	69
98) 1,2,3-TRICHLOROBENZENE	12.611	180	831	0.44	UG/L	94

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

196

Inst : GCMSVOA2

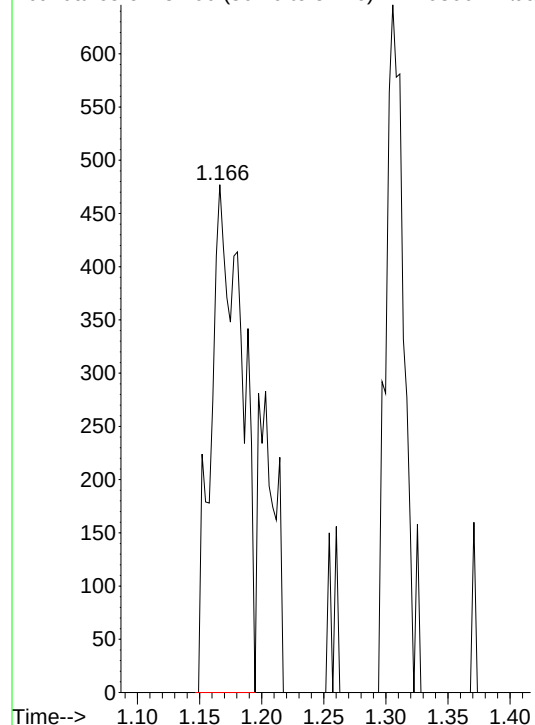


Data Path : Y:\1\DATA\B041819\
Data File : VB108007.D
Acq On : 18 Apr 2019 10:35 am
Operator :
Sample : 8260 STD 0.4 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:27:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration
DIFLUOROCHLOROMETHANE

Abundance on 51.00 (50.70 to 51.70): VB108007.D\data



Original Int. Results

RT : 1.17
Area : 827
Amount: 0.40237

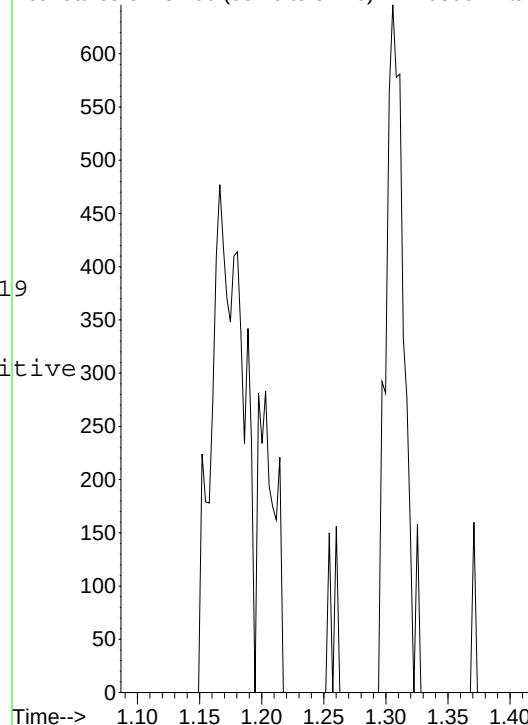
Manual Int. Results

Thu Apr 18 11:25:55 2019

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

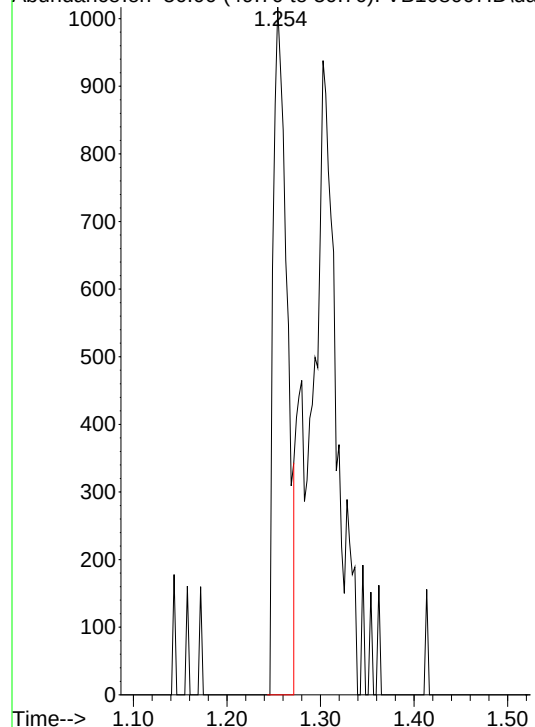
Manual Integration
DIFLUOROCHLOROMETHANE

Abundance on 51.00 (50.70 to 51.70): VB108007.D\data



Original Integration
CHLOROMETHANE

Abundance on 50.00 (49.70 to 50.70): VB108007.D\data



Original Int. Results

RT : 1.25
Area : 1044
Amount: 0.473491

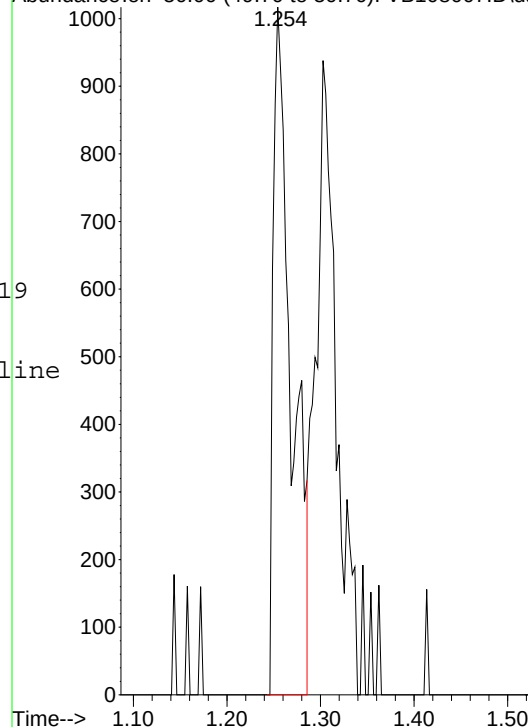
Manual Int. Results

Thu Apr 18 11:26:01 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 1.25
Area : 1372
Amount: 0.622251

Manual Integration
CHLOROMETHANE

Abundance on 50.00 (49.70 to 50.70): VB108007.D\data



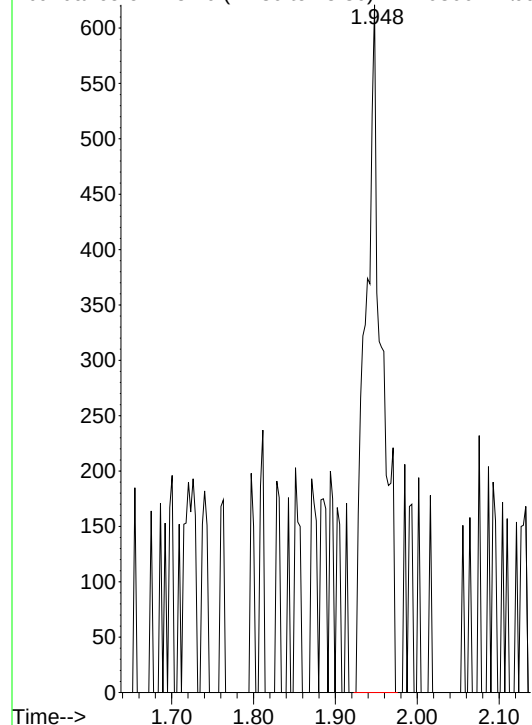
Data Path : Y:\1\DATA\B041819\
Data File : VB108007.D
Acq On : 18 Apr 2019 10:35 am
Operator :
Sample : 8260 STD 0.4 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:27:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHANOL

Abundance on 45.10 (44.80 to 45.80): VB108007.D\data



Original Int. Results

RT : 1.95
Area : 863
Amount: 50.7468

Manual Int. Results

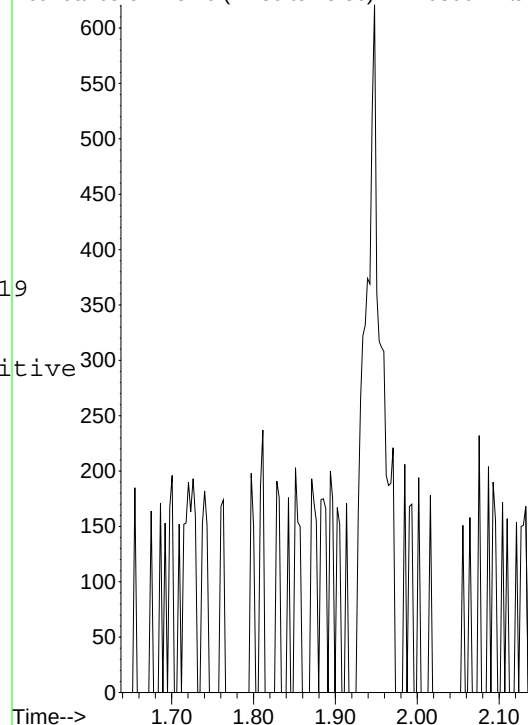
Thu Apr 18 11:26:10 2019

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

Manual Integration

ETHANOL

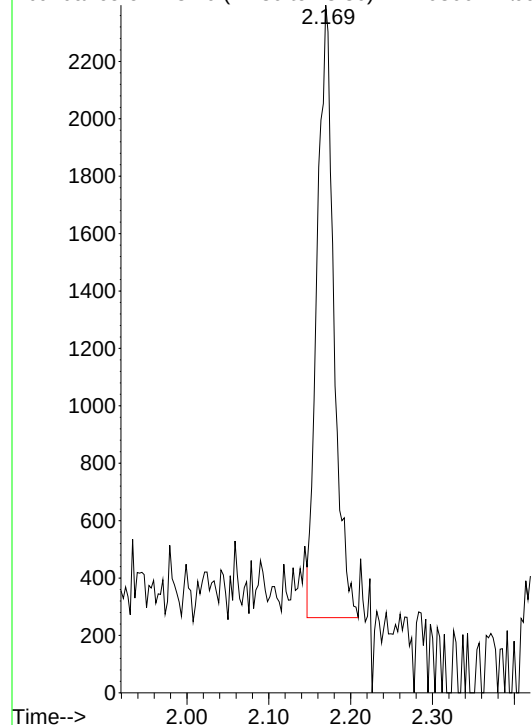
Abundance on 45.10 (44.80 to 45.80): VB108007.D\data



Original Integration

ACETONE

Abundance on 43.10 (42.80 to 43.80): VB108007.D\data



Original Int. Results

RT : 2.17
Area : 3025
Amount: 6.91303

Manual Int. Results

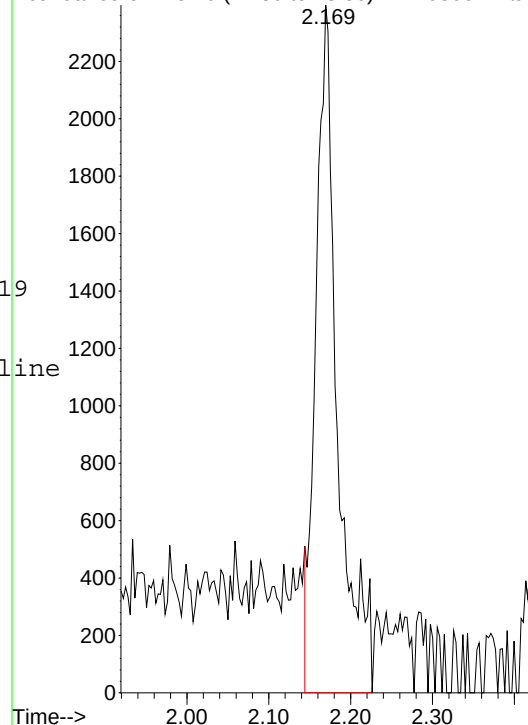
Thu Apr 18 11:26:19 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 2.17
Area : 4373
Amount: 9.99361

Manual Integration

ACETONE

Abundance on 43.10 (42.80 to 43.80): VB108007.D\data



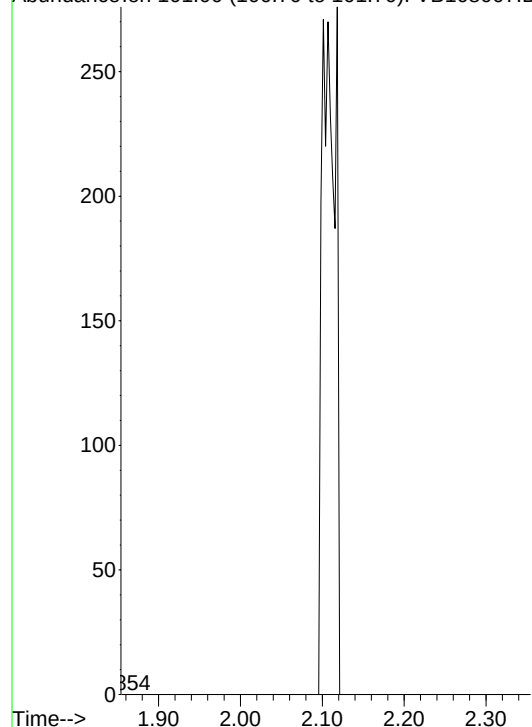
Data Path : Y:\1\DATA\B041819\
Data File : VB108007.D
Acq On : 18 Apr 2019 10:35 am
Operator :
Sample : 8260 STD 0.4 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:27:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

1,1,2-TRICL-1,2,2-TRIFLETHANE

Abundance on 101.00 (100.70 to 101.70): VB108007.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:26:25 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 2.12

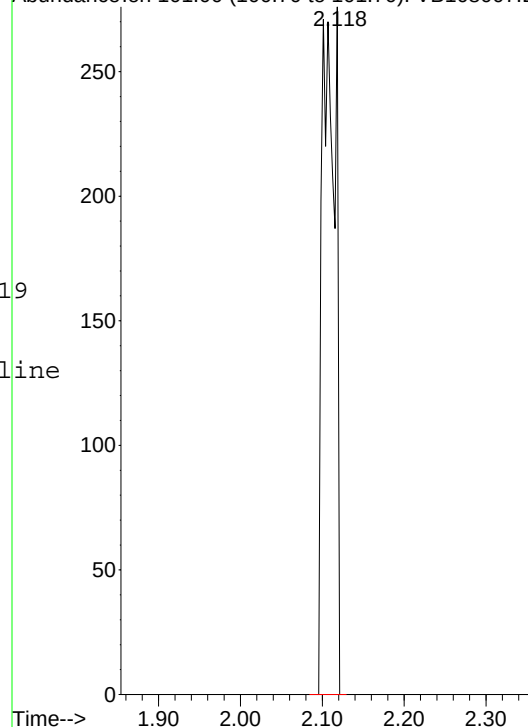
Area : 317

Amount: 0.328126

Manual Integration

1,1,2-TRICL-1,2,2-TRIFLETHANE

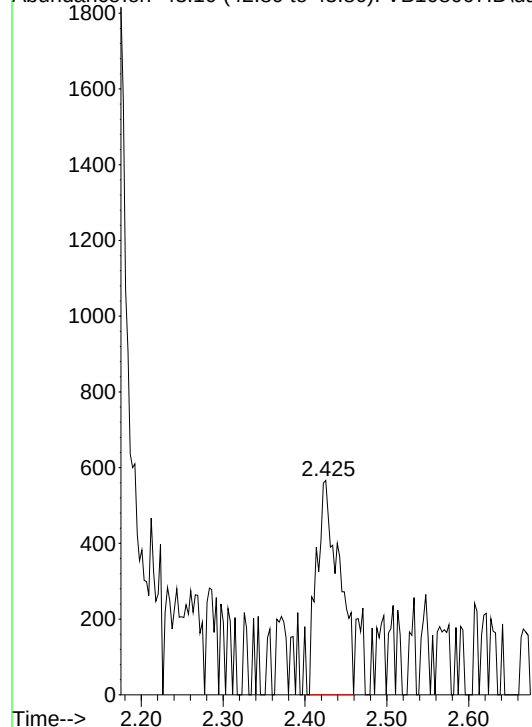
Abundance on 101.00 (100.70 to 101.70): VB108007.D



Original Integration

METHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): VB108007.D\data



Original Int. Results

RT : 2.43

Area : 1073

Amount: 0.410949

Manual Int. Results

Thu Apr 18 11:26:29 2019

MIuser: LBD

Reason: Qdel False Positive

RT : 0.00

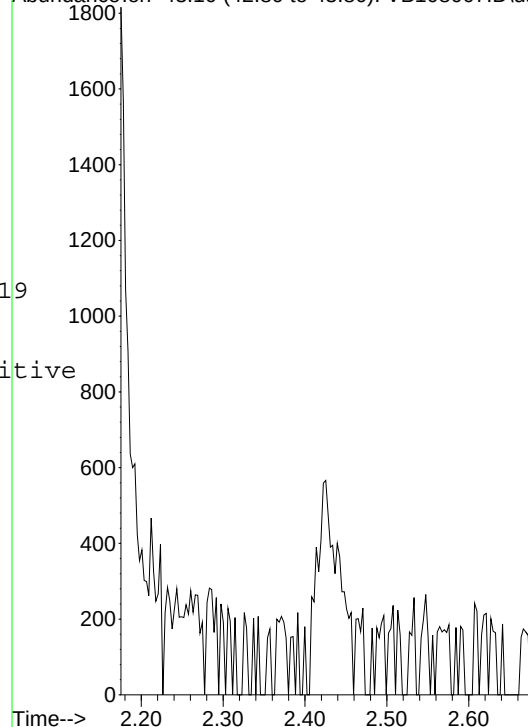
Area : 0

Amount: 0

Manual Integration

METHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): VB108007.D\data



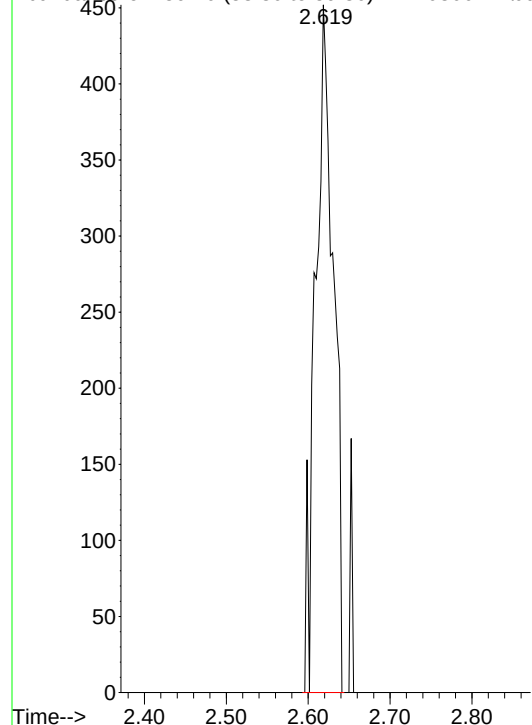
Data Path : Y:\1\DATA\B041819\
Data File : VB108007.D
Acq On : 18 Apr 2019 10:35 am
Operator :
Sample : 8260 STD 0.4 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:27:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

T-BUTYL ALCOHOL

Abundance on 59.10 (58.80 to 59.80): VB108007.D\data



Original Int. Results

RT : 2.62
Area : 690
Amount: 4.1067

Manual Int. Results

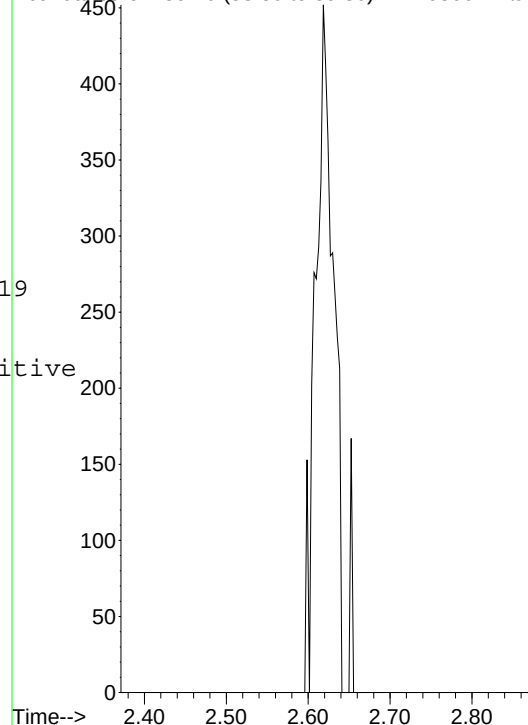
Thu Apr 18 11:26:37 2019

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

Manual Integration

T-BUTYL ALCOHOL

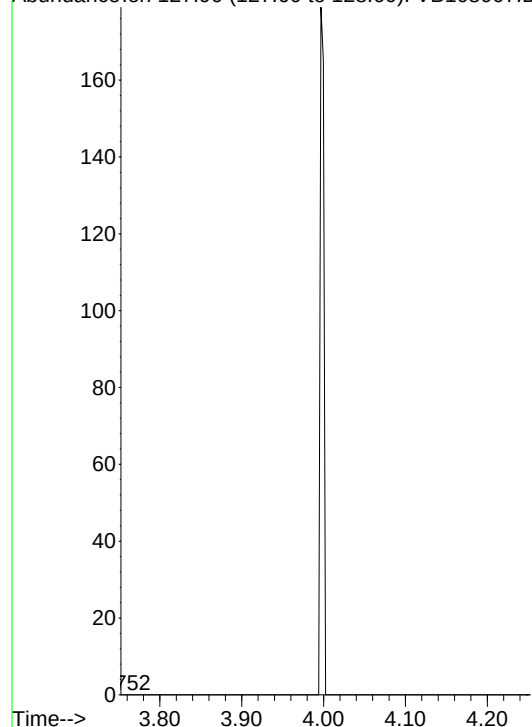
Abundance on 59.10 (58.80 to 59.80): VB108007.D\data



Original Integration

BROMOCHLOROMETHANE

Abundance on 127.90 (127.60 to 128.60): VB108007.D



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

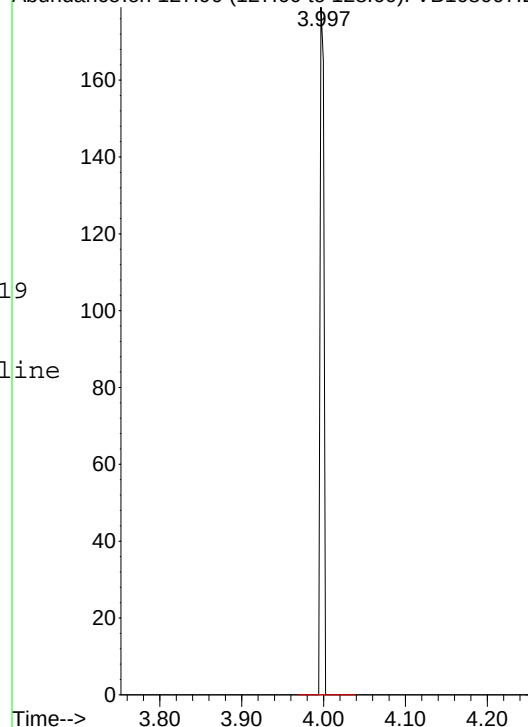
Thu Apr 18 11:26:48 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 4.00
Area : 59
Amount: 0.0867979

Manual Integration

BROMOCHLOROMETHANE

Abundance on 127.90 (127.60 to 128.60): VB108007.D



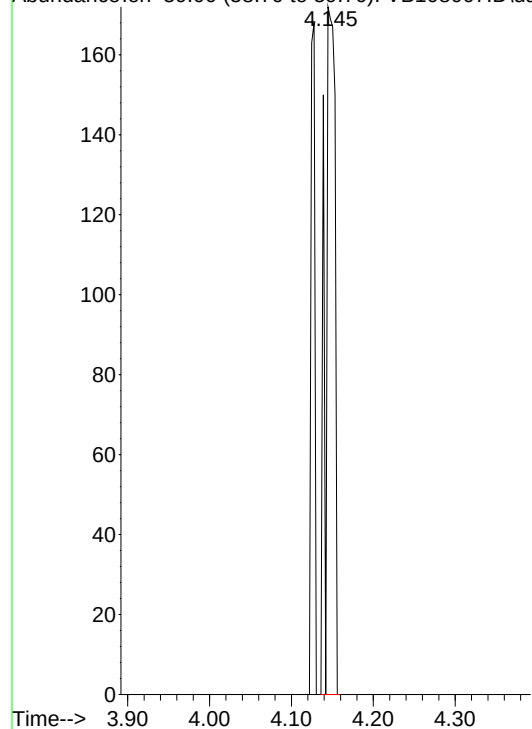
Data Path : Y:\1\DATA\B041819\
Data File : VB108007.D
Acq On : 18 Apr 2019 10:35 am
Operator :
Sample : 8260 STD 0.4 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:27:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): VB108007.D\data



Original Int. Results

RT : 4.14
Area : 138
Amount: 0.108285

Manual Int. Results

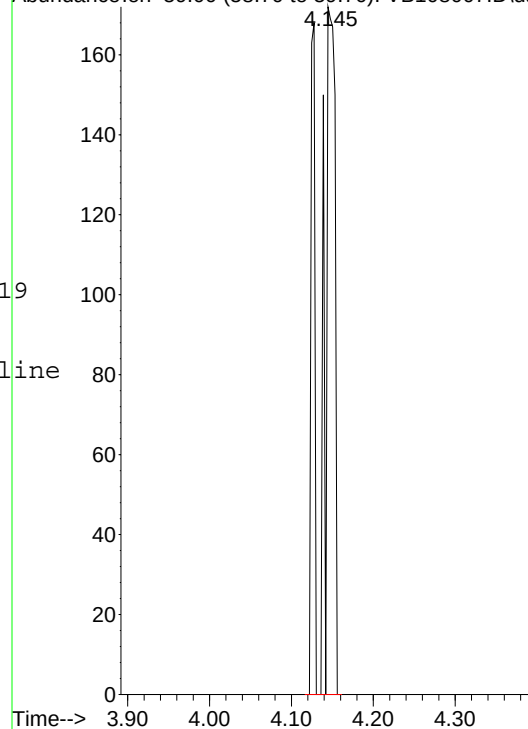
Thu Apr 18 11:26:55 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 4.14
Area : 194
Amount: 0.152227

Manual Integration

T-BUTYL FORMATE

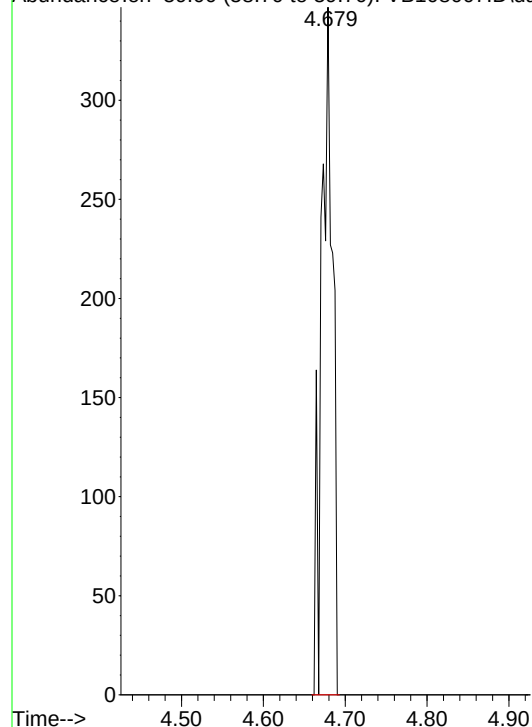
Abundance on 59.00 (58.70 to 59.70): VB108007.D\data



Original Integration

T-AMYL ALCOHOL

Abundance on 59.00 (58.70 to 59.70): VB108007.D\data



Original Int. Results

RT : 4.68
Area : 324
Amount: 2.30494

Manual Int. Results

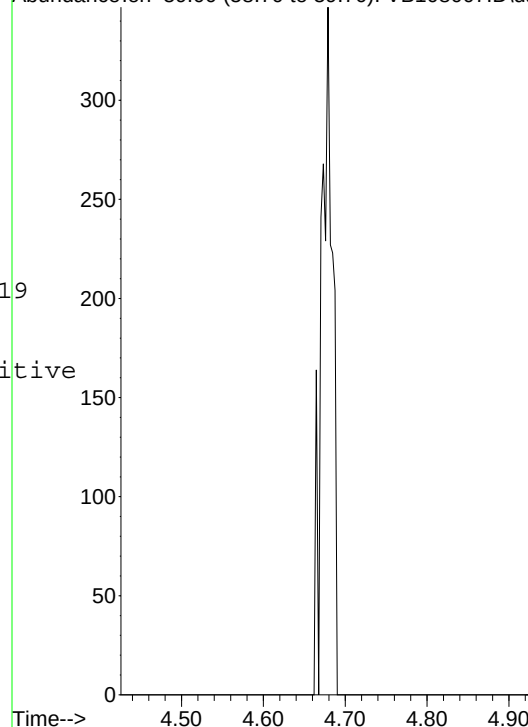
Thu Apr 18 11:27:04 2019

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

Manual Integration

T-AMYL ALCOHOL

Abundance on 59.00 (58.70 to 59.70): VB108007.D\data



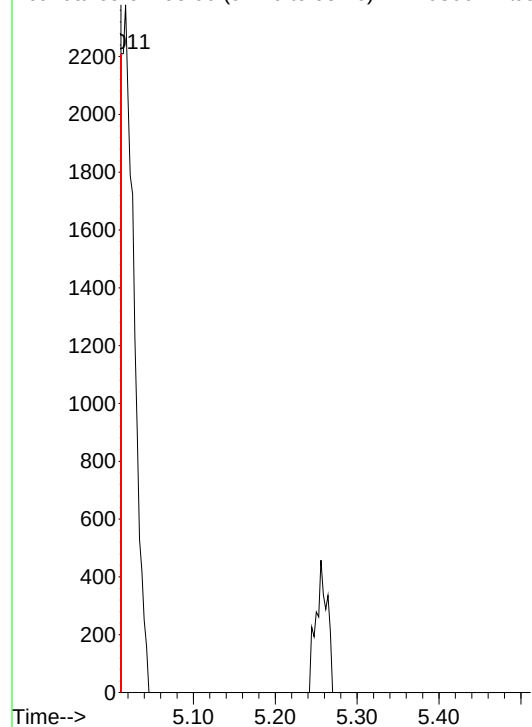
Data Path : Y:\1\DATA\B041819\
Data File : VB108007.D
Acq On : 18 Apr 2019 10:35 am
Operator :
Sample : 8260 STD 0.4 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:27:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

TRICHLOROETHENE

Abundance on 95.00 (94.70 to 95.70): VB108007.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:27:12 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 5.26

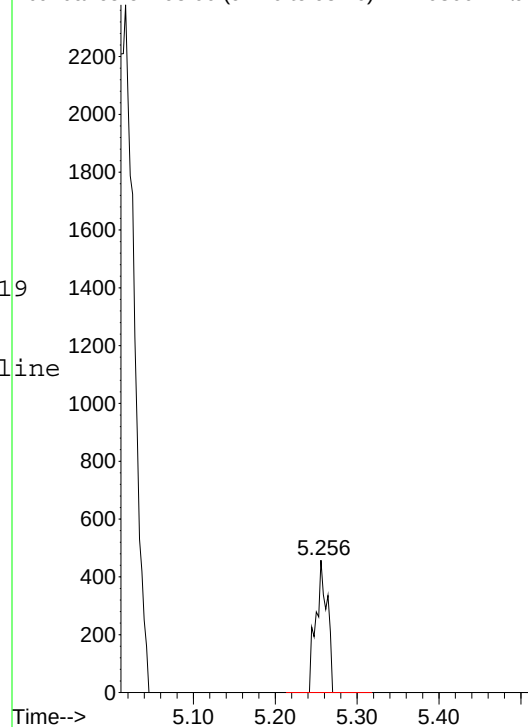
Area : 441

Amount: 0.316387

Manual Integration

TRICHLOROETHENE

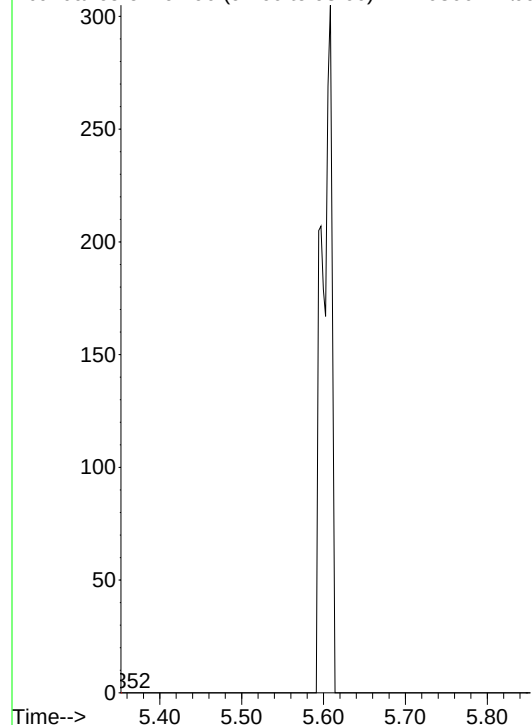
Abundance on 95.00 (94.70 to 95.70): VB108007.D\data



Original Integration

DIBROMOMETHANE

Abundance on 92.90 (92.60 to 93.60): VB108007.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:27:25 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 5.61

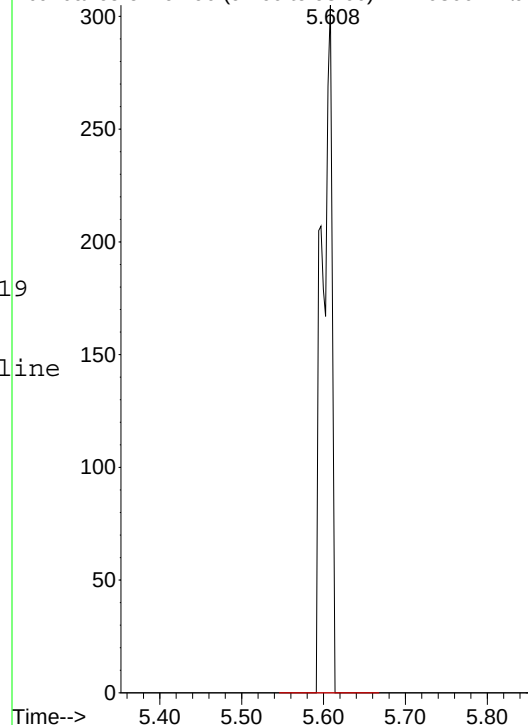
Area : 255

Amount: 0.292058

Manual Integration

DIBROMOMETHANE

Abundance on 92.90 (92.60 to 93.60): VB108007.D\data



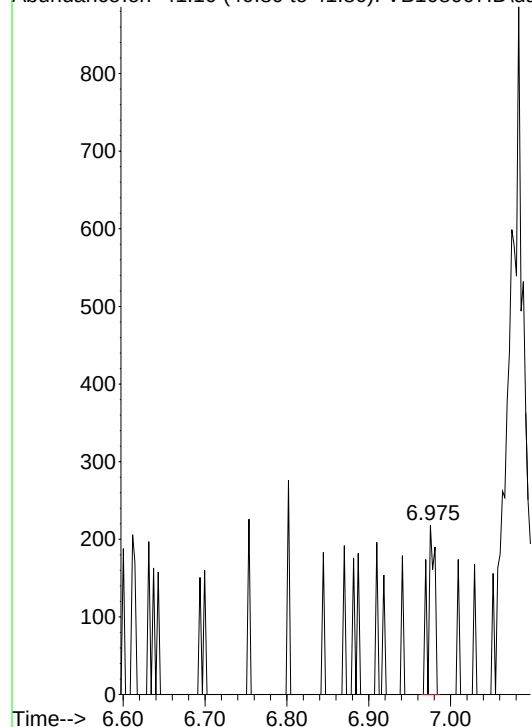
Data Path : Y:\1\DATA\B041819\
Data File : VB108007.D
Acq On : 18 Apr 2019 10:35 am
Operator :
Sample : 8260 STD 0.4 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:27:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108007.D\data



Original Int. Results

RT : 6.98

Area : 127

Amount: 0

Manual Int. Results

Thu Apr 18 11:27:35 2019

MIuser: LBD

Reason: Qdel False Positive

RT : 0.00

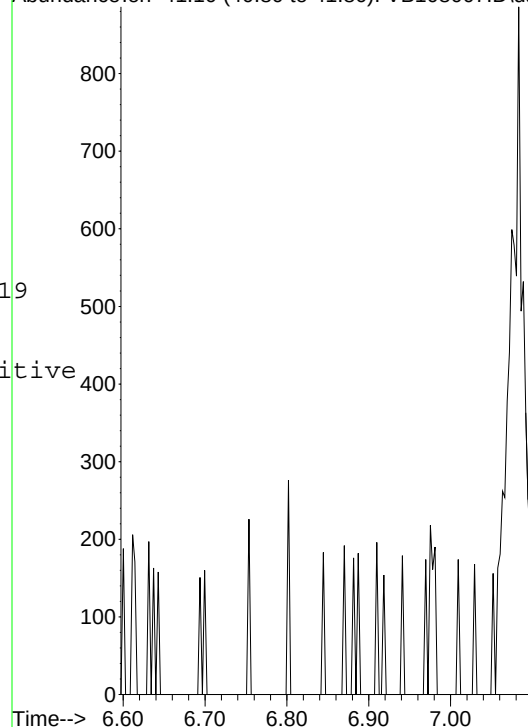
Area : 0

Amount: 0

Manual Integration

ETHYL METHACRYLATE

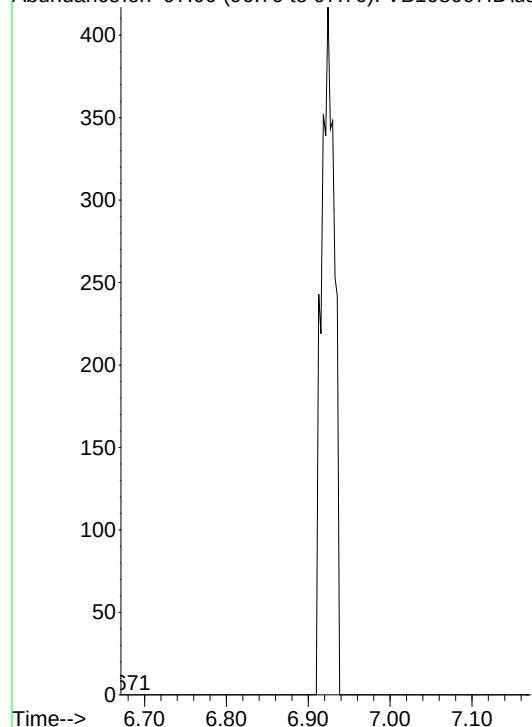
Abundance on 41.10 (40.80 to 41.80): VB108007.D\data



Original Integration

1,1,2-TRICHLOROETHANE

Abundance on 97.00 (96.70 to 97.70): VB108007.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:27:39 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 6.92

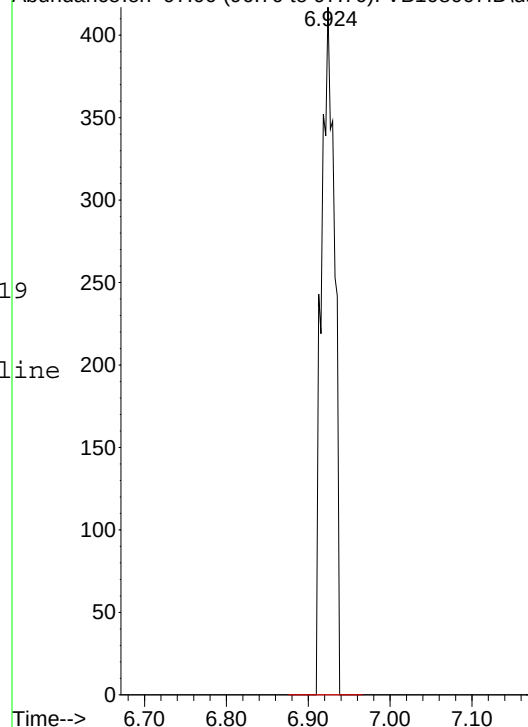
Area : 470

Amount: 0.359218

Manual Integration

1,1,2-TRICHLOROETHANE

Abundance on 97.00 (96.70 to 97.70): VB108007.D\data



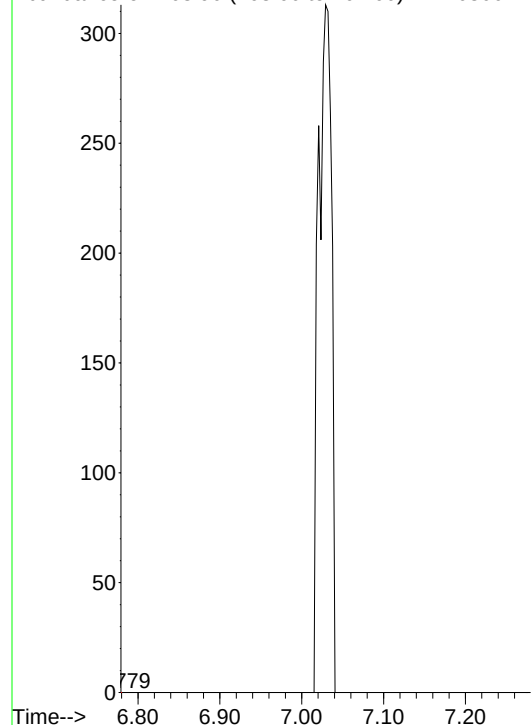
Data Path : Y:\1\DATA\B041819\
Data File : VB108007.D
Acq On : 18 Apr 2019 10:35 am
Operator :
Sample : 8260 STD 0.4 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:27:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

TETRACHLOROETHENE

Abundance on 163.90 (163.60 to 164.60): VB108007.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:27:44 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 7.03

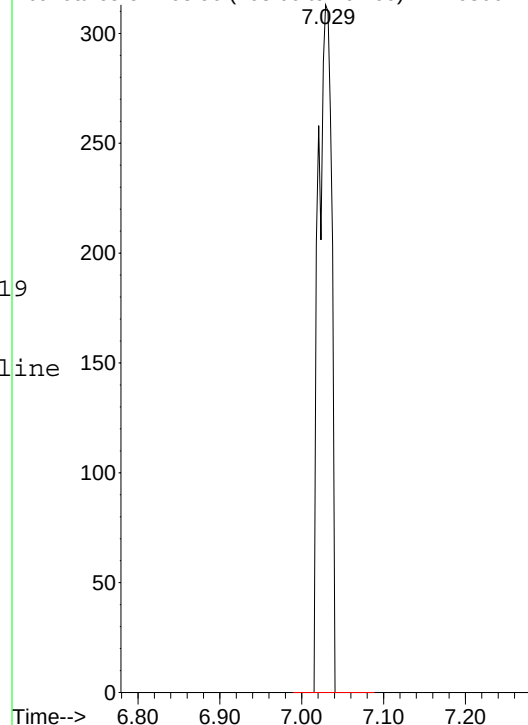
Area : 349

Amount: 0.306979

Manual Integration

TETRACHLOROETHENE

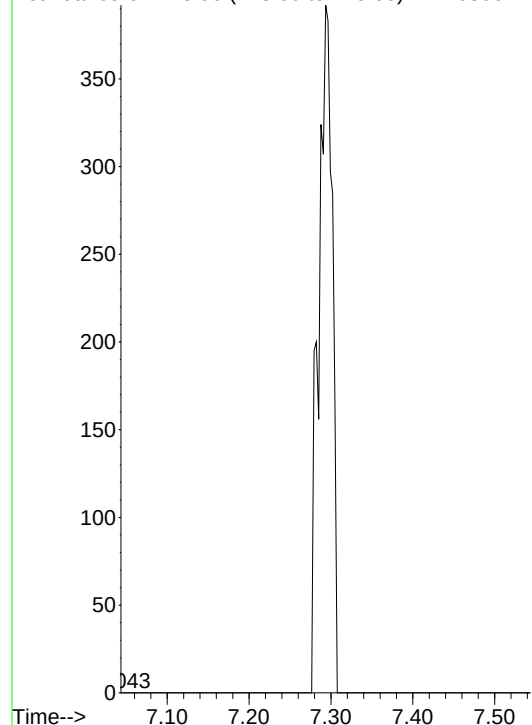
Abundance on 163.90 (163.60 to 164.60): VB108007.D



Original Integration

DIBROMOCHLOROMETHANE

Abundance on 128.90 (128.60 to 129.60): VB108007.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:27:47 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 7.29

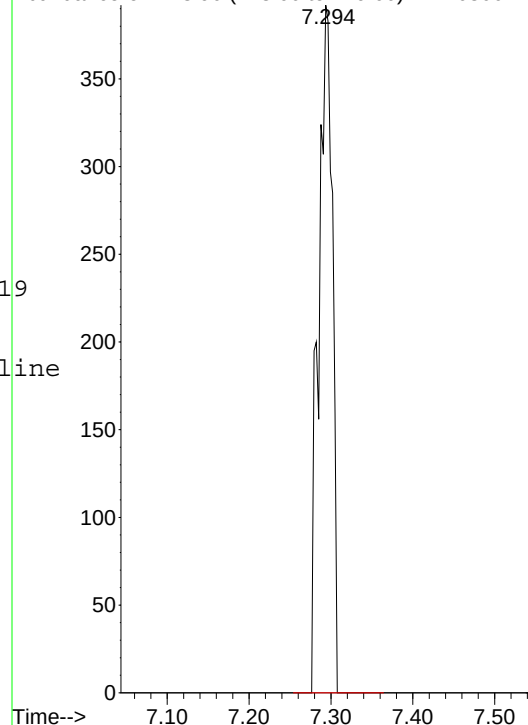
Area : 460

Amount: 0.299933

Manual Integration

DIBROMOCHLOROMETHANE

Abundance on 128.90 (128.60 to 129.60): VB108007.D

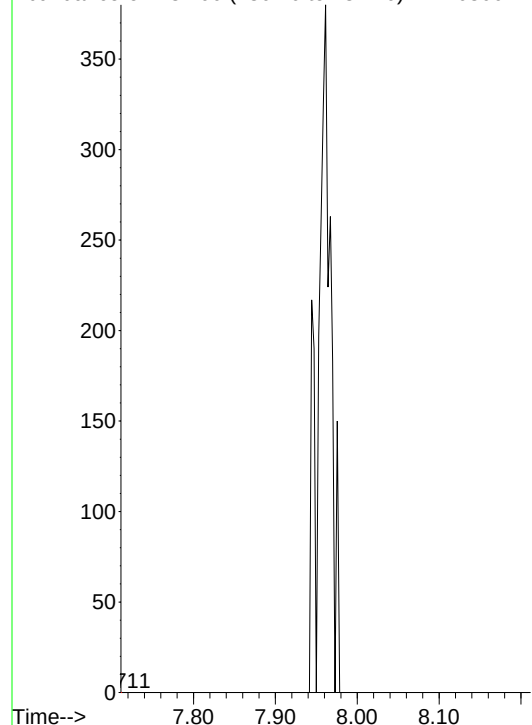


Data Path : Y:\1\DATA\B041819\
Data File : VB108007.D
Acq On : 18 Apr 2019 10:35 am
Operator :
Sample : 8260 STD 0.4 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:27:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration
1,1,1,2-TETRACHLOROETHANE

Abundance on 131.00 (130.70 to 131.70): VB108007.D



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

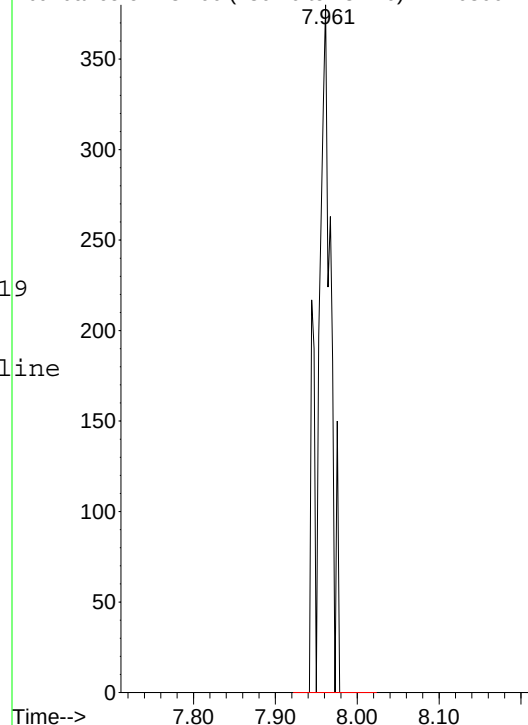
Manual Int. Results

Thu Apr 18 11:27:53 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 7.96
Area : 407
Amount: 0.26399

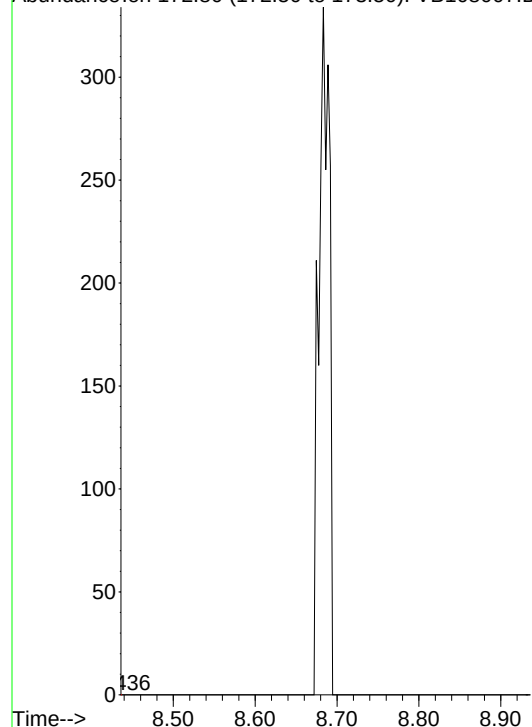
Manual Integration
1,1,1,2-TETRACHLOROETHANE

Abundance on 131.00 (130.70 to 131.70): VB108007.D



Original Integration
BROMOFORM

Abundance on 172.80 (172.50 to 173.50): VB108007.D



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

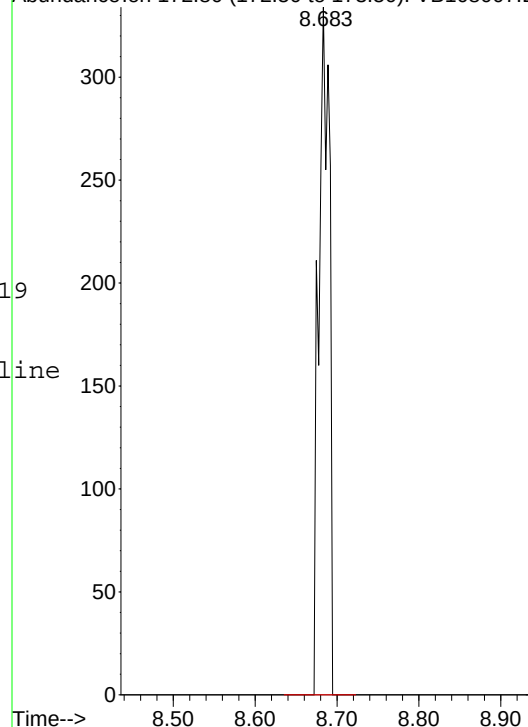
Manual Int. Results

Thu Apr 18 11:27:58 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 8.68
Area : 304
Amount: 0.251294

Manual Integration
BROMOFORM

Abundance on 172.80 (172.50 to 173.50): VB108007.D



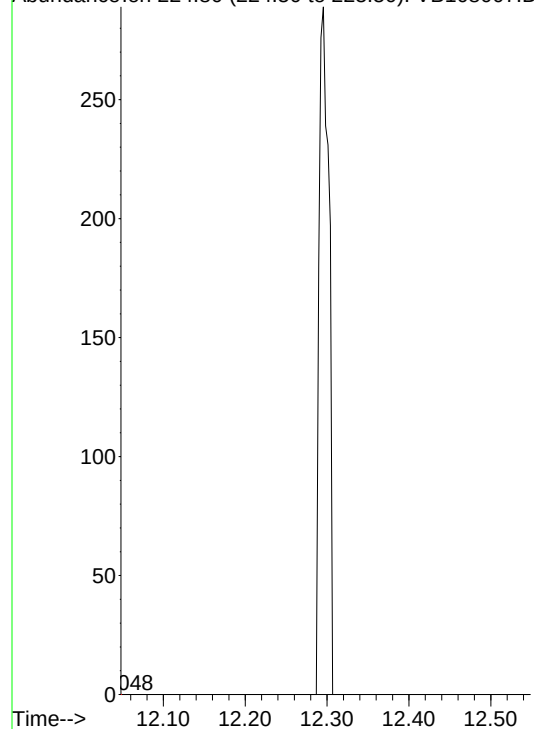
Data Path : Y:\1\DATA\B041819\
Data File : VB108007.D
Acq On : 18 Apr 2019 10:35 am
Operator :
Sample : 8260 STD 0.4 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:27:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

HEXACHLOROBUTADIENE

Abundance on 224.80 (224.50 to 225.50): VB108007.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:28:13 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 12.30

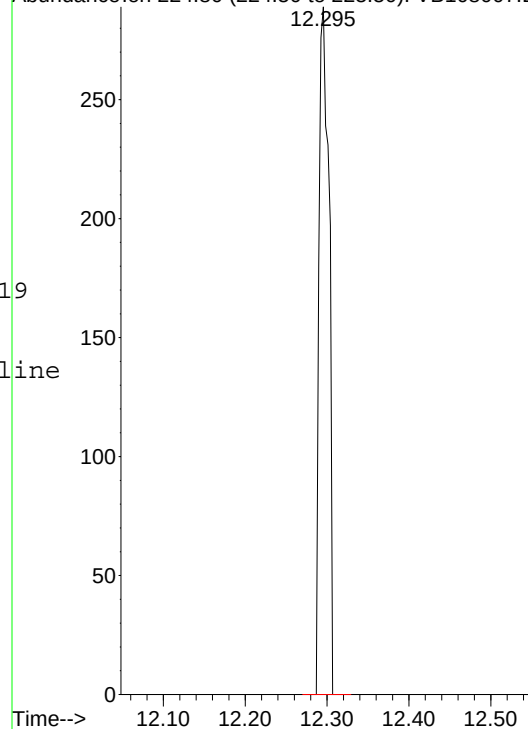
Area : 241

Amount: 0.32503

Manual Integration

HEXACHLOROBUTADIENE

Abundance on 224.80 (224.50 to 225.50): VB108007.D



Data Path : Y:\1\DATA\B041819\
 Data File : VB108008.D
 Acq On : 18 Apr 2019 11:06 am
 Operator :
 Sample : 8260 STD 0.5 PPB 1904257
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 11:33:05 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	73393	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.014	114	117118	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.845	82	63533	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.141	152	63365	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	48396	34.96	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	139.84%#
45) TOLUENE-D8 SS	6.444	98	114907	24.93	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	99.72%
66) 4-BROMOFLUROBENZENE SS	9.002	95	46477	24.39	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	97.56%
Target Compounds						
3) DICHLORODIFLOUROMETHANE	1.146	85	925	0.63	UG/L	Qvalue # 43
4) DIFLUOROCHLOROMETHANE	0.000		0	N.D.	d	
5) CHLOROMETHANE	1.260	50	1703	0.77	UG/L	# 43
6) VINYL CHLORIDE	1.328	62	1114	0.65	UG/L	# 43
7) BROMOMETHANE	1.533	94	1071	1.13	UG/L	96
8) CHLOROETHANE	1.598	64	536	0.59	UG/L	99
9) FLUORODICHLOROMETHANE	1.723	67	1587	0.76	UG/L	94
10) TRICHLOROFLUOROMETHANE	1.757	101	1086	0.63	UG/L	88
11) ETHANOL	0.000		0	N.D.	d	
12) DI ETHYL ETHER	1.948	59	672	0.59	UG/L	# 14
13) ACROLEIN	2.056	56	2990	8.85	UG/L	# 76
14) ACETONE	2.167	43	4943m	11.24	UG/L	
15) 1,1-DICHLOROETHENE	2.110	61	1350	0.76	UG/L	# 68
16) 1,1,2-TRICL-1,2,2-TRIF...	2.113	101	473m	0.49	UG/L	
17) IODOMETHANE	2.238	142	6442	3.61	UG/L	93
18) METHYL ACETATE	0.000		0	N.D.	d	
19) T-BUTYL ALCOHOL	0.000		0	N.D.	d	
20) ACRYLONITRILE	2.752	53	282m	0.41	UG/L	
21) METHYLENE CHLORIDE	2.502	49	1561	0.78	UG/L	# 61
22) CARBON DISULFIDE	2.283	76	21693	5.68	UG/L	100
23) METHYL TERT-BUTYL ETHE...	2.746	73	1953	0.53	UG/L	# 89
24) TRANS 1,2-DICHLOROETHENE	2.741	61	1187	0.61	UG/L	# 65
25) 1,1-DICHLOROETHANE	3.167	63	1589	0.63	UG/L	# 51
26) VINYL ACETATE	3.229	43	23200	6.97	UG/L	# 94
27) DI ISOPROPYL ETHER	3.232	45	2998	0.63	UG/L	# 52
28) 2-BUTANONE	3.801	43	5122	6.67	UG/L	# 83
29) T-BUTYL ETHYL ETHER	3.602	59	2528	0.55	UG/L	94
30) CIS-1,2-DICHLOROETHENE	3.761	61	1467	0.63	UG/L	# 68
31) 2,2-DICHLOROPROPANE	3.747	77	1214	0.80	UG/L	# 47
32) ETHYL ACETATE	0.000		0	N.D.		
33) BROMOCHLOROMETHANE	4.000	128	148m	0.22	UG/L	
34) TETRAHYDROFURAN	0.000		0	N.D.		
35) T-BUTYL FORMATE	4.139	59	449m	0.35	UG/L	
36) CHLOROFORM	4.091	83	1416	0.63	UG/L	98
37) 1,1,1-TRICHLOROETHANE	4.244	97	1108	0.60	UG/L	# 62
38) CYCLOHEXANE	4.295	56	3842	1.42	UG/L	# 88
39) CARBON TETRACHLORIDE	4.409	117	985	0.61	UG/L	88
40) 1,1-DICHLOROPROPENE	4.412	75	922	0.57	UG/L	# 40
41) BENZENE	4.622	78	2861	0.55	UG/L	97
42) T-AMYL ALCOHOL	0.000		0	N.D.	d	
43) T-AMYLMETHYL ETHER	4.741	73	1771	0.50	UG/L	# 70
46) 1,2-DICHLOROETHANE	4.662	62	1334	0.63	UG/L	# 52
47) TRICHLOROETHENE	5.259	95	809	0.57	UG/L	# 68

Data Path : Y:\1\DATA\B041819\
 Data File : VB108008.D
 Acq On : 18 Apr 2019 11:06 am
 Operator :
 Sample : 8260 STD 0.5 PPB 1904257
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Inst : GCMSVOA2

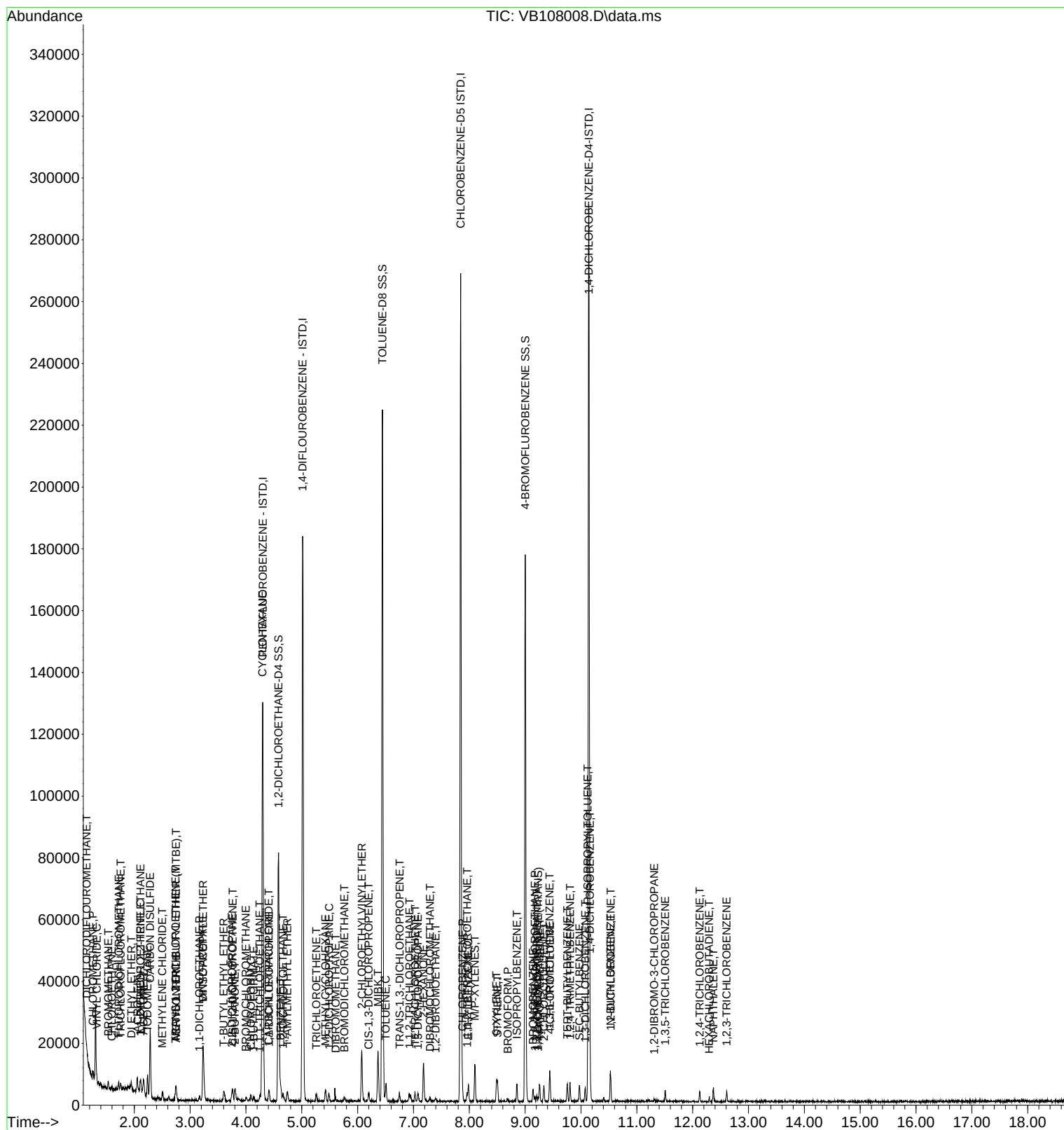
Quant Time: Apr 18 11:33:05 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.421	83	1031	0.51	UG/L #	64
49) 1,2-DICHLOROPROPANE	5.489	63	736	0.46	UG/L #	49
50) DIBROMOMETHANE	5.608	93	448m	0.51	UG/L	
51) 1,4-DIOXANE	0.000		0	N.D.		
52) BROMODICHLOROMETHANE	5.762	83	1024	0.58	UG/L #	96
53) 2-CHLOROETHYLVINYLEETHER	6.077	63	5840	5.44	UG/L #	74
54) MIBK	6.364	43	10477	6.31	UG/L #	88
55) CIS-1,3-DICHLOROPROPENE	6.196	75	1102	0.50	UG/L #	30
56) TOLUENE	6.503	91	3170	0.55	UG/L	90
57) TRANS-1,3,-DICHLOROPRO...	6.751	75	1006	0.51	UG/L #	36
58) ETHYL METHACRYLATE	0.000		0	N.D.	d	
59) 1,1,2-TRICHLOROETHANE	6.930	97	684	0.52	UG/L #	68
60) 2-HEXANONE	7.180	43	8367	7.22	UG/L #	80
61) TETRACHLOROETHENE	7.026	164	634m	0.55	UG/L	
62) 1,3-DICHLOROPROPANE	7.080	76	1072	0.46	UG/L #	38
63) DIBROMOCHLOROMETHANE	7.296	129	679	0.44	UG/L	93
64) 1,2-DIBROMOETHANE	7.396	107	640	0.43	UG/L #	100
67) CHLOROBENZENE	7.876	112	2068	0.49	UG/L #	47
68) 1,1,1,2-TETRACHLOROETHANE	7.961	131	652	0.42	UG/L #	67
69) ETHYLBENZENE	7.984	91	3732	0.53	UG/L	91
70) M/P-XYLENES	8.101	91	6040	1.11	UG/L	97
71) O-XYLENE	8.487	91	3032	0.54	UG/L	92
72) STYRENE	8.507	104	2352	0.50	UG/L #	84
73) BROMOFORM	8.689	173	461m	0.38	UG/L	
74) ISOPROPYLBENZENE	8.854	105	3413	0.51	UG/L	94
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.		
76) 1,1,2,2-TETRACHLOROETHANE	9.175	83	826	0.42	UG/L #	95
77) 1,4-DICHLORO-2-BUTENE(...	9.232	53	277m	0.42	UG/L	
78) BROMOBENZENE	9.141	77	1464	0.54	UG/L	90
79) 1,2,3-TRICHLOROPROPANE	9.206	110	288m	0.46	UG/L	
80) N-PROPYLBENZENE	9.260	91	4181	0.54	UG/L	93
81) 2-CHLOROTOLUENE	9.337	91	2784	0.58	UG/L #	87
82) 1,3,5-TRIMETHYLBENZENE	9.436	105	3004	0.52	UG/L	87
83) 4-CHLOROTOLUENE	9.448	91	3327	0.59	UG/L #	87
85) TERT-BUTYLBENZENE	9.755	119	2508	0.53	UG/L #	82
86) 1,2,4-TRIMETHYLBENZENE	9.806	105	3103	0.55	UG/L	89
87) SEC-BUTYLBENZENE	9.971	105	3615	0.58	UG/L #	90
88) 1,3-DICHLOROBENZENE	10.076	146	1883	0.56	UG/L	94
89) P-ISOPROPYLTOLUENE	10.121	119	2913	0.50	UG/L #	90
90) 1,4-DICHLOROBENZENE	10.161	146	1863	0.53	UG/L #	86
91) N-BUTYLBENZENE	10.528	91	2844	0.63	UG/L	94
92) 1,2-DICHLOROBENZENE	10.530	146	1945	0.59	UG/L	94
93) 1,2-DIBROMO-3-CHLOROPR...	11.312	75	124m	0.35	UG/L	
94) 1,3,5-TRICHLOROBENZENE	11.508	180	1096	0.49	UG/L	92
95) 1,2,4-TRICHLOROBENZENE	12.125	180	1120	0.53	UG/L #	79
96) HEXACHLOROBUTADIENE	12.293	225	287m	0.39	UG/L	
97) NAPHTHALENE	12.372	128	3144	0.56	UG/L #	69
98) 1,2,3-TRICHLOROBENZENE	12.608	180	1015	0.53	UG/L	93

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

209

Inst : GCMSVOA2

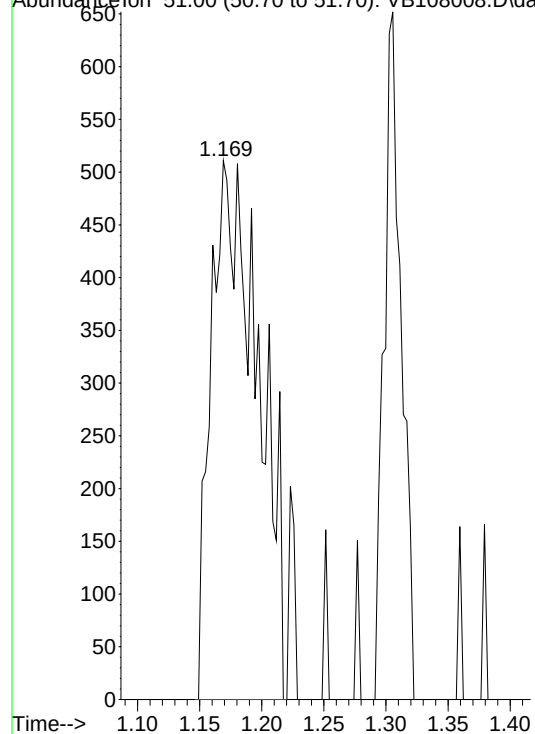


Data Path : Y:\1\DATA\B041819\
Data File : VB108008.D
Acq On : 18 Apr 2019 11:06 am
Operator :
Sample : 8260 STD 0.5 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:33:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration
DIFLUOROCHLOROMETHANE

Abundance on 51.00 (50.70 to 51.70): VB108008.D\data



Original Int. Results

RT : 1.17
Area : 1342
Amount: 0.649737

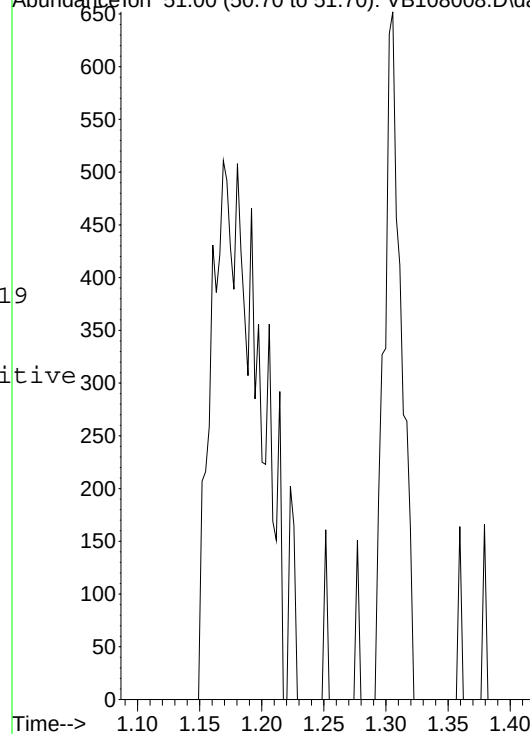
Manual Int. Results

Thu Apr 18 11:31:27 2019

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

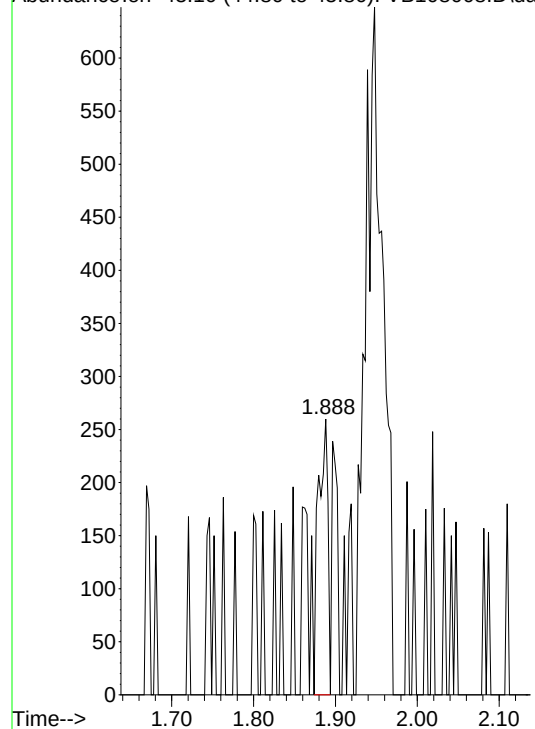
Manual Integration
DIFLUOROCHLOROMETHANE

Abundance on 51.00 (50.70 to 51.70): VB108008.D\data



Original Integration
ETHANOL

Abundance on 45.10 (44.80 to 45.80): VB108008.D\data



Original Int. Results

RT : 1.89
Area : 208
Amount: 12.171

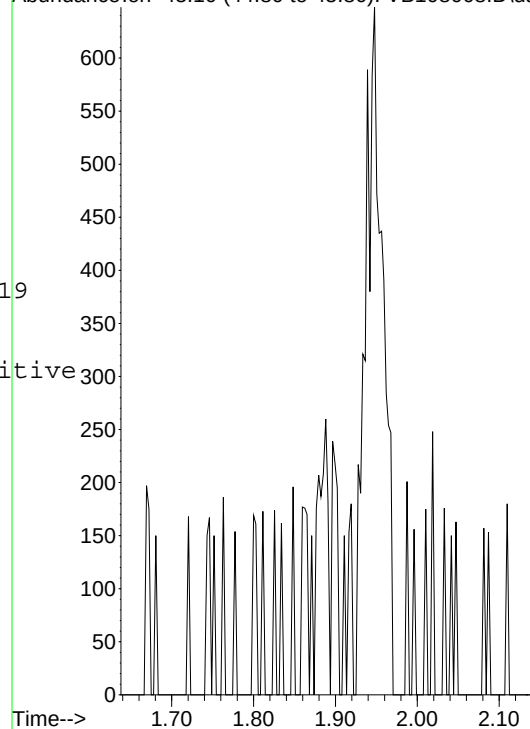
Manual Int. Results

Thu Apr 18 11:31:34 2019

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

Manual Integration
ETHANOL

Abundance on 45.10 (44.80 to 45.80): VB108008.D\data



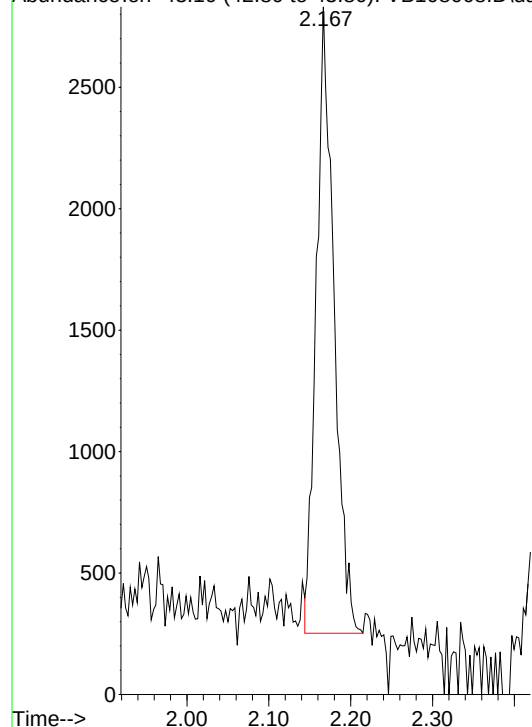
Data Path : Y:\1\DATA\B041819\
Data File : VB108008.D
Acq On : 18 Apr 2019 11:06 am
Operator :
Sample : 8260 STD 0.5 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:33:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ACETONE

Abundance on 43.10 (42.80 to 43.80): VB108008.D\data



Original Int. Results

RT : 2.17
Area : 3869
Amount: 8.79845

Manual Int. Results

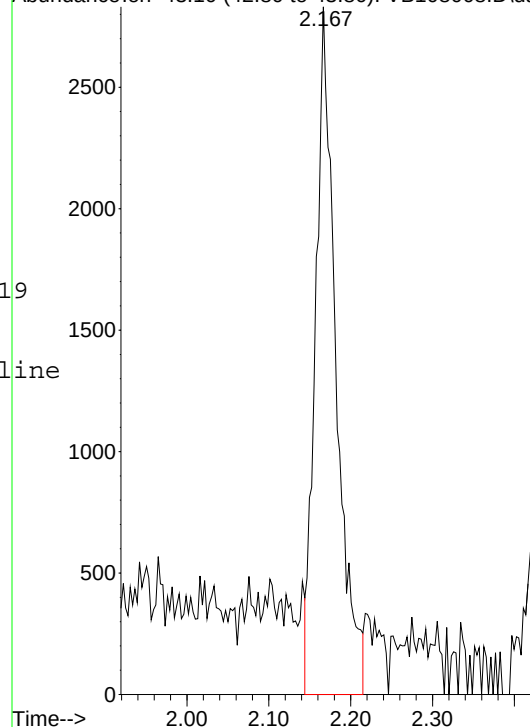
Thu Apr 18 11:31:42 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 2.17
Area : 4943
Amount: 11.2408

Manual Integration

ACETONE

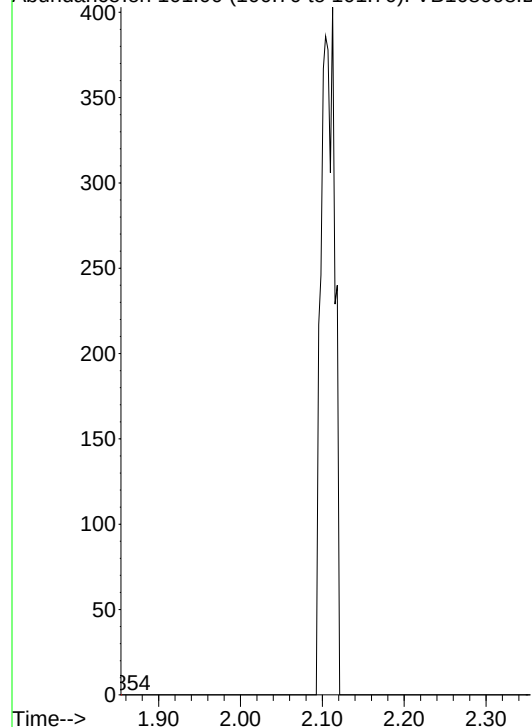
Abundance on 43.10 (42.80 to 43.80): VB108008.D\data



Original Integration

1,1,2-TRICL-1,2,2-TRIFLETHANE

Abundance on 101.00 (100.70 to 101.70): VB108008.D



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

Thu Apr 18 11:31:50 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 2.11
Area : 473
Amount: 0.4872

Manual Integration

1,1,2-TRICL-1,2,2-TRIFLETHANE

Abundance on 101.00 (100.70 to 101.70): VB108008.D



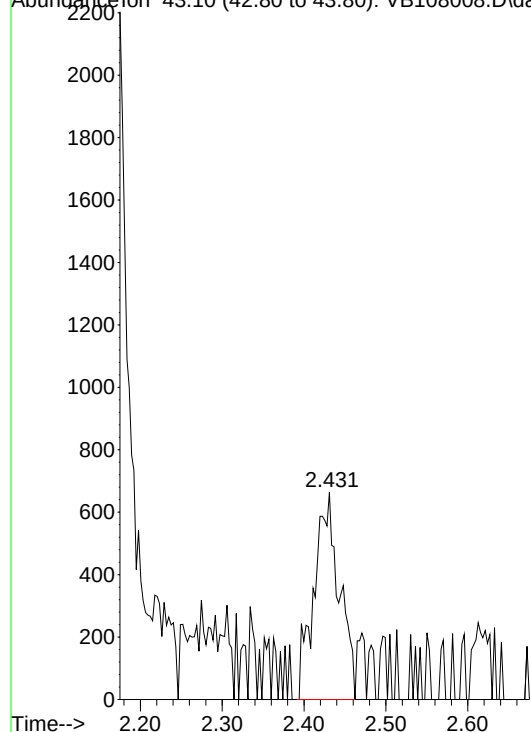
Data Path : Y:\1\DATA\B041819\
Data File : VB108008.D
Acq On : 18 Apr 2019 11:06 am
Operator :
Sample : 8260 STD 0.5 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:33:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

METHYL ACETATE

Abundance Ion 43.10 (42.80 to 43.80): VB108008.D\data



Original Int. Results

RT : 2.43
Area : 1426
Amount: 0.543466

Manual Int. Results

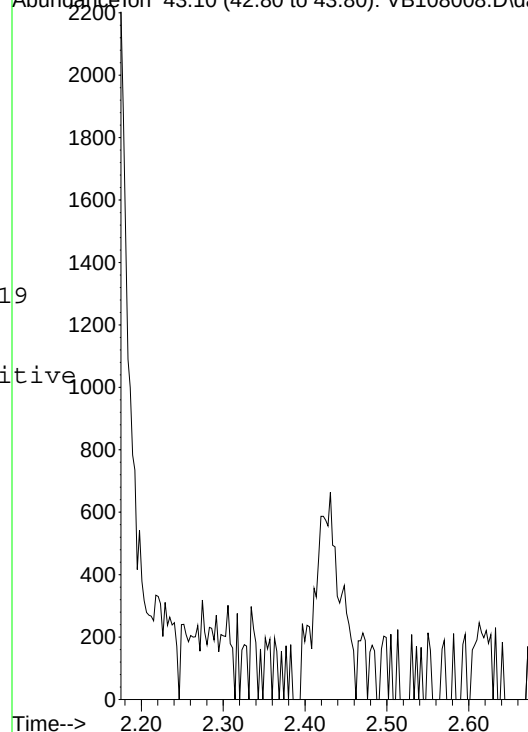
Thu Apr 18 11:32:15 2019

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

Manual Integration

METHYL ACETATE

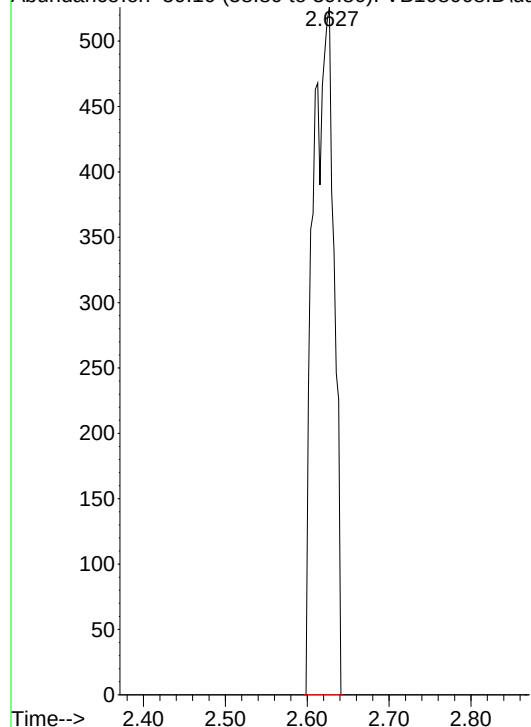
Abundance Ion 43.10 (42.80 to 43.80): VB108008.D\data



Original Integration

T-BUTYL ALCOHOL

Abundance Ion 59.10 (58.80 to 59.80): VB108008.D\data



Original Int. Results

RT : 2.63
Area : 933
Amount: 5.52574

Manual Int. Results

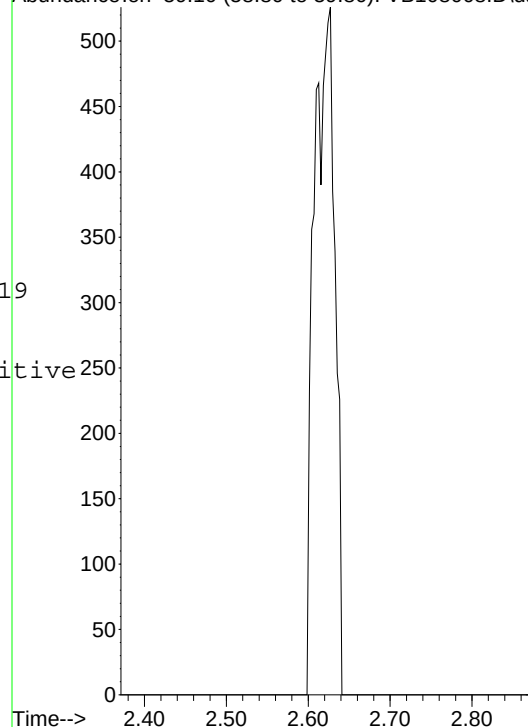
Thu Apr 18 11:32:23 2019

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

Manual Integration

T-BUTYL ALCOHOL

Abundance Ion 59.10 (58.80 to 59.80): VB108008.D\data



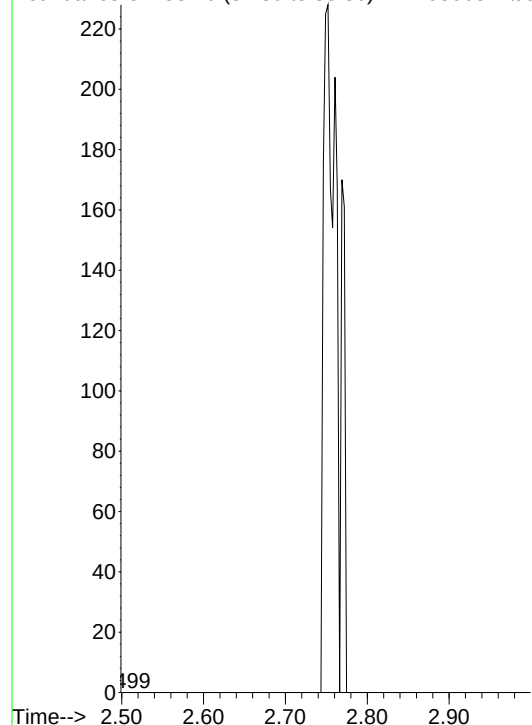
Data Path : Y:\1\DATA\B041819\
Data File : VB108008.D
Acq On : 18 Apr 2019 11:06 am
Operator :
Sample : 8260 STD 0.5 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:33:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ACRYLONITRILE

Abundance on 53.10 (52.80 to 53.80): VB108008.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:32:26 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 2.75

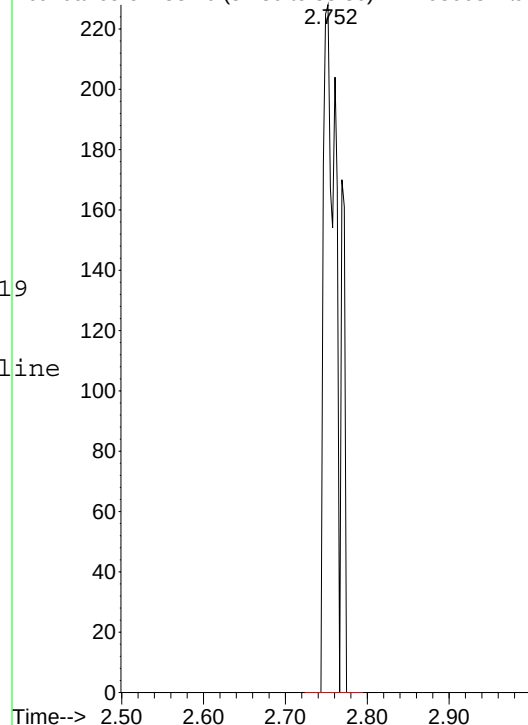
Area : 282

Amount: 0.406062

Manual Integration

ACRYLONITRILE

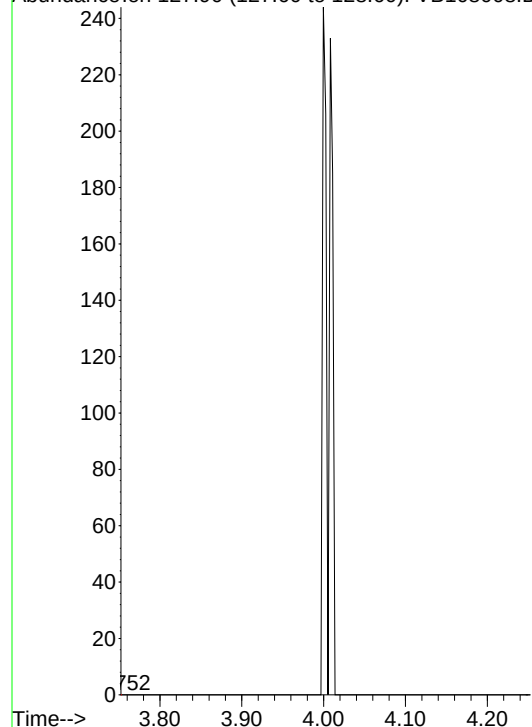
Abundance on 53.10 (52.80 to 53.80): VB108008.D\data



Original Integration

BROMOCHLOROMETHANE

Abundance on 127.90 (127.60 to 128.60): VB108008.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:32:35 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 4.00

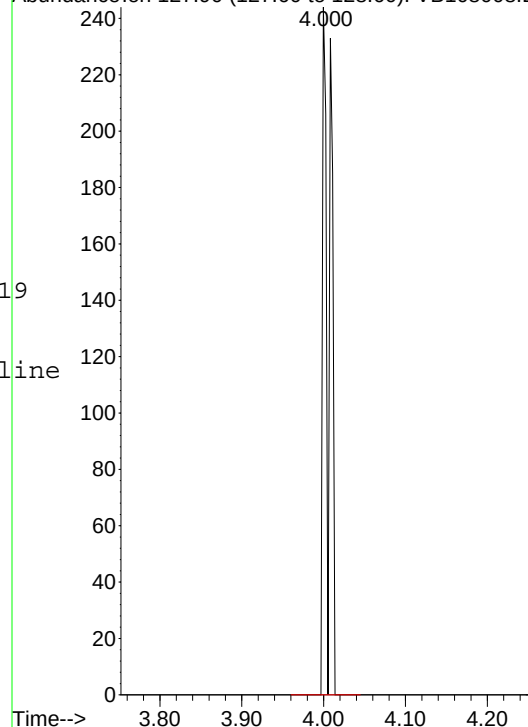
Area : 148

Amount: 0.216662

Manual Integration

BROMOCHLOROMETHANE

Abundance on 127.90 (127.60 to 128.60): VB108008.D



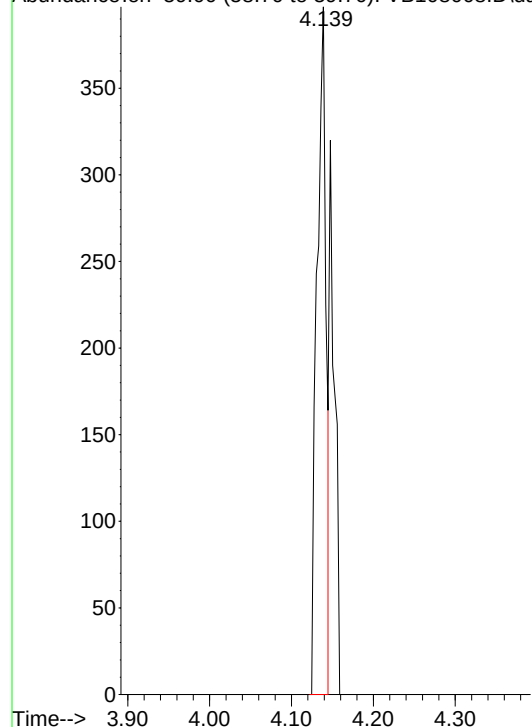
Data Path : Y:\1\DATA\B041819\
Data File : VB108008.D
Acq On : 18 Apr 2019 11:06 am
Operator :
Sample : 8260 STD 0.5 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:33:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): VB108008.D\data



Original Int. Results

RT : 4.14
Area : 306
Amount: 0.238933

Manual Int. Results

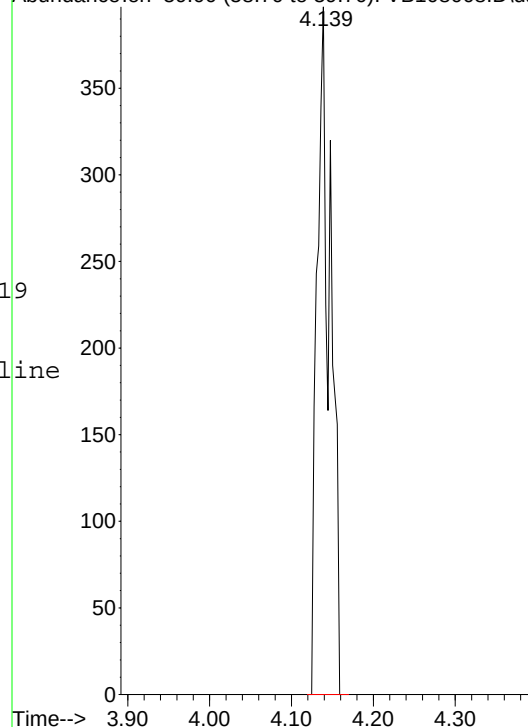
Thu Apr 18 11:32:40 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 4.14
Area : 449
Amount: 0.350591

Manual Integration

T-BUTYL FORMATE

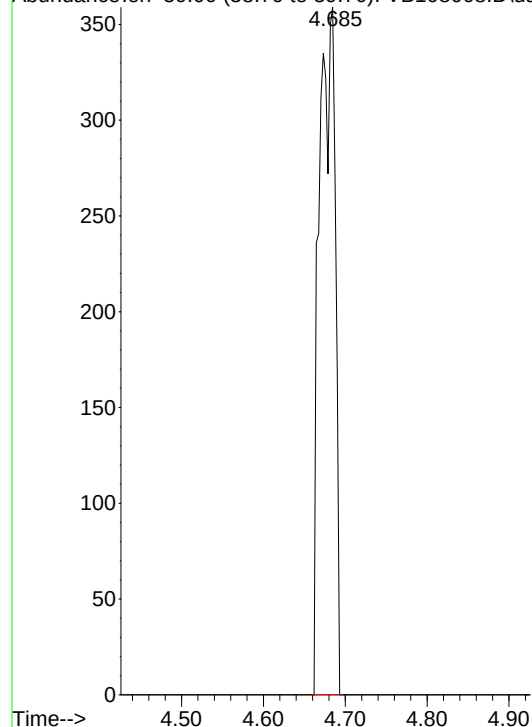
Abundance on 59.00 (58.70 to 59.70): VB108008.D\data



Original Integration

T-AMYL ALCOHOL

Abundance on 59.00 (58.70 to 59.70): VB108008.D\data



Original Int. Results

RT : 4.68
Area : 489
Amount: 3.46168

Manual Int. Results

Thu Apr 18 11:32:49 2019

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

Manual Integration

T-AMYL ALCOHOL

Abundance on 59.00 (58.70 to 59.70): VB108008.D\data

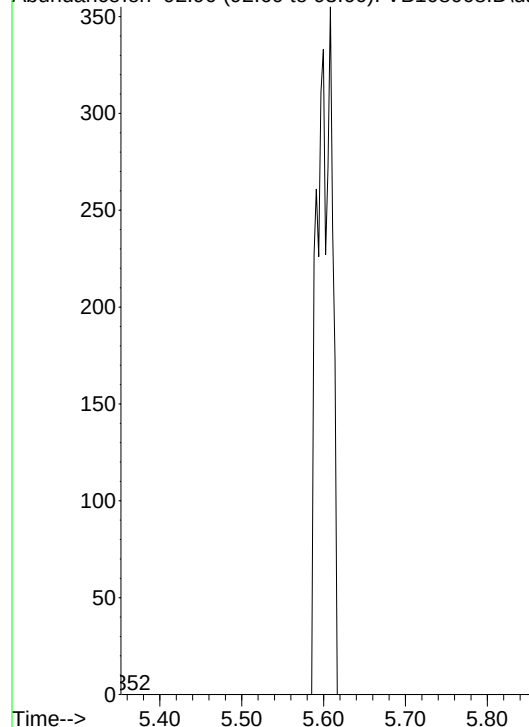


Data Path : Y:\1\DATA\B041819\
Data File : VB108008.D
Acq On : 18 Apr 2019 11:06 am
Operator :
Sample : 8260 STD 0.5 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:33:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration
DIBROMOMETHANE

Abundance on 92.90 (92.60 to 93.60): VB108008.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

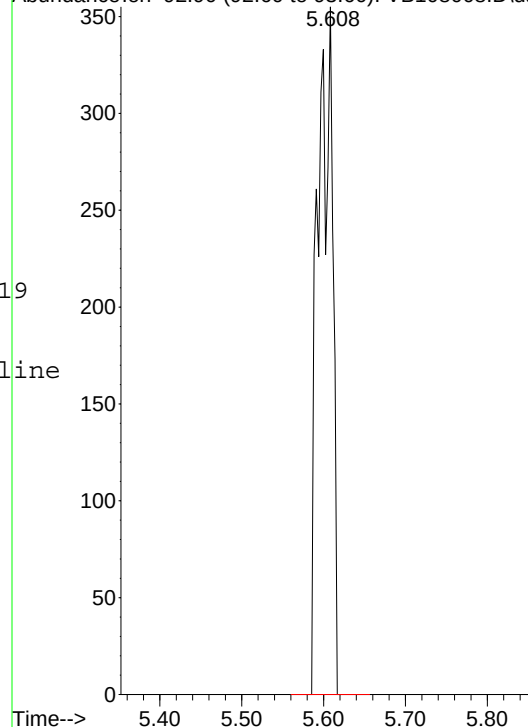
Manual Int. Results

Thu Apr 18 11:32:59 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 5.61
Area : 448
Amount: 0.507651

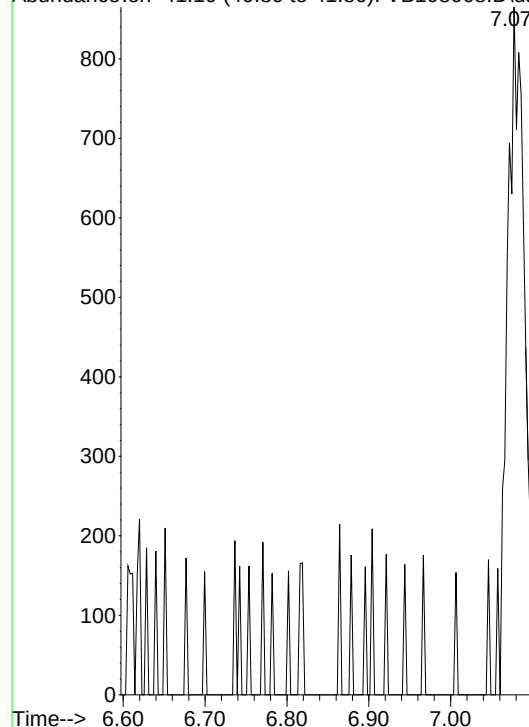
Manual Integration
DIBROMOMETHANE

Abundance on 92.90 (92.60 to 93.60): VB108008.D\data



Original Integration
ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108008.D\data



Original Int. Results

RT : 7.08
Area : 1318
Amount: 0

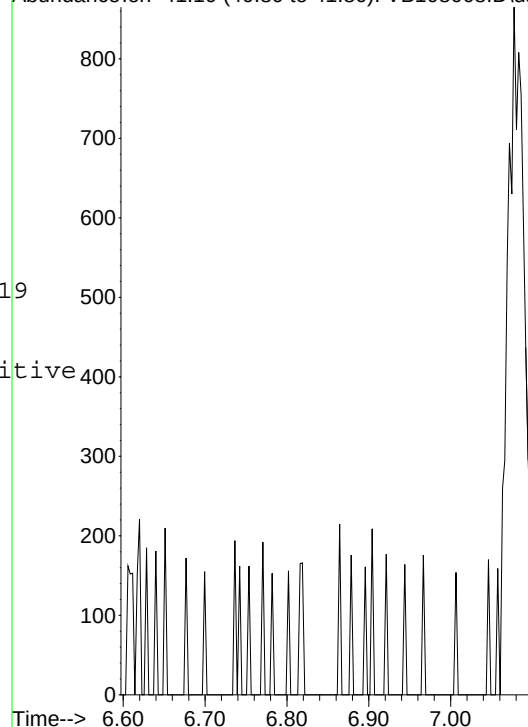
Manual Int. Results

Thu Apr 18 11:33:06 2019

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

Manual Integration
ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108008.D\data



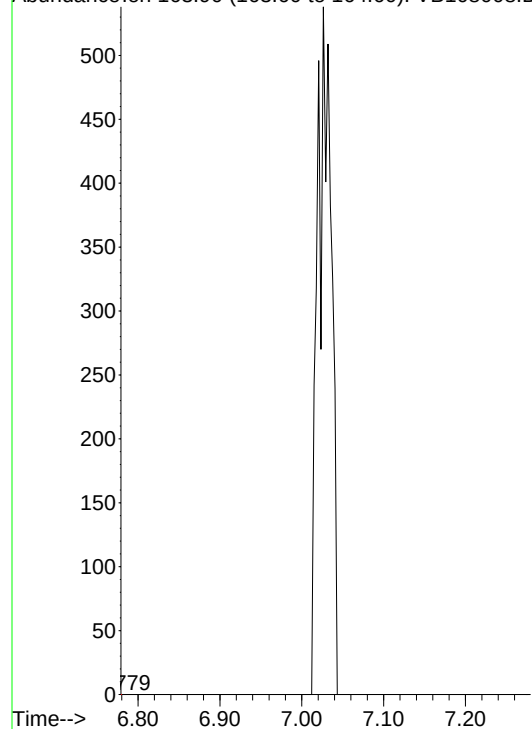
Data Path : Y:\1\DATA\B041819\
Data File : VB108008.D
Acq On : 18 Apr 2019 11:06 am
Operator :
Sample : 8260 STD 0.5 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:33:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

TETRACHLOROETHENE

Abundance on 163.90 (163.60 to 164.60): VB108008.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:33:10 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 7.03

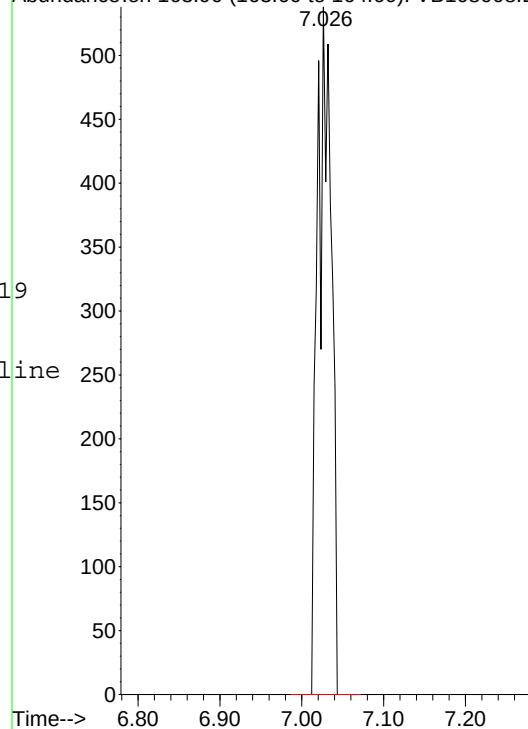
Area : 634

Amount: 0.551736

Manual Integration

TETRACHLOROETHENE

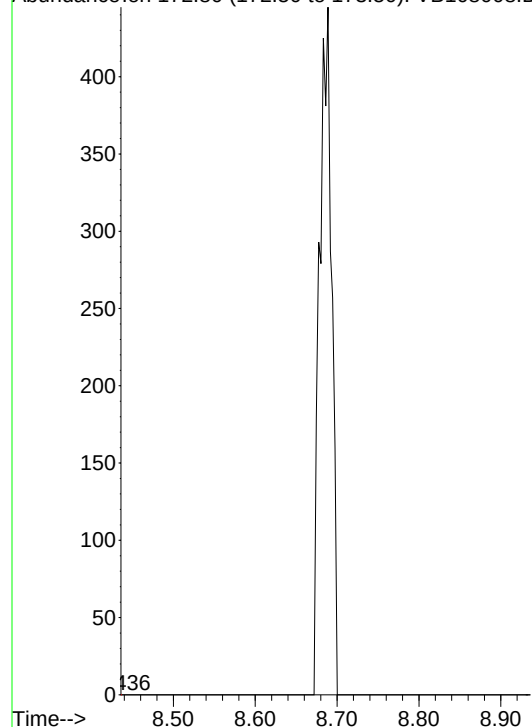
Abundance on 163.90 (163.60 to 164.60): VB108008.D



Original Integration

BROMOFORM

Abundance on 172.80 (172.50 to 173.50): VB108008.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:33:18 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 8.69

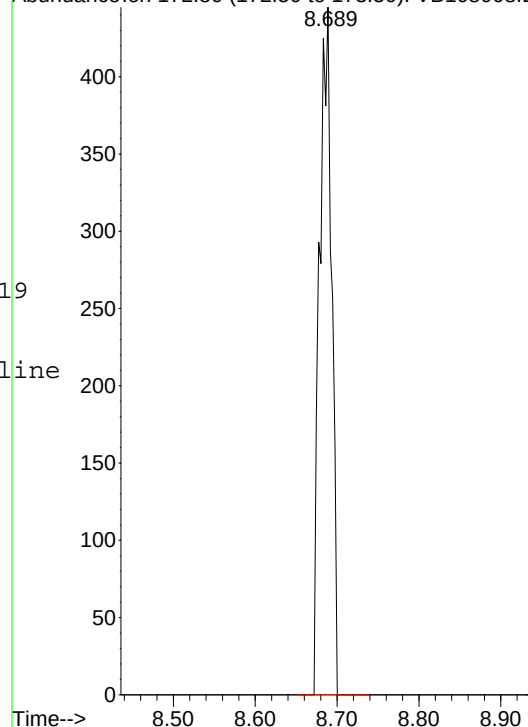
Area : 461

Amount: 0.376953

Manual Integration

BROMOFORM

Abundance on 172.80 (172.50 to 173.50): VB108008.D

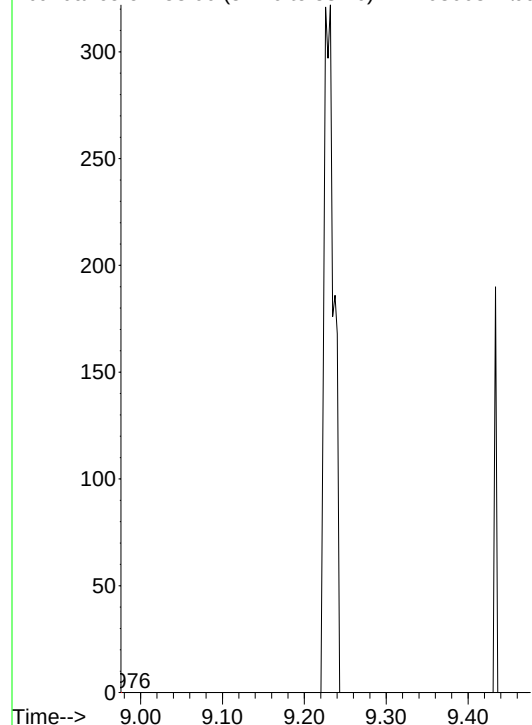


Data Path : Y:\1\DATA\B041819\
Data File : VB108008.D
Acq On : 18 Apr 2019 11:06 am
Operator :
Sample : 8260 STD 0.5 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:33:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

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

Abundance on 53.00 (52.70 to 53.70): VB108008.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

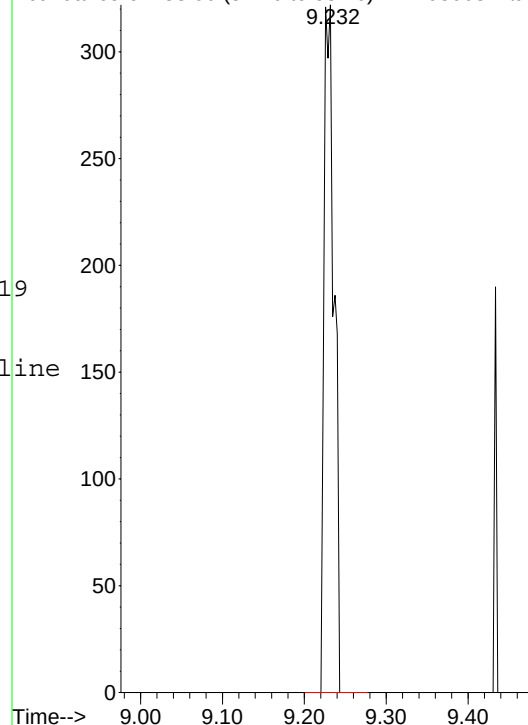
Manual Int. Results

Thu Apr 18 11:33:23 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 9.23
Area : 277
Amount: 0.417215

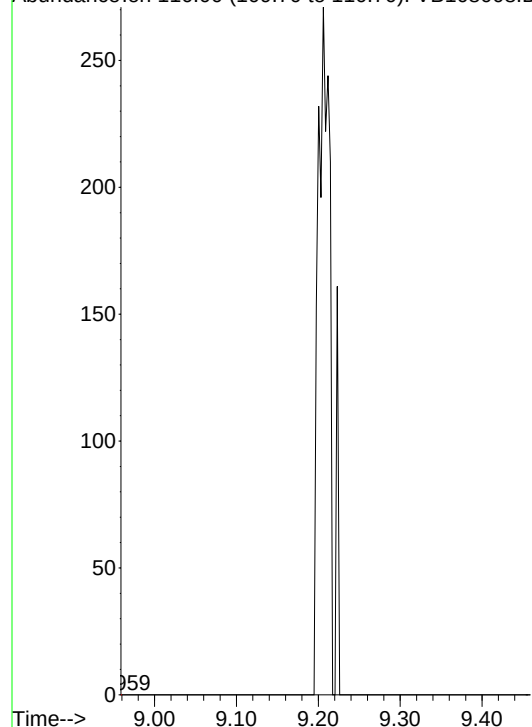
Manual Integration
1,4-DICHLORO-2-BUTENE (TRANS)

Abundance on 53.00 (52.70 to 53.70): VB108008.D\data



Original Integration
1,2,3-TRICHLOROPROPANE

Abundance on 110.00 (109.70 to 110.70): VB108008.D



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

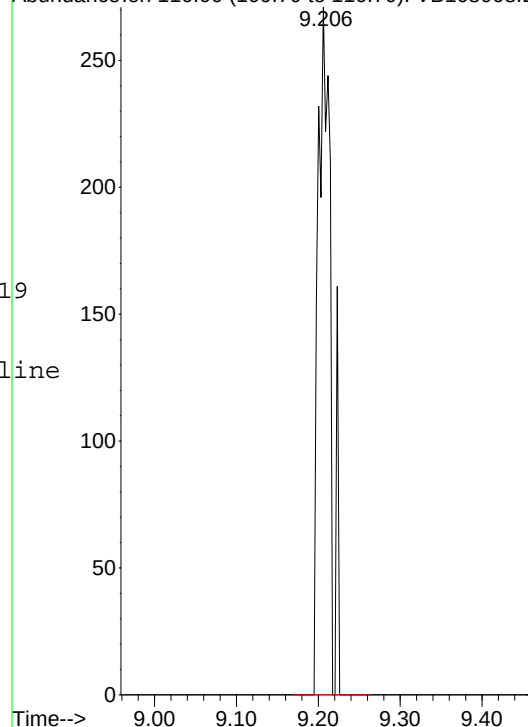
Manual Int. Results

Thu Apr 18 11:33:26 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 9.21
Area : 288
Amount: 0.464167

Manual Integration
1,2,3-TRICHLOROPROPANE

Abundance on 110.00 (109.70 to 110.70): VB108008.D



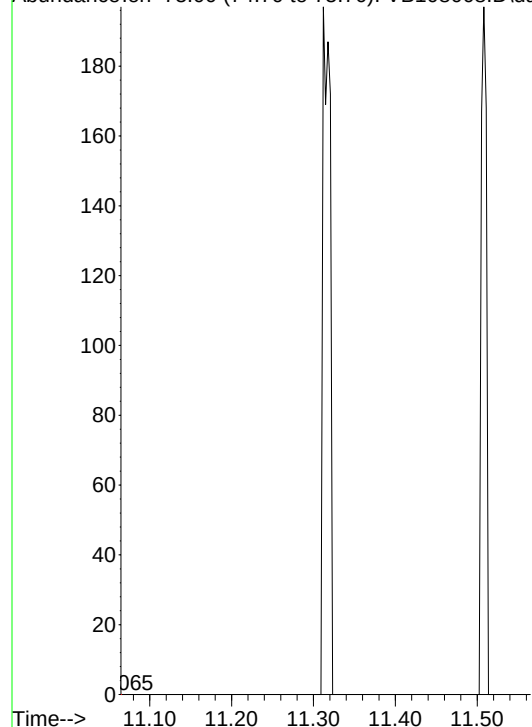
Data Path : Y:\1\DATA\B041819\
Data File : VB108008.D
Acq On : 18 Apr 2019 11:06 am
Operator :
Sample : 8260 STD 0.5 PPB 1904257
Misc :

Quant Time : Thu Apr 18 11:33:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

1,2-DIBROMO-3-CHLOROPROPANE

Abundance on 75.00 (74.70 to 75.70): VB108008.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:33:34 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 11.31

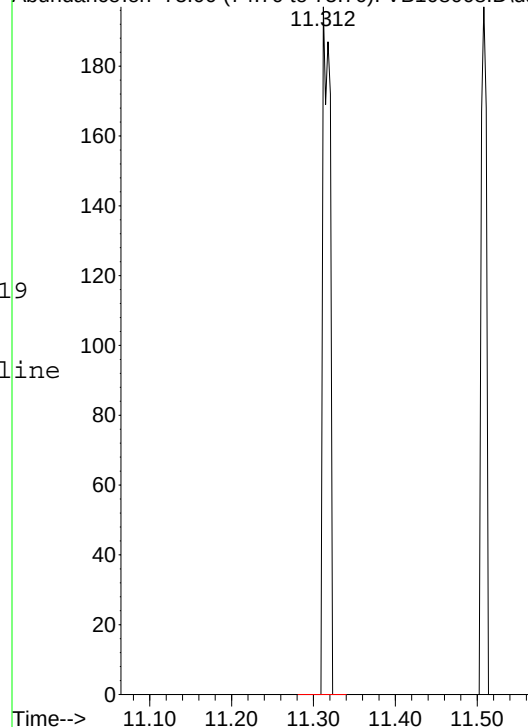
Area : 124

Amount: 0.347724

Manual Integration

1,2-DIBROMO-3-CHLOROPROPANE

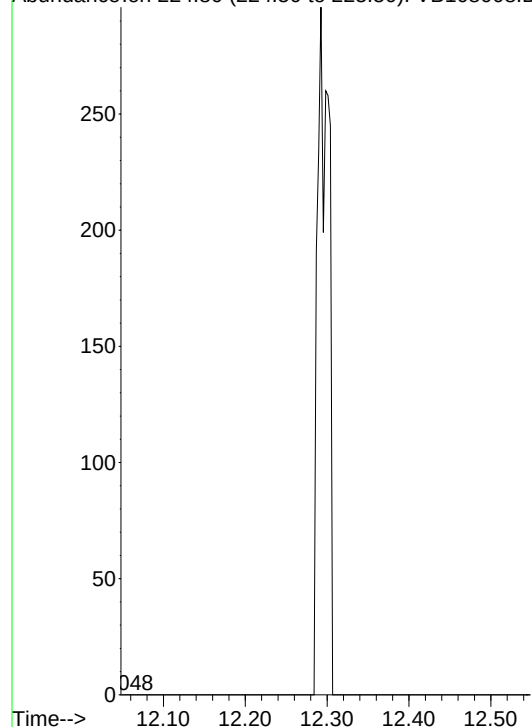
Abundance on 75.00 (74.70 to 75.70): VB108008.D\data



Original Integration

HEXACHLOROBUTADIENE

Abundance on 224.80 (224.50 to 225.50): VB108008.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 11:33:39 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 12.29

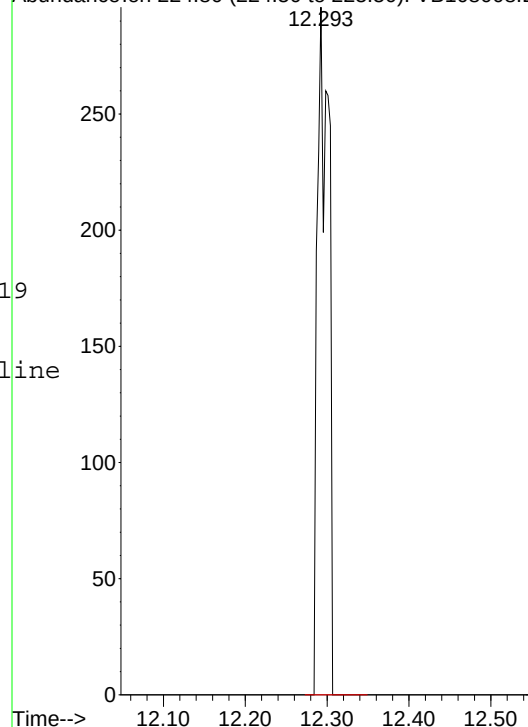
Area : 287

Amount: 0.385456

Manual Integration

HEXACHLOROBUTADIENE

Abundance on 224.80 (224.50 to 225.50): VB108008.D



Data Path : Y:\1\DATA\B041819\
 Data File : VB108009.D
 Acq On : 18 Apr 2019 11:37 am
 Operator :
 Sample : 8260 STD 1.0 PPB 1904257
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 12:27:33 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	71256	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	113462	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.845	82	61366	30.00	UG/L	0.00
84) 1,4-DICHLOROENZENE-D4...	10.138	152	62318	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	47141	35.07	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	140.28%#		
45) TOLUENE-D8 SS	6.441	98	111123	24.89	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	99.56%		
66) 4-BROMOFLUROBENZENE SS	9.002	95	45855	24.92	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	99.68%		
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.149	85	1691	1.19	UG/L #	43
4) DIFLUOROCHLOROMETHANE	1.166	51	2875	1.43	UG/L #	75
5) CHLOROMETHANE	1.257	50	3852	1.79	UG/L #	88
6) VINYL CHLORIDE	1.326	62	2027	1.23	UG/L	100
7) BROMOMETHANE	1.533	94	1724	1.87	UG/L	95
8) CHLOROETHANE	1.593	64	1155	1.31	UG/L	94
9) FLUORODICHLOROMETHANE	1.715	67	2861	1.41	UG/L	92
10) TRICHLOROFLUOROMETHANE	1.758	101	2159	1.29	UG/L	99
11) ETHANOL	0.000		0	N.D.	d	
12) DI ETHYL ETHER	1.948	59	1255	1.13	UG/L #	59
13) ACROLEIN	2.053	56	5470	16.67	UG/L #	79
14) ACETONE	2.170	43	8442m	19.77	UG/L	
15) 1,1-DICHLOROETHENE	2.116	61	2542	1.47	UG/L #	86
16) 1,1,2-TRICL-1,2,2-TRIF...	2.104	101	997	1.06	UG/L #	72
17) IODOMETHANE	2.235	142	13264	7.67	UG/L	92
18) METHYL ACETATE	2.428	43	2393	0.94	UG/L #	58
19) T-BUTYL ALCOHOL	2.619	59	1832	11.18	UG/L #	61
20) ACRYLONITRILE	2.749	53	550	0.82	UG/L #	19
21) METHYLENE CHLORIDE	2.508	49	2769	1.42	UG/L #	85
22) CARBON DISULFIDE	2.283	76	41245	11.12	UG/L	99
23) METHYL TERT-BUTYL ETHE...	2.738	73	3689	1.03	UG/L #	87
24) TRANS 1,2-DICHLOROETHENE	2.744	61	2380	1.25	UG/L	93
25) 1,1-DICHLOROETHANE	3.167	63	3068	1.26	UG/L #	85
26) VINYL ACETATE	3.232	43	47215	14.62	UG/L #	93
27) DI ISOPROPYL ETHER	3.232	45	5956	1.28	UG/L #	88
28) 2-BUTANONE	3.801	43	9956	13.36	UG/L #	88
29) T-BUTYL ETHYL ETHER	3.602	59	5104	1.13	UG/L	91
30) CIS-1,2-DICHLOROETHENE	3.761	61	2886	1.28	UG/L	94
31) 2,2-DICHLOROPROPANE	3.753	77	2327	1.57	UG/L #	75
32) ETHYL ACETATE	0.000		0	N.D.	d	
33) BROMOCHLOROMETHANE	4.011	128	622	0.94	UG/L #	46
34) TETRAHYDROFURAN	0.000		0	N.D.	d	
35) T-BUTYL FORMATE	4.145	59	826	0.66	UG/L #	77
36) CHLOROFORM	4.094	83	2592	1.18	UG/L	94
37) 1,1,1-TRICHLOROETHANE	4.250	97	2427	1.35	UG/L	94
38) CYCLOHEXANE	4.295	56	5269	2.01	UG/L	95
39) CARBON TETRACHLORIDE	4.406	117	1885	1.19	UG/L	93
40) 1,1-DICHLOROPROPENE	4.412	75	1819	1.16	UG/L #	66
41) BENZENE	4.622	78	5268	1.05	UG/L	100
42) T-AMYL ALCOHOL	4.676	59	1142	8.33	UG/L #	78
43) T-AMYLMETHYL ETHER	4.742	73	3601	1.04	UG/L #	89
46) 1,2-DICHLOROETHANE	4.659	62	2890	1.41	UG/L #	92
47) TRICHLOROETHENE	5.256	95	1397	1.02	UG/L	93

Data Path : Y:\1\DATA\B041819\

Data File : VB108009.D

Acq On : 18 Apr 2019 11:37 am

Operator :

Sample : 8260 STD 1.0 PPB 1904257

Inst : GCMSVOA2

Misc :

ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 12:27:33 2019

Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M

Quant Title : 8260 CALIBRATION VOAMS 5973

QLast Update : Thu Apr 11 08:23:37 2019

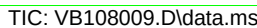
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.424	83	1868	0.95	UG/L #	70
49) 1,2-DICHLOROPROPANE	5.483	63	1692	1.08	UG/L #	67
50) DIBROMOMETHANE	5.600	93	942	1.10	UG/L	89
51) 1,4-DIOXANE	0.000		0	N.D.		
52) BROMODICHLOROMETHANE	5.762	83	2083	1.22	UG/L #	94
53) 2-CHLOROETHYLVINYLEETHER	6.069	63	11010	10.59	UG/L #	74
54) MIBK	6.361	43	20658	12.85	UG/L #	88
55) CIS-1,3-DICHLOROPROPENE	6.199	75	2255	1.06	UG/L #	47
56) TOLUENE	6.506	91	5878	1.05	UG/L	96
57) TRANS-1,3,-DICHLOROPRO...	6.745	75	2145	1.12	UG/L #	54
58) ETHYL METHACRYLATE	0.000		0	N.D.	d	
59) 1,1,2-TRICHLOROETHANE	6.921	97	1271	0.99	UG/L	98
60) 2-HEXANONE	7.177	43	15120	13.47	UG/L #	86
61) TETRACHLOROETHENE	7.027	164	1036	0.93	UG/L	96
62) 1,3-DICHLOROPROPANE	7.083	76	2238	1.00	UG/L #	58
63) DIBROMOCHLOROMETHANE	7.294	129	1407	0.94	UG/L	96
64) 1,2-DIBROMOETHANE	7.390	107	1452	1.02	UG/L #	95
67) CHLOROBENZENE	7.873	112	3885	0.96	UG/L	98
68) 1,1,1,2-TETRACHLOROETHANE	7.959	131	1389	0.92	UG/L	93
69) ETHYLBENZENE	7.984	91	6948	1.03	UG/L	94
70) M/P-XYLENES	8.101	91	11040	2.11	UG/L	95
71) O-XYLENE	8.487	91	5821	1.07	UG/L	97
72) STYRENE	8.507	104	4356	0.97	UG/L #	82
73) BROMOFORM	8.689	173	1009	0.85	UG/L #	96
74) ISOPROPYLBENZENE	8.854	105	6555	1.02	UG/L	94
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.		
76) 1,1,2,2-TETRACHLOROETHANE	9.169	83	1826	0.97	UG/L #	96
77) 1,4-DICHLORO-2-BUTENE(...	9.232	53	739	1.15	UG/L #	36
78) BROMOBENZENE	9.144	77	2800	1.06	UG/L	95
79) 1,2,3-TRICHLOROPROPANE	9.206	110	537	0.90	UG/L	74
80) N-PROPYLBENZENE	9.257	91	8148	1.08	UG/L	91
81) 2-CHLOROTOLUENE	9.331	91	4985	1.08	UG/L	92
82) 1,3,5-TRIMETHYLBENZENE	9.437	105	5530	0.99	UG/L	90
83) 4-CHLOROTOLUENE	9.445	91	5845	1.07	UG/L	91
85) TERT-BUTYLBENZENE	9.752	119	4668	1.00	UG/L #	83
86) 1,2,4-TRIMETHYLBENZENE	9.803	105	5744	1.04	UG/L	94
87) SEC-BUTYLBENZENE	9.971	105	6494	1.06	UG/L	94
88) 1,3-DICHLOROBENZENE	10.073	146	3563	1.08	UG/L	96
89) P-ISOPROPYLTOLUENE	10.119	119	5567	0.97	UG/L #	91
90) 1,4-DICHLOROBENZENE	10.161	146	3565	1.02	UG/L #	67
91) N-BUTYLBENZENE	10.525	91	4913	1.11	UG/L	99
92) 1,2-DICHLOROBENZENE	10.534	146	3325	1.02	UG/L	97
93) 1,2-DIBROMO-3-CHLOROPR...	11.318	75	285m	0.81	UG/L	
94) 1,3,5-TRICHLOROBENZENE	11.508	180	2132	0.98	UG/L	99
95) 1,2,4-TRICHLOROBENZENE	12.128	180	2211	1.06	UG/L	96
96) HEXACHLOROBUTADIENE	12.301	225	818	1.12	UG/L #	23
97) NAPHTHALENE	12.369	128	5562	1.01	UG/L	99
98) 1,2,3-TRICHLOROBENZENE	12.608	180	1840	0.99	UG/L	97

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

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Inst : GCMSVOA2



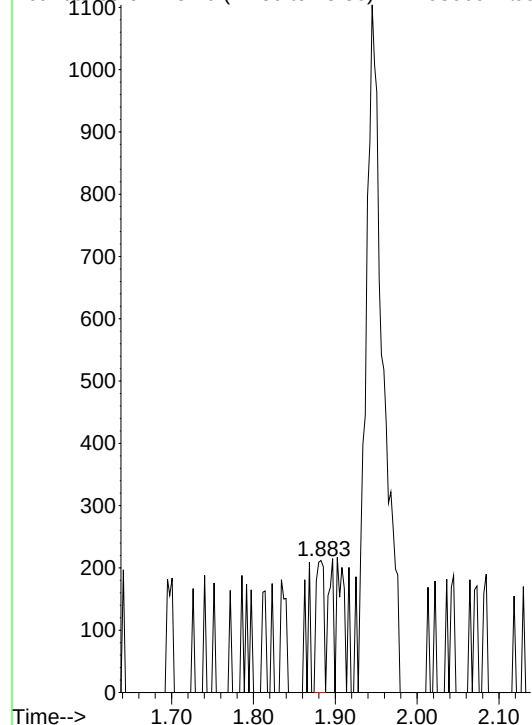
Data Path : Y:\1\DATA\B041819\
Data File : VB108009.D
Acq On : 18 Apr 2019 11:37 am
Operator :
Sample : 8260 STD 1.0 PPB 1904257
Misc :

Quant Time : Thu Apr 18 12:27:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHANOL

Abundance on 45.10 (44.80 to 45.80): VB108009.D\data



Original Int. Results

RT : 1.88
Area : 137
Amount: 8.25688

Manual Int. Results

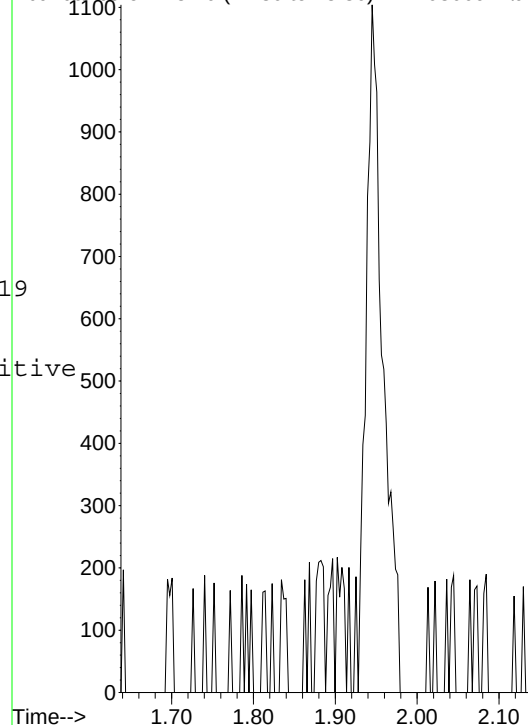
Thu Apr 18 12:27:05 2019

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

Manual Integration

ETHANOL

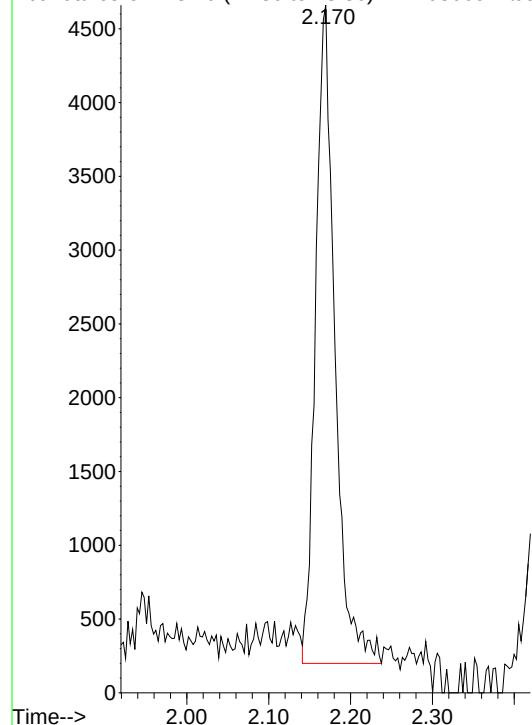
Abundance on 45.10 (44.80 to 45.80): VB108009.D\data



Original Integration

ACETONE

Abundance on 43.10 (42.80 to 43.80): VB108009.D\data



Original Int. Results

RT : 2.17
Area : 7283
Amount: 17.0589

Manual Int. Results

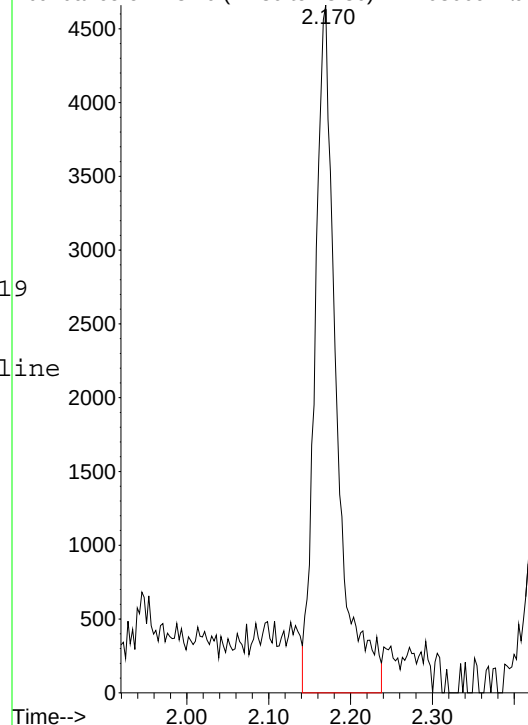
Thu Apr 18 12:27:11 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 2.17
Area : 8442
Amount: 19.7736

Manual Integration

ACETONE

Abundance on 43.10 (42.80 to 43.80): VB108009.D\data



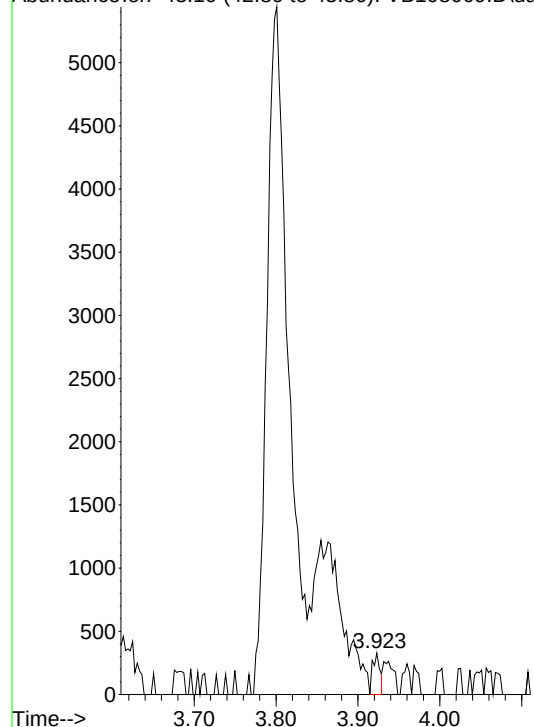
Data Path : Y:\1\DATA\B041819\
Data File : VB108009.D
Acq On : 18 Apr 2019 11:37 am
Operator :
Sample : 8260 STD 1.0 PPB 1904257
Misc :

Quant Time : Thu Apr 18 12:27:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): VB108009.D\data



Original Int. Results

RT : 3.92
Area : 205
Amount: 0.122325

Manual Int. Results

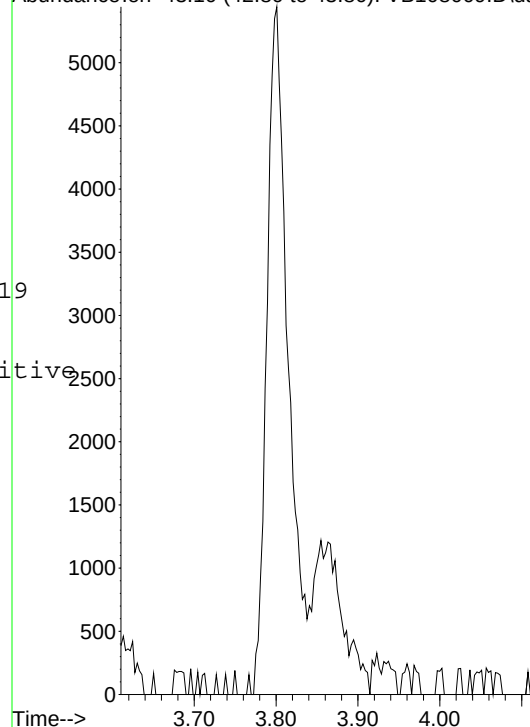
Thu Apr 18 12:27:34 2019

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

Manual Integration

ETHYL ACETATE

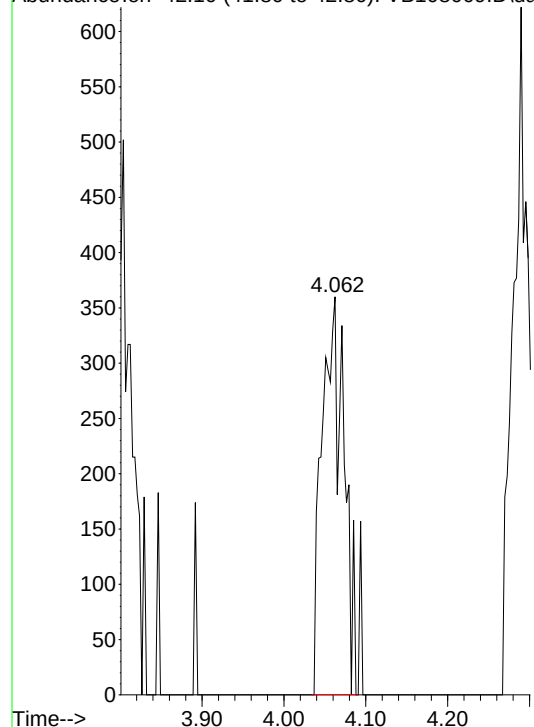
Abundance on 43.10 (42.80 to 43.80): VB108009.D\data



Original Integration

TETRAHYDROFURAN

Abundance on 42.10 (41.80 to 42.80): VB108009.D\data



Original Int. Results

RT : 4.06
Area : 668
Amount: 1.28665

Manual Int. Results

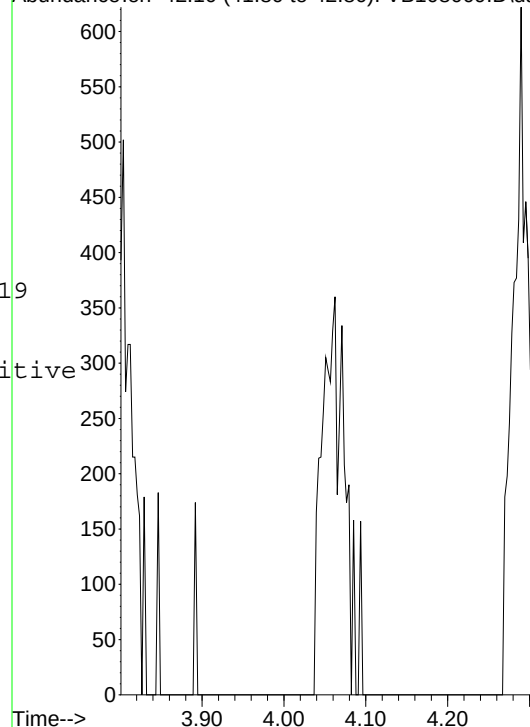
Thu Apr 18 12:27:40 2019

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

Manual Integration

TETRAHYDROFURAN

Abundance on 42.10 (41.80 to 42.80): VB108009.D\data



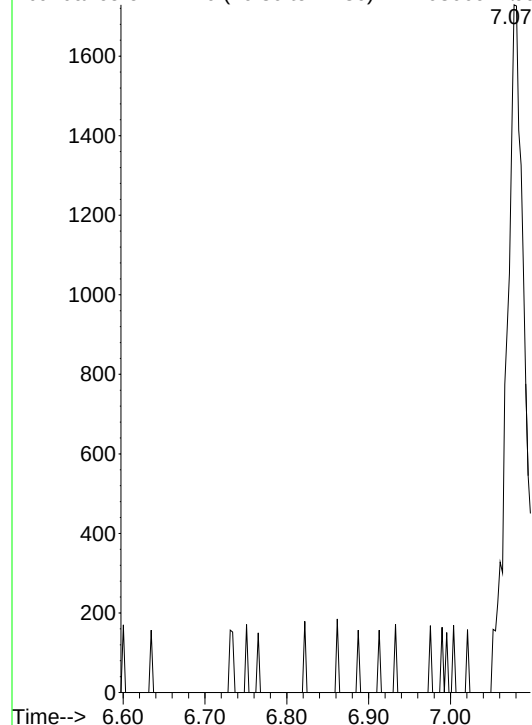
Data Path : Y:\1\DATA\B041819\
Data File : VB108009.D
Acq On : 18 Apr 2019 11:37 am
Operator :
Sample : 8260 STD 1.0 PPB 1904257
Misc :

Quant Time : Thu Apr 18 12:27:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108009.D\data



Original Int. Results

RT : 7.08
Area : 2694
Amount: 0

Manual Int. Results

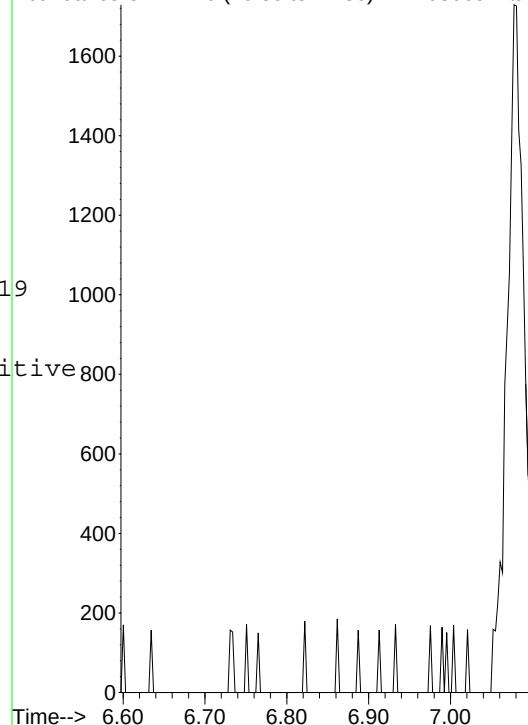
Thu Apr 18 12:27:58 2019

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

Manual Integration

ETHYL METHACRYLATE

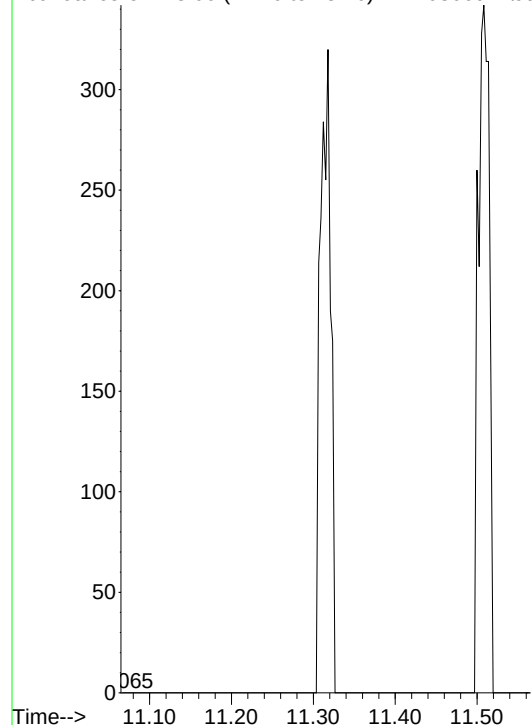
Abundance on 41.10 (40.80 to 41.80): VB108009.D\data



Original Integration

1,2-DIBROMO-3-CHLOROPROPANE

Abundance on 75.00 (74.70 to 75.70): VB108009.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

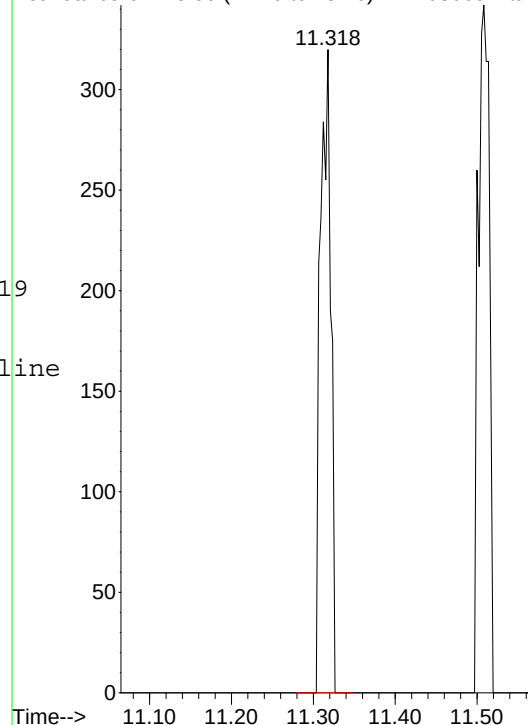
Thu Apr 18 12:28:16 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 11.32
Area : 285
Amount: 0.812632

Manual Integration

1,2-DIBROMO-3-CHLOROPROPANE

Abundance on 75.00 (74.70 to 75.70): VB108009.D\data



Data Path : Y:\1\DATA\B041819\
 Data File : VB108010.D
 Acq On : 18 Apr 2019 12:08 pm
 Operator :
 Sample : 8260 STD 2.0 PPB 1904257
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 12:41:03 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	72589	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	113659	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	62461	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.138	152	63014	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	47417	34.63	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 138.52%#			
45) TOLUENE-D8 SS	6.444	98	113312	25.33	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 101.32%			
66) 4-BROMOFLUOROBENZENE SS	8.999	95	46780	24.97	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 99.88%			
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.146	85	3683	2.55	UG/L	98
4) DIFLUOROCHLOROMETHANE	1.169	51	5284	2.59	UG/L	100
5) CHLOROMETHANE	1.257	50	7584	3.46	UG/L	91
6) VINYL CHLORIDE	1.328	62	4385	2.60	UG/L	97
7) BROMOMETHANE	1.533	94	2679	2.86	UG/L	99
8) CHLOROETHANE	1.595	64	2361	2.63	UG/L	99
9) FLUORODICHLOROMETHANE	1.721	67	5860	2.84	UG/L	93
10) TRICHLOROFLUOROMETHANE	1.758	101	4752	2.78	UG/L	99
11) ETHANOL	0.000		0	N.D.	d	
12) DI ETHYL ETHER	1.948	59	2907	2.58	UG/L #	76
13) ACROLEIN	2.056	56	9856	29.48	UG/L #	94
14) ACETONE	2.170	43	15327m	35.24	UG/L	
15) 1,1-DICHLOROETHENE	2.116	61	5401	3.06	UG/L #	89
16) 1,1,2-TRICL-1,2,2-TRIF...	2.104	101	2148	2.24	UG/L	99
17) IODOMETHANE	2.238	142	31762	18.02	UG/L	91
18) METHYL ACETATE	2.425	43	4416	1.70	UG/L #	80
19) T-BUTYL ALCOHOL	2.616	59	3961	23.72	UG/L #	65
20) ACRYLONITRILE	2.749	53	1484	2.16	UG/L #	37
21) METHYLENE CHLORIDE	2.505	49	6181	3.10	UG/L #	82
22) CARBON DISULFIDE	2.286	76	86504	22.90	UG/L	100
23) METHYL TERT-BUTYL ETHE...	2.744	73	8281	2.27	UG/L	95
24) TRANS 1,2-DICHLOROETHENE	2.747	61	5244	2.71	UG/L	92
25) 1,1-DICHLOROETHANE	3.170	63	6430	2.59	UG/L	98
26) VINYL ACETATE	3.232	43	98218	29.85	UG/L #	95
27) DI ISOPROPYL ETHER	3.232	45	12988	2.74	UG/L #	87
28) 2-BUTANONE	3.798	43	20314	26.76	UG/L #	92
29) T-BUTYL ETHYL ETHER	3.605	59	11066	2.42	UG/L	95
30) CIS-1,2-DICHLOROETHENE	3.755	61	6260	2.72	UG/L	90
31) 2,2-DICHLOROPROPANE	3.753	77	4797	3.19	UG/L	96
32) ETHYL ACETATE	3.861	43	5616m	3.29	UG/L	
33) BROMOCHLOROMETHANE	4.003	128	1607	2.38	UG/L #	75
34) TETRAHYDROFURAN	4.054	42	1426	2.70	UG/L #	56
35) T-BUTYL FORMATE	4.142	59	2308	1.82	UG/L #	92
36) CHLOROFORM	4.085	83	5804	2.59	UG/L	99
37) 1,1,1-TRICHLOROETHANE	4.247	97	4796	2.61	UG/L #	92
38) CYCLOHEXANE	4.295	56	8336	3.13	UG/L	92
39) CARBON TETRACHLORIDE	4.406	117	4544	2.83	UG/L	86
40) 1,1-DICHLOROPROPENE	4.418	75	3920	2.45	UG/L	97
41) BENZENE	4.622	78	10947	2.14	UG/L	98
42) T-AMYL ALCOHOL	4.673	59	2478	17.74	UG/L #	83
43) T-AMYLMETHYL ETHER	4.739	73	7683	2.18	UG/L	95
46) 1,2-DICHLOROETHANE	4.656	62	5810	2.83	UG/L #	93
47) TRICHLOROETHENE	5.256	95	3066	2.24	UG/L	92

Data Path : Y:\1\DATA\B041819\
 Data File : VB108010.D
 Acq On : 18 Apr 2019 12:08 pm
 Operator :
 Sample : 8260 STD 2.0 PPB 1904257
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Inst : GCMSVOA2

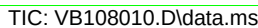
Quant Time: Apr 18 12:41:03 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.421	83	3796	1.92	UG/L #	76
49) 1,2-DICHLOROPROPANE	5.486	63	3615	2.30	UG/L #	76
50) DIBROMOMETHANE	5.600	93	2158	2.52	UG/L	92
51) 1,4-DIOXANE	0.000		0	N.D.		
52) BROMODICHLOROMETHANE	5.762	83	4261	2.50	UG/L #	94
53) 2-CHLOROETHYLVINYLEETHER	6.072	63	23130	22.22	UG/L #	77
54) MIBK	6.364	43	42089	26.14	UG/L #	89
55) CIS-1,3-DICHLOROPROPENE	6.197	75	4822	2.27	UG/L #	65
56) TOLUENE	6.506	91	12676	2.27	UG/L	95
57) TRANS-1,3,-DICHLOROPRO...	6.748	75	4647	2.42	UG/L #	66
58) ETHYL METHACRYLATE	0.000		0	N.D.	d	
59) 1,1,2-TRICHLOROETHANE	6.924	97	2815	2.19	UG/L	97
60) 2-HEXANONE	7.177	43	31633	28.14	UG/L #	86
61) TETRACHLOROETHENE	7.027	164	2349	2.11	UG/L	96
62) 1,3-DICHLOROPROPANE	7.080	76	4928	2.20	UG/L #	69
63) DIBROMOCHLOROMETHANE	7.294	129	3143	2.09	UG/L	97
64) 1,2-DIBROMOETHANE	7.399	107	2977	2.08	UG/L #	96
67) CHLOROBENZENE	7.871	112	8235	2.00	UG/L	92
68) 1,1,1,2-TETRACHLOROETHANE	7.956	131	2872	1.87	UG/L	97
69) ETHYLBENZENE	7.984	91	14340	2.09	UG/L	97
70) M/P-XYLENES	8.101	91	23694	4.44	UG/L	93
71) O-XYLENE	8.487	91	11865	2.14	UG/L	94
72) STYRENE	8.507	104	9241	2.02	UG/L #	82
73) BROMOFORM	8.683	173	2330	1.94	UG/L #	93
74) ISOPROPYLBENZENE	8.851	105	13631	2.07	UG/L	96
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.		
76) 1,1,2,2-TETRACHLOROETHANE	9.172	83	3752	1.95	UG/L #	96
77) 1,4-DICHLORO-2-BUTENE(...	9.229	53	1806	2.77	UG/L #	36
78) BROMOBENZENE	9.138	77	5811	2.16	UG/L	97
79) 1,2,3-TRICHLOROPROPANE	9.209	110	1234	2.02	UG/L	95
80) N-PROPYLBENZENE	9.260	91	16659	2.17	UG/L	97
81) 2-CHLOROTOLUENE	9.334	91	10286	2.18	UG/L	93
82) 1,3,5-TRIMETHYLBENZENE	9.437	105	11379	2.01	UG/L	93
83) 4-CHLOROTOLUENE	9.445	91	12159	2.19	UG/L	94
85) TERT-BUTYLBENZENE	9.752	119	9719	2.06	UG/L	86
86) 1,2,4-TRIMETHYLBENZENE	9.800	105	12057	2.15	UG/L	94
87) SEC-BUTYLBENZENE	9.971	105	13880	2.23	UG/L	96
88) 1,3-DICHLOROBENZENE	10.073	146	7096	2.12	UG/L	97
89) P-ISOPROPYLTOLUENE	10.119	119	11696	2.02	UG/L #	92
90) 1,4-DICHLOROBENZENE	10.164	146	7576	2.15	UG/L #	93
91) N-BUTYLBENZENE	10.528	91	10343	2.32	UG/L	97
92) 1,2-DICHLOROBENZENE	10.531	146	6672	2.03	UG/L	94
93) 1,2-DIBROMO-3-CHLOROPR...	11.309	75	734	2.07	UG/L	92
94) 1,3,5-TRICHLOROBENZENE	11.508	180	4533	2.05	UG/L	95
95) 1,2,4-TRICHLOROBENZENE	12.125	180	4457	2.12	UG/L	96
96) HEXACHLOROBTADIENE	12.293	225	1562	2.11	UG/L #	89
97) NAPHTHALENE	12.372	128	11474	2.05	UG/L	99
98) 1,2,3-TRICHLOROBENZENE	12.611	180	4138	2.19	UG/L	96

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

227

Inst : GCMSVOA2



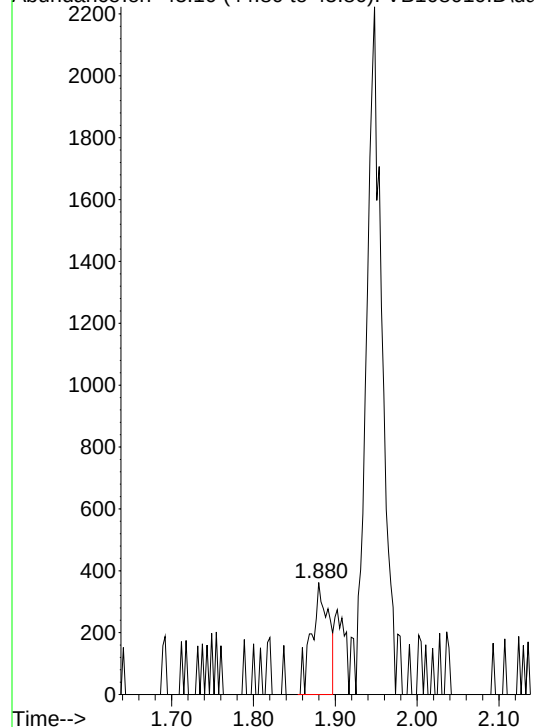
Data Path : Y:\1\DATA\B041819\
Data File : VB108010.D
Acq On : 18 Apr 2019 12:08 pm
Operator :
Sample : 8260 STD 2.0 PPB 1904257
Misc :

Quant Time : Thu Apr 18 12:41:03 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHANOL

Abundance 45.10 (44.80 to 45.80): VB108010.D\data



Original Int. Results

RT : 1.88
Area : 517
Amount: 30.587

Manual Int. Results

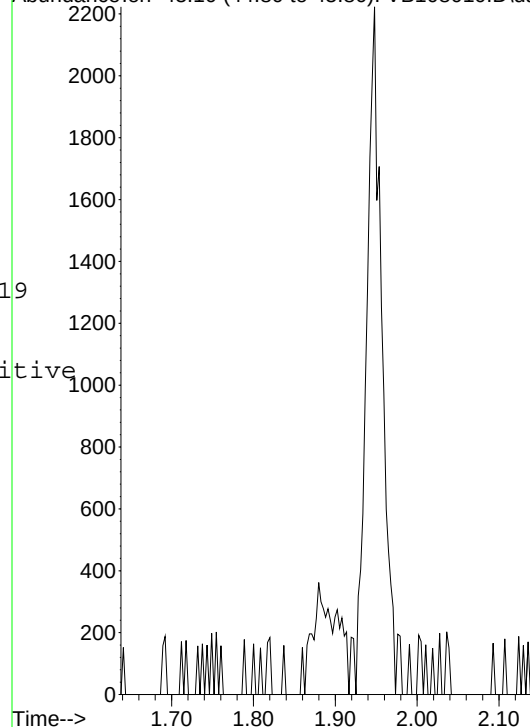
Thu Apr 18 12:41:13 2019

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

Manual Integration

ETHANOL

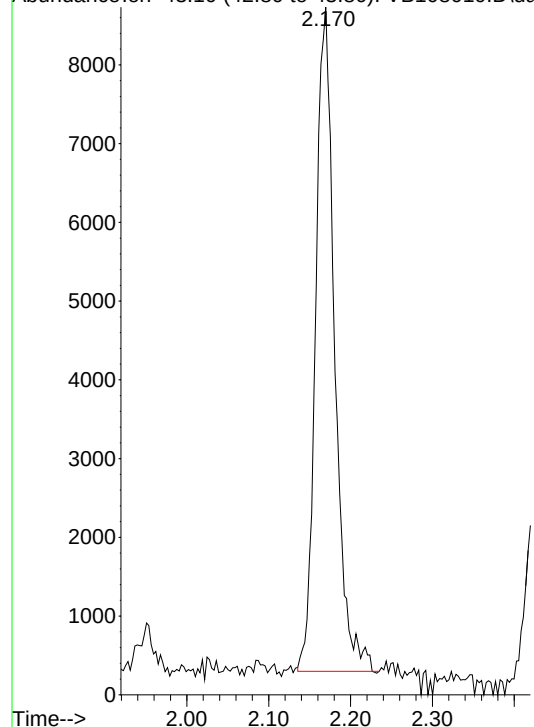
Abundance 45.10 (44.80 to 45.80): VB108010.D\data



Original Integration

ACETONE

Abundance 43.10 (42.80 to 43.80): VB108010.D\data



Original Int. Results

RT : 2.17
Area : 13601
Amount: 31.2725

Manual Int. Results

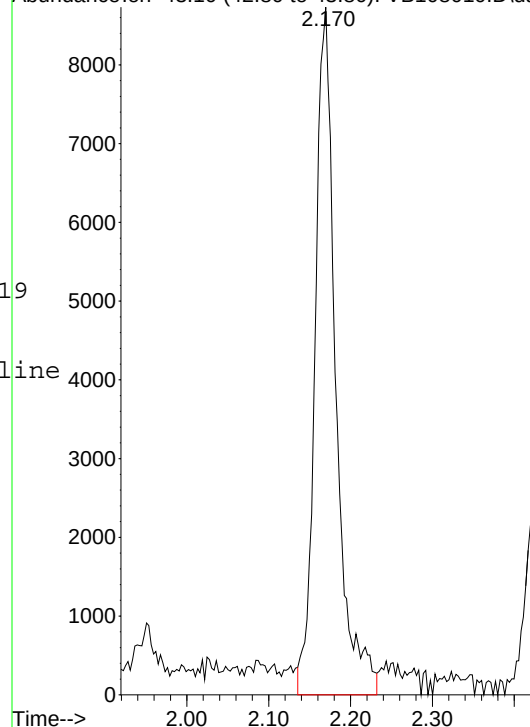
Thu Apr 18 12:41:19 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 2.17
Area : 15327
Amount: 35.241

Manual Integration

ACETONE

Abundance 43.10 (42.80 to 43.80): VB108010.D\data



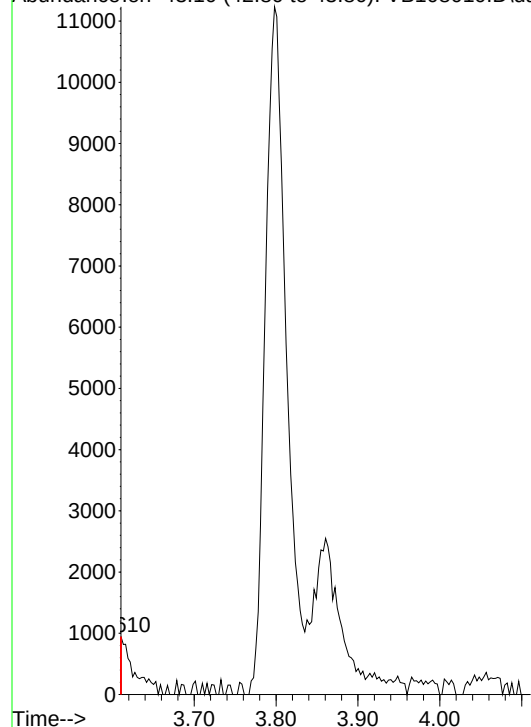
Data Path : Y:\1\DATA\B041819\
Data File : VB108010.D
Acq On : 18 Apr 2019 12:08 pm
Operator :
Sample : 8260 STD 2.0 PPB 1904257
Misc :

Quant Time : Thu Apr 18 12:41:03 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): VB108010.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Thu Apr 18 12:41:31 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 3.86

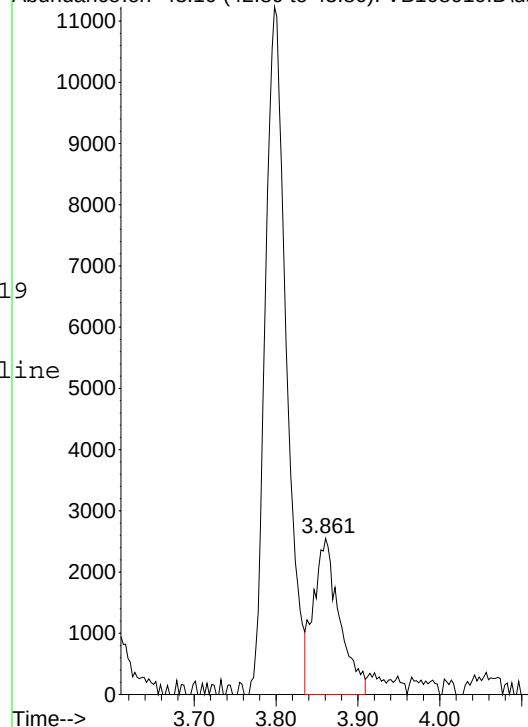
Area : 5616

Amount: 3.28957

Manual Integration

ETHYL ACETATE

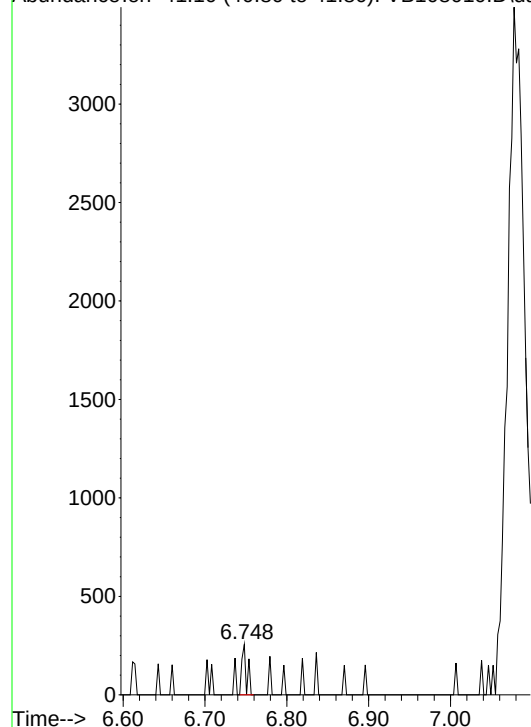
Abundance on 43.10 (42.80 to 43.80): VB108010.D\data



Original Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108010.D\data



Original Int. Results

RT : 6.75

Area : 106

Amount: 0

Manual Int. Results

Thu Apr 18 12:41:47 2019

MIuser: LBD

Reason: Qdel False Positive

RT : 0.00

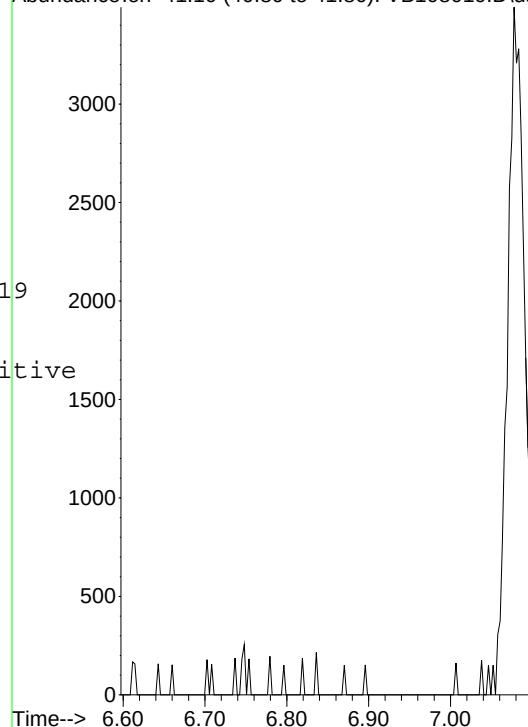
Area : 0

Amount: 0

Manual Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108010.D\data



Data Path : Y:\1\DATA\B041819\
 Data File : VB108011.D
 Acq On : 18 Apr 2019 12:38 pm
 Operator :
 Sample : 8260 STD 5.0 PPB 1904257
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 13:55:58 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	71588	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	113549	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	62564	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.141	152	63001	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	46918	34.75	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	139.00%	#	
45) TOLUENE-D8 SS	6.444	98	111703	25.00	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	100.00%		
66) 4-BROMOFLUROBENZENE SS	9.002	95	46877	24.98	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	99.92%		
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.147	85	8102	5.70	UG/L	97
4) DIFLUOROCHLOROMETHANE	1.169	51	11812	5.86	UG/L #	82
5) CHLOROMETHANE	1.254	50	21620	10.00	UG/L	98
6) VINYL CHLORIDE	1.326	62	9273	5.58	UG/L	99
7) BROMOMETHANE	1.536	94	4654	5.03	UG/L	94
8) CHLOROETHANE	1.593	64	5249	5.93	UG/L	96
9) FLUORODICHLOROMETHANE	1.718	67	12956	6.36	UG/L	97
10) TRICHLOROFLUOROMETHANE	1.755	101	10912	6.48	UG/L	98
11) ETHANOL	1.885	45	1257	75.41	UG/L #	77
12) DI ETHYL ETHER	1.948	59	6843	6.15	UG/L #	81
13) ACROLEIN	2.053	56	21232	64.39	UG/L #	96
14) ACETONE	2.167	43	31072	72.44	UG/L #	87
15) 1,1-DICHLOROETHENE	2.113	61	11471	6.58	UG/L	90
16) 1,1,2-TRICL-1,2,2-TRIF...	2.107	101	4738	5.00	UG/L	92
17) IODOMETHANE	2.235	142	81177	46.70	UG/L	90
18) METHYL ACETATE	2.423	43	9551	3.73	UG/L #	85
19) T-BUTYL ALCOHOL	2.613	59	9099	55.25	UG/L #	85
20) ACRYLONITRILE	2.749	53	3619	5.34	UG/L #	95
21) METHYLENE CHLORIDE	2.505	49	14149	7.21	UG/L #	82
22) CARBON DISULFIDE	2.283	76	187501	50.33	UG/L	100
23) METHYL TERT-BUTYL ETHE...	2.744	73	19946	5.55	UG/L	98
24) TRANS 1,2-DICHLOROETHENE	2.744	61	12066	6.32	UG/L	92
25) 1,1-DICHLOROETHANE	3.170	63	14569	5.95	UG/L	99
26) VINYL ACETATE	3.230	43	251434	77.48	UG/L #	94
27) DI ISOPROPYL ETHER	3.233	45	30489	6.53	UG/L #	90
28) 2-BUTANONE	3.795	43	48190	64.36	UG/L #	93
29) T-BUTYL ETHYL ETHER	3.605	59	26523	5.87	UG/L	97
30) CIS-1,2-DICHLOROETHENE	3.761	61	14319	6.32	UG/L	90
31) 2,2-DICHLOROPROPANE	3.753	77	10445	7.04	UG/L	97
32) ETHYL ACETATE	3.855	43	12971m	7.70	UG/L	
33) BROMOCHLOROMETHANE	4.003	128	3705	5.56	UG/L #	72
34) TETRAHYDROFURAN	4.057	42	3260	6.25	UG/L #	77
35) T-BUTYL FORMATE	4.139	59	6554	5.25	UG/L	96
36) CHLOROFORM	4.091	83	13082	5.92	UG/L	99
37) 1,1,1-TRICHLOROETHANE	4.253	97	11530	6.37	UG/L	94
38) CYCLOHEXANE	4.293	56	15627	5.94	UG/L #	89
39) CARBON TETRACHLORIDE	4.406	117	9737	6.14	UG/L	96
40) 1,1-DICHLOROPROPENE	4.415	75	9058	5.75	UG/L	93
41) BENZENE	4.622	78	25309	5.01	UG/L	99
42) T-AMYL ALCOHOL	4.671	59	6374	46.26	UG/L #	91
43) T-AMYLMETHYL ETHER	4.739	73	18684	5.38	UG/L	96
46) 1,2-DICHLOROETHANE	4.656	62	13586	6.63	UG/L #	93
47) TRICHLOROETHENE	5.256	95	6968	5.10	UG/L	91

Data Path : Y:\1\DATA\B041819\
 Data File : VB108011.D
 Acq On : 18 Apr 2019 12:38 pm
 Operator :
 Sample : 8260 STD 5.0 PPB 1904257
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Inst : GCMSVOA2

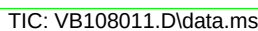
Quant Time: Apr 18 13:55:58 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.427	83	8737	4.42	UG/L #	83
49) 1,2-DICHLOROPROPANE	5.483	63	8206	5.23	UG/L #	79
50) DIBROMOMETHANE	5.600	93	5170	6.04	UG/L	93
51) 1,4-DIOXANE	5.634	88	364m	40.75	UG/L	
52) BROMODICHLOROMETHANE	5.762	83	10378	6.09	UG/L	100
53) 2-CHLOROETHYLVINYLEETHER	6.072	63	56081	53.92	UG/L #	76
54) MIBK	6.364	43	101541	63.11	UG/L #	89
55) CIS-1,3-DICHLOROPROPENE	6.197	75	12105	5.69	UG/L #	70
56) TOLUENE	6.506	91	28602	5.12	UG/L	98
57) TRANS-1,3,-DICHLOROPRO...	6.748	75	11442	5.97	UG/L #	73
58) ETHYL METHACRYLATE	0.000		0	N.D.	d	
59) 1,1,2-TRICHLOROETHANE	6.919	97	6292	4.91	UG/L	94
60) 2-HEXANONE	7.177	43	73209	65.18	UG/L #	87
61) TETRACHLOROETHENE	7.024	164	5477	4.92	UG/L	98
62) 1,3-DICHLOROPROPANE	7.081	76	11892	5.31	UG/L #	71
63) DIBROMOCHLOROMETHANE	7.294	129	7747	5.15	UG/L	96
64) 1,2-DIBROMOETHANE	7.399	107	7441	5.22	UG/L #	99
67) CHLOROBENZENE	7.871	112	19437	4.71	UG/L	94
68) 1,1,1,2-TETRACHLOROETHANE	7.962	131	7228	4.71	UG/L	97
69) ETHYLBENZENE	7.981	91	32672	4.75	UG/L	95
70) M/P-XYLENES	8.101	91	52811	9.88	UG/L	94
71) O-XYLENE	8.487	91	26747	4.82	UG/L	96
72) STYRENE	8.504	104	22081	4.81	UG/L #	84
73) BROMOFORM	8.681	173	5596	4.65	UG/L #	96
74) ISOPROPYLBENZENE	8.851	105	31463	4.78	UG/L	97
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.	d	
76) 1,1,2,2-TETRACHLOROETHANE	9.172	83	9208	4.79	UG/L	99
77) 1,4-DICHLORO-2-BUTENE(...	9.229	53	4100	6.27	UG/L	92
78) BROMOBENZENE	9.138	77	13283	4.93	UG/L	98
79) 1,2,3-TRICHLOROPROPANE	9.201	110	2800	4.58	UG/L	88
80) N-PROPYLBENZENE	9.258	91	37732	4.91	UG/L	95
81) 2-CHLOROTOLUENE	9.334	91	23123	4.89	UG/L	97
82) 1,3,5-TRIMETHYLBENZENE	9.437	105	25989	4.58	UG/L	95
83) 4-CHLOROTOLUENE	9.442	91	28308	5.08	UG/L	92
85) TERT-BUTYLBENZENE	9.752	119	22088	4.67	UG/L	86
86) 1,2,4-TRIMETHYLBENZENE	9.803	105	27975	4.99	UG/L	93
87) SEC-BUTYLBENZENE	9.971	105	31001	4.99	UG/L	97
88) 1,3-DICHLOROBENZENE	10.073	146	16580	4.95	UG/L	99
89) P-ISOPROPYLTOLUENE	10.121	119	26777	4.63	UG/L #	94
90) 1,4-DICHLOROBENZENE	10.161	146	17322	4.92	UG/L	97
91) N-BUTYLBENZENE	10.525	91	23700	5.31	UG/L	96
92) 1,2-DICHLOROBENZENE	10.528	146	16489	5.01	UG/L	98
93) 1,2-DIBROMO-3-CHLOROPR...	11.312	75	1898	5.35	UG/L	87
94) 1,3,5-TRICHLOROBENZENE	11.508	180	10309	4.66	UG/L	93
95) 1,2,4-TRICHLOROBENZENE	12.125	180	10510	5.00	UG/L	98
96) HEXACHLOROBUTADIENE	12.296	225	3759	5.08	UG/L	98
97) NAPHTHALENE	12.369	128	27406	4.90	UG/L	99
98) 1,2,3-TRICHLOROBENZENE	12.608	180	9424	5.00	UG/L	96

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

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Inst : GCMSVOA2



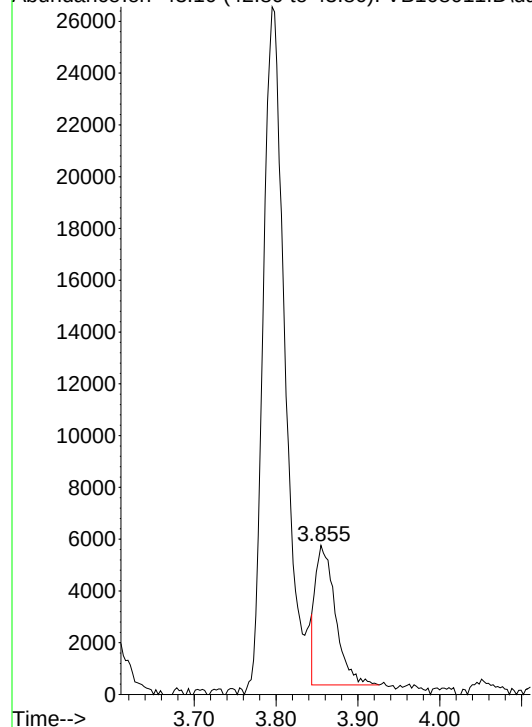
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Data File : VB108011.D
Acq On : 18 Apr 2019 12:38 pm
Operator :
Sample : 8260 STD 5.0 PPB 1904257
Misc :

Quant Time : Thu Apr 18 13:55:58 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): VB108011.D\data



Original Int. Results

RT : 3.85
Area : 9172
Amount: 5.44762

Manual Int. Results

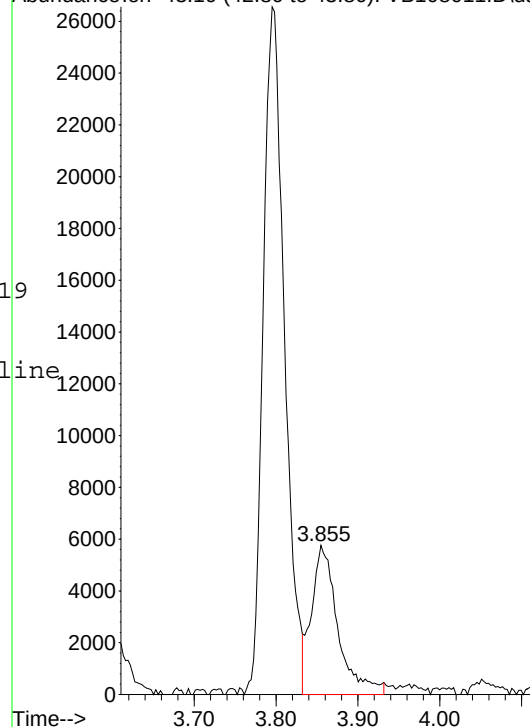
Thu Apr 18 13:55:13 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.85
Area : 12971
Amount: 7.704

Manual Integration

ETHYL ACETATE

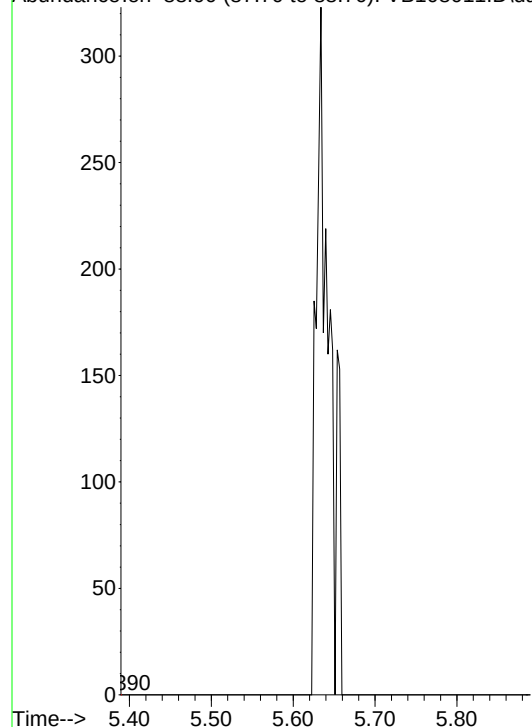
Abundance on 43.10 (42.80 to 43.80): VB108011.D\data



Original Integration

1,4-DIOXANE

Abundance on 88.00 (87.70 to 88.70): VB108011.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

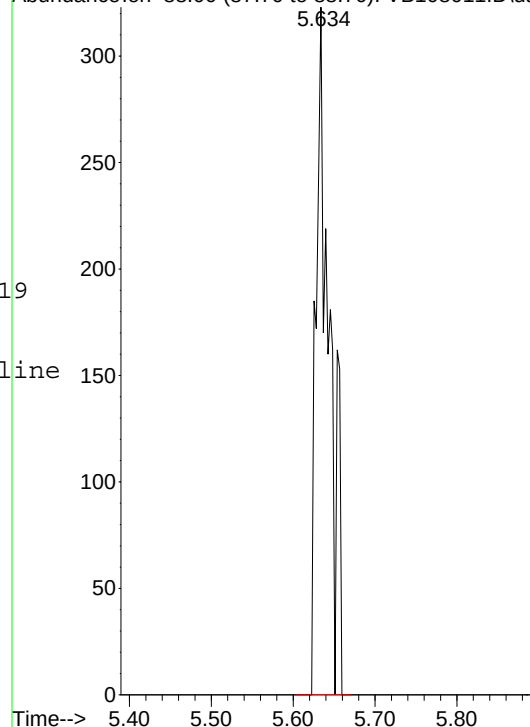
Thu Apr 18 13:56:49 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 5.63
Area : 364
Amount: 40.7476

Manual Integration

1,4-DIOXANE

Abundance on 88.00 (87.70 to 88.70): VB108011.D\data



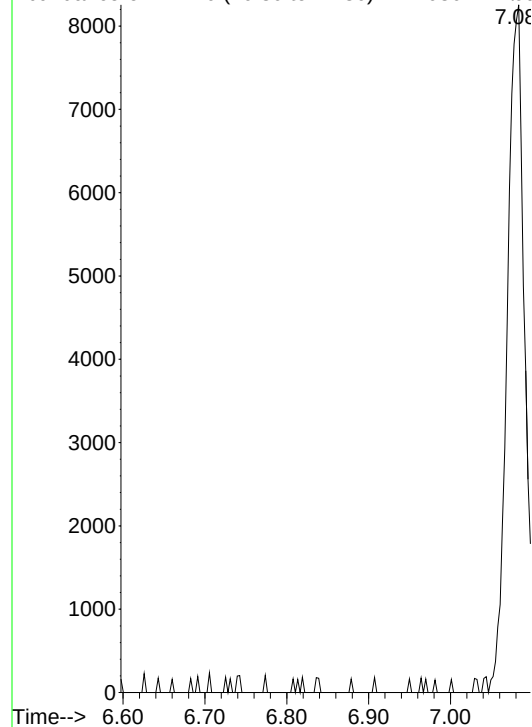
Data Path : Y:\1\DATA\B041819\
Data File : VB108011.D
Acq On : 18 Apr 2019 12:38 pm
Operator :
Sample : 8260 STD 5.0 PPB 1904257
Misc :

Quant Time : Thu Apr 18 13:55:58 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108011.D\data



Original Int. Results

RT : 7.08
Area : 12447
Amount: 0

Manual Int. Results

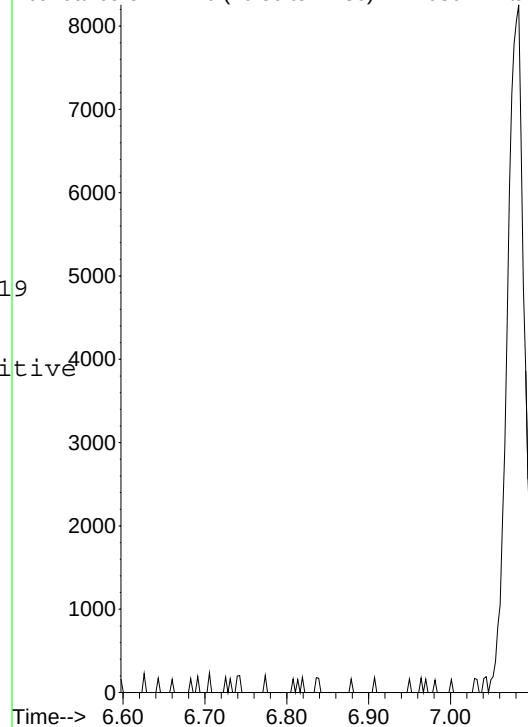
Thu Apr 18 13:55:34 2019

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

Manual Integration

ETHYL METHACRYLATE

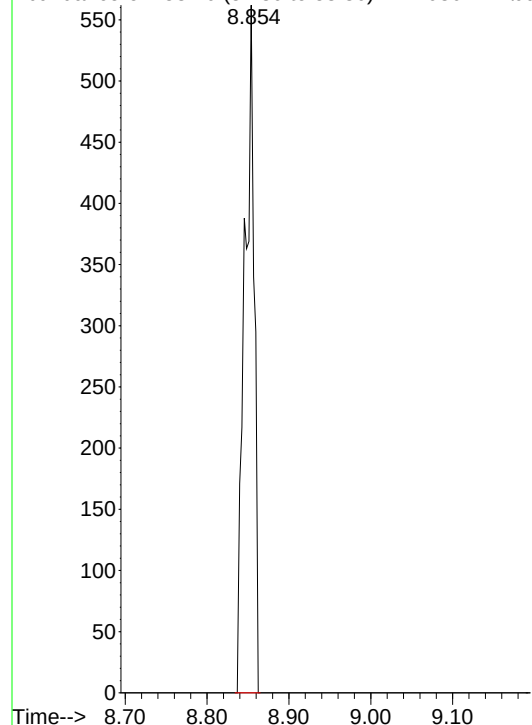
Abundance on 41.10 (40.80 to 41.80): VB108011.D\data



Original Integration

CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108011.D\data



Original Int. Results

RT : 8.85
Area : 461
Amount: 0

Manual Int. Results

Thu Apr 18 13:55:44 2019

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

Manual Integration

CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108011.D\data



Data Path : Y:\1\DATA\B041819\
 Data File : VB108012.D
 Acq On : 18 Apr 2019 1:09 pm
 Operator :
 Sample : 8260 STD 10 PPB 1904257
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 13:58:20 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	72484	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	115420	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	62266	30.00	UG/L	0.00
84) 1,4-DICHLOROENZENE-D4...	10.139	152	64053	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	46861	34.28	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	137.12%#		
45) TOLUENE-D8 SS	6.444	98	112386	24.74	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	98.96%		
66) 4-BROMOFLUROBENZENE SS	9.002	95	46194	24.74	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	98.96%		
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.147	85	18232	12.67	UG/L	99
4) DIFLUOROCHLOROMETHANE	1.169	51	25488	12.49	UG/L	98
5) CHLOROMETHANE	1.255	50	39679	18.13	UG/L	99
6) VINYL CHLORIDE	1.326	62	21255	12.64	UG/L	98
7) BROMOMETHANE	1.527	94	8410	8.98	UG/L	94
8) CHLOROETHANE	1.593	64	11353	12.67	UG/L	99
9) FLUORODICHLOROMETHANE	1.718	67	27621	13.40	UG/L	99
10) TRICHLOROFLUOROMETHANE	1.755	101	23556	13.81	UG/L	99
11) ETHANOL	1.883	45	2205	130.64	UG/L #	81
12) DI ETHYL ETHER	1.948	59	14328	12.72	UG/L	86
13) ACROLEIN	2.050	56	43666	130.80	UG/L #	99
14) ACETONE	2.170	43	65472	150.76	UG/L #	87
15) 1,1-DICHLOROETHENE	2.116	61	25685	14.56	UG/L	90
16) 1,1,2-TRICL-1,2,2-TRIF...	2.104	101	10751	11.21	UG/L	94
17) IODOMETHANE	2.238	142	192934	109.61	UG/L	89
18) METHYL ACETATE	2.425	43	17439	6.73	UG/L #	91
19) T-BUTYL ALCOHOL	2.619	59	19089	114.47	UG/L #	90
20) ACRYLONITRILE	2.744	53	7532	10.98	UG/L	94
21) METHYLENE CHLORIDE	2.505	49	29402	14.79	UG/L #	83
22) CARBON DISULFIDE	2.283	76	408824	108.38	UG/L	100
23) METHYL TERT-BUTYL ETHE...	2.747	73	41891	11.51	UG/L	98
24) TRANS 1,2-DICHLOROETHENE	2.744	61	25064	12.97	UG/L	95
25) 1,1-DICHLOROETHANE	3.170	63	30864	12.44	UG/L	99
26) VINYL ACETATE	3.230	43	510400	155.33	UG/L #	95
27) DI ISOPROPYL ETHER	3.233	45	64936	13.74	UG/L #	90
28) 2-BUTANONE	3.795	43	103285	136.24	UG/L	94
29) T-BUTYL ETHYL ETHER	3.608	59	56642	12.38	UG/L	97
30) CIS-1,2-DICHLOROETHENE	3.758	61	30723	13.39	UG/L	90
31) 2,2-DICHLOROPROPANE	3.747	77	22406	14.90	UG/L	97
32) ETHYL ACETATE	3.855	43	25639m	15.04	UG/L	
33) BROMOCHLOROMETHANE	4.003	128	8134	12.06	UG/L #	74
34) TETRAHYDROFURAN	4.051	42	6820	12.91	UG/L #	88
35) T-BUTYL FORMATE	4.142	59	13325	10.54	UG/L	96
36) CHLOROFORM	4.091	83	28094	12.56	UG/L	98
37) 1,1,1-TRICHLOROETHANE	4.250	97	24771	13.51	UG/L	94
38) CYCLOHEXANE	4.290	56	32318	12.14	UG/L #	86
39) CARBON TETRACHLORIDE	4.409	117	21451	13.37	UG/L	95
40) 1,1-DICHLOROPROPENE	4.418	75	20294	12.73	UG/L	95
41) BENZENE	4.622	78	55394	10.83	UG/L	99
42) T-AMYL ALCOHOL	4.673	59	13356	95.73	UG/L #	93
43) T-AMYLMETHYL ETHER	4.742	73	39139	11.13	UG/L	98
46) 1,2-DICHLOROETHANE	4.656	62	28852	13.85	UG/L #	94
47) TRICHLOROETHENE	5.256	95	15767	11.36	UG/L	92

Data Path : Y:\1\DATA\B041819\
 Data File : VB108012.D
 Acq On : 18 Apr 2019 1:09 pm
 Operator :
 Sample : 8260 STD 10 PPB 1904257
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Inst : GCMSVOA2

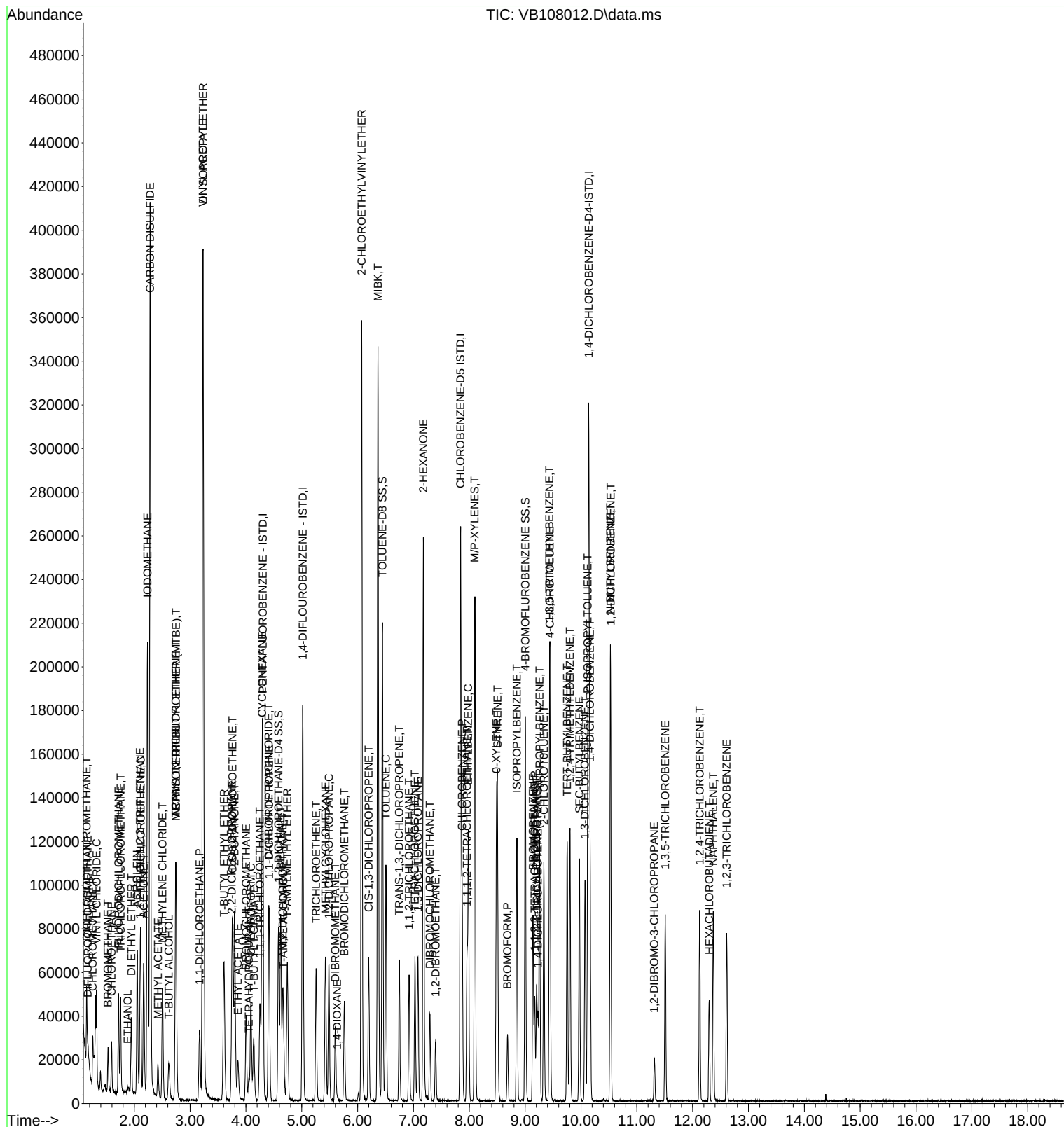
Quant Time: Apr 18 13:58:20 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.427	83	19838	9.87	UG/L #	85
49) 1,2-DICHLOROPROPANE	5.486	63	17668	11.08	UG/L #	81
50) DIBROMOMETHANE	5.600	93	10862	12.49	UG/L	91
51) 1,4-DIOXANE	5.631	88	917	72.05	UG/L #	83
52) BROMODICHLOROMETHANE	5.762	83	22117	12.77	UG/L	100
53) 2-CHLOROETHYLVINYLEETHER	6.072	63	115956	109.68	UG/L #	76
54) MIBK	6.364	43	210849	128.93	UG/L #	90
55) CIS-1,3-DICHLOROPROPENE	6.197	75	25604	11.84	UG/L #	72
56) TOLUENE	6.507	91	60194	10.60	UG/L	99
57) TRANS-1,3,-DICHLOROPRO...	6.745	75	24133	12.38	UG/L #	72
58) ETHYL METHACRYLATE	0.000		0	N.D.	d	
59) 1,1,2-TRICHLOROETHANE	6.921	97	13948	10.70	UG/L	97
60) 2-HEXANONE	7.177	43	153953	134.85	UG/L #	87
61) TETRACHLOROETHENE	7.027	164	12063	10.65	UG/L	98
62) 1,3-DICHLOROPROPANE	7.081	76	25240	11.08	UG/L #	76
63) DIBROMOCHLOROMETHANE	7.294	129	16979	11.11	UG/L	99
64) 1,2-DIBROMOETHANE	7.396	107	15691	10.82	UG/L #	98
67) CHLOROBENZENE	7.871	112	40216	9.79	UG/L	97
68) 1,1,1,2-TETRACHLOROETHANE	7.959	131	15235	9.97	UG/L	98
69) ETHYLBENZENE	7.981	91	70686	10.33	UG/L	96
70) M/P-XYLENES	8.098	91	111998	21.05	UG/L	95
71) O-XYLENE	8.485	91	57048	10.33	UG/L	96
72) STYRENE	8.504	104	47180	10.33	UG/L #	86
73) BROMOFORM	8.683	173	11840	9.88	UG/L	98
74) ISOPROPYLBENZENE	8.851	105	67088	10.24	UG/L	96
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.	d	
76) 1,1,2,2-TETRACHLOROETHANE	9.169	83	19003	9.92	UG/L	98
77) 1,4-DICHLORO-2-BUTENE(...	9.229	53	8582	13.19	UG/L	93
78) BROMOBENZENE	9.141	77	27669	10.33	UG/L	97
79) 1,2,3-TRICHLOROPROPANE	9.206	110	5900	9.70	UG/L	92
80) N-PROPYLBENZENE	9.258	91	81589	10.68	UG/L	95
81) 2-CHLOROTOLUENE	9.337	91	49738	10.57	UG/L	94
82) 1,3,5-TRIMETHYLBENZENE	9.437	105	56644	10.03	UG/L	94
83) 4-CHLOROTOLUENE	9.445	91	60688	10.95	UG/L	92
85) TERT-BUTYLBENZENE	9.752	119	47929	9.97	UG/L	87
86) 1,2,4-TRIMETHYLBENZENE	9.803	105	58508	10.26	UG/L	94
87) SEC-BUTYLBENZENE	9.971	105	66768	10.57	UG/L	98
88) 1,3-DICHLOROBENZENE	10.070	146	35382	10.40	UG/L	100
89) P-ISOPROPYLTOLUENE	10.121	119	58266	9.92	UG/L	95
90) 1,4-DICHLOROBENZENE	10.161	146	36774	10.26	UG/L	98
91) N-BUTYLBENZENE	10.525	91	51721	11.39	UG/L	94
92) 1,2-DICHLOROBENZENE	10.531	146	34493	10.31	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	11.312	75	4235	11.75	UG/L	81
94) 1,3,5-TRICHLOROBENZENE	11.508	180	22322	9.93	UG/L	94
95) 1,2,4-TRICHLOROBENZENE	12.125	180	22136	10.36	UG/L	95
96) HEXACHLOROBUTADIENE	12.296	225	8029	10.67	UG/L	97
97) NAPHTHALENE	12.369	128	57402	10.10	UG/L	100
98) 1,2,3-TRICHLOROBENZENE	12.608	180	19830	10.34	UG/L	96

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

237

Inst : GCMSVOA2



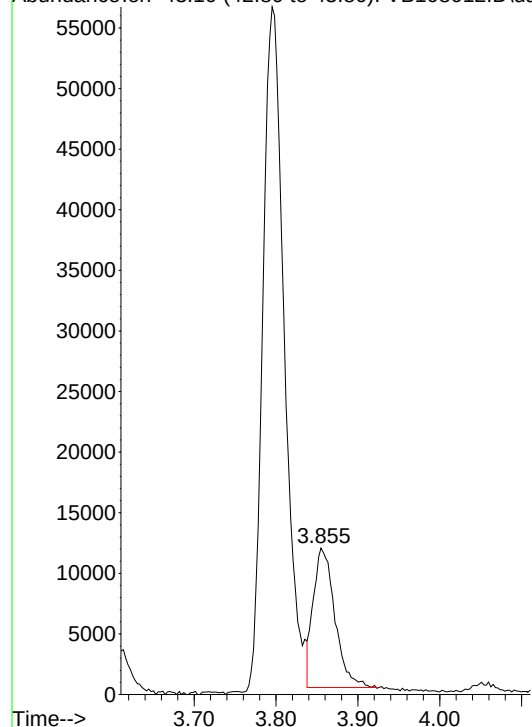
Data Path : Y:\1\DATA\B041819\
Data File : VB108012.D
Acq On : 18 Apr 2019 1:09 pm
Operator :
Sample : 8260 STD 10 PPB 1904257
Misc :

Quant Time : Thu Apr 18 13:58:20 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): VB108012.D\data



Original Int. Results

RT : 3.85
Area : 21025
Amount: 12.3332

Manual Int. Results

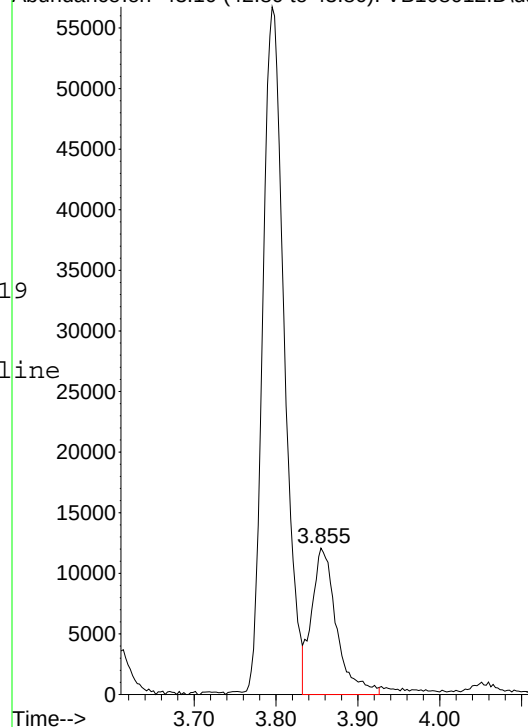
Thu Apr 18 13:58:40 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.85
Area : 25639
Amount: 15.0398

Manual Integration

ETHYL ACETATE

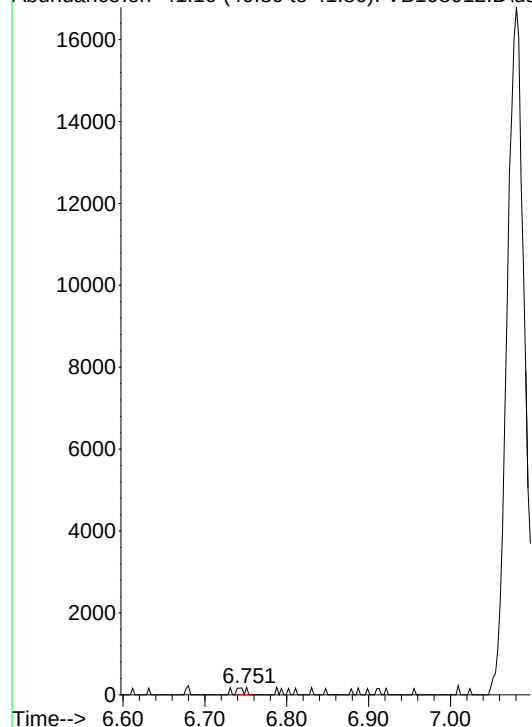
Abundance on 43.10 (42.80 to 43.80): VB108012.D\data



Original Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108012.D\data



Original Int. Results

RT : 6.75
Area : 115
Amount: 0

Manual Int. Results

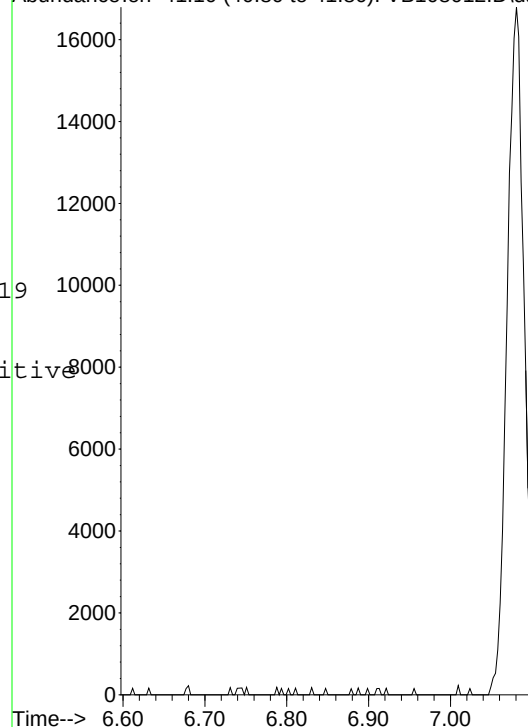
Thu Apr 18 13:59:01 2019

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

Manual Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108012.D\data

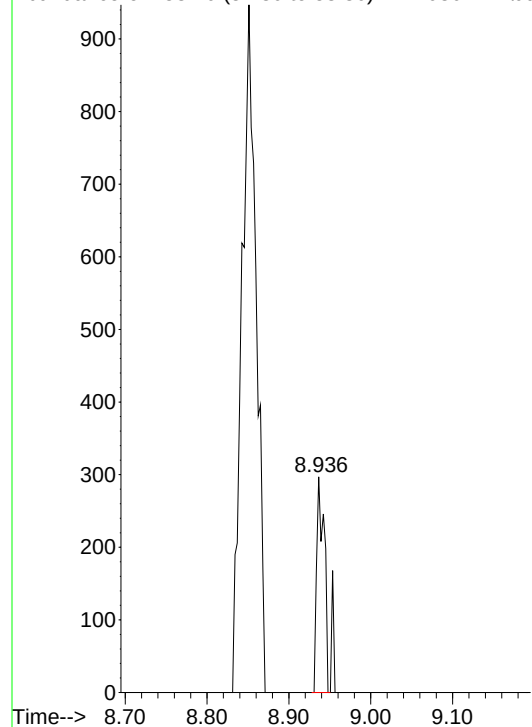


Data Path : Y:\1\DATA\B041819\
Data File : VB108012.D
Acq On : 18 Apr 2019 1:09 pm
Operator :
Sample : 8260 STD 10 PPB 1904257
Misc :

Quant Time : Thu Apr 18 13:58:20 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108012.D\data



Original Int. Results

RT : 8.94
Area : 190
Amount: 0

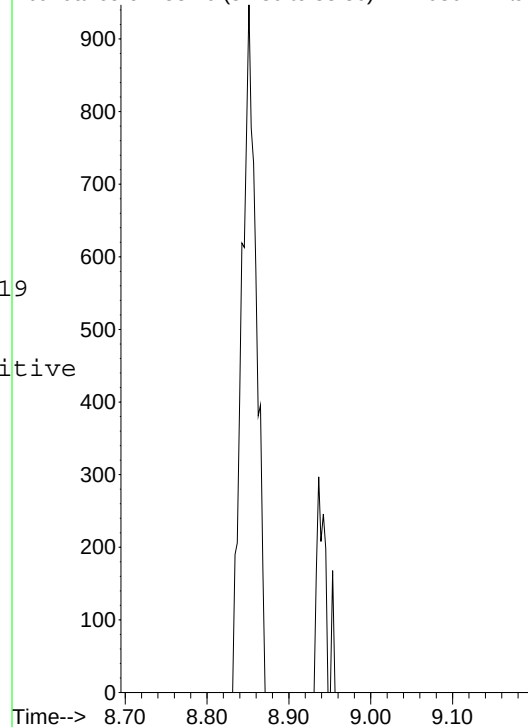
Manual Int. Results

Thu Apr 18 13:59:10 2019

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

Manual Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108012.D\data



Data Path : Y:\1\DATA\B041819\
 Data File : VB108013.D
 Acq On : 18 Apr 2019 1:40 pm
 Operator :
 Sample : 8260 STD 20 PPB 1904257
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 14:00:44 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	76123	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.014	114	121022	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	64364	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.139	152	65708	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	48745	33.95	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	135.80%#		
45) TOLUENE-D8 SS	6.444	98	117100	24.59	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	98.36%		
66) 4-BROMOFLUROBENZENE SS	9.002	95	47564	24.64	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	98.56%		
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.147	85	36706	24.28	UG/L	99
4) DIFLUOROCHLOROMETHANE	1.172	51	51219	23.91	UG/L	98
5) CHLOROMETHANE	1.257	50	71378	31.06	UG/L	99
6) VINYL CHLORIDE	1.326	62	42411	24.02	UG/L	99
7) BROMOMETHANE	1.527	94	17521	17.82	UG/L	88
8) CHLOROETHANE	1.593	64	23775	25.26	UG/L	99
9) FLUORODICHLOROMETHANE	1.715	67	56687	26.19	UG/L	99
10) TRICHLOROFLUOROMETHANE	1.752	101	48276	26.94	UG/L	97
11) ETHANOL	1.888	45	3648	205.80	UG/L #	82
12) DI ETHYL ETHER	1.948	59	29369	24.83	UG/L #	86
13) ACROLEIN	2.053	56	92733	264.49	UG/L #	97
14) ACETONE	2.170	43	134352	294.57	UG/L #	86
15) 1,1-DICHLOROETHENE	2.113	61	51822	27.96	UG/L	90
16) 1,1,2-TRICL-1,2,2-TRIF...	2.104	101	21767	21.62	UG/L	94
17) IODOMETHANE	2.235	142	418474	226.38	UG/L	88
18) METHYL ACETATE	2.420	43	37349	13.72	UG/L #	91
19) T-BUTYL ALCOHOL	2.621	59	39060	223.04	UG/L #	92
20) ACRYLONITRILE	2.744	53	16409	22.78	UG/L	96
21) METHYLENE CHLORIDE	2.505	49	60530	28.99	UG/L #	83
22) CARBON DISULFIDE	2.283	76	829288	209.34	UG/L	99
23) METHYL TERT-BUTYL ETHE...	2.744	73	88263	23.10	UG/L	98
24) TRANS 1,2-DICHLOROETHENE	2.741	61	52364	25.80	UG/L	94
25) 1,1-DICHLOROETHANE	3.167	63	63571	24.40	UG/L	99
26) VINYL ACETATE	3.230	43	1119597	324.45	UG/L #	95
27) DI ISOPROPYL ETHER	3.233	45	139378	28.07	UG/L #	90
28) 2-BUTANONE	3.792	43	215358	270.49	UG/L	93
29) T-BUTYL ETHYL ETHER	3.602	59	121416	25.27	UG/L	97
30) CIS-1,2-DICHLOROETHENE	3.758	61	63488	26.35	UG/L	90
31) 2,2-DICHLOROPROPANE	3.753	77	45380	28.74	UG/L	97
32) ETHYL ACETATE	3.855	43	51609m	28.83	UG/L	
33) BROMOCHLOROMETHANE	4.006	128	16420	23.18	UG/L #	71
34) TETRAHYDROFURAN	4.054	42	13417	24.19	UG/L	90
35) T-BUTYL FORMATE	4.142	59	34291	25.82	UG/L #	92
36) CHLOROFORM	4.088	83	58112	24.73	UG/L	98
37) 1,1,1-TRICHLOROETHANE	4.250	97	51709	26.86	UG/L	96
38) CYCLOHEXANE	4.290	56	64107	22.92	UG/L #	84
39) CARBON TETRACHLORIDE	4.406	117	44669	26.50	UG/L	94
40) 1,1-DICHLOROPROPENE	4.415	75	42102	25.14	UG/L	96
41) BENZENE	4.622	78	114908	21.38	UG/L	98
42) T-AMYL ALCOHOL	4.671	59	28805	196.60	UG/L #	93
43) T-AMYLMETHYL ETHER	4.742	73	82428	22.31	UG/L	99
46) 1,2-DICHLOROETHANE	4.656	62	59875	27.41	UG/L	94
47) TRICHLOROETHENE	5.256	95	31739	21.80	UG/L	94

Data Path : Y:\1\DATA\B041819\
 Data File : VB108013.D
 Acq On : 18 Apr 2019 1:40 pm
 Operator :
 Sample : 8260 STD 20 PPB 1904257
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Inst : GCMSVOA2

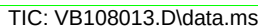
Quant Time: Apr 18 14:00:44 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.424	83	41235	19.57	UG/L #	85
49) 1,2-DICHLOROPROPANE	5.483	63	36517	21.85	UG/L #	82
50) DIBROMOMETHANE	5.597	93	22540	24.72	UG/L	91
51) 1,4-DIOXANE	5.628	88	2214	140.42	UG/L #	96
52) BROMODICHLOROMETHANE	5.762	83	45770	25.19	UG/L	99
53) 2-CHLOROETHYLVINYLEETHER	6.072	63	245660	221.62	UG/L #	76
54) MIBK	6.364	43	444621	259.29	UG/L #	90
55) CIS-1,3-DICHLOROPROPENE	6.197	75	53829	23.75	UG/L #	72
56) TOLUENE	6.506	91	126289	21.21	UG/L	98
57) TRANS-1,3,-DICHLOROPRO...	6.745	75	51832	25.36	UG/L #	74
58) ETHYL METHACRYLATE	0.000		0	N.D.	d	
59) 1,1,2-TRICHLOROETHANE	6.919	97	29421	21.53	UG/L	96
60) 2-HEXANONE	7.177	43	318243	265.85	UG/L #	88
61) TETRACHLOROETHENE	7.027	164	25472	21.45	UG/L	97
62) 1,3-DICHLOROPROPANE	7.081	76	52024	21.78	UG/L #	74
63) DIBROMOCHLOROMETHANE	7.297	129	35545	22.19	UG/L	99
64) 1,2-DIBROMOETHANE	7.396	107	33343	21.93	UG/L #	100
67) CHLOROBENZENE	7.871	112	84706	19.94	UG/L	99
68) 1,1,1,2-TETRACHLOROETHANE	7.959	131	32938	20.86	UG/L	97
69) ETHYLBENZENE	7.981	91	145013	20.51	UG/L	97
70) M/P-XYLENES	8.101	91	228705	41.58	UG/L	95
71) O-XYLENE	8.484	91	117883	20.66	UG/L	94
72) STYRENE	8.504	104	98048	20.77	UG/L #	87
73) BROMOFORM	8.683	173	25531	20.61	UG/L	99
74) ISOPROPYLBENZENE	8.851	105	137681	20.33	UG/L	98
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.	d	
76) 1,1,2,2-TETRACHLOROETHANE	9.169	83	40584	20.50	UG/L	100
77) 1,4-DICHLORO-2-BUTENE(...	9.229	53	18386	27.34	UG/L	94
78) BROMOBENZENE	9.141	77	57093	20.62	UG/L	98
79) 1,2,3-TRICHLOROPROPANE	9.206	110	12277	19.53	UG/L	89
80) N-PROPYLBENZENE	9.258	91	168437	21.32	UG/L	95
81) 2-CHLOROTOLUENE	9.331	91	100211	20.60	UG/L	96
82) 1,3,5-TRIMETHYLBENZENE	9.437	105	116512	19.96	UG/L	94
83) 4-CHLOROTOLUENE	9.445	91	122405	21.36	UG/L	93
85) TERT-BUTYLBENZENE	9.752	119	97152	19.71	UG/L	86
86) 1,2,4-TRIMETHYLBENZENE	9.803	105	121396	20.76	UG/L	95
87) SEC-BUTYLBENZENE	9.971	105	136997	21.13	UG/L	98
88) 1,3-DICHLOROBENZENE	10.073	146	73262	20.99	UG/L	99
89) P-ISOPROPYLTOLUENE	10.121	119	118913	19.73	UG/L #	95
90) 1,4-DICHLOROBENZENE	10.161	146	75922	20.66	UG/L	99
91) N-BUTYLBENZENE	10.525	91	105853	22.73	UG/L	97
92) 1,2-DICHLOROBENZENE	10.528	146	70473	20.54	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	11.312	75	8365	22.62	UG/L	87
94) 1,3,5-TRICHLOROBENZENE	11.508	180	46035	19.97	UG/L	96
95) 1,2,4-TRICHLOROBENZENE	12.125	180	45104	20.59	UG/L	94
96) HEXACHLOROBUTADIENE	12.296	225	15983	20.70	UG/L	99
97) NAPHTHALENE	12.369	128	118523	20.33	UG/L	100
98) 1,2,3-TRICHLOROBENZENE	12.608	180	40461	20.57	UG/L	95

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

242

Inst : GCMSVOA2



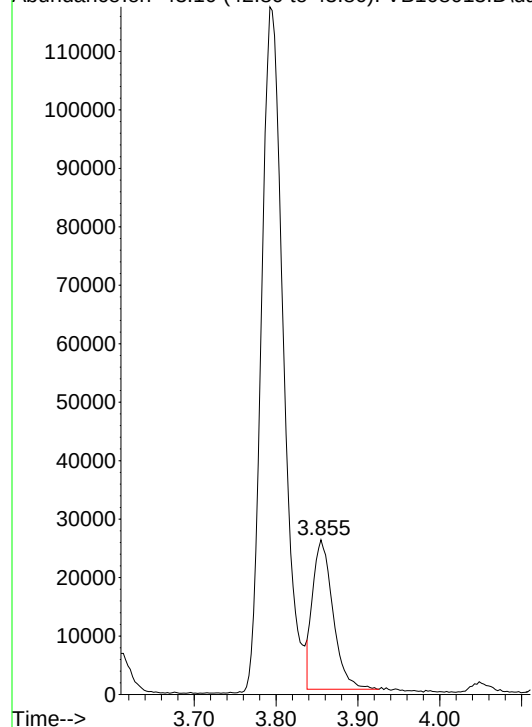
Data Path : Y:\1\DATA\B041819\
Data File : VB108013.D
Acq On : 18 Apr 2019 1:40 pm
Operator :
Sample : 8260 STD 20 PPB 1904257
Misc :

Quant Time : Thu Apr 18 14:00:44 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): VB108013.D\data



Original Int. Results

RT : 3.85
Area : 43983
Amount: 24.567

Manual Int. Results

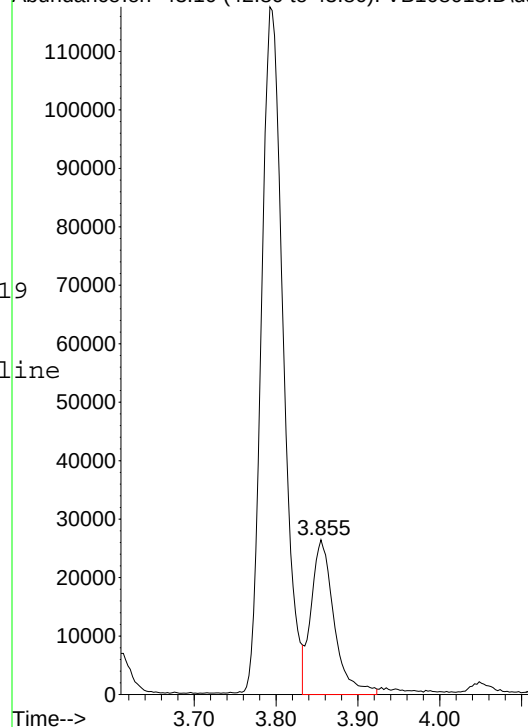
Thu Apr 18 14:01:10 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.85
Area : 51609
Amount: 28.8266

Manual Integration

ETHYL ACETATE

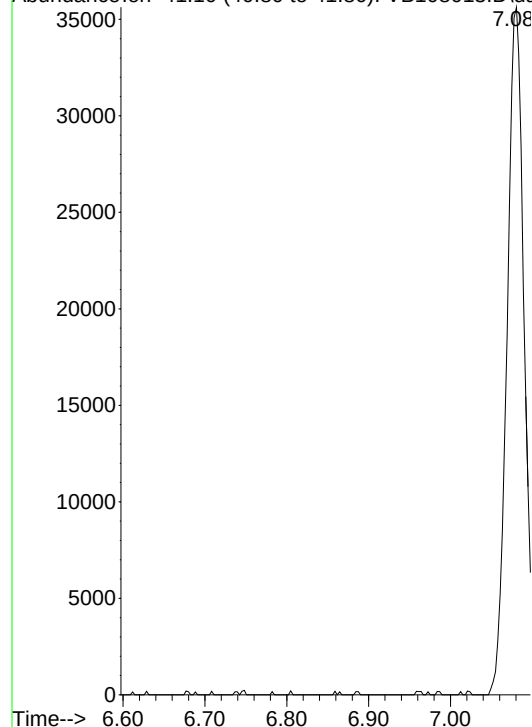
Abundance on 43.10 (42.80 to 43.80): VB108013.D\data



Original Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108013.D\data



Original Int. Results

RT : 7.08
Area : 52253
Amount: 0

Manual Int. Results

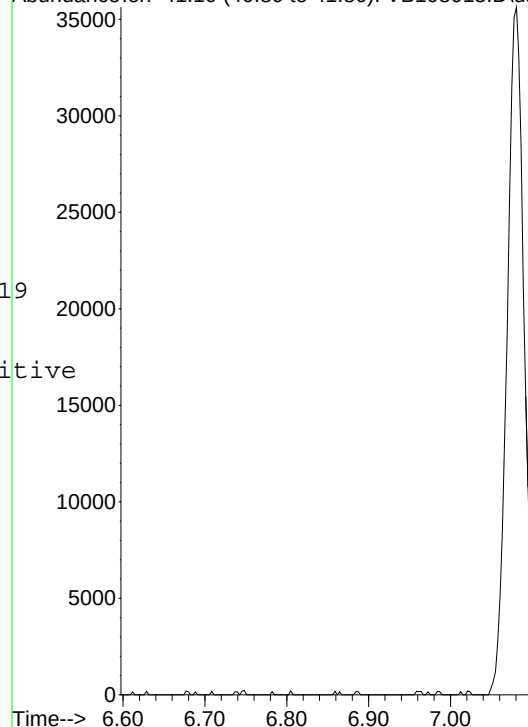
Thu Apr 18 14:01:24 2019

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

Manual Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108013.D\data

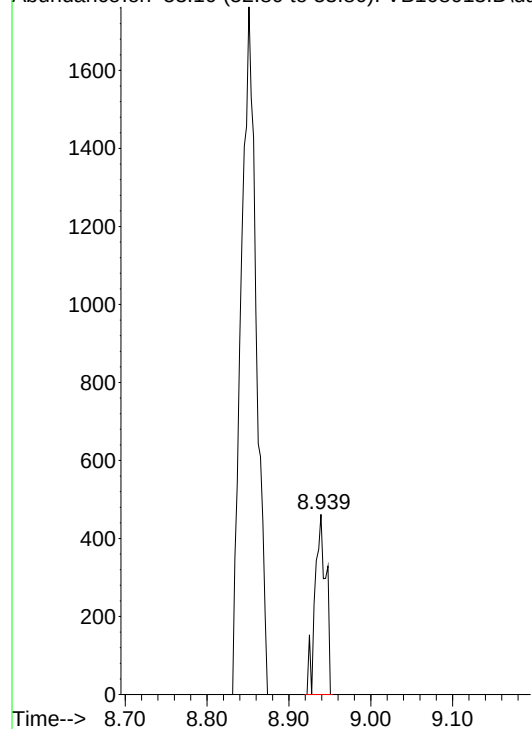


Data Path : Y:\1\DATA\B041819\
Data File : VB108013.D
Acq On : 18 Apr 2019 1:40 pm
Operator :
Sample : 8260 STD 20 PPB 1904257
Misc :

Quant Time : Thu Apr 18 14:00:44 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108013.D\data



Original Int. Results

RT : 8.94
Area : 424
Amount: 0

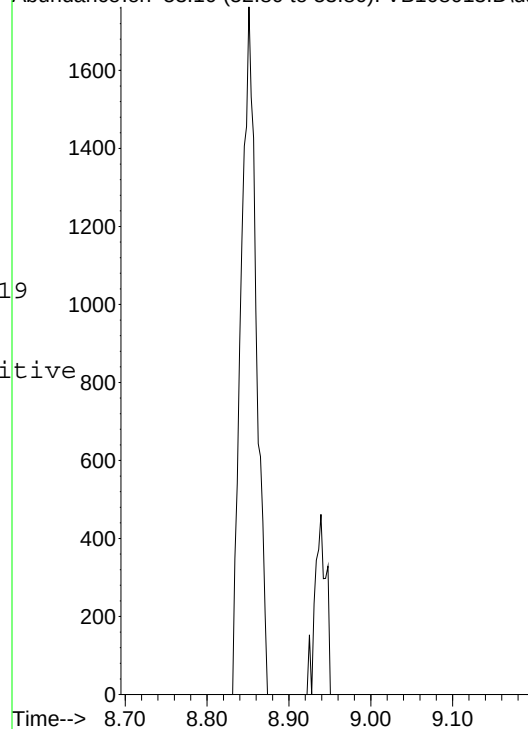
Manual Int. Results

Thu Apr 18 14:01:35 2019

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

Manual Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108013.D\data



Data Path : Y:\1\DATA\B041819\
 Data File : VB108014.D
 Acq On : 18 Apr 2019 2:11 pm
 Operator :
 Sample : 8260 STD 50 PPB 1901533
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 19 04:55:40 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	79325	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	126062	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.845	82	68605	30.00	UG/L	0.00
84) 1,4-DICHLOROENZENE-D4...	10.139	152	67139	30.00	UG/L	# 0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.580	65	48887	32.67	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	130.68%	#	
45) TOLUENE-D8 SS	6.444	98	122063	24.60	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	98.40%		
66) 4-BROMOFLUROBENZENE SS	9.002	95	49078	23.85	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	95.40%		
Target Compounds						
						Qvalue
3) DICHLORODIFLOUROMETHANE	1.147	85	77232	49.02	UG/L	99
4) DIFLUOROCHLOROMETHANE	1.169	51	132098	59.17	UG/L	97
5) CHLOROMETHANE	1.289	50	143488	59.92	UG/L	98
6) VINYL CHLORIDE	1.326	62	101882	55.37	UG/L	99
7) BROMOMETHANE	1.530	94	49235	48.06	UG/L	93
8) CHLOROETHANE	1.593	64	56249	57.36	UG/L	98
9) FLUORODICHLOROMETHANE	1.718	67	144604	64.11	UG/L	99
10) TRICHLOROFLUOROMETHANE	1.752	101	119650	64.08	UG/L	98
11) ETHANOL	0.000		0	N.D.	d	
12) DI ETHYL ETHER	1.945	59	80370	65.20	UG/L	87
13) ACROLEIN	2.050	56	191424	523.94	UG/L	# 99
14) ACETONE	2.167	43	341231	717.96	UG/L	# 86
15) 1,1-DICHLOROETHENE	2.113	61	127967	66.27	UG/L	91
16) 1,1,2-TRICL-1,2,2-TRIF...	2.107	101	62316	59.39	UG/L	93
17) IODOMETHANE	2.235	142	1062937	551.81	UG/L	# 86
18) METHYL ACETATE	2.423	43	115184	40.62	UG/L	# 90
19) T-BUTYL ALCOHOL	2.619	59	108006	591.84	UG/L	96
20) ACRYLONITRILE	2.744	53	47447	63.21	UG/L	96
21) METHYLENE CHLORIDE	2.505	49	147879	67.97	UG/L	# 83
22) CARBON DISULFIDE	2.283	76	1966239	476.31	UG/L	98
23) METHYL TERT-BUTYL ETHE...	2.744	73	246939	62.01	UG/L	98
24) TRANS 1,2-DICHLOROETHENE	2.741	61	128782	60.89	UG/L	94
25) 1,1-DICHLOROETHANE	3.167	63	155025	57.10	UG/L	99
26) VINYL ACETATE	3.233	43	2567854	714.10	UG/L	96
27) DI ISOPROPYL ETHER	3.233	45	380265	73.50	UG/L	# 90
28) 2-BUTANONE	3.795	43	566380	682.65	UG/L	94
29) T-BUTYL ETHYL ETHER	3.605	59	324059	64.72	UG/L	98
30) CIS-1,2-DICHLOROETHENE	3.761	61	154728	61.62	UG/L	91
31) 2,2-DICHLOROPROPANE	3.753	77	109371	66.48	UG/L	97
32) ETHYL ACETATE	3.855	43	136288m	73.05	UG/L	
33) BROMOCHLOROMETHANE	4.003	128	39392	53.35	UG/L	# 73
34) TETRAHYDROFURAN	4.045	42	38228	66.14	UG/L	92
35) T-BUTYL FORMATE	4.139	59	90586	65.44	UG/L	# 93
36) CHLOROFORM	4.088	83	141949	57.97	UG/L	97
37) 1,1,1-TRICHLOROETHANE	4.250	97	127332	63.47	UG/L	93
38) CYCLOHEXANE	4.293	56	164937	56.60	UG/L	# 85
39) CARBON TETRACHLORIDE	4.409	117	109964	62.61	UG/L	97
40) 1,1-DICHLOROPROPENE	4.418	75	105157	60.26	UG/L	97
41) BENZENE	4.622	78	286776	51.21	UG/L	98
42) T-AMYL ALCOHOL	4.673	59	80624	528.07	UG/L	# 94
43) T-AMYLMETHYL ETHER	4.742	73	233791	60.73	UG/L	99
46) 1,2-DICHLOROETHANE	4.656	62	146662	64.44	UG/L	95
47) TRICHLOROETHENE	5.256	95	81990	54.07	UG/L	92

Data Path : Y:\1\DATA\B041819\
 Data File : VB108014.D
 Acq On : 18 Apr 2019 2:11 pm
 Operator :
 Sample : 8260 STD 50 PPB 1901533
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Inst : GCMSVOA2

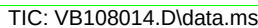
Quant Time: Apr 19 04:55:40 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.424	83	116460	53.06	UG/L #	85
49) 1,2-DICHLOROPROPANE	5.486	63	91408	52.50	UG/L #	83
50) DIBROMOMETHANE	5.600	93	55826	58.77	UG/L	93
51) 1,4-DIOXANE	5.631	88	6964m	384.50	UG/L	
52) BROMODICHLOROMETHANE	5.762	83	114980	60.76	UG/L	100
53) 2-CHLOROETHYLVINYLEETHER	6.074	63	641371	555.47	UG/L #	76
54) MIBK	6.364	43	1198641	671.07	UG/L #	91
55) CIS-1,3-DICHLOROPROPENE	6.197	75	136397	57.77	UG/L #	73
56) TOLUENE	6.509	91	315911	50.93	UG/L	99
57) TRANS-1,3,-DICHLOROPRO...	6.745	75	131216	61.64	UG/L #	74
58) ETHYL METHACRYLATE	0.000		0	N.D.	d	
59) 1,1,2-TRICHLOROETHANE	6.921	97	74221	52.14	UG/L	97
60) 2-HEXANONE	7.180	43	850798	682.32	UG/L #	89
61) TETRACHLOROETHENE	7.029	164	63433	51.29	UG/L	99
62) 1,3-DICHLOROPROPANE	7.081	76	131394	52.81	UG/L #	75
63) DIBROMOCHLOROMETHANE	7.294	129	90989	54.53	UG/L	97
64) 1,2-DIBROMOETHANE	7.396	107	85312	53.86	UG/L #	99
67) CHLOROBENZENE	7.871	112	213053	47.05	UG/L	98
68) 1,1,1,2-TETRACHLOROETHANE	7.959	131	84454	50.18	UG/L	98
69) ETHYLBENZENE	7.984	91	364901	48.42	UG/L	97
70) M/P-XYLENES	8.101	91	568047	96.90	UG/L	96
71) O-XYLENE	8.487	91	296349	48.72	UG/L	94
72) STYRENE	8.504	104	245712	48.82	UG/L #	86
73) BROMOFORM	8.683	173	68082	51.55	UG/L	99
74) ISOPROPYLBENZENE	8.851	105	339553	47.04	UG/L	97
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.	d	
76) 1,1,2,2-TETRACHLOROETHANE	9.169	83	102514	48.59	UG/L	99
77) 1,4-DICHLORO-2-BUTENE(...	9.229	53	51283	71.53	UG/L	97
78) BROMOBENZENE	9.138	77	141900	48.07	UG/L	98
79) 1,2,3-TRICHLOROPROPANE	9.206	110	32115	47.93	UG/L	86
80) N-PROPYLBENZENE	9.258	91	414260	49.20	UG/L	95
81) 2-CHLOROTOLUENE	9.337	91	247458	47.73	UG/L	96
82) 1,3,5-TRIMETHYLBENZENE	9.437	105	289863	46.58	UG/L	94
83) 4-CHLOROTOLUENE	9.445	91	301576	49.38	UG/L	93
85) TERT-BUTYLBENZENE	9.755	119	239708	47.59	UG/L	85
86) 1,2,4-TRIMETHYLBENZENE	9.803	105	303245	50.74	UG/L	94
87) SEC-BUTYLBENZENE	9.971	105	339178	51.21	UG/L	99
88) 1,3-DICHLOROBENZENE	10.073	146	178952	50.18	UG/L	99
89) P-ISOPROPYLTOLUENE	10.121	119	297594	48.33	UG/L #	95
90) 1,4-DICHLOROBENZENE	10.164	146	186732	49.73	UG/L	99
91) N-BUTYLBENZENE	10.525	91	265427	55.79	UG/L	96
92) 1,2-DICHLOROBENZENE	10.531	146	173003	49.34	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	11.315	75	22139	58.59	UG/L	84
94) 1,3,5-TRICHLOROBENZENE	11.508	180	117901	50.05	UG/L	93
95) 1,2,4-TRICHLOROBENZENE	12.125	180	113172	50.55	UG/L	94
96) HEXACHLOROBUTADIENE	12.298	225	40825	51.75	UG/L	98
97) NAPHTHALENE	12.369	128	303913	51.01	UG/L	100
98) 1,2,3-TRICHLOROBENZENE	12.611	180	102134	50.81	UG/L	95

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

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Inst : GCMSVOA2

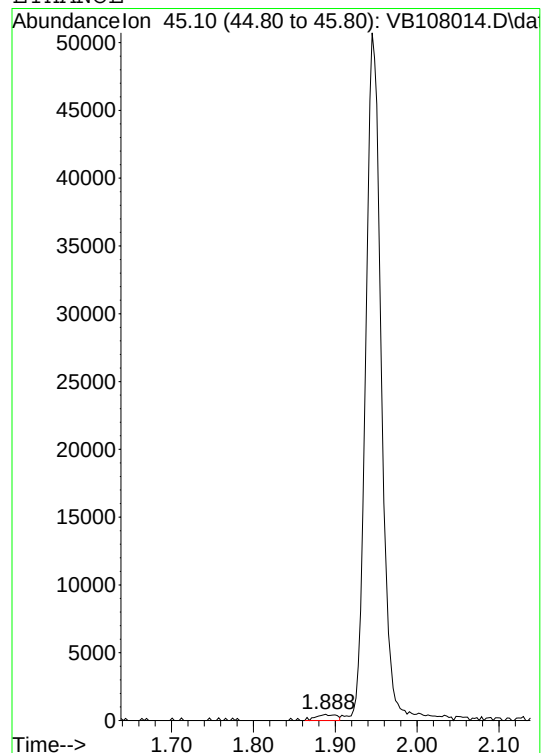


Data Path : Y:\1\DATA\B041819\
Data File : VB108014.D
Acq On : 18 Apr 2019 2:11 pm
Operator :
Sample : 8260 STD 50 PPB 1901533
Misc :

Quant Time : Fri Apr 19 04:55:40 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHANOL



Original Int. Results

RT : 1.89
Area : 792
Amount: 42.8777

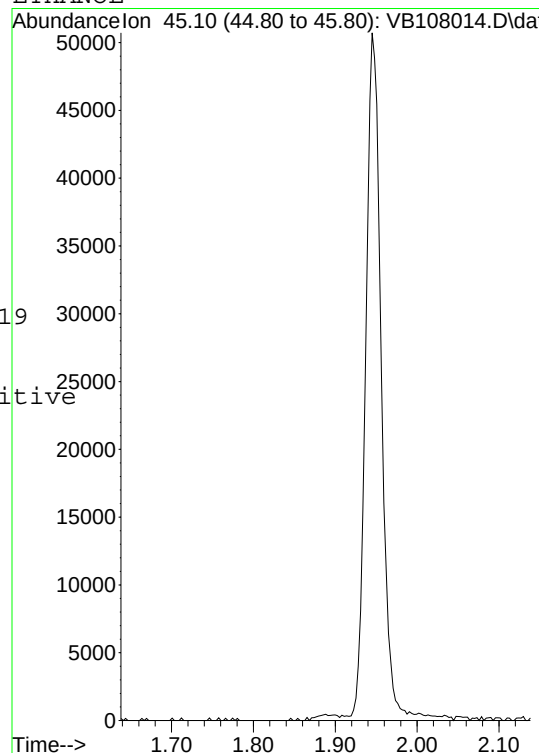
Manual Int. Results

Fri Apr 19 04:54:26 2019

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

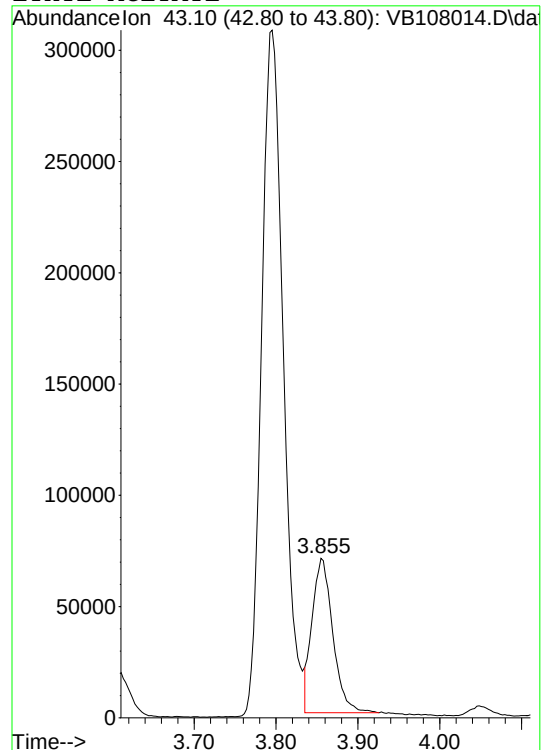
Manual Integration

ETHANOL



Original Integration

ETHYL ACETATE



Original Int. Results

RT : 3.85
Area : 122031
Amount: 65.4099

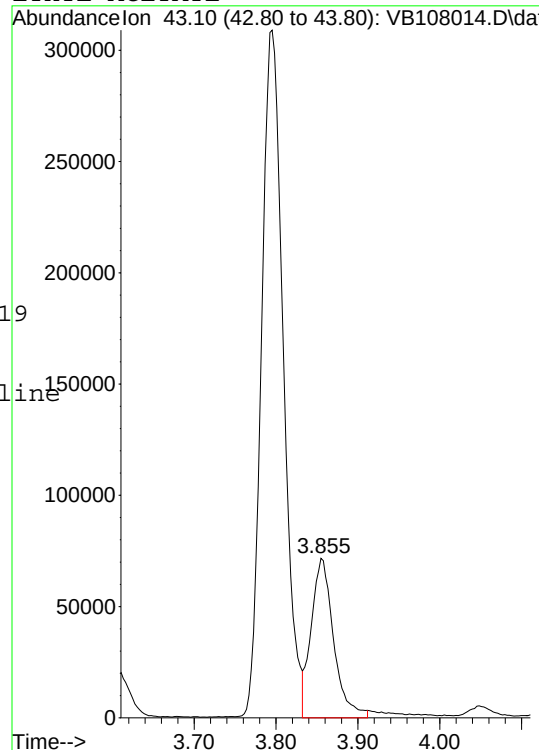
Manual Int. Results

Fri Apr 19 04:54:43 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.85
Area : 136288
Amount: 73.0518

Manual Integration

ETHYL ACETATE



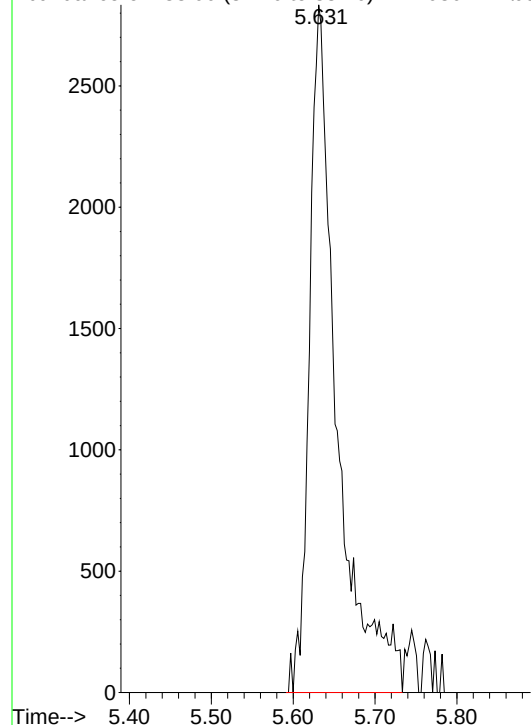
Data Path : Y:\1\DATA\B041819\
Data File : VB108014.D
Acq On : 18 Apr 2019 2:11 pm
Operator :
Sample : 8260 STD 50 PPB 1901533
Misc :

Quant Time : Fri Apr 19 04:55:40 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

1,4-DIOXANE

Abundance on 88.00 (87.70 to 88.70): VB108014.D\data



Original Int. Results

RT : 5.63
Area : 6588
Amount: 364.8

Manual Int. Results

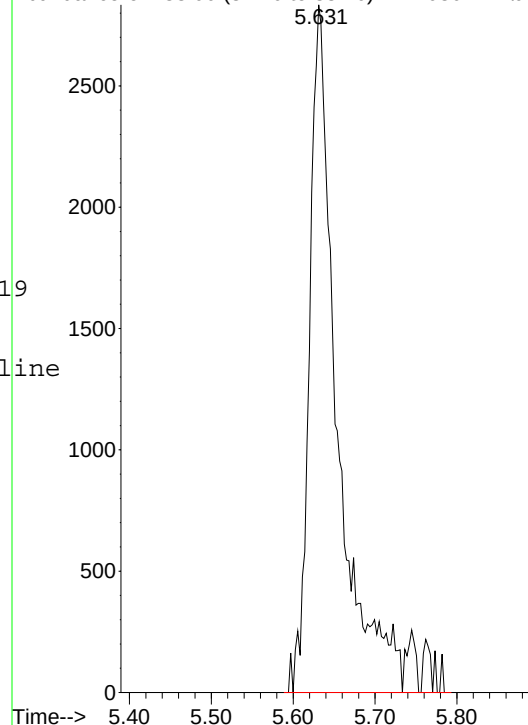
Fri Apr 19 04:55:04 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 5.63
Area : 6964
Amount: 384.503

Manual Integration

1,4-DIOXANE

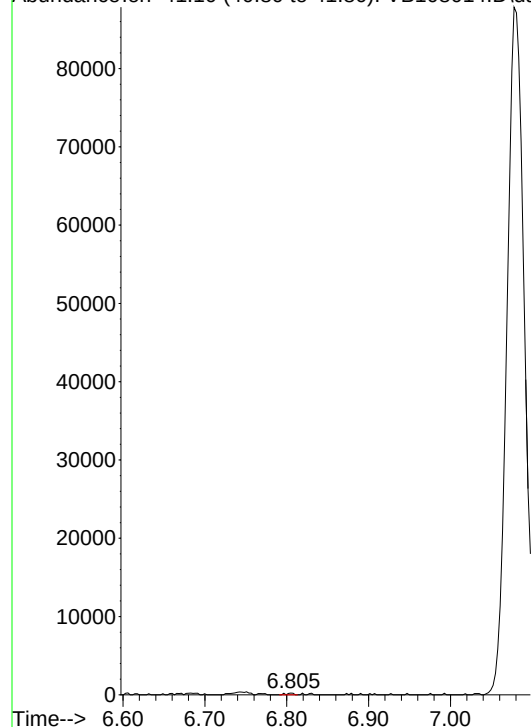
Abundance on 88.00 (87.70 to 88.70): VB108014.D\data



Original Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108014.D\data



Original Int. Results

RT : 6.80
Area : 142
Amount: 0

Manual Int. Results

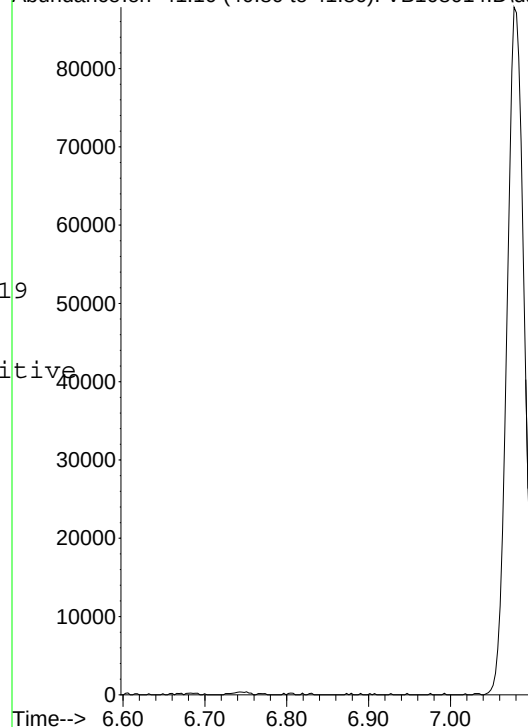
Fri Apr 19 04:55:14 2019

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

Manual Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108014.D\data

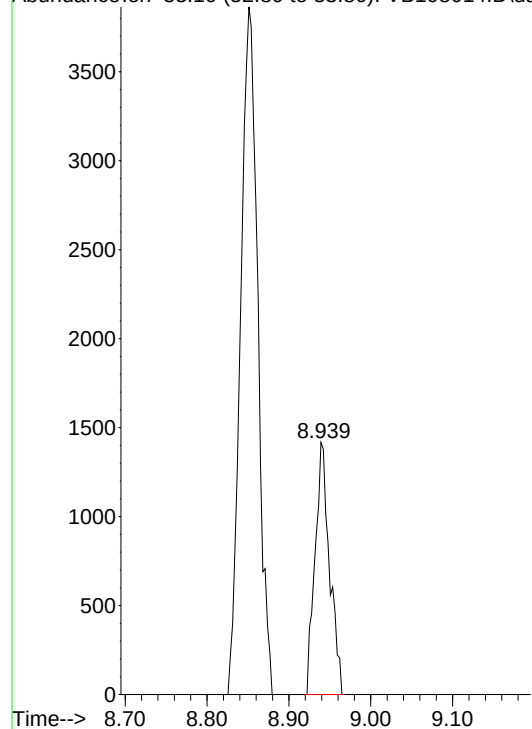


Data Path : Y:\1\DATA\B041819\
Data File : VB108014.D
Acq On : 18 Apr 2019 2:11 pm
Operator :
Sample : 8260 STD 50 PPB 1901533
Misc :

Quant Time : Fri Apr 19 04:55:40 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108014.D\data



Original Int. Results

RT : 8.94
Area : 1744
Amount: 0

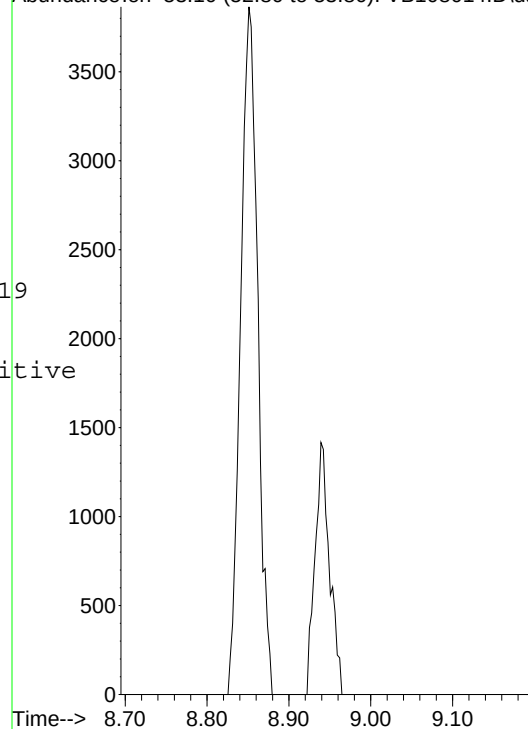
Manual Int. Results

Fri Apr 19 04:55:27 2019

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

Manual Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108014.D\data



Data Path : Y:\1\DATA\B041819\
 Data File : VB108015.D
 Acq On : 18 Apr 2019 2:42 pm
 Operator :
 Sample : 8260 STD 100 PPB 1901533
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 19 04:58:17 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	81427	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	131194	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.845	82	69595	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.141	152	70710	30.00	UG/L	# 0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.580	65	50493	32.88	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	131.52%	#	
45) TOLUENE-D8 SS	6.447	98	127319	24.66	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	98.64%		
66) 4-BROMOFLUROBENZENE SS	9.005	95	50493	24.19	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	96.76%		
Target Compounds						
						Qvalue
3) DICHLORODIFLOUROMETHANE	1.146	85	154243	95.38	UG/L	99
4) DIFLUOROCHLOROMETHANE	1.169	51	273952	119.55	UG/L	99
5) CHLOROMETHANE	1.289	50	273181	111.13	UG/L	98
6) VINYL CHLORIDE	1.326	62	205962	109.04	UG/L	99
7) BROMOMETHANE	1.527	94	112075	106.57	UG/L	92
8) CHLOROETHANE	1.590	64	113571	112.83	UG/L	99
9) FLUORODICHLOROMETHANE	1.715	67	292989	126.54	UG/L	99
10) TRICHLOROFLUOROMETHANE	1.752	101	237629	123.98	UG/L	99
11) ETHANOL	0.000		0	N.D.	d	
12) DI ETHYL ETHER	1.945	59	163614	129.31	UG/L	87
13) ACROLEIN	2.053	56	386673	1031.02	UG/L	# 99
14) ACETONE	2.167	43	686840m	1407.83	UG/L	
15) 1,1-DICHLOROETHENE	2.113	61	259988	131.16	UG/L	91
16) 1,1,2-TRICL-1,2,2-TRIF...	2.104	101	126028	117.00	UG/L	94
17) IODOMETHANE	2.235	142	2129380	1076.90	UG/L	# 84
18) METHYL ACETATE	2.420	43	259665	89.20	UG/L	# 90
19) T-BUTYL ALCOHOL	2.619	59	215938	1152.72	UG/L	96
20) ACRYLONITRILE	2.744	53	97843	126.99	UG/L	95
21) METHYLENE CHLORIDE	2.505	49	306835	137.39	UG/L	# 83
22) CARBON DISULFIDE	2.283	76	3713842	876.44	UG/L	96
23) METHYL TERT-BUTYL ETHE...	2.744	73	511114	125.04	UG/L	99
24) TRANS 1,2-DICHLOROETHENE	2.741	61	265996	122.52	UG/L	94
25) 1,1-DICHLOROETHANE	3.167	63	323997	116.26	UG/L	99
26) VINYL ACETATE	3.235	43	4812015	1303.64	UG/L	97
27) DI ISOPROPYL ETHER	3.235	45	778076	146.51	UG/L	91
28) 2-BUTANONE	3.795	43	1146524	1346.21	UG/L	95
29) T-BUTYL ETHYL ETHER	3.605	59	675288	131.39	UG/L	98
30) CIS-1,2-DICHLOROETHENE	3.758	61	319996	124.16	UG/L	92
31) 2,2-DICHLOROPROPANE	3.753	77	221431	131.12	UG/L	98
32) ETHYL ACETATE	3.855	43	281361m	146.92	UG/L	
33) BROMOCHLOROMETHANE	4.003	128	78253	103.25	UG/L	# 75
34) TETRAHYDROFURAN	4.048	42	76724	129.32	UG/L	95
35) T-BUTYL FORMATE	4.139	59	190293	133.93	UG/L	# 93
36) CHLOROFORM	4.088	83	297160	118.22	UG/L	97
37) 1,1,1-TRICHLOROETHANE	4.250	97	265161	128.75	UG/L	95
38) CYCLOHEXANE	4.290	56	336800	112.59	UG/L	# 84
39) CARBON TETRACHLORIDE	4.406	117	227719	126.32	UG/L	95
40) 1,1-DICHLOROPROPENE	4.415	75	219074	122.31	UG/L	97
41) BENZENE	4.622	78	592508	103.08	UG/L	98
42) T-AMYL ALCOHOL	4.676	59	170451	1087.59	UG/L	# 94
43) T-AMYLMETHYL ETHER	4.742	73	490567	124.13	UG/L	98
46) 1,2-DICHLOROETHANE	4.656	62	304771	128.68	UG/L	95
47) TRICHLOROETHENE	5.256	95	170015	107.73	UG/L	92

Data Path : Y:\1\DATA\B041819\
 Data File : VB108015.D
 Acq On : 18 Apr 2019 2:42 pm
 Operator :
 Sample : 8260 STD 100 PPB 1901533
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Inst : GCMSVOA2

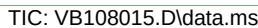
Quant Time: Apr 19 04:58:17 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.424	83	242138	106.00	UG/L #	86
49) 1,2-DICHLOROPROPANE	5.486	63	191532	105.71	UG/L #	84
50) DIBROMOMETHANE	5.600	93	114708	116.04	UG/L	92
51) 1,4-DIOXANE	5.631	88	14832m	766.40	UG/L	
52) BROMODICHLOROMETHANE	5.762	83	240366	122.05	UG/L	99
53) 2-CHLOROETHYLVINYLEETHER	6.080	63	1279814	1065.04	UG/L #	76
54) MIBK	6.367	43	2334860	1256.06	UG/L #	94
55) CIS-1,3-DICHLOROPROPENE	6.200	75	283652	115.44	UG/L #	73
56) TOLUENE	6.509	91	649203	100.56	UG/L	99
57) TRANS-1,3,-DICHLOROPRO...	6.748	75	275025	124.15	UG/L #	75
58) ETHYL METHACRYLATE	0.000		0	N.D.	d	
59) 1,1,2-TRICHLOROETHANE	6.921	97	156462	105.62	UG/L	97
60) 2-HEXANONE	7.183	43	1665935	1283.77	UG/L #	90
61) TETRACHLOROETHENE	7.027	164	134727	104.67	UG/L	97
62) 1,3-DICHLOROPROPANE	7.081	76	273221	105.51	UG/L #	76
63) DIBROMOCHLOROMETHANE	7.297	129	192742	111.00	UG/L	100
64) 1,2-DIBROMOETHANE	7.396	107	175744	106.60	UG/L #	99
67) CHLOROBENZENE	7.871	112	431148	93.87	UG/L	99
68) 1,1,1,2-TETRACHLOROETHANE	7.959	131	175230	102.64	UG/L	98
69) ETHYLBENZENE	7.984	91	739136	96.68	UG/L	98
70) M/P-XYLENES	8.101	91	1133505	190.61	UG/L	96
71) O-XYLENE	8.487	91	601013	97.41	UG/L	95
72) STYRENE	8.507	104	496261	97.21	UG/L #	85
73) BROMOFORM	8.683	173	144124	107.58	UG/L	99
74) ISOPROPYLBENZENE	8.851	105	699397	95.51	UG/L	97
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.	d	
76) 1,1,2,2-TETRACHLOROETHANE	9.172	83	212075	99.08	UG/L	99
77) 1,4-DICHLORO-2-BUTENE(...	9.229	53	106093	145.88	UG/L	98
78) BROMOBENZENE	9.141	77	294751	98.44	UG/L	98
79) 1,2,3-TRICHLOROPROPANE	9.206	110	67297	99.01	UG/L	89
80) N-PROPYLBENZENE	9.260	91	846524	99.10	UG/L	95
81) 2-CHLOROTOLUENE	9.337	91	505881	96.19	UG/L	96
82) 1,3,5-TRIMETHYLBENZENE	9.439	105	602620	95.47	UG/L	94
83) 4-CHLOROTOLUENE	9.445	91	618894	99.89	UG/L	94
85) TERT-BUTYLBENZENE	9.755	119	496055	93.50	UG/L	85
86) 1,2,4-TRIMETHYLBENZENE	9.806	105	628435	99.85	UG/L	95
87) SEC-BUTYLBENZENE	9.974	105	695599	99.71	UG/L	100
88) 1,3-DICHLOROBENZENE	10.073	146	370033	98.52	UG/L	99
89) P-ISOPROPYLTOLUENE	10.121	119	619305	95.51	UG/L #	94
90) 1,4-DICHLOROBENZENE	10.164	146	388051	98.12	UG/L	100
91) N-BUTYLBENZENE	10.528	91	550220	109.80	UG/L	97
92) 1,2-DICHLOROBENZENE	10.531	146	361082	97.77	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	11.315	75	45954	115.48	UG/L	86
94) 1,3,5-TRICHLOROBENZENE	11.511	180	248612	100.21	UG/L	94
95) 1,2,4-TRICHLOROBENZENE	12.125	180	238288	101.06	UG/L	95
96) HEXACHLOROBUTADIENE	12.298	225	88076	106.00	UG/L	98
97) NAPHTHALENE	12.369	128	623123	99.30	UG/L	99
98) 1,2,3-TRICHLOROBENZENE	12.611	180	216559	102.29	UG/L	96

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

253

Inst : GCMSVOA2



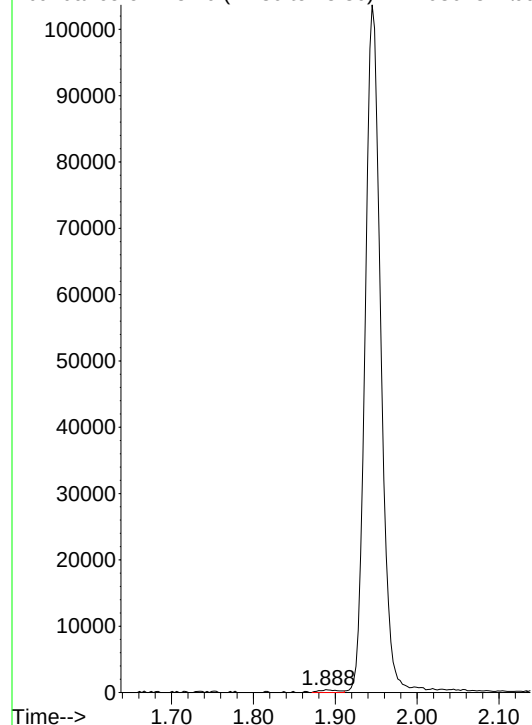
Data Path : Y:\1\DATA\B041819\
Data File : VB108015.D
Acq On : 18 Apr 2019 2:42 pm
Operator :
Sample : 8260 STD 100 PPB 1901533
Misc :

Quant Time : Fri Apr 19 04:58:17 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHANOL

Abundance 45.10 (44.80 to 45.80): VB108015.D\data



Original Int. Results

RT : 1.89
Area : 682
Amount: 35.9694

Manual Int. Results

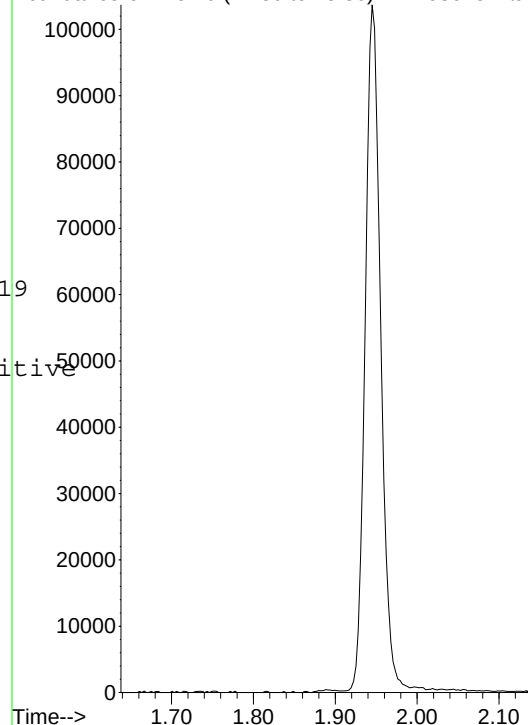
Fri Apr 19 04:57:05 2019

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

Manual Integration

ETHANOL

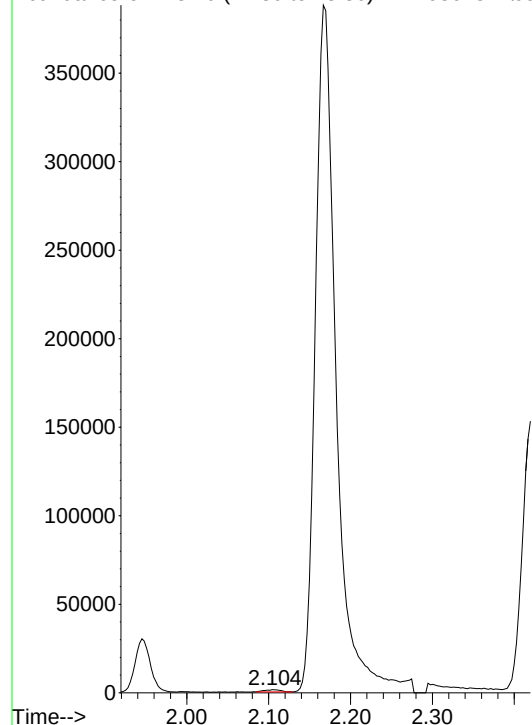
Abundance 45.10 (44.80 to 45.80): VB108015.D\data



Original Integration

ACETONE

Abundance 43.10 (42.80 to 43.80): VB108015.D\data



Original Int. Results

RT : 2.10
Area : 1809
Amount: 3.70794

Manual Int. Results

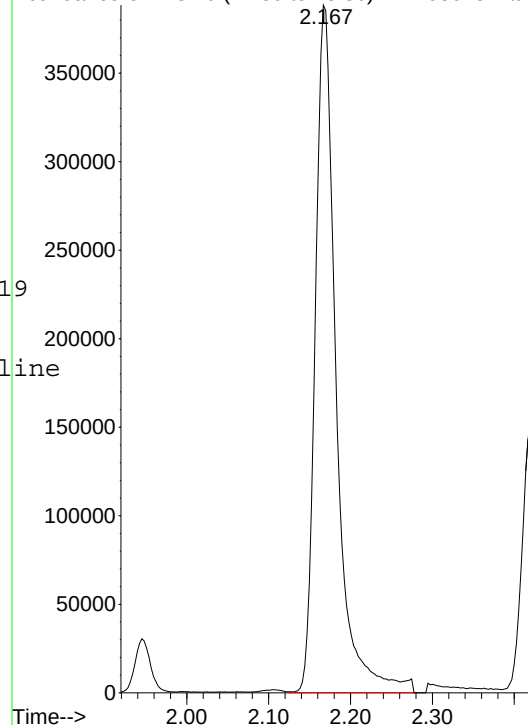
Fri Apr 19 04:57:13 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 2.17
Area : 686840
Amount: 1407.83

Manual Integration

ACETONE

Abundance 43.10 (42.80 to 43.80): VB108015.D\data



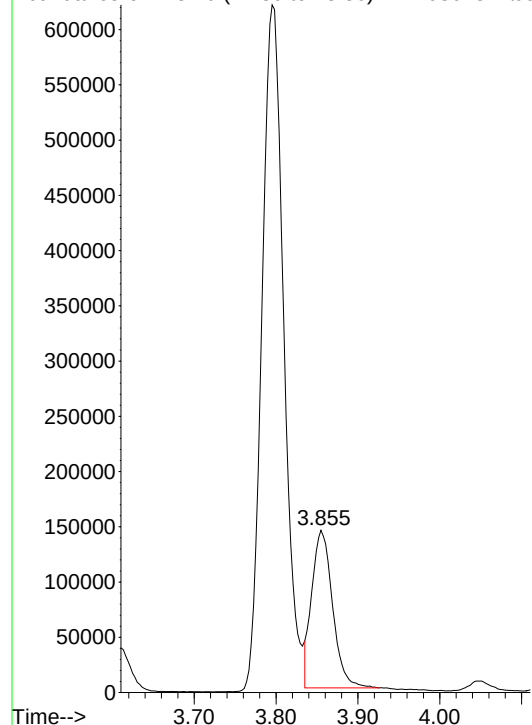
Data Path : Y:\1\DATA\B041819\
Data File : VB108015.D
Acq On : 18 Apr 2019 2:42 pm
Operator :
Sample : 8260 STD 100 PPB 1901533
Misc :

Quant Time : Fri Apr 19 04:58:17 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): VB108015.D\data



Original Int. Results

RT : 3.85
Area : 251059
Amount: 131.096

Manual Int. Results

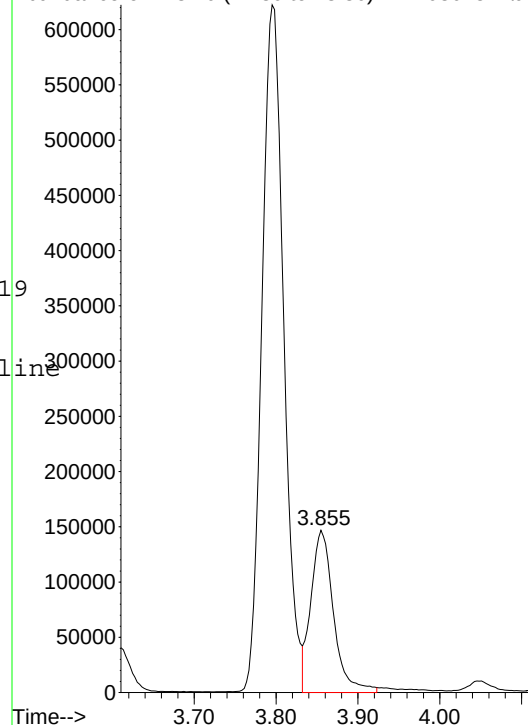
Fri Apr 19 04:57:32 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.85
Area : 281361
Amount: 146.919

Manual Integration

ETHYL ACETATE

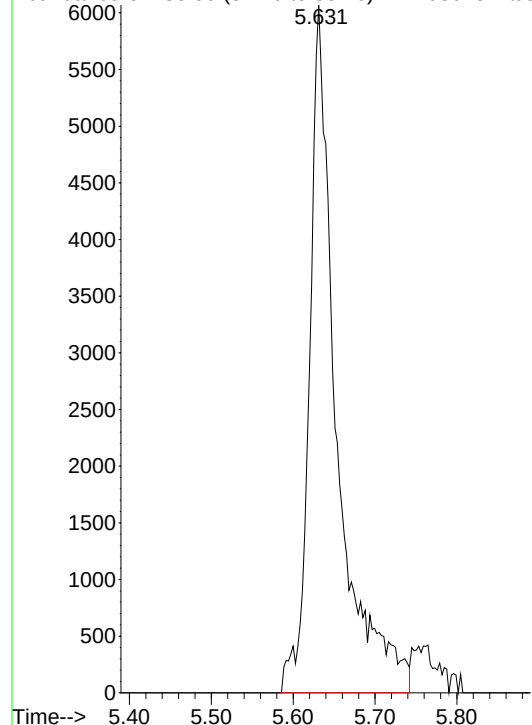
Abundance on 43.10 (42.80 to 43.80): VB108015.D\data



Original Integration

1,4-DIOXANE

Abundance on 88.00 (87.70 to 88.70): VB108015.D\data



Original Int. Results

RT : 5.63
Area : 13887
Amount: 718.82

Manual Int. Results

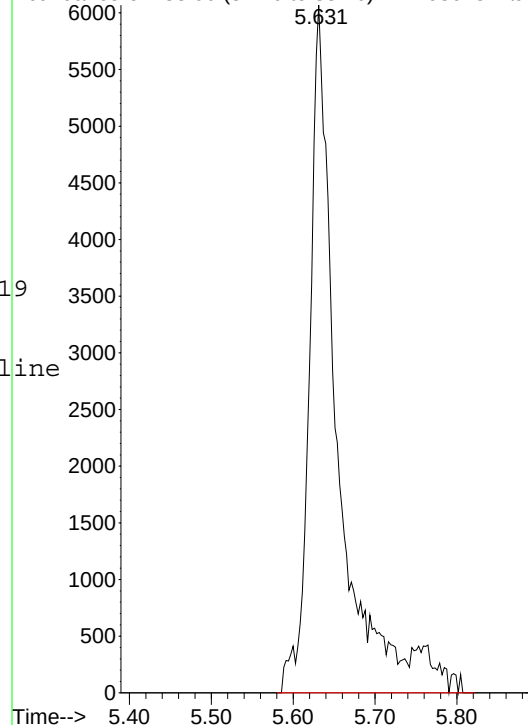
Fri Apr 19 04:57:46 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 5.63
Area : 14832
Amount: 766.403

Manual Integration

1,4-DIOXANE

Abundance on 88.00 (87.70 to 88.70): VB108015.D\data



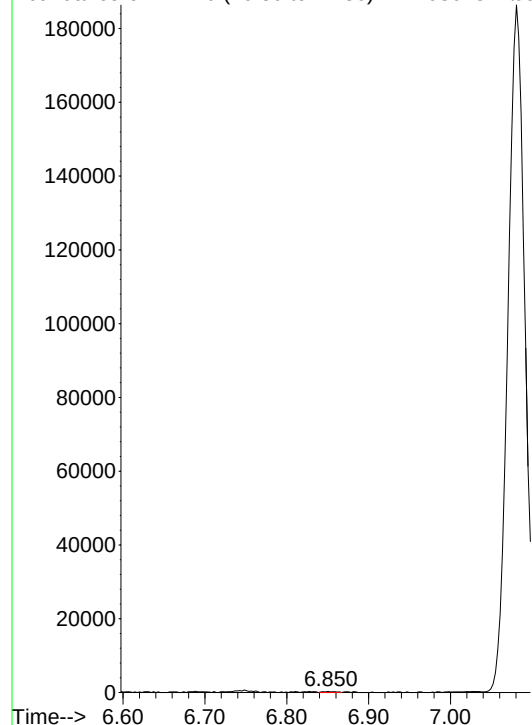
Data Path : Y:\1\DATA\B041819\
Data File : VB108015.D
Acq On : 18 Apr 2019 2:42 pm
Operator :
Sample : 8260 STD 100 PPB 1901533
Misc :

Quant Time : Fri Apr 19 04:58:17 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108015.D\data



Original Int. Results

RT : 6.85
Area : 316
Amount: 0

Manual Int. Results

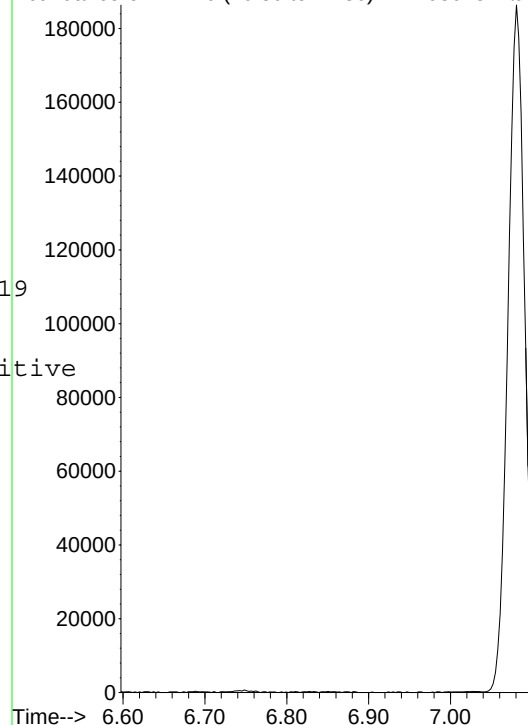
Fri Apr 19 04:57:53 2019

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

Manual Integration

ETHYL METHACRYLATE

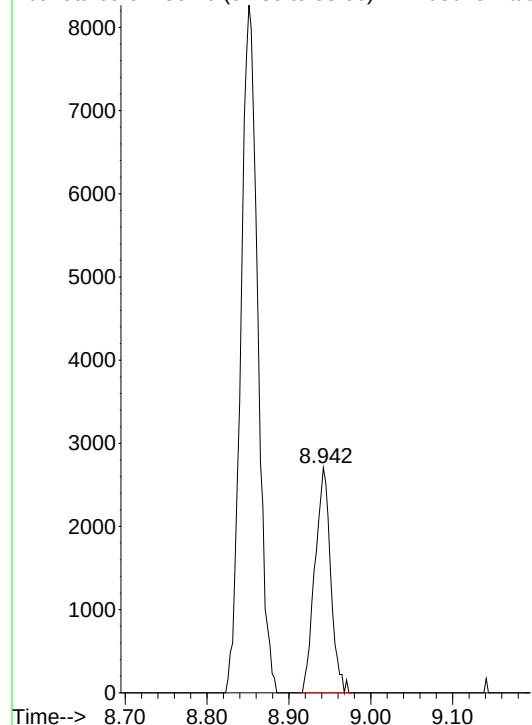
Abundance on 41.10 (40.80 to 41.80): VB108015.D\data



Original Integration

CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108015.D\data



Original Int. Results

RT : 8.94
Area : 3608
Amount: 0

Manual Int. Results

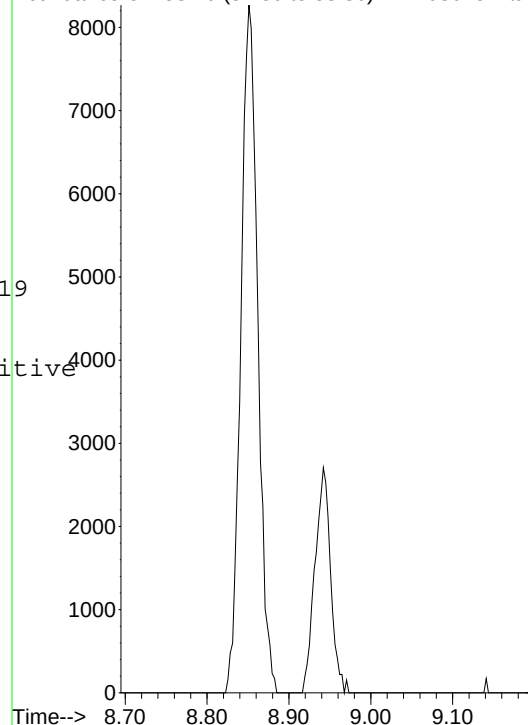
Fri Apr 19 04:58:04 2019

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

Manual Integration

CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108015.D\data



Data Path : Y:\1\DATA\B041819\
 Data File : VB108016.D
 Acq On : 18 Apr 2019 3:13 pm
 Operator :
 Sample : 8260 STD 200 PPB 1901533
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 19 05:04:06 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	85389	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	137333	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.845	82	74129	30.00	UG/L	0.00
84) 1,4-DICHLOROENZENE-D4...	10.141	152	73471	30.00	UG/L	# 0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	53894	33.46	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	133.84%	#	
45) TOLUENE-D8 SS	6.449	98	135183	25.01	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	100.04%		
66) 4-BROMOFLUROBENZENE SS	9.004	95	52741	23.72	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	94.88%		
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.146	85	296959	175.11	UG/L	98
4) DIFLUOROCHLOROMETHANE	1.172	51	538649	224.15	UG/L	98
5) CHLOROMETHANE	1.288	50	541895	210.21	UG/L	98
6) VINYL CHLORIDE	1.323	62	411122	207.56	UG/L	99
7) BROMOMETHANE	1.519	94	253489	229.86	UG/L	93
8) CHLOROETHANE	1.587	64	229732	217.64	UG/L	99
9) FLUORODICHLOROMETHANE	1.715	67	591319	243.54	UG/L	100
10) TRICHLOROFLUOROMETHANE	1.749	101	491180	244.37	UG/L	100
11) ETHANOL	0.000		0	N.D.	d	
12) DI ETHYL ETHER	1.945	59	336835	253.86	UG/L	88
13) ACROLEIN	2.050	56	814968	2072.19	UG/L	# 99
14) ACETONE	2.169	43	1345188	2629.32	UG/L	89
15) 1,1-DICHLOROETHENE	2.110	61	523251	251.71	UG/L	92
16) 1,1,2-TRICL-1,2,2-TRIF...	2.101	101	256129	226.76	UG/L	93
17) IODOMETHANE	2.232	142	3921658	1891.29	UG/L	# 82
18) METHYL ACETATE	2.420	43	546420	178.99	UG/L	# 91
19) T-BUTYL ALCOHOL	2.624	59	457576	2329.30	UG/L	96
20) ACRYLONITRILE	2.743	53	204755	253.41	UG/L	97
21) METHYLENE CHLORIDE	2.502	49	616082	263.06	UG/L	# 85
22) CARBON DISULFIDE	2.280	76	6465038	1454.90	UG/L	# 92
23) METHYL TERT-BUTYL ETHE...	2.743	73	1036238	241.75	UG/L	97
24) TRANS 1,2-DICHLOROETHENE	2.741	61	541010	237.62	UG/L	94
25) 1,1-DICHLOROETHANE	3.170	63	666168	227.95	UG/L	98
26) VINYL ACETATE	3.241	43	9054656	2339.22	UG/L	99
27) DI ISOPROPYL ETHER	3.241	45	1557721	279.70	UG/L	92
28) 2-BUTANONE	3.798	43	2309382	2585.79	UG/L	96
29) T-BUTYL ETHYL ETHER	3.607	59	1394154	258.68	UG/L	98
30) CIS-1,2-DICHLOROETHENE	3.758	61	659449	243.99	UG/L	92
31) 2,2-DICHLOROPROPANE	3.750	77	449817	254.00	UG/L	97
32) ETHYL ACETATE	3.858	43	597396m	297.47	UG/L	
33) BROMOCHLOROMETHANE	4.002	128	149414	188.00	UG/L	# 76
34) TETRAHYDROFURAN	4.048	42	162034	260.44	UG/L	93
35) T-BUTYL FORMATE	4.142	59	372002	249.66	UG/L	# 94
36) CHLOROFORM	4.088	83	610804	231.73	UG/L	97
37) 1,1,1-TRICHLOROETHANE	4.250	97	544276	252.02	UG/L	94
38) CYCLOHEXANE	4.290	56	679950	216.75	UG/L	# 84
39) CARBON TETRACHLORIDE	4.406	117	464912	245.93	UG/L	95
40) 1,1-DICHLOROPROPENE	4.415	75	450698	239.94	UG/L	97
41) BENZENE	4.622	78	1196469	198.50	UG/L	97
42) T-AMYL ALCOHOL	4.679	59	364380	2217.10	UG/L	# 93
43) T-AMYLMETHYL ETHER	4.741	73	995341	240.18	UG/L	98
46) 1,2-DICHLOROETHANE	4.656	62	621607	250.72	UG/L	96
47) TRICHLOROETHENE	5.259	95	349175	211.36	UG/L	92

Data Path : Y:\1\DATA\B041819\
 Data File : VB108016.D
 Acq On : 18 Apr 2019 3:13 pm
 Operator :
 Sample : 8260 STD 200 PPB 1901533
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Inst : GCMSVOA2

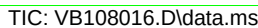
Quant Time: Apr 19 05:04:06 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.426	83	496214	207.51	UG/L #	86
49) 1,2-DICHLOROPROPANE	5.486	63	393393	207.42	UG/L #	85
50) DIBROMOMETHANE	5.600	93	237271	229.29	UG/L	92
51) 1,4-DIOXANE	5.631	88	32134m	1565.28	UG/L	
52) BROMODICHLOROMETHANE	5.762	83	496838	241.01	UG/L	99
53) 2-CHLOROETHYLVINYLETHER	6.086	63	2449468	1947.29	UG/L #	77
54) MIBK	6.376	43	4454710	2289.34	UG/L	97
55) CIS-1,3-DICHLOROPROPENE	6.202	75	579512	225.31	UG/L #	74
56) TOLUENE	6.512	91	1318871	195.16	UG/L	99
57) TRANS-1,3,-DICHLOROPRO...	6.748	75	564934	243.61	UG/L #	76
58) ETHYL METHACRYLATE	0.000		0	N.D.	d	
59) 1,1,2-TRICHLOROETHANE	6.924	97	323092	208.35	UG/L	97
60) 2-HEXANONE	7.186	43	3239108	2384.49	UG/L	93
61) TETRACHLOROETHENE	7.029	164	278182	206.45	UG/L	97
62) 1,3-DICHLOROPROPANE	7.080	76	562202	207.40	UG/L #	76
63) DIBROMOCHLOROMETHANE	7.299	129	399879	219.99	UG/L	99
64) 1,2-DIBROMOETHANE	7.401	107	362823	210.25	UG/L #	99
67) CHLOROBENZENE	7.873	112	878360	179.54	UG/L	98
68) 1,1,1,2-TETRACHLOROETHANE	7.961	131	362763	199.48	UG/L	98
69) ETHYLBENZENE	7.987	91	1473127	180.90	UG/L	99
70) M/P-XYLENES	8.103	91	2211963	349.21	UG/L	97
71) O-XYLENE	8.490	91	1208092	183.83	UG/L	96
72) STYRENE	8.507	104	1005539	184.92	UG/L #	84
73) BROMOFORM	8.686	173	302441	211.95	UG/L	98
74) ISOPROPYLBENZENE	8.854	105	1402807	179.85	UG/L	98
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.	d	
76) 1,1,2,2-TETRACHLOROETHANE	9.175	83	449760	197.27	UG/L	99
77) 1,4-DICHLORO-2-BUTENE(...	9.232	53	222556	287.30	UG/L	99
78) BROMOBENZENE	9.141	77	607666	190.52	UG/L	98
79) 1,2,3-TRICHLOROPROPANE	9.209	110	141827	195.91	UG/L	90
80) N-PROPYLBENZENE	9.263	91	1690966	185.84	UG/L	96
81) 2-CHLOROTOLUENE	9.340	91	1026226	183.20	UG/L	97
82) 1,3,5-TRIMETHYLBENZENE	9.439	105	1224205	182.07	UG/L	95
83) 4-CHLOROTOLUENE	9.448	91	1248250	189.14	UG/L	94
85) TERT-BUTYLBENZENE	9.757	119	1003477	182.04	UG/L #	84
86) 1,2,4-TRIMETHYLBENZENE	9.806	105	1287126	196.82	UG/L	96
87) SEC-BUTYLBENZENE	9.973	105	1393008	192.18	UG/L	100
88) 1,3-DICHLOROBENZENE	10.076	146	752876	192.91	UG/L	98
89) P-ISOPROPYLTOLUENE	10.124	119	1238090	183.76	UG/L #	93
90) 1,4-DICHLOROBENZENE	10.167	146	782210	190.35	UG/L	100
91) N-BUTYLBENZENE	10.528	91	1117335	214.60	UG/L	98
92) 1,2-DICHLOROBENZENE	10.533	146	728422	189.83	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	11.315	75	95533	231.05	UG/L	86
94) 1,3,5-TRICHLOROBENZENE	11.511	180	503927	195.49	UG/L	94
95) 1,2,4-TRICHLOROBENZENE	12.128	180	480508	196.13	UG/L	94
96) HEXACHLOROBUTADIENE	12.298	225	175935	203.79	UG/L	99
97) NAPHTHALENE	12.372	128	1245723	191.05	UG/L	98
98) 1,2,3-TRICHLOROBENZENE	12.611	180	438262	199.23	UG/L	96

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

259

Inst : GCMSVOA2



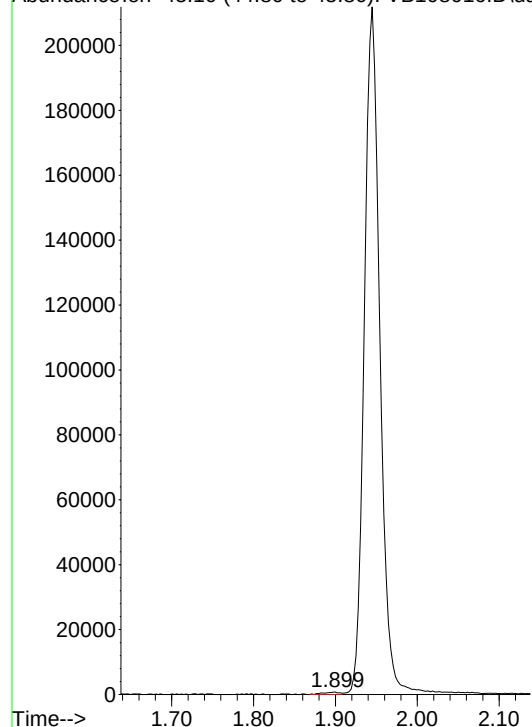
Data Path : Y:\1\DATA\B041819\
Data File : VB108016.D
Acq On : 18 Apr 2019 3:13 pm
Operator :
Sample : 8260 STD 200 PPB 1901533
Misc :

Quant Time : Fri Apr 19 05:04:06 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

ETHANOL

Abundance 45.10 (44.80 to 45.80): VB108016.D\data



Original Int. Results

RT : 1.90
Area : 1070
Amount: 53.8144

Manual Int. Results

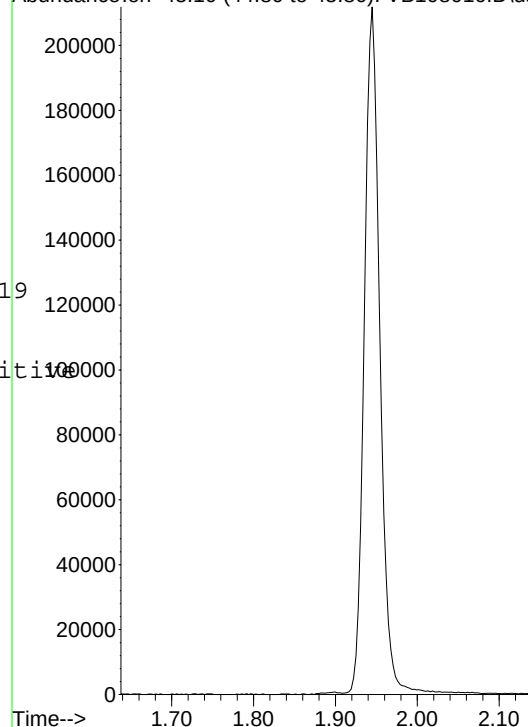
Fri Apr 19 05:02:49 2019

MIuser: LBD
Reason: Qdel False Position
RT : 0.00
Area : 0
Amount: 0

Manual Integration

ETHANOL

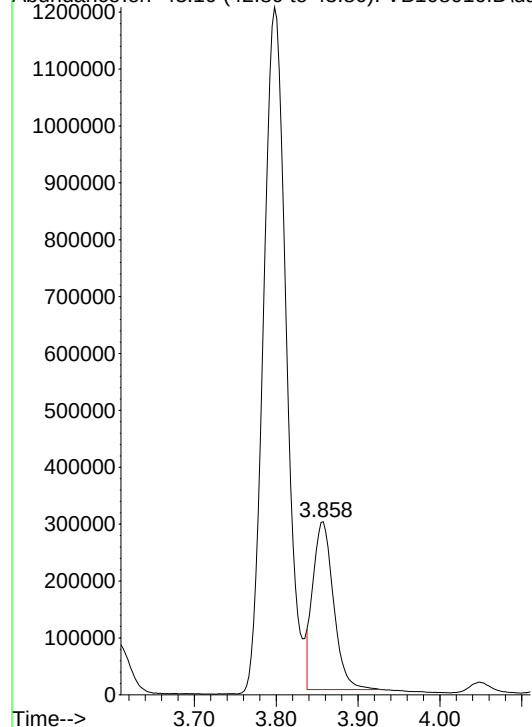
Abundance 45.10 (44.80 to 45.80): VB108016.D\data



Original Integration

ETHYL ACETATE

Abundance 43.10 (42.80 to 43.80): VB108016.D\data



Original Int. Results

RT : 3.86
Area : 513720
Amount: 255.804

Manual Int. Results

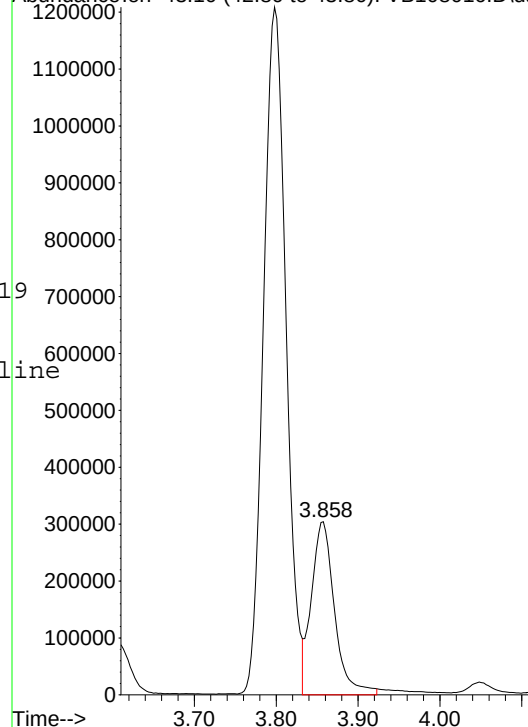
Fri Apr 19 05:03:06 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.86
Area : 597396
Amount: 297.47

Manual Integration

ETHYL ACETATE

Abundance 43.10 (42.80 to 43.80): VB108016.D\data

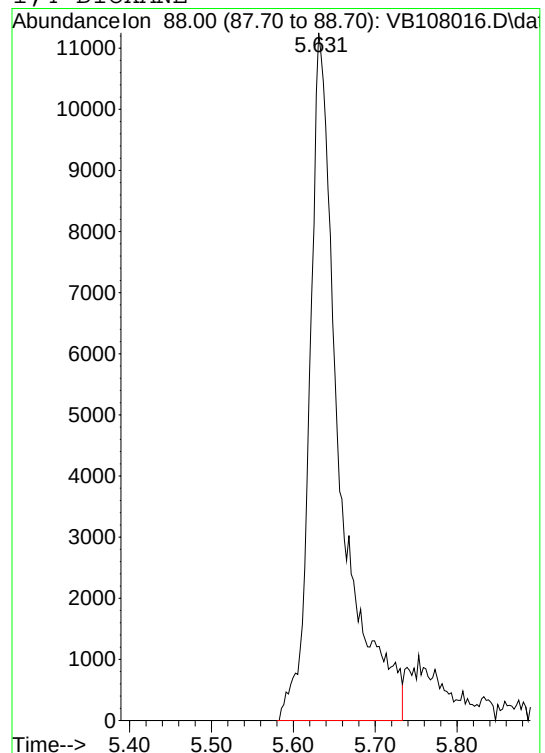


Data Path : Y:\1\DATA\B041819\
Data File : VB108016.D
Acq On : 18 Apr 2019 3:13 pm
Operator :
Sample : 8260 STD 200 PPB 1901533
Misc :

Quant Time : Fri Apr 19 05:04:06 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration

1,4-DIOXANE



Original Int. Results

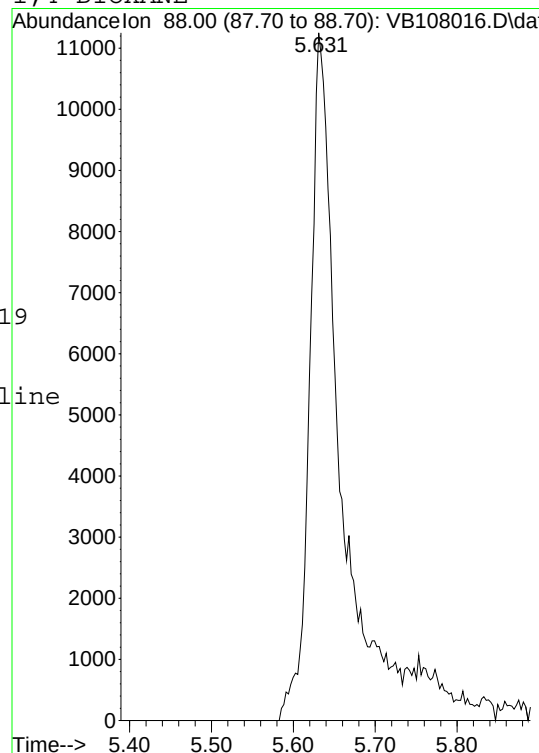
RT : 5.63
Area : 28176
Amount: 1374.89

Manual Int. Results

Fri Apr 19 05:03:27 2019
MIuser: LBD
Reason: Incorrect Baseline
RT : 5.63
Area : 32134
Amount: 1565.28

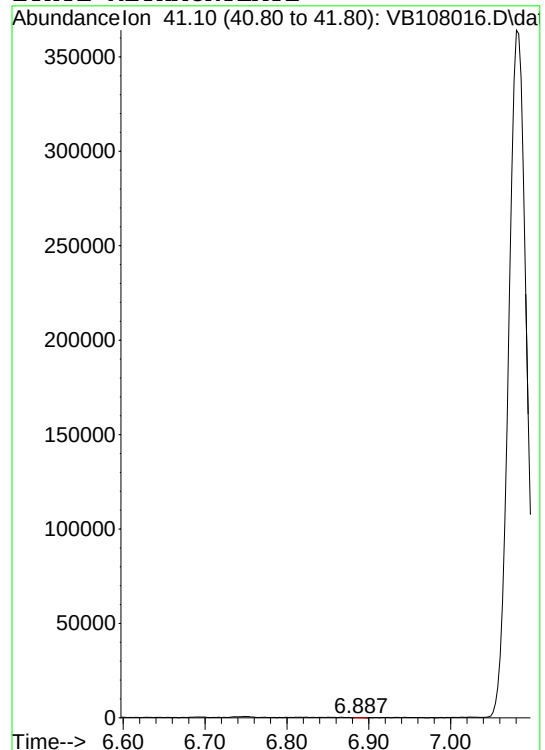
Manual Integration

1,4-DIOXANE



Original Integration

ETHYL METHACRYLATE



Original Int. Results

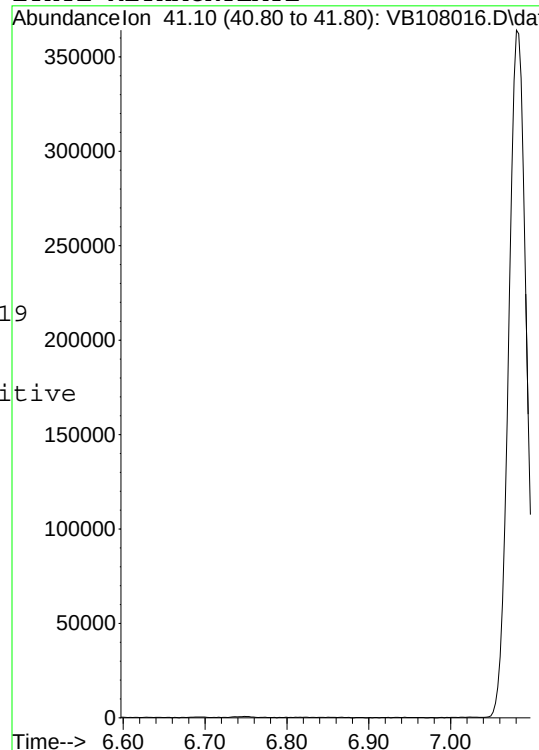
RT : 6.89
Area : 110
Amount: 0

Manual Int. Results

Fri Apr 19 05:03:38 2019
MIuser: LBD
Reason: Qdel False Positive
RT : 0.00
Area : 0
Amount: 0

Manual Integration

ETHYL METHACRYLATE

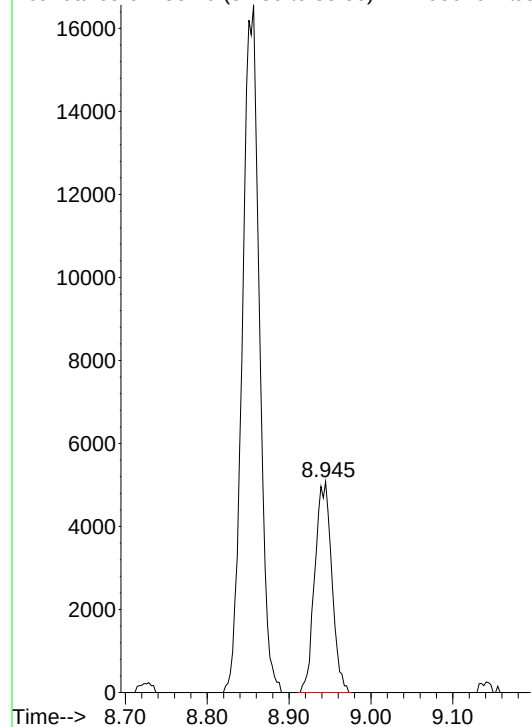


Data Path : Y:\1\DATA\B041819\
Data File : VB108016.D
Acq On : 18 Apr 2019 3:13 pm
Operator :
Sample : 8260 STD 200 PPB 1901533
Misc :

Quant Time : Fri Apr 19 05:04:06 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
QLast Update : Thu Apr 11 08:23:37 2019

Original Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108016.D\data



Original Int. Results

RT : 8.94
Area : 7298
Amount: 0

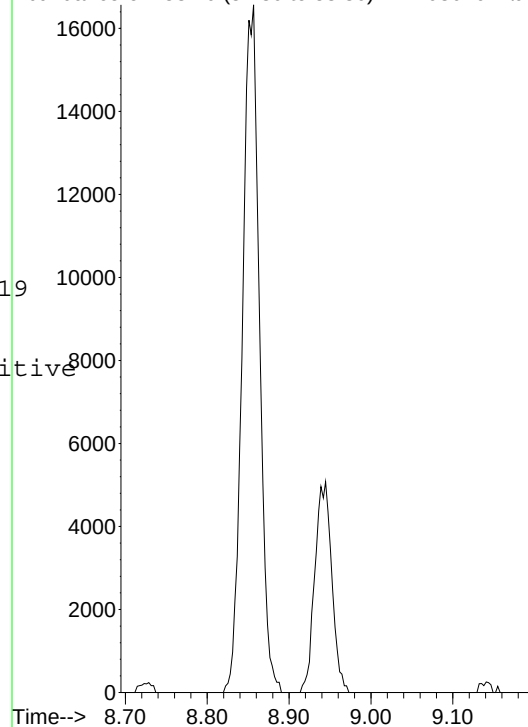
Manual Int. Results

Fri Apr 19 05:03:53 2019

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

Manual Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108016.D\data



Data Path : Y:\1\DATA\B041819\
 Data File : VB108017.D
 Acq On : 18 Apr 2019 3:43 pm
 Operator :
 Sample : 8260 ETOH 500 PPB
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 16:02:32 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	74725	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	116347	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	63404	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.139	152	64116	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	48749	34.59	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 138.36%#			
45) TOLUENE-D8 SS	6.444	98	114070	24.91	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 99.64%			
66) 4-BROMOFLUOROBENZENE SS	9.002	95	47170	24.81	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 99.24%			
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	0.000		0	N.D.		
4) DIFLUOROCHLOROMETHANE	1.306	51	597	0.28 UG/L #		66
5) CHLOROMETHANE	1.260	50	1217	0.54 UG/L #		43
6) VINYL CHLORIDE	0.000		0	N.D.		
7) BROMOMETHANE	1.530	94	963	1.00 UG/L		83
8) CHLOROETHANE	0.000		0	N.D.		
9) FLUORODICHLOROMETHANE	1.721	67	234	0.11 UG/L #		43
10) TRICHLOROFLUOROMETHANE	1.752	101	525	0.30 UG/L #		18
11) ETHANOL	1.885	45	9962	572.53 UG/L #		89
12) DI ETHYL ETHER	0.000		0	N.D.		
13) ACROLEIN	2.050	56	1353	3.93 UG/L #		69
14) ACETONE	2.170	43	1624	3.63 UG/L #		41
15) 1,1-DICHLOROETHENE	0.000		0	N.D.		
16) 1,1,2-TRICL-1,2,2-TRIF...	0.000		0	N.D.		
17) IODOMETHANE	2.241	142	11455	6.31 UG/L #		84
18) METHYL ACETATE	2.425	43	666	0.25 UG/L #		58
19) T-BUTYL ALCOHOL	2.624	59	4877	28.37 UG/L #		61
20) ACRYLONITRILE	0.000		0	N.D.		
21) METHYLENE CHLORIDE	0.000		0	N.D.		
22) CARBON DISULFIDE	2.283	76	15960	4.10 UG/L		99
23) METHYL TERT-BUTYL ETHE...	0.000		0	N.D.		
24) TRANS 1,2-DICHLOROETHENE	2.744	61	649	0.33 UG/L #		27
25) 1,1-DICHLOROETHANE	0.000		0	N.D.		
26) VINYL ACETATE	3.235	43	6536	1.93 UG/L #		78
27) DI ISOPROPYL ETHER	3.230	45	1356	0.28 UG/L #		52
28) 2-BUTANONE	3.804	43	2488	3.18 UG/L #		61
29) T-BUTYL ETHYL ETHER	3.605	59	798	0.17 UG/L #		41
30) CIS-1,2-DICHLOROETHENE	0.000		0	N.D.		
31) 2,2-DICHLOROPROPANE	0.000		0	N.D.		
32) ETHYL ACETATE	0.000		0	N.D.		
33) BROMOCHLOROMETHANE	0.000		0	N.D.		
34) TETRAHYDROFURAN	0.000		0	N.D.		
35) T-BUTYL FORMATE	0.000		0	N.D.		
36) CHLOROFORM	0.000		0	N.D.		
37) 1,1,1-TRICHLOROETHANE	0.000		0	N.D.		
38) CYCLOHEXANE	4.293	56	3546	1.29 UG/L #		85
39) CARBON TETRACHLORIDE	0.000		0	N.D.		
40) 1,1-DICHLOROPROPENE	4.415	75	617	0.38 UG/L #		40
41) BENZENE	4.625	78	1288	0.24 UG/L #		52
42) T-AMYL ALCOHOL	4.682	59	3281	22.81 UG/L #		90
43) T-AMYLMETHYL ETHER	4.750	73	1138	0.31 UG/L #		47
46) 1,2-DICHLOROETHANE	0.000		0	N.D.		
47) TRICHLOROETHENE	5.262	95	521	0.37 UG/L #		1

Data Path : Y:\1\DATA\B041819\
 Data File : VB108017.D
 Acq On : 18 Apr 2019 3:43 pm
 Operator :
 Sample : 8260 ETOH 500 PPB
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Inst : GCMSVOA2

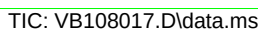
Quant Time: Apr 18 16:02:32 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.429	83	1697	0.84	UG/L #	74
49) 1,2-DICHLOROPROPANE	0.000		0	N.D.		
50) DIBROMOMETHANE	0.000		0	N.D.		
51) 1,4-DIOXANE	5.634	88	3466	216.36	UG/L #	76
52) BROMODICHLOROMETHANE	0.000		0	N.D.		
53) 2-CHLOROETHYLVINYLEETHER	6.072	63	3048	2.86	UG/L #	74
54) MIBK	6.367	43	19431	11.79	UG/L #	90
55) CIS-1,3-DICHLOROPROPENE	0.000		0	N.D.		
56) TOLUENE	6.509	91	5001	0.87	UG/L	97
57) TRANS-1,3,-DICHLOROPRO...	6.754	75	755	0.38	UG/L #	29
58) ETHYL METHACRYLATE	7.086	41	935	No Calib	#	
59) 1,1,2-TRICHLOROETHANE	0.000		0	N.D.		
60) 2-HEXANONE	7.180	43	21067	18.31	UG/L #	87
61) TETRACHLOROETHENE	7.027	164	1110	0.97	UG/L	94
62) 1,3-DICHLOROPROPANE	7.081	76	662	0.29	UG/L #	23
63) DIBROMOCHLOROMETHANE	0.000		0	N.D.		
64) 1,2-DIBROMOETHANE	7.393	107	679	0.46	UG/L #	95
67) CHLOROBENZENE	7.865	112	4085	0.98	UG/L #	49
68) 1,1,1,2-TETRACHLOROETHANE	7.962	131	724	0.47	UG/L #	63
69) ETHYLBENZENE	7.981	91	7199	1.03	UG/L	93
70) M/P-XYLENES	8.101	91	10285	1.90	UG/L	96
71) O-XYLENE	8.490	91	5299	0.94	UG/L	91
72) STYRENE	8.504	104	4205	0.90	UG/L #	88
73) BROMOFORM	8.683	173	792	0.65	UG/L #	31
74) ISOPROPYLBENZENE	8.851	105	7324	1.10	UG/L	99
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.		
76) 1,1,2,2-TETRACHLOROETHANE	9.169	83	2853	1.46	UG/L #	94
77) 1,4-DICHLORO-2-BUTENE(...	9.232	53	915	1.38	UG/L #	36
78) BROMOBENZENE	9.144	77	3365	1.23	UG/L	98
79) 1,2,3-TRICHLOROPROPANE	9.204	110	731	1.18	UG/L	87
80) N-PROPYLBENZENE	9.258	91	10032	1.29	UG/L	95
81) 2-CHLOROTOLUENE	9.337	91	6042	1.26	UG/L	94
82) 1,3,5-TRIMETHYLBENZENE	9.434	105	6770	1.18	UG/L	91
83) 4-CHLOROTOLUENE	9.448	91	7309	1.29	UG/L	93
85) TERT-BUTYLBENZENE	9.755	119	6229	1.29	UG/L	85
86) 1,2,4-TRIMETHYLBENZENE	9.803	105	7825	1.37	UG/L	91
87) SEC-BUTYLBENZENE	9.971	105	11570	1.83	UG/L	93
88) 1,3-DICHLOROBENZENE	10.073	146	5762	1.69	UG/L	96
89) P-ISOPROPYLTOLUENE	10.121	119	10345	1.76	UG/L #	92
90) 1,4-DICHLOROBENZENE	10.164	146	5934	1.65	UG/L #	92
91) N-BUTYLBENZENE	10.528	91	13037	2.87	UG/L	97
92) 1,2-DICHLOROBENZENE	10.528	146	7124	2.13	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	11.318	75	2599	7.20	UG/L	85
94) 1,3,5-TRICHLOROBENZENE	11.508	180	9660	4.29	UG/L	95
95) 1,2,4-TRICHLOROBENZENE	12.125	180	14802	6.92	UG/L	96
96) HEXACHLOROBUTADIENE	12.296	225	7610	10.10	UG/L	99
97) NAPHTHALENE	12.369	128	75836	13.33	UG/L	100
98) 1,2,3-TRICHLOROBENZENE	12.611	180	21347	11.12	UG/L	95

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

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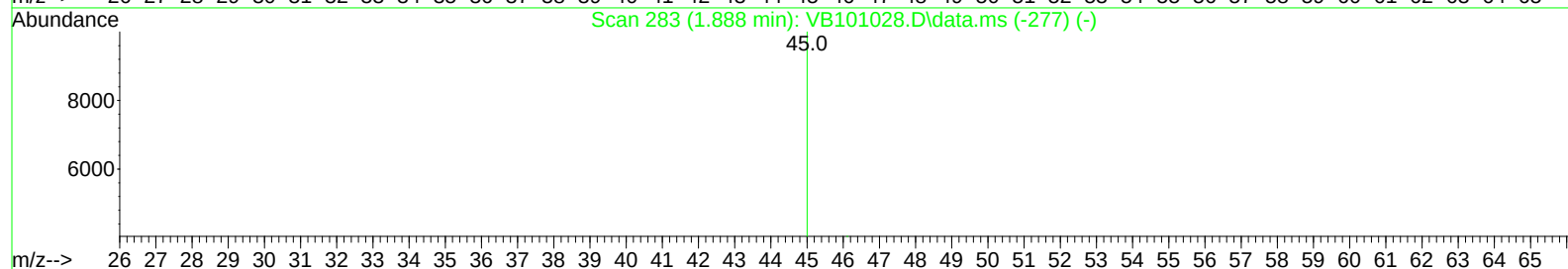
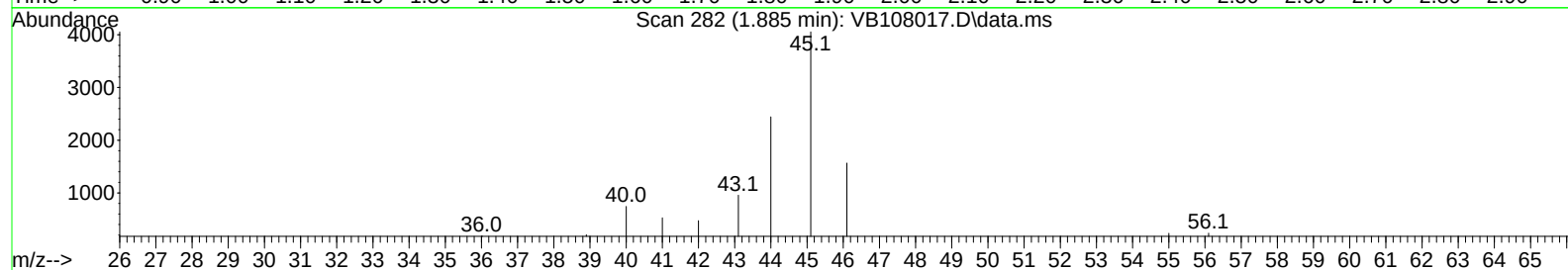
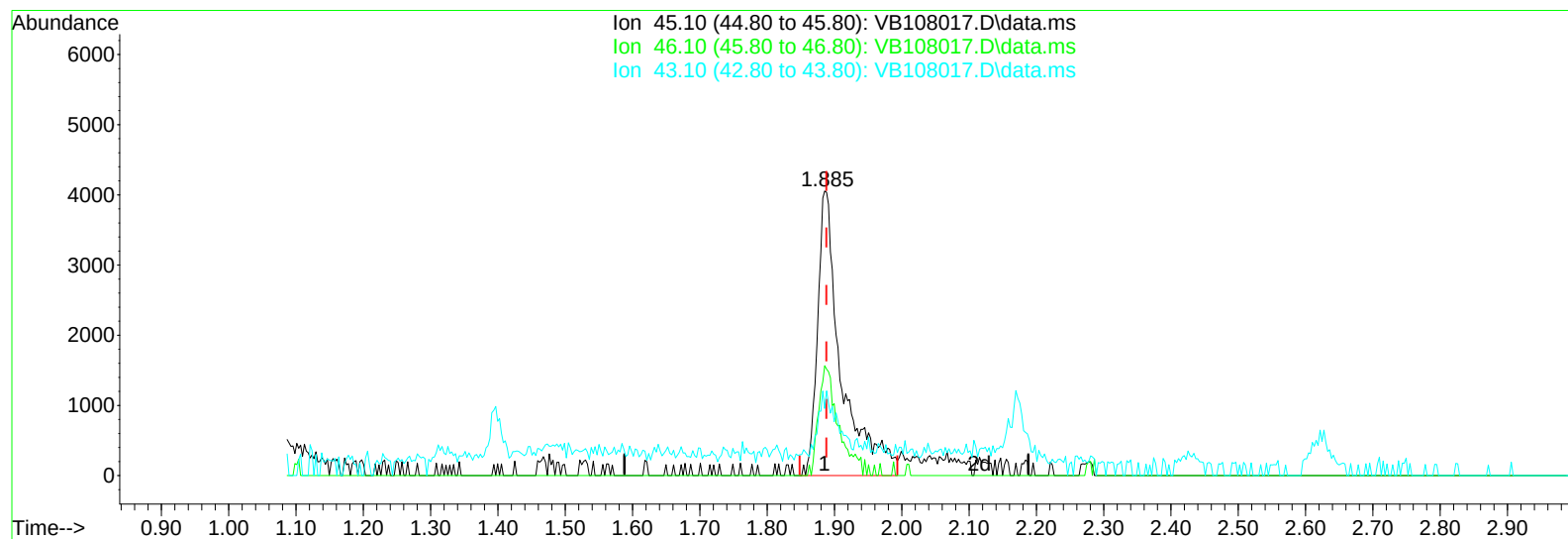
Inst : GCMSVOA2



Data Path : Y:\1\DATA\B041819\
Data File : VB108017.D
Acq On : 18 Apr 2019 3:43 pm
Operator :
Sample : 8260 ETOH 500 PPB
Misc :
ALS Vial : 14 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 16:02:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
Quant Title : 8260 CALIBRATION VOAMS 5973
QLast Update : Thu Apr 11 08:23:37 2019
Response via : Initial Calibration



TIC: VB108017.D\data.ms

(11) ETHANOL

1.885min (-0.003) 572.53 UG/L

response 9962

Ion	Exp%	Act%
45.10	100	100
46.10	30.10	32.34
43.10	27.80	17.92#
0.00	0.00	0.00

Data Path : Y:\1\DATA\B041819\
 Data File : VB108018.D
 Acq On : 18 Apr 2019 4:14 pm
 Operator :
 Sample : 8260 ETOH 1000 PPB
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 16:33:16 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	71508	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	111677	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.845	82	60905	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.141	152	62598	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.583	65	47068	34.90	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 139.60%#			
45) TOLUENE-D8 SS	6.444	98	110485	25.14	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 100.56%			
66) 4-BROMOFLUROBENZENE SS	9.002	95	45615	24.97	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 99.88%			
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	0.000		0	N.D.		
4) DIFLUOROCHLOROMETHANE	1.306	51	565	0.28 UG/L #		66
5) CHLOROMETHANE	1.306	50	869	0.40 UG/L #		43
6) VINYL CHLORIDE	0.000		0	N.D.		
7) BROMOMETHANE	1.536	94	574	0.62 UG/L #		6
8) CHLOROETHANE	0.000		0	N.D.		
9) FLUORODICHLOROMETHANE	0.000		0	N.D.		
10) TRICHLOROFLUOROMETHANE	0.000		0	N.D.		
11) ETHANOL	1.883	45	18409	1105.59 UG/L #		90
12) DI ETHYL ETHER	0.000		0	N.D.		
13) ACROLEIN	2.059	56	532	1.62 UG/L #		15
14) ACETONE	0.000		0	N.D.		
15) 1,1-DICHLOROETHENE	0.000		0	N.D.		
16) 1,1,2-TRICL-1,2,2-TRIF...	0.000		0	N.D.		
17) IODOMETHANE	2.238	142	5271	3.04 UG/L		96
18) METHYL ACETATE	2.374	43	117	0.05 UG/L #		58
19) T-BUTYL ALCOHOL	0.000		0	N.D.		
20) ACRYLONITRILE	0.000		0	N.D.		
21) METHYLENE CHLORIDE	0.000		0	N.D.		
22) CARBON DISULFIDE	2.286	76	7231	1.94 UG/L		99
23) METHYL TERT-BUTYL ETHE...	0.000		0	N.D.		
24) TRANS 1,2-DICHLOROETHENE	0.000		0	N.D.		
25) 1,1-DICHLOROETHANE	0.000		0	N.D.		
26) VINYL ACETATE	3.241	43	1367	0.42 UG/L #		78
27) DI ISOPROPYL ETHER	0.000		0	N.D.		
28) 2-BUTANONE	3.807	43	526	0.70 UG/L #		61
29) T-BUTYL ETHYL ETHER	0.000		0	N.D.		
30) CIS-1,2-DICHLOROETHENE	0.000		0	N.D.		
31) 2,2-DICHLOROPROPANE	0.000		0	N.D.		
32) ETHYL ACETATE	3.841	43	155	0.09 UG/L #		72
33) BROMOCHLOROMETHANE	0.000		0	N.D.		
34) TETRAHYDROFURAN	0.000		0	N.D.		
35) T-BUTYL FORMATE	0.000		0	N.D.		
36) CHLOROFORM	0.000		0	N.D.		
37) 1,1,1-TRICHLOROETHANE	0.000		0	N.D.		
38) CYCLOHEXANE	4.298	56	2507	0.95 UG/L #		76
39) CARBON TETRACHLORIDE	0.000		0	N.D.		
40) 1,1-DICHLOROPROPENE	0.000		0	N.D.		
41) BENZENE	0.000		0	N.D.		
42) T-AMYL ALCOHOL	0.000		0	N.D.		
43) T-AMYLMETHYL ETHER	0.000		0	N.D.		
46) 1,2-DICHLOROETHANE	0.000		0	N.D.		
47) TRICHLOROETHENE	0.000		0	N.D.		

Data Path : Y:\1\DATA\B041819\
 Data File : VB108018.D
 Acq On : 18 Apr 2019 4:14 pm
 Operator :
 Sample : 8260 ETOH 1000 PPB
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 16:33:16 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

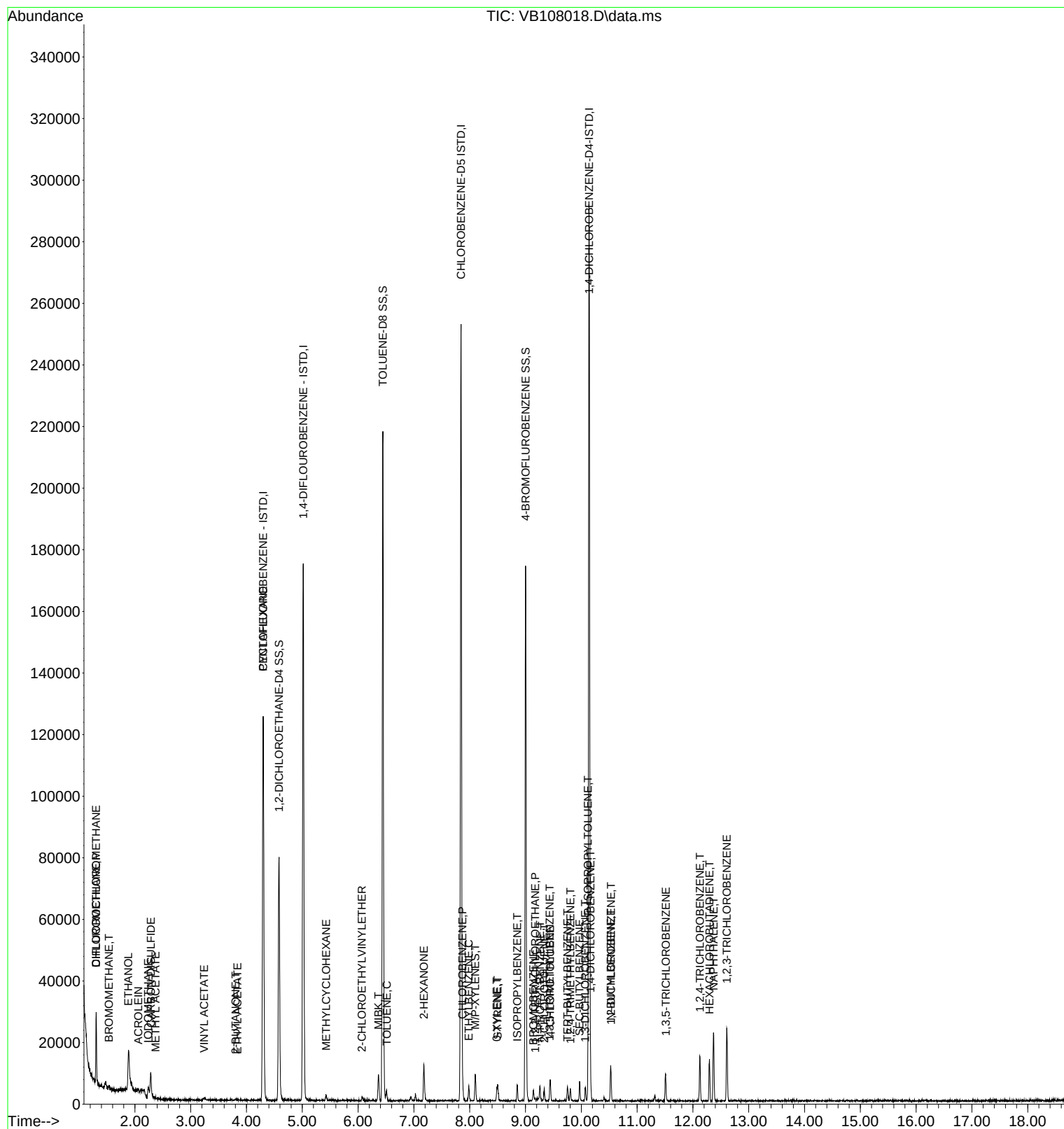
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.429	83	445	0.23	UG/L #	63
49) 1,2-DICHLOROPROPANE	0.000		0	N.D.		
50) DIBROMOMETHANE	0.000		0	N.D.		
51) 1,4-DIOXANE	0.000		0	N.D.		
52) BROMODICHLOROMETHANE	0.000		0	N.D.		
53) 2-CHLOROETHYLVINYLEETHER	6.069	63	510	0.50	UG/L #	16
54) MIBK	6.364	43	5643	3.57	UG/L #	83
55) CIS-1,3-DICHLOROPROPENE	0.000		0	N.D.		
56) TOLUENE	6.512	91	2115	0.38	UG/L	93
57) TRANS-1,3,-DICHLOROPRO...	0.000		0	N.D.		
58) ETHYL METHACRYLATE	0.000		0	N.D.		
59) 1,1,2-TRICHLOROETHANE	0.000		0	N.D.		
60) 2-HEXANONE	7.177	43	7504	6.79	UG/L #	82
61) TETRACHLOROETHENE	0.000		0	N.D.		
62) 1,3-DICHLOROPROPANE	0.000		0	N.D.		
63) DIBROMOCHLOROMETHANE	0.000		0	N.D.		
64) 1,2-DIBROMOETHANE	0.000		0	N.D.		
67) CHLOROBENZENE	7.871	112	1586	0.39	UG/L #	29
68) 1,1,1,2-TETRACHLOROETHANE	0.000		0	N.D.		
69) ETHYLBENZENE	7.984	91	3143	0.47	UG/L	97
70) M/P-XYLENES	8.101	91	4541	0.87	UG/L	94
71) O-XYLENE	8.487	91	2250	0.42	UG/L	89
72) STYRENE	8.502	104	1690	0.38	UG/L #	87
73) BROMOFORM	0.000		0	N.D.		
74) ISOPROPYLBENZENE	8.851	105	3067	0.48	UG/L	92
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.		
76) 1,1,2,2-TETRACHLOROETHANE	9.175	83	668	0.36	UG/L #	26
77) 1,4-DICHLORO-2-BUTENE(...	0.000		0	N.D.		
78) BROMOBENZENE	9.141	77	1368	0.52	UG/L	89
79) 1,2,3-TRICHLOROPROPANE	0.000		0	N.D.		
80) N-PROPYLBENZENE	9.260	91	3779	0.51	UG/L #	90
81) 2-CHLOROTOLUENE	9.337	91	2244	0.49	UG/L	92
82) 1,3,5-TRIMETHYLBENZENE	9.434	105	2298	0.42	UG/L #	84
83) 4-CHLOROTOLUENE	9.445	91	2599	0.48	UG/L #	88
85) TERT-BUTYLBENZENE	9.752	119	2133	0.45	UG/L #	79
86) 1,2,4-TRIMETHYLBENZENE	9.806	105	2255	0.40	UG/L	93
87) SEC-BUTYLBENZENE	9.968	105	3696	0.60	UG/L	96
88) 1,3-DICHLOROBENZENE	10.070	146	1692	0.51	UG/L	96
89) P-ISOPROPYLTOLUENE	10.122	119	3076	0.54	UG/L #	86
90) 1,4-DICHLOROBENZENE	10.164	146	1805	0.52	UG/L #	73
91) N-BUTYLBENZENE	10.528	91	3586	0.81	UG/L	96
92) 1,2-DICHLOROBENZENE	10.531	146	2008	0.61	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	0.000		0	N.D.		
94) 1,3,5-TRICHLOROBENZENE	11.514	180	2719	1.24	UG/L	92
95) 1,2,4-TRICHLOROBENZENE	12.125	180	4167	2.00	UG/L	93
96) HEXACHLOROBUTADIENE	12.296	225	2405	3.27	UG/L	96
97) NAPHTHALENE	12.372	128	15439	2.78	UG/L	98
98) 1,2,3-TRICHLOROBENZENE	12.608	180	6417	3.42	UG/L	97

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

Data Path : Y:\1\DATA\B041819\
Data File : VB108018.D
Acq On : 18 Apr 2019 4:14 pm
Operator :
Sample : 8260 ETOH 1000 PPB
Misc :
ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSVOA2

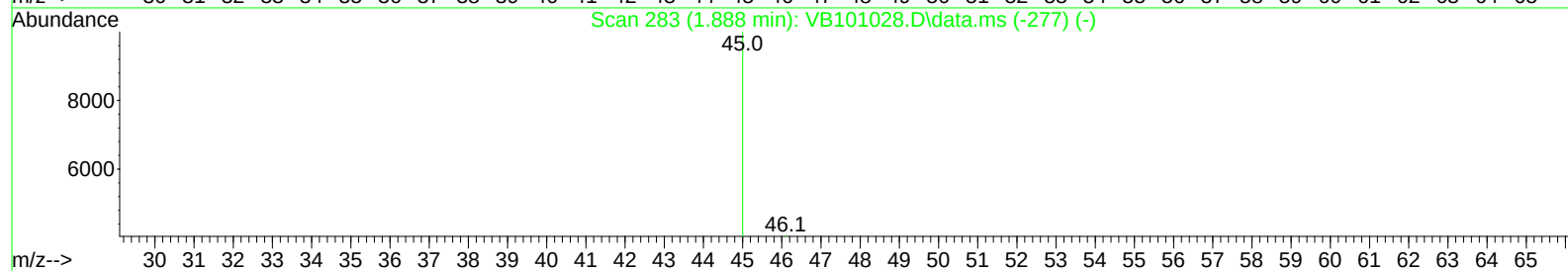
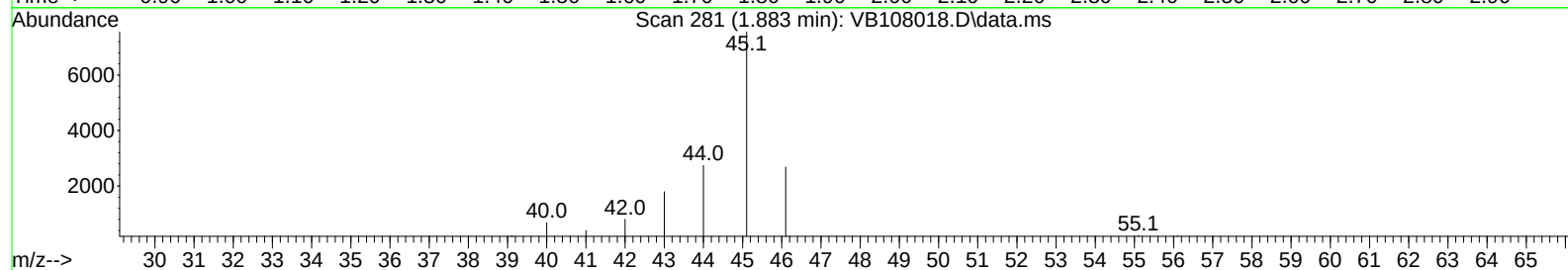
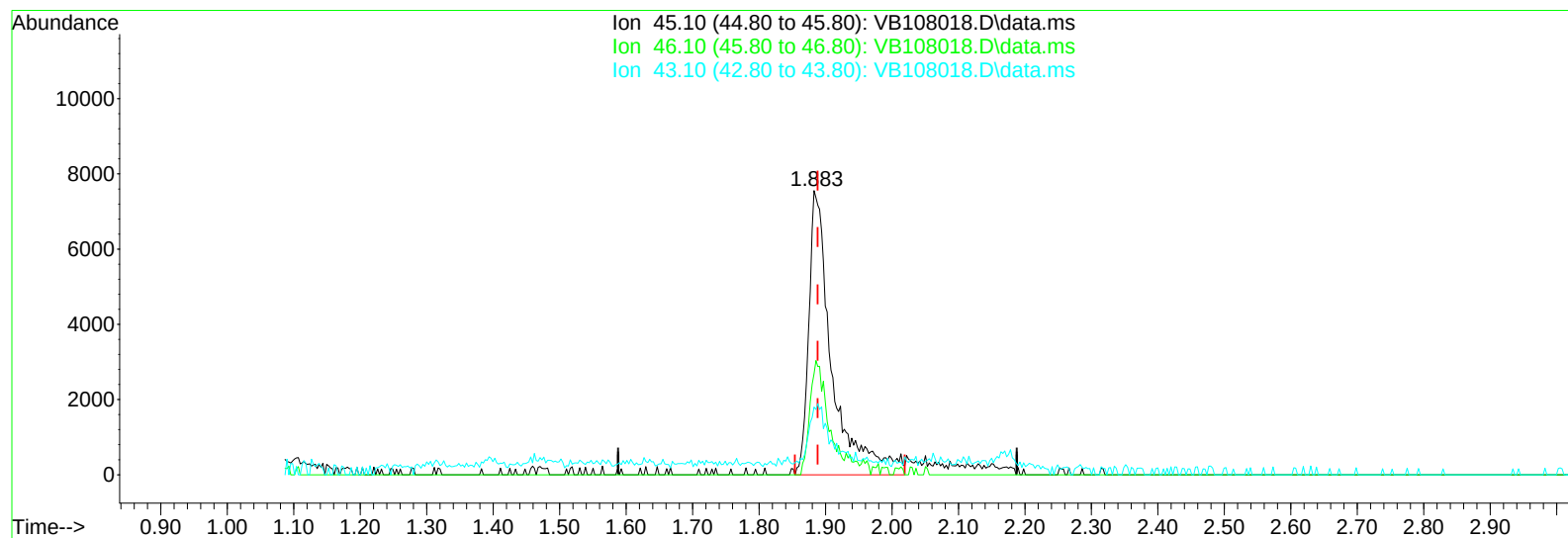
Quant Time: Apr 18 16:33:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
Quant Title : 8260 CALIBRATION VOAMS 5973
QLast Update : Thu Apr 11 08:23:37 2019
Response via : Initial Calibration



Data Path : Y:\1\DATA\B041819\
Data File : VB108018.D
Acq On : 18 Apr 2019 4:14 pm
Operator :
Sample : 8260 ETOH 1000 PPB
Misc :
ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 16:33:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
Quant Title : 8260 CALIBRATION VOAMS 5973
QLast Update : Thu Apr 11 08:23:37 2019
Response via : Initial Calibration



TIC: VB108018.D\data.ms

(11) ETHANOL

1.883min (-0.005) 1105.59 UG/L

response 18409

Ion	Exp%	Act%
45.10	100	100
46.10	30.10	31.01
43.10	27.80	17.87#
0.00	0.00	0.00

Data Path : Y:\1\DATA\B041819\
 Data File : VB108019.D
 Acq On : 18 Apr 2019 4:45 pm
 Operator :
 Sample : 8260 ETOH 2000 PPB
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 17:03:59 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	70526	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	110531	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	61558	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.138	152	62718	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	47056	35.37	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 141.48%#			
45) TOLUENE-D8 SS	6.444	98	109396	25.15	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 100.60%			
66) 4-BROMOFLUROBENZENE SS	9.002	95	45370	24.58	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 98.32%			
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	0.000		0	N.D.		
4) DIFLUOROCHLOROMETHANE	1.306	51	588	0.30 UG/L #		66
5) CHLOROMETHANE	1.306	50	777	0.36 UG/L #		43
6) VINYL CHLORIDE	0.000		0	N.D.		
7) BROMOMETHANE	1.524	94	787	0.86 UG/L #		6
8) CHLOROETHANE	0.000		0	N.D.		
9) FLUORODICHLOROMETHANE	0.000		0	N.D.		
10) TRICHLOROFLUOROMETHANE	0.000		0	N.D.		
11) ETHANOL	1.888	45	39258	2390.54 UG/L #		85
12) DI ETHYL ETHER	0.000		0	N.D.		
13) ACROLEIN	0.000		0	N.D.		
14) ACETONE	0.000		0	N.D.		
15) 1,1-DICHLOROETHENE	0.000		0	N.D.		
16) 1,1,2-TRICL-1,2,2-TRIF...	0.000		0	N.D.		
17) IODOMETHANE	2.241	142	5985	3.49 UG/L		94
18) METHYL ACETATE	2.425	43	236	0.09 UG/L #		58
19) T-BUTYL ALCOHOL	0.000		0	N.D.		
20) ACRYLONITRILE	0.000		0	N.D.		
21) METHYLENE CHLORIDE	0.000		0	N.D.		
22) CARBON DISULFIDE	2.283	76	4567	1.24 UG/L #		75
23) METHYL TERT-BUTYL ETHE...	0.000		0	N.D.		
24) TRANS 1,2-DICHLOROETHENE	0.000		0	N.D.		
25) 1,1-DICHLOROETHANE	0.000		0	N.D.		
26) VINYL ACETATE	3.247	43	483	0.15 UG/L #		78
27) DI ISOPROPYL ETHER	0.000		0	N.D.		
28) 2-BUTANONE	0.000		0	N.D.		
29) T-BUTYL ETHYL ETHER	0.000		0	N.D.		
30) CIS-1,2-DICHLOROETHENE	0.000		0	N.D.		
31) 2,2-DICHLOROPROPANE	0.000		0	N.D.		
32) ETHYL ACETATE	3.818	43	130	0.08 UG/L #		72
33) BROMOCHLOROMETHANE	0.000		0	N.D.		
34) TETRAHYDROFURAN	0.000		0	N.D.		
35) T-BUTYL FORMATE	0.000		0	N.D.		
36) CHLOROFORM	0.000		0	N.D.		
37) 1,1,1-TRICHLOROETHANE	0.000		0	N.D.		
38) CYCLOHEXANE	4.304	56	2361	0.91 UG/L #		67
39) CARBON TETRACHLORIDE	0.000		0	N.D.		
40) 1,1-DICHLOROPROPENE	0.000		0	N.D.		
41) BENZENE	0.000		0	N.D.		
42) T-AMYL ALCOHOL	0.000		0	N.D.		
43) T-AMYLMETHYL ETHER	0.000		0	N.D.		
46) 1,2-DICHLOROETHANE	0.000		0	N.D.		
47) TRICHLOROETHENE	0.000		0	N.D.		

Data Path : Y:\1\DATA\B041819\
 Data File : VB108019.D
 Acq On : 18 Apr 2019 4:45 pm
 Operator :
 Sample : 8260 ETOH 2000 PPB
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Inst : GCMSVOA2

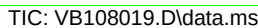
Quant Time: Apr 18 17:03:59 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Thu Apr 11 08:23:37 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	0.000		0	N.D.		
49) 1,2-DICHLOROPROPANE	0.000		0	N.D.		
50) DIBROMOMETHANE	0.000		0	N.D.		
51) 1,4-DIOXANE	0.000		0	N.D.		
52) BROMODICHLOROMETHANE	0.000		0	N.D.		
53) 2-CHLOROETHYLVINYLEETHER	0.000		0	N.D.		
54) MIBK	6.364	43	2662	1.70	UG/L #	78
55) CIS-1,3-DICHLOROPROPENE	0.000		0	N.D.		
56) TOLUENE	6.506	91	1239	0.23	UG/L #	78
57) TRANS-1,3,-DICHLOROPRO...	0.000		0	N.D.		
58) ETHYL METHACRYLATE	0.000		0	N.D.		
59) 1,1,2-TRICHLOROETHANE	0.000		0	N.D.		
60) 2-HEXANONE	7.180	43	3963	3.62	UG/L #	82
61) TETRACHLOROETHENE	0.000		0	N.D.		
62) 1,3-DICHLOROPROPANE	0.000		0	N.D.		
63) DIBROMOCHLOROMETHANE	0.000		0	N.D.		
64) 1,2-DIBROMOETHANE	0.000		0	N.D.		
67) CHLOROBENZENE	7.871	112	974	0.24	UG/L #	29
68) 1,1,1,2-TETRACHLOROETHANE	0.000		0	N.D.		
69) ETHYLBENZENE	7.981	91	2142	0.32	UG/L #	88
70) M/P-XYLENES	8.101	91	3196	0.61	UG/L	91
71) O-XYLENE	8.482	91	1441	0.26	UG/L	94
72) STYRENE	8.501	104	1133	0.25	UG/L #	87
73) BROMOFORM	0.000		0	N.D.		
74) ISOPROPYLBENZENE	8.851	105	2051	0.32	UG/L #	47
75) CIS-1,4-DICHLORO-2-BUTENE	0.000		0	N.D.		
76) 1,1,2,2-TETRACHLOROETHANE	0.000		0	N.D.		
77) 1,4-DICHLORO-2-BUTENE(...	0.000		0	N.D.		
78) BROMOBENZENE	9.144	77	816	0.31	UG/L #	55
79) 1,2,3-TRICHLOROPROPANE	0.000		0	N.D.		
80) N-PROPYLBENZENE	9.257	91	2225	0.29	UG/L #	50
81) 2-CHLOROTOLUENE	9.331	91	1450	0.31	UG/L #	39
82) 1,3,5-TRIMETHYLBENZENE	9.439	105	1283	0.23	UG/L #	26
83) 4-CHLOROTOLUENE	9.442	91	1598	0.29	UG/L #	41
85) TERT-BUTYLBENZENE	9.752	119	1417	0.30	UG/L #	80
86) 1,2,4-TRIMETHYLBENZENE	9.809	105	1325	0.24	UG/L #	29
87) SEC-BUTYLBENZENE	9.974	105	2309	0.37	UG/L #	55
88) 1,3-DICHLOROBENZENE	10.073	146	954	0.29	UG/L #	73
89) P-ISOPROPYLTOLUENE	10.119	119	1771	0.31	UG/L #	53
90) 1,4-DICHLOROBENZENE	10.164	146	1065	0.30	UG/L #	54
91) N-BUTYLBENZENE	10.528	91	1912	0.43	UG/L #	79
92) 1,2-DICHLOROBENZENE	10.534	146	1077	0.33	UG/L #	68
93) 1,2-DIBROMO-3-CHLOROPR...	0.000		0	N.D.		
94) 1,3,5-TRICHLOROBENZENE	11.505	180	1282	0.58	UG/L	85
95) 1,2,4-TRICHLOROBENZENE	12.128	180	1955	0.93	UG/L	97
96) HEXACHLOROBUTADIENE	12.298	225	1231	1.67	UG/L #	78
97) NAPHTHALENE	12.372	128	5626	1.01	UG/L #	85
98) 1,2,3-TRICHLOROBENZENE	12.608	180	3127	1.67	UG/L	98

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

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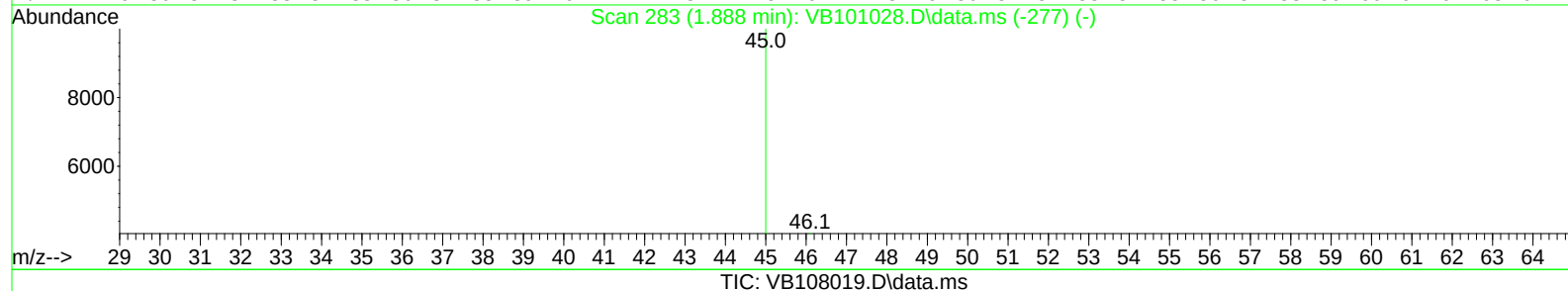
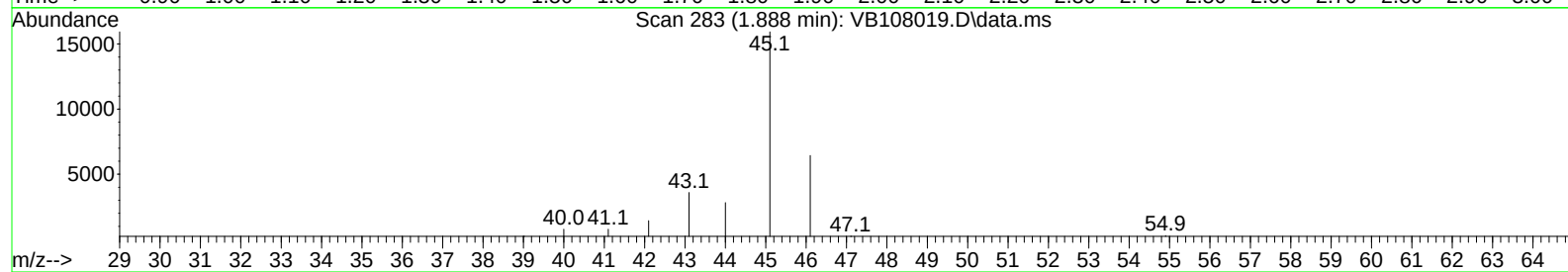
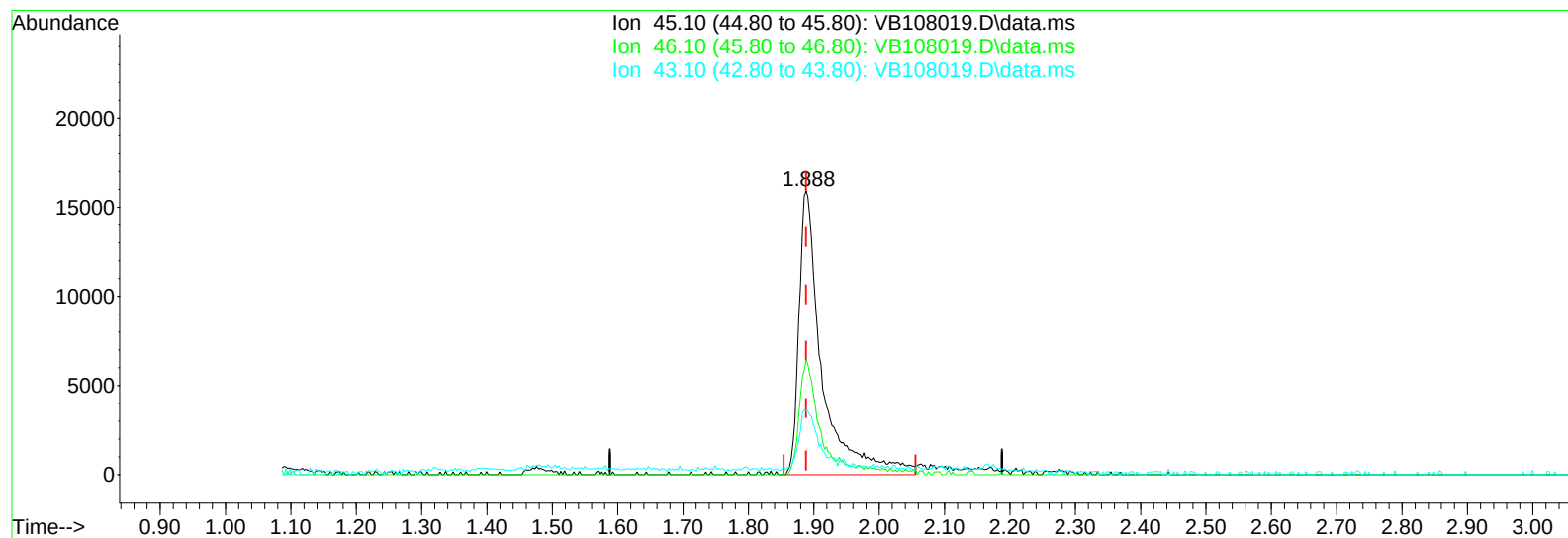
Inst : GCMSVOA2



Data Path : Y:\1\DATA\B041819\
Data File : VB108019.D
Acq On : 18 Apr 2019 4:45 pm
Operator :
Sample : 8260 ETOH 2000 PPB
Misc :
ALS Vial : 16 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 18 17:03:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\B020119W.M
Quant Title : 8260 CALIBRATION VOAMS 5973
QLast Update : Thu Apr 11 08:23:37 2019
Response via : Initial Calibration



(11) ETHANOL

1.888min (+0.000) 2390.54 UG/L

response 39258

Ion	Exp%	Act%
45.10	100	100
46.10	30.10	34.78
43.10	27.80	16.66#
0.00	0.00	0.00

Data Path : Y:\1\DATA\B041819\
 Data File : VB108023.D
 Acq On : 18 Apr 2019 6:48 pm
 Operator :
 Sample : ICV
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 19 06:22:01 2019
 Quant Method : Y:\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	71465	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	114365	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.845	82	61764	30.00	UG/L	0.00
84) 1,4-DICHLOROENZENE-D4...	10.141	152	63247	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.580	65	45867	24.91	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	99.64%		
45) TOLUENE-D8 SS	6.444	98	110898	24.78	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	99.12%		
66) 4-BROMOFLUROBENZENE SS	9.004	95	46123	25.38	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	101.52%		
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.149	85	14899	9.44	UG/L	99
4) DIFLUOROCHLOROMETHANE	1.172	51	25594	10.34	UG/L	98
5) CHLOROMETHANE	1.280	50	30040	8.45	UG/L #	56
6) VINYL CHLORIDE	1.325	62	18662	9.65	UG/L	99
7) BROMOMETHANE	1.533	94	6924	7.54	UG/L	98
8) CHLOROETHANE	1.595	64	11013	10.45	UG/L	97
9) FLUORODICHLOROMETHANE	1.720	67	28719	10.53	UG/L	98
10) TRICHLOROFLUOROMETHANE	1.755	101	21140	9.81	UG/L	99
11) ETHANOL	1.882	45	1892	105.82	UG/L #	90
12) DI ETHYL ETHER	1.948	59	15629	11.37	UG/L	98
13) ACROLEIN	2.053	56	18253	45.63	UG/L #	96
14) ACETONE	2.167	43	83800	127.01	UG/L	100
15) 1,1-DICHLOROETHENE	2.113	61	25880	10.70	UG/L	99
16) 1,1,2-TRICL-1,2,2-TRIF...	2.107	101	11742	11.65	UG/L	95
17) IODOMETHANE	2.238	142	23450	13.59	UG/L	94
18) METHYL ACETATE	2.422	43	18544	8.94	UG/L	99
19) T-BUTYL ALCOHOL	2.619	59	16960	90.00	UG/L	99
20) ACRYLONITRILE	2.746	53	8264	10.86	UG/L	97
21) METHYLENE CHLORIDE	2.508	49	28613	10.10	UG/L	99
22) CARBON DISULFIDE	2.286	76	54010	14.29	UG/L	100
23) METHYL TERT-BUTYL ETHE...	2.744	73	44630	10.92	UG/L	99
24) TRANS 1,2-DICHLOROETHENE	2.746	61	25690	10.89	UG/L	99
25) 1,1-DICHLOROETHANE	3.170	63	30880	10.63	UG/L	99
26) VINYL ACETATE	3.232	43	313315	67.12	UG/L	99
27) DI ISOPROPYL ETHER	3.235	45	67600	10.73	UG/L	99
28) 2-BUTANONE	3.795	43	103710	103.94	UG/L	98
29) T-BUTYL ETHYL ETHER	3.608	59	56788	10.44	UG/L	99
30) CIS-1,2-DICHLOROETHENE	3.761	61	29772	10.39	UG/L	99
31) 2,2-DICHLOROPROPANE	3.752	77	18793	8.72	UG/L	99
32) ETHYL ACETATE	3.858	43	24110m	9.52	UG/L	
33) BROMOCHLOROMETHANE	4.005	128	7785	10.83	UG/L	98
34) TETRAHYDROFURAN	4.051	42	7054	10.52	UG/L #	55
36) CHLOROFORM	4.091	83	27616	10.39	UG/L	100
37) 1,1,1-TRICHLOROETHANE	4.250	97	24550	10.61	UG/L	97
38) CYCLOHEXANE	4.290	56	33529	11.12	UG/L	99
39) CARBON TETRACHLORIDE	4.409	117	21238	10.78	UG/L	100
40) 1,1-DICHLOROPROPENE	4.415	75	19214	10.27	UG/L	98
41) BENZENE	4.622	78	54540	10.35	UG/L	99
43) T-AMYLMETHYL ETHER	4.741	73	42190	11.08	UG/L	99
46) 1,2-DICHLOROETHANE	4.656	62	27901	10.28	UG/L	98
47) TRICHLOROETHENE	5.256	95	15907	10.96	UG/L	99
48) METHYLCYCLOHEXANE	5.426	83	21034	10.69	UG/L	99
49) 1,2-DICHLOROPROPANE	5.483	63	17376	10.54	UG/L	95

Data Path : Y:\1\DATA\B041819\
 Data File : VB108023.D
 Acq On : 18 Apr 2019 6:48 pm
 Operator :
 Sample : ICV
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Inst : GCMSVOA2

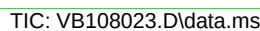
Quant Time: Apr 19 06:22:01 2019
 Quant Method : Y:\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) DIBROMOMETHANE	5.600	93	10278	10.57	UG/L	98
51) 1,4-DIOXANE	5.634	88	718	81.94	UG/L #	60
52) BROMODICHLOROMETHANE	5.762	83	22313	10.73	UG/L	99
54) MIBK	6.364	43	202687	98.54	UG/L	100
55) CIS-1,3-DICHLOROPROPENE	6.199	75	23806	9.98	UG/L	99
56) TOLUENE	6.509	91	60407	10.31	UG/L	100
57) TRANS-1,3,-DICHLOROPRO...	6.745	75	22348	9.77	UG/L	99
59) 1,1,2-TRICHLOROETHANE	6.924	97	13527	10.18	UG/L	99
60) 2-HEXANONE	7.177	43	149807	98.95	UG/L	99
61) TETRACHLOROETHENE	7.029	164	11669	10.32	UG/L	96
62) 1,3-DICHLOROPROPANE	7.083	76	23527	10.07	UG/L	98
63) DIBROMOCHLOROMETHANE	7.296	129	16944	11.02	UG/L	99
64) 1,2-DIBROMOETHANE	7.393	107	15106	10.20	UG/L #	100
67) CHLOROBENZENE	7.870	112	41164	10.57	UG/L	99
68) 1,1,1,2-TETRACHLOROETHANE	7.959	131	15359	10.82	UG/L	99
69) ETHYLBENZENE	7.984	91	69790	10.29	UG/L	99
70) M/P-XYLENES	8.098	91	112165	20.79	UG/L	99
71) O-XYLENE	8.487	91	58679	10.54	UG/L	98
72) STYRENE	8.504	104	46443	10.46	UG/L	99
73) BROMOFORM	8.683	173	11843	10.32	UG/L	99
74) ISOPROPYLBENZENE	8.851	105	67841	10.65	UG/L	99
76) 1,1,2,2-TETRACHLOROETHANE	9.169	83	18117	9.87	UG/L	99
77) 1,4-DICHLORO-2-BUTENE(...	9.226	53	8607	9.88	UG/L	98
78) BROMOBENZENE	9.141	77	28454	10.55	UG/L	97
79) 1,2,3-TRICHLOROPROPANE	9.209	110	5750	9.94	UG/L	95
80) N-PROPYLBENZENE	9.257	91	83114	10.59	UG/L	100
81) 2-CHLOROTOLUENE	9.334	91	50946	10.57	UG/L	99
82) 1,3,5-TRIMETHYLBENZENE	9.436	105	55914	10.24	UG/L	99
83) 4-CHLOROTOLUENE	9.445	91	60525	10.46	UG/L	99
85) TERT-BUTYLBENZENE	9.755	119	48148	10.37	UG/L	99
86) 1,2,4-TRIMETHYLBENZENE	9.803	105	57150	9.82	UG/L	98
87) SEC-BUTYLBENZENE	9.971	105	68674	10.51	UG/L	99
88) 1,3-DICHLOROBENZENE	10.073	146	36754	10.59	UG/L	99
89) P-ISOPROPYLTOLUENE	10.121	119	59048	10.44	UG/L	99
90) 1,4-DICHLOROBENZENE	10.161	146	37284	10.31	UG/L	99
91) N-BUTYLBENZENE	10.525	91	51926	10.25	UG/L	99
92) 1,2-DICHLOROBENZENE	10.531	146	34821	10.39	UG/L	98
93) 1,2-DIBROMO-3-CHLOROPR...	11.318	75	3859	9.96	UG/L	94
94) 1,3,5-TRICHLOROBENZENE	11.508	180	22827	10.31	UG/L	98
95) 1,2,4-TRICHLOROBENZENE	12.125	180	22293	10.24	UG/L	100
96) HEXACHLOROBUTADIENE	12.295	225	8540	11.51	UG/L	99
97) NAPHTHALENE	12.367	128	55127	9.64	UG/L	99
98) 1,2,3-TRICHLOROBENZENE	12.608	180	19809	10.11	UG/L	99

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

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Inst : GCMSVOA2



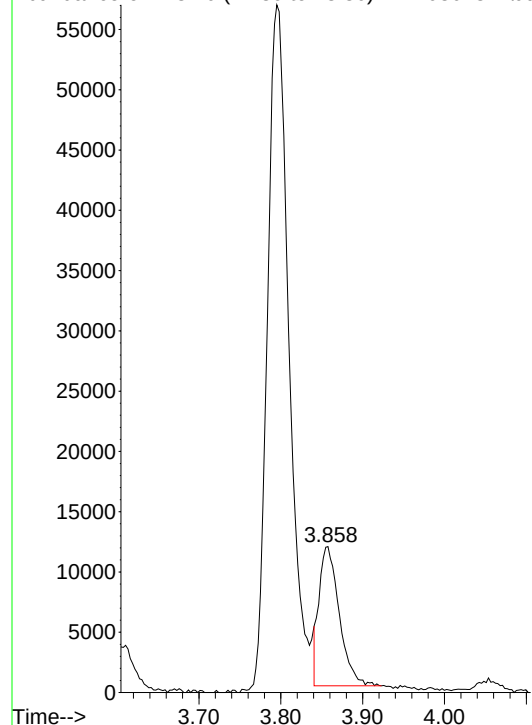
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Data File : VB108023.D
Acq On : 18 Apr 2019 6:48 pm
Operator :
Sample : ICV
Misc :

Quant Time : Fri Apr 19 06:22:01 2019
Quant Method : Y:\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): VB108023.D\data



Original Int. Results

RT : 3.86
Area : 19757
Amount: 7.80044

Manual Int. Results

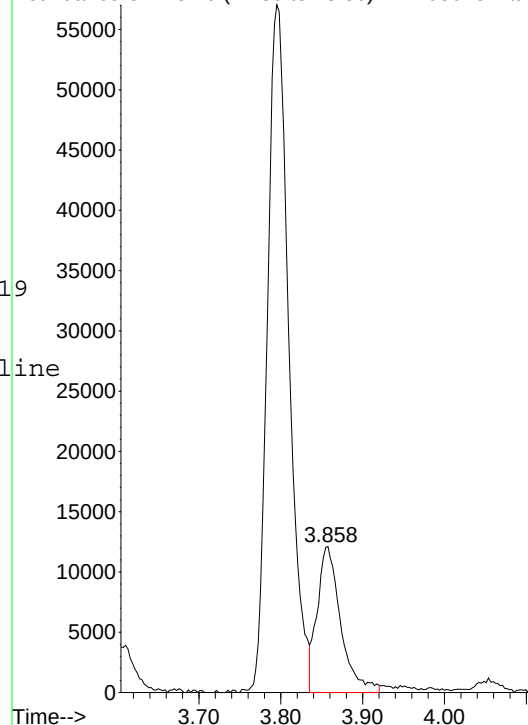
Fri Apr 19 06:20:49 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.86
Area : 24110
Amount: 9.51909

Manual Integration

ETHYL ACETATE

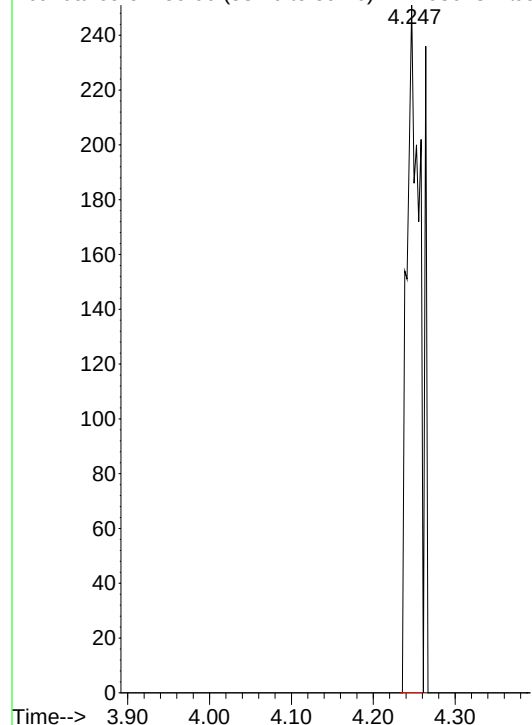
Abundance on 43.10 (42.80 to 43.80): VB108023.D\data



Original Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): VB108023.D\data



Original Int. Results

RT : 4.25
Area : 259
Amount: 0.177274

Manual Int. Results

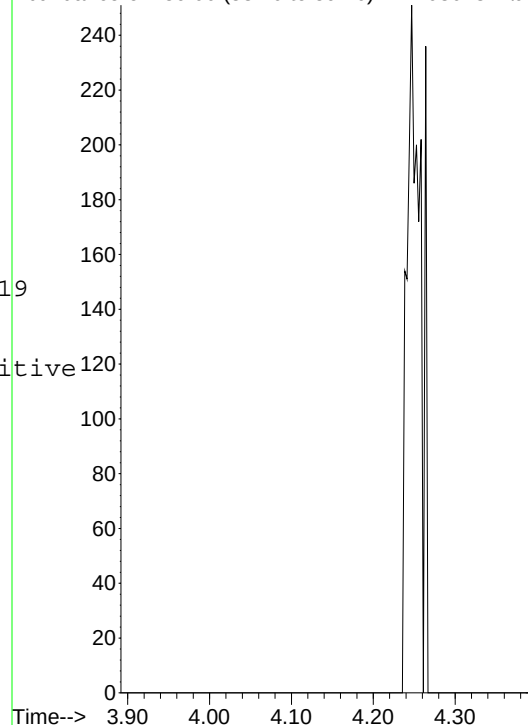
Fri Apr 19 06:21:00 2019

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

Manual Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): VB108023.D\data



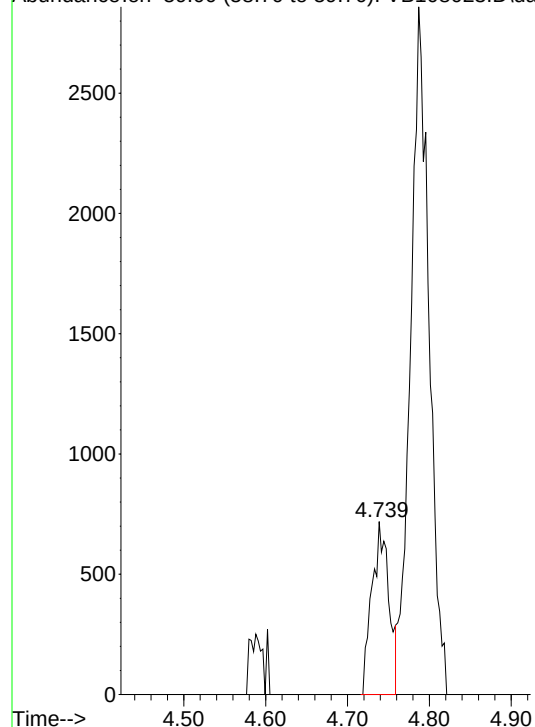
Data Path : Y:\1\DATA\B041819\
Data File : VB108023.D
Acq On : 18 Apr 2019 6:48 pm
Operator :
Sample : ICV
Misc :

Quant Time : Fri Apr 19 06:22:01 2019
Quant Method : Y:\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

T-AMYL ALCOHOL

Abundance on 59.00 (58.70 to 59.70): VB108023.D\data



Original Int. Results

RT : 4.74
Area : 1039
Amount: 7.71042

Manual Int. Results

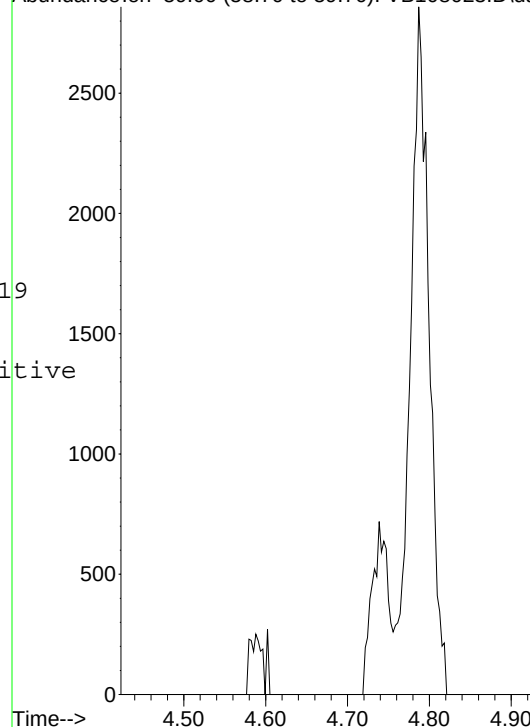
Fri Apr 19 06:21:08 2019

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

Manual Integration

T-AMYL ALCOHOL

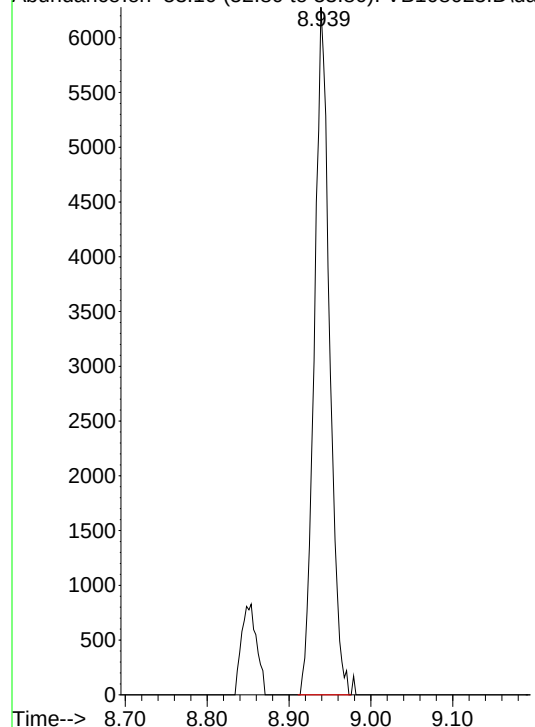
Abundance on 59.00 (58.70 to 59.70): VB108023.D\data



Original Integration

CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108023.D\data



Original Int. Results

RT : 8.94
Area : 8105
Amount: 0

Manual Int. Results

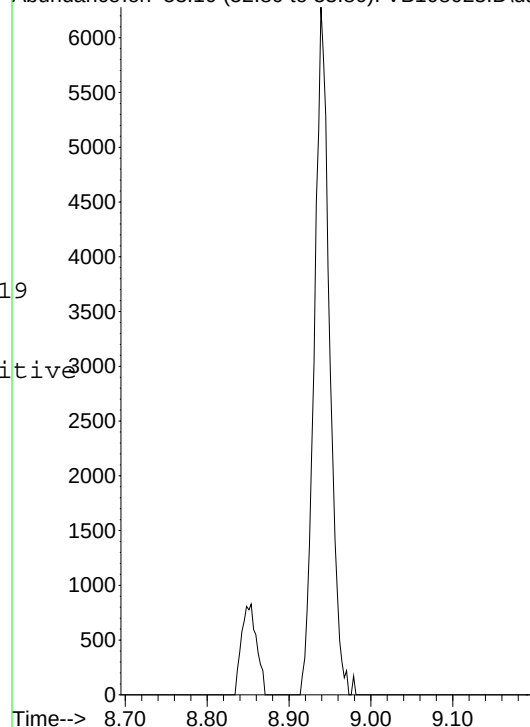
Fri Apr 19 06:21:54 2019

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

Manual Integration

CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108023.D\data



Data Path : Y:\1\DATA\B041819\
 Data File : VB108024.D
 Acq On : 18 Apr 2019 7:18 pm
 Operator :
 Sample : ICVD
 Misc :
 ALS Vial : 21 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Apr 19 06:24:08 2019
 Quant Method : Y:\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	71158	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	112816	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.845	82	62173	30.00	UG/L	0.00
84) 1,4-DICHLOROENZENE-D4...	10.139	152	62463	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	45990	25.08	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	100.32%		
45) TOLUENE-D8 SS	6.444	98	111676	25.29	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	101.16%		
66) 4-BROMOFLUROBENZENE SS	9.002	95	45386	24.81	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	99.24%		
Target Compounds						
						Qvalue
3) DICHLORODIFLOUROMETHANE	1.149	85	13613	8.66	UG/L	100
4) DIFLUOROCHLOROMETHANE	1.172	51	23043	9.35	UG/L	99
5) CHLOROMETHANE	1.277	50	27202	7.69	UG/L	99
6) VINYL CHLORIDE	1.326	62	17088	8.87	UG/L	100
7) BROMOMETHANE	1.533	94	6800	7.43	UG/L	98
8) CHLOROETHANE	1.593	64	10167	9.69	UG/L	98
9) FLUORODICHLOROMETHANE	1.721	67	27047	9.96	UG/L	99
10) TRICHLOROFLUOROMETHANE	1.755	101	19151	8.92	UG/L	98
11) ETHANOL	1.885	45	2114	118.74	UG/L #	84
12) DI ETHYL ETHER	1.948	59	15254	11.14	UG/L	100
13) ACROLEIN	2.053	56	18582	46.65	UG/L #	94
14) ACETONE	2.170	43	77228	117.56	UG/L	100
15) 1,1-DICHLOROETHENE	2.116	61	23938	9.94	UG/L	100
16) 1,1,2-TRICL-1,2,2-TRIF...	2.107	101	10498	10.46	UG/L	92
17) IODOMETHANE	2.238	142	25502	14.84	UG/L	95
18) METHYL ACETATE	2.423	43	19464	9.42	UG/L	98
19) T-BUTYL ALCOHOL	2.619	59	17674	94.19	UG/L	100
20) ACRYLONITRILE	2.747	53	8153	10.76	UG/L	98
21) METHYLENE CHLORIDE	2.508	49	27416	9.72	UG/L	99
22) CARBON DISULFIDE	2.286	76	49989	13.28	UG/L	99
23) METHYL TERT-BUTYL ETHE...	2.747	73	44433	10.92	UG/L	99
24) TRANS 1,2-DICHLOROETHENE	2.744	61	23895	10.17	UG/L	99
25) 1,1-DICHLOROETHANE	3.170	63	29260	10.12	UG/L	100
26) VINYL ACETATE	3.233	43	334326	71.93	UG/L	99
27) DI ISOPROPYL ETHER	3.235	45	65609	10.46	UG/L	100
28) 2-BUTANONE	3.795	43	102418	103.09	UG/L	99
29) T-BUTYL ETHYL ETHER	3.608	59	55967	10.33	UG/L	100
30) CIS-1,2-DICHLOROETHENE	3.761	61	28248	9.90	UG/L	99
31) 2,2-DICHLOROPROPANE	3.753	77	18045	8.41	UG/L	99
32) ETHYL ACETATE	3.861	43	24869m	9.86	UG/L	
33) BROMOCHLOROMETHANE	4.003	128	7575	10.59	UG/L	96
34) TETRAHYDROFURAN	4.051	42	7139	10.69	UG/L #	55
36) CHLOROFORM	4.091	83	26018	9.83	UG/L	99
37) 1,1,1-TRICHLOROETHANE	4.253	97	23354	10.14	UG/L	98
38) CYCLOHEXANE	4.290	56	31235	10.41	UG/L	99
39) CARBON TETRACHLORIDE	4.406	117	19648	10.01	UG/L	98
40) 1,1-DICHLOROPROPENE	4.412	75	18209	9.77	UG/L	99
41) BENZENE	4.625	78	51503	9.81	UG/L	100
43) T-AMYLMETHYL ETHER	4.739	73	41330	10.90	UG/L	98
46) 1,2-DICHLOROETHANE	4.656	62	27586	10.30	UG/L	98
47) TRICHLOROETHENE	5.259	95	14883	10.40	UG/L	99
48) METHYLCYCLOHEXANE	5.424	83	19634	10.11	UG/L	99
49) 1,2-DICHLOROPROPANE	5.486	63	16491	10.14	UG/L	95

Data Path : Y:\1\DATA\B041819\
 Data File : VB108024.D
 Acq On : 18 Apr 2019 7:18 pm
 Operator :
 Sample : ICVD
 Misc :
 ALS Vial : 21 Sample Multiplier: 1

Inst : GCMSVOA2

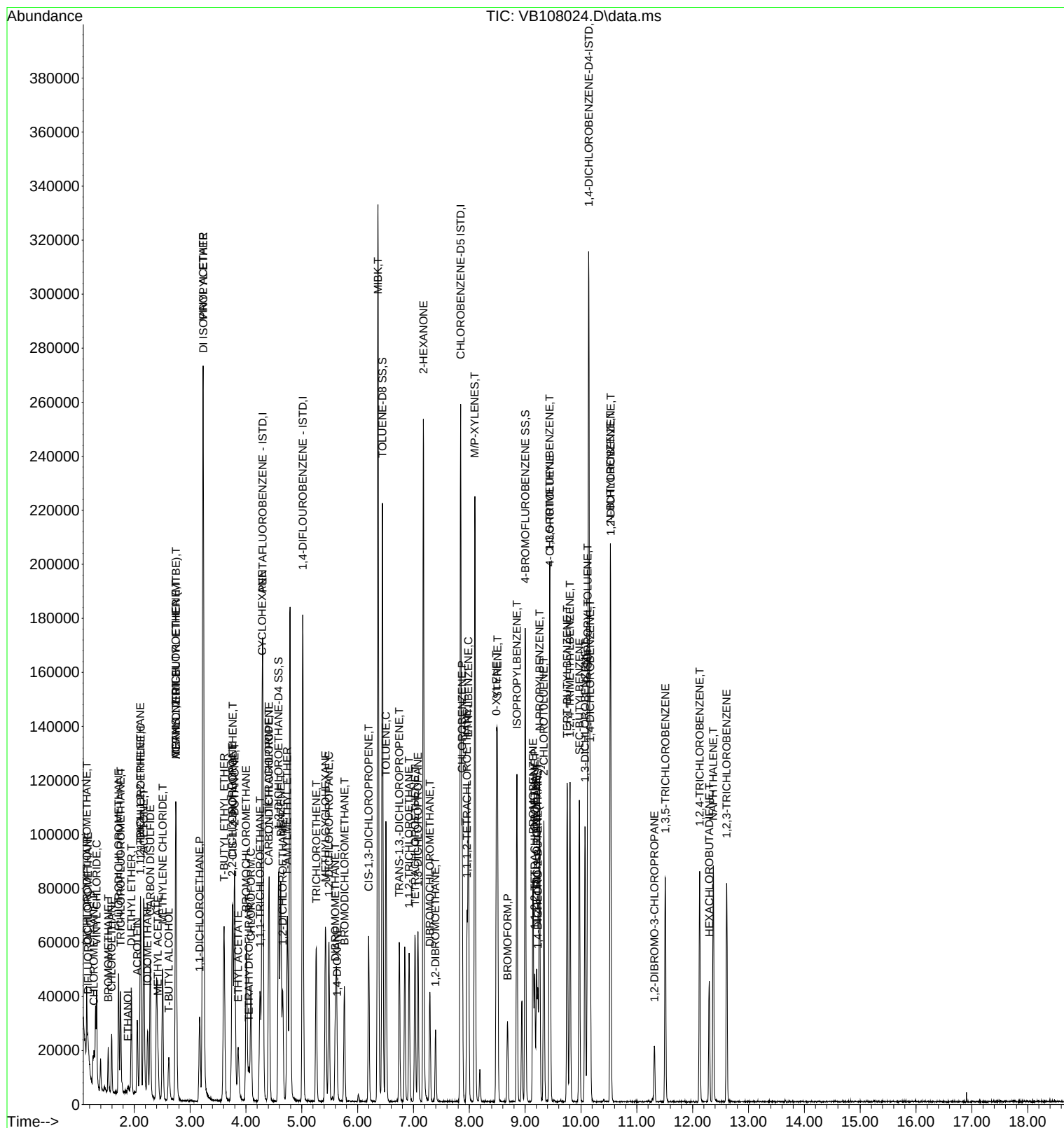
Quant Time: Apr 19 06:24:08 2019
 Quant Method : Y:\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) DIBROMOMETHANE	5.600	93	10551	11.00	UG/L	99
51) 1,4-DIOXANE	5.634	88	1163	116.29	UG/L #	95
52) BROMODICHLOROMETHANE	5.765	83	21544	10.50	UG/L	99
54) MIBK	6.362	43	205348	101.21	UG/L	100
55) CIS-1,3-DICHLOROPROPENE	6.197	75	23075	9.81	UG/L	98
56) TOLUENE	6.507	91	57346	9.92	UG/L	100
57) TRANS-1,3,-DICHLOROPRO...	6.745	75	21671	9.60	UG/L	98
59) 1,1,2-TRICHLOROETHANE	6.921	97	13780	10.51	UG/L	98
60) 2-HEXANONE	7.177	43	150290	100.64	UG/L	99
61) TETRACHLOROETHENE	7.032	164	11493	10.30	UG/L	98
62) 1,3-DICHLOROPROPANE	7.081	76	23431	10.17	UG/L	98
63) DIBROMOCHLOROMETHANE	7.294	129	17106	11.28	UG/L	98
64) 1,2-DIBROMOETHANE	7.393	107	15038	10.29	UG/L #	99
67) CHLOROBENZENE	7.871	112	39419	10.05	UG/L	99
68) 1,1,1,2-TETRACHLOROETHANE	7.959	131	15109	10.58	UG/L	97
69) ETHYLBENZENE	7.984	91	67208	9.84	UG/L	99
70) M/P-XYLENES	8.098	91	107767	19.84	UG/L	99
71) O-XYLENE	8.485	91	56170	10.03	UG/L	98
72) STYRENE	8.504	104	44627	9.99	UG/L	99
73) BROMOFORM	8.686	173	11573	10.01	UG/L	98
74) ISOPROPYLBENZENE	8.851	105	65080	10.15	UG/L	100
76) 1,1,2,2-TETRACHLOROETHANE	9.169	83	18717	10.13	UG/L	98
77) 1,4-DICHLORO-2-BUTENE(...	9.229	53	8525	9.72	UG/L	98
78) BROMOBENZENE	9.141	77	28245	10.40	UG/L	96
79) 1,2,3-TRICHLOROPROPANE	9.206	110	5822	10.00	UG/L	100
80) N-PROPYLBENZENE	9.258	91	79215	10.03	UG/L	99
81) 2-CHLOROTOLUENE	9.334	91	49209	10.14	UG/L	99
82) 1,3,5-TRIMETHYLBENZENE	9.437	105	53621	9.76	UG/L	99
83) 4-CHLOROTOLUENE	9.445	91	58120	9.98	UG/L	98
85) TERT-BUTYLBENZENE	9.752	119	45973	10.02	UG/L	100
86) 1,2,4-TRIMETHYLBENZENE	9.803	105	54781	9.53	UG/L	100
87) SEC-BUTYLBENZENE	9.971	105	64894	10.05	UG/L	98
88) 1,3-DICHLOROBENZENE	10.073	146	35520	10.36	UG/L	99
89) P-ISOPROPYLTOLUENE	10.119	119	56056	10.04	UG/L	99
90) 1,4-DICHLOROBENZENE	10.164	146	36172	10.12	UG/L	99
91) N-BUTYLBENZENE	10.525	91	49016	9.80	UG/L	97
92) 1,2-DICHLOROBENZENE	10.531	146	34408	10.39	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	11.315	75	4199	10.98	UG/L	97
94) 1,3,5-TRICHLOROBENZENE	11.511	180	23008	10.52	UG/L	97
95) 1,2,4-TRICHLOROBENZENE	12.125	180	22007	10.24	UG/L	99
96) HEXACHLOROBUTADIENE	12.298	225	8031	10.96	UG/L	97
97) NAPHTHALENE	12.369	128	58538	10.36	UG/L	100
98) 1,2,3-TRICHLOROBENZENE	12.608	180	20182	10.43	UG/L	99

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

282

Inst : GCMSVOA2



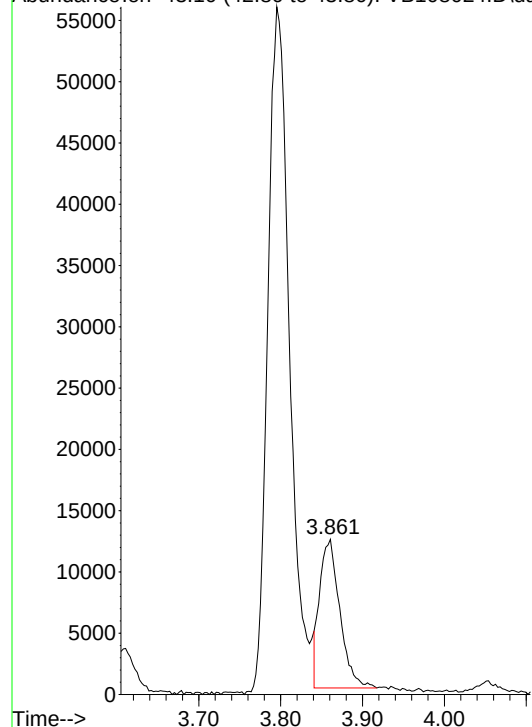
Data Path : Y:\1\DATA\B041819\
Data File : VB108024.D
Acq On : 18 Apr 2019 7:18 pm
Operator :
Sample : ICVD
Misc :

Quant Time : Fri Apr 19 06:24:08 2019
Quant Method : Y:\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): VB108024.D\data



Original Int. Results

RT : 3.86
Area : 20754
Amount: 8.22943

Manual Int. Results

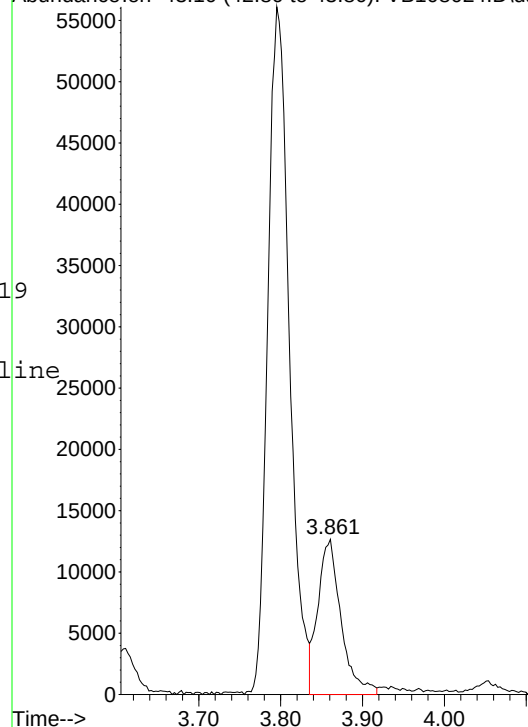
Fri Apr 19 06:23:10 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.86
Area : 24869
Amount: 9.86112

Manual Integration

ETHYL ACETATE

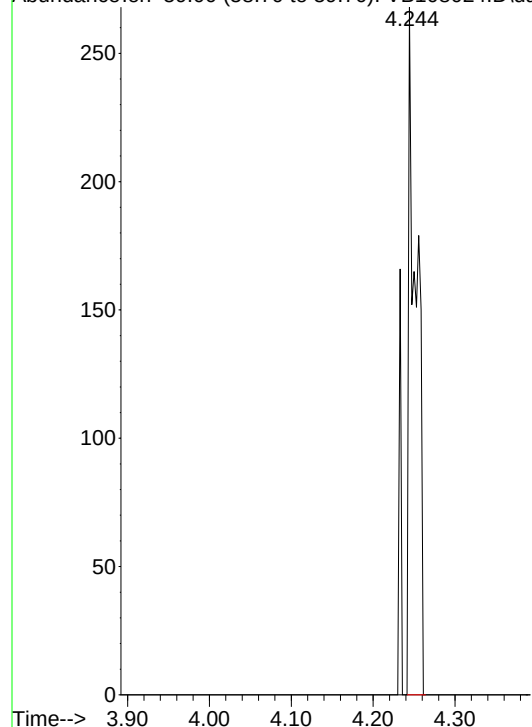
Abundance on 43.10 (42.80 to 43.80): VB108024.D\data



Original Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): VB108024.D\data



Original Int. Results

RT : 4.24
Area : 182
Amount: 0.125108

Manual Int. Results

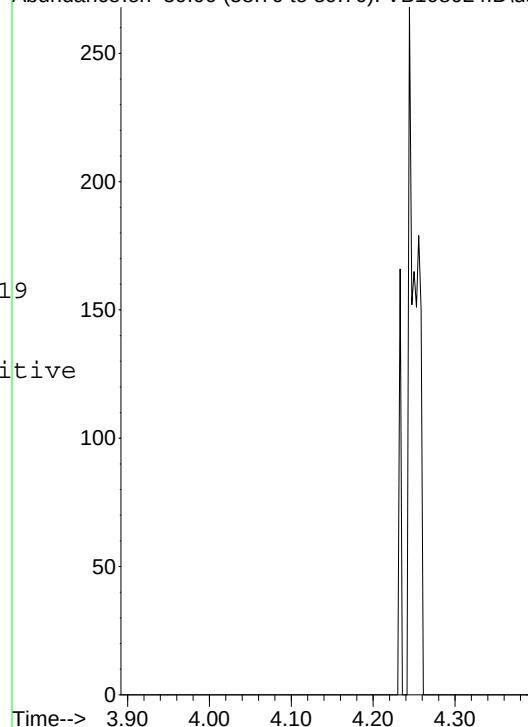
Fri Apr 19 06:23:20 2019

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

Manual Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): VB108024.D\data



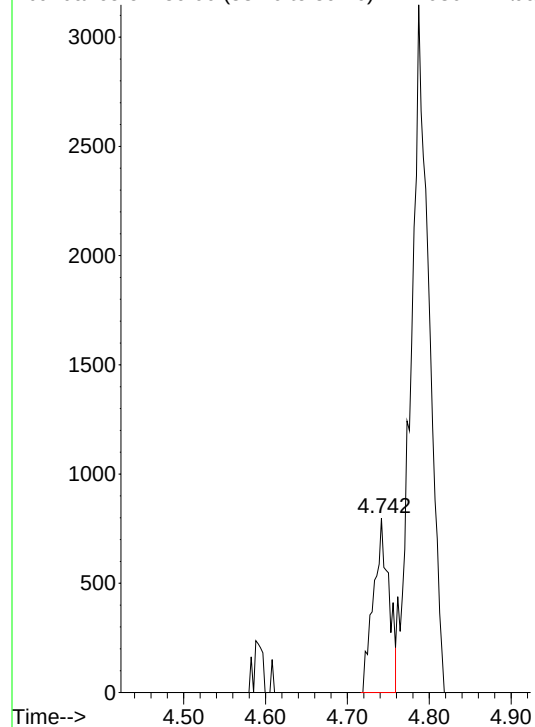
Data Path : Y:\1\DATA\B041819\
Data File : VB108024.D
Acq On : 18 Apr 2019 7:18 pm
Operator :
Sample : ICVD
Misc :

Quant Time : Fri Apr 19 06:24:08 2019
Quant Method : Y:\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

T-AMYL ALCOHOL

Abundance on 59.00 (58.70 to 59.70): VB108024.D\data



Original Int. Results

RT : 4.74
Area : 1039
Amount: 7.74369

Manual Int. Results

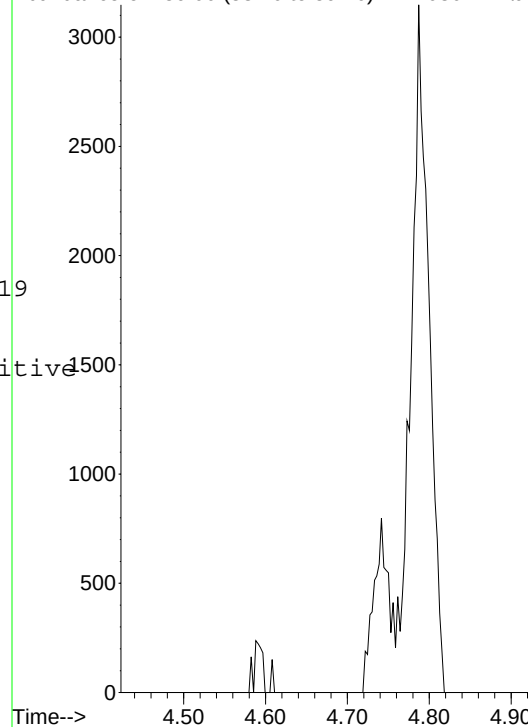
Fri Apr 19 06:23:27 2019

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

Manual Integration

T-AMYL ALCOHOL

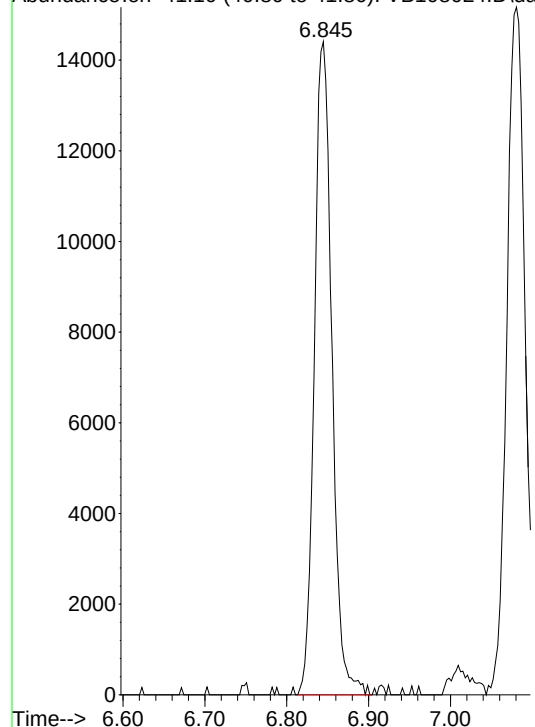
Abundance on 59.00 (58.70 to 59.70): VB108024.D\data



Original Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108024.D\data



Original Int. Results

RT : 6.84
Area : 21333
Amount: 0

Manual Int. Results

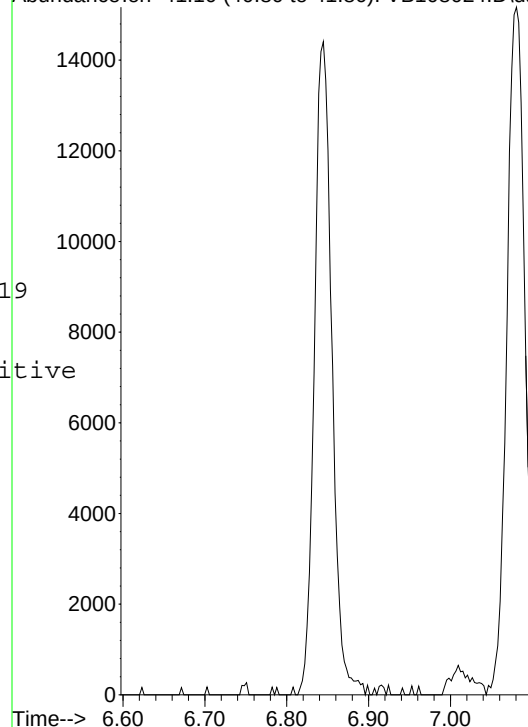
Fri Apr 19 06:23:49 2019

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

Manual Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): VB108024.D\data

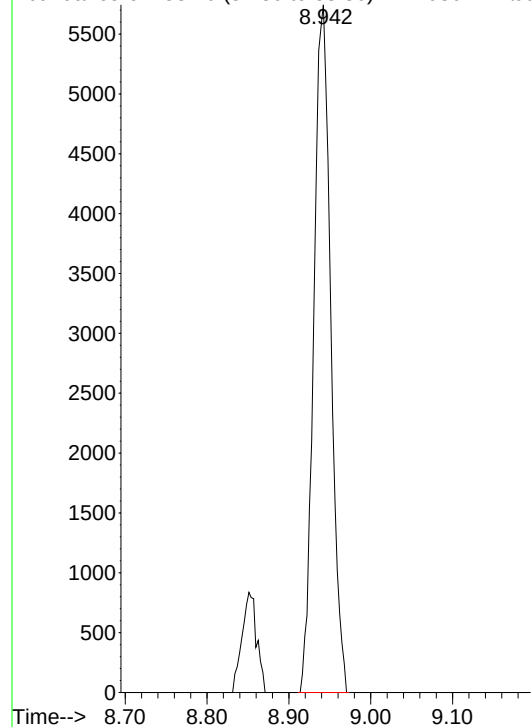


Data Path : Y:\1\DATA\B041819\
Data File : VB108024.D
Acq On : 18 Apr 2019 7:18 pm
Operator :
Sample : ICVD
Misc :

Quant Time : Fri Apr 19 06:24:08 2019
Quant Method : Y:\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108024.D\data



Original Int. Results

RT : 8.94
Area : 8251
Amount: 0

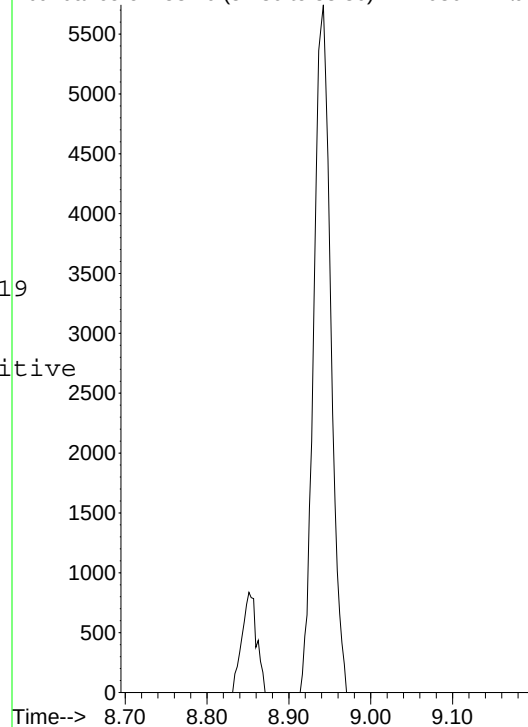
Manual Int. Results

Fri Apr 19 06:24:00 2019

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

Manual Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): VB108024.D\data



INITIAL CALIBRATION STANDARDS

286

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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-DICHL0...	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

Method	Path : C:\msdchem\1\methods\												
Method	File : C051619.M												
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-DICHL0...	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-DICHL0...											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-CHLOROTOLUENE	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-DICHLOROBEN...	1.096	1.211	1.210	1.184	1.150	1.155	1.220	1.261	1.148	1.216	1.185	4.05

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

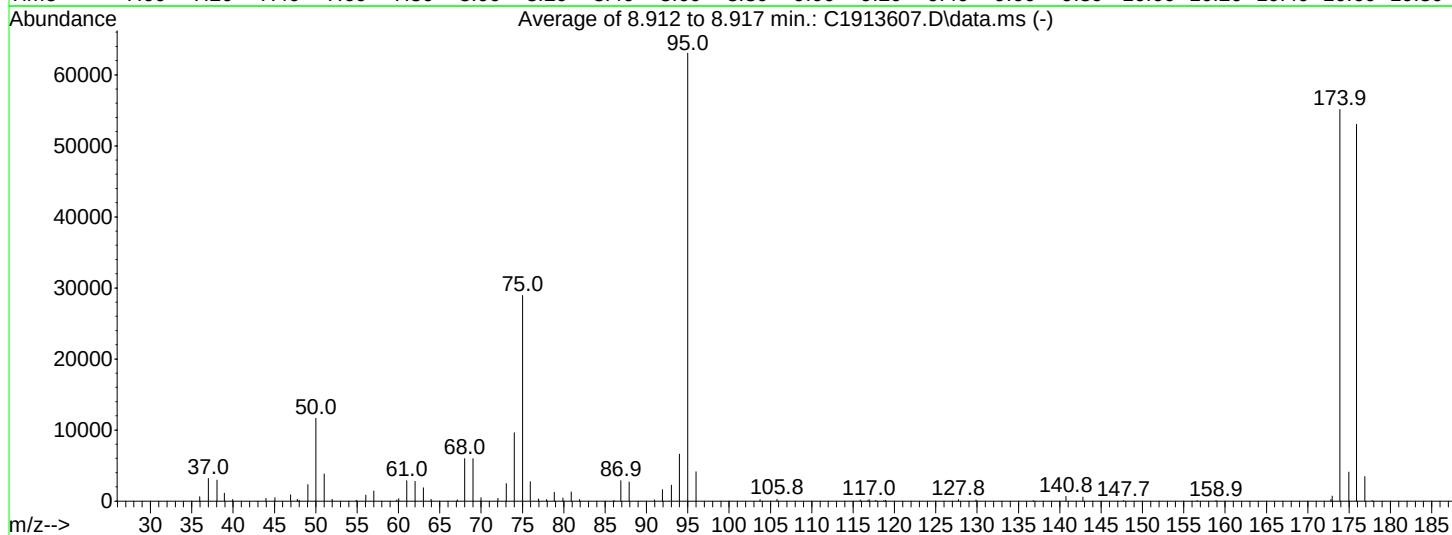
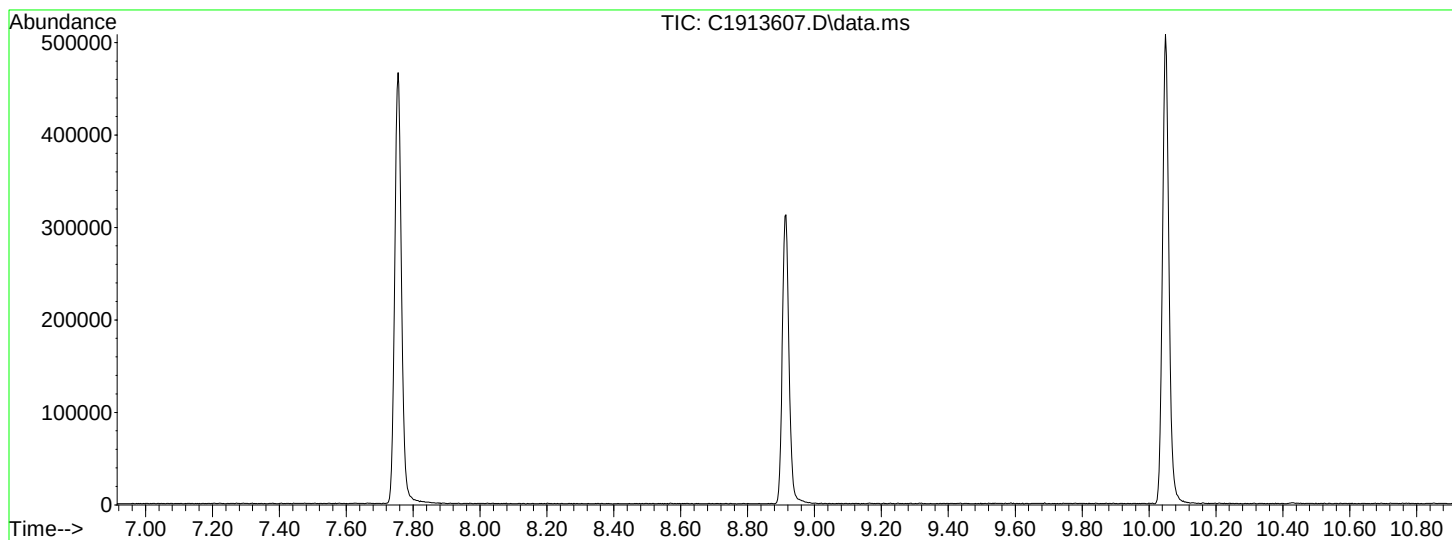
Data Path : C:\msdchem\1\data\C051619\
 Data File : C1913607.D
 Acq On : 16 May 2019 9:46 am
 Operator :
 Sample : BFB
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

291

Inst : GCMSVOA3

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
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Inst : GCMSVOA3

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) ACRROLEIN	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-AMYL METHYL 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
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Inst : GCMSVOA3

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-CHLOROETHYL VINYLETHER	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) O-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-CHLOROTOLUENE	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

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Inst : GCMSV0A3

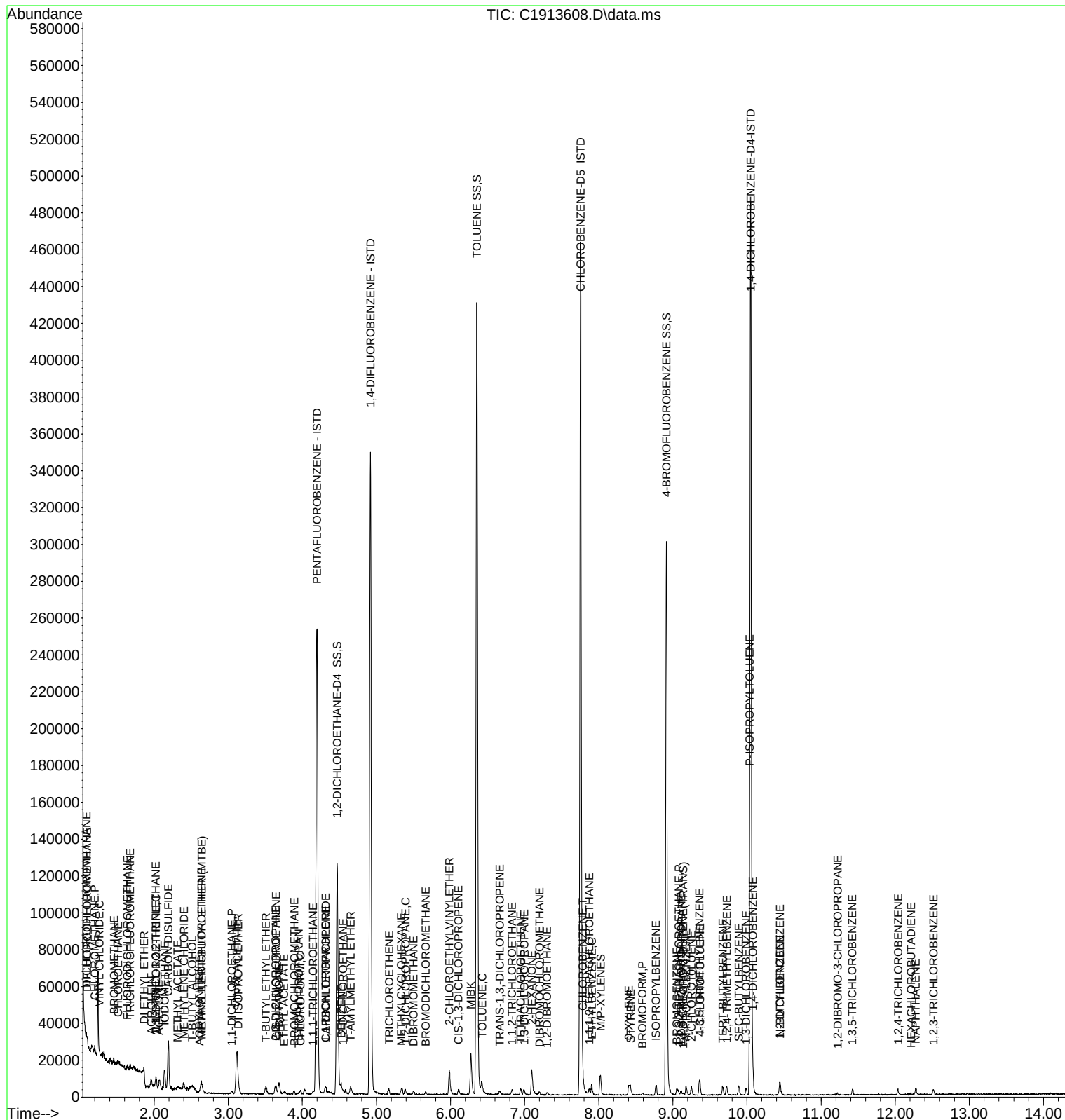
Quant Time: May 16 14:37:18 2019

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

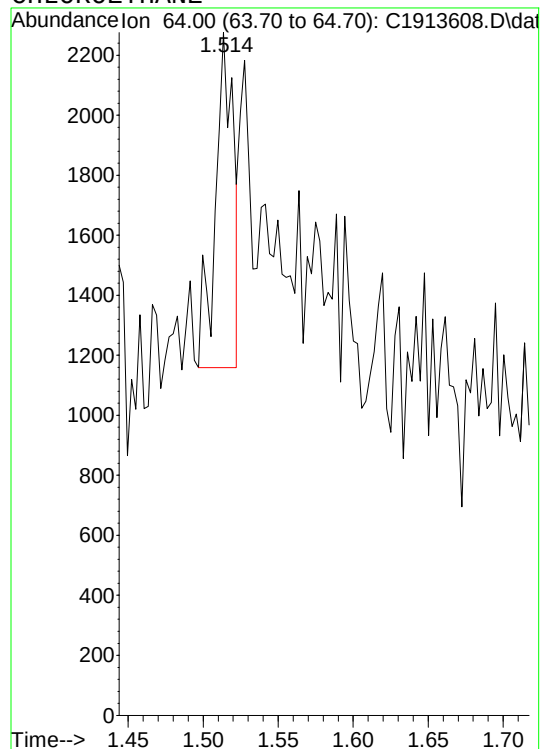
Response via : Initial Calibration



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

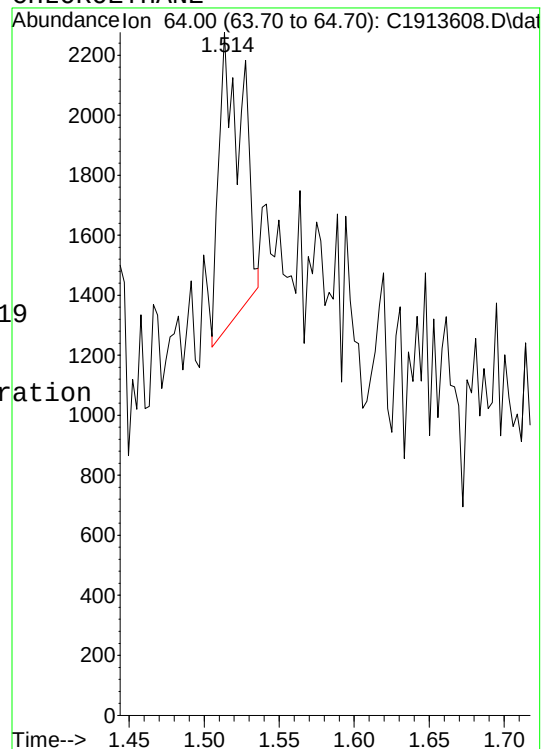
RT : 1.51
Area : 928
Amount: 0.494269

Manual Int. Results

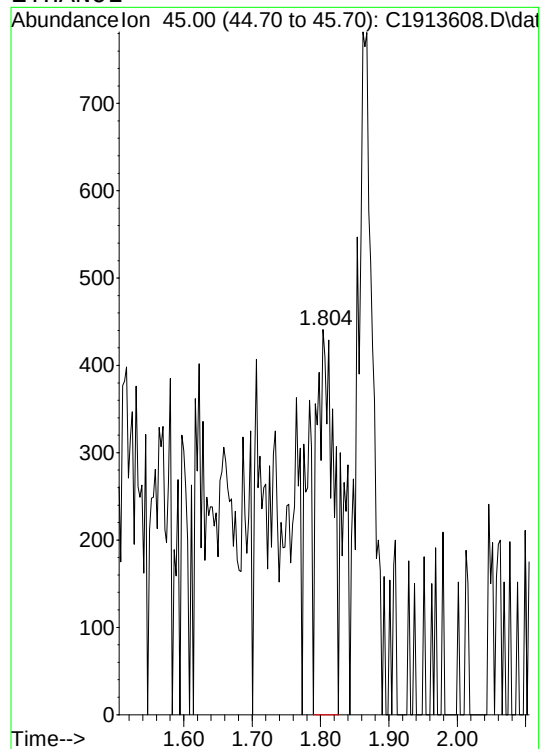
Thu May 16 14:35:50 2019

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

Manual Integration
CHLOROETHANE



Original Integration
ETHANOL



Original Int. Results

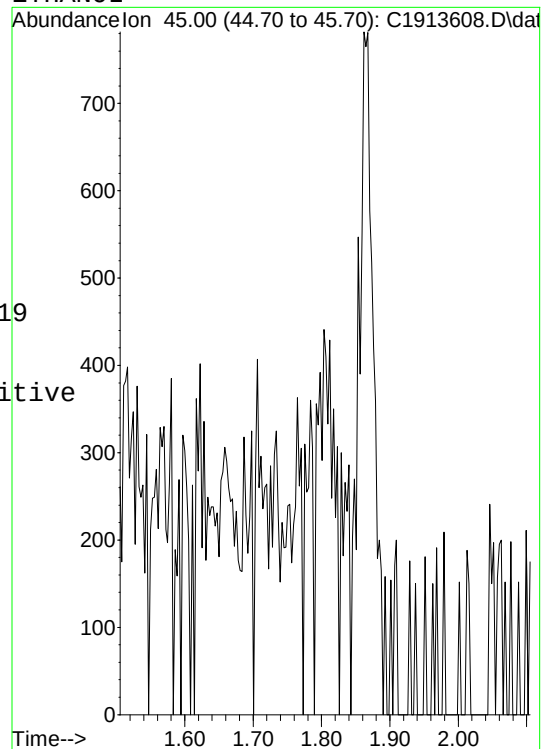
RT : 1.80
Area : 689
Amount: -11.1349

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

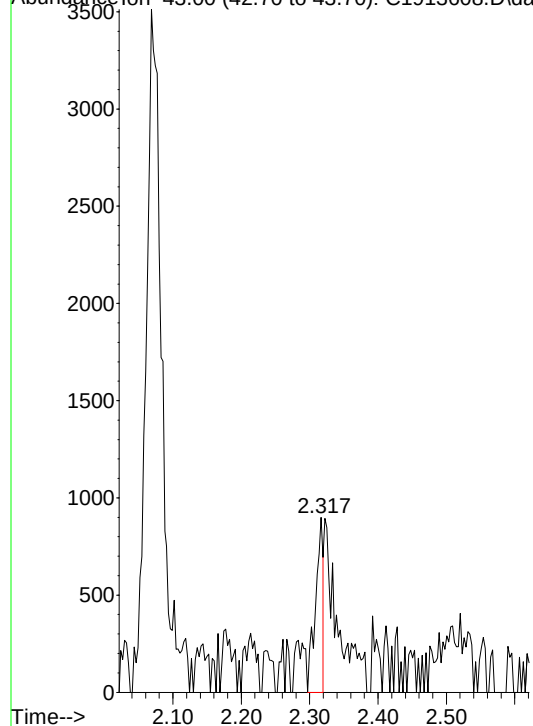


Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

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

Abundance Ion 43.00 (42.70 to 43.70): C1913608.D\data



Original Int. Results

RT : 2.32
Area : 688
Amount: 0.108353

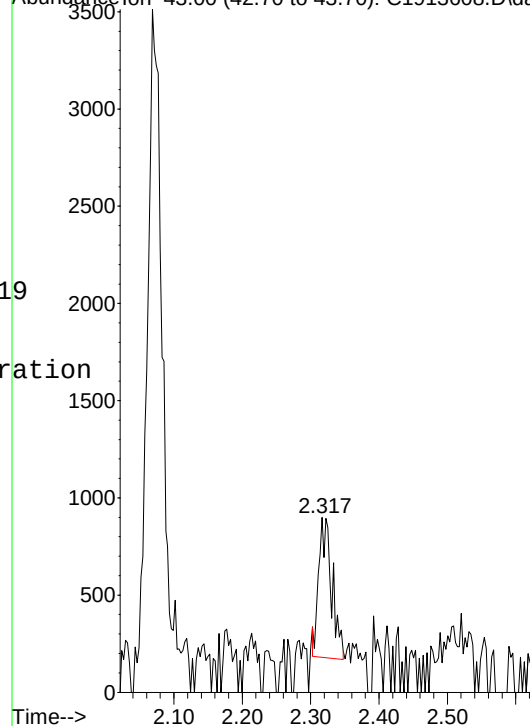
Manual Int. Results

Thu May 16 14:36:05 2019

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

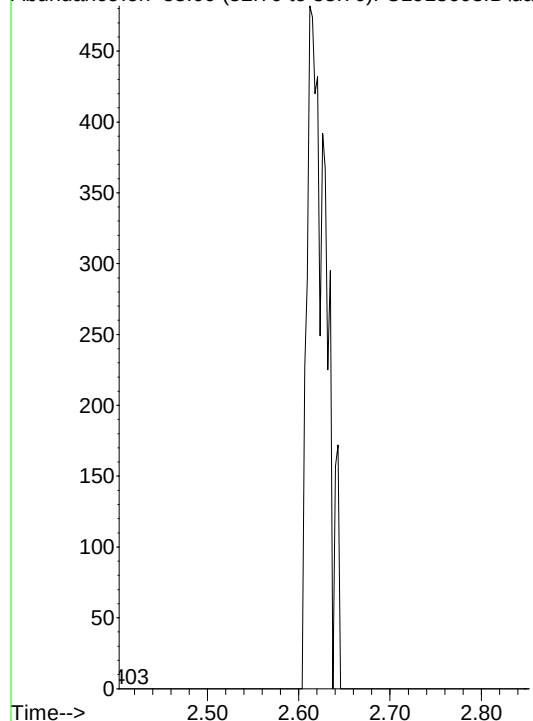
Manual Integration
METHYL ACETATE

Abundance Ion 43.00 (42.70 to 43.70): C1913608.D\data



Original Integration
ACRYLONITRILE

Abundance Ion 53.00 (52.70 to 53.70): C1913608.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

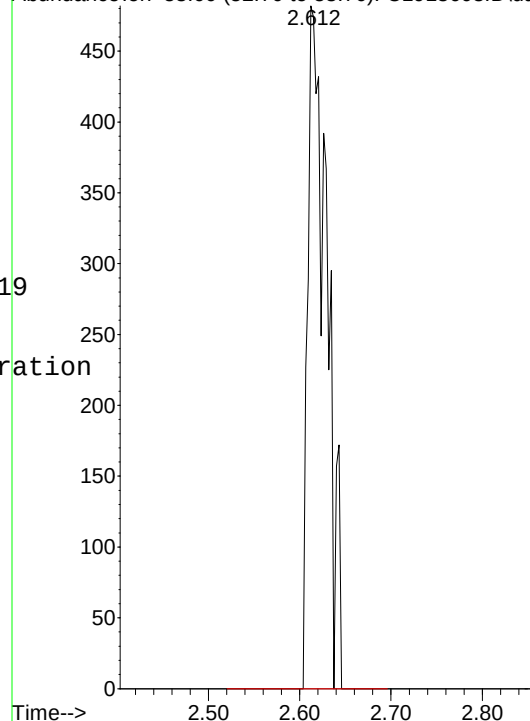
Manual Int. Results

Thu May 16 14:36:08 2019

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

Manual Integration
ACRYLONITRILE

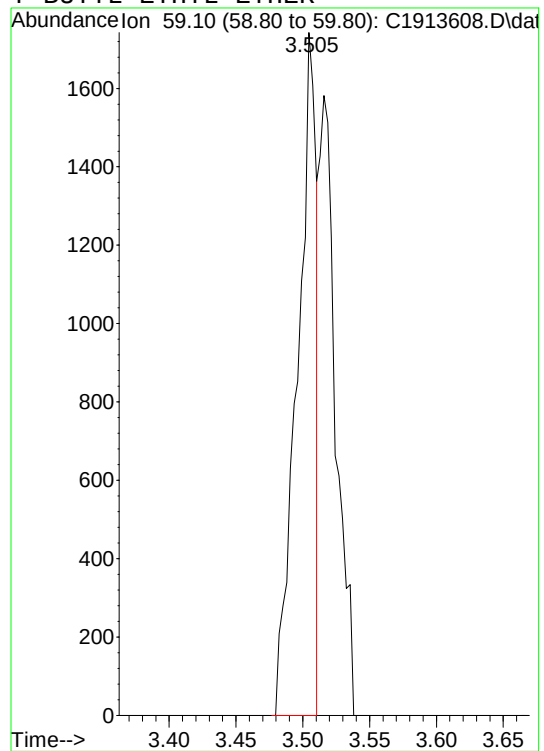
Abundance Ion 53.00 (52.70 to 53.70): C1913608.D\data



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

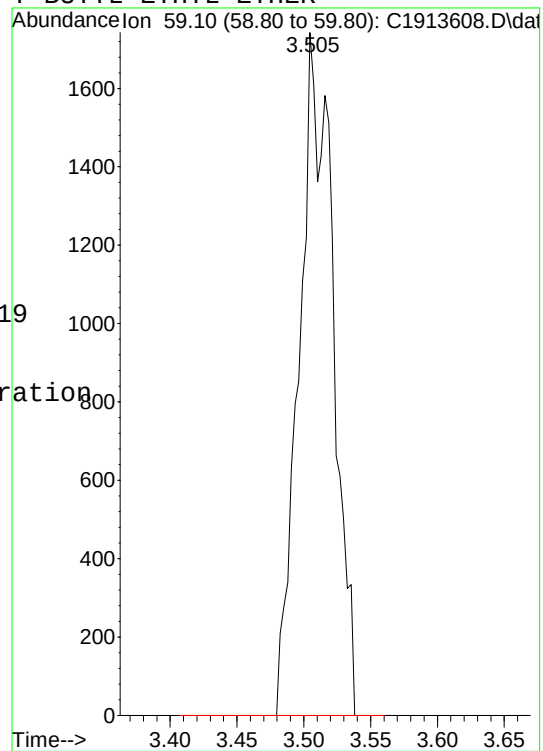
RT : 3.50
Area : 1698
Amount: 0.181217

Manual Int. Results

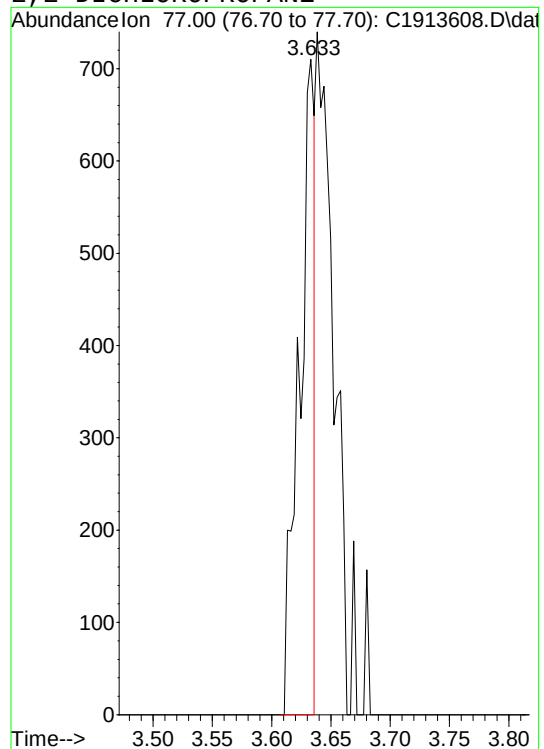
Thu May 16 14:36:16 2019

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

Manual Integration
T-BUTYL ETHYL ETHER



Original Integration
2,2-DICHLOROPROPANE



Original Int. Results

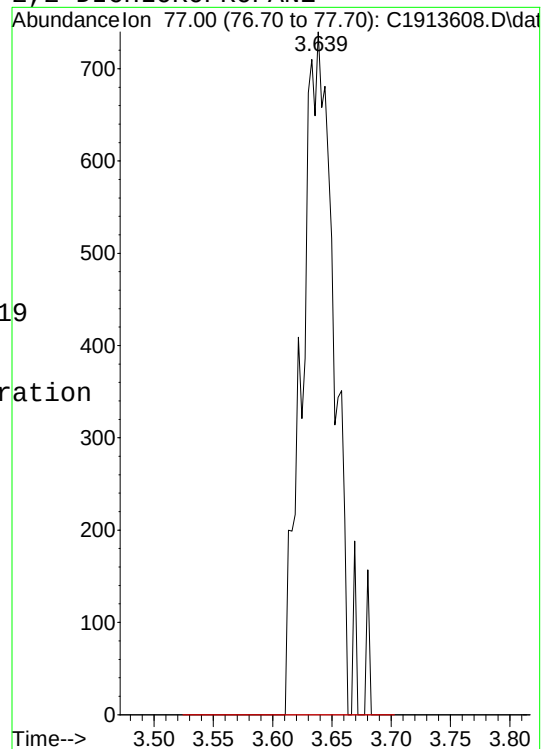
RT : 3.63
Area : 630
Amount: 0.188163

Manual Int. Results

Thu May 16 14:36:20 2019

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

Manual Integration
2,2-DICHLOROPROPANE



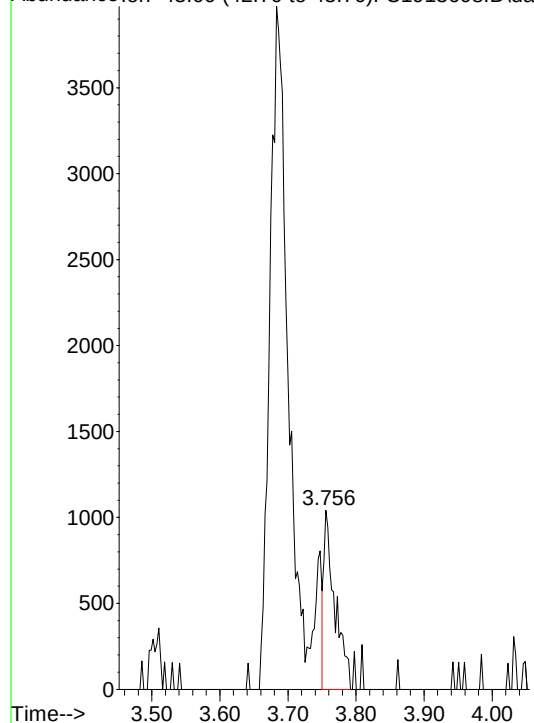
Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

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

Abundance Ion 43.00 (42.70 to 43.70): C1913608.D\data



Original Int. Results

RT : 3.76
Area : 1164
Amount: 0.582562

Manual Int. Results

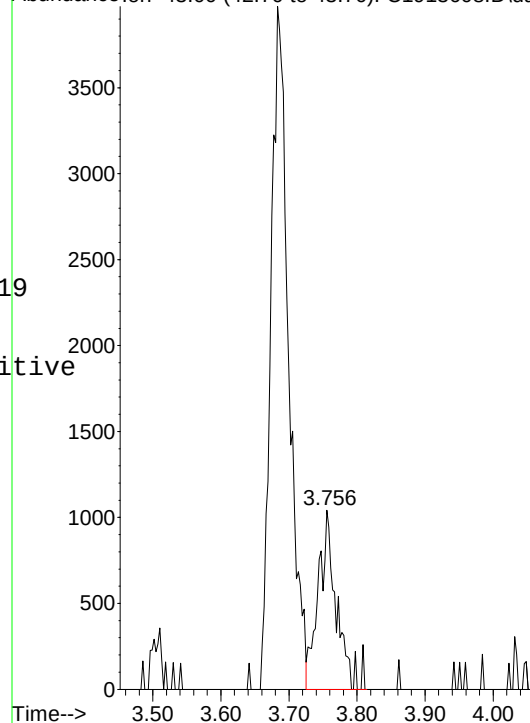
Thu May 16 14:36:23 2019

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

Manual Integration

ETHYL ACETATE

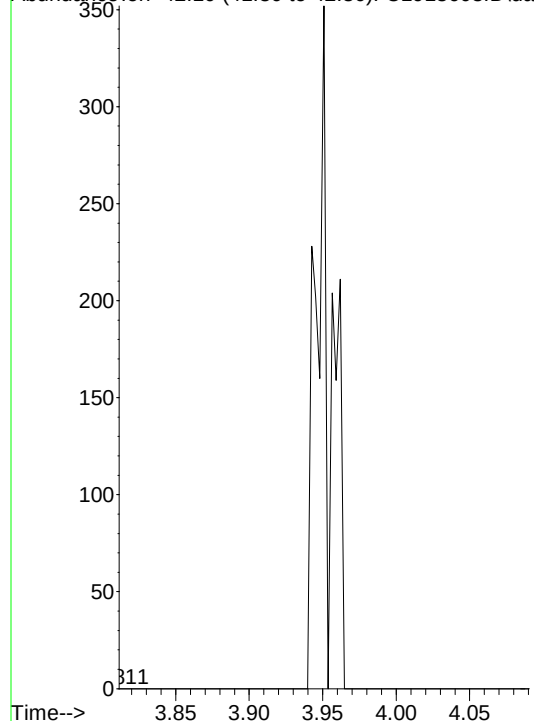
Abundance Ion 43.00 (42.70 to 43.70): C1913608.D\data



Original Integration

TETRAHYDROFURAN

Abundance Ion 42.10 (41.80 to 42.80): C1913608.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

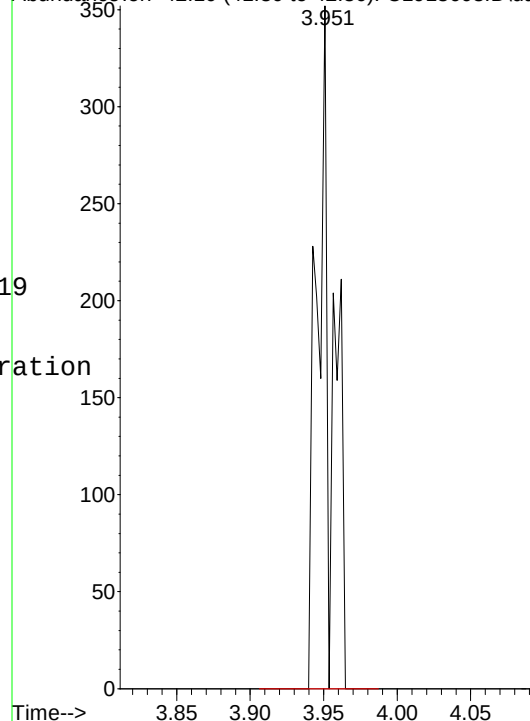
Thu May 16 14:36:30 2019

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

Manual Integration

TETRAHYDROFURAN

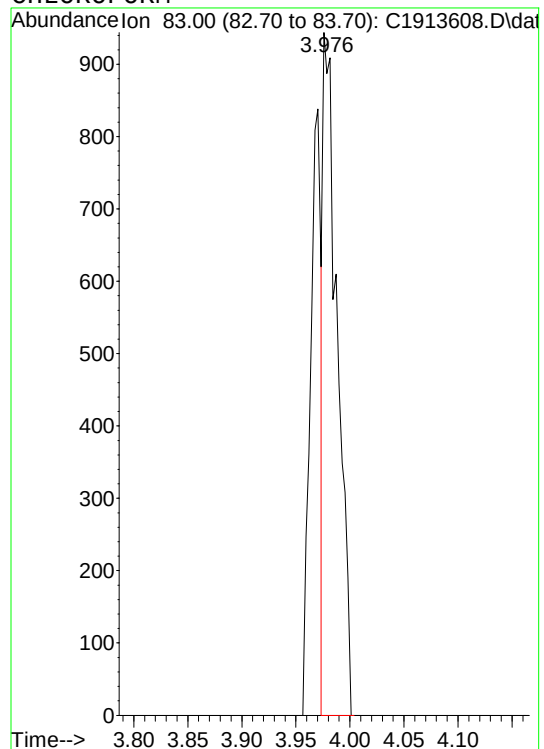
Abundance Ion 42.10 (41.80 to 42.80): C1913608.D\data



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

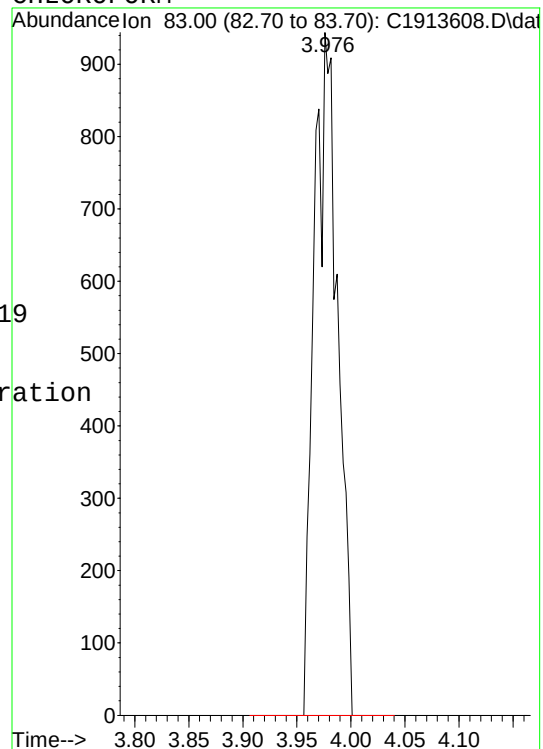
RT : 3.98
Area : 875
Amount: 0.194519

Manual Int. Results

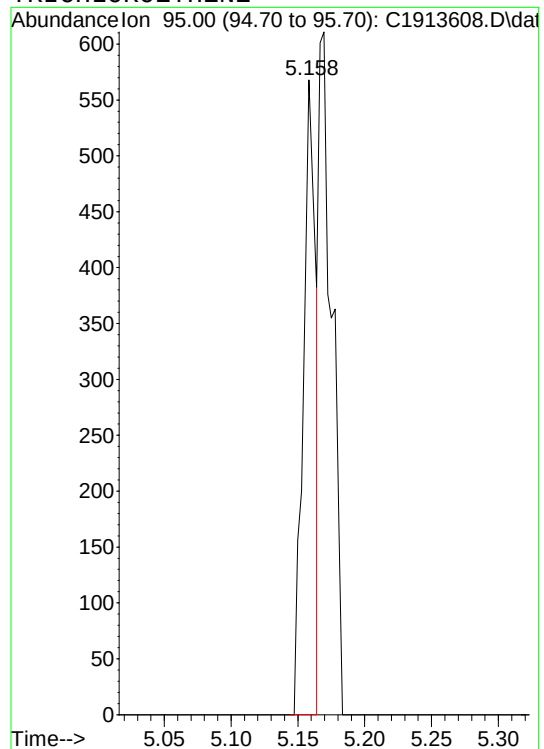
Thu May 16 14:36:32 2019

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

Manual Integration
CHLOROFORM



Original Integration
TRICHLOROETHENE



Original Int. Results

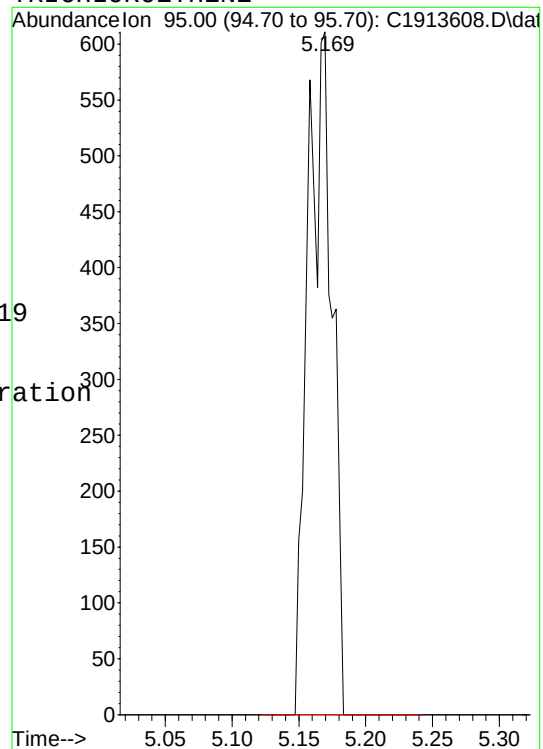
RT : 5.16
Area : 363
Amount: 0.155525

Manual Int. Results

Thu May 16 14:36:41 2019

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

Manual Integration
TRICHLOROETHENE



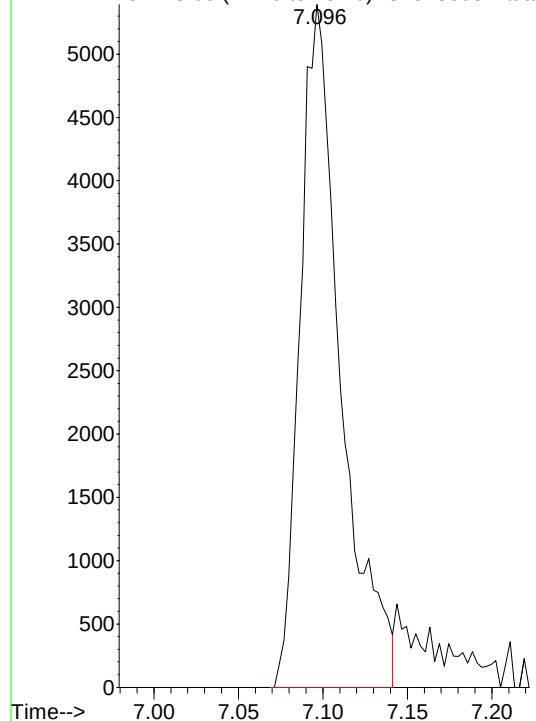
Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

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

Abundance Ion 43.00 (42.70 to 43.70): C1913608.D\data



Original Int. Results

RT : 7.10
Area : 8971
Amount: 3.21701

Manual Int. Results

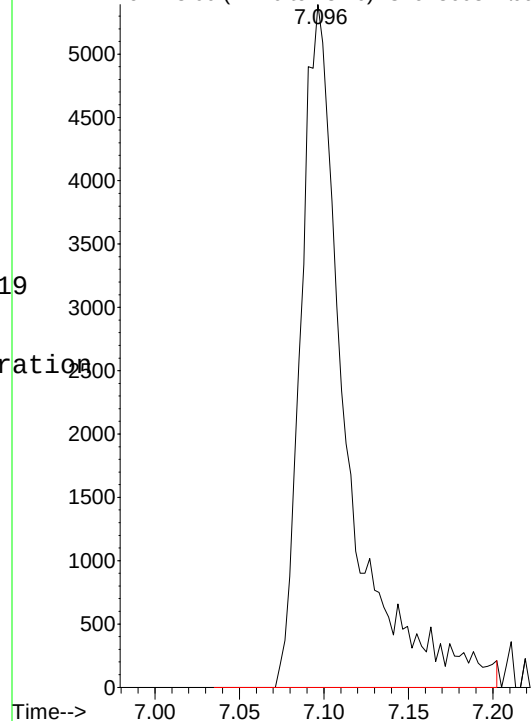
Thu May 16 14:36:53 2019

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

Manual Integration

2-HEXANONE

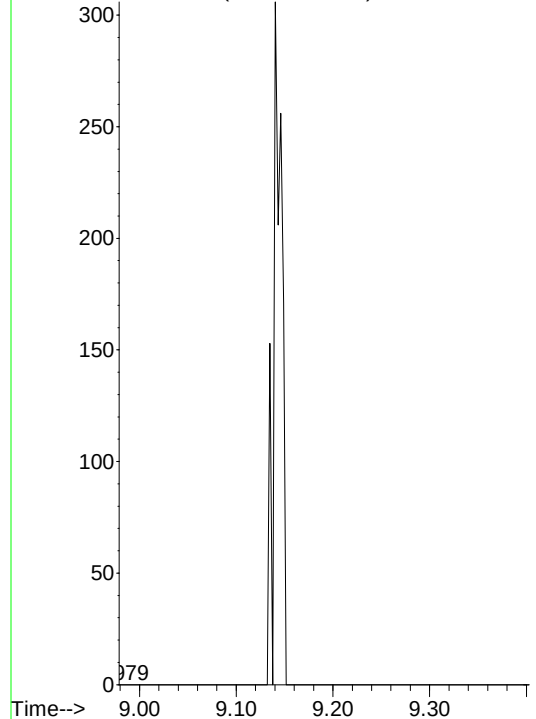
Abundance Ion 43.00 (42.70 to 43.70): C1913608.D\data



Original Integration

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

Abundance Ion 53.00 (52.70 to 53.70): C1913608.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

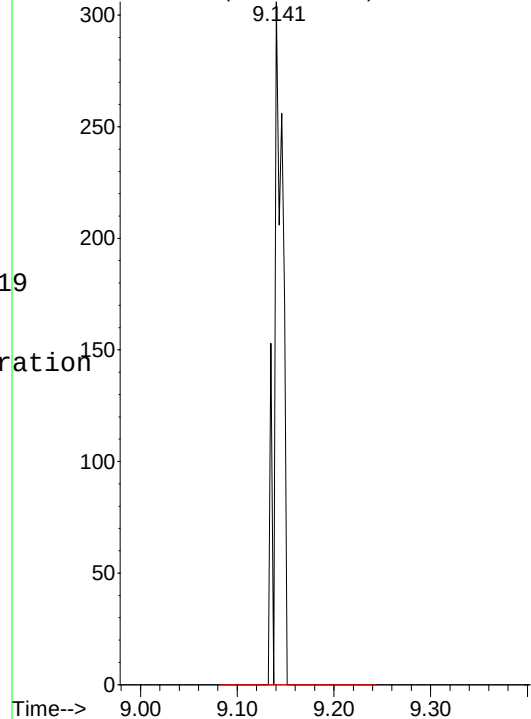
Thu May 16 14:37:03 2019

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

Manual Integration

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

Abundance Ion 53.00 (52.70 to 53.70): C1913608.D\data



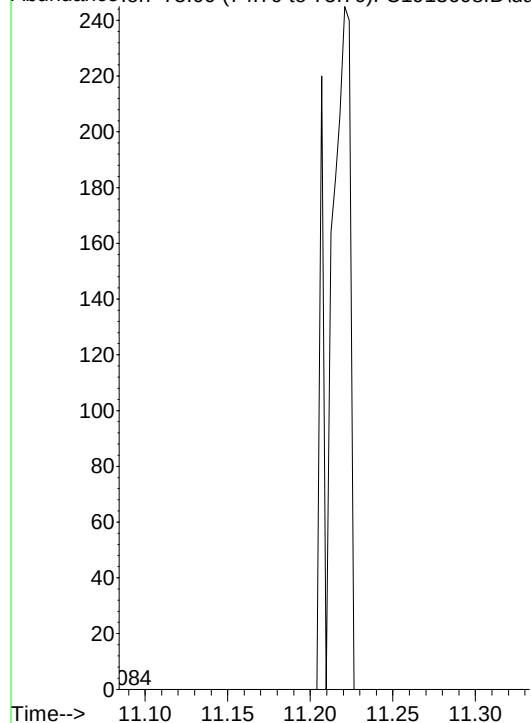
Data Path : C:\msdchem\1\data\C051619\
Data File : C1913608.D
Acq On : 16 May 2019 10:12 am
Operator :
Sample : 8260STD 0.4PPB 1905273
Misc :

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

Abundance Ion 75.00 (74.70 to 75.70): C1913608.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

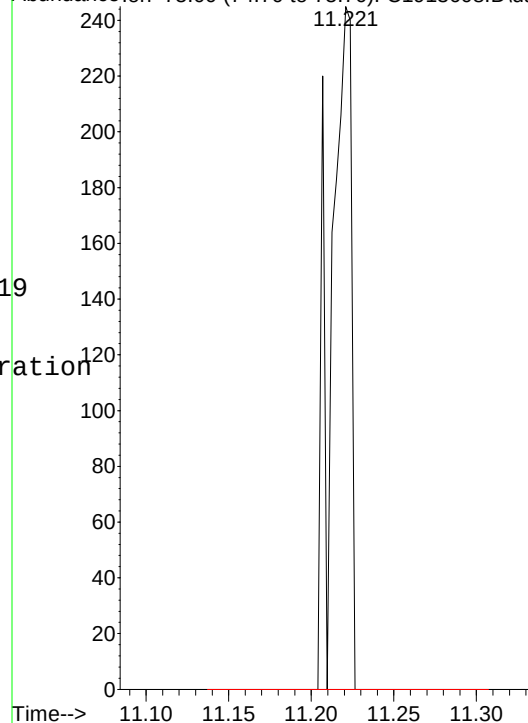
Thu May 16 14:37:14 2019

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

Manual Integration

1,2-DIBROMO-3-CHLOROPROPANE

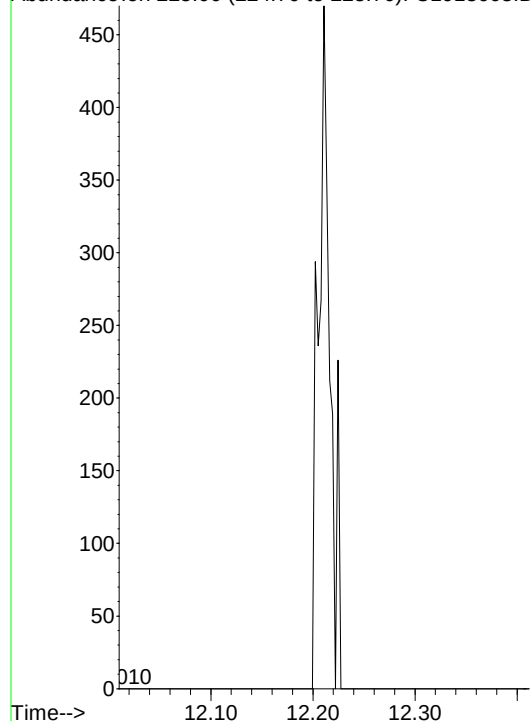
Abundance Ion 75.00 (74.70 to 75.70): C1913608.D\data



Original Integration

HEXACHLOROBUTADIENE

Abundance Ion 225.00 (224.70 to 225.70): C1913608.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

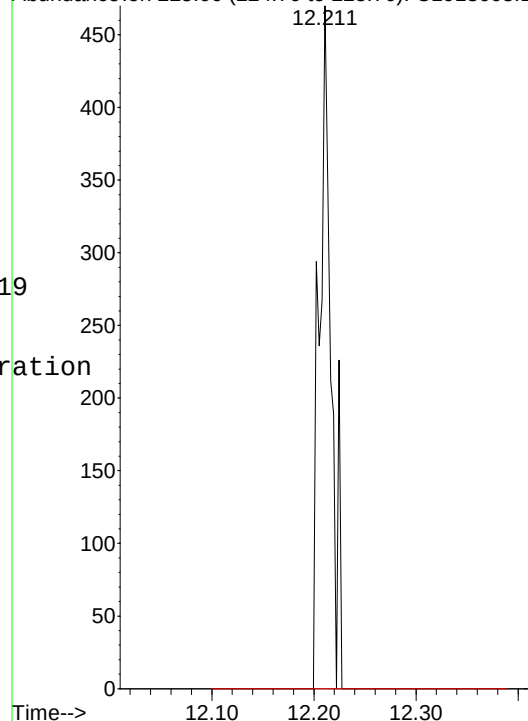
Thu May 16 14:37:18 2019

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

Manual Integration

HEXACHLOROBUTADIENE

Abundance Ion 225.00 (224.70 to 225.70): C1913608.D\data



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 :
 ALS Vial : 9 Sample Multiplier: 1

Inst : GCMSVOA3

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-AMYL METHYL 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
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Inst : GCMSVOA3

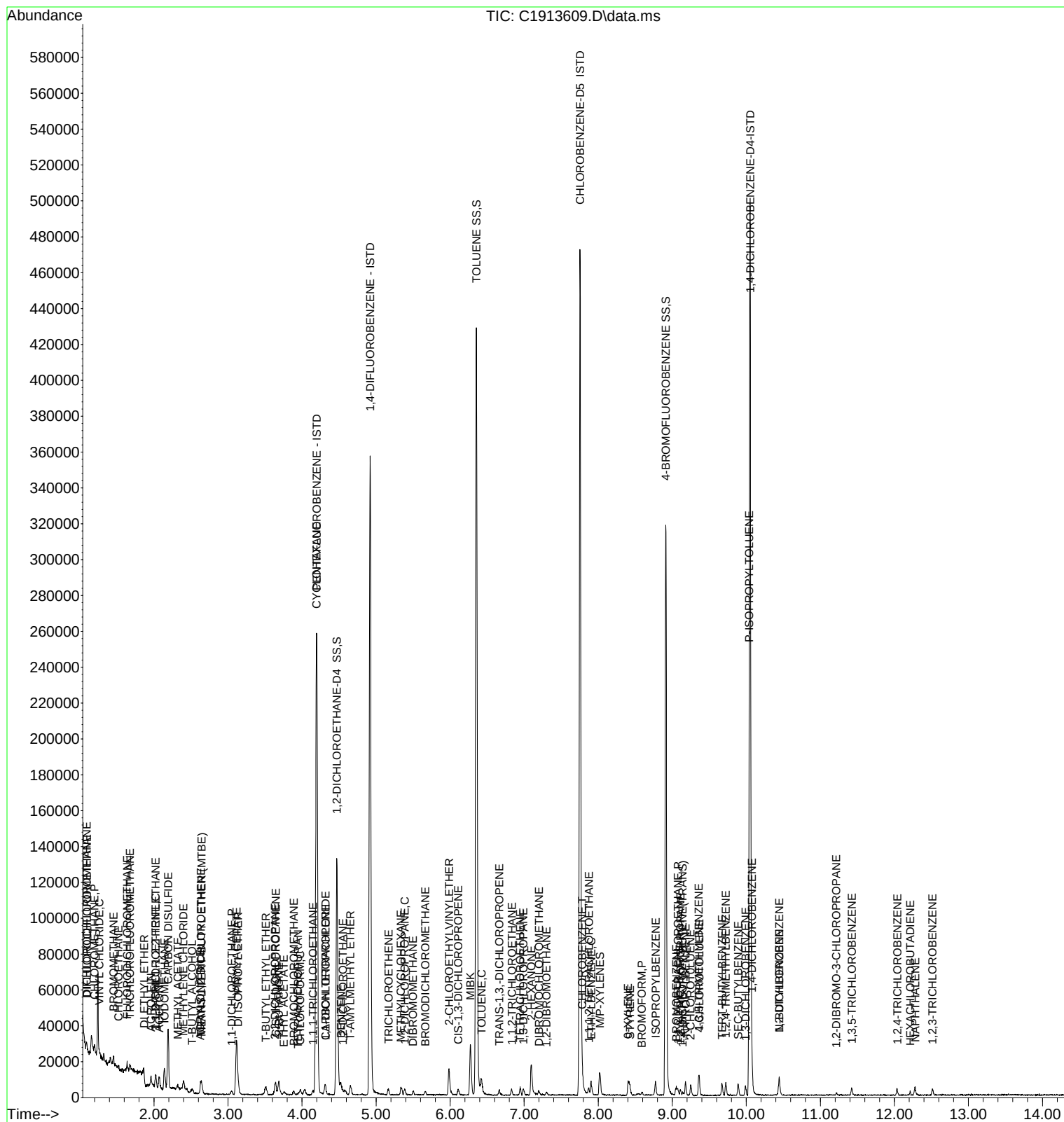
Quant Time: May 16 14:39:05 2019
 Quant Method : C:\msdchem\1\methods\C053018.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Wed Mar 13 07:34:04 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) BROMODICHLOROMETHANE	5.663	83	1389	0.41	UG/L #	24
58) 2-CHLOROETHYL VINYLETHANOL	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-DICHLOROPROPENE	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) O-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-CHLOROTOLUENE	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-CHLOROPROPENE	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

304

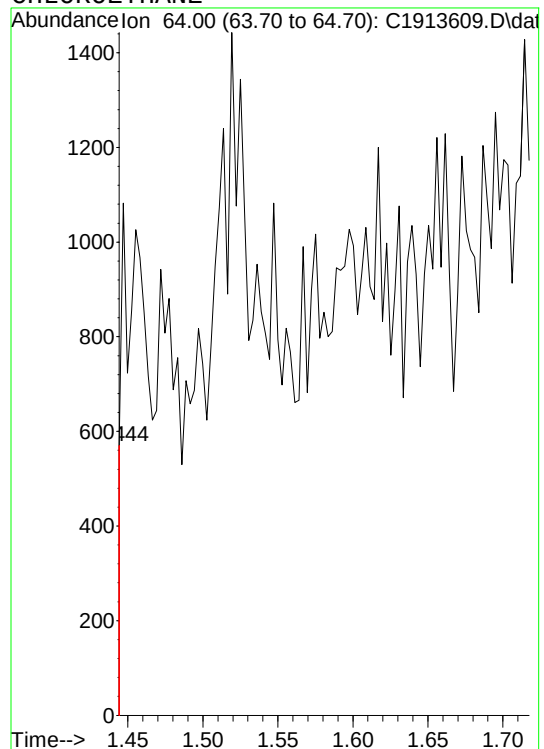
Quant Time: May 16 14:39:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



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

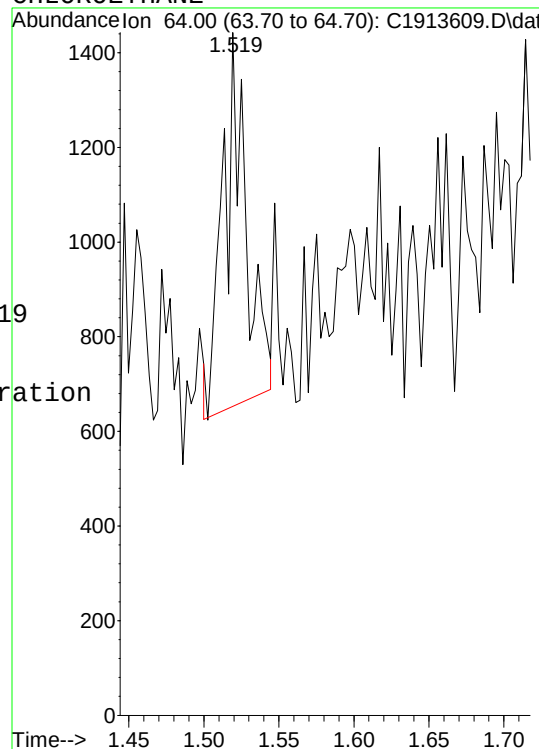
RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

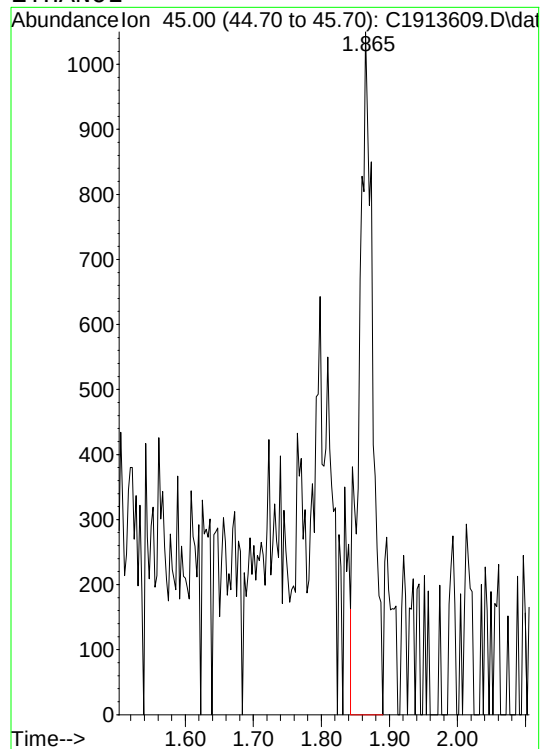
Thu May 16 14:37:45 2019

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

Manual Integration CHLOROETHANE



Original Integration ETHANOL



Original Int. Results

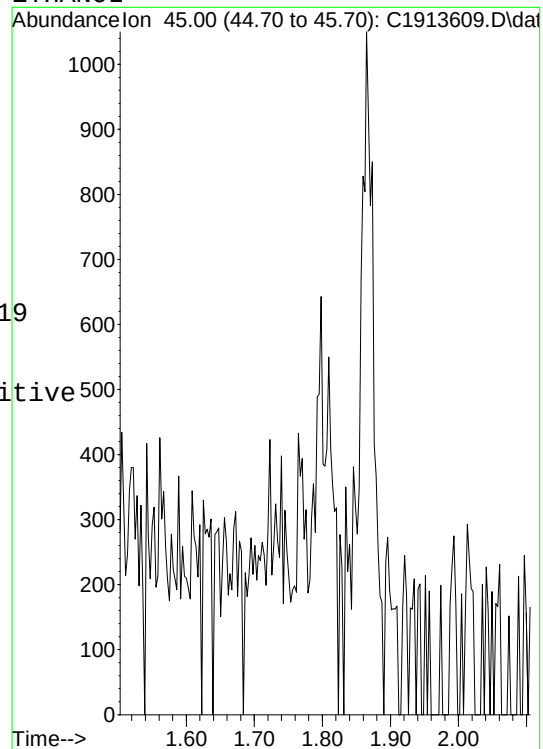
RT : 1.87
Area : 1444
Amount: 3.76042

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



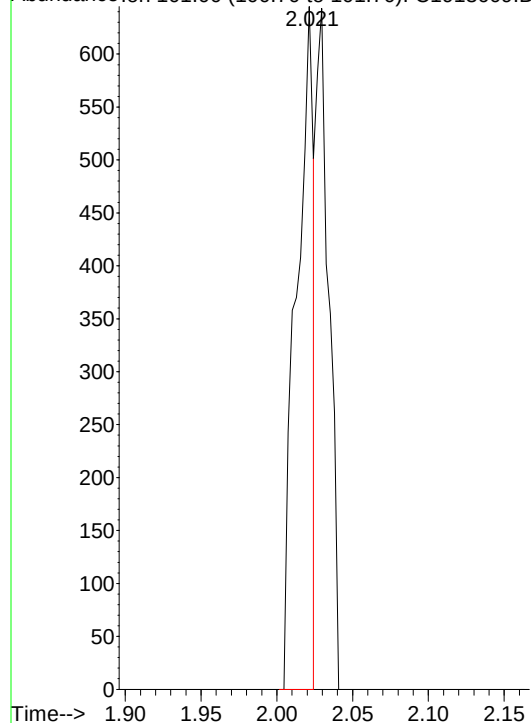
Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

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

Abundance on 101.00 (100.70 to 101.70): C1913609.D



Original Int. Results

RT : 2.02
Area : 508
Amount: 0.270495

Manual Int. Results

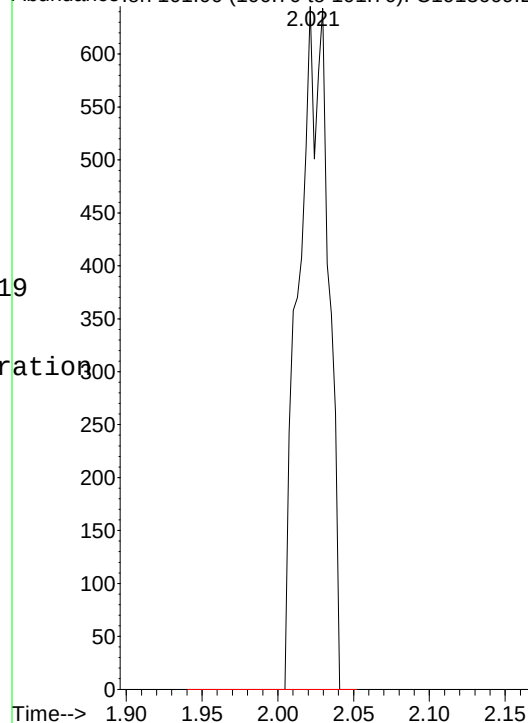
Thu May 16 14:37:56 2019

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

Manual Integration

1,1,2-TRICL-1,2,2-TRIFLETHANE

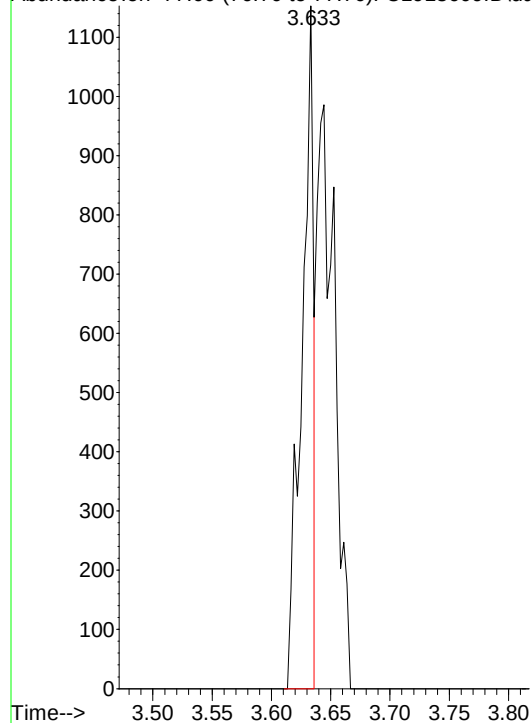
Abundance on 101.00 (100.70 to 101.70): C1913609.D



Original Integration

2,2-DICHLOROPROPANE

Abundance on 77.00 (76.70 to 77.70): C1913609.D\data



Original Int. Results

RT : 3.63
Area : 776
Amount: 0.227808

Manual Int. Results

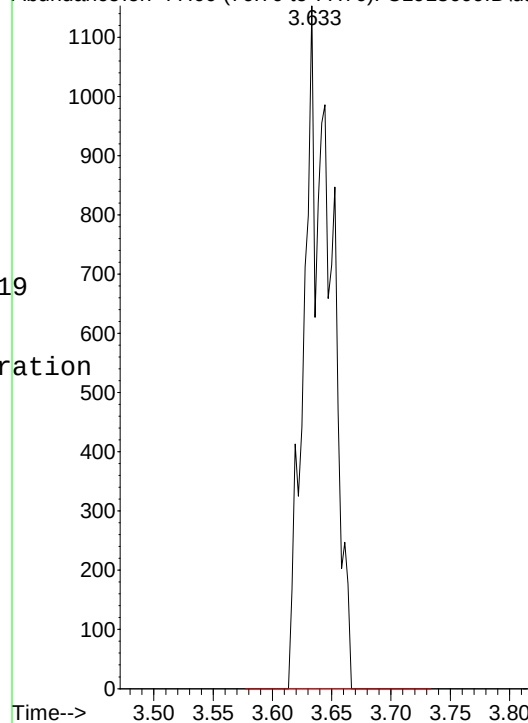
Thu May 16 14:38:06 2019

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

Manual Integration

2,2-DICHLOROPROPANE

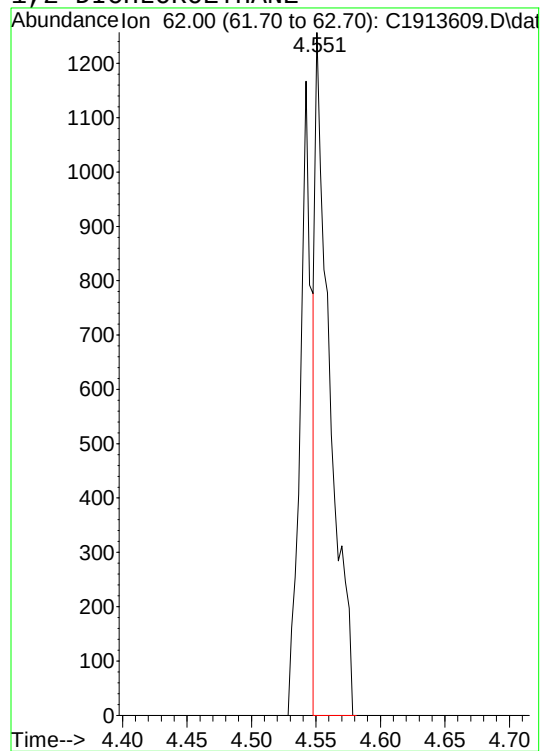
Abundance on 77.00 (76.70 to 77.70): C1913609.D\data



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

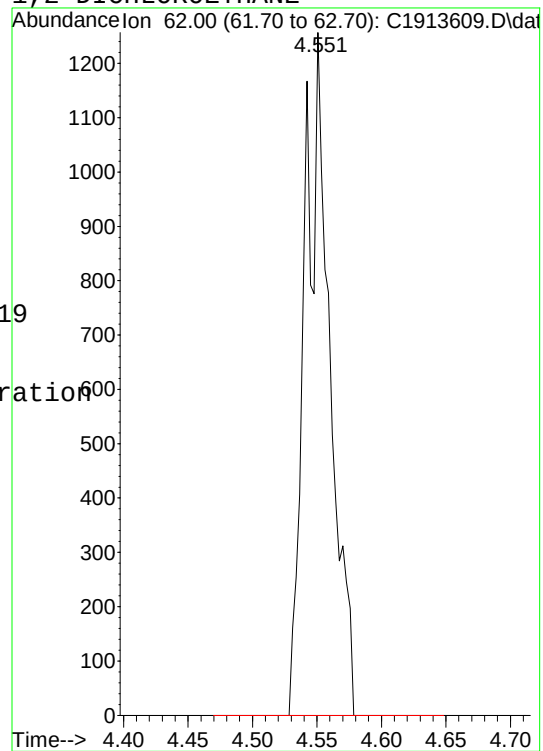
RT : 4.55
Area : 972
Amount: 0.208962

Manual Int. Results

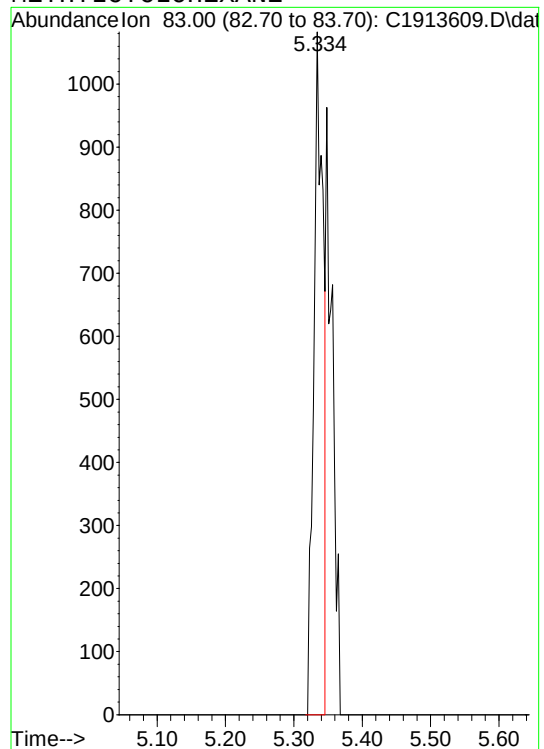
Thu May 16 14:38:16 2019

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

Manual Integration
1,2-DICHLOROETHANE



Original Integration
METHYLCYCLOHEXANE



Original Int. Results

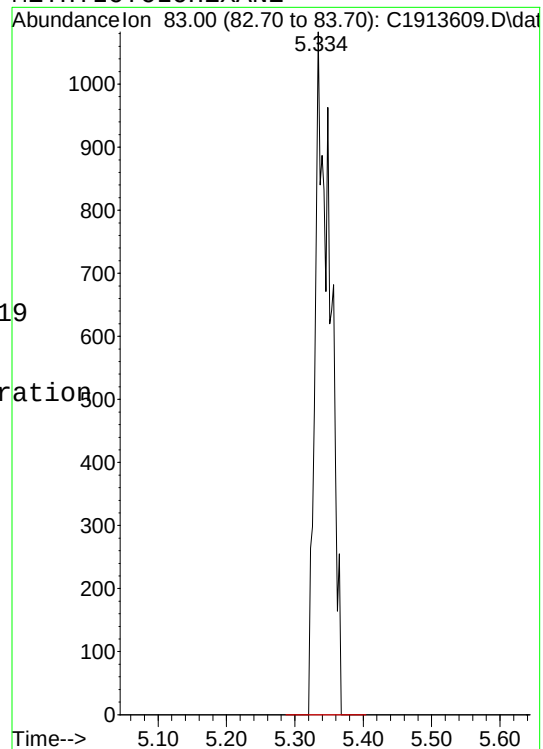
RT : 5.33
Area : 1025
Amount: 0.344971

Manual Int. Results

Thu May 16 14:38:20 2019

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

Manual Integration
METHYLCYCLOHEXANE

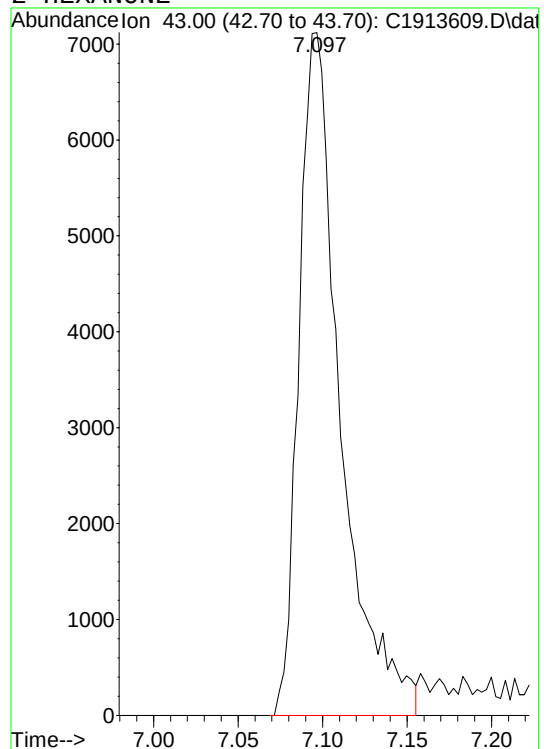


Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

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

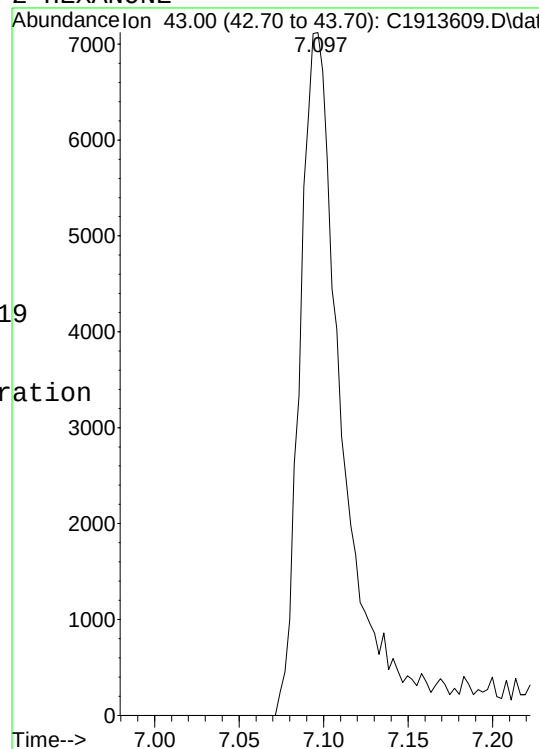
Manual Int. Results

Thu May 16 14:38:32 2019

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

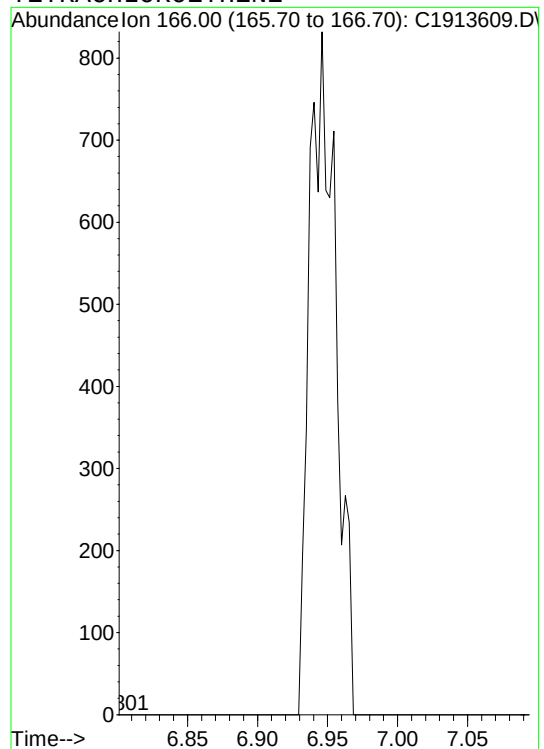
Manual Integration

2-HEXANONE



Original Integration

TETRACHLOROETHENE



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

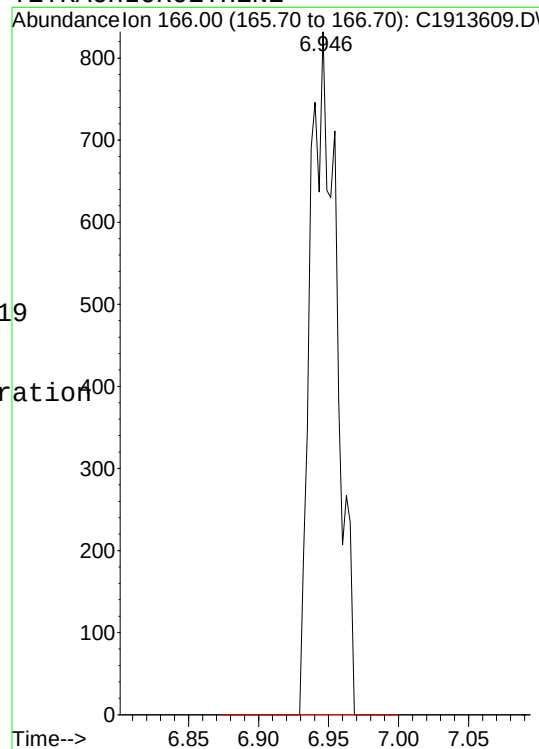
Manual Int. Results

Thu May 16 14:38:35 2019

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

Manual Integration

TETRACHLOROETHENE

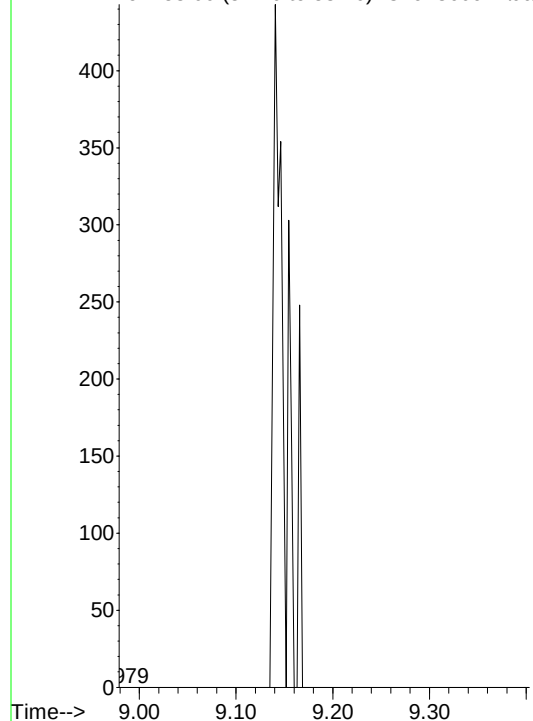


Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

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)

Abundance Ion 53.00 (52.70 to 53.70): C1913609.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

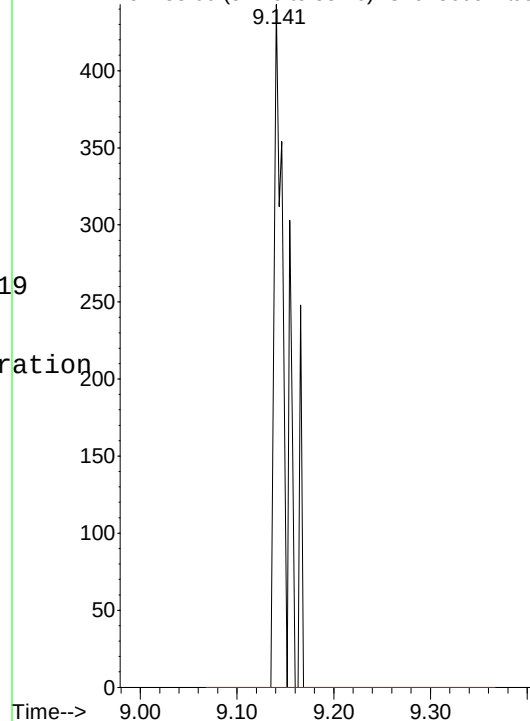
Manual Int. Results

Thu May 16 14:38:46 2019

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

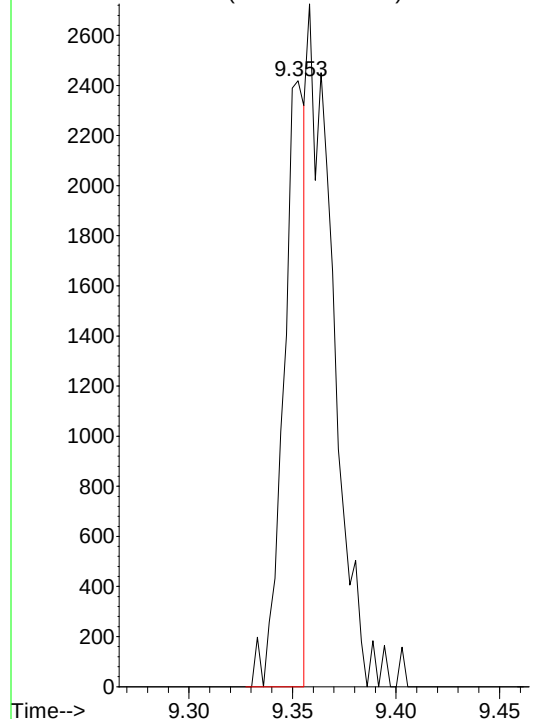
Manual Integration
1,4-DICHLORO-2-BUTENE(TRANS)

Abundance Ion 53.00 (52.70 to 53.70): C1913609.D\data



Original Integration
1,3,5-TRIMETHYLBENZENE

Abundance Ion 105.00 (104.70 to 105.70): C1913609.D\data



Original Int. Results

RT : 9.35
Area : 1746
Amount: 0.226029

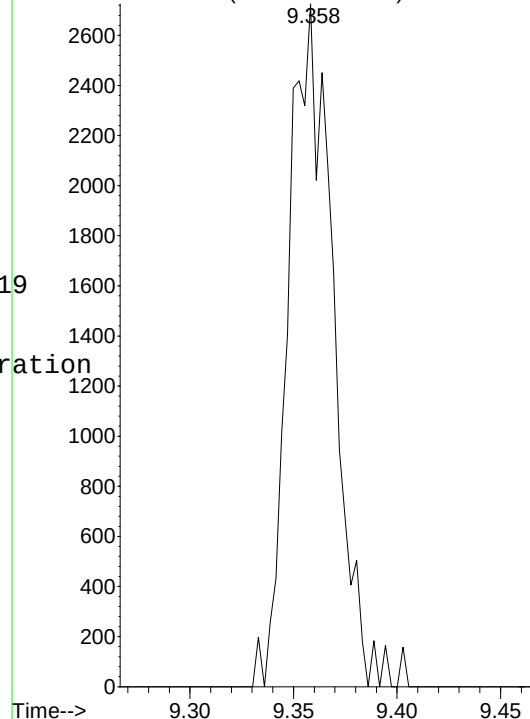
Manual Int. Results

Thu May 16 14:38:51 2019

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

Manual Integration
1,3,5-TRIMETHYLBENZENE

Abundance Ion 105.00 (104.70 to 105.70): C1913609.D\data

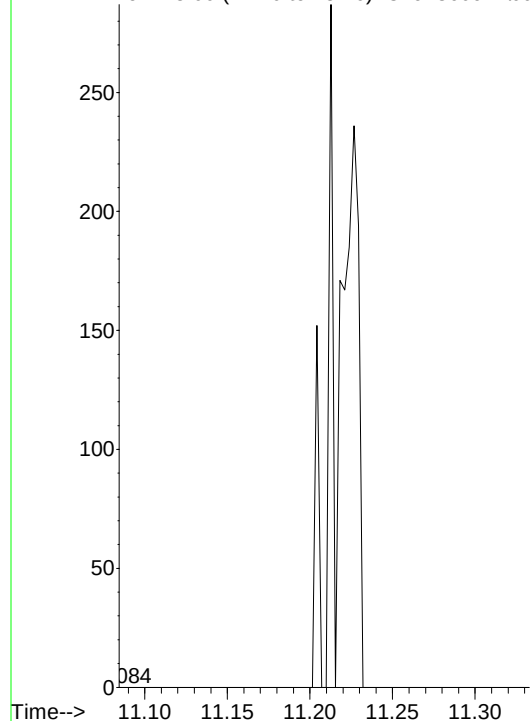


Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

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

Abundance Ion 75.00 (74.70 to 75.70): C1913609.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

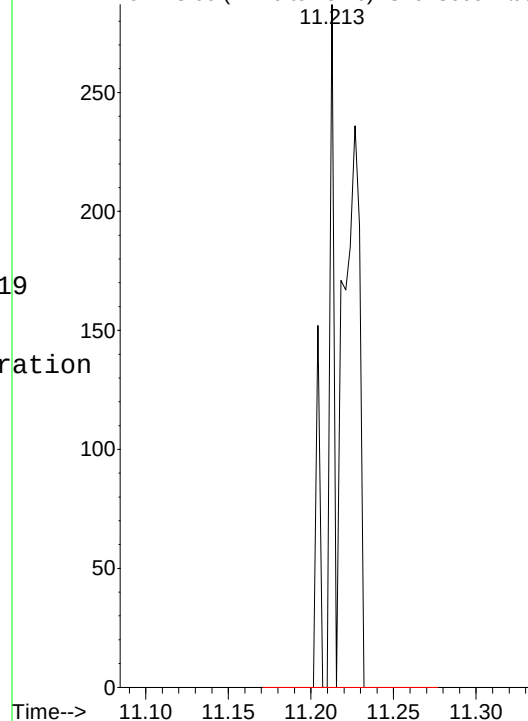
Manual Int. Results

Thu May 16 14:38:58 2019

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

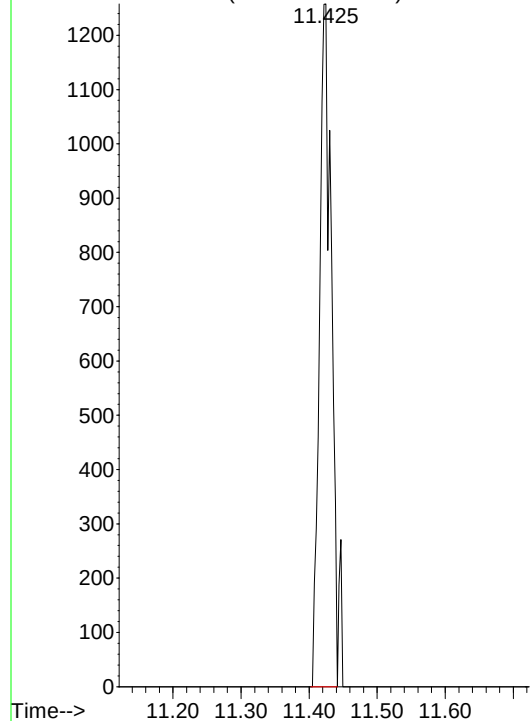
Manual Integration
1,2-DIBROMO-3-CHLOROPROPANE

Abundance Ion 75.00 (74.70 to 75.70): C1913609.D\data



Original Integration
1,3,5-TRICHLOROBENZENE

Abundance Ion 180.00 (179.70 to 180.70): C1913609.D\data



Original Int. Results

RT : 11.42
Area : 1471
Amount: 0.492718

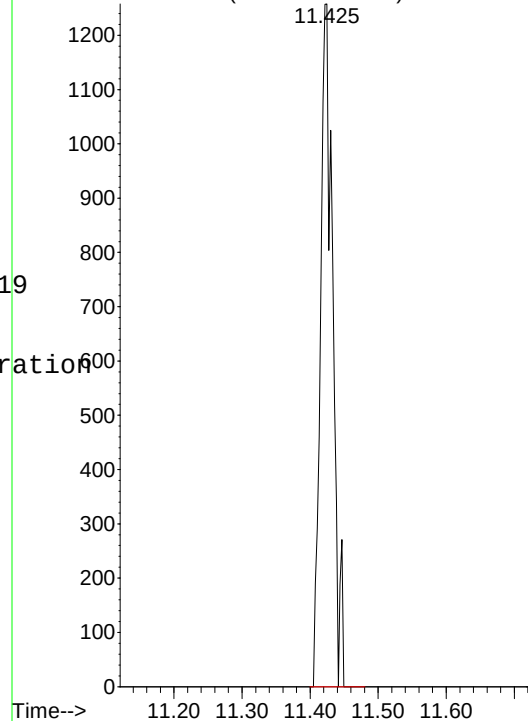
Manual Int. Results

Thu May 16 14:39:02 2019

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

Manual Integration
1,3,5-TRICHLOROBENZENE

Abundance Ion 180.00 (179.70 to 180.70): C1913609.D\data

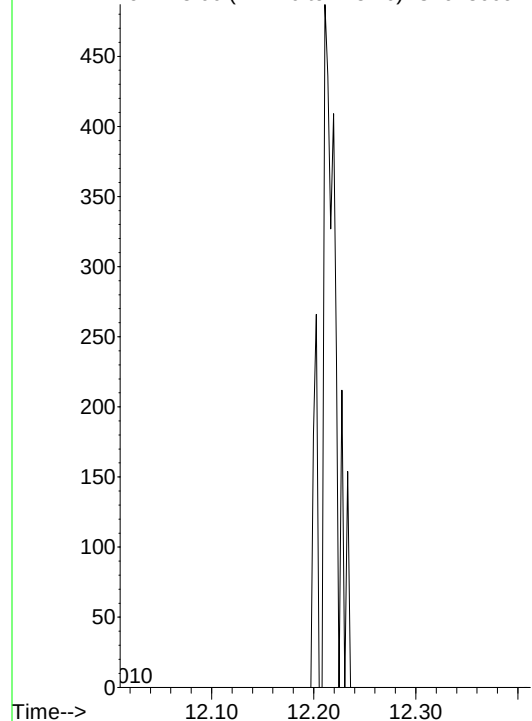


Data Path : C:\msdchem\1\data\C051619\
Data File : C1913609.D
Acq On : 16 May 2019 10:38 am
Operator :
Sample : 8260STD 0.5PPB 1905273
Misc :

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

Abundance Ion 225.00 (224.70 to 225.70): C1913609.D



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

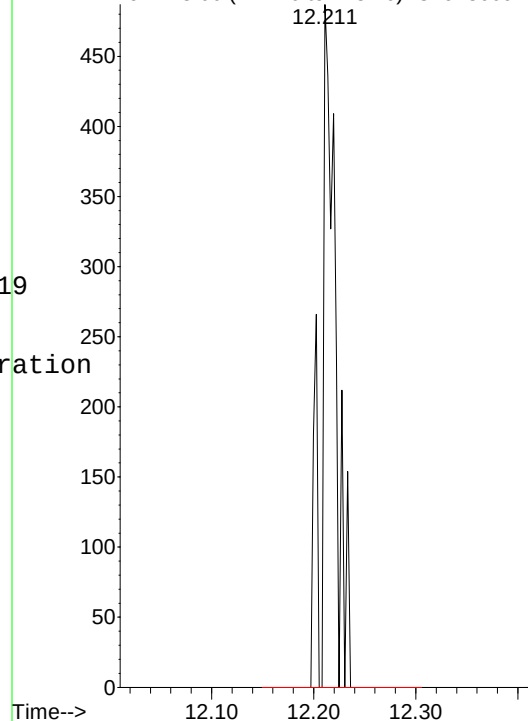
Manual Int. Results

Thu May 16 14:39:05 2019

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

Manual Integration
HEXACHLOROBUTADIENE

Abundance Ion 225.00 (224.70 to 225.70): C1913609.D



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 :
 ALS Vial : 11 Sample Multiplier: 1

Inst : GCMSVOA3

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-AMYL METHYL 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\
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 Acq On : 16 May 2019 11:31 am
 Operator :
 Sample : 8260STD 2.0PPB 1905273
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Inst : GCMSVOA3

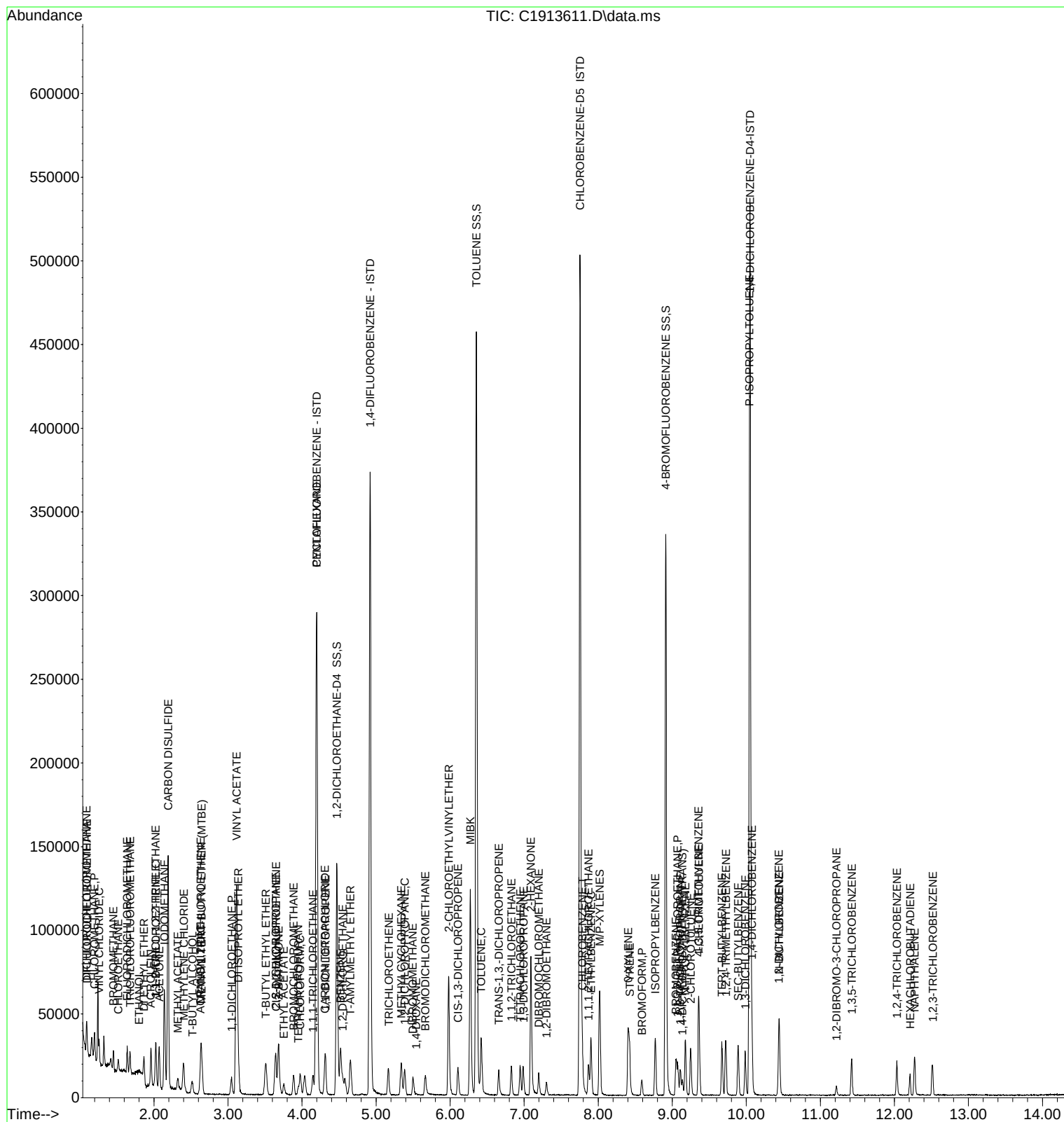
Quant Time: May 16 14:41:20 2019
 Quant Method : C:\msdchem\1\methods\C053018.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Wed Mar 13 07:34:04 2019
 Response via : Initial Calibration

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-CHLOROETHYL VINYLETHYL	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) O-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-CHLOROTOLUENE	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

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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



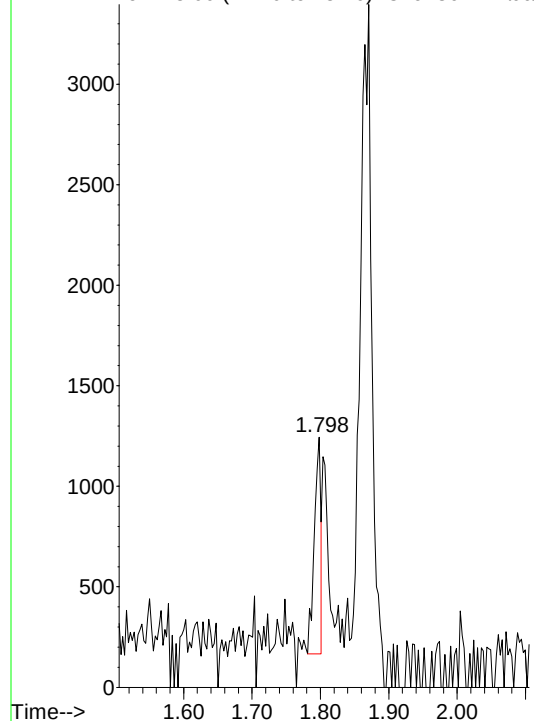
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Acq On : 16 May 2019 11:31 am
Operator :
Sample : 8260STD 2.0PPB 1905273
Misc :

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

AbundanceIon 45.00 (44.70 to 45.70): C1913611.D\data



Original Int. Results

RT : 1.80
Area : 710
Amount: -11.6589

Manual Int. Results

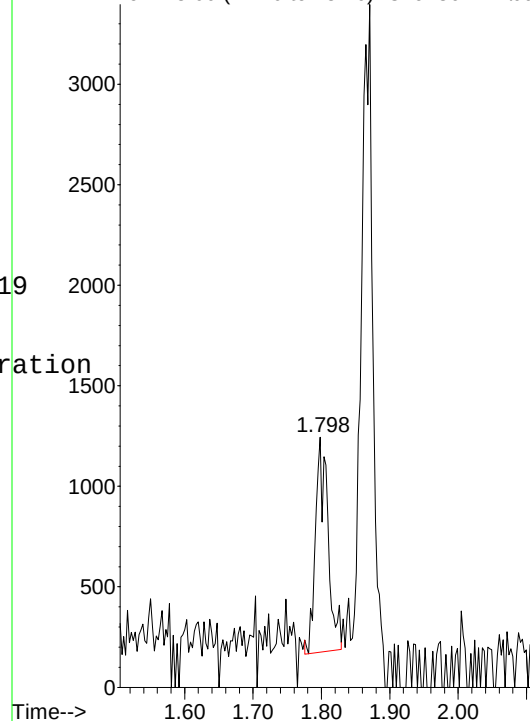
Thu May 16 14:40:55 2019

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

Manual Integration

ETHANOL

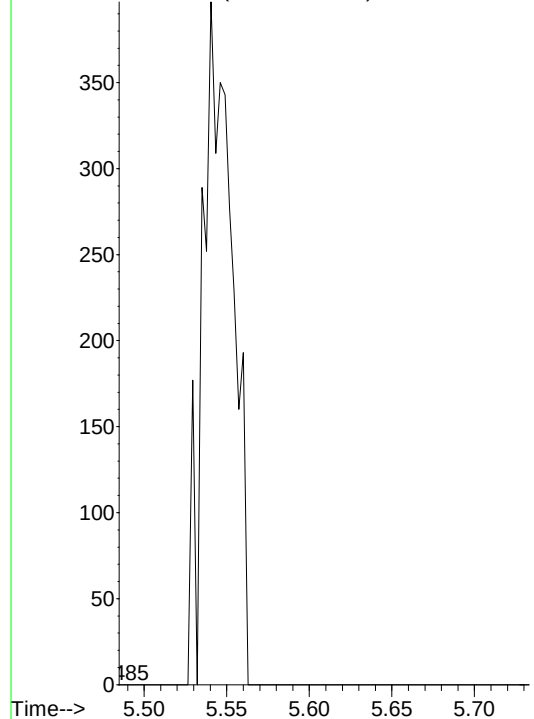
AbundanceIon 45.00 (44.70 to 45.70): C1913611.D\data



Original Integration

1,4-DIOXANE

AbundanceIon 88.10 (87.80 to 88.80): C1913611.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

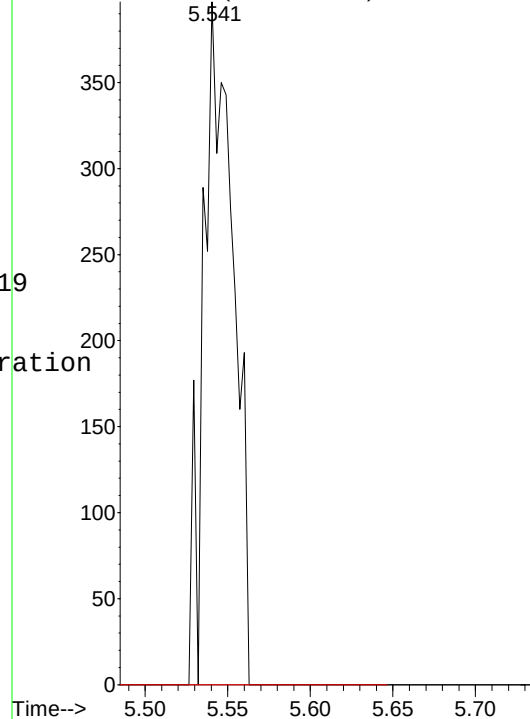
Thu May 16 14:41:20 2019

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

Manual Integration

1,4-DIOXANE

AbundanceIon 88.10 (87.80 to 88.80): C1913611.D\data



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

Inst : GCMSVOA3

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-AMYL METHYL 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
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 Operator :
 Sample : 8260STD 5.0PPB 1905273
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Inst : GCMSVOA3

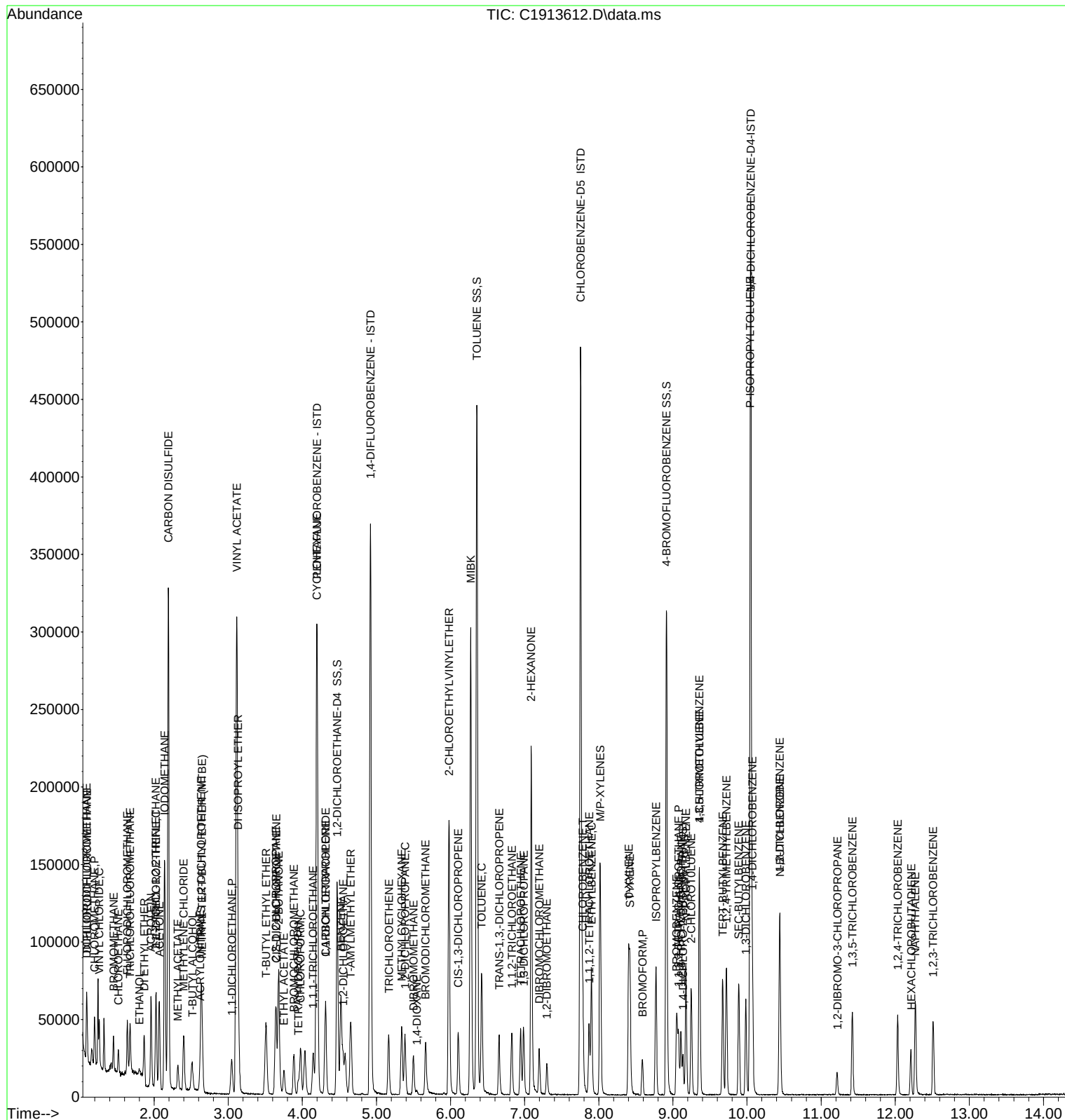
Quant Time: May 16 14:42:02 2019
 Quant Method : C:\msdchem\1\methods\C053018.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Wed Mar 13 07:34:04 2019
 Response via : Initial Calibration

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) O-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-CHLOROTOLUENE	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

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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



Data Path : C:\msdchem\1\data\C051619\
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 Operator :
 Sample : 8260STD 10PPB 1905273
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 ALS Vial : 13 Sample Multiplier: 1

Inst : GCMSVOA3

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						
3) DICHLORODIFLUOROMETHANE	1.087	85	24501	7.32	UG/L	Qvalue 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-AMYL METHYL 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
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Inst : GCMSVOA3

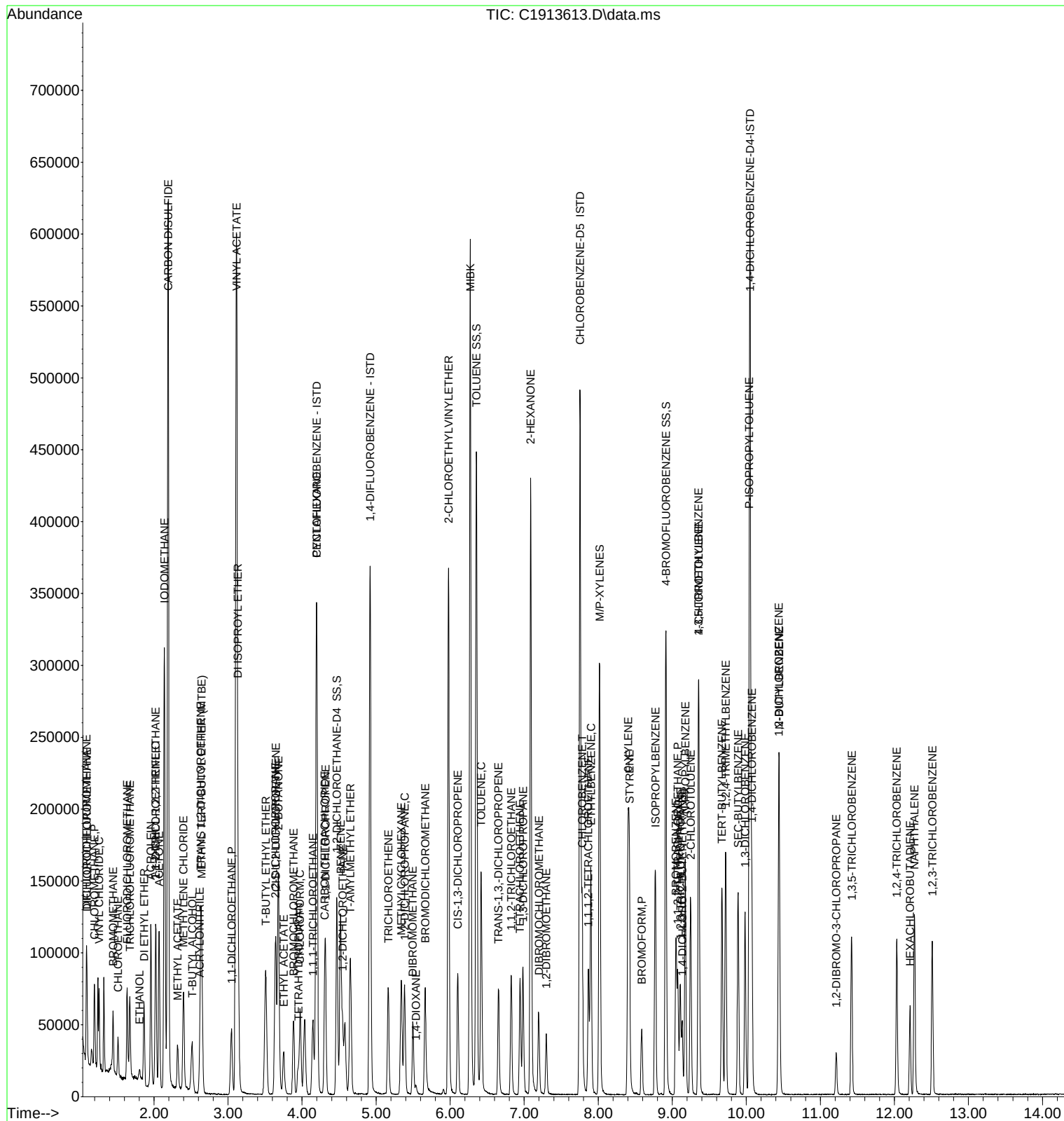
Quant Time: May 16 14:43:39 2019
 Quant Method : C:\msdchem\1\methods\C053018.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Wed Mar 13 07:34:04 2019
 Response via : Initial Calibration

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) O-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-CHLOROTOLUENE	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

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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
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Inst : GCMSVOA3

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						
3) DICHLORODIFLUOROMETHANE	1.087	85	52119	15.55	UG/L	Qvalue 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-AMYL METHYL 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
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Inst : GCMSVOA3

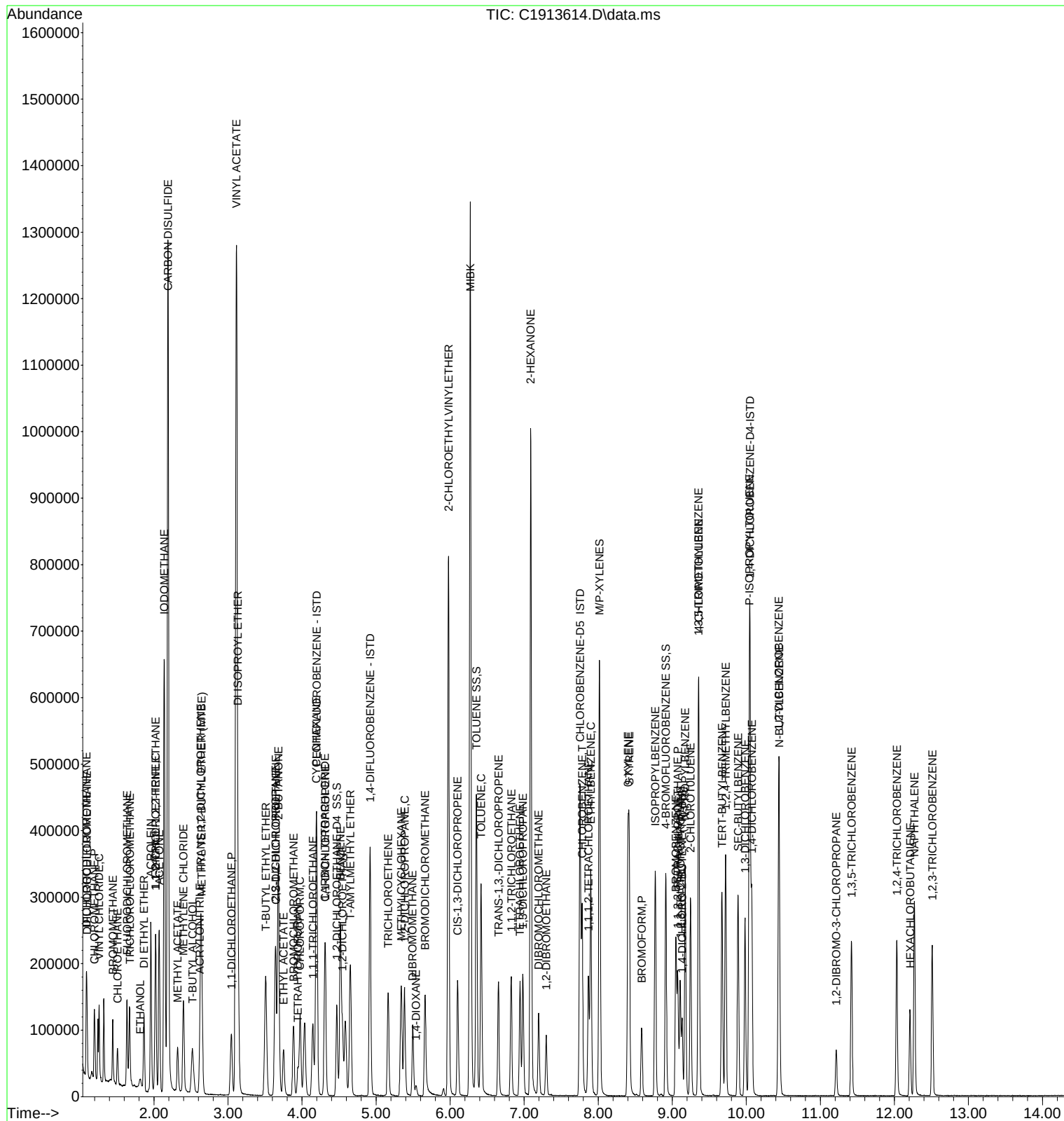
Quant Time: May 17 05:16:44 2019
 Quant Method : C:\msdchem\1\methods\C053018.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Wed Mar 13 07:34:04 2019
 Response via : Initial Calibration

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-CHLOROETHYL VINYLETHYL	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) O-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-CHLOROTOLUENE	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

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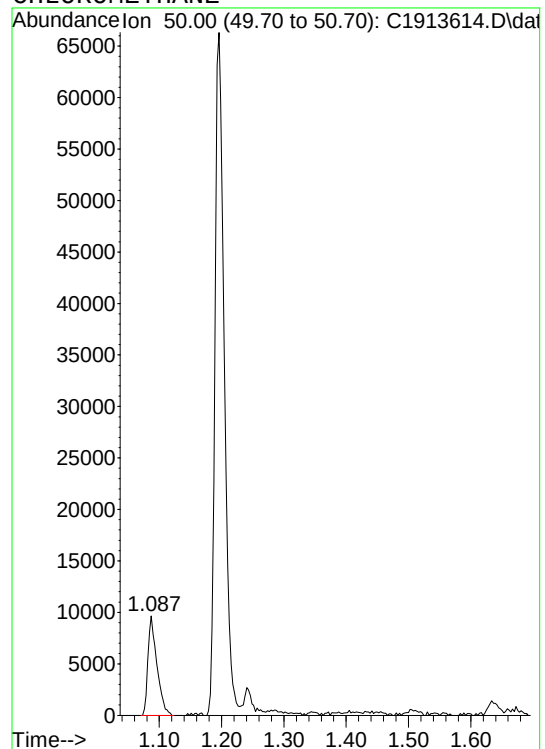
Quant Time: May 17 05:16:44 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



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

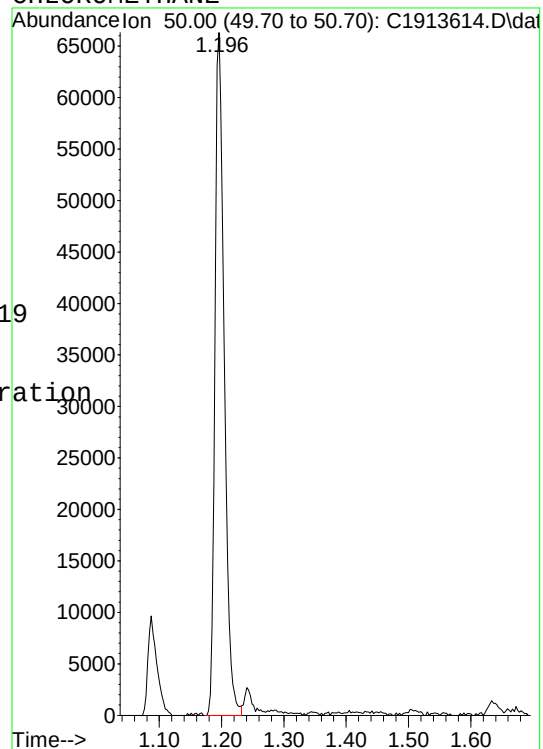
RT : 1.09
Area : 9638
Amount: 2.45887

Manual Int. Results

Fri May 17 05:16:44 2019

MIuser: EEH
Reason: Incoret 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
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSVOA3

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						
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-AMYL METHYL 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
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSVOA3

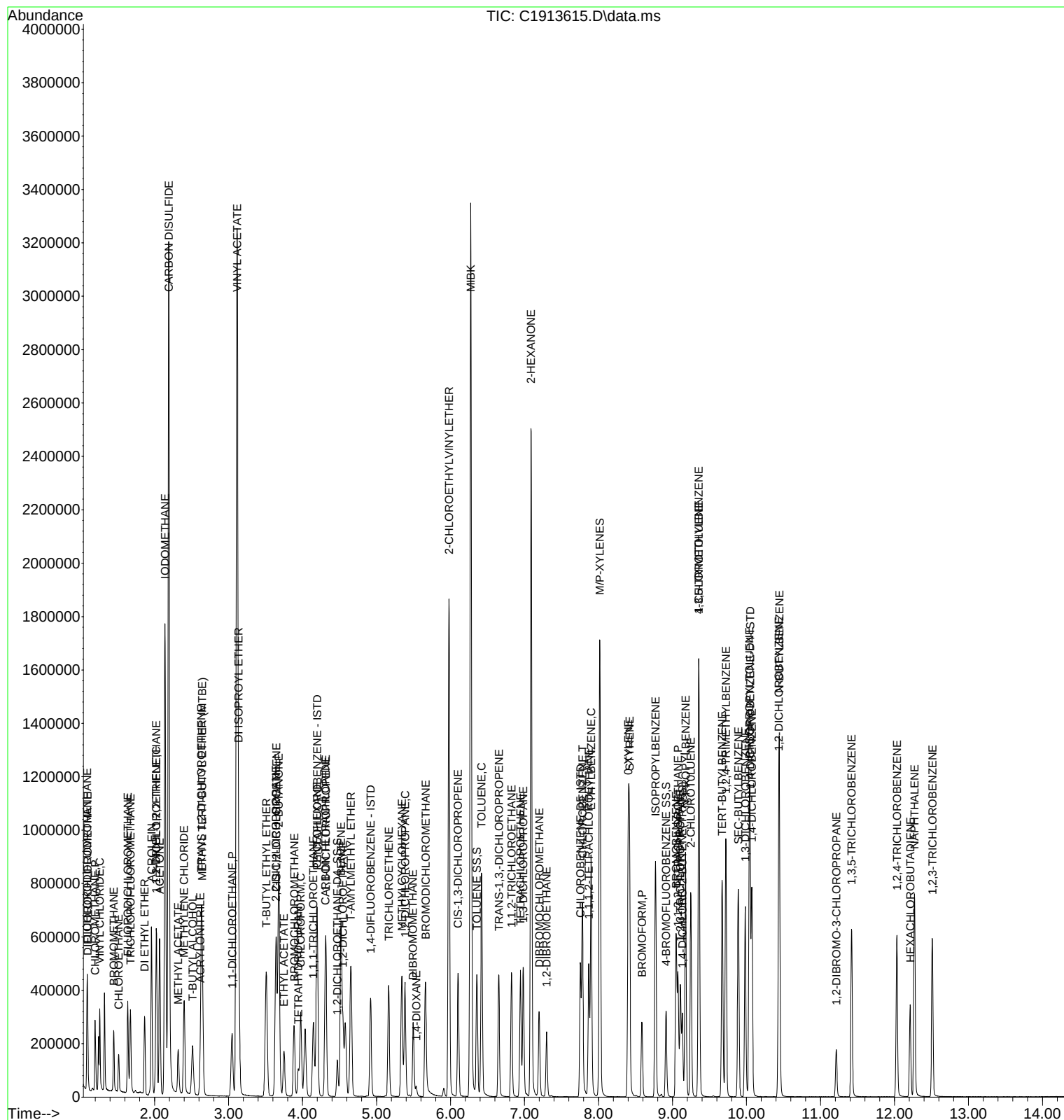
Quant Time: May 17 05:18:05 2019
 Quant Method : C:\msdchem\1\methods\C053018.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Wed Mar 13 07:34:04 2019
 Response via : Initial Calibration

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-CHLOROETHYL VINYLETHANOL	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-DICHLOROPROPENE	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) O-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-CHLOROTOLUENE	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-CHLOROPROPANE	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

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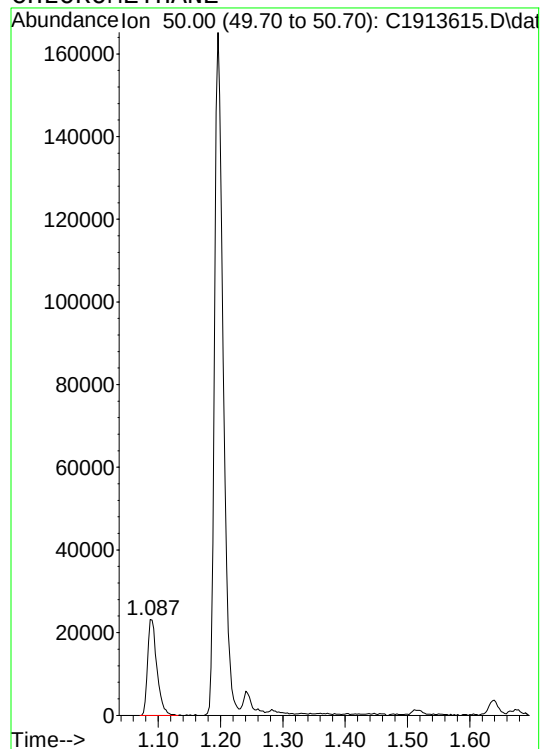
Quant Time: May 17 05:18:05 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



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

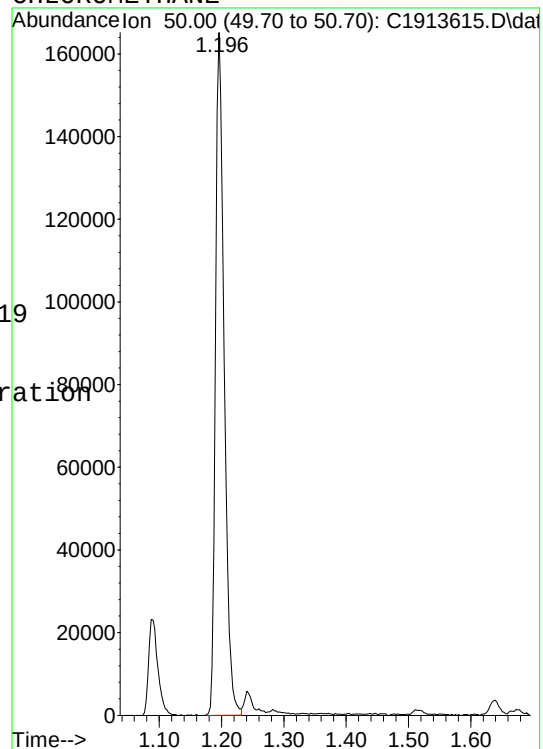
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Manual Int. Results

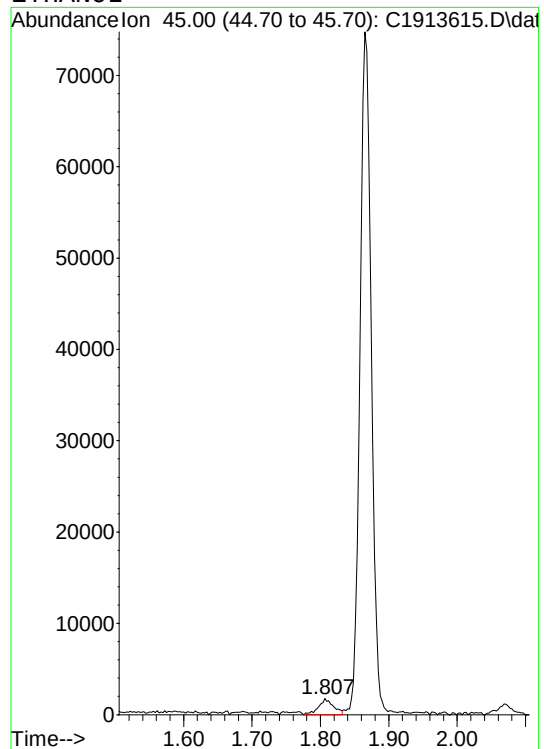
Fri May 17 05:17:57 2019

MIuser: EEH
Reason: Incoret Integration
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Amount: 39.9243

Manual Integration
CHLOROMETHANE



Original Integration
ETHANOL



Original Int. Results

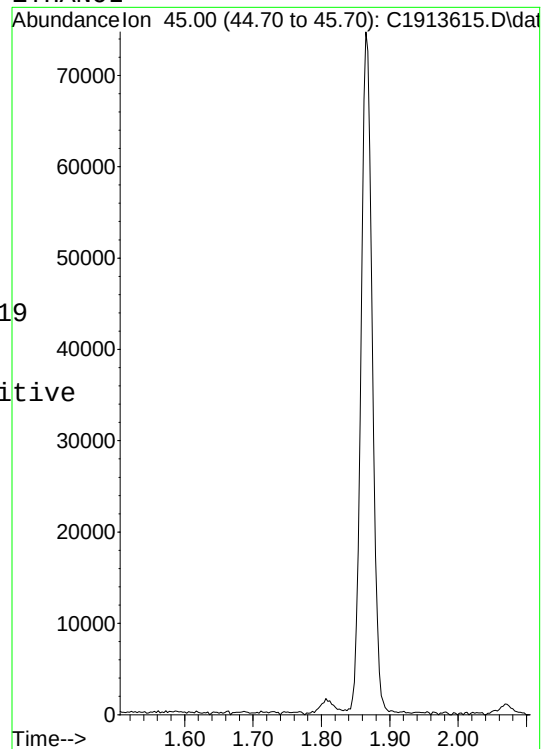
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Amount: 24.6117

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
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Inst : GCMSVOA3

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						
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-AMYL METHYL 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
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Inst : GCMSVOA3

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-CHLOROETHYL VINYLETHANOL	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-DICHLOROPROPENE	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) O-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-CHLOROTOLUENE	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-CHLOROPROPENE	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

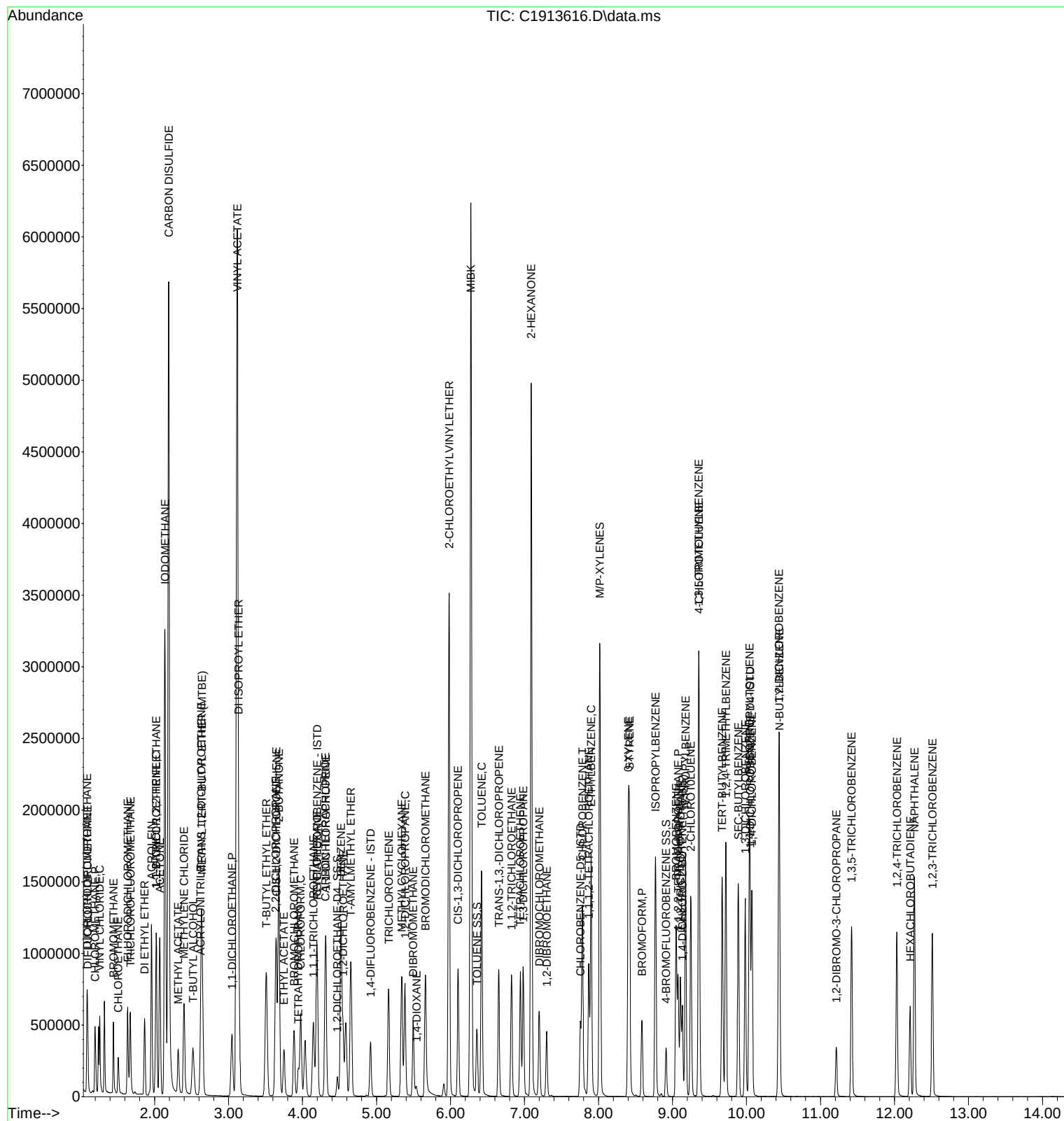
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Operator :
Sample : 8260STD 100PPB 1905273
Misc :
ALS Vial : 16 Sample Multiplier: 1

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Inst : GCMSVOA3

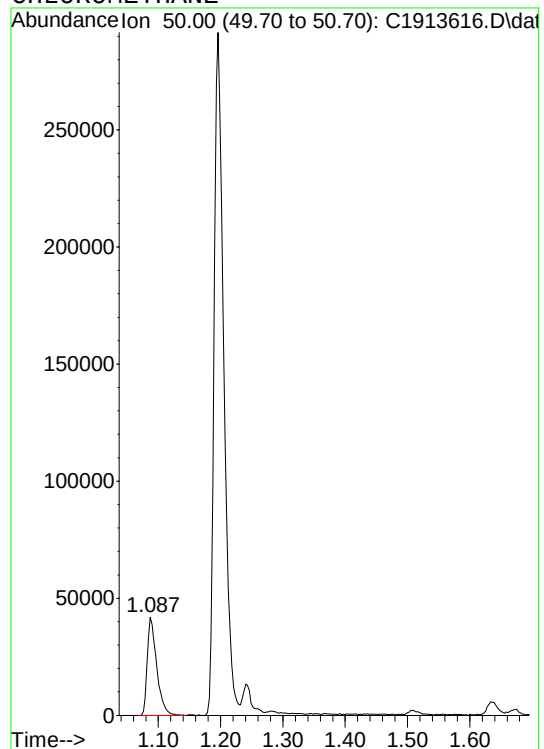
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Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



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

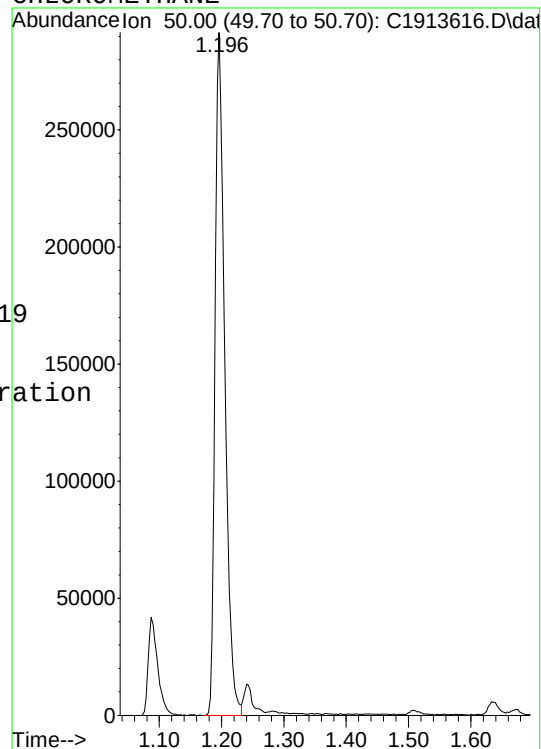
RT : 1.09
Area : 43928
Amount: 10.9769

Manual Int. Results

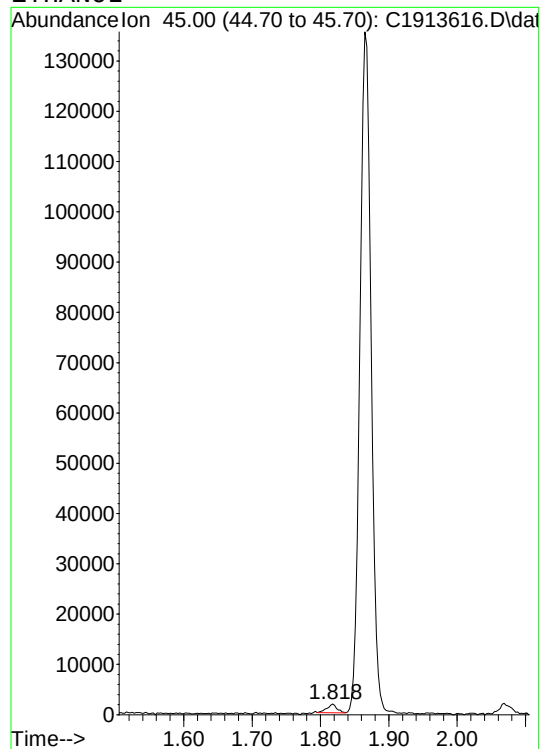
Fri May 17 05:19:20 2019

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

Manual Integration
CHLOROMETHANE



Original Integration
ETHANOL



Original Int. Results

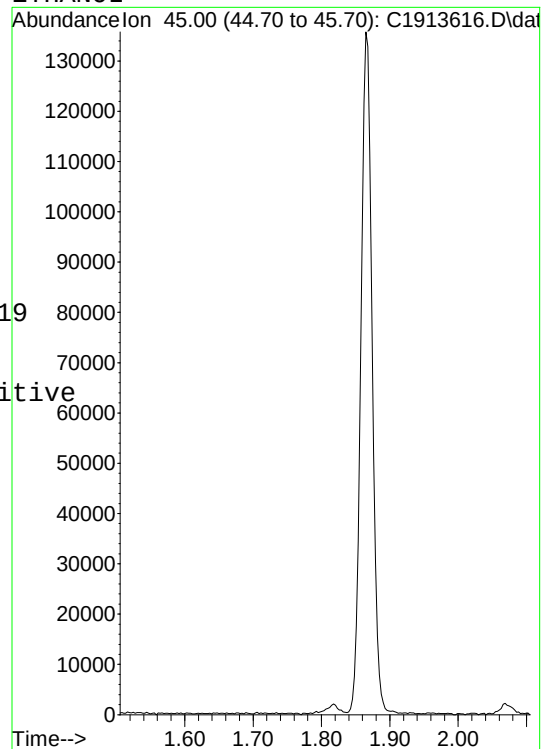
RT : 1.82
Area : 1768
Amount: 8.33336

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
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Inst : GCMSVOA3

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-AMYL METHYL 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
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Inst : GCMSVOA3

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

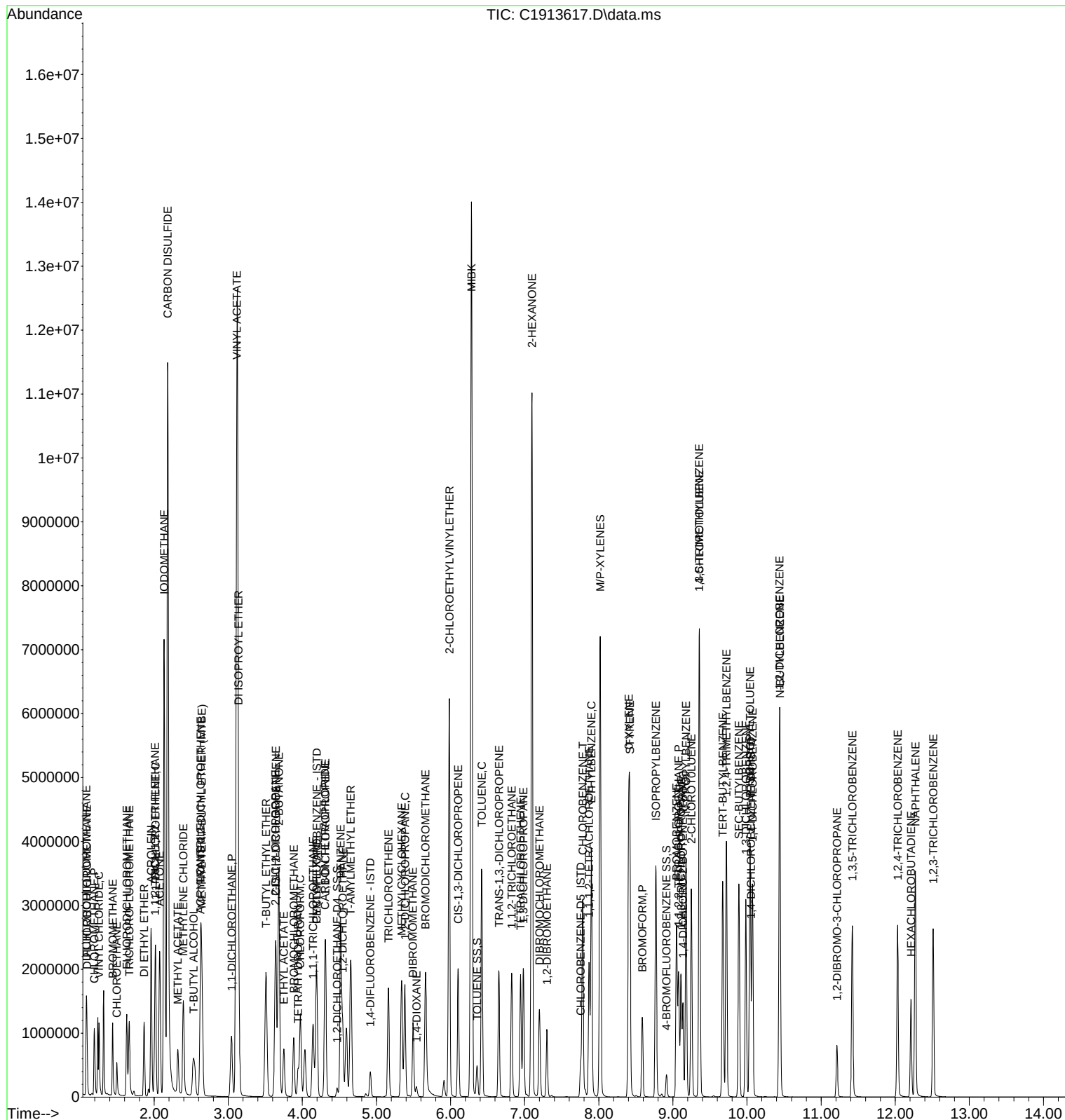
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,4-DIOXANE	5.540	88	90016	2165.03	UG/L	# 62
57) BROMODICHLOROMETHANE	5.660	83	710530	193.16	UG/L	97
58) 2-CHLOROETHYL VINYLETHANOL	5.984	63	2222458	924.03	UG/L	95
59) MIBK	6.282	43	8762354	2115.39	UG/L	99
60) CIS-1,3-DICHLOROPROPENE	6.104	75	924846	224.81	UG/L	94
61) TOLUENE	6.422	91	2073128	197.35	UG/L	99
62) TRANS-1,3-DICHLOROPROPENE	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) O-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-CHLOROTOLUENE	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-CHLOROPROPENE	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

336

Inst : GCMSV0A3

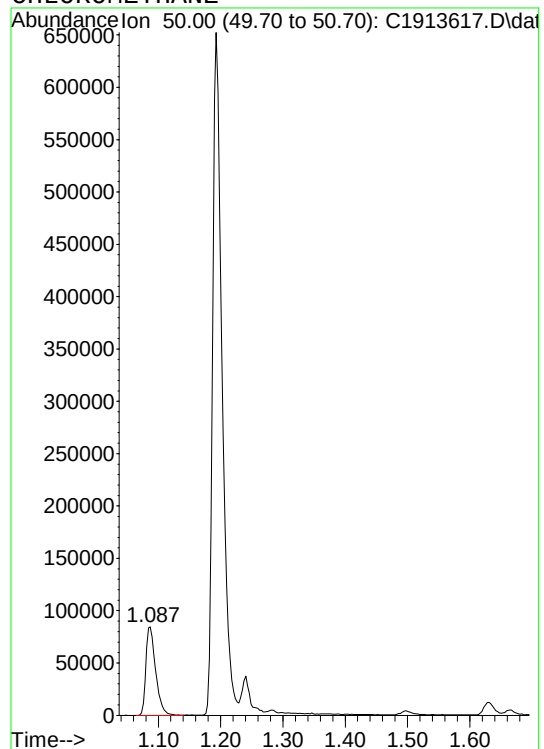
Quant Time: May 17 05:20:56 2019
Quant Method : C:\msdchem\1\methods\C053018.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Wed Mar 13 07:34:04 2019
Response via : Initial Calibration



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

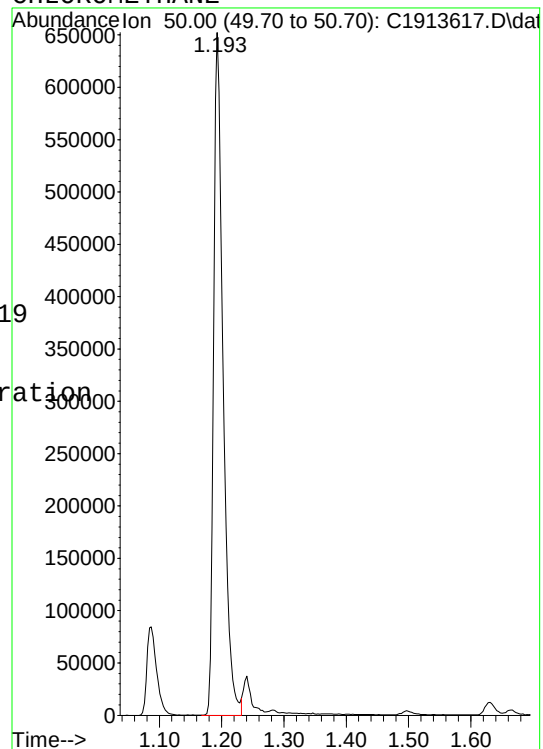
RT : 1.09
Area : 92118
Amount: 22.2301

Manual Int. Results

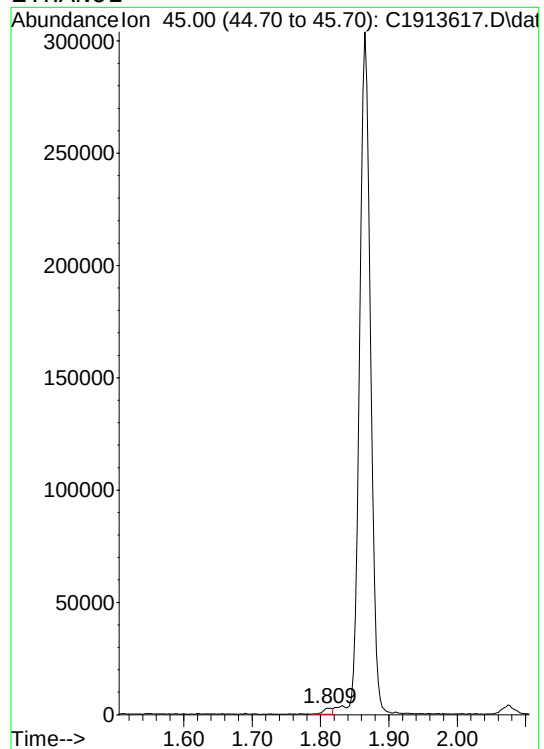
Fri May 17 05:20:37 2019

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

Manual Integration
CHLOROMETHANE



Original Integration
ETHANOL



Original Int. Results

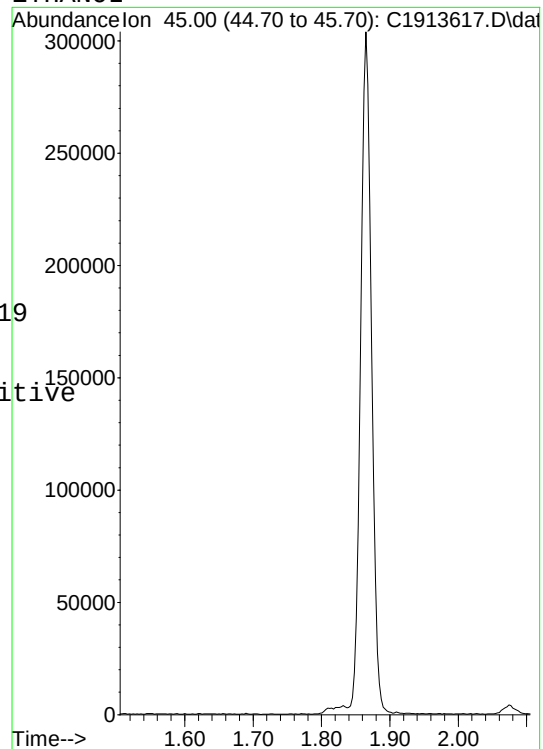
RT : 1.81
Area : 2518
Amount: 20.9175

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



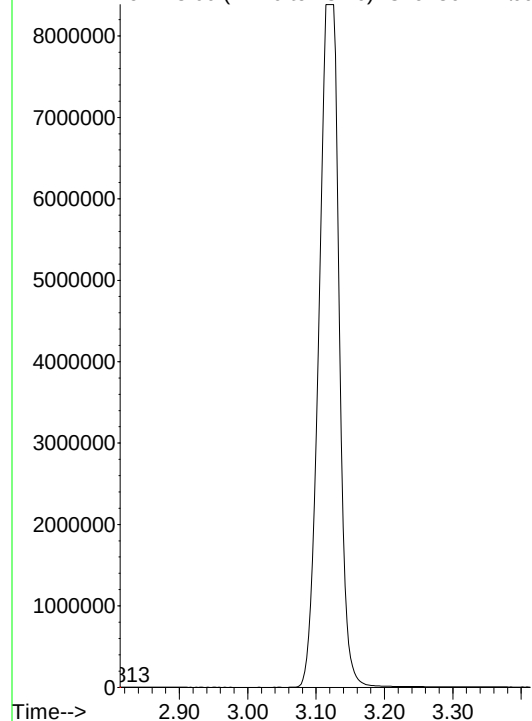
Data Path : C:\msdchem\1\data\C051619\
Data File : C1913617.D
Acq On : 16 May 2019 2:10 pm
Operator :
Sample : 8260STD 200PPB 1905273
Misc :

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

Abundance on 43.00 (42.70 to 43.70): C1913617.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

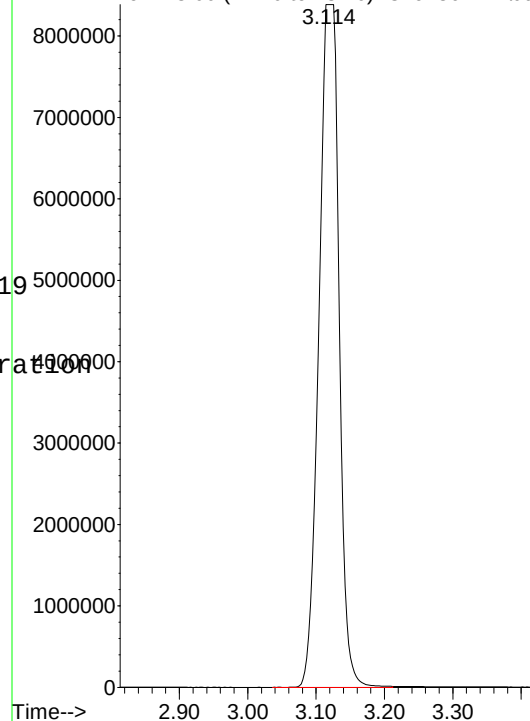
Fri May 17 05:20:56 2019

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

Manual Integration

VINYL ACETATE

Abundance on 43.00 (42.70 to 43.70): C1913617.D\data



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

Inst : GCMSVOA3

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-CHLOROETHYL VINYLETHER	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) O-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
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Inst : GCMSVOA3

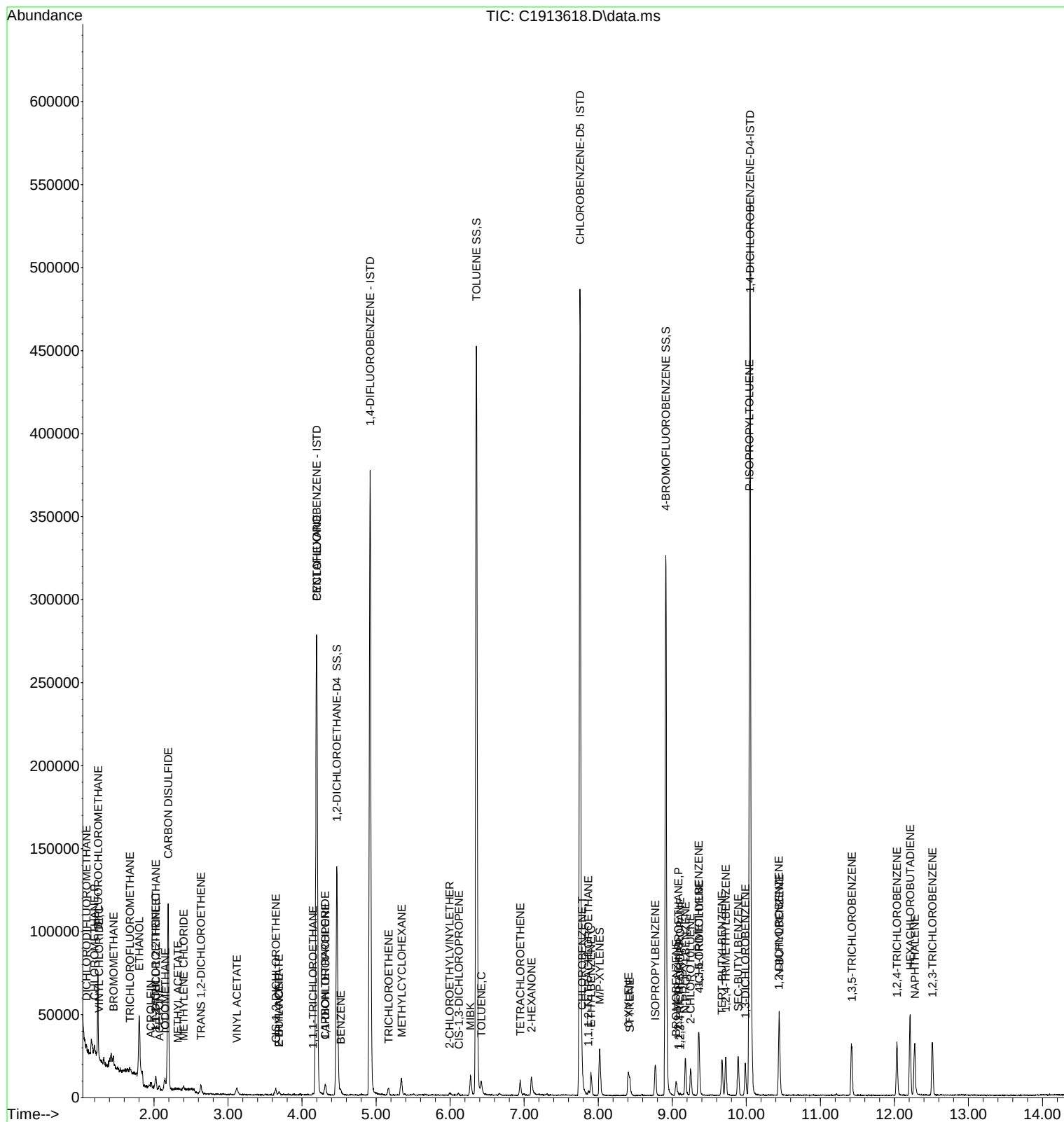
Quant Time: May 17 05:24:45 2019
 Quant Method : C:\msdchem\1\methods\C053018.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Fri May 17 05:24:05 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
85) N-PROPYLBENZENE	9.180	91	16070	1.38	UG/L	97
86) 2-CHLOROTOLUENE	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

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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

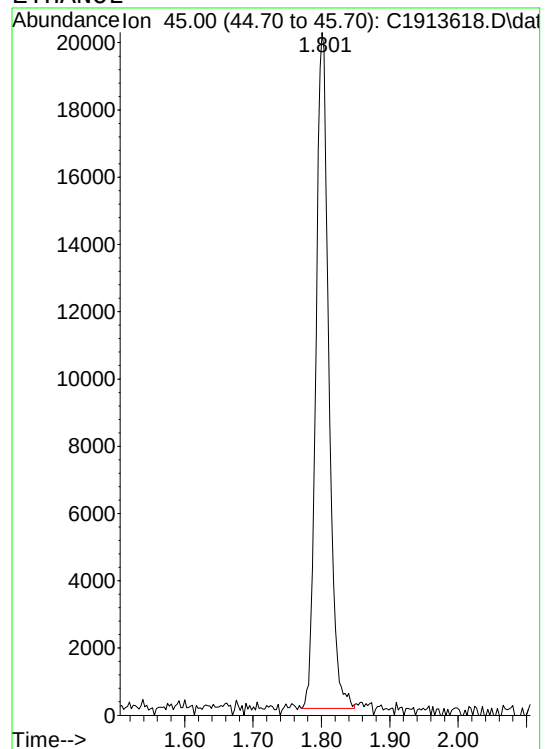


Data Path : C:\msdchem\1\data\C051619\
Data File : C1913618.D
Acq On : 16 May 2019 2:36 pm
Operator :
Sample : ETHOH 500PPB
Misc :

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

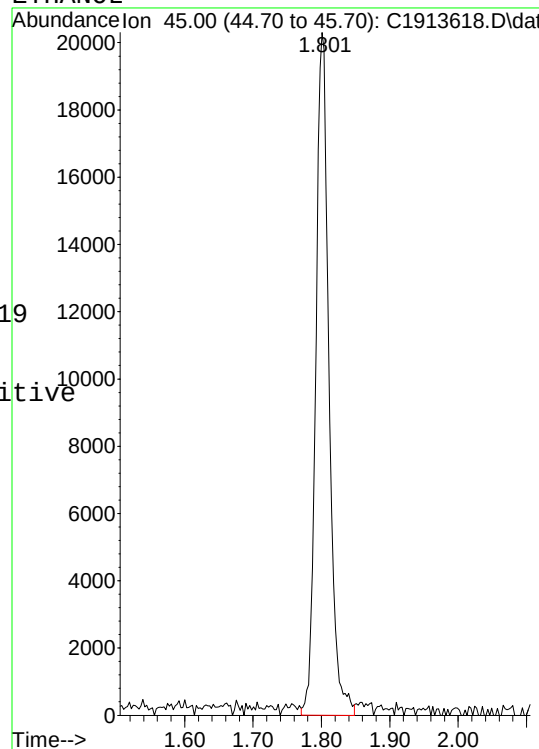
RT : 1.80
Area : 25985
Amount: 473.171

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
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Inst : GCMSVOA3

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) O-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-CHLOROTOLUENE	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

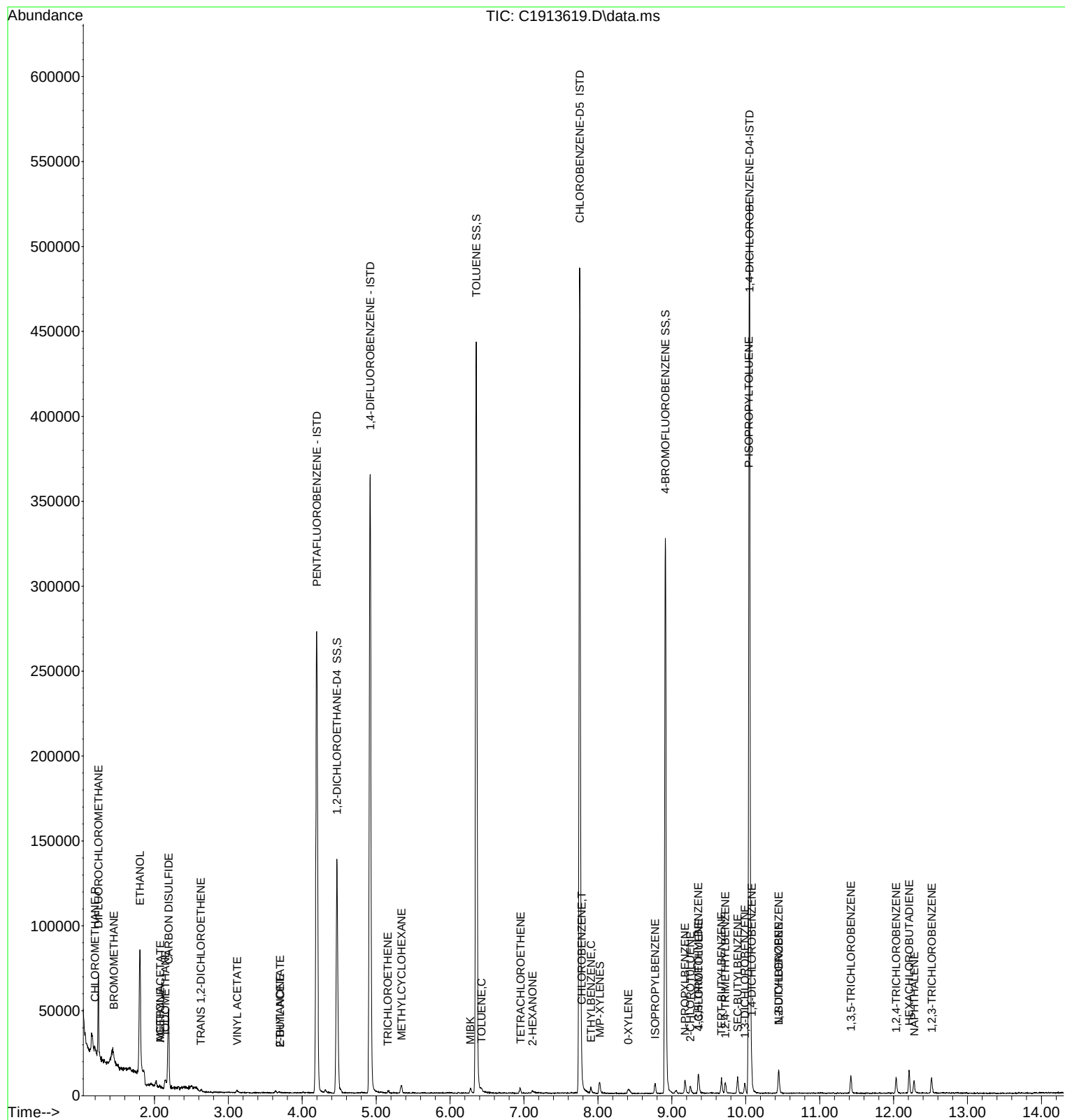
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

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Inst : GCMSVOA3

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



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

Inst : GCMSVOA3

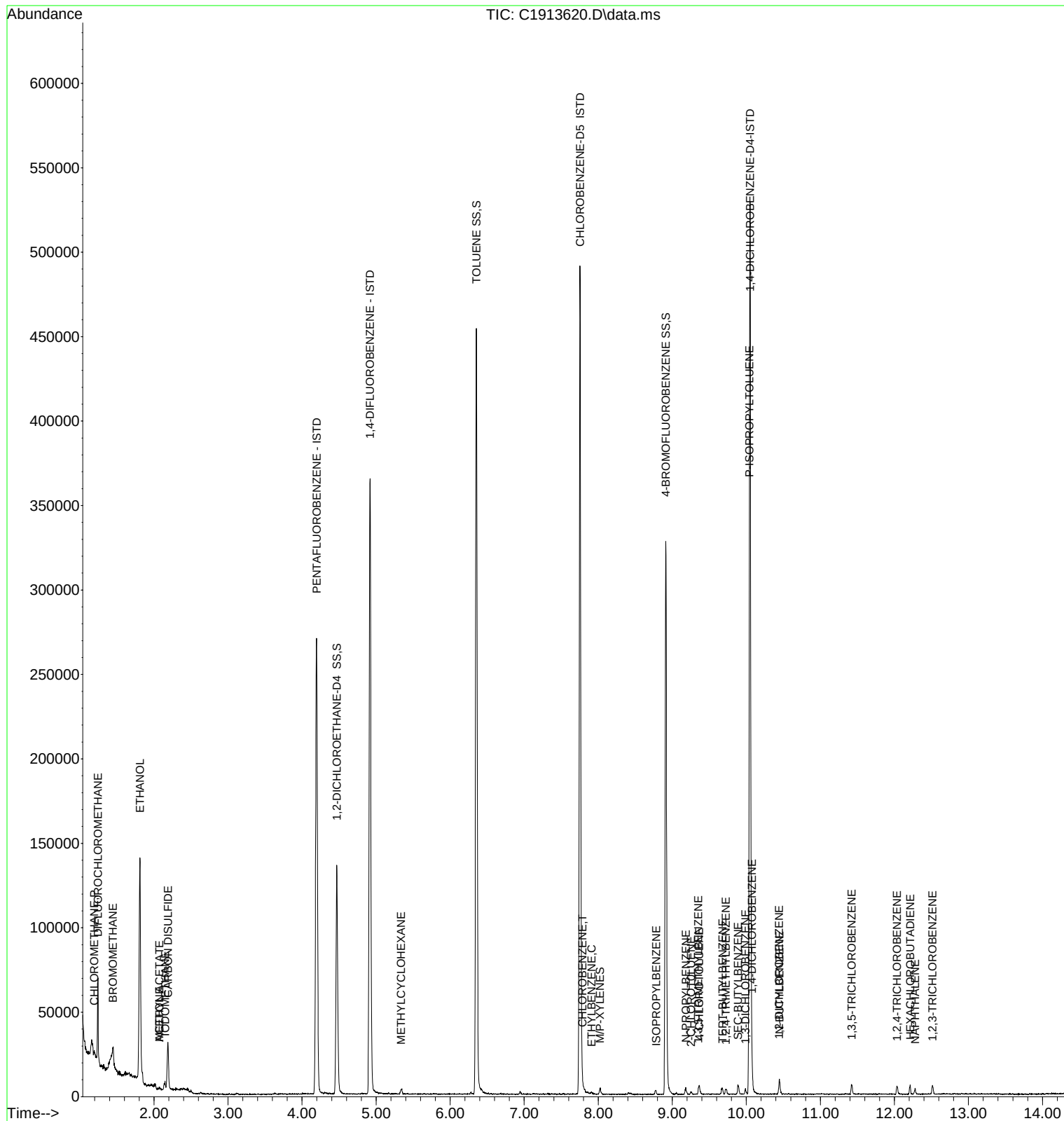
Quant Time: May 17 05:25:19 2019
 Quant Method : C:\msdchem\1\methods\C053018.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Fri May 17 05:24:05 2019
 Response via : Initial Calibration

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-CHLOROTOLUENE	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

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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
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

Inst : GCMSVOA3

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-AMYL METHYL 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
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

Inst : GCMSVOA3

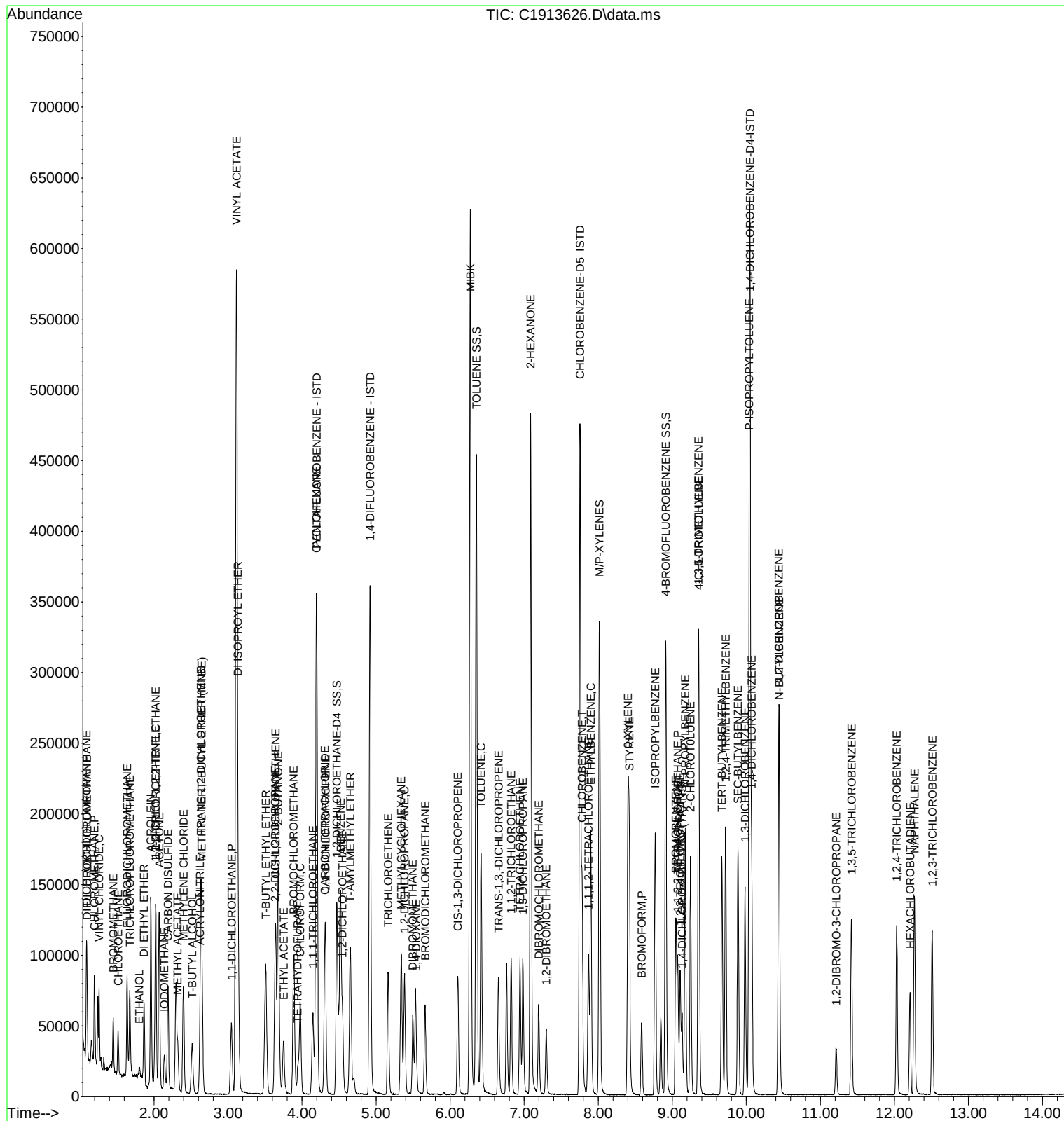
Quant Time: May 17 05:33:17 2019
 Quant Method : C:\msdchem\1\methods\C051619.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Fri May 17 05:29:37 2019
 Response via : Initial Calibration

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) O-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-CHLOROTOLUENE	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

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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:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	GCMSVOA2	Calibration:	1900126
Lab File ID:	B1922525.D	Calibration Date:	04/18/19 10:04
Sequence:	S039168	Injection Date:	08/13/19
Lab Sample ID:	S039168-CCV1	Injection Time:	18:57

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	100	88.3	0.2769679	0.2446415		-11.7	20
Acrylonitrile	A	10.0	10.2	0.3194576	0.3241025		1.5	20
tert-Amyl Methyl Ether (TAME)	A	10.0	8.68	1.598391	1.387536		-13.2	20
Benzene	A	10.0	8.93	2.213117	1.976755		-10.7	20
Bromobenzene	A	10.0	9.87	1.310258	1.29362		-1.3	20
Bromochloromethane	A	10.0	10.6	0.3016768	0.3188076		5.7	20
Bromodichloromethane	A	10.0	10.5	0.5453889	0.5729208		5.0	20
Bromoform	A	10.0	9.85	0.5576654	0.5492841		-1.5	20
Bromomethane	A	10.0	23.2	0.3856681	0.8932013		132	20 *
2-Butanone (MEK)	A	100	93.0	0.4188478	0.3893254		-7.0	20
tert-Butyl Alcohol (TBA)	A	100	96.9	7.910615E-02	0.0766229		-3.1	20
n-Butylbenzene	A	10.0	7.98	2.403319	1.918458		-20.2	20 *
sec-Butylbenzene	A	10.0	8.40	3.100541	2.605299		-16.0	20
tert-Butylbenzene	A	10.0	9.26	2.202821	2.038873		-7.4	20
tert-Butyl Ethyl Ether (TBEE)	A	10.0	9.76	2.283115	2.227258		-2.4	20
Carbon Disulfide	A	100	86.0	1.586558	1.365001		-14.0	20
Carbon Tetrachloride	A	10.0	10.9	0.827279	0.9000318		8.8	20
Chlorobenzene	A	10.0	9.81	1.892475	1.857392		-1.9	20
Chlorodibromomethane	A	10.0	11.6	0.4034213	0.4674567		15.9	20
Chloroethane	A	10.0	9.18	0.4423197	0.4062268		-8.2	20
Chloroform	A	10.0	9.59	1.115997	1.070475		-4.1	20
Chloromethane	A	10.0	6.91	1.492028	1.031187		-30.9	20 *
2-Chlorotoluene	A	10.0	9.41	2.341569	2.204093		-5.9	20
4-Chlorotoluene	A	10.0	9.42	2.810374	2.647491		-5.8	20
1,2-Dibromo-3-chloropropane (DBCP)	A	10.0	9.40	0.1837314	0.1727929		-6.0	20
1,2-Dibromoethane (EDB)	A	10.0	10.2	0.3886294	0.3973274		2.2	20
Dibromomethane	A	10.0	10.4	0.255048	0.2645247		3.7	20
1,2-Dichlorobenzene	A	10.0	9.48	1.590349	1.50786		-5.2	20
1,3-Dichlorobenzene	A	10.0	9.29	1.646151	1.529748		-7.1	20

CONTINUING CALIBRATION VERIFICATION

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Instrument ID: GCMSVOA2

Calibration: 1900126

Lab File ID: B1922525.D

Calibration Date: 04/18/19 10:04

Sequence: S039168

Injection Date: 08/13/19

Lab Sample ID: S039168-CCV1

Injection Time: 18:57

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dichlorobenzene	A	10.0	9.36	1.715993	1.606446		-6.4	20
trans-1,4-Dichloro-2-butene	A	10.0	9.70	0.4232914	0.4107823		-3.0	20
Dichlorodifluoromethane (Freon 12)	A	10.0	11.5	0.662506	0.7622048		15.0	20
1,1-Dichloroethane	A	10.0	9.94	1.219397	1.212591		-0.6	20
1,2-Dichloroethane	A	10.0	11.3	0.711952	0.8044159		13.0	20
1,1-Dichloroethylene	A	10.0	9.58	1.015305	0.9731018		-4.2	20
cis-1,2-Dichloroethylene	A	10.0	9.82	1.202488	1.180663		-1.8	20
trans-1,2-Dichloroethylene	A	10.0	9.90	0.9905665	0.9809912		-1.0	20
1,2-Dichloropropane	A	10.0	9.92	0.4325733	0.4293124		-0.8	20
1,3-Dichloropropane	A	10.0	9.61	0.612843	0.5887332		-3.9	20
2,2-Dichloropropane	A	10.0	9.51	0.9042566	0.8595256		-4.9	20
1,1-Dichloropropene	A	10.0	9.06	0.785502	0.711903		-9.4	20
cis-1,3-Dichloropropene	A	10.0	9.61	0.6255614	0.6010157		-3.9	20
trans-1,3-Dichloropropene	A	10.0	9.53	0.6001103	0.5717322		-4.7	20
Diethyl Ether	A	10.0	9.05	0.5772458	0.5226093		-9.5	20
Diisopropyl Ether (DIPE)	A	10.0	9.06	2.645352	2.39569		-9.4	20
1,4-Dioxane	A	100	107	2.877828E-03	2.76267E-03		6.9	20
Ethylbenzene	A	10.0	9.54	3.294744	3.143608		-4.6	20
Hexachlorobutadiene	A	10.0	10.6	0.3520431	0.3716263		5.6	20
2-Hexanone (MBK)	A	100	106	0.397123	0.4191406		5.5	20
Isopropylbenzene (Cumene)	A	10.0	10.2	3.093509	3.152607		1.9	20
p-Isopropyltoluene (p-Cymene)	A	10.0	9.26	2.682278	2.482689		-7.4	20
Methyl Acetate	A	10.0	9.04	0.8707559	0.7868792		-9.6	20
Methyl tert-Butyl Ether (MTBE)	A	10.0	9.43	1.715429	1.616912		-5.7	20
Methyl Cyclohexane	A	10.0	8.37	0.5163053	0.4321219		-16.3	20
Methylene Chloride	A	10.0	9.55	1.188752	1.13555		-4.5	20
4-Methyl-2-pentanone (MIBK)	A	100	105	0.5395485	0.5675792		5.2	20
Naphthalene	A	10.0	9.04	2.713616	2.454276		-9.6	20
n-Propylbenzene	A	10.0	8.90	3.810382	3.389337		-11.0	20

CONTINUING CALIBRATION VERIFICATION

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	GCMSVOA2	Calibration:	1900126
Lab File ID:	B1922525.D	Calibration Date:	04/18/19 10:04
Sequence:	S039168	Injection Date:	08/13/19
Lab Sample ID:	S039168-CCV1	Injection Time:	18:57

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Styrene	A	10.0	9.60	2.156272	2.069996		-4.0	20
1,1,1,2-Tetrachloroethane	A	10.0	10.3	0.6893048	0.7112737		3.2	20
1,1,2,2-Tetrachloroethane	A	10.0	9.01	0.8916204	0.8030551		-9.9	20
Tetrachloroethylene	A	10.0	10.8	0.2967119	0.3219033		8.5	20
Tetrahydrofuran	A	10.0	8.56	0.2815737	0.2410251		-14.4	20
Toluene	A	10.0	9.53	1.537402	1.465584		-4.7	20
1,2,3-Trichlorobenzene	A	10.0	9.28	0.9295821	0.8625408		-7.2	20
1,2,4-Trichlorobenzene	A	10.0	9.48	1.032392	0.9788038		-5.2	20
1,3,5-Trichlorobenzene	A	10.0	9.37	1.050083	0.9838458		-6.3	20
1,1,1-Trichloroethane	A	10.0	10.6	0.9712622	1.033093		6.4	20
1,1,2-Trichloroethane	A	10.0	9.60	0.3485793	0.3346901		-4.0	20
Trichloroethylene	A	10.0	9.91	0.3805688	0.3770126		-0.9	20
Trichlorofluoromethane (Freon 11)	A	10.0	10.5	0.9050556	0.9489569		4.9	20
1,2,3-Trichloropropane	A	10.0	10.7	0.2808563	0.2994064		6.6	20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	10.3	0.423244	0.435296		2.8	20
1,2,4-Trimethylbenzene	A	10.0	9.26	2.760115	2.556006		-7.4	20
1,3,5-Trimethylbenzene	A	10.0	9.68	2.651928	2.5679		-3.2	20
Vinyl Chloride	A	10.0	9.19	0.8120006	0.7458435		-8.1	20
m+p Xylene	A	20.0	19.1	2.620803	2.503021		-4.5	20
o-Xylene	A	10.0	9.46	2.703311	2.557241		-5.4	20
1,2-Dichloroethane-d4	A	25.0	26.4	0.7730754	0.8164355		5.6	
Toluene-d8	A	25.0	26.3	1.174095	1.23308		5.0	
4-Bromofluorobenzene	A	25.0	27.2	0.8828428	0.961394		8.9	

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

* Values outside of QC limits

Data Path : Y:\1\DATA\B081319\

Data File : B1922525.D

Acq On : 13 Aug 2019 6:57 pm

Operator :

Sample : BFB / 8260 STD 10PPB 1906029

Inst : GCMSVOA2

Misc :

ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 14 10:04:48 2019

Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M

Quant Title : 8260 CALIBRATION VOAMS 5973

QLast Update : Fri Apr 19 05:25:51 2019

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	56658	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	83289	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	47003	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.138	152	50575	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	38548	26.40	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	105.60%		
45) TOLUENE-D8 SS	6.444	98	85585	26.26	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	105.04%		
66) 4-BROMOFLUROBENZENE SS	9.002	95	37657	27.22	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	108.88%		
Target Compounds						Qvalue
3) DICHLORODIFLOUROMETHANE	1.146	85	14395	11.50	UG/L	98
4) DIFLUOROCHLOROMETHANE	1.166	51	20540	10.47	UG/L	94
5) CHLOROMETHANE	1.286	50	19475m	6.91	UG/L	
6) VINYL CHLORIDE	1.326	62	14086	9.19	UG/L	96
7) BROMOMETHANE	1.530	94	16869	23.16	UG/L	99
8) CHLOROETHANE	1.593	64	7672	9.18	UG/L	97
9) FLUORODICHLOROMETHANE	1.715	67	20875	9.66	UG/L	96
10) TRICHLOROFLUOROMETHANE	1.752	101	17922	10.49	UG/L	100
11) ETHANOL	1.883	45	1208m	85.22	UG/L	
12) DI ETHYL ETHER	1.948	59	9870	9.05	UG/L	95
13) ACROLEIN	2.050	56	26408	83.27	UG/L #	96
14) ACETONE	2.167	43	46203	88.33	UG/L	98
15) 1,1-DICHLOROETHENE	2.113	61	18378	9.58	UG/L	99
16) 1,1,2-TRICL-1,2,2-TRIF...	2.107	101	8221	10.28	UG/L	93
17) IODOMETHANE	2.235	142	66787	48.81	UG/L	94
18) METHYL ACETATE	2.423	43	14861	9.04	UG/L	98
19) T-BUTYL ALCOHOL	2.619	59	14471	96.86	UG/L	100
20) ACRYLONITRILE	2.744	53	6121	10.15	UG/L	97
21) METHYLENE CHLORIDE	2.502	49	21446	9.55	UG/L	94
22) CARBON DISULFIDE	2.283	76	257794	86.04	UG/L	98
23) METHYL TERT-BUTYL ETHE...	2.744	73	30537	9.43	UG/L	99
24) TRANS 1,2-DICHLOROETHENE	2.741	61	18527	9.90	UG/L	94
25) 1,1-DICHLOROETHANE	3.173	63	22901	9.94	UG/L	97
26) VINYL ACETATE	3.230	43	369969	99.98	UG/L	100
27) DI ISOPROPYL ETHER	3.232	45	45245	9.06	UG/L	99
28) 2-BUTANONE	3.795	43	73528	92.95	UG/L	97
29) T-BUTYL ETHYL ETHER	3.605	59	42064	9.76	UG/L	98
30) CIS-1,2-DICHLOROETHENE	3.761	61	22298	9.82	UG/L	95
31) 2,2-DICHLOROPROPANE	3.747	77	16233	9.51	UG/L	96
32) ETHYL ACETATE	3.858	43	17720m	8.82	UG/L	
33) BROMOCHLOROMETHANE	4.000	128	6021	10.57	UG/L	99
34) TETRAHYDROFURAN	4.048	42	4552	8.56	UG/L	98
35) T-BUTYL FORMATE	4.136	59	8252	7.12	UG/L	97
36) CHLOROFORM	4.085	83	20217	9.59	UG/L	96
37) 1,1,1-TRICHLOROETHANE	4.247	97	19511	10.64	UG/L	97
38) CYCLOHEXANE	4.290	56	23710	9.92	UG/L	91
39) CARBON TETRACHLORIDE	4.406	117	16998	10.88	UG/L	100
40) 1,1-DICHLOROPROPENE	4.415	75	13445	9.06	UG/L	95
41) BENZENE	4.622	78	37333	8.93	UG/L	98
42) T-AMYL ALCOHOL	4.671	59	9676	90.57	UG/L	93
43) T-AMYLMETHYL ETHER	4.742	73	26205	8.68	UG/L #	91
46) 1,2-DICHLOROETHANE	4.656	62	22333	11.30	UG/L	96
47) TRICHLOROETHENE	5.256	95	10467	9.91	UG/L	94

Data Path : Y:\1\DATA\B081319\

Data File : B1922525.D

Acq On : 13 Aug 2019 6:57 pm

Operator :

Sample : BFB / 8260 STD 10PPB 1906029

Inst : GCMSVOA2

Misc :

ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 14 10:04:48 2019

Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M

Quant Title : 8260 CALIBRATION VOAMS 5973

QLast Update : Fri Apr 19 05:25:51 2019

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.424	83	11997	8.37	UG/L #	88
49) 1,2-DICHLOROPROPANE	5.483	63	11919	9.92	UG/L	98
50) DIBROMOMETHANE	5.600	93	7344	10.37	UG/L	91
51) 1,4-DIOXANE	5.634	88	767	106.92	UG/L #	76
52) BROMODICHLOROMETHANE	5.759	83	15906	10.50	UG/L	98
53) 2-CHLOROETHYLVINYLEETHER	6.072	63	48443	59.69	UG/L	98
54) MIBK	6.361	43	157577	105.20	UG/L	96
55) CIS-1,3-DICHLOROPROPENE	6.191	75	16686	9.61	UG/L	96
56) TOLUENE	6.506	91	40689	9.53	UG/L	99
57) TRANS-1,3,-DICHLOROPRO...	6.745	75	15873	9.53	UG/L	94
59) 1,1,2-TRICHLOROETHANE	6.919	97	9292	9.60	UG/L	99
60) 2-HEXANONE	7.177	43	116366	105.54	UG/L	96
61) TETRACHLOROETHENE	7.027	164	8937	10.85	UG/L	100
62) 1,3-DICHLOROPROPANE	7.078	76	16345	9.61	UG/L	93
63) DIBROMOCHLOROMETHANE	7.291	129	12978	11.59	UG/L	99
64) 1,2-DIBROMOETHANE	7.396	107	11031	10.22	UG/L #	99
67) CHLOROBENZENE	7.871	112	29101	9.81	UG/L	94
68) 1,1,1,2-TETRACHLOROETHANE	7.956	131	11144	10.32	UG/L	95
69) ETHYLBENZENE	7.981	91	49253	9.54	UG/L	99
70) M/P-XYLENES	8.098	91	78433	19.10	UG/L	99
71) O-XYLENE	8.484	91	40066	9.46	UG/L	96
72) STYRENE	8.504	104	32432	9.60	UG/L	95
73) BROMOFORM	8.686	173	8606	9.85	UG/L	99
74) ISOPROPYLBENZENE	8.851	105	49394	10.19	UG/L	99
76) 1,1,2,2-TETRACHLOROETHANE	9.172	83	12582	9.01	UG/L	94
77) 1,4-DICHLORO-2-BUTENE(...	9.229	53	6436	9.70	UG/L	100
78) BROMOBENZENE	9.141	77	20268	9.87	UG/L	96
79) 1,2,3-TRICHLOROPROPANE	9.203	110	4691	10.66	UG/L	75
80) N-PROPYLBENZENE	9.257	91	53103	8.90	UG/L	97
81) 2-CHLOROTOLUENE	9.334	91	34533	9.41	UG/L	96
82) 1,3,5-TRIMETHYLBENZENE	9.434	105	40233	9.68	UG/L	97
83) 4-CHLOROTOLUENE	9.442	91	41480	9.42	UG/L	98
85) TERT-BUTYLBENZENE	9.752	119	34372	9.26	UG/L	94
86) 1,2,4-TRIMETHYLBENZENE	9.803	105	43090	9.26	UG/L	100
87) SEC-BUTYLBENZENE	9.971	105	43921	8.40	UG/L	99
88) 1,3-DICHLOROBENZENE	10.070	146	25789	9.29	UG/L	100
89) P-ISOPROPYLTOLUENE	10.121	119	41854	9.26	UG/L	98
90) 1,4-DICHLOROBENZENE	10.164	146	27082	9.36	UG/L	98
91) N-BUTYLBENZENE	10.525	91	32342	7.98	UG/L	97
92) 1,2-DICHLOROBENZENE	10.531	146	25420	9.48	UG/L	97
93) 1,2-DIBROMO-3-CHLOROPR...	11.312	75	2913	9.40	UG/L #	85
94) 1,3,5-TRICHLOROBENZENE	11.508	180	16586	9.37	UG/L	96
95) 1,2,4-TRICHLOROBENZENE	12.125	180	16501	9.48	UG/L	99
96) HEXACHLOROBUTADIENE	12.293	225	6265	10.56	UG/L	97
97) NAPHTHALENE	12.369	128	41375	9.04	UG/L	99
98) 1,2,3-TRICHLOROBENZENE	12.608	180	14541	9.28	UG/L	97

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

356

Acq On : 13 Aug 2019 6:57 pm

Operator :

Sample : BFB / 8260 STD 10PPB 1906029

Inst : GCMSVOA2

Misc :

ALS Vial : 25 Sample Multiplier: 1

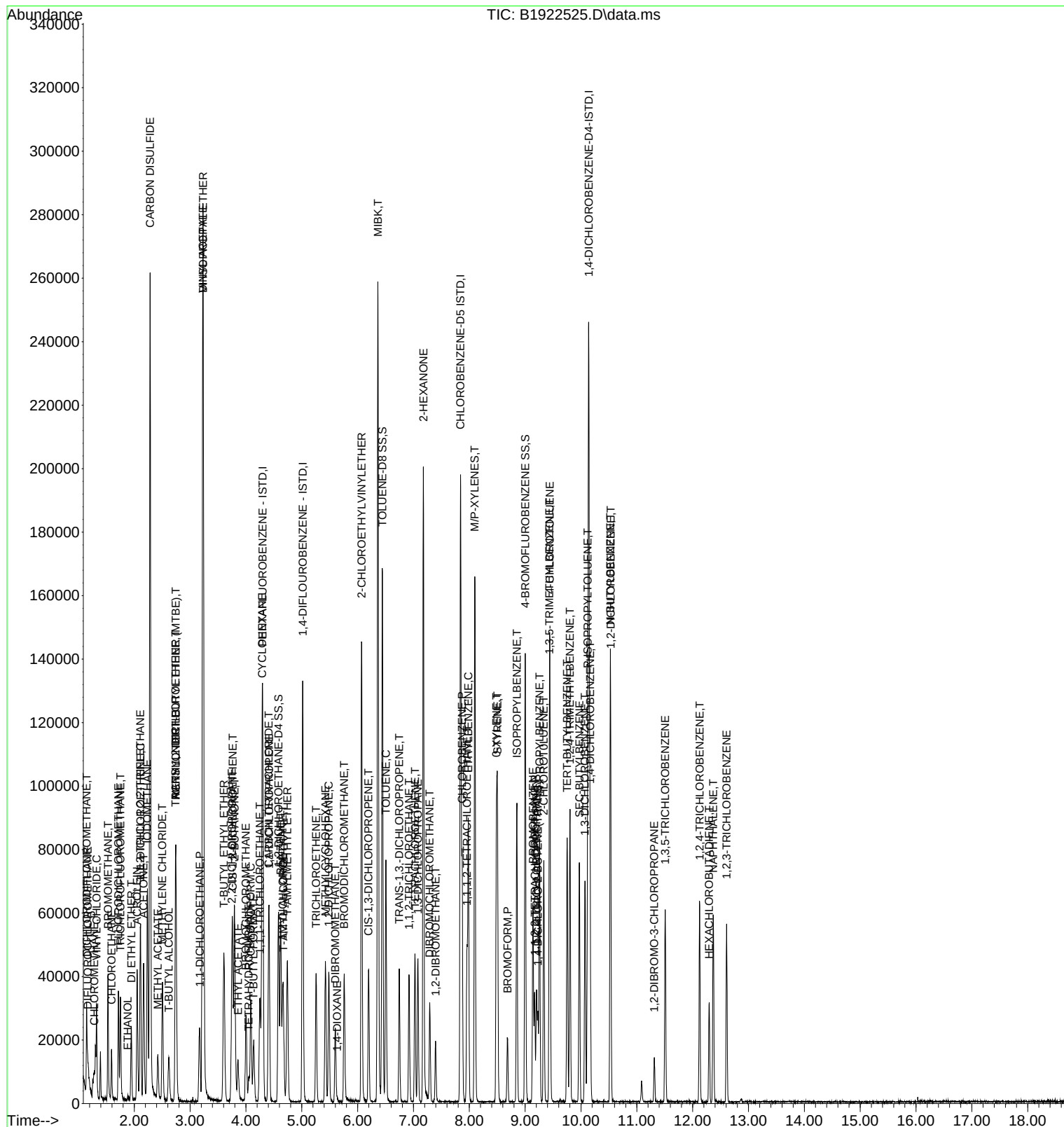
Quant Time: Aug 14 10:04:48 2019

Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M

Quant Title : 8260 CALIBRATION VOAMS 5973

QLast Update : Fri Apr 19 05:25:51 2019

Response via : Initial Calibration



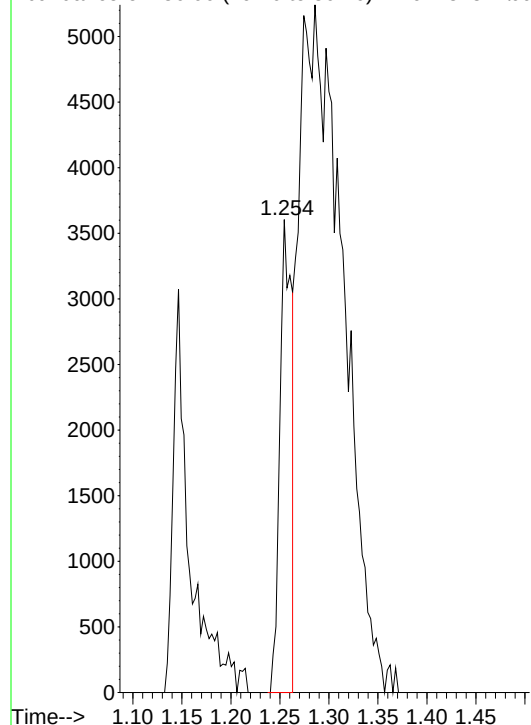
Data Path : Y:\1\DATA\B081319\
Data File : B1922525.D
Acq On : 13 Aug 2019 6:57 pm
Operator :
Sample : BFB / 8260 STD 10PPB 1906029
Misc :

Quant Time : Wed Aug 14 10:04:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

CHLOROMETHANE

Abundance Ion 50.00 (49.70 to 50.70): B1922525.D\data



Original Int. Results

RT : 1.25
Area : 3074
Amount: 1.0909

Manual Int. Results

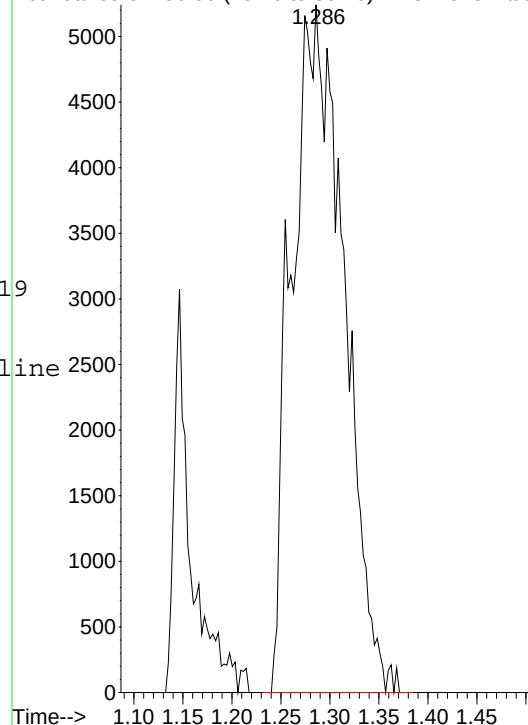
Wed Aug 14 10:04:10 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 1.29
Area : 19475
Amount: 6.91131

Manual Integration

CHLOROMETHANE

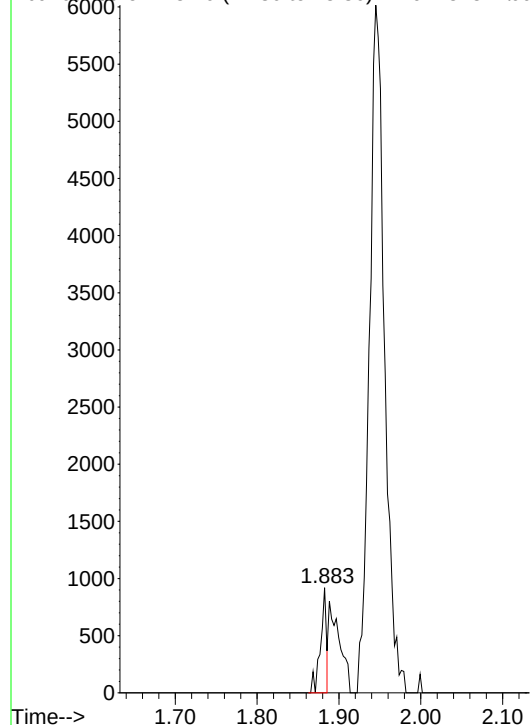
Abundance Ion 50.00 (49.70 to 50.70): B1922525.D\data



Original Integration

ETHANOL

Abundance Ion 45.10 (44.80 to 45.80): B1922525.D\data



Original Int. Results

RT : 1.88
Area : 455
Amount: 32.0983

Manual Int. Results

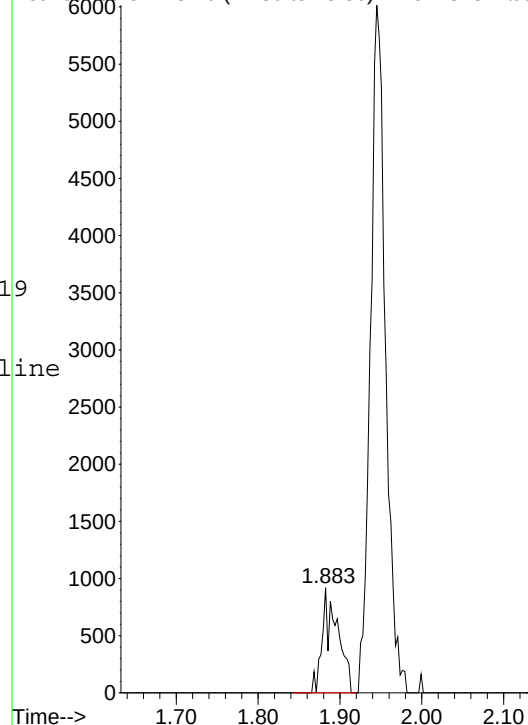
Wed Aug 14 10:04:16 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 1.88
Area : 1208
Amount: 85.2193

Manual Integration

ETHANOL

Abundance Ion 45.10 (44.80 to 45.80): B1922525.D\data



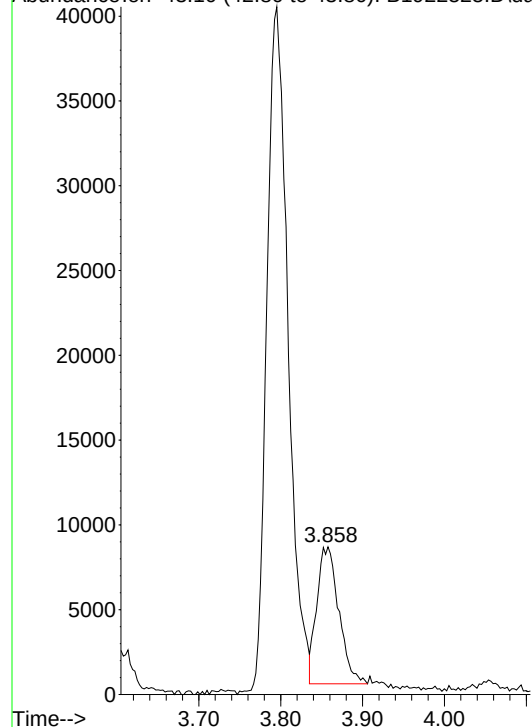
Data Path : Y:\1\DATA\B081319\
Data File : B1922525.D
Acq On : 13 Aug 2019 6:57 pm
Operator :
Sample : BFB / 8260 STD 10PPB 1906029
Misc :

Quant Time : Wed Aug 14 10:04:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): B1922525.D\data



Original Int. Results

RT : 3.86
Area : 15035
Amount: 7.48745

Manual Int. Results

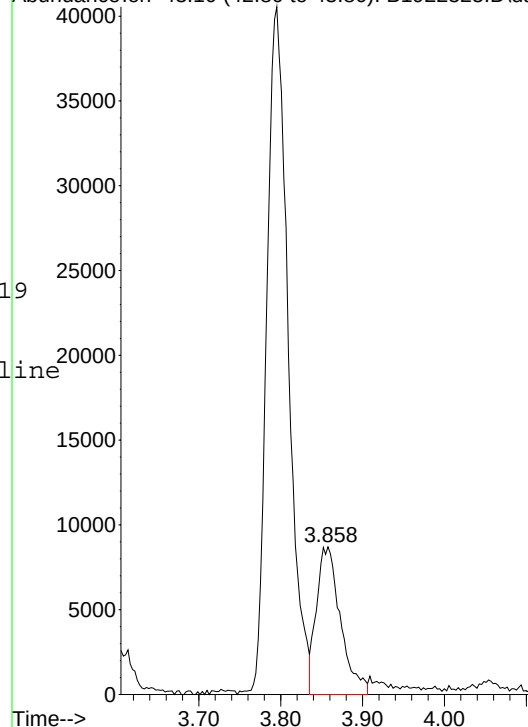
Wed Aug 14 10:04:30 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.86
Area : 17720
Amount: 8.82458

Manual Integration

ETHYL ACETATE

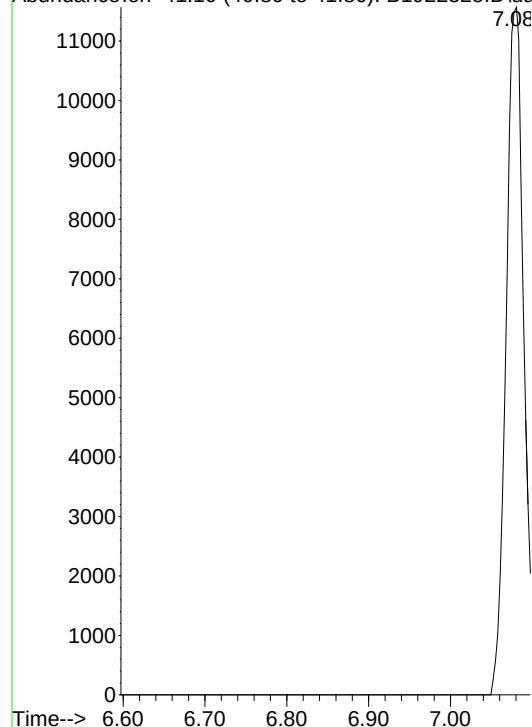
Abundance on 43.10 (42.80 to 43.80): B1922525.D\data



Original Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): B1922525.D\data



Original Int. Results

RT : 7.08
Area : 17489
Amount: 0

Manual Int. Results

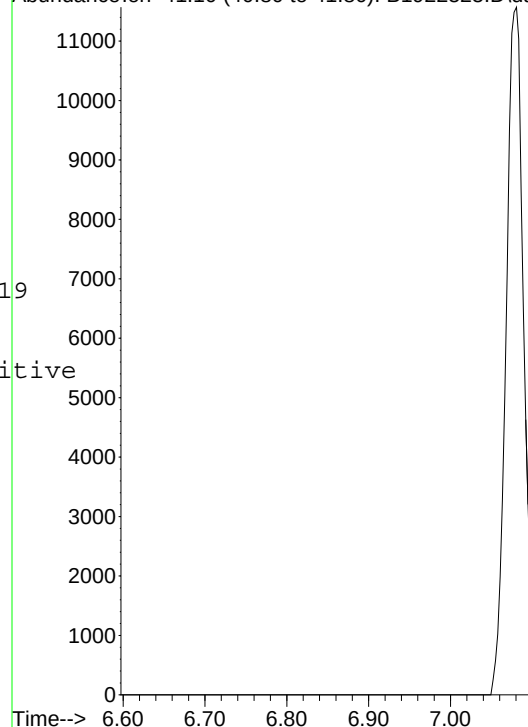
Wed Aug 14 10:04:45 2019

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

Manual Integration

ETHYL METHACRYLATE

Abundance on 41.10 (40.80 to 41.80): B1922525.D\data

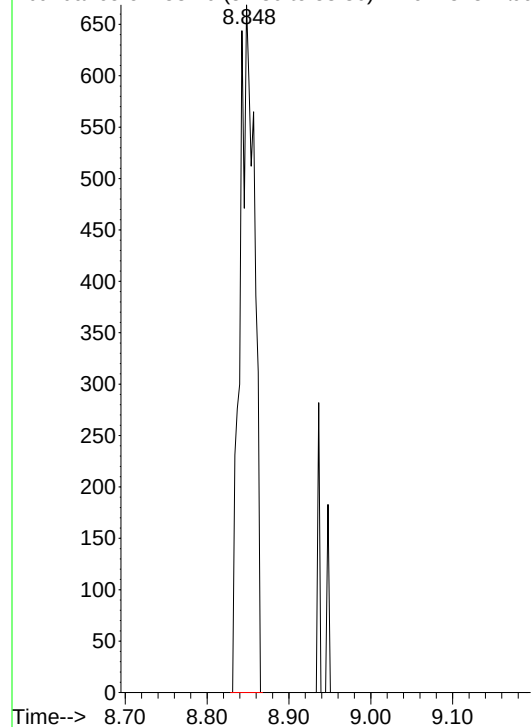


Data Path : Y:\1\DATA\B081319\
Data File : B1922525.D
Acq On : 13 Aug 2019 6:57 pm
Operator :
Sample : BFB / 8260 STD 10PPB 1906029
Misc :

Quant Time : Wed Aug 14 10:04:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): B1922525.D\data



Original Int. Results

RT : 8.85

Area : 846

Amount: 0

Manual Int. Results

Wed Aug 14 10:04:55 2019

MIuser: LBD

Reason: Qdel False Positive

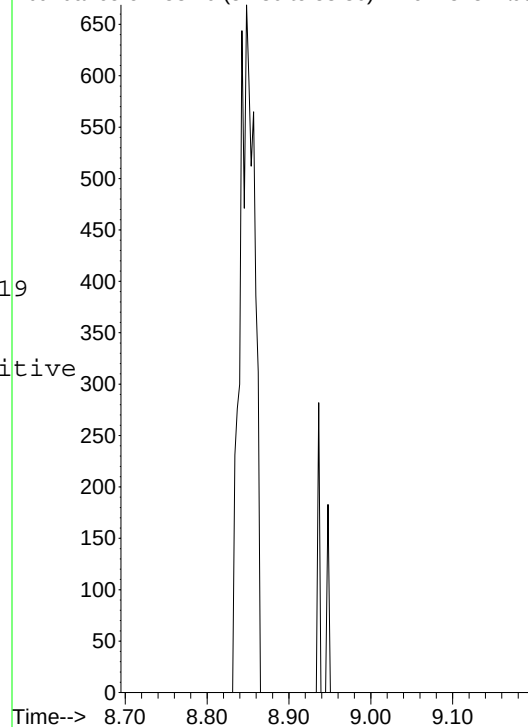
RT : 0.00

Area : 0

Amount: 0

Manual Integration
CIS-1,4-DICHLORO-2-BUTENE

Abundance on 53.10 (52.80 to 53.80): B1922525.D\data



CONTINUING CALIBRATION VERIFICATION

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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

CONTINUING CALIBRATION VERIFICATION

SW-846 8260C

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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:	19H0528
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

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSVOA3

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						
3) DICHLORODIFLUOROMETHANE	1.087	85	16421	9.33	UG/L	Qvalue 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-AMYL METHYL ETHER	4.651	73	46459	10.01	UG/L	98
50) 1,2-DICHLOROETHANE	4.548	62	24793	11.00	UG/L	96
51) TRICHLOROETHANE	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
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSVOA3

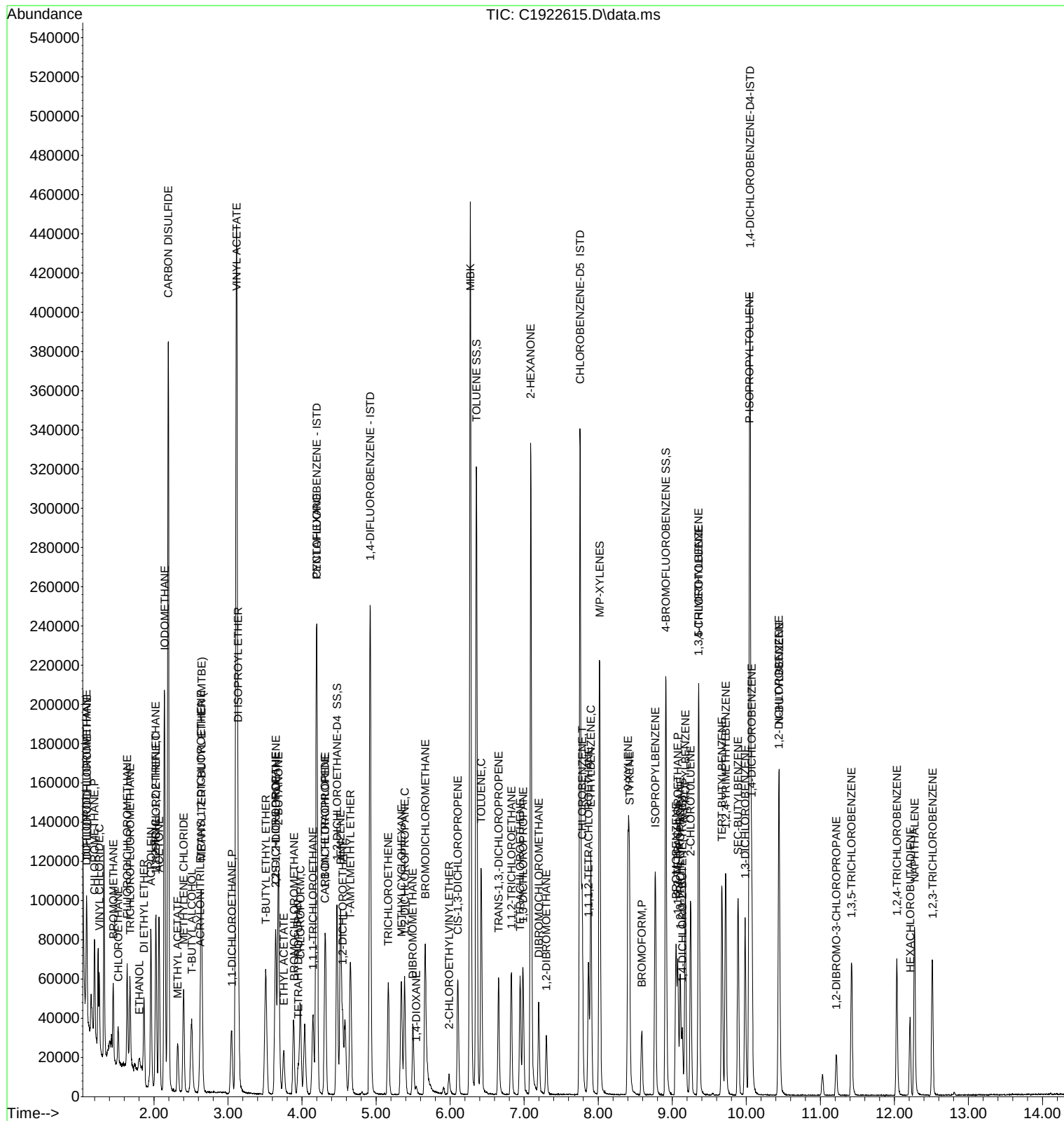
Quant Time: Aug 15 08:31:42 2019
 Quant Method : C:\msdchem\1\methods\C051619.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Fri May 17 05:29:37 2019
 Response via : Initial Calibration

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) O-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-CHLOROTOLUENE	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

365

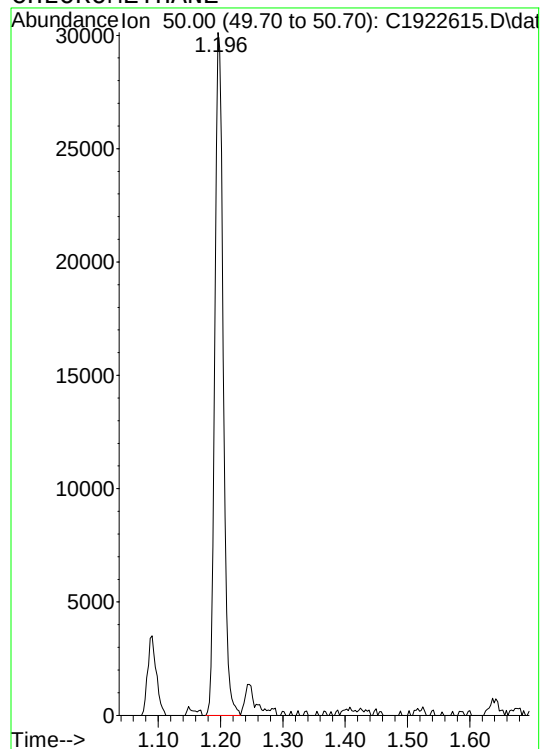
Quant Time: Aug 15 08:31:42 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration



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

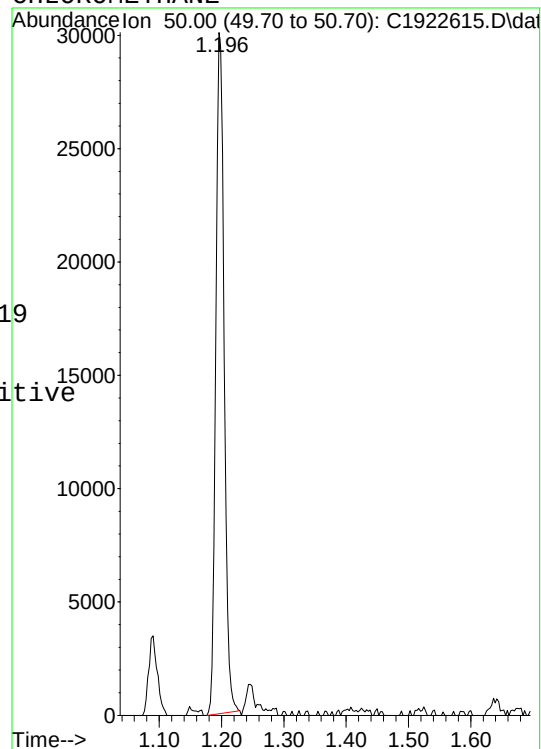
RT : 1.20
Area : 28394
Amount: 12.0845

Manual Int. Results

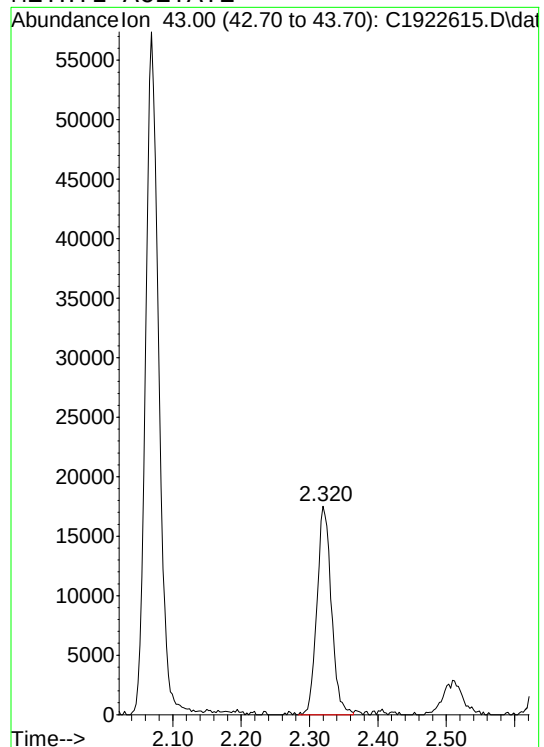
Thu Aug 15 08:31:29 2019

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

Manual Integration
CHLOROMETHANE



Original Integration
METHYL ACETATE



Original Int. Results

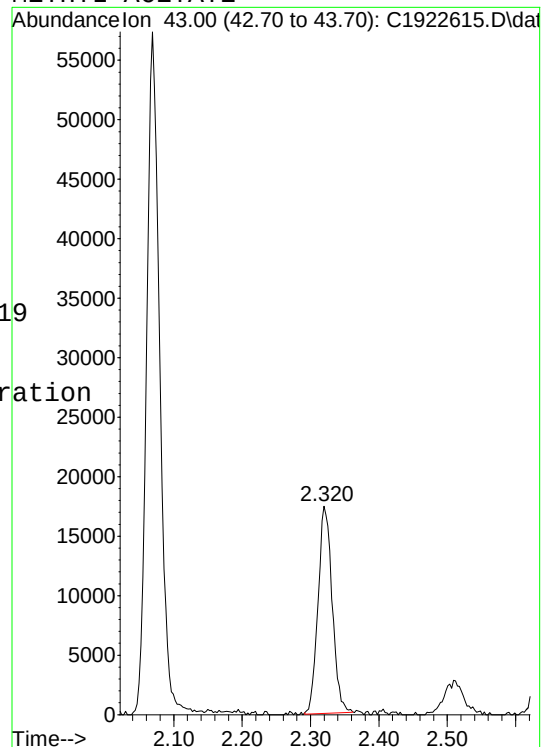
RT : 2.32
Area : 25419
Amount: 12.1126

Manual Int. Results

Thu Aug 15 08:31:42 2019

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

Manual Integration
METHYL ACETATE



8 - FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY

367

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Sequence: S039168

Instrument: GCMSVOA2

Calibration: 1900126

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S039168-CCV1)			<i>Lab File ID: B1922525.D</i>			<i>Analyzed: 08/13/19 18:57</i>			
Pentafluorobenzene	56658	4.298	72484	4.301	78	50 - 200	-0.0030	+/-0.50	
1,4-Difluorobenzene	83289	5.017	115420	5.017	72	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	47003	7.842	62266	7.842	75	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	50575	10.138	64053	10.139	79	50 - 200	-0.0010	+/-0.50	
LCS (B237875-BS1)			<i>Lab File ID: B1922527.D</i>			<i>Analyzed: 08/13/19 19:59</i>			
Pentafluorobenzene	56922	4.298	56658	4.298	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	83504	5.017	83289	5.017	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	47516	7.842	47003	7.842	101	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	50963	10.141	50575	10.138	101	50 - 200	0.0030	+/-0.50	
LCS Dup (B237875-BSD1)			<i>Lab File ID: B1922528.D</i>			<i>Analyzed: 08/13/19 20:30</i>			
Pentafluorobenzene	56895	4.298	56658	4.298	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	82184	5.014	83289	5.017	99	50 - 200	-0.0030	+/-0.50	
Chlorobenzene-d5	47614	7.845	47003	7.842	101	50 - 200	0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	51015	10.138	50575	10.138	101	50 - 200	0.0000	+/-0.50	
Blank (B237875-BLK1)			<i>Lab File ID: B1922531.D</i>			<i>Analyzed: 08/13/19 22:02</i>			
Pentafluorobenzene	53869	4.298	56658	4.298	95	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	75860	5.017	83289	5.017	91	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	46955	7.842	47003	7.842	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	49345	10.141	50575	10.138	98	50 - 200	0.0030	+/-0.50	
Trip Blank-8/8/19 (19H0528-01)			<i>Lab File ID: B1922533.D</i>			<i>Analyzed: 08/13/19 23:04</i>			
Pentafluorobenzene	52560	4.301	56658	4.298	93	50 - 200	0.0030	+/-0.50	
1,4-Difluorobenzene	74840	5.017	83289	5.017	90	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	46262	7.845	47003	7.842	98	50 - 200	0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	48577	10.135	50575	10.138	96	50 - 200	-0.0030	+/-0.50	
OC-17S (19H0528-03)			<i>Lab File ID: B1922534.D</i>			<i>Analyzed: 08/13/19 23:34</i>			
Pentafluorobenzene	51183	4.298	56658	4.298	90	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	70711	5.017	83289	5.017	85	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	43143	7.842	47003	7.842	92	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	46840	10.138	50575	10.138	93	50 - 200	0.0000	+/-0.50	

8 - FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY

368

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Sequence: S039168

Instrument: GCMSVOA2

Calibration: 1900126

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
OC-17D (19H0528-02)			<i>Lab File ID: B1922535.D</i>			<i>Analyzed: 08/14/19 00:05</i>			
Pentafluorobenzene	54958	4.295	56658	4.298	97	50 - 200	-0.0030	+/-0.50	
1,4-Difluorobenzene	74332	5.015	83289	5.017	89	50 - 200	-0.0020	+/-0.50	
Chlorobenzene-d5	47292	7.842	47003	7.842	101	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	48070	10.139	50575	10.138	95	50 - 200	0.0010	+/-0.50	
MW-22R (19H0528-04)			<i>Lab File ID: B1922536.D</i>			<i>Analyzed: 08/14/19 00:36</i>			
Pentafluorobenzene	54205	4.301	56658	4.298	96	50 - 200	0.0030	+/-0.50	
1,4-Difluorobenzene	75762	5.014	83289	5.017	91	50 - 200	-0.0030	+/-0.50	
Chlorobenzene-d5	46582	7.842	47003	7.842	99	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	49919	10.139	50575	10.138	99	50 - 200	0.0010	+/-0.50	
MW-27 (19H0528-05)			<i>Lab File ID: B1922537.D</i>			<i>Analyzed: 08/14/19 01:07</i>			
Pentafluorobenzene	52848	4.298	56658	4.298	93	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	74418	5.014	83289	5.017	89	50 - 200	-0.0030	+/-0.50	
Chlorobenzene-d5	44246	7.842	47003	7.842	94	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	49203	10.139	50575	10.138	97	50 - 200	0.0010	+/-0.50	
MW-22S (19H0528-06)			<i>Lab File ID: B1922538.D</i>			<i>Analyzed: 08/14/19 01:37</i>			
Pentafluorobenzene	52933	4.298	56658	4.298	93	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	72675	5.014	83289	5.017	87	50 - 200	-0.0030	+/-0.50	
Chlorobenzene-d5	45828	7.842	47003	7.842	98	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	48998	10.138	50575	10.138	97	50 - 200	0.0000	+/-0.50	
Blind Duplicate (19H0528-07)			<i>Lab File ID: B1922539.D</i>			<i>Analyzed: 08/14/19 02:08</i>			
Pentafluorobenzene	52569	4.295	56658	4.298	93	50 - 200	-0.0030	+/-0.50	
1,4-Difluorobenzene	74204	5.014	83289	5.017	89	50 - 200	-0.0030	+/-0.50	
Chlorobenzene-d5	46987	7.842	47003	7.842	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	48412	10.141	50575	10.138	96	50 - 200	0.0030	+/-0.50	
Matrix Spike (B237875-MS1)			<i>Lab File ID: B1922546.D</i>			<i>Analyzed: 08/14/19 05:44</i>			
Pentafluorobenzene	55390	4.298	56658	4.298	98	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	78271	5.017	83289	5.017	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	44543	7.842	47003	7.842	95	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	50845	10.138	50575	10.138	101	50 - 200	0.0000	+/-0.50	

8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY

369

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Sequence: S039168

Instrument: GCMSVOA2

Calibration: 1900126

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike Dup (B237875-MSD1)			<i>Lab File ID: B1922547.D</i>			<i>Analyzed: 08/14/19 06:14</i>			
Pentafluorobenzene	56409	4.301	56658	4.298	100	50 - 200	0.0030	+/-0.50	
1,4-Difluorobenzene	81417	5.017	83289	5.017	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	47400	7.842	47003	7.842	101	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	51655	10.136	50575	10.138	102	50 - 200	-0.0020	+/-0.50	

8 - FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY

370

SW-846 8260C

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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)			<i>Lab File ID: C1922615.D</i>			<i>Analyzed: 08/14/19 13:15</i>			
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)			<i>Lab File ID: C1922616.D</i>			<i>Analyzed: 08/14/19 13:42</i>			
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)			<i>Lab File ID: C1922617.D</i>			<i>Analyzed: 08/14/19 14:08</i>			
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)			<i>Lab File ID: C1922619.D</i>			<i>Analyzed: 08/14/19 15:01</i>			
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	
MW-22R (19H0528-04RE1)			<i>Lab File ID: C1922624.D</i>			<i>Analyzed: 08/14/19 17:13</i>			
Pentafluorobenzene	107221	4.196	108023	4.199	99	50 - 200	-0.0030	+/-0.50	
1,4-Difluorobenzene	163866	4.921	165450	4.919	99	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5	81507	7.755	85140	7.755	96	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	73124	10.05	79990	10.05	91	50 - 200	0.0000	+/-0.50	

QC DATA

1 - FORM I

ANALYSIS DATA SHEET

372

Blank

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-BLK1
		File ID:	B1922531.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 22:02
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
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	V-05
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	V-05
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

373

Blank

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-BLK1
		File ID:	B1922531.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 22:02
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
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

374

Blank

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0528
Client: Dvirka And Bartilucci Project: Farrand Controls Site
Matrix: Water Laboratory ID: B237875-BLK1 File ID: B1922531.D
Sampled: Prepared: 08/13/19 07:22 Analyzed: 08/13/19 22:02
Solids: Preparation: SW-846 5030B Dilution:
Batch: B237875 Sequence: S039168 Calibration: 1900126 Instrument: GCMSVOA2
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 113)		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	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922531.D
 Acq On : 13 Aug 2019 10:02 pm
 Operator :
 Sample : B0-BLK1 @ (TICs)
 Misc :
 ALS Vial : 31 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 10:55:31 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	53869	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	75860	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	46955	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.141	152	49345	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	38223	27.54	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	110.16%
45) TOLUENE-D8 SS	6.441	98	82593	27.82	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	111.28%
66) 4-BROMOFLUROBENZENE SS	8.999	95	33897	24.53	UG/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	98.12%
Target Compounds						
54) MIBK	6.370	43	347m	0.25	UG/L	
60) 2-HEXANONE	7.183	43	262m	0.26	UG/L	
70) M/P-XYLENES	8.095	91	436m	0.11	UG/L	
95) 1,2,4-TRICHLOROBENZENE	12.114	180	276m	0.16	UG/L	
97) NAPHTHALENE	12.375	128	1225	0.27	UG/L #	69
98) 1,2,3-TRICHLOROBENZENE	12.611	180	358	0.23	UG/L #	63

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

Data Path : Y:\1\DATA\B081319\

Data File : B1922531.D

Acq On : 13 Aug 2019 10:02 pm

Operator :

Sample : B0-BLK1 @ (TICs)

Inst : GCMSVOA2

Misc :

ALS Vial : 31 Sample Multiplier: 1

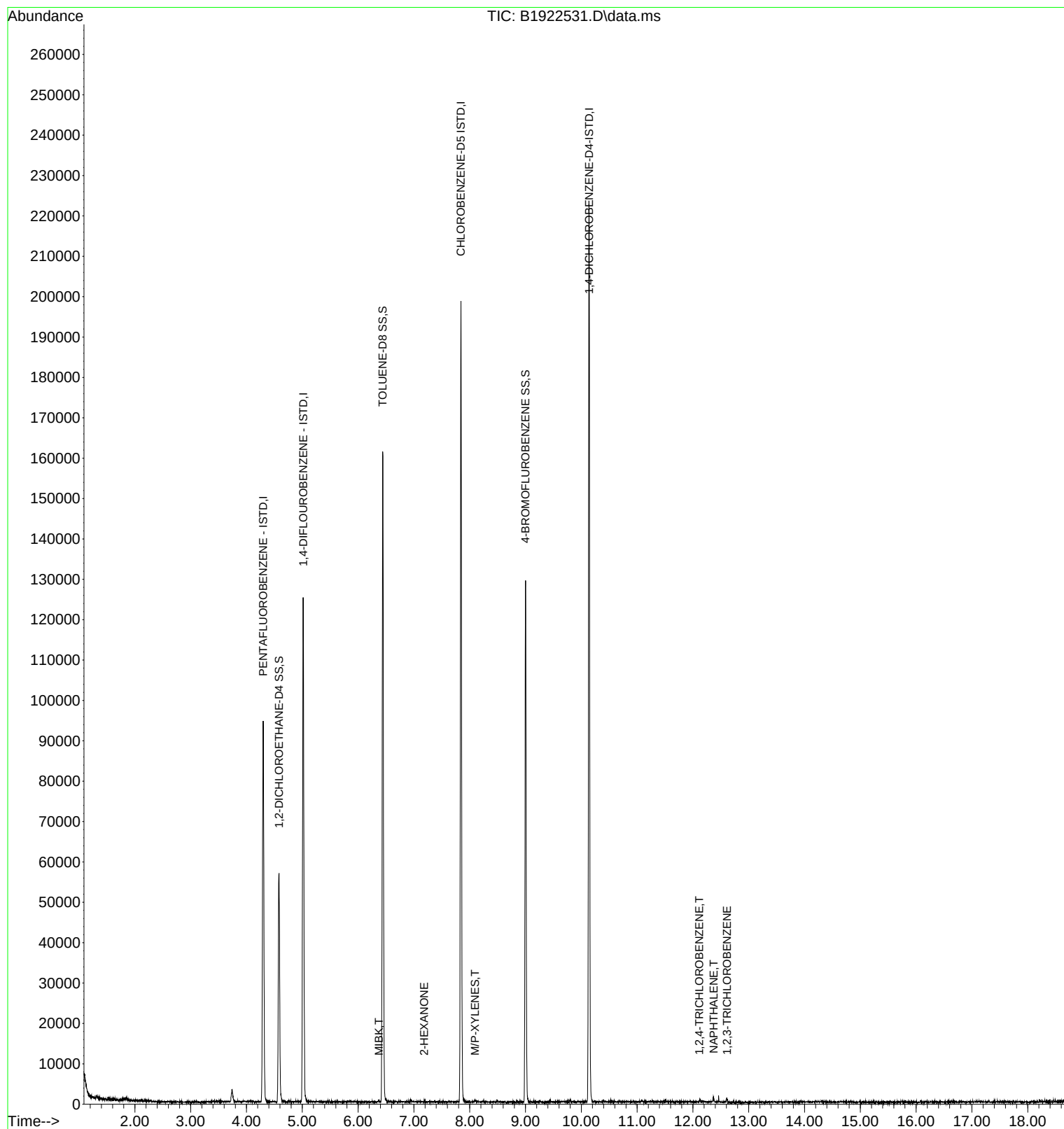
Quant Time: Aug 14 10:55:31 2019

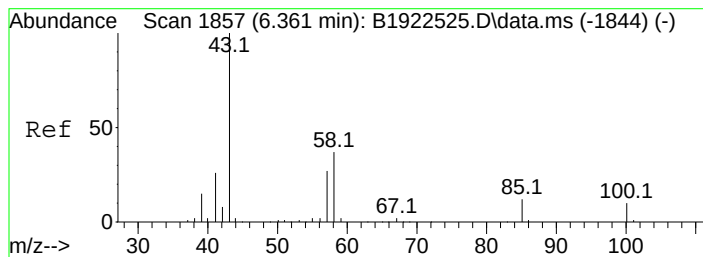
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M

Quant Title : 8260 CALIBRATION VOAMS 5973

QLast Update : Fri Apr 19 05:25:51 2019

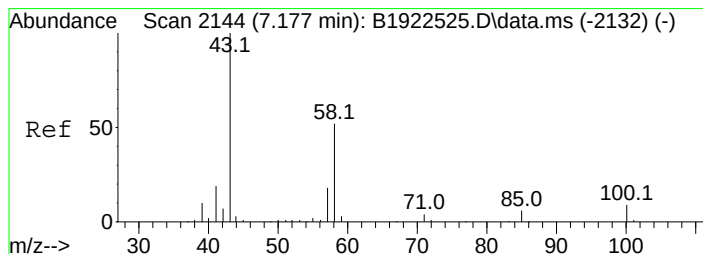
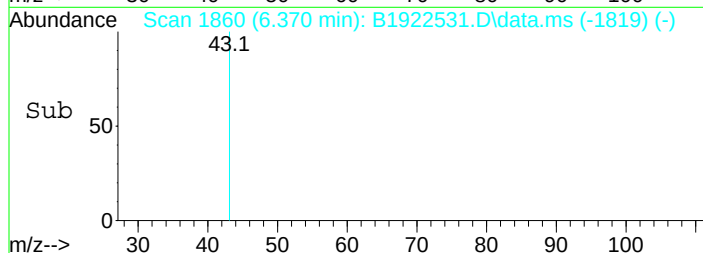
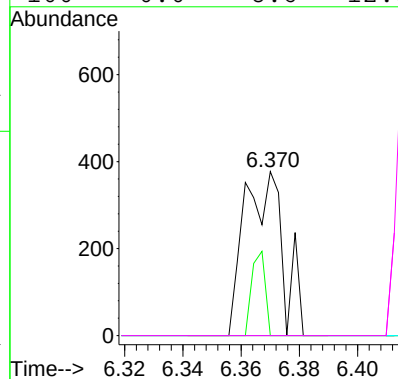
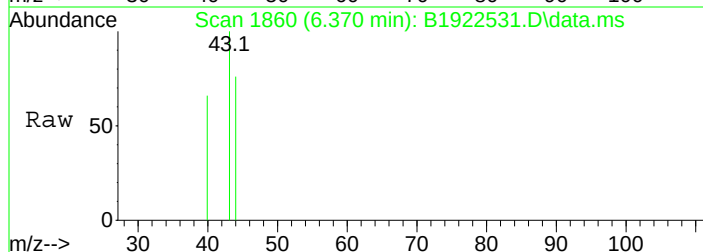
Response via : Initial Calibration





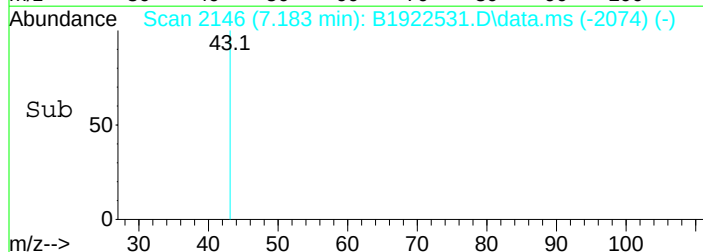
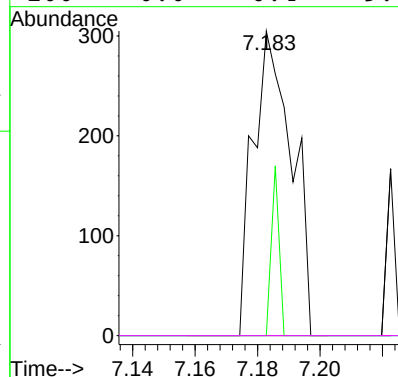
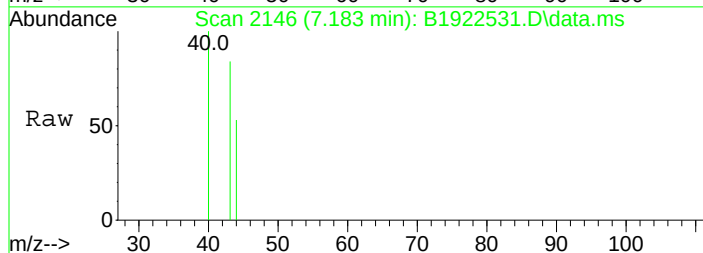
#54
MIBK
Concen: 0.25 UG/L m
RT: 6.370 min Scan# 1860
Delta R.T. 0.006 min
Lab File: B1922531.D
Acq: 13 Aug 2019 10:02 pm

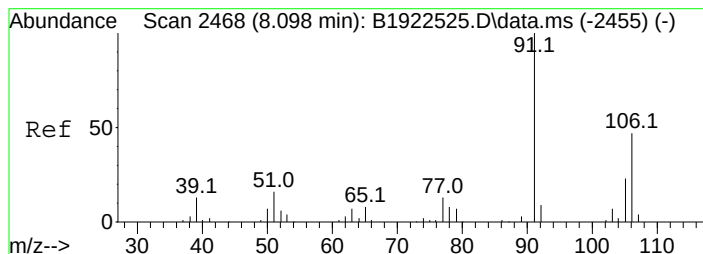
Tgt Ion	43	Resp	347
Ion Ratio	Lower	Upper	
43	100		
58	0.0	27.0	40.6#
57	0.0	18.6	27.8#
100	0.0	8.6	12.8#



#60
2-HEXANONE
Concen: 0.26 UG/L m
RT: 7.183 min Scan# 2146
Delta R.T. 0.006 min
Lab File: B1922531.D
Acq: 13 Aug 2019 10:02 pm

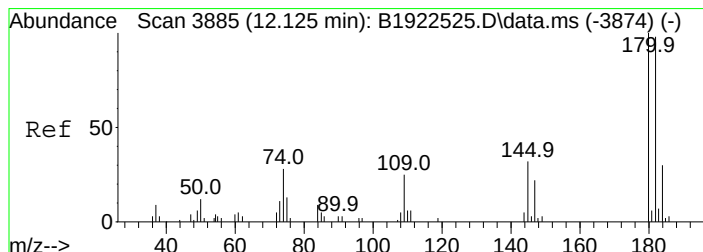
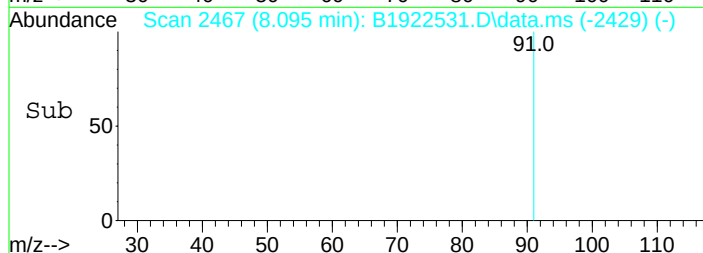
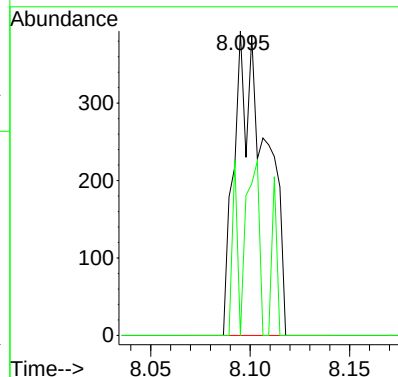
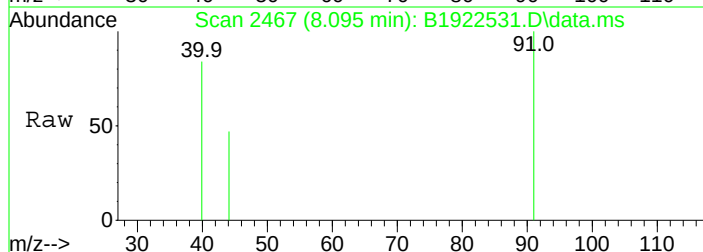
Tgt Ion	43	Resp	262
Ion Ratio	Lower	Upper	
43	100		
58	0.0	37.1	55.7#
57	0.0	13.9	20.9#
100	0.0	6.4	9.6#





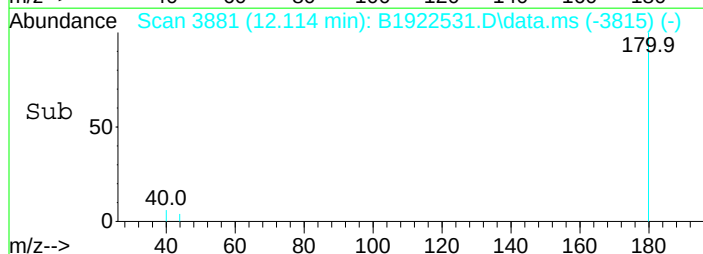
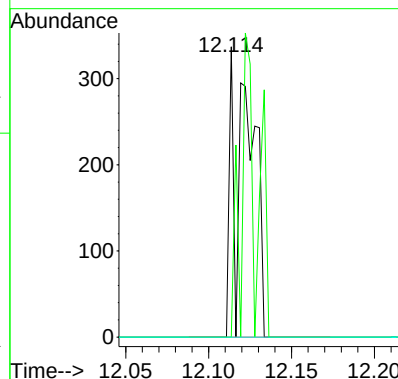
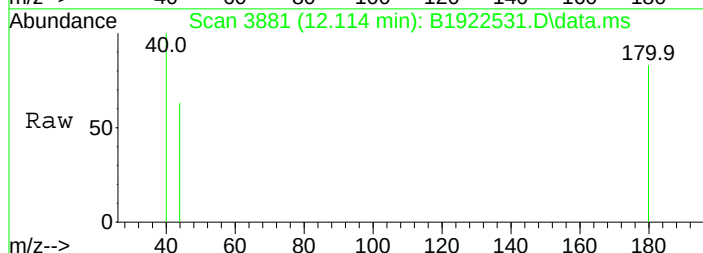
#70
M/P-XYLENES
Concen: 0.11 UG/L m
RT: 8.095 min Scan# 2467
Delta R.T. -0.003 min
Lab File: B1922531.D
Acq: 13 Aug 2019 10:02 pm

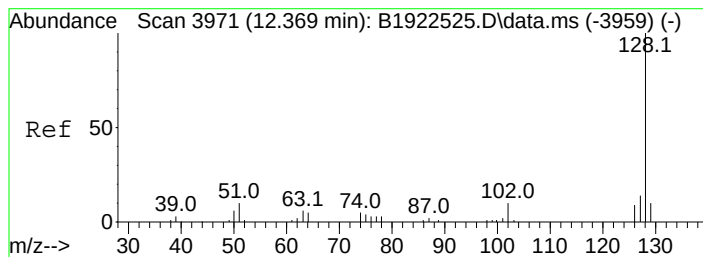
Tgt Ion: 91 Resp: 436
Ion Ratio Lower Upper
91 100
106 0.0 38.5 57.7#



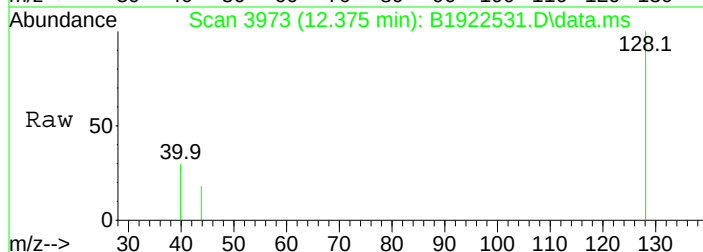
#95
1,2,4-TRICHLOROBENZENE
Concen: 0.16 UG/L m
RT: 12.114 min Scan# 3881
Delta R.T. -0.011 min
Lab File: B1922531.D
Acq: 13 Aug 2019 10:02 pm

Tgt Ion: 180 Resp: 276
Ion Ratio Lower Upper
180 100
182 0.0 80.1 120.1#
145 0.0 25.1 37.7#

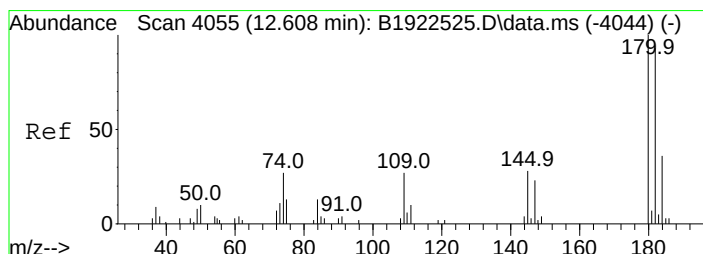
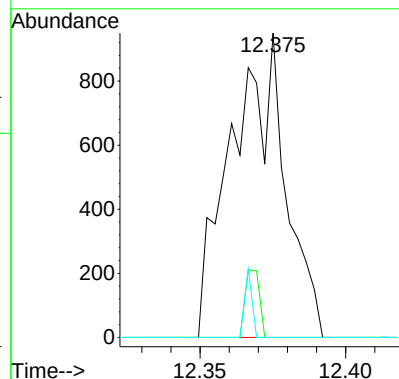




#97
NAPHTHALENE
Concen: 0.27 UG/L
RT: 12.375 min Scan# 3973
Delta R.T. 0.006 min
Lab File: B1922531.D
Acq: 13 Aug 2019 10:02 pm

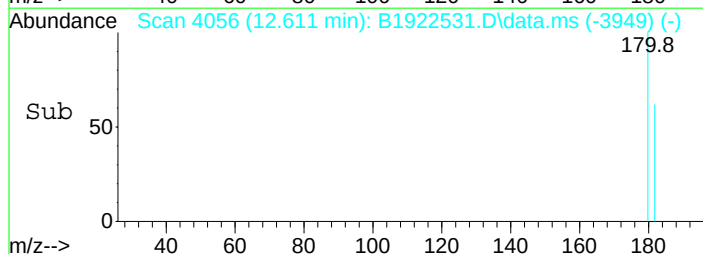
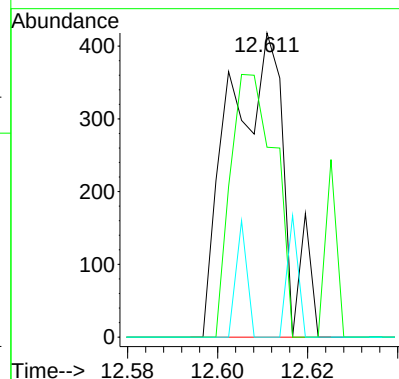
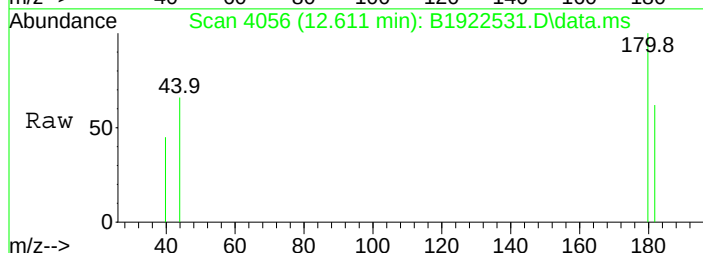


Tgt Ion	Ratio	Lower	Upper
128	100		
129	0.0	8.6	12.8#
127	0.0	10.4	15.6#



#98
1,2,3-TRICHLOROBENZENE
Concen: 0.23 UG/L
RT: 12.611 min Scan# 4056
Delta R.T. 0.003 min
Lab File: B1922531.D
Acq: 13 Aug 2019 10:02 pm

Tgt Ion	Ratio	Lower	Upper
180	100		
182	69.0	49.6	149.0
145	0.0	16.1	48.3#



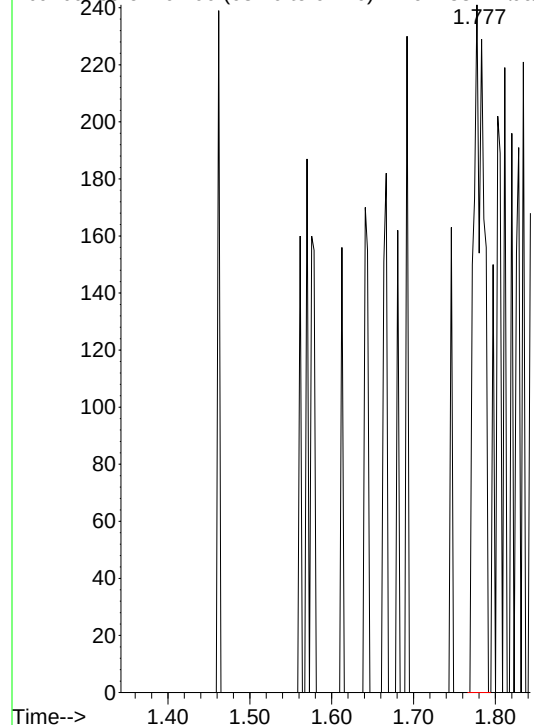
Data Path : Y:\1\DATA\B081319\
Data File : B1922531.D
Acq On : 13 Aug 2019 10:02 pm
Operator :
Sample : B0-BLK1 @ (TICs)
Misc :

Quant Time : Wed Aug 14 10:55:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

CHLOROETHANE

Abundance on 64.00 (63.70 to 64.70): B1922531.D\data



Original Int. Results

RT : 1.78
Area : 216
Amount: 0.271957

Manual Int. Results

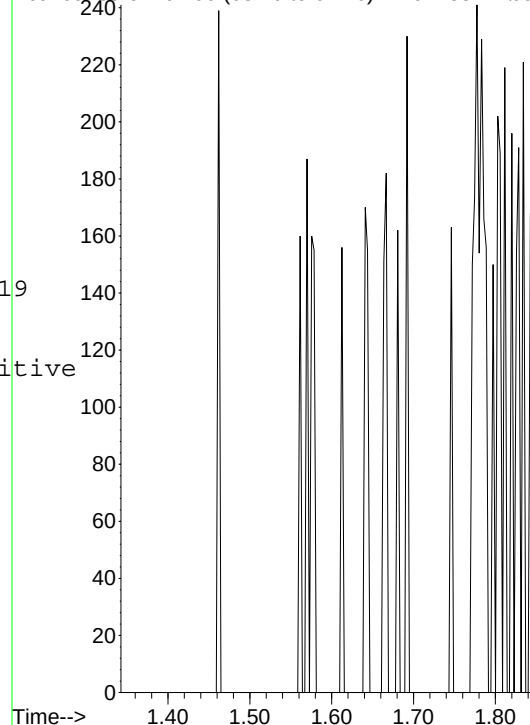
Wed Aug 14 10:54:24 2019

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

Manual Integration

CHLOROETHANE

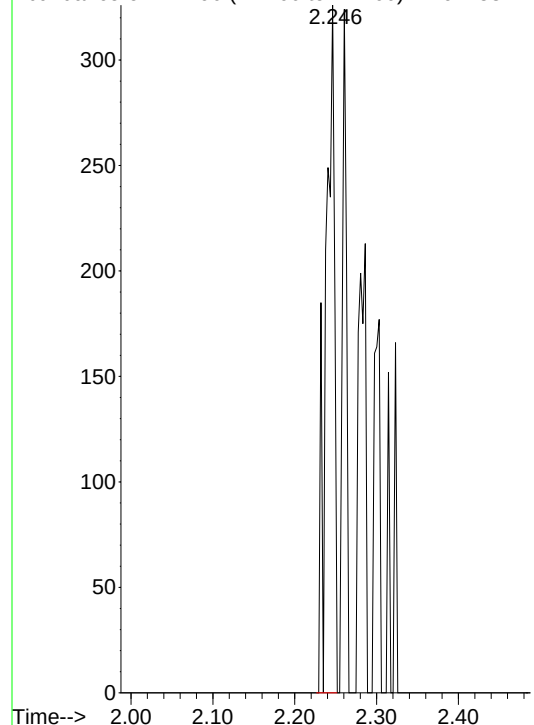
Abundance on 64.00 (63.70 to 64.70): B1922531.D\data



Original Integration

IODOMETHANE

Abundance on 141.90 (141.60 to 142.60): B1922531.D\data



Original Int. Results

RT : 2.25
Area : 236
Amount: 0.181418

Manual Int. Results

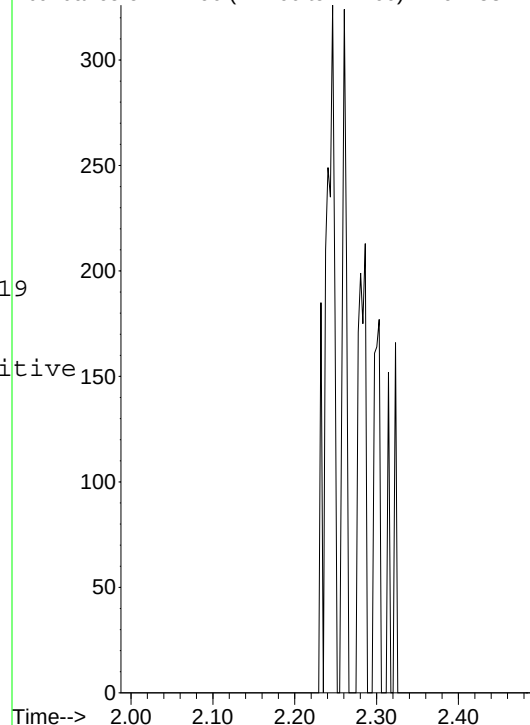
Wed Aug 14 10:54:32 2019

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

Manual Integration

IODOMETHANE

Abundance on 141.90 (141.60 to 142.60): B1922531.D\data



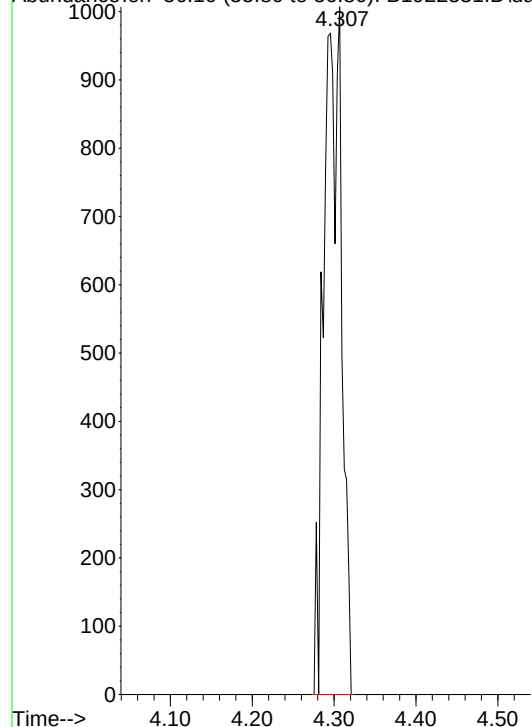
Data Path : Y:\1\DATA\B081319\
Data File : B1922531.D
Acq On : 13 Aug 2019 10:02 pm
Operator :
Sample : B0-BLK1 @ (TICs)
Misc :

Quant Time : Wed Aug 14 10:55:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

CYCLOHEXANE

Abundance on 56.10 (55.80 to 56.80): B1922531.D\data



Original Int. Results

RT : 4.31
Area : 1517
Amount: 0.667546

Manual Int. Results

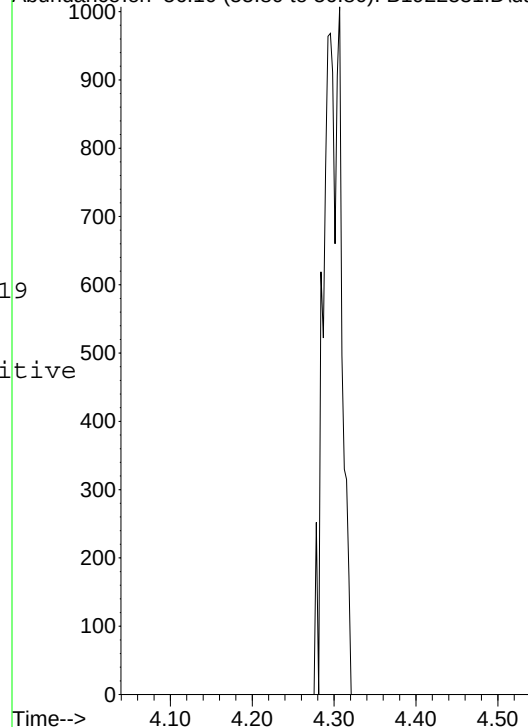
Wed Aug 14 10:54:42 2019

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

Manual Integration

CYCLOHEXANE

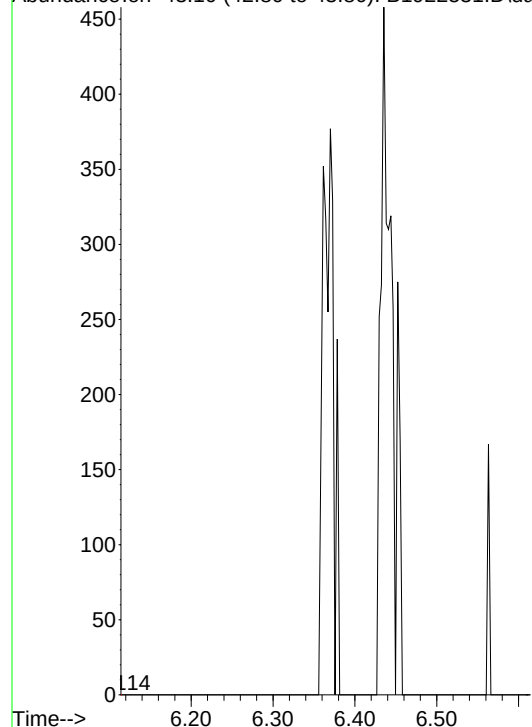
Abundance on 56.10 (55.80 to 56.80): B1922531.D\data



Original Integration

MIBK

Abundance on 43.10 (42.80 to 43.80): B1922531.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

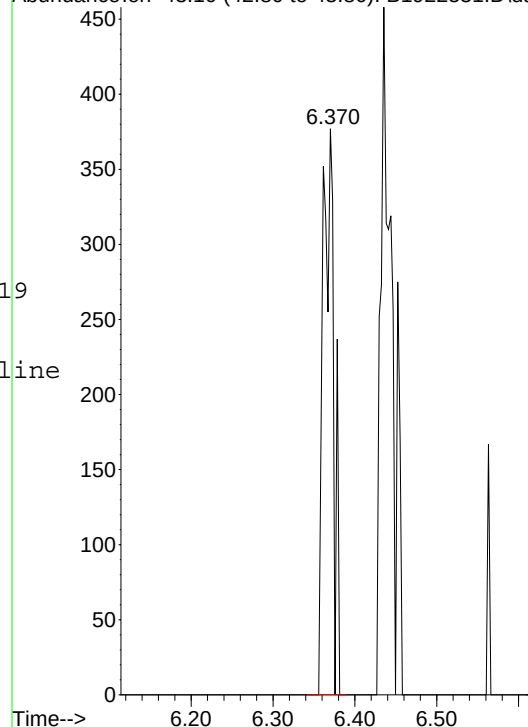
Wed Aug 14 10:54:52 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 6.37
Area : 347
Amount: 0.254336

Manual Integration

MIBK

Abundance on 43.10 (42.80 to 43.80): B1922531.D\data



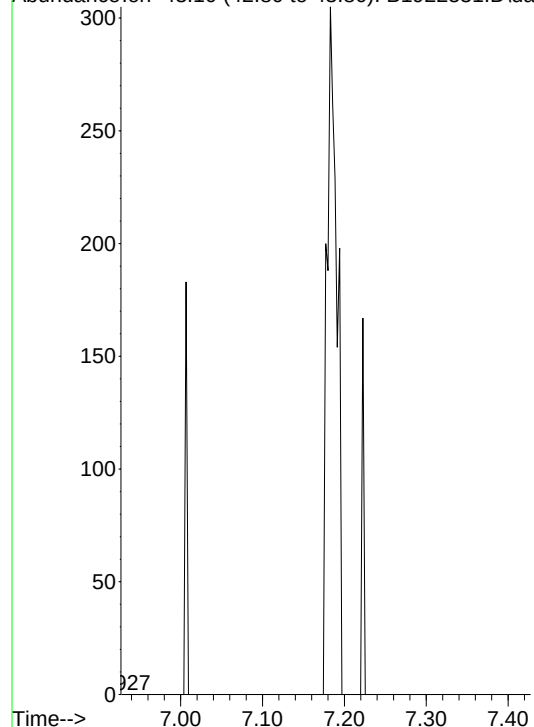
Data Path : Y:\1\DATA\B081319\
Data File : B1922531.D
Acq On : 13 Aug 2019 10:02 pm
Operator :
Sample : B0-BLK1 @ (TICs)
Misc :

Quant Time : Wed Aug 14 10:55:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

2-HEXANONE

Abundance on 43.10 (42.80 to 43.80): B1922531.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Wed Aug 14 10:55:06 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 7.18

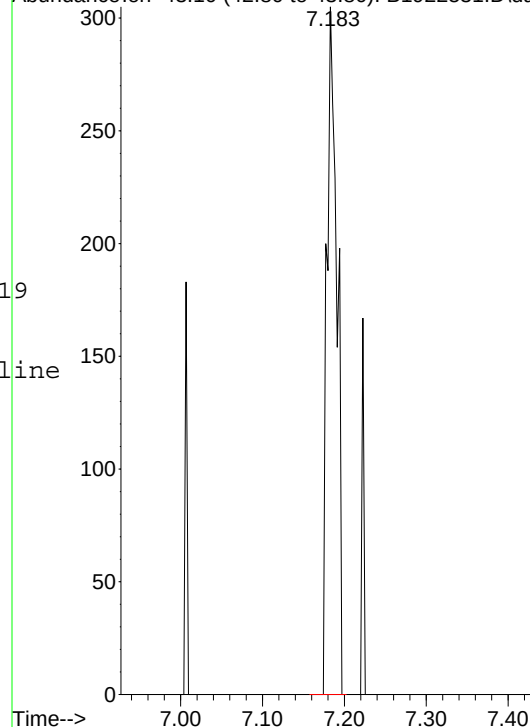
Area : 262

Amount: 0.260906

Manual Integration

2-HEXANONE

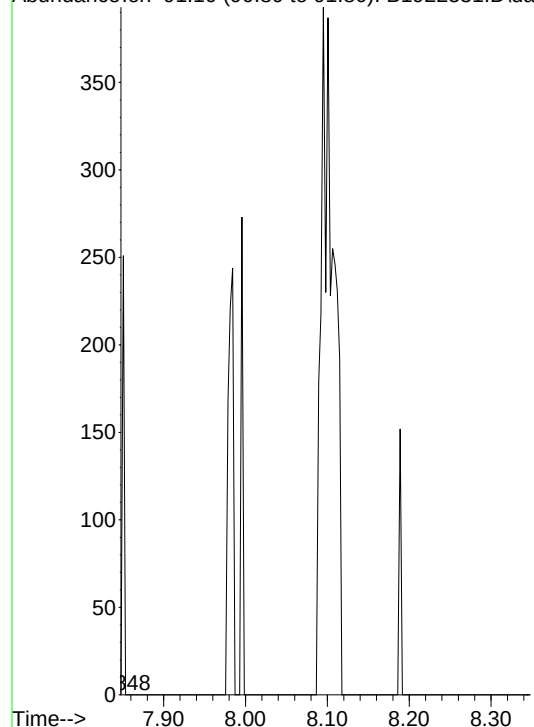
Abundance on 43.10 (42.80 to 43.80): B1922531.D\data



Original Integration

M/P-XYLENES

Abundance on 91.10 (90.80 to 91.80): B1922531.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Wed Aug 14 10:55:13 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 8.10

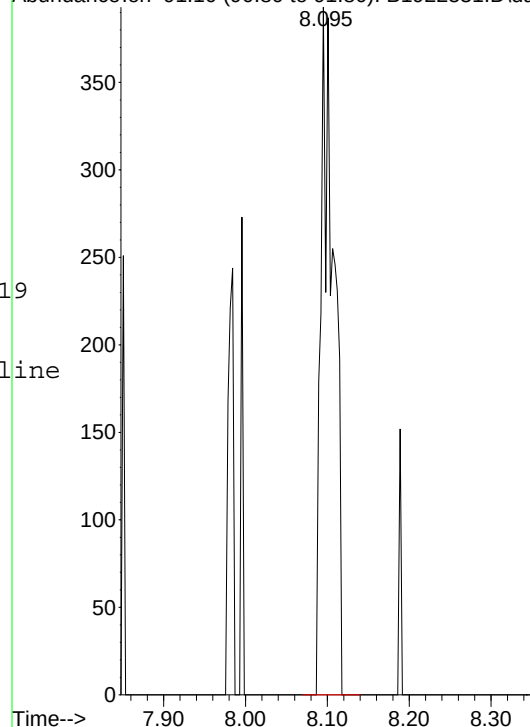
Area : 436

Amount: 0.10629

Manual Integration

M/P-XYLENES

Abundance on 91.10 (90.80 to 91.80): B1922531.D\data



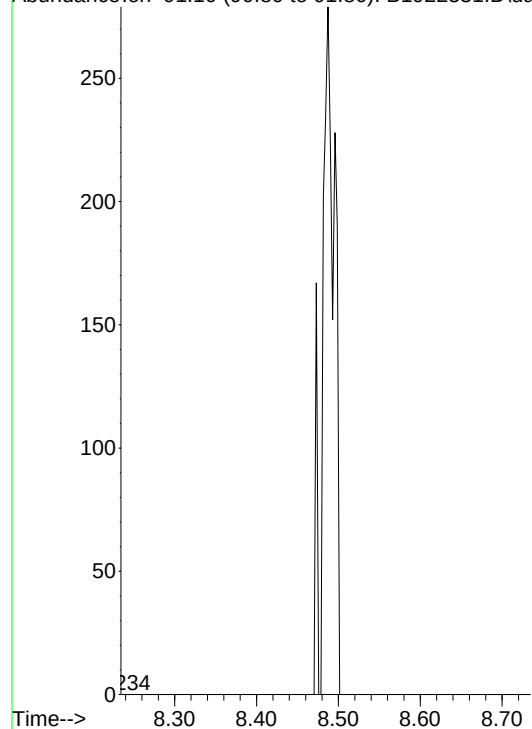
Data Path : Y:\1\DATA\B081319\
Data File : B1922531.D
Acq On : 13 Aug 2019 10:02 pm
Operator :
Sample : B0-BLK1 @ (TICs)
Misc :

Quant Time : Wed Aug 14 10:55:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

0-XYLENE

Abundance on 91.10 (90.80 to 91.80): B1922531.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Wed Aug 14 10:55:17 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 8.49

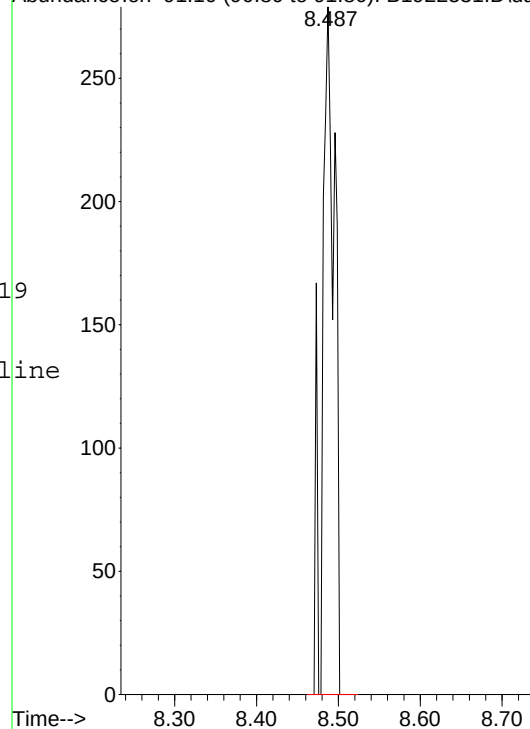
Area : 286

Amount: 0.0675942

Manual Integration

0-XYLENE

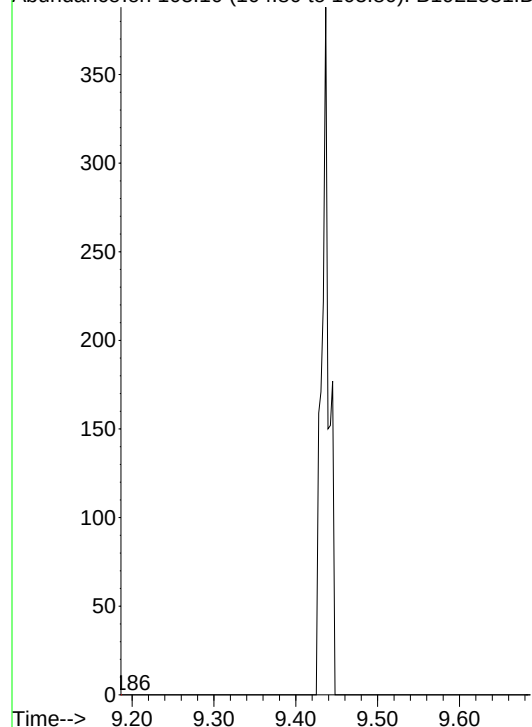
Abundance on 91.10 (90.80 to 91.80): B1922531.D\data



Original Integration

1,3,5-TRIMETHYLBENZENE

Abundance on 105.10 (104.80 to 105.80): B1922531.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Wed Aug 14 10:55:24 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 9.44

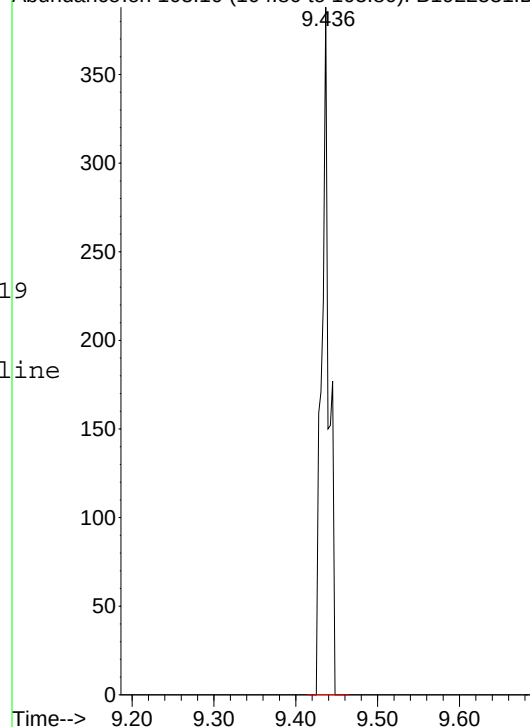
Area : 242

Amount: 0.0583033

Manual Integration

1,3,5-TRIMETHYLBENZENE

Abundance on 105.10 (104.80 to 105.80): B1922531.D\data

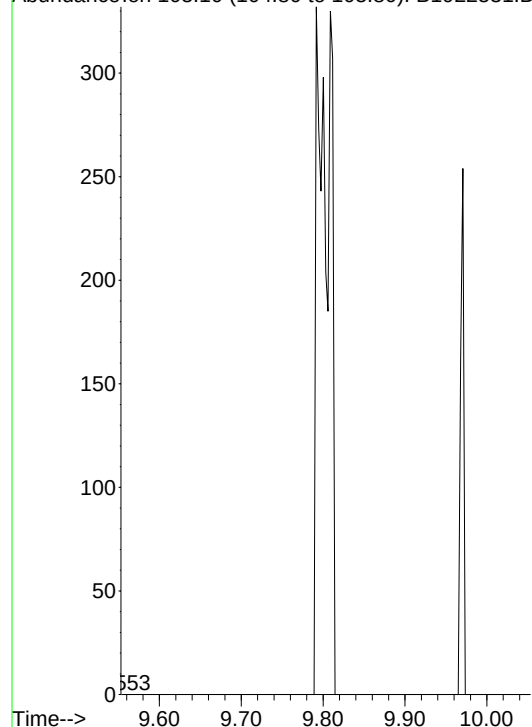


Data Path : Y:\1\DATA\B081319\
Data File : B1922531.D
Acq On : 13 Aug 2019 10:02 pm
Operator :
Sample : B0-BLK1 @ (TICs)
Misc :

Quant Time : Wed Aug 14 10:55:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
1,2,4-TRIMETHYLBENZENE

Abundance on 105.10 (104.80 to 105.80): B1922531.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Wed Aug 14 10:55:29 2019

MIuser: LBD

Reason: Incorrect Baseline

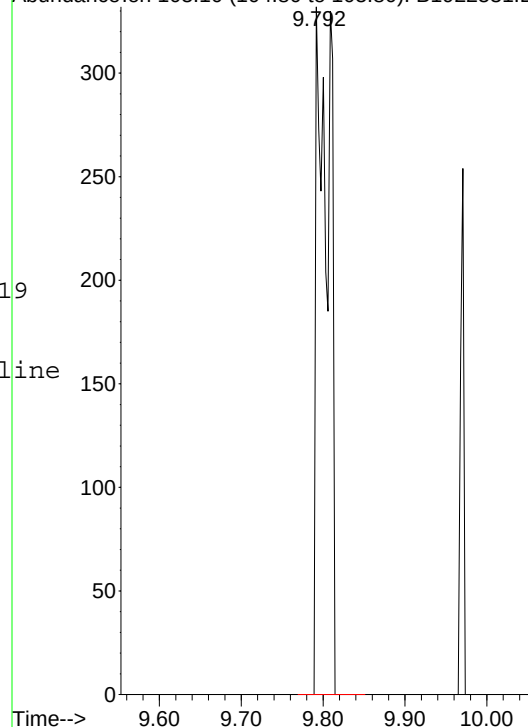
RT : 9.79

Area : 370

Amount: 0.0814991

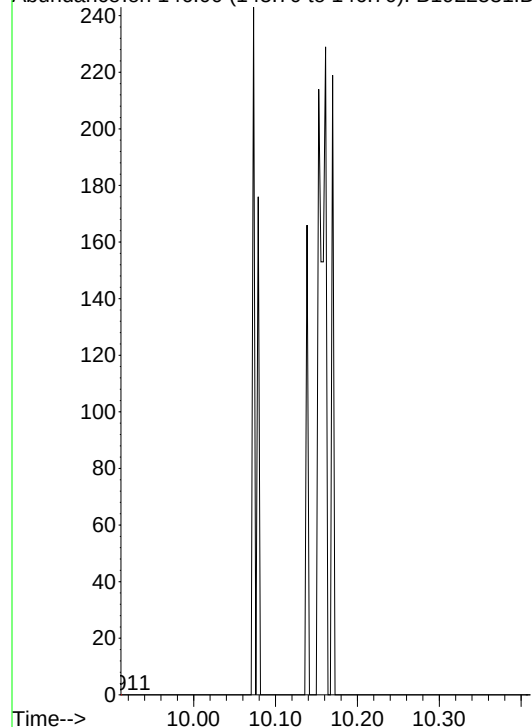
Manual Integration
1,2,4-TRIMETHYLBENZENE

Abundance on 105.10 (104.80 to 105.80): B1922531.D



Original Integration
1,4-DICHLOROBENZENE

Abundance on 146.00 (145.70 to 146.70): B1922531.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Wed Aug 14 10:55:34 2019

MIuser: LBD

Reason: Incorrect Baseline

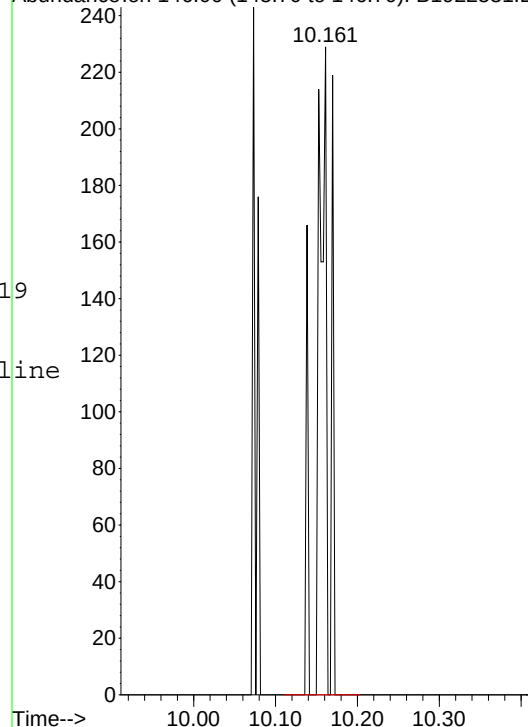
RT : 10.16

Area : 193

Amount: 0.0683786

Manual Integration
1,4-DICHLOROBENZENE

Abundance on 146.00 (145.70 to 146.70): B1922531.D



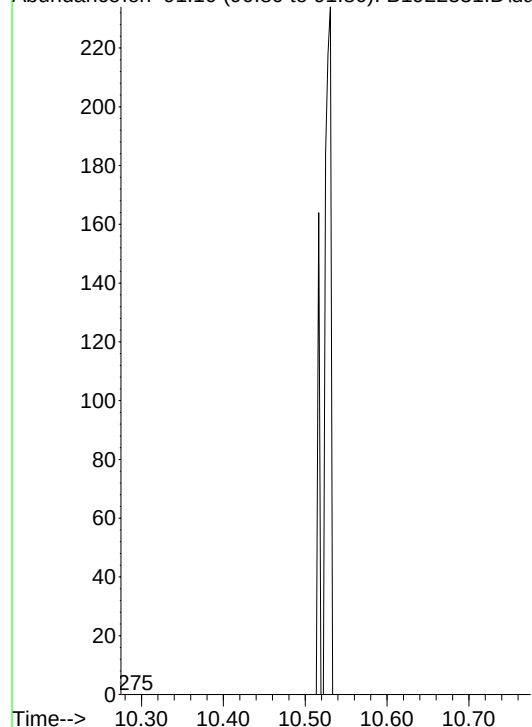
Data Path : Y:\1\DATA\B081319\
Data File : B1922531.D
Acq On : 13 Aug 2019 10:02 pm
Operator :
Sample : B0-BLK1 @ (TICs)
Misc :

Quant Time : Wed Aug 14 10:55:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

N-BUTYLBENZENE

Abundance on 91.10 (90.80 to 91.80): B1922531.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Wed Aug 14 10:55:37 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 10.53

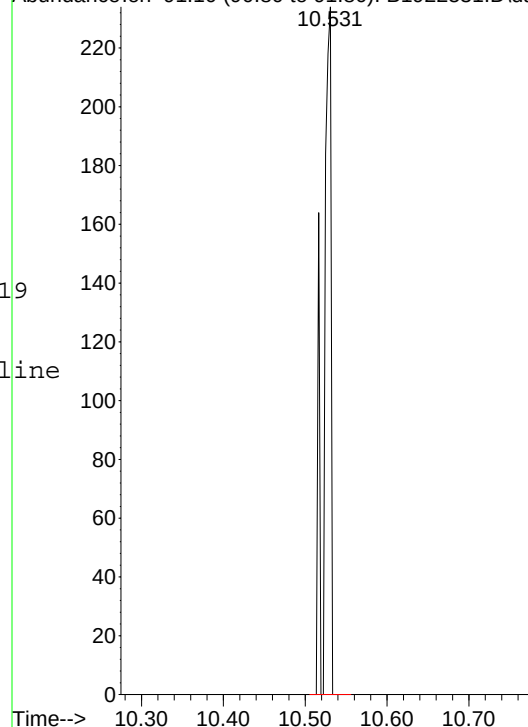
Area : 136

Amount: 0.0344037

Manual Integration

N-BUTYLBENZENE

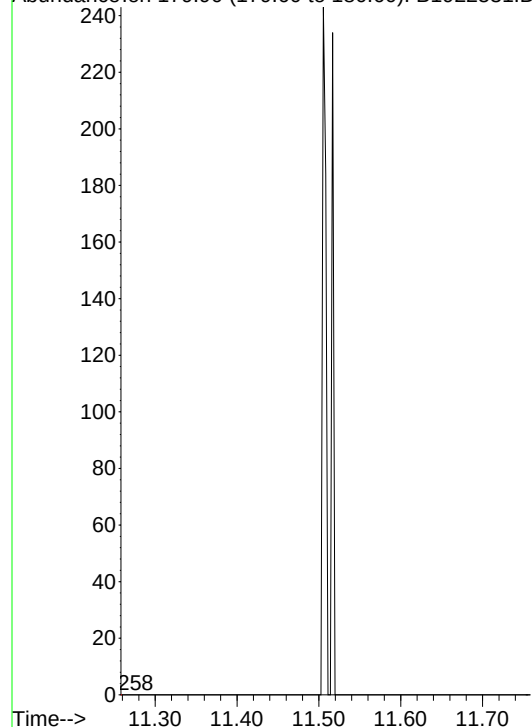
Abundance on 91.10 (90.80 to 91.80): B1922531.D\data



Original Integration

1,3,5-TRICHLOROBENZENE

Abundance on 179.90 (179.60 to 180.60): B1922531.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Wed Aug 14 10:55:41 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 11.51

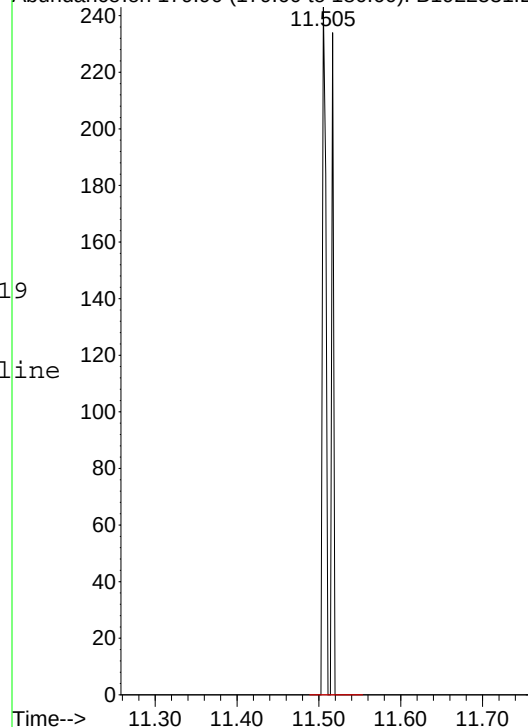
Area : 113

Amount: 0.0654234

Manual Integration

1,3,5-TRICHLOROBENZENE

Abundance on 179.90 (179.60 to 180.60): B1922531.D\data

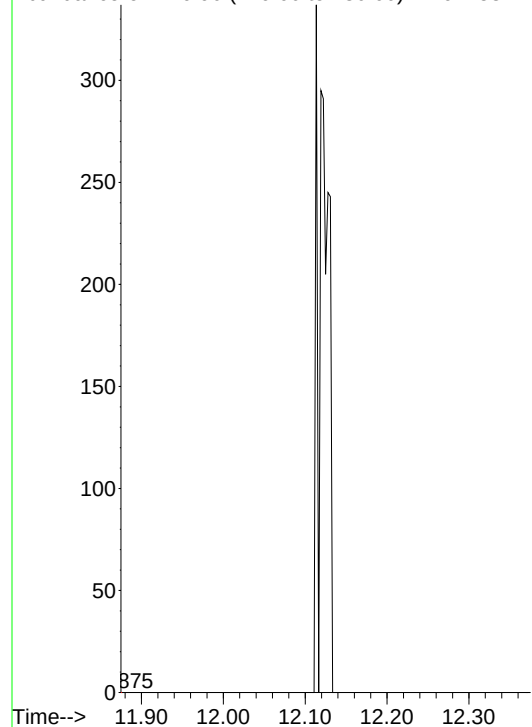


Data Path : Y:\1\DATA\B081319\
Data File : B1922531.D
Acq On : 13 Aug 2019 10:02 pm
Operator :
Sample : B0-BLK1 @ (TICs)
Misc :

Quant Time : Wed Aug 14 10:55:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration
1,2,4-TRICHLOROBENZENE

Abundance on 179.90 (179.60 to 180.60): B1922531.D



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Wed Aug 14 10:55:44 2019

MIuser: LBD

Reason: Incorrect Baseline

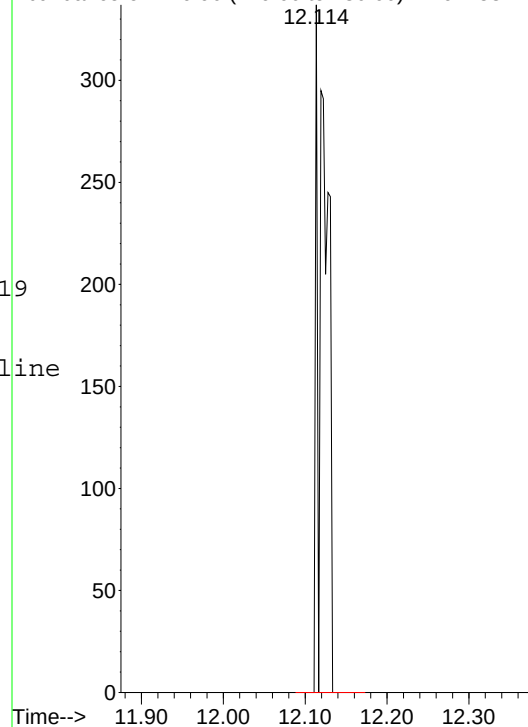
RT : 12.11

Area : 276

Amount: 0.162533

Manual Integration
1,2,4-TRICHLOROBENZENE

Abundance on 179.90 (179.60 to 180.60): B1922531.D



Data Path : Y:\1\DATA\B081319\
 Data File : B1922531.D
 Acq On : 13 Aug 2019 10:02 pm
 Operator :
 Sample : B0-BLK1 @ (TICs)
 Misc :
 ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: 8260LOW.P
 Integrator: RTE
 Smoothing : OFF
 Sampling : 1
 Start Thrs: 0.2
 Stop Thrs : 0

Filtering: 5
 Min Area: 1 % of largest Peak
 Max Peaks: 100
 Peak Location: TOP

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

Method : Y:\1\METHODS\B041819W.M
 Title : 8260 CALIBRATION VOAMS 5973

Signal : TIC: B1922531.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.298	1118	1131	1147	rBV	94336	156690	49.89%	10.697%
2	4.582	1218	1231	1242	rBV3	56765	97023	30.89%	6.623%
3	5.014	1370	1383	1396	rBV2	124974	194874	62.05%	13.304%
4	6.441	1873	1885	1901	rBV	161122	240451	76.56%	16.415%
5	7.842	2365	2378	2394	rBV2	198482	282895	90.07%	19.312%
6	9.002	2775	2786	2803	rVB2	129263	178816	56.93%	12.207%
7	10.138	3173	3186	3205	rBV2	222393	314081	100.00%	21.441%

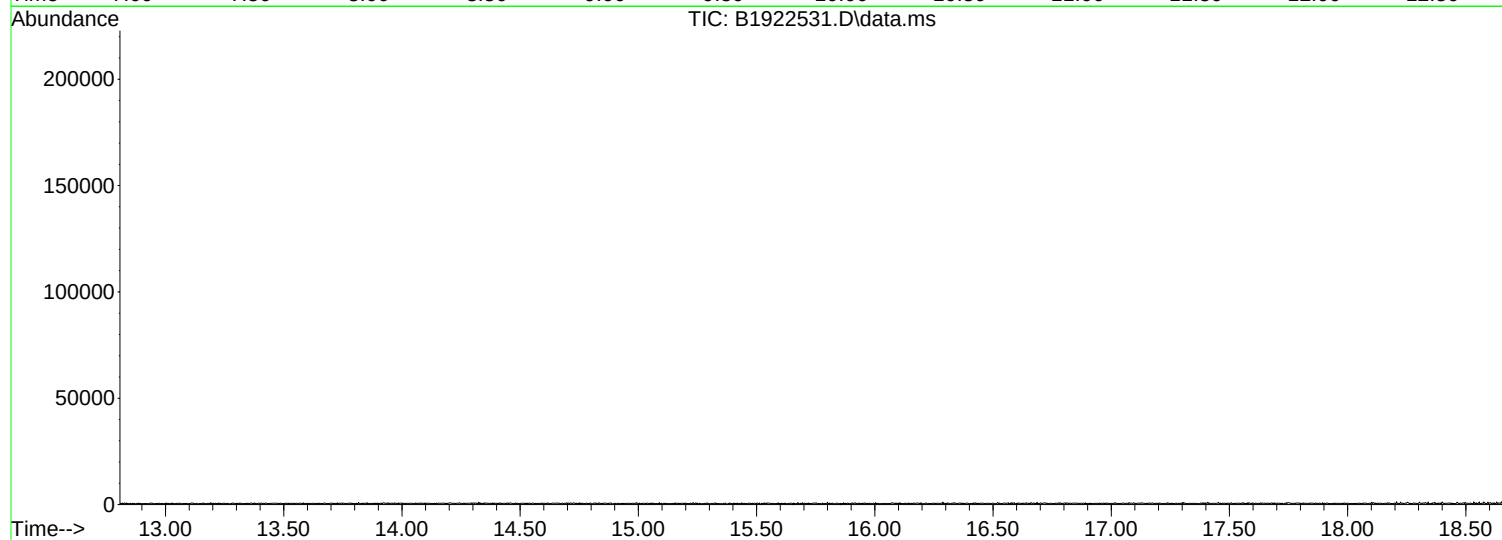
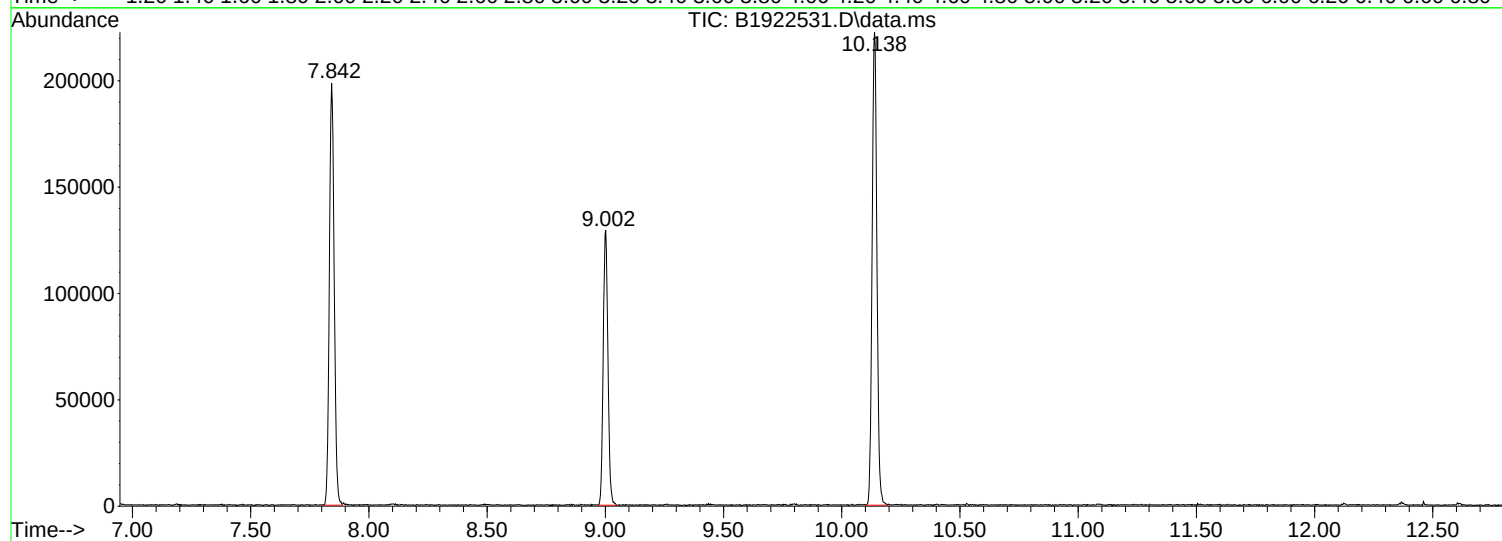
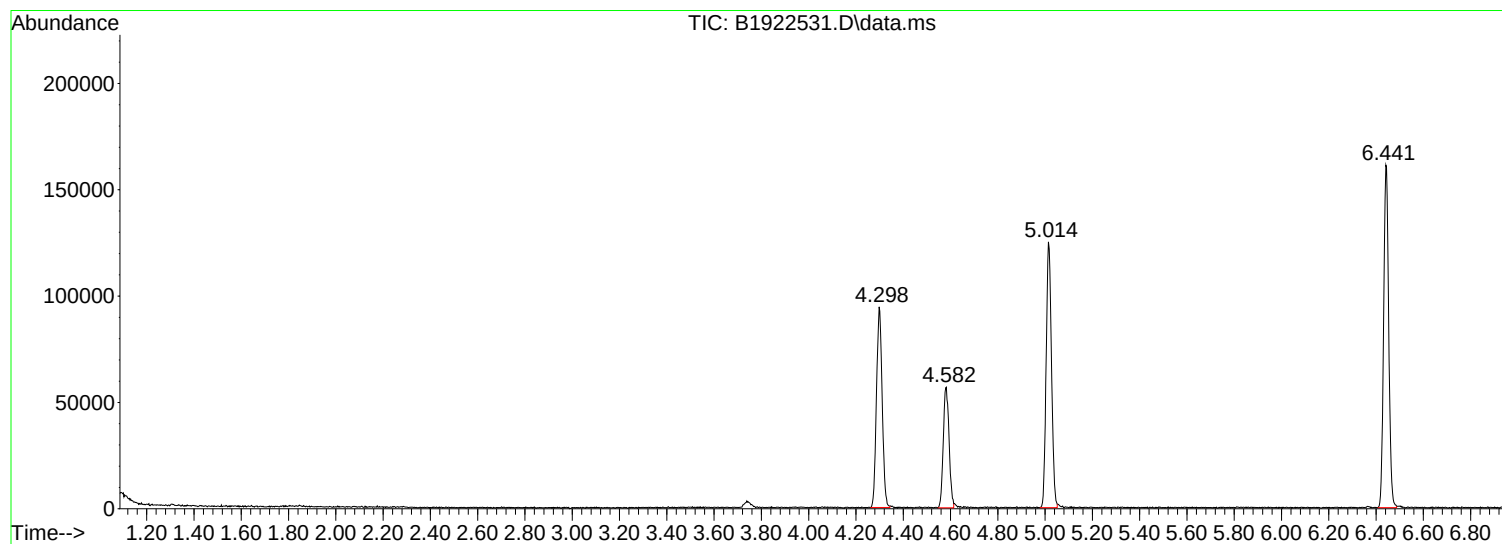
Sum of corrected areas: 1464830

Data Path : Y:\1\DATA\B081319\
Data File : B1922531.D
Acq On : 13 Aug 2019 10:02 pm
Operator :
Sample : B0-BLK1 @ (TICs)
Misc :
ALS Vial : 31 Sample Multiplier: 1

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Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
Quant Title : 8260 CALIBRATION VOAMS 5973

TIC Library : F:\CTAL-Laboratory\Management\DJJ\Database\NIST08.L
TIC Integration Parameters: LSCINT.P



Data Path : Y:\1\DATA\B081319\
Data File : B1922531.D
Acq On : 13 Aug 2019 10:02 pm
Operator :
Sample : B0-BLK1 @ (TICs)
Misc :
ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
Quant Title : 8260 CALIBRATION VOAMS 5973

TIC Library : F:\CTAL-Laboratory\Management\DJJD\Database\NIST08.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

Data Path : Y:\1\DATA\B081319\
Data File : B1922531.D
Acq On : 13 Aug 2019 10:02 pm
Operator :
Sample : B0-BLK1 @ (TICs)
Misc :
ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
Quant Title : 8260 CALIBRATION VOAMS 5973

TIC Library : F:\CTAL-Laboratory\Management\DJJ\Database\NIST08.L
TIC Integration Parameters: LSCINT.P

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

1 - FORM I

ANALYSIS DATA SHEET

LCS

391

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-BS1
		File ID:	B1922527.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 19:59
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone	97.2	3.8	50	
107-13-1	Acrylonitrile	10.9	0.52	5.0	
994-05-8	tert-Amyl Methyl Ether (TAME)	9.42	0.14	0.50	
71-43-2	Benzene	9.65	0.18	1.0	
108-86-1	Bromobenzene	11.0	0.15	1.0	
74-97-5	Bromochloromethane	11.7	0.32	1.0	
75-27-4	Bromodichloromethane	10.9	0.16	0.50	
75-25-2	Bromoform	10.6	0.46	1.0	
74-83-9	Bromomethane	4.40	0.78	2.0	V-20
78-93-3	2-Butanone (MEK)	101	1.9	20	
75-65-0	tert-Butyl Alcohol (TBA)	112	4.2	20	
104-51-8	n-Butylbenzene	8.39	0.21	1.0	V-05
135-98-8	sec-Butylbenzene	9.13	0.16	1.0	
98-06-6	tert-Butylbenzene	9.92	0.17	1.0	
637-92-3	tert-Butyl Ethyl Ether (TBEE)	10.1	0.16	0.50	
75-15-0	Carbon Disulfide	10.2	4.4	5.0	V-36
56-23-5	Carbon Tetrachloride	11.5	0.11	5.0	
108-90-7	Chlorobenzene	10.4	0.15	1.0	
124-48-1	Chlorodibromomethane	12.1	0.21	0.50	
75-00-3	Chloroethane	10.0	0.35	2.0	
67-66-3	Chloroform	10.2	0.17	2.0	
74-87-3	Chloromethane	6.36	0.45	2.0	V-05
95-49-8	2-Chlorotoluene	9.95	0.12	1.0	
106-43-4	4-Chlorotoluene	9.78	0.14	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	11.6	0.53	5.0	
106-93-4	1,2-Dibromoethane (EDB)	10.7	0.19	0.50	
74-95-3	Dibromomethane	11.6	0.37	1.0	
95-50-1	1,2-Dichlorobenzene	10.5	0.16	1.0	
541-73-1	1,3-Dichlorobenzene	10.4	0.12	1.0	
106-46-7	1,4-Dichlorobenzene	10.0	0.13	1.0	

1 - FORM I

ANALYSIS DATA SHEET

LCS

392

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-BS1
		File ID:	B1922527.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 19:59
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene	10.8	0.31	2.0	
75-71-8	Dichlorodifluoromethane (Freon 12)	10.0	0.26	2.0	
75-34-3	1,1-Dichloroethane	10.6	0.16	1.0	
107-06-2	1,2-Dichloroethane	12.1	0.41	1.0	
75-35-4	1,1-Dichloroethylene	10.2	0.32	1.0	
156-59-2	cis-1,2-Dichloroethylene	10.4	0.13	1.0	
156-60-5	trans-1,2-Dichloroethylene	11.0	0.31	1.0	
78-87-5	1,2-Dichloropropane	10.6	0.20	1.0	
142-28-9	1,3-Dichloropropane	10.3	0.11	0.50	
594-20-7	2,2-Dichloropropane	10.1	0.20	1.0	
563-58-6	1,1-Dichloropropene	9.64	0.16	2.0	
10061-01-5	cis-1,3-Dichloropropene	9.93	0.13	0.50	
10061-02-6	trans-1,3-Dichloropropene	10.1	0.23	0.50	
60-29-7	Diethyl Ether	9.39	0.34	2.0	
108-20-3	Diisopropyl Ether (DIPE)	9.84	0.17	0.50	
123-91-1	1,4-Dioxane	122	22	50	
100-41-4	Ethylbenzene	10.1	0.13	1.0	
87-68-3	Hexachlorobutadiene	12.2	0.47	0.60	
591-78-6	2-Hexanone (MBK)	111	1.5	10	
98-82-8	Isopropylbenzene (Cumene)	10.8	0.17	1.0	
99-87-6	p-Isopropyltoluene (p-Cymene)	9.98	0.20	1.0	
79-20-9	Methyl Acetate	9.47	0.42	1.0	
1634-04-4	Methyl tert-Butyl Ether (MTBE)	10.0	0.25	1.0	
108-87-2	Methyl Cyclohexane	9.26	0.20	1.0	
75-09-2	Methylene Chloride	10.1	0.34	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	111	1.7	10	
91-20-3	Naphthalene	11.3	0.31	2.0	
103-65-1	n-Propylbenzene	9.26	0.13	1.0	
100-42-5	Styrene	10.2	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

393

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0528

Client: Dvirka And Bartilucci Project: Farrand Controls Site

Matrix: Water Laboratory ID: B237875-BS1 File ID: B1922527.D

Sampled: Prepared: 08/13/19 07:22 Analyzed: 08/13/19 19:59

Solids: Preparation: SW-846 5030B Dilution:

Batch: B237875 Sequence: S039168 Calibration: 1900126 Instrument: GCMSVOA2

Column: 1

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane	10.4	0.22	0.50	
127-18-4	Tetrachloroethylene	12.0	0.18	1.0	
109-99-9	Tetrahydrofuran	9.65	0.51	10	
108-88-3	Toluene	10.1	0.14	1.0	
87-61-6	1,2,3-Trichlorobenzene	11.3	0.57	5.0	
120-82-1	1,2,4-Trichlorobenzene	10.4	0.40	1.0	
108-70-3	1,3,5-Trichlorobenzene	10.3	0.30	1.0	
71-55-6	1,1,1-Trichloroethane	10.7	0.20	1.0	
79-00-5	1,1,2-Trichloroethane	10.5	0.16	1.0	
79-01-6	Trichloroethylene	10.9	0.24	1.0	
75-69-4	Trichlorofluoromethane (Freon 11)	10.1	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 113)	10.8	0.32	1.0	
95-63-6	1,2,4-Trimethylbenzene	9.39	0.18	1.0	
108-67-8	1,3,5-Trimethylbenzene	10.5	0.14	1.0	
75-01-4	Vinyl Chloride	9.02	0.45	2.0	
108383/106423	m+p Xylene	19.8	0.30	2.0	
95-47-6	o-Xylene	9.88	0.17	1.0	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922527.D
 Acq On : 13 Aug 2019 7:59 pm
 Operator :
 Sample : B0-BS1
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 10:30:45 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	56922	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	83504	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	47516	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.141	152	50963	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	38182	26.03	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 104.12%			
45) TOLUENE-D8 SS	6.444	98	86057	26.33	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 105.32%			
66) 4-BROMOFLUROBENZENE SS	9.002	95	37698	26.96	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 107.84%			
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.146	85	12586	10.01	UG/L	100
4) DIFLUOROCHLOROMETHANE	1.172	51	18428	9.35	UG/L	100
5) CHLOROMETHANE	1.297	50	18014	6.36	UG/L #	74
6) VINYL CHLORIDE	1.325	62	13899	9.02	UG/L	98
7) BROMOMETHANE	1.530	94	3220	4.40	UG/L	99
8) CHLOROETHANE	1.593	64	8401	10.01	UG/L	99
9) FLUORODICHLOROMETHANE	1.715	67	20707	9.53	UG/L	95
10) TRICHLOROFLUOROMETHANE	1.755	101	17396	10.13	UG/L	98
11) ETHANOL	1.888	45	1388	97.46	UG/L #	89
12) DI ETHYL ETHER	1.945	59	10283	9.39	UG/L	94
13) ACROLEIN	2.050	56	13164	41.32	UG/L #	91
14) ACETONE	2.167	43	51081	97.20	UG/L	99
15) 1,1-DICHLOROETHENE	2.113	61	19606	10.18	UG/L	99
16) 1,1,2-TRICL-1,2,2-TRIF...	2.104	101	8706	10.84	UG/L #	80
17) IODOMETHANE	2.238	142	9959	7.25	UG/L	94
18) METHYL ACETATE	2.422	43	15640	9.47	UG/L	98
19) T-BUTYL ALCOHOL	2.621	59	16751	111.60	UG/L	97
20) ACRYLONITRILE	2.746	53	6621	10.92	UG/L	99
21) METHYLENE CHLORIDE	2.505	49	22767	10.09	UG/L	93
22) CARBON DISULFIDE	2.283	76	30654	10.18	UG/L	98
23) METHYL TERT-BUTYL ETHE...	2.741	73	32717	10.05	UG/L	98
24) TRANS 1,2-DICHLOROETHENE	2.744	61	20771	11.05	UG/L	94
25) 1,1-DICHLOROETHANE	3.167	63	24617	10.64	UG/L	99
26) VINYL ACETATE	3.230	43	370372	99.62	UG/L	100
27) DI ISOPROPYL ETHER	3.232	45	49397	9.84	UG/L	99
28) 2-BUTANONE	3.795	43	80409	101.18	UG/L	96
29) T-BUTYL ETHYL ETHER	3.605	59	43753	10.10	UG/L	98
30) CIS-1,2-DICHLOROETHENE	3.758	61	23796	10.43	UG/L	94
31) 2,2-DICHLOROPROPANE	3.750	77	17295	10.08	UG/L	97
32) ETHYL ACETATE	3.858	43	19435m	9.63	UG/L	
33) BROMOCHLOROMETHANE	4.003	128	6696	11.70	UG/L	94
34) TETRAHYDROFURAN	4.051	42	5156	9.65	UG/L #	54
36) CHLOROFORM	4.091	83	21564	10.18	UG/L	97
37) 1,1,1-TRICHLOROETHANE	4.250	97	19670	10.67	UG/L	97
38) CYCLOHEXANE	4.287	56	25535	10.63	UG/L	90
39) CARBON TETRACHLORIDE	4.406	117	18049	11.50	UG/L	100
40) 1,1-DICHLOROPROPENE	4.412	75	14363	9.64	UG/L	96
41) BENZENE	4.622	78	40502	9.65	UG/L	99
43) T-AMYLMETHYL ETHER	4.739	73	28573	9.42	UG/L #	91
46) 1,2-DICHLOROETHANE	4.656	62	24040	12.13	UG/L	96
47) TRICHLOROETHENE	5.259	95	11504	10.86	UG/L	97
48) METHYLCYCLOHEXANE	5.426	83	13314	9.26	UG/L #	88
49) 1,2-DICHLOROPROPANE	5.486	63	12790	10.62	UG/L	97

Data Path : Y:\1\DATA\B081319\
 Data File : B1922527.D
 Acq On : 13 Aug 2019 7:59 pm
 Operator :
 Sample : B0-BS1
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 10:30:45 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) DIBROMOMETHANE	5.600	93	8252	11.62	UG/L	93
51) 1,4-DIOXANE	5.634	88	918	122.13	UG/L #	99
52) BROMODICHLOROMETHANE	5.762	83	16588	10.93	UG/L	94
53) 2-CHLOROETHYL VINYLETHYR	6.077	63	360m	0.44	UG/L	
54) MIBK	6.361	43	167322	111.41	UG/L	96
55) CIS-1,3-DICHLOROPROPENE	6.197	75	17284	9.93	UG/L	99
56) TOLUENE	6.506	91	43373	10.14	UG/L	100
57) TRANS-1,3,-DICHLOROPRO...	6.748	75	16877	10.10	UG/L	95
59) 1,1,2-TRICHLOROETHANE	6.921	97	10224	10.54	UG/L	97
60) 2-HEXANONE	7.177	43	123053	111.32	UG/L	94
61) TETRACHLOROETHENE	7.024	164	9872	11.95	UG/L	97
62) 1,3-DICHLOROPROPANE	7.080	76	17508	10.26	UG/L	94
63) DIBROMOCHLOROMETHANE	7.291	129	13609	12.12	UG/L	98
64) 1,2-DIBROMOETHANE	7.393	107	11594	10.72	UG/L #	95
67) CHLOROBENZENE	7.868	112	31329	10.45	UG/L	98
68) 1,1,1,2-TETRACHLOROETHANE	7.959	131	12461	11.41	UG/L	97
69) ETHYLBENZENE	7.984	91	52666	10.09	UG/L	99
70) M/P-XYLENES	8.098	91	82174	19.80	UG/L	99
71) O-XYLENE	8.487	91	42324	9.88	UG/L	99
72) STYRENE	8.501	104	34975	10.24	UG/L	95
73) BROMOFORM	8.686	173	9408	10.65	UG/L	99
74) ISOPROPYLBENZENE	8.851	105	52955	10.81	UG/L	100
76) 1,1,2,2-TETRACHLOROETHANE	9.166	83	14620	10.35	UG/L #	94
77) 1,4-DICHLORO-2-BUTENE(...	9.226	53	7207	10.75	UG/L	98
78) BROMOBENZENE	9.141	77	22855	11.01	UG/L	99
79) 1,2,3-TRICHLOROPROPANE	9.201	110	4850	10.90	UG/L	85
80) N-PROPYLBENZENE	9.257	91	55869	9.26	UG/L	97
81) 2-CHLOROTOLUENE	9.334	91	36919	9.95	UG/L	95
82) 1,3,5-TRIMETHYLBENZENE	9.436	105	44179	10.52	UG/L	100
83) 4-CHLOROTOLUENE	9.442	91	43549	9.78	UG/L	96
85) TERT-BUTYLBENZENE	9.755	119	37116	9.92	UG/L	94
86) 1,2,4-TRIMETHYLBENZENE	9.800	105	44012	9.39	UG/L	97
87) SEC-BUTYLBENZENE	9.968	105	48092	9.13	UG/L	98
88) 1,3-DICHLOROBENZENE	10.070	146	29086	10.40	UG/L	100
89) P-ISOPROPYLTOLUENE	10.119	119	45453	9.98	UG/L	98
90) 1,4-DICHLOROBENZENE	10.164	146	29262	10.04	UG/L	99
91) N-BUTYLBENZENE	10.525	91	34263	8.39	UG/L	94
92) 1,2-DICHLOROBENZENE	10.531	146	28402	10.51	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	11.309	75	3609	11.56	UG/L	94
94) 1,3,5-TRICHLOROBENZENE	11.505	180	18295	10.26	UG/L	100
95) 1,2,4-TRICHLOROBENZENE	12.125	180	18320	10.45	UG/L	98
96) HEXACHLOROBUTADIENE	12.293	225	7298	12.20	UG/L	97
97) NAPHTHALENE	12.367	128	52187	11.32	UG/L	99
98) 1,2,3-TRICHLOROBENZENE	12.611	180	17793	11.27	UG/L	98

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

396

Inst : GCMSVOA2

[illegible]

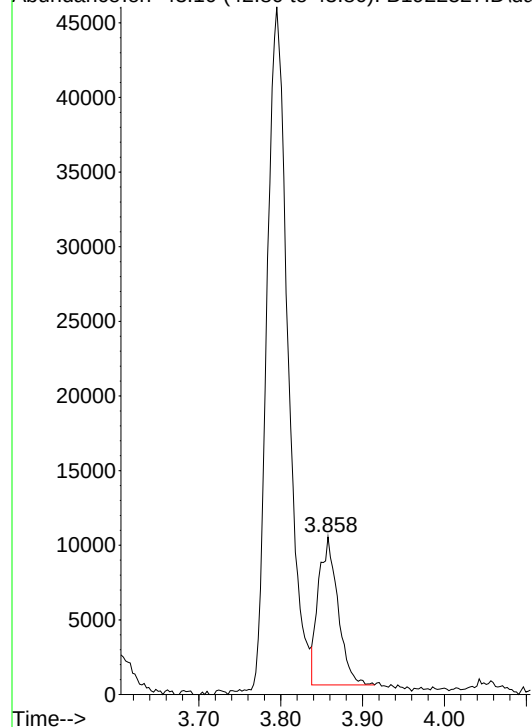
Data Path : Y:\1\DATA\B081319\
Data File : B1922527.D
Acq On : 13 Aug 2019 7:59 pm
Operator :
Sample : B0-BS1
Misc :

Quant Time : Wed Aug 14 10:30:45 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): B1922527.D\data



Original Int. Results

RT : 3.86
Area : 16299
Amount: 8.07928

Manual Int. Results

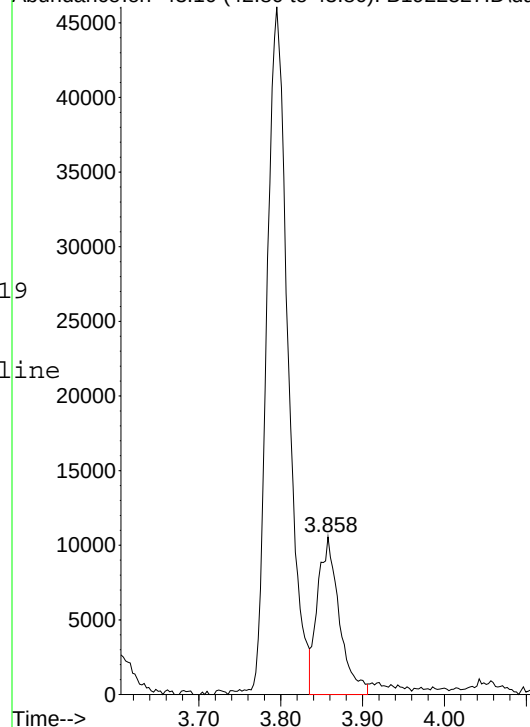
Wed Aug 14 10:30:34 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.86
Area : 19435
Amount: 9.63376

Manual Integration

ETHYL ACETATE

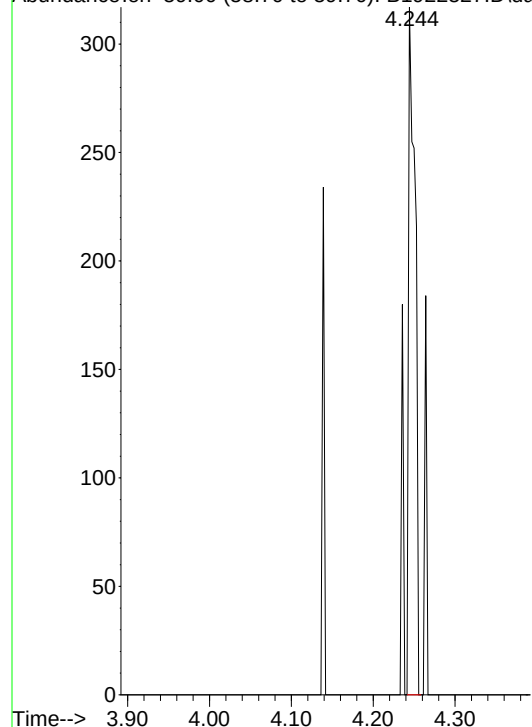
Abundance on 43.10 (42.80 to 43.80): B1922527.D\data



Original Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922527.D\data



Original Int. Results

RT : 4.24
Area : 177
Amount: 0.152101

Manual Int. Results

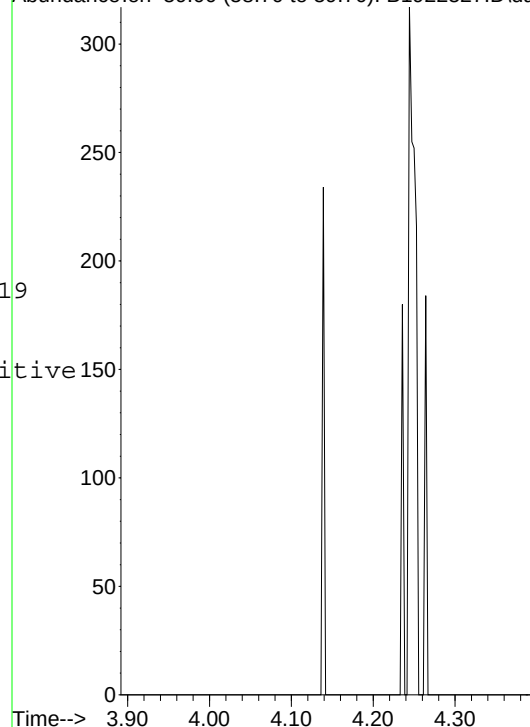
Wed Aug 14 10:30:40 2019

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

Manual Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922527.D\data



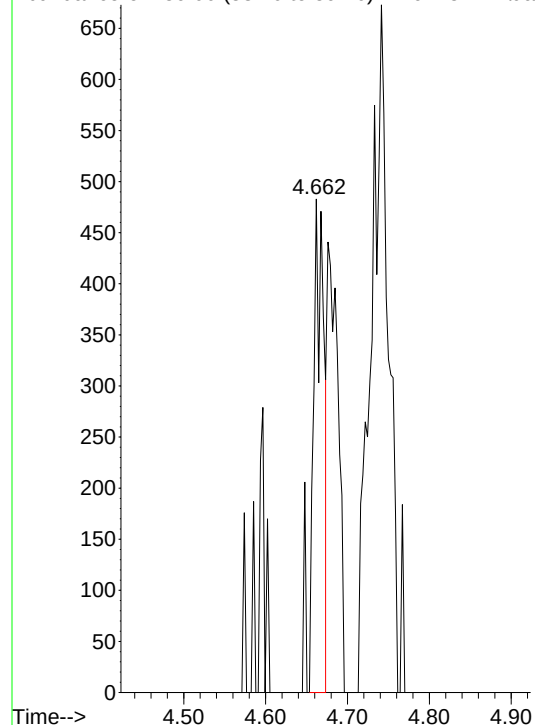
Data Path : Y:\1\DATA\B081319\
Data File : B1922527.D
Acq On : 13 Aug 2019 7:59 pm
Operator :
Sample : B0-BS1
Misc :

Quant Time : Wed Aug 14 10:30:45 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

T-AMYL ALCOHOL

Abundance on 59.00 (58.70 to 59.70): B1922527.D\data



Original Int. Results

RT : 4.66
Area : 414
Amount: 3.85724

Manual Int. Results

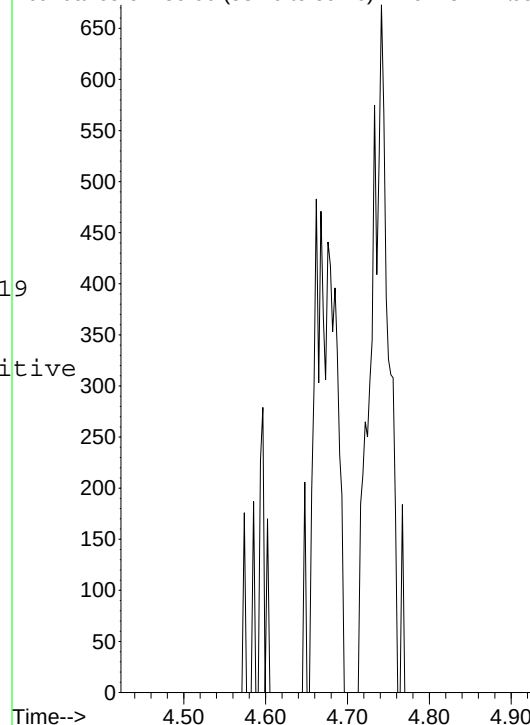
Wed Aug 14 10:30:47 2019

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

Manual Integration

T-AMYL ALCOHOL

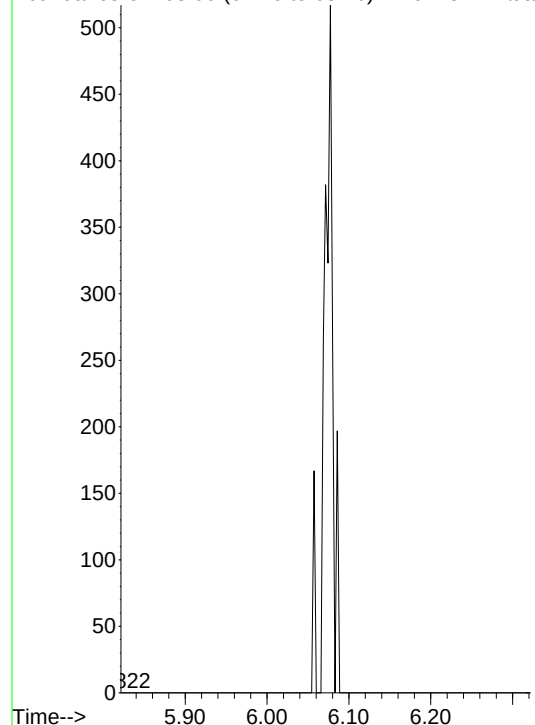
Abundance on 59.00 (58.70 to 59.70): B1922527.D\data



Original Integration

2-CHLOROETHYL VINYLETHER

Abundance on 63.00 (62.70 to 63.70): B1922527.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

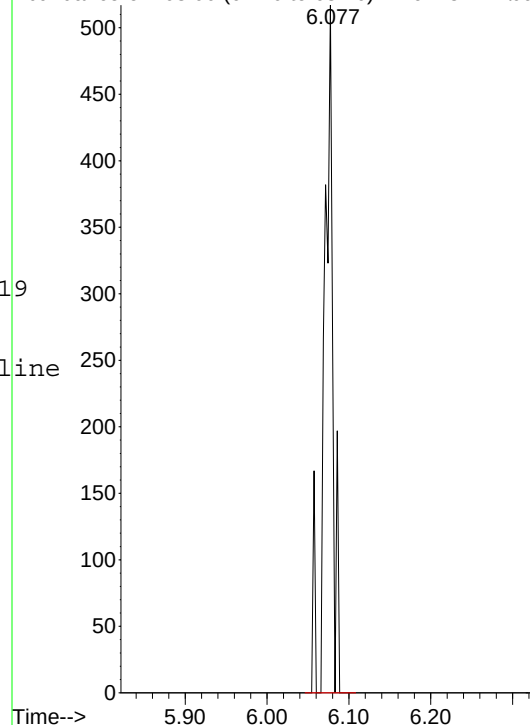
Wed Aug 14 10:30:56 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 6.08
Area : 360
Amount: 0.44244

Manual Integration

2-CHLOROETHYL VINYLETHER

Abundance on 63.00 (62.70 to 63.70): B1922527.D\data



1 - FORM I

ANALYSIS DATA SHEET

399

LCS Dup

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-BSD1
		File ID:	B1922528.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 20:30
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone	93.9	3.8	50	
107-13-1	Acrylonitrile	11.0	0.52	5.0	
994-05-8	tert-Amyl Methyl Ether (TAME)	9.02	0.14	0.50	
71-43-2	Benzene	9.30	0.18	1.0	
108-86-1	Bromobenzene	10.5	0.15	1.0	
74-97-5	Bromochloromethane	11.0	0.32	1.0	
75-27-4	Bromodichloromethane	11.0	0.16	0.50	
75-25-2	Bromoform	10.1	0.46	1.0	
74-83-9	Bromomethane	4.71	0.78	2.0	V-20
78-93-3	2-Butanone (MEK)	98.8	1.9	20	
75-65-0	tert-Butyl Alcohol (TBA)	109	4.2	20	
104-51-8	n-Butylbenzene	8.41	0.21	1.0	V-05
135-98-8	sec-Butylbenzene	9.08	0.16	1.0	
98-06-6	tert-Butylbenzene	9.79	0.17	1.0	
637-92-3	tert-Butyl Ethyl Ether (TBEE)	9.89	0.16	0.50	
75-15-0	Carbon Disulfide	9.92	4.4	5.0	V-36
56-23-5	Carbon Tetrachloride	11.1	0.11	5.0	
108-90-7	Chlorobenzene	10.4	0.15	1.0	
124-48-1	Chlorodibromomethane	12.3	0.21	0.50	
75-00-3	Chloroethane	9.93	0.35	2.0	
67-66-3	Chloroform	10.2	0.17	2.0	
74-87-3	Chloromethane	6.25	0.45	2.0	V-05
95-49-8	2-Chlorotoluene	10.2	0.12	1.0	
106-43-4	4-Chlorotoluene	9.82	0.14	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	11.7	0.53	5.0	
106-93-4	1,2-Dibromoethane (EDB)	10.8	0.19	0.50	
74-95-3	Dibromomethane	11.6	0.37	1.0	
95-50-1	1,2-Dichlorobenzene	10.4	0.16	1.0	
541-73-1	1,3-Dichlorobenzene	10.2	0.12	1.0	
106-46-7	1,4-Dichlorobenzene	10.3	0.13	1.0	

1 - FORM I

ANALYSIS DATA SHEET

400

LCS Dup

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-BSD1
		File ID:	B1922528.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 20:30
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene	10.3	0.31	2.0	
75-71-8	Dichlorodifluoromethane (Freon 12)	10.1	0.26	2.0	
75-34-3	1,1-Dichloroethane	10.7	0.16	1.0	
107-06-2	1,2-Dichloroethane	12.2	0.41	1.0	
75-35-4	1,1-Dichloroethylene	9.97	0.32	1.0	
156-59-2	cis-1,2-Dichloroethylene	10.3	0.13	1.0	
156-60-5	trans-1,2-Dichloroethylene	11.0	0.31	1.0	
78-87-5	1,2-Dichloropropane	10.9	0.20	1.0	
142-28-9	1,3-Dichloropropane	10.3	0.11	0.50	
594-20-7	2,2-Dichloropropane	9.72	0.20	1.0	
563-58-6	1,1-Dichloropropene	9.92	0.16	2.0	
10061-01-5	cis-1,3-Dichloropropene	9.93	0.13	0.50	
10061-02-6	trans-1,3-Dichloropropene	10.3	0.23	0.50	
60-29-7	Diethyl Ether	9.29	0.34	2.0	
108-20-3	Diisopropyl Ether (DIPE)	9.82	0.17	0.50	
123-91-1	1,4-Dioxane	127	22	50	
100-41-4	Ethylbenzene	9.94	0.13	1.0	
87-68-3	Hexachlorobutadiene	11.6	0.47	0.60	
591-78-6	2-Hexanone (MBK)	112	1.5	10	
98-82-8	Isopropylbenzene (Cumene)	10.8	0.17	1.0	
99-87-6	p-Isopropyltoluene (p-Cymene)	9.88	0.20	1.0	
79-20-9	Methyl Acetate	9.16	0.42	1.0	
1634-04-4	Methyl tert-Butyl Ether (MTBE)	9.98	0.25	1.0	
108-87-2	Methyl Cyclohexane	9.20	0.20	1.0	
75-09-2	Methylene Chloride	9.73	0.34	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	111	1.7	10	
91-20-3	Naphthalene	11.2	0.31	2.0	
103-65-1	n-Propylbenzene	9.27	0.13	1.0	
100-42-5	Styrene	10.2	0.11	1.0	
630-20-6	1,1,1,2-Tetrachloroethane	11.2	0.27	1.0	

1 - FORM I

ANALYSIS DATA SHEET

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LCS Dup

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-BSD1
		File ID:	B1922528.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/13/19 20:30
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane	10.3	0.22	0.50	
127-18-4	Tetrachloroethylene	11.5	0.18	1.0	
109-99-9	Tetrahydrofuran	9.42	0.51	10	
108-88-3	Toluene	10.1	0.14	1.0	
87-61-6	1,2,3-Trichlorobenzene	11.4	0.57	5.0	
120-82-1	1,2,4-Trichlorobenzene	10.5	0.40	1.0	
108-70-3	1,3,5-Trichlorobenzene	10.4	0.30	1.0	
71-55-6	1,1,1-Trichloroethane	10.8	0.20	1.0	
79-00-5	1,1,2-Trichloroethane	10.6	0.16	1.0	
79-01-6	Trichloroethylene	11.0	0.24	1.0	
75-69-4	Trichlorofluoromethane (Freon 11)	9.73	0.33	2.0	
96-18-4	1,2,3-Trichloropropane	11.0	0.25	2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.9	0.32	1.0	
95-63-6	1,2,4-Trimethylbenzene	9.59	0.18	1.0	
108-67-8	1,3,5-Trimethylbenzene	10.1	0.14	1.0	
75-01-4	Vinyl Chloride	8.74	0.45	2.0	
108383/106423	m+p Xylene	19.7	0.30	2.0	
95-47-6	o-Xylene	9.87	0.17	1.0	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922528.D
 Acq On : 13 Aug 2019 8:30 pm
 Operator :
 Sample : B0-BSD1
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 10:32:54 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	56895	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.014	114	82184	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.845	82	47614	30.00	UG/L	0.00
84) 1,4-DICHLOROENZENE-D4...	10.138	152	51015	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	38659	26.37	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 105.48%			
45) TOLUENE-D8 SS	6.444	98	86482	26.89	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 107.56%			
66) 4-BROMOFLUROBENZENE SS	9.002	95	37481	26.75	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 107.00%			
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.146	85	12712	10.12	UG/L	100
4) DIFLUOROCHLOROMETHANE	1.163	51	18396	9.34	UG/L	95
5) CHLOROMETHANE	1.277	50	17685	6.25	UG/L	99
6) VINYL CHLORIDE	1.325	62	13457	8.74	UG/L	99
7) BROMOMETHANE	1.530	94	3448	4.71	UG/L	88
8) CHLOROETHANE	1.593	64	8331	9.93	UG/L	98
9) FLUORODICHLOROMETHANE	1.718	67	20802	9.58	UG/L	97
10) TRICHLOROFLUOROMETHANE	1.755	101	16700	9.73	UG/L	98
11) ETHANOL	1.885	45	1230	86.41	UG/L #	78
12) DI ETHYL ETHER	1.945	59	10172	9.29	UG/L	92
13) ACROLEIN	2.053	56	13130	41.23	UG/L #	91
14) ACETONE	2.167	43	49311	93.88	UG/L	99
15) 1,1-DICHLOROETHENE	2.113	61	19198	9.97	UG/L	99
16) 1,1,2-TRICL-1,2,2-TRIF...	2.104	101	8716	10.86	UG/L	84
17) IODOMETHANE	2.235	142	8220	5.98	UG/L	92
18) METHYL ACETATE	2.420	43	15133	9.16	UG/L	97
19) T-BUTYL ALCOHOL	2.619	59	16361	109.06	UG/L	95
20) ACRYLONITRILE	2.741	53	6679	11.02	UG/L	97
21) METHYLENE CHLORIDE	2.502	49	21934	9.73	UG/L	97
22) CARBON DISULFIDE	2.283	76	29843	9.92	UG/L	98
23) METHYL TERT-BUTYL ETHE...	2.744	73	32458	9.98	UG/L	96
24) TRANS 1,2-DICHLOROETHENE	2.741	61	20567	10.95	UG/L	93
25) 1,1-DICHLOROETHANE	3.167	63	24674	10.67	UG/L	97
26) VINYL ACETATE	3.230	43	362113	97.45	UG/L	99
27) DI ISOPROPYL ETHER	3.235	45	49287	9.82	UG/L	98
28) 2-BUTANONE	3.792	43	78497	98.82	UG/L	96
29) T-BUTYL ETHYL ETHER	3.605	59	42832	9.89	UG/L	97
30) CIS-1,2-DICHLOROETHENE	3.755	61	23575	10.34	UG/L	95
31) 2,2-DICHLOROPROPANE	3.750	77	16662	9.72	UG/L	98
32) ETHYL ACETATE	3.858	43	20704m	10.27	UG/L	
33) BROMOCHLOROMETHANE	4.000	128	6312	11.03	UG/L	99
34) TETRAHYDROFURAN	4.054	42	5028	9.42	UG/L #	55
36) CHLOROFORM	4.088	83	21560	10.19	UG/L	99
37) 1,1,1-TRICHLOROETHANE	4.250	97	19807	10.75	UG/L	97
38) CYCLOHEXANE	4.287	56	25486	10.62	UG/L	89
39) CARBON TETRACHLORIDE	4.406	117	17346	11.06	UG/L	99
40) 1,1-DICHLOROPROPENE	4.412	75	14771	9.92	UG/L	98
41) BENZENE	4.619	78	39038	9.30	UG/L	99
43) T-AMYL METHYL ETHER	4.739	73	27347	9.02	UG/L #	88
46) 1,2-DICHLOROETHANE	4.656	62	23781	12.19	UG/L	95
47) TRICHLOROETHENE	5.256	95	11489	11.02	UG/L	98
48) METHYLCYCLOHEXANE	5.426	83	13009	9.20	UG/L #	87
49) 1,2-DICHLOROPROPANE	5.483	63	12938	10.92	UG/L	97

Data Path : Y:\1\DATA\B081319\
 Data File : B1922528.D
 Acq On : 13 Aug 2019 8:30 pm
 Operator :
 Sample : B0-BSD1
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Inst : GCMSVOA2

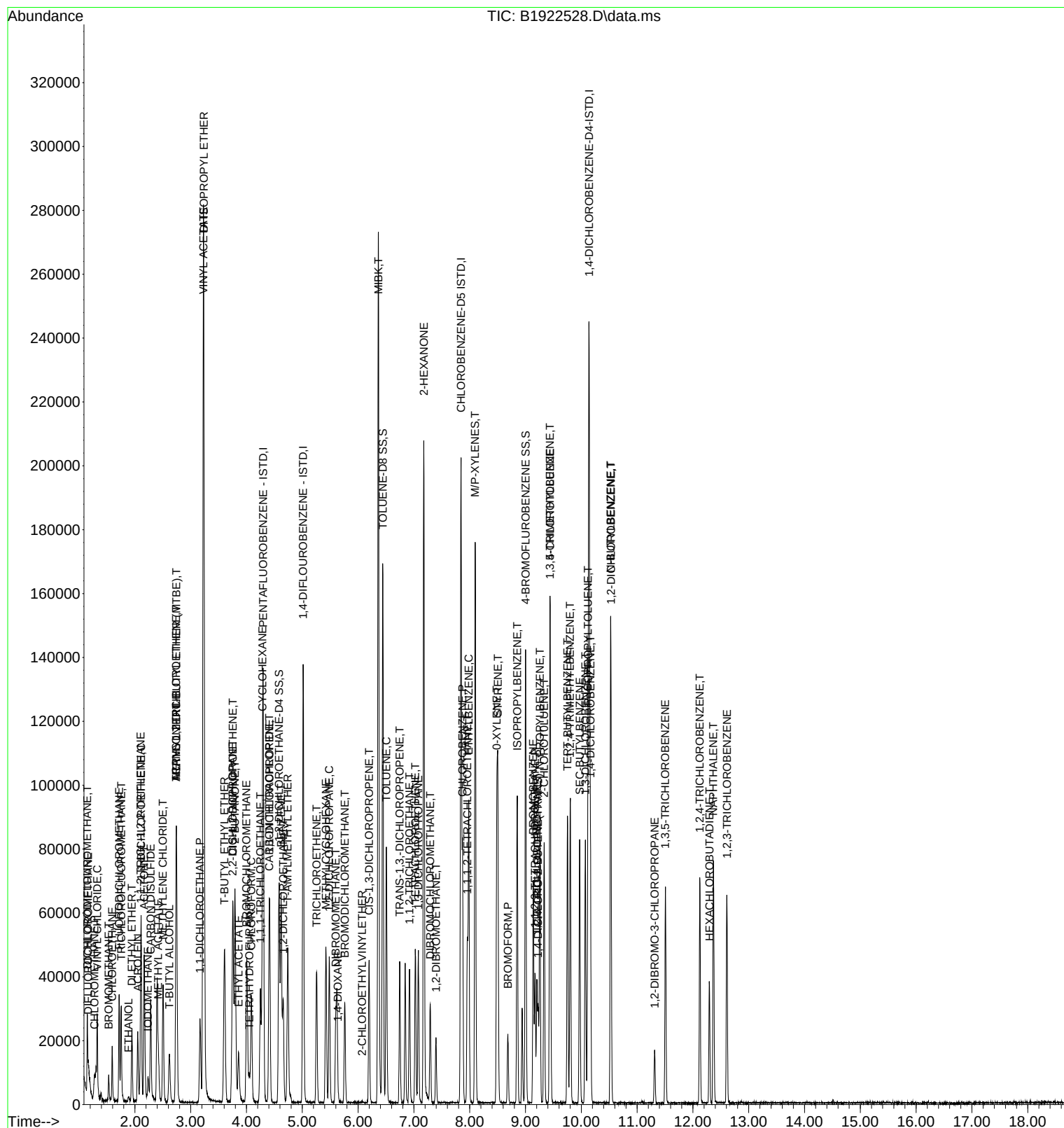
Quant Time: Aug 14 10:32:54 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) DIBROMOMETHANE	5.600	93	8120	11.62	UG/L	90
51) 1,4-DIOXANE	5.637	88	946	126.54	UG/L #	82
52) BROMODICHLOROMETHANE	5.762	83	16374	10.96	UG/L	97
53) 2-CHLOROETHYL VINYLETHYR	6.072	63	211m	0.26	UG/L	
54) MIBK	6.361	43	164328	111.18	UG/L	96
55) CIS-1,3-DICHLOROPROPENE	6.197	75	17017	9.93	UG/L	99
56) TOLUENE	6.506	91	42722	10.14	UG/L	99
57) TRANS-1,3,-DICHLOROPRO...	6.745	75	16896	10.28	UG/L	94
59) 1,1,2-TRICHLOROETHANE	6.921	97	10163	10.64	UG/L	94
60) 2-HEXANONE	7.177	43	122168	112.30	UG/L	95
61) TETRACHLOROETHENE	7.024	164	9379	11.54	UG/L	97
62) 1,3-DICHLOROPROPANE	7.078	76	17361	10.34	UG/L	94
63) DIBROMOCHLOROMETHANE	7.294	129	13561	12.27	UG/L	98
64) 1,2-DIBROMOETHANE	7.396	107	11527	10.83	UG/L #	94
67) CHLOROBENZENE	7.870	112	31121	10.36	UG/L	97
68) 1,1,1,2-TETRACHLOROETHANE	7.956	131	12258	11.20	UG/L	99
69) ETHYLBENZENE	7.984	91	51962	9.94	UG/L	100
70) M/P-XYLENES	8.098	91	81981	19.71	UG/L	99
71) O-XYLENE	8.484	91	42330	9.87	UG/L	98
72) STYRENE	8.504	104	34941	10.21	UG/L	97
73) BROMOFORM	8.683	173	8969	10.13	UG/L	99
74) ISOPROPYLBENZENE	8.851	105	52965	10.79	UG/L	99
76) 1,1,2,2-TETRACHLOROETHANE	9.169	83	14532	10.27	UG/L	95
77) 1,4-DICHLORO-2-BUTENE(...	9.223	53	6891	10.26	UG/L	97
78) BROMOBENZENE	9.138	77	21762	10.46	UG/L	97
79) 1,2,3-TRICHLOROPROPANE	9.206	110	4910	11.01	UG/L	81
80) N-PROPYLBENZENE	9.257	91	56091	9.27	UG/L	96
81) 2-CHLOROTOLUENE	9.334	91	37990	10.22	UG/L	100
82) 1,3,5-TRIMETHYLBENZENE	9.436	105	42529	10.10	UG/L	100
83) 4-CHLOROTOLUENE	9.442	91	43821	9.82	UG/L	97
85) TERT-BUTYLBENZENE	9.752	119	36689	9.79	UG/L	97
86) 1,2,4-TRIMETHYLBENZENE	9.800	105	44998	9.59	UG/L	98
87) SEC-BUTYLBENZENE	9.971	105	47885	9.08	UG/L	100
88) 1,3-DICHLOROBENZENE	10.073	146	28566	10.20	UG/L	100
89) P-ISOPROPYLTOLUENE	10.118	119	45080	9.88	UG/L	98
90) 1,4-DICHLOROBENZENE	10.164	146	30128	10.32	UG/L	98
91) N-BUTYLBENZENE	10.525	91	34365	8.41	UG/L	93
92) 1,2-DICHLOROBENZENE	10.531	146	27983	10.35	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	11.315	75	3664	11.73	UG/L	95
94) 1,3,5-TRICHLOROBENZENE	11.505	180	18487	10.35	UG/L	98
95) 1,2,4-TRICHLOROBENZENE	12.122	180	18384	10.47	UG/L	98
96) HEXACHLOROBUTADIENE	12.295	225	6968	11.64	UG/L	96
97) NAPHTHALENE	12.366	128	51789	11.22	UG/L	99
98) 1,2,3-TRICHLOROBENZENE	12.611	180	18040	11.41	UG/L	98

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

404

Quant Time: Aug 14 10:32:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
Quant Title : 8260 CALIBRATION VOAMS 5973
QLast Update : Fri Apr 19 05:25:51 2019
Response via : Initial Calibration



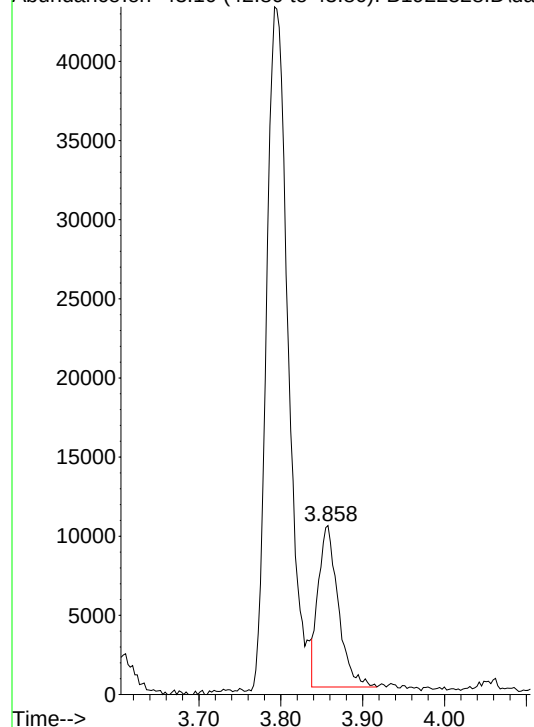
Data Path : Y:\1\DATA\B081319\
Data File : B1922528.D
Acq On : 13 Aug 2019 8:30 pm
Operator :
Sample : B0-BSD1
Misc :

Quant Time : Wed Aug 14 10:32:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

ETHYL ACETATE

Abundance on 43.10 (42.80 to 43.80): B1922528.D\data



Original Int. Results

RT : 3.86
Area : 17258
Amount: 8.5587

Manual Int. Results

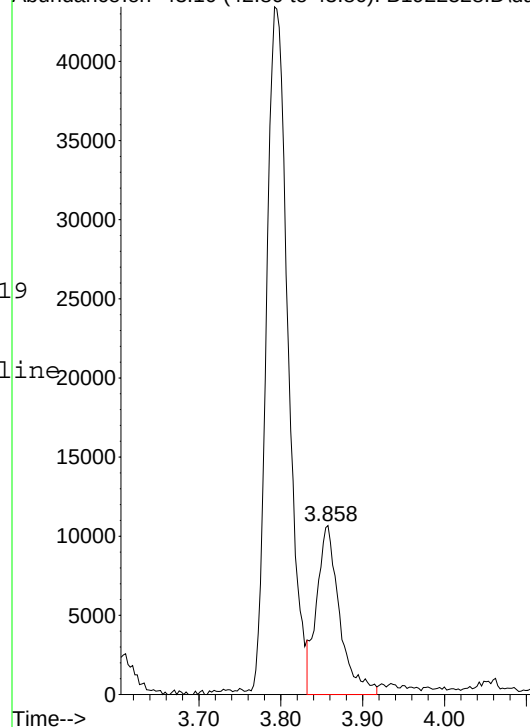
Wed Aug 14 10:31:48 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 3.86
Area : 20704
Amount: 10.2677

Manual Integration

ETHYL ACETATE

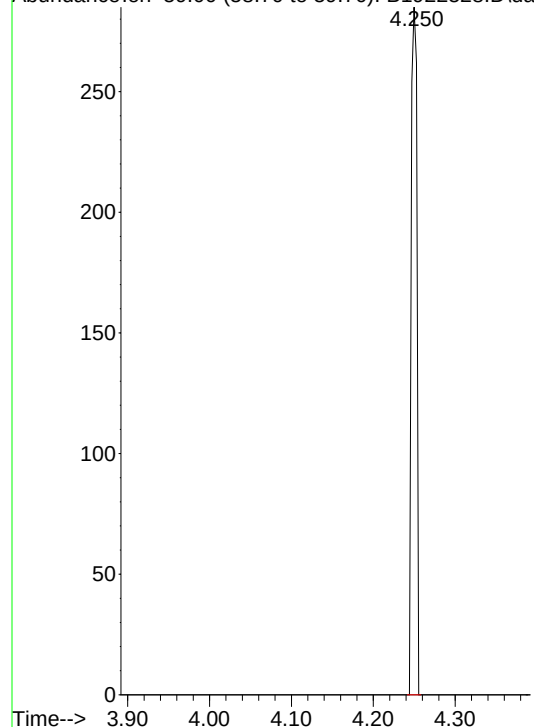
Abundance on 43.10 (42.80 to 43.80): B1922528.D\data



Original Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922528.D\data



Original Int. Results

RT : 4.25
Area : 137
Amount: 0.117784

Manual Int. Results

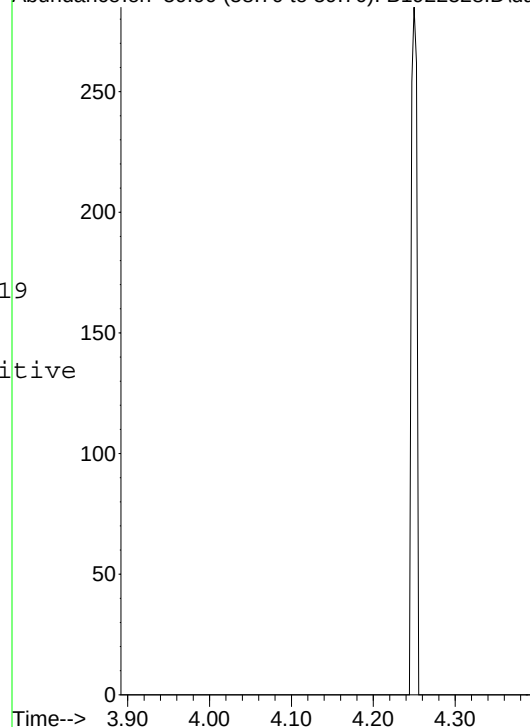
Wed Aug 14 10:31:53 2019

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

Manual Integration

T-BUTYL FORMATE

Abundance on 59.00 (58.70 to 59.70): B1922528.D\data



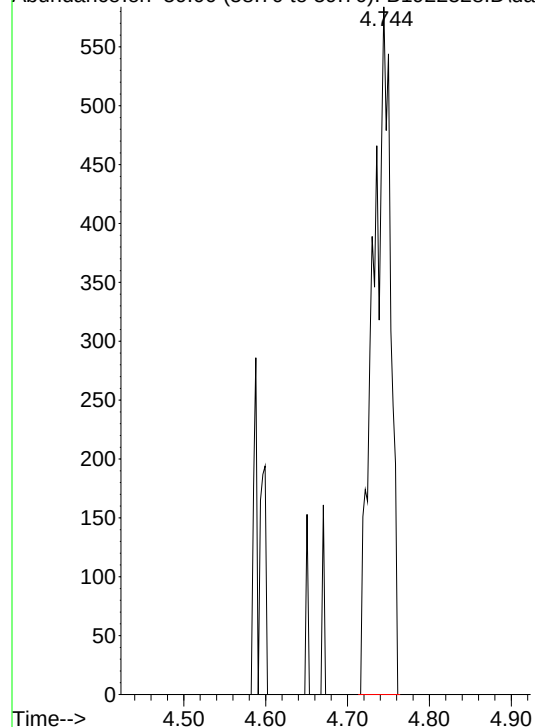
Data Path : Y:\1\DATA\B081319\
Data File : B1922528.D
Acq On : 13 Aug 2019 8:30 pm
Operator :
Sample : B0-BSD1
Misc :

Quant Time : Wed Aug 14 10:32:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

T-AMYL ALCOHOL

Abundance on 59.00 (58.70 to 59.70): B1922528.D\data



Original Int. Results

RT : 4.74
Area : 872
Amount: 8.12828

Manual Int. Results

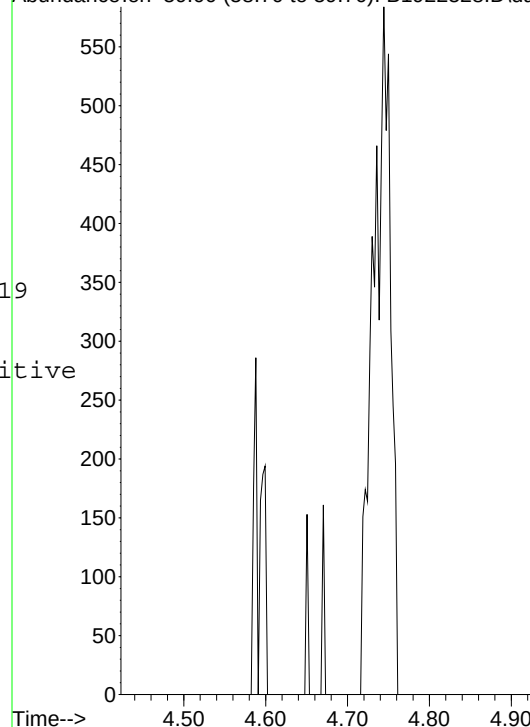
Wed Aug 14 10:32:57 2019

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

Manual Integration

T-AMYL ALCOHOL

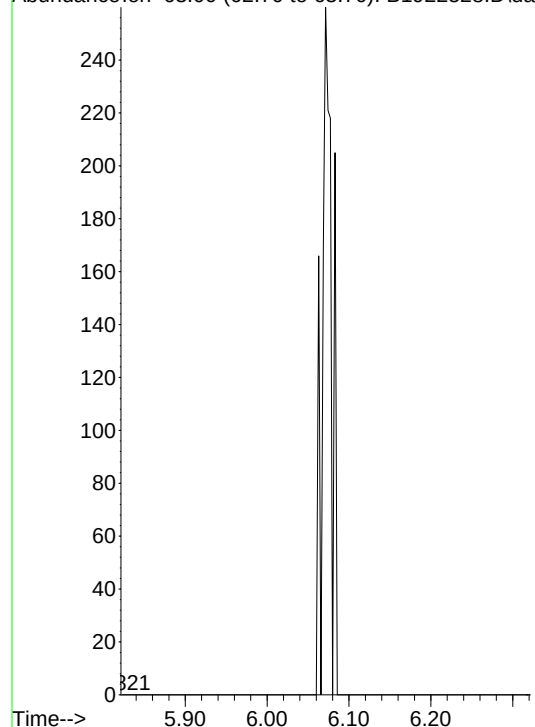
Abundance on 59.00 (58.70 to 59.70): B1922528.D\data



Original Integration

2-CHLOROETHYL VINYLETHER

Abundance on 63.00 (62.70 to 63.70): B1922528.D\data



Original Int. Results

RT : 0.00
Area : 0
Amount: 0

Manual Int. Results

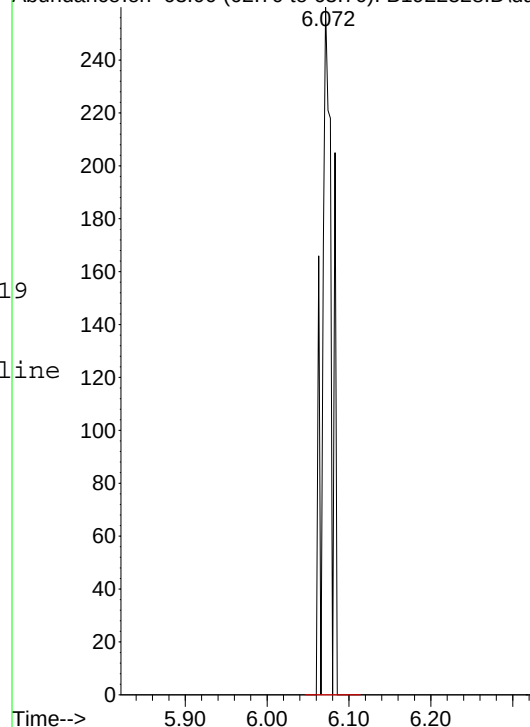
Wed Aug 14 10:33:05 2019

MIuser: LBD
Reason: Incorrect Baseline
RT : 6.07
Area : 211
Amount: 0.263484

Manual Integration

2-CHLOROETHYL VINYLETHER

Abundance on 63.00 (62.70 to 63.70): B1922528.D\data



1 - FORM I

ANALYSIS DATA SHEET

407

Matrix Spike

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-MS1
		File ID:	B1922546.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 05:44
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone	4000	190	2500	
107-13-1	Acrylonitrile	470	26	250	
994-05-8	tert-Amyl Methyl Ether (TAME)	424	7.0	25	
71-43-2	Benzene	472	9.0	50	
108-86-1	Bromobenzene	550	7.5	50	
74-97-5	Bromochloromethane	582	16	50	
75-27-4	Bromodichloromethane	561	8.0	25	
75-25-2	Bromoform	543	23	50	
74-83-9	Bromomethane	242	39	100	MS-09
78-93-3	2-Butanone (MEK)	4210	97	1000	
75-65-0	tert-Butyl Alcohol (TBA)	4330	210	1000	
104-51-8	n-Butylbenzene	408	10	50	V-05
135-98-8	sec-Butylbenzene	446	8.0	50	
98-06-6	tert-Butylbenzene	494	8.5	50	
637-92-3	tert-Butyl Ethyl Ether (TBEE)	449	8.0	25	
75-15-0	Carbon Disulfide	483	220	250	
56-23-5	Carbon Tetrachloride	608	5.5	250	
108-90-7	Chlorobenzene	558	7.5	50	
124-48-1	Chlorodibromomethane	616	10	25	
75-00-3	Chloroethane	476	18	100	
67-66-3	Chloroform	508	8.5	100	
74-87-3	Chloromethane	272	22	100	MS-09, V-05
95-49-8	2-Chlorotoluene	516	6.0	50	
106-43-4	4-Chlorotoluene	515	7.0	50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	457	26	250	
106-93-4	1,2-Dibromoethane (EDB)	555	9.5	25	
74-95-3	Dibromomethane	583	18	50	
95-50-1	1,2-Dichlorobenzene	507	8.0	50	
541-73-1	1,3-Dichlorobenzene	500	6.0	50	
106-46-7	1,4-Dichlorobenzene	502	6.5	50	

1 - FORM I

ANALYSIS DATA SHEET

408

Matrix Spike

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-MS1
		File ID:	B1922546.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 05:44
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene	433	16	100	
75-71-8	Dichlorodifluoromethane (Freon 12)	537	13	100	
75-34-3	1,1-Dichloroethane	898	8.0	50	
107-06-2	1,2-Dichloroethane	609	20	50	
75-35-4	1,1-Dichloroethylene	838	16	50	
156-59-2	cis-1,2-Dichloroethylene	507	6.5	50	
156-60-5	trans-1,2-Dichloroethylene	526	16	50	
78-87-5	1,2-Dichloropropane	544	10	50	
142-28-9	1,3-Dichloropropane	514	5.5	25	
594-20-7	2,2-Dichloropropane	386	10	50	
563-58-6	1,1-Dichloropropene	504	8.0	100	
10061-01-5	cis-1,3-Dichloropropene	506	6.5	25	
10061-02-6	trans-1,3-Dichloropropene	488	12	25	
60-29-7	Diethyl Ether	459	17	100	
108-20-3	Diisopropyl Ether (DIPE)	418	8.5	25	
123-91-1	1,4-Dioxane	5710	1100	2500	
100-41-4	Ethylbenzene	522	6.5	50	
87-68-3	Hexachlorobutadiene	565	24	30	
591-78-6	2-Hexanone (MBK)	4910	76	500	
98-82-8	Isopropylbenzene (Cumene)	570	8.5	50	
99-87-6	p-Isopropyltoluene (p-Cymene)	493	10	50	
79-20-9	Methyl Acetate	421	21	50	
1634-04-4	Methyl tert-Butyl Ether (MTBE)	505	12	50	
108-87-2	Methyl Cyclohexane	489	10	50	
75-09-2	Methylene Chloride	462	17	250	
108-10-1	4-Methyl-2-pentanone (MIBK)	4890	84	500	
91-20-3	Naphthalene	440	16	100	
103-65-1	n-Propylbenzene	480	6.5	50	
100-42-5	Styrene	520	5.5	50	
630-20-6	1,1,1,2-Tetrachloroethane	580	14	50	

1 - FORM I

ANALYSIS DATA SHEET

409

Matrix Spike

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-MS1
		File ID:	B1922546.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 05:44
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane	512	11	25	
127-18-4	Tetrachloroethylene	645	9.0	50	
109-99-9	Tetrahydrofuran	397	26	500	
108-88-3	Toluene	518	7.0	50	
87-61-6	1,2,3-Trichlorobenzene	492	28	250	
120-82-1	1,2,4-Trichlorobenzene	489	20	50	
108-70-3	1,3,5-Trichlorobenzene	514	15	50	
71-55-6	1,1,1-Trichloroethane	5240	10	50	MS-24
79-00-5	1,1,2-Trichloroethane	552	8.0	50	
79-01-6	Trichloroethylene	3560	12	50	MS-24
75-69-4	Trichlorofluoromethane (Freon 11)	508	16	100	
96-18-4	1,2,3-Trichloropropane	564	12	100	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 11)	10100	16	50	MS-19
95-63-6	1,2,4-Trimethylbenzene	474	9.0	50	
108-67-8	1,3,5-Trimethylbenzene	537	7.0	50	
75-01-4	Vinyl Chloride	408	22	100	
108383/106423	m+p Xylene	1050	15	100	
95-47-6	o-Xylene	526	8.5	50	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922546.D
 Acq On : 14 Aug 2019 5:44 am
 Operator :
 Sample : 19H0528-04MS1 @ 50X
 Misc : 50
 ALS Vial : 46 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 13:34:26 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.298	168	55390	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	78271	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	44543	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.138	152	50845	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.579	65	36209	25.37	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	101.48%		
45) TOLUENE-D8 SS	6.444	98	81827	26.71	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	106.84%		
66) 4-BROMOFLUROBENZENE SS	8.999	95	36525	27.86	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	111.44%		
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.146	85	13139	10.74	UG/L	97
4) DIFLUOROCHLOROMETHANE	1.172	51	17550	9.15	UG/L	96
5) CHLOROMETHANE	1.291	50	15003	5.45	UG/L	99
6) VINYL CHLORIDE	1.325	62	12227	8.16	UG/L	96
7) BROMOMETHANE	1.533	94	3449	4.84	UG/L	97
8) CHLOROETHANE	1.592	64	7779	9.53	UG/L	94
9) FLUORODICHLOROMETHANE	1.717	67	20507	9.70	UG/L	94
10) TRICHLOROFLUOROMETHANE	1.752	101	16989	10.17	UG/L	98
11) ETHANOL	1.882	45	569	41.06	UG/L #	69
12) DI ETHYL ETHER	1.945	59	9779	9.18	UG/L	87
13) ACROLEIN	2.050	56	25329	81.69	UG/L #	94
14) ACETONE	2.167	43	40919	80.02	UG/L	100
15) 1,1-DICHLOROETHENE	2.112	61	31421	16.76	UG/L	99
16) 1,1,2-TRICL-1,2,2-TRIF...	2.107	101	157378	201.39	UG/L	87
17) IODOMETHANE	2.235	142	4857	3.63	UG/L	90
18) METHYL ACETATE	2.425	43	13539	8.42	UG/L	99
19) T-BUTYL ALCOHOL	2.616	59	12658	86.67	UG/L	97
20) ACRYLONITRILE	2.749	53	5550	9.41	UG/L	98
21) METHYLENE CHLORIDE	2.505	49	20258	9.23	UG/L	98
22) CARBON DISULFIDE	2.283	76	28299	9.66	UG/L	98
23) METHYL TERT-BUTYL ETHE...	2.746	73	31998	10.10	UG/L	100
24) TRANS 1,2-DICHLOROETHENE	2.743	61	19259	10.53	UG/L	99
25) 1,1-DICHLOROETHANE	3.170	63	40423	17.95	UG/L	99
26) VINYL ACETATE	3.229	43	319015	88.18	UG/L	98
27) DI ISOPROPYL ETHER	3.229	45	40878	8.37	UG/L	97
28) 2-BUTANONE	3.795	43	65103	84.18	UG/L	99
29) T-BUTYL ETHYL ETHER	3.607	59	37840	8.98	UG/L	98
30) CIS-1,2-DICHLOROETHENE	3.758	61	22517	10.14	UG/L	99
31) 2,2-DICHLOROPROPANE	3.752	77	12881	7.72	UG/L	97
32) ETHYL ACETATE	3.860	43	14988	7.63	UG/L #	95
33) BROMOCHLOROMETHANE	4.005	128	6489	11.65	UG/L	86
34) TETRAHYDROFURAN	4.051	42	4130	7.94	UG/L #	54
35) T-BUTYL FORMATE	4.250	59	2812	2.48	UG/L #	21
36) CHLOROFORM	4.088	83	20940	10.16	UG/L	94
37) 1,1,1-TRICHLOROETHANE	4.250	97	187969	104.82	UG/L	97
38) CYCLOHEXANE	4.287	56	24124	10.32	UG/L	92
39) CARBON TETRACHLORIDE	4.409	117	18584	12.17	UG/L	100
40) 1,1-DICHLOROPROPENE	4.415	75	14609	10.07	UG/L	98
41) BENZENE	4.622	78	38515	9.43	UG/L	100
42) T-AMYL ALCOHOL	4.747	59	807	7.73	UG/L #	1
43) T-AMYLMETHYL ETHER	4.741	73	24989	8.47	UG/L	90
46) 1,2-DICHLOROETHANE	4.656	62	22624	12.18	UG/L	93
47) TRICHLOROETHENE	5.256	95	70629	71.13	UG/L	95

Data Path : Y:\1\DATA\B081319\
 Data File : B1922546.D
 Acq On : 14 Aug 2019 5:44 am
 Operator :
 Sample : 19H0528-04MS1 @ 50X
 Misc : 50
 ALS Vial : 46 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 13:34:26 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.423	83	13180	9.78	UG/L	93
49) 1,2-DICHLOROPROPANE	5.483	63	12295	10.89	UG/L	95
50) DIBROMOMETHANE	5.600	93	7761	11.66	UG/L	90
51) 1,4-DIOXANE	5.620	88	788m	114.24	UG/L	
52) BROMODICHLOROMETHANE	5.759	83	15970	11.22	UG/L	93
54) MIBK	6.361	43	137754	97.86	UG/L	93
55) CIS-1,3-DICHLOROPROPENE	6.196	75	16499	10.11	UG/L	91
56) TOLUENE	6.509	91	41570	10.36	UG/L	99
57) TRANS-1,3,-DICHLOROPRO...	6.742	75	15289	9.76	UG/L	90
59) 1,1,2-TRICHLOROETHANE	6.918	97	10035	11.03	UG/L	94
60) 2-HEXANONE	7.177	43	101730	98.18	UG/L	92
61) TETRACHLOROETHENE	7.026	164	9987	12.90	UG/L	96
62) 1,3-DICHLOROPROPANE	7.077	76	16436	10.28	UG/L	95
63) DIBROMOCHLOROMETHANE	7.291	129	12963	12.32	UG/L	99
64) 1,2-DIBROMOETHANE	7.393	107	11255	11.10	UG/L #	99
67) CHLOROBENZENE	7.870	112	31350	11.16	UG/L	97
68) 1,1,1,2-TETRACHLOROETHANE	7.961	131	11862	11.59	UG/L	94
69) ETHYLBENZENE	7.984	91	51112	10.45	UG/L	98
70) M/P-XYLENES	8.101	91	81670	20.99	UG/L	100
71) O-XYLENE	8.484	91	42188	10.51	UG/L	99
72) STYRENE	8.504	104	33319	10.41	UG/L	96
73) BROMOFORM	8.683	173	8991	10.86	UG/L #	98
74) ISOPROPYLBENZENE	8.848	105	52383	11.40	UG/L	98
76) 1,1,2,2-TETRACHLOROETHANE	9.172	83	13545	10.23	UG/L #	98
77) 1,4-DICHLORO-2-BUTENE(...	9.229	53	5445	8.66	UG/L #	87
78) BROMOBENZENE	9.141	77	21374	10.99	UG/L	95
79) 1,2,3-TRICHLOROPROPANE	9.200	110	4705	11.28	UG/L	74
80) N-PROPYLBENZENE	9.254	91	54387	9.61	UG/L	95
81) 2-CHLOROTOLUENE	9.334	91	35838	10.31	UG/L	94
82) 1,3,5-TRIMETHYLBENZENE	9.433	105	42301	10.74	UG/L	100
83) 4-CHLOROTOLUENE	9.442	91	42971	10.30	UG/L	96
85) TERT-BUTYLBENZENE	9.752	119	36889	9.88	UG/L	95
86) 1,2,4-TRIMETHYLBENZENE	9.800	105	44314	9.47	UG/L	99
87) SEC-BUTYLBENZENE	9.971	105	46834	8.91	UG/L	97
88) 1,3-DICHLOROBENZENE	10.073	146	27902	10.00	UG/L	99
89) P-ISOPROPYLTOLUENE	10.121	119	44844	9.86	UG/L	96
90) 1,4-DICHLOROBENZENE	10.161	146	29223	10.05	UG/L	99
91) N-BUTYLBENZENE	10.522	91	33264	8.17	UG/L	95
92) 1,2-DICHLOROBENZENE	10.528	146	27333	10.14	UG/L	100
93) 1,2-DIBROMO-3-CHLOROPR...	11.312	75	2847	9.14	UG/L #	78
94) 1,3,5-TRICHLOROBENZENE	11.508	180	18316	10.29	UG/L	98
95) 1,2,4-TRICHLOROBENZENE	12.122	180	17121	9.78	UG/L	98
96) HEXACHLOROBUTADIENE	12.295	225	6743	11.30	UG/L	97
97) NAPHTHALENE	12.366	128	40447	8.79	UG/L	100
98) 1,2,3-TRICHLOROBENZENE	12.611	180	15485	9.83	UG/L	96

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

412

Inst : GCMSVOA2



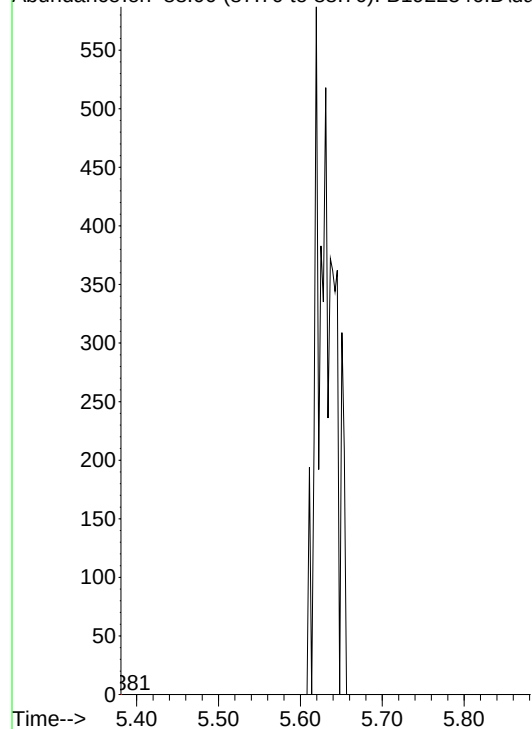
Data Path : Y:\1\DATA\B081319\
Data File : B1922546.D
Acq On : 14 Aug 2019 5:44 am
Operator :
Sample : 19H0528-04MS1 @ 50X
Misc : 50

Quant Time : Wed Aug 14 13:34:26 2019
Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
QLast Update : Fri Apr 19 05:25:51 2019

Original Integration

1,4-DIOXANE

Abundance on 88.00 (87.70 to 88.70): B1922546.D\data



Original Int. Results

RT : 0.00

Area : 0

Amount: 0

Manual Int. Results

Wed Aug 14 13:34:36 2019

MIuser: LBD

Reason: Incorrect Baseline

RT : 5.62

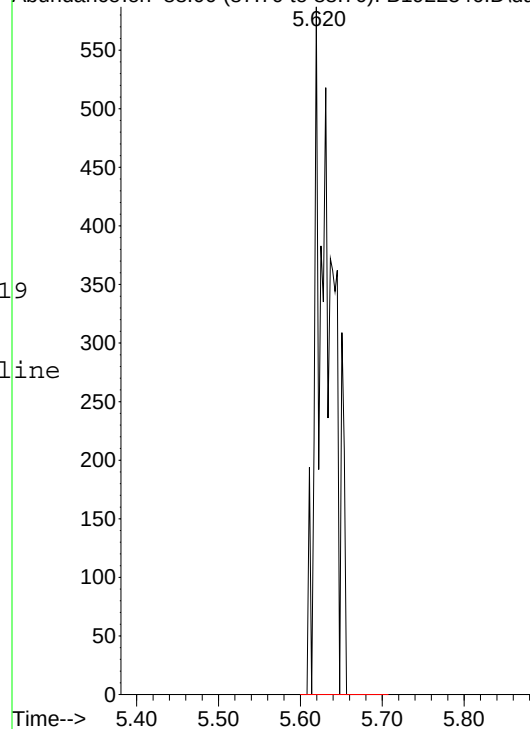
Area : 788

Amount: 114.236

Manual Integration

1,4-DIOXANE

Abundance on 88.00 (87.70 to 88.70): B1922546.D\data



1 - FORM I

ANALYSIS DATA SHEET

414

Matrix Spike Dup

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-MSD1
		File ID:	B1922547.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 06:14
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
67-64-1	Acetone	3960	190	2500	
107-13-1	Acrylonitrile	494	26	250	
994-05-8	tert-Amyl Methyl Ether (TAME)	432	7.0	25	
71-43-2	Benzene	462	9.0	50	
108-86-1	Bromobenzene	510	7.5	50	
74-97-5	Bromochloromethane	550	16	50	
75-27-4	Bromodichloromethane	539	8.0	25	
75-25-2	Bromoform	511	23	50	
74-83-9	Bromomethane	253	39	100	MS-09
78-93-3	2-Butanone (MEK)	4610	97	1000	
75-65-0	tert-Butyl Alcohol (TBA)	4760	210	1000	
104-51-8	n-Butylbenzene	393	10	50	V-05
135-98-8	sec-Butylbenzene	438	8.0	50	
98-06-6	tert-Butylbenzene	466	8.5	50	
637-92-3	tert-Butyl Ethyl Ether (TBEE)	462	8.0	25	
75-15-0	Carbon Disulfide	465	220	250	
56-23-5	Carbon Tetrachloride	580	5.5	250	
108-90-7	Chlorobenzene	524	7.5	50	
124-48-1	Chlorodibromomethane	582	10	25	
75-00-3	Chloroethane	477	18	100	
67-66-3	Chloroform	498	8.5	100	
74-87-3	Chloromethane	293	22	100	MS-09, V-05
95-49-8	2-Chlorotoluene	483	6.0	50	
106-43-4	4-Chlorotoluene	481	7.0	50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	518	26	250	
106-93-4	1,2-Dibromoethane (EDB)	508	9.5	25	
74-95-3	Dibromomethane	551	18	50	
95-50-1	1,2-Dichlorobenzene	484	8.0	50	
541-73-1	1,3-Dichlorobenzene	479	6.0	50	
106-46-7	1,4-Dichlorobenzene	474	6.5	50	

1 - FORM I

ANALYSIS DATA SHEET

415

Matrix Spike Dup

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-MSD1
		File ID:	B1922547.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 06:14
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
110-57-6	trans-1,4-Dichloro-2-butene	438	16	100	
75-71-8	Dichlorodifluoromethane (Freon 12)	502	13	100	
75-34-3	1,1-Dichloroethane	897	8.0	50	
107-06-2	1,2-Dichloroethane	598	20	50	
75-35-4	1,1-Dichloroethylene	812	16	50	
156-59-2	cis-1,2-Dichloroethylene	515	6.5	50	
156-60-5	trans-1,2-Dichloroethylene	542	16	50	
78-87-5	1,2-Dichloropropane	536	10	50	
142-28-9	1,3-Dichloropropane	494	5.5	25	
594-20-7	2,2-Dichloropropane	370	10	50	
563-58-6	1,1-Dichloropropene	480	8.0	100	
10061-01-5	cis-1,3-Dichloropropene	486	6.5	25	
10061-02-6	trans-1,3-Dichloropropene	460	12	25	
60-29-7	Diethyl Ether	462	17	100	
108-20-3	Diisopropyl Ether (DIPE)	452	8.5	25	
123-91-1	1,4-Dioxane	6060	1100	2500	
100-41-4	Ethylbenzene	488	6.5	50	
87-68-3	Hexachlorobutadiene	538	24	30	
591-78-6	2-Hexanone (MBK)	5220	76	500	
98-82-8	Isopropylbenzene (Cumene)	516	8.5	50	
99-87-6	p-Isopropyltoluene (p-Cymene)	478	10	50	
79-20-9	Methyl Acetate	401	21	50	
1634-04-4	Methyl tert-Butyl Ether (MTBE)	492	12	50	
108-87-2	Methyl Cyclohexane	448	10	50	
75-09-2	Methylene Chloride	463	17	250	
108-10-1	4-Methyl-2-pentanone (MIBK)	5170	84	500	
91-20-3	Naphthalene	506	16	100	
103-65-1	n-Propylbenzene	454	6.5	50	
100-42-5	Styrene	478	5.5	50	
630-20-6	1,1,1,2-Tetrachloroethane	560	14	50	

1 - FORM I

ANALYSIS DATA SHEET

416

Matrix Spike Dup

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B237875-MSD1
		File ID:	B1922547.D
Sampled:		Prepared:	08/13/19 07:22
		Analyzed:	08/14/19 06:14
Solids:		Preparation:	SW-846 5030B
		Dilution:	
Batch:	B237875	Sequence:	S039168
		Calibration:	1900126
		Instrument:	GCMSVOA2
Column:	1		

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
79-34-5	1,1,2,2-Tetrachloroethane	478	11	25	
127-18-4	Tetrachloroethylene	578	9.0	50	
109-99-9	Tetrahydrofuran	400	26	500	
108-88-3	Toluene	496	7.0	50	
87-61-6	1,2,3-Trichlorobenzene	500	28	250	
120-82-1	1,2,4-Trichlorobenzene	472	20	50	
108-70-3	1,3,5-Trichlorobenzene	467	15	50	
71-55-6	1,1,1-Trichloroethane	5180	10	50	
79-00-5	1,1,2-Trichloroethane	508	8.0	50	
79-01-6	Trichloroethylene	3450	12	50	
75-69-4	Trichlorofluoromethane (Freon 11)	490	16	100	
96-18-4	1,2,3-Trichloropropane	540	12	100	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 11)	9410	16	50	MS-19
95-63-6	1,2,4-Trimethylbenzene	442	9.0	50	
108-67-8	1,3,5-Trimethylbenzene	489	7.0	50	
75-01-4	Vinyl Chloride	422	22	100	
108383/106423	m+p Xylene	980	15	100	
95-47-6	o-Xylene	480	8.5	50	

Data Path : Y:\1\DATA\B081319\
 Data File : B1922547.D
 Acq On : 14 Aug 2019 6:14 am
 Operator :
 Sample : 19H0528-04MSD1 @ 50X
 Misc : 50
 ALS Vial : 47 Sample Multiplier: 1

Inst : GCMSVOA2

Quant Time: Aug 14 06:33:43 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.301	168	56409	30.00	UG/L	0.00
44) 1,4-DIFLOUROBENZENE - ...	5.017	114	81417	30.00	UG/L	0.00
65) CHLOROBENZENE-D5 ISTD	7.842	82	47400	30.00	UG/L	0.00
84) 1,4-DICHLOROBENZENE-D4...	10.136	152	51655	30.00	UG/L	0.00
System Monitoring Compounds						
2) 1,2-DICHLOROETHANE-D4 SS	4.582	65	38454	26.45	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 105.80%			
45) TOLUENE-D8 SS	6.444	98	85061	26.70	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 106.80%			
66) 4-BROMOFLUROBENZENE SS	9.002	95	38114	27.32	UG/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 109.28%			
Target Compounds						
					Qvalue	
3) DICHLORODIFLOUROMETHANE	1.146	85	12496	10.03	UG/L	98
4) DIFLUOROCHLOROMETHANE	1.164	51	17776	9.10	UG/L	99
5) CHLOROMETHANE	1.286	50	16447	5.86	UG/L	98
6) VINYL CHLORIDE	1.323	62	12867	8.43	UG/L	98
7) BROMOMETHANE	1.530	94	3671	5.06	UG/L	97
8) CHLOROETHANE	1.590	64	7931	9.54	UG/L	99
9) FLUORODICHLOROMETHANE	1.718	67	19453	9.04	UG/L	95
10) TRICHLOROFLUOROMETHANE	1.749	101	16655	9.79	UG/L	98
11) ETHANOL	1.888	45	1206	85.45	UG/L #	68
12) DI ETHYL ETHER	1.948	59	10038	9.25	UG/L	91
13) ACROLEIN	2.053	56	26799	84.87	UG/L #	95
14) ACETONE	2.167	43	41262	79.23	UG/L	97
15) 1,1-DICHLOROETHENE	2.113	61	31008	16.24	UG/L	99
16) 1,1,2-TRICL-1,2,2-TRIF...	2.104	101	149741	188.16	UG/L	88
17) IODOMETHANE	2.235	142	5672	4.16	UG/L	96
18) METHYL ACETATE	2.420	43	13123	8.02	UG/L	97
19) T-BUTYL ALCOHOL	2.616	59	14152	95.14	UG/L	97
20) ACRYLONITRILE	2.741	53	5926	9.87	UG/L	97
21) METHYLENE CHLORIDE	2.505	49	20703	9.26	UG/L	98
22) CARBON DISULFIDE	2.280	76	27738	9.30	UG/L	97
23) METHYL TERT-BUTYL ETHE...	2.747	73	31695	9.83	UG/L	100
24) TRANS 1,2-DICHLOROETHENE	2.741	61	20209	10.85	UG/L	94
25) 1,1-DICHLOROETHANE	3.167	63	41134	17.94	UG/L	99
26) VINYL ACETATE	3.227	43	337559	91.62	UG/L	99
27) DI ISOPROPYL ETHER	3.235	45	44986	9.04	UG/L	100
28) 2-BUTANONE	3.795	43	72652	92.25	UG/L	97
29) T-BUTYL ETHYL ETHER	3.605	59	39717	9.25	UG/L	97
30) CIS-1,2-DICHLOROETHENE	3.755	61	23287	10.30	UG/L	97
31) 2,2-DICHLOROPROPANE	3.753	77	12604	7.41	UG/L	96
32) ETHYL ACETATE	3.855	43	16987	8.50	UG/L	98
33) BROMOCHLOROMETHANE	4.000	128	6233	10.99	UG/L	95
34) TETRAHYDROFURAN	4.054	42	4242	8.01	UG/L #	50
35) T-BUTYL FORMATE	4.250	59	2908	2.52	UG/L #	21
36) CHLOROFORM	4.088	83	20928	9.97	UG/L	99
37) 1,1,1-TRICHLOROETHANE	4.250	97	189088	103.54	UG/L	98
38) CYCLOHEXANE	4.287	56	24792	10.42	UG/L	92
39) CARBON TETRACHLORIDE	4.406	117	18056	11.61	UG/L	100
40) 1,1-DICHLOROPROPENE	4.412	75	14171	9.59	UG/L	96
41) BENZENE	4.625	78	38401	9.23	UG/L	99
42) T-AMYL ALCOHOL	4.739	59	745	7.00	UG/L #	1
43) T-AMYLMETHYL ETHER	4.736	73	25975	8.64	UG/L #	91
46) 1,2-DICHLOROETHANE	4.659	62	23120	11.97	UG/L #	87
47) TRICHLOROETHENE	5.256	95	71196	68.93	UG/L	95

Data Path : Y:\1\DATA\B081319\
 Data File : B1922547.D
 Acq On : 14 Aug 2019 6:14 am
 Operator :
 Sample : 19H0528-04MSD1 @ 50X
 Misc : 50
 ALS Vial : 47 Sample Multiplier: 1

Inst : GCMSVOA2

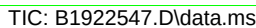
Quant Time: Aug 14 06:33:43 2019
 Quant Method : C:\MSDCHEM\1\METHODS\B041819W.M
 Quant Title : 8260 CALIBRATION VOAMS 5973
 QLast Update : Fri Apr 19 05:25:51 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) METHYLCYCLOHEXANE	5.421	83	12557	8.96	UG/L	87
49) 1,2-DICHLOROPROPANE	5.486	63	12576	10.71	UG/L	97
50) DIBROMOMETHANE	5.597	93	7625	11.02	UG/L	91
51) 1,4-DIOXANE	5.637	88	887	121.28	UG/L #	81
52) BROMODICHLOROMETHANE	5.762	83	15953	10.78	UG/L	97
54) MIBK	6.361	43	151467	103.44	UG/L	95
55) CIS-1,3-DICHLOROPROPENE	6.197	75	16515	9.73	UG/L	96
56) TOLUENE	6.509	91	41341	9.91	UG/L	98
57) TRANS-1,3,-DICHLOROPRO...	6.745	75	14996	9.21	UG/L	94
59) 1,1,2-TRICHLOROETHANE	6.924	97	9603	10.15	UG/L	94
60) 2-HEXANONE	7.177	43	112455	104.34	UG/L	94
61) TETRACHLOROETHENE	7.027	164	9313	11.57	UG/L	97
62) 1,3-DICHLOROPROPANE	7.078	76	16426	9.88	UG/L	98
63) DIBROMOCHLOROMETHANE	7.294	129	12748	11.64	UG/L	98
64) 1,2-DIBROMOETHANE	7.393	107	10727	10.17	UG/L #	92
67) CHLOROBENZENE	7.871	112	31298	10.47	UG/L	97
68) 1,1,1,2-TETRACHLOROETHANE	7.959	131	12205	11.21	UG/L	95
69) ETHYLBENZENE	7.984	91	50803	9.76	UG/L	99
70) M/P-XYLENES	8.098	91	81216	19.61	UG/L	98
71) O-XYLENE	8.487	91	40940	9.59	UG/L	100
72) STYRENE	8.504	104	32530	9.55	UG/L	93
73) BROMOFORM	8.686	173	9006	10.22	UG/L	96
74) ISOPROPYLBENZENE	8.851	105	50512	10.33	UG/L	100
76) 1,1,2,2-TETRACHLOROETHANE	9.172	83	13469	9.56	UG/L	97
77) 1,4-DICHLORO-2-BUTENE(...	9.226	53	5861	8.76	UG/L	96
78) BROMOBENZENE	9.141	77	21141	10.21	UG/L	99
79) 1,2,3-TRICHLOROPROPANE	9.203	110	4798	10.81	UG/L	74
80) N-PROPYLBENZENE	9.257	91	54715	9.09	UG/L	97
81) 2-CHLOROTOLUENE	9.334	91	35724	9.66	UG/L	96
82) 1,3,5-TRIMETHYLBENZENE	9.437	105	40977	9.78	UG/L	99
83) 4-CHLOROTOLUENE	9.445	91	42696	9.62	UG/L	96
85) TERT-BUTYLBENZENE	9.752	119	35338	9.32	UG/L	98
86) 1,2,4-TRIMETHYLBENZENE	9.800	105	42010	8.84	UG/L	98
87) SEC-BUTYLBENZENE	9.971	105	46783	8.76	UG/L	98
88) 1,3-DICHLOROBENZENE	10.073	146	27160	9.58	UG/L	100
89) P-ISOPROPYLTOLUENE	10.121	119	44220	9.57	UG/L	98
90) 1,4-DICHLOROBENZENE	10.161	146	27976	9.47	UG/L	98
91) N-BUTYLBENZENE	10.525	91	32543	7.86	UG/L	95
92) 1,2-DICHLOROBENZENE	10.531	146	26494	9.68	UG/L	99
93) 1,2-DIBROMO-3-CHLOROPR...	11.315	75	3275	10.35	UG/L	88
94) 1,3,5-TRICHLOROBENZENE	11.505	180	16887	9.34	UG/L	98
95) 1,2,4-TRICHLOROBENZENE	12.122	180	16769	9.43	UG/L	97
96) HEXACHLOROBUTADIENE	12.293	225	6520	10.76	UG/L	96
97) NAPHTHALENE	12.367	128	47295	10.12	UG/L	99
98) 1,2,3-TRICHLOROBENZENE	12.608	180	16002	10.00	UG/L	99

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

419

Inst : GCMSVOA2



1 - FORM I

ANALYSIS DATA SHEET

420

Blank

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

421

Blank

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

422

Blank

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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 113)		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	

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

Inst : GCMSVOA3

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)

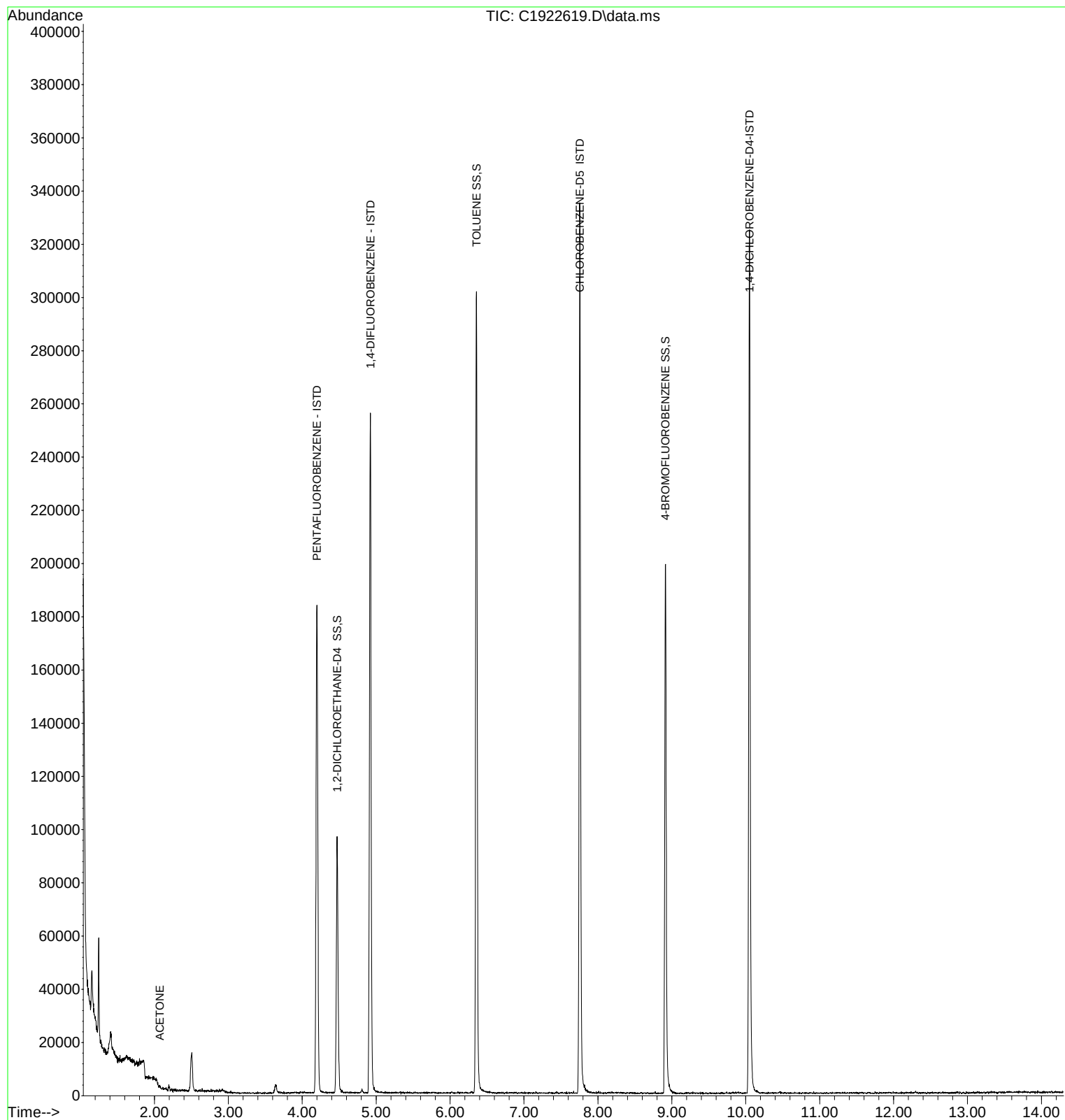
Internal Standards						
1) PENTAFLUOROBENZENE - ISTD	4.199	168	107223	30.00	UG/L	0.00
48) 1,4-DIFLUOROBENZENE - ...	4.922	114	168923	30.00	UG/L	0.00
70) CHLOROBENZENE-D5 ISTD	7.755	82	83556	30.00	UG/L	0.00
89) 1,4-DICHLOROBENZENE-D4...	10.050	152	75195	30.00	UG/L	# 0.00
System Monitoring Compounds						
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						
14) ACETONE	2.071	43	575	0.85	UG/L	Qvalue # 47

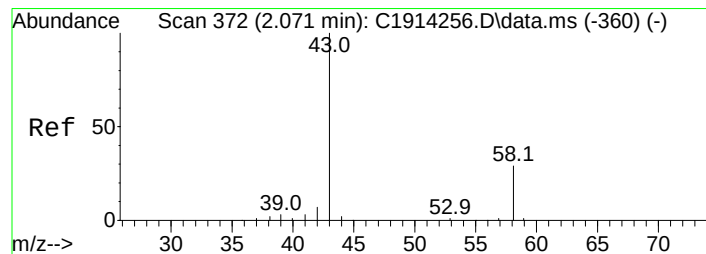
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Inst : GCMSVOA3

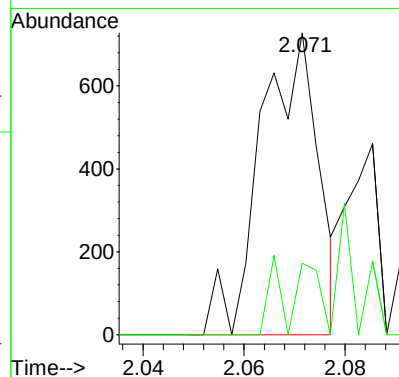
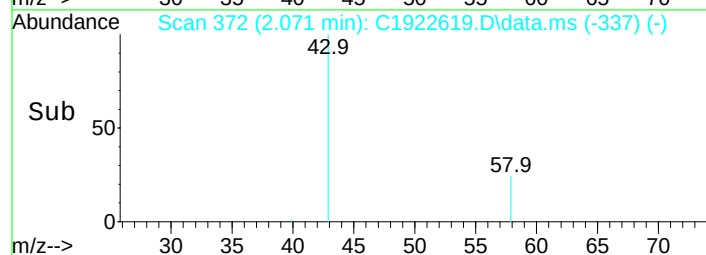
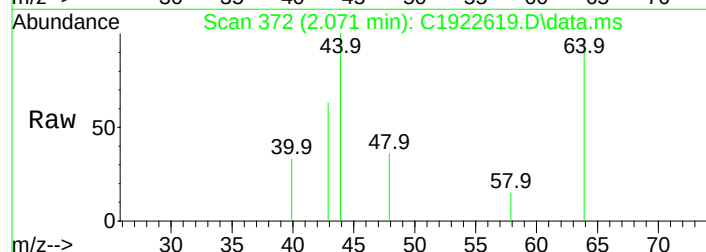
Quant Time: Aug 15 08:34:46 2019
Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration





#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

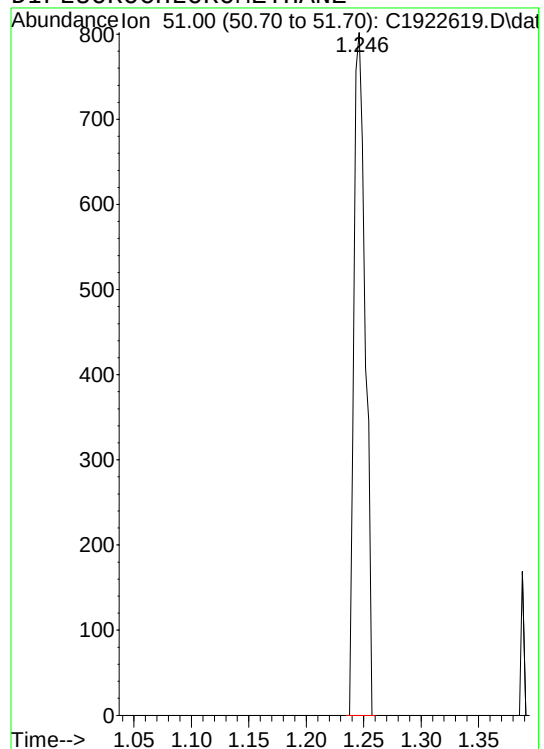
Tgt Ion: 43 Resp: 575
Ion Ratio Lower Upper
43 100
58 0.0 22.1 33.1#



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

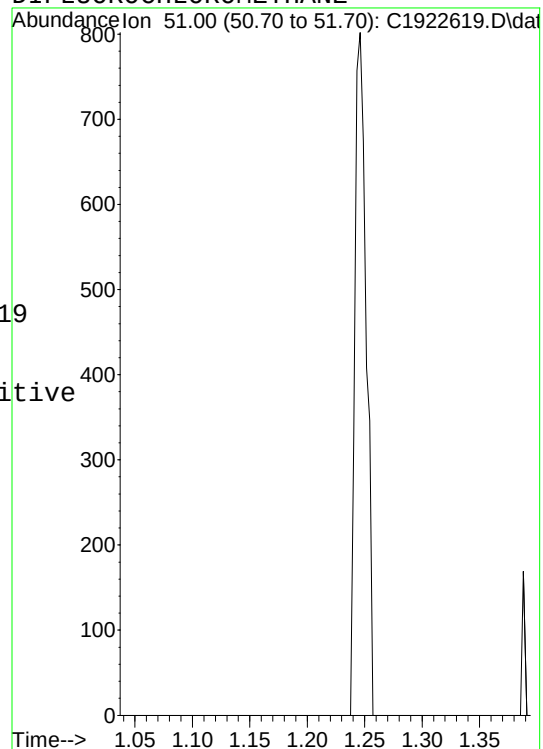
RT : 1.25
Area : 555
Amount: 0.265627

Manual Int. Results

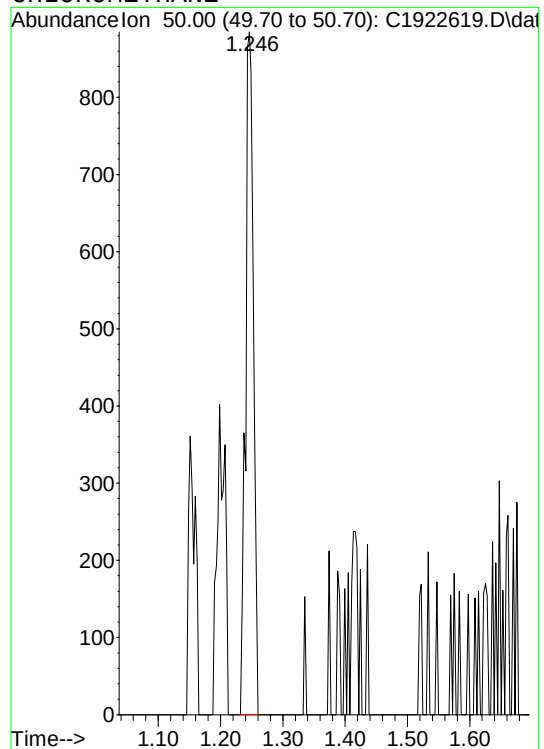
Thu Aug 15 08:34:22 2019

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

Manual Integration
DIFLUOROCHLOROMETHANE



Original Integration
CHLOROMETHANE



Original Int. Results

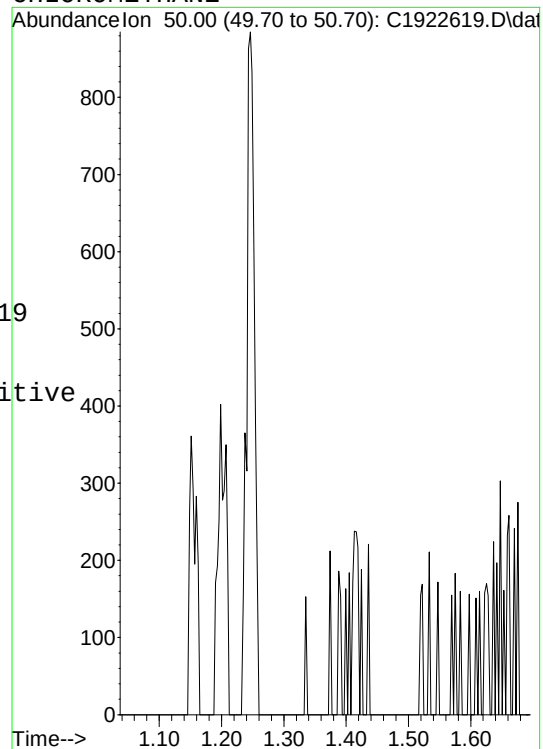
RT : 1.25
Area : 770
Amount: 0.330156

Manual Int. Results

Thu Aug 15 08:34:24 2019

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

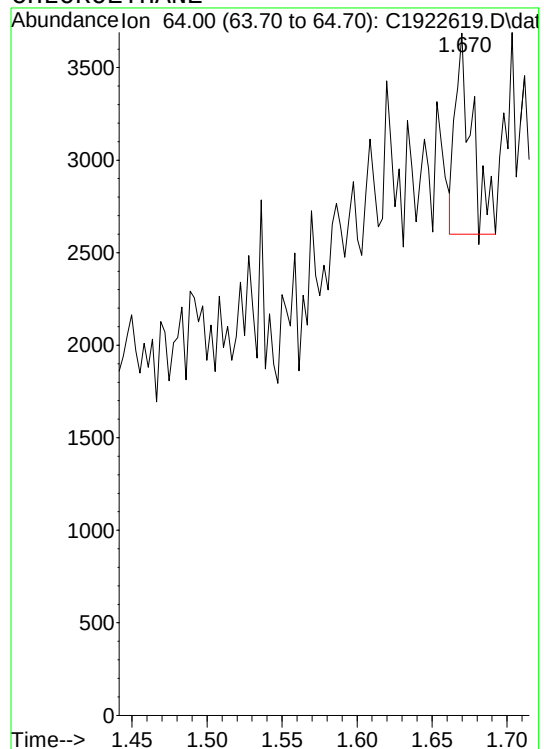
Manual Integration
CHLOROMETHANE



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

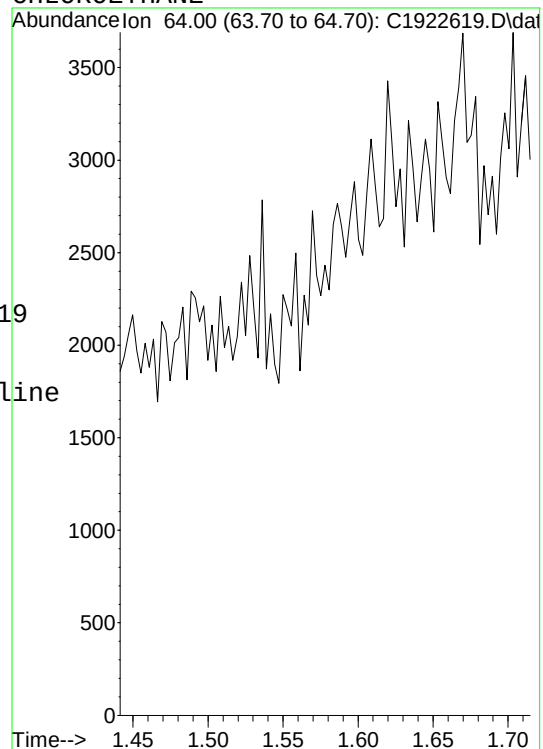
RT : 1.67
Area : 836
Amount: 0.811735

Manual Int. Results

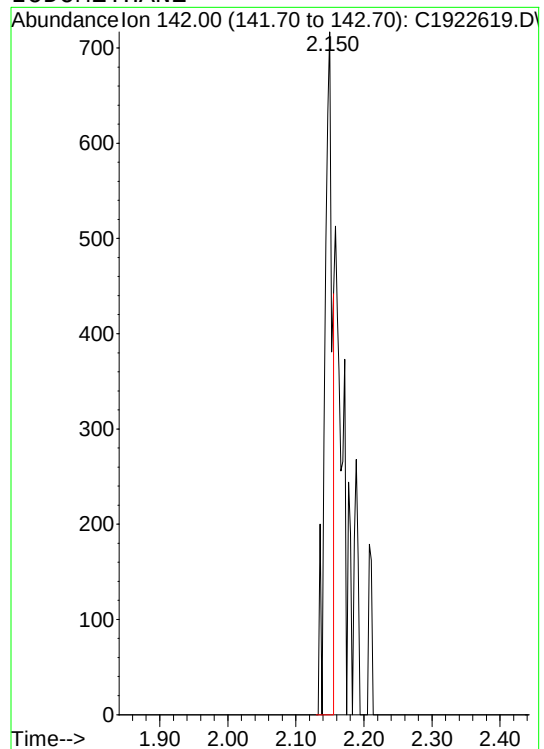
Thu Aug 15 08:34:27 2019

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

Manual Integration
CHLOROETHANE



Original Integration
IODOMETHANE



Original Int. Results

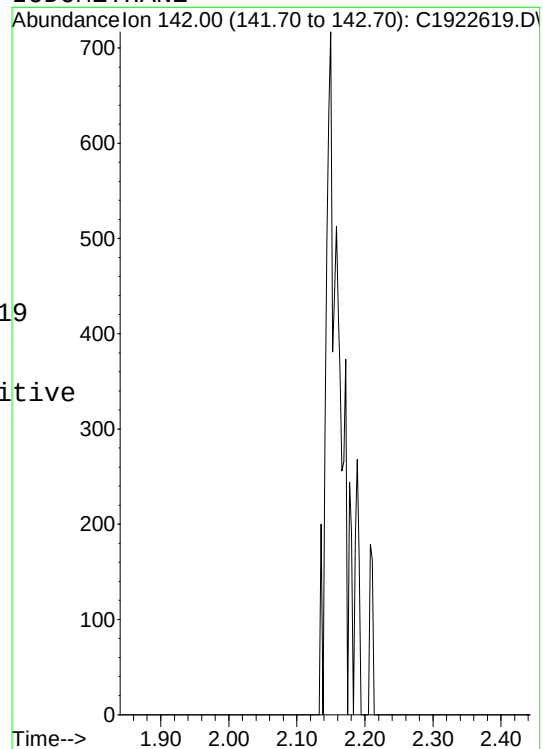
RT : 2.15
Area : 528
Amount: 0.310908

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

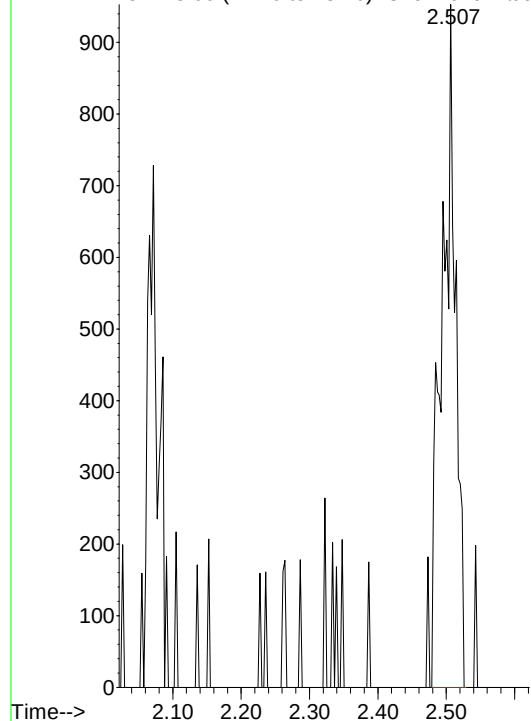


Data Path : C:\msdchem\1\data\C081419\
Data File : C1922619.D
Acq On : 14 Aug 2019 3:01 pm
Operator :
Sample : B0-BLK1
Misc :

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

Abundance Ion 43.00 (42.70 to 43.70): C1922619.D\data



Original Int. Results

RT : 2.51
Area : 1325
Amount: 0.636098

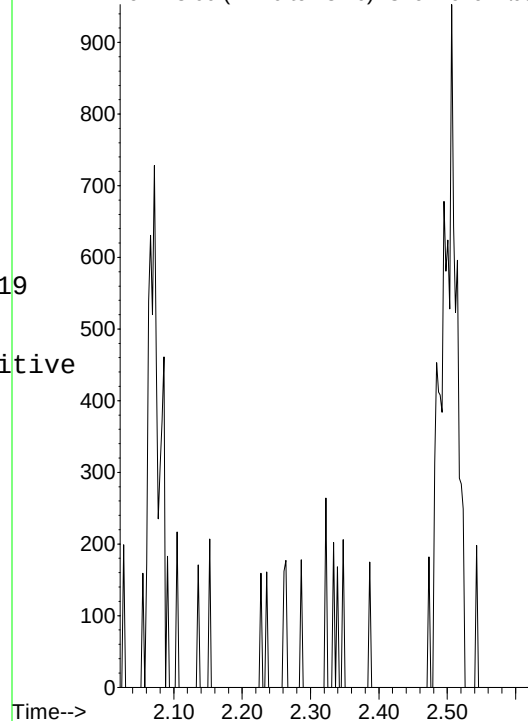
Manual Int. Results

Thu Aug 15 08:34:34 2019

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

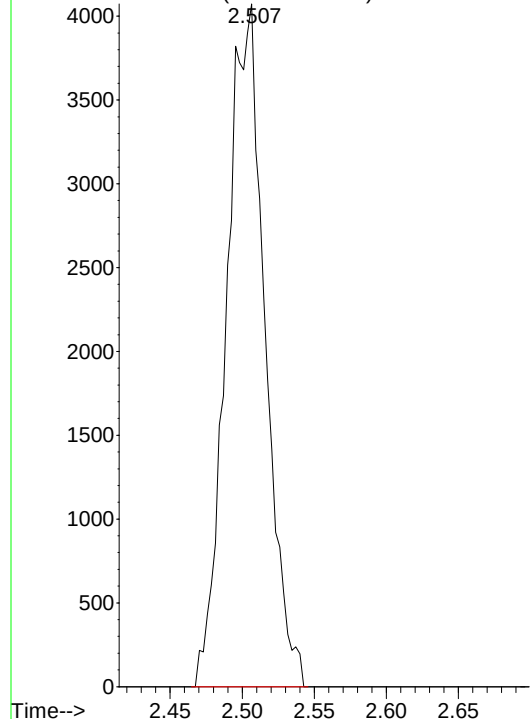
Manual Integration
METHYL ACETATE

Abundance Ion 43.00 (42.70 to 43.70): C1922619.D\data



Original Integration
T-BUTYL ALCOHOL

Abundance Ion 59.10 (58.80 to 59.80): C1922619.D\data



Original Int. Results

RT : 2.51
Area : 7540
Amount: 29.1431

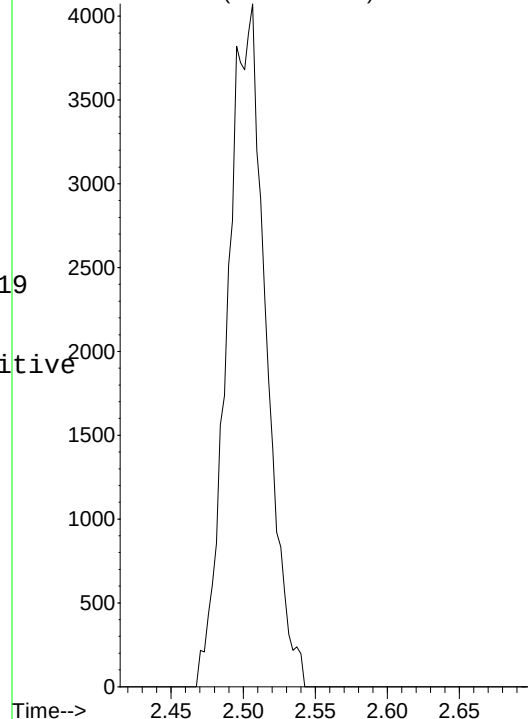
Manual Int. Results

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

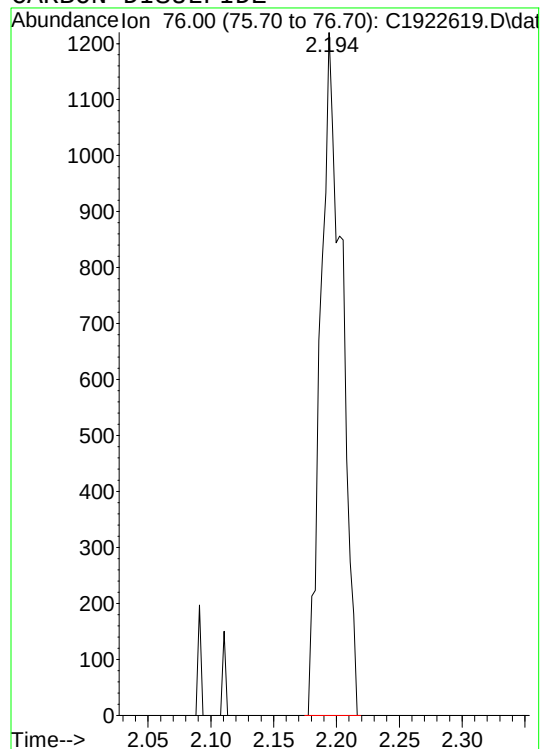
Abundance Ion 59.10 (58.80 to 59.80): C1922619.D\data



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

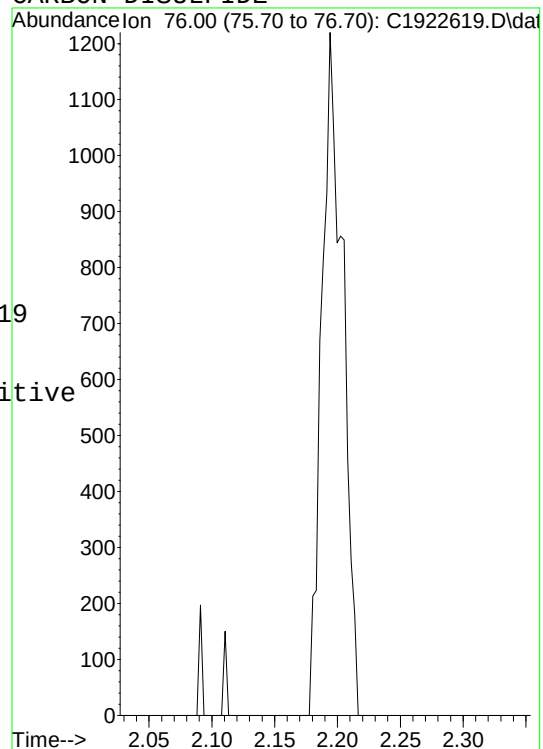
RT : 2.19
Area : 1437
Amount: 0.359029

Manual Int. Results

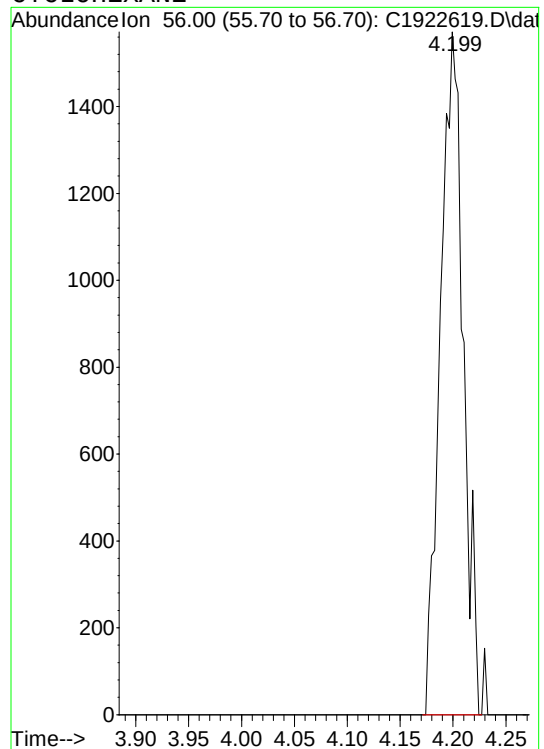
Thu Aug 15 08:34:40 2019

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

Manual Integration
CARBON DISULFIDE



Original Integration
CYCLOHEXANE



Original Int. Results

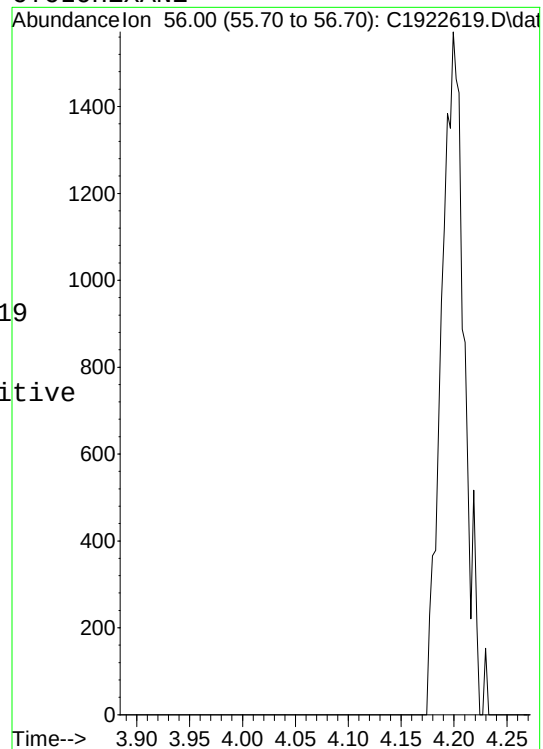
RT : 4.20
Area : 2364
Amount: 0.936879

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



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

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 500 Area counts

Max Peaks: 9

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

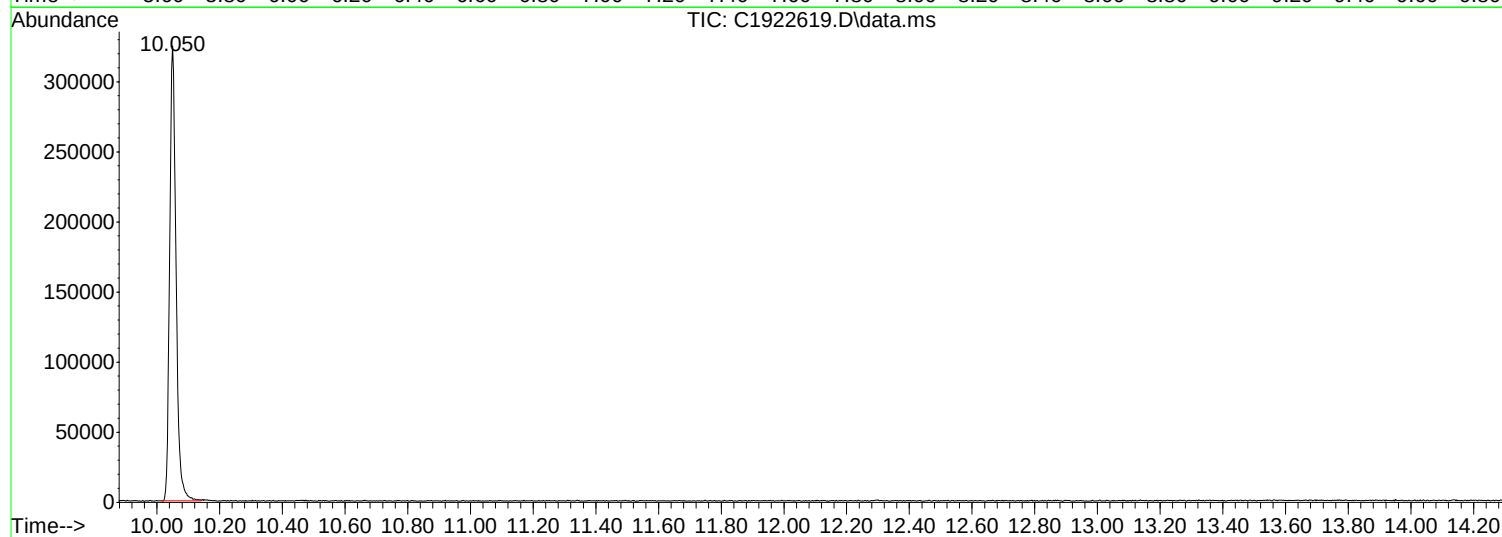
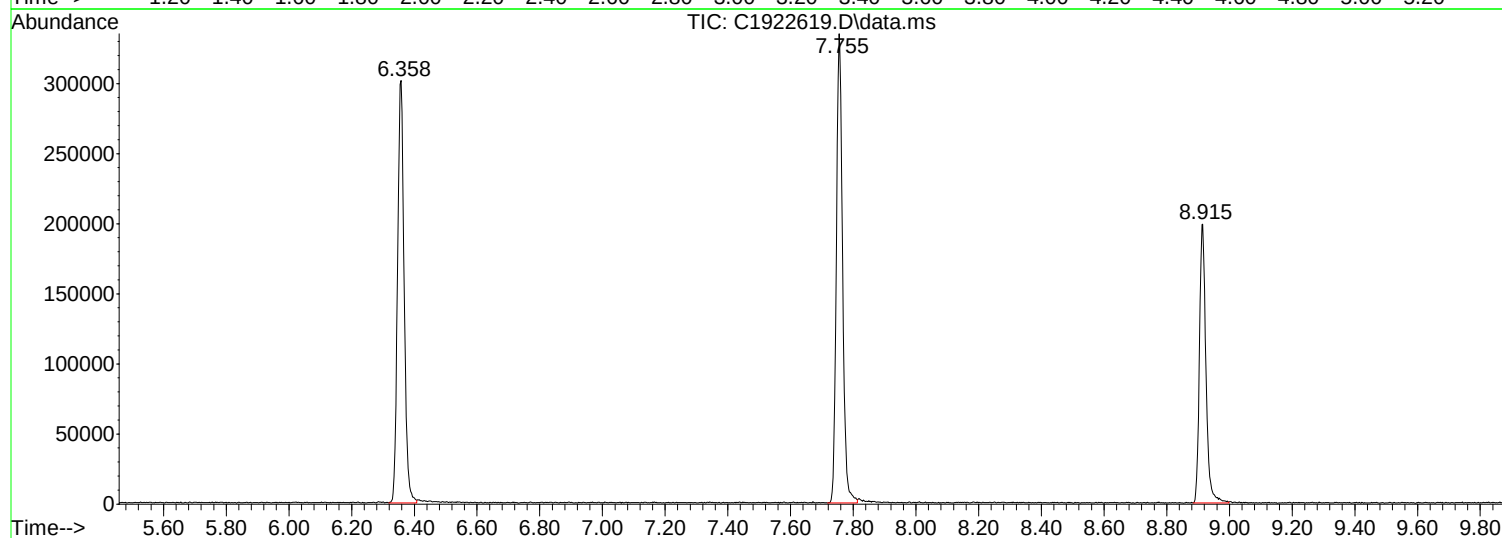
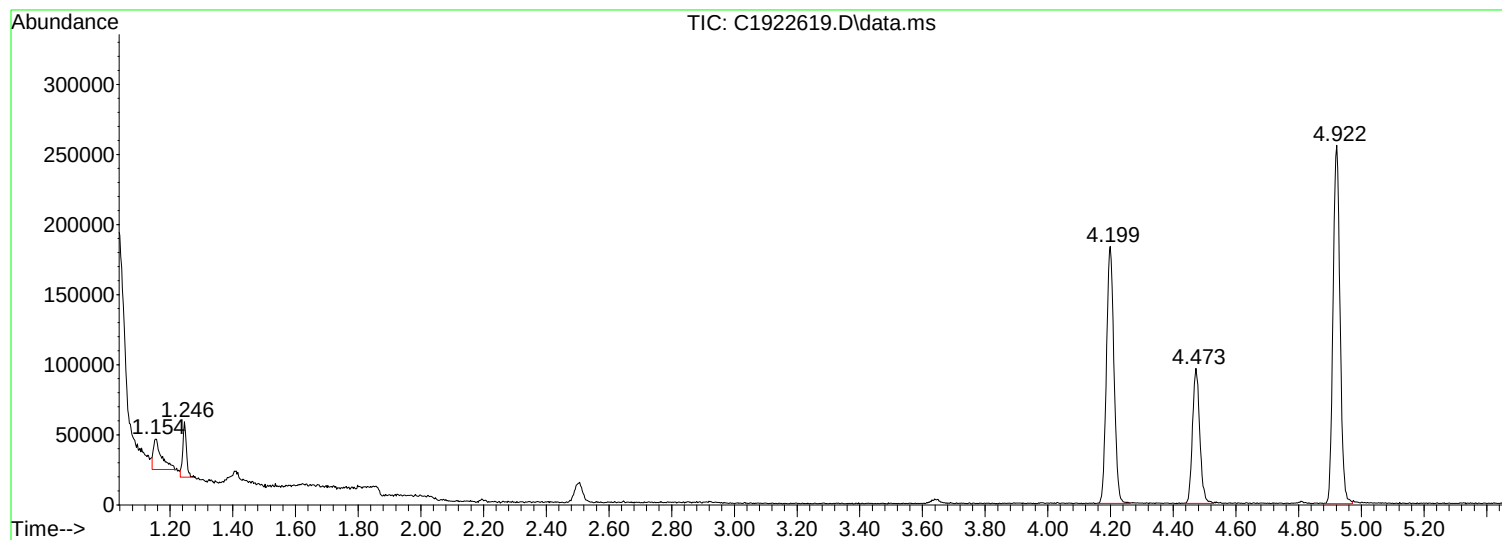
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.154	39	43	66	rVB2	21722	38837	8.39%	1.510%
2	1.246	71	76	85	rVB	39691	31374	6.78%	1.220%
3	4.199	1120	1135	1158	rBV2	183301	303518	65.60%	11.802%
4	4.473	1219	1233	1253	rBV2	96338	155250	33.55%	6.037%
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\DJJ\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\DJJ\Database\NIST08.L
TIC Integration Parameters: 8260B.P

No Library Search Compounds Detected

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\DJJ\Database\NIST08.L
TIC Integration Parameters: 8260B.P

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

1 - FORM I

ANALYSIS DATA SHEET

LCS

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Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

435

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

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Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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 113)	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
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Inst : GCMSVOA3

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-AMYL METHYL ETHER	4.654	73	51121	10.86	UG/L	96
50) 1,2-DICHLOROETHANE	4.548	62	28899	12.78	UG/L	97
51) TRICHLOROETHANE	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
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Inst : GCMSVOA3

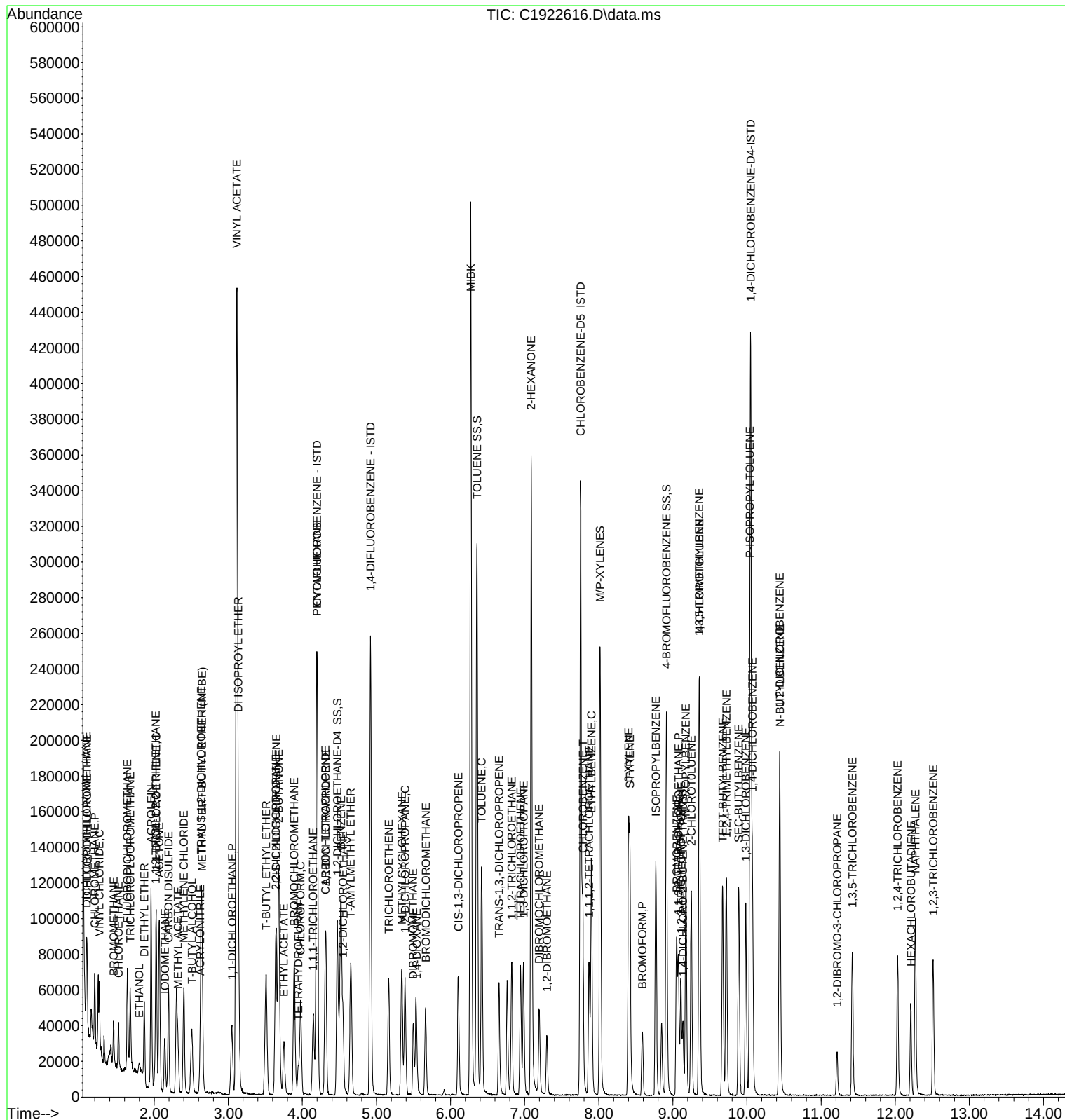
Quant Time: Aug 15 08:32:46 2019
 Quant Method : C:\msdchem\1\methods\C051619.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Fri May 17 05:29:37 2019
 Response via : Initial Calibration

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) O-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-CHLOROTOLUENE	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

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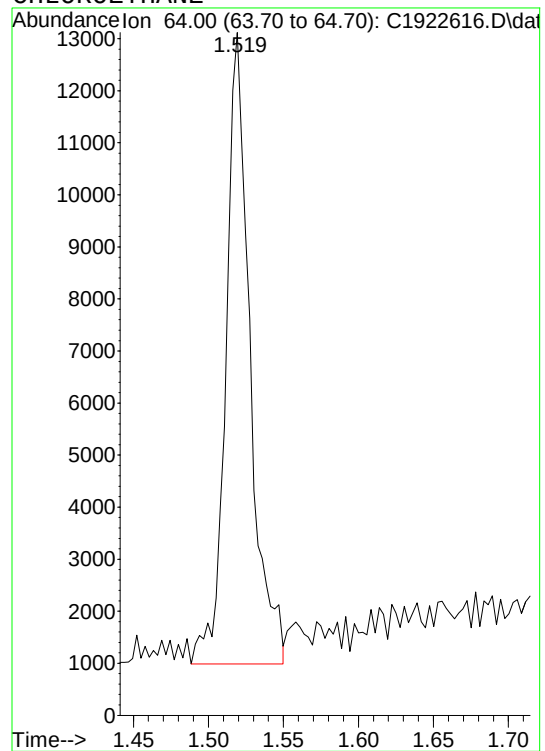
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Quant Method : C:\msdchem\1\methods\C051619.M
Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
QLast Update : Fri May 17 05:29:37 2019
Response via : Initial Calibration



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

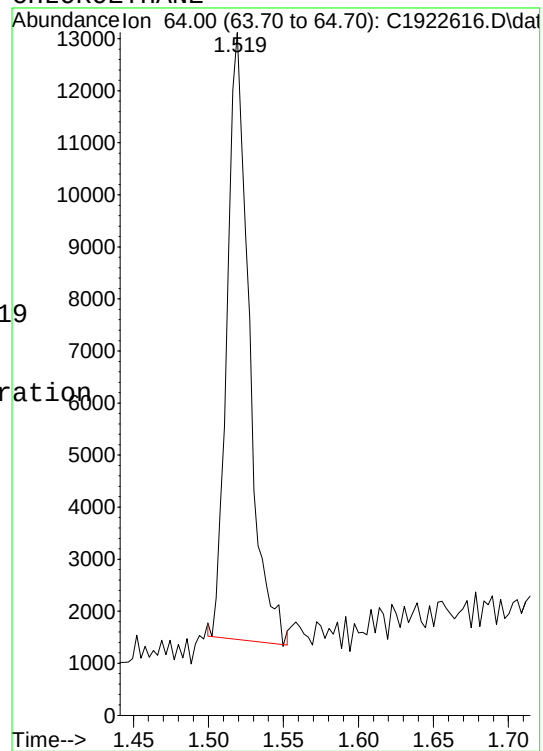
RT : 1.52
Area : 13467
Amount: 12.8011

Manual Int. Results

Thu Aug 15 08:32:46 2019

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

Manual Integration
CHLOROETHANE



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ANALYSIS DATA SHEET

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LCS Dup

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

442

LCS Dup

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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
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

443

LCS Dup

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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 113)	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
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Inst : GCMSVOA3

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-AMYL METHYL ETHER	4.656	73	51142	10.93	UG/L	97
50) 1,2-DICHLOROETHANE	4.548	62	28573	12.52	UG/L	95
51) TRICHLOROETHANE	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
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Inst : GCMSVOA3

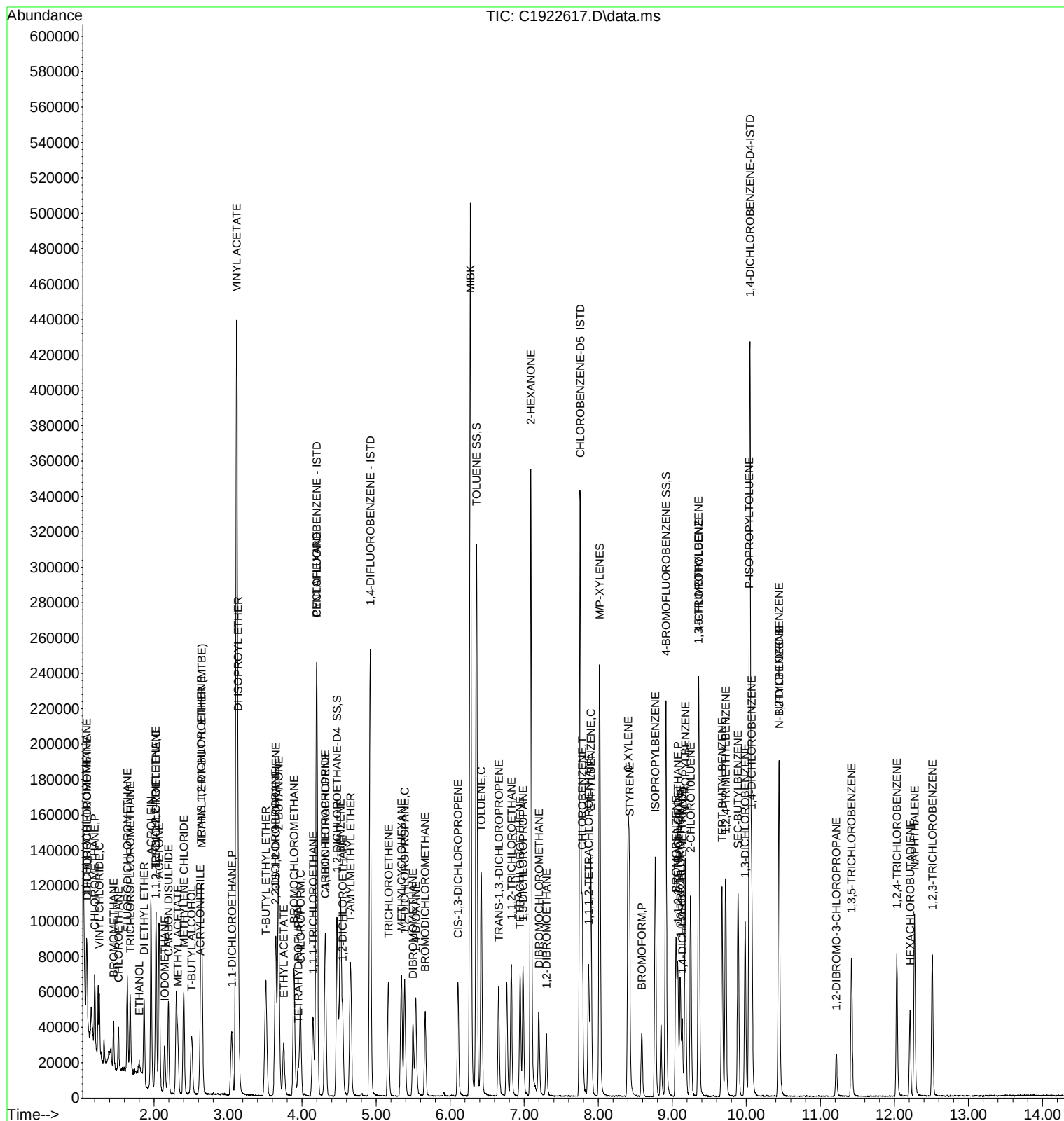
Quant Time: Aug 15 07:44:15 2019
 Quant Method : C:\msdchem\1\methods\C051619.M
 Quant Title : 8260 WATER 5MLS VOAMS 5973 #3
 QLast Update : Fri May 17 05:29:37 2019
 Response via : Initial Calibration

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) O-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-CHLOROTOLUENE	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

446

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



B237875

CON-TEST ANALYTICAL LABORATORY

Printed: 8/14/2019 1:46:27PM

Matrix: Water

Prepared using: VOC - SW-846 5030B

Surrogate used: 1906187

Lab Number	Sample Name	Analysis	Due Date	TAT	Initial (mL)	Final (mL)	Spike ID	uL Spike
19H0528-01	Trip Blank-8/8/19	8260 Standard	08/23/19 13:30	10	5	5		
19H0528-02	OC-17D	8260 Standard	08/23/19 13:30	10	5	5		
19H0528-03	OC-17S	8260 Standard	08/23/19 13:30	10	5	5		
19H0528-04	MW-22R	8260 Tentatively Iden		10	5	5		
19H0528-04	MW-22R	8260 Standard	08/23/19 13:30	10	5	5		
19H0528-05	MW-27	8260 Standard	08/23/19 13:30	10	5	5		
19H0528-06	MW-22S	8260 Standard	08/23/19 13:30	10	5	5		
19H0528-07	Blind Duplicate	8260 Standard	08/23/19 13:30	10	5	5		
19H0576-01	Trip Blank-8/9/19	8260 Standard	08/21/19 13:30	7	5	5		
19H0576-01	Trip Blank-8/9/19	8260 Tentatively Iden	08/21/19 13:30	7	5	5		
19H0576-02	OC-19D	8260 Standard	08/21/19 13:30	7	5	5		
19H0576-02	OC-19D	8260 Tentatively Iden	08/21/19 13:30	7	5	5		
19H0576-03	MW-21R	8260 Tentatively Iden	08/21/19 13:30	7	5	5		
19H0576-03	MW-21R	8260 Standard	08/21/19 13:30	7	5	5		
19H0576-04	OC-19S	8260 Standard	08/21/19 13:30	7	5	5		
19H0576-04	OC-19S	8260 Tentatively Iden	08/21/19 13:30	7	5	5		
19H0576-05	MW-21S	8260 Standard	08/21/19 13:30	7	5	5		
19H0576-05	MW-21S	8260 Tentatively Iden	08/21/19 13:30	7	5	5		
19H0576-06	Drum Composite	8260 Standard	08/21/19 13:30	7	5	5		
19H0576-06	Drum Composite	8260 Tentatively Iden	08/21/19 13:30	7	5	5		
B237875-BLK1	Blank	QC			5	5		
B237875-BS1	LCS	QC			5	5	1907058	2.5
B237875-BSD1	LCS Dup	QC			5	5	1907058	2.5

Spiking Witnessed By _____ Date _____

Preparation Reviewed By _____ Date _____

Extracts Received By _____ Date _____

B237875

CON-TEST ANALYTICAL LABORATORY

Printed: 8/14/2019 1:46:27PM

Matrix: Water

Prepared using: VOC - SW-846 5030B

Surrogate used: 1906187

Lab Number	Sample Name	Analysis	Due Date	TAT	Initial (mL)	Final (mL)	Spike ID	uL Spike	
B237875-MS1	Matrix Spike	QC			5	5	1907058	125	
B237875-MSD1	Matrix Spike Dup	QC			5	5	1907058	125	

8/13/19#2 2ND

Spiking Witnessed By _____ Date _____

Preparation Reviewed By _____ Date _____

Extracts Received By _____ Date _____

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 _____

Y:\1\DATA\B081319\

Date		Filename	Lab ID	Sample Info
13 Aug 2019	6:38 am	B1922501.D	CLEAN UP	
13 Aug 2019	7:09 am	B1922502.D	BLK	
13 Aug 2019	7:40 am	B1922503.D	LBD WATER	
13 Aug 2019	8:10 am	B1922504.D	BFB / 8260 STD 10PPB 1906029	
13 Aug 2019	8:41 am	B1922505.D	B0-BS1 @ RCP	
13 Aug 2019	9:12 am	B1922506.D	B0-BS1	
13 Aug 2019	9:43 am	B1922507.D	B0-BSD1	
13 Aug 2019	10:14 am	B1922508.D	BLK	
13 Aug 2019	10:45 am	B1922509.D	BLK	
13 Aug 2019	11:16 am	B1922510.D	B0-BLK1	
13 Aug 2019	11:47 am	B1922511.D	19G1292-45 @ 200X MEOH PT 200	
13 Aug 2019	12:17 pm	B1922512.D	19G1292-45 @ 100X MEOH PT 100	
13 Aug 2019	12:48 pm	B1922513.D	BLK	
13 Aug 2019	1:19 pm	B1922514.D	BLK	
13 Aug 2019	1:50 pm	B1922515.D	19G1292-20 @ 5X PT	5
13 Aug 2019	2:21 pm	B1922516.D	19G1292-20 @ PT	
13 Aug 2019	2:52 pm	B1922517.D	BLK	
13 Aug 2019	3:22 pm	B1922518.D	19D0954-05 @ QC	
13 Aug 2019	3:53 pm	B1922519.D	BLK	
13 Aug 2019	4:24 pm	B1922520.D	BLK	
13 Aug 2019	4:55 pm	B1922521.D	19D1292-20 @ PT	
13 Aug 2019	5:26 pm	B1922522.D	BLK	
13 Aug 2019	5:56 pm	B1922523.D	BLK	
13 Aug 2019	6:27 pm	B1922524.D	BLK	
13 Aug 2019	6:57 pm	B1922525.D	BFB / 8260 STD 10PPB 1906029	
13 Aug 2019	7:28 pm	B1922526.D	B0-BS1 @ (RCP)	
13 Aug 2019	7:59 pm	B1922527.D	B0-BS1	
13 Aug 2019	8:30 pm	B1922528.D	B0-BSD1	
13 Aug 2019	9:00 pm	B1922529.D	CLEAN UP	
13 Aug 2019	9:31 pm	B1922530.D	CLEAN UP	
13 Aug 2019	10:02 pm	B1922531.D	B0-BLK1 @ (TICs)	
13 Aug 2019	10:33 pm	B1922532.D	19H0576-01 @ TB (TICs)	
13 Aug 2019	11:04 pm	B1922533.D	19H0528-01 @ TB	
13 Aug 2019	11:34 pm	B1922534.D	19H0528-03	
14 Aug 2019	12:05 am	B1922535.D	19H0528-02 @ 20X	20
14 Aug 2019	12:36 am	B1922536.D	19H0528-04 @ 50X	50
14 Aug 2019	1:07 am	B1922537.D	19H0528-05 @ 10X	10
14 Aug 2019	1:37 am	B1922538.D	19H0528-06 @ 20X	20
14 Aug 2019	2:08 am	B1922539.D	19H0528-07 @ 20X	20
14 Aug 2019	2:39 am	B1922540.D	CLEAN UP	
14 Aug 2019	3:10 am	B1922541.D	19H0576-04 @ (TICs)	
14 Aug 2019	3:41 am	B1922542.D	19H0576-05 @ (TICs)	
14 Aug 2019	4:11 am	B1922543.D	19H0576-02 @ 10X (TICs)	10
14 Aug 2019	4:42 am	B1922544.D	19H0576-03 @ 1000X (TICs)	1000
14 Aug 2019	5:13 am	B1922545.D	19H0576-06 @ 50X (TICs)	50
14 Aug 2019	5:44 am	B1922546.D	19H0528-04MSD1 @ 50X	50
14 Aug 2019	6:14 am	B1922547.D	19H0528-04MSD1 @ 50X	50
14 Aug 2019	6:45 am	B1922548.D	BLK	

pH<2

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

454

MW-22R

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0528
Client: Dvirka And Bartilucci Project: Farrand Controls Site
Matrix: Ground Water Laboratory ID: 19H0528-04 File ID: F1922809.D
Sampled: 08/08/19 11:40 Prepared: 08/13/19 04:55 Analyzed: 08/16/19 14:55
Solids: Preparation: SW-846 3510C Dilution: 1
Initial/Final: 1055 mL / 1 mL
Batch: B237852 Sequence: S039298 Calibration: 1900232 Instrument: GCMSSV6

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	0.98	0.031	0.19	

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922809.D
Acq On : 16 Aug 2019 2:55 pm
Operator : CLA
Sample : 19H0528-04
Misc :
ALS Vial : 9 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:11 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	11.120	150	979150	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	67152	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.989	96	67152	2.089	ug/mL	0.00
Target Compounds						
4] 1,4-Dioxane	8.037	88	7770	1.038	ug/mL#	Qvalue 88

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

CHECKED BY: AUG 19 2019
Tina Radue

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922809.D
Acq On : 16 Aug 2019 2:55 pm
Operator : CLA
Sample : 19H0528-04
Misc :
ALS Vial : 9 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:11 2019

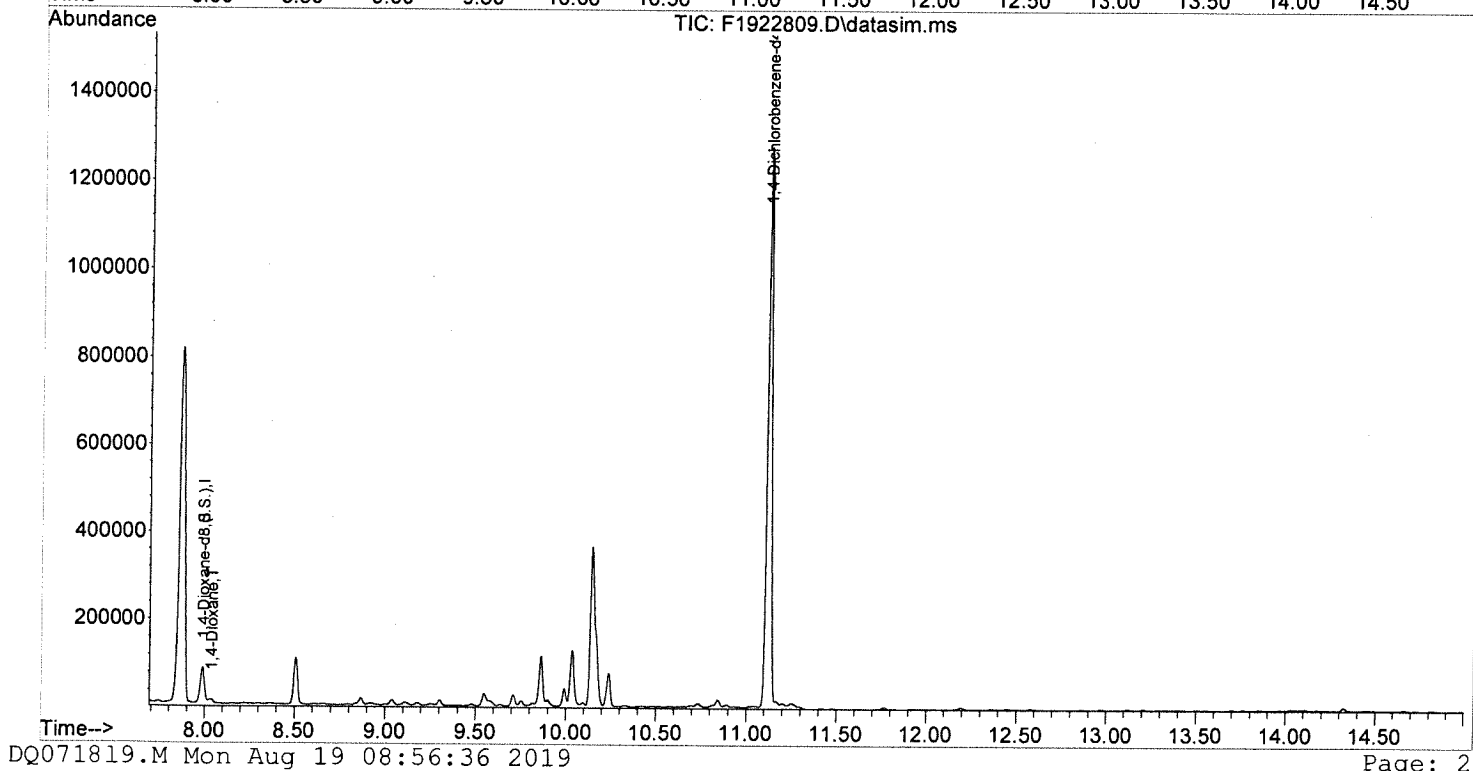
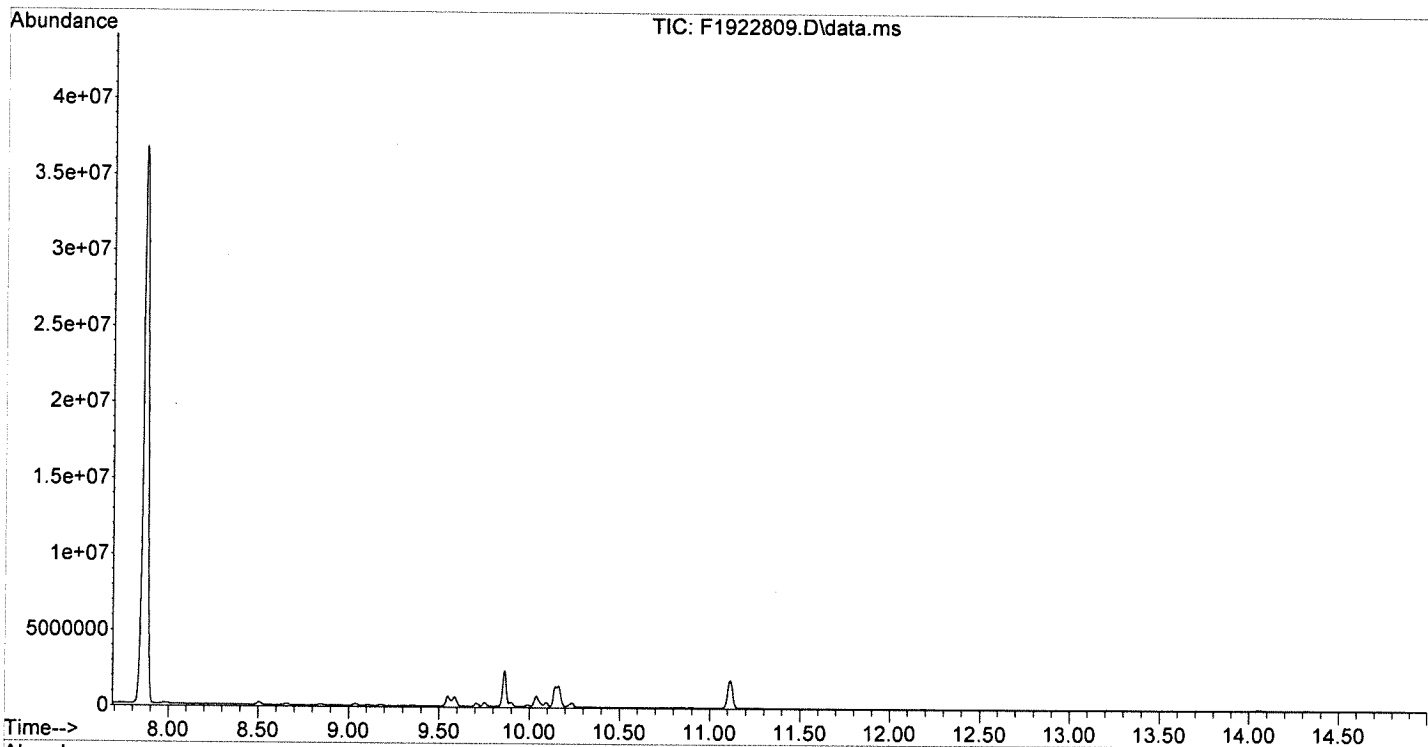
DataAcq Meth:D051518.M

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

457

MW-22S

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0528
Client: Dvirka And Bartilucci Project: Farrand Controls Site
Matrix: Ground Water Laboratory ID: 19H0528-06 File ID: F1922810.D
Sampled: 08/08/19 14:10 Prepared: 08/13/19 04:55 Analyzed: 08/16/19 15:15
Solids: Preparation: SW-846 3510C Dilution: 1
Initial/Final: 1040 mL / 1 mL
Batch: B237852 Sequence: S039298 Calibration: 1900232 Instrument: GCMSSV6

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	0.80	0.031	0.19	

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922810.D
Acq On : 16 Aug 2019 3:15 pm
Operator : CLA
Sample : 19H0528-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:56:56 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	11.120	150	994033	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	7.996	96	81237	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.996	96	81237	2.489	ug/mL	0.00
Target Compounds						
4] 1,4-Dioxane	8.043	88	7556m	0.835	ug/mL	Qvalue

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

CHECKED BY: AUG 19 2019
Irina Raducan

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922810.D
Acq On : 16 Aug 2019 3:15 pm
Operator : CLA
Sample : 19H0528-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:56:56 2019

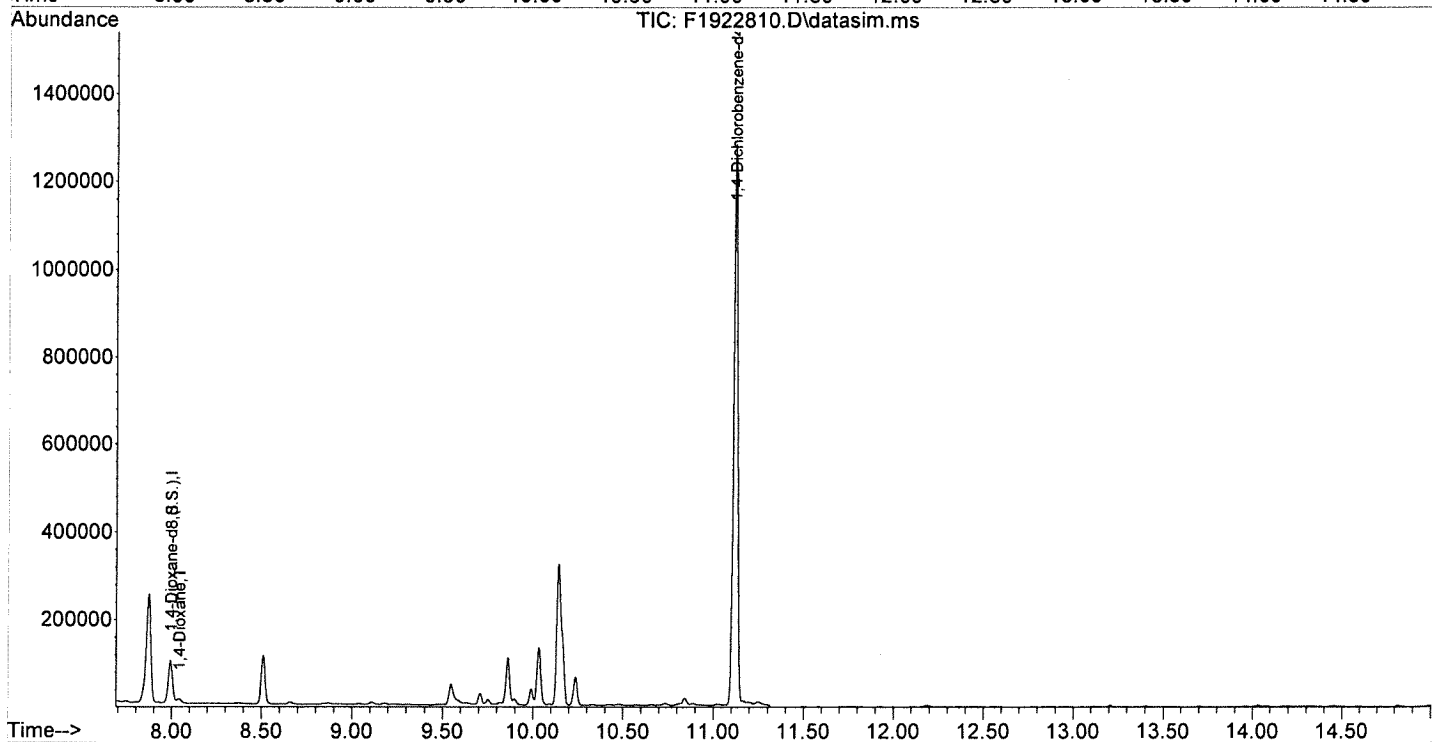
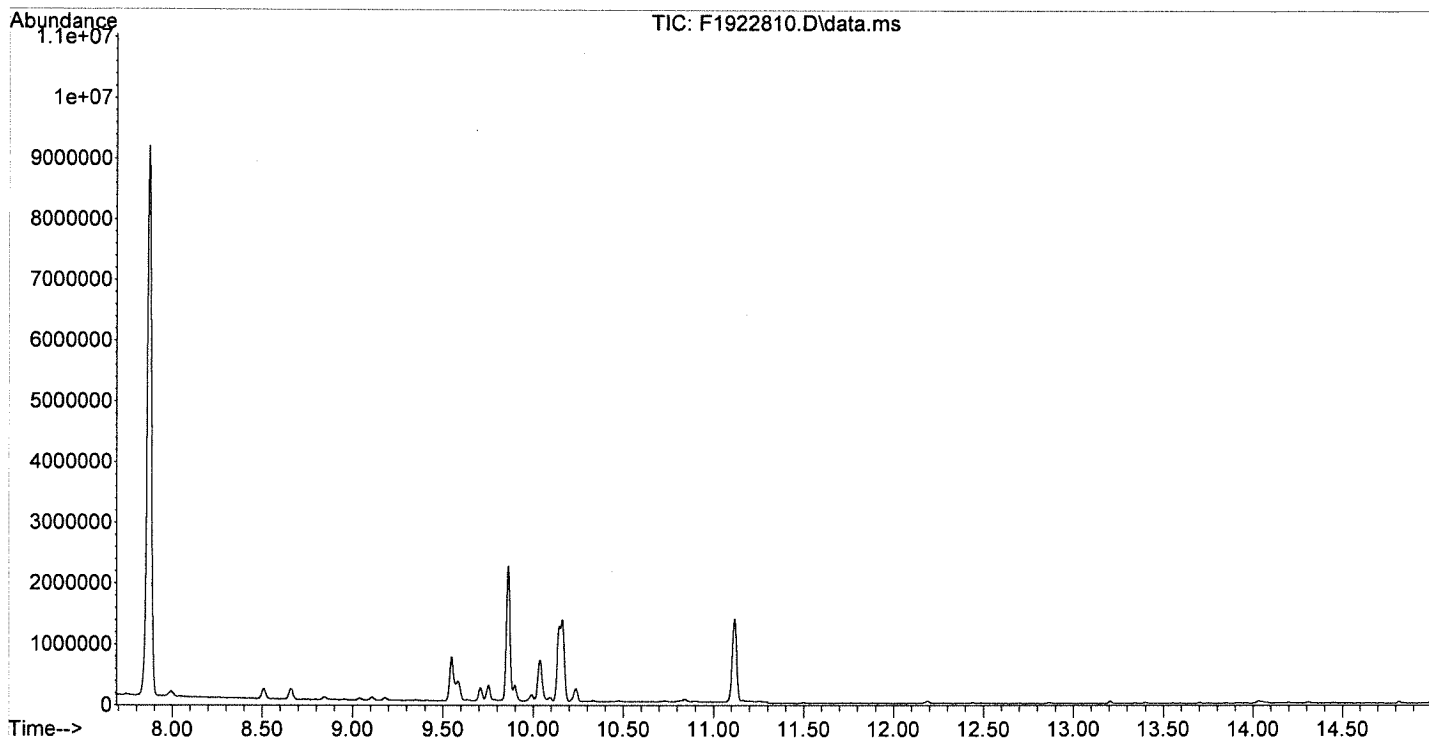
DataAcq Meth:D051518.M

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



Data Path : C:\msdchem\1\data\F081619\
 Data File : F1922810.D
 Acq On : 16 Aug 2019 3:15 pm
 Operator : CLA
 Sample : 19H0528-06
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:13 2019

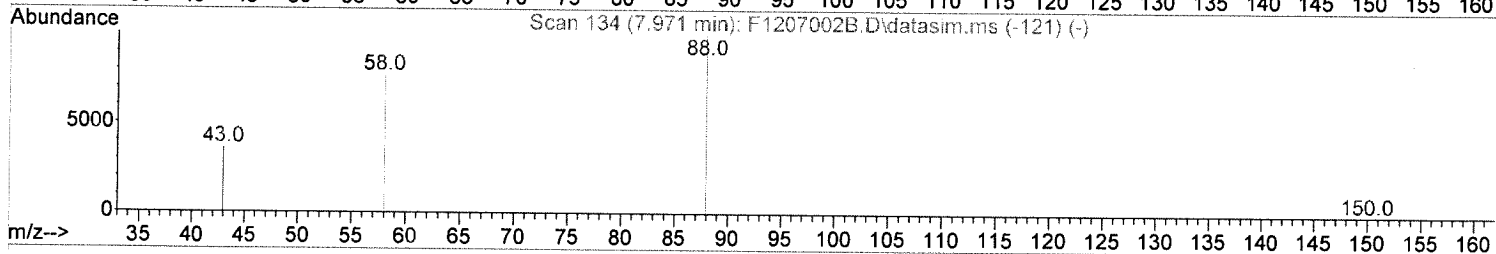
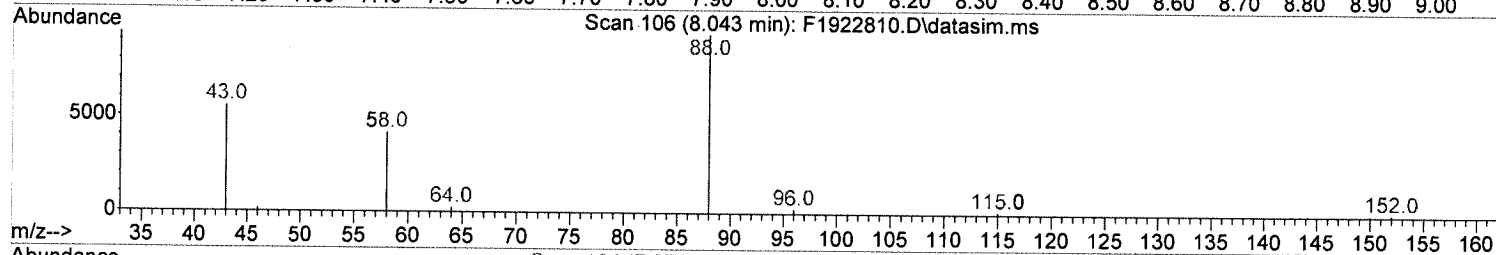
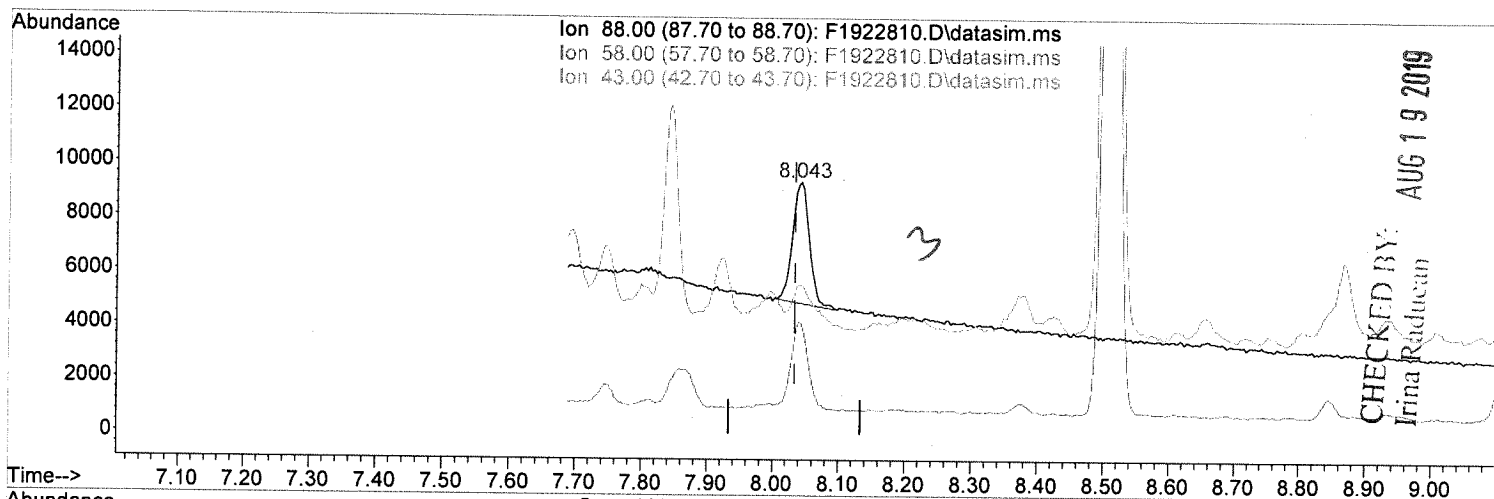
DataAcq Meth:D051518.M

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



TIC: F1922810.D\data.ms

(4) 1,4-Dioxane (T)

8.043min (+ 0.009) 0.863 ug/mL

response 7810

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	70.60	69.59
43.00	31.70	28.34
0.00	0.00	0.00

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922810.D
Acq On : 16 Aug 2019 3:15 pm
Operator : CLA
Sample : 19H0528-06
Misc :
ALS Vial : 10 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:13 2019

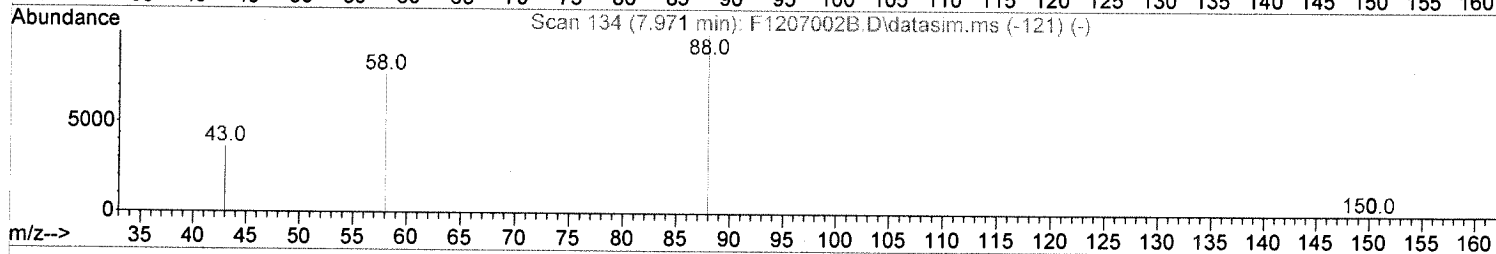
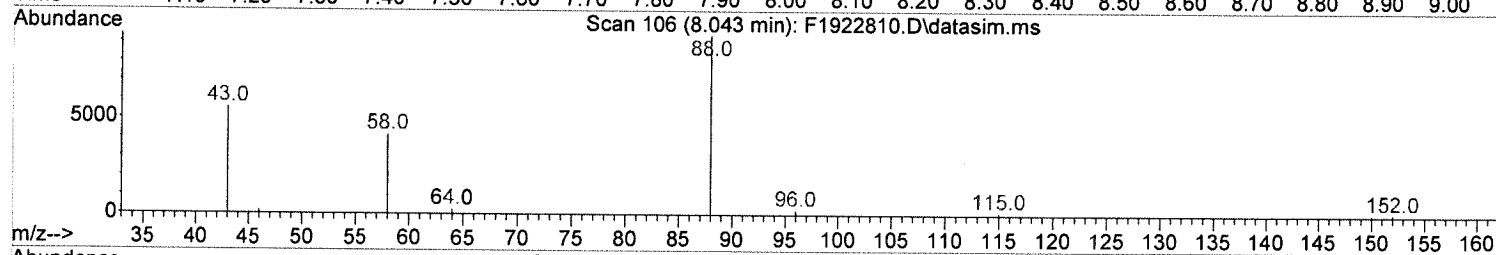
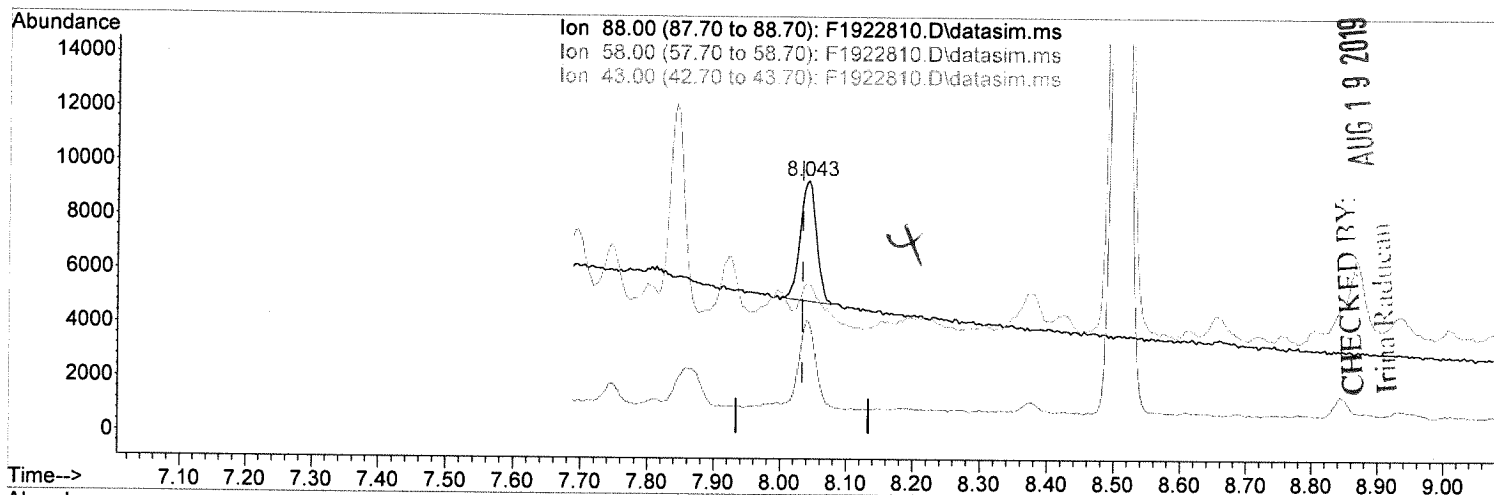
DataAcq Meth:D051518.M

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



TIC: F1922810.D\data.ms

(4) 1,4-Dioxane (T)

8.043min (+ 0.009) 0.835 ug/mL m

response 7556

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	70.60	71.93
43.00	31.70	29.29
0.00	0.00	0.00

1 - FORM I
ANALYSIS DATA SHEET

462

Blind Duplicate

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0528
Client: Dvirka And Bartilucci Project: Farrand Controls Site
Matrix: Ground Water Laboratory ID: 19H0528-07 File ID: F1922811.D
Sampled: 08/08/19 00:00 Prepared: 08/13/19 04:55 Analyzed: 08/16/19 15:35
Solids: Preparation: SW-846 3510C Dilution: 1
Initial/Final: 1040 mL / 1 mL
Batch: B237852 Sequence: S039298 Calibration: 1900232 Instrument: GCMSSV6

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	0.80	0.031	0.19	

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922811.D
Acq On : 16 Aug 2019 3:35 pm
Operator : CLA
Sample : 19H0528-07
Misc :
ALS Vial : 11 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:57:26 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	11.120	150	964268	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	7.993	96	84702	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.993	96	84702	2.676	ug/mL	0.00
Target Compounds						
4] 1,4-Dioxane	8.037	88	7832m	0.830	ug/mL	Qvalue

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

CHECKED BY: AUG 19 2019
Irina Raducan

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922811.D
Acq On : 16 Aug 2019 3:35 pm
Operator : CLA
Sample : 19H0528-07
Misc :
ALS Vial : 11 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:57:26 2019

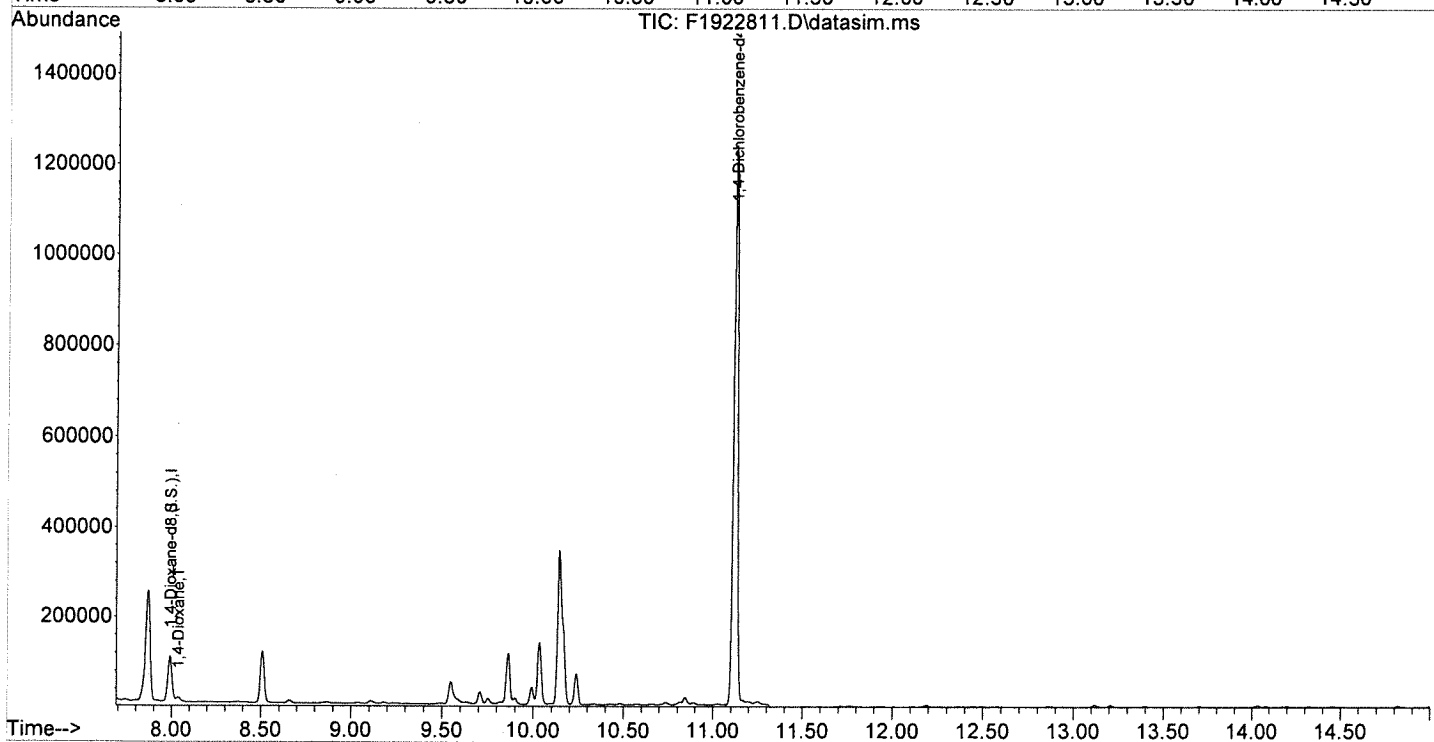
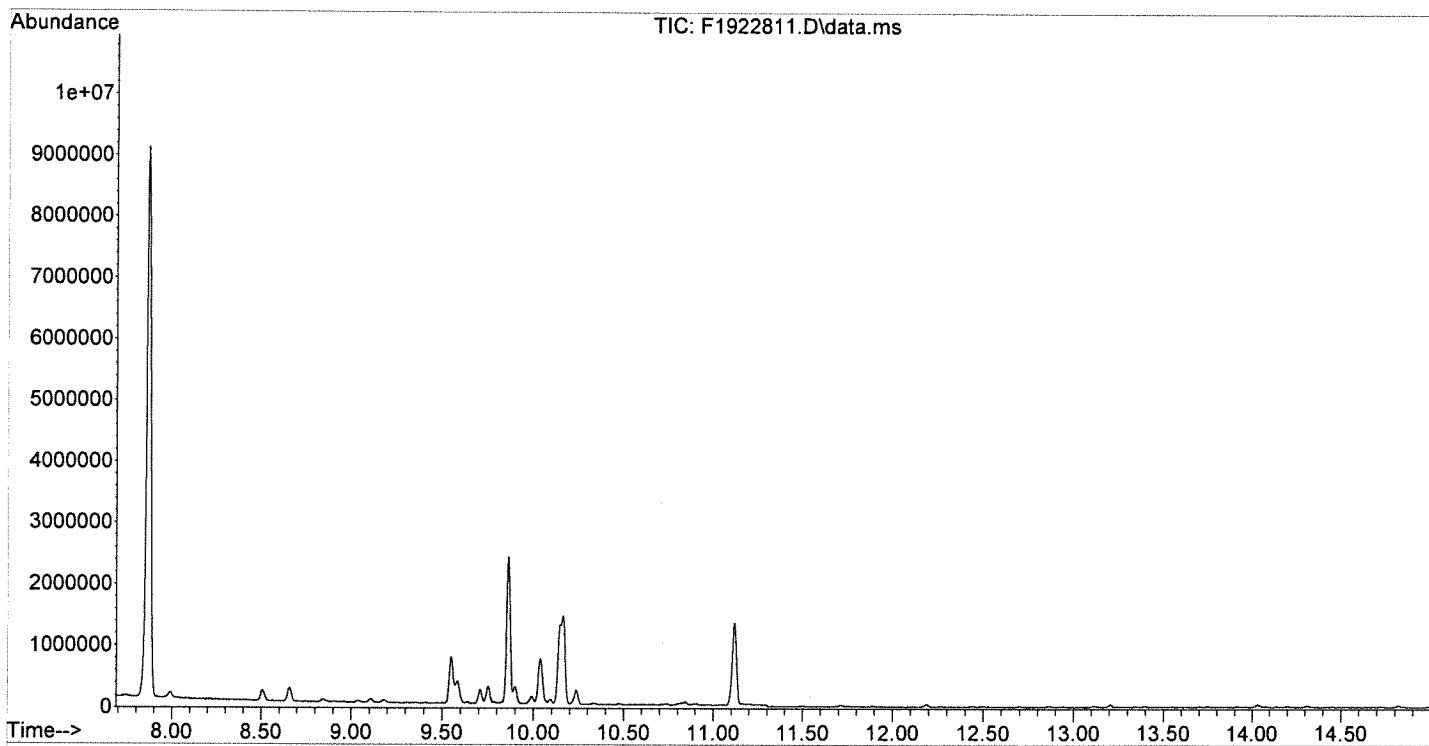
DataAcq Meth:D051518.M

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



Data Path : C:\msdchem\1\data\F081619\
Data File : F1922811.D
Acq On : 16 Aug 2019 3:35 pm
Operator : CLA
Sample : 19H0528-07
Misc :
ALS Vial : 11 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:15 2019

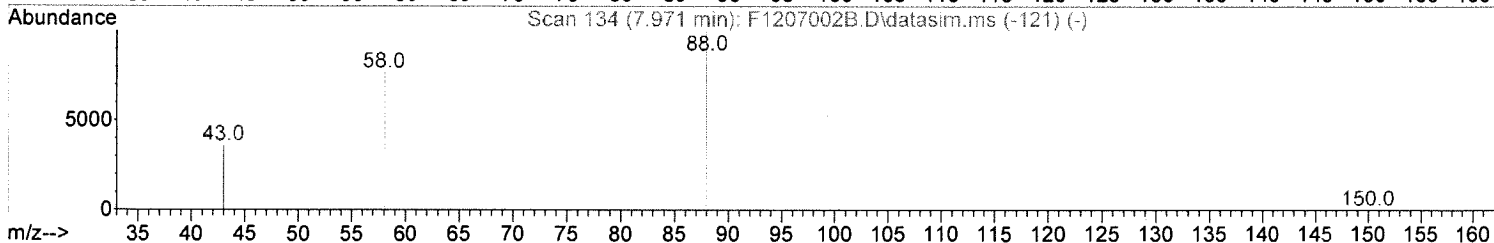
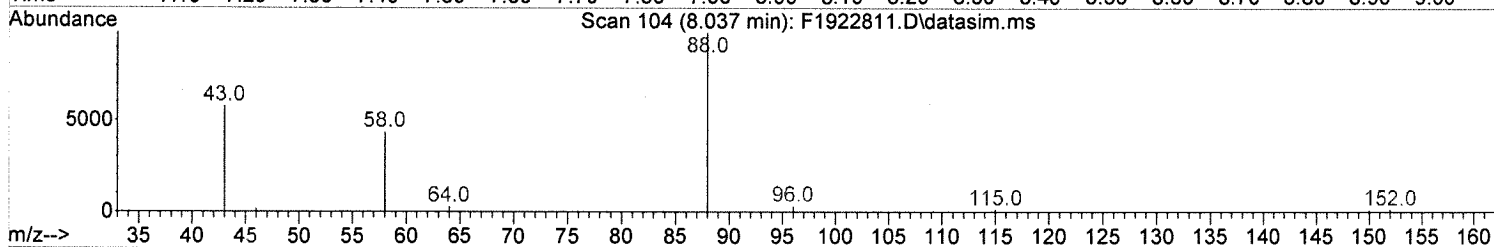
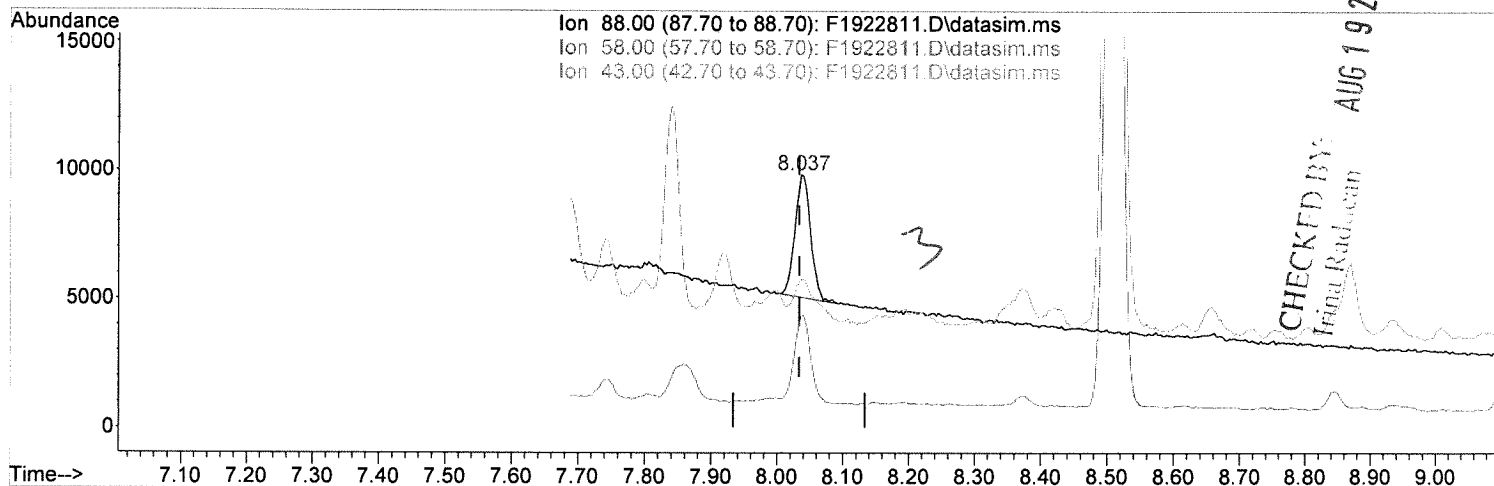
DataAcq Meth:D051518.M

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



TIC: F1922811.D\data.ms

(4) 1,4-Dioxane (T)

8.037min (+ 0.002) 0.841 ug/mL

response 7939

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	70.60	69.40
43.00	31.70	29.70
0.00	0.00	0.00

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922811.D
Acq On : 16 Aug 2019 3:35 pm
Operator : CLA
Sample : 19H0528-07
Misc :
ALS Vial : 11 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:15 2019

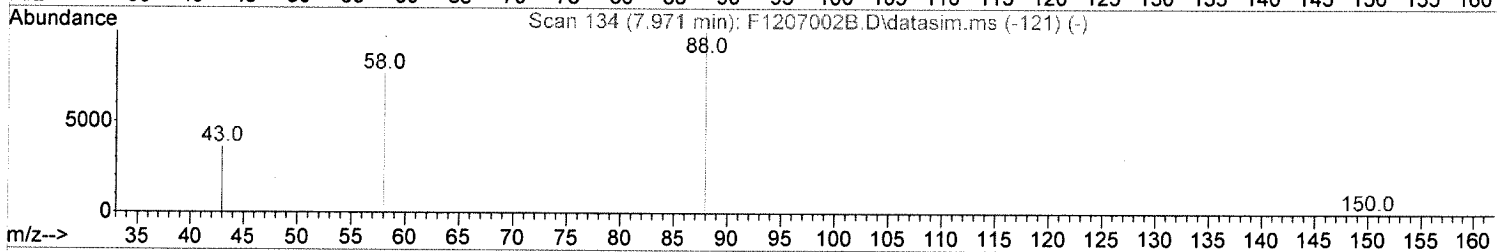
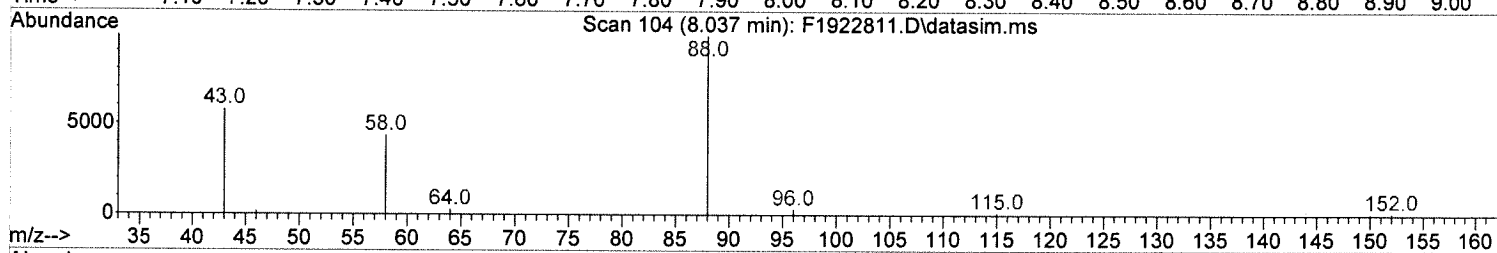
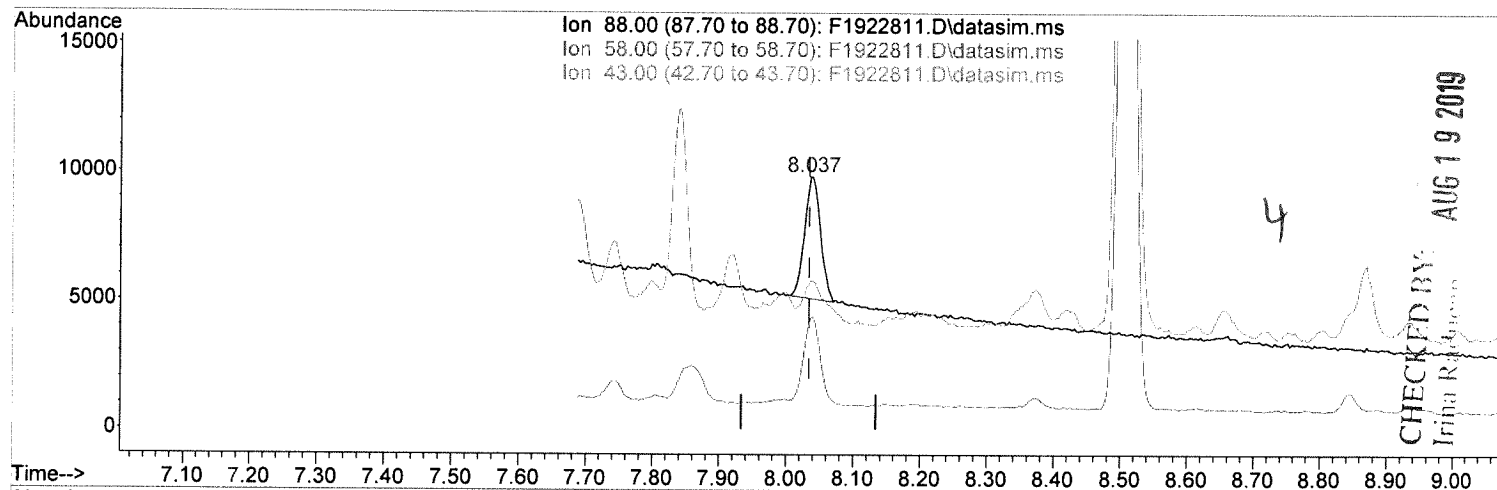
DataAcq Meth:D051518.M

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



TIC: F1922811.D\data.ms

(4) 1,4-Dioxane (T)

8.037min (+ 0.002) 0.830 ug/mL m

response 7832

Ion	Exp%	Act%
88.00	100.00	100.00
58.00	70.60	70.35
43.00	31.70	30.11
0.00	0.00	0.00

QC DATA

2 - FORM II
SYSTEM MONITORING COMPOUND SUMMARY
SW-846 8270D

468

Laboratory:	Con-Test Analytical Laboratory	SDG:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Instrument:	GCMSSV6

1,4-Dioxane-
d8

19H0528-04	20.9
19H0528-06	24.9
19H0528-07	26.8
B237852-BLK1	24.5
B237852-BS1	29.5
B237852-BSD1	27.6
B237852-MS1	21.8
B237852-MSD1	23.5

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY
MW-22R

Laboratory:Con-Test Analytical Laboratory

Client:Dvirka And Bartilucci

Matrix:Water

Batch:B237852

% Solids:

Initial/Final:1055 mL / 1 mL

Column:

Work Order:19H0528

Project:Farrand Controls Site

Analysis:SW-846 8270D

Preparation:SW-846 3510C

Laboratory ID:B237852-MS1

Sample Lab ID:19H0528-04

ANALYTE	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC.	QC LIMITS REC.
1,4-Dioxane	9.48	0.984	10.6	101	40 - 140

ANALYTE	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #	% RPD	QC LIMITS	
					RPD	REC.
1,4-Dioxane	9.52	10.7	102	1.69	20	40 - 140

LCS / LCS DUPLICATE RECOVERY

SW-846 8270D

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Preparation: SW-846 3510C

Batch: B237852

Laboratory ID: B237852-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	9.75	97.5	40 - 140

ANALYTE	SPIKE ADDED (µg/L)	LCSD CONCENTRATION (µg/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	REC.
1,4-Dioxane	10.0	10.2	102	4.16	30	40 - 140

4 - FORM IV
METHOD BLANK SUMMARY

471

SW-846 8270D

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Blank ID: B237852-BLK1

Batch: B237852

Prepared: 08/13/2019 04:55

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
LCS	B237852-BS1	F1922804.D	13:15
LCS Dup	B237852-BSD1	F1922805.D	13:35
MW-22R	19H0528-04	F1922809.D	14:55
MW-22S	19H0528-06	F1922810.D	15:15
Blind Duplicate	19H0528-07	F1922811.D	15:35
Matrix Spike	B237852-MS1	F1922814.D	16:35
Matrix Spike Dup	B237852-MSD1	F1922815.D	16:55

5 - FORM V

INSTRUMENT PERFORMANCE CHECK

472

SW-846 8270D

Laboratory: Con-Test Analytical Laboratory	Work Order: 19H0528
Client: Dvirka And Bartilucci	Project: Farrand Controls Site
Lab File ID: F1922801B.D	Injection Date: 08/16/19
Instrument ID: GCMSSV6	Injection Time: 12:08
Sequence: S039298	Lab Sample ID: S039298-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	10 - 80% of 198	48.9	PASS
68	Less than 2% of 69	1.67	PASS
69	Base peak, 100% relative abundance	100	PASS
70	Less than 2% of 69	0.451	PASS
127	10 - 80% of 198	50.8	PASS
197	Less than 2% of 198	0.564	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.75	PASS
275	10 - 60% of 198	26.2	PASS
365	1 - 100% of 198	3.48	PASS
441	Less than 24% of 442	15.8	PASS
442	50 - 100% of 198	94.8	PASS
443	15 - 24% of 442	20	PASS

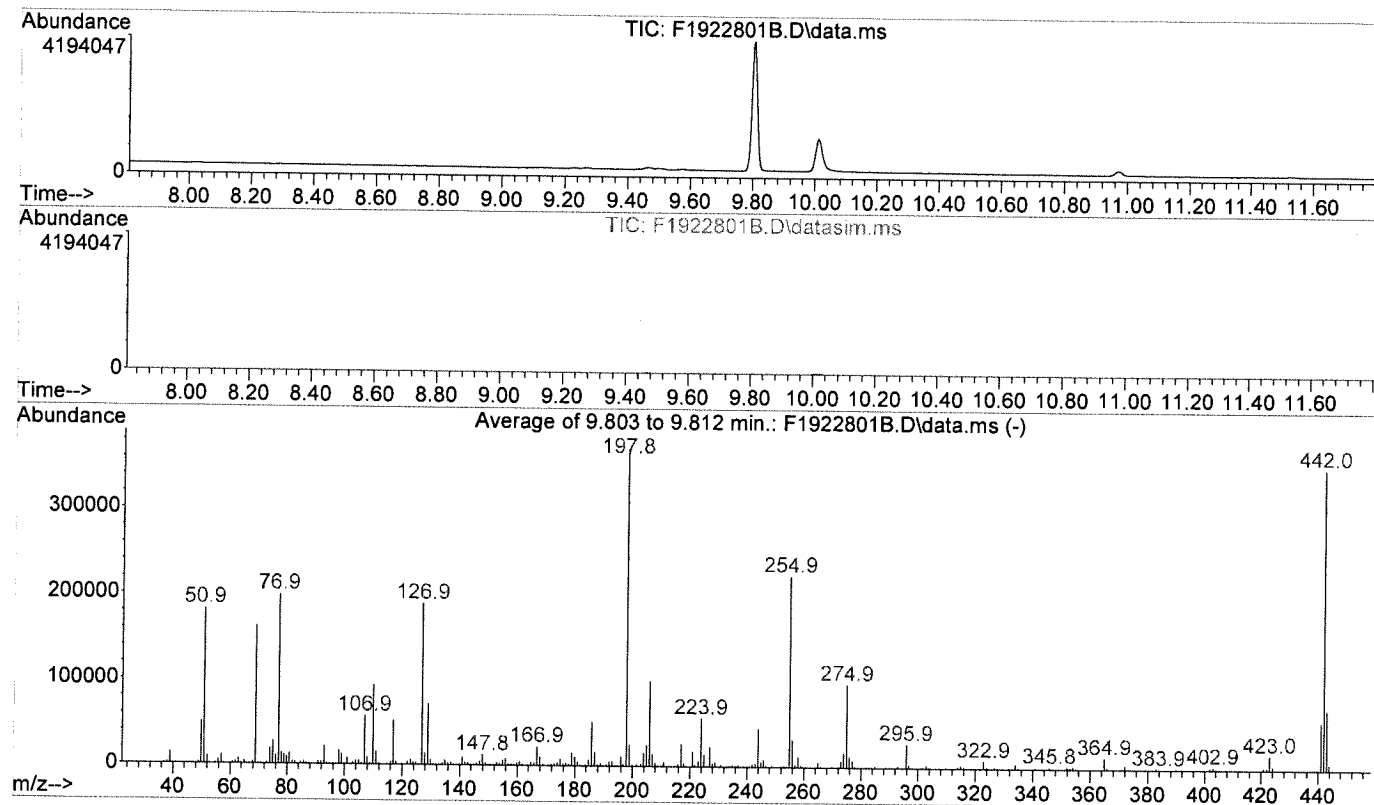
Client ID	Sample ID	File ID	Date Analyzed	Time Analyzed
Calibration Check	S039298-CCV1	F1922802B.D	08/16/2019	12:35:00
Calibration Check	S039298-CCV1	F1922803.D	08/16/2019	12:35:00
LCS	B237852-BS1	F1922804.D	08/16/2019	13:15:00
LCS Dup	B237852-BSD1	F1922805.D	08/16/2019	13:35:00
Blank	B237852-BLK1	F1922806.D	08/16/2019	13:55:00
MW-22R	19H0528-04	F1922809.D	08/16/2019	14:55:00
MW-22S	19H0528-06	F1922810.D	08/16/2019	15:15:00
Blind Duplicate	19H0528-07	F1922811.D	08/16/2019	15:35:00
Matrix Spike	B237852-MS1	F1922814.D	08/16/2019	16:35:00
Matrix Spike Dup	B237852-MSD1	F1922815.D	08/16/2019	16:55:00

Data Path : C:\msdchem\1\data\F081619\
 Data File : F1922801B.D
 Acq On : 16 Aug 2019 12:08 pm
 Operator : CLA
 Sample : TUNE 25 ng
 Misc : 1902259 EXP 093019
 ALS Vial : 1 Sample Multiplier: 1

Inst : GCMSSV6

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 444, 445, 446; Background Corrected with Scan 436

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	48.9	181509	PASS
68	69	0.00	2	1.7	2692	PASS
69	69	100	100	100.0	161490	PASS
70	69	0.00	2	0.5	729	PASS
127	198	10	80	50.8	188523	PASS
197	198	0.00	2	0.6	2094	PASS
198	198	100	100	100.0	371243	PASS
199	198	5	9	6.7	25048	PASS
275	198	10	60	26.2	97224	PASS
365	198	1	100	3.5	12928	PASS
441	442	0.01	24	15.8	55715	PASS
442	198	50	100	94.8	352085	PASS
443	442	15	24	20.0	70421	PASS

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922801B.D
Acq On : 16 Aug 2019 12:08 pm
Operator : CLA
Sample : TUNE 25 ng
Misc : 1902259 EXP 093019
ALS Vial : 1 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:53:15 2019

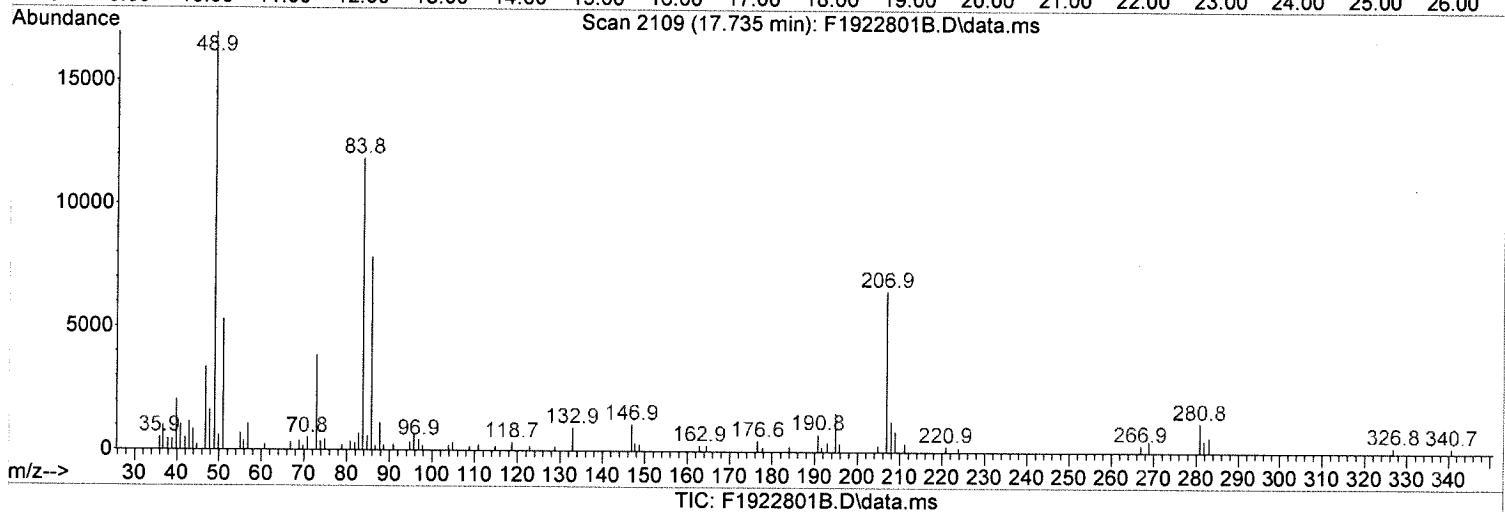
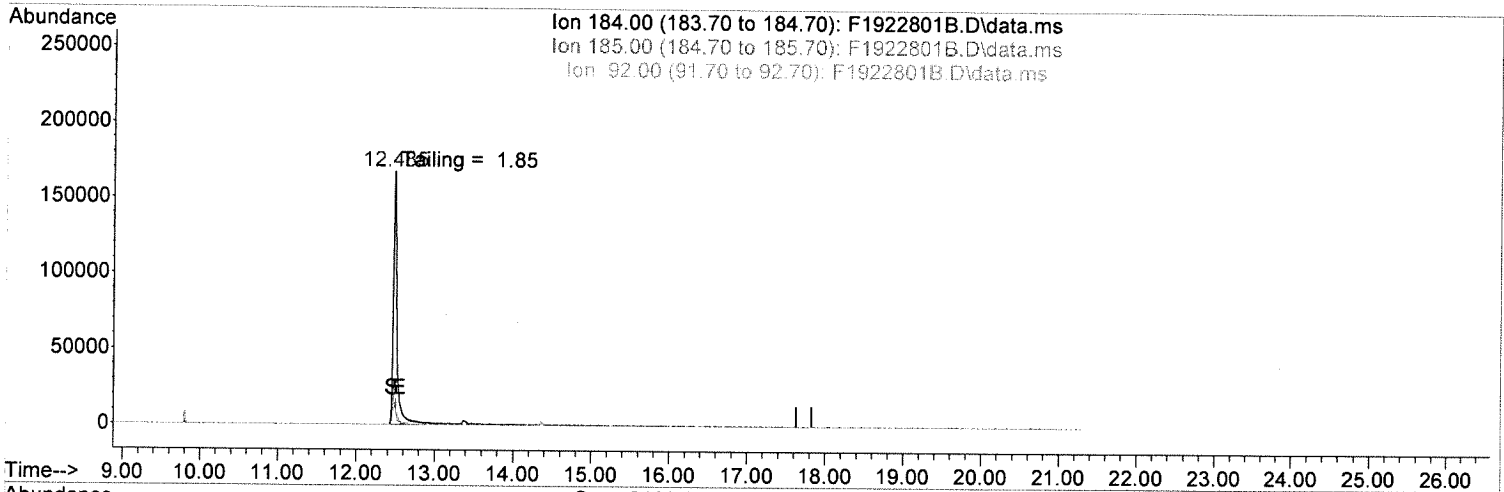
DataAcq Meth:DT122215.M

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

17.733min (-17.733) 0.000 ng/uL

response 0

Ion	Exp%	Act%
184.00	100.00	0.00
185.00	13.70	0.00#
92.00	9.30	0.00#
0.00	0.00	0.00

CALIBRATION DATA

6 - FORM VI INITIAL CALIBRATION DATA SHEET

476

SW-846 8270D

Client: Dvirka And Bartilucci

SDG: 19H0528

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: 19H0528

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: 19H0528

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

477

SW-846 8270D

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Sequence:	S038265	Instrument:	GCMSSV6
Calibration:	1900232		

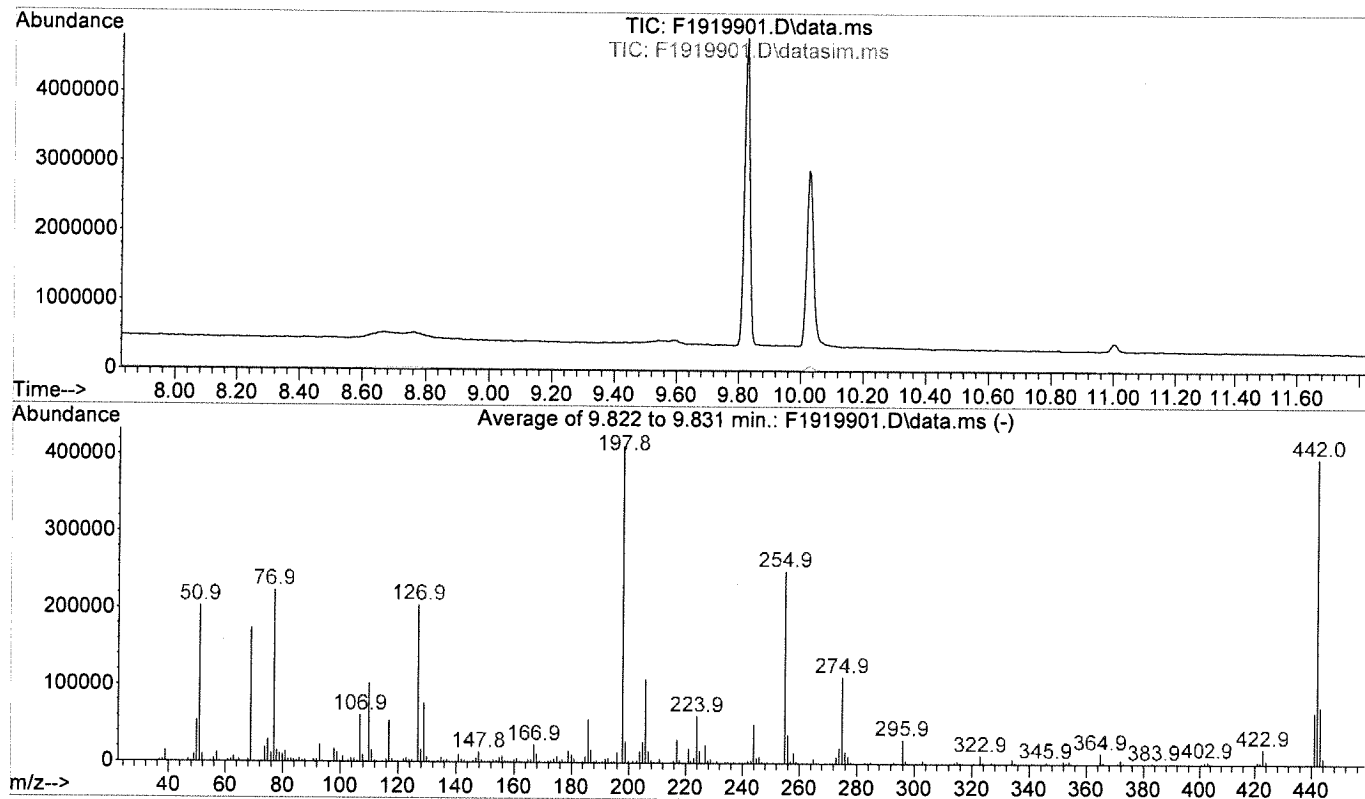
Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
1902259	1,4-Dioxane Tune - 25 ng/uL	S038265-TUN1	F1919901.D	07/18/19 09:05
1810183	Diox 0.2	S038265-CAL1	F1919905.D	07/18/19 10:31
1810184	Diox 1.0	S038265-CAL2	F1919906.D	07/18/19 10:51
1810185	Diox 2.5	S038265-CAL3	F1919907.D	07/18/19 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
 Misc : 1902259 EXP 093019
 ALS Vial : 1 Sample Multiplier: 1

Inst : GCMSSV6

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
Misc : 1902259 EXP 093019
ALS Vial : 1 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Jul 18 13:57:26 2019

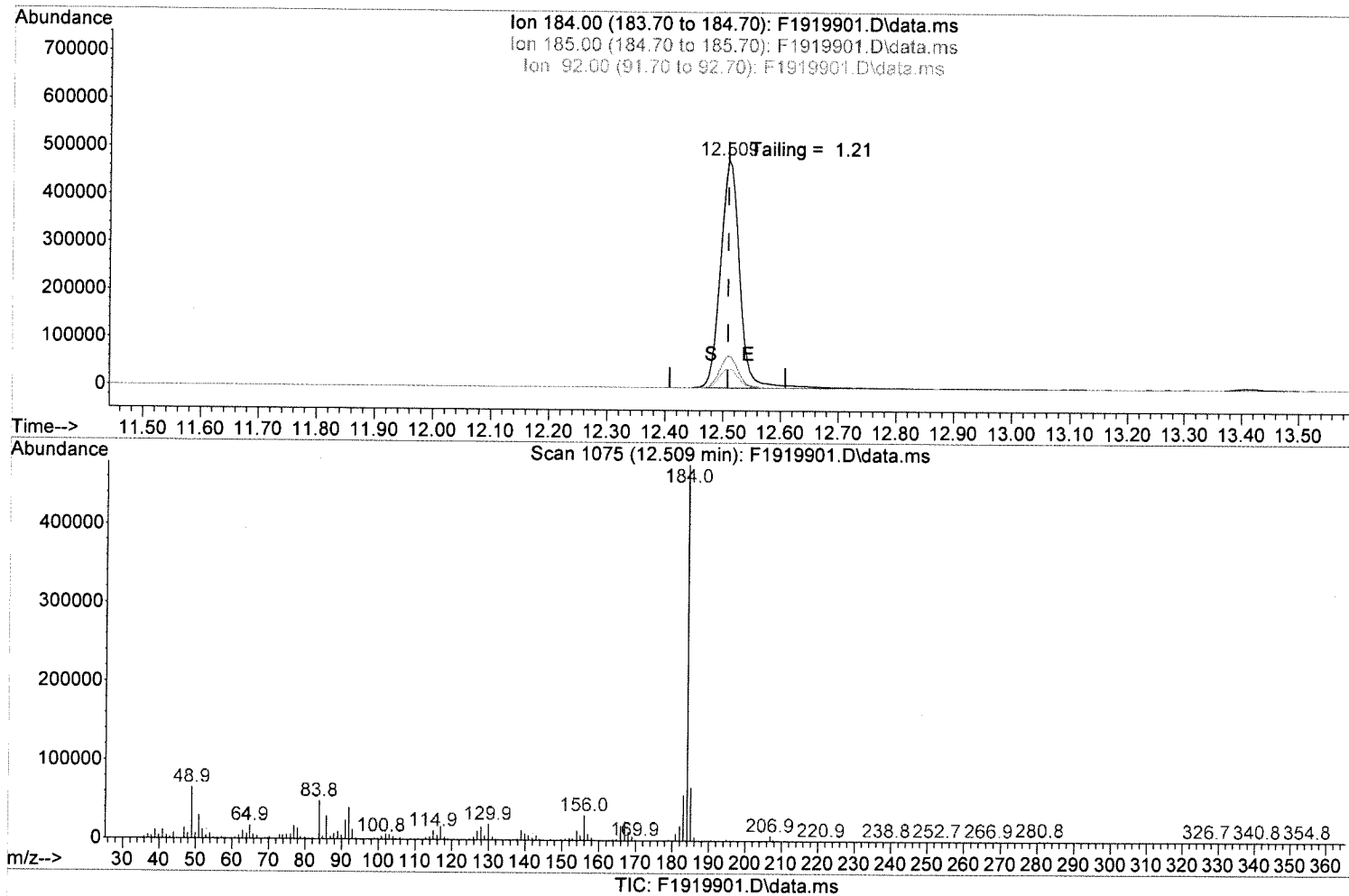
DataAcq Meth:DT122215.M

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

DQ071819.M Fri Jul 19 07:43:33 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

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
Misc :
ALS Vial : 5 Sample Multiplier: 1

Inst : GCMSSV6

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

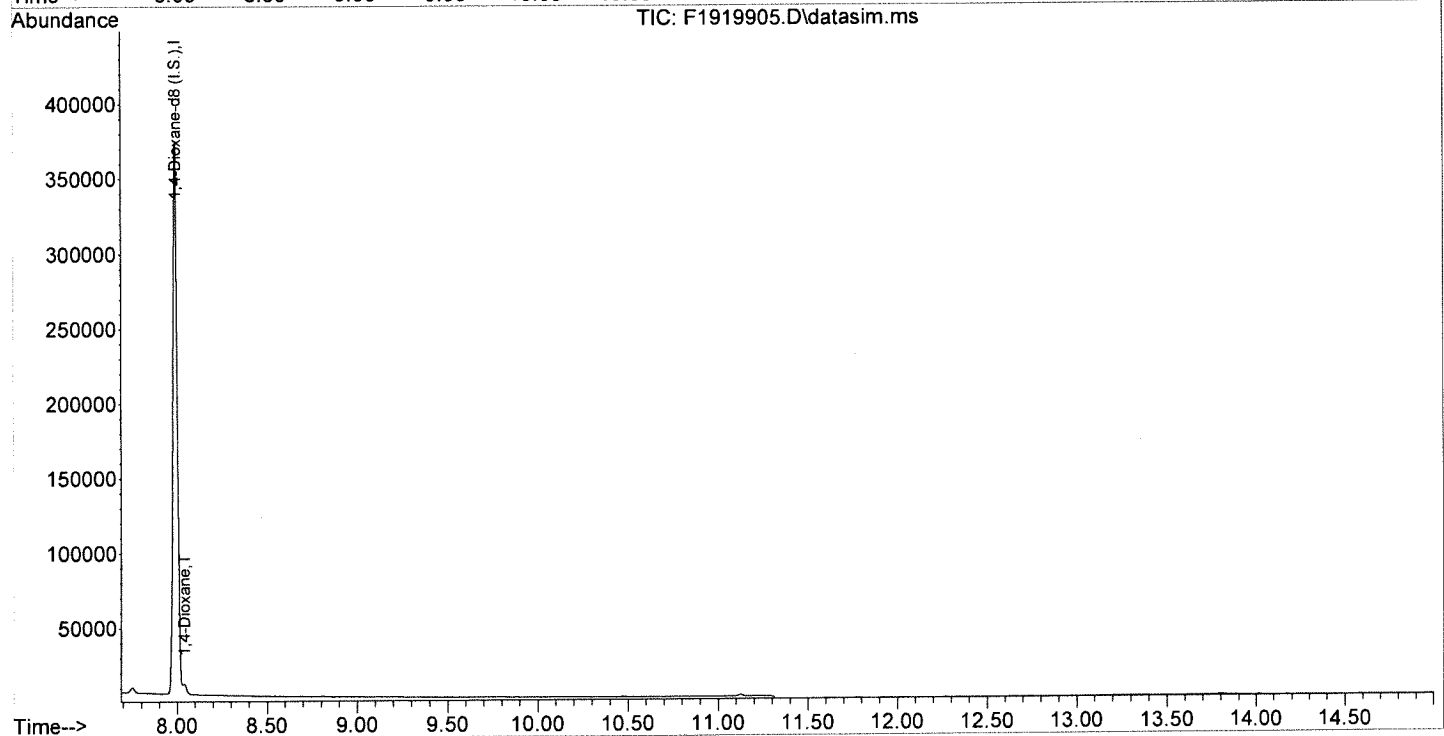
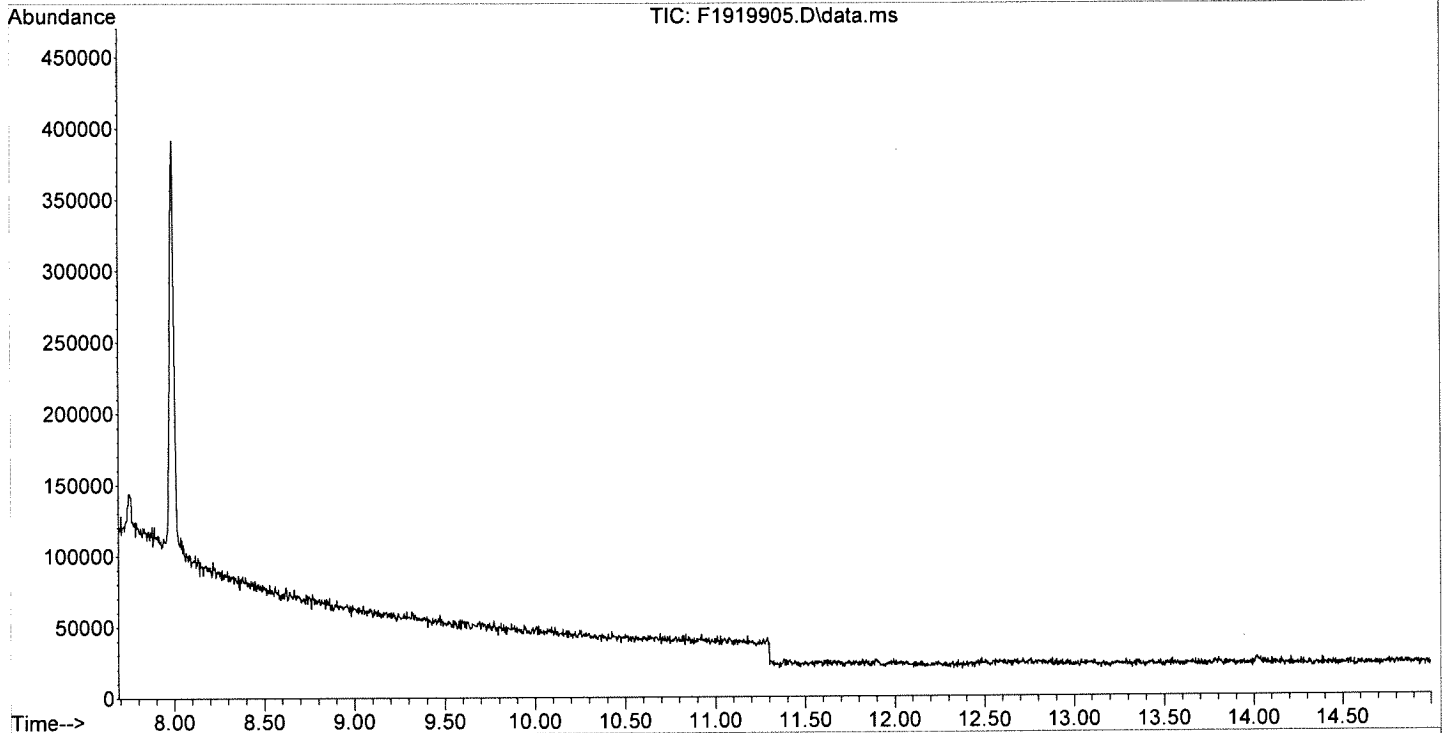
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.993	96	307921	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						
4) 1,4-Dioxane	8.040	88	5664	0.173	ug/mL	Qvalue 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
Misc :
ALS Vial : 5 Sample Multiplier: 1

Inst : GCMSSV6

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



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
Misc :
ALS Vial : 6 Sample Multiplier: 1

Inst : GCMSSV6

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)

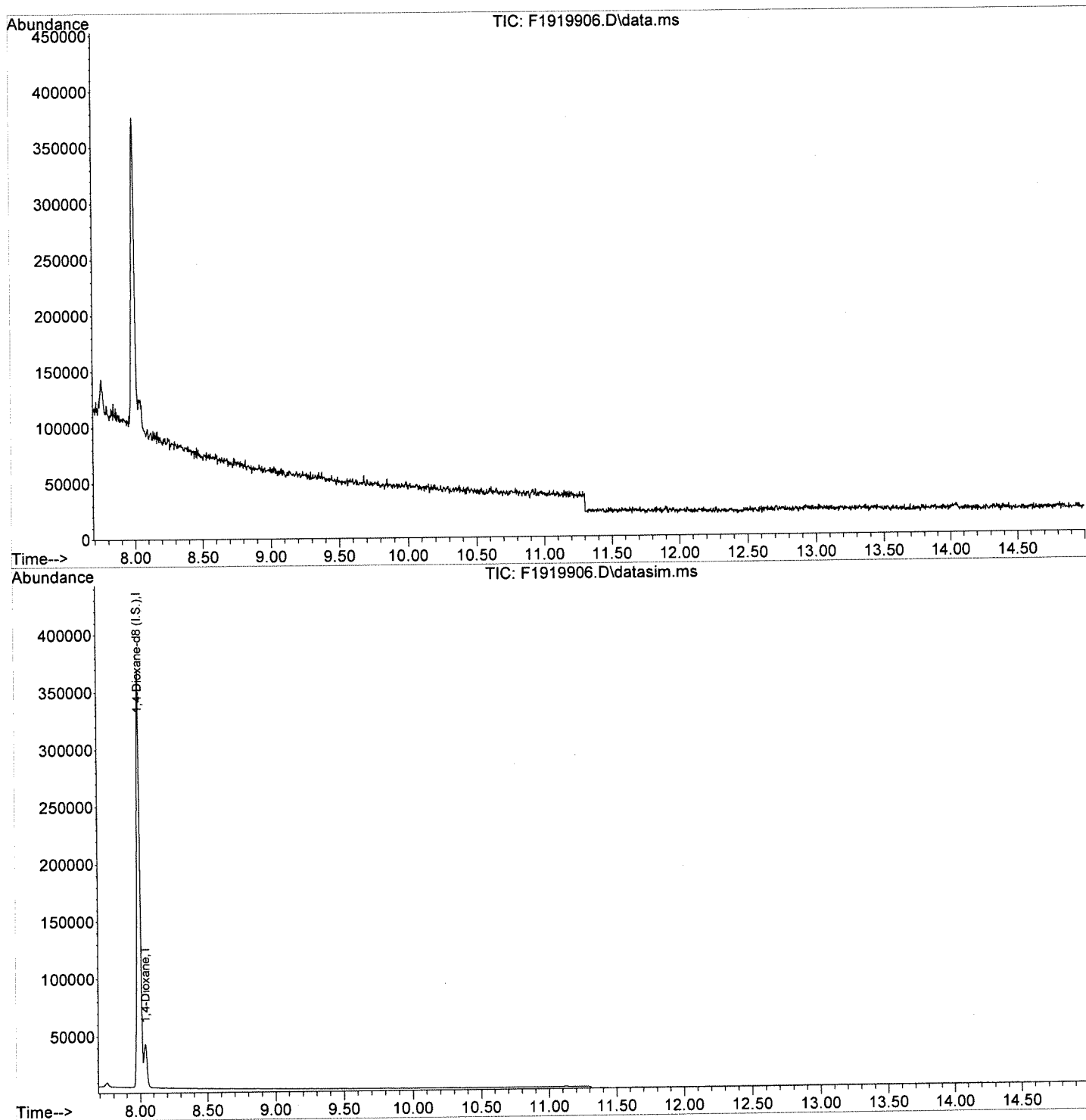
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.993	96	299175	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						
4] 1,4-Dioxane	8.040	88	30660	0.963	ug/mL	Qvalue 98

(#) = 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
Misc :
ALS Vial : 6 Sample Multiplier: 1

Inst : GCMSSV6

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



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
Misc :
ALS Vial : 7 Sample Multiplier: 1

Inst : GCMSSV6

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)

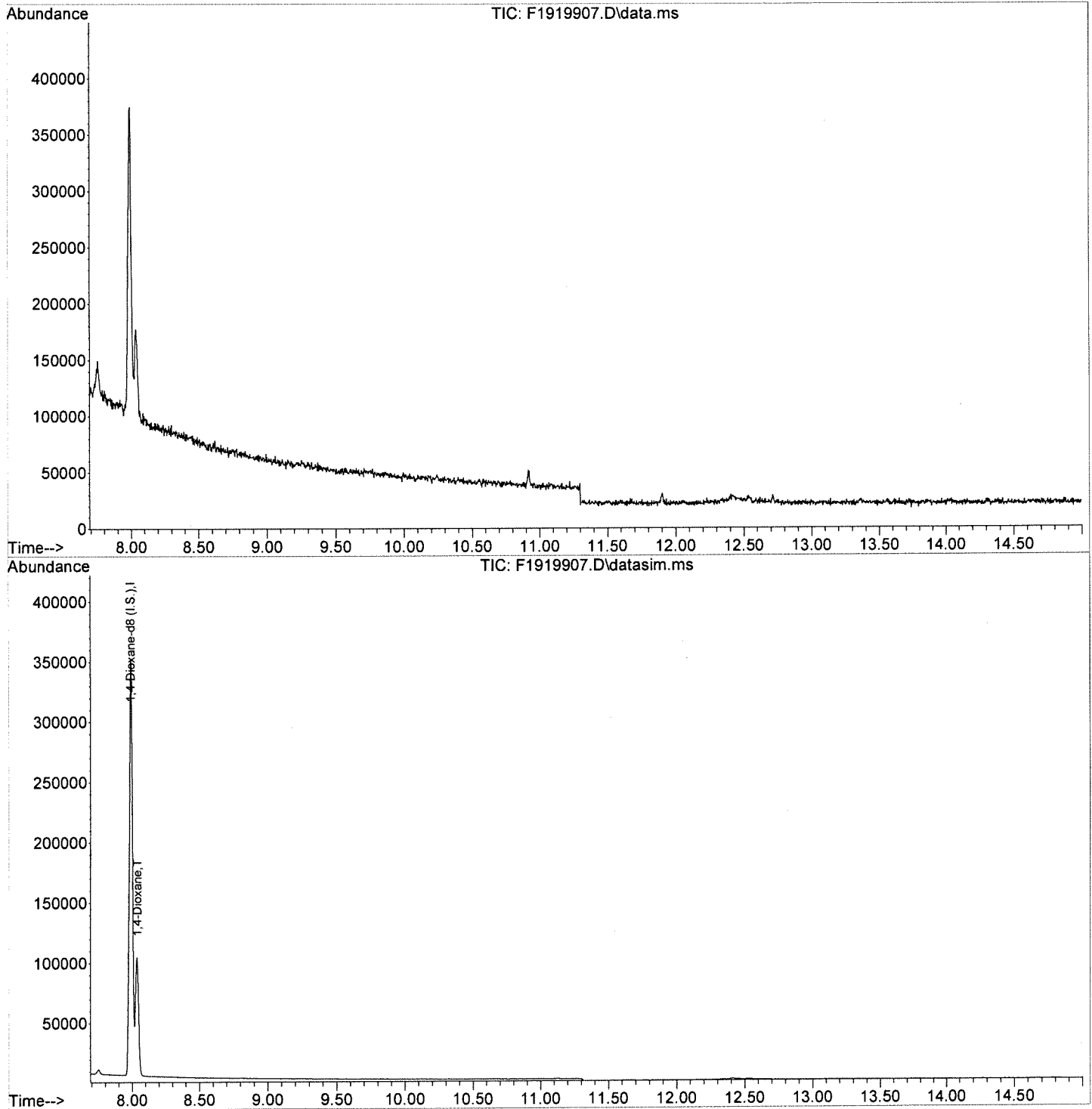
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	286861	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						
4) 1,4-Dioxane	8.037	88	79851	2.615	ug/mL	Qvalue 99

(#) = 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
Misc :
ALS Vial : 7 Sample Multiplier: 1

Inst : GCMSSV6

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



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
Misc :
ALS Vial : 8 Sample Multiplier: 1

Inst : GCMSSV6

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)

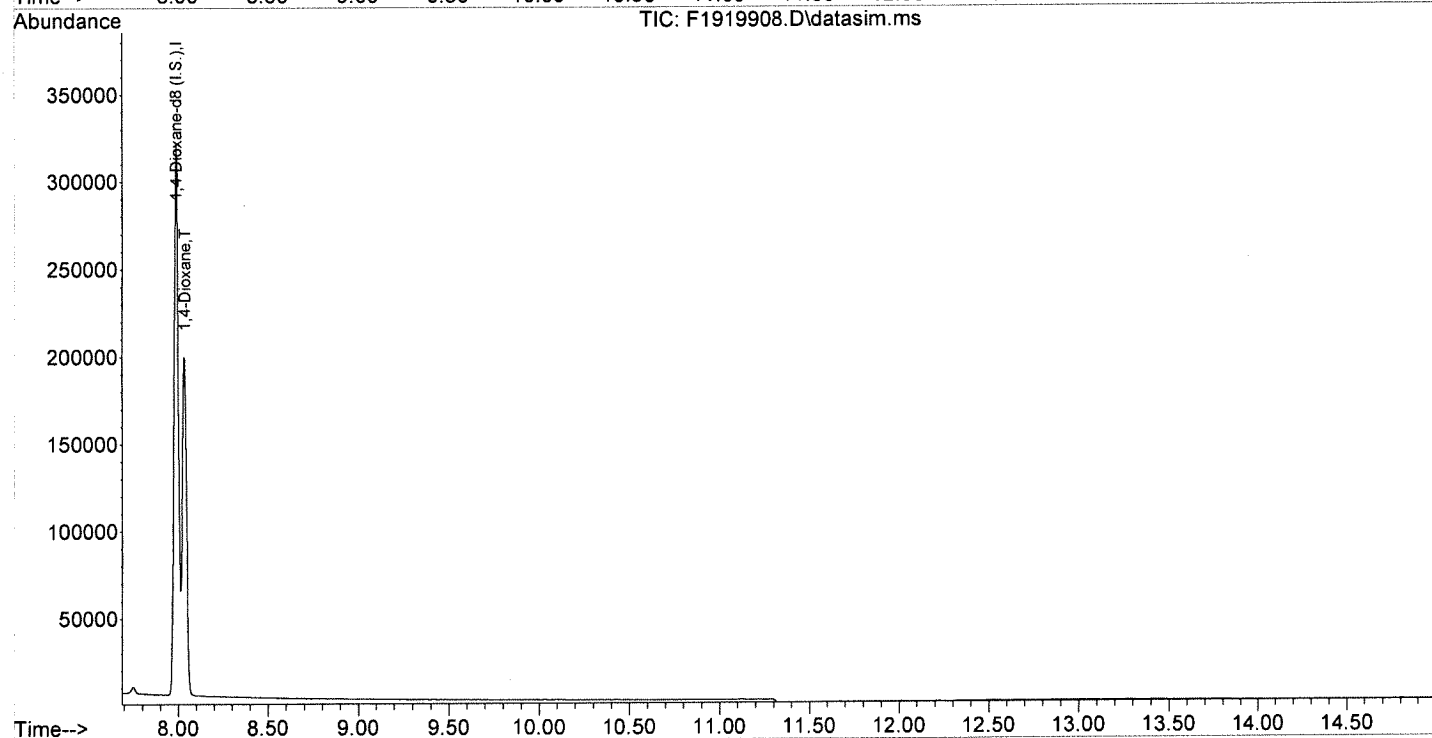
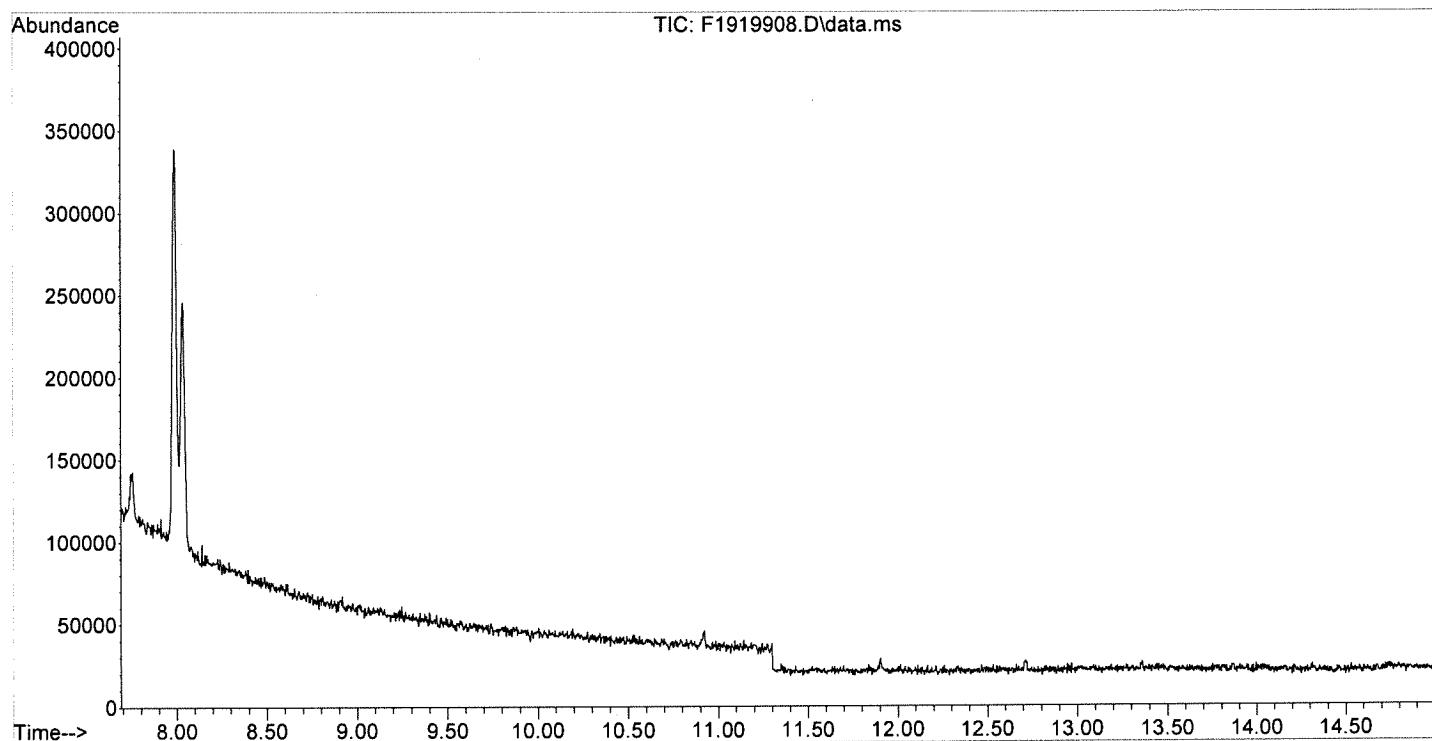
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	260073	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						
4] 1,4-Dioxane	8.037	88	157897	5.704	ug/mL	Qvalue 99

(#) = 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
Misc :
ALS Vial : 8 Sample Multiplier: 1

Inst : GCMSSV6

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
Misc :
ALS Vial : 9 Sample Multiplier: 1

Inst : GCMSSV6

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						
4] 1,4-Dioxane	8.033	88	320640	11.960	ug/mL	Qvalue 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

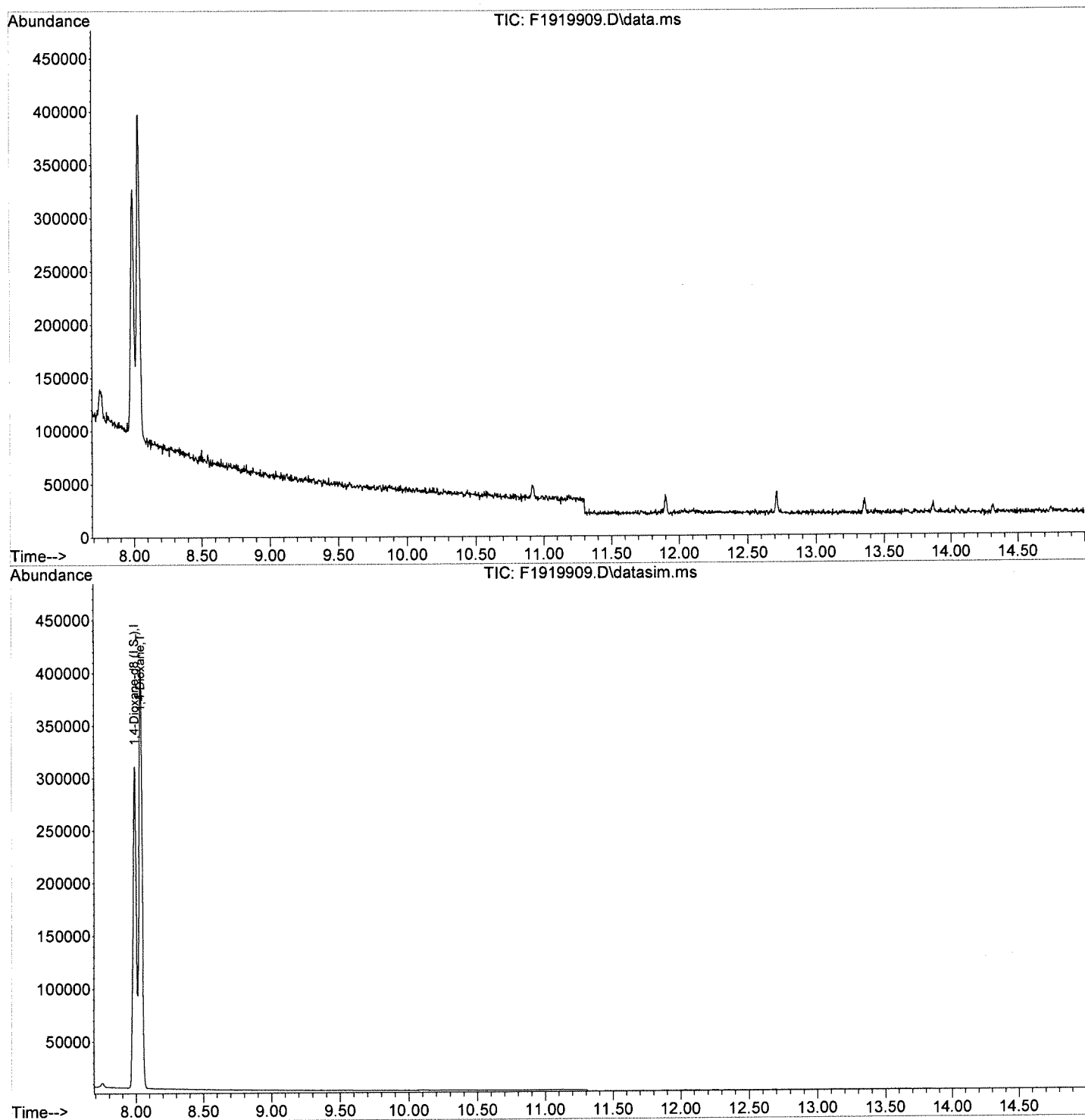
DataAcq Meth:D051518.M

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
Misc :
ALS Vial : 10 Sample Multiplier: 1

Inst : GCMSSV6

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

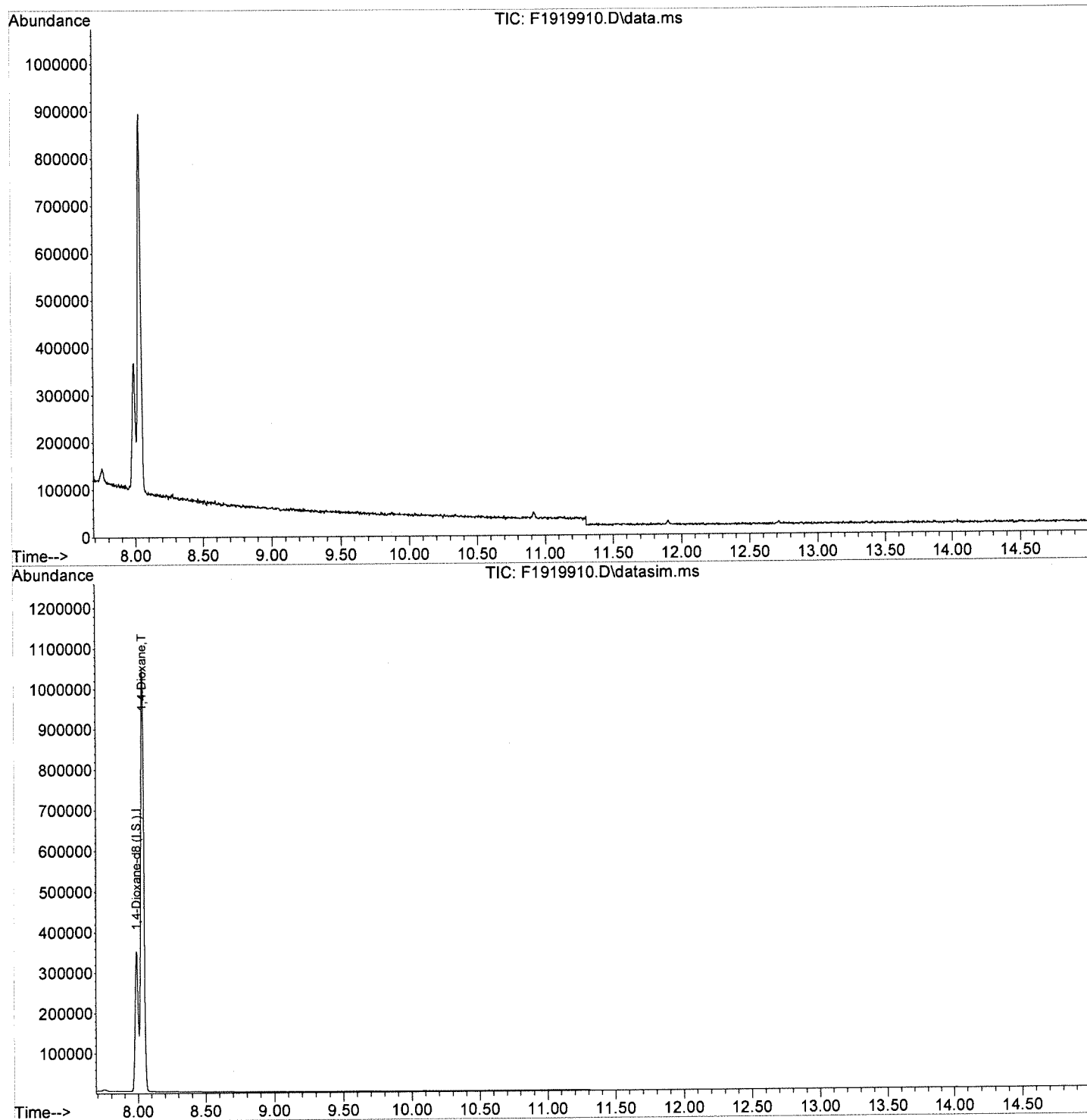
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	285307	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						
4] 1,4-Dioxane	8.033	88	833918	27.459	ug/mL	Qvalue 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
Misc :
ALS Vial : 10 Sample Multiplier: 1

Inst : GCMSSV6

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 : CIA
Sample : DIOX 50 ug/ml
Misc :
ALS Vial : 11 Sample Multiplier: 1

Inst : GCMSSV6

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

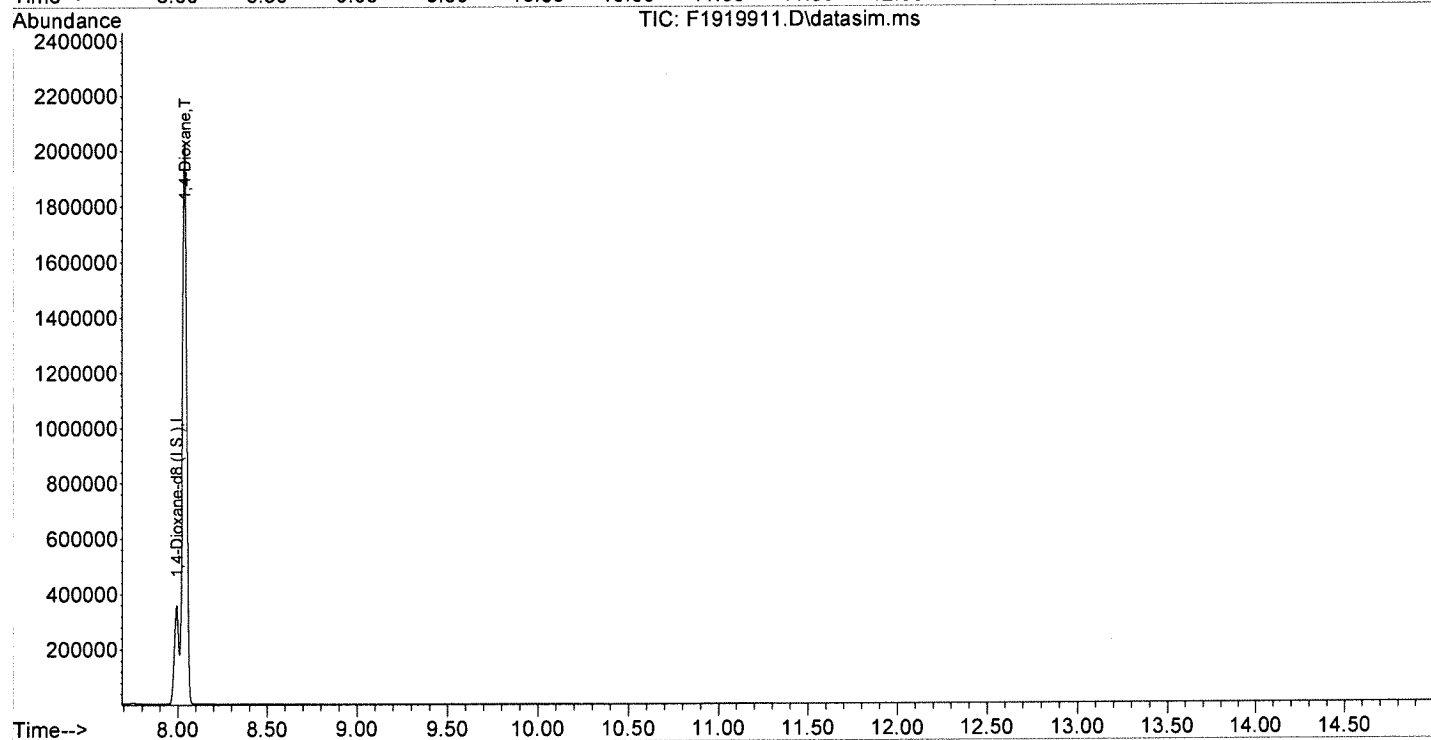
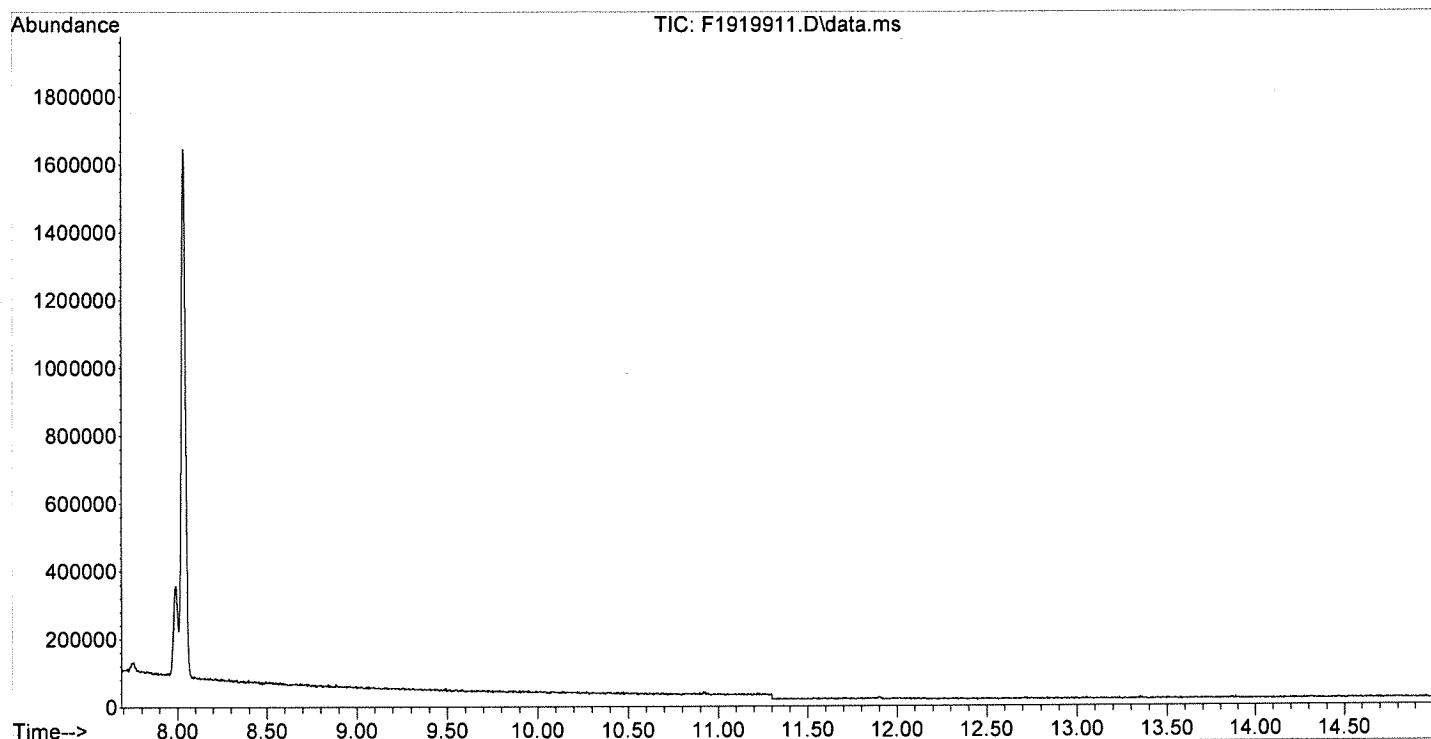
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.993	96	292805	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						
4] 1,4-Dioxane	8.037	88	1609142	51.628	ug/mL	Qvalue 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
Misc :
ALS Vial : 11 Sample Multiplier: 1

Inst : GCMSSV6

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



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)

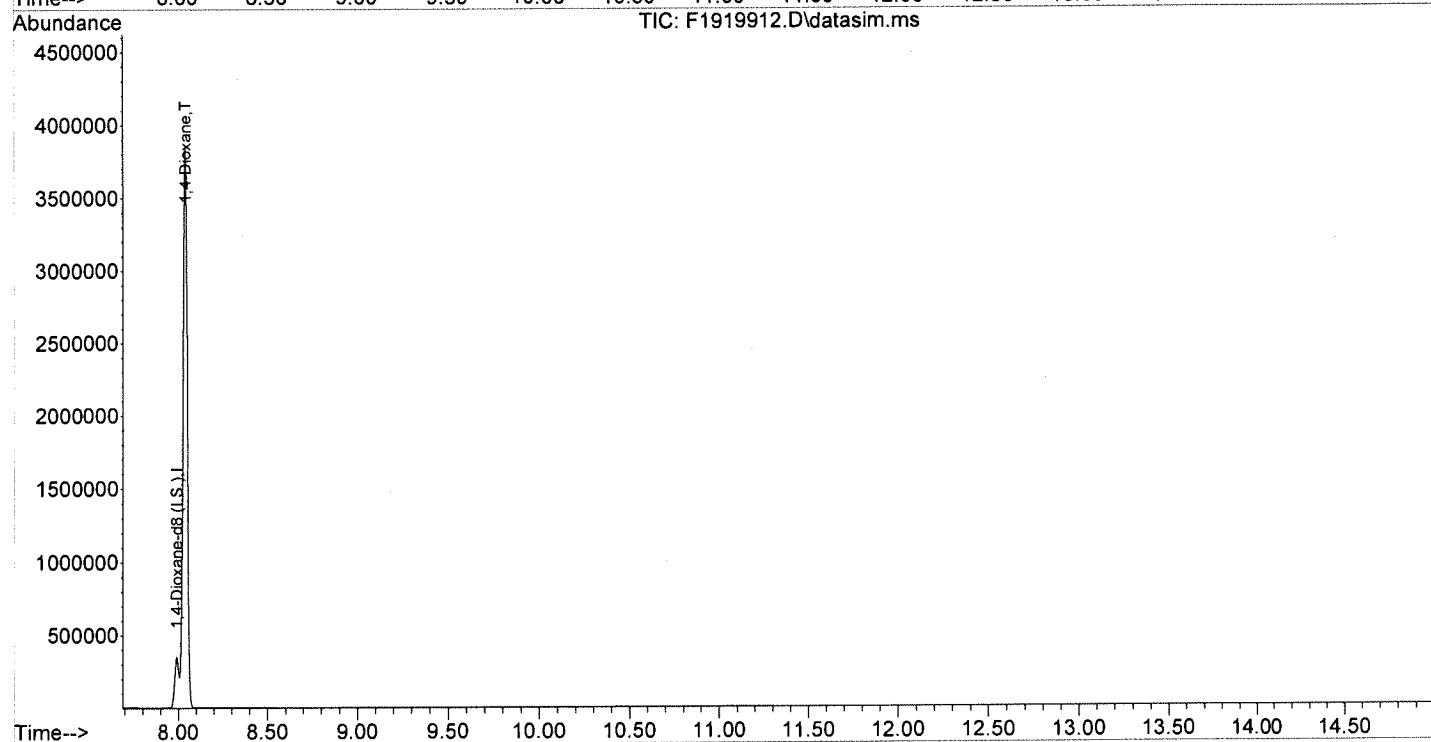
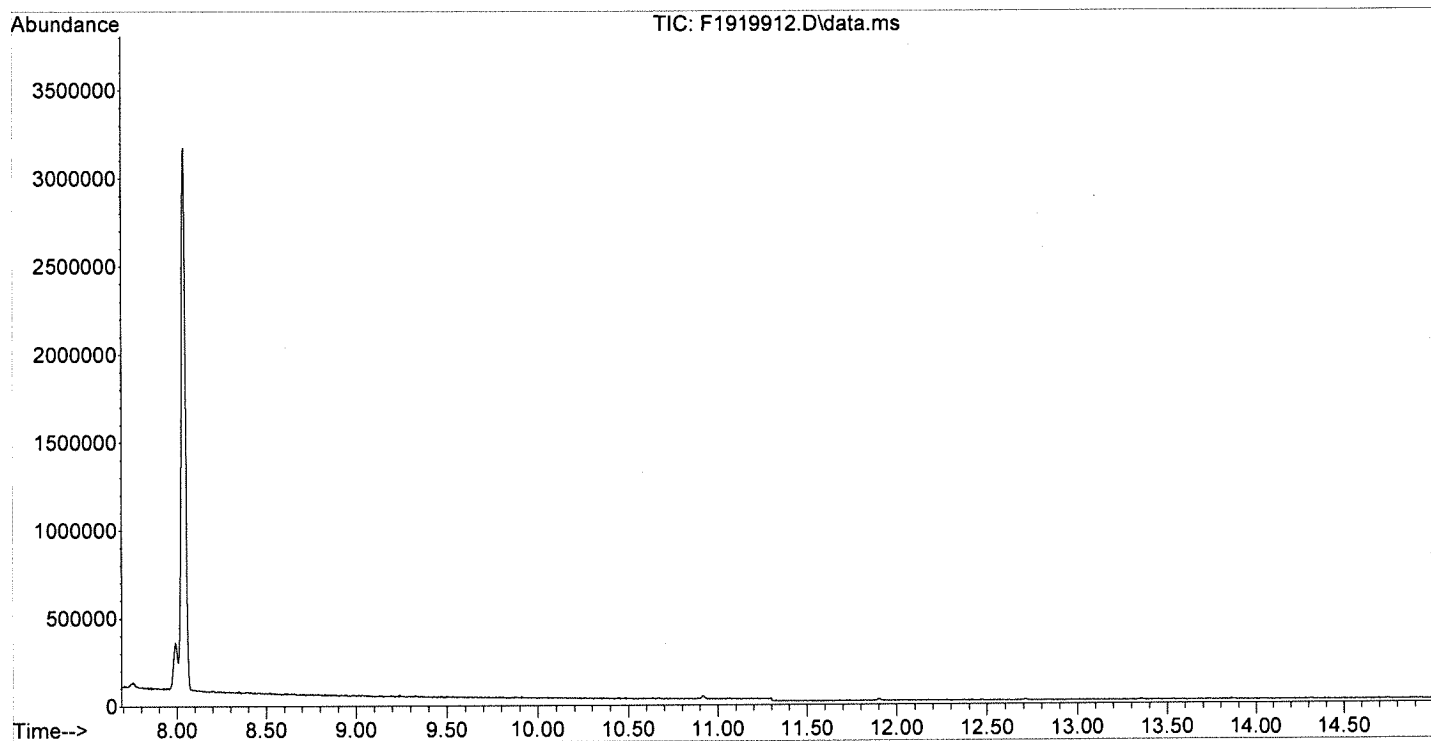
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	7.993	96	290373	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						
4] 1,4-Dioxane	8.040	88	3193920	103.332	ug/mL	Qvalue 99

(#) = 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
Misc :
ALS Vial : 12 Sample Multiplier: 1

Inst : GCMSSV6

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



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)

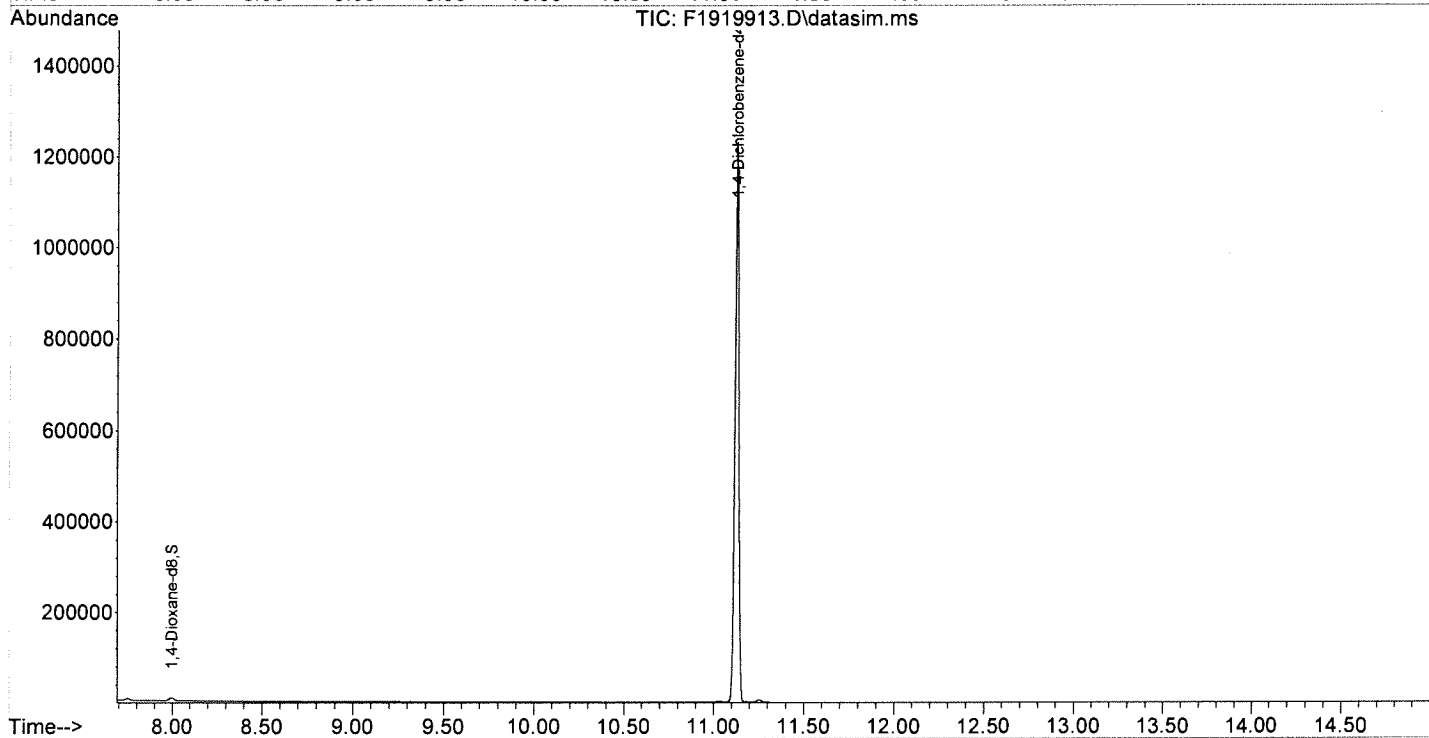
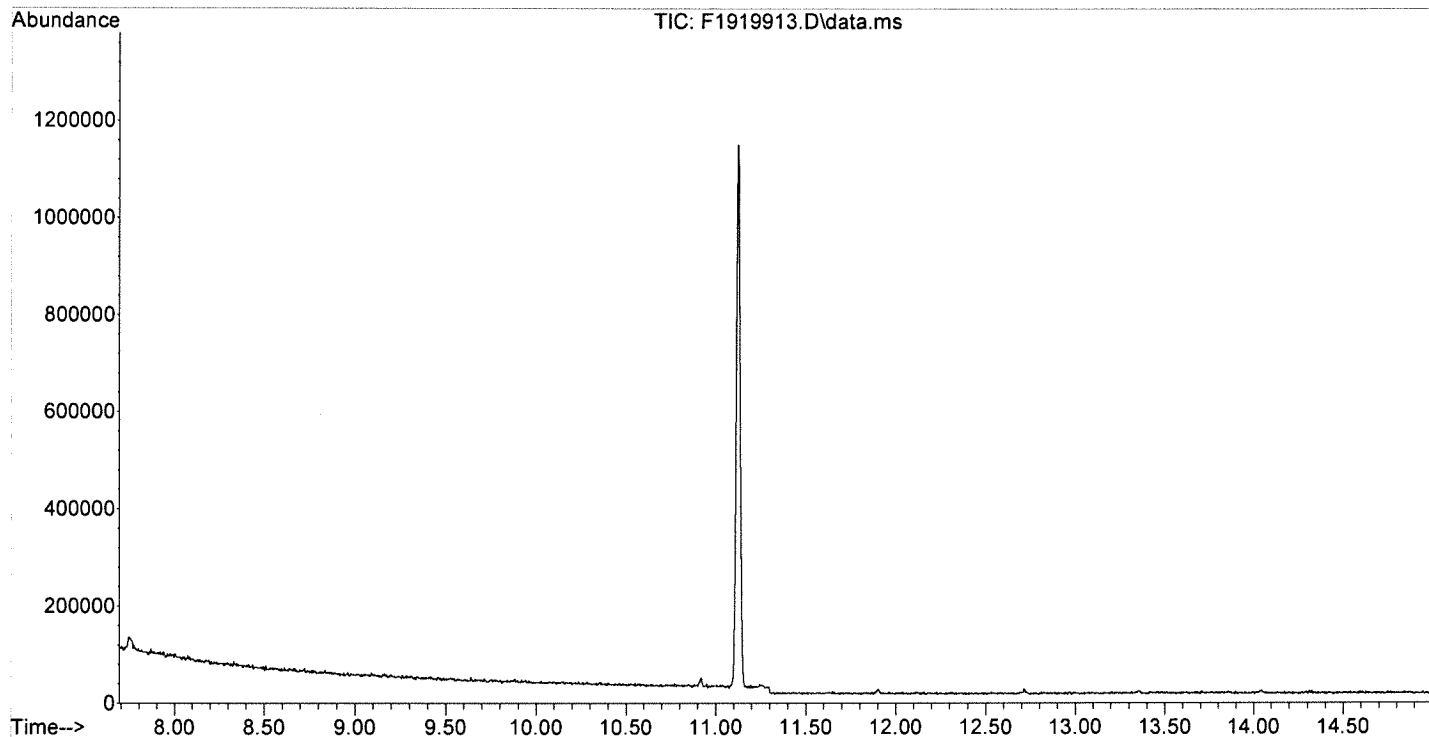
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	916492	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.996	96	5445	0.192	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.	d	Qvalue

(#) = 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
Misc :
ALS Vial : 13 Sample Multiplier: 1

Inst : GCMSSV6

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



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)

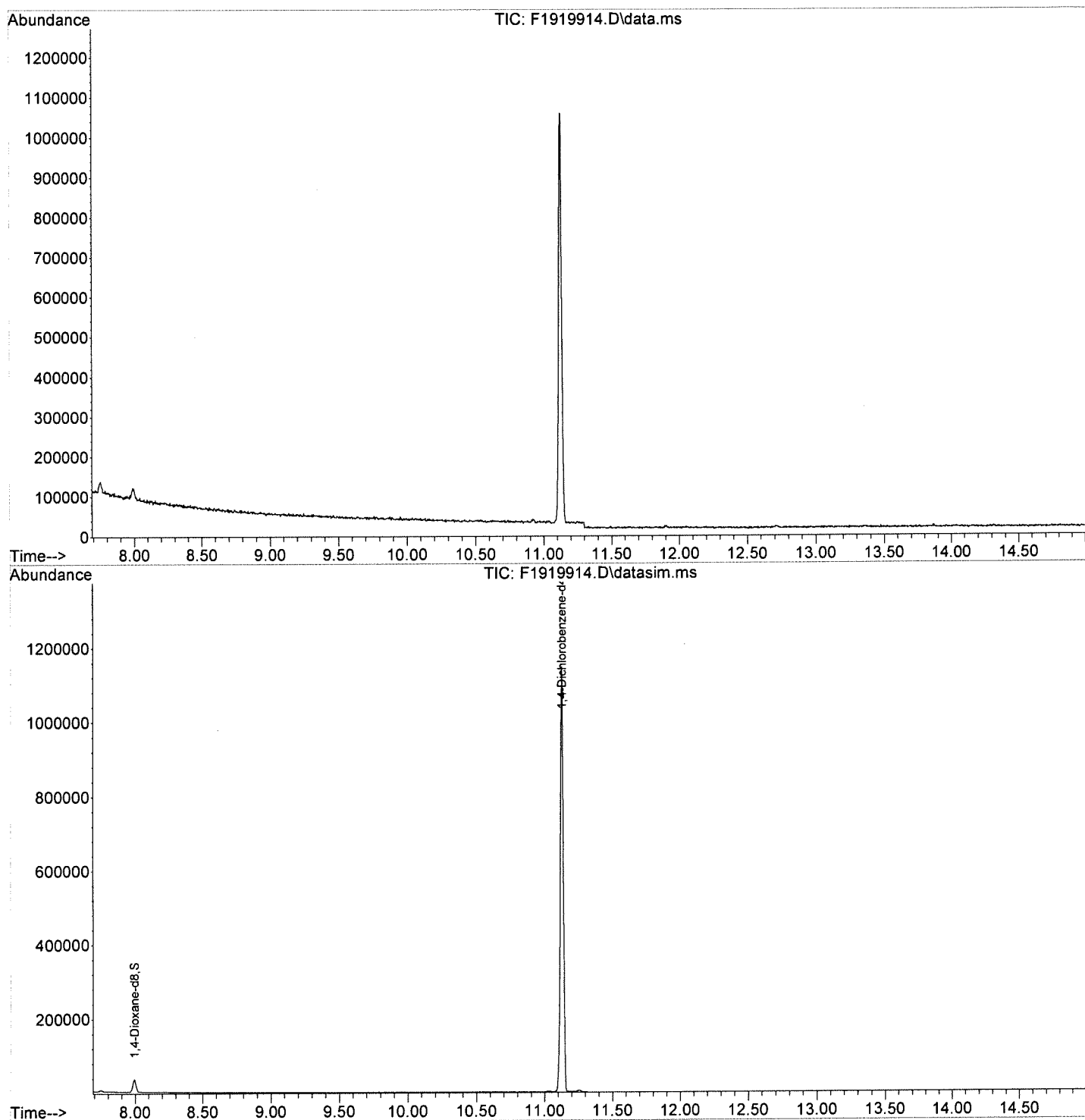
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	864716	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.993	96	27774	1.040	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.	d	Qvalue

(#) = 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
Misc :
ALS Vial : 14 Sample Multiplier: 1

Inst : GCMSSV6

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



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)

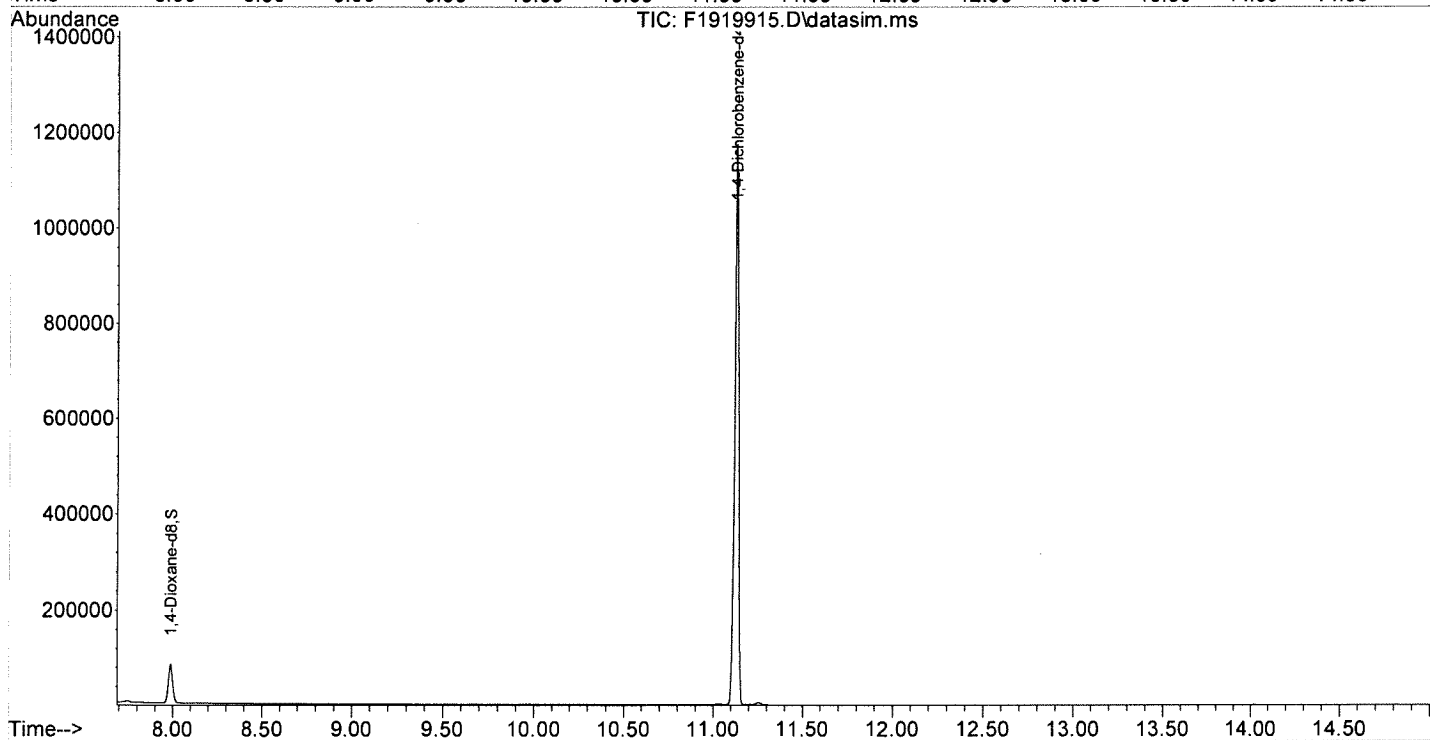
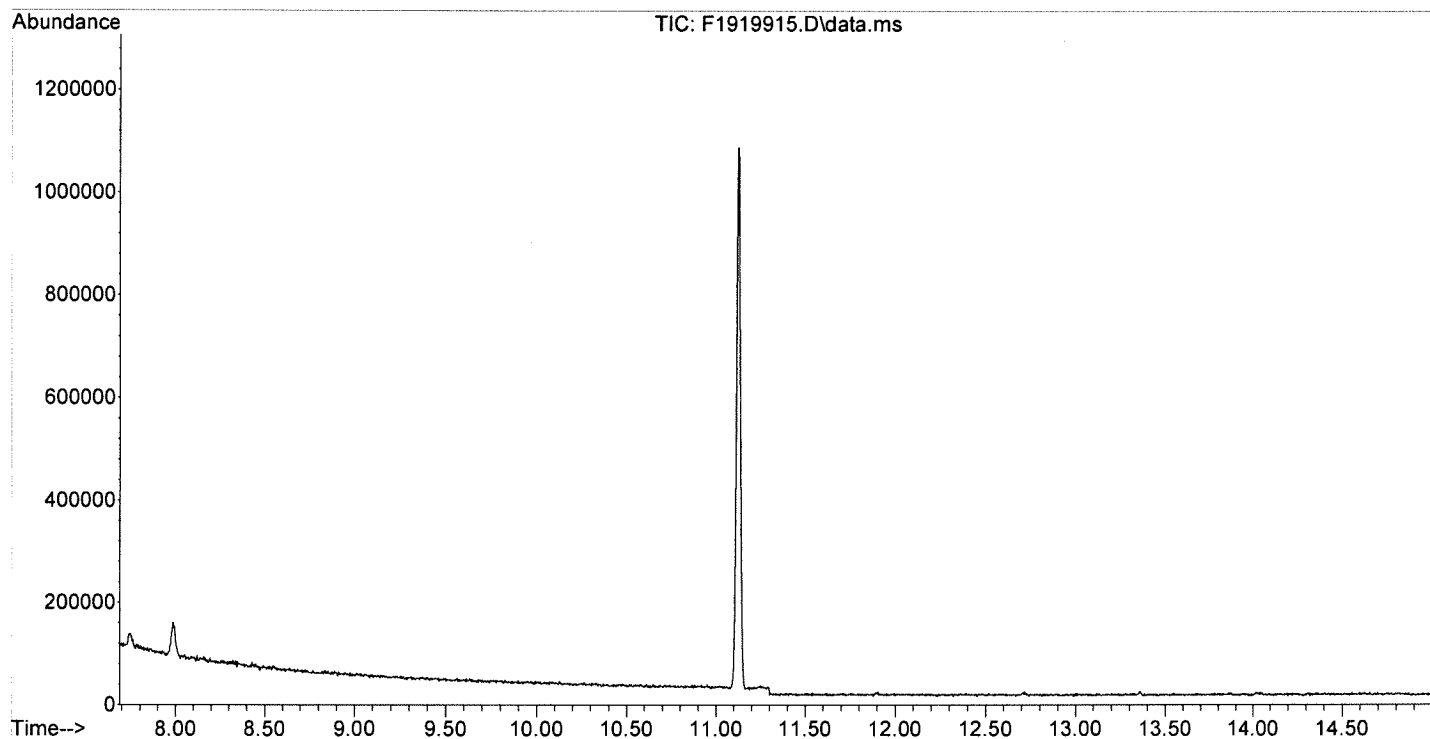
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	885504	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.989	96	68107	2.491	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.	d	Qvalue

(#) = 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
Misc :
ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSSV6

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



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

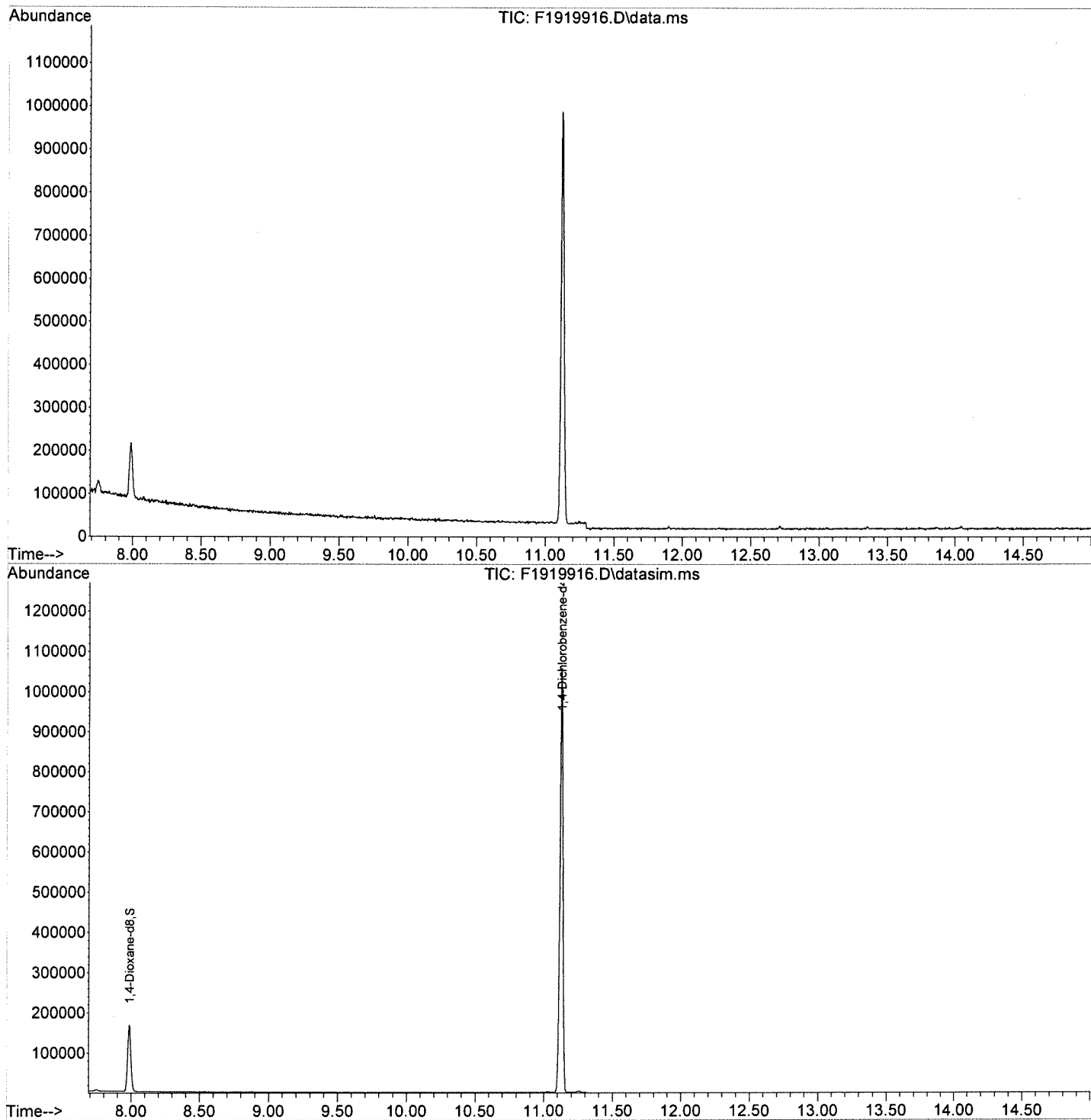
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	790024	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.989	96	138304	5.669	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.		Qvalue

(#) = 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
Misc :
ALS Vial : 16 Sample Multiplier: 1

Inst : GCMSSV6

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



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)

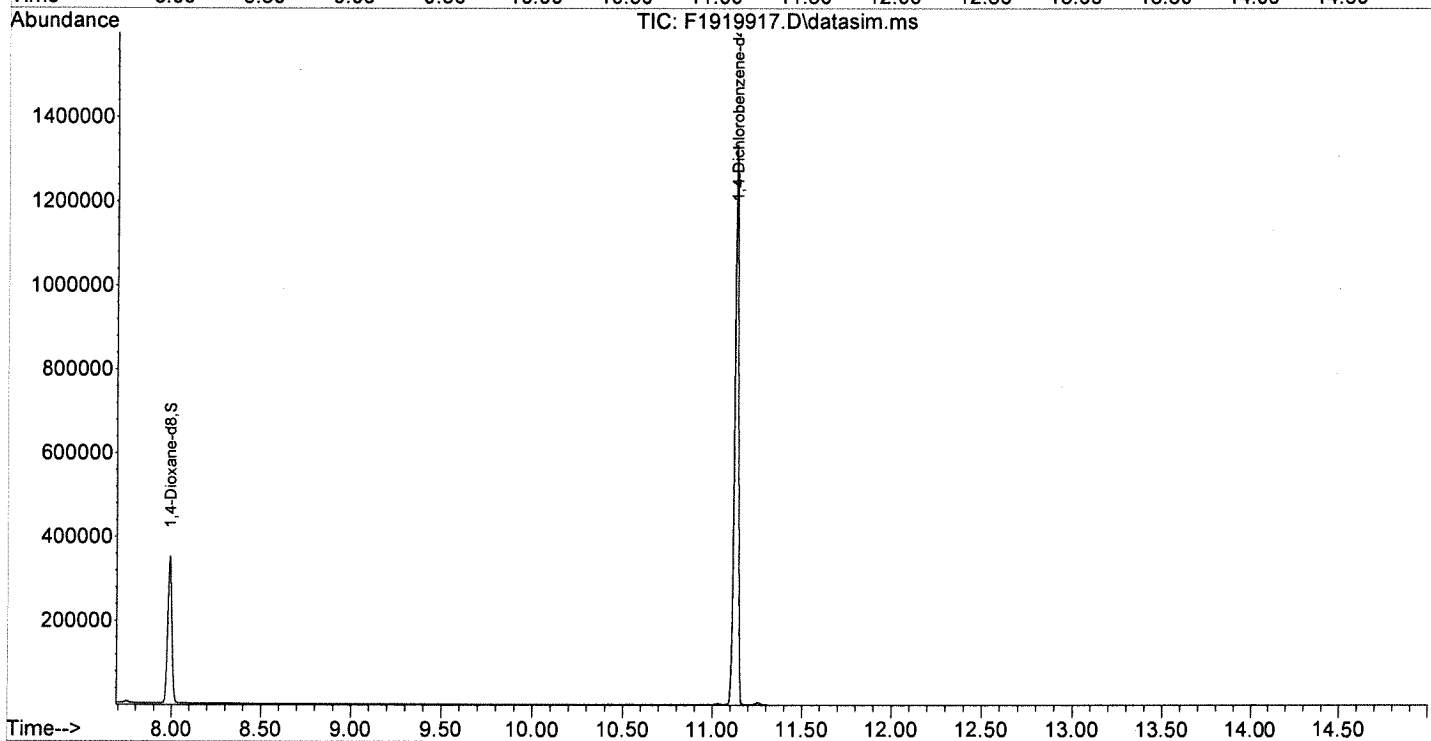
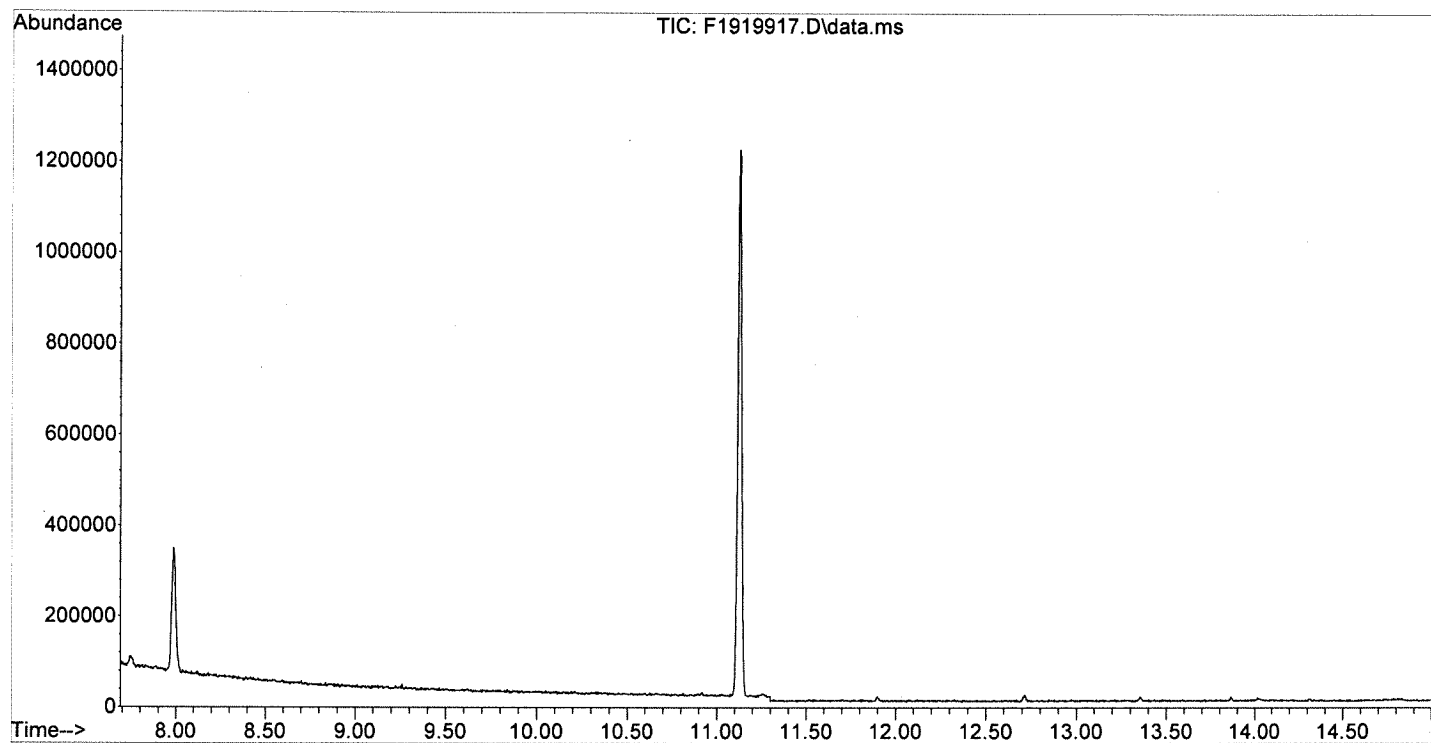
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	989590	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.989	96	288562	9.443	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.	d	Qvalue

(#) = 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
Misc :
ALS Vial : 17 Sample Multiplier: 1

Inst : GCMSSV6

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



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
Misc :
ALS Vial : 18 Sample Multiplier: 1

Inst : GCMSSV6

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)

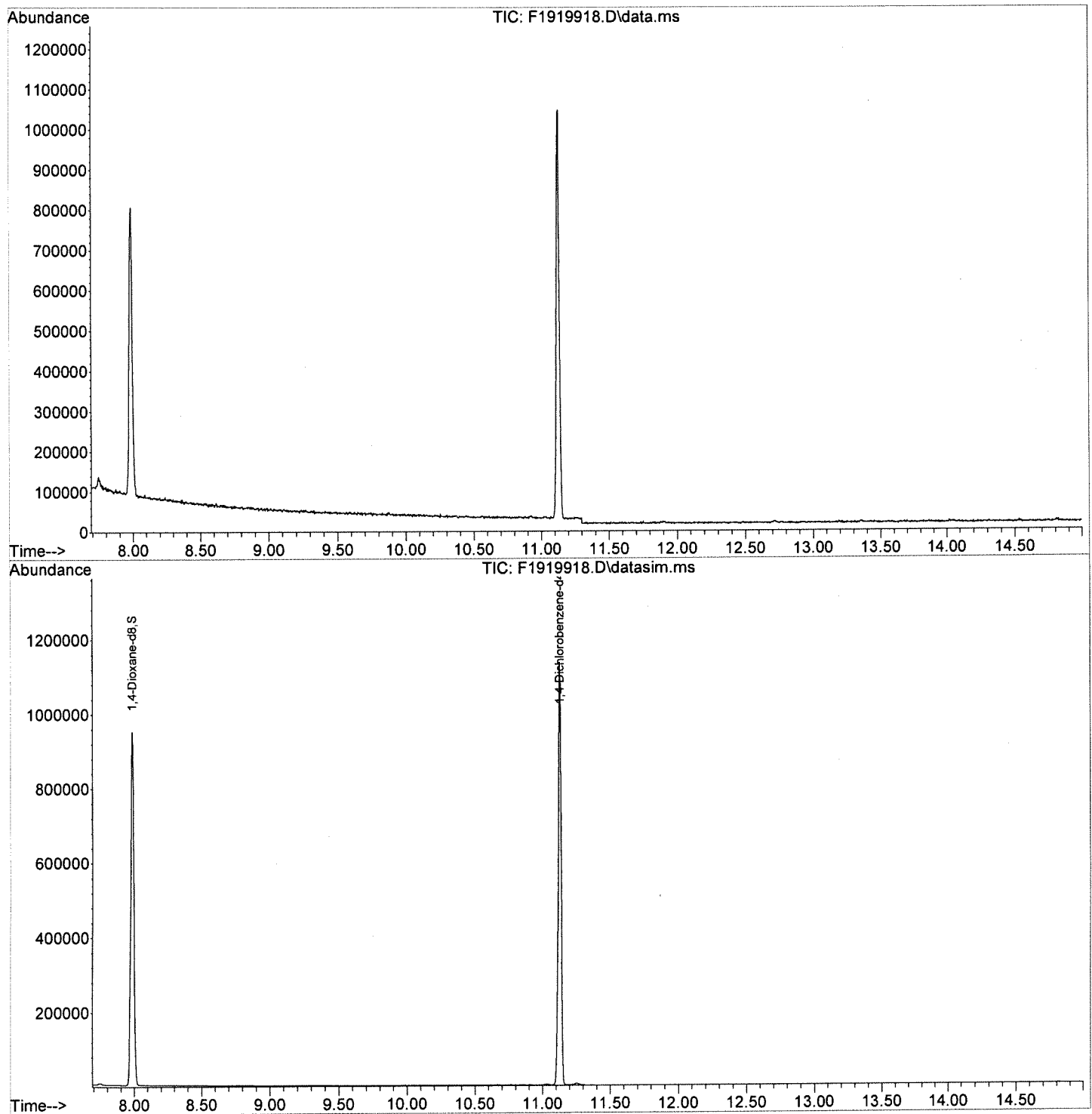
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	847398	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.986	96	780259	29.818	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.	d	Qvalue

(#) = 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
Misc :
ALS Vial : 18 Sample Multiplier: 1

Inst : GCMSSV6

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



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
Misc :
ALS Vial : 19 Sample Multiplier: 1

Inst : GCMSSV6

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)

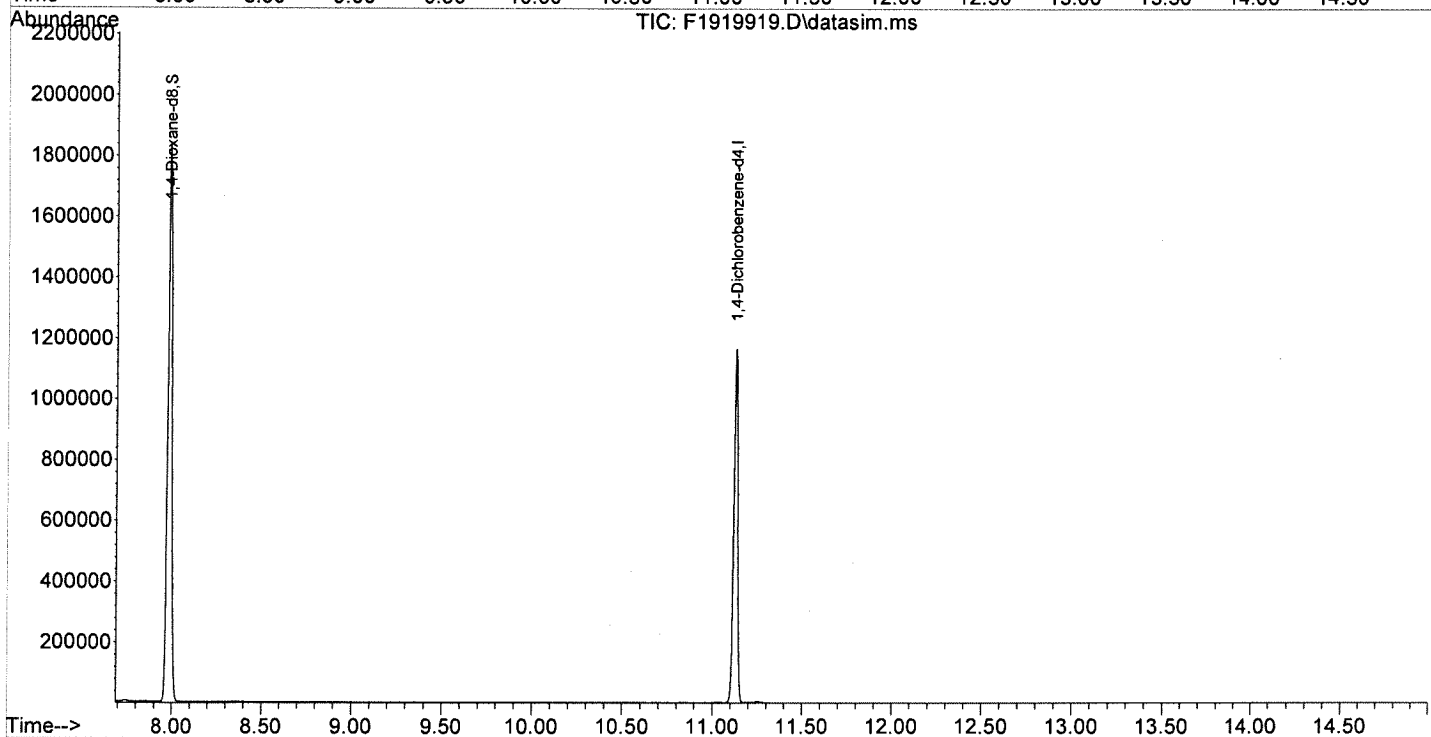
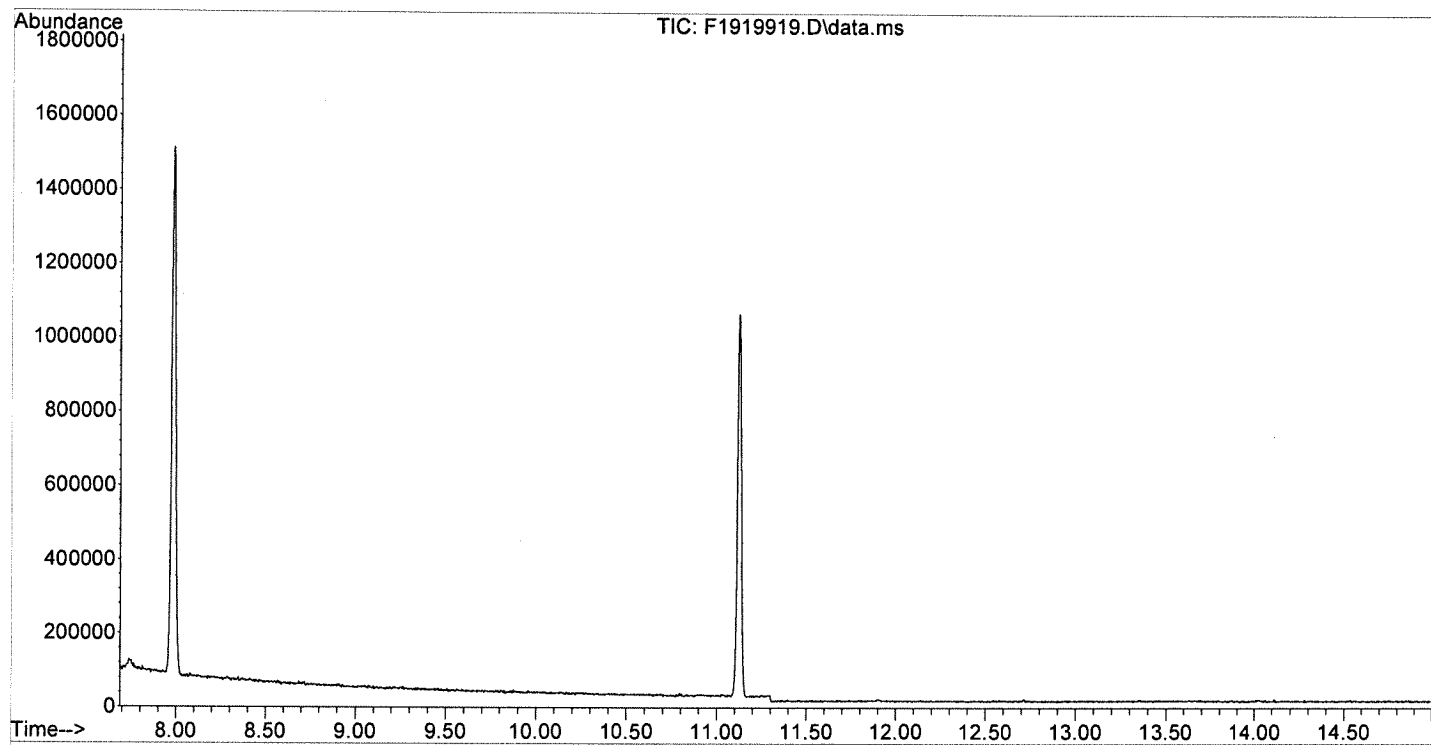
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	884049	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.986	96	1502515	55.039	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.	d	Qvalue

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

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
Misc :
ALS Vial : 19 Sample Multiplier: 1

Inst : GCMSSV6

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



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
Misc :
ALS Vial : 20 Sample Multiplier: 1

Inst : GCMSSV6

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)

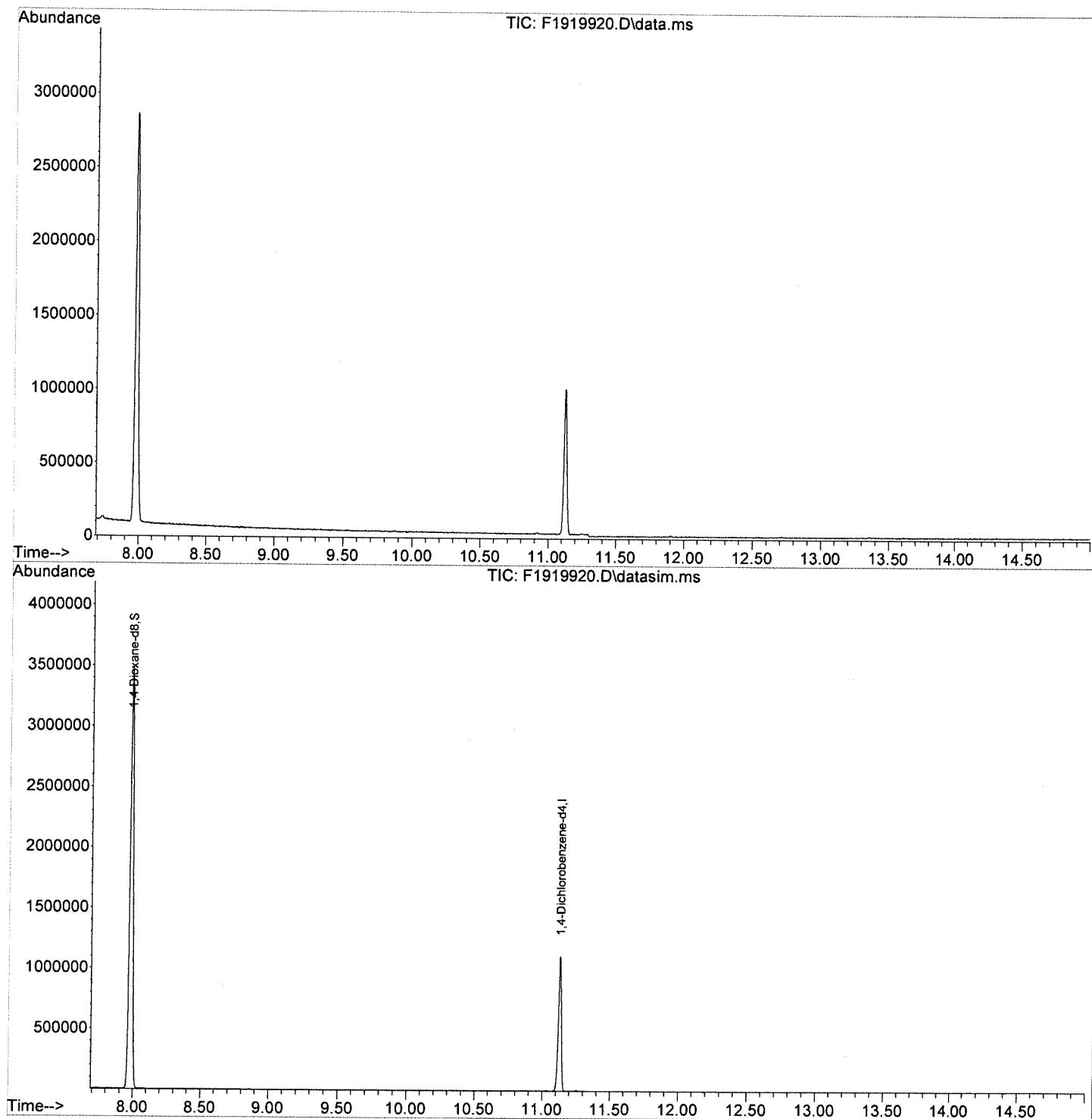
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.127	150	840950	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.983	96	2947488	113.503	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.	d	Qvalue

(#) = 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
Misc :
ALS Vial : 20 Sample Multiplier: 1

Inst : GCMSSV6

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



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

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
Misc :
ALS Vial : 21 Sample Multiplier: 1

Inst : GCMSSV6

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)

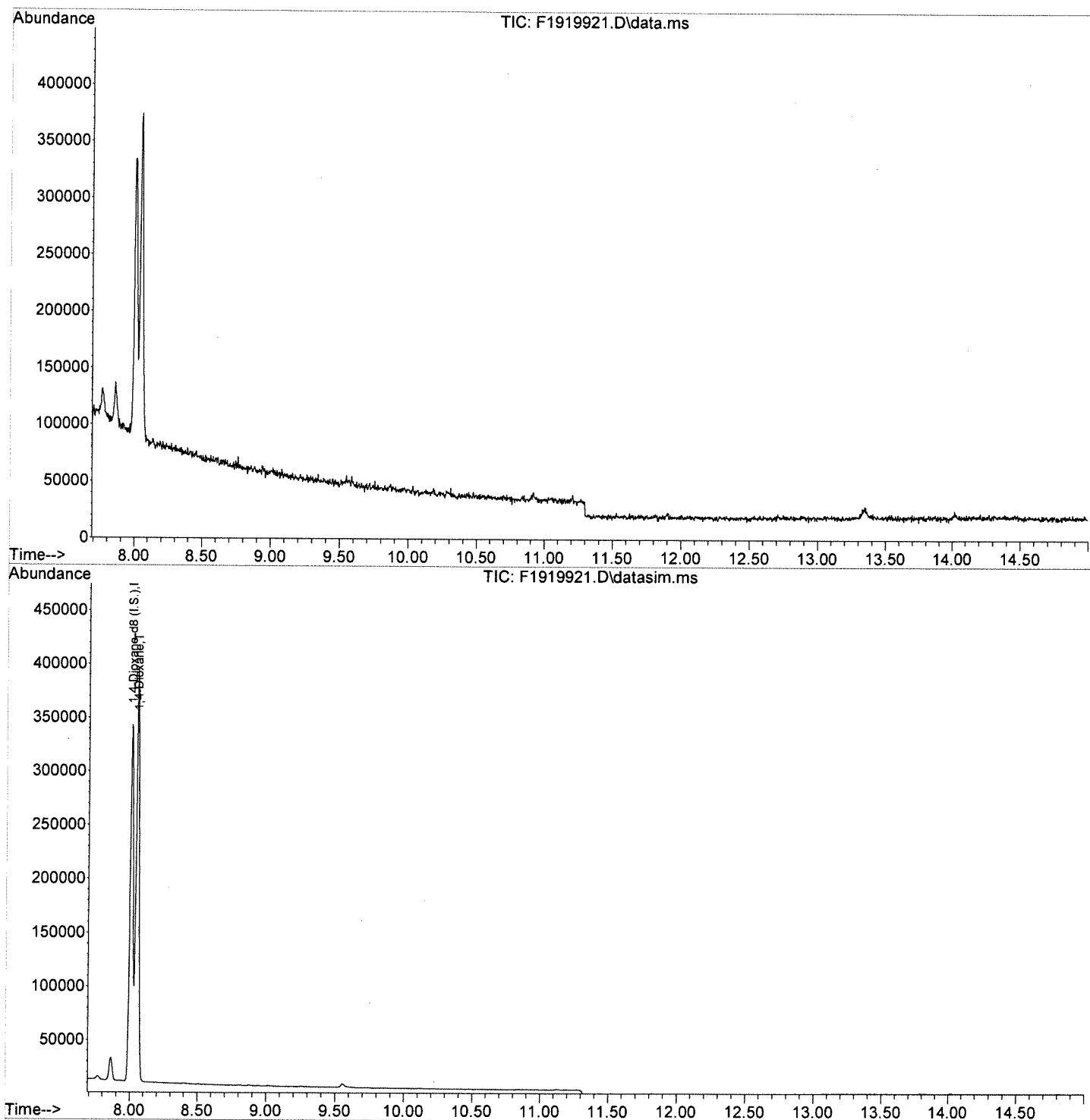
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	150	0m	10.000	ug/mL	-11.13
3) 1,4-Dioxane-d8 (I.S.)	8.006	96	275491	10.000	ug/mL	0.02
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						
4) 1,4-Dioxane	8.050	88	308750	10.059	ug/mL	Qvalue 100 ✓

(#) = 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
Misc :
ALS Vial : 21 Sample Multiplier: 1

Inst : GCMSSV6

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



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
Misc :
ALS Vial : 22 Sample Multiplier: 1

Inst : GCMSSV6

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

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
Misc :
ALS Vial : 22 Sample Multiplier: 1

Inst : GCMSSV6

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)

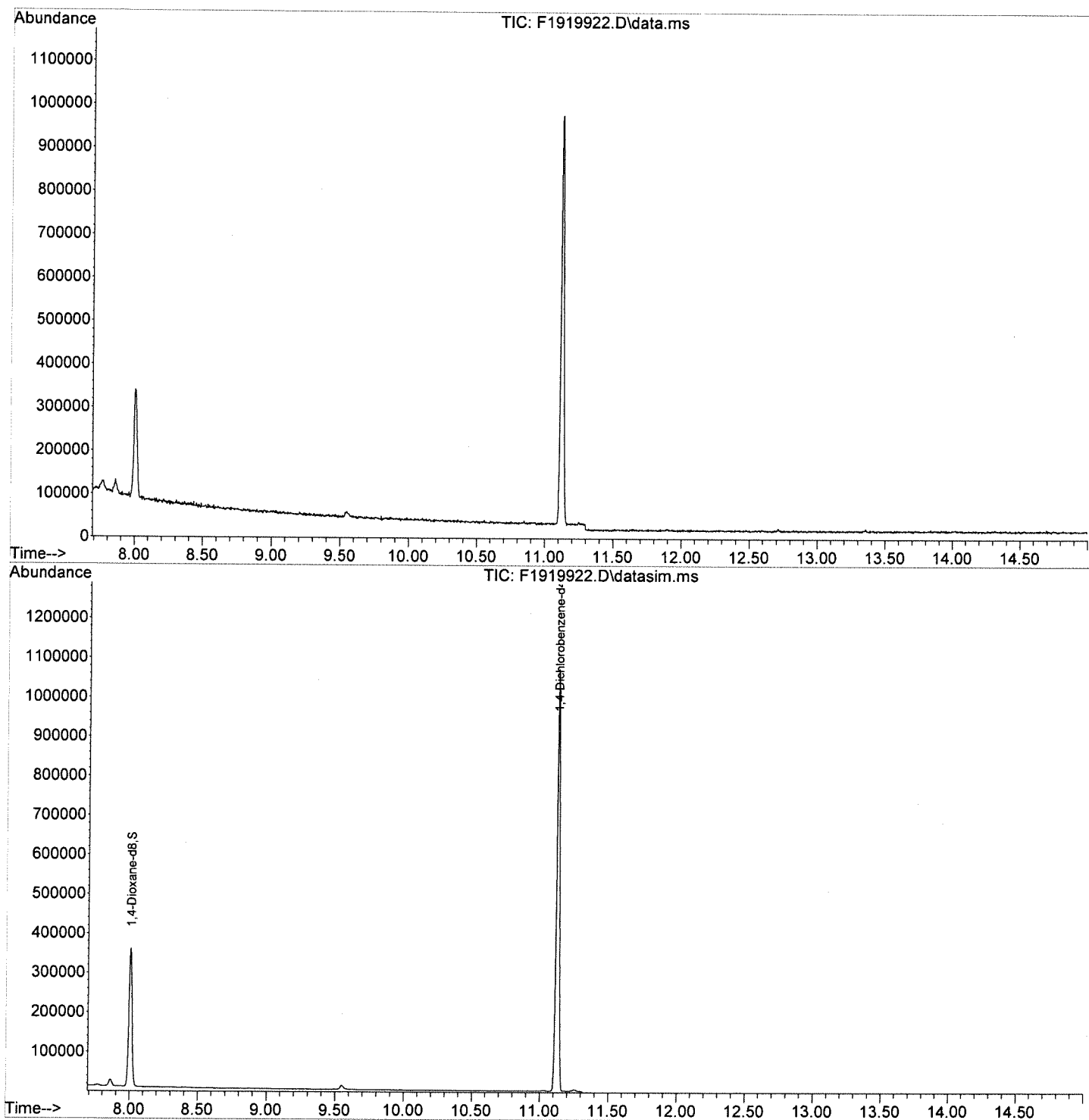
Internal Standards						
1) 1,4-Dichlorobenzene-d4	11.123	150	793751	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	0.000	96	0m	10.000	ug/mL	-7.99
System Monitoring Compounds						
2) 1,4-Dioxane-d8	8.006	96	288901	11.087	ug/mL	0.02
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.	d	Qvalue

(#) = 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
Misc :
ALS Vial : 22 Sample Multiplier: 1

Inst : GCMSSV6

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:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	GCMSSV6	Calibration:	1900232
Lab File ID:	F1922802B.D	Calibration Date:	07/19/19 14:13
Sequence:	S039298	Injection Date:	08/16/19
Lab Sample ID:	S039298-CCV1	Injection Time:	12:35

COMPOUND	TYPE	CONC. (µg/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dioxane	A	10.0	10.6	1.114196	1.185411		6.4	
1,4-Dioxane-d8	A	10.0	9.23	0.3282932	0.3028925		-7.7	

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\F081619\
Data File : F1922802B.D
Acq On : 16 Aug 2019 12:35 pm
Operator : CLA
Sample : DIOX 10 ug/mL
Misc : 1902462 EXP 050719
ALS Vial : 2 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:53:33 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	102	0.00
4 T	1,4-Dioxane	10.000	10.639	-6.4	95	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

CHECKED BY: AUG 19 2019
Irina Raducan

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922802B.D
Acq On : 16 Aug 2019 12:35 pm
Operator : CLA
Sample : DIOX 10 ug/mL
Misc : 1902462 EXP 050719
ALS Vial : 2 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:53:33 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	256031	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	0.000	96	0d	0.000	ug/mL	
Target Compounds						
4) 1,4-Dioxane	8.030	88	303502	10.639	ug/mL	Qvalue 99

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

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922802B.D
Acq On : 16 Aug 2019 12:35 pm
Operator : CLA
Sample : DIOX 10 ug/mL
Misc : 1902462 EXP 050719
ALS Vial : 2 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:53:33 2019

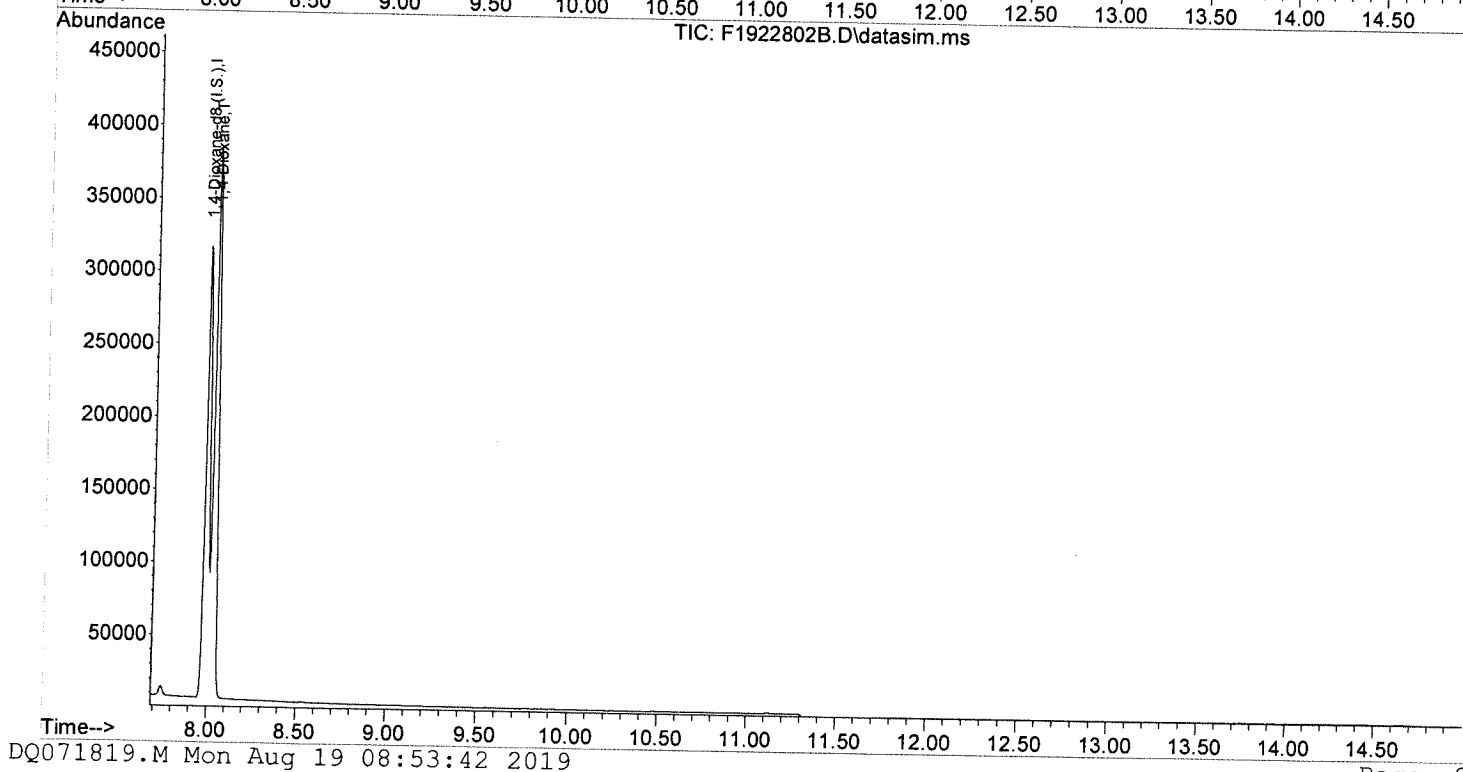
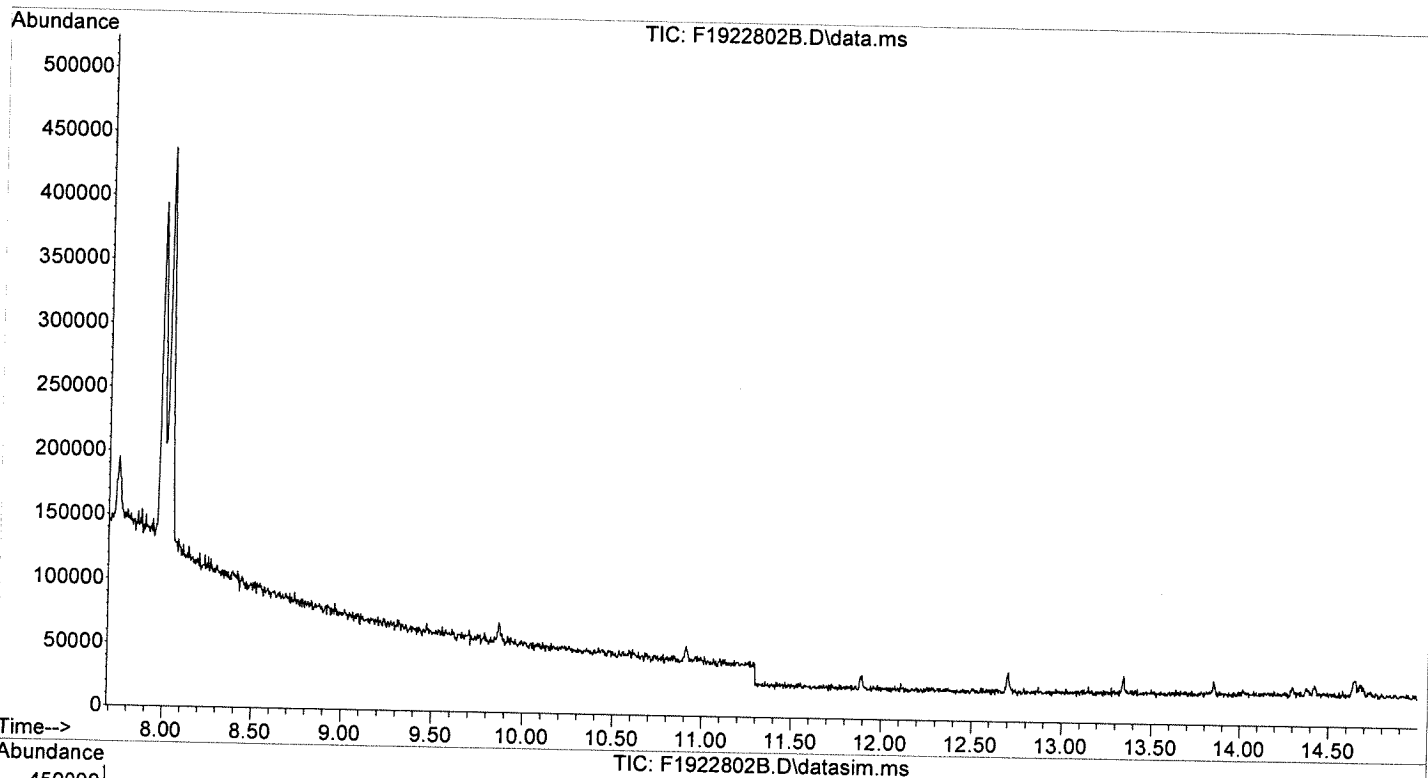
DataAcq Meth:D051518.M

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



Data Path : C:\msdchem\1\data\F081619\
Data File : F1922803.D
Acq On : 16 Aug 2019 12:55 pm
Operator : CLA
Sample : DIOX-D8 10 ug/mL
Misc : 1902463 EXP 090519
ALS Vial : 3 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:53:47 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	90	0.00
2 S	1,4-Dioxane-d8	10.000	9.226	7.7	94	0.00
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

CHECKED BY: AUG 19 2019
Irina Raducan

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922803.D
Acq On : 16 Aug 2019 12:55 pm
Operator : CLA
Sample : DIOX-D8 10 ug/mL
Misc : 1902463 EXP 090519
ALS Vial : 3 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:53:47 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	11.123	150	893723	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	270702	9.226	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.	d	Qvalue

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

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922803.D
Acq On : 16 Aug 2019 12:55 pm
Operator : CLA
Sample : DIOX-D8 10 ug/mL
Misc : 1902463 EXP 090519
ALS Vial : 3 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:53:47 2019

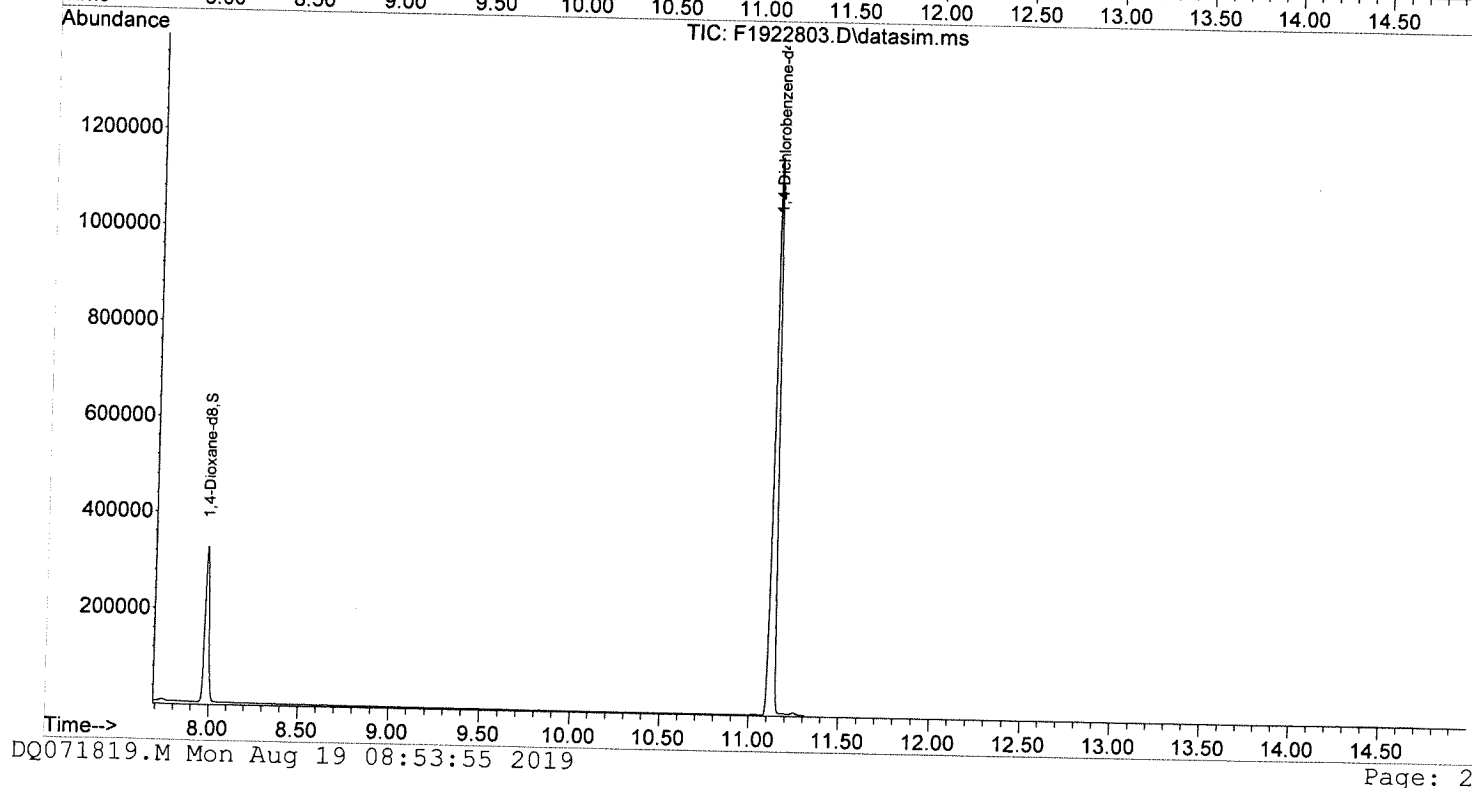
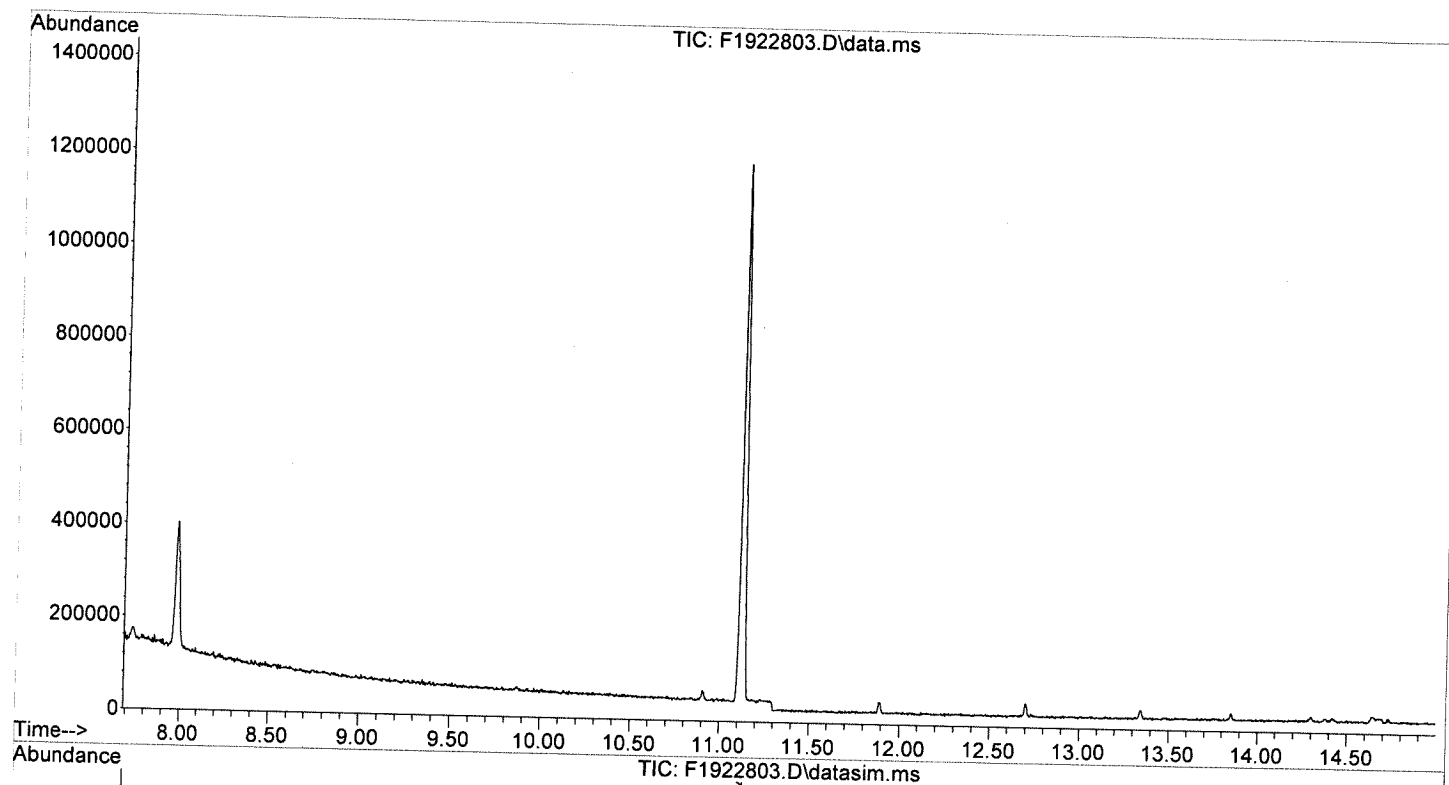
DataAcq Meth:D051518.M

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

529

SW-846 8270D

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Sequence: S039298

Instrument: GCMSSV6

Calibration: 1900232

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S039298-CCV1)			<i>Lab File ID: F1922803.D</i>			<i>Analyzed: 08/16/19 12:35</i>			
1,4-Dichlorobenzene-d4	893723	11.123	989590	11.127	90	50 - 200	-0.0040	+/-0.50	
LCS (B237852-BS1)			<i>Lab File ID: F1922804.D</i>			<i>Analyzed: 08/16/19 13:15</i>			
1,4-Dichlorobenzene-d4	875002	11.12	893723	11.123	98	50 - 200	-0.0030	+/-0.50	
LCS Dup (B237852-BSD1)			<i>Lab File ID: F1922805.D</i>			<i>Analyzed: 08/16/19 13:35</i>			
1,4-Dichlorobenzene-d4	996141	11.12	893723	11.123	111	50 - 200	-0.0030	+/-0.50	
Blank (B237852-BLK1)			<i>Lab File ID: F1922806.D</i>			<i>Analyzed: 08/16/19 13:55</i>			
1,4-Dichlorobenzene-d4	983171	11.12	893723	11.123	110	50 - 200	-0.0030	+/-0.50	
MW-22R (19H0528-04)			<i>Lab File ID: F1922809.D</i>			<i>Analyzed: 08/16/19 14:55</i>			
1,4-Dichlorobenzene-d4	979150	11.12	893723	11.123	110	50 - 200	-0.0030	+/-0.50	
MW-22S (19H0528-06)			<i>Lab File ID: F1922810.D</i>			<i>Analyzed: 08/16/19 15:15</i>			
1,4-Dichlorobenzene-d4	994033	11.12	893723	11.123	111	50 - 200	-0.0030	+/-0.50	
Blind Duplicate (19H0528-07)			<i>Lab File ID: F1922811.D</i>			<i>Analyzed: 08/16/19 15:35</i>			
1,4-Dichlorobenzene-d4	964268	11.12	893723	11.123	108	50 - 200	-0.0030	+/-0.50	
Matrix Spike (B237852-MS1)			<i>Lab File ID: F1922814.D</i>			<i>Analyzed: 08/16/19 16:35</i>			
1,4-Dichlorobenzene-d4	966283	11.123	893723	11.123	108	50 - 200	0.0000	+/-0.50	
Matrix Spike Dup (B237852-MSD1)			<i>Lab File ID: F1922815.D</i>			<i>Analyzed: 08/16/19 16:55</i>			
1,4-Dichlorobenzene-d4	1003822	11.124	893723	11.123	112	50 - 200	0.0010	+/-0.50	

QC DATA

1 - FORM I
ANALYSIS DATA SHEET

531

Blank

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0528
Client: Dvirka And Bartilucci Project: Farrand Controls Site
Matrix: Water Laboratory ID: B237852-BLK1 File ID: F1922806.D
Sampled: Prepared: 08/13/19 04:55 Analyzed: 08/16/19 13:55
Solids: Preparation: SW-846 3510C Dilution:
Batch: B237852 Sequence: S039298 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	

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922806.D
Acq On : 16 Aug 2019 1:55 pm
Operator : CLA
Sample : B237852-BLK1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:05 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	11.120	150	983171	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	79104	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.989	96	79104	2.451	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	0.000		0	N.D.		Qvalue

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

CHECKED BY: AUG 19 2019
Irina Raducan

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922806.D
Acq On : 16 Aug 2019 1:55 pm
Operator : CLA
Sample : B237852-BLK1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:05 2019

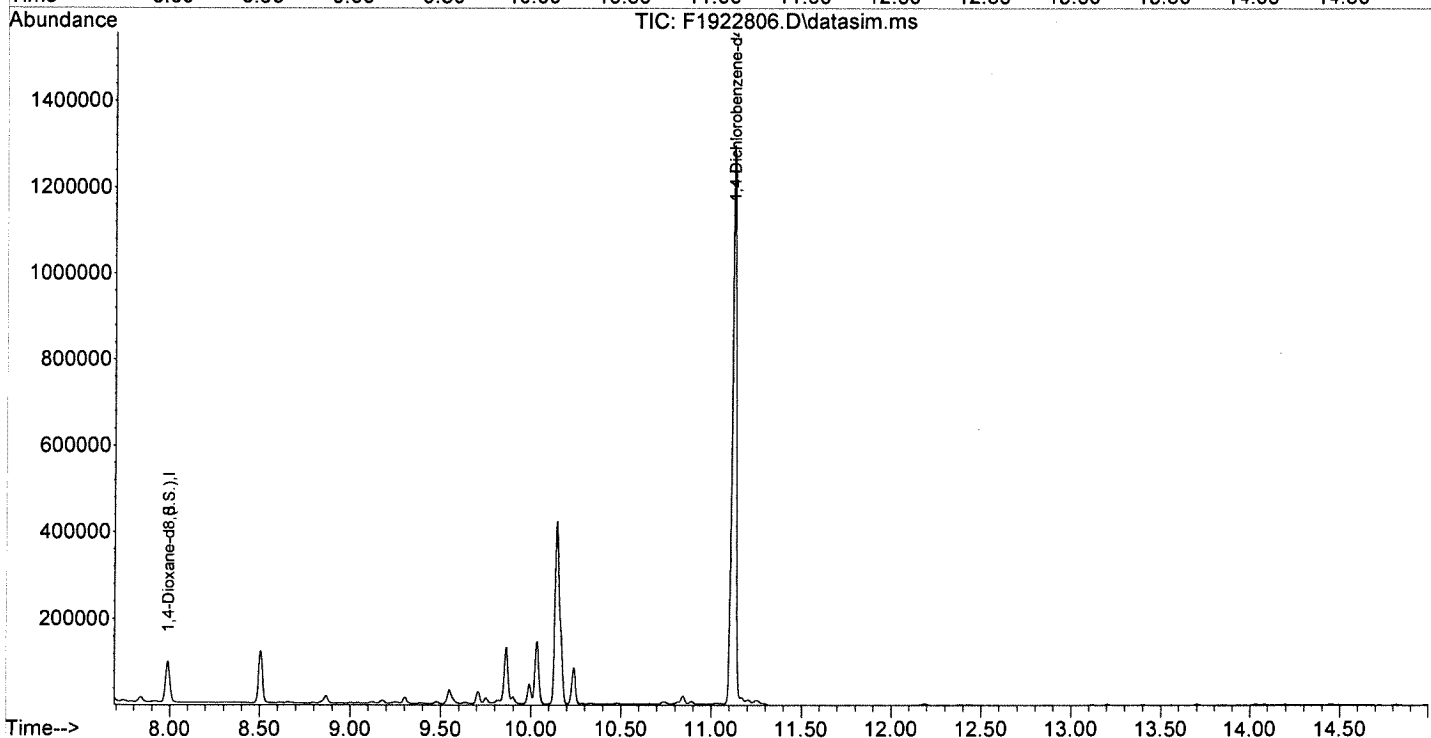
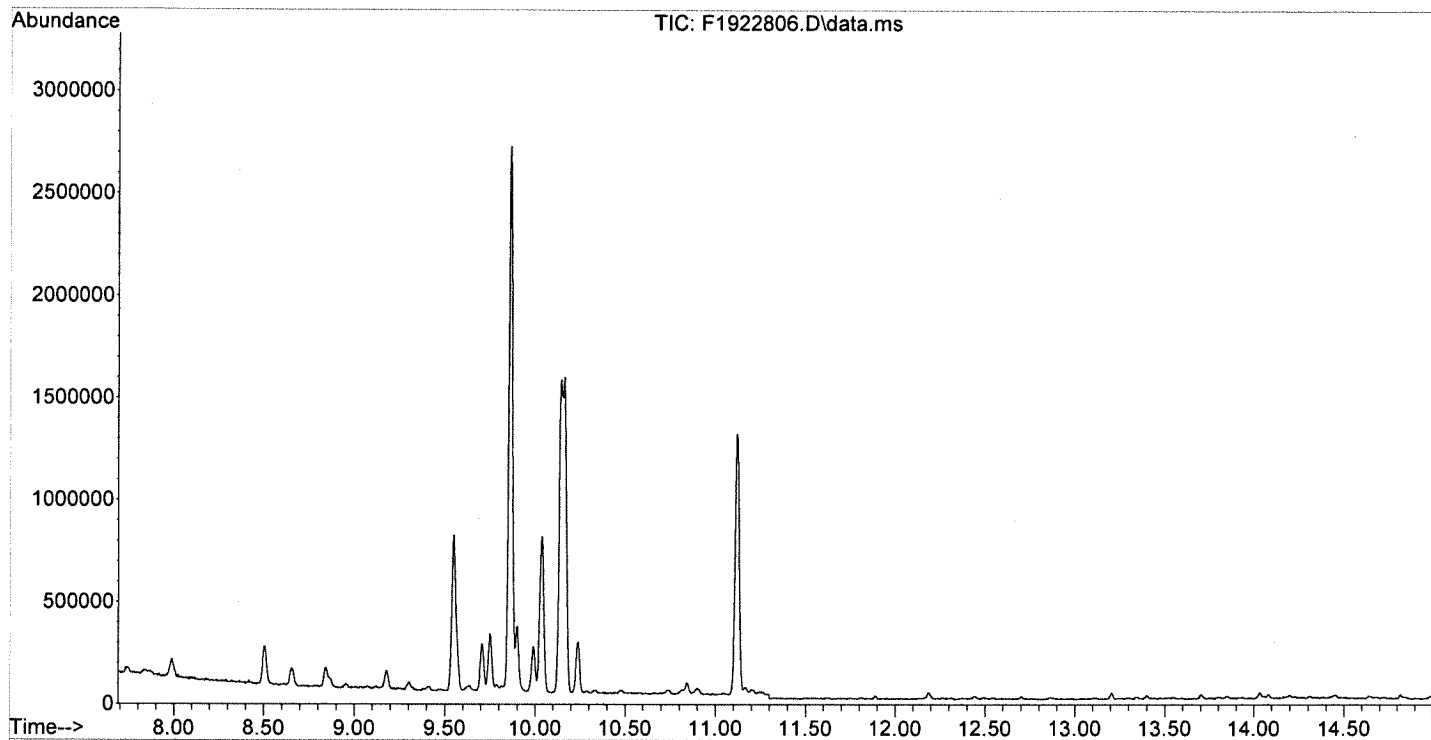
DataAcq Meth:D051518.M

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

534

Laboratory:	Con-Test Analytical Laboratory			Work Order:	19H0528	
Client:	Dvirka And Bartilucci			Project:	Farrand Controls Site	
Matrix:	Water	Laboratory ID:	B237852-BS1	File ID:	F1922804.D	
Sampled:		Prepared:	08/13/19 04:55	Analyzed:	08/16/19 13:15	
Solids:		Preparation:	SW-846 3510C	Dilution:		
Batch:	B237852	Sequence:	S039298	Calibration:	1900232	Instrument: GCMSSV6
Column:	1					

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	9.75	0.033	0.20	

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922804.D
Acq On : 16 Aug 2019 1:15 pm
Operator : CLA
Sample : B237852-BS1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:01 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	11.120	150	875002	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	7.993	96	84737	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.993	96	84737	2.950	ug/mL	0.00
Target Compounds						
4] 1,4-Dioxane	8.037	88	92055	9.750	ug/mL	Qvalue 99

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

CHECKED BY: AUG 19 2019
Irina Raducan

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922804.D
Acq On : 16 Aug 2019 1:15 pm
Operator : CLA
Sample : B237852-BS1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:01 2019

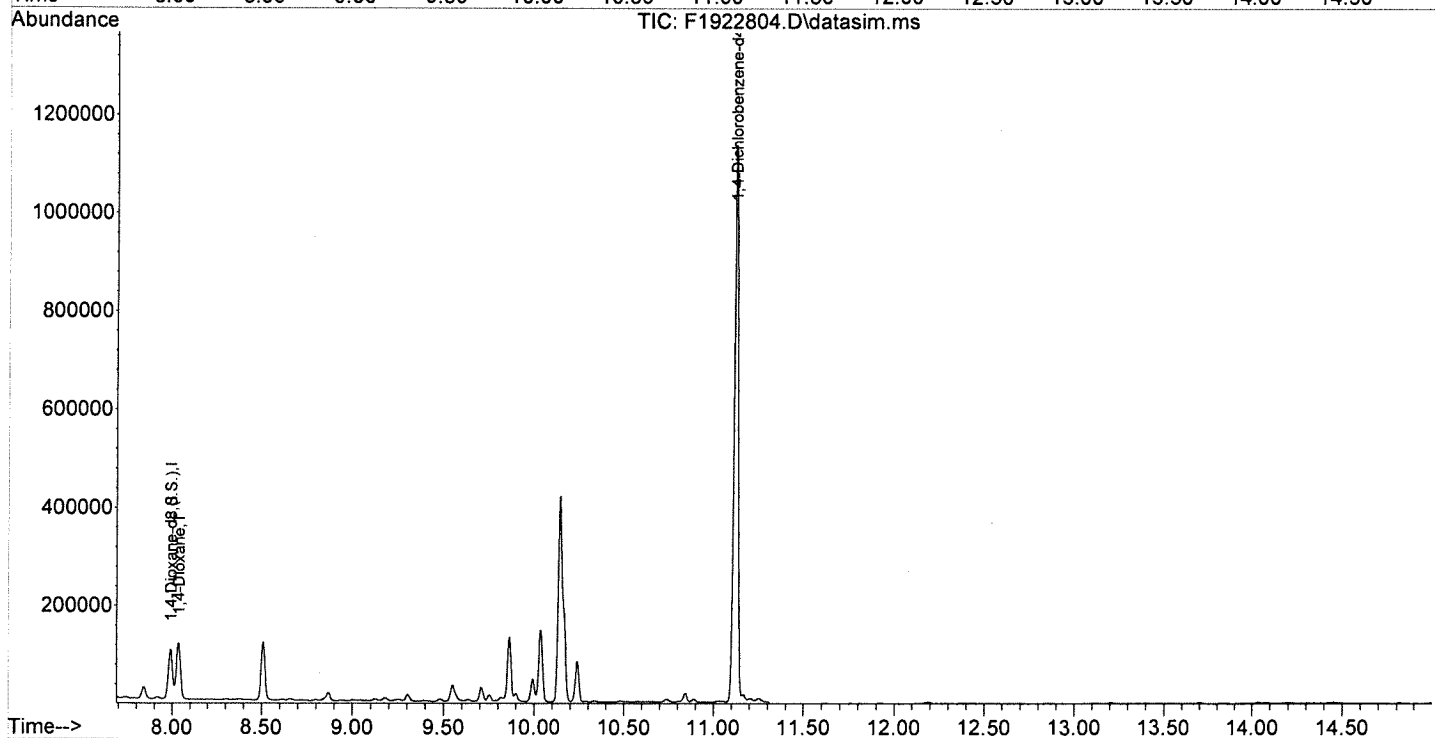
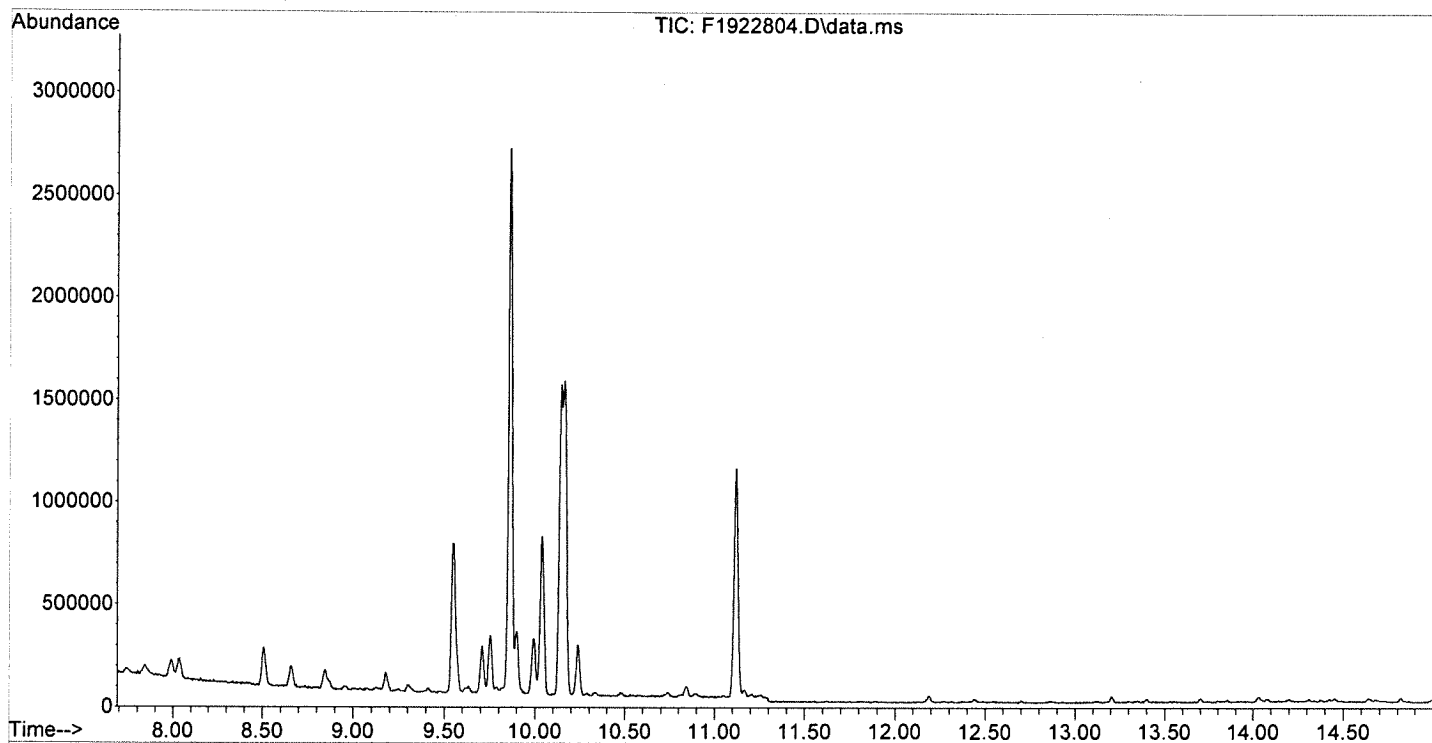
DataAcq Meth:D051518.M

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

537

LCS Dup

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0528
Client: Dvirka And Bartilucci Project: Farrand Controls Site
Matrix: Water Laboratory ID: B237852-BSD1 File ID: F1922805.D
Sampled: Prepared: 08/13/19 04:55 Analyzed: 08/16/19 13:35
Solids: Preparation: SW-846 3510C Dilution:
Batch: B237852 Sequence: S039298 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	

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922805.D
Acq On : 16 Aug 2019 1:35 pm
Operator : CLA
Sample : B237852-BSD1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:03 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	11.120	150	996141	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	7.996	96	90291	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.996	96	90291	2.761	ug/mL	0.00
Target Compounds						
4] 1,4-Dioxane	8.040	88	102256	10.164	ug/mL	Qvalue 98

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

CHECKED BY: AUG 19 2019
Irina Raducan

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922805.D
Acq On : 16 Aug 2019 1:35 pm
Operator : CLA
Sample : B237852-BSD1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:03 2019

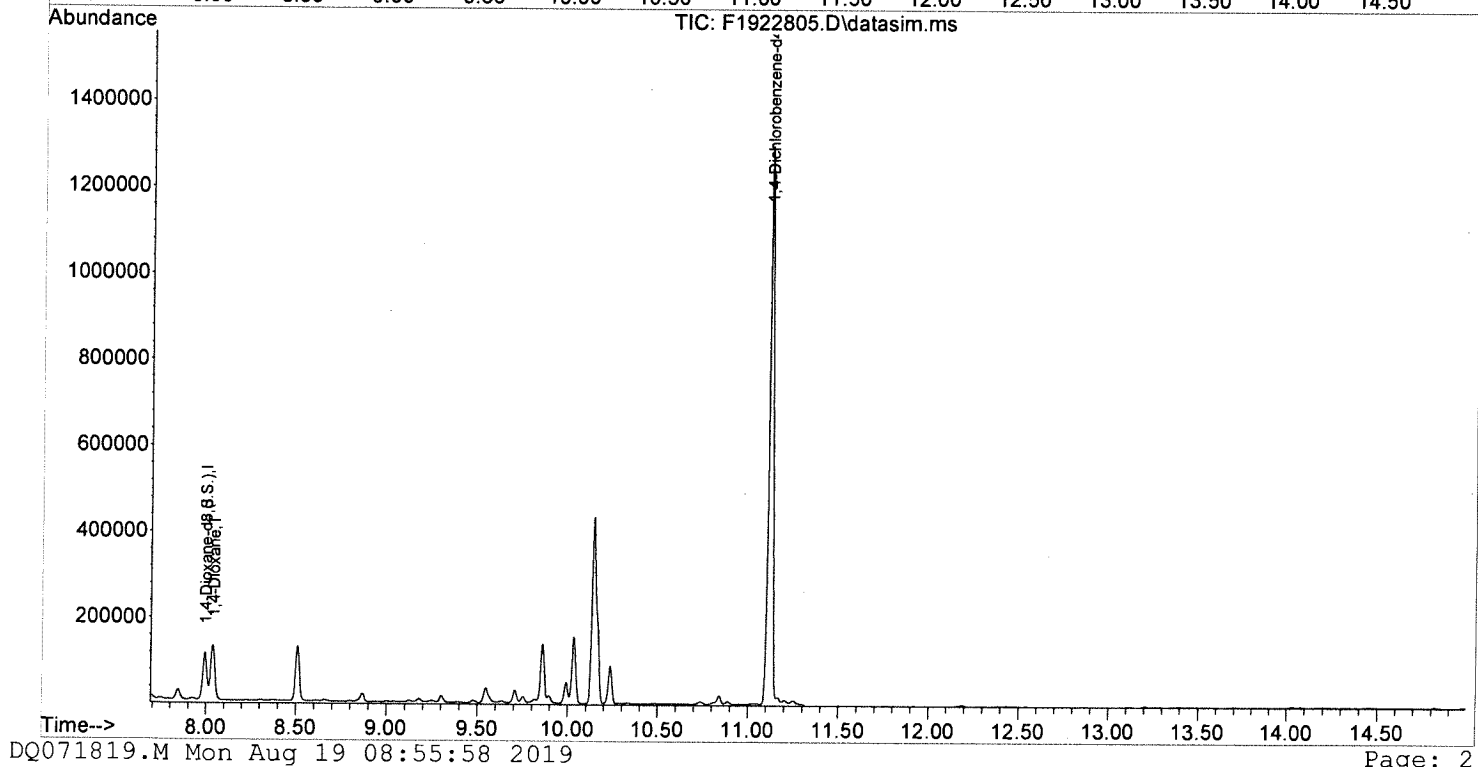
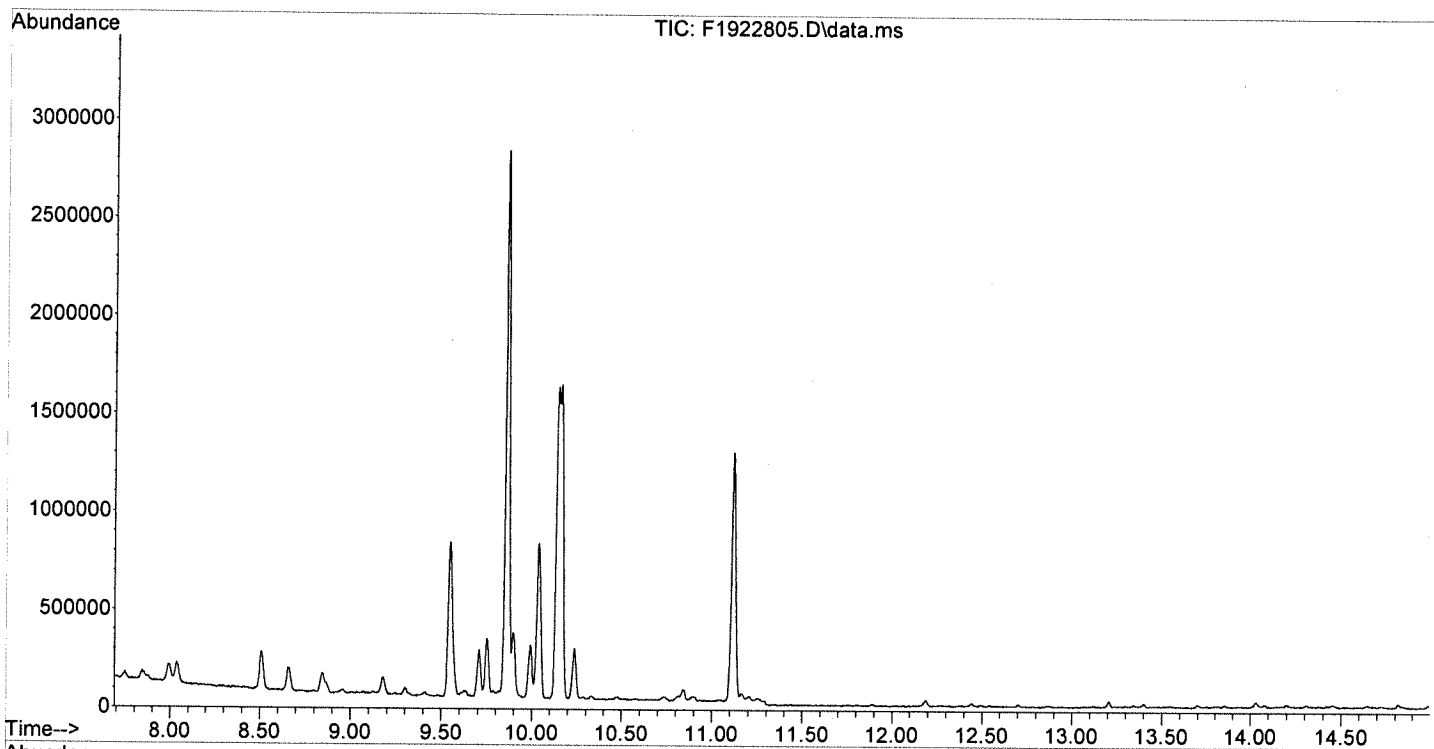
DataAcq Meth:D051518.M

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

540

Matrix Spike

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0528
Client: Dvirka And Bartilucci Project: Farrand Controls Site
Matrix: Water Laboratory ID: B237852-MS1 File ID: F1922814.D
Sampled: Prepared: 08/13/19 04:55 Analyzed: 08/16/19 16:35
Solids: Preparation: SW-846 3510C Dilution:
Batch: B237852 Sequence: S039298 Calibration: 1900232 Instrument: GCMSSV6
Column: 1

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	10.6	0.031	0.19	

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922814.D
Acq On : 16 Aug 2019 4:35 pm
Operator : CLA
Sample : B237852-MS1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:21 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	11.123	150	966283	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	69307	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.989	96	69307	2.185	ug/mL	0.00
Target Compounds						
4) 1,4-Dioxane	8.033	88	85952	11.131	ug/mL	Qvalue 99

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

CHECKED BY: AUG 19 2019
Irina Raducan

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922814.D
Acq On : 16 Aug 2019 4:35 pm
Operator : CLA
Sample : B237852-MS1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:21 2019

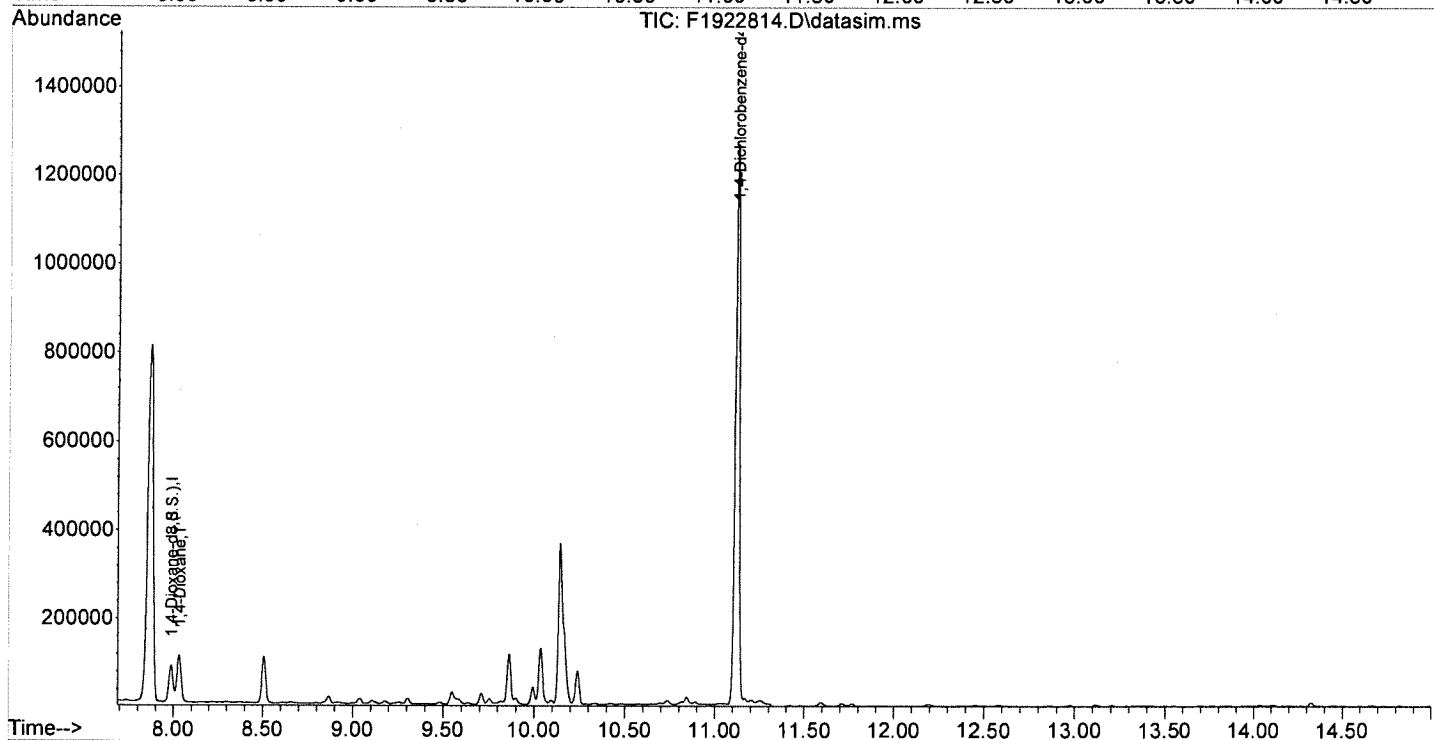
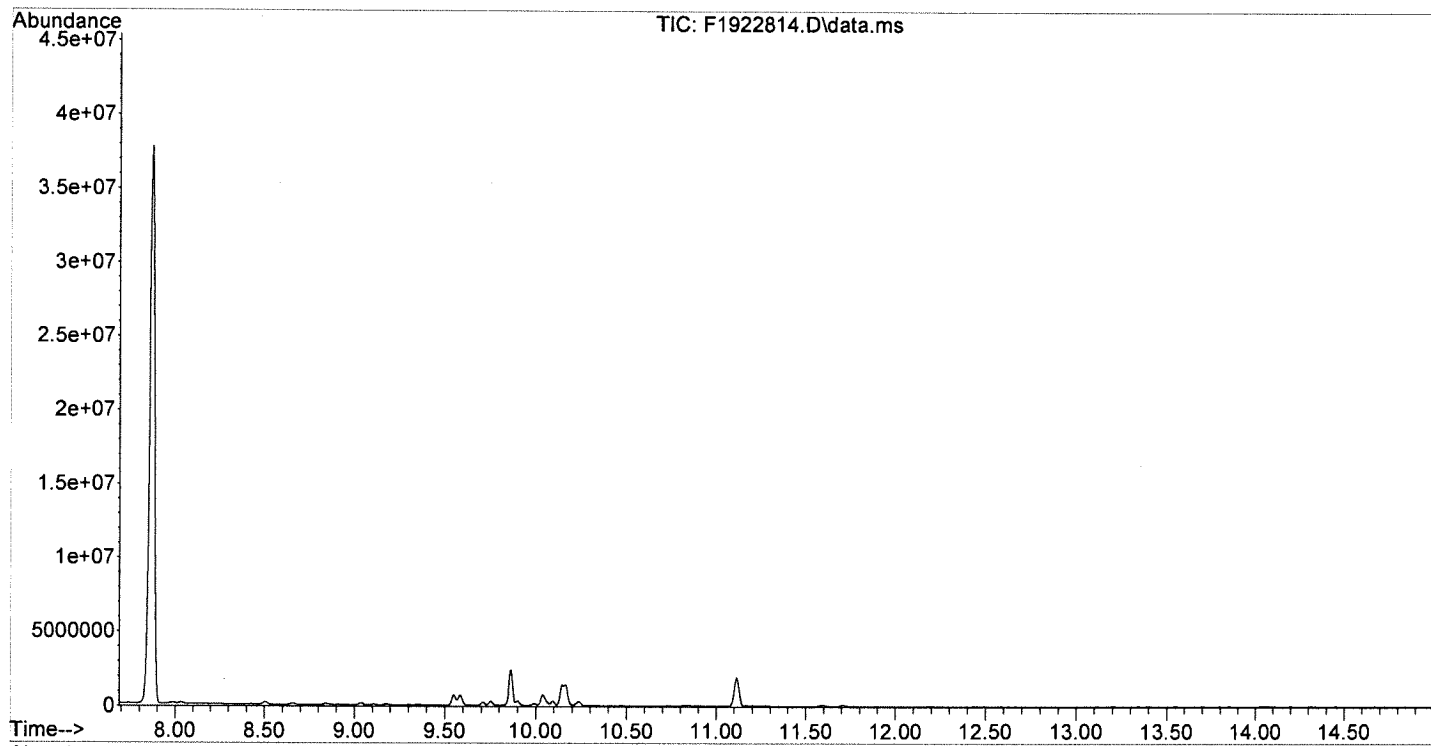
DataAcq Meth:D051518.M

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

543

Matrix Spike Dup

Laboratory: Con-Test Analytical Laboratory Work Order: 19H0528
Client: Dvirka And Bartilucci Project: Farrand Controls Site
Matrix: Water Laboratory ID: B237852-MSD1 File ID: F1922815.D
Sampled: Prepared: 08/13/19 04:55 Analyzed: 08/16/19 16:55
Solids: Preparation: SW-846 3510C Dilution:
Batch: B237852 Sequence: S039298 Calibration: 1900232 Instrument: GCMSSV6
Column: 1

CAS NO.	COMPOUND	CONC. (µg/L)	MDL	RL	Q
123-91-1	1,4-Dioxane	10.7	0.031	0.19	

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922815.D
Acq On : 16 Aug 2019 4:55 pm
Operator : CLA
Sample : B237852-MSD1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:23 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	11.124	150	1003822	10.000	ug/mL	0.00
3) 1,4-Dioxane-d8 (I.S.)	7.989	96	77515	10.000	ug/mL	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	7.989	96	77515	2.352	ug/mL	0.00
Target Compounds						
4] 1,4-Dioxane	8.033	88	97311	11.267	ug/mL	Qvalue 99

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

CHECKED BY: AUG 19 2019
Irina Radugin

Data Path : C:\msdchem\1\data\F081619\
Data File : F1922815.D
Acq On : 16 Aug 2019 4:55 pm
Operator : CLA
Sample : B237852-MSD1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Inst : GCMSSV6

Quant Time: Aug 19 08:41:23 2019

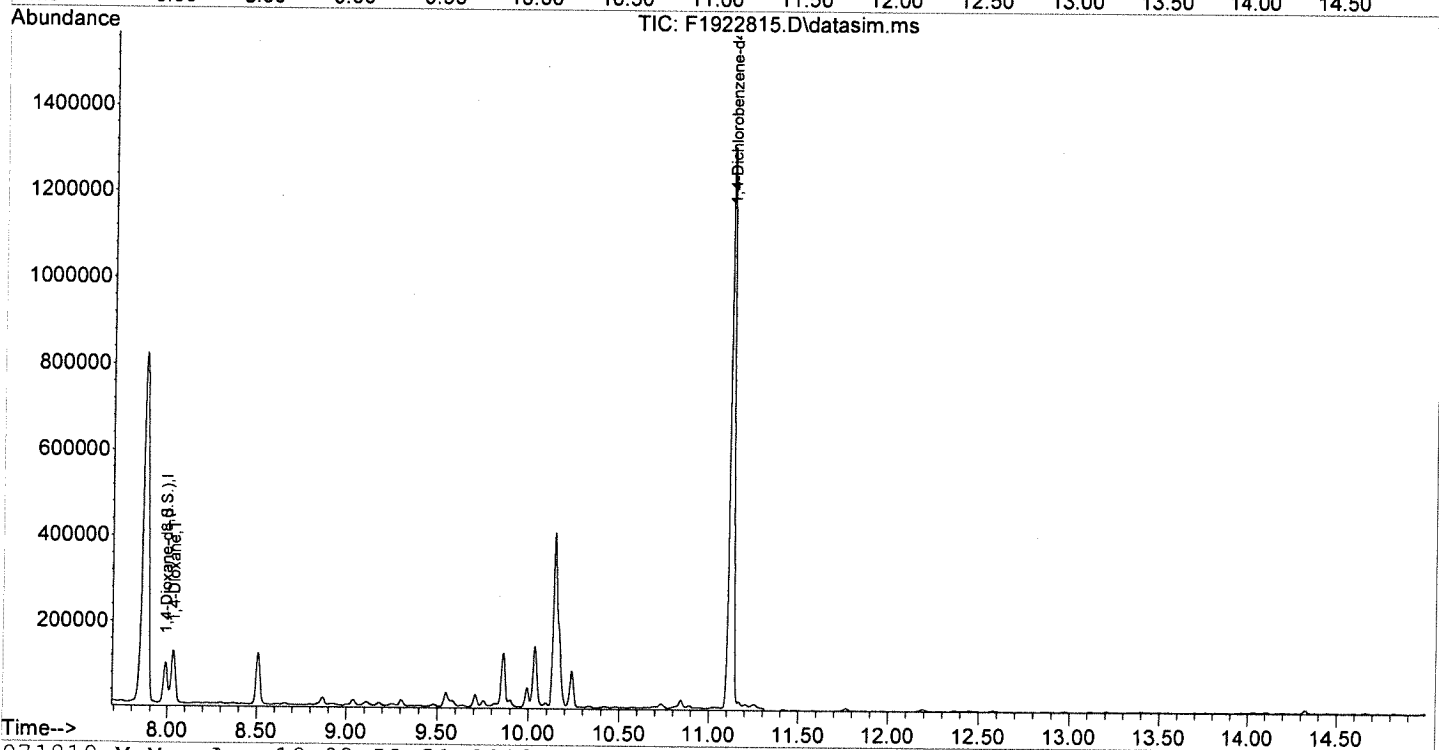
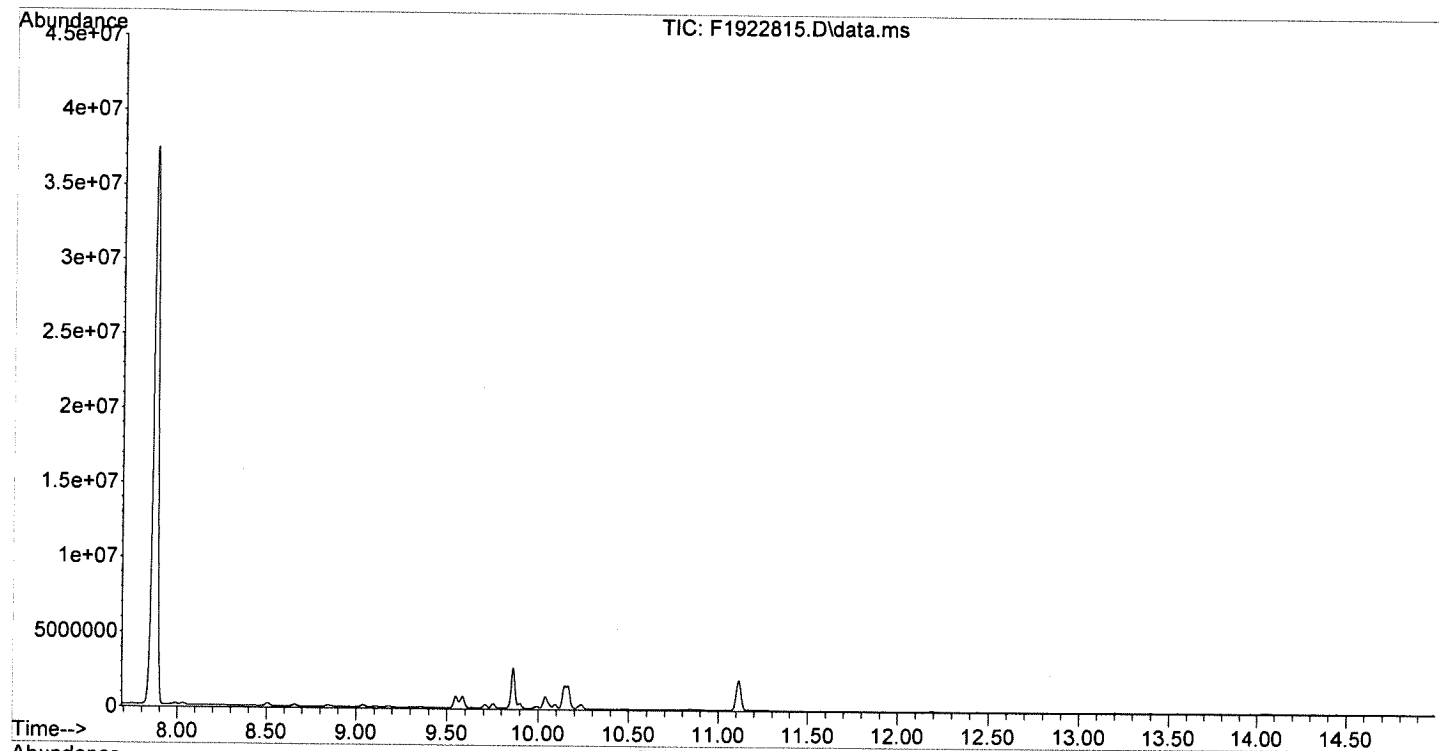
DataAcq Meth:D051518.M

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

546

Printed: 8/13/2019 6:58:44AM

Analysis
1,4-Dioxane SIM

B237852

Con-Test Analytical Laboratory

Prepared using: SW-846 3510C

Matrix: Water

5

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	TAT
B237852-BLK1	Blank			MPH 8/16/19	7	1000	1.0		100		
B237852-BS1	LCS							100	100		
B237852-BSD1	LCS Dup							100	100		
B237852-MS1	Matrix Spike [19H0528-04]							100	100		
B237852-MSD1	Matrix Spike Dup [19H0528-04]							100	100		
19H0483-01	MW-301	08/19/19	08/15/19			1050			100		
19H0484-01	KLF-B19-1 OW	08/19/19	08/15/19			1040			100		7
19H0528-04	MW-22R	08/23/19	08/15/19			1030			100		7
19H0528-06	MW-22S WA	08/23/19	08/15/19			1055			100	MS/MSD	10
19H0528-07	Blind Duplicate L	08/23/19	08/15/19		7	1040			100		10
19H0576-03	MW-21R LB	08/21/19	08/16/19						100		10
19H0576-05	MW-21S L	08/21/19	08/16/19			1020			100		7

Start Date/Time _____

Stop Date/Time _____

Standard ID#	Description	Manufacture Lot#
1904204	Filter Paper (VWR 100) 12.5cm	16887239
1906430	Methylene Chloride, 4L Bottle	DV815-US
1907355	Sodium Sulfate (Baked)	Sodium Sulfate/1
1907493	Acetone	DW590-US

SPK
HR2

SPK
SUC
WIT
MPH
AVF

8/13/19
Date

SUC + HR2
Extracted By

8/13/19
Date

Injection Log

C:\msdchem\1\data\F081619\

Date		Filename	Lab ID	Sample Info
16 Aug 2019	11:21 am	F1922801.D	TUNE 25 ng	1902259 EXP 093019
16 Aug 2019	11:48 am	F1922802.D	DIOX 10 ug/mL	1902462 EXP 050719
16 Aug 2019	12:08 pm	F1922801B.D	TUNE 25 ng	1902259 EXP 093019
16 Aug 2019	12:35 pm	F1922802B.D	DIOX 10 ug/mL	1902462 EXP 050719
16 Aug 2019	12:55 pm	F1922803.D	DIOX-D8 10 ug/mL	1902463 EXP 090519
16 Aug 2019	1:15 pm	F1922804.D	B237852-BS1	
16 Aug 2019	1:35 pm	F1922805.D	B237852-BSD1	
16 Aug 2019	1:55 pm	F1922806.D	B237852-BLK1	
16 Aug 2019	2:15 pm	F1922807.D	19H0483-01	
16 Aug 2019	2:35 pm	F1922808.D	19H0484-01	
16 Aug 2019	2:55 pm	F1922809.D	19H0528-04	
16 Aug 2019	3:15 pm	F1922810.D	19H0528-06	
16 Aug 2019	3:35 pm	F1922811.D	19H0528-07	
16 Aug 2019	3:55 pm	F1922812.D	19H0576-03	
16 Aug 2019	4:15 pm	F1922813.D	19H0576-05	
16 Aug 2019	4:35 pm	F1922814.D	B237852-MS1	
16 Aug 2019	4:55 pm	F1922815.D	B237852-MSD1	
16 Aug 2019	5:15 pm	F1922816.D	1908252 MDL SPK	4X
16 Aug 2019	5:33 pm	F1922817.D	B238267-SRM2	
16 Aug 2019	6:10 pm	F1922818.D	b238252-SRM1	
18 Aug 2019	8:22 am	F1922819.D	B238267-SRM1	glassware

5039298

HPLC

SAMPLE DATA

1 - FORM I

ANALYSIS DATA SHEET

550

MW-22R

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-04
		File ID:	19H0528-04.d
Sampled:	08/08/19 11:40	Prepared:	08/19/19 00:00
		Analyzed:	08/21/19 12:20
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)	5.0	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)	4.2	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 (PFTTrDA)		2.0	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)		2.0	2.0	

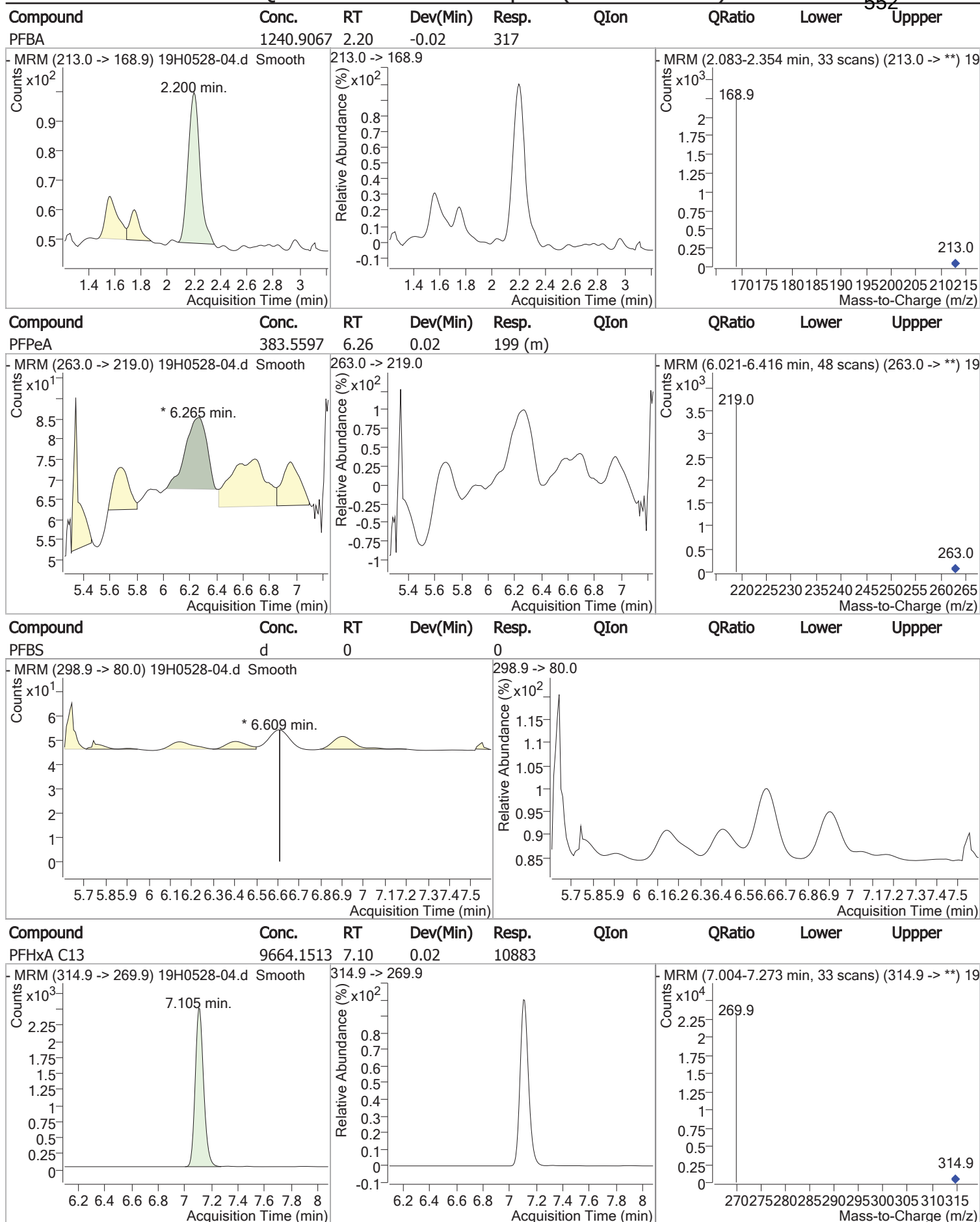
Quantitation Results Report (Not Reviewed)

Data File	19H0528-04.d	Operator	
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Sample Name	19H0528-04	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			

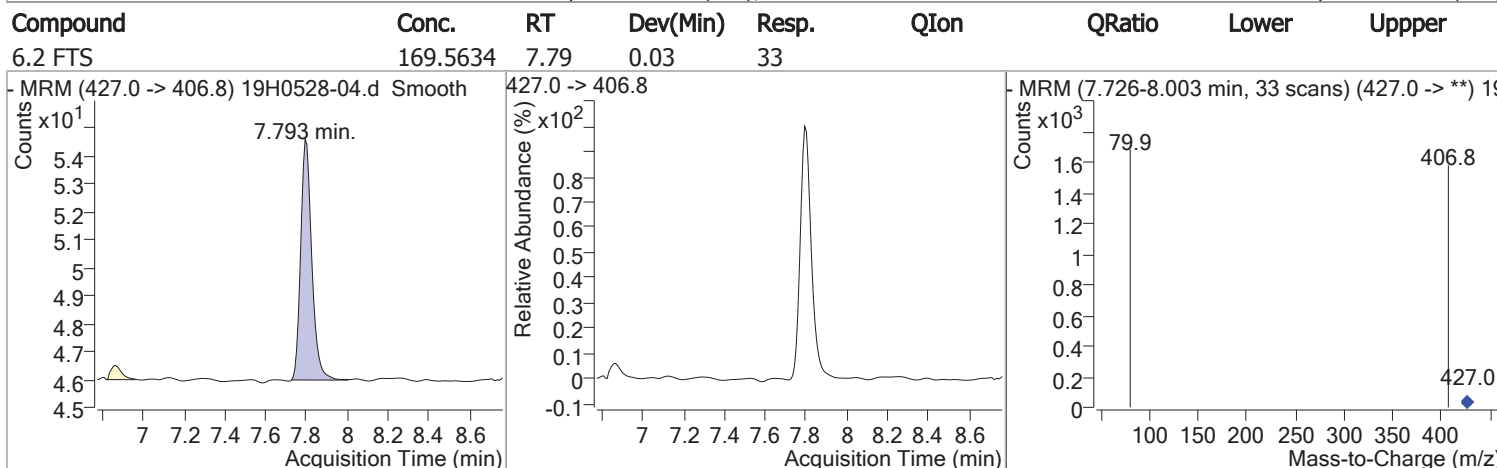
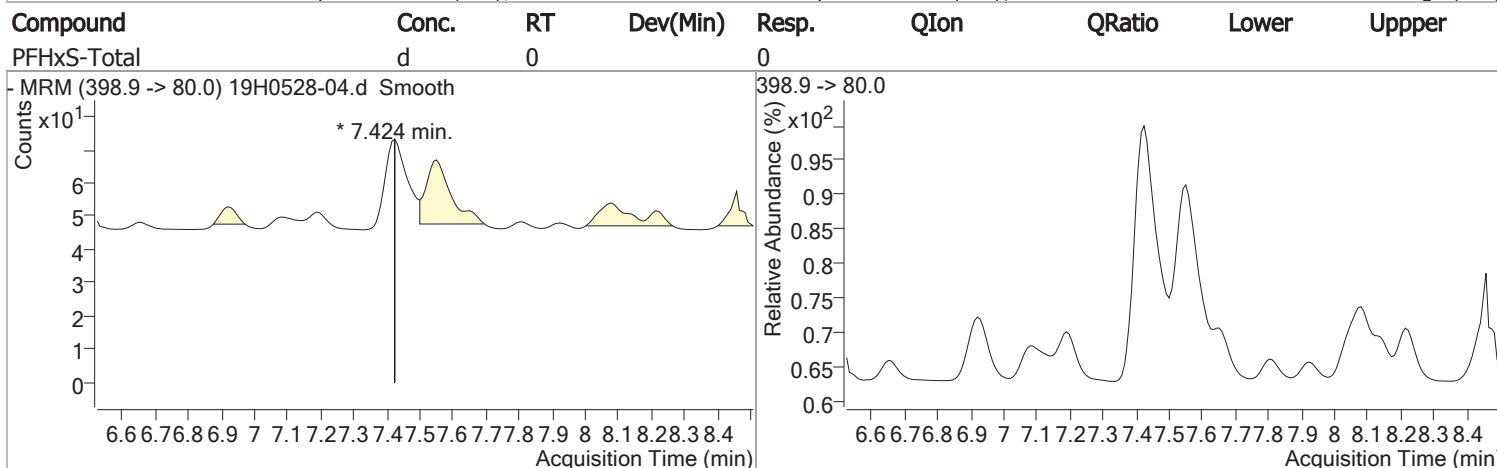
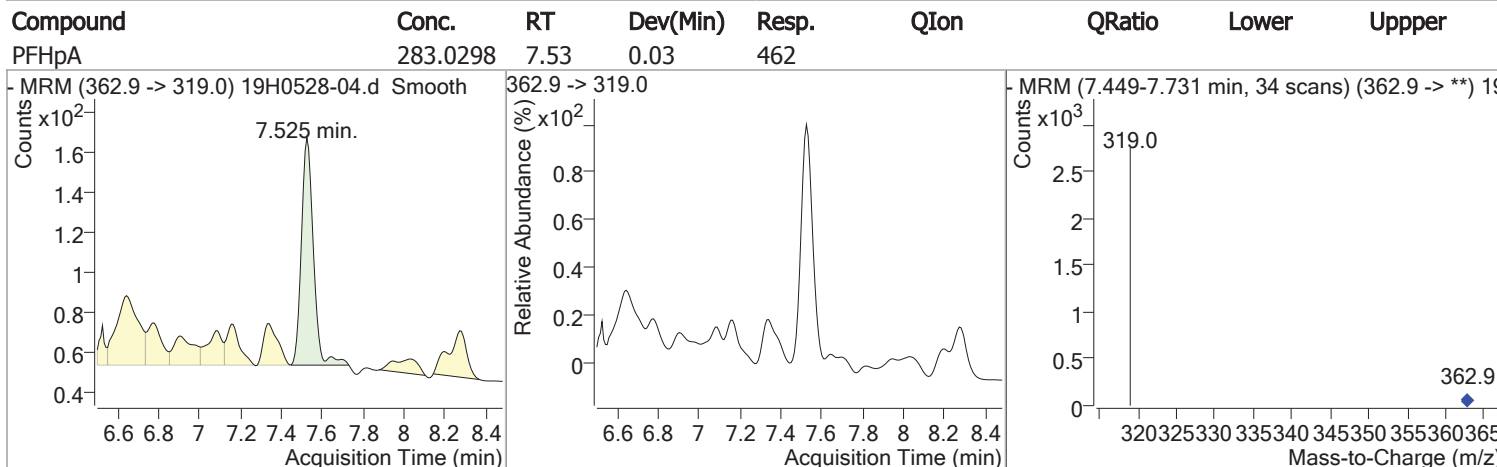
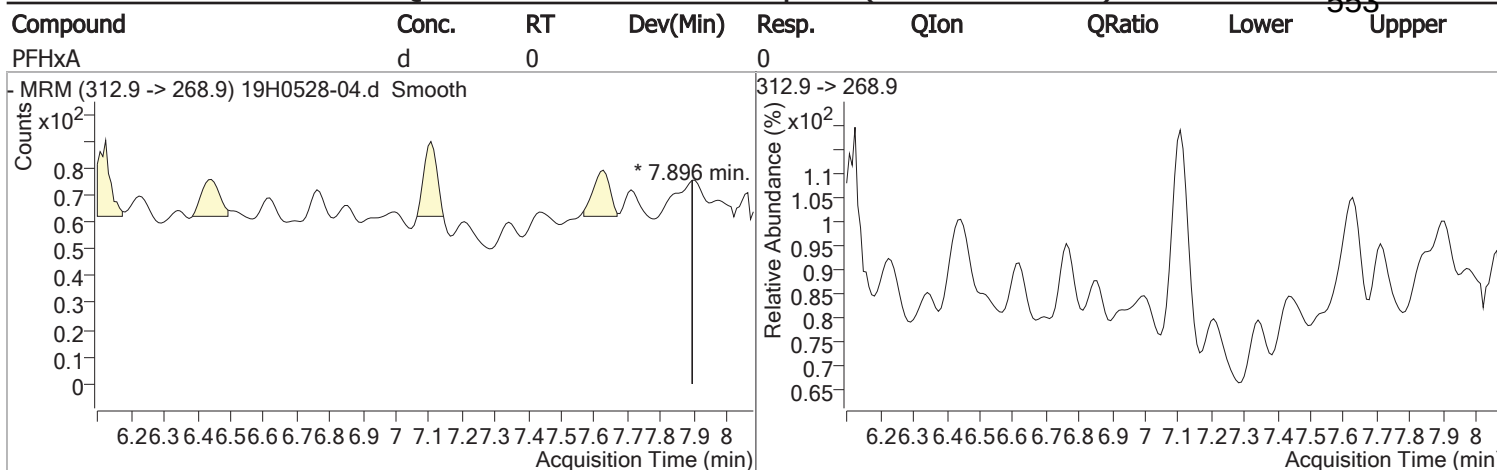
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.810	416.9 -> 371.9	15788	10000.0000	pg/ml	0.034
M PFOS C13	8.035	502.9 -> 80.0	23229	28700.0000	pg/ml	0.042
M d3-N-MeFOSAA	8.294	573.2 -> 419.0	10208	40000.0000	pg/ml	0.034
System Monitoring Compounds						
S PFHxA C13	7.105	314.9 -> 269.9	10883	9664.1513	pg/ml	0.017
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 96.64%		
S PFDA C13	8.211	514.9 -> 469.9	12763	7764.9452	pg/ml	0.034
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 77.65%		
S d5-N-MeFOSAA	8.369	589.2 -> 419.0	4868	20165.6175	pg/ml	0.034
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 50.41%		*
Target Compounds						QValue
T PFBA	2.200	213.0 -> 168.9	317	1240.9067	pg/ml	100
T PFPeA	6.265	263.0 -> 219.0	199	383.5597	pg/ml m	100
T PFBS	6.609	298.9 -> 80.0	0	0.0000	pg/ml md	1
T PFHxA	7.896	312.9 -> 268.9	0	0.0000	pg/ml md	1
T PFHpA	7.525	362.9 -> 319.0	462	283.0298	pg/ml	100
T PFHxS-Total	7.424	398.9 -> 80.0	0	0.0000	pg/ml md	1
T 6.2 FTS	7.793	427.0 -> 406.8	33	169.5634	pg/ml	100
T PFOA-Total	7.810	412.9 -> 368.9	2168	1045.8960	pg/ml	100
T PFHpS	7.843	449.0 -> 79.7	0	0.0000	pg/ml md	1
T PFOS-Total	8.027	498.9 -> 80.0	406	337.5933	pg/ml m	100
T PFNA	8.801	462.9 -> 418.9	0	0.0000	pg/ml md	1
T 8.2 FTS	7.756	527.0 -> 81.0	0	0.0000	pg/ml md	1
T PFDA	7.337	513.1 -> 469.0	0	0.0000	pg/ml md	1
T N-MeFOSAA	8.361	570.2 -> 419.1	0	0.0000	pg/ml md	1
T FOSA	9.230	497.9 -> 77.9	0	0.0000	pg/ml md	1
T PFDS	8.310	599.0 -> 80.0	0	0.0000	pg/ml md	1
T PFUnA	8.681	563.1 -> 519.0	0	0.0000	pg/ml md	1
T N-EtFOSAA	8.235	584.2 -> 419.0	0	0.0000	pg/ml md	1
T PFDoA	8.360	613.1 -> 569.0	0	0.0000	pg/ml md	1
T PFTrDA	8.999	663.1 -> 619.0	0	0.0000	pg/ml md	1
T PFTA	9.511	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

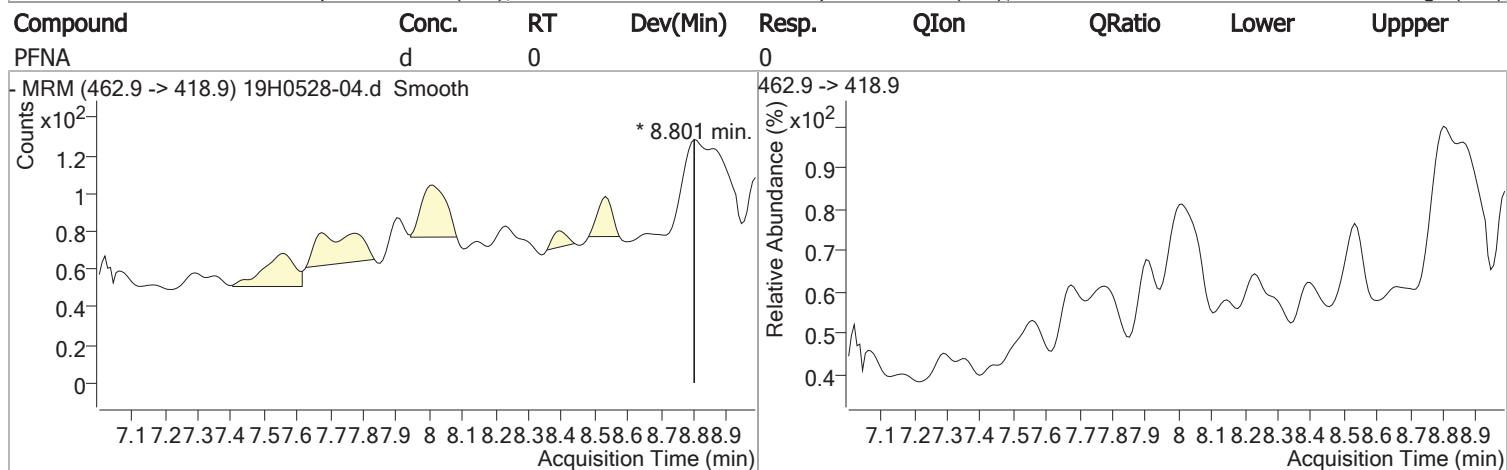
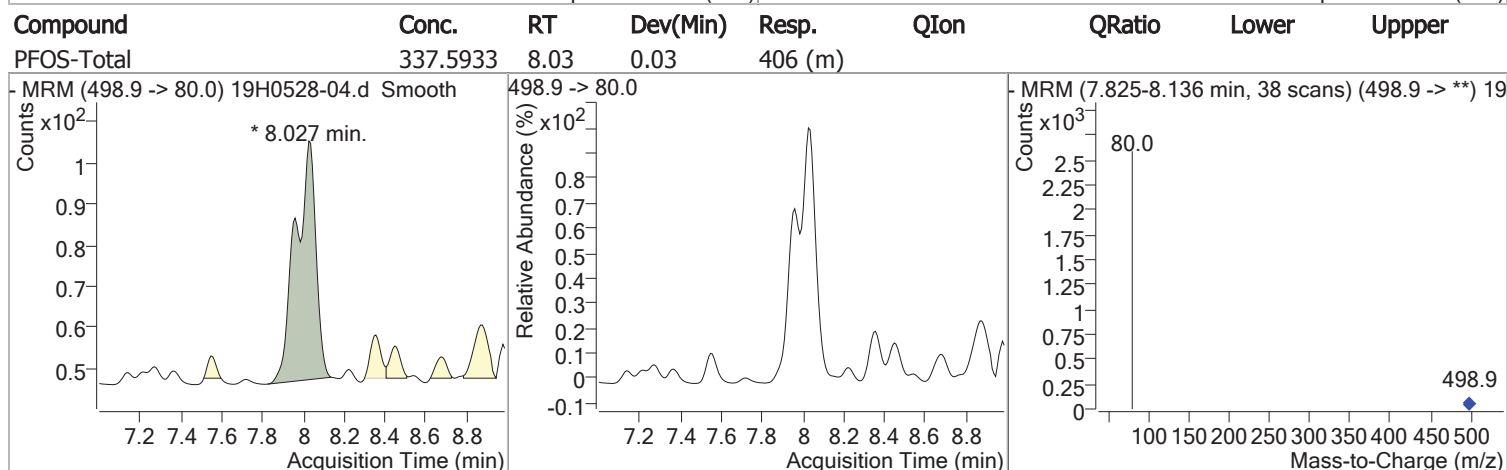
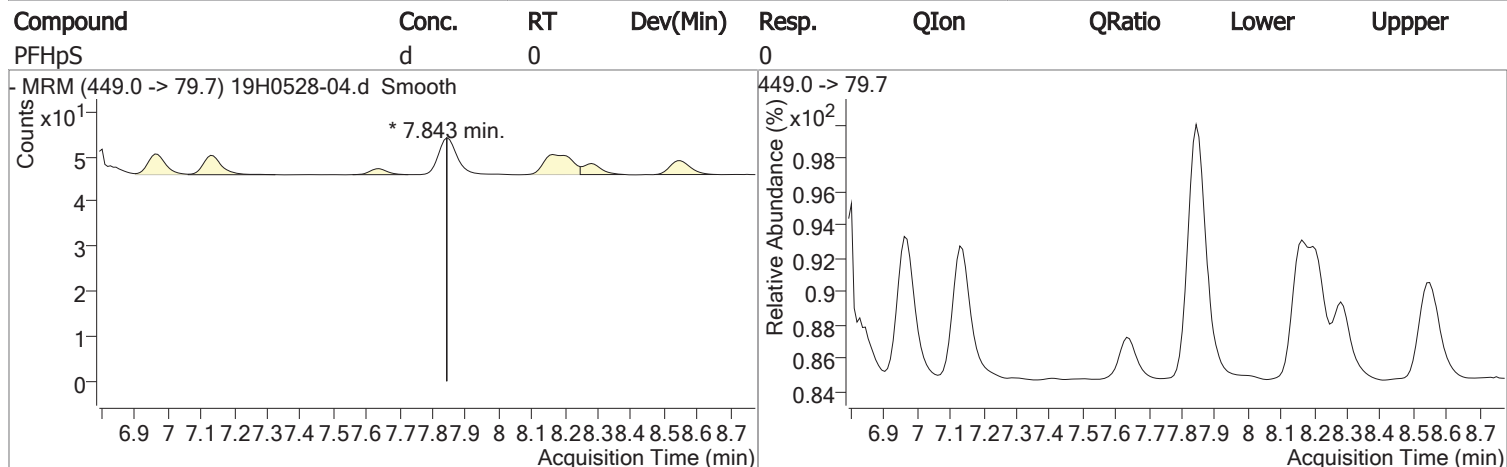
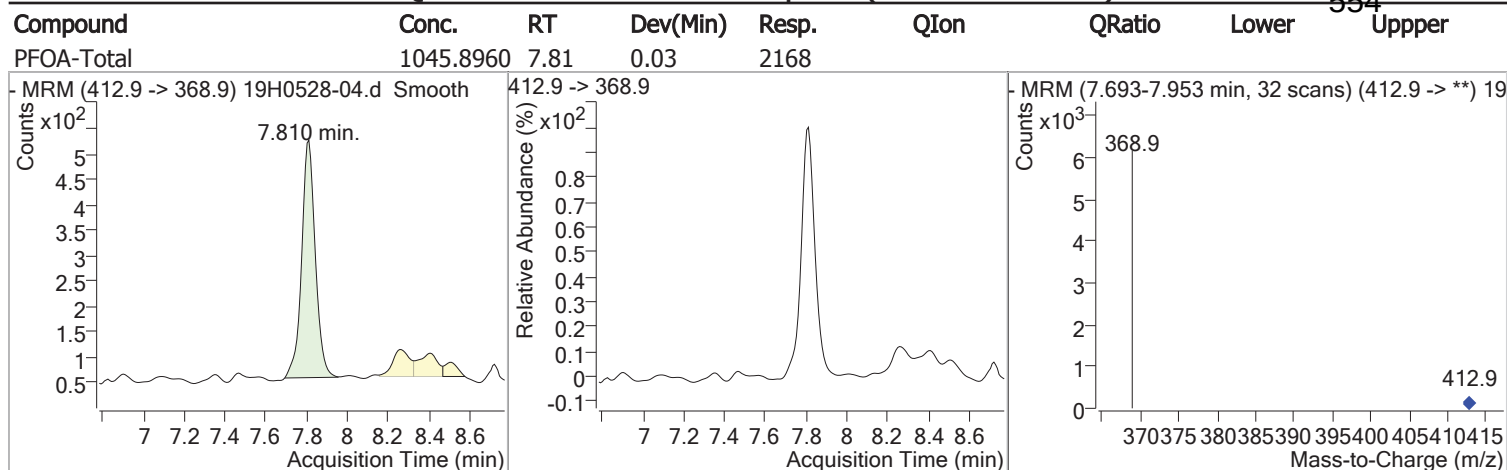
Quantitation Results Report (Not Reviewed)



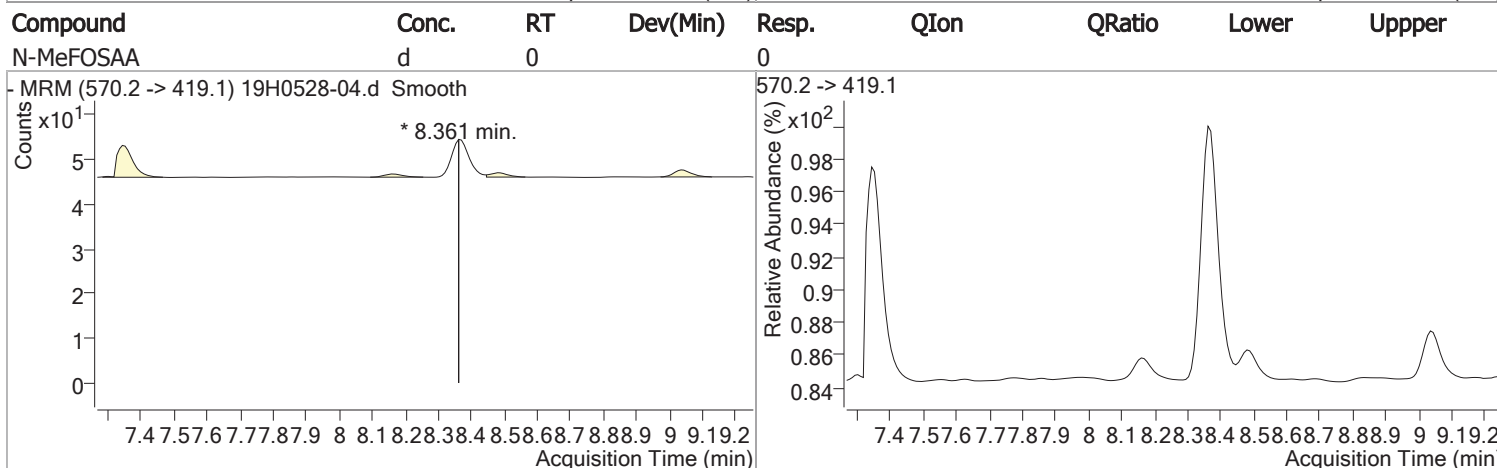
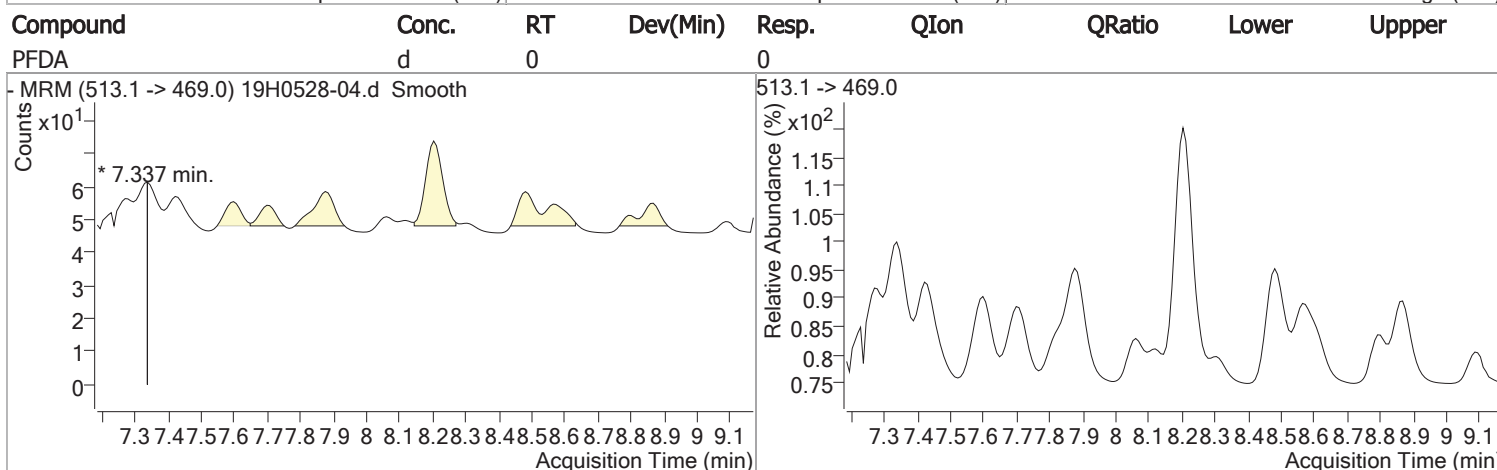
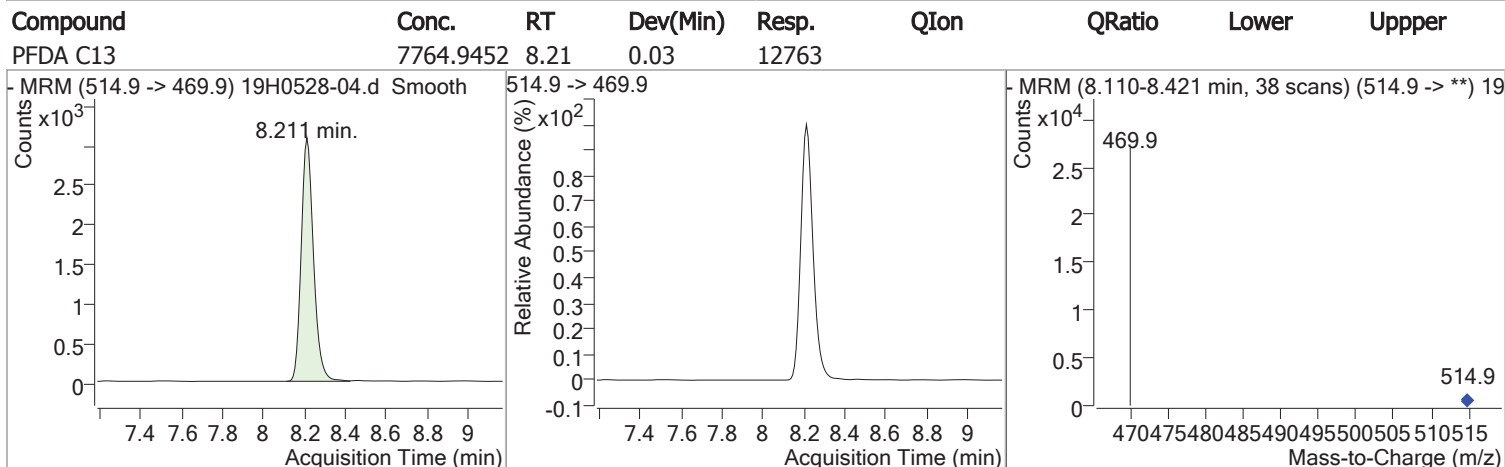
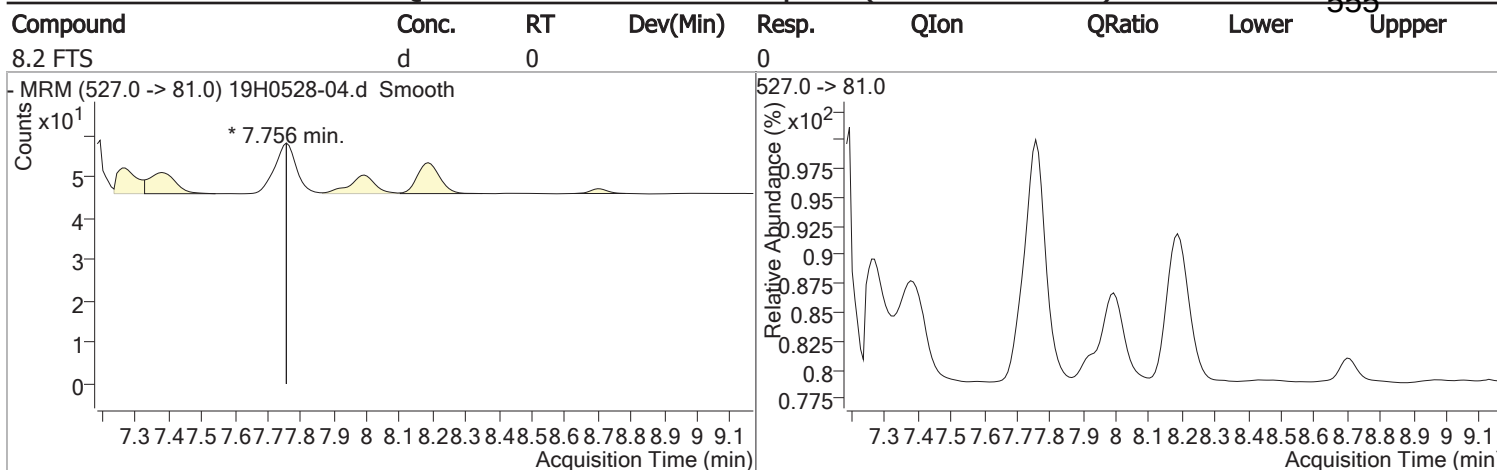
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)

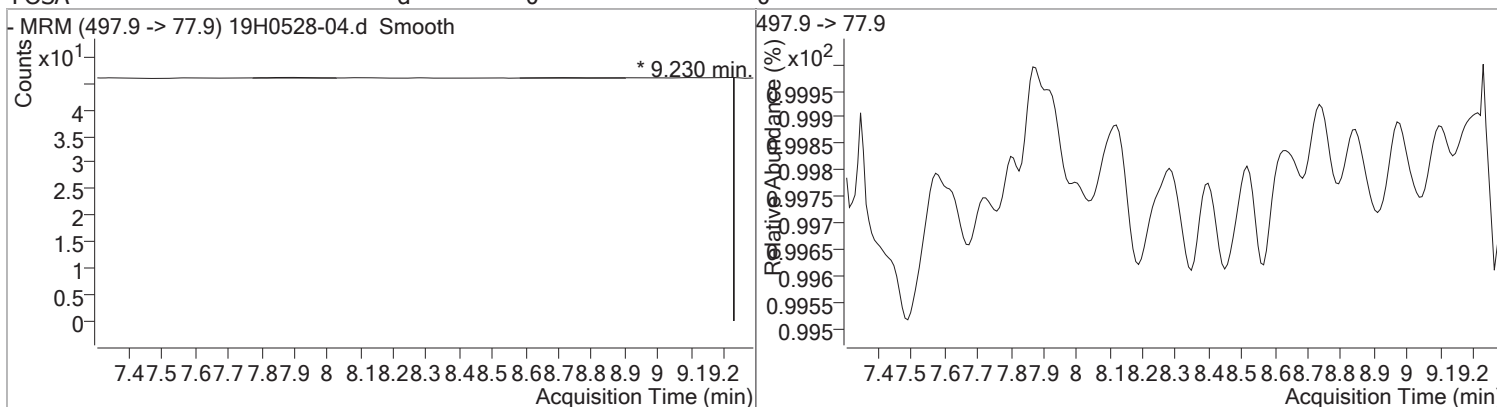


Quantitation Results Report (Not Reviewed)

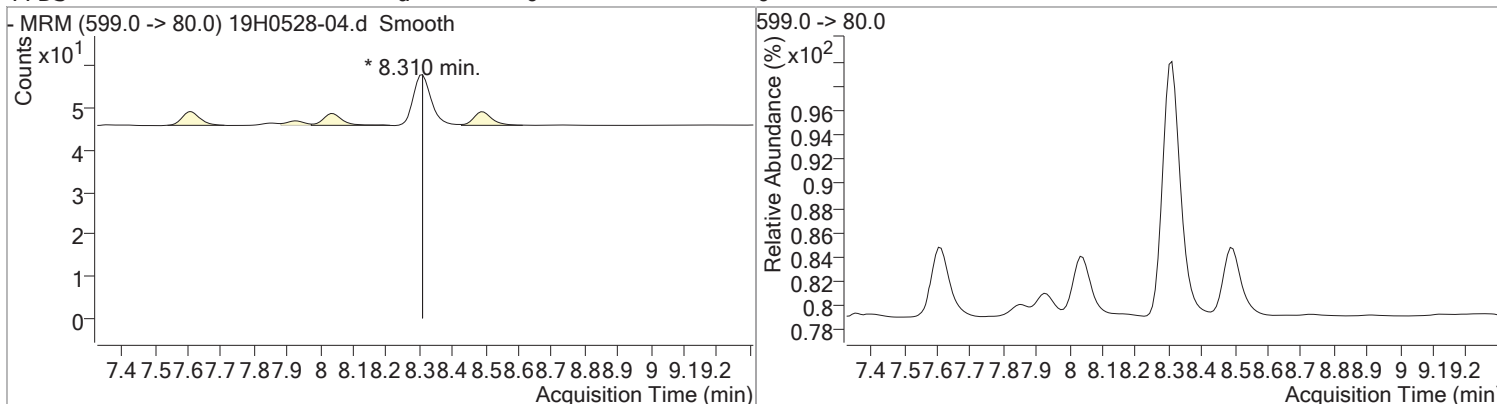


Quantitation Results Report (Not Reviewed)

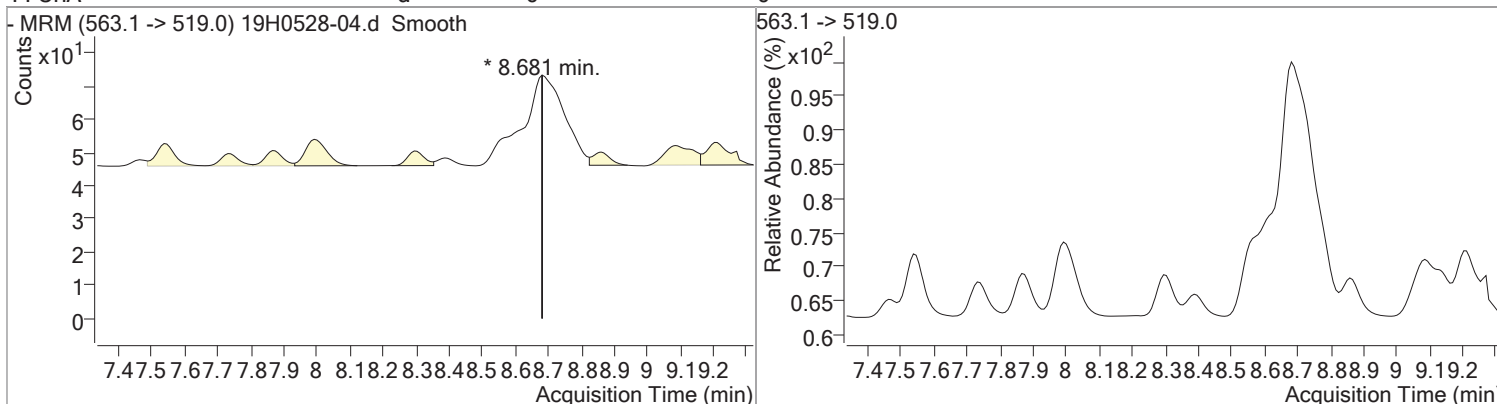
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
FOSA	d	0		0				



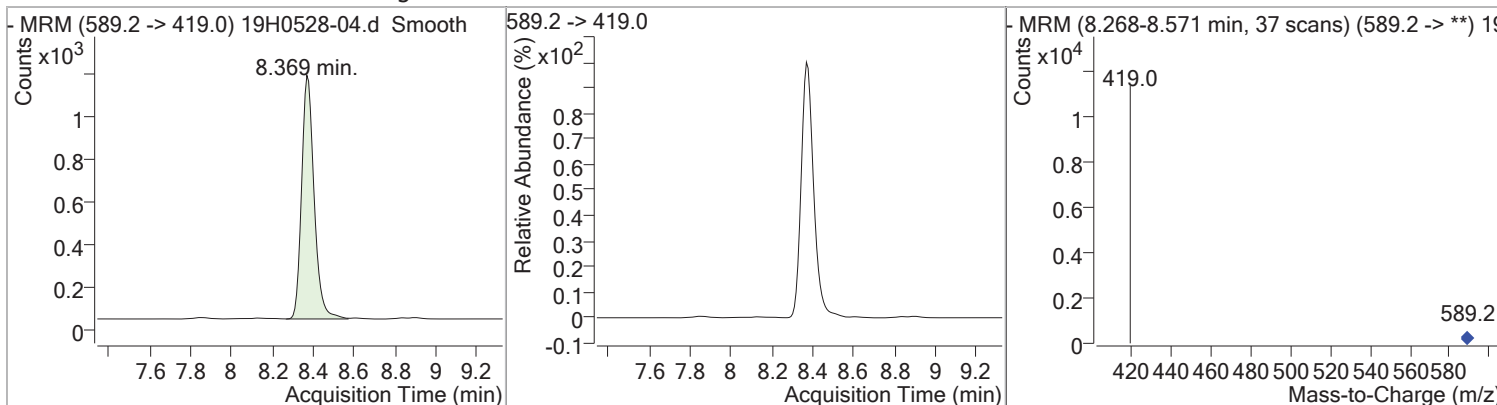
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFDS	d	0		0				



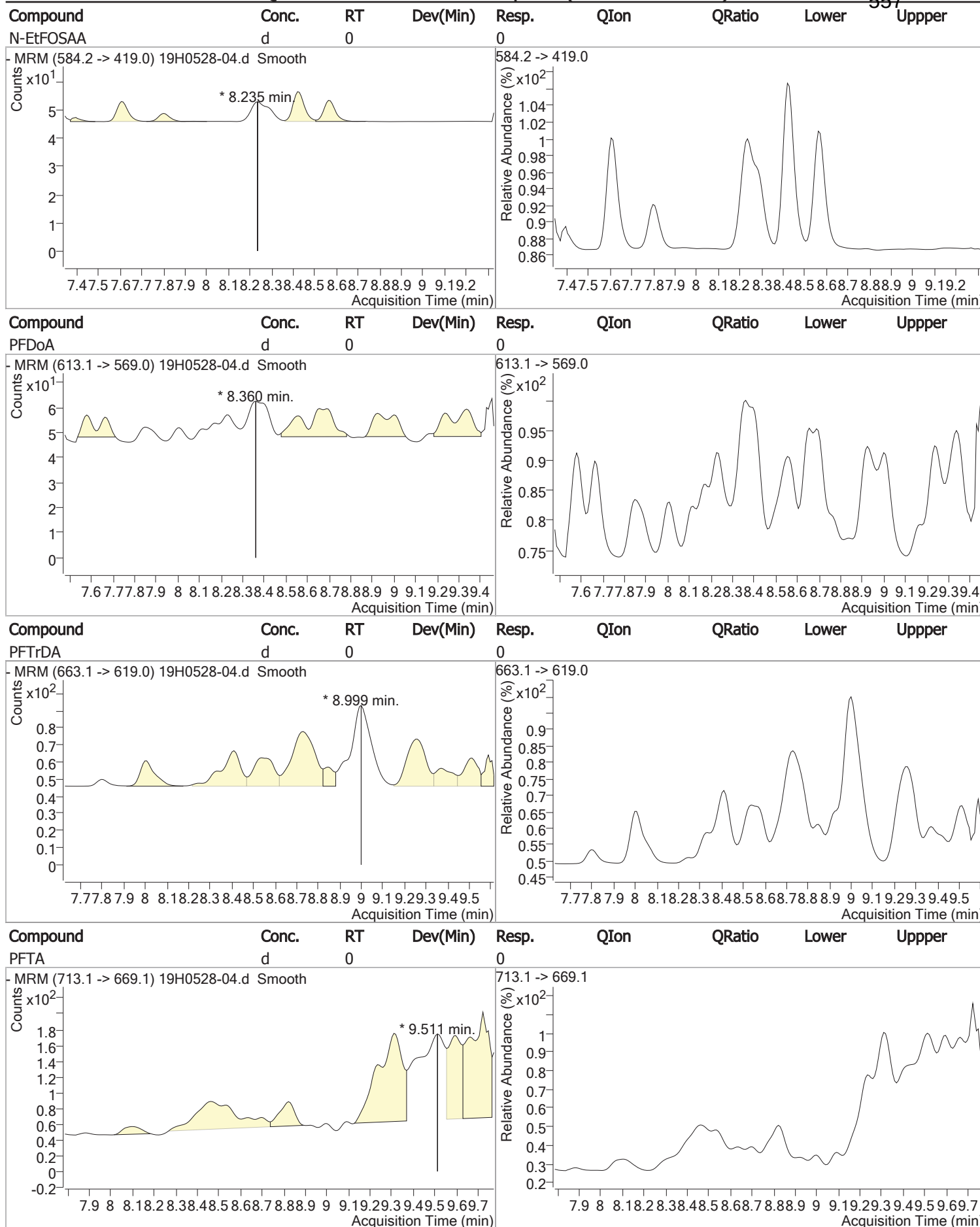
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFUnA	d	0		0				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
d5-N-MeFOSAA	20165.617	8.37	0.03	4868				



Quantitation Results Report (Not Reviewed)



1 - FORM I

ANALYSIS DATA SHEET

558

MW-22S

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-06
		File ID:	19H0528-06R.d
Sampled:	08/08/19 14:10	Prepared:	08/19/19 00:00
		Analyzed:	08/21/19 20:22
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)	3.0	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)	3.6	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 (PFTTrDA)		2.0	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)		2.0	2.0	

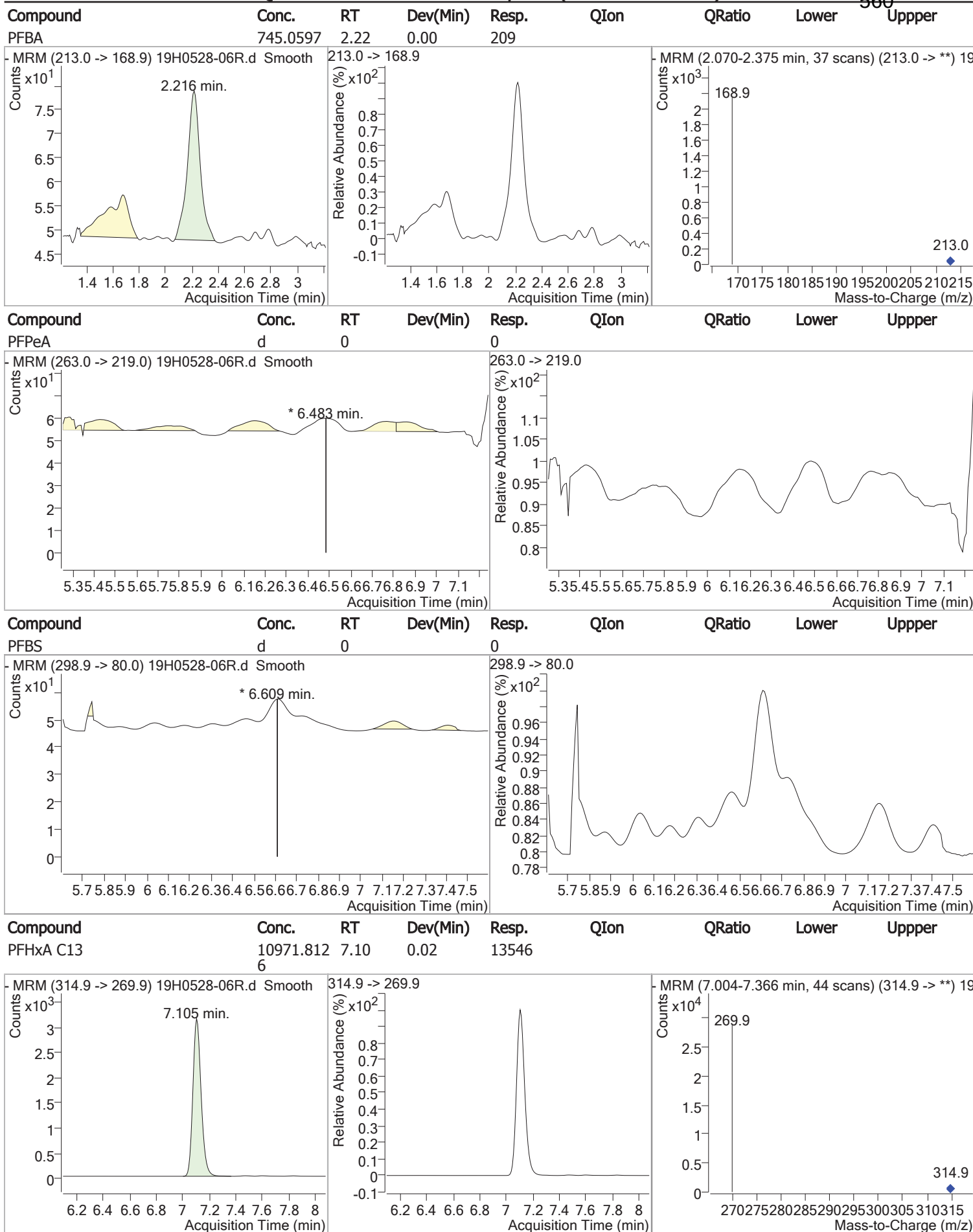
Quantitation Results Report (Not Reviewed)

Data File	19H0528-06R.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 8:22:28 PM
Sample Name	19H0528-06	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			

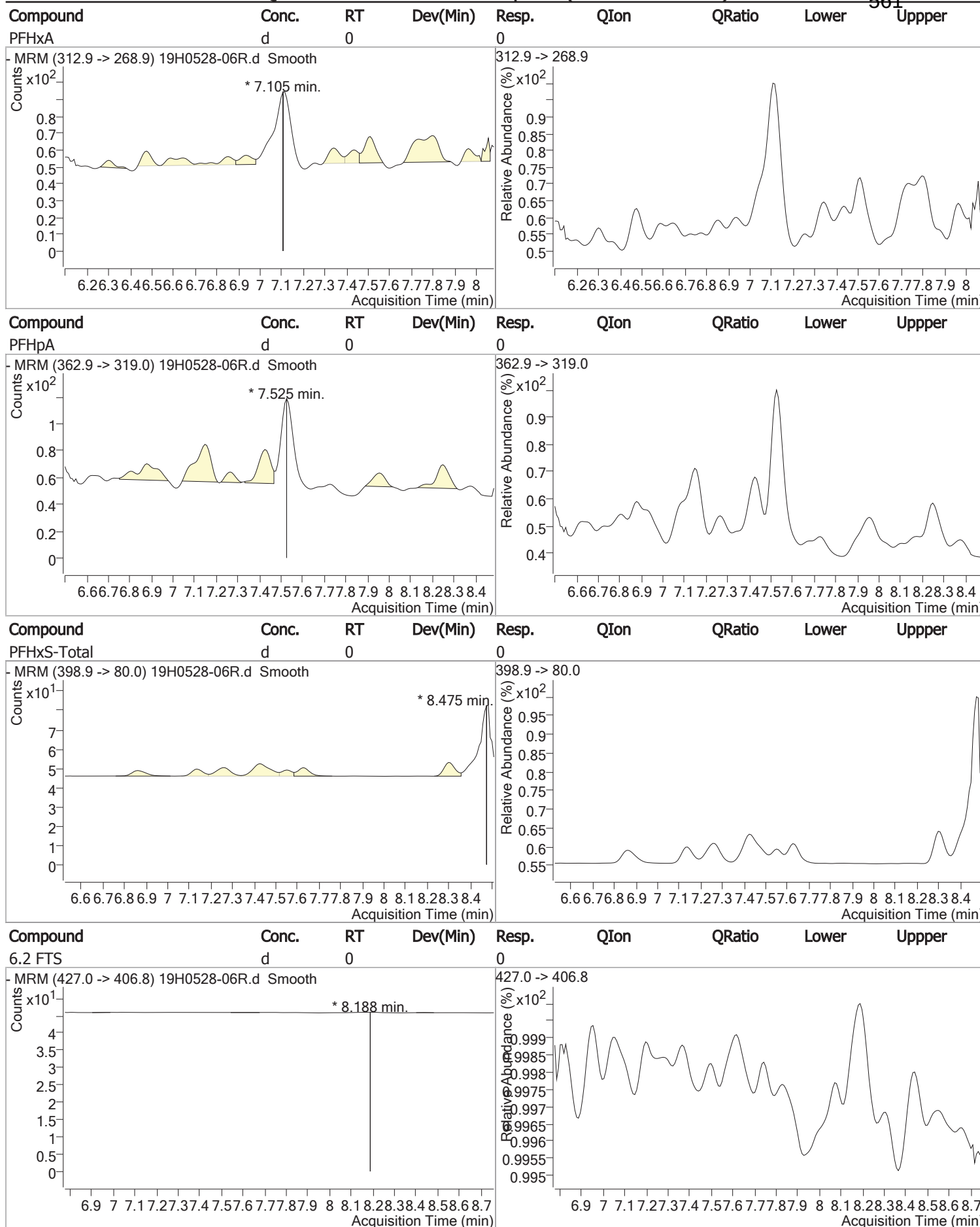
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.810	416.9 -> 371.9	17309	10000.0000	pg/ml		0.034
M PFOS C13	8.035	502.9 -> 80.0	24303	28700.0000	pg/ml		0.042
M d3-N-MeFOSAA	8.302	573.2 -> 419.0	12917	40000.0000	pg/ml	m	0.042
System Monitoring Compounds							
S PFHxA C13	7.105	314.9 -> 269.9	13546	10971.8126	pg/ml		0.017
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 109.72%			
S PFDA C13	8.219	514.9 -> 469.9	19438	10786.8230	pg/ml		0.042
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 107.87%			
S d5-N-MeFOSAA	8.377	589.2 -> 419.0	8604	28164.7154	pg/ml		0.042
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 70.41%			
Target Compounds							QValue
T PFBA	2.216	213.0 -> 168.9	209	745.0597	pg/ml		100
T PFPeA	6.483	263.0 -> 219.0	0	0.0000	pg/ml	md	1
T PFBS	6.609	298.9 -> 80.0	0	0.0000	pg/ml	md	1
T PFHxA	7.105	312.9 -> 268.9	0	0.0000	pg/ml	md	1
T PFHpA	7.525	362.9 -> 319.0	0	0.0000	pg/ml	md	1
T PFHxS-Total	8.475	398.9 -> 80.0	0	0.0000	pg/ml	md	1
T 6.2 FTS	8.188	427.0 -> 406.8	0	0.0000	pg/ml	md	1
T PFOA-Total	7.810	412.9 -> 368.9	2066	909.1400	pg/ml		100
T PFHpS	8.028	449.0 -> 79.7	0	0.0000	pg/ml	md	1
T PFOS-Total	7.968	498.9 -> 80.0	561	446.2358	pg/ml	m	100
T PFNA	8.742	462.9 -> 418.9	0	0.0000	pg/ml	md	1
T 8.2 FTS	8.210	527.0 -> 81.0	0	0.0000	pg/ml	md	1
T PFDA	8.211	513.1 -> 469.0	0	0.0000	pg/ml	md	1
T N-MeFOSAA	8.218	570.2 -> 419.1	0	0.0000	pg/ml	md	1
T FOSA	7.413	497.9 -> 77.9	0	0.0000	pg/ml	md	1
T PFDS	8.881	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	8.100	584.2 -> 419.0	0	0.0000	pg/ml	md	1
T PFDoA	8.814	613.1 -> 569.0	0	0.0000	pg/ml	md	1
T PFTrDA	8.889	663.1 -> 619.0	0	0.0000	pg/ml	md	1
T PFTA	9.410	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

Quantitation Results Report (Not Reviewed)



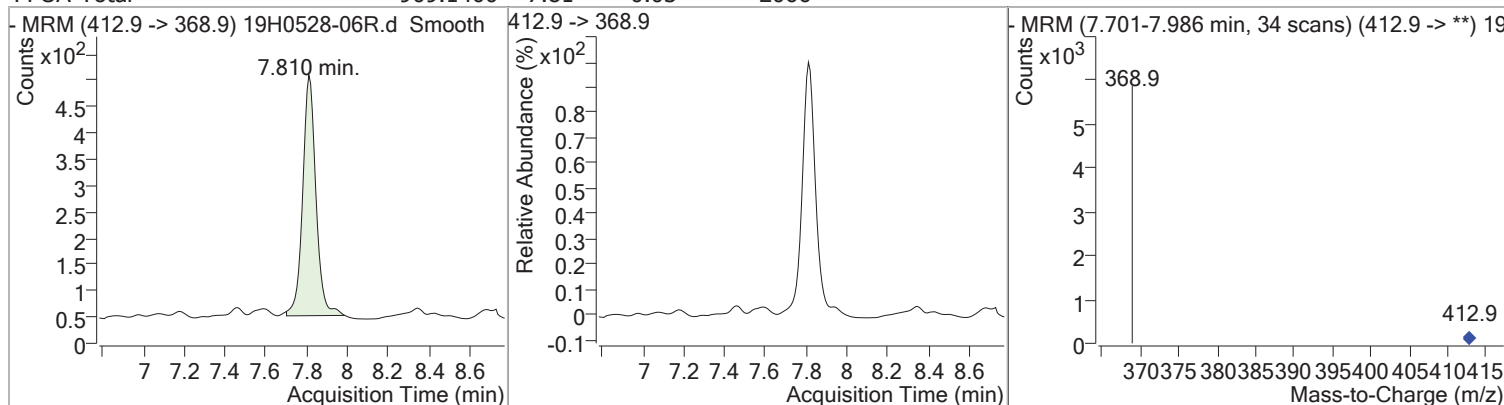
Quantitation Results Report (Not Reviewed)



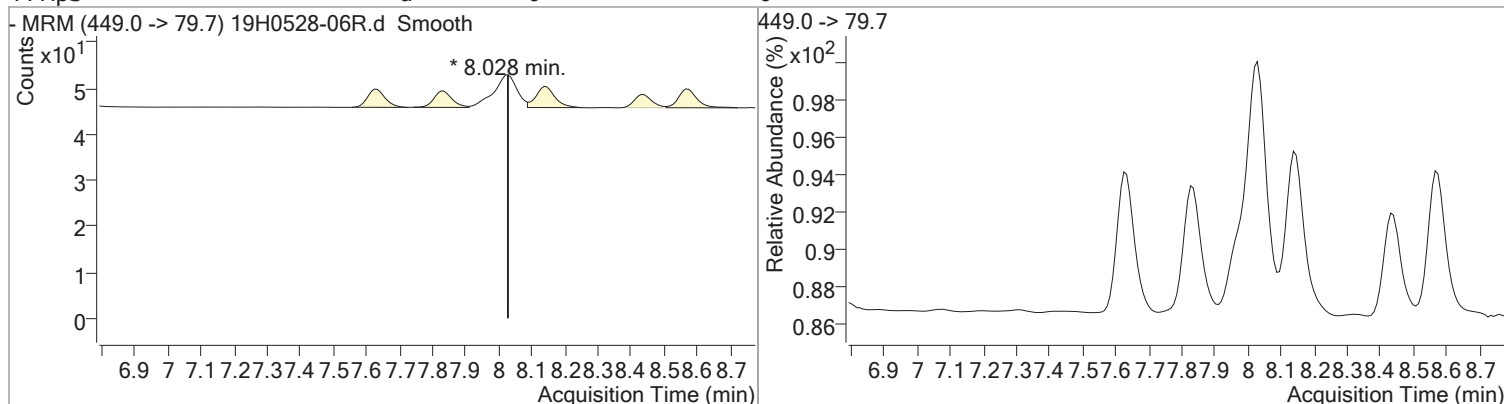
Quantitation Results Report (Not Reviewed)

562

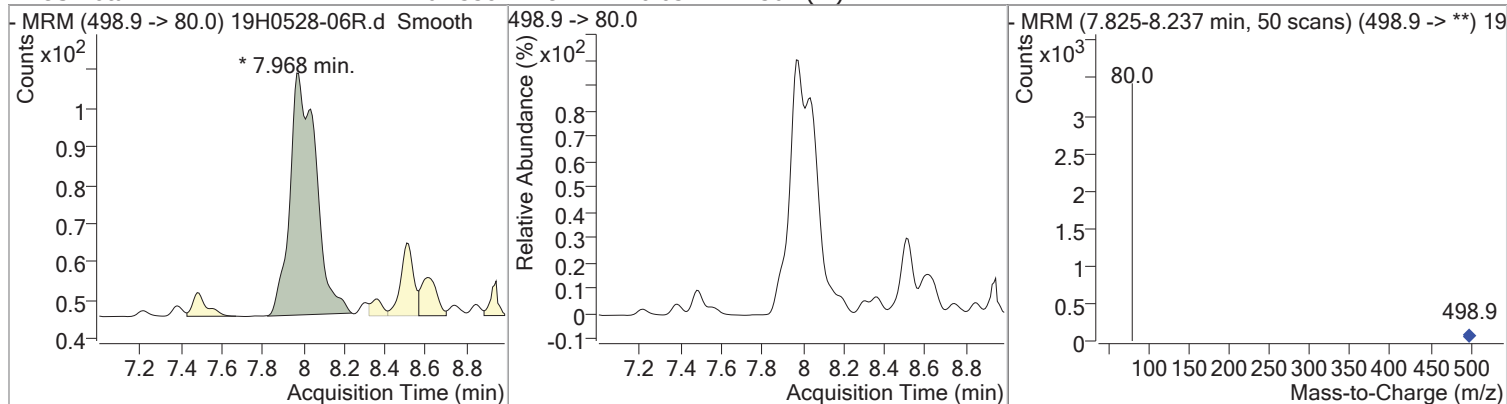
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFOA-Total	909.1400	7.81	0.03	2066				



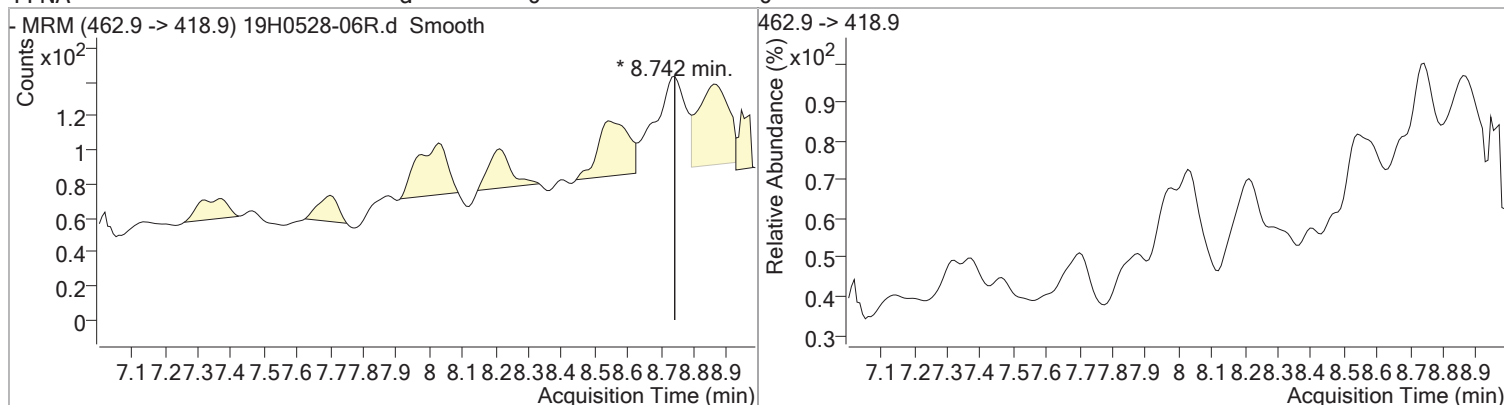
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFHpS	d	0		0				



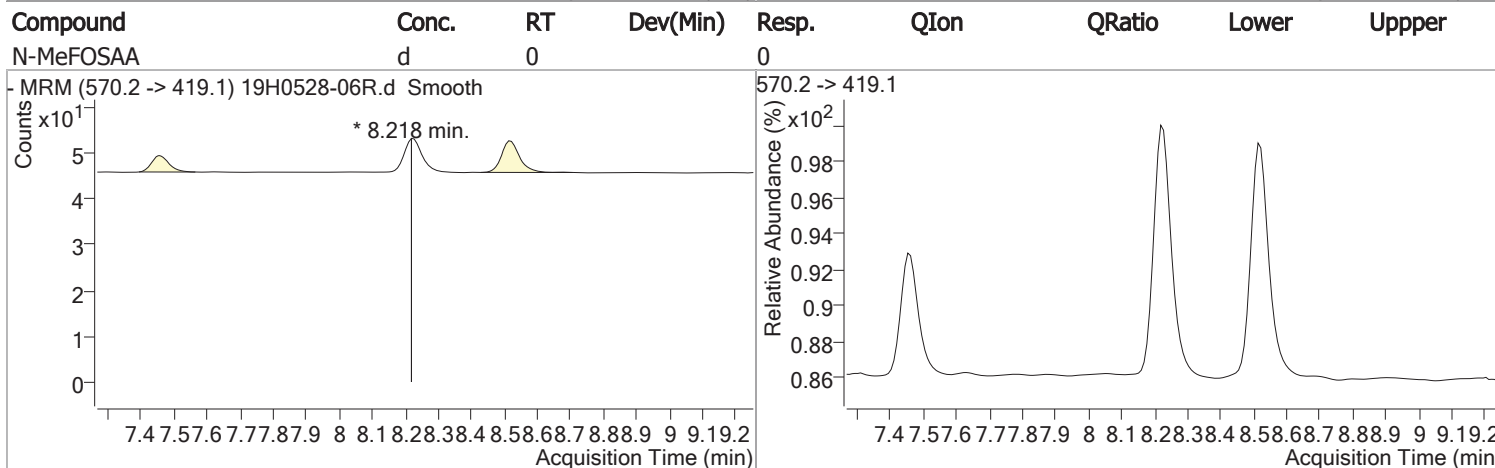
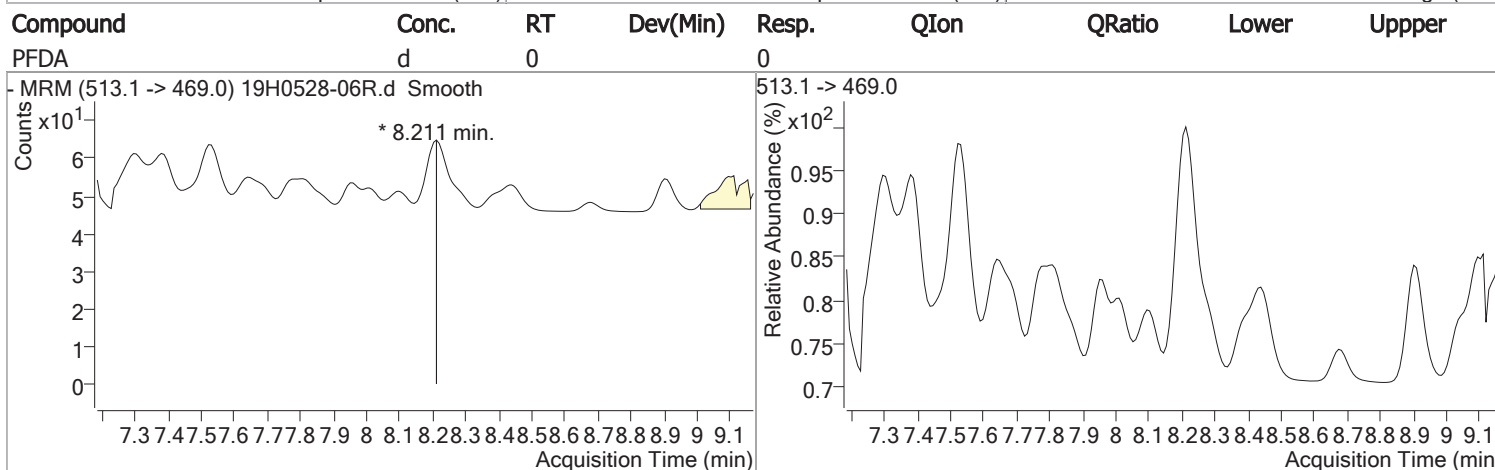
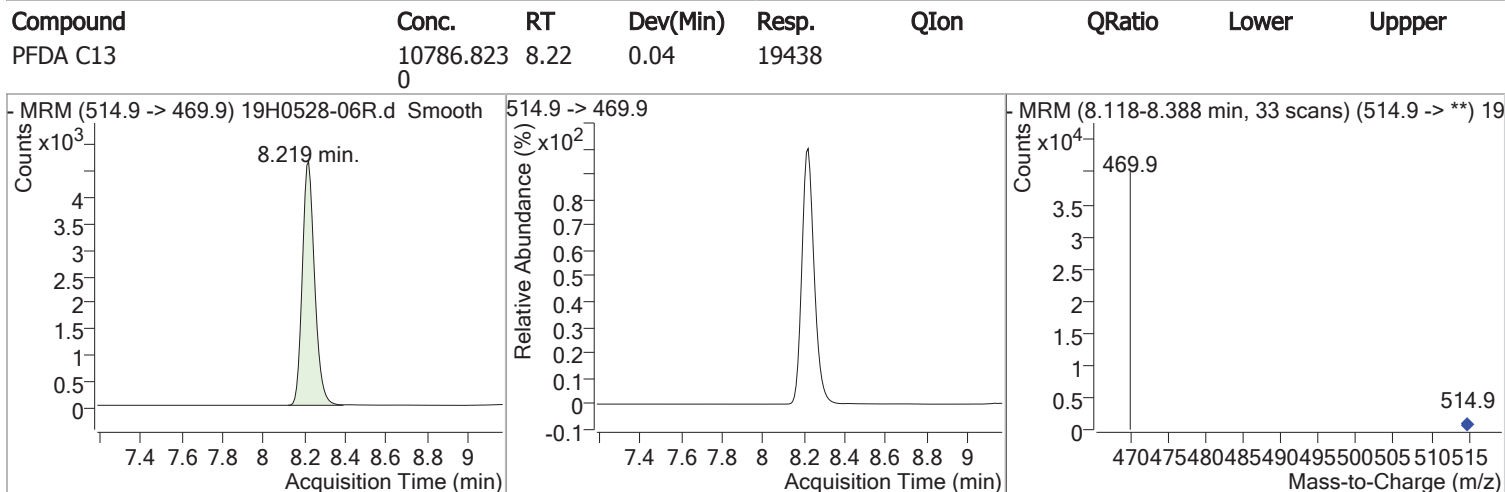
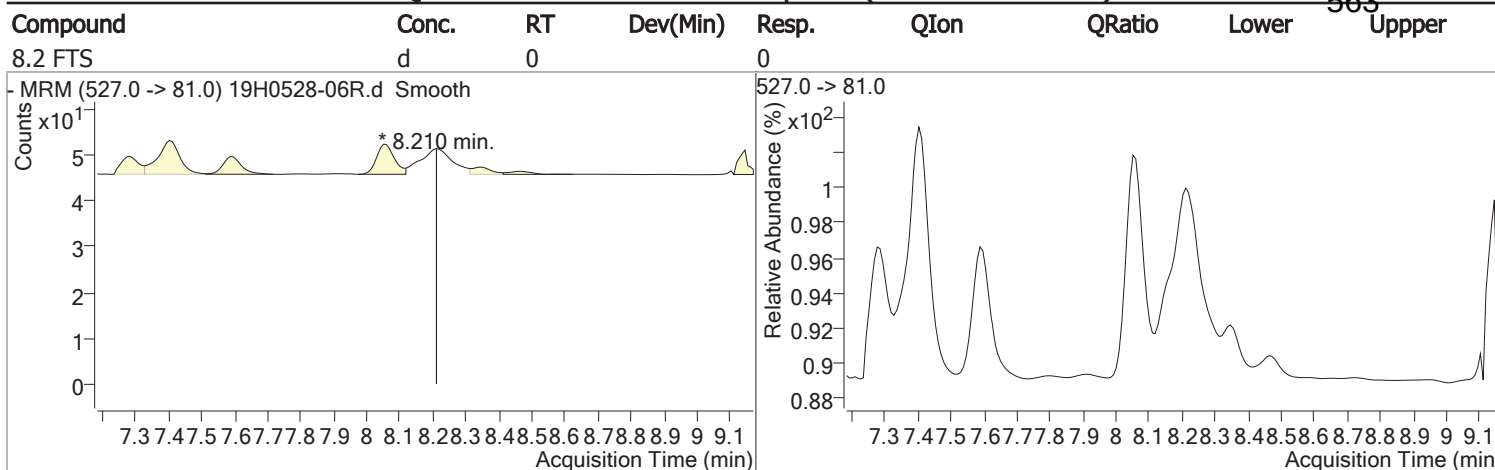
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFOS-Total	446.2358	7.97	-0.03	561 (m)				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFNA	d	0		0				

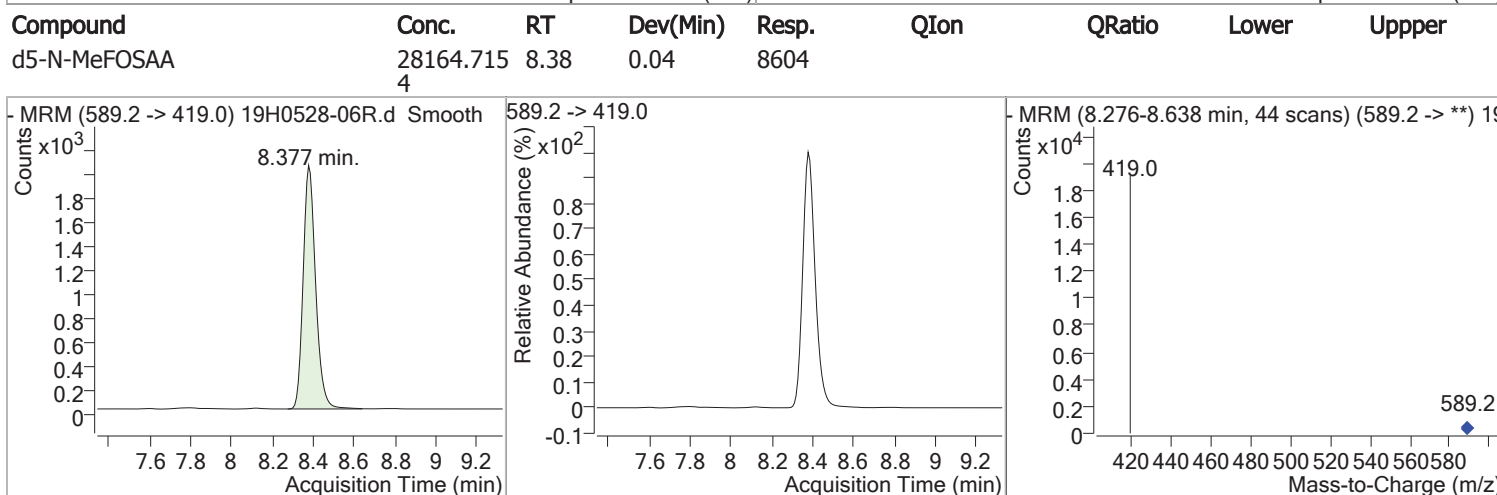
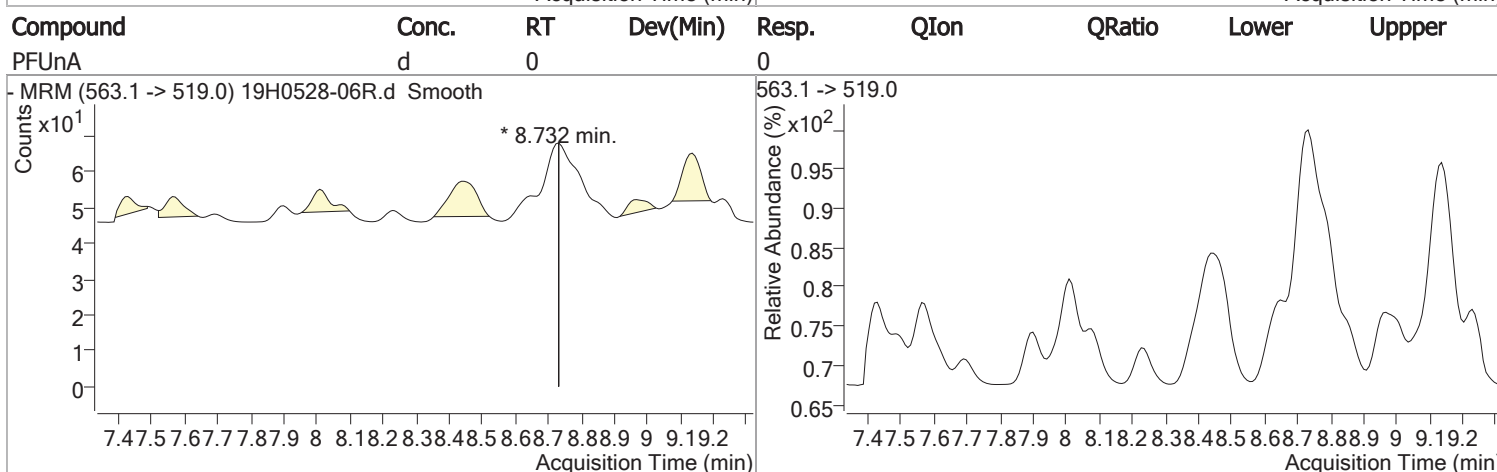
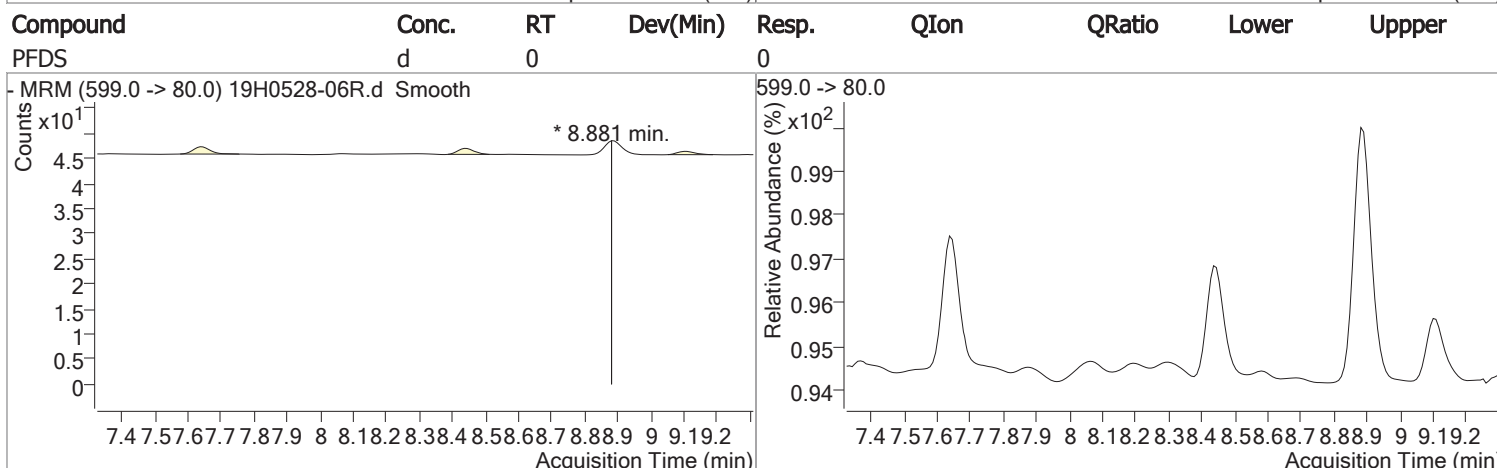
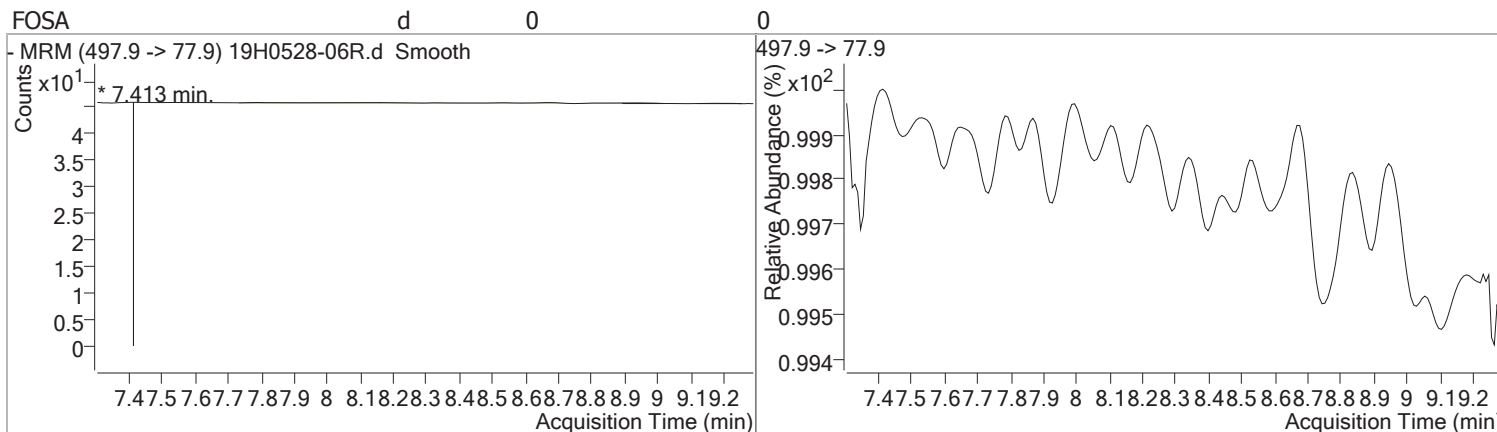


Quantitation Results Report (Not Reviewed)

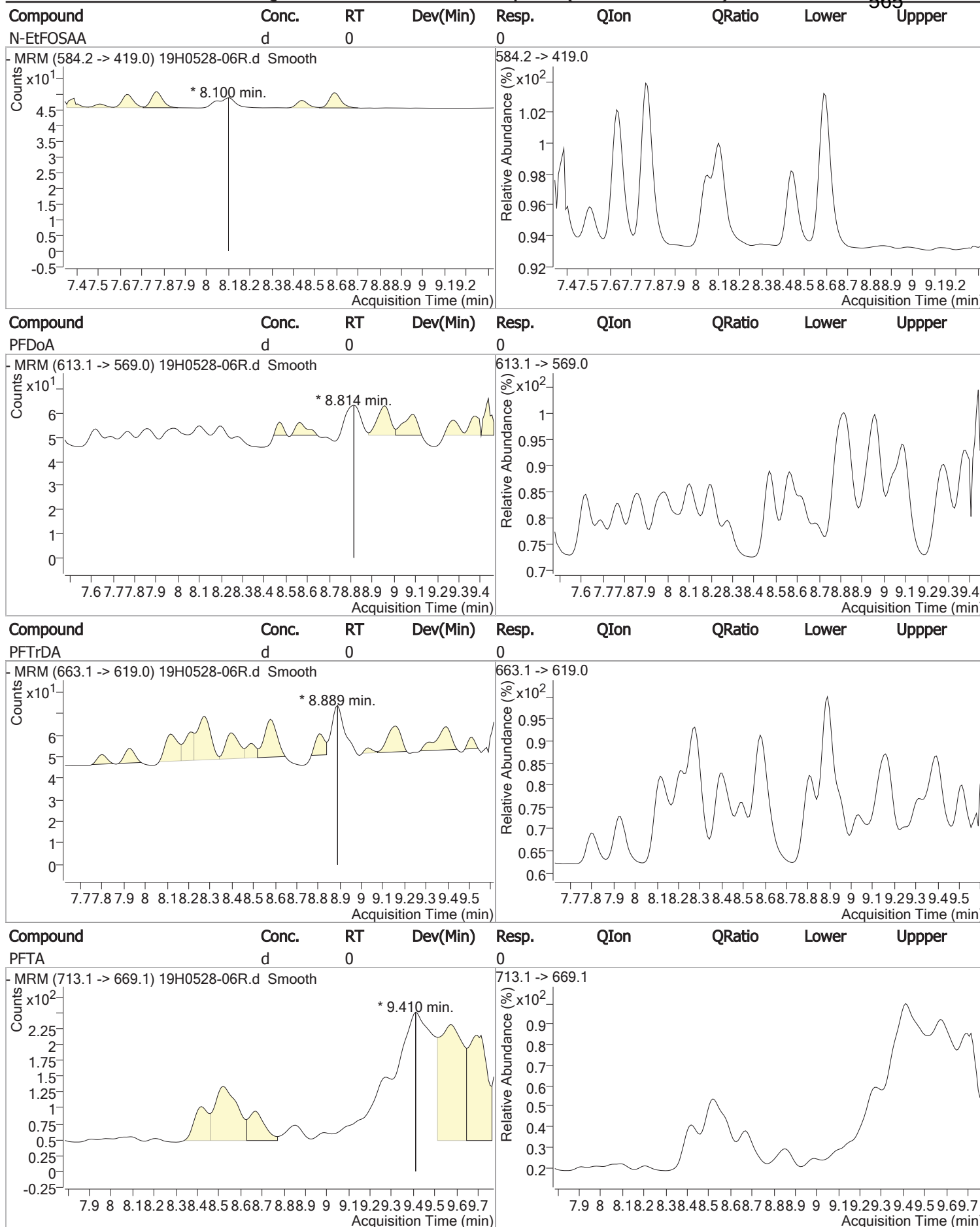


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper



Quantitation Results Report (Not Reviewed)



1 - FORM I

ANALYSIS DATA SHEET

566

Blind Duplicate

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Ground Water	Laboratory ID:	19H0528-07
		File ID:	19H1176-02RE1.d
Sampled:	08/08/19 00:00	Prepared:	08/19/19 00:00
		Analyzed:	08/27/19 10:54
Solids:		Preparation:	SOP 434-PFAAS
		Dilution:	1
Initial/Final:	250 mL / 1 mL		
Batch:	B238243	Sequence:	S039667
		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)	5.9	2.0	2.0	
375-22-4	Perfluorobutanoic acid (PFBA)	3.4	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)	41	2.0	2.0	
	8:2 Fluorotelomersulfonate (8:2 FTS A)	5.5	2.0	2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)		2.0	2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	7.5	2.0	2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.4	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 (PFTTrDA)		2.0	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)		2.0	2.0	

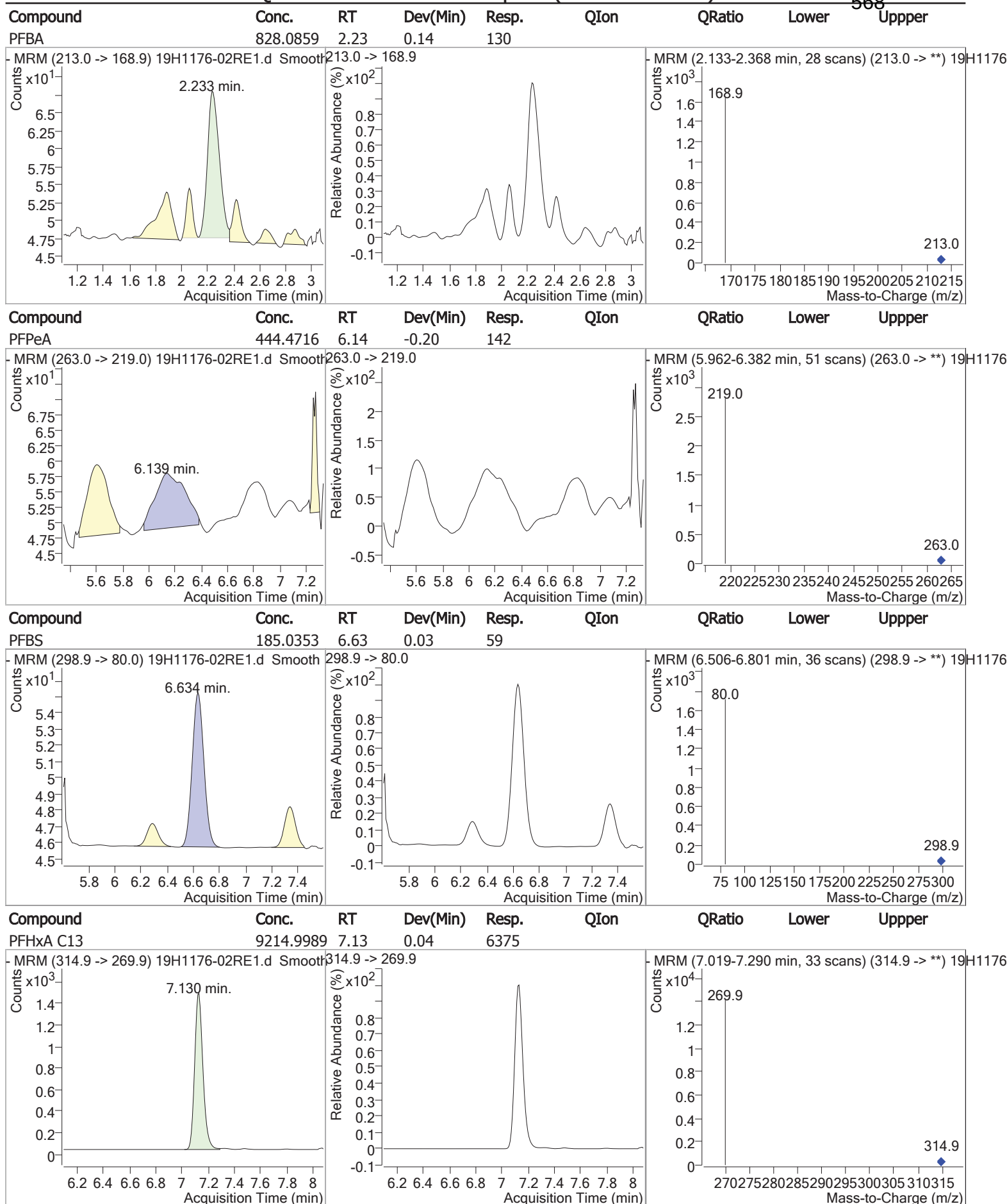
Quantitation Results Report (Not Reviewed)

Data File	19H1176-02RE1.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/27/2019 10:54:10 AM
Sample Name	19H0528-07	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	1.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

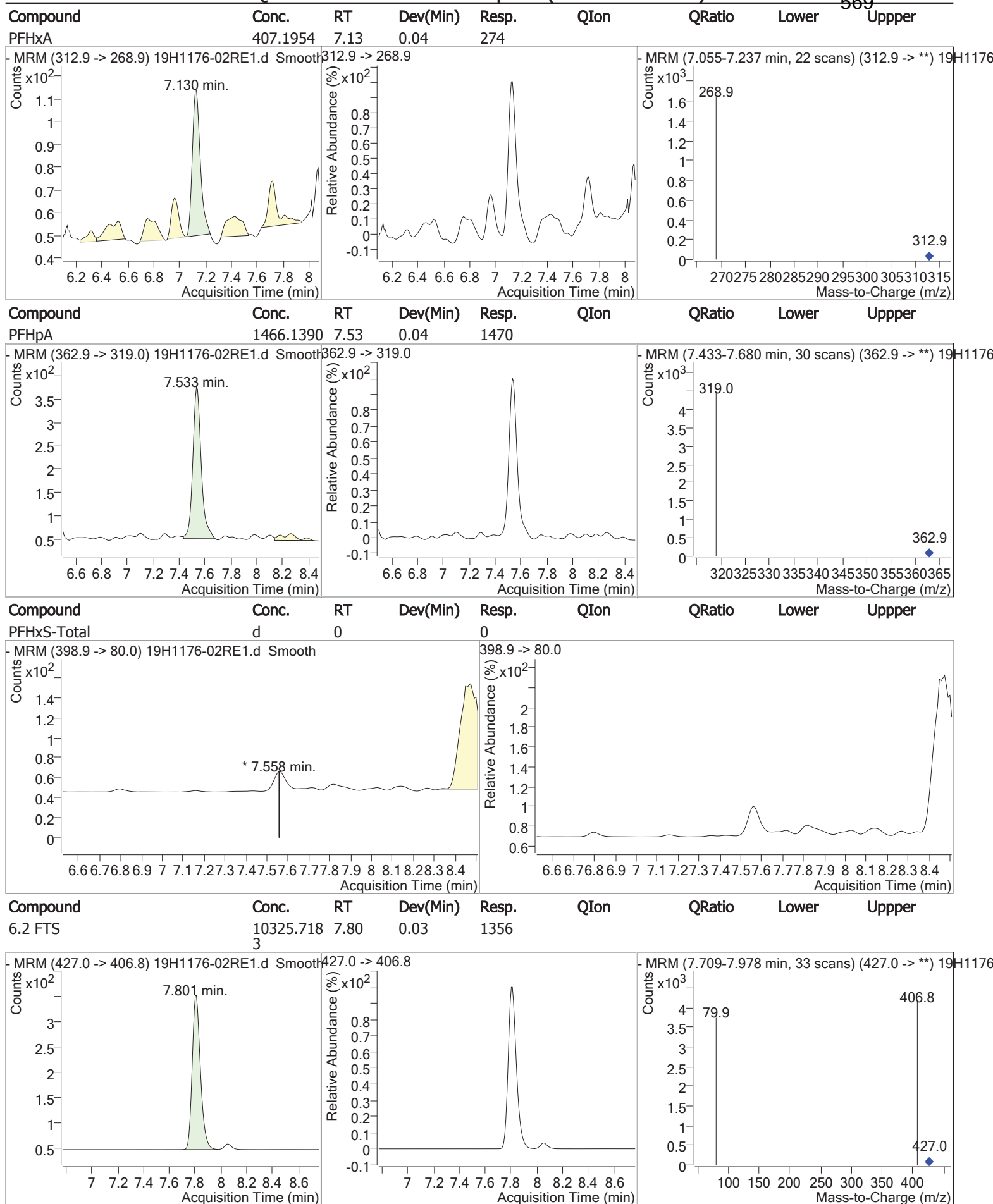
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.810	416.9 -> 371.9	9700	10000.0000	pg/ml		0.034
M PFOS C13	8.035	502.9 -> 80.0	15858	28700.0000	pg/ml		0.042
M d3-N-MeFOSAA	8.294	573.2 -> 419.0	9851	40000.0000	pg/ml	m	0.034
System Monitoring Compounds							
S PFHxA C13	7.130	314.9 -> 269.9	6375	9214.9989	pg/ml		0.042
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 92.15%			
S PFDA C13	8.211	514.9 -> 469.9	9176	9086.1232	pg/ml		0.034
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 90.86%			
S d5-N-MeFOSAA	8.369	589.2 -> 419.0	6668	26684.1219	pg/ml	m	0.034
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 71.55%			
Target Compounds							QValue
T PFBA	2.233	213.0 -> 168.9	130	828.0859	pg/ml		100
T PFPeA	6.139	263.0 -> 219.0	142	444.4716	pg/ml		100
T PFBS	6.634	298.9 -> 80.0	59	185.0353	pg/ml		100
T PFHxA	7.130	312.9 -> 268.9	274	407.1954	pg/ml		100
T PFHpA	7.533	362.9 -> 319.0	1470	1466.1390	pg/ml		100
T PFHxS-Total	7.558	398.9 -> 80.0	0	0.0000	pg/ml	md	1
T 6.2 FTS	7.801	427.0 -> 406.8	1356	10325.7183	pg/ml		100
T PFOA-Total	7.810	412.9 -> 368.9	2373	1863.0157	pg/ml		100
T PFHpS	8.600	449.0 -> 79.7	0	0.0000	pg/ml	md	1
T PFOS-Total	8.027	498.9 -> 80.0	486	592.6282	pg/ml	m	100
T PFNA	8.028	462.9 -> 418.9	383	496.3267	pg/ml		100
T 8.2 FTS	8.219	527.0 -> 81.0	299	1375.8150	pg/ml		100
T PFDA	8.236	513.1 -> 469.0	0	0.0000	pg/ml	md	1
T N-MeFOSAA	7.436	570.2 -> 419.1	0	0.0000	pg/ml	md	1
T FOSA	9.003	497.9 -> 77.9	0	0.0000	pg/ml	md	1
T PFDS	8.427	599.0 -> 80.0	93	180.6740	pg/ml		100
T PFUnA	8.370	563.1 -> 519.0	0	0.0000	pg/ml	md	1
T N-EtFOSAA	7.553	584.2 -> 419.0	0	0.0000	pg/ml	md	1
T PFDoA	8.578	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	9.520	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

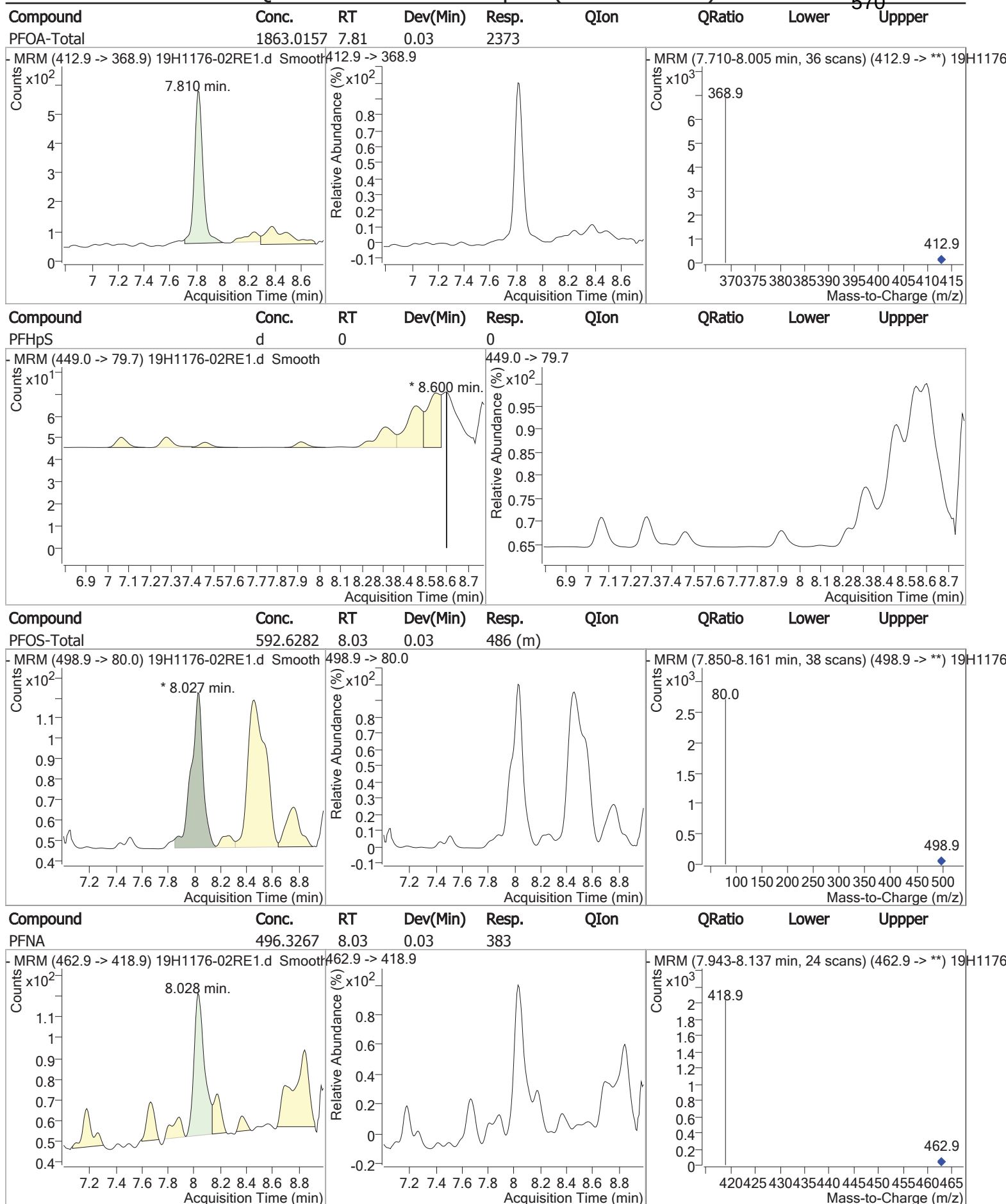
Quantitation Results Report (Not Reviewed)



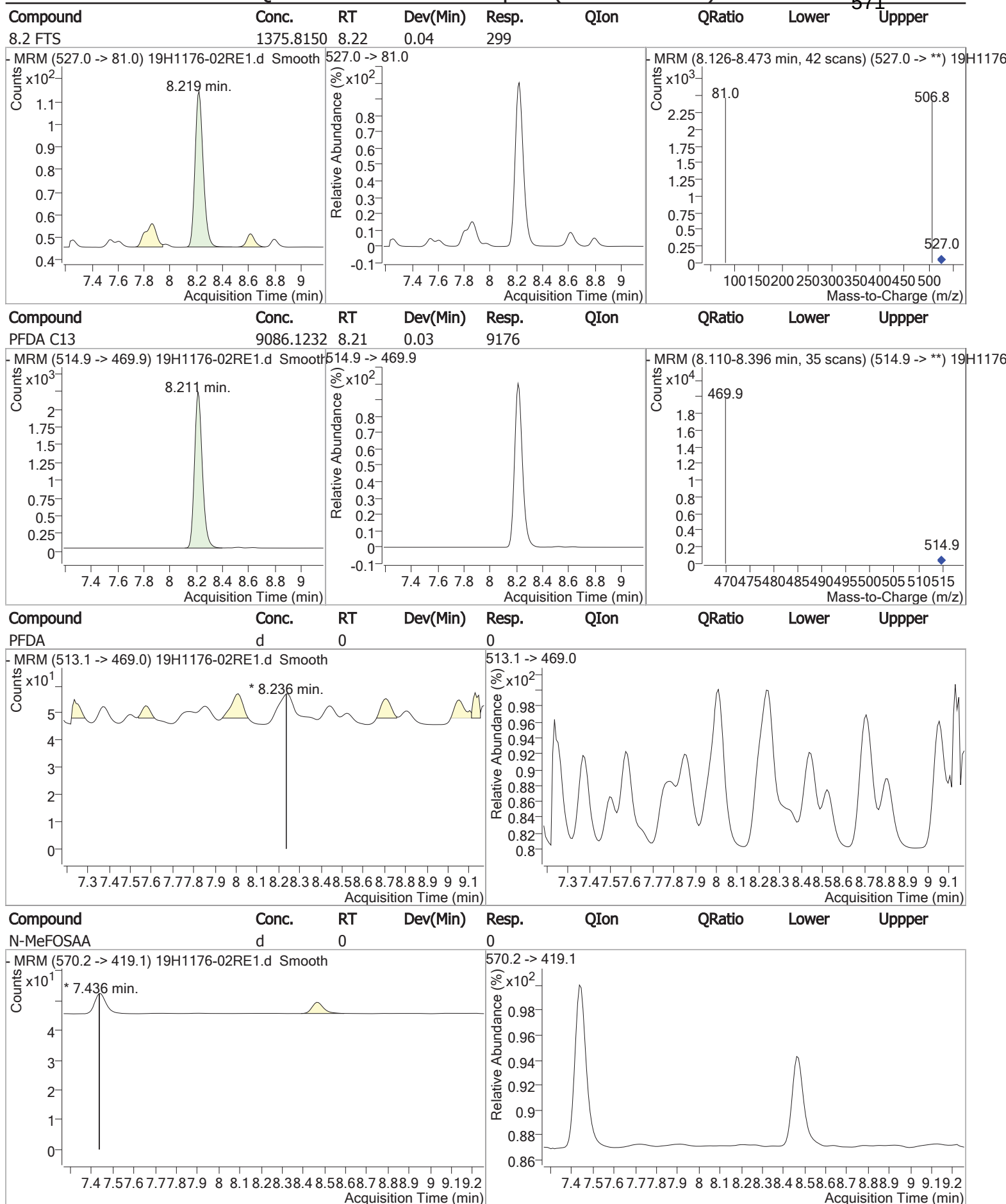
Quantitation Results Report (Not Reviewed)



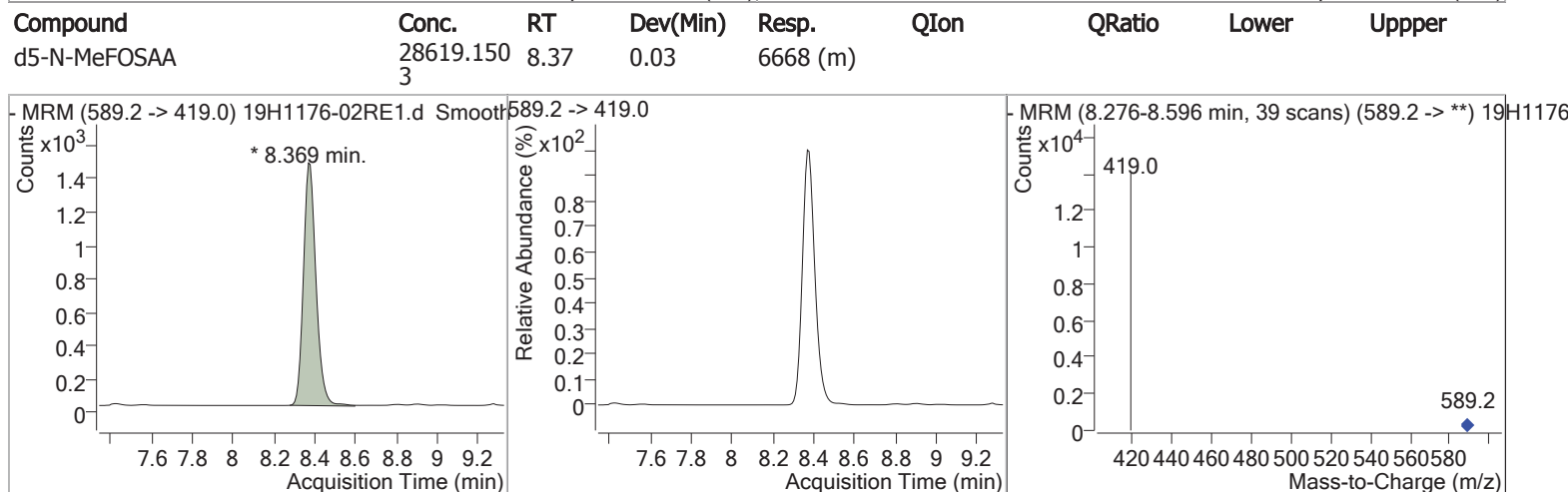
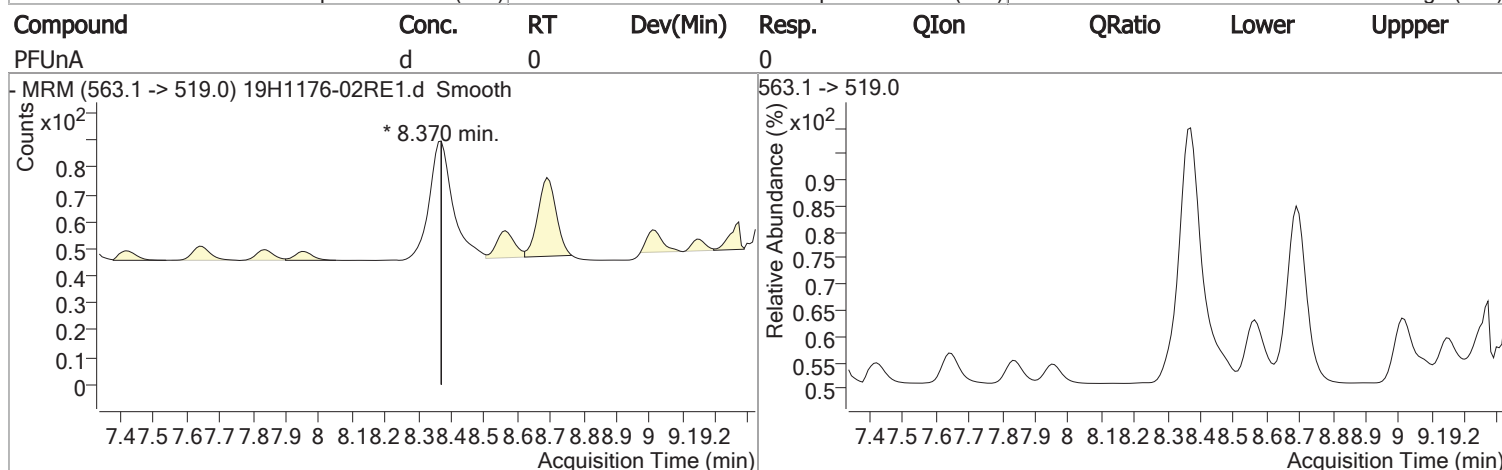
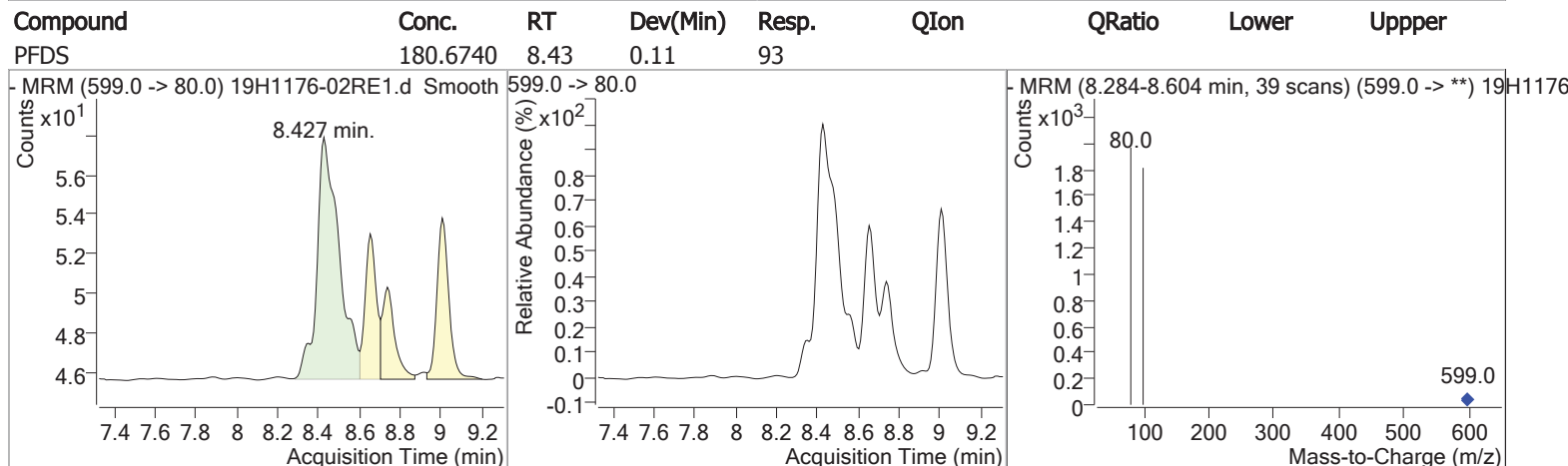
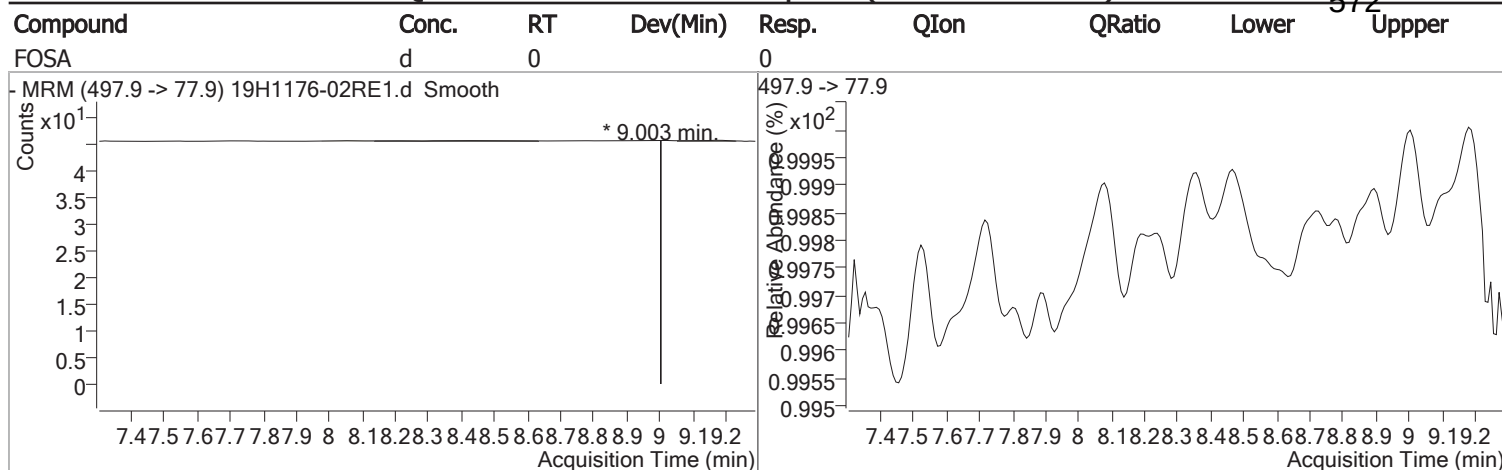
Quantitation Results Report (Not Reviewed)



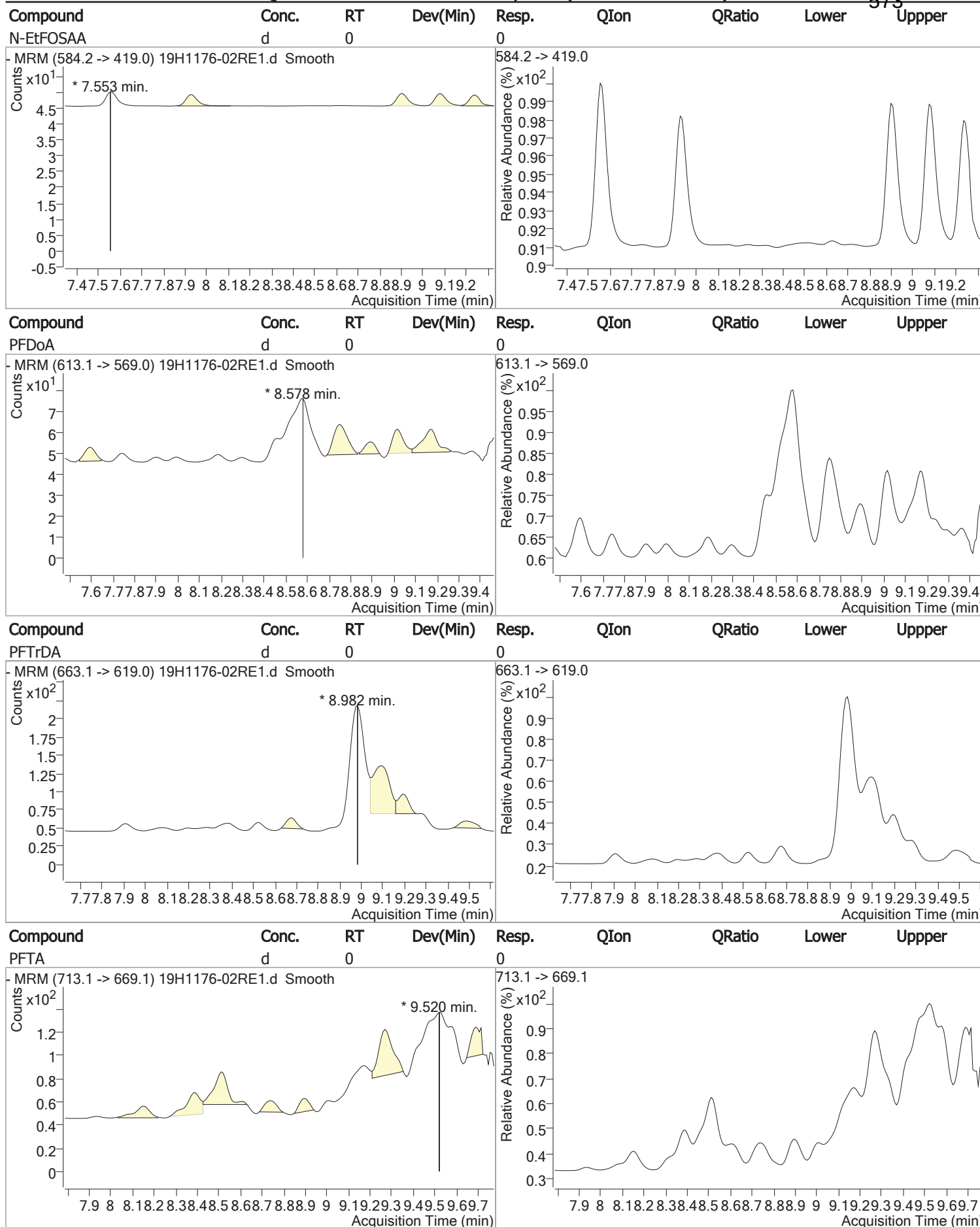
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



QC DATA

2 - FORM II
SYSTEM MONITORING COMPOUND SUMMARY
SOP 434-PFAAS

575

Laboratory:	Con-Test Analytical Laboratory	SDG:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Instrument:	HPLC1

	13C-PFDA (70% - 130%)	13C-PFHxA (70% - 130%)	d5-NEtFOSA (70% - 130%)
19H0528-04	77.6	96.6	50.4*
19H0528-06	108	110	70.4
19H0528-07	90.9	92.2	71.5
B238243-BLK1	87.1	106	70.4
B238243-BS1	138*	121	112
B238243-MS1	80.6	95.8	54.2*
B238243-MSD1	90.6	99.7	56.5*

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-22R

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Analysis: SOP 434-PFAAS

Batch: B238243

Preparation: SOP 434-PFAAS

% Solids:

Laboratory ID: B238243-MS1

Initial/Final: 250 mL / 1 mL

Sample Lab ID: 19H0528-04

Column:

ANALYTE	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC.	QC LIMITS REC.
Perfluorobutanesulfonic acid (PFBS)	8.85	ND	10.9	123	70 - 130
Perfluorohexanoic acid (PFHxA)	10.0	ND	10.8	108	70 - 130
Perfluoroheptanoic acid (PFHpA)	10.0	ND	9.96	99.6	70 - 130
Perfluorobutanoic acid (PFBA)	10.0	4.96	9.04	40.8	30 - 110
Perfluorodecanesulfonic acid (PFDS)	9.65	ND	4.04	41.9	* 70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	9.50	ND	9.58	101	70 - 130
Perfluorooctanesulfonamide (FOSA)	10.0	ND	2.0 U	0	* 70 - 130
Perfluoropentanoic acid (PFPeA)	10.0	ND	8.53	85.3	70 - 130
6:2 Fluorotelomersulfonate (6:2 FTS A)	9.50	ND	6.55	68.9	* 70 - 130
8:2 Fluorotelomersulfonate (8:2 FTS A)	9.60	ND	12.3	128	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	9.10	ND	8.05	88.5	70 - 130
Perfluorooctanoic acid (PFOA)	10.0	4.18	12.4	81.7	70 - 130
Perfluorooctanesulfonic acid (PFOS)	9.25	ND	7.92	85.7	70 - 130
Perfluorononanoic acid (PFNA)	10.0	ND	8.06	80.6	70 - 130
Perfluorodecanoic acid (PFDA)	10.0	ND	7.45	74.5	70 - 130
N-MeFOSAA	10.0	ND	7.11	71.1	70 - 130
Perfluoroundecanoic acid (PFUnA)	10.0	ND	5.56	55.6	* 70 - 130
N-EtFOSAA	10.0	ND	5.31	53.1	* 70 - 130
Perfluorododecanoic acid (PFDoA)	10.0	ND	4.35	43.5	* 70 - 130
Perfluorotridecanoic acid (PFTTrDA)	10.0	ND	3.45	34.5	* 70 - 130
Perfluorotetradecanoic acid (PFTA)	10.0	ND	3.62	36.2	* 70 - 130

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MW-22R

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Matrix: Water

Analysis: SOP 434-PFAAS

Batch: B238243

Preparation: SOP 434-PFAAS

% Solids:

Laboratory ID: B238243-MS1

Initial/Final: 250 mL / 1 mL

Sample Lab ID: 19H0528-04

Column:

ANALYTE	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC. #	% RPD	QC LIMITS	
					RPD	REC.
Perfluorobutanesulfonic acid (PFBS)	8.85	7.51	84.9	37.1 *	30	70 - 130
Perfluorohexanoic acid (PFHxA)	10.0	11.8	118	9.26	30	70 - 130
Perfluoroheptanoic acid (PFHpA)	10.0	9.30	93.0	6.85	30	70 - 130
Perfluorobutanoic acid (PFBA)	10.0	10.1	51.8	11.5	30	30 - 110
Perfluorodecanesulfonic acid (PFDS)	9.65	3.70	38.3 *	8.91	30	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	9.50	7.86	82.8	19.6	30	70 - 130
Perfluorooctanesulfonamide (FOSA)	10.0	2.0 U	0 *		30	70 - 130
Perfluoropentanoic acid (PFPeA)	10.0	12.3	123	36.2 *	30	70 - 130
6:2 Fluorotelomersulfonate (6:2 FTS A)	9.50	12.3	129	60.8 *	30	70 - 130
8:2 Fluorotelomersulfonate (8:2 FTS A)	9.60	10.3	108	17.3	30	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	9.10	8.12	89.2	0.772	30	70 - 130
Perfluorooctanoic acid (PFOA)	10.0	13.1	89.6	6.24	30	70 - 130
Perfluorooctanesulfonic acid (PFOS)	9.25	7.93	85.7	0.0316	30	70 - 130
Perfluorononanoic acid (PFNA)	10.0	7.89	78.9	2.22	30	70 - 130
Perfluorodecanoic acid (PFDA)	10.0	9.28	92.8	21.9	30	70 - 130
N-MeFOSAA	10.0	4.87	48.7 *	37.4 *	30	70 - 130
Perfluoroundecanoic acid (PFUnA)	10.0	7.31	73.1	27.3	30	70 - 130
N-EtFOSAA	10.0	7.36	73.6	32.3 *	30	70 - 130
Perfluorododecanoic acid (PFDoA)	10.0	5.68	56.8 *	26.4	30	70 - 130
Perfluorotridecanoic acid (PFTTrDA)	10.0	4.49	44.9 *	26.2	30	70 - 130
Perfluorotetradecanoic acid (PFTA)	10.0	4.39	43.9 *	19.3	30	70 - 130

LCS / LCS DUPLICATE RECOVERY

SOP 434-PFAAS

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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

579

SOP 434-PFAAS

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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
MW-22R	19H0528-04	19H0528-04.d	12:20
Matrix Spike	B238243-MS1	B238243-MS1.d	12:33
Matrix Spike Dup	B238243-MSD1	B238243-MSD1.d	12:45
MW-22S	19H0528-06	19H0528-06R.d	20:22
LCS	B238243-BS1	B238243-BS1.d	14:13
Blind Duplicate	19H0528-07	19H1176-02RE1.d	10:54

CALIBRATION DATA

6 - FORM VI

INITIAL CALIBRATION DATA SHEET

581

SOP 434-PFAAS

Client: Dvirka And Bartilucci

SDG: 19H0528

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 (PFBS)	221	0.439533E-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 (PFDS)	241	1.732655	482	1.088221	965	0.9232948	2410	0.7812951	4820	0.9710502	9650	0.7901414
Perfluoroheptanesulfonic acid (PFHpS)	238	0.6557665	475	0.5513387	950	0.5168276	2380	0.4452865	4750	0.5025686	9500	0.49212
Perfluorooctanesulfonamide (PFOS)	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 FTSA)	238	0.3636571	475	0.1207109	950	0.248925	2380	0.3043812	4750	0.229421	9500	0.2541806
8:2 Fluorotelomersulfonate (8:2 FTSA)	240	0.5160146	480	0.2170268	960	0.5034566	2400	0.3894073	4800	0.3242357	9600	0.3906011
Perfluorohexanesulfonic acid (PFHxS)	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 (PFOS)	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 (PFUdA)	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 (PFDDA)	250	2.059933	500	2.356638	1000	2.404284	2500	2.00084	5000	2.208807	10000	2.0774
Perfluorotridecanoic acid (PFTriA)	250	2.558654	500	2.780253	1000	2.491909	2500	2.217594	5000	2.863112	10000	2.307985
Perfluorotetradecanoic acid (PFTetA)	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-N-EtFOSAA	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)

582

SOP 434-PFAAS

Client: Dvirka And Bartilucci

SDG: 19H0528

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 (PFBS)	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 (PFDS)	24100	0.8870023	48200	0.9789127								
Perfluoroheptanesulfonic acid (PFHpS)	23800	0.4483712	47500	0.4817227								
Perfluorooctanesulfonamide (PFOS)	25000	7.415508	50000	7.844119								
Perfluoropentanoic acid (PFPeA)	25000	0.3396383	50000	0.3375767								
6:2 Fluorotelomersulfonate (6:2 FTS)	23800	0.2429459	47500	0.2354187								
8:2 Fluorotelomersulfonate (8:2 FTS)	24000	0.3919645	48000	0.3942908								
Perfluorohexanesulfonic acid (PFHxS)	22800	0.932042	45500	0.9569146								
Perfluorooctanoic acid (PFOA)	25000	1.38283	50000	1.321524								
Perfluorooctanesulfonic acid (PFOS)	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 (PFUdA)	25000	1.624082	50000	1.729151								
N-EtFOSAA	25000	0.9650055	50000	0.99337								
Perfluorododecanoic acid (PFDDA)	25000	2.250963	50000	2.524343								
Perfluorotridecanoic acid (PFTrA)	25000	2.556851	50000	2.868739								
Perfluorotetradecanoic acid (PFTeA)	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)

583

SOP 434-PFAAS

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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

584

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

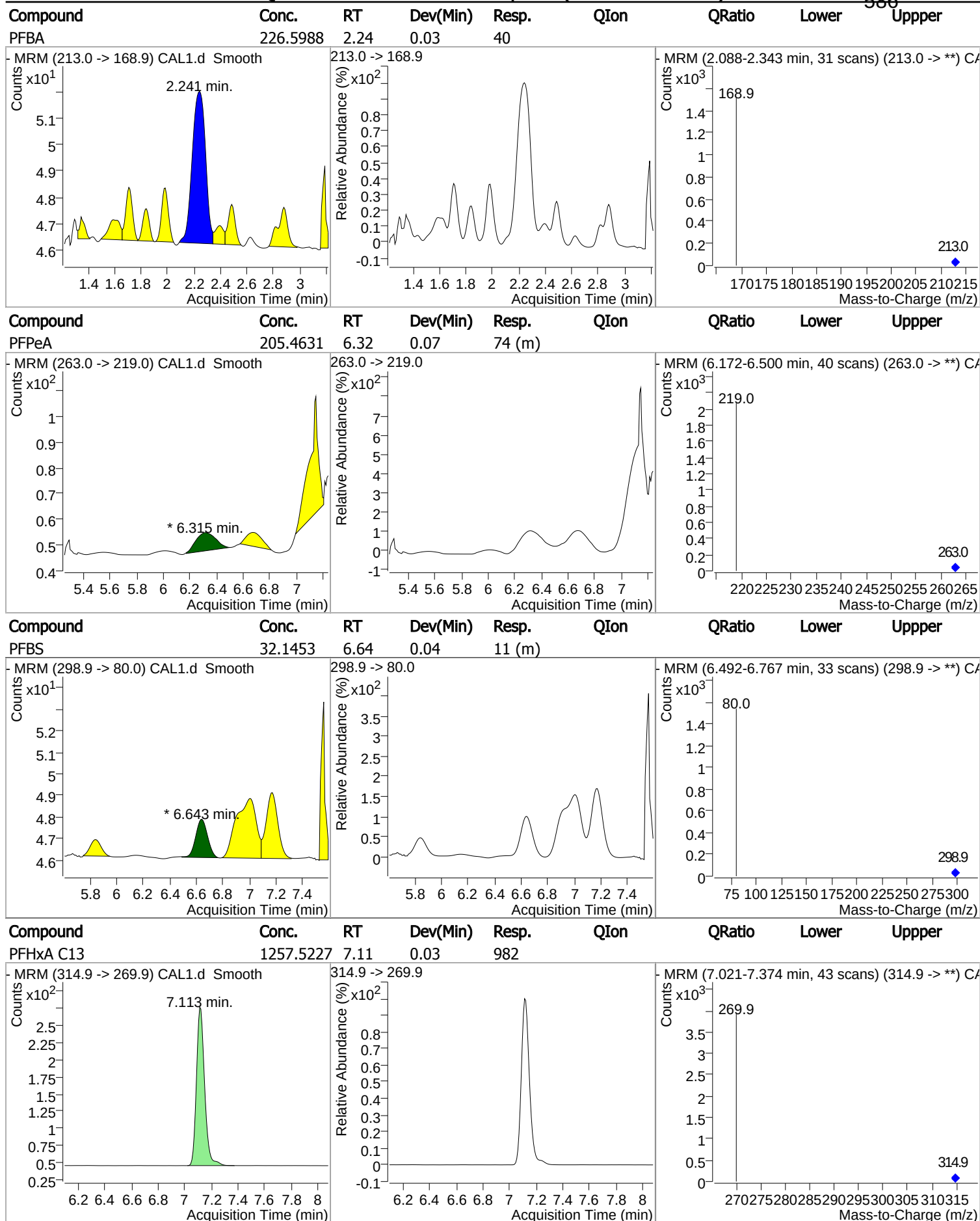
Quantitation Results Report (Not Reviewed)

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			

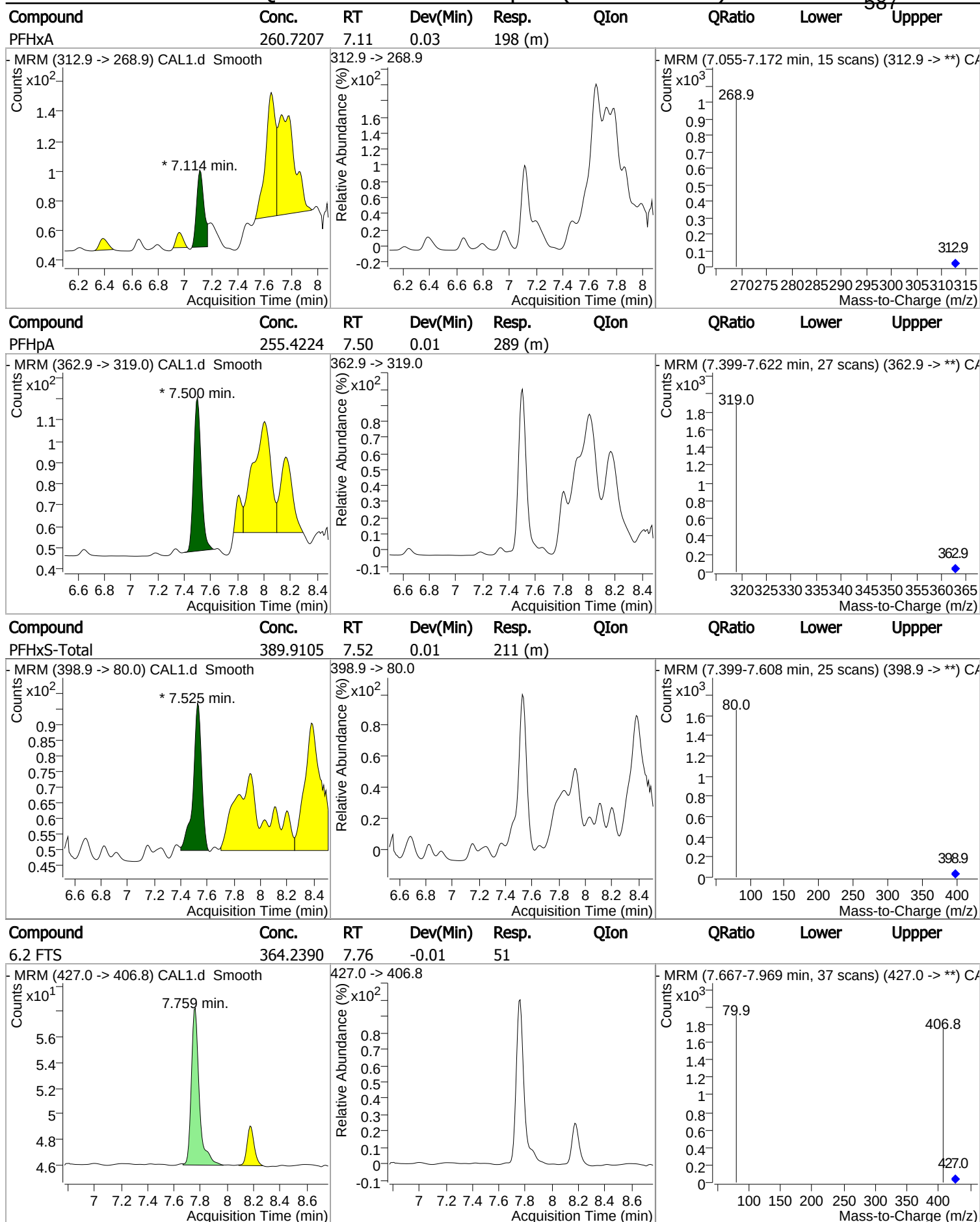
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.768	416.9 -> 371.9	10951	10000.0000	pg/ml	m	-0.008
M PFOS C13	7.976	502.9 -> 80.0	17044	28700.0000	pg/ml		-0.017
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	9609	40000.0000	pg/ml		-0.042
System Monitoring Compounds							
S PFHxA 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

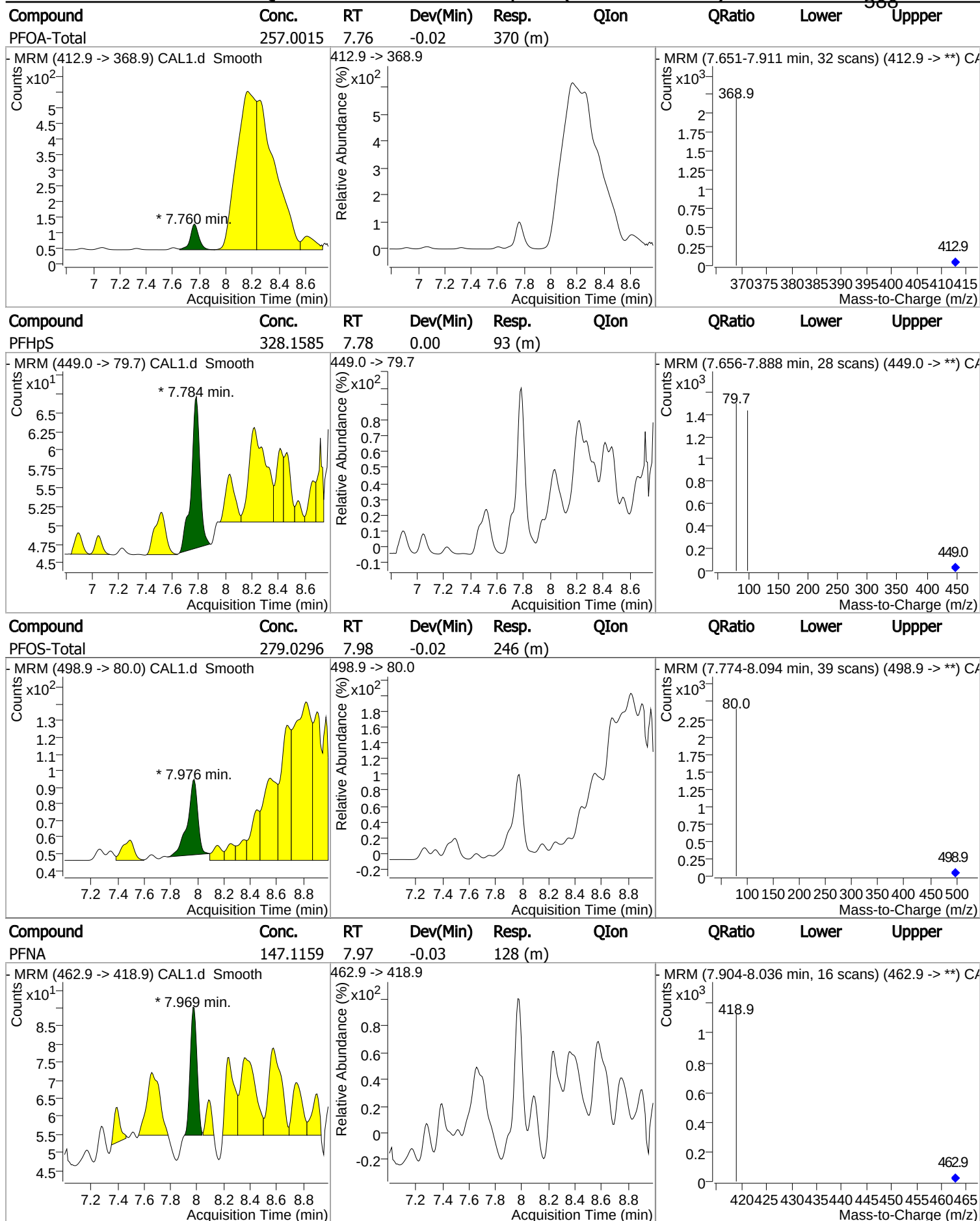
Quantitation Results Report (Not Reviewed)



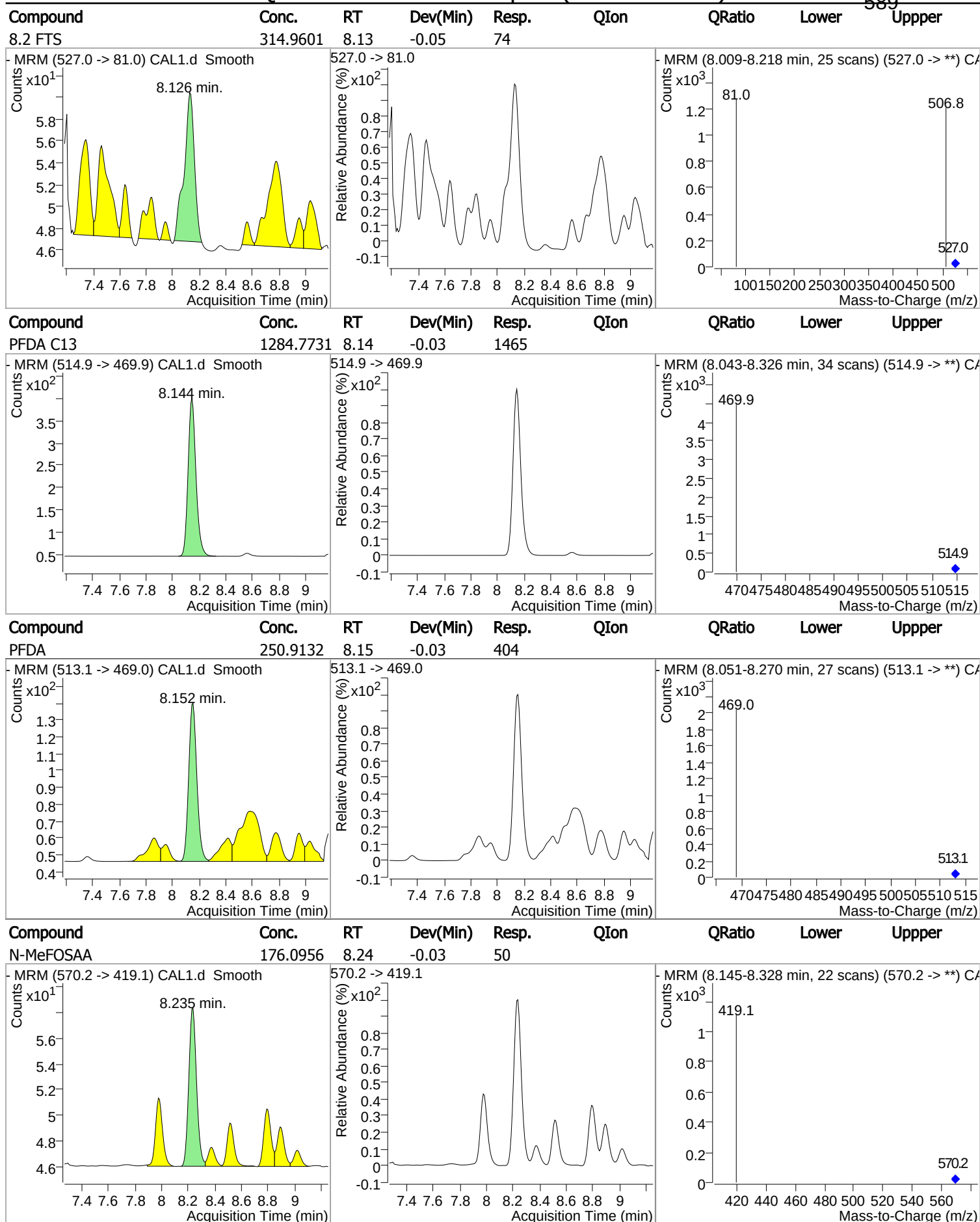
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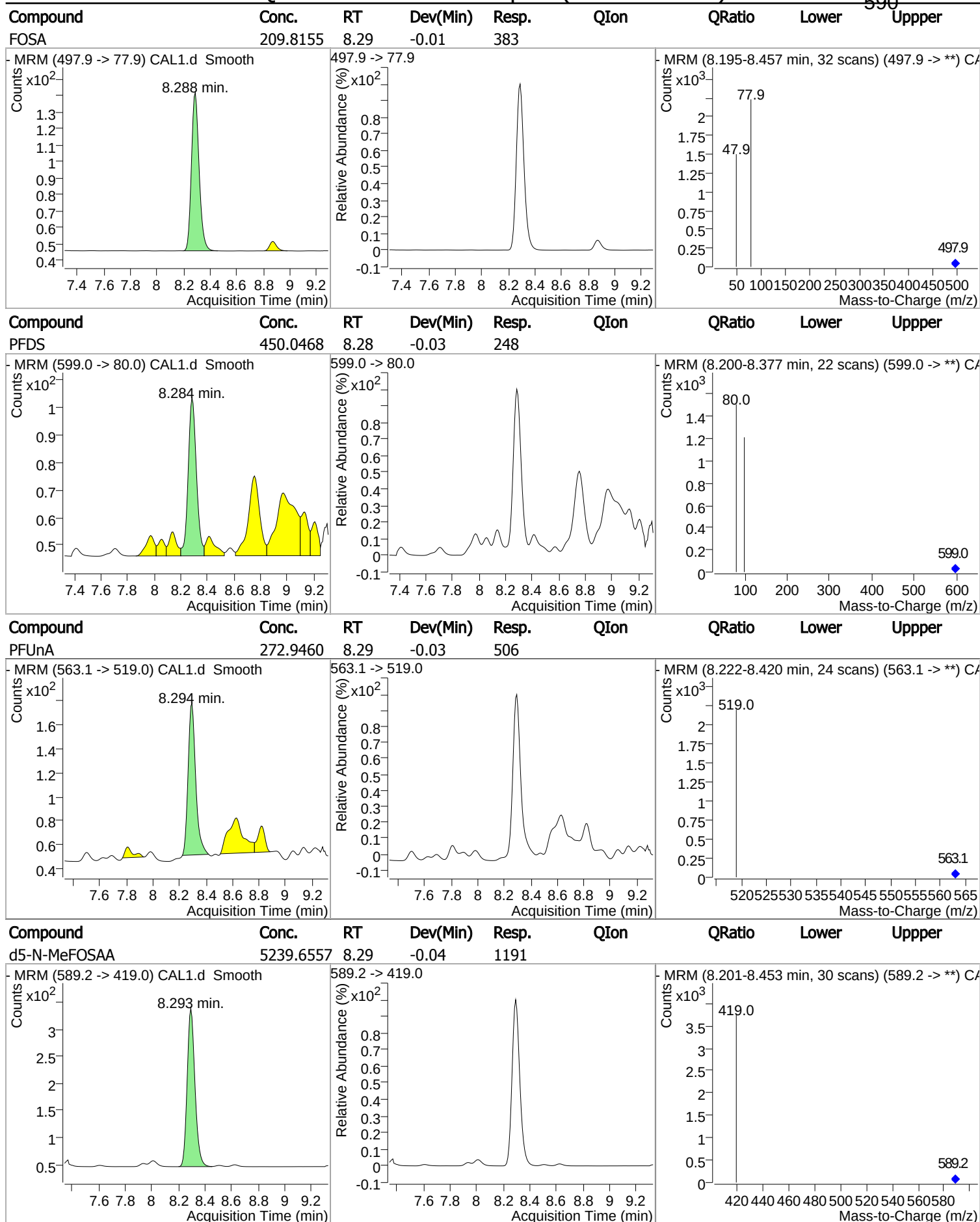
Quantitation Results Report (Not Reviewed)



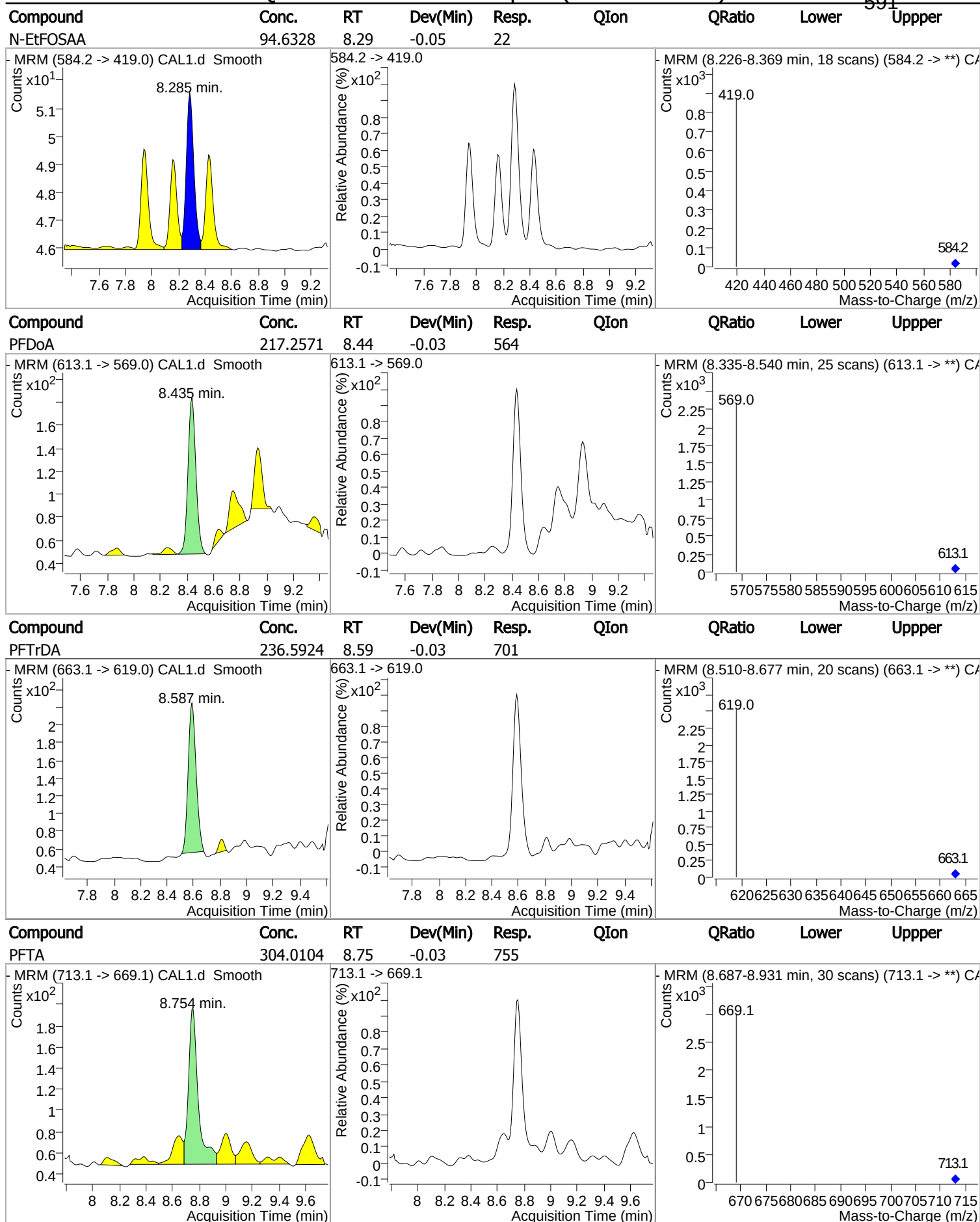
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



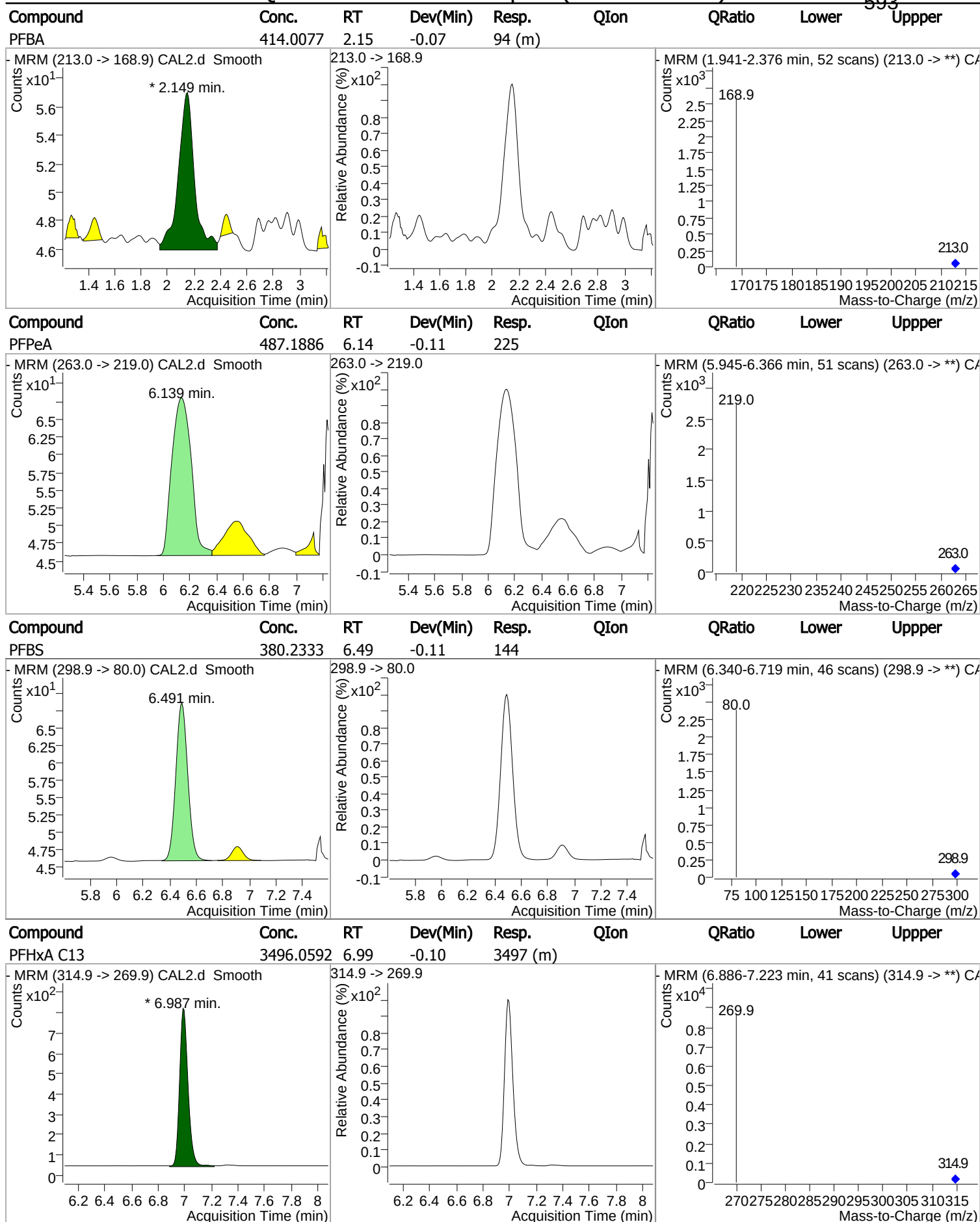
Quantitation Results Report (Not Reviewed)

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			

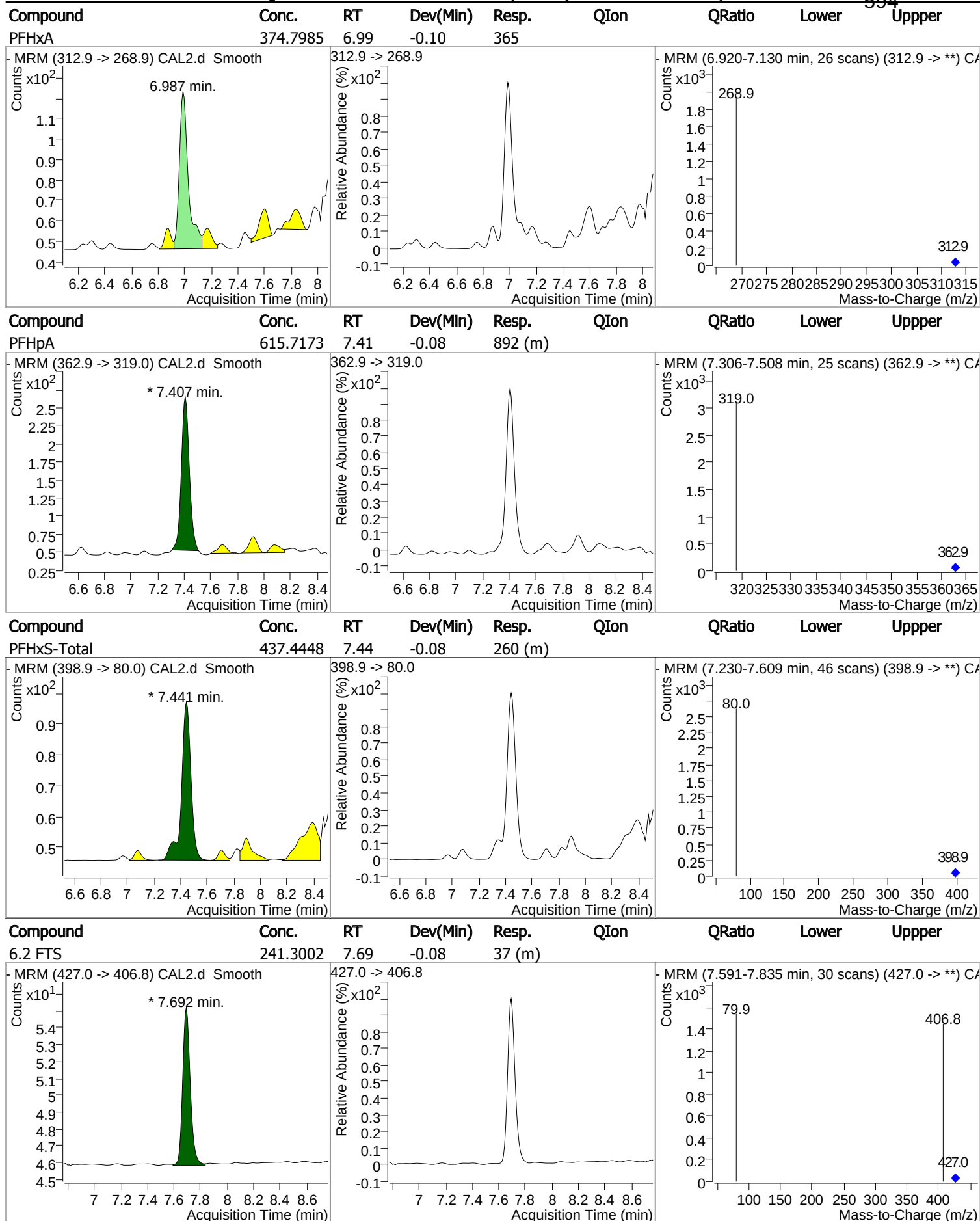
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.701	416.9 -> 371.9	14023	10000.0000	pg/ml	m	-0.076
M PFOS C13	7.934	502.9 -> 80.0	18678	28700.0000	pg/ml	m	-0.059
M d3-N-MeFOSAA	8.201	573.2 -> 419.0	11637	40000.0000	pg/ml	m	-0.059
System Monitoring Compounds							
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

Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)

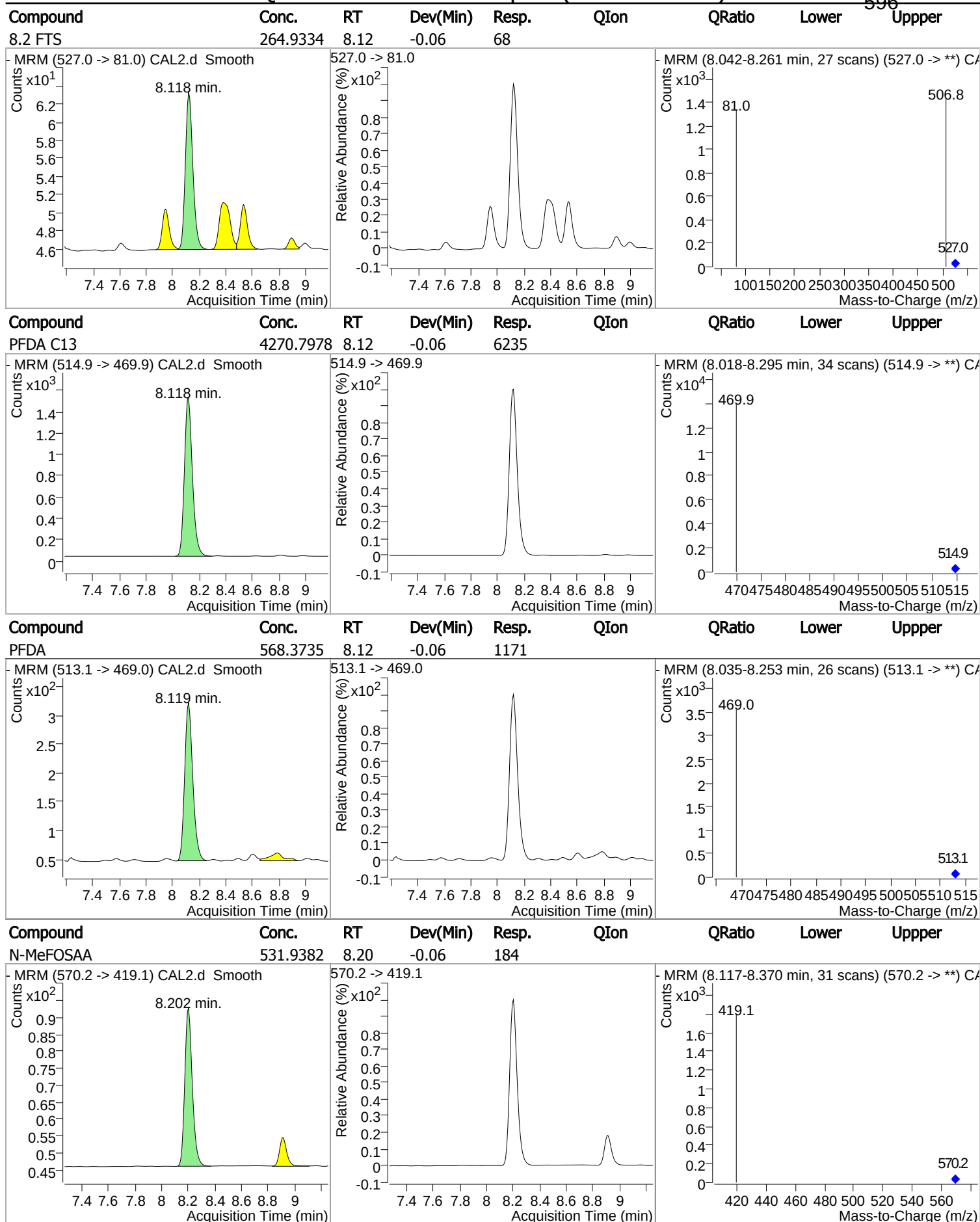


Quantitation Results Report (Not Reviewed)

595

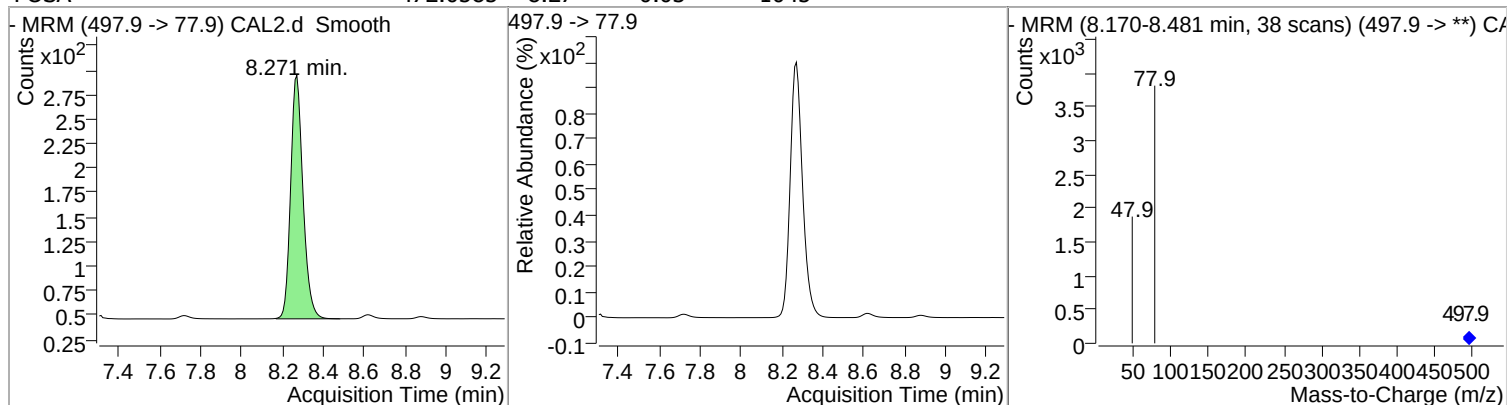
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFOA-Total	618.8194	7.70	-0.08	1139				
MRM (412.9 -> 368.9) CAL2.d Smooth 412.9 -> 368.9 MRM (7.622-7.804 min, 22 scans) (412.9 -> **) CA								
Counts x10² 7.701 min. Acquisition Time (min) Relative Abundance (%) x10² Acquisition Time (min) Counts x10³ 368.9 Mass-to-Charge (m/z)								
PFHpS	550.6419	7.72	-0.07	170 (m)				
MRM (449.0 -> 79.7) CAL2.d Smooth 449.0 -> 79.7 MRM (7.641-8.003 min, 44 scans) (449.0 -> **) CA								
Counts x10¹ * 7.717 min. Acquisition Time (min) Relative Abundance (%) x10² Acquisition Time (min) Counts x10³ 79.7 Mass-to-Charge (m/z)								
PFOS-Total	564.6053	7.93	-0.07	546				
MRM (498.9 -> 80.0) CAL2.d Smooth 498.9 -> 80.0 MRM (7.741-8.090 min, 42 scans) (498.9 -> **) CA								
Counts x10² 7.926 min. Acquisition Time (min) Relative Abundance (%) x10² Acquisition Time (min) Counts x10³ 80.0 Mass-to-Charge (m/z)								
PFNA	740.9481	7.93	-0.07	828				
MRM (462.9 -> 418.9) CAL2.d Smooth 462.9 -> 418.9 MRM (7.826-8.034 min, 25 scans) (462.9 -> **) CA								
Counts x10² 7.927 min. Acquisition Time (min) Relative Abundance (%) x10² Acquisition Time (min) Counts x10³ 418.9 Mass-to-Charge (m/z)								

Quantitation Results Report (Not Reviewed)

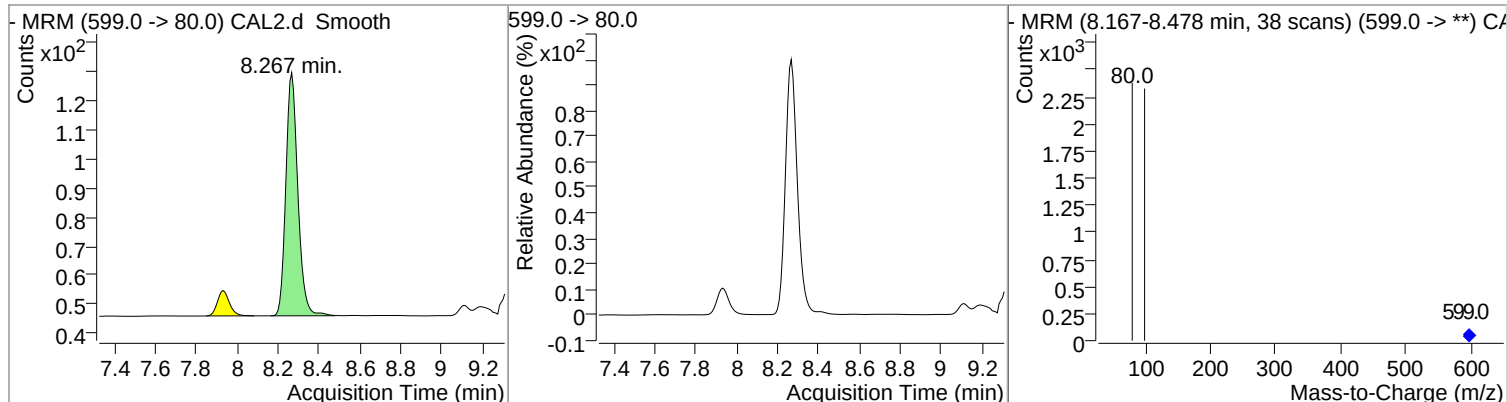


Quantitation Results Report (Not Reviewed)

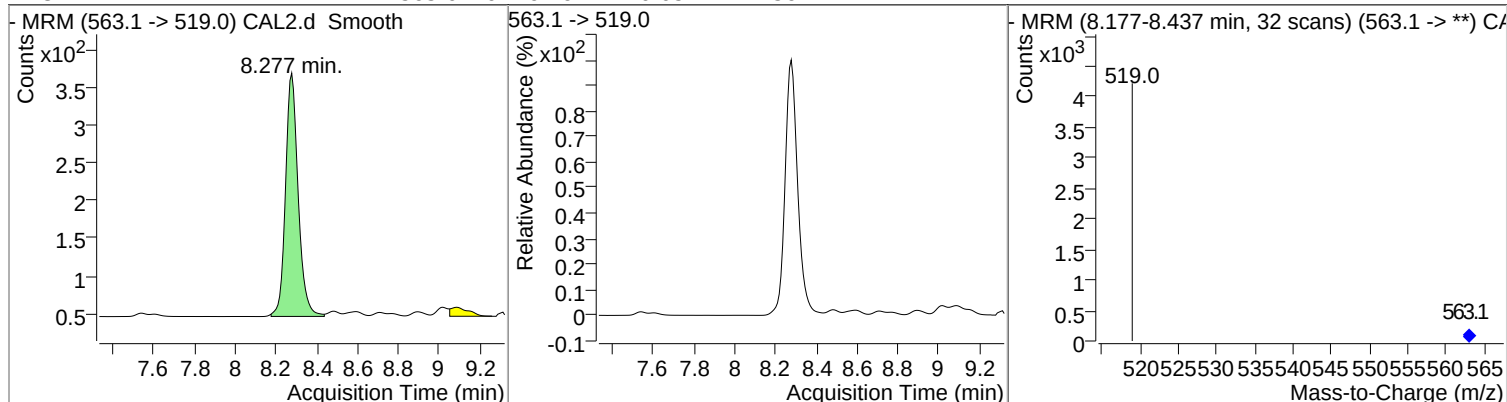
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
FOSA	472.0585	8.27	-0.03	1045				



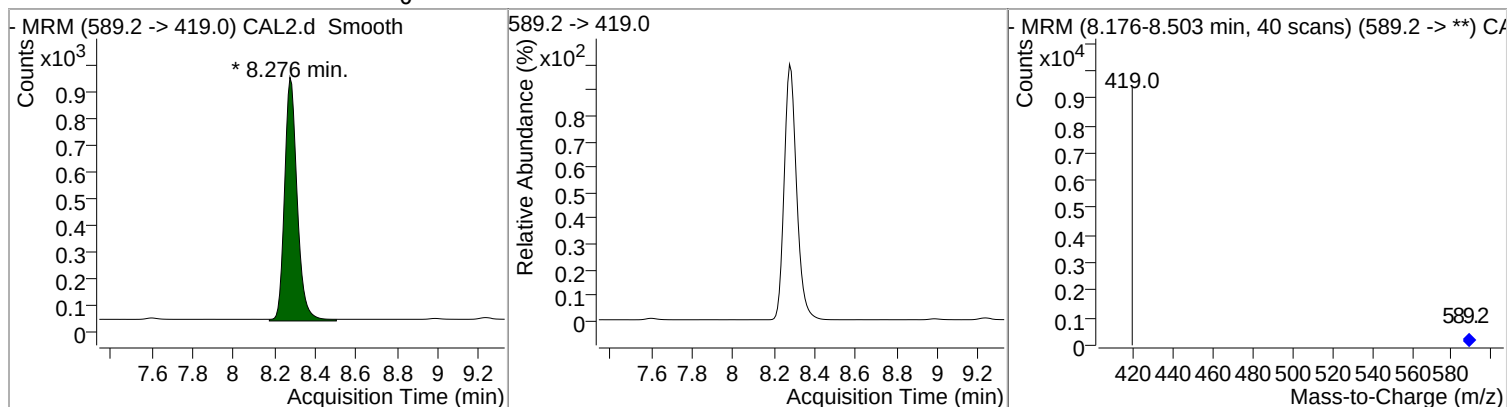
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFDS	565.3174	8.27	-0.05	341				



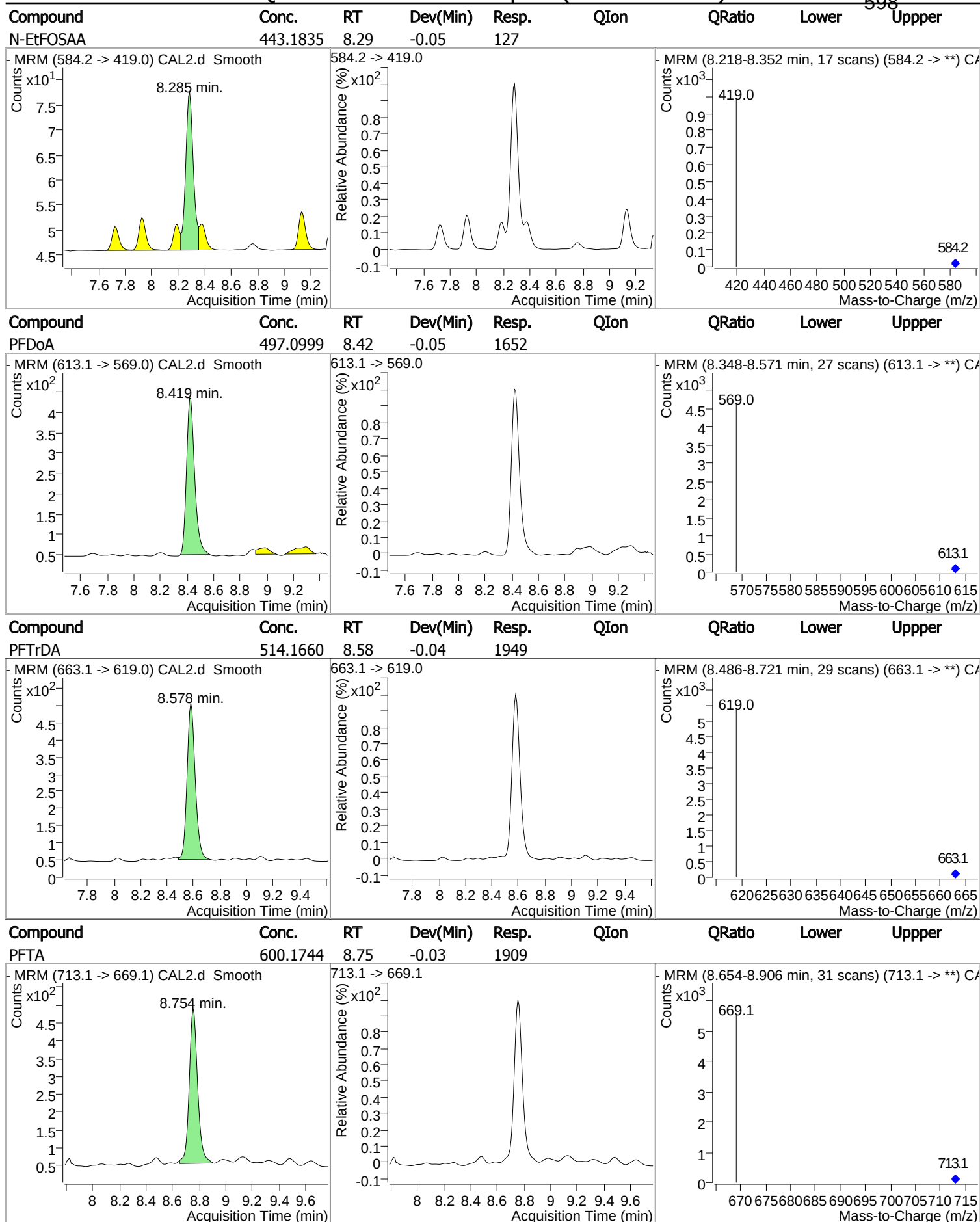
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFUnA	583.0140	8.28	-0.05	1384				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
d5-N-MeFOSAA	14258.867	8.28	-0.06	3924 (m)				



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)

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			

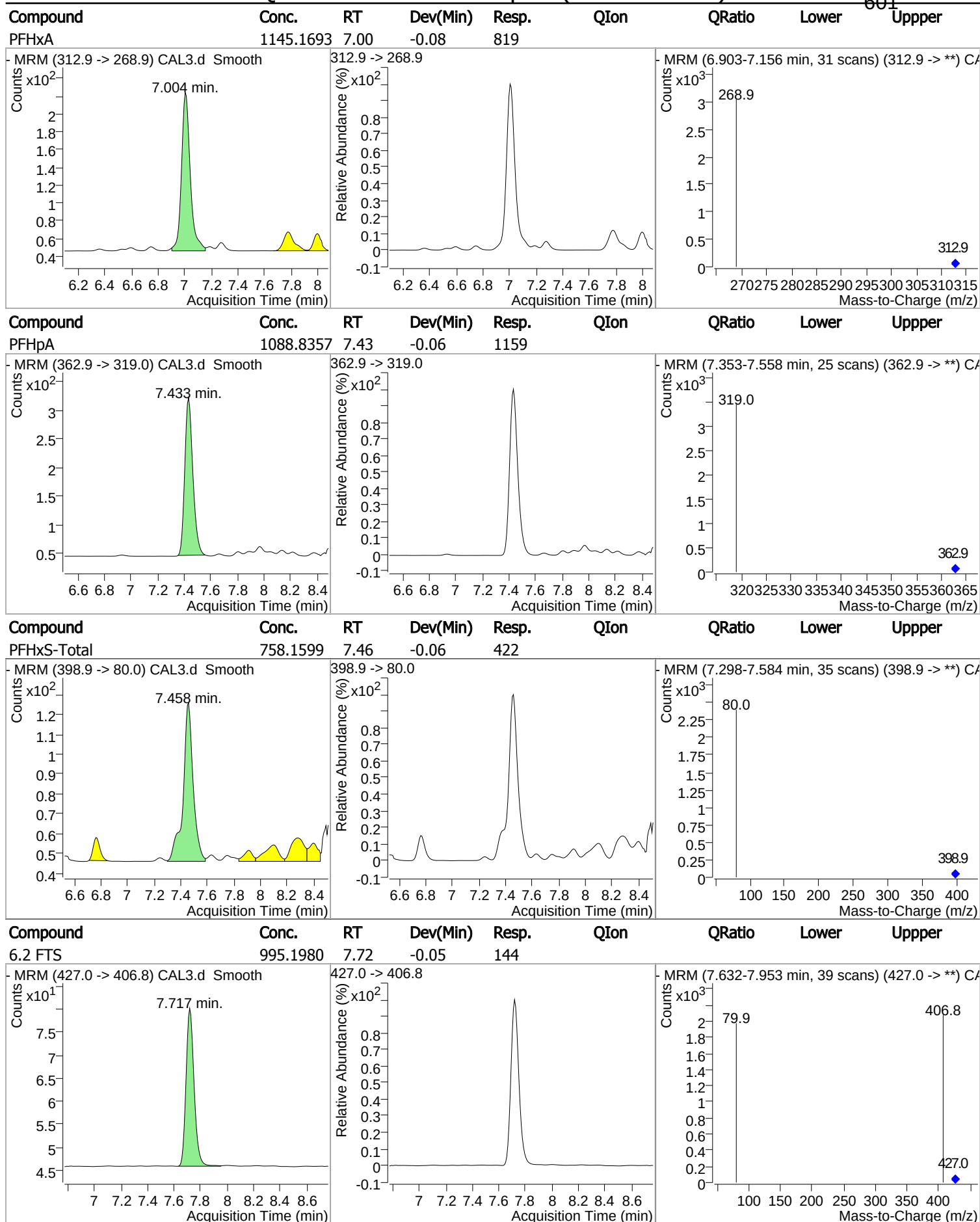
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.726	416.9 -> 371.9	10303	10000.0000	pg/ml	-0.050
M PFOS C13	7.951	502.9 -> 80.0	17510	28700.0000	pg/ml m	-0.042
M d3-N-MeFOSAA	8.226	573.2 -> 419.0	6682	40000.0000	pg/ml m	-0.034
System Monitoring Compounds						
S PFHxA 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 PFTTrDA	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

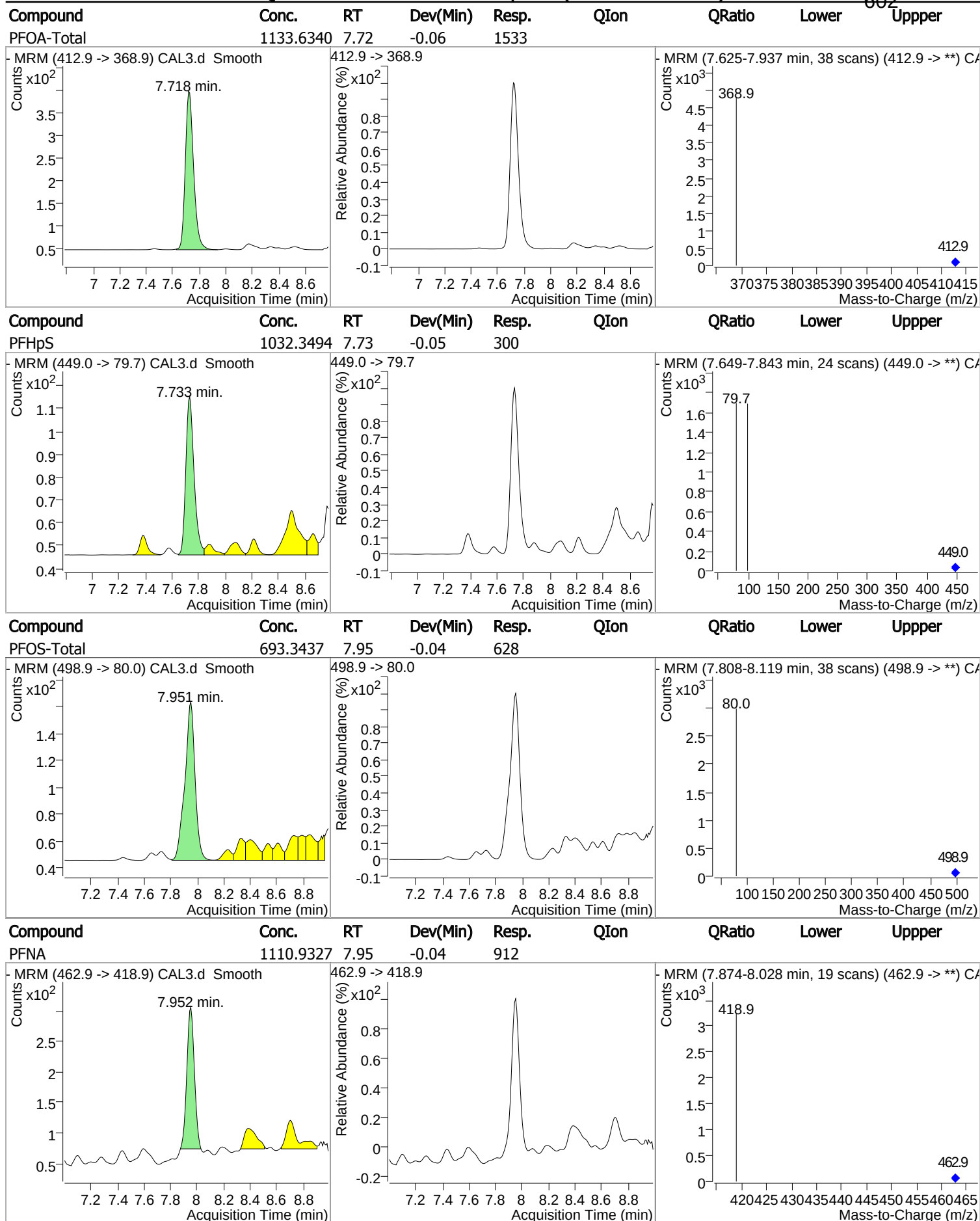
Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBA	1094.9571	2.15	-0.07	183				
MRM (213.0 -> 168.9) CAL3.d Smooth 213.0 -> 168.9 MRM (2.031-2.326 min, 36 scans) (213.0 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFPeA	904.9745	6.16	-0.09	306				
MRM (263.0 -> 219.0) CAL3.d Smooth 263.0 -> 219.0 MRM (5.928-6.391 min, 56 scans) (263.0 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBS	874.0103	6.51	-0.09	309				
MRM (298.9 -> 80.0) CAL3.d Smooth 298.9 -> 80.0 MRM (6.357-6.749 min, 47 scans) (298.9 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFHxA C13	5964.7966	7.01	-0.08	4383 (m)				
MRM (314.9 -> 269.9) CAL3.d Smooth 314.9 -> 269.9 MRM (6.928-7.130 min, 25 scans) (314.9 -> **) CA 								

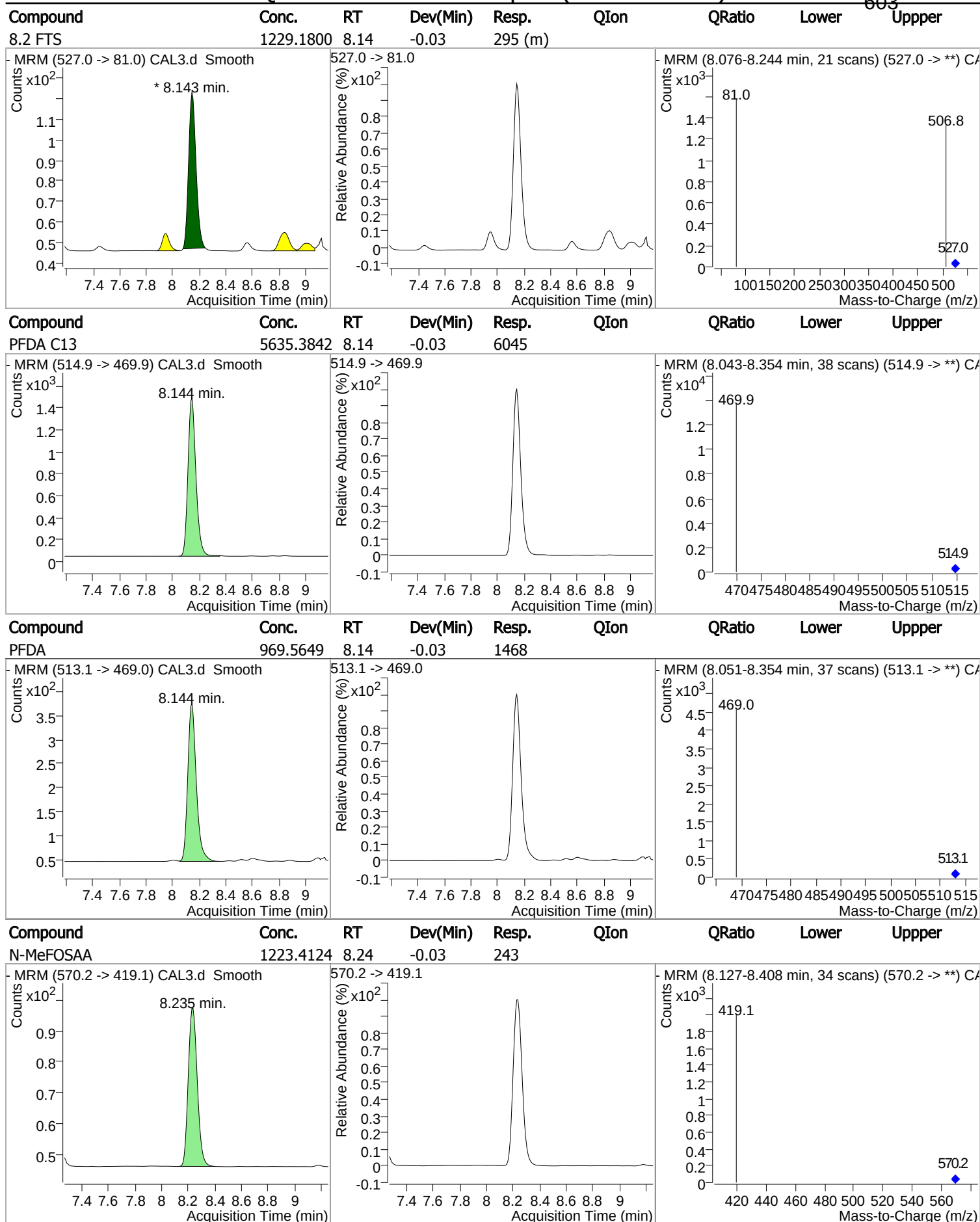
Quantitation Results Report (Not Reviewed)



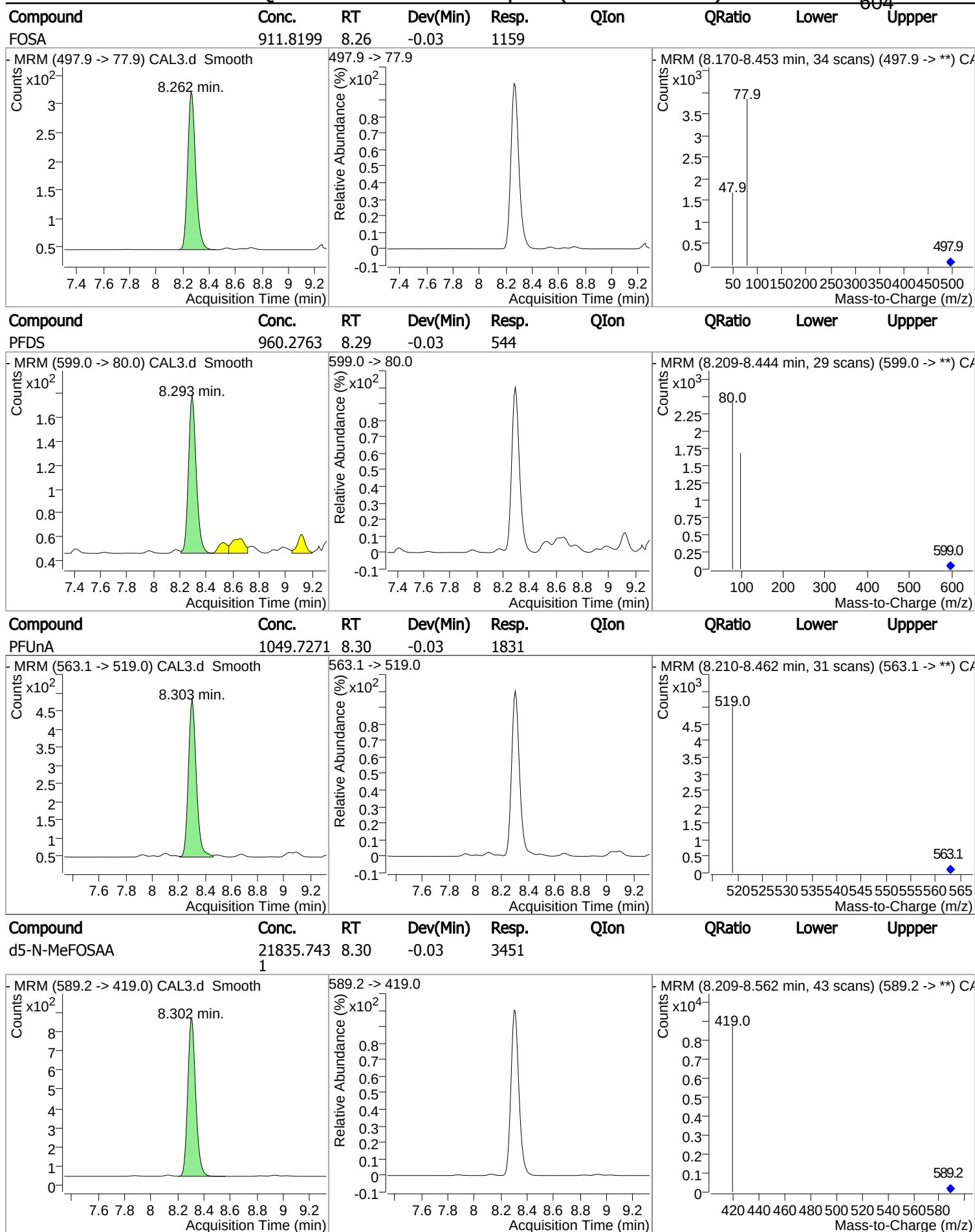
Quantitation Results Report (Not Reviewed)



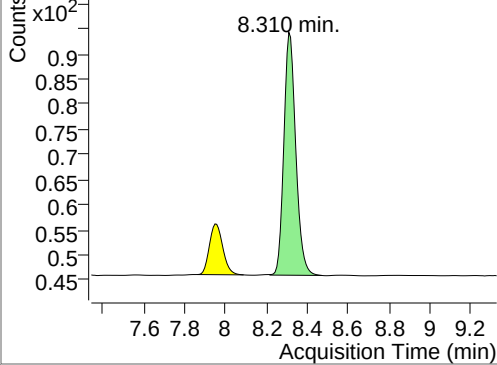
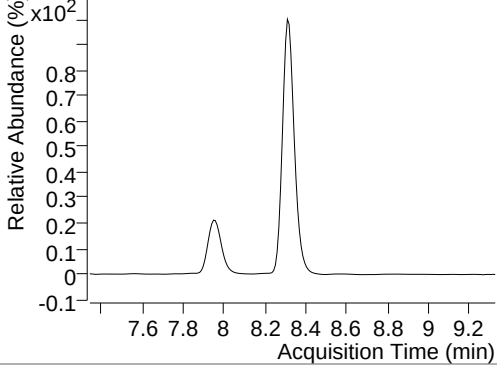
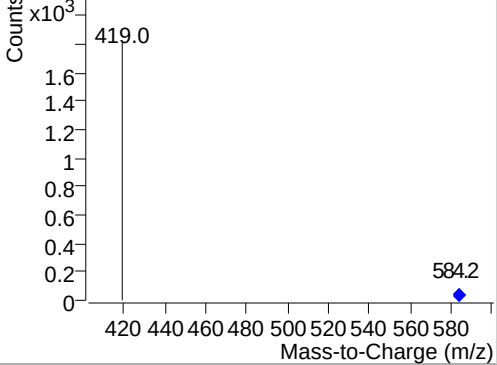
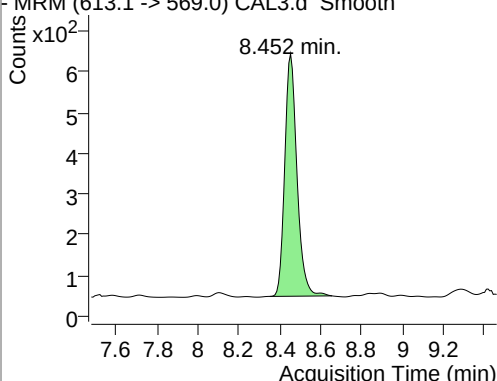
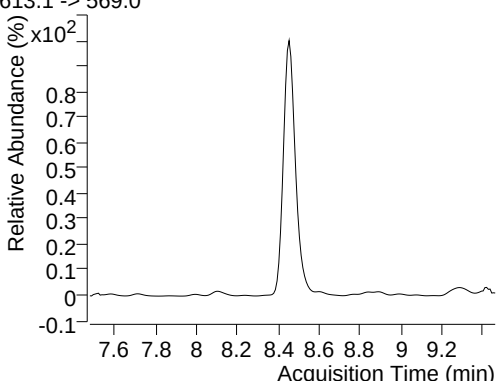
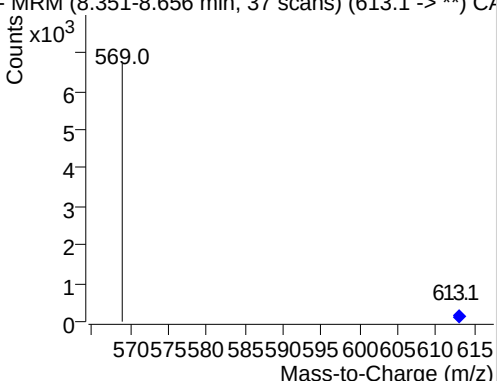
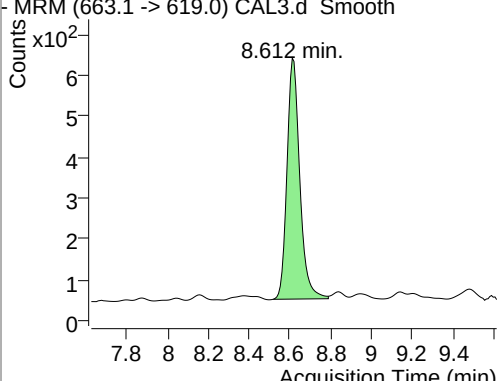
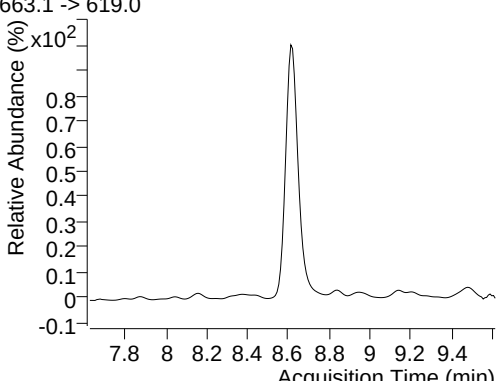
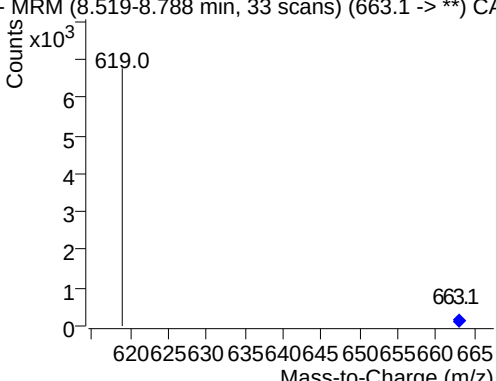
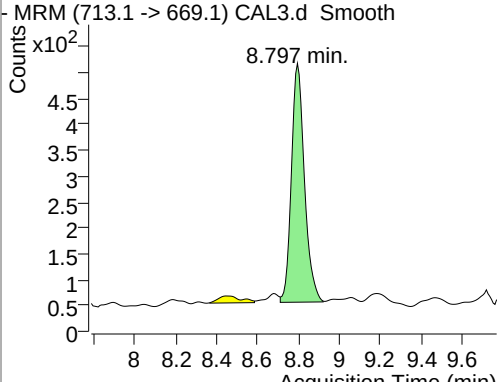
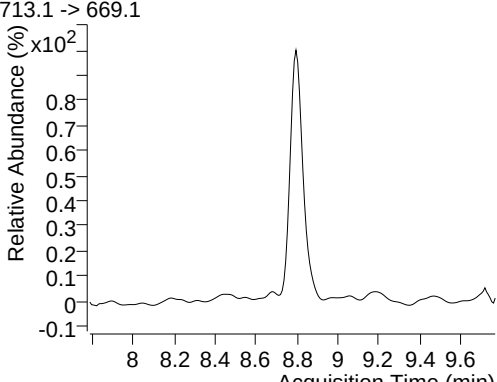
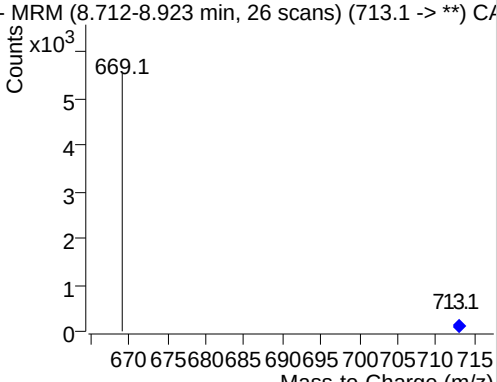
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
N-EtFOSAA	1193.0356	8.31	-0.03	196				
MRM (584.2 -> 419.0) CAL3.d Smooth  584.2 -> 419.0  MRM (8.218-8.473 min, 31 scans) (584.2 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFDaA	1014.3004	8.45	-0.02	2477				
MRM (613.1 -> 569.0) CAL3.d Smooth  613.1 -> 569.0  MRM (8.351-8.656 min, 37 scans) (613.1 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFTrDA	921.6824	8.61	-0.01	2567				
MRM (663.1 -> 619.0) CAL3.d Smooth  663.1 -> 619.0  MRM (8.519-8.788 min, 33 scans) (663.1 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFTA	877.3246	8.80	0.02	2050				
MRM (713.1 -> 669.1) CAL3.d Smooth  713.1 -> 669.1  MRM (8.712-8.923 min, 26 scans) (713.1 -> **) CA 								

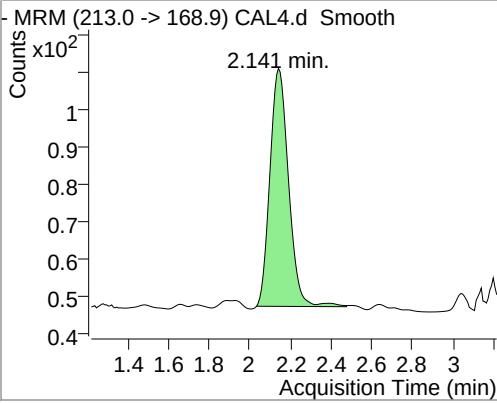
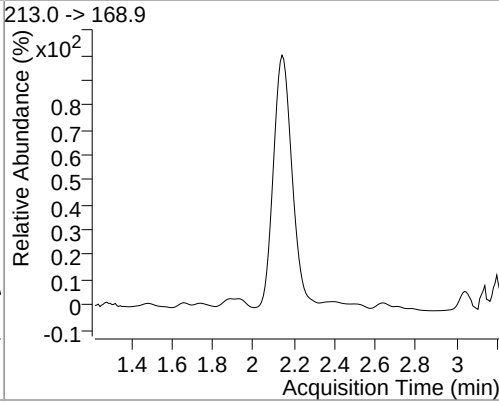
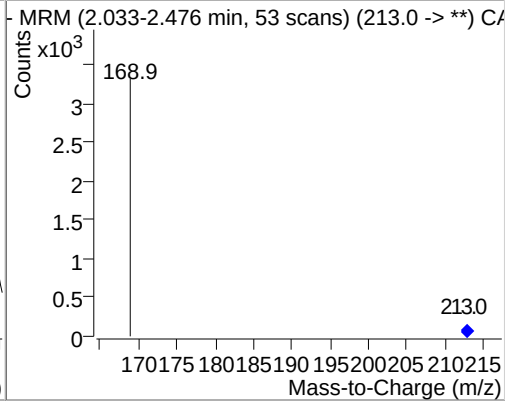
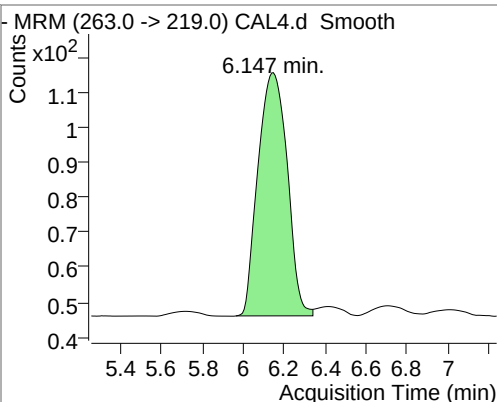
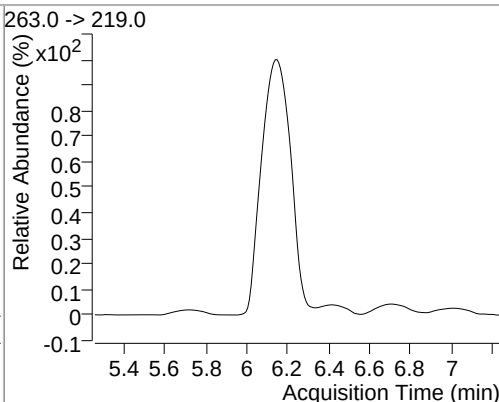
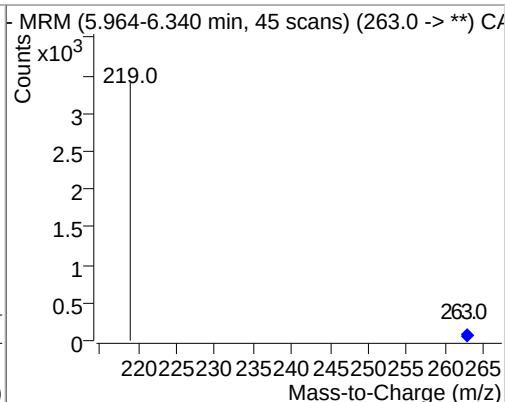
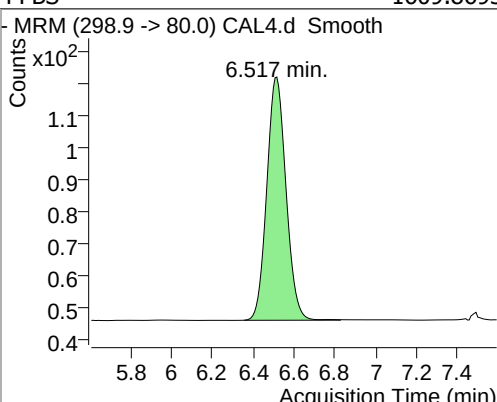
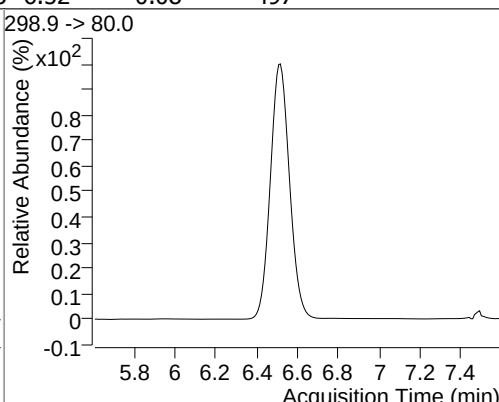
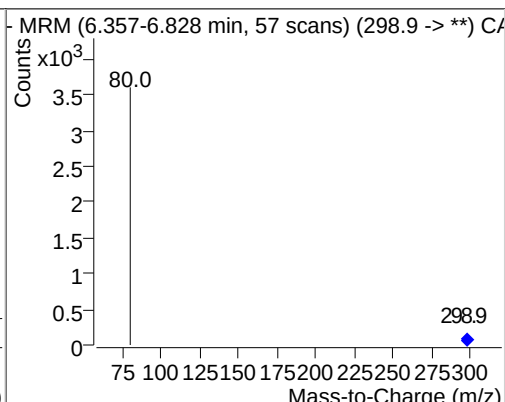
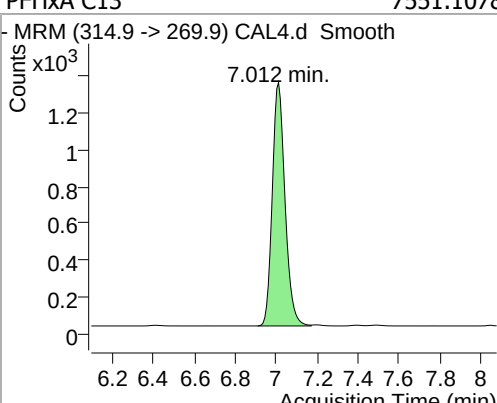
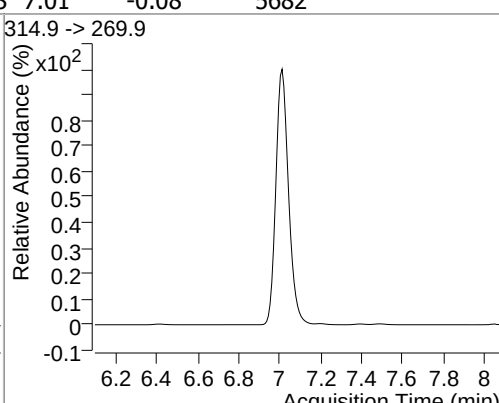
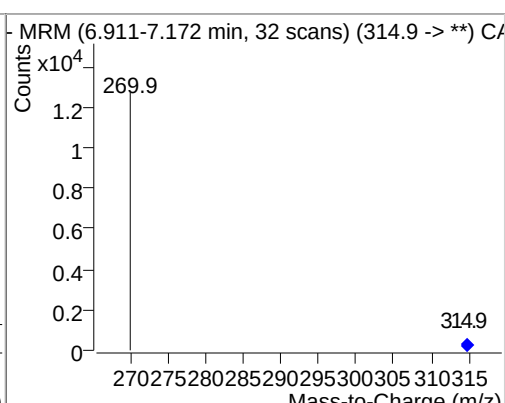
Quantitation Results Report (Not Reviewed)

Data File	CAL4.d	Operator	
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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			

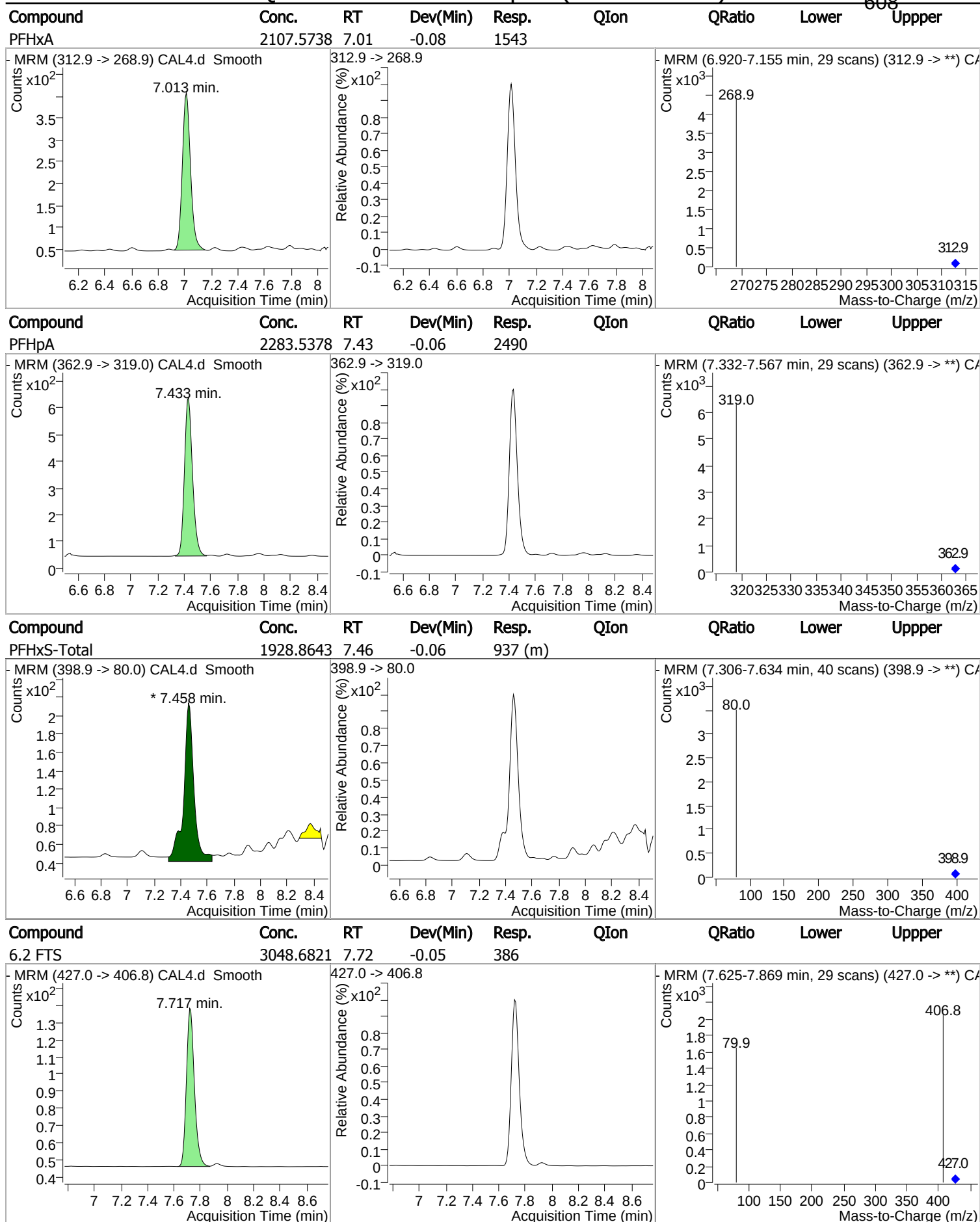
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.726	416.9 -> 371.9	10550	10000.0000	pg/ml	m	-0.050
M PFOS C13	7.959	502.9 -> 80.0	15283	28700.0000	pg/ml		-0.034
M d3-N-MeFOSAA	8.227	573.2 -> 419.0	6671	40000.0000	pg/ml	m	-0.034
System Monitoring Compounds							
S 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

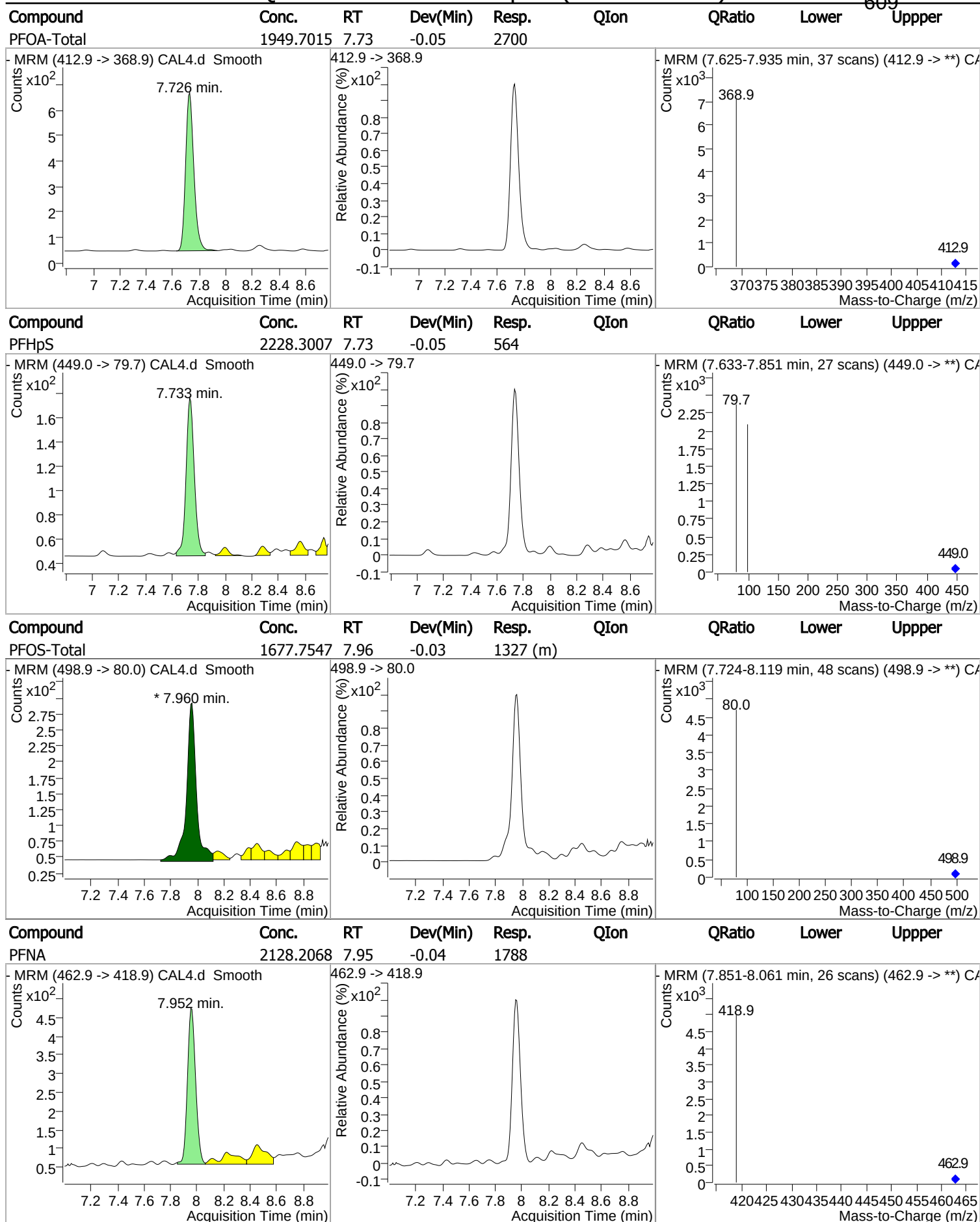
Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBA	2368.4214	2.14	-0.08	405				
MRM (213.0 -> 168.9) CAL4.d Smooth  MRM (213.0 -> 168.9)  MRM (2.033-2.476 min, 53 scans) (213.0 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFPeA	2014.0503	6.15	-0.10	698				
MRM (263.0 -> 219.0) CAL4.d Smooth  MRM (263.0 -> 219.0)  MRM (5.964-6.340 min, 45 scans) (263.0 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBS	1609.8693	6.52	-0.08	497				
MRM (298.9 -> 80.0) CAL4.d Smooth  MRM (298.9 -> 80.0)  MRM (6.357-6.828 min, 57 scans) (298.9 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFHxA C13	7551.1078	7.01	-0.08	5682				
MRM (314.9 -> 269.9) CAL4.d Smooth  MRM (314.9 -> 269.9)  MRM (6.911-7.172 min, 32 scans) (314.9 -> **) CA 								

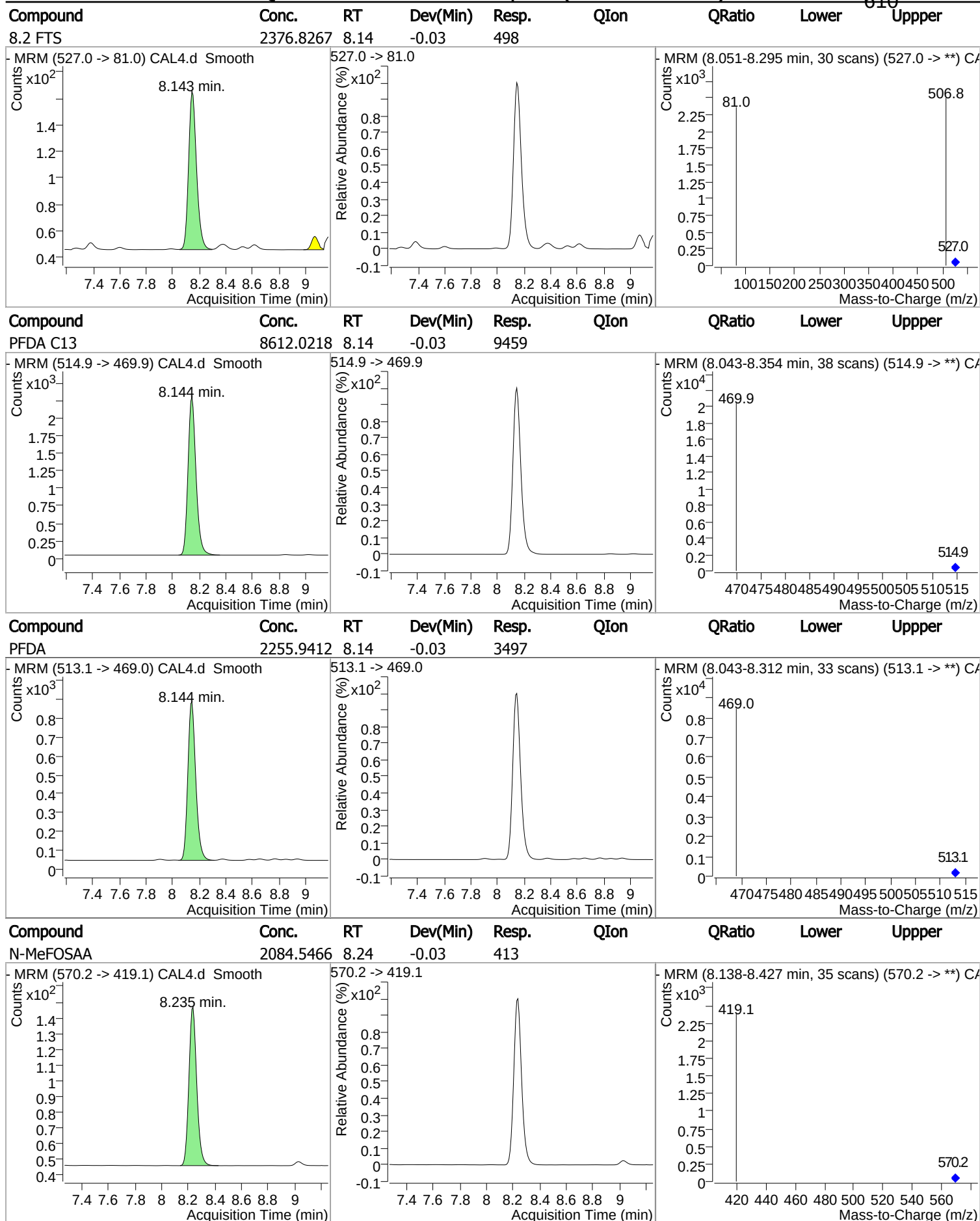
Quantitation Results Report (Not Reviewed)



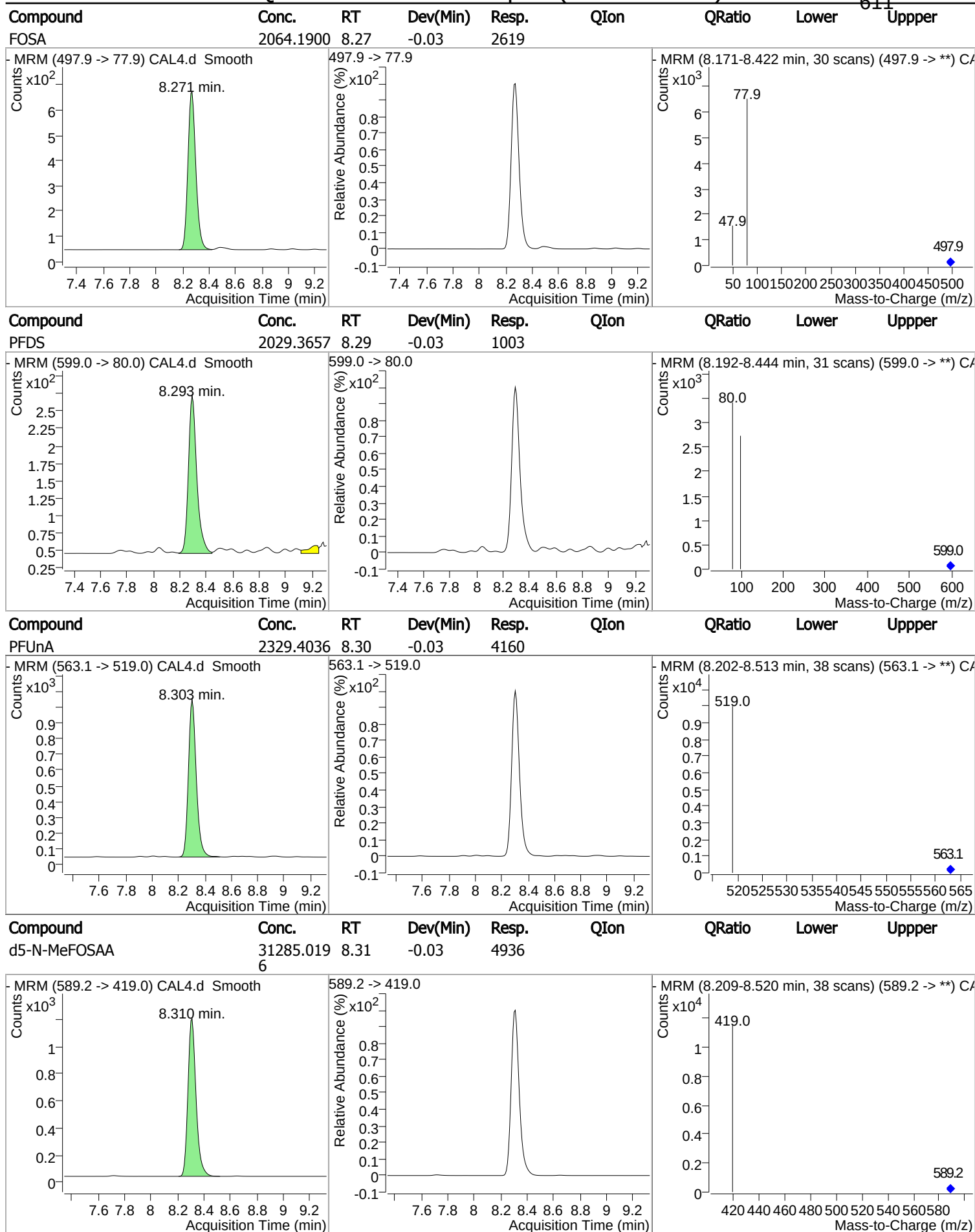
Quantitation Results Report (Not Reviewed)



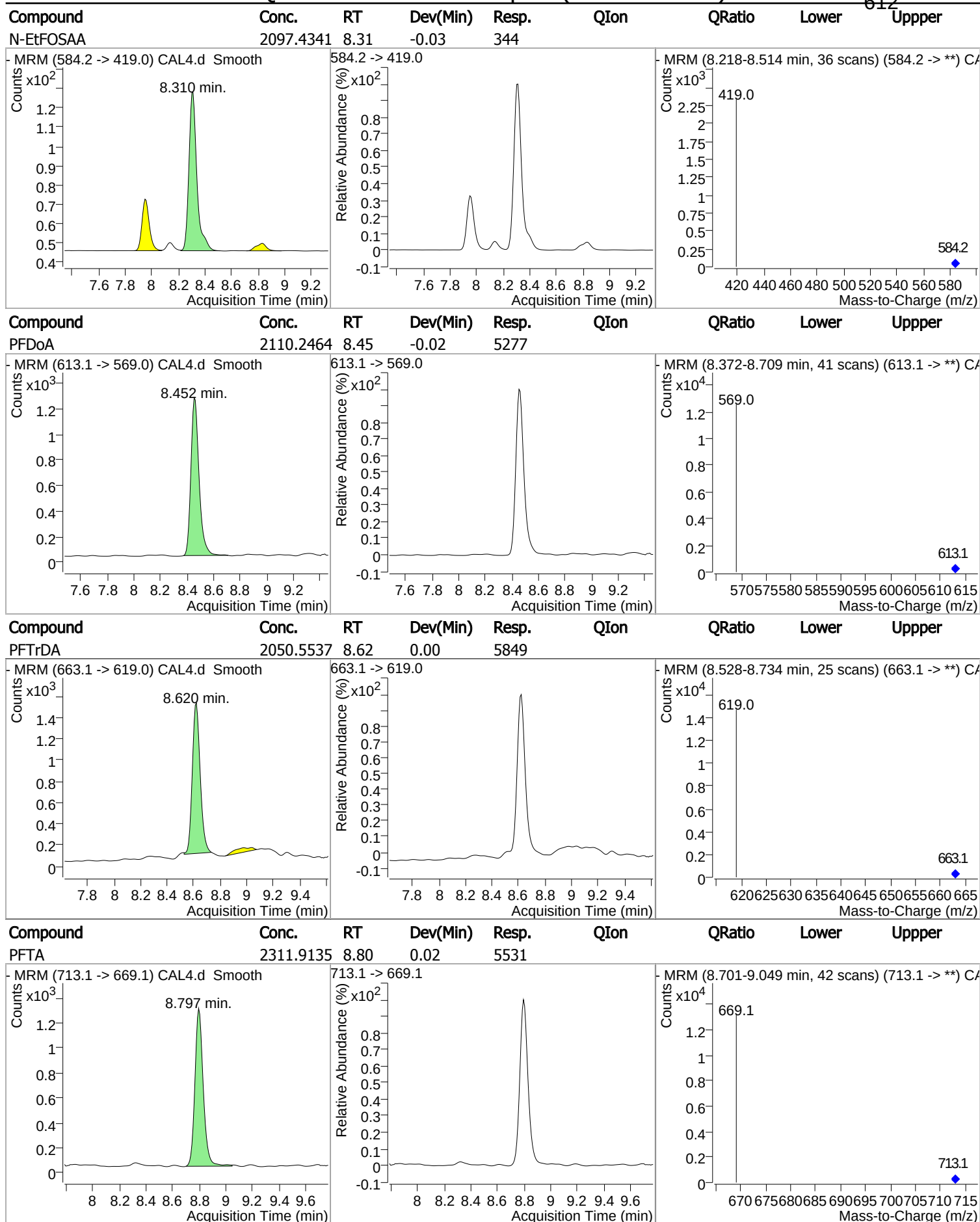
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



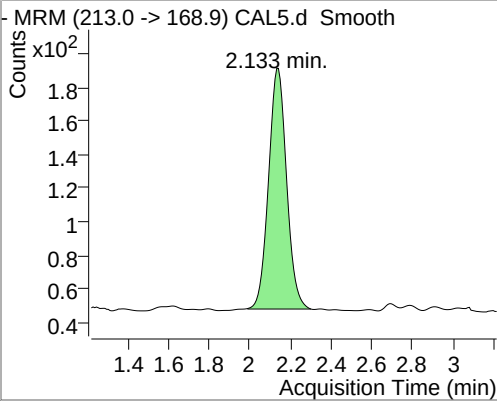
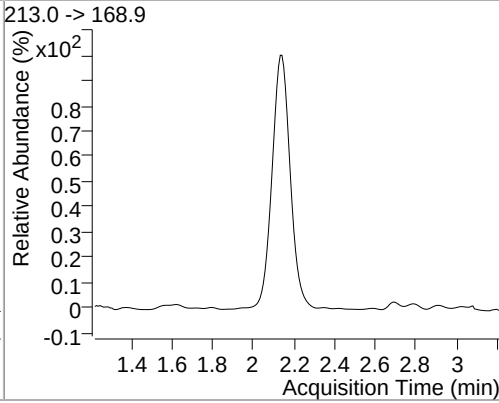
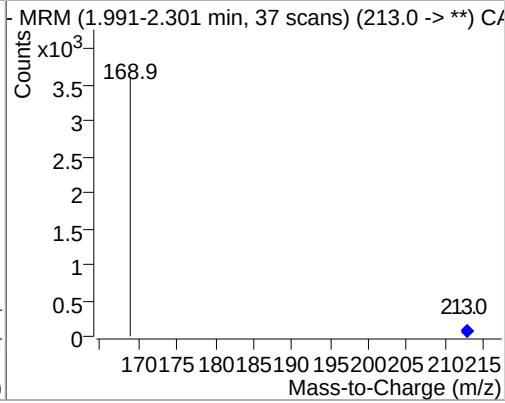
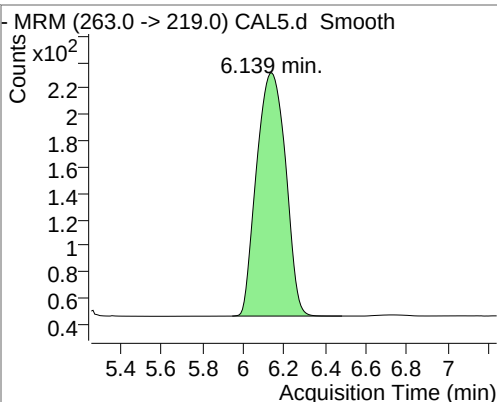
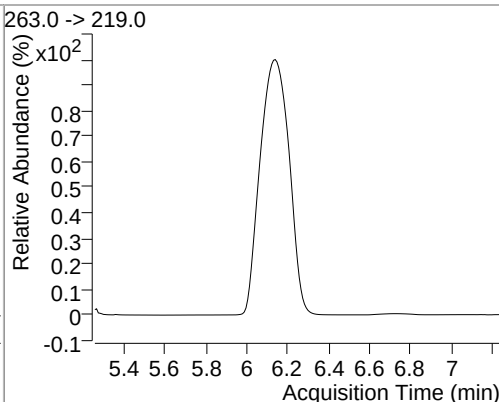
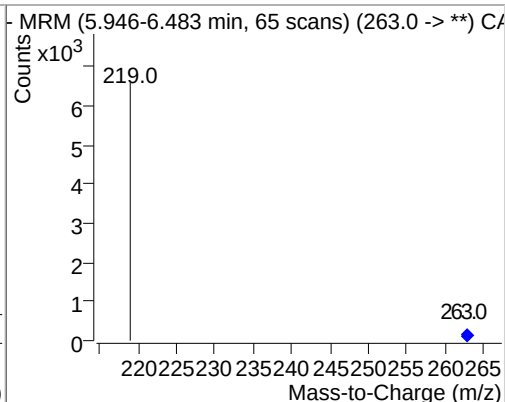
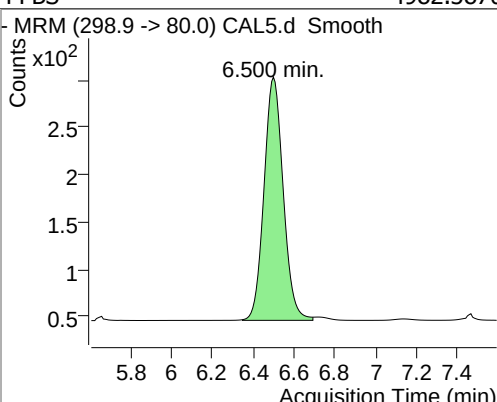
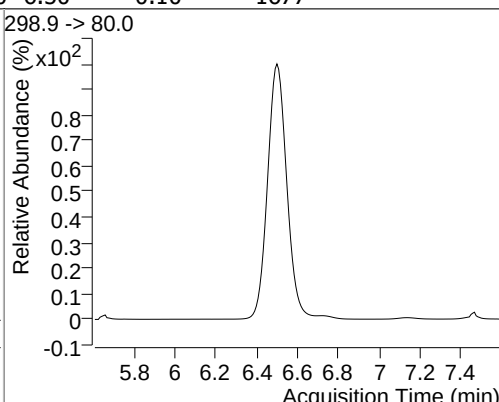
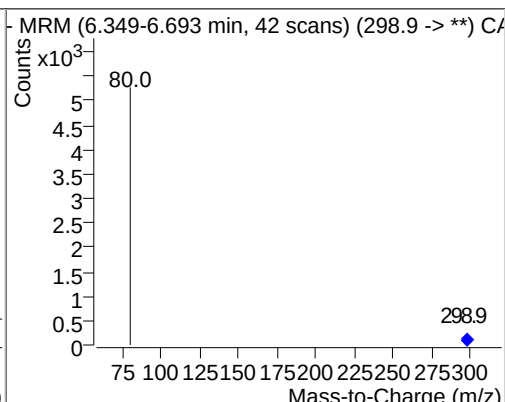
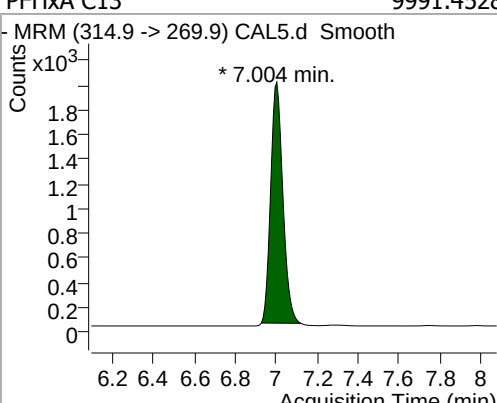
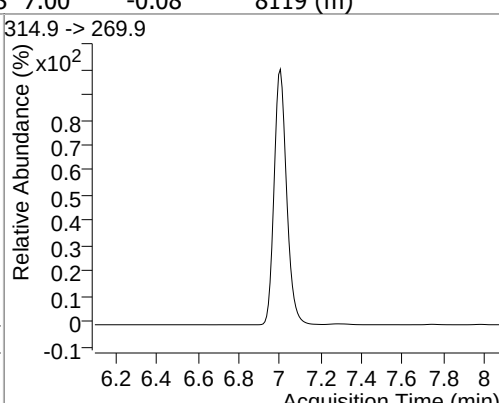
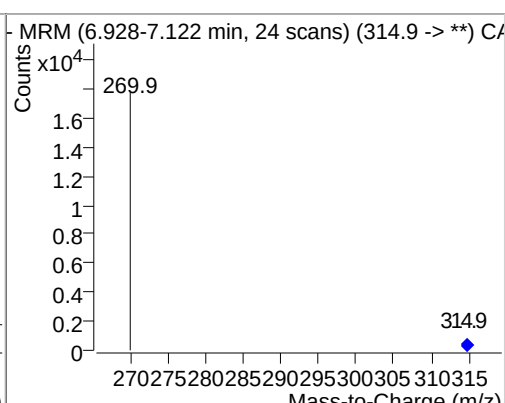
Quantitation Results Report (Not Reviewed)

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			

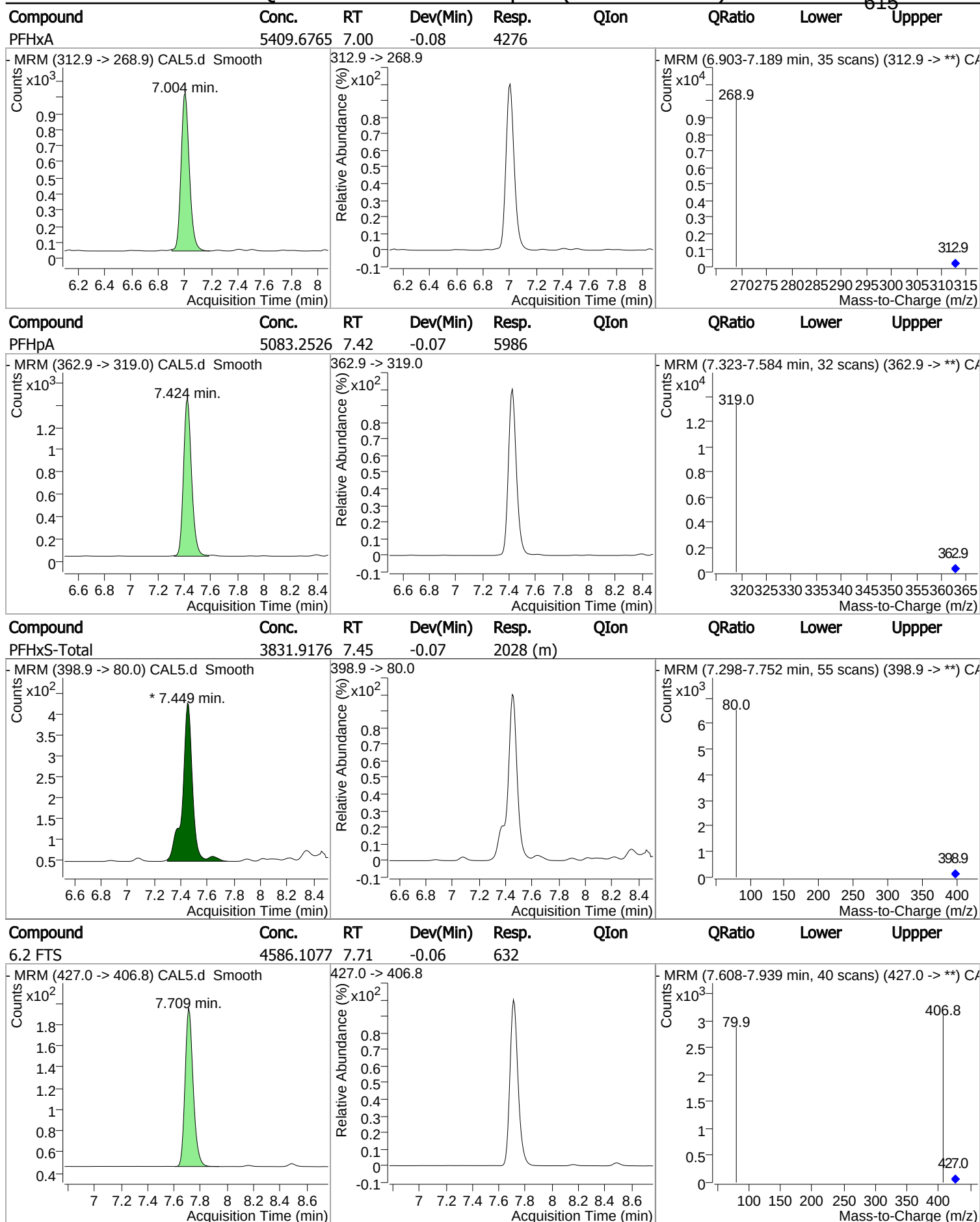
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.718	416.9 -> 371.9	11392	10000.0000	pg/ml		-0.059
M PFOS C13	7.951	502.9 -> 80.0	16652	28700.0000	pg/ml		-0.042
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	6949	40000.0000	pg/ml	m	-0.042
System Monitoring Compounds							
S PFHxA 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							
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

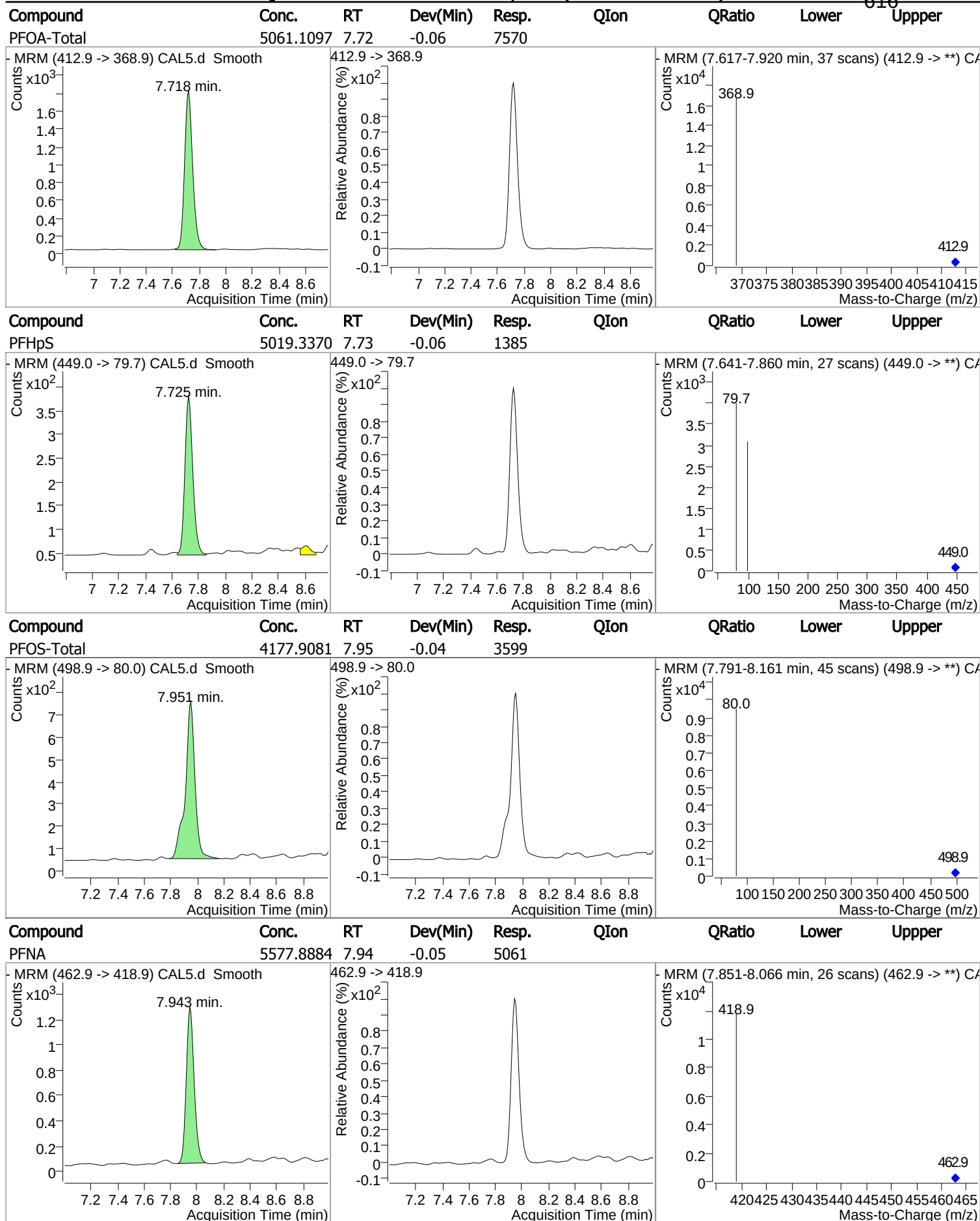
Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBA	4787.5494	2.13	-0.08	883				
MRM (213.0 -> 168.9) CAL5.d Smooth  213.0 -> 168.9  MRM (1.991-2.301 min, 37 scans) (213.0 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFPeA	4899.7507	6.14	-0.11	1834				
MRM (263.0 -> 219.0) CAL5.d Smooth  263.0 -> 219.0  MRM (5.946-6.483 min, 65 scans) (263.0 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBS	4982.3870	6.50	-0.10	1677				
MRM (298.9 -> 80.0) CAL5.d Smooth  298.9 -> 80.0  MRM (6.349-6.693 min, 42 scans) (298.9 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFHxA C13	9991.4528	7.00	-0.08	8119 (m)				
MRM (314.9 -> 269.9) CAL5.d Smooth  314.9 -> 269.9  MRM (6.928-7.122 min, 24 scans) (314.9 -> **) CA 								

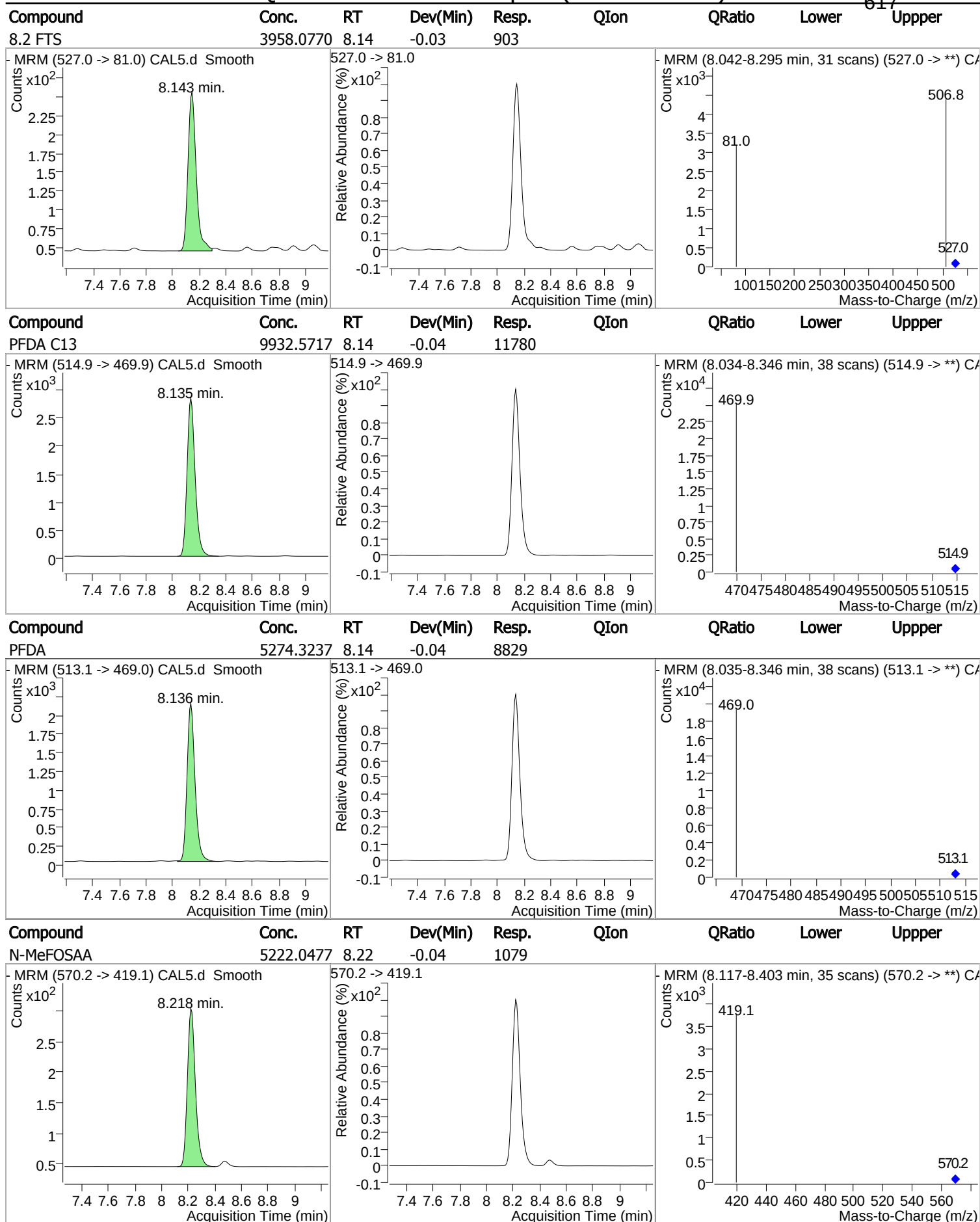
Quantitation Results Report (Not Reviewed)



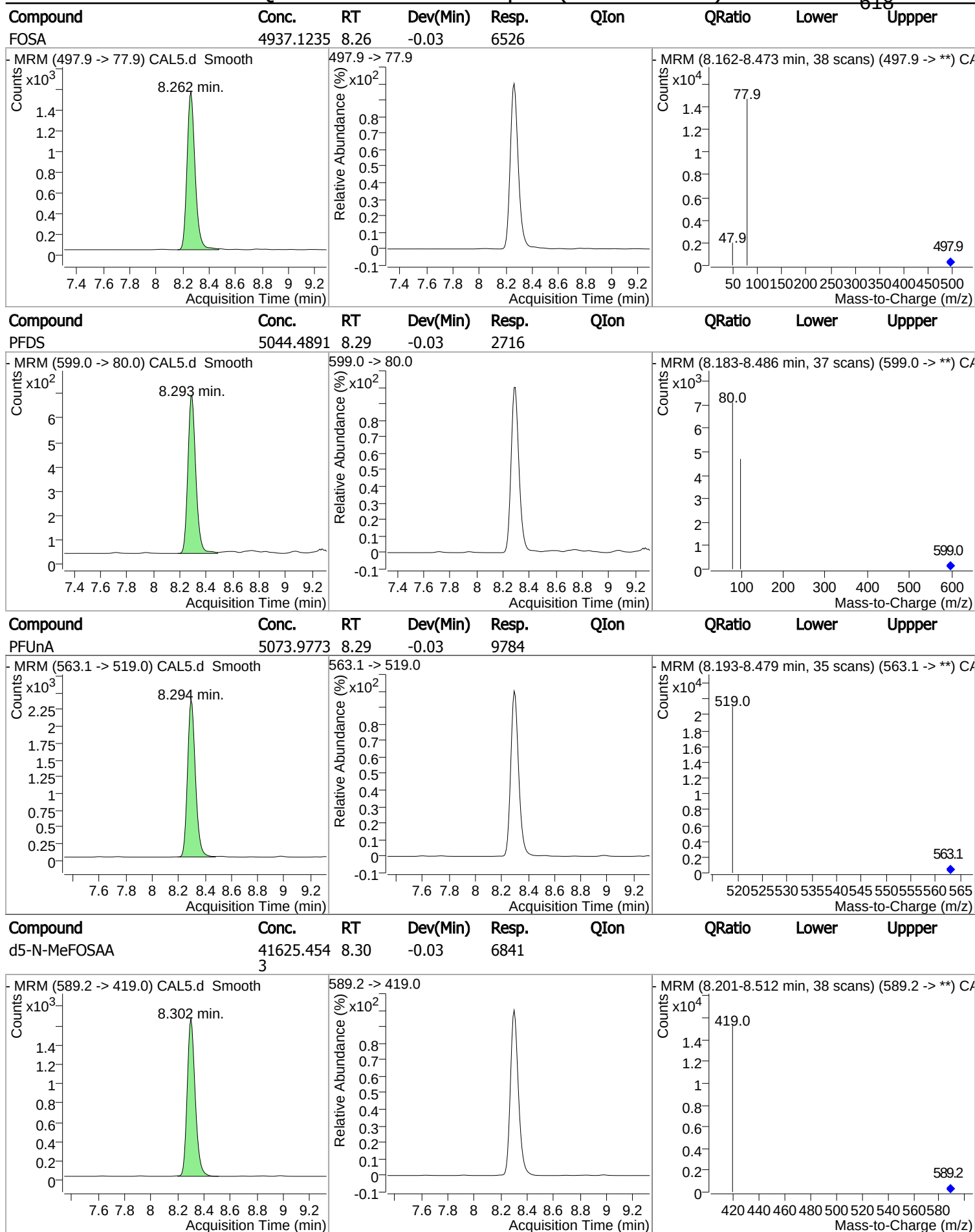
Quantitation Results Report (Not Reviewed)



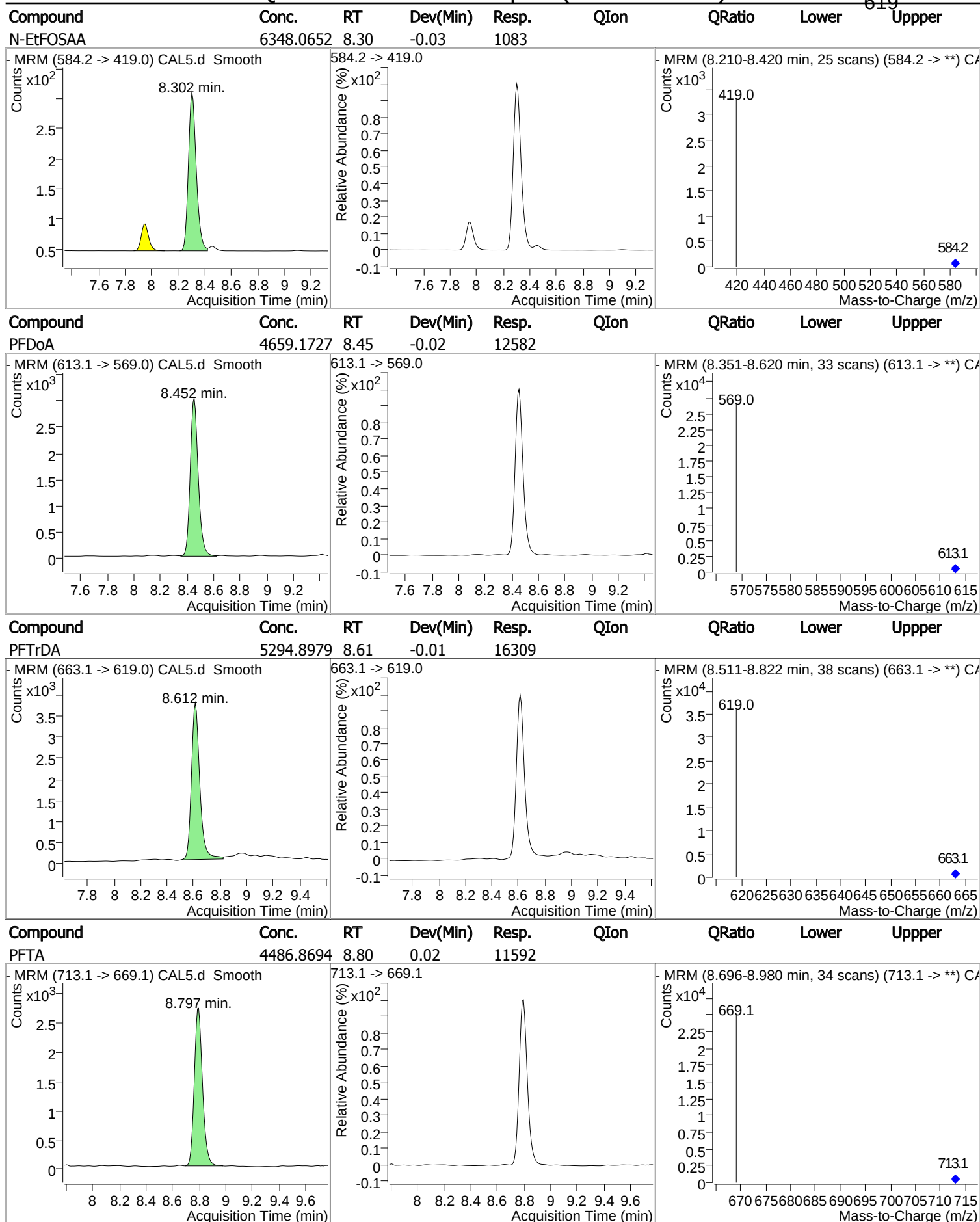
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



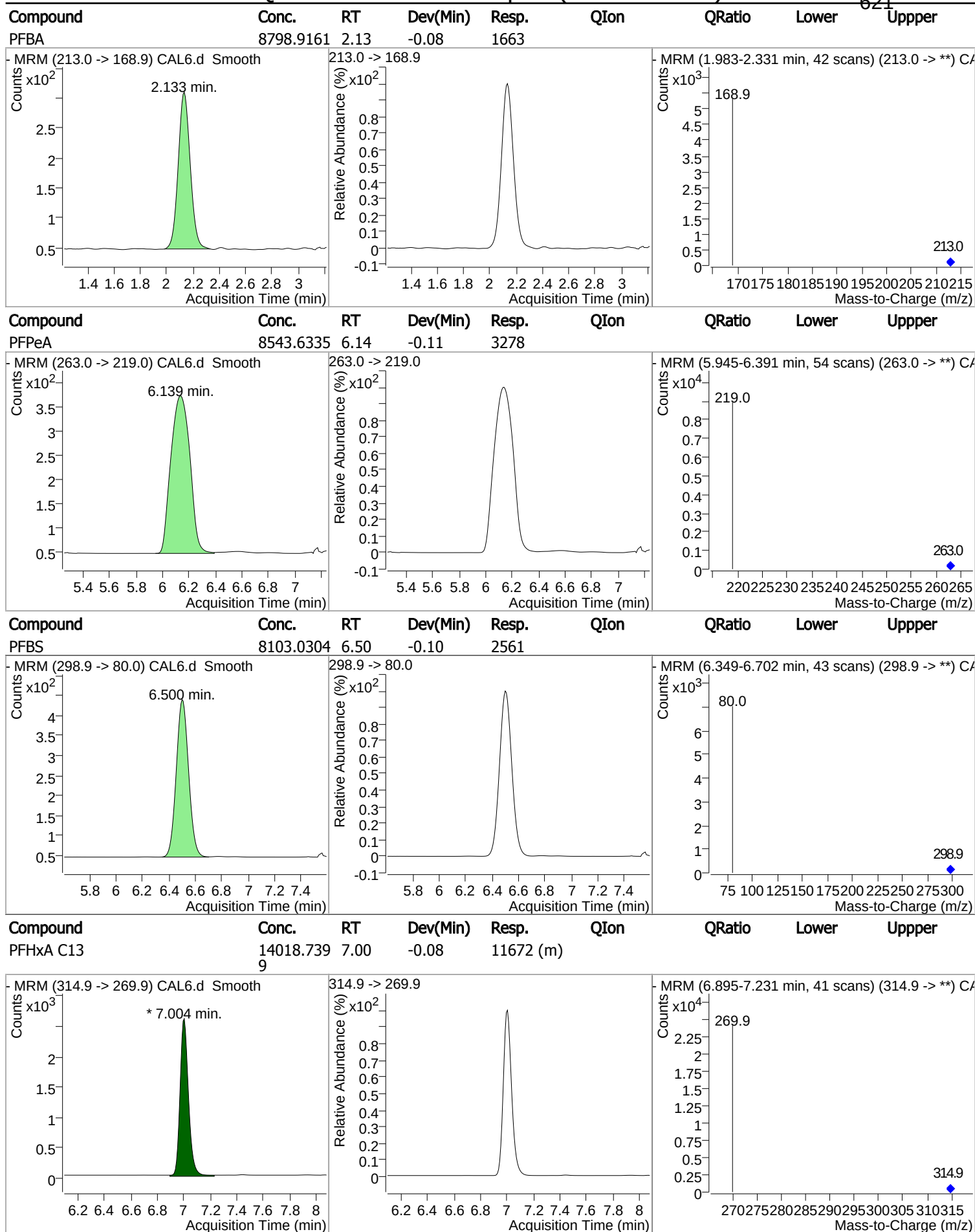
Quantitation Results Report (Not Reviewed)

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			

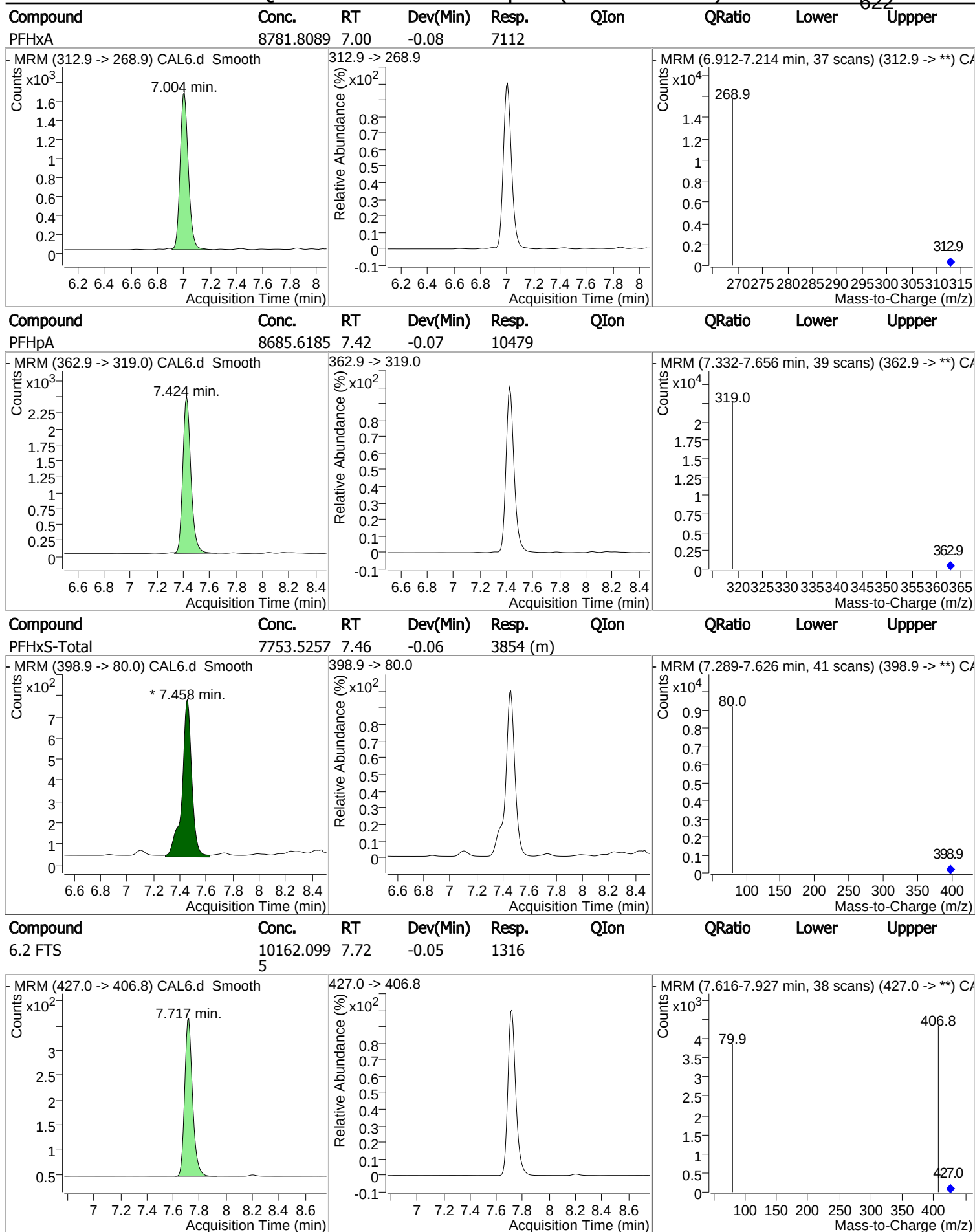
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.718	416.9 -> 371.9	11673	10000.0000	pg/ml m	-0.059
M PFOS C13	7.951	502.9 -> 80.0	15636	28700.0000	pg/ml	-0.042
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	6739	40000.0000	pg/ml	-0.042
System Monitoring Compounds						
S PFHxA 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

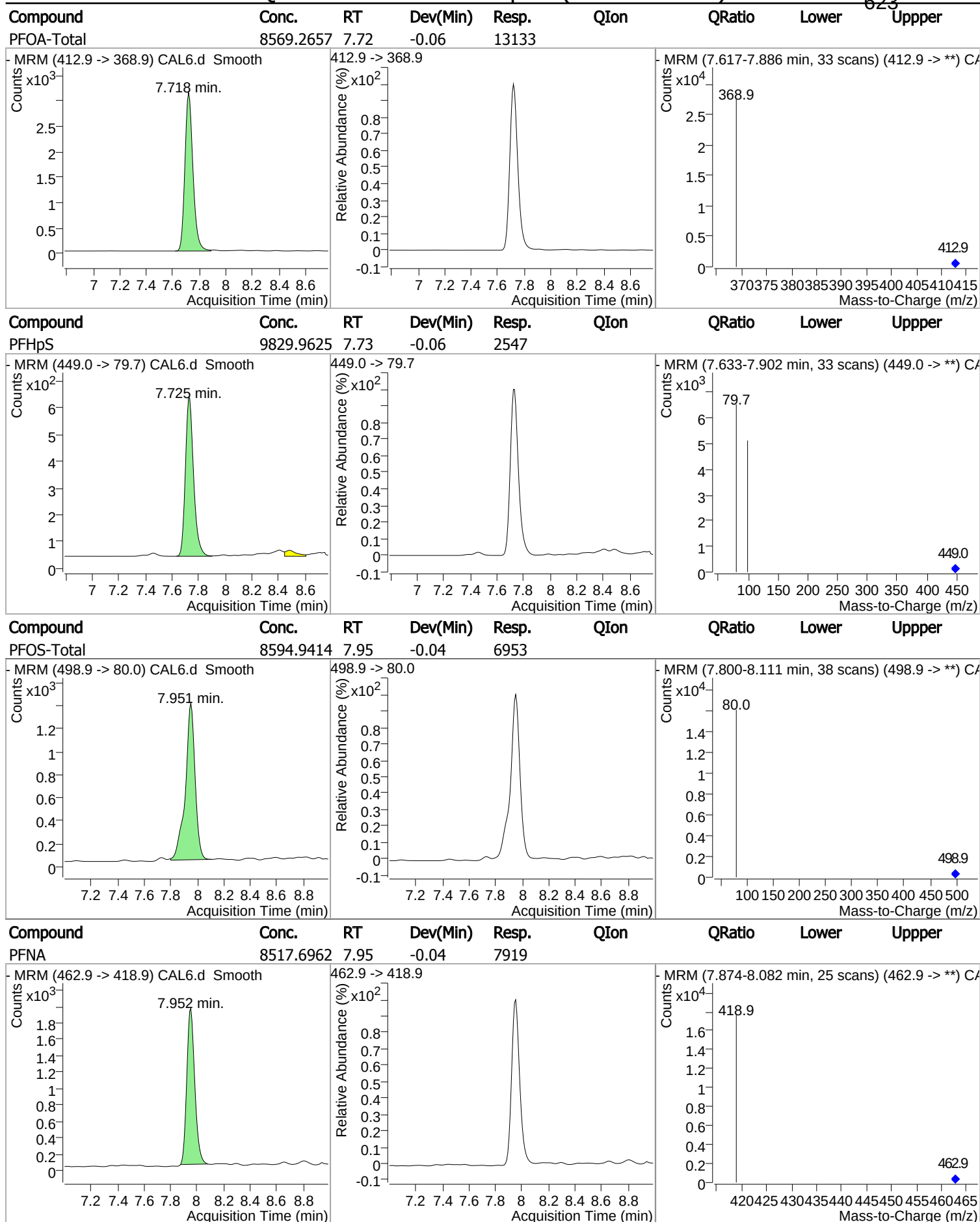
Quantitation Results Report (Not Reviewed)



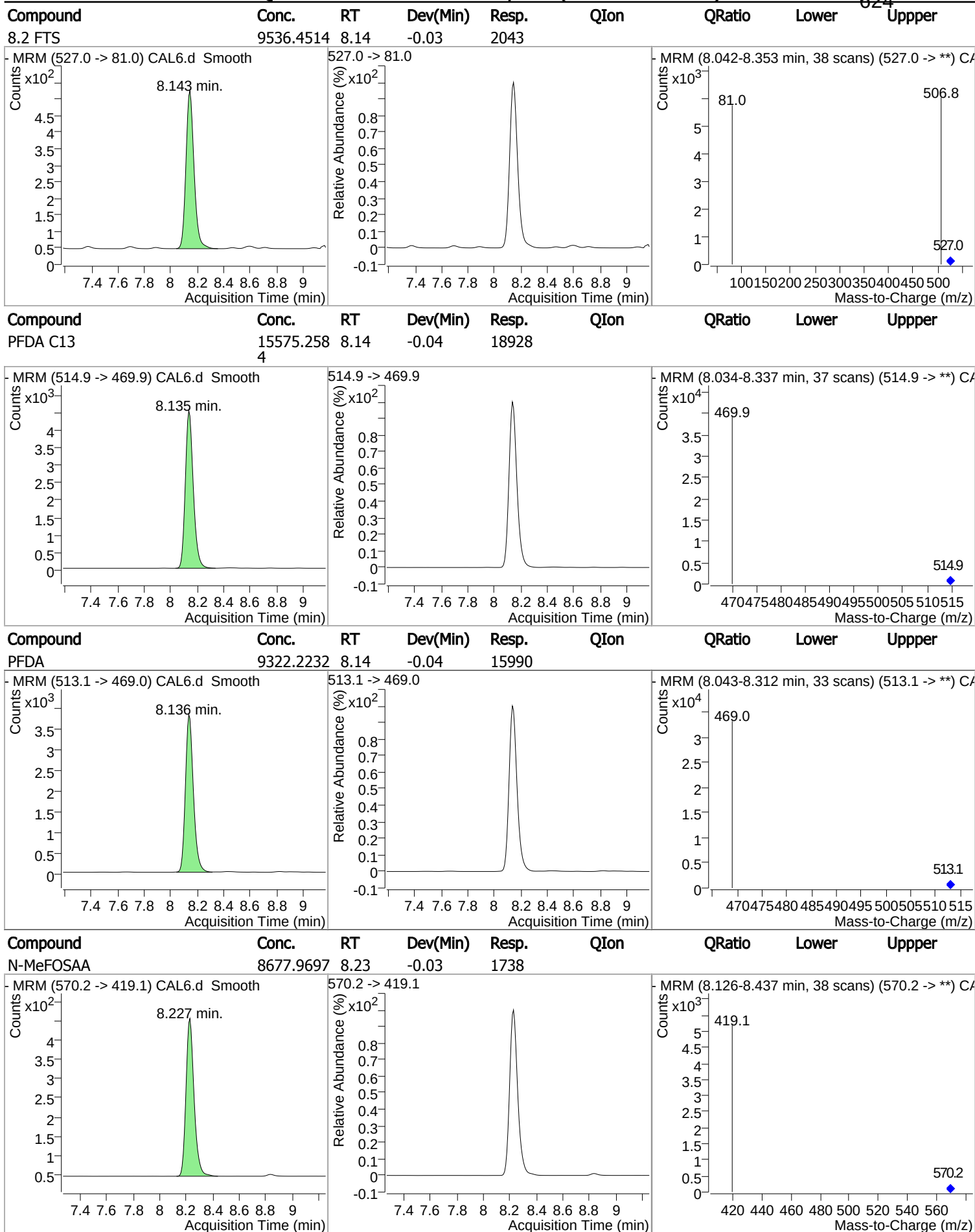
Quantitation Results Report (Not Reviewed)



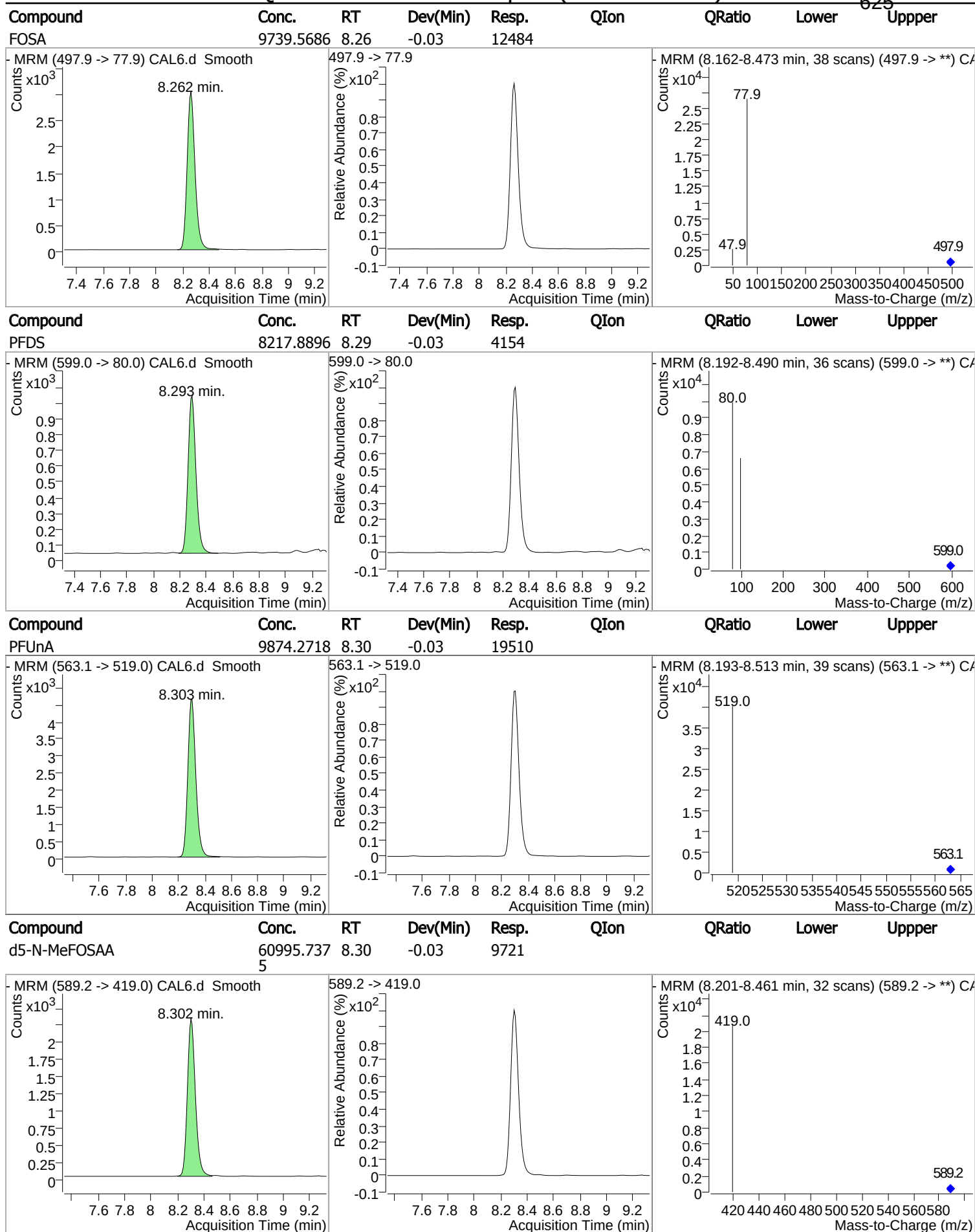
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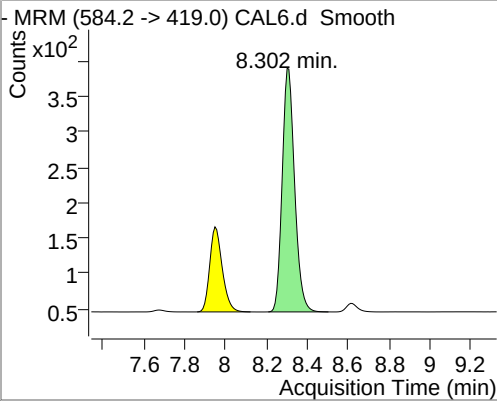
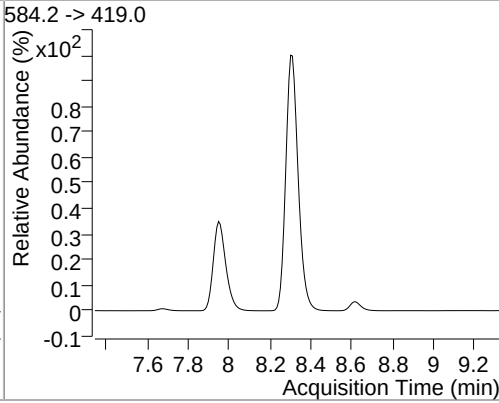
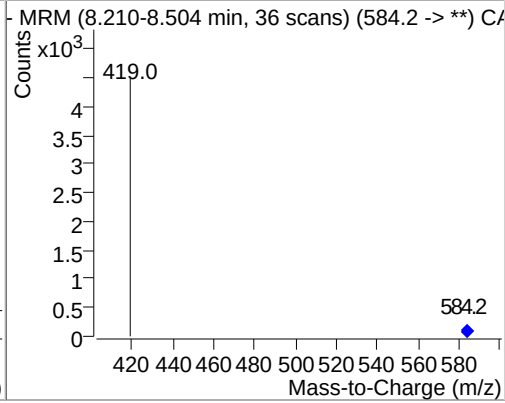
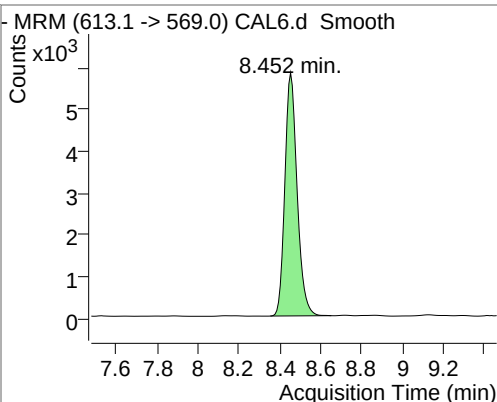
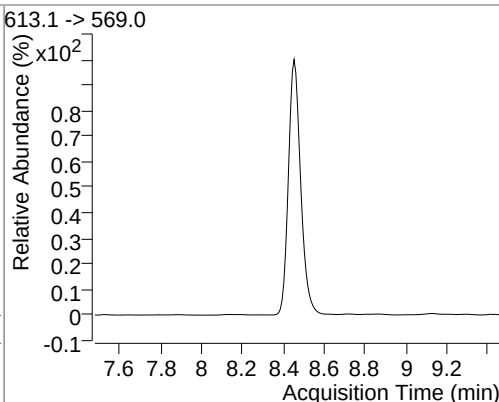
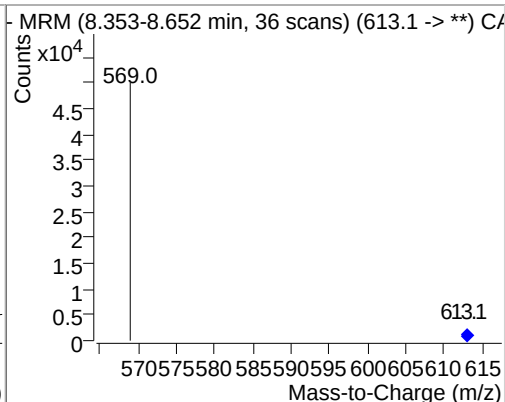
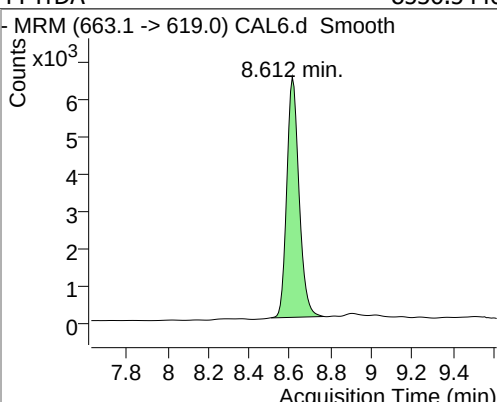
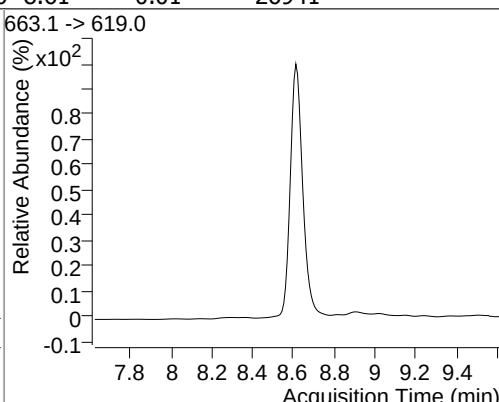
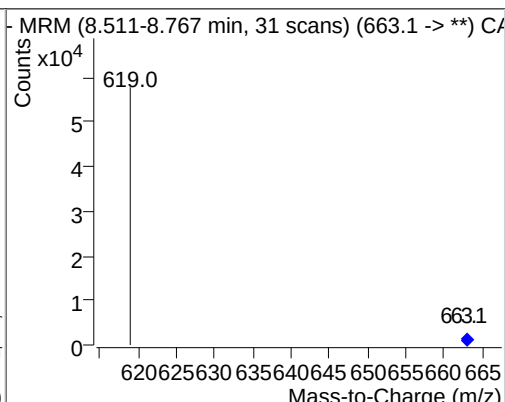
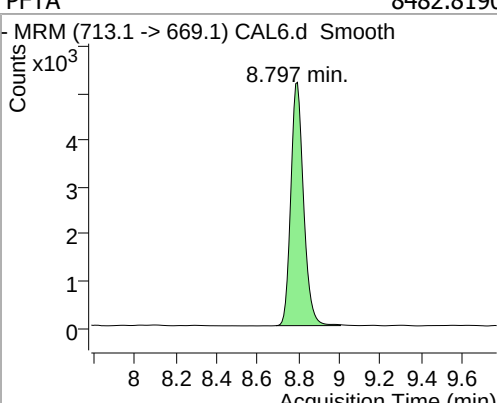
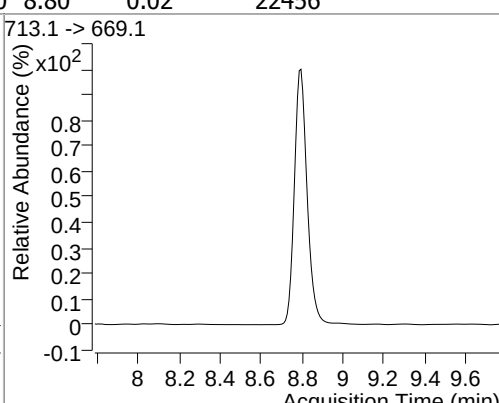
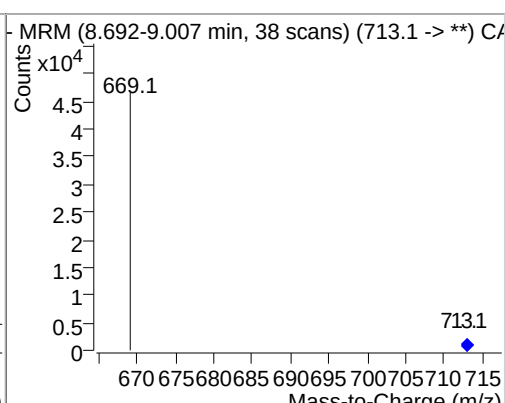
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
N-EtFOSAA	8800.5610	8.30	-0.03	1457				
MRM (584.2 -> 419.0) CAL6.d Smooth  584.2 -> 419.0  MRM (8.210-8.504 min, 36 scans) (584.2 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFDaA	8763.9734	8.45	-0.02	24250				
MRM (613.1 -> 569.0) CAL6.d Smooth  613.1 -> 569.0  MRM (8.353-8.652 min, 36 scans) (613.1 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFTrDA	8536.5446	8.61	-0.01	26941				
MRM (663.1 -> 619.0) CAL6.d Smooth  663.1 -> 619.0  MRM (8.511-8.767 min, 31 scans) (663.1 -> **) CA 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFTA	8482.8190	8.80	0.02	22456				
MRM (713.1 -> 669.1) CAL6.d Smooth  713.1 -> 669.1  MRM (8.692-9.007 min, 38 scans) (713.1 -> **) CA 								

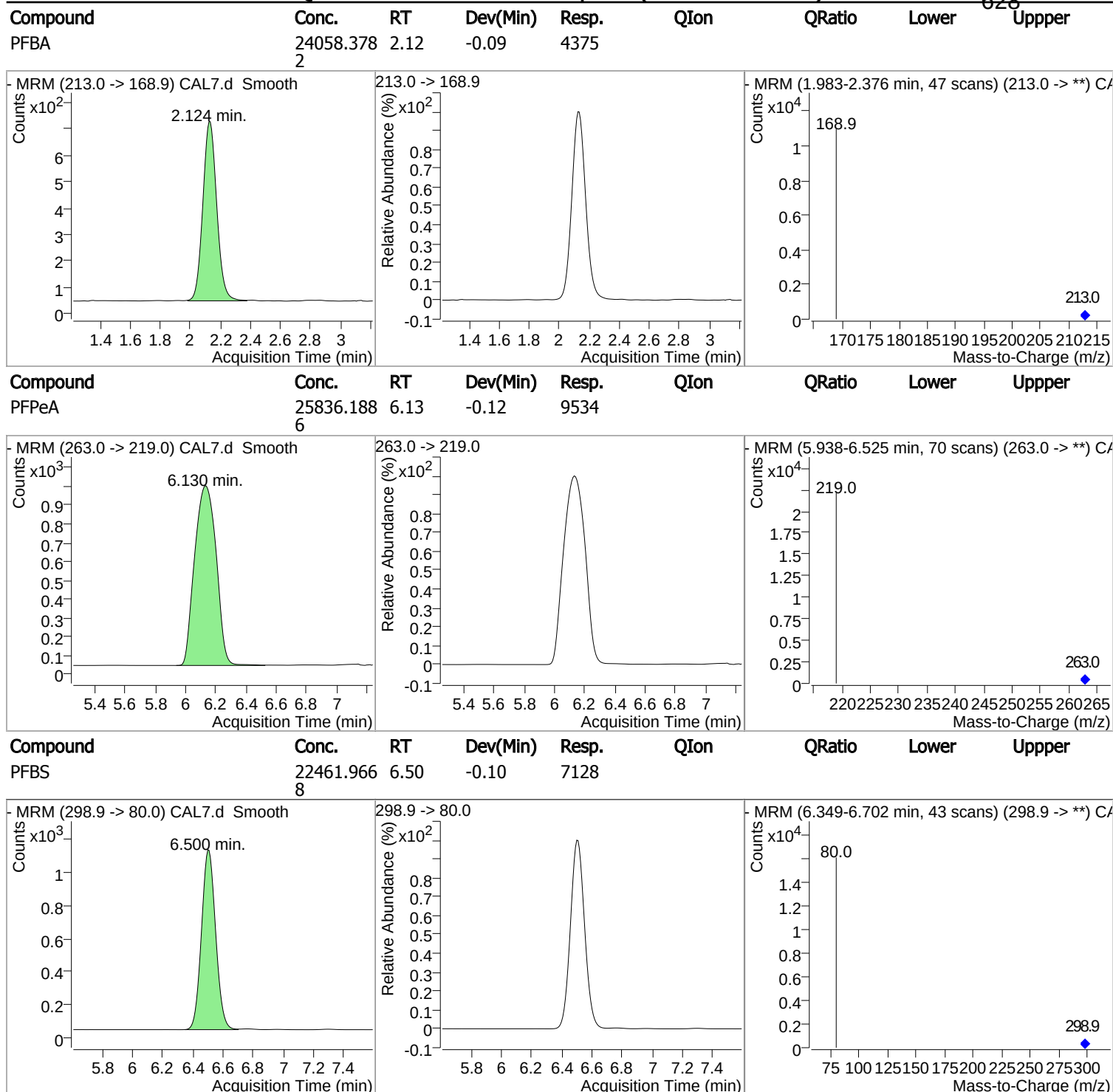
Quantitation Results Report (Not Reviewed)

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			

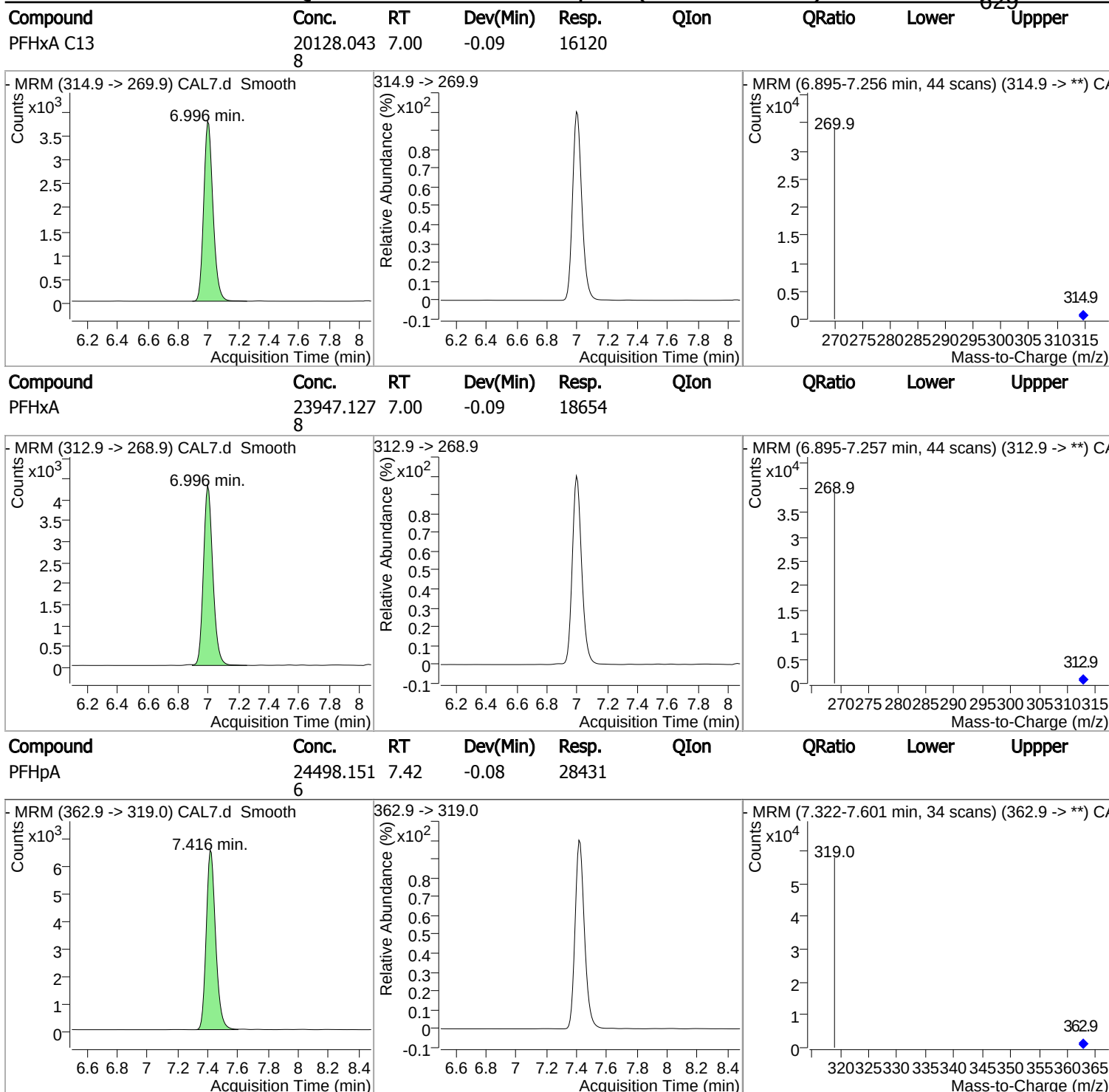
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.709	416.9 -> 371.9	11228	10000.0000	pg/ml	-0.067
M PFOS C13	7.942	502.9 -> 80.0	15697	28700.0000	pg/ml	-0.050
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	6927	40000.0000	pg/ml	-0.042
System Monitoring Compounds						
S PFHxA C13	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

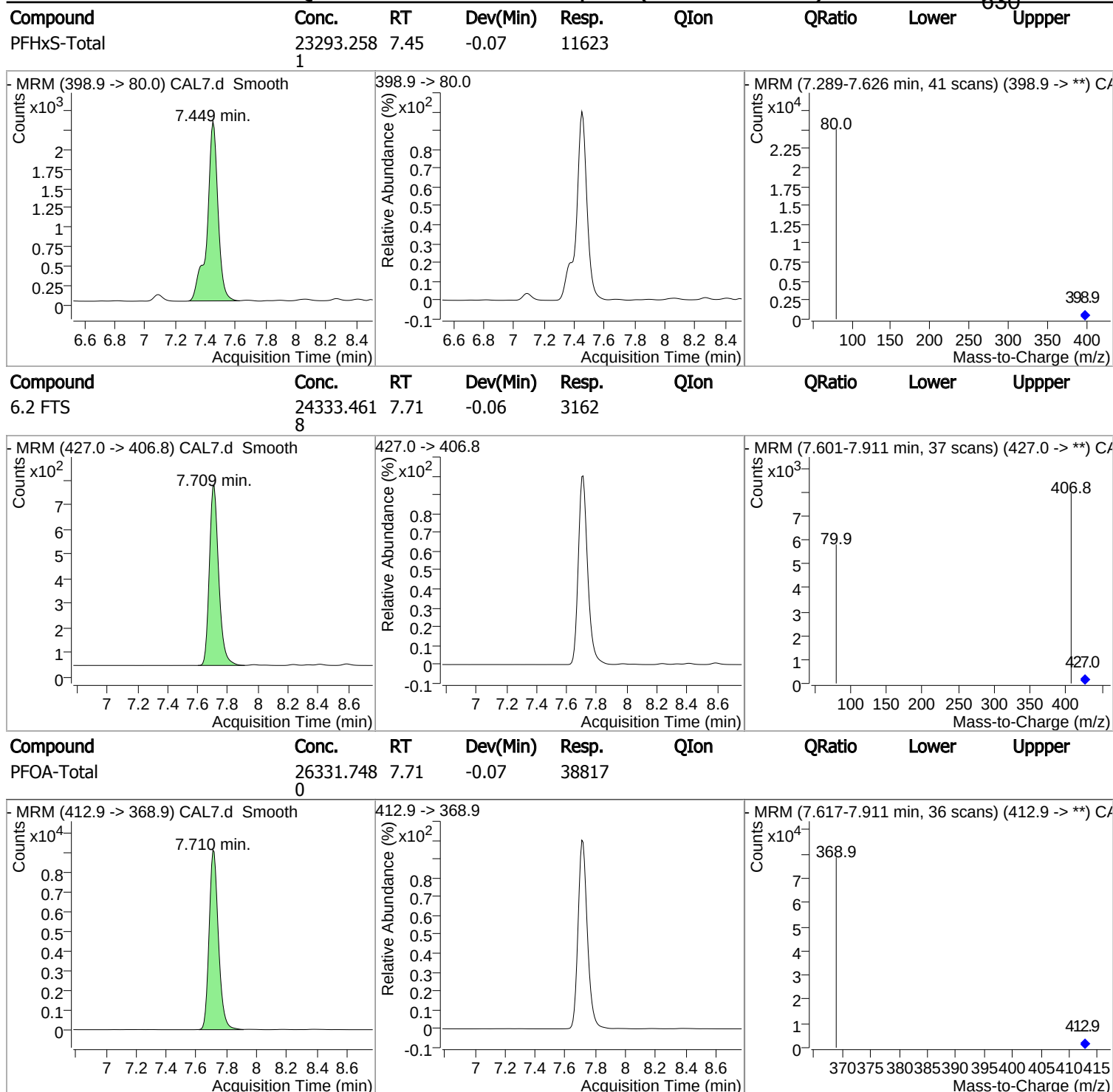
Quantitation Results Report (Not Reviewed)



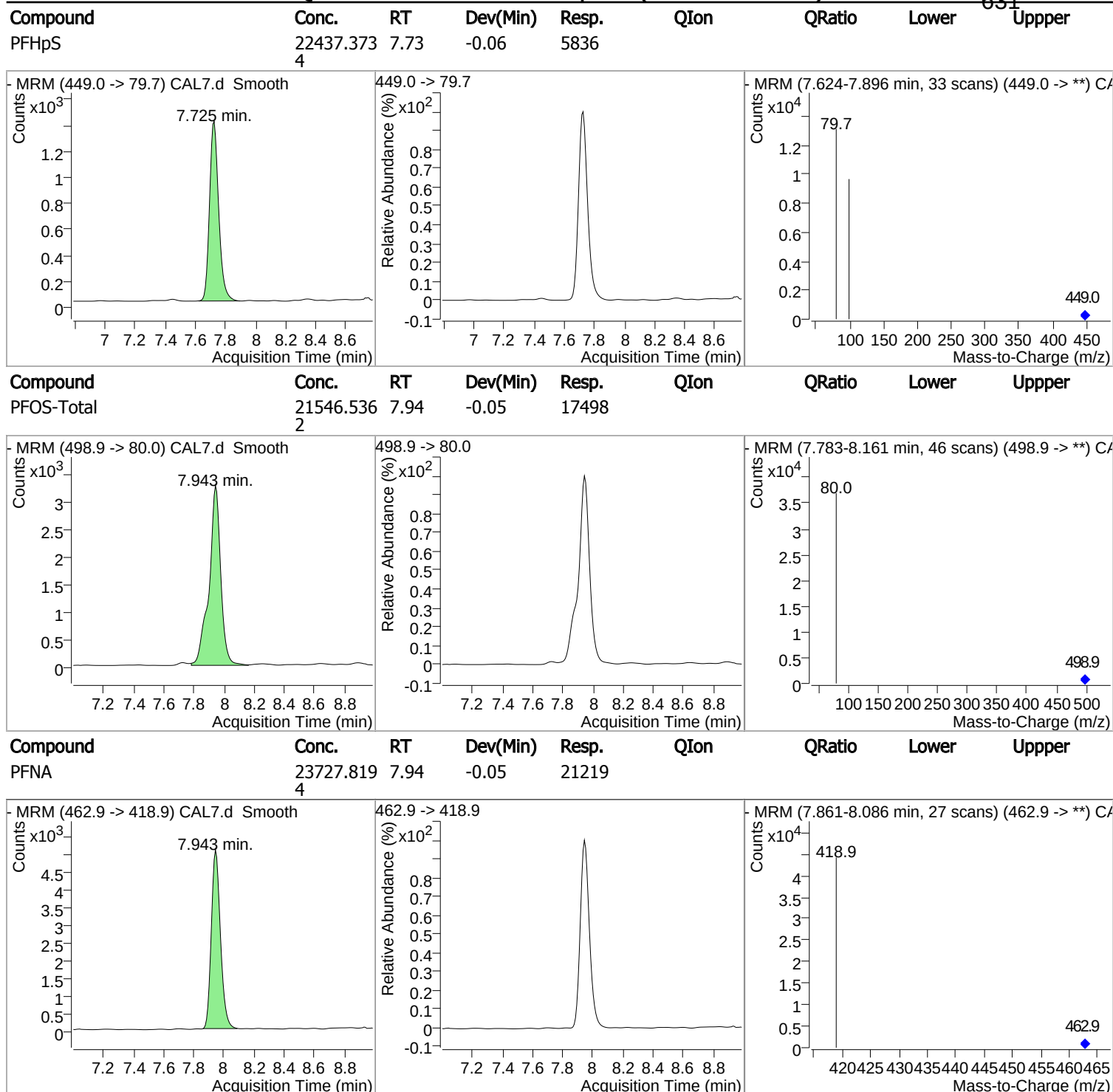
Quantitation Results Report (Not Reviewed)



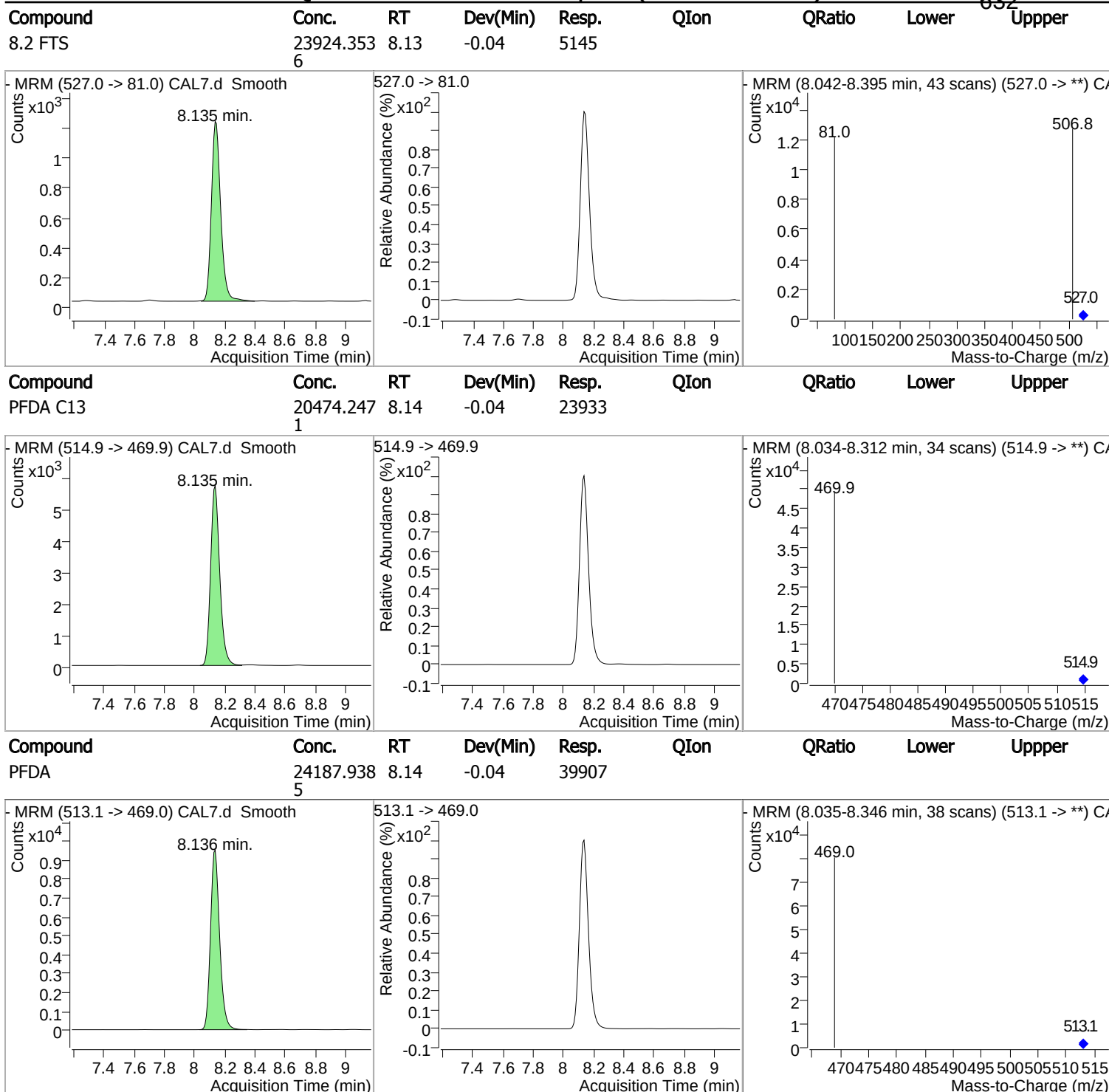
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Quantitation Results Report (Not Reviewed)

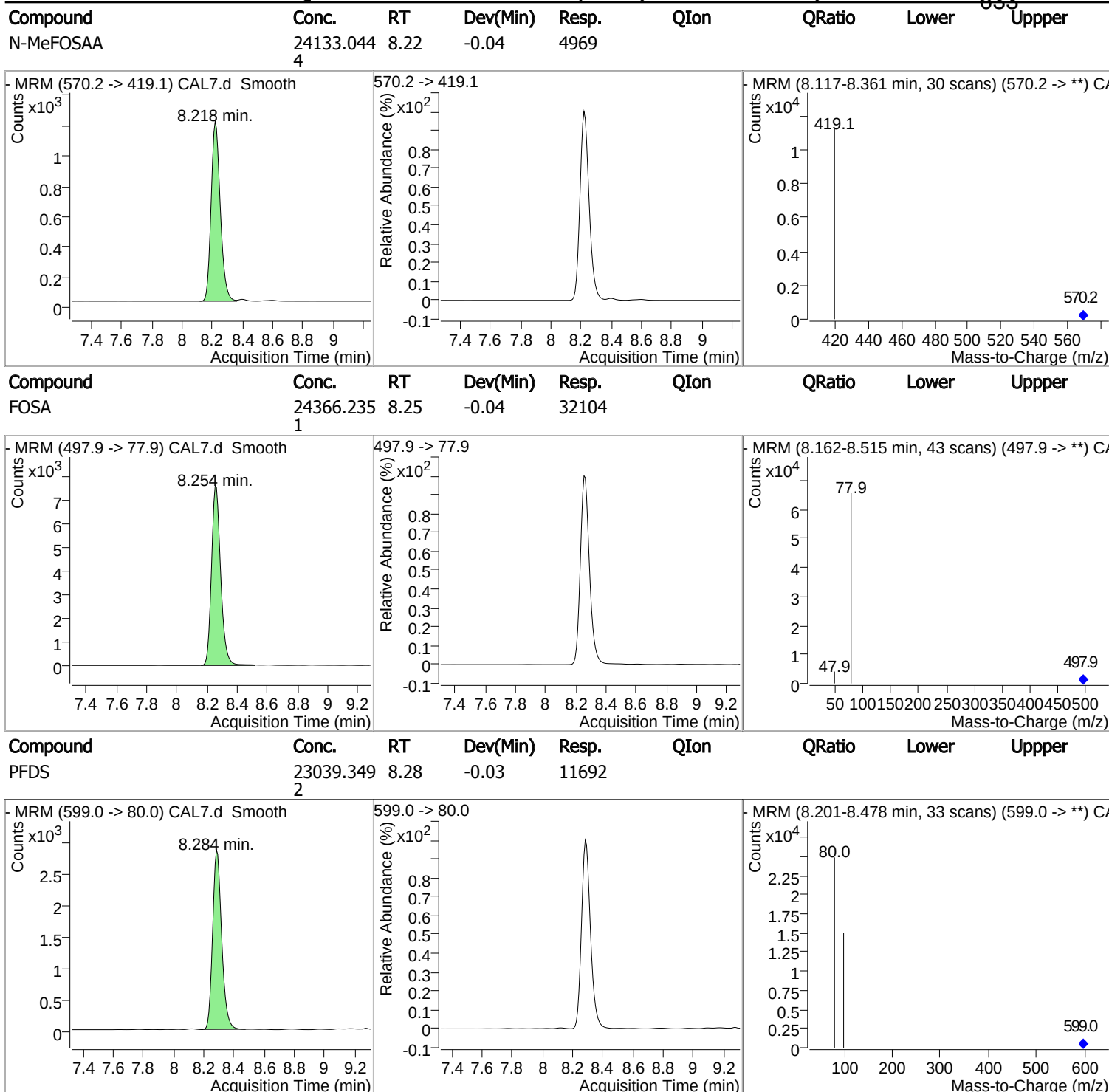


Quantitation Results Report (Not Reviewed)

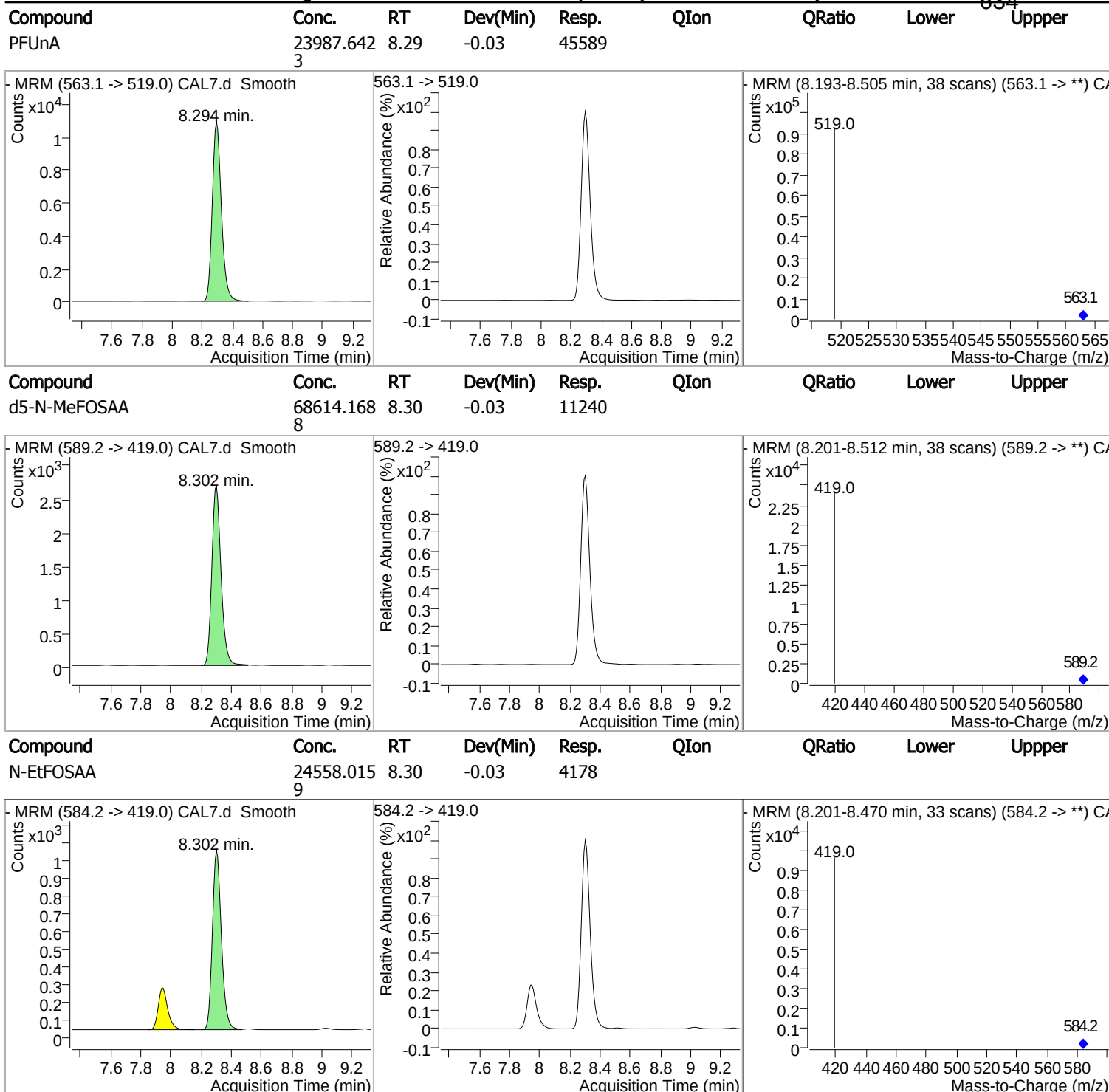


Quantitation Results Report (Not Reviewed)

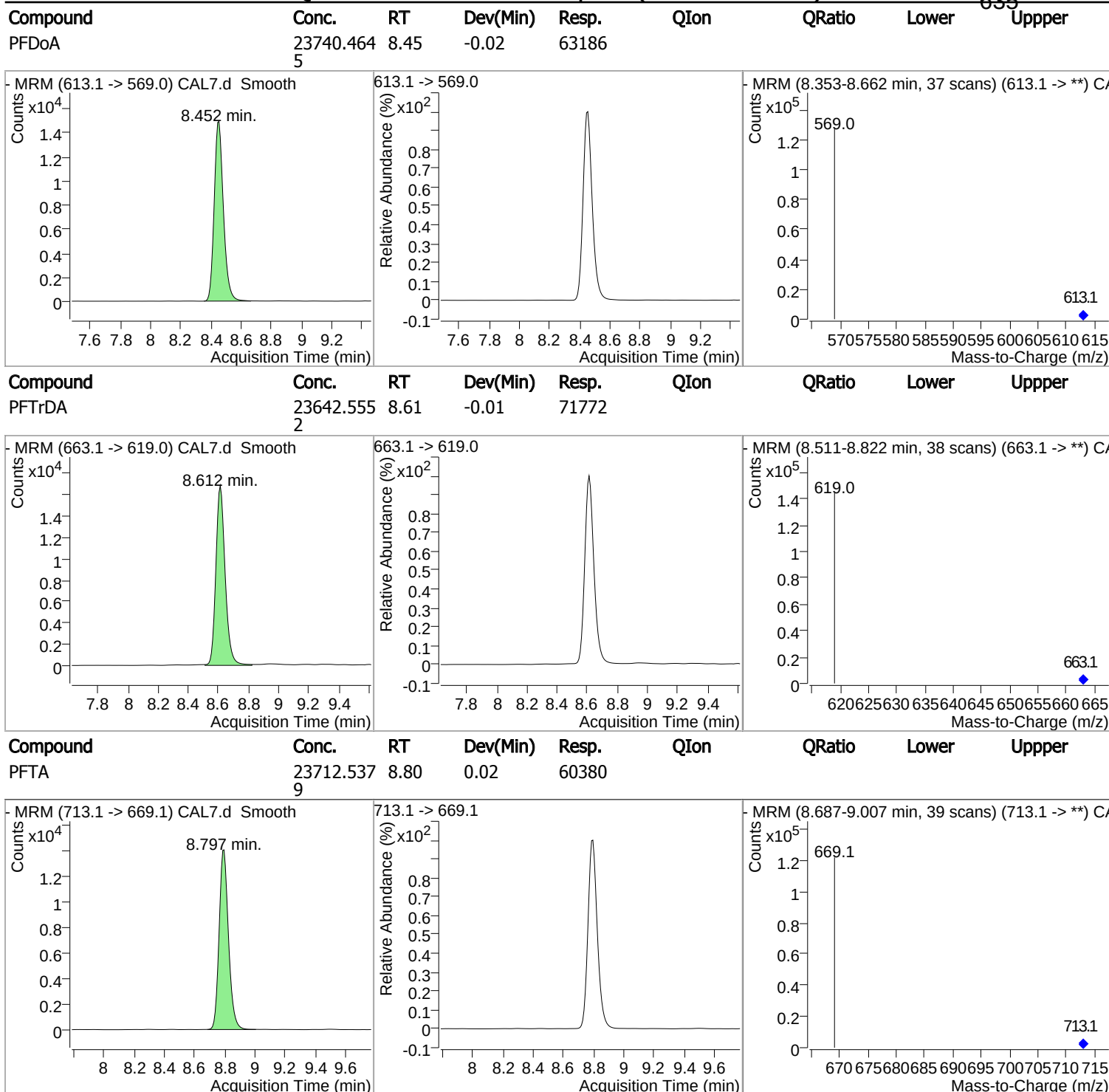
633



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



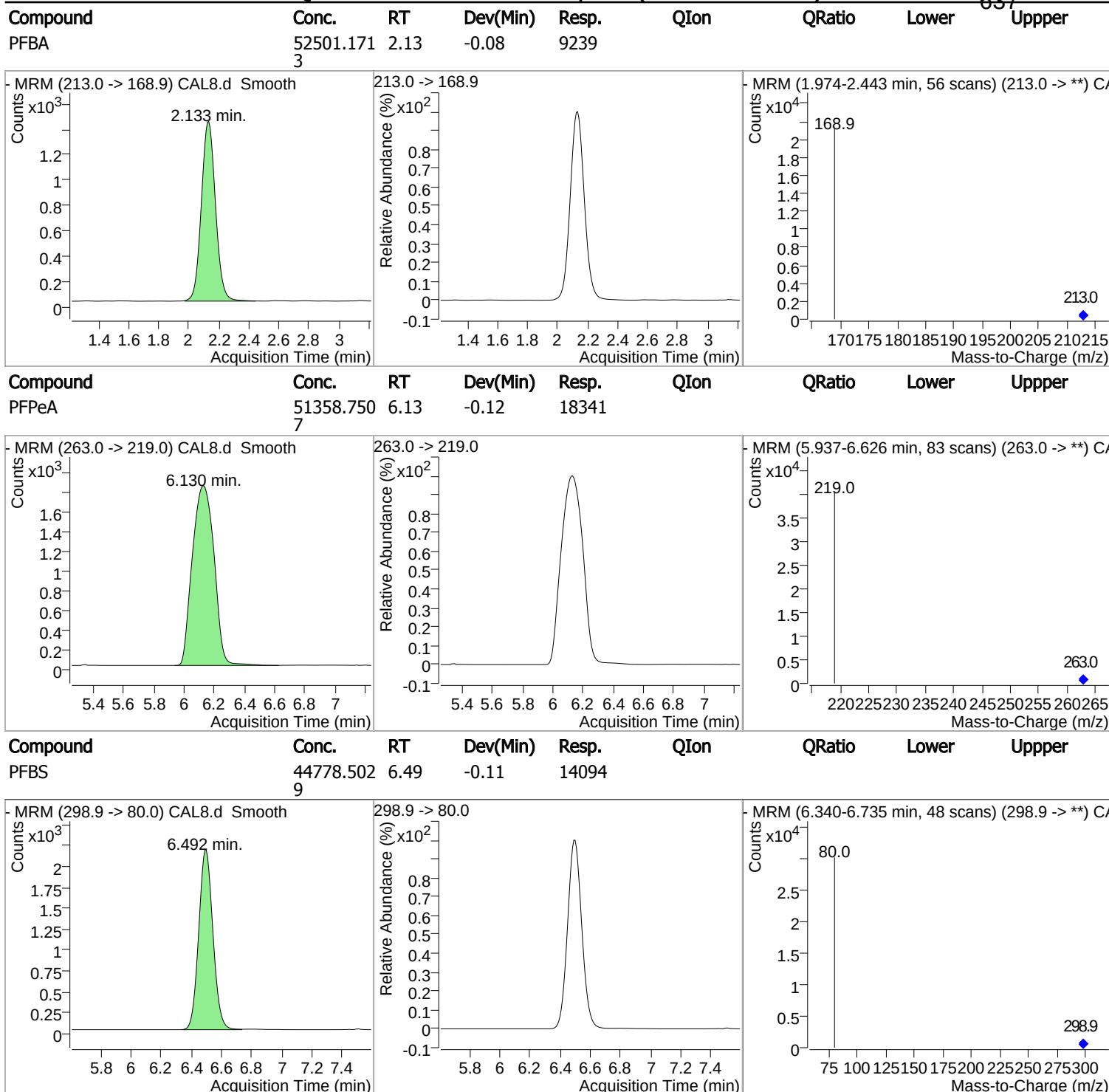
Quantitation Results Report (Not Reviewed)

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			

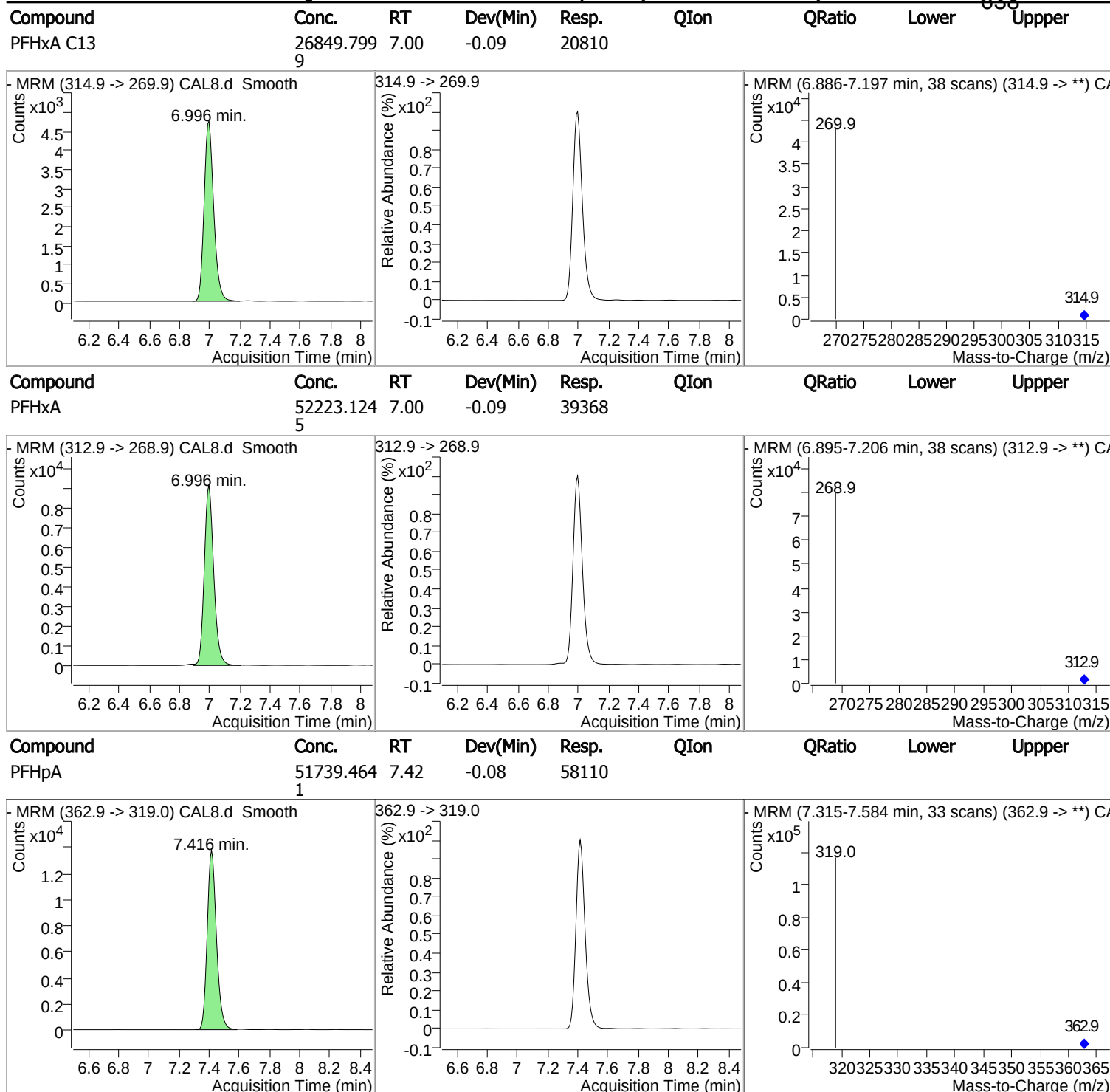
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.709	416.9 -> 371.9	10866	10000.0000	pg/ml	-0.067
M PFOS C13	7.942	502.9 -> 80.0	15569	28700.0000	pg/ml	-0.050
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	6980	40000.0000	pg/ml	-0.042
System Monitoring Compounds						
S PFHxA C13	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

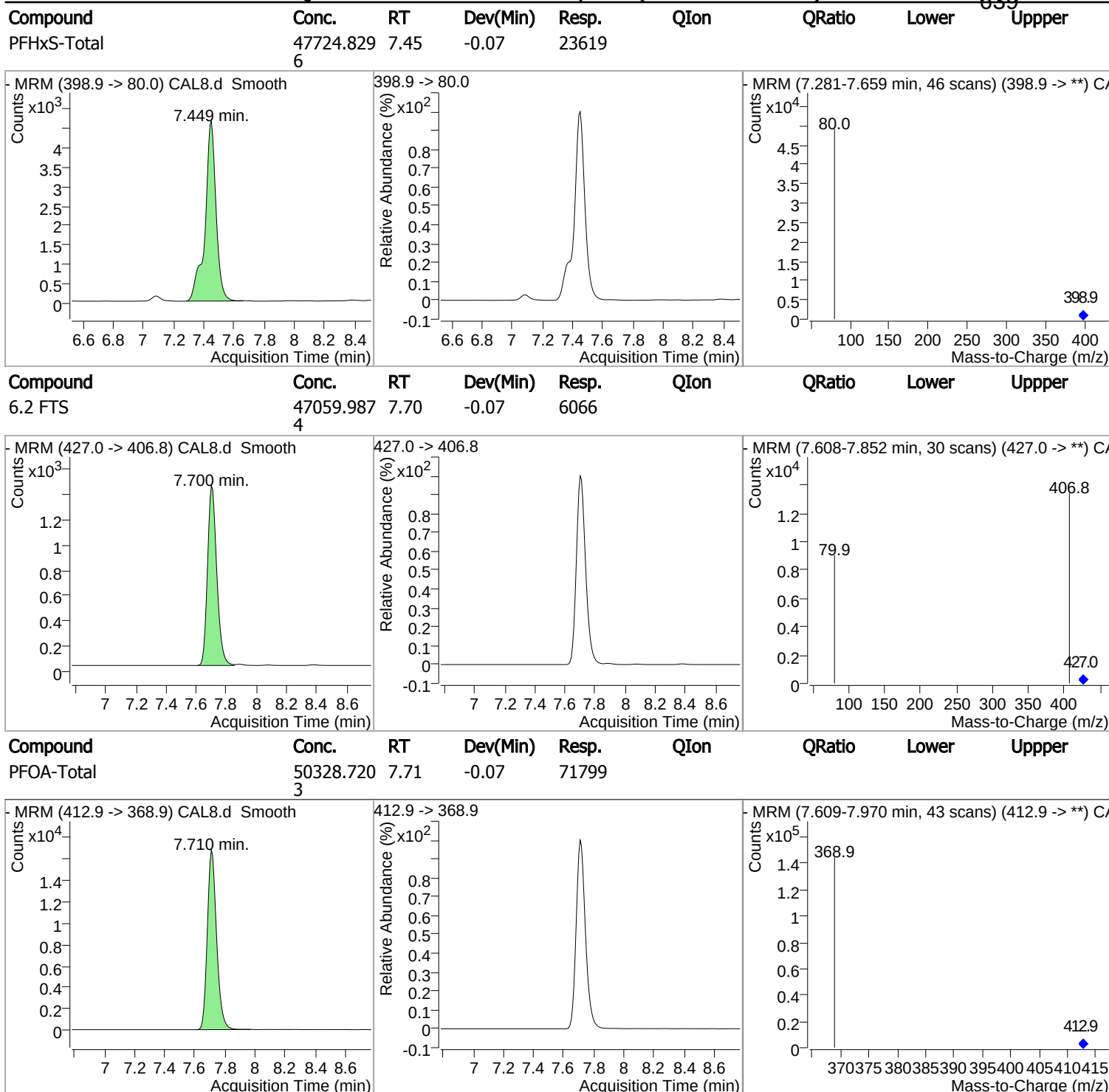
Quantitation Results Report (Not Reviewed)



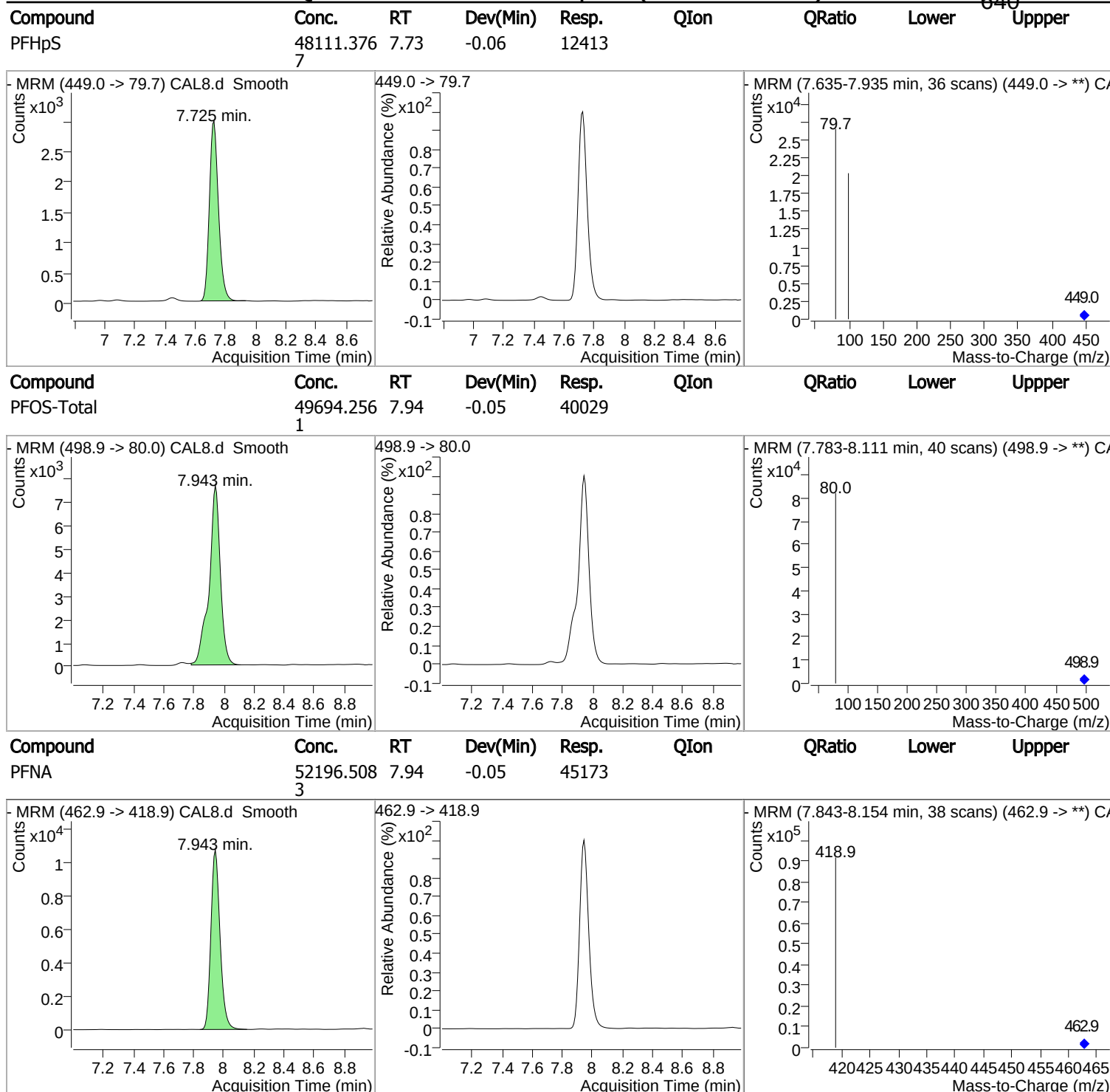
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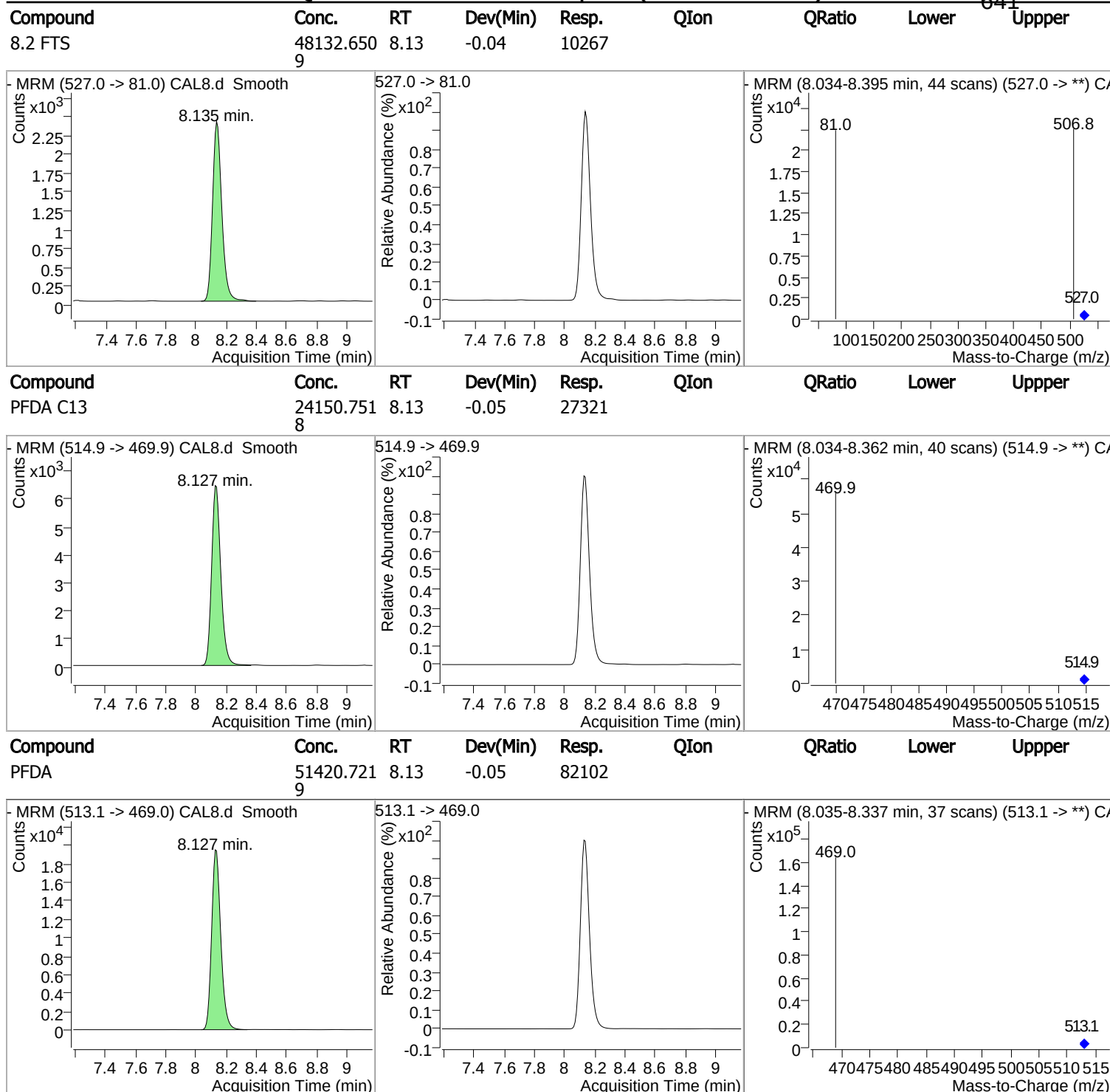
Quantitation Results Report (Not Reviewed)



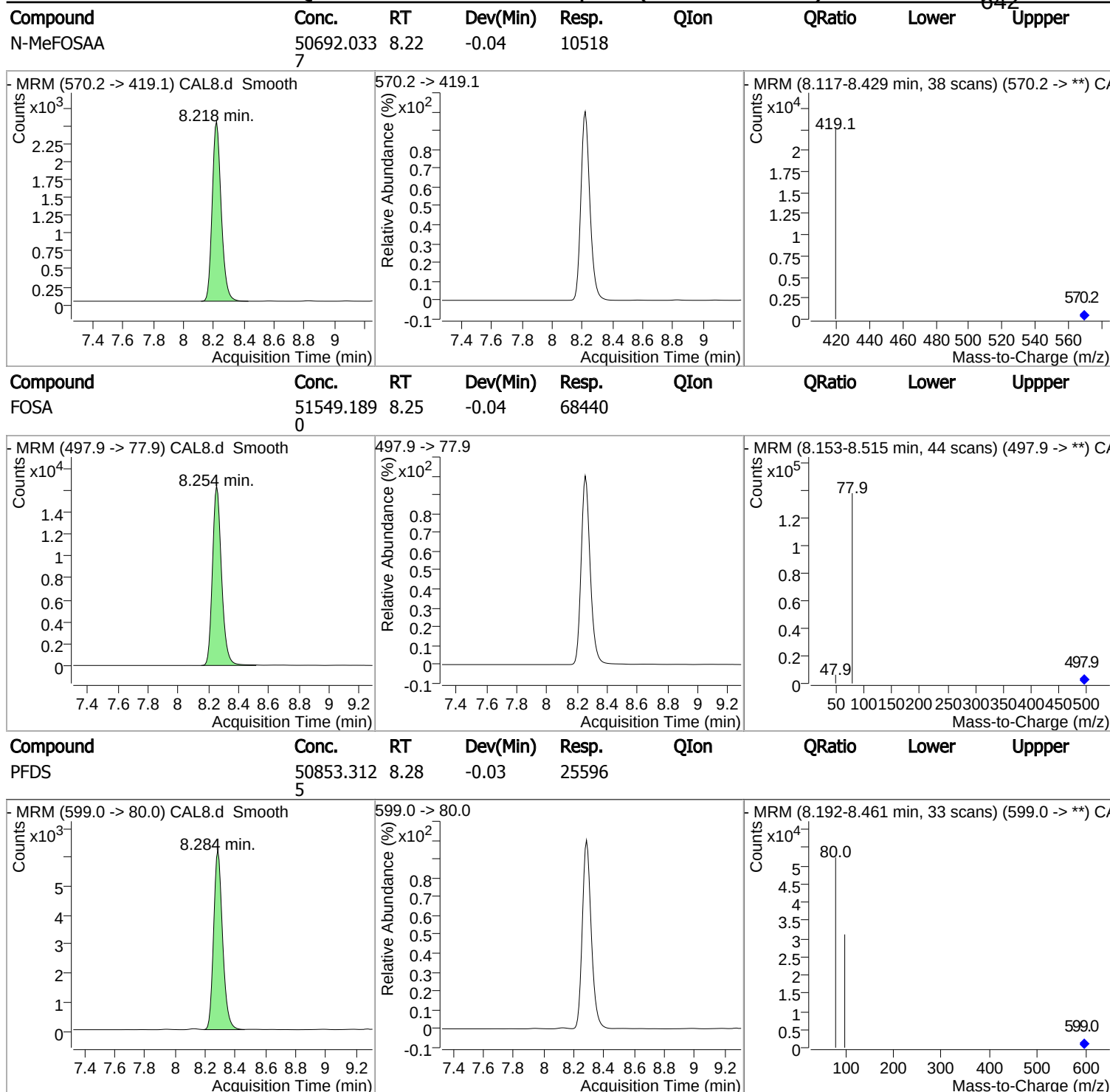
Quantitation Results Report (Not Reviewed)



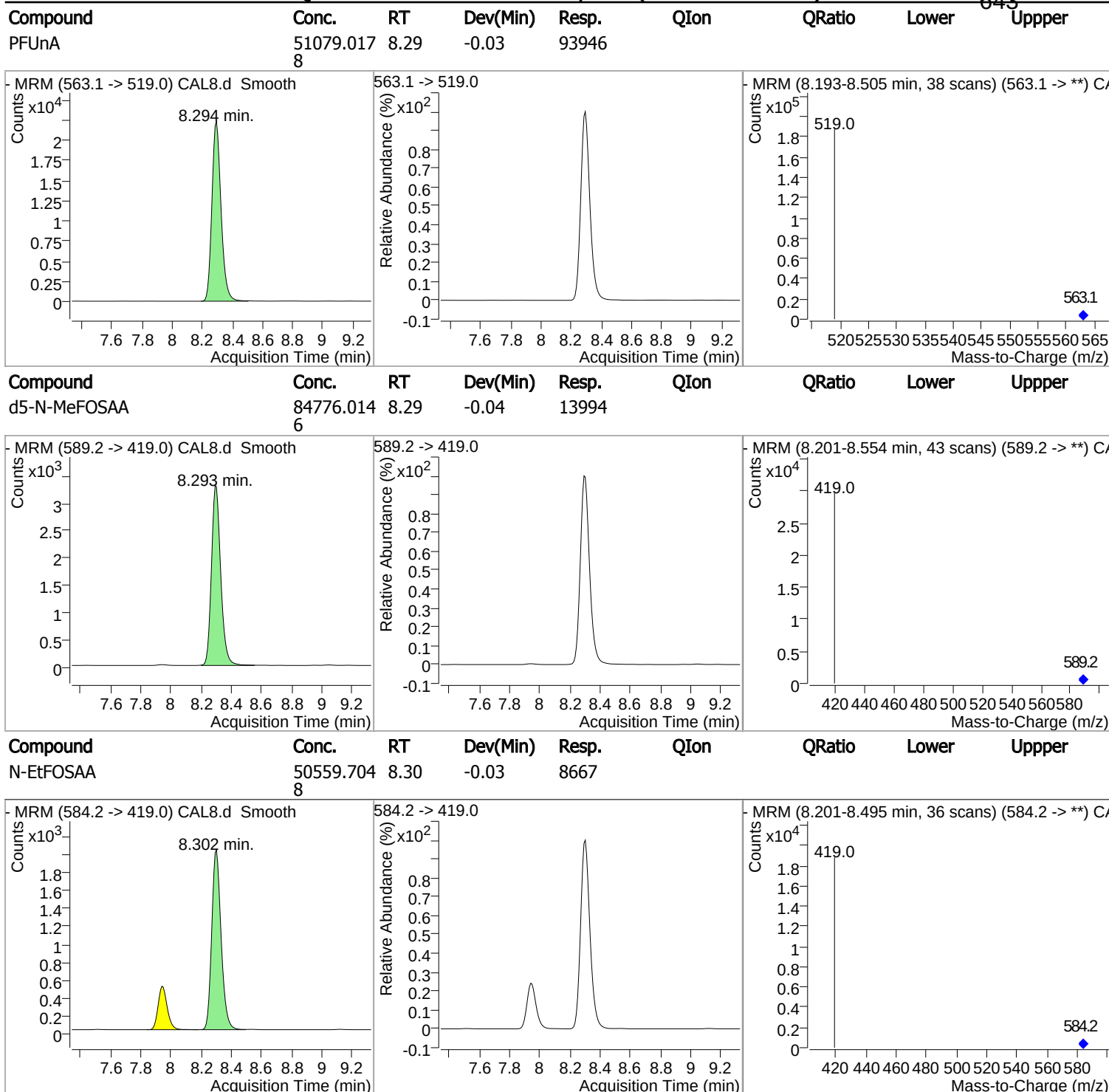
Quantitation Results Report (Not Reviewed)



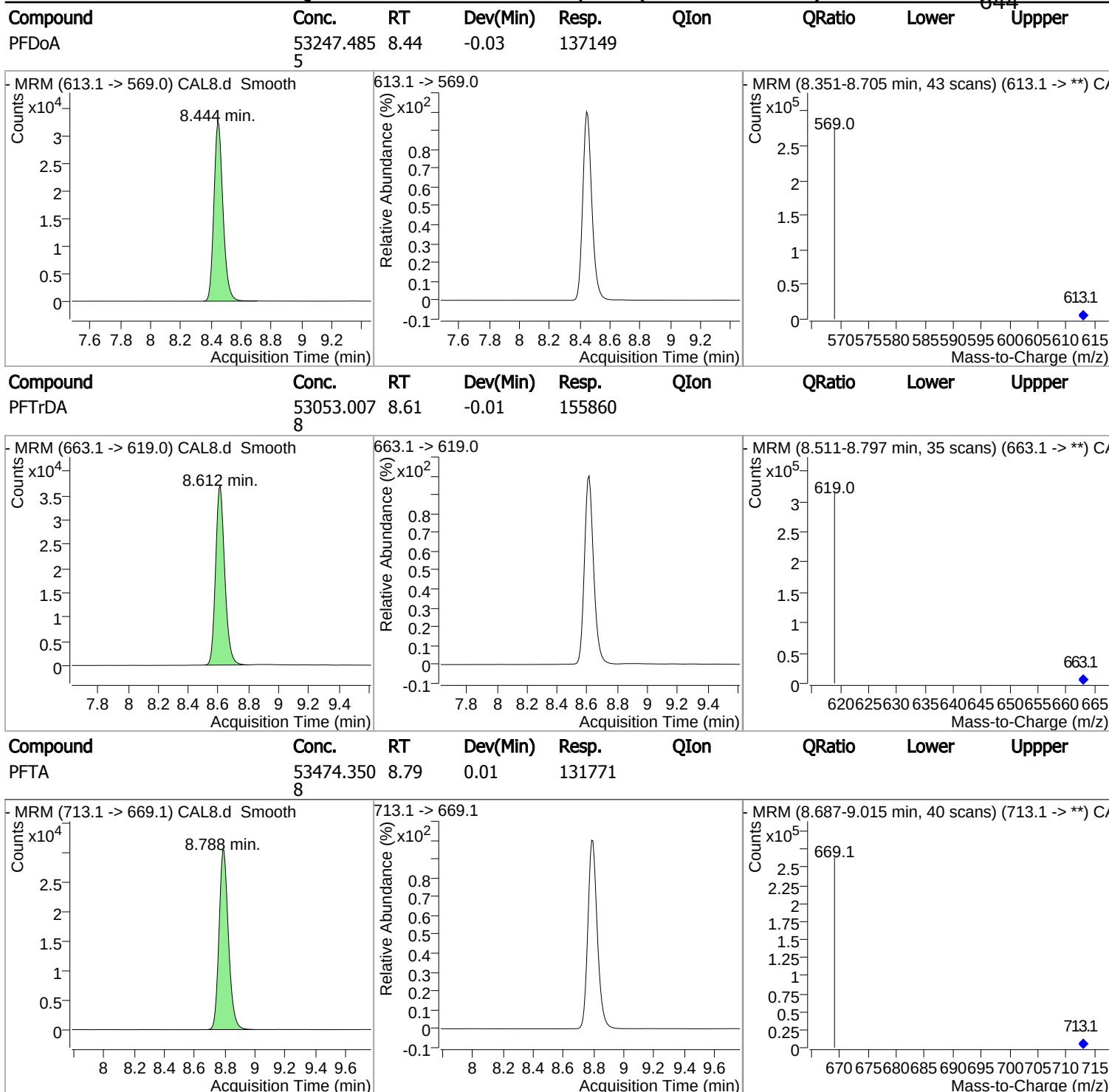
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



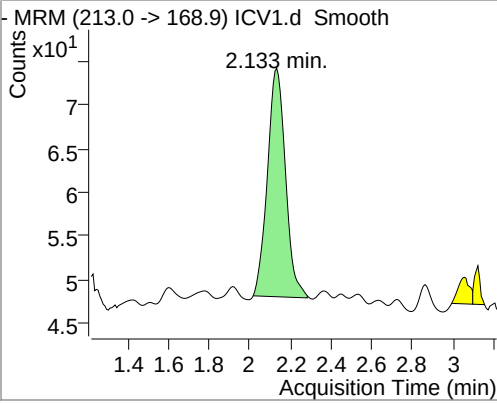
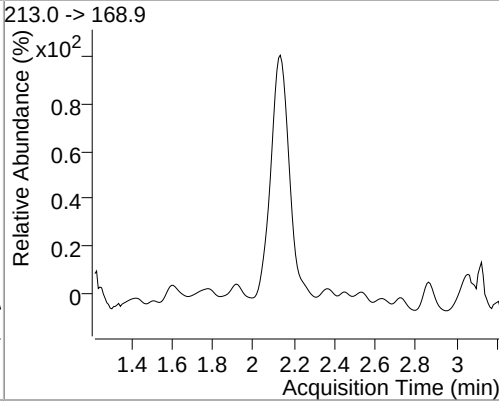
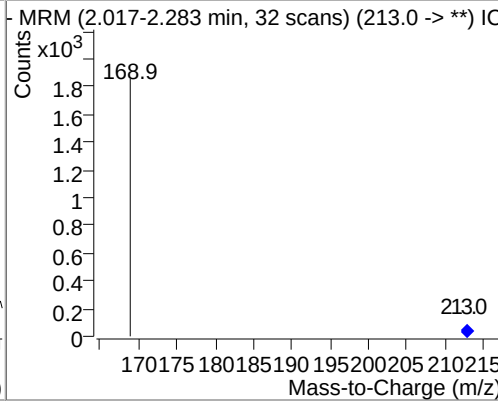
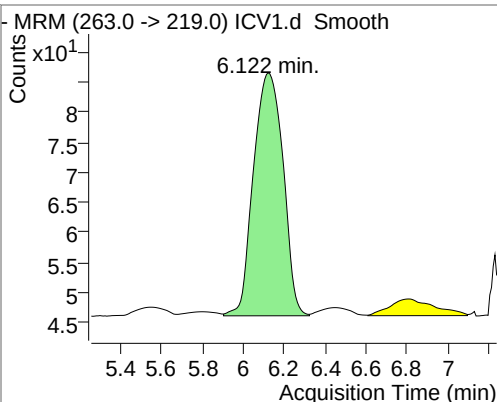
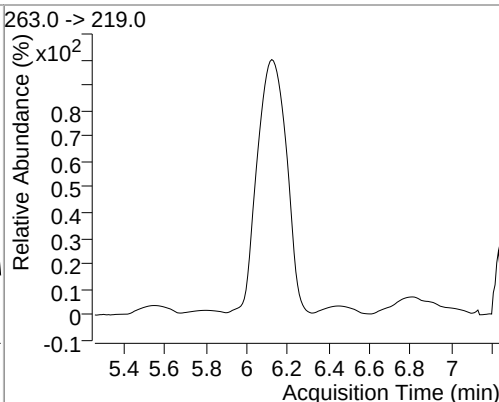
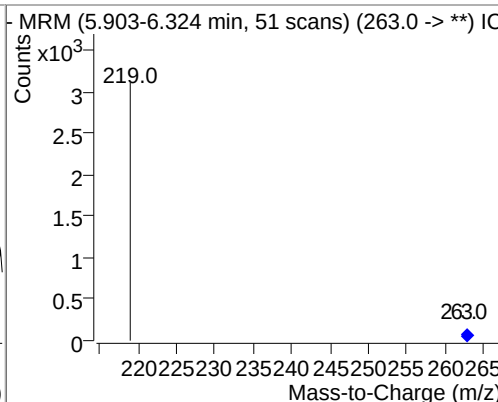
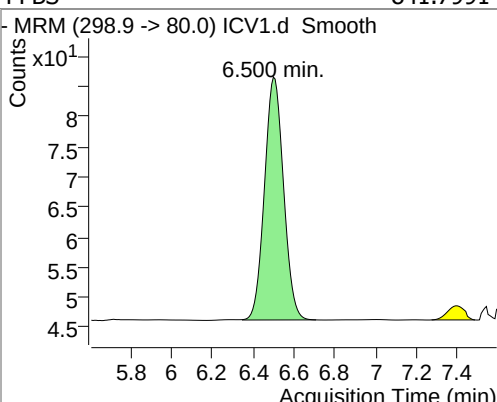
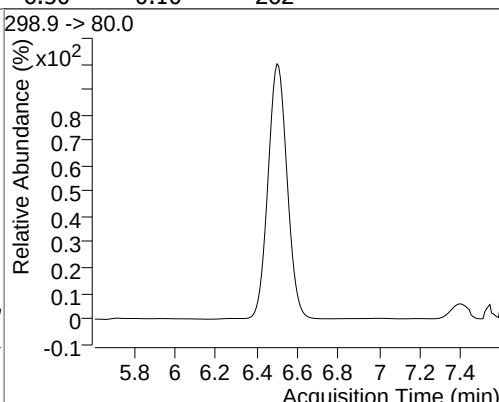
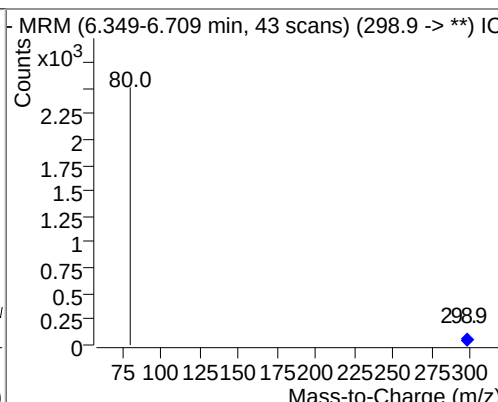
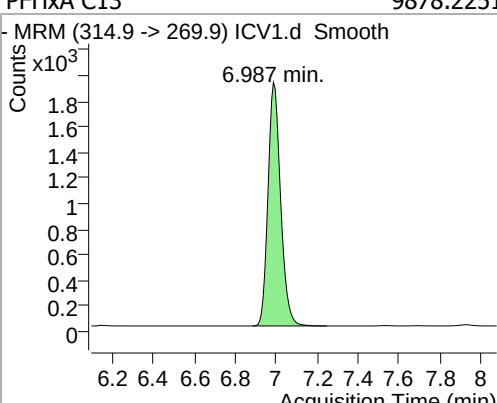
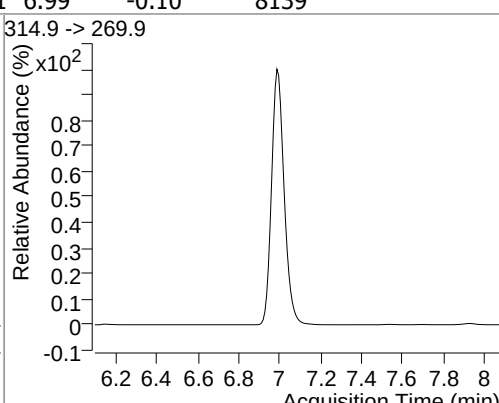
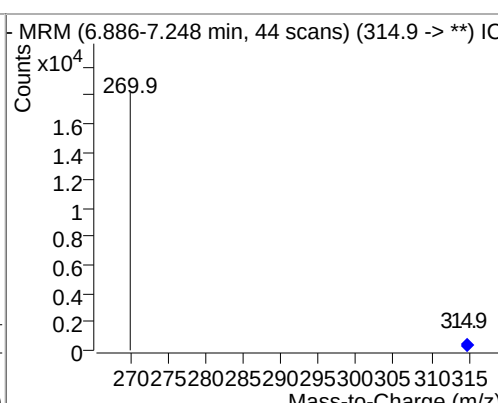
Quantitation Results Report (Not Reviewed)

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			

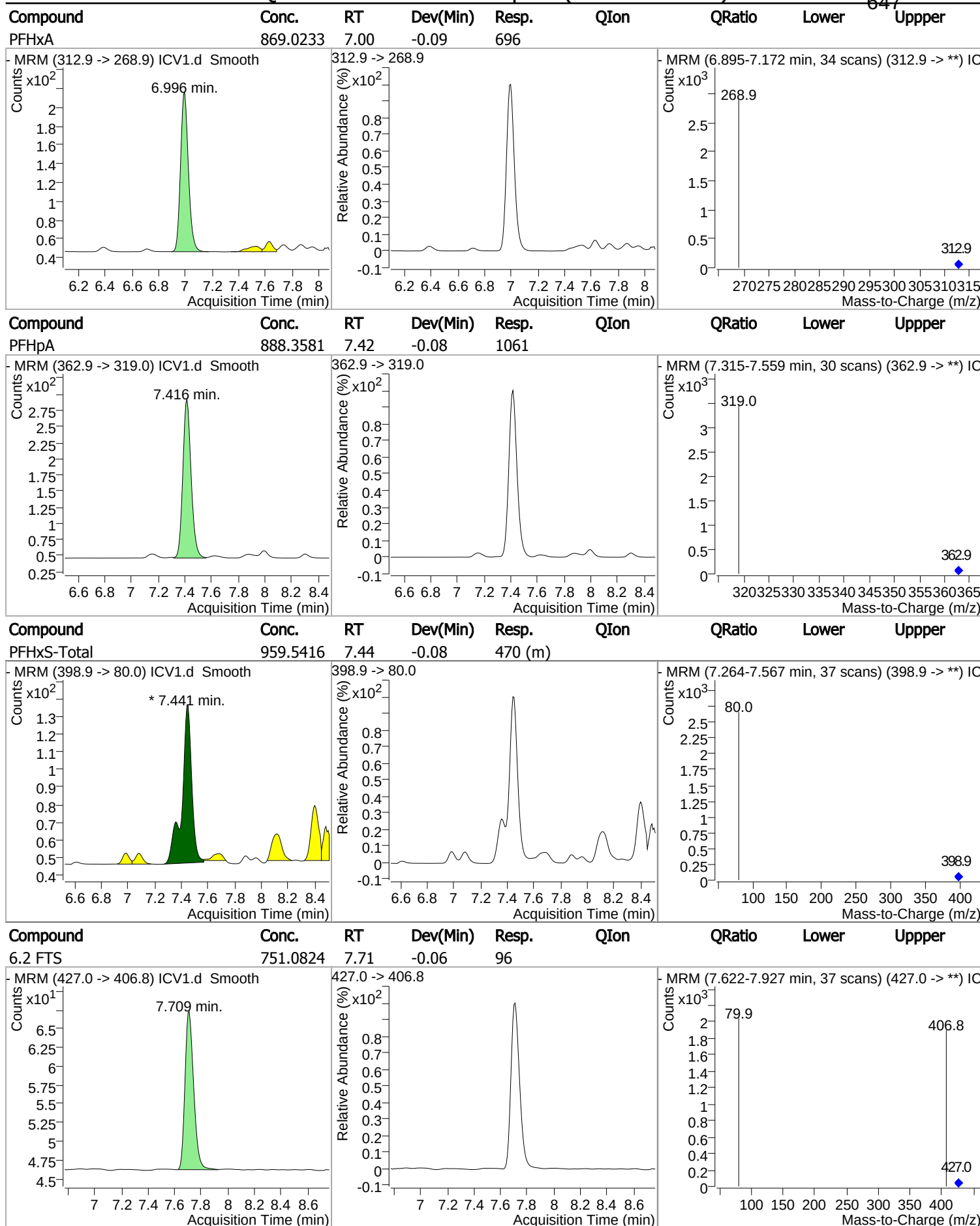
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.709	416.9 -> 371.9	11552	10000.0000	pg/ml		-0.067
M PFOS C13	7.942	502.9 -> 80.0	15398	28700.0000	pg/ml		-0.050
M d3-N-MeFOSAA	8.218	573.2 -> 419.0	6625	40000.0000	pg/ml	m	-0.042
System Monitoring Compounds							
S PFHxA 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							
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 PFTTrDA	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

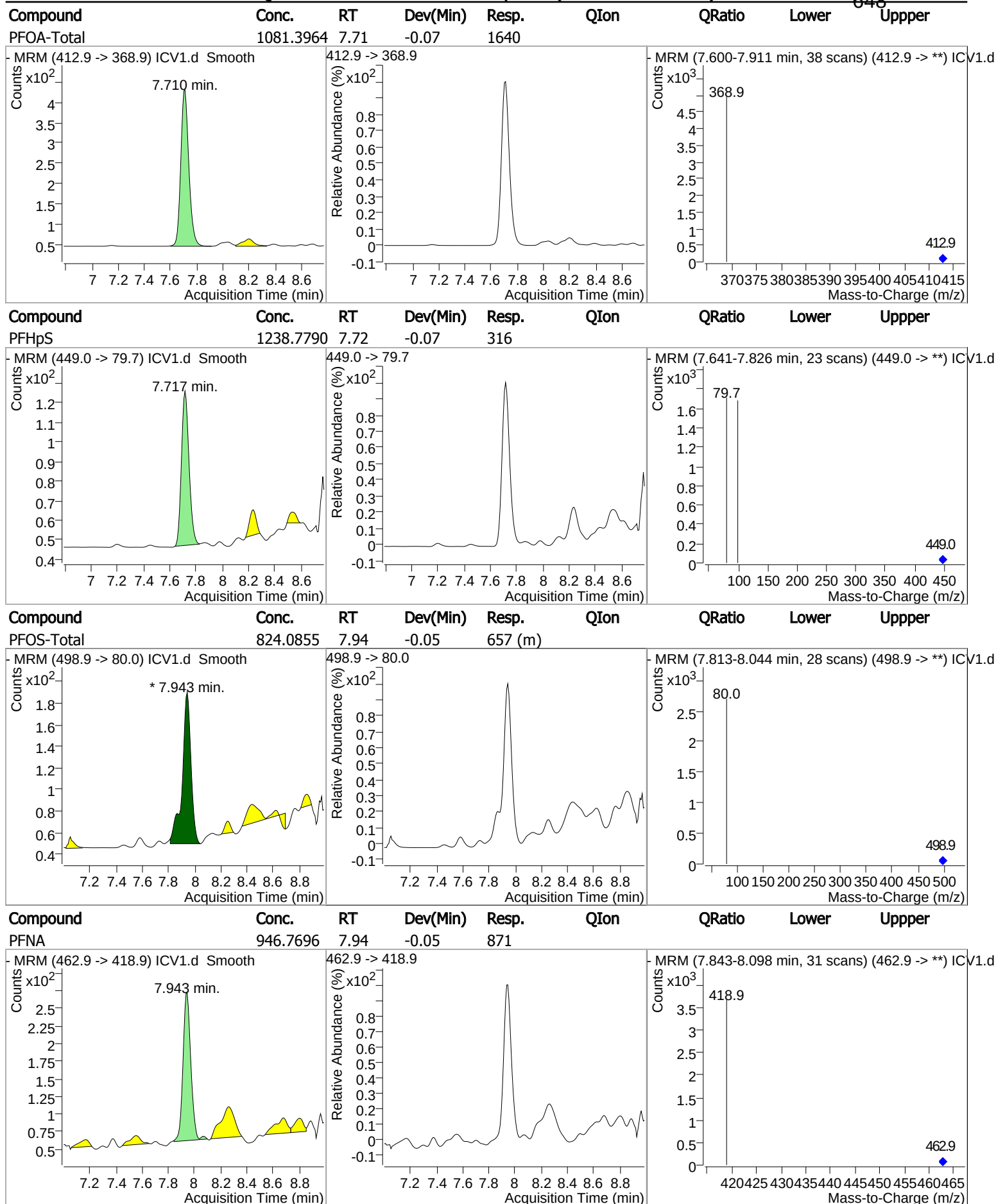
Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBA	864.4810	2.13	-0.08	162				
MRM (213.0 -> 168.9) ICV1.d Smooth  213.0 -> 168.9  MRM (2.017-2.283 min, 32 scans) (213.0 -> **) ICV1.d 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFPeA	1075.1166	6.12	-0.13	408				
MRM (263.0 -> 219.0) ICV1.d Smooth  263.0 -> 219.0  MRM (5.903-6.324 min, 51 scans) (263.0 -> **) ICV1.d 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBS	841.7991	6.50	-0.10	262				
MRM (298.9 -> 80.0) ICV1.d Smooth  298.9 -> 80.0  MRM (6.349-6.709 min, 43 scans) (298.9 -> **) ICV1.d 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFHxA C13	9878.2251	6.99	-0.10	8139				
MRM (314.9 -> 269.9) ICV1.d Smooth  314.9 -> 269.9  MRM (6.886-7.248 min, 44 scans) (314.9 -> **) ICV1.d 								

Quantitation Results Report (Not Reviewed)



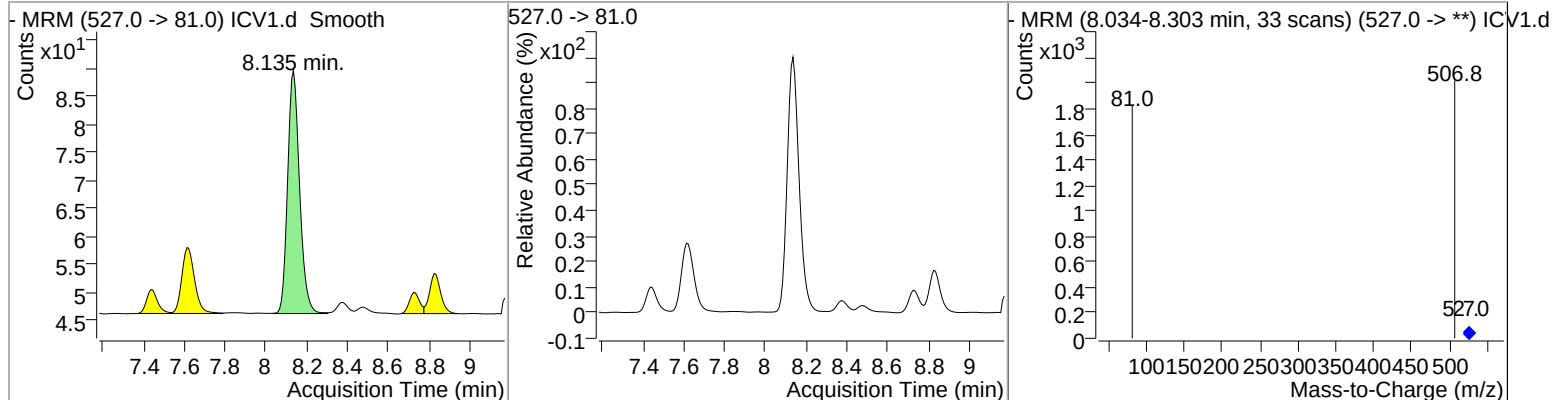
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)

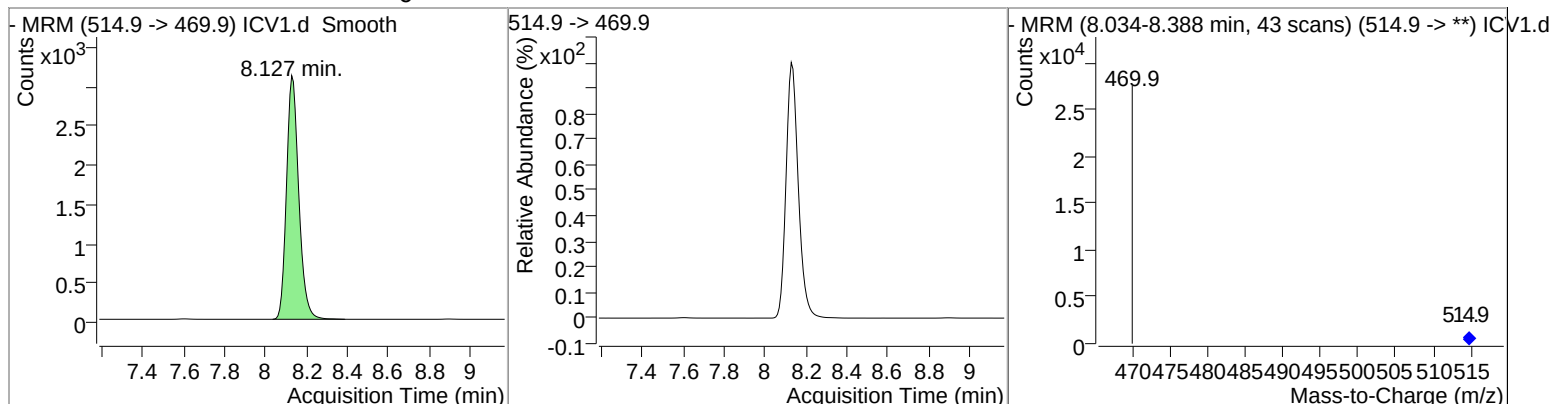
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper

8.2 FTS	836.4173	8.13	-0.04	176				



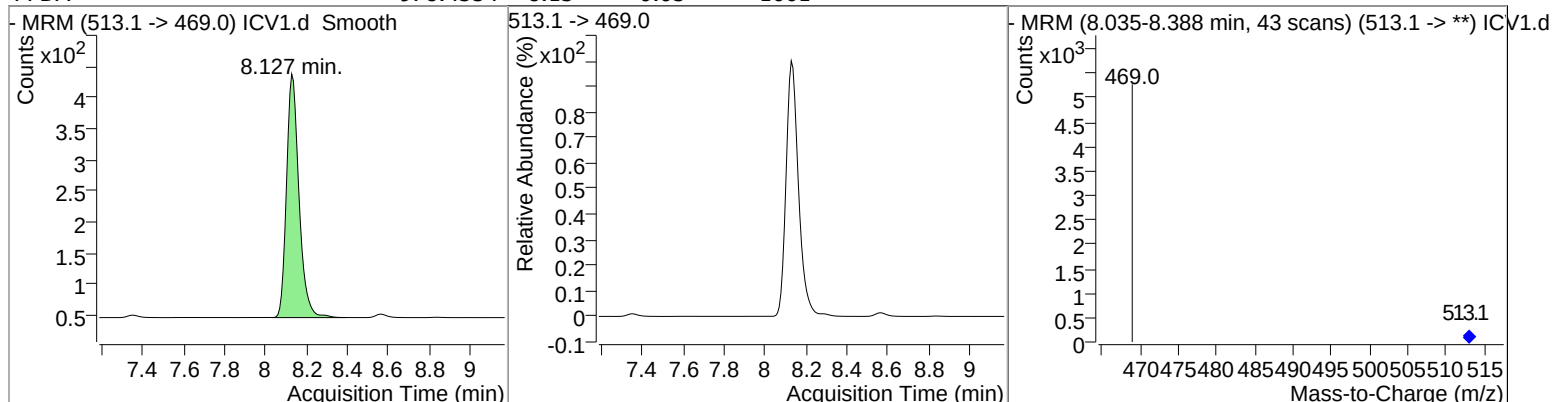
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper

PFDA C13	10732.705	8.13	-0.05	12907				



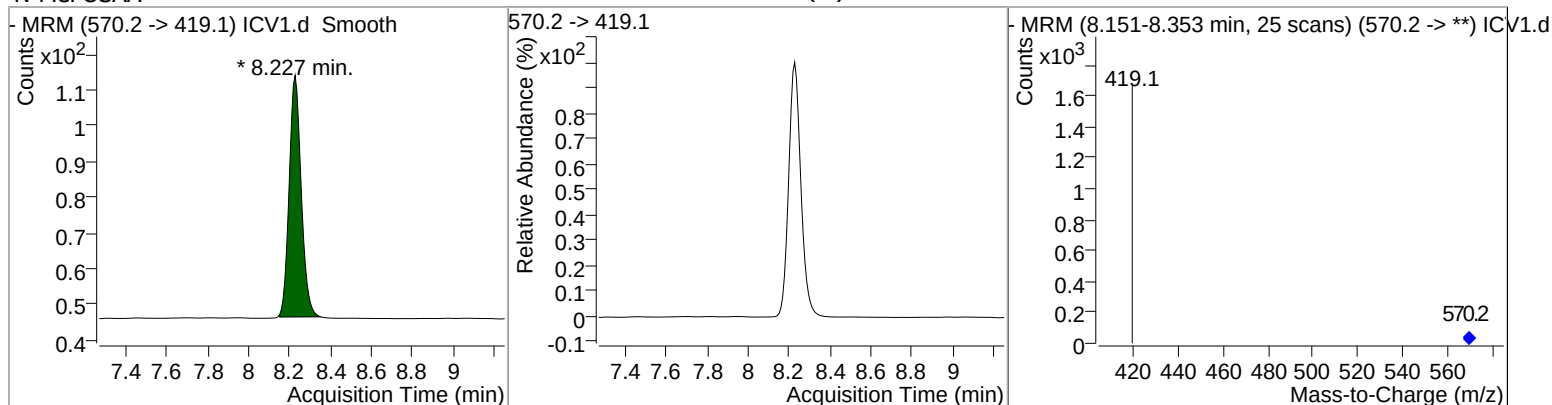
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper

PFDA	978.4554	8.13	-0.05	1661				

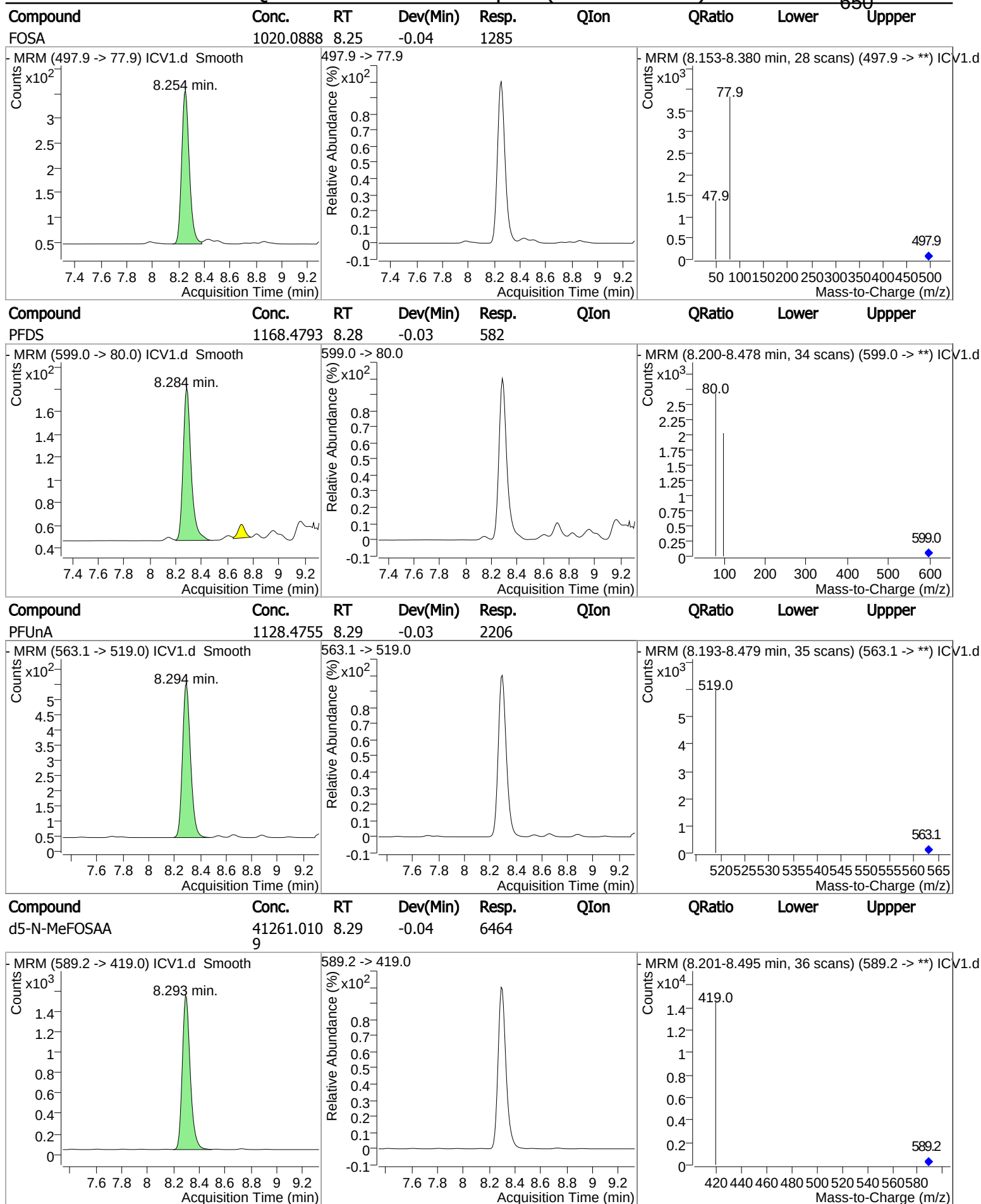


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper

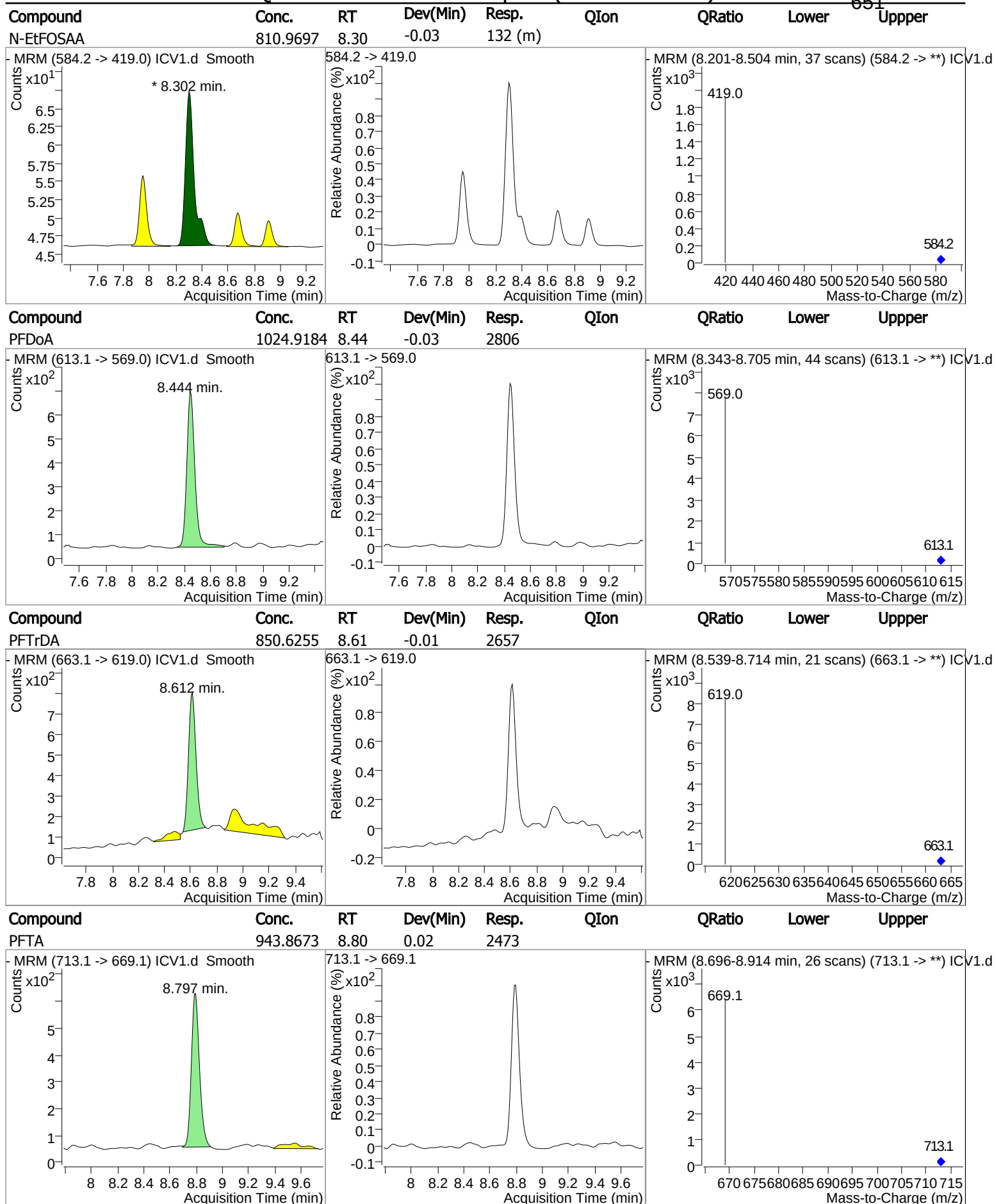
N-MeFOSAA	1255.8436	8.23	-0.03	247 (m)				



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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	

CONTINUING CALIBRATION VERIFICATION
SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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

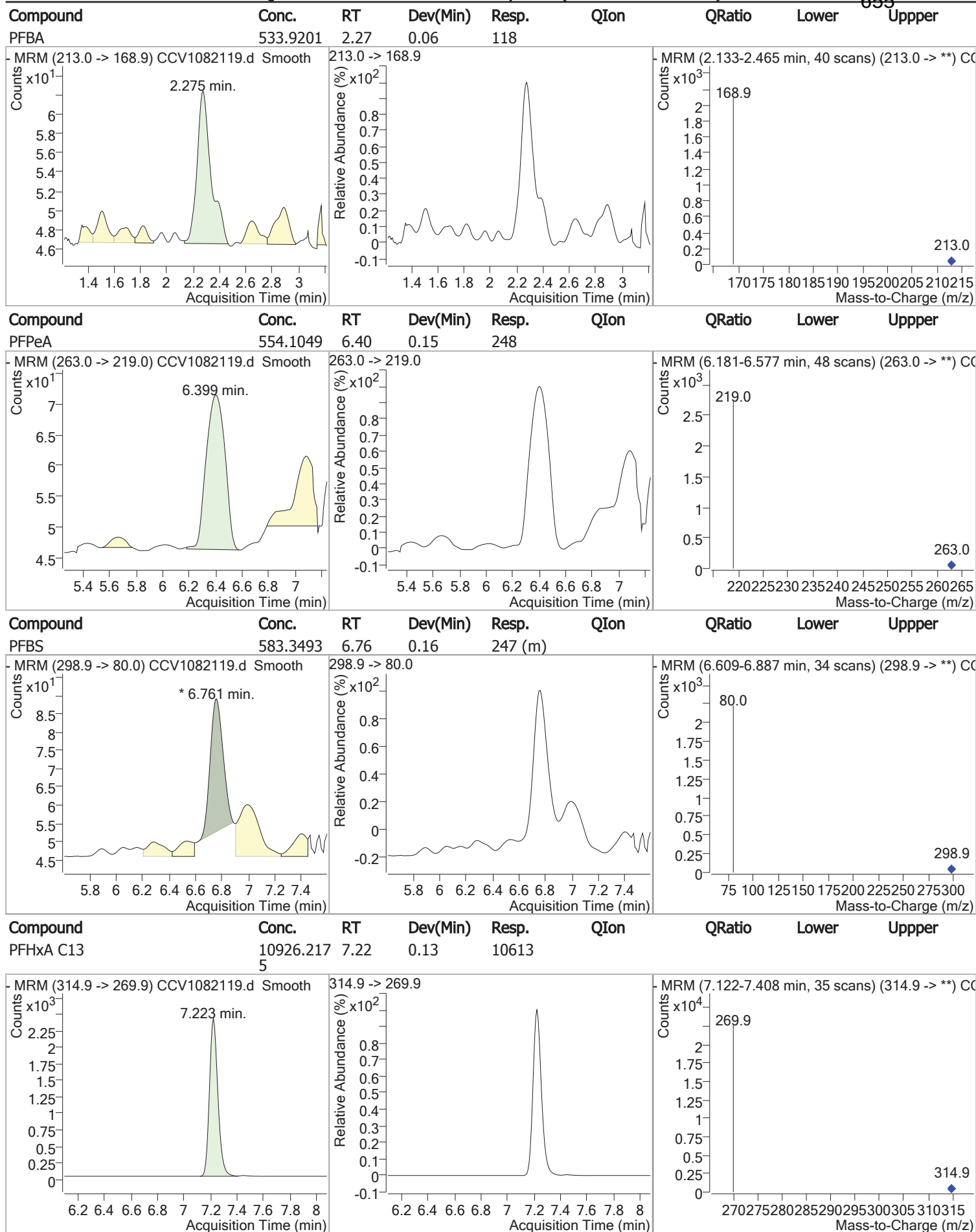
Quantitation Results Report (Not Reviewed)

Data File	CCV1082119.d	Operator	
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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			

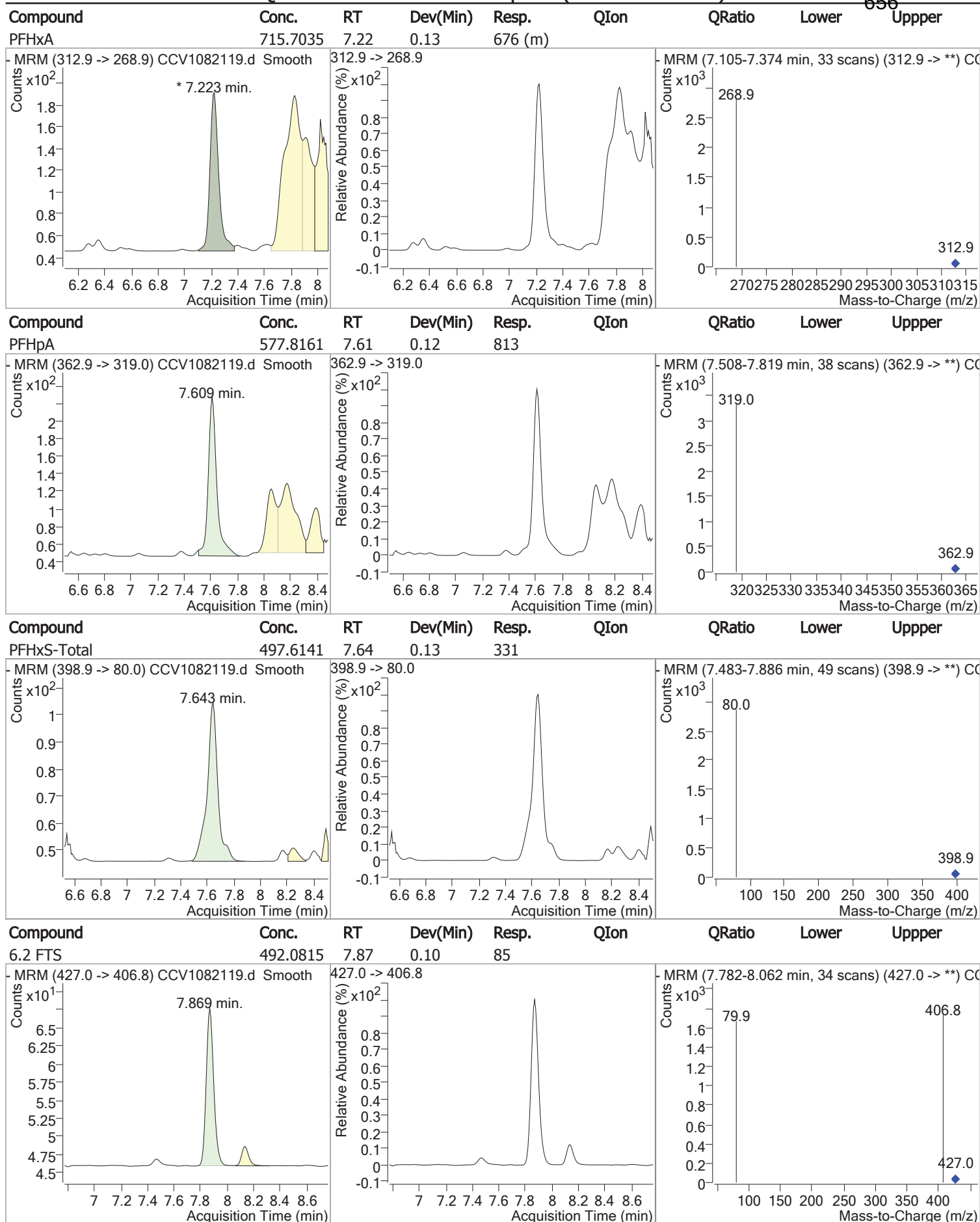
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.877	416.9 -> 371.9	13618	10000.0000	pg/ml		0.101
M PFOS C13	8.077	502.9 -> 80.0	20909	28700.0000	pg/ml		0.084
M d3-N-MeFOSAA	8.319	573.2 -> 419.0	10211	40000.0000	pg/ml	m	0.059
System Monitoring Compounds							
S PFHxA 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 PFTTrDA	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

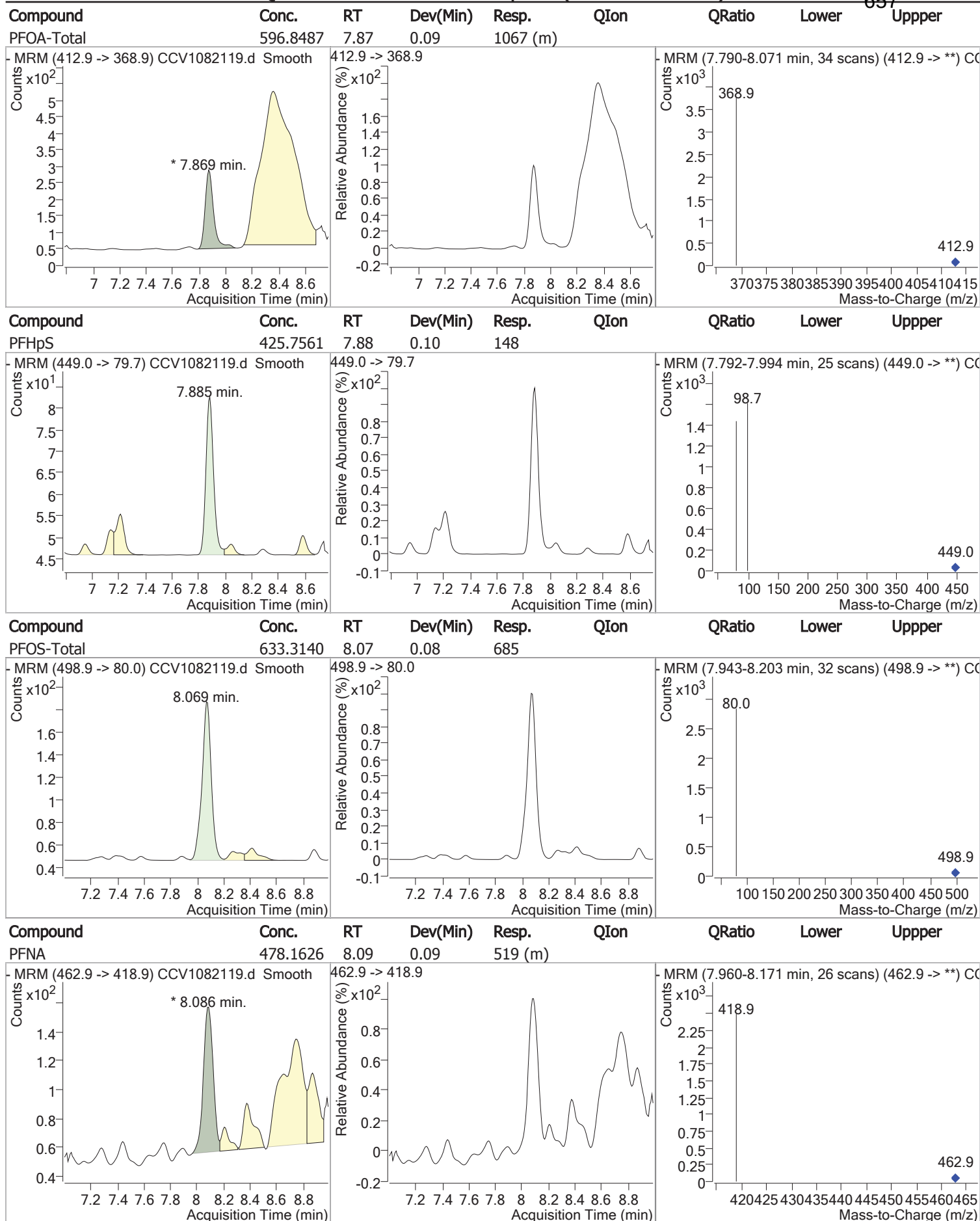
Quantitation Results Report (Not Reviewed)



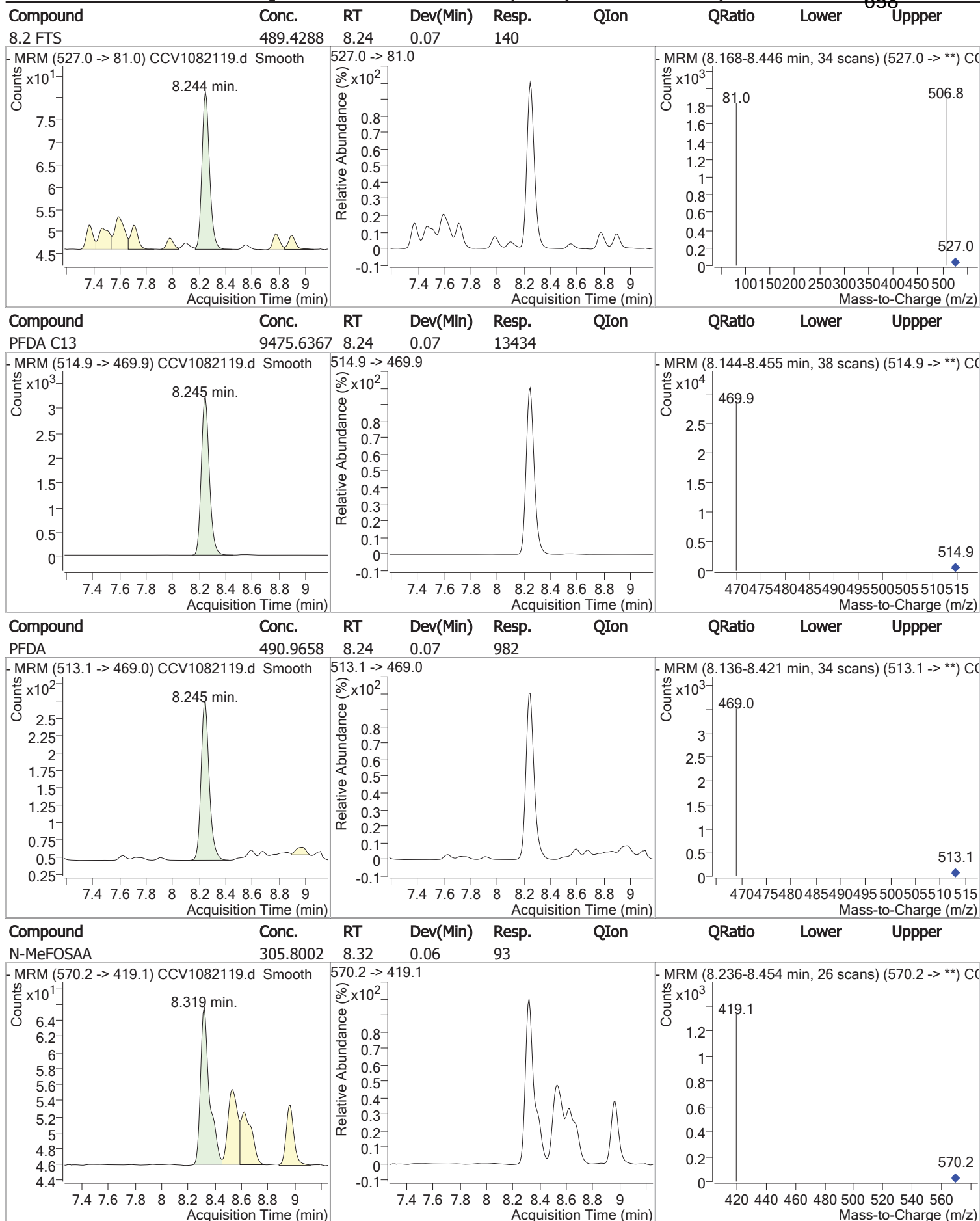
Quantitation Results Report (Not Reviewed)



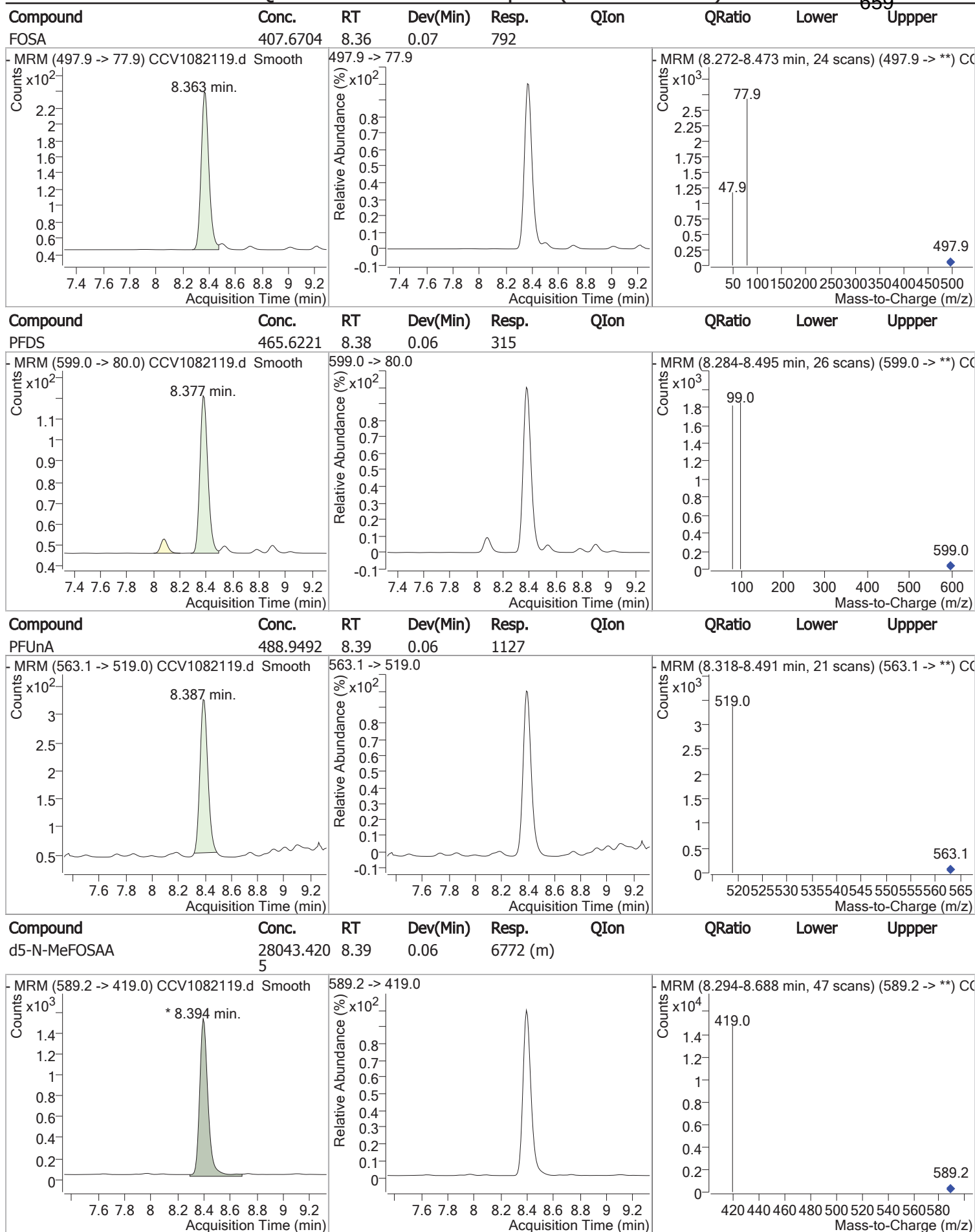
Quantitation Results Report (Not Reviewed)



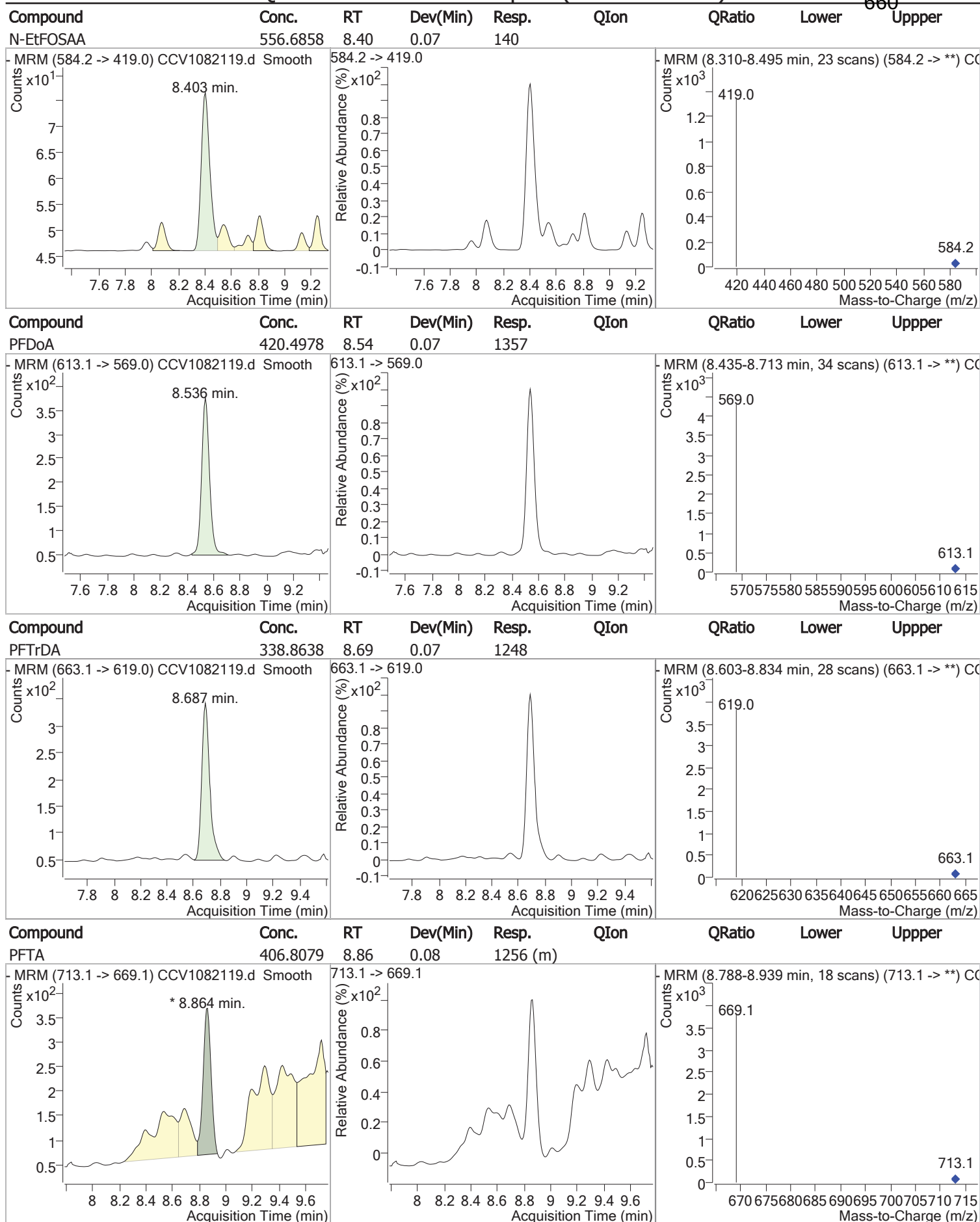
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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	

CONTINUING CALIBRATION VERIFICATION
SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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

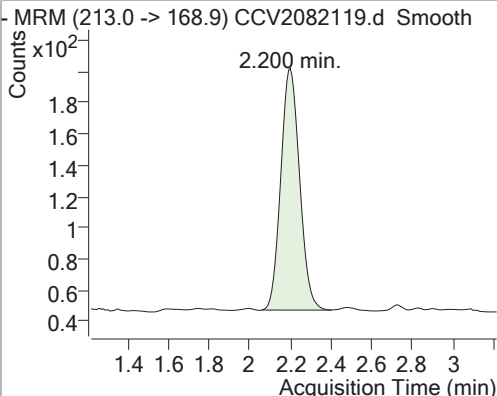
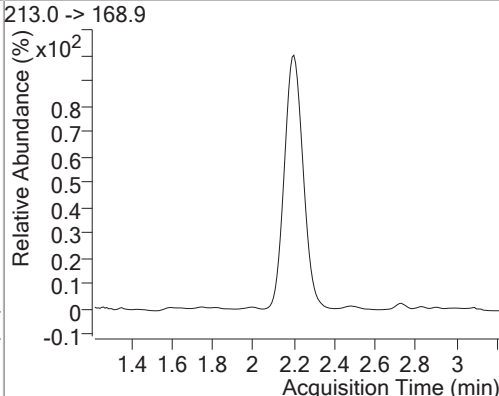
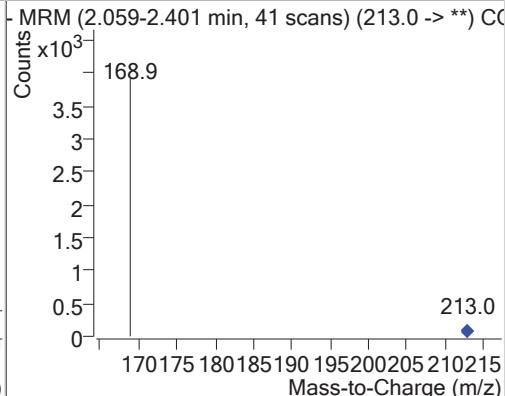
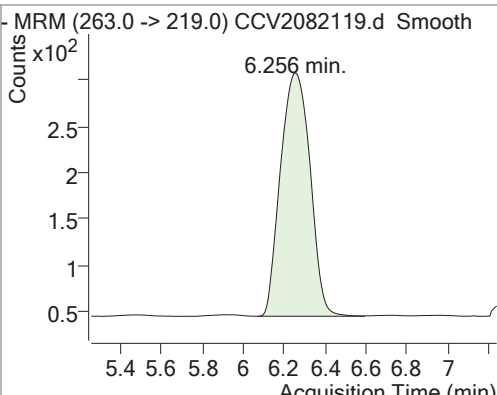
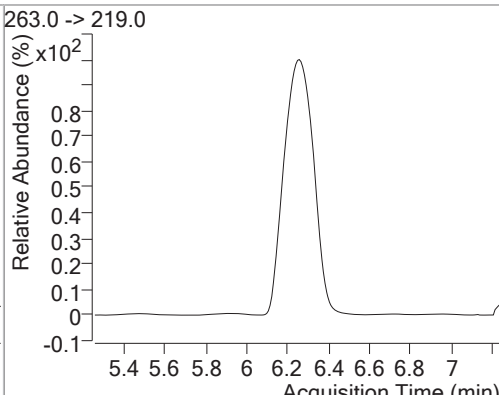
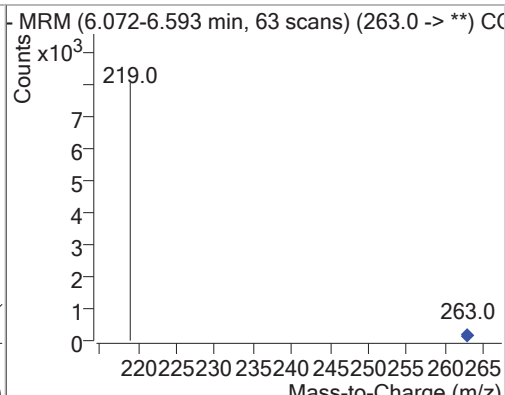
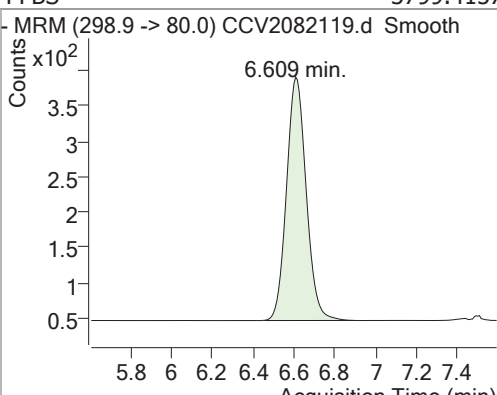
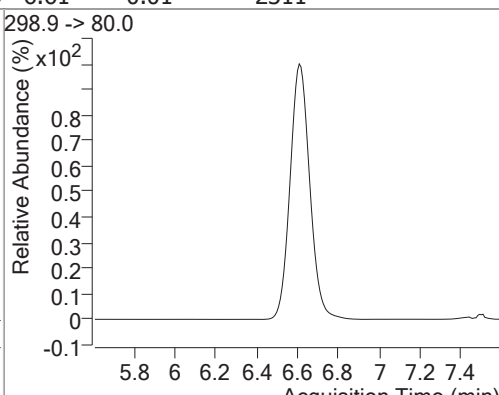
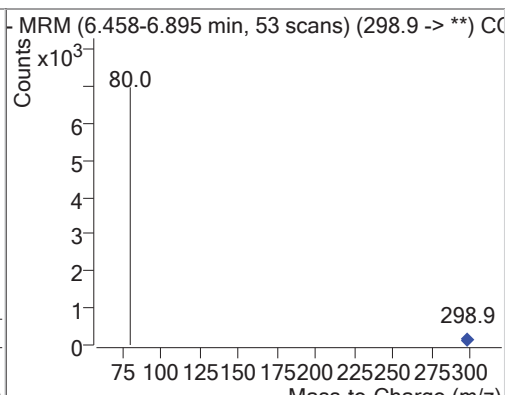
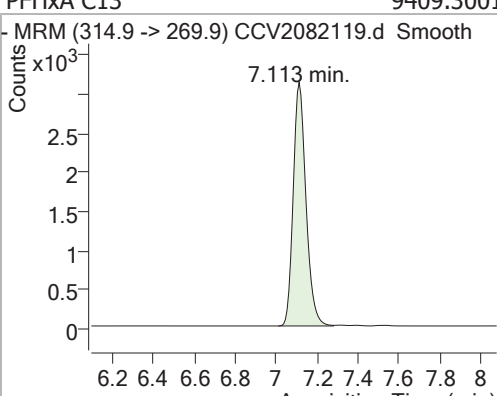
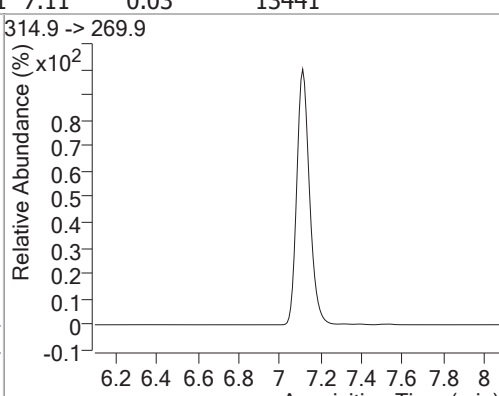
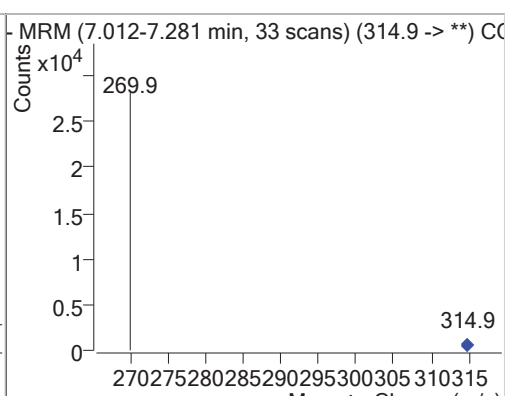
Quantitation Results Report (Not Reviewed)

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			

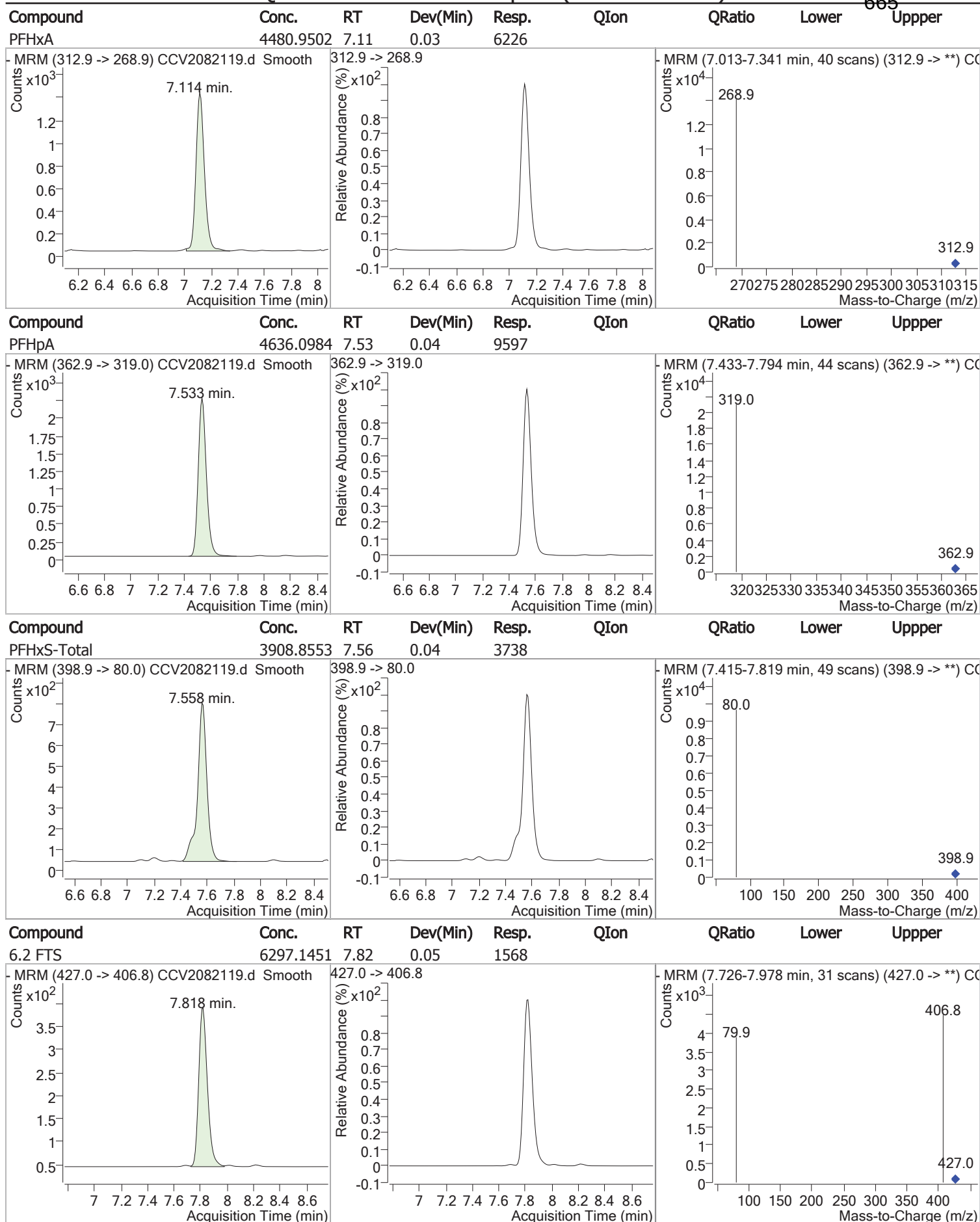
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.819	416.9 -> 371.9	20027	10000.0000	pg/ml	0.042
M PFOS C13	8.043	502.9 -> 80.0	30082	28700.0000	pg/ml	0.050
M d3-N-MeFOSAA	8.302	573.2 -> 419.0	15307	40000.0000	pg/ml	m 0.042
System Monitoring Compounds						
S PFHxA C13	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 PFTTrDA	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

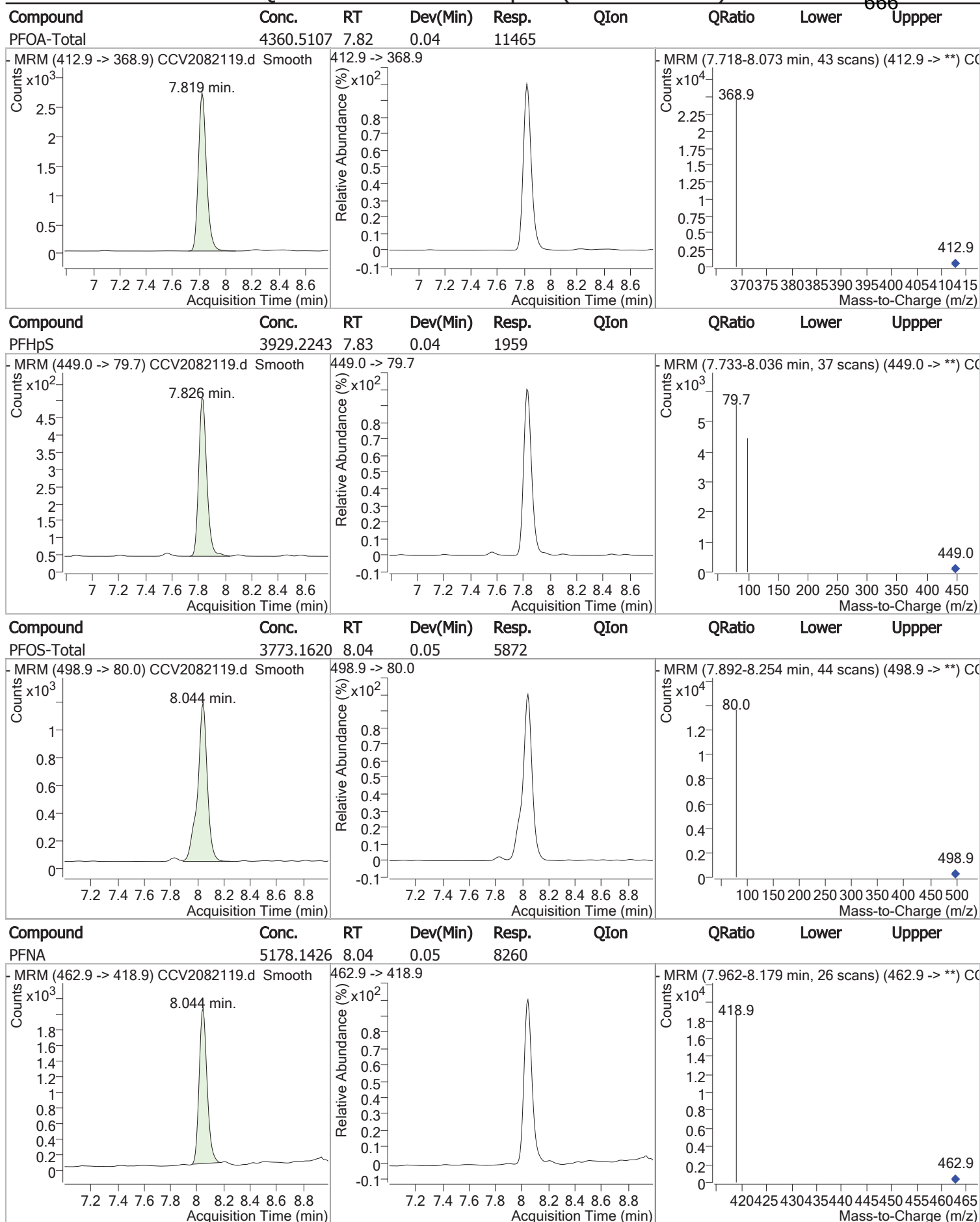
Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBA	3068.6306	2.20	-0.02	995				
MRM (213.0 -> 168.9) CCV2082119.d Smooth  MRM (213.0 -> 168.9)  MRM (2.059-2.401 min, 41 scans) (213.0 -> **) CCV2082119.d 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFPeA	4005.7300	6.26	0.01	2637				
MRM (263.0 -> 219.0) CCV2082119.d Smooth  MRM (263.0 -> 219.0)  MRM (6.072-6.593 min, 63 scans) (263.0 -> **) CCV2082119.d 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBS	3799.4157	6.61	0.01	2311				
MRM (298.9 -> 80.0) CCV2082119.d Smooth  MRM (298.9 -> 80.0)  MRM (6.458-6.895 min, 53 scans) (298.9 -> **) CCV2082119.d 								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFHxA C13	9409.3001	7.11	0.03	13441				
MRM (314.9 -> 269.9) CCV2082119.d Smooth  MRM (314.9 -> 269.9)  MRM (7.012-7.281 min, 33 scans) (314.9 -> **) CCV2082119.d 								

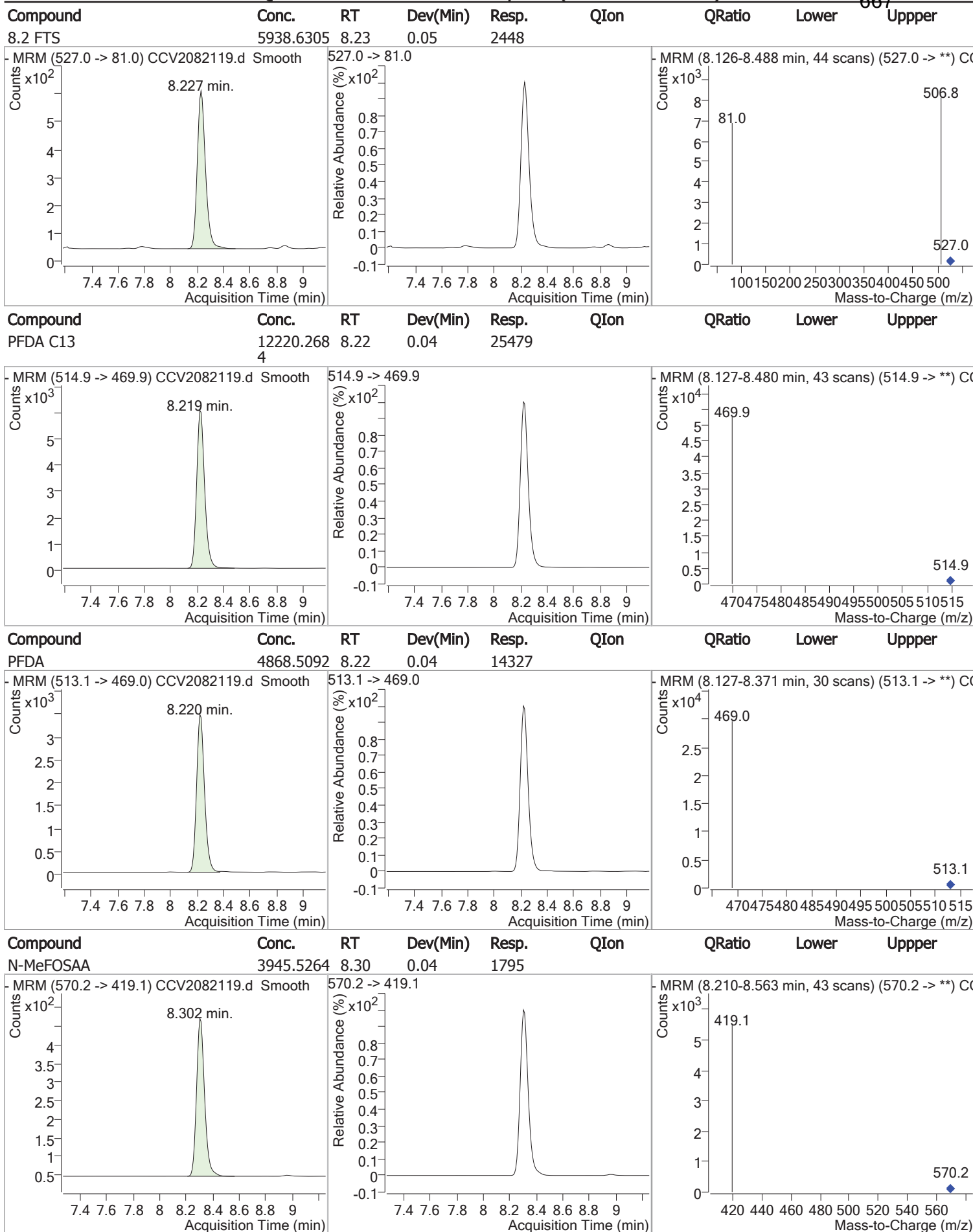
Quantitation Results Report (Not Reviewed)



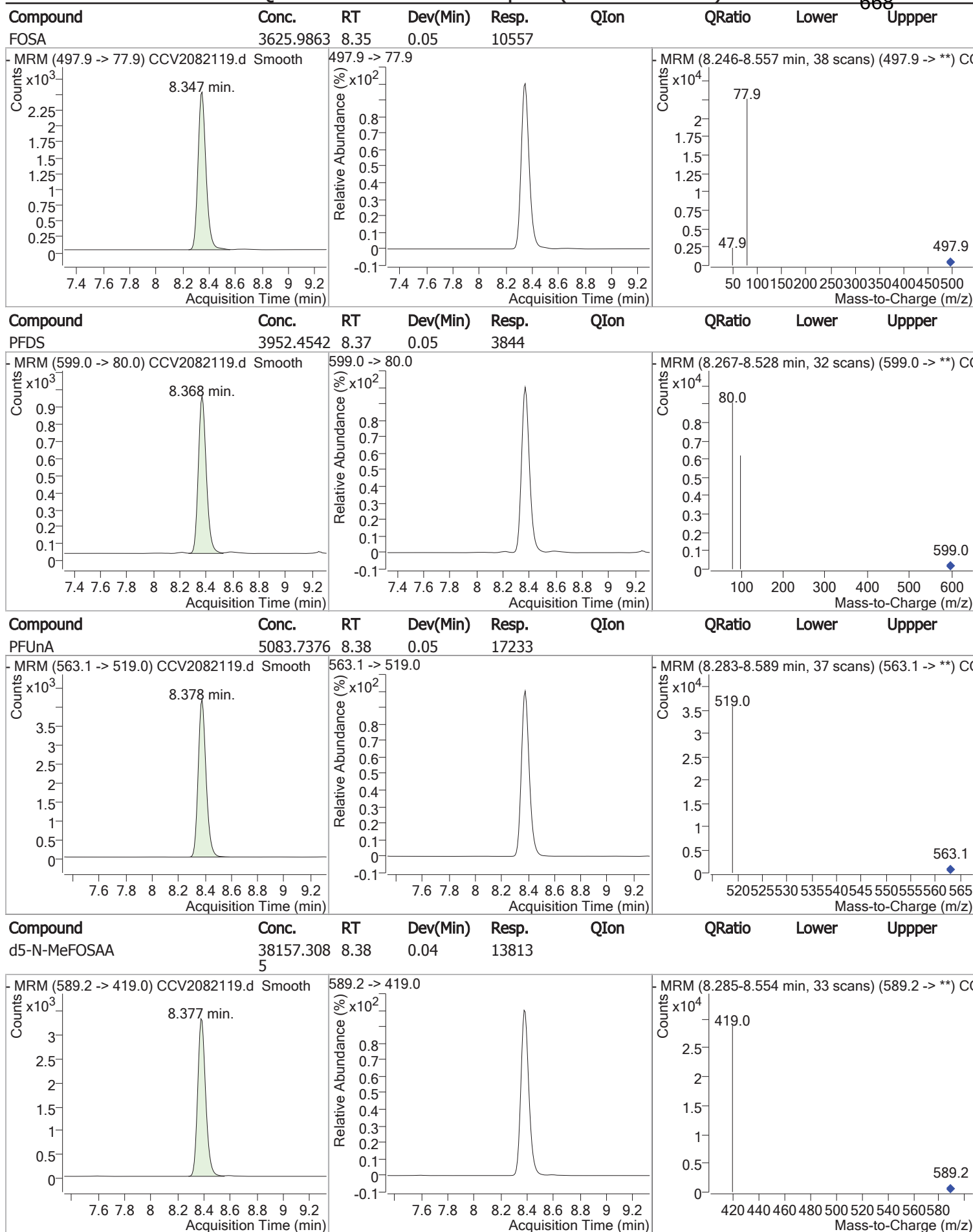
Quantitation Results Report (Not Reviewed)



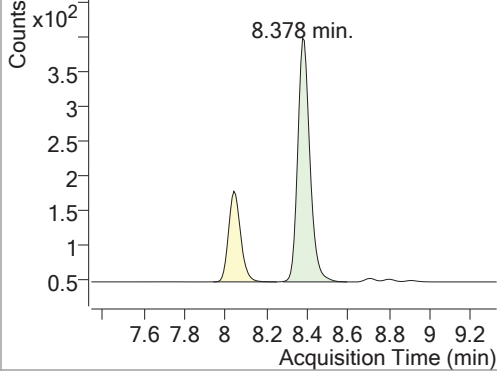
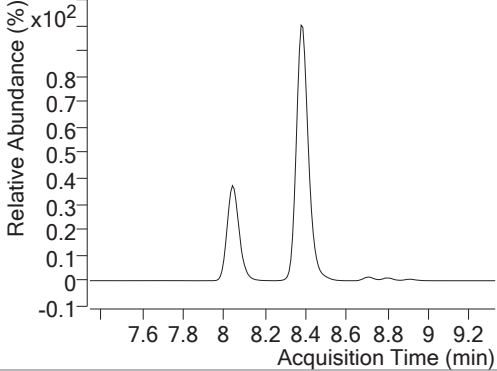
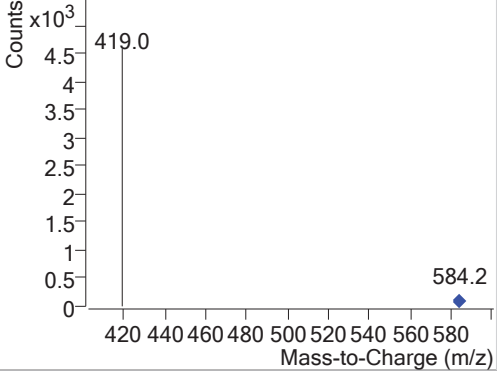
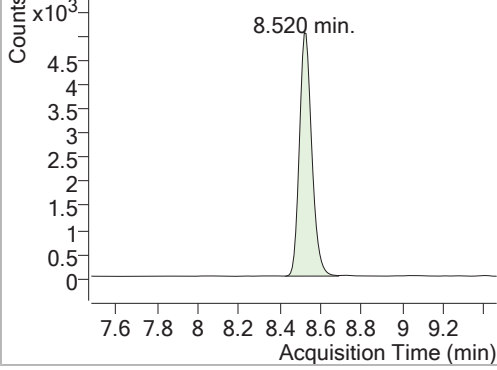
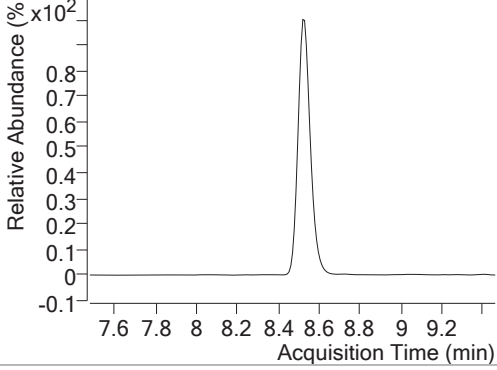
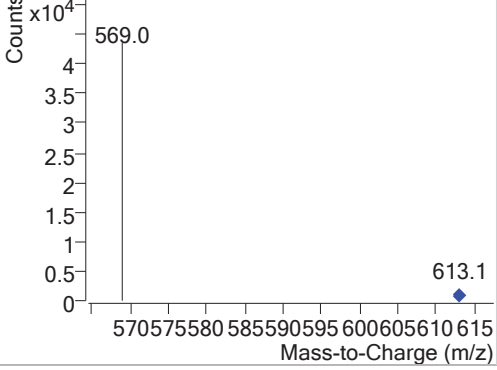
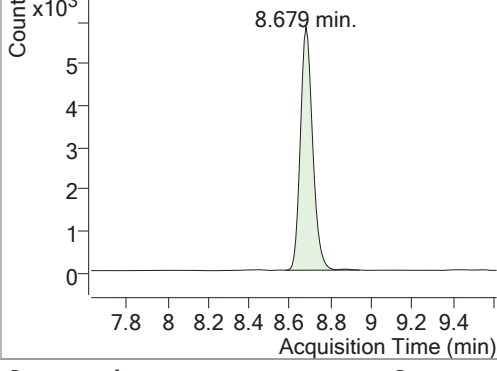
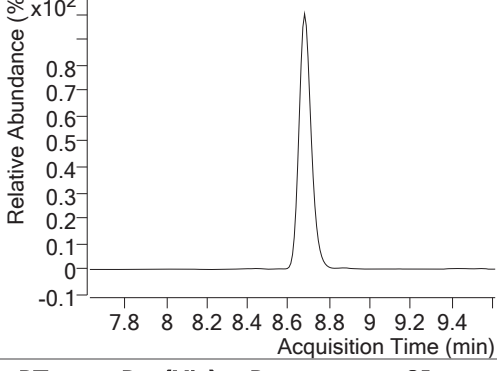
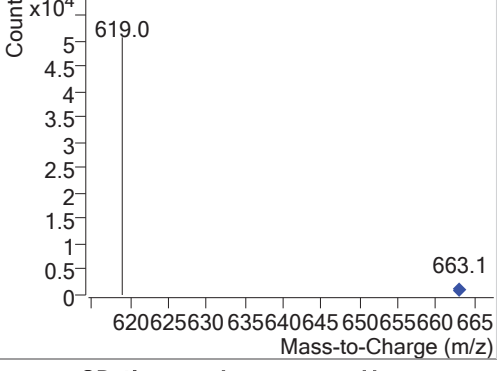
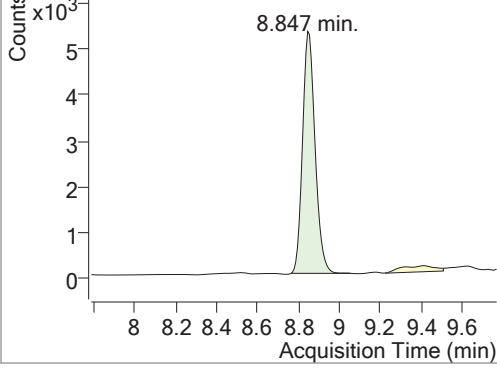
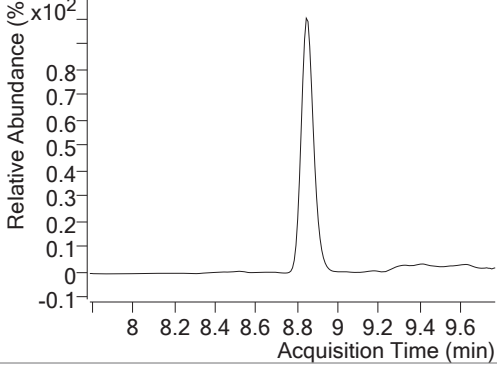
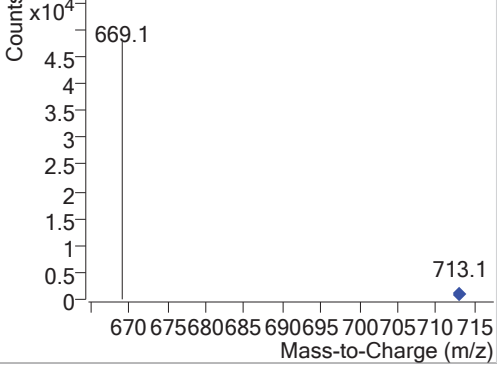
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
N-EtFOSAA	3870.8464	8.38	0.04	1455				
MRM (584.2 -> 419.0) CCV2082119.d Smooth 584.2 -> 419.0 MRM (8.285-8.596 min, 38 scans) (584.2 -> **) CCV2082119.d Smooth								
  								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFDaA	4458.0665	8.52	0.05	21164				
MRM (613.1 -> 569.0) CCV2082119.d Smooth 613.1 -> 569.0 MRM (8.427-8.688 min, 32 scans) (613.1 -> **) CCV2082119.d Smooth								
  								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFTrDA	4503.5378	8.68	0.06	24385				
MRM (663.1 -> 619.0) CCV2082119.d Smooth 663.1 -> 619.0 MRM (8.578-8.940 min, 44 scans) (663.1 -> **) CCV2082119.d Smooth								
  								
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFTA	4986.4470	8.85	0.07	22647				
MRM (713.1 -> 669.1) CCV2082119.d Smooth 713.1 -> 669.1 MRM (8.765-9.057 min, 35 scans) (713.1 -> **) CCV2082119.d Smooth								
  								

CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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	

CONTINUING CALIBRATION VERIFICATION
SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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

Quantitation Results Report (Not Reviewed)

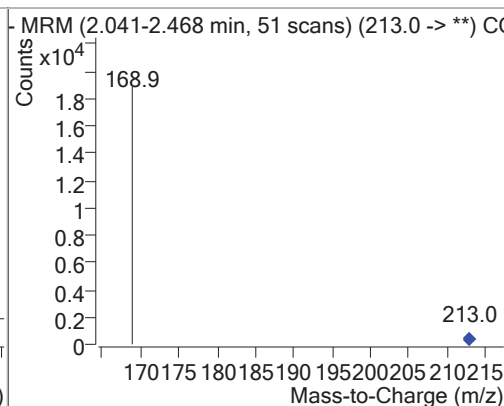
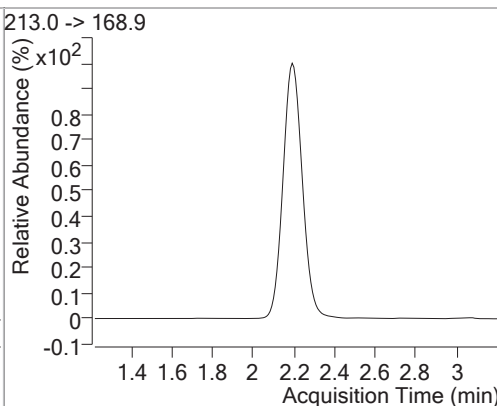
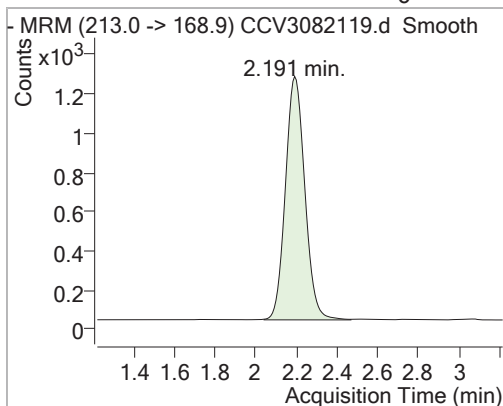
Data File	CCV3082119.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 5:38:15 PM
Sample Name	CCV3082119	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
Batch Name	B238243.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

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

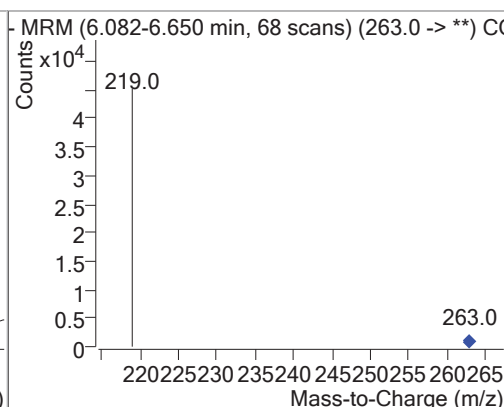
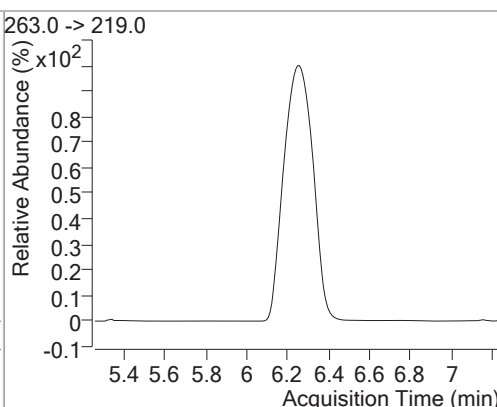
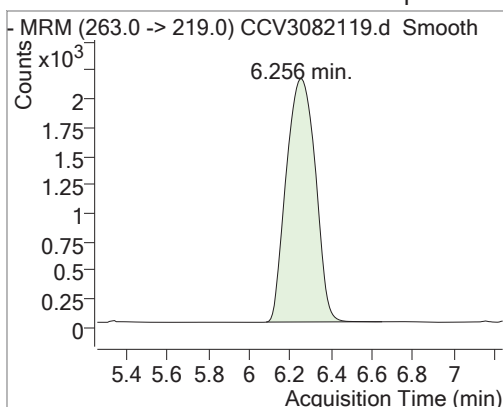
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitation Results Report (Not Reviewed)

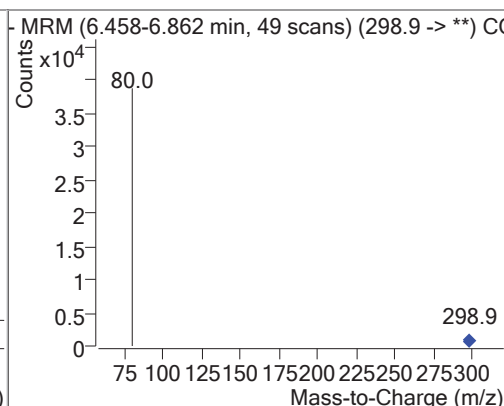
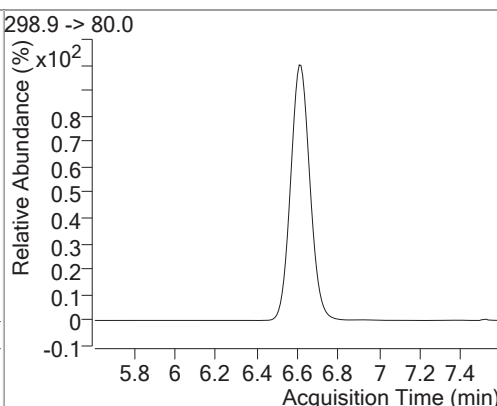
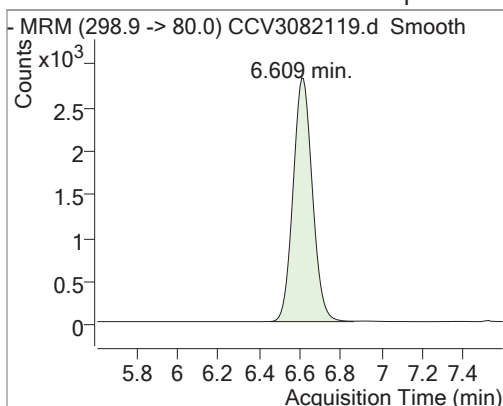
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBA	33158.899	2.19	-0.03	8243				
	6							



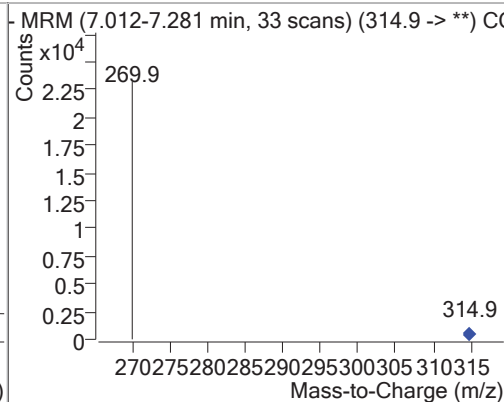
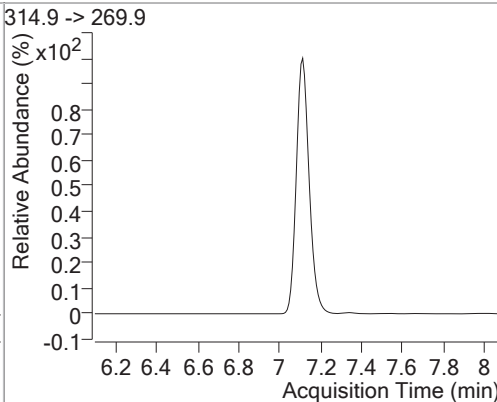
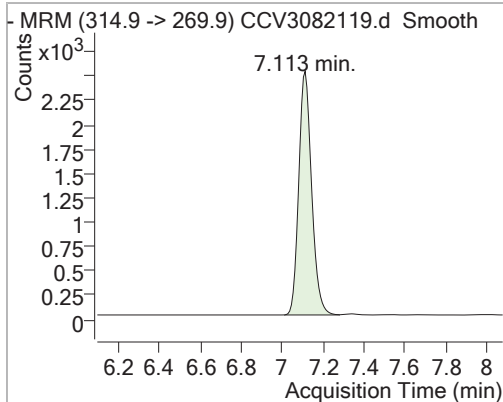
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFPeA	41862.976	6.26	0.01	21117				
	4							



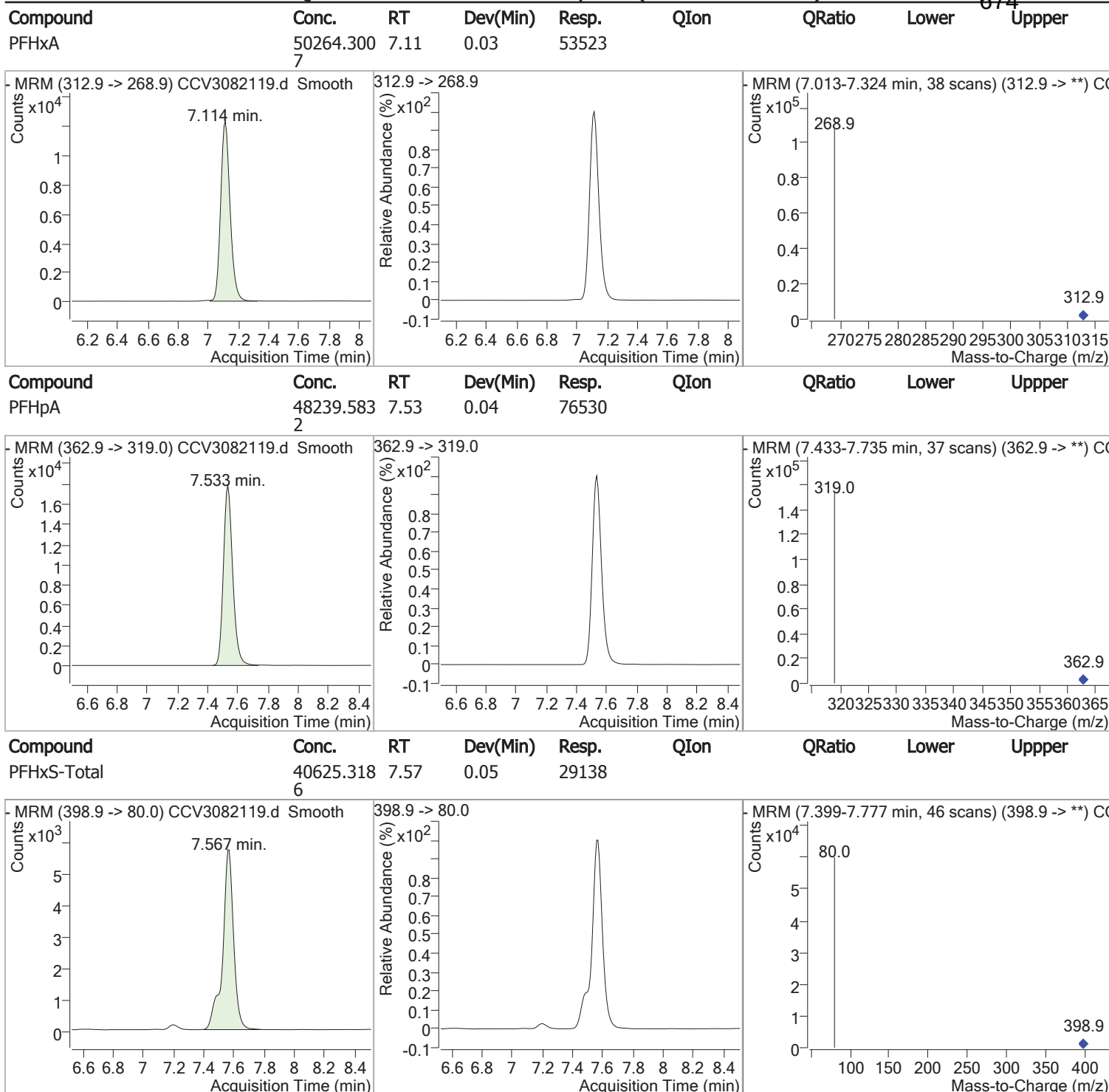
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBS	40270.832	6.61	0.01	18370				
	4							



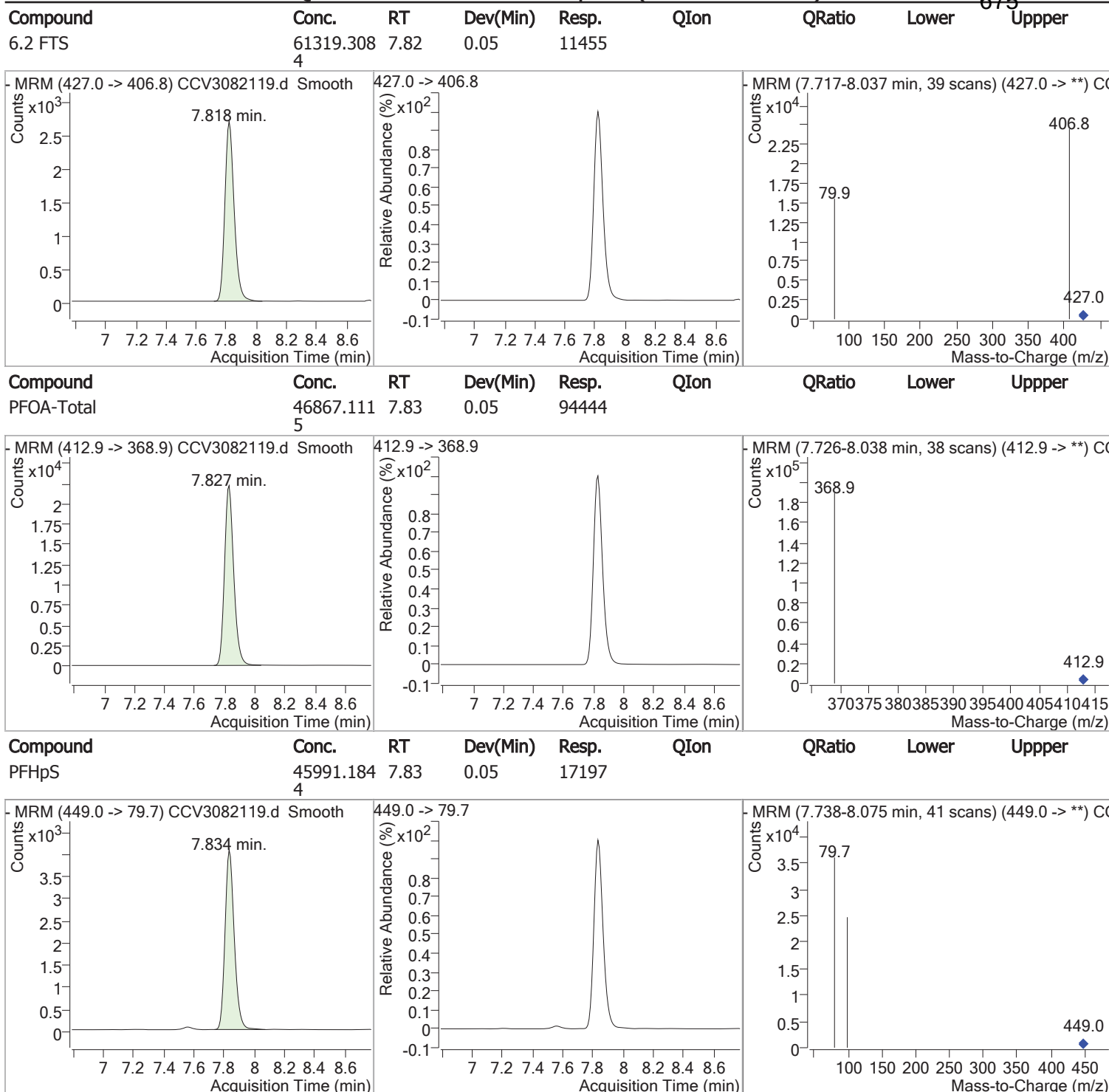
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFHxA C13	9996.6073	7.11	0.03	10944				



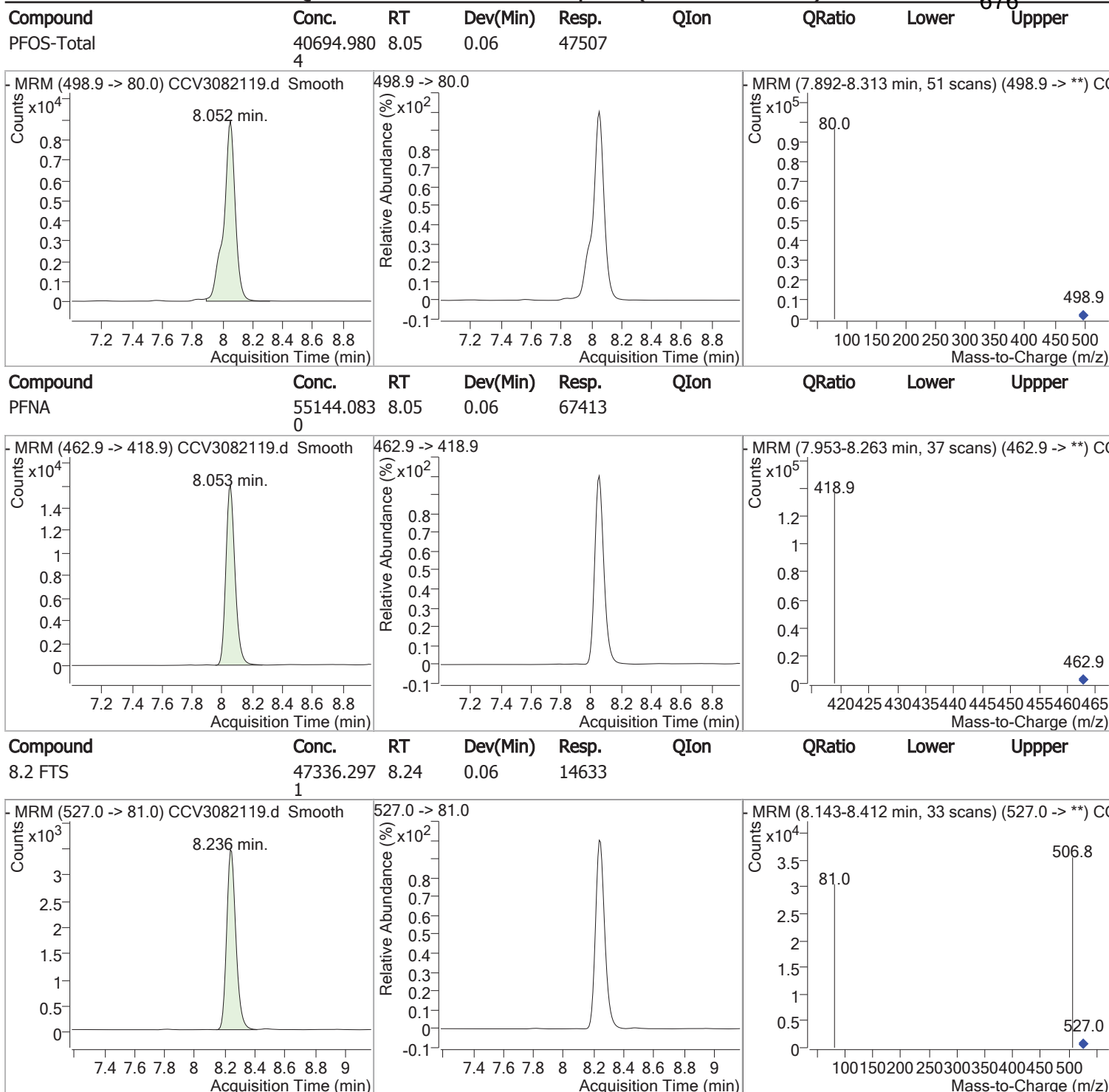
Quantitation Results Report (Not Reviewed)



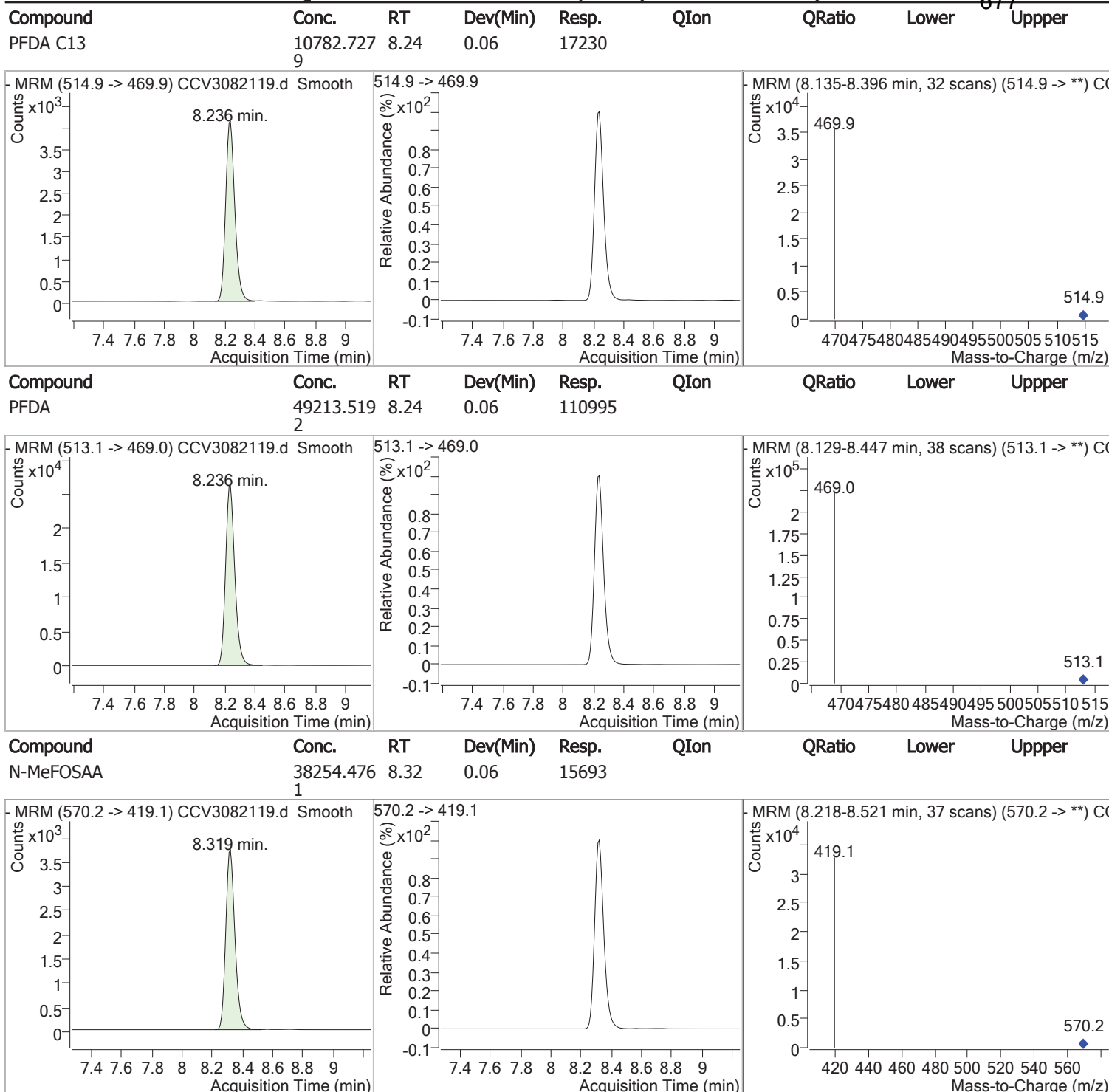
Quantitation Results Report (Not Reviewed)



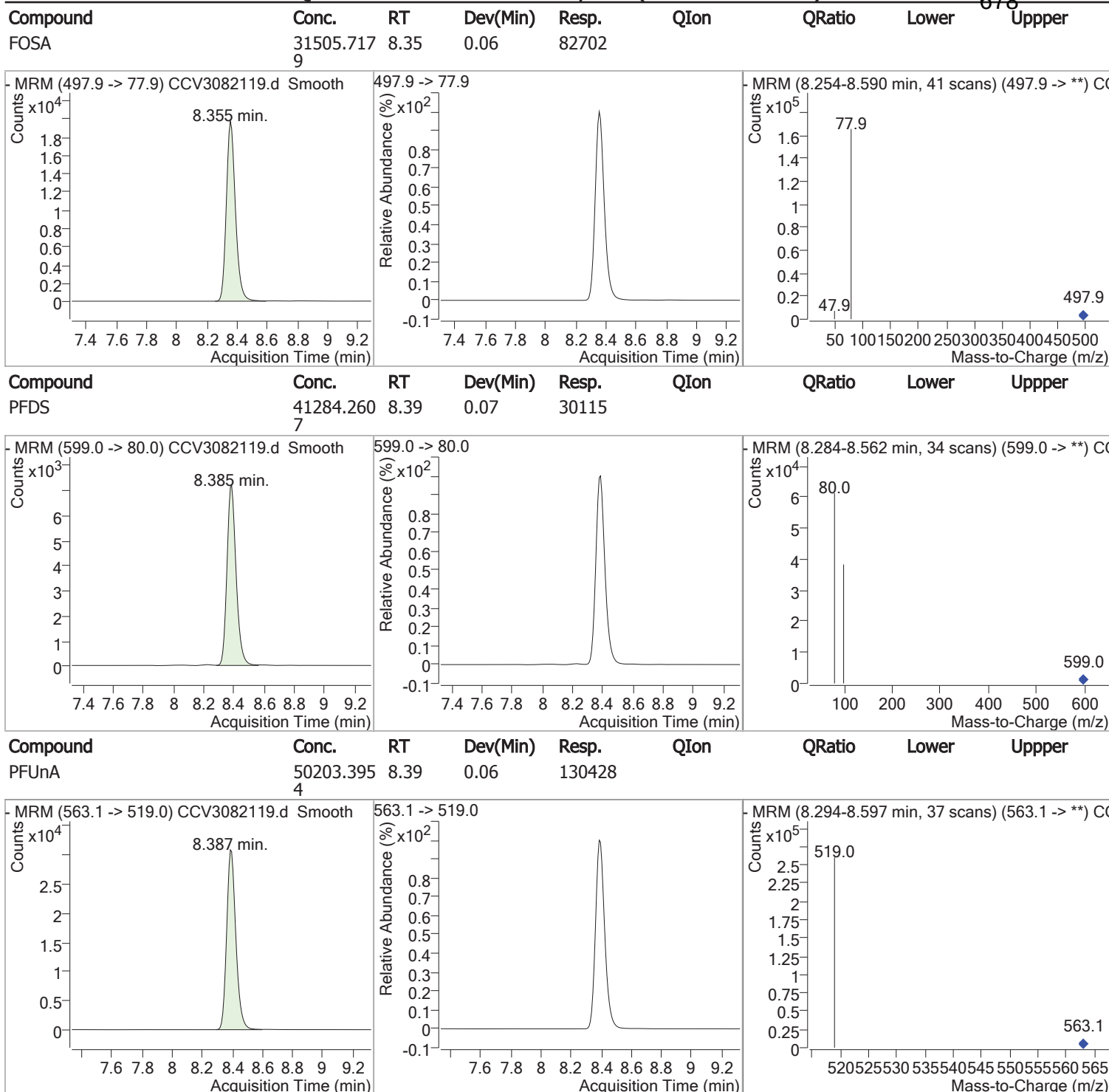
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)

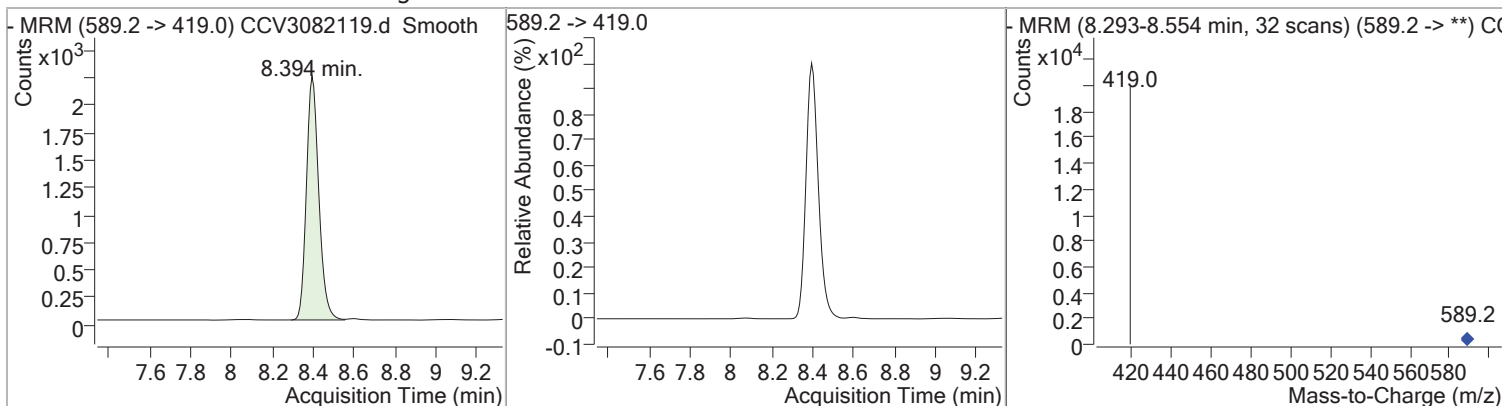


Quantitation Results Report (Not Reviewed)

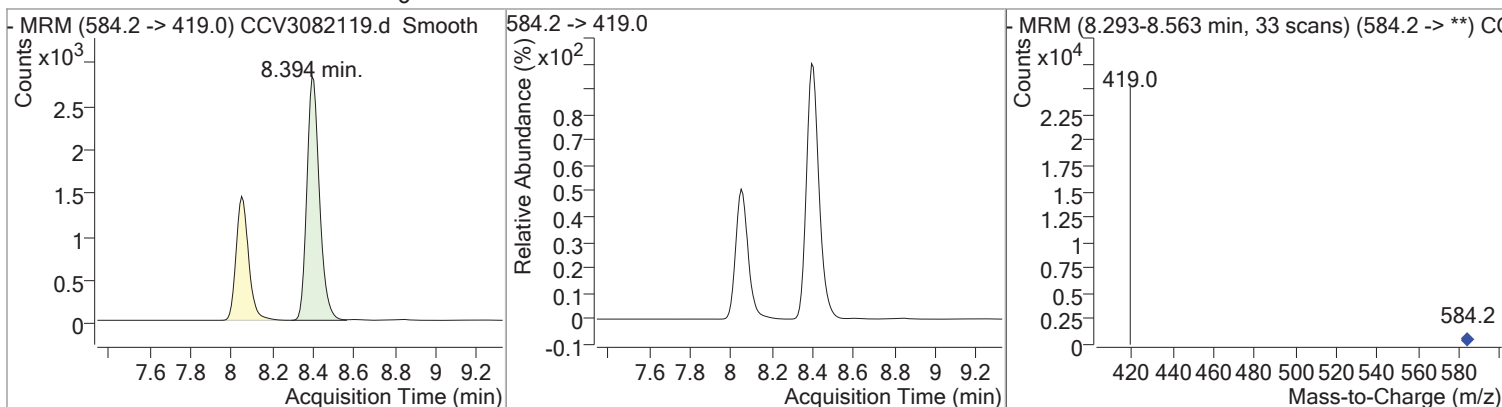


Quantitation Results Report (Not Reviewed)

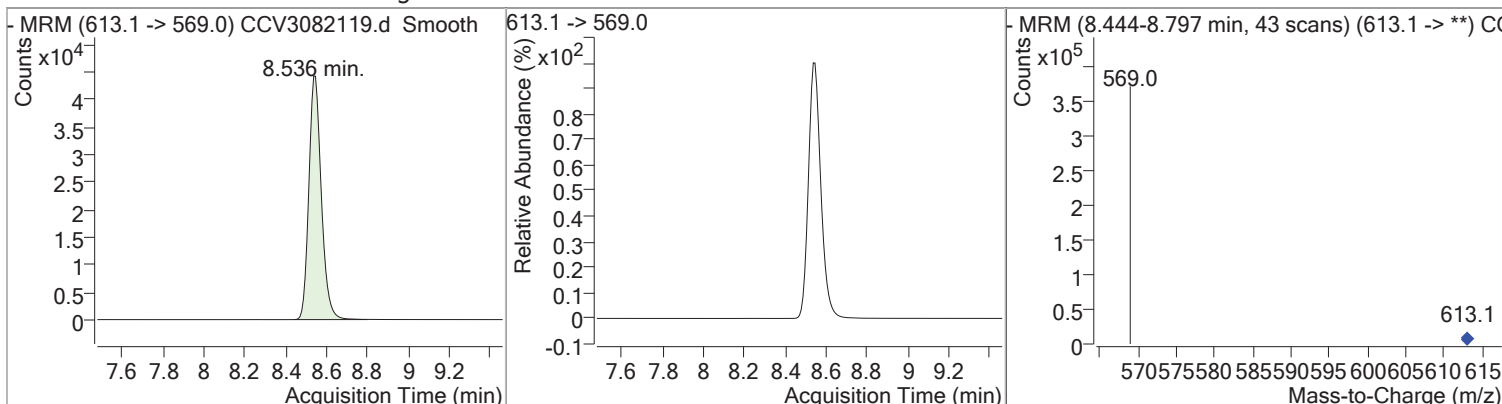
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
d5-N-MeFOSAA	28637.721 5	8.39	0.06	9347				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
N-EtFOSAA	35271.055 6	8.39	0.06	11954				

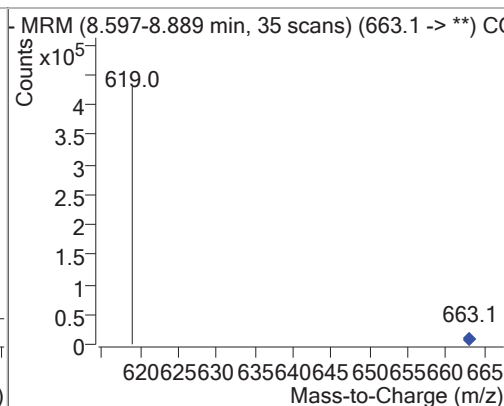
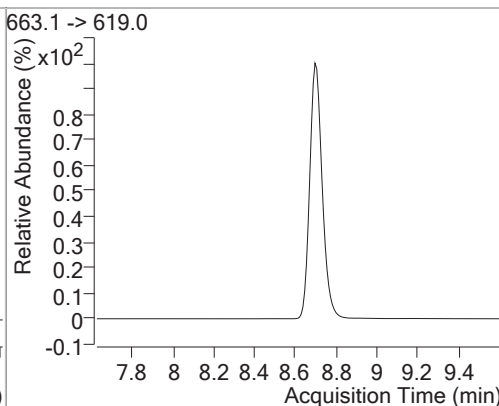
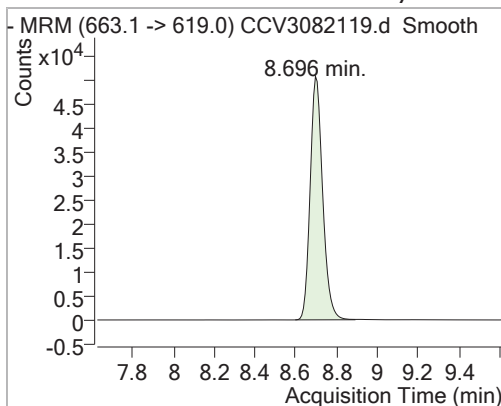


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFDaA	51396.098 5	8.54	0.07	186994				

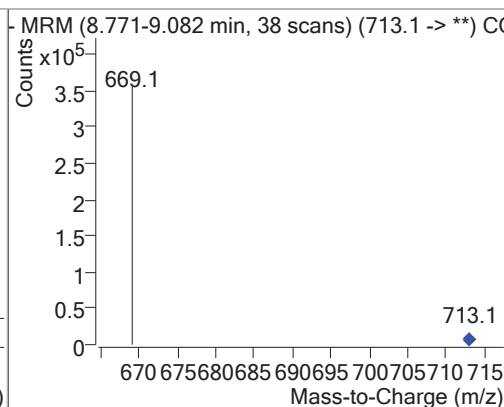
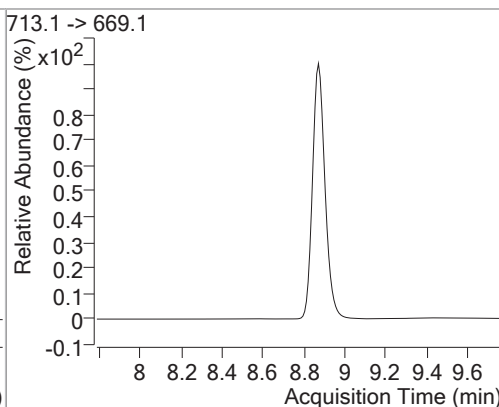
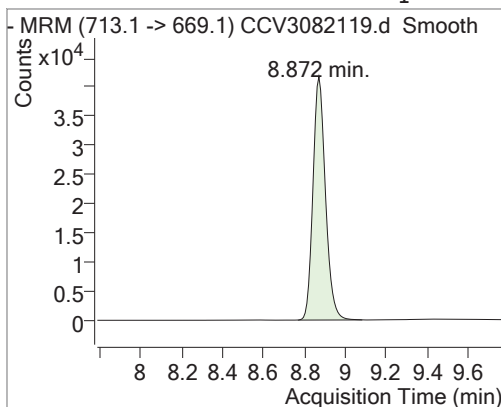


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFTTrDA	52016.399	8.70	0.08	215859				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFTA	50946.675	8.87	0.09	177336				



CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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	

CONTINUING CALIBRATION VERIFICATION
SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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

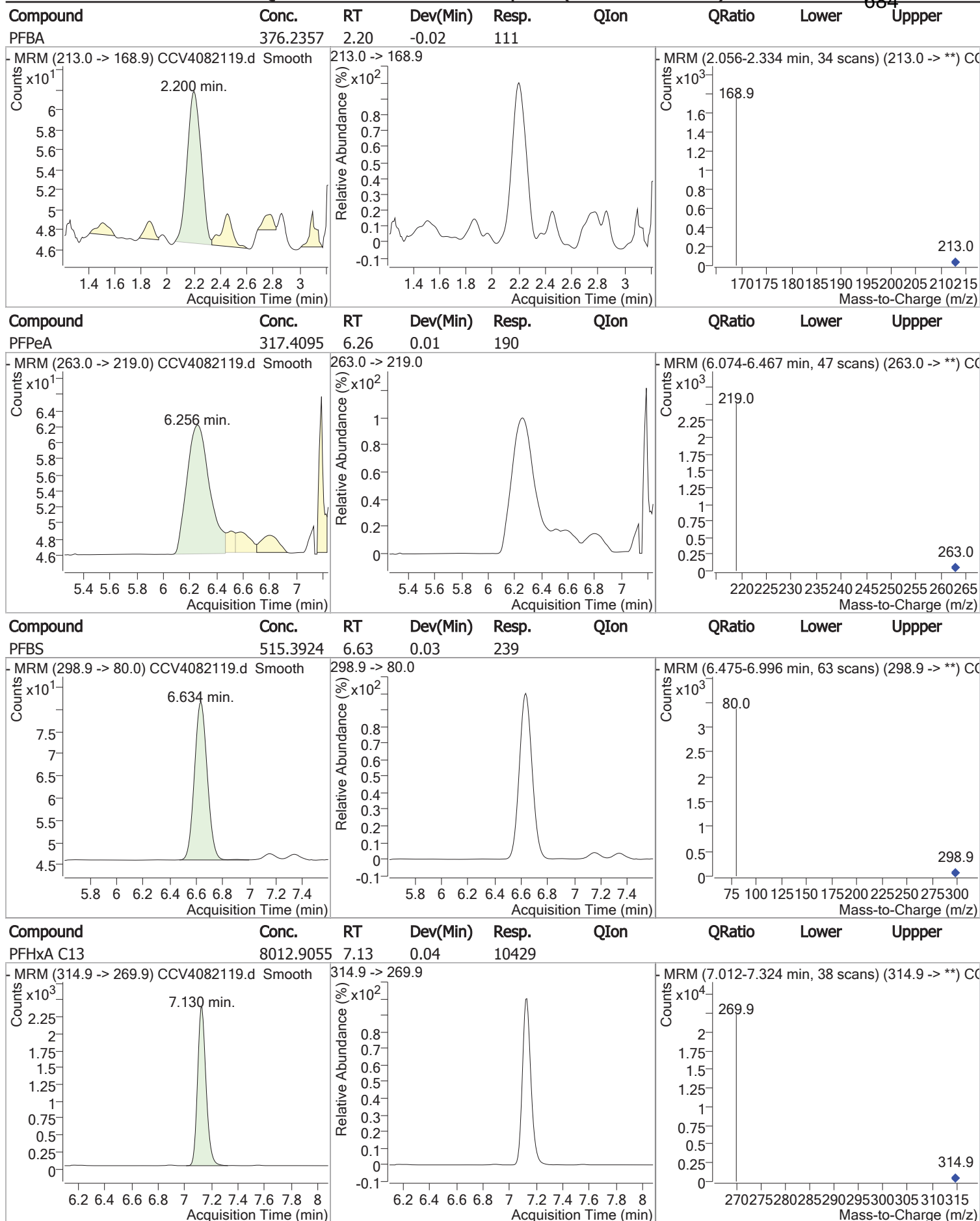
Quantitation Results Report (Not Reviewed)

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			

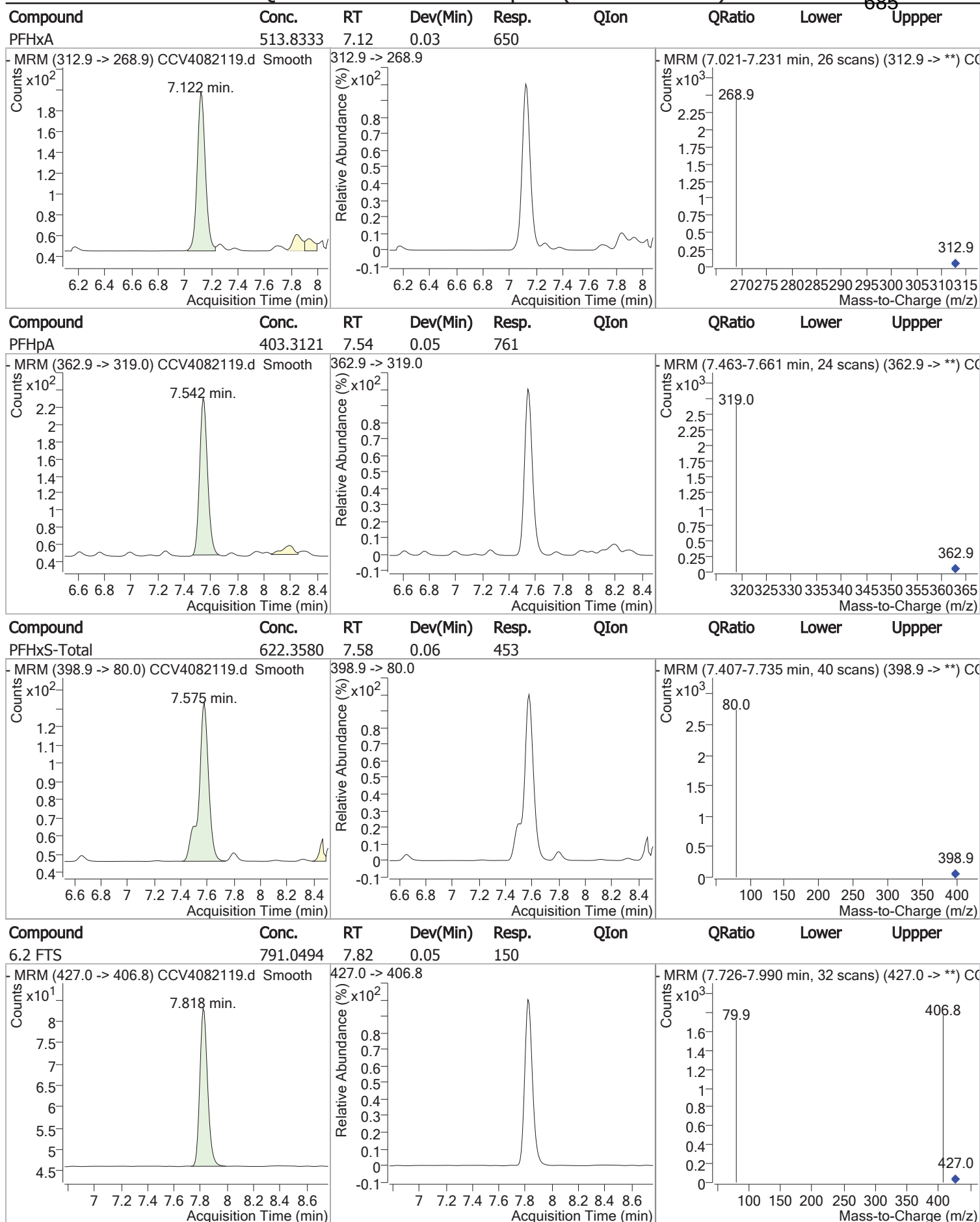
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.827	416.9 -> 371.9	18247	10000.0000	pg/ml	0.050
M PFOS C13	8.052	502.9 -> 80.0	22911	28700.0000	pg/ml	0.059
M d3-N-MeFOSAA	8.311	573.2 -> 419.0	14289	40000.0000	pg/ml	0.050
System Monitoring Compounds						
S PFHxA C13	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

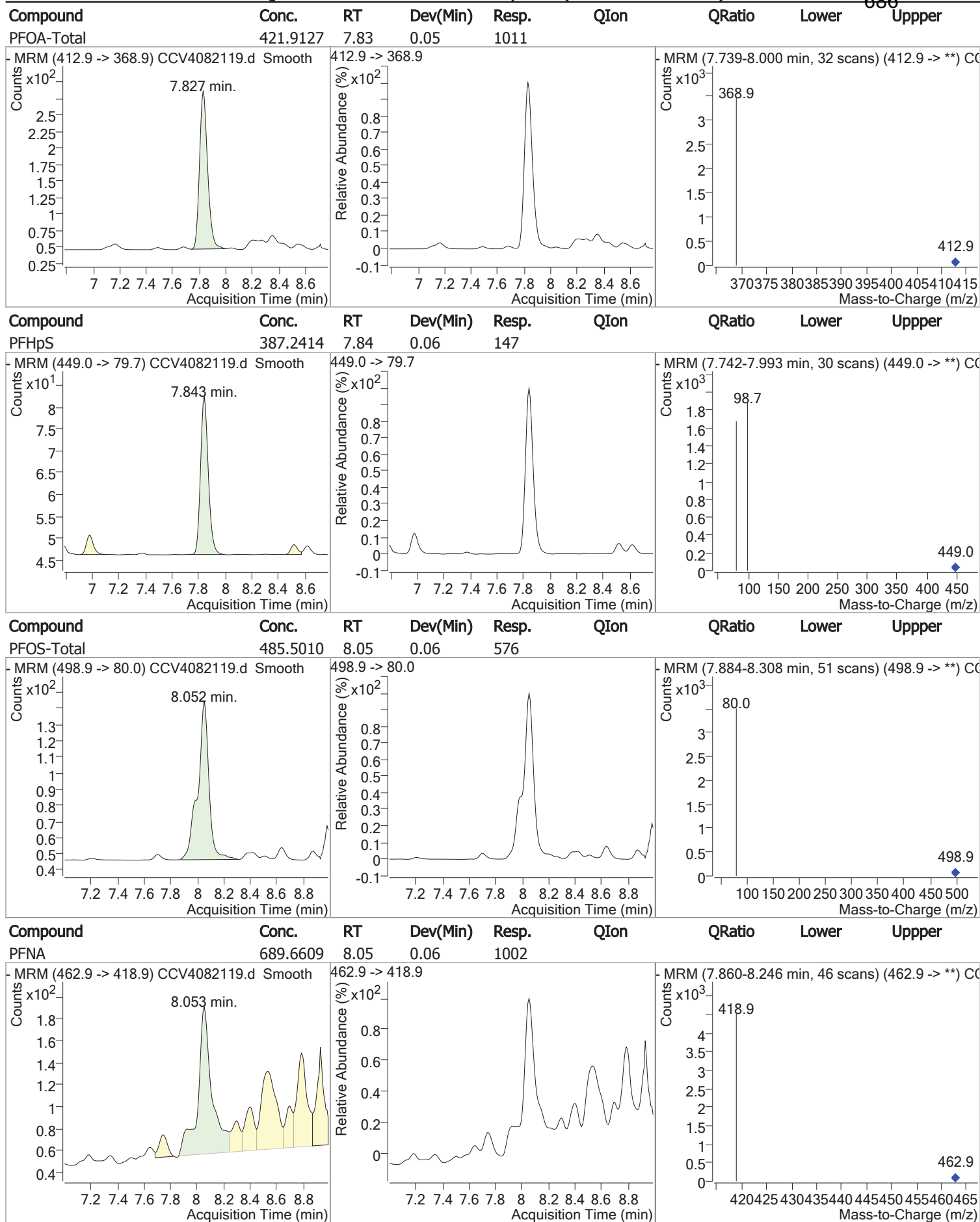
Quantitation Results Report (Not Reviewed)



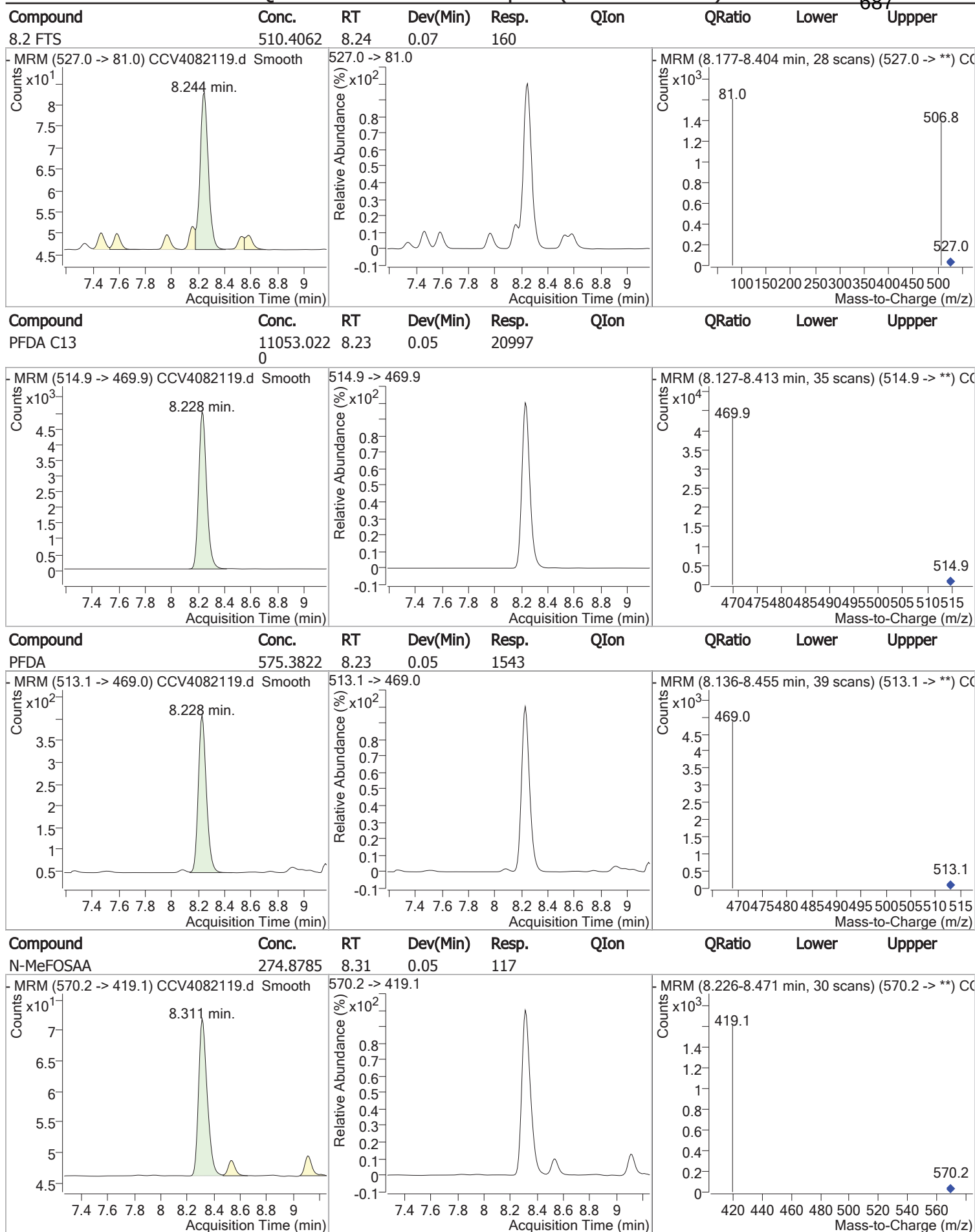
Quantitation Results Report (Not Reviewed)



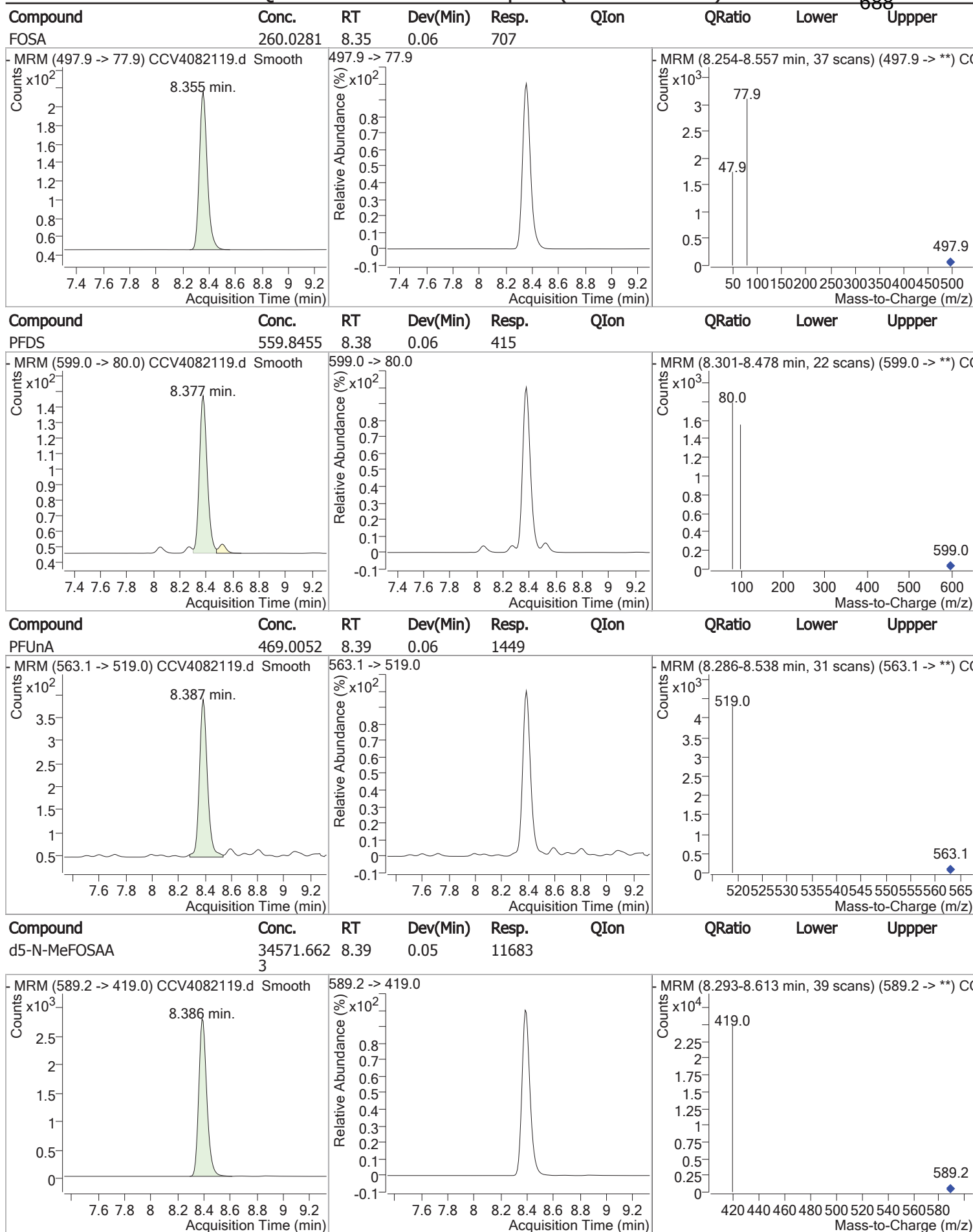
Quantitation Results Report (Not Reviewed)



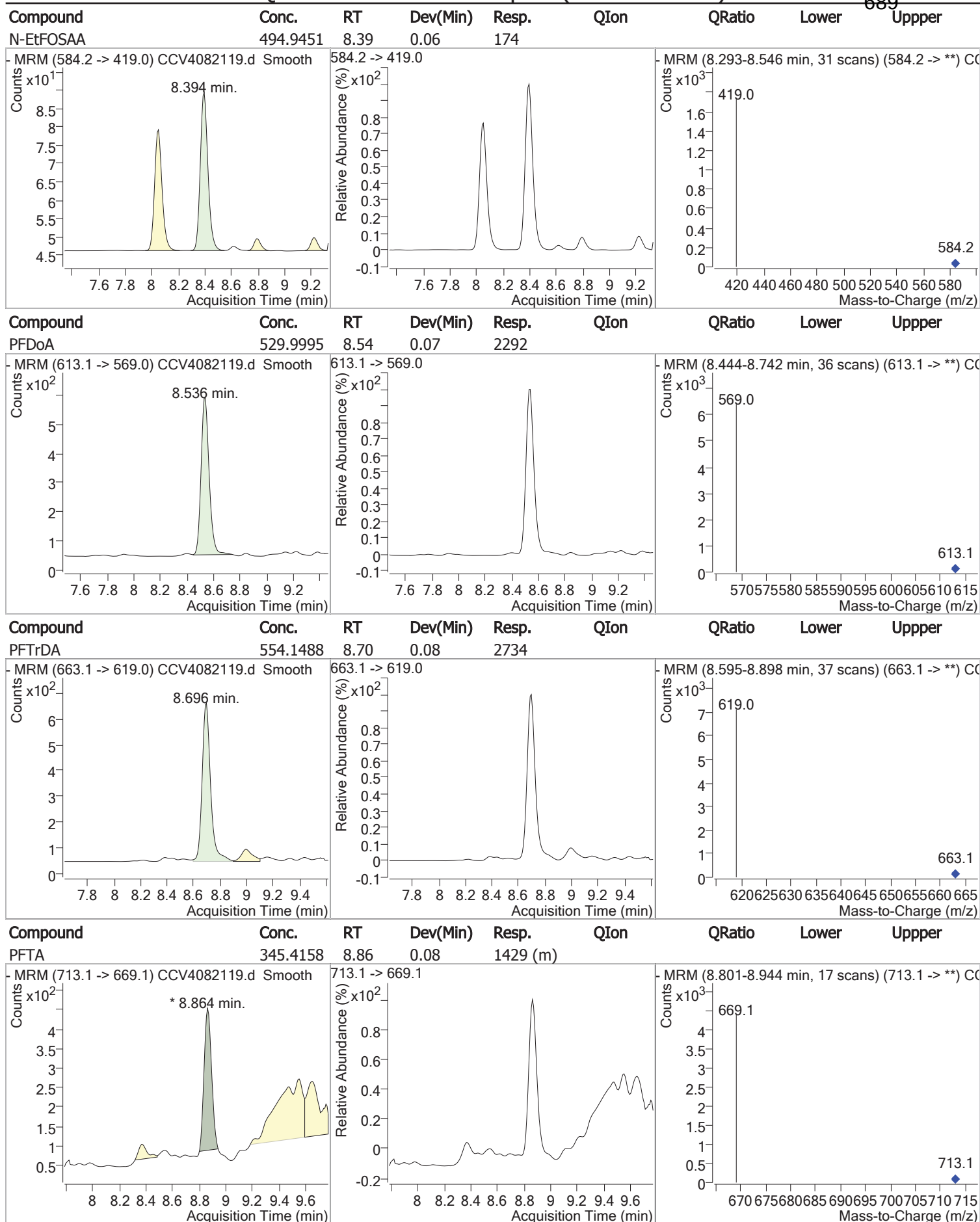
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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:	19H0528
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

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		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

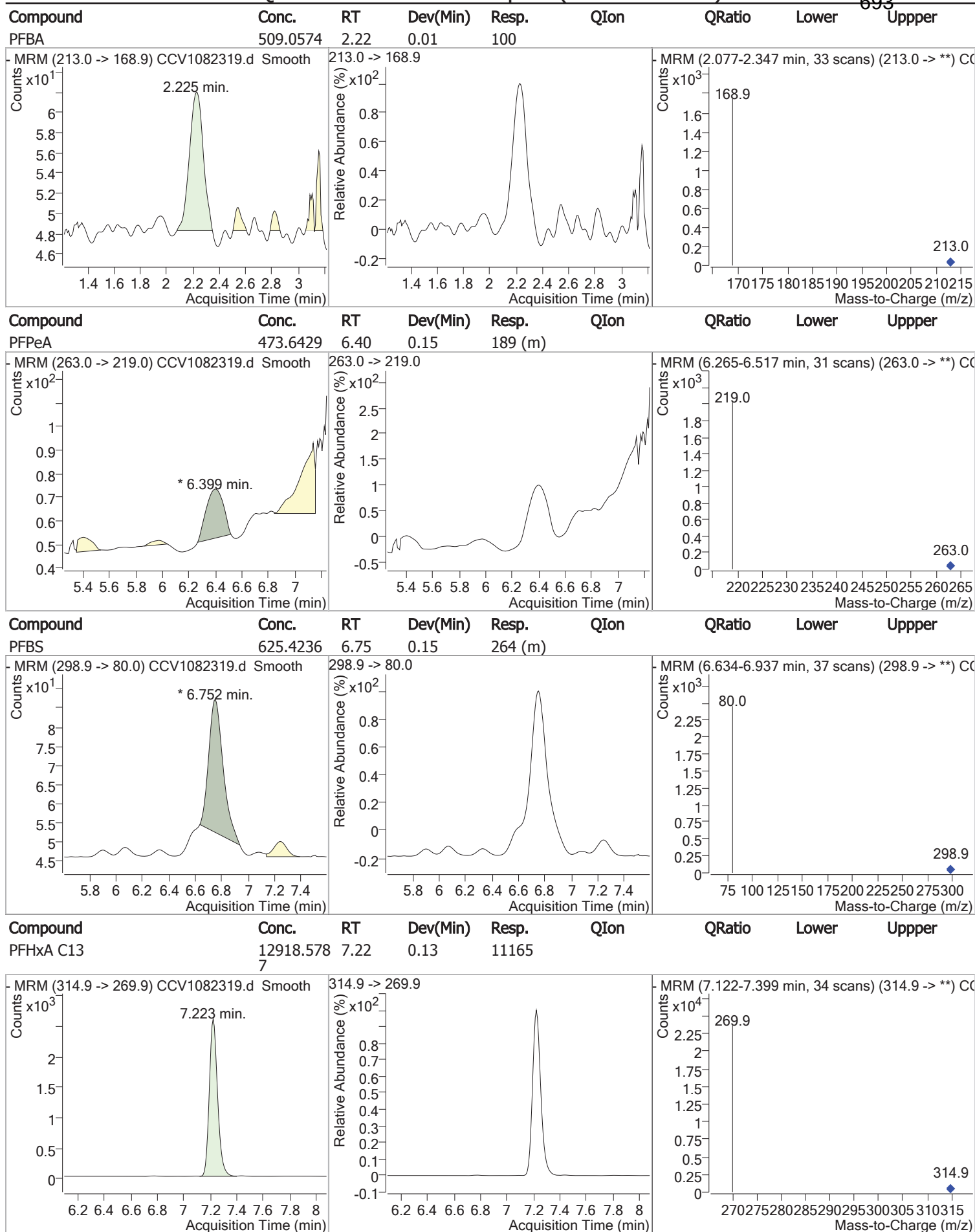
Quantitation Results Report (Not Reviewed)

Data File	CCV1082319.d	Operator	
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Sample Name	CCV1082219	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File	081319.m	Comment	
Tune File		Tune Date	
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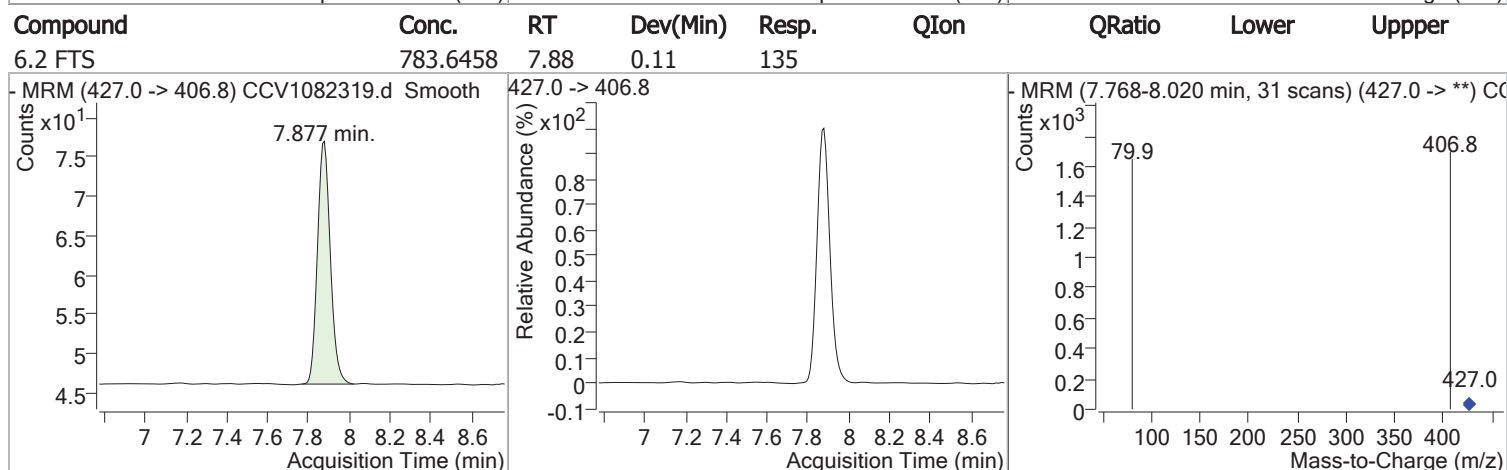
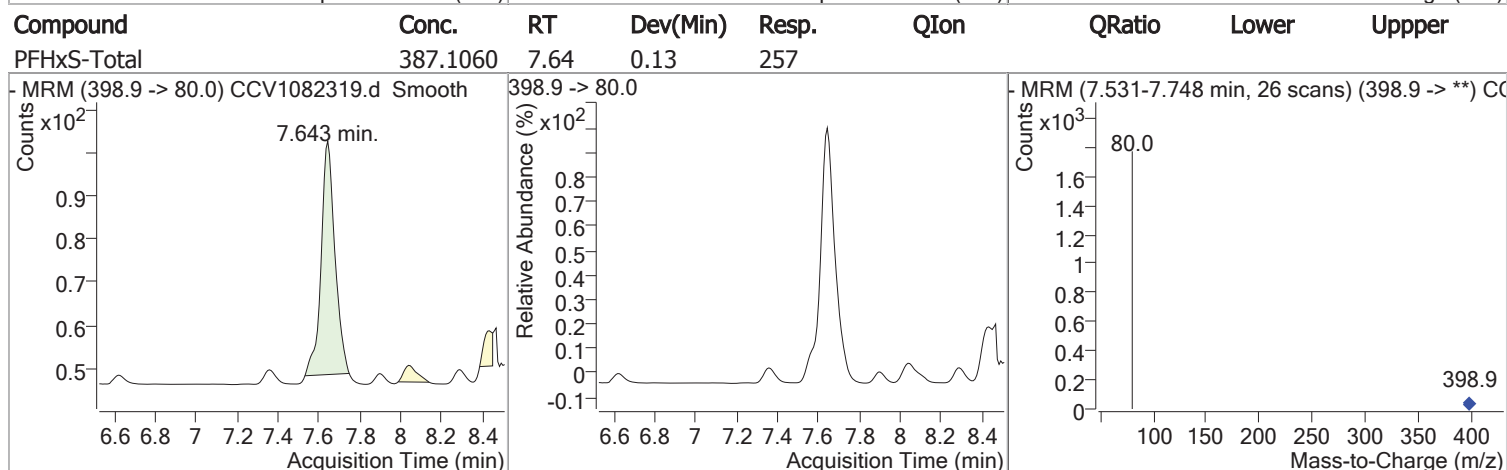
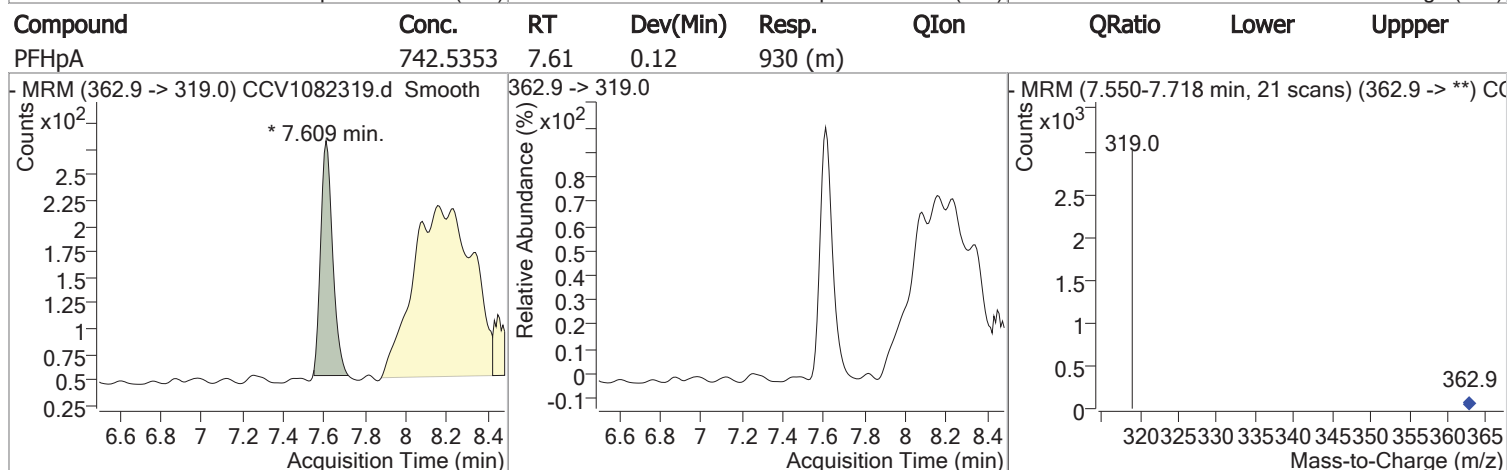
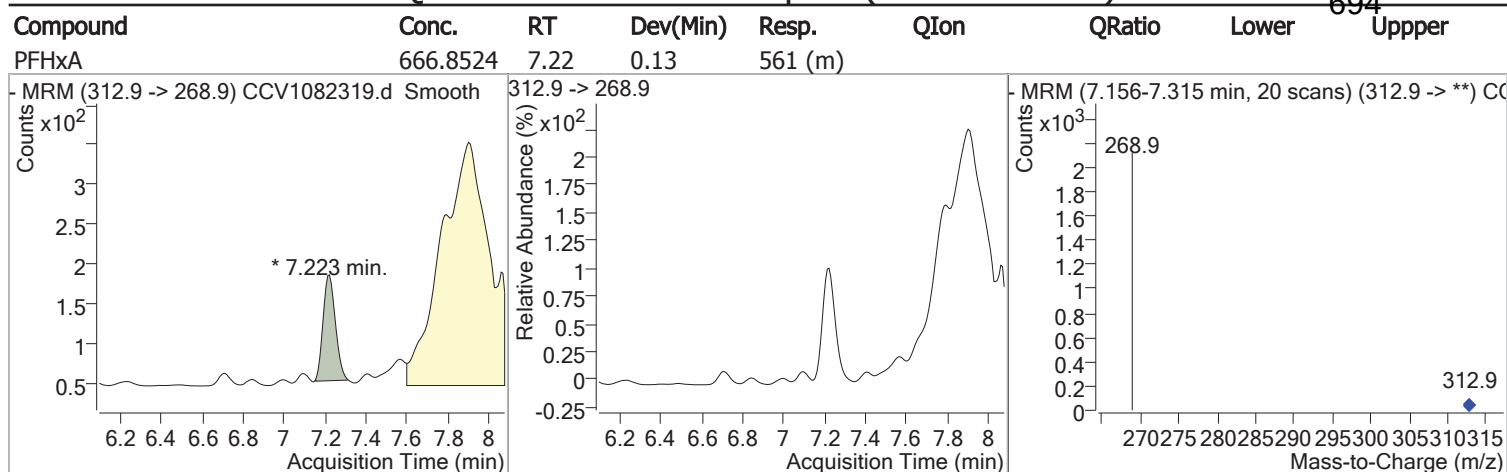
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.877	416.9 -> 371.9	12117	10000.0000	pg/ml	0.101
M PFOS C13	8.077	502.9 -> 80.0	20854	28700.0000	pg/ml	0.084
M d3-N-MeFOSAA	8.327	573.2 -> 419.0	8894	40000.0000	pg/ml	0.067
System Monitoring Compounds						
S PFHxA C13	7.223	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 PFTTrDA	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

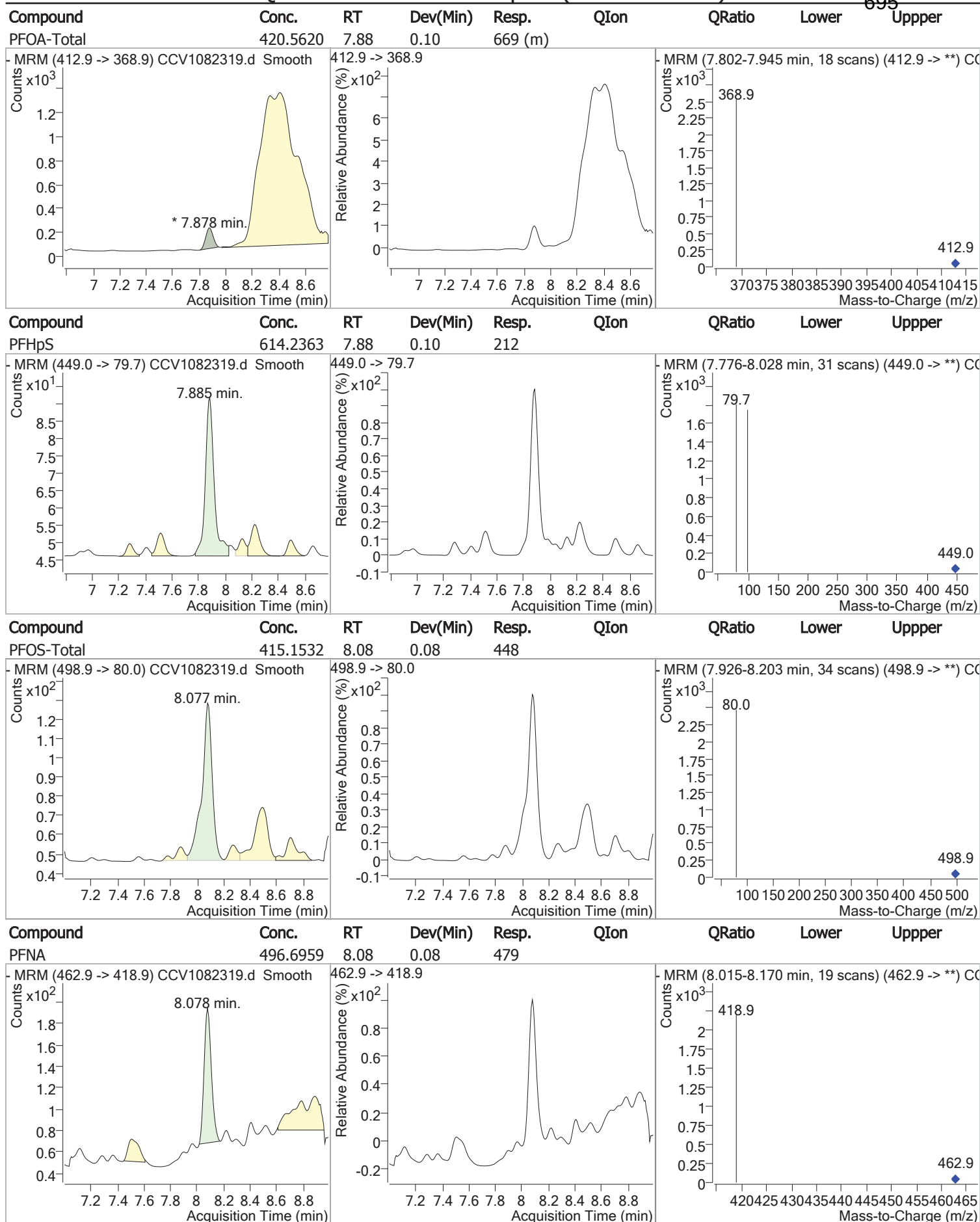
Quantitation Results Report (Not Reviewed)



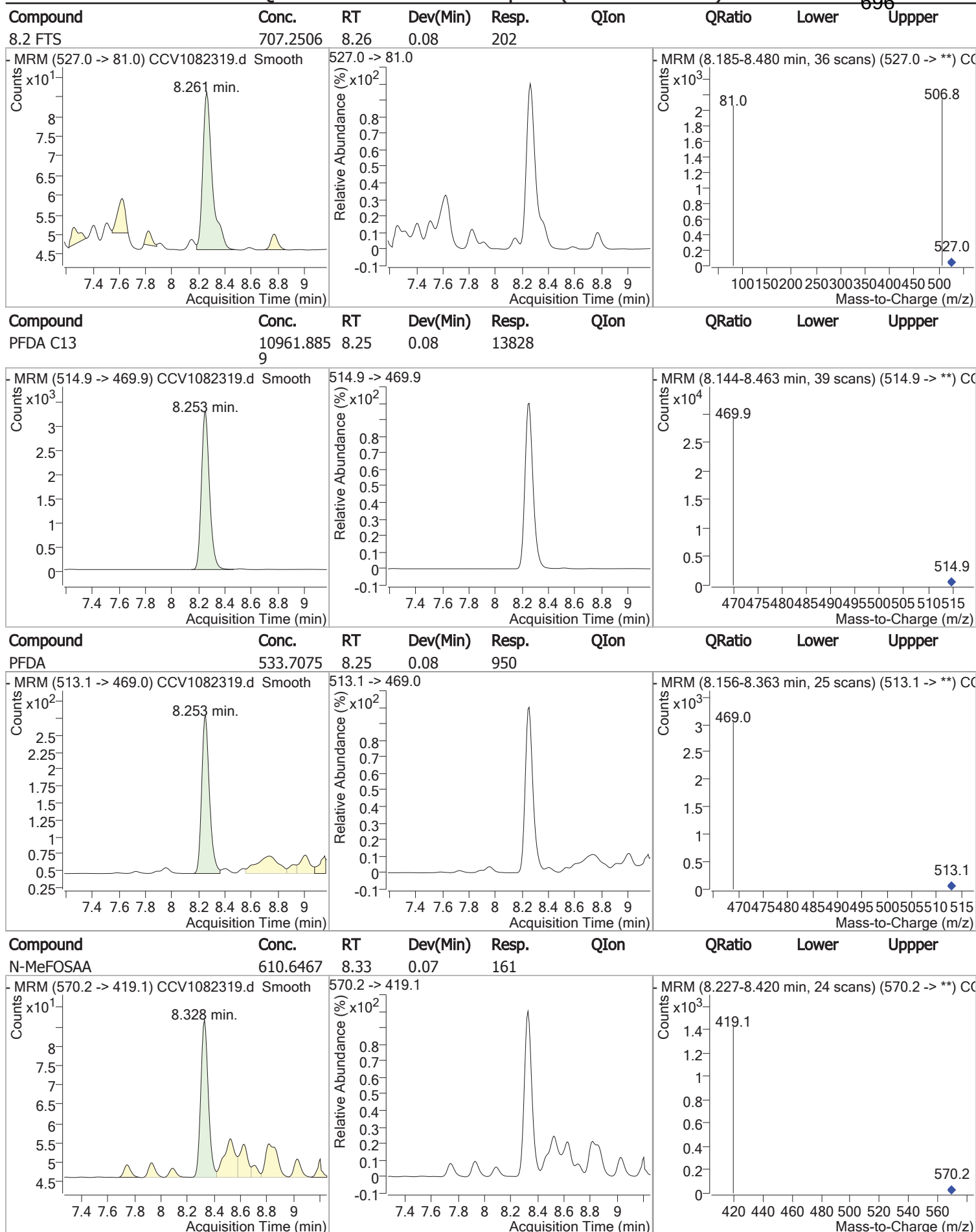
Quantitation Results Report (Not Reviewed)



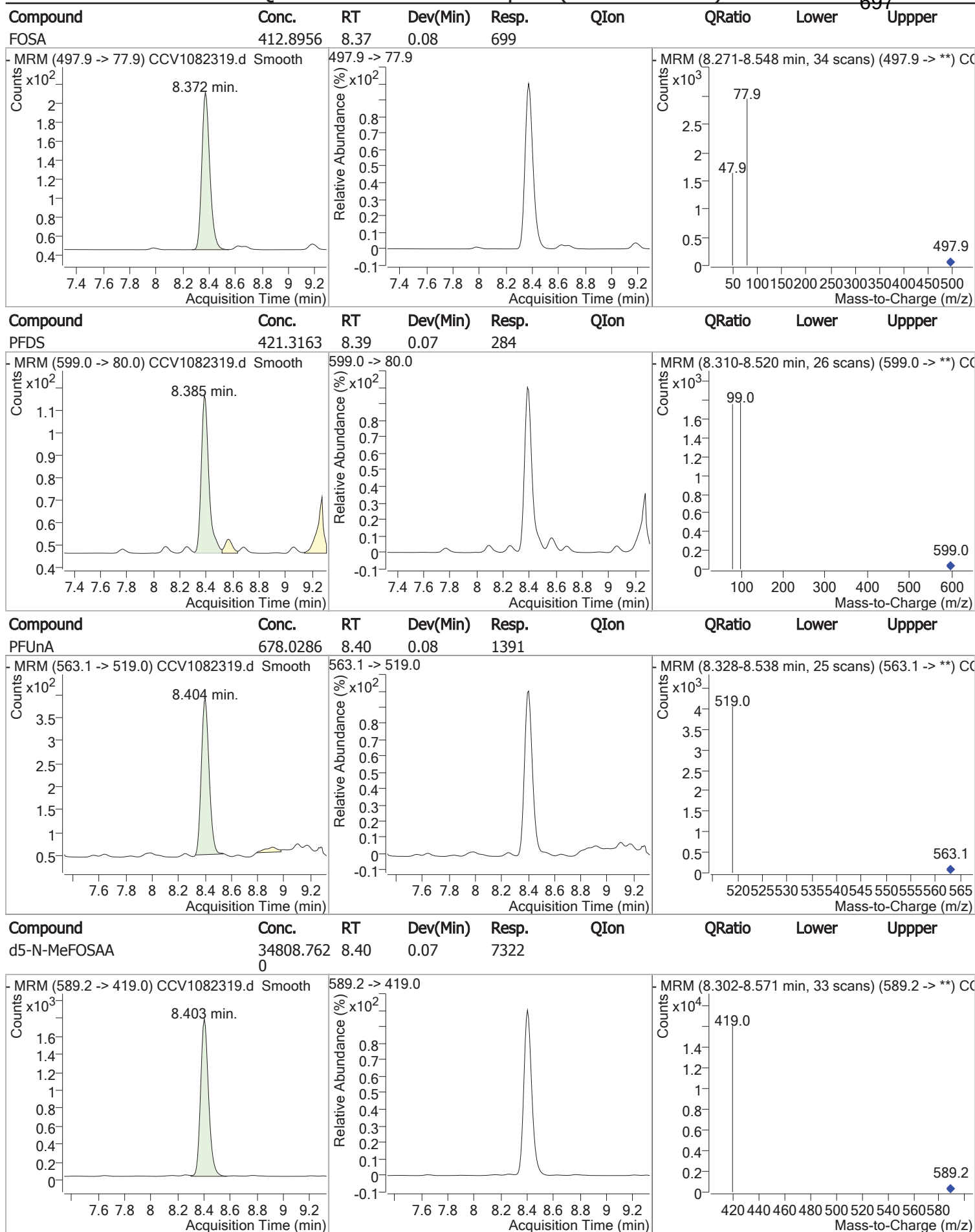
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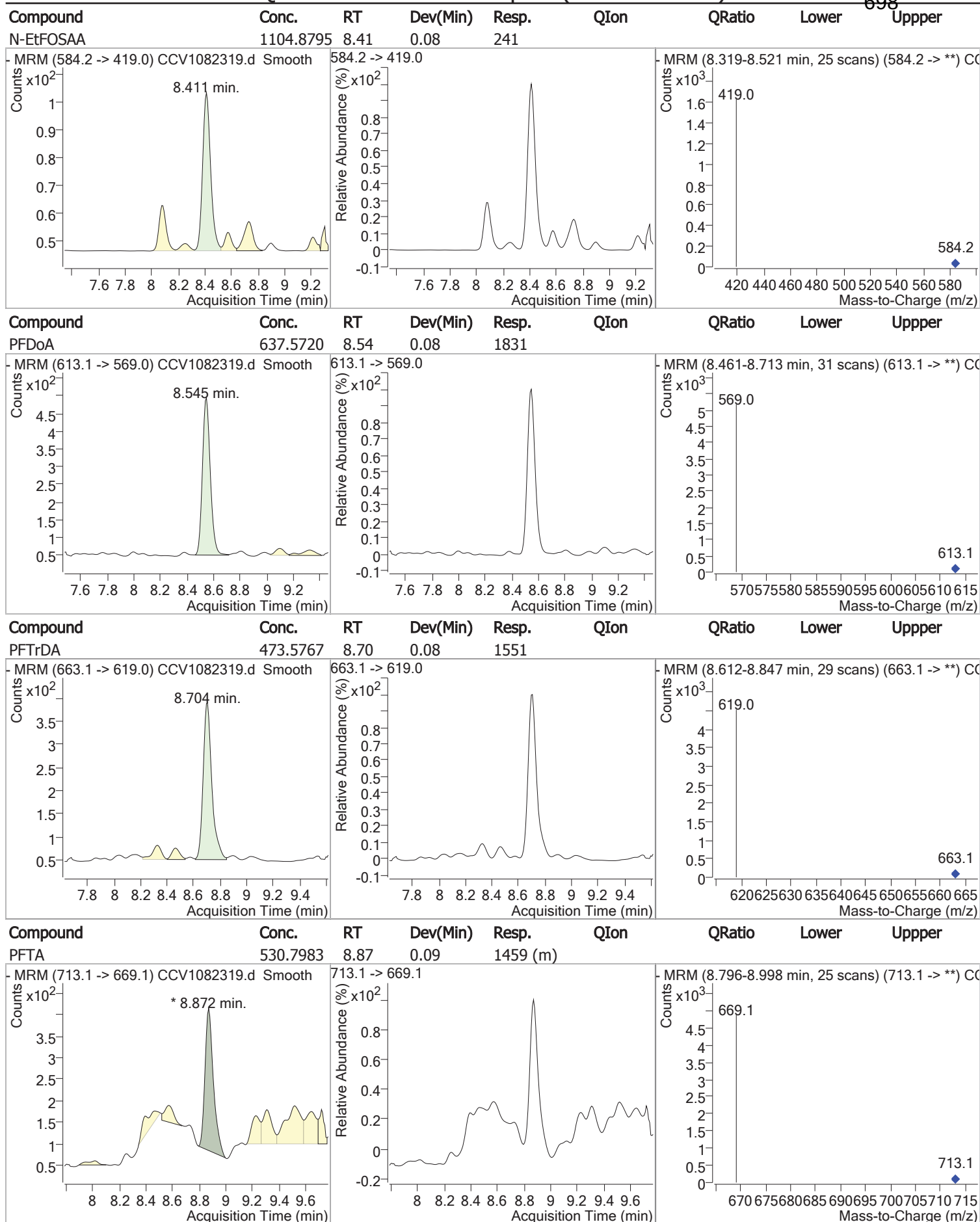
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



CONTINUING CALIBRATION VERIFICATION

SOP 434-PFAAS

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Instrument ID: HPLC1

Calibration: 1900263

Lab File ID: CCV1082719.d

Calibration Date: 08/14/19 14:37

Sequence: S039667

Injection Date: 08/27/19

Lab Sample ID: S039667-CCV1

Injection Time: 10:41

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Perfluorobutanoic acid (PFBA)	A	500	315	0.1543906	0.1020564		-37.0	
Perfluorobutanesulfonic acid (PFBS)	A	442	409	0.5510923	0.537462		-7.4	
Perfluoropentanoic acid (PFPeA)	A	500	486	0.3040697	0.3192332		-2.9	
Perfluorohexanoic acid (PFHxA)	A	500	658	0.6714809	0.9134298		31.7	
Perfluorohexanesulfonic acid (PFHxS)	A	455	230	0.8347983	0.4612616		-49.4	
Perfluoroheptanoic acid (PFHpA)	A	500	419	1.053666	0.8666863		-16.1	
Perfluoroheptanesulfonic acid (PFHpS)	A	475	359	0.5117502	0.3593915		-24.4	
Perfluorooctanoic acid (PFOA)	A	500	439	1.330641	1.151674		-12.3	
Perfluorooctanesulfonic acid (PFOS)	A	462	518	1.438054	1.663443		12.0	
Perfluorooctanesulfonamide (FOSA)	A	500	335	7.121342	5.102642		-32.9	
6:2 Fluorotelomersulfonate (6:2 FTS A)	A	475	684	0.2337119	0.3422256		44.0	
Perfluorononanoic acid (PFNA)	A	500	427	0.842486	0.680897		-14.5	
Perfluorodecanoic acid (PFDA)	A	500	540	1.468554	1.585864		7.9	
Perfluorodecanesulfonic acid (PFDS)	A	482	242	0.9068341	0.4657709		-49.8	
N-EtFOSAA	A	500	330	0.9910125	0.6473963		-34.1	
8:2 Fluorotelomersulfonate (8:2 FTS A)	A	480	687	0.3729975	0.5626327		43.1	
Perfluoroundecanoic acid (PFUnA)	A	500	506	1.739723	1.713693		1.2	
N-MeFOSAA	A	500	459	1.146938	1.092448		-8.1	
Perfluorododecanoic acid (PFDoA)	A	500	422	2.235401	2.00197		-15.5	
Perfluorotridecanoic acid (PFTrDA)	A	500	414	2.580637	2.240896		-17.1	
Perfluorotetradecanoic acid (PFTA)	A	500	267	2.262719	1.210327		-46.6	

CONTINUING CALIBRATION VERIFICATION
SOP 434-PFAAS

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Instrument ID:	HPLC1	Calibration:	1900263
Lab File ID:	CCV1082719.d	Calibration Date:	08/14/19 14:37
Sequence:	S039667	Injection Date:	08/27/19
Lab Sample ID:	S039667-CCV1	Injection Time:	10:41

COMPOUND	TYPE	CONC. (ng/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
13C-PFHxA	A	10000	7860	0.6955487	0.5602693		-21.4	
13C-PFDA	A	10000	9280	1.05667	0.9661585		-7.2	
d5-NEtFOSAA	A	40000	30100	0.8657046	0.7122342		-24.7	

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

* Values outside of QC limits

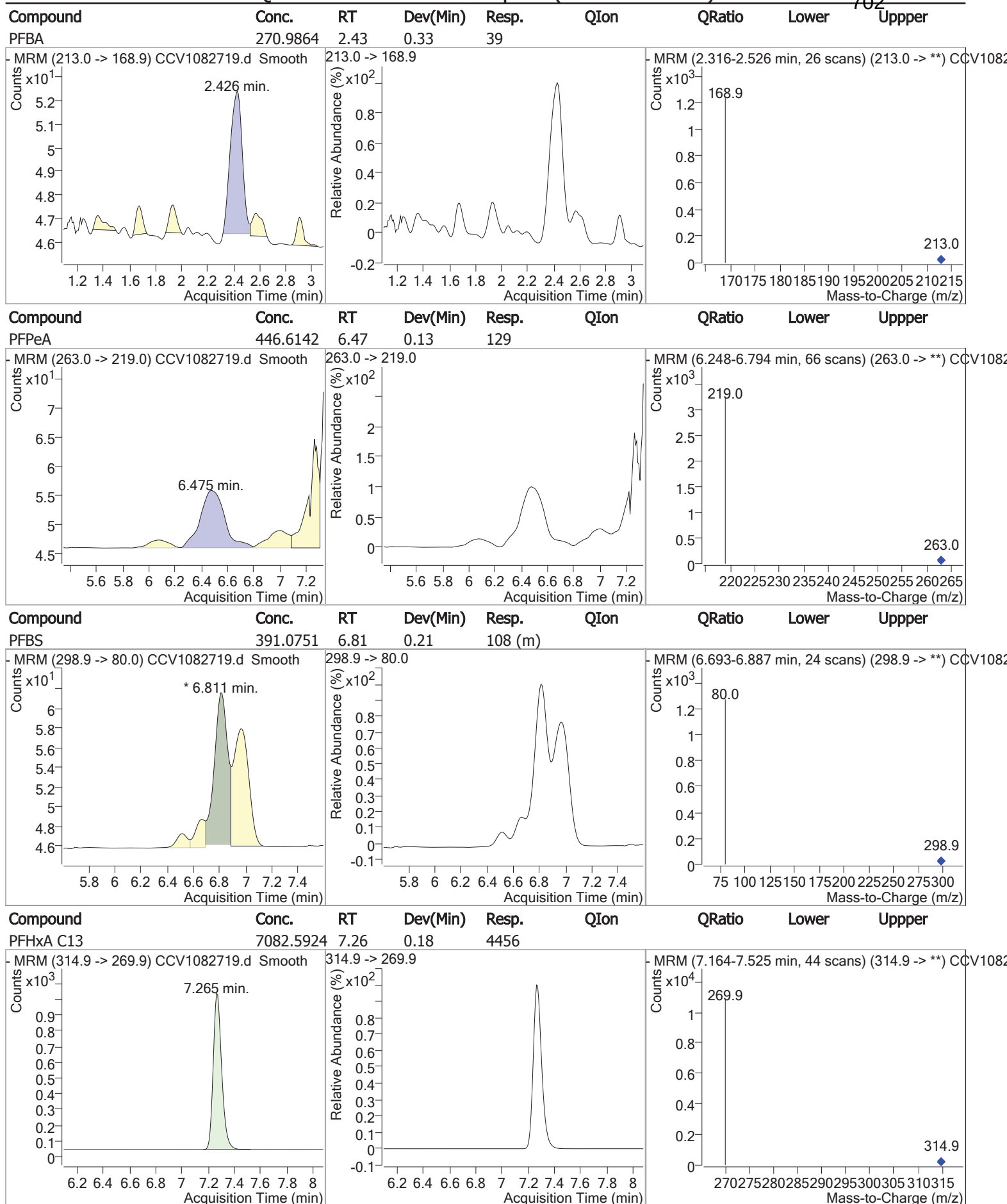
Quantitation Results Report (Not Reviewed)

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Sample Name	CCV1082719	Instrument	QQQ1
Vial		Multiplier	1.00
DA Method File		Comment	
Tune File		Tune Date	
Batch Name	1.batch.bin	Last Calib Update	8/14/2019 2:32:09 PM
Ref Library			

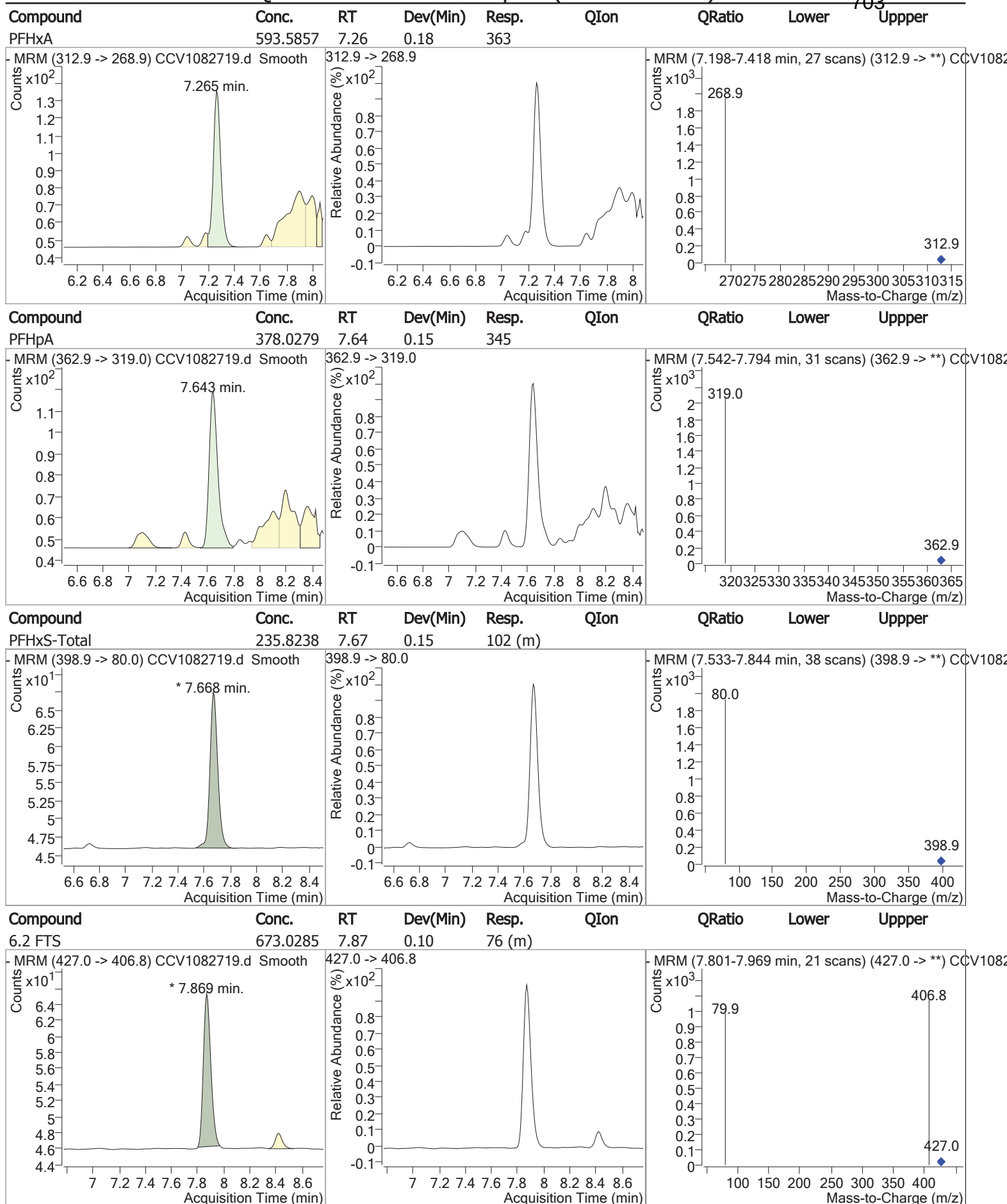
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.894	416.9 -> 371.9	8821	10000.0000	pg/ml	m	0.118
M PFOS C13	8.085	502.9 -> 80.0	13640	28700.0000	pg/ml	m	0.092
M d3-N-MeFOSAA	8.327	573.2 -> 419.0	8566	40000.0000	pg/ml	m	0.067
System Monitoring Compounds							
S PFHxA C13	7.265	314.9 -> 269.9	4456	7082.5924	pg/ml		0.177
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 70.83%			
S PFDA C13	8.245	514.9 -> 469.9	7684	8367.7065	pg/ml		0.067
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 83.68%			
S d5-N-MeFOSAA	8.403	589.2 -> 419.0	5678	28619.1503	pg/ml	m	0.067
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 70.07%			
Target Compounds							QValue
T PFBA	2.426	213.0 -> 168.9	39	270.9864	pg/ml		100
T PFPeA	6.475	263.0 -> 219.0	129	446.6142	pg/ml		100
T PFBS	6.811	298.9 -> 80.0	108	391.0751	pg/ml	m	100
T PFHxA	7.265	312.9 -> 268.9	363	593.5857	pg/ml		100
T PFHpA	7.643	362.9 -> 319.0	345	378.0279	pg/ml		100
T PFHxS-Total	7.668	398.9 -> 80.0	102	235.8238	pg/ml	m	100
T 6.2 FTS	7.869	427.0 -> 406.8	76	673.0285	pg/ml	m	100
T PFOA-Total	7.886	412.9 -> 368.9	458	395.4712	pg/ml		100
T PFHpS	7.910	449.0 -> 79.7	80	353.1252	pg/ml		100
T PFOS-Total	8.086	498.9 -> 80.0	359	509.1788	pg/ml		100
T PFNA	8.086	462.9 -> 418.9	271	385.4173	pg/ml		100
T 8.2 FTS	8.253	527.0 -> 81.0	126	675.7072	pg/ml	m	100
T PFDA	8.245	513.1 -> 469.0	631	486.5630	pg/ml		100
T N-MeFOSAA	8.319	570.2 -> 419.1	105	412.0097	pg/ml		100
T FOSA	8.372	497.9 -> 77.9	490	300.7454	pg/ml		100
T PFDS	8.377	599.0 -> 80.0	107	243.1335	pg/ml	m	100
T PFUnA	8.395	563.1 -> 519.0	681	456.4437	pg/ml		100
T N-EtFOSAA	8.420	584.2 -> 419.0	62	295.5221	pg/ml		100
T PFDoA	8.545	613.1 -> 569.0	796	380.7614	pg/ml		100
T PFTTrDA	8.696	663.1 -> 619.0	891	373.6676	pg/ml		100
T PFTA	8.872	713.1 -> 669.1	516	257.8996	pg/ml	m	100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

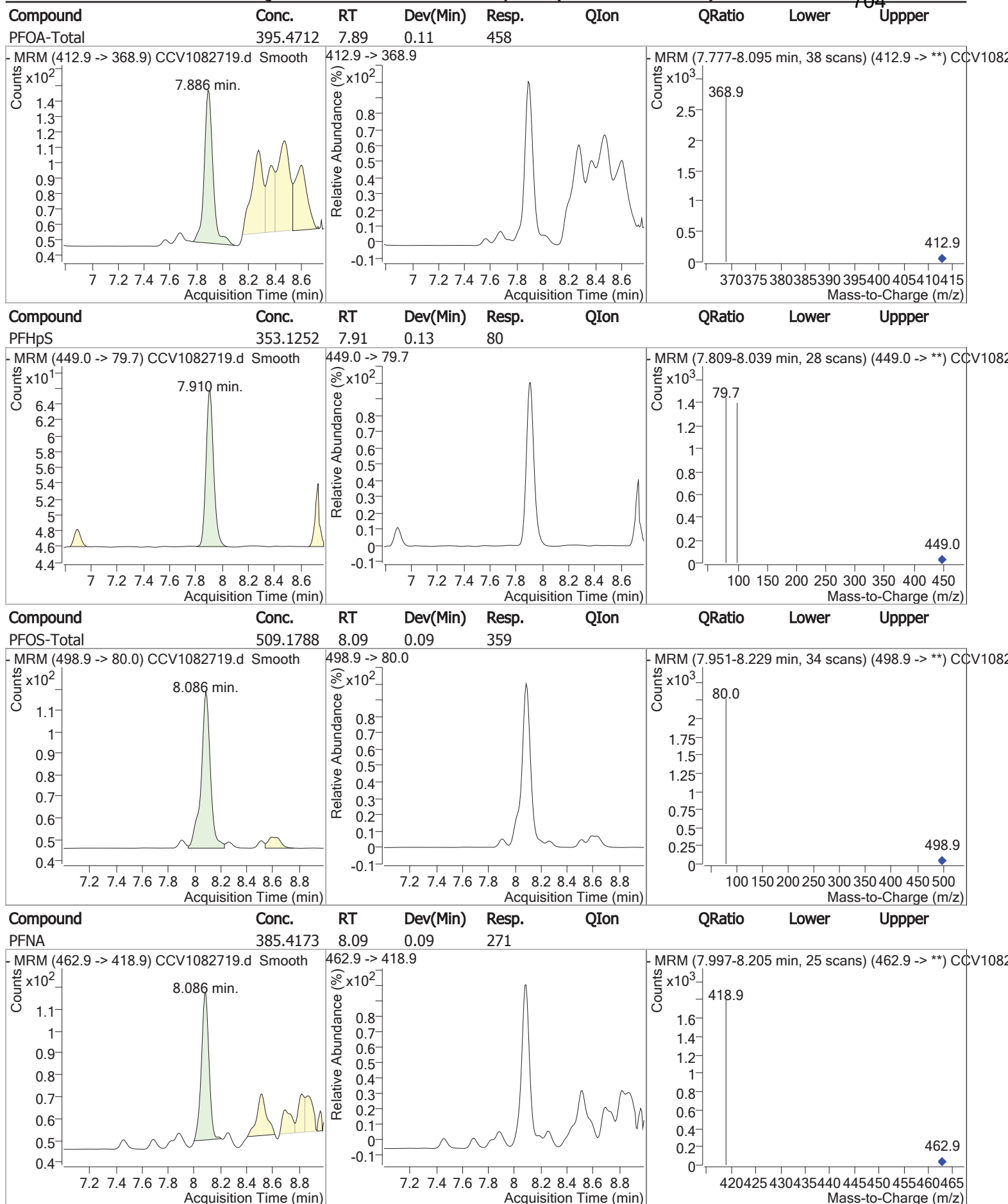
Quantitation Results Report (Not Reviewed)



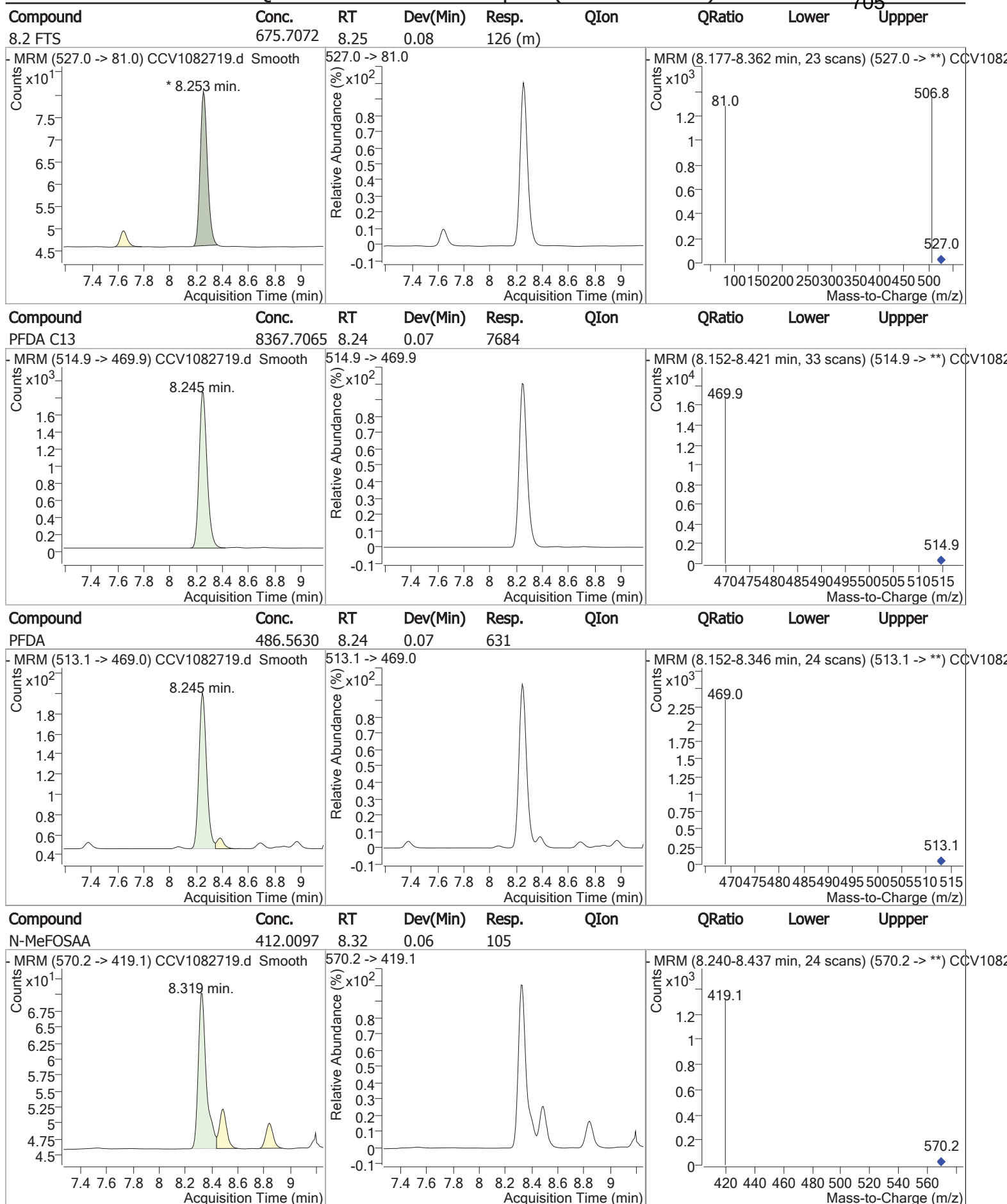
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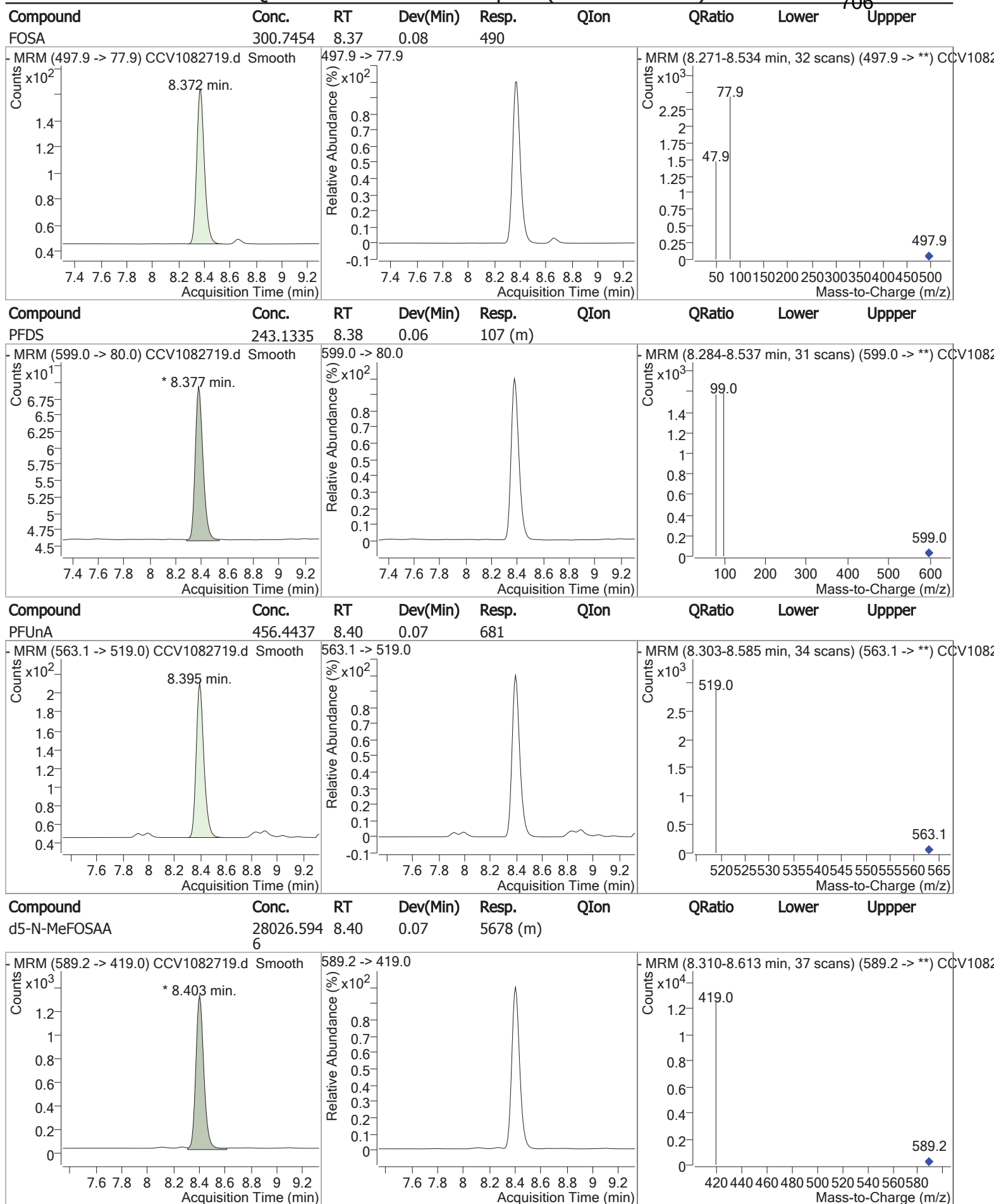
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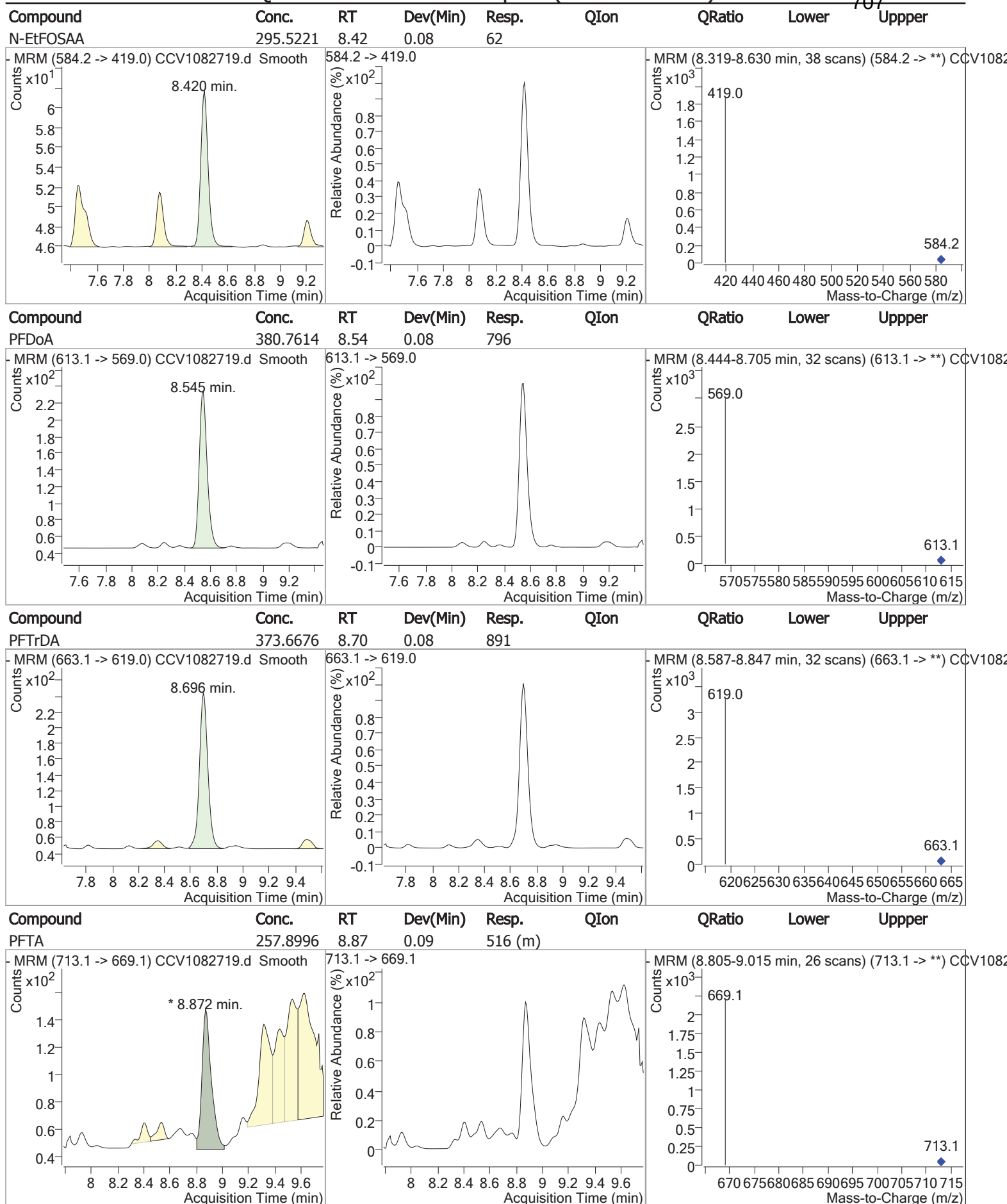
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY
SOP 434-PFAAS

708

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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)			<i>Lab File ID: CCV1082119.d</i>			<i>Analyzed: 08/21/19 12:07</i>			
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	
MW-22R (19H0528-04)			<i>Lab File ID: 19H0528-04.d</i>			<i>Analyzed: 08/21/19 12:20</i>			
13C-PFOA	15788.25	7.8102	13618.2	7.877483	116	50 - 150	-0.0673	+/-0.50	
13C-PFOS	23228.96	8.0349	20908.88	8.07695	111	50 - 150	-0.0420	+/-0.50	
d3-NMeFOSAA	10207.69	8.29375	10211	8.318983	100	50 - 150	-0.0252	+/-0.50	
Matrix Spike (B238243-MS1)			<i>Lab File ID: B238243-MS1.d</i>			<i>Analyzed: 08/21/19 12:33</i>			
13C-PFOA	15779.7	7.818617	13618.2	7.877483	116	50 - 150	-0.0589	+/-0.50	
13C-PFOS	23293.28	8.0349	20908.88	8.07695	111	50 - 150	-0.0420	+/-0.50	
d3-NMeFOSAA	10841.32	8.29375	10211	8.318983	106	50 - 150	-0.0252	+/-0.50	
Matrix Spike Dup (B238243-MSD1)			<i>Lab File ID: B238243-MSD1.d</i>			<i>Analyzed: 08/21/19 12:45</i>			
13C-PFOA	14858.41	7.818617	13618.2	7.877483	109	50 - 150	-0.0589	+/-0.50	
13C-PFOS	23531.46	8.0433	20908.88	8.07695	113	50 - 150	-0.0336	+/-0.50	
d3-NMeFOSAA	11231.64	8.310567	10211	8.318983	110	50 - 150	-0.0084	+/-0.50	
Calibration Check (S039480-CCV2)			<i>Lab File ID: CCV2082119.d</i>			<i>Analyzed: 08/21/19 15:16</i>			
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)			<i>Lab File ID: CCV3082119.d</i>			<i>Analyzed: 08/21/19 17:38</i>			
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)			<i>Lab File ID: B238243-BLK1R.d</i>			<i>Analyzed: 08/21/19 19:19</i>			
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	
MW-22S (19H0528-06)			<i>Lab File ID: 19H0528-06R.d</i>			<i>Analyzed: 08/21/19 20:22</i>			
13C-PFOA	17309.23	7.8102	15348.93	7.827017	113	50 - 150	-0.0168	+/-0.50	
13C-PFOS	24302.68	8.0349	22563.73	8.051717	108	50 - 150	-0.0168	+/-0.50	
d3-NMeFOSAA	12917.33	8.302167	13800.51	8.318983	94	50 - 150	-0.0168	+/-0.50	

8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY
SOP 434-PFAAS

709

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

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-CCV4)			<i>Lab File ID: CCV4082119.d</i>			<i>Analyzed: 08/21/19 21:00</i>			
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

710

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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)			<i>Lab File ID: CCV1082319.d</i>			<i>Analyzed: 08/23/19 13:54</i>			
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)			<i>Lab File ID: B238243-BS1.d</i>			<i>Analyzed: 08/23/19 14:13</i>			
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	

8 - FORM VIII
INTERNAL STANDARD AREA AND RT SUMMARY
SOP 434-PFAAS

711

Laboratory: Con-Test Analytical Laboratory

Work Order: 19H0528

Client: Dvirka And Bartilucci

Project: Farrand Controls Site

Sequence: S039667

Instrument: HPLC1

Calibration: 1900263

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S039667-CCV1)			<i>Lab File ID: CCV1082719.d</i>			<i>Analyzed: 08/27/19 10:41</i>			
13C-PFOA	7953.226	7.8943	14022.56	7.700883	57	50 - 150	0.1934	+/-0.50	
13C-PFOS	13419.08	8.08535	18678.12	7.933983	72	50 - 150	0.1514	+/-0.50	
d3-NMeFOSAA	7682.327	8.327383	11636.93	8.20125	66	50 - 150	0.1261	+/-0.50	
Blind Duplicate (19H0528-07.)			<i>Lab File ID: 19H1176-02RE1.d</i>			<i>Analyzed: 08/27/19 10:54</i>			
13C-PFOA	9699.94	7.8102	7953.226	7.8943	122	50 - 150	-0.0841	+/-0.50	
13C-PFOS	15857.91	8.0349	13419.08	8.08535	118	50 - 150	-0.0504	+/-0.50	
d3-NMeFOSAA	9851.294	8.29375	7682.327	8.327383	128	50 - 150	-0.0336	+/-0.50	

QC DATA

1 - FORM I

ANALYSIS DATA SHEET

713

Blank

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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 (PFTTrDA)		2.0	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)		2.0	2.0	

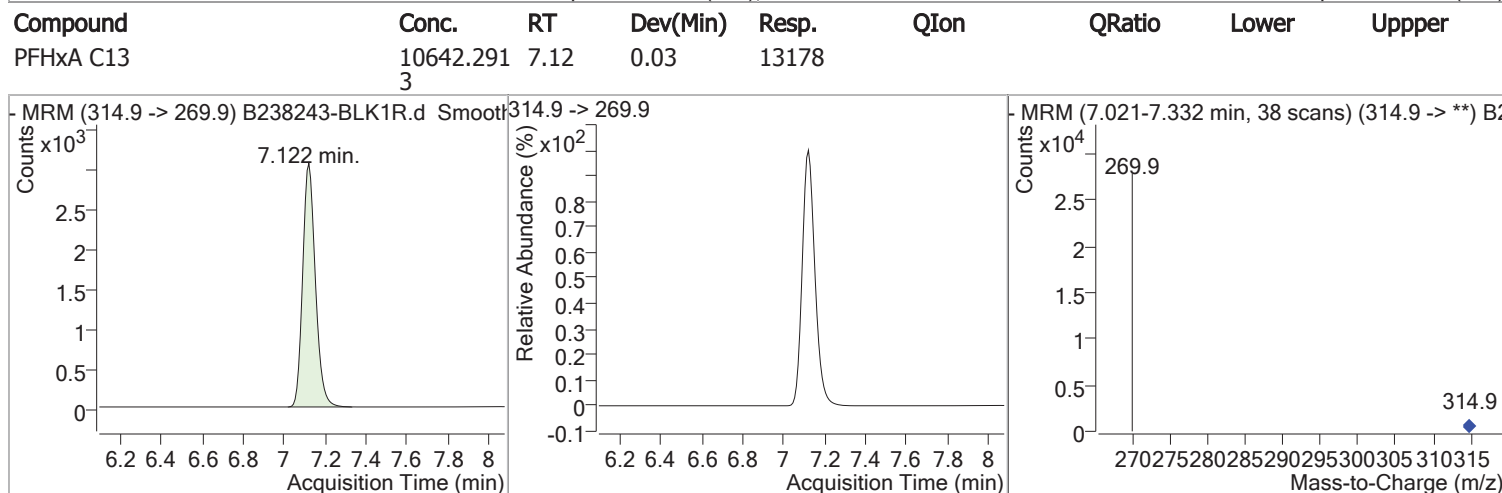
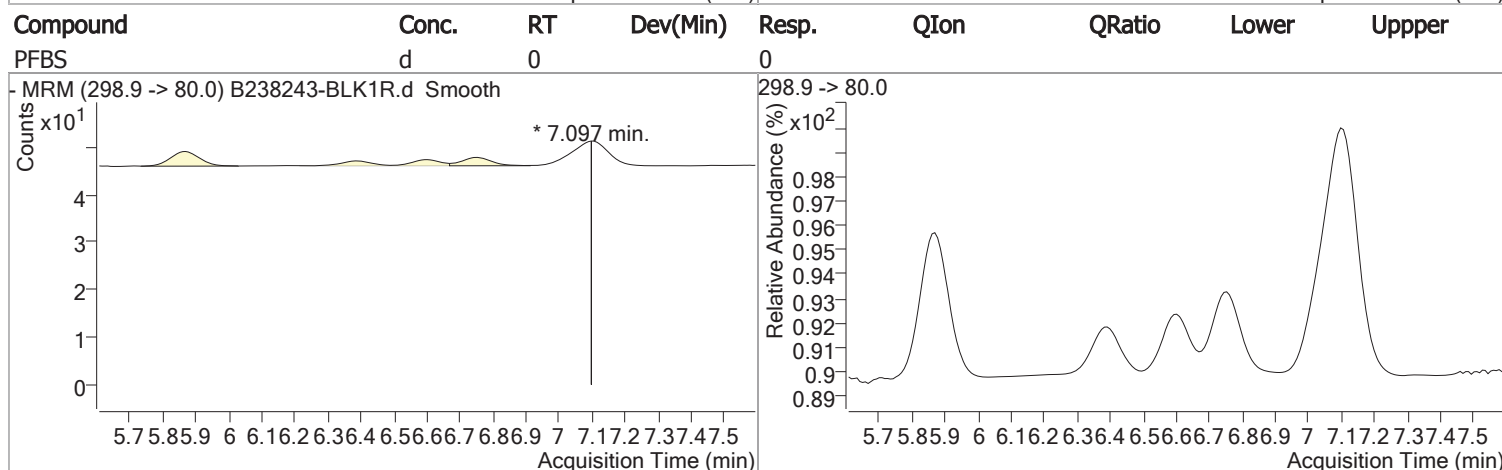
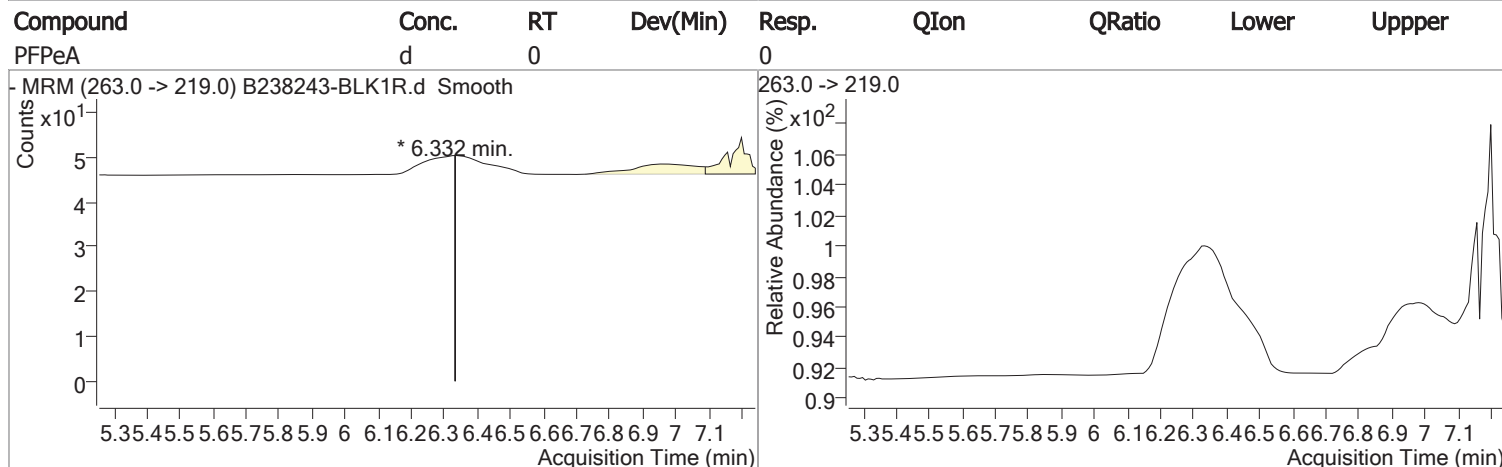
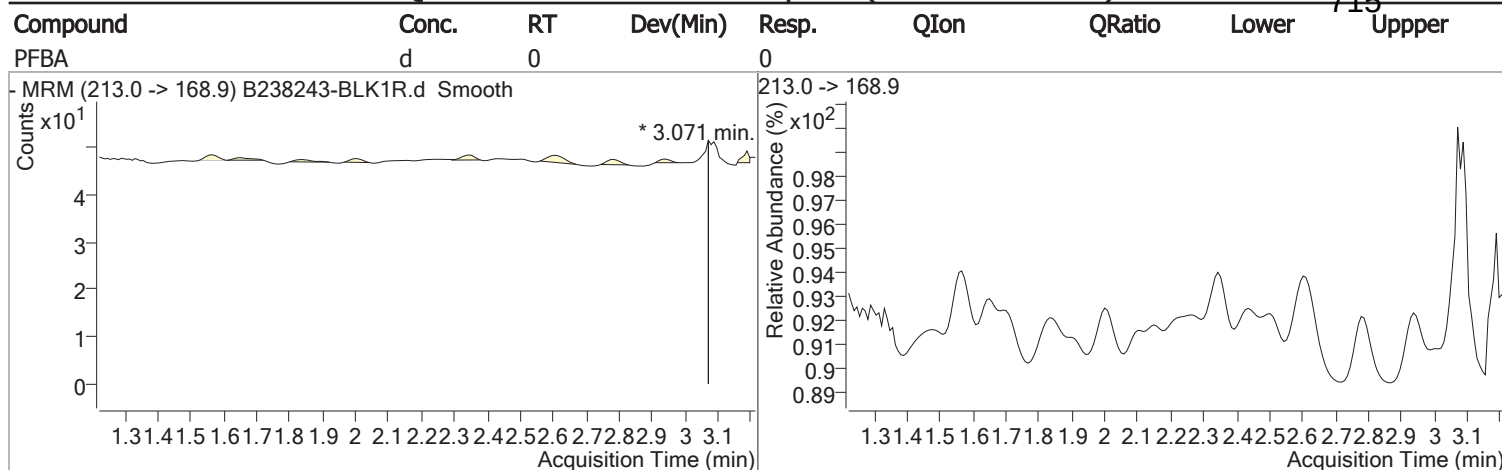
Quantitation Results Report (Not Reviewed)

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			

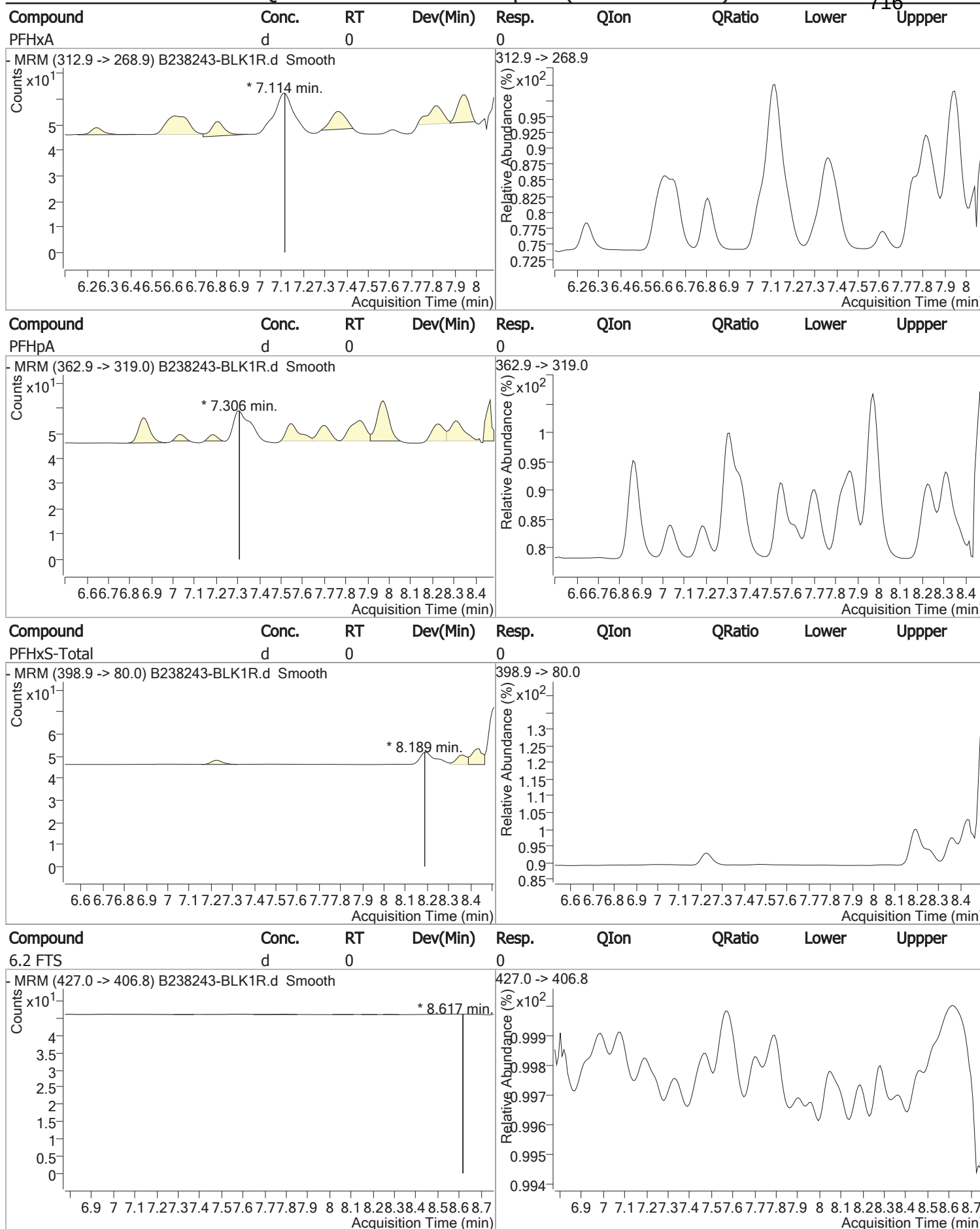
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.827	416.9 -> 371.9	17361	10000.0000	pg/ml		0.050
M PFOS C13	8.052	502.9 -> 80.0	23374	28700.0000	pg/ml		0.059
M d3-N-MeFOSAA	8.311	573.2 -> 419.0	12048	40000.0000	pg/ml	m	0.050
System Monitoring Compounds							
S PFHxA 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

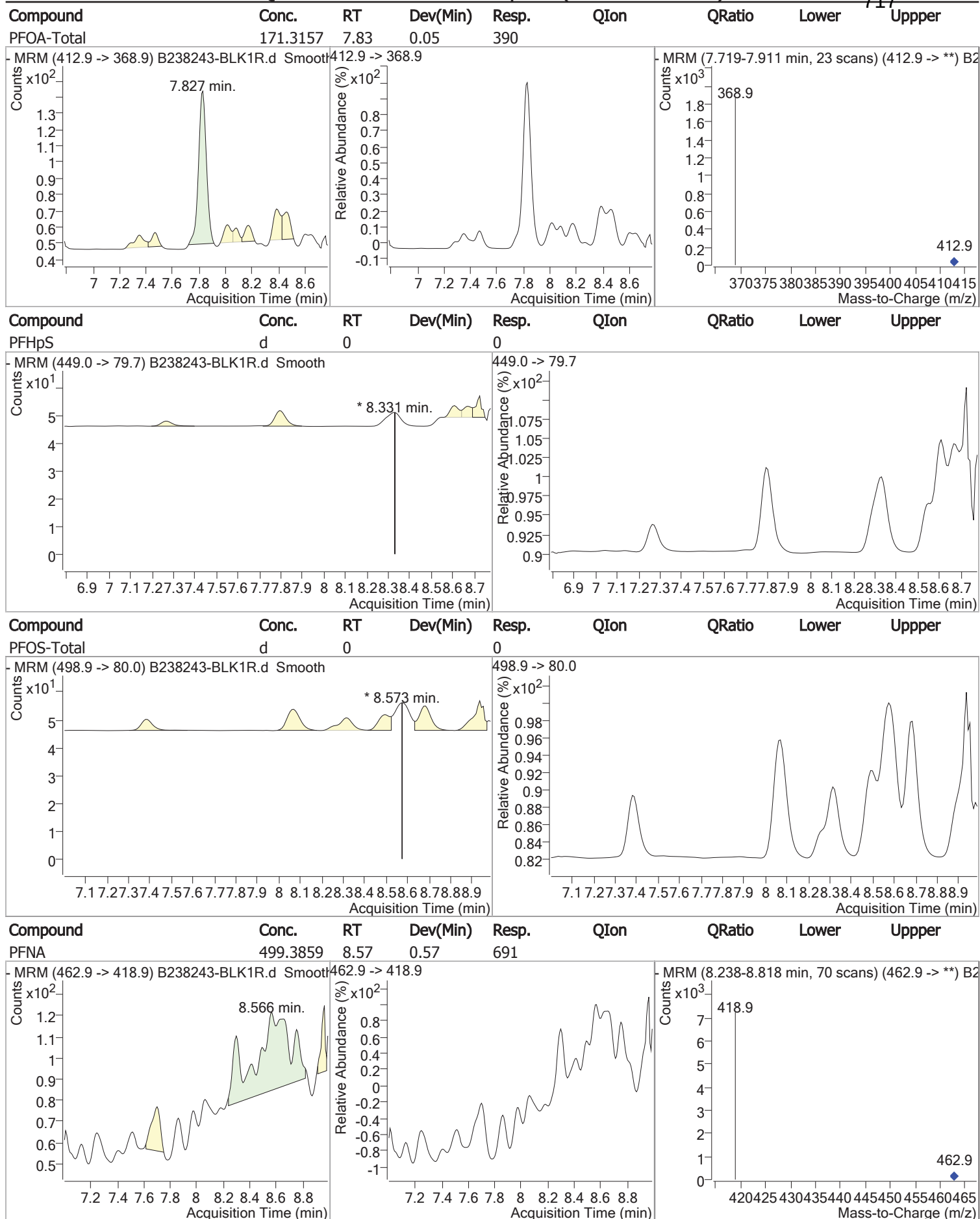
Quantitation Results Report (Not Reviewed)



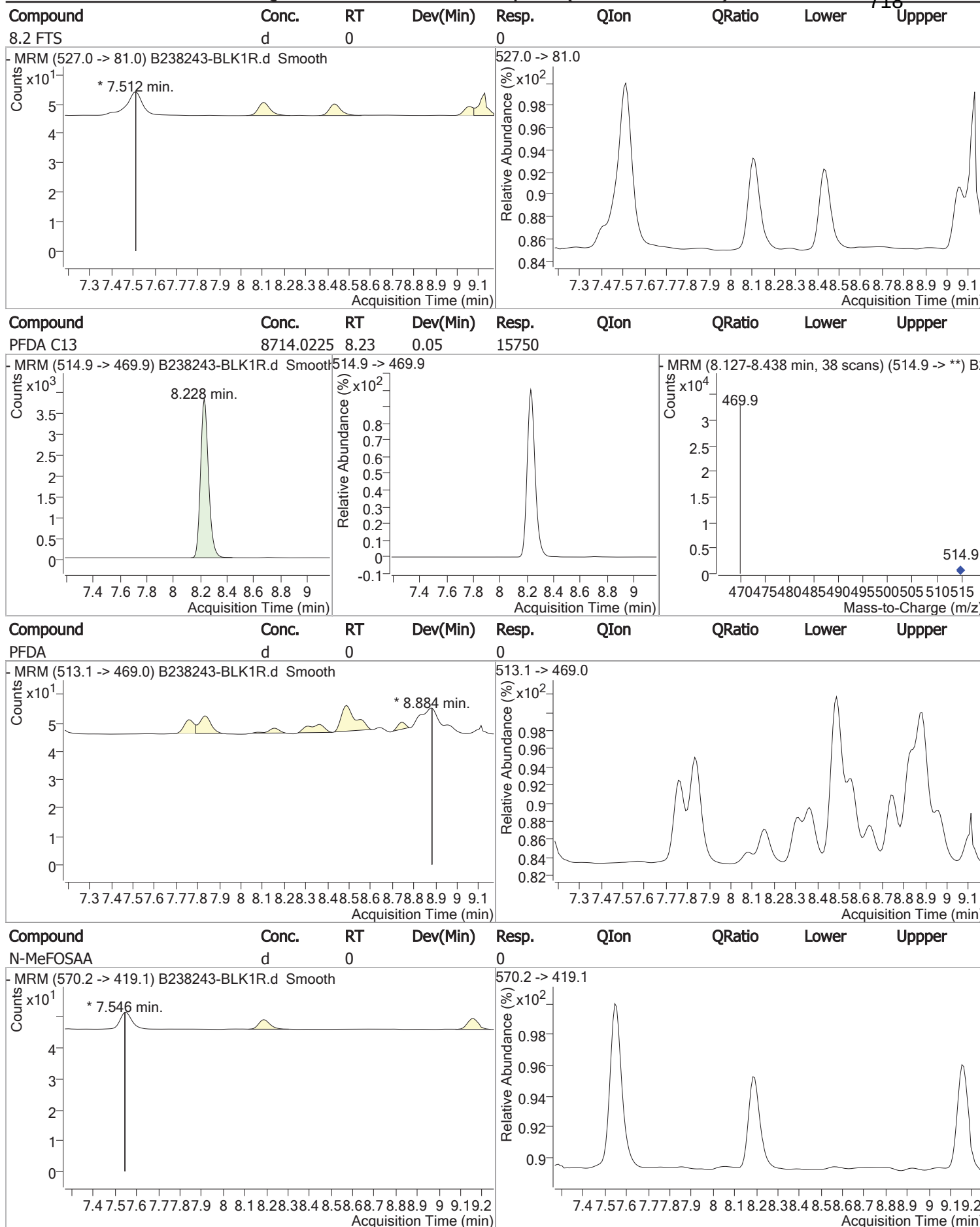
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)

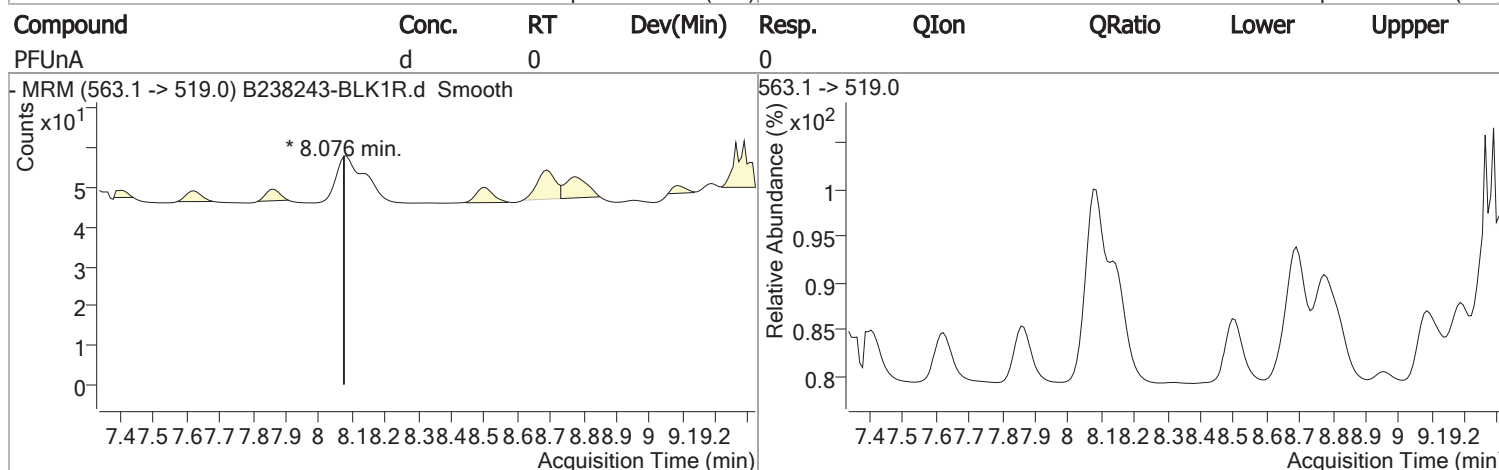
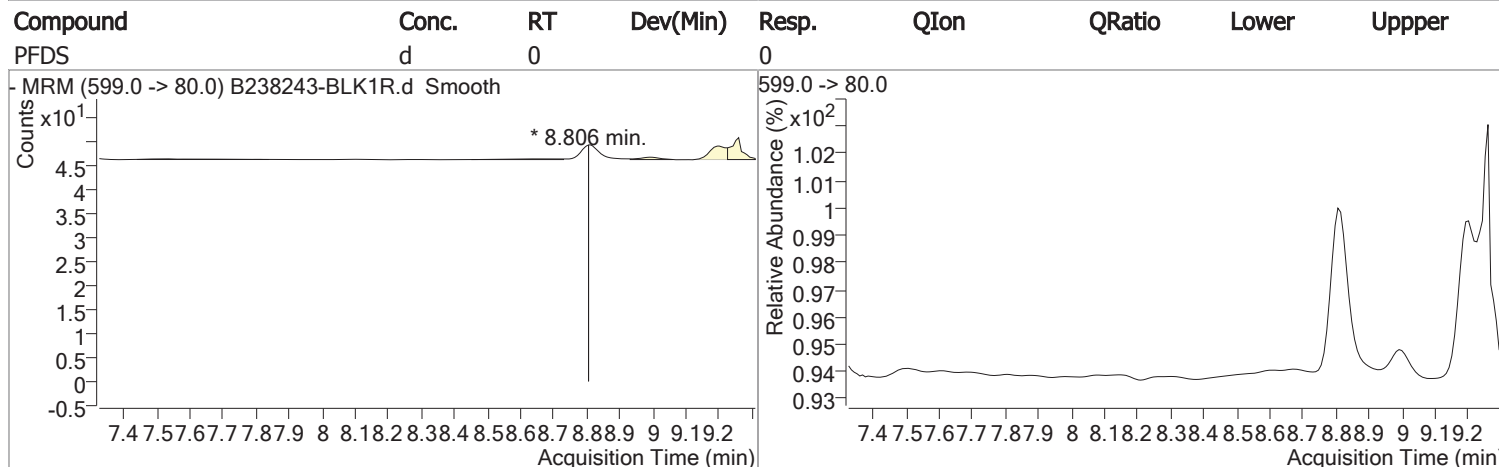
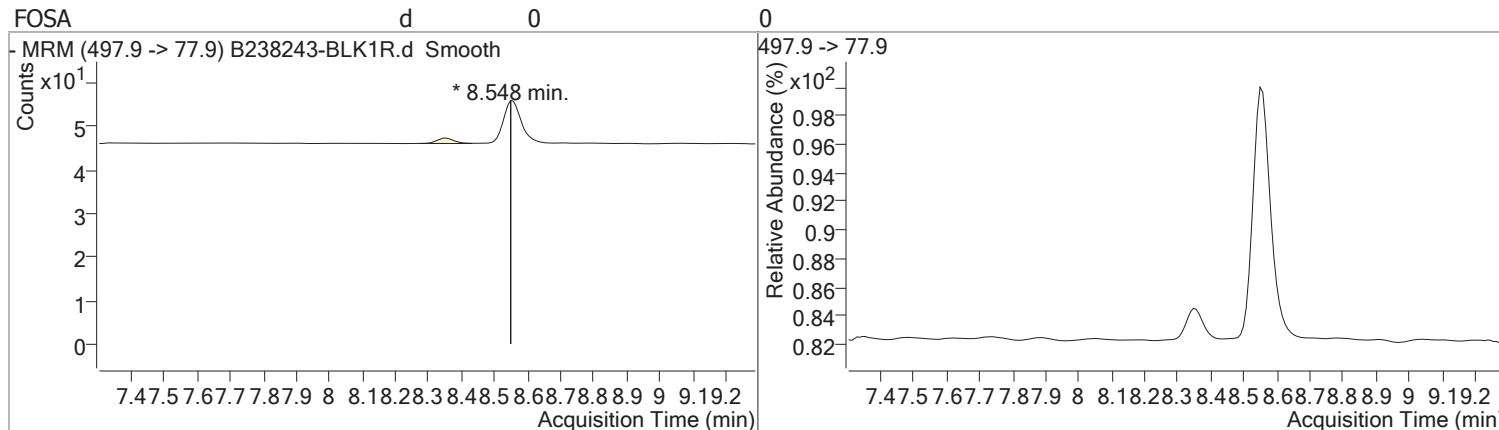


Quantitation Results Report (Not Reviewed)

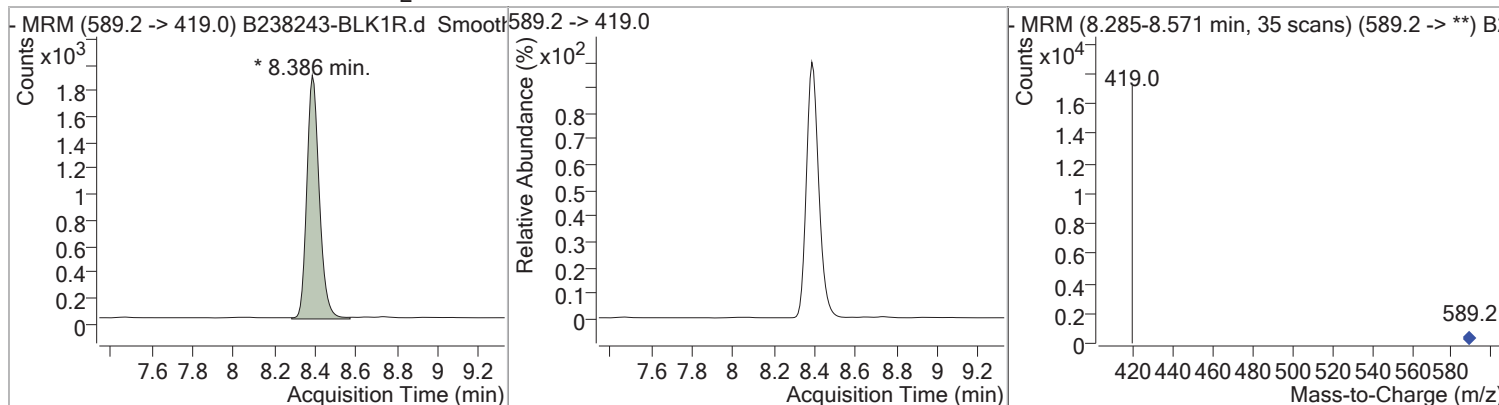


Quantitation Results Report (Not Reviewed)

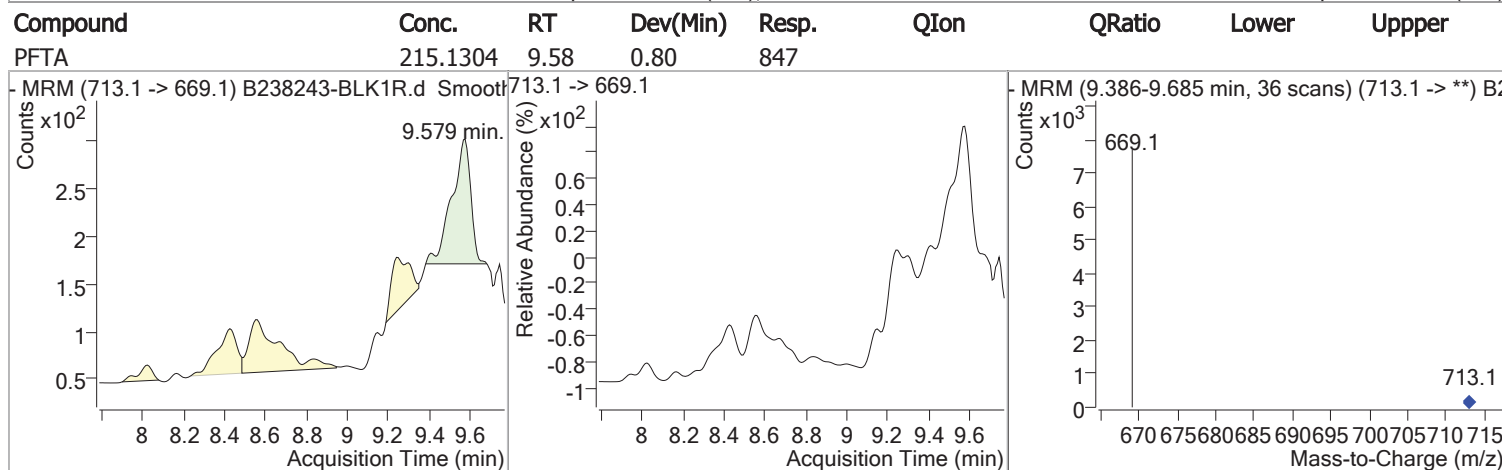
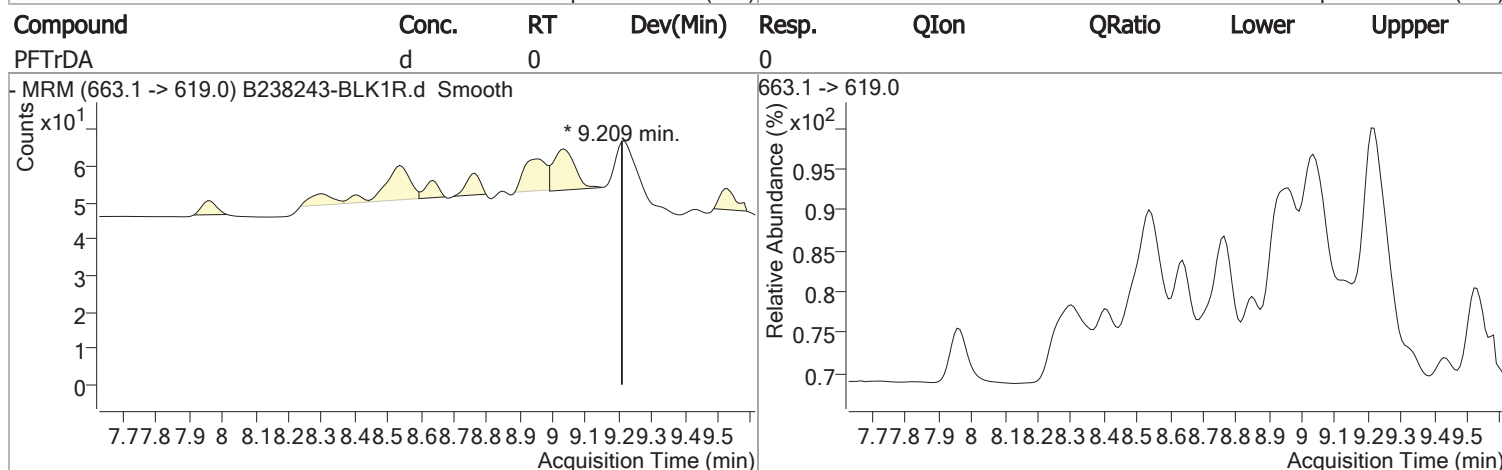
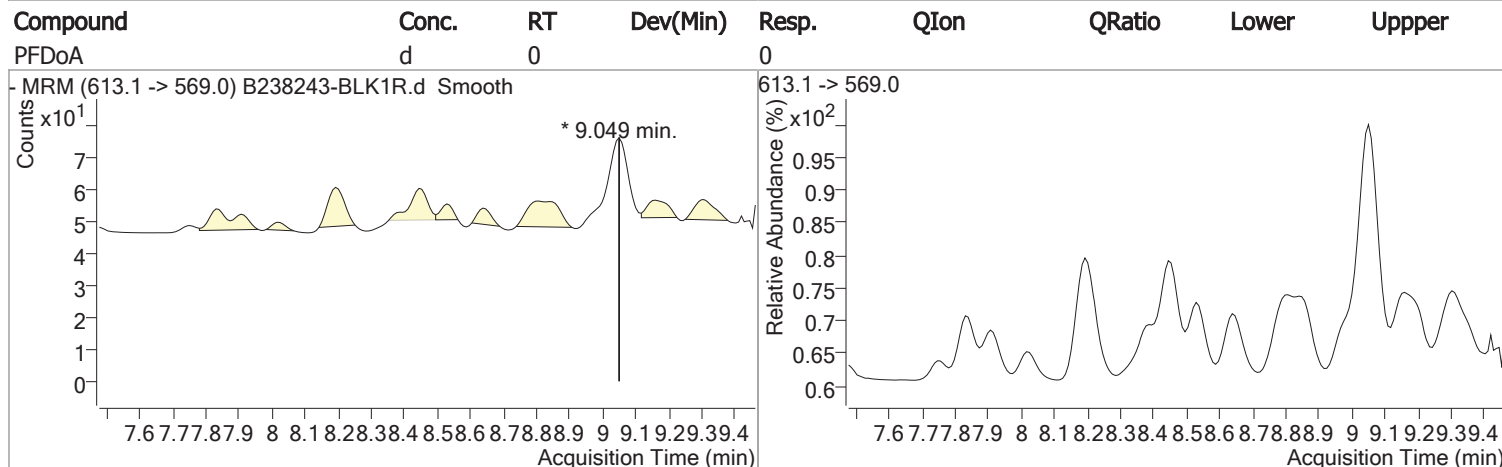
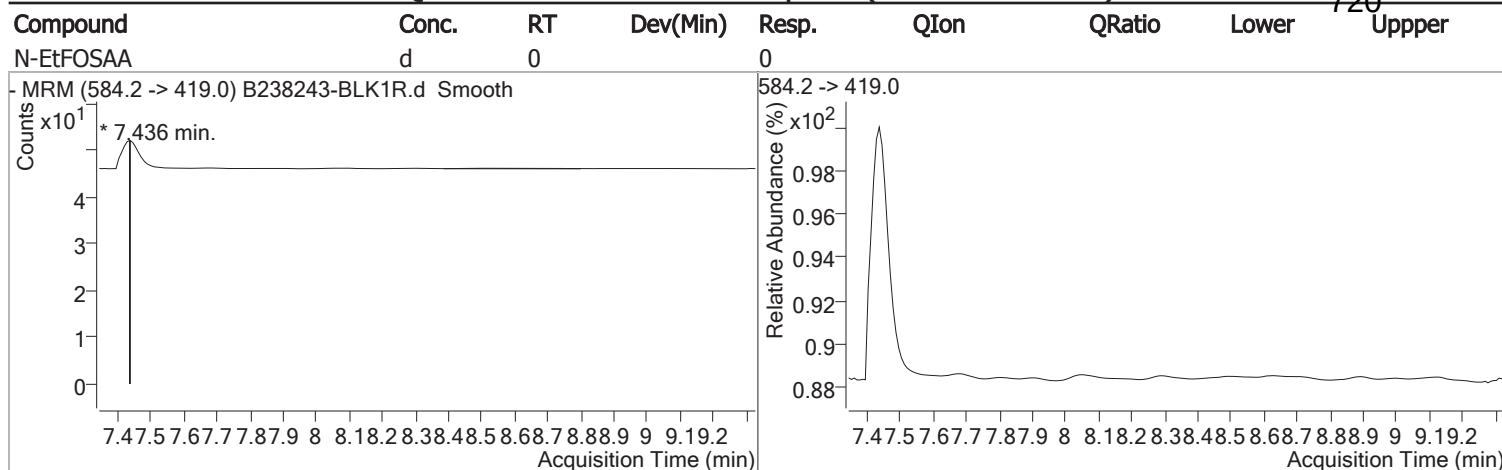
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
d5-N-MeFOSAA	28164.499	8.39	0.05	8025 (m)				



Quantitation Results Report (Not Reviewed)



1 - FORM I

ANALYSIS DATA SHEET

LCS

721

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
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 (PFTTrDA)	10.8	2.0	2.0	
376-06-7	Perfluorotetradecanoic acid (PFTA)	10.1	2.0	2.0	

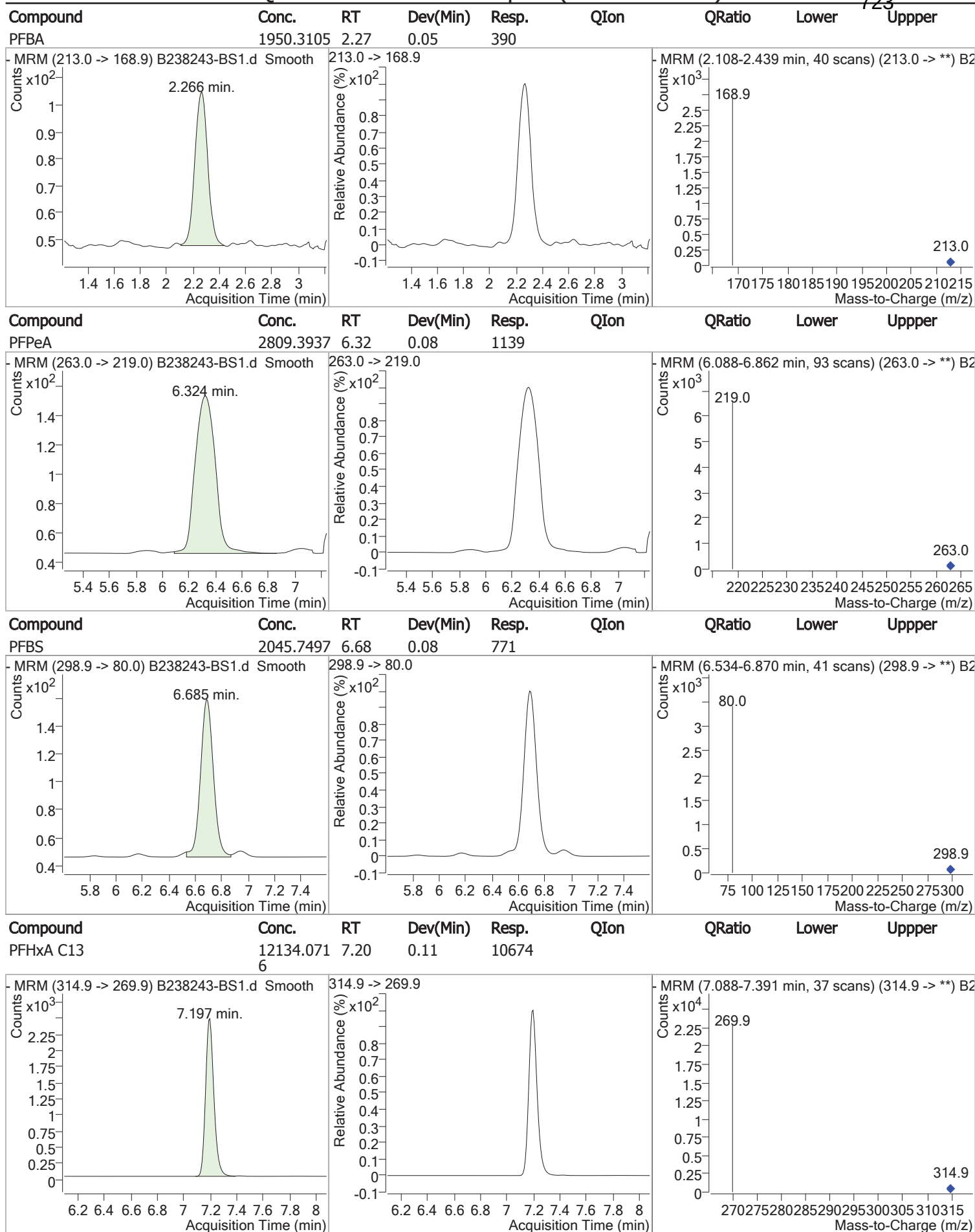
Quantitation Results Report (Not Reviewed)

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			

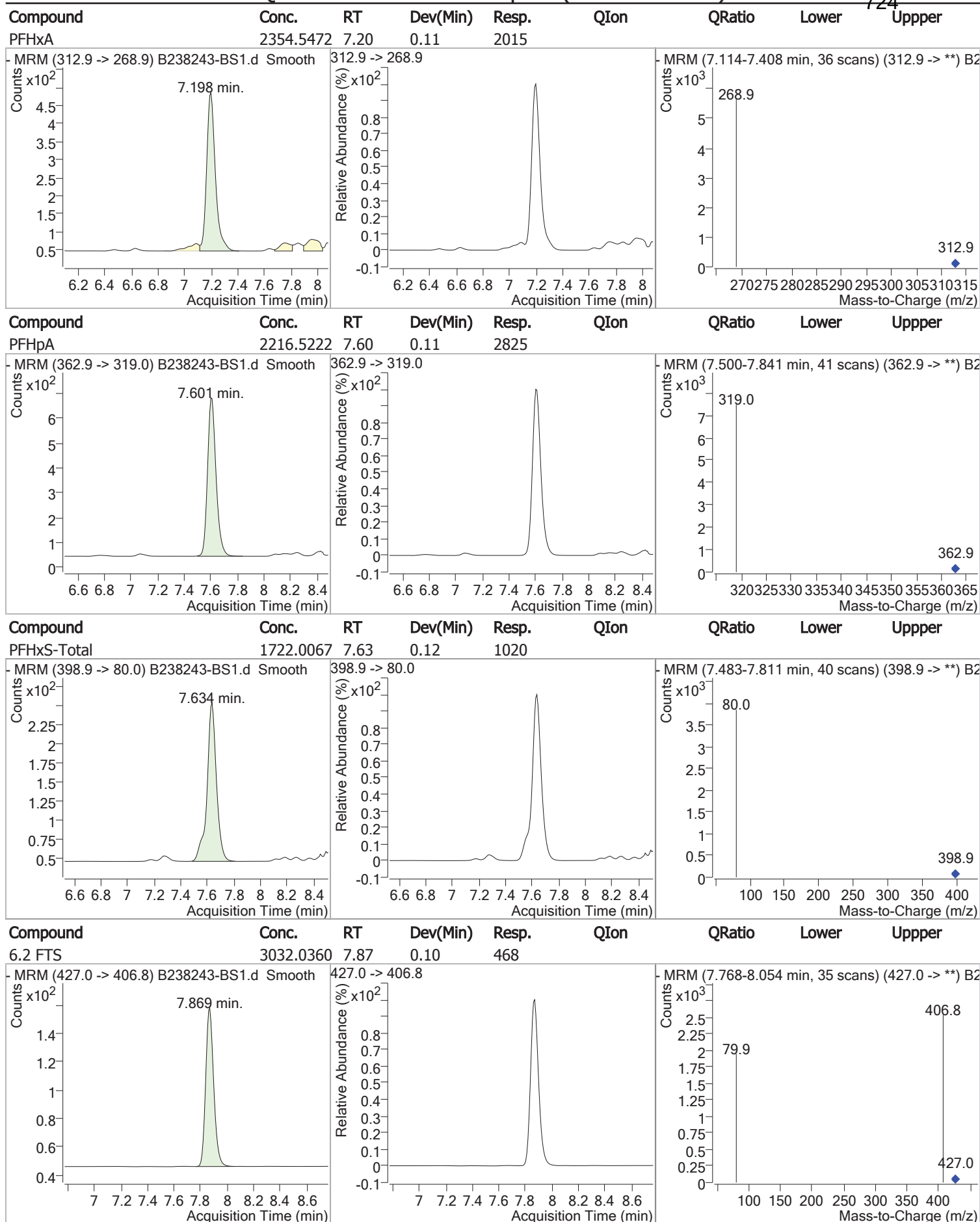
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M PFOA C13	7.869	416.9 -> 371.9	12333	10000.0000	pg/ml	m	0.093
M PFOS C13	8.077	502.9 -> 80.0	18637	28700.0000	pg/ml		0.084
M d3-N-MeFOSAA	8.327	573.2 -> 419.0	10708	40000.0000	pg/ml		0.067
System Monitoring Compounds							
S PFHxA C13	7.197	314.9 -> 269.9	10674	12134.0716	pg/ml	m *	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		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							
T PFBA	2.266	213.0 -> 168.9	390	1950.3105	pg/ml	m	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		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 PFTTrDA	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

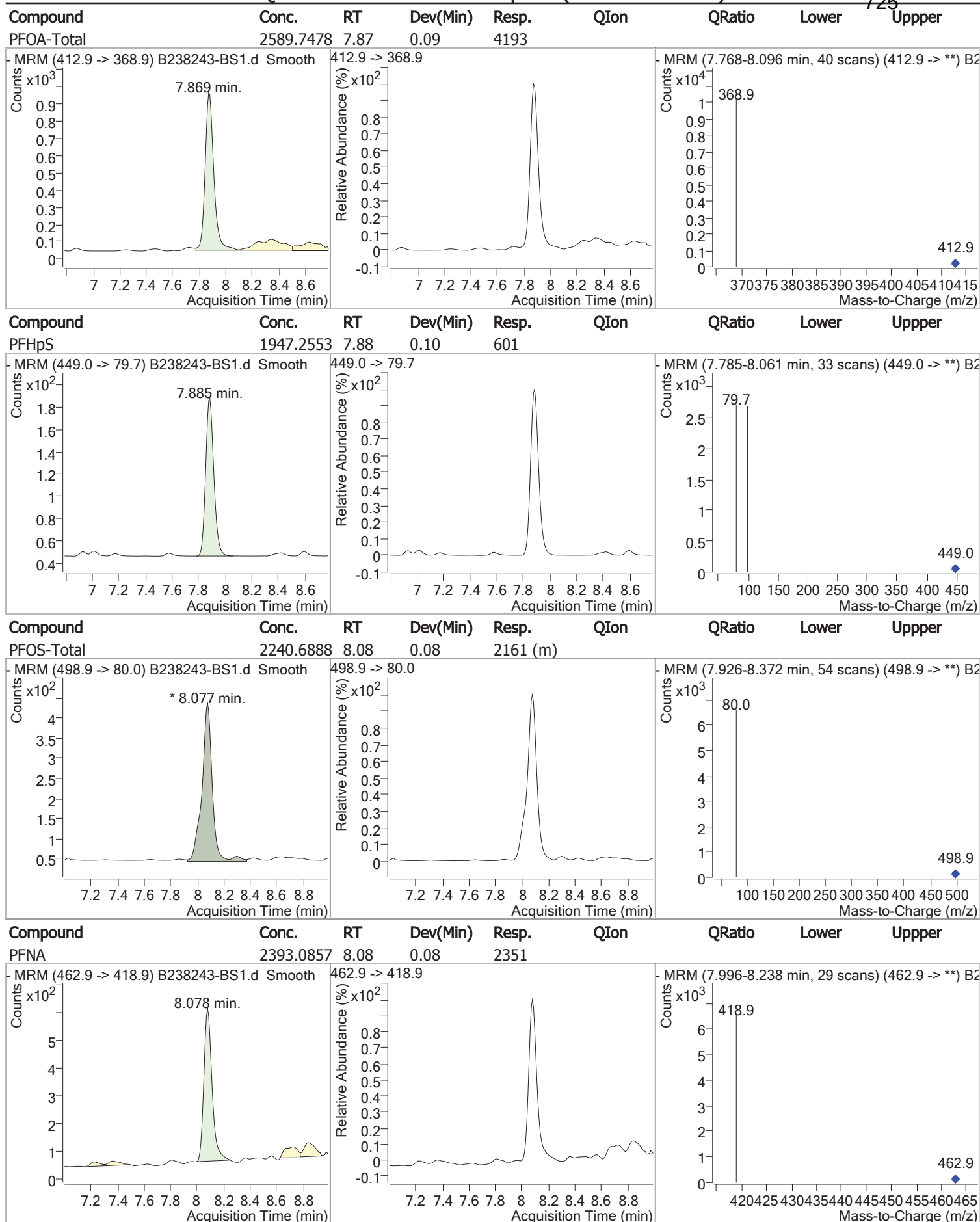
Quantitation Results Report (Not Reviewed)



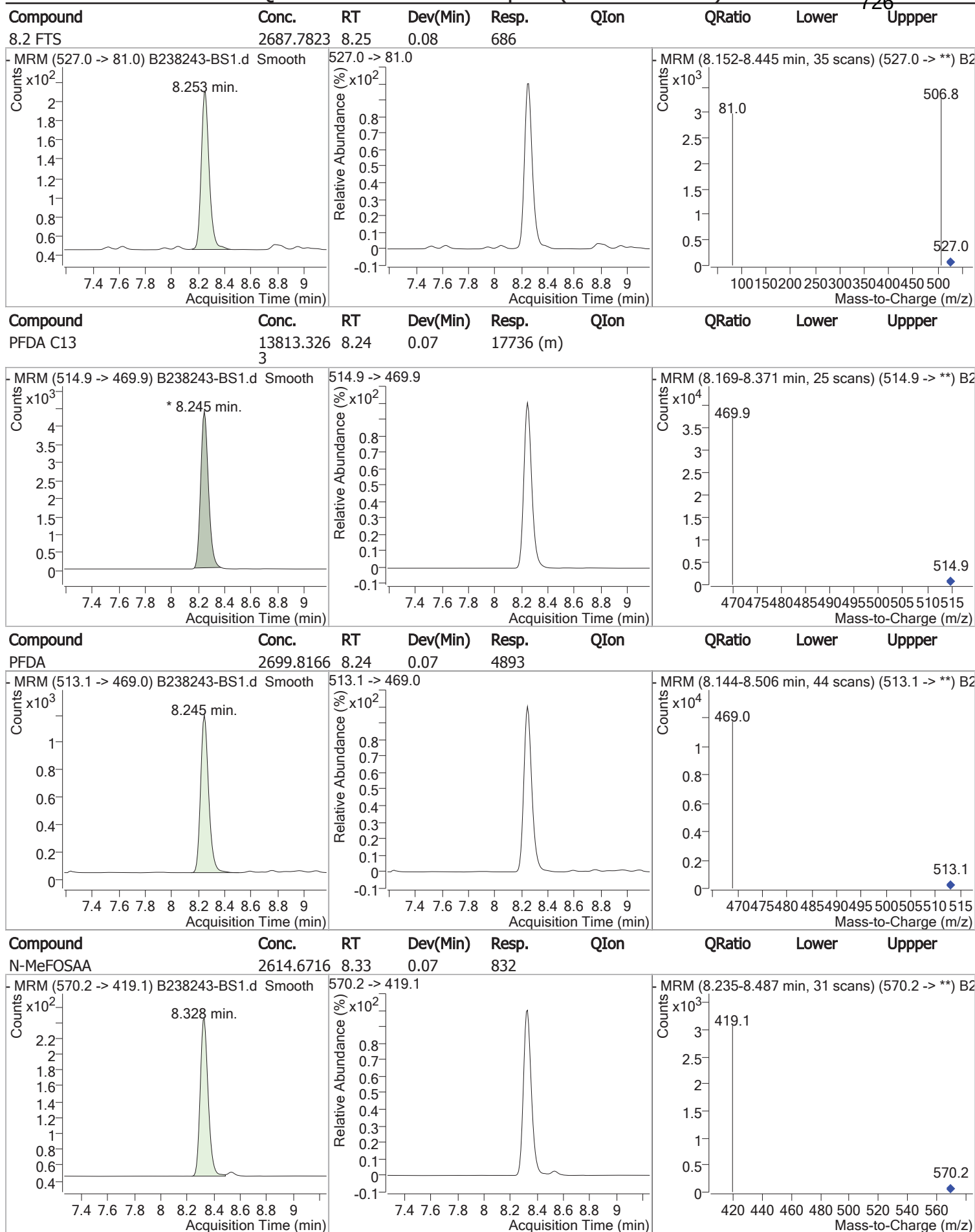
Quantitation Results Report (Not Reviewed)



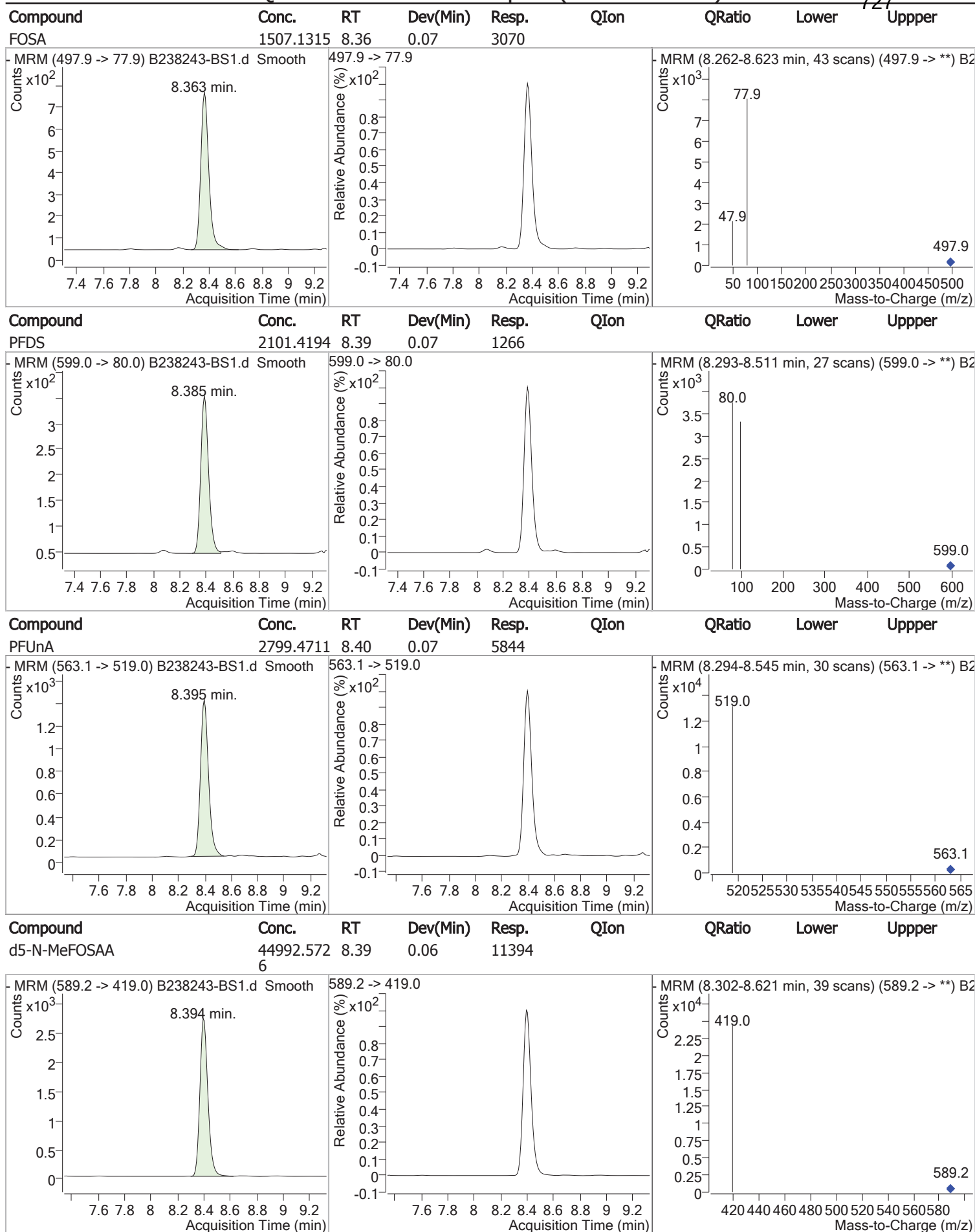
Quantitation Results Report (Not Reviewed)



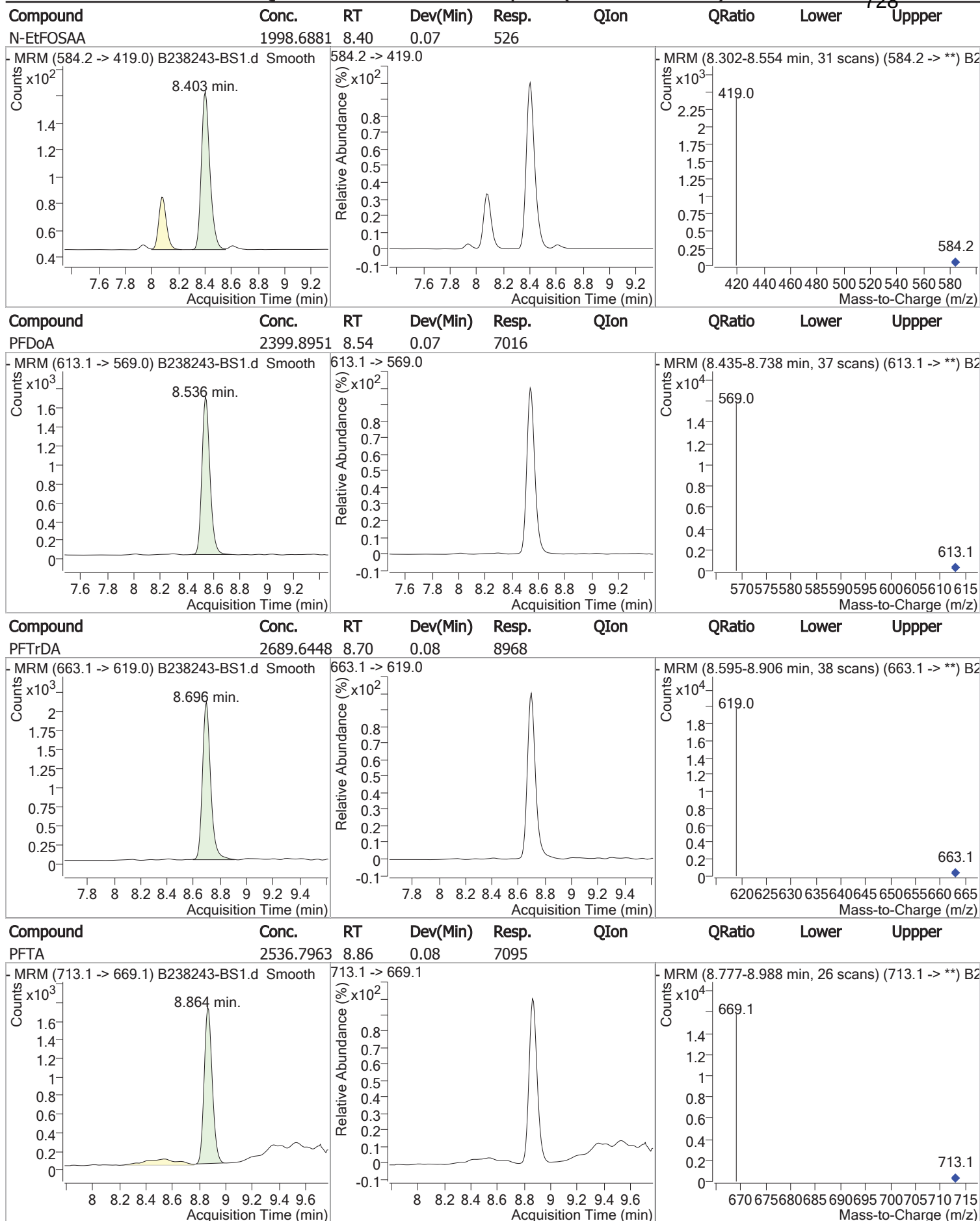
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



1 - FORM I

ANALYSIS DATA SHEET

729

Matrix Spike

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B238243-MS1
		File ID:	B238243-MS1.d
Sampled:		Prepared:	08/19/19 00:00
		Analyzed:	08/21/19 12:33
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)	10.9	2.0	2.0	
307-24-4	Perfluorohexanoic acid (PFHxA)	10.8	2.0	2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	9.96	2.0	2.0	
375-22-4	Perfluorobutanoic acid (PFBA)	9.04	2.0	2.0	
335-77-3	Perfluorodecanesulfonic acid (PFDS)	4.04	2.0	2.0	MS-07A
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	9.58	2.0	2.0	
75491-6	Perfluorooctanesulfonamide (FOSA)		2.0	2.0	MS-07A
2706-90-3	Perfluoropentanoic acid (PFPeA)	8.53	2.0	2.0	
	6:2 Fluorotelomersulfonate (6:2 FTS A)	6.55	2.0	2.0	MS-23
	8:2 Fluorotelomersulfonate (8:2 FTS A)	12.3	2.0	2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	8.05	2.0	2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	12.4	2.0	2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	7.92	2.0	2.0	
375-95-1	Perfluorononanoic acid (PFNA)	8.06	2.0	2.0	
335-76-2	Perfluorodecanoic acid (PFDA)	7.45	2.0	2.0	
	N-MeFOSAA	7.11	2.0	2.0	
2058-94-8	Perfluoroundecanoic acid (PFUnA)	5.56	2.0	2.0	MS-22
	N-EtFOSAA	5.31	2.0	2.0	MS-23
307-55-1	Perfluorododecanoic acid (PFDoA)	4.35	2.0	2.0	MS-07A
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	3.45	2.0	2.0	MS-07A
376-06-7	Perfluorotetradecanoic acid (PFTA)	3.62	2.0	2.0	MS-07A

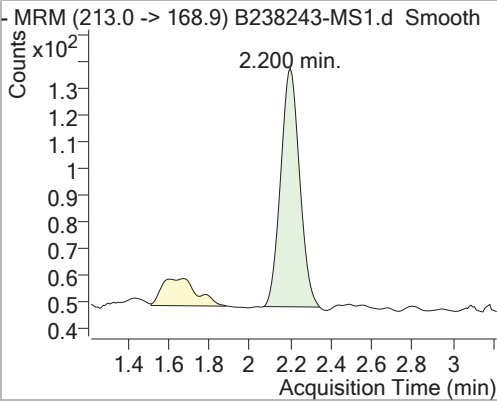
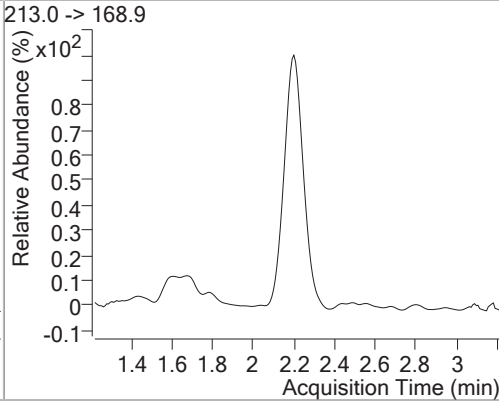
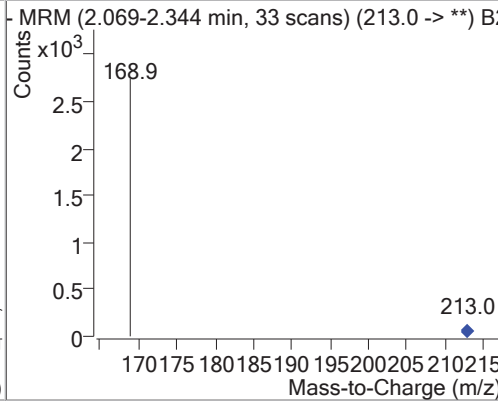
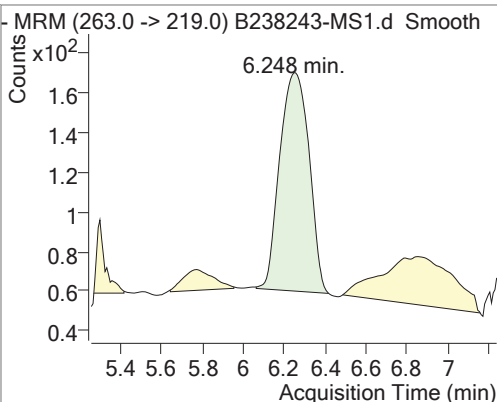
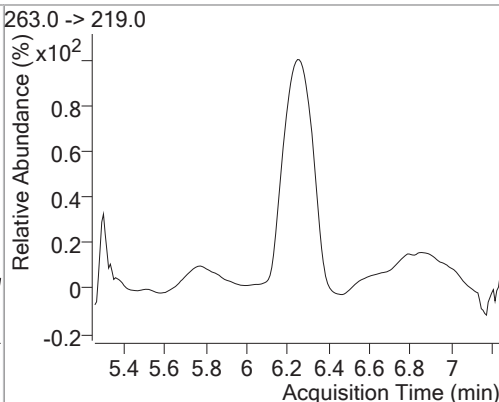
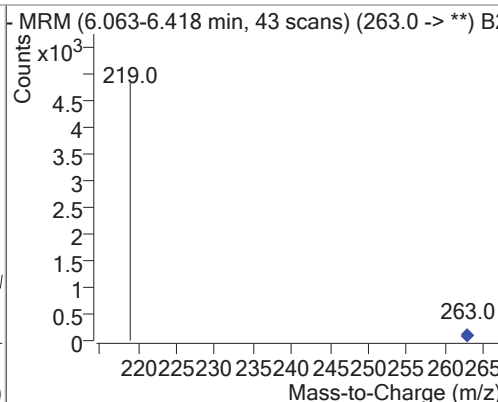
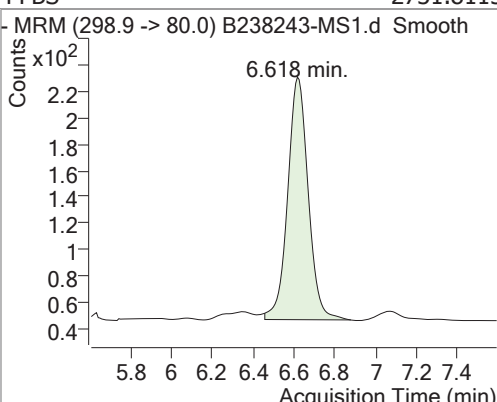
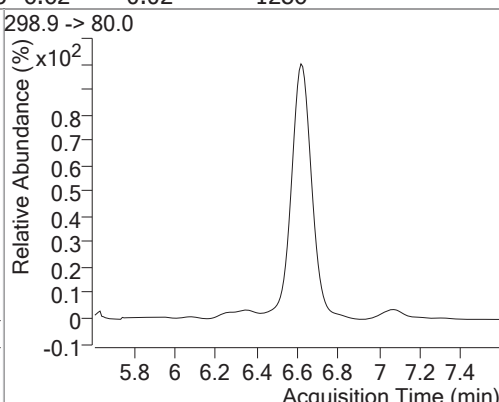
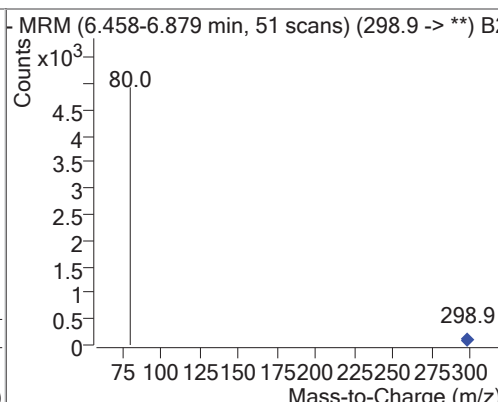
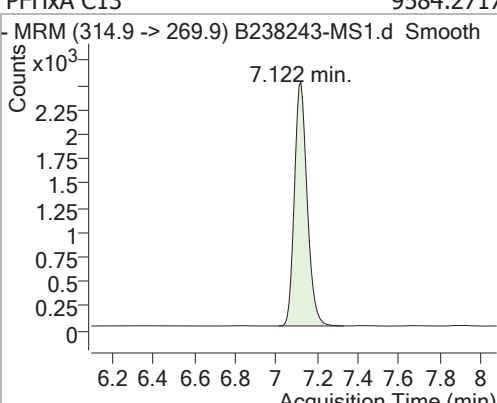
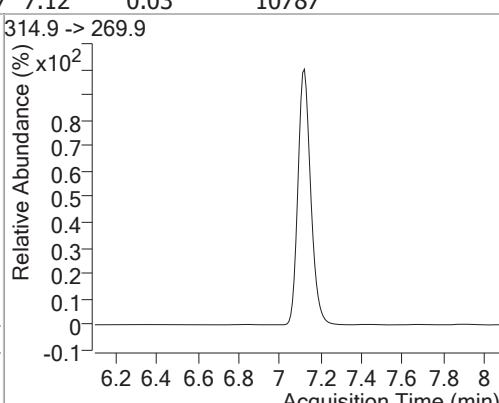
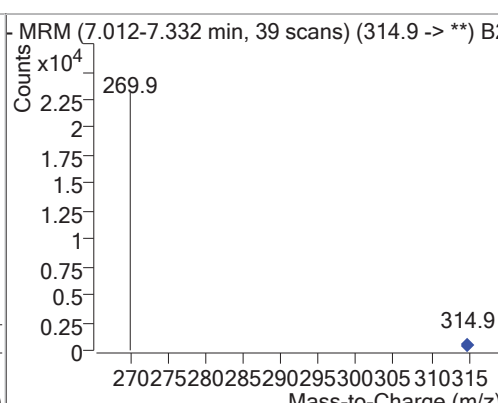
Quantitation Results Report (Not Reviewed)

Data File	B238243-MS1.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 12:33:02 PM
Sample Name	B238243-MS1	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			

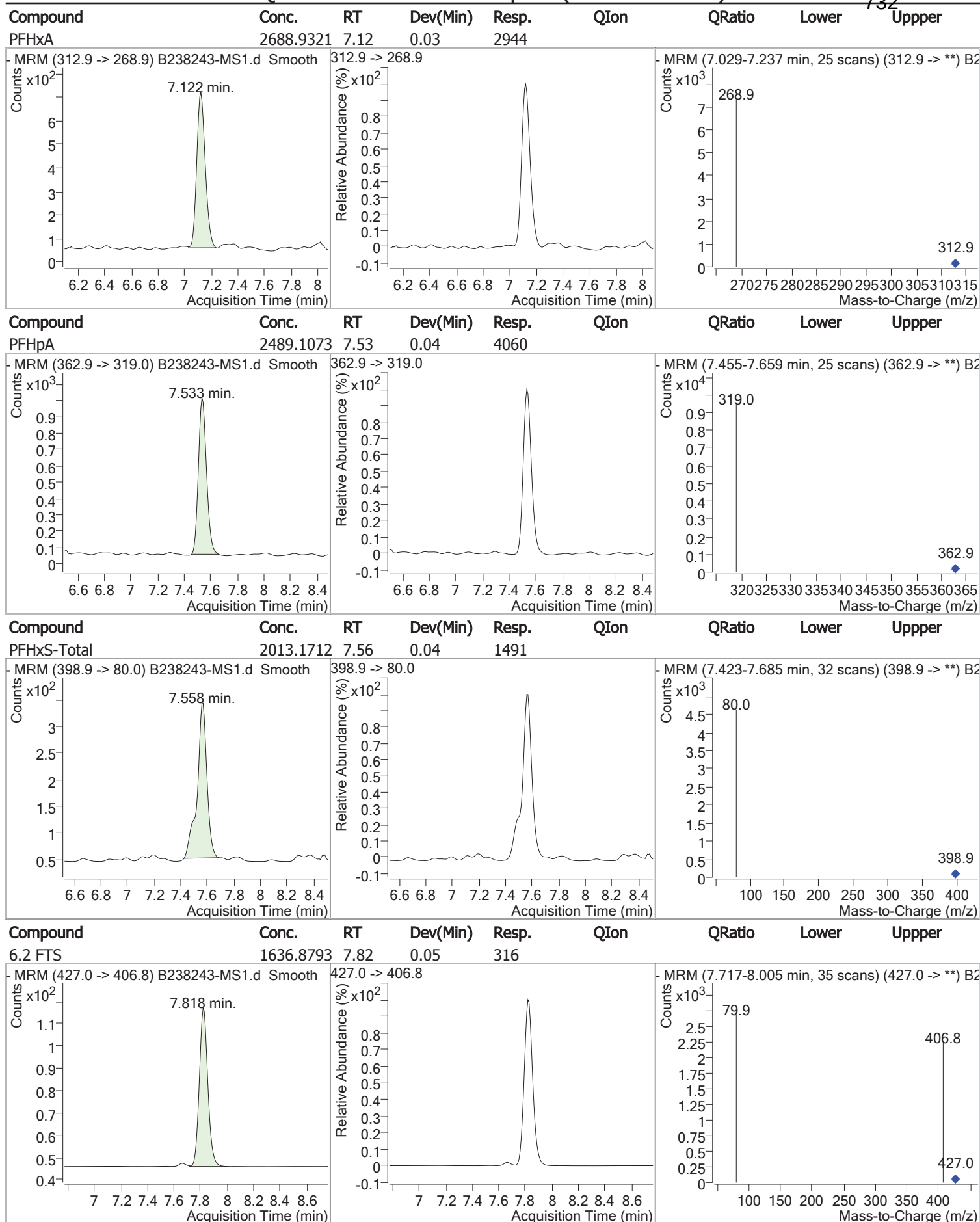
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.819	416.9 -> 371.9	15780	10000.0000	pg/ml	0.042
M PFOS C13	8.035	502.9 -> 80.0	23293	28700.0000	pg/ml	0.042
M d3-N-MeFOSAA	8.294	573.2 -> 419.0	10841	40000.0000	pg/ml	0.034
System Monitoring Compounds						
S PFHxA C13	7.122	314.9 -> 269.9	10787	9584.2717	pg/ml	0.034
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 95.84%		
S PFDA C13	8.211	514.9 -> 469.9	13244	8061.7044	pg/ml	0.034
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 80.62%		
S d5-N-MeFOSAA	8.369	589.2 -> 419.0	5563	21697.8126	pg/ml	0.034
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 54.24%		*
Target Compounds						QValue
T PFBA	2.200	213.0 -> 168.9	578	2260.3016	pg/ml	100
T PFPeA	6.248	263.0 -> 219.0	1105	2131.4972	pg/ml	100
T PFBS	6.618	298.9 -> 80.0	1286	2731.8115	pg/ml	100
T PFHxA	7.122	312.9 -> 268.9	2944	2688.9321	pg/ml	100
T PFHpA	7.533	362.9 -> 319.0	4060	2489.1073	pg/ml	100
T PFHxS-Total	7.558	398.9 -> 80.0	1491	2013.1712	pg/ml	100
T 6.2 FTS	7.818	427.0 -> 406.8	316	1636.8793	pg/ml	100
T PFOA-Total	7.819	412.9 -> 368.9	6398	3088.0774	pg/ml	100
T PFHpS	7.826	449.0 -> 79.7	924	2393.7597	pg/ml	100
T PFOS-Total	8.035	498.9 -> 80.0	2387	1980.8828	pg/ml	100
T PFNA	8.036	462.9 -> 418.9	2533	2015.7887	pg/ml	100
T 8.2 FTS	8.219	527.0 -> 81.0	981	3075.2090	pg/ml	100
T PFDA	8.211	513.1 -> 469.0	4316	1861.4421	pg/ml	100
T N-MeFOSAA	8.294	570.2 -> 419.1	573	1777.3950	pg/ml	100
T FOSA	8.313	497.9 -> 77.9	50	24.4115	pg/ml	m100
T PFDS	8.352	599.0 -> 80.0	761	1010.0050	pg/ml	100
T PFUnA	8.362	563.1 -> 519.0	3711	1389.2674	pg/ml	100
T N-EtFOSAA	8.378	584.2 -> 419.0	354	1327.9086	pg/ml	100
T PFDoA	8.511	613.1 -> 569.0	4069	1087.7450	pg/ml	100
T PFTTrDA	8.662	663.1 -> 619.0	3682	862.9619	pg/ml	100
T PFTA	8.839	713.1 -> 669.1	3239	905.0201	pg/ml	100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

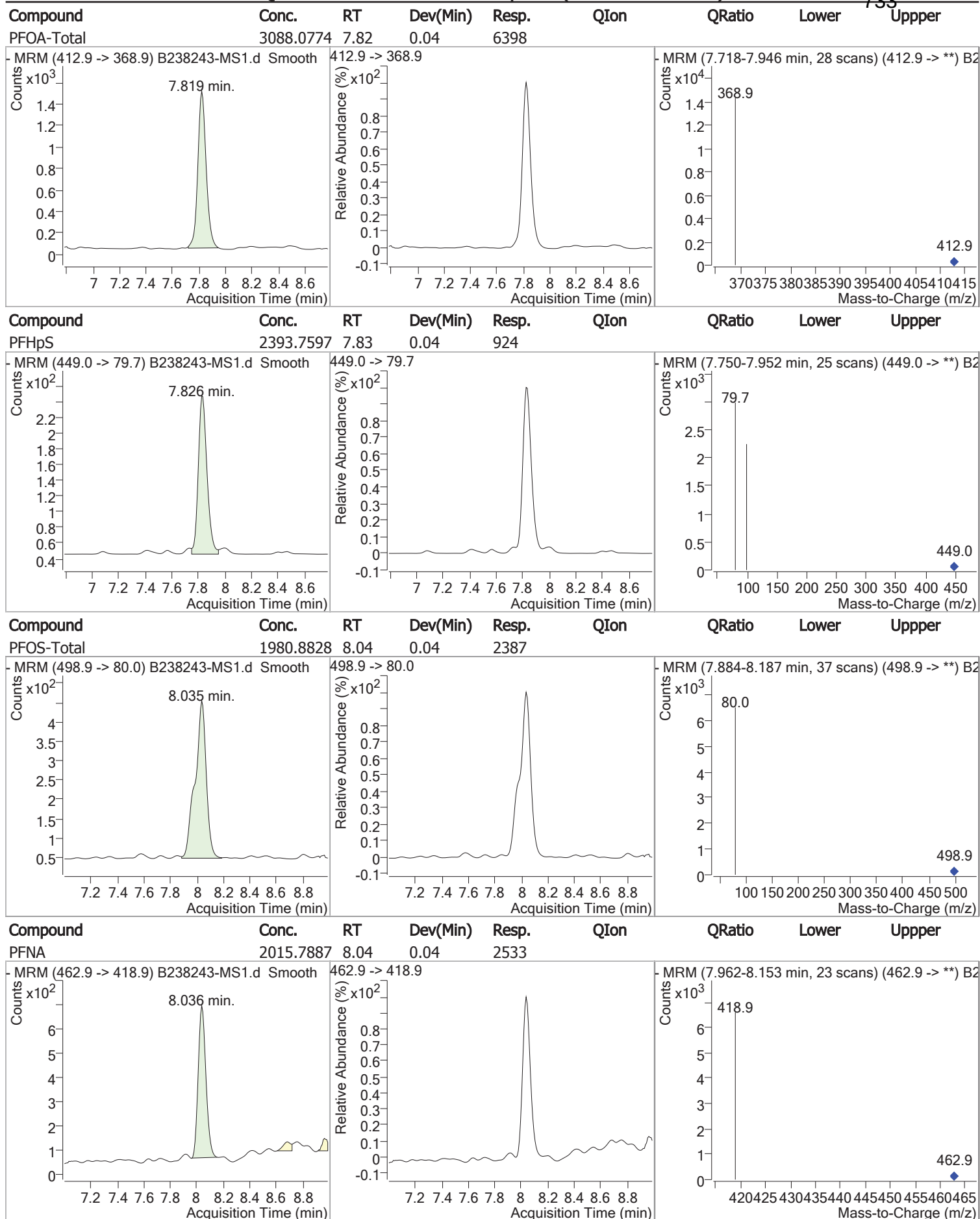
Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
PFBA	2260.3016	2.20	-0.02	578				
MRM (213.0 -> 168.9) B238243-MS1.d Smooth  MRM (213.0 -> 168.9)  MRM (2.069-2.344 min, 33 scans) (213.0 -> **) B2 								
PFPeA	2131.4972	6.25	0.00	1105				
MRM (263.0 -> 219.0) B238243-MS1.d Smooth  MRM (263.0 -> 219.0)  MRM (6.063-6.418 min, 43 scans) (263.0 -> **) B2 								
PFBS	2731.8115	6.62	0.02	1286				
MRM (298.9 -> 80.0) B238243-MS1.d Smooth  MRM (298.9 -> 80.0)  MRM (6.458-6.879 min, 51 scans) (298.9 -> **) B2 								
PFHxA C13	9584.2717	7.12	0.03	10787				
MRM (314.9 -> 269.9) B238243-MS1.d Smooth  MRM (314.9 -> 269.9)  MRM (7.012-7.332 min, 39 scans) (314.9 -> **) B2 								

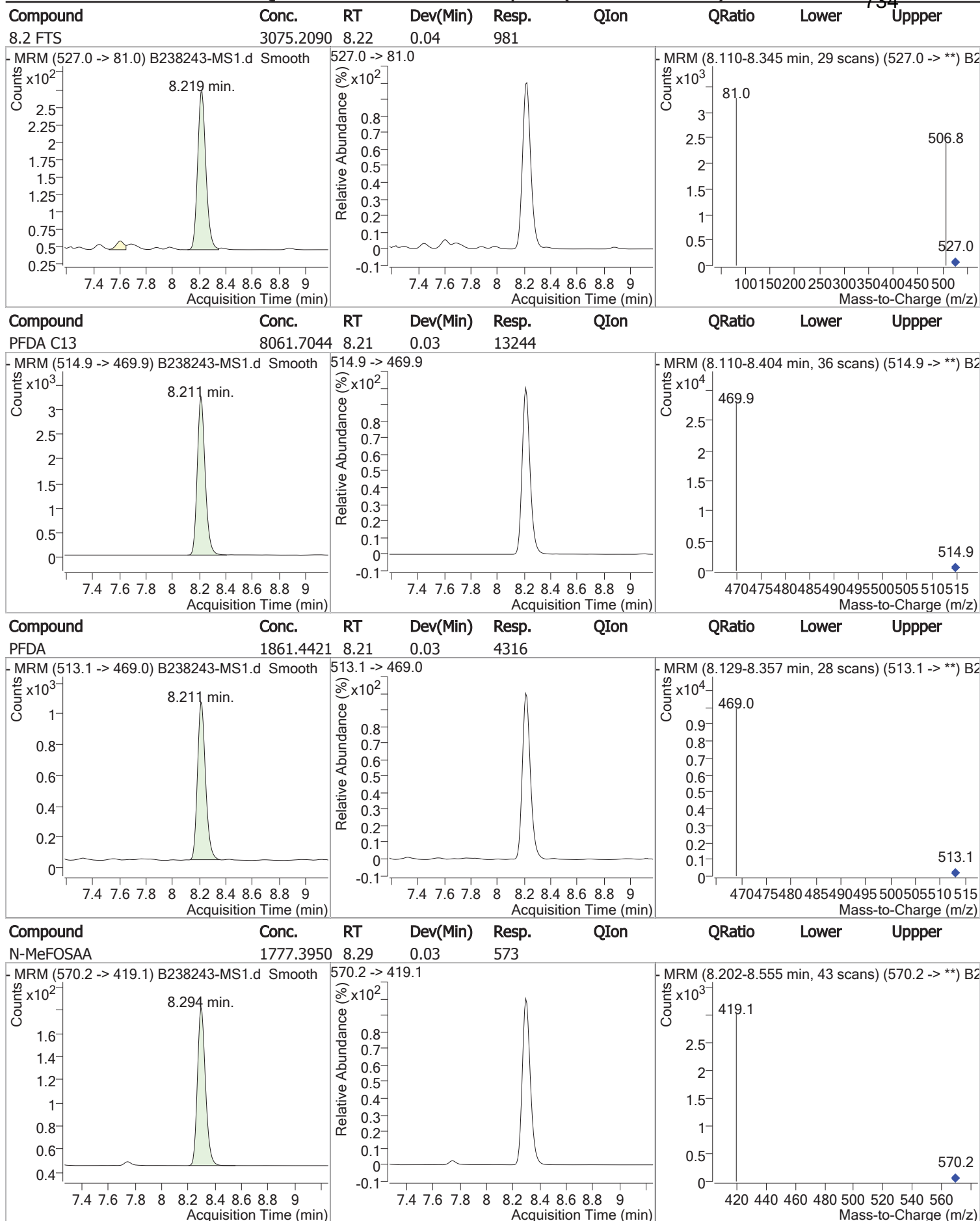
Quantitation Results Report (Not Reviewed)



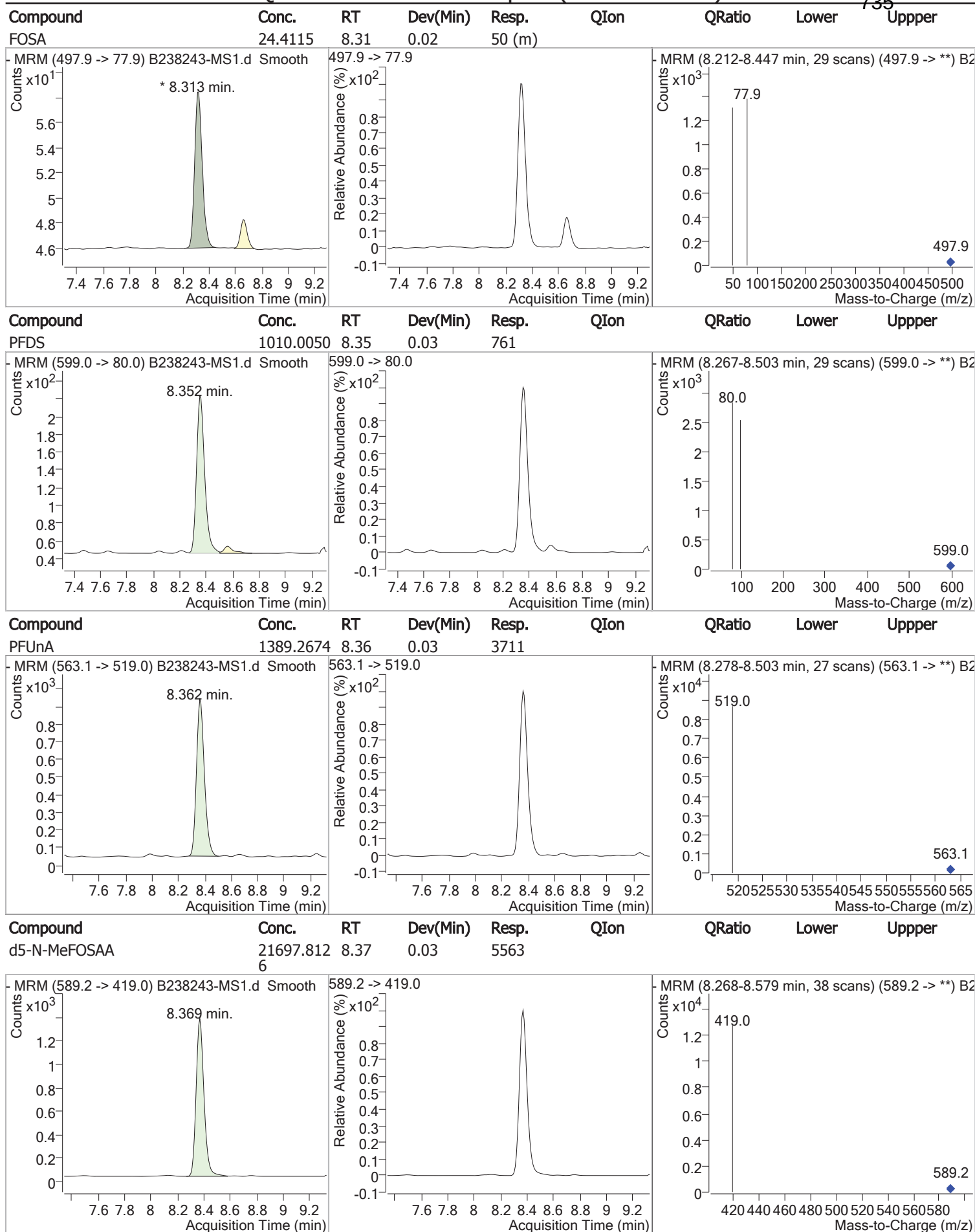
Quantitation Results Report (Not Reviewed)



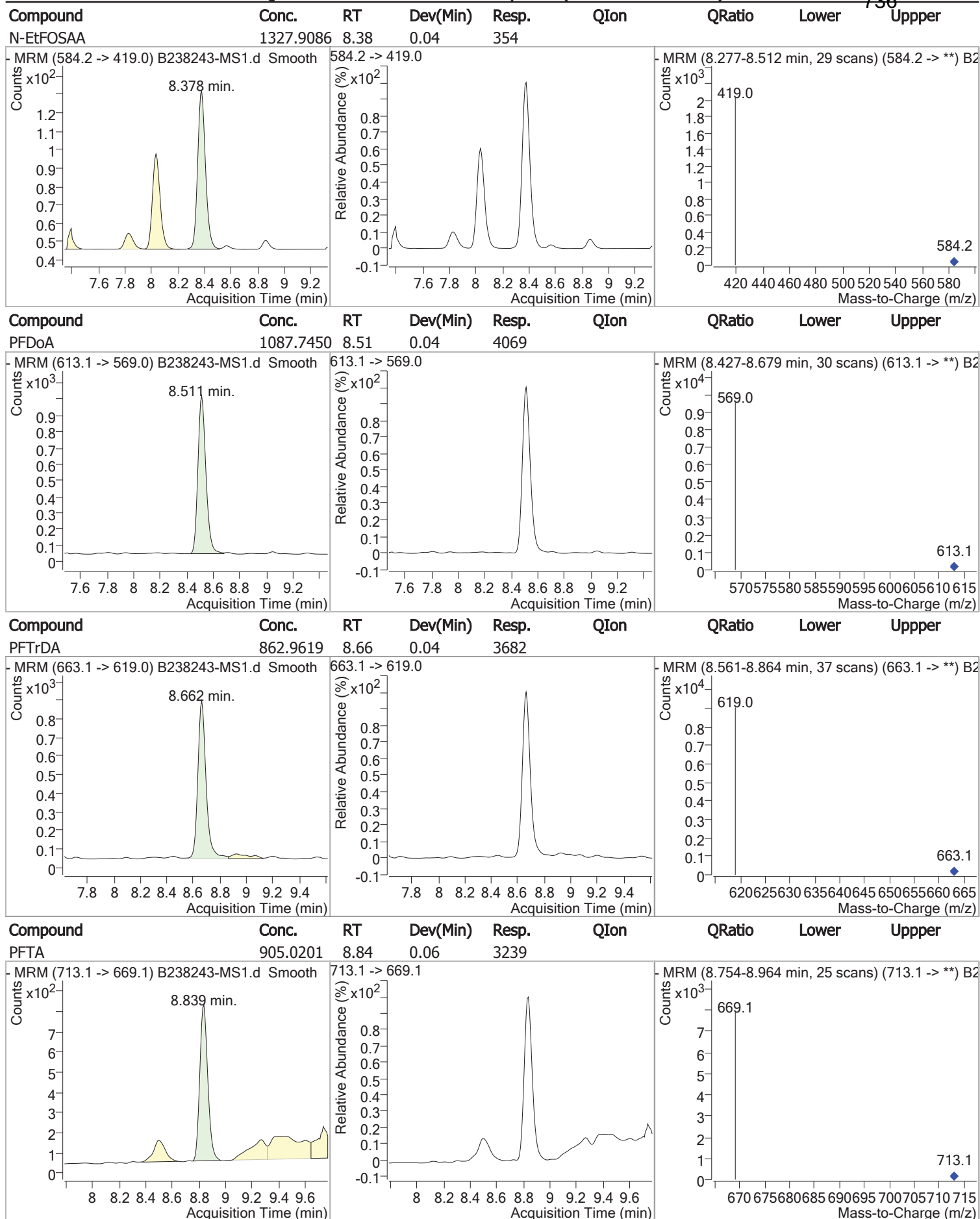
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



1 - FORM I

ANALYSIS DATA SHEET

737

Matrix Spike Dup

Laboratory:	Con-Test Analytical Laboratory	Work Order:	19H0528
Client:	Dvirka And Bartilucci	Project:	Farrand Controls Site
Matrix:	Water	Laboratory ID:	B238243-MSD1
		File ID:	B238243-MSD1.d
Sampled:		Prepared:	08/19/19 00:00
		Analyzed:	08/21/19 12:45
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)	7.51	2.0	2.0	R-06
307-24-4	Perfluorohexanoic acid (PFHxA)	11.8	2.0	2.0	
375-85-9	Perfluoroheptanoic acid (PFHpA)	9.30	2.0	2.0	
375-22-4	Perfluorobutanoic acid (PFBA)	10.1	2.0	2.0	
335-77-3	Perfluorodecanesulfonic acid (PFDS)	3.70	2.0	2.0	MS-07A
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	7.86	2.0	2.0	
75491-6	Perfluorooctanesulfonamide (FOSA)		2.0	2.0	MS-07A
2706-90-3	Perfluoropentanoic acid (PFPeA)	12.3	2.0	2.0	R-06
	6:2 Fluorotelomersulfonate (6:2 FTS A)	12.3	2.0	2.0	MS-23
	8:2 Fluorotelomersulfonate (8:2 FTS A)	10.3	2.0	2.0	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	8.12	2.0	2.0	
335-67-1	Perfluorooctanoic acid (PFOA)	13.1	2.0	2.0	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	7.93	2.0	2.0	
375-95-1	Perfluorononanoic acid (PFNA)	7.89	2.0	2.0	
335-76-2	Perfluorodecanoic acid (PFDA)	9.28	2.0	2.0	
	N-MeFOSAA	4.87	2.0	2.0	MS-23
2058-94-8	Perfluoroundecanoic acid (PFUnA)	7.31	2.0	2.0	
	N-EtFOSAA	7.36	2.0	2.0	MS-23
307-55-1	Perfluorododecanoic acid (PFDoA)	5.68	2.0	2.0	MS-07A
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	4.49	2.0	2.0	MS-07A
376-06-7	Perfluorotetradecanoic acid (PFTA)	4.39	2.0	2.0	MS-07A

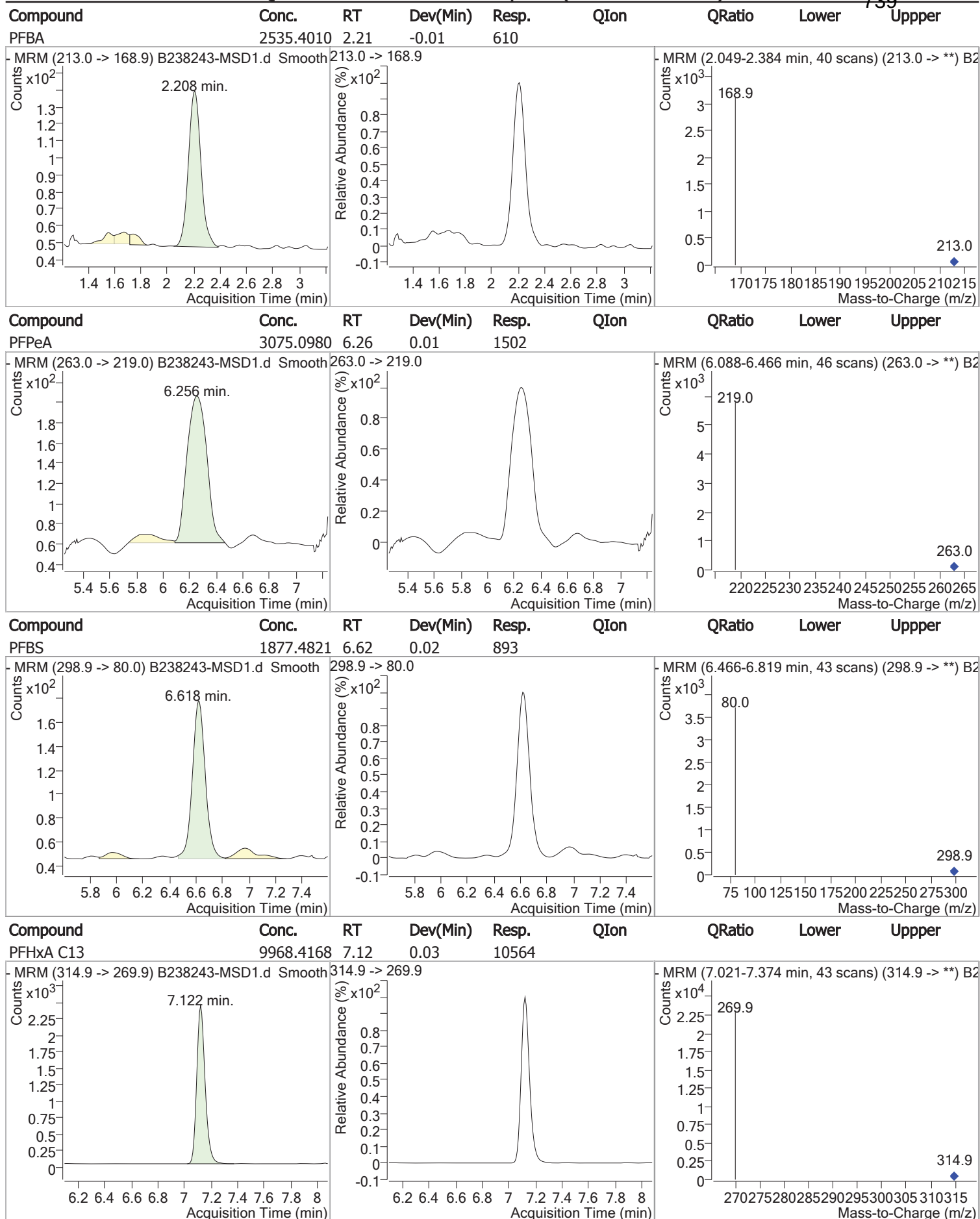
Quantitation Results Report (Not Reviewed)

Data File	B238243-MSD1.d	Operator	
Acq. Method	21List021219.m	Acq. Date-Time	8/21/2019 12:45:39 PM
Sample Name	B238243-MSD1	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			

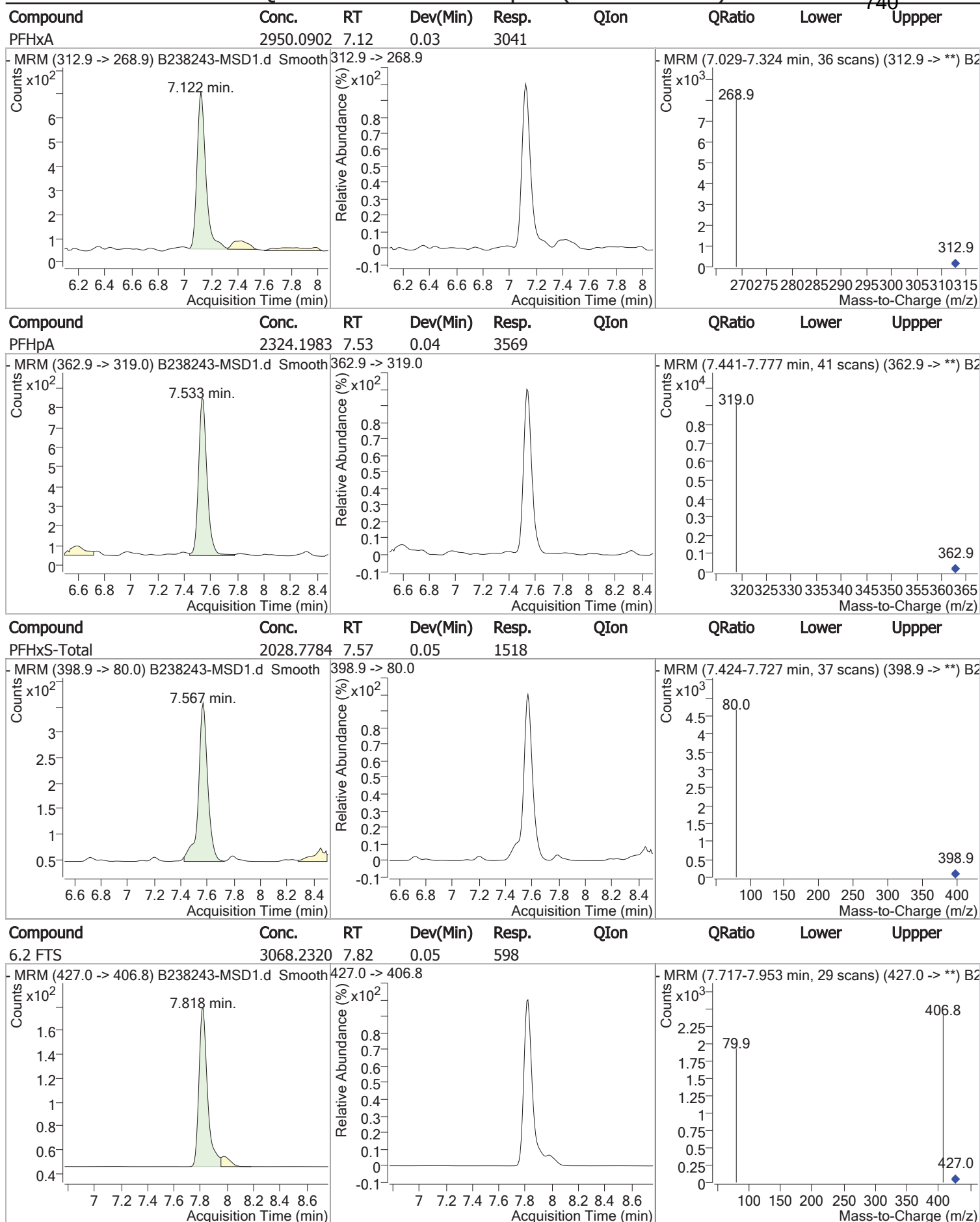
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M PFOA C13	7.819	416.9 -> 371.9	14858	10000.0000	pg/ml	0.042
M PFOS C13	8.043	502.9 -> 80.0	23531	28700.0000	pg/ml	0.050
M d3-N-MeFOSAA	8.311	573.2 -> 419.0	11232	40000.0000	pg/ml	0.050
System Monitoring Compounds						
S PFHxA C13	7.122	314.9 -> 269.9	10564	9968.4168	pg/ml	0.034
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 99.68%		
S PFDA C13	8.228	514.9 -> 469.9	14017	9061.4494	pg/ml	0.050
Spiked Amount: 10000.000	Range: 70.0 - 130.0%			Recovery = 90.61%		
S d5-N-MeFOSAA	8.386	589.2 -> 419.0	6005	22606.2231	pg/ml	0.050
Spiked Amount: 40000.000	Range: 70.0 - 130.0%			Recovery = 56.52%		*
Target Compounds						QValue
T PFBA	2.208	213.0 -> 168.9	610	2535.4010	pg/ml	100
T PFPeA	6.256	263.0 -> 219.0	1502	3075.0980	pg/ml	100
T PFBS	6.618	298.9 -> 80.0	893	1877.4821	pg/ml	100
T PFHxA	7.122	312.9 -> 268.9	3041	2950.0902	pg/ml	100
T PFHpA	7.533	362.9 -> 319.0	3569	2324.1983	pg/ml	100
T PFHxS-Total	7.567	398.9 -> 80.0	1518	2028.7784	pg/ml	100
T 6.2 FTS	7.818	427.0 -> 406.8	598	3068.2320	pg/ml	100
T PFOA-Total	7.819	412.9 -> 368.9	6412	3286.9388	pg/ml	100
T PFHpS	7.834	449.0 -> 79.7	767	1966.1298	pg/ml	100
T PFOS-Total	8.044	498.9 -> 80.0	2412	1981.5103	pg/ml	100
T PFNA	8.044	462.9 -> 418.9	2333	1971.6015	pg/ml	100
T 8.2 FTS	8.236	527.0 -> 81.0	833	2584.6666	pg/ml	100
T PFDA	8.228	513.1 -> 469.0	5064	2319.2349	pg/ml	100
T N-MeFOSAA	8.311	570.2 -> 419.1	406	1216.9254	pg/ml	100
T FOSA	8.347	497.9 -> 77.9	78	36.6348	pg/ml	m 100
T PFDS	8.377	599.0 -> 80.0	703	923.8092	pg/ml	100
T PFUnA	8.378	563.1 -> 519.0	4597	1827.9116	pg/ml	100
T N-EtFOSAA	8.394	584.2 -> 419.0	507	1839.0382	pg/ml	100
T PFDoA	8.528	613.1 -> 569.0	4997	1418.8724	pg/ml	100
T PFTrDA	8.687	663.1 -> 619.0	4512	1123.0571	pg/ml	100
T PFTA	8.864	713.1 -> 669.1	3700	1097.9386	pg/ml	100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

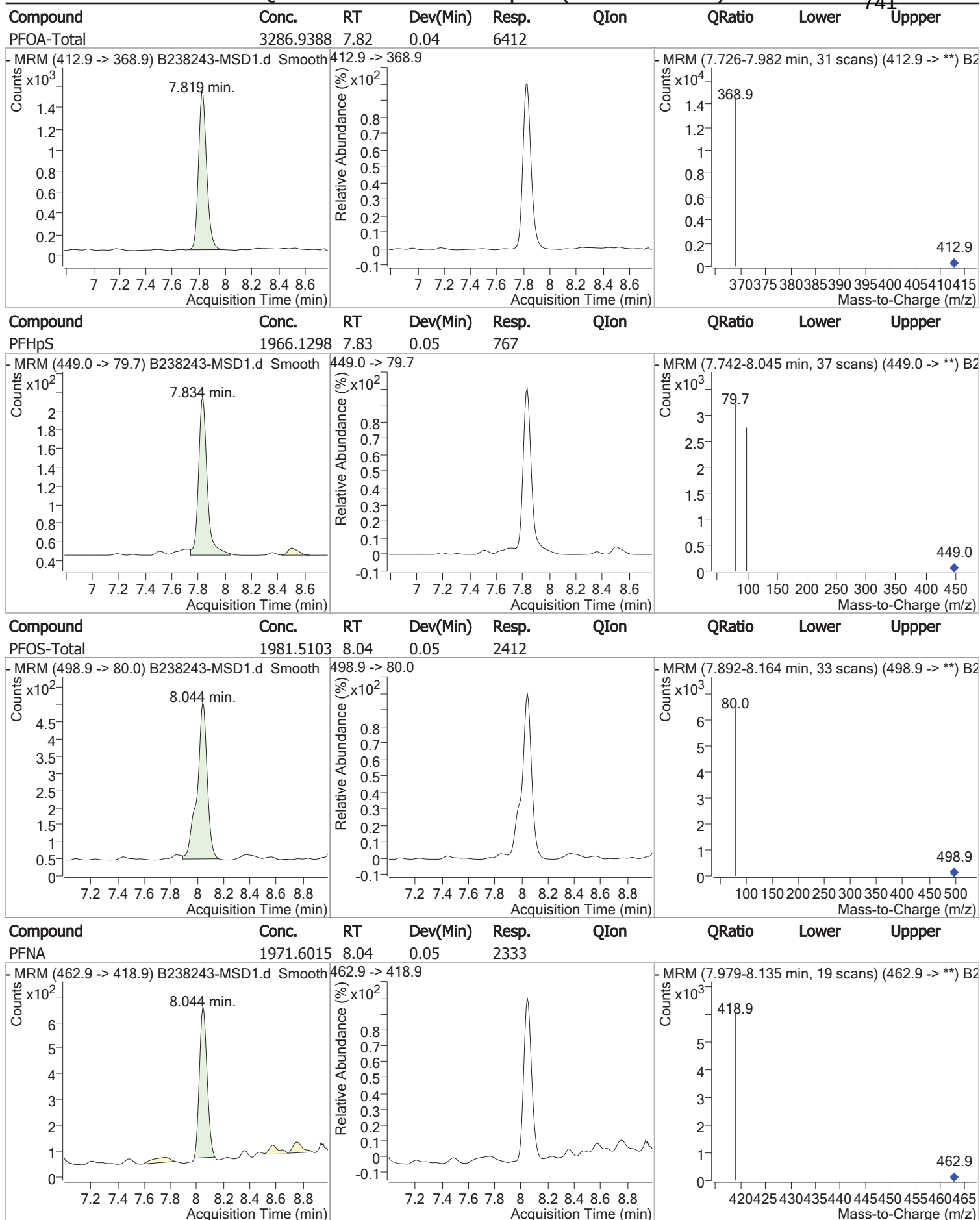
Quantitation Results Report (Not Reviewed)



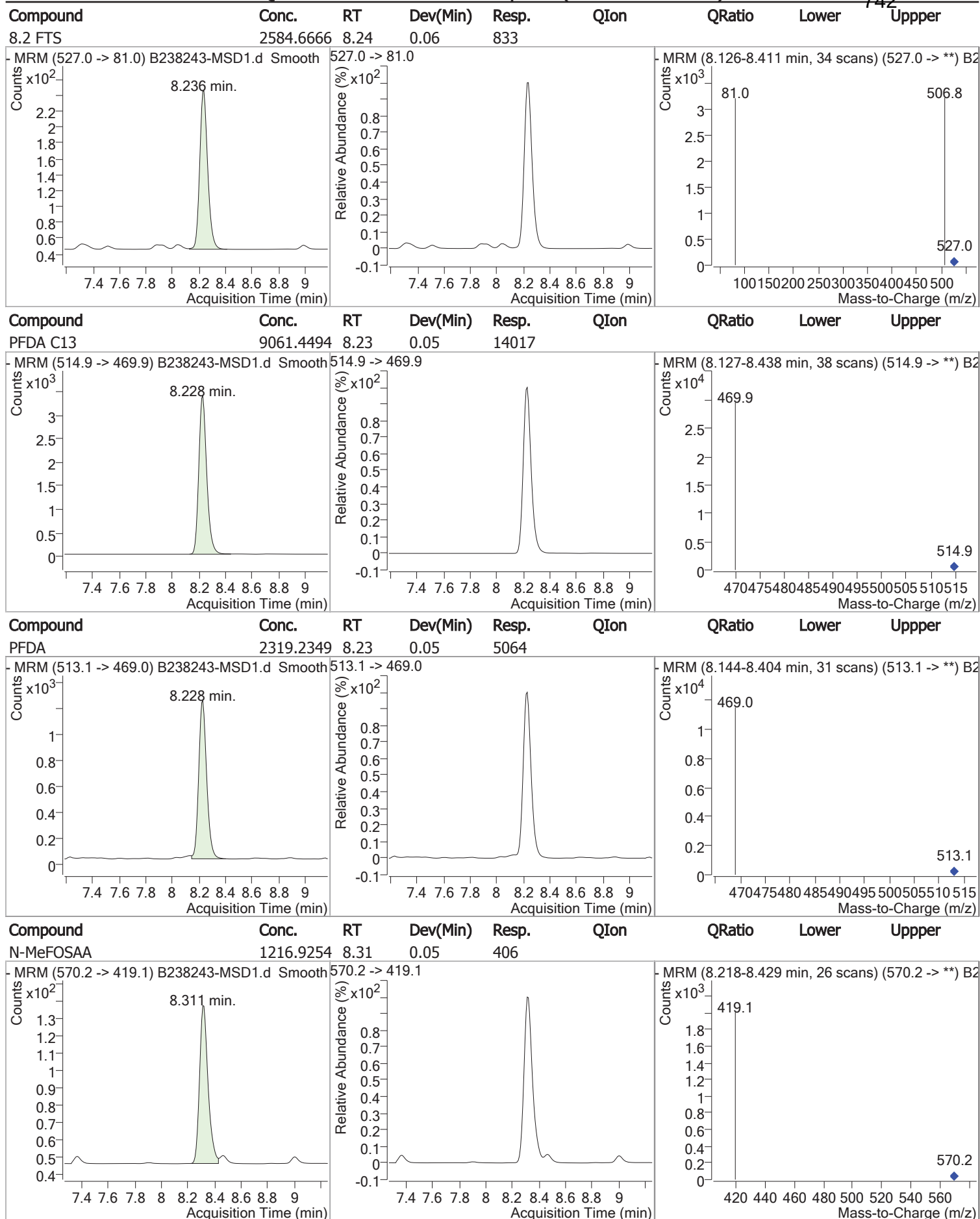
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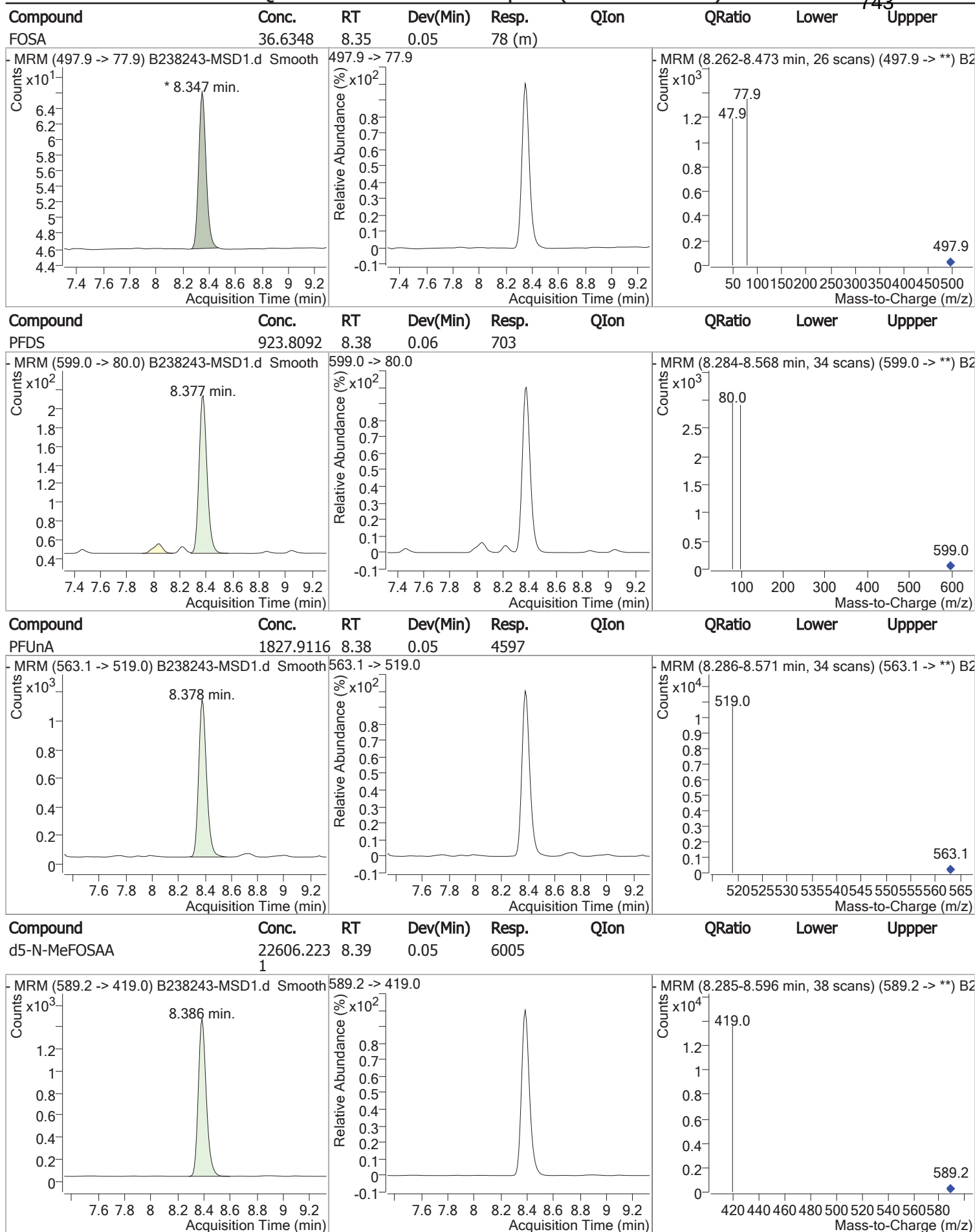
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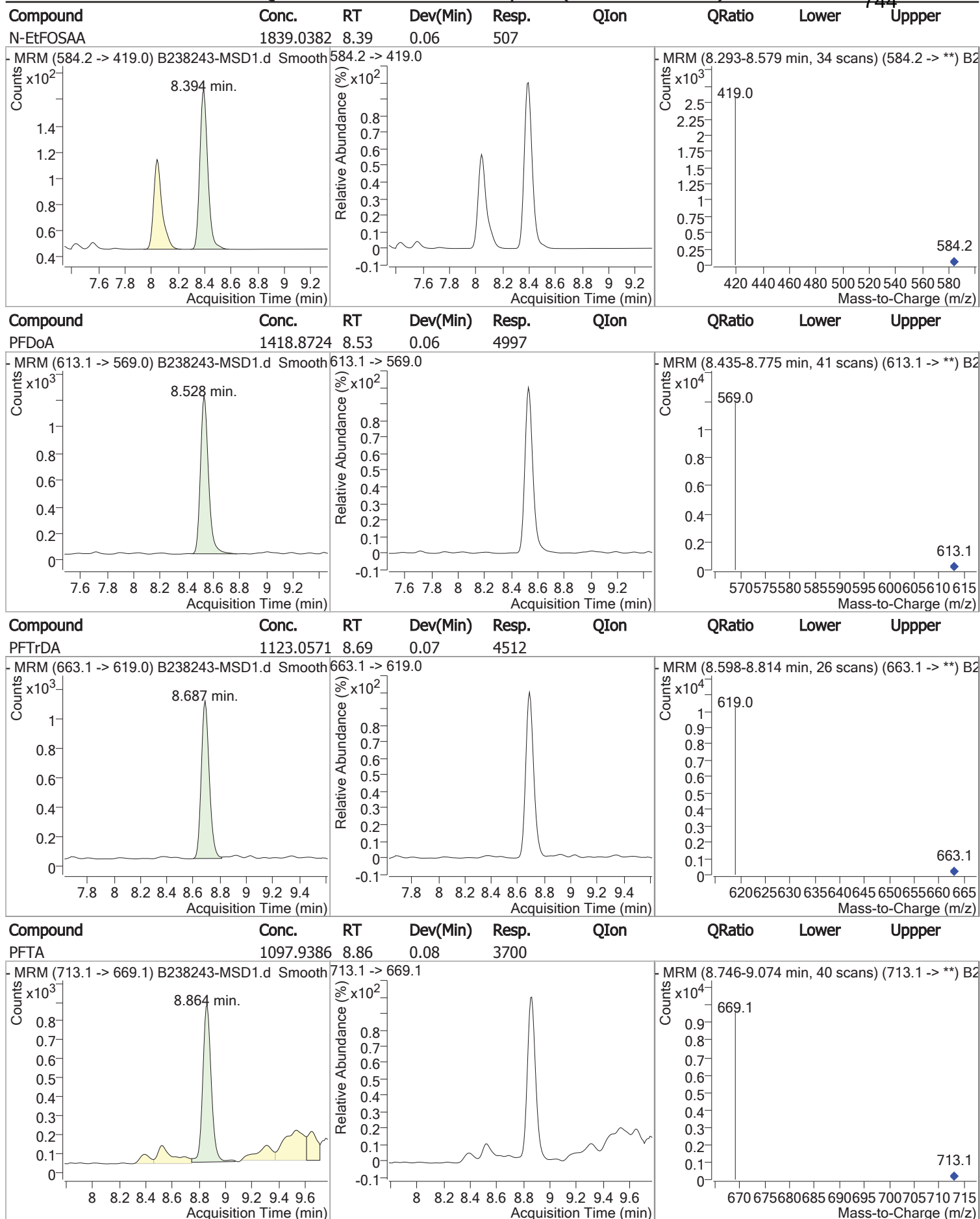
Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



Quantitation Results Report (Not Reviewed)



PREPARATION BENCH SHEET

745

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 R1Spiking 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 _____

Stop Date/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

S/L

JFC

Spikedby/Witnessed By

8/19/19
Date

JFC

Extracted By

8/19/19
Date

S039480

Instrument: HPLC1

Calibration 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

S039525

Instrument: HPLC1

Calibration ID: 1900263

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
S039525-CCV1	QC		1		1905418	1907362	
B238243-BS1	QC		2			1907362	

S039667

Instrument: HPLC1

Calibration ID: 1900263

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
S039667-CCV1	QC		1		1905418	1907362	
19H0528-07	PFAS trace	A	2			1907362	
S039667-CCV2	QC		3		1905419	1907362	