



**Groundwater Sample Results,
Level 4 Laboratory Report, Electronic Data
Deliverable, Data Validation Report, Sample Location
Report, SDG 1700852**

MCAS
El Toro, CA
April 2021

July 26, 2017

Vista Work Order No. 1700852

Ms. Nia Nikmanesh
KMEA
2423 Hoover Avenue
National City, CA 91950

Dear Ms. Nikmanesh,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on July 12, 2017. This sample set was analyzed on a rush turn-around time, under your Project Name 'MCAS El Toro, BRAC PFAS'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier
Laboratory Director



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Work Order No. 1700852**Case Narrative****Sample Condition on Receipt:**

Nine aqueous samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology.

Analytical Notes:**Modified EPA Method 537**

Samples "DUP01-20170711", "5-GW-05-DGMW68A-20170711" and "1-GW-01-PZ20-20170711" contained particulate and were centrifuged prior to extraction.

The samples were extracted and analyzed for a selected list of 14 PFAS using Modified EPA Method 537.

Holding Times

The samples were extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 the LOQ. The OPR recoveries were within the method acceptance criteria

The labeled standard recoveries outside the acceptance criteria are listed in the table below.

As requested, an MS/MSD was performed on sample "1-GW-01-MW204-20170711".

QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
1700852-01	EB 02_20170711	Modified EPA Method 537	13C3-PFBS	H	151
1700852-02	DUP01-20170711	Modified EPA Method 537	13C3-PFBS	H	152
1700852-03	1-GW-01-MW204-20170711	Modified EPA Method 537	13C3-PFBS	H	154
1700852-04	1-GW-01-MW206-20170711	Modified EPA Method 537	13C3-PFBS	H	162
1700852-05	2-GW-02DGMW59-20170711	Modified EPA Method 537	13C3-PFBS	H	163
1700852-07	5-GW-05-DGMW68A-20170711	Modified EPA Method 537	13C3-PFBS	H	152
1700852-08	1-GW-01-PZ20-20170711	Modified EPA Method 537	13C3-PFBS	H	152
1700852-09	1-GW-01-MW209-20170711	Modified EPA Method 537	13C3-PFBS	H	151
B7G0107-BLK1	B7G0107-BLK1	Modified EPA Method 537	13C3-PFBS	H	153
B7G0107-BLK1	B7G0107-BLK1	Modified EPA Method 537	13C2-PFTeDA	H	20.4
B7G0107-BS1	B7G0107-BS1	Modified EPA Method 537	13C3-PFBS	H	157
B7G0107-BS1	B7G0107-BS1	Modified EPA Method 537	13C2-PFTeDA	H	36.5
B7G0107-MSD1	B7G0107-MSD1	Modified EPA Method 537	13C3-PFBS	H	154

H = Recovery was outside laboratory acceptance criteria.

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Sample Inventory Report

Vista Sample ID	Client Sample ID		Sampled	Received	Components/Containers
1700852-01	EB 02_20170711		11-Jul-17 14:00	12-Jul-17 09:12	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700852-02	DUP01-20170711		11-Jul-17 08:20	12-Jul-17 09:12	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700852-03	1-GW-01-MW204-20170711	MS/MSD MS/MSD MS/MSD MS/MSD MS/MSD MS/MSD	11-Jul-17 09:30	12-Jul-17 09:12	HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700852-04	1-GW-01-MW206-20170711		11-Jul-17 11:25	12-Jul-17 09:12	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700852-05	2-GW-02DGMW59-20170711		11-Jul-17 13:25	12-Jul-17 09:12	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700852-06	2-GW-02NEW16-20170711		11-Jul-17 14:20	12-Jul-17 09:12	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700852-07	5-GW-05-DGMW68A-20170711		11-Jul-17 16:00	12-Jul-17 09:12	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700852-08	1-GW-01-PZ20-20170711		11-Jul-17 08:15	12-Jul-17 09:12	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700852-09	1-GW-01-MW209-20170711		11-Jul-17 10:20	12-Jul-17 09:12	HDPE Bottle, 125 mL HDPE Bottle, 125 mL

ANALYTICAL RESULTS

Sample ID: Method Blank						Modified EPA Method 537				
Matrix: Aqueous Sample Size: 0.125 L		QC Batch: B7G0107 Date Extracted: 24-Jul-2017 10:44				Lab Sample: B7G0107-BLK1 Date Analyzed: 25-Jul-17 14:58 Column: BEH C18				
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard		%R	LCL-UCL	Qualifiers
PFBS	ND	1.79	5.00	8.00		IS	13C3-PFBS	153	50 - 150	H
PFHxA	ND	2.18	5.00	8.00		IS	13C2-PFHxA	115	50 - 150	
PFHpA	ND	0.591	5.00	8.00		IS	13C4-PFHpA	97.5	50 - 150	
PFHxS	ND	0.947	5.00	8.00		IS	18O2-PFHxS	120	50 - 150	
PFOA	ND	0.651	5.00	8.00		IS	13C2-PFOA	103	50 - 150	
PFOS	ND	0.807	5.00	8.00		IS	13C8-PFOS	120	50 - 150	
PFNA	ND	0.810	5.00	8.00		IS	13C5-PFNA	92.0	50 - 150	
PFDA	ND	1.49	5.00	8.00		IS	13C2-PFDA	97.6	50 - 150	
MeFOSAA	ND	1.65	5.00	8.00		IS	d3-MeFOSAA	90.3	50 - 150	
PFUnA	ND	1.05	5.00	8.00		IS	13C2-PFUnA	85.8	50 - 150	
EtFOSAA	ND	1.37	5.00	8.00		IS	d5-EtFOSAA	82.1	50 - 150	
PFDaA	ND	0.792	5.00	8.00		IS	13C2-PFDaA	65.5	50 - 150	
PFTTrDA	ND	0.494	5.00	8.00		IS	13C2-PFTeDA	20.4	50 - 150	H
PFTeDA	ND	0.755	5.00	8.00						

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

Sample ID: OPR

Modified EPA Method 537

Matrix: Aqueous Sample Size: 0.125 L		QC Batch: B7G0107 Date Extracted: 24-Jul-2017 10:44			Lab Sample: B7G0107-BS1 Date Analyzed: 25-Jul-17 14:36 Column: BEH C18			
Analyte	Amt Found (ng/L)	Spike Amt	%R	Limits	Labeled Standard		%R	LCL-UCL
PFBS	73.4	80.0	91.8	70 - 130	IS	13C3-PFBS	157	50 - 150
PFHxA	69.6	80.0	87.0	70 - 130	IS	13C2-PFHxA	124	50 - 150
PFHpA	76.9	80.0	96.1	70 - 130	IS	13C4-PFHpA	97.1	50 - 150
PFHxS	73.3	80.0	91.6	70 - 130	IS	18O2-PFHxS	127	50 - 150
PFOA	74.6	80.0	93.3	70 - 130	IS	13C2-PFOA	117	50 - 150
PFOS	64.1	80.0	80.1	70 - 130	IS	13C8-PFOS	125	50 - 150
PFNA	78.4	80.0	98.0	70 - 130	IS	13C5-PFNA	108	50 - 150
PFDA	73.6	80.0	92.0	70 - 130	IS	13C2-PFDA	104	50 - 150
MeFOSAA	71.4	80.0	89.2	70 - 130	IS	d3-MeFOSAA	107	50 - 150
PFUnA	74.4	80.0	93.0	70 - 130	IS	13C2-PFUnA	91.1	50 - 150
EtFOSAA	72.7	80.0	90.9	70 - 130	IS	d5-EtFOSAA	102	50 - 150
PFDaA	74.3	80.0	92.9	70 - 130	IS	13C2-PFDaA	90.7	50 - 150
PFTTrDA	49.1	80.0	61.4	60 - 130	IS	13C2-PFTeDA	36.5	50 - 150
PFTeDA	74.6	80.0	93.3	70 - 130				

LCL-UCL - Lower control limit - upper control limit

Sample ID: EB 02_20170711 **Modified EPA Method 537**

Client Data			Sample Data			Laboratory Data					
Name:	KMEA		Matrix:	Water		Lab Sample:	1700852-01		Date Received:	12-Jul-2017 9:12	
Project:	MCAS El Toro, BRAC PFAS		Sample Size:	0.121 L		QC Batch:	B7G0107		Date Extracted:	24-Jul-2017 10:44	
Date Collected:	11-Jul-2017 14:00					Date Analyzed:	25-Jul-17 17:50 Column: BEH C18				
Location:											
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard		%R	LCL-UCL	Qualifiers	
PFBS	ND	1.85	5.17	8.25		IS	13C3-PFBS	151	50 - 150	H	
PFHxA	ND	2.25	5.17	8.25		IS	13C2-PFHxA	123	50 - 150		
PFHpA	ND	0.609	5.17	8.25		IS	13C4-PFHpA	110	50 - 150		
PFHxS	ND	0.977	5.17	8.25		IS	18O2-PFHxS	124	50 - 150		
PFOA	ND	0.671	5.17	8.25		IS	13C2-PFOA	115	50 - 150		
PFOS	ND	0.832	5.17	8.25		IS	13C8-PFOS	131	50 - 150		
PFNA	ND	0.835	5.17	8.25		IS	13C5-PFNA	106	50 - 150		
PFDA	ND	1.54	5.17	8.25		IS	13C2-PFDA	108	50 - 150		
MeFOSAA	ND	1.70	5.17	8.25		IS	d3-MeFOSAA	90.4	50 - 150		
PFUnA	ND	1.08	5.17	8.25		IS	13C2-PFUnA	98.3	50 - 150		
EtFOSAA	ND	1.41	5.17	8.25		IS	d5-EtFOSAA	88.1	50 - 150		
PFDaA	ND	0.817	5.17	8.25		IS	13C2-PFDaA	90.7	50 - 150		
PFTTrDA	ND	0.509	5.17	8.25		IS	13C2-PFTeDA	91.6	50 - 150		
PFTeDA	ND	0.779	5.17	8.25							

DL - Detection limit
RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit
Results reported to DL.
When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: DUP01-20170711
Modified EPA Method 537

Client Data			Sample Data			Laboratory Data					
Name:	KMEA		Matrix:	Groundwater		Lab Sample:	1700852-02		Date Received:	12-Jul-2017 9:12	
Project:	MCAS El Toro, BRAC PFAS		Sample Size:	0.120 L		QC Batch:	B7G0107		Date Extracted:	24-Jul-2017 10:44	
Date Collected:	11-Jul-2017 8:20					Date Analyzed:	25-Jul-17 18:01		Column:	BEH C18	
Location:											
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard		%R	LCL-UCL	Qualifiers	
PFBS	ND	1.87	5.21	8.34		IS	13C3-PFBS	152	50 - 150	H	
PFHxA	ND	2.27	5.21	8.34		IS	13C2-PFHxA	126	50 - 150		
PFHpA	ND	0.616	5.21	8.34		IS	13C4-PFHpA	109	50 - 150		
PFHxS	ND	0.987	5.21	8.34		IS	18O2-PFHxS	124	50 - 150		
PFOA	ND	0.678	5.21	8.34		IS	13C2-PFOA	113	50 - 150		
PFOS	ND	0.841	5.21	8.34		IS	13C8-PFOS	122	50 - 150		
PFNA	ND	0.844	5.21	8.34		IS	13C5-PFNA	125	50 - 150		
PFDA	ND	1.55	5.21	8.34		IS	13C2-PFDA	130	50 - 150		
MeFOSAA	ND	1.72	5.21	8.34		IS	d3-MeFOSAA	124	50 - 150		
PFUnA	ND	1.09	5.21	8.34		IS	13C2-PFUnA	119	50 - 150		
EtFOSAA	ND	1.43	5.21	8.34		IS	d5-EtFOSAA	122	50 - 150		
PFDaA	ND	0.825	5.21	8.34		IS	13C2-PFDaA	107	50 - 150		
PFTTrDA	ND	0.515	5.21	8.34		IS	13C2-PFTeDA	99.2	50 - 150		
PFTeDA	ND	0.787	5.21	8.34							

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

Sample ID: 1-GW-01-MW204-20170711

Modified EPA Method 537

Client Data		Sample Data		Laboratory Data					
Name:	KMEA	Matrix:	Groundwater	Lab Sample:	1700852-03	Date Received:	12-Jul-2017	9:12	
Project:	MCAS El Toro, BRAC PFAS	Sample Size:	0.116 L	QC Batch:	B7G0107	Date Extracted:	24-Jul-2017	10:44	
Date Collected:	11-Jul-2017 9:30			Date Analyzed:	25-Jul-17 18:12	Column:	BEH C18		
Location:									
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	19.6	1.92	5.39	8.58		IS 13C3-PFBS	154	50 - 150	H
PFHxA	21.0	2.34	5.39	8.58		IS 13C2-PFHxA	126	50 - 150	
PFHpA	4.25	0.634	5.39	8.58	J	IS 13C4-PFHpA	106	50 - 150	
PFHxS	190	1.02	5.39	8.58		IS 18O2-PFHxS	134	50 - 150	
PFOA	9.38	0.699	5.39	8.58		IS 13C2-PFOA	136	50 - 150	
PFOS	23.2	0.866	5.39	8.58		IS 13C8-PFOS	131	50 - 150	
PFNA	ND	0.869	5.39	8.58		IS 13C5-PFNA	133	50 - 150	
PFDA	ND	1.60	5.39	8.58		IS 13C2-PFDA	113	50 - 150	
MeFOSAA	ND	1.77	5.39	8.58		IS d3-MeFOSAA	131	50 - 150	
PFUnA	ND	1.13	5.39	8.58		IS 13C2-PFUnA	121	50 - 150	
EtFOSAA	ND	1.47	5.39	8.58		IS d5-EtFOSAA	115	50 - 150	
PFDaA	ND	0.850	5.39	8.58		IS 13C2-PFDaA	131	50 - 150	
PFTTrDA	ND	0.530	5.39	8.58		IS 13C2-PFTeDA	103	50 - 150	
PFTeDA	ND	0.810	5.39	8.58					

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

Matrix Spike Results

Modified EPA Method 537

Source Client ID: 1-GW-01-MW204-20170711				QC Batch: B7G0107						Lab Sample: B7G0107-MS1/B7G0107-MSD1					
Source LabNumber: 1700852-03				Date Extracted: 24-Jul-2017 10:44						Date Analyzed: 25-Jul-17 18:22 Column: BEH C18					
Matrix: Aqueous										25-Jul-17 18:33 Column: BEH C18					
Sample Size: 0.121/0.116 L															
Analyte	Spike-MS (ng/L)	MS %R	MS Qual.	Spike-MSD (ng/L)	MSD %R	MSD RPD	MSD Qual.	%R Limit	%RPD Limit	Labeled Standard		MS %R	MS Qualifiers	MSD %R	MS Qual.
PFBS	82.8	94.9		86.2	103	8.19		70 - 130	25	IS	13C3-PFBS	146		154	H
PFHxA	82.8	88.3		86.2	93.8	6.04		70 - 130	25	IS	13C2-PFHxA	119		124	
PFHpA	82.8	96.2		86.2	91.6	4.90		70 - 130	25	IS	13C4-PFHpA	96.3		109	
PFHxS	82.8	65.8	H	86.2	94.4	35.7	H	70 - 130	25	IS	18O2-PFHxS	119		125	
PFOA	82.8	84.6		86.2	90.0	6.19		70 - 130	25	IS	13C2-PFOA	117		114	
PFOS	82.8	78.8		86.2	90.1	13.4		70 - 130	25	IS	13C8-PFOS	125		126	
PFNA	82.8	96.6		86.2	98.7	2.15		70 - 130	25	IS	13C5-PFNA	115		128	
PFDA	82.8	88.2		86.2	102	14.5		70 - 130	25	IS	13C2-PFDA	115		125	
MeFOSAA	82.8	94.3		86.2	96.7	2.51		70 - 130	25	IS	d3-MeFOSAA	106		110	
PFUnA	82.8	97.1		86.2	95.5	1.66		70 - 130	25	IS	13C2-PFUnA	89.6		99.1	
EtFOSAA	82.8	90.6		86.2	104	13.8		70 - 130	25	IS	d5-EtFOSAA	106		109	
PFDaA	82.8	84.1		86.2	94.5	11.6		70 - 130	25	IS	13C2-PFDaA	109		116	
PFTTrDA	82.8	81.6		86.2	96.0	16.2		60 - 130	25	IS	13C2-PFTeDA	75.6		106	
PFTeDA	82.8	92.3		86.2	91.0	1.42		70 - 130	25						

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: 1-GW-01-MW206-20170711

Modified EPA Method 537

Client Data			Sample Data			Laboratory Data				
Name:	KMEA		Matrix:	Groundwater		Lab Sample:	1700852-04		Date Received:	12-Jul-2017 9:12
Project:	MCAS El Toro, BRAC PFAS		Sample Size:	0.121 L		QC Batch:	B7G0107		Date Extracted:	24-Jul-2017 10:44
Date Collected:	11-Jul-2017 11:25					Date Analyzed:	25-Jul-17 18:44 Column: BEH C18			
Location:										
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard		%R	LCL-UCL	Qualifiers
PFBS	ND	1.85	5.17	8.29		IS	13C3-PFBS	162	50 - 150	H
PFHxA	ND	2.26	5.17	8.29		IS	13C2-PFHxA	125	50 - 150	
PFHpA	ND	0.612	5.17	8.29		IS	13C4-PFHpA	111	50 - 150	
PFHxS	ND	0.981	5.17	8.29		IS	18O2-PFHxS	144	50 - 150	
PFOA	ND	0.674	5.17	8.29		IS	13C2-PFOA	126	50 - 150	
PFOS	ND	0.836	5.17	8.29		IS	13C8-PFOS	133	50 - 150	
PFNA	ND	0.839	5.17	8.29		IS	13C5-PFNA	113	50 - 150	
PFDA	ND	1.54	5.17	8.29		IS	13C2-PFDA	129	50 - 150	
MeFOSAA	ND	1.71	5.17	8.29		IS	d3-MeFOSAA	96.0	50 - 150	
PFUnA	ND	1.09	5.17	8.29		IS	13C2-PFUnA	106	50 - 150	
EtFOSAA	ND	1.42	5.17	8.29		IS	d5-EtFOSAA	94.6	50 - 150	
PFDaA	ND	0.820	5.17	8.29		IS	13C2-PFDaA	98.6	50 - 150	
PFTTrDA	ND	0.512	5.17	8.29		IS	13C2-PFTeDA	77.4	50 - 150	
PFTeDA	ND	0.782	5.17	8.29						

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

Sample ID: 2-GW-02DGMW59-20170711

Modified EPA Method 537

Client Data		Sample Data		Laboratory Data					
Name:	KMEA	Matrix:	Groundwater	Lab Sample:	1700852-05	Date Received:	12-Jul-2017	9:12	
Project:	MCAS El Toro, BRAC PFAS	Sample Size:	0.119 L	QC Batch:	B7G0107	Date Extracted:	24-Jul-2017	10:44	
Date Collected:	11-Jul-2017 13:25			Date Analyzed:	25-Jul-17 18:55	Column:	BEH C18		
Location:									
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	11.6	1.88	5.25	8.42		IS 13C3-PFBS	163	50 - 150	H
PFHxA	20.3	2.29	5.25	8.42		IS 13C2-PFHxA	131	50 - 150	
PFHpA	7.50	0.622	5.25	8.42	J	IS 13C4-PFHpA	111	50 - 150	
PFHxS	8.84	0.997	5.25	8.42		IS 18O2-PFHxS	132	50 - 150	
PFOA	31.8	0.685	5.25	8.42		IS 13C2-PFOA	118	50 - 150	
PFOS	11.6	0.850	5.25	8.42		IS 13C8-PFOS	125	50 - 150	
PFNA	ND	0.853	5.25	8.42		IS 13C5-PFNA	118	50 - 150	
PFDA	ND	1.57	5.25	8.42		IS 13C2-PFDA	117	50 - 150	
MeFOSAA	ND	1.74	5.25	8.42		IS d3-MeFOSAA	109	50 - 150	
PFUnA	ND	1.11	5.25	8.42		IS 13C2-PFUnA	100	50 - 150	
EtFOSAA	ND	1.44	5.25	8.42		IS d5-EtFOSAA	104	50 - 150	
PFDaA	ND	0.834	5.25	8.42		IS 13C2-PFDaA	99.4	50 - 150	
PFTTrDA	ND	0.520	5.25	8.42		IS 13C2-PFTeDA	66.1	50 - 150	
PFTeDA	ND	0.795	5.25	8.42					

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

Sample ID: 2-GW-02NEW16-20170711

Modified EPA Method 537

Client Data		Sample Data		Laboratory Data	
Name:	KMEA	Matrix:	Groundwater	Lab Sample:	1700852-06
Project:	MCAS El Toro, BRAC PFAS	Sample Size:	0.124 L	QC Batch:	B7G0107
Date Collected:	11-Jul-2017 14:20			Date Received:	12-Jul-2017 9:12
Location:				Date Extracted:	24-Jul-2017 10:44
				Date Analyzed:	25-Jul-17 19:05 Column: BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	9.74	1.81	5.04	8.09		IS 13C3-PFBS	149	50 - 150	
PFHxA	12.1	2.21	5.04	8.09		IS 13C2-PFHxA	126	50 - 150	
PFHpA	3.80	0.598	5.04	8.09	J	IS 13C4-PFHpA	109	50 - 150	
PFHxS	37.5	0.958	5.04	8.09		IS 18O2-PFHxS	126	50 - 150	
PFOA	7.67	0.659	5.04	8.09	J	IS 13C2-PFOA	130	50 - 150	
PFOS	2.92	0.816	5.04	8.09	J	IS 13C8-PFOS	135	50 - 150	
PFNA	ND	0.820	5.04	8.09		IS 13C5-PFNA	123	50 - 150	
PFDA	ND	1.51	5.04	8.09		IS 13C2-PFDA	114	50 - 150	
MeFOSAA	ND	1.67	5.04	8.09		IS d3-MeFOSAA	105	50 - 150	
PFUnA	ND	1.06	5.04	8.09		IS 13C2-PFUnA	113	50 - 150	
EtFOSAA	ND	1.39	5.04	8.09		IS d5-EtFOSAA	107	50 - 150	
PFDaA	ND	0.801	5.04	8.09		IS 13C2-PFDaA	117	50 - 150	
PFTTrDA	ND	0.500	5.04	8.09		IS 13C2-PFTeDA	99.8	50 - 150	
PFTeDA	ND	0.764	5.04	8.09					

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

Sample ID: 5-GW-05-DGMW68A-20170711 **Modified EPA Method 537**

Client Data			Sample Data			Laboratory Data				
Name:	KMEA		Matrix:	Groundwater		Lab Sample:	1700852-07	Date Received:	12-Jul-2017 9:12	
Project:	MCAS El Toro, BRAC PFAS		Sample Size:	0.108 L		QC Batch:	B7G0107	Date Extracted:	24-Jul-2017 10:44	
Date Collected:	11-Jul-2017 16:00					Date Analyzed:	25-Jul-17 19:16 Column: BEH C18			
Location:										
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard		%R	LCL-UCL	Qualifiers
PFBS	4.04	2.06	5.79	9.22	J	IS	13C3-PFBS	152	50 - 150	H
PFHxA	6.91	2.51	5.79	9.22	J	IS	13C2-PFHxA	116	50 - 150	
PFHpA	3.14	0.681	5.79	9.22	J	IS	13C4-PFHpA	92.5	50 - 150	
PFHxS	7.33	1.09	5.79	9.22	J	IS	18O2-PFHxS	120	50 - 150	
PFOA	26.5	0.750	5.79	9.22		IS	13C2-PFOA	118	50 - 150	
PFOS	7.54	0.930	5.79	9.22	J	IS	13C8-PFOS	112	50 - 150	
PFNA	ND	0.934	5.79	9.22		IS	13C5-PFNA	107	50 - 150	
PFDA	ND	1.72	5.79	9.22		IS	13C2-PFDA	109	50 - 150	
MeFOSAA	ND	1.90	5.79	9.22		IS	d3-MeFOSAA	117	50 - 150	
PFUnA	ND	1.21	5.79	9.22		IS	13C2-PFUnA	107	50 - 150	
EtFOSAA	ND	1.58	5.79	9.22		IS	d5-EtFOSAA	117	50 - 150	
PFDaA	ND	0.913	5.79	9.22		IS	13C2-PFDaA	112	50 - 150	
PFTTrDA	ND	0.569	5.79	9.22		IS	13C2-PFTeDA	92.1	50 - 150	
PFTeDA	ND	0.870	5.79	9.22						

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

Sample ID: 1-GW-01-PZ20-20170711

Modified EPA Method 537

Client Data			Sample Data			Laboratory Data					
Name:	KMEA		Matrix:	Groundwater		Lab Sample:	1700852-08		Date Received:	12-Jul-2017 9:12	
Project:	MCAS El Toro, BRAC PFAS		Sample Size:	0.110 L		QC Batch:	B7G0107		Date Extracted:	24-Jul-2017 10:44	
Date Collected:	11-Jul-2017 8:15					Date Analyzed:	25-Jul-17 19:27 Column: BEH C18				
Location:											
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard		%R	LCL-UCL	Qualifiers	
PFBS	ND	2.04	5.68	9.12		IS	13C3-PFBS	152	50 - 150	H	
PFHxA	ND	2.49	5.68	9.12		IS	13C2-PFHxA	115	50 - 150		
PFHpA	ND	0.674	5.68	9.12		IS	13C4-PFHpA	106	50 - 150		
PFHxS	ND	1.08	5.68	9.12		IS	18O2-PFHxS	131	50 - 150		
PFOA	ND	0.742	5.68	9.12		IS	13C2-PFOA	112	50 - 150		
PFOS	ND	0.920	5.68	9.12		IS	13C8-PFOS	126	50 - 150		
PFNA	ND	0.923	5.68	9.12		IS	13C5-PFNA	116	50 - 150		
PFDA	ND	1.70	5.68	9.12		IS	13C2-PFDA	109	50 - 150		
MeFOSAA	ND	1.88	5.68	9.12		IS	d3-MeFOSAA	119	50 - 150		
PFUnA	ND	1.20	5.68	9.12		IS	13C2-PFUnA	109	50 - 150		
EtFOSAA	ND	1.56	5.68	9.12		IS	d5-EtFOSAA	117	50 - 150		
PFDaA	ND	0.903	5.68	9.12		IS	13C2-PFDaA	95.1	50 - 150		
PFTTrDA	ND	0.563	5.68	9.12		IS	13C2-PFTeDA	94.7	50 - 150		
PFTeDA	ND	0.861	5.68	9.12							

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

Sample ID: 1-GW-01-MW209-20170711
Modified EPA Method 537

Client Data		Sample Data		Laboratory Data					
Name:	KMEA	Matrix:	Groundwater	Lab Sample:	1700852-09	Date Received:	12-Jul-2017	9:12	
Project:	MCAS El Toro, BRAC PFAS	Sample Size:	0.117 L	QC Batch:	B7G0107	Date Extracted:	24-Jul-2017	10:44	
Date Collected:	11-Jul-2017 10:20			Date Analyzed:	25-Jul-17 19:38	Column:	BEH C18		
Location:									
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	90.0	1.91	5.34	8.52		IS 13C3-PFBS	151	50 - 150	H
PFHxA	149	2.32	5.34	8.52		IS 13C2-PFHxA	121	50 - 150	
PFHpA	44.7	0.629	5.34	8.52		IS 13C4-PFHpA	101	50 - 150	
PFHxS	617	1.01	5.34	8.52		IS 18O2-PFHxS	120	50 - 150	
PFOA	62.2	0.693	5.34	8.52		IS 13C2-PFOA	109	50 - 150	
PFOS	333	0.859	5.34	8.52		IS 13C8-PFOS	126	50 - 150	
PFNA	2.63	0.863	5.34	8.52	J	IS 13C5-PFNA	116	50 - 150	
PFDA	ND	1.59	5.34	8.52		IS 13C2-PFDA	121	50 - 150	
MeFOSAA	ND	1.76	5.34	8.52		IS d3-MeFOSAA	95.3	50 - 150	
PFUnA	ND	1.12	5.34	8.52		IS 13C2-PFUnA	84.3	50 - 150	
EtFOSAA	ND	1.46	5.34	8.52		IS d5-EtFOSAA	94.7	50 - 150	
PFDaA	ND	0.843	5.34	8.52		IS 13C2-PFDaA	96.4	50 - 150	
PFTTrDA	ND	0.526	5.34	8.52		IS 13C2-PFTeDA	88.3	50 - 150	
PFTeDA	ND	0.804	5.34	8.52					

DL - Detection limit

RL - Reporting limit

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.

Only the linear isomer is reported for all other analytes.

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank.
D	Dilution
E	The associated compound concentration exceeded the calibration range of the instrument.
H	Recovery and/or RPD was outside laboratory acceptance limits.
I	Chemical Interference
J	The amount detected is below the Reporting Limit/LOQ.
M	Estimated Maximum Possible Concentration. (CA Region 2 projects only)
*	See Cover Letter
Conc.	Concentration
NA	Not applicable
ND	Not Detected
TEQ	Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
Arkansas Department of Environmental Quality	17-015-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-18
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2016026
Minnesota Department of Health	1175673
Nevada Division of Environmental Protection	CA004132017-1
New Hampshire Environmental Accreditation Program	207716
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-008
Pennsylvania Department of Environmental Protection	013
Texas Commission on Environmental Quality	T104704189-17-8
Virginia Department of General Services	8621
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	Method
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23

MATRIX: Biological Tissue	
Description of Test	Method
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	Method
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537

MATRIX: Non-Potable Water	
Description of Test	Method
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	Method
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope	EPA 1613B

Dilution GC/HRMS	
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

**1104 Windfield Way
El Dorado Hills, CA 95762
TEL: 916-673-1520**

1700852 -0.5°C

CHAIN OF CUSTODY RECORD

DATE: 7/11/2017

PAGE: 1 OF 1

Vista PM: Karen Volpendesta

LABORATORY CLIENT: AMEC Foster Wheeler E & I, Inc. ADDRESS: 9210 Sky Park Court CITY: San Diego, CA 92123 TEL: 603.639.3400 E-Mail: medora.hackler@amecfw.com E-MAIL: marie.bevier@amecfw.com						CLIENT PROJECT NAME / NUMBER: MCAS El Toro, BRAC PFAS PROJECT CONTACT: Medora Hackler/Marie Bevier SAMPLER(S): (SIGNATURE) <i>Uey Rute</i>						P.O. NO.: TO 008 CONTRACT NO.: N62473-16-D-2405 LAB USE ONLY <table border="1"><tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr></table>						☐	☐	☐	☐	☐	☐																																																																																																																																																																																																																																																																																										
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<table border="1"><thead><tr><th rowspan="2">LAB USE ONLY</th><th rowspan="2">SAMPLE ID</th><th colspan="2">SAMPLING</th><th rowspan="2">Matrix</th><th rowspan="2">#Cont</th><th rowspan="2">QC Level</th><th rowspan="2">PFOA, PFOS, and PFBS (U.S. EPA 537 Mod.)</th><th colspan="16"></th></tr><tr><th>DATE</th><th>TIME</th><th colspan="16"></th></tr></thead><tbody><tr><td></td><td>EB02</td><td>7/11/17</td><td>14:00</td><td>BW</td><td>2</td><td></td><td>X</td><td colspan="16"></td></tr><tr><td></td><td>1-GW-01-PZ20-20170711</td><td></td><td>8:15</td><td>GW</td><td>2</td><td>IV</td><td>X</td><td colspan="16"></td></tr><tr><td></td><td>DUP01-20170711</td><td></td><td>8:20</td><td></td><td>2</td><td></td><td>X</td><td colspan="16"></td></tr><tr><td></td><td>1-GW-01-MW204-20170711</td><td></td><td>9:30</td><td></td><td>6</td><td></td><td>X</td><td colspan="16">MS / MSD</td></tr><tr><td></td><td>1-GW-01-MW209-20170711</td><td></td><td>10:20</td><td></td><td>2</td><td>IV</td><td>X</td><td colspan="16"></td></tr><tr><td></td><td>1-GW-01-MW206-20170711</td><td></td><td>11:25</td><td></td><td>2</td><td></td><td>X</td><td colspan="16"></td></tr><tr><td></td><td>2-GW-02DGMW59-20170711</td><td></td><td>13:25</td><td></td><td>2</td><td></td><td>X</td><td colspan="16"></td></tr><tr><td></td><td>2-GW-02 NEW16-20170711</td><td></td><td>14:20</td><td></td><td>2</td><td></td><td>X</td><td colspan="16"></td></tr><tr><td></td><td>5-GW-05-DGMW68A-20170711</td><td></td><td>16:00</td><td></td><td>2</td><td></td><td>X</td><td colspan="16"></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td colspan="16"></td></tr></tbody></table>						LAB USE ONLY	SAMPLE ID	SAMPLING		Matrix	#Cont	QC Level	PFOA, PFOS, and PFBS (U.S. EPA 537 Mod.)																	DATE	TIME																		EB02	7/11/17	14:00	BW	2		X																		1-GW-01-PZ20-20170711		8:15	GW	2	IV	X																		DUP01-20170711		8:20		2		X																		1-GW-01-MW204-20170711		9:30		6		X	MS / MSD																	1-GW-01-MW209-20170711		10:20		2	IV	X																		1-GW-01-MW206-20170711		11:25		2		X																		2-GW-02DGMW59-20170711		13:25		2		X																		2-GW-02 NEW16-20170711		14:20		2		X																		5-GW-05-DGMW68A-20170711		16:00		2		X																																																										
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* Samples logged in to workorder 1700859 BUB 07/12/17

Sample Log-in Checklist

Vista Work Order #: 1700852 TAT 14 days

Samples Arrival:	Date/Time 07/12/17 0912	Initials: UBB	Location: WR-2 Shelf/Rack: NA
Logged In:	Date/Time 7/12/17 1131	Initials: UBB	Location: WR-2 Shelf/Rack: 2-4
Delivered By:	☒ FedEx ☐ UPS ☐ On Trac ☐ GSO ☐ DHL ☐ Hand Delivered ☐ Other		
Preservation:	☒ Ice ☐ Blue Ice ☐ Dry Ice ☐ None		
Temp °C: 0.2 (uncorrected)	Time: 0920	Thermometer ID: DT-3	
Temp °C: -0.5 (corrected)	Probe used: Yes ☒ No ☐		

		YES	NO	NA
Adequate Sample Volume Received?		✓		
Holding Time Acceptable?		✓		
Shipping Container(s) Intact?		✓		
Shipping Custody Seals Intact?		✓		
Shipping Documentation Present?		✓		
Airbill	Trk # 8081 9079 4100	✓		
Sample Container Intact?		✓		
Sample Custody Seals Intact?				✓
Chain of Custody / Sample Documentation Present?		✓		
COC Anomaly/Sample Acceptance Form completed?			✓	✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?				✓
Preservation Documented:	Na ₂ S ₂ O ₃ Trizma <u>None</u>	<u>Yes</u>	No	NA
Shipping Container	Vista Client <u>Retain</u>	Return	Dispose	

Comments: UBB 7/12/17
~~Samples + GW-01-PZ20-20170711-1/B~~ } Has a lime green tint
~~DUP - 20170711~~ } UBB 7/12/17
 5-GW-05-DGMWBA-20170711 - red brown sediment present.

EXTRACTION INFORMATION

Process Sheet
Workorder: 1700852

RX

Prep Expiration: 2017-Jul-25
Client: KMEA

Workorder Due: 26-Jul-17 00:00

TAT: 14

Method: 537M PFAS DOD (LOQ as mRL)
Matrix: Aqueous

Prep Batch: 3760107

Prep Data Entered: HB 7/25/17
Date and Initials

Version: 537 (14 Analyte)

Initial Sequence: _____

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1700852-01	B ☐	~~EB 02-20170711~~ EB02 7/24/17	12-Jul-17 09:12	WR-2 A-4	
1700852-02	B ☒	DUP01-20170711	12-Jul-17 09:12	WR-2 A-4	
1700852-03	B ☒	1-GW-01-MW204-20170711	12-Jul-17 09:12	WR-2 A-4	MS/MSD
1700852-04	B ☒	1-GW-01-MW206-20170711	12-Jul-17 09:12	WR-2 A-4	
1700852-05	B ☒	2-GW-02DGMW59-20170711	12-Jul-17 09:12	WR-2 A-4	
1700852-06	B ☒	2-GW-02NEW16-20170711	12-Jul-17 09:12	WR-2 A-4	
1700852-07	B ☒	5-GW-05-DGMW68A-20170711	12-Jul-17 09:12	WR-2 A-4	
1700852-08	B ☒	1-GW-01-PZ20-20170711	12-Jul-17 09:12	WR-2 A-4	
1700852-09	B ☐	~~1-GW-02-MW209-20170711~~ 1-GW-01-MW209-20170711	12-Jul-17 09:12	WR-2 A-4	

Vista PM: Martha Maier

Vial Box ID: So-fishticated

Sample Reconciled By: QAB 7/24/17

Batch: B7G0107

Matrix: Aqueous

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1700851-01RE1	0.12032 ✓	NA	NA	1000	24-Jul-17 10:44	BAP			Water	537M PFAS DOD (LOQ as
1700851-02RE1	0.11963 ✓			1000	24-Jul-17 10:44	BAP			Water	537M PFAS DOD (LOQ as
1700851-03RE1	0.116 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700851-04RE1	0.1162 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700851-05RE1	0.12103 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700851-06RE1	0.11733 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700851-07RE1	0.12048 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700851-08RE1	0.12071 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700851-09RE1	0.11384 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700851-10RE1	0.12055 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700852-01RE1	0.12122 ✓			1000	24-Jul-17 10:44	BAP			Water	537M PFAS DOD (LOQ as
1700852-02RE1	0.11996 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700852-03RE1	0.11649 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700852-04RE1	0.12068 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700852-05RE1	0.11874 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700852-06RE1	0.12355 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700852-07RE1	0.10845 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700852-08RE1	0.10965 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
1700852-09RE1	0.11738 ✓			1000	24-Jul-17 10:44	BAP			Groundwater	537M PFAS DOD (LOQ as
B7G0107-BLK1	0.125 ✓			1000	24-Jul-17 10:44	BAP				QC
B7G0107-BS1	0.125 ✓			1000	24-Jul-17 10:44	BAP	17D2705 ✓	10 ✓		QC
B7G0107-MS1	0.12078 ✓			1000	24-Jul-17 10:44	BAP	17D2705 ✓	10 ✓		QC
B7G0107-MS2	0.11945 ✓			1000	24-Jul-17 10:44	BAP	17D2705 ✓	10 ✓		QC
B7G0107-MSD1	0.11599 ✓			1000	24-Jul-17 10:44	BAP	17D2705 ✓	10 ✓		QC
B7G0107-MSD2	0.12098 ✓			1000	24-Jul-17 10:44	BAP	17D2705 ✓	10 ✓		QC

HB 7/25/17

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOO as mRL)

B7G0107

Chemist: 80

Prep Date/Time: 24-Jul-17 10:44

Prepared using: LCMS - SPE Extraction-LCMS

C	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
☐	1700851-10RE1	6	2	0	2	148.01	27.46	0.12055	✓	7/24/17	BP 7/25/17
☐	1700852-01RE1	5	2	0	2	148.23	27.01	0.12122	✓		
☐	1700852-02RE1 (A)	7	2	0	2	147.12	27.16	0.11996	✓		
☐	1700852-03RE1	6	2	0	2	143.78	27.29	0.11649	✓		
☐	1700852-04RE1	6	2	0	2	147.91	27.23	0.12068	✓		
☐	1700852-05RE1	6	2	0	2	146.00	27.26	0.11874	✓		
☐	1700852-06RE1	6	2	0	2	150.78	27.23	0.12355	✓		
☐	1700852-07RE1 (A)	7	2	0	2	136.19	27.24	0.10845	✓		
☐	1700852-08RE1 (A)	7	2	0	2	136.99	27.34	0.10965	✓		
☐	1700852-09RE1	6	2	0	2	144.64	27.26	0.11738	✓		

(A) sample was centrifuged to remove particulate. 7/24/17

IS Name <u>17G1307, 10mL</u> (V6)	NS Name <u>17D2705, 10mL</u> (V1)	RS Name <u>17F3038, 10mL</u> (V2)	SPE Chem: _____	Check Out: Chemist/Date: <u>MB 7/24/17</u>
			Ele SOLV: _____	Check In: Chemist/Date: <u>empty NA</u>
			Final Volume(s) _____	Balance ID: <u>HRMS-8</u>
				pH Adjusted: Chemist/Date: <u>AB 7/24/17</u>

Comments: Assume 1 g = 1 mL

Work Order 1700852

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOO as mRL)

B7G0107

Chemist: BP

Prep Date/Time: 24-Jul-17 10:44

Prepared using: LCMS - SPE Extraction-LCMS

C	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
☐	B7G0107-BLK1	5	2	0	2	NA	NA	(0.125)	BP 7/24/17	BP 7/24/17	BP 7/25/17
☐	B7G0107-BS1	5	2	0	2	↓	↓	↓			
☐	B7G0107-MS1 1700852-03RE1	6	2	0	2	147.99	27.21	0.12078			
☐	B7G0107-MS2 1700851-10RE1	6	2	0	2	146.87	27.42	0.11945			
☐	B7G0107-MSD1 1700852-03RE1	6	2	0	2	143.24	27.25	0.11599			
☐	B7G0107-MSD2 1700851-10RE1	6	2	0	2	148.38	27.40	0.12098			
☐	1700851-01RE1	5	2	0	2	147.52	27.20	0.12032			
☐	1700851-02RE1	5	2	0	2	146.85	27.22	0.11963			
☐	1700851-03RE1	6	2	0	2	143.32	27.32	0.11600			
☐	1700851-04RE1 (A)	6	2	0	2	143.55	27.35	0.11620			
☐	1700851-05RE1	6	2	0	2	148.23	27.20	0.12103			
☐	1700851-06RE1	7	2	0	2	144.49	27.16	0.11733			
☐	1700851-07RE1	7	2	0	2	147.48	27.00	0.12048			
☐	1700851-08RE1	6	2	0	2	147.85	27.14	0.12071			
☐	1700851-09RE1 (A)	6	2	0	2	141.03	27.19	0.11384			

(A) Sample was centrifuged to remove particulate HB 7/24/17

IS Name 17G1307, 10mL	NS Name 17D2705, 10mL	RS Name 17F3038, 10mL	SPE Chem: Strata X-NW 334 200mg/6mL	Check Out: Chemist/Date: HB 7/24/17
			Ele SOLV: 0.5% NH ₄ Cl in MeOH/MeOH	Check In: Chemist/Date: empty NA
			Final Volume(s) 1 mL	Balance ID: 112M-8
				pH Adjusted: Chemist/Date: HB 7/24/17

Comments: Assume 1 g = 1 mL

SAMPLE DATA – MODIFIED EPA METHOD 537

Dataset: U:\Q4.PRO\results\170725M1\170725M1-5.qld

Last Altered: Wednesday, July 26, 2017 10:39:58 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:40:13 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_5, Date: 25-Jul-2017, Time: 14:58:18, ID: B7G0107-BLK1 Method Blank 0.125, Description: Method Blank

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	1.15e0	6.58e3	0.125		2.96	3.00	0.00219		
2	4 PFHxA	313.2 > 268.9		1.76e4	0.125		3.19				
3	5 PFHpA	363 > 318.9		4.13e4	0.125		3.45				
4	6 PFHxS	398.9 > 79.6	4.29e1	4.54e3	0.125		3.56	3.55	0.118	0.606	
5	8 PFOA	413 > 368.7		5.18e4	0.125		3.65				
6	10 PFNA	462.9 > 418.8		4.27e4	0.125		3.83				
7	12 PFOS	499 > 79.9		9.68e3	0.125		3.89				
8	13 PFDA	513 > 468.8	6.58e1	3.82e4	0.125		4.01	4.01	0.0215		
9	15 N-MeFOSAA	570.1 > 419		6.24e3	0.125		4.03				
10	16 N-EtFOSAA	584.2 > 419		5.79e3	0.125		4.10				
11	17 PFUnA	562.9 > 518.9	1.08e2	3.21e4	0.125		4.17	4.20	0.0419	0.306	
12	19 PFDoA	612.9 > 318.8		2.40e3	0.125		4.34				

Dataset: U:\Q4.PRO\results\170725M1\170725M1-5.qld

Last Altered: Wednesday, July 26, 2017 10:39:58 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:40:35 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_5, Date: 25-Jul-2017, Time: 14:58:18, ID: B7G0107-BLK1 Method Blank 0.125, Description: Method Blank

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9		2.40e3	0.125		4.50				
2	22 PFTeDA	712.9 > 668.8		5.50e3	0.125		4.68				
3	28 13C3-PFBA	216.1 > 171.8	3.19e4	3.35e4	0.125	0.820	1.54	1.55	11.9	116	116.1
4	29 13C3-PFPeA	266 > 221.8	4.65e4	5.55e4	0.125	0.248	2.77	2.80	4.19	135	135.1
5	30 13C3-PFBS	302 > 98.8	6.58e3	5.55e4	0.125	0.031	2.96	3.00	0.593	153	152.6
6	31 13C2-PFHxA	315 > 269.8	1.76e4	5.55e4	0.125	0.276	3.19	3.22	1.59	46.0	114.9
7	32 13C4-PFHpA	367.2 > 321.8	4.13e4	5.55e4	0.125	0.306	3.45	3.48	3.73	97.5	97.5
8	33 18O2-PFHxS	403 > 102.6	4.54e3	9.60e3	0.125	0.393	3.56	3.55	5.91	120	120.3
9	34 13C2-6:2 FTS	429.1 > 408.9	8.61e3	4.71e4	0.125	0.158	3.64	3.67	2.28	116	115.9
10	35 13C2-PFOA	414.9 > 369.7	5.18e4	4.71e4	0.125	1.067	3.65	3.68	13.8	103	103.0
11	36 13C5-PFNA	468.2 > 422.9	4.27e4	5.44e4	0.125	0.852	3.83	3.85	9.80	92.0	92.0
12	37 13C8-PFOSA	506.1 > 77.7	2.26e3	3.89e4	0.125	0.098	3.84	3.86	0.726	59.1	59.1
13	38 13C8-PFOS	507 > 79.9	9.68e3	8.65e3	0.125	0.936	3.89	3.90	14.0	120	119.5
14	39 13C2-PFDA	515.1 > 469.9	3.82e4	4.83e4	0.125	0.810	4.01	4.02	9.88	97.6	97.6
15	40 13C2-8:2 FTS	529.1 > 508.7	4.47e3	4.83e4	0.125	0.086	4.00	4.02	1.16	108	108.1
16	41 d3-N-MeFOSAA	573.3 > 419	6.24e3	3.89e4	0.125	0.014	4.03	4.05	2.01	1170	90.3
17	42 d5-N-EtFOSAA	589.3 > 419	5.79e3	3.89e4	0.125	0.014	4.12	4.11	1.86	1070	82.1
18	43 13C2-PFUnA	565 > 519.8	3.21e4	3.89e4	0.125	0.962	4.17	4.18	10.3	85.8	85.8
19	44 13C2-PFDoA	615 > 569.7	2.40e3	3.89e4	0.125	0.094	4.34	4.34	0.773	65.5	65.5
20	46 13C2-PFTeDA	714.8 > 669.6	5.50e3	3.89e4	0.125	0.694	4.68	4.69	1.77	20.4	20.4
21	48 13C2-PFHxDA	815 > 769.7	1.25e3	3.89e4	0.125	0.843	5.06	5.05	0.403	3.82	9.6
22	51 13C4-PFBA	217 > 171.8	3.35e4	3.35e4	0.125	1.000	1.54	1.55	12.5	100	100.0
23	52 13C5-PFHxA	318 > 272.9	5.55e4	5.55e4	0.125	1.000	3.19	3.22	5.00	40.0	100.0
24	53 13C3-PFHxS	401.9 > 79.9	9.60e3	9.60e3	0.125	1.000	3.56	3.55	12.5	100	100.0
25	54 13C8-PFOA	421.3 > 376	4.71e4	4.71e4	0.125	1.000	3.65	3.67	12.5	100	100.0
26	55 13C9-PFNA	472.2 > 426.9	5.44e4	5.44e4	0.125	1.000	3.83	3.85	12.5	100	100.0
27	56 13C4-PFOS	503 > 79.9	8.65e3	8.65e3	0.125	1.000	3.89	3.90	12.5	100	100.0
28	57 13C6-PFDA	519.1 > 473.7	4.83e4	4.83e4	0.125	1.000	4.01	4.02	12.5	100	100.0
29	58 13C7-PFUnA	570.1 > 524.8	3.89e4	3.89e4	0.125	1.000	4.17	4.18	12.5	100	100.0
30	59 Total PFBS	299 > 79.7	1.15e0	6.58e3	0.125		2.96		0.000		
31	60 Total PFHxS	398.9 > 79.6	4.29e1	4.54e3	0.125		3.52		0.118	0.606	
32	61 Total PFOA	413 > 368.7	0.00e0	5.18e4	0.125		3.65		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-5.qld

Last Altered: Wednesday, July 26, 2017 10:39:58 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:40:35 Pacific Daylight Time

Name: 170725M1_5, Date: 25-Jul-2017, Time: 14:58:18, ID: B7G0107-BLK1 Method Blank 0.125, Description: Method Blank

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	0.00e0	9.68e3	0.125		3.89		0.000		
34	63 Total N-Me-FOSAA	570.1 > 419	0.00e0	6.24e3	0.125		4.03		0.000		
35	64 Total N-EtFOSAA	584.2 > 419	0.00e0	5.79e3	0.125		4.17		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-5.qld

Last Altered: Wednesday, July 26, 2017 10:39:58 Pacific Daylight Time

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Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_5, Date: 25-Jul-2017, Time: 14:58:18, ID: B7G0107-BLK1 Method Blank 0.125, Description: Method Blank

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.00	1.154	6582.323	0.002	MMI	

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.55	42.868	4538.808	0.118	bb	0.6

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9			9678.167		MM-I	

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 N-MeFOSAA	570.1 > 419			6244.668		MM-I	

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419			5785.626		MM-I	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-5.qld

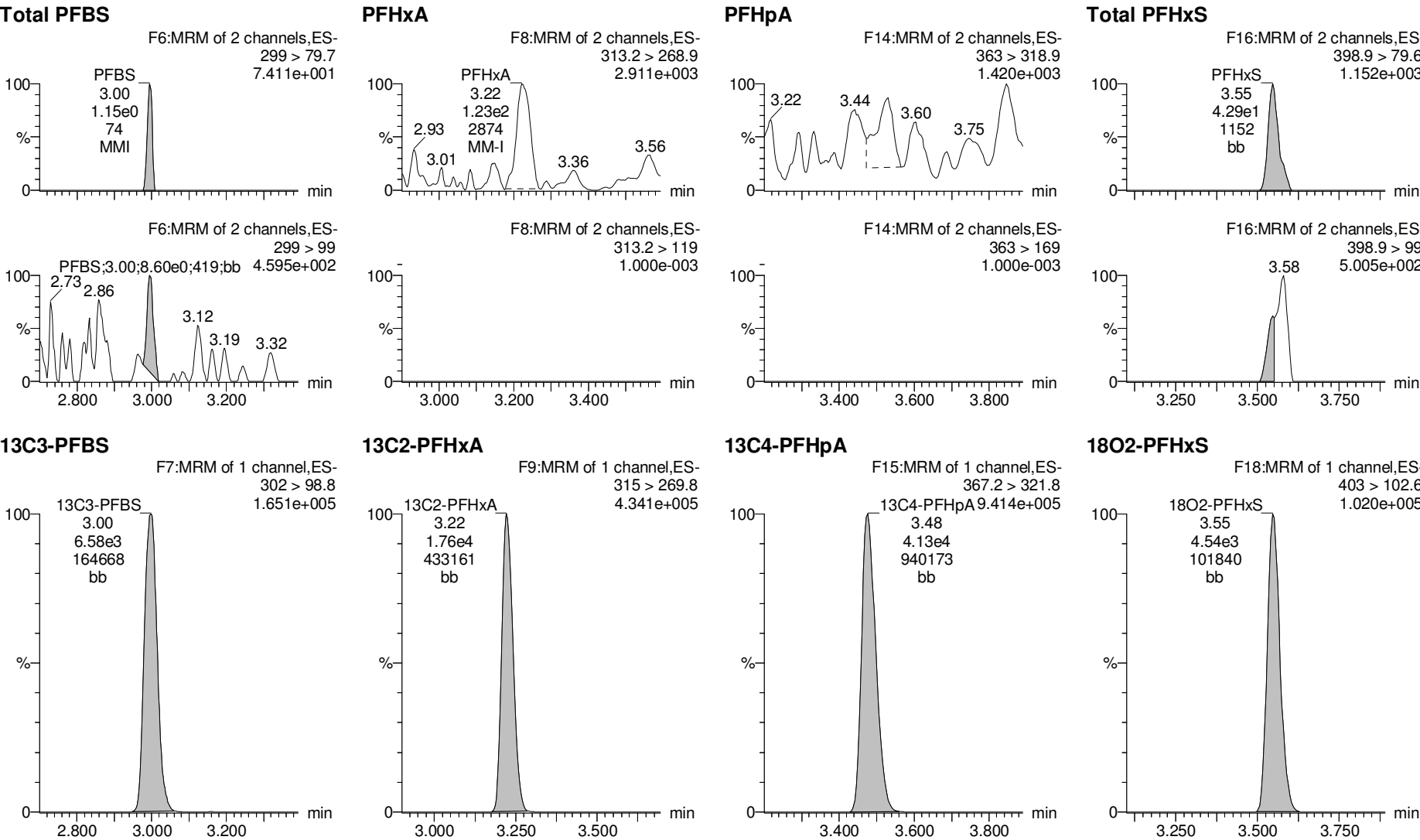
Last Altered: Wednesday, July 26, 2017 10:39:58 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:40:13 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_5, Date: 25-Jul-2017, Time: 14:58:18, ID: B7G0107-BLK1 Method Blank 0.125, Description: Method Blank

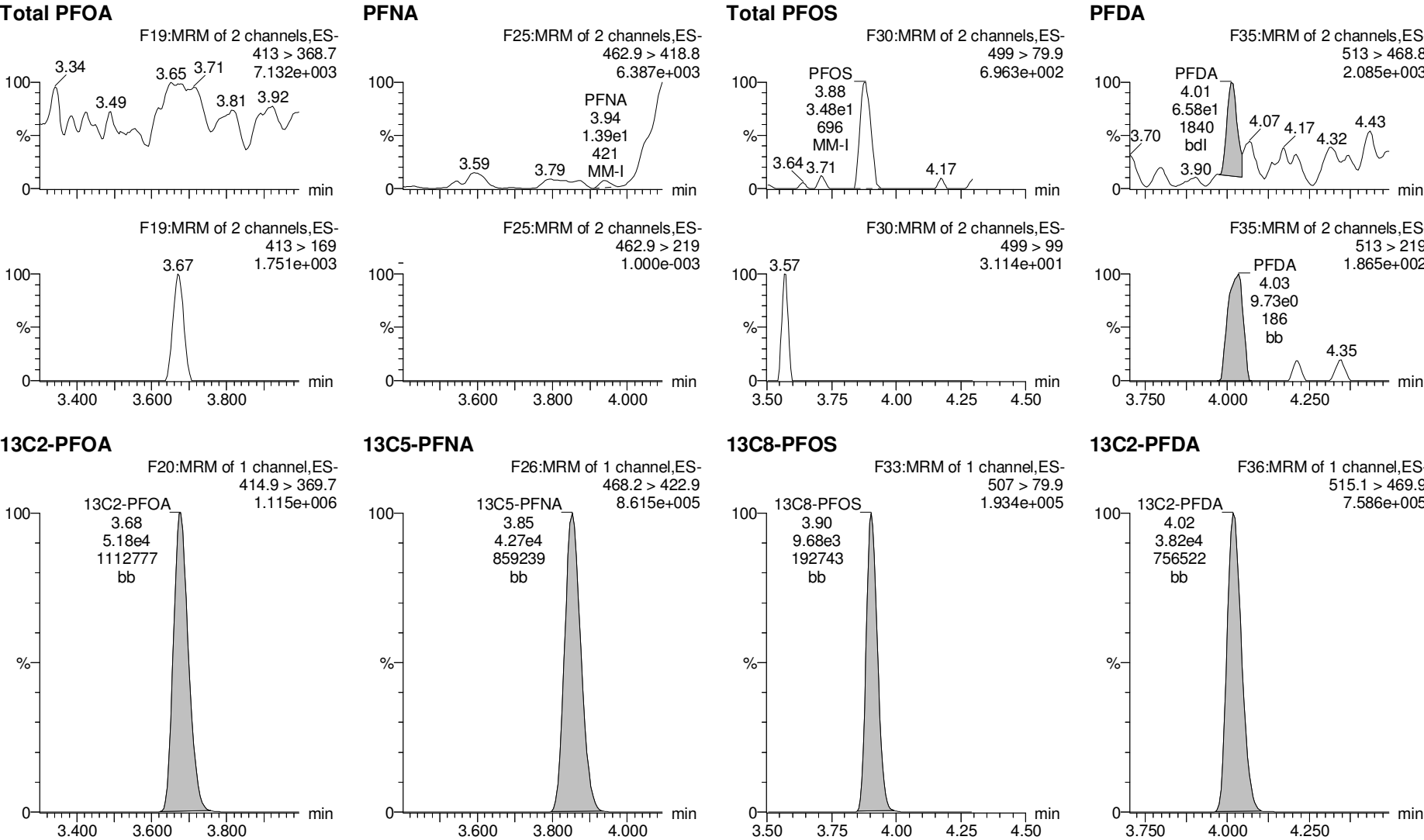


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Last Altered: Wednesday, July 26, 2017 10:39:58 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:40:13 Pacific Daylight Time

Name: 170725M1_5, Date: 25-Jul-2017, Time: 14:58:18, ID: B7G0107-BLK1 Method Blank 0.125, Description: Method Blank

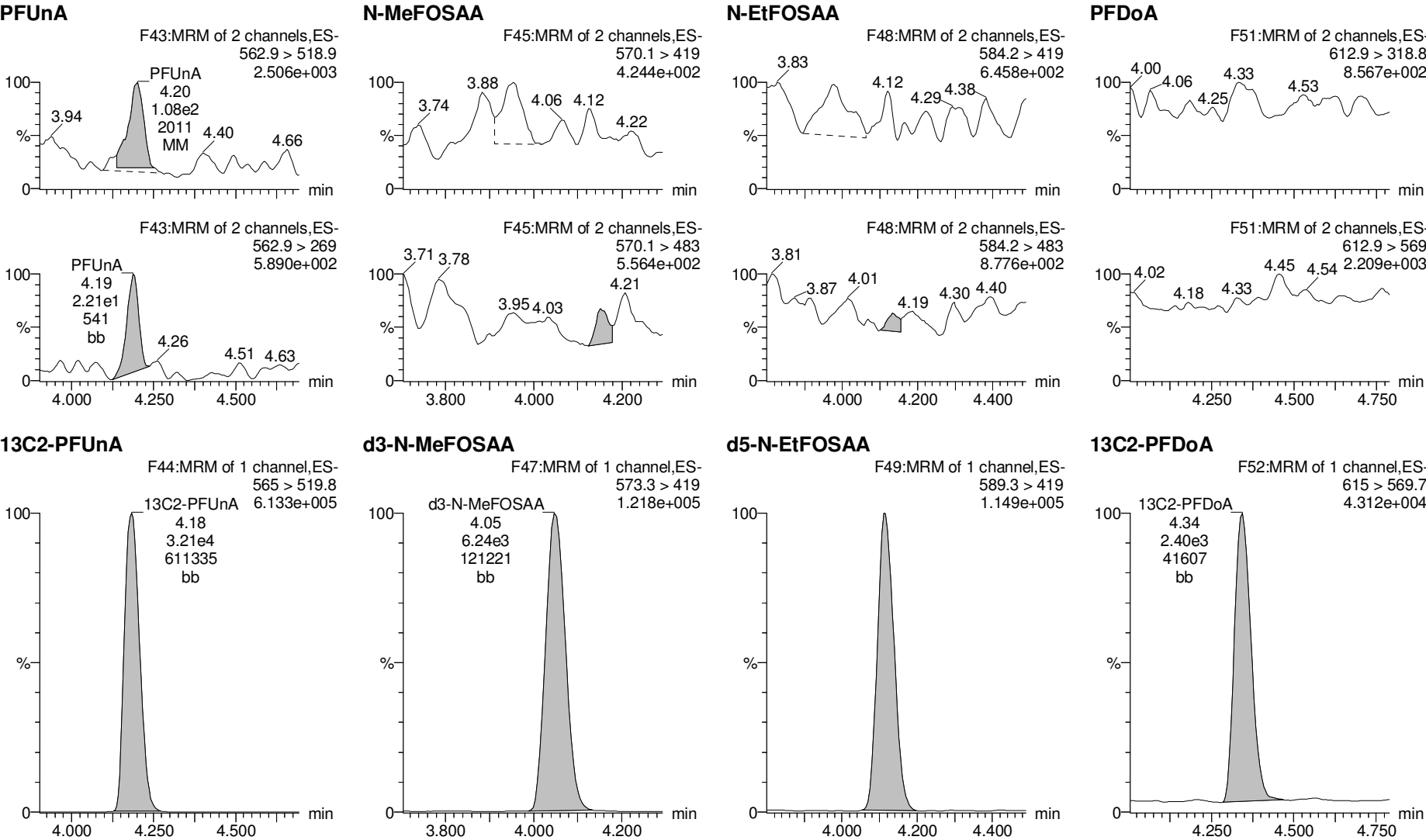


Dataset: U:\Q4.PRO\results\170725M1\170725M1-5.qld

Last Altered: Wednesday, July 26, 2017 10:39:58 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:40:13 Pacific Daylight Time

Name: 170725M1_5, Date: 25-Jul-2017, Time: 14:58:18, ID: B7G0107-BLK1 Method Blank 0.125, Description: Method Blank



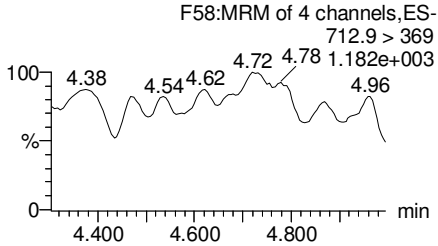
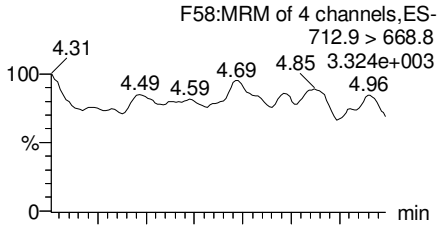
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Last Altered: Wednesday, July 26, 2017 10:39:58 Pacific Daylight Time

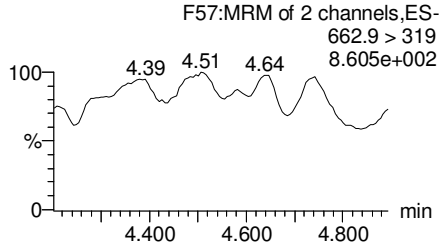
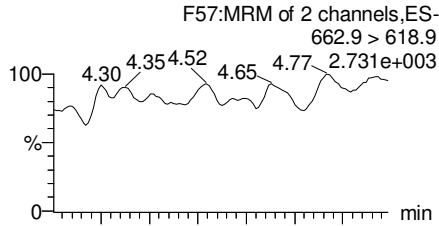
Printed: Wednesday, July 26, 2017 10:40:13 Pacific Daylight Time

Name: 170725M1_5, Date: 25-Jul-2017, Time: 14:58:18, ID: B7G0107-BLK1 Method Blank 0.125, Description: Method Blank

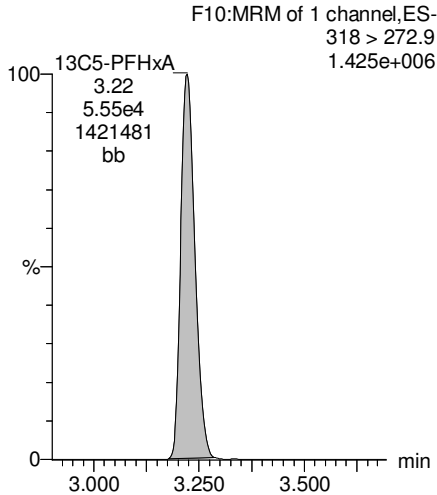
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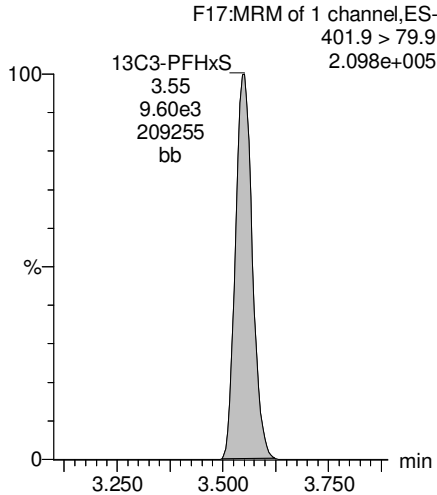
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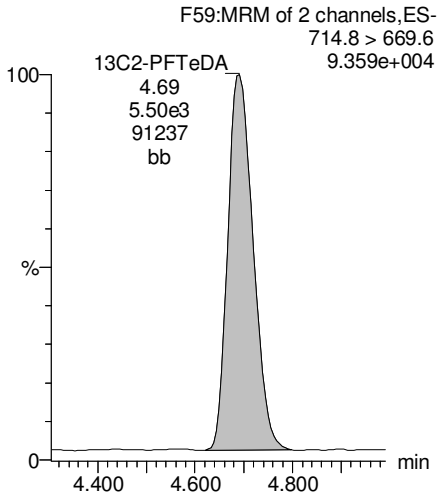
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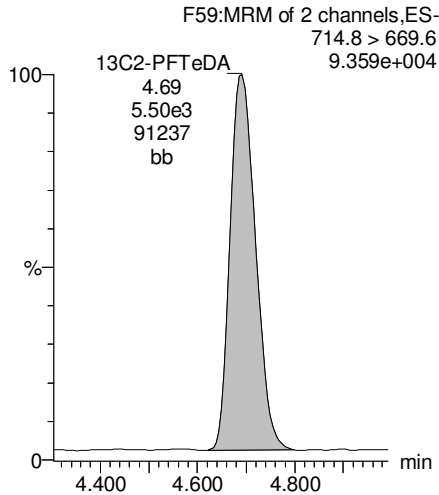
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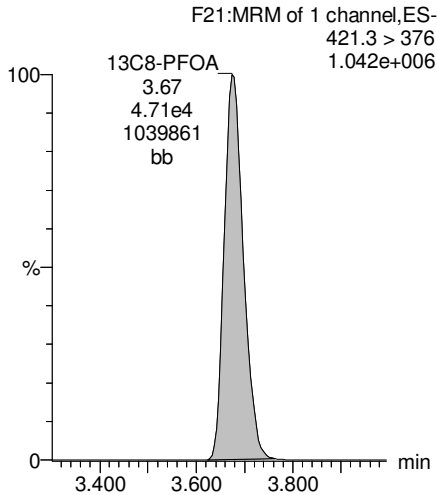
13C2-PFTeDA



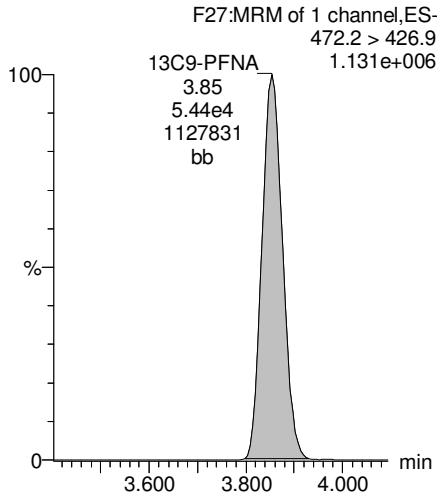
13C2-PFTeDA



13C8-PFOA



13C9-PFNA

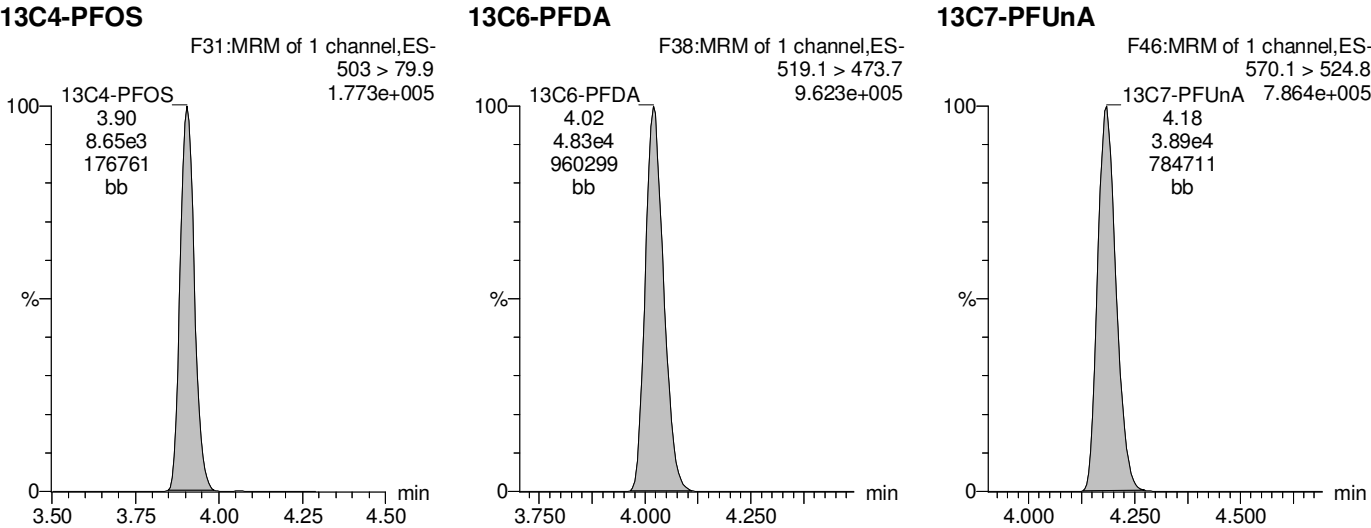


Dataset: U:\Q4.PRO\results\170725M1\170725M1-5.qld

Last Altered: Wednesday, July 26, 2017 10:39:58 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:40:13 Pacific Daylight Time

Name: 170725M1_5, Date: 25-Jul-2017, Time: 14:58:18, ID: B7G0107-BLK1 Method Blank 0.125, Description: Method Blank



Dataset: U:\Q4.PRO\results\170725M1\170725M1-3.qld

Last Altered: Wednesday, July 26, 2017 10:34:33 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:36:04 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_3, Date: 25-Jul-2017, Time: 14:36:53, ID: B7G0107-BS1 OPR 0.125, Description: OPR

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	8.23e3	6.02e3	0.125		2.96	3.00	17.1	73.4	91.8
2	4 PFHxA	313.2 > 268.9	4.47e4	1.68e4	0.125		3.19	3.22	13.3	69.6	87.0
3	5 PFHpA	363 > 318.9	3.54e4	3.65e4	0.125		3.45	3.48	12.1	76.9	96.1
4	6 PFHxS	398.9 > 79.6	5.37e3	4.32e3	0.125		3.56	3.55	15.5	73.3	91.6
5	8 PFOA	413 > 368.7	3.79e4	5.12e4	0.125		3.65	3.68	9.26	74.6	93.3
6	10 PFNA	462.9 > 418.8	3.64e4	4.16e4	0.125		3.83	3.85	10.9	78.4	98.0
7	12 PFOS	499 > 79.9	7.59e3	1.00e4	0.125		3.89	3.90	9.48	64.1	80.1
8	13 PFDA	513 > 468.8	3.77e4	3.91e4	0.125		4.01	4.02	12.1	73.6	92.0
9	15 N-MeFOSAA	570.1 > 419	8.33e3	7.63e3	0.125		4.03	4.05	177	71.4	89.2
10	16 N-EtFOSAA	584.2 > 419	6.67e3	7.39e3	0.125		4.10	4.12	147	72.7	90.9
11	17 PFUnA	562.9 > 518.9	2.31e4	3.52e4	0.125		4.17	4.19	8.22	74.4	93.0
12	19 PFDoA	612.9 > 318.8	2.41e3	3.44e3	0.125		4.34	4.34	8.77	74.3	92.9

Dataset: U:\Q4.PRO\results\170725M1\170725M1-3.qld

Last Altered: Wednesday, July 26, 2017 10:34:33 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:36:26 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_3, Date: 25-Jul-2017, Time: 14:36:53, ID: B7G0107-BS1 OPR 0.125, Description: OPR

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9	1.90e4	3.44e3	0.125		4.50	4.52	68.9	49.1	61.4
2	22 PFTeDA	712.9 > 668.8	8.76e3	1.02e4	0.125		4.68	4.70	10.8	74.6	93.3
3	28 13C3-PFBA	216.1 > 171.8	2.83e4	2.98e4	0.125	0.820	1.54	1.54	11.9	116	115.8
4	29 13C3-PFPeA	266 > 221.8	4.20e4	4.92e4	0.125	0.248	2.77	2.80	4.27	138	137.6
5	30 13C3-PFBS	302 > 98.8	6.02e3	4.92e4	0.125	0.031	2.96	2.99	0.612	157	157.4
6	31 13C2-PFHxA	315 > 269.8	1.68e4	4.92e4	0.125	0.276	3.19	3.22	1.71	49.4	123.5
7	32 13C4-PFHpA	367.2 > 321.8	3.65e4	4.92e4	0.125	0.306	3.45	3.48	3.71	97.1	97.1
8	33 18O2-PFHxS	403 > 102.6	4.32e3	8.71e3	0.125	0.393	3.56	3.55	6.21	126	126.5
9	34 13C2-6:2 FTS	429.1 > 408.9	8.53e3	4.12e4	0.125	0.158	3.64	3.67	2.59	131	131.4
10	35 13C2-PFOA	414.9 > 369.7	5.12e4	4.12e4	0.125	1.067	3.65	3.68	15.6	117	116.6
11	36 13C5-PFNA	468.2 > 422.9	4.16e4	4.53e4	0.125	0.852	3.83	3.85	11.5	108	108.0
12	37 13C8-PFOSA	506.1 > 77.7	2.69e3	4.01e4	0.125	0.098	3.84	3.87	0.839	68.3	68.3
13	38 13C8-PFOS	507 > 79.9	1.00e4	8.53e3	0.125	0.936	3.89	3.90	14.7	125	125.4
14	39 13C2-PFDA	515.1 > 469.9	3.91e4	4.64e4	0.125	0.810	4.01	4.02	10.5	104	104.0
15	40 13C2-8:2 FTS	529.1 > 508.7	5.38e3	4.64e4	0.125	0.086	4.00	4.02	1.45	136	135.5
16	41 d3-N-MeFOSAA	573.3 > 419	7.63e3	4.01e4	0.125	0.014	4.03	4.05	2.38	1390	106.8
17	42 d5-N-EtFOSAA	589.3 > 419	7.39e3	4.01e4	0.125	0.014	4.12	4.12	2.30	1320	101.6
18	43 13C2-PFUnA	565 > 519.8	3.52e4	4.01e4	0.125	0.962	4.17	4.19	11.0	91.1	91.1
19	44 13C2-PFDoA	615 > 569.7	3.44e3	4.01e4	0.125	0.094	4.34	4.34	1.07	90.7	90.7
20	46 13C2-PFTeDA	714.8 > 669.6	1.02e4	4.01e4	0.125	0.694	4.68	4.70	3.17	36.5	36.5
21	48 13C2-PFHxDA	815 > 769.7	2.57e3	4.01e4	0.125	0.843	5.06	5.06	0.802	7.61	19.0
22	51 13C4-PFBA	217 > 171.8	2.98e4	2.98e4	0.125	1.000	1.54	1.55	12.5	100	100.0
23	52 13C5-PFHxA	318 > 272.9	4.92e4	4.92e4	0.125	1.000	3.19	3.22	5.00	40.0	100.0
24	53 13C3-PFHxS	401.9 > 79.9	8.71e3	8.71e3	0.125	1.000	3.56	3.55	12.5	100	100.0
25	54 13C8-PFOA	421.3 > 376	4.12e4	4.12e4	0.125	1.000	3.65	3.68	12.5	100	100.0
26	55 13C9-PFNA	472.2 > 426.9	4.53e4	4.53e4	0.125	1.000	3.83	3.85	12.5	100	100.0
27	56 13C4-PFOS	503 > 79.9	8.53e3	8.53e3	0.125	1.000	3.89	3.91	12.5	100	100.0
28	57 13C6-PFDA	519.1 > 473.7	4.64e4	4.64e4	0.125	1.000	4.01	4.02	12.5	100	100.0
29	58 13C7-PFUnA	570.1 > 524.8	4.01e4	4.01e4	0.125	1.000	4.17	4.19	12.5	100	100.0
30	59 Total PFBS	299 > 79.7	8.23e3	6.02e3	0.125		2.96		17.1	73.4	
31	60 Total PFHxS	398.9 > 79.6	5.37e3	4.32e3	0.125		3.52		15.5	73.3	
32	61 Total PFOA	413 > 368.7	3.79e4	5.12e4	0.125		3.65		9.26	74.6	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-3.qld

Last Altered: Wednesday, July 26, 2017 10:34:33 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:36:26 Pacific Daylight Time

Name: 170725M1_3, Date: 25-Jul-2017, Time: 14:36:53, ID: B7G0107-BS1 OPR 0.125, Description: OPR

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	7.59e3	1.00e4	0.125		3.89		9.48	64.1	
34	63 Total N-Me-FOSAA	570.1 > 419	8.33e3	7.63e3	0.125		4.03		177	71.4	
35	64 Total N-EtFOSAA	584.2 > 419	6.67e3	7.39e3	0.125		4.17		147	72.7	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-3.qld

Last Altered: Wednesday, July 26, 2017 10:34:33 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:36:04 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_3, Date: 25-Jul-2017, Time: 14:36:53, ID: B7G0107-BS1 OPR 0.125, Description: OPR

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.00	8225.857	6023.405	17.071	bb	73.4

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.55	5367.093	4324.375	15.514	MM	73.3

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	3.68	37932.793	51228.836	9.256	bb	74.6

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.90	7593.815	10013.058	9.480	bb	64.1

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 N-MeFOSAA	570.1 > 419	4.05	8330.892	7630.618	177.413	bb	71.4

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419	4.12	6673.021	7392.395	146.687	bb	72.7

Dataset: U:\Q4.PRO\results\170725M1\170725M1-3.qld

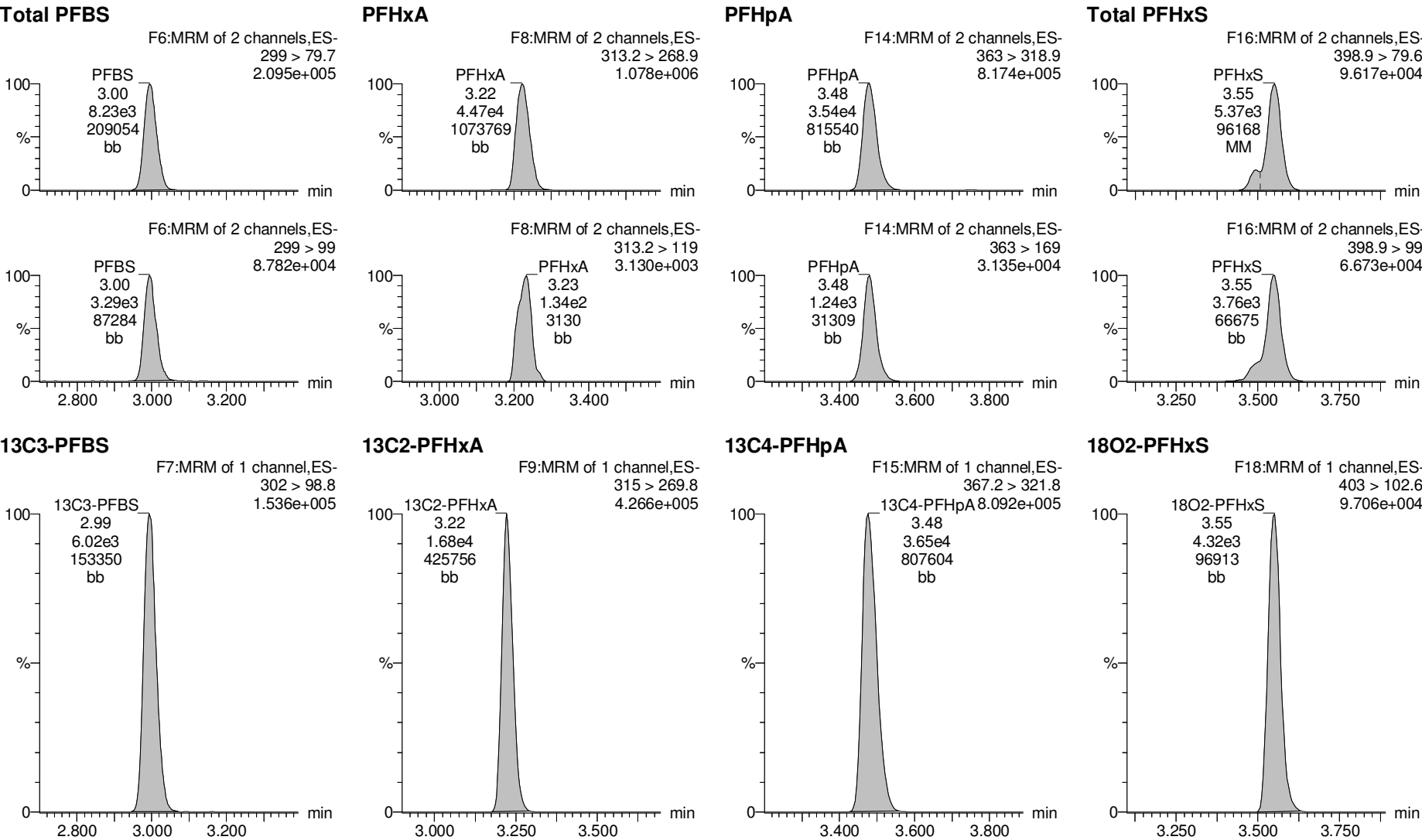
Last Altered: Wednesday, July 26, 2017 10:34:33 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:36:04 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_3, Date: 25-Jul-2017, Time: 14:36:53, ID: B7G0107-BS1 OPR 0.125, Description: OPR

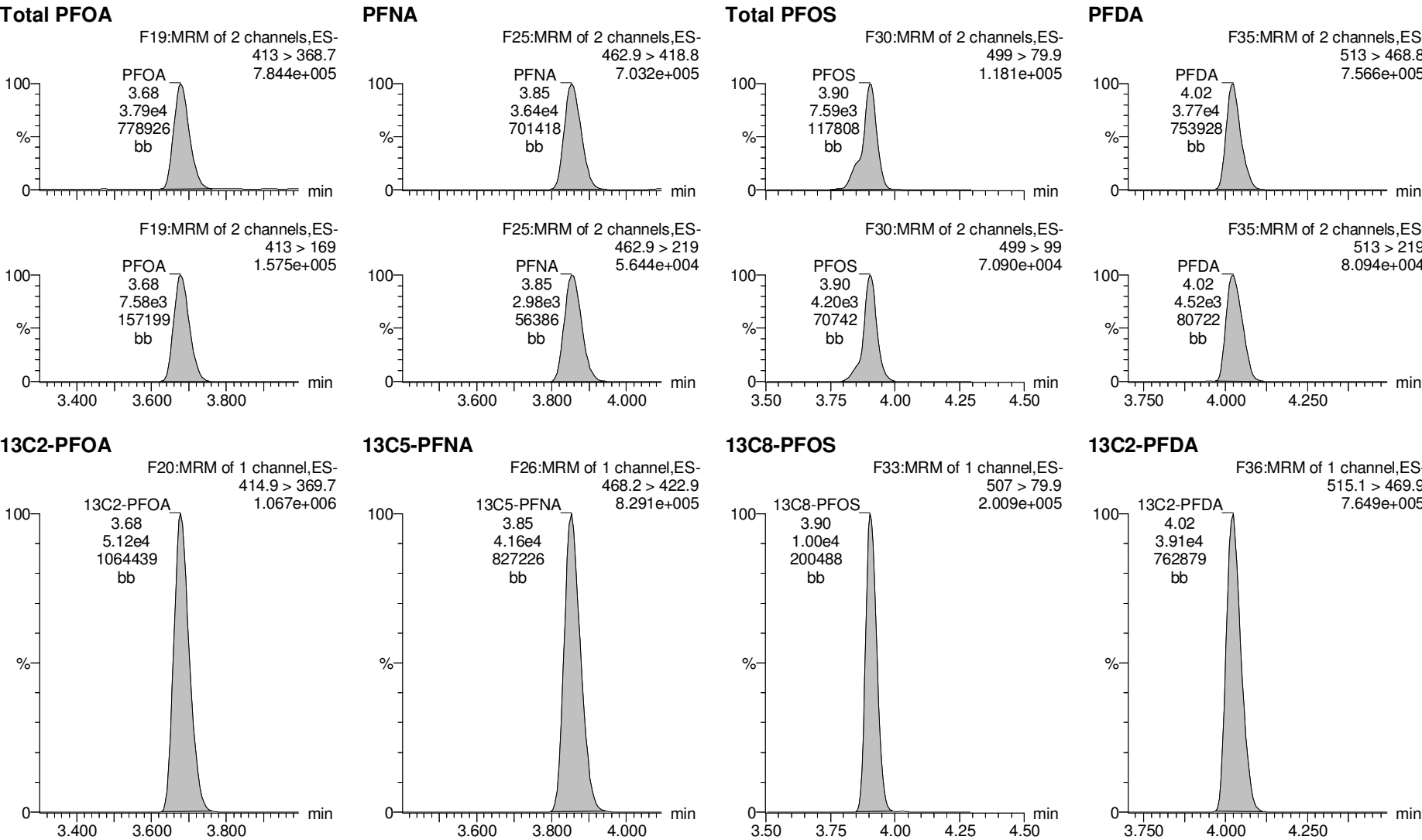


Dataset: U:\Q4.PRO\results\170725M1\170725M1-3.qld

Last Altered: Wednesday, July 26, 2017 10:34:33 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:36:04 Pacific Daylight Time

Name: 170725M1_3, Date: 25-Jul-2017, Time: 14:36:53, ID: B7G0107-BS1 OPR 0.125, Description: OPR

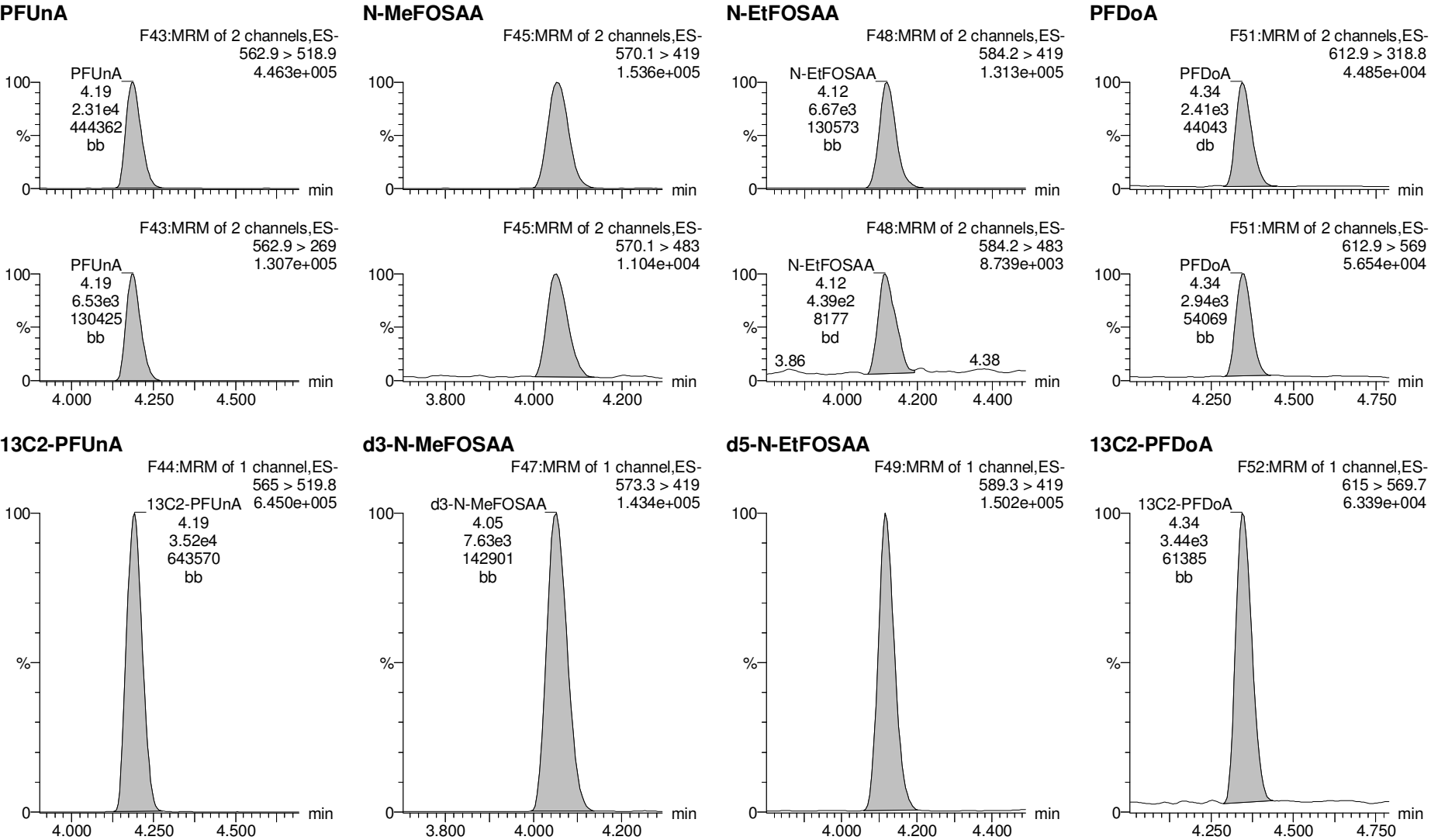


Dataset: U:\Q4.PRO\results\170725M1\170725M1-3.qld

Last Altered: Wednesday, July 26, 2017 10:34:33 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:36:04 Pacific Daylight Time

Name: 170725M1_3, Date: 25-Jul-2017, Time: 14:36:53, ID: B7G0107-BS1 OPR 0.125, Description: OPR

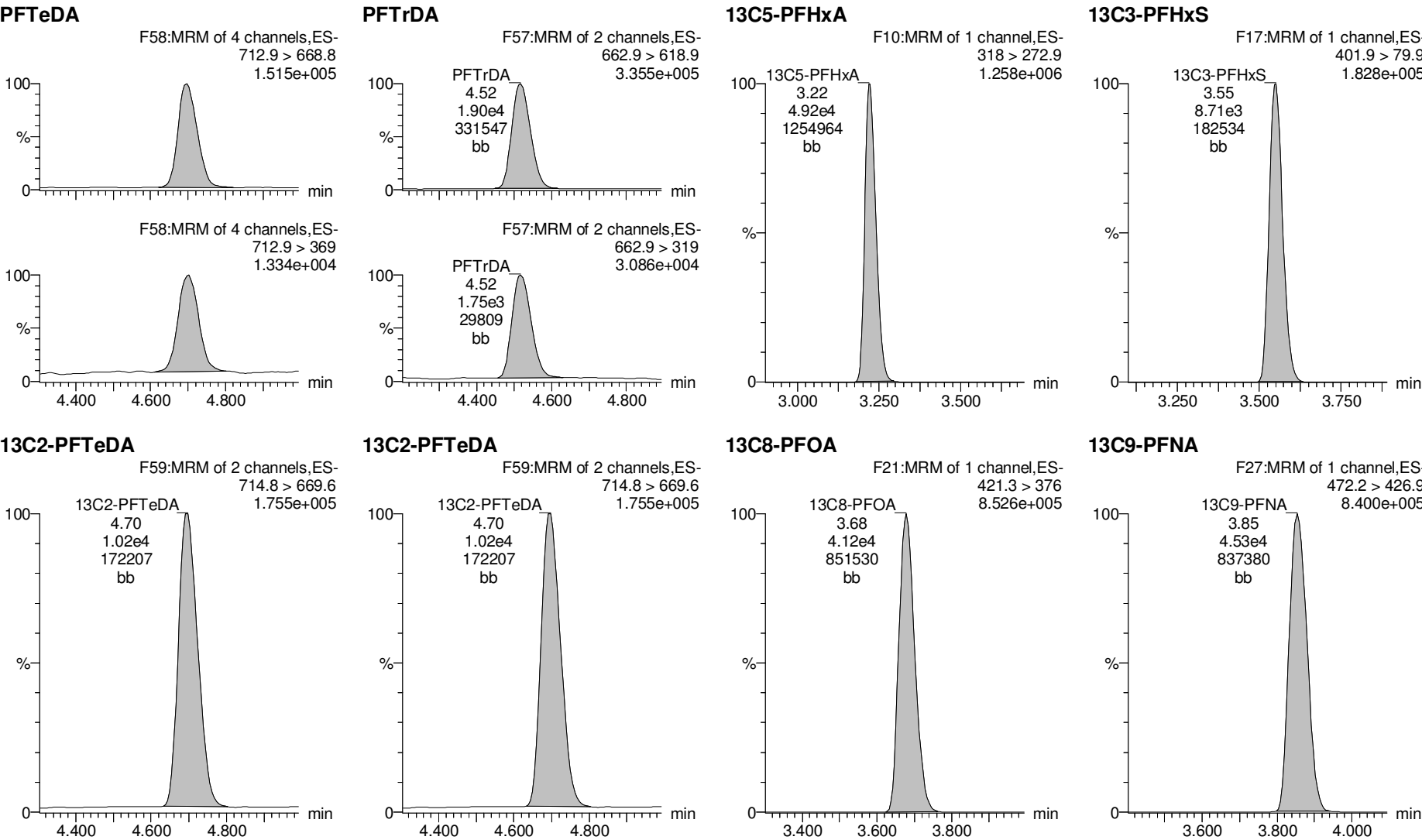


Dataset: U:\Q4.PRO\results\170725M1\170725M1-3.qld

Last Altered: Wednesday, July 26, 2017 10:34:33 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:36:04 Pacific Daylight Time

Name: 170725M1_3, Date: 25-Jul-2017, Time: 14:36:53, ID: B7G0107-BS1 OPR 0.125, Description: OPR

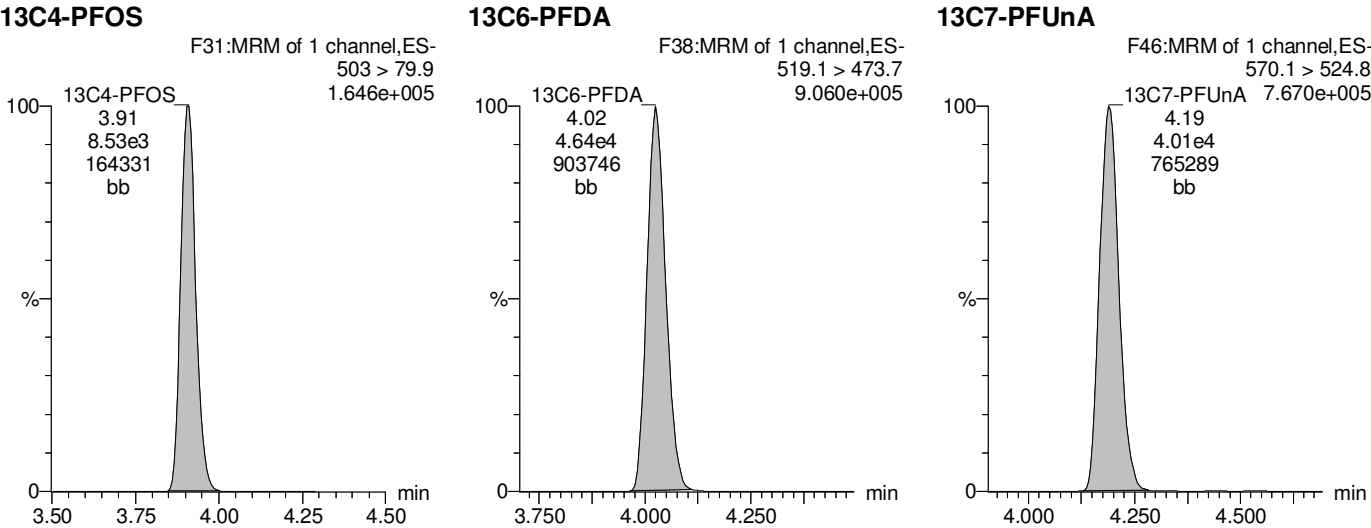


Dataset: U:\Q4.PRO\results\170725M1\170725M1-3.qld

Last Altered: Wednesday, July 26, 2017 10:34:33 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:36:04 Pacific Daylight Time

Name: 170725M1_3, Date: 25-Jul-2017, Time: 14:36:53, ID: B7G0107-BS1 OPR 0.125, Description: OPR



Dataset: U:\Q4.PRO\results\170725M1\170725M1-21.qld

Last Altered: Wednesday, July 26, 2017 10:44:09 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:44:31 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_21, Date: 25-Jul-2017, Time: 17:50:30, ID: 1700852-01RE1 EB 02_20170711 0.12122, Description: EB 02_20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7		3.74e3	0.121		2.96				
2	4 PFHxA	313.2 > 268.9		1.08e4	0.121		3.19				
3	5 PFHpA	363 > 318.9		2.68e4	0.121		3.45				
4	6 PFHxS	398.9 > 79.6	1.28e1	2.67e3	0.121		3.56	3.55	0.0597	0.343	
5	8 PFOA	413 > 368.7		3.38e4	0.121		3.65				
6	10 PFNA	462.9 > 418.8		2.81e4	0.121		3.83				
7	12 PFOS	499 > 79.9	6.98e-1	6.44e3	0.121		3.89	3.88	0.00136		
8	13 PFDA	513 > 468.8		2.27e4	0.121		4.01				
9	15 N-MeFOSAA	570.1 > 419		4.99e3	0.121		4.03				
10	16 N-EtFOSAA	584.2 > 419		4.95e3	0.121		4.10				
11	17 PFUnA	562.9 > 518.9		2.93e4	0.121		4.17				
12	19 PFDoA	612.9 > 318.8		2.66e3	0.121		4.34				

Dataset: U:\Q4.PRO\results\170725M1\170725M1-21.qld

Last Altered: Wednesday, July 26, 2017 10:44:09 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:45:00 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_21, Date: 25-Jul-2017, Time: 17:50:30, ID: 1700852-01RE1 EB 02_20170711 0.12122, Description: EB 02_20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9		2.66e3	0.121		4.50				
2	22 PFTeDA	712.9 > 668.8		1.97e4	0.121		4.68				
3	28 13C3-PFBA	216.1 > 171.8	1.90e4	1.85e4	0.121	0.820	1.54	1.57	12.8	129	124.9
4	29 13C3-PFPeA	266 > 221.8	2.88e4	3.19e4	0.121	0.248	2.77	2.80	4.51	150	145.4
5	30 13C3-PFBS	302 > 98.8	3.74e3	3.19e4	0.121	0.031	2.96	3.00	0.587	156	150.9
6	31 13C2-PFHxA	315 > 269.8	1.08e4	3.19e4	0.121	0.276	3.19	3.22	1.70	50.7	122.9
7	32 13C4-PFHpA	367.2 > 321.8	2.68e4	3.19e4	0.121	0.306	3.45	3.48	4.19	113	109.8
8	33 18O2-PFHxS	403 > 102.6	2.67e3	5.48e3	0.121	0.393	3.56	3.55	6.10	128	124.2
9	34 13C2-6:2 FTS	429.1 > 408.9	5.15e3	2.75e4	0.121	0.158	3.64	3.67	2.34	122	118.6
10	35 13C2-PFOA	414.9 > 369.7	3.38e4	2.75e4	0.121	1.067	3.65	3.68	15.4	119	115.1
11	36 13C5-PFNA	468.2 > 422.9	2.81e4	3.11e4	0.121	0.852	3.83	3.86	11.3	109	105.9
12	37 13C8-PFOSA	506.1 > 77.7	1.80e3	3.10e4	0.121	0.098	3.84	3.86	0.724	60.8	58.9
13	38 13C8-PFOS	507 > 79.9	6.44e3	5.26e3	0.121	0.936	3.89	3.91	15.3	135	130.8
14	39 13C2-PFDA	515.1 > 469.9	2.27e4	2.59e4	0.121	0.810	4.01	4.03	10.9	112	108.1
15	40 13C2-8:2 FTS	529.1 > 508.7	3.18e3	2.59e4	0.121	0.086	4.00	4.02	1.53	148	143.5
16	41 d3-N-MeFOSAA	573.3 > 419	4.99e3	3.10e4	0.121	0.014	4.03	4.05	2.01	1210	90.4
17	42 d5-N-EtFOSAA	589.3 > 419	4.95e3	3.10e4	0.121	0.014	4.12	4.12	2.00	1180	88.1
18	43 13C2-PFUnA	565 > 519.8	2.93e4	3.10e4	0.121	0.962	4.17	4.19	11.8	101	98.3
19	44 13C2-PFDoA	615 > 569.7	2.66e3	3.10e4	0.121	0.094	4.34	4.35	1.07	93.6	90.7
20	46 13C2-PFTeDA	714.8 > 669.6	1.97e4	3.10e4	0.121	0.694	4.68	4.70	7.95	94.4	91.6
21	48 13C2-PFHxDA	815 > 769.7	9.56e3	3.10e4	0.121	0.843	5.06	5.07	3.85	37.7	91.5
22	51 13C4-PFBA	217 > 171.8	1.85e4	1.85e4	0.121	1.000	1.54	1.56	12.5	103	100.0
23	52 13C5-PFHxA	318 > 272.9	3.19e4	3.19e4	0.121	1.000	3.19	3.22	5.00	41.2	100.0
24	53 13C3-PFHxS	401.9 > 79.9	5.48e3	5.48e3	0.121	1.000	3.56	3.55	12.5	103	100.0
25	54 13C8-PFOA	421.3 > 376	2.75e4	2.75e4	0.121	1.000	3.65	3.68	12.5	103	100.0
26	55 13C9-PFNA	472.2 > 426.9	3.11e4	3.11e4	0.121	1.000	3.83	3.85	12.5	103	100.0
27	56 13C4-PFOS	503 > 79.9	5.26e3	5.26e3	0.121	1.000	3.89	3.91	12.5	103	100.0
28	57 13C6-PFDA	519.1 > 473.7	2.59e4	2.59e4	0.121	1.000	4.01	4.03	12.5	103	100.0
29	58 13C7-PFUnA	570.1 > 524.8	3.10e4	3.10e4	0.121	1.000	4.17	4.19	12.5	103	100.0
30	59 Total PFBS	299 > 79.7	0.00e0	3.74e3	0.121		2.96		0.000		
31	60 Total PFHxS	398.9 > 79.6	1.28e1	2.67e3	0.121		3.52		0.0597	0.343	
32	61 Total PFOA	413 > 368.7	0.00e0	3.38e4	0.121		3.65		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-21.qld

Last Altered: Wednesday, July 26, 2017 10:44:09 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:45:00 Pacific Daylight Time

Name: 170725M1_21, Date: 25-Jul-2017, Time: 17:50:30, ID: 1700852-01RE1 EB 02_20170711 0.12122, Description: EB 02_20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	6.98e-1	6.44e3	0.121		3.89		0.000		
34	63 Total N-Me-FOSAA	570.1 > 419	0.00e0	4.99e3	0.121		4.03		0.000		
35	64 Total N-EtFOSAA	584.2 > 419	0.00e0	4.95e3	0.121		4.17		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-21.qld

Last Altered: Wednesday, July 26, 2017 10:44:09 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:44:31 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_21, Date: 25-Jul-2017, Time: 17:50:30, ID: 1700852-01RE1 EB 02_20170711 0.12122, Description: EB 02_20170711

Total PFBS

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total PFHxS

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.55	12.756	2672.287	0.060	bb	0.3

Total PFOA

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7			33828.957		MM-I	

Total PFOS

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.88	0.698	6436.126	0.001	MMI	

Total N-Me-FOSAA

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 N-MeFOSAA	570.1 > 419			4991.547		MM-I	

Total N-EtFOSAA

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419			4950.260		MM-I	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-21.qld

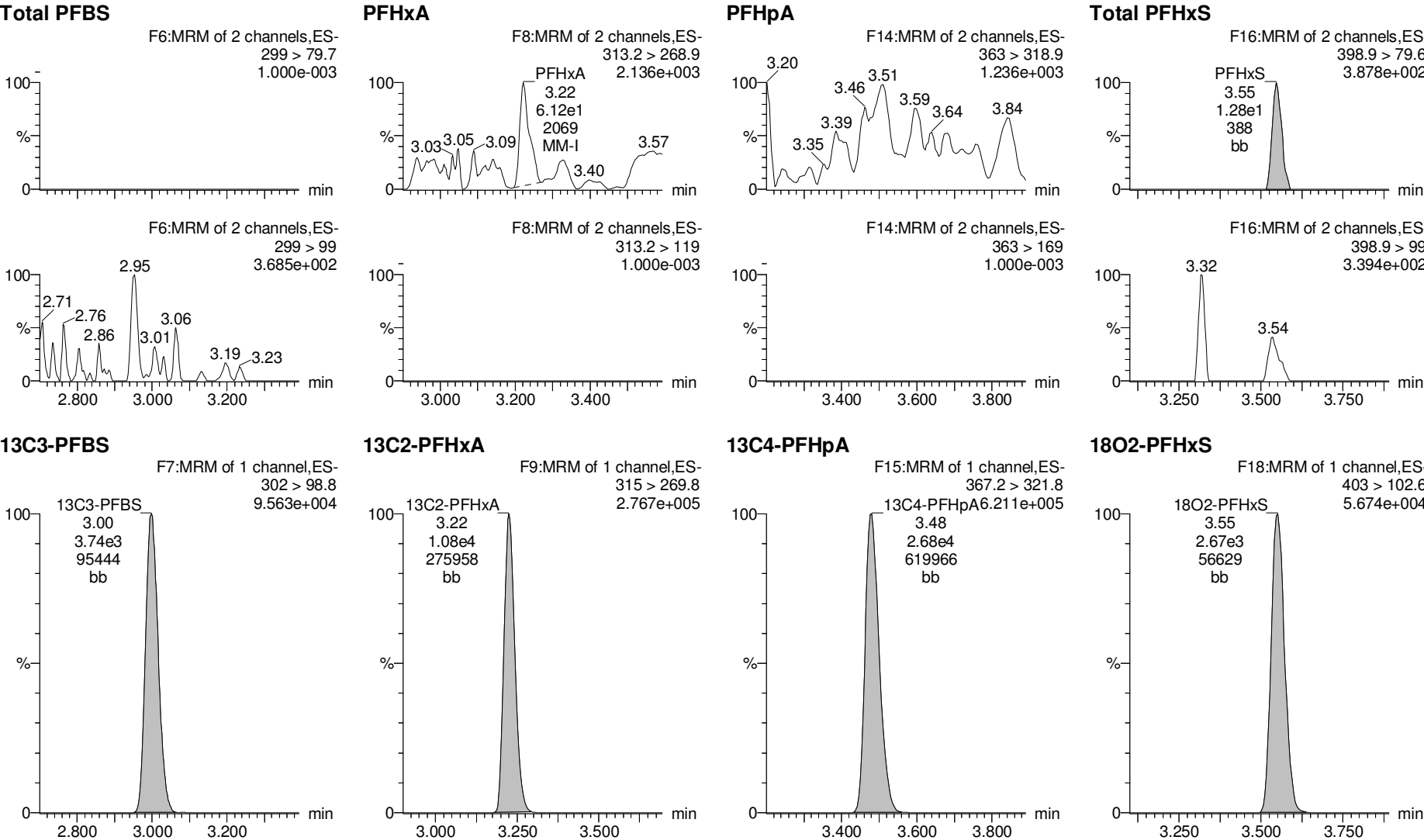
Last Altered: Wednesday, July 26, 2017 10:44:09 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:44:31 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_21, Date: 25-Jul-2017, Time: 17:50:30, ID: 1700852-01RE1 EB 02_20170711 0.12122, Description: EB 02_20170711

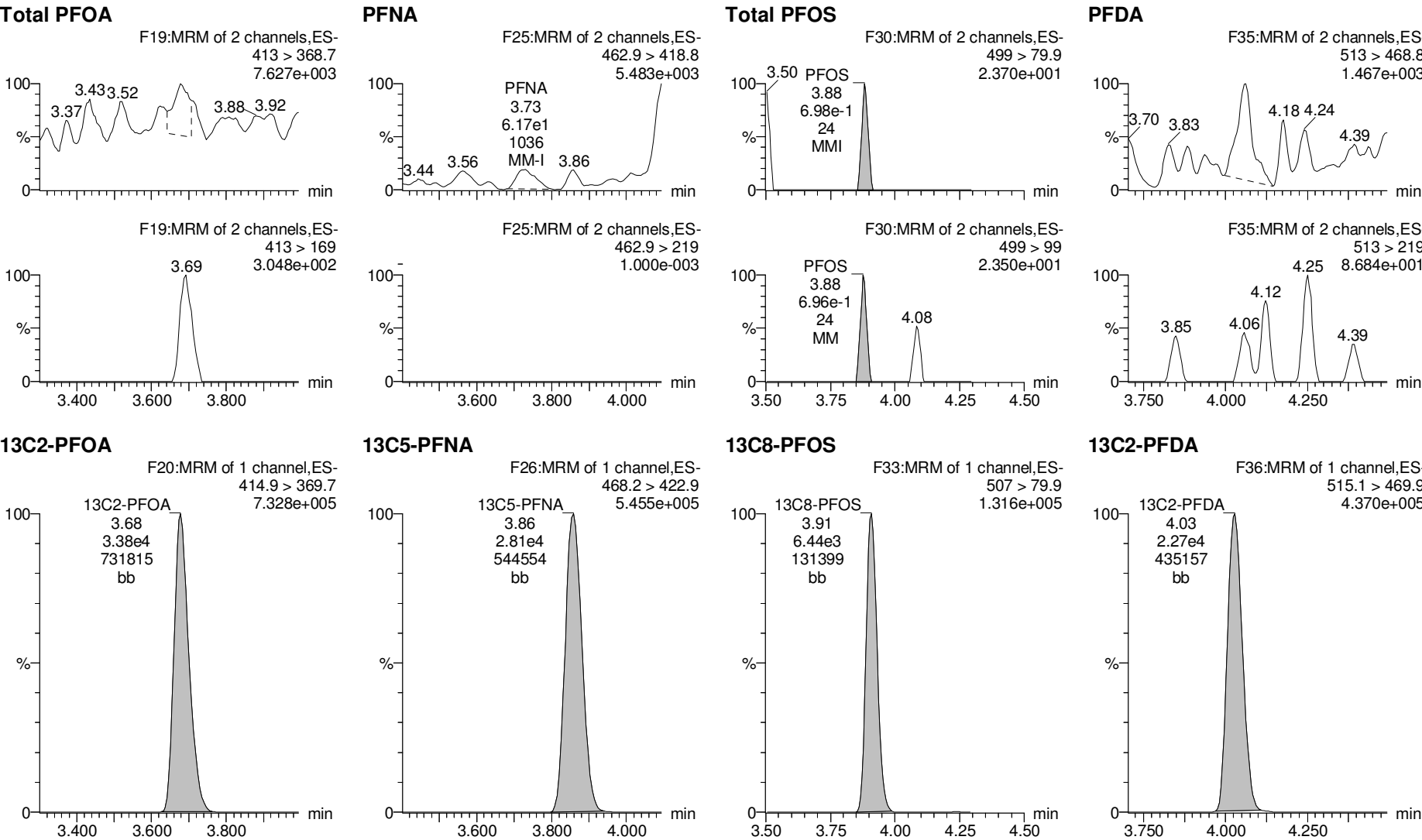


Dataset: U:\Q4.PRO\results\170725M1\170725M1-21.qld

Last Altered: Wednesday, July 26, 2017 10:44:09 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:44:31 Pacific Daylight Time

Name: 170725M1_21, Date: 25-Jul-2017, Time: 17:50:30, ID: 1700852-01RE1 EB 02_20170711 0.12122, Description: EB 02_20170711

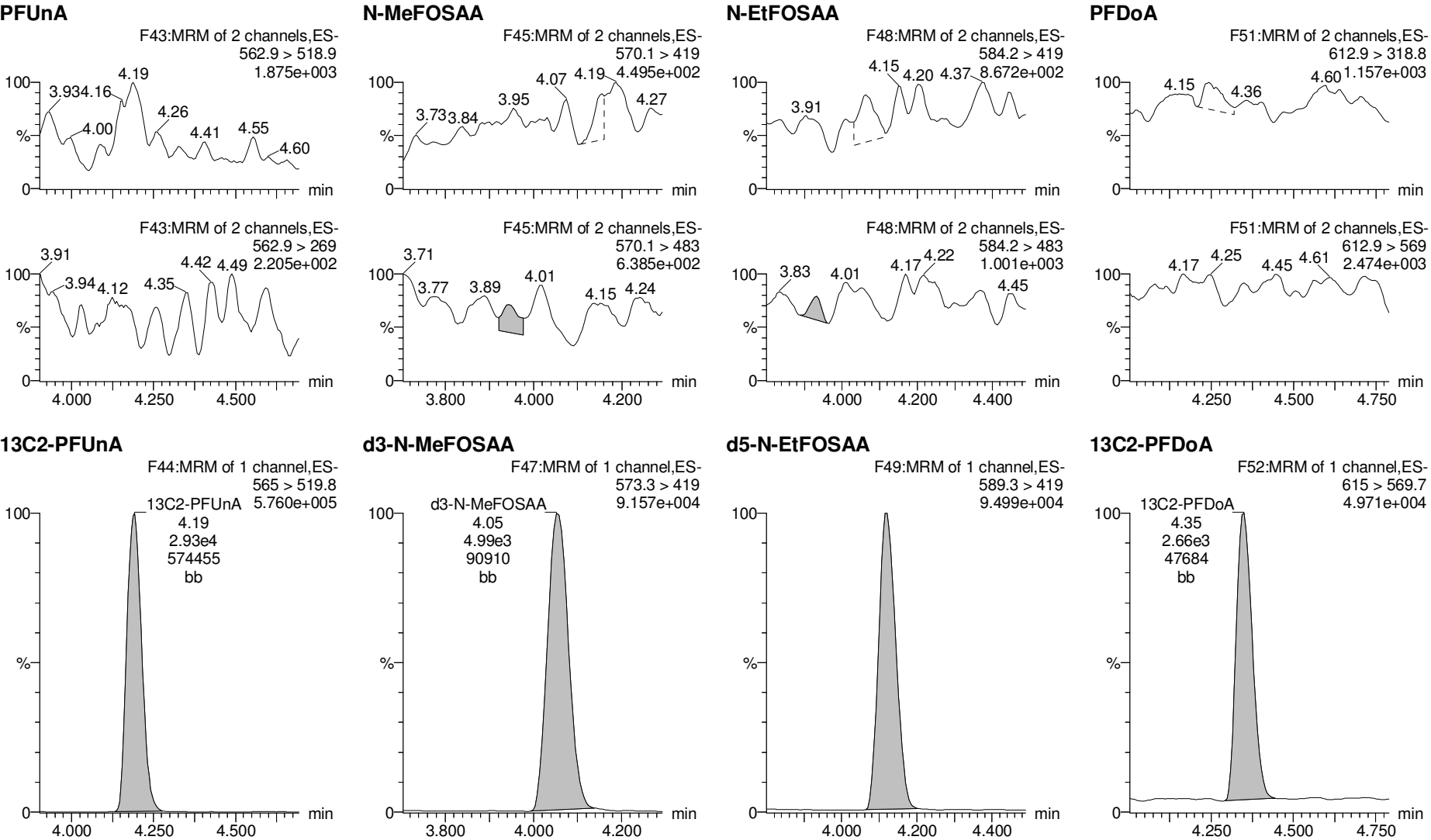


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Last Altered: Wednesday, July 26, 2017 10:44:09 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:44:31 Pacific Daylight Time

Name: 170725M1_21, Date: 25-Jul-2017, Time: 17:50:30, ID: 1700852-01RE1 EB 02_20170711 0.12122, Description: EB 02_20170711



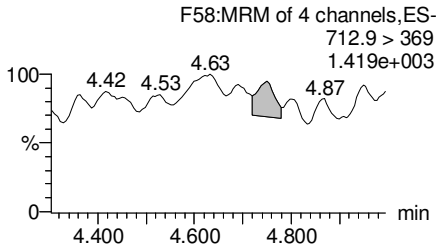
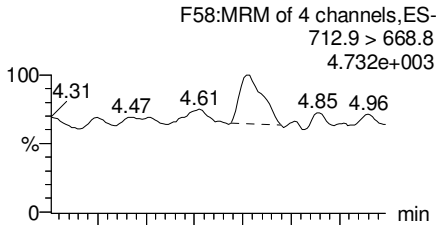
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Last Altered: Wednesday, July 26, 2017 10:44:09 Pacific Daylight Time
Printed: Wednesday, July 26, 2017 10:44:31 Pacific Daylight Time

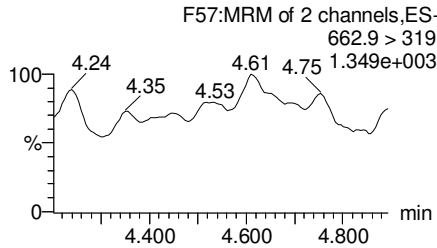
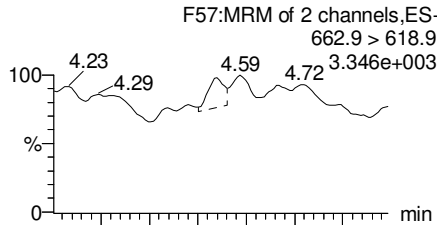
Rev'd: MM 7/26/17

Name: 170725M1_21, Date: 25-Jul-2017, Time: 17:50:30, ID: 1700852-01RE1 EB 02_20170711 0.12122, Description: EB 02_20170711

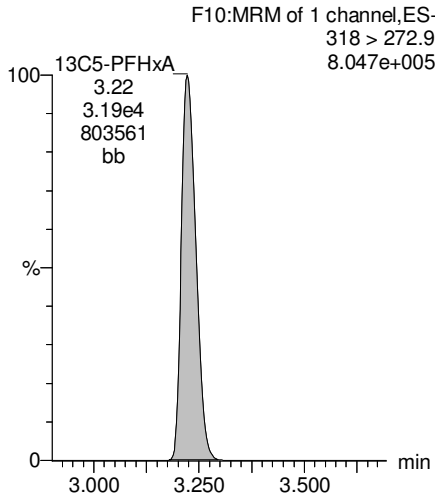
PFTeDA



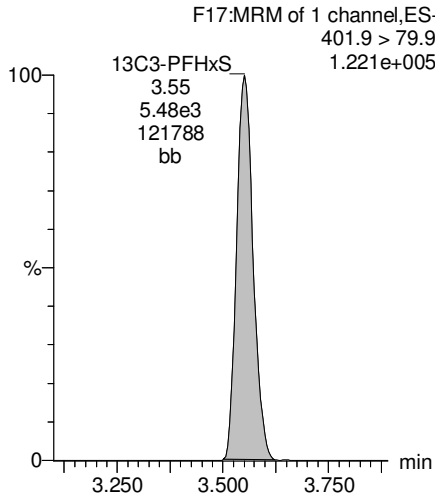
PFTrDA



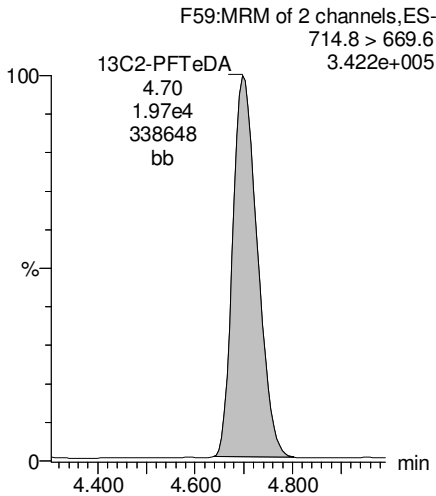
13C5-PFHxA



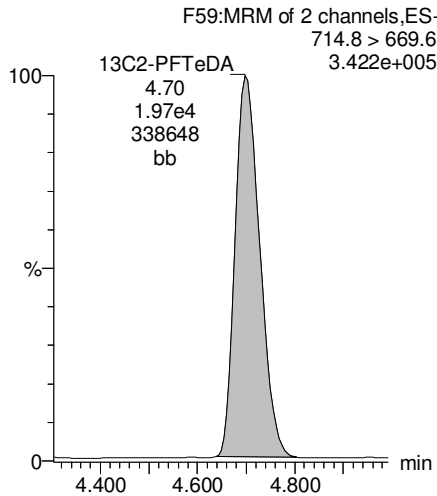
13C3-PFHxS



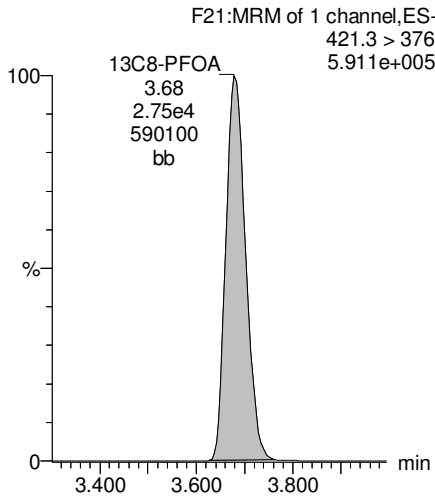
13C2-PFTeDA



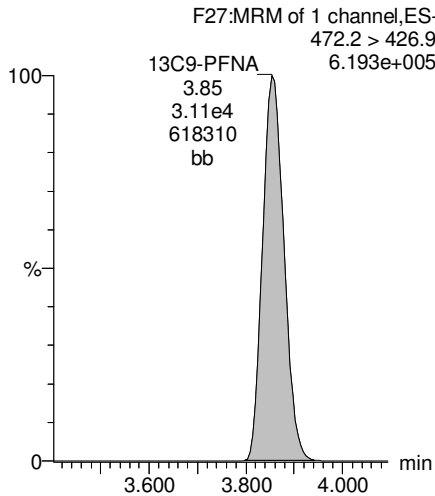
13C2-PFTeDA



13C8-PFOA



13C9-PFNA

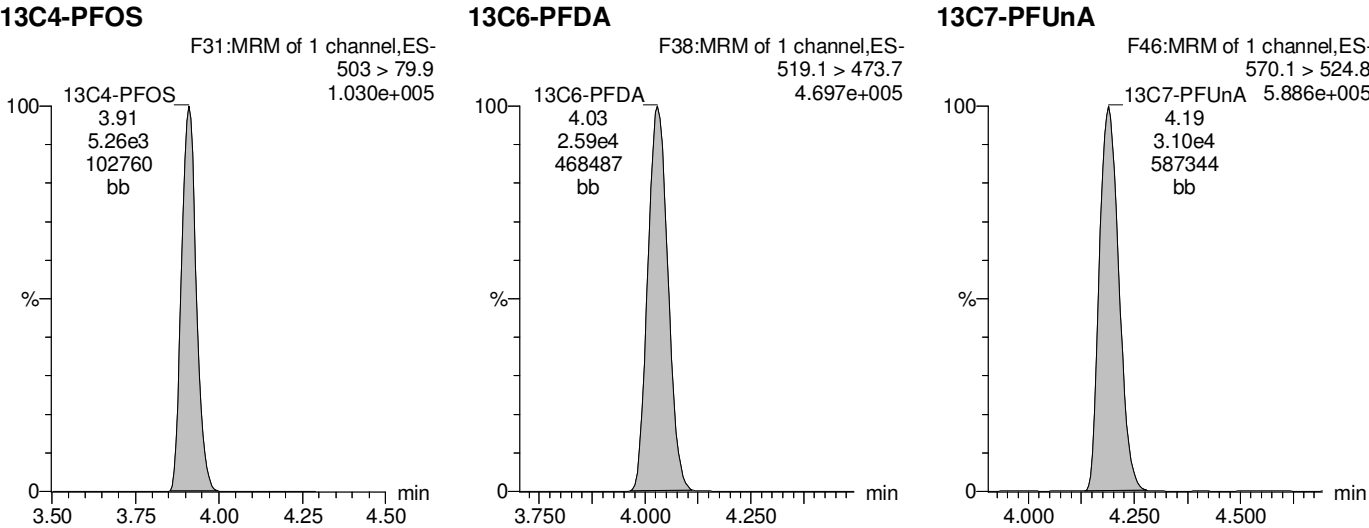


Dataset: U:\Q4.PRO\results\170725M1\170725M1-21.qld

Last Altered: Wednesday, July 26, 2017 10:44:09 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:44:31 Pacific Daylight Time

Name: 170725M1_21, Date: 25-Jul-2017, Time: 17:50:30, ID: 1700852-01RE1 EB 02_20170711 0.12122, Description: EB 02_20170711



Dataset: U:\Q4.PRO\results\170725M1\170725M1-22.qld

Last Altered: Wednesday, July 26, 2017 11:12:51 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:13:24 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_22, Date: 25-Jul-2017, Time: 18:01:17, ID: 1700852-02RE1 DUP01-20170711 0.11996, Description: DUP01-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7		3.33e3	0.120		2.96				
2	4 PFHxA	313.2 > 268.9		9.79e3	0.120		3.19				
3	5 PFHpA	363 > 318.9		2.34e4	0.120		3.45				
4	6 PFHxS	398.9 > 79.6		2.50e3	0.120		3.56				
5	8 PFOA	413 > 368.7		2.70e4	0.120		3.65				
6	10 PFNA	462.9 > 418.8		2.42e4	0.120		3.83				
7	12 PFOS	499 > 79.9		5.06e3	0.120		3.89				
8	13 PFDA	513 > 468.8		2.72e4	0.120		4.01				
9	15 N-MeFOSAA	570.1 > 419		5.04e3	0.120		4.03				
10	16 N-EtFOSAA	584.2 > 419		5.06e3	0.120		4.10				
11	17 PFUnA	562.9 > 518.9		2.61e4	0.120		4.17				
12	19 PFDoA	612.9 > 318.8		2.32e3	0.120		4.34				

Dataset: U:\Q4.PRO\results\170725M1\170725M1-22.qld

Last Altered: Wednesday, July 26, 2017 11:12:51 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:13:46 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_22, Date: 25-Jul-2017, Time: 18:01:17, ID: 1700852-02RE1 DUP01-20170711 0.11996, Description: DUP01-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9		2.32e3	0.120		4.50				
2	22 PFTeDA	712.9 > 668.8		1.57e4	0.120		4.68				
3	28 13C3-PFBA	216.1 > 171.8	1.63e4	1.63e4	0.120	0.820	1.54	1.57	12.4	126	121.3
4	29 13C3-PFPeA	266 > 221.8	2.58e4	2.82e4	0.120	0.248	2.77	2.81	4.58	154	147.6
5	30 13C3-PFBS	302 > 98.8	3.33e3	2.82e4	0.120	0.031	2.96	3.00	0.591	158	151.9
6	31 13C2-PFHxA	315 > 269.8	9.79e3	2.82e4	0.120	0.276	3.19	3.22	1.73	52.3	125.5
7	32 13C4-PFHpA	367.2 > 321.8	2.34e4	2.82e4	0.120	0.306	3.45	3.49	4.15	113	108.5
8	33 18O2-PFHxS	403 > 102.6	2.50e3	5.12e3	0.120	0.393	3.56	3.56	6.10	129	124.2
9	34 13C2-6:2 FTS	429.1 > 408.9	5.54e3	2.25e4	0.120	0.158	3.64	3.67	3.08	163	156.3
10	35 13C2-PFOA	414.9 > 369.7	2.70e4	2.25e4	0.120	1.067	3.65	3.69	15.0	117	112.5
11	36 13C5-PFNA	468.2 > 422.9	2.42e4	2.28e4	0.120	0.852	3.83	3.86	13.3	130	124.7
12	37 13C8-PFOSA	506.1 > 77.7	2.18e3	2.28e4	0.120	0.098	3.84	3.87	1.19	101	97.1
13	38 13C8-PFOS	507 > 79.9	5.06e3	4.43e3	0.120	0.936	3.89	3.91	14.3	127	122.2
14	39 13C2-PFDA	515.1 > 469.9	2.72e4	2.57e4	0.120	0.810	4.01	4.03	13.2	136	130.2
15	40 13C2-8:2 FTS	529.1 > 508.7	2.87e3	2.57e4	0.120	0.086	4.00	4.03	1.39	136	130.1
16	41 d3-N-MeFOSAA	573.3 > 419	5.04e3	2.28e4	0.120	0.014	4.03	4.06	2.76	1680	123.8
17	42 d5-N-EtFOSAA	589.3 > 419	5.06e3	2.28e4	0.120	0.014	4.12	4.12	2.77	1660	122.2
18	43 13C2-PFUnA	565 > 519.8	2.61e4	2.28e4	0.120	0.962	4.17	4.20	14.3	124	119.0
19	44 13C2-PFDoA	615 > 569.7	2.32e3	2.28e4	0.120	0.094	4.34	4.36	1.27	112	107.4
20	46 13C2-PFTeDA	714.8 > 669.6	1.57e4	2.28e4	0.120	0.694	4.68	4.70	8.61	103	99.2
21	48 13C2-PFHxDA	815 > 769.7	6.55e3	2.28e4	0.120	0.843	5.06	5.07	3.59	35.5	85.1
22	51 13C4-PFBA	217 > 171.8	1.63e4	1.63e4	0.120	1.000	1.54	1.57	12.5	104	100.0
23	52 13C5-PFHxA	318 > 272.9	2.82e4	2.82e4	0.120	1.000	3.19	3.23	5.00	41.7	100.0
24	53 13C3-PFHxS	401.9 > 79.9	5.12e3	5.12e3	0.120	1.000	3.56	3.56	12.5	104	100.0
25	54 13C8-PFOA	421.3 > 376	2.25e4	2.25e4	0.120	1.000	3.65	3.68	12.5	104	100.0
26	55 13C9-PFNA	472.2 > 426.9	2.28e4	2.28e4	0.120	1.000	3.83	3.86	12.5	104	100.0
27	56 13C4-PFOS	503 > 79.9	4.43e3	4.43e3	0.120	1.000	3.89	3.91	12.5	104	100.0
28	57 13C6-PFDA	519.1 > 473.7	2.57e4	2.57e4	0.120	1.000	4.01	4.03	12.5	104	100.0
29	58 13C7-PFUnA	570.1 > 524.8	2.28e4	2.28e4	0.120	1.000	4.17	4.19	12.5	104	100.0
30	59 Total PFBS	299 > 79.7	0.00e0	3.33e3	0.120		2.96		0.000		
31	60 Total PFHxS	398.9 > 79.6	0.00e0	2.50e3	0.120		3.52		0.000		
32	61 Total PFOA	413 > 368.7	0.00e0	2.70e4	0.120		3.65		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-22.qld

Last Altered: Wednesday, July 26, 2017 11:12:51 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:13:46 Pacific Daylight Time

Name: 170725M1_22, Date: 25-Jul-2017, Time: 18:01:17, ID: 1700852-02RE1 DUP01-20170711 0.11996, Description: DUP01-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	0.00e0	5.06e3	0.120		3.89		0.000		
34	63 Total N-Me-FOSAA	570.1 > 419	0.00e0	5.04e3	0.120		4.03		0.000		
35	64 Total N-EtFOSAA	584.2 > 419	0.00e0	5.06e3	0.120		4.17		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-22.qld

Last Altered: Wednesday, July 26, 2017 11:12:51 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:13:24 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_22, Date: 25-Jul-2017, Time: 18:01:17, ID: 1700852-02RE1 DUP01-20170711 0.11996, Description: DUP01-20170711

Total PFBS

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total PFHxS

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total PFOA

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7			26963.203		MM-I	

Total PFOS

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total N-Me-FOSAA

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 N-MeFOSAA	570.1 > 419			5035.341		MM-I	

Total N-EtFOSAA

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
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Dataset: U:\Q4.PRO\results\170725M1\170725M1-22.qld

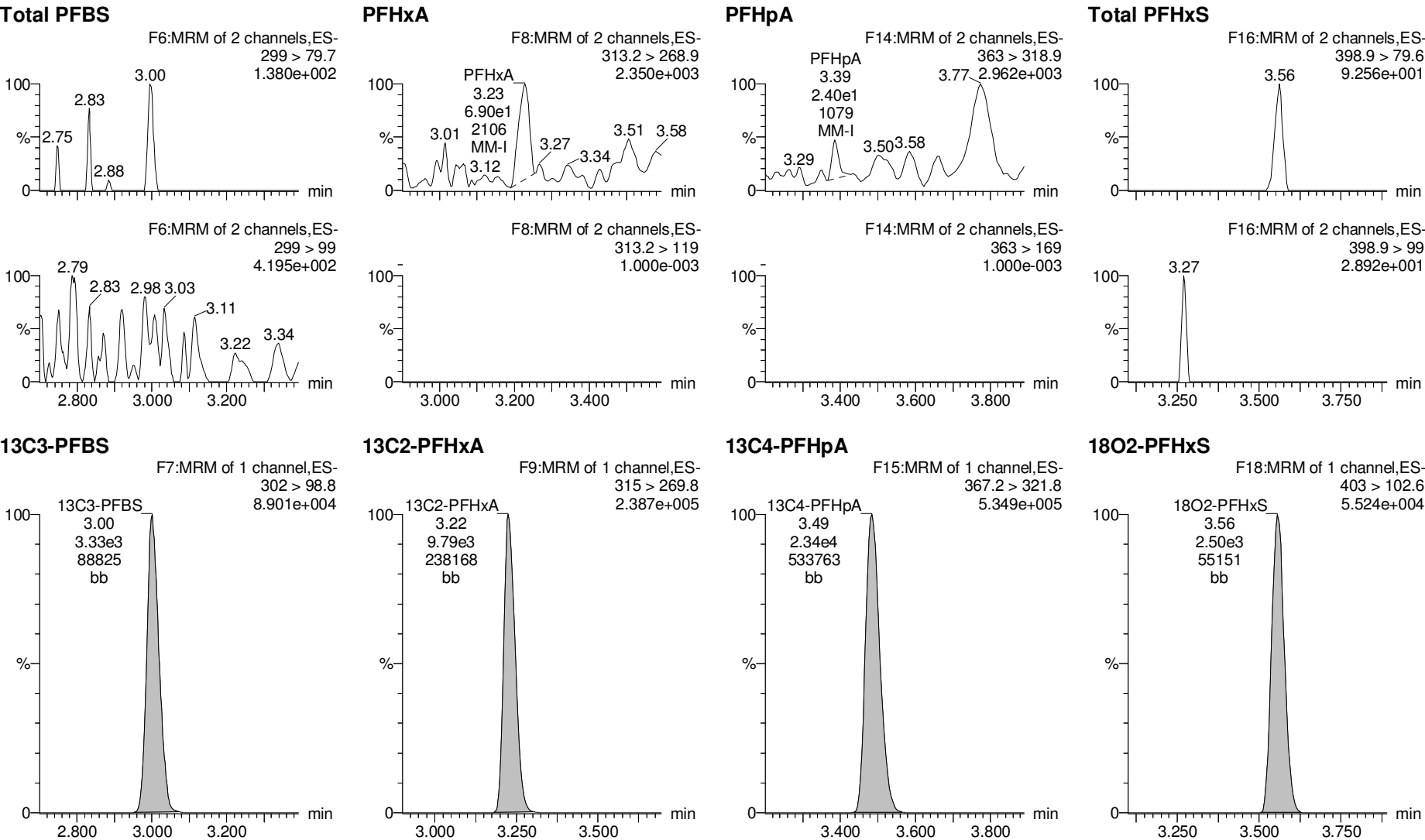
Last Altered: Wednesday, July 26, 2017 11:12:51 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:13:24 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

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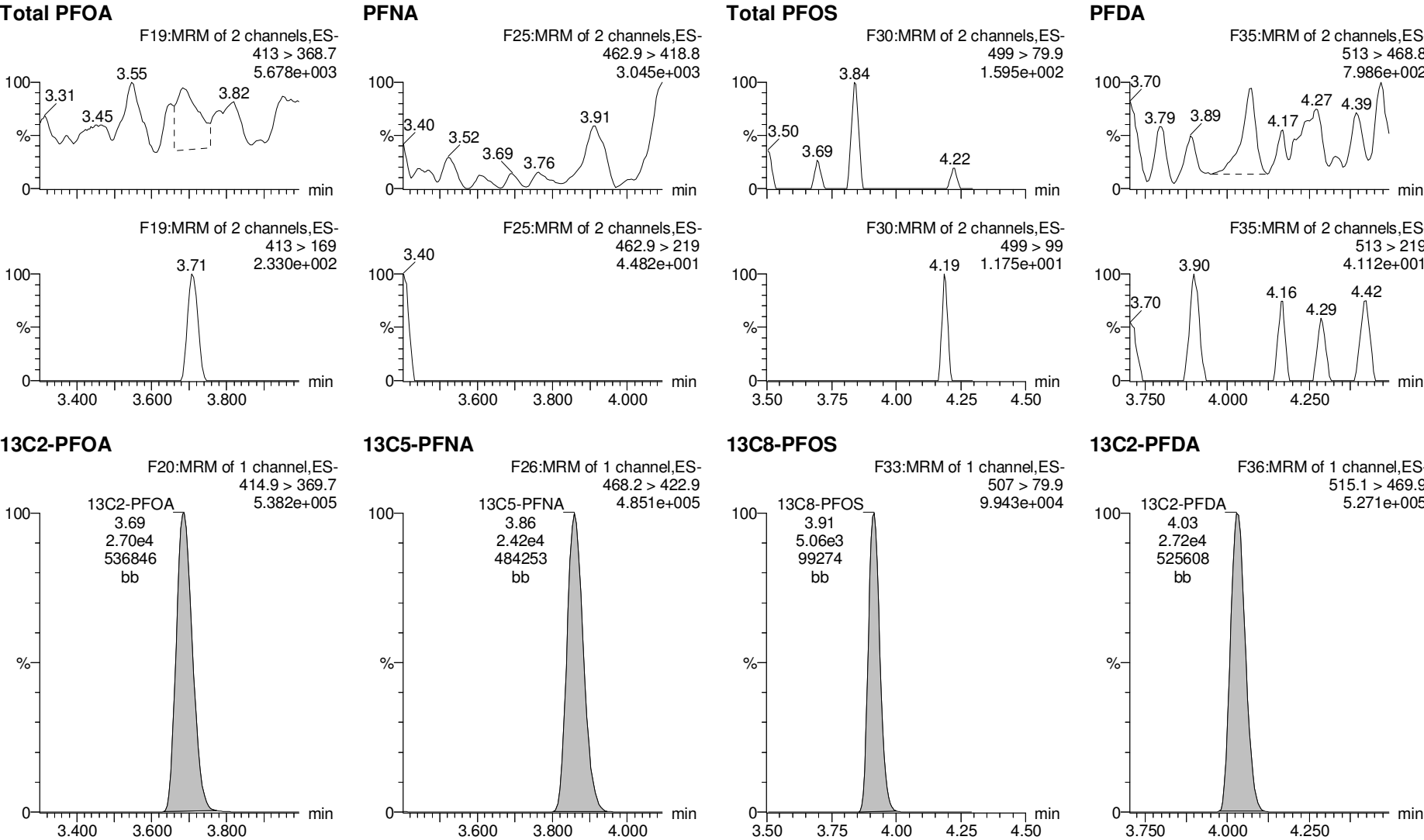


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Last Altered: Wednesday, July 26, 2017 11:12:51 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:13:24 Pacific Daylight Time

Name: 170725M1_22, Date: 25-Jul-2017, Time: 18:01:17, ID: 1700852-02RE1 DUP01-20170711 0.11996, Description: DUP01-20170711

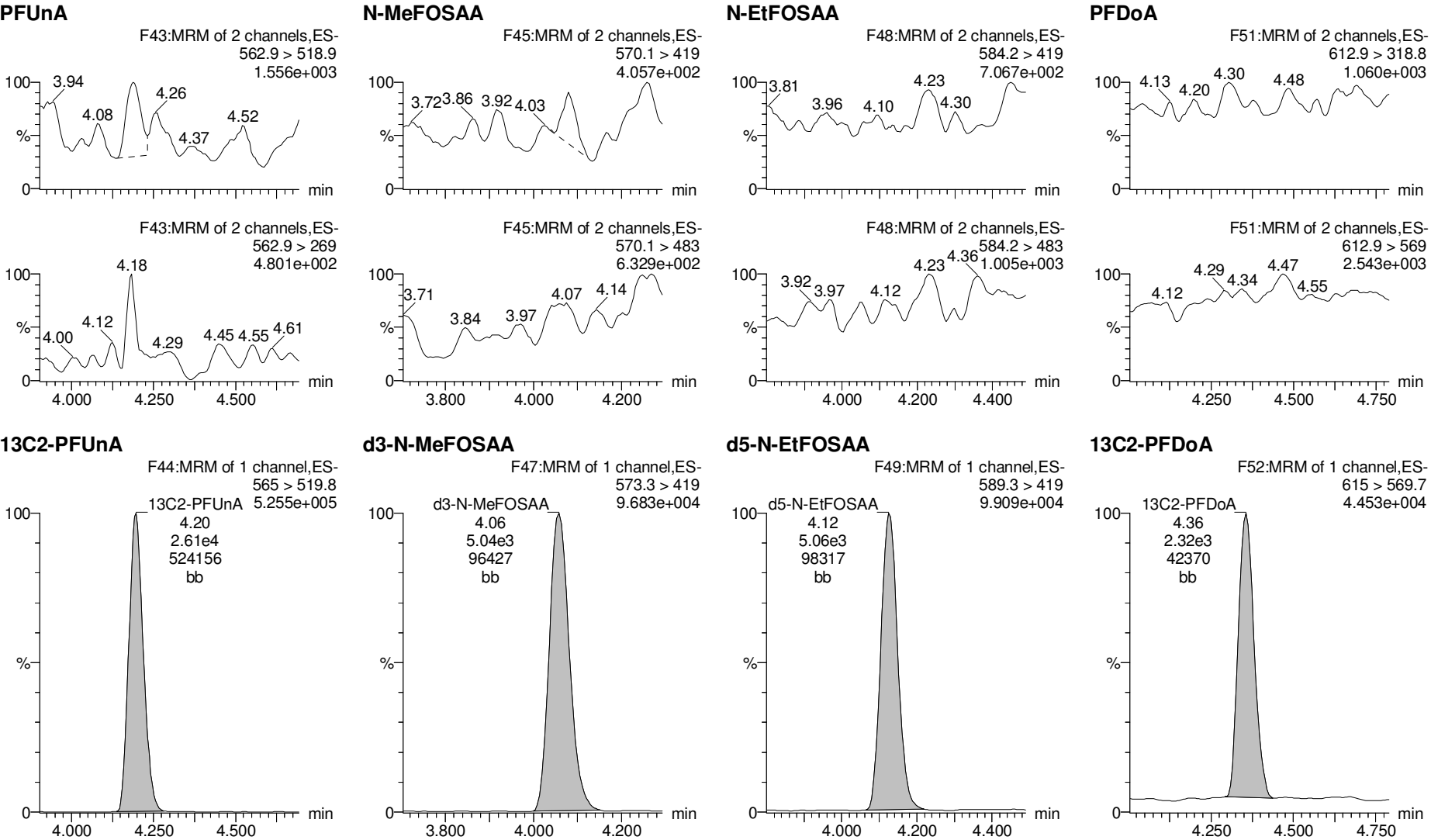


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Last Altered: Wednesday, July 26, 2017 11:12:51 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:13:24 Pacific Daylight Time

Name: 170725M1_22, Date: 25-Jul-2017, Time: 18:01:17, ID: 1700852-02RE1 DUP01-20170711 0.11996, Description: DUP01-20170711



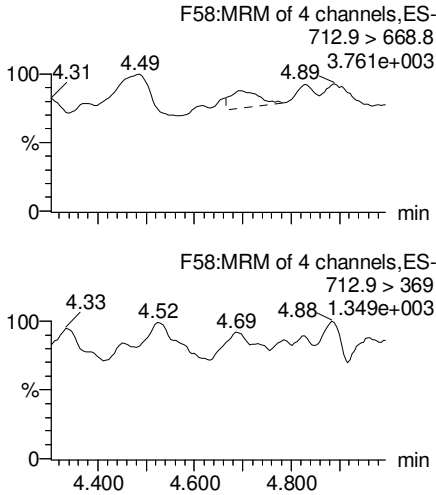
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Last Altered: Wednesday, July 26, 2017 11:12:51 Pacific Daylight Time

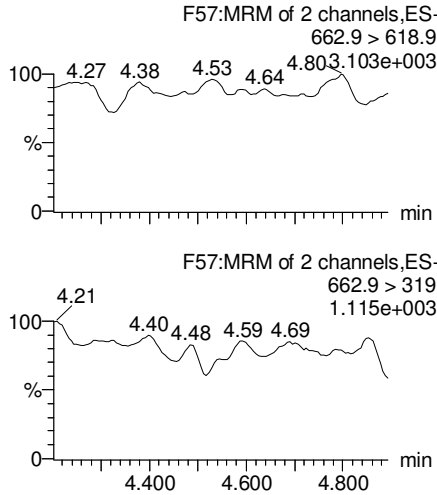
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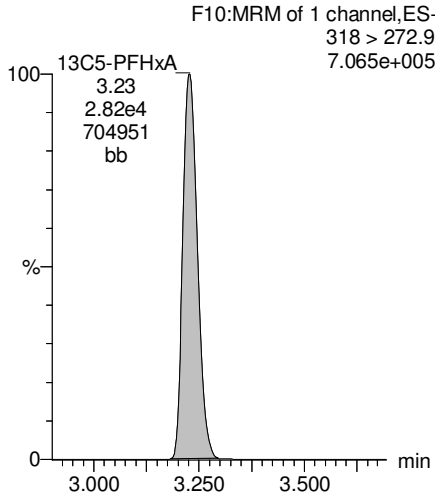
PFTeDA



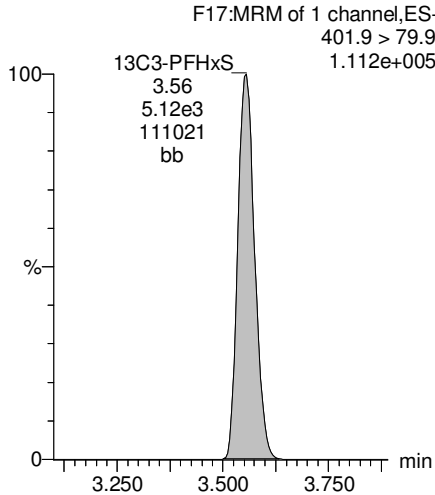
PFTrDA



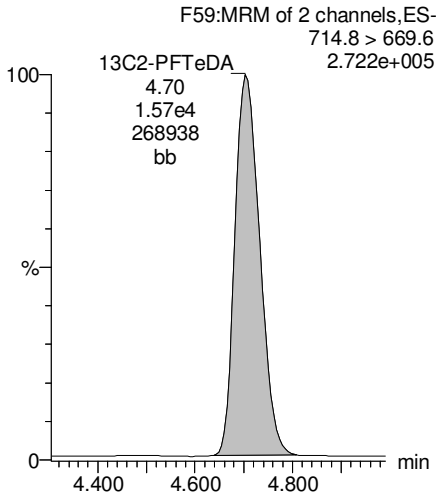
13C5-PFHxA



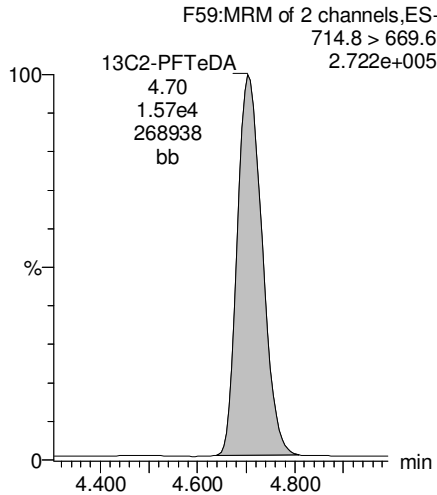
13C3-PFHxS



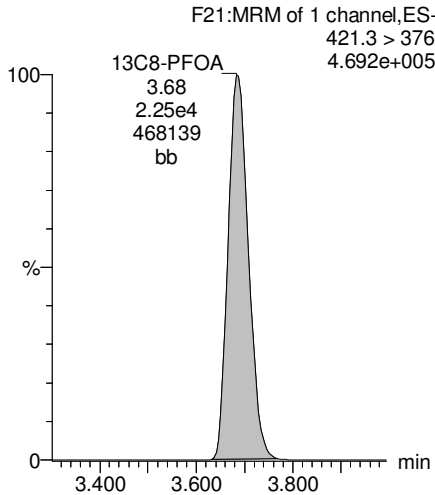
13C2-PFTeDA



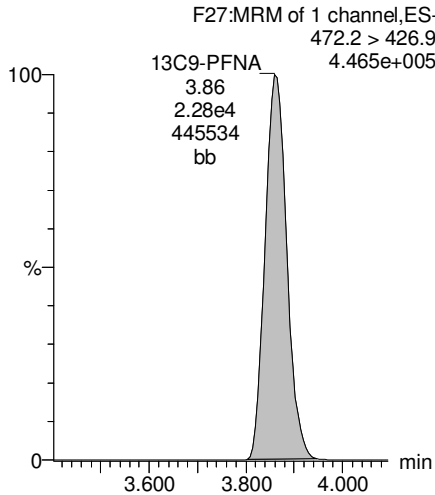
13C2-PFTeDA



13C8-PFOA



13C9-PFNA

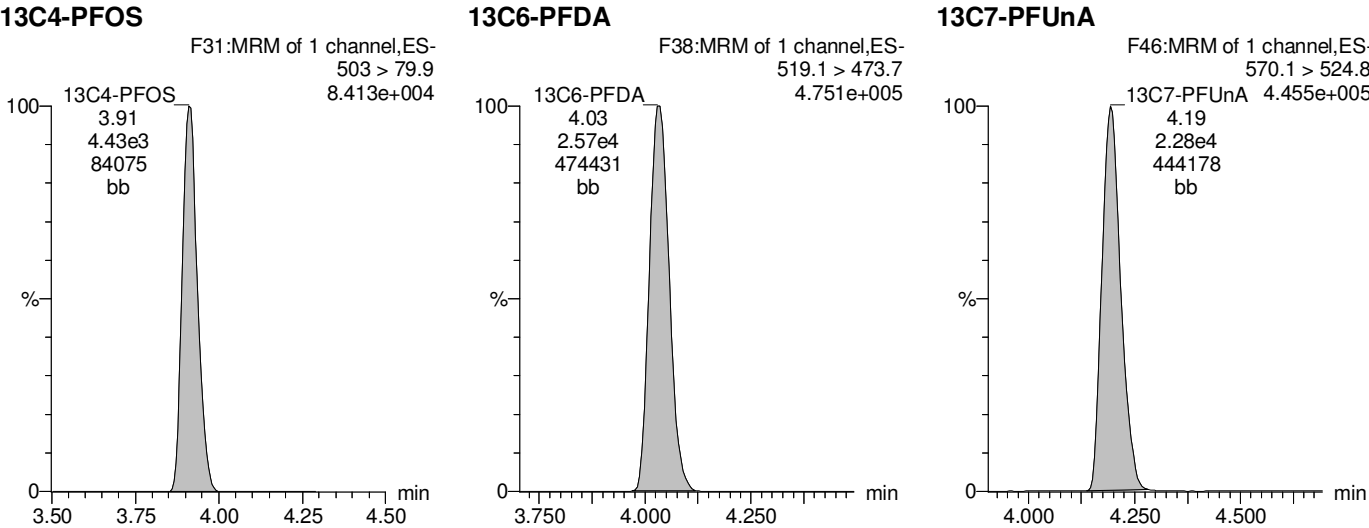


Dataset: U:\Q4.PRO\results\170725M1\170725M1-22.qld

Last Altered: Wednesday, July 26, 2017 11:12:51 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:13:24 Pacific Daylight Time

Name: 170725M1_22, Date: 25-Jul-2017, Time: 18:01:17, ID: 1700852-02RE1 DUP01-20170711 0.11996, Description: DUP01-20170711



Dataset: U:\Q4.PRO\results\170725M1\170725M1-23.qld

Last Altered: Wednesday, July 26, 2017 11:16:16 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:16:32 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_23, Date: 25-Jul-2017, Time: 18:12:03, ID: 1700852-03RE1 1-GW-01-MW204-20170711 0.11649, Description: 1-GW-01-MW204-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	1.11e3	3.22e3	0.116		2.96	3.00	4.31	19.6	
2	4 PFHxA	313.2 > 268.9	7.20e3	9.36e3	0.116		3.19	3.22	3.85	21.0	
3	5 PFHpA	363 > 318.9	1.22e3	2.18e4	0.116		3.45	3.48	0.700	4.25	
4	6 PFHxS	398.9 > 79.6	6.36e3	2.15e3	0.116		3.56	3.55	37.0	190	
5	8 PFOA	413 > 368.7	2.81e3	2.78e4	0.116		3.65	3.68	1.26	9.38	
6	10 PFNA	462.9 > 418.8		2.45e4	0.116		3.83				
7	12 PFOS	499 > 79.9	1.31e3	5.08e3	0.116		3.89	3.90	3.23	23.2	
8	13 PFDA	513 > 468.8		2.33e4	0.116		4.01				
9	15 N-MeFOSAA	570.1 > 419		4.65e3	0.116		4.03				
10	16 N-EtFOSAA	584.2 > 419		4.17e3	0.116		4.10				
11	17 PFUnA	562.9 > 518.9		2.32e4	0.116		4.17				
12	19 PFDoA	612.9 > 318.8		2.47e3	0.116		4.34				

Dataset: U:\Q4.PRO\results\170725M1\170725M1-23.qld

Last Altered: Wednesday, July 26, 2017 11:16:16 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:16:54 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_23, Date: 25-Jul-2017, Time: 18:12:03, ID: 1700852-03RE1 1-GW-01-MW204-20170711 0.11649, Description: 1-GW-01-MW204-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9		2.47e3	0.116		4.50				
2	22 PFTeDA	712.9 > 668.8		1.42e4	0.116		4.68				
3	28 13C3-PFBA	216.1 > 171.8	1.59e4	1.53e4	0.116	0.820	1.54	1.57	13.1	137	127.3
4	29 13C3-PFPeA	266 > 221.8	2.55e4	2.69e4	0.116	0.248	2.77	2.81	4.74	164	152.8
5	30 13C3-PFBS	302 > 98.8	3.22e3	2.69e4	0.116	0.031	2.96	3.00	0.598	165	153.9
6	31 13C2-PFHxA	315 > 269.8	9.36e3	2.69e4	0.116	0.276	3.19	3.22	1.74	54.1	126.0
7	32 13C4-PFHpA	367.2 > 321.8	2.18e4	2.69e4	0.116	0.306	3.45	3.48	4.05	114	106.0
8	33 18O2-PFHxS	403 > 102.6	2.15e3	4.10e3	0.116	0.393	3.56	3.55	6.56	143	133.6
9	34 13C2-6:2 FTS	429.1 > 408.9	4.42e3	1.92e4	0.116	0.158	3.64	3.67	2.87	156	145.6
10	35 13C2-PFOA	414.9 > 369.7	2.78e4	1.92e4	0.116	1.067	3.65	3.68	18.1	145	135.6
11	36 13C5-PFNA	468.2 > 422.9	2.45e4	2.16e4	0.116	0.852	3.83	3.86	14.2	143	133.0
12	37 13C8-PFOSA	506.1 > 77.7	1.93e3	1.99e4	0.116	0.098	3.84	3.87	1.21	106	98.7
13	38 13C8-PFOS	507 > 79.9	5.08e3	4.15e3	0.116	0.936	3.89	3.91	15.3	140	130.6
14	39 13C2-PFDA	515.1 > 469.9	2.33e4	2.55e4	0.116	0.810	4.01	4.03	11.4	121	112.9
15	40 13C2-8:2 FTS	529.1 > 508.7	2.77e3	2.55e4	0.116	0.086	4.00	4.02	1.36	136	127.0
16	41 d3-N-MeFOSAA	573.3 > 419	4.65e3	1.99e4	0.116	0.014	4.03	4.06	2.92	1830	131.3
17	42 d5-N-EtFOSAA	589.3 > 419	4.17e3	1.99e4	0.116	0.014	4.12	4.12	2.62	1610	115.4
18	43 13C2-PFUnA	565 > 519.8	2.32e4	1.99e4	0.116	0.962	4.17	4.20	14.6	130	121.3
19	44 13C2-PFDoA	615 > 569.7	2.47e3	1.99e4	0.116	0.094	4.34	4.36	1.55	141	131.3
20	46 13C2-PFTeDA	714.8 > 669.6	1.42e4	1.99e4	0.116	0.694	4.68	4.70	8.93	110	102.9
21	48 13C2-PFHxDA	815 > 769.7	4.53e3	1.99e4	0.116	0.843	5.06	5.07	2.84	29.0	67.5
22	51 13C4-PFBA	217 > 171.8	1.53e4	1.53e4	0.116	1.000	1.54	1.57	12.5	107	100.0
23	52 13C5-PFHxA	318 > 272.9	2.69e4	2.69e4	0.116	1.000	3.19	3.22	5.00	42.9	100.0
24	53 13C3-PFHxS	401.9 > 79.9	4.10e3	4.10e3	0.116	1.000	3.56	3.55	12.5	107	100.0
25	54 13C8-PFOA	421.3 > 376	1.92e4	1.92e4	0.116	1.000	3.65	3.68	12.5	107	100.0
26	55 13C9-PFNA	472.2 > 426.9	2.16e4	2.16e4	0.116	1.000	3.83	3.86	12.5	107	100.0
27	56 13C4-PFOS	503 > 79.9	4.15e3	4.15e3	0.116	1.000	3.89	3.91	12.5	107	100.0
28	57 13C6-PFDA	519.1 > 473.7	2.55e4	2.55e4	0.116	1.000	4.01	4.03	12.5	107	100.0
29	58 13C7-PFUnA	570.1 > 524.8	1.99e4	1.99e4	0.116	1.000	4.17	4.19	12.5	107	100.0
30	59 Total PFBS	299 > 79.7	1.11e3	3.22e3	0.116		2.96		4.31	19.6	
31	60 Total PFHxS	398.9 > 79.6	6.36e3	2.15e3	0.116		3.52		37.0	190	
32	61 Total PFOA	413 > 368.7	2.81e3	2.78e4	0.116		3.65		1.26	9.38	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-23.qld

Last Altered: Wednesday, July 26, 2017 11:16:16 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:16:54 Pacific Daylight Time

Name: 170725M1_23, Date: 25-Jul-2017, Time: 18:12:03, ID: 1700852-03RE1 1-GW-01-MW204-20170711 0.11649, Description: 1-GW-01-MW204-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	1.31e3	5.08e3	0.116		3.89		3.23	23.2	
34	63 Total N-Me-FOSAA	570.1 > 419	0.00e0	4.65e3	0.116		4.03		0.000		
35	64 Total N-EtFOSAA	584.2 > 419	0.00e0	4.17e3	0.116		4.17		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-23.qld

Last Altered: Wednesday, July 26, 2017 11:16:16 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:16:32 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_23, Date: 25-Jul-2017, Time: 18:12:03, ID: 1700852-03RE1 1-GW-01-MW204-20170711 0.11649, Description: 1-GW-01-MW204-20170711

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.00	1108.913	3216.751	4.309	bb	19.6

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.55	6363.427	2151.315	36.974	MM	189.6

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	3.68	2805.358	27823.500	1.260	bb	9.4

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.90	1311.700	5076.970	3.230	bb	23.2

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419			4167.590		MM-I	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-23.qld

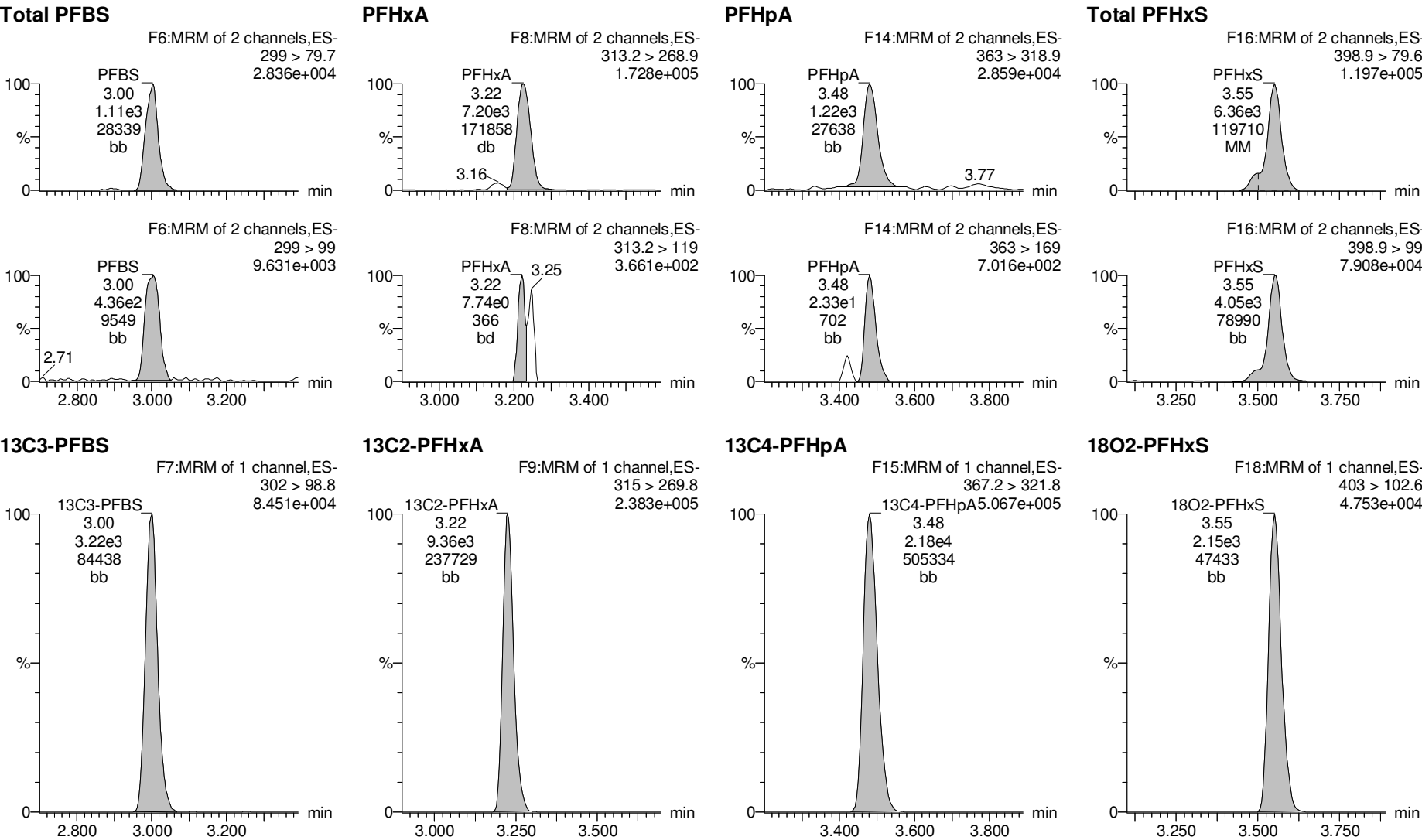
Last Altered: Wednesday, July 26, 2017 11:16:16 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:16:32 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_23, Date: 25-Jul-2017, Time: 18:12:03, ID: 1700852-03RE1 1-GW-01-MW204-20170711 0.11649, Description: 1-GW-01-MW204-20170711

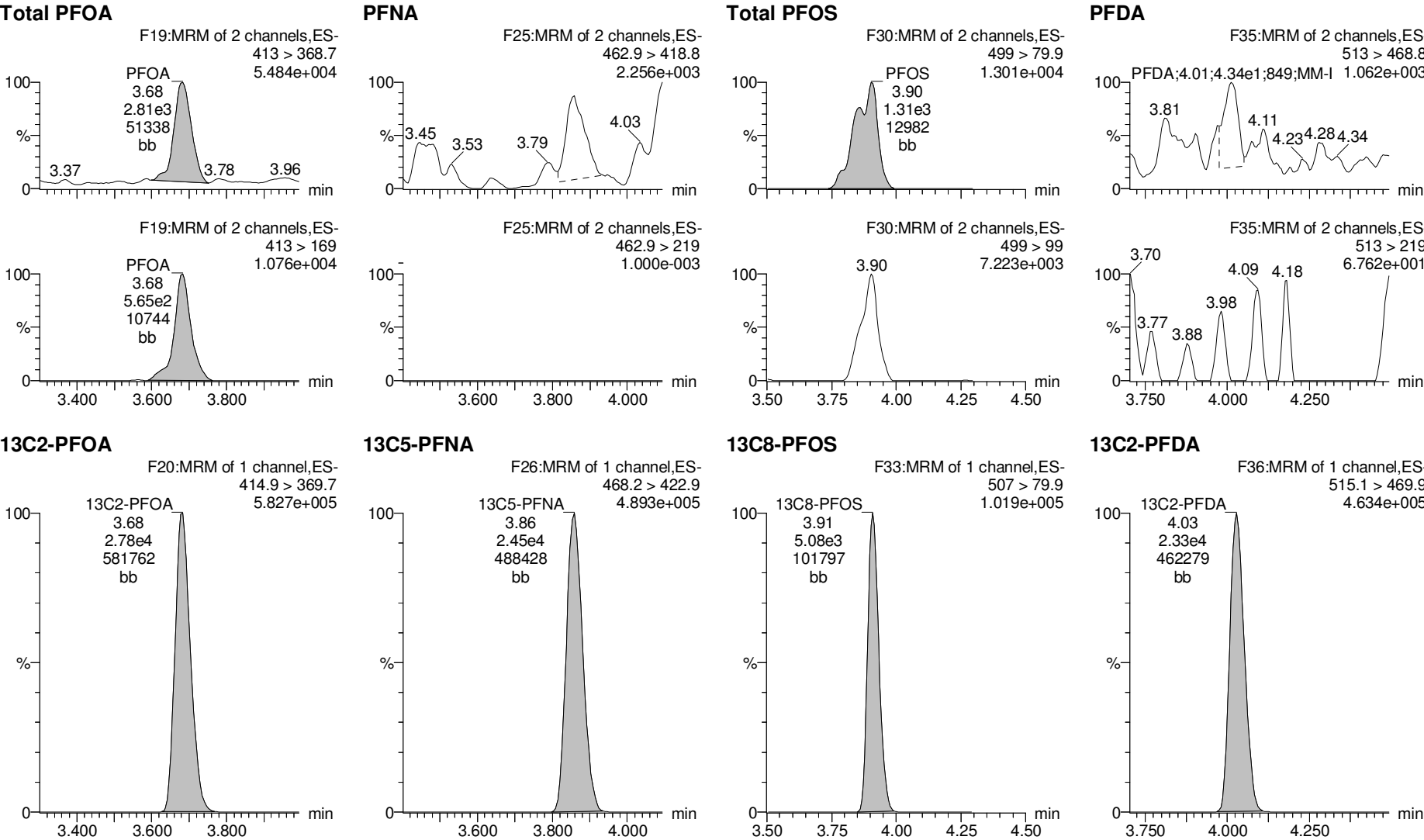


Dataset: U:\Q4.PRO\results\170725M1\170725M1-23.qld

Last Altered: Wednesday, July 26, 2017 11:16:16 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:16:32 Pacific Daylight Time

Name: 170725M1_23, Date: 25-Jul-2017, Time: 18:12:03, ID: 1700852-03RE1 1-GW-01-MW204-20170711 0.11649, Description: 1-GW-01-MW204-20170711

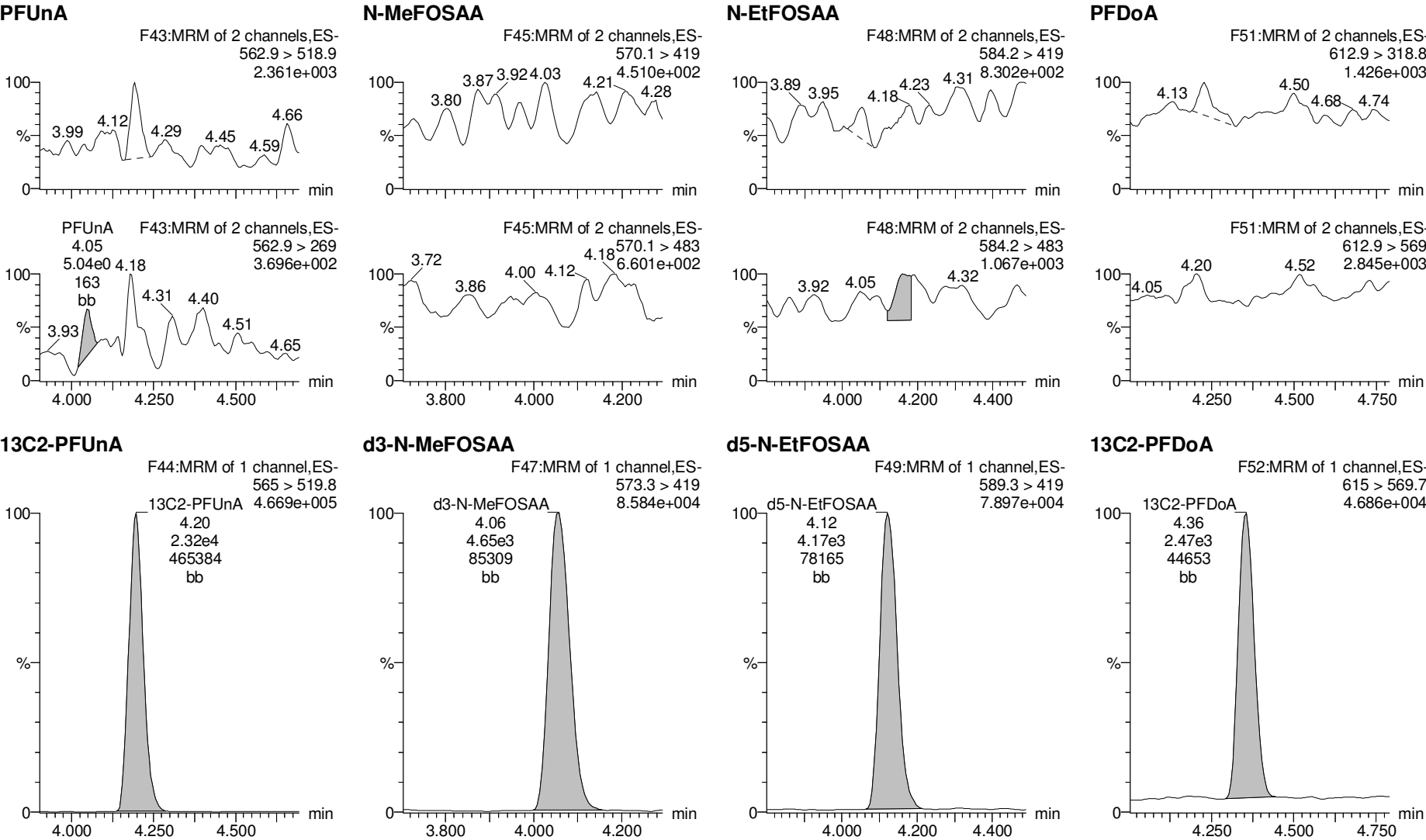


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Last Altered: Wednesday, July 26, 2017 11:16:16 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:16:32 Pacific Daylight Time

Name: 170725M1_23, Date: 25-Jul-2017, Time: 18:12:03, ID: 1700852-03RE1 1-GW-01-MW204-20170711 0.11649, Description: 1-GW-01-MW204-20170711

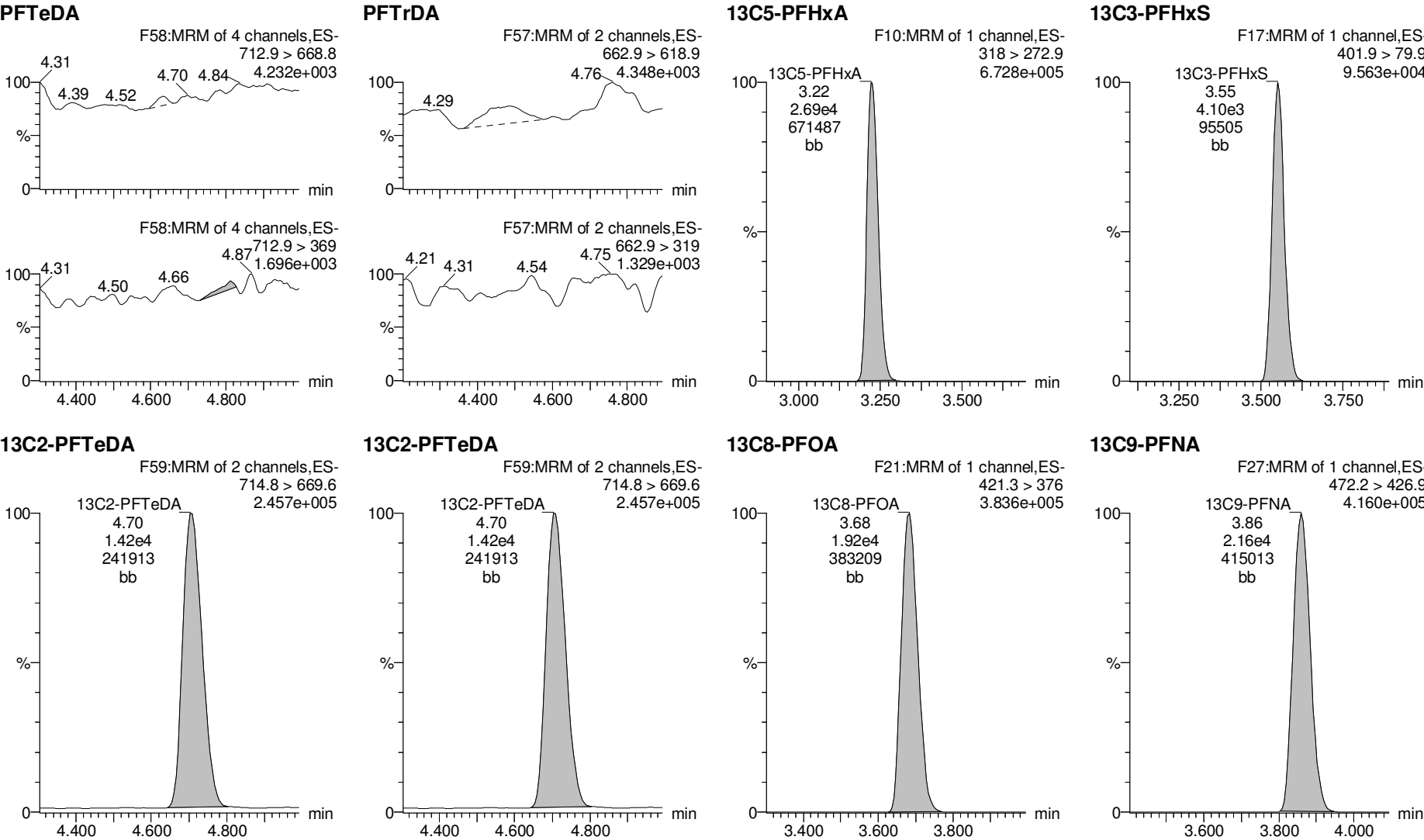


Dataset: U:\Q4.PRO\results\170725M1\170725M1-23.qld

Last Altered: Wednesday, July 26, 2017 11:16:16 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:16:32 Pacific Daylight Time

Name: 170725M1_23, Date: 25-Jul-2017, Time: 18:12:03, ID: 1700852-03RE1 1-GW-01-MW204-20170711 0.11649, Description: 1-GW-01-MW204-20170711

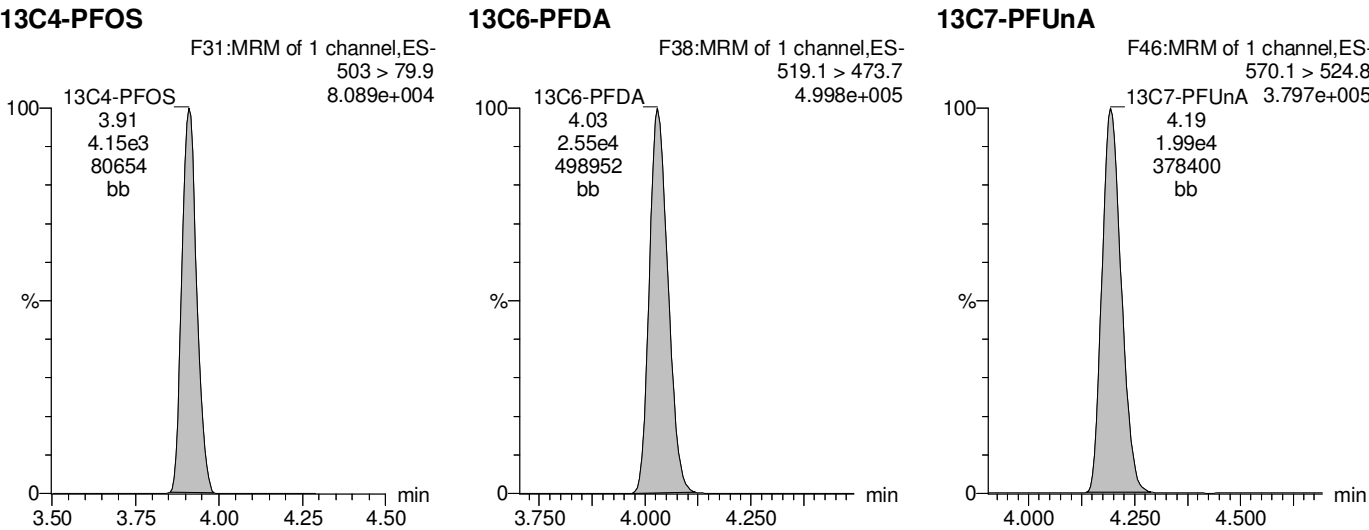


Dataset: U:\Q4.PRO\results\170725M1\170725M1-23.qld

Last Altered: Wednesday, July 26, 2017 11:16:16 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:16:32 Pacific Daylight Time

Name: 170725M1_23, Date: 25-Jul-2017, Time: 18:12:03, ID: 1700852-03RE1 1-GW-01-MW204-20170711 0.11649, Description: 1-GW-01-MW204-20170711



Dataset: U:\Q4.PRO\results\170725M1\170725M1-24.qld

Last Altered: Wednesday, July 26, 2017 11:19:08 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:19:23 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_24, Date: 25-Jul-2017, Time: 18:22:49, ID: B7G0107-MS1 Matrix Spike 0.12078, Description: Matrix Spike

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	8.89e3	5.04e3	0.121		2.96	3.00	22.0	98.2	
2	4 PFHxA	313.2 > 268.9	5.05e4	1.46e4	0.121		3.19	3.22	17.3	94.1	
3	5 PFHpA	363 > 318.9	3.35e4	3.28e4	0.121		3.45	3.48	12.8	83.9	
4	6 PFHxS	398.9 > 79.6	1.33e4	3.38e3	0.121		3.56	3.55	49.0	244	
5	8 PFOA	413 > 368.7	3.46e4	4.55e4	0.121		3.65	3.68	9.51	79.4	
6	10 PFNA	462.9 > 418.8	3.32e4	3.86e4	0.121		3.83	3.86	10.8	80.0	
7	12 PFOS	499 > 79.9	8.10e3	8.04e3	0.121		3.89	3.91	12.6	88.5	
8	13 PFDA	513 > 468.8	3.31e4	3.58e4	0.121		4.01	4.03	11.6	73.1	
9	15 N-MeFOSAA	570.1 > 419	7.53e3	6.53e3	0.121		4.03	4.06	187	78.1	
10	16 N-EtFOSAA	584.2 > 419	6.00e3	6.67e3	0.121		4.10	4.12	146	75.1	
11	17 PFUnA	562.9 > 518.9	2.05e4	2.99e4	0.121		4.17	4.19	8.57	80.4	
12	19 PFDoA	612.9 > 318.8	2.28e3	3.58e3	0.121		4.34	4.36	7.97	69.7	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-24.qld

Last Altered: Wednesday, July 26, 2017 11:19:08 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:20:29 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_24, Date: 25-Jul-2017, Time: 18:22:49, ID: B7G0107-MS1 Matrix Spike 0.12078, Description: Matrix Spike

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9	2.60e4	3.58e3	0.121		4.50	4.52	90.9	67.5	
2	22 PFTeDA	712.9 > 668.8	1.55e4	1.82e4	0.121		4.68	4.70	10.7	76.5	
3	28 13C3-PFBA	216.1 > 171.8	2.48e4	2.54e4	0.121	0.820	1.54	1.57	12.2	123	118.7
4	29 13C3-PFPeA	266 > 221.8	3.89e4	4.45e4	0.121	0.248	2.77	2.81	4.37	146	140.8
5	30 13C3-PFBS	302 > 98.8	5.04e3	4.45e4	0.121	0.031	2.96	3.00	0.566	151	145.7
6	31 13C2-PFHxA	315 > 269.8	1.46e4	4.45e4	0.121	0.276	3.19	3.22	1.64	49.1	118.6
7	32 13C4-PFHpA	367.2 > 321.8	3.28e4	4.45e4	0.121	0.306	3.45	3.48	3.68	99.7	96.3
8	33 18O2-PFHxS	403 > 102.6	3.38e3	7.25e3	0.121	0.393	3.56	3.56	5.82	123	118.6
9	34 13C2-6:2 FTS	429.1 > 408.9	7.18e3	3.65e4	0.121	0.158	3.64	3.67	2.46	129	124.6
10	35 13C2-PFOA	414.9 > 369.7	4.55e4	3.65e4	0.121	1.067	3.65	3.68	15.6	121	116.7
11	36 13C5-PFNA	468.2 > 422.9	3.86e4	3.93e4	0.121	0.852	3.83	3.86	12.3	119	115.2
12	37 13C8-PFOSA	506.1 > 77.7	2.48e3	3.47e4	0.121	0.098	3.84	3.87	0.893	75.3	72.7
13	38 13C8-PFOS	507 > 79.9	8.04e3	6.86e3	0.121	0.936	3.89	3.91	14.7	130	125.3
14	39 13C2-PFDA	515.1 > 469.9	3.58e4	3.83e4	0.121	0.810	4.01	4.03	11.7	119	115.3
15	40 13C2-8:2 FTS	529.1 > 508.7	4.57e3	3.83e4	0.121	0.086	4.00	4.02	1.49	144	139.3
16	41 d3-N-MeFOSAA	573.3 > 419	6.53e3	3.47e4	0.121	0.014	4.03	4.06	2.36	1420	105.9
17	42 d5-N-EtFOSAA	589.3 > 419	6.67e3	3.47e4	0.121	0.014	4.12	4.12	2.41	1430	106.2
18	43 13C2-PFUnA	565 > 519.8	2.99e4	3.47e4	0.121	0.962	4.17	4.19	10.8	92.7	89.6
19	44 13C2-PFDoA	615 > 569.7	3.58e3	3.47e4	0.121	0.094	4.34	4.36	1.29	113	109.4
20	46 13C2-PFTeDA	714.8 > 669.6	1.82e4	3.47e4	0.121	0.694	4.68	4.70	6.56	78.3	75.6
21	48 13C2-PFHxDA	815 > 769.7	5.81e3	3.47e4	0.121	0.843	5.06	5.07	2.09	20.6	49.7
22	51 13C4-PFBA	217 > 171.8	2.54e4	2.54e4	0.121	1.000	1.54	1.57	12.5	103	100.0
23	52 13C5-PFHxA	318 > 272.9	4.45e4	4.45e4	0.121	1.000	3.19	3.22	5.00	41.4	100.0
24	53 13C3-PFHxS	401.9 > 79.9	7.25e3	7.25e3	0.121	1.000	3.56	3.56	12.5	103	100.0
25	54 13C8-PFOA	421.3 > 376	3.65e4	3.65e4	0.121	1.000	3.65	3.68	12.5	103	100.0
26	55 13C9-PFNA	472.2 > 426.9	3.93e4	3.93e4	0.121	1.000	3.83	3.86	12.5	103	100.0
27	56 13C4-PFOS	503 > 79.9	6.86e3	6.86e3	0.121	1.000	3.89	3.91	12.5	103	100.0
28	57 13C6-PFDA	519.1 > 473.7	3.83e4	3.83e4	0.121	1.000	4.01	4.03	12.5	103	100.0
29	58 13C7-PFUnA	570.1 > 524.8	3.47e4	3.47e4	0.121	1.000	4.17	4.19	12.5	103	100.0
30	59 Total PFBS	299 > 79.7	8.91e3	5.04e3	0.121		2.96		22.0	98.2	
31	60 Total PFHxS	398.9 > 79.6	1.33e4	3.38e3	0.121		3.52		49.0	244	
32	61 Total PFOA	413 > 368.7	3.47e4	4.55e4	0.121		3.65		9.51	79.4	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-24.qld

Last Altered: Wednesday, July 26, 2017 11:19:08 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:20:29 Pacific Daylight Time

Name: 170725M1_24, Date: 25-Jul-2017, Time: 18:22:49, ID: B7G0107-MS1 Matrix Spike 0.12078, Description: Matrix Spike

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	8.10e3	8.04e3	0.121		3.89		12.6	88.5	
34	63 Total N-Me-FOSAA	570.1 > 419	7.53e3	6.53e3	0.121		4.03		187	78.1	
35	64 Total N-EtFOSAA	584.2 > 419	6.00e3	6.67e3	0.121		4.17		146	75.1	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-24.qld

Last Altered: Wednesday, July 26, 2017 11:19:08 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:19:23 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_24, Date: 25-Jul-2017, Time: 18:22:49, ID: B7G0107-MS1 Matrix Spike 0.12078, Description: Matrix Spike

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.00	8893.477	5043.952	22.040	bb	98.2
2	59 Total PFBS	299 > 79.7	2.89	14.224	5043.952	0.035	bbl	

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.55	13251.066	3378.732	49.024	MM	244.0

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	3.68	34637.840	45509.391	9.514	bb	79.4
2	61 Total PFOA	413 > 368.7	3.37	105.885	45509.391	0.029	bbl	

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.91	8101.024	8036.417	12.600	MM	88.5

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 N-MeFOSAA	570.1 > 419	4.06	7534.799	6533.631	187.400	bb	78.1

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419	4.12	6003.659	6671.581	146.231	db	75.1

Dataset: U:\Q4.PRO\results\170725M1\170725M1-24.qld

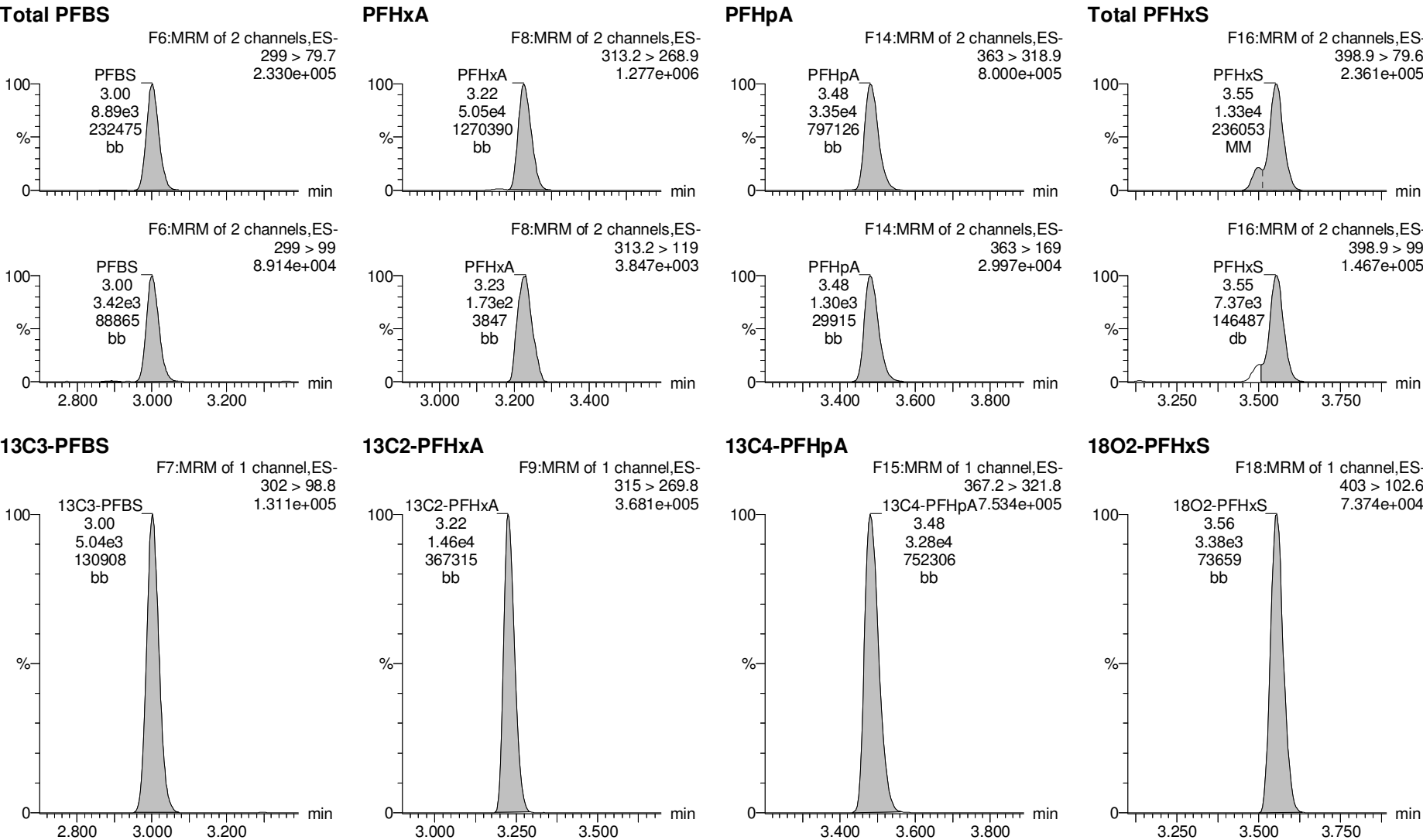
Last Altered: Wednesday, July 26, 2017 11:19:08 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:19:23 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_24, Date: 25-Jul-2017, Time: 18:22:49, ID: B7G0107-MS1 Matrix Spike 0.12078, Description: Matrix Spike

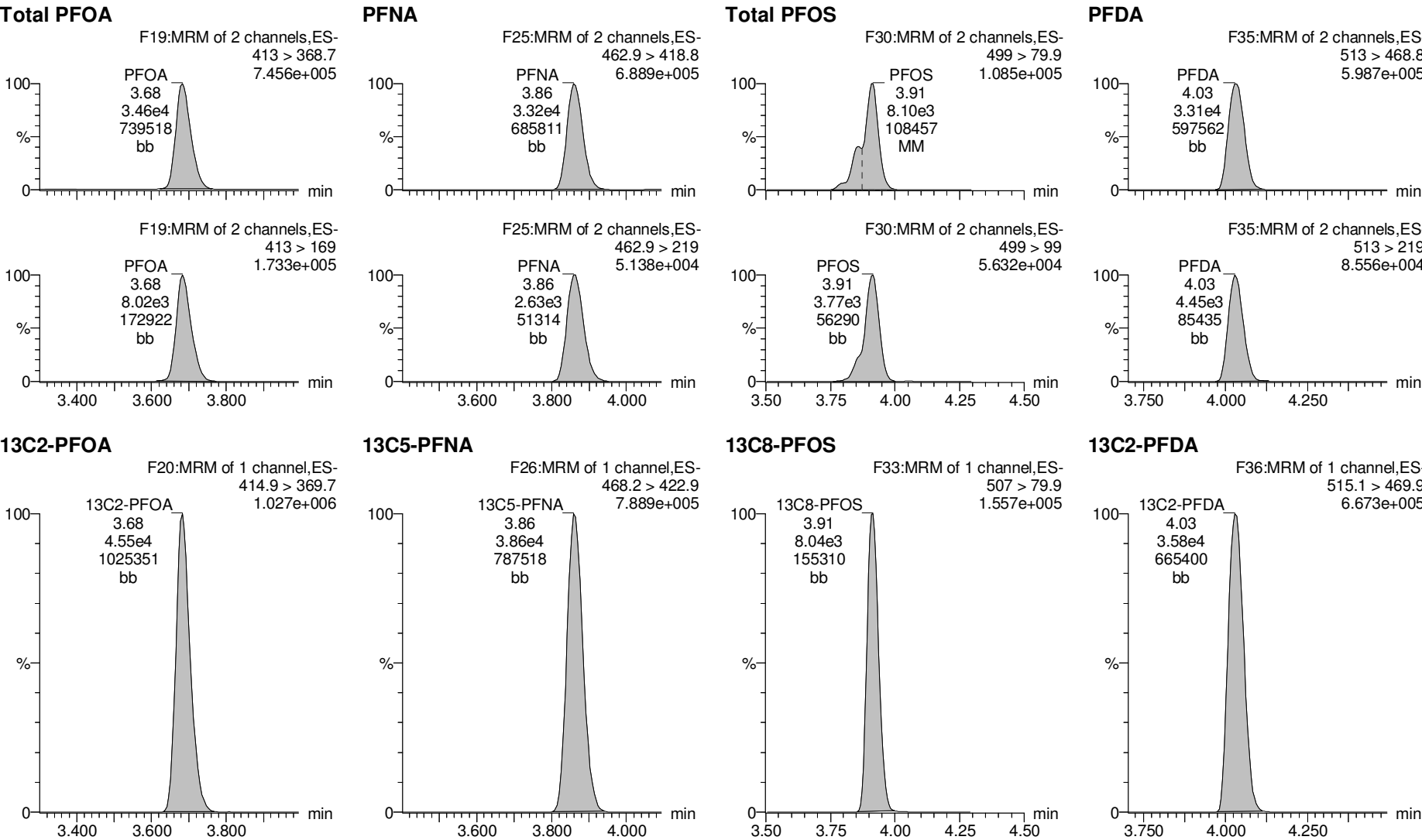


Dataset: U:\Q4.PRO\results\170725M1\170725M1-24.qld

Last Altered: Wednesday, July 26, 2017 11:19:08 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:19:23 Pacific Daylight Time

Name: 170725M1_24, Date: 25-Jul-2017, Time: 18:22:49, ID: B7G0107-MS1 Matrix Spike 0.12078, Description: Matrix Spike

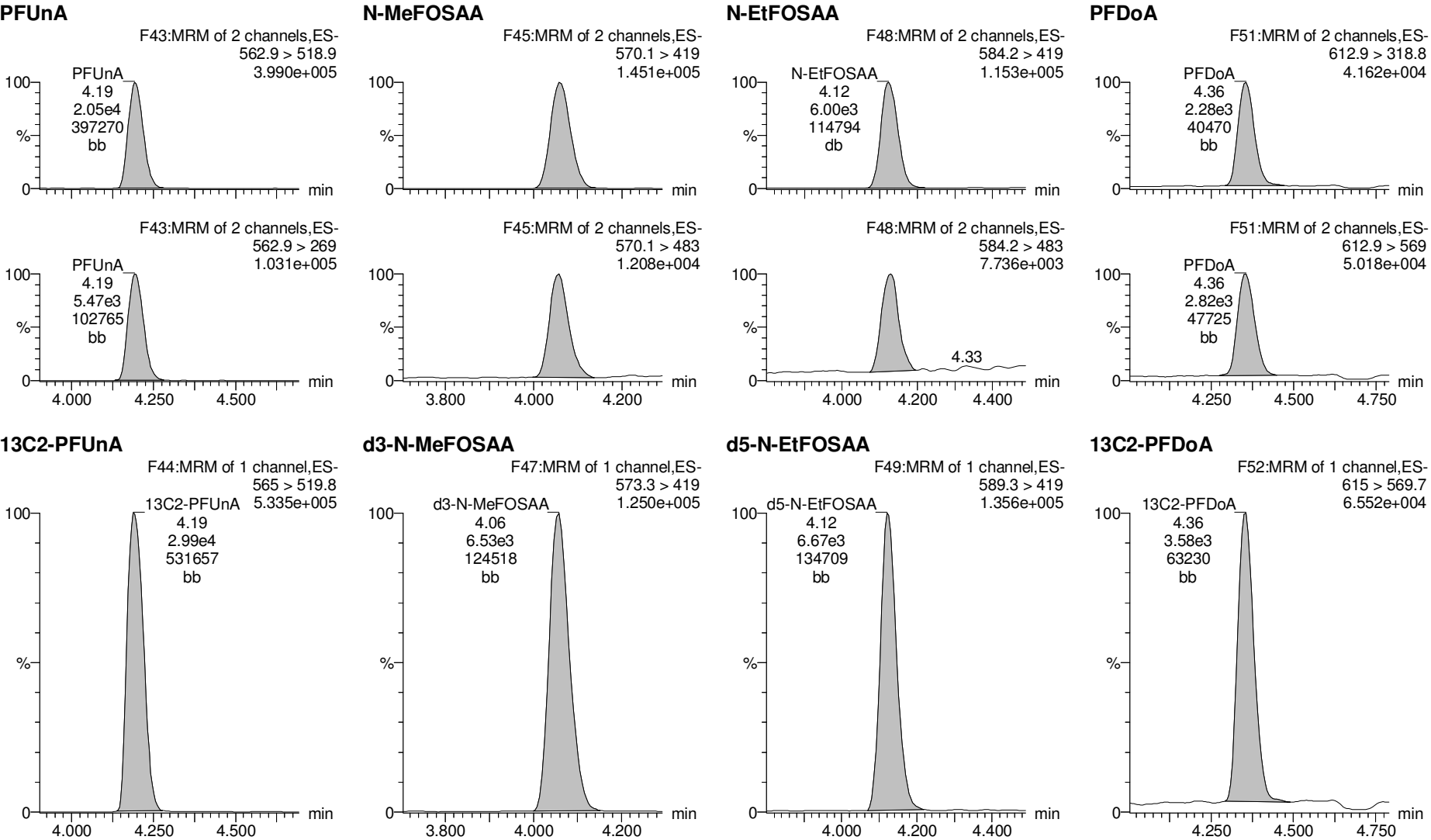


Dataset: U:\Q4.PRO\results\170725M1\170725M1-24.qld

Last Altered: Wednesday, July 26, 2017 11:19:08 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:19:23 Pacific Daylight Time

Name: 170725M1_24, Date: 25-Jul-2017, Time: 18:22:49, ID: B7G0107-MS1 Matrix Spike 0.12078, Description: Matrix Spike

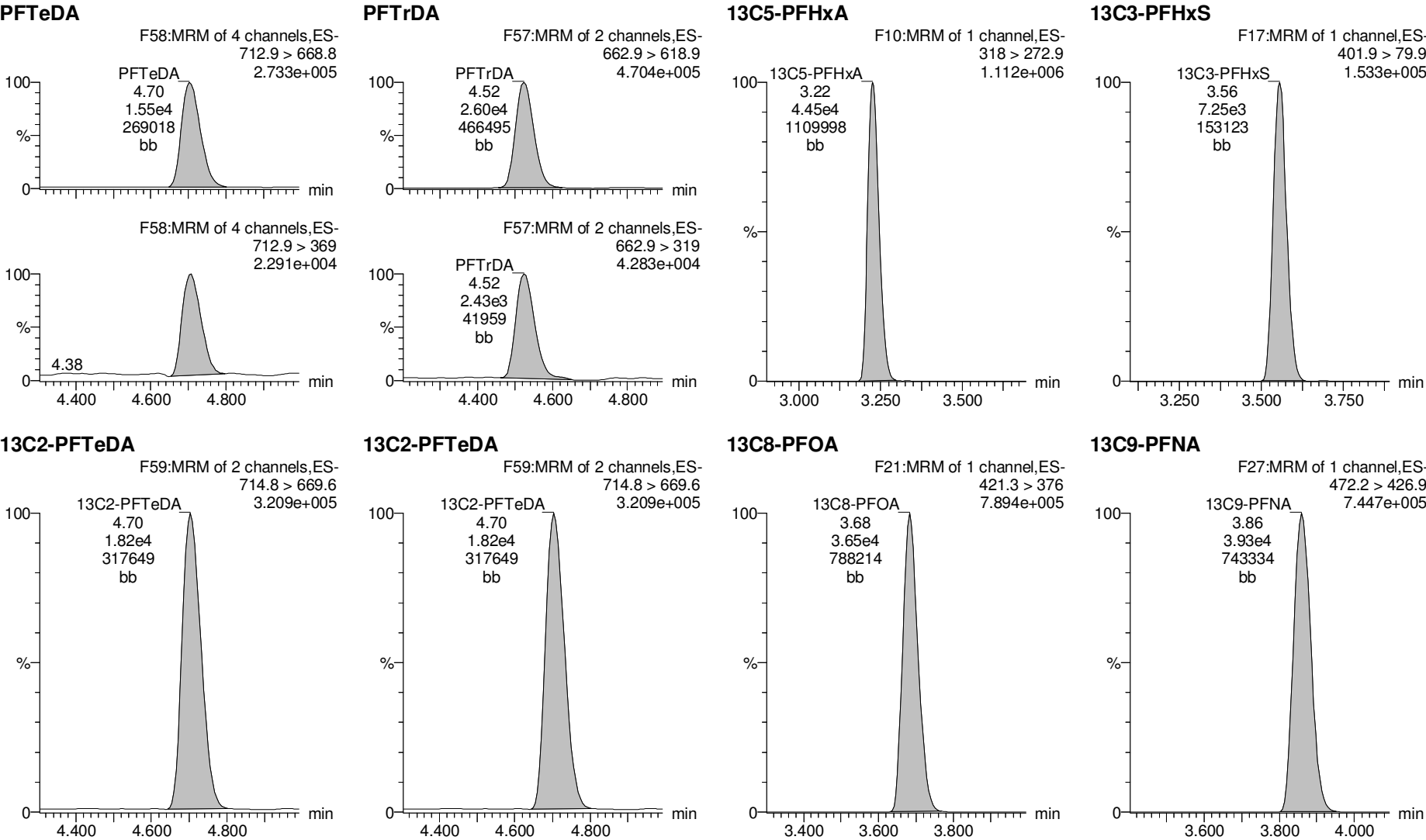


Dataset: U:\Q4.PRO\results\170725M1\170725M1-24.qld

Last Altered: Wednesday, July 26, 2017 11:19:08 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:19:23 Pacific Daylight Time

Name: 170725M1_24, Date: 25-Jul-2017, Time: 18:22:49, ID: B7G0107-MS1 Matrix Spike 0.12078, Description: Matrix Spike



13C5-PFHxA

F10:MRM of 1 channel,ES-318 > 272.9
1.112e+006

3.22

4.45e4

1109998

bb

min

13C3-PFHxS

F17:MRM of 1 channel,ES-401.9 > 79.9
1.533e+005

3.56

7.25e3

153123

bb

min

13C2-PFTeDA

F59:MRM of 2 channels,ES-714.8 > 669.6
3.209e+005

4.70

1.82e4

317649

bb

min

13C2-PFTeDA

F59:MRM of 2 channels,ES-714.8 > 669.6
3.209e+005

4.70

1.82e4

317649

bb

min

13C8-PFOA

F21:MRM of 1 channel,ES-421.3 > 376
7.894e+005

3.68

3.65e4

788214

bb

min

13C9-PFNA

F27:MRM of 1 channel,ES-472.2 > 426.9
7.447e+005

3.86

3.93e4

743334

bb

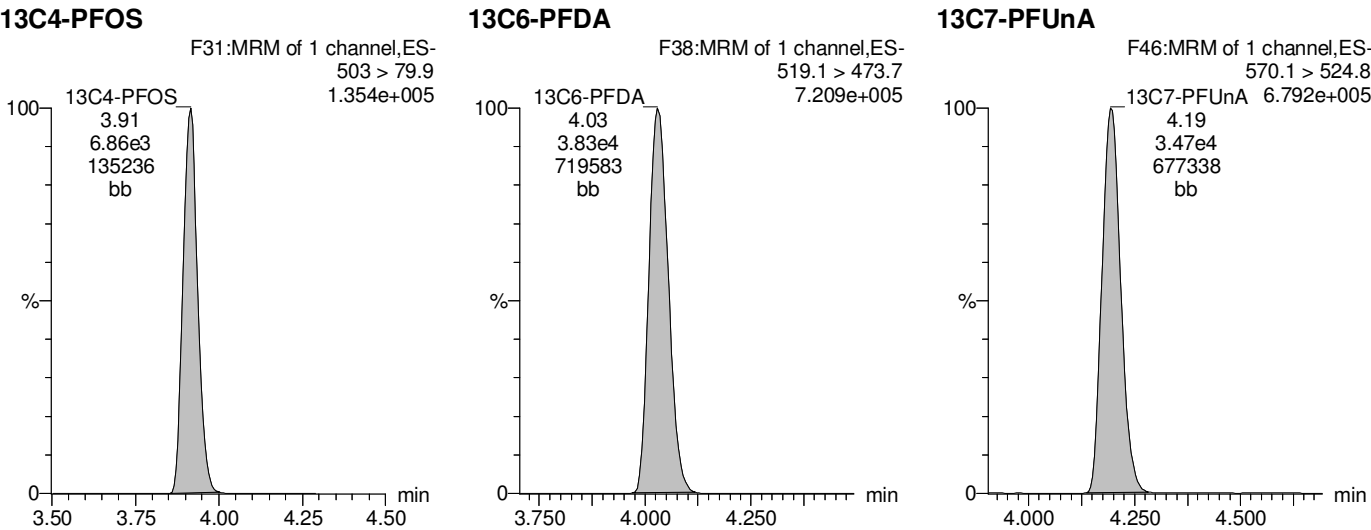
min

Dataset: U:\Q4.PRO\results\170725M1\170725M1-24.qld

Last Altered: Wednesday, July 26, 2017 11:19:08 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:19:23 Pacific Daylight Time

Name: 170725M1_24, Date: 25-Jul-2017, Time: 18:22:49, ID: B7G0107-MS1 Matrix Spike 0.12078, Description: Matrix Spike



Dataset: U:\Q4.PRO\results\170725M1\170725M1-25.qld

Last Altered: Wednesday, July 26, 2017 11:25:04 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:27:04 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_25, Date: 25-Jul-2017, Time: 18:33:36, ID: B7G0107-MSD1 Matrix Spike Dup 0.11599, Description: Matrix Spike Dup

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	7.09e3	3.80e3	0.116		2.96	3.00	23.3	108	
2	4 PFHxA	313.2 > 268.9	3.91e4	1.09e4	0.116		3.19	3.22	18.0	102	
3	5 PFHpA	363 > 318.9	2.57e4	2.64e4	0.116		3.45	3.48	12.2	83.2	
4	6 PFHxS	398.9 > 79.6	1.10e4	2.63e3	0.116		3.56	3.56	52.2	271	
5	8 PFOA	413 > 368.7	2.67e4	3.34e4	0.116		3.65	3.68	9.99	87.0	
6	10 PFNA	462.9 > 418.8	2.74e4	3.11e4	0.116		3.83	3.86	11.0	85.1	
7	12 PFOS	499 > 79.9	6.89e3	6.25e3	0.116		3.89	3.91	13.8	101	
8	13 PFDA	513 > 468.8	2.81e4	2.63e4	0.116		4.01	4.03	13.3	87.8	
9	15 N-MeFOSAA	570.1 > 419	6.66e3	5.64e3	0.116		4.03	4.06	192	83.3	
10	16 N-EtFOSAA	584.2 > 419	5.85e3	5.66e3	0.116		4.10	4.12	168	89.7	
11	17 PFUnA	562.9 > 518.9	1.85e4	2.74e4	0.116		4.17	4.19	8.43	82.3	
12	19 PFDoA	612.9 > 318.8	2.25e3	3.16e3	0.116		4.34	4.36	8.92	81.4	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-25.qld

Last Altered: Wednesday, July 26, 2017 11:25:04 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:27:32 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_25, Date: 25-Jul-2017, Time: 18:33:36, ID: B7G0107-MSD1 Matrix Spike Dup 0.11599, Description: Matrix Spike Dup

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9	2.69e4	3.16e3	0.116		4.50	4.52	107	82.7	
2	22 PFTeDA	712.9 > 668.8	1.78e4	2.12e4	0.116		4.68	4.70	10.5	78.4	
3	28 13C3-PFBA	216.1 > 171.8	1.76e4	1.77e4	0.116	0.820	1.54	1.57	12.4	131	121.2
4	29 13C3-PFPeA	266 > 221.8	2.97e4	3.18e4	0.116	0.248	2.77	2.81	4.67	162	150.6
5	30 13C3-PFBS	302 > 98.8	3.80e3	3.18e4	0.116	0.031	2.96	3.00	0.598	166	153.9
6	31 13C2-PFHxA	315 > 269.8	1.09e4	3.18e4	0.116	0.276	3.19	3.22	1.71	53.4	124.0
7	32 13C4-PFHpA	367.2 > 321.8	2.64e4	3.18e4	0.116	0.306	3.45	3.48	4.16	117	108.9
8	33 18O2-PFHxS	403 > 102.6	2.63e3	5.39e3	0.116	0.393	3.56	3.56	6.11	134	124.5
9	34 13C2-6:2 FTS	429.1 > 408.9	5.46e3	2.74e4	0.116	0.158	3.64	3.67	2.49	136	126.5
10	35 13C2-PFOA	414.9 > 369.7	3.34e4	2.74e4	0.116	1.067	3.65	3.68	15.2	123	114.2
11	36 13C5-PFNA	468.2 > 422.9	3.11e4	2.86e4	0.116	0.852	3.83	3.86	13.6	138	127.7
12	37 13C8-PFOSA	506.1 > 77.7	2.23e3	2.88e4	0.116	0.098	3.84	3.87	0.970	85.2	79.0
13	38 13C8-PFOS	507 > 79.9	6.25e3	5.30e3	0.116	0.936	3.89	3.91	14.7	136	126.0
14	39 13C2-PFDA	515.1 > 469.9	2.63e4	2.61e4	0.116	0.810	4.01	4.03	12.6	134	124.7
15	40 13C2-8:2 FTS	529.1 > 508.7	3.05e3	2.61e4	0.116	0.086	4.00	4.03	1.46	148	136.9
16	41 d3-N-MeFOSAA	573.3 > 419	5.64e3	2.88e4	0.116	0.014	4.03	4.06	2.45	1540	110.1
17	42 d5-N-EtFOSAA	589.3 > 419	5.66e3	2.88e4	0.116	0.014	4.12	4.12	2.46	1520	108.6
18	43 13C2-PFUnA	565 > 519.8	2.74e4	2.88e4	0.116	0.962	4.17	4.20	11.9	107	99.1
19	44 13C2-PFDoA	615 > 569.7	3.16e3	2.88e4	0.116	0.094	4.34	4.36	1.37	125	116.2
20	46 13C2-PFTeDA	714.8 > 669.6	2.12e4	2.88e4	0.116	0.694	4.68	4.70	9.21	114	106.1
21	48 13C2-PFHxDA	815 > 769.7	6.44e3	2.88e4	0.116	0.843	5.06	5.07	2.80	28.6	66.3
22	51 13C4-PFBA	217 > 171.8	1.77e4	1.77e4	0.116	1.000	1.54	1.57	12.5	108	100.0
23	52 13C5-PFHxA	318 > 272.9	3.18e4	3.18e4	0.116	1.000	3.19	3.23	5.00	43.1	100.0
24	53 13C3-PFHxS	401.9 > 79.9	5.39e3	5.39e3	0.116	1.000	3.56	3.56	12.5	108	100.0
25	54 13C8-PFOA	421.3 > 376	2.74e4	2.74e4	0.116	1.000	3.65	3.68	12.5	108	100.0
26	55 13C9-PFNA	472.2 > 426.9	2.86e4	2.86e4	0.116	1.000	3.83	3.86	12.5	108	100.0
27	56 13C4-PFOS	503 > 79.9	5.30e3	5.30e3	0.116	1.000	3.89	3.91	12.5	108	100.0
28	57 13C6-PFDA	519.1 > 473.7	2.61e4	2.61e4	0.116	1.000	4.01	4.03	12.5	108	100.0
29	58 13C7-PFUnA	570.1 > 524.8	2.88e4	2.88e4	0.116	1.000	4.17	4.19	12.5	108	100.0
30	59 Total PFBS	299 > 79.7	7.10e3	3.80e3	0.116		2.96		23.3	108	
31	60 Total PFHxS	398.9 > 79.6	1.10e4	2.63e3	0.116		3.52		52.2	271	
32	61 Total PFOA	413 > 368.7	2.67e4	3.34e4	0.116		3.65		9.99	87.0	

AC 7/26/17

Dataset: U:\Q4.PRO\results\170725M1\170725M1-25.qld

Last Altered: Wednesday, July 26, 2017 11:25:04 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:27:32 Pacific Daylight Time

Name: 170725M1_25, Date: 25-Jul-2017, Time: 18:33:36, ID: B7G0107-MSD1 Matrix Spike Dup 0.11599, Description: Matrix Spike Dup

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	6.89e3	6.25e3	0.116		3.89		13.8	101	
34	63 Total N-Me-FOSAA	570.1 > 419	6.66e3	5.64e3	0.116		4.03		192	83.3	
35	64 Total N-EtFOSAA	584.2 > 419	5.85e3	5.66e3	0.116		4.17		168	89.7	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-25.qld

Last Altered: Wednesday, July 26, 2017 11:25:04 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:27:04 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_25, Date: 25-Jul-2017, Time: 18:33:36, ID: B7G0107-MSD1 Matrix Spike Dup 0.11599, Description: Matrix Spike Dup

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.00	7085.216	3800.212	23.305	bb	108.1
2	59 Total PFBS	299 > 79.7	2.89	15.240	3800.212	0.050	bbl	

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.56	10994.577	2633.899	52.178	bb	270.9

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	3.68	26687.430	33385.160	9.992	bb	87.0

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.91	6890.114	6247.179	13.786	MM	100.9

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 N-MeFOSAA	570.1 > 419	4.06	6664.936	5637.116	192.129	bb	83.3

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419	4.12	5850.189	5664.734	167.820	bd	89.7

Dataset: U:\Q4.PRO\results\170725M1\170725M1-25.qld

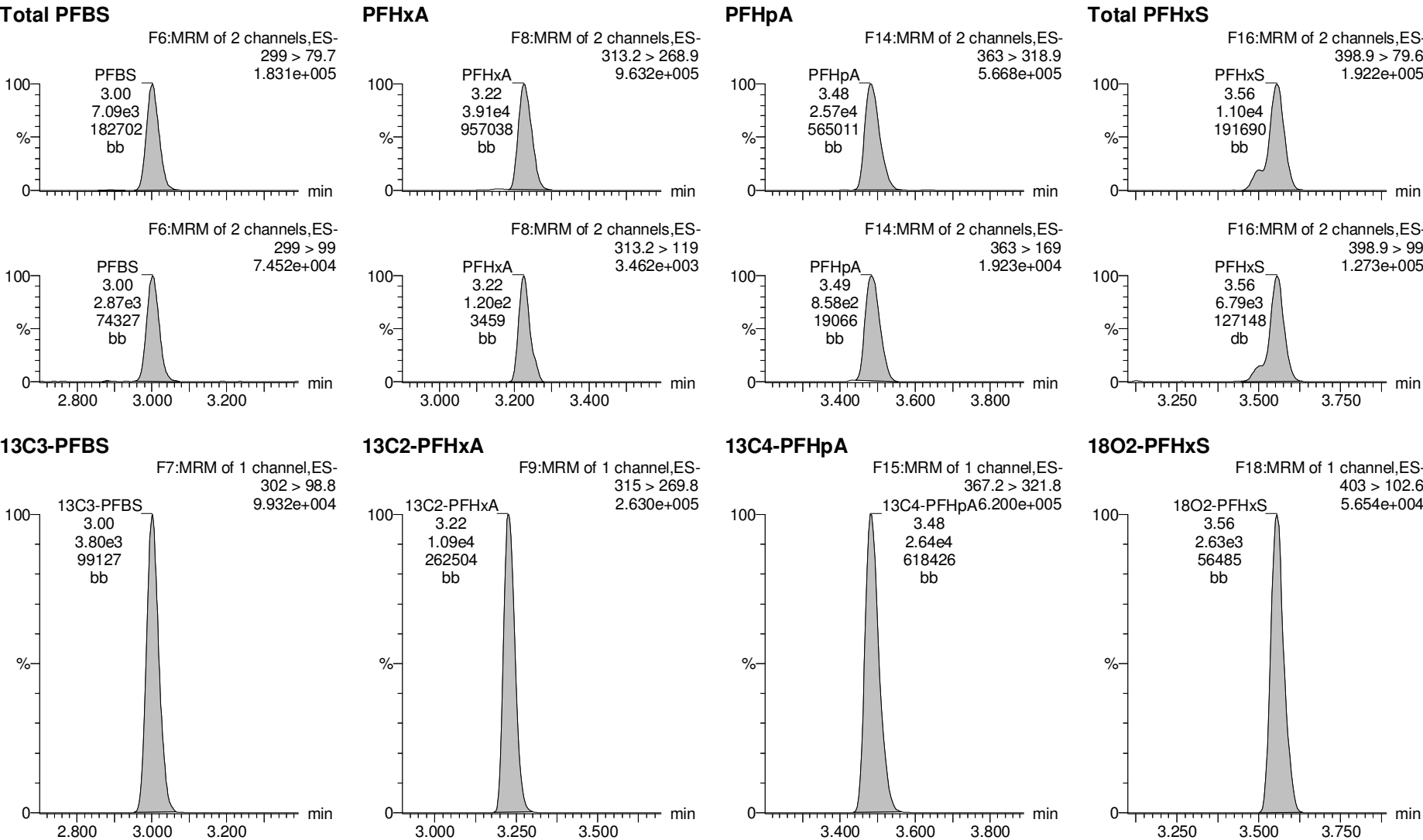
Last Altered: Wednesday, July 26, 2017 11:25:04 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:27:04 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_25, Date: 25-Jul-2017, Time: 18:33:36, ID: B7G0107-MSD1 Matrix Spike Dup 0.11599, Description: Matrix Spike Dup

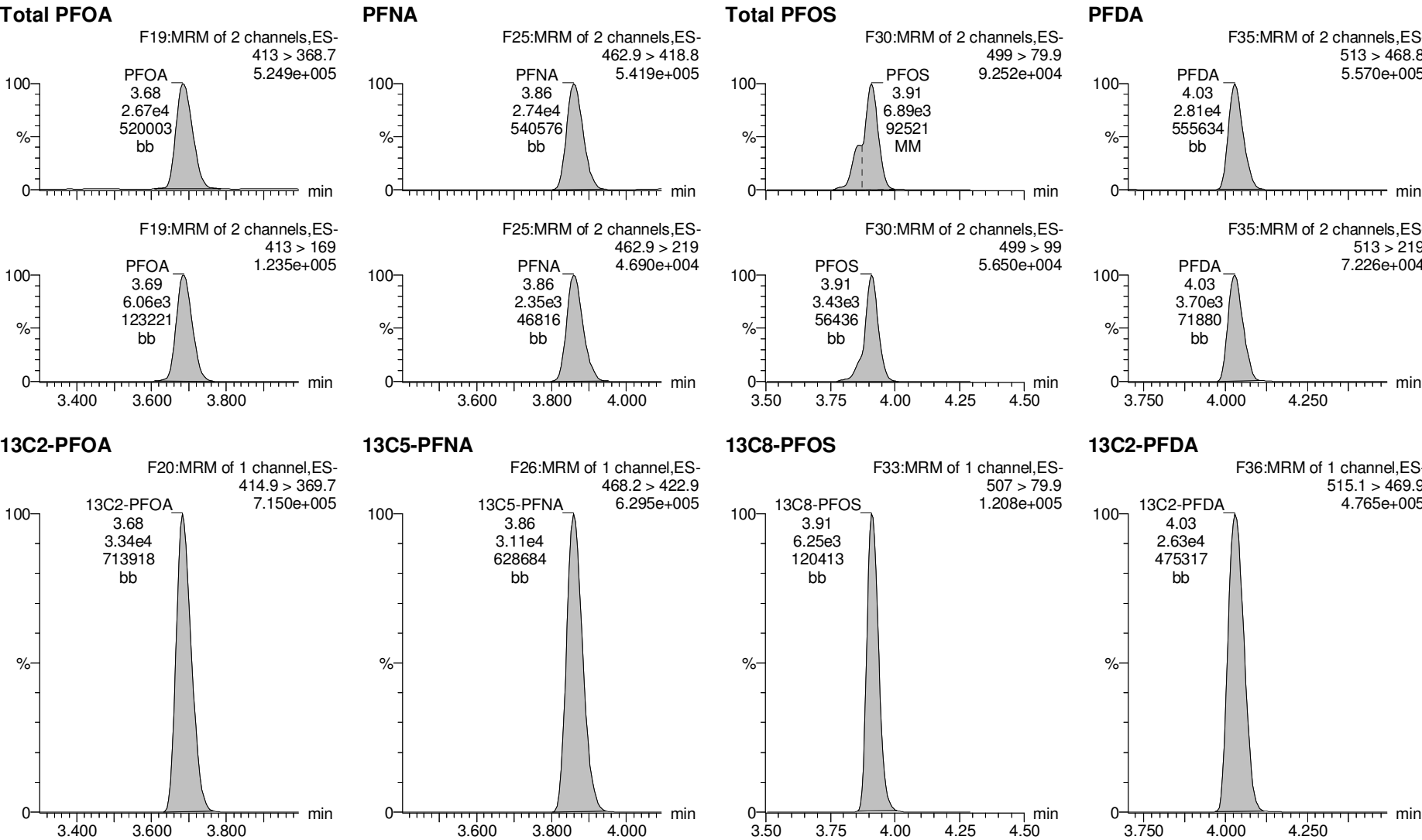


Dataset: U:\Q4.PRO\results\170725M1\170725M1-25.qld

Last Altered: Wednesday, July 26, 2017 11:25:04 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:27:04 Pacific Daylight Time

Name: 170725M1_25, Date: 25-Jul-2017, Time: 18:33:36, ID: B7G0107-MSD1 Matrix Spike Dup 0.11599, Description: Matrix Spike Dup

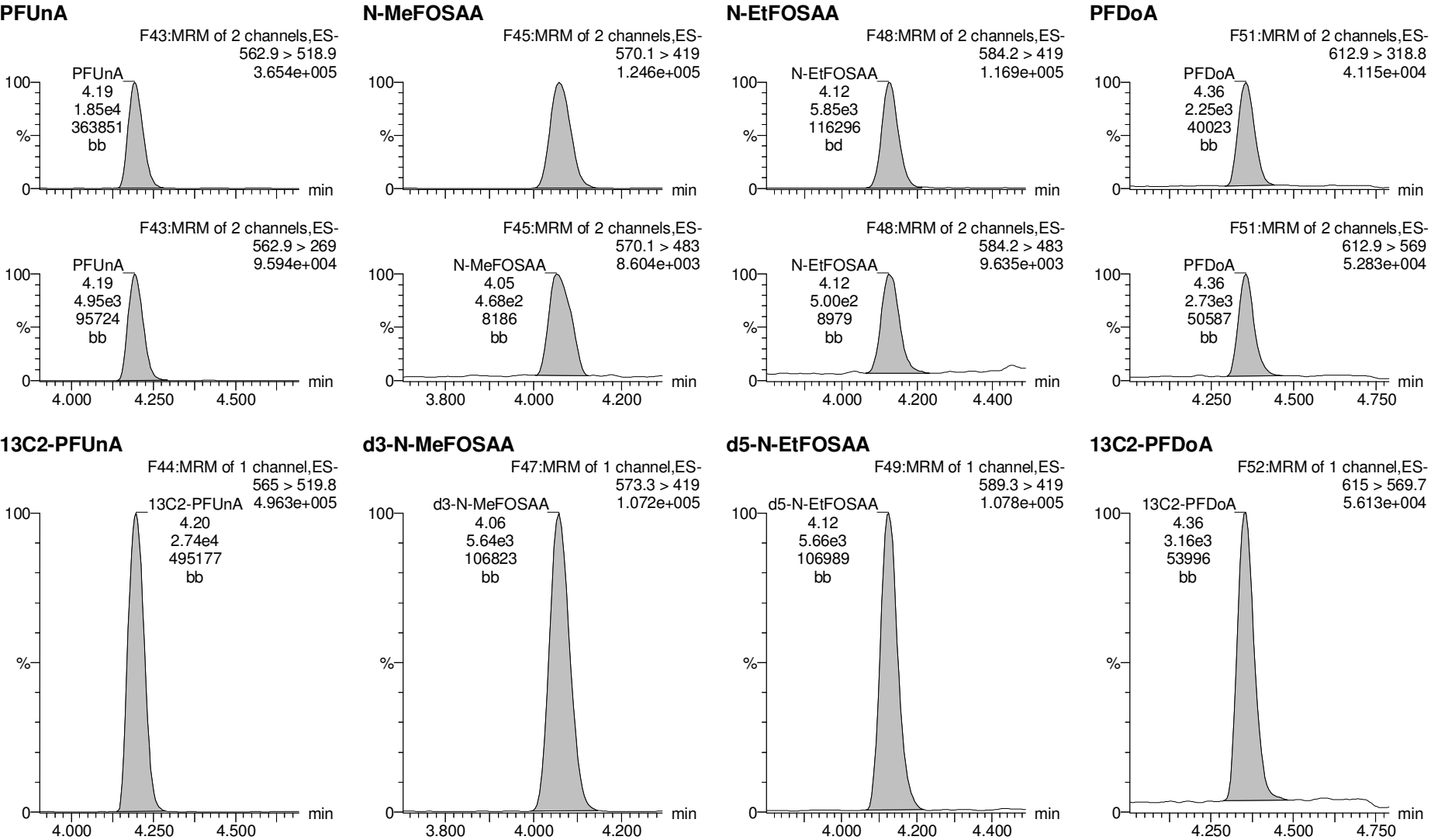


Dataset: U:\Q4.PRO\results\170725M1\170725M1-25.qld

Last Altered: Wednesday, July 26, 2017 11:25:04 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:27:04 Pacific Daylight Time

Name: 170725M1_25, Date: 25-Jul-2017, Time: 18:33:36, ID: B7G0107-MSD1 Matrix Spike Dup 0.11599, Description: Matrix Spike Dup

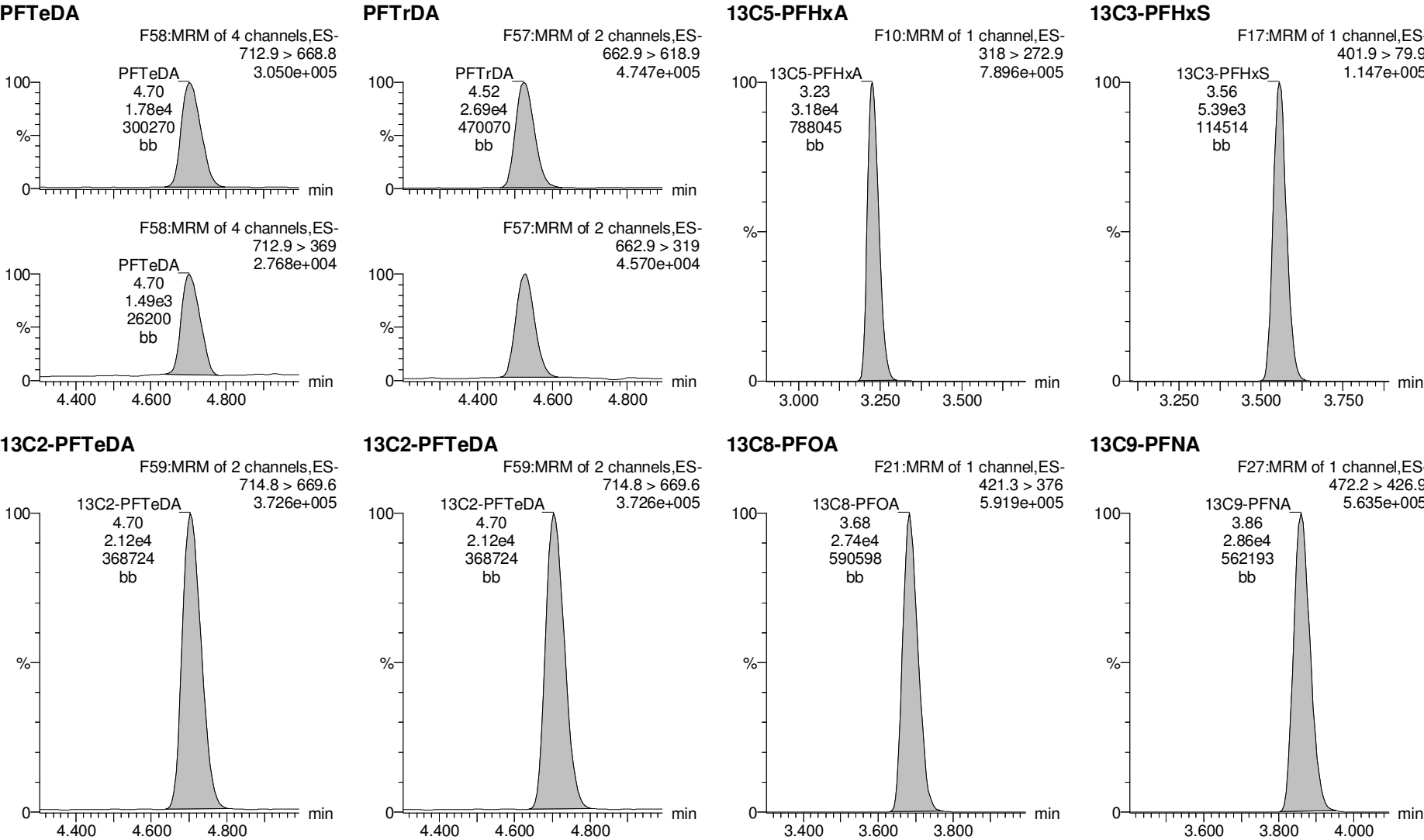


Dataset: U:\Q4.PRO\results\170725M1\170725M1-25.qld

Last Altered: Wednesday, July 26, 2017 11:25:04 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:27:04 Pacific Daylight Time

Name: 170725M1_25, Date: 25-Jul-2017, Time: 18:33:36, ID: B7G0107-MSD1 Matrix Spike Dup 0.11599, Description: Matrix Spike Dup

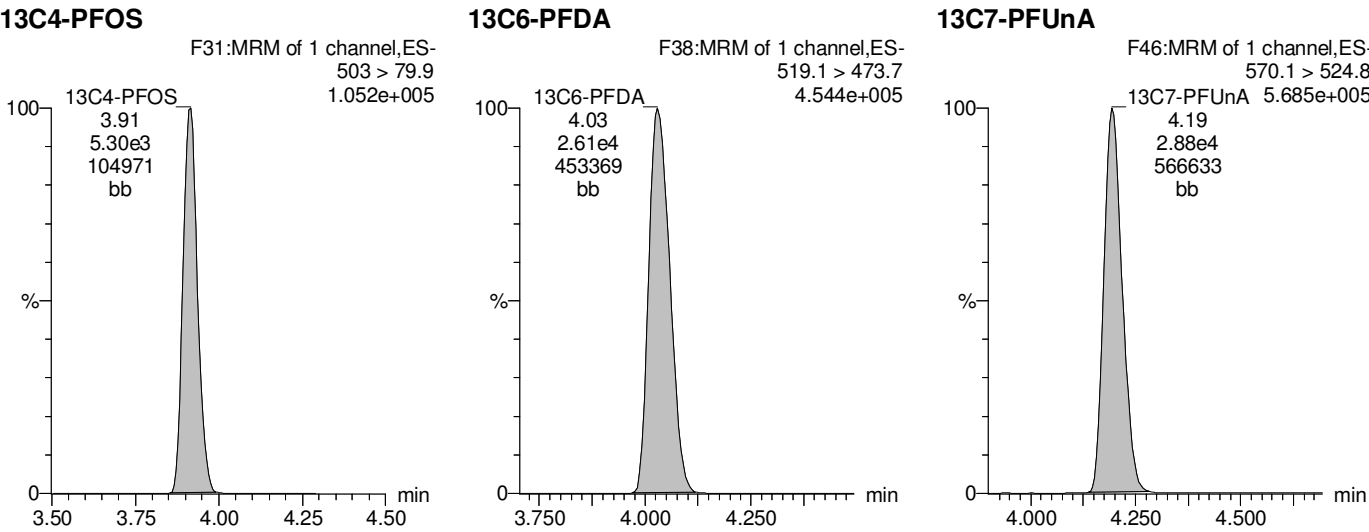


Dataset: U:\Q4.PRO\results\170725M1\170725M1-25.qld

Last Altered: Wednesday, July 26, 2017 11:25:04 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:27:04 Pacific Daylight Time

Name: 170725M1_25, Date: 25-Jul-2017, Time: 18:33:36, ID: B7G0107-MSD1 Matrix Spike Dup 0.11599, Description: Matrix Spike Dup



Dataset: U:\Q4.PRO\results\170725M1\170725M1-26.qld

Last Altered: Wednesday, July 26, 2017 11:31:32 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:31:45 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_26, Date: 25-Jul-2017, Time: 18:44:23, ID: 1700852-04RE1 1-GW-01-MW206-20170711 0.12068, Description: 1-GW-01-MW206-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	4.99e1	4.80e3	0.121		2.96	3.01	0.130	0.246	
2	4 PFHxA	313.2 > 268.9		1.31e4	0.121		3.19				
3	5 PFHpA	363 > 318.9		3.23e4	0.121		3.45				
4	6 PFHxS	398.9 > 79.6		3.53e3	0.121		3.56				
5	8 PFOA	413 > 368.7		4.31e4	0.121		3.65				
6	10 PFNA	462.9 > 418.8		3.33e4	0.121		3.83				
7	12 PFOS	499 > 79.9		7.61e3	0.121		3.89				
8	13 PFDA	513 > 468.8		3.52e4	0.121		4.01				
9	15 N-MeFOSAA	570.1 > 419		6.09e3	0.121		4.03				
10	16 N-EtFOSAA	584.2 > 419		6.12e3	0.121		4.10				
11	17 PFUnA	562.9 > 518.9		3.63e4	0.121		4.17				
12	19 PFDoA	612.9 > 318.8		3.32e3	0.121		4.34				

Dataset: U:\Q4.PRO\results\170725M1\170725M1-26.qld

Last Altered: Wednesday, July 26, 2017 11:31:32 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:32:11 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_26, Date: 25-Jul-2017, Time: 18:44:23, ID: 1700852-04RE1 1-GW-01-MW206-20170711 0.12068, Description: 1-GW-01-MW206-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9		3.32e3	0.121		4.50				
2	22 PFTeDA	712.9 > 668.8		1.92e4	0.121		4.68				
3	28 13C3-PFBA	216.1 > 171.8	2.31e4	2.22e4	0.121	0.820	1.54	1.57	13.0	132	127.1
4	29 13C3-PFPeA	266 > 221.8	3.65e4	3.80e4	0.121	0.248	2.77	2.81	4.80	160	154.8
5	30 13C3-PFBS	302 > 98.8	4.80e3	3.80e4	0.121	0.031	2.96	3.00	0.631	168	162.3
6	31 13C2-PFHxA	315 > 269.8	1.31e4	3.80e4	0.121	0.276	3.19	3.23	1.72	51.7	124.8
7	32 13C4-PFHpA	367.2 > 321.8	3.23e4	3.80e4	0.121	0.306	3.45	3.48	4.25	115	111.2
8	33 18O2-PFHxS	403 > 102.6	3.53e3	6.25e3	0.121	0.393	3.56	3.56	7.06	149	143.8
9	34 13C2-6:2 FTS	429.1 > 408.9	6.96e3	3.21e4	0.121	0.158	3.64	3.67	2.71	142	137.5
10	35 13C2-PFOA	414.9 > 369.7	4.31e4	3.21e4	0.121	1.067	3.65	3.68	16.8	130	125.8
11	36 13C5-PFNA	468.2 > 422.9	3.33e4	3.45e4	0.121	0.852	3.83	3.86	12.0	117	113.0
12	37 13C8-PFOSA	506.1 > 77.7	2.51e3	3.57e4	0.121	0.098	3.84	3.87	0.880	74.2	71.7
13	38 13C8-PFOS	507 > 79.9	7.61e3	6.11e3	0.121	0.936	3.89	3.91	15.6	138	133.1
14	39 13C2-PFDA	515.1 > 469.9	3.52e4	3.37e4	0.121	0.810	4.01	4.03	13.1	134	128.9
15	40 13C2-8:2 FTS	529.1 > 508.7	4.12e3	3.37e4	0.121	0.086	4.00	4.02	1.53	148	142.9
16	41 d3-N-MeFOSAA	573.3 > 419	6.09e3	3.57e4	0.121	0.014	4.03	4.05	2.14	1290	96.0
17	42 d5-N-EtFOSAA	589.3 > 419	6.12e3	3.57e4	0.121	0.014	4.12	4.12	2.14	1270	94.6
18	43 13C2-PFUnA	565 > 519.8	3.63e4	3.57e4	0.121	0.962	4.17	4.20	12.7	109	105.7
19	44 13C2-PFDoA	615 > 569.7	3.32e3	3.57e4	0.121	0.094	4.34	4.36	1.16	102	98.6
20	46 13C2-PFTeDA	714.8 > 669.6	1.92e4	3.57e4	0.121	0.694	4.68	4.70	6.71	80.1	77.4
21	48 13C2-PFHxDA	815 > 769.7	6.38e3	3.57e4	0.121	0.843	5.06	5.07	2.24	22.0	53.1
22	51 13C4-PFBA	217 > 171.8	2.22e4	2.22e4	0.121	1.000	1.54	1.58	12.5	104	100.0
23	52 13C5-PFHxA	318 > 272.9	3.80e4	3.80e4	0.121	1.000	3.19	3.22	5.00	41.4	100.0
24	53 13C3-PFHxS	401.9 > 79.9	6.25e3	6.25e3	0.121	1.000	3.56	3.56	12.5	104	100.0
25	54 13C8-PFOA	421.3 > 376	3.21e4	3.21e4	0.121	1.000	3.65	3.68	12.5	104	100.0
26	55 13C9-PFNA	472.2 > 426.9	3.45e4	3.45e4	0.121	1.000	3.83	3.86	12.5	104	100.0
27	56 13C4-PFOS	503 > 79.9	6.11e3	6.11e3	0.121	1.000	3.89	3.91	12.5	104	100.0
28	57 13C6-PFDA	519.1 > 473.7	3.37e4	3.37e4	0.121	1.000	4.01	4.03	12.5	104	100.0
29	58 13C7-PFUnA	570.1 > 524.8	3.57e4	3.57e4	0.121	1.000	4.17	4.20	12.5	104	100.0
30	59 Total PFBS	299 > 79.7	4.99e1	4.80e3	0.121		2.96		0.130	0.246	
31	60 Total PFHxS	398.9 > 79.6	0.00e0	3.53e3	0.121		3.52		0.000		
32	61 Total PFOA	413 > 368.7	0.00e0	4.31e4	0.121		3.65		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-26.qld

Last Altered: Wednesday, July 26, 2017 11:31:32 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:32:11 Pacific Daylight Time

Name: 170725M1_26, Date: 25-Jul-2017, Time: 18:44:23, ID: 1700852-04RE1 1-GW-01-MW206-20170711 0.12068, Description: 1-GW-01-MW206-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	0.00e0	7.61e3	0.121		3.89		0.000		
34	63 Total N-Me-FOSAA	570.1 > 419	0.00e0	6.09e3	0.121		4.03		0.000		
35	64 Total N-EtFOSAA	584.2 > 419	0.00e0	6.12e3	0.121		4.17		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-26.qld

Last Altered: Wednesday, July 26, 2017 11:31:32 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:31:45 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_26, Date: 25-Jul-2017, Time: 18:44:23, ID: 1700852-04RE1 1-GW-01-MW206-20170711 0.12068, Description: 1-GW-01-MW206-20170711

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.01	49.949	4795.014	0.130	MM	0.2

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7			43104.512		MM-I	

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9			7613.346		MM-I	

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419			6118.569		MM-I	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-26.qld

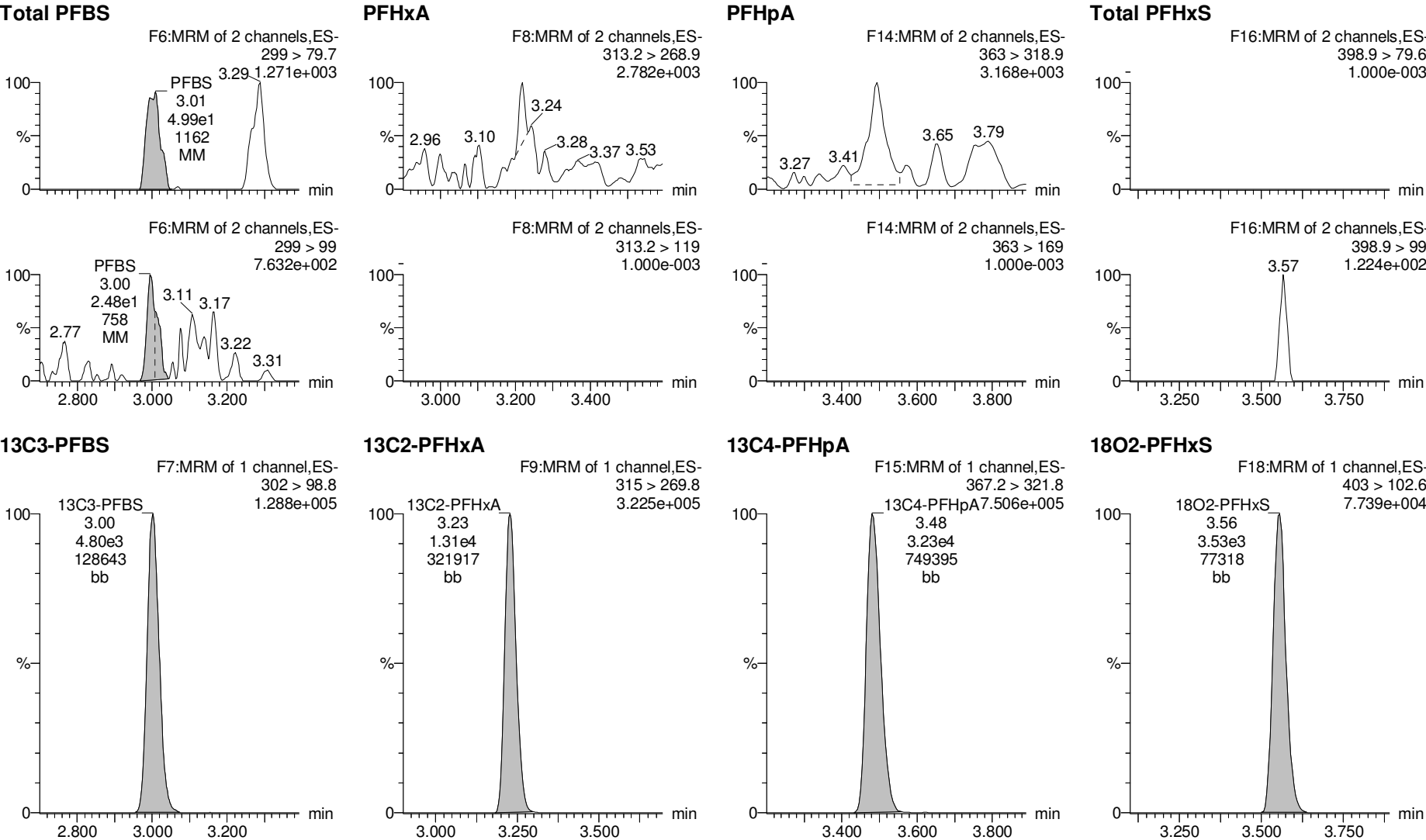
Last Altered: Wednesday, July 26, 2017 11:31:32 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:31:45 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_26, Date: 25-Jul-2017, Time: 18:44:23, ID: 1700852-04RE1 1-GW-01-MW206-20170711 0.12068, Description: 1-GW-01-MW206-20170711

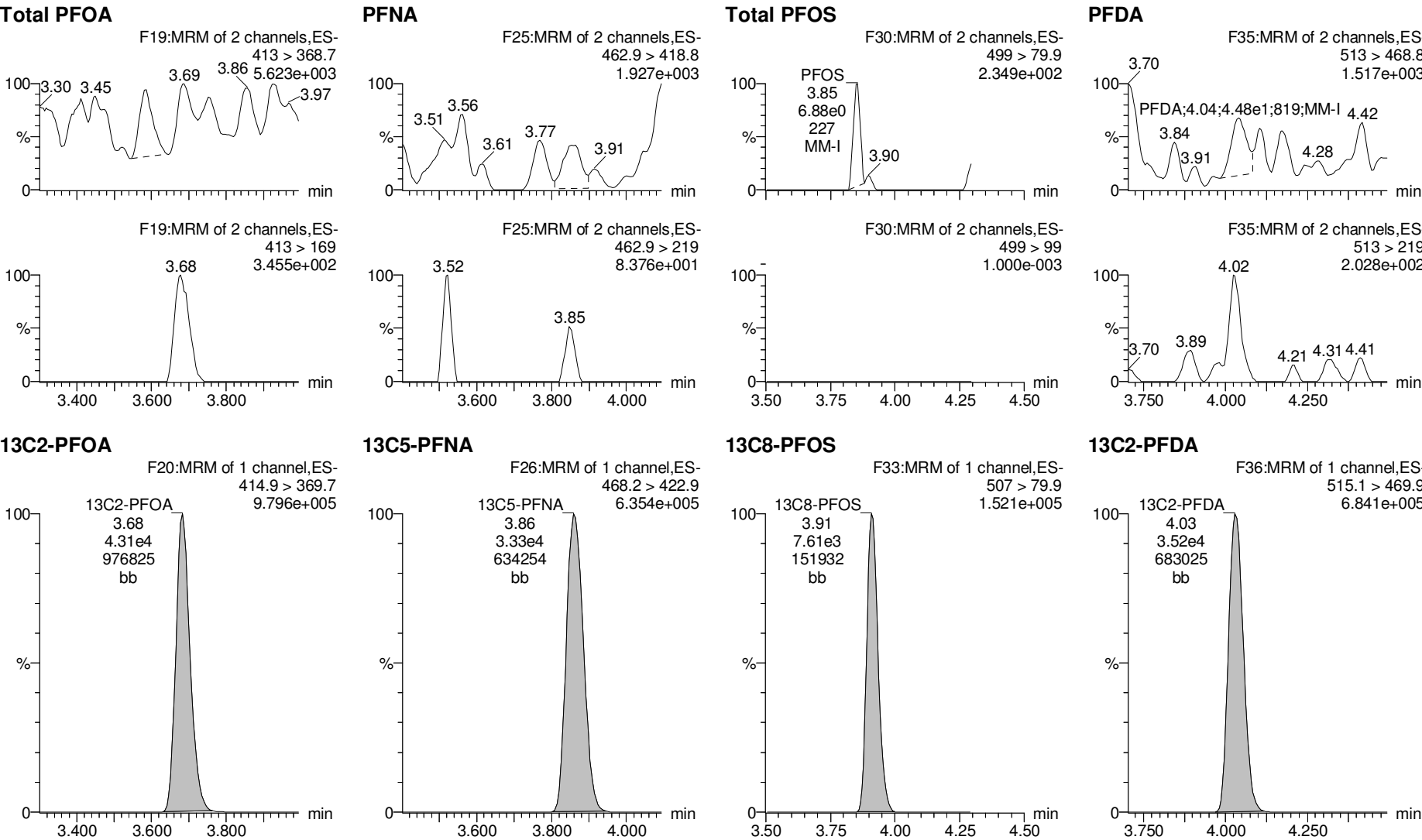


Dataset: U:\Q4.PRO\results\170725M1\170725M1-26.qld

Last Altered: Wednesday, July 26, 2017 11:31:32 Pacific Daylight Time
Printed: Wednesday, July 26, 2017 11:31:45 Pacific Daylight Time

Rev'd: MM 7/26/17

Name: 170725M1_26, Date: 25-Jul-2017, Time: 18:44:23, ID: 1700852-04RE1 1-GW-01-MW206-20170711 0.12068, Description: 1-GW-01-MW206-20170711

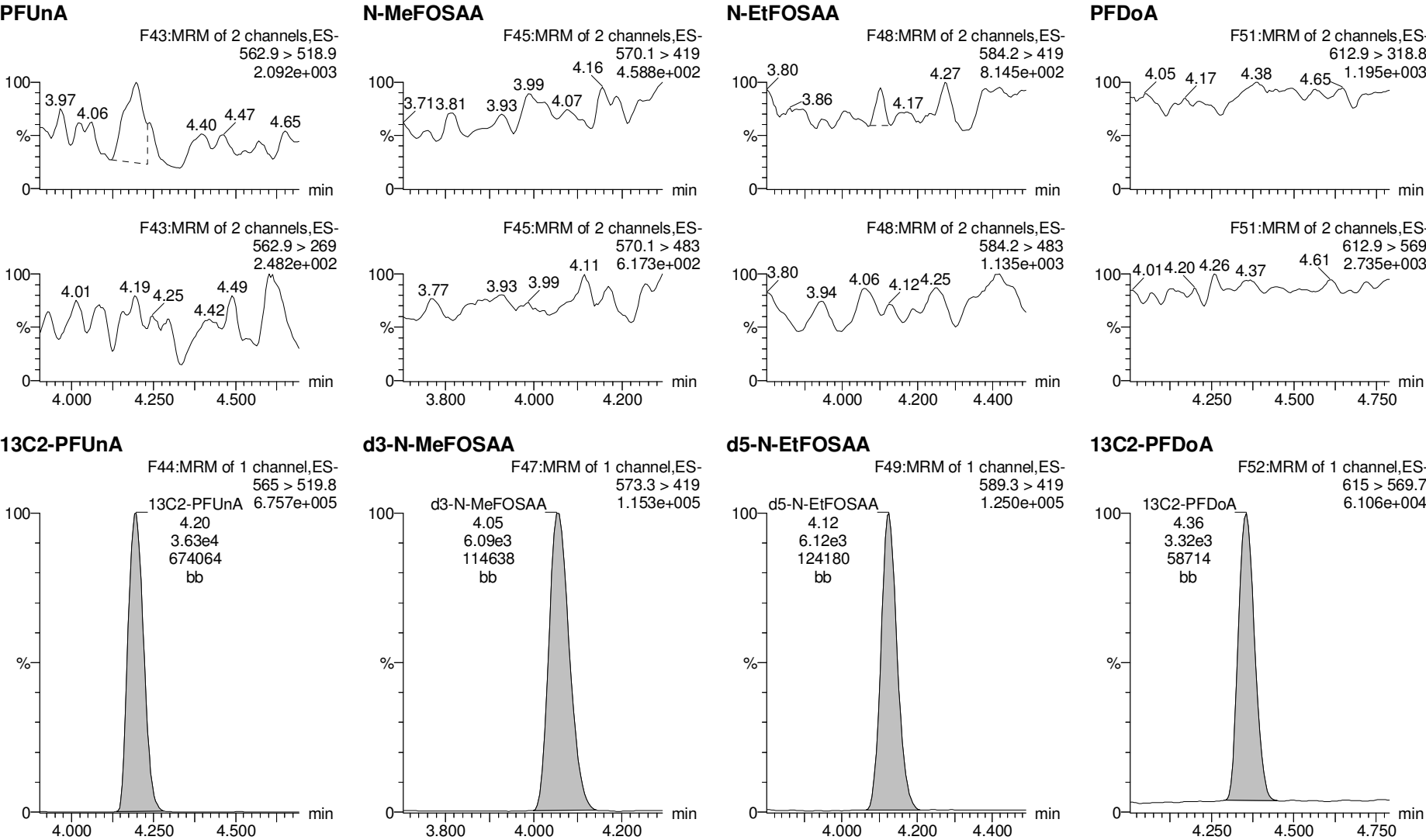


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Last Altered: Wednesday, July 26, 2017 11:31:32 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:31:45 Pacific Daylight Time

Name: 170725M1_26, Date: 25-Jul-2017, Time: 18:44:23, ID: 1700852-04RE1 1-GW-01-MW206-20170711 0.12068, Description: 1-GW-01-MW206-20170711



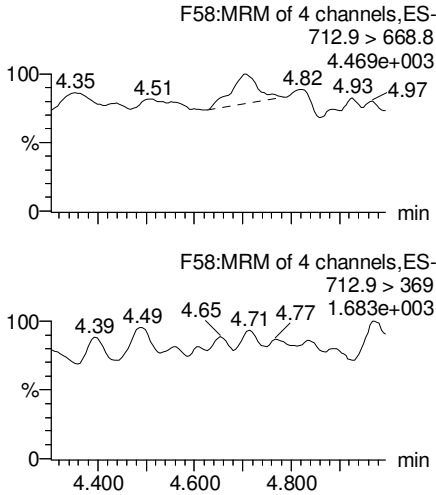
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Last Altered: Wednesday, July 26, 2017 11:31:32 Pacific Daylight Time

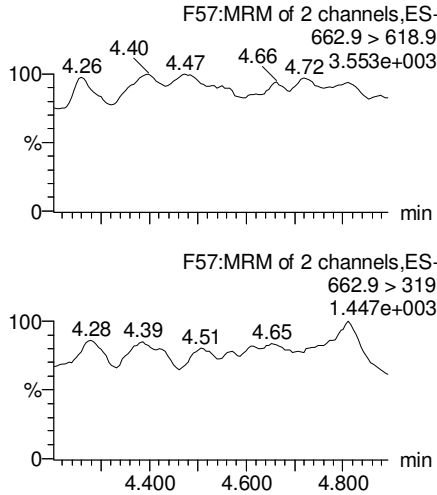
Printed: Wednesday, July 26, 2017 11:31:45 Pacific Daylight Time

Name: 170725M1_26, Date: 25-Jul-2017, Time: 18:44:23, ID: 1700852-04RE1 1-GW-01-MW206-20170711 0.12068, Description: 1-GW-01-MW206-20170711

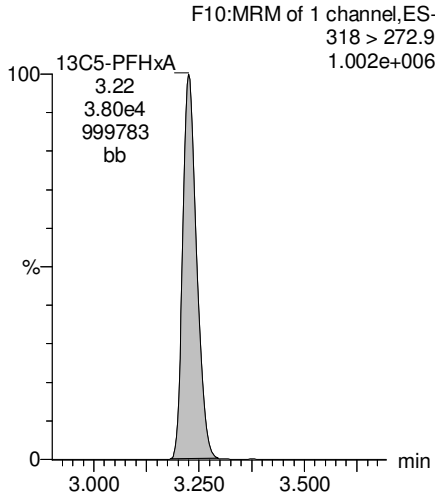
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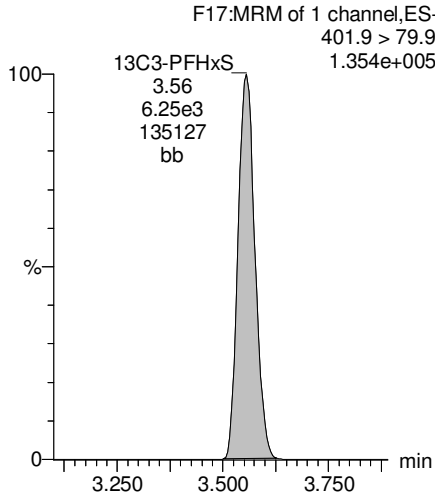
PFTrDA



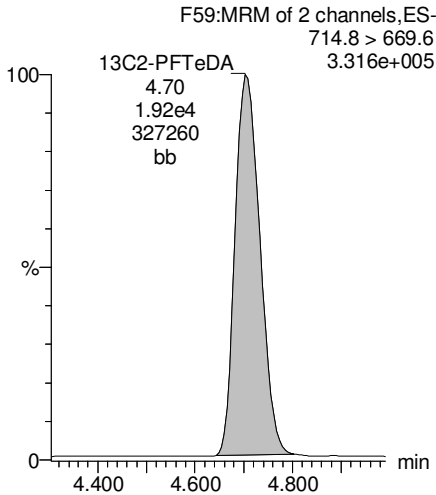
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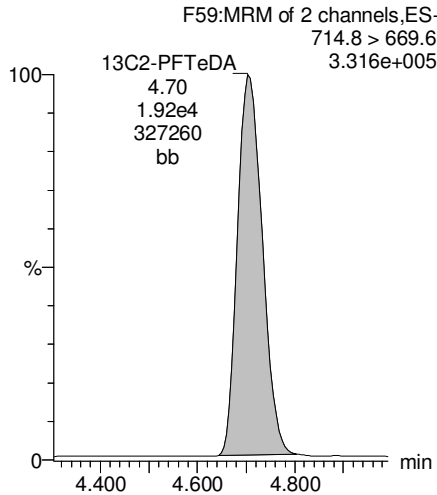
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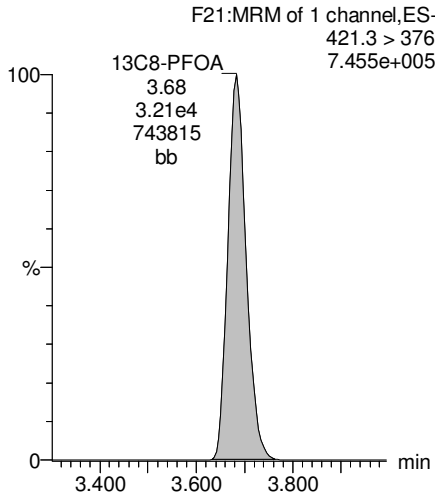
13C2-PFTeDA



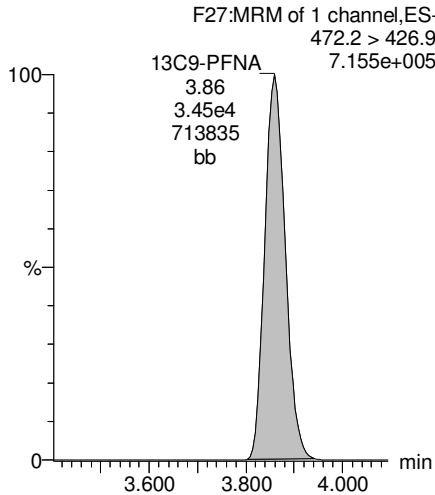
13C2-PFTeDA



13C8-PFOA



13C9-PFNA

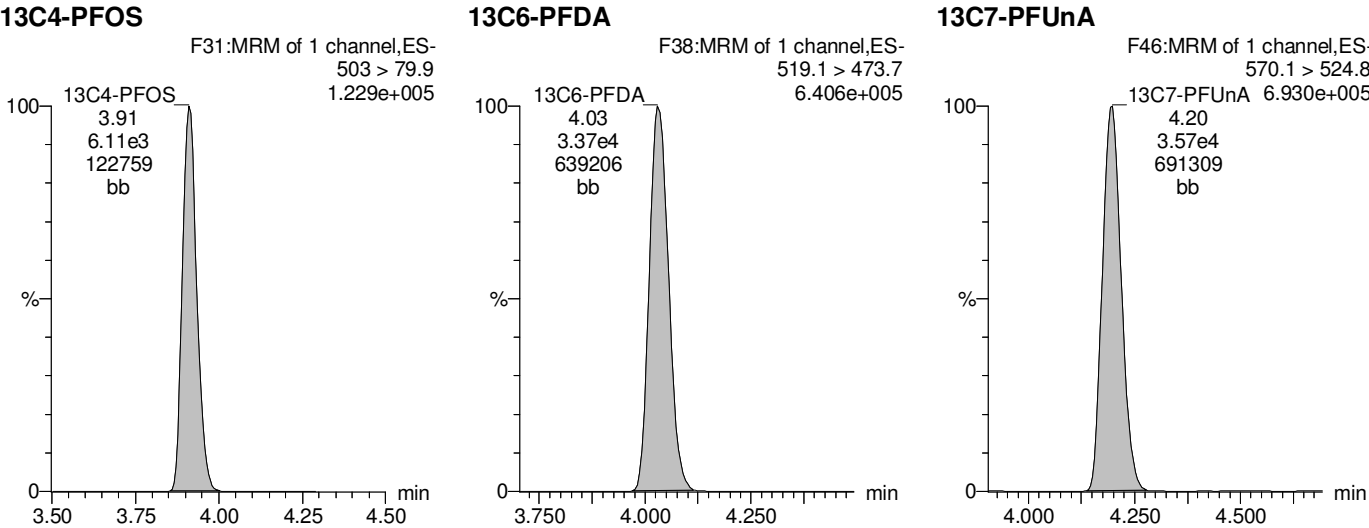


Dataset: U:\Q4.PRO\results\170725M1\170725M1-26.qld

Last Altered: Wednesday, July 26, 2017 11:31:32 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:31:45 Pacific Daylight Time

Name: 170725M1_26, Date: 25-Jul-2017, Time: 18:44:23, ID: 1700852-04RE1 1-GW-01-MW206-20170711 0.12068, Description: 1-GW-01-MW206-20170711



Dataset: U:\Q4.PRO\results\170725M1\170725M1-27.qld

Last Altered: Wednesday, July 26, 2017 11:34:46 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:35:00 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_27, Date: 25-Jul-2017, Time: 18:55:10, ID: 1700852-05RE1 2-GW-02DGMW59-20170711 0.11874, Description: 2-GW-02DGMW59-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	1.63e3	7.73e3	0.119		2.96	3.00	2.63	11.6	
2	4 PFHxA	313.2 > 268.9	1.68e4	2.21e4	0.119		3.19	3.23	3.80	20.3	
3	5 PFHpA	363 > 318.9	4.97e3	5.19e4	0.119		3.45	3.48	1.20	7.50	
4	6 PFHxS	398.9 > 79.6	7.70e2	5.41e3	0.119		3.56	3.56	1.78	8.84	
5	8 PFOA	413 > 368.7	2.10e4	6.91e4	0.119		3.65	3.68	3.80	31.2	
6	10 PFNA	462.9 > 418.8	1.11e3	5.46e4	0.119		3.83	3.86	0.255	0.825	
7	12 PFOS	499 > 79.9	1.55e3	1.17e4	0.119		3.89	3.91	1.66	11.6	
8	13 PFDA	513 > 468.8		4.87e4	0.119		4.01				
9	15 N-MeFOSAA	570.1 > 419		1.04e4	0.119		4.03				
10	16 N-EtFOSAA	584.2 > 419		1.01e4	0.119		4.10				
11	17 PFUnA	562.9 > 518.9		5.17e4	0.119		4.17				
12	19 PFDoA	612.9 > 318.8		5.03e3	0.119		4.34				

Dataset: U:\Q4.PRO\results\170725M1\170725M1-27.qld

Last Altered: Wednesday, July 26, 2017 11:34:46 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:35:36 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_27, Date: 25-Jul-2017, Time: 18:55:10, ID: 1700852-05RE1 2-GW-02DGMW59-20170711 0.11874, Description: 2-GW-02DGMW59-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9		5.03e3	0.119		4.50				
2	22 PFTeDA	712.9 > 668.8		2.46e4	0.119		4.68				
3	28 13C3-PFBA	216.1 > 171.8	3.90e4	3.65e4	0.119	0.820	1.54	1.57	13.3	137	130.0
4	29 13C3-PFPeA	266 > 221.8	5.82e4	6.12e4	0.119	0.248	2.77	2.81	4.76	162	153.5
5	30 13C3-PFBS	302 > 98.8	7.73e3	6.12e4	0.119	0.031	2.96	3.00	0.632	171	162.5
6	31 13C2-PFHxA	315 > 269.8	2.21e4	6.12e4	0.119	0.276	3.19	3.23	1.81	55.0	130.7
7	32 13C4-PFHpA	367.2 > 321.8	5.19e4	6.12e4	0.119	0.306	3.45	3.48	4.24	117	111.1
8	33 18O2-PFHxS	403 > 102.6	5.41e3	1.05e4	0.119	0.393	3.56	3.55	6.46	138	131.5
9	34 13C2-6:2 FTS	429.1 > 408.9	1.03e4	5.50e4	0.119	0.158	3.64	3.67	2.33	124	118.2
10	35 13C2-PFOA	414.9 > 369.7	6.91e4	5.50e4	0.119	1.067	3.65	3.68	15.7	124	117.7
11	36 13C5-PFNA	468.2 > 422.9	5.46e4	5.42e4	0.119	0.852	3.83	3.86	12.6	124	118.2
12	37 13C8-PFOSA	506.1 > 77.7	4.39e3	5.36e4	0.119	0.098	3.84	3.87	1.02	87.7	83.3
13	38 13C8-PFOS	507 > 79.9	1.17e4	9.99e3	0.119	0.936	3.89	3.91	14.6	131	124.8
14	39 13C2-PFDA	515.1 > 469.9	4.87e4	5.13e4	0.119	0.810	4.01	4.03	11.9	124	117.4
15	40 13C2-8:2 FTS	529.1 > 508.7	5.87e3	5.13e4	0.119	0.086	4.00	4.02	1.43	141	133.9
16	41 d3-N-MeFOSAA	573.3 > 419	1.04e4	5.36e4	0.119	0.014	4.03	4.06	2.43	1490	109.0
17	42 d5-N-EtFOSAA	589.3 > 419	1.01e4	5.36e4	0.119	0.014	4.12	4.12	2.37	1430	104.4
18	43 13C2-PFUnA	565 > 519.8	5.17e4	5.36e4	0.119	0.962	4.17	4.19	12.0	105	100.1
19	44 13C2-PFDoA	615 > 569.7	5.03e3	5.36e4	0.119	0.094	4.34	4.35	1.17	105	99.4
20	46 13C2-PFTeDA	714.8 > 669.6	2.46e4	5.36e4	0.119	0.694	4.68	4.70	5.74	69.6	66.1
21	48 13C2-PFHxDA	815 > 769.7	6.94e3	5.36e4	0.119	0.843	5.06	5.07	1.62	16.2	38.4
22	51 13C4-PFBA	217 > 171.8	3.65e4	3.65e4	0.119	1.000	1.54	1.58	12.5	105	100.0
23	52 13C5-PFHxA	318 > 272.9	6.12e4	6.12e4	0.119	1.000	3.19	3.23	5.00	42.1	100.0
24	53 13C3-PFHxS	401.9 > 79.9	1.05e4	1.05e4	0.119	1.000	3.56	3.55	12.5	105	100.0
25	54 13C8-PFOA	421.3 > 376	5.50e4	5.50e4	0.119	1.000	3.65	3.68	12.5	105	100.0
26	55 13C9-PFNA	472.2 > 426.9	5.42e4	5.42e4	0.119	1.000	3.83	3.86	12.5	105	100.0
27	56 13C4-PFOS	503 > 79.9	9.99e3	9.99e3	0.119	1.000	3.89	3.91	12.5	105	100.0
28	57 13C6-PFDA	519.1 > 473.7	5.13e4	5.13e4	0.119	1.000	4.01	4.03	12.5	105	100.0
29	58 13C7-PFUnA	570.1 > 524.8	5.36e4	5.36e4	0.119	1.000	4.17	4.19	12.5	105	100.0
30	59 Total PFBS	299 > 79.7	1.63e3	7.73e3	0.119		2.96		2.63	11.6	
31	60 Total PFHxS	398.9 > 79.6	7.70e2	5.41e3	0.119		3.52		1.78	8.84	
32	61 Total PFOA	413 > 368.7	2.25e4	6.91e4	0.119		3.65		4.06	31.8	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-27.qld

Last Altered: Wednesday, July 26, 2017 11:34:46 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:35:36 Pacific Daylight Time

Name: 170725M1_27, Date: 25-Jul-2017, Time: 18:55:10, ID: 1700852-05RE1 2-GW-02DGMW59-20170711 0.11874, Description: 2-GW-02DGMW59-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	1.55e3	1.17e4	0.119		3.89		1.66	11.6	
34	63 Total N-Me-FOSAA	570.1 > 419	0.00e0	1.04e4	0.119		4.03		0.000		
35	64 Total N-EtFOSAA	584.2 > 419	0.00e0	1.01e4	0.119		4.17		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-27.qld

Last Altered: Wednesday, July 26, 2017 11:34:46 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:35:00 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_27, Date: 25-Jul-2017, Time: 18:55:10, ID: 1700852-05RE1 2-GW-02DGMW59-20170711 0.11874, Description: 2-GW-02DGMW59-20170711

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.00	1626.170	7726.147	2.631	bb	11.6

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.56	769.908	5409.209	1.779	MM	8.8

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	3.68	20974.193	69076.367	3.795	db	31.2
2	61 Total PFOA	413 > 368.7	3.63	1485.600	69076.367	0.269	bd	0.6

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.91	1548.867	11666.188	1.660	MM	11.6

Total N-Me-FOSAA

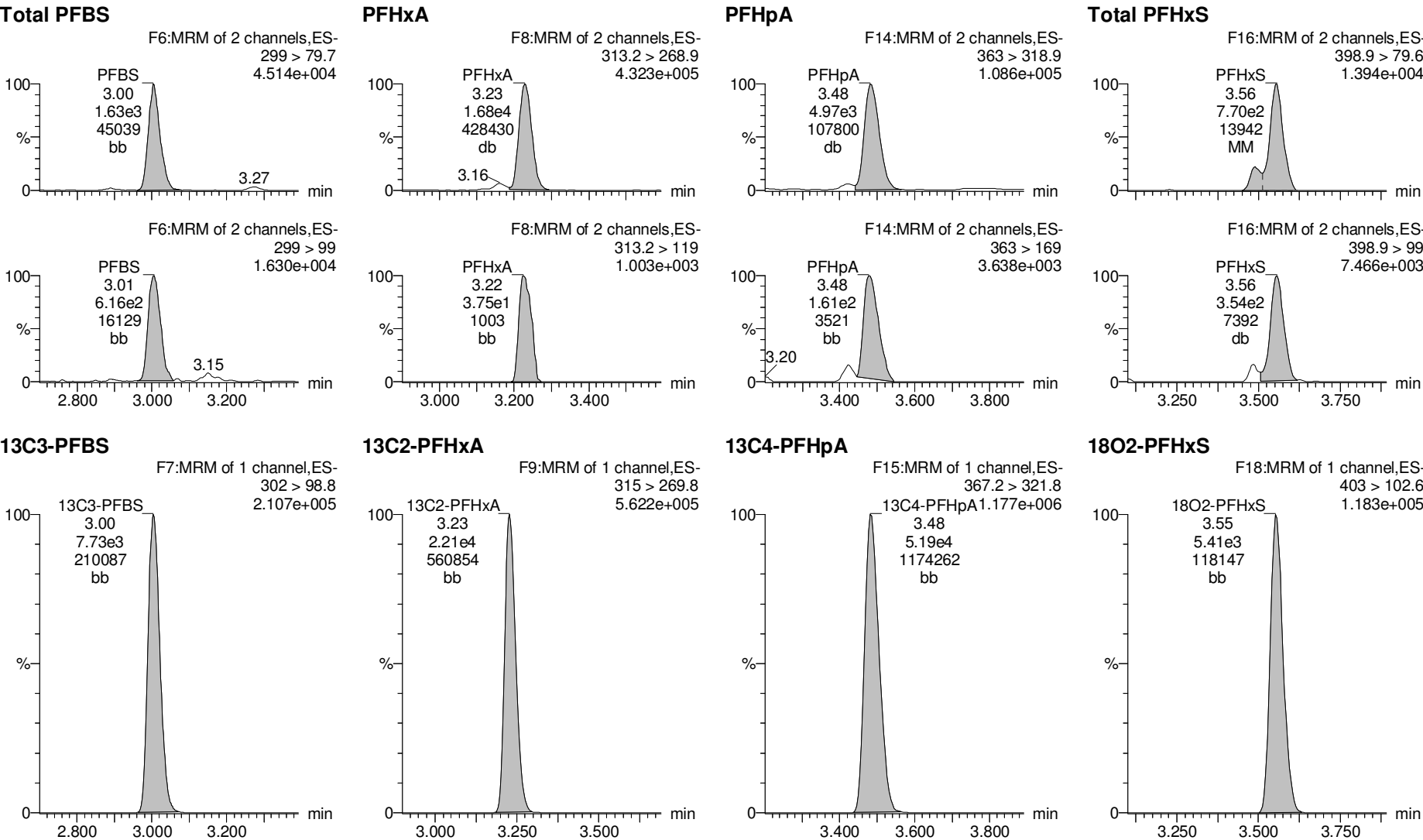
	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419			10148.756		MM-I	

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_27, Date: 25-Jul-2017, Time: 18:55:10, ID: 1700852-05RE1 2-GW-02DGMW59-20170711 0.11874, Description: 2-GW-02DGMW59-20170711

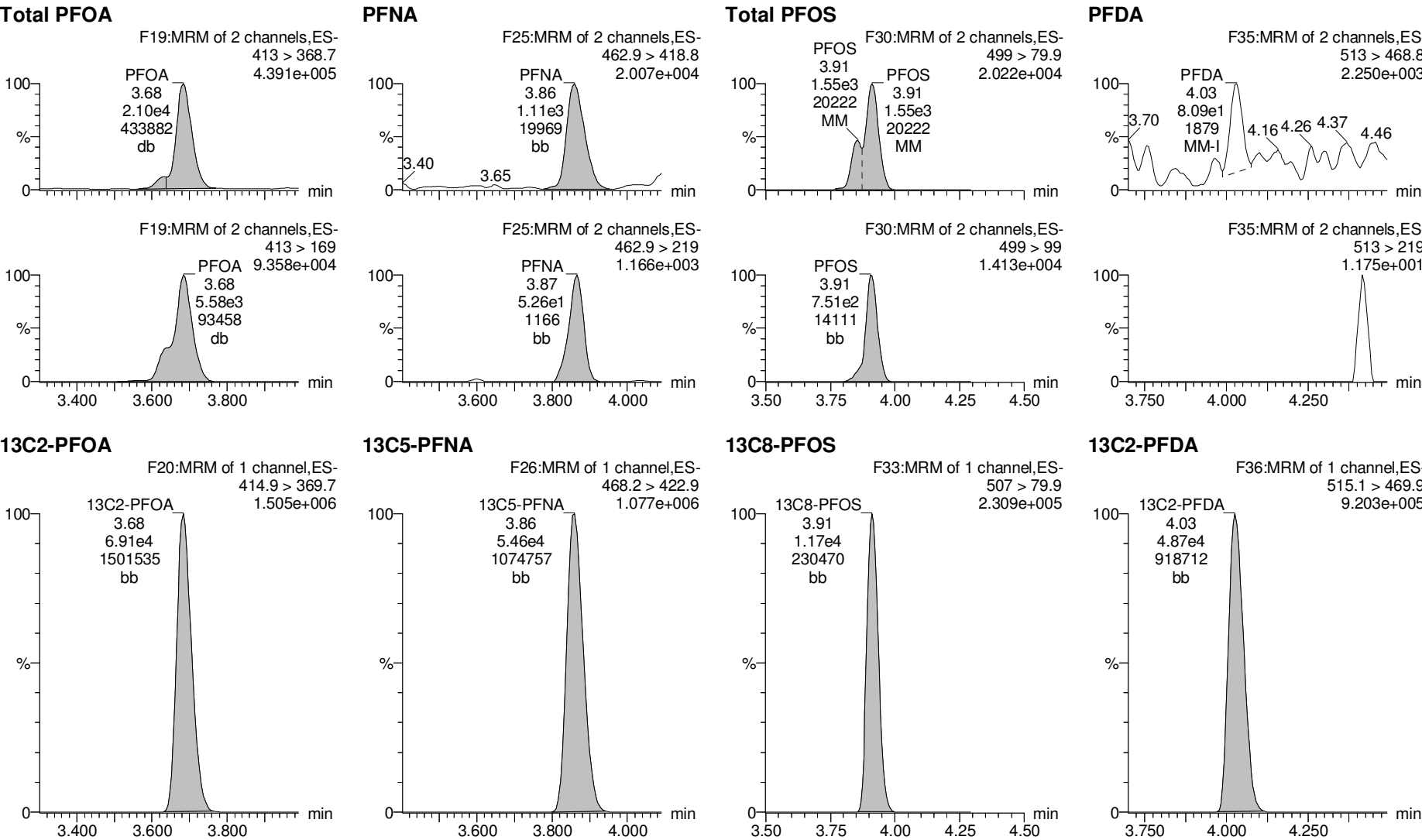


Dataset: U:\Q4.PRO\results\170725M1\170725M1-27.qld

Last Altered: Wednesday, July 26, 2017 11:34:46 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:35:00 Pacific Daylight Time

Name: 170725M1_27, Date: 25-Jul-2017, Time: 18:55:10, ID: 1700852-05RE1 2-GW-02DGMW59-20170711 0.11874, Description: 2-GW-02DGMW59-20170711

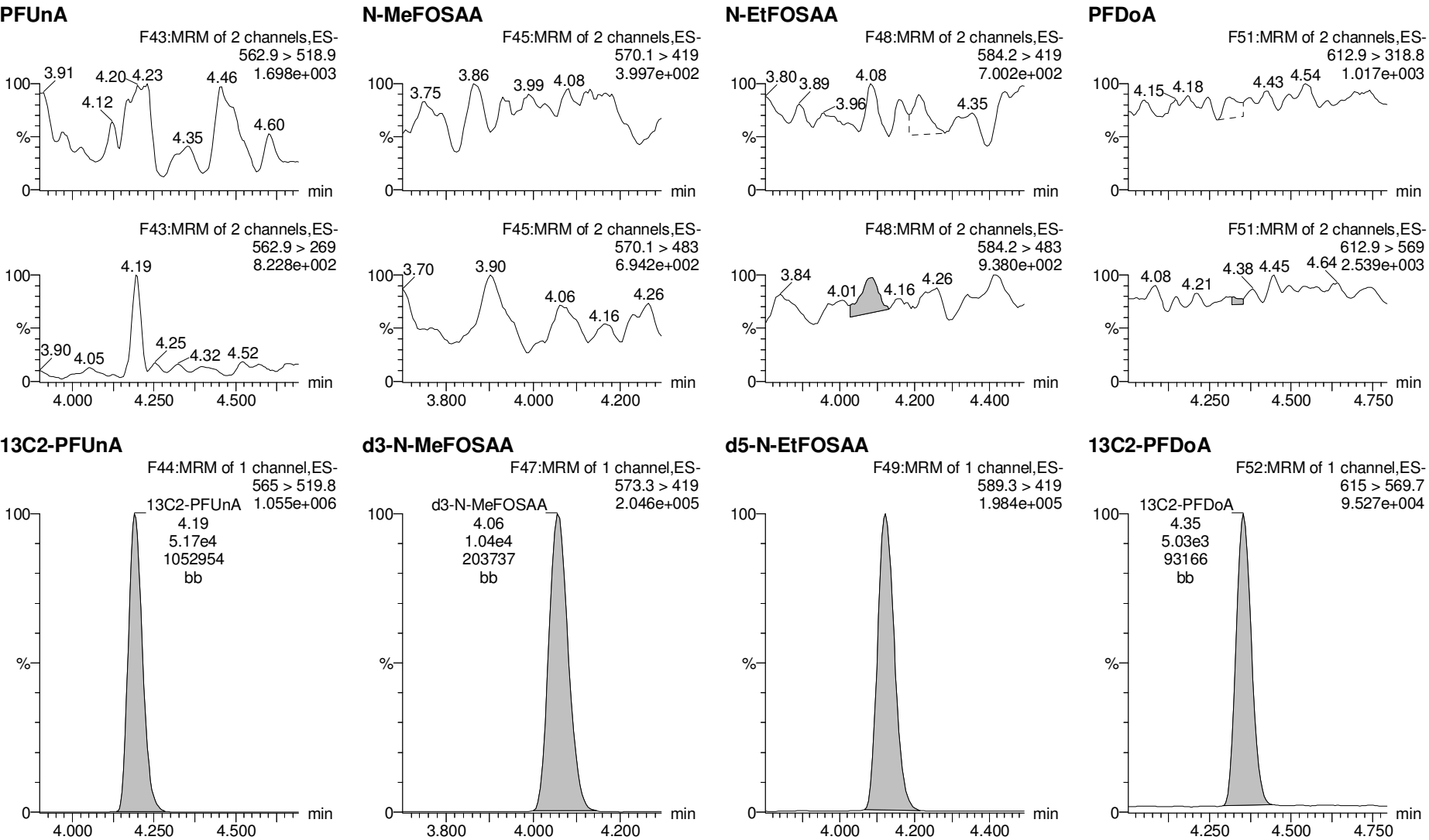


Dataset: U:\Q4.PRO\results\170725M1\170725M1-27.qld

Last Altered: Wednesday, July 26, 2017 11:34:46 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:35:00 Pacific Daylight Time

Name: 170725M1_27, Date: 25-Jul-2017, Time: 18:55:10, ID: 1700852-05RE1 2-GW-02DGMW59-20170711 0.11874, Description: 2-GW-02DGMW59-20170711

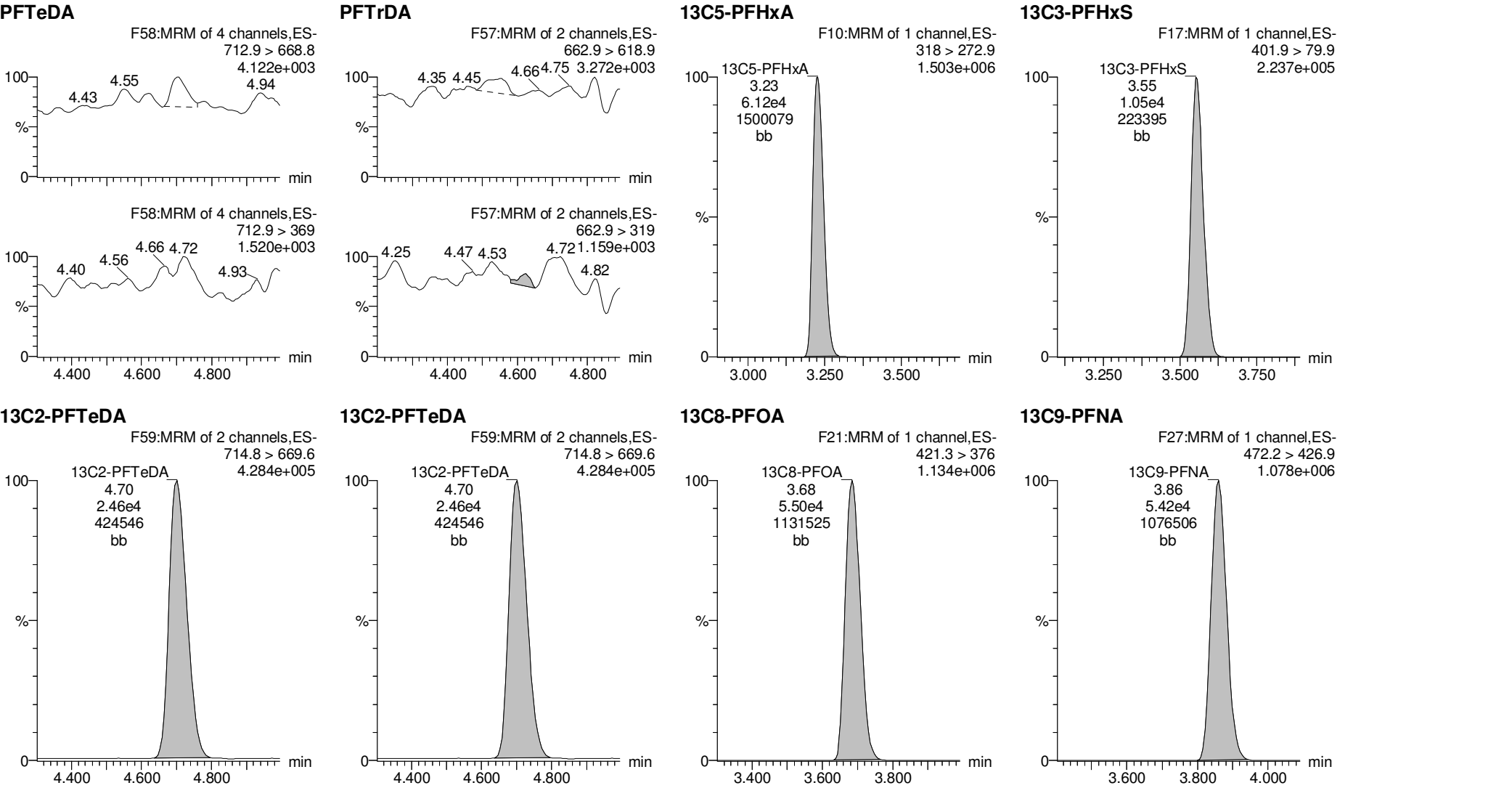


Dataset: U:\Q4.PRO\results\170725M1\170725M1-27.qld

Last Altered: Wednesday, July 26, 2017 11:34:46 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:35:00 Pacific Daylight Time

Name: 170725M1_27, Date: 25-Jul-2017, Time: 18:55:10, ID: 1700852-05RE1 2-GW-02DGMW59-20170711 0.11874, Description: 2-GW-02DGMW59-20170711

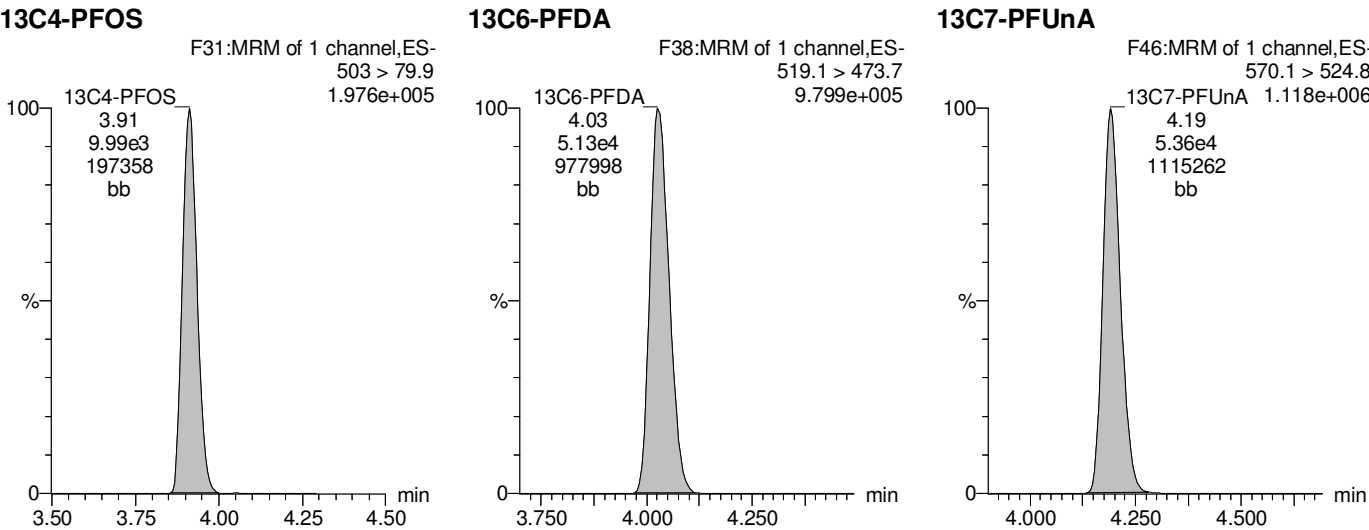


Dataset: U:\Q4.PRO\results\170725M1\170725M1-27.qld

Last Altered: Wednesday, July 26, 2017 11:34:46 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:35:00 Pacific Daylight Time

Name: 170725M1_27, Date: 25-Jul-2017, Time: 18:55:10, ID: 1700852-05RE1 2-GW-02DGMW59-20170711 0.11874, Description: 2-GW-02DGMW59-20170711



Dataset: U:\Q4.PRO\results\170725M1\170725M1-28.qld

Last Altered: Wednesday, July 26, 2017 11:46:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:48:07 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_28, Date: 25-Jul-2017, Time: 19:05:57, ID: 1700852-06RE1 2-GW-02NEW16-20170711 0.12355, Description: 2-GW-02NEW16-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	1.08e3	5.84e3	0.124		2.96	3.00	2.30	9.74	
2	4 PFHxA	313.2 > 268.9	8.43e3	1.75e4	0.124		3.19	3.23	2.41	12.1	
3	5 PFHpA	363 > 318.9	2.22e3	4.17e4	0.124		3.45	3.49	0.667	3.80	
4	6 PFHxS	398.9 > 79.6	2.19e3	3.47e3	0.124		3.56	3.56	7.86	37.5	
5	8 PFOA	413 > 368.7	4.44e3	4.95e4	0.124		3.65	3.68	1.12	7.67	
6	10 PFNA	462.9 > 418.8		3.72e4	0.124		3.83				
7	12 PFOS	499 > 79.9	2.36e2	6.59e3	0.124		3.89	3.85	0.448	2.92	
8	13 PFDA	513 > 468.8		2.43e4	0.124		4.01				
9	15 N-MeFOSAA	570.1 > 419		4.53e3	0.124		4.03				
10	16 N-EtFOSAA	584.2 > 419		4.71e3	0.124		4.10				
11	17 PFUnA	562.9 > 518.9		2.63e4	0.124		4.17				
12	19 PFDoA	612.9 > 318.8		2.67e3	0.124		4.34				

Dataset: U:\Q4.PRO\results\170725M1\170725M1-28.qld

Last Altered: Wednesday, July 26, 2017 11:46:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:48:43 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_28, Date: 25-Jul-2017, Time: 19:05:57, ID: 1700852-06RE1 2-GW-02NEW16-20170711 0.12355, Description: 2-GW-02NEW16-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9		2.67e3	0.124		4.50				
2	22 PFTeDA	712.9 > 668.8		1.68e4	0.124		4.68				
3	28 13C3-PFBA	216.1 > 171.8	3.08e4	3.01e4	0.124	0.820	1.54	1.57	12.8	126	124.6
4	29 13C3-PFPeA	266 > 221.8	4.70e4	5.03e4	0.124	0.248	2.77	2.81	4.67	152	150.6
5	30 13C3-PFBS	302 > 98.8	5.84e3	5.03e4	0.124	0.031	2.96	3.00	0.581	151	149.4
6	31 13C2-PFHxA	315 > 269.8	1.75e4	5.03e4	0.124	0.276	3.19	3.22	1.74	51.0	126.1
7	32 13C4-PFHpA	367.2 > 321.8	4.17e4	5.03e4	0.124	0.306	3.45	3.49	4.15	110	108.5
8	33 18O2-PFHxS	403 > 102.6	3.47e3	7.01e3	0.124	0.393	3.56	3.56	6.20	128	126.3
9	34 13C2-6:2 FTS	429.1 > 408.9	7.14e3	3.57e4	0.124	0.158	3.64	3.67	2.50	128	126.7
10	35 13C2-PFOA	414.9 > 369.7	4.95e4	3.57e4	0.124	1.067	3.65	3.68	17.3	131	129.9
11	36 13C5-PFNA	468.2 > 422.9	3.72e4	3.55e4	0.124	0.852	3.83	3.86	13.1	124	122.6
12	37 13C8-PFOSA	506.1 > 77.7	1.52e3	2.43e4	0.124	0.098	3.84	3.87	0.784	64.6	63.9
13	38 13C8-PFOS	507 > 79.9	6.59e3	5.24e3	0.124	0.936	3.89	3.91	15.7	136	134.6
14	39 13C2-PFDA	515.1 > 469.9	2.43e4	2.64e4	0.124	0.810	4.01	4.03	11.5	115	113.5
15	40 13C2-8:2 FTS	529.1 > 508.7	3.06e3	2.64e4	0.124	0.086	4.00	4.02	1.45	137	135.4
16	41 d3-N-MeFOSAA	573.3 > 419	4.53e3	2.43e4	0.124	0.014	4.03	4.06	2.33	1380	104.9
17	42 d5-N-EtFOSAA	589.3 > 419	4.71e3	2.43e4	0.124	0.014	4.12	4.12	2.43	1410	107.0
18	43 13C2-PFUnA	565 > 519.8	2.63e4	2.43e4	0.124	0.962	4.17	4.19	13.6	114	112.7
19	44 13C2-PFDoA	615 > 569.7	2.67e3	2.43e4	0.124	0.094	4.34	4.36	1.38	118	116.6
20	46 13C2-PFTeDA	714.8 > 669.6	1.68e4	2.43e4	0.124	0.694	4.68	4.70	8.66	101	99.8
21	48 13C2-PFHxDA	815 > 769.7	6.03e3	2.43e4	0.124	0.843	5.06	5.08	3.11	29.8	73.7
22	51 13C4-PFBA	217 > 171.8	3.01e4	3.01e4	0.124	1.000	1.54	1.58	12.5	101	100.0
23	52 13C5-PFHxA	318 > 272.9	5.03e4	5.03e4	0.124	1.000	3.19	3.23	5.00	40.5	100.0
24	53 13C3-PFHxS	401.9 > 79.9	7.01e3	7.01e3	0.124	1.000	3.56	3.56	12.5	101	100.0
25	54 13C8-PFOA	421.3 > 376	3.57e4	3.57e4	0.124	1.000	3.65	3.68	12.5	101	100.0
26	55 13C9-PFNA	472.2 > 426.9	3.55e4	3.55e4	0.124	1.000	3.83	3.86	12.5	101	100.0
27	56 13C4-PFOS	503 > 79.9	5.24e3	5.24e3	0.124	1.000	3.89	3.91	12.5	101	100.0
28	57 13C6-PFDA	519.1 > 473.7	2.64e4	2.64e4	0.124	1.000	4.01	4.03	12.5	101	100.0
29	58 13C7-PFUnA	570.1 > 524.8	2.43e4	2.43e4	0.124	1.000	4.17	4.19	12.5	101	100.0
30	59 Total PFBS	299 > 79.7	1.08e3	5.84e3	0.124		2.96		2.30	9.74	
31	60 Total PFHxS	398.9 > 79.6	2.19e3	3.47e3	0.124		3.52		7.86	37.5	
32	61 Total PFOA	413 > 368.7	4.73e3	4.95e4	0.124		3.65		1.12	7.67	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-28.qld

Last Altered: Wednesday, July 26, 2017 11:46:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:48:43 Pacific Daylight Time

Name: 170725M1_28, Date: 25-Jul-2017, Time: 19:05:57, ID: 1700852-06RE1 2-GW-02NEW16-20170711 0.12355, Description: 2-GW-02NEW16-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	2.36e2	6.59e3	0.124		3.89		0.448	2.92	
34	63 Total N-Me-FOSAA	570.1 > 419	0.00e0	4.53e3	0.124		4.03		0.000		
35	64 Total N-EtFOSAA	584.2 > 419	0.00e0	4.71e3	0.124		4.17		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-28.qld

Last Altered: Wednesday, July 26, 2017 11:46:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:48:07 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_28, Date: 25-Jul-2017, Time: 19:05:57, ID: 1700852-06RE1 2-GW-02NEW16-20170711 0.12355, Description: 2-GW-02NEW16-20170711

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.00	1076.260	5836.590	2.305	bb	9.7

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.56	2185.289	3473.724	7.864	MM	37.5

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	3.68	4437.271	49538.410	1.120	MM	7.7
2	61 Total PFOA	413 > 368.7	3.64	289.409	49538.410	0.073	MMI	

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.85	236.223	6594.317	0.448	MM	2.9

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Dataset: U:\Q4.PRO\results\170725M1\170725M1-28.qld

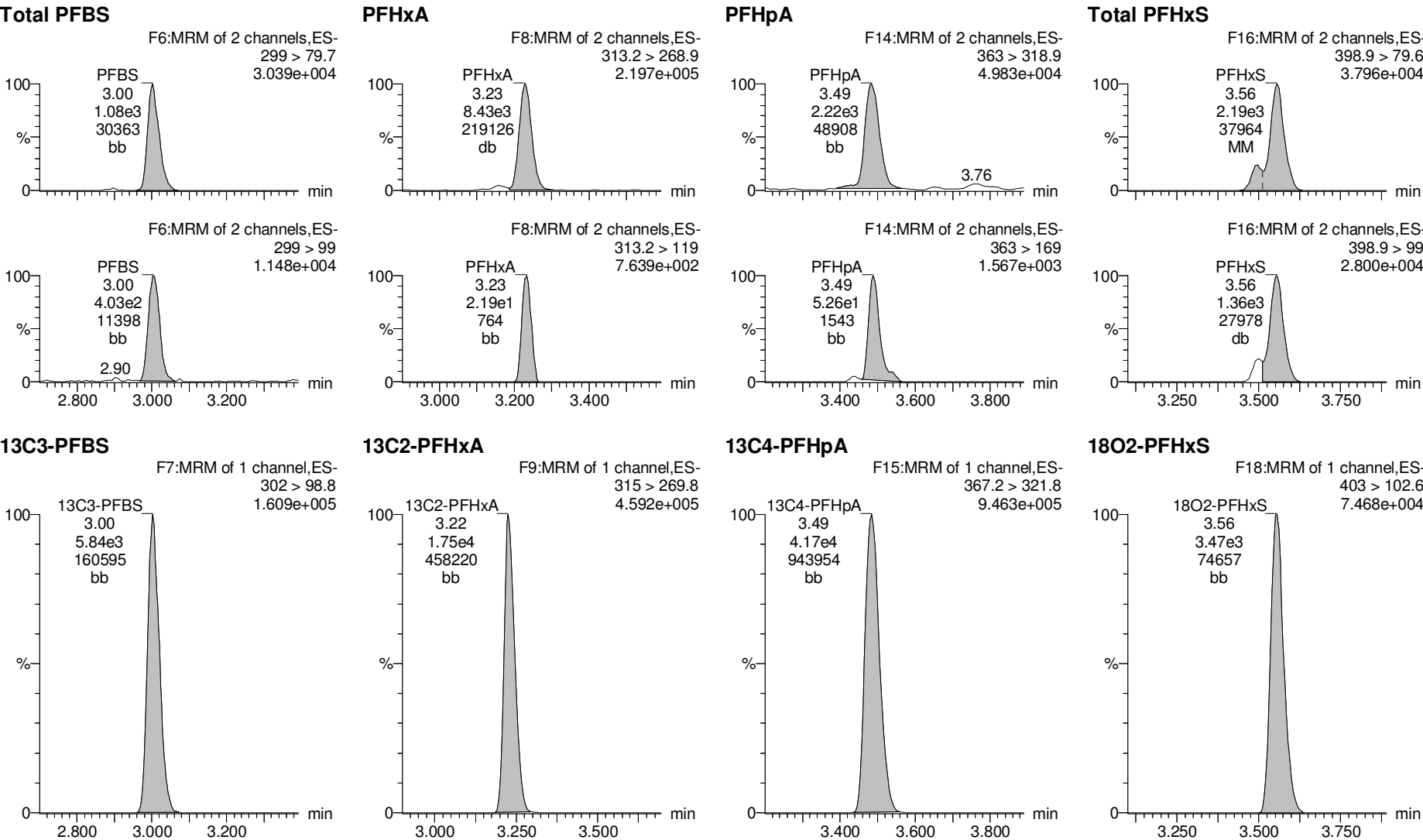
Last Altered: Wednesday, July 26, 2017 11:46:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:48:07 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_28, Date: 25-Jul-2017, Time: 19:05:57, ID: 1700852-06RE1 2-GW-02NEW16-20170711 0.12355, Description: 2-GW-02NEW16-20170711

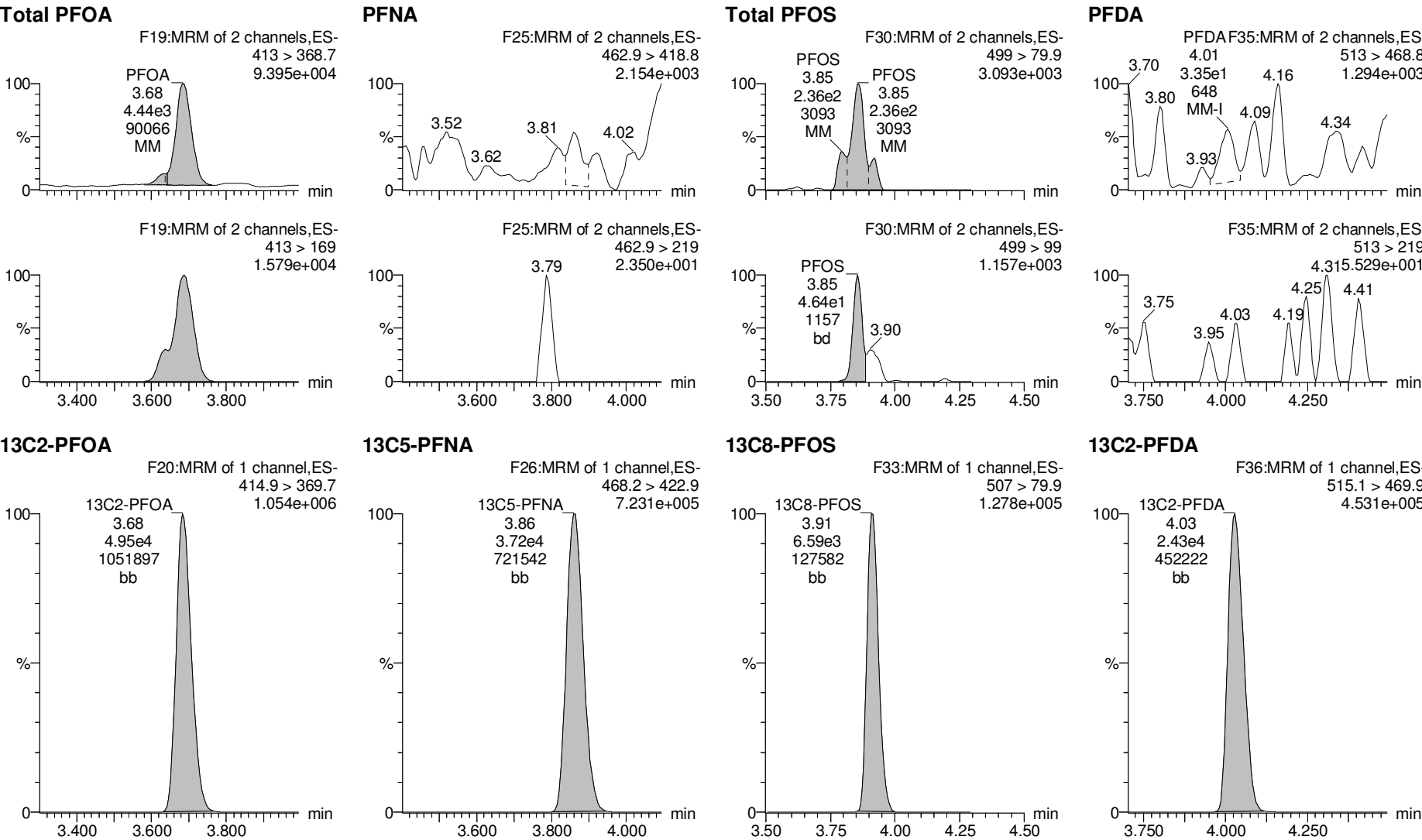


Dataset: U:\Q4.PRO\results\170725M1\170725M1-28.qld

Last Altered: Wednesday, July 26, 2017 11:46:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:48:07 Pacific Daylight Time

Name: 170725M1_28, Date: 25-Jul-2017, Time: 19:05:57, ID: 1700852-06RE1 2-GW-02NEW16-20170711 0.12355, Description: 2-GW-02NEW16-20170711

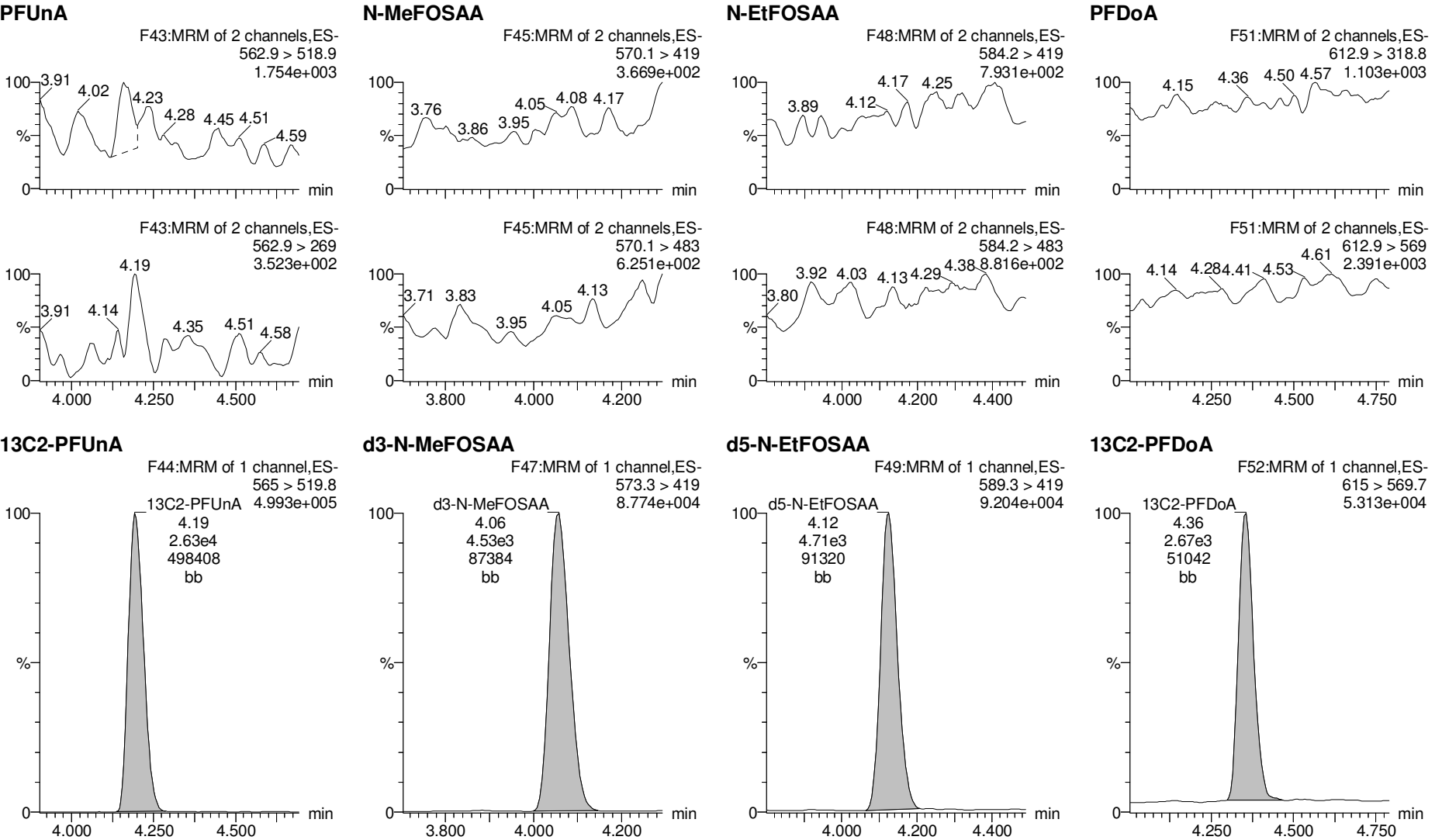


Dataset: U:\Q4.PRO\results\170725M1\170725M1-28.qld

Last Altered: Wednesday, July 26, 2017 11:46:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:48:07 Pacific Daylight Time

Name: 170725M1_28, Date: 25-Jul-2017, Time: 19:05:57, ID: 1700852-06RE1 2-GW-02NEW16-20170711 0.12355, Description: 2-GW-02NEW16-20170711

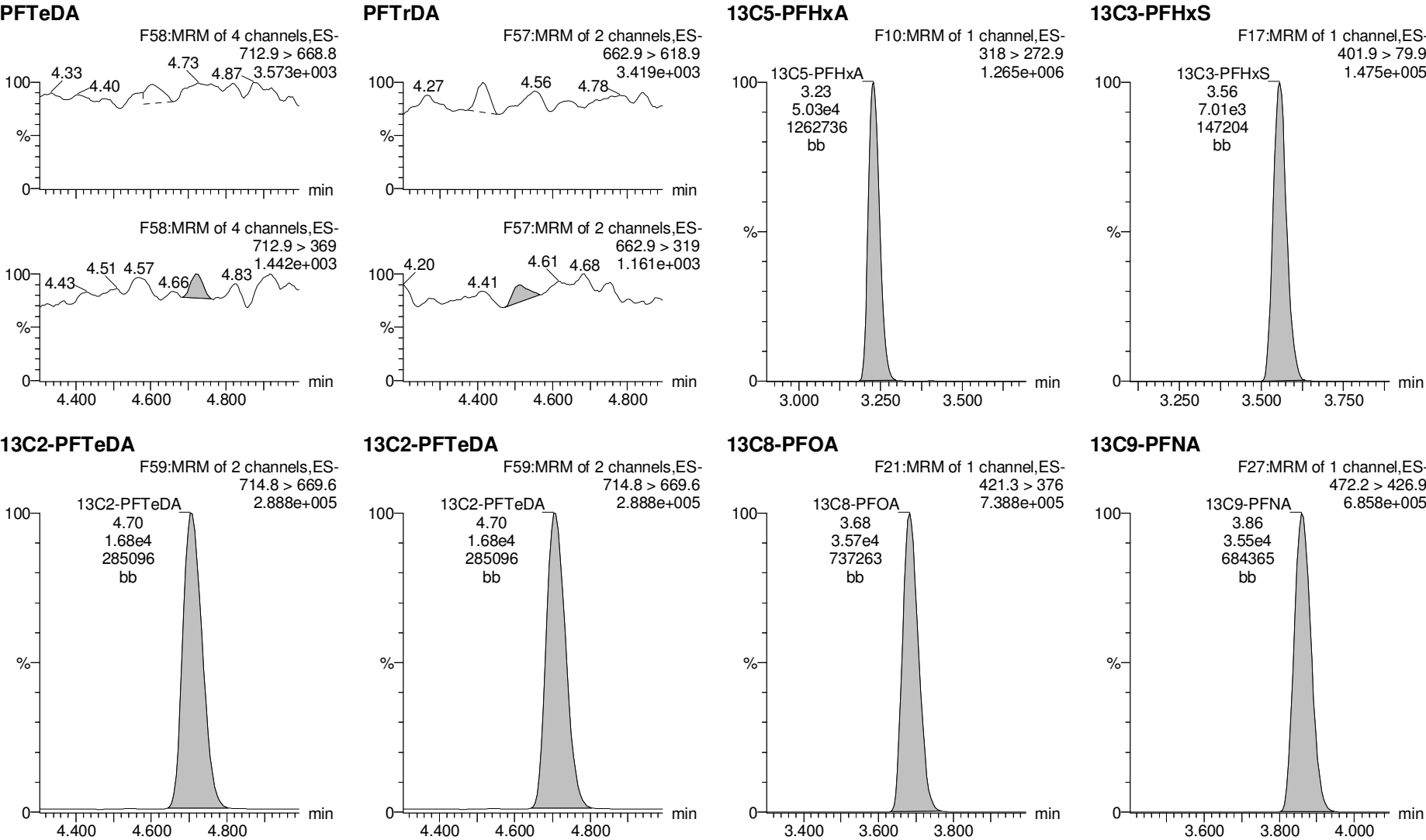


Dataset: U:\Q4.PRO\results\170725M1\170725M1-28.qld

Last Altered: Wednesday, July 26, 2017 11:46:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:48:07 Pacific Daylight Time

Name: 170725M1_28, Date: 25-Jul-2017, Time: 19:05:57, ID: 1700852-06RE1 2-GW-02NEW16-20170711 0.12355, Description: 2-GW-02NEW16-20170711

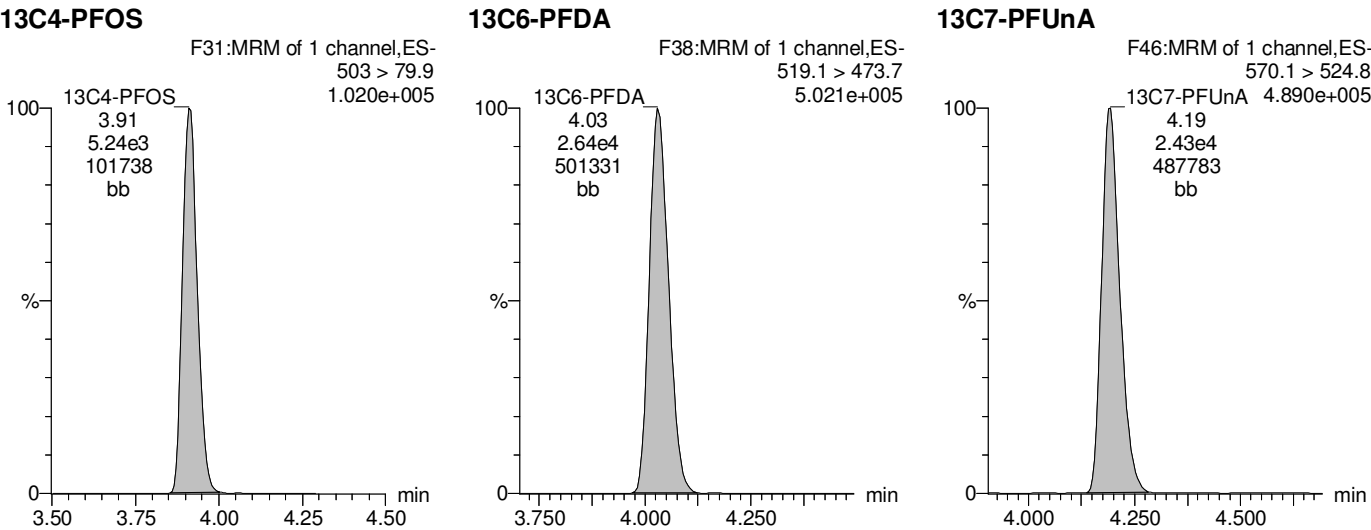


Dataset: U:\Q4.PRO\results\170725M1\170725M1-28.qld

Last Altered: Wednesday, July 26, 2017 11:46:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:48:07 Pacific Daylight Time

Name: 170725M1_28, Date: 25-Jul-2017, Time: 19:05:57, ID: 1700852-06RE1 2-GW-02NEW16-20170711 0.12355, Description: 2-GW-02NEW16-20170711



Dataset: U:\Q4.PRO\results\170725M1\170725M1-29.qld

Last Altered: Wednesday, July 26, 2017 11:52:01 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:52:16 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_29, Date: 25-Jul-2017, Time: 19:16:44, ID: 1700852-07RE1 5-GW-05-DGMW68A-20170711 0.10845, Description: 5-GW-05-DGMW68A-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	3.60e2	5.08e3	0.108		2.96	3.00	0.887	4.04	
2	4 PFHxA	313.2 > 268.9	3.56e3	1.38e4	0.108		3.19	3.23	1.29	6.91	
3	5 PFHpA	363 > 318.9	1.23e3	3.04e4	0.108		3.45	3.49	0.506	3.14	
4	6 PFHxS	398.9 > 79.6	3.72e2	3.46e3	0.108		3.56	3.56	1.34	7.33	
5	8 PFOA	413 > 368.7	1.00e4	4.23e4	0.108		3.65	3.68	2.95	26.2	
6	10 PFNA	462.9 > 418.8	2.80e2	3.50e4	0.108		3.83	3.86	0.0997		
7	12 PFOS	499 > 79.9	6.32e2	7.97e3	0.108		3.89	3.91	0.991	7.54	
8	13 PFDA	513 > 468.8		3.20e4	0.108		4.01				
9	15 N-MeFOSAA	570.1 > 419		7.82e3	0.108		4.03				
10	16 N-EtFOSAA	584.2 > 419		7.97e3	0.108		4.10				
11	17 PFUnA	562.9 > 518.9	8.49e1	3.89e4	0.108		4.17	4.18	0.0273	0.202	
12	19 PFDoA	612.9 > 318.8		3.99e3	0.108		4.34				

Dataset: U:\Q4.PRO\results\170725M1\170725M1-29.qld

Last Altered: Wednesday, July 26, 2017 11:52:01 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:52:45 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_29, Date: 25-Jul-2017, Time: 19:16:44, ID: 1700852-07RE1 5-GW-05-DGMW68A-20170711 0.10845, Description: 5-GW-05-DGMW68A-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9		3.99e3	0.108		4.50				
2	22 PFTeDA	712.9 > 668.8		2.41e4	0.108		4.68				
3	28 13C3-PFBA	216.1 > 171.8	2.30e4	2.39e4	0.108	0.820	1.54	1.57	12.0	135	117.0
4	29 13C3-PFPeA	266 > 221.8	3.63e4	4.30e4	0.108	0.248	2.77	2.80	4.22	157	136.1
5	30 13C3-PFBS	302 > 98.8	5.08e3	4.30e4	0.108	0.031	2.96	3.00	0.590	175	151.8
6	31 13C2-PFHxA	315 > 269.8	1.38e4	4.30e4	0.108	0.276	3.19	3.22	1.60	53.5	116.1
7	32 13C4-PFHpA	367.2 > 321.8	3.04e4	4.30e4	0.108	0.306	3.45	3.49	3.53	107	92.5
8	33 18O2-PFHxS	403 > 102.6	3.46e3	7.35e3	0.108	0.393	3.56	3.56	5.89	138	119.9
9	34 13C2-6:2 FTS	429.1 > 408.9	7.08e3	3.37e4	0.108	0.158	3.64	3.67	2.63	154	133.4
10	35 13C2-PFOA	414.9 > 369.7	4.23e4	3.37e4	0.108	1.067	3.65	3.68	15.7	136	117.9
11	36 13C5-PFNA	468.2 > 422.9	3.50e4	3.85e4	0.108	0.852	3.83	3.86	11.4	123	106.7
12	37 13C8-PFOSA	506.1 > 77.7	2.73e3	3.77e4	0.108	0.098	3.84	3.87	0.907	85.1	73.9
13	38 13C8-PFOS	507 > 79.9	7.97e3	7.61e3	0.108	0.936	3.89	3.91	13.1	129	112.0
14	39 13C2-PFDA	515.1 > 469.9	3.20e4	3.64e4	0.108	0.810	4.01	4.03	11.0	125	108.5
15	40 13C2-8:2 FTS	529.1 > 508.7	4.46e3	3.64e4	0.108	0.086	4.00	4.02	1.53	165	143.1
16	41 d3-N-MeFOSAA	573.3 > 419	7.82e3	3.77e4	0.108	0.014	4.03	4.06	2.59	1750	116.5
17	42 d5-N-EtFOSAA	589.3 > 419	7.97e3	3.77e4	0.108	0.014	4.12	4.12	2.64	1750	116.6
18	43 13C2-PFUnA	565 > 519.8	3.89e4	3.77e4	0.108	0.962	4.17	4.19	12.9	124	107.4
19	44 13C2-PFDoA	615 > 569.7	3.99e3	3.77e4	0.108	0.094	4.34	4.36	1.32	129	112.0
20	46 13C2-PFTeDA	714.8 > 669.6	2.41e4	3.77e4	0.108	0.694	4.68	4.70	7.99	106	92.1
21	48 13C2-PFHxDA	815 > 769.7	9.30e3	3.77e4	0.108	0.843	5.06	5.07	3.08	33.7	73.1
22	51 13C4-PFBA	217 > 171.8	2.39e4	2.39e4	0.108	1.000	1.54	1.57	12.5	115	100.0
23	52 13C5-PFHxA	318 > 272.9	4.30e4	4.30e4	0.108	1.000	3.19	3.22	5.00	46.1	100.0
24	53 13C3-PFHxS	401.9 > 79.9	7.35e3	7.35e3	0.108	1.000	3.56	3.56	12.5	115	100.0
25	54 13C8-PFOA	421.3 > 376	3.37e4	3.37e4	0.108	1.000	3.65	3.68	12.5	115	100.0
26	55 13C9-PFNA	472.2 > 426.9	3.85e4	3.85e4	0.108	1.000	3.83	3.86	12.5	115	100.0
27	56 13C4-PFOS	503 > 79.9	7.61e3	7.61e3	0.108	1.000	3.89	3.91	12.5	115	100.0
28	57 13C6-PFDA	519.1 > 473.7	3.64e4	3.64e4	0.108	1.000	4.01	4.03	12.5	115	100.0
29	58 13C7-PFUnA	570.1 > 524.8	3.77e4	3.77e4	0.108	1.000	4.17	4.19	12.5	115	100.0
30	59 Total PFBS	299 > 79.7	3.60e2	5.08e3	0.108		2.96		0.887	4.04	
31	60 Total PFHxS	398.9 > 79.6	3.72e2	3.46e3	0.108		3.52		1.34	7.33	
32	61 Total PFOA	413 > 368.7	1.08e4	4.23e4	0.108		3.65		3.19	26.5	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-29.qld

Last Altered: Wednesday, July 26, 2017 11:52:01 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:52:45 Pacific Daylight Time

Name: 170725M1_29, Date: 25-Jul-2017, Time: 19:16:44, ID: 1700852-07RE1 5-GW-05-DGMW68A-20170711 0.10845, Description: 5-GW-05-DGMW68A-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	6.32e2	7.97e3	0.108		3.89		0.991	7.54	
34	63 Total N-Me-FOSAA	570.1 > 419	0.00e0	7.82e3	0.108		4.03		0.000		
35	64 Total N-EtFOSAA	584.2 > 419	0.00e0	7.97e3	0.108		4.17		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-29.qld

Last Altered: Wednesday, July 26, 2017 11:52:01 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:52:16 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_29, Date: 25-Jul-2017, Time: 19:16:44, ID: 1700852-07RE1 5-GW-05-DGMW68A-20170711 0.10845, Description: 5-GW-05-DGMW68A-20170711

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.00	360.102	5077.395	0.887	bb	4.0

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.56	372.375	3460.998	1.345	MM	7.3

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	61 Total PFOA	413 > 368.7	3.63	792.055	42349.449	0.234	bd	0.3
2	8 PFOA	413 > 368.7	3.68	10005.278	42349.449	2.953	db	26.2

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.91	631.896	7968.976	0.991	bb	7.5

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 N-MeFOSAA	570.1 > 419			7821.123		MM-I	

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419			7965.839		MM-I	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-29.qld

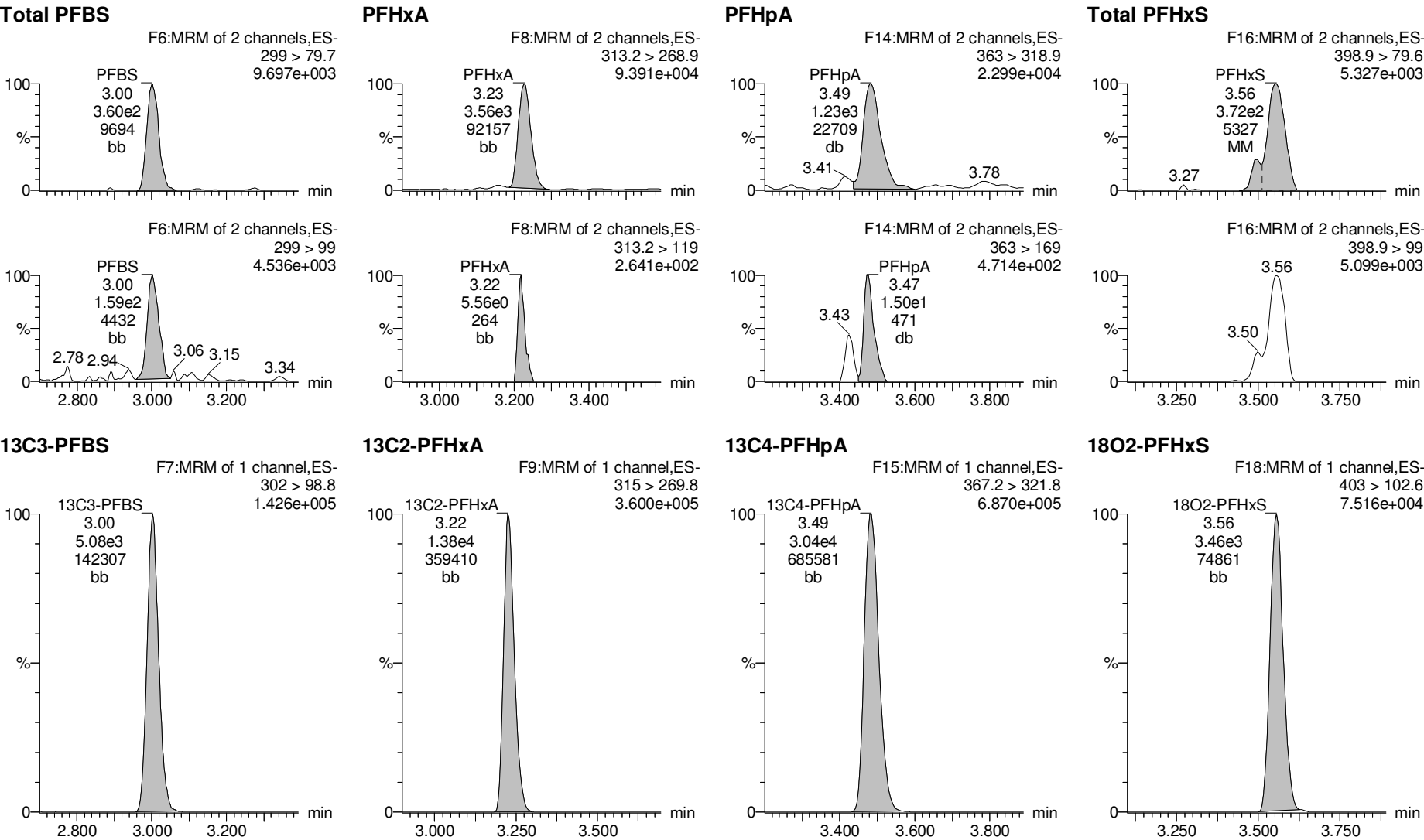
Last Altered: Wednesday, July 26, 2017 11:52:01 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:52:16 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_29, Date: 25-Jul-2017, Time: 19:16:44, ID: 1700852-07RE1 5-GW-05-DGMW68A-20170711 0.10845, Description: 5-GW-05-DGMW68A-20170711

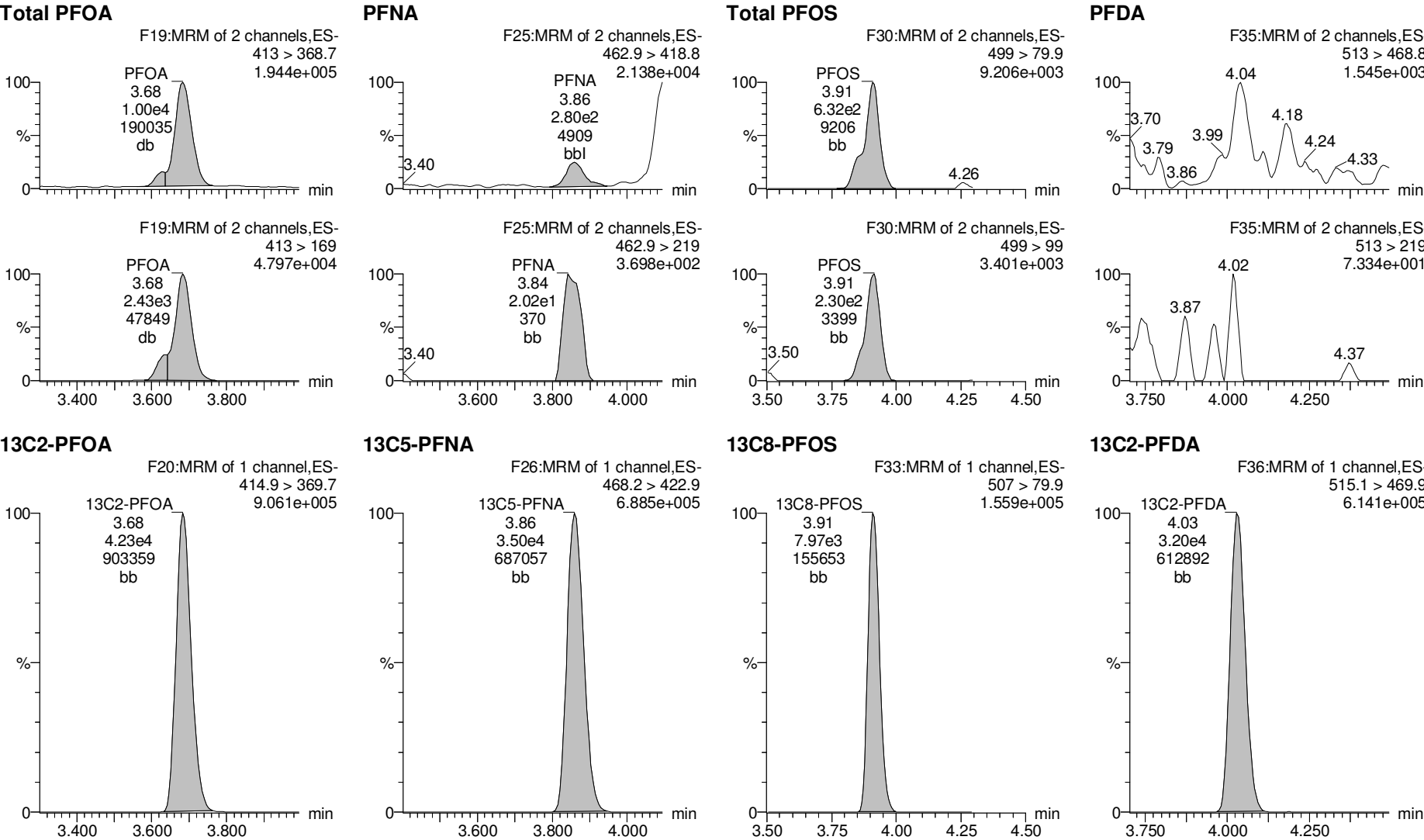


Dataset: U:\Q4.PRO\results\170725M1\170725M1-29.qld

Last Altered: Wednesday, July 26, 2017 11:52:01 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:52:16 Pacific Daylight Time

Name: 170725M1_29, Date: 25-Jul-2017, Time: 19:16:44, ID: 1700852-07RE1 5-GW-05-DGMW68A-20170711 0.10845, Description: 5-GW-05-DGMW68A-20170711

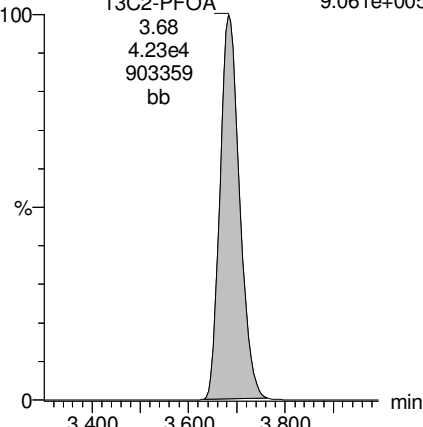


13C2-PFOA

F20:MRM of 1 channel,ES-414.9 > 369.7
9.061e+005

13C2-PFOA

3.68
4.23e4
903359
bb

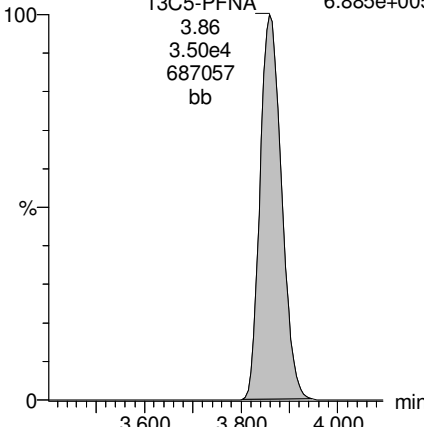


13C5-PFNA

F26:MRM of 1 channel,ES-468.2 > 422.9
6.885e+005

13C5-PFNA

3.86
3.50e4
687057
bb

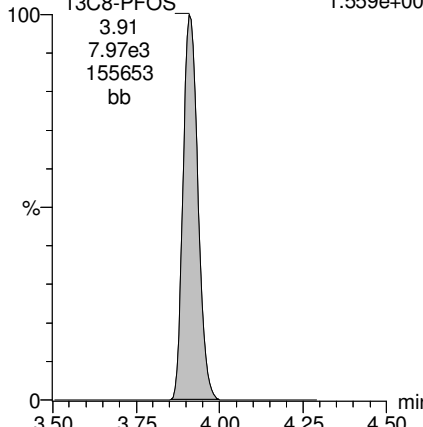


13C8-PFOS

F33:MRM of 1 channel,ES-507 > 79.9
1.559e+005

13C8-PFOS

3.91
7.97e3
155653
bb

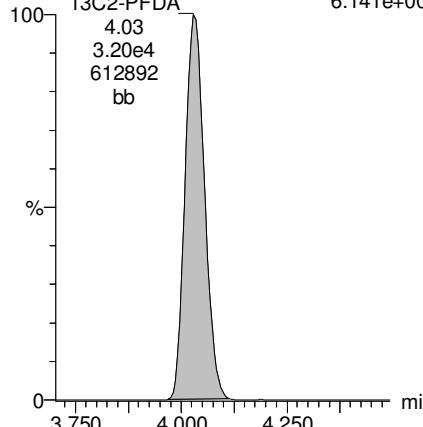


13C2-PFDA

F36:MRM of 1 channel,ES-515.1 > 469.9
6.141e+005

13C2-PFDA

4.03
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612892
bb



Work Order 1700852

AC 7/26/17

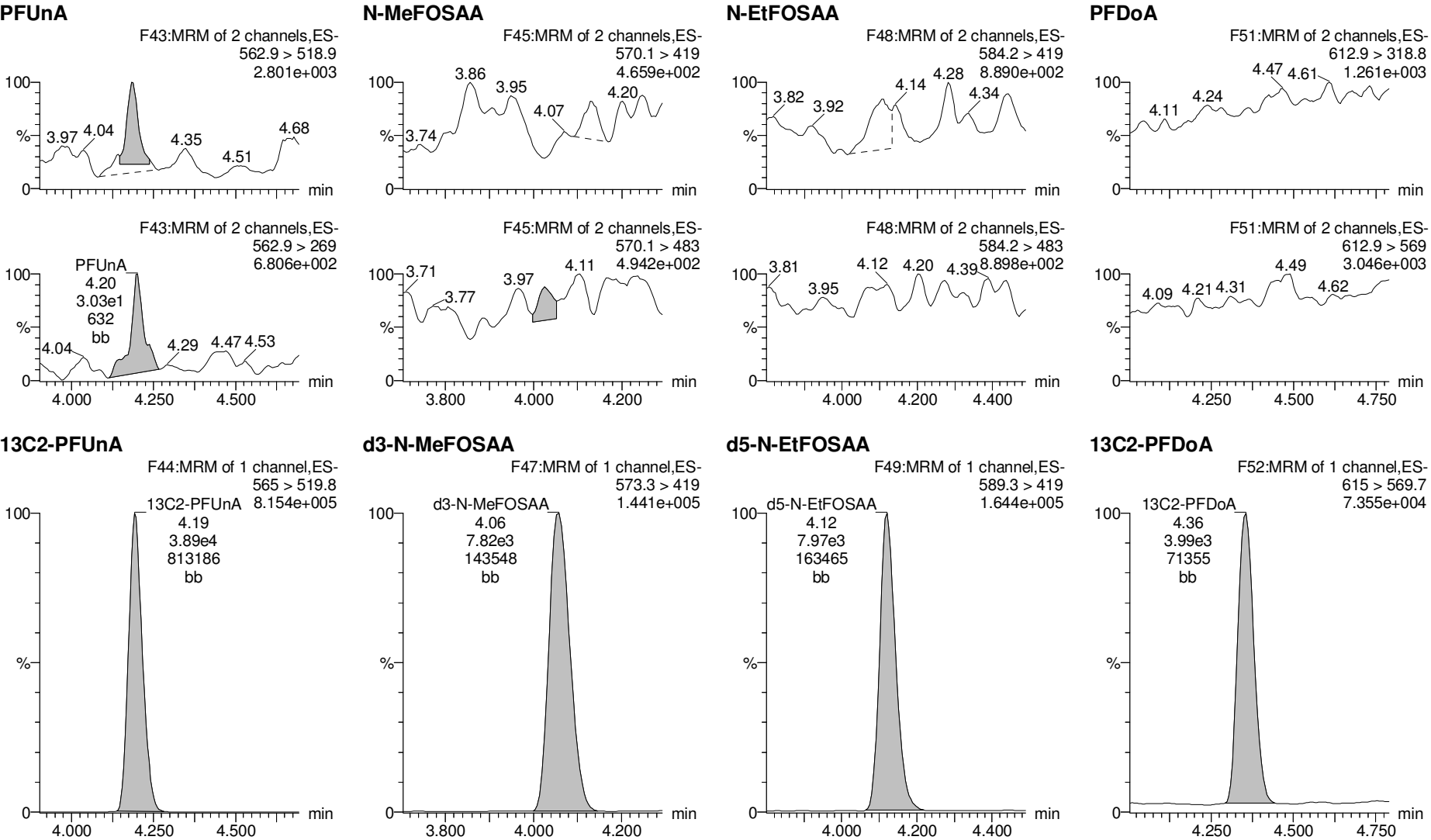
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Dataset: U:\Q4.PRO\results\170725M1\170725M1-29.qld

Last Altered: Wednesday, July 26, 2017 11:52:01 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:52:16 Pacific Daylight Time

Name: 170725M1_29, Date: 25-Jul-2017, Time: 19:16:44, ID: 1700852-07RE1 5-GW-05-DGMW68A-20170711 0.10845, Description: 5-GW-05-DGMW68A-20170711

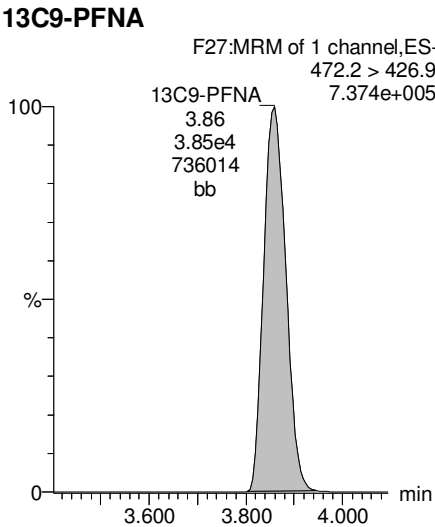
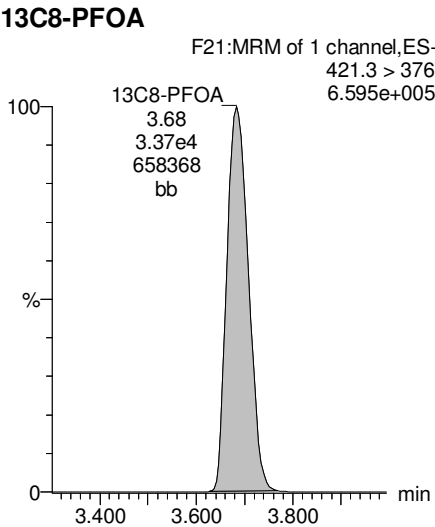
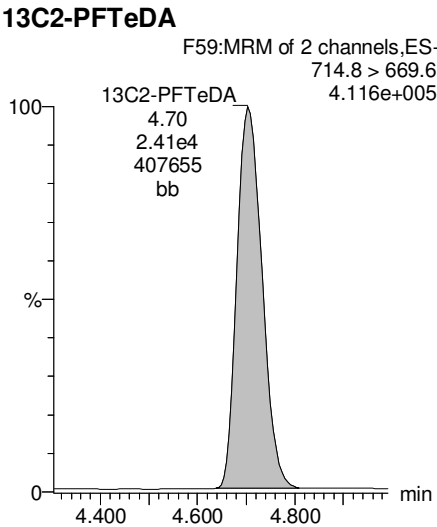
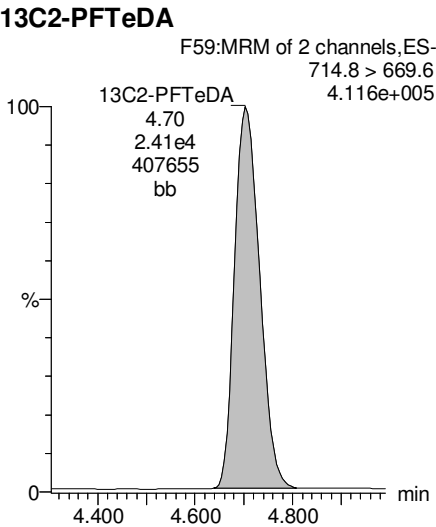
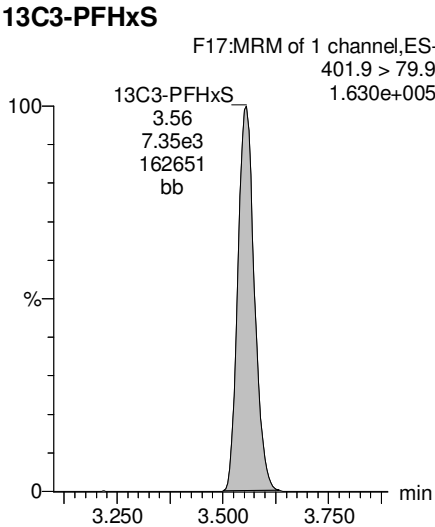
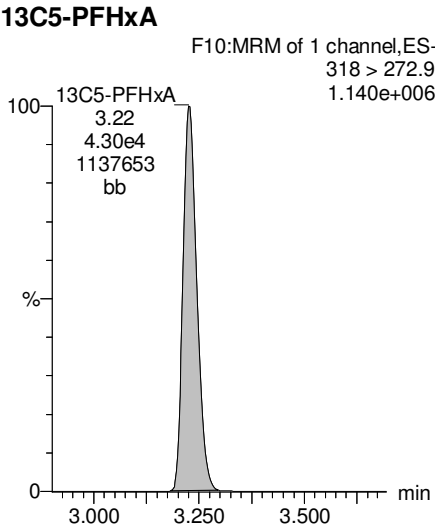
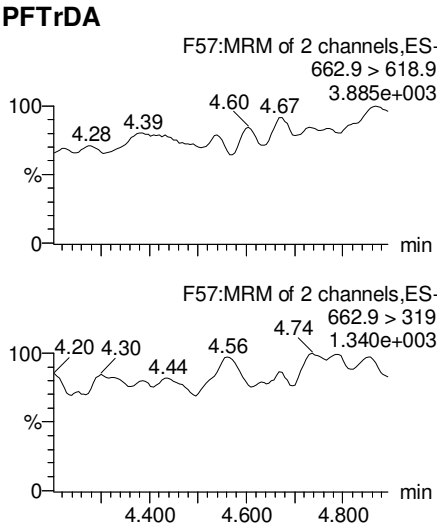
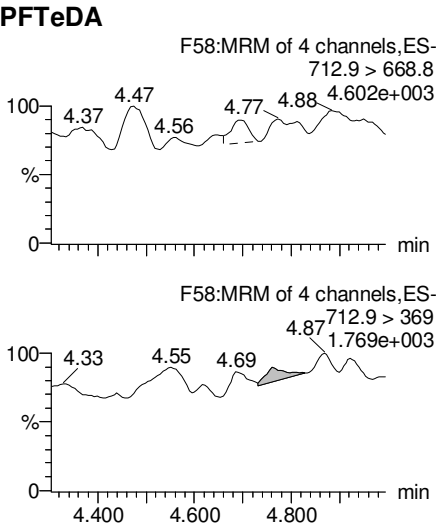


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Last Altered: Wednesday, July 26, 2017 11:52:01 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:52:16 Pacific Daylight Time

Name: 170725M1_29, Date: 25-Jul-2017, Time: 19:16:44, ID: 1700852-07RE1 5-GW-05-DGMW68A-20170711 0.10845, Description: 5-GW-05-DGMW68A-20170711

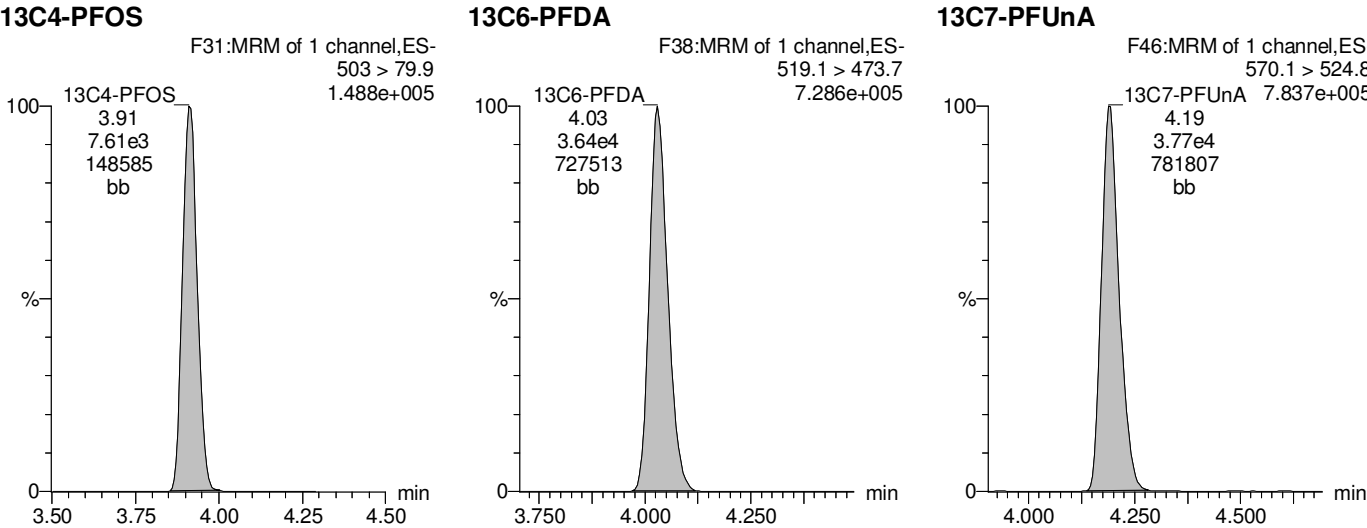


Dataset: U:\Q4.PRO\results\170725M1\170725M1-29.qld

Last Altered: Wednesday, July 26, 2017 11:52:01 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:52:16 Pacific Daylight Time

Name: 170725M1_29, Date: 25-Jul-2017, Time: 19:16:44, ID: 1700852-07RE1 5-GW-05-DGMW68A-20170711 0.10845, Description: 5-GW-05-DGMW68A-20170711



Dataset: U:\Q4.PRO\results\170725M1\170725M1-30.qld

Last Altered: Wednesday, July 26, 2017 11:56:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:56:36 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_30, Date: 25-Jul-2017, Time: 19:27:29, ID: 1700852-08RE1 1-GW-01-PZ20-20170711 0.10965, Description: 1-GW-01-PZ20-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7		6.05e3	0.110		2.96				
2	4 PFHxA	313.2 > 268.9		1.62e4	0.110		3.19				
3	5 PFHpA	363 > 318.9		4.13e4	0.110		3.45				
4	6 PFHxS	398.9 > 79.6	1.75e1	4.19e3	0.110		3.56	3.57	0.0522	0.340	
5	8 PFOA	413 > 368.7		4.77e4	0.110		3.65				
6	10 PFNA	462.9 > 418.8		4.27e4	0.110		3.83				
7	12 PFOS	499 > 79.9	6.45e1	8.78e3	0.110		3.89	3.92	0.0919	0.564	
8	13 PFDA	513 > 468.8	9.32e1	3.55e4	0.110		4.01	4.05	0.0328		
9	15 N-MeFOSAA	570.1 > 419		7.56e3	0.110		4.03				
10	16 N-EtFOSAA	584.2 > 419		7.58e3	0.110		4.10				
11	17 PFUnA	562.9 > 518.9		3.74e4	0.110		4.17				
12	19 PFDoA	612.9 > 318.8		3.21e3	0.110		4.34				

Dataset: U:\Q4.PRO\results\170725M1\170725M1-30.qld

Last Altered: Wednesday, July 26, 2017 11:56:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:59:02 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_30, Date: 25-Jul-2017, Time: 19:27:29, ID: 1700852-08RE1 1-GW-01-PZ20-20170711 0.10965, Description: 1-GW-01-PZ20-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9		3.21e3	0.110		4.50				
2	22 PFTeDA	712.9 > 668.8		2.35e4	0.110		4.68				
3	28 13C3-PFBA	216.1 > 171.8	2.91e4	3.06e4	0.110	0.820	1.54	1.58	11.9	132	116.2
4	29 13C3-PFPeA	266 > 221.8	4.48e4	5.11e4	0.110	0.248	2.77	2.81	4.38	161	141.3
5	30 13C3-PFBS	302 > 98.8	6.05e3	5.11e4	0.110	0.031	2.96	3.01	0.592	174	152.2
6	31 13C2-PFHxA	315 > 269.8	1.62e4	5.11e4	0.110	0.276	3.19	3.23	1.58	52.2	114.6
7	32 13C4-PFHpA	367.2 > 321.8	4.13e4	5.11e4	0.110	0.306	3.45	3.48	4.04	120	105.6
8	33 18O2-PFHxS	403 > 102.6	4.19e3	8.16e3	0.110	0.393	3.56	3.56	6.41	149	130.6
9	34 13C2-6:2 FTS	429.1 > 408.9	9.84e3	3.98e4	0.110	0.158	3.64	3.67	3.09	179	156.9
10	35 13C2-PFOA	414.9 > 369.7	4.77e4	3.98e4	0.110	1.067	3.65	3.68	15.0	128	112.3
11	36 13C5-PFNA	468.2 > 422.9	4.27e4	4.33e4	0.110	0.852	3.83	3.86	12.3	132	115.6
12	37 13C8-PFOSA	506.1 > 77.7	2.70e3	3.58e4	0.110	0.098	3.84	3.87	0.942	87.5	76.7
13	38 13C8-PFOS	507 > 79.9	8.78e3	7.47e3	0.110	0.936	3.89	3.91	14.7	143	125.5
14	39 13C2-PFDA	515.1 > 469.9	3.55e4	4.04e4	0.110	0.810	4.01	4.03	11.0	124	108.7
15	40 13C2-8:2 FTS	529.1 > 508.7	5.55e3	4.04e4	0.110	0.086	4.00	4.02	1.72	183	160.8
16	41 d3-N-MeFOSAA	573.3 > 419	7.56e3	3.58e4	0.110	0.014	4.03	4.06	2.64	1760	118.7
17	42 d5-N-EtFOSAA	589.3 > 419	7.58e3	3.58e4	0.110	0.014	4.12	4.12	2.65	1730	116.9
18	43 13C2-PFUnA	565 > 519.8	3.74e4	3.58e4	0.110	0.962	4.17	4.19	13.1	124	108.7
19	44 13C2-PFDoA	615 > 569.7	3.21e3	3.58e4	0.110	0.094	4.34	4.36	1.12	108	95.1
20	46 13C2-PFTeDA	714.8 > 669.6	2.35e4	3.58e4	0.110	0.694	4.68	4.70	8.22	108	94.7
21	48 13C2-PFHxDA	815 > 769.7	1.08e4	3.58e4	0.110	0.843	5.06	5.07	3.79	41.0	89.9
22	51 13C4-PFBA	217 > 171.8	3.06e4	3.06e4	0.110	1.000	1.54	1.58	12.5	114	100.0
23	52 13C5-PFHxA	318 > 272.9	5.11e4	5.11e4	0.110	1.000	3.19	3.23	5.00	45.6	100.0
24	53 13C3-PFHxS	401.9 > 79.9	8.16e3	8.16e3	0.110	1.000	3.56	3.56	12.5	114	100.0
25	54 13C8-PFOA	421.3 > 376	3.98e4	3.98e4	0.110	1.000	3.65	3.68	12.5	114	100.0
26	55 13C9-PFNA	472.2 > 426.9	4.33e4	4.33e4	0.110	1.000	3.83	3.86	12.5	114	100.0
27	56 13C4-PFOS	503 > 79.9	7.47e3	7.47e3	0.110	1.000	3.89	3.91	12.5	114	100.0
28	57 13C6-PFDA	519.1 > 473.7	4.04e4	4.04e4	0.110	1.000	4.01	4.03	12.5	114	100.0
29	58 13C7-PFUnA	570.1 > 524.8	3.58e4	3.58e4	0.110	1.000	4.17	4.19	12.5	114	100.0
30	59 Total PFBS	299 > 79.7	0.00e0	6.05e3	0.110		2.96		0.000		
31	60 Total PFHxS	398.9 > 79.6	1.75e1	4.19e3	0.110		3.52		0.0522	0.340	
32	61 Total PFOA	413 > 368.7	0.00e0	4.77e4	0.110		3.65		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-30.qld

Last Altered: Wednesday, July 26, 2017 11:56:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:59:02 Pacific Daylight Time

Name: 170725M1_30, Date: 25-Jul-2017, Time: 19:27:29, ID: 1700852-08RE1 1-GW-01-PZ20-20170711 0.10965, Description: 1-GW-01-PZ20-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	6.45e1	8.78e3	0.110		3.89		0.0919	0.564	
34	63 Total N-Me-FOSAA	570.1 > 419	0.00e0	7.56e3	0.110		4.03		0.000		
35	64 Total N-EtFOSAA	584.2 > 419	0.00e0	7.58e3	0.110		4.17		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-30.qld

Last Altered: Wednesday, July 26, 2017 11:56:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:56:36 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_30, Date: 25-Jul-2017, Time: 19:27:29, ID: 1700852-08RE1 1-GW-01-PZ20-20170711 0.10965, Description: 1-GW-01-PZ20-20170711

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.57	17.493	4186.548	0.052	bb	0.3

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7			47700.133		MM-I	

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.92	64.488	8775.646	0.092	MM	0.6

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419			7578.884		MM-I	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-30.qld

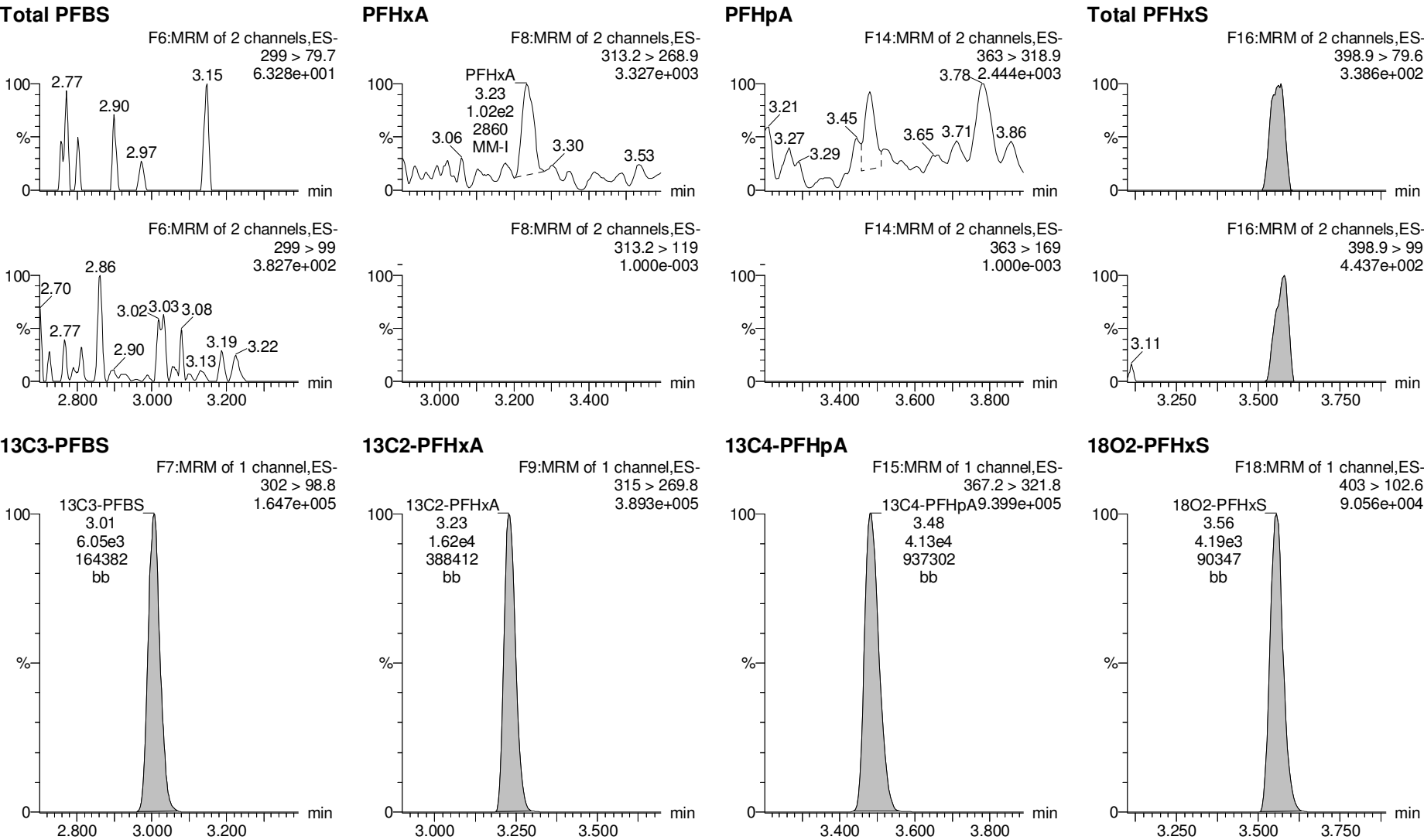
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Printed: Wednesday, July 26, 2017 11:56:36 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_30, Date: 25-Jul-2017, Time: 19:27:29, ID: 1700852-08RE1 1-GW-01-PZ20-20170711 0.10965, Description: 1-GW-01-PZ20-20170711

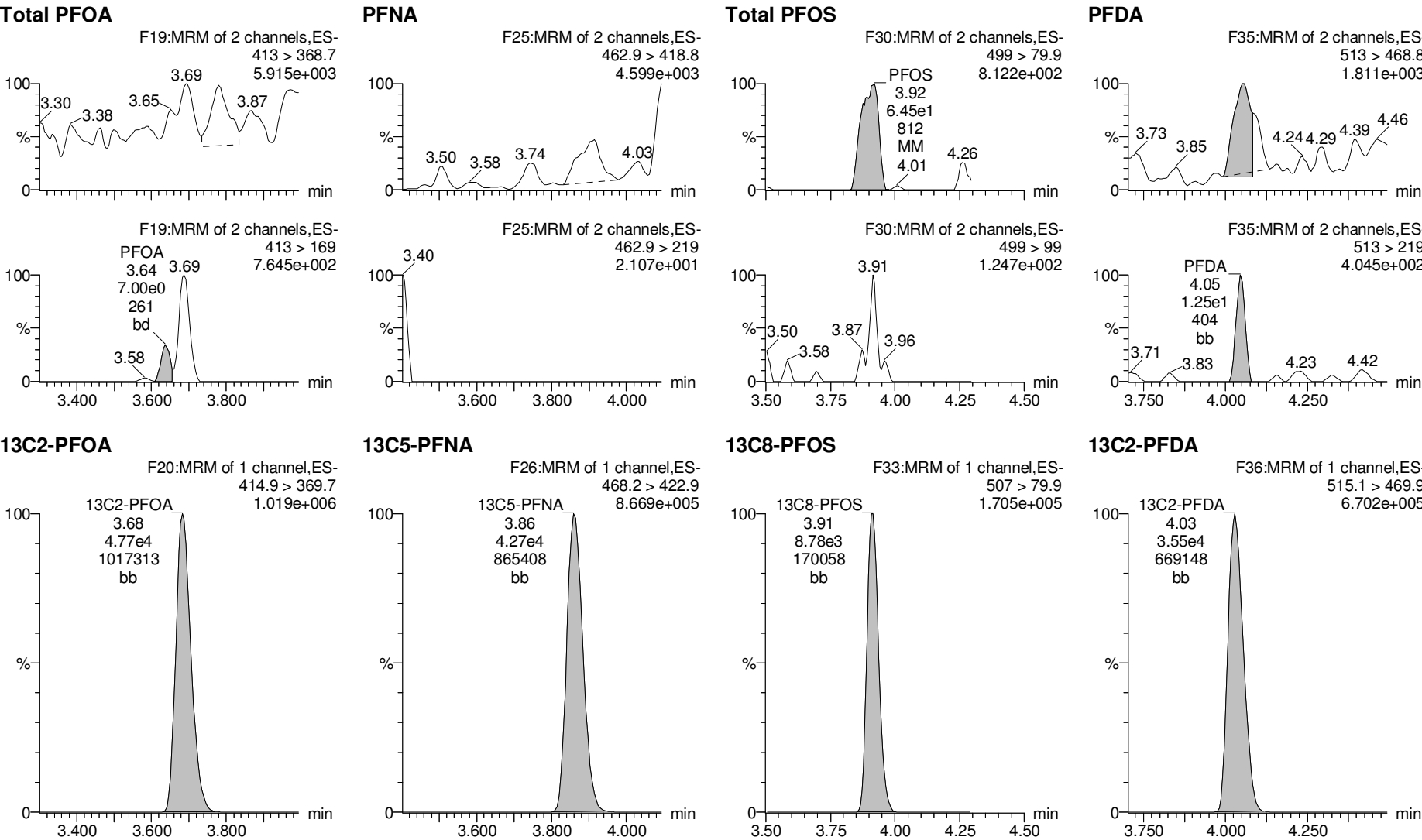


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Printed: Wednesday, July 26, 2017 11:56:36 Pacific Daylight Time

Name: 170725M1_30, Date: 25-Jul-2017, Time: 19:27:29, ID: 1700852-08RE1 1-GW-01-PZ20-20170711 0.10965, Description: 1-GW-01-PZ20-20170711

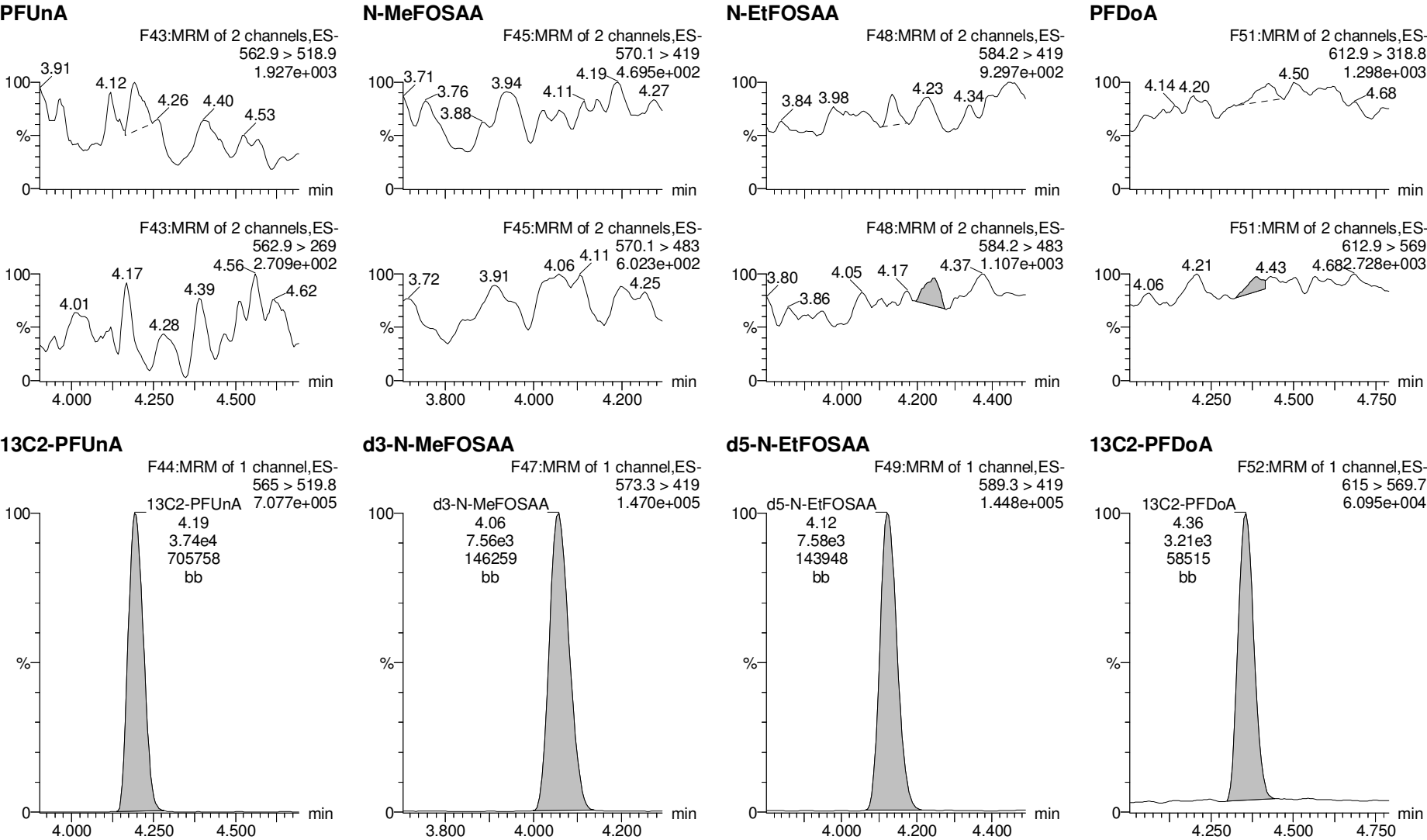


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Last Altered: Wednesday, July 26, 2017 11:56:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:56:36 Pacific Daylight Time

Name: 170725M1_30, Date: 25-Jul-2017, Time: 19:27:29, ID: 1700852-08RE1 1-GW-01-PZ20-20170711 0.10965, Description: 1-GW-01-PZ20-20170711



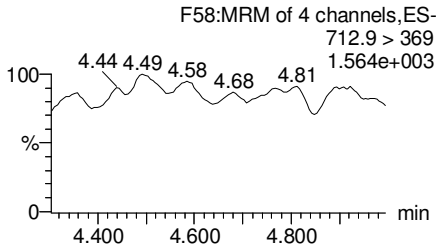
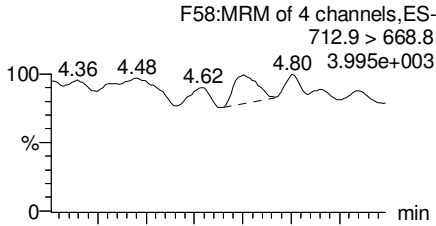
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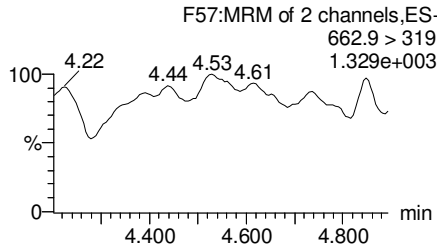
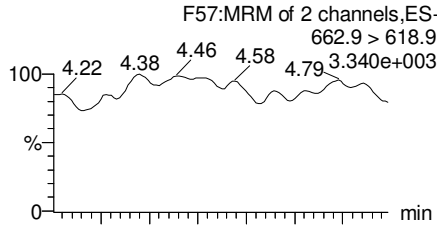
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Name: 170725M1_30, Date: 25-Jul-2017, Time: 19:27:29, ID: 1700852-08RE1 1-GW-01-PZ20-20170711 0.10965, Description: 1-GW-01-PZ20-20170711

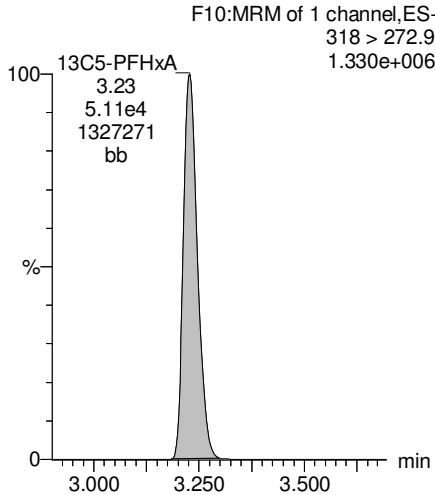
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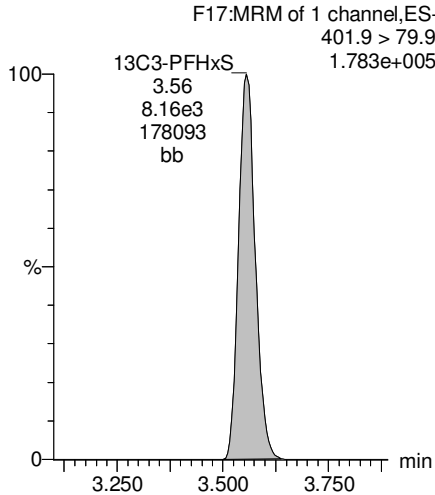
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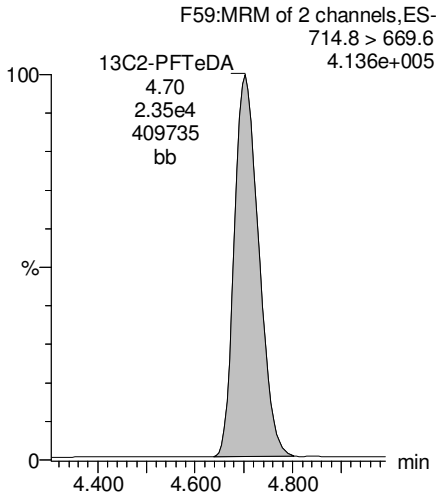
13C5-PFHxA



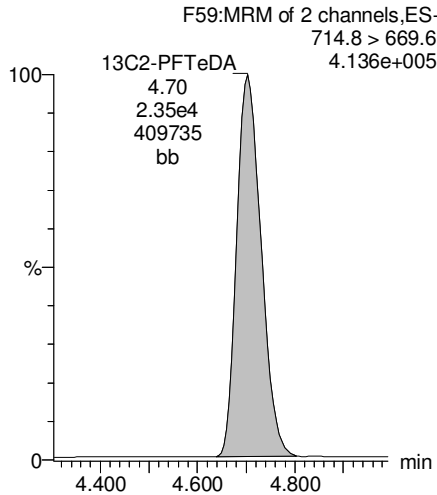
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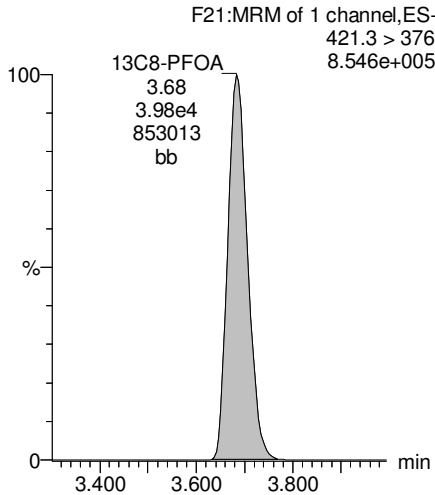
13C2-PFTeDA



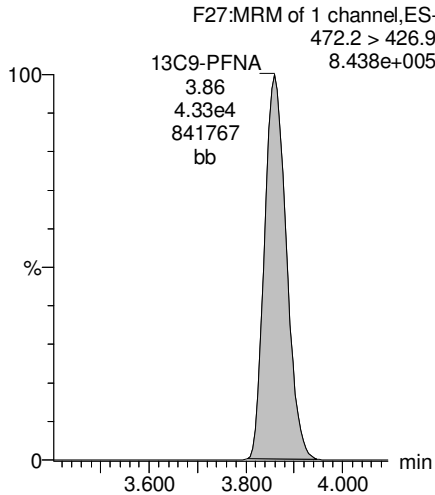
13C2-PFTeDA



13C8-PFOA



13C9-PFNA

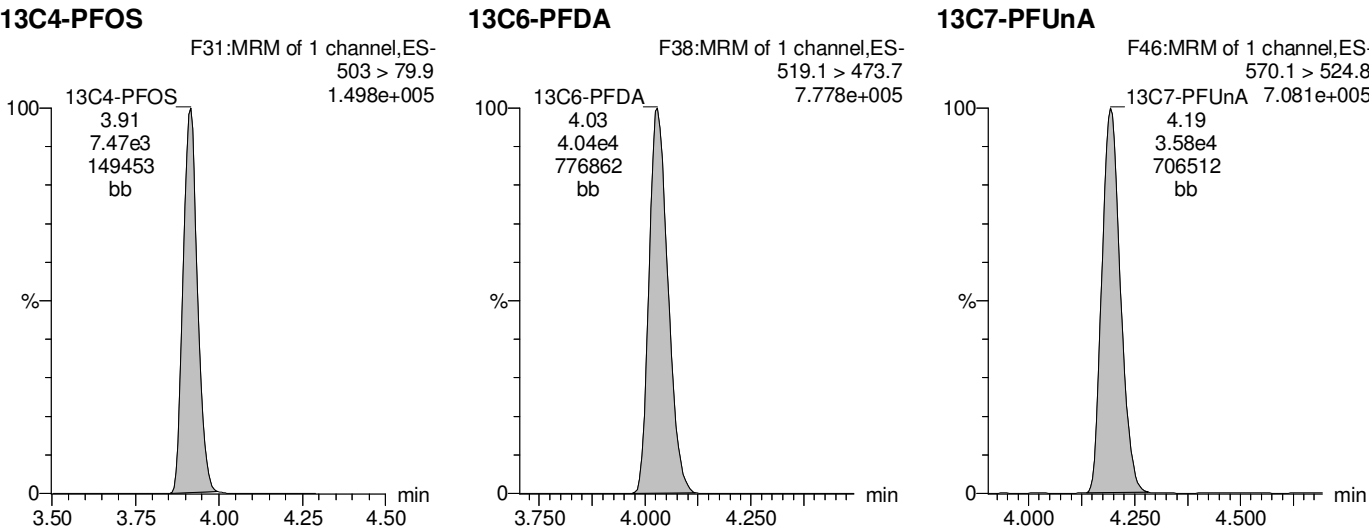


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Last Altered: Wednesday, July 26, 2017 11:56:15 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 11:56:36 Pacific Daylight Time

Name: 170725M1_30, Date: 25-Jul-2017, Time: 19:27:29, ID: 1700852-08RE1 1-GW-01-PZ20-20170711 0.10965, Description: 1-GW-01-PZ20-20170711



Dataset: U:\Q4.PRO\results\170725M1\170725M1-31.qld

Last Altered: Wednesday, July 26, 2017 12:03:54 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 12:04:46 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_31, Date: 25-Jul-2017, Time: 19:38:30, ID: 1700852-09RE1 1-GW-02-MW209-20170711 0.11738, Description: 1-GW-02-MW209-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	6.40e3	4.13e3	0.117		2.96	3.01	19.3	88.6	
2	4 PFHxA	313.2 > 268.9	6.23e4	1.17e4	0.117		3.19	3.22	26.6	149	
3	5 PFHpA	363 > 318.9	1.45e4	2.72e4	0.117		3.45	3.49	6.65	44.7	
4	6 PFHxS	398.9 > 79.6	2.59e4	2.80e3	0.117		3.56	3.56	116	617	
5	8 PFOA	413 > 368.7	2.08e4	3.70e4	0.117		3.65	3.68	7.03	59.9	
6	10 PFNA	462.9 > 418.8	1.18e3	3.03e4	0.117		3.83	3.86	0.487	2.63	
7	12 PFOS	499 > 79.9	2.36e4	6.60e3	0.117		3.89	3.85	44.6	333	
8	13 PFDA	513 > 468.8		3.03e4	0.117		4.01				
9	15 N-MeFOSAA	570.1 > 419		5.91e3	0.117		4.03				
10	16 N-EtFOSAA	584.2 > 419		5.97e3	0.117		4.10				
11	17 PFUnA	562.9 > 518.9		2.82e4	0.117		4.17				
12	19 PFDoA	612.9 > 318.8		3.17e3	0.117		4.34				

Dataset: U:\Q4.PRO\results\170725M1\170725M1-31.qld

Last Altered: Wednesday, July 26, 2017 12:03:54 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 12:05:15 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_31, Date: 25-Jul-2017, Time: 19:38:30, ID: 1700852-09RE1 1-GW-02-MW209-20170711 0.11738, Description: 1-GW-02-MW209-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 PFTTrDA	662.9 > 618.9		3.17e3	0.117		4.50				
2	22 PFTeDA	712.9 > 668.8		2.13e4	0.117		4.68				
3	28 13C3-PFBA	216.1 > 171.8	1.95e4	2.04e4	0.117	0.820	1.54	1.59	11.9	124	116.5
4	29 13C3-PFPeA	266 > 221.8	3.12e4	3.51e4	0.117	0.248	2.77	2.82	4.44	152	143.0
5	30 13C3-PFBS	302 > 98.8	4.13e3	3.51e4	0.117	0.031	2.96	3.00	0.588	161	151.3
6	31 13C2-PFHxA	315 > 269.8	1.17e4	3.51e4	0.117	0.276	3.19	3.22	1.67	51.4	120.6
7	32 13C4-PFHpA	367.2 > 321.8	2.72e4	3.51e4	0.117	0.306	3.45	3.48	3.87	108	101.4
8	33 18O2-PFHxS	403 > 102.6	2.80e3	5.95e3	0.117	0.393	3.56	3.56	5.87	127	119.7
9	34 13C2-6:2 FTS	429.1 > 408.9	6.00e3	3.17e4	0.117	0.158	3.64	3.67	2.36	128	119.9
10	35 13C2-PFOA	414.9 > 369.7	3.70e4	3.17e4	0.117	1.067	3.65	3.68	14.6	116	109.3
11	36 13C5-PFNA	468.2 > 422.9	3.03e4	3.07e4	0.117	0.852	3.83	3.86	12.4	124	116.1
12	37 13C8-PFOSA	506.1 > 77.7	2.38e3	3.48e4	0.117	0.098	3.84	3.87	0.856	74.3	69.7
13	38 13C8-PFOS	507 > 79.9	6.60e3	5.58e3	0.117	0.936	3.89	3.91	14.8	135	126.3
14	39 13C2-PFDA	515.1 > 469.9	3.03e4	3.10e4	0.117	0.810	4.01	4.03	12.2	128	120.5
15	40 13C2-8:2 FTS	529.1 > 508.7	3.85e3	3.10e4	0.117	0.086	4.00	4.02	1.55	154	144.9
16	41 d3-N-MeFOSAA	573.3 > 419	5.91e3	3.48e4	0.117	0.014	4.03	4.06	2.12	1320	95.3
17	42 d5-N-EtFOSAA	589.3 > 419	5.97e3	3.48e4	0.117	0.014	4.12	4.12	2.15	1310	94.7
18	43 13C2-PFUnA	565 > 519.8	2.82e4	3.48e4	0.117	0.962	4.17	4.20	10.1	89.8	84.3
19	44 13C2-PFDoA	615 > 569.7	3.17e3	3.48e4	0.117	0.094	4.34	4.36	1.14	103	96.4
20	46 13C2-PFTeDA	714.8 > 669.6	2.13e4	3.48e4	0.117	0.694	4.68	4.71	7.66	94.0	88.3
21	48 13C2-PFHxDA	815 > 769.7	8.76e3	3.48e4	0.117	0.843	5.06	5.08	3.15	31.8	74.7
22	51 13C4-PFBA	217 > 171.8	2.04e4	2.04e4	0.117	1.000	1.54	1.59	12.5	106	100.0
23	52 13C5-PFHxA	318 > 272.9	3.51e4	3.51e4	0.117	1.000	3.19	3.22	5.00	42.6	100.0
24	53 13C3-PFHxS	401.9 > 79.9	5.95e3	5.95e3	0.117	1.000	3.56	3.56	12.5	106	100.0
25	54 13C8-PFOA	421.3 > 376	3.17e4	3.17e4	0.117	1.000	3.65	3.68	12.5	106	100.0
26	55 13C9-PFNA	472.2 > 426.9	3.07e4	3.07e4	0.117	1.000	3.83	3.86	12.5	106	100.0
27	56 13C4-PFOS	503 > 79.9	5.58e3	5.58e3	0.117	1.000	3.89	3.91	12.5	106	100.0
28	57 13C6-PFDA	519.1 > 473.7	3.10e4	3.10e4	0.117	1.000	4.01	4.03	12.5	106	100.0
29	58 13C7-PFUnA	570.1 > 524.8	3.48e4	3.48e4	0.117	1.000	4.17	4.19	12.5	106	100.0
30	59 Total PFBS	299 > 79.7	6.52e3	4.13e3	0.117		2.96		19.7	90.0	
31	60 Total PFHxS	398.9 > 79.6	2.59e4	2.80e3	0.117		3.52		116	617	
32	61 Total PFOA	413 > 368.7	2.22e4	3.70e4	0.117		3.65		7.49	62.2	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-31.qld

Last Altered: Wednesday, July 26, 2017 12:03:54 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 12:05:15 Pacific Daylight Time

Name: 170725M1_31, Date: 25-Jul-2017, Time: 19:38:30, ID: 1700852-09RE1 1-GW-02-MW209-20170711 0.11738, Description: 1-GW-02-MW209-20170711

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	62 Total PFOS	499 > 79.9	2.36e4	6.60e3	0.117		3.89		44.6	333	
34	63 Total N-Me-FOSAA	570.1 > 419	0.00e0	5.91e3	0.117		4.03		0.000		
35	64 Total N-EtFOSAA	584.2 > 419	0.00e0	5.97e3	0.117		4.17		0.000		

Dataset: U:\Q4.PRO\results\170725M1\170725M1-31.qld

Last Altered: Wednesday, July 26, 2017 12:03:54 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 12:04:46 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_31, Date: 25-Jul-2017, Time: 19:38:30, ID: 1700852-09RE1 1-GW-02-MW209-20170711 0.11738, Description: 1-GW-02-MW209-20170711

Total PFBS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.01	6398.177	4134.811	19.342	bb	88.6
2	59 Total PFBS	299 > 79.7	2.89	122.928	4134.811	0.372	bb	1.4

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	3.56	25908.393	2795.870	115.833	MM	617.5

Total PFOA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	3.68	20793.973	36980.906	7.029	db	59.9
2	61 Total PFOA	413 > 368.7	3.63	1366.985	36980.906	0.462	bd	2.3

Total PFOS

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	12 PFOS	499 > 79.9	3.85	23557.793	6599.229	44.622	MM	332.5

Total N-Me-FOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1								

Total N-EtFOSAA

	# Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	16 N-EtFOSAA	584.2 > 419			5970.815		MM-I	

Dataset: U:\Q4.PRO\results\170725M1\170725M1-31.qld

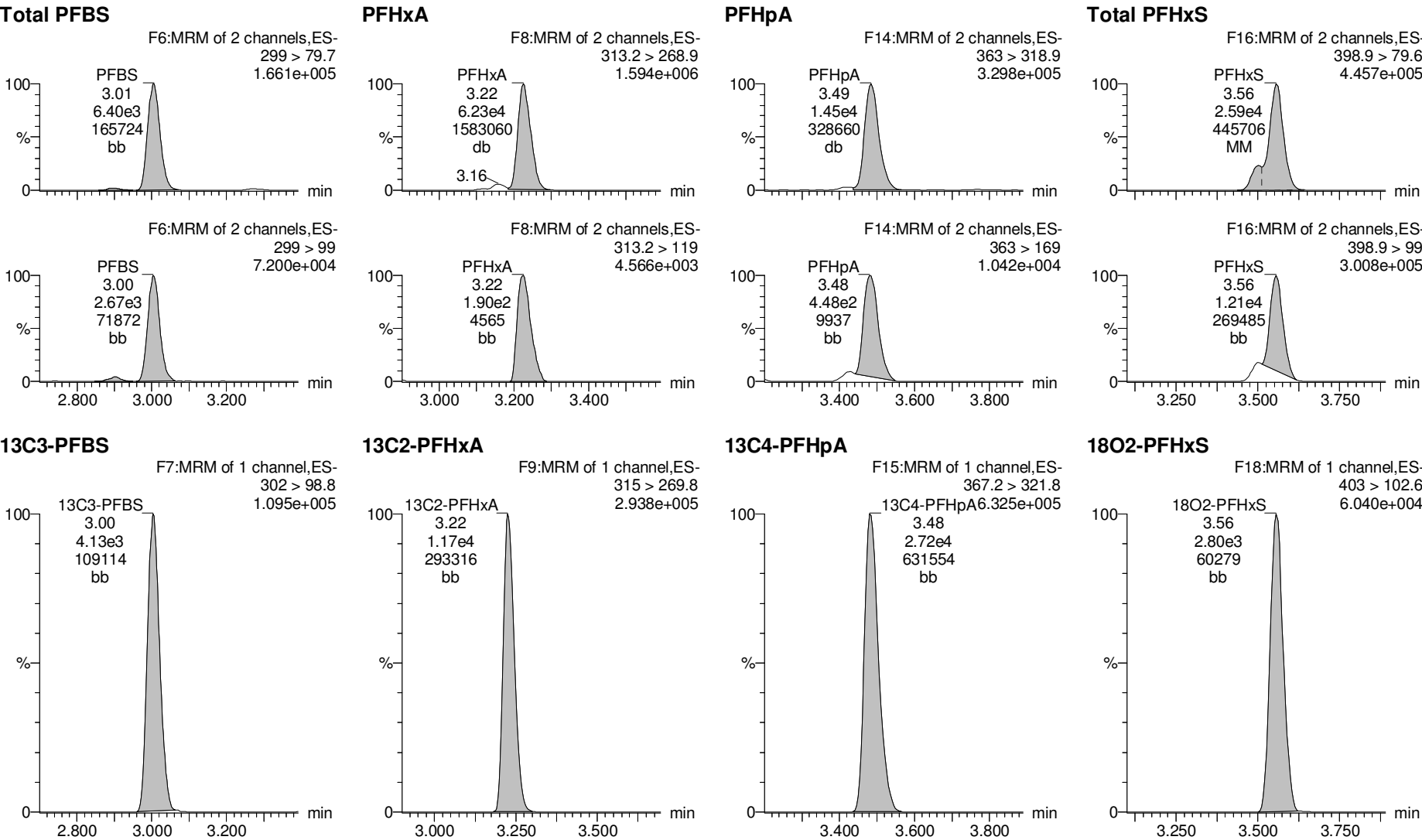
Last Altered: Wednesday, July 26, 2017 12:03:54 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 12:04:46 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_31, Date: 25-Jul-2017, Time: 19:38:30, ID: 1700852-09RE1 1-GW-02-MW209-20170711 0.11738, Description: 1-GW-02-MW209-20170711

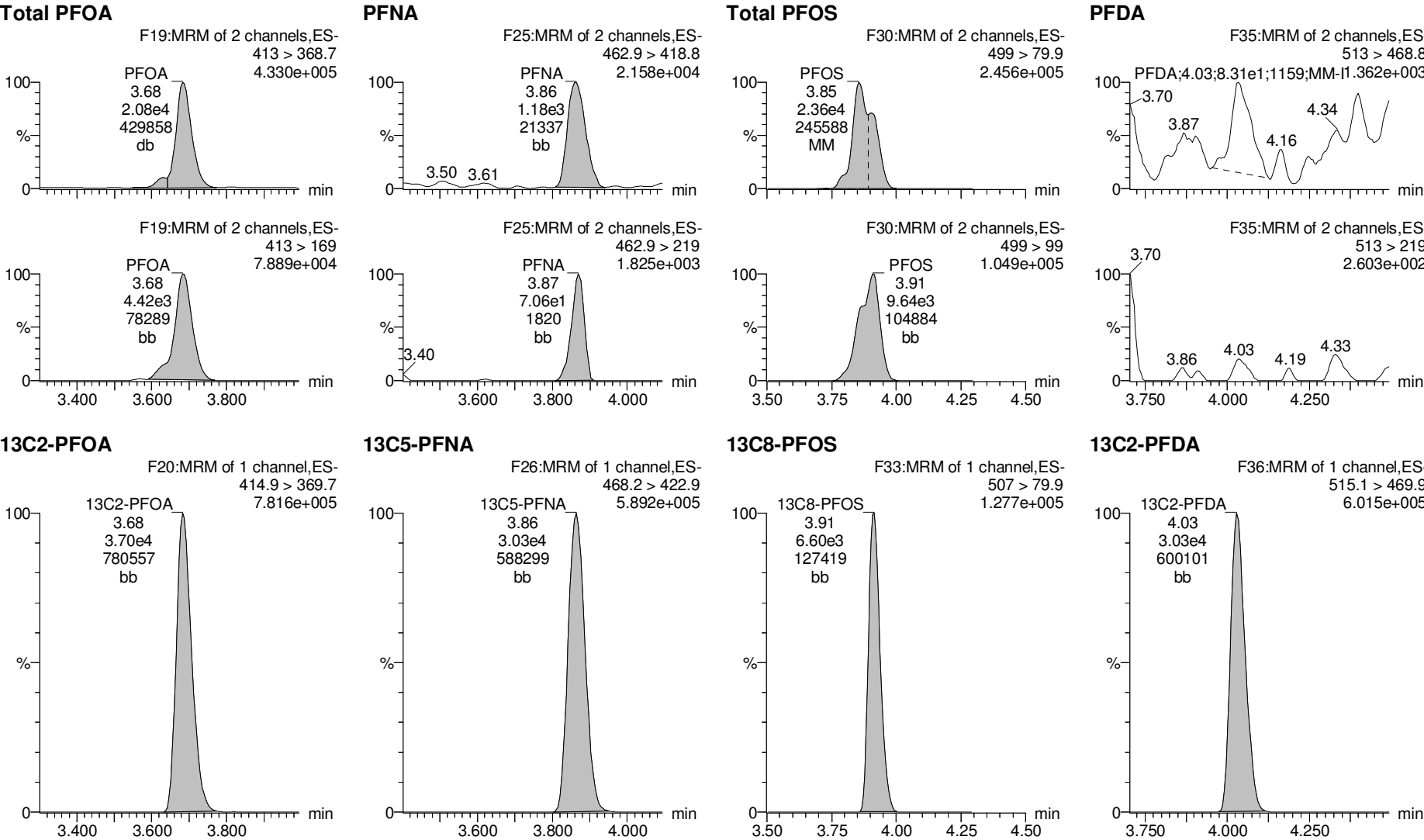


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Last Altered: Wednesday, July 26, 2017 12:03:54 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 12:04:46 Pacific Daylight Time

Name: 170725M1_31, Date: 25-Jul-2017, Time: 19:38:30, ID: 1700852-09RE1 1-GW-02-MW209-20170711 0.11738, Description: 1-GW-02-MW209-20170711

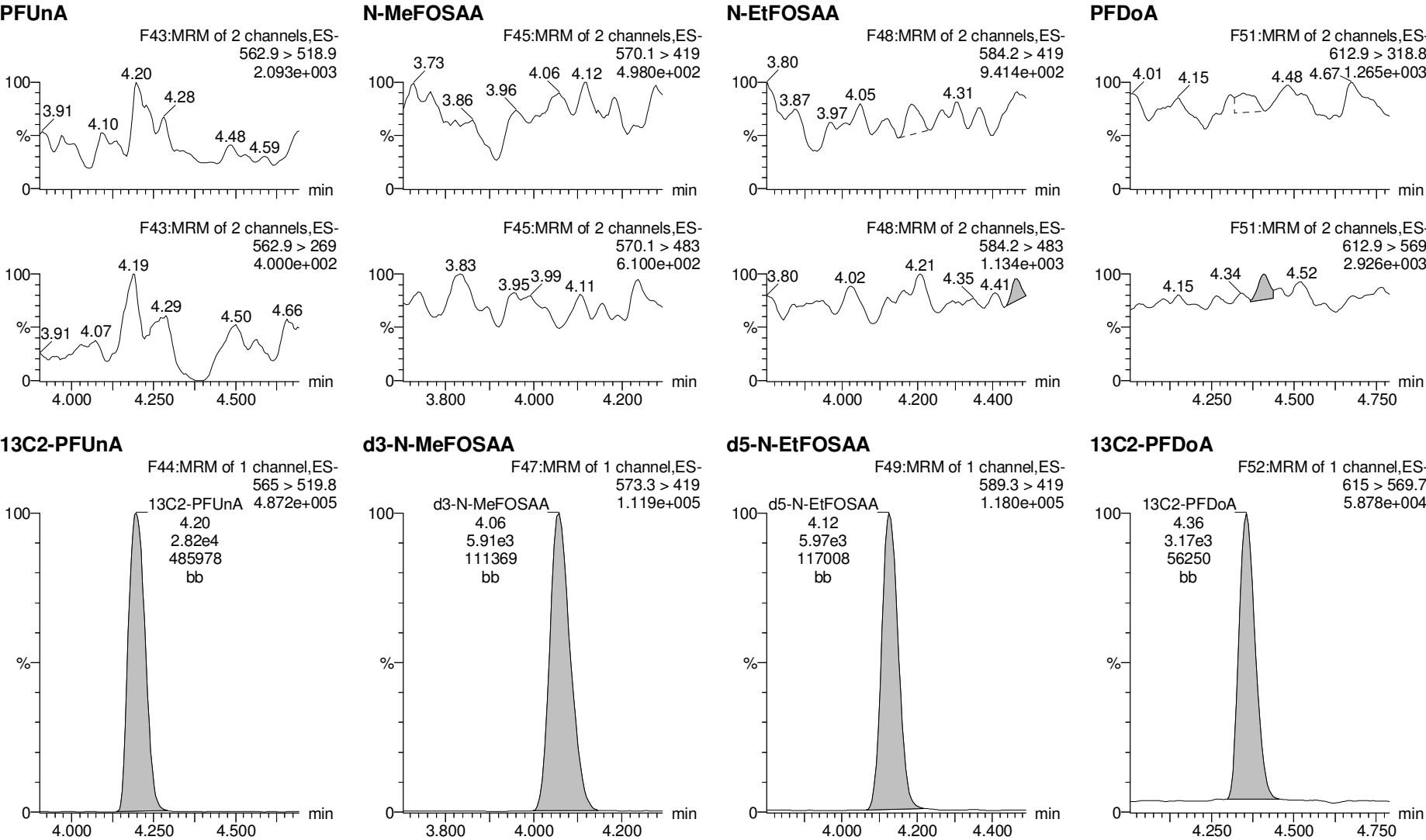


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Last Altered: Wednesday, July 26, 2017 12:03:54 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 12:04:46 Pacific Daylight Time

Name: 170725M1_31, Date: 25-Jul-2017, Time: 19:38:30, ID: 1700852-09RE1 1-GW-02-MW209-20170711 0.11738, Description: 1-GW-02-MW209-20170711



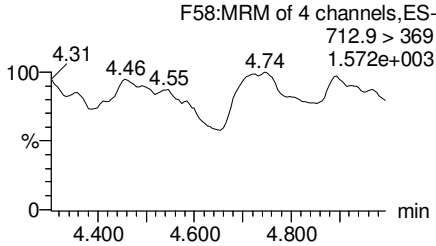
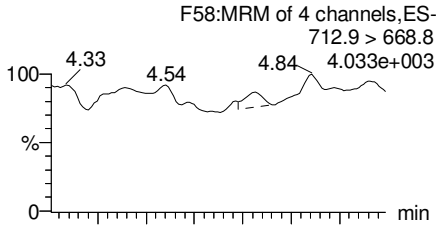
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Last Altered: Wednesday, July 26, 2017 12:03:54 Pacific Daylight Time

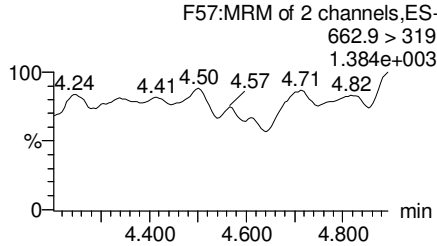
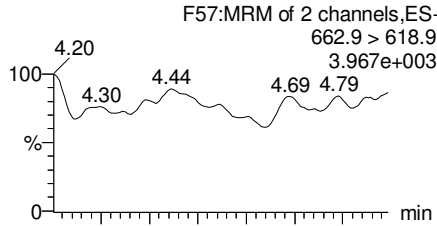
Printed: Wednesday, July 26, 2017 12:04:46 Pacific Daylight Time

Name: 170725M1_31, Date: 25-Jul-2017, Time: 19:38:30, ID: 1700852-09RE1 1-GW-02-MW209-20170711 0.11738, Description: 1-GW-02-MW209-20170711

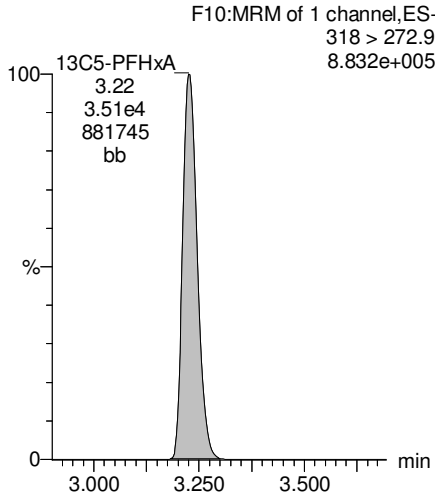
PFTeDA



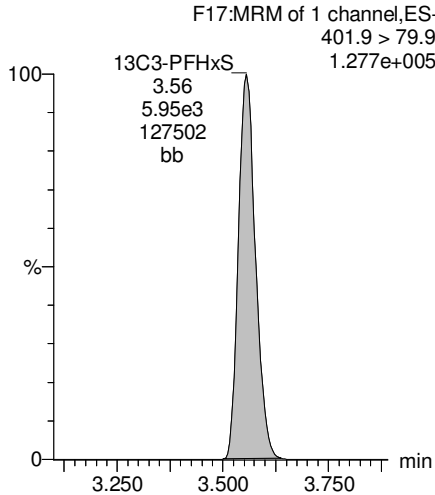
PFTrDA



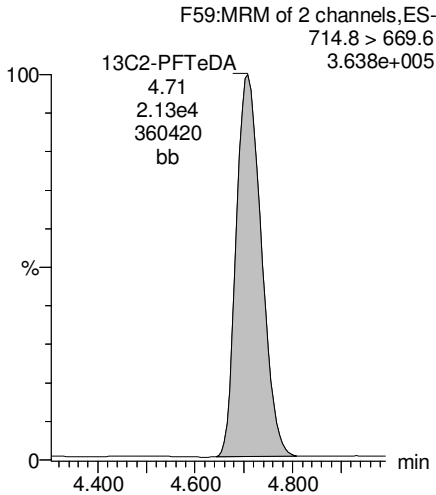
13C5-PFHxA



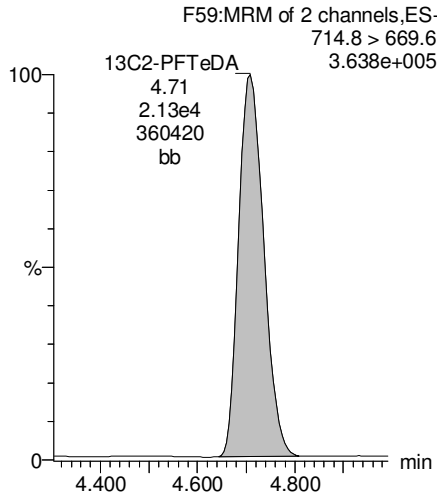
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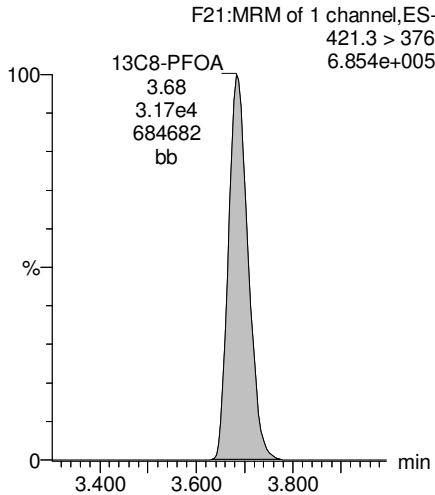
13C2-PFTeDA



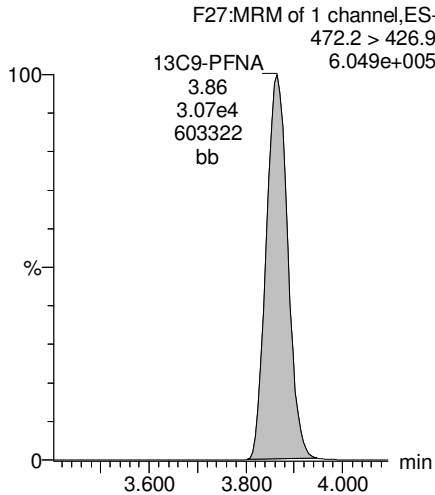
13C2-PFTeDA



13C8-PFOA



13C9-PFNA

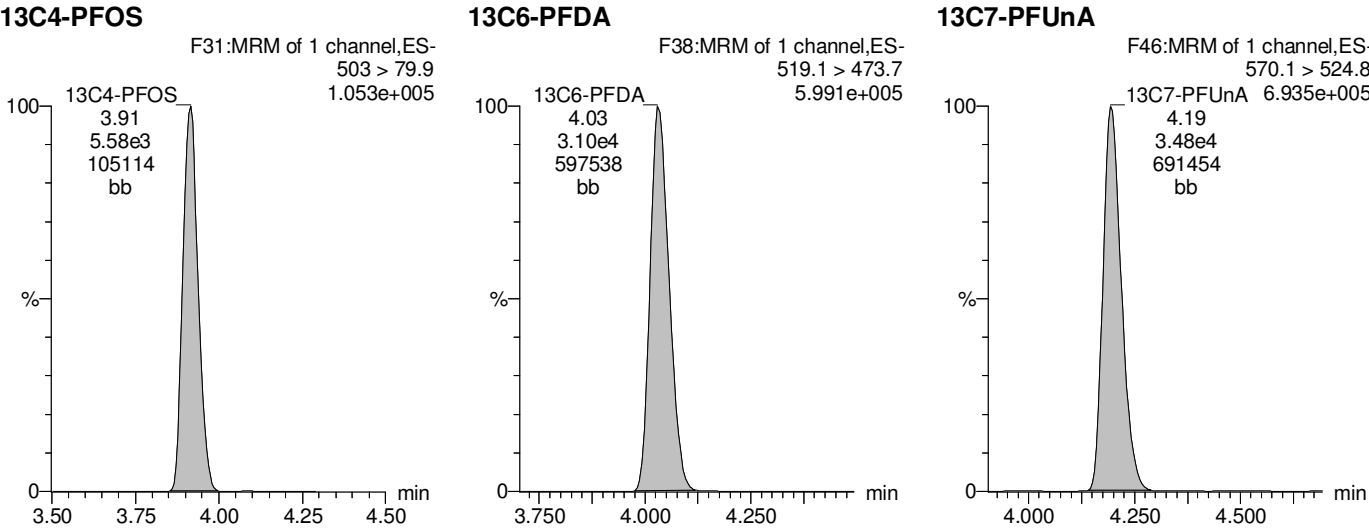


Dataset: U:\Q4.PRO\results\170725M1\170725M1-31.qld

Last Altered: Wednesday, July 26, 2017 12:03:54 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 12:04:46 Pacific Daylight Time

Name: 170725M1_31, Date: 25-Jul-2017, Time: 19:38:30, ID: 1700852-09RE1 1-GW-02-MW209-20170711 0.11738, Description: 1-GW-02-MW209-20170711



CONTINUING CALIBRATION

Dataset: U:\Q4.PRO\results\170725M1\170725M1-2.qld

Last Altered: Wednesday, July 26, 2017 09:49:35 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:50:51 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_2, Date: 25-Jul-2017, Time: 14:26:15, ID: ST170725M1-1 PFC CS-1 17G2502, Description: PFC CS-1 17G2502

Ⓐ outside method limits.
not used.

AC
7/26/17

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	8.74e2	1.63e4		1.54	1.55	0.672	0.451	90.3
2	2 PFPeA	263.1 > 218.9	1.44e3	3.13e4		2.77	2.80	0.576	0.475	95.0
3	3 PFBS	299 > 79.7	3.14e2	3.82e3		2.96	3.00	1.03	0.515	103.0
4	4 PFHxA	313.2 > 268.9	2.50e3	1.36e4		3.19	3.22	0.916	0.503	100.6
5	5 PFHpA	363 > 318.9	2.49e3	4.10e4		3.45	3.48	0.758	0.541	108.3
6	6 PFHxS	398.9 > 79.6	2.49e2	3.60e3		3.56	3.55	0.864	0.513	102.5
7	7 6:2 FTS	427.1 > 407	3.88e2	1.02e4		3.64	3.66	0.476	0.318	Ⓐ 63.6
8	8 PFOA	413 > 368.7	3.77e3	6.91e4		3.65	3.67	0.682	0.497	99.3
9	9 PFHpS	448.9 > 98.8	2.66e2	6.91e4		3.71	3.74	0.0481	0.377	75.4
10	10 PFNA	462.9 > 418.8	3.65e3	6.65e4		3.83	3.85	0.687	0.492	98.3
11	11 PFOSA	498.1 > 77.8	3.12e2	6.66e3		3.84	3.86	0.585	0.511	102.2
12	12 PFOS	499 > 79.9	7.02e2	1.32e4		3.89	3.90	0.665	0.544	108.8
13	13 PFDA	513 > 468.8	3.67e3	6.47e4		4.01	4.02	0.709	0.448	89.5
14	14 8:2 FTS	527 > 506.9	4.86e2	7.34e3		4.00	4.02	0.828	0.464	92.8
15	15 N-MeFOSAA	570.1 > 419	9.33e2	1.43e4		4.03	4.05	10.6	0.504	100.8
16	16 N-EtFOSAA	584.2 > 419	7.07e2	1.46e4		4.10	4.12	7.85	0.482	96.4
17	17 PFUnA	562.9 > 518.9	2.94e3	6.70e4		4.17	4.18	0.548	0.601	120.1
18	18 PFDS	598.9 > 98.7	2.63e2	6.70e4		4.22	4.24	0.0491	0.563	112.6
19	19 PFDoA	612.9 > 318.8	3.55e2	7.88e3		4.34	4.34	0.562	0.387	77.5
20	20 N-MeFOSA	512.1 > 168.9	6.05e2	3.02e4		4.29	4.41	3.01	2.69	107.7
21	21 PFTTrDA	662.9 > 618.9	3.99e3	7.88e3		4.50	4.51	6.32	0.415	83.0
22	22 PFTeDA	712.9 > 668.8	2.74e3	5.13e4		4.68	4.69	0.666	0.483	96.6
23	23 N-EtFOSA	526.1 > 168.9	7.51e2	4.18e4		4.87	4.99	2.70	2.62	104.9
24	24 PFHxDA	812.8 > 768.9	4.47e3	2.53e4		5.06	5.06	0.883	0.459	91.8
25	25 PFODA	912.8 > 868.8	3.89e3	2.53e4		5.43	5.42	0.770	0.524	104.9
26	26 N-MeFOSE	616.1 > 58.9	8.63e2	4.44e4		5.42	5.44	2.91	2.41	96.6
27	27 N-EtFOSE	630.1 > 58.9	1.01e3	4.46e4		5.59	5.61	3.39	2.48	99.2
28	28 13C3-PFBA	216.1 > 171.8	1.63e4	1.97e4	0.820	1.54	1.55	10.3	12.6	100.5
29	29 13C3-PFPeA	266 > 221.8	3.13e4	4.84e4	0.248	2.77	2.80	3.23	13.0	104.2
30	30 13C3-PFBS	302 > 98.8	3.82e3	4.84e4	0.031	2.96	3.00	0.394	12.7	101.5
31	Work Order 170725M1-2	315 > 269.8	1.36e4	4.84e4	0.276	3.19	3.22	1.41	5.09	101.8

70-130

50-150

Dataset: U:\Q4.PRO\results\170725M1\170725M1-2.qld

Last Altered: Wednesday, July 26, 2017 09:49:35 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:50:51 Pacific Daylight Time

Name: 170725M1_2, Date: 25-Jul-2017, Time: 14:26:15, ID: ST170725M1-1 PFC CS-1 17G2502, Description: PFC CS-1 17G2502

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32 13C4-PFHpA	367.2 > 321.8	4.10e4	4.84e4	0.306	3.45	3.48	4.23	13.8	110.8
33	33 18O2-PFHxS	403 > 102.6	3.60e3	9.64e3	0.393	3.56	3.55	4.67	11.9	95.1
34	34 13C2-6:2 FTS	429.1 > 408.9	1.02e4	6.13e4	0.158	3.64	3.66	2.08	13.2	105.3
35	35 13C2-PFOA	414.9 > 369.7	6.91e4	6.13e4	1.067	3.65	3.67	14.1	13.2	105.6
36	36 13C5-PFNA	468.2 > 422.9	6.65e4	8.91e4	0.852	3.83	3.85	9.32	10.9	87.5
37	37 13C8-PFOSA	506.1 > 77.7	6.66e3	8.97e4	0.098	3.84	3.86	0.929	9.46	75.7
38	38 13C8-PFOS	507 > 79.9	1.32e4	1.34e4	0.936	3.89	3.90	12.3	13.1	104.7
39	39 13C2-PFDA	515.1 > 469.9	6.47e4	8.24e4	0.810	4.01	4.02	9.82	12.1	97.0
40	40 13C2-8:2 FTS	529.1 > 508.7	7.34e3	8.24e4	0.086	4.00	4.01	1.11	13.0	104.1
41	41 d3-N-MeFOSAA	573.3 > 419	1.43e4	8.97e4	0.014	4.03	4.05	2.00	146	89.7
42	42 d5-N-EtFOSAA	589.3 > 419	1.46e4	8.97e4	0.014	4.12	4.12	2.04	146	90.0
43	43 13C2-PFUnA	565 > 519.8	6.70e4	8.97e4	0.962	4.17	4.19	9.34	9.71	77.7
44	44 13C2-PFDoA	615 > 569.7	7.88e3	8.97e4	0.094	4.34	4.34	1.10	11.6	93.1
45	45 d3-N-MeFOSA	515.2 > 168.9	3.02e4	8.97e4	0.034	4.29	4.45	4.21	122	81.5
46	46 13C2-PFTeDA	714.8 > 669.6	5.13e4	8.97e4	0.694	4.68	4.69	7.15	10.3	82.4
47	47 d5-N-ETFOSA	531.1 > 168.9	4.18e4	8.97e4	0.049	5.01	5.03	5.83	120	79.8
48	48 13C2-PFHxDA	815 > 769.7	2.53e4	8.97e4	0.843	5.06	5.06	3.53	4.18	83.6
49	49 d7-N-MeFOSE	623.1 > 58.9	4.44e4	8.97e4	0.055	5.42	5.43	6.19	113	75.5
50	50 d9-N-EtFOSE	639.2 > 58.8	4.46e4	8.97e4	0.053	5.59	5.60	6.22	116	77.6
51	51 13C4-PFBA	217 > 171.8	1.97e4	1.97e4	1.000	1.54	1.55	12.5	12.5	100.0
52	52 13C5-PFHxA	318 > 272.9	4.84e4	4.84e4	1.000	3.19	3.22	5.00	5.00	100.0
53	53 13C3-PFHxS	401.9 > 79.9	9.64e3	9.64e3	1.000	3.56	3.55	12.5	12.5	100.0
54	54 13C8-PFOA	421.3 > 376	6.13e4	6.13e4	1.000	3.65	3.67	12.5	12.5	100.0
55	55 13C9-PFNA	472.2 > 426.9	8.91e4	8.91e4	1.000	3.83	3.85	12.5	12.5	100.0
56	56 13C4-PFOS	503 > 79.9	1.34e4	1.34e4	1.000	3.89	3.90	12.5	12.5	100.0
57	57 13C6-PFDA	519.1 > 473.7	8.24e4	8.24e4	1.000	4.01	4.02	12.5	12.5	100.0
58	58 13C7-PFUnA	570.1 > 524.8	8.97e4	8.97e4	1.000	4.17	4.18	12.5	12.5	100.0

50-150



Dataset: Untitled

Last Altered: Wednesday, July 26, 2017 10:28:43 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:29:07 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	170725M1_1	IPA	25-Jul-17	14:15:31
2	170725M1_2	ST170725M1-1 PFC CS-1 17G2502	25-Jul-17	14:26:15
3	170725M1_3	B7G0107-BS1 OPR 0.125	25-Jul-17	14:36:53
4	170725M1_4	IPA	25-Jul-17	14:47:39
5	170725M1_5	B7G0107-BLK1 Method Blank 0.125	25-Jul-17	14:58:18
6	170725M1_6	1700851-01RE1 SB 01_20170710 0.12032	25-Jul-17	15:08:56
7	170725M1_7	1700851-02RE1 EB 01_20170710 0.11963	25-Jul-17	15:19:35
8	170725M1_8	1700851-03RE1 18-GW-18MCAS03-5-20170...	25-Jul-17	15:30:13
9	170725M1_9	1700851-04RE1 18-GW-18MCAS03-2-20170...	25-Jul-17	15:40:51
10	170725M1_10	1700851-05RE1 18-GW-18MCAS02-5-20170...	25-Jul-17	15:51:30
11	170725M1_11	1700851-06RE1 18-GW-18MCAS07-3-20170...	25-Jul-17	16:02:08
12	170725M1_12	1700851-07RE1 24-GW-24MW08B-20170710...	25-Jul-17	16:12:47
13	170725M1_13	1700851-08RE1 DUP03-20170710 0.12071	25-Jul-17	16:23:25
14	170725M1_14	1700851-09RE1 24-GW-24EX11-20170710 0....	25-Jul-17	16:34:03
15	170725M1_15	1700851-10RE1 SGV-GW-SGV Transfer Stati...	25-Jul-17	16:44:46
16	170725M1_16	B7G0107-MS2 Matrix Spike 0.11945	25-Jul-17	16:55:33
17	170725M1_17	B7G0107-MSD2 Matrix Spike Dup 0.12098	25-Jul-17	17:06:33
18	170725M1_18	IPA	25-Jul-17	17:17:45
19	170725M1_19	ST170725M1-2 PFC CS3 17G2503	25-Jul-17	17:28:43
20	170725M1_20	IPA	25-Jul-17	17:39:41
21	170725M1_21	1700852-01RE1 EB 02_20170711 0.12122	25-Jul-17	17:50:30
22	170725M1_22	1700852-02RE1 DUP01-20170711 0.11996	25-Jul-17	18:01:17
23	170725M1_23	1700852-03RE1 1-GW-01-MW204-20170711 ...	25-Jul-17	18:12:03
24	170725M1_24	B7G0107-MS1 Matrix Spike 0.12078	25-Jul-17	18:22:49
25	170725M1_25	B7G0107-MSD1 Matrix Spike Dup 0.11599	25-Jul-17	18:33:36
26	170725M1_26	1700852-04RE1 1-GW-01-MW206-20170711 ...	25-Jul-17	18:44:23
27	170725M1_27	1700852-05RE1 2-GW-02DGMW59-2017071...	25-Jul-17	18:55:10
28	170725M1_28	1700852-06RE1 2-GW-02NEW16-20170711 ...	25-Jul-17	19:05:57
29	170725M1_29	1700852-07RE1 5-GW-05-DGMW68A-20170...	25-Jul-17	19:16:44
30	170725M1_30	1700852-08RE1 1-GW-01-PZ20-20170711 0....	25-Jul-17	19:27:29
31	170725M1_31	1700852-09RE1 1-GW-02-MW209-20170711 ...	25-Jul-17	19:38:30

Dataset: Untitled

Last Altered: Wednesday, July 26, 2017 10:28:43 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:29:07 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170725M1_32	IPA	25-Jul-17	19:49:44
33	170725M1_33	ST170725M1-3 PFC CS3 17G2503	25-Jul-17	20:00:29
34	170725M1_34	IPA	25-Jul-17	20:11:07
35	170725M1_35	B7G0108-BS1 OPR 0.125	25-Jul-17	20:21:46
36	170725M1_36	IPA	25-Jul-17	20:32:24
37	170725M1_37	B7G0108-BLK1 Method Blank 0.125	25-Jul-17	20:43:03
38	170725M1_38	1700856-01RE1 INFLUENT-20170710 0.121	25-Jul-17	20:53:41
39	170725M1_39	1700856-02RE1 DUP05-20170710 0.11647	25-Jul-17	21:04:19
40	170725M1_40	1700856-03RE1 MID-POINT-20170710 0.11731	25-Jul-17	21:14:58
41	170725M1_41	1700856-04RE1 EFFLUENT-20170710 0.12084	25-Jul-17	21:25:36
42	170725M1_42	B7G0108-MS1 Matrix Spike 0.12162	25-Jul-17	21:36:14
43	170725M1_43	B7G0108-MSD1 Matrix Spike Dup 0.11849	25-Jul-17	21:47:01
44	170725M1_44	1700856-05RE1 MW-37S-20170711 0.11696	25-Jul-17	21:57:39
45	170725M1_45	1700856-06RE1 ERB-01-20170711 0.12043	25-Jul-17	22:08:34
46	170725M1_46	1700856-07RE1 11-MW-1-20170710 0.11482	25-Jul-17	22:19:33
47	170725M1_47	1700856-08RE1 LF-MW-54BR-20170710 0.11...	25-Jul-17	22:30:16
48	170725M1_48	1700856-09RE1 MW-48BR-20170711 0.12084	25-Jul-17	22:40:54
49	170725M1_49	1700856-10RE1 MW-34S-20170711 0.11812	25-Jul-17	22:51:33
50	170725M1_50	IPA	25-Jul-17	23:02:11
51	170725M1_51	ST170725M1-4 PFC CS3 17G2503	25-Jul-17	23:12:50
52	170725M1_52	IPA	25-Jul-17	23:23:36
53	170725M1_53	1700856-11RE1 MW-31BR-20170711 0.11774	25-Jul-17	23:34:14
54	170725M1_54	1700856-12RE1 MW-31S-20170711 0.11732	25-Jul-17	23:45:01
55	170725M1_55	1700732-04RE1@5X MW PFC 03 0.11929	25-Jul-17	23:55:47
56	170725M1_56	1700906-05@5X MW-02BR-20170718 0.125	26-Jul-17	00:06:56
57	170725M1_57	1700907-04@5X AT028-MW17-06-071717-13...	26-Jul-17	00:18:17
58	170725M1_58	1700907-09@5X AT028-MW17-01-071817-09...	26-Jul-17	00:29:47
59	170725M1_59	IPA	26-Jul-17	00:40:33
60	170725M1_60	ST170725M1-5 PFC CS3 17G2503	26-Jul-17	00:51:21
61	170725M1_61	IPA	26-Jul-17	01:02:08
62	170725M1_62	1700845-01@5X MW-29S-20170707 0.12034	26-Jul-17	01:12:49
63	170725M1_63	1700845-02@5X DUP04-20170707 0.12279	26-Jul-17	01:23:33
64	170725M1_64	1700845-03@20X MW-27S-20170707 0.11824	26-Jul-17	01:34:11
65	170725M1_65	B7G0033-MS1@20X Matrix Spike 0.12283	26-Jul-17	01:44:49

Dataset: Untitled

Last Altered: Wednesday, July 26, 2017 10:28:43 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:29:07 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	170725M1_66	B7G0033-MSD1@20X Matrix Spike Dup 0.124	26-Jul-17	01:55:28
67	170725M1_67	1700845-04@5X MW-30S-20170707 0.11933	26-Jul-17	02:06:06
68	170725M1_68	1700894-02@5X POND 1 at PD 0.125	26-Jul-17	02:16:53
69	170725M1_69	1700894-03@5X POND 1 -STAFF 0.125	26-Jul-17	02:27:50
70	170725M1_70	1700894-04@10X SEED-POND 1 0.125	26-Jul-17	02:38:34
71	170725M1_71	1700732-05RE1 SD-46 3.2	26-Jul-17	02:49:12
72	170725M1_72	IPA	26-Jul-17	02:59:50
73	170725M1_73	ST170725M1-6 PFC CS3 17G2503	26-Jul-17	03:10:29
74	170725M1_74	IPA	26-Jul-17	03:21:15

LC Calibration Standards Review Checklist

Q4

Calibration ID:	ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	
ST170725M1-1 (L M H)	N/A	(A) ✓	✓	✓	✓	✓	N/A
Calibration ID: -2 (L M H)	□	✓	✓	✓	✓	✓	□
Calibration ID: -3 (L M H)	□	✓	✓	✓	✓	✓	□
Calibration ID: -4 (L M H)	□	✓	✓	✓	✓	✓	□
Calibration ID: -5 (L M H)	□	✓	✓	✓	✓	✓	□
Calibration ID: -6 (L M H)	✓	✓	✓	✓	✓	✓	✓
Calibration ID: (L M H)	□	□	□	□	□	□	□
Calibration ID: (L M H)	□	□	□	□	□	□	□
Calibration ID: (L M H)	□	□	□	□	□	□	□
Calibration ID: (L M H)	□	□	□	□	□	□	□

Full Mass Cal. Date: 6/21/17

Run Log Present: ☒

of Samples per Sequence Checked: ☒

Reviewed By: YU 7/26/17
Initials/Date

Comments:
Full List.
(A) 6:2 FTS outside method limits. Not used.
AC 7/26/17

Dataset: U:\Q4.PRO\results\170725M1\170725M1-2.qld

Last Altered: Wednesday, July 26, 2017 09:49:35 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:50:51 Pacific Daylight Time

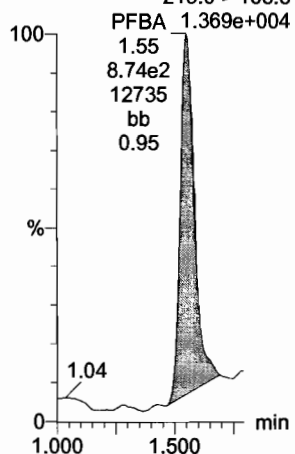
Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_2, Date: 25-Jul-2017, Time: 14:26:15, ID: ST170725M1-1 PFC CS-1 17G2502, Description: PFC CS-1 17G2502

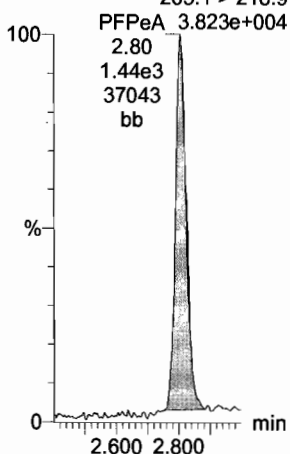
PFBA

F1:MRM of 2 channels,ES-
213.0 > 168.8



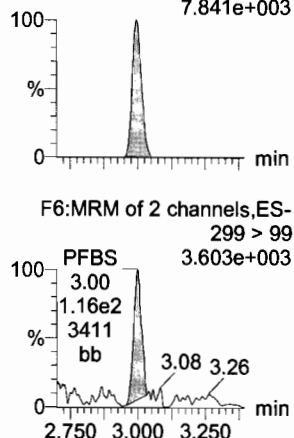
PFPeA

F4:MRM of 1 channel,ES-
263.1 > 218.9



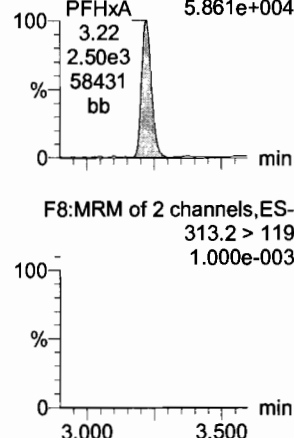
PFBS

F6:MRM of 2 channels,ES-
299 > 79.7
7.841e+003



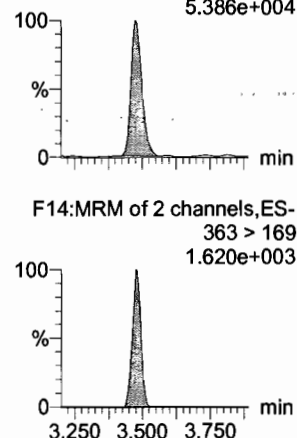
PFHxA

F8:MRM of 2 channels,ES-
313.2 > 268.9
5.861e+004



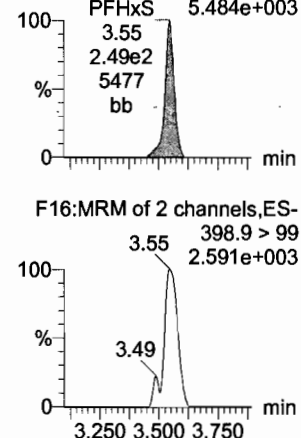
PFHpA

F14:MRM of 2 channels,ES-
363 > 318.9
5.386e+004



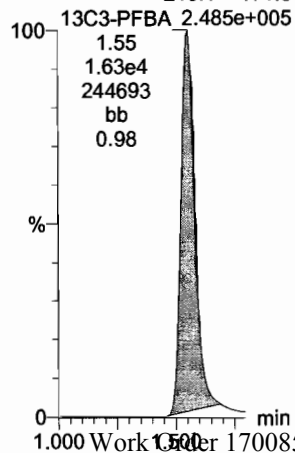
PFHxS

F16:MRM of 2 channels,ES-
398.9 > 79.6
5.484e+003



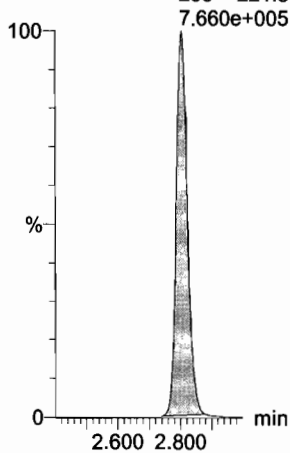
13C3-PFBA

F2:MRM of 1 channel,ES-
216.1 > 171.8



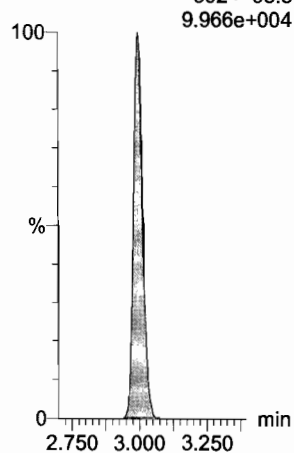
13C3-PFPeA

F5:MRM of 1 channel,ES-
266 > 221.8
7.660e+005



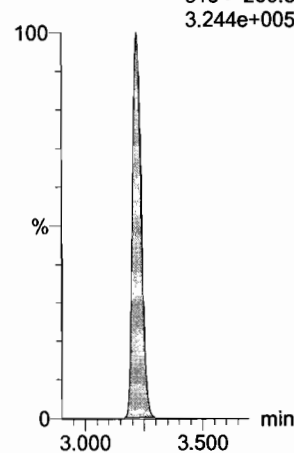
13C3-PFBS

F7:MRM of 1 channel,ES-
302 > 98.8
9.966e+004



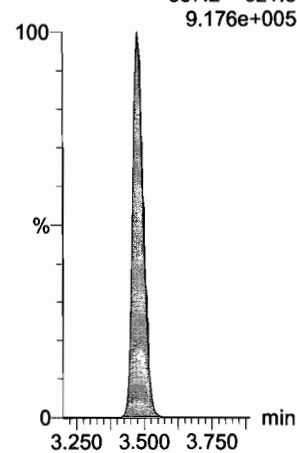
13C2-PFHxA

F9:MRM of 1 channel,ES-
315 > 269.8
3.244e+005



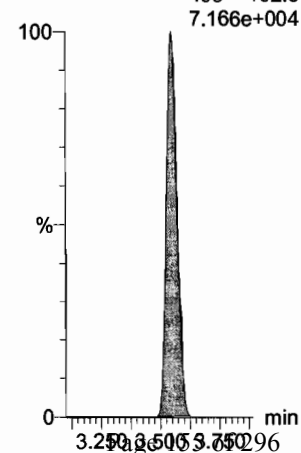
13C4-PFHpA

F15:MRM of 1 channel,ES-
367.2 > 321.8
9.176e+005



18O2-PFHxS

F18:MRM of 1 channel,ES-
403 > 102.6
7.166e+004



Dataset: U:\Q4.PRO\results\170725M1\170725M1-2.qld

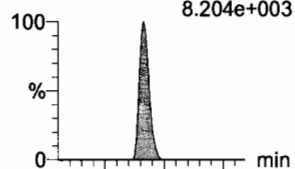
Last Altered: Wednesday, July 26, 2017 09:49:35 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:50:51 Pacific Daylight Time

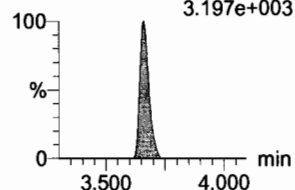
Name: 170725M1_2, Date: 25-Jul-2017, Time: 14:26:15, ID: ST170725M1-1 PFC CS-1 17G2502, Description: PFC CS-1 17G2502

6:2 FTS

F22:MRM of 2 channels,ES-
427.1 > 407
8.204e+003

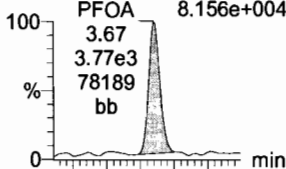


F22:MRM of 2 channels,ES-
427.1 > 80
3.197e+003

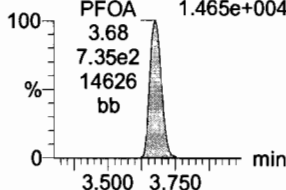


PFOA

F19:MRM of 2 channels,ES-
413 > 368.7
8.156e+004

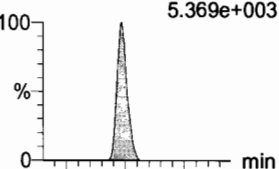


F19:MRM of 2 channels,ES-
413 > 169
1.465e+004

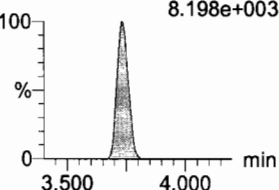


PFHpS

F24:MRM of 4 channels,ES-
448.9 > 98.8
5.369e+003

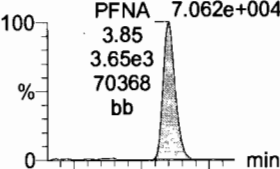


F24:MRM of 4 channels,ES-
448.9 > 79.9
8.198e+003

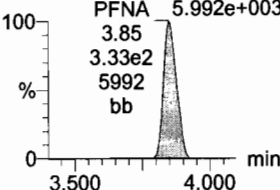


PFNA

F25:MRM of 2 channels,ES-
462.9 > 418.8
7.062e+004

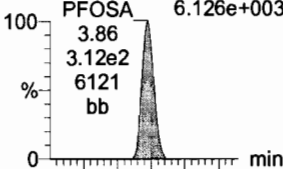


F25:MRM of 2 channels,ES-
462.9 > 219
5.992e+003

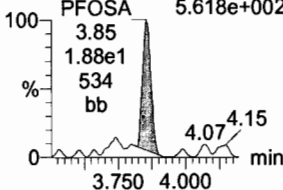


PFOSA

F28:MRM of 2 channels,ES-
498.1 > 77.8
6.126e+003



F28:MRM of 2 channels,ES-
498.1 > 478
5.618e+002

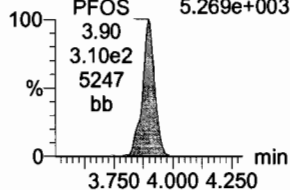


PFOS

F30:MRM of 2 channels,ES-
499 > 79.9
9.452e+003

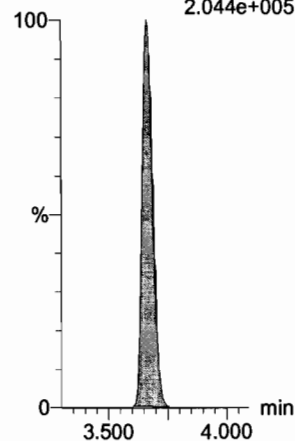


F30:MRM of 2 channels,ES-
499 > 99
5.269e+003



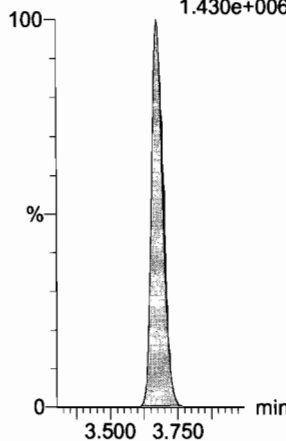
13C2-6:2 FTS

F23:MRM of 1 channel,ES-
429.1 > 408.9
2.044e+005



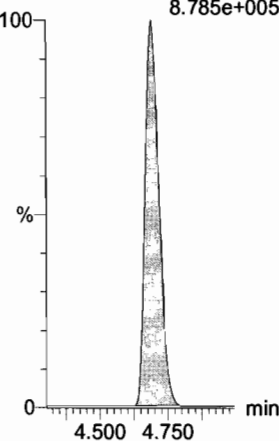
13C2-PFOA

F20:MRM of 1 channel,ES-
414.9 > 369.7
1.430e+006



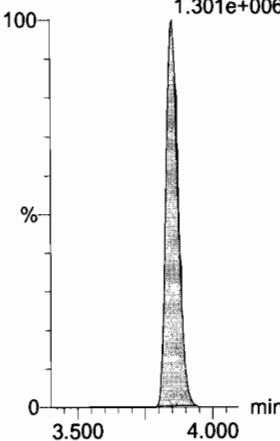
13C2-PFTeDA

F59:MRM of 2 channels,ES-
714.8 > 669.6
8.785e+005



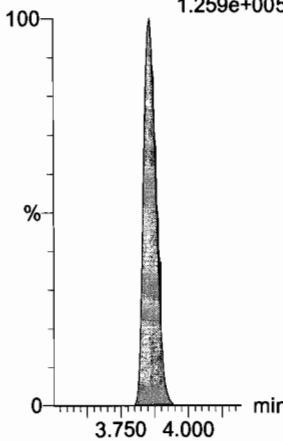
13C5-PFNA

F26:MRM of 1 channel,ES-
468.2 > 422.9
1.301e+006



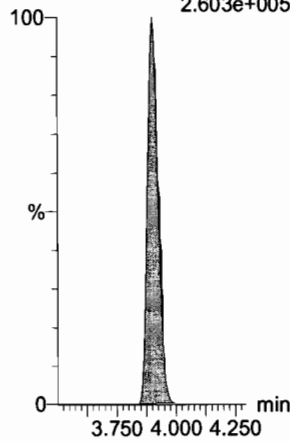
13C8-PFOSA

F32:MRM of 1 channel,ES-
506.1 > 77.7
1.259e+005



13C8-PFOS

F33:MRM of 1 channel,ES-
507 > 79.9
2.603e+005



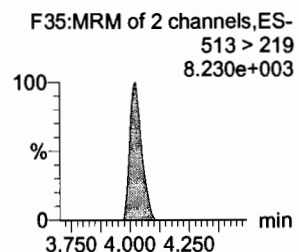
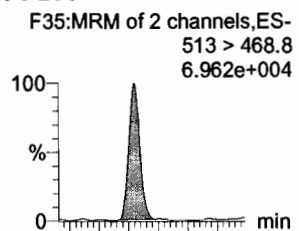
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Last Altered: Wednesday, July 26, 2017 09:49:35 Pacific Daylight Time

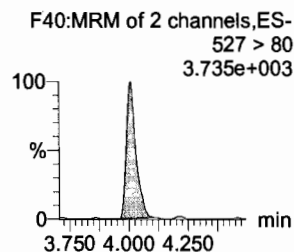
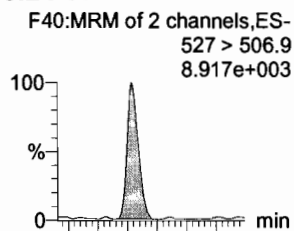
Printed: Wednesday, July 26, 2017 09:50:51 Pacific Daylight Time

Name: 170725M1_2, Date: 25-Jul-2017, Time: 14:26:15, ID: ST170725M1-1 PFC CS-1 17G2502, Description: PFC CS-1 17G2502

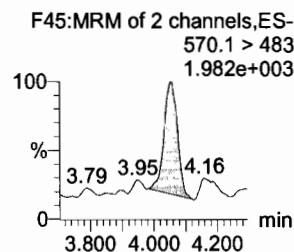
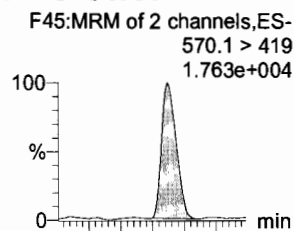
PFDA



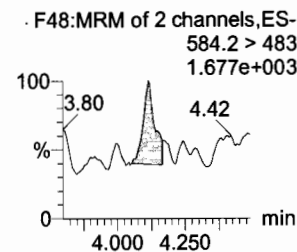
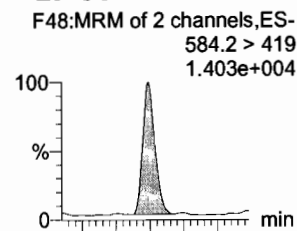
8:2 FTS



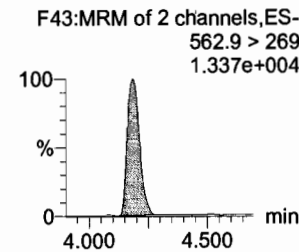
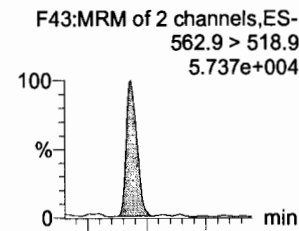
N-MeFOSAA



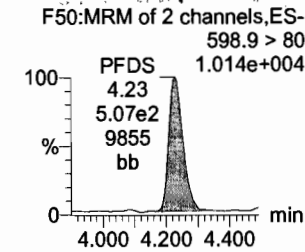
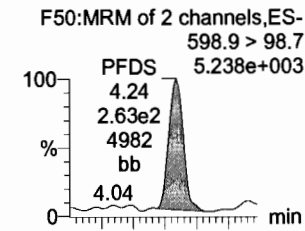
N-EtFOSAA



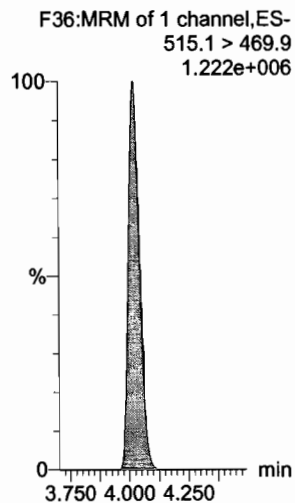
PFUnA



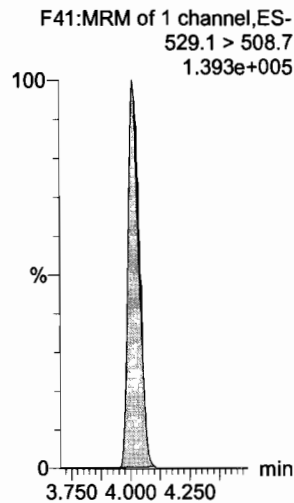
PFDS



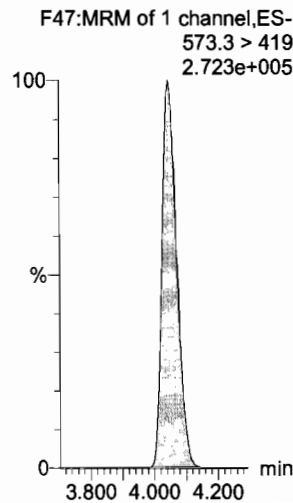
13C2-PFDA



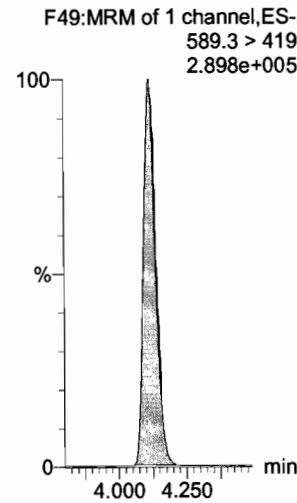
13C2-8:2 FTS



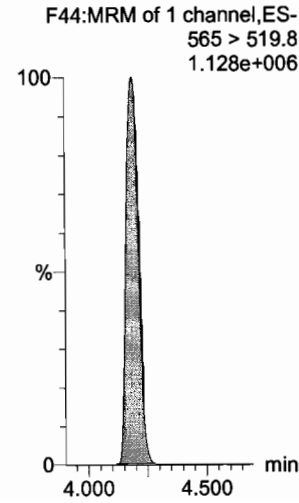
d3-N-MeFOSAA



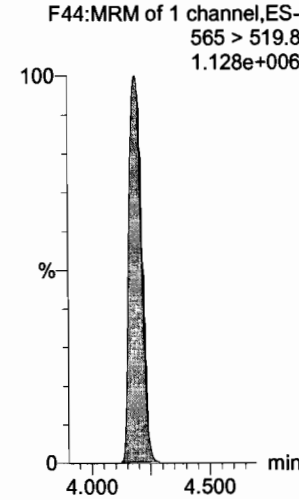
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



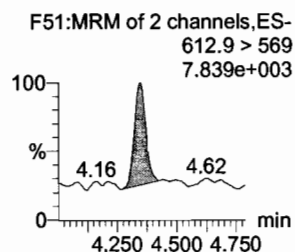
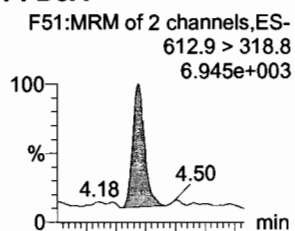
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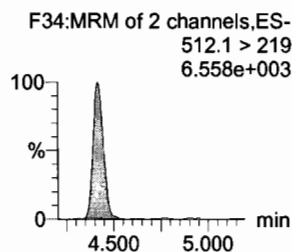
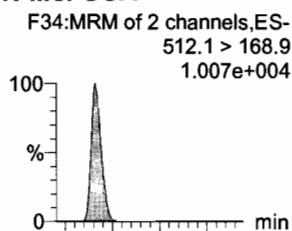
Printed: Wednesday, July 26, 2017 09:50:51 Pacific Daylight Time

Name: 170725M1_2, Date: 25-Jul-2017, Time: 14:26:15, ID: ST170725M1-1 PFC CS-1 17G2502, Description: PFC CS-1 17G2502

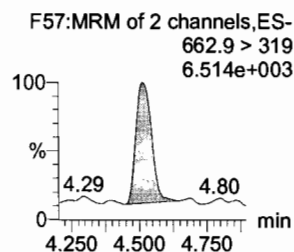
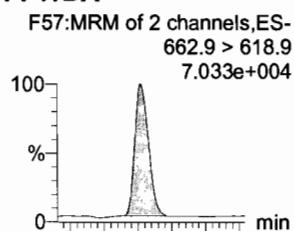
PFDaA



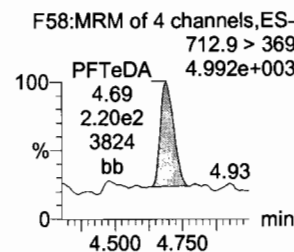
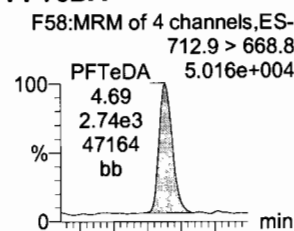
N-MeFOSA



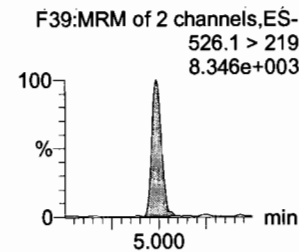
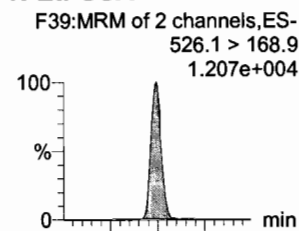
PFTTrDA



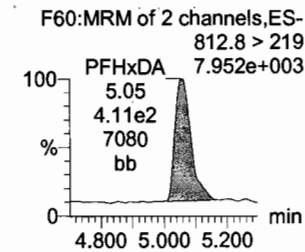
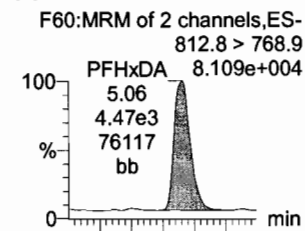
PFTeDA



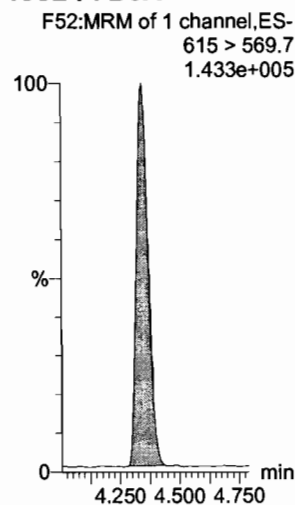
N-EtFOSA



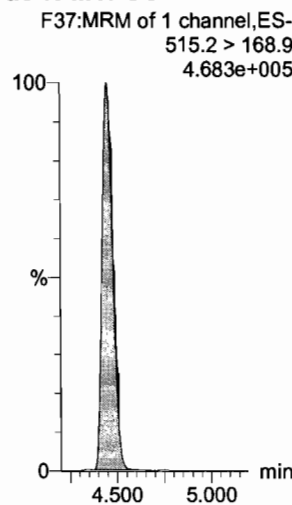
PFHxDA



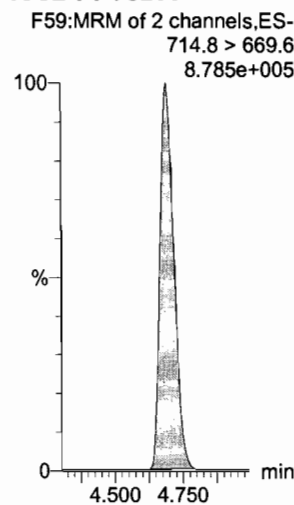
13C2-PFDaA



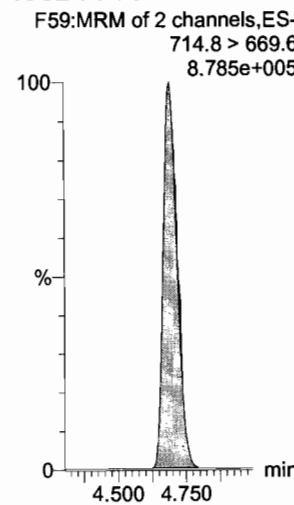
d3-N-MeFOSA



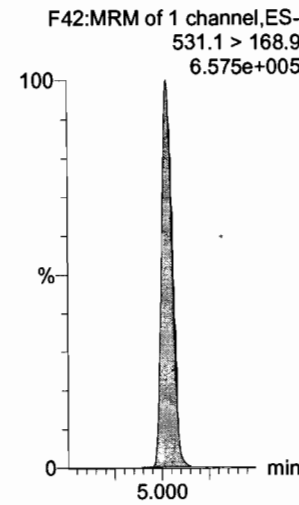
13C2-PFTeDA



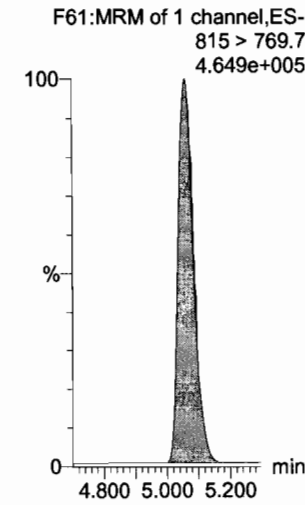
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



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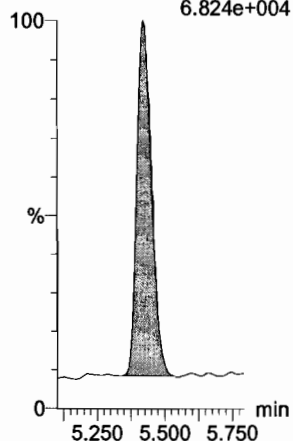
Last Altered: Wednesday, July 26, 2017 09:49:35 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:50:51 Pacific Daylight Time

Name: 170725M1_2, Date: 25-Jul-2017, Time: 14:26:15, ID: ST170725M1-1 PFC CS-1 17G2502, Description: PFC CS-1 17G2502

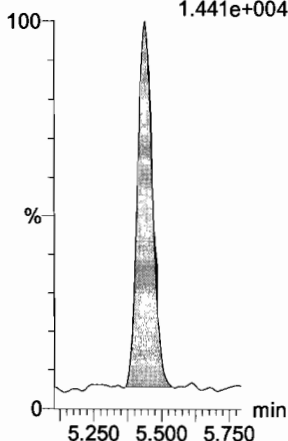
PFODA

F62:MRM of 4 channels,ES-
912.8 > 868.8
6.824e+004



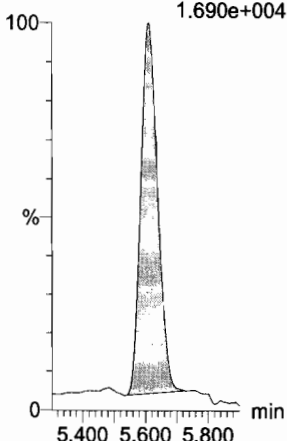
N-MeFOSE

F53:MRM of 1 channel,ES-
616.1 > 58.9
1.441e+004



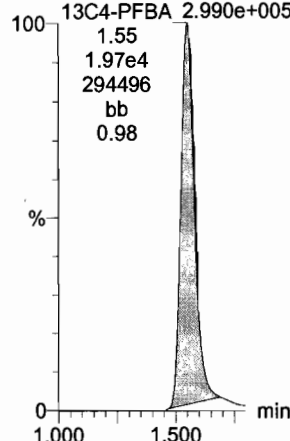
N-EtFOSE

F55:MRM of 1 channel,ES-
630.1 > 58.9
1.690e+004



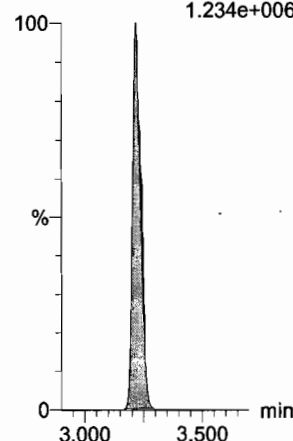
13C4-PFBA

F3:MRM of 1 channel,ES-
217 > 171.8
13C4-PFBA 2.990e+005
1.55
1.97e4
294496
bb
0.98



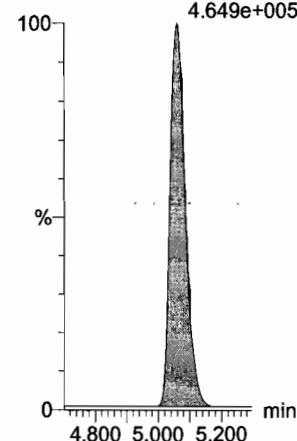
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
1.234e+006



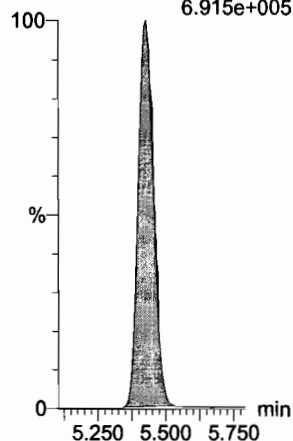
13C2-PFHxDA

F61:MRM of 1 channel,ES-
815 > 769.7
4.649e+005



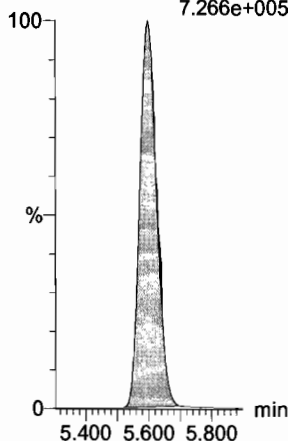
d7-N-MeFOSE

F54:MRM of 1 channel,ES-
623.1 > 58.9
6.915e+005



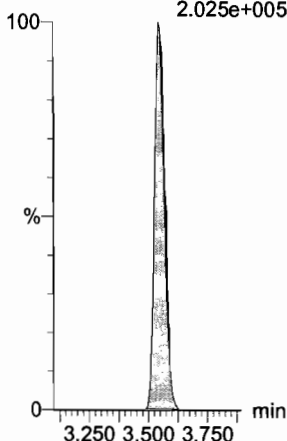
d9-N-EtFOSE

F56:MRM of 1 channel,ES-
639.2 > 58.8
7.266e+005



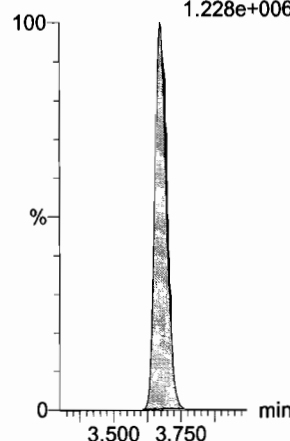
13C3-PFHxS

F17:MRM of 1 channel,ES-
401.9 > 79.9
2.025e+005



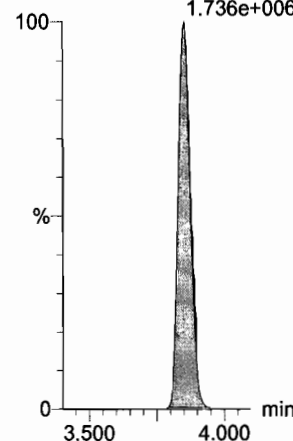
13C8-PFOA

F21:MRM of 1 channel,ES-
421.3 > 376
1.228e+006



13C9-PFNA

F27:MRM of 1 channel,ES-
472.2 > 426.9
1.736e+006



Dataset: U:\Q4.PRO\results\170725M1\170725M1-2.qld

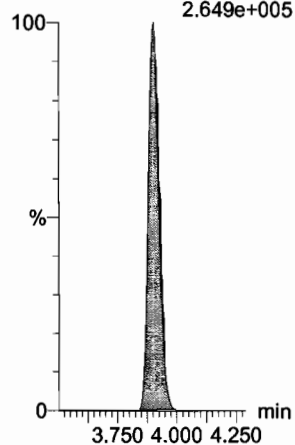
Last Altered: Wednesday, July 26, 2017 09:49:35 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:50:51 Pacific Daylight Time

Name: 170725M1_2, Date: 25-Jul-2017, Time: 14:26:15, ID: ST170725M1-1 PFC CS-1 17G2502, Description: PFC CS-1 17G2502

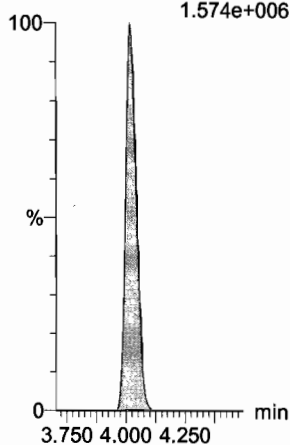
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
2.649e+005



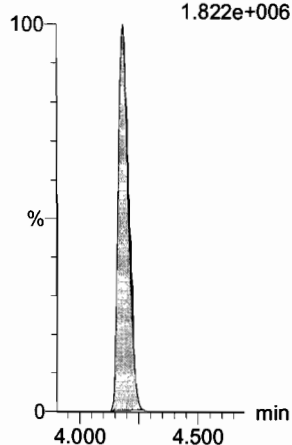
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
1.574e+006



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
1.822e+006



Dataset: U:\Q4.PRO\results\170725M1\170725M1-19.qld

Last Altered: Wednesday, July 26, 2017 09:53:34 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:54:02 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_19, Date: 25-Jul-2017, Time: 17:28:43, ID: ST170725M1-2 PFC CS3 17G2503, Description: PFC CS3 17G2503

AC
7/26/17

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc	%Rec
1	1 PFBA	213.0 > 168.8	1.47e4	1.66e4		1.54	1.58	11.1	9.67	96.7
2	2 PFPeA	263.1 > 218.9	2.63e4	3.34e4		2.77	2.81	9.86	9.83	98.3
3	3 PFBS	299 > 79.7	6.25e3	4.30e3		2.96	3.00	18.2	9.77	97.7
4	4 PFHxA	313.2 > 268.9	4.19e4	1.49e4		3.19	3.22	14.1	9.24	92.4
5	5 PFHpA	363 > 318.9	3.88e4	4.12e4		3.45	3.48	11.8	9.34	93.4
6	6 PFHxS	398.9 > 79.6	5.40e3	4.14e3		3.56	3.56	16.3	9.63	96.3
7	7 6:2 FTS	427.1 > 407	8.69e3	9.47e3		3.64	3.67	11.5	10.9	108.8
8	8 PFOA	413 > 368.7	5.65e4	6.99e4		3.65	3.68	10.1	10.2	102.0
9	9 PFHpS	448.9 > 98.8	5.95e3	6.99e4		3.71	3.74	1.07	11.8	118.4
10	10 PFNA	462.9 > 418.8	6.16e4	7.03e4		3.83	3.86	10.9	9.83	98.3
11	11 PFOSA	498.1 > 77.8	6.15e3	7.52e3		3.84	3.86	10.2	9.70	97.0
12	12 PFOS	499 > 79.9	1.08e4	1.37e4		3.89	3.91	9.84	8.33	83.3
13	13 PFDA	513 > 468.8	6.86e4	6.92e4		4.01	4.03	12.4	9.45	94.5
14	14 8:2 FTS	527 > 506.9	7.82e3	7.08e3		4.00	4.02	13.8	9.38	93.8
15	15 N-MeFOSAA	570.1 > 419	1.80e4	1.49e4		4.03	4.06	195	9.83	98.3
16	16 N-EtFOSAA	584.2 > 419	1.40e4	1.48e4		4.10	4.12	154	9.55	95.5
17	17 PFUnA	562.9 > 518.9	4.63e4	7.48e4		4.17	4.19	7.73	8.74	87.4
18	18 PFDS	598.9 > 98.7	4.83e3	7.48e4		4.22	4.24	0.806	9.04	90.4
19	19 PFDoA	612.9 > 318.8	5.56e3	8.12e3		4.34	4.36	8.56	9.06	90.6
20	20 N-MeFOSA	512.1 > 168.9	1.03e4	3.01e4		4.29	4.43	51.4	49.3	98.6
21	21 PFTrDA	662.9 > 618.9	6.83e4	8.12e3		4.50	4.52	105	9.46	94.6
22	22 PFTeDA	712.9 > 668.8	4.83e4	5.36e4		4.68	4.70	11.3	9.76	97.6
23	23 N-EtFOSA	526.1 > 168.9	1.29e4	4.28e4		4.87	5.00	45.4	49.8	99.6
24	24 PFHxDA	812.8 > 768.9	6.77e4	2.50e4		5.06	5.07	13.5	9.91	99.1
25	25 PFODA	912.8 > 868.8	6.56e4	2.50e4		5.43	5.44	13.1	10.2	102.2
26	26 N-MeFOSE	616.1 > 58.9	1.55e4	4.61e4		5.42	5.44	50.5	49.3	98.6
27	27 N-EtFOSE	630.1 > 58.9	1.76e4	4.55e4		5.59	5.61	58.0	49.3	98.6
28	28 13C3-PFBA	216.1 > 171.8	1.66e4	1.99e4	0.820	1.54	1.57	10.5	12.8	102.0
29	29 13C3-PFPeA	266 > 221.8	3.34e4	5.22e4	0.248	2.77	2.82	3.19	12.9	102.9
30	30 13C3-PFBS	302 > 98.8	4.30e3	5.22e4	0.031	2.96	3.00	0.412	13.2	105.9
31	31 13C3-PFUnA	315 > 269.8	1.49e4	5.22e4	0.276	3.19	3.22	1.42	5.15	102.9

70730

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Dataset: U:\Q4.PRO\results\170725M1\170725M1-19.qld

Last Altered: Wednesday, July 26, 2017 09:53:34 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:54:02 Pacific Daylight Time

Name: 170725M1_19, Date: 25-Jul-2017, Time: 17:28:43, ID: ST170725M1-2 PFC CS3 17G2503, Description: PFC CS3 17G2503

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32 13C4-PFHpa	367.2 > 321.8	4.12e4	5.22e4	0.306	3.45	3.48	3.94	12.9	103.2
33	33 18O2-PFHxS	403 > 102.6	4.14e3	9.76e3	0.393	3.56	3.55	5.31	13.5	108.1
34	34 13C2-6:2 FTS	429.1 > 408.9	9.47e3	6.73e4	0.158	3.64	3.67	1.76	11.2	89.3
35	35 13C2-PFOA	414.9 > 369.7	6.99e4	6.73e4	1.067	3.65	3.68	13.0	12.2	97.3
36	36 13C5-PFNA	468.2 > 422.9	7.03e4	8.23e4	0.852	3.83	3.86	10.7	12.5	100.2
37	37 13C8-PFOA	506.1 > 77.7	7.52e3	7.61e4	0.098	3.84	3.87	1.24	12.6	100.6
38	38 13C8-PFOS	507 > 79.9	1.37e4	1.35e4	0.936	3.89	3.91	12.7	13.5	108.3
39	39 13C2-PFDA	515.1 > 469.9	6.92e4	8.07e4	0.810	4.01	4.03	10.7	13.2	105.8
40	40 13C2-8:2 FTS	529.1 > 508.7	7.08e3	8.07e4	0.086	4.00	4.02	1.10	12.8	102.4
41	41 d3-N-MeFOSAA	573.3 > 419	1.49e4	7.61e4	0.014	4.03	4.06	2.46	179	110.3
42	42 d5-N-EtFOSAA	589.3 > 419	1.48e4	7.61e4	0.014	4.12	4.12	2.43	174	107.3
43	43 13C2-PFUnA	565 > 519.8	7.48e4	7.61e4	0.962	4.17	4.19	12.3	12.8	102.2
44	44 13C2-PFDoA	615 > 569.7	8.12e3	7.61e4	0.094	4.34	4.36	1.33	14.1	113.0
45	45 d3-N-MeFOSA	515.2 > 168.9	3.01e4	7.61e4	0.034	4.29	4.46	4.95	144	95.9
46	46 13C2-PFTeDA	714.8 > 669.6	5.36e4	7.61e4	0.694	4.68	4.70	8.81	12.7	101.5
47	47 d5-N-ETFOSA	531.1 > 168.9	4.28e4	7.61e4	0.049	5.01	5.04	7.02	144	96.2
48	48 13C2-PFHxDA	815 > 769.7	2.50e4	7.61e4	0.843	5.06	5.07	4.10	4.87	97.4
49	49 d7-N-MeFOSE	623.1 > 58.9	4.61e4	7.61e4	0.055	5.42	5.43	7.57	139	92.4
50	50 d9-N-EtFOSE	639.2 > 58.8	4.55e4	7.61e4	0.053	5.59	5.60	7.47	140	93.2
51	51 13C4-PFBA	217 > 171.8	1.99e4	1.99e4	1.000	1.54	1.58	12.5	12.5	100.0
52	52 13C5-PFHxA	318 > 272.9	5.22e4	5.22e4	1.000	3.19	3.22	5.00	5.00	100.0
53	53 13C3-PFHxS	401.9 > 79.9	9.76e3	9.76e3	1.000	3.56	3.55	12.5	12.5	100.0
54	54 13C8-PFOA	421.3 > 376	6.73e4	6.73e4	1.000	3.65	3.68	12.5	12.5	100.0
55	55 13C9-PFNA	472.2 > 426.9	8.23e4	8.23e4	1.000	3.83	3.86	12.5	12.5	100.0
56	56 13C4-PFOS	503 > 79.9	1.35e4	1.35e4	1.000	3.89	3.91	12.5	12.5	100.0
57	57 13C6-PFDA	519.1 > 473.7	8.07e4	8.07e4	1.000	4.01	4.03	12.5	12.5	100.0
58	58 13C7-PFUnA	570.1 > 524.8	7.61e4	7.61e4	1.000	4.17	4.19	12.5	12.5	100.0

50-150



Dataset: Untitled

Last Altered: Wednesday, July 26, 2017 10:28:43 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:29:07 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Compound name: PFBA

Name	ID	Acq.Date	Acq.Time
170725M1_1	IPA	25-Jul-17	14:15:31
170725M1_2	ST170725M1-1 PFC CS-1 17G2502	25-Jul-17	14:26:15
170725M1_3	B7G0107-BS1 OPR 0.125	25-Jul-17	14:36:53
170725M1_4	IPA	25-Jul-17	14:47:39
170725M1_5	B7G0107-BLK1 Method Blank 0.125	25-Jul-17	14:58:18
170725M1_6	1700851-01RE1 SB 01_20170710 0.12032	25-Jul-17	15:08:56
170725M1_7	1700851-02RE1 EB 01_20170710 0.11963	25-Jul-17	15:19:35
170725M1_8	1700851-03RE1 18-GW-18MCAS03-5-20170...	25-Jul-17	15:30:13
170725M1_9	1700851-04RE1 18-GW-18MCAS03-2-20170...	25-Jul-17	15:40:51
170725M1_10	1700851-05RE1 18-GW-18MCAS02-5-20170...	25-Jul-17	15:51:30
170725M1_11	1700851-06RE1 18-GW-18MCAS07-3-20170...	25-Jul-17	16:02:08
170725M1_12	1700851-07RE1 24-GW-24MW08B-20170710...	25-Jul-17	16:12:47
170725M1_13	1700851-08RE1 DUP03-20170710 0.12071	25-Jul-17	16:23:25
170725M1_14	1700851-09RE1 24-GW-24EX11-20170710 0....	25-Jul-17	16:34:03
170725M1_15	1700851-10RE1 SGV-GW-SGV Transfer Stati...	25-Jul-17	16:44:46
170725M1_16	B7G0107-MS2 Matrix Spike 0.11945	25-Jul-17	16:55:33
170725M1_17	B7G0107-MSD2 Matrix Spike Dup 0.12098	25-Jul-17	17:06:33
170725M1_18	IPA	25-Jul-17	17:17:45
170725M1_19	ST170725M1-2 PFC CS3 17G2503	25-Jul-17	17:28:43
170725M1_20	IPA	25-Jul-17	17:39:41
170725M1_21	1700852-01RE1 EB 02_20170711 0.12122	25-Jul-17	17:50:30
170725M1_22	1700852-02RE1 DUP01-20170711 0.11996	25-Jul-17	18:01:17
170725M1_23	1700852-03RE1 1-GW-01-MW204-20170711 ...	25-Jul-17	18:12:03
170725M1_24	B7G0107-MS1 Matrix Spike 0.12078	25-Jul-17	18:22:49
170725M1_25	B7G0107-MSD1 Matrix Spike Dup 0.11599	25-Jul-17	18:33:36
170725M1_26	1700852-04RE1 1-GW-01-MW206-20170711 ...	25-Jul-17	18:44:23
170725M1_27	1700852-05RE1 2-GW-02DGMW59-2017071...	25-Jul-17	18:55:10
170725M1_28	1700852-06RE1 2-GW-02NEW16-20170711 ...	25-Jul-17	19:05:57
170725M1_29	1700852-07RE1 5-GW-05-DGMW68A-20170...	25-Jul-17	19:16:44
170725M1_30	1700852-08RE1 1-GW-01-PZ20-20170711 0....	25-Jul-17	19:27:29
170725M1_31	1700852-09RE1 1-GW-02-MW209-20170711 ...	25-Jul-17	19:38:30

Dataset: Untitled

Last Altered: Wednesday, July 26, 2017 10:28:43 Pacific Daylight Time
Printed: Wednesday, July 26, 2017 10:29:07 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170725M1_32	IPA	25-Jul-17	19:49:44
33	170725M1_33	ST170725M1-3 PFC CS3 17G2503	25-Jul-17	20:00:29
34	170725M1_34	IPA	25-Jul-17	20:11:07
35	170725M1_35	B7G0108-BS1 OPR 0.125	25-Jul-17	20:21:46
36	170725M1_36	IPA	25-Jul-17	20:32:24
37	170725M1_37	B7G0108-BLK1 Method Blank 0.125	25-Jul-17	20:43:03
38	170725M1_38	1700856-01RE1 INFLUENT-20170710 0.121	25-Jul-17	20:53:41
39	170725M1_39	1700856-02RE1 DUP05-20170710 0.11647	25-Jul-17	21:04:19
40	170725M1_40	1700856-03RE1 MID-POINT-20170710 0.11731	25-Jul-17	21:14:58
41	170725M1_41	1700856-04RE1 EFFLUENT-20170710 0.12084	25-Jul-17	21:25:36
42	170725M1_42	B7G0108-MS1 Matrix Spike 0.12162	25-Jul-17	21:36:14
43	170725M1_43	B7G0108-MSD1 Matrix Spike Dup 0.11849	25-Jul-17	21:47:01
44	170725M1_44	1700856-05RE1 MW-37S-20170711 0.11696	25-Jul-17	21:57:39
45	170725M1_45	1700856-06RE1 ERB-01-20170711 0.12043	25-Jul-17	22:08:34
46	170725M1_46	1700856-07RE1 11-MW-1-20170710 0.11482	25-Jul-17	22:19:33
47	170725M1_47	1700856-08RE1 LF-MW-54BR-20170710 0.11...	25-Jul-17	22:30:16
48	170725M1_48	1700856-09RE1 MW-48BR-20170711 0.12084	25-Jul-17	22:40:54
49	170725M1_49	1700856-10RE1 MW-34S-20170711 0.11812	25-Jul-17	22:51:33
50	170725M1_50	IPA	25-Jul-17	23:02:11
51	170725M1_51	ST170725M1-4 PFC CS3 17G2503	25-Jul-17	23:12:50
52	170725M1_52	IPA	25-Jul-17	23:23:36
53	170725M1_53	1700856-11RE1 MW-31BR-20170711 0.11774	25-Jul-17	23:34:14
54	170725M1_54	1700856-12RE1 MW-31S-20170711 0.11732	25-Jul-17	23:45:01
55	170725M1_55	1700732-04RE1@5X MW PFC 03 0.11929	25-Jul-17	23:55:47
56	170725M1_56	1700906-05@5X MW-02BR-20170718 0.125	26-Jul-17	00:06:56
57	170725M1_57	1700907-04@5X AT028-MW17-06-071717-13...	26-Jul-17	00:18:17
58	170725M1_58	1700907-09@5X AT028-MW17-01-071817-09...	26-Jul-17	00:29:47
59	170725M1_59	IPA	26-Jul-17	00:40:33
60	170725M1_60	ST170725M1-5 PFC CS3 17G2503	26-Jul-17	00:51:21
61	170725M1_61	IPA	26-Jul-17	01:02:08
62	170725M1_62	1700845-01@5X MW-29S-20170707 0.12034	26-Jul-17	01:12:49
63	170725M1_63	1700845-02@5X DUP04-20170707 0.12279	26-Jul-17	01:23:33
64	170725M1_64	1700845-03@20X MW-27S-20170707 0.11824	26-Jul-17	01:34:11
65	170725M1_65	B7G0033-MS1@20X Matrix Spike 0.12283	26-Jul-17	01:44:49

Dataset: Untitled

Last Altered: Wednesday, July 26, 2017 10:28:43 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:29:07 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	170725M1_66	B7G0033-MSD1@20X Matrix Spike Dup 0.124	26-Jul-17	01:55:28
67	170725M1_67	1700845-04@5X MW-30S-20170707 0.11933	26-Jul-17	02:06:06
68	170725M1_68	1700894-02@5X POND 1 at PD 0.125	26-Jul-17	02:16:53
69	170725M1_69	1700894-03@5X POND 1 -STAFF 0.125	26-Jul-17	02:27:50
70	170725M1_70	1700894-04@10X SEED-POND 1 0.125	26-Jul-17	02:38:34
71	170725M1_71	1700732-05RE1 SD-46 3.2	26-Jul-17	02:49:12
72	170725M1_72	IPA	26-Jul-17	02:59:50
73	170725M1_73	ST170725M1-6 PFC CS3 17G2503	26-Jul-17	03:10:29
74	170725M1_74	IPA	26-Jul-17	03:21:15

Dataset: U:\Q4.PRO\results\170725M1\170725M1-19.qld

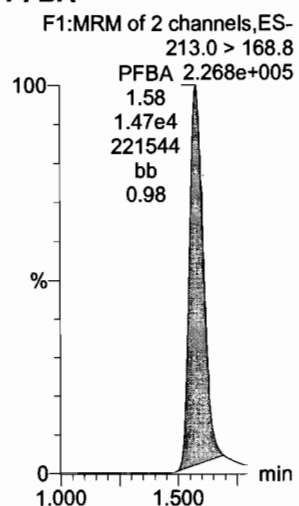
Last Altered: Wednesday, July 26, 2017 09:53:34 Pacific Daylight Time
Printed: Wednesday, July 26, 2017 09:54:02 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

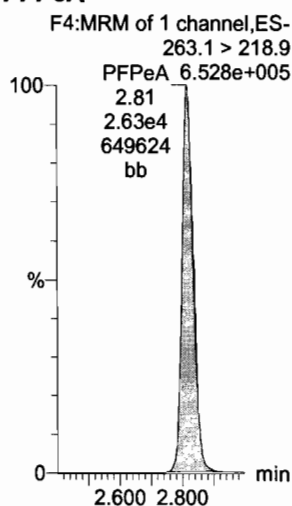
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Name: 170725M1_19, Date: 25-Jul-2017, Time: 17:28:43, ID: ST170725M1-2 PFC CS3 17G2503, Description: PFC CS3 17G2503

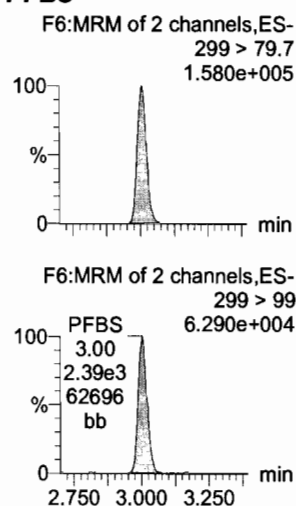
PFBA



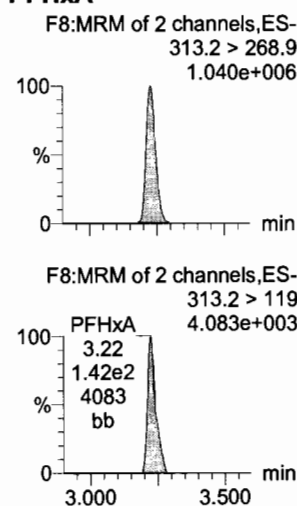
PFPeA



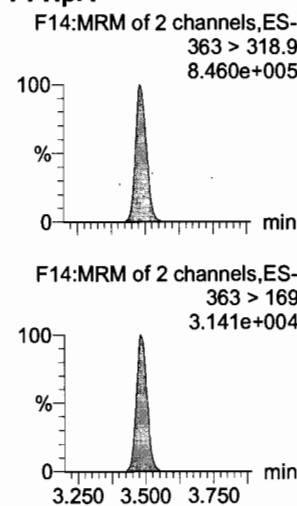
PFBS



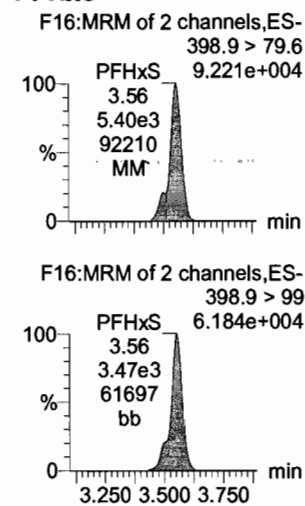
PFHxA



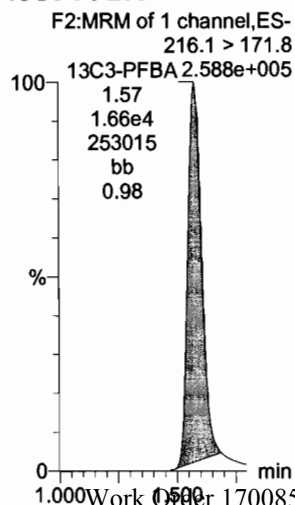
PFHpA



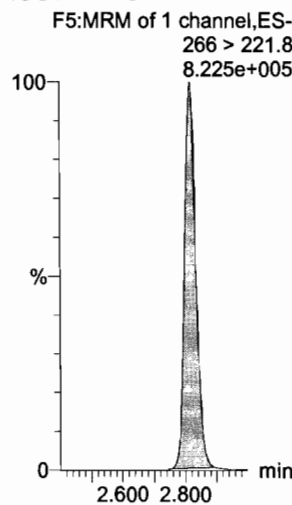
PFHxS



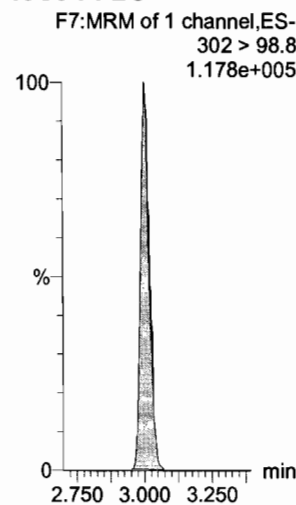
13C3-PFBA



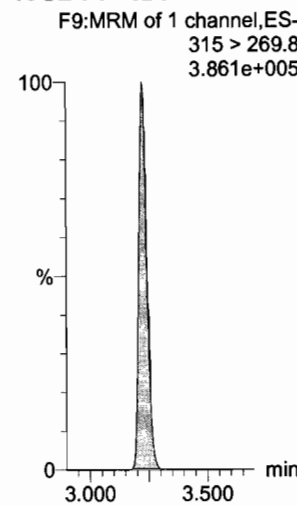
13C3-PFPeA



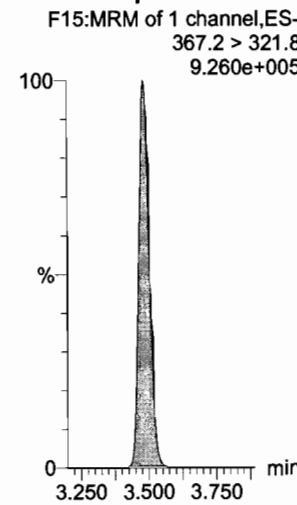
13C3-PFBS



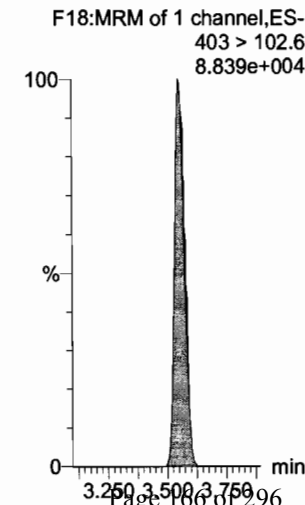
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

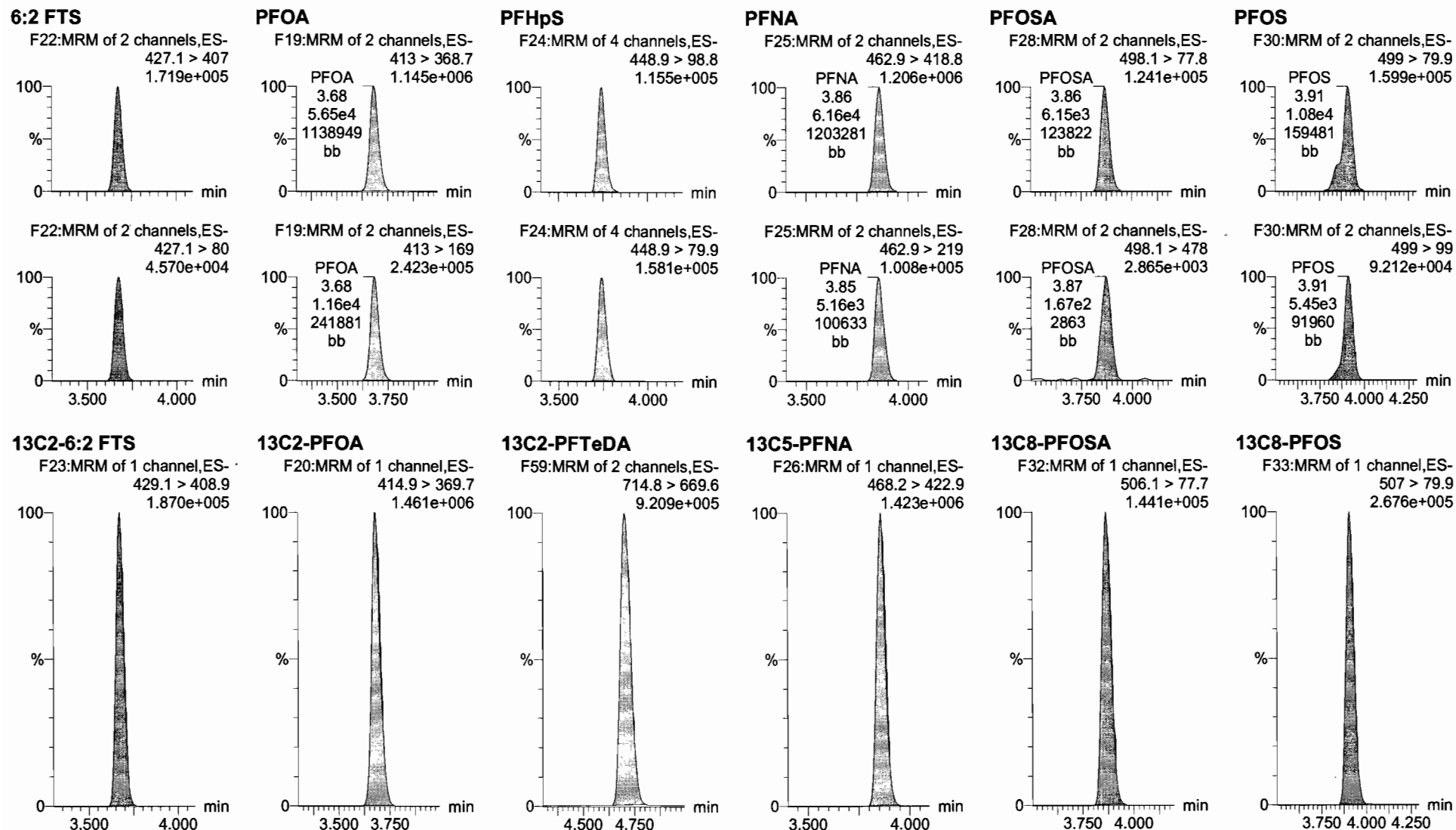


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Last Altered: Wednesday, July 26, 2017 09:53:34 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:54:02 Pacific Daylight Time

Name: 170725M1_19, Date: 25-Jul-2017, Time: 17:28:43, ID: ST170725M1-2 PFC CS3 17G2503, Description: PFC CS3 17G2503



Dataset: U:\Q4.PRO\results\170725M1\170725M1-19.qld

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Printed: Wednesday, July 26, 2017 09:54:02 Pacific Daylight Time

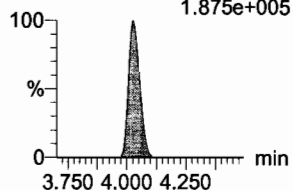
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PFDA

F35:MRM of 2 channels,ES-
513 > 468.8
1.243e+006

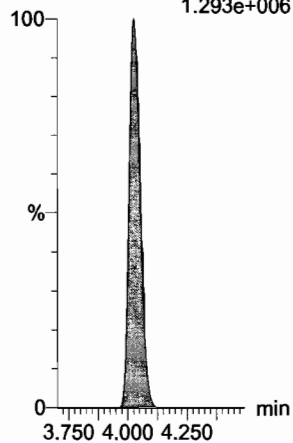


F35:MRM of 2 channels,ES-
513 > 219
1.875e+005



13C2-PFDA

F36:MRM of 1 channel,ES-
515.1 > 469.9
1.293e+006

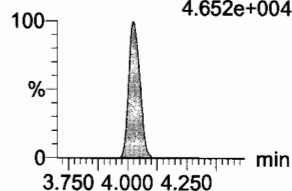


8:2 FTS

F40:MRM of 2 channels,ES-
527 > 506.9
1.478e+005

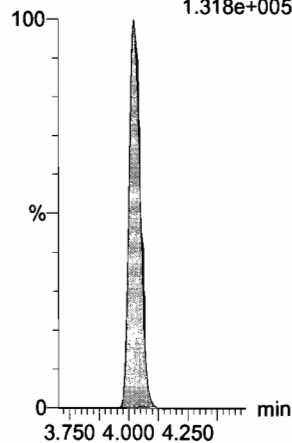


F40:MRM of 2 channels,ES-
527 > 80
4.652e+004



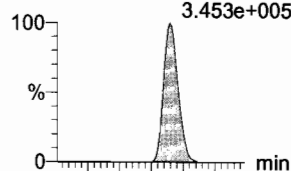
13C2-8:2 FTS

F41:MRM of 1 channel,ES-
529.1 > 508.7
1.318e+005

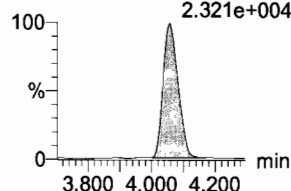


N-MeFOSAA

F45:MRM of 2 channels,ES-
570.1 > 419
3.453e+005

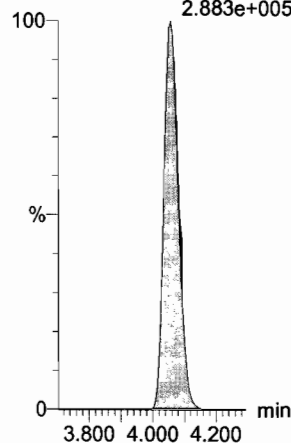


F45:MRM of 2 channels,ES-
570.1 > 483
2.321e+004



d3-N-MeFOSAA

F47:MRM of 1 channel,ES-
573.3 > 419
2.883e+005

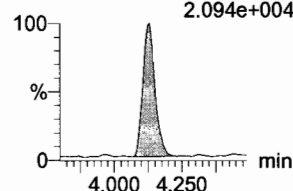


N-EtFOSAA

F48:MRM of 2 channels,ES-
584.2 > 419
2.715e+005

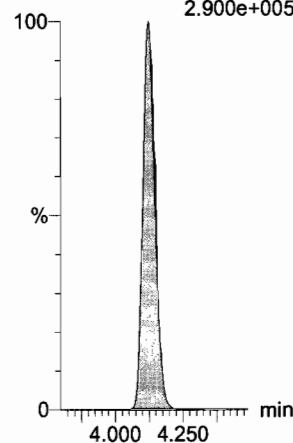


F48:MRM of 2 channels,ES-
584.2 > 483
2.094e+004



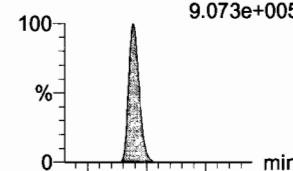
d5-N-EtFOSAA

F49:MRM of 1 channel,ES-
589.3 > 419
2.900e+005

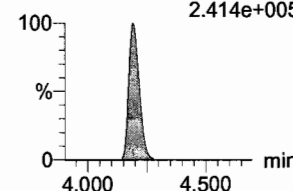


PFUnA

F43:MRM of 2 channels,ES-
562.9 > 518.9
9.073e+005

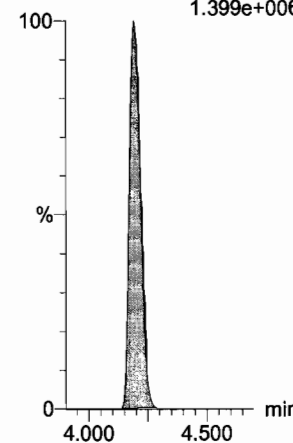


F43:MRM of 2 channels,ES-
562.9 > 269
2.414e+005



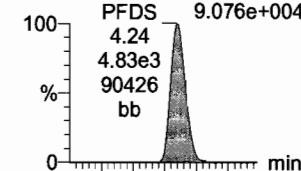
13C2-PFUnA

F44:MRM of 1 channel,ES-
565 > 519.8
1.399e+006

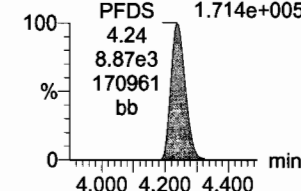


PFDS

F50:MRM of 2 channels,ES-
598.9 > 98.7
9.076e+004

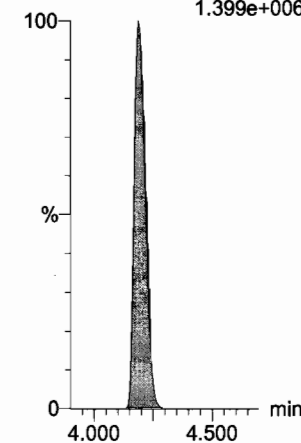


F50:MRM of 2 channels,ES-
598.9 > 80
1.714e+005



13C2-PFUnA

F44:MRM of 1 channel,ES-
565 > 519.8
1.399e+006



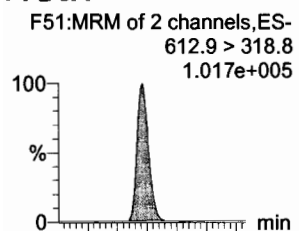
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Last Altered: Wednesday, July 26, 2017 09:53:34 Pacific Daylight Time

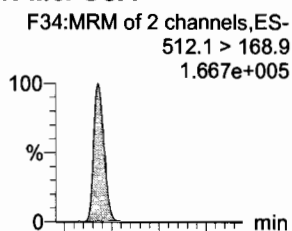
Printed: Wednesday, July 26, 2017 09:54:02 Pacific Daylight Time

Name: 170725M1_19, Date: 25-Jul-2017, Time: 17:28:43, ID: ST170725M1-2 PFC CS3 17G2503, Description: PFC CS3 17G2503

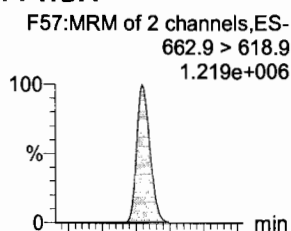
PFDaA



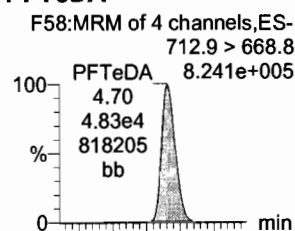
N-MeFOSA



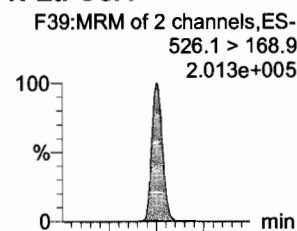
PFTrDA



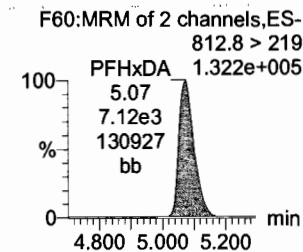
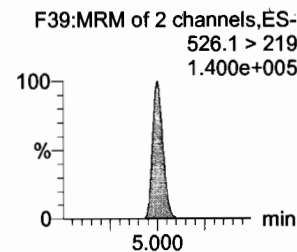
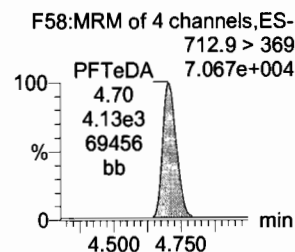
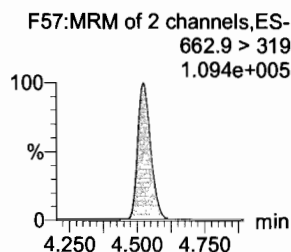
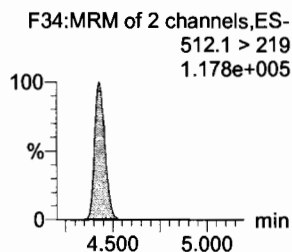
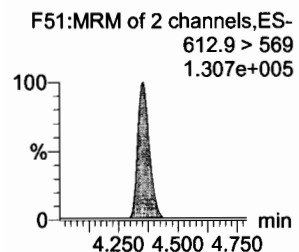
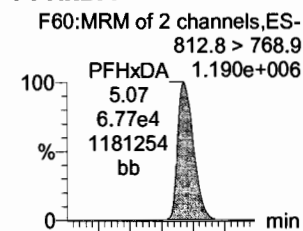
PFTeDA



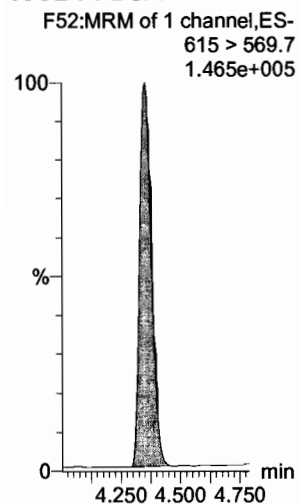
N-EtFOSA



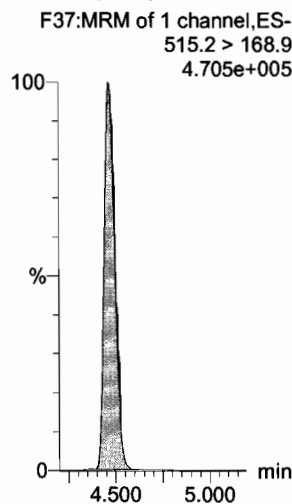
PFHxDA



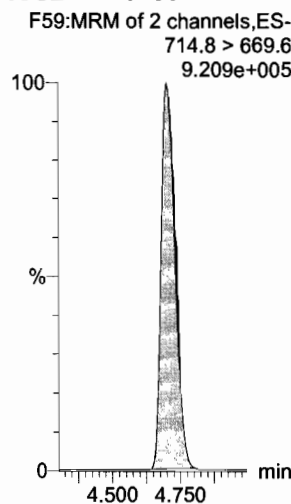
13C2-PFDaA



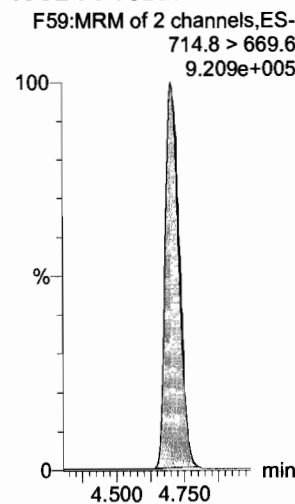
d3-N-MeFOSA



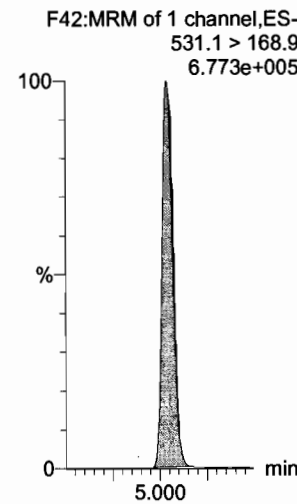
13C2-PFTeDA



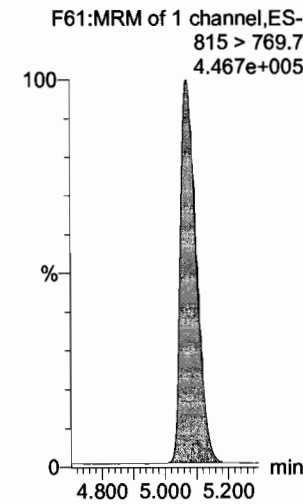
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



Dataset: U:\Q4.PRO\results\170725M1\170725M1-19.qld

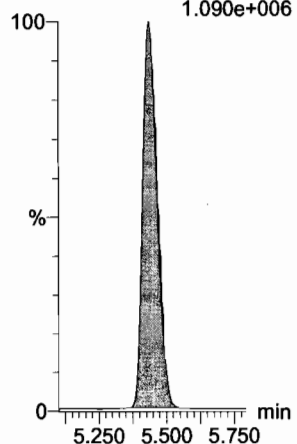
Last Altered: Wednesday, July 26, 2017 09:53:34 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:54:02 Pacific Daylight Time

Name: 170725M1_19, Date: 25-Jul-2017, Time: 17:28:43, ID: ST170725M1-2 PFC CS3 17G2503, Description: PFC CS3 17G2503

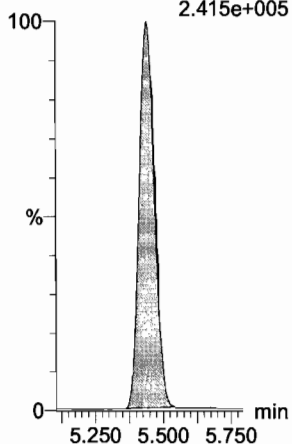
PFODA

F62:MRM of 4 channels,ES-
912.8 > 868.8
1.090e+006



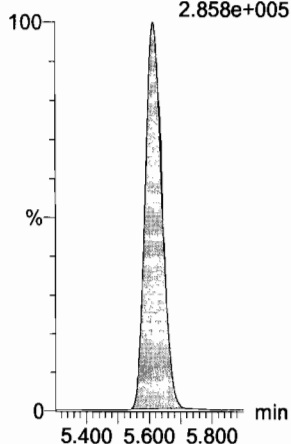
N-MeFOSE

F53:MRM of 1 channel,ES-
616.1 > 58.9
2.415e+005



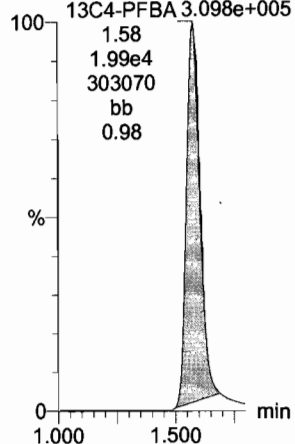
N-EtFOSE

F55:MRM of 1 channel,ES-
630.1 > 58.9
2.858e+005



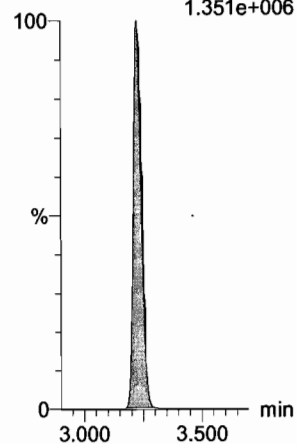
13C4-PFBA

F3:MRM of 1 channel,ES-
217 > 171.8
13C4-PFBA 3.098e+005
1.58
1.99e4
303070
bb
0.98



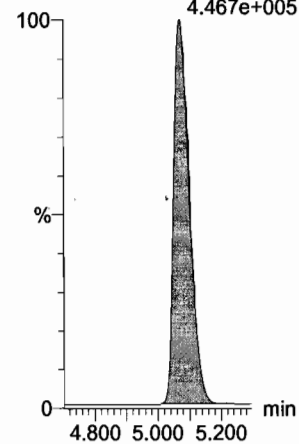
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
1.351e+006



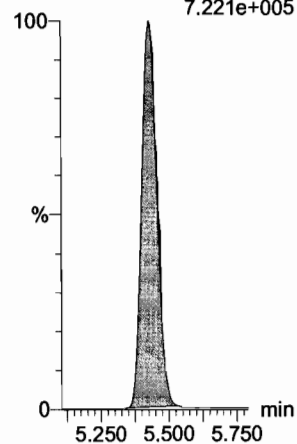
13C2-PFHxDA

F61:MRM of 1 channel,ES-
815 > 769.7
4.467e+005



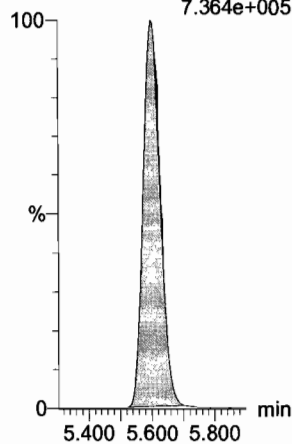
d7-N-MeFOSE

F54:MRM of 1 channel,ES-
623.1 > 58.9
7.221e+005



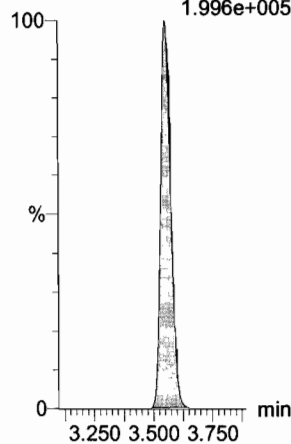
d9-N-EtFOSE

F56:MRM of 1 channel,ES-
639.2 > 58.8
7.364e+005



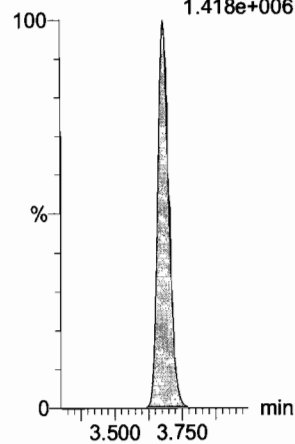
13C3-PFHxS

F17:MRM of 1 channel,ES-
401.9 > 79.9
1.996e+005



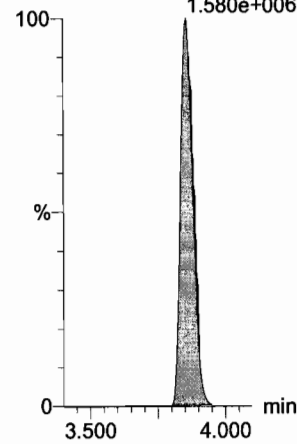
13C8-PFOA

F21:MRM of 1 channel,ES-
421.3 > 376
1.418e+006



13C9-PFNA

F27:MRM of 1 channel,ES-
472.2 > 426.9
1.580e+006



Dataset: U:\Q4.PRO\results\170725M1\170725M1-19.qld

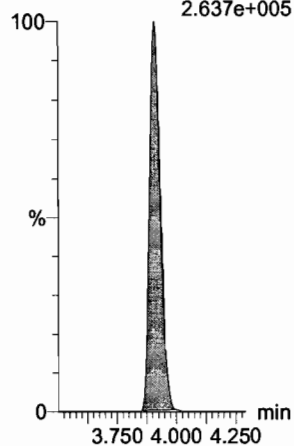
Last Altered: Wednesday, July 26, 2017 09:53:34 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:54:02 Pacific Daylight Time

Name: 170725M1_19, Date: 25-Jul-2017, Time: 17:28:43, ID: ST170725M1-2 PFC CS3 17G2503, Description: PFC CS3 17G2503

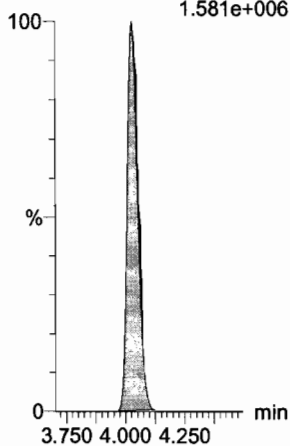
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
2.637e+005



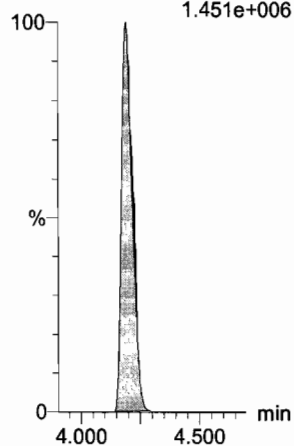
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
1.581e+006



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
1.451e+006



Dataset: U:\Q4.PRO\results\170725M1\170725M1-33.qld

Last Altered: Wednesday, July 26, 2017 09:54:41 Pacific Daylight Time

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Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170725M1_33, Date: 25-Jul-2017, Time: 20:00:29, ID: ST170725M1-3 PFC CS3 17G2503, Description: PFC CS3 17G2503

AC
7/26/17

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.43e4	1.63e4		1.54	1.57	10.9	9.55	95.5
2	2 PFPeA	263.1 > 218.9	2.57e4	3.30e4		2.77	2.81	9.73	9.70	97.0
3	3 PFBS	299 > 79.7	6.10e3	3.98e3		2.96	3.01	19.2	10.3	103.1
4	4 PFHxA	313.2 > 268.9	4.11e4	1.44e4		3.19	3.22	14.2	9.32	93.2
5	5 PFHpA	363 > 318.9	3.95e4	4.12e4		3.45	3.49	12.0	9.50	95.0
6	6 PFHxS	398.9 > 79.6	5.08e3	3.97e3		3.56	3.56	16.0	9.46	94.6
7	7 6:2 FTS	427.1 > 407	8.56e3	9.21e3		3.64	3.67	11.6	11.0	110.3
8	8 PFOA	413 > 368.7	5.55e4	7.29e4		3.65	3.68	9.52	9.60	96.0
9	9 PFHpS	448.9 > 98.8	5.62e3	7.29e4		3.71	3.74	0.963	10.7	106.9
10	10 PFNA	462.9 > 418.8	6.16e4	7.10e4		3.83	3.86	10.8	9.74	97.4
11	11 PFOSA	498.1 > 77.8	6.26e3	7.52e3		3.84	3.86	10.4	9.87	98.7
12	12 PFOS	499 > 79.9	1.16e4	1.42e4		3.89	3.91	10.3	8.68	86.8
13	13 PFDA	513 > 468.8	7.26e4	6.58e4		4.01	4.03	13.8	10.5	105.3
14	14 8:2 FTS	527 > 506.9	8.13e3	7.65e3		4.00	4.02	13.3	9.00	90.0
15	15 N-MeFOSAA	570.1 > 419	1.84e4	1.52e4		4.03	4.06	197	9.92	99.2
16	16 N-EtFOSAA	584.2 > 419	1.48e4	1.60e4		4.10	4.12	151	9.33	93.3
17	17 PFUnA	562.9 > 518.9	5.06e4	7.51e4		4.17	4.19	8.42	9.54	95.4
18	18 PFDS	598.9 > 98.7	5.02e3	7.51e4		4.22	4.24	0.836	9.39	93.9
19	19 PFDoA	612.9 > 318.8	5.65e3	8.10e3		4.34	4.36	8.71	9.23	92.3
20	20 N-MeFOSA	512.1 > 168.9	1.07e4	3.19e4		4.29	4.43	50.5	48.4	96.9
21	21 PFTrDA	662.9 > 618.9	7.23e4	8.10e3		4.50	4.52	112	10.0	100.5
22	22 PFTeDA	712.9 > 668.8	5.07e4	5.79e4		4.68	4.71	10.9	9.49	94.9
23	23 N-EtFOSA	526.1 > 168.9	1.31e4	4.40e4		4.87	5.01	44.9	49.3	98.5
24	24 PFHxDA	812.8 > 768.9	7.13e4	2.76e4		5.06	5.07	12.9	9.43	94.3
25	25 PFODA	912.8 > 868.8	7.00e4	2.76e4		5.43	5.44	12.7	9.85	98.5
26	26 N-MeFOSE	616.1 > 58.9	1.60e4	4.72e4		5.42	5.44	50.7	49.5	99.0
27	27 N-EtFOSE	630.1 > 58.9	1.80e4	4.69e4		5.59	5.61	57.7	49.0	98.1
28	28 13C3-PFBA	216.1 > 171.8	1.63e4	1.99e4	0.820	1.54	1.57	10.3	12.5	100.1
29	29 13C3-PFPeA	266 > 221.8	3.30e4	5.08e4	0.248	2.77	2.81	3.25	13.1	104.6
30	30 13C3-PFBS	302 > 98.8	3.98e3	5.08e4	0.031	2.96	3.00	0.392	12.6	100.8
31	31 13C3-PFHxA	315 > 269.8	1.44e4	5.08e4	0.276	3.19	3.23	1.42	5.14	102.8

10-130

50-150

Dataset: U:\Q4.PRO\results\170725M1\170725M1-33.qld

Last Altered: Wednesday, July 26, 2017 09:54:41 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:55:08 Pacific Daylight Time

Name: 170725M1_33, Date: 25-Jul-2017, Time: 20:00:29, ID: ST170725M1-3 PFC CS3 17G2503, Description: PFC CS3 17G2503

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32 13C4-PFHpa	367.2 > 321.8	4.12e4	5.08e4	0.306	3.45	3.48	4.05	13.3	106.1
33	33 18O2-PFHxS	403 > 102.6	3.97e3	9.30e3	0.393	3.56	3.56	5.33	13.6	108.6
34	34 13C2-6:2 FTS	429.1 > 408.9	9.21e3	6.63e4	0.158	3.64	3.67	1.74	11.0	88.1
35	35 13C2-PFOA	414.9 > 369.7	7.29e4	6.63e4	1.067	3.65	3.68	13.7	12.9	103.0
36	36 13C5-PFNA	468.2 > 422.9	7.10e4	8.58e4	0.852	3.83	3.86	10.3	12.1	97.1
37	37 13C8-PFOSA	506.1 > 77.7	7.52e3	6.80e4	0.098	3.84	3.87	1.38	14.1	112.6
38	38 13C8-PFOS	507 > 79.9	1.42e4	1.42e4	0.936	3.89	3.91	12.5	13.3	106.5
39	39 13C2-PFDA	515.1 > 469.9	6.58e4	8.33e4	0.810	4.01	4.03	9.88	12.2	97.6
40	40 13C2-8:2 FTS	529.1 > 508.7	7.65e3	8.33e4	0.086	4.00	4.02	1.15	13.4	107.3
41	41 d3-N-MeFOSAA	573.3 > 419	1.52e4	6.80e4	0.014	4.03	4.06	2.79	204	125.4
42	42 d5-N-EtFOSAA	589.3 > 419	1.60e4	6.80e4	0.014	4.12	4.12	2.94	211	129.7
43	43 13C2-PFUnA	565 > 519.8	7.51e4	6.80e4	0.962	4.17	4.19	13.8	14.3	114.8
44	44 13C2-PFDoA	615 > 569.7	8.10e3	6.80e4	0.094	4.34	4.36	1.49	15.8	126.2
45	45 d3-N-MeFOSA	515.2 > 168.9	3.19e4	6.80e4	0.034	4.29	4.48	5.87	171	113.7
46	46 13C2-PFTeDA	714.8 > 669.6	5.79e4	6.80e4	0.694	4.68	4.70	10.6	15.3	122.7
47	47 d5-N-ETFOSA	531.1 > 168.9	4.40e4	6.80e4	0.049	5.01	5.04	8.08	166	110.7
48	48 13C2-PFHxDA	815 > 769.7	2.76e4	6.80e4	0.843	5.06	5.08	5.08	6.03	120.5
49	49 d7-N-MeFOSE	623.1 > 58.9	4.72e4	6.80e4	0.055	5.42	5.43	8.68	159	105.9
50	50 d9-N-EtFOSE	639.2 > 58.8	4.69e4	6.80e4	0.053	5.59	5.60	8.61	161	107.5
51	51 13C4-PFBA	217 > 171.8	1.99e4	1.99e4	1.000	1.54	1.57	12.5	12.5	100.0
52	52 13C5-PFHxA	318 > 272.9	5.08e4	5.08e4	1.000	3.19	3.23	5.00	5.00	100.0
53	53 13C3-PFHxS	401.9 > 79.9	9.30e3	9.30e3	1.000	3.56	3.56	12.5	12.5	100.0
54	54 13C8-PFOA	421.3 > 376	6.63e4	6.63e4	1.000	3.65	3.68	12.5	12.5	100.0
55	55 13C9-PFNA	472.2 > 426.9	8.58e4	8.58e4	1.000	3.83	3.86	12.5	12.5	100.0
56	56 13C4-PFOS	503 > 79.9	1.42e4	1.42e4	1.000	3.89	3.91	12.5	12.5	100.0
57	57 13C6-PFDA	519.1 > 473.7	8.33e4	8.33e4	1.000	4.01	4.03	12.5	12.5	100.0
58	58 13C7-PFUnA	570.1 > 524.8	6.80e4	6.80e4	1.000	4.17	4.20	12.5	12.5	100.0

50-150
↓

Dataset: Untitled

Last Altered: Wednesday, July 26, 2017 10:28:43 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:29:07 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Compound name: PFBA

Name	ID	Acq.Date	Acq.Time
170725M1_1	IPA	25-Jul-17	14:15:31
170725M1_2	ST170725M1-1 PFC CS-1 17G2502	25-Jul-17	14:26:15
170725M1_3	B7G0107-BS1 OPR 0.125	25-Jul-17	14:36:53
170725M1_4	IPA	25-Jul-17	14:47:39
170725M1_5	B7G0107-BLK1 Method Blank 0.125	25-Jul-17	14:58:18
170725M1_6	1700851-01RE1 SB 01_20170710 0.12032	25-Jul-17	15:08:56
170725M1_7	1700851-02RE1 EB 01_20170710 0.11963	25-Jul-17	15:19:35
170725M1_8	1700851-03RE1 18-GW-18MCAS03-5-20170...	25-Jul-17	15:30:13
170725M1_9	1700851-04RE1 18-GW-18MCAS03-2-20170...	25-Jul-17	15:40:51
170725M1_10	1700851-05RE1 18-GW-18MCAS02-5-20170...	25-Jul-17	15:51:30
170725M1_11	1700851-06RE1 18-GW-18MCAS07-3-20170...	25-Jul-17	16:02:08
170725M1_12	1700851-07RE1 24-GW-24MW08B-20170710...	25-Jul-17	16:12:47
170725M1_13	1700851-08RE1 DUP03-20170710 0.12071	25-Jul-17	16:23:25
170725M1_14	1700851-09RE1 24-GW-24EX11-20170710 0....	25-Jul-17	16:34:03
170725M1_15	1700851-10RE1 SGV-GW-SGV Transfer Stati...	25-Jul-17	16:44:46
170725M1_16	B7G0107-MS2 Matrix Spike 0.11945	25-Jul-17	16:55:33
170725M1_17	B7G0107-MSD2 Matrix Spike Dup 0.12098	25-Jul-17	17:06:33
170725M1_18	IPA	25-Jul-17	17:17:45
170725M1_19	ST170725M1-2 PFC CS3 17G2503	25-Jul-17	17:28:43
170725M1_20	IPA	25-Jul-17	17:39:41
170725M1_21	1700852-01RE1 EB 02_20170711 0.12122	25-Jul-17	17:50:30
170725M1_22	1700852-02RE1 DUP01-20170711 0.11996	25-Jul-17	18:01:17
170725M1_23	1700852-03RE1 1-GW-01-MW204-20170711 ...	25-Jul-17	18:12:03
170725M1_24	B7G0107-MS1 Matrix Spike 0.12078	25-Jul-17	18:22:49
170725M1_25	B7G0107-MSD1 Matrix Spike Dup 0.11599	25-Jul-17	18:33:36
170725M1_26	1700852-04RE1 1-GW-01-MW206-20170711 ...	25-Jul-17	18:44:23
170725M1_27	1700852-05RE1 2-GW-02DGMW59-2017071...	25-Jul-17	18:55:10
170725M1_28	1700852-06RE1 2-GW-02NEW16-20170711 ...	25-Jul-17	19:05:57
170725M1_29	1700852-07RE1 5-GW-05-DGMW68A-20170...	25-Jul-17	19:16:44
170725M1_30	1700852-08RE1 1-GW-01-PZ20-20170711 0....	25-Jul-17	19:27:29
170725M1_31	1700852-09RE1 1-GW-02-MW209-20170711 ...	25-Jul-17	19:38:30

Dataset: Untitled

Last Altered: Wednesday, July 26, 2017 10:28:43 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:29:07 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170725M1_32	IPA	25-Jul-17	19:49:44
33	170725M1_33	ST170725M1-3 PFC CS3 17G2503	25-Jul-17	20:00:29
34	170725M1_34	IPA	25-Jul-17	20:11:07
35	170725M1_35	B7G0108-BS1 OPR 0.125	25-Jul-17	20:21:46
36	170725M1_36	IPA	25-Jul-17	20:32:24
37	170725M1_37	B7G0108-BLK1 Method Blank 0.125	25-Jul-17	20:43:03
38	170725M1_38	1700856-01RE1 INFLUENT-20170710 0.121	25-Jul-17	20:53:41
39	170725M1_39	1700856-02RE1 DUP05-20170710 0.11647	25-Jul-17	21:04:19
40	170725M1_40	1700856-03RE1 MID-POINT-20170710 0.11731	25-Jul-17	21:14:58
41	170725M1_41	1700856-04RE1 EFFLUENT-20170710 0.12084	25-Jul-17	21:25:36
42	170725M1_42	B7G0108-MS1 Matrix Spike 0.12162	25-Jul-17	21:36:14
43	170725M1_43	B7G0108-MSD1 Matrix Spike Dup 0.11849	25-Jul-17	21:47:01
44	170725M1_44	1700856-05RE1 MW-37S-20170711 0.11696	25-Jul-17	21:57:39
45	170725M1_45	1700856-06RE1 ERB-01-20170711 0.12043	25-Jul-17	22:08:34
46	170725M1_46	1700856-07RE1 11-MW-1-20170710 0.11482	25-Jul-17	22:19:33
47	170725M1_47	1700856-08RE1 LF-MW-54BR-20170710 0.11...	25-Jul-17	22:30:16
48	170725M1_48	1700856-09RE1 MW-48BR-20170711 0.12084	25-Jul-17	22:40:54
49	170725M1_49	1700856-10RE1 MW-34S-20170711 0.11812	25-Jul-17	22:51:33
50	170725M1_50	IPA	25-Jul-17	23:02:11
51	170725M1_51	ST170725M1-4 PFC CS3 17G2503	25-Jul-17	23:12:50
52	170725M1_52	IPA	25-Jul-17	23:23:36
53	170725M1_53	1700856-11RE1 MW-31BR-20170711 0.11774	25-Jul-17	23:34:14
54	170725M1_54	1700856-12RE1 MW-31S-20170711 0.11732	25-Jul-17	23:45:01
55	170725M1_55	1700732-04RE1@5X MW PFC 03 0.11929	25-Jul-17	23:55:47
56	170725M1_56	1700906-05@5X MW-02BR-20170718 0.125	26-Jul-17	00:06:56
57	170725M1_57	1700907-04@5X AT028-MW17-06-071717-13...	26-Jul-17	00:18:17
58	170725M1_58	1700907-09@5X AT028-MW17-01-071817-09...	26-Jul-17	00:29:47
59	170725M1_59	IPA	26-Jul-17	00:40:33
60	170725M1_60	ST170725M1-5 PFC CS3 17G2503	26-Jul-17	00:51:21
61	170725M1_61	IPA	26-Jul-17	01:02:08
62	170725M1_62	1700845-01@5X MW-29S-20170707 0.12034	26-Jul-17	01:12:49
63	170725M1_63	1700845-02@5X DUP04-20170707 0.12279	26-Jul-17	01:23:33
64	170725M1_64	1700845-03@20X MW-27S-20170707 0.11824	26-Jul-17	01:34:11
65	170725M1_65	B7G0033-MS1@20X Matrix Spike 0.12283	26-Jul-17	01:44:49

Dataset: Untitled

Last Altered: Wednesday, July 26, 2017 10:28:43 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 10:29:07 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	170725M1_66	B7G0033-MSD1@20X Matrix Spike Dup 0.124	26-Jul-17	01:55:28
67	170725M1_67	1700845-04@5X MW-30S-20170707 0.11933	26-Jul-17	02:06:06
68	170725M1_68	1700894-02@5X POND 1 at PD 0.125	26-Jul-17	02:16:53
69	170725M1_69	1700894-03@5X POND 1 -STAFF 0.125	26-Jul-17	02:27:50
70	170725M1_70	1700894-04@10X SEED-POND 1 0.125	26-Jul-17	02:38:34
71	170725M1_71	1700732-05RE1 SD-46 3.2	26-Jul-17	02:49:12
72	170725M1_72	IPA	26-Jul-17	02:59:50
73	170725M1_73	ST 170725M1-6 PFC CS3 17G2503	26-Jul-17	03:10:29
74	170725M1_74	IPA	26-Jul-17	03:21:15

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Last Altered: Wednesday, July 26, 2017 09:54:41 Pacific Daylight Time

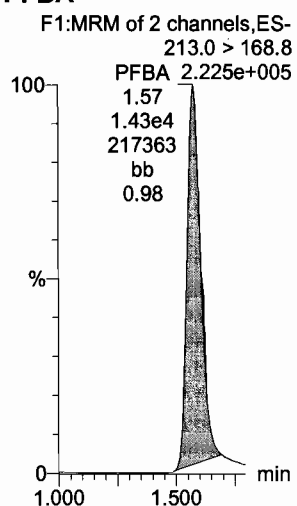
Printed: Wednesday, July 26, 2017 09:55:08 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 25 Jul 2017 12:44:55

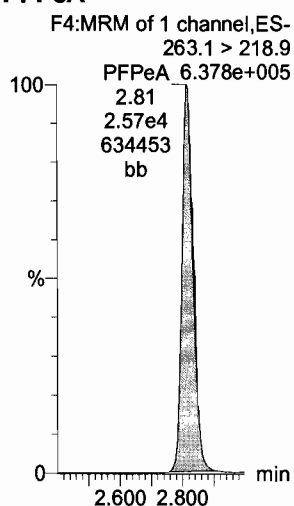
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Name: 170725M1_33, Date: 25-Jul-2017, Time: 20:00:29, ID: ST170725M1-3 PFC CS3 17G2503, Description: PFC CS3 17G2503

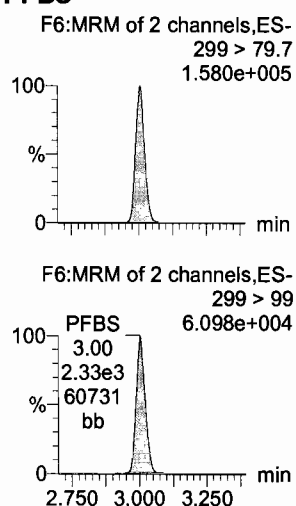
PFBA



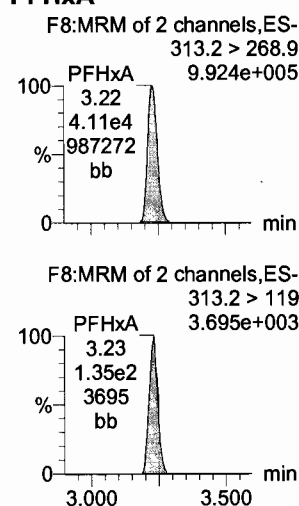
PFPeA



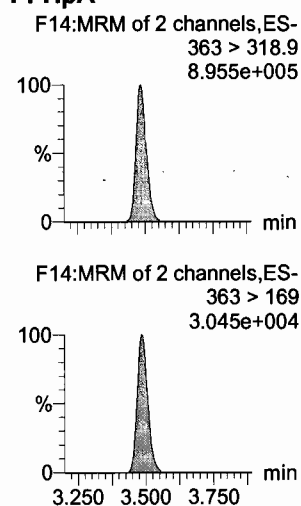
PFBS



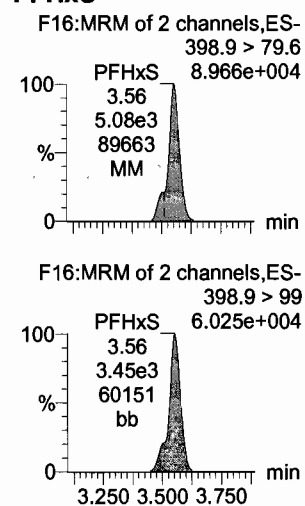
PFHxA



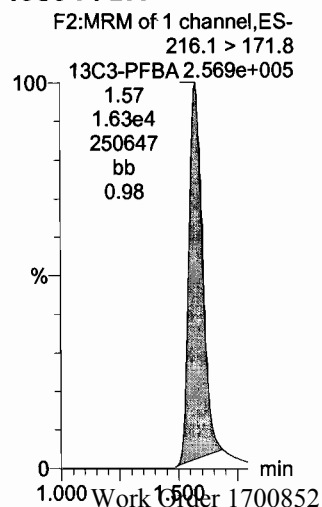
PFHpA



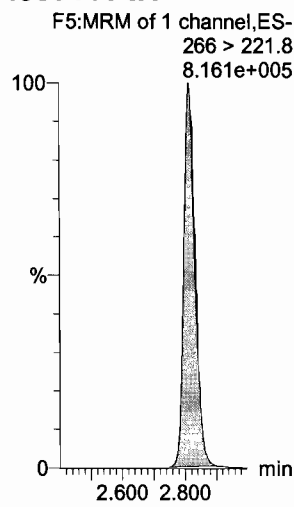
PFHxS



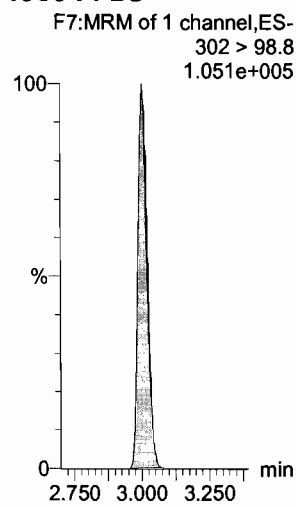
13C3-PFBA



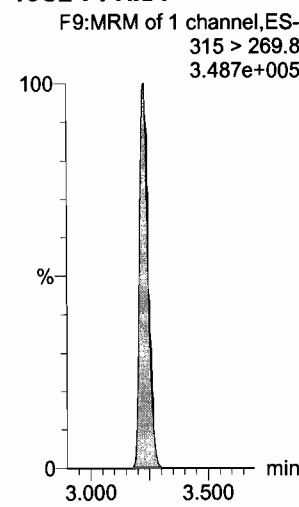
13C3-PFPeA



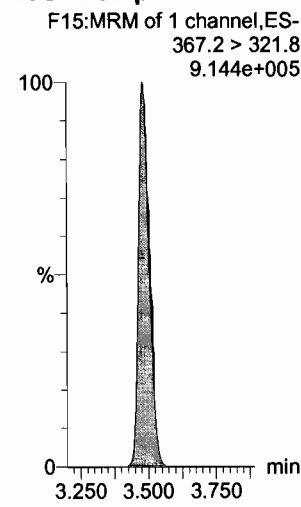
13C3-PFBS



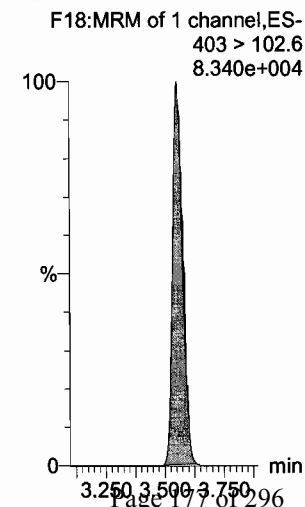
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



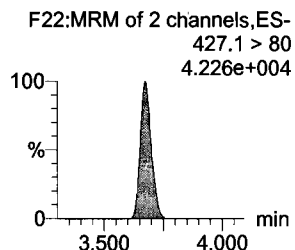
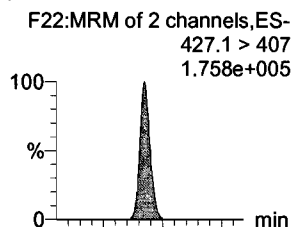
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Last Altered: Wednesday, July 26, 2017 09:54:41 Pacific Daylight Time

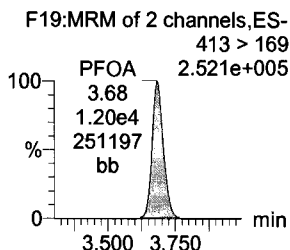
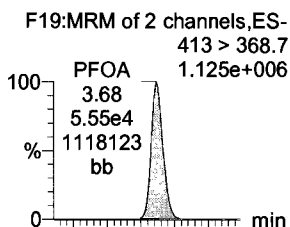
Printed: Wednesday, July 26, 2017 09:55:08 Pacific Daylight Time

Name: 170725M1_33, Date: 25-Jul-2017, Time: 20:00:29, ID: ST170725M1-3 PFC CS3 17G2503, Description: PFC CS3 17G2503

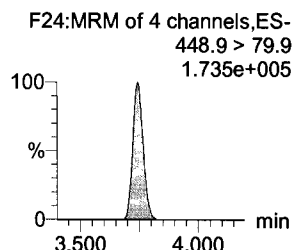
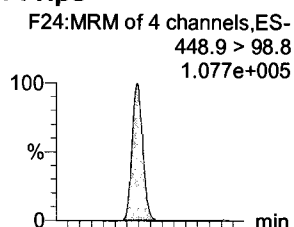
6:2 FTS



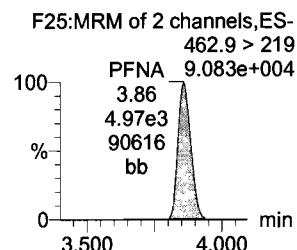
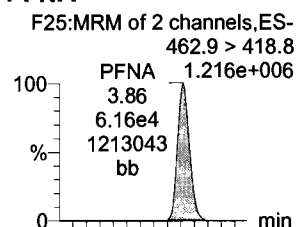
PFOA



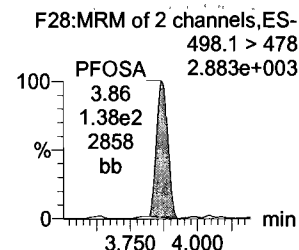
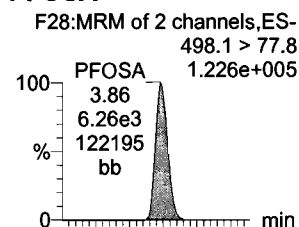
PFHpS



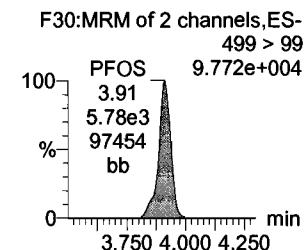
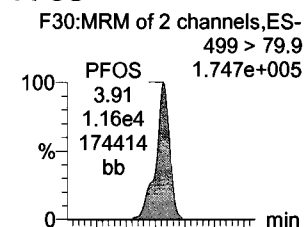
PFNA



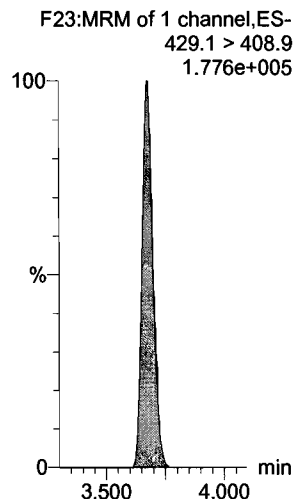
PFOSA



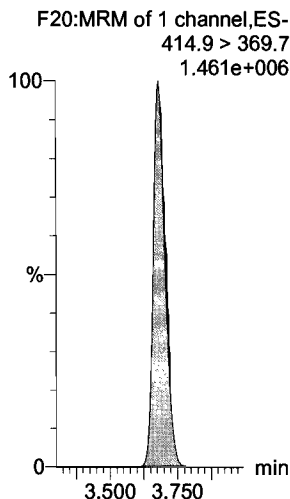
PFOS



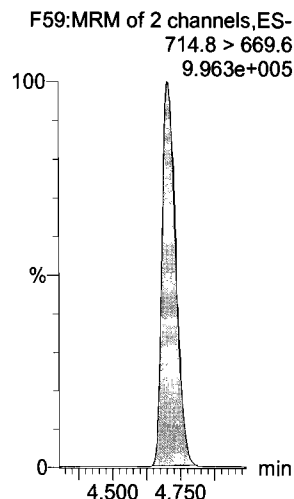
13C2-6:2 FTS



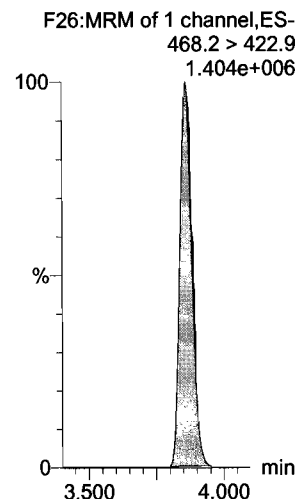
13C2-PFOA



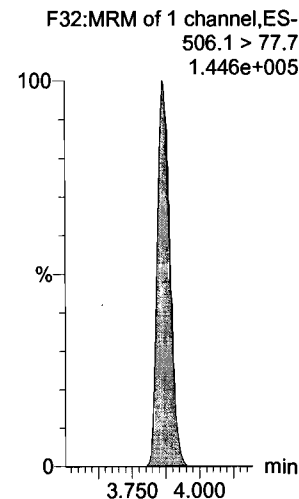
13C2-PFTeDA



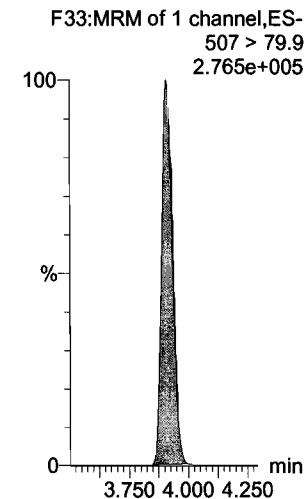
13C5-PFNA



13C8-PFOSA



13C8-PFOS



Dataset: U:\Q4.PRO\results\170725M1\170725M1-33.qld

Last Altered: Wednesday, July 26, 2017 09:54:41 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:55:08 Pacific Daylight Time

Name: 170725M1_33, Date: 25-Jul-2017, Time: 20:00:29, ID: ST170725M1-3 PFC CS3 17G2503, Description: PFC CS3 17G2503

PFDA

F35:MRM of 2 channels,ES-
513 > 468.8
1.320e+006



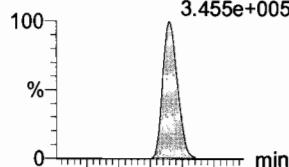
8:2 FTS

F40:MRM of 2 channels,ES-
527 > 506.9
1.544e+005



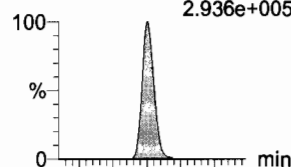
N-MeFOSAA

F45:MRM of 2 channels,ES-
570.1 > 419
3.455e+005



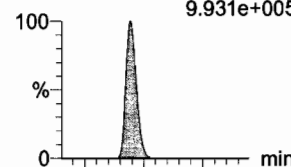
N-EtFOSAA

F48:MRM of 2 channels,ES-
584.2 > 419
2.936e+005



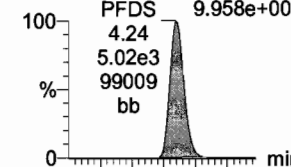
PFUnA

F43:MRM of 2 channels,ES-
562.9 > 518.9
9.931e+005

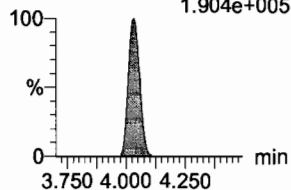


PFDS

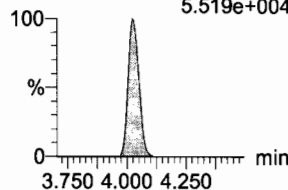
F50:MRM of 2 channels,ES-
598.9 > 98.7
9.958e+004



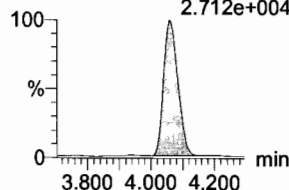
F35:MRM of 2 channels,ES-
513 > 219
1.904e+005



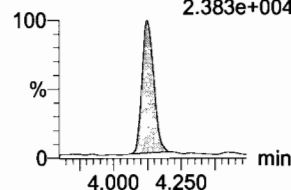
F40:MRM of 2 channels,ES-
527 > 80
5.519e+004



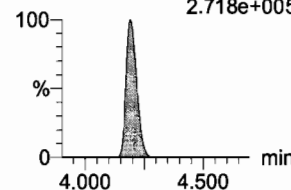
F45:MRM of 2 channels,ES-
570.1 > 483
2.712e+004



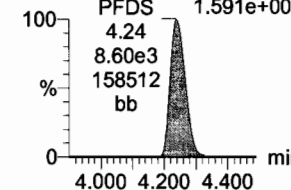
F48:MRM of 2 channels,ES-
584.2 > 483
2.383e+004



F43:MRM of 2 channels,ES-
562.9 > 269
2.718e+005

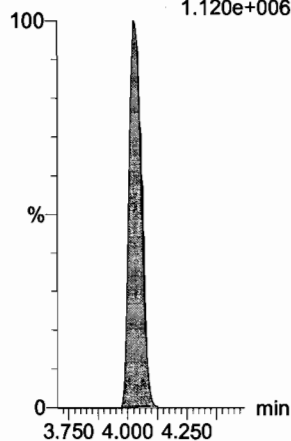


F50:MRM of 2 channels,ES-
598.9 > 80
1.591e+005



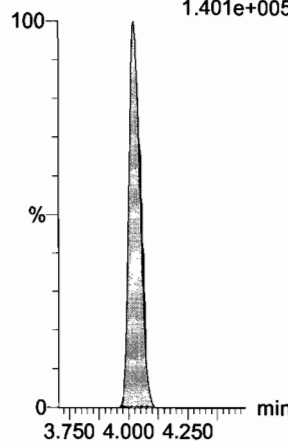
13C2-PFDA

F36:MRM of 1 channel,ES-
515.1 > 469.9
1.120e+006



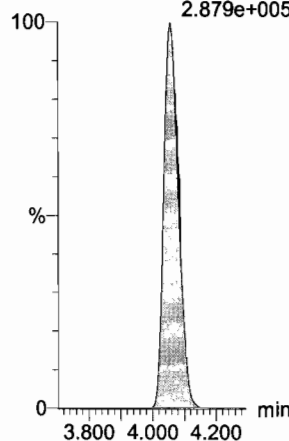
13C2-8:2 FTS

F41:MRM of 1 channel,ES-
529.1 > 508.7
1.401e+005



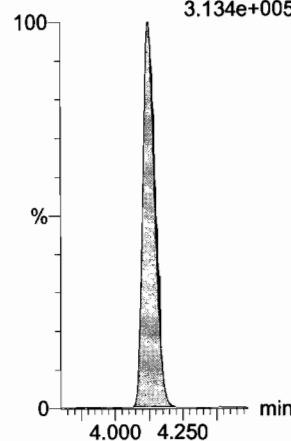
d3-N-MeFOSAA

F47:MRM of 1 channel,ES-
573.3 > 419
2.879e+005



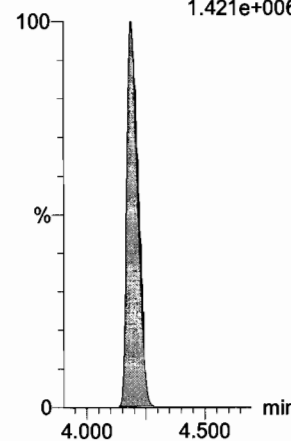
d5-N-EtFOSAA

F49:MRM of 1 channel,ES-
589.3 > 419
3.134e+005



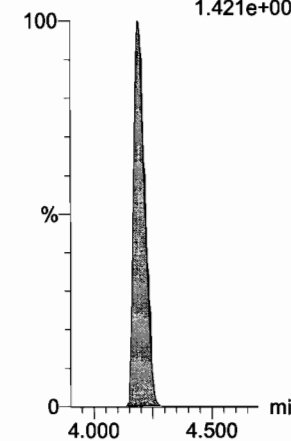
13C2-PFUnA

F44:MRM of 1 channel,ES-
565 > 519.8
1.421e+006



13C2-PFUnA

F44:MRM of 1 channel,ES-
565 > 519.8
1.421e+006



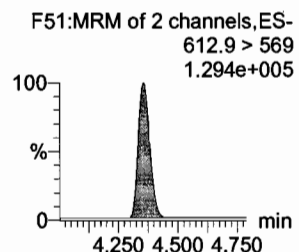
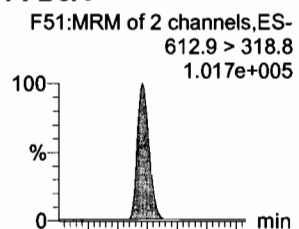
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Last Altered: Wednesday, July 26, 2017 09:54:41 Pacific Daylight Time

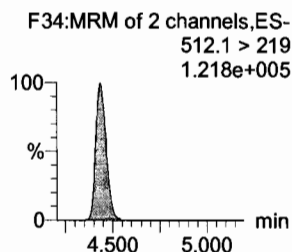
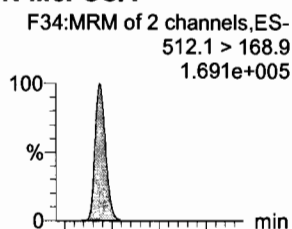
Printed: Wednesday, July 26, 2017 09:55:08 Pacific Daylight Time

Name: 170725M1_33, Date: 25-Jul-2017, Time: 20:00:29, ID: ST170725M1-3 PFC CS3 17G2503, Description: PFC CS3 17G2503

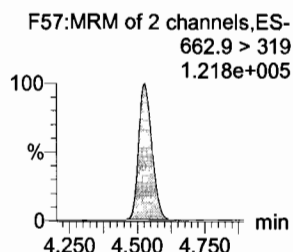
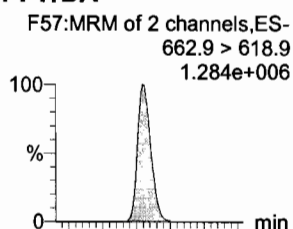
PFDaA



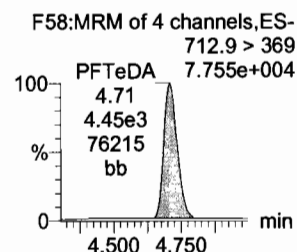
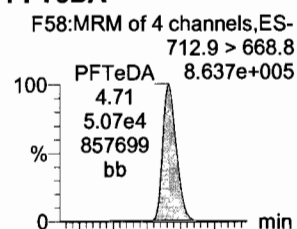
N-MeFOSA



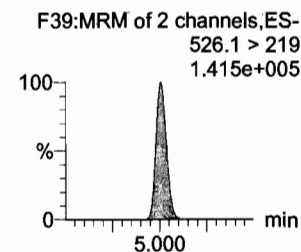
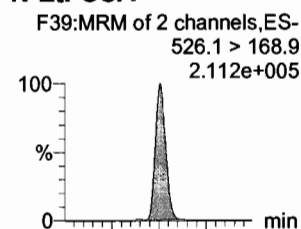
PFTrDA



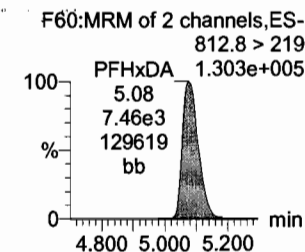
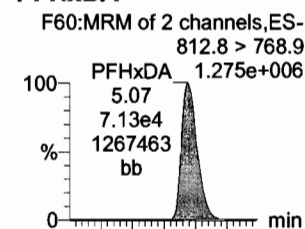
PFTeDA



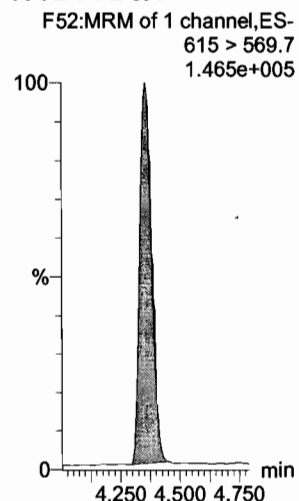
N-EtFOSA



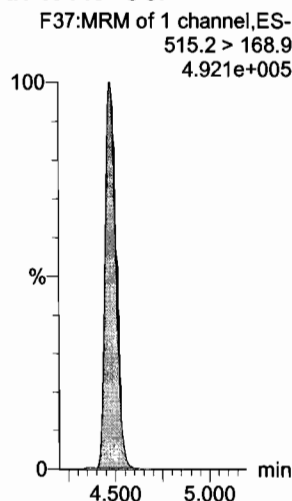
PFHxDA



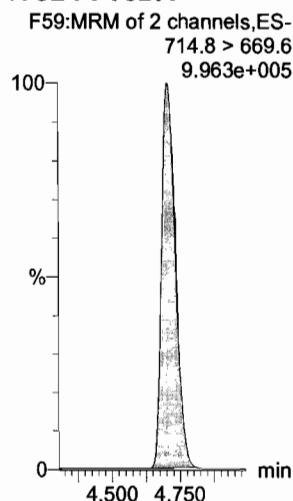
13C2-PFDaA



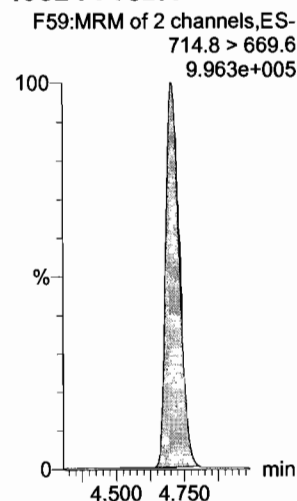
d3-N-MeFOSA



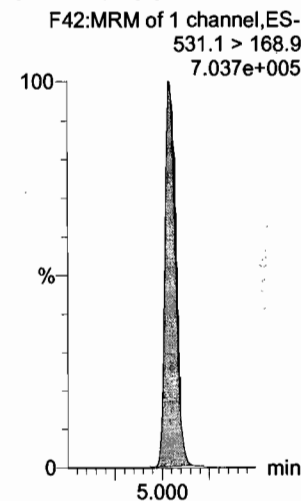
13C2-PFTeDA



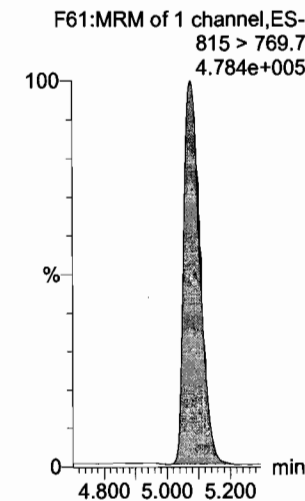
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



Dataset: U:\Q4.PRO\results\170725M1\170725M1-33.qld

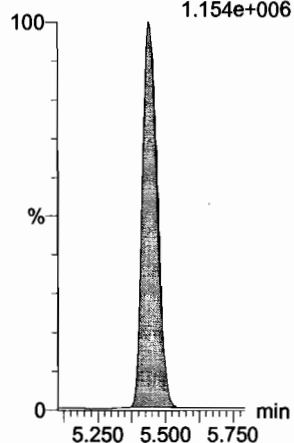
Last Altered: Wednesday, July 26, 2017 09:54:41 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:55:08 Pacific Daylight Time

Name: 170725M1_33, Date: 25-Jul-2017, Time: 20:00:29, ID: ST170725M1-3 PFC CS3 17G2503, Description: PFC CS3 17G2503

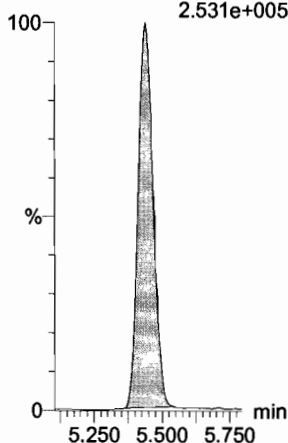
PFODA

F62:MRM of 4 channels,ES-
912.8 > 868.8
1.154e+006



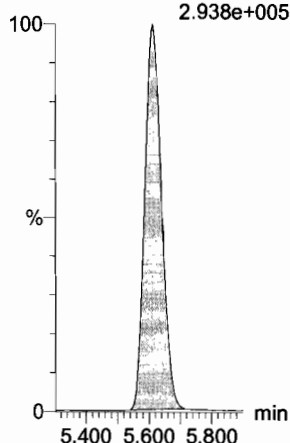
N-MeFOSE

F53:MRM of 1 channel,ES-
616.1 > 58.9
2.531e+005



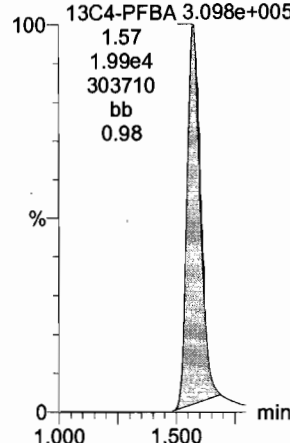
N-EtFOSE

F55:MRM of 1 channel,ES-
630.1 > 58.9
2.938e+005



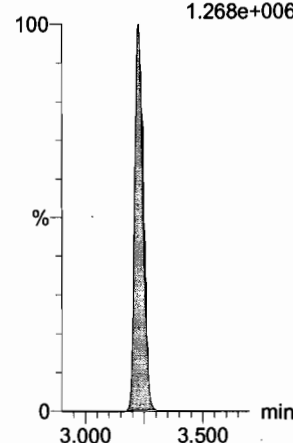
13C4-PFBA

F3:MRM of 1 channel,ES-
217 > 171.8
13C4-PFBA 3.098e+005
1.57
1.99e4
303710
bb
0.98



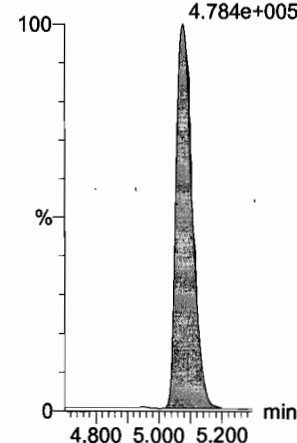
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
1.268e+006



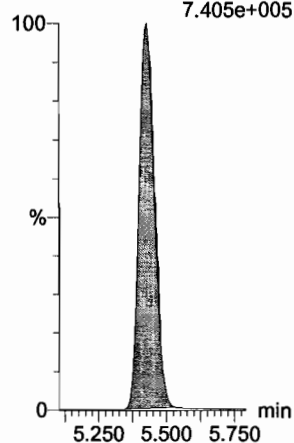
13C2-PFHxDA

F61:MRM of 1 channel,ES-
815 > 769.7
4.784e+005



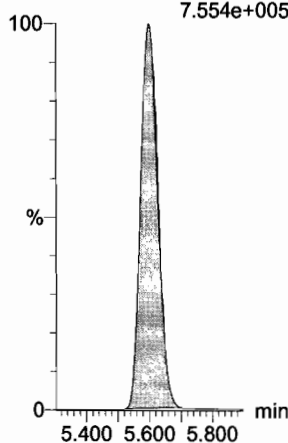
d7-N-MeFOSE

F54:MRM of 1 channel,ES-
623.1 > 58.9
7.405e+005



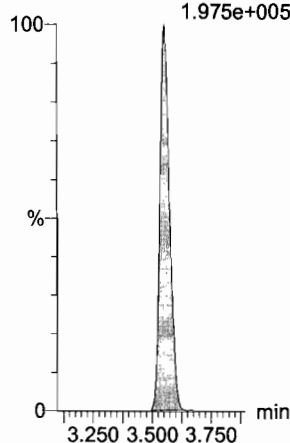
d9-N-EtFOSE

F56:MRM of 1 channel,ES-
639.2 > 58.8
7.554e+005



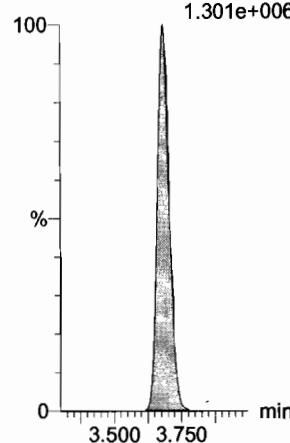
13C3-PFHxS

F17:MRM of 1 channel,ES-
401.9 > 79.9
1.975e+005



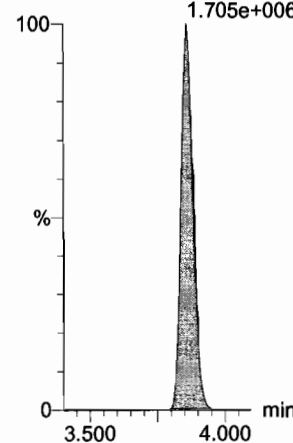
13C8-PFOA

F21:MRM of 1 channel,ES-
421.3 > 376
1.301e+006



13C9-PFNA

F27:MRM of 1 channel,ES-
472.2 > 426.9
1.705e+006



Dataset: U:\Q4.PRO\results\170725M1\170725M1-33.qld

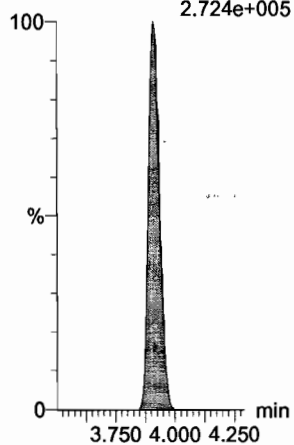
Last Altered: Wednesday, July 26, 2017 09:54:41 Pacific Daylight Time

Printed: Wednesday, July 26, 2017 09:55:08 Pacific Daylight Time

Name: 170725M1_33, Date: 25-Jul-2017, Time: 20:00:29, ID: ST170725M1-3 PFC CS3 17G2503, Description: PFC CS3 17G2503

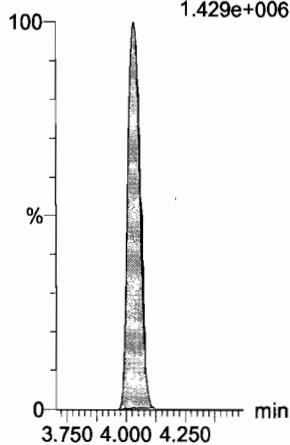
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
2.724e+005



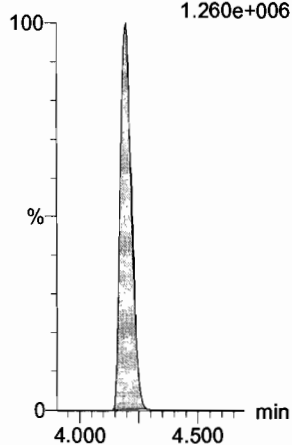
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
1.429e+006



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
1.260e+006



INITIAL CALIBRATION

Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:40:40 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 24 Jul 2017 15:22:13

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Compound name: PFBA

Correlation coefficient: $r = 0.999644$, $r^2 = 0.999287$

Calibration curve: $1.1275 * x + 0.163356$

Response type: Internal Std (Ref 28), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

AC
7/24/17
Keli 7/24/17

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	1.55	407.719	12354.435	0.413	0.2	-11.6	NO	0.999	NO	bb
2	2 170724M1_4	Standard	0.500	1.55	682.657	12177.060	0.701	0.5	-4.7	NO	0.999	NO	bb
3	3 170724M1_5	Standard	1.000	1.55	1308.852	12151.235	1.346	1.0	4.9	NO	0.999	NO	bb
4	4 170724M1_6	Standard	2.000	1.55	2608.698	12859.778	2.536	2.1	5.2	NO	0.999	NO	bb
5	5 170724M1_7	Standard	5.000	1.55	6350.984	12263.796	6.473	5.6	11.9	NO	0.999	NO	bb
6	6 170724M1_8	Standard	10.000	1.55	11274.906	12983.228	10.855	9.5	-5.2	NO	0.999	NO	bb
7	7 170724M1_9	Standard	50.000	1.55	55148.398	12298.162	56.053	49.6	-0.9	NO	0.999	NO	bb
8	8 170724M1_10	Standard	100.000	1.57	109673.492	12111.065	113.196	100.2	0.2	NO	0.999	NO	bb

Compound name: PFPeA

Correlation coefficient: $r = 0.999528$, $r^2 = 0.999056$

Calibration curve: $0.99208 * x + 0.104629$

Response type: Internal Std (Ref 29), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	2.80	607.592	24708.574	0.307	0.2	-18.3	NO	0.999	NO	bb
2	2 170724M1_4	Standard	0.500	2.80	1138.424	24374.584	0.584	0.5	-3.4	NO	0.999	NO	bb
3	3 170724M1_5	Standard	1.000	2.80	2230.288	24321.555	1.146	1.0	5.0	NO	0.999	NO	bb
4	4 170724M1_6	Standard	2.000	2.80	4575.088	25826.396	2.214	2.1	6.3	NO	0.999	NO	bb
5	5 170724M1_7	Standard	5.000	2.80	11044.060	24387.125	5.661	5.6	12.0	NO	0.999	NO	bb
6	6 170724M1_8	Standard	10.000	2.81	20066.025	25621.486	9.790	9.8	-2.4	NO	0.999	NO	bb
7	7 170724M1_9	Standard	50.000	2.80	97100.672	23859.781	50.870	51.2	2.3	NO	0.999	NO	bb
8	8 170724M1_10	Standard	100.000	2.81	190500.000	24378.607	97.678	98.4	-1.6	NO	0.999	NO	bb

Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:40:40 Pacific Daylight Time

Compound name: PFBS

Correlation coefficient: $r = 0.999611$, $r^2 = 0.999223$

Calibration curve: $1.85223 * x + 0.0752948$

Response type: Internal Std (Ref 30), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	0.250	3.00	116.281	3068.403	0.474	0.2	-14.0	NO	0.999	NO	bb
2	2	170724M1_4	Standard	0.500	3.00	214.965	3020.354	0.890	0.4	-12.1	NO	0.999	NO	MM
3	3	170724M1_5	Standard	1.000	2.99	512.501	3001.774	2.134	1.1	11.2	NO	0.999	NO	bb
4	4	170724M1_6	Standard	2.000	3.00	1085.602	3295.993	4.117	2.2	9.1	NO	0.999	NO	bb
5	5	170724M1_7	Standard	5.000	3.00	2583.207	3132.764	10.307	5.5	10.5	NO	0.999	NO	bb
6	6	170724M1_8	Standard	10.000	3.00	4677.829	3302.426	17.706	9.5	-4.8	NO	0.999	NO	bb
7	7	170724M1_9	Standard	50.000	3.00	22355.119	2994.649	93.313	50.3	0.7	NO	0.999	NO	bb
8	8	170724M1_10	Standard	100.000	3.00	43420.234	2946.134	184.225	99.4	-0.6	NO	0.999	NO	bb

Compound name: PFHxA

Correlation coefficient: $r = 0.999648$, $r^2 = 0.999296$

Calibration curve: $1.50967 * x + 0.157344$

Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	0.250	3.22	1079.404	11341.955	0.476	0.2	-15.6	NO	0.999	NO	bb
2	2	170724M1_4	Standard	0.500	3.22	1906.946	10636.292	0.896	0.5	-2.1	NO	0.999	NO	bb
3	3	170724M1_5	Standard	1.000	3.22	3807.136	10865.864	1.752	1.1	5.6	NO	0.999	NO	db
4	4	170724M1_6	Standard	2.000	3.22	7912.540	12006.801	3.295	2.1	3.9	NO	0.999	NO	bb
5	5	170724M1_7	Standard	5.000	3.22	18325.188	10585.094	8.656	5.6	12.6	NO	0.999	NO	bb
6	6	170724M1_8	Standard	10.000	3.22	34348.887	11649.966	14.742	9.7	-3.4	NO	0.999	NO	bb
7	7	170724M1_9	Standard	50.000	3.22	154915.125	10379.170	74.628	49.3	-1.3	NO	0.999	NO	bb
8	8	170724M1_10	Standard	100.000	3.22	320392.531	10569.161	151.570	100.3	0.3	NO	0.999	NO	bb

Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:40:40 Pacific Daylight Time

Compound name: PFHpA

Correlation coefficient: $r = 0.999811$, $r^2 = 0.999621$

Calibration curve: $1.25322 * x + 0.0796155$

Response type: Internal Std (Ref 32), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	3.47	835.892	29540.787	0.354	0.2	-12.5	NO	1.000	NO	bb
2	2 170724M1_4	Standard	0.500	3.48	1686.437	28831.211	0.731	0.5	4.0	NO	1.000	NO	db
3	3 170724M1_5	Standard	1.000	3.48	3129.354	30065.992	1.301	1.0	-2.5	NO	1.000	NO	bb
4	4 170724M1_6	Standard	2.000	3.48	6923.302	31499.152	2.747	2.1	6.4	NO	1.000	NO	bb
5	5 170724M1_7	Standard	5.000	3.48	17221.189	31478.633	6.838	5.4	7.9	NO	1.000	NO	bb
6	6 170724M1_8	Standard	10.000	3.48	32050.246	32505.703	12.325	9.8	-2.3	NO	1.000	NO	bb
7	7 170724M1_9	Standard	50.000	3.48	148752.578	30043.684	61.890	49.3	-1.4	NO	1.000	NO	bb
8	8 170724M1_10	Standard	100.000	3.48	294885.219	29270.332	125.932	100.4	0.4	NO	1.000	NO	bb

Compound name: PFHxS

Coefficient of Determination: $R^2 = 0.999711$

Calibration curve: $-0.00151846 * x^2 + 1.70838 * x + -0.0114403$

Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	3.56	73.733	2957.523	0.312	0.2	-24.3	NO	1.000	NO	MM
2	2 170724M1_4	Standard	0.500	3.55	233.030	2945.944	0.989	0.6	17.2	NO	1.000	NO	bb
3	3 170724M1_5	Standard	1.000	3.55	387.605	2882.763	1.681	1.0	-0.9	NO	1.000	NO	bb
4	4 170724M1_6	Standard	2.000	3.55	883.679	3069.216	3.599	2.1	5.9	NO	1.000	NO	bb
5	5 170724M1_7	Standard	5.000	3.55	2121.650	3078.477	8.615	5.1	1.4	NO	1.000	NO	MM
6	6 170724M1_8	Standard	10.000	3.55	3757.863	2827.577	16.613	9.8	-1.8	NO	1.000	NO	MM
7	7 170724M1_9	Standard	50.000	3.55	19494.768	2990.466	81.487	49.9	-0.2	NO	1.000	NO	MM
8	8 170724M1_10	Standard	100.000	3.55	36940.883	2965.238	155.725	100.1	0.1	NO	1.000	NO	bb

Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

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Compound name: 6:2 FTS

Coefficient of Determination: $R^2 = 0.997533$

Calibration curve: $-0.00313053 * x^2 + 1.07473 * x + 0.134469$

Response type: Internal Std (Ref 34), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	3.67	204.440	7589.777	0.337	0.2	-24.7	NO	0.998	NO	bb
2	2 170724M1_4	Standard	0.500	3.67	400.907	7687.979	0.652	0.5	-3.6	NO	0.998	NO	bb
3	3 170724M1_5	Standard	1.000	3.67	747.740	7427.477	1.258	1.0	4.9	NO	0.998	NO	bb
4	4 170724M1_6	Standard	2.000	3.66	1573.173	7868.375	2.499	2.2	10.7	NO	0.998	NO	bb
5	5 170724M1_7	Standard	5.000	3.66	3802.596	7544.070	6.301	5.8	16.7	NO	0.998	NO	bb
6	6 170724M1_8	Standard	10.000	3.67	6777.476	8079.142	10.486	9.9	-0.8	NO	0.998	NO	bb
7	7 170724M1_9	Standard	50.000	3.67	31001.344	8775.410	44.159	47.5	-4.9	NO	0.998	NO	bb
8	8 170724M1_10	Standard	100.000	3.66	59887.281	9696.150	77.205	102.0	2.0	NO	0.998	NO	bb

Compound name: PFOA

Correlation coefficient: $r = 0.999233$, $r^2 = 0.998466$

Calibration curve: $0.970801 * x + 0.199778$

Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	3.67	1654.212	55437.824	0.373	0.2	-28.6	NO	0.998	NO	bb
2	2 170724M1_4	Standard	0.500	3.67	2766.273	52853.566	0.654	0.5	-6.4	NO	0.998	NO	bb
3	3 170724M1_5	Standard	1.000	3.67	5264.665	53444.164	1.231	1.1	6.3	NO	0.998	NO	bb
4	4 170724M1_6	Standard	2.000	3.68	10233.177	55652.324	2.298	2.2	8.1	NO	0.998	NO	bb
5	5 170724M1_7	Standard	5.000	3.68	26080.451	55510.707	5.873	5.8	16.9	NO	0.998	NO	bb
6	6 170724M1_8	Standard	10.000	3.68	45105.969	54392.293	10.366	10.5	4.7	NO	0.998	NO	bb
7	7 170724M1_9	Standard	50.000	3.67	220048.344	55876.563	49.226	50.5	1.0	NO	0.998	NO	bb
8	8 170724M1_10	Standard	100.000	3.68	421252.813	55196.383	95.399	98.1	-1.9	NO	0.998	NO	bb

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Compound name: PFHpS

Correlation coefficient: $r = 0.999150$, $r^2 = 0.998301$

Calibration curve: $0.0887442 * x + 0.014645$

Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	3.74	113.671	55437.824	0.026	0.1	-50.5	NO	0.998	NO	bbX
2	2 170724M1_4	Standard	0.500	3.74	222.089	52853.566	0.053	0.4	-14.6	NO	0.998	NO	bb
3	3 170724M1_5	Standard	1.000	3.73	522.454	53444.164	0.122	1.2	21.2	NO	0.998	NO	bb
4	4 170724M1_6	Standard	2.000	3.74	936.558	55652.324	0.210	2.2	10.3	NO	0.998	NO	bb
5	5 170724M1_7	Standard	5.000	3.73	2346.630	55510.707	0.528	5.8	15.8	NO	0.998	NO	bb
6	6 170724M1_8	Standard	10.000	3.74	4004.412	54392.293	0.920	10.2	2.0	NO	0.998	NO	bb
7	7 170724M1_9	Standard	50.000	3.74	19773.092	55876.563	4.423	49.7	-0.6	NO	0.998	NO	bb
8	8 170724M1_10	Standard	100.000	3.74	38852.836	55196.383	8.799	99.0	-1.0	NO	0.998	NO	bb

Compound name: PFNA

Correlation coefficient: $r = 0.998659$, $r^2 = 0.997320$

Calibration curve: $1.09835 * x + 0.147218$

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	3.85	1506.464	55001.828	0.342	0.2	-28.9	NO	0.997	NO	MM
2	2 170724M1_4	Standard	0.500	3.85	2694.965	54762.438	0.615	0.4	-14.8	NO	0.997	NO	bb
3	3 170724M1_5	Standard	1.000	3.85	5691.902	55321.512	1.286	1.0	3.7	NO	0.997	NO	bb
4	4 170724M1_6	Standard	2.000	3.85	12559.827	59225.996	2.651	2.3	14.0	NO	0.997	NO	bb
5	5 170724M1_7	Standard	5.000	3.85	29286.219	53341.520	6.863	6.1	22.3	NO	0.997	NO	bb
6	6 170724M1_8	Standard	10.000	3.85	53683.984	56161.168	11.949	10.7	7.4	NO	0.997	NO	bb
7	7 170724M1_9	Standard	50.000	3.85	236461.688	55495.742	53.261	48.4	-3.3	NO	0.997	NO	bb
8	8 170724M1_10	Standard	100.000	3.85	475993.000	54308.789	109.557	99.6	-0.4	NO	0.997	NO	bb

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Compound name: PFOSA

Correlation coefficient: $r = 0.998808$, $r^2 = 0.997616$

Calibration curve: $1.0493 * x + 0.0489398$

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	3.86	163.860	6633.945	0.309	0.2	-1.0	NO	0.998	NO	bb
2	2 170724M1_4	Standard	0.500	3.85	301.866	6613.513	0.571	0.5	-0.6	NO	0.998	NO	bb
3	3 170724M1_5	Standard	1.000	3.85	477.914	6491.109	0.920	0.8	-17.0	NO	0.998	NO	bb
4	4 170724M1_6	Standard	2.000	3.86	1315.264	7021.902	2.341	2.2	9.2	NO	0.998	NO	bb
5	5 170724M1_7	Standard	5.000	3.86	2927.381	6519.732	5.613	5.3	6.0	NO	0.998	NO	bb
6	6 170724M1_8	Standard	10.000	3.86	5570.263	6576.866	10.587	10.0	0.4	NO	0.998	NO	bb
7	7 170724M1_9	Standard	50.000	3.86	26459.754	5926.425	55.809	53.1	6.3	NO	0.998	NO	bb
8	8 170724M1_10	Standard	100.000	3.86	50171.699	6190.267	101.312	96.5	-3.5	NO	0.998	NO	bb

Compound name: PFOS

Coefficient of Determination: $R^2 = 0.999148$

Calibration curve: $-0.00122032 * x^2 + 1.19038 * x + 0.0183073$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	3.90	300.610	10711.932	0.351	0.3	11.8	NO	0.999	NO	MM
2	2 170724M1_4	Standard	0.500	3.90	466.042	10010.674	0.582	0.5	-5.3	NO	0.999	NO	bb
3	3 170724M1_5	Standard	1.000	3.90	1032.724	10207.536	1.265	1.0	4.8	NO	0.999	NO	MM
4	4 170724M1_6	Standard	2.000	3.90	1981.837	10715.066	2.312	1.9	-3.5	NO	0.999	NO	MM
5	5 170724M1_7	Standard	5.000	3.90	5099.578	10217.659	6.239	5.3	5.1	NO	0.999	NO	bb
6	6 170724M1_8	Standard	10.000	3.90	8336.075	9647.514	10.801	9.1	-8.6	NO	0.999	NO	bb
7	7 170724M1_9	Standard	50.000	3.91	43091.355	9325.974	57.757	51.2	2.4	NO	0.999	NO	bb
8	8 170724M1_10	Standard	100.000	3.90	78910.156	9278.883	106.303	99.4	-0.6	NO	0.999	NO	bb

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Compound name: PFDA

Correlation coefficient: $r = 0.999397$, $r^2 = 0.998795$

Calibration curve: $1.29731 * x + 0.128184$

Response type: Internal Std (Ref 39), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	4.02	1671.759	55156.438	0.379	0.2	-22.7	NO	0.999	NO	bb
2	2 170724M1_4	Standard	0.500	4.02	3226.587	49449.902	0.816	0.5	6.0	NO	0.999	NO	bb
3	3 170724M1_5	Standard	1.000	4.02	6606.647	59736.465	1.382	1.0	-3.3	NO	0.999	NO	db
4	4 170724M1_6	Standard	2.000	4.02	14672.154	61862.684	2.965	2.2	9.3	NO	0.999	NO	bb
5	5 170724M1_7	Standard	5.000	4.02	32741.914	53915.461	7.591	5.8	15.1	NO	0.999	NO	bb
6	6 170724M1_8	Standard	10.000	4.02	60142.156	58734.430	12.800	9.8	-2.3	NO	0.999	NO	bb
7	7 170724M1_9	Standard	50.000	4.03	291430.906	57610.250	63.233	48.6	-2.7	NO	0.999	NO	bb
8	8 170724M1_10	Standard	100.000	4.02	519240.375	49628.984	130.781	100.7	0.7	NO	0.999	NO	bb

Compound name: 8:2 FTS

Coefficient of Determination: $R^2 = 0.996738$

Calibration curve: $-0.00420182 * x^2 + 1.49722 * x + 0.133523$

Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	4.01	116.059	5712.626	0.254	0.1	-67.8	NO	0.997	NO	bbX
2	2 170724M1_4	Standard	0.500	4.02	436.336	5926.817	0.920	0.5	5.2	NO	0.997	NO	bb
3	3 170724M1_5	Standard	1.000	4.01	704.575	5605.082	1.571	1.0	-3.7	NO	0.997	NO	bb
4	4 170724M1_6	Standard	2.000	4.01	1467.688	6033.180	3.041	2.0	-2.4	NO	0.997	NO	bb
5	5 170724M1_7	Standard	5.000	4.02	3942.699	5463.454	9.021	6.0	20.8	NO	0.997	NO	bb
6	6 170724M1_8	Standard	10.000	4.02	6715.274	5614.961	14.950	10.2	1.9	NO	0.997	NO	bb
7	7 170724M1_9	Standard	50.000	4.02	29821.402	6078.795	61.323	47.1	-5.8	NO	0.997	NO	bb
8	8 170724M1_10	Standard	100.000	4.02	56335.957	6441.568	109.321	102.3	2.3	NO	0.997	NO	bb

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Compound name: N-MeFOSAA

Coefficient of Determination: $R^2 = 0.999848$

Calibration curve: $-0.0104077 * x^2 + 19.9194 * x + 0.547687$

Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc.	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	4.05	448.925	12099.400	6.029	0.3	10.1	NO	1.000	NO	bb
2	2 170724M1_4	Standard	0.500	4.05	716.809	11504.973	10.124	0.5	-3.8	NO	1.000	NO	bb
3	3 170724M1_5	Standard	1.000	4.06	1261.768	11265.637	18.200	0.9	-11.3	NO	1.000	NO	bb
4	4 170724M1_6	Standard	2.000	4.05	3173.830	12505.027	41.243	2.0	2.3	NO	1.000	NO	bb
5	5 170724M1_7	Standard	5.000	4.05	7648.363	12072.939	102.946	5.2	3.1	NO	1.000	NO	bb
6	6 170724M1_8	Standard	10.000	4.05	14431.390	11803.941	198.671	10.0	-0.0	NO	1.000	NO	bb
7	7 170724M1_9	Standard	50.000	4.05	69860.063	11737.307	967.195	49.8	-0.3	NO	1.000	NO	bb
8	8 170724M1_10	Standard	100.000	4.05	130379.672	11210.404	1889.914	100.1	0.1	NO	1.000	NO	bb

Compound name: N-EtFOSAA

Coefficient of Determination: $R^2 = 0.999908$

Calibration curve: $-0.00439744 * x^2 + 16.1657 * x + 0.0580373$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc.	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	4.12	300.173	12172.007	4.007	0.2	-2.3	NO	1.000	NO	bb
2	2 170724M1_4	Standard	0.500	4.12	550.297	11615.228	7.699	0.5	-5.5	NO	1.000	NO	bb
3	3 170724M1_5	Standard	1.000	4.12	1245.830	11653.344	17.372	1.1	7.1	NO	1.000	NO	bb
4	4 170724M1_6	Standard	2.000	4.12	2483.220	12504.510	32.270	2.0	-0.3	NO	1.000	NO	bb
5	5 170724M1_7	Standard	5.000	4.12	6280.812	12228.059	83.466	5.2	3.3	NO	1.000	NO	bb
6	6 170724M1_8	Standard	10.000	4.12	12176.978	12339.168	160.364	9.9	-0.6	NO	1.000	NO	bb
7	7 170724M1_9	Standard	50.000	4.12	57061.832	11695.135	792.855	49.7	-0.6	NO	1.000	NO	bb
8	8 170724M1_10	Standard	100.000	4.12	112917.555	11651.338	1574.849	100.1	0.1	NO	1.000	NO	bb

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Compound name: PFUnA

Coefficient of Determination: $R^2 = 0.998430$

Calibration curve: $-0.0020331 * x^2 + 0.901478 * x + 0.00751751$

Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	4.18	1408.556	65735.461	0.268	0.3	15.6	NO	0.998	NO	bb
2	2 170724M1_4	Standard	0.500	4.19	2456.148	63870.914	0.481	0.5	5.1	NO	0.998	NO	bb
3	3 170724M1_5	Standard	1.000	4.19	4367.807	64348.984	0.848	0.9	-6.5	NO	0.998	NO	bb
4	4 170724M1_6	Standard	2.000	4.19	9271.418	67160.539	1.726	1.9	-4.3	NO	0.998	NO	bb
5	5 170724M1_7	Standard	5.000	4.19	22206.646	66089.180	4.200	4.7	-6.0	NO	0.998	NO	bb
6	6 170724M1_8	Standard	10.000	4.19	40104.945	61335.543	8.173	9.3	-7.5	NO	0.998	NO	bb
7	7 170724M1_9	Standard	50.000	4.19	187190.781	55960.629	41.813	52.6	5.2	NO	0.998	NO	bb
8	8 170724M1_10	Standard	100.000	4.19	357250.000	64722.215	68.997	98.3	-1.7	NO	0.998	NO	bb

Compound name: PFDS

Coefficient of Determination: $R^2 = 0.998889$

Calibration curve: $-0.000220781 * x^2 + 0.0914068 * x + -0.00228704$

Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	4.24	125.500	65735.461	0.024	0.3	14.5	NO	0.999	NO	bb
2	2 170724M1_4	Standard	0.500	4.24	213.650	63870.914	0.042	0.5	-3.4	NO	0.999	NO	MM
3	3 170724M1_5	Standard	1.000	4.23	432.153	64348.984	0.084	0.9	-5.4	NO	0.999	NO	bb
4	4 170724M1_6	Standard	2.000	4.24	998.163	67160.539	0.186	2.1	3.4	NO	0.999	NO	bb
5	5 170724M1_7	Standard	5.000	4.23	2251.549	66089.180	0.426	4.7	-5.2	NO	0.999	NO	bb
6	6 170724M1_8	Standard	10.000	4.23	4080.028	61335.543	0.831	9.3	-6.7	NO	0.999	NO	bb
7	7 170724M1_9	Standard	50.000	4.24	18621.564	55960.629	4.160	52.1	4.2	NO	0.999	NO	bb
8	8 170724M1_10	Standard	100.000	4.23	35549.465	64722.215	6.866	98.6	-1.4	NO	0.999	NO	bb

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Compound name: PFDaA

Coefficient of Determination: $R^2 = 0.999700$

Calibration curve: $-0.000446703 * x^2 + 0.926687 * x + 0.203454$

Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	4.34	212.884	6396.985	0.416	0.2	-8.3	NO	1.000	NO	MM
2	2 170724M1_4	Standard	0.500	4.35	285.030	5632.353	0.633	0.5	-7.4	NO	1.000	NO	MM
3	3 170724M1_5	Standard	1.000	4.35	576.941	5998.723	1.202	1.1	7.8	NO	1.000	NO	bb
4	4 170724M1_6	Standard	2.000	4.35	1144.260	6584.378	2.172	2.1	6.3	NO	1.000	NO	bb
5	5 170724M1_7	Standard	5.000	4.35	2601.126	6419.244	5.065	5.3	5.2	NO	1.000	NO	bb
6	6 170724M1_8	Standard	10.000	4.35	4871.013	6690.135	9.101	9.6	-3.5	NO	1.000	NO	bb
7	7 170724M1_9	Standard	50.000	4.35	21850.346	6031.607	45.283	49.8	-0.3	NO	1.000	NO	bb
8	8 170724M1_10	Standard	100.000	4.35	43781.789	6184.443	88.492	100.1	0.1	NO	1.000	NO	bb

Compound name: N-MeFOSA

Correlation coefficient: $r = 0.999273$, $r^2 = 0.998546$

Calibration curve: $1.0376 * x + 0.213391$

Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	1.250	4.39	228.733	27834.387	1.233	1.0	-21.4	NO	0.999	NO	MM
2	2 170724M1_4	Standard	2.500	4.39	521.665	26795.877	2.920	2.6	4.3	NO	0.999	NO	db
3	3 170724M1_5	Standard	5.000	4.39	1023.477	27001.328	5.686	5.3	5.5	NO	0.999	NO	bb
4	4 170724M1_6	Standard	10.000	4.39	2219.793	28178.129	11.817	11.2	11.8	NO	0.999	NO	bb
5	5 170724M1_7	Standard	25.000	4.39	5367.556	27075.477	29.737	28.5	13.8	NO	0.999	NO	bb
6	6 170724M1_8	Standard	50.000	4.39	9739.016	27395.363	53.325	51.2	2.4	NO	0.999	NO	db
7	7 170724M1_9	Standard	250.000	4.39	46919.371	26470.068	265.882	256.0	2.4	NO	0.999	NO	bb
8	8 170724M1_10	Standard	500.000	4.39	92806.148	27480.182	506.580	488.0	-2.4	NO	0.999	NO	bb

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Compound name: PFT_rDA

Correlation coefficient: $r = 0.999414$, $r^2 = 0.998828$

Calibration curve: $10.9255 * x + 1.79$

Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	0.250	4.52	1936.804	6396.985	3.785	0.2	-27.0	NO	0.999	NO	MM
2	2	170724M1_4	Standard	0.500	4.52	3347.446	5632.353	7.429	0.5	3.2	NO	0.999	NO	bb
3	3	170724M1_5	Standard	1.000	4.52	6246.435	5998.723	13.016	1.0	2.8	NO	0.999	NO	bb
4	4	170724M1_6	Standard	2.000	4.52	13537.021	6584.378	25.699	2.2	9.4	NO	0.999	NO	bb
5	5	170724M1_7	Standard	5.000	4.52	32633.807	6419.244	63.547	5.7	13.1	NO	0.999	NO	bb
6	6	170724M1_8	Standard	10.000	4.52	58224.531	6690.135	108.788	9.8	-2.1	NO	0.999	NO	bb
7	7	170724M1_9	Standard	50.000	4.52	270796.875	6031.607	561.204	51.2	2.4	NO	0.999	NO	bb
8	8	170724M1_10	Standard	100.000	4.52	531631.563	6184.443	1074.534	98.2	-1.8	NO	0.999	NO	bb

Compound name: PFT_eDA

Coefficient of Determination: $R^2 = 0.999057$

Calibration curve: $-0.000800394 * x^2 + 1.14875 * x + 0.111533$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	0.250	4.70	1552.113	52611.504	0.369	0.2	-10.4	NO	0.999	NO	MM
2	2	170724M1_4	Standard	0.500	4.70	2285.720	43220.855	0.661	0.5	-4.3	NO	0.999	NO	bb
3	3	170724M1_5	Standard	1.000	4.70	4798.681	44254.344	1.355	1.1	8.4	NO	0.999	NO	bb
4	4	170724M1_6	Standard	2.000	4.70	9477.179	47041.410	2.518	2.1	4.9	NO	0.999	NO	bb
5	5	170724M1_7	Standard	5.000	4.70	23144.785	45392.488	6.374	5.5	9.4	NO	0.999	NO	bb
6	6	170724M1_8	Standard	10.000	4.70	40819.449	48426.250	10.536	9.1	-8.7	NO	0.999	NO	bb
7	7	170724M1_9	Standard	50.000	4.70	191033.828	42647.246	55.992	50.4	0.8	NO	0.999	NO	bb
8	8	170724M1_10	Standard	100.000	4.70	370959.375	43405.691	106.829	99.8	-0.2	NO	0.999	NO	bb

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Compound name: N-EtFOSA

Correlation coefficient: $r = 0.999689$, $r^2 = 0.999377$

Calibration curve: $0.904115 * x + 0.326191$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	1.250	4.96	337.684	39437.277	1.284	1.1	-15.2	NO	0.999	NO	bb
2	2 170724M1_4	Standard	2.500	4.97	613.630	37412.609	2.460	2.4	-5.6	NO	0.999	NO	bb
3	3 170724M1_5	Standard	5.000	4.97	1267.991	37050.801	5.133	5.3	6.3	NO	0.999	NO	bb
4	4 170724M1_6	Standard	10.000	4.96	2697.465	40104.539	10.089	10.8	8.0	NO	0.999	NO	bb
5	5 170724M1_7	Standard	25.000	4.97	6431.737	38083.547	25.333	27.7	10.6	NO	0.999	NO	bb
6	6 170724M1_8	Standard	50.000	4.97	11627.879	39916.621	43.696	48.0	-4.1	NO	0.999	NO	db
7	7 170724M1_9	Standard	250.000	4.96	57443.004	37926.309	227.189	250.9	0.4	NO	0.999	NO	db
8	8 170724M1_10	Standard	500.000	4.97	116042.914	38657.641	450.272	497.7	-0.5	NO	0.999	NO	db

Compound name: PFHxDA

Coefficient of Determination: $R^2 = 0.999358$

Calibration curve: $-0.000715061 * x^2 + 1.34773 * x + 0.264398$

Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	5.07	2816.818	25428.396	0.554	0.2	-14.1	NO	0.999	NO	bb
2	2 170724M1_4	Standard	0.500	5.07	3878.399	21542.566	0.900	0.5	-5.6	NO	0.999	NO	bb
3	3 170724M1_5	Standard	1.000	5.07	7068.157	21611.141	1.635	1.0	1.8	NO	0.999	NO	bb
4	4 170724M1_6	Standard	2.000	5.07	14417.972	22044.896	3.270	2.2	11.6	NO	0.999	NO	bb
5	5 170724M1_7	Standard	5.000	5.07	33676.410	22327.822	7.541	5.4	8.3	NO	0.999	NO	bb
6	6 170724M1_8	Standard	10.000	5.07	61493.496	22552.494	13.633	10.0	-0.3	NO	0.999	NO	bb
7	7 170724M1_9	Standard	50.000	5.07	276231.906	21452.613	64.382	48.8	-2.3	NO	0.999	NO	bb
8	8 170724M1_10	Standard	100.000	5.07	545977.438	21228.160	128.597	100.6	0.6	NO	0.999	NO	bb

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Compound name: PFODA

Correlation coefficient: $r = 0.999378$, $r^2 = 0.998756$

Calibration curve: $1.27561 * x + 0.10098$

Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	0.250	5.43	1893.557	25428.396	0.372	0.2	-14.9	NO	0.999	NO	MM
2	2 170724M1_4	Standard	0.500	5.44	3335.536	21542.566	0.774	0.5	5.5	NO	0.999	NO	bb
3	3 170724M1_5	Standard	1.000	5.44	6573.281	21611.141	1.521	1.1	11.3	NO	0.999	NO	bb
4	4 170724M1_6	Standard	2.000	5.44	13511.143	22044.896	3.064	2.3	16.2	NO	0.999	NO	bb
5	5 170724M1_7	Standard	5.000	5.44	32601.881	22327.822	7.301	5.6	12.9	NO	0.999	NO	bb
6	6 170724M1_8	Standard	10.000	5.44	59011.938	22552.494	13.083	10.2	1.8	NO	0.999	NO	bb
7	7 170724M1_9	Standard	50.000	5.43	274924.375	21452.613	64.077	50.2	0.3	NO	0.999	NO	bb
8	8 170724M1_10	Standard	100.000	5.44	534414.688	21228.160	125.874	98.6	-1.4	NO	0.999	NO	bb

Compound name: N-MeFOSE

Correlation coefficient: $r = 0.999476$, $r^2 = 0.998953$

Calibration curve: $1.01603 * x + 0.461771$

Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	1.250	5.43	419.747	45355.609	1.388	0.9	-27.1	NO	0.999	NO	bb
2	2 170724M1_4	Standard	2.500	5.43	827.391	42298.965	2.934	2.4	-2.7	NO	0.999	NO	bb
3	3 170724M1_5	Standard	5.000	5.43	1698.216	42181.715	6.039	5.5	9.8	NO	0.999	NO	bb
4	4 170724M1_6	Standard	10.000	5.43	3509.137	44882.496	11.728	11.1	10.9	NO	0.999	NO	bb
5	5 170724M1_7	Standard	25.000	5.43	8229.911	42480.406	29.060	28.1	12.6	NO	0.999	NO	bb
6	6 170724M1_8	Standard	50.000	5.43	14647.859	44502.430	49.372	48.1	-3.7	NO	0.999	NO	bb
7	7 170724M1_9	Standard	250.000	5.43	72247.016	42011.336	257.955	253.4	1.4	NO	0.999	NO	bb
8	8 170724M1_10	Standard	500.000	5.43	142986.313	42682.813	502.496	494.1	-1.2	NO	0.999	NO	bb

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Compound name: N-EtFOSE

Correlation coefficient: $r = 0.999680$, $r^2 = 0.999361$

Calibration curve: $1.16673 * x + 0.501898$

Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	1.250	5.60	493.408	44922.563	1.648	1.0	-21.4	NO	0.999	NO	bb
2	2 170724M1_4	Standard	2.500	5.61	917.078	40989.961	3.356	2.4	-2.2	NO	0.999	NO	bb
3	3 170724M1_5	Standard	5.000	5.61	1793.908	40752.352	6.603	5.2	4.6	NO	0.999	NO	bb
4	4 170724M1_6	Standard	10.000	5.60	3804.083	43177.285	13.216	10.9	9.0	NO	0.999	NO	bb
5	5 170724M1_7	Standard	25.000	5.61	9310.704	42231.566	33.070	27.9	11.7	NO	0.999	NO	bb
6	6 170724M1_8	Standard	50.000	5.61	16671.494	42902.656	58.288	49.5	-0.9	NO	0.999	NO	bb
7	7 170724M1_9	Standard	250.000	5.60	80911.422	41552.719	292.080	249.9	-0.0	NO	0.999	NO	bb
8	8 170724M1_10	Standard	500.000	5.61	163300.031	42219.305	580.185	496.8	-0.6	NO	0.999	NO	bb

Compound name: 13C3-PFBA

Response Factor: 0.820483

RRF SD: 0.00867593, Relative SD: 1.05742

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	1.54	12354.435	15090.568	10.234	12.5	-0.2	NO		NO	bb
2	2 170724M1_4	Standard	12.500	1.55	12177.060	14962.116	10.173	12.4	-0.8	NO		NO	bb
3	3 170724M1_5	Standard	12.500	1.54	12151.235	14894.126	10.198	12.4	-0.6	NO		NO	bb
4	4 170724M1_6	Standard	12.500	1.55	12859.778	15482.658	10.382	12.7	1.2	NO		NO	bb
5	5 170724M1_7	Standard	12.500	1.55	12263.796	15091.931	10.158	12.4	-1.0	NO		NO	bb
6	6 170724M1_8	Standard	12.500	1.55	12983.228	15599.055	10.404	12.7	1.4	NO		NO	bb
7	7 170724M1_9	Standard	12.500	1.55	12298.162	14839.394	10.359	12.6	1.0	NO		NO	bb
8	8 170724M1_10	Standard	12.500	1.56	12111.065	14929.445	10.140	12.4	-1.1	NO		NO	bb

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Compound name: 13C3-PFPeA

Response Factor: 0.248174

RRF SD: 0.00555735, Relative SD: 2.2393

Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	12.500	2.80	24708.574	40367.738	3.060	12.3	-1.3	NO		NO	bb
2	2	170724M1_4	Standard	12.500	2.80	24374.584	38823.406	3.139	12.6	1.2	NO		NO	bb
3	3	170724M1_5	Standard	12.500	2.80	24321.555	37967.629	3.203	12.9	3.2	NO		NO	bb
4	4	170724M1_6	Standard	12.500	2.80	25826.396	42133.270	3.065	12.3	-1.2	NO		NO	bb
5	5	170724M1_7	Standard	12.500	2.80	24387.125	39088.754	3.119	12.6	0.6	NO		NO	bb
6	6	170724M1_8	Standard	12.500	2.81	25621.486	41725.730	3.070	12.4	-1.0	NO		NO	bb
7	7	170724M1_9	Standard	12.500	2.80	23859.781	39920.477	2.988	12.0	-3.7	NO		NO	bb
8	8	170724M1_10	Standard	12.500	2.81	24378.607	38428.922	3.172	12.8	2.2	NO		NO	bb

Compound name: 13C3-PFBS

Response Factor: 0.0311034

RRF SD: 0.000697979, Relative SD: 2.24406

Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	12.500	3.00	3068.403	40367.738	0.380	12.2	-2.2	NO		NO	bb
2	2	170724M1_4	Standard	12.500	3.00	3020.354	38823.406	0.389	12.5	0.0	NO		NO	bb
3	3	170724M1_5	Standard	12.500	3.00	3001.774	37967.629	0.395	12.7	1.7	NO		NO	bb
4	4	170724M1_6	Standard	12.500	3.00	3295.993	42133.270	0.391	12.6	0.6	NO		NO	bb
5	5	170724M1_7	Standard	12.500	3.00	3132.764	39088.754	0.401	12.9	3.1	NO		NO	bb
6	6	170724M1_8	Standard	12.500	3.00	3302.426	41725.730	0.396	12.7	1.8	NO		NO	bb
7	7	170724M1_9	Standard	12.500	3.00	2994.649	39920.477	0.375	12.1	-3.5	NO		NO	bb
8	8	170724M1_10	Standard	12.500	3.00	2946.134	38428.922	0.383	12.3	-1.4	NO		NO	bb

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Compound name: 13C2-PFHxA

Response Factor: 0.27639

RRF SD: 0.00850433, Relative SD: 3.07693

Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	5.000	3.22	11341.955	40367.738	1.405	5.1	1.7	NO		NO	bb
2	2 170724M1_4	Standard	5.000	3.22	10636.292	38823.406	1.370	5.0	-0.9	NO		NO	bb
3	3 170724M1_5	Standard	5.000	3.22	10865.864	37967.629	1.431	5.2	3.5	NO		NO	bb
4	4 170724M1_6	Standard	5.000	3.22	12006.801	42133.270	1.425	5.2	3.1	NO		NO	bb
5	5 170724M1_7	Standard	5.000	3.22	10585.094	39088.754	1.354	4.9	-2.0	NO		NO	bb
6	6 170724M1_8	Standard	5.000	3.22	11649.966	41725.730	1.396	5.1	1.0	NO		NO	bb
7	7 170724M1_9	Standard	5.000	3.22	10379.170	39920.477	1.300	4.7	-5.9	NO		NO	bb
8	8 170724M1_10	Standard	5.000	3.22	10569.161	38428.922	1.375	5.0	-0.5	NO		NO	bb

Compound name: 13C4-PFHpA

Response Factor: 0.305626

RRF SD: 0.0102637, Relative SD: 3.35826

Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	3.48	29540.787	40367.738	3.659	12.0	-4.2	NO		NO	bb
2	2 170724M1_4	Standard	12.500	3.48	28831.211	38823.406	3.713	12.1	-2.8	NO		NO	bb
3	3 170724M1_5	Standard	12.500	3.48	30065.992	37967.629	3.959	13.0	3.6	NO		NO	bb
4	4 170724M1_6	Standard	12.500	3.48	31499.152	42133.270	3.738	12.2	-2.2	NO		NO	bb
5	5 170724M1_7	Standard	12.500	3.48	31478.633	39088.754	4.027	13.2	5.4	NO		NO	bb
6	6 170724M1_8	Standard	12.500	3.48	32505.703	41725.730	3.895	12.7	2.0	NO		NO	bb
7	7 170724M1_9	Standard	12.500	3.48	30043.684	39920.477	3.763	12.3	-1.5	NO		NO	bb
8	8 170724M1_10	Standard	12.500	3.48	29270.332	38428.922	3.808	12.5	-0.3	NO		NO	bb

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Compound name: 18O2-PFHxS

Response Factor: 0.392715

RRF SD: 0.0177977, Relative SD: 4.53197

Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	3.55	2957.523	7582.089	4.876	12.4	-0.7	NO		NO	bb
2	2 170724M1_4	Standard	12.500	3.55	2945.944	7322.380	5.029	12.8	2.4	NO		NO	bb
3	3 170724M1_5	Standard	12.500	3.55	2882.763	7368.760	4.890	12.5	-0.4	NO		NO	bb
4	4 170724M1_6	Standard	12.500	3.55	3069.216	7556.806	5.077	12.9	3.4	NO		NO	bb
5	5 170724M1_7	Standard	12.500	3.55	3078.477	7669.834	5.017	12.8	2.2	NO		NO	bb
6	6 170724M1_8	Standard	12.500	3.55	2827.577	8056.833	4.387	11.2	-10.6	NO		NO	bb
7	7 170724M1_9	Standard	12.500	3.55	2990.466	7531.759	4.963	12.6	1.1	NO		NO	bb
8	8 170724M1_10	Standard	12.500	3.55	2965.238	7365.456	5.032	12.8	2.5	NO		NO	bb

Compound name: 13C2-6:2 FTS

Response Factor: 0.157694

RRF SD: 0.0188884, Relative SD: 11.9778

Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	3.66	7589.777	50417.762	1.882	11.9	-4.5	NO		NO	bb
2	2 170724M1_4	Standard	12.500	3.66	7687.979	52862.527	1.818	11.5	-7.8	NO		NO	bb
3	3 170724M1_5	Standard	12.500	3.66	7427.477	49459.691	1.877	11.9	-4.8	NO		NO	bb
4	4 170724M1_6	Standard	12.500	3.67	7868.375	51986.957	1.892	12.0	-4.0	NO		NO	bb
5	5 170724M1_7	Standard	12.500	3.66	7544.070	54009.070	1.746	11.1	-11.4	NO		NO	bb
6	6 170724M1_8	Standard	12.500	3.67	8079.142	53144.688	1.900	12.1	-3.6	NO		NO	bb
7	7 170724M1_9	Standard	12.500	3.67	8775.410	49946.758	2.196	13.9	11.4	NO		NO	bb
8	8 170724M1_10	Standard	12.500	3.67	9696.150	49303.969	2.458	15.6	24.7	NO		NO	bb

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Compound name: 13C2-PFOA

Response Factor: 1.0675

RRF SD: 0.0457168, Relative SD: 4.28261

Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	3.67	55437.824	50417.762	13.745	12.9	3.0	NO		NO	bb
2	2 170724M1_4	Standard	12.500	3.67	52853.566	52862.527	12.498	11.7	-6.3	NO		NO	bb
3	3 170724M1_5	Standard	12.500	3.67	53444.164	49459.691	13.507	12.7	1.2	NO		NO	bb
4	4 170724M1_6	Standard	12.500	3.67	55652.324	51986.957	13.381	12.5	0.3	NO		NO	bb
5	5 170724M1_7	Standard	12.500	3.67	55510.707	54009.070	12.848	12.0	-3.7	NO		NO	bb
6	6 170724M1_8	Standard	12.500	3.68	54392.293	53144.688	12.793	12.0	-4.1	NO		NO	bb
7	7 170724M1_9	Standard	12.500	3.67	55876.563	49946.758	13.984	13.1	4.8	NO		NO	bb
8	8 170724M1_10	Standard	12.500	3.67	55196.383	49303.969	13.994	13.1	4.9	NO		NO	bb

Compound name: 13C5-PFNA

Response Factor: 0.852128

RRF SD: 0.0623325, Relative SD: 7.31492

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	3.85	55001.828	63362.148	10.851	12.7	1.9	NO		NO	bb
2	2 170724M1_4	Standard	12.500	3.85	54762.438	66233.305	10.335	12.1	-3.0	NO		NO	bb
3	3 170724M1_5	Standard	12.500	3.85	55321.512	62897.914	10.994	12.9	3.2	NO		NO	bb
4	4 170724M1_6	Standard	12.500	3.85	59225.996	73098.813	10.128	11.9	-4.9	NO		NO	bb
5	5 170724M1_7	Standard	12.500	3.85	53341.520	71059.133	9.383	11.0	-11.9	NO		NO	bb
6	6 170724M1_8	Standard	12.500	3.85	56161.168	60050.086	11.690	13.7	9.8	NO		NO	bb
7	7 170724M1_9	Standard	12.500	3.85	55495.742	67689.273	10.248	12.0	-3.8	NO		NO	bb
8	8 170724M1_10	Standard	12.500	3.85	54308.789	58608.688	11.583	13.6	8.7	NO		NO	bb

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Compound name: 13C8-PFOSA

Response Factor: 0.0982354

RRF SD: 0.00607611, Relative SD: 6.18526

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	3.86	6633.945	66110.742	1.254	12.8	2.1	NO		NO	bb
2	2 170724M1_4	Standard	12.500	3.85	6613.513	63178.059	1.309	13.3	6.6	NO		NO	bb
3	3 170724M1_5	Standard	12.500	3.86	6491.109	65533.590	1.238	12.6	0.8	NO		NO	bb
4	4 170724M1_6	Standard	12.500	3.86	7021.902	74336.992	1.181	12.0	-3.8	NO		NO	bb
5	5 170724M1_7	Standard	12.500	3.86	6519.732	73722.414	1.105	11.3	-10.0	NO		NO	bb
6	6 170724M1_8	Standard	12.500	3.86	6576.866	61426.844	1.338	13.6	9.0	NO		NO	bb
7	7 170724M1_9	Standard	12.500	3.86	5926.425	63456.004	1.167	11.9	-4.9	NO		NO	bb
8	8 170724M1_10	Standard	12.500	3.86	6190.267	62878.969	1.231	12.5	0.2	NO		NO	bb

Compound name: 13C8-PFOS

Response Factor: 0.935738

RRF SD: 0.0307604, Relative SD: 3.28729

Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	3.90	10711.932	10984.350	12.190	13.0	4.2	NO		NO	bb
2	2 170724M1_4	Standard	12.500	3.90	10010.674	10756.134	11.634	12.4	-0.5	NO		NO	bb
3	3 170724M1_5	Standard	12.500	3.90	10207.536	10707.182	11.917	12.7	1.9	NO		NO	bb
4	4 170724M1_6	Standard	12.500	3.90	10715.066	11395.518	11.754	12.6	0.5	NO		NO	bb
5	5 170724M1_7	Standard	12.500	3.90	10217.659	10582.909	12.069	12.9	3.2	NO		NO	bb
6	6 170724M1_8	Standard	12.500	3.90	9647.514	10701.979	11.268	12.0	-3.7	NO		NO	bb
7	7 170724M1_9	Standard	12.500	3.91	9325.974	10546.740	11.053	11.8	-5.5	NO		NO	bb
8	8 170724M1_10	Standard	12.500	3.90	9278.883	9922.027	11.690	12.5	-0.1	NO		NO	bb

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Compound name: 13C2-PFDA

Response Factor: 0.809787

RRF SD: 0.0475325, Relative SD: 5.86975

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	4.02	55156.438	71538.672	9.638	11.9	-4.8	NO		NO	bb
2	2 170724M1_4	Standard	12.500	4.02	49449.902	67518.039	9.155	11.3	-9.6	NO		NO	bb
3	3 170724M1_5	Standard	12.500	4.02	59736.465	67946.188	10.990	13.6	8.6	NO		NO	bb
4	4 170724M1_6	Standard	12.500	4.02	61862.684	75237.898	10.278	12.7	1.5	NO		NO	bb
5	5 170724M1_7	Standard	12.500	4.02	53915.461	68309.617	9.866	12.2	-2.5	NO		NO	bb
6	6 170724M1_8	Standard	12.500	4.02	58734.430	69500.219	10.564	13.0	4.4	NO		NO	bb
7	7 170724M1_9	Standard	12.500	4.03	57610.250	72719.445	9.903	12.2	-2.2	NO		NO	bb
8	8 170724M1_10	Standard	12.500	4.02	49628.984	58601.402	10.586	13.1	4.6	NO		NO	bb

Compound name: 13C2-8:2 FTS

Response Factor: 0.0855752

RRF SD: 0.010191, Relative SD: 11.9089

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	4.01	5712.626	71538.672	0.998	11.7	-6.7	NO		NO	bb
2	2 170724M1_4	Standard	12.500	4.02	5926.817	67518.039	1.097	12.8	2.6	NO		NO	bb
3	3 170724M1_5	Standard	12.500	4.01	5605.082	67946.188	1.031	12.0	-3.6	NO		NO	bb
4	4 170724M1_6	Standard	12.500	4.01	6033.180	75237.898	1.002	11.7	-6.3	NO		NO	bb
5	5 170724M1_7	Standard	12.500	4.02	5463.454	68309.617	1.000	11.7	-6.5	NO		NO	bb
6	6 170724M1_8	Standard	12.500	4.02	5614.961	69500.219	1.010	11.8	-5.6	NO		NO	bb
7	7 170724M1_9	Standard	12.500	4.02	6078.795	72719.445	1.045	12.2	-2.3	NO		NO	bb
8	8 170724M1_10	Standard	12.500	4.02	6441.568	58601.402	1.374	16.1	28.5	NO		NO	bb

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Compound name: d3-N-MeFOSAA

Response Factor: 0.0136964

RRF SD: 0.000727833, Relative SD: 5.31404

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	162.500	4.05	12099.400	66110.742	2.288	167.0	2.8	NO		NO	bb
2	2 170724M1_4	Standard	162.500	4.05	11504.973	63178.059	2.276	166.2	2.3	NO		NO	bb
3	3 170724M1_5	Standard	162.500	4.05	11265.637	65533.590	2.149	156.9	-3.5	NO		NO	bb
4	4 170724M1_6	Standard	162.500	4.05	12505.027	74336.992	2.103	153.5	-5.5	NO		NO	bb
5	5 170724M1_7	Standard	162.500	4.05	12072.939	73722.414	2.047	149.5	-8.0	NO		NO	bb
6	6 170724M1_8	Standard	162.500	4.05	11803.941	61426.844	2.402	175.4	7.9	NO		NO	bb
7	7 170724M1_9	Standard	162.500	4.05	11737.307	63456.004	2.312	168.8	3.9	NO		NO	bb
8	8 170724M1_10	Standard	162.500	4.05	11210.404	62878.969	2.229	162.7	0.1	NO		NO	bb

Compound name: d5-N-EtFOSAA

Response Factor: 0.0139456

RRF SD: 0.000844744, Relative SD: 6.05742

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	162.500	4.12	12172.007	66110.742	2.301	165.0	1.6	NO		NO	bb
2	2 170724M1_4	Standard	162.500	4.12	11615.228	63178.059	2.298	164.8	1.4	NO		NO	bb
3	3 170724M1_5	Standard	162.500	4.12	11653.344	65533.590	2.223	159.4	-1.9	NO		NO	bb
4	4 170724M1_6	Standard	162.500	4.12	12504.510	74336.992	2.103	150.8	-7.2	NO		NO	bb
5	5 170724M1_7	Standard	162.500	4.12	12228.059	73722.414	2.073	148.7	-8.5	NO		NO	bb
6	6 170724M1_8	Standard	162.500	4.12	12339.168	61426.844	2.511	180.1	10.8	NO		NO	bb
7	7 170724M1_9	Standard	162.500	4.12	11695.135	63456.004	2.304	165.2	1.7	NO		NO	bb
8	8 170724M1_10	Standard	162.500	4.12	11651.338	62878.969	2.316	166.1	2.2	NO		NO	bb

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Compound name: 13C2-PFUnA

Response Factor: 0.962105

RRF SD: 0.058365, Relative SD: 6.06639

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	4.18	65735.461	66110.742	12.429	12.9	3.3	NO		NO	bb
2	2 170724M1_4	Standard	12.500	4.18	63870.914	63178.059	12.637	13.1	5.1	NO		NO	bb
3	3 170724M1_5	Standard	12.500	4.19	64348.984	65533.590	12.274	12.8	2.1	NO		NO	bb
4	4 170724M1_6	Standard	12.500	4.18	67160.539	74336.992	11.293	11.7	-6.1	NO		NO	bb
5	5 170724M1_7	Standard	12.500	4.19	66089.180	73722.414	11.206	11.6	-6.8	NO		NO	bb
6	6 170724M1_8	Standard	12.500	4.19	61335.543	61426.844	12.481	13.0	3.8	NO		NO	bb
7	7 170724M1_9	Standard	12.500	4.18	55960.629	63456.004	11.024	11.5	-8.3	NO		NO	bb
8	8 170724M1_10	Standard	12.500	4.19	64722.215	62878.969	12.866	13.4	7.0	NO		NO	bb

Compound name: 13C2-PFDoA

Response Factor: 0.0944269

RRF SD: 0.00712756, Relative SD: 7.54822

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	4.34	6396.985	66110.742	1.210	12.8	2.5	NO		NO	bb
2	2 170724M1_4	Standard	12.500	4.35	5632.353	63178.059	1.114	11.8	-5.6	NO		NO	bb
3	3 170724M1_5	Standard	12.500	4.35	5998.723	65533.590	1.144	12.1	-3.1	NO		NO	bb
4	4 170724M1_6	Standard	12.500	4.35	6584.378	74336.992	1.107	11.7	-6.2	NO		NO	bb
5	5 170724M1_7	Standard	12.500	4.35	6419.244	73722.414	1.088	11.5	-7.8	NO		NO	bb
6	6 170724M1_8	Standard	12.500	4.35	6690.135	61426.844	1.361	14.4	15.3	NO		NO	bb
7	7 170724M1_9	Standard	12.500	4.35	6031.607	63456.004	1.188	12.6	0.7	NO		NO	bb
8	8 170724M1_10	Standard	12.500	4.35	6184.443	62878.969	1.229	13.0	4.2	NO		NO	bd

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Compound name: d3-N-MeFOSA

Response Factor: 0.0344131

RRF SD: 0.00225283, Relative SD: 6.54642

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	150.000	4.42	27834.387	66110.742	5.263	152.9	2.0	NO		NO	bb
2	2 170724M1_4	Standard	150.000	4.42	26795.877	63178.059	5.302	154.1	2.7	NO		NO	bb
3	3 170724M1_5	Standard	150.000	4.42	27001.328	65533.590	5.150	149.7	-0.2	NO		NO	bb
4	4 170724M1_6	Standard	150.000	4.42	28178.129	74336.992	4.738	137.7	-8.2	NO		NO	bb
5	5 170724M1_7	Standard	150.000	4.42	27075.477	73722.414	4.591	133.4	-11.1	NO		NO	bb
6	6 170724M1_8	Standard	150.000	4.43	27395.363	61426.844	5.575	162.0	8.0	NO		NO	bb
7	7 170724M1_9	Standard	150.000	4.42	26470.068	63456.004	5.214	151.5	1.0	NO		NO	bb
8	8 170724M1_10	Standard	150.000	4.43	27480.182	62878.969	5.463	158.7	5.8	NO		NO	bb

Compound name: 13C2-PFTeDA

Response Factor: 0.694311

RRF SD: 0.0655535, Relative SD: 9.44152

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	4.70	52611.504	66110.742	9.948	14.3	14.6	NO		NO	bb
2	2 170724M1_4	Standard	12.500	4.70	43220.855	63178.059	8.551	12.3	-1.5	NO		NO	bb
3	3 170724M1_5	Standard	12.500	4.70	44254.344	65533.590	8.441	12.2	-2.7	NO		NO	bb
4	4 170724M1_6	Standard	12.500	4.70	47041.410	74336.992	7.910	11.4	-8.9	NO		NO	bb
5	5 170724M1_7	Standard	12.500	4.70	45392.488	73722.414	7.697	11.1	-11.3	NO		NO	bb
6	6 170724M1_8	Standard	12.500	4.70	48426.250	61426.844	9.854	14.2	13.5	NO		NO	bb
7	7 170724M1_9	Standard	12.500	4.70	42647.246	63456.004	8.401	12.1	-3.2	NO		NO	bb
8	8 170724M1_10	Standard	12.500	4.70	43405.691	62878.969	8.629	12.4	-0.6	NO		NO	bb

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Compound name: d5-N-ETFOSA

Response Factor: 0.0486714

RRF SD: 0.00353064, Relative SD: 7.25403

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	150.000	5.00	39437.277	66110.742	7.457	153.2	2.1	NO		NO	MM
2	2	170724M1_4	Standard	150.000	5.01	37412.609	63178.059	7.402	152.1	1.4	NO		NO	MM
3	3	170724M1_5	Standard	150.000	5.01	37050.801	65533.590	7.067	145.2	-3.2	NO		NO	MM
4	4	170724M1_6	Standard	150.000	5.01	40104.539	74336.992	6.744	138.6	-7.6	NO		NO	MM
5	5	170724M1_7	Standard	150.000	5.01	38083.547	73722.414	6.457	132.7	-11.6	NO		NO	MM
6	6	170724M1_8	Standard	150.000	5.01	39916.621	61426.844	8.123	166.9	11.3	NO		NO	MM
7	7	170724M1_9	Standard	150.000	5.01	37926.309	63456.004	7.471	153.5	2.3	NO		NO	MM
8	8	170724M1_10	Standard	150.000	5.01	38657.641	62878.969	7.685	157.9	5.3	NO		NO	MM

Compound name: 13C2-PFHxDA

Response Factor: 0.843007

RRF SD: 0.0734853, Relative SD: 8.71705

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	5.000	5.07	25428.396	66110.742	4.808	5.7	14.1	NO		NO	bb
2	2	170724M1_4	Standard	5.000	5.07	21542.566	63178.059	4.262	5.1	1.1	NO		NO	bb
3	3	170724M1_5	Standard	5.000	5.07	21611.141	65533.590	4.122	4.9	-2.2	NO		NO	bb
4	4	170724M1_6	Standard	5.000	5.07	22044.896	74336.992	3.707	4.4	-12.1	NO		NO	bb
5	5	170724M1_7	Standard	5.000	5.07	22327.822	73722.414	3.786	4.5	-10.2	NO		NO	bb
6	6	170724M1_8	Standard	5.000	5.07	22552.494	61426.844	4.589	5.4	8.9	NO		NO	bb
7	7	170724M1_9	Standard	5.000	5.07	21452.613	63456.004	4.226	5.0	0.3	NO		NO	bb
8	8	170724M1_10	Standard	5.000	5.07	21228.160	62878.969	4.220	5.0	0.1	NO		NO	bb

Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

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Compound name: d7-N-MeFOSE

Response Factor: 0.054631

RRF SD: 0.0039309, Relative SD: 7.19536

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	150.000	5.42	45355.609	66110.742	8.576	157.0	4.6	NO		NO	bb
2	2 170724M1_4	Standard	150.000	5.42	42298.965	63178.059	8.369	153.2	2.1	NO		NO	bb
3	3 170724M1_5	Standard	150.000	5.42	42181.715	65533.590	8.046	147.3	-1.8	NO		NO	bb
4	4 170724M1_6	Standard	150.000	5.42	44882.496	74336.992	7.547	138.1	-7.9	NO		NO	bb
5	5 170724M1_7	Standard	150.000	5.42	42480.406	73722.414	7.203	131.8	-12.1	NO		NO	bb
6	6 170724M1_8	Standard	150.000	5.42	44502.430	61426.844	9.056	165.8	10.5	NO		NO	bb
7	7 170724M1_9	Standard	150.000	5.42	42011.336	63456.004	8.276	151.5	1.0	NO		NO	bb
8	8 170724M1_10	Standard	150.000	5.42	42682.813	62878.969	8.485	155.3	3.5	NO		NO	bb

Compound name: d9-N-EtFOSE

Response Factor: 0.0534223

RRF SD: 0.00380471, Relative SD: 7.12196

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	150.000	5.59	44922.563	66110.742	8.494	159.0	6.0	NO		NO	bb
2	2 170724M1_4	Standard	150.000	5.59	40989.961	63178.059	8.110	151.8	1.2	NO		NO	bb
3	3 170724M1_5	Standard	150.000	5.59	40752.352	65533.590	7.773	145.5	-3.0	NO		NO	bb
4	4 170724M1_6	Standard	150.000	5.59	43177.285	74336.992	7.260	135.9	-9.4	NO		NO	bb
5	5 170724M1_7	Standard	150.000	5.59	42231.566	73722.414	7.161	134.0	-10.6	NO		NO	bb
6	6 170724M1_8	Standard	150.000	5.59	42902.656	61426.844	8.730	163.4	8.9	NO		NO	bb
7	7 170724M1_9	Standard	150.000	5.59	41552.719	63456.004	8.185	153.2	2.1	NO		NO	bb
8	8 170724M1_10	Standard	150.000	5.59	42219.305	62878.969	8.393	157.1	4.7	NO		NO	bb

Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

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Compound name: 13C4-PFBA

Response Factor: 1

RRF SD: 1.02787e-016, Relative SD: 1.02787e-014

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	12.500	1.55	15090.568	15090.568	12.500	12.5	0.0	NO		NO	bb
2	2	170724M1_4	Standard	12.500	1.55	14962.116	14962.116	12.500	12.5	0.0	NO		NO	bb
3	3	170724M1_5	Standard	12.500	1.55	14894.126	14894.126	12.500	12.5	0.0	NO		NO	bb
4	4	170724M1_6	Standard	12.500	1.55	15482.658	15482.658	12.500	12.5	0.0	NO		NO	bb
5	5	170724M1_7	Standard	12.500	1.55	15091.931	15091.931	12.500	12.5	0.0	NO		NO	bb
6	6	170724M1_8	Standard	12.500	1.55	15599.055	15599.055	12.500	12.5	0.0	NO		NO	bb
7	7	170724M1_9	Standard	12.500	1.55	14839.394	14839.394	12.500	12.5	0.0	NO		NO	bb
8	8	170724M1_10	Standard	12.500	1.56	14929.445	14929.445	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C5-PFHxA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	5.000	3.22	40367.738	40367.738	5.000	5.0	0.0	NO		NO	bb
2	2	170724M1_4	Standard	5.000	3.22	38823.406	38823.406	5.000	5.0	0.0	NO		NO	bb
3	3	170724M1_5	Standard	5.000	3.22	37967.629	37967.629	5.000	5.0	0.0	NO		NO	bb
4	4	170724M1_6	Standard	5.000	3.22	42133.270	42133.270	5.000	5.0	0.0	NO		NO	bb
5	5	170724M1_7	Standard	5.000	3.22	39088.754	39088.754	5.000	5.0	0.0	NO		NO	bb
6	6	170724M1_8	Standard	5.000	3.22	41725.730	41725.730	5.000	5.0	0.0	NO		NO	bb
7	7	170724M1_9	Standard	5.000	3.23	39920.477	39920.477	5.000	5.0	0.0	NO		NO	bb
8	8	170724M1_10	Standard	5.000	3.22	38428.922	38428.922	5.000	5.0	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

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Compound name: 13C3-PFHxS

Response Factor: 1

RRF SD: 7.26812e-017, Relative SD: 7.26812e-015

Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	3.55	7582.089	7582.089	12.500	12.5	0.0	NO		NO	bb
2	2 170724M1_4	Standard	12.500	3.55	7322.380	7322.380	12.500	12.5	0.0	NO		NO	bb
3	3 170724M1_5	Standard	12.500	3.55	7368.760	7368.760	12.500	12.5	0.0	NO		NO	bb
4	4 170724M1_6	Standard	12.500	3.55	7556.806	7556.806	12.500	12.5	0.0	NO		NO	bb
5	5 170724M1_7	Standard	12.500	3.55	7669.834	7669.834	12.500	12.5	0.0	NO		NO	bb
6	6 170724M1_8	Standard	12.500	3.55	8056.833	8056.833	12.500	12.5	0.0	NO		NO	bb
7	7 170724M1_9	Standard	12.500	3.55	7531.759	7531.759	12.500	12.5	0.0	NO		NO	bb
8	8 170724M1_10	Standard	12.500	3.55	7365.456	7365.456	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C8-PFOA

Response Factor: 1

RRF SD: 9.3831e-017, Relative SD: 9.3831e-015

Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	3.67	50417.762	50417.762	12.500	12.5	0.0	NO		NO	bb
2	2 170724M1_4	Standard	12.500	3.67	52862.527	52862.527	12.500	12.5	0.0	NO		NO	bb
3	3 170724M1_5	Standard	12.500	3.67	49459.691	49459.691	12.500	12.5	0.0	NO		NO	bb
4	4 170724M1_6	Standard	12.500	3.67	51986.957	51986.957	12.500	12.5	0.0	NO		NO	bb
5	5 170724M1_7	Standard	12.500	3.68	54009.070	54009.070	12.500	12.5	0.0	NO		NO	bb
6	6 170724M1_8	Standard	12.500	3.68	53144.688	53144.688	12.500	12.5	0.0	NO		NO	bb
7	7 170724M1_9	Standard	12.500	3.67	49946.758	49946.758	12.500	12.5	0.0	NO		NO	bb
8	8 170724M1_10	Standard	12.500	3.67	49303.969	49303.969	12.500	12.5	0.0	NO		NO	bb

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Compound name: 13C9-PFNA

Response Factor: 1

RRF SD: 9.3831e-017, Relative SD: 9.3831e-015

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	12.500	3.85	63362.148	63362.148	12.500	12.5	0.0	NO		NO	bb
2	2	170724M1_4	Standard	12.500	3.85	66233.305	66233.305	12.500	12.5	0.0	NO		NO	bb
3	3	170724M1_5	Standard	12.500	3.85	62897.914	62897.914	12.500	12.5	0.0	NO		NO	bb
4	4	170724M1_6	Standard	12.500	3.85	73098.813	73098.813	12.500	12.5	0.0	NO		NO	bb
5	5	170724M1_7	Standard	12.500	3.85	71059.133	71059.133	12.500	12.5	0.0	NO		NO	bb
6	6	170724M1_8	Standard	12.500	3.85	60050.086	60050.086	12.500	12.5	0.0	NO		NO	bb
7	7	170724M1_9	Standard	12.500	3.86	67689.273	67689.273	12.500	12.5	0.0	NO		NO	bb
8	8	170724M1_10	Standard	12.500	3.85	58608.688	58608.688	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C4-PFOS

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	170724M1_3	Standard	12.500	3.90	10984.350	10984.350	12.500	12.5	0.0	NO		NO	bb
2	2	170724M1_4	Standard	12.500	3.90	10756.134	10756.134	12.500	12.5	0.0	NO		NO	bb
3	3	170724M1_5	Standard	12.500	3.90	10707.182	10707.182	12.500	12.5	0.0	NO		NO	bb
4	4	170724M1_6	Standard	12.500	3.90	11395.518	11395.518	12.500	12.5	0.0	NO		NO	bb
5	5	170724M1_7	Standard	12.500	3.90	10582.909	10582.909	12.500	12.5	0.0	NO		NO	bb
6	6	170724M1_8	Standard	12.500	3.90	10701.979	10701.979	12.500	12.5	0.0	NO		NO	bb
7	7	170724M1_9	Standard	12.500	3.91	10546.740	10546.740	12.500	12.5	0.0	NO		NO	bb
8	8	170724M1_10	Standard	12.500	3.90	9922.027	9922.027	12.500	12.5	0.0	NO		NO	bb

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Compound name: 13C6-PFDA

Response Factor: 1

RRF SD: 1.25887e-016, Relative SD: 1.25887e-014

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	4.02	71538.672	71538.672	12.500	12.5	0.0	NO		NO	bb
2	2 170724M1_4	Standard	12.500	4.02	67518.039	67518.039	12.500	12.5	0.0	NO		NO	bb
3	3 170724M1_5	Standard	12.500	4.02	67946.188	67946.188	12.500	12.5	0.0	NO		NO	bb
4	4 170724M1_6	Standard	12.500	4.02	75237.898	75237.898	12.500	12.5	0.0	NO		NO	bb
5	5 170724M1_7	Standard	12.500	4.02	68309.617	68309.617	12.500	12.5	0.0	NO		NO	bb
6	6 170724M1_8	Standard	12.500	4.02	69500.219	69500.219	12.500	12.5	0.0	NO		NO	bb
7	7 170724M1_9	Standard	12.500	4.03	72719.445	72719.445	12.500	12.5	0.0	NO		NO	bb
8	8 170724M1_10	Standard	12.500	4.02	58601.402	58601.402	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C7-PFUnA

Response Factor: 1

RRF SD: 1.45362e-016, Relative SD: 1.45362e-014

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170724M1_3	Standard	12.500	4.18	66110.742	66110.742	12.500	12.5	0.0	NO		NO	bb
2	2 170724M1_4	Standard	12.500	4.19	63178.059	63178.059	12.500	12.5	0.0	NO		NO	bb
3	3 170724M1_5	Standard	12.500	4.18	65533.590	65533.590	12.500	12.5	0.0	NO		NO	bb
4	4 170724M1_6	Standard	12.500	4.19	74336.992	74336.992	12.500	12.5	0.0	NO		NO	bb
5	5 170724M1_7	Standard	12.500	4.19	73722.414	73722.414	12.500	12.5	0.0	NO		NO	bb
6	6 170724M1_8	Standard	12.500	4.19	61426.844	61426.844	12.500	12.5	0.0	NO		NO	bb
7	7 170724M1_9	Standard	12.500	4.18	63456.004	63456.004	12.500	12.5	0.0	NO		NO	bb
8	8 170724M1_10	Standard	12.500	4.19	62878.969	62878.969	12.500	12.5	0.0	NO		NO	bb

Dataset: Untitled

Last Altered: Monday, July 24, 2017 15:48:17 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:50:08 Pacific Daylight Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	170724M1_2	IPA	24-Jul-17	13:40:23
2	170724M1_3	ST170724M1-1 PFC CS-2 17G2422	24-Jul-17	13:51:04
3	170724M1_4	ST170724M1-2 PFC CS-1 17G2119	24-Jul-17	14:01:50
4	170724M1_5	ST170724M1-3 PFC CS0 17G2423	24-Jul-17	14:12:36
5	170724M1_6	ST170724M1-4 PFC CS1 17G2424	24-Jul-17	14:23:23
6	170724M1_7	ST170724M1-5 PFC CS2 17G2425	24-Jul-17	14:34:02
7	170724M1_8	ST170724M1-6 PFC CS3 17G2118	24-Jul-17	14:44:48
8	170724M1_9	ST170724M1-7 PFC CS4 17G2426	24-Jul-17	14:55:34
9	170724M1_10	ST170724M1-8 PFC CS5 17G2427	24-Jul-17	15:06:35
10	170724M1_11	IPA	24-Jul-17	15:17:30
11	170724M1_12	SS170724M4-1 PFC SSS 17G2421	24-Jul-17	15:28:15

Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

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Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 24 Jul 2017 15:22:13

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

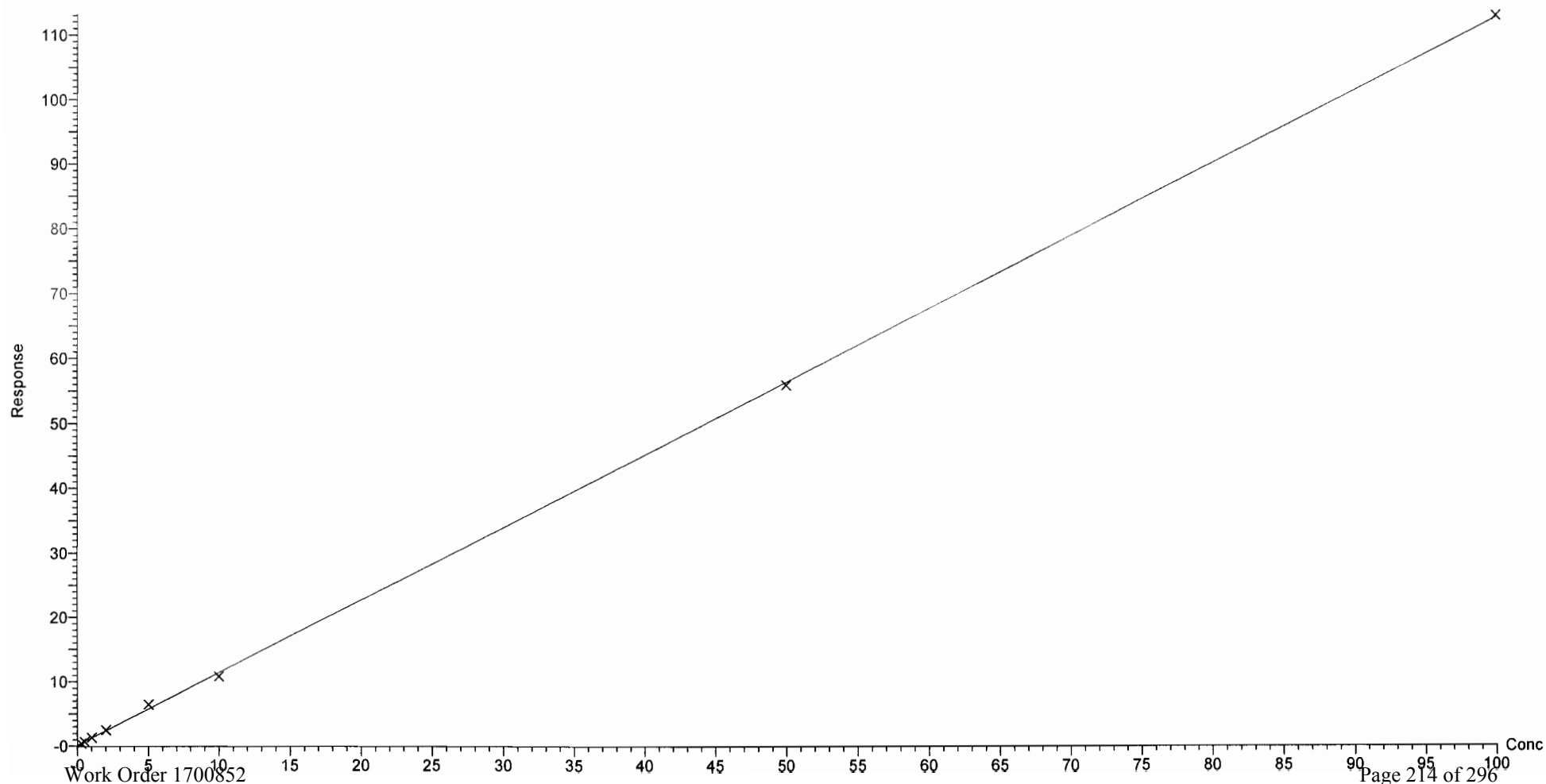
Compound name: PFBA

Correlation coefficient: $r = 0.999644$, $r^2 = 0.999287$

Calibration curve: $1.1275 * x + 0.163356$

Response type: Internal Std (Ref 28), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

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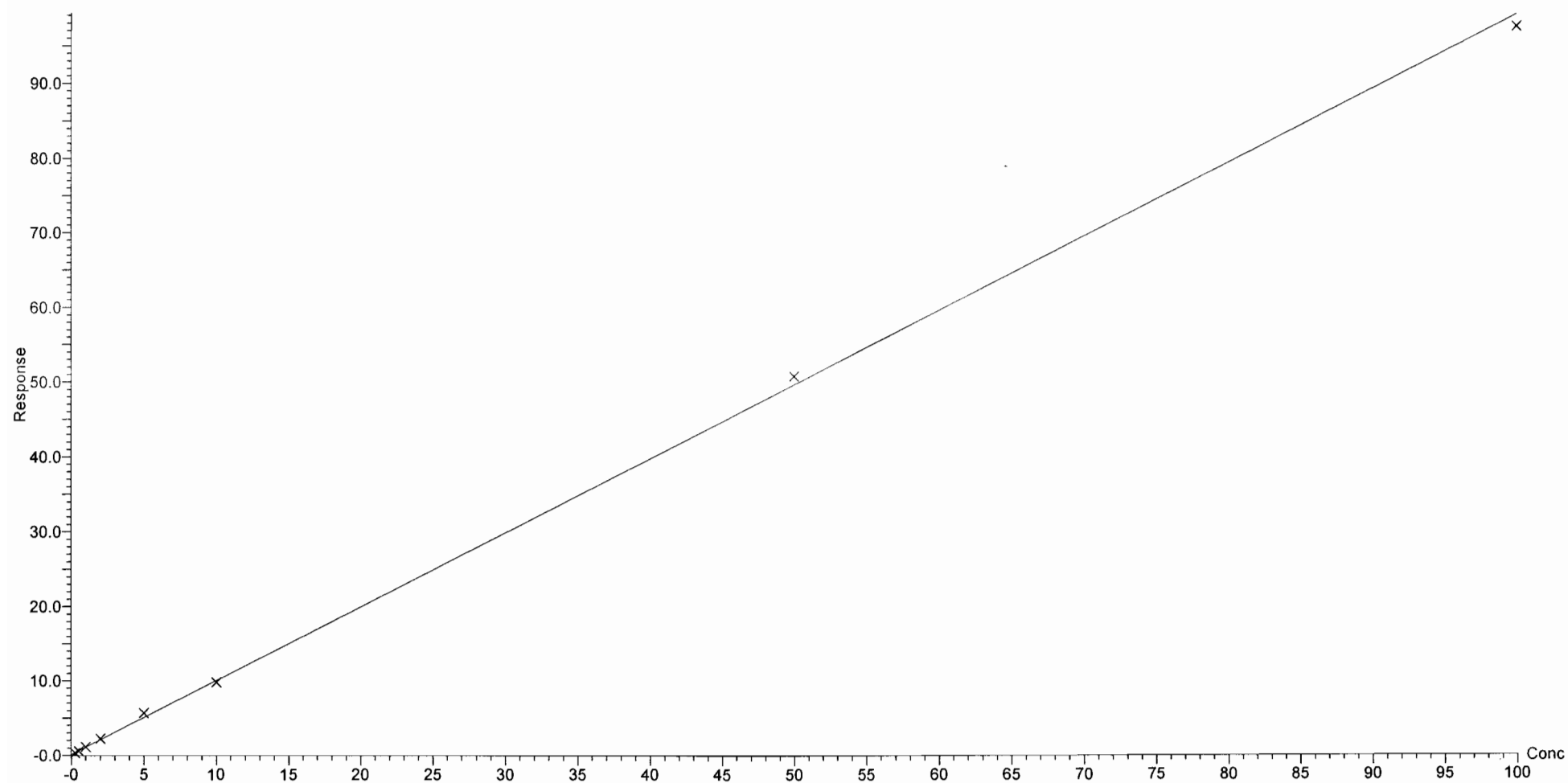
Compound name: PFPeA

Correlation coefficient: $r = 0.999528$, $r^2 = 0.999056$

Calibration curve: $0.99208 * x + 0.104629$

Response type: Internal Std (Ref 29), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

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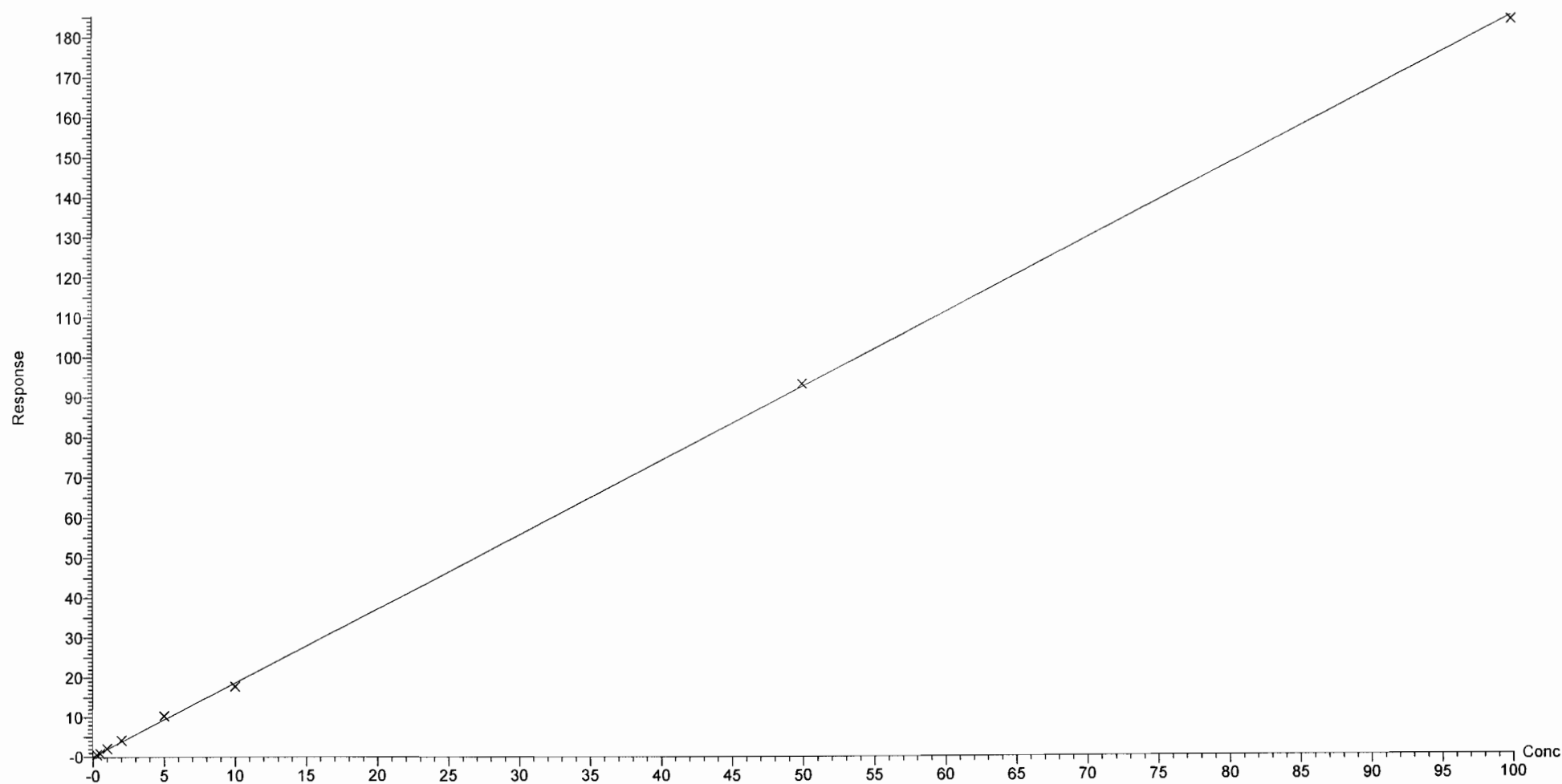
Compound name: PFBS

Correlation coefficient: $r = 0.999611$, $r^2 = 0.999223$

Calibration curve: $1.85223 * x + 0.0752948$

Response type: Internal Std (Ref 30), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



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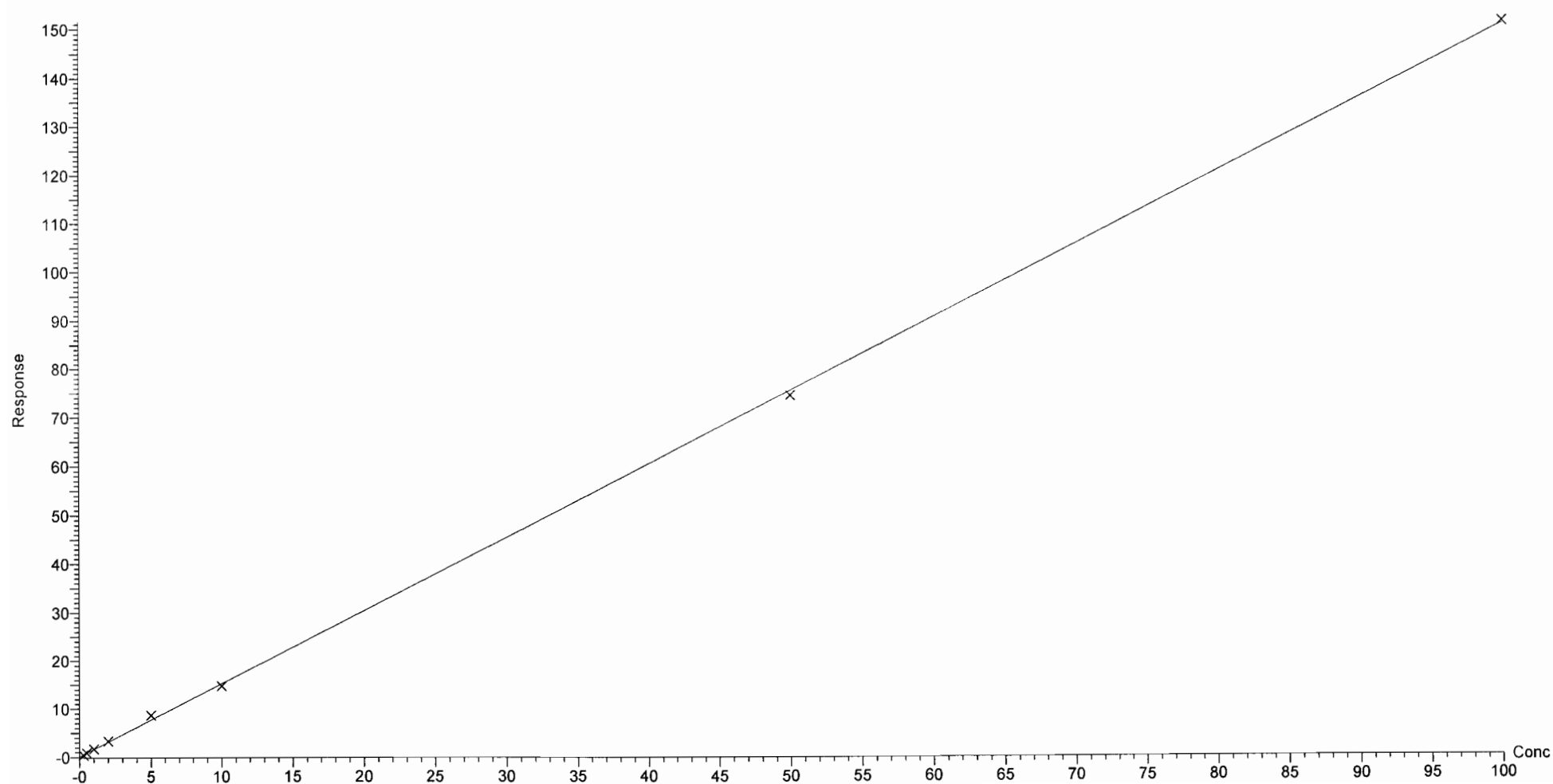
Compound name: PFHxA

Correlation coefficient: $r = 0.999648$, $r^2 = 0.999296$

Calibration curve: $1.50967 * x + 0.157344$

Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



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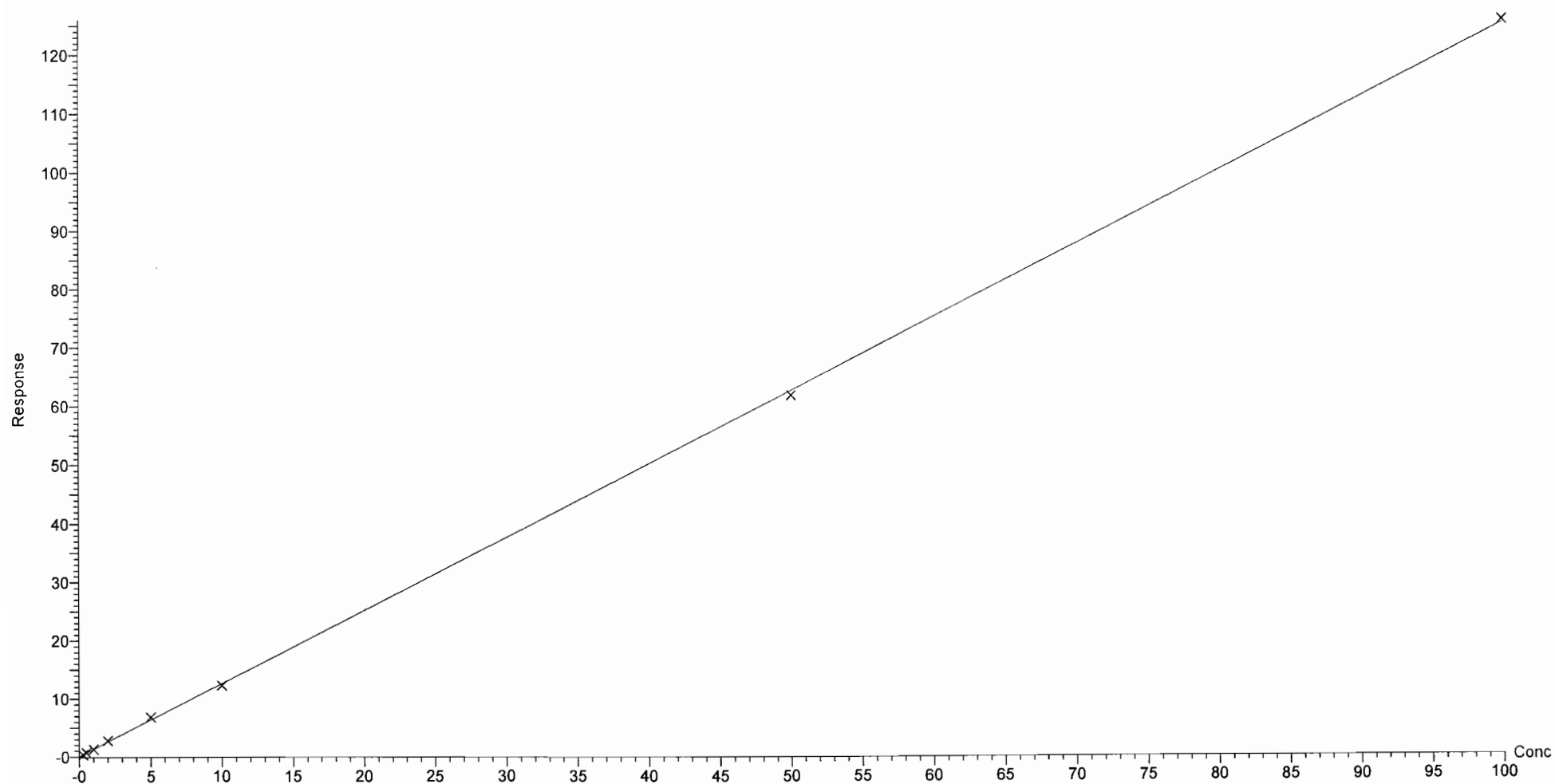
Compound name: PFHpA

Correlation coefficient: $r = 0.999811$, $r^2 = 0.999621$

Calibration curve: $1.25322 * x + 0.0796155$

Response type: Internal Std (Ref 32), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

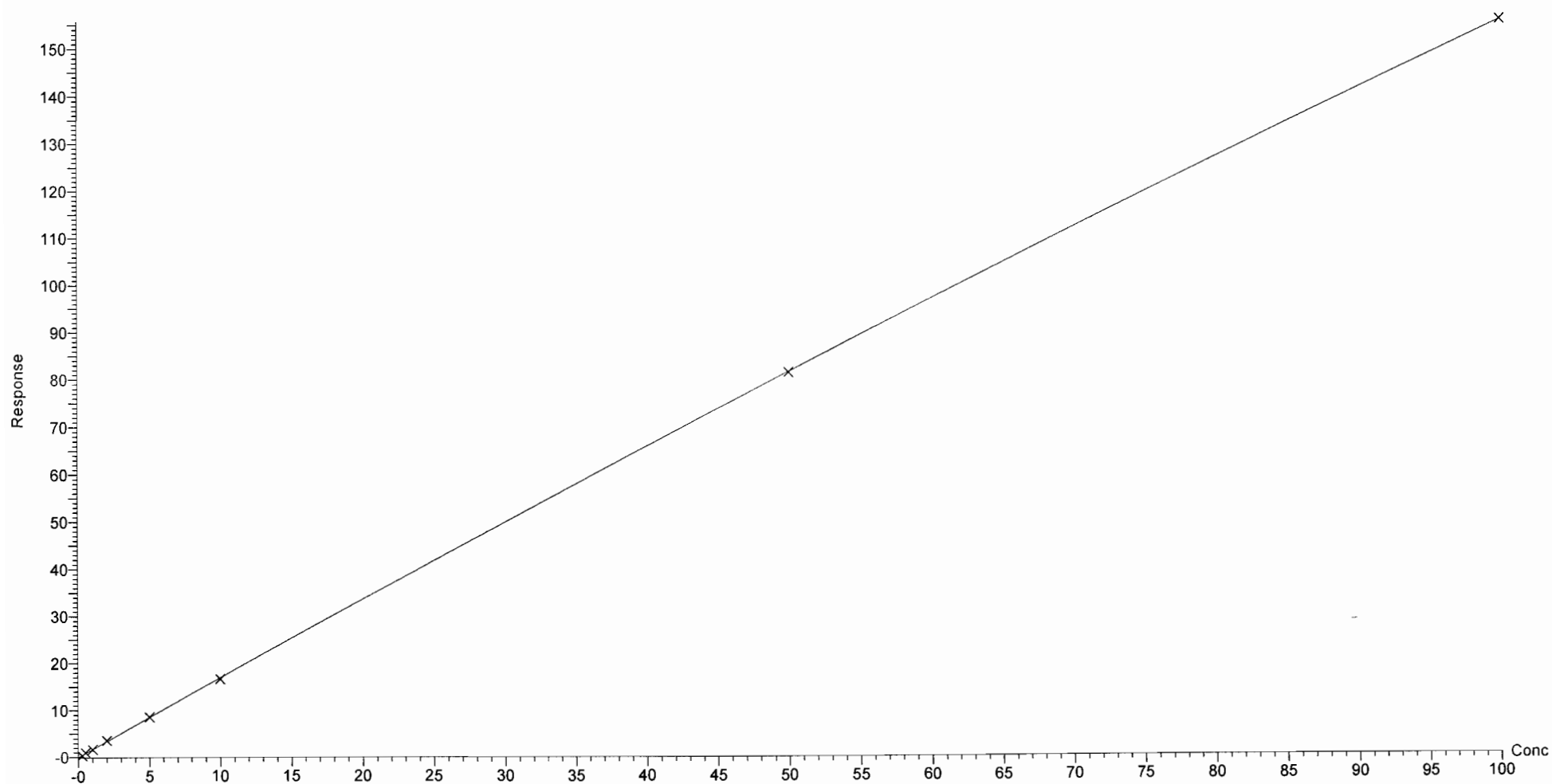
Compound name: PFHxS

Coefficient of Determination: $R^2 = 0.999711$

Calibration curve: $-0.00151846 * x^2 + 1.70838 * x + -0.0114403$

Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

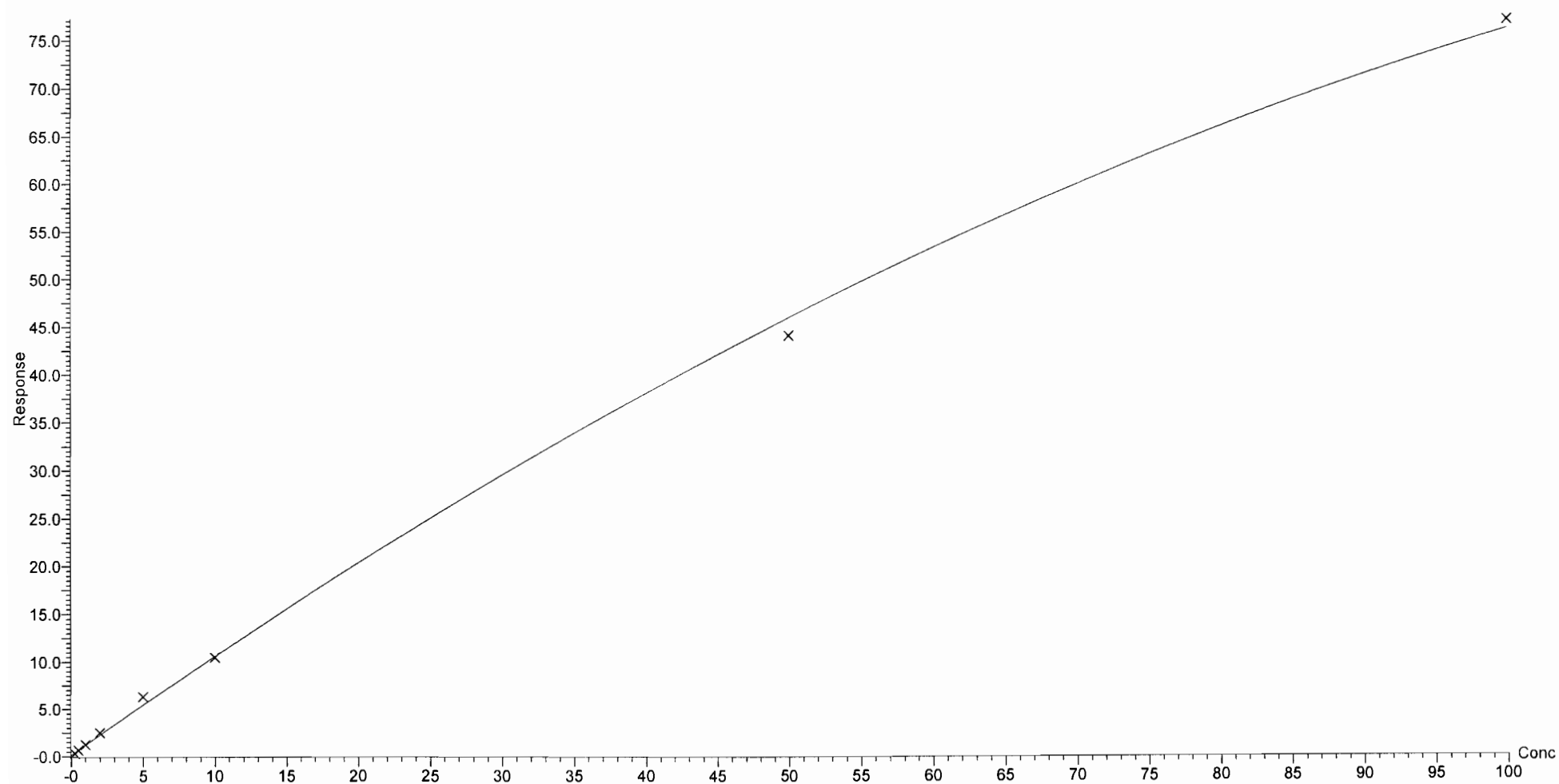
Compound name: 6:2 FTS

Coefficient of Determination: $R^2 = 0.997533$

Calibration curve: $-0.00313053 * x^2 + 1.07473 * x + 0.134469$

Response type: Internal Std (Ref 34), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

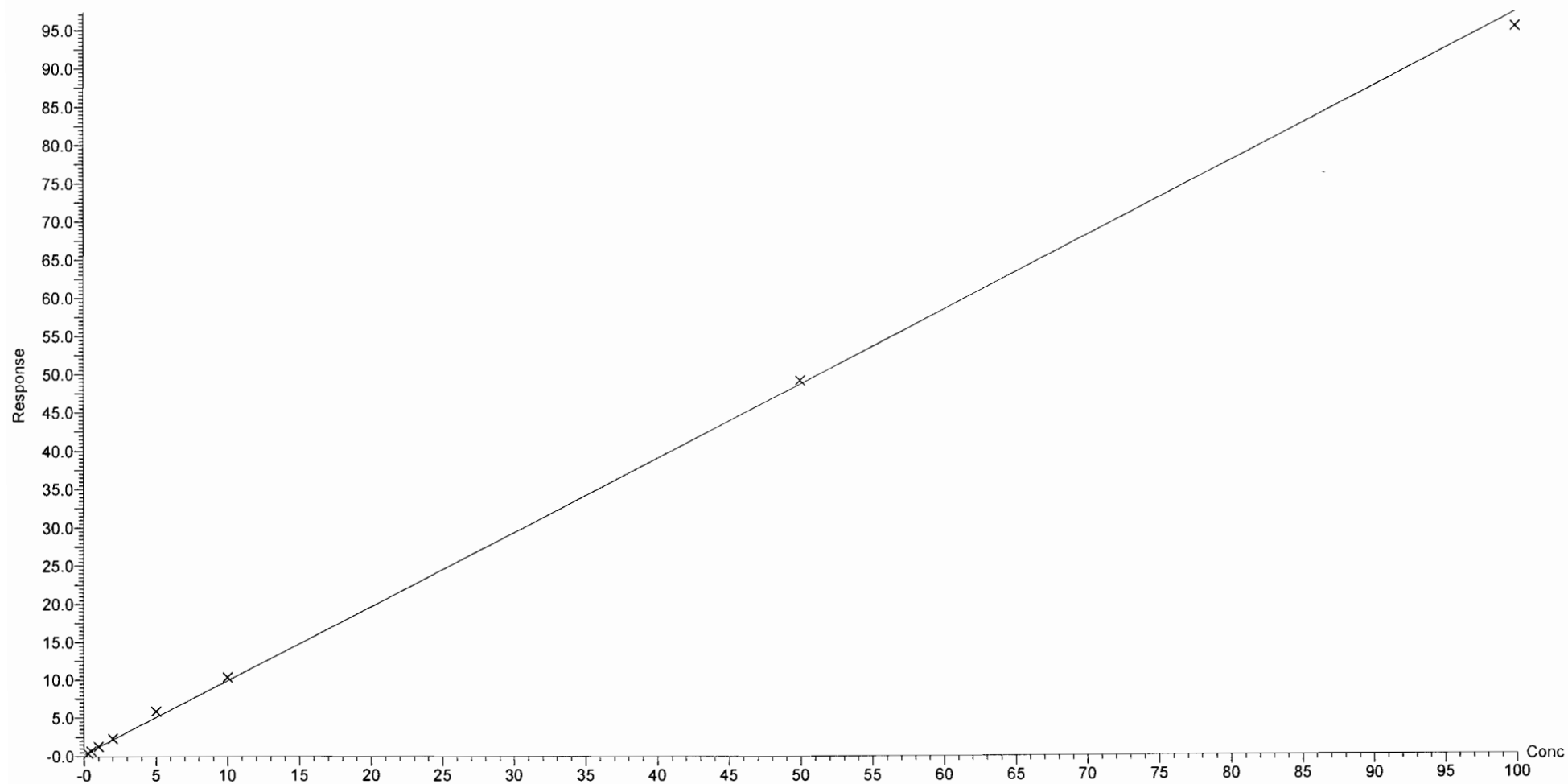
Compound name: PFOA

Correlation coefficient: $r = 0.999233$, $r^2 = 0.998466$

Calibration curve: $0.970801 * x + 0.199778$

Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

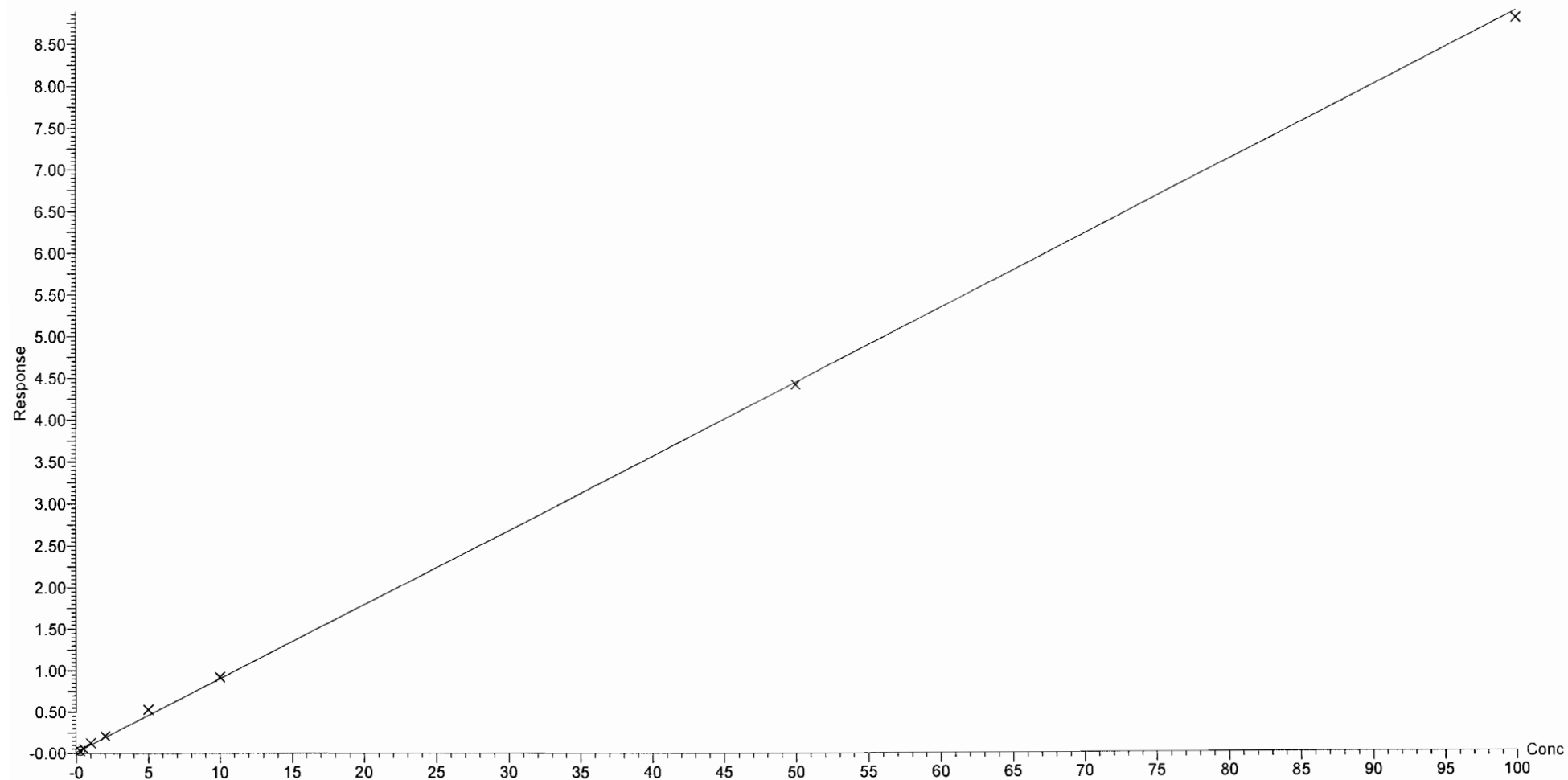
Compound name: PFHpS

Correlation coefficient: $r = 0.999150$, $r^2 = 0.998301$

Calibration curve: $0.0887442 * x + 0.014645$

Response type: Internal Std (Ref 35), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

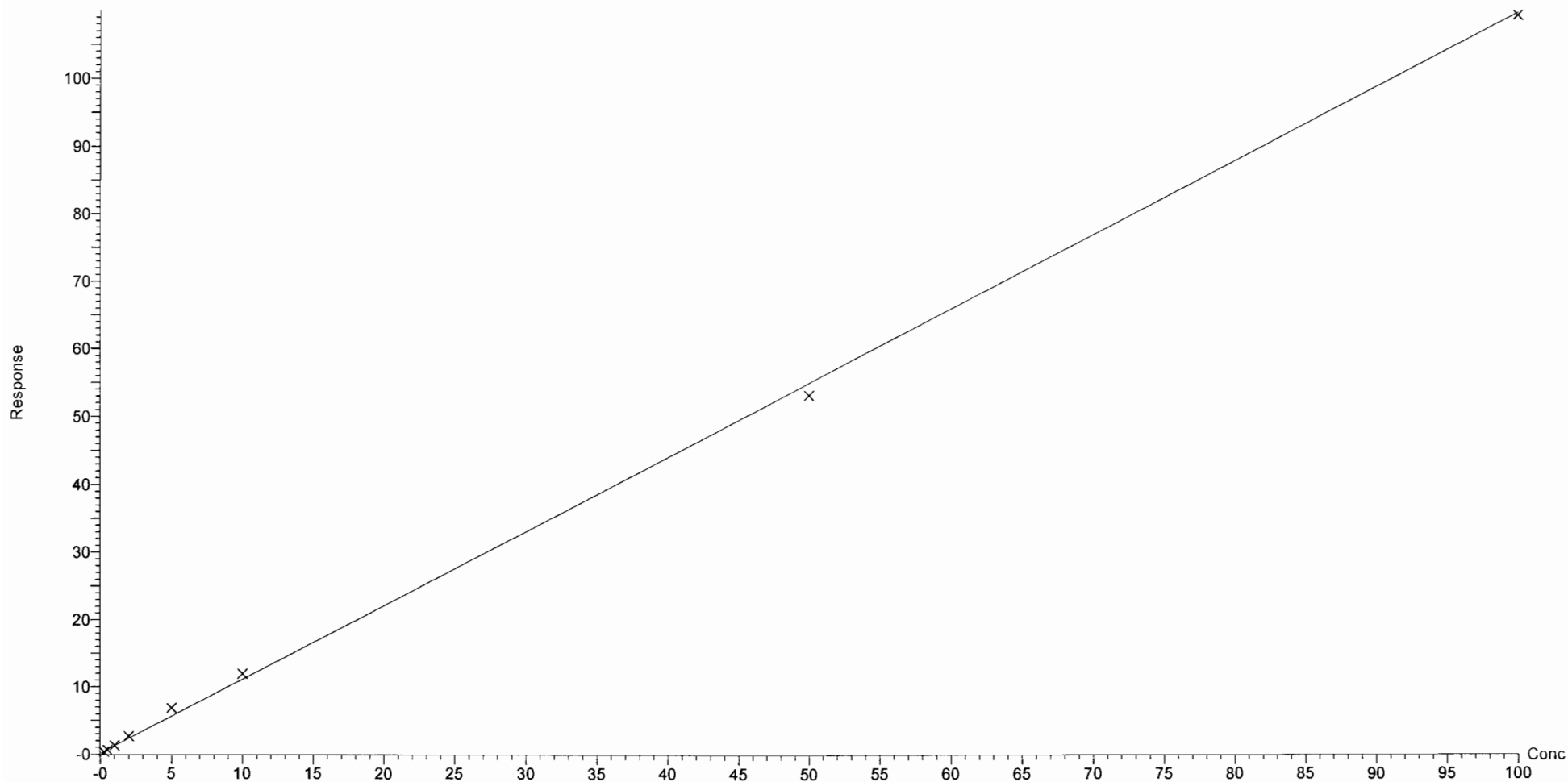
Compound name: PFNA

Correlation coefficient: $r = 0.998659$, $r^2 = 0.997320$

Calibration curve: $1.09835 * x + 0.147218$

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

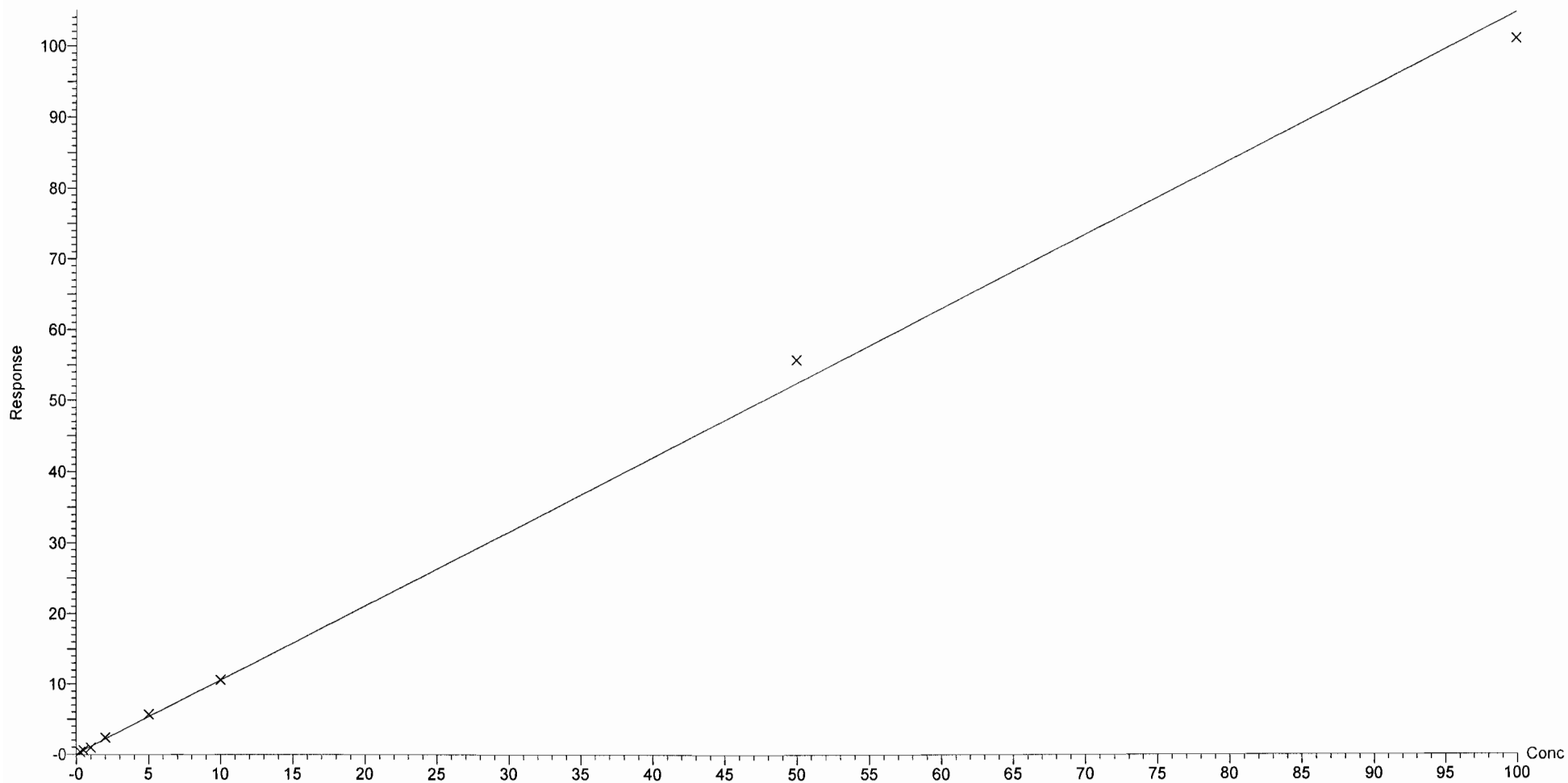
Compound name: PFOSA

Correlation coefficient: $r = 0.998808$, $r^2 = 0.997616$

Calibration curve: $1.0493 * x + 0.0489398$

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

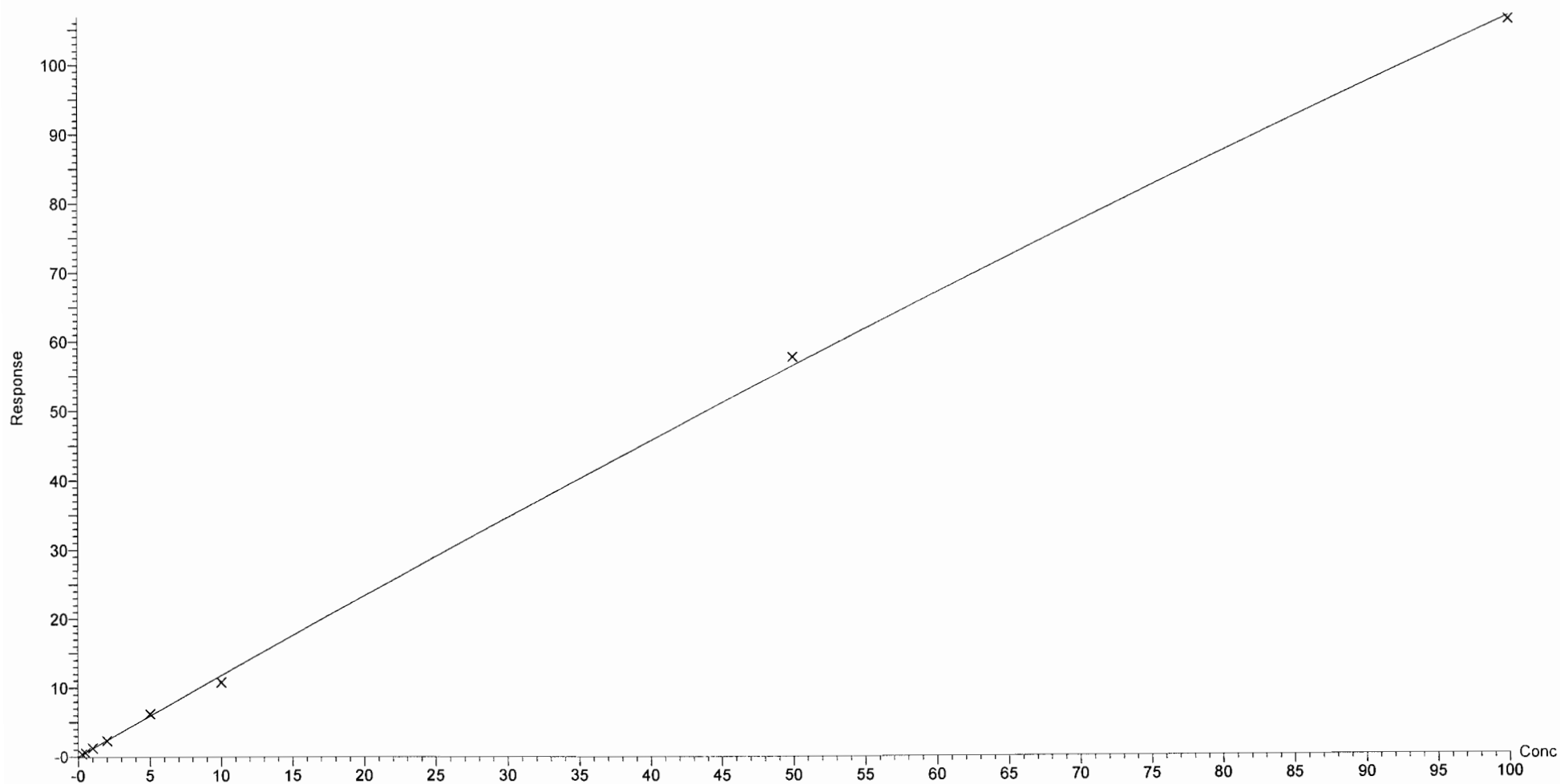
Compound name: PFOS

Coefficient of Determination: $R^2 = 0.999148$

Calibration curve: $-0.00122032 * x^2 + 1.19038 * x + 0.0183073$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

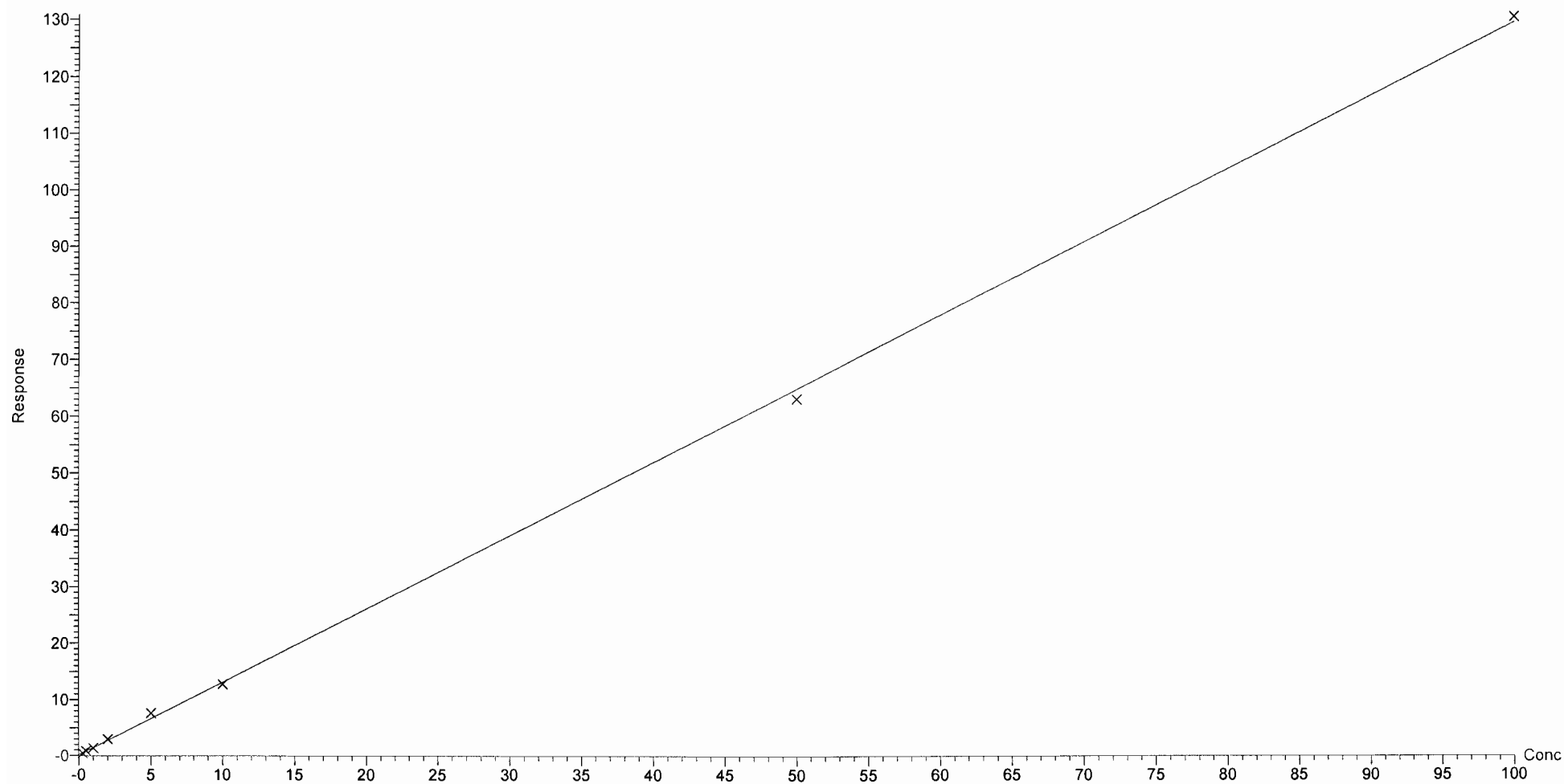
Compound name: PFDA

Correlation coefficient: $r = 0.999397$, $r^2 = 0.998795$

Calibration curve: $1.29731 * x + 0.128184$

Response type: Internal Std (Ref 39), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

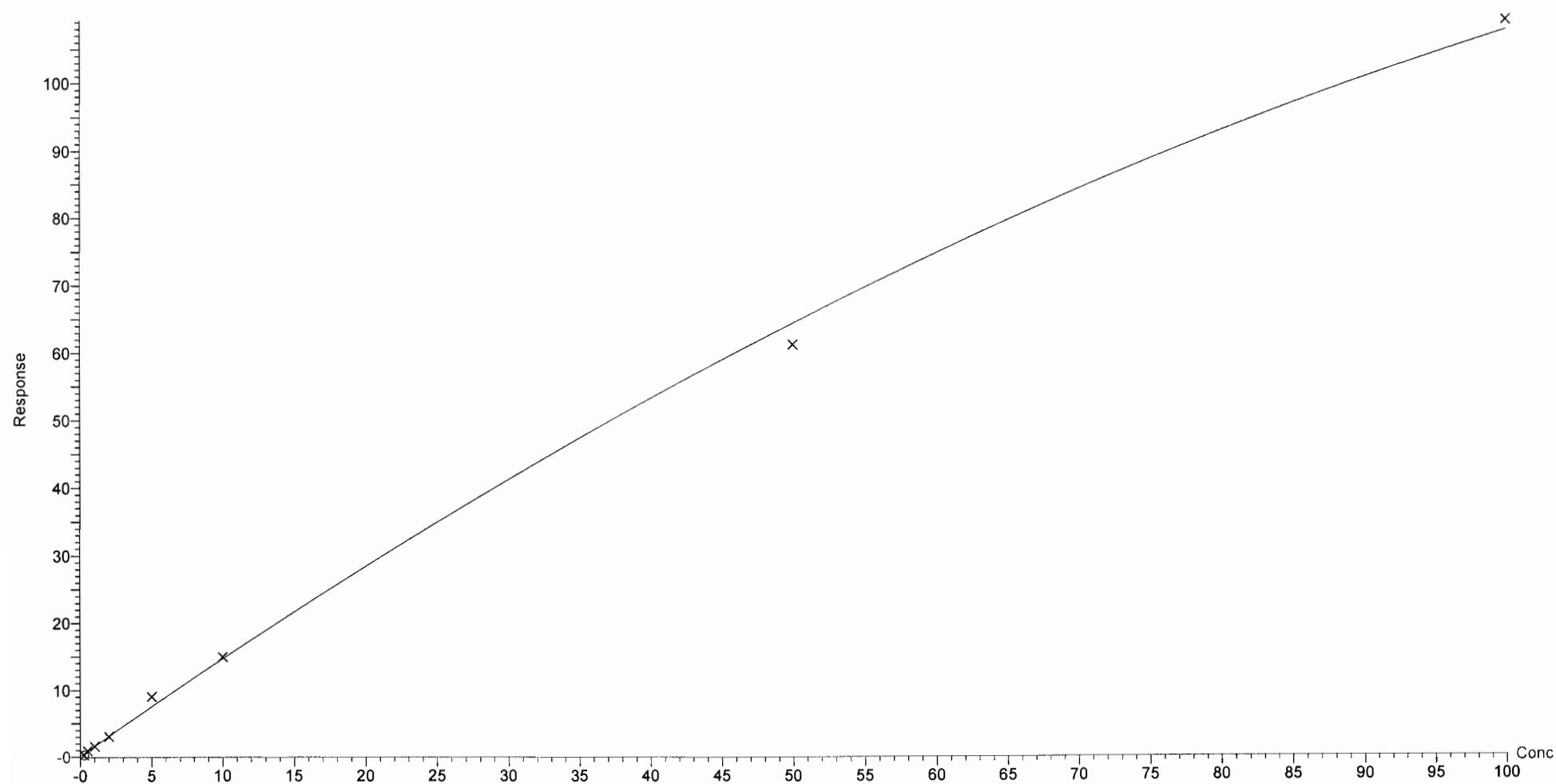
Compound name: 8:2 FTS

Coefficient of Determination: $R^2 = 0.996738$

Calibration curve: $-0.00420182 * x^2 + 1.49722 * x + 0.133523$

Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

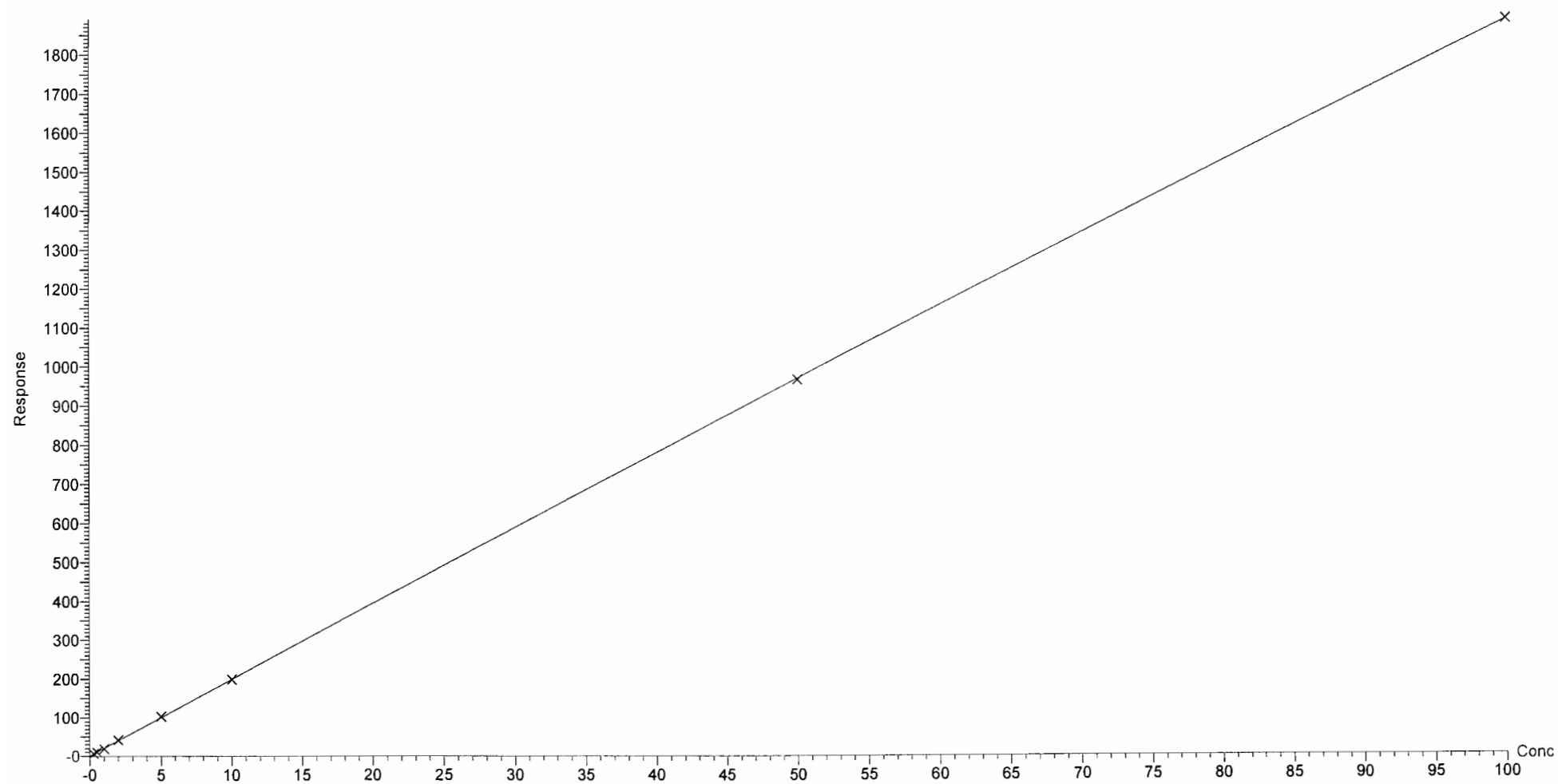
Compound name: N-MeFOSAA

Coefficient of Determination: $R^2 = 0.999848$

Calibration curve: $-0.0104077 * x^2 + 19.9194 * x + 0.547687$

Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

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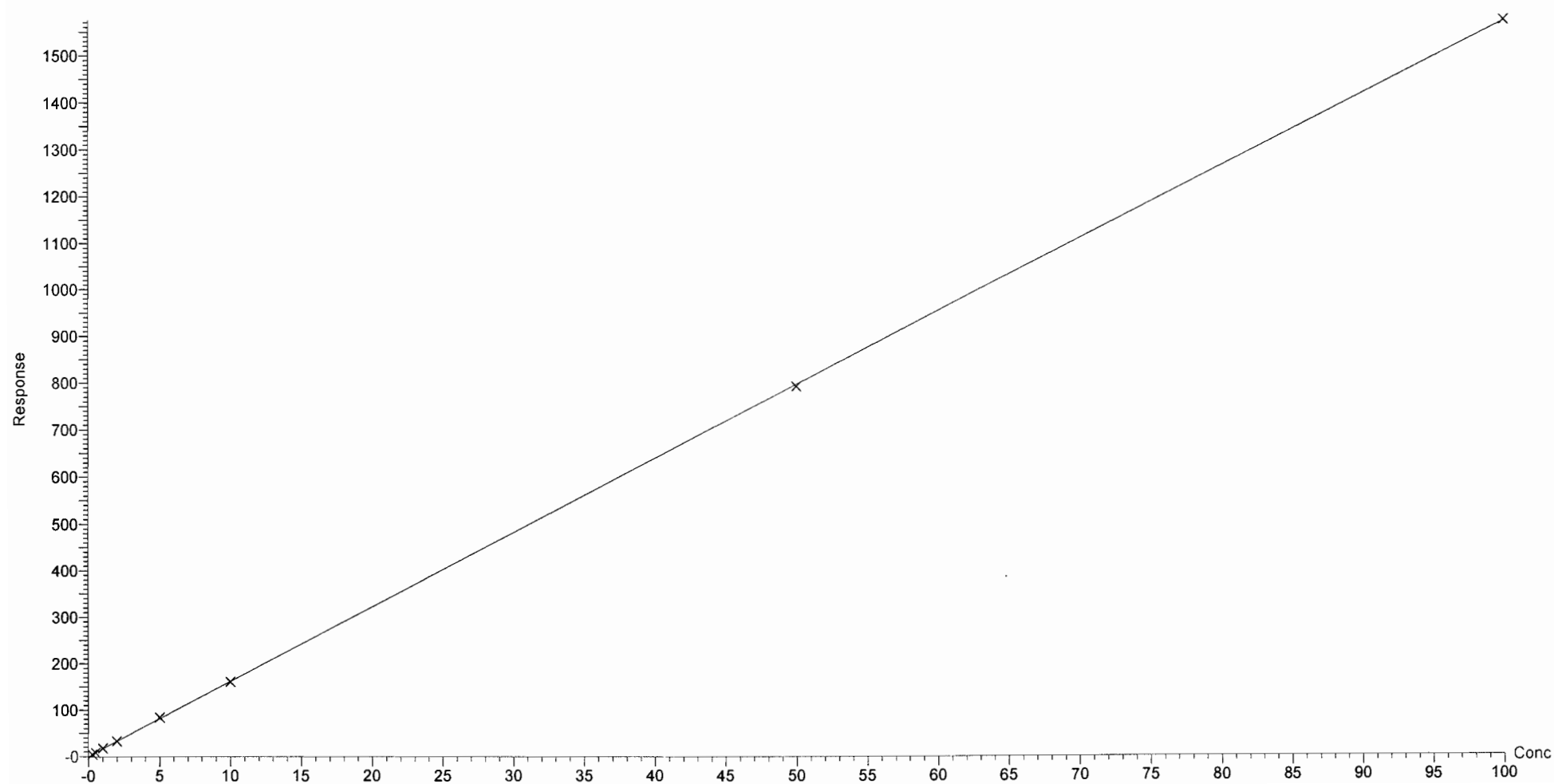
Compound name: N-EtFOSAA

Coefficient of Determination: $R^2 = 0.999908$

Calibration curve: $-0.00439744 * x^2 + 16.1657 * x + 0.0580373$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

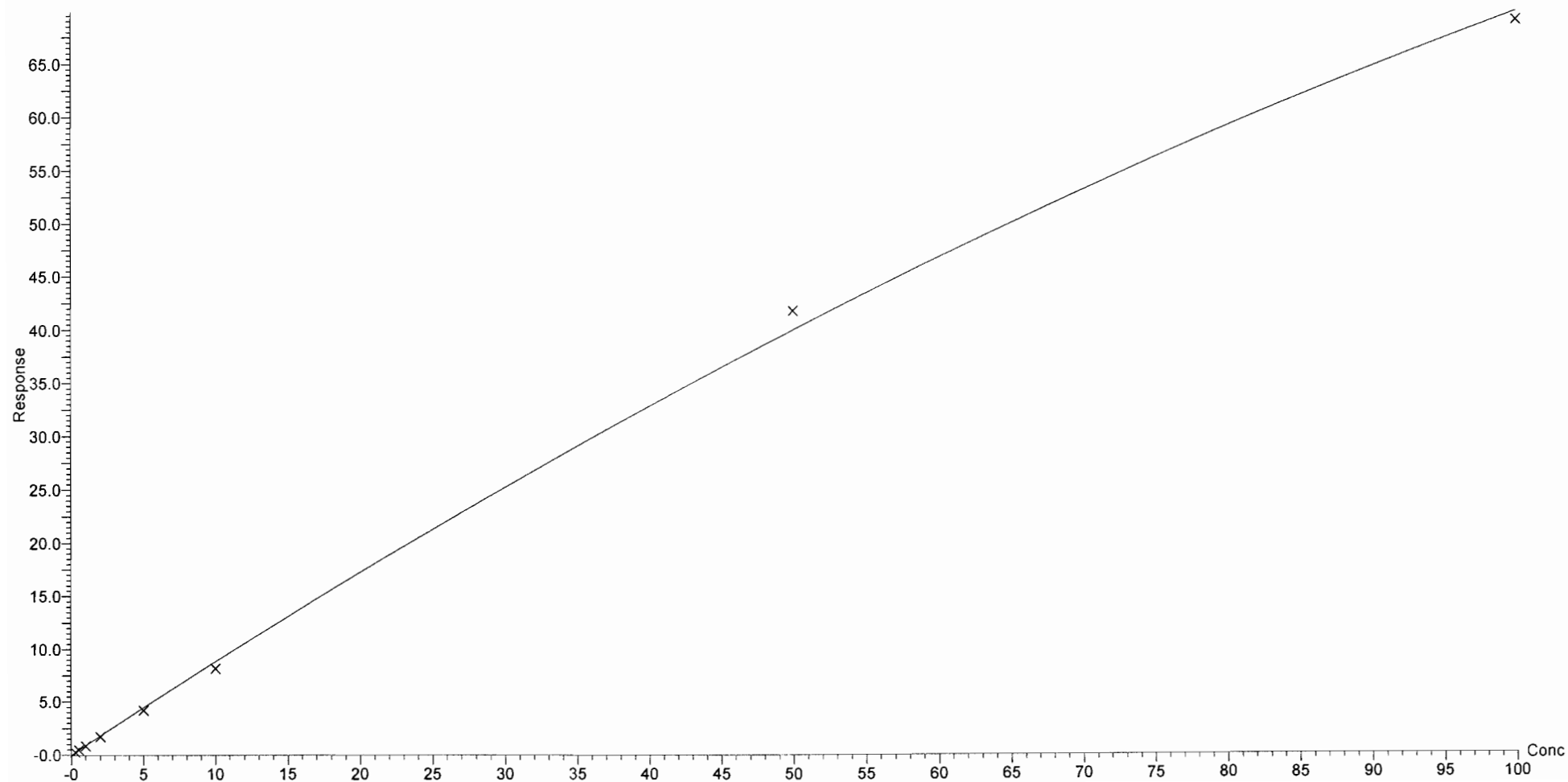
Compound name: PFUnA

Coefficient of Determination: $R^2 = 0.998430$

Calibration curve: $-0.0020331 * x^2 + 0.901478 * x + 0.00751751$

Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

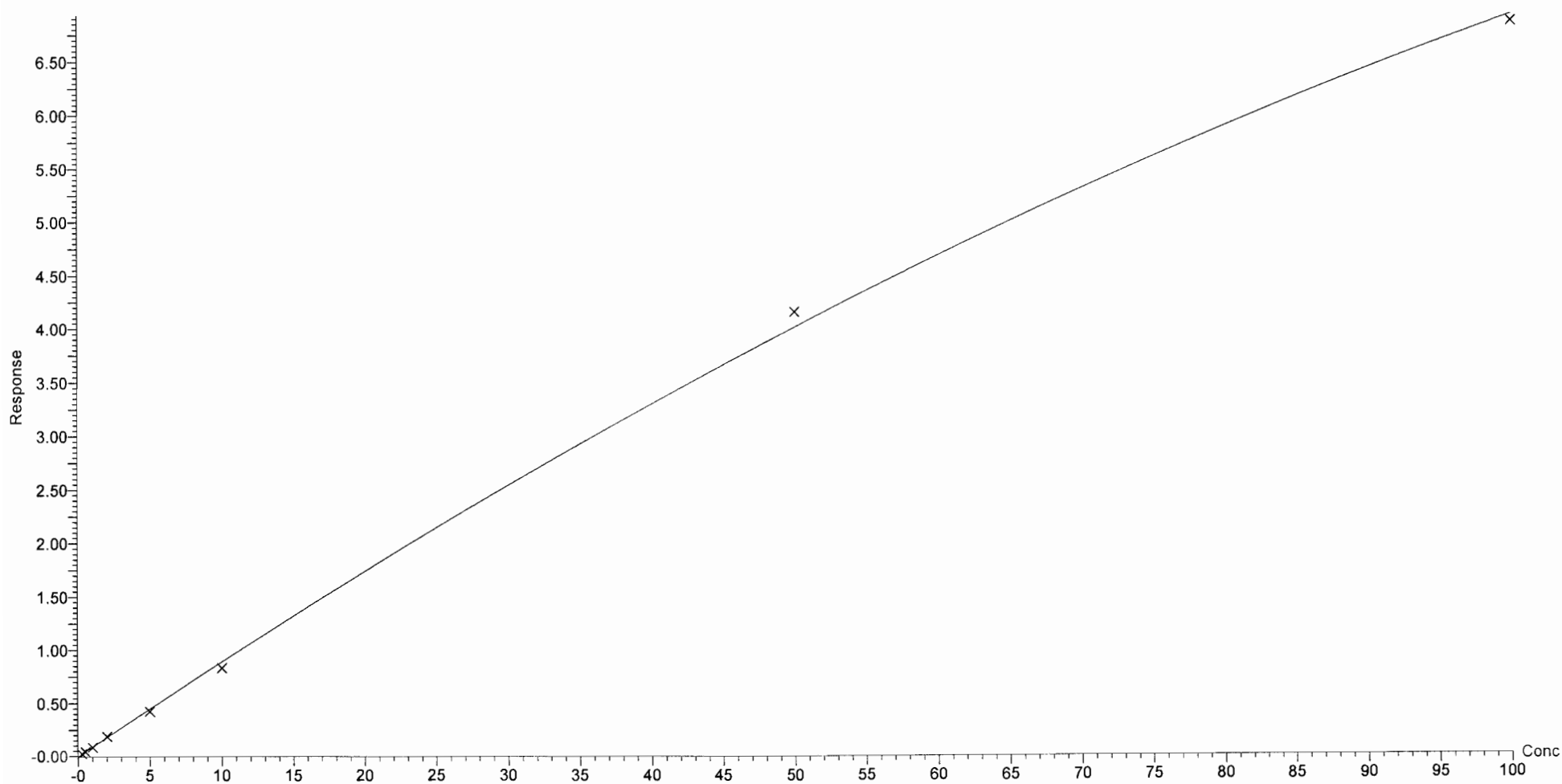
Compound name: PFDS

Coefficient of Determination: $R^2 = 0.998889$

Calibration curve: $-0.000220781 * x^2 + 0.0914068 * x + -0.00228704$

Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

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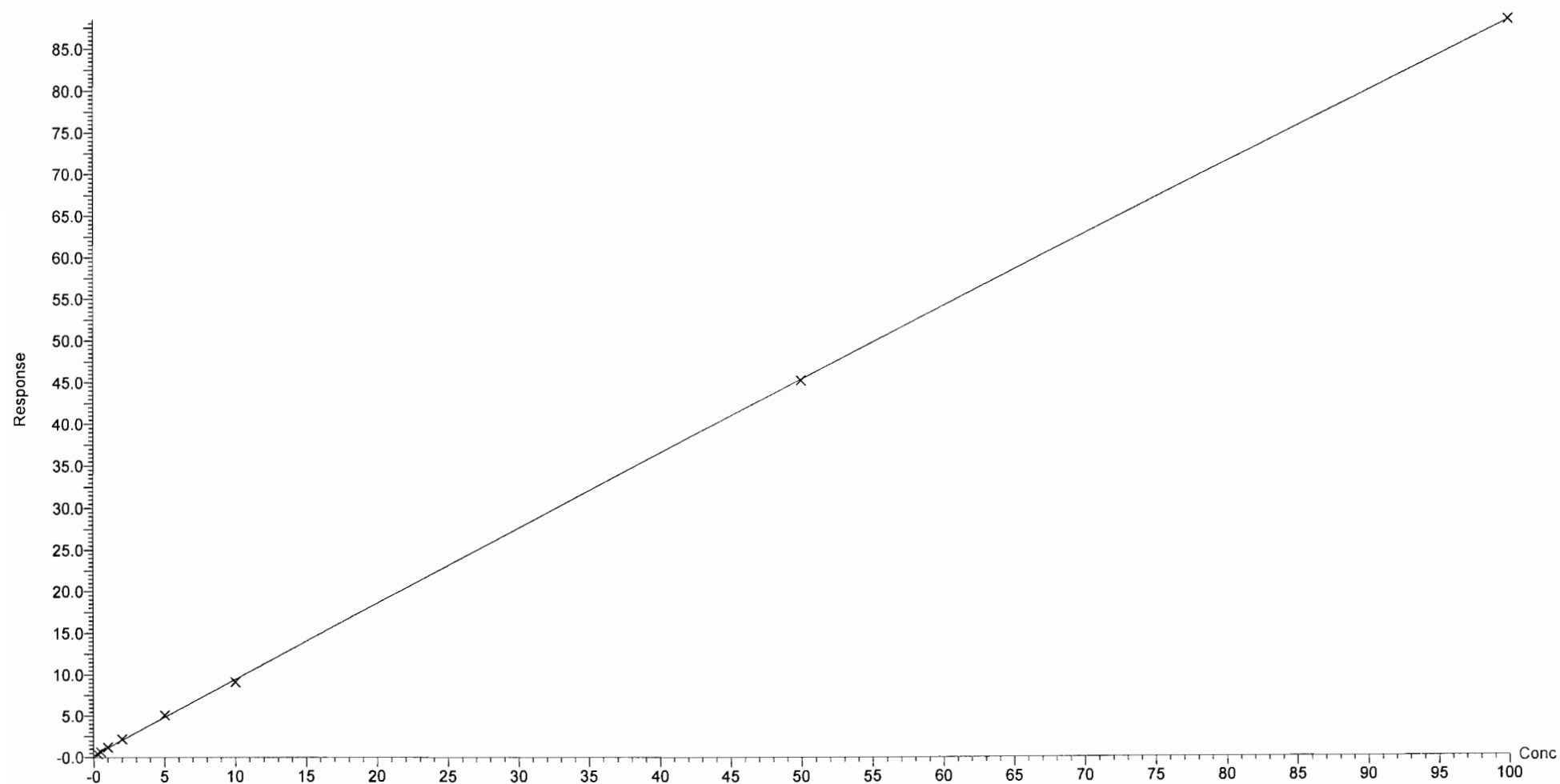
Compound name: PFD_oA

Coefficient of Determination: $R^2 = 0.999700$

Calibration curve: $-0.000446703 * x^2 + 0.926687 * x + 0.203454$

Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

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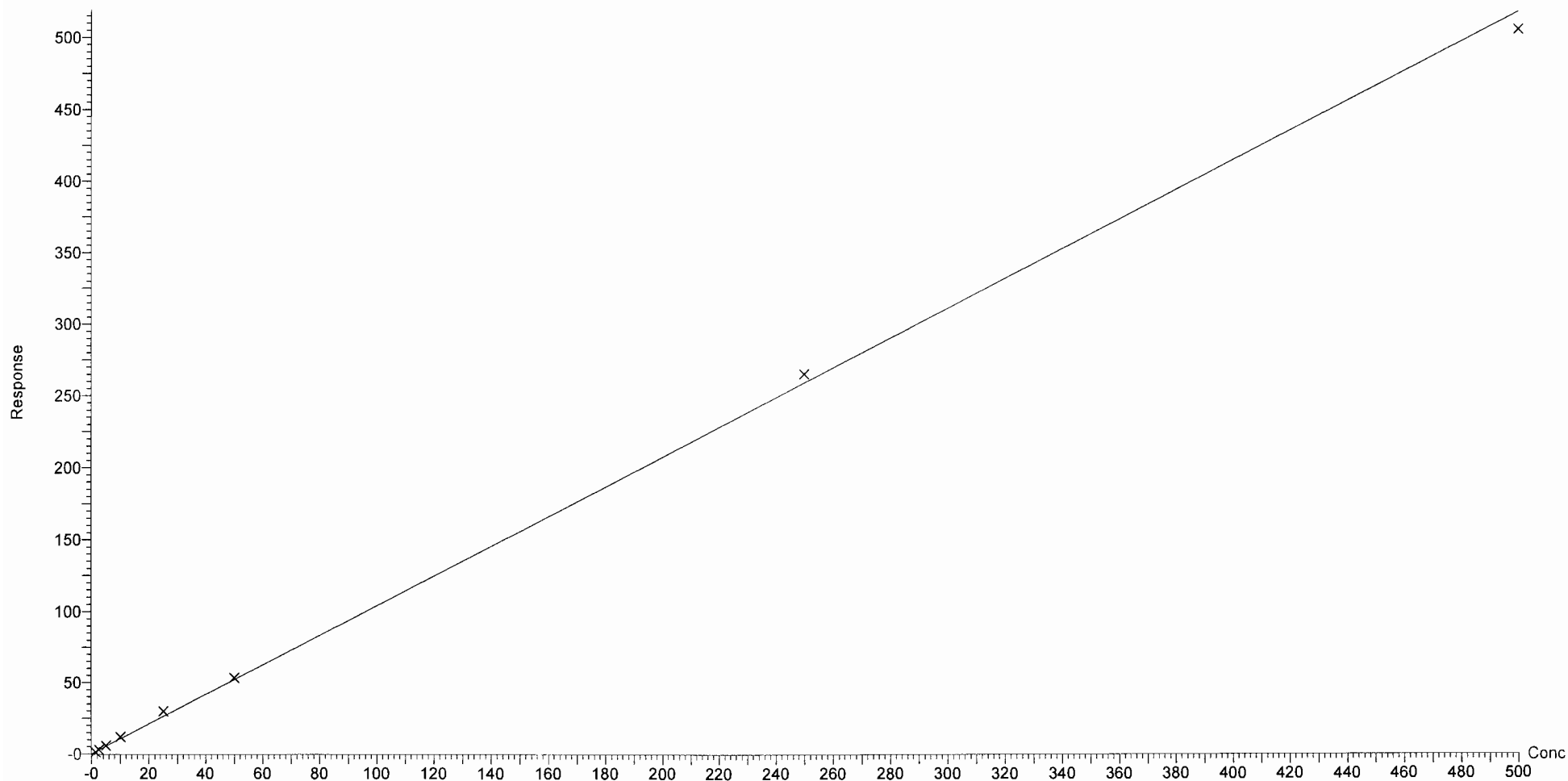
Compound name: **N-MeFOSA**

Correlation coefficient: $r = 0.999273$, $r^2 = 0.998546$

Calibration curve: $1.0376 * x + 0.213391$

Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

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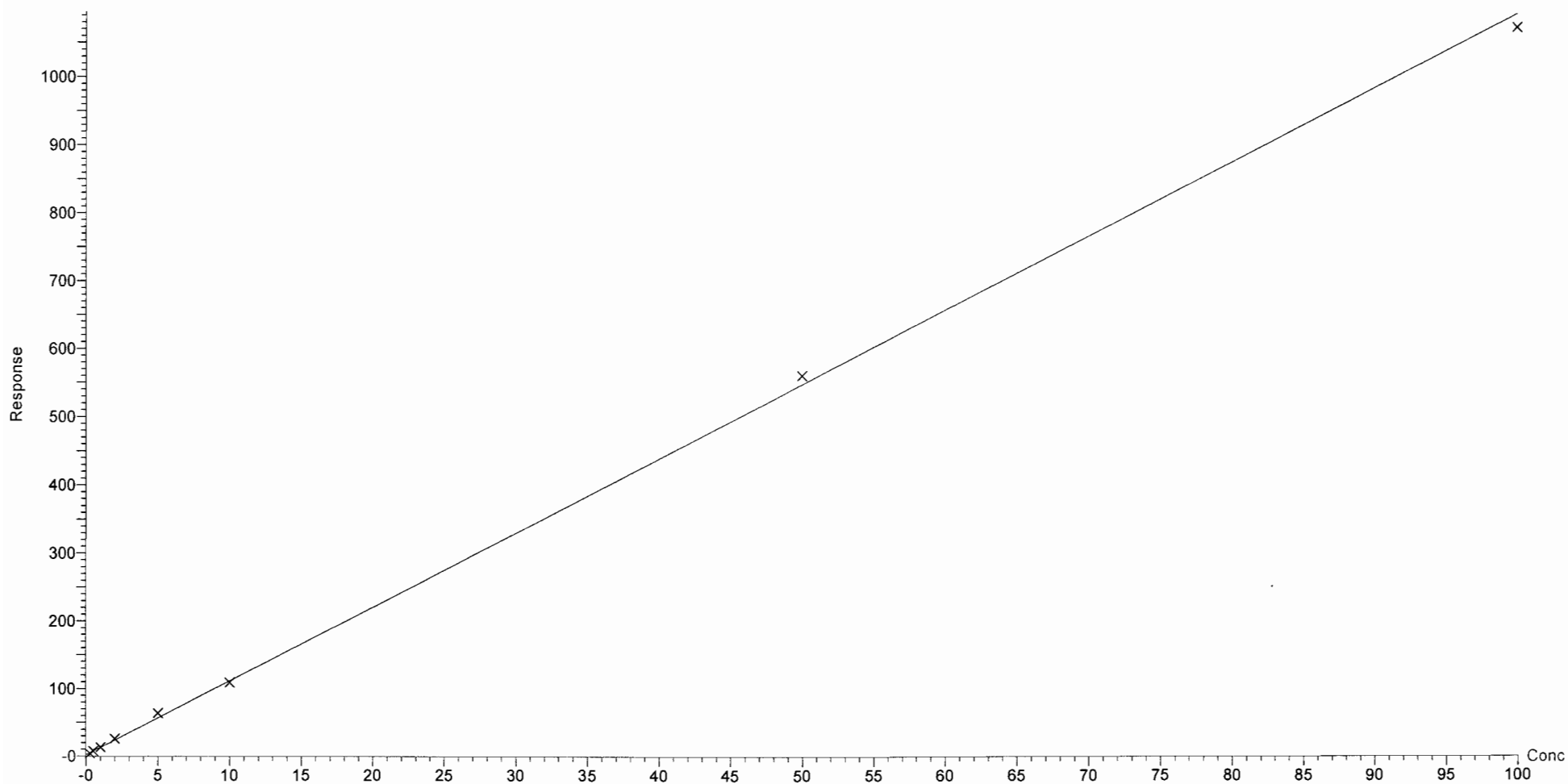
Compound name: PFTrDA

Correlation coefficient: $r = 0.999414$, $r^2 = 0.998828$

Calibration curve: $10.9255 * x + 1.79$

Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

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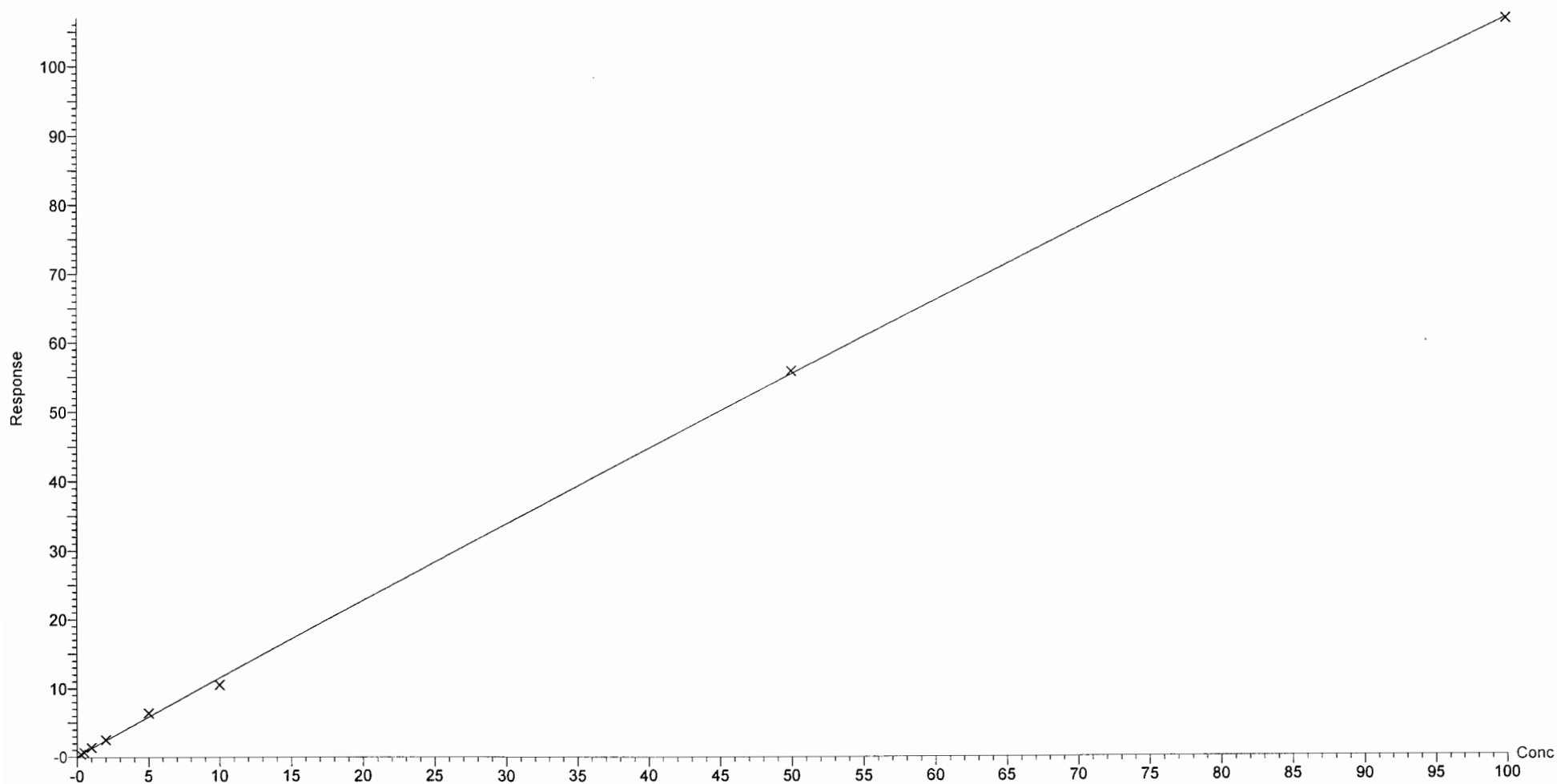
Compound name: PFTeDA

Coefficient of Determination: $R^2 = 0.999057$

Calibration curve: $-0.000800394 * x^2 + 1.14875 * x + 0.111533$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

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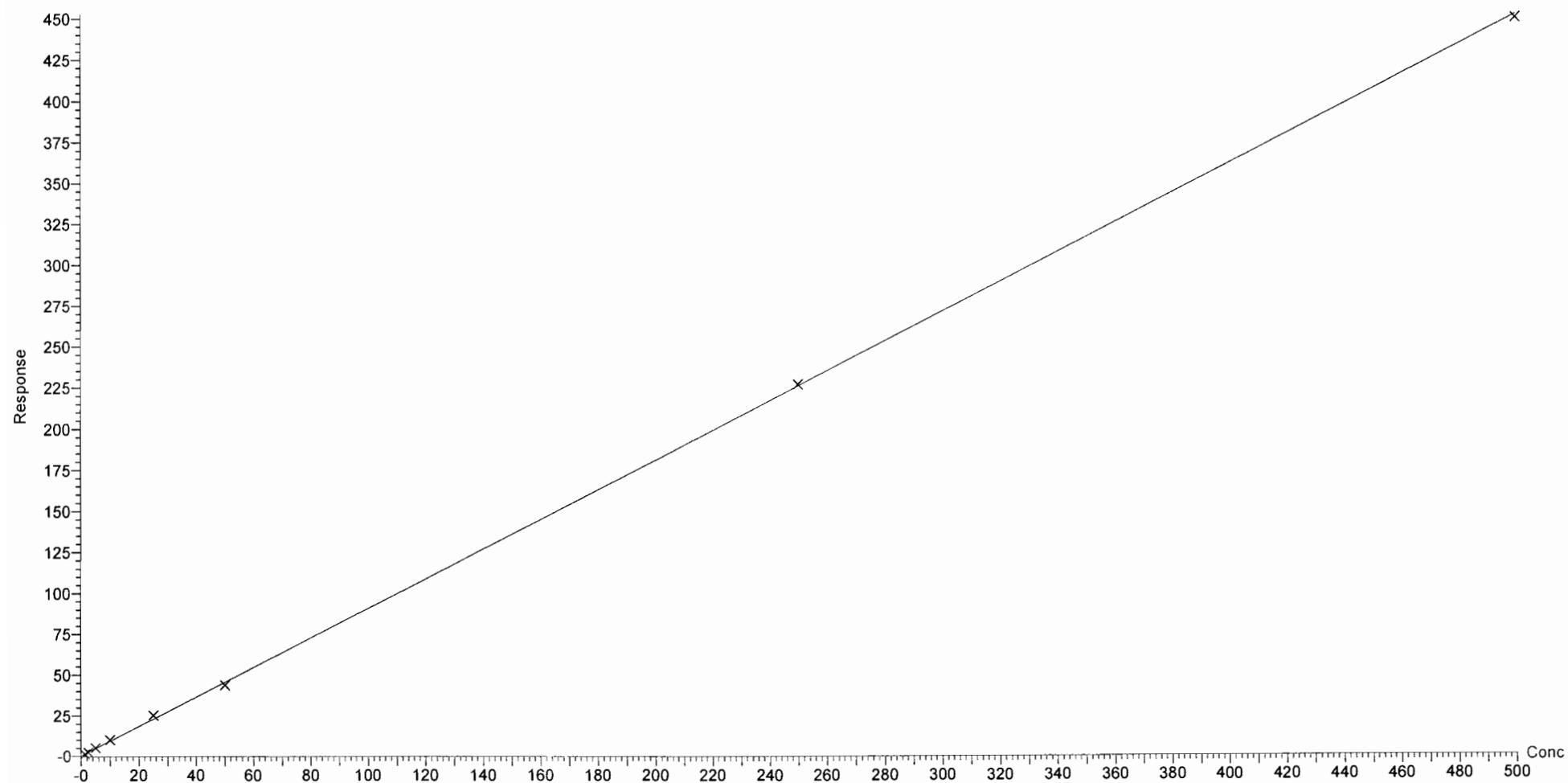
Compound name: N-EtFOSA

Correlation coefficient: $r = 0.999689$, $r^2 = 0.999377$

Calibration curve: $0.904115 * x + 0.326191$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

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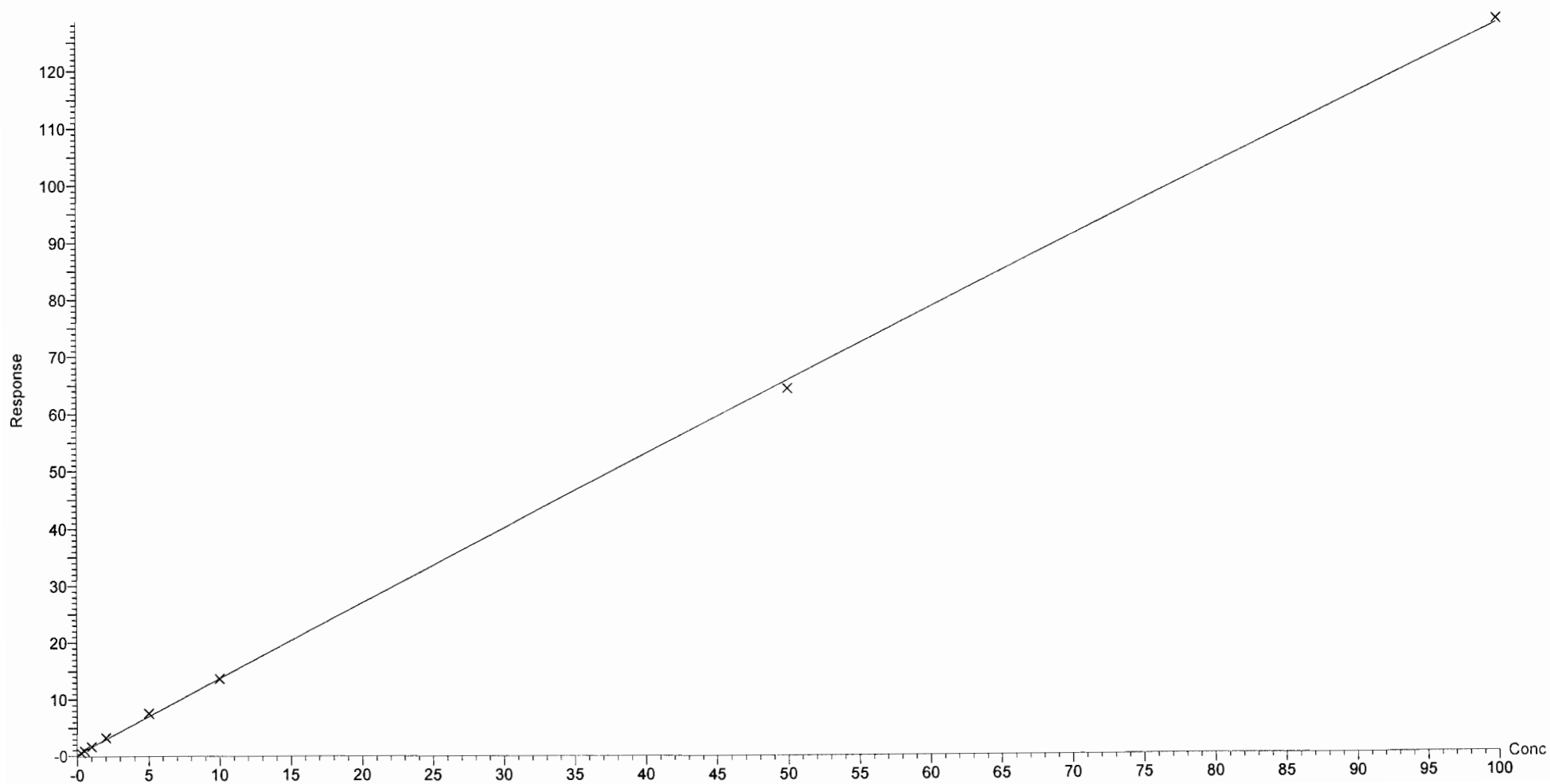
Compound name: PFHxDA

Coefficient of Determination: $R^2 = 0.999358$

Calibration curve: $-0.000715061 * x^2 + 1.34773 * x + 0.264398$

Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

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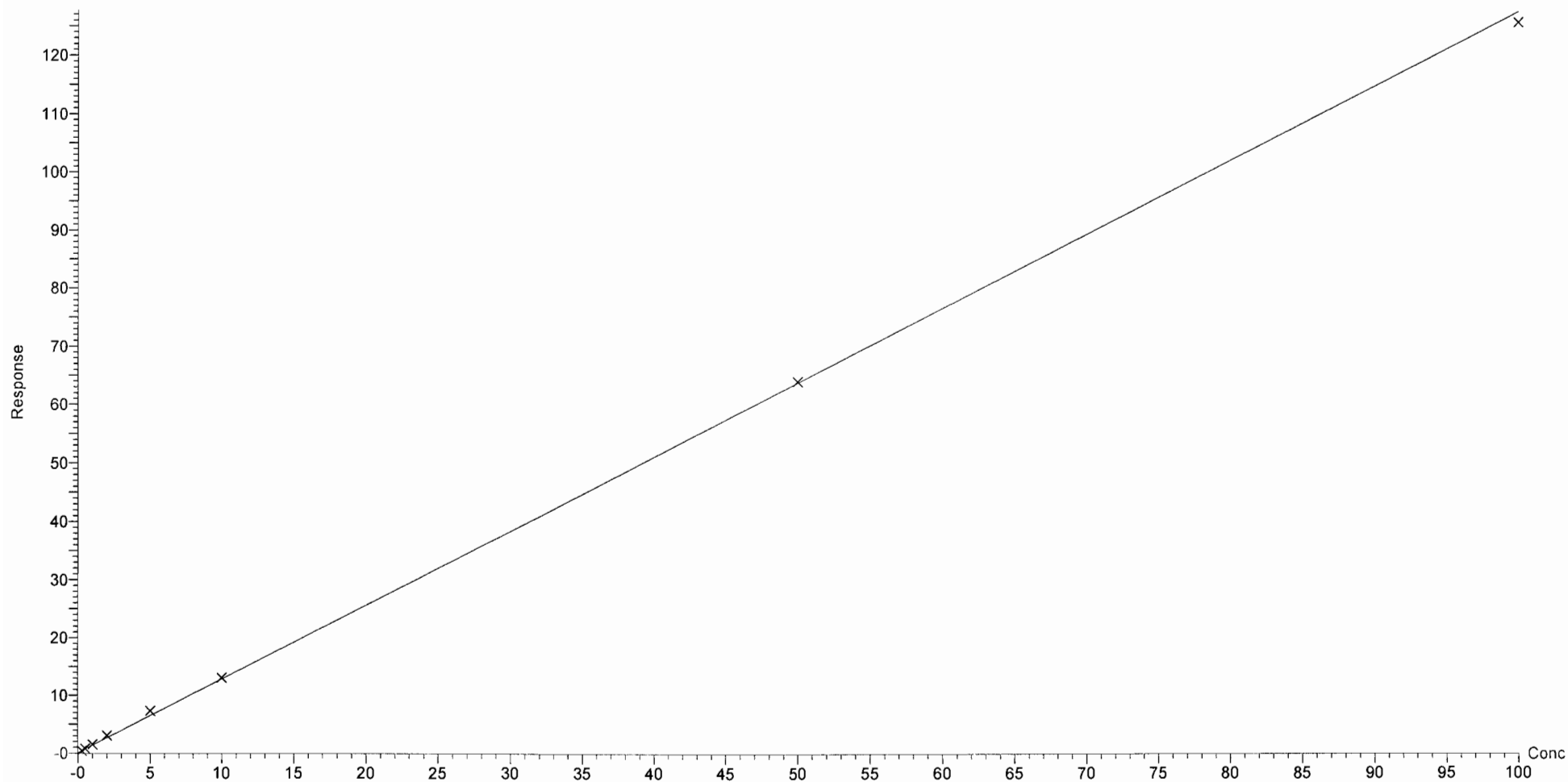
Compound name: PFODA

Correlation coefficient: $r = 0.999378$, $r^2 = 0.998756$

Calibration curve: $1.27561 * x + 0.10098$

Response type: Internal Std (Ref 48), Area % (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:37:22 Pacific Daylight Time

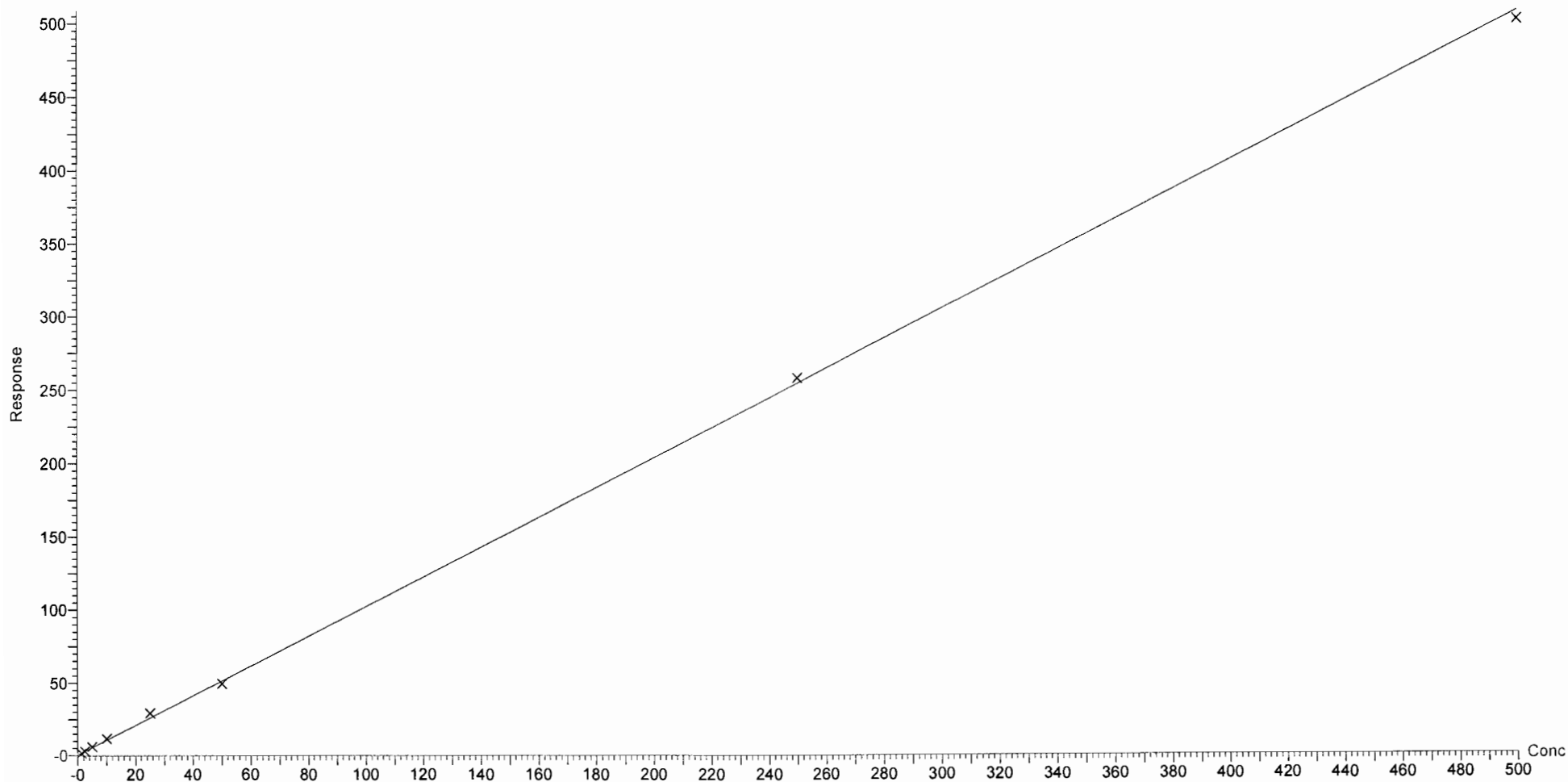
Compound name: N-MeFOSE

Correlation coefficient: $r = 0.999476$, $r^2 = 0.998953$

Calibration curve: $1.01603 * x + 0.461771$

Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

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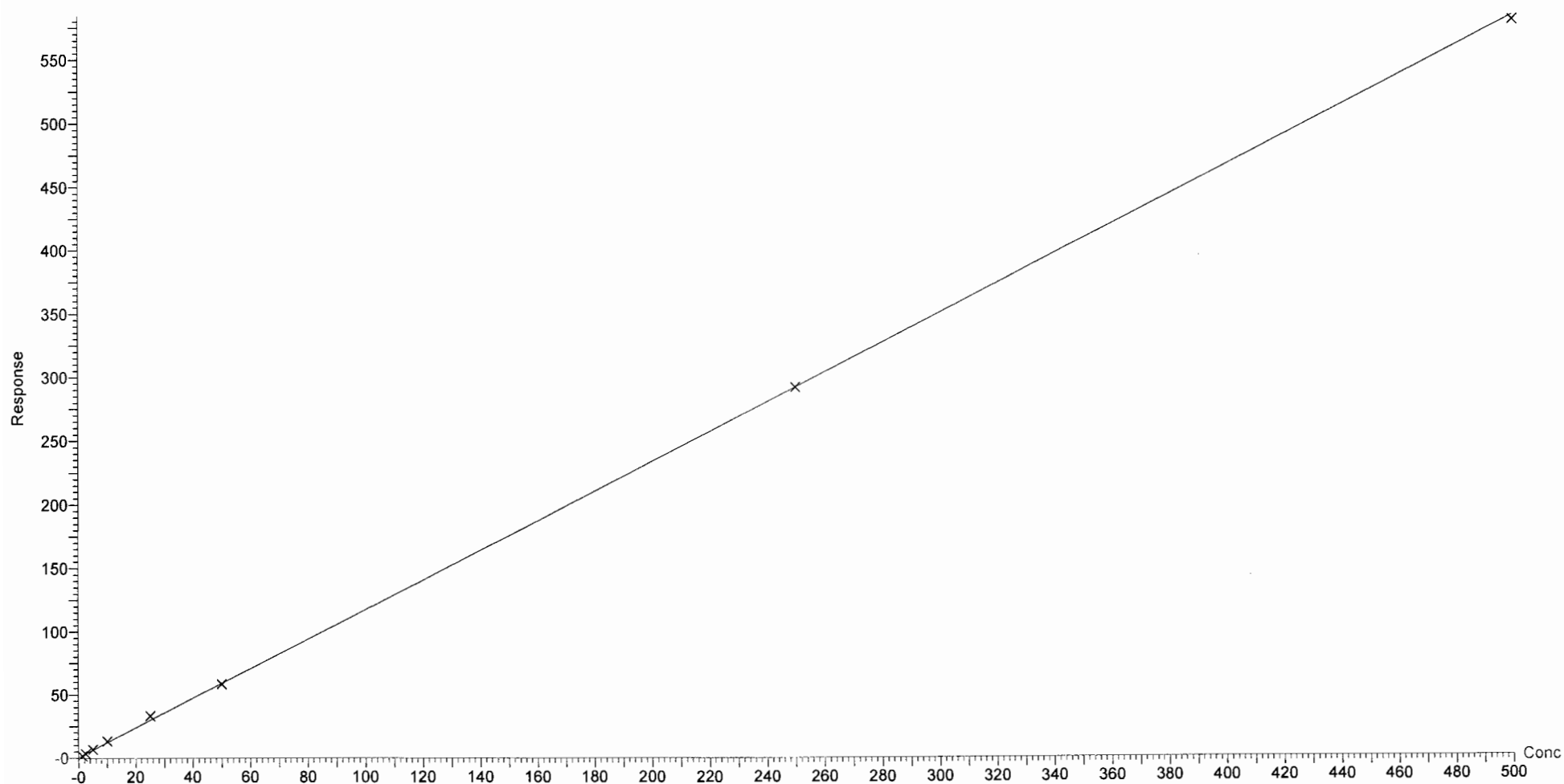
Compound name: N-EtFOSE

Correlation coefficient: $r = 0.999680$, $r^2 = 0.999361$

Calibration curve: $1.16673 * x + 0.501898$

Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

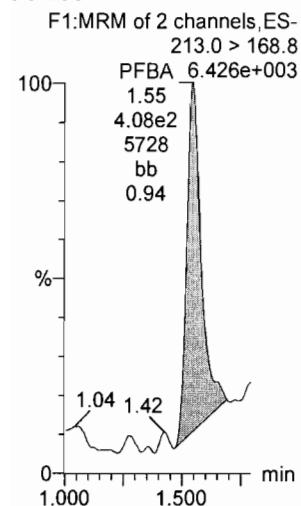
Printed: Monday, July 24, 2017 15:36:37 Pacific Daylight Time

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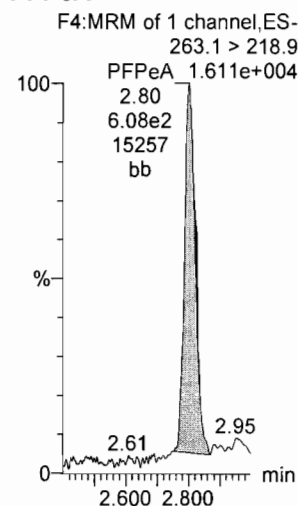
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Name: 170724M1_3, Date: 24-Jul-2017, Time: 13:51:04, ID: ST170724M1-1 PFC CS-2 17G2422, Description: PFC CS-2 17G2422

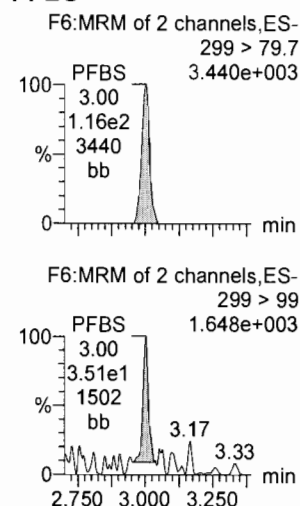
PFBA



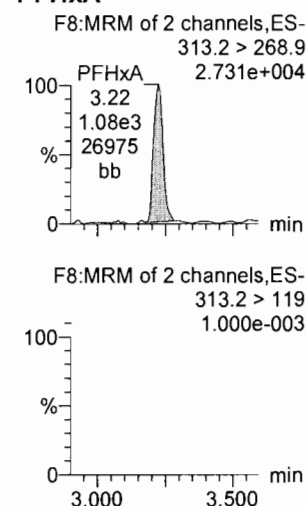
PFPeA



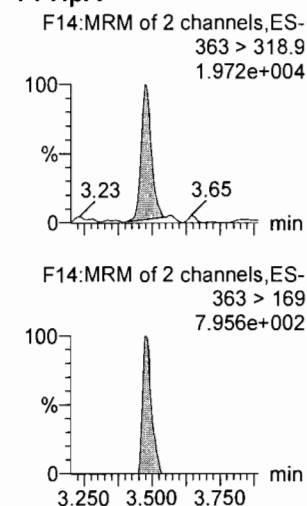
PFBS



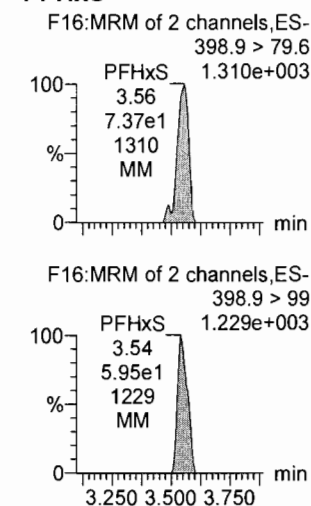
PFHxA



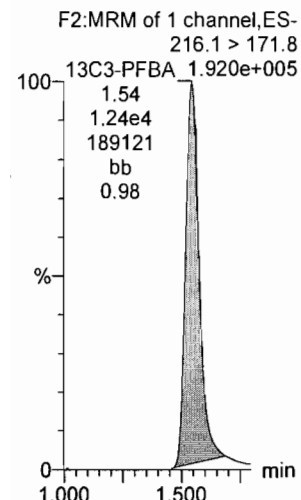
PFHpA



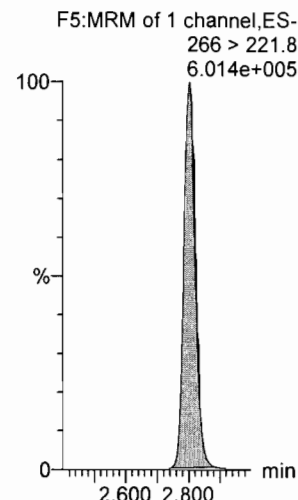
PFHxS



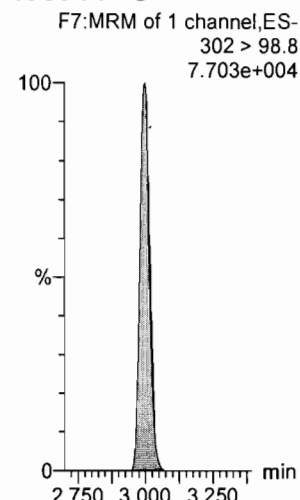
13C3-PFBA



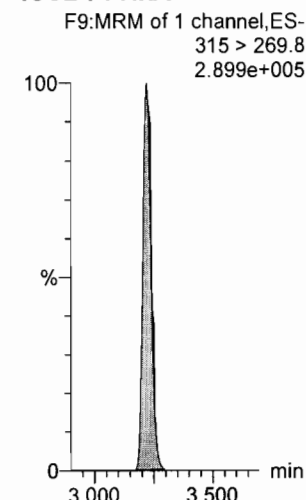
13C3-PFPeA



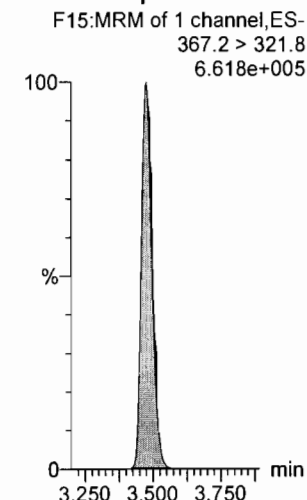
13C3-PFBS



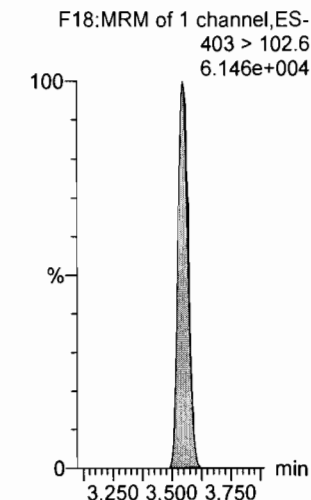
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



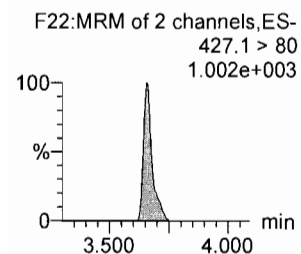
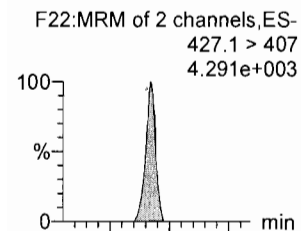
Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

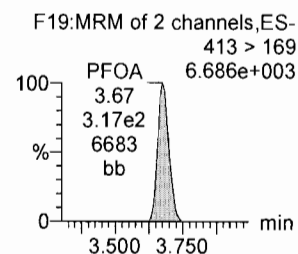
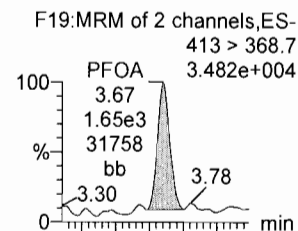
Printed: Monday, July 24, 2017 15:36:37 Pacific Daylight Time

Name: 170724M1_3, Date: 24-Jul-2017, Time: 13:51:04, ID: ST170724M1-1 PFC CS-2 17G2422, Description: PFC CS-2 17G2422

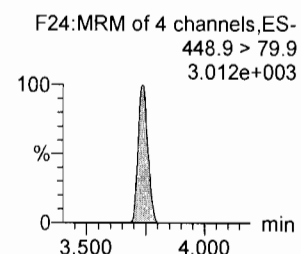
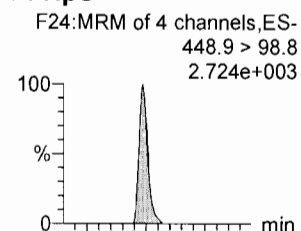
6:2 FTS



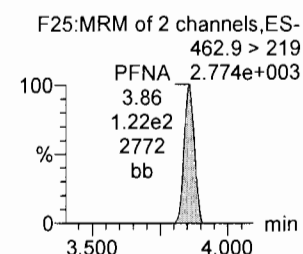
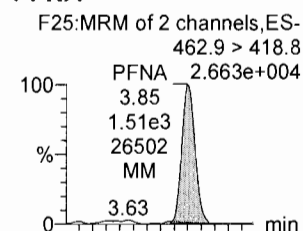
PFOA



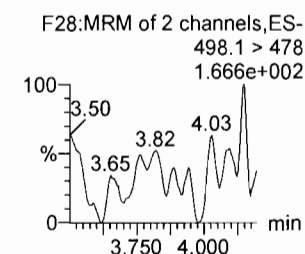
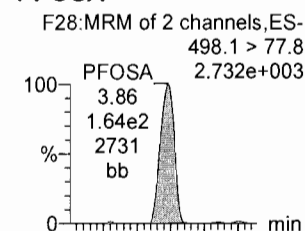
PFHpS



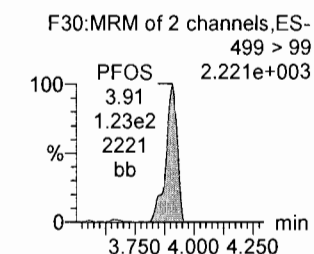
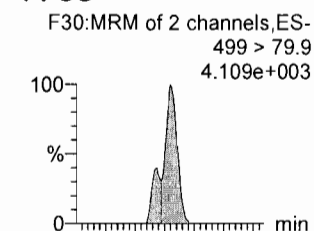
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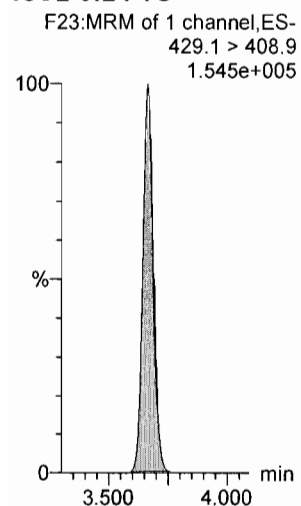
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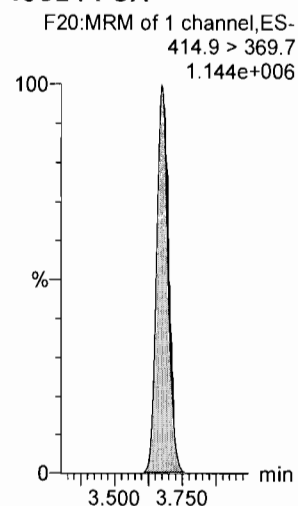
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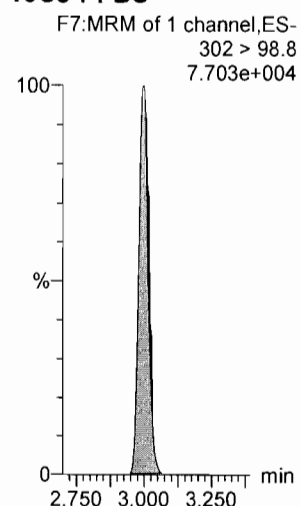
13C2-6:2 FTS



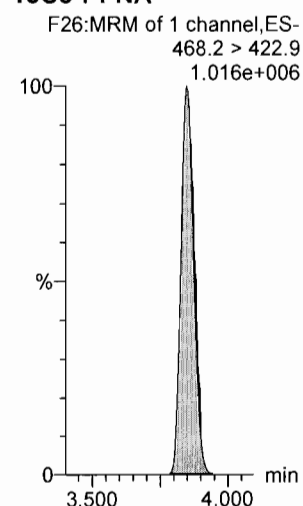
13C2-PFOA



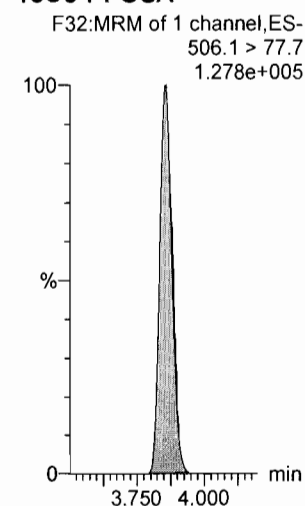
13C3-PFBS



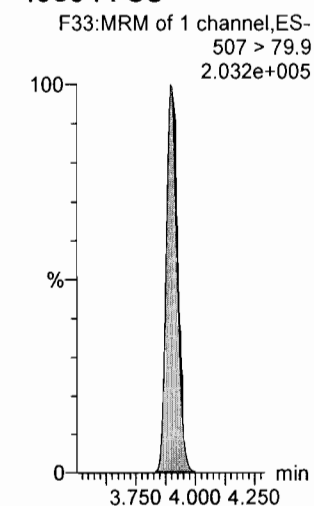
13C5-PFNA



13C8-PFOSA



13C8-PFOS



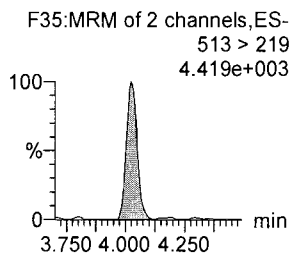
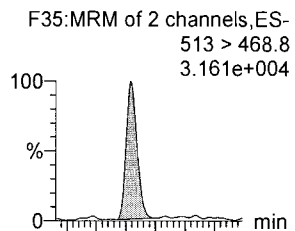
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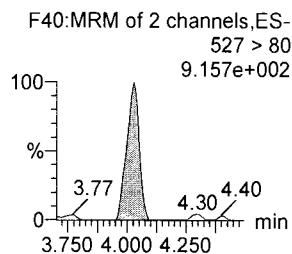
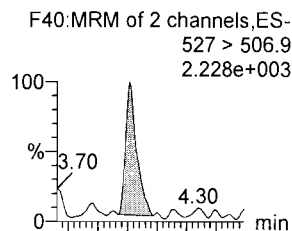
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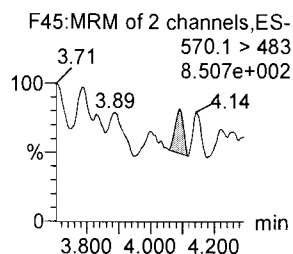
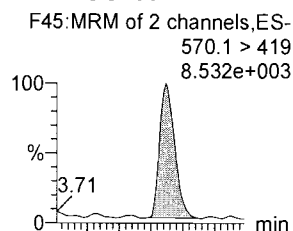
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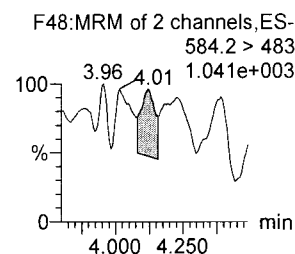
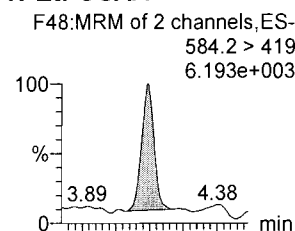
8:2 FTS



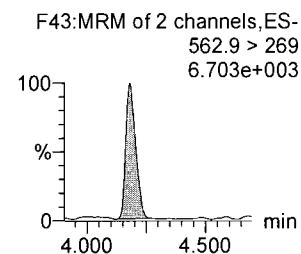
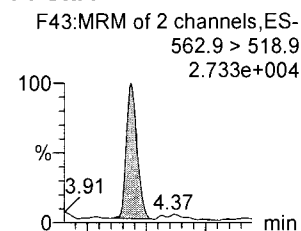
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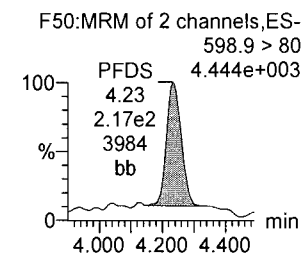
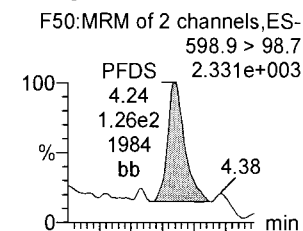
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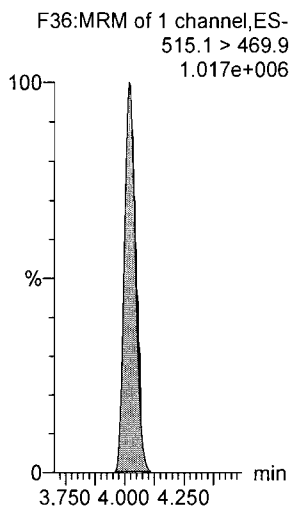
PFUnA



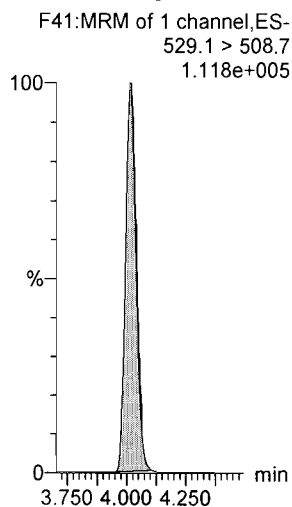
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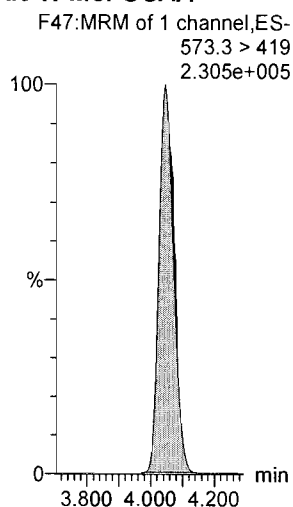
13C2-PFDA



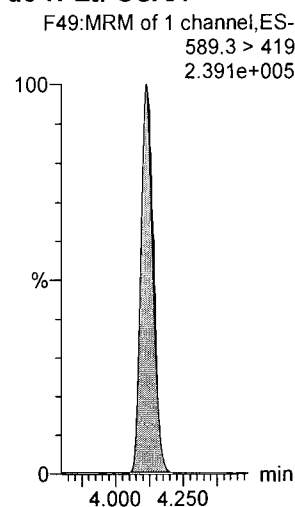
13C2-8:2 FTS



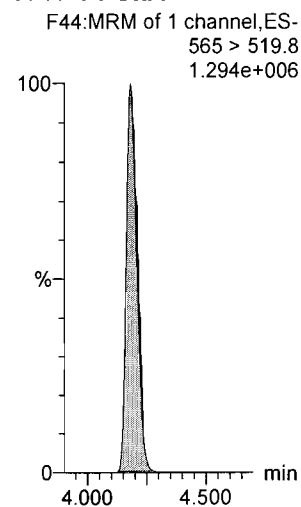
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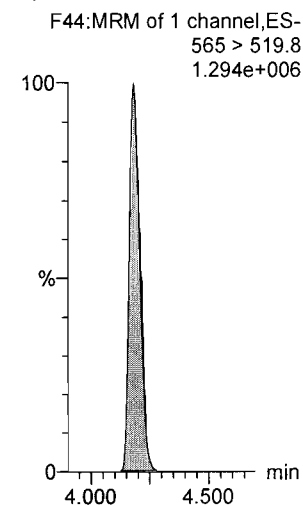
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13C2-PFUnA



13C2-PFUnA



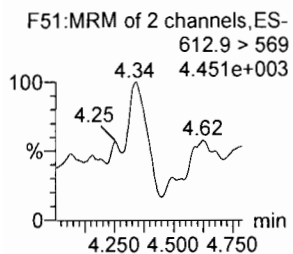
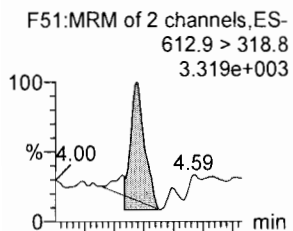
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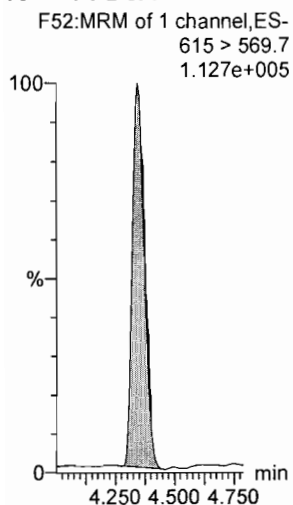
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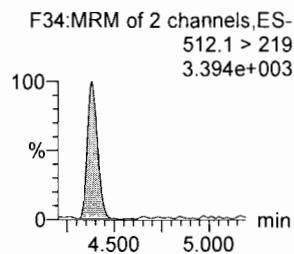
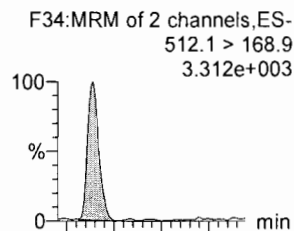
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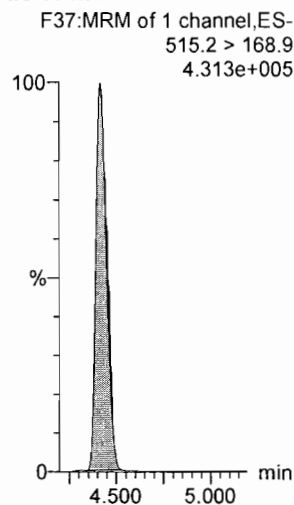
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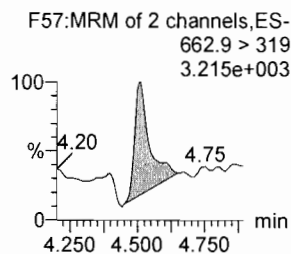
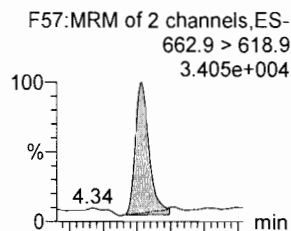
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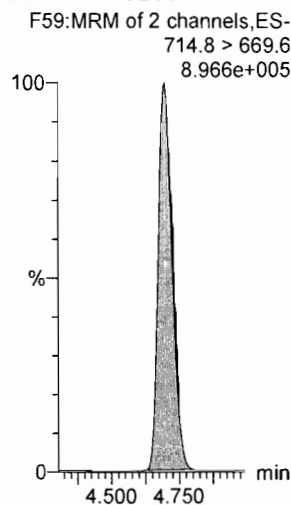
d3-N-MeFOSA



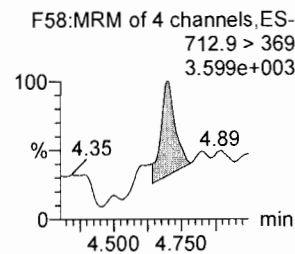
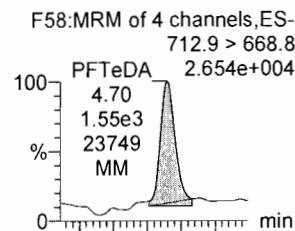
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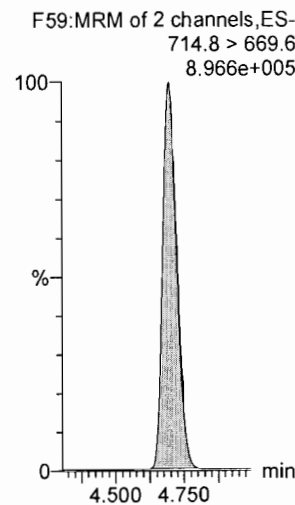
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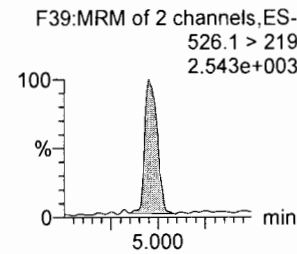
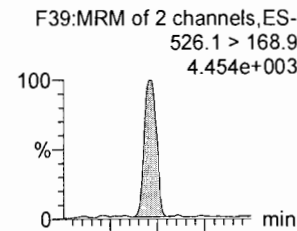
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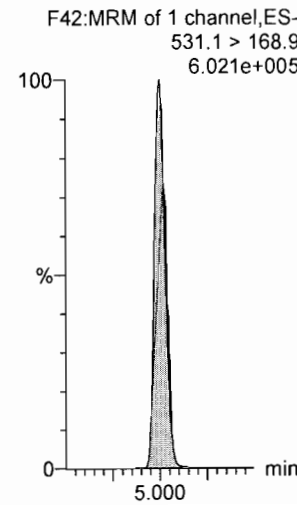
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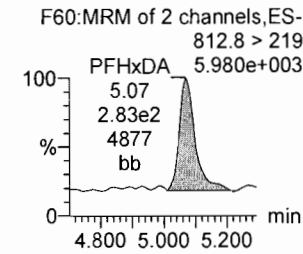
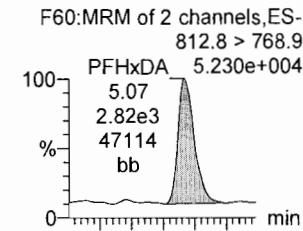
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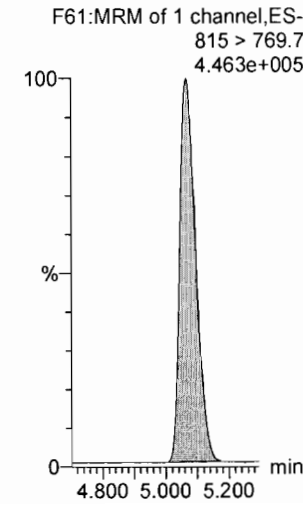
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PFHxDA



13C2-PFHxDA



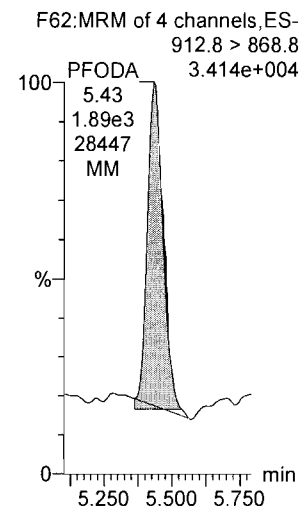
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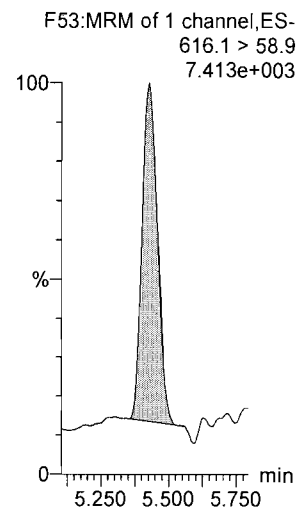
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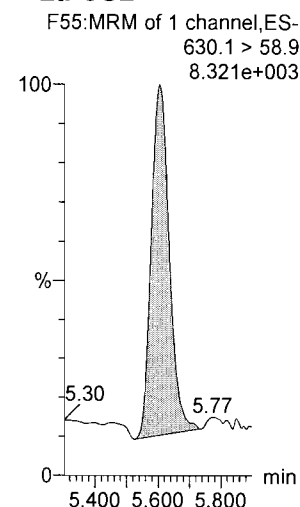
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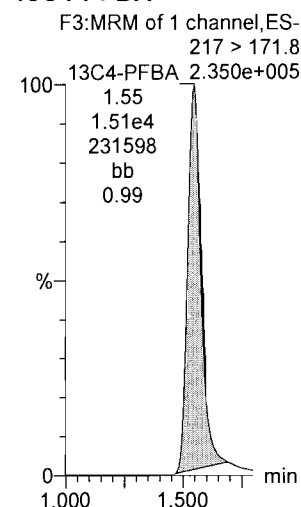
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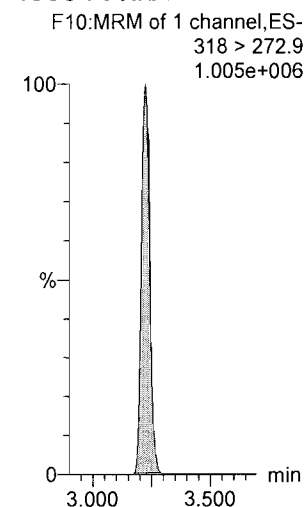
N-EtFOSE



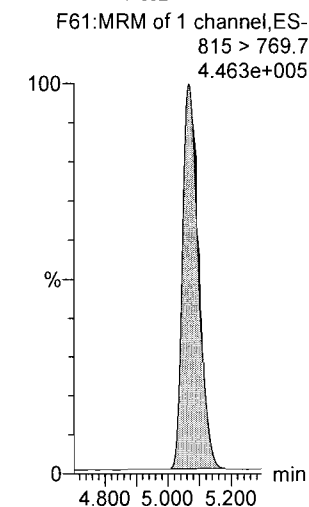
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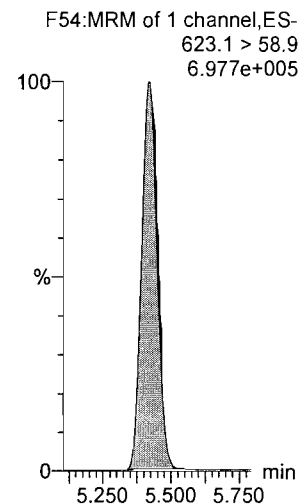
13C5-PFHxA



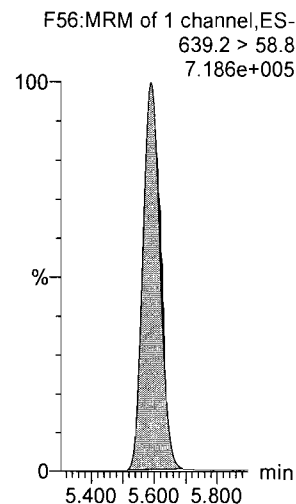
13C2-PFHxDA



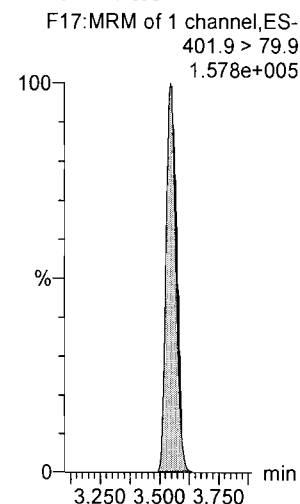
d7-N-MeFOSE



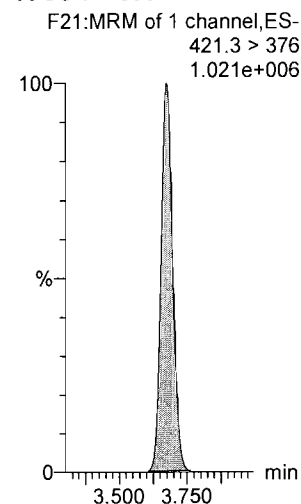
d9-N-EtFOSE



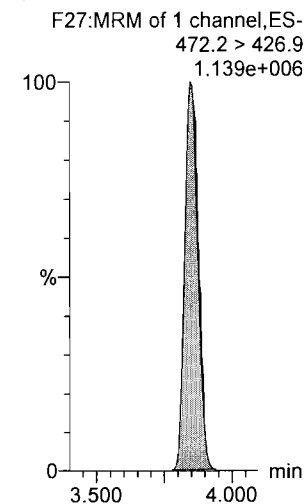
13C3-PFHxS



13C8-PFOA



13C9-PFNA



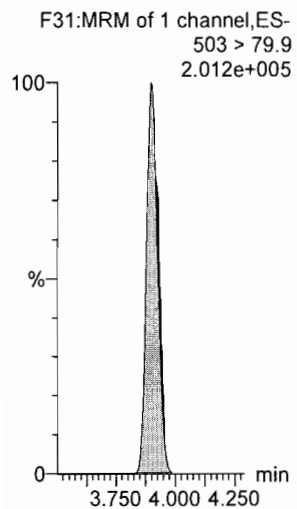
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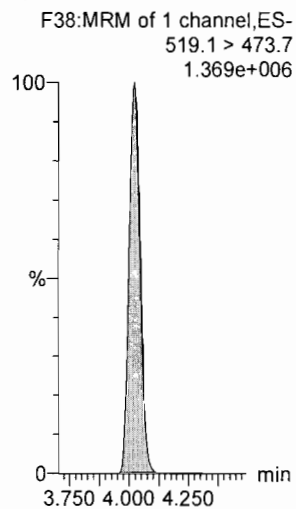
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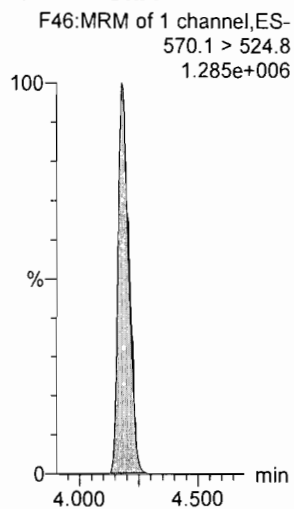
13C4-PFOS



13C6-PFDA



13C7-PFUnA

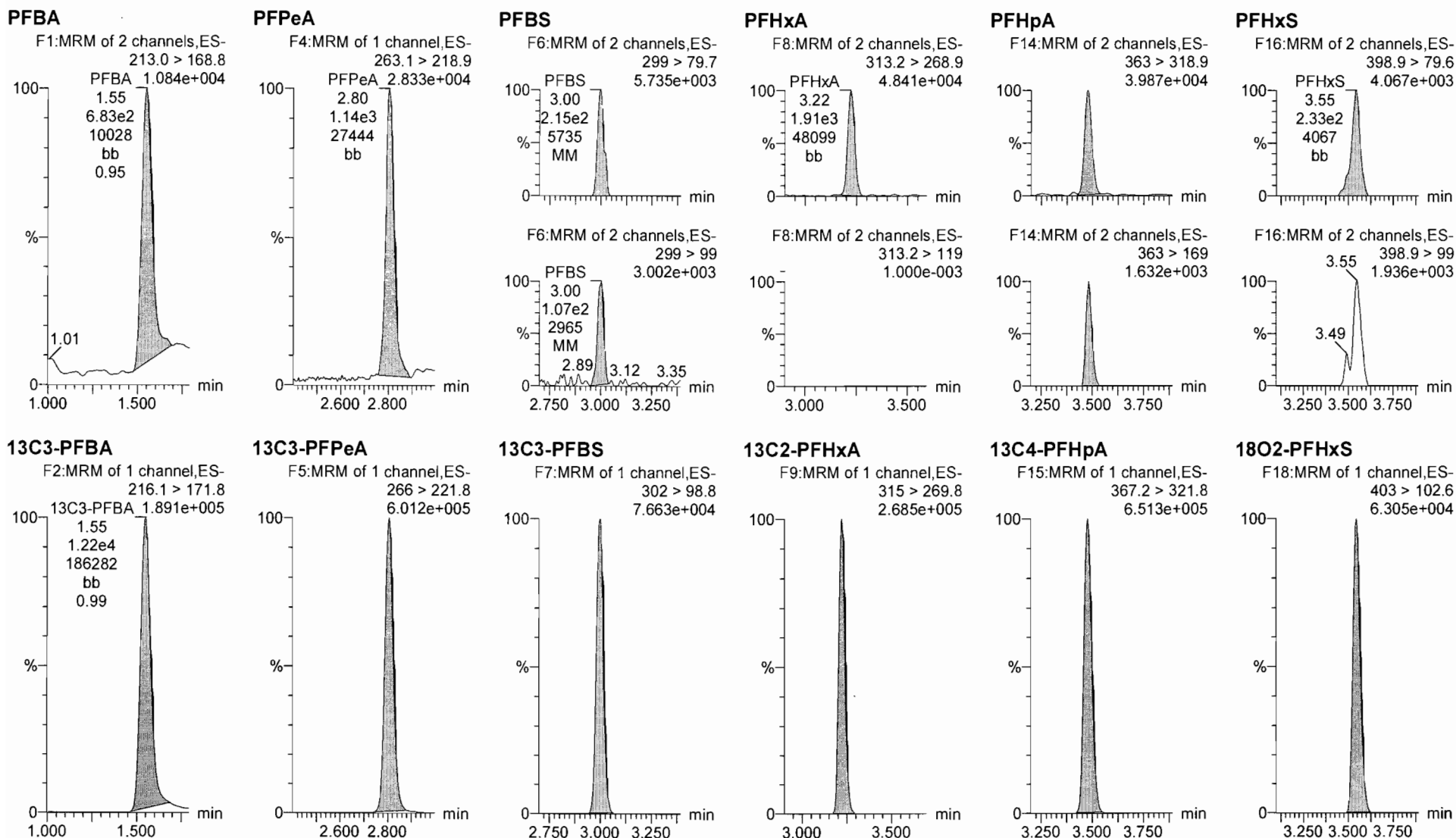


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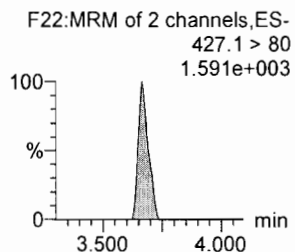
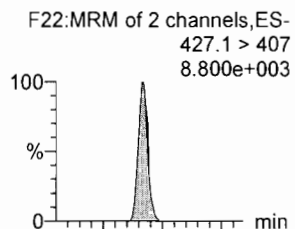
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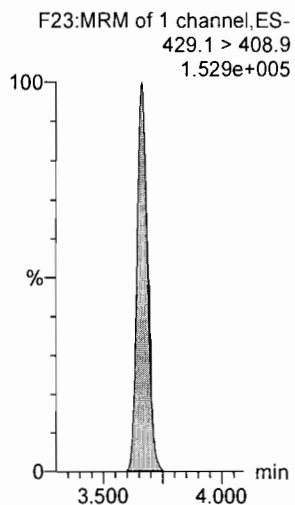
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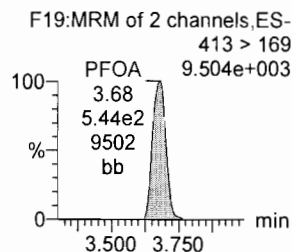
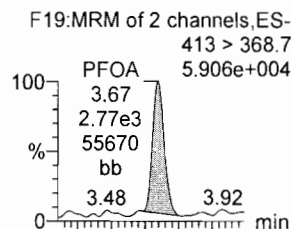
6:2 FTS



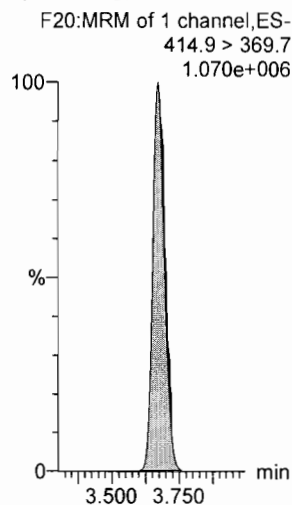
13C2-6:2 FTS



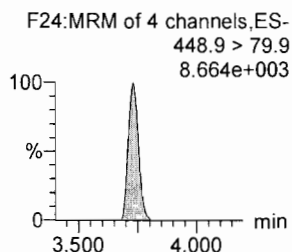
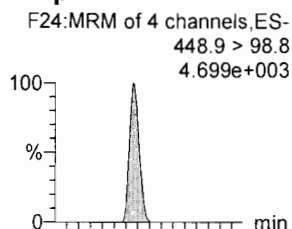
PFOA



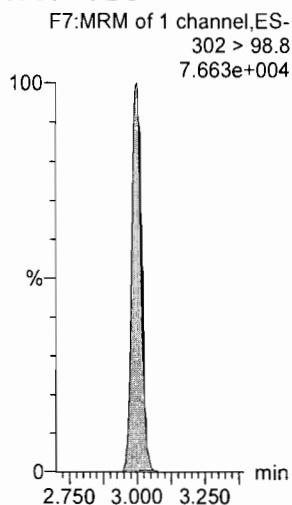
13C2-PFOA



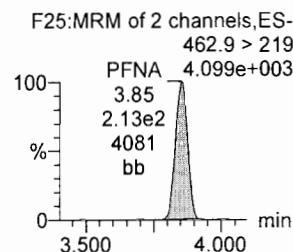
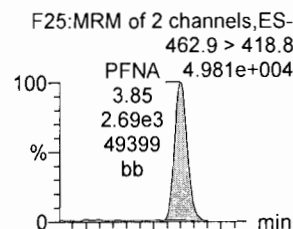
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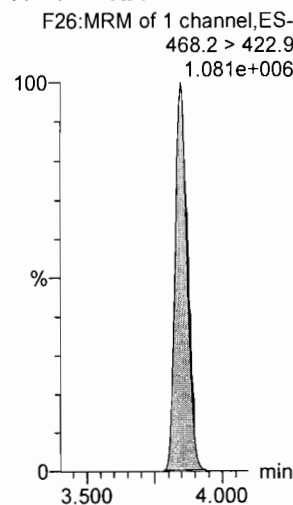
13C3-PFBS



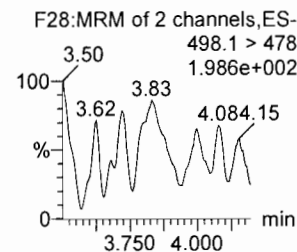
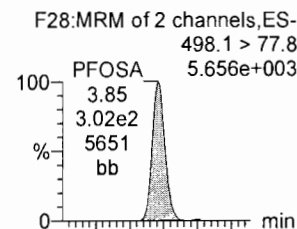
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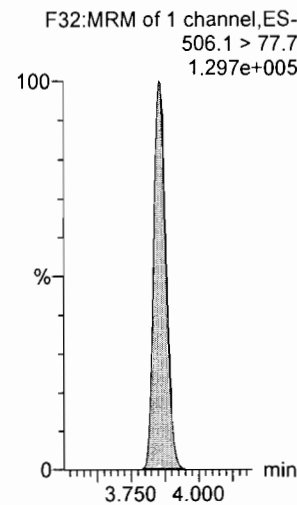
13C5-PFNA



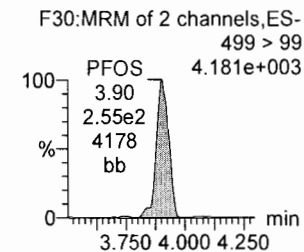
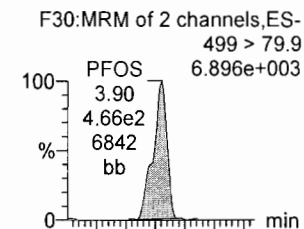
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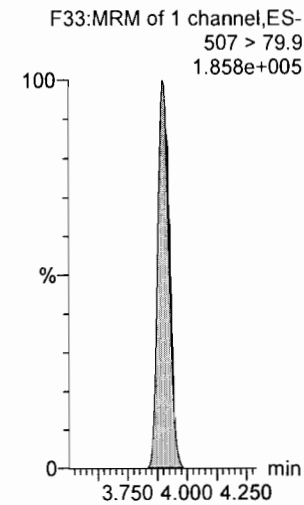
13C8-PFOSA



PFOS



13C8-PFOS



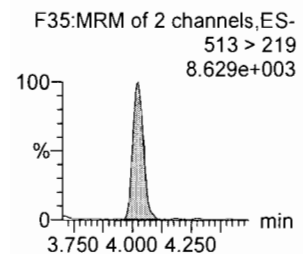
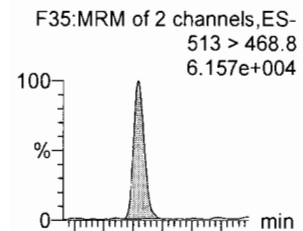
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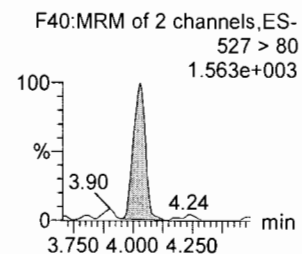
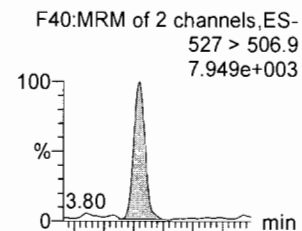
Printed: Monday, July 24, 2017 15:36:37 Pacific Daylight Time

Name: 170724M1_4, Date: 24-Jul-2017, Time: 14:01:50, ID: ST170724M1-2 PFC CS-1 17G2119, Description: PFC CS-1 17G2119

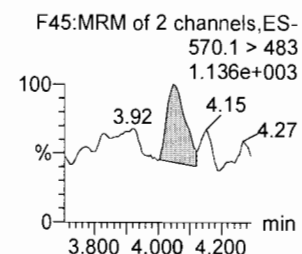
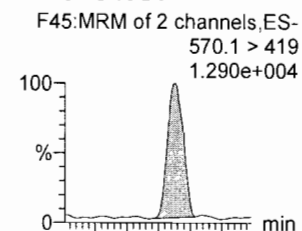
PFDA



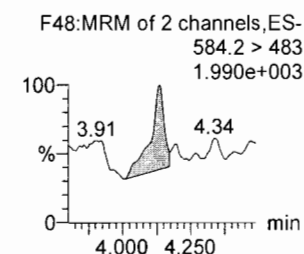
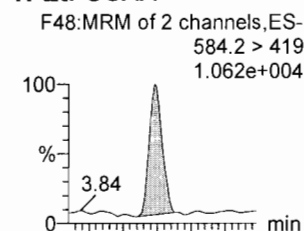
8:2 FTS



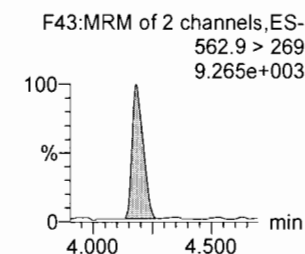
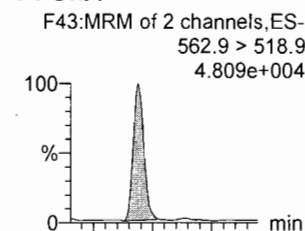
N-MeFOSAA



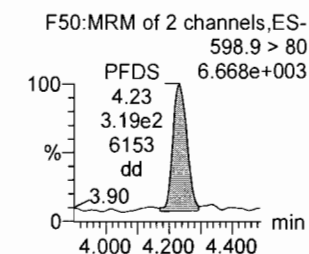
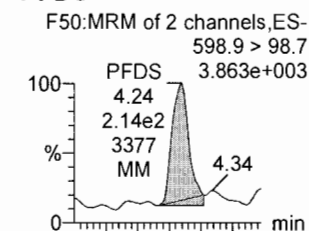
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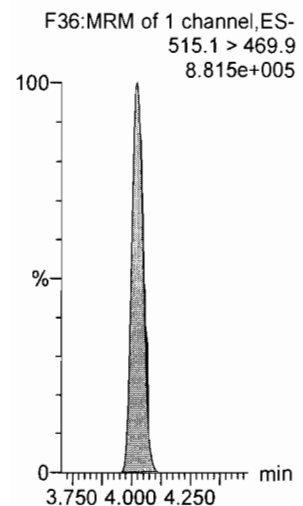
PFUnA



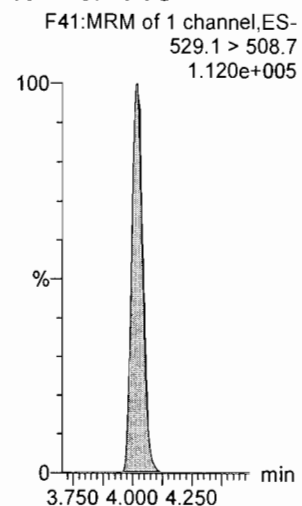
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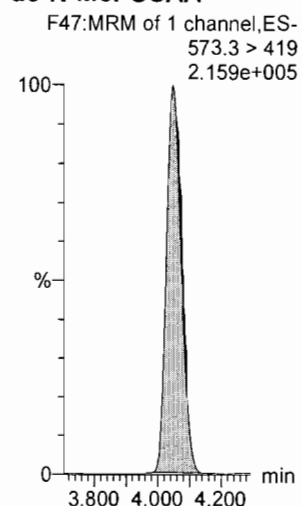
13C2-PFDA



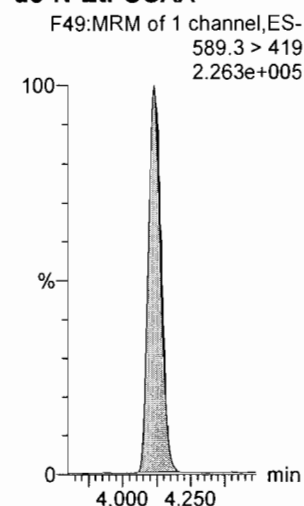
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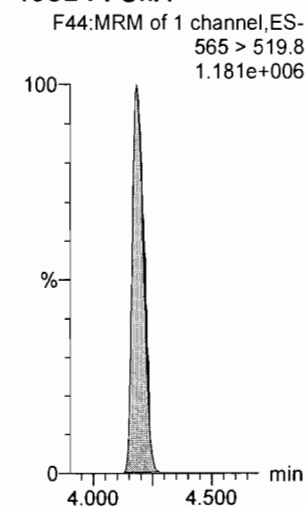
d3-N-MeFOSAA



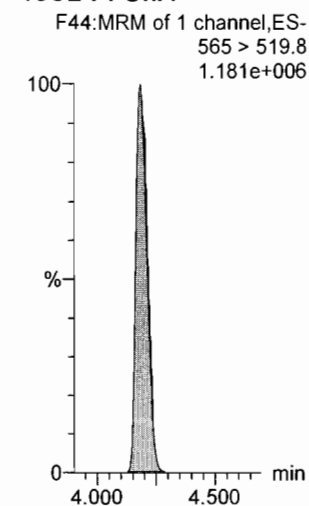
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



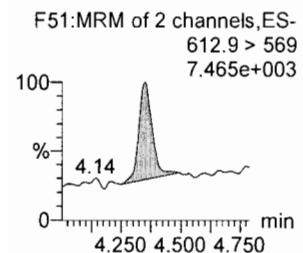
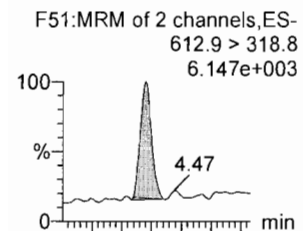
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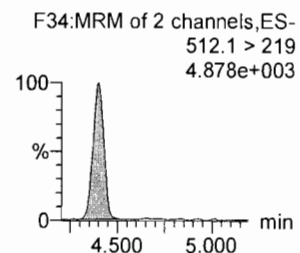
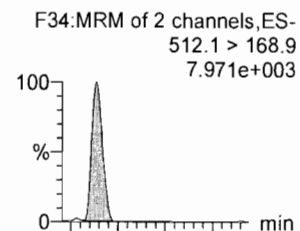
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Name: 170724M1_4, Date: 24-Jul-2017, Time: 14:01:50, ID: ST170724M1-2 PFC CS-1 17G2119, Description: PFC CS-1 17G2119

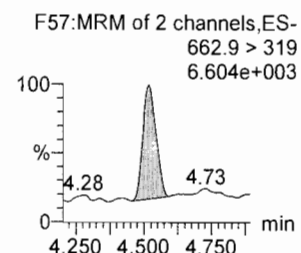
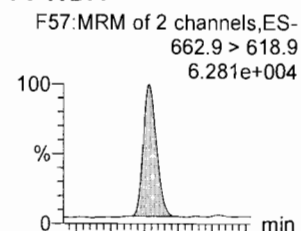
PFDaA



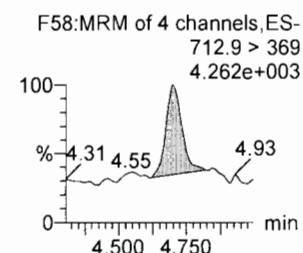
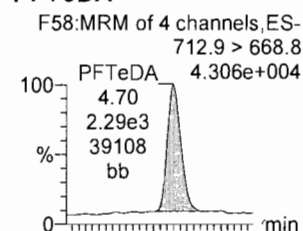
N-MeFOSA



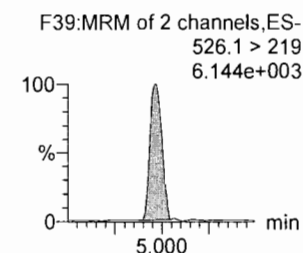
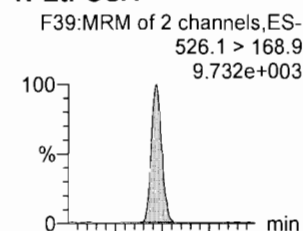
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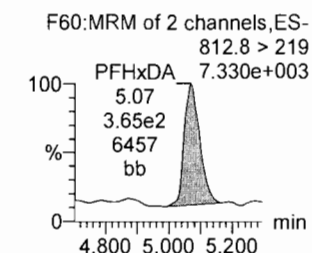
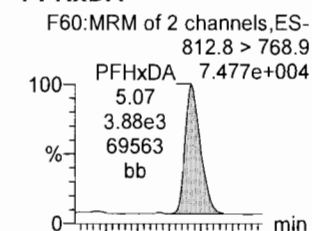
PFTeDA



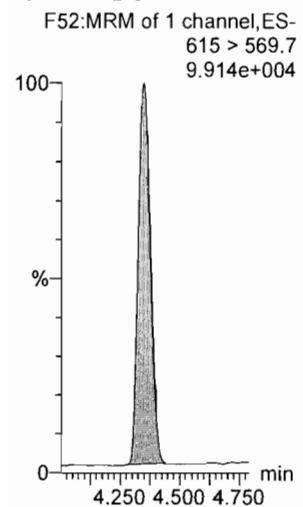
N-EtFOSA



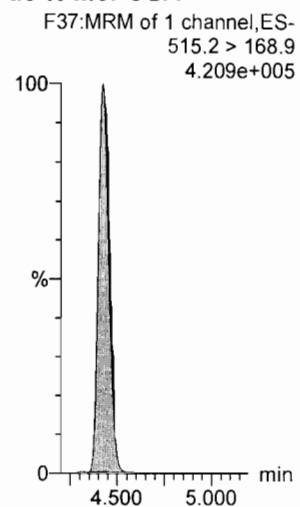
PFHxDA



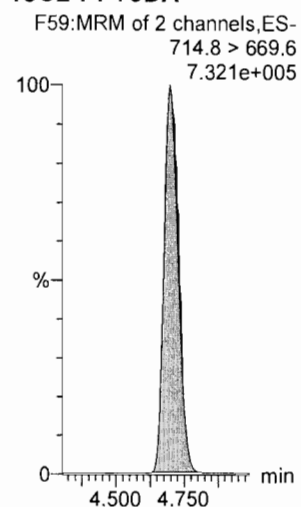
13C2-PFDaA



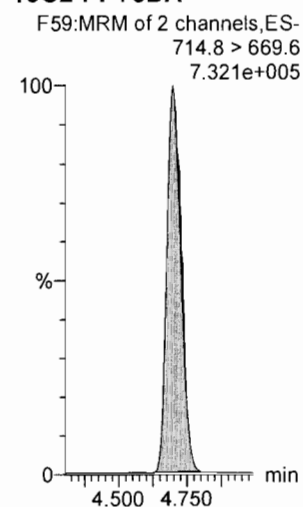
d3-N-MeFOSA



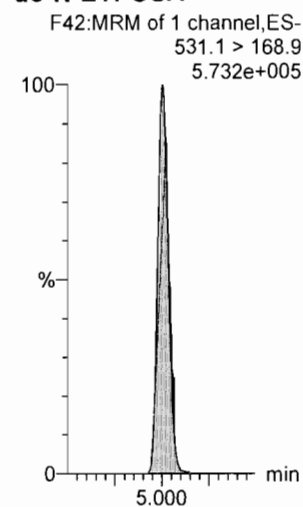
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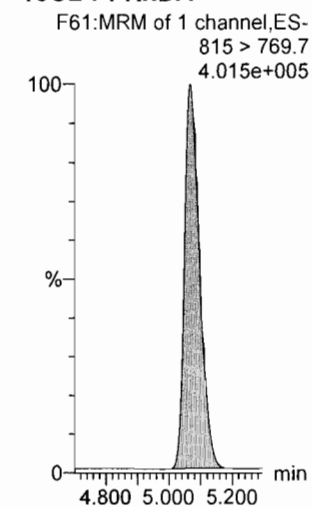
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



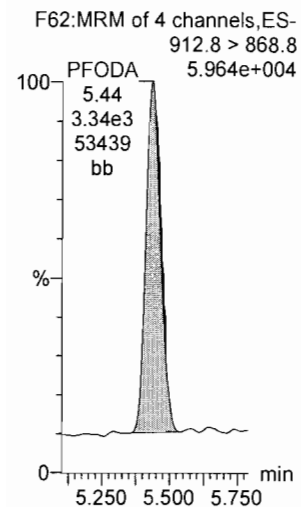
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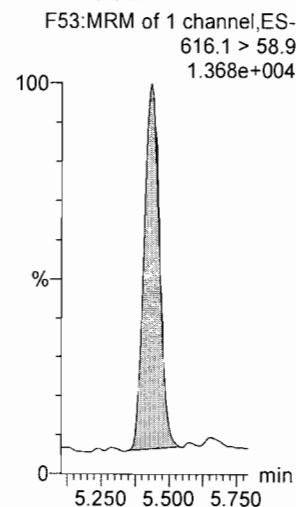
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Name: 170724M1_4, Date: 24-Jul-2017, Time: 14:01:50, ID: ST170724M1-2 PFC CS-1 17G2119, Description: PFC CS-1 17G2119

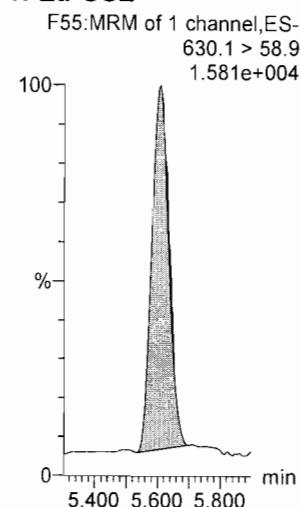
PFODA



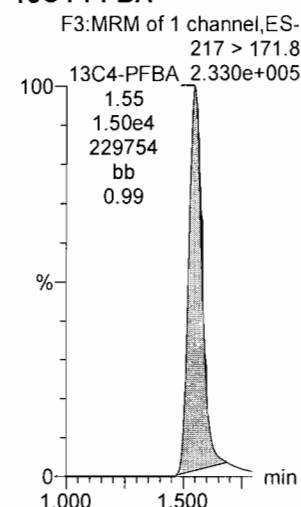
N-MeFOSE



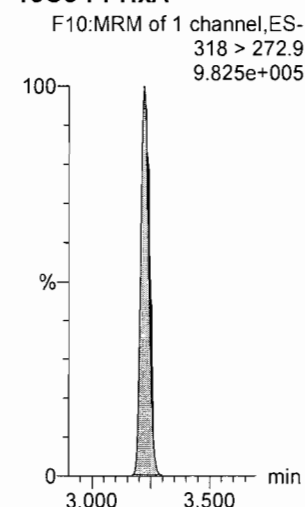
N-EtFOSE



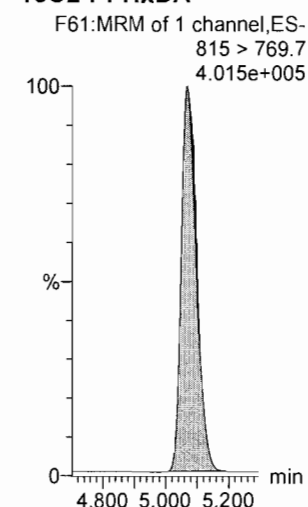
13C4-PFBA



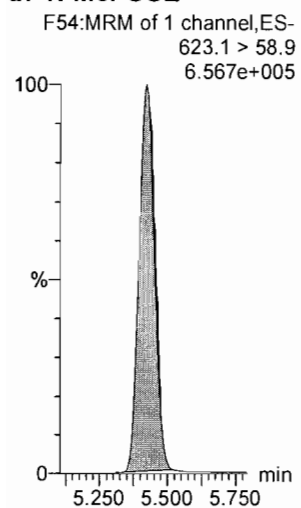
13C5-PFHxA



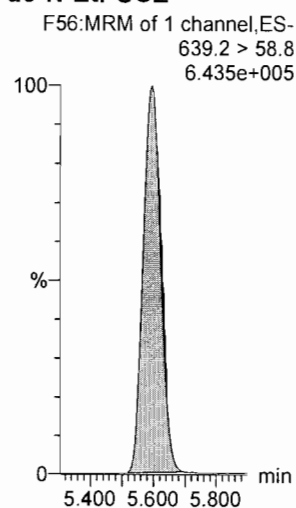
13C2-PFHxDA



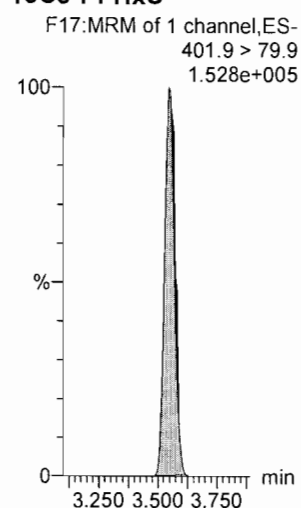
d7-N-MeFOSE



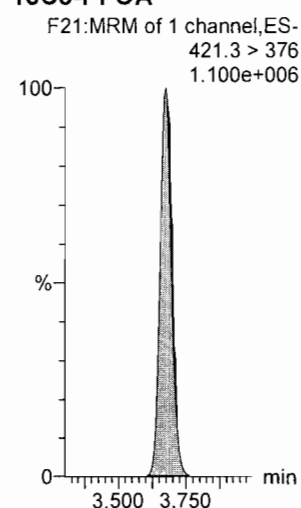
d9-N-EtFOSE



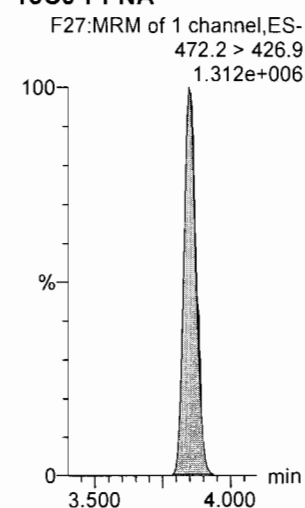
13C3-PFHxS



13C8-PFOA



13C9-PFNA



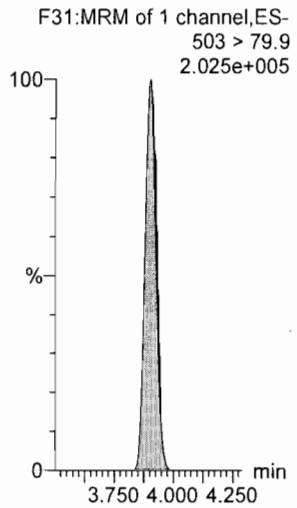
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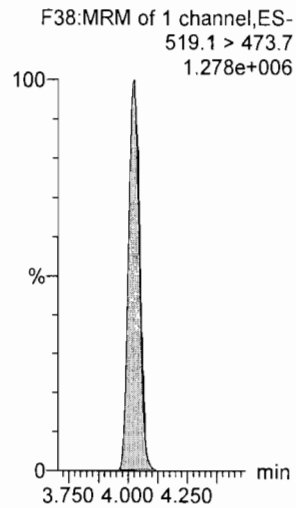
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Name: 170724M1_4, Date: 24-Jul-2017, Time: 14:01:50, ID: ST170724M1-2 PFC CS-1 17G2119, Description: PFC CS-1 17G2119

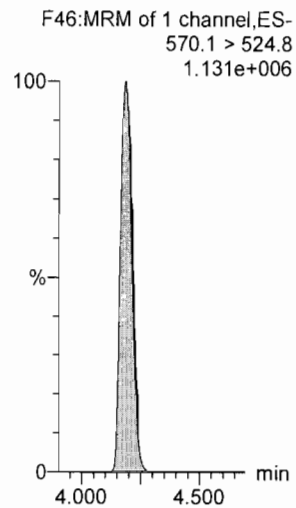
13C4-PFOS



13C6-PFDA



13C7-PFUnA



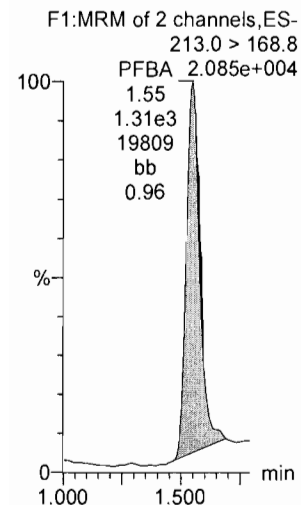
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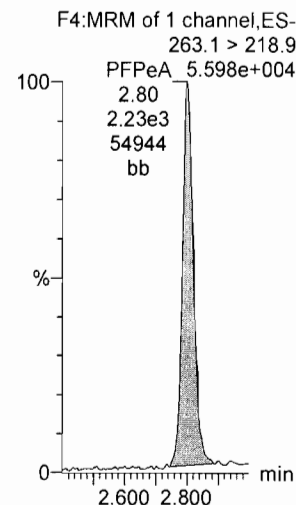
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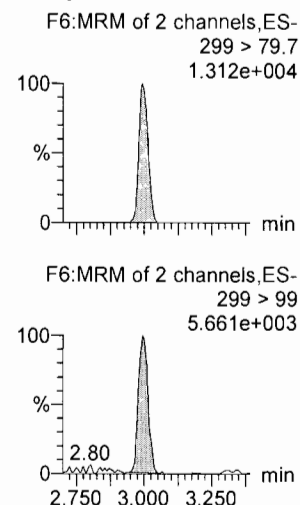
PFBA



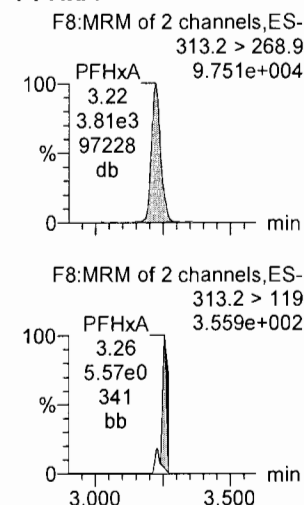
PFPeA



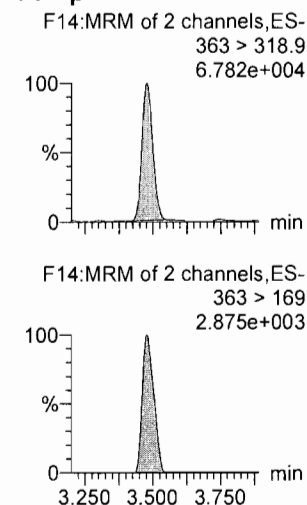
PFBS



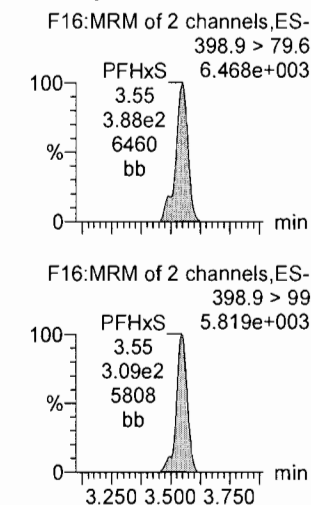
PFHxA



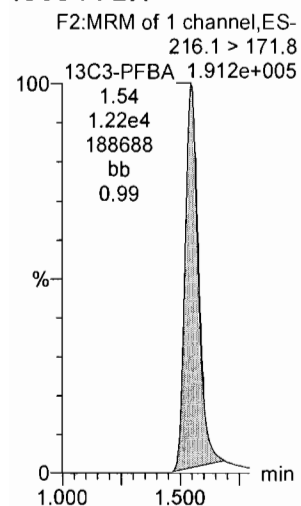
PFHpA



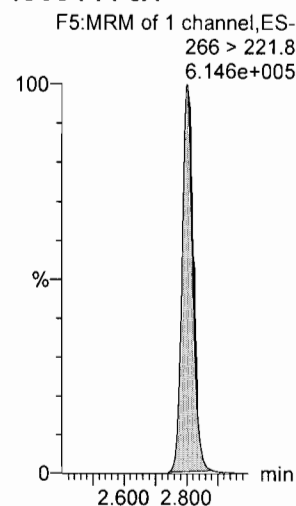
PFHxS



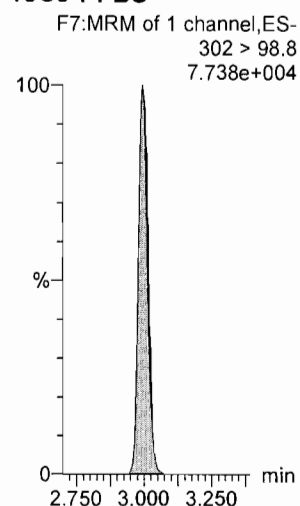
13C3-PFBA



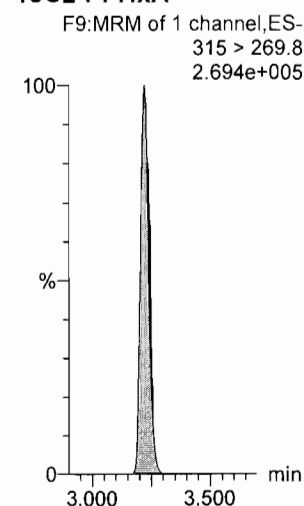
13C3-PFPeA



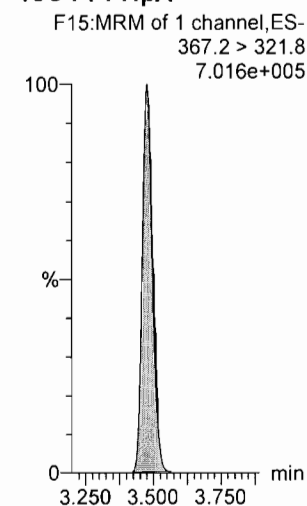
13C3-PFBS



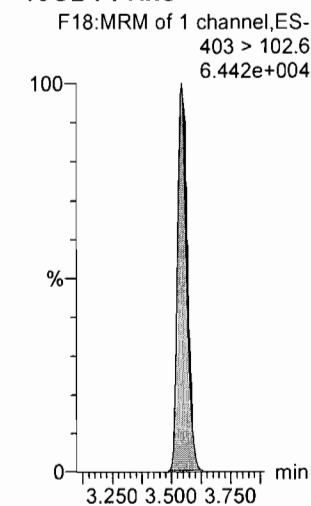
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



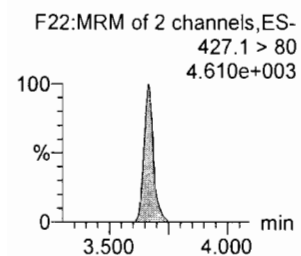
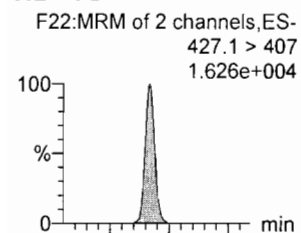
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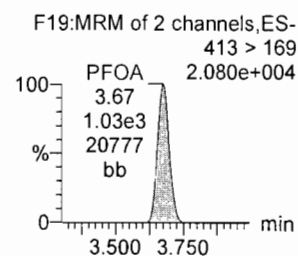
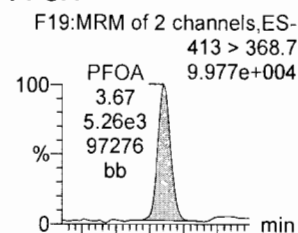
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Name: 170724M1_5, Date: 24-Jul-2017, Time: 14:12:36, ID: ST170724M1-3 PFC CS0 17G2423, Description: PFC CS0 17G2423

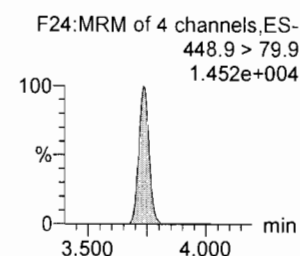
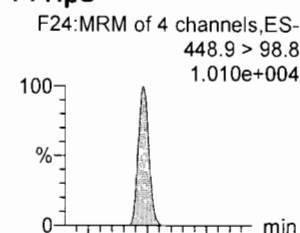
6:2 FTS



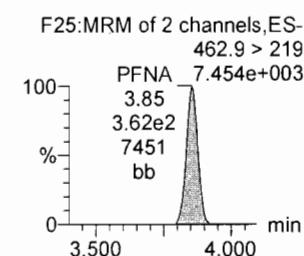
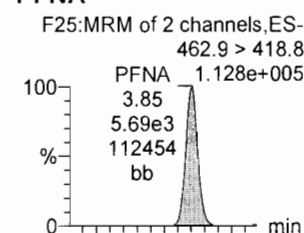
PFOA



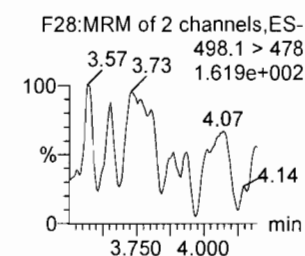
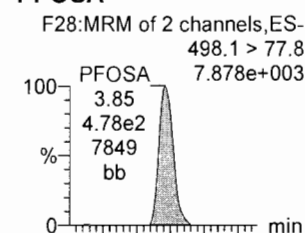
PFHpS



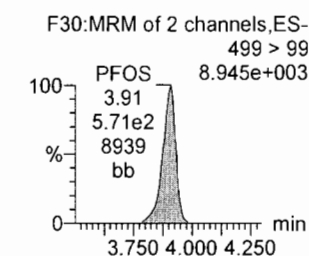
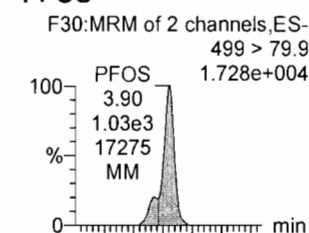
PFNA



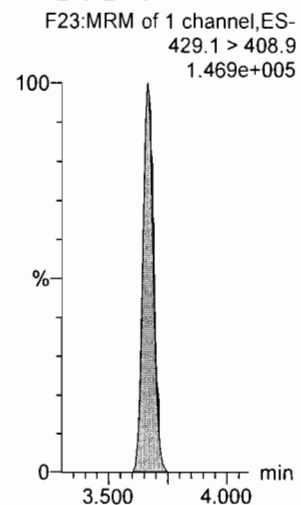
PFOSA



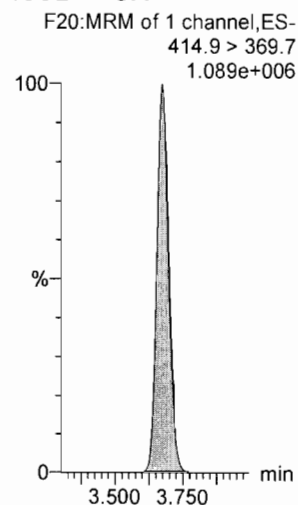
PFOS



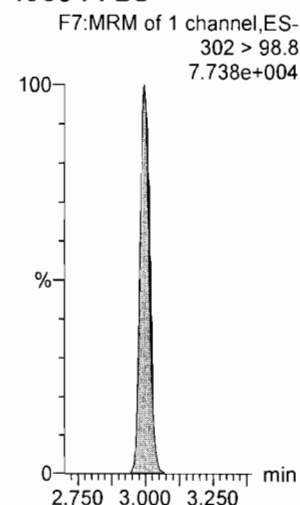
13C2-6:2 FTS



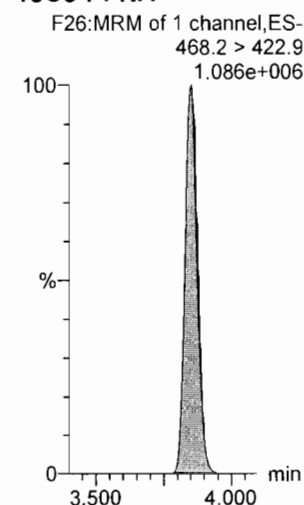
13C2-PFOA



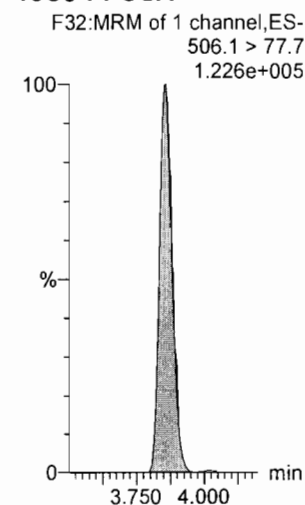
13C3-PFBS



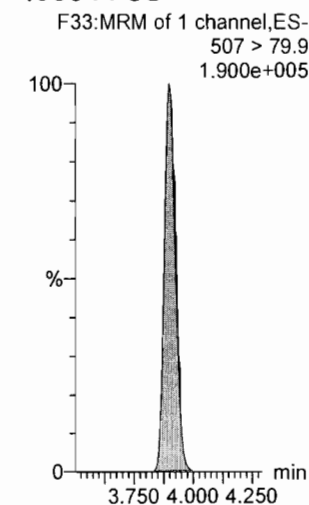
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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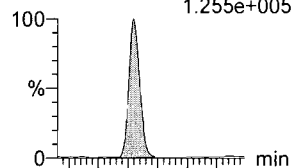
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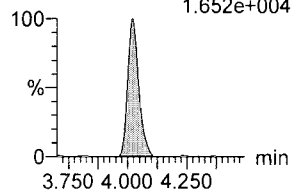
Name: 170724M1_5, Date: 24-Jul-2017, Time: 14:12:36, ID: ST170724M1-3 PFC CS0 17G2423, Description: PFC CS0 17G2423

PFDA

F35:MRM of 2 channels,ES-
513 > 468.8
1.255e+005

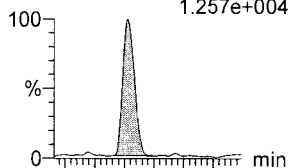


F35:MRM of 2 channels,ES-
513 > 219
1.652e+004

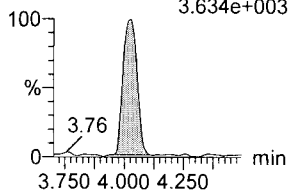


8:2 FTS

F40:MRM of 2 channels,ES-
527 > 506.9
1.257e+004

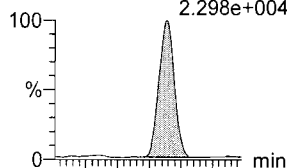


F40:MRM of 2 channels,ES-
527 > 80
3.634e+003

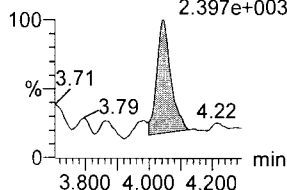


N-MeFOSAA

F45:MRM of 2 channels,ES-
570.1 > 419
2.298e+004

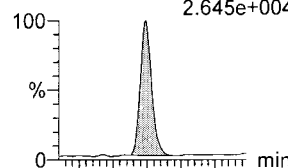


F45:MRM of 2 channels,ES-
570.1 > 483
2.397e+003

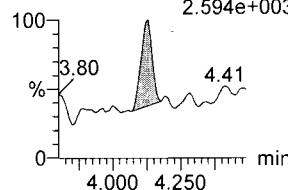


N-EtFOSAA

F48:MRM of 2 channels,ES-
584.2 > 419
2.645e+004

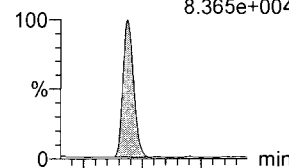


F48:MRM of 2 channels,ES-
584.2 > 483
2.594e+003

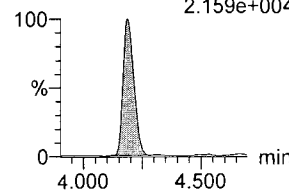


PFUnA

F43:MRM of 2 channels,ES-
562.9 > 518.9
8.365e+004

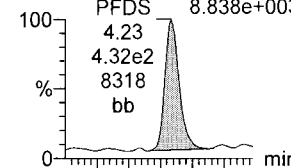


F43:MRM of 2 channels,ES-
562.9 > 269
2.159e+004

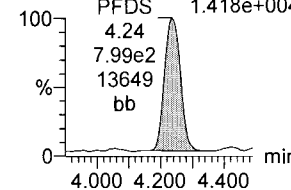


PFDS

F50:MRM of 2 channels,ES-
598.9 > 98.7
8.838e+003

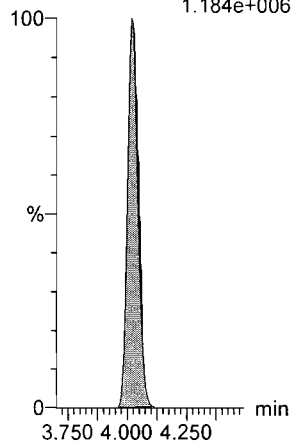


F50:MRM of 2 channels,ES-
598.9 > 80
1.418e+004



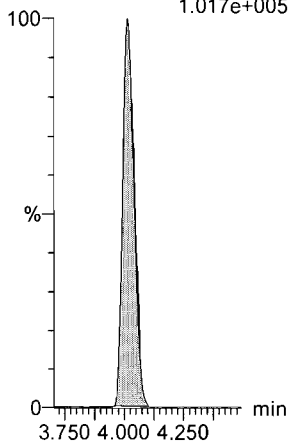
13C2-PFDA

F36:MRM of 1 channel,ES-
515.1 > 469.9
1.184e+006



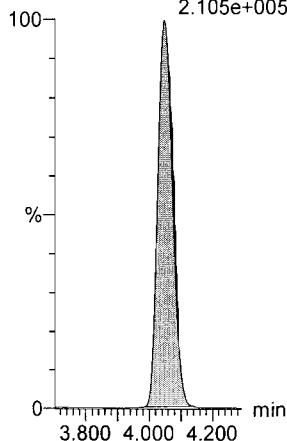
13C2-8:2 FTS

F41:MRM of 1 channel,ES-
529.1 > 508.7
1.017e+005



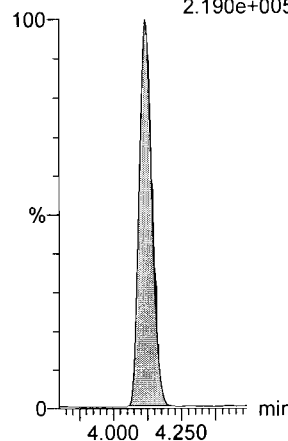
d3-N-MeFOSAA

F47:MRM of 1 channel,ES-
573.3 > 419
2.105e+005



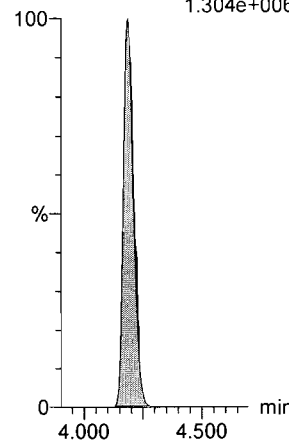
d5-N-EtFOSAA

F49:MRM of 1 channel,ES-
589.3 > 419
2.190e+005



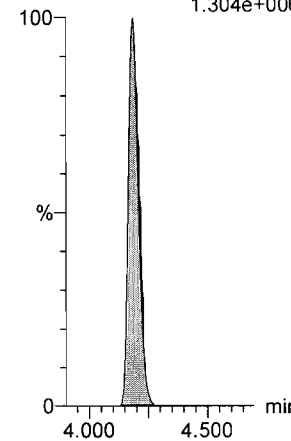
13C2-PFUnA

F44:MRM of 1 channel,ES-
565 > 519.8
1.304e+006



13C2-PFUnA

F44:MRM of 1 channel,ES-
565 > 519.8
1.304e+006



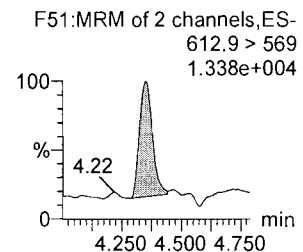
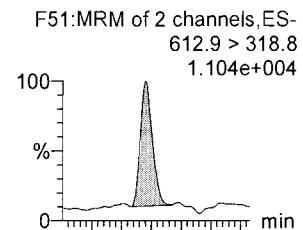
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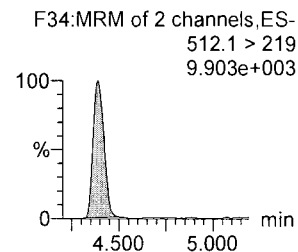
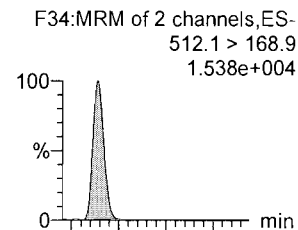
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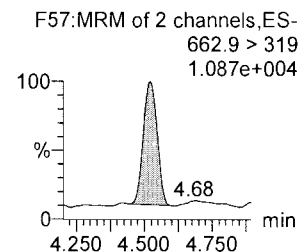
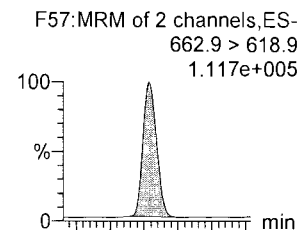
PFDa



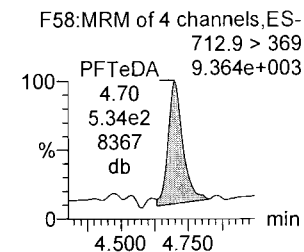
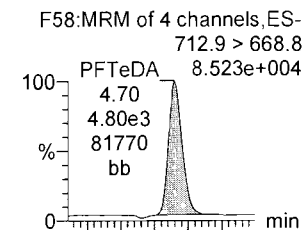
N-MeFOSA



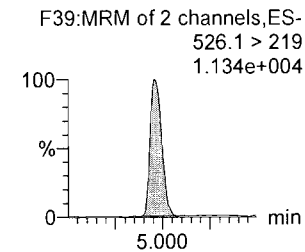
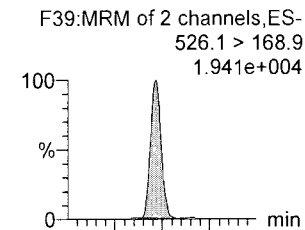
PFTTrDA



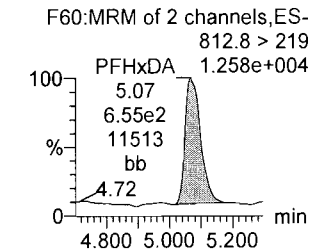
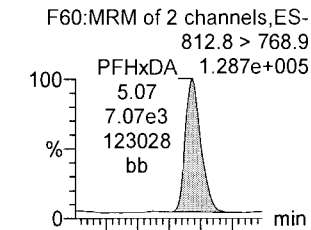
PFTeDA



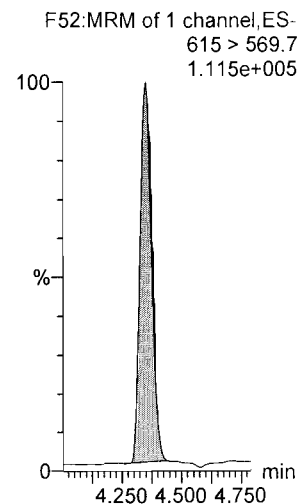
N-EtFOSA



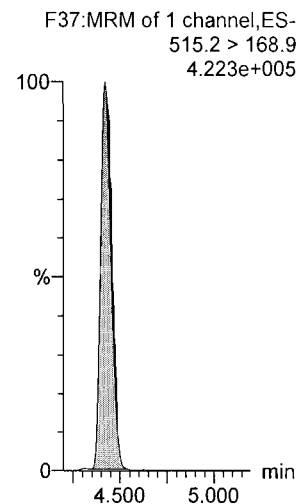
PFHxDA



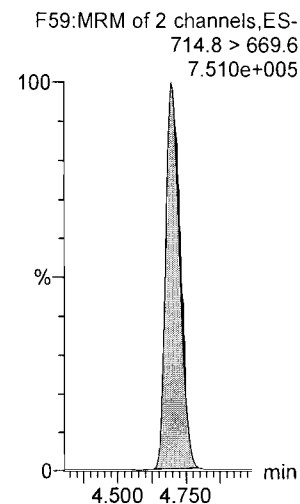
13C2-PFDa



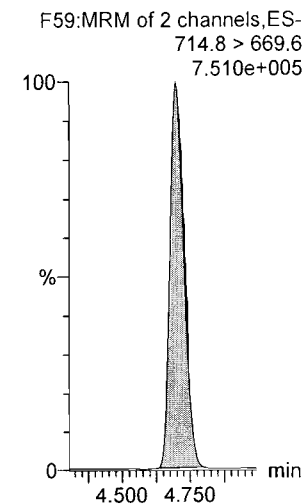
d3-N-MeFOSA



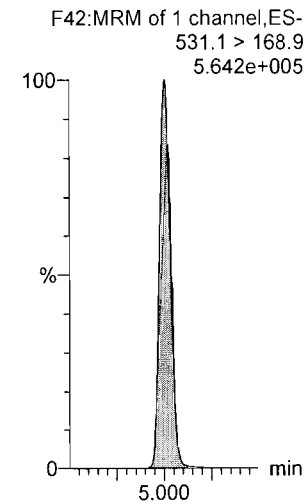
13C2-PFTeDA



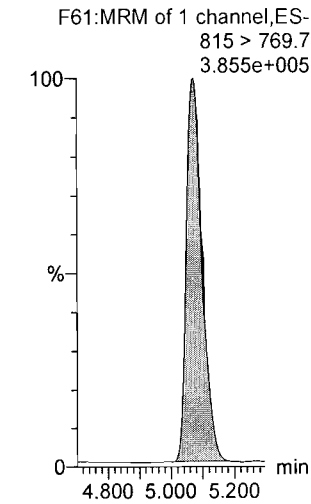
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



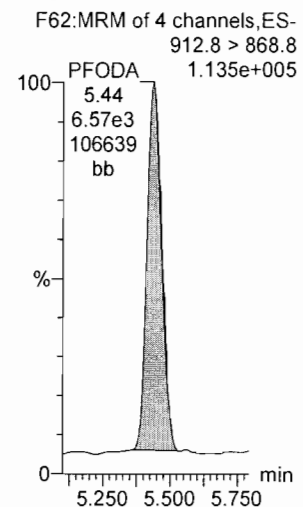
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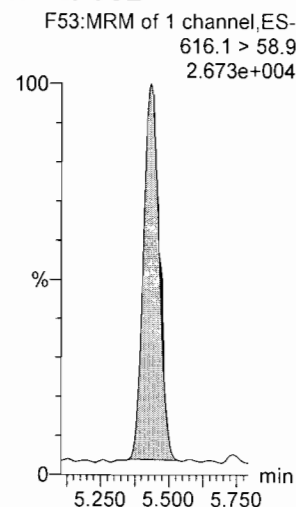
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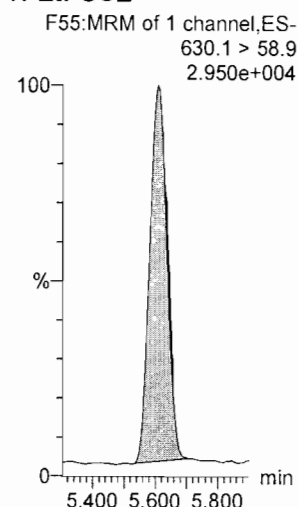
PFODA



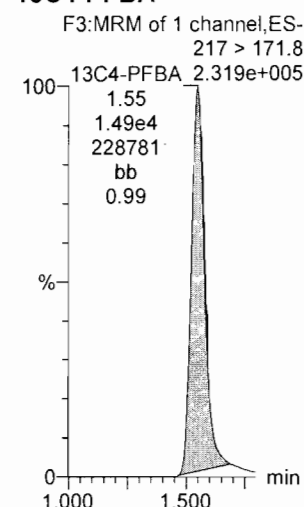
N-MeFOSE



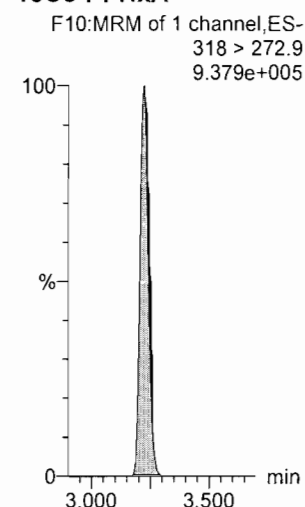
N-EtFOSE



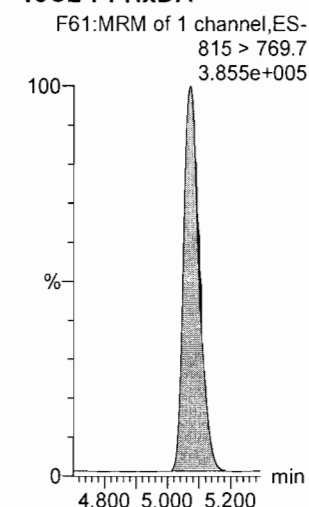
13C4-PFBA



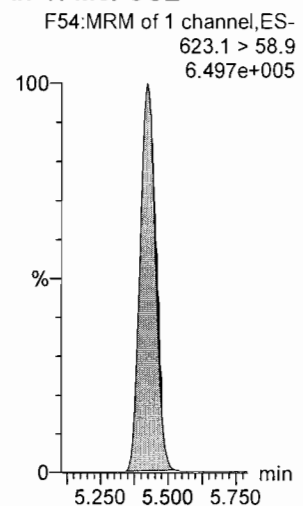
13C5-PFHxA



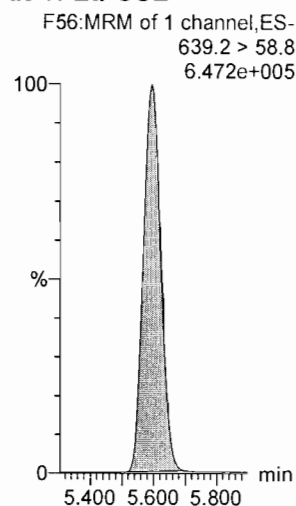
13C2-PFHxDA



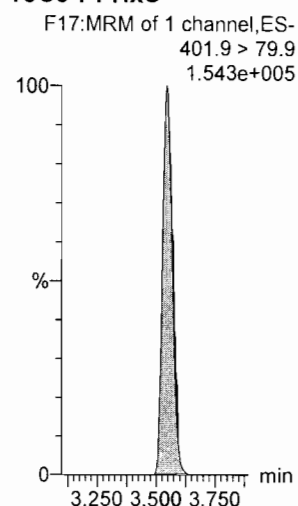
d7-N-MeFOSE



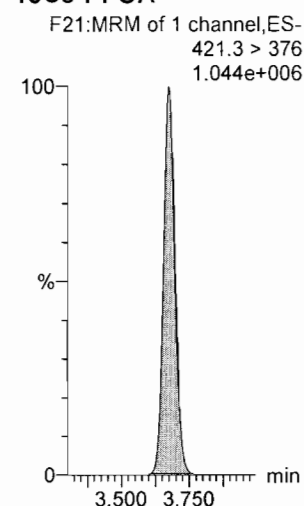
d9-N-EtFOSE



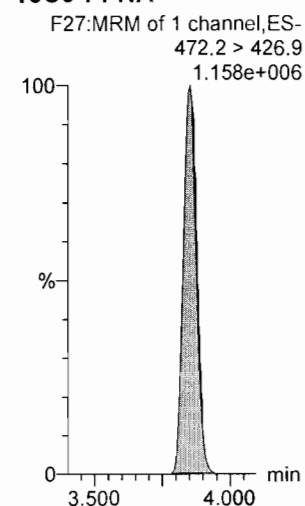
13C3-PFHxS



13C8-PFOA



13C9-PFNA



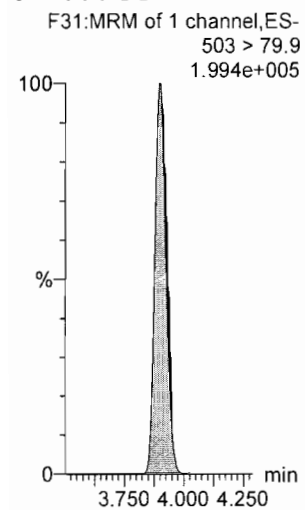
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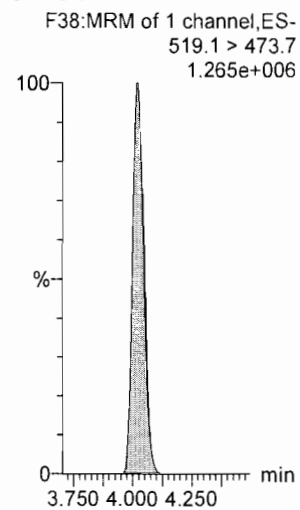
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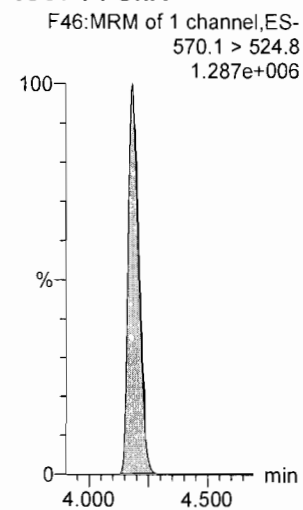
13C4-PFOS



13C6-PFDA



13C7-PFUnA



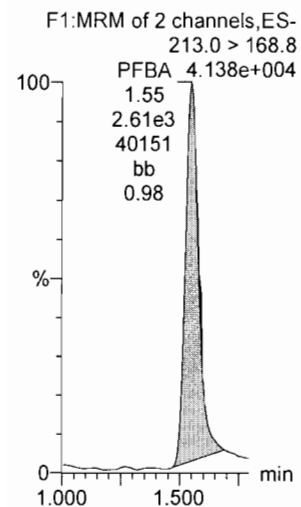
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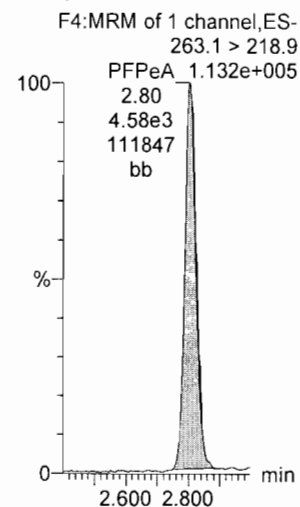
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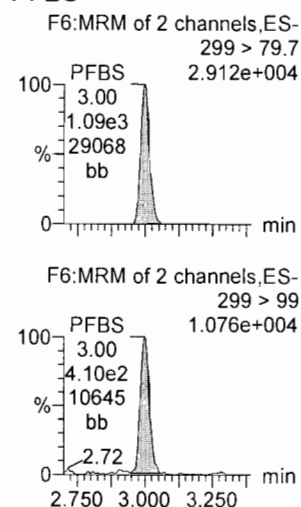
PFBA



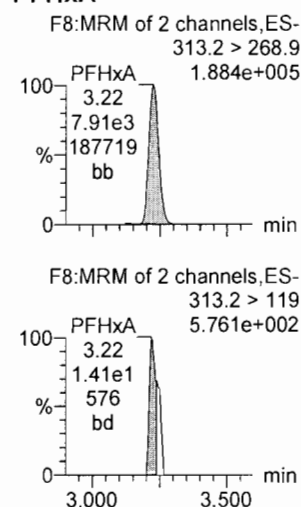
PFPeA



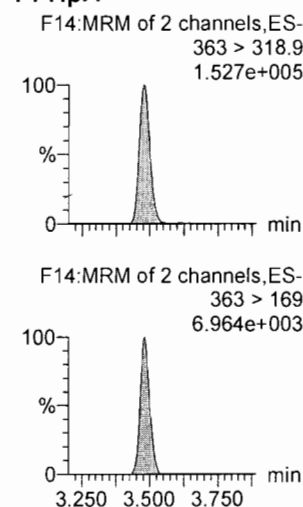
PFBS



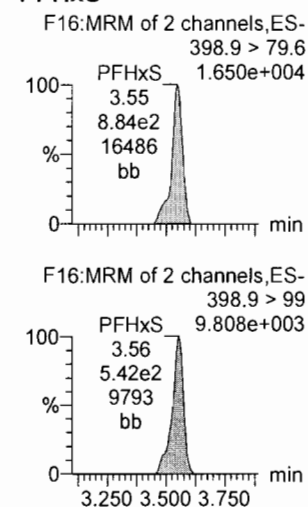
PFHxA



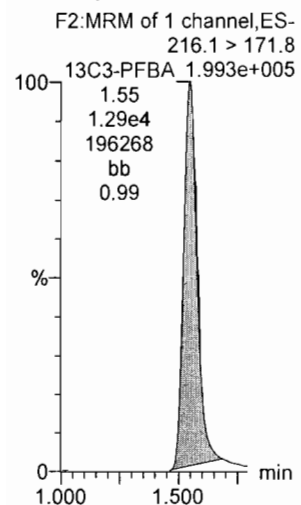
PFHpA



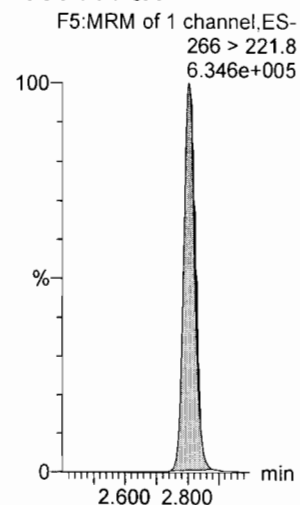
PFHxS



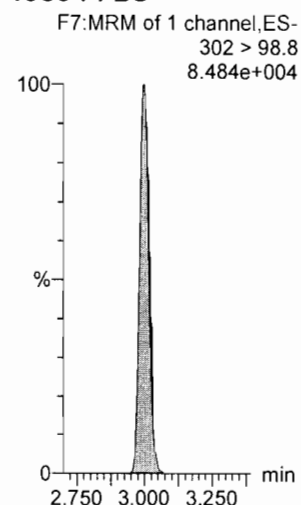
13C3-PFBA



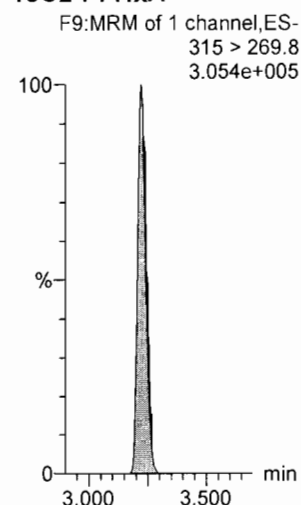
13C3-PFPeA



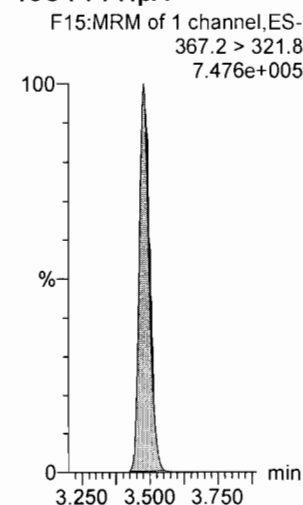
13C3-PFBS



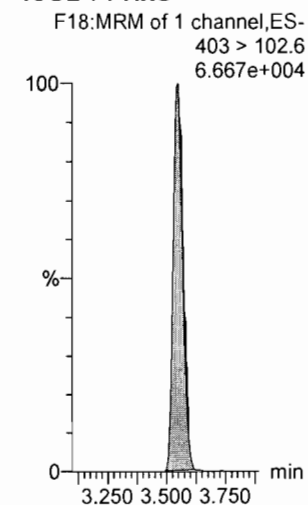
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



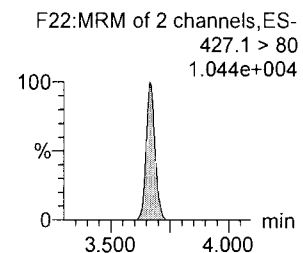
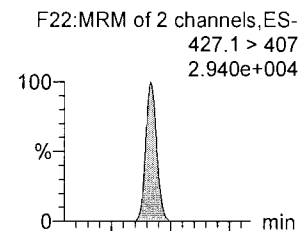
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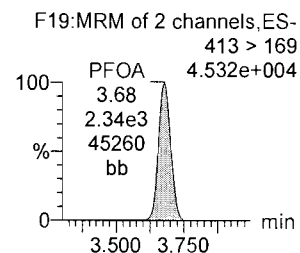
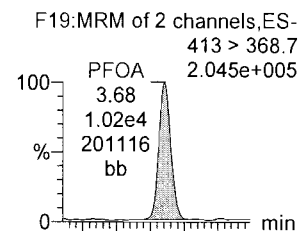
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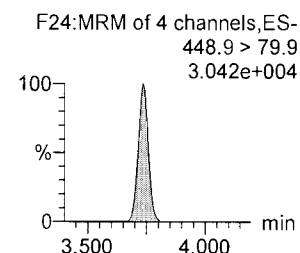
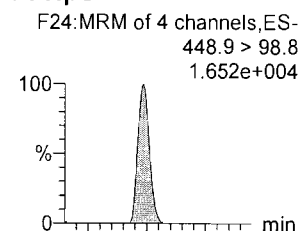
6:2 FTS



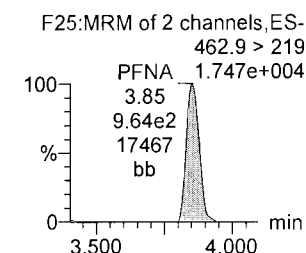
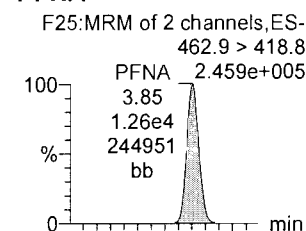
PFOA



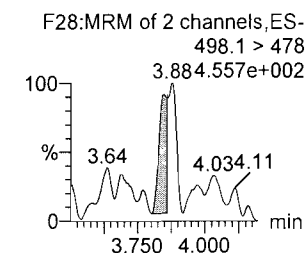
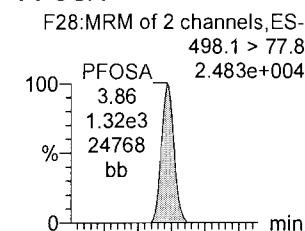
PFHpS



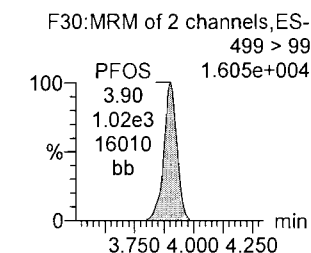
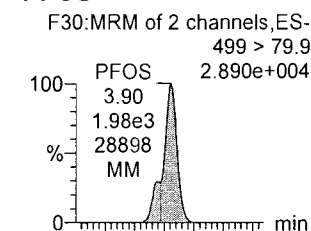
PFNA



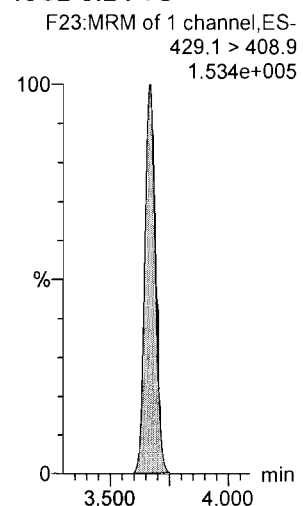
PFOSA



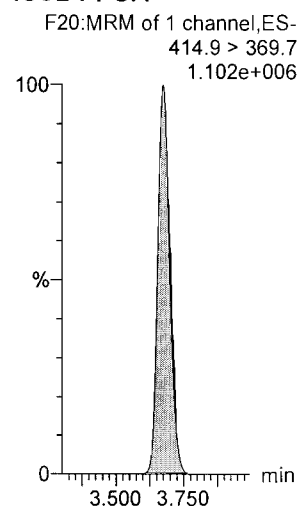
PFOS



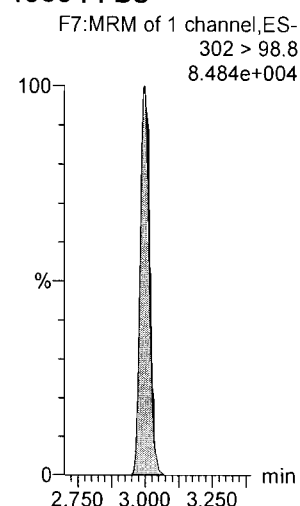
13C2-6:2 FTS



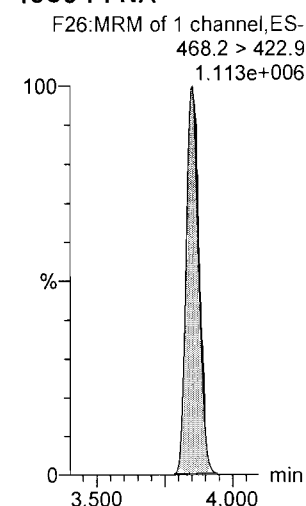
13C2-PFOA



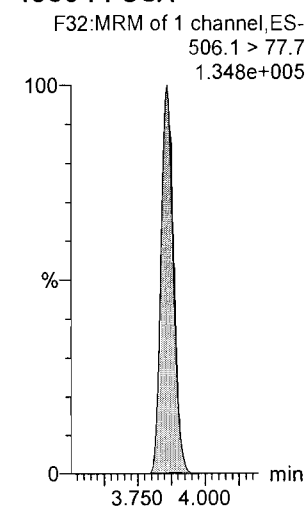
13C3-PFBS



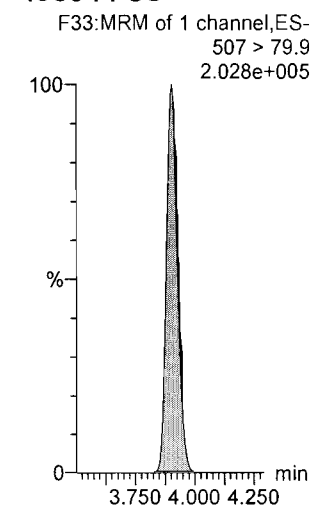
13C5-PFNA



13C8-PFOSA



13C8-PFOS



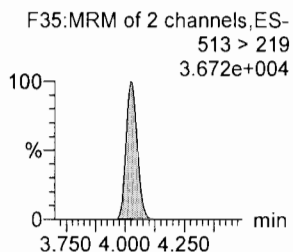
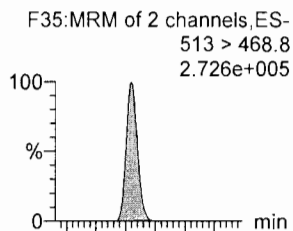
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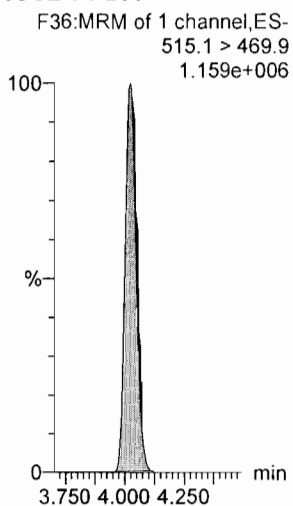
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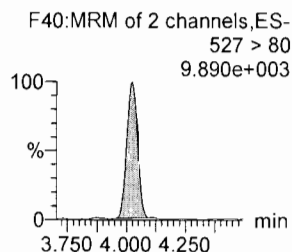
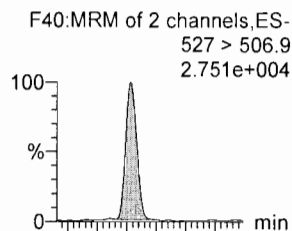
PFDA



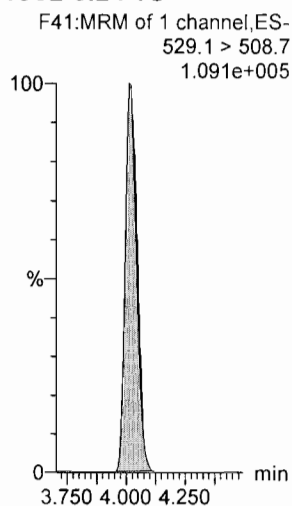
13C2-PFDA



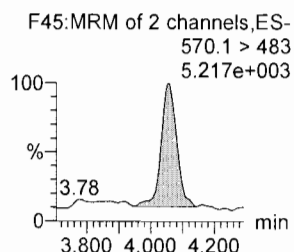
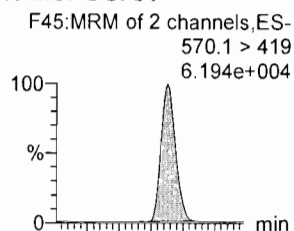
8:2 FTS



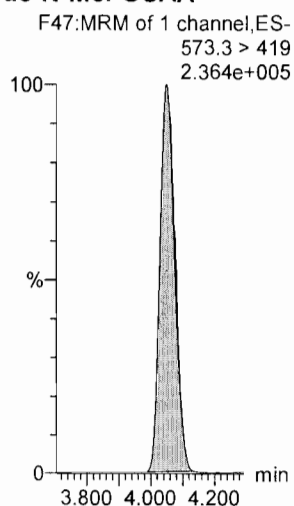
13C2-8:2 FTS



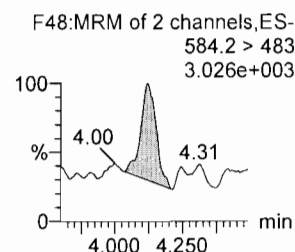
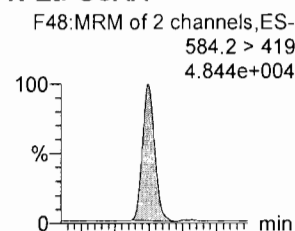
N-MeFOSAA



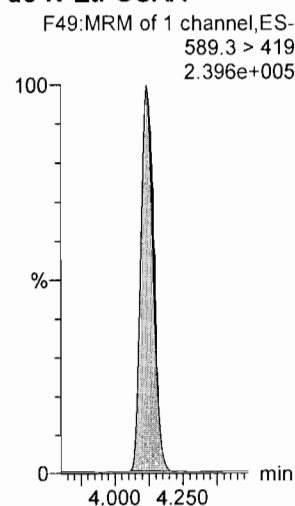
d3-N-MeFOSAA



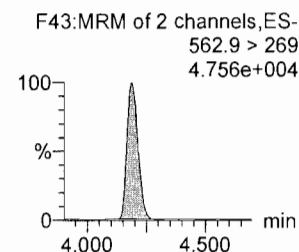
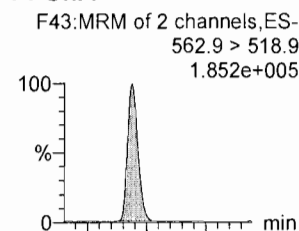
N-EtFOSAA



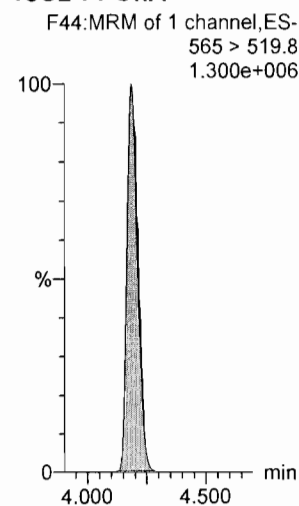
d5-N-EtFOSAA



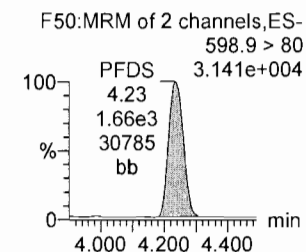
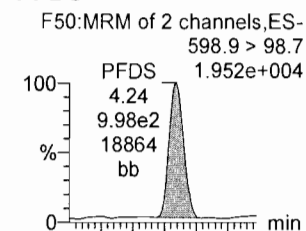
PFUnA



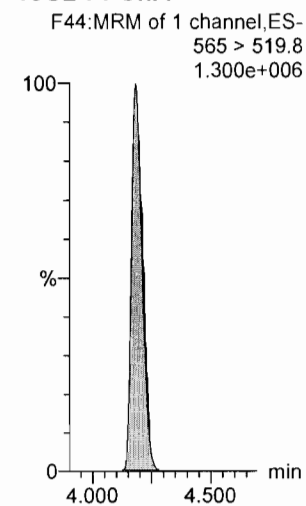
13C2-PFUnA



PFDS



13C2-PFUnA



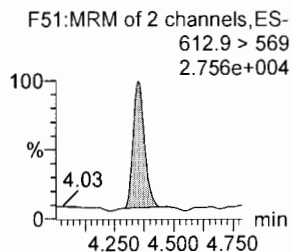
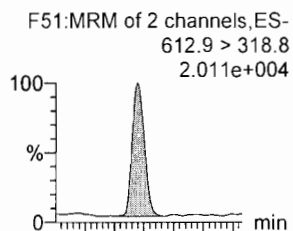
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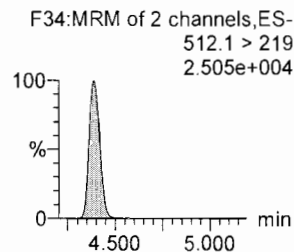
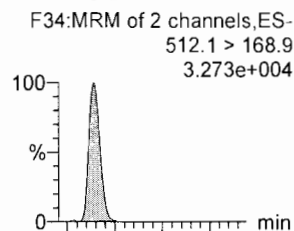
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Name: 170724M1_6, Date: 24-Jul-2017, Time: 14:23:23, ID: ST170724M1-4 PFC CS1 17G2424, Description: PFC CS1 17G2424

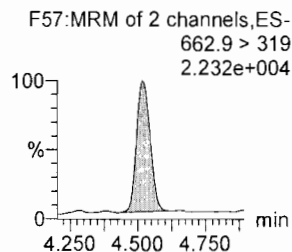
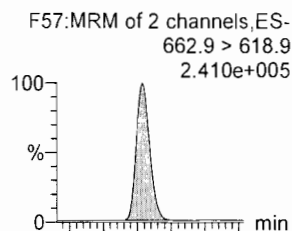
PFDaA



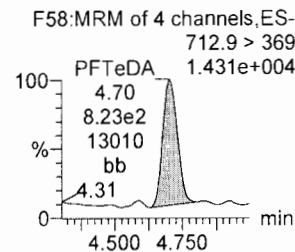
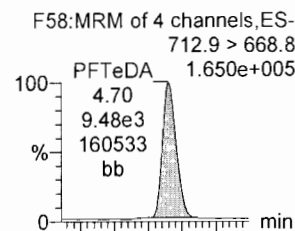
N-MeFOSA



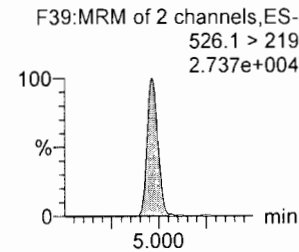
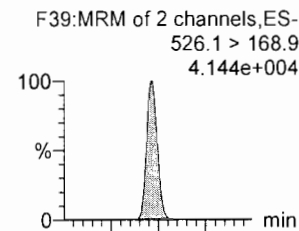
PFTrDA



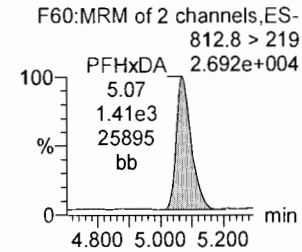
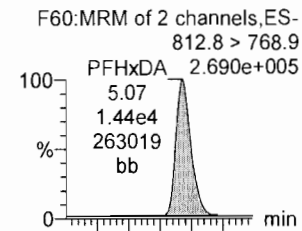
PFTeDA



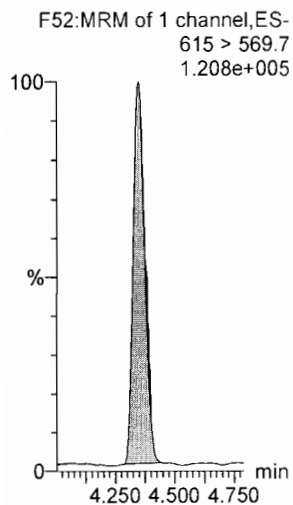
N-EtFOSA



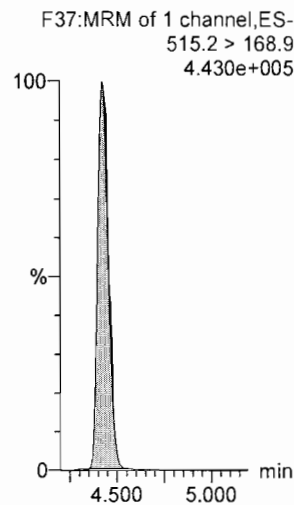
PFHxDA



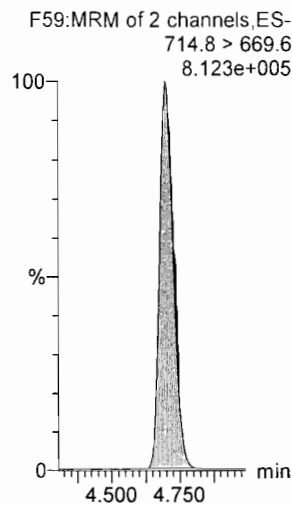
13C2-PFDaA



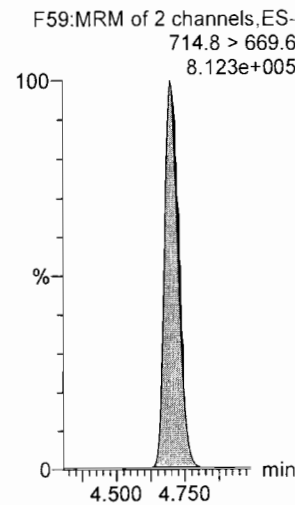
d3-N-MeFOSA



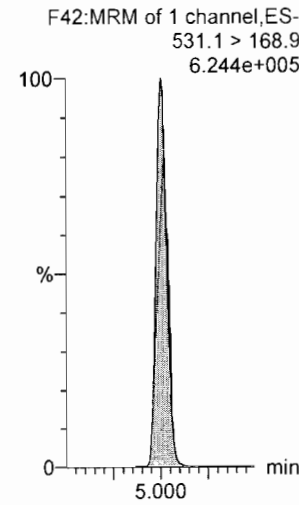
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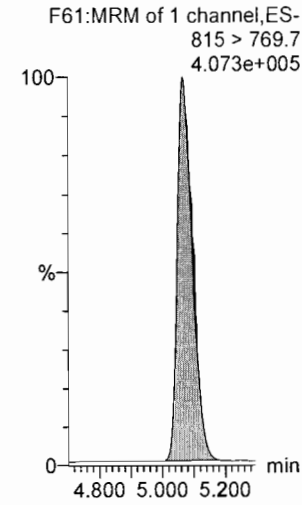
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



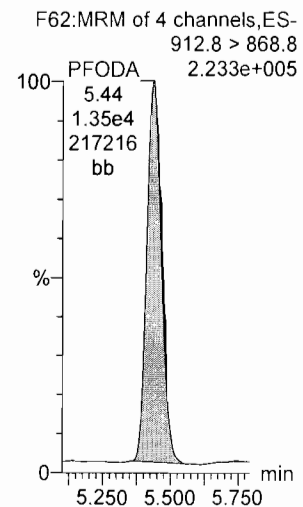
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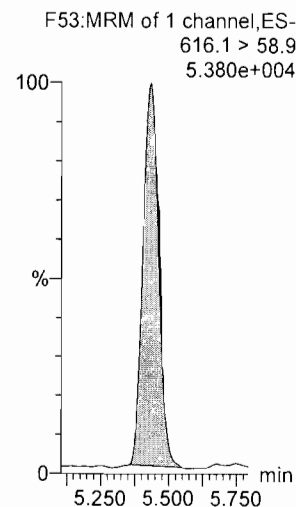
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Name: 170724M1_6, Date: 24-Jul-2017, Time: 14:23:23, ID: ST170724M1-4 PFC CS1 17G2424, Description: PFC CS1 17G2424

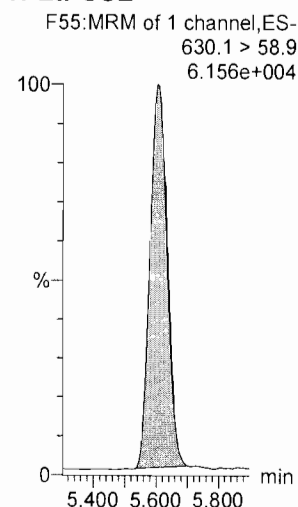
PFODA



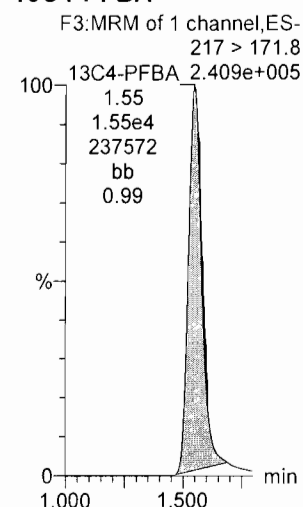
N-MeFOSE



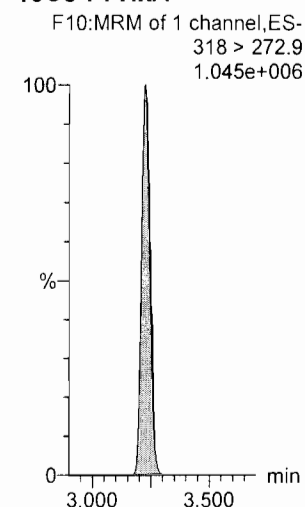
N-EtFOSE



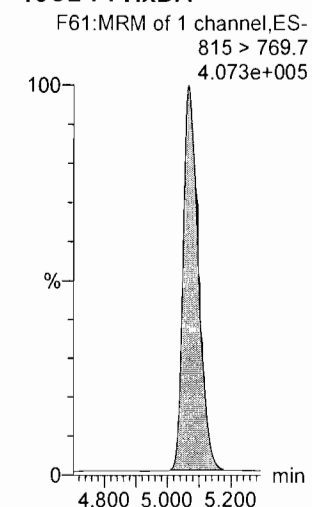
13C4-PFBA



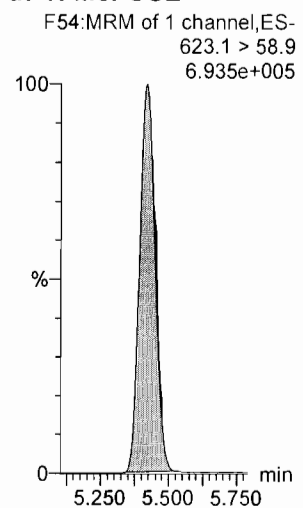
13C5-PFHxA



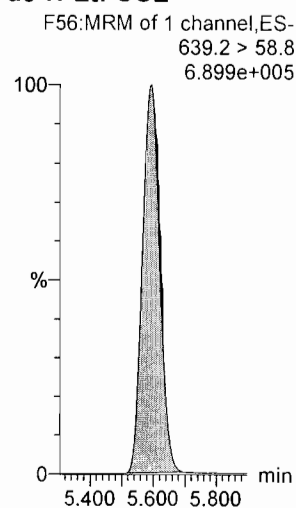
13C2-PFHxDA



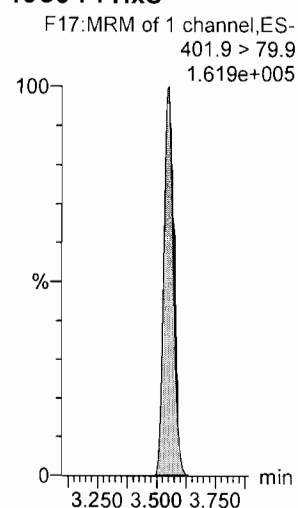
d7-N-MeFOSE



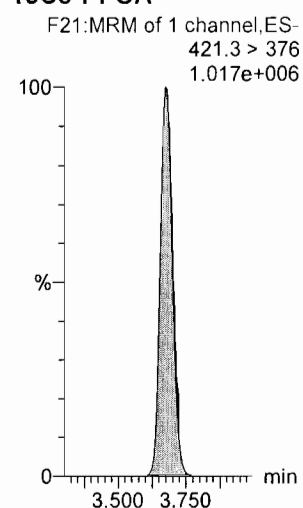
d9-N-EtFOSE



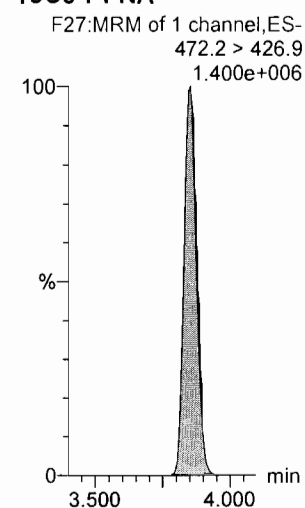
13C3-PFHxS



13C8-PFOA



13C9-PFNA



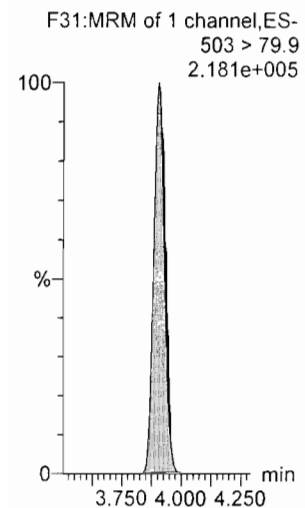
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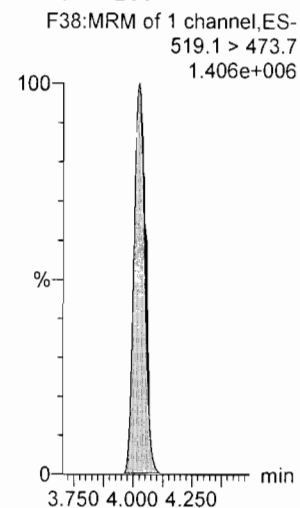
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Name: 170724M1_6, Date: 24-Jul-2017, Time: 14:23:23, ID: ST170724M1-4 PFC CS1 17G2424, Description: PFC CS1 17G2424

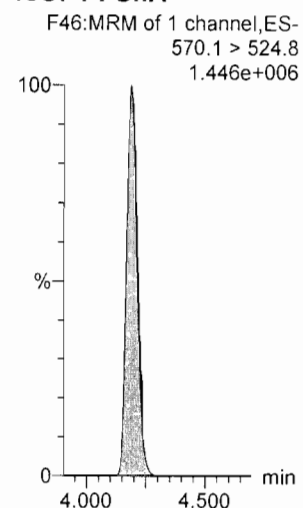
13C4-PFOS



13C6-PFDA



13C7-PFUnA



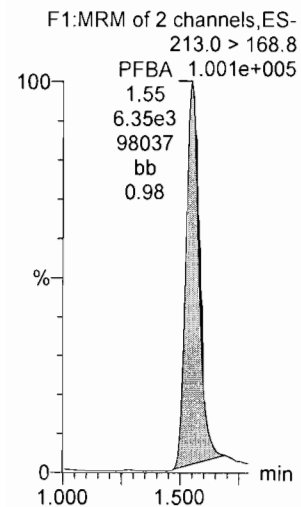
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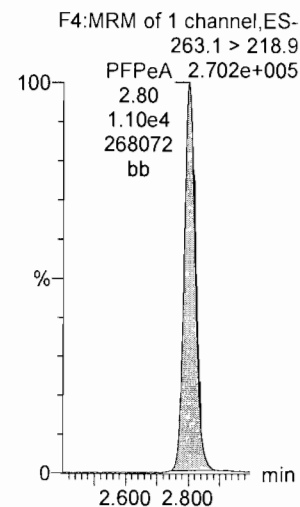
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Name: 170724M1_7, Date: 24-Jul-2017, Time: 14:34:02, ID: ST170724M1-5 PFC CS2 17G2425, Description: PFC CS2 17G2425

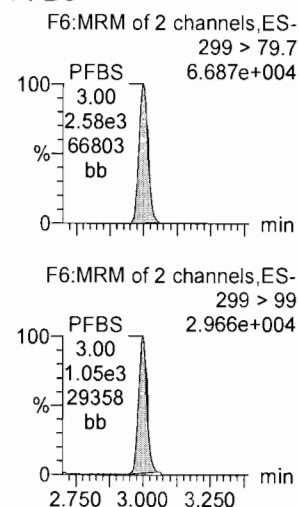
PFBA



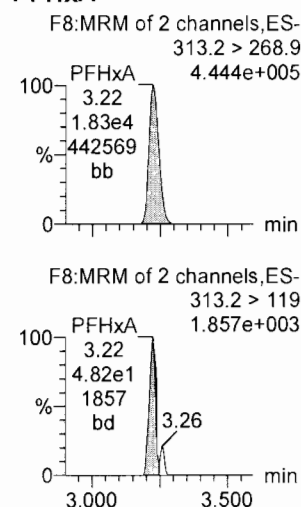
PFPeA



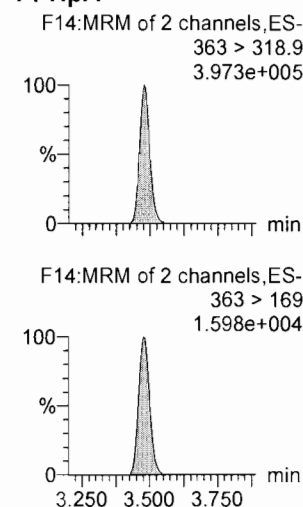
PFBS



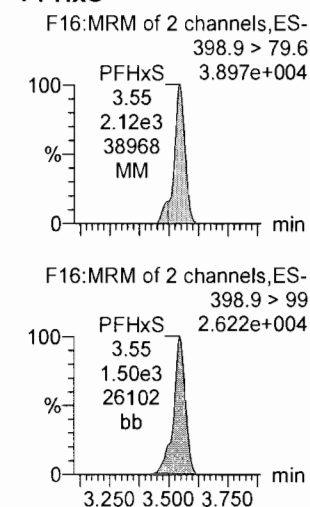
PFHxA



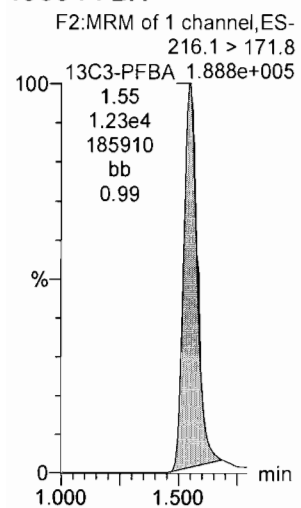
PFHpA



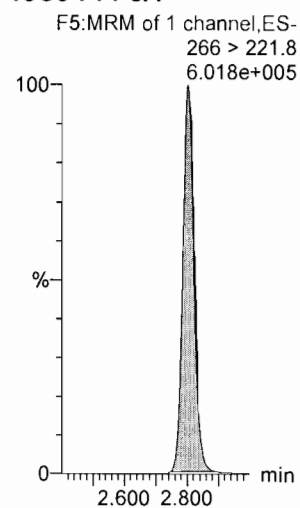
PFHxS



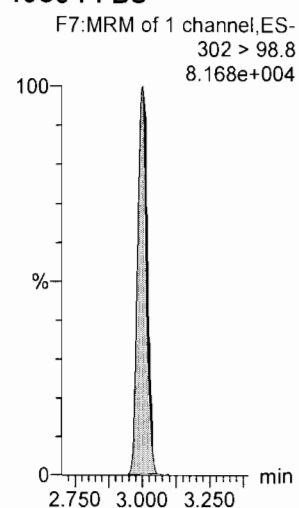
13C3-PFBA



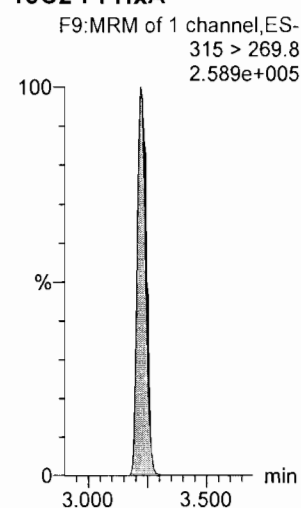
13C3-PFPeA



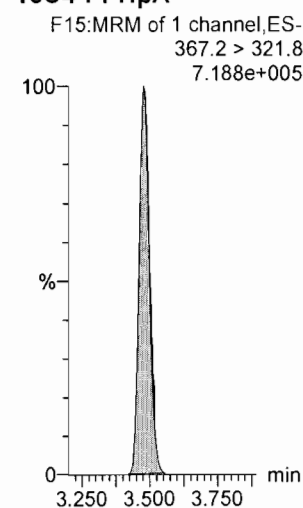
13C3-PFBS



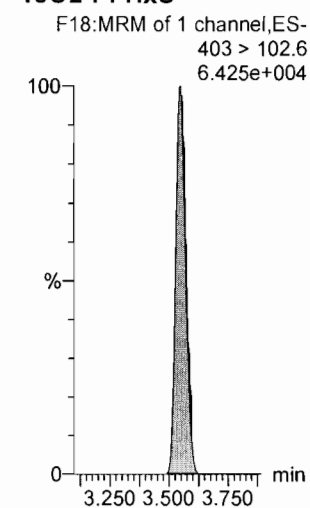
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



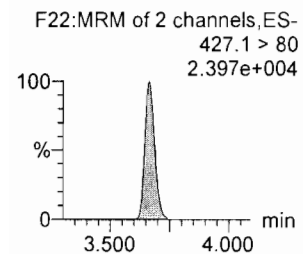
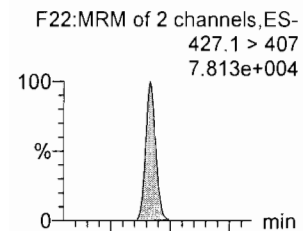
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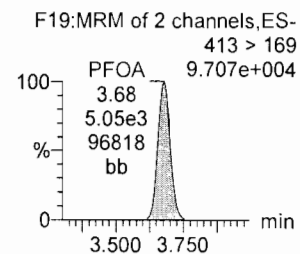
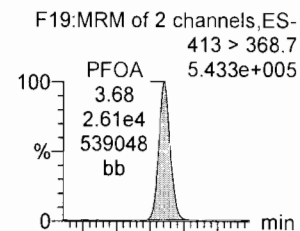
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Name: 170724M1_7, Date: 24-Jul-2017, Time: 14:34:02, ID: ST170724M1-5 PFC CS2 17G2425, Description: PFC CS2 17G2425

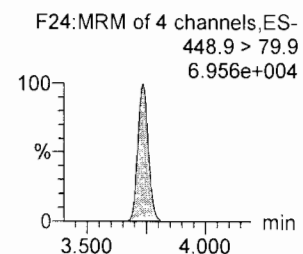
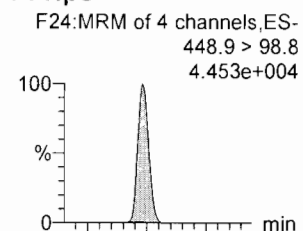
6:2 FTS



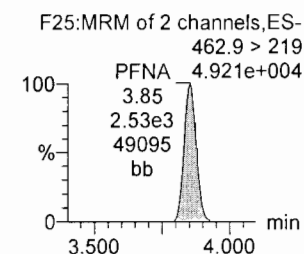
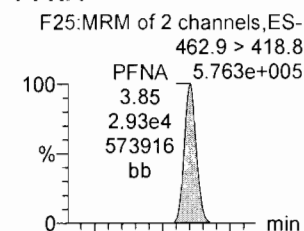
PFOA



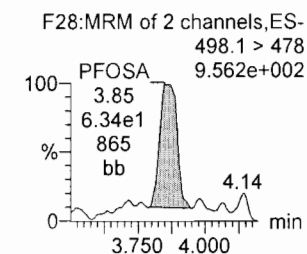
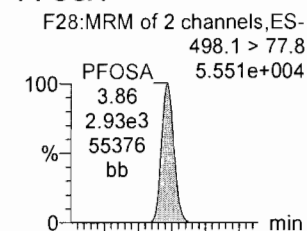
PFHpS



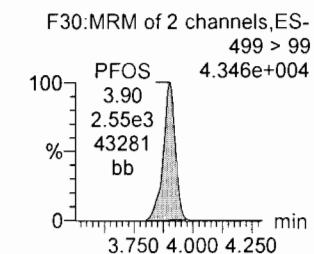
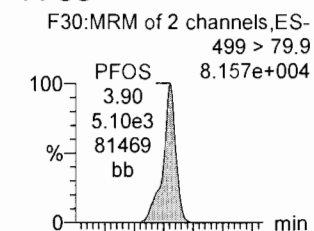
PFNA



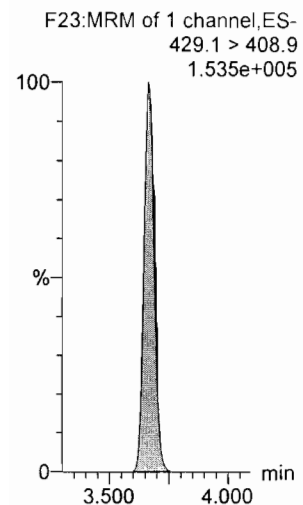
PFOSA



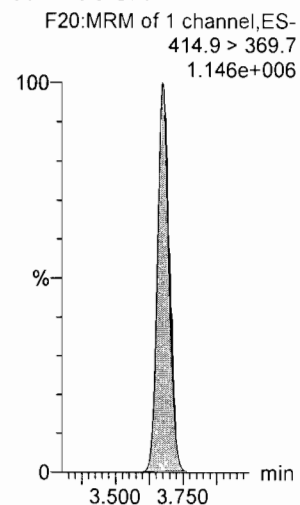
PFOS



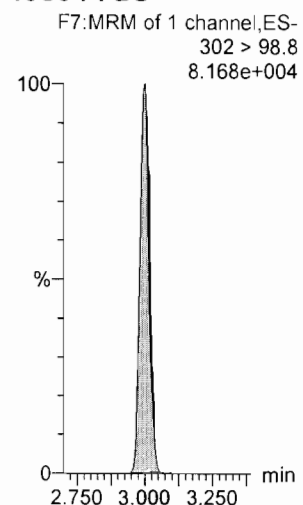
13C2-6:2 FTS



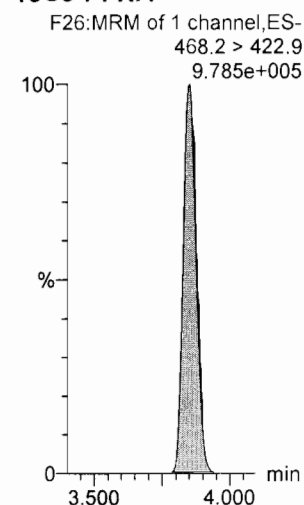
13C2-PFOA



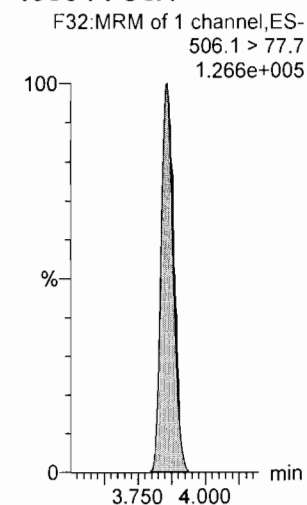
13C3-PFBS



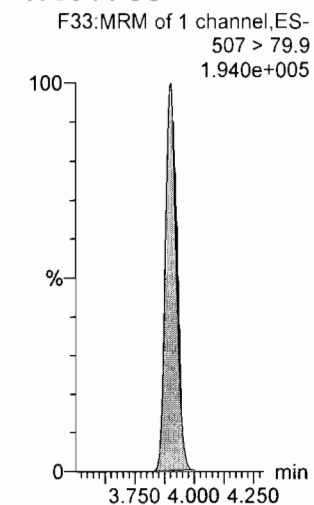
13C5-PFNA



13C8-PFOSA



13C8-PFOS



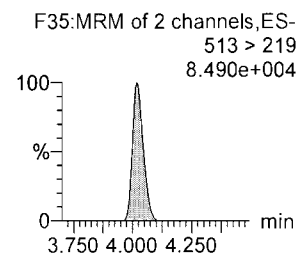
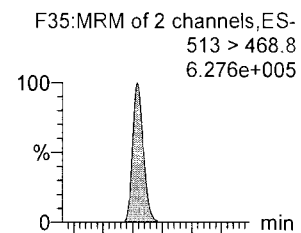
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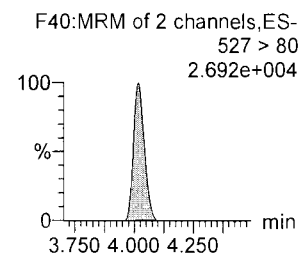
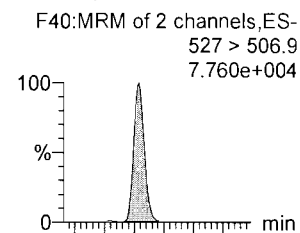
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Name: 170724M1_7, Date: 24-Jul-2017, Time: 14:34:02, ID: ST170724M1-5 PFC CS2 17G2425, Description: PFC CS2 17G2425

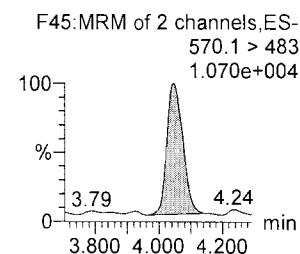
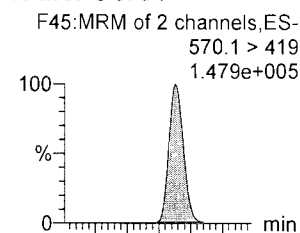
PFDA



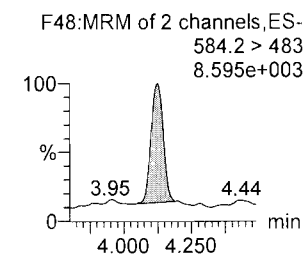
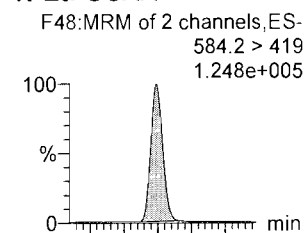
8:2 FTS



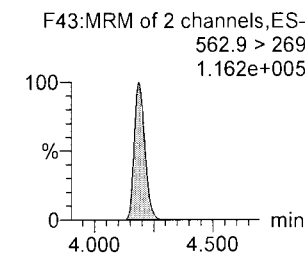
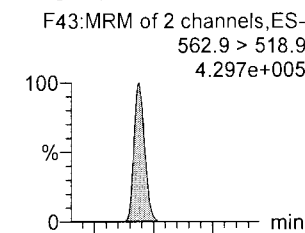
N-MeFOSAA



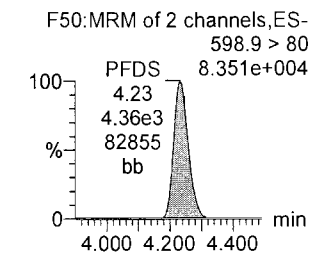
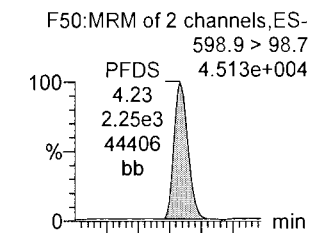
N-EtFOSAA



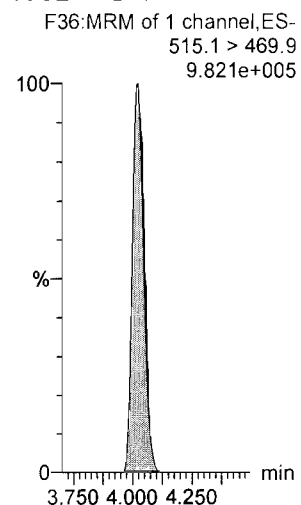
PFUnA



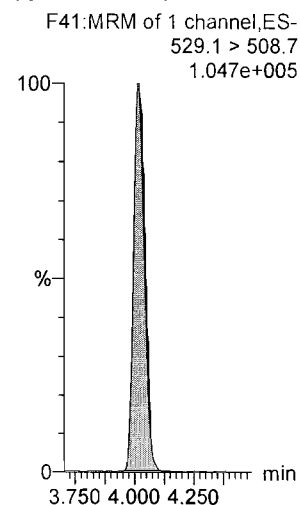
PFDS



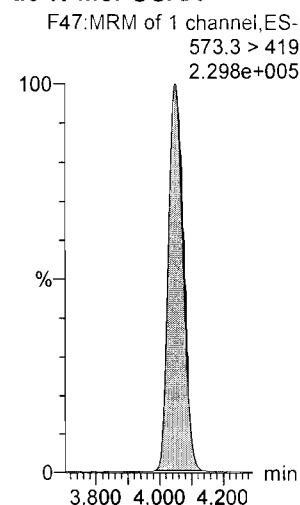
13C2-PFDA



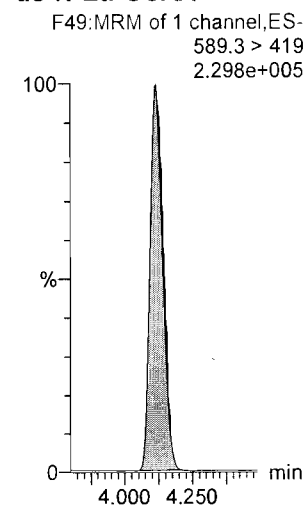
13C2-8:2 FTS



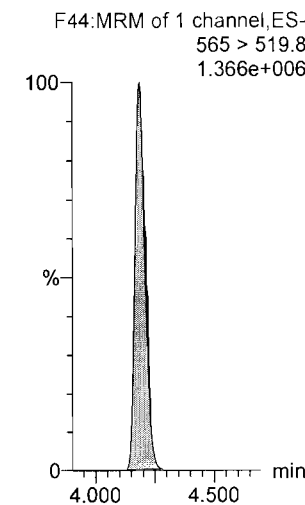
d3-N-MeFOSAA



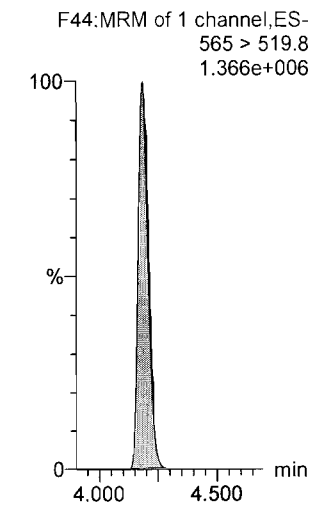
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



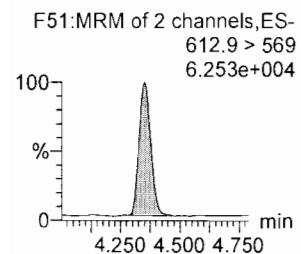
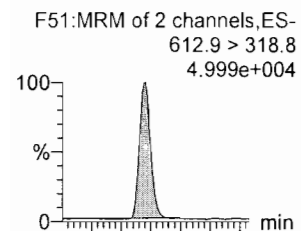
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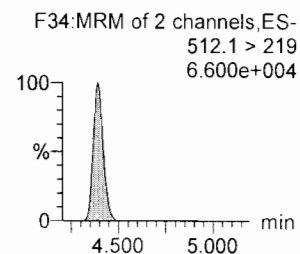
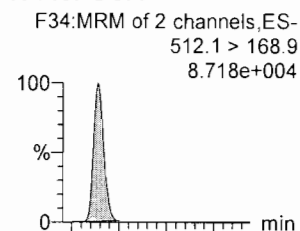
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Name: 170724M1_7, Date: 24-Jul-2017, Time: 14:34:02, ID: ST170724M1-5 PFC CS2 17G2425, Description: PFC CS2 17G2425

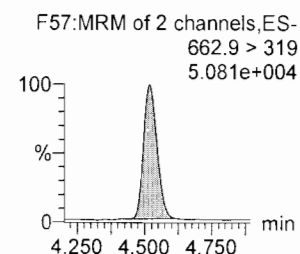
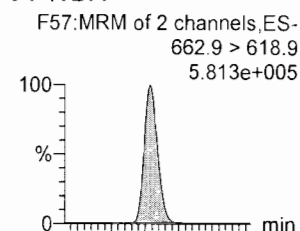
PFD_oA



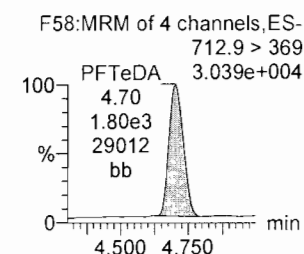
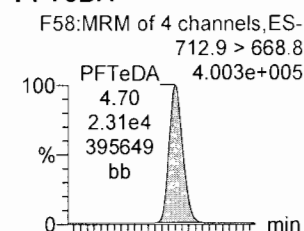
N-MeFOSA



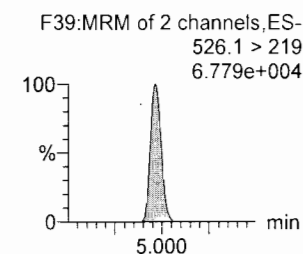
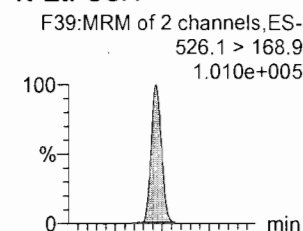
PFT_rDA



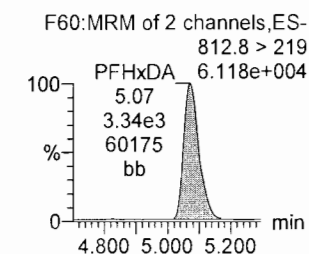
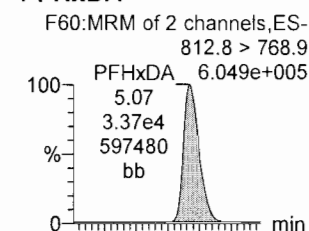
PFT_eDA



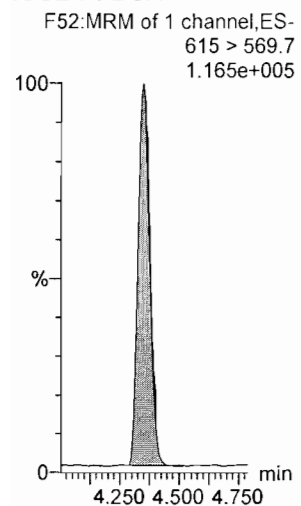
N-EtFOSA



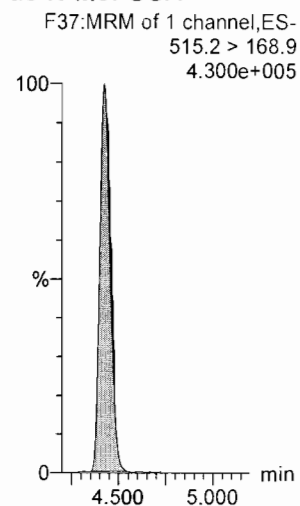
PFH_xDA



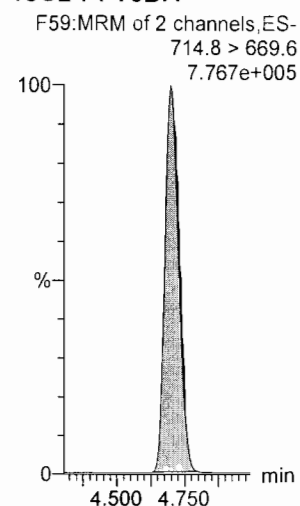
13C2-PFD_oA



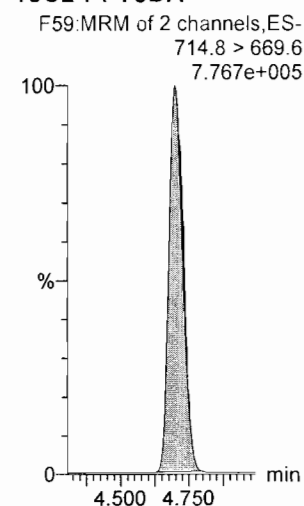
d3-N-MeFOSA



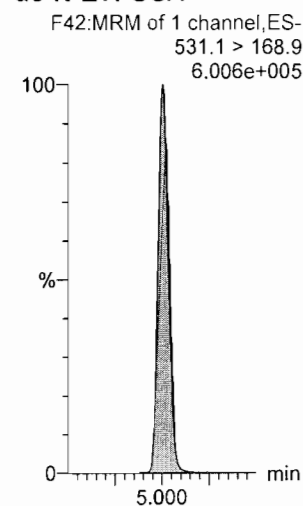
13C2-PFT_eDA



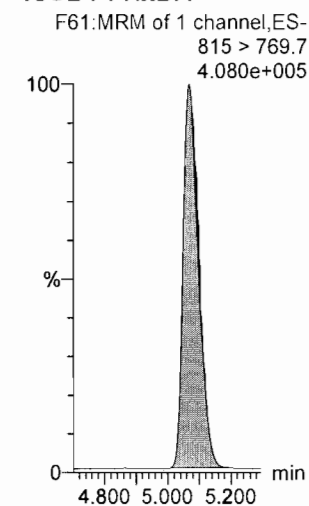
13C2-PFT_eDA



d5-N-ETFOSA



13C2-PFH_xDA



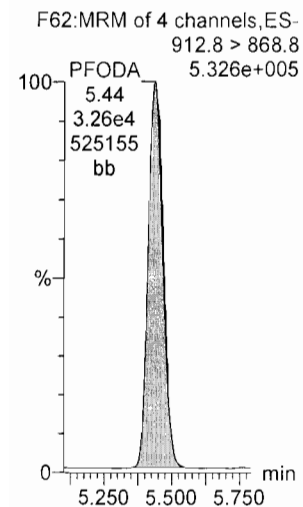
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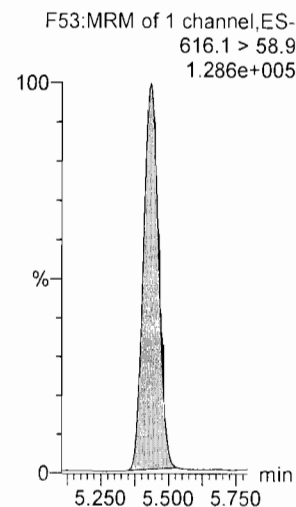
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Name: 170724M1_7, Date: 24-Jul-2017, Time: 14:34:02, ID: ST170724M1-5 PFC CS2 17G2425, Description: PFC CS2 17G2425

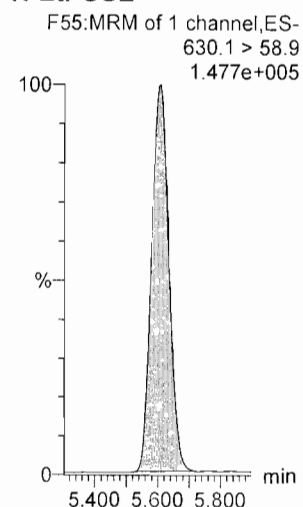
PFODA



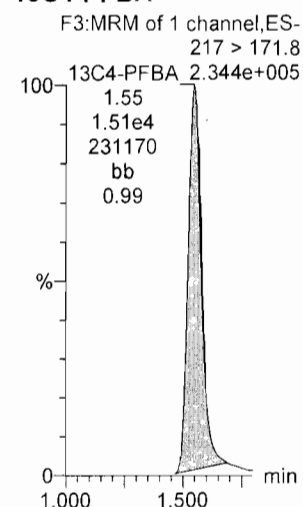
N-MeFOSE



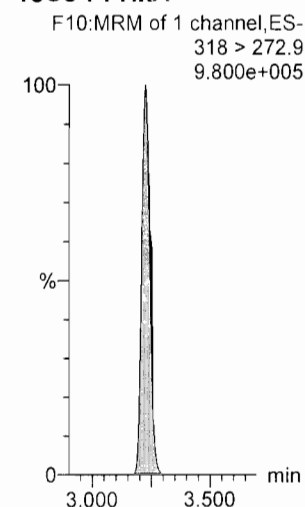
N-EtFOSE



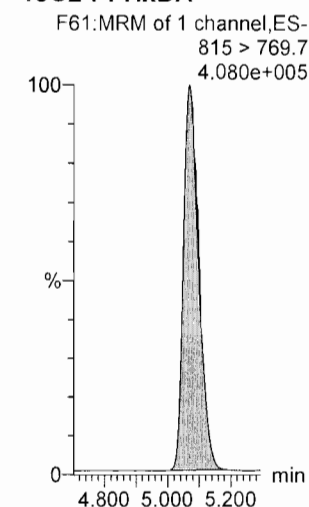
13C4-PFBA



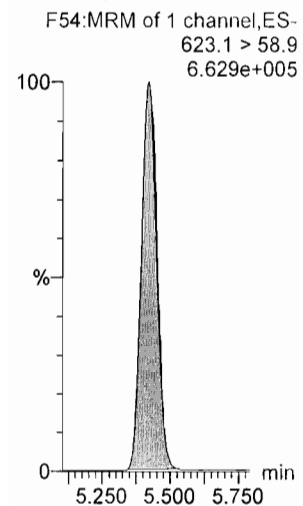
13C5-PFHxA



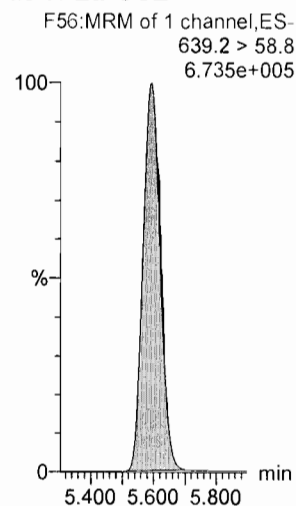
13C2-PFHxDA



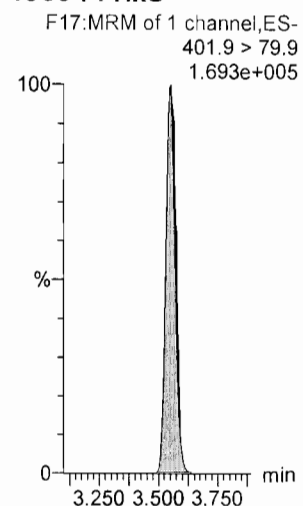
d7-N-MeFOSE



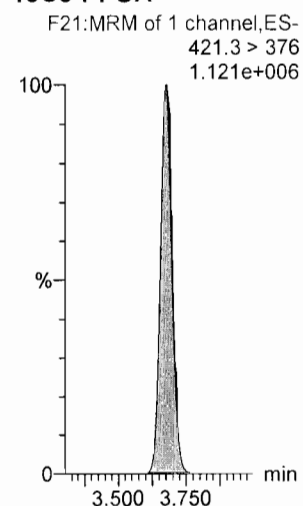
d9-N-EtFOSE



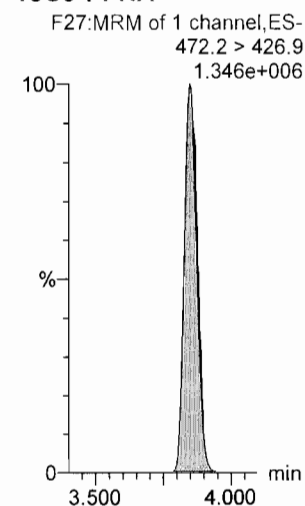
13C3-PFHxS



13C8-PFOA



13C9-PFNA



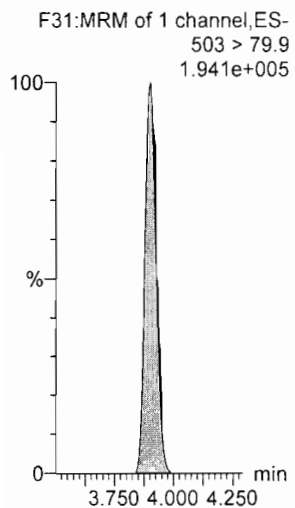
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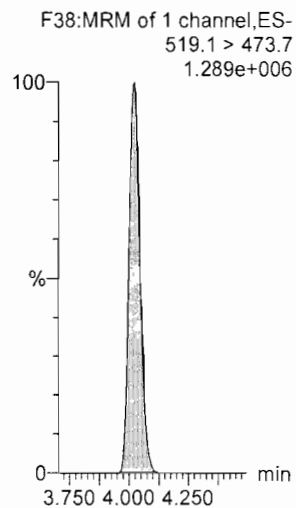
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Name: 170724M1_7, Date: 24-Jul-2017, Time: 14:34:02, ID: ST170724M1-5 PFC CS2 17G2425, Description: PFC CS2 17G2425

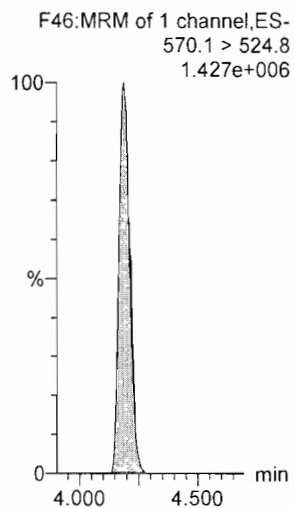
13C4-PFOS



13C6-PFDA



13C7-PFUnA



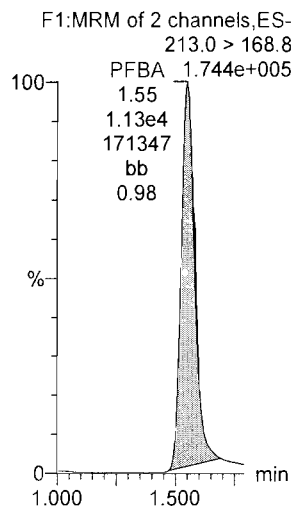
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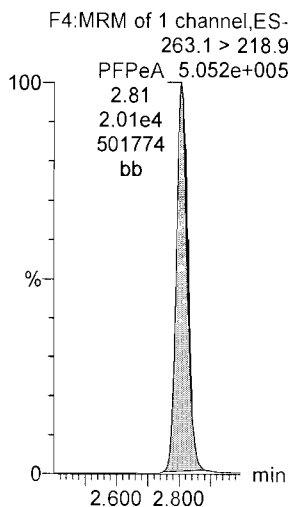
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Name: 170724M1_8, Date: 24-Jul-2017, Time: 14:44:48, ID: ST170724M1-6 PFC CS3 17G2118, Description: PFC CS3 17G2118

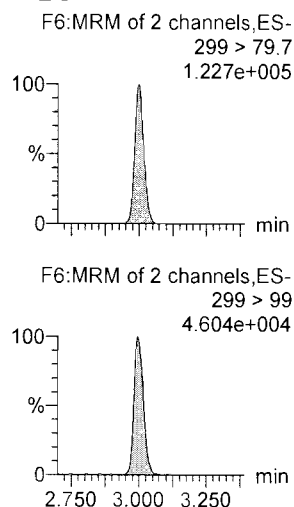
PFBA



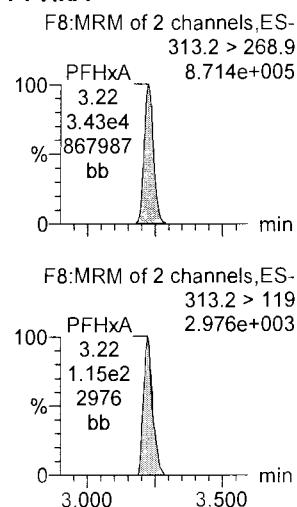
PFPeA



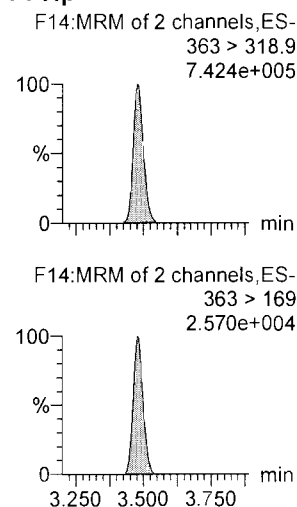
PFBS



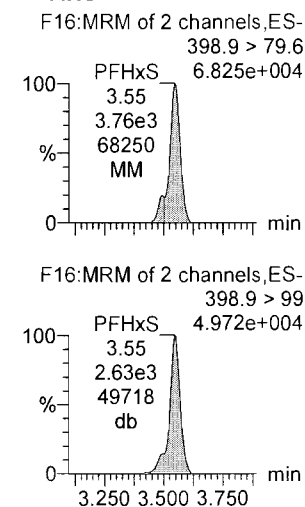
PFHxA



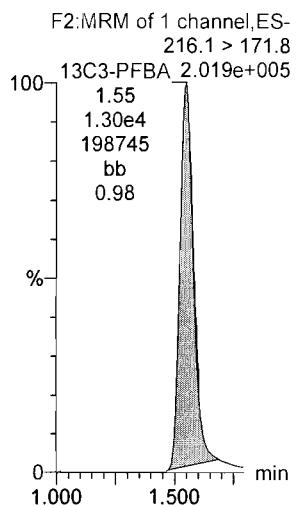
PFHpA



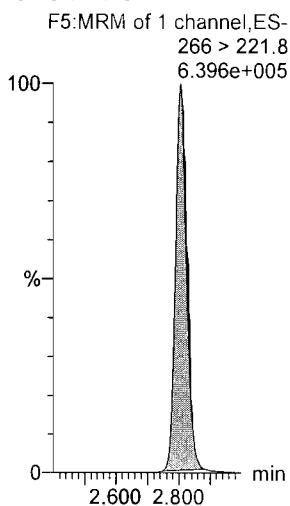
PFHxS



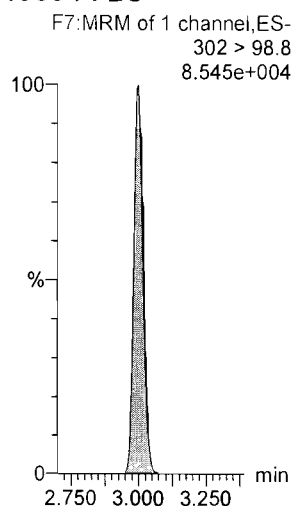
13C3-PFBA



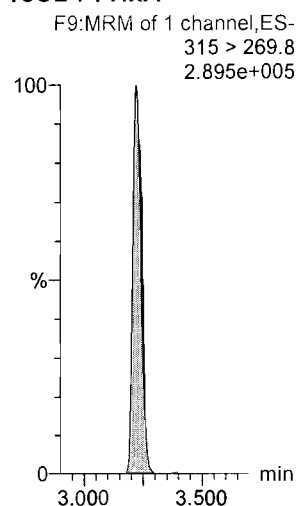
13C3-PFPeA



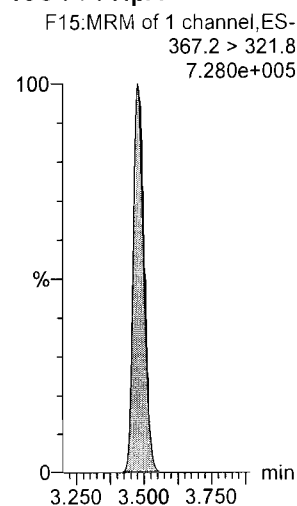
13C3-PFBS



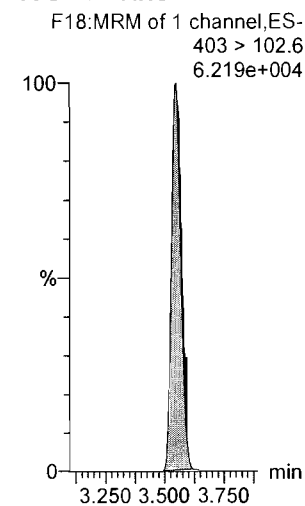
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



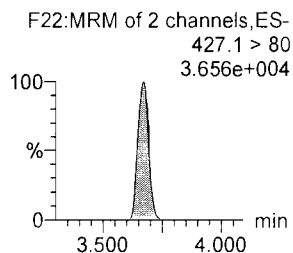
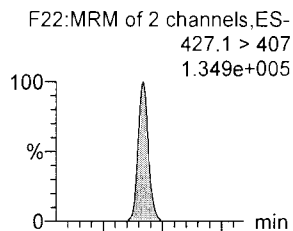
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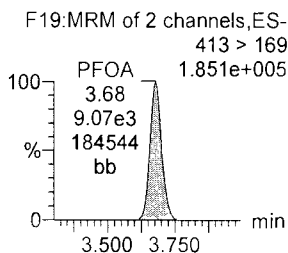
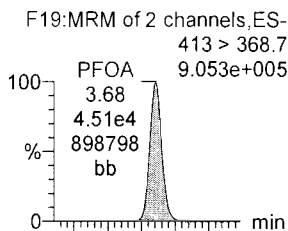
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Name: 170724M1_8, Date: 24-Jul-2017, Time: 14:44:48, ID: ST170724M1-6 PFC CS3 17G2118, Description: PFC CS3 17G2118

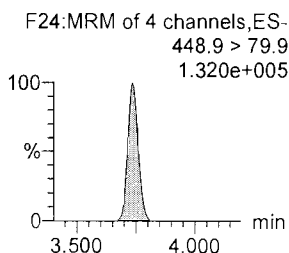
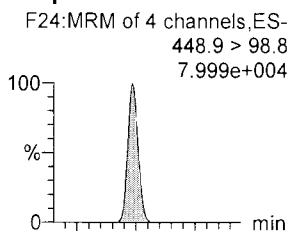
6:2 FTS



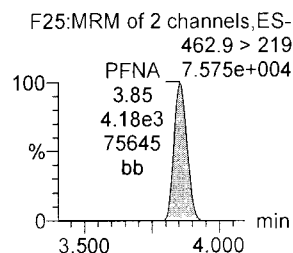
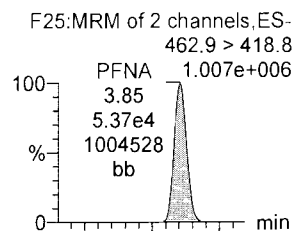
PFOA



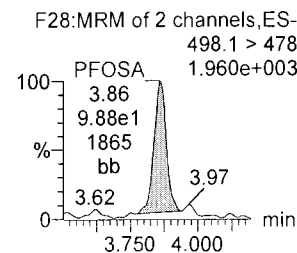
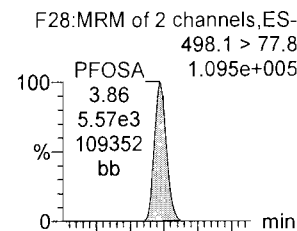
PFHpS



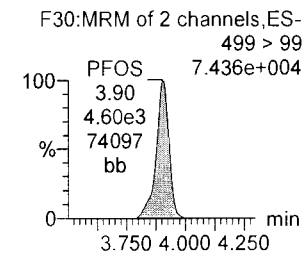
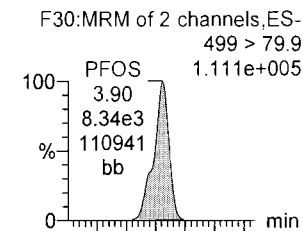
PFNA



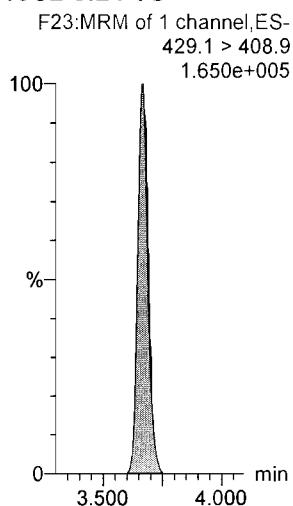
PFOSA



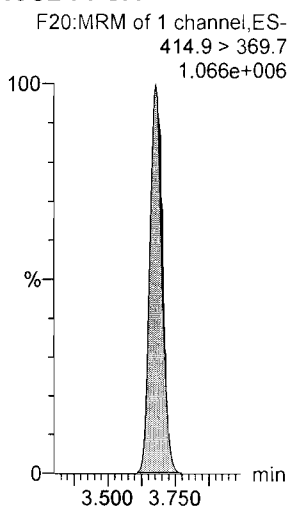
PFOS



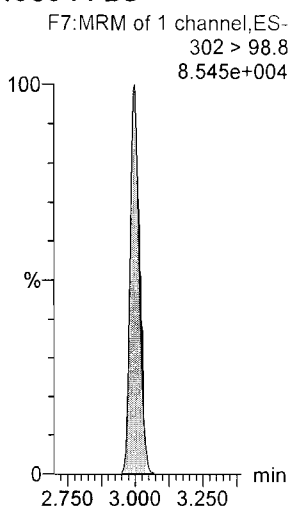
13C2-6:2 FTS



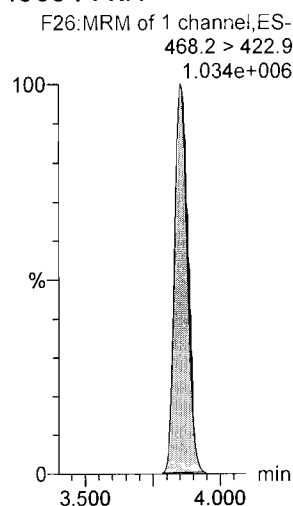
13C2-PFOA



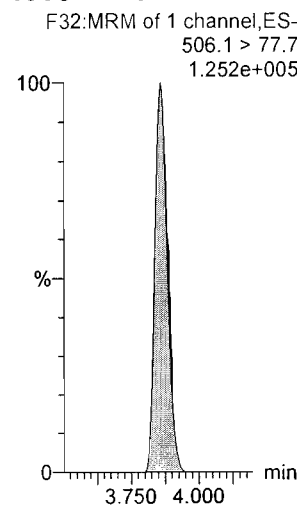
13C3-PFBS



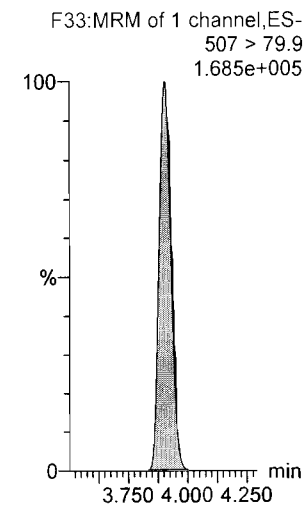
13C5-PFNA



13C8-PFOSA



13C8-PFOS



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

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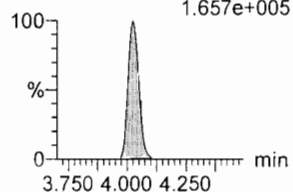
Name: 170724M1_8, Date: 24-Jul-2017, Time: 14:44:48, ID: ST170724M1-6 PFC CS3 17G2118, Description: PFC CS3 17G2118

PFDA

F35:MRM of 2 channels,ES-
513 > 468.8
1.120e+006



F35:MRM of 2 channels,ES-
513 > 219
1.657e+005

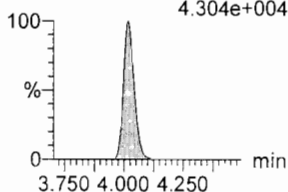


8:2 FTS

F40:MRM of 2 channels,ES-
527 > 506.9
1.262e+005



F40:MRM of 2 channels,ES-
527 > 80
4.304e+004

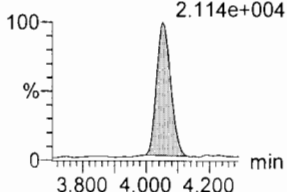


N-MeFOSAA

F45:MRM of 2 channels,ES-
570.1 > 419
2.733e+005



F45:MRM of 2 channels,ES-
570.1 > 483
2.114e+004

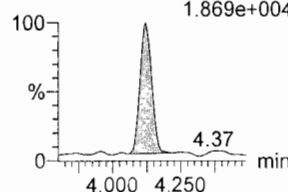


N-EtFOSAA

F48:MRM of 2 channels,ES-
584.2 > 419
2.415e+005

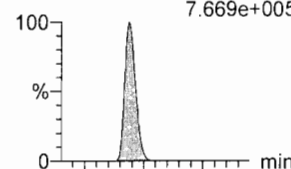


F48:MRM of 2 channels,ES-
584.2 > 483
1.869e+004

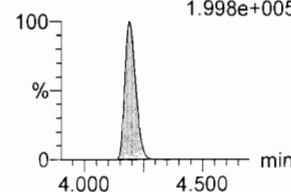


PFUnA

F43:MRM of 2 channels,ES-
562.9 > 518.9
7.669e+005

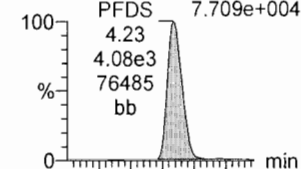


F43:MRM of 2 channels,ES-
562.9 > 269
1.998e+005

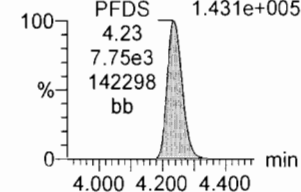


PFDS

F50:MRM of 2 channels,ES-
598.9 > 98.7
7.709e+004

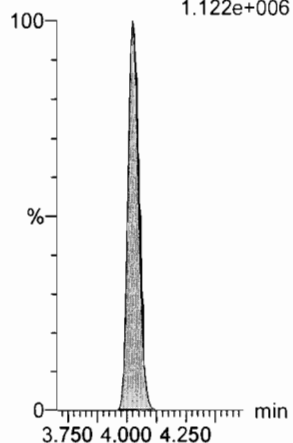


F50:MRM of 2 channels,ES-
598.9 > 80
1.431e+005



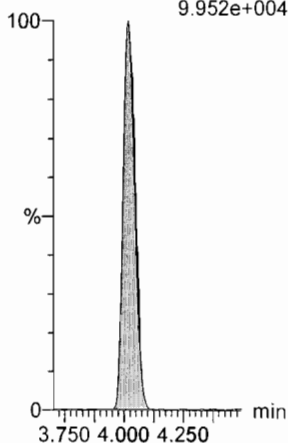
13C2-PFDA

F36:MRM of 1 channel,ES-
515.1 > 469.9
1.122e+006



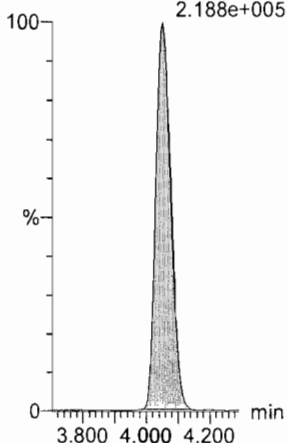
13C2-8:2 FTS

F41:MRM of 1 channel,ES-
529.1 > 508.7
9.952e+004



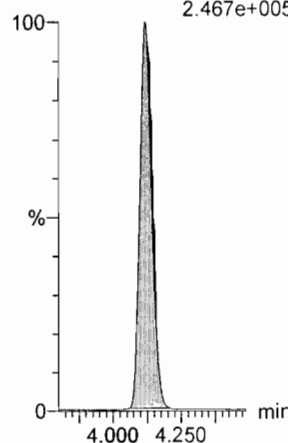
d3-N-MeFOSAA

F47:MRM of 1 channel,ES-
573.3 > 419
2.188e+005



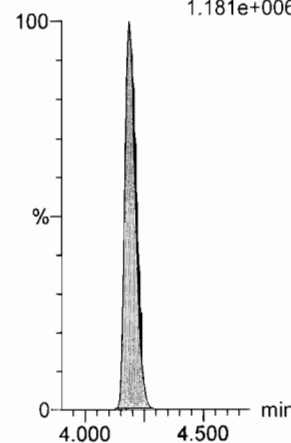
d5-N-EtFOSAA

F49:MRM of 1 channel,ES-
589.3 > 419
2.467e+005



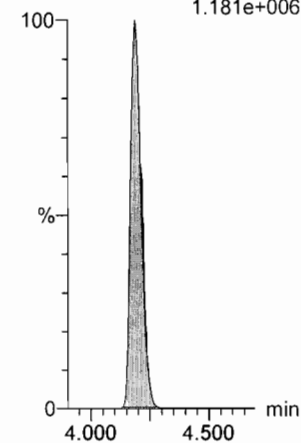
13C2-PFUnA

F44:MRM of 1 channel,ES-
565 > 519.8
1.181e+006



13C2-PFUnA

F44:MRM of 1 channel,ES-
565 > 519.8
1.181e+006



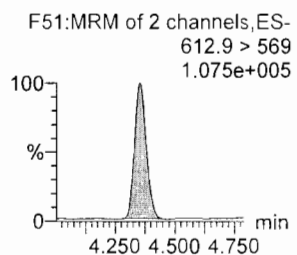
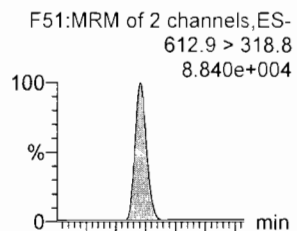
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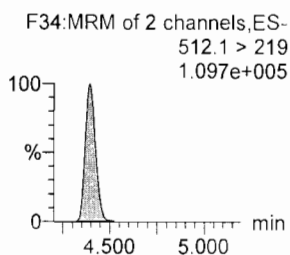
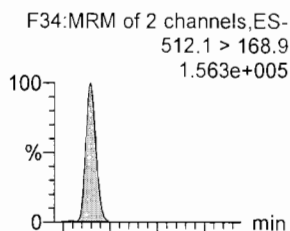
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Name: 170724M1_8, Date: 24-Jul-2017, Time: 14:44:48, ID: ST170724M1-6 PFC CS3 17G2118, Description: PFC CS3 17G2118

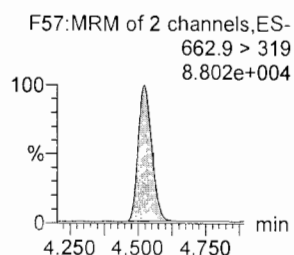
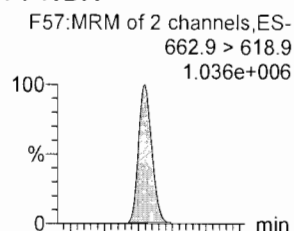
PFD_oA



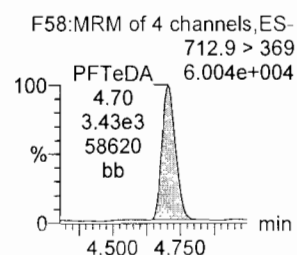
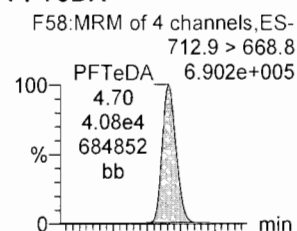
N-MeFOSA



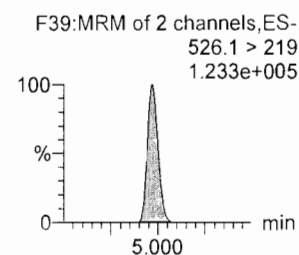
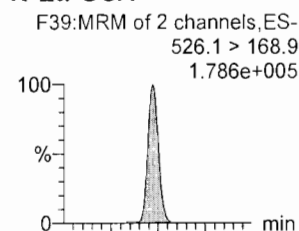
PFT_rDA



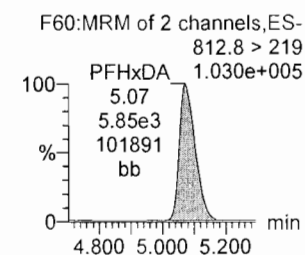
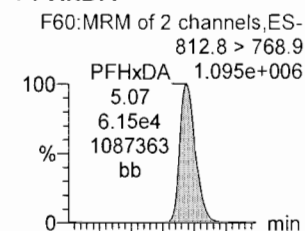
PFT_eDA



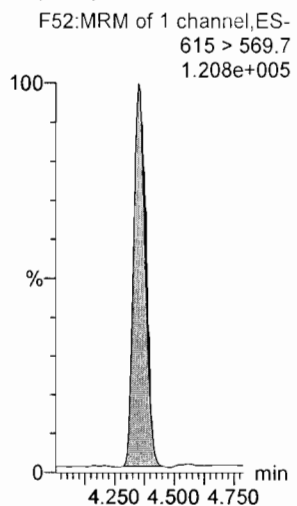
N-EtFOSA



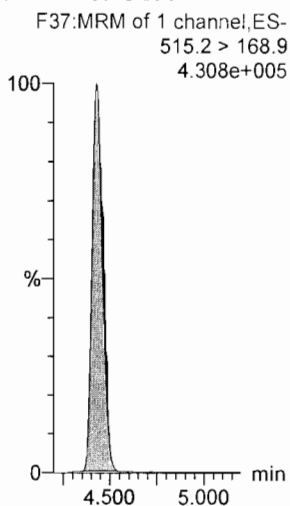
PFH_xDA



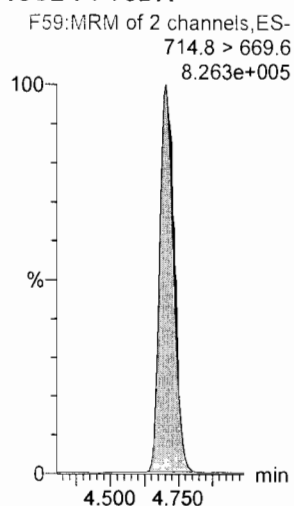
13C2-PFD_oA



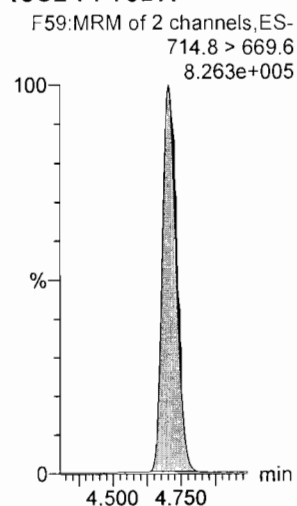
d3-N-MeFOSA



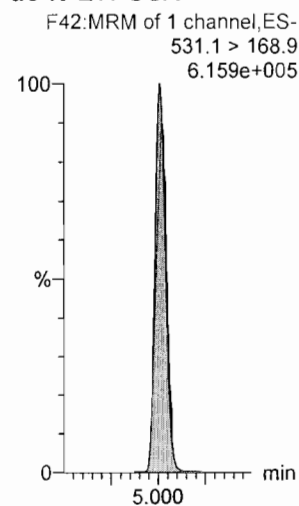
13C2-PFT_eDA



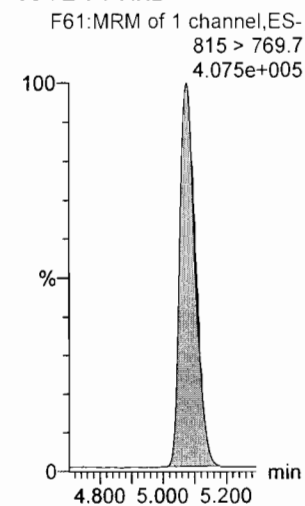
13C2-PFT_eDA



d5-N-ETFOSA



13C2-PFH_xDA



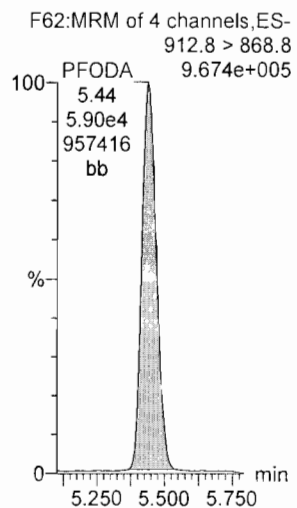
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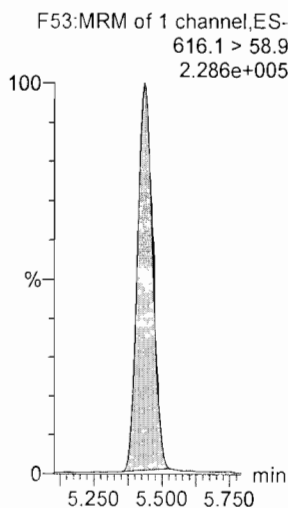
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Name: 170724M1_8, Date: 24-Jul-2017, Time: 14:44:48, ID: ST170724M1-6 PFC CS3 17G2118, Description: PFC CS3 17G2118

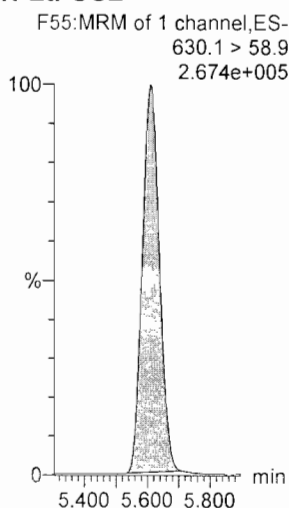
PFODA



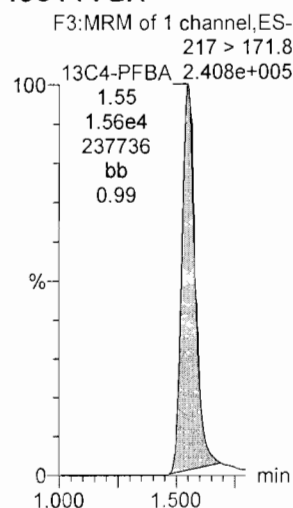
N-MeFOSE



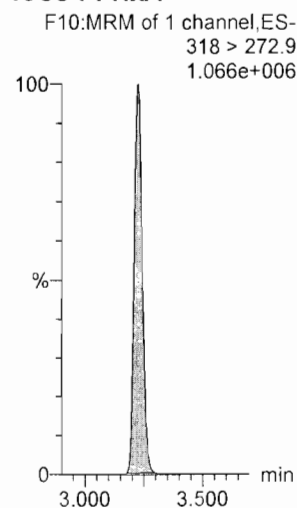
N-EtFOSE



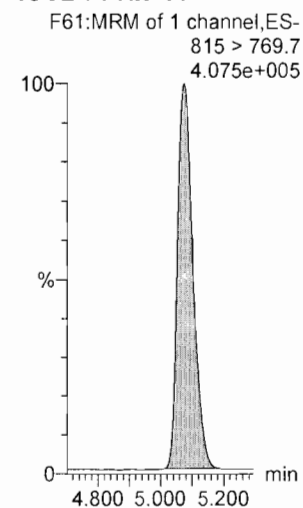
13C4-PFBA



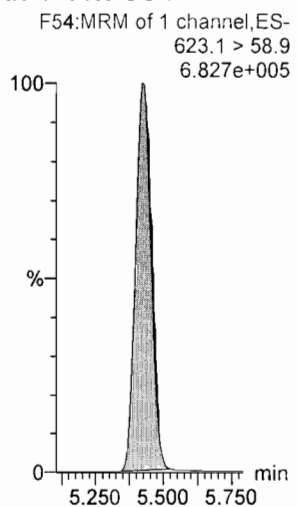
13C5-PFHxA



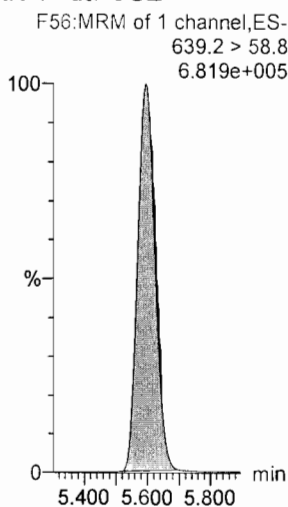
13C2-PFHxDA



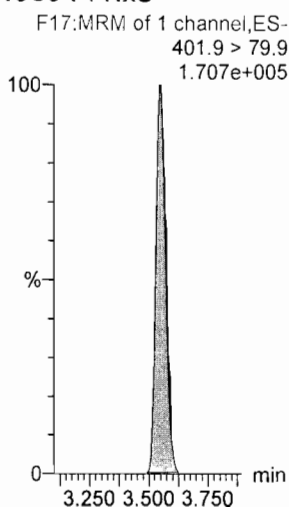
d7-N-MeFOSE



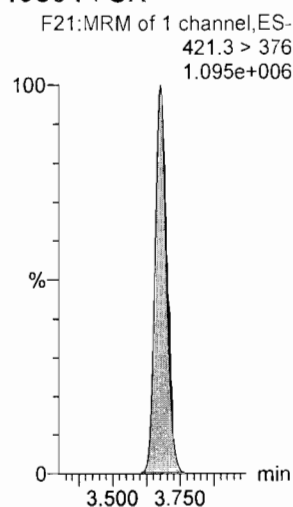
d9-N-EtFOSE



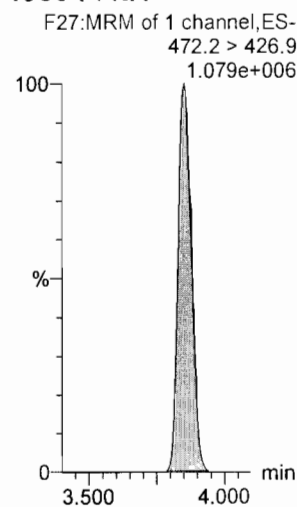
13C3-PFHxS



13C8-PFOA



13C9-PFNA



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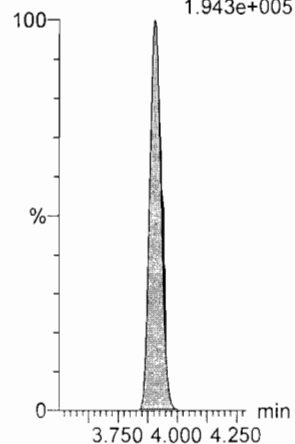
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Name: 170724M1_8, Date: 24-Jul-2017, Time: 14:44:48, ID: ST170724M1-6 PFC CS3 17G2118, Description: PFC CS3 17G2118

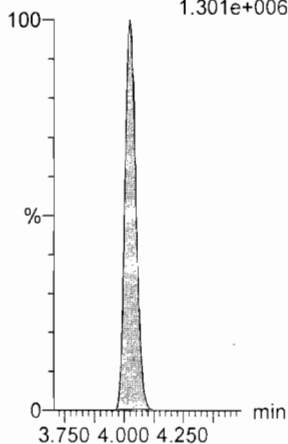
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
1.943e+005



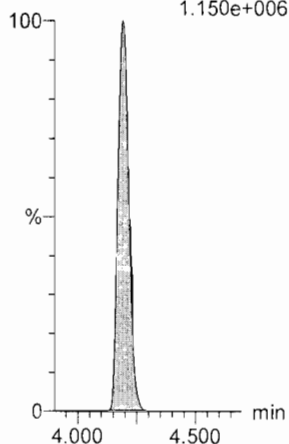
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
1.301e+006



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
1.150e+006



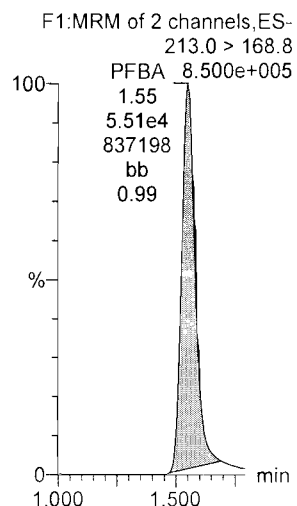
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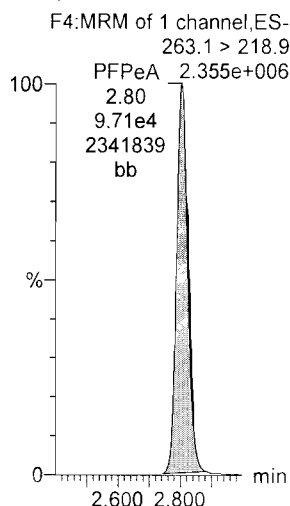
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Name: 170724M1_9, Date: 24-Jul-2017, Time: 14:55:34, ID: ST170724M1-7 PFC CS4 17G2426, Description: PFC CS4 17G2426

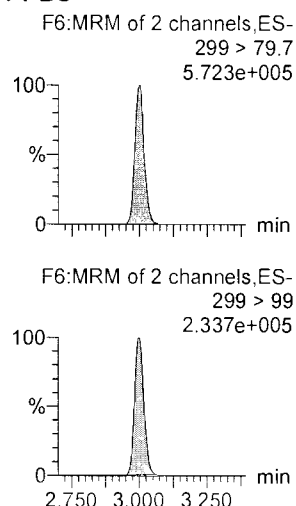
PFBA



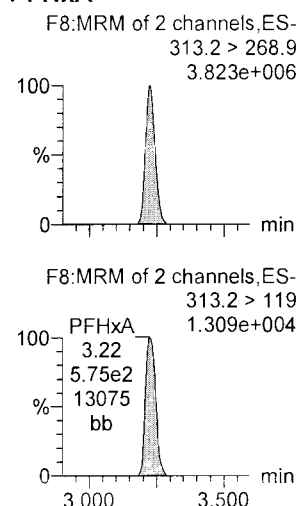
PFPeA



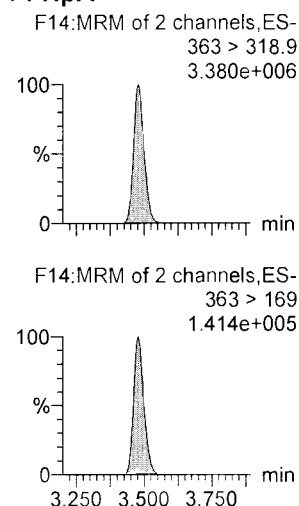
PFBS



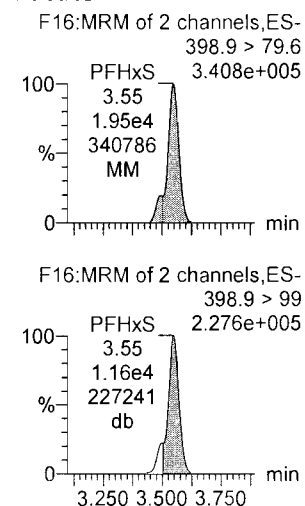
PFHxA



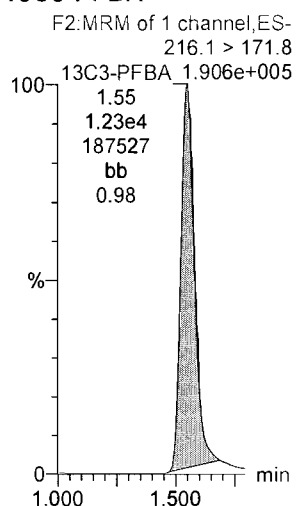
PFHpA



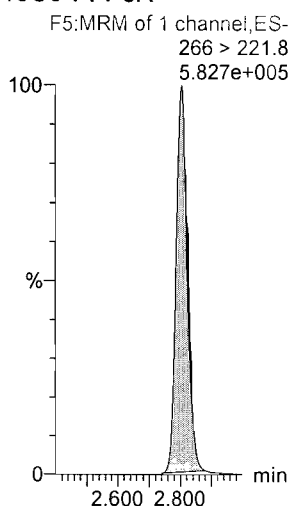
PFHxS



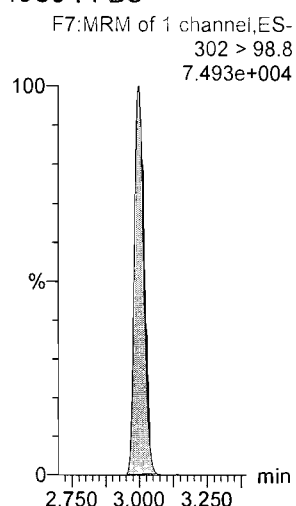
13C3-PFBA



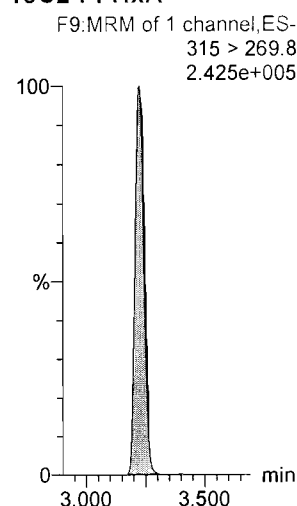
13C3-PFPeA



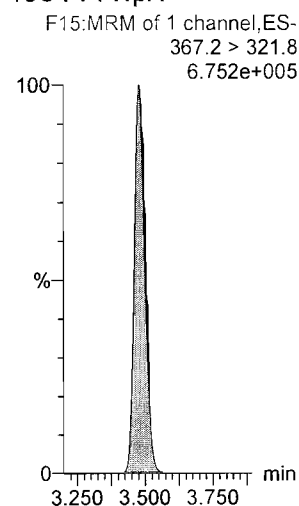
13C3-PFBS



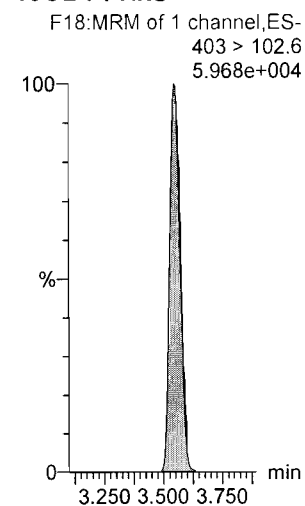
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



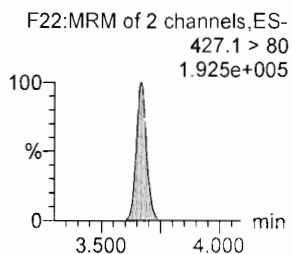
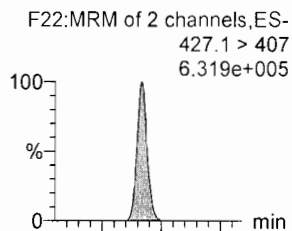
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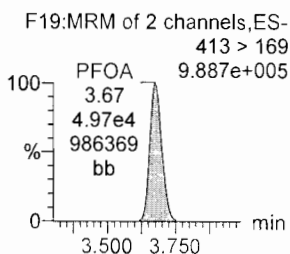
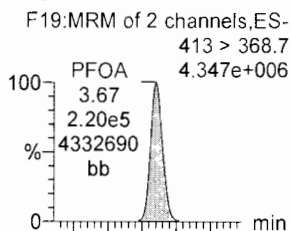
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Name: 170724M1_9, Date: 24-Jul-2017, Time: 14:55:34, ID: ST170724M1-7 PFC CS4 17G2426, Description: PFC CS4 17G2426

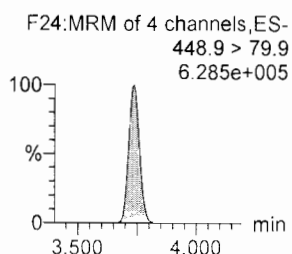
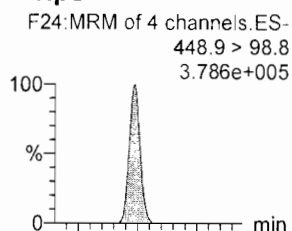
6:2 FTS



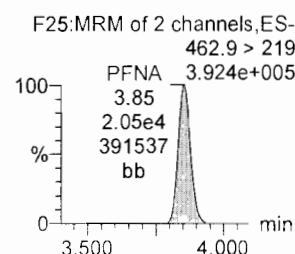
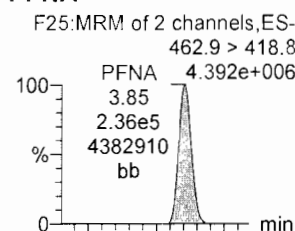
PFOA



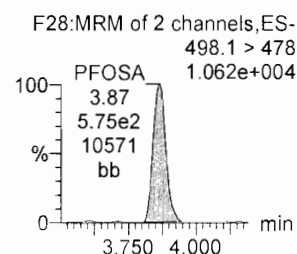
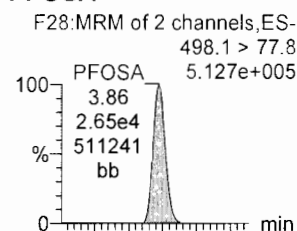
PFHpS



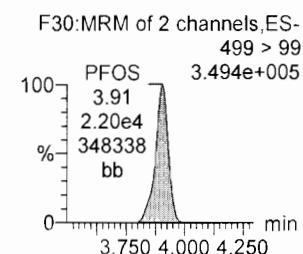
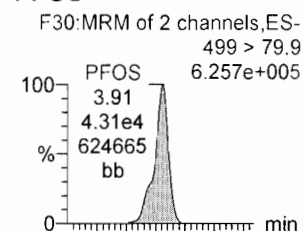
PFNA



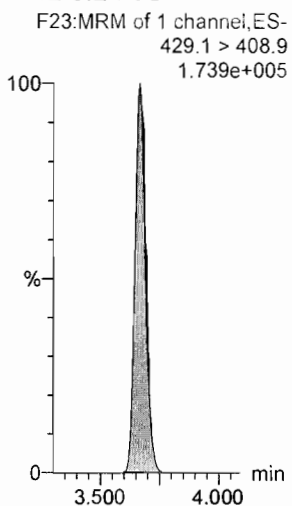
PFOSA



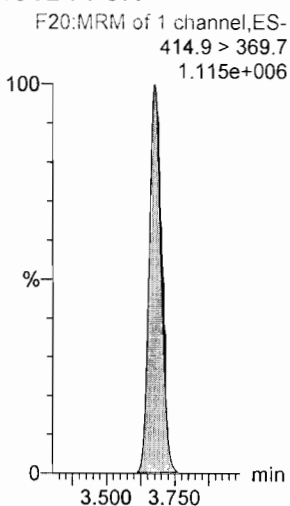
PFOS



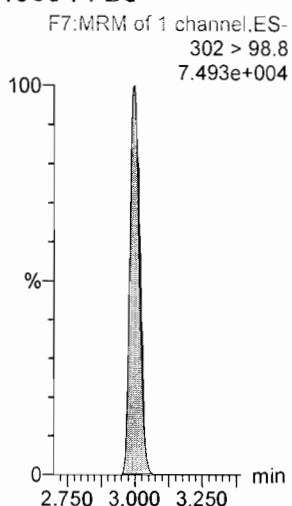
13C2-6:2 FTS



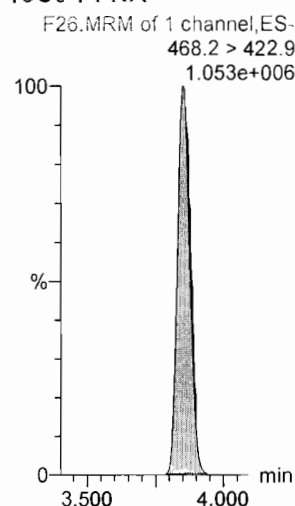
13C2-PFOA



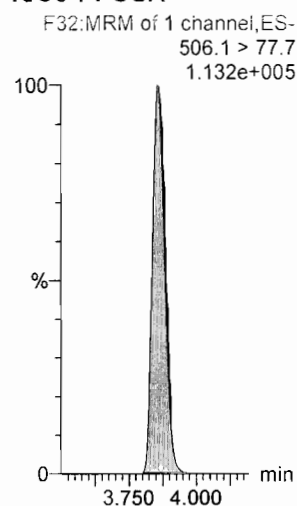
13C3-PFBS



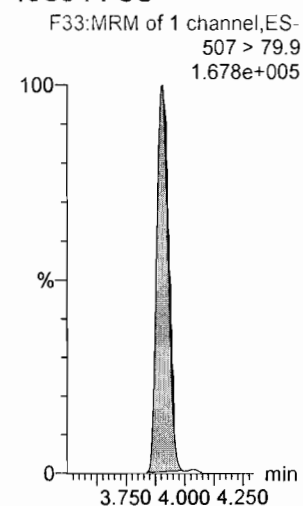
13C5-PFNA



13C8-PFOSA



13C8-PFOS



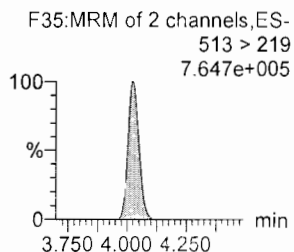
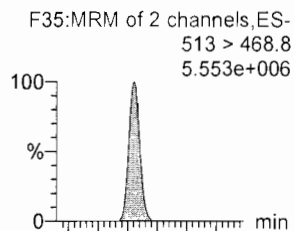
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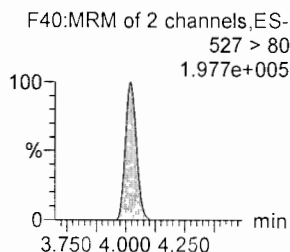
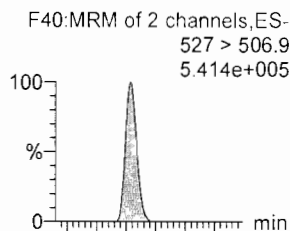
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Name: 170724M1_9, Date: 24-Jul-2017, Time: 14:55:34, ID: ST170724M1-7 PFC CS4 17G2426, Description: PFC CS4 17G2426

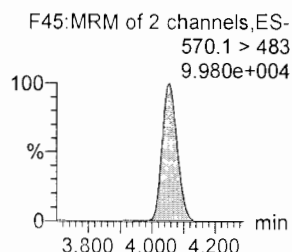
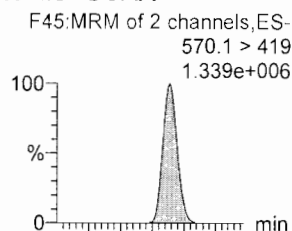
PFDA



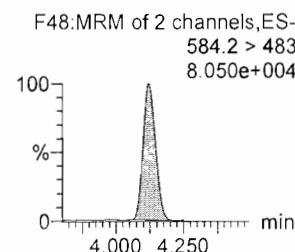
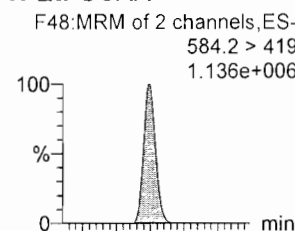
8:2 FTS



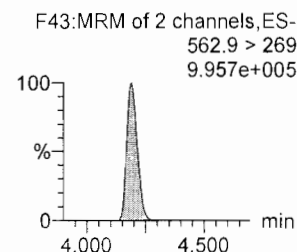
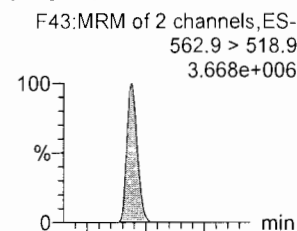
N-MeFOSAA



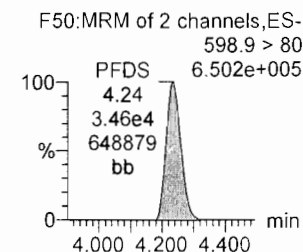
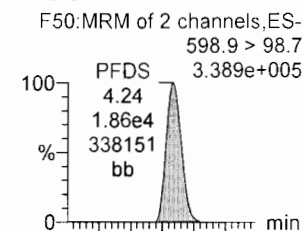
N-EtFOSAA



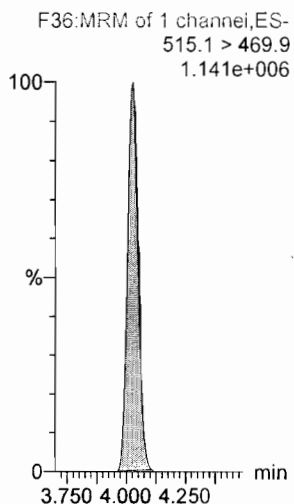
PFUnA



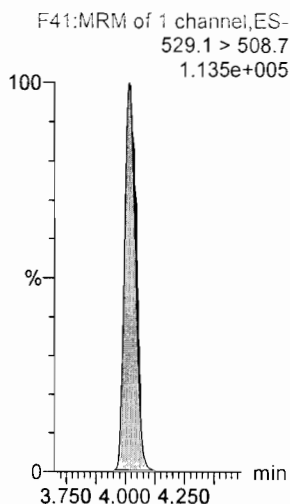
PFDS



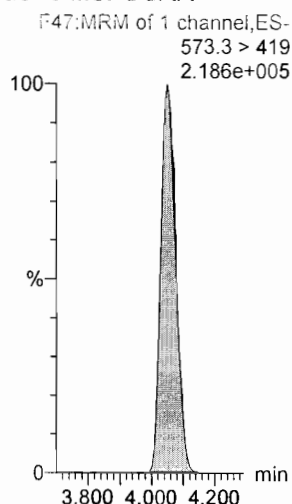
13C2-PFDA



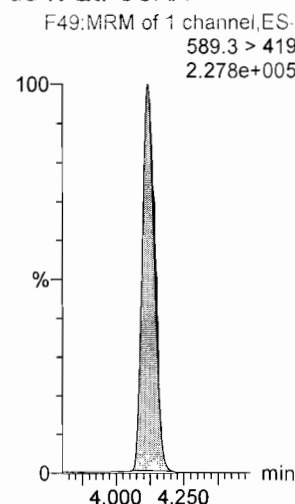
13C2-8:2 FTS



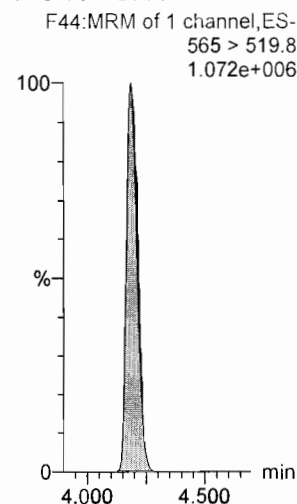
d3-N-MeFOSAA



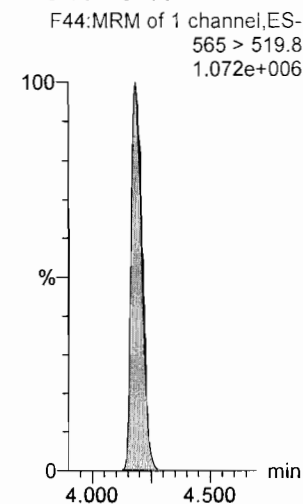
d5-N-EtFOSAA



13C2-PFUnA



13C2-PFUnA



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

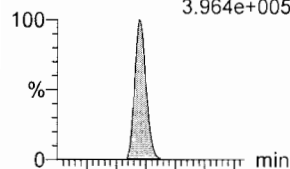
Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:36:37 Pacific Daylight Time

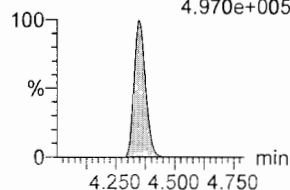
Name: 170724M1_9, Date: 24-Jul-2017, Time: 14:55:34, ID: ST170724M1-7 PFC CS4 17G2426, Description: PFC CS4 17G2426

PFD_oA

F51:MRM of 2 channels,ES-
612.9 > 318.8
3.964e+005

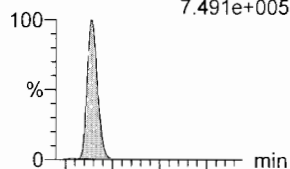


F51:MRM of 2 channels,ES-
612.9 > 569
4.970e+005

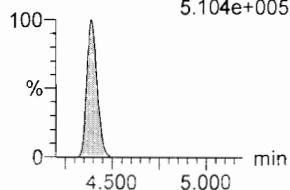


N-MeFOSA

F34:MRM of 2 channels,ES-
512.1 > 168.9
7.491e+005

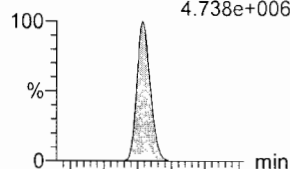


F34:MRM of 2 channels,ES-
512.1 > 219
5.104e+005

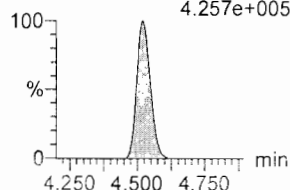


PFT_rDA

F57:MRM of 2 channels,ES-
662.9 > 618.9
4.738e+006

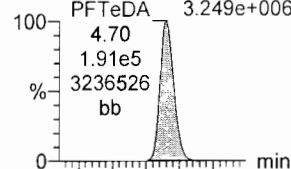


F57:MRM of 2 channels,ES-
662.9 > 319
4.257e+005

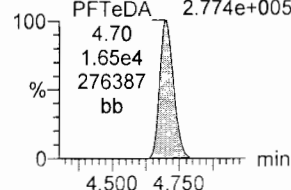


PFT_eDA

F58:MRM of 4 channels,ES-
712.9 > 668.8
3.249e+006

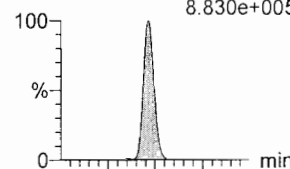


F58:MRM of 4 channels,ES-
712.9 > 369
2.774e+005

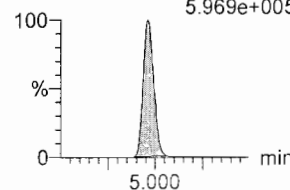


N-EtFOSA

F39:MRM of 2 channels,ES-
526.1 > 168.9
8.830e+005

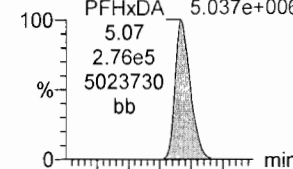


F39:MRM of 2 channels,ES-
526.1 > 219
5.969e+005

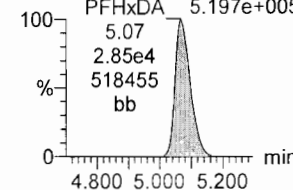


PFH_xDA

F60:MRM of 2 channels,ES-
812.8 > 768.9
5.037e+006

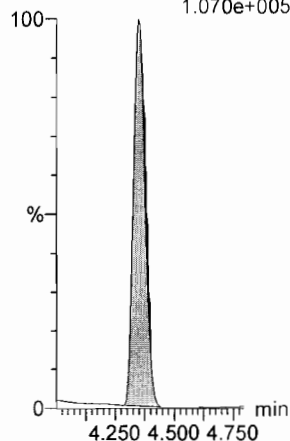


F60:MRM of 2 channels,ES-
812.8 > 219
5.197e+005



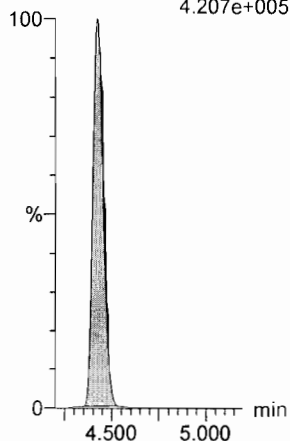
13C2-PFD_oA

F52:MRM of 1 channel,ES-
615 > 569.7
1.070e+005



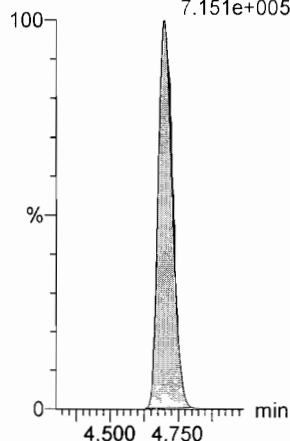
d3-N-MeFOSA

F37:MRM of 1 channel,ES-
515.2 > 168.9
4.207e+005



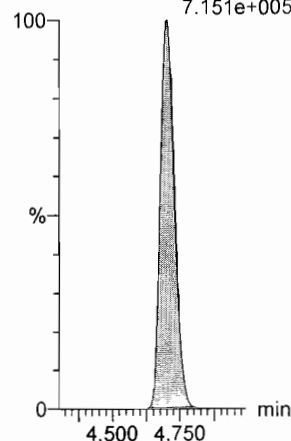
13C2-PFT_eDA

F59:MRM of 2 channels,ES-
714.8 > 669.6
7.151e+005



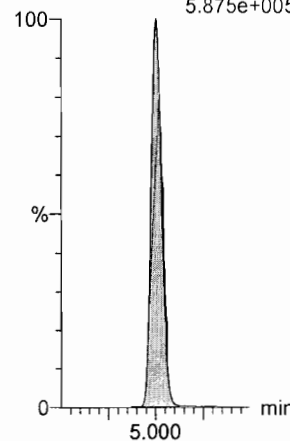
13C2-PFT_eDA

F59:MRM of 2 channels,ES-
714.8 > 669.6
7.151e+005



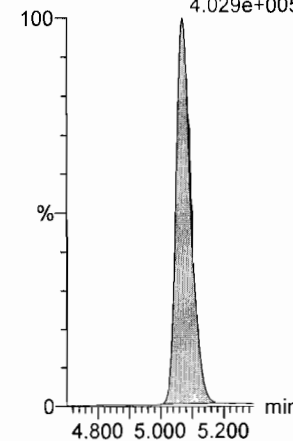
d5-N-ETFOSA

F42:MRM of 1 channel,ES-
531.1 > 168.9
5.875e+005



13C2-PFH_xDA

F61:MRM of 1 channel,ES-
815 > 769.7
4.029e+005



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

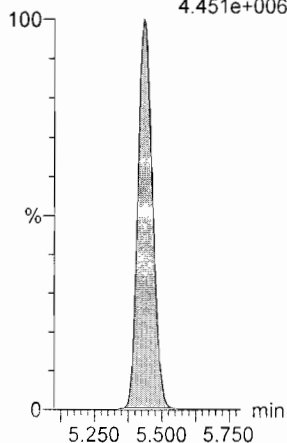
Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:36:37 Pacific Daylight Time

Name: 170724M1_9, Date: 24-Jul-2017, Time: 14:55:34, ID: ST170724M1-7 PFC CS4 17G2426, Description: PFC CS4 17G2426

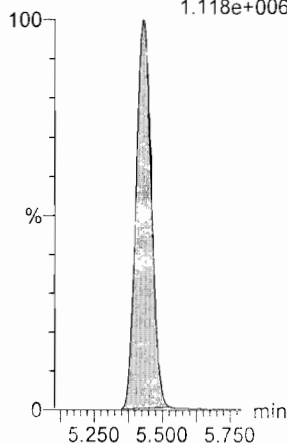
PFODA

F62:MRM of 4 channels,ES-
912.8 > 868.8
4.451e+006



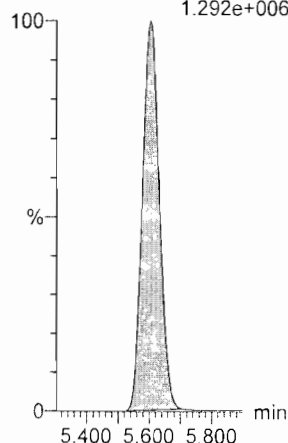
N-MeFOSE

F53:MRM of 1 channel,ES-
616.1 > 58.9
1.118e+006



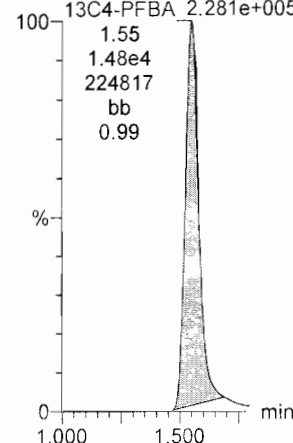
N-EtFOSE

F55:MRM of 1 channel,ES-
630.1 > 58.9
1.292e+006



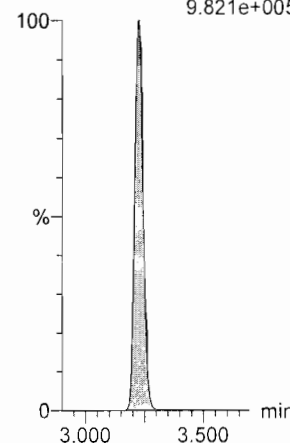
13C4-PFBA

F3:MRM of 1 channel,ES-
217 > 171.8
2.281e+005



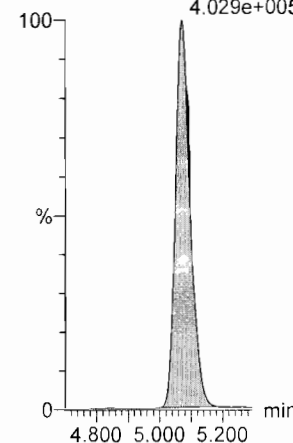
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
9.821e+005



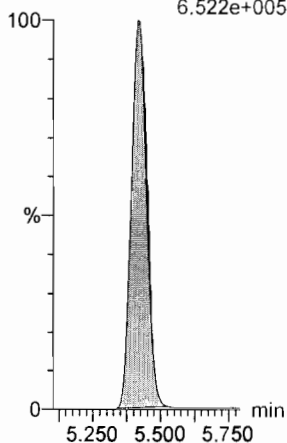
13C2-PFHxDA

F61:MRM of 1 channel,ES-
815 > 769.7
4.029e+005



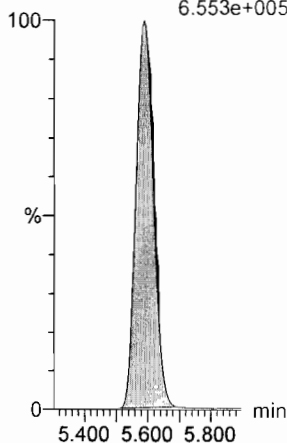
d7-N-MeFOSE

F54:MRM of 1 channel,ES-
623.1 > 58.9
6.522e+005



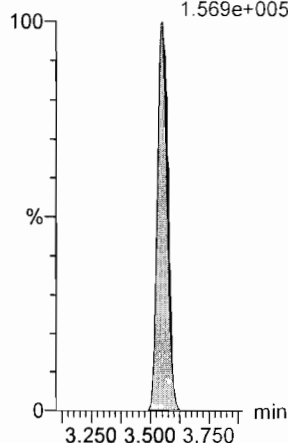
d9-N-EtFOSE

F56:MRM of 1 channel,ES-
639.2 > 58.8
6.553e+005



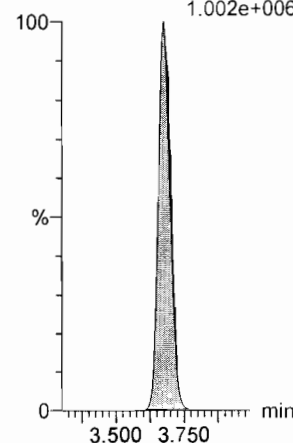
13C3-PFHxS

F17:MRM of 1 channel,ES-
401.9 > 79.9
1.569e+005



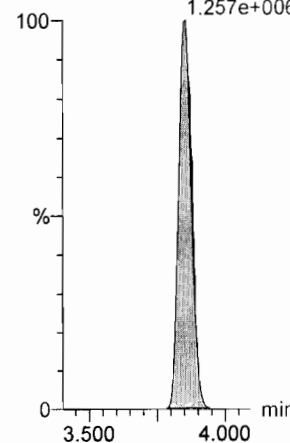
13C8-PFOA

F21:MRM of 1 channel,ES-
421.3 > 376
1.002e+006



13C9-PFNA

F27:MRM of 1 channel,ES-
472.2 > 426.9
1.257e+006



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

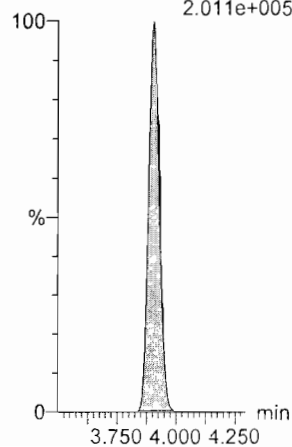
Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:36:37 Pacific Daylight Time

Name: 170724M1_9, Date: 24-Jul-2017, Time: 14:55:34, ID: ST170724M1-7 PFC CS4 17G2426, Description: PFC CS4 17G2426

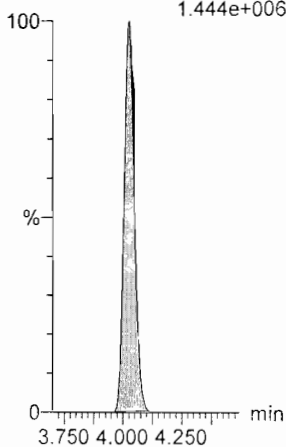
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
2.011e+005



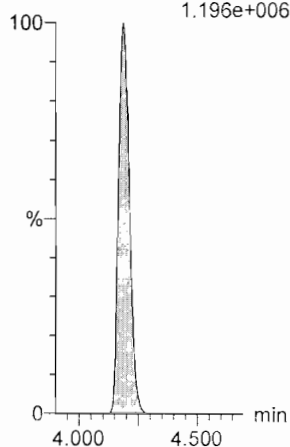
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
1.444e+006



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
1.196e+006



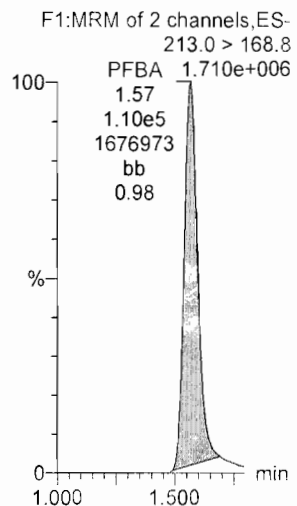
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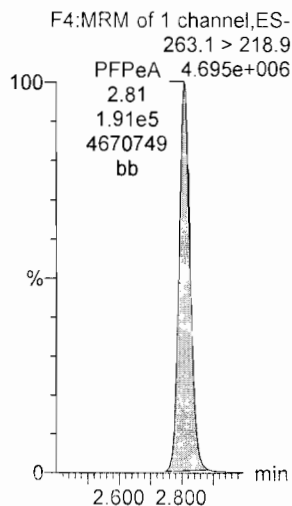
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Name: 170724M1_10, Date: 24-Jul-2017, Time: 15:06:35, ID: ST170724M1-8 PFC CS5 17G2427, Description: PFC CS5 17G2427

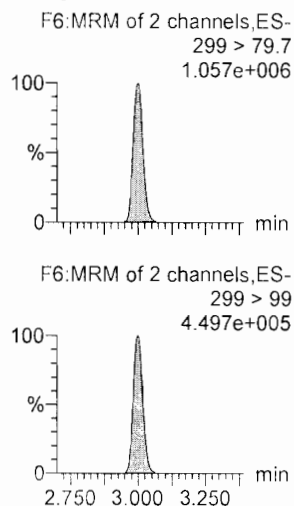
PFBA



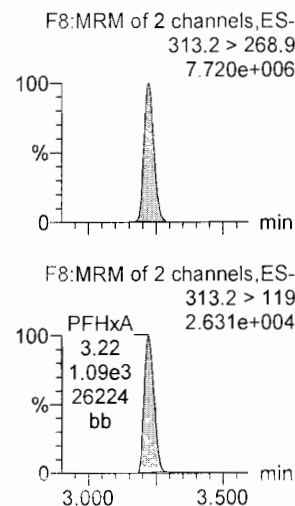
PFPeA



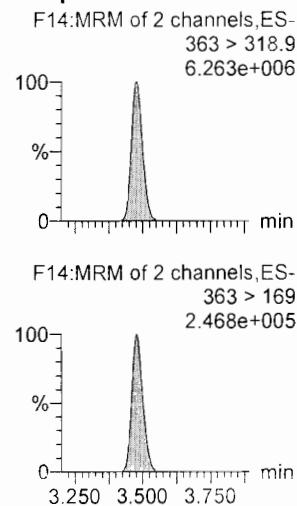
PFBS



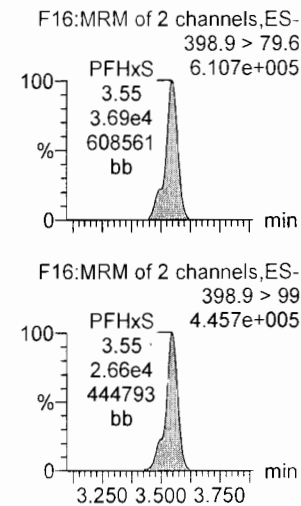
PFHxA



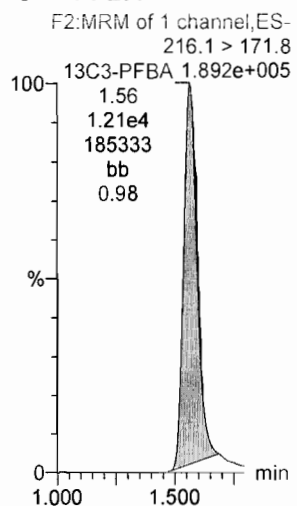
PFHpA



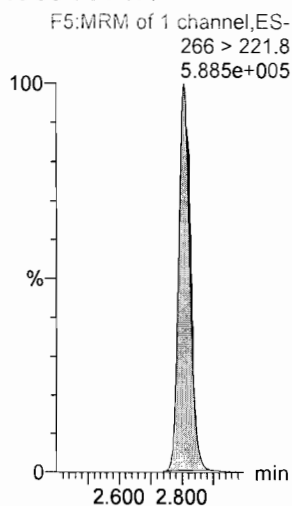
PFHxS



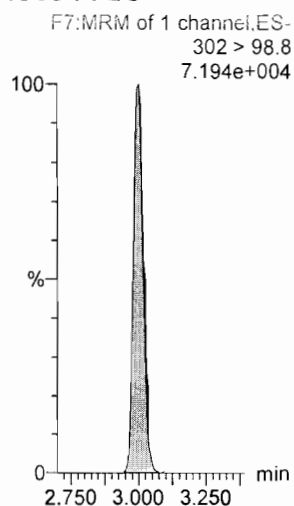
13C3-PFBA



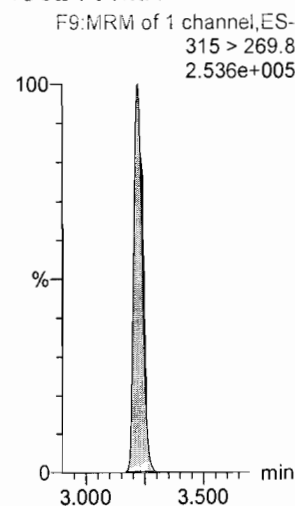
13C3-PFPeA



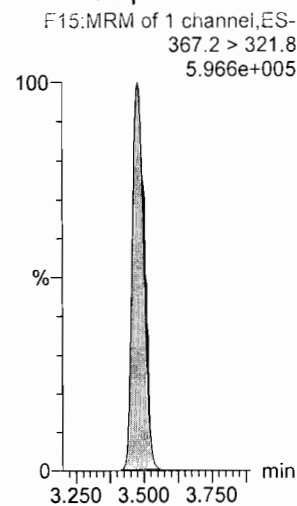
13C3-PFBS



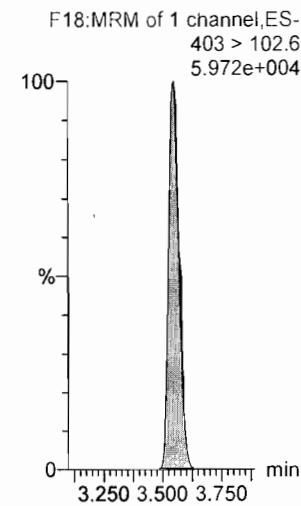
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



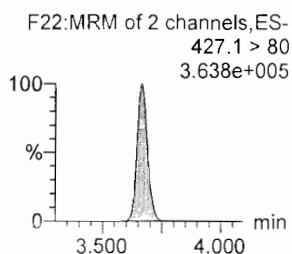
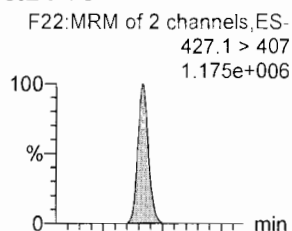
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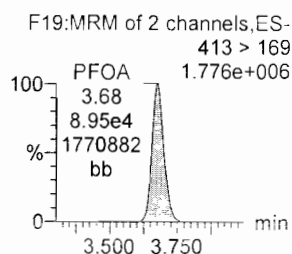
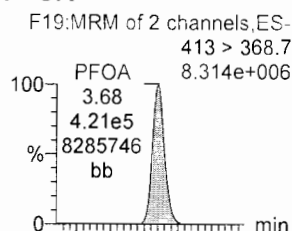
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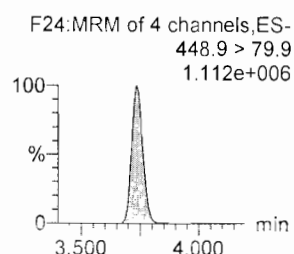
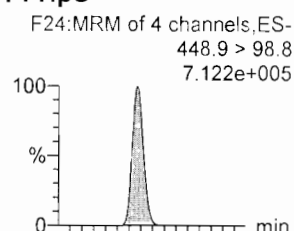
6:2 FTS



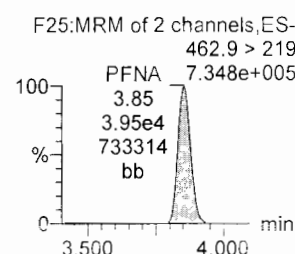
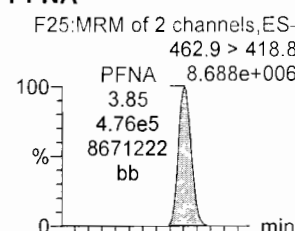
PFOA



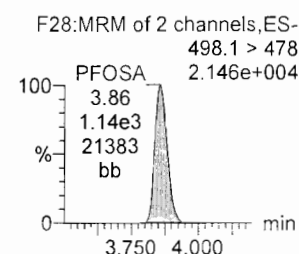
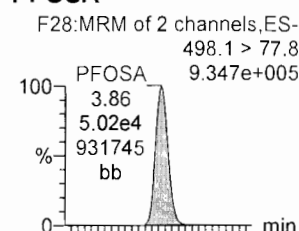
PFHpS



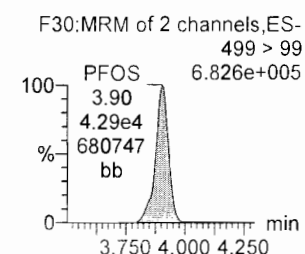
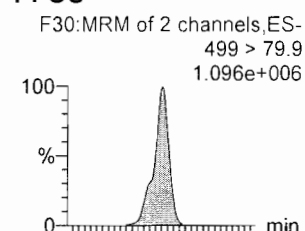
PFNA



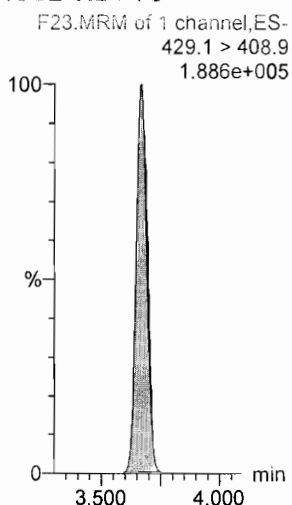
PFOSA



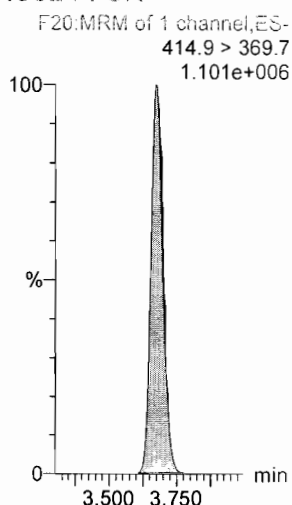
PFOS



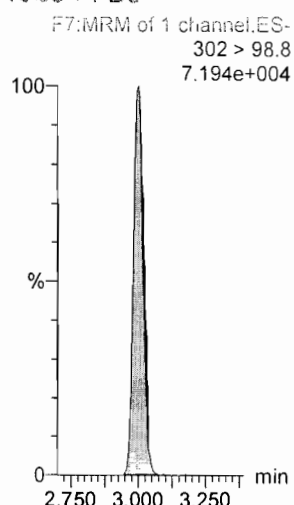
13C2-6:2 FTS



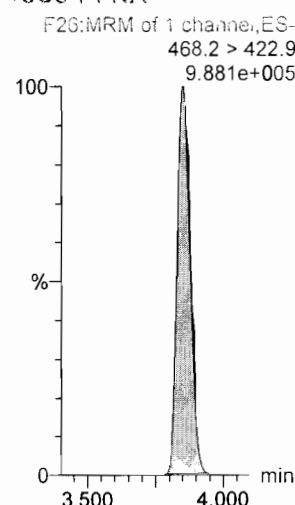
13C2-PFOA



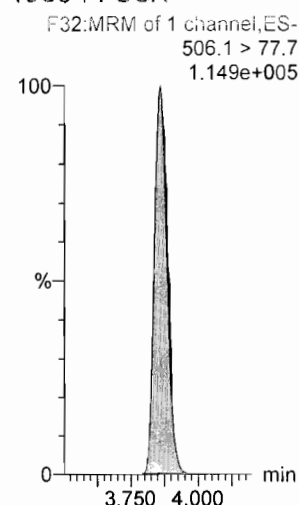
13C3-PFBS



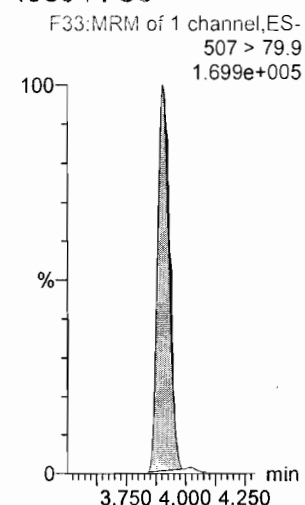
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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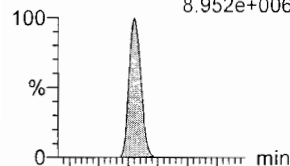
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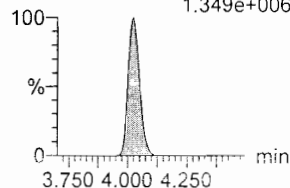
Name: 170724M1_10, Date: 24-Jul-2017, Time: 15:06:35, ID: ST170724M1-8 PFC CS5 17G2427, Description: PFC CS5 17G2427

PFDA

F35:MRM of 2 channels,ES-
513 > 468.8
8.952e+006

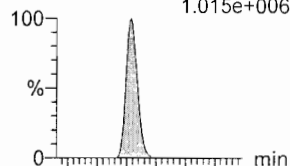


F35:MRM of 2 channels,ES-
513 > 219
1.349e+006

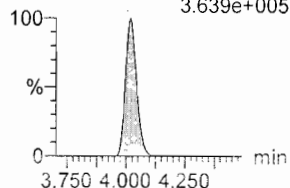


8:2 FTS

F40:MRM of 2 channels,ES-
527 > 506.9
1.015e+006

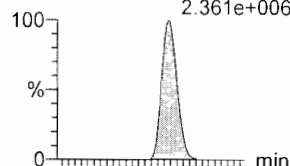


F40:MRM of 2 channels,ES-
527 > 80
3.639e+005

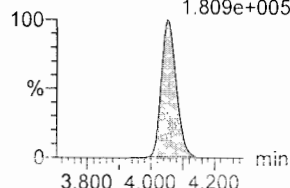


N-MeFOSAA

F45:MRM of 2 channels,ES-
570.1 > 419
2.361e+006

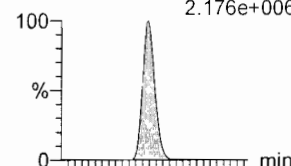


F45:MRM of 2 channels,ES-
570.1 > 483
1.809e+005

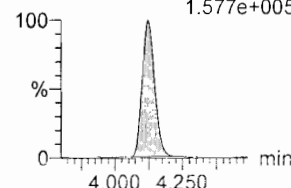


N-EtFOSAA

F48:MRM of 2 channels,ES-
584.2 > 419
2.176e+006

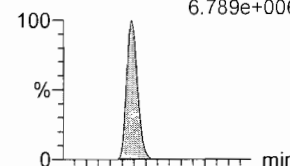


F48:MRM of 2 channels,ES-
584.2 > 483
1.577e+005

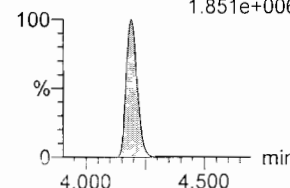


PfUnA

F43:MRM of 2 channels,ES-
562.9 > 518.9
6.789e+006

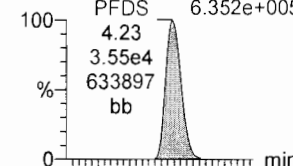


F43:MRM of 2 channels,ES-
562.9 > 269
1.851e+006

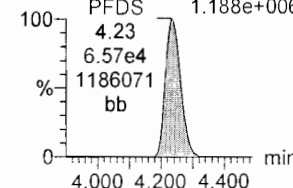


PFDS

F50:MRM of 2 channels,ES-
598.9 > 98.7
6.352e+005

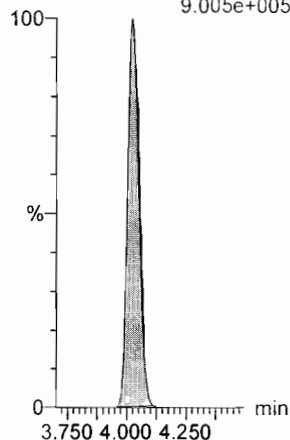


F50:MRM of 2 channels,ES-
598.9 > 80
1.188e+006



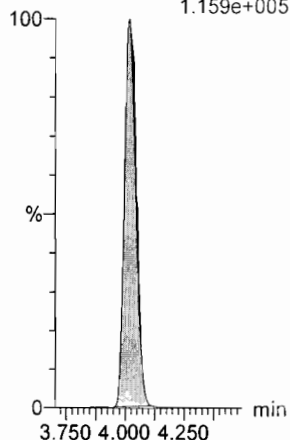
13C2-PFDA

F35:MRM of 1 channel,ES-
515.1 > 469.9
9.005e+005



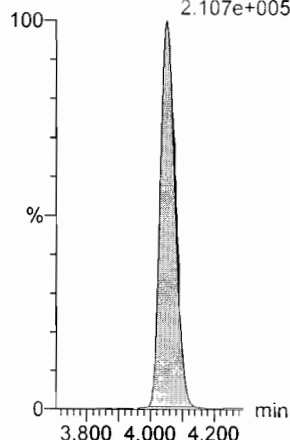
13C2-8:2 FTS

F41:MRM of 1 channel,ES-
529.1 > 508.7
1.159e+005



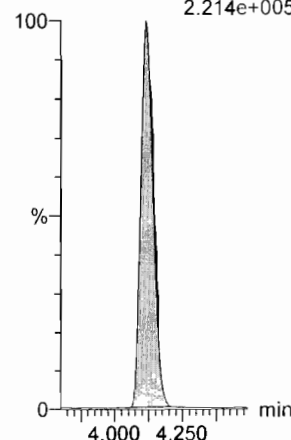
d3-N-MeFOSAA

F47:MRM of 1 channel,ES-
573.3 > 419
2.107e+005



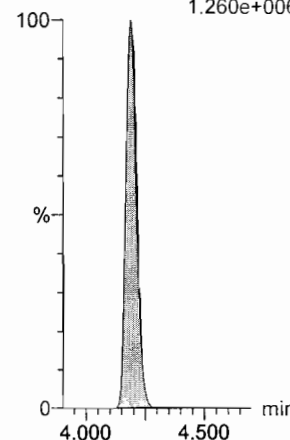
d5-N-EtFOSAA

F49:MRM of 1 channel,ES-
589.3 > 419
2.214e+005



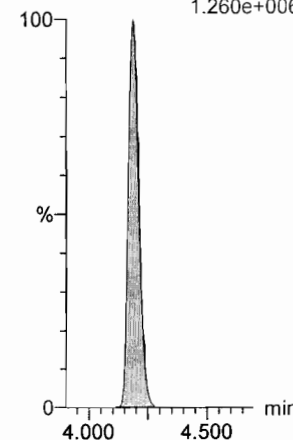
13C2-PfUnA

F44:MRM of 1 channel,ES-
565 > 519.8
1.260e+006



13C2-PfUnA

F44:MRM of 1 channel,ES-
565 > 519.8
1.260e+006



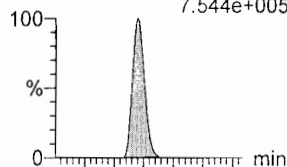
Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time
Printed: Monday, July 24, 2017 15:36:37 Pacific Daylight Time

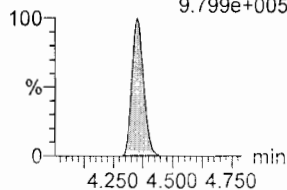
Name: 170724M1_10, Date: 24-Jul-2017, Time: 15:06:35, ID: ST170724M1-8 PFC CS5 17G2427, Description: PFC CS5 17G2427

PFD_oA

F51:MRM of 2 channels,ES-
612.9 > 318.8
7.544e+005

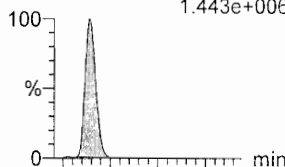


F51:MRM of 2 channels,ES-
612.9 > 569
9.799e+005

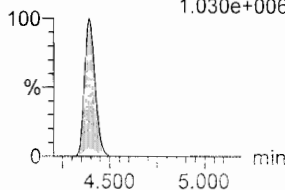


N-MeFOSA

F34:MRM of 2 channels,ES-
512.1 > 168.9
1.443e+006

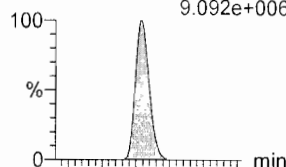


F34:MRM of 2 channels,ES-
512.1 > 219
1.030e+006

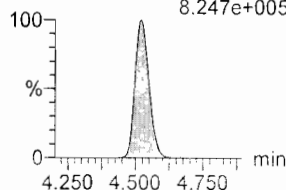


PFT_rDA

F57:MRM of 2 channels,ES-
662.9 > 618.9
9.092e+006

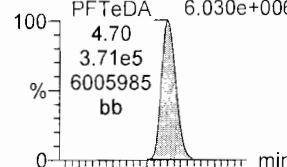


F57:MRM of 2 channels,ES-
662.9 > 319
8.247e+005

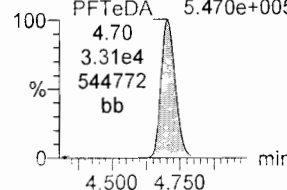


PFT_eDA

F58:MRM of 4 channels,ES-
712.9 > 668.8
6.030e+006

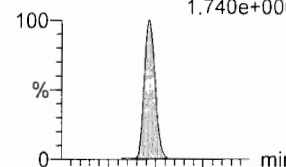


F58:MRM of 4 channels,ES-
712.9 > 369
5.470e+005

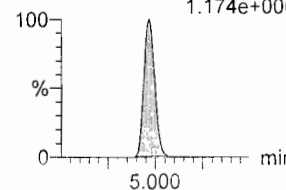


N-EtFOSA

F39:MRM of 2 channels,ES-
526.1 > 168.9
1.740e+006

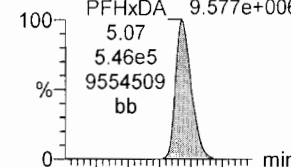


F39:MRM of 2 channels,ES-
526.1 > 219
1.174e+006

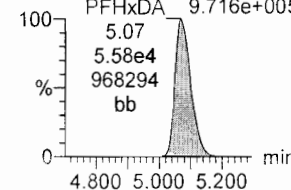


PFH_xDA

F60:MRM of 2 channels,ES-
812.8 > 768.9
9.577e+006

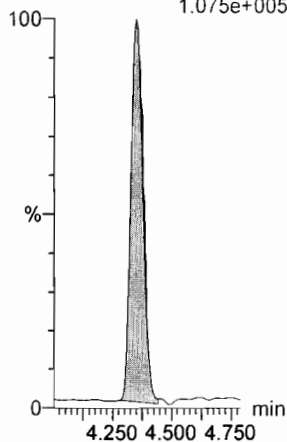


F60:MRM of 2 channels,ES-
812.8 > 219
9.716e+005



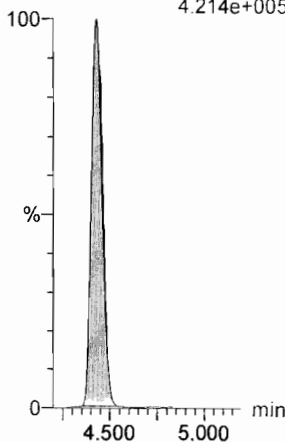
13C2-PFD_oA

F52:MRM of 1 channel,ES-
615 > 569.7
1.075e+005



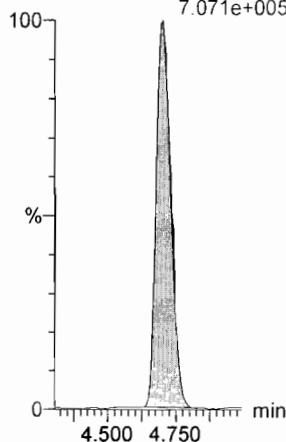
d3-N-MeFOSA

F37:MRM of 1 channel,ES-
515.2 > 168.9
4.214e+005



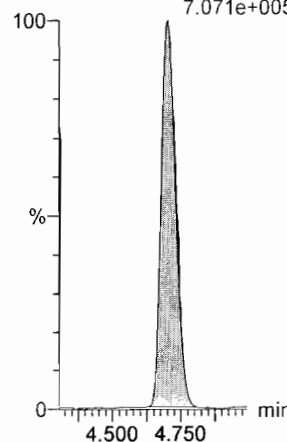
13C2-PFT_eDA

F59:MRM of 2 channels,ES-
714.8 > 669.6
7.071e+005



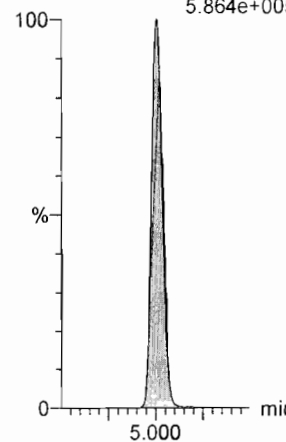
13C2-PFT_eDA

F59:MRM of 2 channels,ES-
714.8 > 669.6
7.071e+005



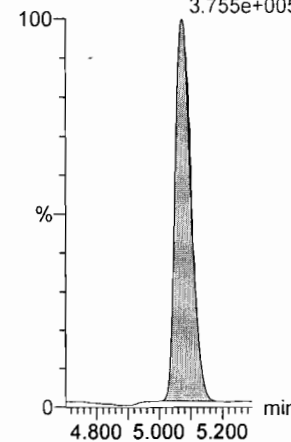
d5-N-ETFOSA

F42:MRM of 1 channel,ES-
531.1 > 168.9
5.864e+005



13C2-PFH_xDA

F61:MRM of 1 channel,ES-
815 > 769.7
3.755e+005



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

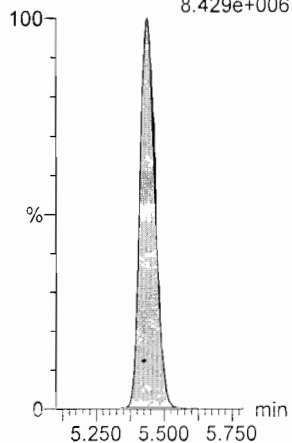
Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:36:37 Pacific Daylight Time

Name: 170724M1_10, Date: 24-Jul-2017, Time: 15:06:35, ID: ST170724M1-8 PFC CS5 17G2427, Description: PFC CS5 17G2427

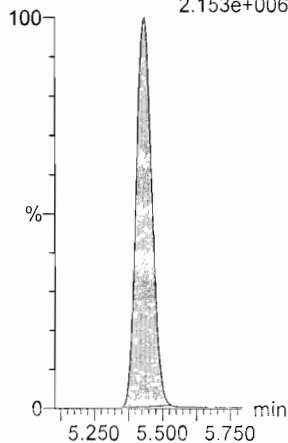
PFODA

F62:MRM of 4 channels,ES-
912.8 > 868.8
8.429e+006



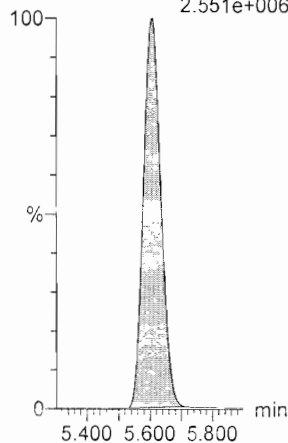
N-MeFOSE

F53:MRM of 1 channel,ES-
616.1 > 58.9
2.153e+006



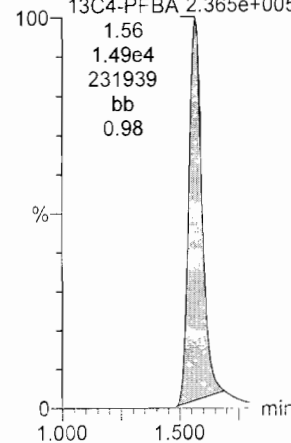
N-EtFOSE

F55:MRM of 1 channel,ES-
630.1 > 58.9
2.551e+006



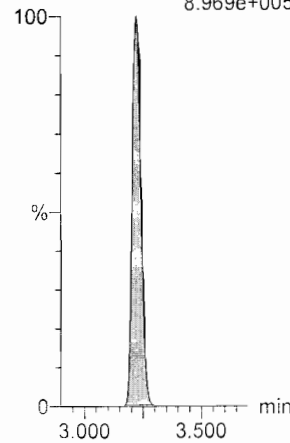
13C4-PFBA

F3:MRM of 1 channel,ES-
217 > 171.8
2.365e+005



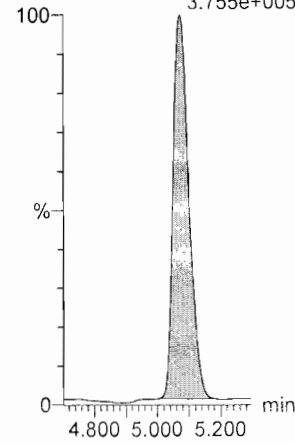
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
8.969e+005



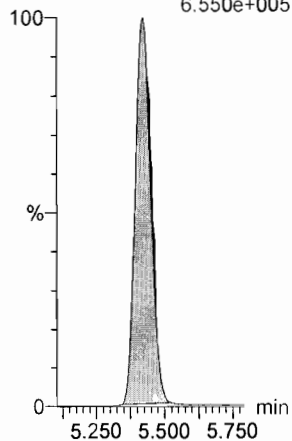
13C2-PFHxDA

F61:MRM of 1 channel,ES-
815 > 769.7
3.755e+005



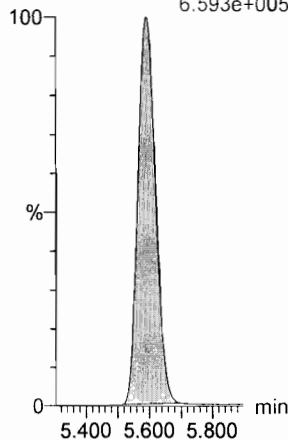
d7-N-MeFOSE

F54:MRM of 1 channel,ES-
623.1 > 58.9
6.550e+005



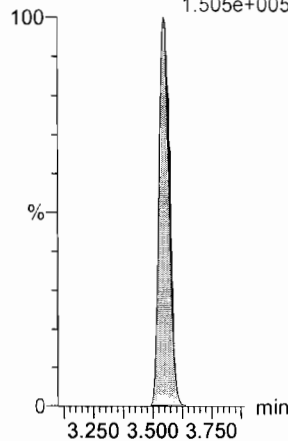
d9-N-EtFOSE

F56:MRM of 1 channel,ES-
639.2 > 58.8
6.593e+005



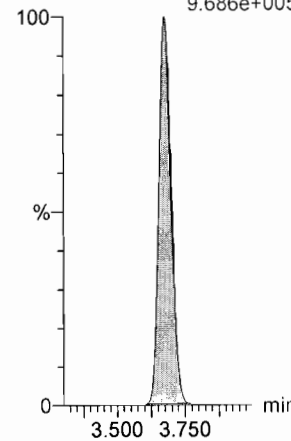
13C3-PFHxS

F17:MRM of 1 channel,ES-
401.9 > 79.9
1.505e+005



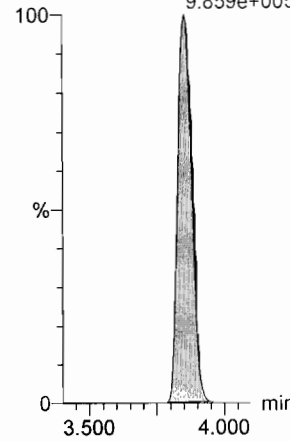
13C8-PFOA

F21:MRM of 1 channel,ES-
421.3 > 376
9.686e+005



13C9-PFNA

F27:MRM of 1 channel,ES-
472.2 > 426.9
9.859e+005



Dataset: U:\Q4.PRO\results\170724M1\170724M1-CRV.qld

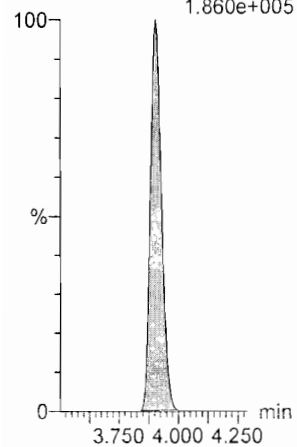
Last Altered: Monday, July 24, 2017 15:32:30 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:36:37 Pacific Daylight Time

Name: 170724M1_10, Date: 24-Jul-2017, Time: 15:06:35, ID: ST170724M1-8 PFC CS5 17G2427, Description: PFC CS5 17G2427

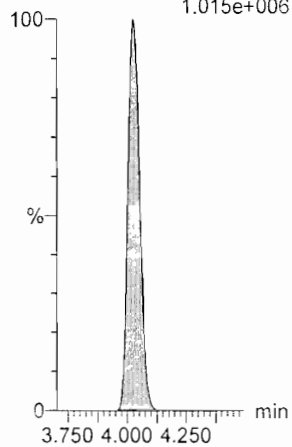
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
1.860e+005



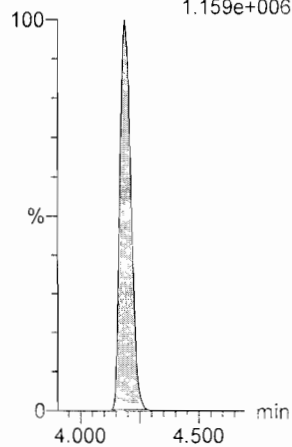
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
1.015e+006



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
1.159e+006



Dataset: U:\Q4.PRO\results\170724M1\170724M1-12.qld

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Ⓐ Not in SS.

Method: U:\Q4.PRO\MethDB\PFAS_FULL_7-20-17.mdb 24 Jul 2017 15:34:12

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_7-24-17-FULL.cdb 24 Jul 2017 15:32:30

Name: 170724M1_12, Date: 24-Jul-2017, Time: 15:28:15, ID: SS170724M4-1 PFC SSS 17G2421, Description: PFC SSS 17G2421

AC
7/24/17

	# Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	11377.467	12073.278		1.000	1.56	10.30	103.03
2	2 PFPeA	263.1 > 218.9	19853.004	23925.629		1.000	2.81	10.35	103.50
3	3 PFBS	299 > 79.7	4150.350	2957.477		1.000	3.00	9.43	94.30
4	4 PFHxA	313.2 > 268.9	31616.176	10121.942		1.000	3.23	10.24	102.41
5	5 PFHpA	363 > 318.9	29691.209	29688.498		1.000	3.48	9.91	99.12
6	6 PFHxS	398.9 > 79.6	3522.001	2850.923		1.000	3.55	9.12	91.20
7	7 6:2 FTS	427.1 > 407	6778.936	7715.412		1.000	3.67	10.41	104.10
8	8 PFOA	413 > 368.7	48252.109	57527.922		1.000	3.68	10.59	105.94
9	9 PFHpS	448.9 > 98.8	3857.262	57527.922		1.000	3.74	9.28	92.79
10	10 PFNA	462.9 > 418.8	52020.793	55397.191		1.000	3.85	10.55	105.53
11	11 PFOSA	498.1 > 77.8	5708.063	6500.262		1.000	3.86	10.41	104.14
12	12 PFOS	499 > 79.9	8177.322	10272.242		1.000	3.90	8.42	84.17
13	13 PFDA	513 > 468.8	54158.824	56205.117		1.000	4.02	9.19	91.86
14	14 8:2 FTS	527 > 506.9	6486.744	5254.963		1.000	4.02	10.53	105.28
15	15 N-MeFOSAA	570.1 > 419	14470.231	11971.411		1.000	4.06	9.88	98.84
16	16 N-EtFOSAA	584.2 > 419	12443.312	12068.997		1.000	4.12	10.39	103.90
17	17 PFUnA	562.9 > 518.9	37650.797	59926.145		1.000	4.19	8.88	88.81
18	18 PFDS	598.9 > 98.7	3869.410	59926.145		1.000	4.24	9.05	90.53
19	19 PFDoA	612.9 > 318.8	4450.692	5849.101		1.000	4.35	10.09	100.94
20	20 N-MeFOSA	512.1 > 168.9	9.012	26376.414		1.000	4.39		Ⓐ
21	21 PFTtDA	662.9 > 618.9	52553.016	5849.101		1.000	4.52	10.12	101.16
22	22 PFTeDA	712.9 > 668.8	38350.820	40951.586		1.000	4.70	10.17	101.65
23	23 N-EtFOSA	526.1 > 168.9	12.231	6321.303		1.000	4.97		Ⓐ
24	24 PFHxDA	812.8 > 768.9	616.143	19848.846		1.000	5.07		Ⓐ
25	25 PFODA	912.8 > 868.8	230.613	19848.846		1.000	5.44		Ⓐ
26	26 N-MeFOSE	616.1 > 58.9	26.252	40883.168		1.000	5.45		Ⓐ
27	27 N-EtFOSE	630.1 > 58.9		40456.262		1.000			Ⓐ
28	28 13C3-PFBA	216.1 > 171.8	12073.278	14974.247	0.820	1.000	1.55	12.28	98.27
29	29 13C3-PFPeA	266 > 221.8	23925.629	38341.938	0.248	1.000	2.81	12.57	100.58
30	30 13C3-PFBS	302 > 98.8	2957.477	38341.938	0.031	1.000	3.00	12.40	99.20
31	31 13C3-PFHxA	315 > 269.8	10121.942	38341.938	0.276	1.000	3.23	4.78	95.51

70-130

70-130

Dataset: U:\Q4.PRO\results\170724M1\170724M1-12.qld

Last Altered: Monday, July 24, 2017 15:46:59 Pacific Daylight Time

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Name: 170724M1_12, Date: 24-Jul-2017, Time: 15:28:15, ID: SS170724M4-1 PFC SSS 17G2421, Description: PFC SSS 17G2421

	# Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
32	32 13C4-PFHpA	367.2 > 321.8	29688.498	38341.938	0.306	1.000	3.48	12.67	101.34
33	33 18O2-PFHxS	403 > 102.6	2850.923	7151.517	0.393	1.000	3.55	12.69	101.51
34	34 13C2-6:2 FTS	429.1 > 408.9	7715.412	55193.199	0.158	1.000	3.67	11.08	88.65
35	35 13C2-PFOA	414.9 > 369.7	57527.922	55193.199	1.067	1.000	3.68	12.20	97.64
36	36 13C5-PFNA	468.2 > 422.9	55397.191	58314.438	0.852	1.000	3.85	13.94	111.48
37	37 13C8-PFOSA	506.1 > 77.7	6500.262	73602.336	0.098	1.000	3.86	11.24	89.90
38	38 13C8-PFOS	507 > 79.9	10272.242	10242.656	0.936	1.000	3.91	13.40	107.18
39	39 13C2-PFDA	515.1 > 469.9	56205.117	70397.750	0.810	1.000	4.02	12.32	98.59
40	40 13C2-8:2 FTS	529.1 > 508.7	5254.963	70397.750	0.086	1.000	4.02	10.90	87.23
41	41 d3-N-MeFOSAA	573.3 > 419	11971.411	73602.336	0.014	1.000	4.05	148.44	91.35
42	42 d5-N-EtFOSAA	589.3 > 419	12068.997	73602.336	0.014	1.000	4.12	146.98	90.45
43	43 13C2-PFUnA	565 > 519.8	59926.145	73602.336	0.962	1.000	4.19	10.58	84.63
44	44 13C2-PFDoA	615 > 569.7	5849.101	73602.336	0.094	1.000	4.35	10.52	84.16
45	45 d3-N-MeFOSA	515.2 > 168.9	26376.414	73602.336	0.034	1.000	4.43	130.17	86.78
46	46 13C2-PFTeDA	714.8 > 669.6	40951.586	73602.336	0.694	1.000	4.70	10.02	80.14
47	47 d5-N-ETFOSA	531.1 > 168.9	6321.303	73602.336	0.049	1.000	5.01	22.06	14.70
48	48 13C2-PFHxDA	815 > 769.7	19848.846	73602.336	0.843	1.000	5.07	4.00	79.97
49	49 d7-N-MeFOSE	623.1 > 58.9	40883.168	73602.336	0.055	1.000	5.42	127.09	84.73
50	50 d9-N-EtFOSE	639.2 > 58.8	40456.262	73602.336	0.053	1.000	5.59	128.61	85.74
51	51 13C4-PFBA	217 > 171.8	14974.247	14974.247	1.000	1.000	1.55	12.50	100.00
52	52 13C5-PFHxA	318 > 272.9	38341.938	38341.938	1.000	1.000	3.22	5.00	100.00
53	53 13C3-PFHxS	401.9 > 79.9	7151.517	7151.517	1.000	1.000	3.55	12.50	100.00
54	54 13C8-PFOA	421.3 > 376	55193.199	55193.199	1.000	1.000	3.68	12.50	100.00
55	55 13C9-PFNA	472.2 > 426.9	58314.438	58314.438	1.000	1.000	3.85	12.50	100.00
56	56 13C4-PFOS	503 > 79.9	10242.656	10242.656	1.000	1.000	3.91	12.50	100.00
57	57 13C6-PFDA	519.1 > 473.7	70397.750	70397.750	1.000	1.000	4.02	12.50	100.00
58	58 13C7-PFUnA	570.1 > 524.8	73602.336	73602.336	1.000	1.000	4.19	12.50	100.00

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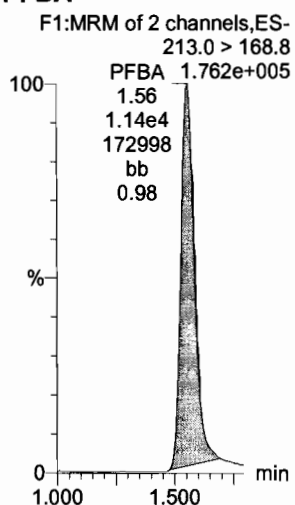
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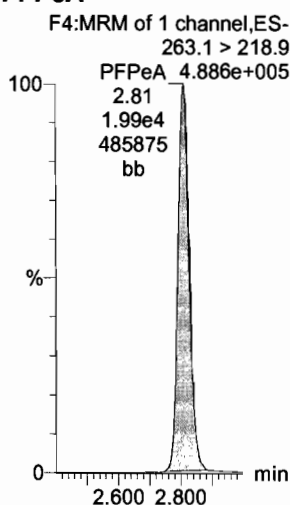
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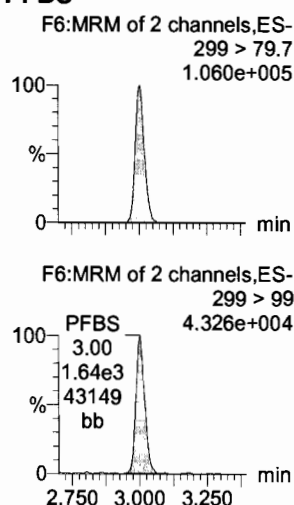
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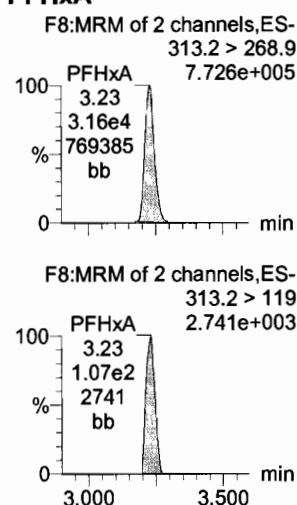
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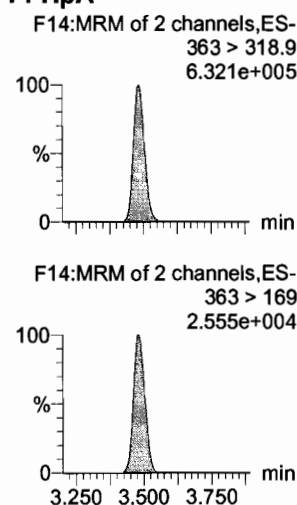
PFBS



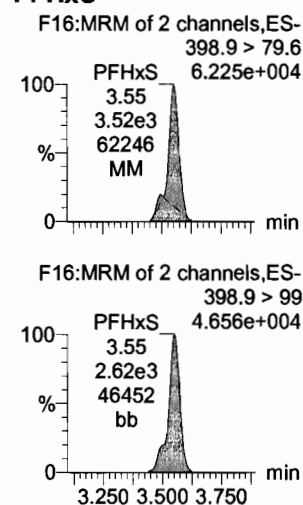
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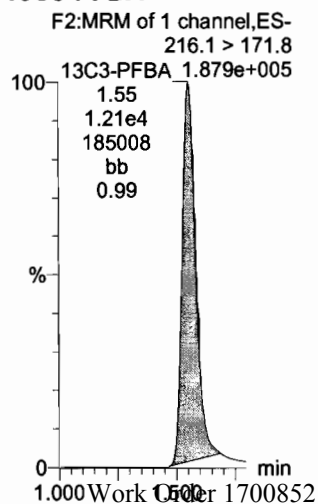
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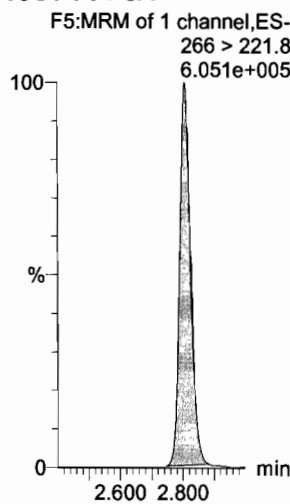
PFHxS



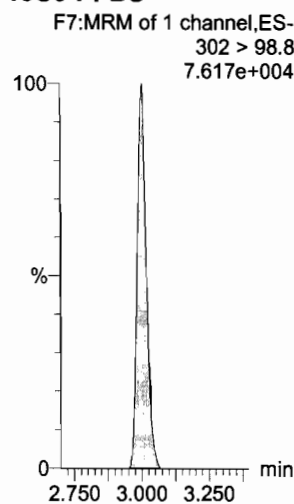
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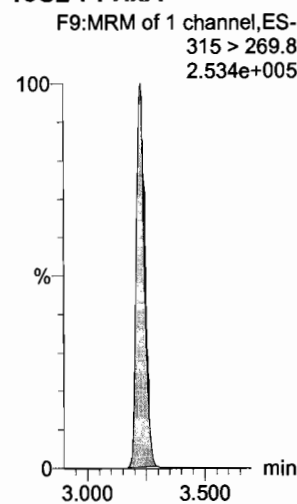
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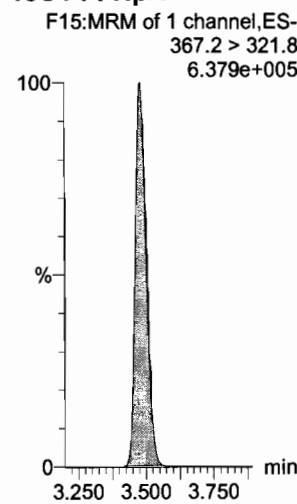
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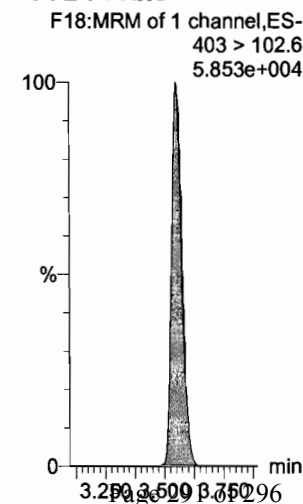
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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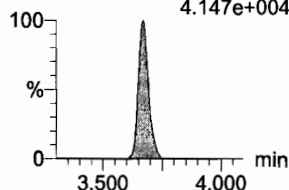
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6:2 FTS

F22:MRM of 2 channels,ES-
427.1 > 407
1.282e+005

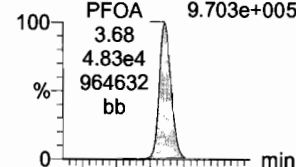


F22:MRM of 2 channels,ES-
427.1 > 80
4.147e+004

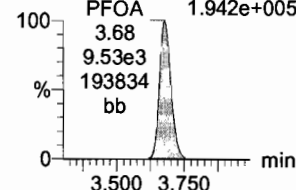


PFOA

F19:MRM of 2 channels,ES-
413 > 368.7
9.703e+005

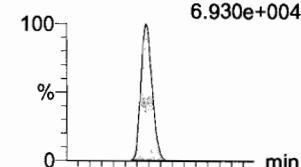


F19:MRM of 2 channels,ES-
413 > 169
1.942e+005

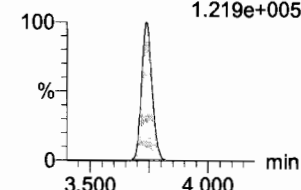


PFHpS

F24:MRM of 4 channels,ES-
448.9 > 98.8
6.930e+004

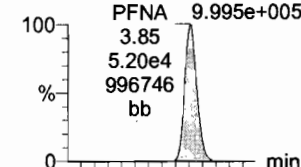


F24:MRM of 4 channels,ES-
448.9 > 79.9
1.219e+005

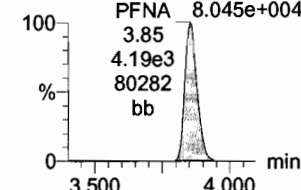


PFNA

F25:MRM of 2 channels,ES-
462.9 > 418.8
9.995e+005

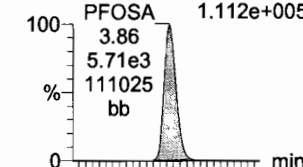


F25:MRM of 2 channels,ES-
462.9 > 219
8.045e+004

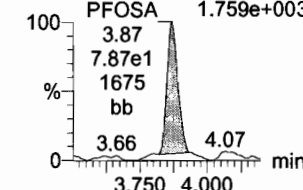


PFOSA

F28:MRM of 2 channels,ES-
498.1 > 77.8
1.112e+005

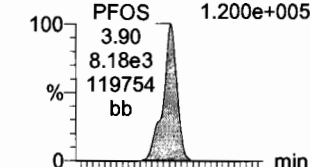


F28:MRM of 2 channels,ES-
498.1 > 478
1.759e+003

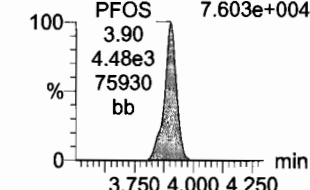


PFOS

F30:MRM of 2 channels,ES-
499 > 79.9
1.200e+005

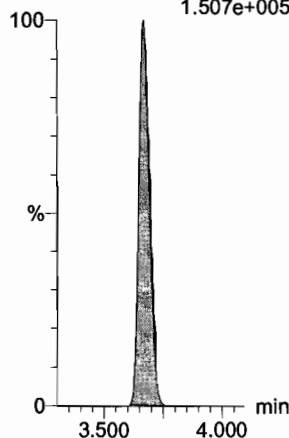


F30:MRM of 2 channels,ES-
499 > 99
7.603e+004



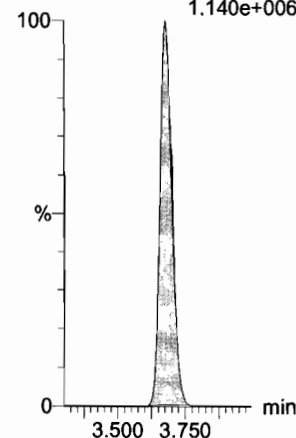
13C2-6:2 FTS

F23:MRM of 1 channel,ES-
429.1 > 408.9
1.507e+005



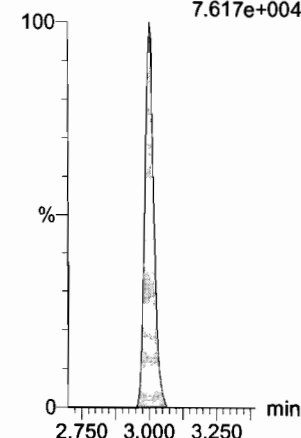
13C2-PFOA

F20:MRM of 1 channel,ES-
414.9 > 369.7
1.140e+006



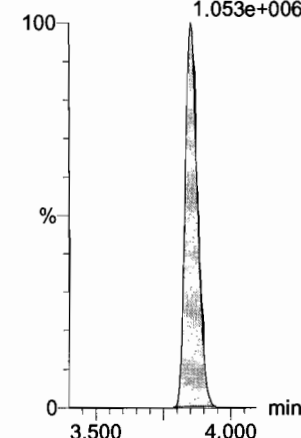
13C3-PFBS

F7:MRM of 1 channel,ES-
302 > 98.8
7.617e+004



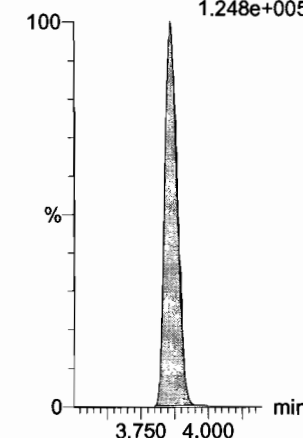
13C5-PFNA

F26:MRM of 1 channel,ES-
468.2 > 422.9
1.053e+006



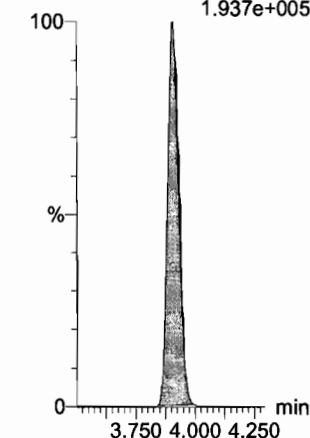
13C8-PFOA

F32:MRM of 1 channel,ES-
506.1 > 77.7
1.248e+005



13C8-PFOS

F33:MRM of 1 channel,ES-
507 > 79.9
1.937e+005

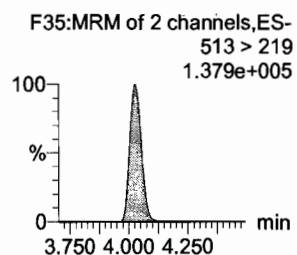
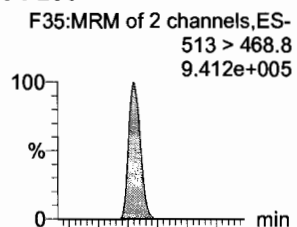


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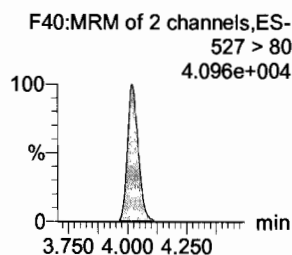
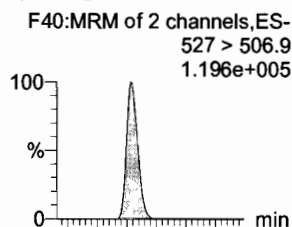
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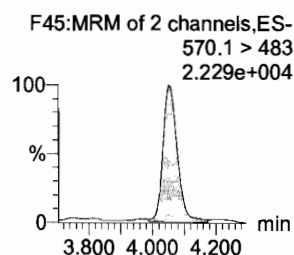
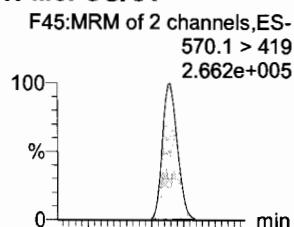
PFDA



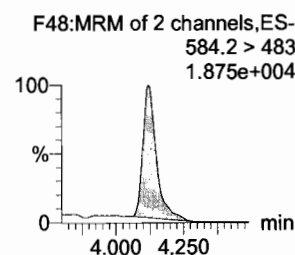
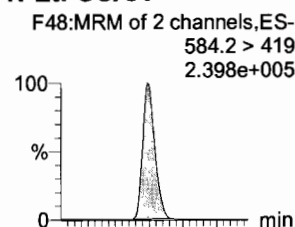
8:2 FTS



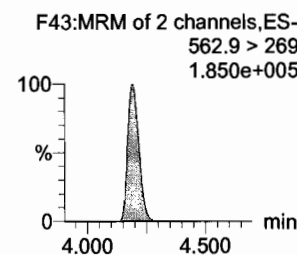
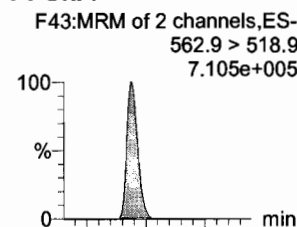
N-MeFOSAA



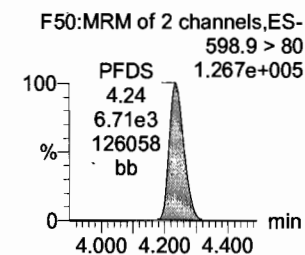
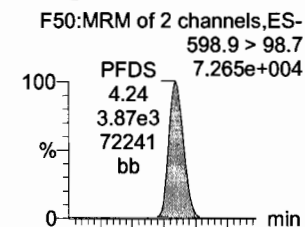
N-EtFOSAA



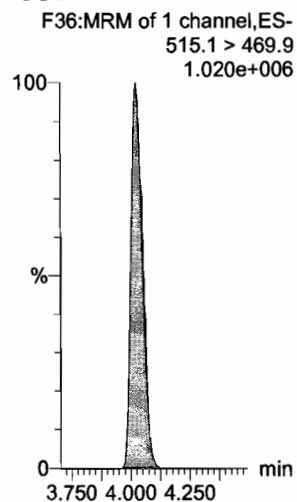
PFUnA



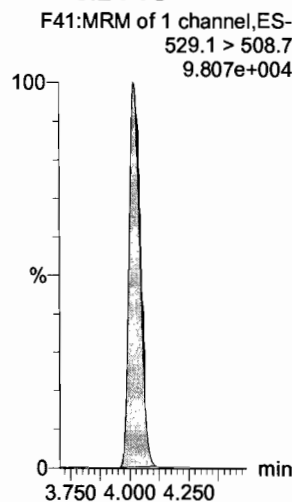
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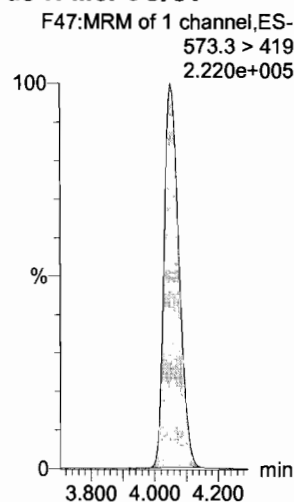
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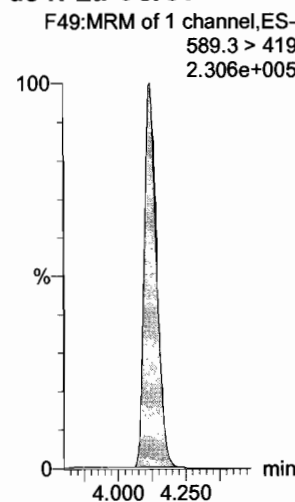
13C2-8:2 FTS



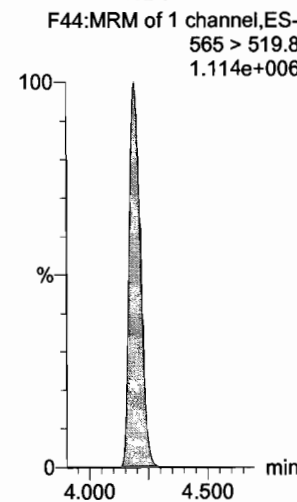
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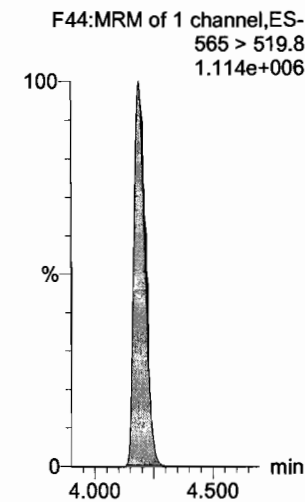
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13C2-PFUnA



13C2-PFUnA



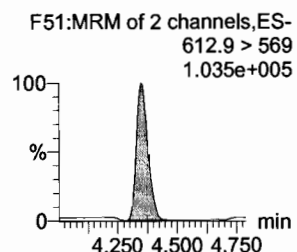
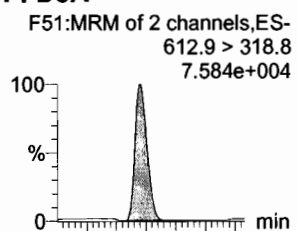
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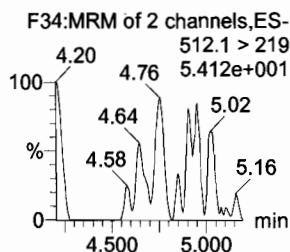
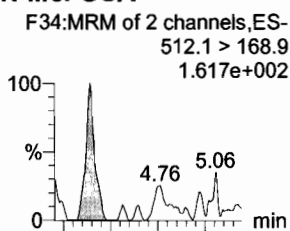
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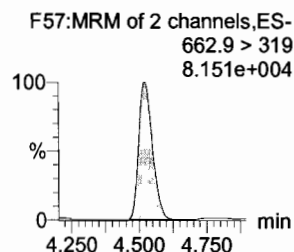
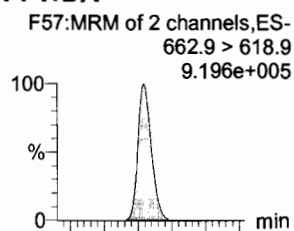
PFDaA



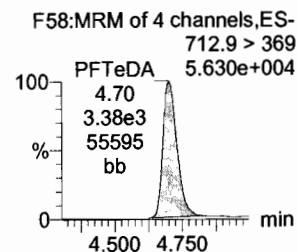
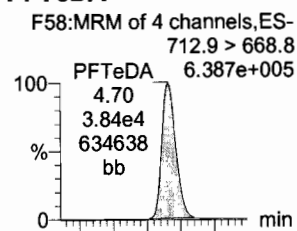
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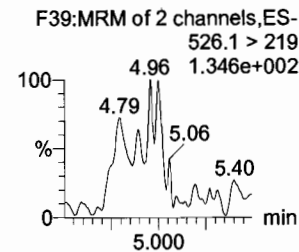
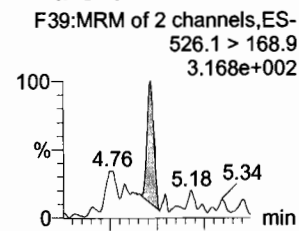
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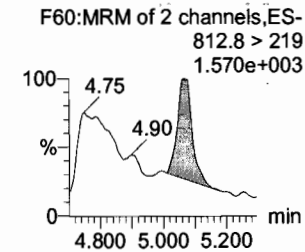
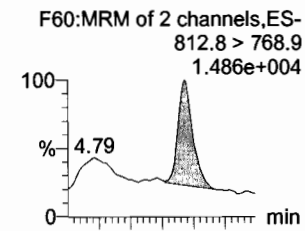
PFTeDA



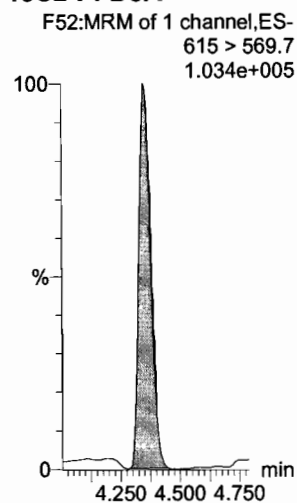
N-EtFOSA



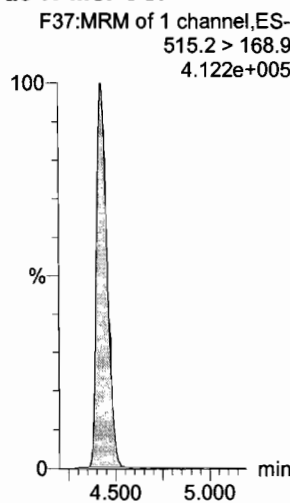
PFHxDA



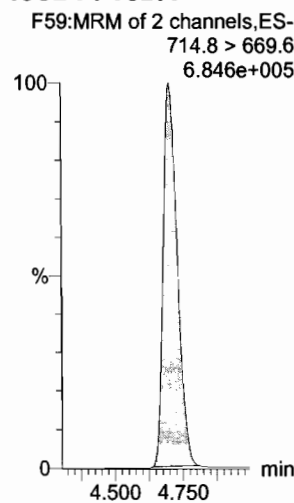
13C2-PFDaA



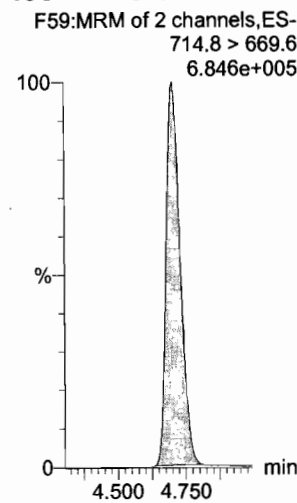
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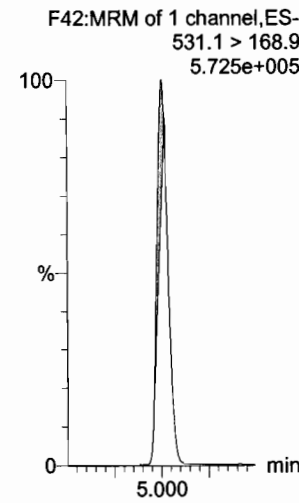
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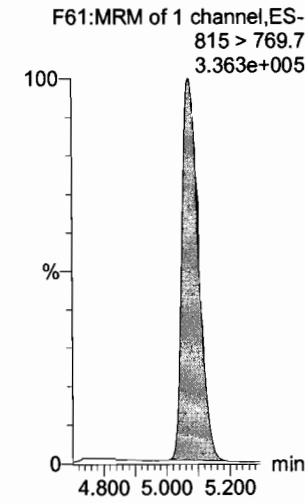
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13C2-PFHxDA



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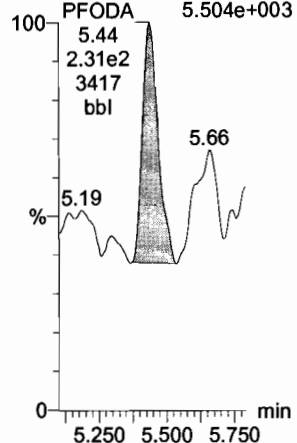
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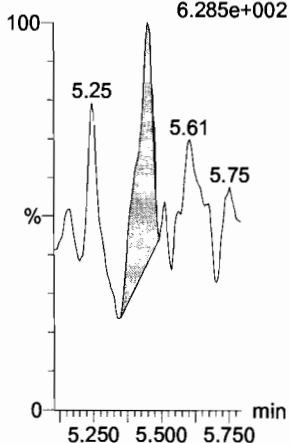
PFODA

F62:MRM of 4 channels,ES-
912.8 > 868.8
5.504e+003



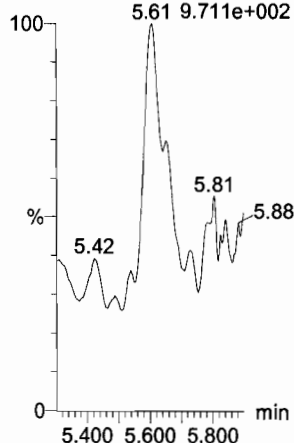
N-MeFOSE

F53:MRM of 1 channel,ES-
616.1 > 58.9
6.285e+002



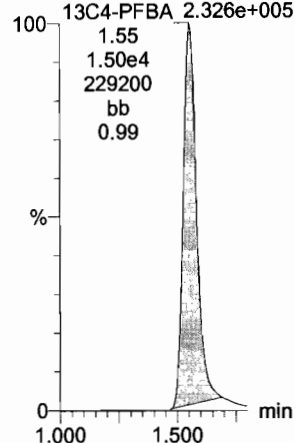
N-EtFOSE

F55:MRM of 1 channel,ES-
630.1 > 58.9
9.711e+002



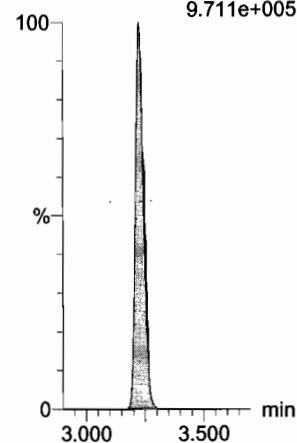
13C4-PFBA

F3:MRM of 1 channel,ES-
217 > 171.8
2.326e+005



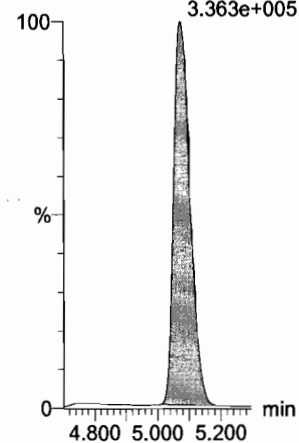
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
9.711e+005



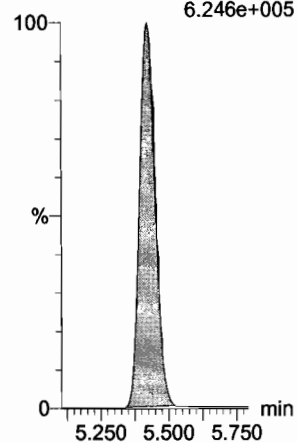
13C2-PFHxDA

F61:MRM of 1 channel,ES-
815 > 769.7
3.363e+005



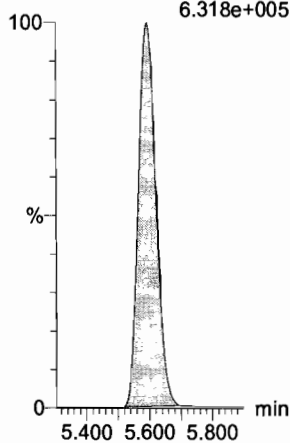
d7-N-MeFOSE

F54:MRM of 1 channel,ES-
623.1 > 58.9
6.246e+005



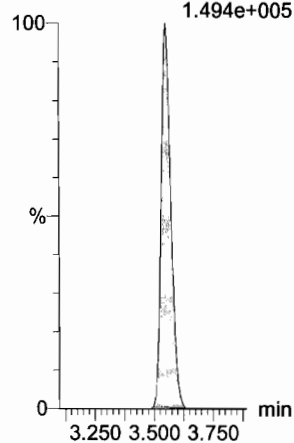
d9-N-EtFOSE

F56:MRM of 1 channel,ES-
639.2 > 58.8
6.318e+005



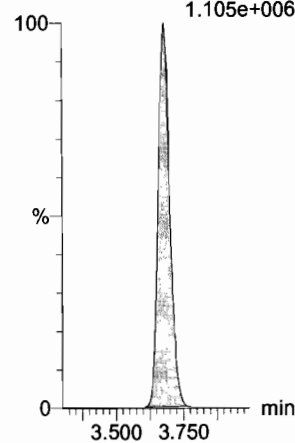
13C3-PFHxS

F17:MRM of 1 channel,ES-
401.9 > 79.9
1.494e+005



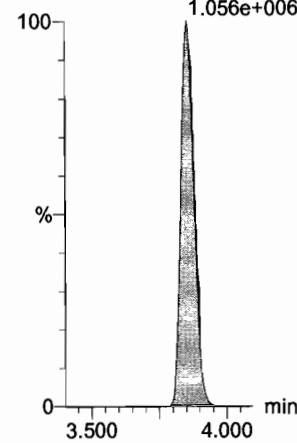
13C8-PFOA

F21:MRM of 1 channel,ES-
421.3 > 376
1.105e+006



13C9-PFNA

F27:MRM of 1 channel,ES-
472.2 > 426.9
1.056e+006



Dataset: U:\Q4.PRO\results\170724M1\170724M1-12.qld

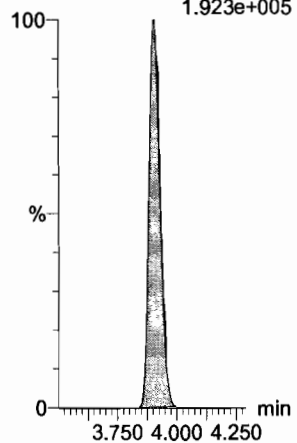
Last Altered: Monday, July 24, 2017 15:46:59 Pacific Daylight Time

Printed: Monday, July 24, 2017 15:47:38 Pacific Daylight Time

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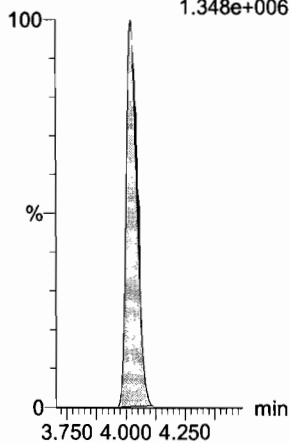
13C4-PFOS

F31:MRM of 1 channel,ES-
503 > 79.9
1.923e+005



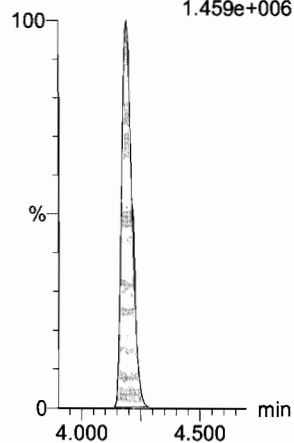
13C6-PFDA

F38:MRM of 1 channel,ES-
519.1 > 473.7
1.348e+006



13C7-PFUnA

F46:MRM of 1 channel,ES-
570.1 > 524.8
1.459e+006



PFBS","151","","IS","Yes","Y","H","Y","","","","PCT_REC","","","","100","151","151","","","","50","150","","","*"" "" ""

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"EB 02_20170711","537_MOD","07/25/17","17:50","N","NA","000","13C4-PFHpA","13C4-PFHpA","110","","IS","Yes","Y","","Y","","","PCT_REC","","","","100","110","110","","","","50","150","","",""" "" ""

"EB 02_20170711","537_MOD","07/25/17","17:50","N","NA","000","18O2-PFHxS","18O2-PFHxS","124","","IS","Yes","Y","","Y","","","PCT_REC","","","","100","124","124","","","","50","150","","",""" "" ""

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"EB 02_20170711","537_MOD","07/25/17","17:50","N","NA","000","13C5-PFNA","13C5-PFNA","106","","IS","Yes","Y","","Y","","","PCT_REC","","","","100","106","106","","","","50","150","","",""" "" ""

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"EB 02_20170711","537_MOD","07/25/17","17:50","N","NA","000","13C2-PFUnA","13C2-PFUnA","98.3","","IS","Yes","Y","","Y","","","PCT_REC","","","","100","98.3","98.3","","","","50","150","","",""" "" ""

"EB 02_20170711","537_MOD","07/25/17","17:50","N","NA","000","d5-EtFOSAA","d5-EtFOSAA","88.1","","IS","Yes","Y","","Y","","","PCT_REC","","","","100","88.1","88.1","","","","50","150","","",""" "" ""

"EB 02_20170711","537_MOD","07/25/17","17:50","N","NA","000","13C2-PFDoA","13C2-PFDoA","90.7","","IS","Yes","Y","","Y","","","PCT_REC","","","","100","90.7","90.7","","","","50","150","","",""" "" ""

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MeFOSAA","124","","IS","Yes","Y","","Y","","","","PCT_REC","","","","","100","124","124","","","","","50","150"
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(PFDA)","","","TRG","Yes","N","U","Y","1.60","5.39","8.58","NG_L","NG_L","","","","","","","","",""
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(PFUNA)","","","TRG","Yes","N","U","Y","1.13","5.39","8.58","NG_L","NG_L","","","","","","","","",""
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"2-GW-02NEW16-20170711", "537_MOD", "07/25/17", "19:05", "N", "NA", "000", "2355-31-9", "MeFOSAA", "", "", "TRG", "Yes", "N", "U", "Y", "1.67", "5.04", "8.09", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", "", "", "", "", "", "",
"2-GW-02NEW16-20170711", "537_MOD", "07/25/17", "19:05", "N", "NA", "000", "2058-94-8", "PERFLUOROUNDECANOIC ACID (PFUNA)", "", "", "TRG", "Yes", "N", "U", "Y", "1.06", "5.04", "8.09", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", "", "", "", "", "", "",
"2-GW-02NEW16-20170711", "537_MOD", "07/25/17", "19:05", "N", "NA", "000", "2991-50-6", "EtFOSAA", "", "", "TRG", "Yes", "N", "U", "Y", "1.39", "5.04", "8.09", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", "", "", "", "", "", "",

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","307-55-
1","PERFLUORODODECANOIC ACID
(PFDOA)","","","TRG","Yes","N","U","Y","0.801","5.04","8.09","NG_L","NG_L","", "", "", "", "", "", "", "", "", "", "", "", "", "", ""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","72629-94-
8","PFTrDA","","","TRG","Yes","N","U","Y","0.500","5.04","8.09","NG_L","NG_L","", "", "", "", "", "", "", "", "", "", "", "", "", ""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","376-06-
7","PFTeDA","","","TRG","Yes","N","U","Y","0.764","5.04","8.09","NG_L","NG_L","", "", "", "", "", "", "", "", "", "", "", "", "", ""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","13C3-PFBS","13C3-
PFBS","149","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","149","149","","","","","50","150","",""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","13C2-PFHxA","13C2-
PFHxA","126","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","126","126","","","","","50","150","",""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","13C4-PFHpA","13C4-
PFHpA","109","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","109","109","","","","","50","150","",""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","18O2-PFHxS","18O2-
PFHxS","126","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","126","126","","","","","50","150","",""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","13C2-PFOA","13C2-
PFOA","130","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","130","130","","","","","50","150","",""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","13C8-PFOS","13C8-
PFOS","135","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","135","135","","","","","50","150","",""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","13C5-PFNA","13C5-
PFNA","123","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","123","123","","","","","50","150","",""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","13C2-PFDA","13C2-
PFDA","114","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","114","114","","","","","50","150","",""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","d3-MeFOSAA","d3-
MeFOSAA","105","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","105","105","","","","","50","150"
"

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","13C2-PFUnA","13C2-
PFUnA","113","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","113","113","","","","","50","150","",""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","d5-EtFOSAA","d5-
EtFOSAA","107","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","107","107","","","","","50","150"
"

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","13C2-PFDoA","13C2-
PFDoA","117","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","117","117","","","","","50","150","",""

"2-GW-02NEW16-20170711","537_MOD","07/25/17","19:05","N","NA","000","13C2-PFTeDA","13C2-
PFTeDA","99.8","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","99.8","99.8","","","","","50","150"
"

"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","375-73-
5","PFBS","4.04","","TRG","Yes","Y","J","Y","2.06","5.79","9.22","NG_L","NG_L","", "", "", "", "", "", "", "", "", "", "", "", "", ""

"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","307-24-
4","PERFLUROHEXANOIC ACID

(PFHXA)","6.91","","TRG","Yes","Y","J","Y","2.51","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","375-85-
9","PERFLUOROHEPTANOIC ACID
(PFHPA)","3.14","","TRG","Yes","Y","J","Y","0.681","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","355-46-
4","PERFLUOROHEXANESULFONIC ACID
(PFHXS)","7.33","","TRG","Yes","Y","J","Y","1.09","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","335-67-
1","PERFLUOROOCTANOIC ACID
(PFOA)","26.5","","TRG","Yes","Y","Y","0.750","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","1763-23-
1","HEPTADEC AFLUOROACTANESULFONIC ACID SOLUTION
","7.54","","TRG","Yes","Y","J","Y","0.930","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","375-95-
1","PERFLUORONONANOIC ACID
(PFNA)","","","TRG","Yes","N","U","Y","0.934","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","335-76-
2","PERFLUORODECANOIC ACID
(PFDA)","","","TRG","Yes","N","U","Y","1.72","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","2355-31-
9","MeFOSAA","","","TRG","Yes","N","U","Y","1.90","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","2058-94-
8","PERFLUOROUNDECANOIC ACID
(PFUNA)","","","TRG","Yes","N","U","Y","1.21","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","2991-50-
6","EtFOSAA","","","TRG","Yes","N","U","Y","1.58","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","307-55-
1","PERFLUORODODECANOIC ACID
(PFDOA)","","","TRG","Yes","N","U","Y","0.913","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","72629-94-
8","PFTTrDA","","","TRG","Yes","N","U","Y","0.569","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","376-06-
7","PFTeDA","","","TRG","Yes","N","U","Y","0.870","5.79","9.22","NG_L","NG_L","","","","","","","","","","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","13C3-PFBS","13C3-
PFBS","152","","IS","Yes","Y","H","Y","","","","PCT_REC","","","100","152","152","","","50","150","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","13C2-PFHxA","13C2-
PFHxA","116","","IS","Yes","Y","","Y","","","PCT_REC","","","100","116","116","","","50","150","","
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","13C4-PFHpA","13C4-
PFHpA","92.5","","IS","Yes","Y","","Y","","","PCT_REC","","","100","92.5","92.5","","","50","150",""

","",""
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","18O2-PFHxS","18O2-PFHxS","120","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","120","120","","","","","50","150","","",""
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","13C2-PFOA","13C2-PFOA","118","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","118","118","","","","","50","150","","",""
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","13C8-PFOS","13C8-PFOS","112","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","112","112","","","","","50","150","","",""
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","13C5-PFNA","13C5-PFNA","107","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","107","107","","","","","50","150","","",""
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","13C2-PFDA","13C2-PFDA","109","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","109","109","","","","","50","150","","",""
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","d3-MeFOSAA","d3-MeFOSAA","117","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","117","117","","","","","50","150","","",""
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","13C2-PFUnA","13C2-PFUnA","107","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","107","107","","","","","50","150","","",""
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","d5-EtFOSAA","d5-EtFOSAA","117","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","117","117","","","","","50","150","","",""
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","13C2-PFDaA","13C2-PFDaA","112","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","112","112","","","","","50","150","","",""
"5-GW-05-DGMW68A-20170711","537_MOD","07/25/17","19:16","N","NA","000","13C2-PFTeDA","13C2-PFTeDA","92.1","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","92.1","92.1","","","","","50","150","","",""
"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","375-73-5","PFBS","","","TRG","Yes","N","U","Y","2.04","5.68","9.12","NG_L","NG_L","","","","","50","150","","",""
"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","307-24-4","PERFLUOROHEXANOIC ACID (PFHXA)","","","TRG","Yes","N","U","Y","2.49","5.68","9.12","NG_L","NG_L","","","","","50","150","","",""
"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","375-85-9","PERFLUOROHEPTANOIC ACID (PFHPA)","","","TRG","Yes","N","U","Y","0.674","5.68","9.12","NG_L","NG_L","","","","","50","150","","",""
"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","355-46-4","PERFLUOROHEXANESULFONIC ACID (PFHXS)","","","TRG","Yes","N","U","Y","1.08","5.68","9.12","NG_L","NG_L","","","","","50","150","","",""
"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","335-67-1","PERFLUOROOCTANOIC ACID (PFOA)","","","TRG","Yes","N","U","Y","0.742","5.68","9.12","NG_L","NG_L","","","","","50","150","","",""
"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","1763-23-1","HEPTADEC AFLUOROACTANESULFONIC ACID SOLUTION","","","TRG","Yes","N","U","Y","0.920","5.68","9.12","NG_L","NG_L","","","","","50","150","","",""
"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","375-95-1","PERFLUORONONANOIC

ACID

"(PFA)", "", "", "TRG", "Yes", "N", "U", "Y", "0.923", "5.68", "9.12", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "335-76-2", "PERFLUORODECANOIC ACID (PFDA)", "", "", "TRG", "Yes", "N", "U", "Y", "1.70", "5.68", "9.12", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "2355-31- 9", "MeFOSAA", "", "", "TRG", "Yes", "N", "U", "Y", "1.88", "5.68", "9.12", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "2058-94- 8", "PERFLUOROUNDECANOIC ACID (PFUNA)", "", "", "TRG", "Yes", "N", "U", "Y", "1.20", "5.68", "9.12", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "2991-50- 6", "EtFOSAA", "", "", "TRG", "Yes", "N", "U", "Y", "1.56", "5.68", "9.12", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "307-55- 1", "PERFLUORODODECANOIC ACID (PFDOA)", "", "", "TRG", "Yes", "N", "U", "Y", "0.903", "5.68", "9.12", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "72629-94- 8", "PFTriDA", "", "", "TRG", "Yes", "N", "U", "Y", "0.563", "5.68", "9.12", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "376-06- 7", "PFTeDA", "", "", "TRG", "Yes", "N", "U", "Y", "0.861", "5.68", "9.12", "NG_L", "NG_L", "", "", "", "", "", "", "", "", "", "", "", ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "13C3-PFBS", "13C3- PFBS", "152", "", "IS", "Yes", "Y", "H", "Y", "", "", "", "PCT_REC", "", "", "", "100", "152", "152", "", "", "", "", "50", "150", "", *" "" "" ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "13C2-PFHxA", "13C2- PFHxA", "115", "", "IS", "Yes", "Y", "", "Y", "", "", "", "PCT_REC", "", "", "", "100", "115", "115", "", "", "", "", "50", "150", "", "" "" "" ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "13C4-PFHpA", "13C4- PFHpA", "106", "", "IS", "Yes", "Y", "", "Y", "", "", "", "PCT_REC", "", "", "", "100", "106", "106", "", "", "", "", "50", "150", "", "" "" "" ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "18O2-PFHxS", "18O2- PFHxS", "131", "", "IS", "Yes", "Y", "", "Y", "", "", "", "PCT_REC", "", "", "", "100", "131", "131", "", "", "", "", "50", "150", "", "" "" "" ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "13C2-PFOA", "13C2- PFOA", "112", "", "IS", "Yes", "Y", "", "Y", "", "", "", "PCT_REC", "", "", "", "100", "112", "112", "", "", "", "", "50", "150", "", " "" "" "" ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "13C8-PFOS", "13C8- PFOS", "126", "", "IS", "Yes", "Y", "", "Y", "", "", "", "PCT_REC", "", "", "", "100", "126", "126", "", "", "", "", "50", "150", "", "" "" "" "" ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "13C5-PFNA", "13C5- PFNA", "116", "", "IS", "Yes", "Y", "", "Y", "", "", "", "PCT_REC", "", "", "", "100", "116", "116", "", "", "", "", "50", "150", "", " "" "" "" ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "13C2-PFDA", "13C2- PFDA", "109", "", "IS", "Yes", "Y", "", "Y", "", "", "", "PCT_REC", "", "", "", "100", "109", "109", "", "", "", "", "50", "150", "", " "" "" "" ""
"1-GW-01-PZ20-20170711", "537_MOD", "07/25/17", "19:27", "N", "NA", "000", "d3-MeFOSAA", "d3- MeFOSAA", "119", "", "IS", "Yes", "Y", "", "Y", "", "", "", "PCT_REC", "", "", "", "100", "119", "119", "", "", "", "", "50", "150" "" "" "" "" ""

"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","13C2-PFUnA","13C2-PFUnA","109","","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","109","109","","","","","50","150","","",
"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","d5-EtFOSAA","d5-EtFOSAA","117","","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","117","117","","","","","50","150",
"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","13C2-PFDoA","13C2-PFDoA","95.1","","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","95.1","95.1","","","","","50","150",
"1-GW-01-PZ20-20170711","537_MOD","07/25/17","19:27","N","NA","000","13C2-PFTeDA","13C2-PFTeDA","94.7","","","IS","Yes","Y","","Y","","","PCT_REC","","","","","100","94.7","94.7","","","","","50","150"
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","375-73-5","PFBS","90.0","","","TRG","Yes","Y","","Y","1.91","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","307-24-4","PERFLUOROHEXANOIC ACID (PFHXA)","149","","","TRG","Yes","Y","","Y","2.32","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","375-85-9","PERFLUOROHEPTANOIC ACID (PFHPA)","44.7","","","TRG","Yes","Y","","Y","0.629","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","355-46-4","PERFLUOROHEXANESULFONIC ACID (PFHXS)","617","","","TRG","Yes","Y","","Y","1.01","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","335-67-1","PERFLUOROOCTANOIC ACID (PFOA)","62.2","","","TRG","Yes","Y","","Y","0.693","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","1763-23-1","HEPTADEC AFLUOROACTANESULFONIC ACID SOLUTION","333","","","TRG","Yes","Y","","Y","0.859","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","375-95-1","PERFLUORONONANOIC ACID (PFNA)","2.63","","","TRG","Yes","Y","J","Y","0.863","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","335-76-2","PERFLUORODECANOIC ACID (PFDA)","","","TRG","Yes","N","U","Y","1.59","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","2355-31-9","MeFOSAA","","","TRG","Yes","N","U","Y","1.76","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","2058-94-8","PERFLUOROUNDECANOIC ACID (PFUNA)","","","TRG","Yes","N","U","Y","1.12","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","2991-50-6","EtFOSAA","","","TRG","Yes","N","U","Y","1.46","5.34","8.52","NG_L","NG_L","","","","","50","150",
"1-GW-01-MW209-20170711","537_MOD","07/25/17","19:38","N","NA","000","307-55-

PFOS","120","","IS","Yes","Y","","Y","","","","PCT_REC","","","","","100","120","120","","","","","","50","150","","
",""
"B7G0107-BLK1","537_MOD","07/25/17","14:58","N","NA","000","13C5-PFNA","13C5-
PFNA","92.0","","IS","Yes","Y","","Y","","","","PCT_REC","","","","","100","92.0","92.0","","","","","","50","150",""
",""
"B7G0107-BLK1","537_MOD","07/25/17","14:58","N","NA","000","13C2-PFDA","13C2-
PFDA","97.6","","IS","Yes","Y","","Y","","","","PCT_REC","","","","","100","97.6","97.6","","","","","","50","150",""
",""
"B7G0107-BLK1","537_MOD","07/25/17","14:58","N","NA","000","d3-MeFOSAA","d3-
MeFOSAA","90.3","","IS","Yes","Y","","Y","","","","PCT_REC","","","","","100","90.3","90.3","","","","","","50","15
0","",""
"B7G0107-BLK1","537_MOD","07/25/17","14:58","N","NA","000","13C2-PFUnA","13C2-
PFUnA","85.8","","IS","Yes","Y","","Y","","","","PCT_REC","","","","","100","85.8","85.8","","","","","","50","150",""
",""
"B7G0107-BLK1","537_MOD","07/25/17","14:58","N","NA","000","d5-EtFOSAA","d5-
EtFOSAA","82.1","","IS","Yes","Y","","Y","","","","PCT_REC","","","","","100","82.1","82.1","","","","","","50","150
",""
"B7G0107-BLK1","537_MOD","07/25/17","14:58","N","NA","000","13C2-PFDoA","13C2-
PFDoA","65.5","","IS","Yes","Y","","Y","","","","PCT_REC","","","","","100","65.5","65.5","","","","","","50","150",""
",""
"B7G0107-BLK1","537_MOD","07/25/17","14:58","N","NA","000","13C2-PFTeDA","13C2-
PFTeDA","20.4","","IS","Yes","Y","H","Y","","","","PCT_REC","","","","","100","20.4","20.4","","","","","","50","15
0","","+",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","375-73-
5","PFBS","73.4","","TRG","Yes","Y","","Y","1.79","5.00","8.00","NG_L","NG_L","","","","80.0","73.4","91.8","",""
","","70","130",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","307-24-4","PERFLUOROHEXANOIC ACID
(PFHXA)","69.6","","TRG","Yes","Y","","Y","2.18","5.00","8.00","NG_L","NG_L","","","","80.0","69.6","87.0","",""
","","70","130",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","375-85-9","PERFLUOROHEPTANOIC ACID
(PFHPA)","76.9","","TRG","Yes","Y","","Y","0.591","5.00","8.00","NG_L","NG_L","","","","80.0","76.9","96.1","",""
","","70","130",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","355-46-4","PERFLUOROHEXANESULFONIC
ACID
(PFHXS)","73.3","","TRG","Yes","Y","","Y","0.947","5.00","8.00","NG_L","NG_L","","","","80.0","73.3","91.6","",""
","","70","130",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","335-67-1","PERFLUOROOCTANOIC ACID
(PFOA)","74.6","","TRG","Yes","Y","","Y","0.651","5.00","8.00","NG_L","NG_L","","","","80.0","74.6","93.3","",""
","","70","130",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","1763-23-
1","HEPTADEC AFLUOROACTANESULFONIC ACID SOLUTION
","64.1","","TRG","Yes","Y","","Y","0.807","5.00","8.00","NG_L","NG_L","","","","80.0","64.1","80.1","",""
","70","130",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","375-95-1","PERFLUORONONANOIC ACID
(PFNA)","78.4","","TRG","Yes","Y","","Y","0.810","5.00","8.00","NG_L","NG_L","","","","80.0","78.4","98.0","",""
","","70","130",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","335-76-2","PERFLUORODECANOIC ACID
(PFDA)","73.6","","TRG","Yes","Y","","Y","1.49","5.00","8.00","NG_L","NG_L","","","","80.0","73.6","92.0","",""
","","70","130",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","2355-31-
9","MeFOSAA","71.4","","TRG","Yes","Y","","Y","1.65","5.00","8.00","NG_L","NG_L","","","","80.0","71.4","89.2"
","","70","130",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","2058-94-8","PERFLUOROUNDECANOIC ACID
(PFUNA)","74.4","","TRG","Yes","Y","","Y","1.05","5.00","8.00","NG_L","NG_L","","","","80.0","74.4","93.0","",""

","","","70","130","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","2991-50-6","EtFOSAA","72.7","","TRG","Yes","Y","","Y","1.37","5.00","8.00","NG_L","NG_L","","","","80.0","72.7","90.9","","","","70","130","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","307-55-1","PERFLUORODODECANOIC ACID (PFDOA)","74.3","","TRG","Yes","Y","","Y","0.792","5.00","8.00","NG_L","NG_L","","","","80.0","74.3","92.9","","","","70","130","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","72629-94-8","PFTTrDA","49.1","","TRG","Yes","Y","","Y","0.494","5.00","8.00","NG_L","NG_L","","","","80.0","49.1","61.4","","","","60","130","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","376-06-7","PFTeDA","74.6","","TRG","Yes","Y","","Y","0.755","5.00","8.00","NG_L","NG_L","","","","80.0","74.6","93.3","","","","70","130","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","13C3-PFBS","13C3-PFBS","157","","IS","Yes","Y","H","Y","","","","PCT_REC","","","","100","157","157","","","","50","150","","","+","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","13C2-PFHxA","13C2-PFHxA","124","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","124","124","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","13C4-PFHpA","13C4-PFHpA","97.1","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","97.1","97.1","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","18O2-PFHxS","18O2-PFHxS","127","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","127","127","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","13C2-PFOA","13C2-PFOA","117","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","117","117","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","13C8-PFOS","13C8-PFOS","125","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","125","125","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","13C5-PFNA","13C5-PFNA","108","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","108","108","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","13C2-PFDA","13C2-PFDA","104","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","104","104","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","d3-MeFOSAA","d3-MeFOSAA","107","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","107","107","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","13C2-PFUnA","13C2-PFUnA","91.1","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","91.1","91.1","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","d5-EtFOSAA","d5-EtFOSAA","102","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","102","102","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","13C2-PFDoA","13C2-PFDoA","90.7","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","90.7","90.7","","","","50","150","","","",""
"B7G0107-BS1","537_MOD","07/25/17","14:36","N","NA","000","13C2-PFTeDA","13C2-PFTeDA","36.5","","IS","Yes","Y","H","Y","","","","PCT_REC","","","","100","36.5","36.5","","","","50","150","","","+","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","375-73-5","PFBS","98.2","","TRG","Yes","Y","","Y","1.85","5.17","8.28","NG_L","NG_L","","","","19.6","82.8","98.2","94.9",""

","","","70","130","","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","307-24-4","PERFLUOROHEXANOIC ACID (PFHXA)","94.1","","TRG","Yes","Y","","Y","2.26","5.17","8.28","NG_L","NG_L","","","21.0","82.8","94.1","88.3","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","375-85-9","PERFLUOROHEPTANOIC ACID (PFHPA)","83.9","","TRG","Yes","Y","","Y","0.612","5.17","8.28","NG_L","NG_L","","","4.25","82.8","83.9","96.2","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","355-46-4","PERFLUOROHEXANESULFONIC ACID (PFHXS)","244","","TRG","Yes","Y","H","Y","0.980","5.17","8.28","NG_L","NG_L","","","190","82.8","244","65.8","","","70","130","","+",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","335-67-1","PERFLUOROOCTANOIC ACID (PFOA)","79.4","","TRG","Yes","Y","","Y","0.674","5.17","8.28","NG_L","NG_L","","","9.38","82.8","79.4","84.6","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","1763-23-1","HEPTADEC AFLUOROACTANESULFONIC ACID SOLUTION","88.5","","TRG","Yes","Y","","Y","0.835","5.17","8.28","NG_L","NG_L","","","23.2","82.8","88.5","78.8","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","375-95-1","PERFLUORONONANOIC ACID (PFNA)","80.0","","TRG","Yes","Y","","Y","0.838","5.17","8.28","NG_L","NG_L","","","82.8","80.0","96.6","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","335-76-2","PERFLUORODECANOIC ACID (PFDA)","73.1","","TRG","Yes","Y","","Y","1.54","5.17","8.28","NG_L","NG_L","","","82.8","73.1","88.2","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","2355-31-9","MeFOSAA","78.1","","TRG","Yes","Y","","Y","1.71","5.17","8.28","NG_L","NG_L","","","82.8","78.1","94.3","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","2058-94-8","PERFLUOROUNDECANOIC ACID (PFUNA)","80.4","","TRG","Yes","Y","","Y","1.09","5.17","8.28","NG_L","NG_L","","","82.8","80.4","97.1","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","2991-50-6","EtFOSAA","75.1","","TRG","Yes","Y","","Y","1.42","5.17","8.28","NG_L","NG_L","","","82.8","75.1","90.6","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","307-55-1","PERFLUORODODECANOIC ACID (PFDOA)","69.7","","TRG","Yes","Y","","Y","0.820","5.17","8.28","NG_L","NG_L","","","82.8","69.7","84.1","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","72629-94-8","PFTTrDA","67.5","","TRG","Yes","Y","","Y","0.511","5.17","8.28","NG_L","NG_L","","","82.8","67.5","81.6","","","60","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","376-06-7","PFTeDA","76.5","","TRG","Yes","Y","","Y","0.781","5.17","8.28","NG_L","NG_L","","","82.8","76.5","92.3","","","70","130","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","13C3-PFBS","13C3-PFBS","146","","IS","Yes","Y","","Y","","","PCT_REC","","","100","146","146","","","50","150","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","13C2-PFHxA","13C2-PFHxA","119","","IS","Yes","Y","","Y","","","PCT_REC","","","100","119","119","","","50","150","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","13C4-PFHpA","13C4-PFHpA","96.3","","IS","Yes","Y","","Y","","","PCT_REC","","","100","96.3","96.3","","","50","150","","",""
"B7G0107-MS1","537_MOD","07/25/17","18:22","N","NA","000","18O2-PFHxS","18O2-PFHxS","119","","IS","Yes","Y","","Y","","","PCT_REC","","","100","119","119","","","50","150","","",""

9","MeFOSAA","83.3","","TRG","Yes","Y","","Y","1.78","5.39","8.62","NG_L","NG_L","","","","86.2","83.3","96.7","78.1","86.2","83.3","96.7","2.51","70","130","25","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","2058-94-8","PERFLUOROUNDECANOIC ACID (PFUNA)","82.3","","TRG","Yes","Y","","Y","1.13","5.39","8.62","NG_L","NG_L","","","","86.2","82.3","95.5","80.4","86.2","82.3","95.5","1.66","70","130","25","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","2991-50-6","EtFOSAA","89.7","","TRG","Yes","Y","","Y","1.48","5.39","8.62","NG_L","NG_L","","","","86.2","89.7","104","75.1","86.2","89.7","104","13.8","70","130","25","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","307-55-1","PERFLUORODODECANOIC ACID (PFDOA)","81.4","","TRG","Yes","Y","","Y","0.854","5.39","8.62","NG_L","NG_L","","","","86.2","81.4","94.5","69.7","86.2","81.4","94.5","11.6","70","130","25","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","72629-94-8","PFTTrDA","82.7","","TRG","Yes","Y","","Y","0.532","5.39","8.62","NG_L","NG_L","","","","86.2","82.7","96.0","67.5","86.2","82.7","96.0","16.2","60","130","25","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","376-06-7","PFTeDA","78.4","","TRG","Yes","Y","","Y","0.814","5.39","8.62","NG_L","NG_L","","","","86.2","78.4","91.0","76.5","86.2","78.4","91.0","1.42","70","130","25","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","13C3-PFBS","13C3-PFBS","154","","IS","Yes","Y","H","Y","","","","PCT_REC","","","","100","154","154","","","","50","150","","+","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","13C2-PFHxA","13C2-PFHxA","124","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","124","124","","","","50","150","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","13C4-PFHpA","13C4-PFHpA","109","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","109","109","","","","50","150","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","18O2-PFHxS","18O2-PFHxS","125","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","125","125","","","","50","150","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","13C2-PFOA","13C2-PFOA","114","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","114","114","","","","50","150","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","13C8-PFOS","13C8-PFOS","126","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","126","126","","","","50","150","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","13C5-PFNA","13C5-PFNA","128","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","128","128","","","","50","150","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","13C2-PFDA","13C2-PFDA","125","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","125","125","","","","50","150","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","d3-MeFOSAA","d3-MeFOSAA","110","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","110","110","","","","50","150","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","13C2-PFUnA","13C2-PFUnA","99.1","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","99.1","99.1","","","","50","150","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","d5-EtFOSAA","d5-EtFOSAA","109","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","109","109","","","","50","150","","",""
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","13C2-PFDoA","13C2-PFDoA","116","","IS","Yes","Y","","Y","","","","PCT_REC","","","","100","116","116","","","","50","150","",""

"" "" ""
,"
"B7G0107-MSD1","537_MOD","07/25/17","18:33","N","NA","000","13C2-PFTeDA","13C2-
PFTeDA","106","","IS","Yes","Y","","Y","","","","PCT_REC","","","","","100","106","106","","","","","","50","150","
","",""



LABORATORY DATA CONSULTANTS, INC.

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AMEC Foster Wheeler, Inc.
7376 SW Durham Road
Portland, OR 97224
Attn: Ms. Marina Mitchell

August 29, 2017

SUBJECT: Revised MCAS El Toro, BRAC PFAs, Data Validation

Dear Ms. Mitchell,

Enclosed are the revised validation reports for the fraction listed below. Please replace the previously submitted reports with the enclosed revised reports

LDC Project #39234:

SDG #

Fraction

1700852, 1700851, 1700871

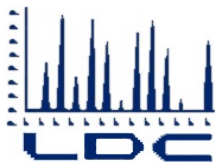
Perfluorinated Alkyl Acids

- Revision: Change in IS section.

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
Project Manager/Senior Chemist



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

AMEC Foster Wheeler, Inc.
7376 SW Durham Road
Portland, OR 97224
Attn: Ms. Marina Mitchell

August 18, 2017

SUBJECT: MCAS El Toro, BRAC PFAs, Data Validation

Dear Ms. Mitchell,

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on August 9, 2017. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project #39234:

<u>SDG #</u>	<u>Fraction</u>
1700852, 1700851, 1700871	Perfluorinated Alkyl Acids

The data validation was performed under Stage 2B & 4 guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Sampling and Analysis Plan, Field Sampling Plan and Quality Assurance Project Plan for Initial Assessment of Per-Fluorinated Compounds or Per- and Polyfluoroalkyl Substances, Sites at Various Base Realignment and Closure Installations, March 2017
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, Version 5.1, 2017
- USEPA, National Functional Guidelines for Superfund Organic Methods Data Review, August 2014

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
Project Manager/Senior Chemist

Client Select / Stage 2B/4 LDC #39234 (AMEC Foster Wheeler - San Diego, CA / MCAS El Toro, BRAC PFAs)

[illegible]

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: MCAS El Toro, BRAC PFAs

LDC Report Date: August 14, 2017

Parameters: Perfluorinated Alkyl Acids

Validation Level: Stage 2B/4

Laboratory: Vista Analytical Laboratory

Sample Delivery Group (SDG): 1700852

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
DUP01-20170711	1700852-02	Water	07/11/17
1-GW-01-MW204-20170711	1700852-03	Water	07/11/17
1-GW-01-MW206-20170711	1700852-04	Water	07/11/17
2-GW-02DGMW59-20170711	1700852-05	Water	07/11/17
2-GW-02NEW16-20170711	1700852-06	Water	07/11/17
5-GW-05-DGMW68A-20170711**	1700852-07**	Water	07/11/17
1-GW-01-PZ20-20170711	1700852-08	Water	07/11/17
1-GW-01-MW209-20170711	1700852-09	Water	07/11/17
1-GW-01-MW204-20170711MS	1700852-03MS	Water	07/11/17
1-GW-01-MW204-20170711MSD	1700852-03MSD	Water	07/11/17

**Indicates sample underwent Stage 4 validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Sampling and Analysis Plan (Field Sampling Plan and Quality Assurance Project Plan) for Initial Assessment of Per-Fluorinated Compounds (PFCS) or Per- and Polyfluoroalkyl Substances (PFAS) Sites at Various Base Realignment and Closure (BRAC) Installations (March 2017), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (August 2014). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Perfluorinated Alkyl Acids by Environmental Protection Agency (EPA) Method 537

All sample results were subjected to Stage 2B data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Stage 4 data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NJ (Presumptive and Estimated): The analysis indicates the presence of a compound or analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. LC/MS Instrument Performance Check

Instrument performance was not required by the method.

III. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

For compounds where average relative response factors (RRFs) were utilized, the percent relative standard deviations (%RSD) were less than or equal to 20.0%.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990.

For each calibration point, the percent differences (%D) of its true value were less than or equal to 30.0% for all compounds.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 30.0% for all compounds.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

Sample EB 2_20170711 was identified as an equipment blank. No contaminants were found.

Sample SB01_20170710 (from SDG 1700851) was identified as a source blank. No contaminants were found.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
1-GW-01-MW204-20170711MS/MSD (1-GW-01-MW204-20170711)	PFHxS	65.8 (70-130)	-	J (all detects)	A

Relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	RPD (Limits)	Flag	A or P
1-GW-01-MW204-20170711MS/MSD (1-GW-01-MW204-20170711)	PFHxS	35.7 (≤ 30)	J (all detects)	A

VIII. Ongoing Precision Recovery Samples

Ongoing precision recovery (OPR) samples were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

IX. Field Duplicates

Samples DUP01-20170711 and 1-GW-01-PZ20-20170711 were identified as field duplicates. No results were detected in any of the samples.

X. Internal Standards

All internal standard recoveries (%R) were within QC limits with the following exceptions:

Sample	Internal Standards	%R (Limits)	Affected Compound	Flag	A or P
DUP01-20170711	13C3-PFBS	152 (50-150)	PFBS	UJ (all non-detects)	P
1-GW-01-MW204-20170711	13C3- PFBS	154 (50-150)	PFBS	J (all detects)	P
1-GW-01-MW206-20170711	13C3- PFBS	162 (50-150)	PFBS	UJ (all non-detects)	P
2-GW-02DGMW59-20170711	13C3- PFBS	163 (50-150)	PFBS	J (all detects)	P
5-GW-05-DGMW68A-20170711**	13C3- PFBS	152 (50-150)	PFBS	J (all detects)	P

Sample	Internal Standards	%R (Limits)	Affected Compound	Flag	A or P
1-GW-01-PZ20-20170711	13C3- PFBS	152 (50-150)	PFBS	UJ (all non-detects)	P
1-GW-01-MW209-20170711	13C3- PFBS	151 (50-150)	PFBS	J (all detects)	P

XI. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Stage 4 validation.

The laboratory limit of quantitation (LOQ) and limit of detection (LOD) are higher than the QAPP LOQ and LOD.

The laboratory detection limit (DL) for PFOS is higher than the QAPP DL.

Raw data were not reviewed for Stage 2B validation.

XII. Target Compound Identifications

All target compound identifications met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIII. System Performance

The system performance was acceptable for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to MS/MSD %R and RPD and internal standards %R, data were qualified as estimated in seven samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

MCAS EI Toro, BRAC PFAs
Perfluorinated Alkyl Acids - Data Qualification Summary - SDG 1700852

Sample	Compound	Flag	A or P	Reason
1-GW-01-MW204-20170711	PFHxS	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD)
DUP01-20170711 1-GW-01-MW204-20170711 1-GW-01-MW206-20170711 2-GW-02DGMW59-20170711 5-GW-05-DGMW68A-20170711** 1-GW-01-PZ20-20170711 1-GW-01-MW209-20170711	PFBS	J (all detects) UJ (all non-detects)	P	Internal standards (%R)

MCAS EI Toro, BRAC PFAs
Perfluorinated Alkyl Acids - Laboratory Blank Data Qualification Summary - SDG 1700852

No Sample Data Qualified in this SDG

MCAS EI Toro, BRAC PFAs
Perfluorinated Alkyl Acids - Field Blank Data Qualification Summary - SDG 1700852

No Sample Data Qualified in this SDG

LDC #: 39234A96

VALIDATION COMPLETENESS WORKSHEET

SDG #: 1700852

Stage 2B/4

Laboratory: Vista Analytical Laboratory

Date: 8/11/17

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: KK

METHOD: LCMS Perfluorinated Alkyl Acids (EPA Method 537)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	LC/MS Instrument performance check	A	
III.	Initial calibration/ICV	ALA	RSO ≤ 20%. Y ² . %D ≤ 30%. ICV ≤ 30%
IV.	Continuing calibration	A	CCV ≤ 30%
V.	Laboratory Blanks	A	
VI.	Field blanks	ND	EB = 1. SB 01-20170710 (1700851)
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	TW	
IX.	Laboratory control samples	A	OPR
X.	Field duplicates	ND	D = 2 + 8
XI.	Internal standards	TW	
XII.	Compound quantitation RL/LOQ/LODs	TW	Not reviewed for Stage 2B validation
XIII.	Target compound identification	A	Not reviewed for Stage 2B validation
XIV.	System performance	A	Not reviewed for Stage 2B validation
XV.	Overall assessment of data	D	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB = Source blank
OTHER:

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	EB 2-20170711	1700852-01	Water	07/11/17
2	DUP01-20170711	1700852-02	Water	07/11/17
3	1-GW-01-MW204-20170711	1700852-03	Water	07/11/17
4	1-GW-01-MW206-20170711	1700852-04	Water	07/11/17
5	2-GW-02DGMW59-20170711	1700852-05	Water	07/11/17
6	2-GW-02NEW16-20170711	1700852-06	Water	07/11/17
7	5-GW-05-DGMW68A-20170711**	1700852-07**	Water	07/11/17
8	1-GW-01-PZ20-20170711	1700852-08	Water	07/11/17
9	1-GW-01-MW209-20170711	1700852-09	Water	07/11/17
10	1-GW-01-MW204-20170711MS	1700852-03MS	Water	07/11/17
11	1-GW-01-MW204-20170711MSD	1700852-03MSD	Water	07/11/17
12				
13	BT010T-BK/			

Method: LCMS (EPA Method 537)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	☒	☐	☐	
Was cooler temperature criteria met?	☒	☐	☐	
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) < 20%?	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of ≥ 0.990 ?	☒	☐	☐	
Were all analytes within 70-130% or percent differences (%D) $\leq 30\%$ of their true value for each calibration standard	☒	☐	☐	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☒	☐	☐	
Were all percent differences (%D) < 30%?	☒	☐	☐	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	☒	☐	☐	
Were all percent differences (%D) of the continuing calibration $\leq 30\%$?	☒	☐	☐	
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	☒	☐	☐	
Was a laboratory blank analyzed for each matrix and concentration?	☒	☐	☐	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	☐	☒	☐	
VI. Field blanks				
Were field blanks identified in this SDG?	☒	☐	☐	
Were target compounds detected in the field blanks?	☐	☒	☐	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	☒	☐	☐	
Was a MS/MSD analyzed every 20 samples of each matrix?	☒	☐	☐	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	☐	☒	☐	
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	☒	☐	☐	

LDC #: SP-34A96

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: JK
2nd Reviewer: KK

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	☒	☐	☐	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒	☐	☐	
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	☒	☐	☐	
Were target compounds detected in the field duplicates?	☐	☒	☐	
XI. Internal standards				
Were internal standard area counts within <u>9.15070</u> $\pm 50\%$ of the associated calibration standard?	☒	☒	☐	
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	☒	☐	☐	
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒	☐	☐	
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	☒	☐	☐	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	☒	☐	☐	
Were chromatogram peaks verified and accounted for?	☒	☐	☐	
XIV. System performance				
System performance was found to be acceptable.	☒	☐	☐	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	☒	☐	☐	

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates/Duplicates

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) or duplicate sample analyzed for each matrix in this SDG?

Y/N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y(N)N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

Y ~~N~~ N/A Were all duplicate sample relative percent differences (RPD) or differences within QC limits?

[illegible]

VALIDATION FINDINGS WORKSHEET

Internal Standards

METHOD: LC/MS PFCs

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y/N N/A Were all internal standard area counts within 50-150% limits?

Y	N	N/A	
			Were the retention times of the internal standards within +/- 30 seconds of the retention times of the associated calibration standard?

[illegible]

VALIDATION FINDINGS WORKSHEET

Compound Quantitation and Reported CRQLs

METHOD: GC HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

~~Level IV/D Only~~

(Y N N/A

Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

~~Y~~ N N/A

Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

[illegible]

Comments: See sample calculation verification worksheet for recalculations

LDC#: 39234A96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 1 of 1
Reviewer: Q
2nd Reviewer: W

Method: LC/MS/MS PFCs

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
7/24/2017	Q4	PFBS	0	0.4737025	0.25
			s1	0.88965125	0.50
			s2	2.13415875	1.00
			s3	4.1171275	2.00
			s4	10.30721875	5.00
			s5	17.7060325	10.00
			s6	93.3127675	50.00
			s7	184.225463	100.00

Regression Output

Reported 

Constant	0.259550	0.075295
Std Err of Y Est		
R Squared	0.999910	0.999223
Degrees of Freedom		
X Coefficient(s)	1.843495	1.852230
Std Err of Coef.		
Correlation Coefficient	0.999955	
Coefficient of Determination (r^2)	0.999910	0.999223

 W+

LDC #: 39-34A96

VALIDATION FINDINGS WORKSHEET **Continuing Calibration Results Verification**

Page: 1 of 1
 Reviewer: Q
 2nd Reviewer: W

METHOD: GC ✓ HPLC MS

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. CF} - \text{CF}) / \text{ave. CF}$
 CF = A/C

Where: ave. CF = initial calibration average CF
 CF = continuing calibration CF
 A = Area of compound
 C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported	Recalculated	Reported	Recalculated
					CF/Conc. CCV	CF/Conc. CCV	%D	%D
1	17075M1-2	7/25/17	PFBS	0.500	0.515	0.514	3.0	2.8
2	17075M1-9	7/25/17	PFBS	10.0	9.77	9.77	33	23
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 393496VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results VerificationPage: 1 of 1
Reviewer: Q
2nd Reviewer: ✓METHOD: GC ☒ HPLC MS

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = $100 * (SSC - SC) / SA$

Where

SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

MS = Matrix spike

MSD = Matrix spike duplicate

RPD = $((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD) * 100$ MS/MSD samples: 10/11

Compound	Spike Added (<u>MS/L</u>)		Sample Conc. (<u>MS/L</u>)	Spike Sample Concentration (<u>MS/L</u>)		Matrix spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
~~PFBS~~	<u>82.8</u>	<u>86.2</u>	<u>19.6</u>	<u>98.2</u>	<u>108</u>	<u>94.9</u>	<u>94.9</u>	<u>103</u>	<u>103</u>	<u>8.19</u>	<u>8.19</u>

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 39234A96

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicate Results VerificationPage: 1 of 1Reviewer: [Signature]2nd Reviewer: [Signature]METHOD: GC ☒ HPLC /MS

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * (SSC - SC) / SA$

Where: SSC = Spiked sample concentration

SC = Concentration

SA = Spike added

RPD = $|SSCLCS - SSCLCSD| * 2 / (SSCLCS + SSCLCSD)$

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: BT40107-B31

Compound	Spike Added (NS/L)		Spiked Sample Concentration (NS/L)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
~~PTBS~~	80.0	NA	73.4	NA	91.8	91.8				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 3P3A96VALIDATION FINDINGS WORKSHEET
Sample Calculation VerificationPage: 1 of 1Reviewer: 92nd Reviewer: WMETHOD: GC ☒ HPLC NS

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10% of the reported results?

Concentration= $\frac{(A)(F_v)(D_f)}{(RF)(V_s \text{ or } W_s)(\%S/100)}$

Example:

Sample ID. T Compound Name PFBSConcentration = $\frac{(\cancel{360.102}) \left(\frac{360.102 \times 12.5}{5077.395} - 0.075 = 948 \right)}{(1.85223)(0.10845)}$ $= 4.04 \text{ NS/L}$

#	Sample ID	Compound	Reported Concentrations (<u>NS/L</u>)	Recalculated Results Concentrations ()	Qualifications
	<u>T</u>	<u>PFBS</u>	<u>4.04</u>		

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: MCAS El Toro, BRAC PFAs

LDC Report Date: August 29, 2017

Parameters: Perfluorinated Alkyl Acids

Validation Level: Stage 2B/4

Laboratory: Vista Analytical Laboratory

Sample Delivery Group (SDG): 1700851

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
18-GW-18MCAS03-5-20170710	1700851-03	Water	07/10/17
18-GW-18MCAS03-2-20170710	1700851-04	Water	07/10/17
18-GW-18MCAS02-5-20170710	1700851-05	Water	07/10/17
18-GW-18MCAS07-3-20170710	1700851-06	Water	07/10/17
24-GW-24MW08B-20170710	1700851-07	Water	07/10/17
DUP03-20170710**	1700851-08**	Water	07/10/17
24-GW-24EX11-20170710	1700851-09	Water	07/10/17
SGV-GW-SGV Transfer Station-20170710**	1700851-10**	Water	07/10/17
SGV-GW-SGV Transfer Station-20170710MS	1700851-10MS	Water	07/10/17
SGV-GW-SGV Transfer Station-20170710MSD	1700851-10MSD	Water	07/10/17

**Indicates sample underwent Stage 4 validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Sampling and Analysis Plan (Field Sampling Plan and Quality Assurance Project Plan) for Initial Assessment of Per-Fluorinated Compounds (PFCS) or Per- and Polyfluoroalkyl Substances (PFAS) Sites at Various Base Realignment and Closure (BRAC) Installations (March 2017), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (August 2014). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Perfluorinated Alkyl Acids by Environmental Protection Agency (EPA) Method 537

All sample results were subjected to Stage 2B data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Stage 4 data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NJ (Presumptive and Estimated): The analysis indicates the presence of a compound or analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. LC/MS Instrument Performance Check

Instrument performance was not required by the method.

III. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

For compounds where average relative response factors (RRFs) were utilized, the percent relative standard deviations (%RSD) were less than or equal to 20.0%.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990.

For each calibration point, the percent differences (%D) of its true value were less than or equal to 30.0% for all compounds.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 30.0% for all compounds.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

Sample EB 01_20170710 was identified as an equipment blank. No contaminants were found.

Sample SB 01_20170710 was identified as a source blank. No contaminants were found.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
SGV-GW-SGV Transfer Station-20170710MS/MSD (SGV-GW-SGV Transfer Station-20170710**)	PFHxS	52.4 (70-130)	-	J (all detects)	A
SGV-GW-SGV Transfer Station-20170710MS/MSD (SGV-GW-SGV Transfer Station-20170710**)	PFOS	139 (70-130)	-	J (all detects)	A

Relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	RPD (Limits)	Flag	A or P
SGV-GW-SGV Transfer Station-20170710MS/MSD (SGV-GW-SGV Transfer Station-20170710**)	PFHxA PFHxS	34.1 (≤30) 58.8 (≤30)	J (all detects) J (all detects)	A

VIII. Ongoing Precision Recovery Samples

Ongoing precision recovery (OPR) samples were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

IX. Field Duplicates

Samples DUP03-20170710** and SGV-GW-SGV Transfer Station-20170710** were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ng/L)		RPD (Limits)	Difference (Limits)	Flag	A or P
	DUP03-20170710**	SGV-GW-SGV Transfer Station-20170710**				
PFBS	80.5	76.0	6 (≤30)	-	-	-
PFHxA	267	268	0 (≤30)	-	-	-
PFHpA	50.9	48.8	4 (≤30)	-	-	-
PFHxS	264	295	11 (≤30)	-	-	-
PFOA	232	234	1 (≤30)	-	-	-
PFOS	407	395	3 (≤30)	-	-	-

Compound	Concentration (ng/L)		RPD (Limits)	Difference (Limits)	Flag	A or P
	DUP03-20170710**	SGV-GW-SGV Transfer Station-20170710**				
PFNA	8.17	8.39	-	0.22 (≤8.30)	-	-

X. Internal Standards

All internal standard recoveries (%R) were within QC limits with the following exceptions:

Sample	Internal Standards	%R (Limits)	Affected Compound	Flag	A or P
18-GW-18MCAS03-2-20170710	13C2-PFTeDA	39.3 (50-150)	PFTeDA	NA	-
18-GW-18MCAS02-5-20170710	13C3-PFBS	181 (50-150)	PFBS	UJ (all non-detects)	P
18-GW-18MCAS07-3-20170710	13C2-PFTeDA	12.7 (50-150)	PFTeDA	NA	-
24-GW-24MW08B-20170710	13C2-PFTeDA	7.8 (50-150)	PFTeDA	NA	-
24-GW-24EX11-20170710	13C3-PFBS	224 (50-150)	PFBS	J (all detects)	P
SGV-GW-SGV Transfer Station-20170710**	13C3-PFBS	180 (50-150)	PFBS	J (all detects)	P
SGV-GW-SGV Transfer Station-20170710**	13C2-PFTeDA	26.6 (50-150)	PFTeDA	NA	-

XI. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Stage 4 validation.

The laboratory limit of quantitation (LOQ) and limit of detection (LOD) dilution are higher than the QAPP LOQ and LOD.

The laboratory detection limit (DL) for PFOS is higher than the QAPP DL.

Raw data were not reviewed for Stage 2B validation.

XII. Target Compound Identifications

All target compound identifications met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIII. System Performance

The system performance was acceptable for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to MS/MSD %R and RPD and internal standards %R, data were qualified as estimated in three samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

MCAS EI Toro, BRAC PFAs**Perfluorinated Alkyl Acids - Data Qualification Summary - SDG 1700851**

Sample	Compound	Flag	A or P	Reason
SGV-GW-SGV Transfer Station-20170710**	PFHxS PFOS	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)
SGV-GW-SGV Transfer Station-20170710**	PFHxA PFHxS	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD)
18-GW-18MCAS02-5-20170710	PFBS	UJ (all non-detects)	P	Internal standards (%R)
SGV-GW-SGV Transfer Station-20170710** 24-GW-24EX11-20170710	PFBS	J (all detects)	P	Internal standards (%R)

MCAS EI Toro, BRAC PFAs**Perfluorinated Alkyl Acids - Laboratory Blank Data Qualification Summary - SDG 1700851**

No Sample Data Qualified in this SDG

MCAS EI Toro, BRAC PFAs**Perfluorinated Alkyl Acids - Field Blank Data Qualification Summary - SDG 1700851**

No Sample Data Qualified in this SDG

LDC #: 39234B96

VALIDATION COMPLETENESS WORKSHEET

SDG #: 1700851

Stage 2B/4

Laboratory: Vista Analytical Laboratory

Date: 8/11/17

Page: 1 of 1

Reviewer: Q

2nd Reviewer: RK

METHOD: LCMS Perfluorinated Alkyl Acids (EPA Method 537)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	LC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	RSD ≤ 20%, Y2. LOD ≤ 30%, ICV ≤ 30%
IV.	Continuing calibration	A	CCV ≤ 30%
V.	Laboratory Blanks	A	
VI.	Field blanks	ND	SB = 1. EB = 2
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	SW	
IX.	Laboratory control samples	A	OPR
X.	Field duplicates	SW	D = 8 + 10
XI.	Internal standards	SW	
XII.	Compound quantitation RL/LOQ/LODs	SW	Not reviewed for Stage 2B validation
XIII.	Target compound identification	A	Not reviewed for Stage 2B validation
XIV.	System performance	A	Not reviewed for Stage 2B validation
XV.	Overall assessment of data	A	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB = Source blank
OTHER:

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	SB 01_20170710	1700851-01	Water	07/10/17
2	EB 01_20170710	1700851-02	Water	07/10/17
3	18-GW-18MCAS03-5-20170710	1700851-03	Water	07/10/17
4	18-GW-18MCAS03-2-20170710	1700851-04	Water	07/10/17
5	18-GW-18MCAS02-5-20170710	1700851-05	Water	07/10/17
6	18-GW-18MCAS07-3-20170710	1700851-06	Water	07/10/17
7	24-GW-24MW08B-20170710	1700851-07	Water	07/10/17
8	DUP03-20170710**	1700851-08**	Water	07/10/17
9	24-GW-24EX11-20170710	1700851-09	Water	07/10/17
10	SGV-GW-SGV Transfer Station-20170710**	1700851-10**	Water	07/10/17
11	SGV-GW-SGV Transfer Station-20170710MS	1700851-10MS	Water	07/10/17
12	SGV-GW-SGV Transfer Station-20170710MSD	1700851-10MSD	Water	07/10/17
13				

BT 4010T-BK

Method: LCMS (EPA Method 537)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	☒	☐	☐	
Was cooler temperature criteria met?	☒	☐	☐	
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) < 20%?	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of > 0.990?	☒	☐	☐	
Were all analytes within 70-130% or percent differences (%D) ≤ 30% of their true value for each calibration standard	☒	☐	☐	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☒	☐	☐	
Were all percent differences (%D) < 30%?	☒	☐	☐	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	☒	☐	☐	
Were all percent differences (%D) of the continuing calibration < 30%?	☒	☐	☐	
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	☒	☐	☐	
Was a laboratory blank analyzed for each matrix and concentration?	☒	☐	☐	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	☐	☒	☐	
VI. Field blanks				
Were field blanks identified in this SDG?	☒	☐	☐	
Were target compounds detected in the field blanks?	☐	☒	☐	
VIII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	☒	☐	☐	
Was a MS/MSD analyzed every 20 samples of each matrix?	☒	☐	☐	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	☐	☒	☐	
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	☒	☐	☐	

LDC #: 39234B96

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: Q
2nd Reviewer: KK

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	☒	☐	☐	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒	☐	☐	
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	☒	☐	☐	
Were target compounds detected in the field duplicates?	☒	☐	☐	
XI. Internal standards				
Were internal standard area counts within $\pm 50\%$ of the associated calibration standard?	☐	☒	☐	
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	☒	☐	☐	
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒	☐	☐	
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	☒	☐	☐	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	☒	☐	☐	
Were chromatogram peaks verified and accounted for?	☒	☐	☐	
XIV. System performance				
System performance was found to be acceptable.	☒	☐	☐	
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	☒	☐	☐	

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates/Duplicates

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) or duplicate sample analyzed for each matrix in this SDG?

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y ~~N~~ N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

Y N N/A Were all duplicate sample relative percent differences (RPD) or differences within QC limits?

[illegible]

LDC# 39234B96**VALIDATION FINDINGS WORKSHEET**
Field DuplicatesPage: 1 of 1
Reviewer: Q
2nd Reviewer: KK**METHOD:** PFCs (Method 537 mod)

Compound	Concentration (ng/L)		(≤30) RPD	Difference	Limits	Qual
	8	10				
PFBS	80.5	76.0	6			
PFHxA	267	268	0			
PFHpA	50.9	48.8	4			
PFHxS	264	295	11			
PFOA	232	234	1			
PFOS	407	395	3			
PFNA	8.17	8.39		0.22	≤8.30	

VALIDATION FINDINGS WORKSHEET **Compound Quantitation and Reported CRQLs**

METHOD: GC HPLC [Signature]

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

- Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding	Associated Samples	Qualifications
	All	The laboratory limit of quantitation (LOQ) and limit of detection (LOD) are higher than the QAPP LOQ and LOD		Text
	All	The laboratory detection limit (DL) for PFOS is higher than the QAPP DL		

Comments: See sample calculation verification worksheet for recalculations

LDC#: 39234B96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 1 of 1
Reviewer: 9
2nd Reviewer: VV

Method: LC/MS/MS PFCs

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
7/24/2017	Q4	PFNA	0	0.3423663	0.25
			s1	0.61514875	0.50
			s2	1.286095	1.00
			s3	2.65082625	2.00
			s4	6.86290375	5.00
			s5	11.94864375	10.00
			s6	53.26122125	50.00
			s7	109.557083	100.00

Regression Output

Reported *

Constant	0.421145	0.147218
Std Err of Y Est		
R Squared	0.999609	0.997320
Degrees of Freedom		
X Coefficient(s)	1.085364	1.098350
Std Err of Coef.		
Correlation Coefficient	0.999804	
Coefficient of Determination (r^2)	0.999609	0.997320

* W+

LDC#: 39-24B96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 1 of 1
Reviewer: [Signature]
2nd Reviewer: [Signature]

Method: LC/MS/MS PFCs

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
7/28/2017	Q4	PFNA	0	0.3015750	0.25
			s1	0.6235587	0.50
			s2	1.1884475	1.00
			s3	2.3838875	2.00
			s4	5.6871375	5.00
			s5	11.414025	10.00
			s6	51.11657201	50.00
			s7	106.4871079	100.00
			s8	269.114227	250.00

Regression Output

Reported *

Constant	-0.164719	0.083874
Std Err of Y Est		
R Squared	0.999871	0.999549
Degrees of Freedom		
X Coefficient(s)	1.074147	1.068800
Std Err of Coef.		
Correlation Coefficient	0.999935	
Coefficient of Determination (r^2)	0.999871	0.999549

* W+

LDC #: 3703/B96

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: Q
2nd Reviewer: W

METHOD: GC ✓ HPLC MS

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. CF} - \text{CF}) / \text{ave. CF}$
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(lcal)/ CCV Conc.	Reported	Recalculated	Reported	Recalculated
					CF/Conc. CCV	CF/Conc. CCV	%D	%D
1	IT0735ML2	7/25/17	~~PFNA~~	0.500	0.492	0.491	1.7	1.9
2	IT0736ML2	7/26/17	~~PFNA~~	0.500	0.470	0.470	5.9	6.0
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 3934B96

VALIDATION FINDINGS WORKSHEET **Matrix Spike/Matrix Spike Duplicates Results Verification**

Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC ☒ HPLC MS

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

Where

SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

MS = Matrix spike

MSD = Matrix spike duplicate

RPD = (((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD)) * 100

MS/MSD samples: 11/12

Compound	Spike Added		Sample Conc.	Spike Sample Concentration		Matrix spike		Matrix Spike Duplicate		MS/MSD	
	(NS/L)			(NS/L)		Percent Recovery		Percent Recovery		RPD	
	MS	MSD		---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PhNA	83.7	82.7	83.9	96.4	90.3	105	105	99.0	99.0	5.88	5.88

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 3734396

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicate Results VerificationPage: 1 of 1Reviewer: Q2nd Reviewer: WMETHOD: GC ☒ HPLC US

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * (SSC - SC) / SA$

Where: SSC = Spiked sample concentration

SC = Concentration

SA = Spike added

RPD = $|SSCLCS - SSCLCSD| * 2 / (SSCLCS + SSCLCSD)$

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: BT40107-B51

Compound	Spike Added (<u>US</u>)		Spiked Sample Concentration (<u>US</u> / <u>4</u>)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
~~PFNA~~	<u>80.0</u>	<u>NA</u>	<u>78.4</u>	<u>NA</u>	<u>98.0</u>	<u>98.0</u>				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 373496VALIDATION FINDINGS WORKSHEET
Sample Calculation VerificationPage: 1 of 1Reviewer: [Signature]2nd Reviewer: [Signature]METHOD: GC ✓ HPLC MSY N N/A
Y N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10% of the reported results?

Concentration= $\frac{(A)(F_v)(D_f)}{(RF)(V_s \text{ or } W_s)(\%S/100)}$

Example:

Sample ID: 8 Compound Name: PFNA

A= Area or height of the compound to be measured

Fv= Final Volume of extract

Df= Dilution Factor

RF= Average response factor of the compound
in the initial calibration

Vs= Initial volume of the sample

Ws= Initial weight of the sample

%S= Percent Solid

Concentration = $\frac{(4960 \times 12.5)}{54500} - 0.083874)(1)$
 $(1.0688)(0.12071)$ $= 8.17 \text{ ng/L}$

#	Sample ID	Compound	Reported Concentrations (<u>ng/L</u>)	Recalculated Results Concentrations ()	Qualifications
	<u>8</u>	<u>PFNA</u>	<u>8.17</u>		

Comments: _____

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: MCAS El Toro, BRAC PFAs

LDC Report Date: August 29, 2017

Parameters: Perfluorinated Alkyl Acids

Validation Level: Stage 2B/4

Laboratory: Vista Analytical Laboratory

Sample Delivery Group (SDG): 1700871

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
5-GW-05_DGMW41B-20170712**	1700871-02**	Water	07/12/17
18-GW-18BGM03E-20170712	1700871-03	Water	07/12/17
24-GW-24IN03-20170712	1700871-04	Water	07/12/17
DUP02-20170712	1700871-05	Water	07/12/17
24-GW-24EX13A-20170712	1700871-06	Water	07/12/17
24-GW-24MW15D-20170712	1700871-07	Water	07/12/17
16-GW-16_MW28-20170712	1700871-08	Water	07/12/17
16-GW-16_MW19-20170712	1700871-09	Water	07/12/17
16-GW-16_MW04-20170713**	1700871-11**	Water	07/13/17

**Indicates sample underwent Stage 4 validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Sampling and Analysis Plan (Field Sampling Plan and Quality Assurance Project Plan) for Initial Assessment of Per-Fluorinated Compounds (PFCS) or Per- and Polyfluoroalkyl Substances (PFAS) Sites at Various Base Realignment and Closure (BRAC) Installations (March 2017), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (August 2014). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Perfluorinated Alkyl Acids by Environmental Protection Agency (EPA) Method 537

All sample results were subjected to Stage 2B data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Stage 4 data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NJ (Presumptive and Estimated): The analysis indicates the presence of a compound or analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. LC/MS Instrument Performance Check

Instrument performance was not required by the method.

III. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

For compounds where average relative response factors (RRFs) were utilized, the percent relative standard deviations (%RSD) were less than or equal to 20.0%.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990.

For each calibration point, the percent differences (%D) of its true value were less than or equal to 30.0% for all compounds.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 30.0% for all compounds.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

Samples EB03-20170712 and EB04-20170713 were identified as equipment blanks. No contaminants were found.

Sample SB01_20170710 (from SDG 1700851) was identified as a source blank. No contaminants were found.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike

duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Ongoing Precision Recovery Samples

Ongoing precision recovery (OPR) samples were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

IX. Field Duplicates

Samples 24-GW-24IN03-20170712 and DUP02-20170712 were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ng/L)		RPD (Limits)	Difference (Limits)	Flag	A or P
	24-GW-24IN03-20170712	DUP02-20170712				
PFBS	8.97	9.66	-	0.69 (≤ 8.52)	-	-
PFHxA	41.2	44.7	-	3.5 (≤ 8.52)	-	-
PFHpA	5.95	6.96	-	1.01 (≤ 8.52)	-	-
PFHxS	18.9	17.6	-	1.3 (≤ 8.52)	-	-
PFOA	40.3	42.7	-	2.4 (≤ 8.52)	-	-

X. Internal Standards

All internal standard recoveries (%R) were within QC limits with the following exceptions:

Sample	Internal Standards	%R (Limits)	Affected Compound	Flag	A or P
24-GW-24IN03-20170712	13C2-PFTeDA	3.50 (50-150)	PFTeDA	NA	-
DUP02-20170712	13C2-PFTeDA	19.3 (50-150)	PFTeDA	NA	-
16-GW-16_MW04-20170713**	13C4-PFHpA	162 (50-150)	PFHpA	UJ (all non-detects)	P
16-GW-16_MW04-20170713**	13C2-PFTeDA	33.6 (50-150)	PFTeDA	NA	-

XI. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Stage 4 validation.

The laboratory limit of quantitation (LOQ) and limit of detection (LOD) are higher than the QAPP LOQ and LOD.

The laboratory detection limit (DL) for PFOS is higher than the QAPP DL.

Raw data were not reviewed for Stage 2B validation.

XII. Target Compound Identifications

All target compound identifications met validation criteria for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIII. System Performance

The system performance was acceptable for samples which underwent Stage 4 validation. Raw data were not reviewed for Stage 2B validation.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to internal standards %R, data were qualified as estimated in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

MCAS EI Toro, BRAC PFAs
Perfluorinated Alkyl Acids - Data Qualification Summary - SDG 1700871

Sample	Compound	Flag	A or P	Reason
16-GW-16_MW04-20170713**	PFHpA	UJ (all non-detects)	P	Internal standards (%R)

MCAS EI Toro, BRAC PFAs
Perfluorinated Alkyl Acids - Laboratory Blank Data Qualification Summary - SDG 1700871

No Sample Data Qualified in this SDG

MCAS EI Toro, BRAC PFAs
Perfluorinated Alkyl Acids - Field Blank Data Qualification Summary - SDG 1700871

No Sample Data Qualified in this SDG

LDC #: 39234C96

VALIDATION COMPLETENESS WORKSHEET

SDG #: 1700871

Stage 2B/4

Laboratory: Vista Analytical Laboratory

Date: 8/1/17

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: LCMS Perfluorinated Alkyl Acids (EPA Method 537)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	LC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A, A	RSD ≤ 20%, χ^2 70 ≤ 30%, ICV ≤ 30%
IV.	Continuing calibration	A	CCV ≤ 30%
V.	Laboratory Blanks	A	
VI.	Field blanks	ND	2B = 1.10. SB01-20170710 (1700871)
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	N	CS
IX.	Laboratory control samples	A	OKR
X.	Field duplicates	W	D = A + S
XI.	Internal standards	W	
XII.	Compound quantitation RL/LOQ/LODs	W	Not reviewed for Stage 2B validation
XIII.	Target compound identification	A	Not reviewed for Stage 2B validation
XIV.	System performance	A	Not reviewed for Stage 2B validation
XV.	Overall assessment of data	A	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB = Source blank
OTHER:

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	EB03-20170712	1700871-01	Water	07/12/17
2	5-GW-05_DGMW41B-20170712**	1700871-02**	Water	07/12/17
3	18-GW-18BGM03E-20170712	1700871-03	Water	07/12/17
4	24-GW-24IN03-20170712	1700871-04	Water	07/12/17
5	DUP02-20170712	1700871-05	Water	07/12/17
6	24-GW-24EX13A-20170712	1700871-06	Water	07/12/17
7	24-GW-24MW15D-20170712	1700871-07	Water	07/12/17
8	16-GW-16_MW28-20170712	1700871-08	Water	07/12/17
9	16-GW-16_MW19-20170712	1700871-09	Water	07/12/17
10	EB04-20170713	1700871-10	Water	07/13/17
11	16-GW-16_MW04-20170713**	1700871-11**	Water	07/13/17
12				
13	BEF006T- [Signature]			

Method: LCMS (EPA Method 537)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	☒	☐	☐	
Was cooler temperature criteria met?	☒	☐	☐	
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) $\leq$ 20%?	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of > 0.990 ?	☒	☐	☐	
Were all analytes within 70-130% or percent differences (%D) $\leq$ 30% of their true value for each calibration standard	☒	☐	☐	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq$ 30%?	☒	☐	☐	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	☒	☐	☐	
Were all percent differences (%D) of the continuing calibration $\leq$ 30%?	☒	☐	☐	
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	☒	☐	☐	
Was a laboratory blank analyzed for each matrix and concentration?	☒	☐	☐	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	☐	☒	☐	
VI. Field blanks				
Were field blanks identified in this SDG?	☒	☐	☐	
Were target compounds detected in the field blanks?	☐	☒	☐	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	☐	☒	☐	
Was a MS/MSD analyzed every 20 samples of each matrix?	☐	☐	☒	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	☐	☐	☒	
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	☒	☐	☐	

LDC #: 39224C96

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: 9
2nd Reviewer: KK

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	☒	☐	☐	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒	☐	☐	
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	☒	☐	☐	
Were target compounds detected in the field duplicates?	☒	☐	☐	
XI. Internal standards				
Were internal standard area counts within <u>50-150%</u> of the associated calibration standard?	☒	☐	☐	
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	☒	☐	☐	
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒	☐	☐	
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	☒	☐	☐	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	☒	☐	☐	
Were chromatogram peaks verified and accounted for?	☒	☐	☐	
XIV. System performance				
System performance was found to be acceptable.	☒	☐	☐	
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	☒	☐	☐	

LDC#: 3134096**VALIDATION FINDINGS WORKSHEET**
Field DuplicatesPage: 1 of 1
Reviewer: Q
2nd Reviewer: KK**METHOD:** PFCs (Method 537 mod)

Compound	Concentration (ng/L)		(<30) RPD	Difference	Limits	Qual
	4	5				
PFBS	8.97	9.66		0.69	≤8.52	
PFHxA	41.2	44.7		3.5	≤8.52	
PFHpA	5.95	6.96		1.01	≤8.52	
PFHxS	18.9	17.6		1.3	≤8.52	
PFOA	40.3	42.7		2.4	≤8.52	

VALIDATION FINDINGS WORKSHEET

Internal Standards

Reviewer: 

2nd Reviewer: _____

METHOD: LC/MS PFCs

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y/N N/A Were all internal standard area counts within 50-150% limits?

Y	N	N/A	
			Were the retention times of the internal standards within +/- 30 seconds of the retention times of the associated calibration standard?

[illegible]

VALIDATION FINDINGS WORKSHEET

Compound Quantitation and Reported CRQLs

METHOD: GC HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

~~Level IV/D Only~~

(Y N) N/A

Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

~~Y~~ ~~N~~ N/A

Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

[illegible]

Comments: See sample calculation verification worksheet for recalculations

LDC#: 39234C96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 1 of 1
Reviewer: [Signature]
2nd Reviewer: [Signature]

Method: LC/MS/MS PFCs

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
7/27/2017	Q4	PFBS	0	0.5308925	0.25
			s1	1.0003625	0.50
			s2	2.000095	1.00
			s3	4.2364375	2.00
			s4	10.778003	5.00
			s5	18.456016	10.00
			s6	94.914883	50.00
			s7	186.169710	100.00

Regression Output

Reported ~~*~~

Constant	0.454206	0.124036
Std Err of Y Est		
R Squared	0.999877	0.999166
Degrees of Freedom		
X Coefficient(s)	1.863424	1.879080
Std Err of Coef.		
Correlation Coefficient	0.999939	
Coefficient of Determination (r^2)	0.999877	0.999166

* W+

/

LDC#: 39198C96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 1 of 1
Reviewer: [Signature]
2nd Reviewer: [Signature]

Method: LC/MS/MS PFCs

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
7/28/2017	Q4	PFTTrDA	0	3.3293183	0.25
			s1	5.8527432	0.50
			s2	11.7753022	1.00
			s3	21.0904224	2.00
			s4	53.4501114	5.00
			s5	100.5446720	10.00
			s6	480.3570407	50.00
			s7	924.896995	100.00
			s8	2490.894811	250.00

Regression Output

Reported *

Constant	-5.316424	1.172150
Std Err of Y Est		
R Squared	0.999191	0.998903
Degrees of Freedom		
X Coefficient(s)	9.886661	9.747200
Std Err of Coef.		
Correlation Coefficient	0.999595	
Coefficient of Determination (r^2)	0.999191	0.998903

* W+

LDC#: 39234C96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 1 of 8
Reviewer: [Signature]
2nd Reviewer: [Signature]

Method: LC/MS/MS PFCs

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
8/1/2017	Q4	PFBS	0	0.5318012	0.25
			s1	1.0024725	0.50
			s2	2.005095	1.00
			s3	4.1366337	2.00
			s4	9.4071825	5.00
			s5	18.311911	10.00
			s6	89.723891	50.00
			s7	185.21046	100.00
			s8	479.232035	250.00

Regression Output

Reported *

Constant	-1.167746	0.067014
Std Err of Y Est		
R Squared	0.999710	0.999400
Degrees of Freedom		
X Coefficient(s)	1.910618	1.884080
Std Err of Coef.		
Correlation Coefficient	0.999855	
Coefficient of Determination (r^2)	0.999710	0.999400

* Wt

LDC #: 38234C96VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results VerificationPage: 1 of 1
Reviewer: [Signature]
2nd Reviewer: [Signature]METHOD: GC ✓ HPLC /MS

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. CF} - \text{CF}) / \text{ave. CF}$
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(lcal)/ CCV Conc.	Reported	Recalculated	Reported	Recalculated
					CF/Conc. CCV	CF/Conc. CCV	%D	%D
1	ITOT/ML66	7/27/17	PFBS	0.500	0.498	0.498	0.4	0.3
2	ITOT/ML79	7/28/17	PFBS	10.00	9.23	9.22	7.7	7.8
3	ITOT/ML20	7/31/17	PFTRDA	10.0	10.7	10.7	6.8	6.9
4	ITOT/ML2	8/3/17	PFBS	1.00	0.919	0.917	8.1	8.3

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 39-34C96

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: 9
2nd Reviewer: VW

METHOD: GC ☒ HPLC MS

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * (SSC - SC) / SA$

Where: SSC = Spiked sample concentration

SC = Concentration

RPD = $|SSCLCS - SSCLCSD| * 2 / (SSCLCS + SSCLCSD)$

SA = Spike added

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: BT400GT-BS1

Compound	Spike Added (<u>MS/L</u>)		Spiked Sample Concentration (<u>MS/L</u>)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
~~PTMX~~	<u>40.0</u>	<u>NA</u>	<u>38.7</u>	<u>NA</u>	<u>96.7</u>	<u>96.7</u>				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 3924C96VALIDATION FINDINGS WORKSHEET
Sample Calculation VerificationPage: 1 of 1Reviewer: 92nd Reviewer: WMETHOD: GC ✓ HPLC MS(Y) N N/A
(Y) N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10% of the reported results?

Concentration = $\frac{(A)(F_v)(D_f)}{(RF)(V_s \text{ or } W_s)(\%S/100)}$

Example:

Sample ID: 2 Compound Name PFBSConcentration = $\left(\frac{230 \times 12.5}{2780} - 0.04036 \right) (1)$
 $(1.87908)(0.11547)$ = 4.19 ng/L

#	Sample ID	Compound	Reported Concentrations (<u>ng/L</u>)	Recalculated Results Concentrations ()	Qualifications
	<u>2</u>	<u>PFBS</u>	<u>4.19</u>		

Comments: _____

LDC #: 39234

EDD POPULATION COMPLETENESS WORKSHEET

Date: 8/18
Page: 1 of 1
2nd Reviewer: adThe LDC job number listed above was entered by JE.

	EDD Process		Comments/Action
I.	EDD Completeness	-	
Ia.	- All methods present?	Y	
Ib.	- All samples present/match report?	Y	
Ic.	- All reported analytes present?	Y	
Id.	(10%) or 100% verification of EDD?	Y	
II.	EDD Preparation/Entry	-	
Ila.	- Carryover U/J?	—	
Ilb.	- Reason Codes used? If so, note which codes.	Y	client
Ilc.	- Additional Information (QC Level, Validator, Validated Y/N, etc.)	Y	
III.	Reasonableness Checks	-	
IIIa.	- Do all qualified ND results have ND qualifier (e.g. UJ)?	Y	
IIIb.	- Do all qualified detect results have detect qualifier (e.g. J)?	Y	
IIIc.	- If reason codes are used, do all qualified results have reason code field populated, and vice versa?	Y	
IIId.	- Does the detect flag require changing for blank qualifier? If so, are all U results marked ND?	+	
IIIe.	- Do blank concentrations in report match EDD where data was qualified due to blank contamination?	—	
IIIf.	- Were multiple results reported due to dilutions/reanalysis? If so, were results qualified appropriately?	+	
IIIg.	- Are there any discrepancies between the data packet and the EDD?	N	

Notes: *see discrepancy sheet

INSTALLATION_ID	SITE_NAME	LOCATION_NAME	LOCATION_TYPE_DESC	COORD_X	COORD_Y	SAMPLE_NAME	SAMPLE_MATRIX_DESC	COLLECT_DATE	ANALYTICAL_METHOD_GRP_DESC	SDG
EL_TORO_MCAS	SITE 00005	05_DGMW68A	Well	6117685.05	2189097.05	5-GW-05-DGMW68A-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02NEW16	Well	6120699.46	2189892.22	2-GW-02NEW16-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	1-GW-01-P220-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02_DGMW59	Well	6121115.39	2189877.3	2-GW-02DGMW59-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW206	Monitoring well	6123914.6	2196059.47	1-GW-01-MW206-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW209	Monitoring well	6124094.32	2196596.26	1-GW-01-MW209-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00005	05_DGMW68A	Well	6117685.05	2189097.05	5-GW-05-DGMW68A-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	DUP01-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02NEW16	Well	6120699.46	2189892.22	2-GW-02NEW16-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW204	Monitoring well	6124173.11	2196799.67	1-GW-01-MW204-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW206	Monitoring well	6123914.6	2196059.47	1-GW-01-MW206-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	1-GW-01-P220-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW204	Monitoring well	6124173.11	2196799.67	1-GW-01-MW204-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02_DGMW59	Well	6121115.39	2189877.3	2-GW-02DGMW59-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW206	Monitoring well	6123914.6	2196059.47	1-GW-01-MW206-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	DUP01-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00005	05_DGMW68A	Well	6117685.05	2189097.05	5-GW-05-DGMW68A-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW209	Monitoring well	6124094.32	2196596.26	1-GW-01-MW209-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02NEW16	Well	6120699.46	2189892.22	2-GW-02NEW16-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	DUP01-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW209	Monitoring well	6124094.32	2196596.26	1-GW-01-MW209-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02_DGMW59	Well	6121115.39	2189877.3	2-GW-02DGMW59-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW204	Monitoring well	6124173.11	2196799.67	1-GW-01-MW204-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW206	Monitoring well	6123914.6	2196059.47	1-GW-01-MW206-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	DUP01-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW209	Monitoring well	6124094.32	2196596.26	1-GW-01-MW209-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02_DGMW59	Well	6121115.39	2189877.3	2-GW-02DGMW59-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02NEW16	Well	6120699.46	2189892.22	2-GW-02NEW16-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	DUP01-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02_DGMW59	Well	6121115.39	2189877.3	2-GW-02DGMW59-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW209	Monitoring well	6124094.32	2196596.26	1-GW-01-MW209-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW204	Monitoring well	6124173.11	2196799.67	1-GW-01-MW204-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00005	05_DGMW68A	Well	6117685.05	2189097.05	5-GW-05-DGMW68A-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	1-GW-01-P220-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW206	Monitoring well	6123914.6	2196059.47	1-GW-01-MW206-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852

INSTALLATION_ID	SITE_NAME	LOCATION_NAME	LOCATION_TYPE_DESC	COORD_X	COORD_Y	SAMPLE_NAME	SAMPLE_MATRIX_DESC	COLLECT_DATE	ANALYTICAL_METHOD_GRP_DESC	SDG
EL_TORO_MCAS	SITE 00005	05_DGMW68A	Well	6117685.05	2189097.05	5-GW-05-DGMW68A-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW209	Monitoring well	6124094.32	2196596.26	1-GW-01-MW209-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	DUP01-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW204	Monitoring well	6124173.11	2196799.67	1-GW-01-MW204-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02_DGMW59	Well	6121115.39	2189877.3	2-GW-02DGMW59-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02NEW16	Well	6120699.46	2189892.22	2-GW-02NEW16-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW206	Monitoring well	6123914.6	2196059.47	1-GW-01-MW206-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW209	Monitoring well	6124094.32	2196596.26	1-GW-01-MW209-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	1-GW-01-P220-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00005	05_DGMW68A	Well	6117685.05	2189097.05	5-GW-05-DGMW68A-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	DUP01-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW204	Monitoring well	6124173.11	2196799.67	1-GW-01-MW204-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02NEW16	Well	6120699.46	2189892.22	2-GW-02NEW16-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	DUP01-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW204	Monitoring well	6124173.11	2196799.67	1-GW-01-MW204-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	1-GW-01-P220-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW206	Monitoring well	6123914.6	2196059.47	1-GW-01-MW206-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00005	05_DGMW68A	Well	6117685.05	2189097.05	5-GW-05-DGMW68A-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW209	Monitoring well	6124094.32	2196596.26	1-GW-01-MW209-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02_DGMW59	Well	6121115.39	2189877.3	2-GW-02DGMW59-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	1-GW-01-P220-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW204	Monitoring well	6124173.11	2196799.67	1-GW-01-MW204-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	1-GW-01-P220-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW206	Monitoring well	6123914.6	2196059.47	1-GW-01-MW206-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW204	Monitoring well	6124173.11	2196799.67	1-GW-01-MW204-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW209	Monitoring well	6124094.32	2196596.26	1-GW-01-MW209-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	1-GW-01-P220-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02_DGMW59	Well	6121115.39	2189877.3	2-GW-02DGMW59-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00005	05_DGMW68A	Well	6117685.05	2189097.05	5-GW-05-DGMW68A-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW206	Monitoring well	6123914.6	2196059.47	1-GW-01-MW206-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-P220	Monitoring well	6124430.57	2196734.05	DUP01-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00002	02NEW16	Well	6120699.46	2189892.22	2-GW-02NEW16-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW206	Monitoring well	6123914.6	2196059.47	1-GW-01-MW206-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW204	Monitoring well	6124173.11	2196799.67	1-GW-01-MW204-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00005	05_DGMW68A	Well	6117685.05	2189097.05	5-GW-05-DGMW68A-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852
EL_TORO_MCAS	SITE 00001	01-MW209	Monitoring well	6124094.32	2196596.26	1-GW-01-MW209-20170711	Ground water	11-Jul-17	Perfluoroalkyl Compounds	1700852