



**Groundwater Sample Results,  
Level 2 Laboratory Report, Level 4 Laboratory Report,  
Electronic Data Deliverable, Data Validation Report,  
and the Sample Location Report, SDG 1701624**

*Naval Air Station Oceana  
Virginia Beach, Virginia*

July 2019

November 21, 2017

**Vista Work Order No. 1701624**

Ms. Tiffany Hill  
CH2M Hill  
1100 NE Circle Blvd. Suite 300  
Corvallis, OR 97330

Dear Ms. Hill,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on November 08, 2017. This sample set was analyzed on a standard turn-around time, under your Project Name 'Fentress Offbase Wells'.

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](mailto:mmaier@vista-analytical.com).

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

Sincerely,



*Martha Maier*  
for

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. 1701624**

### **Case Narrative**

#### **Sample Condition on Receipt:**

Fourteen 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. As requested, samples 12, 13, and 14 were updated to begin with "IDW" instead of "10W".

#### **Analytical Notes:**

##### **Modified EPA Method 537**

Samples "OF-MW33-1117", "IDW-AQ01-110717", "IDW-AQ02-110717" and "IDW-AQ03-110717" contained particulate and were centrifuged prior to extraction.

The samples were extracted and analyzed for a selected list of 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 extract of sample "OF-MW22D-1117" was re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The area criteria passed for the second injection; therefore, the results from the re-injection have been reported.

The extracts of samples "IDW-AQ01-110717", "IDW-AQ02-110717" and "IDW-AQ03-110717" were re-injected because the original calibration did not pass all acceptance criteria.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

As requested, an MS/MSD was performed on sample "OF-MW19-1117". The MS/MSD recoveries and/or RPDs were out of the criteria for PFDA and PFTeDA.

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# Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701624-01	OF-MW20-1117	06-Nov-17 09:50	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-02	OF-MW20P-1117	06-Nov-17 09:55	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-03	OF-MW22-1117	06-Nov-17 11:10	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-04	OF-MW22D-1117	06-Nov-17 12:00	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-05	OF-MW19-1117	MS/MSD06-Nov-17 13:15	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-06	OF-MW19D-1117	06-Nov-17 13:45	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-07	OF-MW21-1117	06-Nov-17 14:55	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-08	OF-MW33-1117	07-Nov-17 08:45	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-09	OF-MW33D-1117	07-Nov-17 09:20	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-10	OF-EB110717	07-Nov-17 09:45	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-11	OF-FB110717	07-Nov-17 09:50	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-12	IDW-AQ01-110717	07-Nov-17 10:00	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-13	IDW-AQ02-110717	07-Nov-17 10:25	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-14	IDW-AQ03-110717	07-Nov-17 10:50	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL

## **ANALYTICAL RESULTS**

**Sample ID: Method Blank** **Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	B7K0059-BLK1	Column:	BEH C18
Project:	Fentress Offbase Wells						

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.79	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFHxA	ND	2.18	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFHpA	ND	0.591	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFHxS	ND	0.947	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFOA	ND	0.651	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFOS	ND	0.807	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFNA	ND	0.810	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFDA	ND	1.49	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
MeFOSAA	ND	1.65	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFUnA	ND	1.05	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
EtFOSAA	ND	1.37	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFDoA	ND	0.792	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFTrDA	ND	0.494	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFTeDA	ND	0.755	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	102	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFHxA	IS	90.7	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C4-PFHpA	IS	94.5	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
18O2-PFHxS	IS	97.1	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFOA	IS	95.2	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C8-PFOS	IS	87.5	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C5-PFNA	IS	81.1	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFDA	IS	56.4	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
d3-MeFOSAA	IS	57.2	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFUnA	IS	59.5	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
d5-EtFOSAA	IS	50.3	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFDoA	IS	64.4	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFTeDA	IS	81.7	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
 Results reported to the DL.  
 When reported, 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**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	B7K0059-BS1	Column:	BEH C18
Project:	Fentress Offbase Wells						

Analyte	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	83.9	80.0	105	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFHxA	83.7	80.0	105	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFHpA	81.3	80.0	102	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFHxS	95.6	80.0	119	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFOA	88.5	80.0	111	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFOS	63.4	80.0	79.2	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFNA	60.2	80.0	75.3	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFDA	80.6	80.0	101	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
MeFOSAA	62.4	80.0	78.0	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFOxA	89.8	80.0	112	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
EtFOSAA	81.9	80.0	102	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFDoA	77.8	80.0	97.2	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFTTrDA	72.6	80.0	90.7	60-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFTeDA	81.9	80.0	102	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1

Labeled Standards	Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	103	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFHxA	IS	96.7	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C4-PFHpA	IS	102	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
18O2-PFHxS	IS	85.9	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFOA	IS	73.8	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C8-PFOS	IS	116	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C5-PFNA	IS	99.5	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFDA	IS	71.0	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
d3-MeFOSAA	IS	56.2	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFOxA	IS	60.3	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
d5-EtFOSAA	IS	80.4	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFDoA	IS	60.7	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFTeDA	IS	76.5	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1



**Sample ID: OF-MW20-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-01	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 09:50	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.10	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFHxA	ND	2.56	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFHpA	ND	0.694	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFHxS	ND	1.11	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFOA	ND	0.764	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFOS	ND	0.947	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFNA	ND	0.951	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFDA	ND	1.75	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
MeFOSAA	ND	1.94	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFUnA	ND	1.23	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
EtFOSAA	ND	1.61	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFDoA	ND	0.929	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFTeDA	ND	0.580	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFTeDA	ND	0.886	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	104	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFHxA	IS	90.5	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C4-PFHpA	IS	94.6	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
18O2-PFHxS	IS	108	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFOA	IS	89.6	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C8-PFOS	IS	101	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C5-PFNA	IS	80.5	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFDA	IS	67.8	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
d3-MeFOSAA	IS	76.7	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFUnA	IS	77.2	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
d5-EtFOSAA	IS	102	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFDoA	IS	62.8	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFTeDA	IS	92.6	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW20P-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-02	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 09:55	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.96	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFHxA	ND	2.39	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFHpA	ND	0.648	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFHxS	ND	1.04	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFOA	ND	0.713	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFOS	ND	0.884	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFNA	ND	0.887	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFDA	ND	1.63	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
MeFOSAA	ND	1.81	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFOxA	ND	1.15	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
EtFOSAA	ND	1.50	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFOxA	ND	0.868	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFTeDA	ND	0.541	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFTeDA	ND	0.827	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	92.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFHxA	IS	84.5	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C4-PFHpA	IS	83.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
18O2-PFHxS	IS	110	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFOA	IS	81.1	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C8-PFOS	IS	102	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C5-PFNA	IS	73.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFDA	IS	75.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
d3-MeFOSAA	IS	78.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFOxA	IS	80.3	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
d5-EtFOSAA	IS	66.5	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFOxA	IS	70.9	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFTeDA	IS	85.1	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW22-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-03	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 11:10	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	19.4	2.15	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFHxA	44.9	2.62	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFHpA	9.15	0.710	6.01	9.61	J	B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFHxS	408	1.14	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOA	126	0.782	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOS	829	0.969	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFNA	ND	0.973	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFDA	ND	1.79	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
MeFOSAA	ND	1.98	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOA	ND	1.26	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
EtFOSAA	ND	1.65	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOA	ND	0.951	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOA	ND	0.593	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOA	ND	0.907	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	102	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFHxA	IS	88.1	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C4-PFHpA	IS	87.1	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
18O2-PFHxS	IS	79.5	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFOA	IS	94.5	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C8-PFOS	IS	81.3	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C5-PFNA	IS	80.0	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFDA	IS	85.4	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
d3-MeFOSAA	IS	95.8	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFOA	IS	77.5	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
d5-EtFOSAA	IS	81.3	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFOA	IS	82.8	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFOA	IS	75.0	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW22D-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-04	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 12:00	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.99	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFHxA	ND	2.42	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFHpA	ND	0.655	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFHxS	14.7	1.05	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFOA	4.85	0.722	5.53	8.87	J	B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFOS	59.5	0.895	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFNA	ND	0.898	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFDA	ND	1.65	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
MeFOSAA	ND	1.83	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFUnA	ND	1.16	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
EtFOSAA	ND	1.52	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFDoA	ND	0.878	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFTrDA	ND	0.548	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFTeDA	ND	0.837	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	93.5	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFHxA	IS	91.1	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C4-PFHpA	IS	102	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
18O2-PFHxS	IS	88.9	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFOA	IS	92.7	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C8-PFOS	IS	67.7	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C5-PFNA	IS	90.2	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFDA	IS	87.1	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
d3-MeFOSAA	IS	91.3	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFUnA	IS	93.8	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
d5-EtFOSAA	IS	86.6	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFDoA	IS	87.4	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFTeDA	IS	89.3	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW19-1117**

**Modified EPA Method 537**

Client Data					Laboratory Data					
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-05	Column:	BEH C18			
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 13:15	Date Received:	08-Nov-17 10:07					

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	2.52	2.03	5.68	9.05	J	B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFHxA	ND	2.47	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFHpA	ND	0.669	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFHxS	13.7	1.07	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFOA	8.10	0.737	5.68	9.05	J	B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFOS	ND	0.913	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFNA	ND	0.917	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFDA	ND	1.69	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
MeFOSAA	ND	1.87	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFUnA	ND	1.19	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
EtFOSAA	ND	1.55	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFDoA	ND	0.896	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFTrDA	ND	0.559	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFTeDA	ND	0.854	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	104	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFHxA	IS	90.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C4-PFHpA	IS	93.5	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
18O2-PFHxS	IS	96.3	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFOA	IS	85.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C8-PFOS	IS	91.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C5-PFNA	IS	81.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFDA	IS	74.3	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
d3-MeFOSAA	IS	70.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFUnA	IS	73.2	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
d5-EtFOSAA	IS	79.5	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFDoA	IS	81.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFTeDA	IS	76.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW19-1117**

**Modified EPA Method 537**

Name:	CH2M Hill	Lab Sample:	B7K0059-MS1/B7K0059-MSD1	Source Lab Sample:	1701624-05
Project:	Fentress Offbase Wells	QC Batch:	B7K0059	Date Extracted:	10-Nov-17
Matrix:	Aqueous	Samp Size:	0.112/0.114 L	Column:	BEH C18

Analyte	Sample (ng/L)	MS (ng/L)	MS Spike Amt	MS % Rec	MS Quals	MSD (ng/L)	MSD Spike Amt	MSD % Rec	RPD	MSD Quals	%Rec Limits	RPD Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
PFBS	2.52	96.5	89.4	105		96.9	87.6	108	2.82		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFHxA	ND	109	89.4	122		94.9	87.6	108	12.2		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFHpA	ND	94.7	89.4	106		89.8	87.6	103	2.87		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFHxS	13.7	119	89.4	117		104	87.6	103	12.7		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFOA	8.10	109	89.4	113		101	87.6	106	6.39		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFOS	ND	89.7	89.4	100		75.6	87.6	86.3	14.7		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFNA	ND	84.0	89.4	94.0		102	87.6	117	21.8		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFDA	ND	119	89.4	133	H	104	87.6	119	11.1		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
MeFOSAA	ND	80.6	89.4	90.2		78.4	87.6	89.5	0.779		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFUnA	ND	85.2	89.4	95.3		78.8	87.6	90.0	5.72		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
EtFOSAA	ND	97.6	89.4	109		90.1	87.6	103	5.66		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFDaA	ND	75.9	89.4	84.8		89.6	87.6	102	18.4		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFTTrDA	ND	73.1	89.4	81.7		107	87.6	122	39.6	H	60-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFTeDA	ND	91.7	89.4	103		99.8	87.6	114	10.1		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1

Labeled Standards	Type	MS % Rec	MS Quals	MSD % Rec	MSD Quals	Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
13C3-PFBS	IS	109		113		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFHxA	IS	94.8		101		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C4-PFHpA	IS	99.1		97.6		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
18O2-PFHxS	IS	100		94.9		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFOA	IS	93.4		93.8		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C8-PFOS	IS	84.1		84.0		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C5-PFNA	IS	77.0		67.9		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFDA	IS	62.0		85.5		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
d3-MeFOSAA	IS	71.2		70.5		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFUnA	IS	70.9		78.1		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
d5-EtFOSAA	IS	91.5		76.5		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFDaA	IS	94.0		68.3		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFTeDA	IS	105		88.3		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1

**Sample ID: OF-MW19D-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-06	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 13:45	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.04	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFHxA	ND	2.48	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFHpA	ND	0.673	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFHxS	ND	1.08	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFOA	ND	0.741	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFOS	ND	0.919	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFNA	ND	0.922	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFDA	ND	1.70	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
MeFOSAA	ND	1.88	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PfUnA	ND	1.20	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
EtFOSAA	ND	1.56	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFDoA	ND	0.901	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFTrDA	ND	0.562	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFTeDA	ND	0.859	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	91.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFHxA	IS	94.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C4-PFHpA	IS	88.2	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
18O2-PFHxS	IS	88.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFOA	IS	87.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C8-PFOS	IS	80.9	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C5-PFNA	IS	73.0	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFDA	IS	80.2	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
d3-MeFOSAA	IS	81.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFUnA	IS	68.3	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
d5-EtFOSAA	IS	66.5	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFDoA	IS	66.9	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFTeDA	IS	90.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW21-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-07	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 14:55	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	40.0	2.00	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFHxA	96.1	2.44	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFHpA	15.9	0.660	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFHxS	1370	1.06	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	243	0.727	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOS	ND	0.901	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFNA	1.09	0.905	5.58	8.94	J	B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFDA	ND	1.66	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
MeFOSAA	ND	1.84	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	ND	1.17	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
EtFOSAA	ND	1.53	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	ND	0.885	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	ND	0.552	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	ND	0.843	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	97.3	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFHxA	IS	99.3	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C4-PFHpA	IS	99.7	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
18O2-PFHxS	IS	77.9	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFOA	IS	81.6	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C8-PFOS	IS	92.7	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C5-PFNA	IS	74.8	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFDA	IS	78.6	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
d3-MeFOSAA	IS	76.3	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFOA	IS	70.7	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
d5-EtFOSAA	IS	55.4	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFOA	IS	64.2	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFOA	IS	91.9	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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



**Sample ID: OF-MW33-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-08	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 08:45	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.18	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFHxA	ND	2.65	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFHpA	ND	0.720	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFHxS	ND	1.15	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	0.793	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOS	ND	0.983	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFNA	ND	0.986	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFDA	ND	1.81	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
MeFOSAA	ND	2.01	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	1.28	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
EtFOSAA	ND	1.67	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	0.964	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	0.602	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	0.919	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	91.9	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFHxA	IS	99.4	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C4-PFHpA	IS	96.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
18O2-PFHxS	IS	84.9	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFOA	IS	87.0	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C8-PFOS	IS	106	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C5-PFNA	IS	89.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFDA	IS	85.3	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
d3-MeFOSAA	IS	90.4	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFOA	IS	73.8	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
d5-EtFOSAA	IS	84.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFOA	IS	89.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFOA	IS	98.1	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW33D-1117** **Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-09	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 09:20	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.03	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFHxA	ND	2.47	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFHpA	ND	0.669	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFHxS	ND	1.07	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFOA	ND	0.737	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFOS	ND	0.914	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFNA	ND	0.917	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFDA	ND	1.69	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
MeFOSAA	ND	1.87	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFOA	ND	1.19	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
EtFOSAA	ND	1.55	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFOA	ND	0.897	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFOA	ND	0.559	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFOA	ND	0.855	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	95.3	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFHxA	IS	92.2	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C4-PFHpA	IS	86.8	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
18O2-PFHxS	IS	83.6	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFOA	IS	87.0	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C8-PFOS	IS	85.4	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C5-PFNA	IS	94.4	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFDA	IS	92.9	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
d3-MeFOSAA	IS	65.7	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFOA	IS	88.0	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
d5-EtFOSAA	IS	80.5	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFOA	IS	86.0	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFOA	IS	92.2	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-EB110717**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	QC Water	Lab Sample:	1701624-10	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 09:45	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.96	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFHxA	ND	2.38	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFHpA	ND	0.646	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFHxS	ND	1.03	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOA	ND	0.711	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOS	ND	0.882	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFNA	ND	0.885	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFDA	ND	1.63	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
MeFOSAA	ND	1.80	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOA	ND	1.15	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
EtFOSAA	ND	1.50	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFDaA	ND	0.865	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFTDA	ND	0.540	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFTeDA	ND	0.825	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	108	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFHxA	IS	103	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C4-PFHpA	IS	105	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
18O2-PFHxS	IS	85.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFOA	IS	99.2	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C8-PFOS	IS	92.9	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C5-PFNA	IS	86.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFDA	IS	85.2	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
d3-MeFOSAA	IS	73.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFOA	IS	79.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
d5-EtFOSAA	IS	84.7	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFDaA	IS	87.2	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFTeDA	IS	92.9	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-FB110717**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	QC Water	Lab Sample:	1701624-11	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 09:50	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.96	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFHxA	ND	2.38	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFHpA	ND	0.646	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFHxS	ND	1.03	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFOA	ND	0.711	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFOS	ND	0.882	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFNA	ND	0.885	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFDA	ND	1.63	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
MeFOSAA	ND	1.80	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFUnA	ND	1.15	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
EtFOSAA	ND	1.50	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFDoA	ND	0.865	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFTeDA	ND	0.540	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFTeDA	ND	0.825	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	99.3	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFHxA	IS	99.0	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C4-PFHpA	IS	96.4	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
18O2-PFHxS	IS	102	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFOA	IS	92.3	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C8-PFOS	IS	106	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C5-PFNA	IS	97.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFDA	IS	70.0	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
d3-MeFOSAA	IS	57.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFUnA	IS	67.1	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
d5-EtFOSAA	IS	69.7	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFDoA	IS	71.4	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFTeDA	IS	72.0	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: IDW-AQ01-110717**

**Modified EPA Method 537**

Client Data					Laboratory Data					
Name:	CH2M Hill	Matrix:	Groundwater		Lab Sample:	1701624-12	Column:	BEH C18		
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 10:00		Date Received:	08-Nov-17 10:07				

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.03	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFHxA	ND	2.47	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFHpA	ND	0.670	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFHxS	ND	1.07	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFOA	ND	0.738	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFOS	0.990	0.914	5.68	9.07	J	B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFNA	ND	0.918	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFDA	ND	1.69	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
MeFOSAA	ND	1.87	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFUnA	ND	1.19	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
EtFOSAA	ND	1.55	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFDoA	ND	0.897	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFTrDA	ND	0.560	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFTeDA	ND	0.856	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	83.6	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFHxA	IS	89.1	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C4-PFHpA	IS	93.8	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
18O2-PFHxS	IS	86.9	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFOA	IS	97.7	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C8-PFOS	IS	115	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C5-PFNA	IS	86.2	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFDA	IS	79.7	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
d3-MeFOSAA	IS	75.4	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFUnA	IS	78.5	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
d5-EtFOSAA	IS	76.5	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFDoA	IS	69.1	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFTeDA	IS	87.4	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: IDW-AQ02-110717**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-13	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 10:25	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	9.93	2.16	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFHxA	17.8	2.64	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFHpA	3.88	0.715	6.07	9.67	J	B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFHxS	138	1.15	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOA	59.4	0.787	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOS	390	0.976	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFNA	ND	0.979	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFDA	ND	1.80	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
MeFOSAA	ND	2.00	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOA	ND	1.27	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
EtFOSAA	ND	1.66	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOA	ND	0.958	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOA	ND	0.597	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOA	ND	0.913	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	101	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFHxA	IS	97.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C4-PFHpA	IS	105	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
18O2-PFHxS	IS	96.5	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFOA	IS	104	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C8-PFOS	IS	90.0	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C5-PFNA	IS	86.8	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFDA	IS	90.7	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
d3-MeFOSAA	IS	75.5	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFOA	IS	100	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
d5-EtFOSAA	IS	69.3	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFOA	IS	77.8	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFOA	IS	87.3	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

Sample ID: IDW-AQ03-110717

Modified EPA Method 537

Client Data					Laboratory Data					
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-14	Column:	BEH C18			
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 10:50	Date Received:	08-Nov-17 10:07					

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	15.7	2.07	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFHxA	34.6	2.53	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFHpA	6.79	0.685	5.79	9.27	J	B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFHxS	353	1.10	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFOA	93.9	0.754	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFOS	490	0.935	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFNA	ND	0.939	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFDA	ND	1.73	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
MeFOSAA	ND	1.91	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFOA	ND	1.22	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
EtFOSAA	ND	1.59	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFOA	ND	0.918	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFOA	ND	0.573	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFOA	ND	0.875	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	91.4	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFHxA	IS	98.0	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C4-PFHpA	IS	110	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
18O2-PFHxS	IS	89.3	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFOA	IS	101	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C8-PFOS	IS	83.2	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C5-PFNA	IS	82.0	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFDA	IS	66.3	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
d3-MeFOSAA	IS	74.5	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFOA	IS	75.7	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
d5-EtFOSAA	IS	75.3	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFOA	IS	91.3	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFOA	IS	88.7	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

## **DATA QUALIFIERS & ABBREVIATIONS**

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

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



## CERTIFICATIONS

<b>Accrediting Authority</b>	<b>Certificate Number</b>
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
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



CTO - WEO1

# CHAIN OF CUSTODY

**For Laboratory Use Only**  
 Work Order #: 1701624 Temp: 0.2 °C  
 Storage ID: WR-2 Storage Secured: Yes  No

Project ID: Fentress Offbase Wells PO#: 10006-7-105444 Sampler: Andrew Winbrenner  
 (name)

TAT Standard:  21 days  
 (check one): Rush (surcharge may apply)  
 14 days  7 days Specify: \_\_\_\_\_

Invoice to: Name Tiffany Hill Company CH2M Address 5701 Cleveland Street, Suite 200 City Virginia Beach State VA Ph# 541-768-3109 Fax# \_\_\_\_\_

Relinquished by (printed name and signature) Andrew Winbrenner Date 11/7/17 Time 1700 Received by (printed name and signature) Marissa Sparks Date 11/08/17 Time 1011  
 Relinquished by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

SHIP TO: Vista Analytical Laboratory  
 1104 Windfield Way  
 El Dorado Hills, CA 95762  
 (916) 673-1520 \* Fax (916) 673-0106  
 ATTN: Martha Maier  
 Method of Shipment: Priority Overnight  
 Tracking No.: \_\_\_\_\_

Sample ID	Date	Time	Location/Sample Description	Add Analysis(es) Requested											Comments
				Quantity	Type	Matrix	PFOM/PFOS	UCMR3/PFAS List:6	537 List: 14	Full List of 26	Other, Please List Below	Mod. EPA Method 537	EPA Method 537(DW only)	PFDA/PFOS	

OF-MW20-1117	11/6/17	0950	GW	2	P	AQ					X									
OF-MW20P-1117	11/6/17	0955	↓	2	P	AQ					X								duplicate	
OF-MW22-1117	11/6/17	1110			2	P	AQ					X								
OF-MW22D-1117	11/6/17	1200			2	P	AQ					X								
OF-MW19D-1117	11/6/17	1315			2	P	AQ					X								
OF-MW19-1117-MS	11/6/17	1315			2	P	AQ					X								MS
OF-MW19-1117-SD	11/6/17	1315			2	P	AQ					X								MSD
OF-MW19D-1117	11/6/17	1345			2	P	AQ					X								
OF-MW21-1117	11/6/17	1455			2	P	AQ					X								

Special Instructions/Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SEND DOCUMENTATION AND RESULTS TO:

Name: Tiffany Hill  
 Company: CH2M  
 Address: 5701 Cleveland St Suite 200  
 City: Virginia Beach State: VA Zip: 23462  
 Phone: 541-768-3109 Fax: \_\_\_\_\_  
 Email: Tiffany.Hill@ch2m.com

Container Types: P= HDPE, PJ= HDPE Jar  
 O = Other: \_\_\_\_\_  
 Bottle Preservation Type: T = Thiosulfate, TZ = Trizma: \_\_\_\_\_  
 Matrix Types: AQ = Aqueous, DW = Drinking Water, EF = Effluent, PP = Pulp/Paper, SD = Sediment, SL = Sludge, SO = Soil, WW = Wastewater, B = Blood/Serum, O = Other: \_\_\_\_\_

CTO-WE01



# CHAIN OF CUSTODY

**For Laboratory Use Only**  
 Work Order #: 1701624 Temp: 0.2 °C  
 Storage ID: WR-2 Storage Secured: Yes  No

Project ID: Fantress Offbase Wells PO#: 10006-7-105444 Sampler: Andrew Winebrunn  
 (name)

TAT (check one):  21 days  
 Rush (surcharge may apply)  
 14 days  7 days Specify: \_\_\_\_\_

Invoice to: Name Tiffany Hill Company CH2M Address 5701 Cleveland St, Suite 200 City Virginia Beach State VA Ph# 541-768-3109 Fax# \_\_\_\_\_

Relinquished by (printed name and signature) Andrew Winebrunn Date 11/7/17 Time 1700 Received by (printed name and signature) Marissa Sparks Date 11/08/17 Time 1011

Relinquished by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

SHIP TO: Vista Analytical Laboratory  
 1104 Windfield Way  
 El Dorado Hills, CA 95762  
 (916) 673-1520 \* Fax (916) 673-0106  
 ATTN: Martha Marer

Method of Shipment: Priority Overnight  
 Tracking No.: \_\_\_\_\_

Sample ID	Date	Time	Location/Sample Description	Add Analysis(es) Requested										Comments			
				Quantity	Type	Matrix	PFOA/PFOS	UCMR3 PFAS List 6	537 List 14	Full List of 26	Other: Please List Below	Mod EPA Method 837	EPA Method 537(DW only)				
OF-MW33-1117	11/7/17	0845	GW	2	P	AQ					X						
OF-MW33D-1117	11/7/17	0920	GW	2	P	AQ					X						
OF-EB110717	11/7/17	0945	QC	2	P	AQ					X						Equipment blank - peri pump
OF-FB110717	11/7/17	0950	QC	2	P	AQ					X						Field blank
OF-10W-AQ01-110717	11/7/17	1000	GW	2	P	AQ					X						10W-MW33S/D
10W-AQ02-110717	11/7/17	1025	GW	2	P	AQ					X						10W-MW22S/D
10W-AQ03-110717	11/7/17	1050	GW	2	P	AQ					X						10W-MW19S/D, MW20, MW21

Special Instructions/Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SEND DOCUMENTATION AND RESULTS TO:

Name: Tiffany Hill  
 Company: CH2M  
 Address: 5701 Cleveland St, Suite 200  
 City: Virginia Beach State: VA Zip: 23462  
 Phone: 541-768-3109 Fax: \_\_\_\_\_  
 Email: Tiffany.Hill@ch2m.com

Container Types: P= HDPE, PJ= HDPE Jar  
 O = Other: \_\_\_\_\_

Bottle Preservation Type: T = Thiosulfate,  
 TZ = Trizma: \_\_\_\_\_

Matrix Types: AQ = Aqueous, DW = Drinking Water, EF = Effluent, PP = Pulp/Paper, SD = Sediment,  
 SL = Sludge, SO = Soil, WW = Wastewater, B = Blood/Serum, O = Other: \_\_\_\_\_

### Sample Log-in Checklist

Vista Work Order #: 1701624 TAT Std

Samples Arrival:	Date/Time 11/08/17 1007	Initials: WWS	Location: WR-2
Logged In:	Date/Time 11/08/17 1313	Initials: WWS	Location: WR-2 Shelf/Rack: E5
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> On Trac
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
Temp °C: 0.1 (uncorrected)	Time: 1011	Thermometer ID: IR-1	
Temp °C: 0.2 (corrected)	Probe used: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

	YES	NO	NA
Adequate Sample Volume Received?	<input checked="" type="checkbox"/>		
Holding Time Acceptable?	<input checked="" type="checkbox"/>		
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>		
Shipping Custody Seals Intact?	<input checked="" type="checkbox"/>		
Shipping Documentation Present?	<input checked="" type="checkbox"/>		
Airbill	Trk # 7706 5076 1523		
Sample Container Intact?	<input checked="" type="checkbox"/>		
Sample Custody Seals Intact?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>		
COC Anomaly/Sample Acceptance Form completed?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			<input checked="" type="checkbox"/>
Preservation Documented:	<input type="checkbox"/> Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	<input type="checkbox"/> Trizma	<input checked="" type="checkbox"/> None
Shipping Container	<input checked="" type="checkbox"/> Vista	<input type="checkbox"/> Client	<input checked="" type="checkbox"/> Retain

Comments: Sample label ID COC ID  
OF-MW190-1117 OF-MW190-1117

November 21, 2017

**Vista Work Order No. 1701624**

Ms. Tiffany Hill  
CH2M Hill  
1100 NE Circle Blvd. Suite 300  
Corvallis, OR 97330

Dear Ms. Hill,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on November 08, 2017. This sample set was analyzed on a standard turn-around time, under your Project Name 'Fentress Offbase Wells'.

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](mailto:mmaier@vista-analytical.com).

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

Sincerely,



*Martha Maier for*

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. 1701624**

### **Case Narrative**

#### **Sample Condition on Receipt:**

Fourteen 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. As requested, samples 12, 13, and 14 were updated to begin with "IDW" instead of "10W".

#### **Analytical Notes:**

##### **Modified EPA Method 537**

Samples "OF-MW33-1117", "IDW-AQ01-110717", "IDW-AQ02-110717" and "IDW-AQ03-110717" contained particulate and were centrifuged prior to extraction.

The samples were extracted and analyzed for a selected list of 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 extract of sample "OF-MW22D-1117" was re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The area criteria passed for the second injection; therefore, the results from the re-injection have been reported.

The extracts of samples "IDW-AQ01-110717", "IDW-AQ02-110717" and "IDW-AQ03-110717" were re-injected because the original calibration did not pass all acceptance criteria.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

As requested, an MS/MSD was performed on sample "OF-MW19-1117". The MS/MSD recoveries and/or RPDs were out of the criteria for PFDA and PFTeDA.



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# Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701624-01	OF-MW20-1117	06-Nov-17 09:50	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-02	OF-MW20P-1117	06-Nov-17 09:55	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-03	OF-MW22-1117	06-Nov-17 11:10	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-04	OF-MW22D-1117	06-Nov-17 12:00	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-05	OF-MW19-1117	MS/MSD06-Nov-17 13:15	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-06	OF-MW19D-1117	06-Nov-17 13:45	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-07	OF-MW21-1117	06-Nov-17 14:55	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-08	OF-MW33-1117	07-Nov-17 08:45	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-09	OF-MW33D-1117	07-Nov-17 09:20	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-10	OF-EB110717	07-Nov-17 09:45	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-11	OF-FB110717	07-Nov-17 09:50	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-12	IDW-AQ01-110717	07-Nov-17 10:00	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-13	IDW-AQ02-110717	07-Nov-17 10:25	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1701624-14	IDW-AQ03-110717	07-Nov-17 10:50	08-Nov-17 10:07	HDPE Bottle, 125 mL HDPE Bottle, 125 mL

## **ANALYTICAL RESULTS**

**Sample ID: Method Blank** **Modified EPA Method 537**

<b>Client Data</b>					<b>Laboratory Data</b>						
Name:	CH2M Hill	Matrix:	Aqueous		Lab Sample:	B7K0059-BLK1	Column:	BEH C18			
Project:	Fentress Offbase Wells										

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.79	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFHxA	ND	2.18	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFHpA	ND	0.591	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFHxS	ND	0.947	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFOA	ND	0.651	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFOS	ND	0.807	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFNA	ND	0.810	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFDA	ND	1.49	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
MeFOSAA	ND	1.65	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFUnA	ND	1.05	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
EtFOSAA	ND	1.37	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFDoA	ND	0.792	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFTrDA	ND	0.494	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
PFTeDA	ND	0.755	5.00	8.00		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	102	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFHxA	IS	90.7	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C4-PFHpA	IS	94.5	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
18O2-PFHxS	IS	97.1	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFOA	IS	95.2	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C8-PFOS	IS	87.5	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C5-PFNA	IS	81.1	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFDA	IS	56.4	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
d3-MeFOSAA	IS	57.2	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFUnA	IS	59.5	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
d5-EtFOSAA	IS	50.3	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFDoA	IS	64.4	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1
13C2-PFTeDA	IS	81.7	50 - 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 21:21	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
 Results reported to the DL.  
 When reported, 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**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	B7K0059-BS1	Column:	BEH C18
Project:	Fentress Offbase Wells						

Analyte	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	83.9	80.0	105	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFHxA	83.7	80.0	105	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFHpA	81.3	80.0	102	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFHxS	95.6	80.0	119	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFOA	88.5	80.0	111	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFOS	63.4	80.0	79.2	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFNA	60.2	80.0	75.3	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFDA	80.6	80.0	101	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
MeFOSAA	62.4	80.0	78.0	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFOA	89.8	80.0	112	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
EtFOSAA	81.9	80.0	102	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFDaA	77.8	80.0	97.2	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFTrDA	72.6	80.0	90.7	60-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
PFTeDA	81.9	80.0	102	70-130		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1

Labeled Standards	Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	103	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFHxA	IS	96.7	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C4-PFHpA	IS	102	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
18O2-PFHxS	IS	85.9	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFOA	IS	73.8	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C8-PFOS	IS	116	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C5-PFNA	IS	99.5	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFDA	IS	71.0	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
d3-MeFOSAA	IS	56.2	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFOA	IS	60.3	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
d5-EtFOSAA	IS	80.4	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFDaA	IS	60.7	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1
13C2-PFTeDA	IS	76.5	50- 150		B7K0059	10-Nov-17	0.125 L	16-Nov-17 20:59	1

**Sample ID: OF-MW20-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-01	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 09:50	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.10	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFHxA	ND	2.56	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFHpA	ND	0.694	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFHxS	ND	1.11	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFOA	ND	0.764	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFOS	ND	0.947	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFNA	ND	0.951	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFDA	ND	1.75	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
MeFOSAA	ND	1.94	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFOA	ND	1.23	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
EtFOSAA	ND	1.61	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFOA	ND	0.929	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFOA	ND	0.580	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFOA	ND	0.886	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	104	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFHxA	IS	90.5	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C4-PFHpA	IS	94.6	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
18O2-PFHxS	IS	108	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFOA	IS	89.6	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C8-PFOS	IS	101	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C5-PFNA	IS	80.5	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFDA	IS	67.8	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
d3-MeFOSAA	IS	76.7	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFOA	IS	77.2	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
d5-EtFOSAA	IS	102	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFOA	IS	62.8	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
13C2-PFOA	IS	92.6	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW20P-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-02	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 09:55	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.96	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFHxA	ND	2.39	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFHpA	ND	0.648	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFHxS	ND	1.04	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFOA	ND	0.713	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFOS	ND	0.884	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFNA	ND	0.887	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFDA	ND	1.63	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
MeFOSAA	ND	1.81	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFOxA	ND	1.15	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
EtFOSAA	ND	1.50	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFOxA	ND	0.868	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFTeDA	ND	0.541	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFTeDA	ND	0.827	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	92.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFHxA	IS	84.5	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C4-PFHpA	IS	83.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
18O2-PFHxS	IS	110	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFOA	IS	81.1	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C8-PFOS	IS	102	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C5-PFNA	IS	73.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFDA	IS	75.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
d3-MeFOSAA	IS	78.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFOxA	IS	80.3	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
d5-EtFOSAA	IS	66.5	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFOxA	IS	70.9	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
13C2-PFTeDA	IS	85.1	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW22-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-03	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 11:10	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	19.4	2.15	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFHxA	44.9	2.62	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFHpA	9.15	0.710	6.01	9.61	J	B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFHxS	408	1.14	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOA	126	0.782	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOS	829	0.969	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFNA	ND	0.973	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFDA	ND	1.79	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
MeFOSAA	ND	1.98	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOA	ND	1.26	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
EtFOSAA	ND	1.65	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOA	ND	0.951	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOA	ND	0.593	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
PFOA	ND	0.907	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	102	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFHxA	IS	88.1	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C4-PFHpA	IS	87.1	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
18O2-PFHxS	IS	79.5	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFOA	IS	94.5	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C8-PFOS	IS	81.3	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C5-PFNA	IS	80.0	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFDA	IS	85.4	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
d3-MeFOSAA	IS	95.8	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFOA	IS	77.5	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
d5-EtFOSAA	IS	81.3	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFOA	IS	82.8	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1
13C2-PFOA	IS	75.0	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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



**Sample ID: OF-MW22D-1117**

**Modified EPA Method 537**

Client Data					Laboratory Data					
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-04	Column:	BEH C18			
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 12:00	Date Received:	08-Nov-17 10:07					

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.99	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFHxA	ND	2.42	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFHpA	ND	0.655	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFHxS	14.7	1.05	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFOA	4.85	0.722	5.53	8.87	J	B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFOS	59.5	0.895	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFNA	ND	0.898	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFDA	ND	1.65	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
MeFOSAA	ND	1.83	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFOA	ND	1.16	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
EtFOSAA	ND	1.52	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFOA	ND	0.878	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFOA	ND	0.548	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFOA	ND	0.837	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	93.5	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFHxA	IS	91.1	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C4-PFHpA	IS	102	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
18O2-PFHxS	IS	88.9	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFOA	IS	92.7	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C8-PFOS	IS	67.7	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C5-PFNA	IS	90.2	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFDA	IS	87.1	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
d3-MeFOSAA	IS	91.3	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFOA	IS	93.8	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
d5-EtFOSAA	IS	86.6	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFOA	IS	87.4	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
13C2-PFOA	IS	89.3	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW19-1117**

**Modified EPA Method 537**

Client Data					Laboratory Data					
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-05	Column:	BEH C18			
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 13:15	Date Received:	08-Nov-17 10:07					

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	2.52	2.03	5.68	9.05	J	B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFHxA	ND	2.47	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFHpA	ND	0.669	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFHxS	13.7	1.07	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFOA	8.10	0.737	5.68	9.05	J	B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFOS	ND	0.913	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFNA	ND	0.917	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFDA	ND	1.69	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
MeFOSAA	ND	1.87	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFUnA	ND	1.19	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
EtFOSAA	ND	1.55	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFDoA	ND	0.896	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFTeDA	ND	0.559	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
PFTeDA	ND	0.854	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	104	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFHxA	IS	90.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C4-PFHpA	IS	93.5	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
18O2-PFHxS	IS	96.3	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFOA	IS	85.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C8-PFOS	IS	91.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C5-PFNA	IS	81.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFDA	IS	74.3	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
d3-MeFOSAA	IS	70.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFUnA	IS	73.2	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
d5-EtFOSAA	IS	79.5	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFDoA	IS	81.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1
13C2-PFTeDA	IS	76.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW19-1117**

**Modified EPA Method 537**

Name:	CH2M Hill	Lab Sample:	B7K0059-MS1/B7K0059-MSD1	Source Lab Sample:	1701624-05
Project:	Fentress Offbase Wells	QC Batch:	B7K0059	Date Extracted:	10-Nov-17
Matrix:	Aqueous	Samp Size:	0.112/0.114 L	Column:	BEH C18

Analyte	Sample (ng/L)	MS (ng/L)	MS Spike Amt	MS % Rec	MS Quals	MSD (ng/L)	MSD Spike Amt	MSD % Rec	RPD	MSD Quals	%Rec Limits	RPD Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
PFBS	2.52	96.5	89.4	105		96.9	87.6	108	2.82		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFHxA	ND	109	89.4	122		94.9	87.6	108	12.2		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFHpA	ND	94.7	89.4	106		89.8	87.6	103	2.87		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFHxS	13.7	119	89.4	117		104	87.6	103	12.7		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFOA	8.10	109	89.4	113		101	87.6	106	6.39		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFOS	ND	89.7	89.4	100		75.6	87.6	86.3	14.7		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFNA	ND	84.0	89.4	94.0		102	87.6	117	21.8		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFDA	ND	119	89.4	133	H	104	87.6	119	11.1		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
MeFOSAA	ND	80.6	89.4	90.2		78.4	87.6	89.5	0.779		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFUnA	ND	85.2	89.4	95.3		78.8	87.6	90.0	5.72		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
EtFOSAA	ND	97.6	89.4	109		90.1	87.6	103	5.66		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFDaA	ND	75.9	89.4	84.8		89.6	87.6	102	18.4		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFTTrDA	ND	73.1	89.4	81.7		107	87.6	122	39.6	H	60-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1
PFTeDA	ND	91.7	89.4	103		99.8	87.6	114	10.1		70-130	30	16-Nov-17 21:33	1	16-Nov-17 21:44	1

Labeled Standards	Type	MS % Rec	MS Quals	MSD % Rec	MSD Quals	Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
13C3-PFBS	IS	109		113		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFHxA	IS	94.8		101		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C4-PFHpA	IS	99.1		97.6		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
18O2-PFHxS	IS	100		94.9		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFOA	IS	93.4		93.8		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C8-PFOS	IS	84.1		84.0		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C5-PFNA	IS	77.0		67.9		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFDA	IS	62.0		85.5		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
d3-MeFOSAA	IS	71.2		70.5		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFUnA	IS	70.9		78.1		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
d5-EtFOSAA	IS	91.5		76.5		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFDaA	IS	94.0		68.3		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1
13C2-PFTeDA	IS	105		88.3		50-150	16-Nov-17 21:33	1	16-Nov-17 21:44	1

**Sample ID: OF-MW19D-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-06	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 13:45	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.04	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFHxA	ND	2.48	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFHpA	ND	0.673	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFHxS	ND	1.08	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFOA	ND	0.741	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFOS	ND	0.919	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFNA	ND	0.922	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFDA	ND	1.70	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
MeFOSAA	ND	1.88	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFUnA	ND	1.20	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
EtFOSAA	ND	1.56	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFDoA	ND	0.901	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFTrDA	ND	0.562	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
PFTeDA	ND	0.859	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	91.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFHxA	IS	94.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C4-PFHpA	IS	88.2	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
18O2-PFHxS	IS	88.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFOA	IS	87.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C8-PFOS	IS	80.9	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C5-PFNA	IS	73.0	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFDA	IS	80.2	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
d3-MeFOSAA	IS	81.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFUnA	IS	68.3	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
d5-EtFOSAA	IS	66.5	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFDoA	IS	66.9	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1
13C2-PFTeDA	IS	90.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW21-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-07	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 14:55	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	40.0	2.00	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFHxA	96.1	2.44	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFHpA	15.9	0.660	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFHxS	1370	1.06	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	243	0.727	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOS	ND	0.901	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFNA	1.09	0.905	5.58	8.94	J	B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFDA	ND	1.66	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
MeFOSAA	ND	1.84	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	ND	1.17	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
EtFOSAA	ND	1.53	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	ND	0.885	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	ND	0.552	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	ND	0.843	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	97.3	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFHxA	IS	99.3	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C4-PFHpA	IS	99.7	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
18O2-PFHxS	IS	77.9	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFOA	IS	81.6	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C8-PFOS	IS	92.7	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C5-PFNA	IS	74.8	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFDA	IS	78.6	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
d3-MeFOSAA	IS	76.3	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFOA	IS	70.7	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
d5-EtFOSAA	IS	55.4	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFOA	IS	64.2	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFOA	IS	91.9	50 - 150		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW33-1117**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-08	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 08:45	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.18	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFHxA	ND	2.65	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFHpA	ND	0.720	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFHxS	ND	1.15	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	0.793	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOS	ND	0.983	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFNA	ND	0.986	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFDA	ND	1.81	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
MeFOSAA	ND	2.01	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	1.28	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
EtFOSAA	ND	1.67	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	0.964	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	0.602	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	0.919	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	91.9	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFHxA	IS	99.4	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C4-PFHpA	IS	96.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
18O2-PFHxS	IS	84.9	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFOA	IS	87.0	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C8-PFOS	IS	106	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C5-PFNA	IS	89.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFDA	IS	85.3	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
d3-MeFOSAA	IS	90.4	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFOA	IS	73.8	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
d5-EtFOSAA	IS	84.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFOA	IS	89.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
13C2-PFOA	IS	98.1	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-MW33D-1117**

**Modified EPA Method 537**

Client Data					Laboratory Data					
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-09	Column:	BEH C18			
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 09:20	Date Received:	08-Nov-17 10:07					

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.03	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFHxA	ND	2.47	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFHpA	ND	0.669	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFHxS	ND	1.07	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFOA	ND	0.737	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFOS	ND	0.914	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFNA	ND	0.917	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFDA	ND	1.69	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
MeFOSAA	ND	1.87	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFUnA	ND	1.19	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
EtFOSAA	ND	1.55	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFDoA	ND	0.897	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFTeDA	ND	0.559	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFTeDA	ND	0.855	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	95.3	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFHxA	IS	92.2	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C4-PFHpA	IS	86.8	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
18O2-PFHxS	IS	83.6	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFOA	IS	87.0	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C8-PFOS	IS	85.4	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C5-PFNA	IS	94.4	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFDA	IS	92.9	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
d3-MeFOSAA	IS	65.7	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFUnA	IS	88.0	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
d5-EtFOSAA	IS	80.5	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFDoA	IS	86.0	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
13C2-PFTeDA	IS	92.2	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: OF-EB110717**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	QC Water	Lab Sample:	1701624-10	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 09:45	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.96	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFHxA	ND	2.38	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFHpA	ND	0.646	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFHxS	ND	1.03	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOA	ND	0.711	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOS	ND	0.882	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFNA	ND	0.885	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFDA	ND	1.63	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
MeFOSAA	ND	1.80	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOA	ND	1.15	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
EtFOSAA	ND	1.50	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOA	ND	0.865	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOA	ND	0.540	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOA	ND	0.825	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	108	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFHxA	IS	103	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C4-PFHpA	IS	105	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
18O2-PFHxS	IS	85.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFOA	IS	99.2	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C8-PFOS	IS	92.9	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C5-PFNA	IS	86.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFDA	IS	85.2	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
d3-MeFOSAA	IS	73.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFOA	IS	79.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
d5-EtFOSAA	IS	84.7	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFOA	IS	87.2	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
13C2-PFOA	IS	92.9	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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



**Sample ID: OF-FB110717**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	QC Water	Lab Sample:	1701624-11	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 09:50	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.96	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFHxA	ND	2.38	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFHpA	ND	0.646	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFHxS	ND	1.03	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFOA	ND	0.711	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFOS	ND	0.882	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFNA	ND	0.885	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFDA	ND	1.63	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
MeFOSAA	ND	1.80	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFOA	ND	1.15	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
EtFOSAA	ND	1.50	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFOA	ND	0.865	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFOA	ND	0.540	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFOA	ND	0.825	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	99.3	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFHxA	IS	99.0	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C4-PFHpA	IS	96.4	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
18O2-PFHxS	IS	102	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFOA	IS	92.3	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C8-PFOS	IS	106	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C5-PFNA	IS	97.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFDA	IS	70.0	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
d3-MeFOSAA	IS	57.5	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFOA	IS	67.1	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
d5-EtFOSAA	IS	69.7	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFOA	IS	71.4	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFOA	IS	72.0	50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: IDW-AQ01-110717**

**Modified EPA Method 537**

Client Data					Laboratory Data					
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-12	Column:	BEH C18			
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 10:00	Date Received:	08-Nov-17 10:07					

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.03	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFHxA	ND	2.47	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFHpA	ND	0.670	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFHxS	ND	1.07	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFOA	ND	0.738	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFOS	0.990	0.914	5.68	9.07	J	B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFNA	ND	0.918	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFDA	ND	1.69	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
MeFOSAA	ND	1.87	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFOA	ND	1.19	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
EtFOSAA	ND	1.55	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFOA	ND	0.897	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFOA	ND	0.560	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
PFOA	ND	0.856	5.68	9.07		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	83.6	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFHxA	IS	89.1	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C4-PFHpA	IS	93.8	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
18O2-PFHxS	IS	86.9	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFOA	IS	97.7	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C8-PFOS	IS	115	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C5-PFNA	IS	86.2	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFDA	IS	79.7	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
d3-MeFOSAA	IS	75.4	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFOA	IS	78.5	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
d5-EtFOSAA	IS	76.5	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFOA	IS	69.1	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1
13C2-PFOA	IS	87.4	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 21:46	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: IDW-AQ02-110717**

**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-13	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 10:25	Date Received:	08-Nov-17 10:07		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	9.93	2.16	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFHxA	17.8	2.64	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFHpA	3.88	0.715	6.07	9.67	J	B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFHxS	138	1.15	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOA	59.4	0.787	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOS	390	0.976	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFNA	ND	0.979	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFDA	ND	1.80	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
MeFOSAA	ND	2.00	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOA	ND	1.27	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
EtFOSAA	ND	1.66	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOA	ND	0.958	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOA	ND	0.597	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
PFOA	ND	0.913	6.07	9.67		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	101	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFHxA	IS	97.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C4-PFHpA	IS	105	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
18O2-PFHxS	IS	96.5	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFOA	IS	104	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C8-PFOS	IS	90.0	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C5-PFNA	IS	86.8	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFDA	IS	90.7	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
d3-MeFOSAA	IS	75.5	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFOA	IS	100	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
d5-EtFOSAA	IS	69.3	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFOA	IS	77.8	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1
13C2-PFOA	IS	87.3	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 22:31	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

**Sample ID: IDW-AQ03-110717**

**Modified EPA Method 537**

Client Data					Laboratory Data					
Name:	CH2M Hill	Matrix:	Groundwater		Lab Sample:	1701624-14	Column:	BEH C18		
Project:	Fentress Offbase Wells	Date Collected:	07-Nov-17 10:50		Date Received:	08-Nov-17 10:07				

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	15.7	2.07	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFHxA	34.6	2.53	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFHpA	6.79	0.685	5.79	9.27	J	B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFHxS	353	1.10	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFOA	93.9	0.754	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFOS	490	0.935	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFNA	ND	0.939	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFDA	ND	1.73	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
MeFOSAA	ND	1.91	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFUnA	ND	1.22	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
EtFOSAA	ND	1.59	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFDoA	ND	0.918	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFTrDA	ND	0.573	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
PFTeDA	ND	0.875	5.79	9.27		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	91.4	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFHxA	IS	98.0	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C4-PFHpA	IS	110	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
18O2-PFHxS	IS	89.3	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFOA	IS	101	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C8-PFOS	IS	83.2	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C5-PFNA	IS	82.0	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFDA	IS	66.3	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
d3-MeFOSAA	IS	74.5	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFUnA	IS	75.7	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
d5-EtFOSAA	IS	75.3	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFDoA	IS	91.3	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1
13C2-PFTeDA	IS	88.7	50 - 150		B7K0059	10-Nov-17	0.108 L	17-Nov-17 22:42	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation

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

## **DATA QUALIFIERS & ABBREVIATIONS**

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

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

## CERTIFICATIONS

<b>Accrediting Authority</b>	<b>Certificate Number</b>
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
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





CTO - WEG1

# CHAIN OF CUSTODY

**For Laboratory Use Only**

Work Order #: 1701624 Temp: 0.2 °C

Storage ID: WR-2 Storage Secured: Yes  No

Project ID: Fentress Offbase Wells PO#: 10006-7-105444 Sampler: Andrew Winebrenner  
(name)

TAT Standard:  21 days  
(check one): Rush (surcharge may apply)  
 14 days  7 days Specify: \_\_\_\_\_

Invoice to: Name Tiffany Hill Company CH2M Address 5701 Cleveland Street, Suite 200 City Virginia Beach State VA Ph# 541-768-3109 Fax# \_\_\_\_\_

Relinquished by (printed name and signature) Andrew Winebrenner Date 11/7/17 Time 1700 Received by (printed name and signature) Marissa Sparks Date 11/08/17 Time 1011

Relinquished by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

SHIP TO: Vista Analytical Laboratory  
1104 Windfield Way  
El Dorado Hills, CA 95762  
(916) 673-1520 \* Fax (916) 673-0106

Method of Shipment: Priority Overnight

ATTN: Martha Maier

Tracking No.: \_\_\_\_\_

Add Analysis(es) Requested		Container(s)		Mod. EPA Method 837		EPA Method 537(DW only)	
Quantity	Type	Matrix	PFOM/PFOS	UCMR3/PFAS List:6	537 List: 14	Full List of 26	Other, Please List Below

Sample ID	Date	Time	Location/Sample Description	Quantity	Type	Matrix	PFOM/PFOS	UCMR3/PFAS List:6	537 List: 14	Full List of 26	Other, Please List Below	PFOM/PFOS	UCMR3/PFAS List:6	PFAS List: 14	Comments
OF-MW20-1117	11/6/17	0950	GW	2	P	AQ		X							
OF-MW20P-1117	11/6/17	0955	↓	2	P	AQ		X							duplicate
OF-MW22-1117	11/6/17	1110			2	P	AQ		X						
OF-MW22D-1117	11/6/17	1200			2	P	AQ		X						
OF-MW19D-1117	11/6/17	1315			2	P	AQ		X						
OF-MW19-1117-MS	11/6/17	1315			2	P	AQ		X						MS
OF-MW19-1117-SD	11/6/17	1315			2	P	AQ		X						MSD
OF-MW19D-1117	11/6/17	1345			2	P	AQ		X						
OF-MW21-1117	11/6/17	1455			2	P	AQ		X						
<del>OF-MW</del>															

Special Instructions/Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SEND DOCUMENTATION AND RESULTS TO:

Name: Tiffany Hill  
Company: CH2M  
Address: 5701 Cleveland St Suite 200  
City: Virginia Beach State: VA Zip: 23462  
Phone: 541-768-3109 Fax: \_\_\_\_\_  
Email: Tiffany.Hill@ch2m.com

Container Types: P= HDPE, PJ= HDPE Jar  
O = Other: \_\_\_\_\_

Bottle Preservation Type: T = Thiosulfate, TZ = Trizma: \_\_\_\_\_

Matrix Types: AQ = Aqueous, DW = Drinking Water, EF = Effluent, PP = Pulp/Paper, SD = Sediment, SL = Sludge, SO = Soil, WW = Wastewater, B = Blood/Serum, O = Other: \_\_\_\_\_

CTO-WE01



# CHAIN OF CUSTODY

**For Laboratory Use Only**  
 Work Order #: 1701624 Temp: 0.2 °C  
 Storage ID: WR-2 Storage Secured: Yes  No

Project ID: Fantress Offbase Wells PO#: 10006-7-105444 Sampler: Andrew Winebrunn  
 (name)

TAT Standard:  21 days  
 (check one): Rush (surcharge may apply)  
 14 days  7 days Specify: \_\_\_\_\_

Invoice to: Name Tiffany Hill Company CH2M Address 5701 Cleveland St, Suite 200 City Virginia Beach State VA Ph# 541-768-3109 Fax# \_\_\_\_\_

Relinquished by (printed name and signature) Andrew Winebrunn Date 11/7/17 Time 1700 Received by (printed name and signature) Marissa Sparks Date 11/08/17 Time 1011  
 Relinquished by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

SHIP TO: Vista Analytical Laboratory  
 1104 Windfield Way  
 El Dorado Hills, CA 95762  
 (916) 673-1520 \* Fax (916) 673-0106  
 ATTN: Martha Marer  
 Method of Shipment: Priority Overnight  
 Tracking No.: \_\_\_\_\_

Sample ID	Date	Time	Location/Sample Description	Add Analysis(es) Requested										Comments			
				Quantity	Type	Matrix	PFOA/PFOS	UCMR3 PFAS List 6	537 List 14	Full List of 26	Other: Please List Below	Mod EPA Method 837	EPA Method 537(DW only)				
OF-MW33-1117	11/7/17	0845	GW	2	P	AQ					X						
OF-MW33D-1117	11/7/17	0920	GW	2	P	AQ					X						
OF-EB110717	11/7/17	0945	QC	2	P	AQ					X						Equipment blank - peri pump
OF-FB110717	11/7/17	0950	QC	2	P	AQ					X						Field blank
OF-10W-AQ01-110717	11/7/17	1000	GW	2	P	AQ					X						10W-MW33S/D
10W-AQ02-110717	11/7/17	1025	GW	2	P	AQ					X						10W-MW22S/D
10W-AQ03-110717	11/7/17	1050	GW	2	P	AQ					X						10W-MW19S/D, MW20, MW21

Special Instructions/Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SEND DOCUMENTATION AND RESULTS TO:

Name: Tiffany Hill  
 Company: CH2M  
 Address: 5701 Cleveland St, Suite 200  
 City: Virginia Beach State: VA Zip: 23462  
 Phone: 541-768-3109 Fax: \_\_\_\_\_  
 Email: Tiffany.Hill@ch2m.com

Container Types: P= HDPE, PJ= HDPE Jar  
 Bottle Preservation Type: T = Thiosulfate, TZ = Trizma:  
 Matrix Types: AQ = Aqueous, DW = Drinking Water, EF = Effluent, PP = Pulp/Paper, SD = Sediment, SL = Sludge, SO = Soil, WW = Wastewater, B = Blood/Serum, O = Other:

### Sample Log-in Checklist

Vista Work Order #: 1701624 TAT Std

Samples Arrival:	Date/Time 11/08/17 1007	Initials: WWS	Location: WR-2
Logged In:	Date/Time 11/08/17 1313	Initials: WWS	Location: WR-2 Shelf/Rack: E5
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> On Trac
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
Temp °C: 0.1 (uncorrected)	Time: 1011	Thermometer ID: IR-1	
Temp °C: 0.2 (corrected)	Probe used: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

	YES	NO	NA
Adequate Sample Volume Received?	<input checked="" type="checkbox"/>		
Holding Time Acceptable?	<input checked="" type="checkbox"/>		
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>		
Shipping Custody Seals Intact?	<input checked="" type="checkbox"/>		
Shipping Documentation Present?	<input checked="" type="checkbox"/>		
Airbill	Trk # 7706 5076 1523		
Sample Container Intact?	<input checked="" type="checkbox"/>		
Sample Custody Seals Intact?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>		
COC Anomaly/Sample Acceptance Form completed?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			<input checked="" type="checkbox"/>
Preservation Documented:	<input type="checkbox"/> Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	<input type="checkbox"/> Trizma	<input checked="" type="checkbox"/> None
Shipping Container	<input checked="" type="checkbox"/> Vista	<input type="checkbox"/> Client	<input checked="" type="checkbox"/> Retain

Comments: Sample label ID COC ID  
OF-MW190-1117 OF-MW190-1117

## **EXTRACTION INFORMATION**

Process Sheet  
**Workorder: 1701624**

Prep Expiration: 2017-Nov-20  
 Client: CH2M Hill

**Workorder Due: 29-Nov-17 00:00**

TAT: 21

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

Prep Batch: B7K0059

Version: 537 (14 Analyte)  
 DoD: DoD QSM 5.1

Prep Data Entered: 11.14.17 HC  
Date and Initials

Initial Sequence: \_\_\_\_\_

LabSampID	A/B	Prep Rec	Spike Rec	ClientSampleID	Comments	Location	Container
1701624-01	"A"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-MW20-1117		WR-2 E-5	HDPE Bottle, 125 mL
1701624-02		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-MW20P-1117		WR-2 E-5	HDPE Bottle, 125 mL
1701624-03		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-MW22-1117		WR-2 E-5	HDPE Bottle, 125 mL
1701624-04		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-MW22D-1117		WR-2 E-5	HDPE Bottle, 125 mL
1701624-05	"ABC"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-MW19-1117	<b>MS/MSD</b>	WR-2 E-5	HDPE Bottle, 125 mL
1701624-06	"A"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-MW190-1117		WR-2 E-5	HDPE Bottle, 125 mL
1701624-07		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-MW21-1117		WR-2 E-5	HDPE Bottle, 125 mL
1701624-08		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-MW33-1117		WR-2 E-5	HDPE Bottle, 125 mL
1701624-09		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-MW33D-1117		WR-2 E-5	HDPE Bottle, 125 mL
1701624-10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-EB110717		WR-2 E-5	HDPE Bottle, 125 mL
1701624-11		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OF-FB110717		WR-2 E-5	HDPE Bottle, 125 mL
1701624-12		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10W-AQ01-110717		WR-2 E-5	HDPE Bottle, 125 mL
1701624-13		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10W-AQ02-110717		WR-2 E-5	HDPE Bottle, 125 mL
1701624-14		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10W-AQ03-110717		WR-2 E-5	HDPE Bottle, 125 mL

Pre-Prep Check Out: HB 11/9/17  
 Pre-Prep Check In: HC 11-9-17

Prep Check Out: KC 11/10/17  
 Prep Check In: NA

Prep Reconciled Initials/Date: HB 11/9/17  
 Spike Reconciled Initials/Date: KC 11/10/17

VialBoxID: \_\_\_\_\_

PREPARATION BENCH SHEET

Matrix: Aqueous

B7K0059

Chemist: KC

Method: 537M PFAS DOD (LOQ as mRL)

Prep Date/Time: 09-Nov-17 10:50

11/10/17 9:00  
KC 11/10/17

Prepared using: LCMS - SPE Extraction-LCMS

		Date/Initials: <u>KB 11/9/17</u>				Balance ID: <u>M2MS-9</u>								
Cen	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			
<input type="checkbox"/>	B7K0059-BLK1	5	2	0	2	NA	NA	(0.125) ✓	KC KBF 11/10/17	KC 11/10/17	KC HN 11/10/17			
<input type="checkbox"/>	B7K0059-BS1	5	2	0	2	↓	↓	(0.125) ✓	T	T	T			
<input type="checkbox"/>	B7K0059-MS1 1701624-05	5	2	0	2	138.65	26.84	0.11181 ✓	T	T	T			
<input type="checkbox"/>	B7K0059-MSD1 1701624-05	5	2	0	2	140.97	26.82	0.11415 ✓	T	T	T			
<input type="checkbox"/>	1701621-01	5	2	0	2	140.67	26.76	0.11391	T	T	T			
<input type="checkbox"/>	1701621-02	5	2	0	2	142.57	26.78	0.11579	T	T	T			
<input type="checkbox"/>	1701621-03	5	2	0	2	143.02	26.84	0.11618	T	T	T			
<input type="checkbox"/>	1701624-01	5	2	0	2	133.30	26.79	0.10651 ✓	T	T	T			
<input type="checkbox"/>	1701624-02	5	2	0	2	140.91	26.82	0.11409 ✓	T	T	T			
<input type="checkbox"/>	1701624-03	5	2	0	2	130.90	26.83	0.10407 ✓	T	T	T			
<input type="checkbox"/>	1701624-04	5	2	0	2	139.46	26.74	0.11272 ✓	T	T	T			
<input type="checkbox"/>	1701624-05	5	2	0	2	136.74	26.79	0.11045 ✓	T	T	T			
<input type="checkbox"/>	1701624-06	12	2	0	6	136.60	26.78	0.10982 ✓	T	T	T			
<input type="checkbox"/>	1701624-07	5	2	0	2	138.72	26.82	0.11190 ✓	T	T	T			
<input checked="" type="checkbox"/>	1701624-08	5	2	0	2	<del>137.22</del> <sup>137.11</sup> <sub>129.49</sub>	26.83	0.10266 ✓	T	T	T			
<input type="checkbox"/>	1701624-09	5	2	0	2	137.22	26.81	0.11041 ✓	↓	↓	↓			

IS: 17K0822, 10µL (V5)  
 IS SUP: NA  
 NS: 17J1820, 10µL (V4)  
 RS: 17J2640, 10µL (V4)

SPE Chem: Strata-X AW 33µm <sup>200mg</sup> ~~100mg~~  
 Ele SOLV: MeOH / .5% NH<sub>4</sub>OH in MeOH  
 Final Volume(s) 1ml

Notes:

Comments: Assume 1 g = 1 mL  
 Cen = Centrifuged  
 Work Order 1701624

PREPARATION BENCH SHEET

Matrix: Aqueous

B7K0059

Chemist: KC

Method: 537M PFAS DOD (LOQ as mRL)

Prep Date/Time: 09-Nov-17 10:50

11/10/17 9:00  
KC 11/10/17

Prepared using: LCMS - SPE Extraction-LCMS

		Date/Initials: <u>KB 11/9/17</u>				BalanceID: <u>H2M5-9</u>					
Cen	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
<input type="checkbox"/>	1701624-10	5	2	0	2	141.21	26.80	0.11441 ✓	KC KBF 11/10/17	KC 11/10/17	KC HN 11/10/17
<input type="checkbox"/>	1701624-11	5	2	0	2	141.26	26.84	0.11442 ✓	↓	↓	↓
<input checked="" type="checkbox"/>	1701624-12	5	2	0	2	137.16	26.85	0.11031 ✓	↓	↓	↓
<input checked="" type="checkbox"/>	1701624-13	5	2	0	2	130.15	26.78	0.10337 ✓	↓	↓	↓
<input checked="" type="checkbox"/>	1701624-14	5	2	0	2	134.67	26.81	0.10786 ✓	↓	↓	↓

IS: <u>17K0822, 10 mL (V5)</u> IS SUP: <u>NA</u> NS: <u>17J1820, 10 mL (V4)</u> RS: <u>17J2640, 10 mL (V4)</u>	SPE Chem: <u>Strata-X-AW 33, 100mg 6mL</u> Ele SOLV: <u>MeOH/.5% NH4OH in MeOH</u> Final Volume(s) <u>1 mL</u>	Notes:
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Comments: Assume 1 g = 1 mL

Cen = Centrifuged  
Work Order 1701624

Batch: B7K0059

Matrix: Aqueous

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1701621-01	0.11391 ✓	NA	NA	1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701621-02	0.11579 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701621-03	0.11618 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-01	0.10651 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-02	0.11409 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-03	0.10407 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-04	0.11272 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-05	0.11045 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-06	0.10982 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-07	0.1119 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-08	0.10266 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-09	0.11041 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-10	0.11441 ✓			1000	10-Nov-17 09:00	KC			QC Water	537M PFAS DOD (LOQ as
1701624-11	0.11442 ✓			1000	10-Nov-17 09:00	KC			QC Water	537M PFAS DOD (LOQ as
1701624-12	0.11031 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-13	0.10337 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
1701624-14	0.10786 ✓			1000	10-Nov-17 09:00	KC			Groundwater	537M PFAS DOD (LOQ as
B7K0059-BLK1	0.125			1000	10-Nov-17 09:00	KC				QC
B7K0059-BS1	0.125			1000	10-Nov-17 09:00	KC				QC
B7K0059-MS1	0.11181 ✓			1000	10-Nov-17 09:00	KC	17J1820	10		QC
B7K0059-MSD1	0.11415 ✓			1000	10-Nov-17 09:00	KC	17J1820	10		QC

HC  
11.14.17



**SAMPLE DATA – MODIFIED EPA METHOD 537**

Dataset: U:\Q4.PRO\results\171116M3\171116M3-28.qld

Last Altered: Friday, November 17, 2017 16:14:11 Pacific Standard Time

Printed: Friday, November 17, 2017 16:14:58 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_28, Date: 16-Nov-2017, Time: 21:21:57, ID: B7K0059-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	299.0 > 79.7		9.71e2	0.1250		2.55				
2	4	PFHxA	313.2 > 268.9		2.62e3	0.1250		3.01				
3	5	PFHpA	363.0 > 318.9		5.15e3	0.1250		3.71				
4	6	L-PFHxS	398.9 > 79.6	2.07e0	8.35e2	0.1250		3.86	3.78	0.0309		
5	9	L-PFOA	413 > 368.7		5.51e3	0.1250		4.22				
6	12	PFNA	463.0 > 418.8		4.46e3	0.1250		4.66				
7	14	L-PFOS	499 > 79.9		1.96e3	0.1250		4.74				
8	16	PFDA	513 > 468.8		3.84e3	0.1250		5.01				
9	18	N-MeFOSAA	570.1 > 419		1.83e3	0.1250		5.17				
10	19	N-EtFOSAA	584.2 > 419		1.68e3	0.1250		5.32				
11	20	PFUdA	563.0 > 518.9		3.59e3	0.1250		5.45				
12	22	PFDoA	612.9 > 569.0		2.14e3	0.1250		5.62				

Dataset: U:\Q4.PRO\results\171116M3\171116M3-28.qld

Last Altered: Friday, November 17, 2017 16:14:11 Pacific Standard Time

Printed: Friday, November 17, 2017 16:15:18 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_28, Date: 16-Nov-2017, Time: 21:21:57, ID: B7K0059-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	24	PFTrDA	662.9 > 618.9	2.14e3	0.1250		5.87				
2	25	PFTeDA	712.9 > 668.8	2.99e3	0.1250		6.01				
3	33	13C3-PFBS	302. > 98.8	9.71e2	0.1250	0.096	2.55	2.51	1.22	101.791	101.8
4	34	13C2-PFHxA	315 > 269.8	2.62e3	0.1250	0.728	3.01	3.00	3.30	36.265	90.7
5	35	13C4-PFHpA	367.2 > 321.8	5.15e3	0.1250	0.550	3.71	3.62	6.49	94.505	94.5
6	36	18O2-PFHxS	403.0 > 102.6	8.35e2	0.1250	0.432	3.86	3.77	5.24	97.133	97.1
7	37	13C2-6:2 FTS	429.1 > 408.9	1.18e3	0.1250	0.217	4.16	4.09	2.14	78.921	78.9
8	38	13C2-PFOA	414.9 > 369.7	5.51e3	0.1250	0.840	4.22	4.15	9.99	95.172	95.2
9	39	13C5-PFNA	468.2 > 422.9	4.46e3	0.1250	0.967	4.66	4.58	9.80	81.088	81.1
10	40	13C8-PFOSA	506.1 > 77.7	1.46e3	0.1250	0.786	4.73	4.64	3.82	38.841	38.8
11	41	13C8-PFOS	507.0 > 79.9	1.96e3	0.1250	0.991	4.73	4.67	10.8	87.518	87.5
12	42	13C2-PFDA	515.1 > 469.9	3.84e3	0.1250	2.153	5.01	4.96	15.2	56.428	56.4
13	43	13C2-8:2 FTS	529.1 > 508.7	6.09e2	0.1250	0.058	4.88	4.94	0.768	105.487	105.5
14	44	d3-N-MeFOSAA	573.3 > 419	1.83e3	0.1250	0.667	5.17	5.12	4.77	57.230	57.2
15	45	d5-N-EtFOSAA	589.3 > 419	1.68e3	0.1250	0.698	5.32	5.27	4.39	50.315	50.3
16	46	13C2-PFUdA	565 > 519.8	3.59e3	0.1250	1.261	5.45	5.30	9.38	59.518	59.5
17	47	13C2-PFDoA	615.0 > 569.7	2.14e3	0.1250	0.695	5.62	5.58	5.59	64.430	64.4
18	49	13C2-PFTeDA	714.8 > 669.6	2.99e3	0.1250	0.762	6.01	6.05	7.79	81.744	81.7
19	55	13C5-PFHxA	318 > 272.9	9.92e3	0.1250	1.000	3.01	3.00	12.5	100.000	100.0
20	56	13C3-PFHxS	401.9 > 79.9	1.99e3	0.1250	1.000	3.86	3.77	12.5	100.000	100.0
21	57	13C8-PFOA	421.3 > 376	6.90e3	0.1250	1.000	4.22	4.14	12.5	100.000	100.0
22	58	13C9-PFNA	472.2 > 426.9	5.69e3	0.1250	1.000	4.66	4.59	12.5	100.000	100.0
23	59	13C4-PFOS	503 > 79.9	2.26e3	0.1250	1.000	4.73	4.67	12.5	100.000	100.0
24	60	13C6-PFDA	519.1 > 473.7	3.16e3	0.1250	1.000	5.01	4.96	12.5	100.000	100.0
25	61	13C7-PFUdA	570.1 > 524.8	4.79e3	0.1250	1.000	5.45	5.29	12.5	100.000	100.0
26	62	Total PFHxS	398.9 > 79.6	2.07e0	0.1250		3.86		0.000		
27	63	Total PFOA	413 > 368.7	0.00e0	0.1250		4.22		0.000		
28	64	Total PFOS	499 > 79.9	0.00e0	0.1250		4.73		0.000		
29	65	Total N-MeFOSAA	570.1 > 419	0.00e0	0.1250		5.54		0.000		
30	66	Total N-EtFOSAA	584.2 > 419	0.00e0	0.1250		5.32		0.000		

Dataset: U:\Q4.PRO\results\171116M3\171116M3-28.qld

Last Altered: Friday, November 17, 2017 16:14:11 Pacific Standard Time

Printed: Friday, November 17, 2017 16:15:18 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_28, Date: 16-Nov-2017, Time: 21:21:57, ID: B7K0059-BLK1 Method Blank 0.125, Description: Method Blank

Total PFHxS

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 L-PFHxS	398.9 > 79.6	3.78	2.066	834.975	0.031	MMI	

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								

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								

Total PFOA+PFOS,Total PFOA,Total PFOS

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

Dataset: U:\Q4.PRO\results\171116M3\171116M3-28.qld

Last Altered: Friday, November 17, 2017 16:14:11 Pacific Standard Time

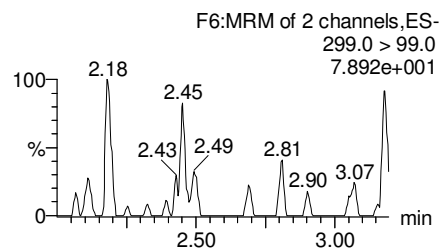
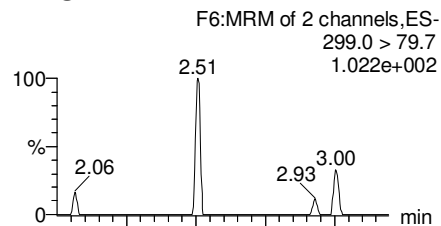
Printed: Friday, November 17, 2017 16:15:18 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

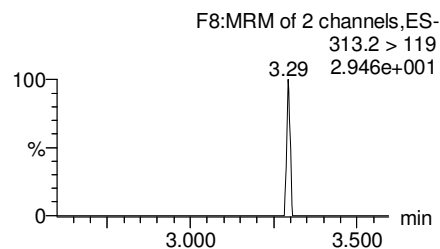
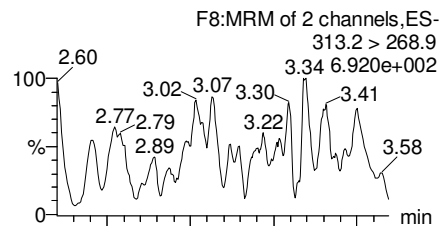
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Name: 171116M3\_28, Date: 16-Nov-2017, Time: 21:21:57, ID: B7K0059-BLK1 Method Blank 0.125, Description: Method Blank

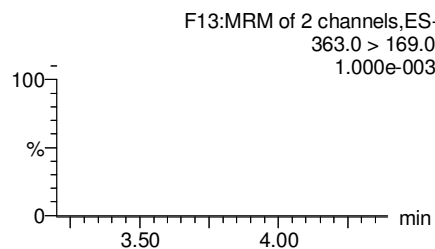
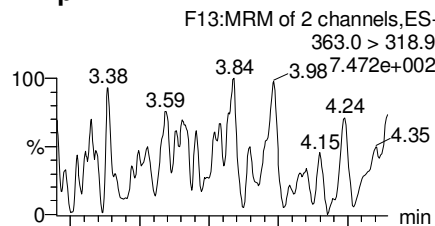
**PFBS**



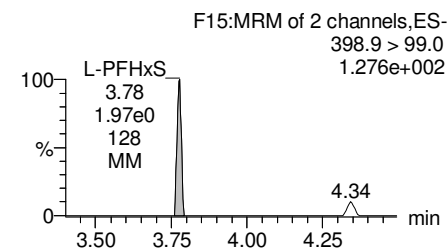
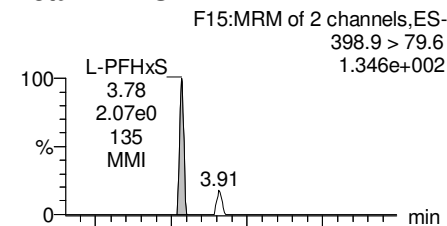
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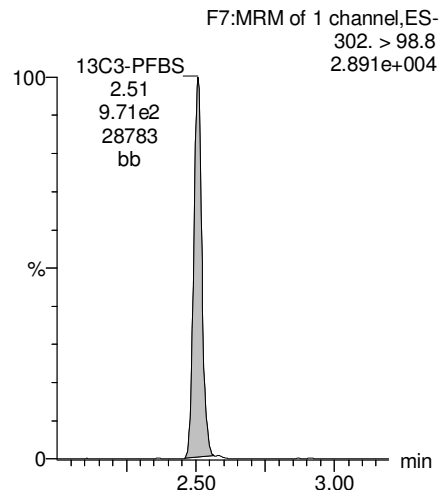
**PFHpA**



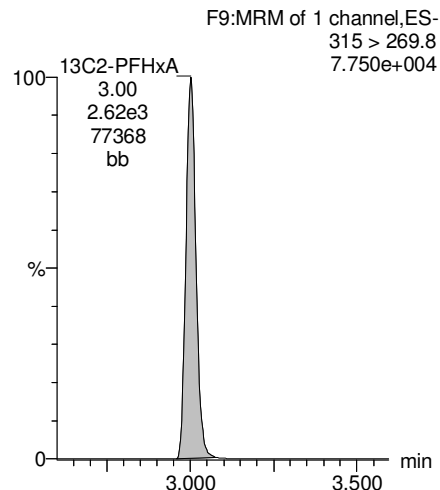
**Total PFHxS**



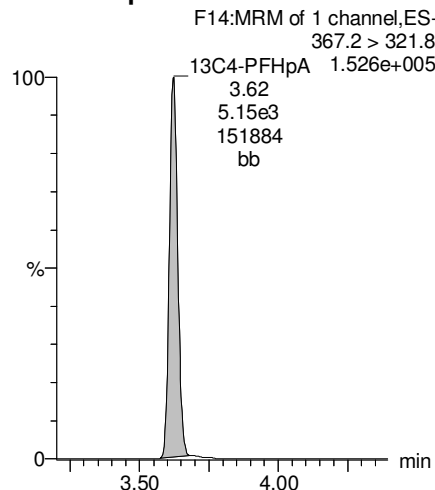
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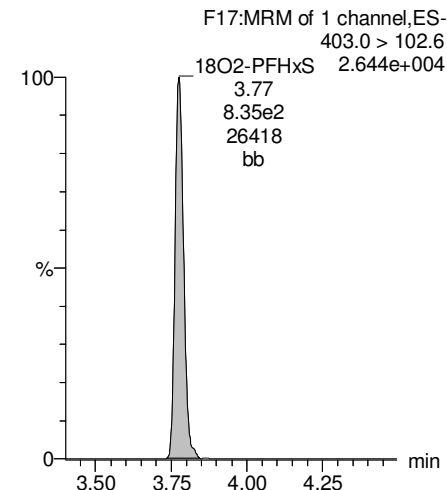
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**13C4-PFHpA**



**18O2-PFHxS**



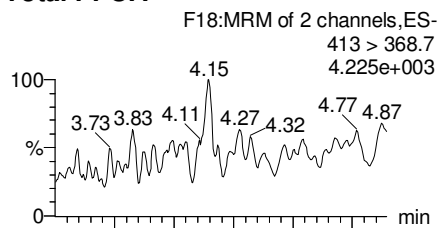
Dataset: U:\Q4.PRO\results\171116M3\171116M3-28.qld

Last Altered: Friday, November 17, 2017 16:14:11 Pacific Standard Time

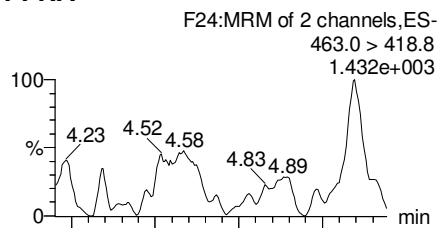
Printed: Friday, November 17, 2017 16:15:18 Pacific Standard Time

Name: 171116M3\_28, Date: 16-Nov-2017, Time: 21:21:57, ID: B7K0059-BLK1 Method Blank 0.125, Description: Method Blank

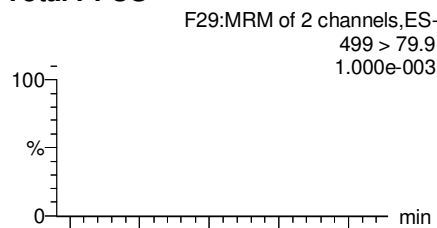
**Total PFOA**



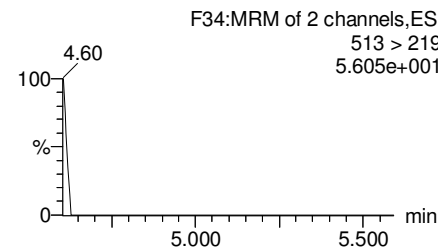
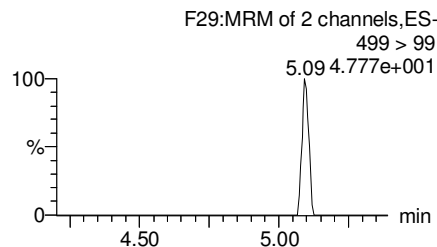
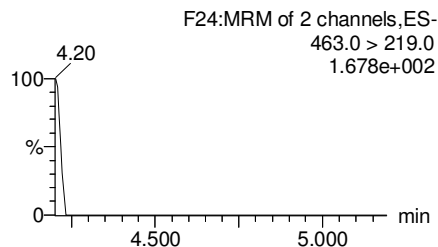
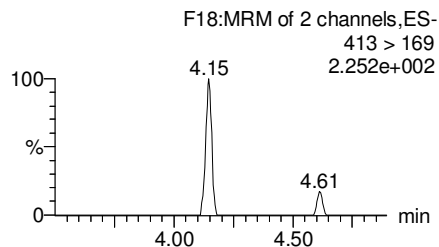
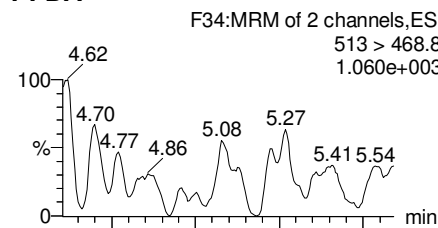
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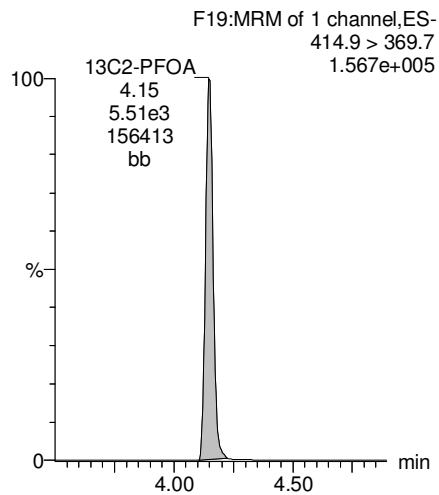
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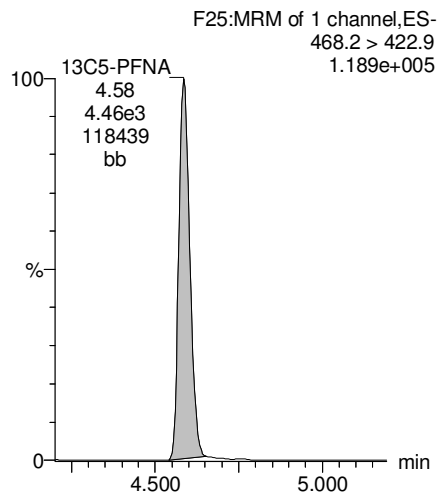
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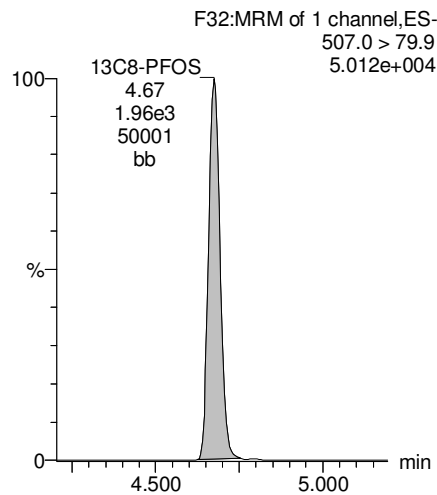
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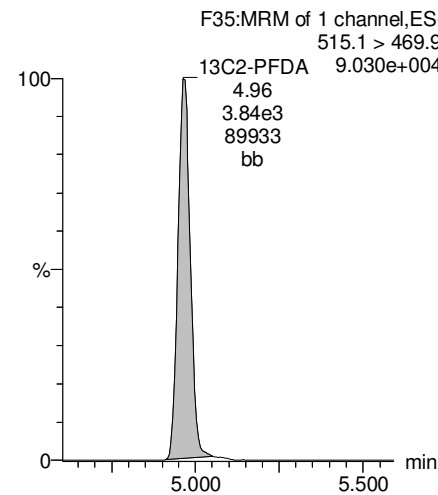
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**



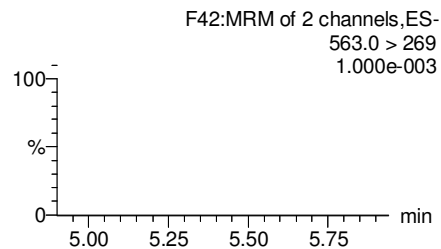
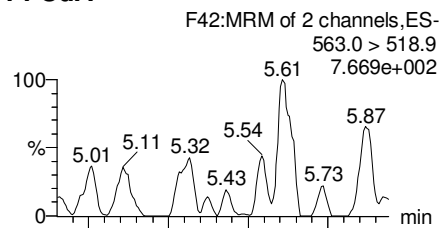
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Last Altered: Friday, November 17, 2017 16:14:11 Pacific Standard Time

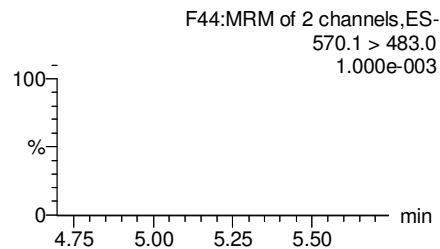
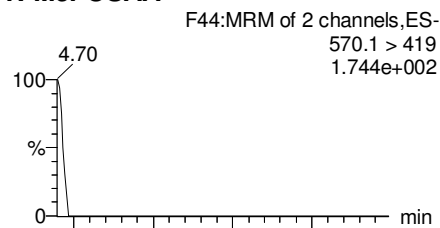
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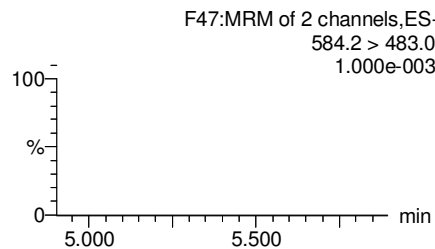
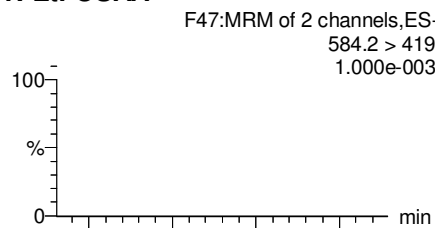
**PFUdA**



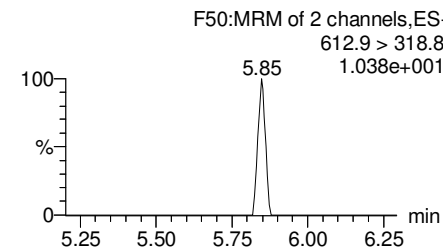
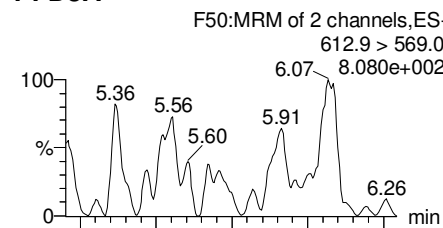
**N-MeFOSAA**



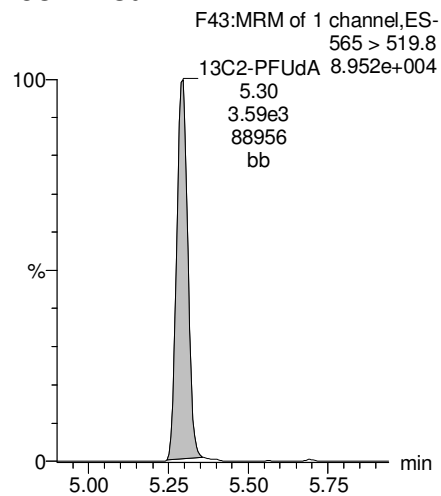
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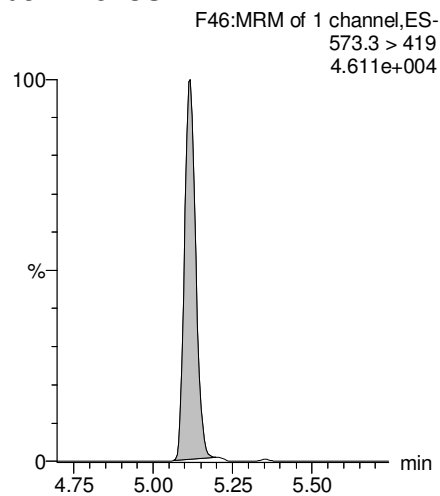
**PFDaA**



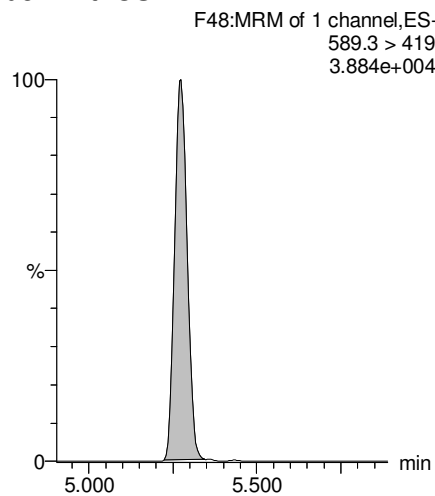
**13C2-PFUdA**



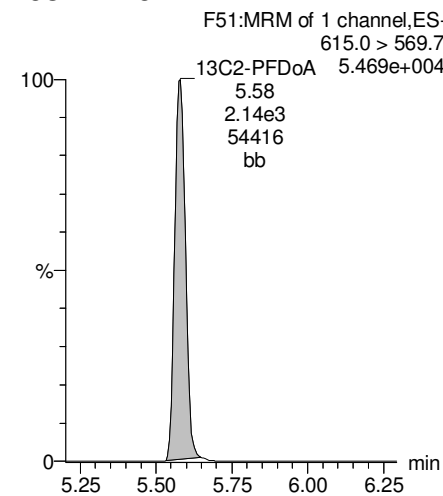
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDaA**



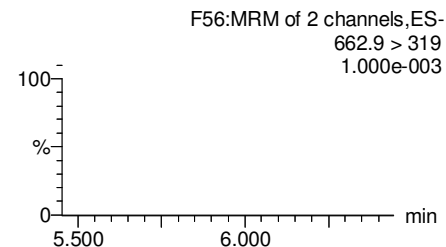
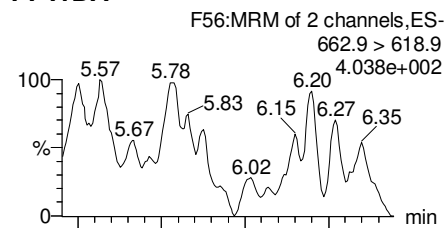
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Last Altered: Friday, November 17, 2017 16:14:11 Pacific Standard Time

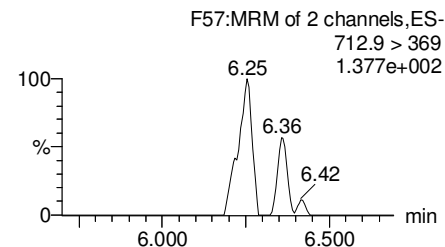
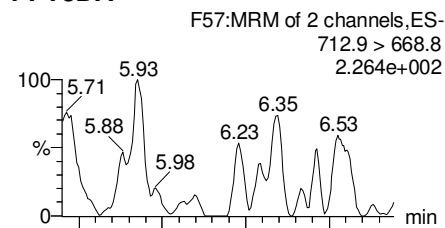
Printed: Friday, November 17, 2017 16:15:18 Pacific Standard Time

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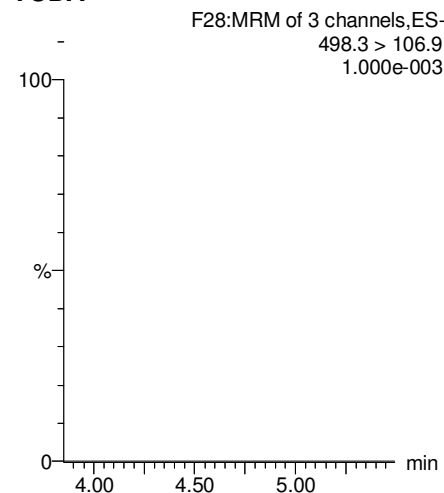
**PFTrDA**



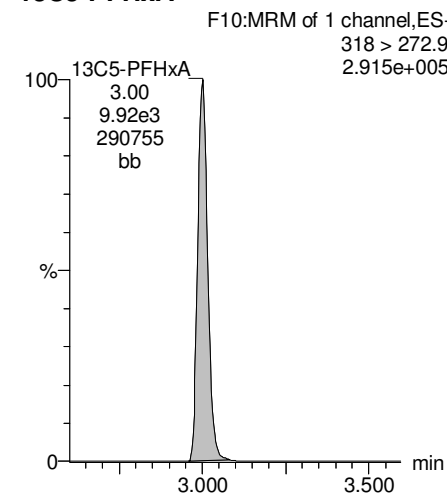
**PFTeDA**



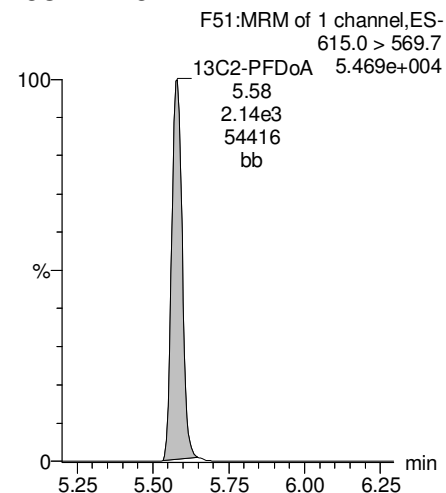
**TCDA**



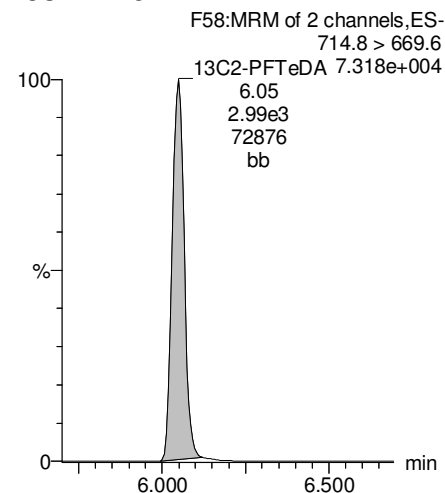
**13C5-PFHxA**



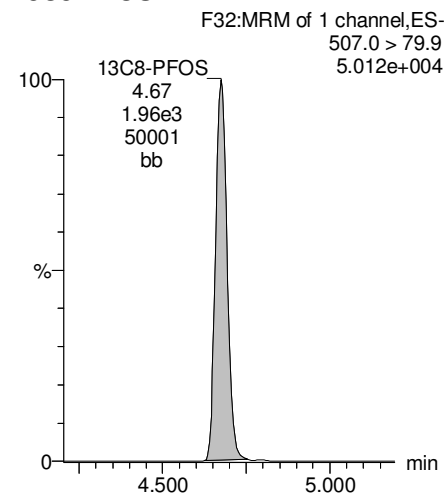
**13C2-PFDoA**



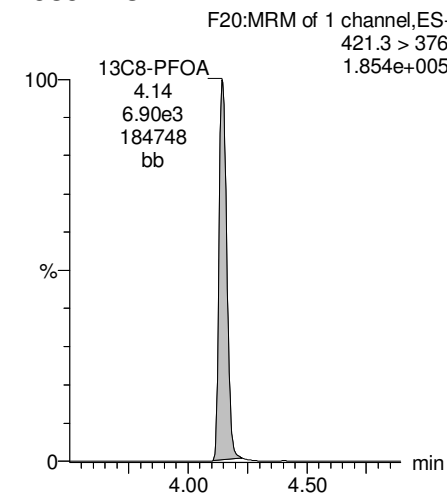
**13C2-PFTeDA**



**13C8-PFOS**



**13C8-PFOA**





Dataset: U:\Q4.PRO\results\171116M3\171116M3-28.qld

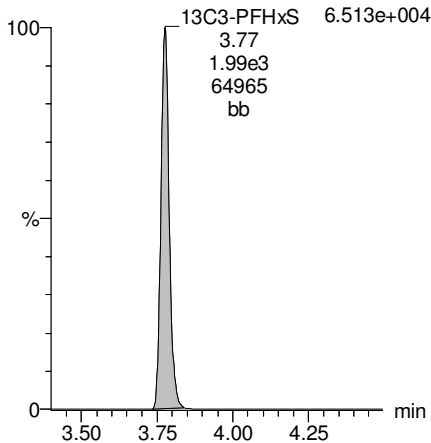
Last Altered: Friday, November 17, 2017 16:14:11 Pacific Standard Time

Printed: Friday, November 17, 2017 16:15:18 Pacific Standard Time

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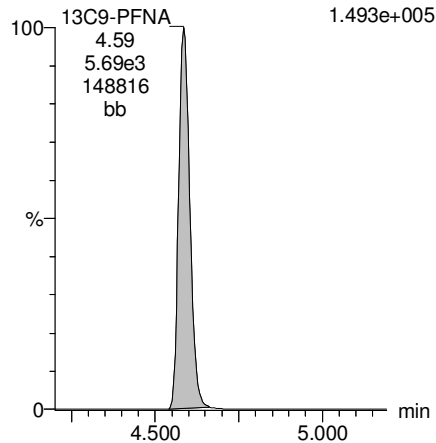
**13C3-PFHxS**

F16:MRM of 1 channel,ES-  
401.9 > 79.9



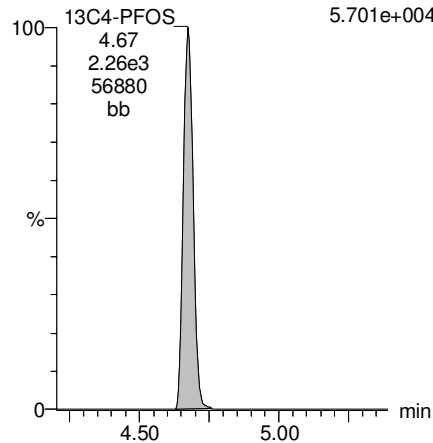
**13C9-PFNA**

F26:MRM of 1 channel,ES-  
472.2 > 426.9



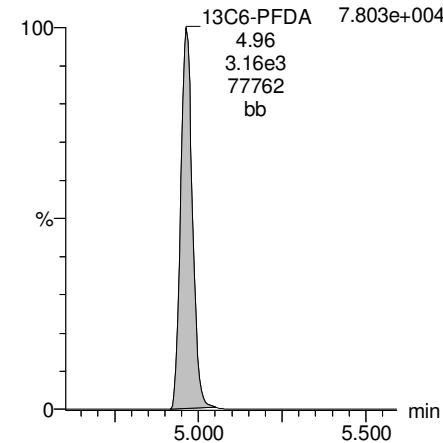
**13C4-PFOS**

F30:MRM of 1 channel,ES-  
503 > 79.9



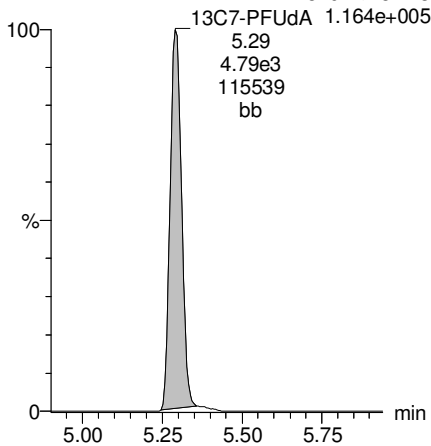
**13C6-PFDA**

F37:MRM of 1 channel,ES-  
519.1 > 473.7



**13C7-PFUdA**

F45:MRM of 1 channel,ES-  
570.1 > 524.8



Dataset: U:\Q4.PRO\results\171116M3\171116M3-26.qld

Last Altered: Friday, November 17, 2017 16:09:42 Pacific Standard Time

Printed: Friday, November 17, 2017 16:10:06 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_26, Date: 16-Nov-2017, Time: 20:59:35, ID: B7K0059-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	299.0 > 79.7	1.58e3	8.82e2	0.1250		2.55	2.50	22.4	83.869	104.8
2	4 PFHxA	313.2 > 268.9	7.52e3	2.51e3	0.1250		3.01	3.00	15.0	83.710	104.6
3	5 PFHpA	363.0 > 318.9	5.43e3	4.97e3	0.1250		3.71	3.62	13.6	81.323	101.7
4	6 L-PFHxS	398.9 > 79.6	1.23e3	6.65e2	0.1250		3.86	3.77	23.1	95.582	119.5
5	9 L-PFOA	413 > 368.7	3.66e3	4.06e3	0.1250		4.22	4.14	11.3	88.462	110.6
6	12 PFNA	463.0 > 418.8	3.91e3	5.74e3	0.1250		4.66	4.58	8.51	60.214	75.3
7	14 L-PFOS	499 > 79.9	1.68e3	2.09e3	0.1250		4.74	4.67	10.0	63.395	79.2
8	16 PFDA	513 > 468.8	2.99e3	3.92e3	0.1250		5.01	4.96	9.54	80.611	100.8
9	18 N-MeFOSAA	570.1 > 419	1.86e3	1.68e3	0.1250		5.17	5.12	13.9	62.406	78.0
10	19 N-EtFOSAA	584.2 > 419	2.23e3	2.52e3	0.1250		5.32	5.27	11.1	81.942	102.4
11	20 PFUdA	563.0 > 518.9	3.95e3	3.41e3	0.1250		5.45	5.29	14.5	89.819	112.3
12	22 PFDaA	612.9 > 569.0	4.52e3	1.89e3	0.1250		5.62	5.58	29.9	77.765	97.2

Dataset: U:\Q4.PRO\results\171116M3\171116M3-26.qld

Last Altered: Friday, November 17, 2017 16:09:42 Pacific Standard Time

Printed: Friday, November 17, 2017 16:10:22 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_26, Date: 16-Nov-2017, Time: 20:59:35, ID: B7K0059-BS1 OPR 0.125, Description: OPR

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24	PFTrDA	662.9 > 618.9	3.46e3	1.89e3	0.1250	5.87	5.83	22.9	72.561	90.7
2	25	PFTeDA	712.9 > 668.8	2.45e3	2.62e3	0.1250	6.01	6.05	11.7	81.932	102.4
3	33	13C3-PFBS	302. > 98.8	8.82e2	8.91e3	0.1250	0.096	2.55	2.50	102.964	103.0
4	34	13C2-PFHxA	315 > 269.8	2.51e3	8.91e3	0.1250	0.728	3.01	3.00	38.695	96.7
5	35	13C4-PFHpA	367.2 > 321.8	4.97e3	8.91e3	0.1250	0.550	3.71	3.62	101.541	101.5
6	36	18O2-PFHxS	403.0 > 102.6	6.65e2	1.79e3	0.1250	0.432	3.86	3.77	85.851	85.9
7	37	13C2-6:2 FTS	429.1 > 408.9	1.10e3	6.55e3	0.1250	0.217	4.16	4.09	77.516	77.5
8	38	13C2-PFOA	414.9 > 369.7	4.06e3	6.55e3	0.1250	0.840	4.22	4.14	73.769	73.8
9	39	13C5-PFNA	468.2 > 422.9	5.74e3	5.97e3	0.1250	0.967	4.66	4.58	99.454	99.5
10	40	13C8-PFOSA	506.1 > 77.7	1.51e3	4.49e3	0.1250	0.786	4.73	4.64	42.755	42.8
11	41	13C8-PFOS	507.0 > 79.9	2.09e3	1.82e3	0.1250	0.991	4.73	4.67	115.802	115.8
12	42	13C2-PFDA	515.1 > 469.9	3.92e3	2.56e3	0.1250	2.153	5.01	4.96	71.012	71.0
13	43	13C2-8:2 FTS	529.1 > 508.7	4.51e2	8.91e3	0.1250	0.058	4.88	4.93	86.985	87.0
14	44	d3-N-MeFOSAA	573.3 > 419	1.68e3	4.49e3	0.1250	0.667	5.17	5.11	56.188	56.2
15	45	d5-N-EtFOSAA	589.3 > 419	2.52e3	4.49e3	0.1250	0.698	5.32	5.27	80.421	80.4
16	46	13C2-PFUdA	565 > 519.8	3.41e3	4.49e3	0.1250	1.261	5.45	5.29	60.330	60.3
17	47	13C2-PFDoA	615.0 > 569.7	1.89e3	4.49e3	0.1250	0.695	5.62	5.58	60.690	60.7
18	49	13C2-PFTeDA	714.8 > 669.6	2.62e3	4.49e3	0.1250	0.762	6.01	6.05	76.519	76.5
19	55	13C5-PFHxA	318 > 272.9	8.91e3	8.91e3	0.1250	1.000	3.01	3.00	100.000	100.0
20	56	13C3-PFHxS	401.9 > 79.9	1.79e3	1.79e3	0.1250	1.000	3.86	3.77	100.000	100.0
21	57	13C8-PFOA	421.3 > 376	6.55e3	6.55e3	0.1250	1.000	4.22	4.14	100.000	100.0
22	58	13C9-PFNA	472.2 > 426.9	5.97e3	5.97e3	0.1250	1.000	4.66	4.59	100.000	100.0
23	59	13C4-PFOS	503 > 79.9	1.82e3	1.82e3	0.1250	1.000	4.73	4.67	100.000	100.0
24	60	13C6-PFDA	519.1 > 473.7	2.56e3	2.56e3	0.1250	1.000	5.01	4.96	100.000	100.0
25	61	13C7-PFUdA	570.1 > 524.8	4.49e3	4.49e3	0.1250	1.000	5.45	5.29	100.000	100.0
26	62	Total PFHxS	398.9 > 79.6	1.23e3	6.65e2	0.1250		3.86	23.1	95.582	
27	63	Total PFOA	413 > 368.7	3.66e3	4.06e3	0.1250		4.22	11.3	88.462	
28	64	Total PFOS	499 > 79.9	1.68e3	2.09e3	0.1250		4.73	10.0	63.395	
29	65	Total N-MeFOSAA	570.1 > 419	1.86e3	1.68e3	0.1250		5.12	13.9	62.406	
30	66	Total N-EtFOSAA	584.2 > 419	2.23e3	2.52e3	0.1250		5.32	11.1	81.942	

Dataset: U:\Q4.PRO\results\171116M3\171116M3-26.qld

Last Altered: Friday, November 17, 2017 16:09:42 Pacific Standard Time

Printed: Friday, November 17, 2017 16:10:22 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_26, Date: 16-Nov-2017, Time: 20:59:35, ID: B7K0059-BS1 OPR 0.125, Description: OPR

**Total PFHxS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	7 Br-PFHxS	398.9 > 79.6			664.517		MM-I	
2	6 L-PFHxS	398.9 > 79.6	3.77	1227.133	664.517	23.083	MM	95.6

**Total PFOA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	9 L-PFOA	413 > 368.7	4.14	3659.010	4055.986	11.277	bb	88.5

**Total PFOS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 Br-PFOS	499 > 79.9			2090.121		MM-	
2	14 L-PFOS	499 > 79.9	4.67	1678.376	2090.121	10.038	MM	63.4

**Total N-Me-FOSAA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	18 N-MeFOSAA	570.1 > 419	5.12	1864.421	1682.106	13.855	bb	62.4

**Total N-EtFOSAA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	19 N-EtFOSAA	584.2 > 419	5.27	2229.196	2516.099	11.075	bb	81.9

**Total PFOA+PFOS,Total PFOA,Total PFOS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	9 L-PFOA	413 > 368.7	4.14	3659.010	4055.986	11.277	bb	88.5
2	15 Br-PFOS	499 > 79.9			2090.121		MM-	
3	14 L-PFOS	499 > 79.9	4.67	1678.376	2090.121	10.038	MM	63.4

Dataset: U:\Q4.PRO\results\171116M3\171116M3-26.qld

Last Altered: Friday, November 17, 2017 16:09:42 Pacific Standard Time

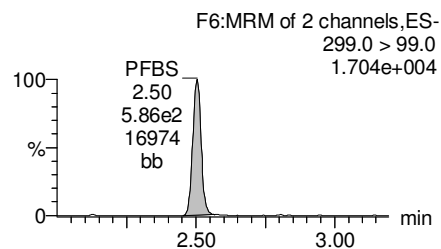
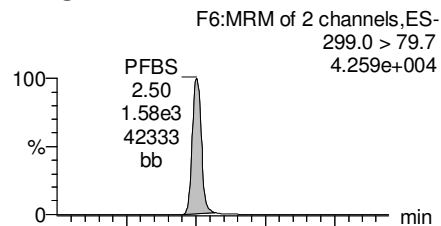
Printed: Friday, November 17, 2017 16:10:22 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

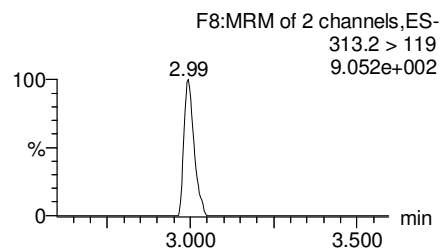
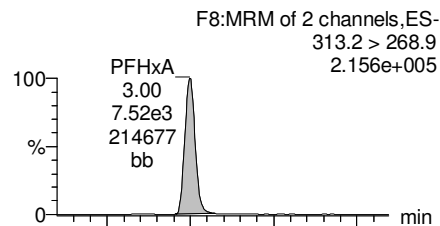
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Name: 171116M3\_26, Date: 16-Nov-2017, Time: 20:59:35, ID: B7K0059-BS1 OPR 0.125, Description: OPR

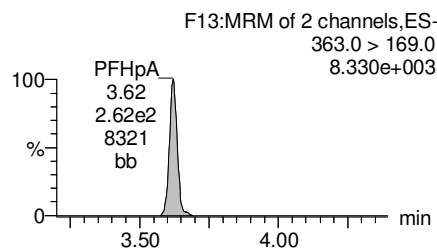
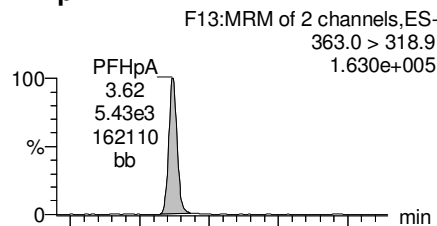
**PFBS**



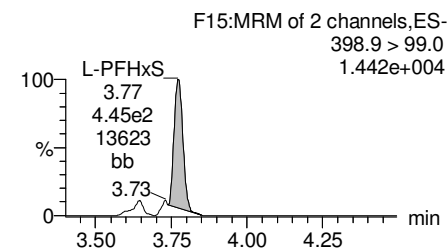
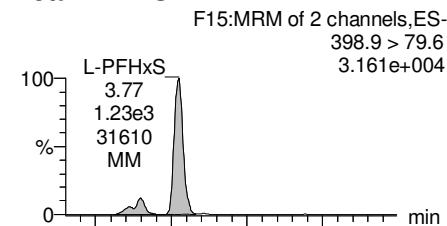
**PFHxA**



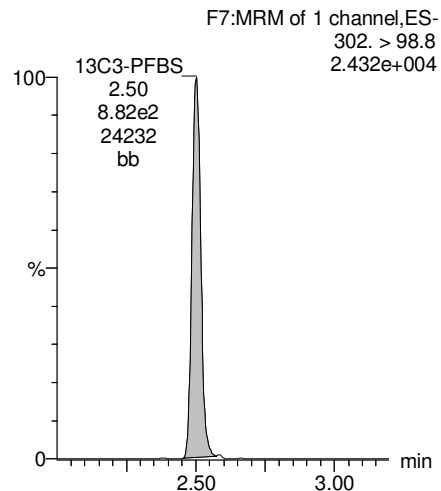
**PFHpA**



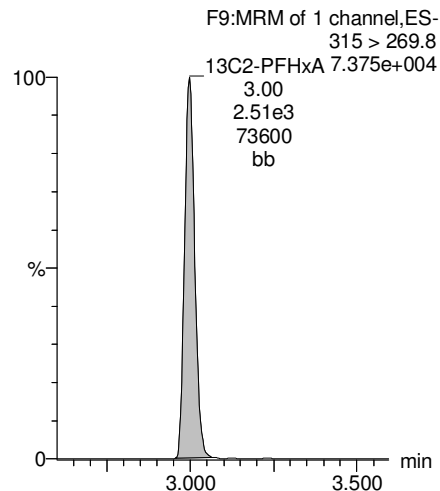
**Total PFHxS**



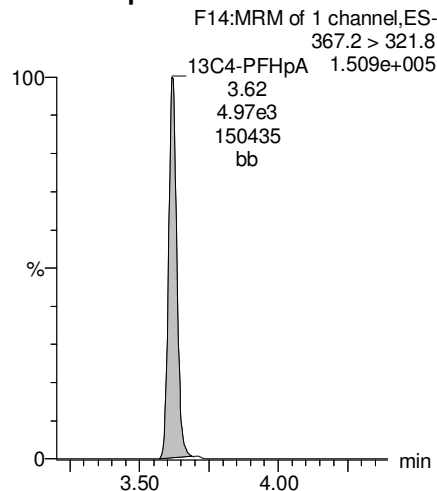
**13C3-PFBS**



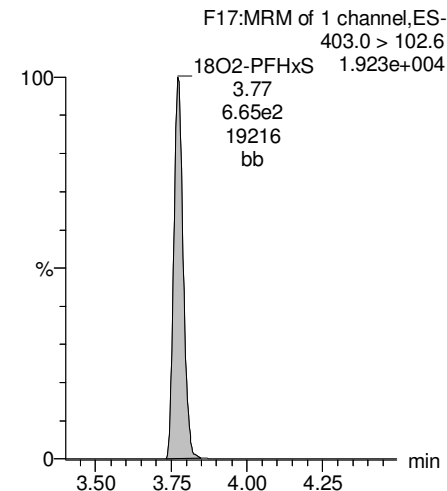
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



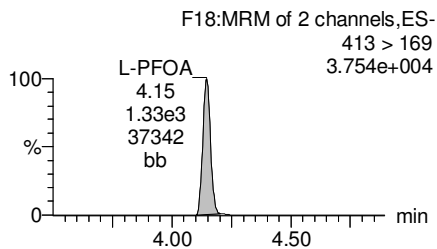
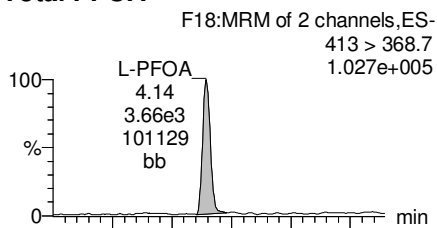
Dataset: U:\Q4.PRO\results\171116M3\171116M3-26.qld

Last Altered: Friday, November 17, 2017 16:09:42 Pacific Standard Time

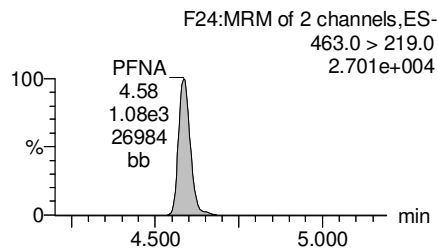
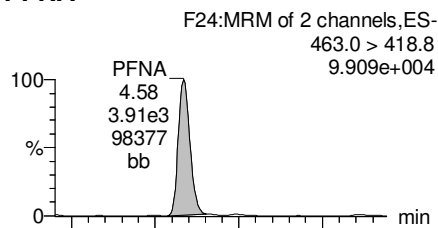
Printed: Friday, November 17, 2017 16:10:22 Pacific Standard Time

Name: 171116M3\_26, Date: 16-Nov-2017, Time: 20:59:35, ID: B7K0059-BS1 OPR 0.125, Description: OPR

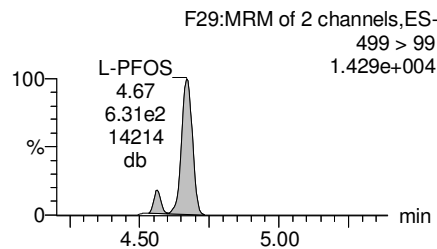
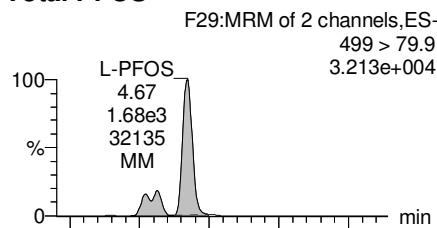
**Total PFOA**



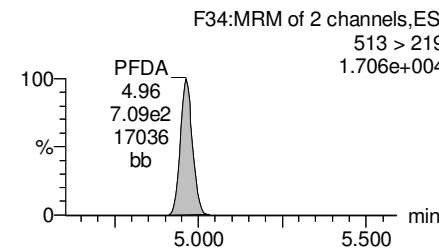
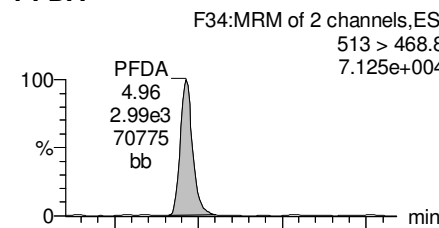
**PFNA**



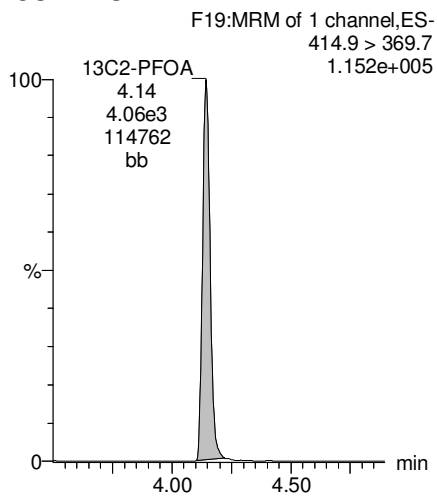
**Total PFOS**



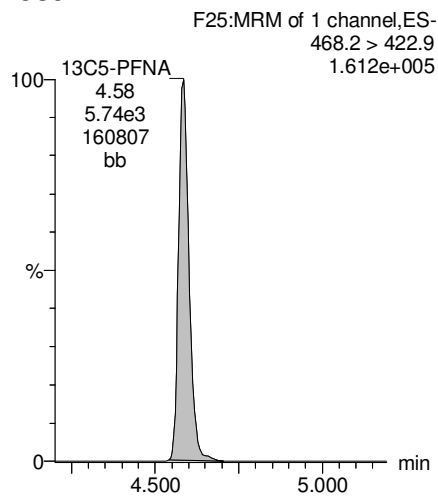
**PFDA**



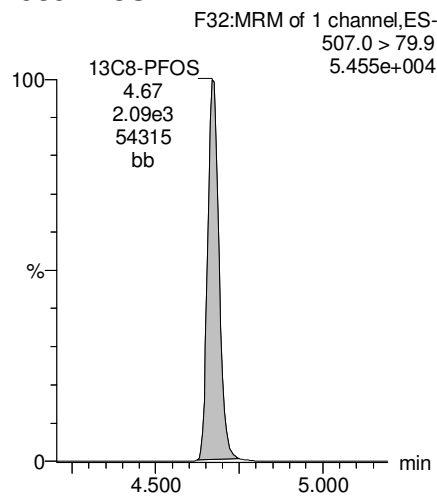
**13C2-PFOA**



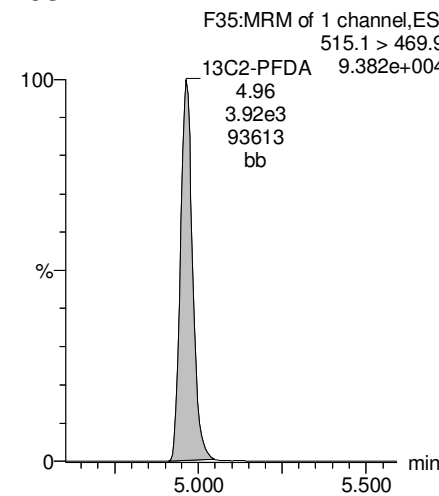
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**



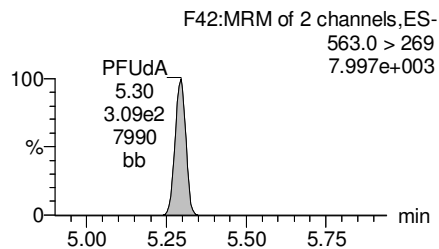
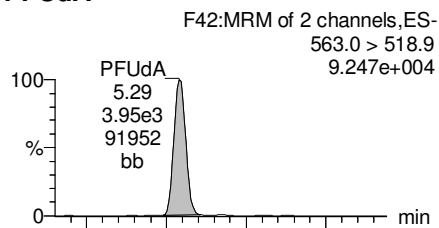
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Last Altered: Friday, November 17, 2017 16:09:42 Pacific Standard Time

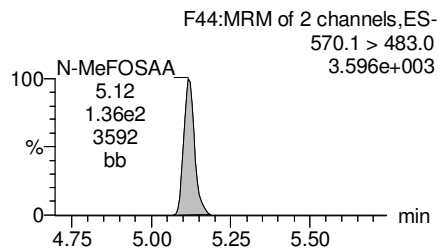
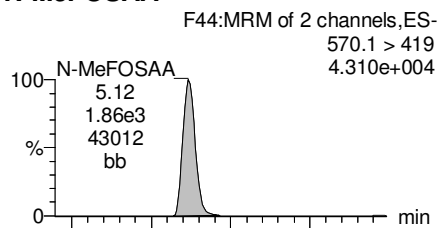
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Name: 171116M3\_26, Date: 16-Nov-2017, Time: 20:59:35, ID: B7K0059-BS1 OPR 0.125, Description: OPR

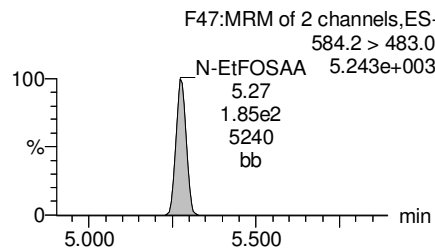
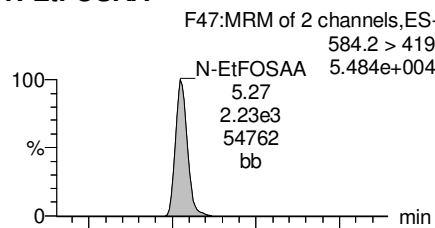
**PFUdA**



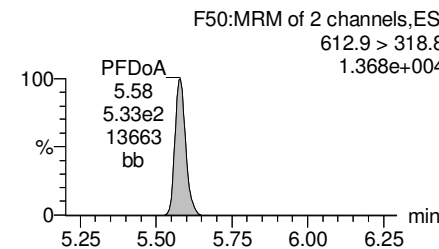
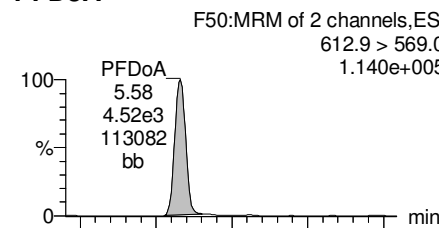
**N-MeFOSAA**



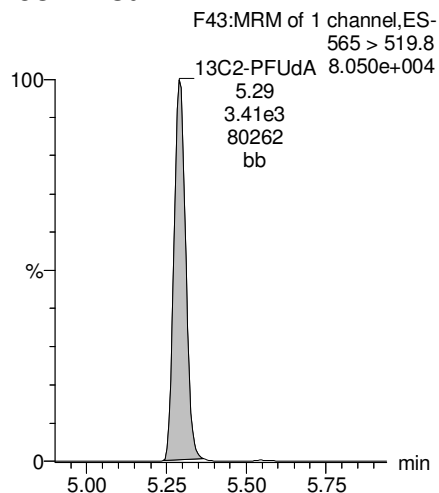
**N-EtFOSAA**



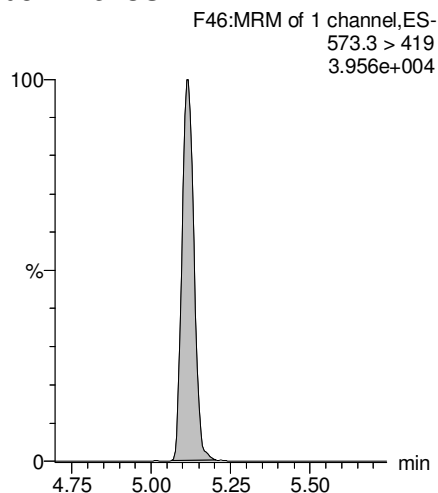
**PFDaA**



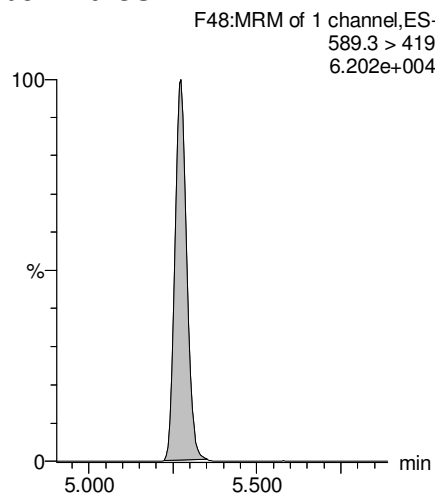
**13C2-PFUdA**



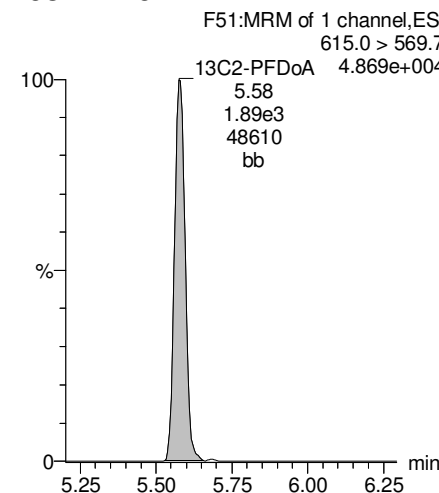
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDaA**



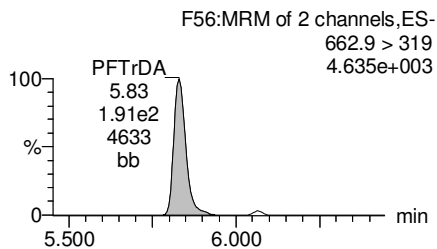
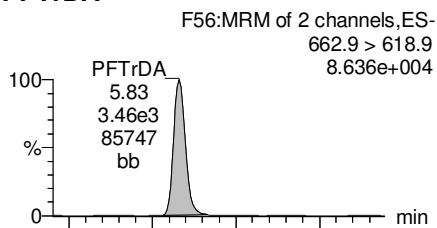
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Last Altered: Friday, November 17, 2017 16:09:42 Pacific Standard Time

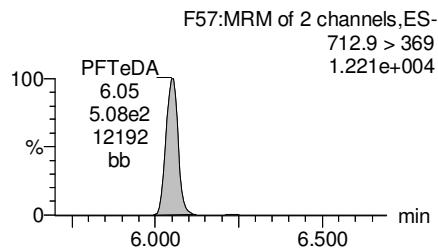
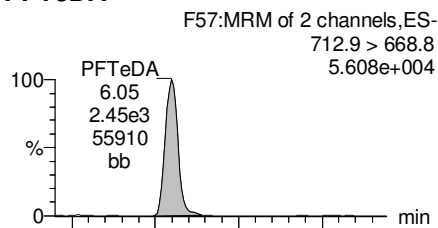
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Name: 171116M3\_26, Date: 16-Nov-2017, Time: 20:59:35, ID: B7K0059-BS1 OPR 0.125, Description: OPR

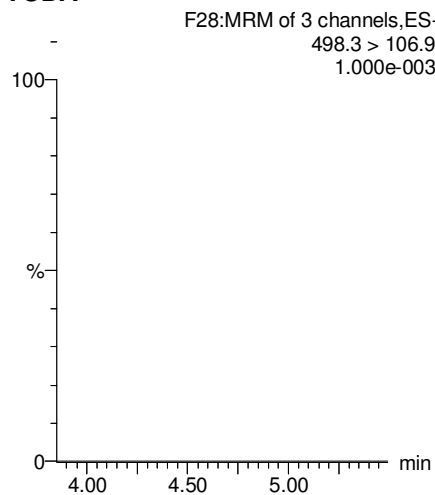
**PFTrDA**



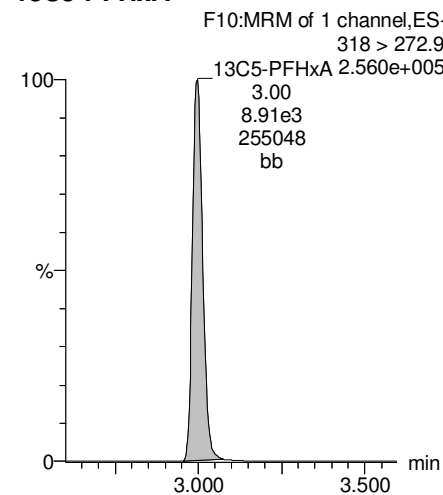
**PFTeDA**



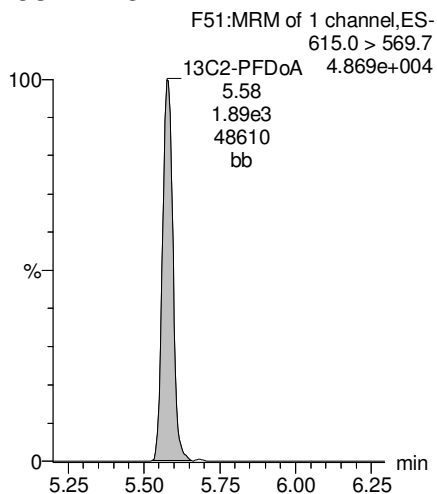
**TCDA**



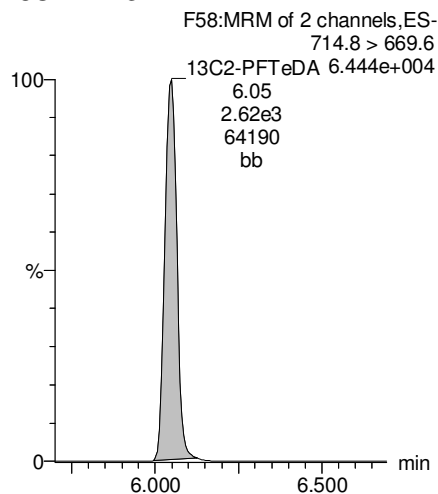
**13C5-PFHxA**



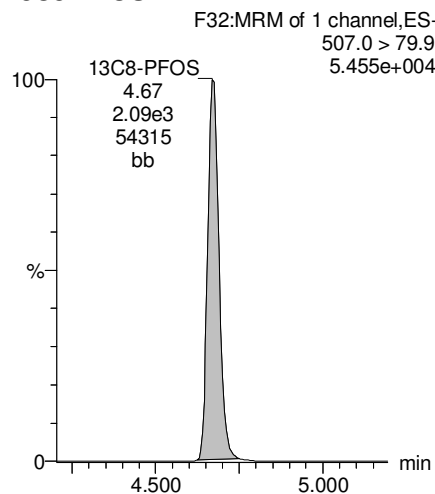
**13C2-PFDoA**



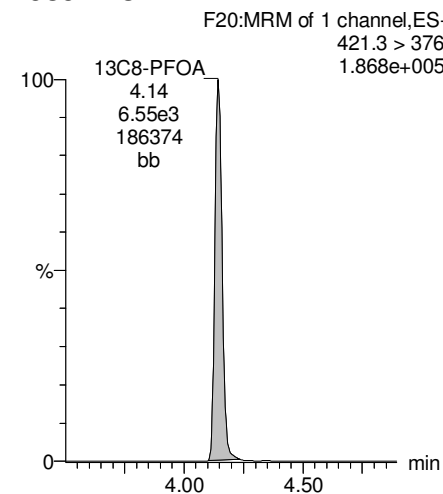
**13C2-PFTeDA**



**13C8-PFOS**



**13C8-PFOA**





Dataset: U:\Q4.PRO\results\171116M3\171116M3-26.qld

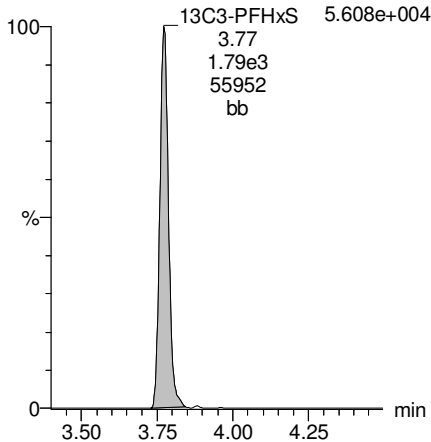
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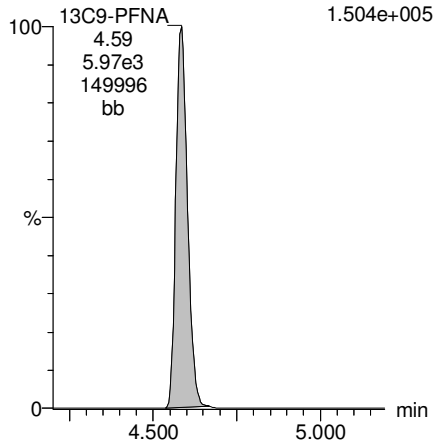
**13C3-PFHxS**

F16:MRM of 1 channel,ES-  
401.9 > 79.9



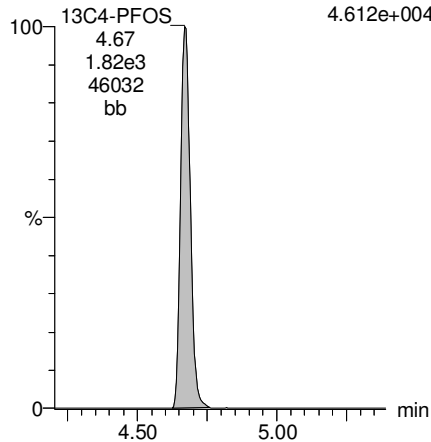
**13C9-PFNA**

F26:MRM of 1 channel,ES-  
472.2 > 426.9



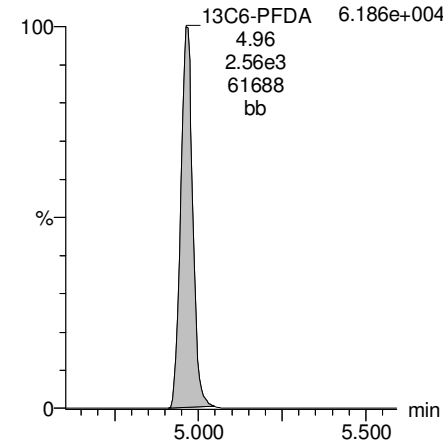
**13C4-PFOS**

F30:MRM of 1 channel,ES-  
503 > 79.9



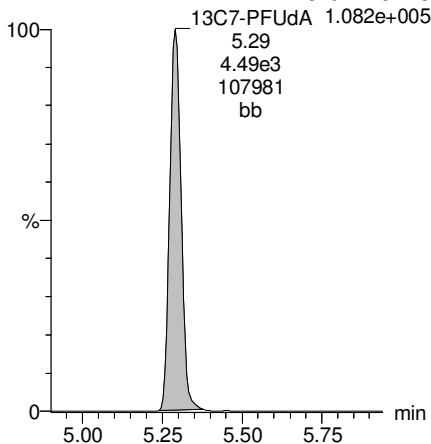
**13C6-PFDA**

F37:MRM of 1 channel,ES-  
519.1 > 473.7



**13C7-PFUdA**

F45:MRM of 1 channel,ES-  
570.1 > 524.8



Dataset: U:\Q4.PRO\results\171116M3\171116M3-37.qld

Last Altered: Saturday, November 18, 2017 12:12:43 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:14:58 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_37, Date: 16-Nov-2017, Time: 23:02:33, ID: 1701624-01 OF-MW20-1117 0.10651, Description: OF-MW20-1117

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		9.86e2	0.1065		2.55				
2	4 PFHxA	313.2 > 268.9		2.60e3	0.1065		3.01				
3	5 PFHpA	363.0 > 318.9		5.13e3	0.1065		3.71				
4	6 L-PFHxS	398.9 > 79.6	6.76e0	8.39e2	0.1065		3.86	3.77	0.101	0.076	
5	9 L-PFOA	413 > 368.7		4.66e3	0.1065		4.22				
6	12 PFNA	463.0 > 418.8		5.42e3	0.1065		4.66				
7	14 L-PFOS	499 > 79.9		2.07e3	0.1065		4.74				
8	16 PFDA	513 > 468.8		4.03e3	0.1065		5.01				
9	18 N-MeFOSAA	570.1 > 419		2.13e3	0.1065		5.17				
10	19 N-EtFOSAA	584.2 > 419		2.97e3	0.1065		5.32				
11	20 PFUdA	563.0 > 518.9		4.06e3	0.1065		5.45				
12	22 PFDoA	612.9 > 569.0		1.82e3	0.1065		5.62				

Dataset: U:\Q4.PRO\results\171116M3\171116M3-37.qld

Last Altered: Saturday, November 18, 2017 12:12:43 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:15:18 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_37, Date: 16-Nov-2017, Time: 23:02:33, ID: 1701624-01 OF-MW20-1117 0.10651, Description: OF-MW20-1117

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24	PFTrDA	662.9 > 618.9	1.82e3	0.1065		5.87				
2	25	PFTeDA	712.9 > 668.8	2.94e3	0.1065		6.01				
3	33	13C3-PFBS	302. > 98.8	9.86e2	0.1065	0.096	2.55	2.50	1.25	122.175	104.1
4	34	13C2-PFHxA	315 > 269.8	2.60e3	0.1065	0.728	3.01	3.00	3.29	42.463	90.5
5	35	13C4-PFHpA	367.2 > 321.8	5.13e3	0.1065	0.550	3.71	3.62	6.50	111.057	94.6
6	36	18O2-PFHxS	403.0 > 102.6	8.39e2	0.1065	0.432	3.86	3.77	5.82	126.713	108.0
7	37	13C2-6:2 FTS	429.1 > 408.9	1.22e3	0.1065	0.217	4.16	4.09	2.46	106.563	90.8
8	38	13C2-PFOA	414.9 > 369.7	4.66e3	0.1065	0.840	4.22	4.14	9.41	105.183	89.6
9	39	13C5-PFNA	468.2 > 422.9	5.42e3	0.1065	0.967	4.66	4.59	9.73	94.507	80.5
10	40	13C8-PFOA	506.1 > 77.7	1.74e3	0.1065	0.786	4.73	4.64	5.23	62.468	53.2
11	41	13C8-PFOS	507.0 > 79.9	2.07e3	0.1065	0.991	4.73	4.67	12.6	118.962	101.4
12	42	13C2-PFDA	515.1 > 469.9	4.03e3	0.1065	2.153	5.01	4.96	18.2	79.538	67.8
13	43	13C2-8:2 FTS	529.1 > 508.7	4.13e2	0.1065	0.058	4.88	4.93	0.524	84.437	71.9
14	44	d3-N-MeFOSAA	573.3 > 419	2.13e3	0.1065	0.667	5.17	5.11	6.40	89.982	76.7
15	45	d5-N-EtFOSAA	589.3 > 419	2.97e3	0.1065	0.698	5.32	5.27	8.89	119.717	102.0
16	46	13C2-PFUdA	565 > 519.8	4.06e3	0.1065	1.261	5.45	5.29	12.2	90.601	77.2
17	47	13C2-PFDoA	615.0 > 569.7	1.82e3	0.1065	0.695	5.62	5.58	5.46	73.741	62.8
18	49	13C2-PFTeDA	714.8 > 669.6	2.94e3	0.1065	0.762	6.01	6.05	8.82	108.639	92.6
19	54	13C4-PFBA	217. > 171.8	6.59e3	0.1065	1.000	1.28	1.25	12.5	117.360	100.0
20	55	13C5-PFHxA	318 > 272.9	9.86e3	0.1065	1.000	3.01	3.00	12.5	117.360	100.0
21	56	13C3-PFHxS	401.9 > 79.9	1.80e3	0.1065	1.000	3.86	3.77	12.5	117.360	100.0
22	57	13C8-PFOA	421.3 > 376	6.20e3	0.1065	1.000	4.22	4.14	12.5	117.360	100.0
23	58	13C9-PFNA	472.2 > 426.9	6.96e3	0.1065	1.000	4.66	4.59	12.5	117.360	100.0
24	59	13C4-PFOS	503 > 79.9	2.06e3	0.1065	1.000	4.73	4.67	12.5	117.360	100.0
25	60	13C6-PFDA	519.1 > 473.7	2.76e3	0.1065	1.000	5.01	4.96	12.5	117.360	100.0
26	61	13C7-PFUdA	570.1 > 524.8	4.17e3	0.1065	1.000	5.45	5.29	12.5	117.360	100.0
27	62	Total PFHxS	398.9 > 79.6	6.76e0	0.1065		3.86		0.101	0.076	
28	63	Total PFOA	413 > 368.7	0.00e0	0.1065		4.22		0.000		
29	64	Total PFOS	499 > 79.9	0.00e0	0.1065		4.73		0.000		
30	65	Total N-MeFOSAA	570.1 > 419	0.00e0	0.1065		5.54		0.000		
31	66	Total N-EtFOSAA	584.2 > 419	0.00e0	0.1065		5.32		0.000		

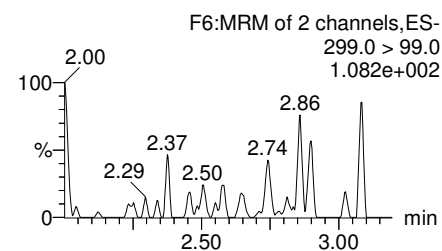
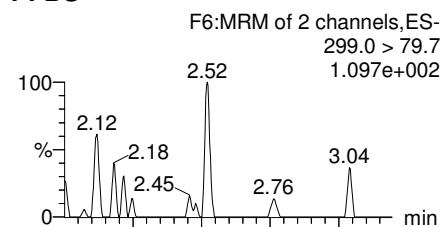
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Last Altered: Saturday, November 18, 2017 12:12:43 Pacific Standard Time  
Printed: Saturday, November 18, 2017 12:15:18 Pacific Standard Time

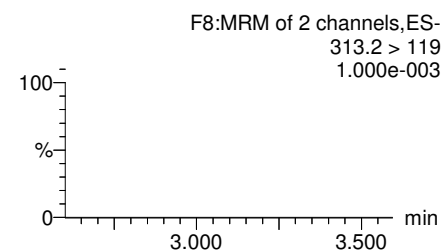
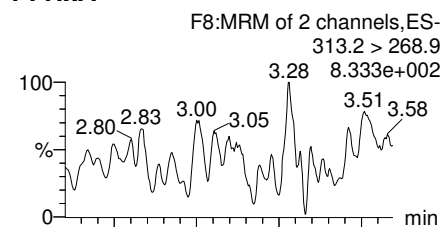
Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_37, Date: 16-Nov-2017, Time: 23:02:33, ID: 1701624-01 OF-MW20-1117 0.10651, Description: OF-MW20-1117

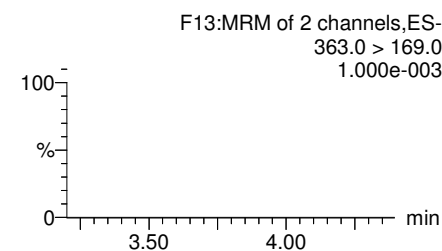
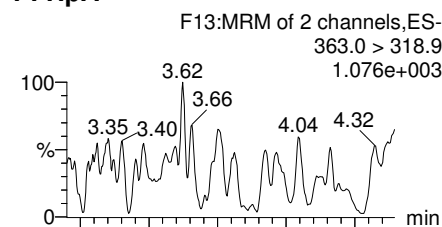
**PFBS**



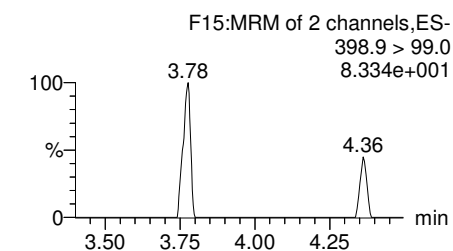
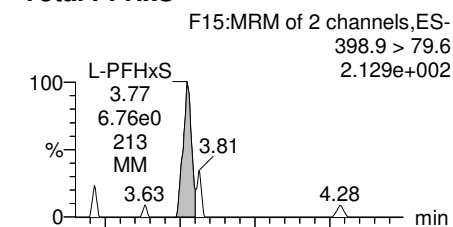
**PFHxA**



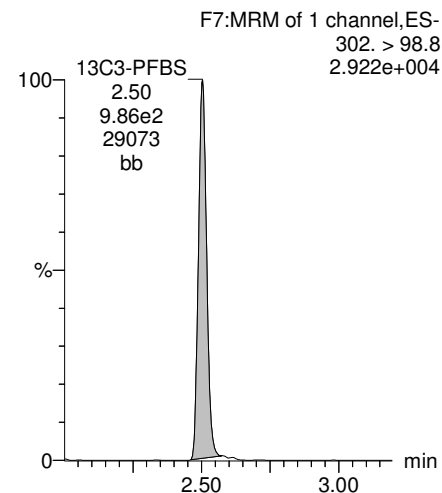
**PFHpA**



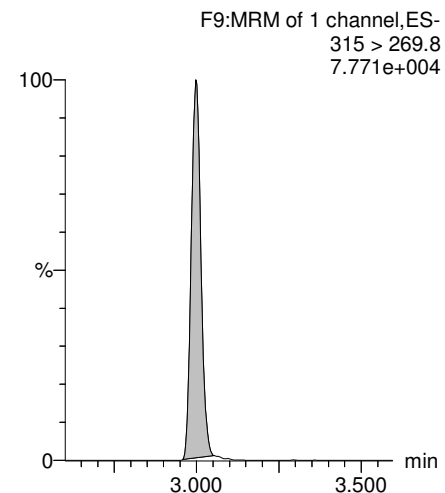
**Total PFHxS**



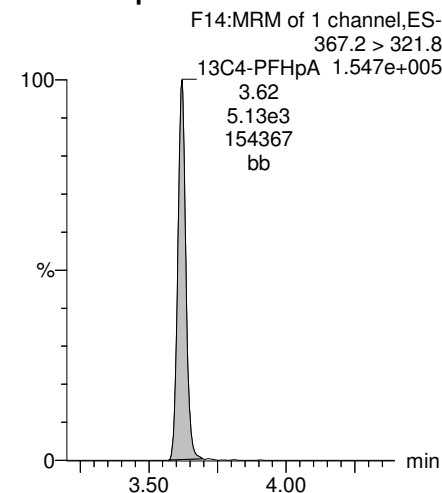
**13C3-PFBS**



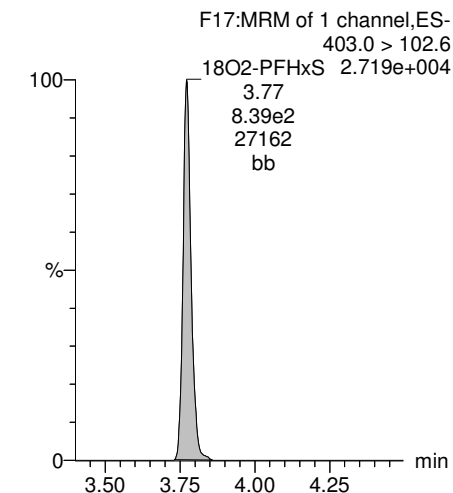
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

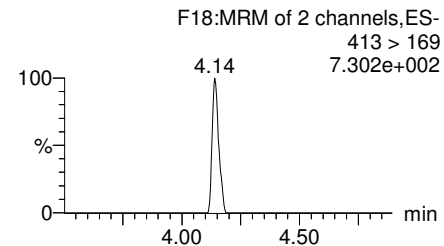
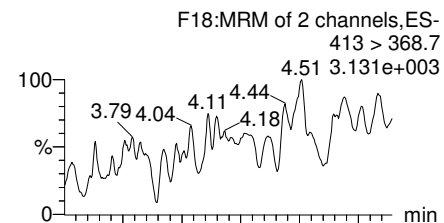


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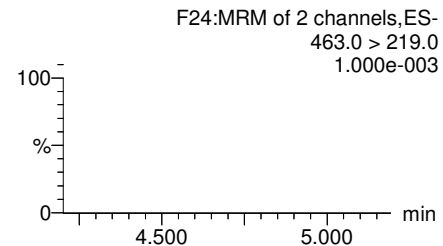
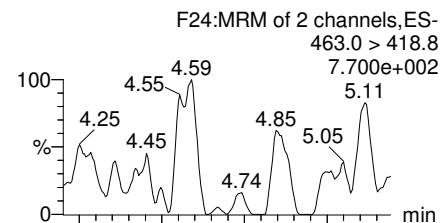
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Printed: Saturday, November 18, 2017 12:15:18 Pacific Standard Time

Name: 171116M3\_37, Date: 16-Nov-2017, Time: 23:02:33, ID: 1701624-01 OF-MW20-1117 0.10651, Description: OF-MW20-1117

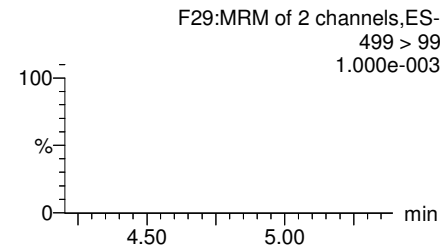
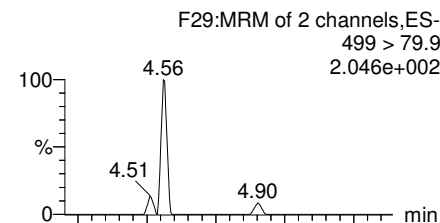
**Total PFOA**



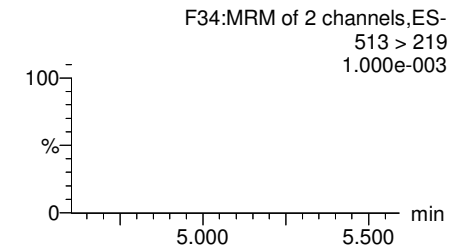
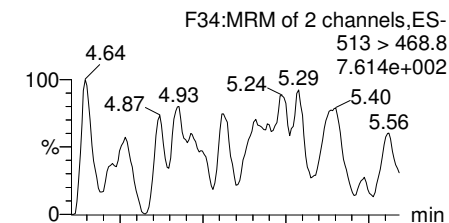
**PFNA**



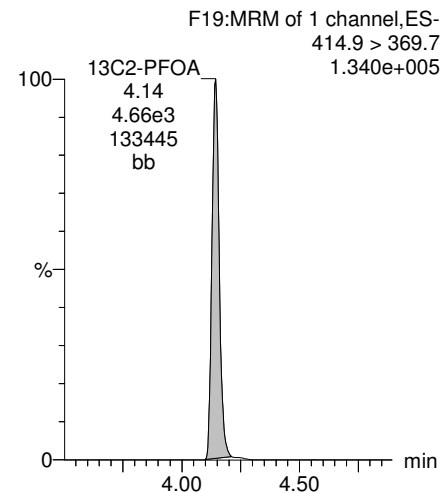
**Total PFOS**



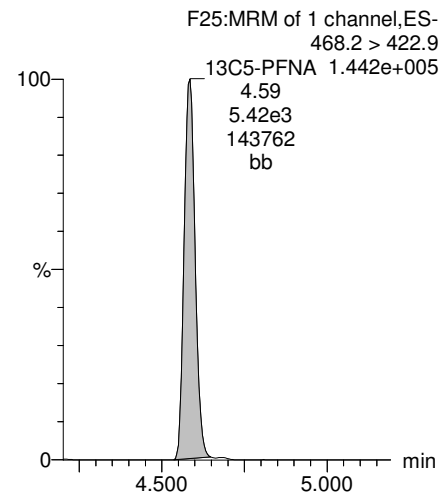
**PFDA**



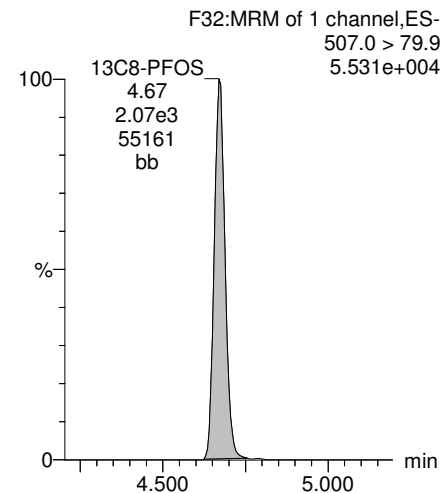
**13C2-PFOA**



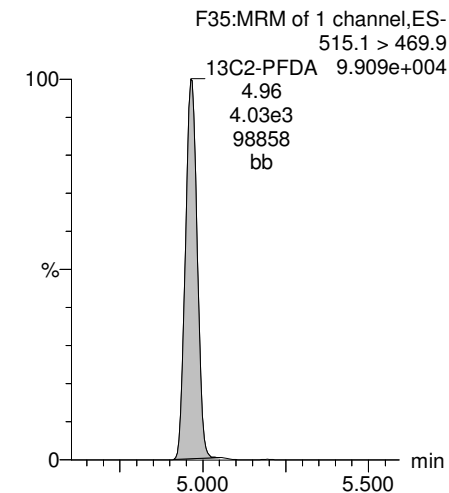
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**

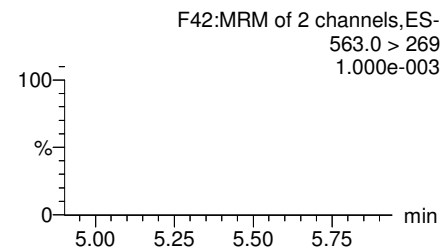
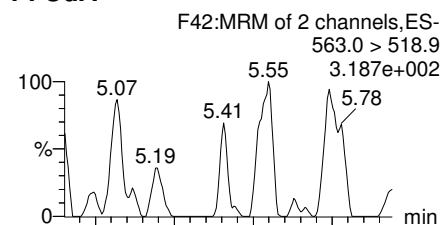


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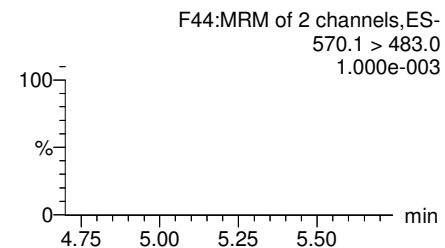
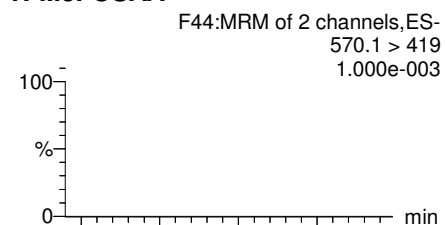
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Name: 171116M3\_37, Date: 16-Nov-2017, Time: 23:02:33, ID: 1701624-01 OF-MW20-1117 0.10651, Description: OF-MW20-1117

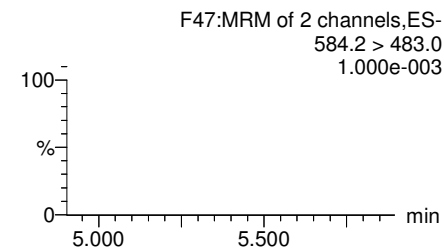
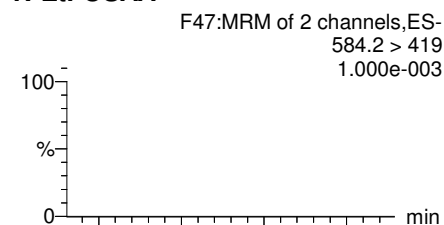
**PFUdA**



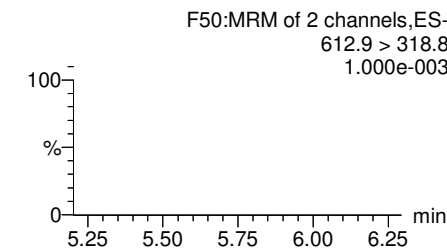
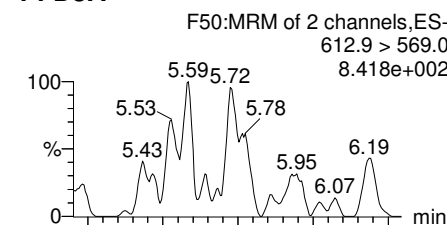
**N-MeFOSAA**



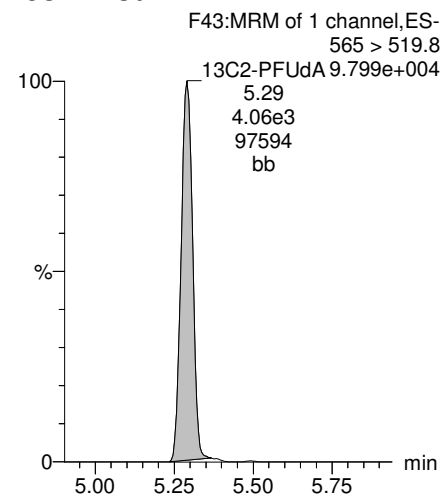
**N-EtFOSAA**



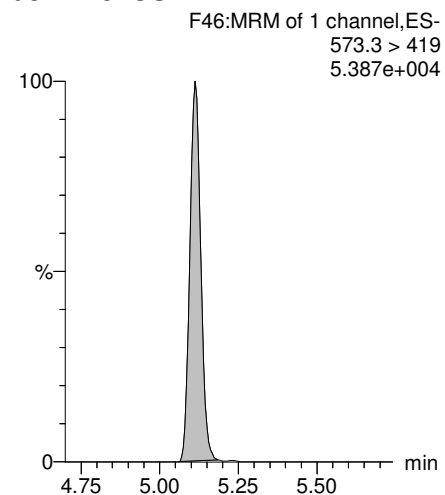
**PFDaA**



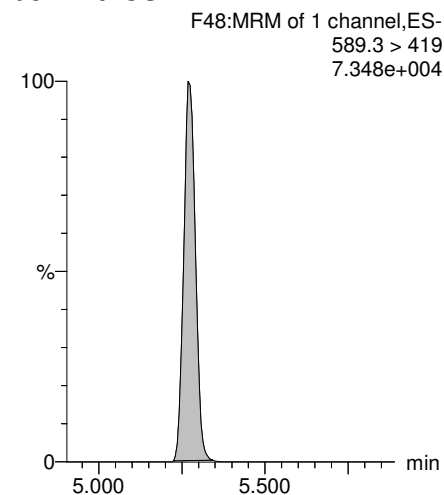
**13C2-PFUdA**



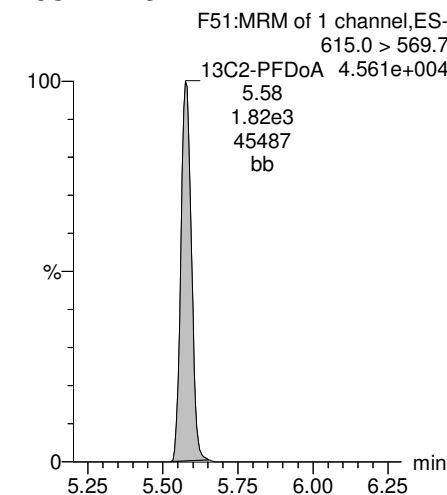
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDaA**

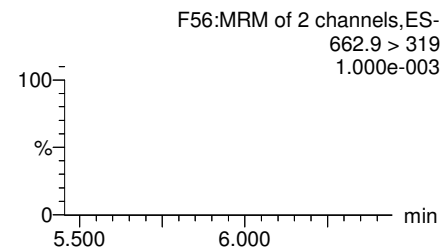
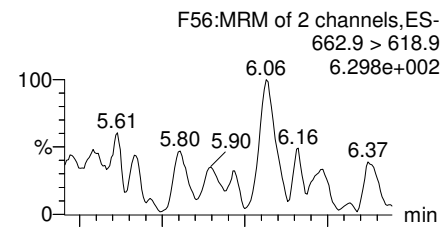


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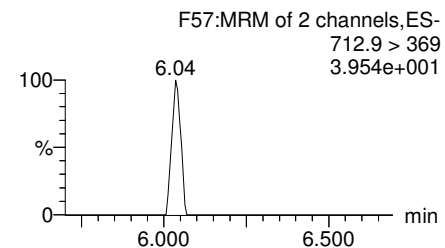
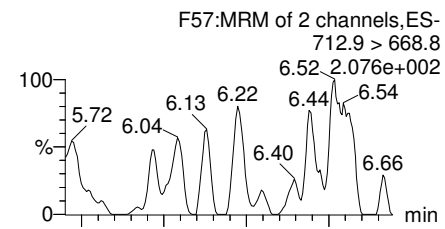
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Name: 171116M3\_37, Date: 16-Nov-2017, Time: 23:02:33, ID: 1701624-01 OF-MW20-1117 0.10651, Description: OF-MW20-1117

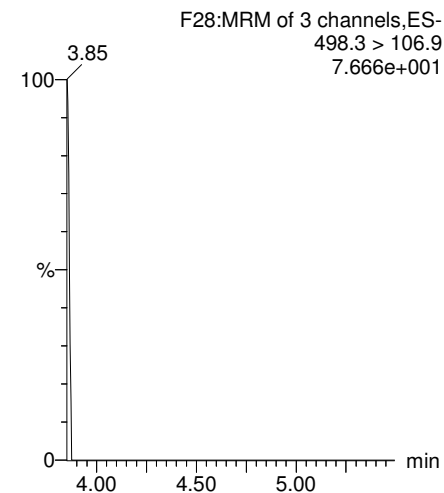
**PFTrDA**



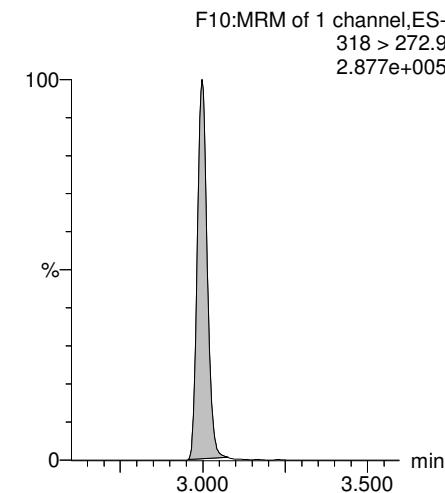
**PFTeDA**



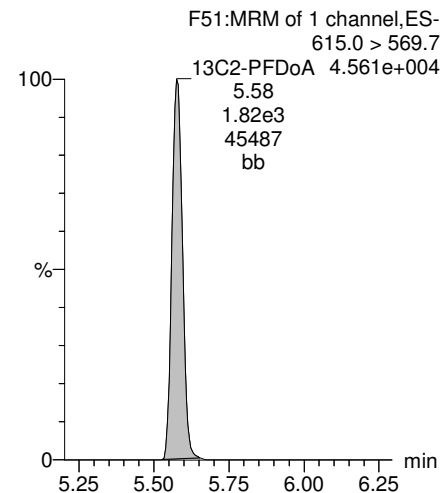
**TCDA**



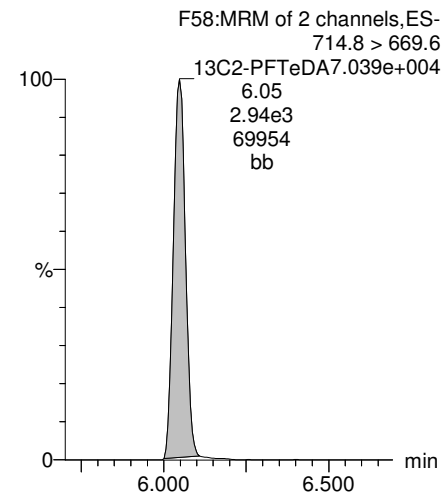
**13C5-PFHxA**



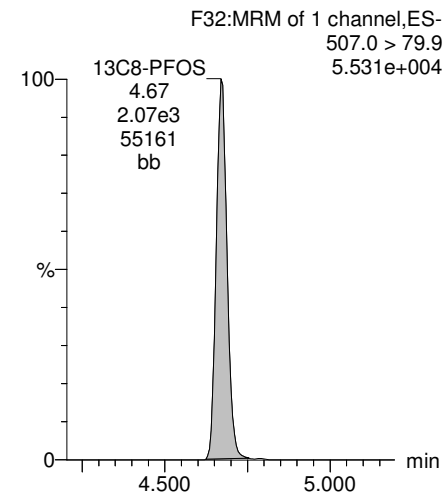
**13C2-PFDoA**



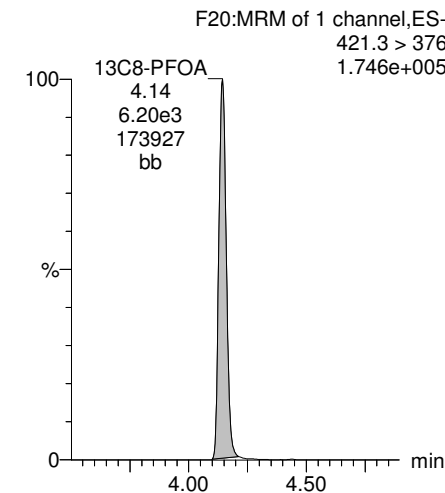
**13C2-PFTeDA**



**13C8-PFOS**



**13C8-PFOA**

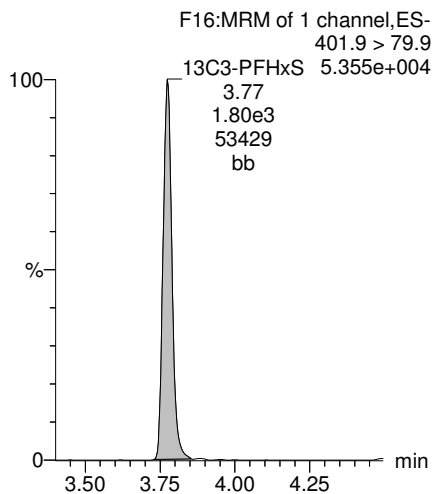


Dataset: U:\Q4.PRO\results\171116M3\171116M3-37.qld

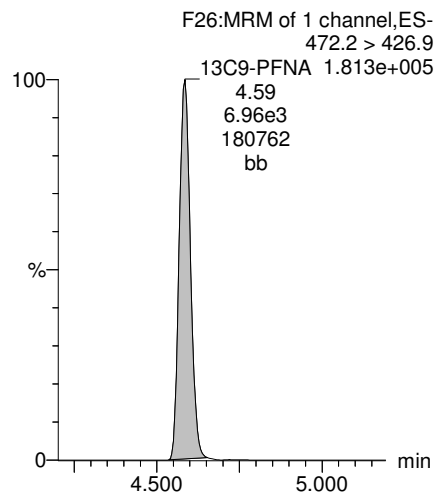
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Name: 171116M3\_37, Date: 16-Nov-2017, Time: 23:02:33, ID: 1701624-01 OF-MW20-1117 0.10651, Description: OF-MW20-1117

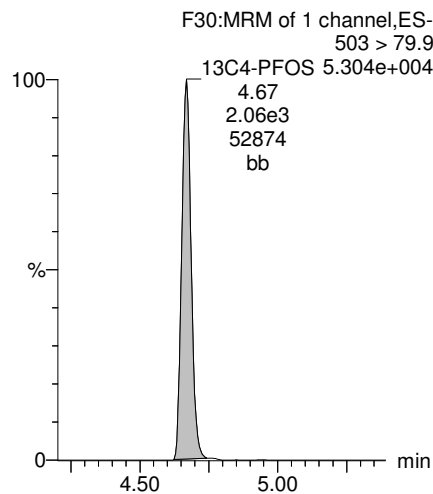
**13C3-PFHxS**



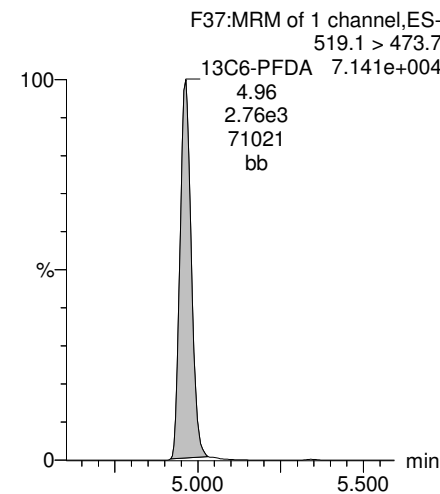
**13C9-PFNA**



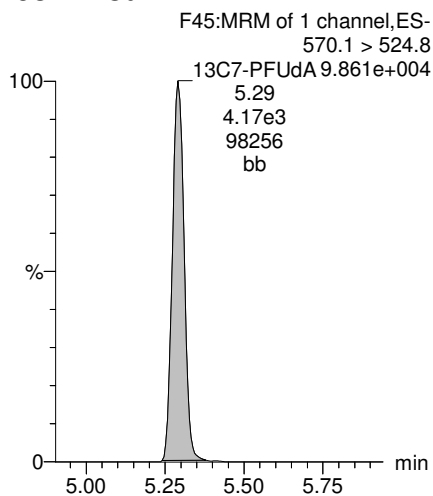
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUdA**





Dataset: U:\Q4.PRO\results\171116M3\171116M3-38.qld

Last Altered: Saturday, November 18, 2017 12:21:19 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:22:29 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_38, Date: 16-Nov-2017, Time: 23:13:44, ID: 1701624-02 OF-MW20P-1117 0.11409, Description: OF-MW20P-1117

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		8.91e2	0.1141		2.55				
2	4	PFHxA	313.2 > 268.9		2.46e3	0.1141		3.01				
3	5	PFHpA	363.0 > 318.9		4.59e3	0.1141		3.71				
4	6	L-PFHxS	398.9 > 79.6	8.74e0	8.46e2	0.1141		3.86	3.77	0.129	0.200	
5	9	L-PFOA	413 > 368.7		4.21e3	0.1141		4.22				
6	12	PFNA	463.0 > 418.8		4.89e3	0.1141		4.66				
7	14	L-PFOS	499 > 79.9		2.13e3	0.1141		4.74				
8	16	PFDA	513 > 468.8		4.41e3	0.1141		5.01				
9	18	N-MeFOSAA	570.1 > 419		1.98e3	0.1141		5.17				
10	19	N-EtFOSAA	584.2 > 419		1.75e3	0.1141		5.32				
11	20	PFUdA	563.0 > 518.9		3.83e3	0.1141		5.45				
12	22	PFDoA	612.9 > 569.0		1.86e3	0.1141		5.62				

Dataset: U:\Q4.PRO\results\171116M3\171116M3-38.qld

Last Altered: Saturday, November 18, 2017 12:21:19 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:22:50 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_38, Date: 16-Nov-2017, Time: 23:13:44, ID: 1701624-02 OF-MW20P-1117 0.11409, Description: OF-MW20P-1117

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	24	PFTrDA	662.9 > 618.9	1.86e3	0.1141		5.87					
2	25	PFTeDA	712.9 > 668.8	2.45e3	0.1141		6.01					
3	33	13C3-PFBS	302. > 98.8	8.91e2	1.00e4	0.096	2.55	2.50	1.11	101.471	92.6	
4	34	13C2-PFHxA	315 > 269.8	2.46e3	1.00e4	0.728	3.01	3.00	3.08	37.037	84.5	
5	35	13C4-PFHpA	367.2 > 321.8	4.59e3	1.00e4	0.550	3.71	3.62	5.74	91.563	83.6	
6	36	18O2-PFHxS	403.0 > 102.6	8.46e2	1.79e3	0.432	3.86	3.77	5.92	120.141	109.7	
7	37	13C2-6:2 FTS	429.1 > 408.9	1.29e3	6.18e3	0.217	4.16	4.09	2.60	105.180	96.0	
8	38	13C2-PFOA	414.9 > 369.7	4.21e3	6.18e3	0.840	4.22	4.14	8.51	88.875	81.1	
9	39	13C5-PFNA	468.2 > 422.9	4.89e3	6.88e3	0.967	4.66	4.59	8.89	80.593	73.6	
10	40	13C8-PFOA	506.1 > 77.7	2.04e3	3.78e3	0.786	4.73	4.64	6.74	75.125	68.6	
11	41	13C8-PFOS	507.0 > 79.9	2.13e3	2.11e3	0.991	4.73	4.67	12.6	111.544	101.8	
12	42	13C2-PFDA	515.1 > 469.9	4.41e3	2.71e3	0.1141	2.153	5.01	4.96	20.4	82.868	75.6
13	43	13C2-8:2 FTS	529.1 > 508.7	3.77e2	1.00e4	0.058	4.88	4.93	0.471	70.887	64.7	
14	44	d3-N-MeFOSAA	573.3 > 419	1.98e3	3.78e3	0.1141	0.667	5.17	5.11	6.56	86.119	78.6
15	45	d5-N-EtFOSAA	589.3 > 419	1.75e3	3.78e3	0.1141	0.698	5.32	5.27	5.80	72.837	66.5
16	46	13C2-PFUdA	565 > 519.8	3.83e3	3.78e3	0.1141	1.261	5.45	5.29	12.7	88.027	80.3
17	47	13C2-PFDoA	615.0 > 569.7	1.86e3	3.78e3	0.1141	0.695	5.62	5.58	6.16	77.664	70.9
18	49	13C2-PFTeDA	714.8 > 669.6	2.45e3	3.78e3	0.1141	0.762	6.01	6.05	8.12	93.284	85.1
19	54	13C4-PFBA	217. > 171.8	6.66e3	6.66e3	0.1141	1.000	1.28	1.25	12.5	109.563	100.0
20	55	13C5-PFHxA	318 > 272.9	1.00e4	1.00e4	0.1141	1.000	3.01	2.99	12.5	109.563	100.0
21	56	13C3-PFHxS	401.9 > 79.9	1.79e3	1.79e3	0.1141	1.000	3.86	3.77	12.5	109.563	100.0
22	57	13C8-PFOA	421.3 > 376	6.18e3	6.18e3	0.1141	1.000	4.22	4.14	12.5	109.563	100.0
23	58	13C9-PFNA	472.2 > 426.9	6.88e3	6.88e3	0.1141	1.000	4.66	4.58	12.5	109.563	100.0
24	59	13C4-PFOS	503 > 79.9	2.11e3	2.11e3	0.1141	1.000	4.73	4.67	12.5	109.563	100.0
25	60	13C6-PFDA	519.1 > 473.7	2.71e3	2.71e3	0.1141	1.000	5.01	4.96	12.5	109.563	100.0
26	61	13C7-PFUdA	570.1 > 524.8	3.78e3	3.78e3	0.1141	1.000	5.45	5.29	12.5	109.563	100.0
27	62	Total PFHxS	398.9 > 79.6	8.74e0	8.46e2	0.1141		3.86		0.129	0.200	
28	63	Total PFOA	413 > 368.7	0.00e0	4.21e3	0.1141		4.22		0.000		
29	64	Total PFOS	499 > 79.9	0.00e0	2.13e3	0.1141		4.73		0.000		
30	65	Total N-MeFOSAA	570.1 > 419	0.00e0	1.98e3	0.1141		5.54		0.000		
31	66	Total N-EtFOSAA	584.2 > 419	0.00e0	1.75e3	0.1141		5.32		0.000		

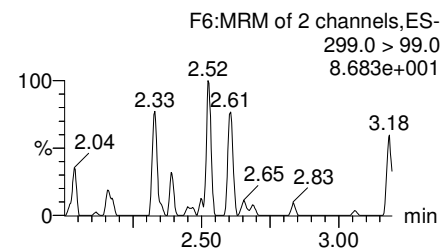
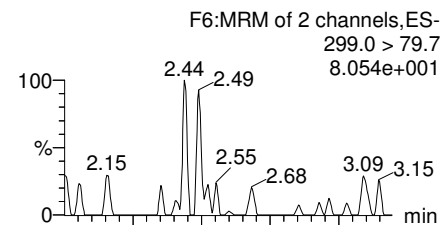
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Printed: Saturday, November 18, 2017 12:22:50 Pacific Standard Time

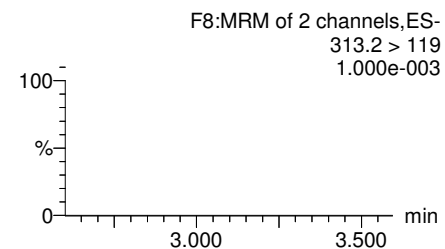
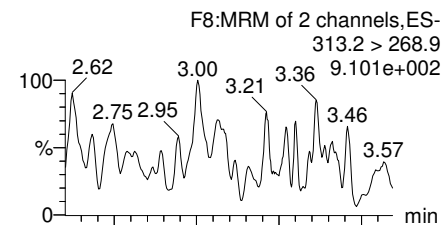
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_38, Date: 16-Nov-2017, Time: 23:13:44, ID: 1701624-02 OF-MW20P-1117 0.11409, Description: OF-MW20P-1117

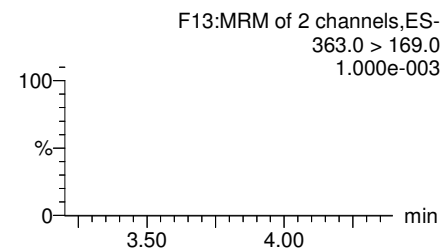
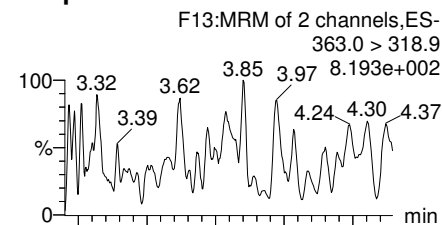
**PFBS**



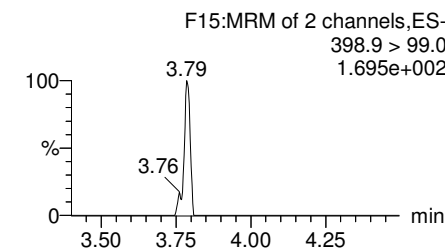
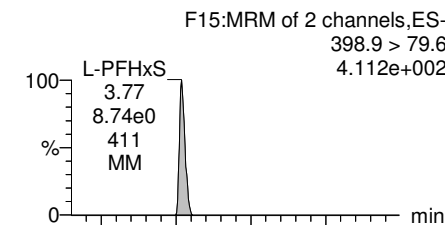
**PFHxA**



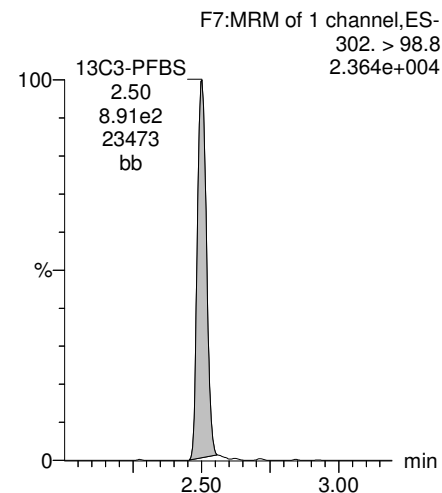
**PFHpA**



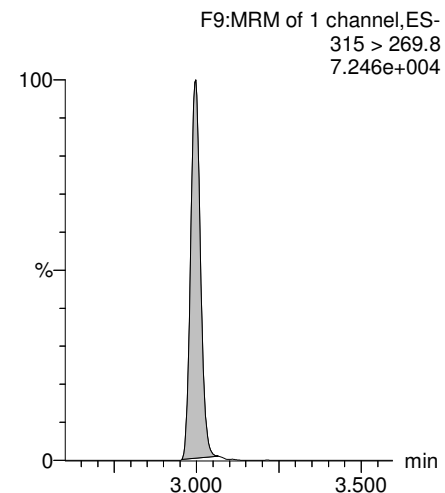
**Total PFHxS**



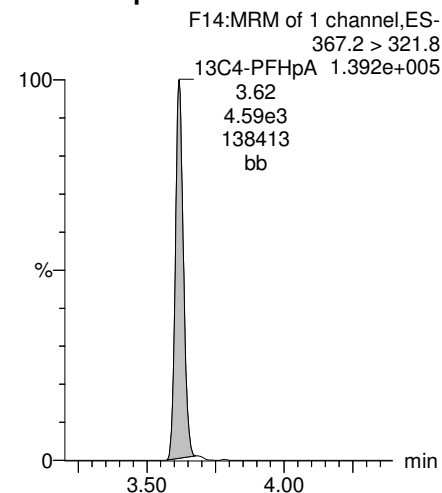
**13C3-PFBS**



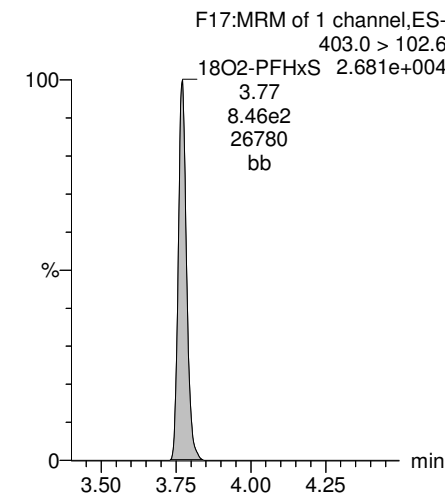
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

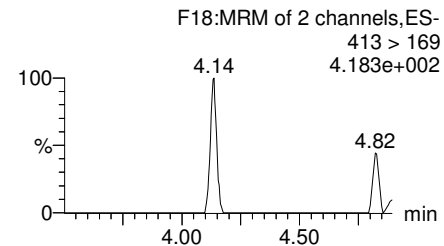
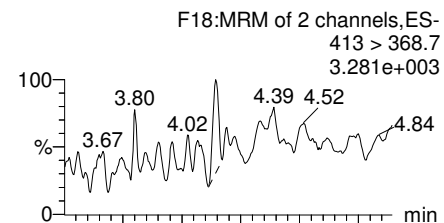


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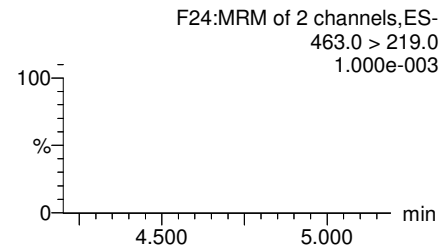
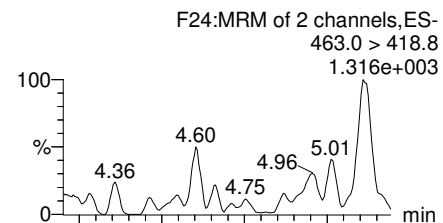
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Printed: Saturday, November 18, 2017 12:22:50 Pacific Standard Time

Name: 171116M3\_38, Date: 16-Nov-2017, Time: 23:13:44, ID: 1701624-02 OF-MW20P-1117 0.11409, Description: OF-MW20P-1117

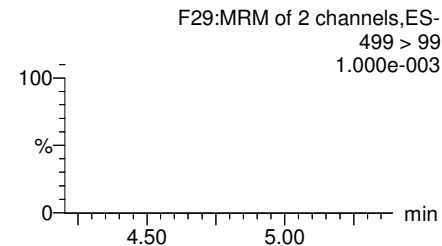
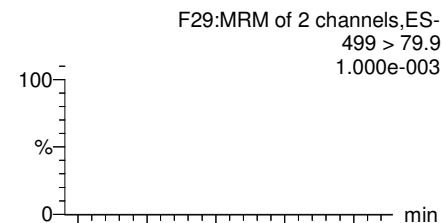
**Total PFOA**



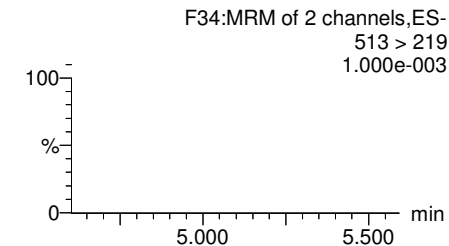
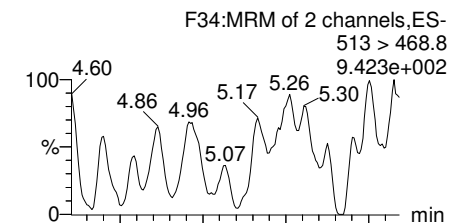
**PFNA**



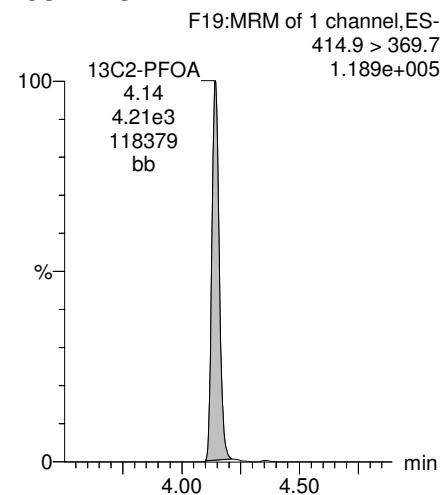
**Total PFOS**



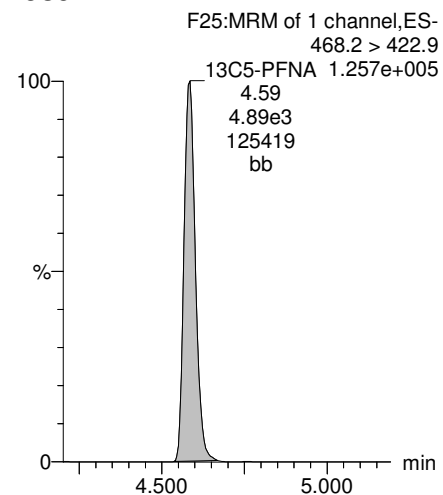
**PFDA**



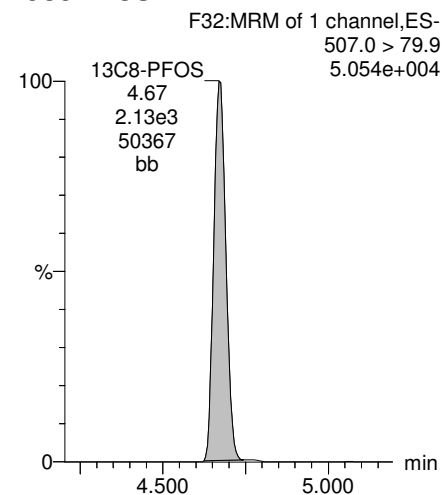
**13C2-PFOA**



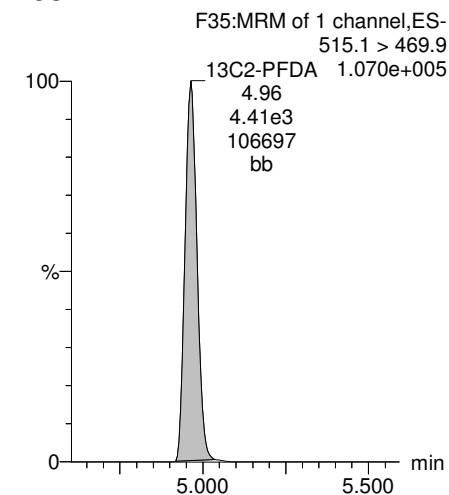
**13C5-PFNA**



**13C8-PFOS**



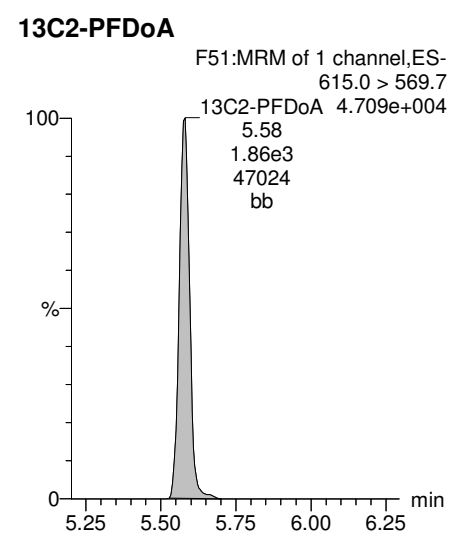
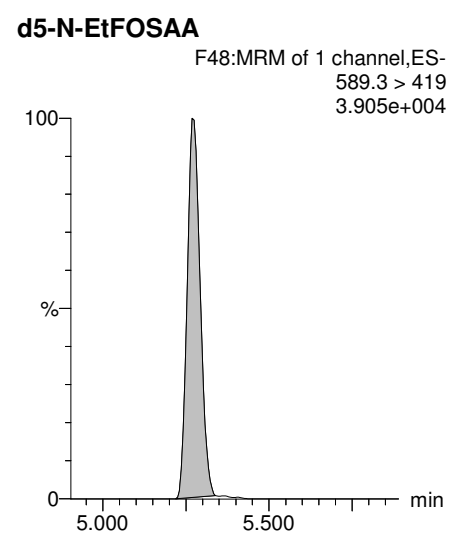
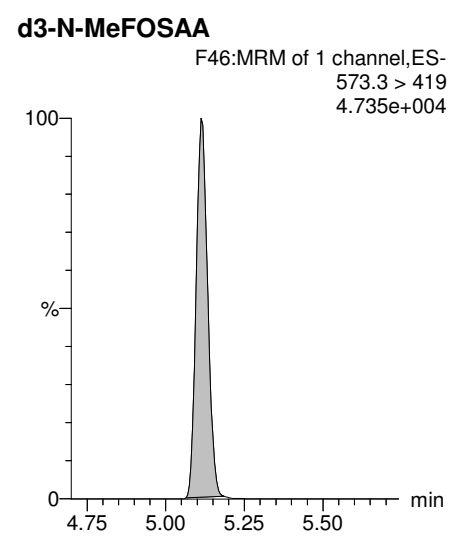
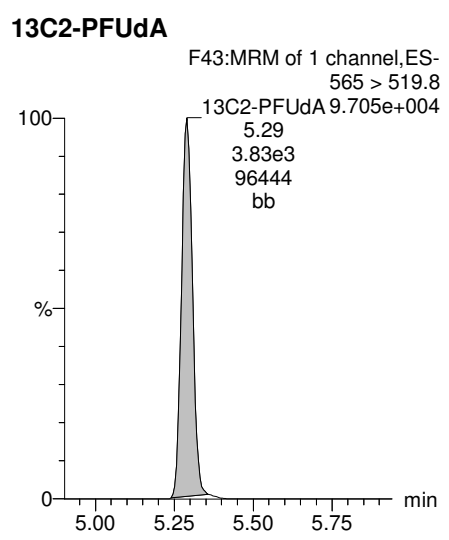
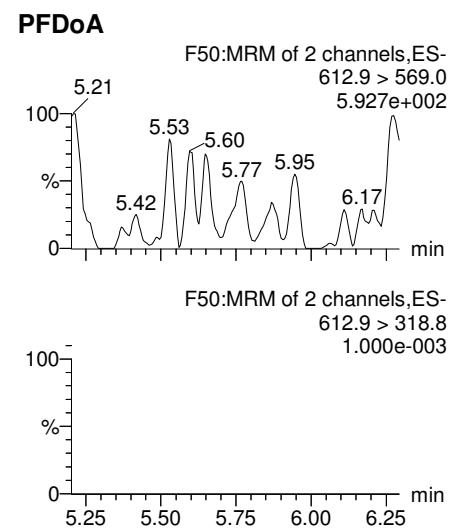
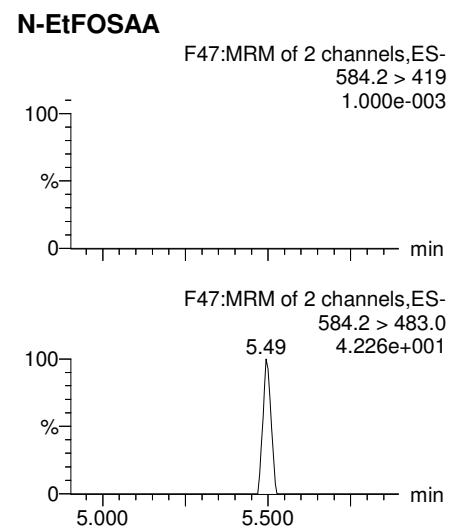
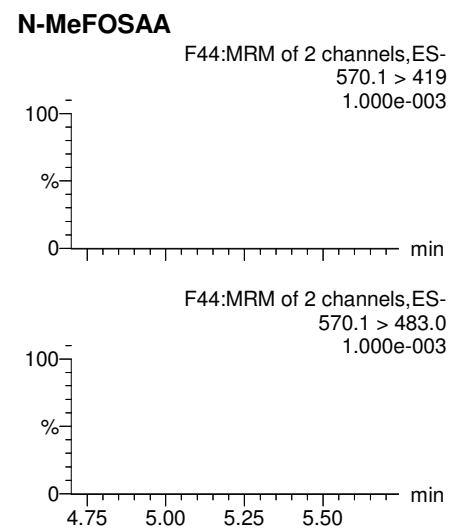
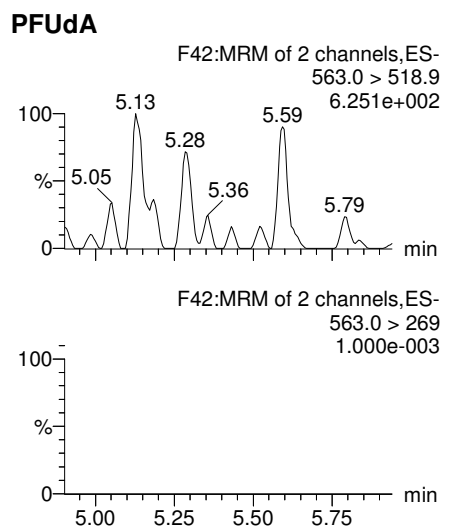
**13C2-PFDA**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-38.qld

Last Altered: Saturday, November 18, 2017 12:21:19 Pacific Standard Time  
Printed: Saturday, November 18, 2017 12:22:50 Pacific Standard Time

Name: 171116M3\_38, Date: 16-Nov-2017, Time: 23:13:44, ID: 1701624-02 OF-MW20P-1117 0.11409, Description: OF-MW20P-1117

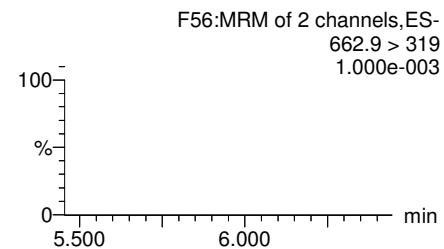
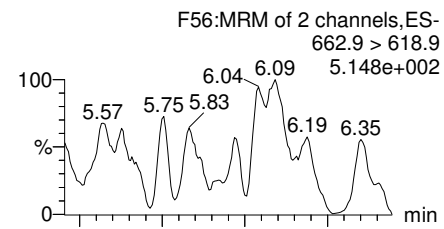


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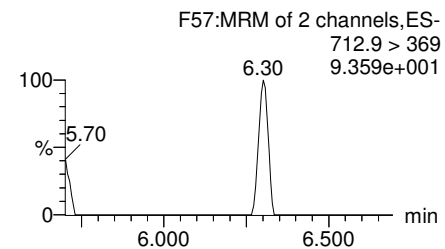
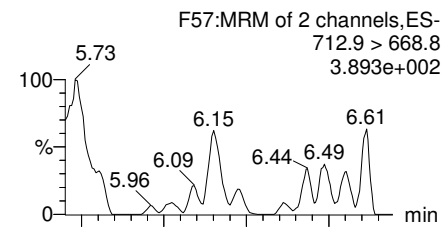
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Printed: Saturday, November 18, 2017 12:22:50 Pacific Standard Time

Name: 171116M3\_38, Date: 16-Nov-2017, Time: 23:13:44, ID: 1701624-02 OF-MW20P-1117 0.11409, Description: OF-MW20P-1117

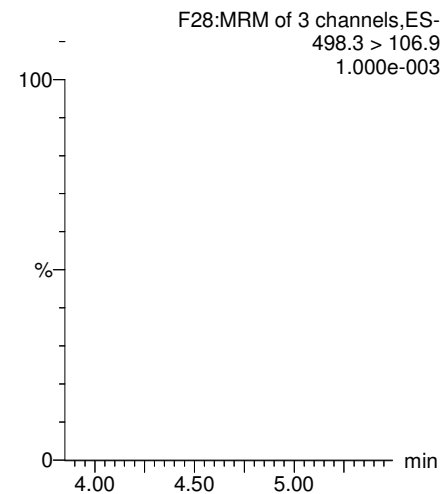
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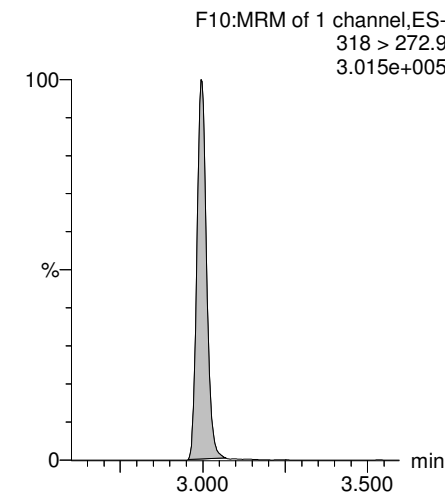
**PFTeDA**



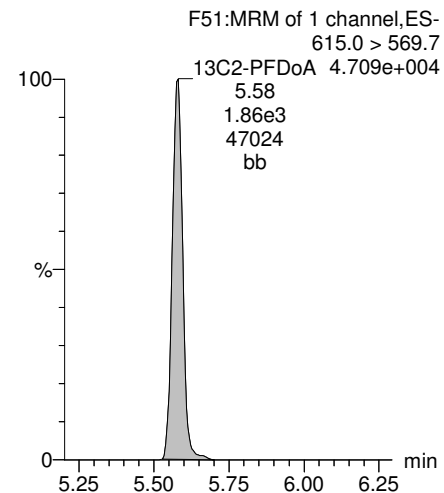
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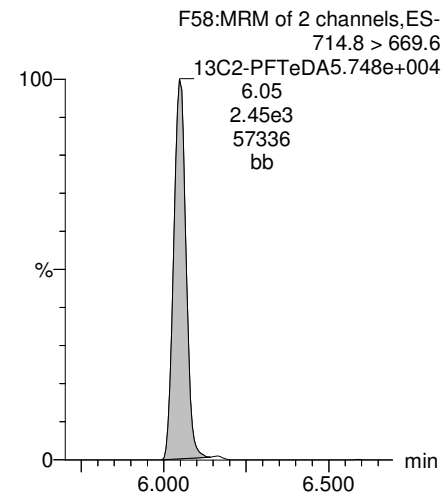
**13C5-PFHxA**



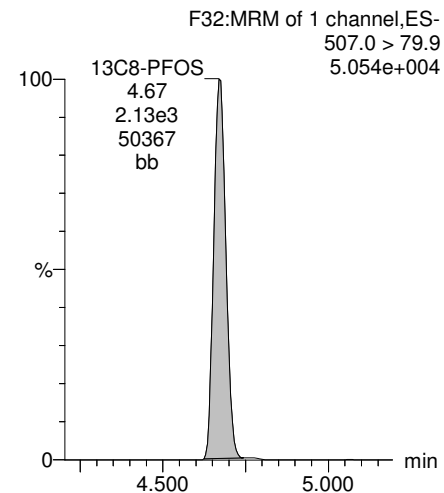
**13C2-PFDoA**



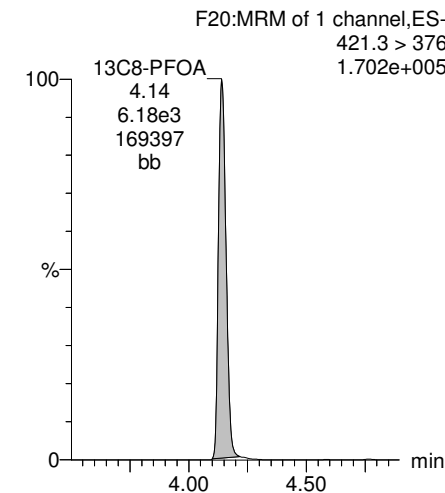
**13C2-PFTeDA**



**13C8-PFOS**



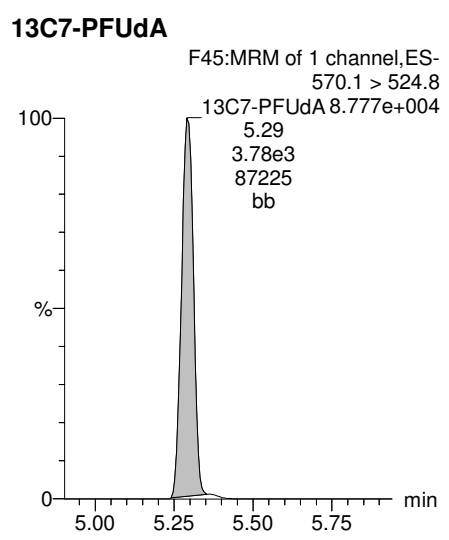
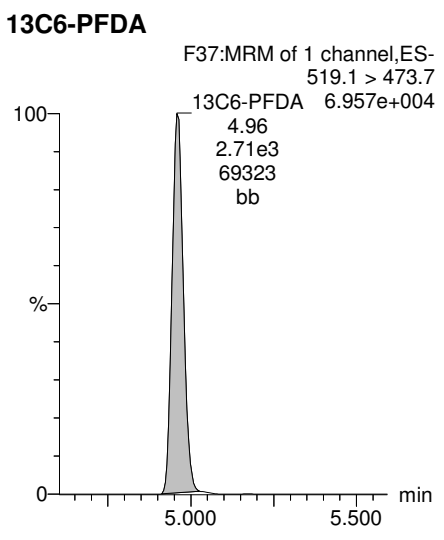
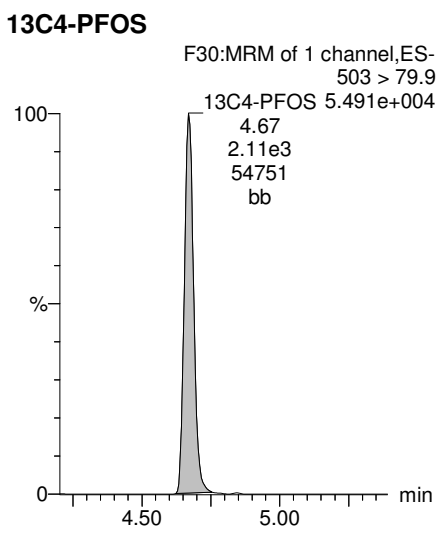
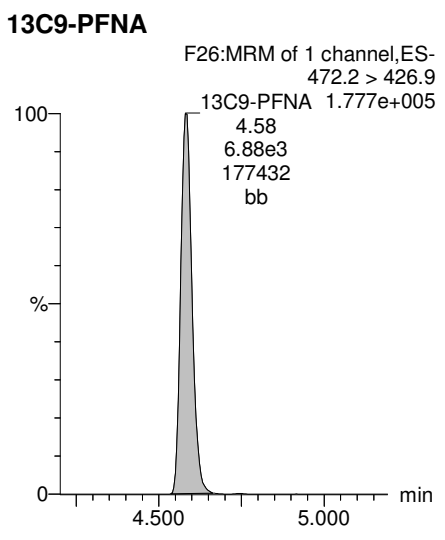
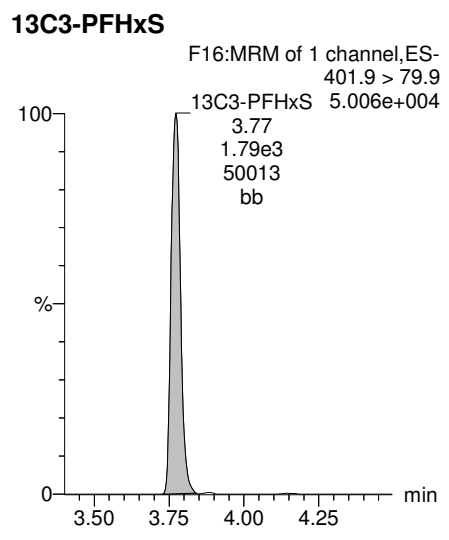
**13C8-PFOA**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-38.qld

Last Altered: Saturday, November 18, 2017 12:21:19 Pacific Standard Time  
Printed: Saturday, November 18, 2017 12:22:50 Pacific Standard Time

Name: 171116M3\_38, Date: 16-Nov-2017, Time: 23:13:44, ID: 1701624-02 OF-MW20P-1117 0.11409, Description: OF-MW20P-1117



Dataset: U:\Q4.PRO\results\171116M3\171116M3-39.qld

Last Altered: Saturday, November 18, 2017 12:28:33 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:29:12 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_39, Date: 16-Nov-2017, Time: 23:24:55, ID: 1701624-03 OF-MW22-1117 0.10407, Description: OF-MW22-1117

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7	3.66e2	1.04e3	0.1041		2.55	2.50	4.40	19.432	
2	4 PFHxA	313.2 > 268.9	3.71e3	2.72e3	0.1041		3.01	3.00	6.81	44.948	
3	5 PFHpA	363.0 > 318.9	5.82e2	5.08e3	0.1041		3.71	3.62	1.43	9.152	
4	6 L-PFHxS	398.9 > 79.6	4.73e3	7.22e2	0.1041		3.86	3.77	81.9	408.174	
5	9 L-PFOA	413 > 368.7	4.95e3	5.31e3	0.1041		4.22	4.14	11.7	109.904	
6	12 PFNA	463.0 > 418.8	1.09e2	5.66e3	0.1041		4.66	4.58	0.240	0.248	
7	14 L-PFOS	499 > 79.9	1.13e4	1.81e3	0.1041		4.74	4.67	78.4	829.440	
8	16 PFDA	513 > 468.8		5.54e3	0.1041		5.01				
9	18 N-MeFOSAA	570.1 > 419		2.45e3	0.1041		5.17				
10	19 N-EtFOSAA	584.2 > 419		2.17e3	0.1041		5.32				
11	20 PFUdA	563.0 > 518.9		3.74e3	0.1041		5.45				
12	22 PFDoA	612.9 > 569.0		2.20e3	0.1041		5.62				



Dataset: U:\Q4.PRO\results\171116M3\171116M3-39.qld

Last Altered: Saturday, November 18, 2017 12:28:33 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:29:23 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_39, Date: 16-Nov-2017, Time: 23:24:55, ID: 1701624-03 OF-MW22-1117 0.10407, Description: OF-MW22-1117

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9		2.20e3	0.1041		5.87				
2	25 PFTeDA	712.9 > 668.8		2.19e3	0.1041		6.01				
3	33 13C3-PFBS	302. > 98.8	1.04e3	1.06e4	0.1041	0.096	2.55	2.50	1.23	122.581	102.1
4	34 13C2-PFHxA	315 > 269.8	2.72e3	1.06e4	0.1041	0.728	3.01	3.00	3.21	42.338	88.1
5	35 13C4-PFHpA	367.2 > 321.8	5.08e3	1.06e4	0.1041	0.550	3.71	3.62	5.98	104.620	87.1
6	36 18O2-PFHxS	403.0 > 102.6	7.22e2	2.11e3	0.1041	0.432	3.86	3.77	4.29	95.479	79.5
7	37 13C2-6:2 FTS	429.1 > 408.9	1.16e3	6.69e3	0.1041	0.217	4.16	4.09	2.16	95.648	79.6
8	38 13C2-PFOA	414.9 > 369.7	5.31e3	6.69e3	0.1041	0.840	4.22	4.15	9.92	113.523	94.5
9	39 13C5-PFNA	468.2 > 422.9	5.66e3	7.33e3	0.1041	0.967	4.66	4.58	9.66	96.038	80.0
10	40 13C8-PFOSA	506.1 > 77.7	2.13e3	3.83e3	0.1041	0.786	4.73	4.64	6.96	85.051	70.8
11	41 13C8-PFOS	507.0 > 79.9	1.81e3	2.24e3	0.1041	0.991	4.73	4.67	10.1	97.666	81.3
12	42 13C2-PFDA	515.1 > 469.9	5.54e3	3.01e3	0.1041	2.153	5.01	4.96	23.0	102.559	85.4
13	43 13C2-8:2 FTS	529.1 > 508.7	6.52e2	1.06e4	0.1041	0.058	4.88	4.93	0.769	126.920	105.7
14	44 d3-N-MeFOSAA	573.3 > 419	2.45e3	3.83e3	0.1041	0.667	5.17	5.12	7.99	115.088	95.8
15	45 d5-N-EtFOSAA	589.3 > 419	2.17e3	3.83e3	0.1041	0.698	5.32	5.27	7.08	97.603	81.3
16	46 13C2-PFUdA	565 > 519.8	3.74e3	3.83e3	0.1041	1.261	5.45	5.29	12.2	93.073	77.5
17	47 13C2-PFDoA	615.0 > 569.7	2.20e3	3.83e3	0.1041	0.695	5.62	5.58	7.19	99.462	82.8
18	49 13C2-PFTeDA	714.8 > 669.6	2.19e3	3.83e3	0.1041	0.762	6.01	6.05	7.15	90.049	75.0
19	54 13C4-PFBA	217. > 171.8	6.90e3	6.90e3	0.1041	1.000	1.28	1.25	12.5	120.111	100.0
20	55 13C5-PFHxA	318 > 272.9	1.06e4	1.06e4	0.1041	1.000	3.01	3.00	12.5	120.111	100.0
21	56 13C3-PFHxS	401.9 > 79.9	2.11e3	2.11e3	0.1041	1.000	3.86	3.77	12.5	120.111	100.0
22	57 13C8-PFOA	421.3 > 376	6.69e3	6.69e3	0.1041	1.000	4.22	4.14	12.5	120.111	100.0
23	58 13C9-PFNA	472.2 > 426.9	7.33e3	7.33e3	0.1041	1.000	4.66	4.59	12.5	120.111	100.0
24	59 13C4-PFOS	503 > 79.9	2.24e3	2.24e3	0.1041	1.000	4.73	4.67	12.5	120.111	100.0
25	60 13C6-PFDA	519.1 > 473.7	3.01e3	3.01e3	0.1041	1.000	5.01	4.96	12.5	120.111	100.0
26	61 13C7-PFUdA	570.1 > 524.8	3.83e3	3.83e3	0.1041	1.000	5.45	5.29	12.5	120.111	100.0
27	62 Total PFHxS	398.9 > 79.6	4.73e3	7.22e2	0.1041		3.86		81.9	408.174	
28	63 Total PFOA	413 > 368.7	5.75e3	5.31e3	0.1041		4.22		13.5	125.596	
29	64 Total PFOS	499 > 79.9	1.13e4	1.81e3	0.1041		4.73		78.4	829.440	
30	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.45e3	0.1041		5.54		0.000		
31	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.17e3	0.1041		5.32		0.000		

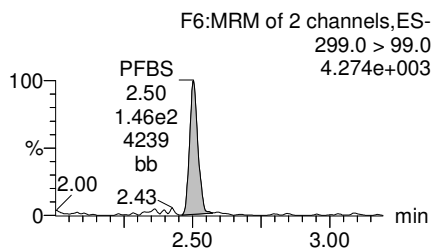
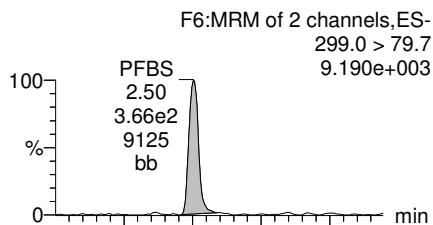
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Printed: Saturday, November 18, 2017 12:29:23 Pacific Standard Time

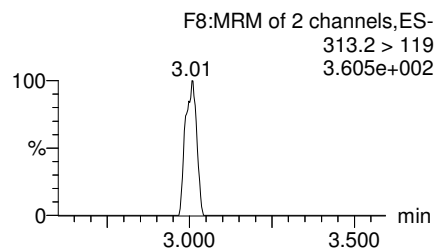
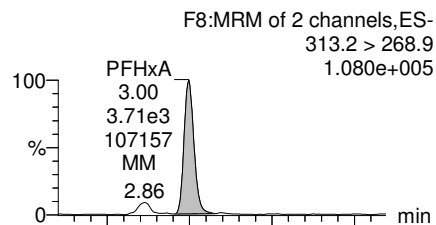
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Name: 171116M3\_39, Date: 16-Nov-2017, Time: 23:24:55, ID: 1701624-03 OF-MW22-1117 0.10407, Description: OF-MW22-1117

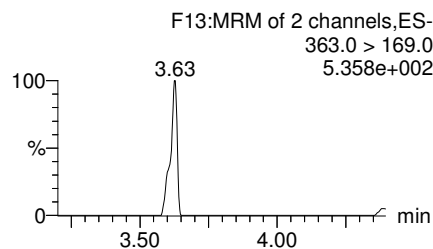
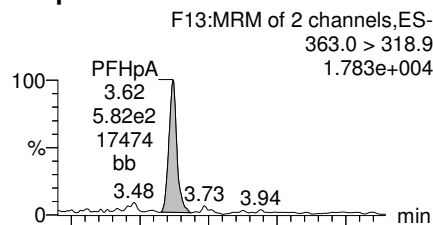
**PFBS**



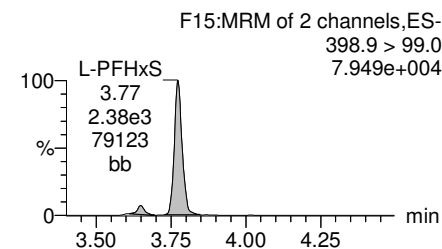
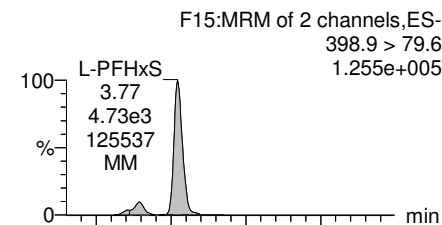
**PFHxA**



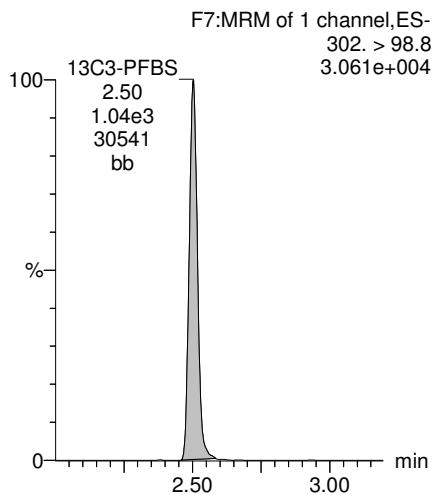
**PFHpA**



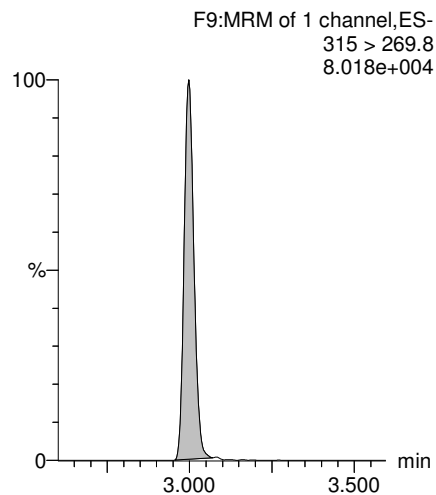
**Total PFHxS**



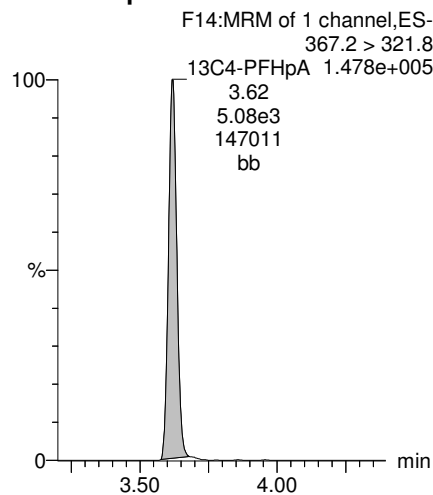
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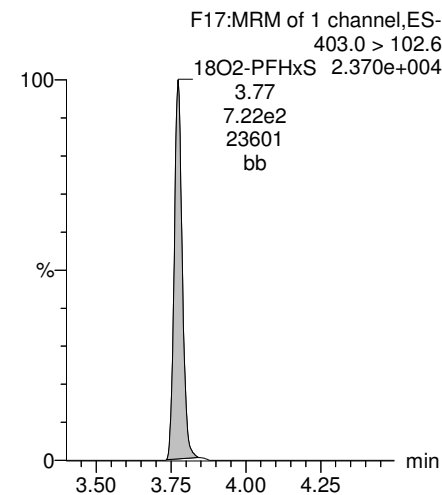
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

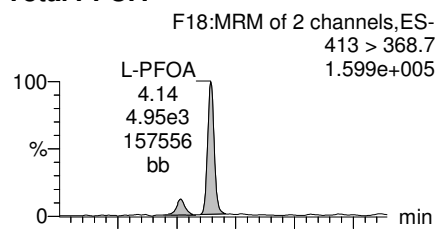


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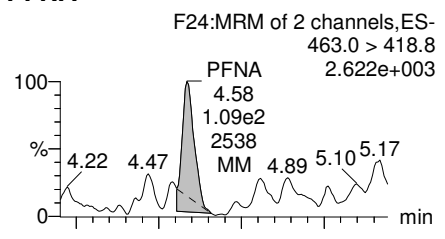
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Printed: Saturday, November 18, 2017 12:29:23 Pacific Standard Time

Name: 171116M3\_39, Date: 16-Nov-2017, Time: 23:24:55, ID: 1701624-03 OF-MW22-1117 0.10407, Description: OF-MW22-1117

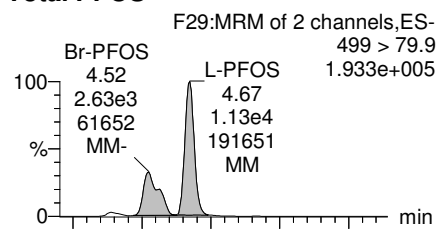
**Total PFOA**



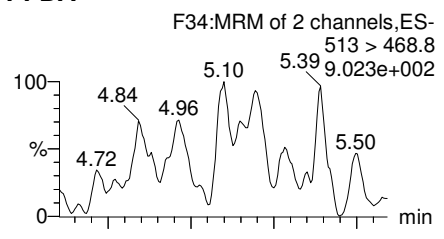
**PFNA**



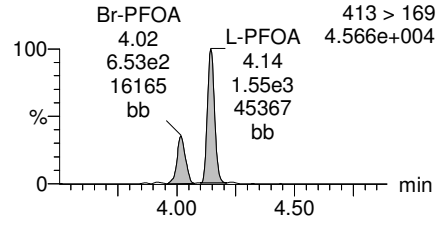
**Total PFOS**



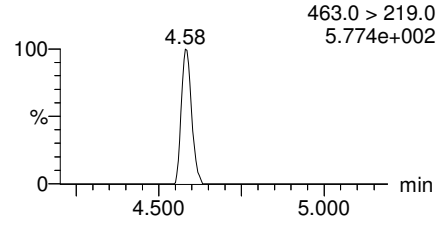
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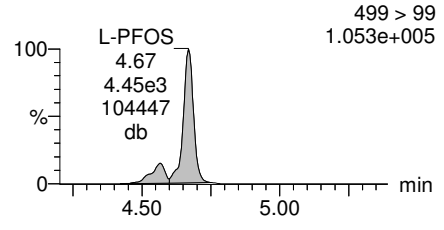
**Br-PFOA**



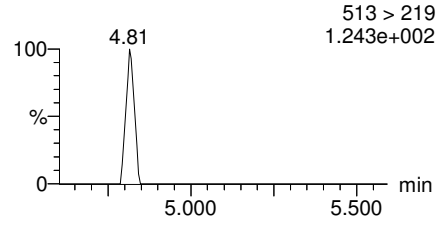
**PFNA**



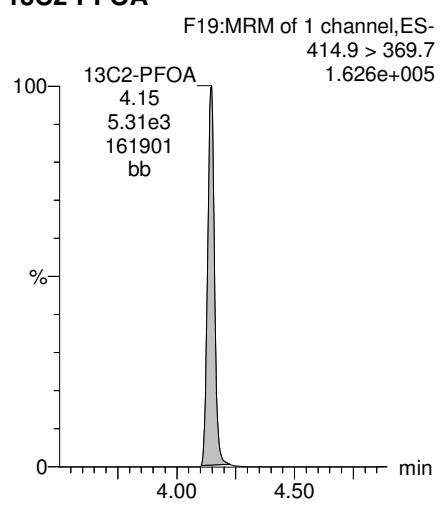
**L-PFOS**



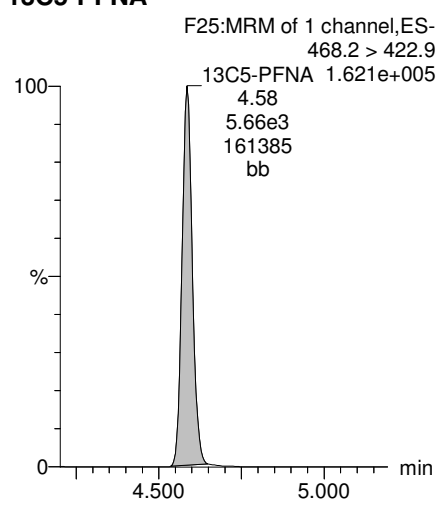
**PFDA**



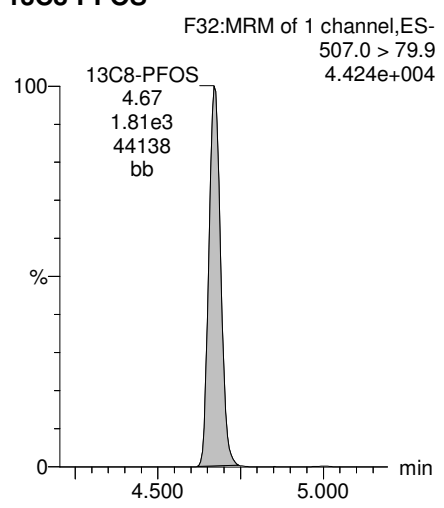
**13C2-PFOA**



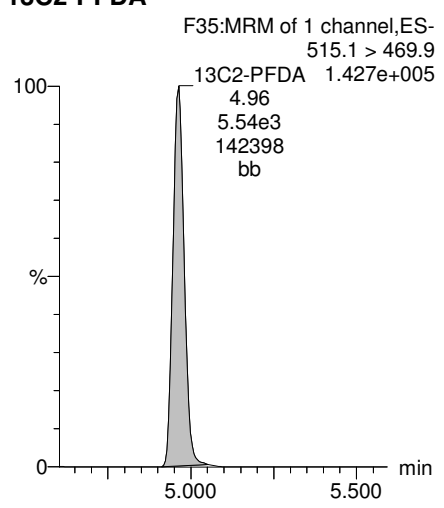
**13C5-PFNA**



**13C8-PFOS**



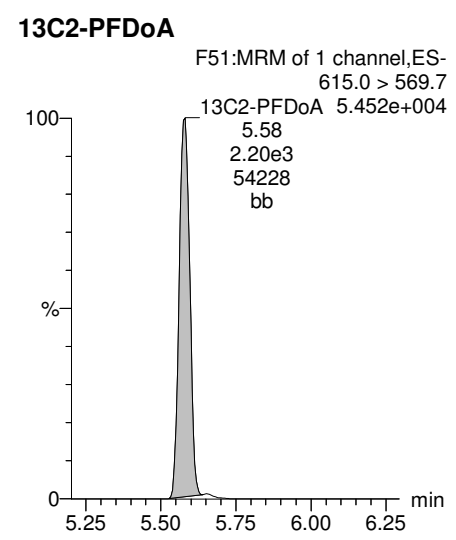
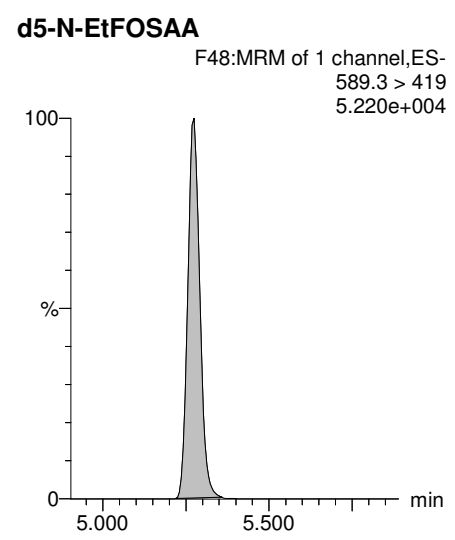
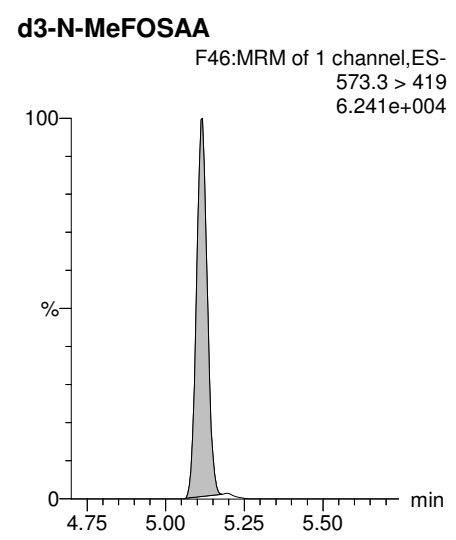
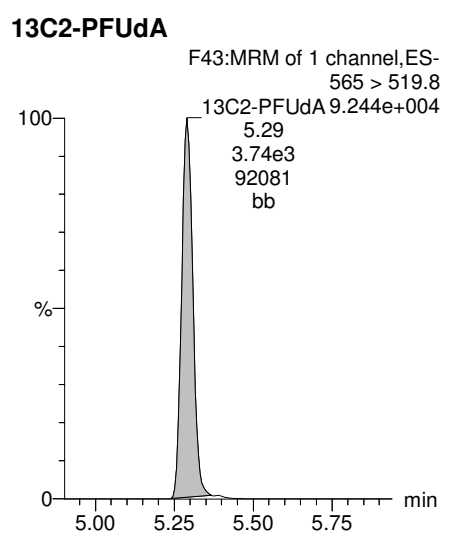
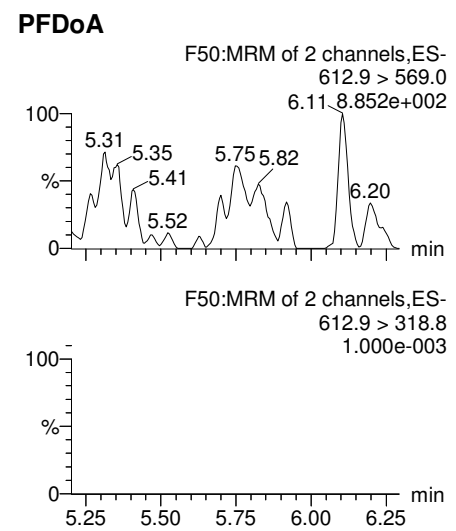
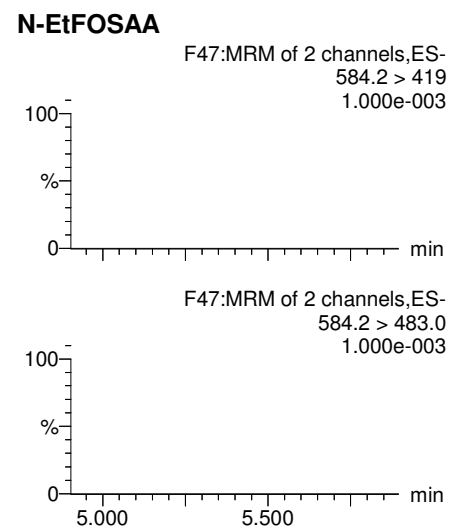
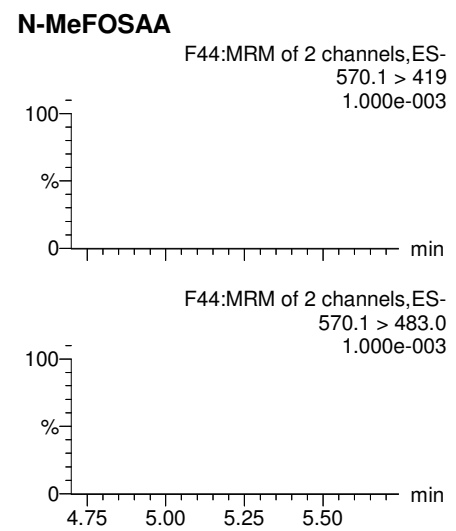
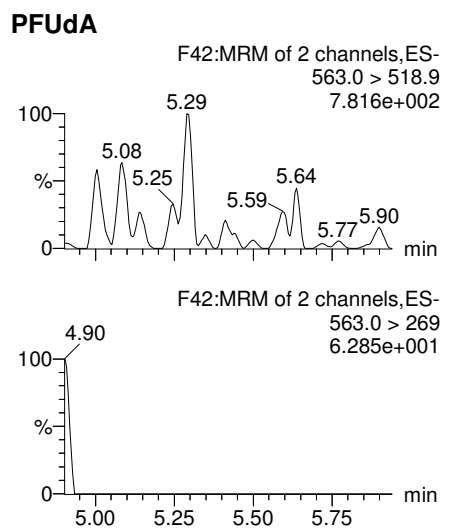
**13C2-PFDA**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-39.qld

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Printed: Saturday, November 18, 2017 12:29:23 Pacific Standard Time

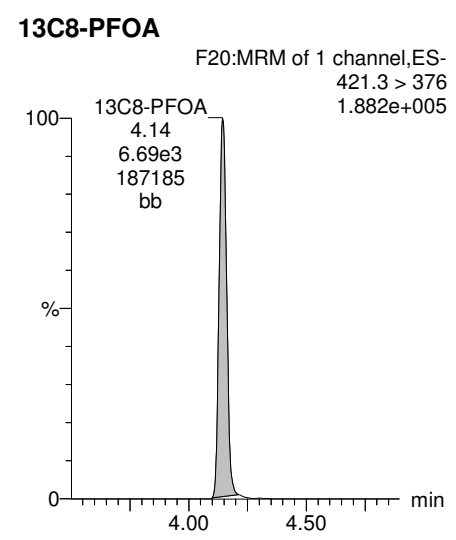
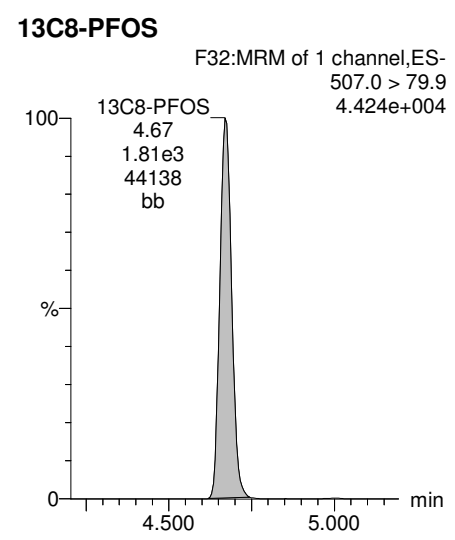
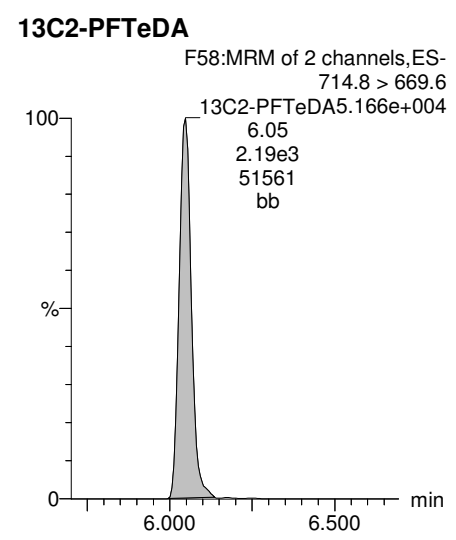
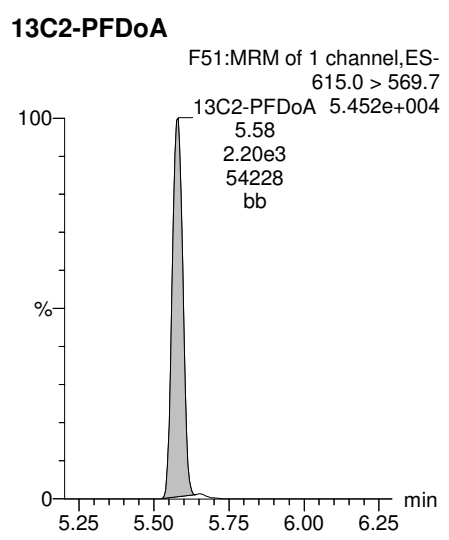
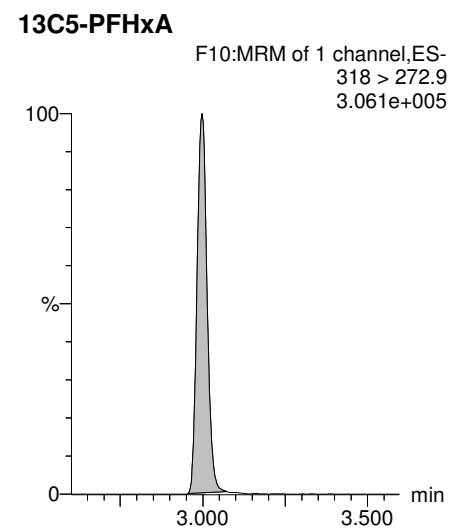
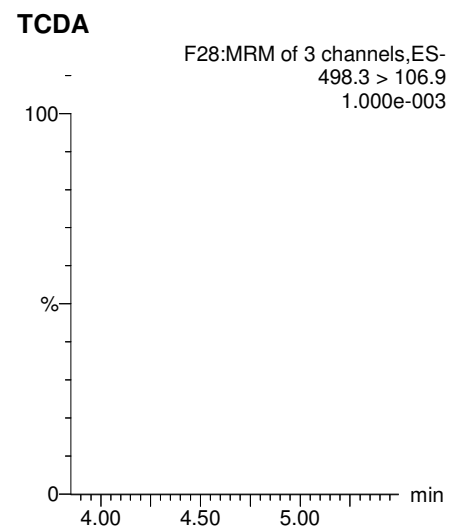
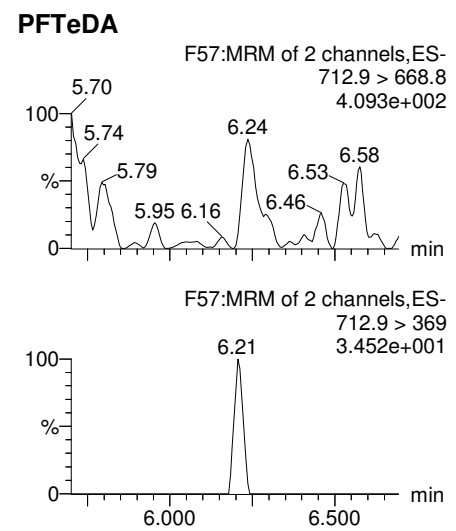
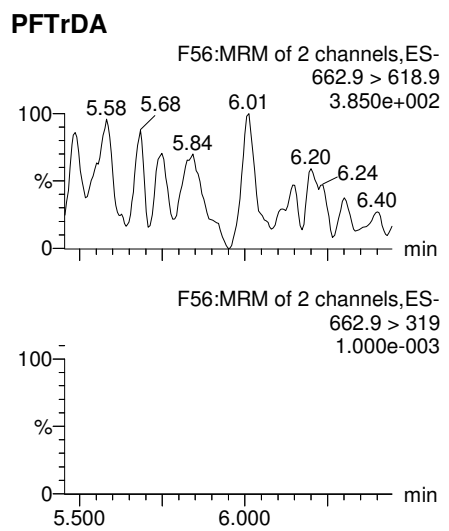
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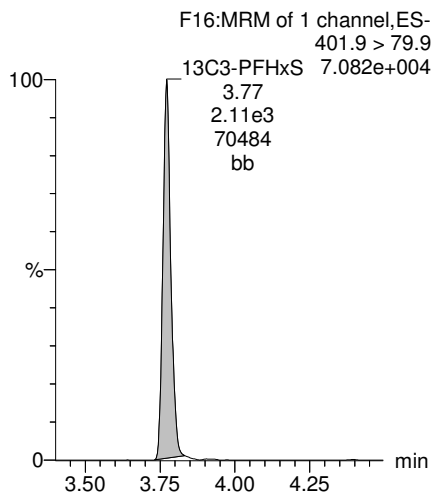
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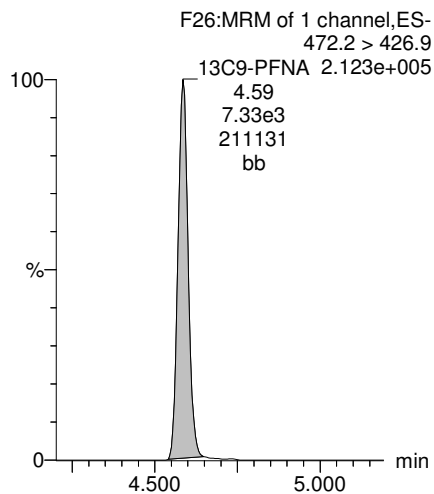
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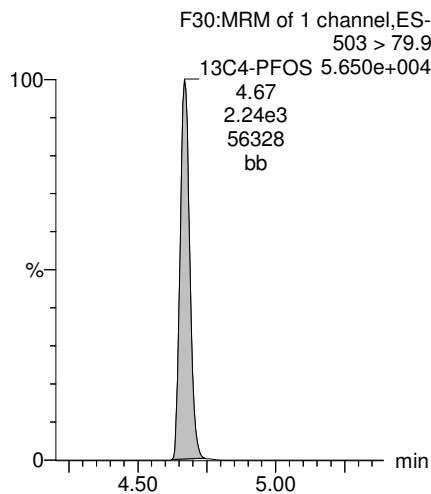
**13C3-PFHxS**



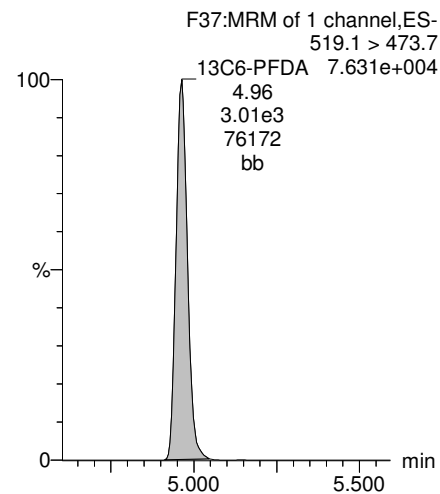
**13C9-PFNA**



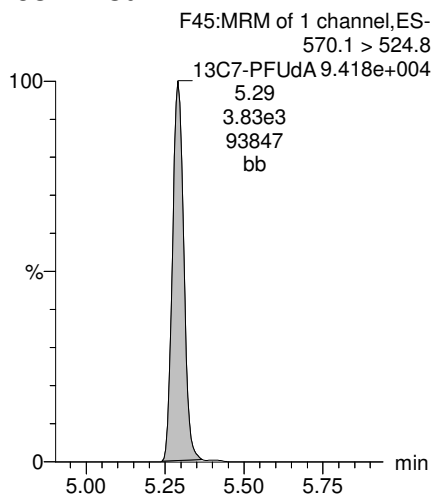
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUdA**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-26.qld

Last Altered: Saturday, November 18, 2017 20:57:28 Pacific Standard Time

Printed: Saturday, November 18, 2017 20:58:33 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_26, Date: 17-Nov-2017, Time: 21:35:21, ID: 1701624-04 OF-MW22D-1117 0.11272, Description: OF-MW22D-1117

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		9.67e2	0.1127		2.90				
2	4	PFHxA	313.2 > 268.9		3.00e3	0.1127		3.40				
3	5	PFHpA	363.0 > 318.9		6.10e3	0.1127		4.03				
4	6	L-PFHxS	398.9 > 79.6	1.92e2	6.94e2	0.1127		4.17	4.14	3.46	14.654	
5	9	L-PFOA	413 > 368.7	4.71e2	6.67e3	0.1127		4.54	4.51	0.884	4.854	
6	12	PFNA	463.0 > 418.8		7.92e3	0.1127		4.97				
7	14	L-PFOS	499 > 79.9	8.59e2	1.57e3	0.1127		5.05	5.02	6.84	59.548	
8	16	PFDA	513 > 468.8		7.40e3	0.1127		5.34				
9	18	N-MeFOSAA	570.1 > 419		2.69e3	0.1127		5.49				
10	19	N-EtFOSAA	584.2 > 419		2.71e3	0.1127		5.64				
11	20	PFUdA	563.0 > 518.9		7.45e3	0.1127		5.66				
12	22	PFDoA	612.9 > 569.0		4.14e3	0.1127		5.94				

Dataset: U:\Q4.PRO\results\171117M2\171117M2-26.qld

Last Altered: Saturday, November 18, 2017 20:57:28 Pacific Standard Time

Printed: Saturday, November 18, 2017 20:58:53 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_26, Date: 17-Nov-2017, Time: 21:35:21, ID: 1701624-04 OF-MW22D-1117 0.11272, Description: OF-MW22D-1117

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	24	PFTrDA	662.9 > 618.9	4.14e3	0.1127		6.18					
2	25	PFTeDA	712.9 > 668.8	5.15e3	0.1127		6.37					
3	33	13C3-PFBS	302. > 98.8	9.67e2	1.07e4	0.1127	0.096	2.90	2.87	1.13	103.695	93.5
4	34	13C2-PFHxA	315 > 269.8	3.00e3	1.07e4	0.1127	0.767	3.40	3.37	3.49	40.428	91.1
5	35	13C4-PFHpA	367.2 > 321.8	6.10e3	1.07e4	0.1127	0.558	4.03	4.00	7.11	113.144	102.0
6	36	18O2-PFHxS	403.0 > 102.6	6.94e2	1.81e3	0.1127	0.430	4.17	4.14	4.78	98.585	88.9
7	37	13C2-6:2 FTS	429.1 > 408.9	1.68e3	7.53e3	0.1127	0.240	4.49	4.45	2.79	103.171	93.0
8	38	13C2-PFOA	414.9 > 369.7	6.67e3	7.53e3	0.1127	0.956	4.54	4.51	11.1	102.816	92.7
9	39	13C5-PFNA	468.2 > 422.9	7.92e3	8.71e3	0.1127	1.009	4.97	4.94	11.4	100.073	90.2
10	40	13C8-PFOA	506.1 > 77.7	2.26e3	6.79e3	0.1127	0.524	5.02	4.99	4.16	70.403	63.5
11	41	13C8-PFOS	507.0 > 79.9	1.57e3	2.15e3	0.1127	1.080	5.05	5.02	9.14	75.081	67.7
12	42	13C2-PFDA	515.1 > 469.9	7.40e3	4.28e3	0.1127	1.982	5.34	5.31	21.6	96.625	87.1
13	43	13C2-8:2 FTS	529.1 > 508.7	8.40e2	1.07e4	0.1127	0.072	5.32	5.29	0.980	120.511	108.7
14	44	d3-N-MeFOSAA	573.3 > 419	2.69e3	6.79e3	0.1127	0.434	5.49	5.46	4.95	101.227	91.3
15	45	d5-N-EtFOSAA	589.3 > 419	2.71e3	6.79e3	0.1127	0.461	5.64	5.61	4.99	96.037	86.6
16	46	13C2-PFUdA	565 > 519.8	7.45e3	6.79e3	0.1127	1.171	5.66	5.63	13.7	103.964	93.8
17	47	13C2-PFDoA	615.0 > 569.7	4.14e3	6.79e3	0.1127	0.697	5.94	5.91	7.62	96.914	87.4
18	49	13C2-PFTeDA	714.8 > 669.6	5.15e3	6.79e3	0.1127	0.849	6.37	6.34	9.48	99.081	89.3
19	54	13C4-PFBA	217. > 171.8	7.03e3	7.03e3	0.1127	1.000	1.66	1.62	12.5	110.894	100.0
20	55	13C5-PFHxA	318 > 272.9	1.07e4	1.07e4	0.1127	1.000	3.40	3.37	12.5	110.894	100.0
21	56	13C3-PFHxS	401.9 > 79.9	1.81e3	1.81e3	0.1127	1.000	4.17	4.14	12.5	110.894	100.0
22	57	13C8-PFOA	421.3 > 376	7.53e3	7.53e3	0.1127	1.000	4.54	4.51	12.5	110.894	100.0
23	58	13C9-PFNA	472.2 > 426.9	8.71e3	8.71e3	0.1127	1.000	4.97	4.94	12.5	110.894	100.0
24	59	13C4-PFOS	503 > 79.9	2.15e3	2.15e3	0.1127	1.000	5.05	5.02	12.5	110.894	100.0
25	60	13C6-PFDA	519.1 > 473.7	4.28e3	4.28e3	0.1127	1.000	5.34	5.31	12.5	110.894	100.0
26	61	13C7-PFUdA	570.1 > 524.8	6.79e3	6.79e3	0.1127	1.000	5.66	5.63	12.5	110.894	100.0
27	62	Total PFHxS	398.9 > 79.6	1.92e2	6.94e2	0.1127		4.17		3.46	14.654	
28	63	Total PFOA	413 > 368.7	4.71e2	6.67e3	0.1127		4.54		0.884	4.854	
29	64	Total PFOS	499 > 79.9	8.59e2	1.57e3	0.1127		5.05		6.84	59.548	
30	65	Total N-MeFOSAA	570.1 > 419	0.00e0	2.69e3	0.1127		5.49		0.000		
31	66	Total N-EtFOSAA	584.2 > 419	0.00e0	2.71e3	0.1127		5.64		0.000		



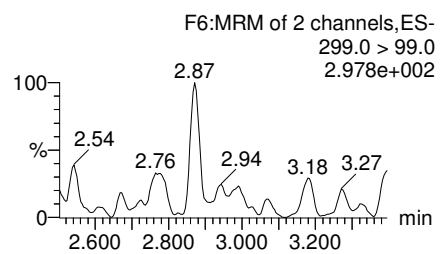
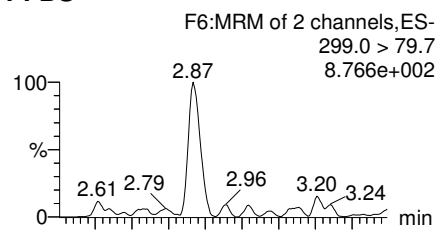
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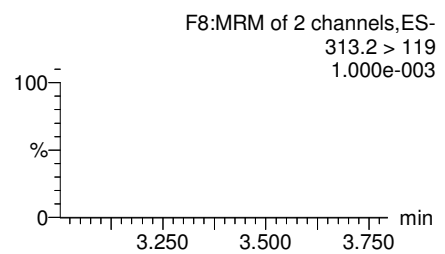
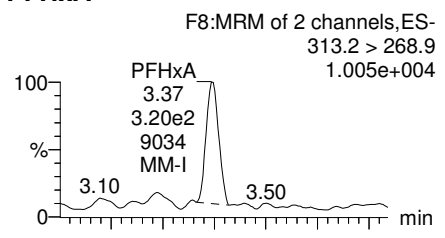
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Name: 171117M2\_26, Date: 17-Nov-2017, Time: 21:35:21, ID: 1701624-04 OF-MW22D-1117 0.11272, Description: OF-MW22D-1117

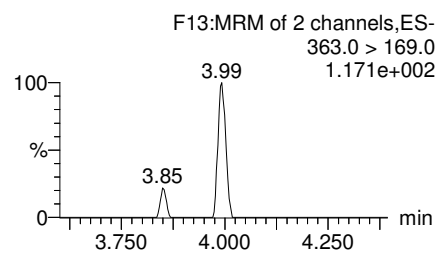
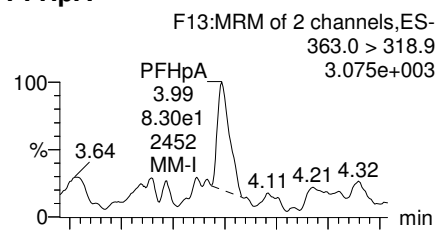
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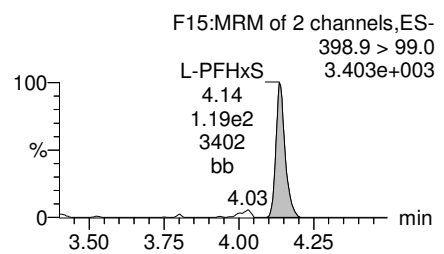
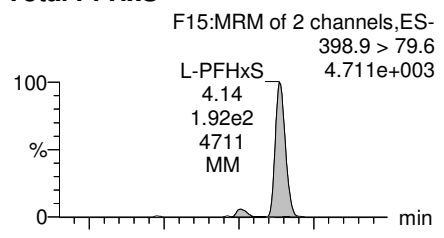
**PFHxA**



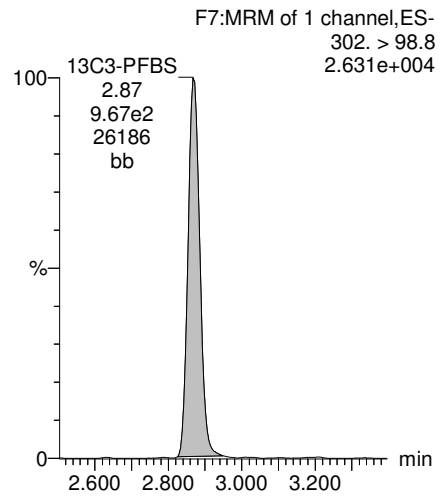
**PFHpA**



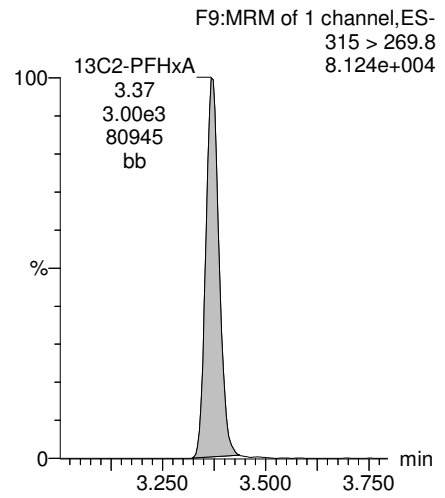
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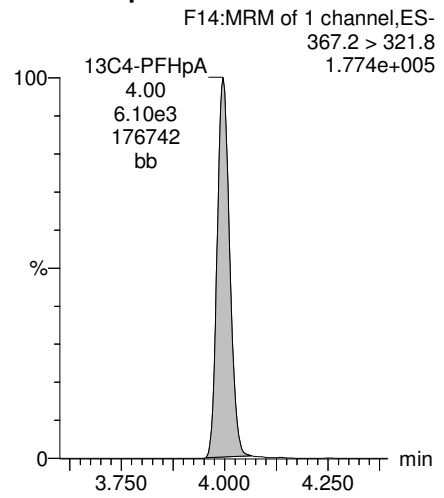
**13C3-PFBS**



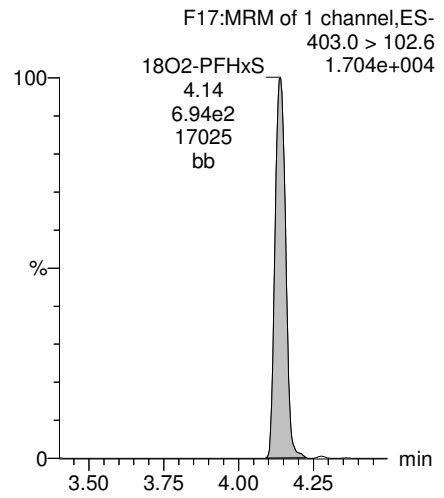
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

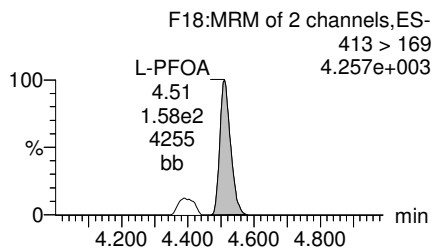
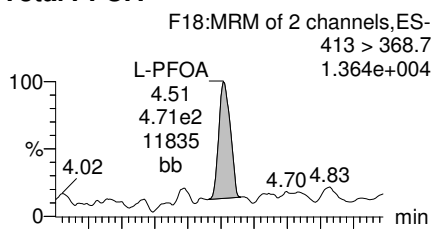


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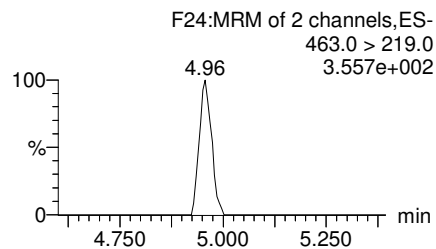
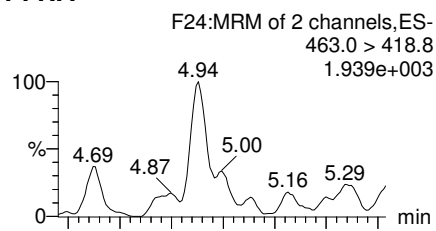
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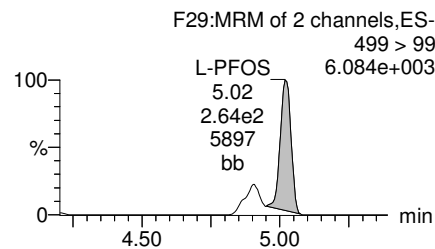
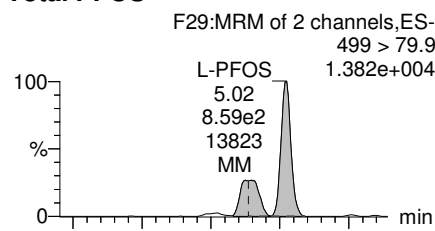
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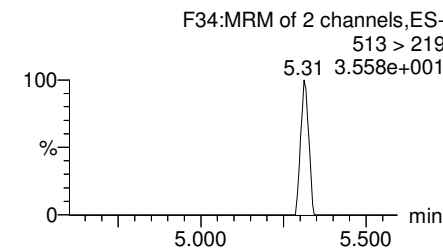
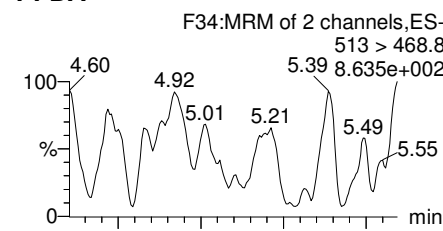
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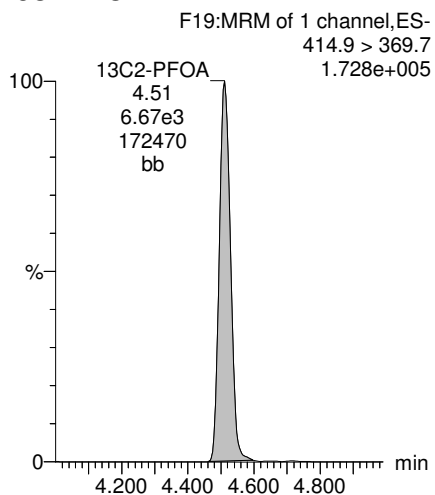
**Total PFOS**



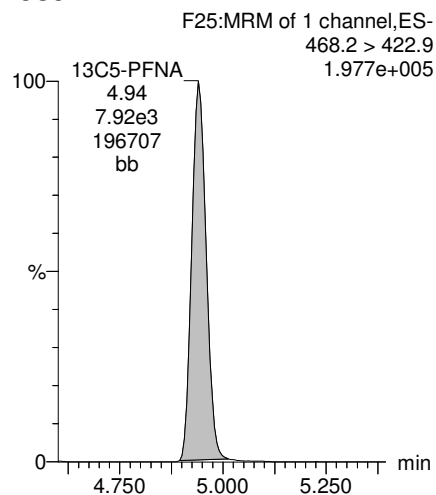
**PFDA**



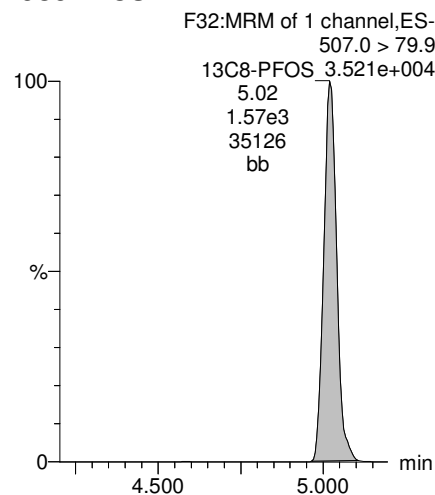
**13C2-PFOA**



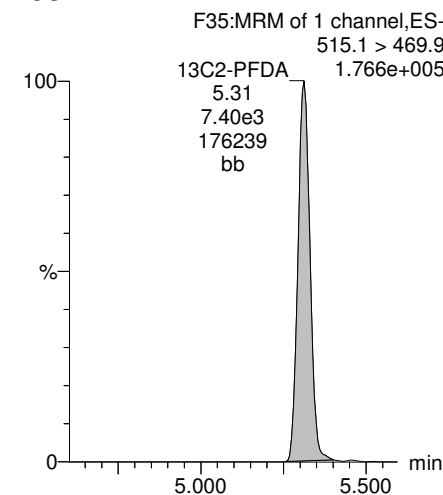
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**

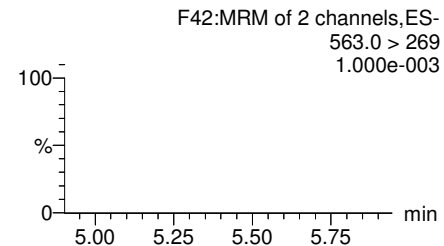
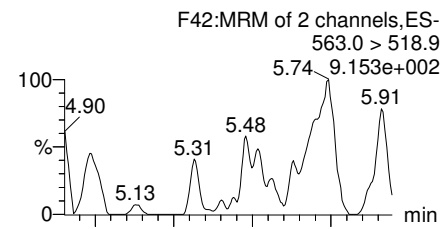


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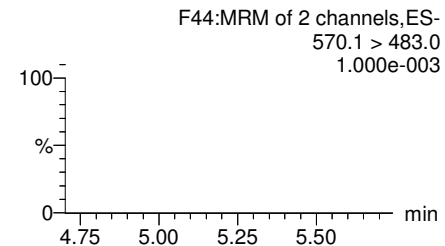
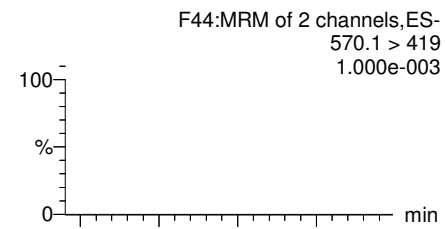
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Printed: Saturday, November 18, 2017 20:58:53 Pacific Standard Time

Name: 171117M2\_26, Date: 17-Nov-2017, Time: 21:35:21, ID: 1701624-04 OF-MW22D-1117 0.11272, Description: OF-MW22D-1117

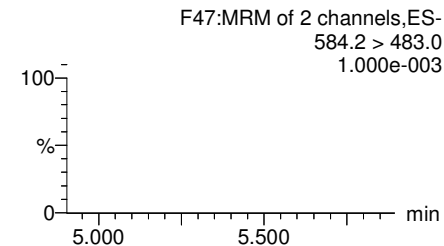
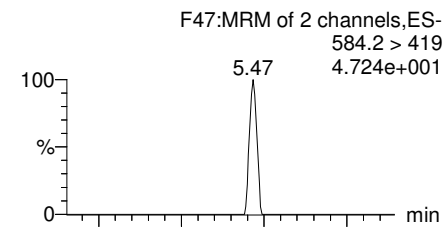
**PFUdA**



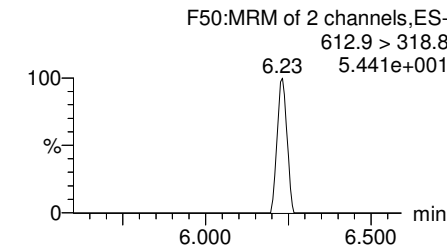
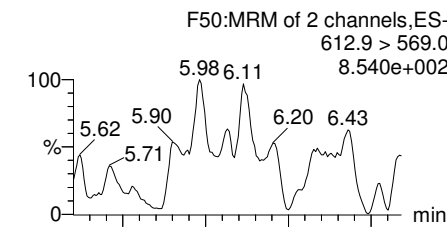
**N-MeFOSAA**



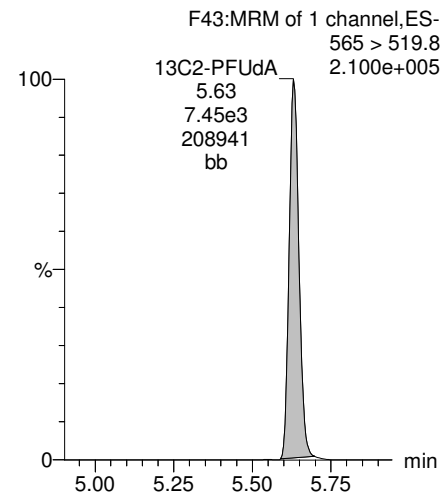
**N-EtFOSAA**



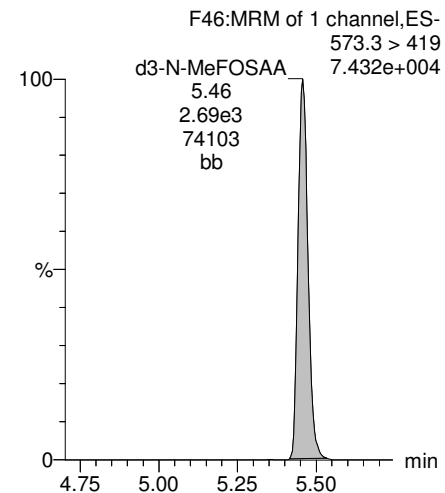
**PFDaA**



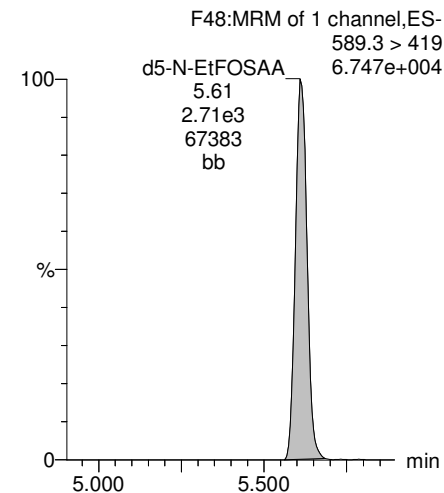
**13C2-PFUdA**



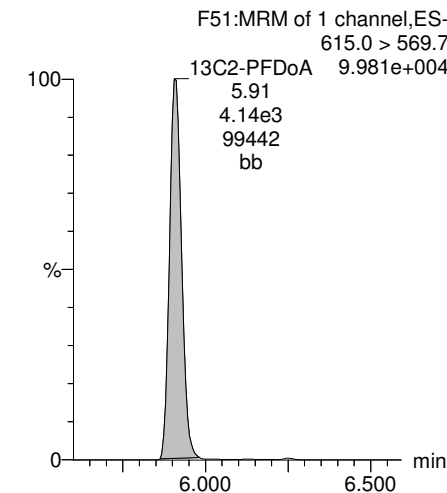
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDaA**

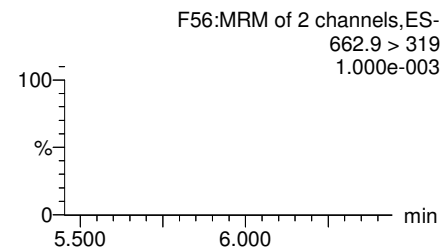
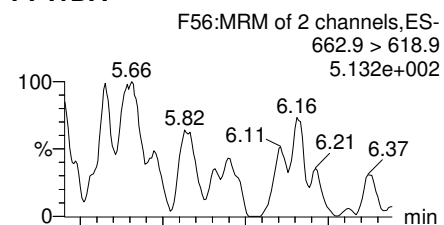


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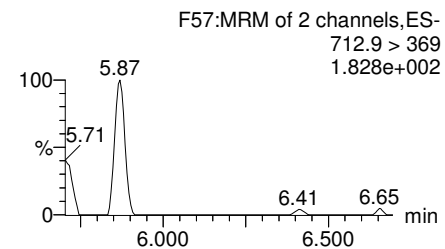
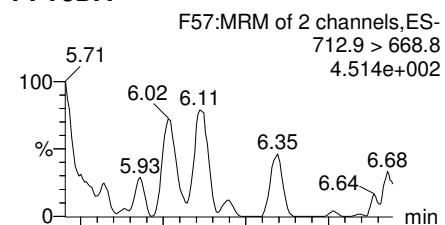
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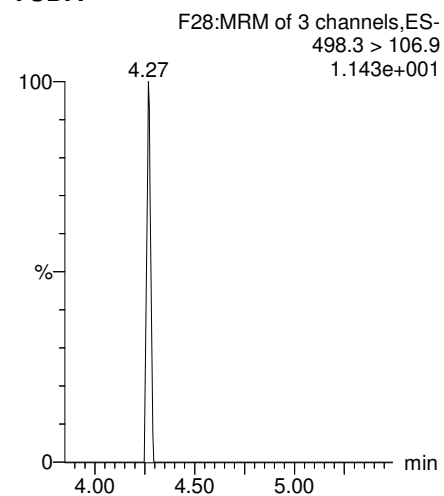
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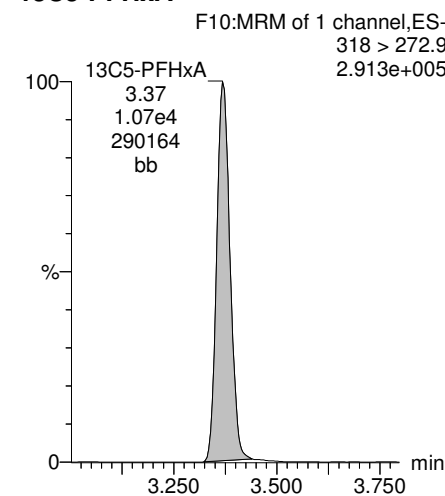
**PFTeDA**



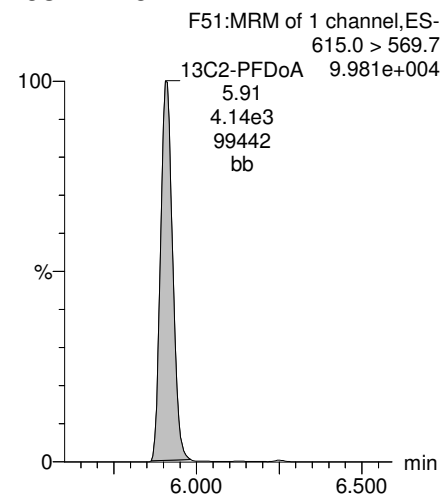
**TCDA**



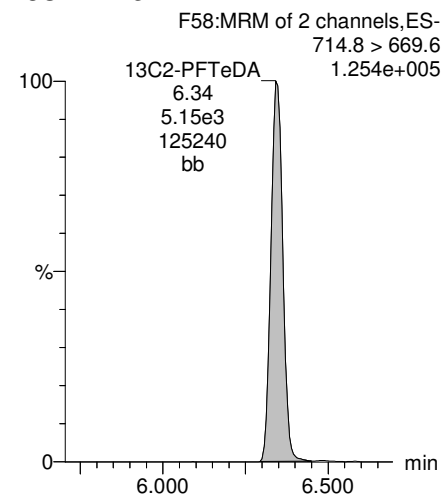
**13C5-PFHxA**



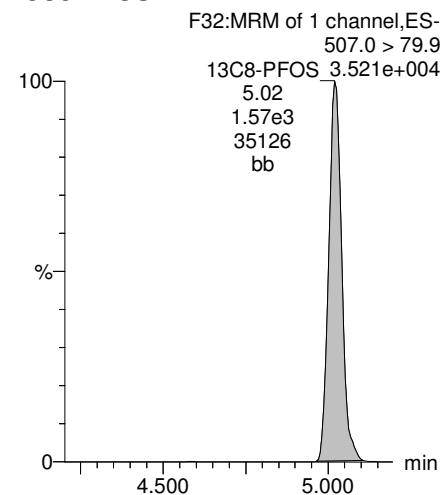
**13C2-PFDoA**



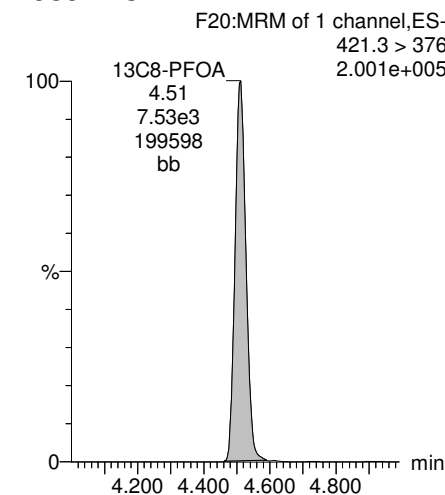
**13C2-PFTeDA**



**13C8-PFOS**



**13C8-PFOA**

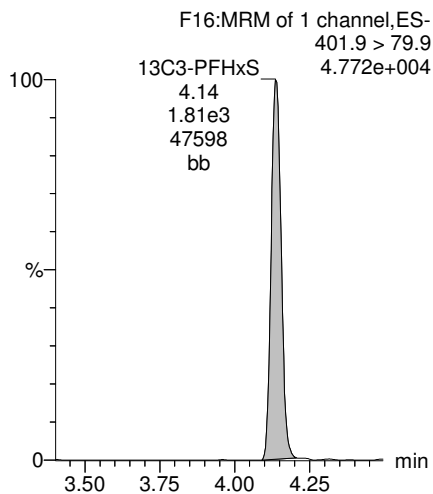


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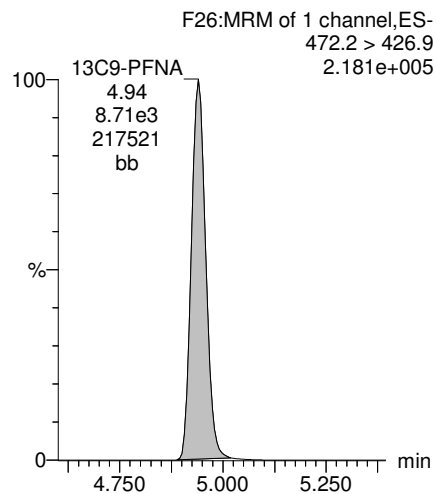
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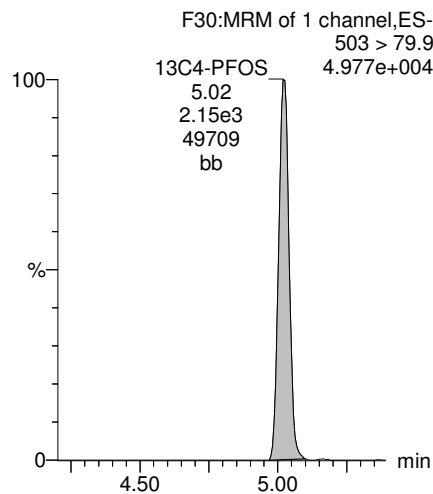
**13C3-PFHxS**



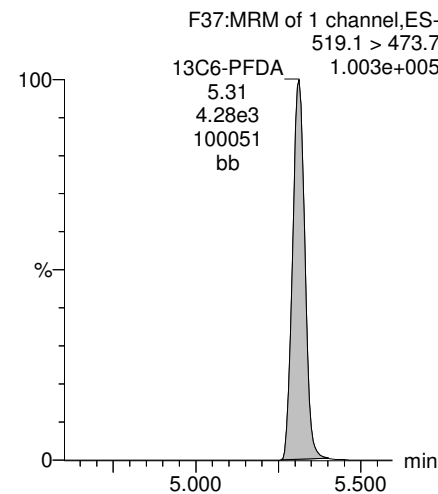
**13C9-PFNA**



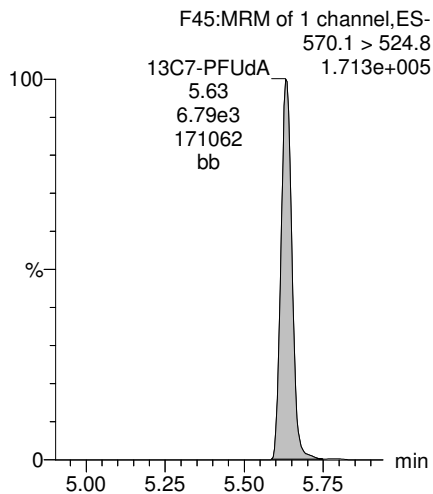
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUdA**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-41.qld

Last Altered: Saturday, November 18, 2017 16:07:06 Pacific Standard Time

Printed: Saturday, November 18, 2017 16:16:29 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_41, Date: 16-Nov-2017, Time: 23:47:16, ID: 1701624-05 OF-MW19-1117 0.11045, Description: OF-MW19-1117

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7	4.78e1	8.62e2	0.1105		2.55	2.51	0.693	2.517	
2	4	PFHxA	313.2 > 268.9		2.29e3	0.1105		3.01				
3	5	PFHpA	363.0 > 318.9		4.44e3	0.1105		3.71				
4	6	L-PFHxS	398.9 > 79.6	1.54e2	6.43e2	0.1105		3.86	3.78	2.99	13.682	
5	9	L-PFOA	413 > 368.7	4.31e2	4.66e3	0.1105		4.22	4.15	1.16	8.102	
6	12	PFNA	463.0 > 418.8		4.76e3	0.1105		4.66				
7	14	L-PFOS	499 > 79.9		1.72e3	0.1105		4.74				
8	16	PFDA	513 > 468.8		4.19e3	0.1105		5.01				
9	18	N-MeFOSAA	570.1 > 419		1.78e3	0.1105		5.17				
10	19	N-EtFOSAA	584.2 > 419		2.10e3	0.1105		5.32				
11	20	PFUdA	563.0 > 518.9		3.49e3	0.1105		5.45				
12	22	PFDoA	612.9 > 569.0		2.15e3	0.1105		5.62				

Dataset: U:\Q4.PRO\results\171116M3\171116M3-41.qld

Last Altered: Saturday, November 18, 2017 16:07:06 Pacific Standard Time

Printed: Saturday, November 18, 2017 16:16:41 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_41, Date: 16-Nov-2017, Time: 23:47:16, ID: 1701624-05 OF-MW19-1117 0.11045, Description: OF-MW19-1117

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	24	PFTrDA	662.9 > 618.9	2.15e3	0.1105		5.87					
2	25	PFTeDA	712.9 > 668.8	2.22e3	0.1105		6.01					
3	33	13C3-PFBS	302. > 98.8	8.62e2	8.64e3	0.1105	0.096	2.55	2.51	1.25	117.407	103.7
4	34	13C2-PFHxA	315 > 269.8	2.29e3	8.64e3	0.1105	0.728	3.01	3.00	3.31	41.111	90.8
5	35	13C4-PFHpA	367.2 > 321.8	4.44e3	8.64e3	0.1105	0.550	3.71	3.63	6.42	105.783	93.5
6	36	18O2-PFHxS	403.0 > 102.6	6.43e2	1.55e3	0.1105	0.432	3.86	3.78	5.20	109.034	96.3
7	37	13C2-6:2 FTS	429.1 > 408.9	1.19e3	6.48e3	0.1105	0.217	4.16	4.09	2.29	95.473	84.4
8	38	13C2-PFOA	414.9 > 369.7	4.66e3	6.48e3	0.1105	0.840	4.22	4.15	8.99	96.987	85.7
9	39	13C5-PFNA	468.2 > 422.9	4.76e3	6.05e3	0.1105	0.967	4.66	4.59	9.83	92.074	81.4
10	40	13C8-PFOA	506.1 > 77.7	1.81e3	3.79e3	0.1105	0.786	4.73	4.64	5.99	68.976	60.9
11	41	13C8-PFOS	507.0 > 79.9	1.72e3	1.90e3	0.1105	0.991	4.73	4.67	11.4	103.817	91.7
12	42	13C2-PFDA	515.1 > 469.9	4.19e3	2.62e3	0.1105	2.153	5.01	4.97	20.0	84.105	74.3
13	43	13C2-8:2 FTS	529.1 > 508.7	3.50e2	8.64e3	0.1105	0.058	4.88	4.94	0.506	78.706	69.5
14	44	d3-N-MeFOSAA	573.3 > 419	1.78e3	3.79e3	0.1105	0.667	5.17	5.11	5.88	79.728	70.4
15	45	d5-N-EtFOSAA	589.3 > 419	2.10e3	3.79e3	0.1105	0.698	5.32	5.27	6.93	89.975	79.5
16	46	13C2-PFUdA	565 > 519.8	3.49e3	3.79e3	0.1105	1.261	5.45	5.30	11.5	82.830	73.2
17	47	13C2-PFDoA	615.0 > 569.7	2.15e3	3.79e3	0.1105	0.695	5.62	5.58	7.10	92.513	81.7
18	49	13C2-PFTeDA	714.8 > 669.6	2.22e3	3.79e3	0.1105	0.762	6.01	6.05	7.32	86.910	76.8
19	54	13C4-PFBA	217. > 171.8	6.22e3	6.22e3	0.1105	1.000	1.28	1.26	12.5	113.173	100.0
20	55	13C5-PFHxA	318 > 272.9	8.64e3	8.64e3	0.1105	1.000	3.01	3.00	12.5	113.173	100.0
21	56	13C3-PFHxS	401.9 > 79.9	1.55e3	1.55e3	0.1105	1.000	3.86	3.78	12.5	113.173	100.0
22	57	13C8-PFOA	421.3 > 376	6.48e3	6.48e3	0.1105	1.000	4.22	4.15	12.5	113.173	100.0
23	58	13C9-PFNA	472.2 > 426.9	6.05e3	6.05e3	0.1105	1.000	4.66	4.59	12.5	113.173	100.0
24	59	13C4-PFOS	503 > 79.9	1.90e3	1.90e3	0.1105	1.000	4.73	4.67	12.5	113.173	100.0
25	60	13C6-PFDA	519.1 > 473.7	2.62e3	2.62e3	0.1105	1.000	5.01	4.96	12.5	113.173	100.0
26	61	13C7-PFUdA	570.1 > 524.8	3.79e3	3.79e3	0.1105	1.000	5.45	5.30	12.5	113.173	100.0
27	62	Total PFHxS	398.9 > 79.6	1.54e2	6.43e2	0.1105		3.86		2.99	13.682	
28	63	Total PFOA	413 > 368.7	4.31e2	4.66e3	0.1105		4.22		1.16	8.102	
29	64	Total PFOS	499 > 79.9	0.00e0	1.72e3	0.1105		4.73		0.000		
30	65	Total N-MeFOSAA	570.1 > 419	0.00e0	1.78e3	0.1105		5.54		0.000		
31	66	Total N-EtFOSAA	584.2 > 419	0.00e0	2.10e3	0.1105		5.32		0.000		

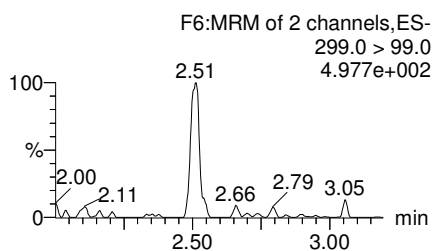
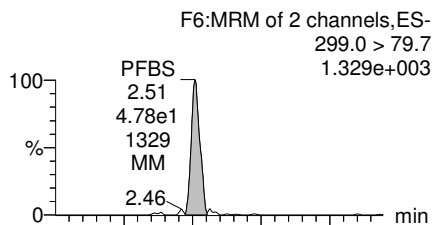
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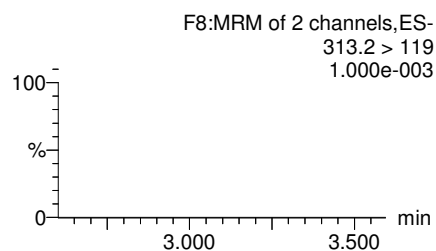
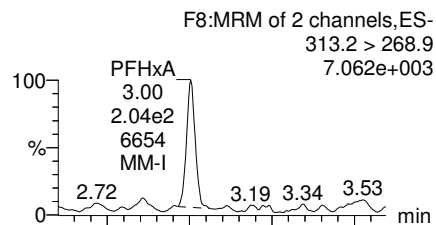
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Name: 171116M3\_41, Date: 16-Nov-2017, Time: 23:47:16, ID: 1701624-05 OF-MW19-1117 0.11045, Description: OF-MW19-1117

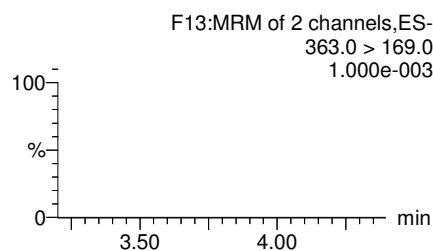
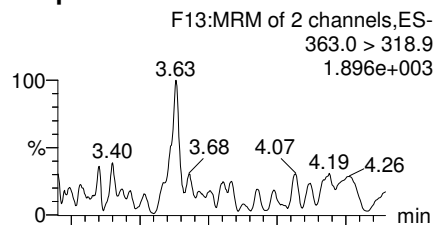
**PFBS**



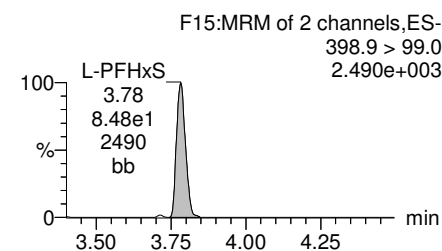
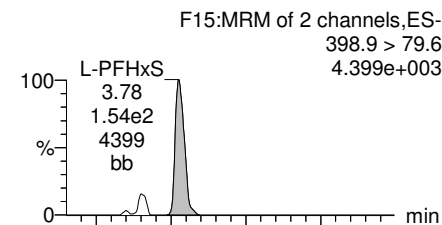
**PFHxA**



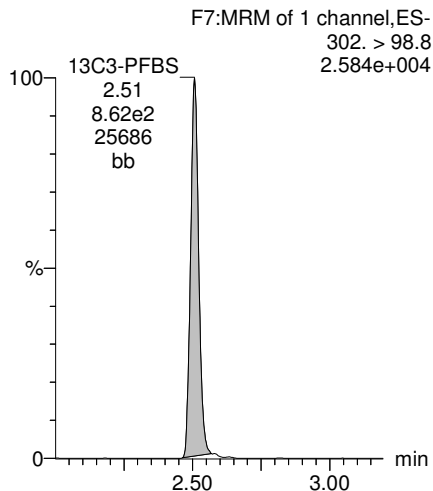
**PFHpA**



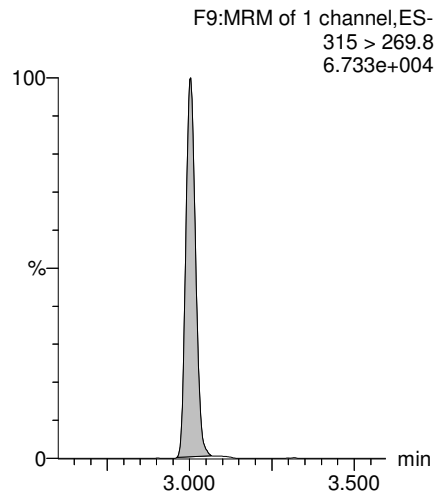
**Total PFHxS**



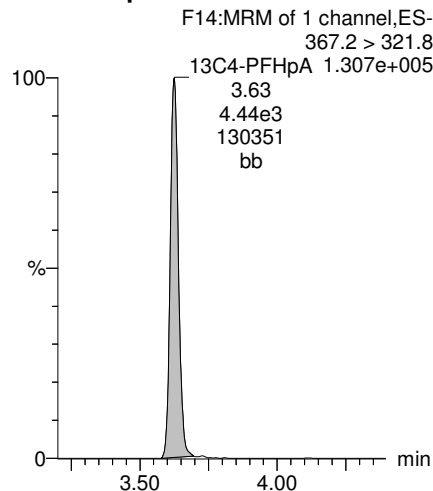
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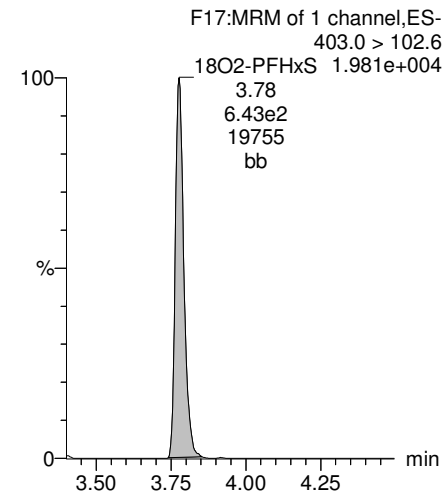
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



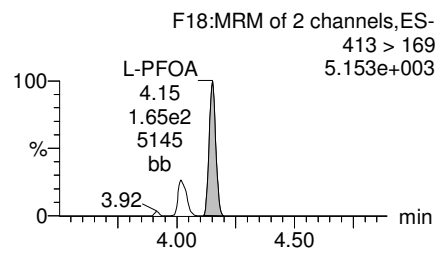
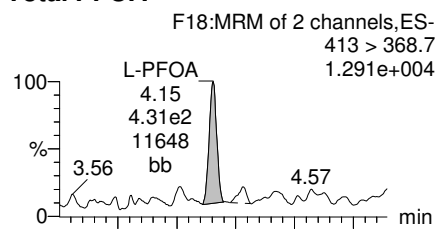


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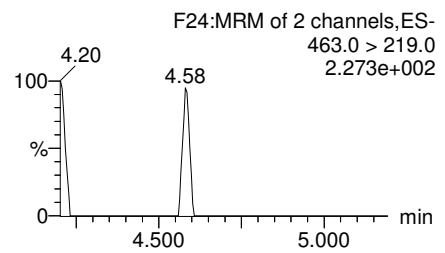
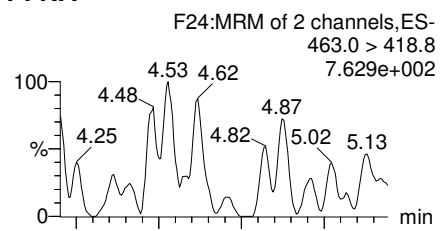
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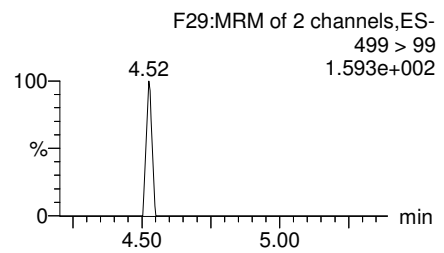
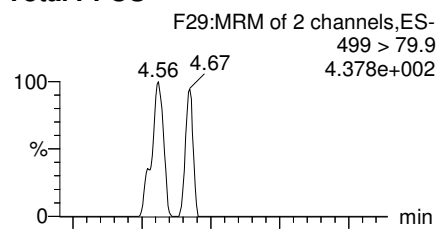
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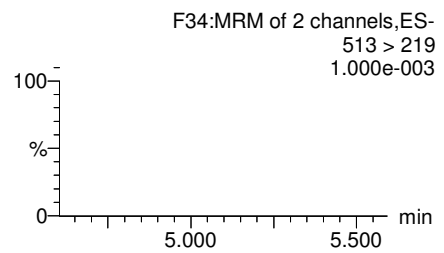
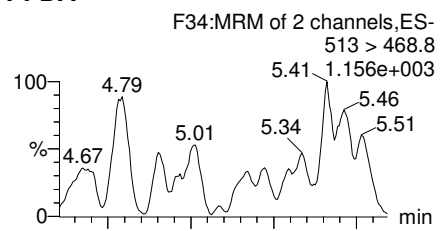
**PFNA**



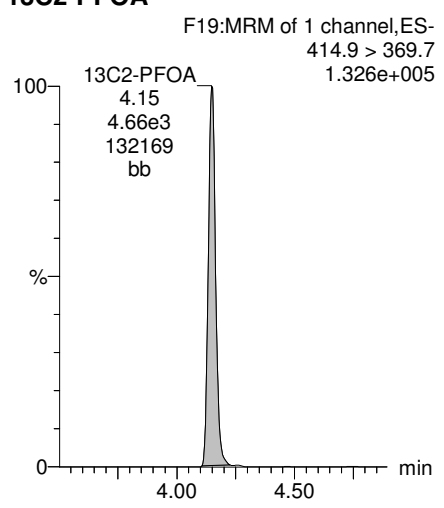
**Total PFOS**



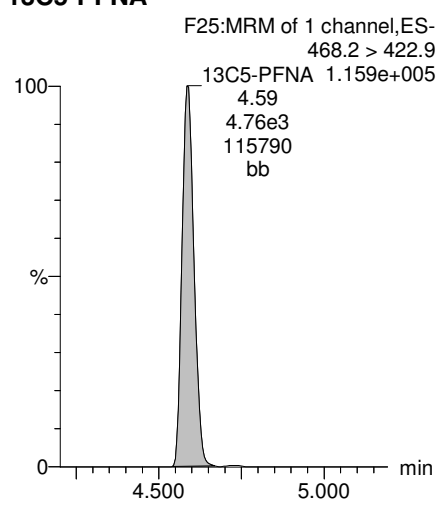
**PFDA**



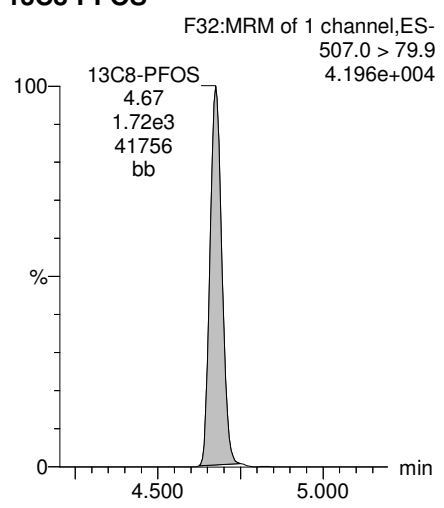
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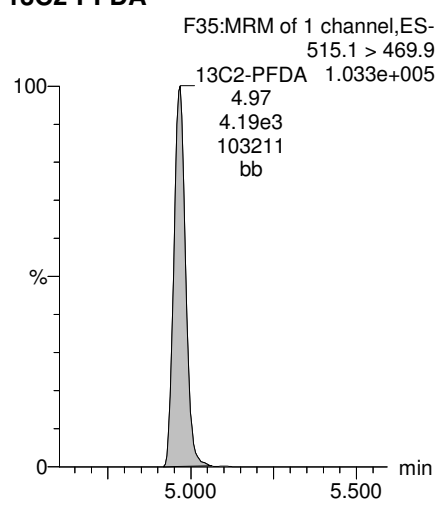
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**

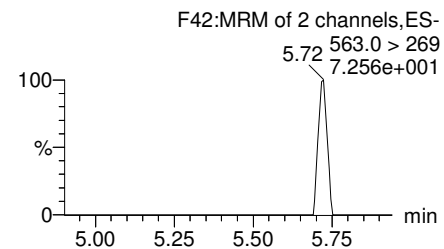
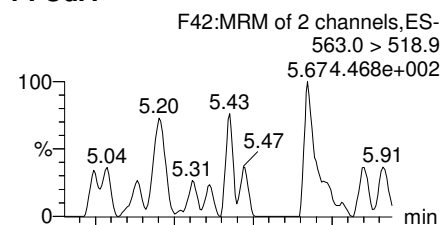


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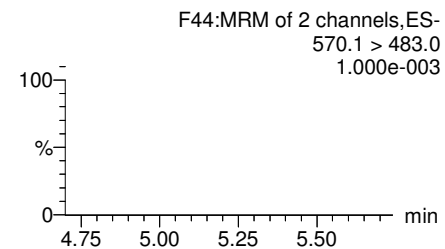
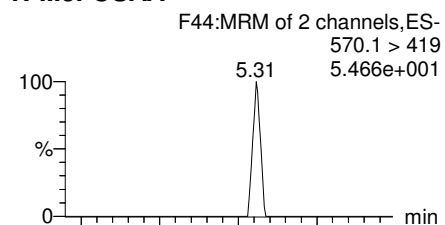
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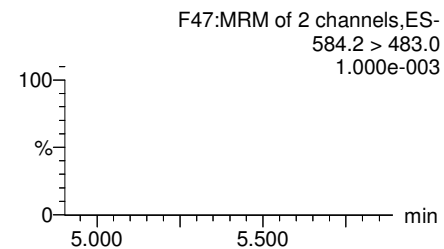
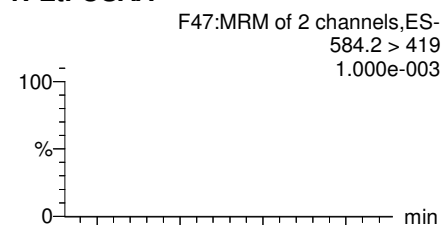
**PFUdA**



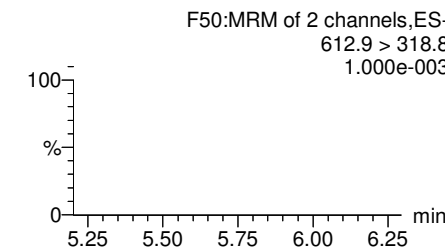
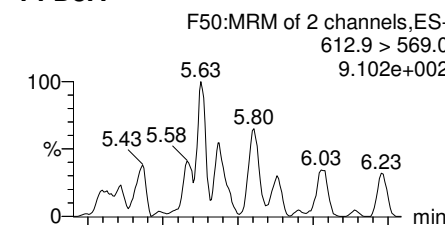
**N-MeFOSAA**



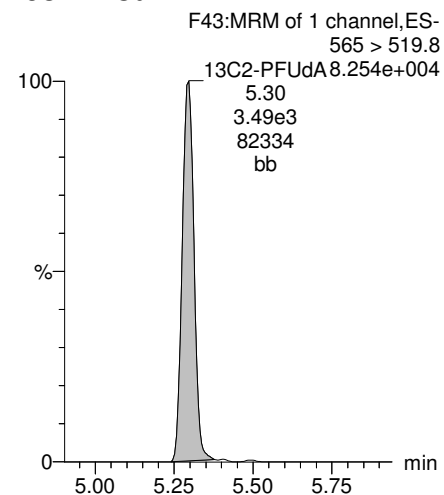
**N-EtFOSAA**



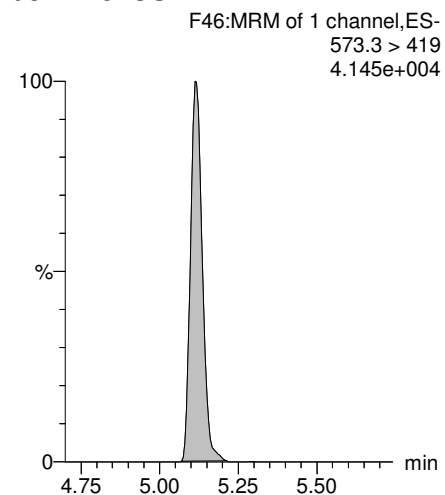
**PFDoA**



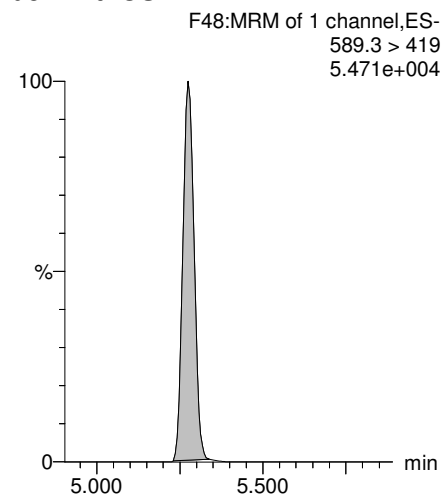
**13C2-PFUdA**



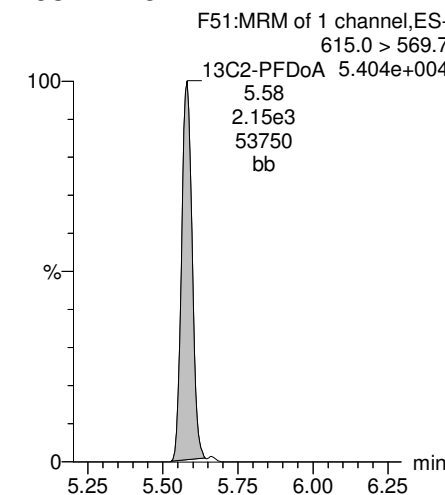
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



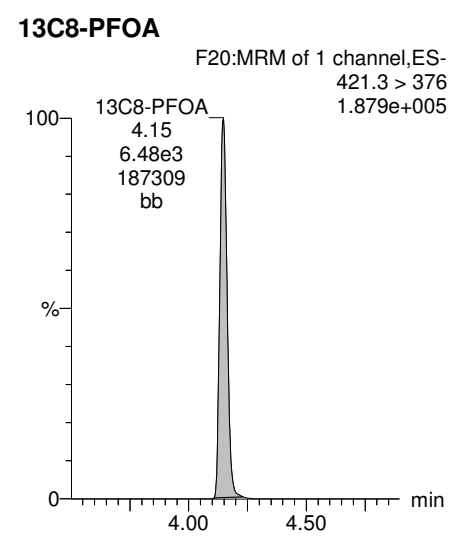
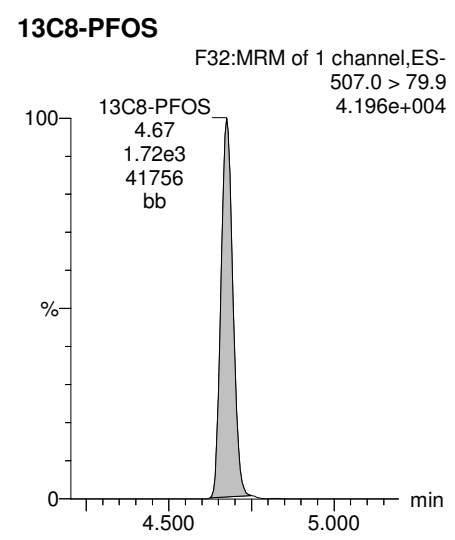
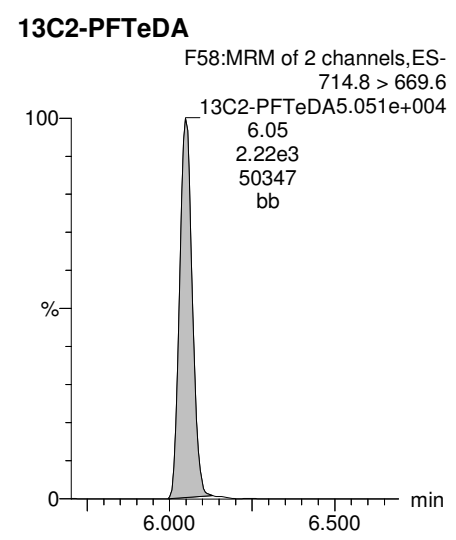
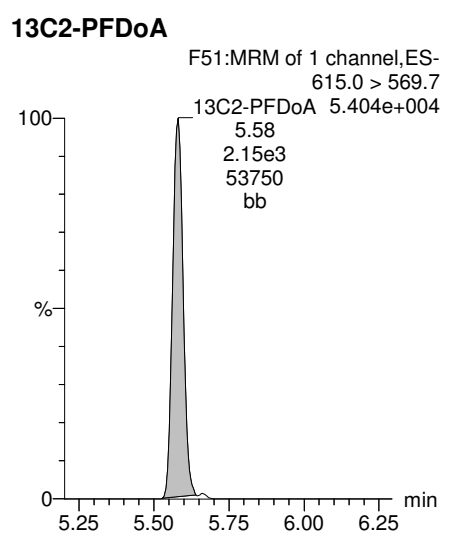
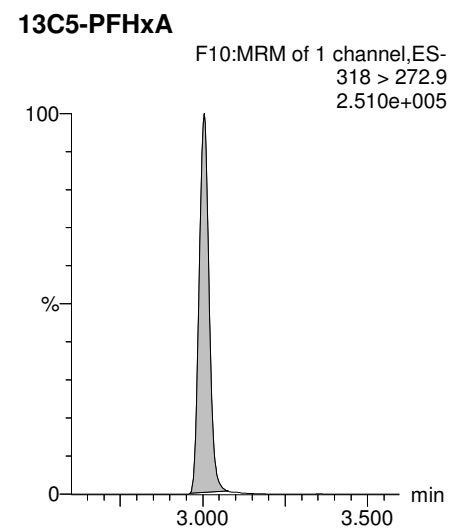
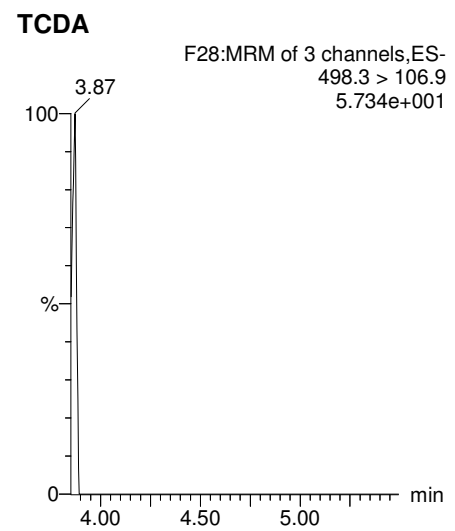
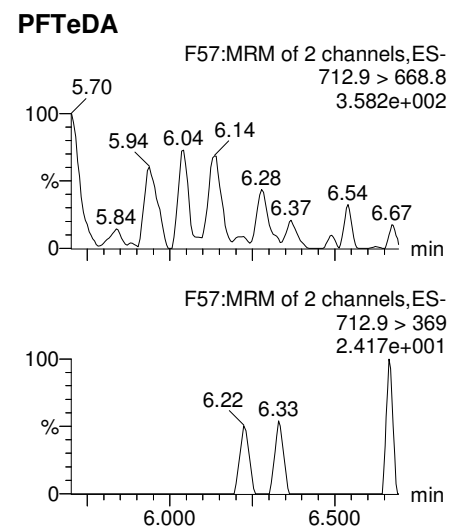
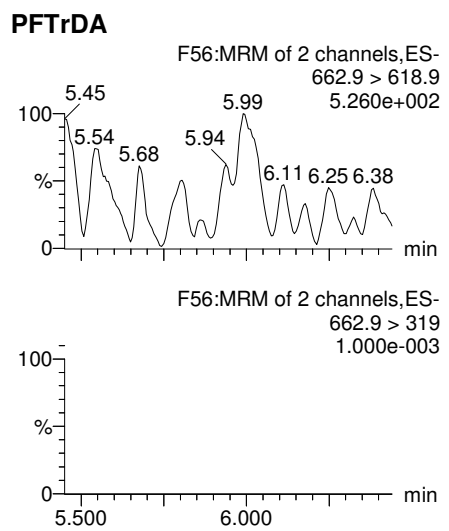
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Printed: Saturday, November 18, 2017 16:16:41 Pacific Standard Time

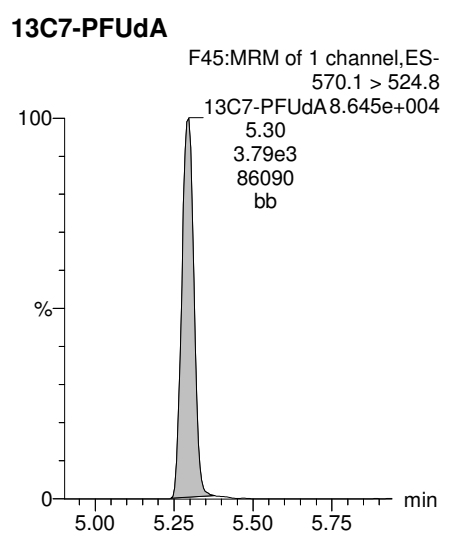
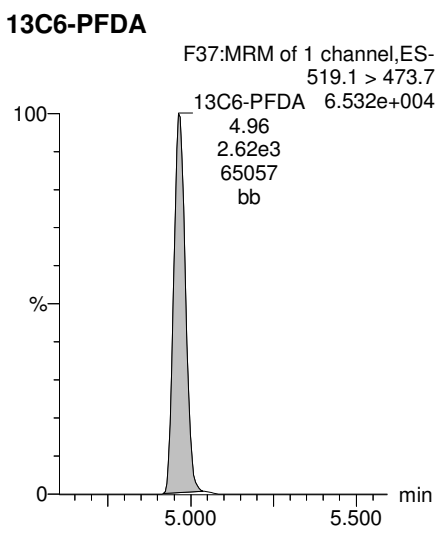
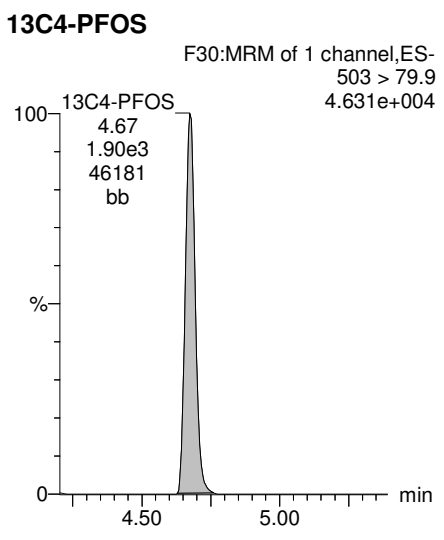
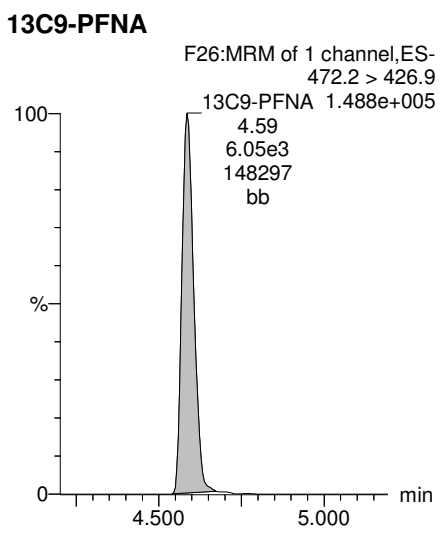
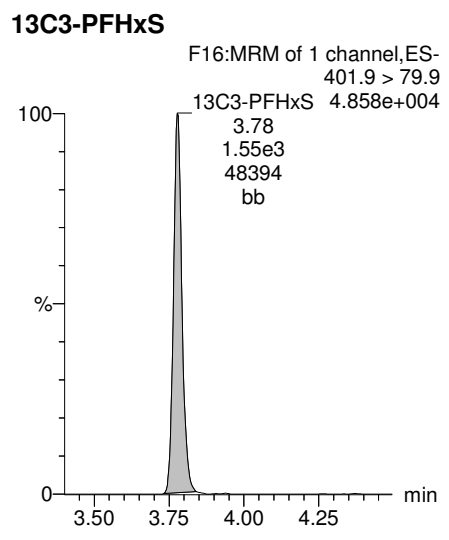
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Name: 171116M3\_41, Date: 16-Nov-2017, Time: 23:47:16, ID: 1701624-05 OF-MW19-1117 0.11045, Description: OF-MW19-1117



Dataset: U:\Q4.PRO\results\171116M3\171116M3-29.qld

Last Altered: Saturday, November 18, 2017 13:35:31 Pacific Standard Time

Printed: Saturday, November 18, 2017 13:36:20 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_29, Date: 16-Nov-2017, Time: 21:33:07, ID: B7K0059-MS1 Matrix Spike 0.11181, Description: Matrix Spike

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7	1.81e3	9.85e2	0.1118		2.55	2.50	23.0	96.549	
2	4 PFHxA	313.2 > 268.9	9.05e3	2.60e3	0.1118		3.01	2.99	17.4	109.176	
3	5 PFHpA	363.0 > 318.9	5.82e3	5.12e3	0.1118		3.71	3.62	14.2	94.691	
4	6 L-PFHxS	398.9 > 79.6	1.67e3	8.17e2	0.1118		3.86	3.77	25.6	118.686	
5	9 L-PFOA	413 > 368.7	4.75e3	4.79e3	0.1118		4.22	4.15	12.4	108.859	
6	12 PFNA	463.0 > 418.8	4.61e3	5.45e3	0.1118		4.66	4.58	10.6	84.024	
7	14 L-PFOS	499 > 79.9	2.04e3	2.01e3	0.1118		4.74	4.67	12.6	89.714	
8	16 PFDA	513 > 468.8	4.34e3	4.31e3	0.1118		5.01	4.96	12.6	119.319	
9	18 N-MeFOSAA	570.1 > 419	2.73e3	2.11e3	0.1118		5.17	5.12	16.2	80.626	
10	19 N-EtFOSAA	584.2 > 419	2.67e3	2.83e3	0.1118		5.32	5.28	11.8	97.561	
11	20 PFUdA	563.0 > 518.9	3.91e3	3.97e3	0.1118		5.45	5.30	12.3	85.235	
12	22 PFDoA	612.9 > 569.0	6.07e3	2.90e3	0.1118		5.62	5.58	26.1	75.855	

Dataset: U:\Q4.PRO\results\171116M3\171116M3-29.qld

Last Altered: Saturday, November 18, 2017 13:35:31 Pacific Standard Time

Printed: Saturday, November 18, 2017 13:36:31 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_29, Date: 16-Nov-2017, Time: 21:33:07, ID: B7K0059-MS1 Matrix Spike 0.11181, Description: Matrix Spike

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9	4.79e3	2.90e3	0.1118		5.87	5.83	20.6	73.057	
2	25 PFTeDA	712.9 > 668.8	3.32e3	3.54e3	0.1118		6.01	6.05	11.7	91.661	
3	33 13C3-PFBS	302. > 98.8	9.85e2	9.40e3	0.1118	0.096	2.55	2.50	1.31	121.782	108.9
4	34 13C2-PFHxA	315 > 269.8	2.60e3	9.40e3	0.1118	0.728	3.01	3.00	3.45	42.393	94.8
5	35 13C4-PFHpA	367.2 > 321.8	5.12e3	9.40e3	0.1118	0.550	3.71	3.62	6.81	110.840	99.1
6	36 18O2-PFHxS	403.0 > 102.6	8.17e2	1.89e3	0.1118	0.432	3.86	3.77	5.41	112.022	100.2
7	37 13C2-6:2 FTS	429.1 > 408.9	1.30e3	6.11e3	0.1118	0.217	4.16	4.09	2.66	109.765	98.2
8	38 13C2-PFOA	414.9 > 369.7	4.79e3	6.11e3	0.1118	0.840	4.22	4.14	9.80	104.431	93.4
9	39 13C5-PFNA	468.2 > 422.9	5.45e3	7.32e3	0.1118	0.967	4.66	4.59	9.31	86.082	77.0
10	40 13C8-PFOA	506.1 > 77.7	2.16e3	4.44e3	0.1118	0.786	4.73	4.64	6.08	69.210	61.9
11	41 13C8-PFOS	507.0 > 79.9	2.01e3	2.42e3	0.1118	0.991	4.73	4.67	10.4	94.052	84.1
12	42 13C2-PFDA	515.1 > 469.9	4.31e3	3.23e3	0.1118	2.153	5.01	4.96	16.7	69.333	62.0
13	43 13C2-8:2 FTS	529.1 > 508.7	6.25e2	9.40e3	0.1118	0.058	4.88	4.93	0.830	127.565	114.1
14	44 d3-N-MeFOSAA	573.3 > 419	2.11e3	4.44e3	0.1118	0.667	5.17	5.12	5.94	79.560	71.2
15	45 d5-N-EtFOSAA	589.3 > 419	2.83e3	4.44e3	0.1118	0.698	5.32	5.27	7.98	102.264	91.5
16	46 13C2-PFUdA	565 > 519.8	3.97e3	4.44e3	0.1118	1.261	5.45	5.29	11.2	79.224	70.9
17	47 13C2-PFDoA	615.0 > 569.7	2.90e3	4.44e3	0.1118	0.695	5.62	5.58	8.16	105.076	94.0
18	49 13C2-PFTeDA	714.8 > 669.6	3.54e3	4.44e3	0.1118	0.762	6.01	6.05	9.97	116.962	104.6
19	54 13C4-PFBA	217. > 171.8	6.69e3	6.69e3	0.1118	1.000	1.28	1.25	12.5	111.797	100.0
20	55 13C5-PFHxA	318 > 272.9	9.40e3	9.40e3	0.1118	1.000	3.01	3.00	12.5	111.797	100.0
21	56 13C3-PFHxS	401.9 > 79.9	1.89e3	1.89e3	0.1118	1.000	3.86	3.77	12.5	111.797	100.0
22	57 13C8-PFOA	421.3 > 376	6.11e3	6.11e3	0.1118	1.000	4.22	4.14	12.5	111.797	100.0
23	58 13C9-PFNA	472.2 > 426.9	7.32e3	7.32e3	0.1118	1.000	4.66	4.59	12.5	111.797	100.0
24	59 13C4-PFOS	503 > 79.9	2.42e3	2.42e3	0.1118	1.000	4.73	4.67	12.5	111.797	100.0
25	60 13C6-PFDA	519.1 > 473.7	3.23e3	3.23e3	0.1118	1.000	5.01	4.96	12.5	111.797	100.0
26	61 13C7-PFUdA	570.1 > 524.8	4.44e3	4.44e3	0.1118	1.000	5.45	5.29	12.5	111.797	100.0
27	62 Total PFHxS	398.9 > 79.6	1.67e3	8.17e2	0.1118		3.86		25.6	118.686	
28	63 Total PFOA	413 > 368.7	4.75e3	4.79e3	0.1118		4.22		12.4	108.859	
29	64 Total PFOS	499 > 79.9	2.04e3	2.01e3	0.1118		4.73		12.6	89.714	
30	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.11e3	0.1118		5.54		0.000		
31	66 Total N-EtFOSAA	584.2 > 419	2.67e3	2.83e3	0.1118		5.32		11.8	97.561	

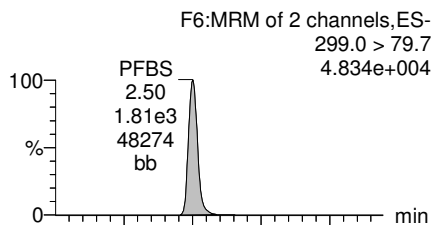
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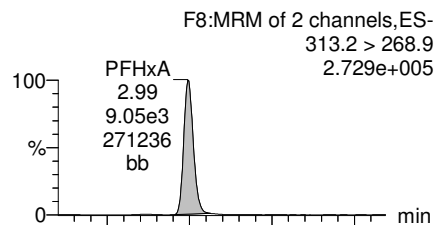
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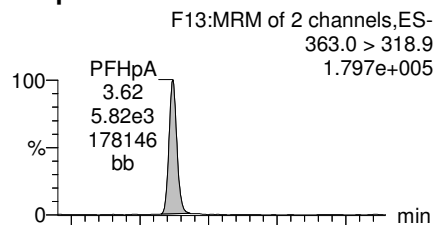
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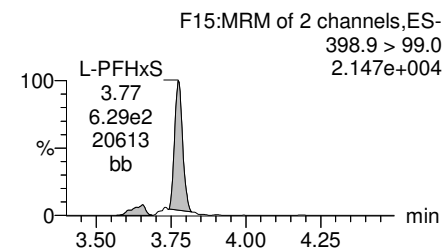
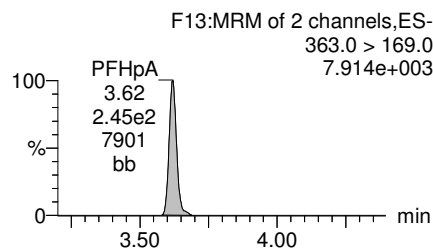
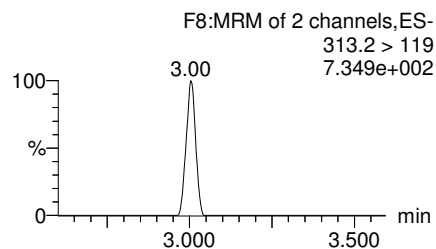
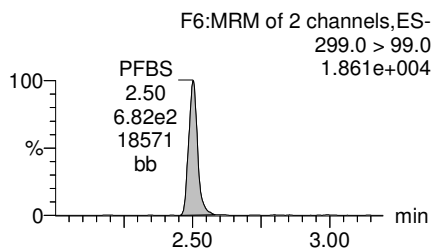
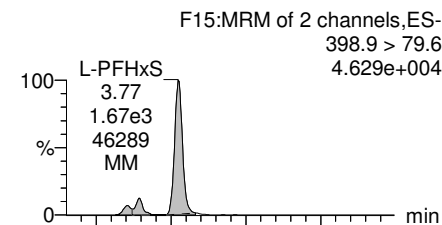
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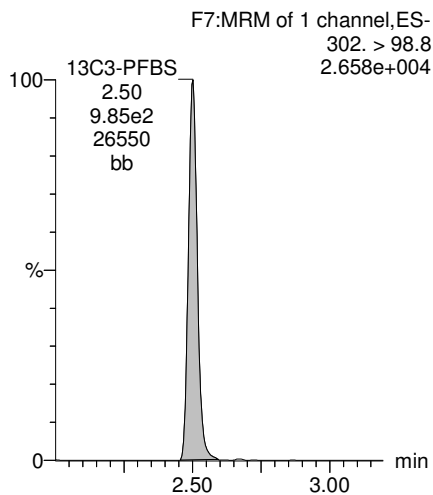
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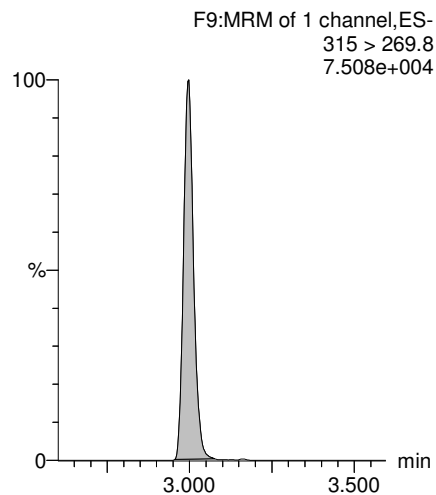
**Total PFHxS**



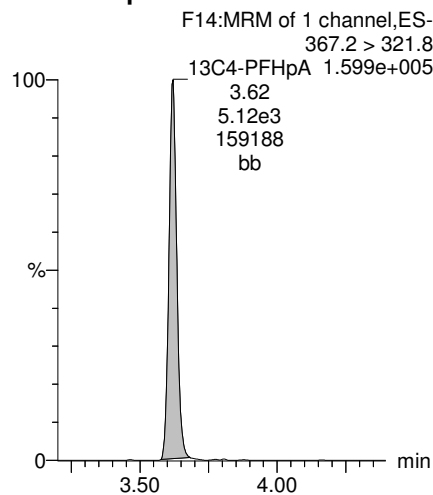
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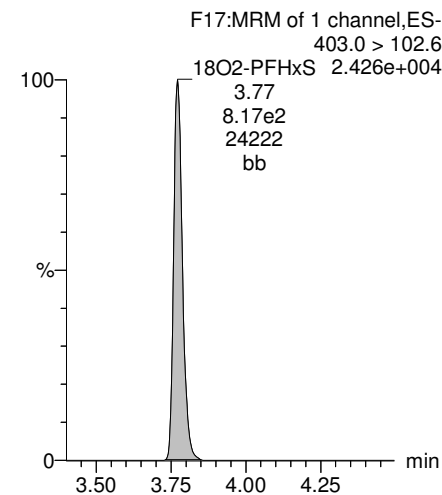
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

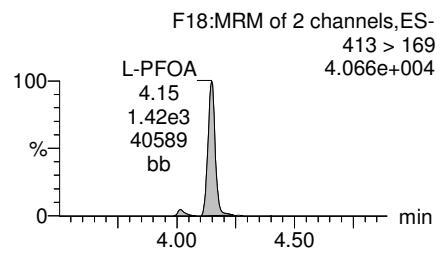
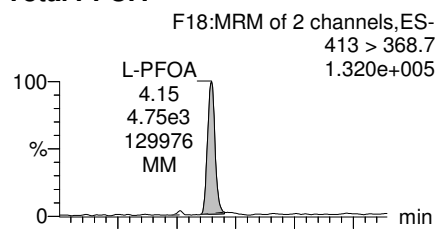


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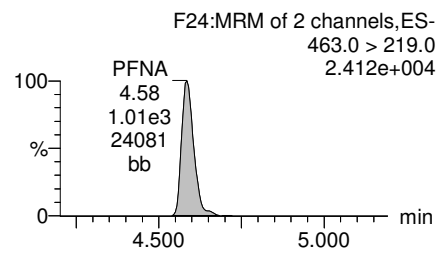
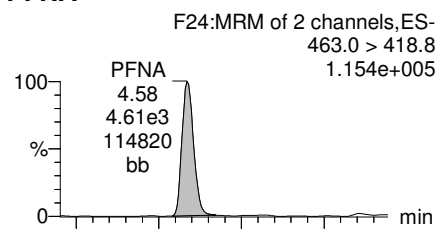
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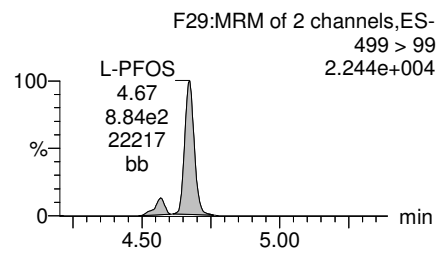
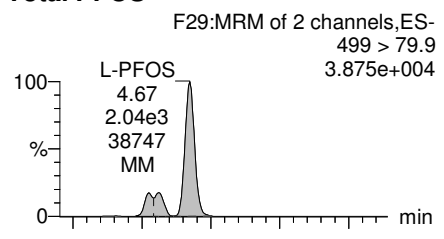
**Total PFOA**



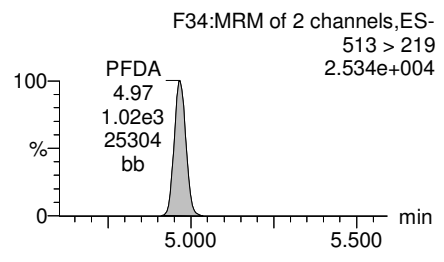
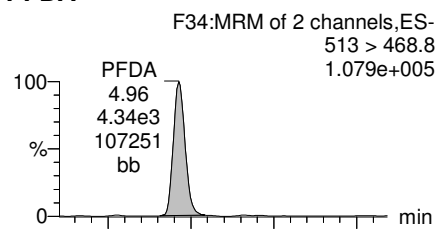
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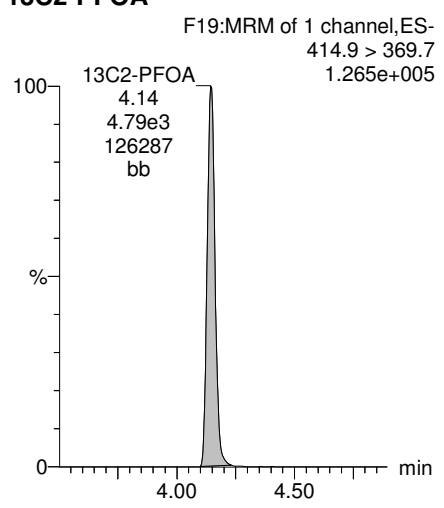
**Total PFOS**



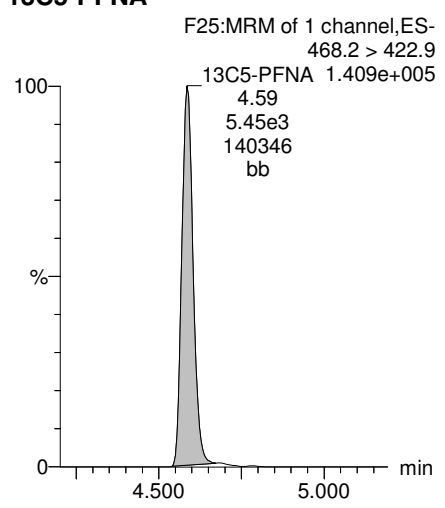
**PFDA**



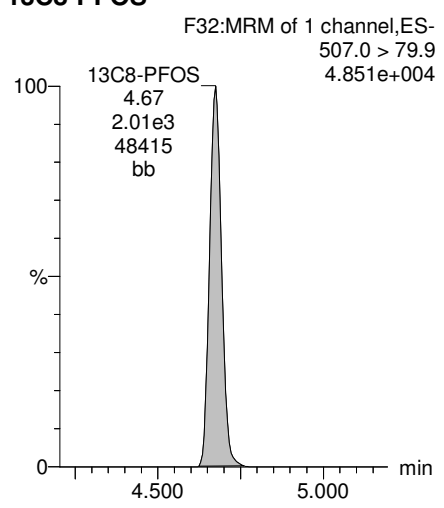
**13C2-PFOA**



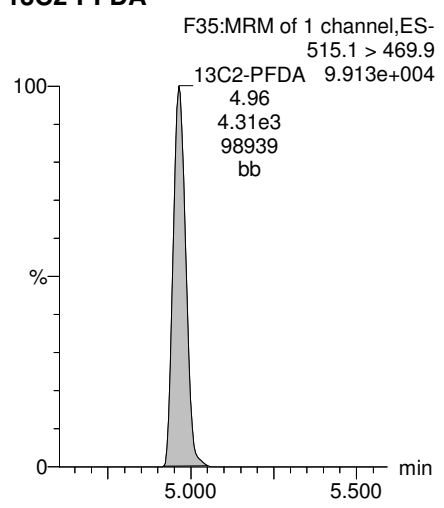
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**



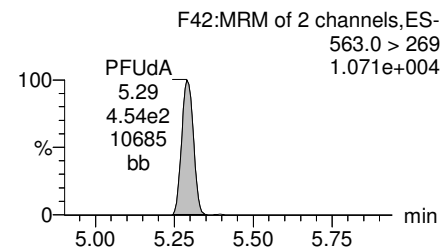
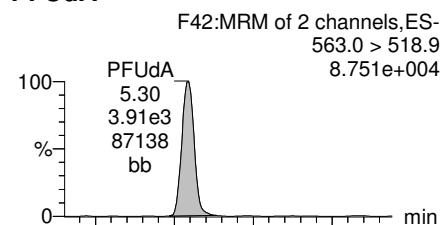


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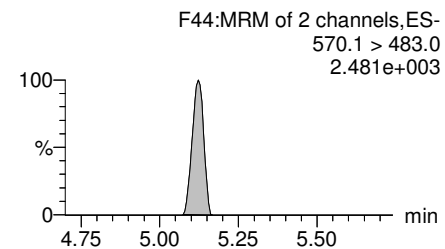
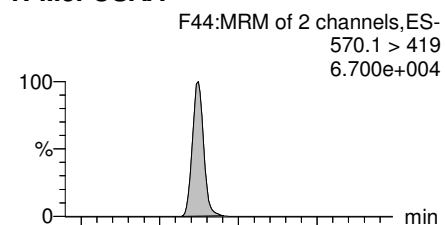
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Name: 171116M3\_29, Date: 16-Nov-2017, Time: 21:33:07, ID: B7K0059-MS1 Matrix Spike 0.11181, Description: Matrix Spike

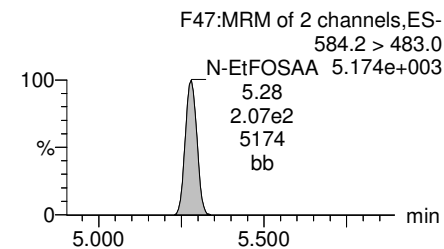
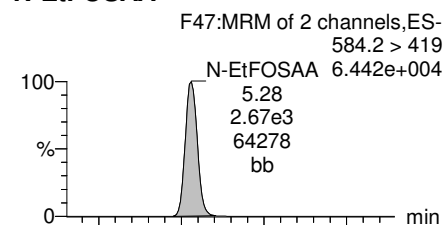
**PFUDa**



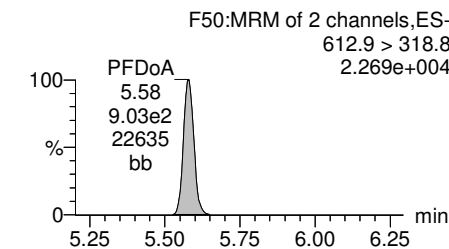
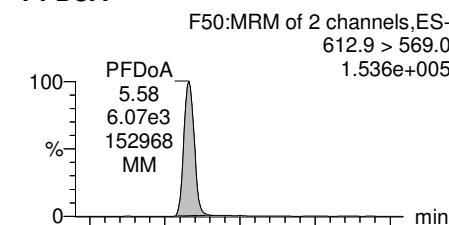
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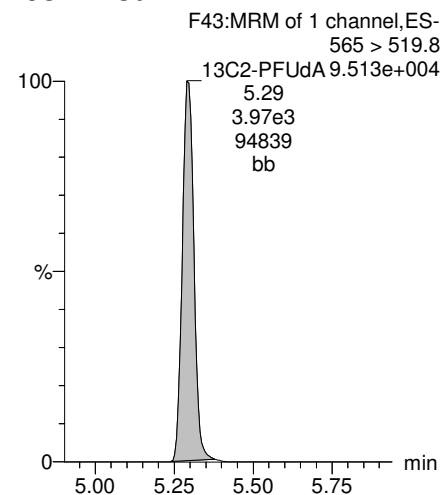
**N-EtFOSAA**



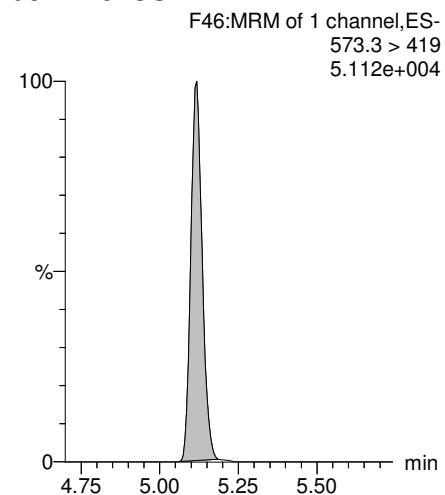
**PFDaA**



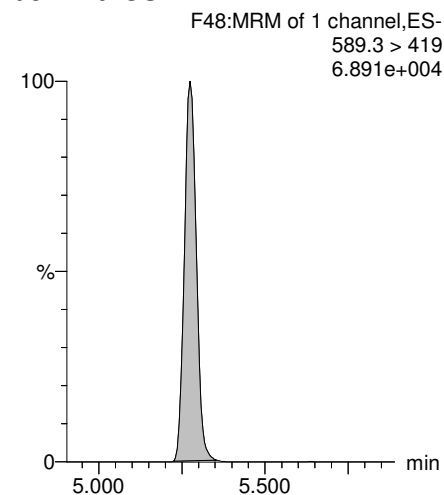
**13C2-PFUDa**



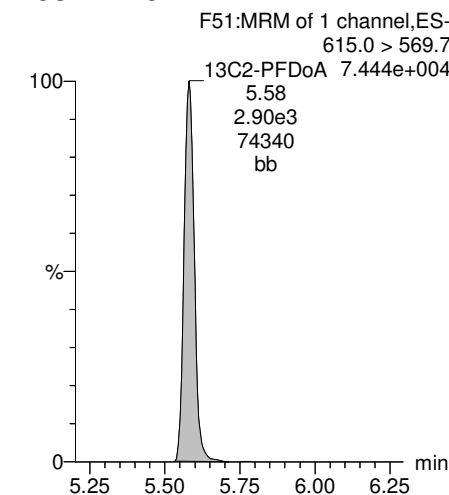
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



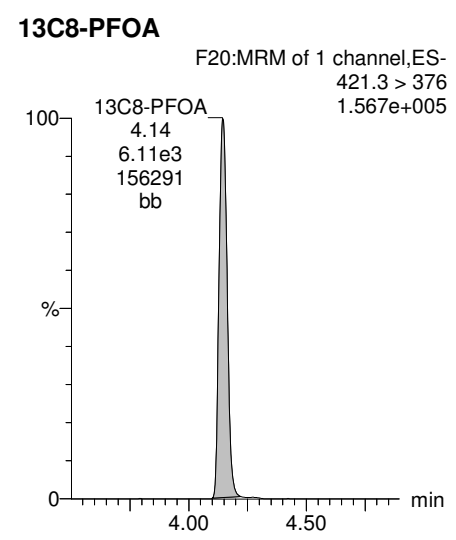
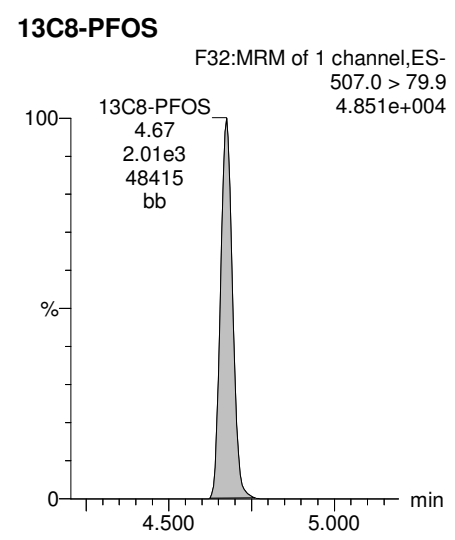
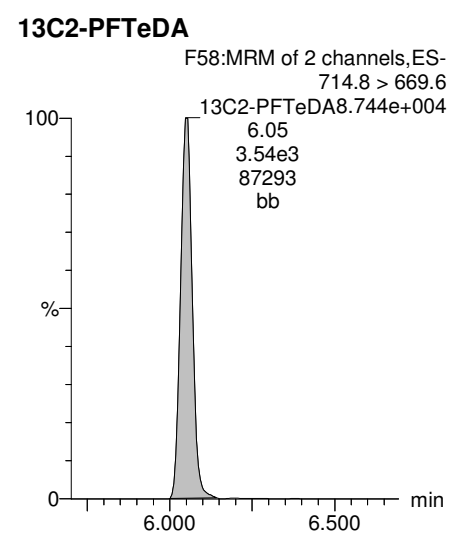
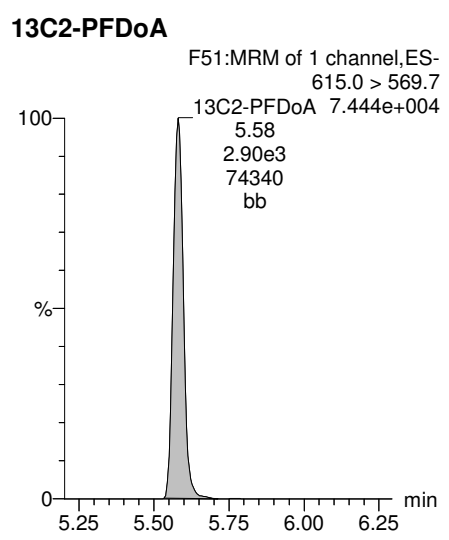
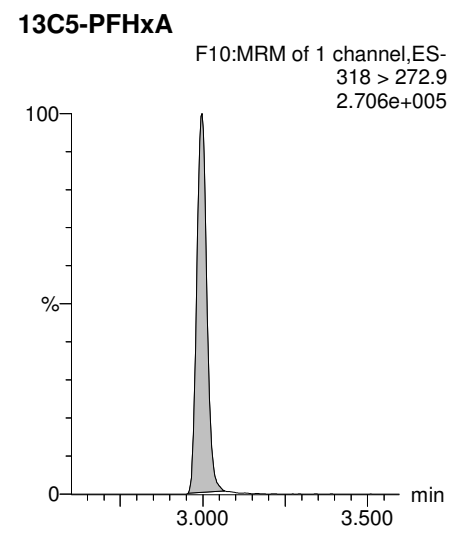
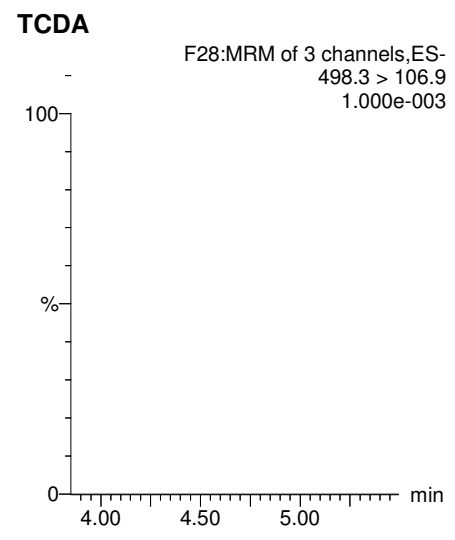
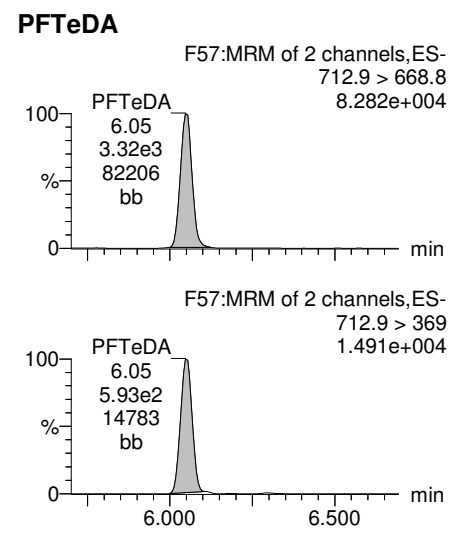
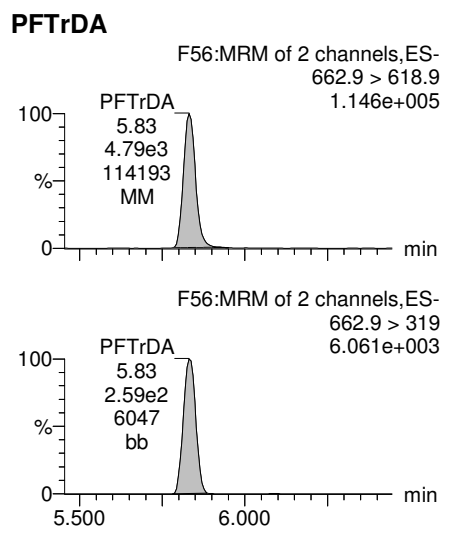
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Name: 171116M3\_29, Date: 16-Nov-2017, Time: 21:33:07, ID: B7K0059-MS1 Matrix Spike 0.11181, Description: Matrix Spike

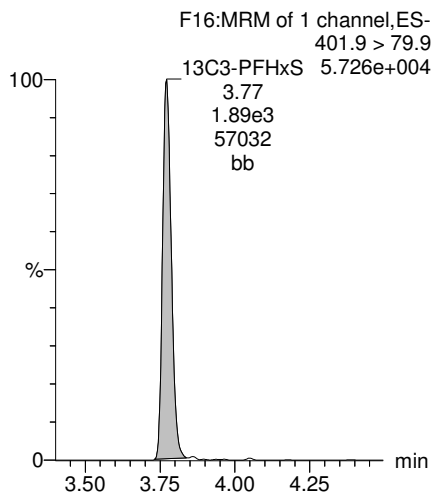


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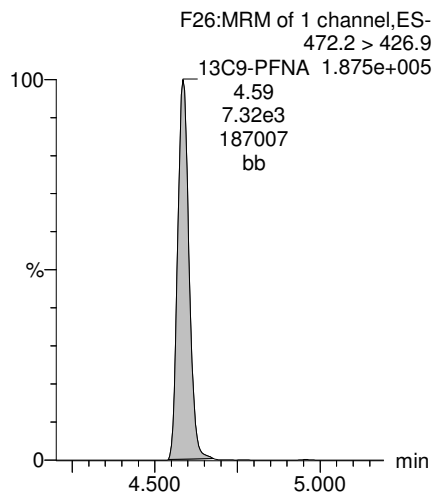
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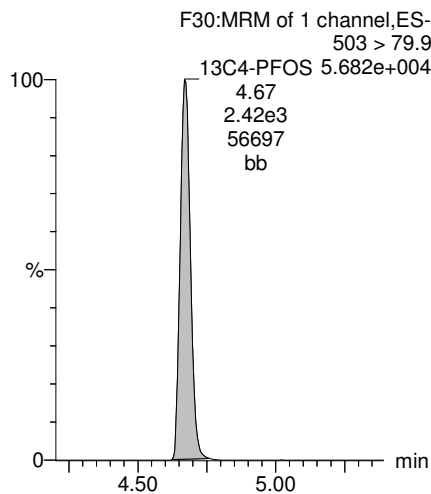
**13C3-PFHxS**



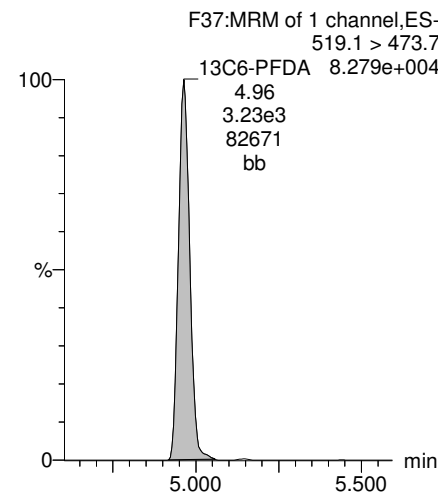
**13C9-PFNA**



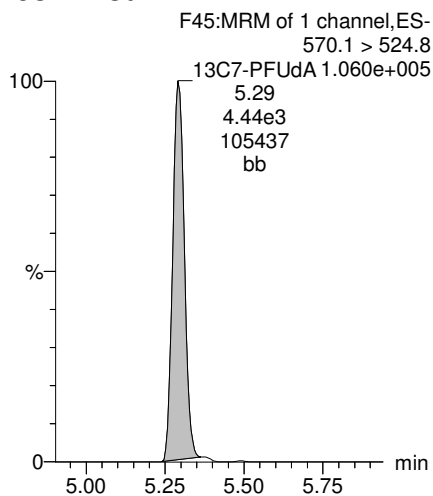
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUdA**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-30.qld

Last Altered: Saturday, November 18, 2017 15:29:05 Pacific Standard Time

Printed: Saturday, November 18, 2017 15:30:51 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_30, Date: 16-Nov-2017, Time: 21:44:18, ID: B7K0059-MSD1 Matrix Spike Dup 0.11415, Description: Matrix Spike Dup

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7	1.83e3	9.68e2	0.1142		2.55	2.50	23.6	96.950	
2	4 PFHxA	313.2 > 268.9	8.12e3	2.62e3	0.1142		3.01	3.00	15.5	94.914	
3	5 PFHpA	363.0 > 318.9	5.27e3	4.79e3	0.1142		3.71	3.62	13.8	89.814	
4	6 L-PFHxS	398.9 > 79.6	1.42e3	7.70e2	0.1142		3.86	3.77	23.0	104.204	
5	9 L-PFOA	413 > 368.7	4.83e3	5.15e3	0.1142		4.22	4.14	11.7	100.771	
6	12 PFNA	463.0 > 418.8	4.95e3	4.72e3	0.1142		4.66	4.59	13.1	102.417	
7	14 L-PFOS	499 > 79.9	1.73e3	1.98e3	0.1142		4.74	4.68	10.9	75.631	
8	16 PFDA	513 > 468.8	3.94e3	4.41e3	0.1142		5.01	4.96	11.2	103.810	
9	18 N-MeFOSAA	570.1 > 419	2.44e3	1.90e3	0.1142		5.17	5.12	16.0	78.400	
10	19 N-EtFOSAA	584.2 > 419	1.91e3	2.15e3	0.1142		5.32	5.28	11.1	90.074	
11	20 PFUdA	563.0 > 518.9	3.70e3	3.97e3	0.1142		5.45	5.29	11.7	78.848	
12	22 PFDoA	612.9 > 569.0	4.81e3	1.92e3	0.1142		5.62	5.58	31.4	89.568	

Dataset: U:\Q4.PRO\results\171116M3\171116M3-30.qld

Last Altered: Saturday, November 18, 2017 15:29:05 Pacific Standard Time

Printed: Saturday, November 18, 2017 15:31:07 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_30, Date: 16-Nov-2017, Time: 21:44:18, ID: B7K0059-MSD1 Matrix Spike Dup 0.11415, Description: Matrix Spike Dup

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9	4.72e3	1.92e3	0.1142		5.87	5.83	30.8	106.872	
2	25 PFTeDA	712.9 > 668.8	2.81e3	2.72e3	0.1142		6.01	6.05	12.9	99.793	
3	33 13C3-PFBS	302. > 98.8	9.68e2	8.93e3	0.1142	0.096	2.55	2.50	1.36	123.513	112.8
4	34 13C2-PFHxA	315 > 269.8	2.62e3	8.93e3	0.1142	0.728	3.01	3.00	3.67	44.158	100.8
5	35 13C4-PFHpA	367.2 > 321.8	4.79e3	8.93e3	0.1142	0.550	3.71	3.62	6.71	106.907	97.6
6	36 18O2-PFHxS	403.0 > 102.6	7.70e2	1.88e3	0.1142	0.432	3.86	3.77	5.12	103.898	94.9
7	37 13C2-6:2 FTS	429.1 > 408.9	1.34e3	6.54e3	0.1142	0.217	4.16	4.09	2.55	102.994	94.1
8	38 13C2-PFOA	414.9 > 369.7	5.15e3	6.54e3	0.1142	0.840	4.22	4.14	9.84	102.712	93.8
9	39 13C5-PFNA	468.2 > 422.9	4.72e3	7.19e3	0.1142	0.967	4.66	4.59	8.21	74.392	67.9
10	40 13C8-PFOA	506.1 > 77.7	1.65e3	4.04e3	0.1142	0.786	4.73	4.64	5.10	56.844	51.9
11	41 13C8-PFOS	507.0 > 79.9	1.98e3	2.37e3	0.1142	0.991	4.73	4.67	10.4	91.996	84.0
12	42 13C2-PFDA	515.1 > 469.9	4.41e3	2.39e3	0.1142	2.153	5.01	4.96	23.0	93.652	85.5
13	43 13C2-8:2 FTS	529.1 > 508.7	6.83e2	8.93e3	0.1142	0.058	4.88	4.93	0.956	143.931	131.4
14	44 d3-N-MeFOSAA	573.3 > 419	1.90e3	4.04e3	0.1142	0.667	5.17	5.11	5.88	77.173	70.5
15	45 d5-N-EtFOSAA	589.3 > 419	2.15e3	4.04e3	0.1142	0.698	5.32	5.28	6.67	83.733	76.5
16	46 13C2-PFUdA	565 > 519.8	3.97e3	4.04e3	0.1142	1.261	5.45	5.30	12.3	85.473	78.1
17	47 13C2-PFDoA	615.0 > 569.7	1.92e3	4.04e3	0.1142	0.695	5.62	5.58	5.93	74.834	68.3
18	49 13C2-PFTeDA	714.8 > 669.6	2.72e3	4.04e3	0.1142	0.762	6.01	6.05	8.42	96.722	88.3
19	54 13C4-PFBA	217. > 171.8	6.33e3	6.33e3	0.1142	1.000	1.28	1.25	12.5	109.505	100.0
20	55 13C5-PFHxA	318 > 272.9	8.93e3	8.93e3	0.1142	1.000	3.01	3.00	12.5	109.505	100.0
21	56 13C3-PFHxS	401.9 > 79.9	1.88e3	1.88e3	0.1142	1.000	3.86	3.78	12.5	109.505	100.0
22	57 13C8-PFOA	421.3 > 376	6.54e3	6.54e3	0.1142	1.000	4.22	4.14	12.5	109.505	100.0
23	58 13C9-PFNA	472.2 > 426.9	7.19e3	7.19e3	0.1142	1.000	4.66	4.59	12.5	109.505	100.0
24	59 13C4-PFOS	503 > 79.9	2.37e3	2.37e3	0.1142	1.000	4.73	4.67	12.5	109.505	100.0
25	60 13C6-PFDA	519.1 > 473.7	2.39e3	2.39e3	0.1142	1.000	5.01	4.96	12.5	109.505	100.0
26	61 13C7-PFUdA	570.1 > 524.8	4.04e3	4.04e3	0.1142	1.000	5.45	5.29	12.5	109.505	100.0
27	62 Total PFHxS	398.9 > 79.6	1.42e3	7.70e2	0.1142		3.86		23.0	104.204	
28	63 Total PFOA	413 > 368.7	4.83e3	5.15e3	0.1142		4.22		11.7	100.771	
29	64 Total PFOS	499 > 79.9	1.73e3	1.98e3	0.1142		4.73		10.9	75.631	
30	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.90e3	0.1142		5.54		0.000		
31	66 Total N-EtFOSAA	584.2 > 419	1.91e3	2.15e3	0.1142		5.32		11.1	90.074	

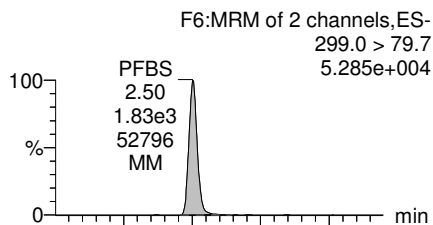
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Printed: Saturday, November 18, 2017 15:31:07 Pacific Standard Time

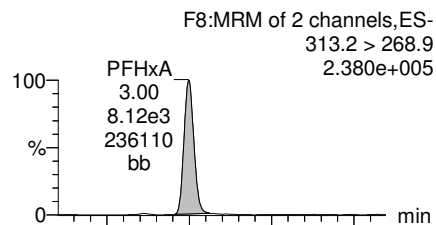
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Name: 171116M3\_30, Date: 16-Nov-2017, Time: 21:44:18, ID: B7K0059-MSD1 Matrix Spike Dup 0.11415, Description: Matrix Spike Dup

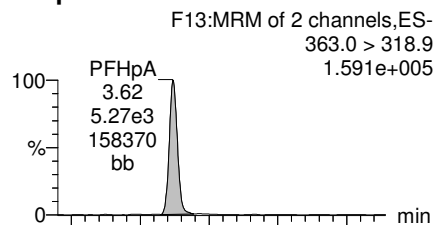
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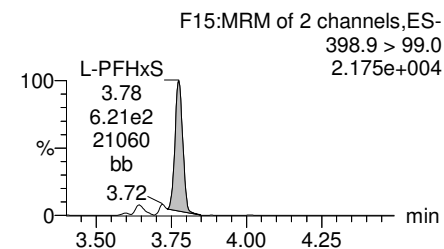
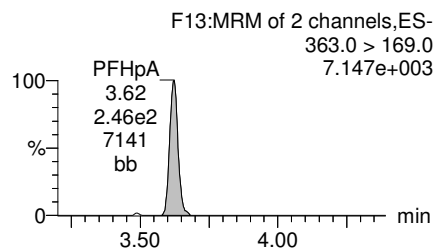
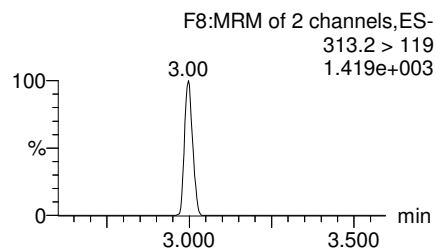
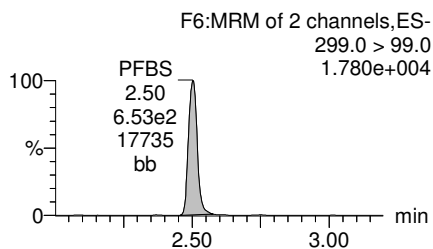
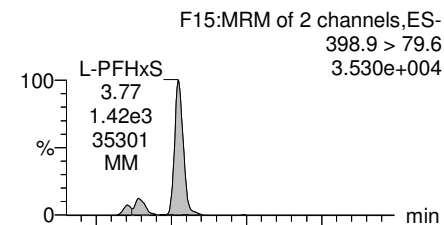
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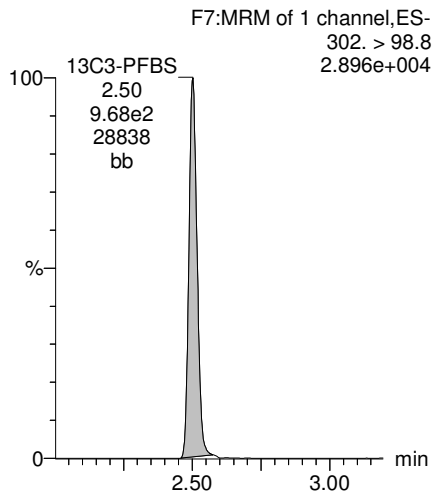
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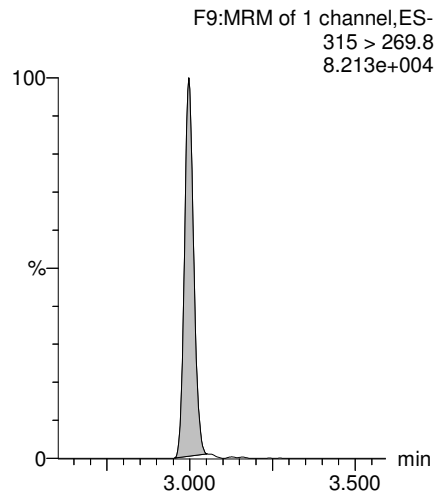
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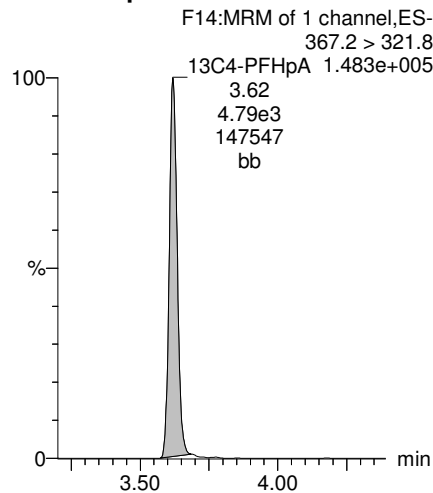
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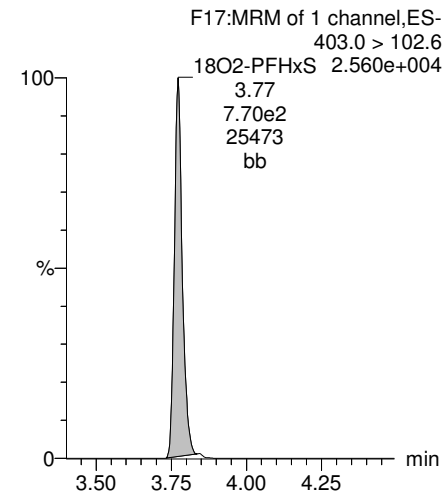
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

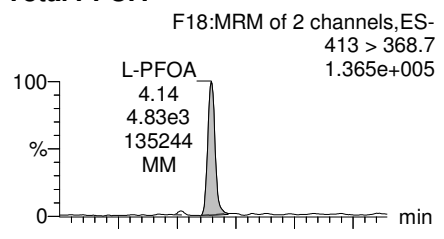


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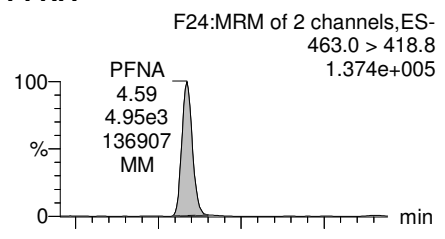
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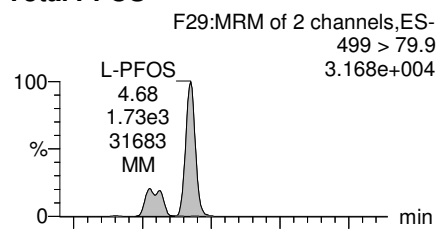
**Total PFOA**



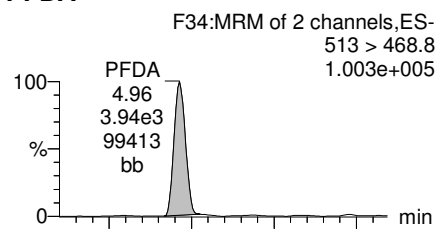
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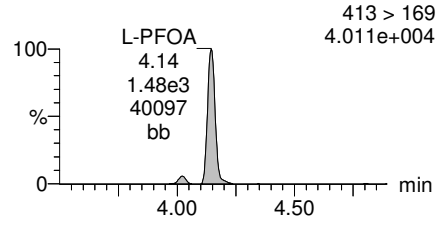
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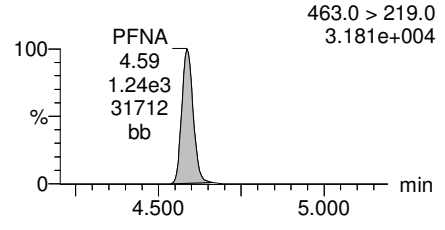
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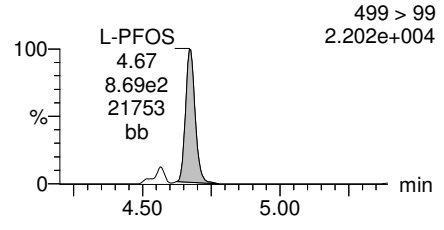
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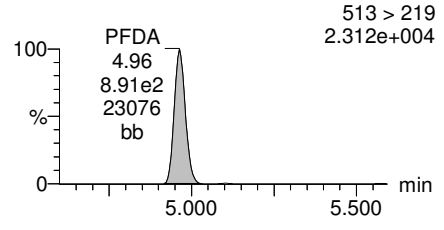
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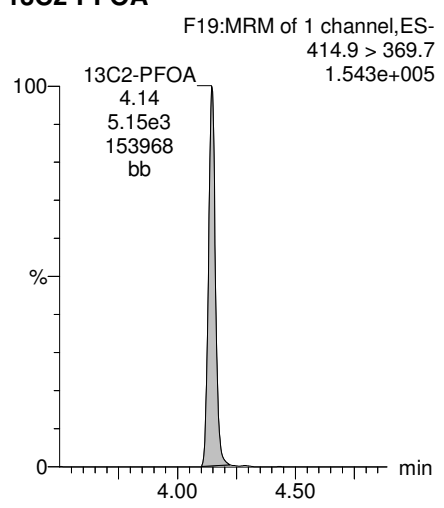
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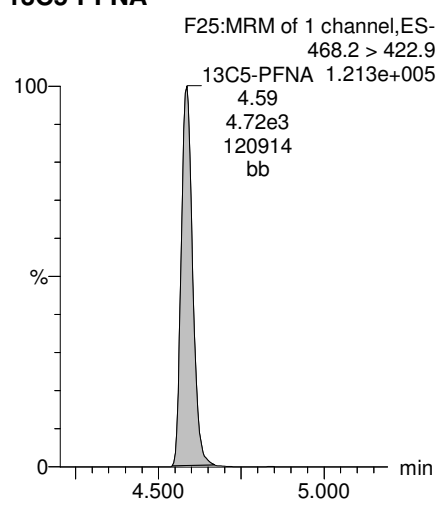
**PFDA**



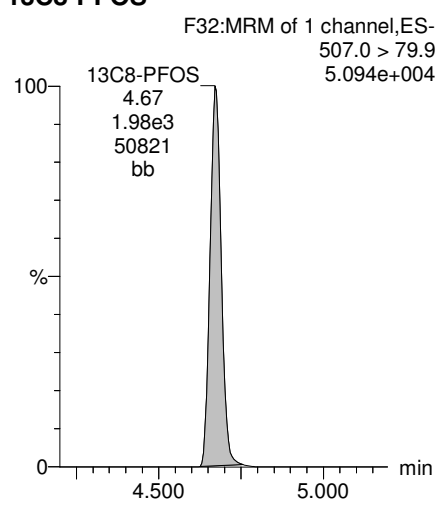
**13C2-PFOA**



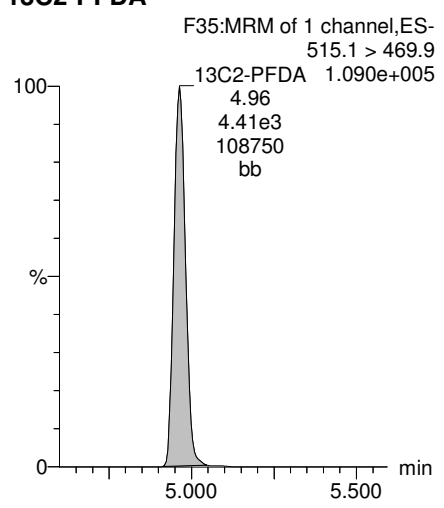
**13C5-PFNA**



**13C8-PFOS**



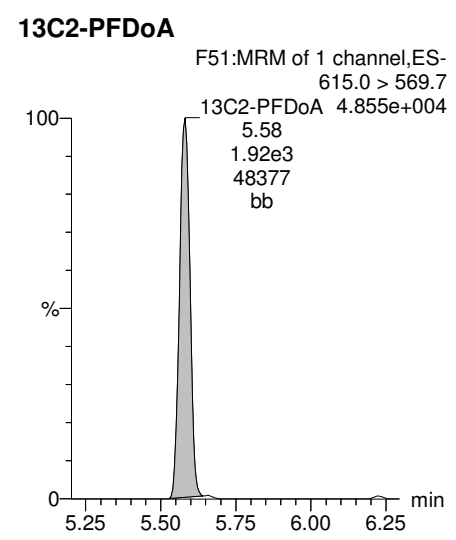
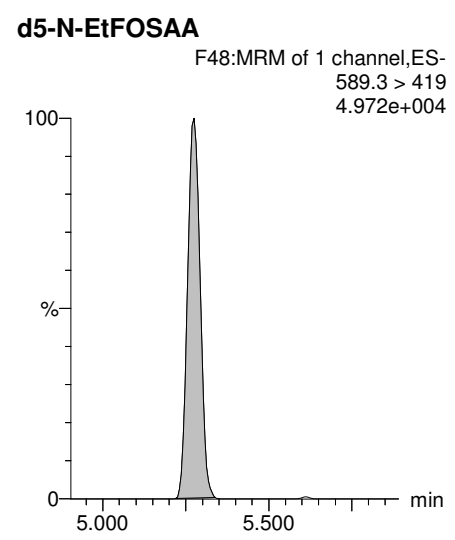
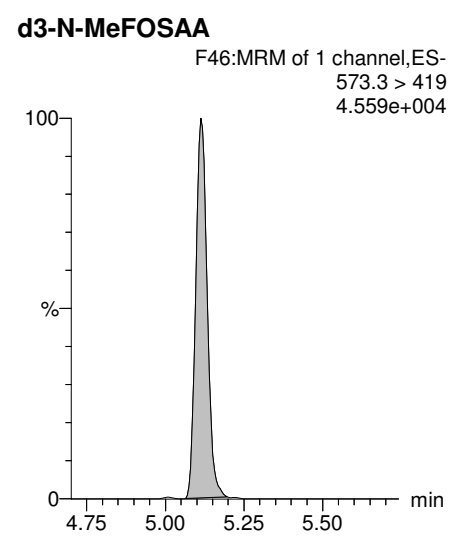
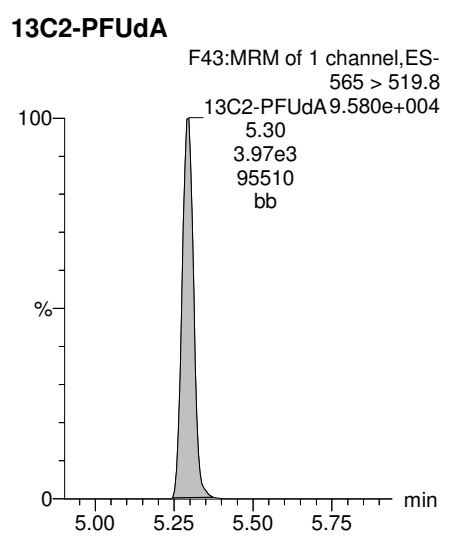
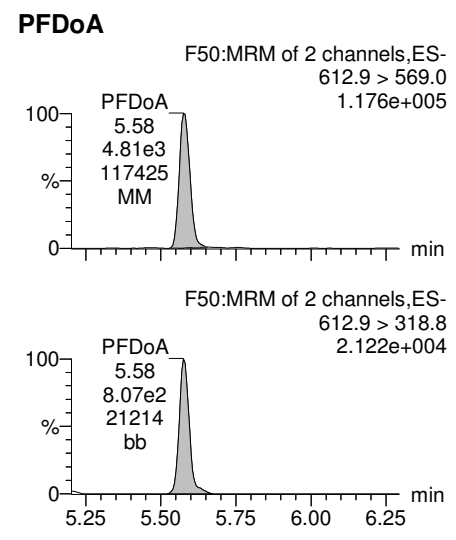
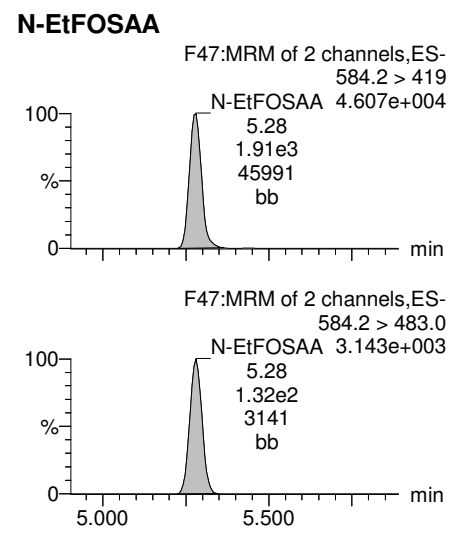
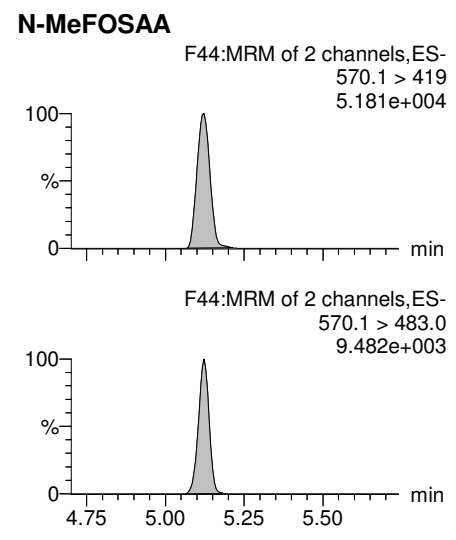
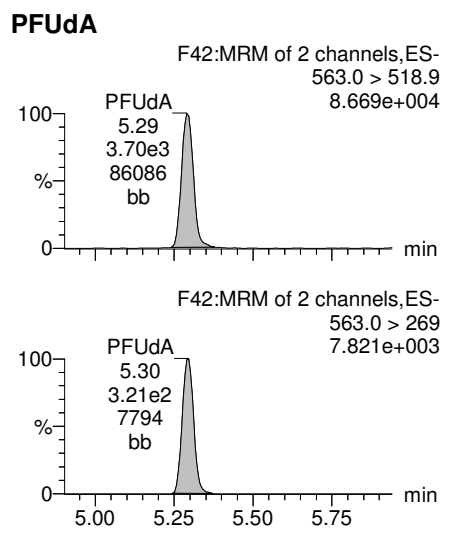
**13C2-PFDA**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-30.qld

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Printed: Saturday, November 18, 2017 15:31:07 Pacific Standard Time

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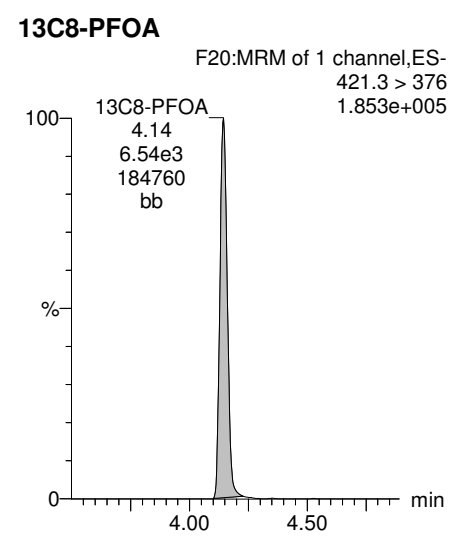
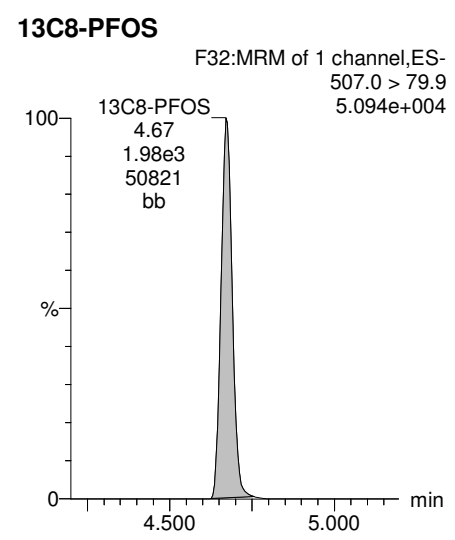
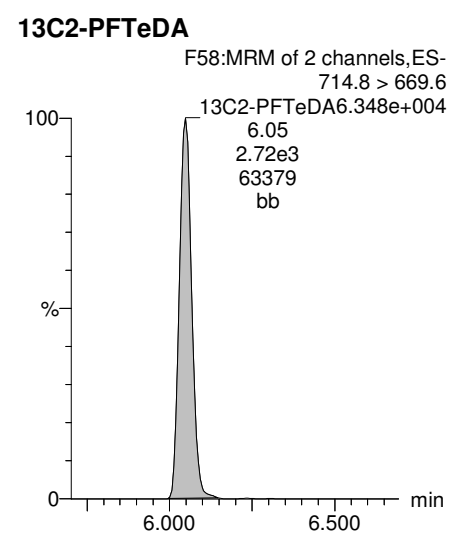
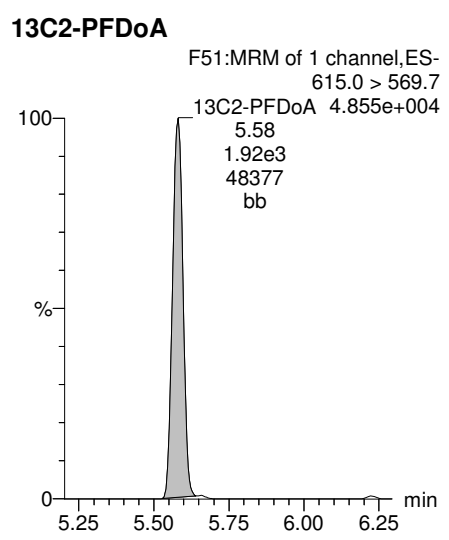
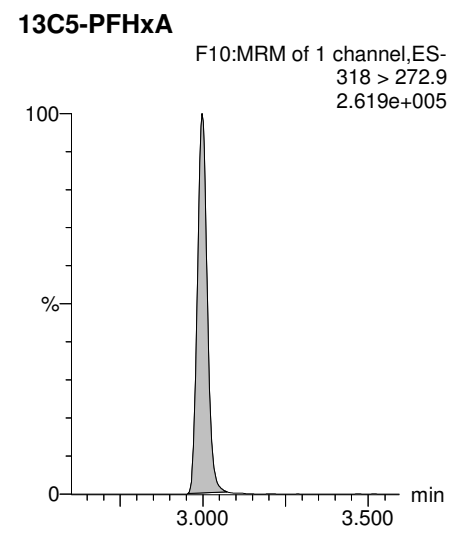
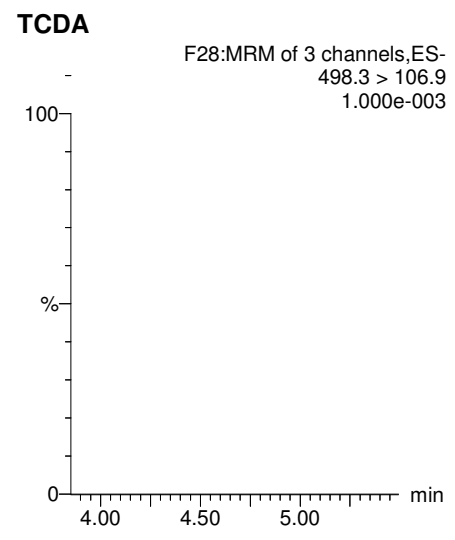
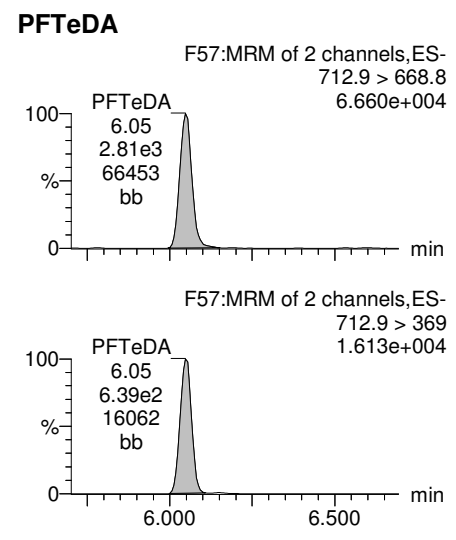
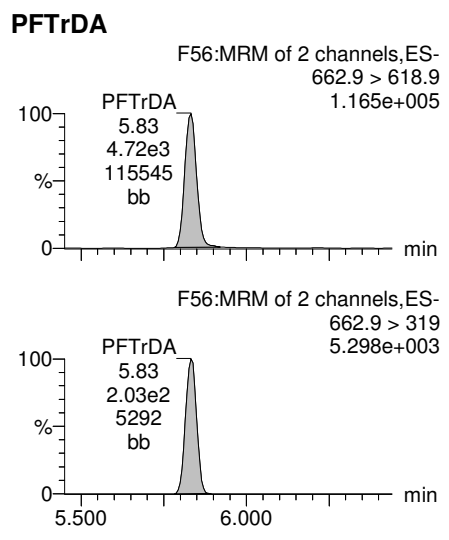




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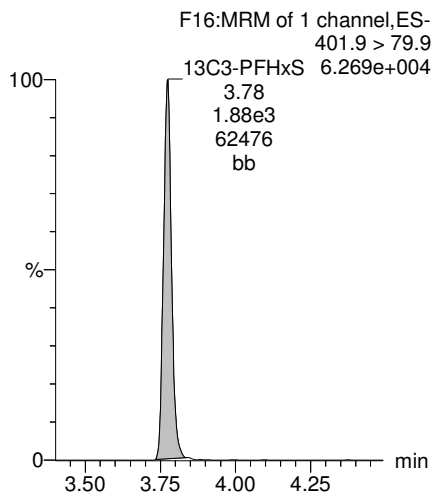


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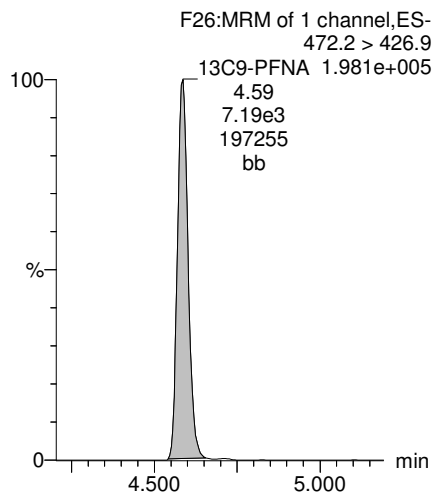
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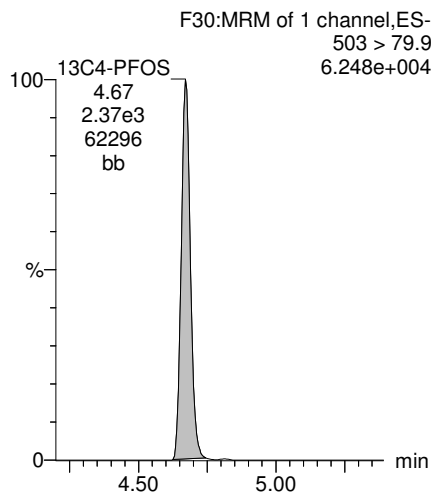
**13C3-PFHxS**



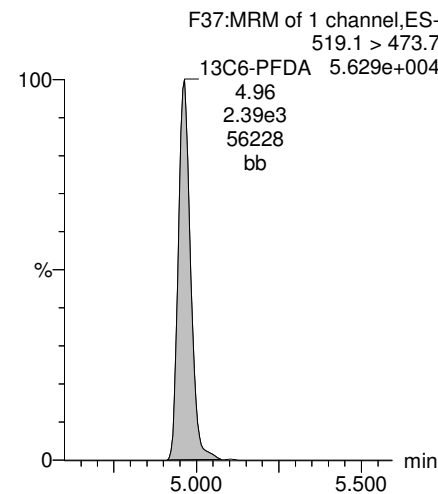
**13C9-PFNA**



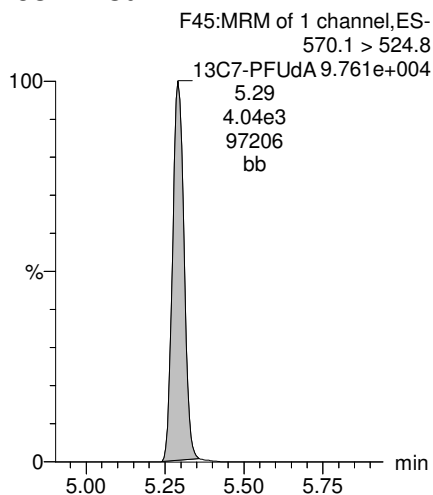
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUDa**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-42.qld

Last Altered: Saturday, November 18, 2017 16:23:59 Pacific Standard Time

Printed: Saturday, November 18, 2017 16:24:38 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_42, Date: 16-Nov-2017, Time: 23:58:27, ID: 1701624-06 OF-MW190-1117 0.10982, Description: OF-MW190-1117

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		9.35e2	0.1098		2.55				
2	4	PFHxA	313.2 > 268.9		2.92e3	0.1098		3.01				
3	5	PFHpA	363.0 > 318.9		5.14e3	0.1098		3.71				
4	6	L-PFHxS	398.9 > 79.6		7.90e2	0.1098		3.86				
5	9	L-PFOA	413 > 368.7		5.18e3	0.1098		4.22				
6	12	PFNA	463.0 > 418.8		4.74e3	0.1098		4.66				
7	14	L-PFOS	499 > 79.9	1.41e0	1.90e3	0.1098		4.74	4.56	0.00925	0.823	
8	16	PFDA	513 > 468.8		5.11e3	0.1098		5.01				
9	18	N-MeFOSAA	570.1 > 419		2.47e3	0.1098		5.17				
10	19	N-EtFOSAA	584.2 > 419		2.10e3	0.1098		5.32				
11	20	PFUdA	563.0 > 518.9		3.89e3	0.1098		5.45				
12	22	PFDoA	612.9 > 569.0		2.10e3	0.1098		5.62				

Dataset: U:\Q4.PRO\results\171116M3\171116M3-42.qld

Last Altered: Saturday, November 18, 2017 16:23:59 Pacific Standard Time

Printed: Saturday, November 18, 2017 16:25:38 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_42, Date: 16-Nov-2017, Time: 23:58:27, ID: 1701624-06 OF-MW190-1117 0.10982, Description: OF-MW190-1117

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	24	PFTrDA	662.9 > 618.9	2.10e3	0.1098		5.87					
2	25	PFTeDA	712.9 > 668.8	3.12e3	0.1098		6.01					
3	33	13C3-PFBS	302. > 98.8	9.35e2	1.06e4	0.1098	0.096	2.55	2.50	1.10	104.435	91.8
4	34	13C2-PFHxA	315 > 269.8	2.92e3	1.06e4	0.1098	0.728	3.01	3.00	3.45	43.129	94.7
5	35	13C4-PFHpA	367.2 > 321.8	5.14e3	1.06e4	0.1098	0.550	3.71	3.62	6.06	100.438	88.2
6	36	18O2-PFHxS	403.0 > 102.6	7.90e2	2.07e3	0.1098	0.432	3.86	3.77	4.77	100.673	88.4
7	37	13C2-6:2 FTS	429.1 > 408.9	1.42e3	7.03e3	0.1098	0.217	4.16	4.09	2.53	106.139	93.2
8	38	13C2-PFOA	414.9 > 369.7	5.18e3	7.03e3	0.1098	0.840	4.22	4.14	9.21	99.893	87.8
9	39	13C5-PFNA	468.2 > 422.9	4.74e3	6.71e3	0.1098	0.967	4.66	4.59	8.82	83.088	73.0
10	40	13C8-PFOA	506.1 > 77.7	2.51e3	4.52e3	0.1098	0.786	4.73	4.64	6.93	80.279	70.5
11	41	13C8-PFOS	507.0 > 79.9	1.90e3	2.37e3	0.1098	0.991	4.73	4.67	10.0	92.047	80.9
12	42	13C2-PFDA	515.1 > 469.9	5.11e3	2.96e3	0.1098	2.153	5.01	4.96	21.6	91.232	80.2
13	43	13C2-8:2 FTS	529.1 > 508.7	6.17e2	1.06e4	0.1098	0.058	4.88	4.93	0.728	113.877	100.0
14	44	d3-N-MeFOSAA	573.3 > 419	2.47e3	4.52e3	0.1098	0.667	5.17	5.11	6.82	93.116	81.8
15	45	d5-N-EtFOSAA	589.3 > 419	2.10e3	4.52e3	0.1098	0.698	5.32	5.27	5.80	75.724	66.5
16	46	13C2-PFUdA	565 > 519.8	3.89e3	4.52e3	0.1098	1.261	5.45	5.29	10.8	77.768	68.3
17	47	13C2-PFDoA	615.0 > 569.7	2.10e3	4.52e3	0.1098	0.695	5.62	5.58	5.81	76.200	66.9
18	49	13C2-PFTeDA	714.8 > 669.6	3.12e3	4.52e3	0.1098	0.762	6.01	6.05	8.61	102.879	90.4
19	54	13C4-PFBA	217. > 171.8	7.17e3	7.17e3	0.1098	1.000	1.28	1.25	12.5	113.823	100.0
20	55	13C5-PFHxA	318 > 272.9	1.06e4	1.06e4	0.1098	1.000	3.01	3.00	12.5	113.823	100.0
21	56	13C3-PFHxS	401.9 > 79.9	2.07e3	2.07e3	0.1098	1.000	3.86	3.77	12.5	113.823	100.0
22	57	13C8-PFOA	421.3 > 376	7.03e3	7.03e3	0.1098	1.000	4.22	4.14	12.5	113.823	100.0
23	58	13C9-PFNA	472.2 > 426.9	6.71e3	6.71e3	0.1098	1.000	4.66	4.59	12.5	113.823	100.0
24	59	13C4-PFOS	503 > 79.9	2.37e3	2.37e3	0.1098	1.000	4.73	4.67	12.5	113.823	100.0
25	60	13C6-PFDA	519.1 > 473.7	2.96e3	2.96e3	0.1098	1.000	5.01	4.96	12.5	113.823	100.0
26	61	13C7-PFUdA	570.1 > 524.8	4.52e3	4.52e3	0.1098	1.000	5.45	5.29	12.5	113.823	100.0
27	62	Total PFHxS	398.9 > 79.6	0.00e0	7.90e2	0.1098		3.86		0.000		
28	63	Total PFOA	413 > 368.7	0.00e0	5.18e3	0.1098		4.22		0.000		
29	64	Total PFOS	499 > 79.9	1.41e0	1.90e3	0.1098		4.73		0.00925	0.823	
30	65	Total N-MeFOSAA	570.1 > 419	0.00e0	2.47e3	0.1098		5.54		0.000		
31	66	Total N-EtFOSAA	584.2 > 419	0.00e0	2.10e3	0.1098		5.32		0.000		

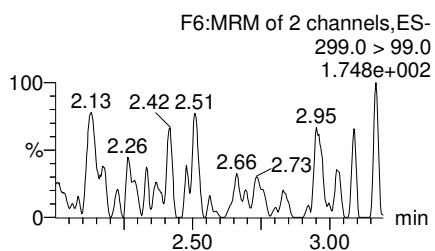
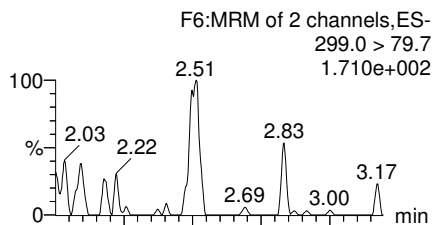
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Printed: Saturday, November 18, 2017 16:25:38 Pacific Standard Time

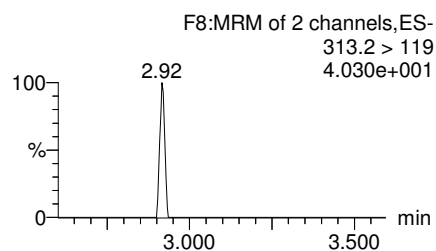
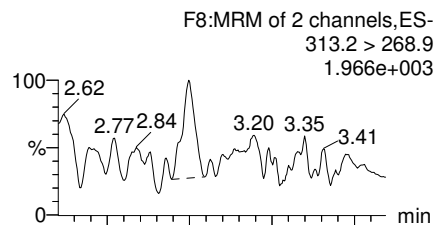
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Name: 171116M3\_42, Date: 16-Nov-2017, Time: 23:58:27, ID: 1701624-06 OF-MW190-1117 0.10982, Description: OF-MW190-1117

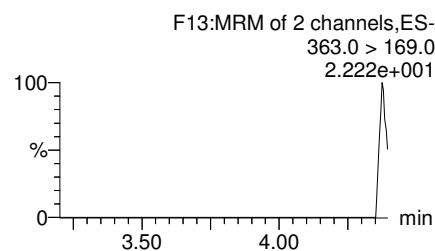
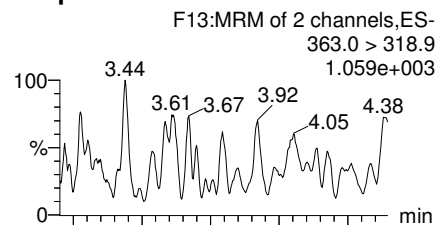
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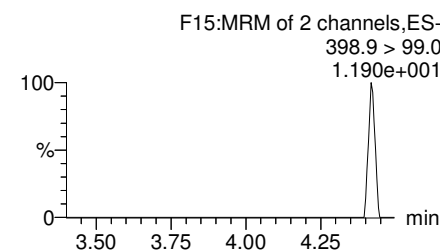
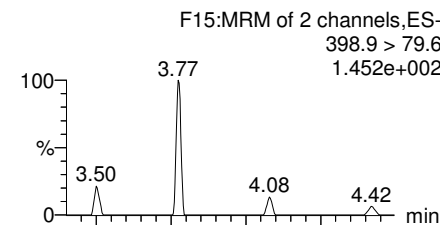
**PFHxA**



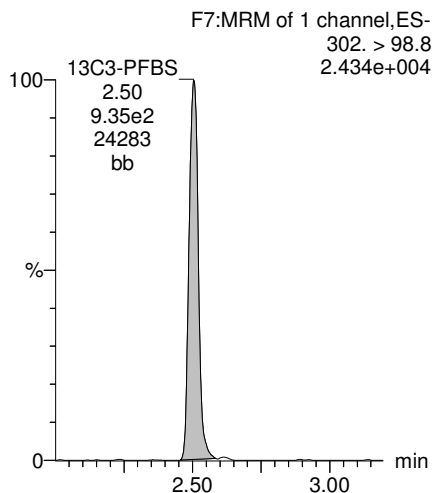
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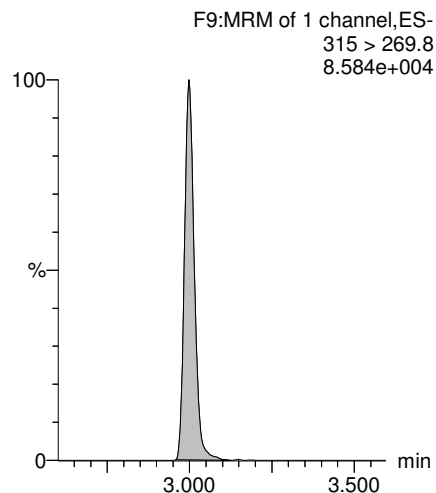
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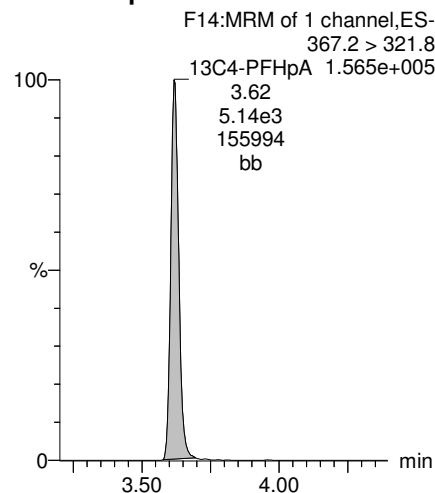
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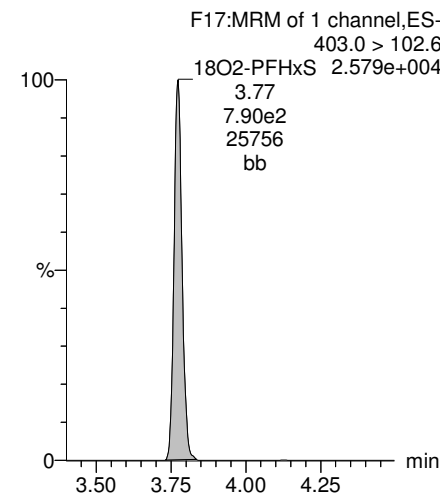
**13C2-PFHxA**



**13C4-PFHpA**



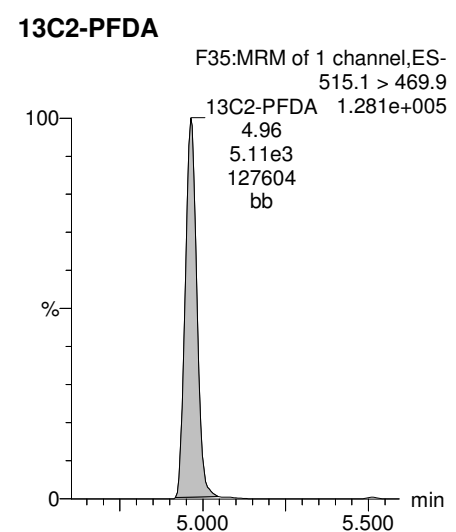
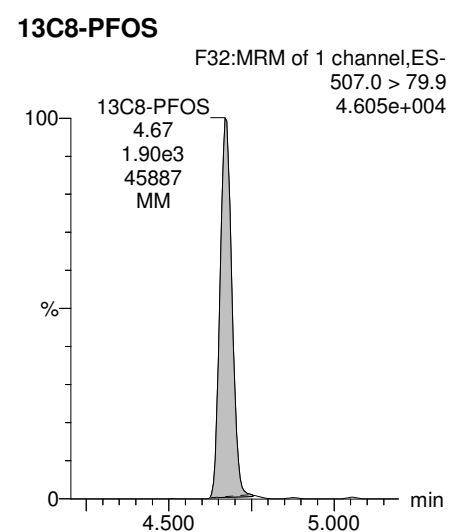
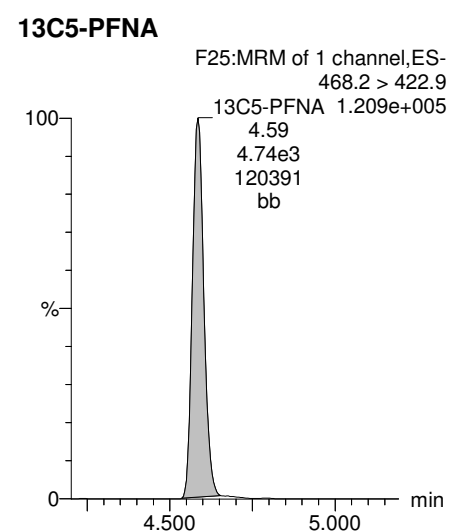
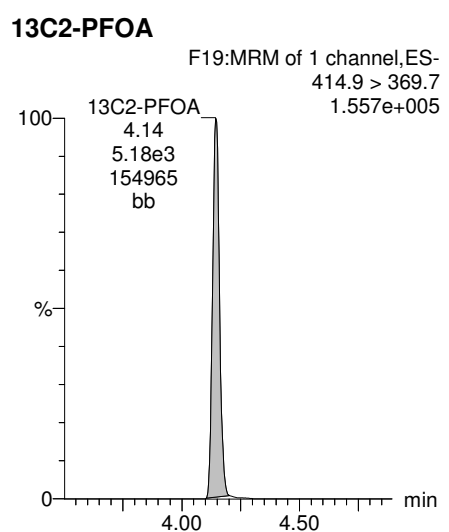
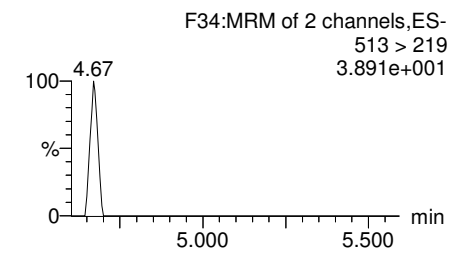
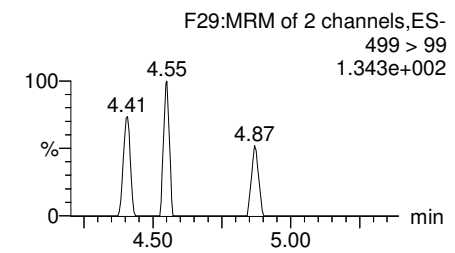
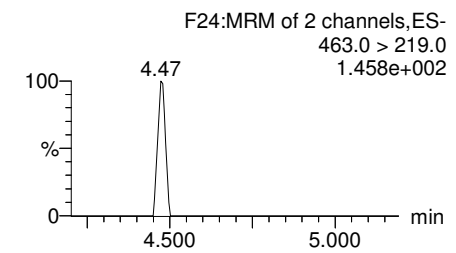
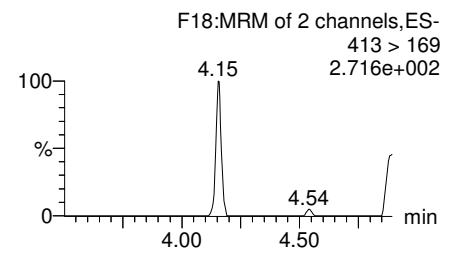
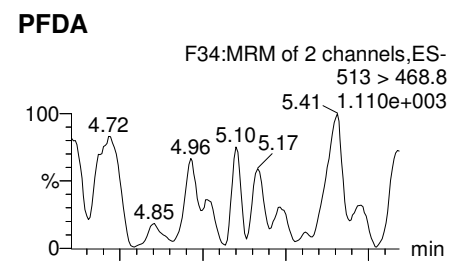
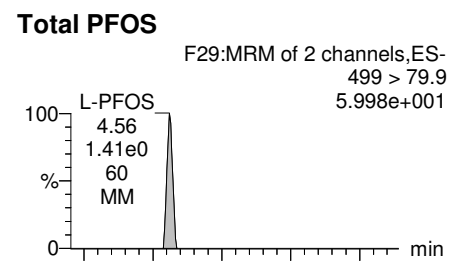
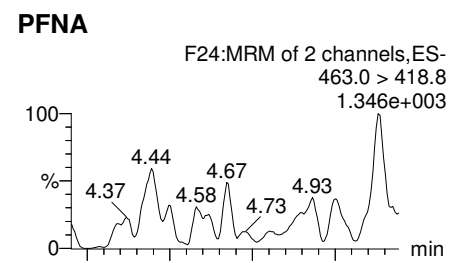
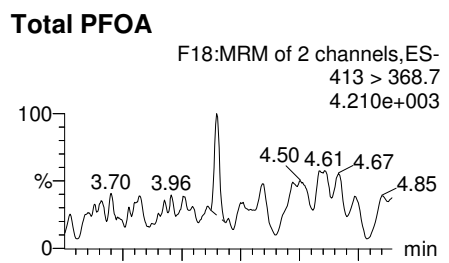
**18O2-PFHxS**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-42.qld

Last Altered: Saturday, November 18, 2017 16:23:59 Pacific Standard Time  
Printed: Saturday, November 18, 2017 16:25:38 Pacific Standard Time

Name: 171116M3\_42, Date: 16-Nov-2017, Time: 23:58:27, ID: 1701624-06 OF-MW190-1117 0.10982, Description: OF-MW190-1117

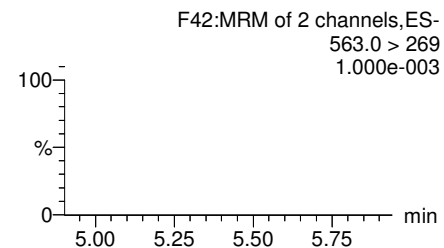
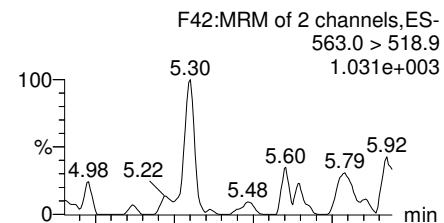


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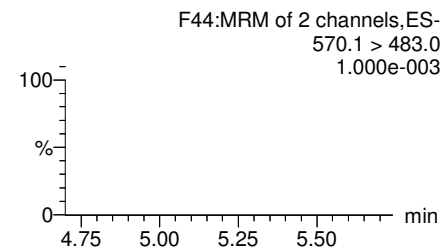
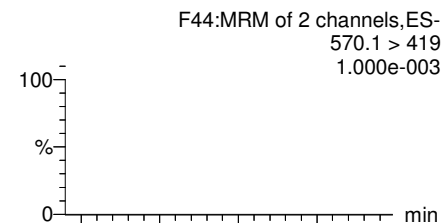
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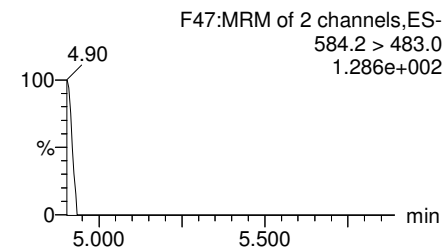
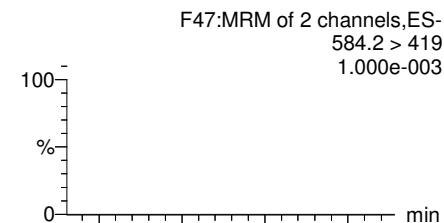
**PFUdA**



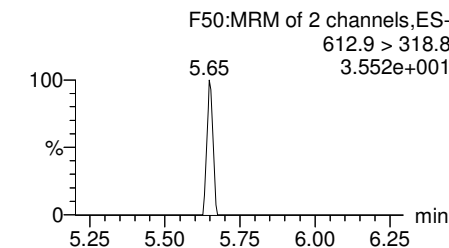
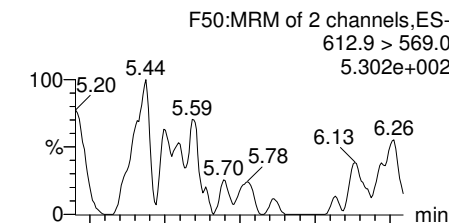
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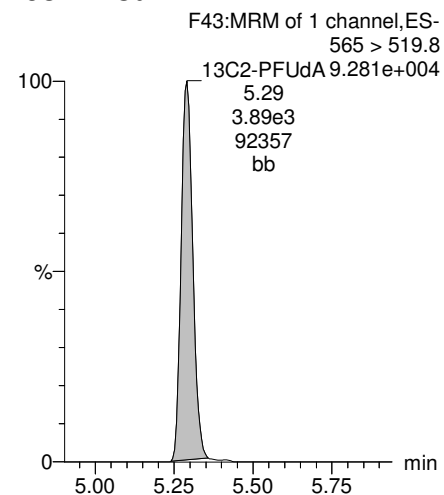
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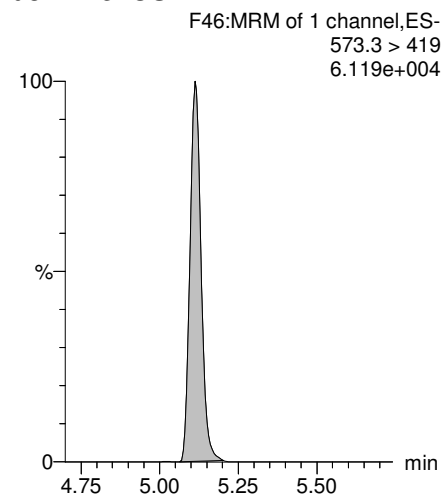
**PFDoA**



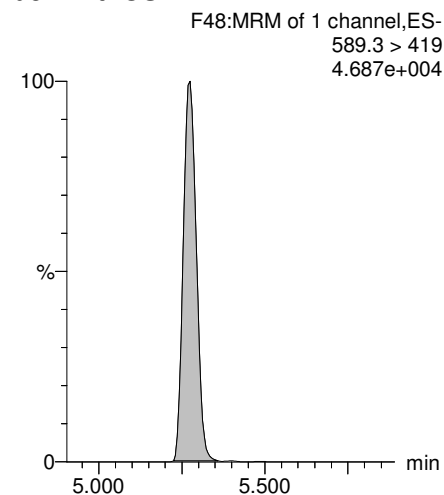
**13C2-PFUdA**



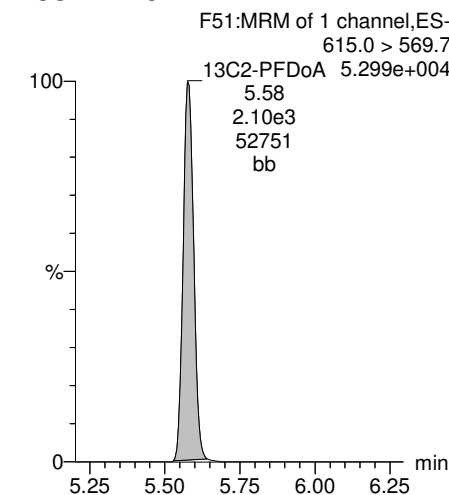
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



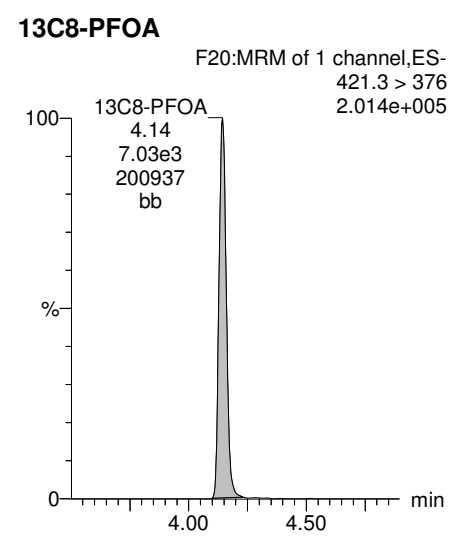
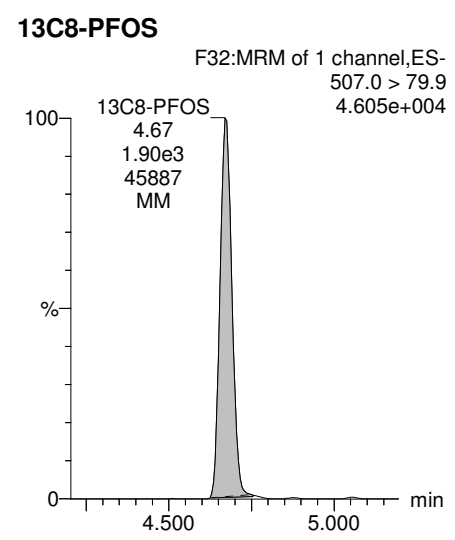
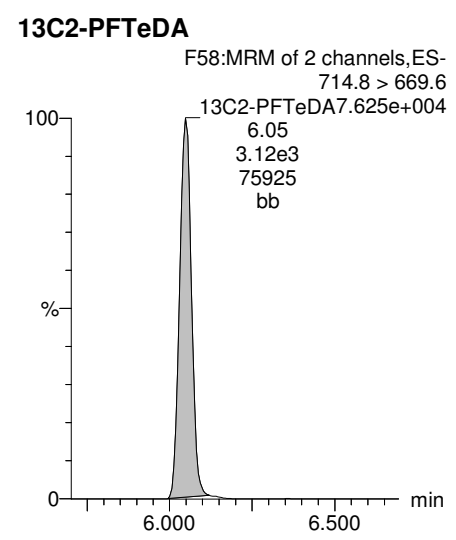
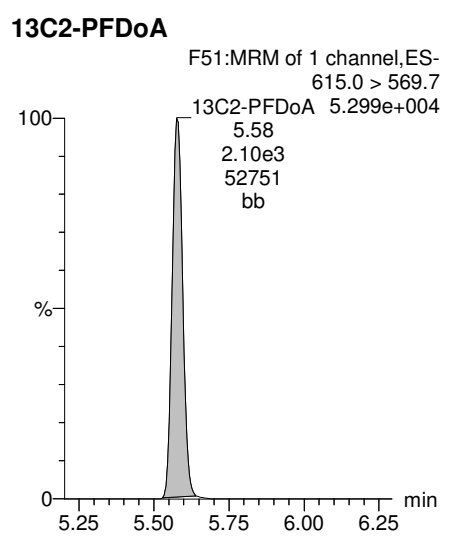
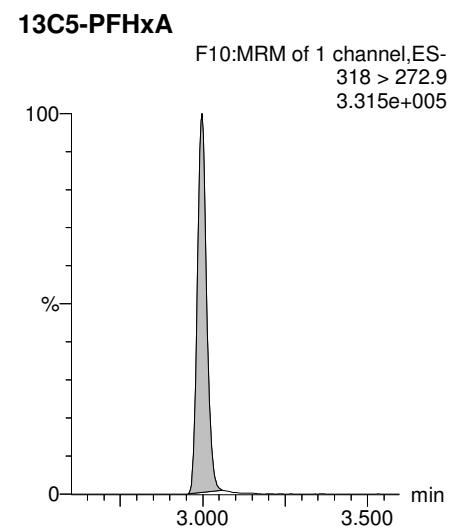
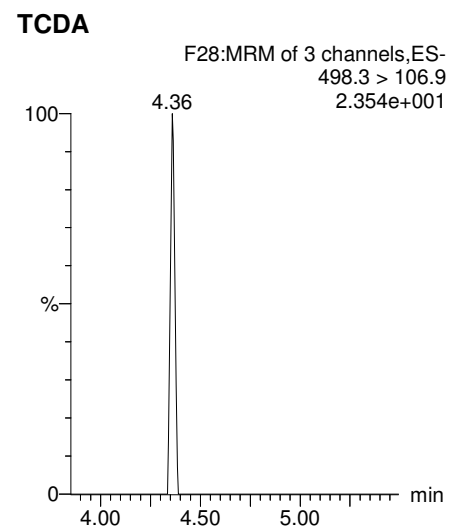
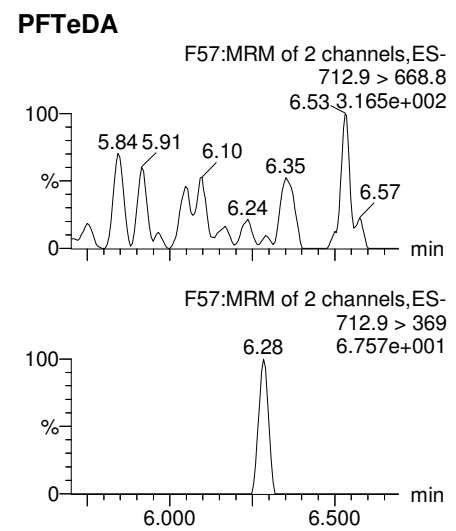
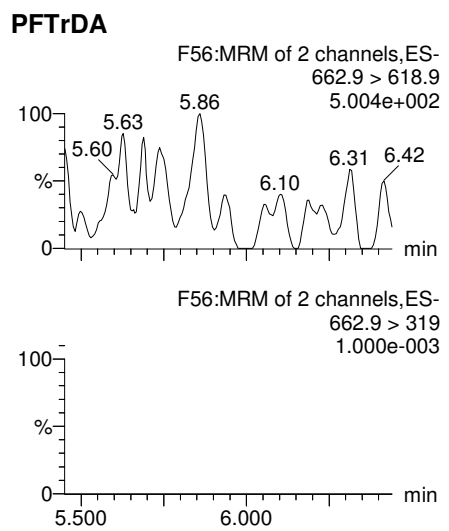
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Printed: Saturday, November 18, 2017 16:25:38 Pacific Standard Time

Name: 171116M3\_42, Date: 16-Nov-2017, Time: 23:58:27, ID: 1701624-06 OF-MW190-1117 0.10982, Description: OF-MW190-1117





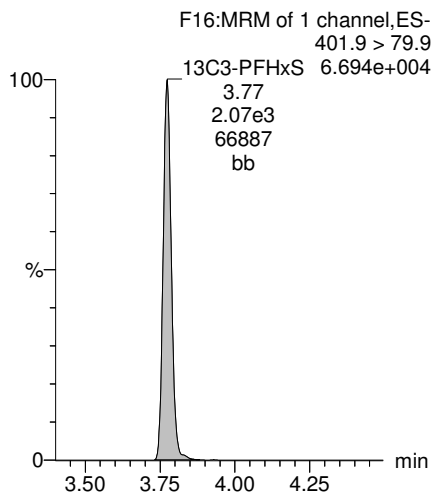
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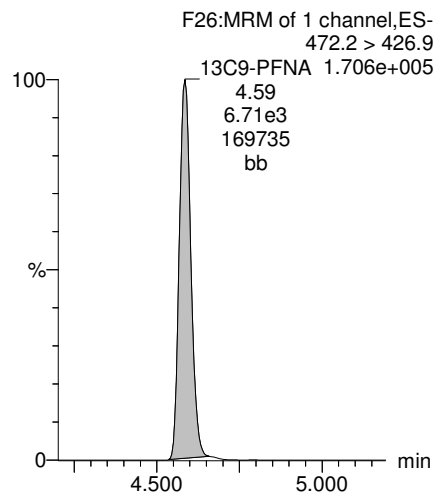
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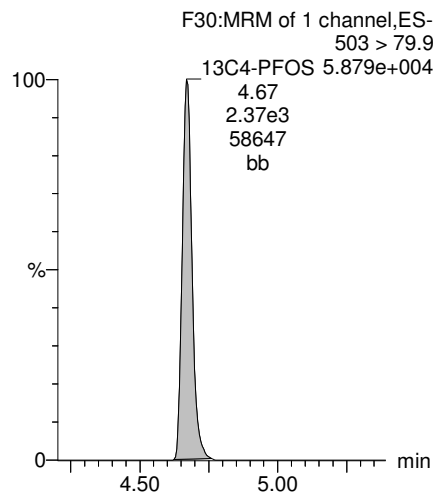
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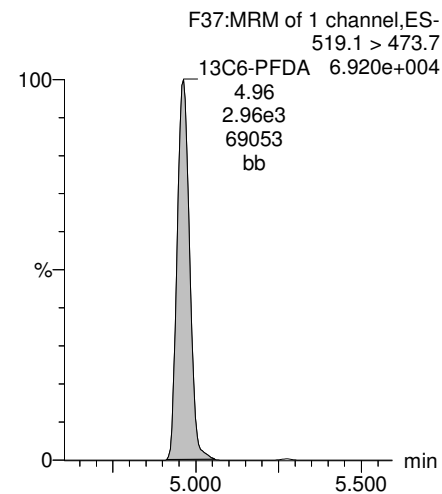
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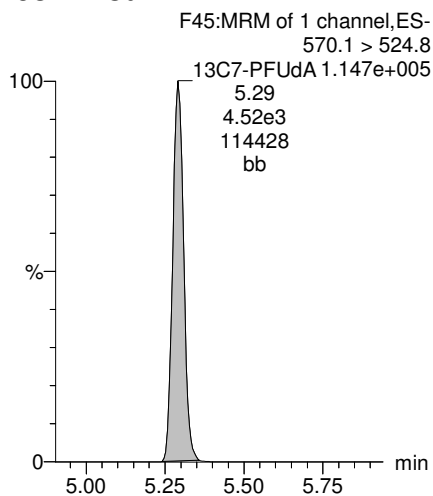
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUDa**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-43.qld

Last Altered: Saturday, November 18, 2017 16:31:07 Pacific Standard Time

Printed: Saturday, November 18, 2017 16:36:59 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_43, Date: 17-Nov-2017, Time: 00:09:38, ID: 1701624-07 OF-MW21-1117 0.1119, Description: OF-MW21-1117

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7	6.93e2	9.00e2	0.1119		2.55	2.50	9.62	40.047	
2	4	PFHxA	313.2 > 268.9	8.56e3	2.78e3	0.1119		3.01	3.00	15.4	96.097	
3	5	PFHpA	363.0 > 318.9	1.07e3	5.27e3	0.1119		3.71	3.62	2.53	15.882	
4	6	L-PFHxS	398.9 > 79.6	1.32e4	5.60e2	0.1119		3.86	3.78	295	1369.535	
5	9	L-PFOA	413 > 368.7	8.52e3	4.56e3	0.1119		4.22	4.15	23.3	207.045	
6	12	PFNA	463.0 > 418.8	1.39e2	5.00e3	0.1119		4.66	4.58	0.346	1.090	
7	14	L-PFOS	499 > 79.9	2.04e4	1.75e3	0.1119		4.74	4.67	146		
8	16	PFDA	513 > 468.8		5.43e3	0.1119		5.01				
9	18	N-MeFOSAA	570.1 > 419		2.36e3	0.1119		5.17				
10	19	N-EtFOSAA	584.2 > 419		1.79e3	0.1119		5.32				
11	20	PFUdA	563.0 > 518.9		4.13e3	0.1119		5.45				
12	22	PFDoA	612.9 > 569.0		2.07e3	0.1119		5.62				

Dataset: U:\Q4.PRO\results\171116M3\171116M3-43.qld

Last Altered: Saturday, November 18, 2017 16:31:07 Pacific Standard Time

Printed: Saturday, November 18, 2017 16:37:11 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_43, Date: 17-Nov-2017, Time: 00:09:38, ID: 1701624-07 OF-MW21-1117 0.1119, Description: OF-MW21-1117

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24	PFTrDA	662.9 > 618.9	2.07e3	0.1119		5.87				
2	25	PFTeDA	712.9 > 668.8	3.25e3	0.1119		6.01				
3	33	13C3-PFBS	302. > 98.8	9.00e2	0.1119	0.096	2.55	2.50	1.17	108.687	97.3
4	34	13C2-PFHxA	315 > 269.8	2.78e3	0.1119	0.728	3.01	3.00	3.61	44.350	99.3
5	35	13C4-PFHpA	367.2 > 321.8	5.27e3	0.1119	0.550	3.71	3.62	6.85	111.352	99.7
6	36	18O2-PFHxS	403.0 > 102.6	5.60e2	0.1119	0.432	3.86	3.77	4.20	87.008	77.9
7	37	13C2-6:2 FTS	429.1 > 408.9	1.37e3	0.1119	0.217	4.16	4.09	2.57	105.815	94.7
8	38	13C2-PFOA	414.9 > 369.7	4.56e3	0.1119	0.840	4.22	4.14	8.56	91.121	81.6
9	39	13C5-PFNA	468.2 > 422.9	5.00e3	0.1119	0.967	4.66	4.59	9.05	83.600	74.8
10	40	13C8-PFOA	506.1 > 77.7	2.29e3	0.1119	0.786	4.73	4.64	6.17	70.086	62.7
11	41	13C8-PFOS	507.0 > 79.9	1.75e3	0.1119	0.991	4.73	4.67	11.5	103.533	92.7
12	42	13C2-PFDA	515.1 > 469.9	5.43e3	0.1119	2.153	5.01	4.96	21.2	87.852	78.6
13	43	13C2-8:2 FTS	529.1 > 508.7	4.45e2	0.1119	0.058	4.88	4.93	0.579	88.806	79.5
14	44	d3-N-MeFOSAA	573.3 > 419	2.36e3	0.1119	0.667	5.17	5.11	6.37	85.282	76.3
15	45	d5-N-EtFOSAA	589.3 > 419	1.79e3	0.1119	0.698	5.32	5.27	4.83	61.921	55.4
16	46	13C2-PFUdA	565 > 519.8	4.13e3	0.1119	1.261	5.45	5.29	11.1	78.963	70.7
17	47	13C2-PFDoA	615.0 > 569.7	2.07e3	0.1119	0.695	5.62	5.58	5.58	71.764	64.2
18	49	13C2-PFTeDA	714.8 > 669.6	3.25e3	0.1119	0.762	6.01	6.05	8.76	102.659	91.9
19	54	13C4-PFBA	217. > 171.8	6.68e3	0.1119	1.000	1.28	1.25	12.5	111.707	100.0
20	55	13C5-PFHxA	318 > 272.9	9.62e3	0.1119	1.000	3.01	3.00	12.5	111.707	100.0
21	56	13C3-PFHxS	401.9 > 79.9	1.67e3	0.1119	1.000	3.86	3.77	12.5	111.707	100.0
22	57	13C8-PFOA	421.3 > 376	6.66e3	0.1119	1.000	4.22	4.14	12.5	111.707	100.0
23	58	13C9-PFNA	472.2 > 426.9	6.91e3	0.1119	1.000	4.66	4.59	12.5	111.707	100.0
24	59	13C4-PFOS	503 > 79.9	1.90e3	0.1119	1.000	4.73	4.67	12.5	111.707	100.0
25	60	13C6-PFDA	519.1 > 473.7	3.20e3	0.1119	1.000	5.01	4.96	12.5	111.707	100.0
26	61	13C7-PFUdA	570.1 > 524.8	4.64e3	0.1119	1.000	5.45	5.29	12.5	111.707	100.0
27	62	Total PFHxS	398.9 > 79.6	1.32e4	0.1119		3.86		295	1369.535	
28	63	Total PFOA	413 > 368.7	1.01e4	0.1119		4.22		27.6	242.752	
29	64	Total PFOS	499 > 79.9	2.04e4	0.1119		4.73		0.000		
30	65	Total N-MeFOSAA	570.1 > 419	0.00e0	0.1119		5.54		0.000		
31	66	Total N-EtFOSAA	584.2 > 419	0.00e0	0.1119		5.32		0.000		

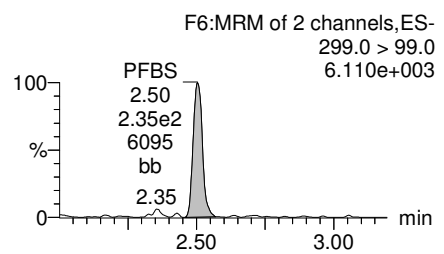
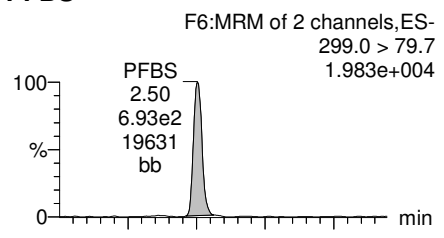
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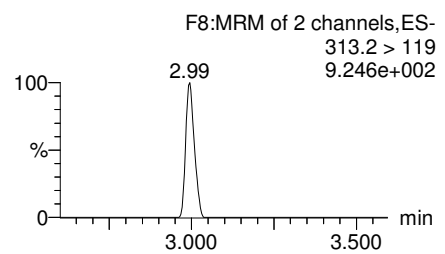
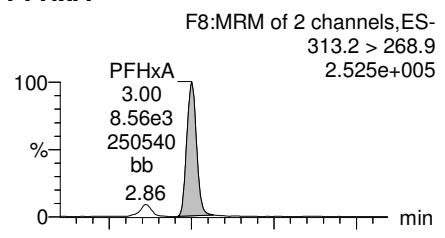
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Name: 171116M3\_43, Date: 17-Nov-2017, Time: 00:09:38, ID: 1701624-07 OF-MW21-1117 0.1119, Description: OF-MW21-1117

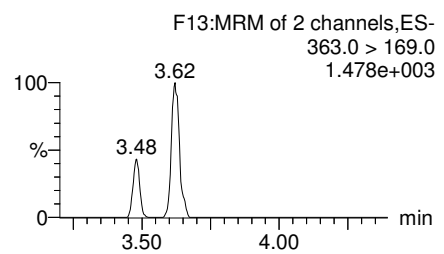
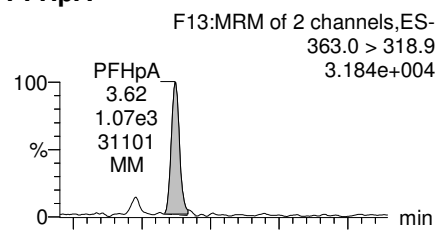
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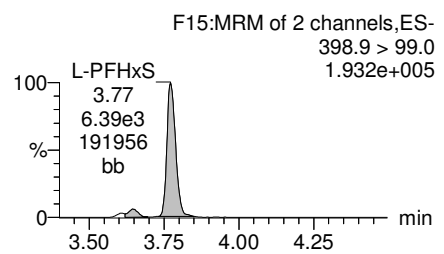
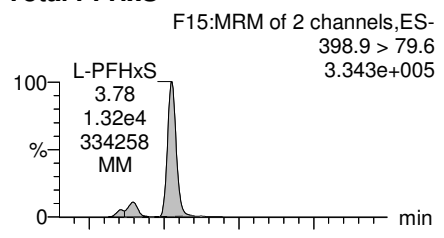
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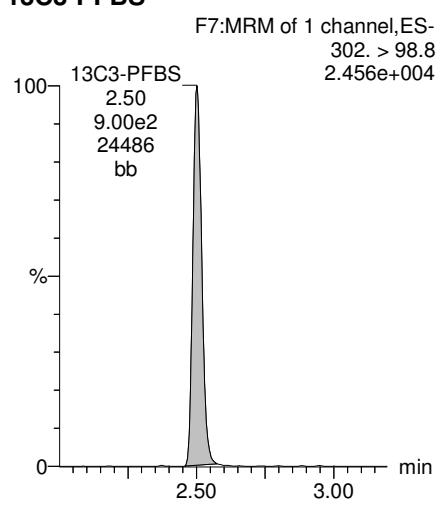
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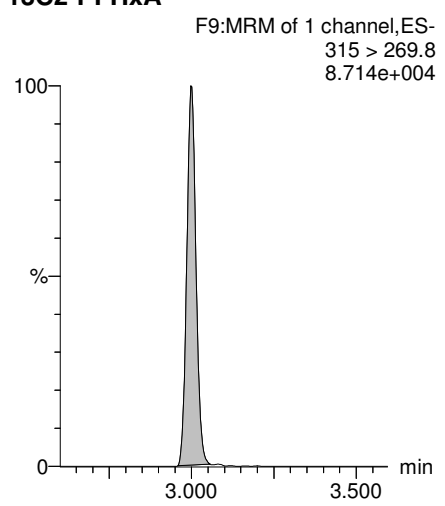
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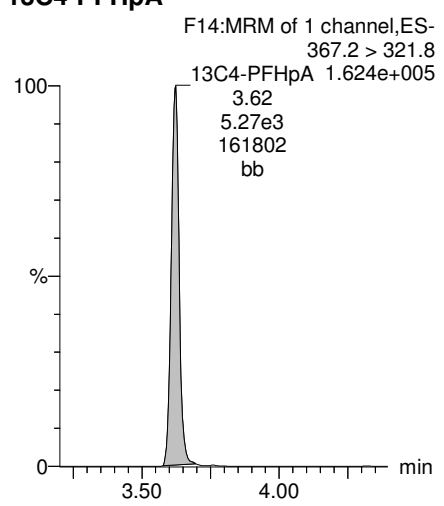
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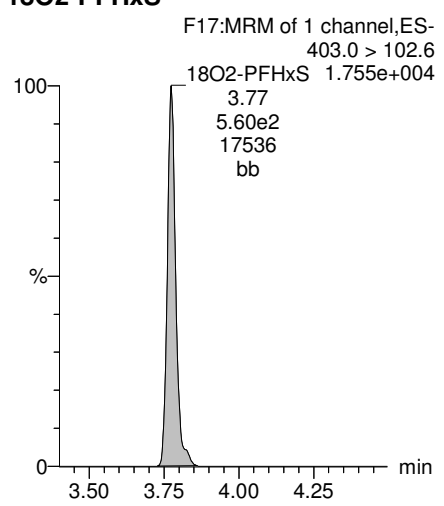
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

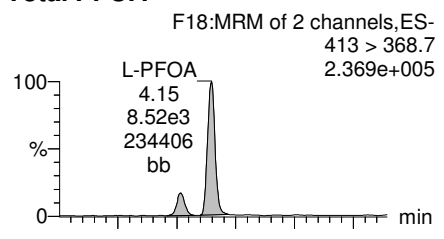


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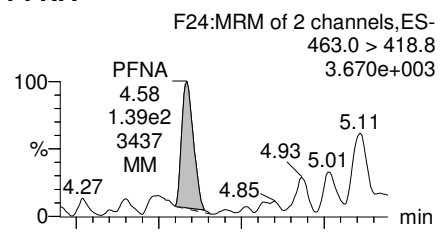
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Name: 171116M3\_43, Date: 17-Nov-2017, Time: 00:09:38, ID: 1701624-07 OF-MW21-1117 0.1119, Description: OF-MW21-1117

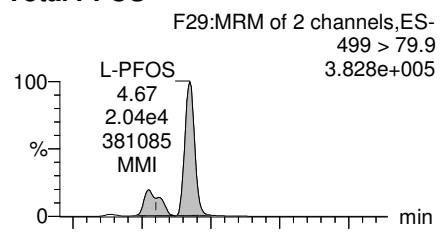
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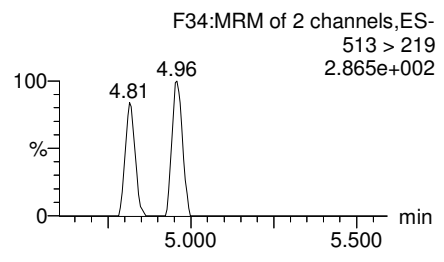
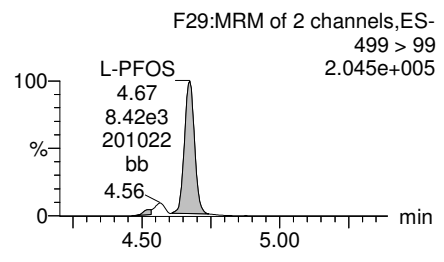
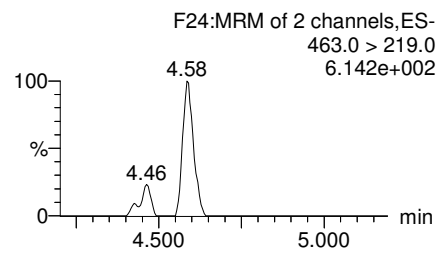
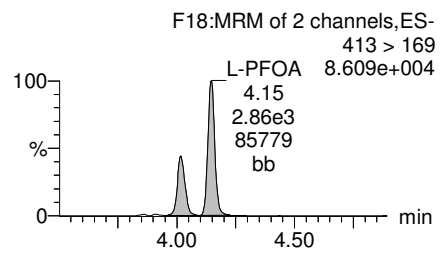
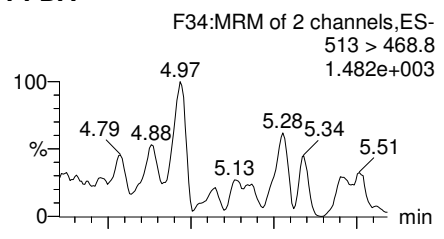
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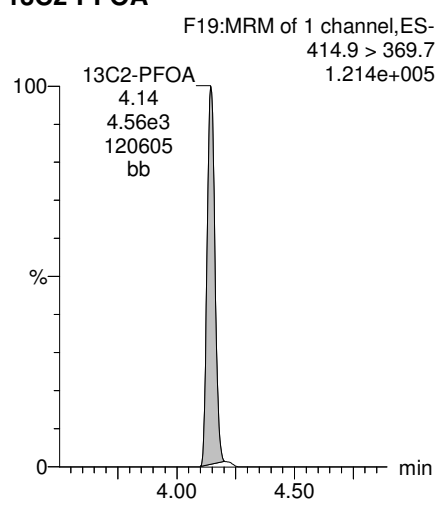
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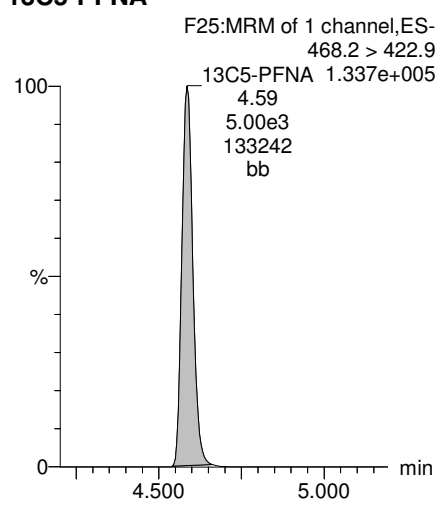
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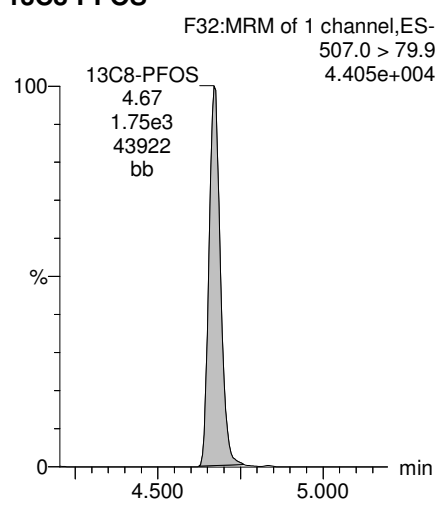
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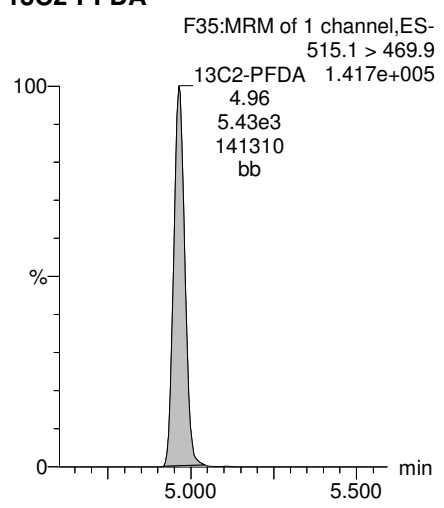
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**

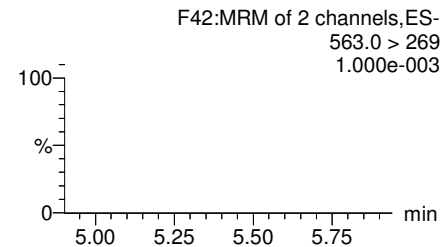
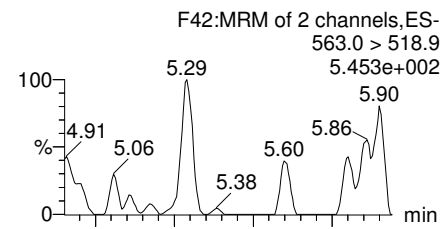


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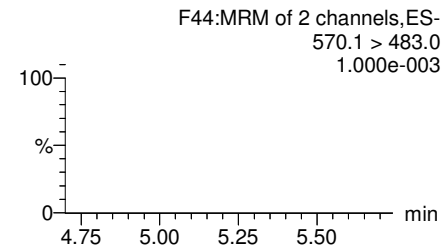
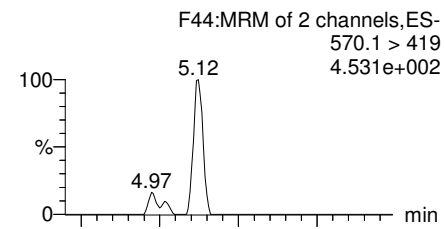
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Name: 171116M3\_43, Date: 17-Nov-2017, Time: 00:09:38, ID: 1701624-07 OF-MW21-1117 0.1119, Description: OF-MW21-1117

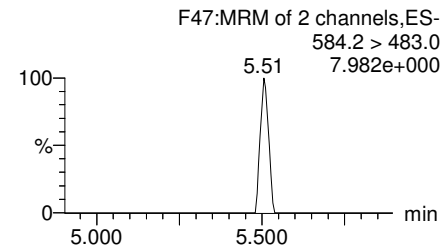
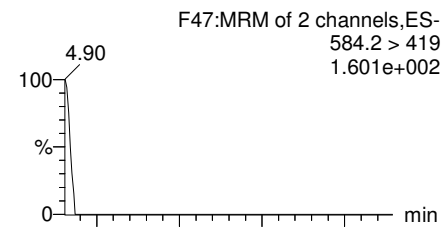
**PFUdA**



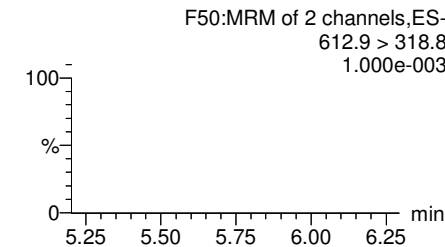
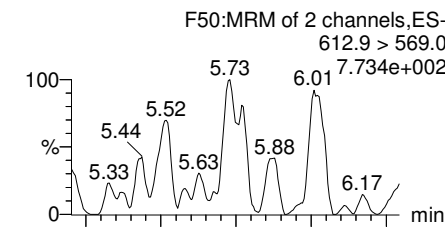
**N-MeFOSAA**



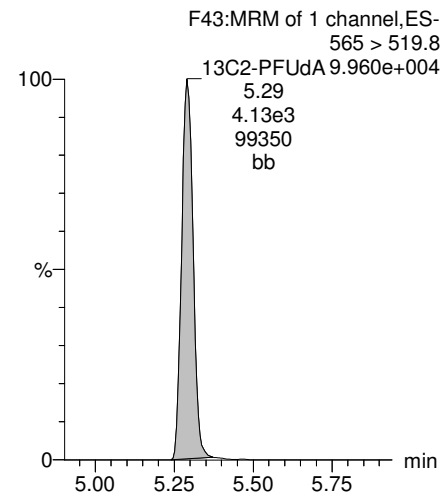
**N-EtFOSAA**



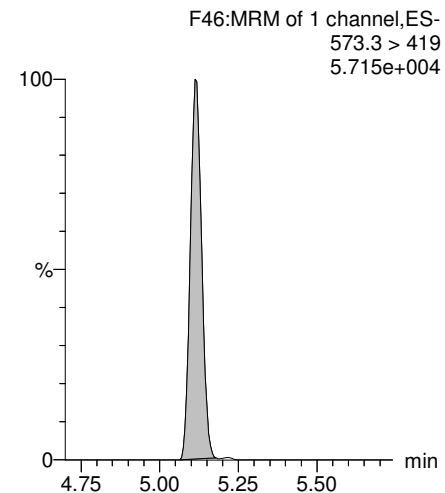
**PFDoA**



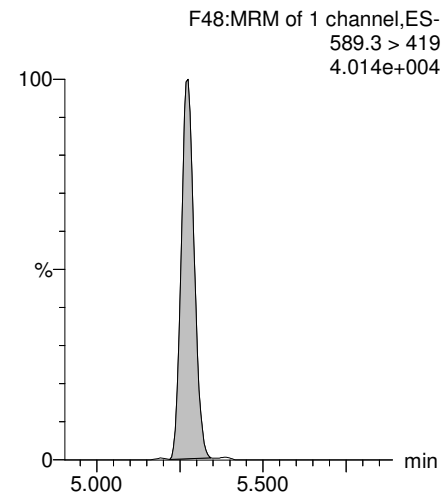
**13C2-PFUdA**



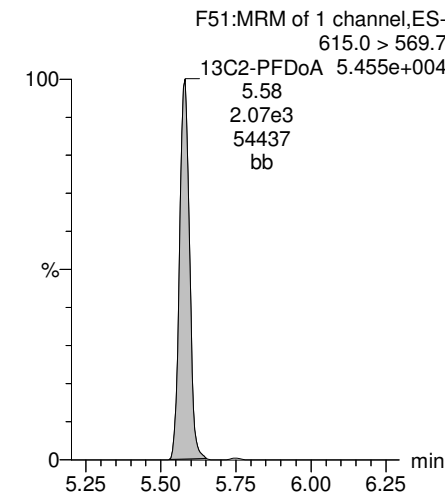
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



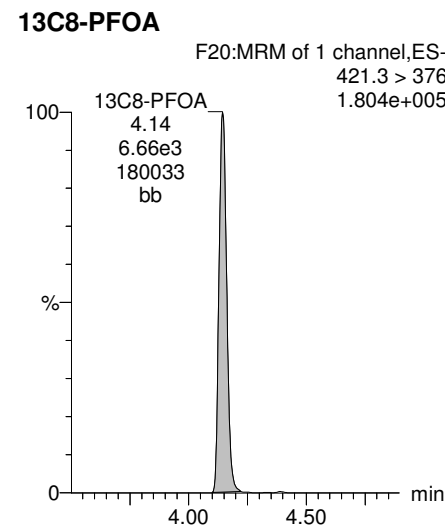
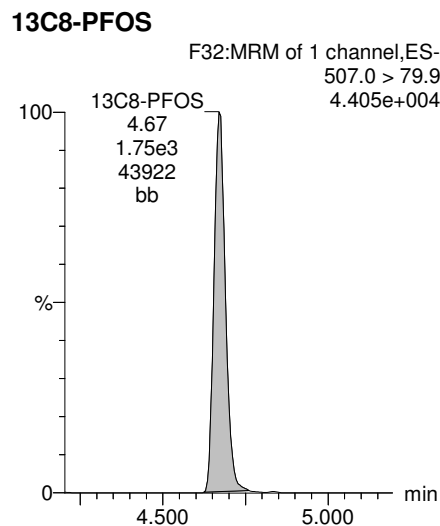
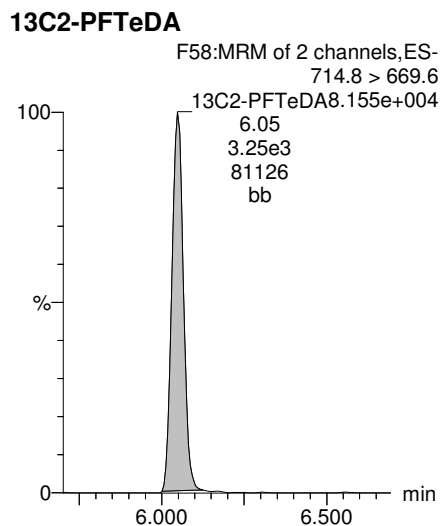
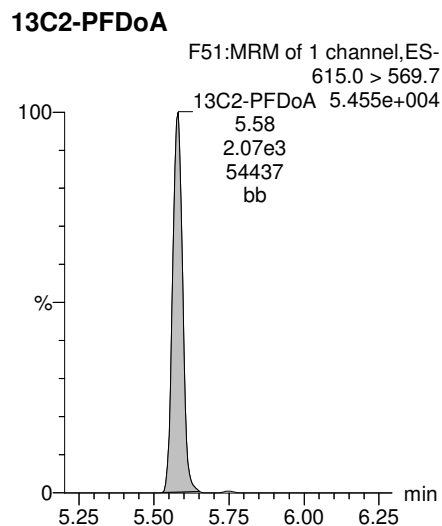
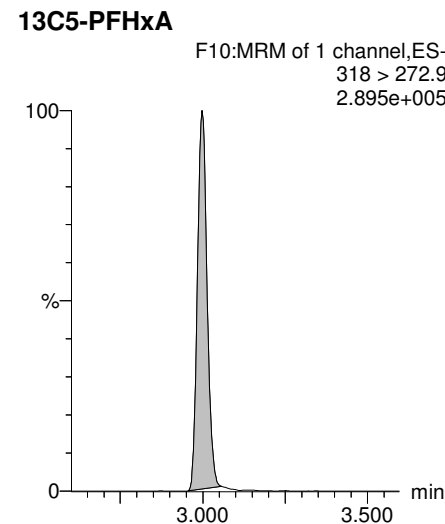
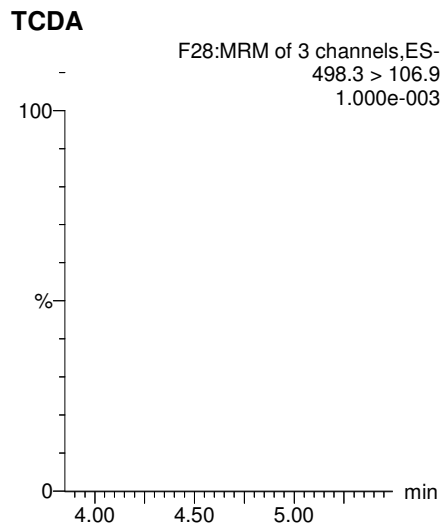
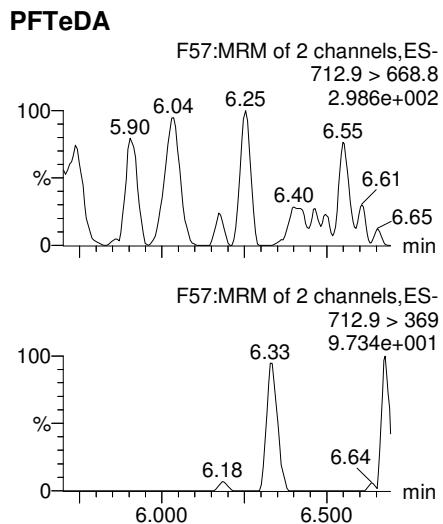
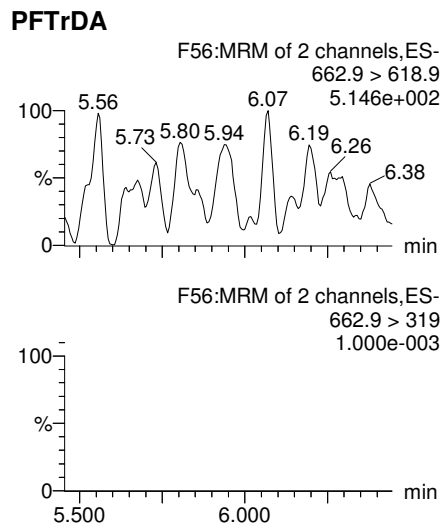
**13C2-PFDoA**



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Printed: Saturday, November 18, 2017 16:37:11 Pacific Standard Time

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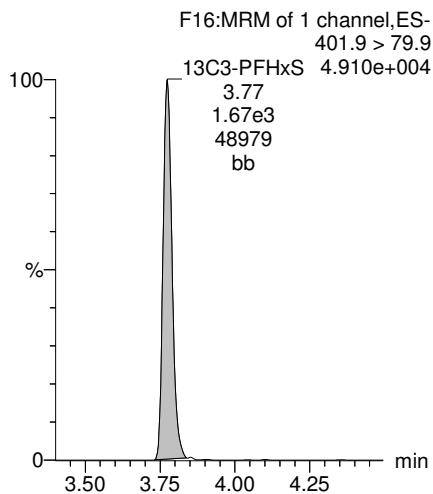


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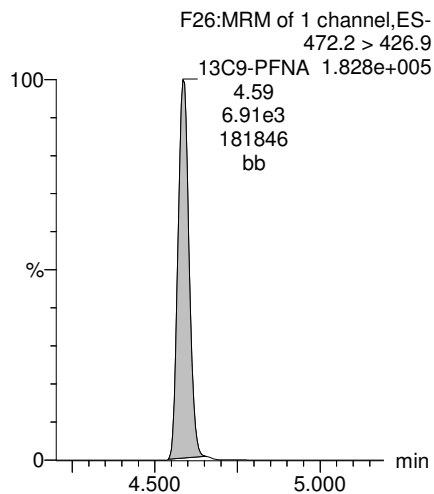
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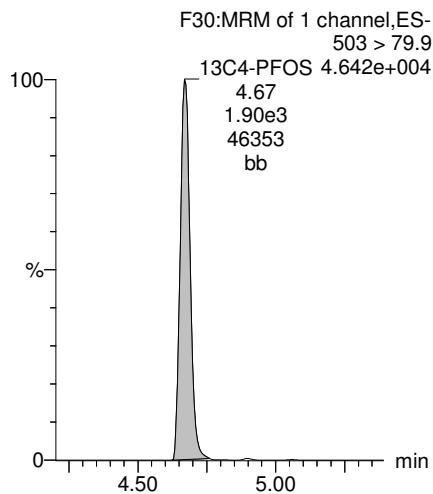
**13C3-PFHxS**



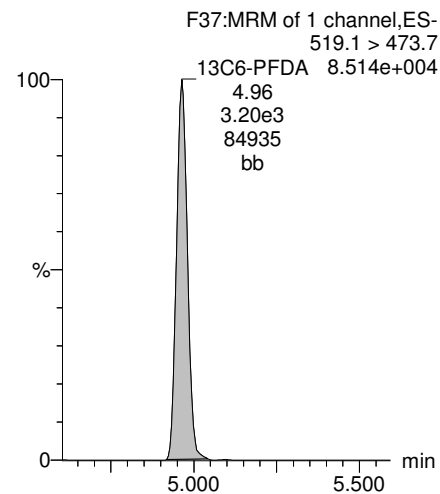
**13C9-PFNA**



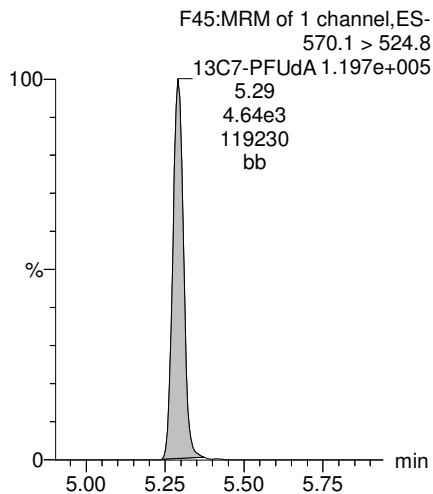
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUDa**





Dataset: U:\Q4.PRO\results\171116M3\171116M3-44.qld

Last Altered: Saturday, November 18, 2017 16:43:44 Pacific Standard Time  
Printed: Saturday, November 18, 2017 16:44:48 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_44, Date: 17-Nov-2017, Time: 00:20:54, ID: 1701624-08 OF-MW33-1117 0.10266, Description: OF-MW33-1117

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		8.27e2	0.1027		2.55				
2	4 PFHxA	313.2 > 268.9		2.71e3	0.1027		3.01				
3	5 PFHpA	363.0 > 318.9		4.95e3	0.1027		3.71				
4	6 L-PFHxS	398.9 > 79.6		6.80e2	0.1027		3.86				
5	9 L-PFOA	413 > 368.7		5.18e3	0.1027		4.22				
6	12 PFNA	463.0 > 418.8		5.72e3	0.1027		4.66				
7	14 L-PFOS	499 > 79.9		1.73e3	0.1027		4.74				
8	16 PFDA	513 > 468.8		4.98e3	0.1027		5.01				
9	18 N-MeFOSAA	570.1 > 419		2.32e3	0.1027		5.17				
10	19 N-EtFOSAA	584.2 > 419		2.25e3	0.1027		5.32				
11	20 PFUdA	563.0 > 518.9		3.58e3	0.1027		5.45				
12	22 PFDoA	612.9 > 569.0		2.38e3	0.1027		5.62				

Dataset: U:\Q4.PRO\results\171116M3\171116M3-44.qld

Last Altered: Saturday, November 18, 2017 16:43:44 Pacific Standard Time

Printed: Saturday, November 18, 2017 16:44:58 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_44, Date: 17-Nov-2017, Time: 00:20:54, ID: 1701624-08 OF-MW33-1117 0.10266, Description: OF-MW33-1117

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9		2.38e3	0.1027		5.87				
2	25 PFTeDA	712.9 > 668.8		2.87e3	0.1027		6.01				
3	33 13C3-PFBS	302. > 98.8	8.27e2	9.37e3	0.1027	0.096	2.55	2.50	1.10	111.849	91.9
4	34 13C2-PFHxA	315 > 269.8	2.71e3	9.37e3	0.1027	0.728	3.01	3.00	3.62	48.392	99.4
5	35 13C4-PFHpA	367.2 > 321.8	4.95e3	9.37e3	0.1027	0.550	3.71	3.62	6.61	117.155	96.2
6	36 18O2-PFHxS	403.0 > 102.6	6.80e2	1.86e3	0.1027	0.432	3.86	3.77	4.58	103.350	84.9
7	37 13C2-6:2 FTS	429.1 > 408.9	1.07e3	7.09e3	0.1027	0.217	4.16	4.09	1.88	84.529	69.4
8	38 13C2-PFOA	414.9 > 369.7	5.18e3	7.09e3	0.1027	0.840	4.22	4.15	9.13	105.945	87.0
9	39 13C5-PFNA	468.2 > 422.9	5.72e3	6.64e3	0.1027	0.967	4.66	4.59	10.8	108.559	89.2
10	40 13C8-PFOA	506.1 > 77.7	2.09e3	3.84e3	0.1027	0.786	4.73	4.64	6.81	84.382	69.3
11	41 13C8-PFOS	507.0 > 79.9	1.73e3	1.65e3	0.1027	0.991	4.73	4.67	13.1	128.756	105.7
12	42 13C2-PFDA	515.1 > 469.9	4.98e3	2.71e3	0.1027	2.153	5.01	4.96	23.0	103.823	85.3
13	43 13C2-8:2 FTS	529.1 > 508.7	4.34e2	9.37e3	0.1027	0.058	4.88	4.93	0.579	96.864	79.6
14	44 d3-N-MeFOSAA	573.3 > 419	2.32e3	3.84e3	0.1027	0.667	5.17	5.12	7.54	110.040	90.4
15	45 d5-N-EtFOSAA	589.3 > 419	2.25e3	3.84e3	0.1027	0.698	5.32	5.27	7.34	102.486	84.2
16	46 13C2-PFUdA	565 > 519.8	3.58e3	3.84e3	0.1027	1.261	5.45	5.30	11.6	89.917	73.8
17	47 13C2-PFDoA	615.0 > 569.7	2.38e3	3.84e3	0.1027	0.695	5.62	5.58	7.74	108.594	89.2
18	49 13C2-PFTeDA	714.8 > 669.6	2.87e3	3.84e3	0.1027	0.762	6.01	6.05	9.35	119.407	98.1
19	54 13C4-PFBA	217. > 171.8	6.36e3	6.36e3	0.1027	1.000	1.28	1.26	12.5	121.761	100.0
20	55 13C5-PFHxA	318 > 272.9	9.37e3	9.37e3	0.1027	1.000	3.01	3.00	12.5	121.761	100.0
21	56 13C3-PFHxS	401.9 > 79.9	1.86e3	1.86e3	0.1027	1.000	3.86	3.77	12.5	121.761	100.0
22	57 13C8-PFOA	421.3 > 376	7.09e3	7.09e3	0.1027	1.000	4.22	4.15	12.5	121.761	100.0
23	58 13C9-PFNA	472.2 > 426.9	6.64e3	6.64e3	0.1027	1.000	4.66	4.59	12.5	121.761	100.0
24	59 13C4-PFOS	503 > 79.9	1.65e3	1.65e3	0.1027	1.000	4.73	4.67	12.5	121.761	100.0
25	60 13C6-PFDA	519.1 > 473.7	2.71e3	2.71e3	0.1027	1.000	5.01	4.96	12.5	121.761	100.0
26	61 13C7-PFUdA	570.1 > 524.8	3.84e3	3.84e3	0.1027	1.000	5.45	5.30	12.5	121.761	100.0
27	62 Total PFHxS	398.9 > 79.6	0.00e0	6.80e2	0.1027		3.86		0.000		
28	63 Total PFOA	413 > 368.7	0.00e0	5.18e3	0.1027		4.22		0.000		
29	64 Total PFOS	499 > 79.9	0.00e0	1.73e3	0.1027		4.73		0.000		
30	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.32e3	0.1027		5.54		0.000		
31	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.25e3	0.1027		5.32		0.000		

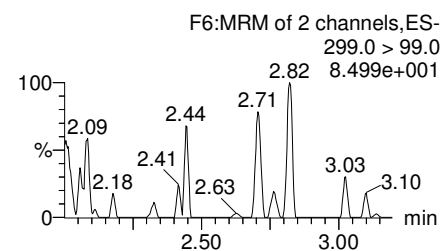
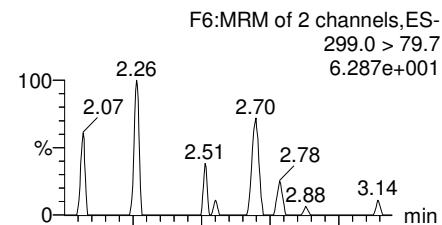
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Printed: Saturday, November 18, 2017 16:44:58 Pacific Standard Time

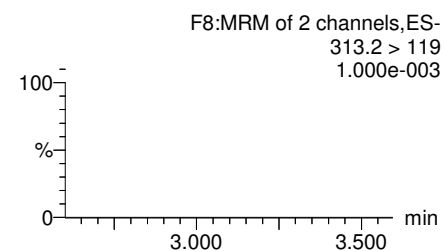
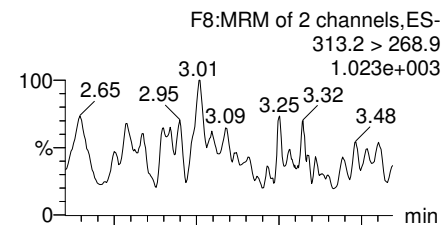
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Name: 171116M3\_44, Date: 17-Nov-2017, Time: 00:20:54, ID: 1701624-08 OF-MW33-1117 0.10266, Description: OF-MW33-1117

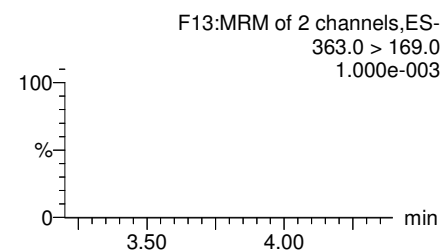
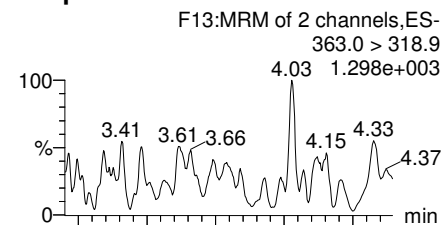
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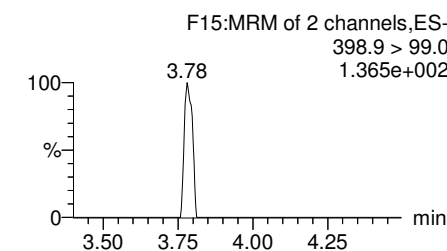
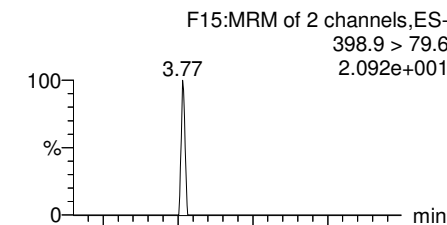
**PFHxA**



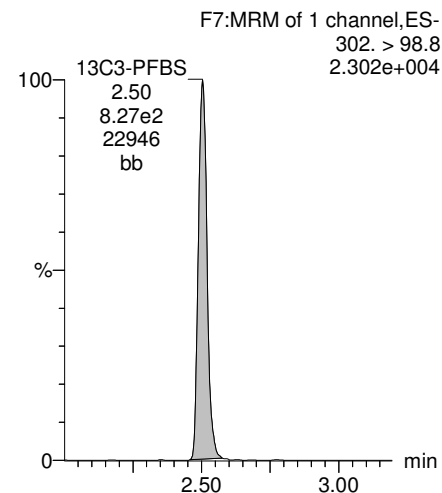
**PFHpA**



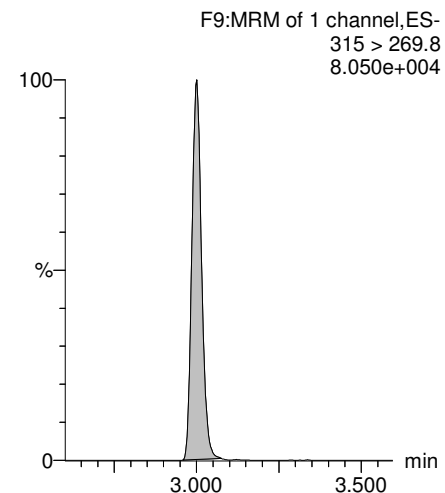
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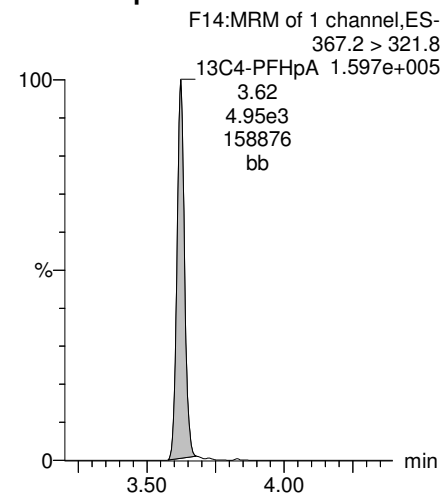
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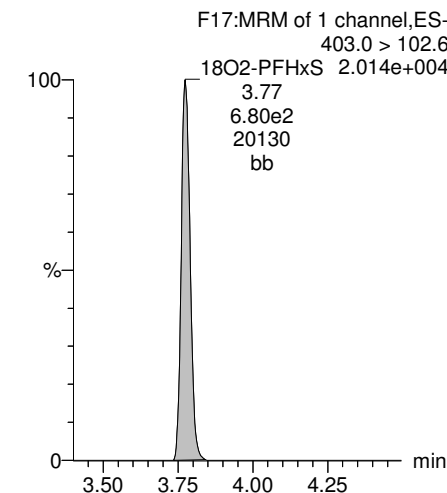
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

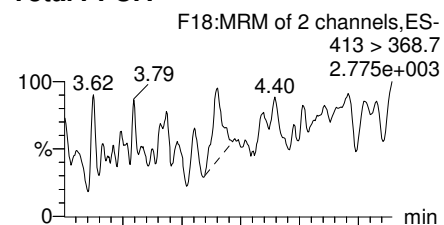


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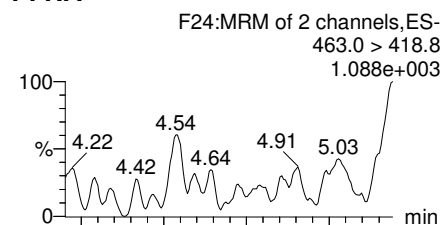
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Name: 171116M3\_44, Date: 17-Nov-2017, Time: 00:20:54, ID: 1701624-08 OF-MW33-1117 0.10266, Description: OF-MW33-1117

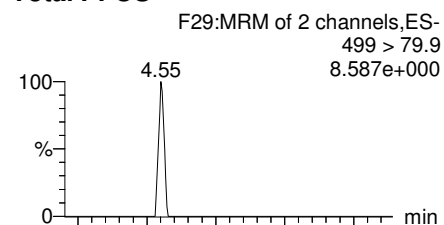
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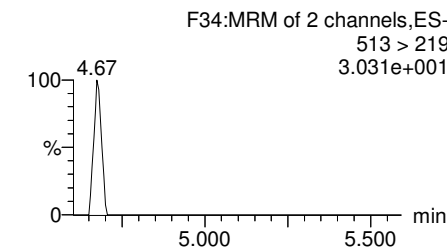
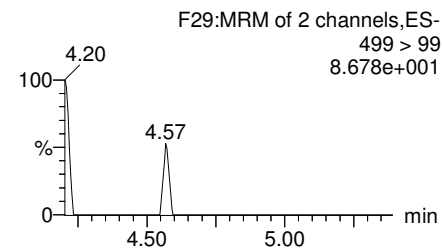
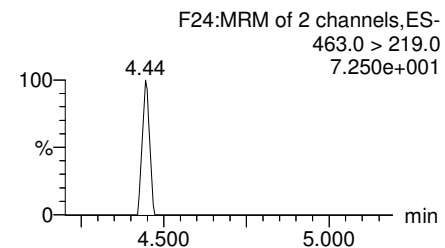
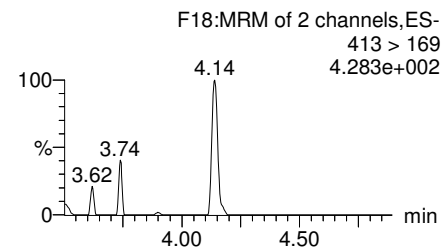
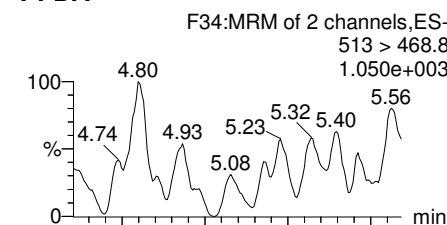
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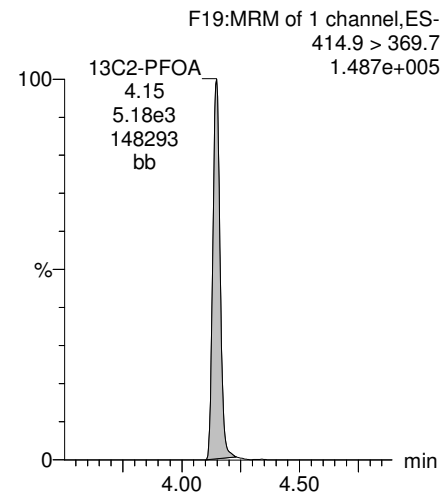
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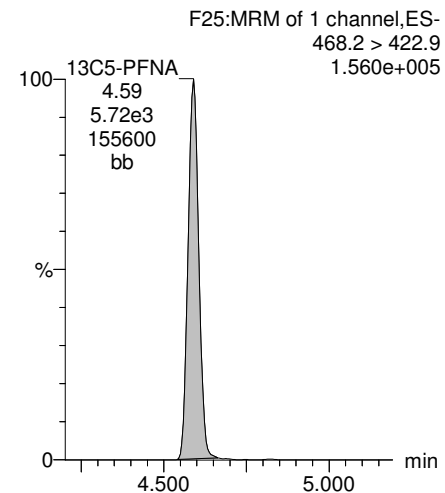
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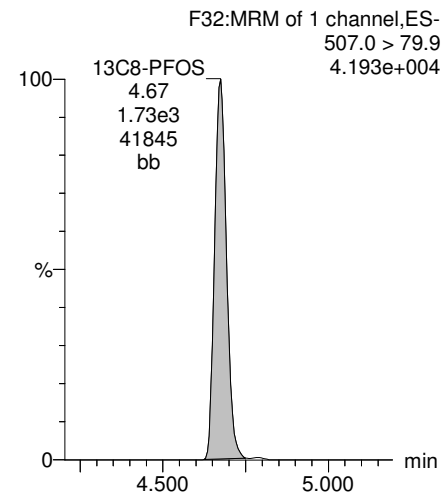
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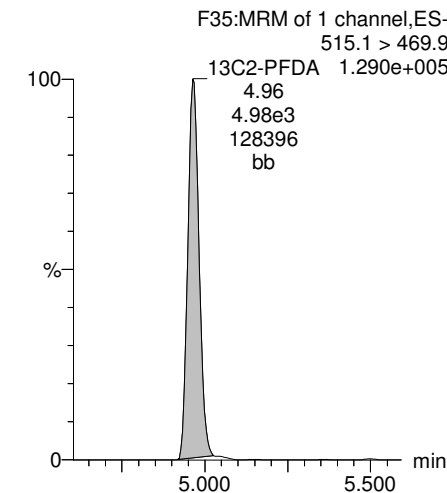
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**

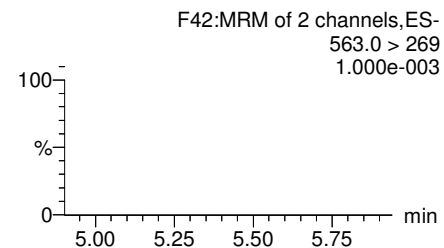
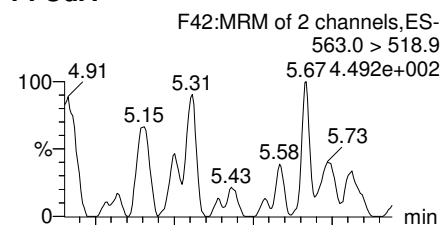


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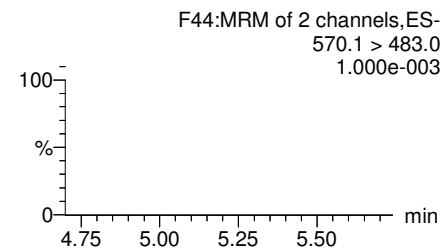
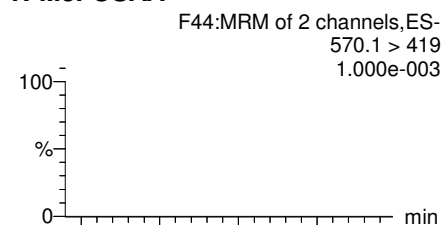
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Name: 171116M3\_44, Date: 17-Nov-2017, Time: 00:20:54, ID: 1701624-08 OF-MW33-1117 0.10266, Description: OF-MW33-1117

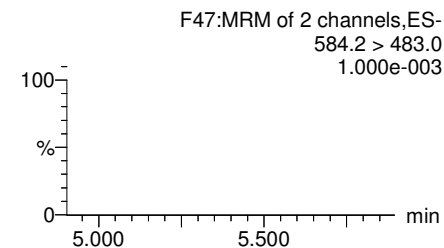
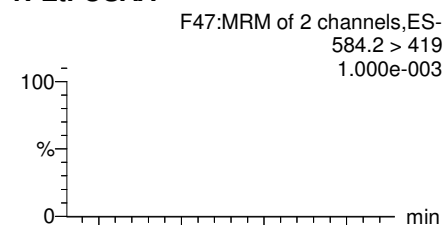
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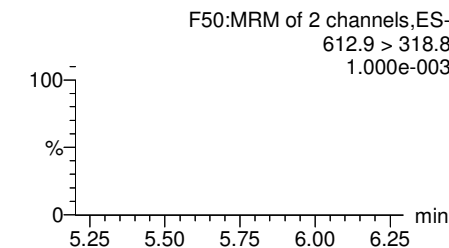
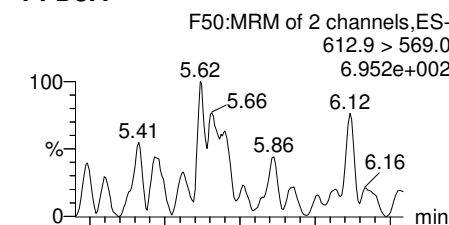
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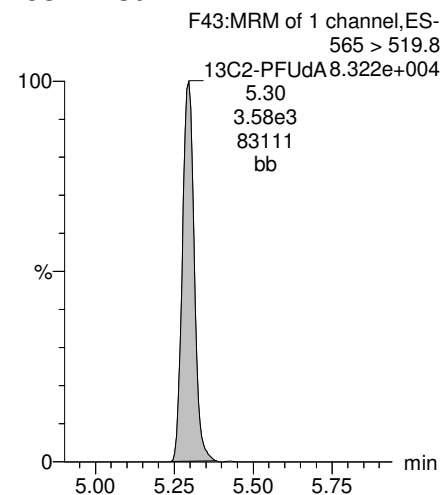
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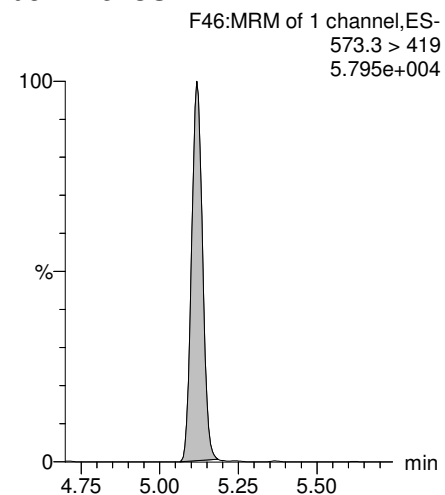
**PFDaA**



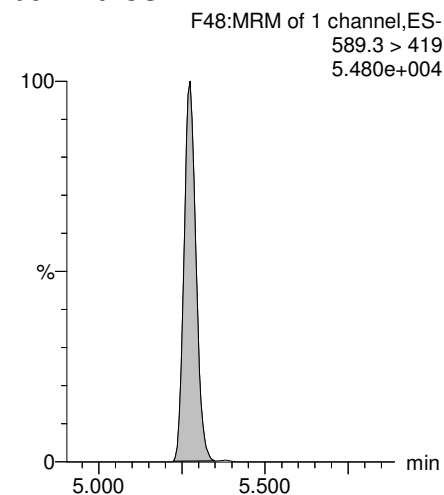
**13C2-PFUdA**



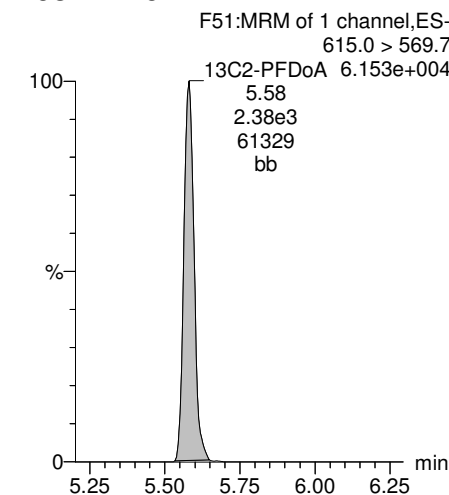
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



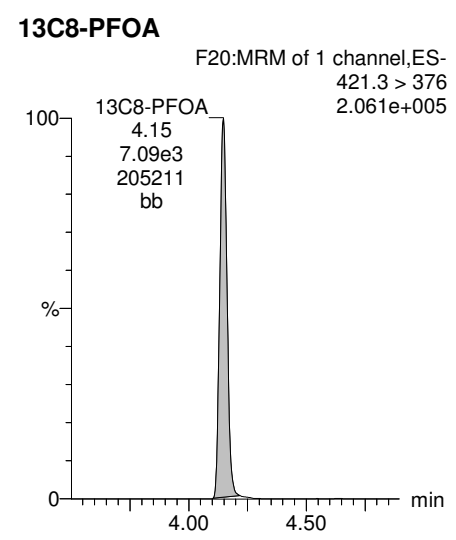
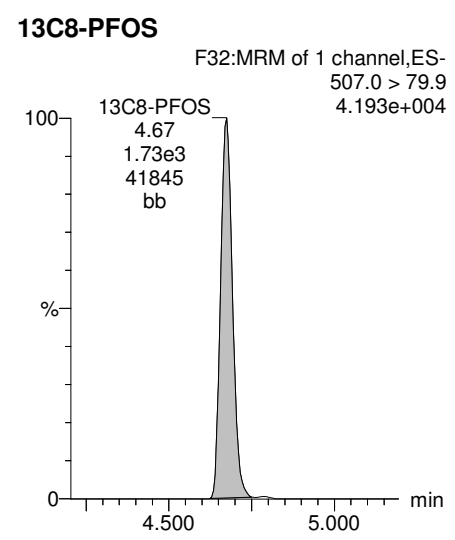
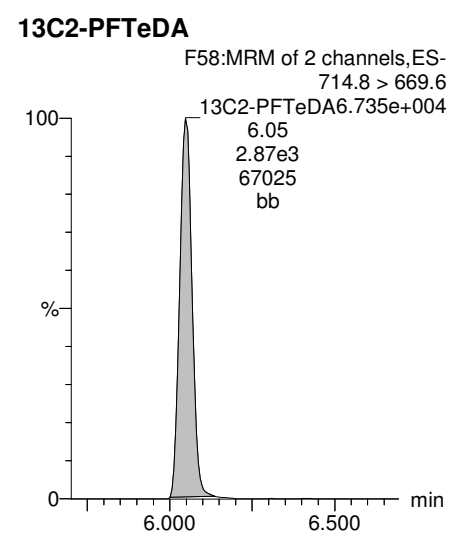
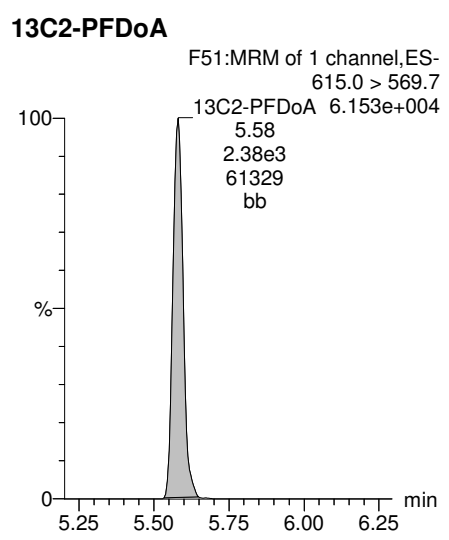
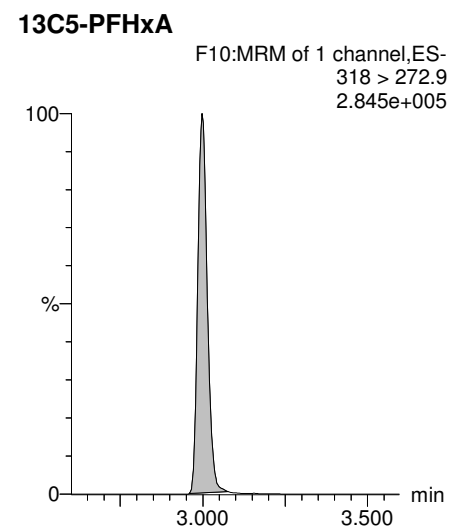
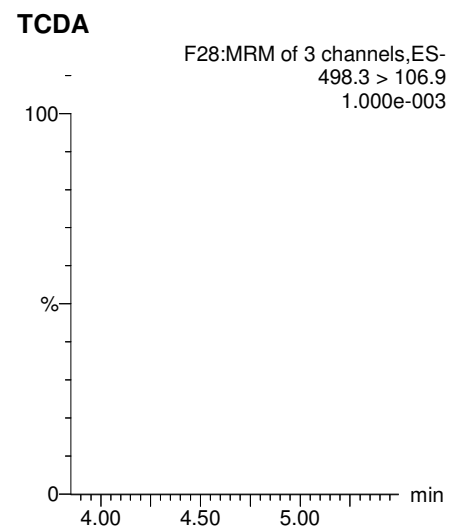
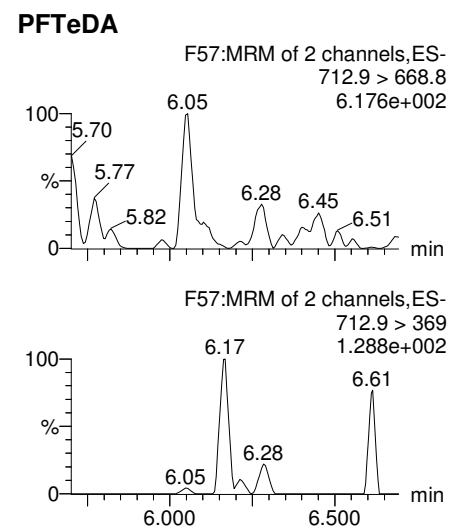
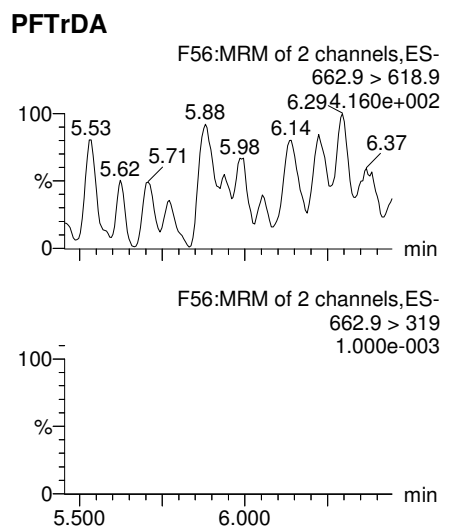
**13C2-PFDaA**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-44.qld

Last Altered: Saturday, November 18, 2017 16:43:44 Pacific Standard Time  
Printed: Saturday, November 18, 2017 16:44:58 Pacific Standard Time

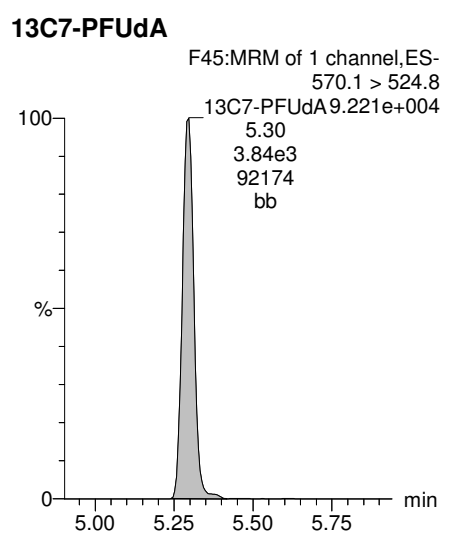
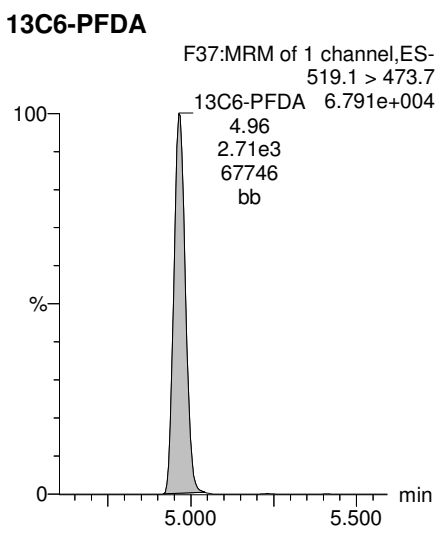
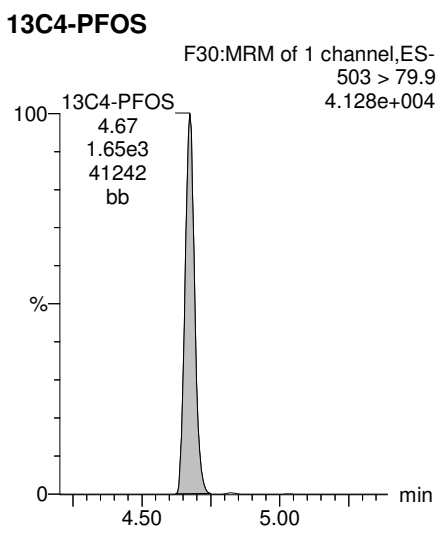
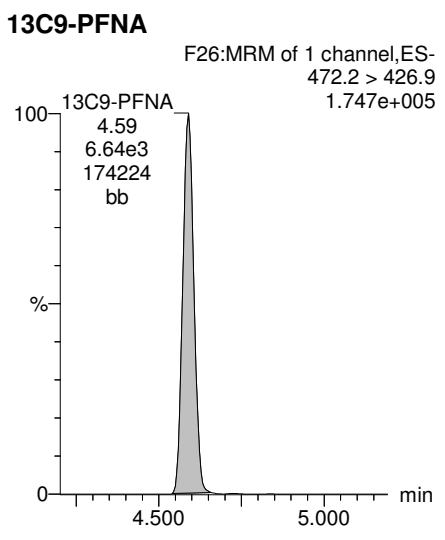
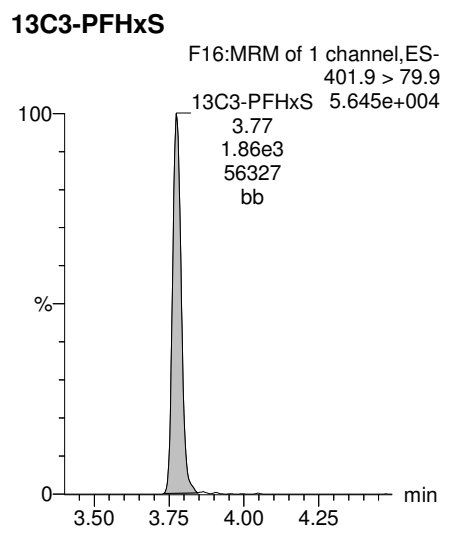
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Printed: Saturday, November 18, 2017 16:44:58 Pacific Standard Time

Name: 171116M3\_44, Date: 17-Nov-2017, Time: 00:20:54, ID: 1701624-08 OF-MW33-1117 0.10266, Description: OF-MW33-1117



Dataset: U:\Q4.PRO\results\171116M3\171116M3-45.qld

Last Altered: Saturday, November 18, 2017 16:54:50 Pacific Standard Time

Printed: Saturday, November 18, 2017 16:55:31 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_45, Date: 17-Nov-2017, Time: 00:32:13, ID: 1701624-09 OF-MW33D-1117 0.11041, Description: OF-MW33D-1117

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		9.87e2	0.1104		2.55				
2	4 PFHxA	313.2 > 268.9		2.89e3	0.1104		3.01				
3	5 PFHpA	363.0 > 318.9		5.14e3	0.1104		3.71				
4	6 L-PFHxS	398.9 > 79.6		7.36e2	0.1104		3.86				
5	9 L-PFOA	413 > 368.7		5.26e3	0.1104		4.22				
6	12 PFNA	463.0 > 418.8		5.92e3	0.1104		4.66				
7	14 L-PFOS	499 > 79.9		2.14e3	0.1104		4.74				
8	16 PFDA	513 > 468.8		5.60e3	0.1104		5.01				
9	18 N-MeFOSAA	570.1 > 419		2.05e3	0.1104		5.17				
10	19 N-EtFOSAA	584.2 > 419		2.63e3	0.1104		5.32				
11	20 PFUdA	563.0 > 518.9		5.19e3	0.1104		5.45				
12	22 PFDoA	612.9 > 569.0		2.79e3	0.1104		5.62				



Dataset: U:\Q4.PRO\results\171116M3\171116M3-45.qld

Last Altered: Saturday, November 18, 2017 16:54:50 Pacific Standard Time

Printed: Saturday, November 18, 2017 16:55:43 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_45, Date: 17-Nov-2017, Time: 00:32:13, ID: 1701624-09 OF-MW33D-1117 0.11041, Description: OF-MW33D-1117

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	24	PFTrDA	662.9 > 618.9	2.79e3	0.1104		5.87					
2	25	PFTeDA	712.9 > 668.8	3.29e3	0.1104		6.01					
3	33	13C3-PFBS	302. > 98.8	9.87e2	1.08e4	0.096	2.55	2.51	1.15	107.924	95.3	
4	34	13C2-PFHxA	315 > 269.8	2.89e3	1.08e4	0.728	3.01	3.00	3.36	41.739	92.2	
5	35	13C4-PFHpA	367.2 > 321.8	5.14e3	1.08e4	0.550	3.71	3.62	5.96	98.284	86.8	
6	36	18O2-PFHxS	403.0 > 102.6	7.36e2	2.04e3	0.432	3.86	3.78	4.51	94.609	83.6	
7	37	13C2-6:2 FTS	429.1 > 408.9	1.25e3	7.20e3	0.217	4.16	4.09	2.18	90.805	80.2	
8	38	13C2-PFOA	414.9 > 369.7	5.26e3	7.20e3	0.840	4.22	4.15	9.13	98.520	87.0	
9	39	13C5-PFNA	468.2 > 422.9	5.92e3	6.49e3	0.967	4.66	4.59	11.4	106.836	94.4	
10	40	13C8-PFOA	506.1 > 77.7	2.14e3	4.68e3	0.786	4.73	4.65	5.72	65.911	58.2	
11	41	13C8-PFOS	507.0 > 79.9	2.14e3	2.52e3	0.991	4.73	4.67	10.6	96.711	85.4	
12	42	13C2-PFDA	515.1 > 469.9	5.60e3	2.80e3	0.1104	2.153	5.01	4.96	25.0	105.199	92.9
13	43	13C2-8:2 FTS	529.1 > 508.7	5.74e2	1.08e4	0.058	4.88	4.93	0.666	103.570	91.5	
14	44	d3-N-MeFOSAA	573.3 > 419	2.05e3	4.68e3	0.1104	0.667	5.17	5.12	5.48	74.415	65.7
15	45	d5-N-EtFOSAA	589.3 > 419	2.63e3	4.68e3	0.1104	0.698	5.32	5.27	7.02	91.137	80.5
16	46	13C2-PFUdA	565 > 519.8	5.19e3	4.68e3	0.1104	1.261	5.45	5.30	13.9	99.666	88.0
17	47	13C2-PFDoA	615.0 > 569.7	2.79e3	4.68e3	0.1104	0.695	5.62	5.58	7.47	97.332	86.0
18	49	13C2-PFTeDA	714.8 > 669.6	3.29e3	4.68e3	0.1104	0.762	6.01	6.05	8.79	104.422	92.2
19	54	13C4-PFBA	217. > 171.8	6.81e3	6.81e3	0.1104	1.000	1.28	1.26	12.5	113.214	100.0
20	55	13C5-PFHxA	318 > 272.9	1.08e4	1.08e4	0.1104	1.000	3.01	3.00	12.5	113.214	100.0
21	56	13C3-PFHxS	401.9 > 79.9	2.04e3	2.04e3	0.1104	1.000	3.86	3.77	12.5	113.214	100.0
22	57	13C8-PFOA	421.3 > 376	7.20e3	7.20e3	0.1104	1.000	4.22	4.15	12.5	113.214	100.0
23	58	13C9-PFNA	472.2 > 426.9	6.49e3	6.49e3	0.1104	1.000	4.66	4.59	12.5	113.214	100.0
24	59	13C4-PFOS	503 > 79.9	2.52e3	2.52e3	0.1104	1.000	4.73	4.67	12.5	113.214	100.0
25	60	13C6-PFDA	519.1 > 473.7	2.80e3	2.80e3	0.1104	1.000	5.01	4.97	12.5	113.214	100.0
26	61	13C7-PFUdA	570.1 > 524.8	4.68e3	4.68e3	0.1104	1.000	5.45	5.29	12.5	113.214	100.0
27	62	Total PFHxS	398.9 > 79.6	0.00e0	7.36e2	0.1104		3.86		0.000		
28	63	Total PFOA	413 > 368.7	0.00e0	5.26e3	0.1104		4.22		0.000		
29	64	Total PFOS	499 > 79.9	0.00e0	2.14e3	0.1104		4.73		0.000		
30	65	Total N-MeFOSAA	570.1 > 419	0.00e0	2.05e3	0.1104		5.54		0.000		
31	66	Total N-EtFOSAA	584.2 > 419	0.00e0	2.63e3	0.1104		5.32		0.000		

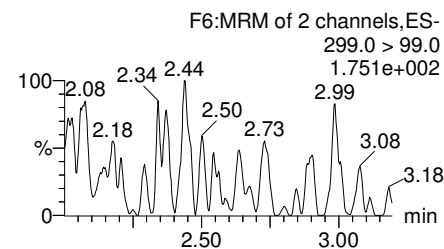
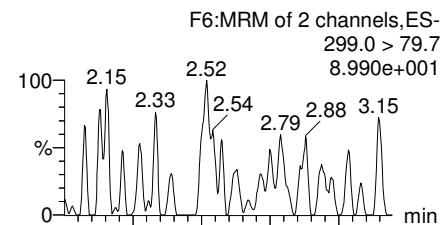
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Printed: Saturday, November 18, 2017 16:55:43 Pacific Standard Time

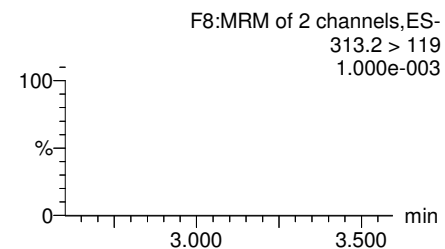
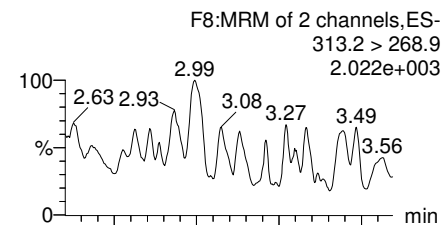
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Name: 171116M3\_45, Date: 17-Nov-2017, Time: 00:32:13, ID: 1701624-09 OF-MW33D-1117 0.11041, Description: OF-MW33D-1117

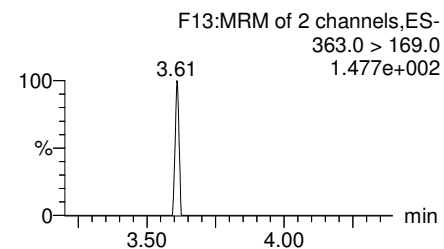
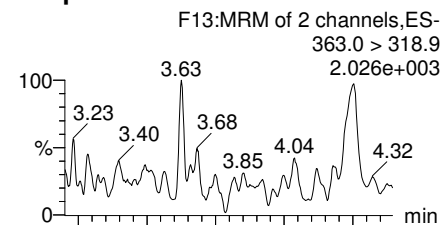
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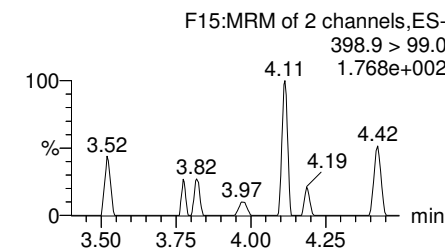
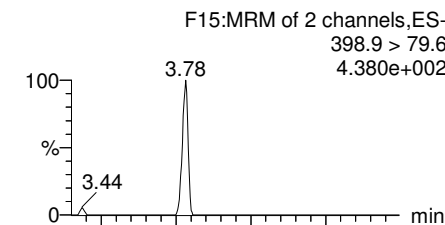
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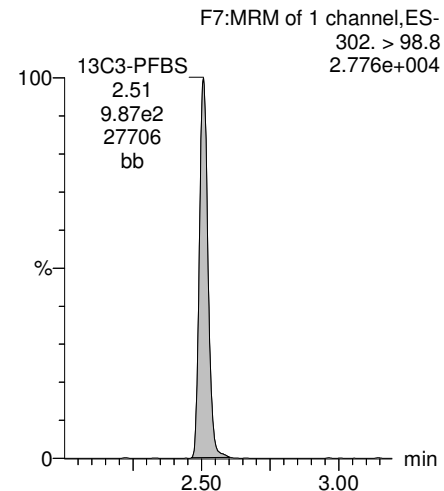
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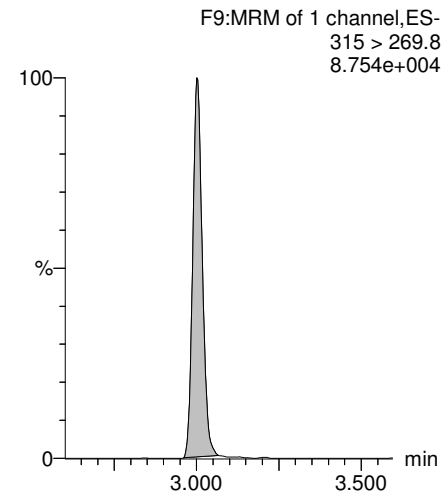
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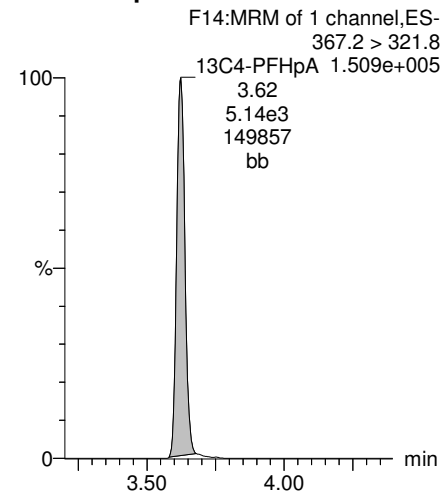
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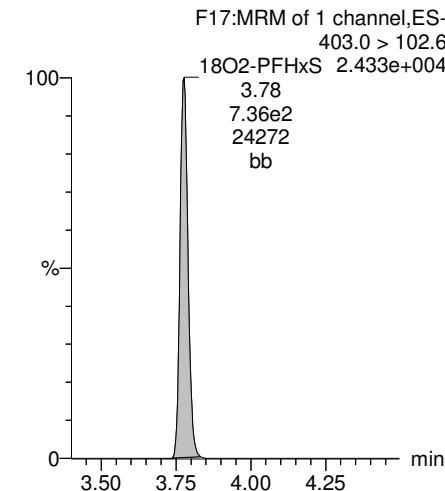
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**13C4-PFHpA**



**18O2-PFHxS**

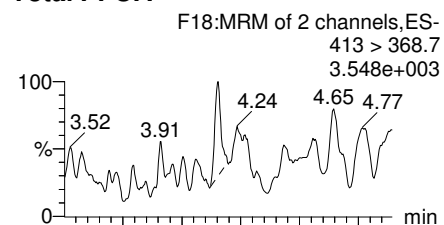


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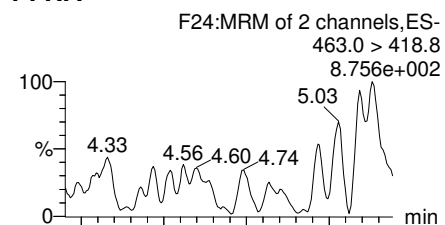
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Name: 171116M3\_45, Date: 17-Nov-2017, Time: 00:32:13, ID: 1701624-09 OF-MW33D-1117 0.11041, Description: OF-MW33D-1117

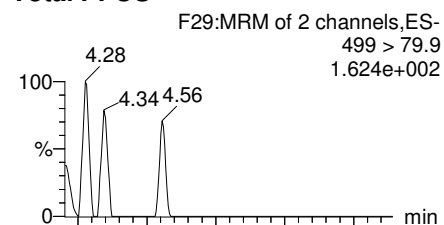
**Total PFOA**



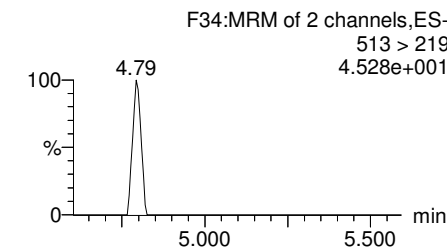
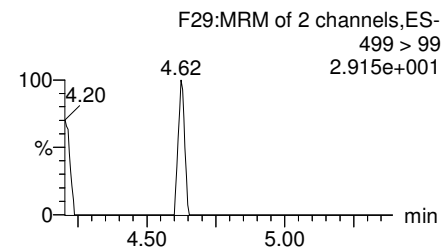
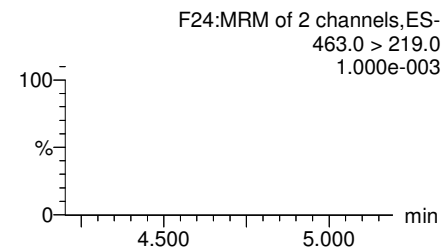
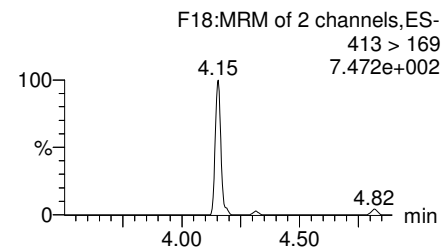
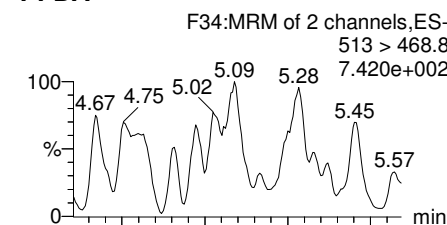
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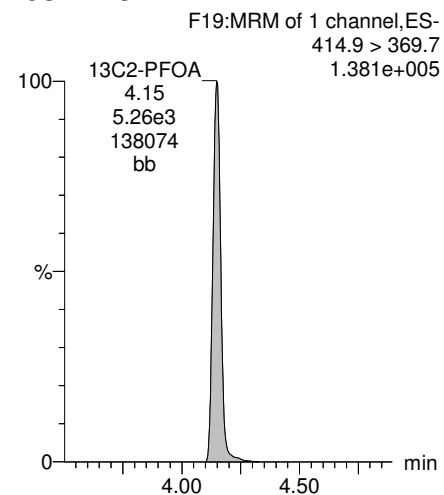
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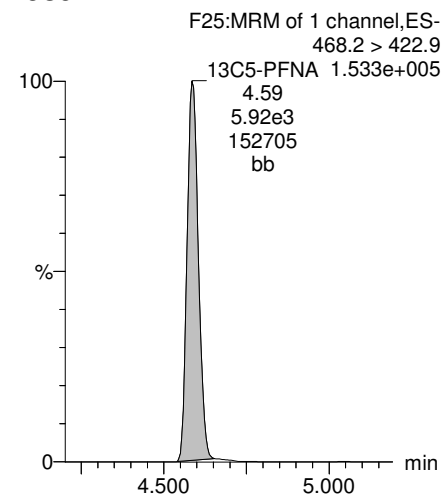
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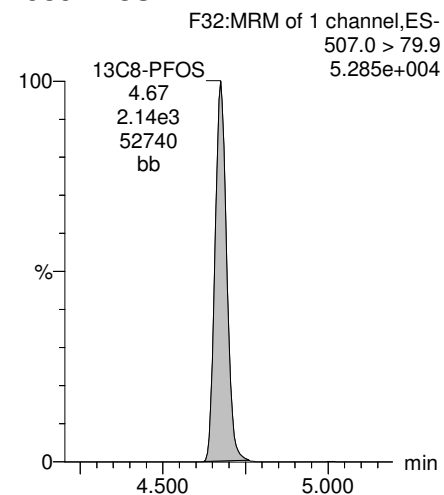
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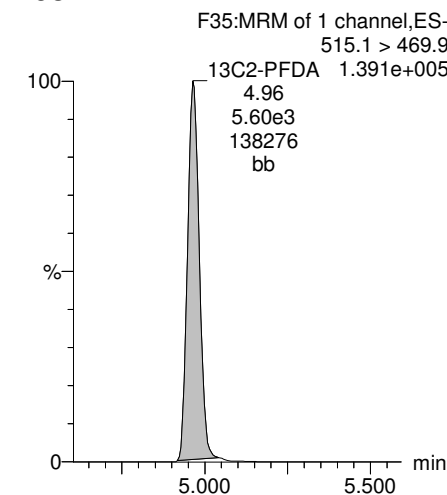
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**

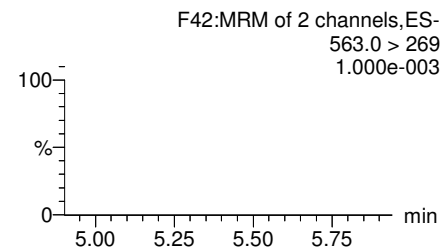
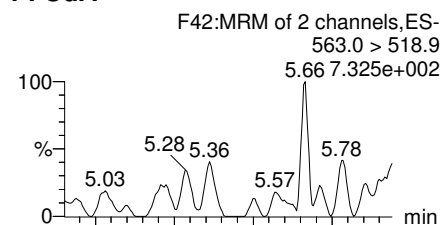


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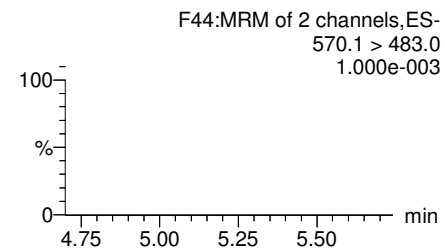
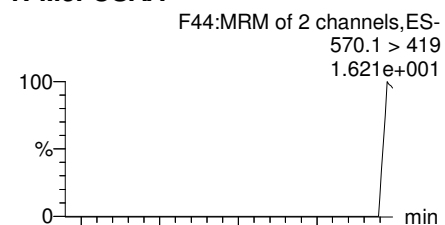
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Name: 171116M3\_45, Date: 17-Nov-2017, Time: 00:32:13, ID: 1701624-09 OF-MW33D-1117 0.11041, Description: OF-MW33D-1117

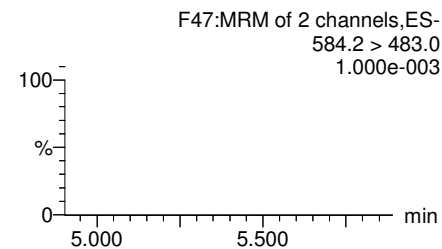
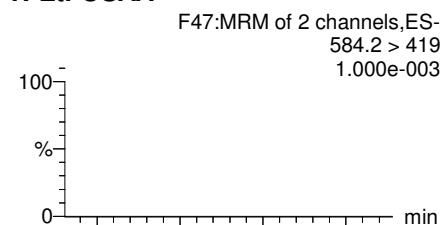
**PFUdA**



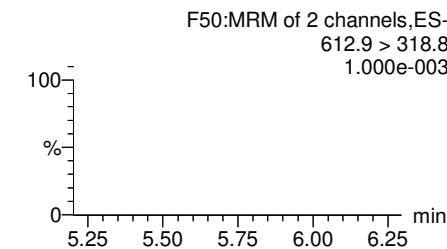
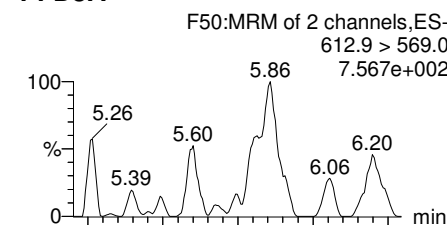
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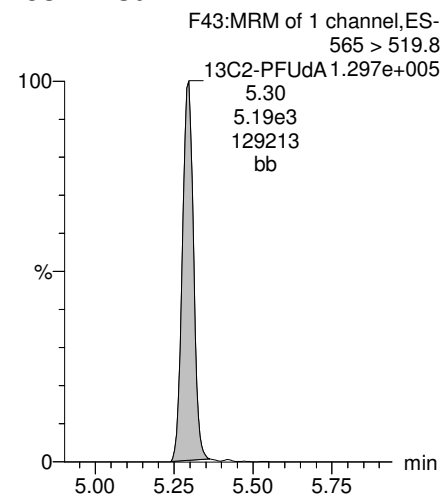
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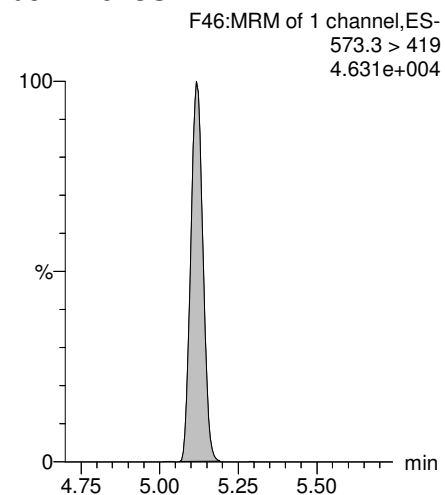
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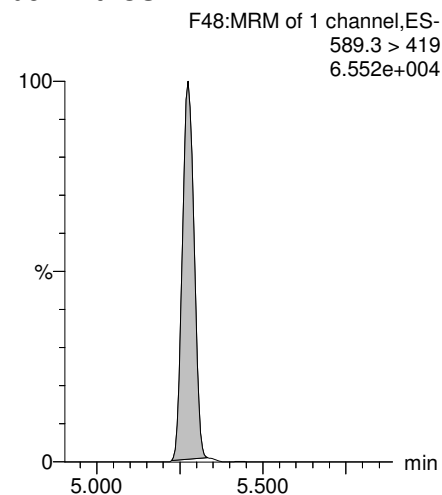
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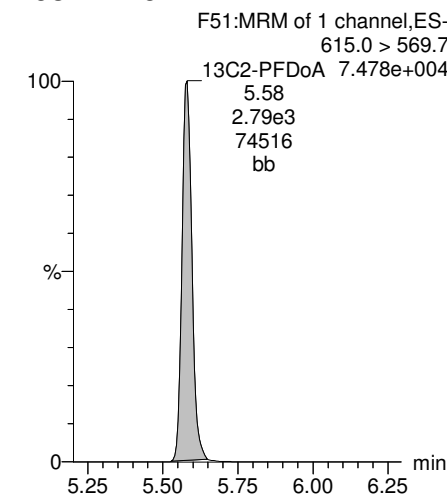
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



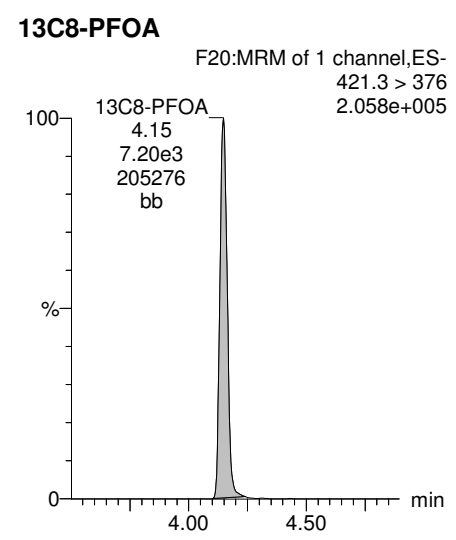
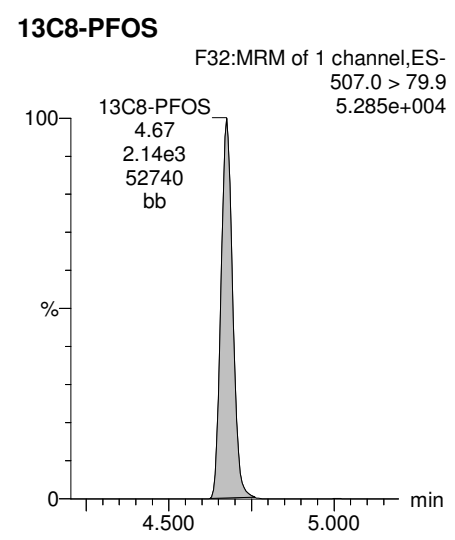
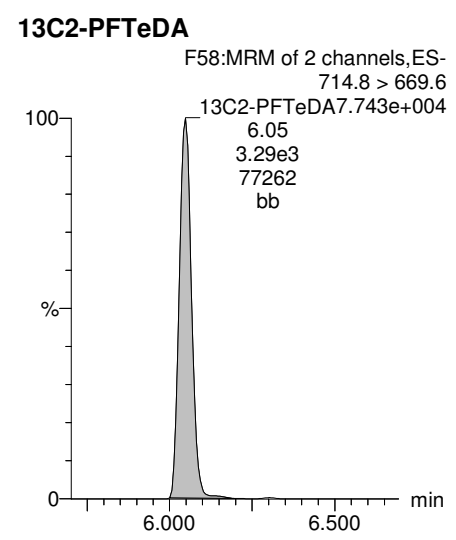
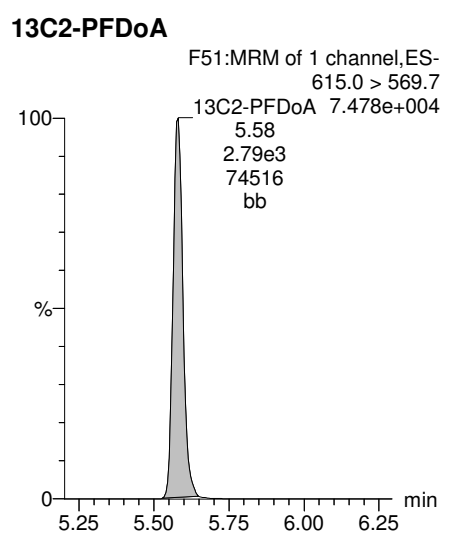
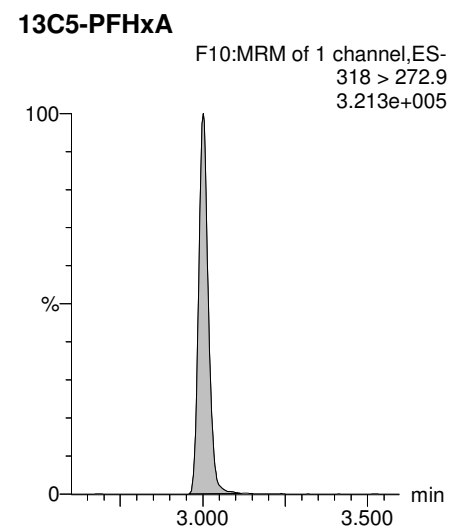
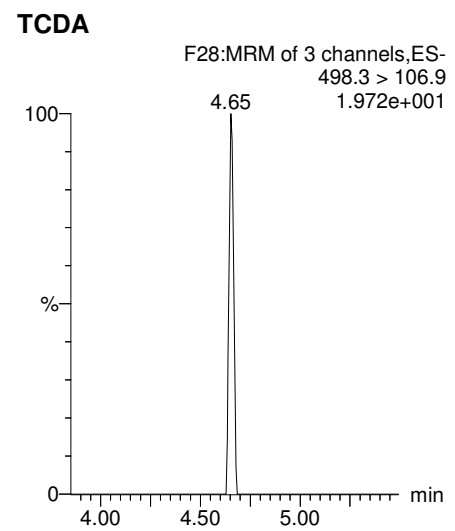
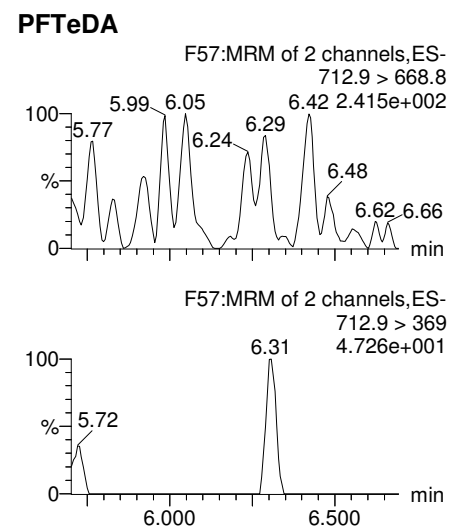
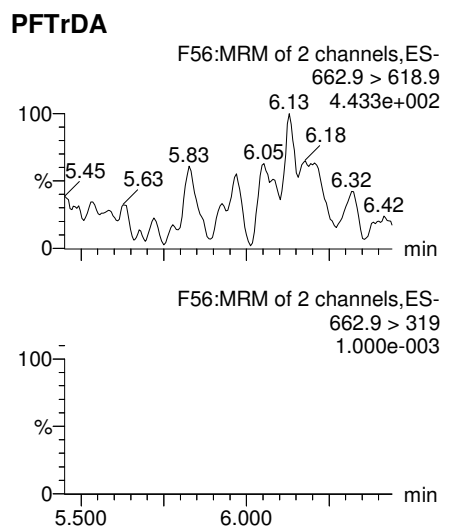
**13C2-PFDoA**



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Printed: Saturday, November 18, 2017 16:55:43 Pacific Standard Time

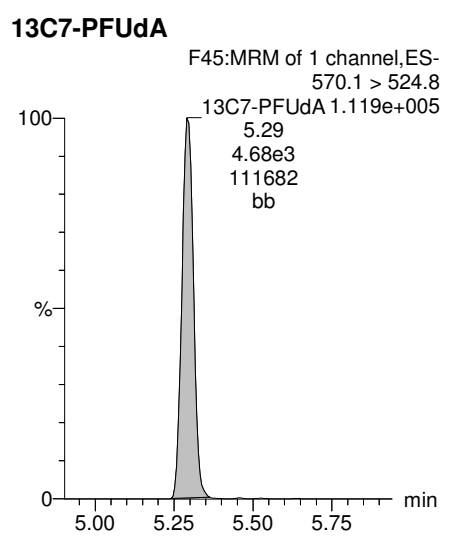
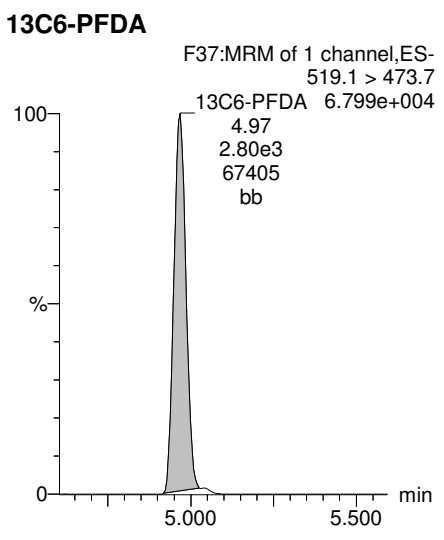
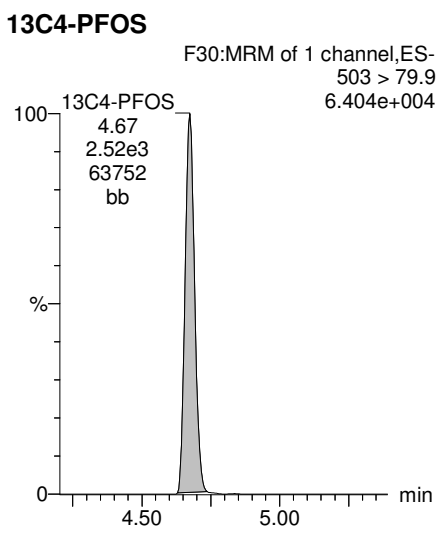
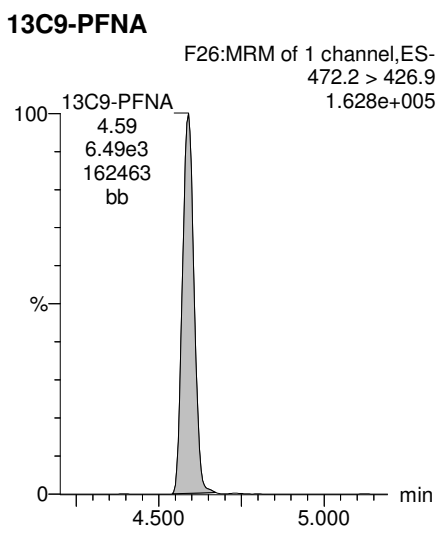
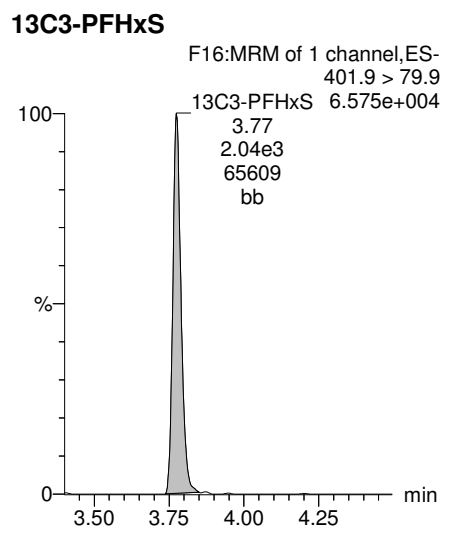
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Printed: Saturday, November 18, 2017 17:13:01 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_46, Date: 17-Nov-2017, Time: 00:43:26, ID: 1701624-10 OF-EB110717 0.11441, Description: OF-EB110717

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		9.70e2	0.1144		2.55				
2	4	PFHxA	313.2 > 268.9		2.79e3	0.1144		3.01				
3	5	PFHpA	363.0 > 318.9		5.35e3	0.1144		3.71				
4	6	L-PFHxS	398.9 > 79.6	5.48e0	7.37e2	0.1144		3.86	3.77	0.0929	0.035	
5	9	L-PFOA	413 > 368.7		5.83e3	0.1144		4.22				
6	12	PFNA	463.0 > 418.8		5.83e3	0.1144		4.66				
7	14	L-PFOS	499 > 79.9		1.87e3	0.1144		4.74				
8	16	PFDA	513 > 468.8		4.66e3	0.1144		5.01				
9	18	N-MeFOSAA	570.1 > 419		2.17e3	0.1144		5.17				
10	19	N-EtFOSAA	584.2 > 419		2.61e3	0.1144		5.32				
11	20	PFUdA	563.0 > 518.9		4.43e3	0.1144		5.45				
12	22	PFDoA	612.9 > 569.0		2.68e3	0.1144		5.62				

Dataset: U:\Q4.PRO\results\171116M3\171116M3-46.qld

Last Altered: Saturday, November 18, 2017 17:12:13 Pacific Standard Time

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Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_46, Date: 17-Nov-2017, Time: 00:43:26, ID: 1701624-10 OF-EB110717 0.11441, Description: OF-EB110717

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9		2.68e3	0.1144		5.87				
2	25 PFTeDA	712.9 > 668.8		3.13e3	0.1144		6.01				
3	33 13C3-PFBS	302. > 98.8	9.70e2	9.30e3	0.1144	0.096	2.55	2.50	1.30	118.454	108.4
4	34 13C2-PFHxA	315 > 269.8	2.79e3	9.30e3	0.1144	0.728	3.01	3.00	3.75	45.037	103.1
5	35 13C4-PFHpA	367.2 > 321.8	5.35e3	9.30e3	0.1144	0.550	3.71	3.62	7.20	114.455	104.8
6	36 18O2-PFHxS	403.0 > 102.6	7.37e2	2.00e3	0.1144	0.432	3.86	3.78	4.61	93.433	85.5
7	37 13C2-6:2 FTS	429.1 > 408.9	1.15e3	7.00e3	0.1144	0.217	4.16	4.09	2.06	82.870	75.8
8	38 13C2-PFOA	414.9 > 369.7	5.83e3	7.00e3	0.1144	0.840	4.22	4.15	10.4	108.408	99.2
9	39 13C5-PFNA	468.2 > 422.9	5.83e3	6.97e3	0.1144	0.967	4.66	4.59	10.5	94.461	86.5
10	40 13C8-PFOA	506.1 > 77.7	2.00e3	4.42e3	0.1144	0.786	4.73	4.64	5.67	63.012	57.7
11	41 13C8-PFOS	507.0 > 79.9	1.87e3	2.03e3	0.1144	0.991	4.73	4.67	11.5	101.456	92.9
12	42 13C2-PFDA	515.1 > 469.9	4.66e3	2.54e3	0.1144	2.153	5.01	4.96	22.9	93.087	85.2
13	43 13C2-8:2 FTS	529.1 > 508.7	3.55e2	9.30e3	0.1144	0.058	4.88	4.93	0.478	71.729	65.7
14	44 d3-N-MeFOSAA	573.3 > 419	2.17e3	4.42e3	0.1144	0.667	5.17	5.12	6.13	80.284	73.5
15	45 d5-N-EtFOSAA	589.3 > 419	2.61e3	4.42e3	0.1144	0.698	5.32	5.27	7.38	92.533	84.7
16	46 13C2-PFUdA	565 > 519.8	4.43e3	4.42e3	0.1144	1.261	5.45	5.29	12.5	86.853	79.5
17	47 13C2-PFDoA	615.0 > 569.7	2.68e3	4.42e3	0.1144	0.695	5.62	5.58	7.57	95.236	87.2
18	49 13C2-PFTeDA	714.8 > 669.6	3.13e3	4.42e3	0.1144	0.762	6.01	6.05	8.85	101.457	92.9
19	54 13C4-PFBA	217. > 171.8	7.24e3	7.24e3	0.1144	1.000	1.28	1.25	12.5	109.256	100.0
20	55 13C5-PFHxA	318 > 272.9	9.30e3	9.30e3	0.1144	1.000	3.01	3.00	12.5	109.256	100.0
21	56 13C3-PFHxS	401.9 > 79.9	2.00e3	2.00e3	0.1144	1.000	3.86	3.77	12.5	109.256	100.0
22	57 13C8-PFOA	421.3 > 376	7.00e3	7.00e3	0.1144	1.000	4.22	4.14	12.5	109.256	100.0
23	58 13C9-PFNA	472.2 > 426.9	6.97e3	6.97e3	0.1144	1.000	4.66	4.59	12.5	109.256	100.0
24	59 13C4-PFOS	503 > 79.9	2.03e3	2.03e3	0.1144	1.000	4.73	4.67	12.5	109.256	100.0
25	60 13C6-PFDA	519.1 > 473.7	2.54e3	2.54e3	0.1144	1.000	5.01	4.96	12.5	109.256	100.0
26	61 13C7-PFUdA	570.1 > 524.8	4.42e3	4.42e3	0.1144	1.000	5.45	5.30	12.5	109.256	100.0
27	62 Total PFHxS	398.9 > 79.6	5.48e0	7.37e2	0.1144		3.86		0.0929	0.035	
28	63 Total PFOA	413 > 368.7	0.00e0	5.83e3	0.1144		4.22		0.000		
29	64 Total PFOS	499 > 79.9	0.00e0	1.87e3	0.1144		4.73		0.000		
30	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.17e3	0.1144		5.54		0.000		
31	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.61e3	0.1144		5.32		0.000		



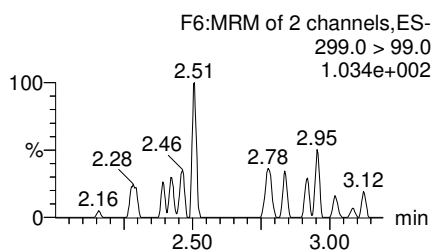
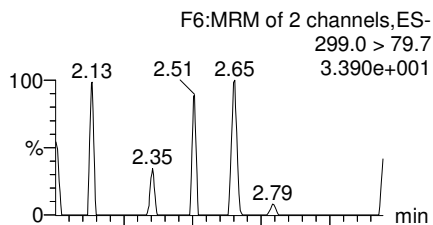
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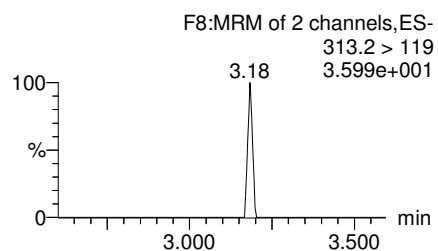
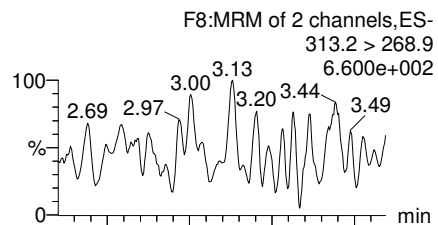
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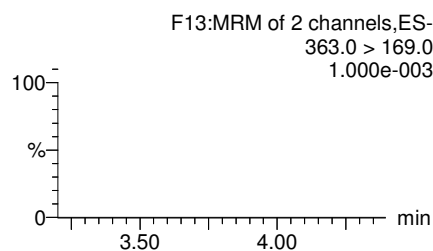
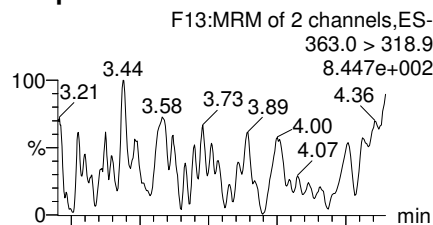
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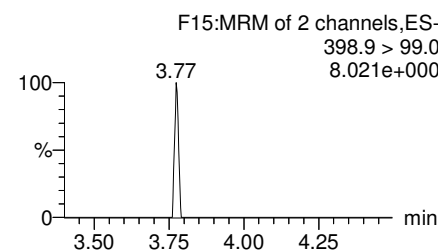
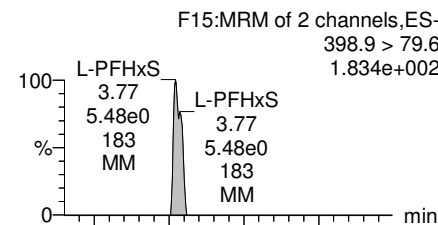
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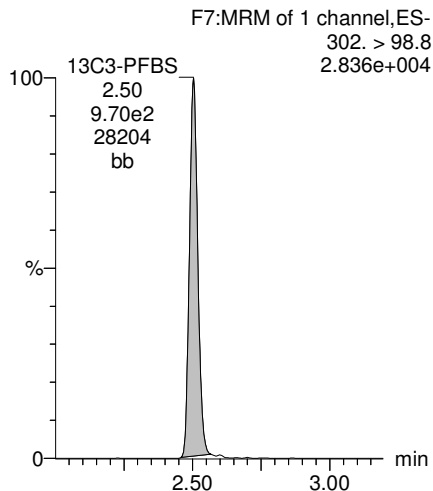
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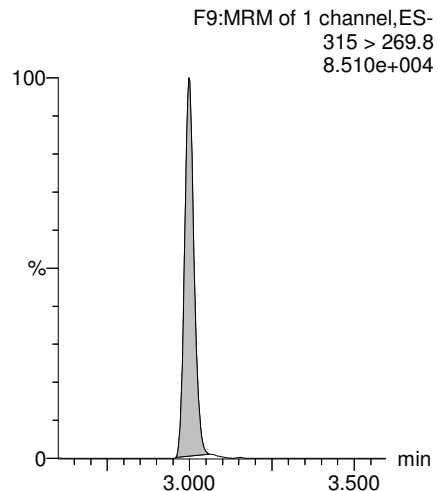
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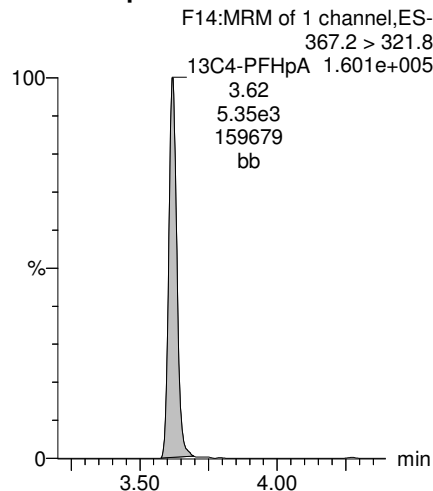
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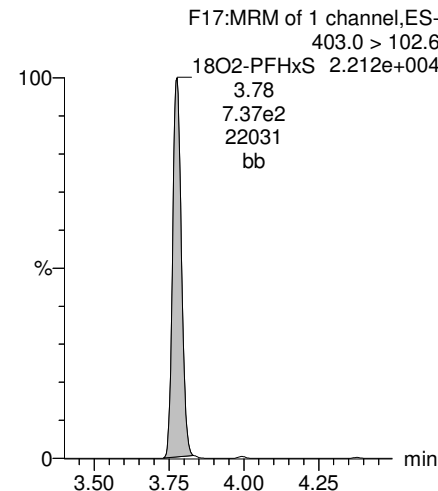
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13C4-PFHpA



18O2-PFHxS

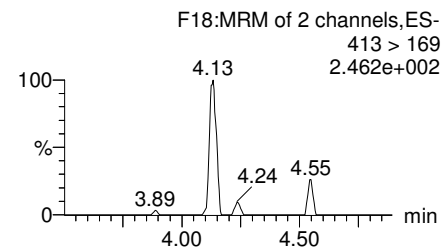
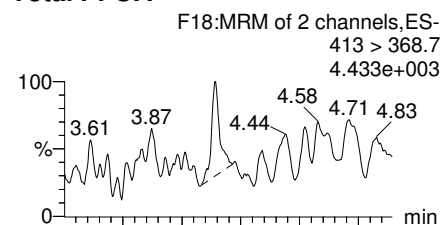


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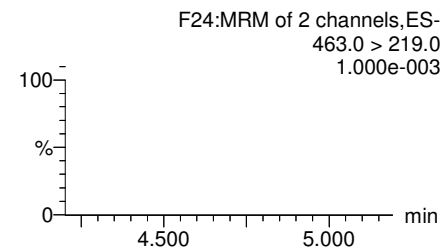
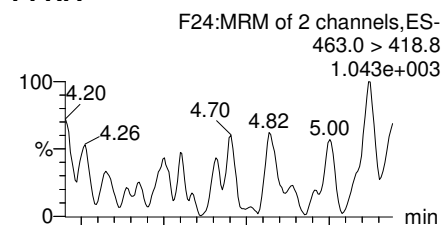
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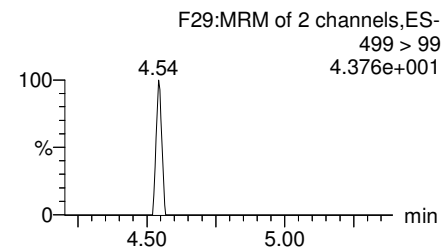
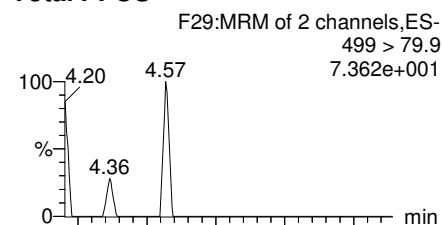
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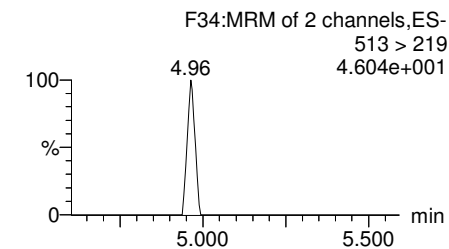
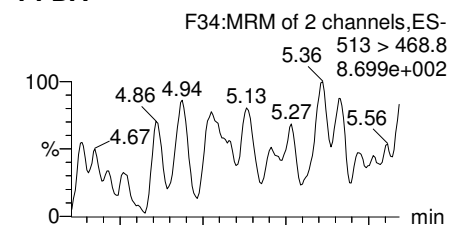
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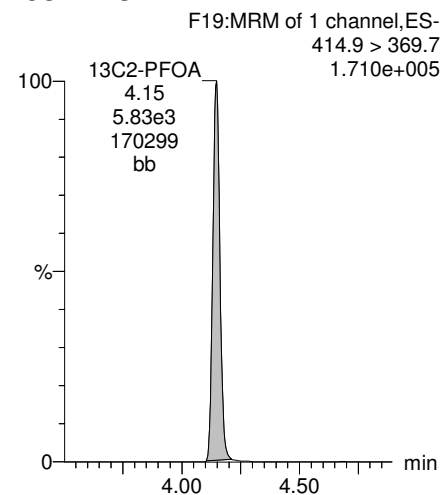
**Total PFOS**



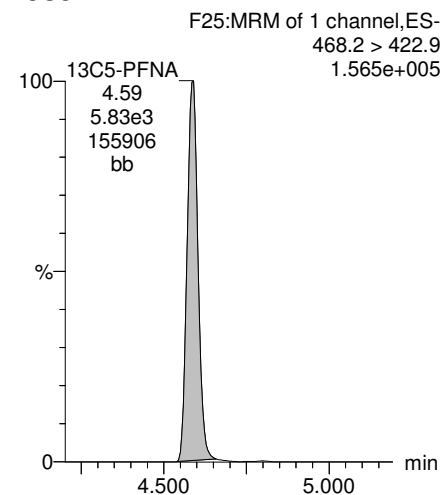
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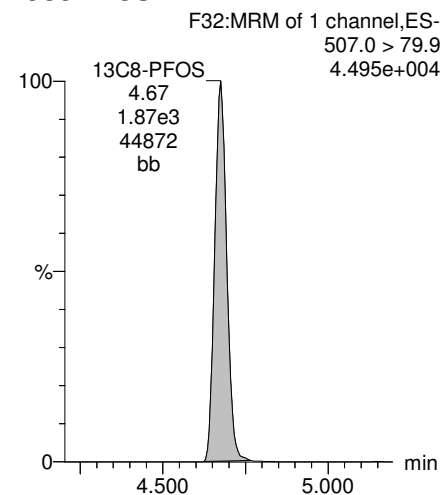
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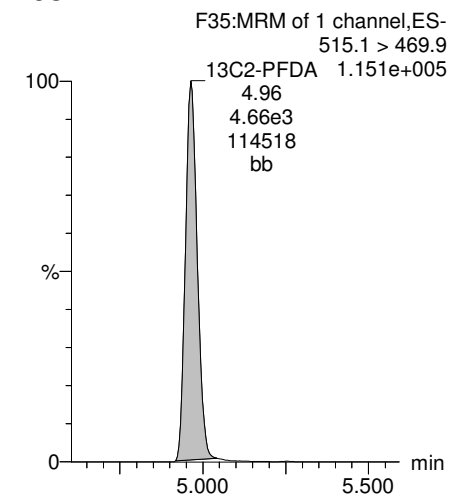
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**13C8-PFOS**



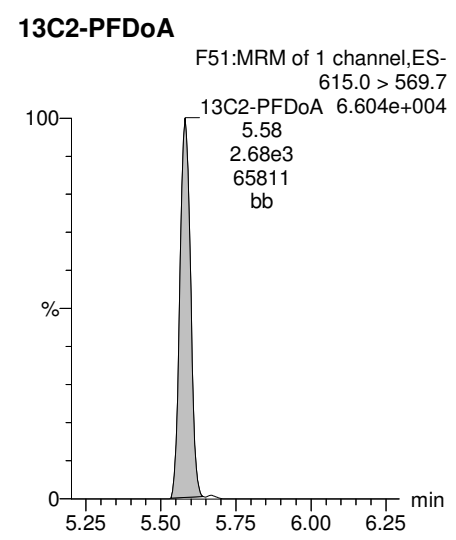
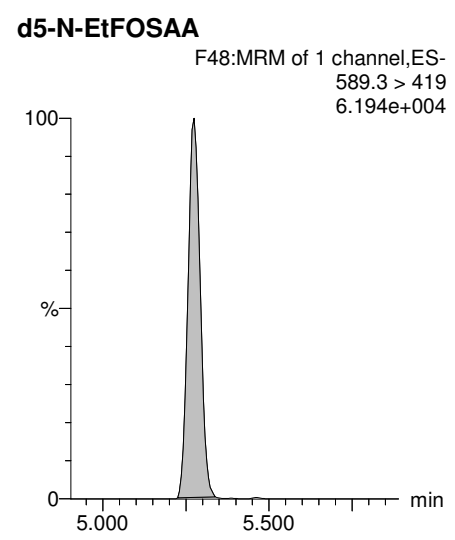
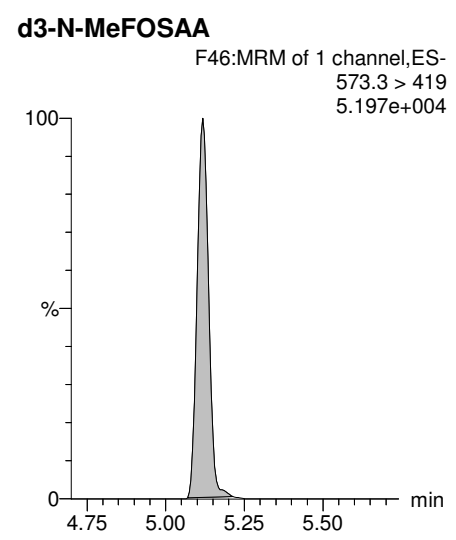
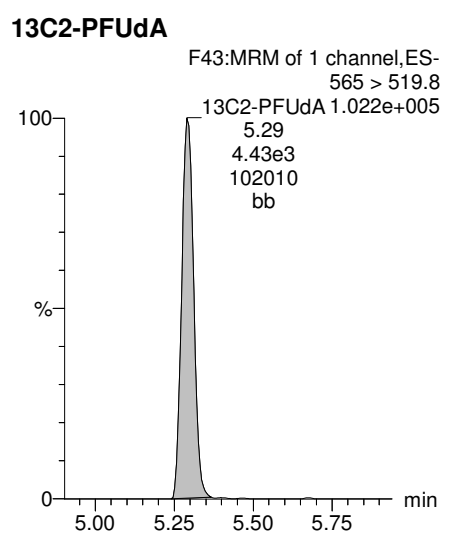
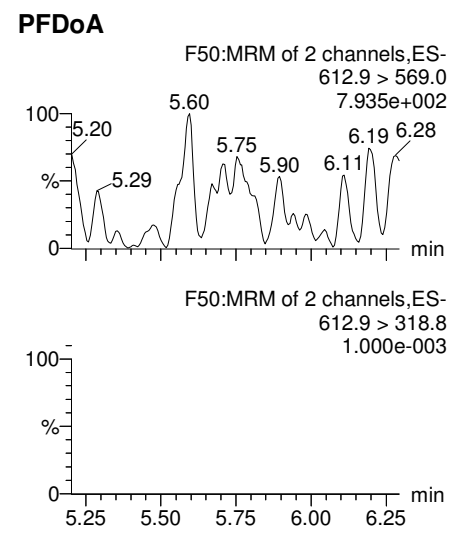
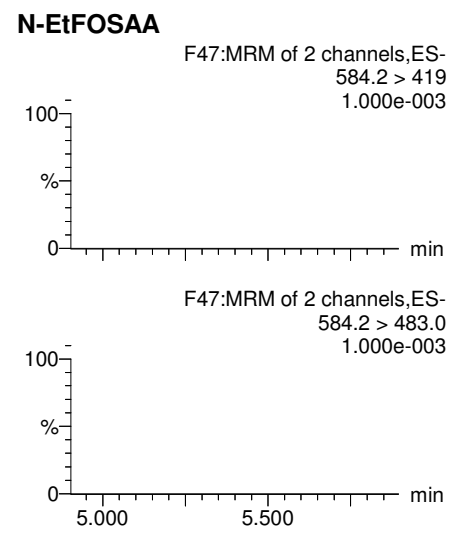
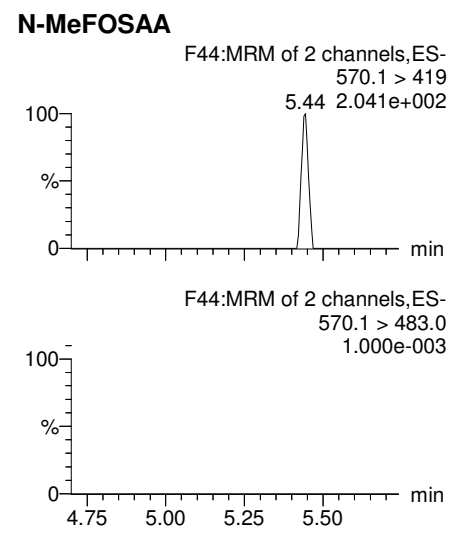
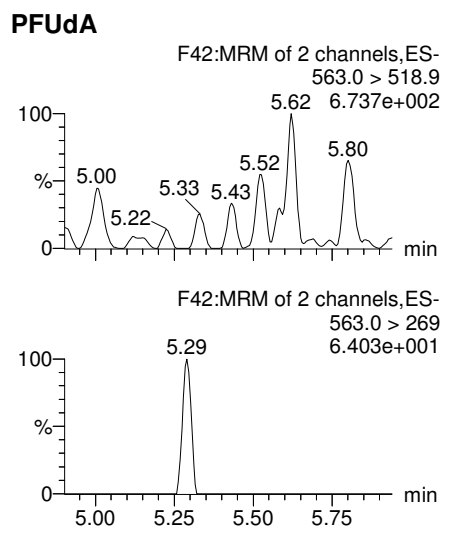
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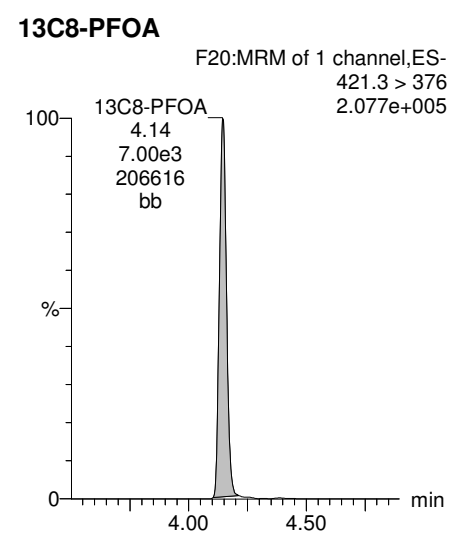
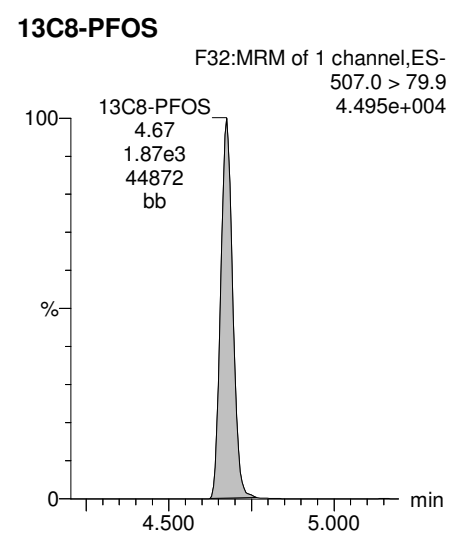
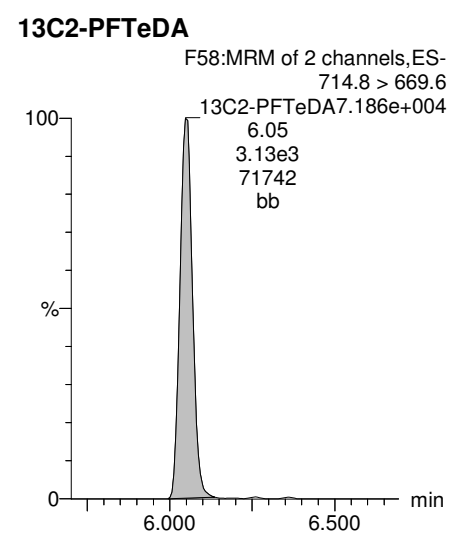
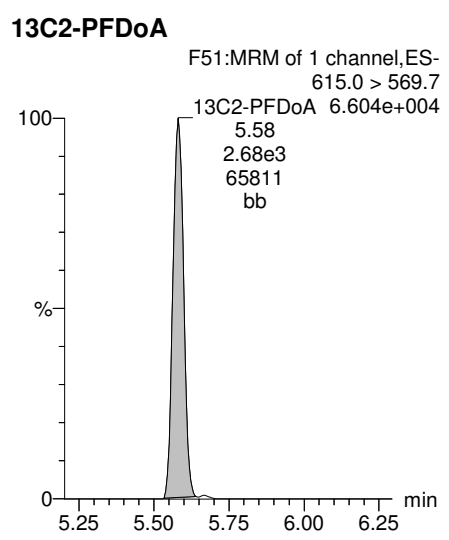
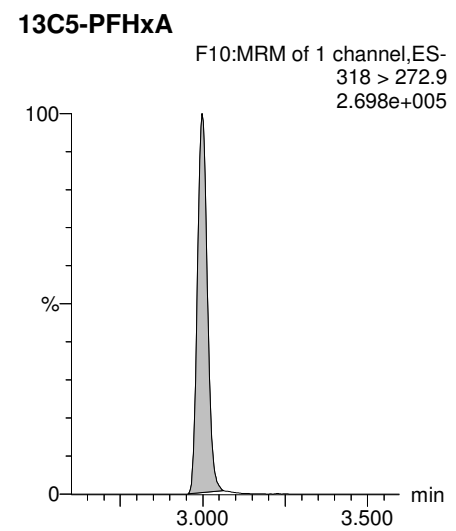
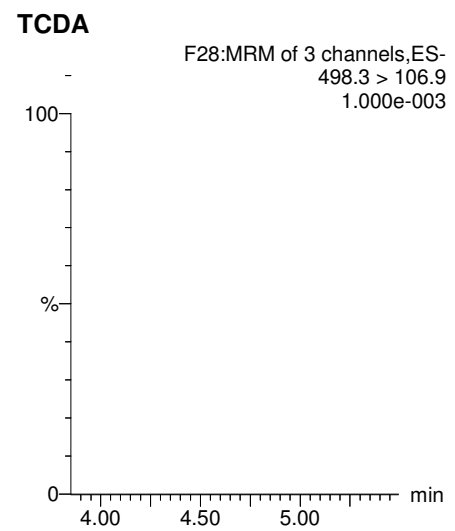
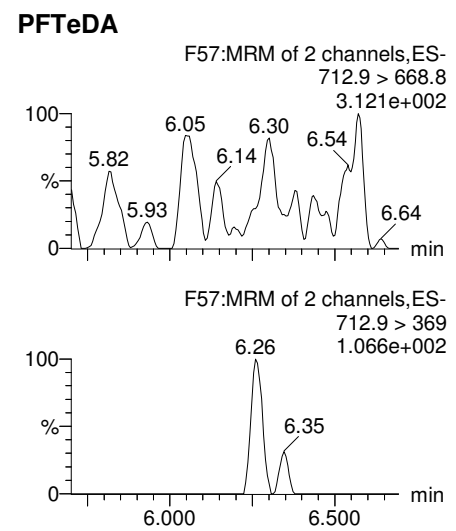
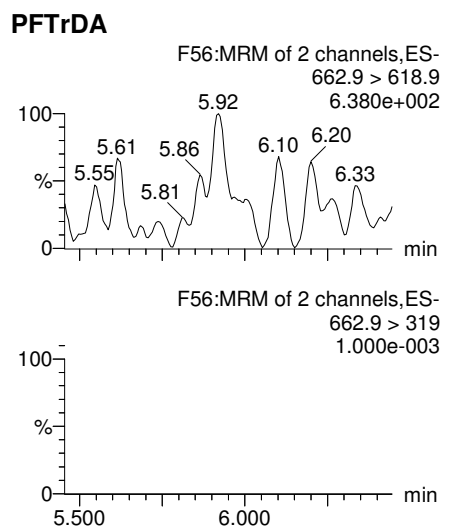
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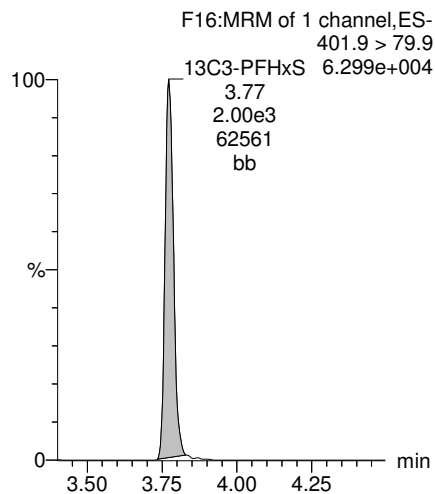


Dataset: U:\Q4.PRO\results\171116M3\171116M3-46.qld

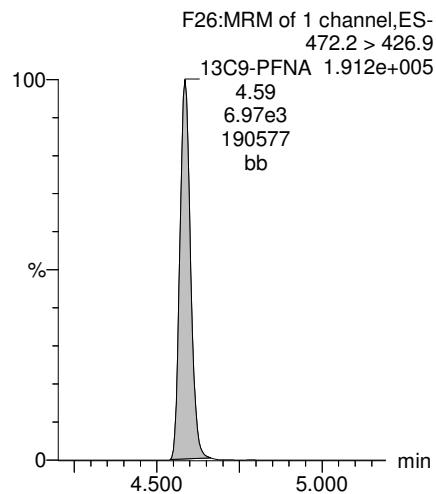
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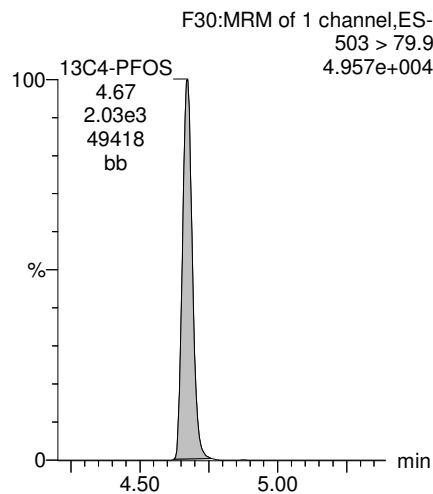
**13C3-PFHxS**



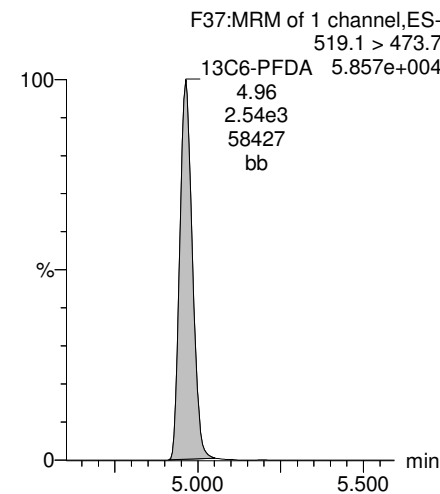
**13C9-PFNA**



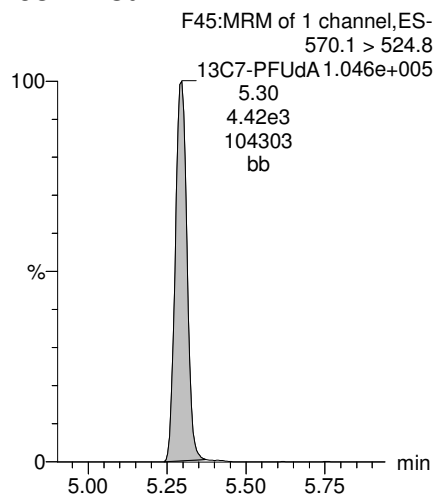
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUdA**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-47.qld

Last Altered: Saturday, November 18, 2017 20:21:23 Pacific Standard Time

Printed: Saturday, November 18, 2017 20:22:30 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_47, Date: 17-Nov-2017, Time: 00:54:37, ID: 1701624-11 OF-FB110717 0.11442, Description: OF-FB110717

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		1.04e3	0.1144		2.55				
2	4	PFHxA	313.2 > 268.9		3.15e3	0.1144		3.01				
3	5	PFHpA	363.0 > 318.9		5.78e3	0.1144		3.71				
4	6	L-PFHxS	398.9 > 79.6		8.11e2	0.1144		3.86				
5	9	L-PFOA	413 > 368.7		4.99e3	0.1144		4.22				
6	12	PFNA	463.0 > 418.8		6.45e3	0.1144		4.66				
7	14	L-PFOS	499 > 79.9		2.24e3	0.1144		4.74				
8	16	PFDA	513 > 468.8		5.01e3	0.1144		5.01				
9	18	N-MeFOSAA	570.1 > 419		1.85e3	0.1144		5.17				
10	19	N-EtFOSAA	584.2 > 419		2.34e3	0.1144		5.32				
11	20	PFUdA	563.0 > 518.9		4.08e3	0.1144		5.45				
12	22	PFDoA	612.9 > 569.0		2.39e3	0.1144		5.62				

Dataset: U:\Q4.PRO\results\171116M3\171116M3-47.qld

Last Altered: Saturday, November 18, 2017 20:21:23 Pacific Standard Time

Printed: Saturday, November 18, 2017 20:22:43 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_47, Date: 17-Nov-2017, Time: 00:54:37, ID: 1701624-11 OF-FB110717 0.11442, Description: OF-FB110717

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	24	PFTrDA	662.9 > 618.9	2.39e3	0.1144		5.87					
2	25	PFTeDA	712.9 > 668.8	2.65e3	0.1144		6.01					
3	33	13C3-PFBS	302. > 98.8	1.04e3	1.09e4	0.1144	0.096	2.55	2.50	1.19	108.522	99.3
4	34	13C2-PFHxA	315 > 269.8	3.15e3	1.09e4	0.1144	0.728	3.01	3.00	3.61	43.265	99.0
5	35	13C4-PFHpA	367.2 > 321.8	5.78e3	1.09e4	0.1144	0.550	3.71	3.62	6.62	105.319	96.4
6	36	18O2-PFHxS	403.0 > 102.6	8.11e2	1.84e3	0.1144	0.432	3.86	3.77	5.52	111.713	102.3
7	37	13C2-6:2 FTS	429.1 > 408.9	1.28e3	6.44e3	0.1144	0.217	4.16	4.09	2.49	100.260	91.8
8	38	13C2-PFOA	414.9 > 369.7	4.99e3	6.44e3	0.1144	0.840	4.22	4.14	9.68	100.823	92.3
9	39	13C5-PFNA	468.2 > 422.9	6.45e3	6.84e3	0.1144	0.967	4.66	4.59	11.8	106.534	97.5
10	40	13C8-PFOA	506.1 > 77.7	1.64e3	4.82e3	0.1144	0.786	4.73	4.64	4.26	47.365	43.4
11	41	13C8-PFOS	507.0 > 79.9	2.24e3	2.13e3	0.1144	0.991	4.73	4.67	13.2	116.099	106.3
12	42	13C2-PFDA	515.1 > 469.9	5.01e3	3.33e3	0.1144	2.153	5.01	4.96	18.8	76.477	70.0
13	43	13C2-8:2 FTS	529.1 > 508.7	5.42e2	1.09e4	0.1144	0.058	4.88	4.93	0.621	93.189	85.3
14	44	d3-N-MeFOSAA	573.3 > 419	1.85e3	4.82e3	0.1144	0.667	5.17	5.11	4.80	62.811	57.5
15	45	d5-N-EtFOSAA	589.3 > 419	2.34e3	4.82e3	0.1144	0.698	5.32	5.27	6.08	76.121	69.7
16	46	13C2-PFUdA	565 > 519.8	4.08e3	4.82e3	0.1144	1.261	5.45	5.29	10.6	73.321	67.1
17	47	13C2-PFDoA	615.0 > 569.7	2.39e3	4.82e3	0.1144	0.695	5.62	5.58	6.20	78.049	71.4
18	49	13C2-PFTeDA	714.8 > 669.6	2.65e3	4.82e3	0.1144	0.762	6.01	6.05	6.86	78.617	72.0
19	54	13C4-PFBA	217. > 171.8	7.35e3	7.35e3	0.1144	1.000	1.28	1.25	12.5	109.247	100.0
20	55	13C5-PFHxA	318 > 272.9	1.09e4	1.09e4	0.1144	1.000	3.01	3.00	12.5	109.247	100.0
21	56	13C3-PFHxS	401.9 > 79.9	1.84e3	1.84e3	0.1144	1.000	3.86	3.77	12.5	109.247	100.0
22	57	13C8-PFOA	421.3 > 376	6.44e3	6.44e3	0.1144	1.000	4.22	4.14	12.5	109.247	100.0
23	58	13C9-PFNA	472.2 > 426.9	6.84e3	6.84e3	0.1144	1.000	4.66	4.59	12.5	109.247	100.0
24	59	13C4-PFOS	503 > 79.9	2.13e3	2.13e3	0.1144	1.000	4.73	4.67	12.5	109.247	100.0
25	60	13C6-PFDA	519.1 > 473.7	3.33e3	3.33e3	0.1144	1.000	5.01	4.96	12.5	109.247	100.0
26	61	13C7-PFUdA	570.1 > 524.8	4.82e3	4.82e3	0.1144	1.000	5.45	5.29	12.5	109.247	100.0
27	62	Total PFHxS	398.9 > 79.6	0.00e0	8.11e2	0.1144		3.86		0.000		
28	63	Total PFOA	413 > 368.7	0.00e0	4.99e3	0.1144		4.22		0.000		
29	64	Total PFOS	499 > 79.9	0.00e0	2.24e3	0.1144		4.73		0.000		
30	65	Total N-MeFOSAA	570.1 > 419	0.00e0	1.85e3	0.1144		5.54		0.000		
31	66	Total N-EtFOSAA	584.2 > 419	0.00e0	2.34e3	0.1144		5.32		0.000		

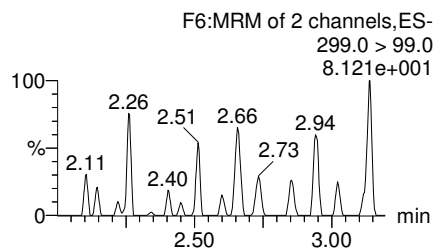
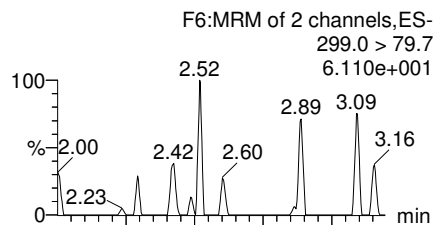
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Printed: Saturday, November 18, 2017 20:22:43 Pacific Standard Time

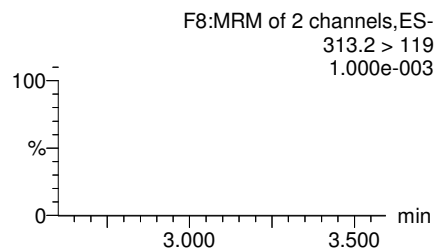
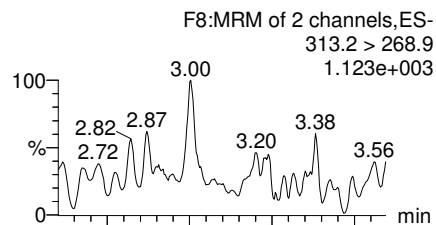
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Name: 171116M3\_47, Date: 17-Nov-2017, Time: 00:54:37, ID: 1701624-11 OF-FB110717 0.11442, Description: OF-FB110717

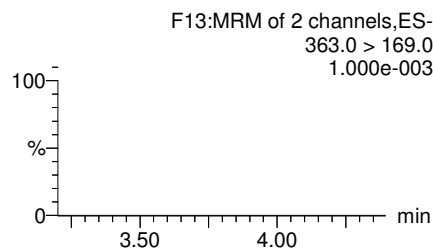
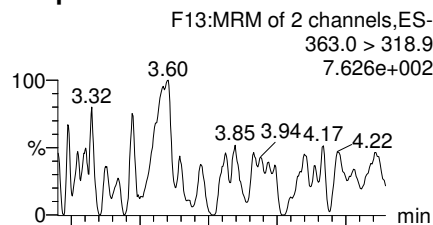
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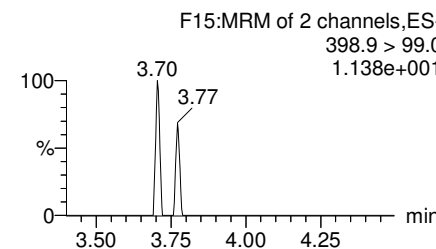
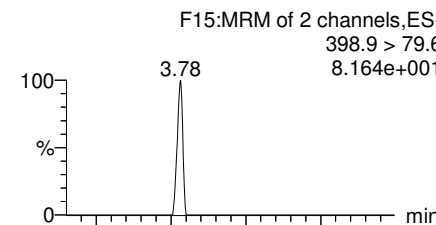
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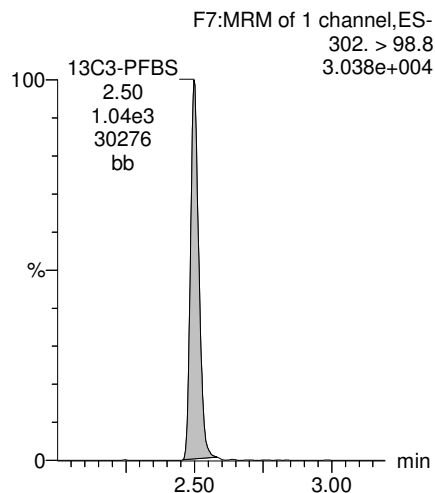
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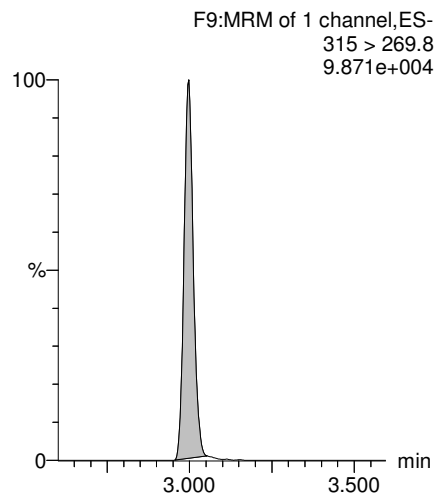
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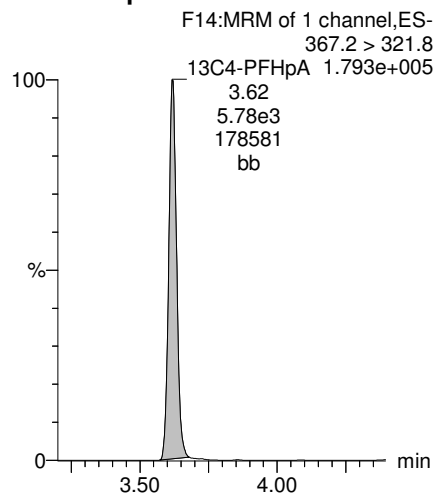
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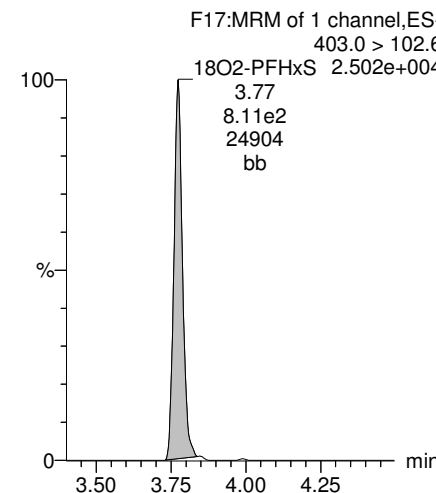
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**13C4-PFHpA**



**18O2-PFHxS**



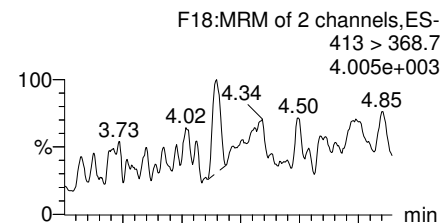


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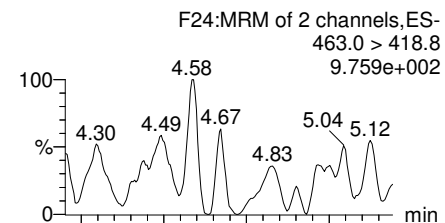
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Name: 171116M3\_47, Date: 17-Nov-2017, Time: 00:54:37, ID: 1701624-11 OF-FB110717 0.11442, Description: OF-FB110717

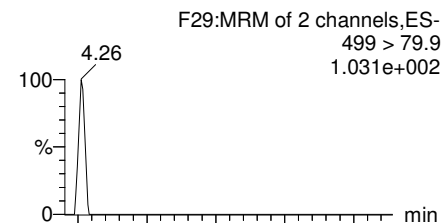
**Total PFOA**



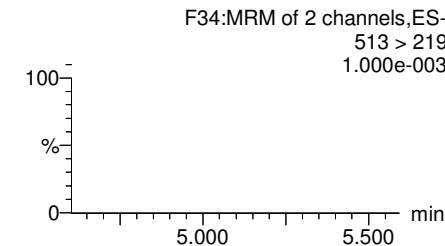
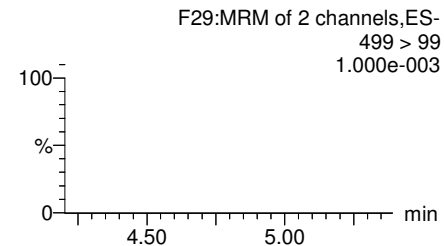
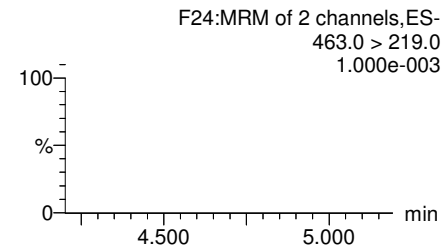
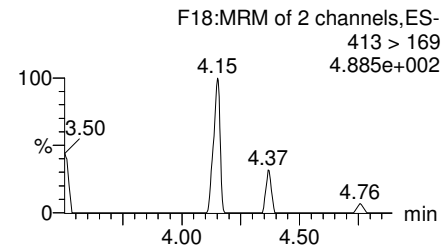
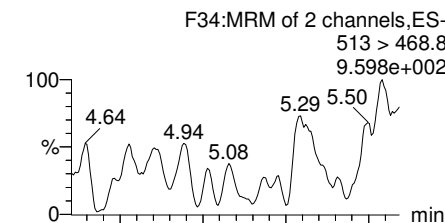
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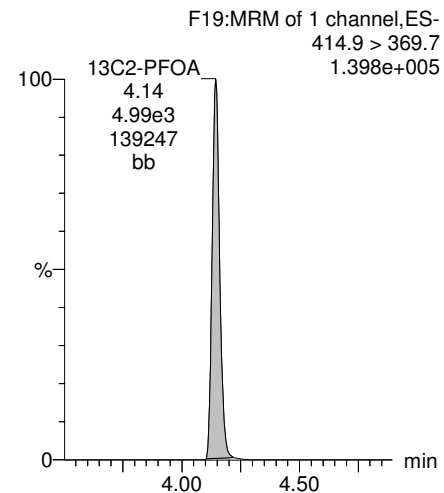
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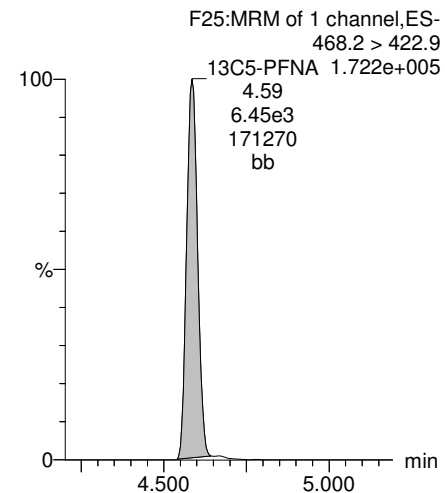
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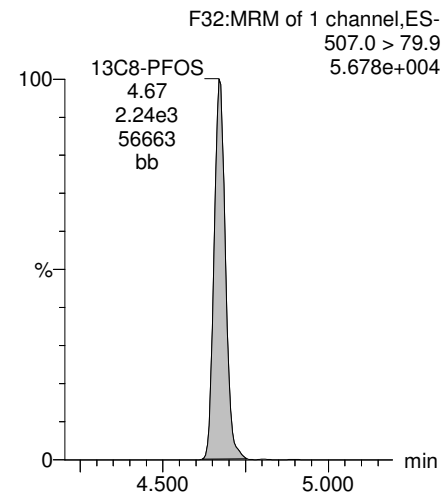
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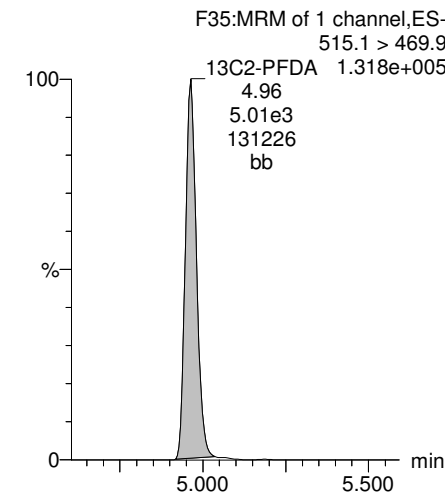
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**

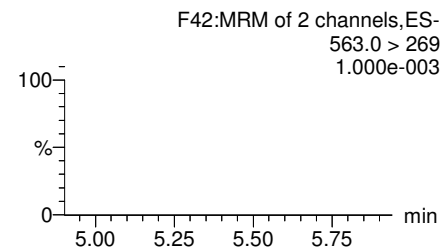
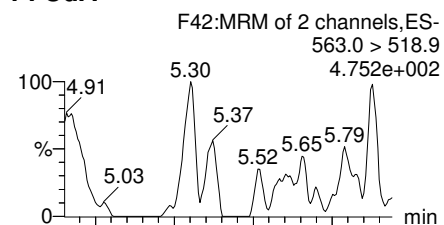


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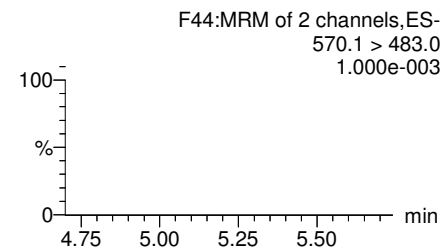
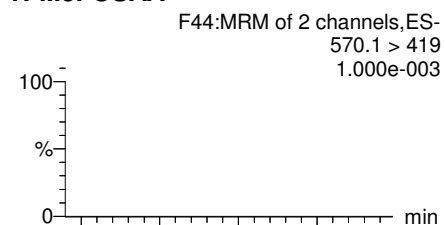
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Name: 171116M3\_47, Date: 17-Nov-2017, Time: 00:54:37, ID: 1701624-11 OF-FB110717 0.11442, Description: OF-FB110717

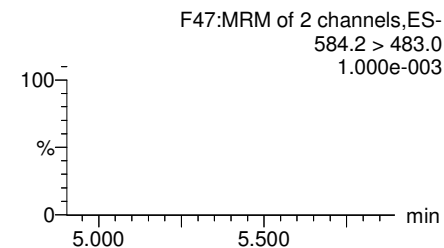
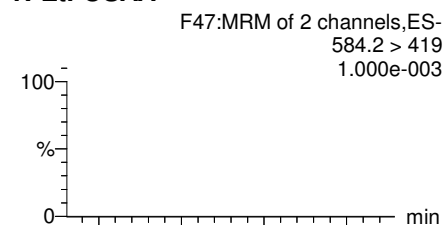
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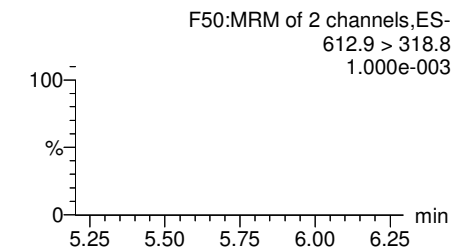
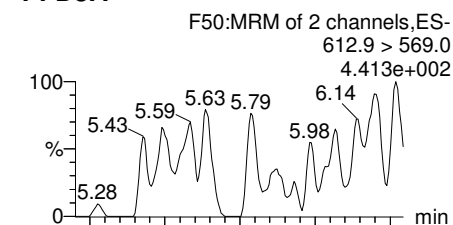
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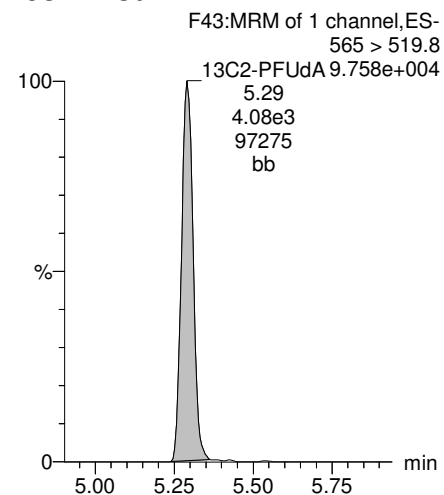
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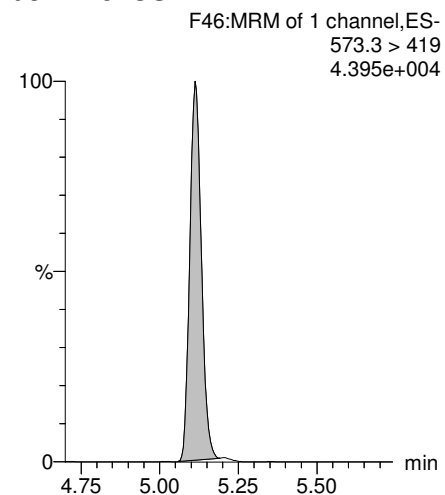
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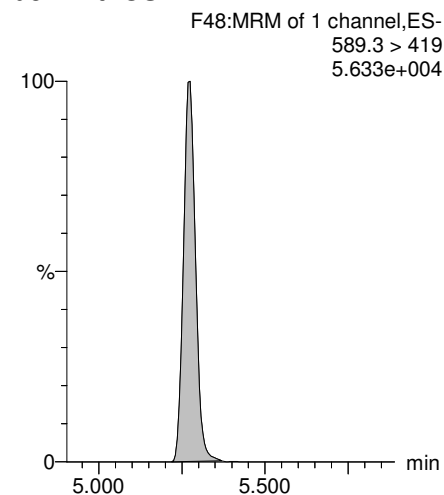
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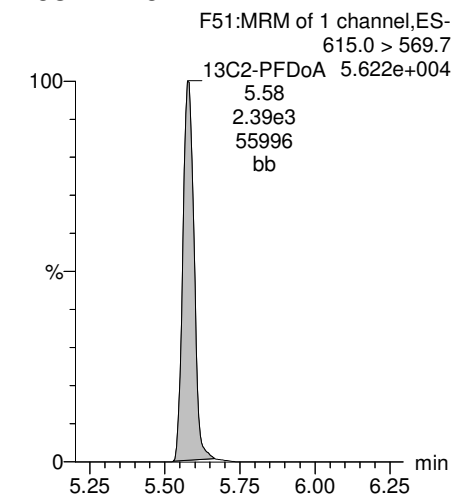
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



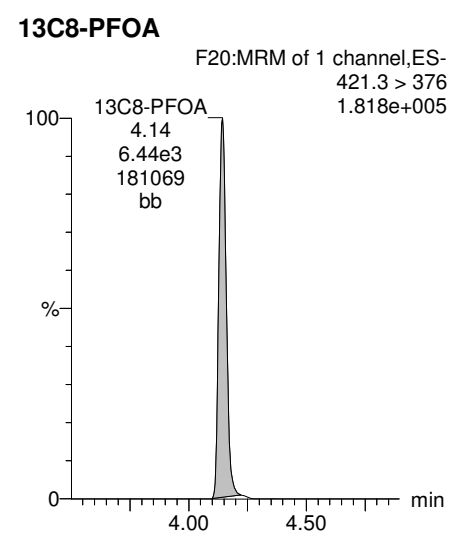
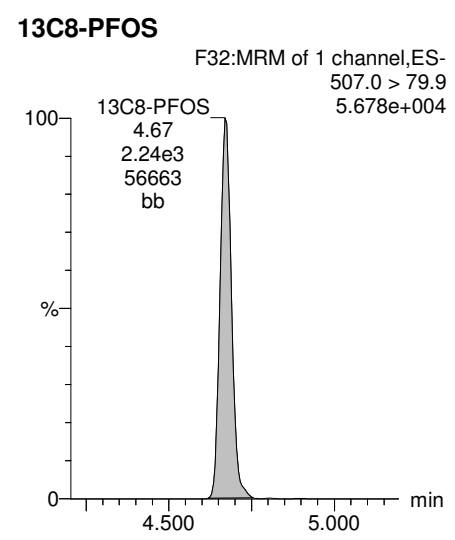
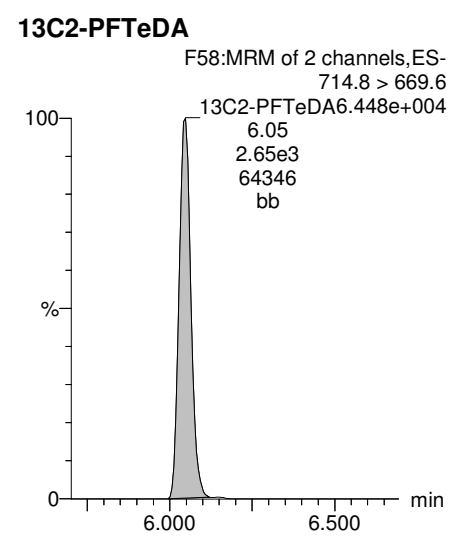
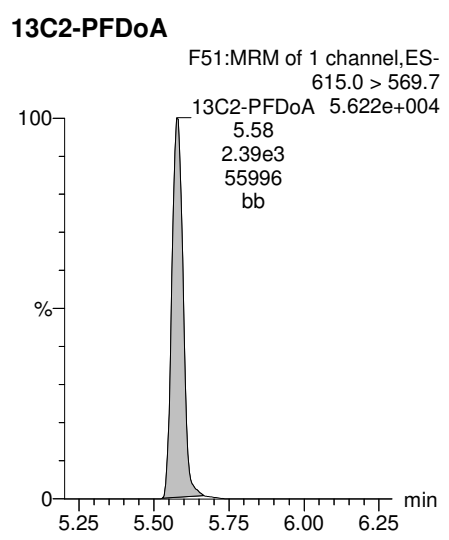
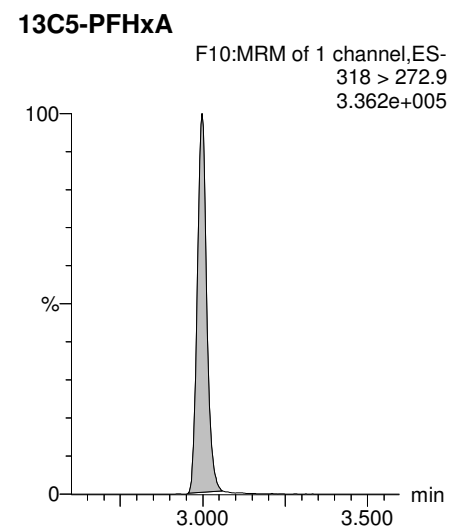
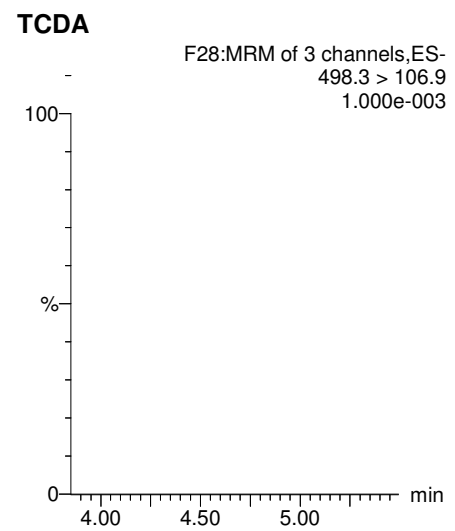
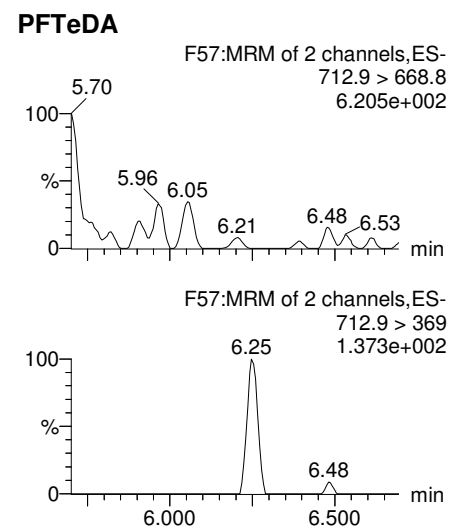
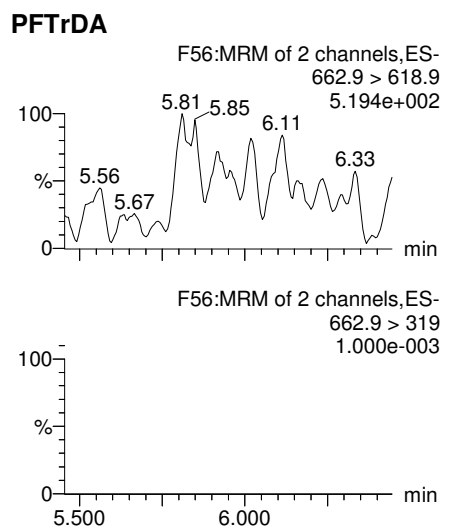
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Printed: Saturday, November 18, 2017 20:22:43 Pacific Standard Time

Name: 171116M3\_47, Date: 17-Nov-2017, Time: 00:54:37, ID: 1701624-11 OF-FB110717 0.11442, Description: OF-FB110717

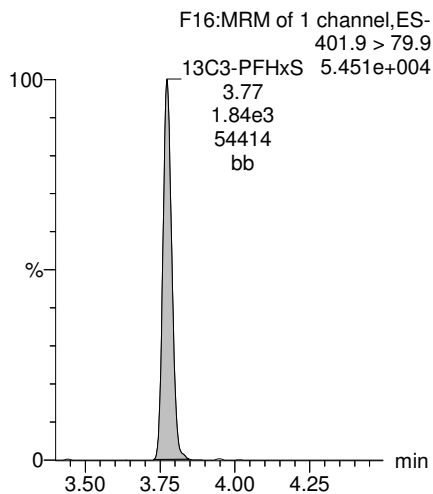


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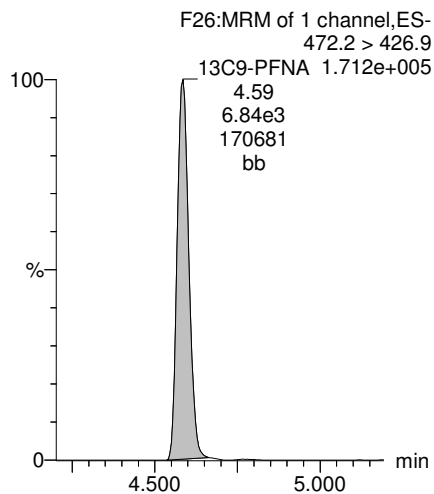
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Printed: Saturday, November 18, 2017 20:22:43 Pacific Standard Time

Name: 171116M3\_47, Date: 17-Nov-2017, Time: 00:54:37, ID: 1701624-11 OF-FB110717 0.11442, Description: OF-FB110717

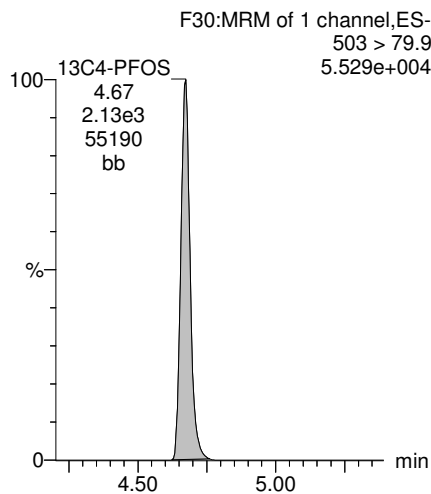
**13C3-PFHxS**



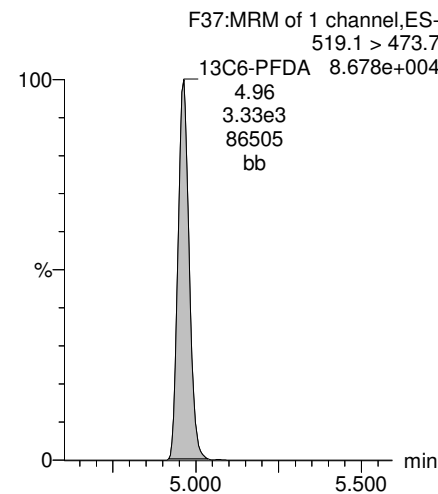
**13C9-PFNA**



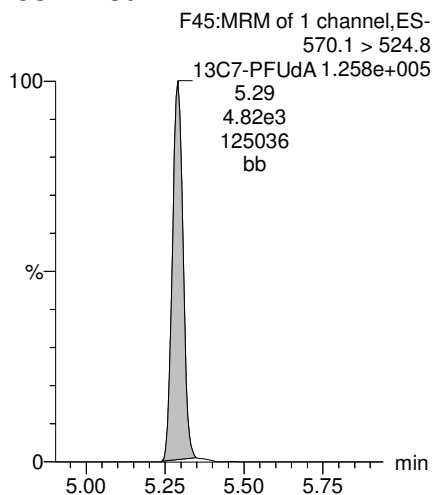
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUdA**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-27.qld

Last Altered: Saturday, November 18, 2017 21:05:46 Pacific Standard Time

Printed: Saturday, November 18, 2017 21:06:49 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_27, Date: 17-Nov-2017, Time: 21:46:31, ID: 1701624-12 10W-AQ01-110717 0.11031, Description: 10W-AQ01-110717

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		1.10e3	0.1103		2.90				
2	4	PFHxA	313.2 > 268.9		3.72e3	0.1103		3.40				
3	5	PFHpA	363.0 > 318.9		7.13e3	0.1103		4.03				
4	6	L-PFHxS	398.9 > 79.6	2.40e0	9.54e2	0.1103		4.17	4.12	0.0314	0.959	
5	9	L-PFOA	413 > 368.7		8.79e3	0.1103		4.54				
6	12	PFNA	463.0 > 418.8		8.65e3	0.1103		4.97				
7	14	L-PFOS	499 > 79.9	2.80e1	3.06e3	0.1103		5.05	5.01	0.114	0.990	
8	16	PFDA	513 > 468.8		7.15e3	0.1103		5.34				
9	18	N-MeFOSAA	570.1 > 419		2.61e3	0.1103		5.49				
10	19	N-EtFOSAA	584.2 > 419		2.82e3	0.1103		5.64				
11	20	PFUdA	563.0 > 518.9		7.34e3	0.1103		5.66				
12	22	PFDoA	612.9 > 569.0		3.85e3	0.1103		5.94				

Dataset: U:\Q4.PRO\results\171117M2\171117M2-27.qld

Last Altered: Saturday, November 18, 2017 21:05:46 Pacific Standard Time

Printed: Saturday, November 18, 2017 21:06:59 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_27, Date: 17-Nov-2017, Time: 21:46:31, ID: 1701624-12 10W-AQ01-110717 0.11031, Description: 10W-AQ01-110717

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
1	24	PFTrDA	662.9 > 618.9	3.85e3	0.1103		6.18					
2	25	PFTeDA	712.9 > 668.8	5.92e3	0.1103		6.37					
3	33	13C3-PFBS	302. > 98.8	1.10e3	1.36e4	0.1103	0.096	2.90	2.86	1.01	94.781	83.6
4	34	13C2-PFHxA	315 > 269.8	3.72e3	1.36e4	0.1103	0.767	3.40	3.36	3.41	40.365	89.1
5	35	13C4-PFHpA	367.2 > 321.8	7.13e3	1.36e4	0.1103	0.558	4.03	3.99	6.54	106.240	93.8
6	36	18O2-PFHxS	403.0 > 102.6	9.54e2	2.55e3	0.1103	0.430	4.17	4.13	4.67	98.458	86.9
7	37	13C2-6:2 FTS	429.1 > 408.9	1.75e3	9.41e3	0.1103	0.240	4.49	4.45	2.32	87.671	77.4
8	38	13C2-PFOA	414.9 > 369.7	8.79e3	9.41e3	0.1103	0.956	4.54	4.50	11.7	110.723	97.7
9	39	13C5-PFNA	468.2 > 422.9	8.65e3	9.94e3	0.1103	1.009	4.97	4.94	10.9	97.715	86.2
10	40	13C8-PFOA	506.1 > 77.7	3.04e3	7.99e3	0.1103	0.524	5.02	4.99	4.76	82.311	72.6
11	41	13C8-PFOS	507.0 > 79.9	3.06e3	2.47e3	0.1103	1.080	5.05	5.01	15.4	129.708	114.5
12	42	13C2-PFDA	515.1 > 469.9	7.15e3	4.53e3	0.1103	1.982	5.34	5.31	19.7	90.318	79.7
13	43	13C2-8:2 FTS	529.1 > 508.7	6.21e2	1.36e4	0.1103	0.072	5.32	5.28	0.569	71.519	63.1
14	44	d3-N-MeFOSAA	573.3 > 419	2.61e3	7.99e3	0.1103	0.434	5.49	5.45	4.09	85.479	75.4
15	45	d5-N-EtFOSAA	589.3 > 419	2.82e3	7.99e3	0.1103	0.461	5.64	5.61	4.41	86.646	76.5
16	46	13C2-PFUdA	565 > 519.8	7.34e3	7.99e3	0.1103	1.171	5.66	5.63	11.5	88.974	78.5
17	47	13C2-PFDoA	615.0 > 569.7	3.85e3	7.99e3	0.1103	0.697	5.94	5.91	6.02	78.324	69.1
18	49	13C2-PFTeDA	714.8 > 669.6	5.92e3	7.99e3	0.1103	0.849	6.37	6.34	9.27	99.020	87.4
19	54	13C4-PFBA	217. > 171.8	8.94e3	8.94e3	0.1103	1.000	1.66	1.61	12.5	113.317	100.0
20	55	13C5-PFHxA	318 > 272.9	1.36e4	1.36e4	0.1103	1.000	3.40	3.36	12.5	113.317	100.0
21	56	13C3-PFHxS	401.9 > 79.9	2.55e3	2.55e3	0.1103	1.000	4.17	4.13	12.5	113.317	100.0
22	57	13C8-PFOA	421.3 > 376	9.41e3	9.41e3	0.1103	1.000	4.54	4.50	12.5	113.317	100.0
23	58	13C9-PFNA	472.2 > 426.9	9.94e3	9.94e3	0.1103	1.000	4.97	4.93	12.5	113.317	100.0
24	59	13C4-PFOS	503 > 79.9	2.47e3	2.47e3	0.1103	1.000	5.05	5.01	12.5	113.317	100.0
25	60	13C6-PFDA	519.1 > 473.7	4.53e3	4.53e3	0.1103	1.000	5.34	5.31	12.5	113.317	100.0
26	61	13C7-PFUdA	570.1 > 524.8	7.99e3	7.99e3	0.1103	1.000	5.66	5.63	12.5	113.317	100.0
27	62	Total PFHxS	398.9 > 79.6	2.40e0	9.54e2	0.1103		4.17		0.0314	0.959	
28	63	Total PFOA	413 > 368.7	0.00e0	8.79e3	0.1103		4.54		0.000		
29	64	Total PFOS	499 > 79.9	2.80e1	3.06e3	0.1103		5.05		0.114	0.990	
30	65	Total N-MeFOSAA	570.1 > 419	0.00e0	2.61e3	0.1103		5.49		0.000		
31	66	Total N-EtFOSAA	584.2 > 419	0.00e0	2.82e3	0.1103		5.64		0.000		

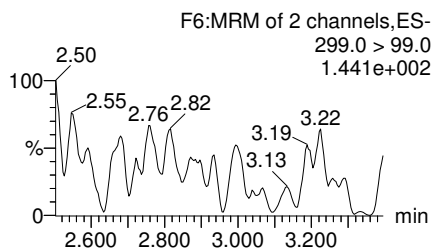
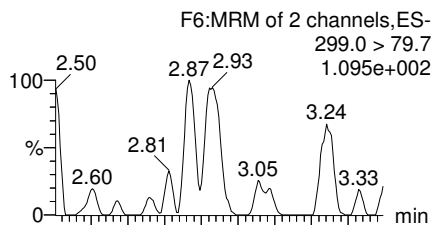
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Printed: Saturday, November 18, 2017 21:06:59 Pacific Standard Time

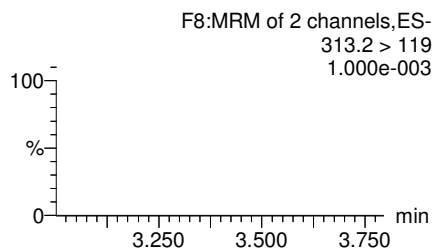
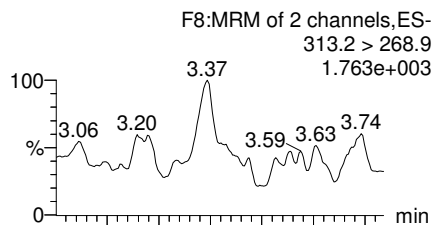
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Name: 171117M2\_27, Date: 17-Nov-2017, Time: 21:46:31, ID: 1701624-12 10W-AQ01-110717 0.11031, Description: 10W-AQ01-110717

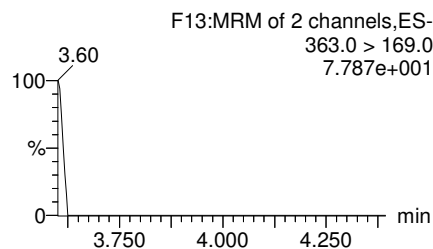
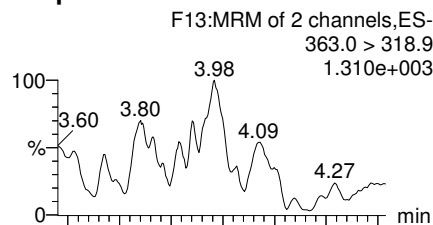
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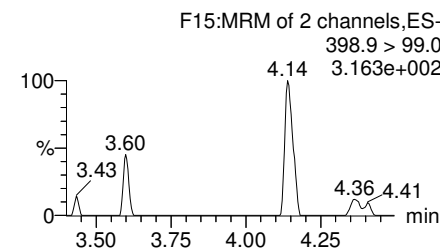
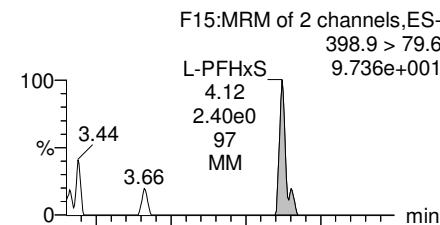
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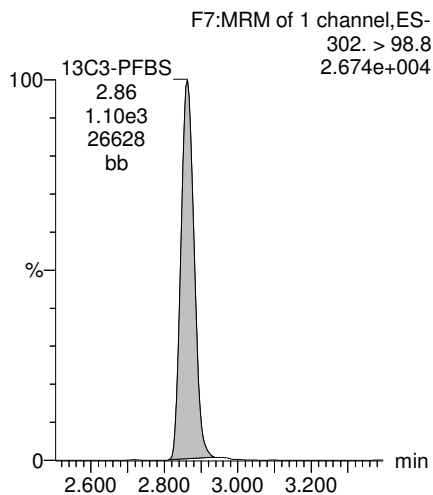
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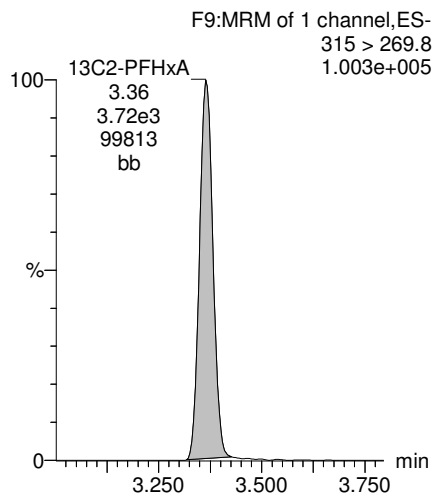
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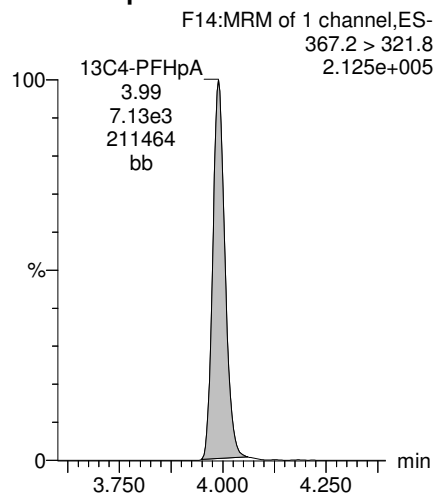
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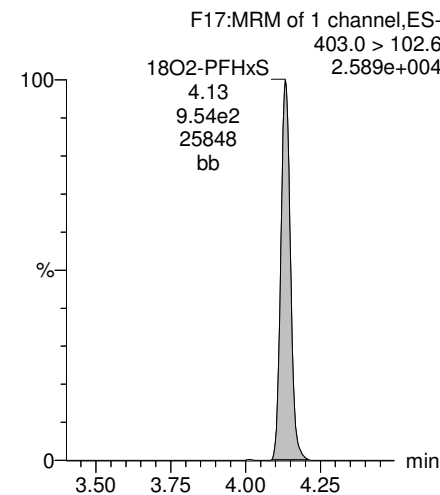
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

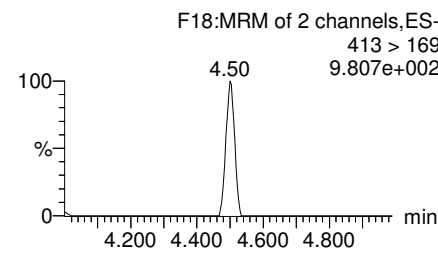
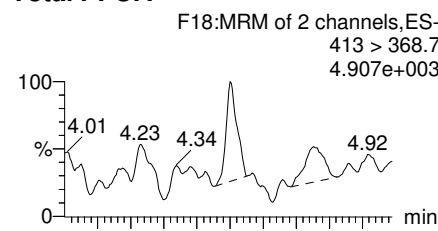


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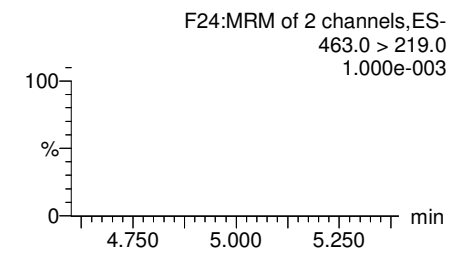
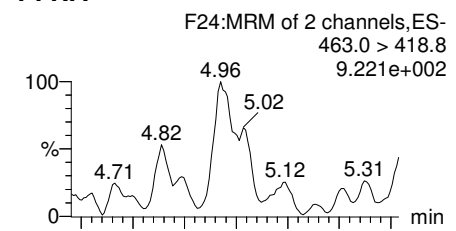
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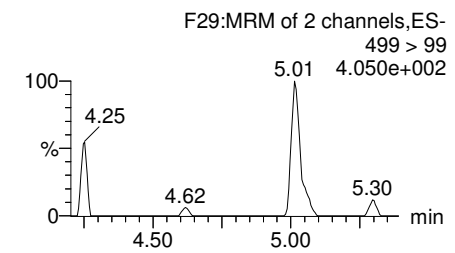
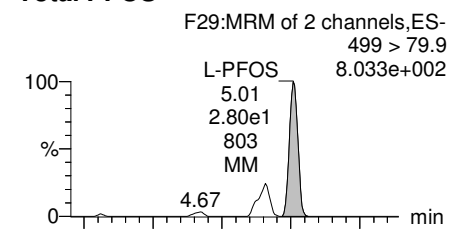
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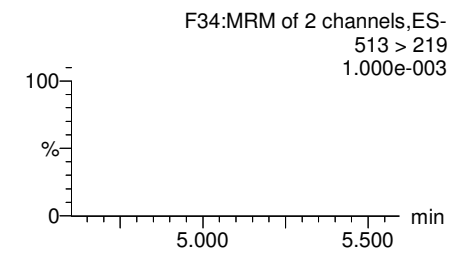
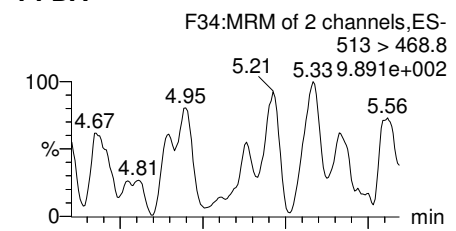
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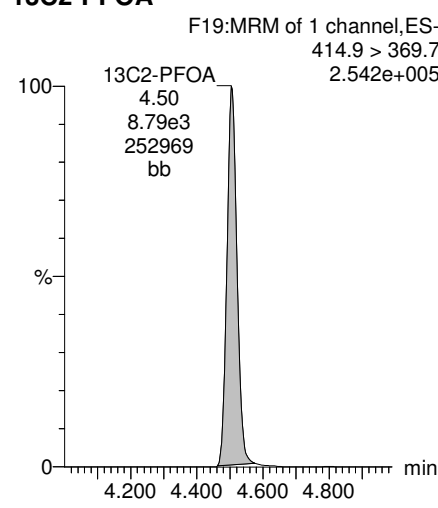
**Total PFOS**



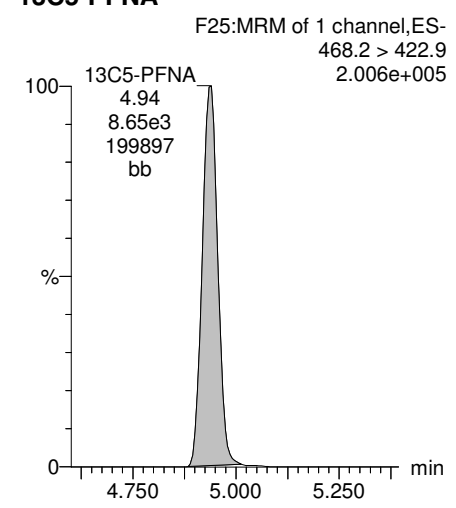
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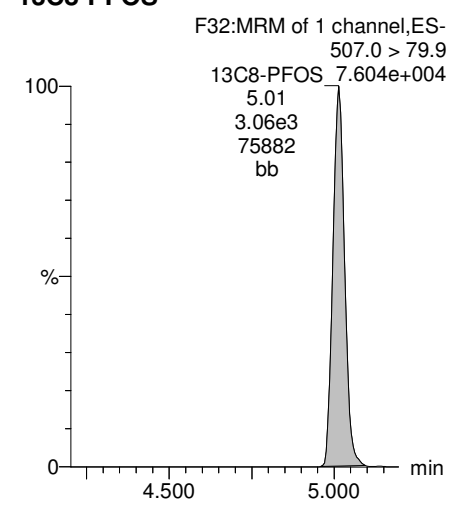
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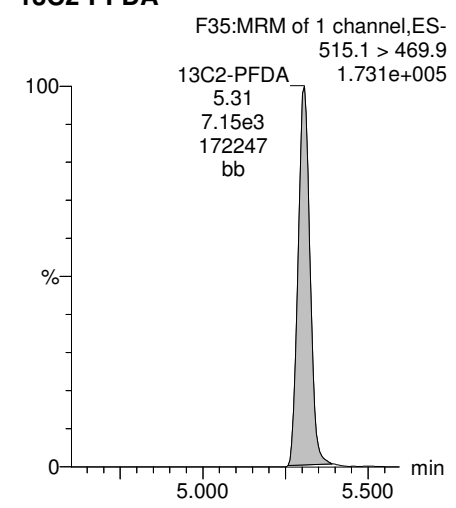
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**

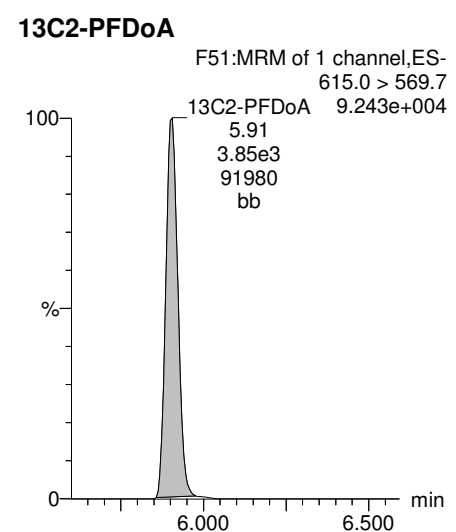
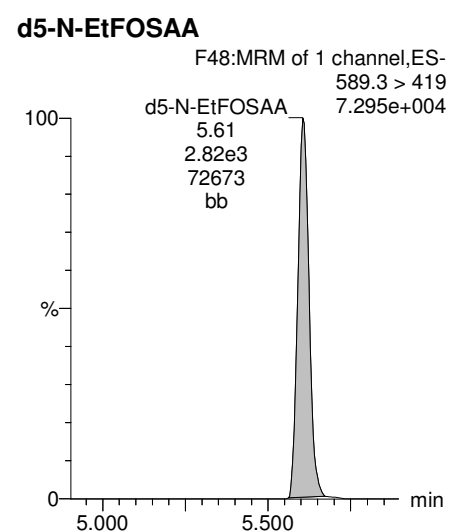
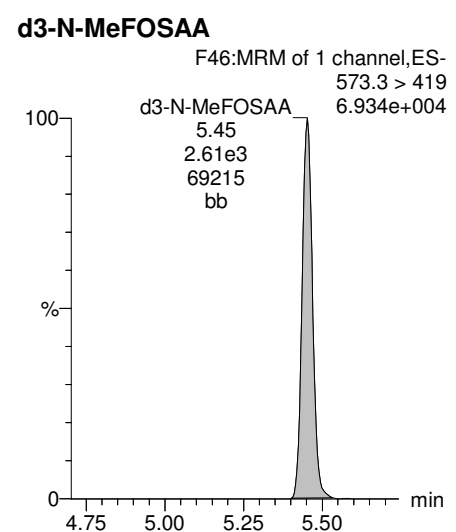
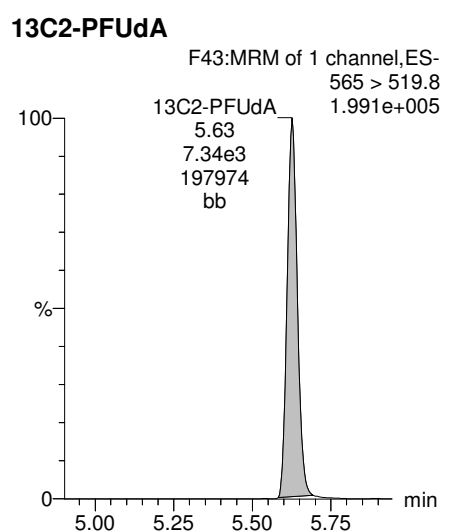
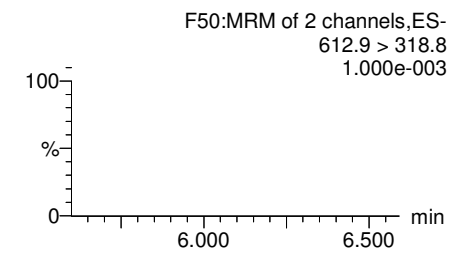
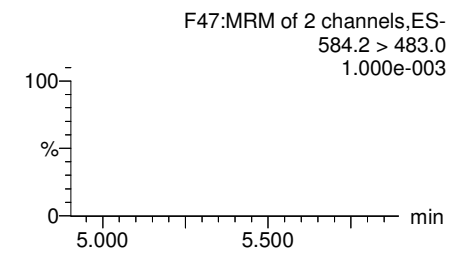
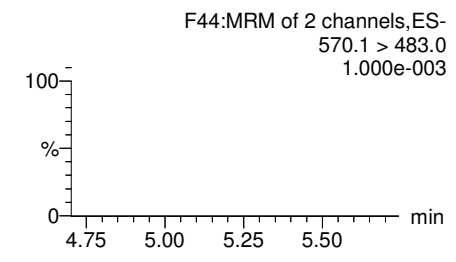
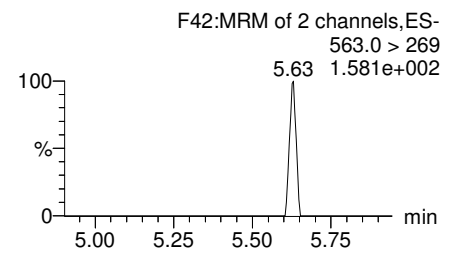
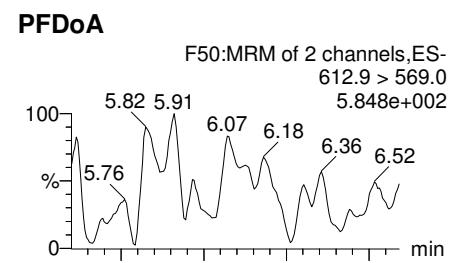
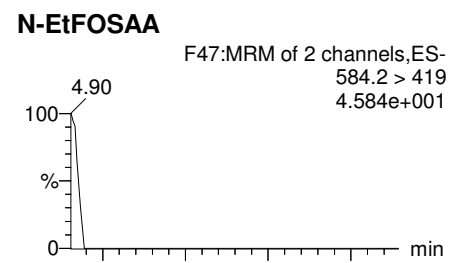
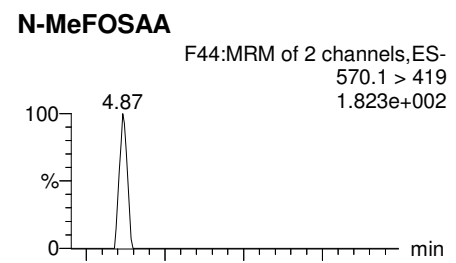
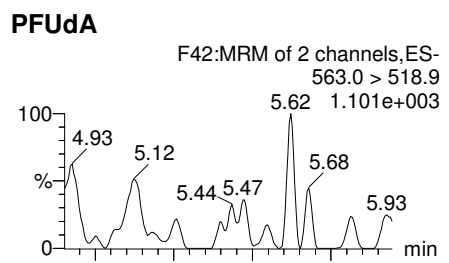




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Name: 171117M2\_27, Date: 17-Nov-2017, Time: 21:46:31, ID: 1701624-12 10W-AQ01-110717 0.11031, Description: 10W-AQ01-110717

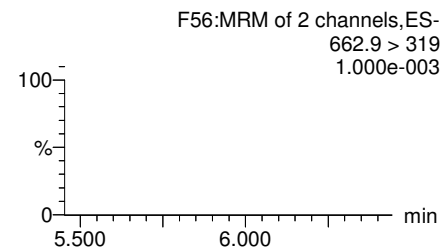
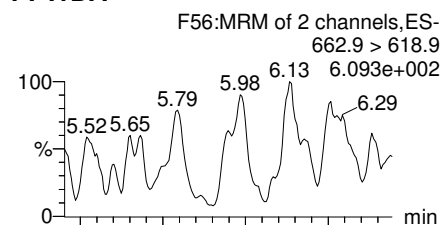


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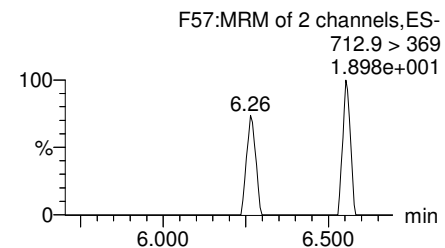
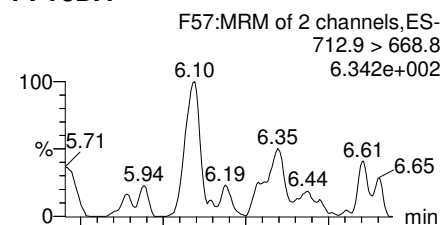
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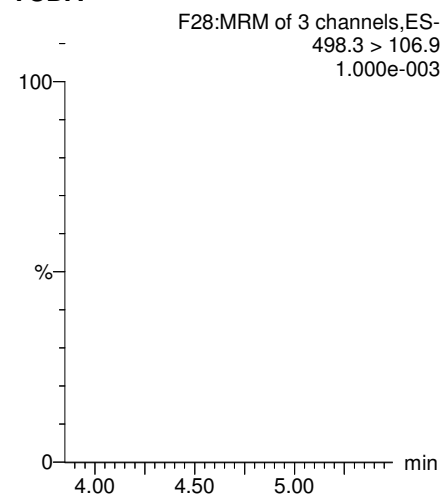
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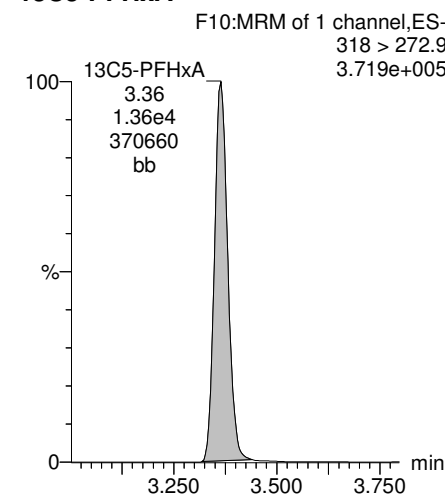
**PFTeDA**



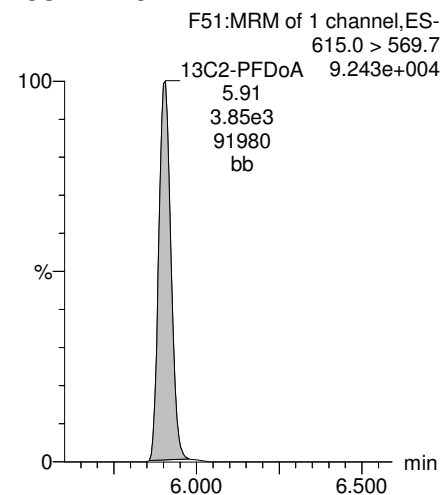
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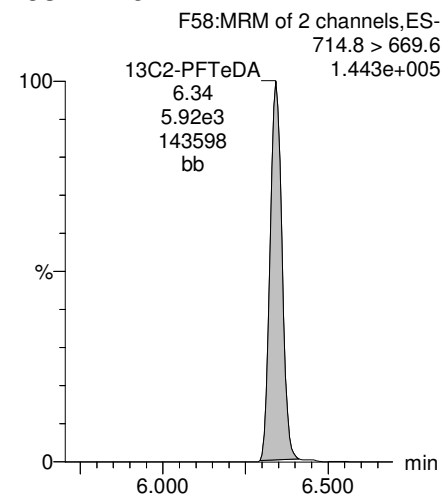
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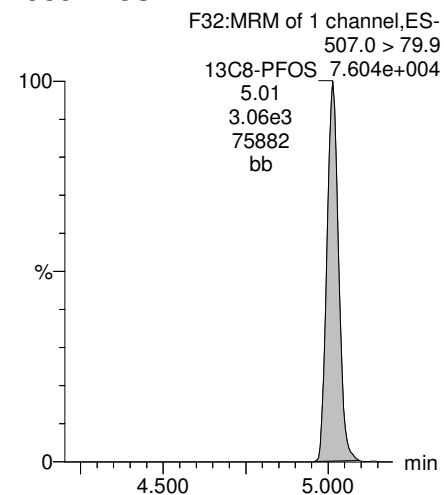
**13C2-PFDoA**



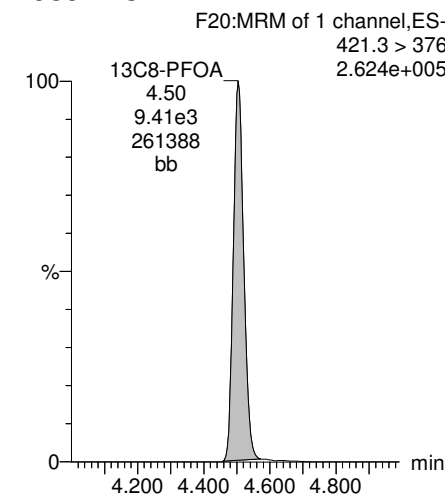
**13C2-PFTeDA**



**13C8-PFOS**



**13C8-PFOA**

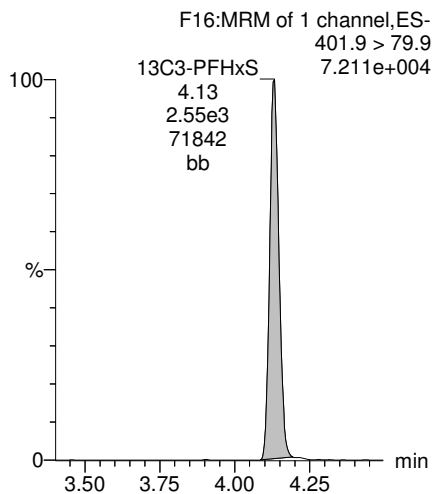


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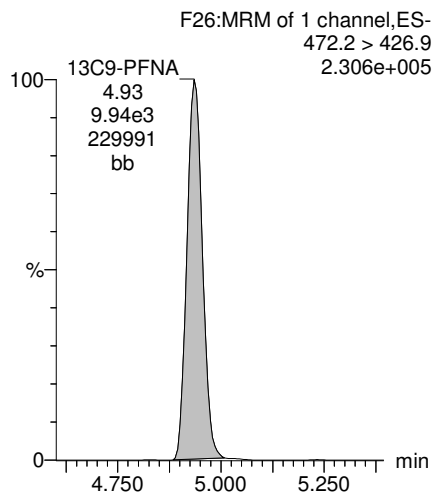
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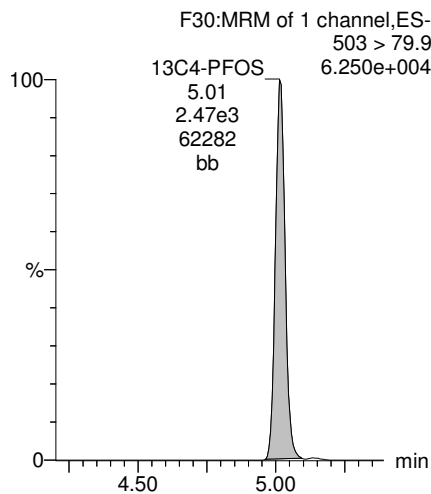
**13C3-PFHxS**



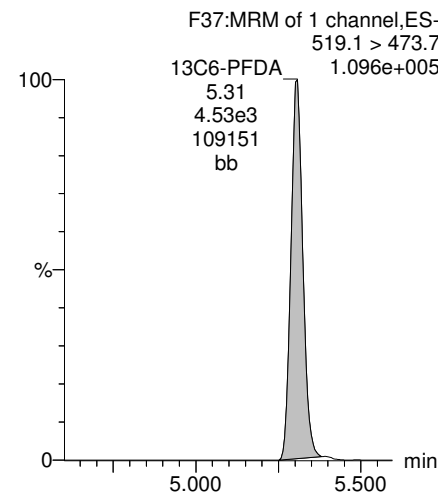
**13C9-PFNA**



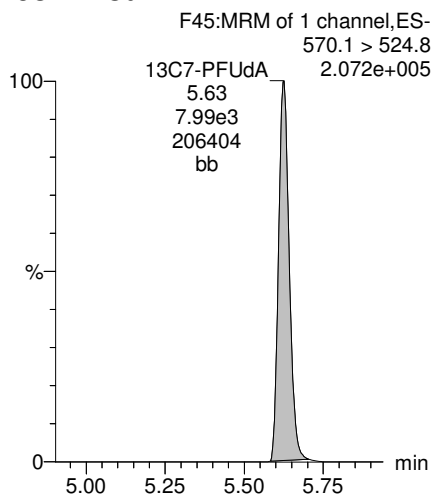
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUdA**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-31.qld

Last Altered: Saturday, November 18, 2017 21:11:12 Pacific Standard Time

Printed: Saturday, November 18, 2017 21:13:25 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_31, Date: 17-Nov-2017, Time: 22:31:14, ID: 1701624-13 10W-AQ02-110717 0.10337, Description: 10W-AQ02-110717

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7	2.38e2	1.31e3	0.1034		2.90	2.88	2.28	9.927	
2	4	PFHxA	313.2 > 268.9	2.19e3	4.00e3	0.1034		3.40	3.44	2.73	17.775	
3	5	PFHpA	363.0 > 318.9	4.20e2	7.87e3	0.1034		4.03	4.08	0.668	3.881	
4	6	L-PFHxS	398.9 > 79.6	3.04e3	1.21e3	0.1034		4.17	4.18	31.3	137.739	
5	9	L-PFOA	413 > 368.7	4.32e3	9.85e3	0.1034		4.54	4.59	5.48	52.148	
6	12	PFNA	463.0 > 418.8	1.44e2	9.56e3	0.1034		4.97	5.02	0.188	0.315	
7	14	L-PFOS	499 > 79.9	7.00e3	2.98e3	0.1034		5.05	5.06	29.4	278.713	
8	16	PFDA	513 > 468.8		9.55e3	0.1034		5.34				
9	18	N-MeFOSAA	570.1 > 419		3.13e3	0.1034		5.49				
10	19	N-EtFOSAA	584.2 > 419		3.06e3	0.1034		5.64				
11	20	PFUdA	563.0 > 518.9		1.12e4	0.1034		5.66				
12	22	PFDoA	612.9 > 569.0		5.20e3	0.1034		5.94				

Dataset: U:\Q4.PRO\results\171117M2\171117M2-31.qld

Last Altered: Saturday, November 18, 2017 21:11:12 Pacific Standard Time

Printed: Saturday, November 18, 2017 21:13:47 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_31, Date: 17-Nov-2017, Time: 22:31:14, ID: 1701624-13 10W-AQ02-110717 0.10337, Description: 10W-AQ02-110717

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9		5.20e3	0.1034		6.18				
2	25 PFTeDA	712.9 > 668.8		7.10e3	0.1034		6.37				
3	33 13C3-PFBS	302. > 98.8	1.31e3	1.34e4	0.1034	0.096	2.90	2.88	1.22	121.873	100.8
4	34 13C2-PFHxA	315 > 269.8	4.00e3	1.34e4	0.1034	0.767	3.40	3.44	3.72	47.006	97.2
5	35 13C4-PFHpA	367.2 > 321.8	7.87e3	1.34e4	0.1034	0.558	4.03	4.08	7.32	126.986	105.0
6	36 18O2-PFHxS	403.0 > 102.6	1.21e3	2.92e3	0.1034	0.430	4.17	4.18	5.19	116.695	96.5
7	37 13C2-6:2 FTS	429.1 > 408.9	1.94e3	9.91e3	0.1034	0.240	4.49	4.56	2.45	98.750	81.7
8	38 13C2-PFOA	414.9 > 369.7	9.85e3	9.91e3	0.1034	0.956	4.54	4.59	12.4	125.802	104.0
9	39 13C5-PFNA	468.2 > 422.9	9.56e3	1.09e4	0.1034	1.009	4.97	5.01	10.9	104.996	86.8
10	40 13C8-PFOSA	506.1 > 77.7	3.32e3	9.58e3	0.1034	0.524	5.02	5.06	4.33	79.894	66.1
11	41 13C8-PFOS	507.0 > 79.9	2.98e3	3.07e3	0.1034	1.080	5.05	5.06	12.1	108.806	90.0
12	42 13C2-PFDA	515.1 > 469.9	9.55e3	5.32e3	0.1034	1.982	5.34	5.38	22.5	109.620	90.7
13	43 13C2-8:2 FTS	529.1 > 508.7	7.16e2	1.34e4	0.1034	0.072	5.32	5.37	0.667	89.413	73.9
14	44 d3-N-MeFOSAA	573.3 > 419	3.13e3	9.58e3	0.1034	0.434	5.49	5.52	4.09	91.265	75.5
15	45 d5-N-EtFOSAA	589.3 > 419	3.06e3	9.58e3	0.1034	0.461	5.64	5.67	4.00	83.842	69.3
16	46 13C2-PFUdA	565 > 519.8	1.12e4	9.58e3	0.1034	1.171	5.66	5.68	14.7	121.114	100.2
17	47 13C2-PFDoA	615.0 > 569.7	5.20e3	9.58e3	0.1034	0.697	5.94	5.95	6.78	94.082	77.8
18	49 13C2-PFTeDA	714.8 > 669.6	7.10e3	9.58e3	0.1034	0.849	6.37	6.36	9.27	105.627	87.3
19	54 13C4-PFBA	217. > 171.8	8.91e3	8.91e3	0.1034	1.000	1.66	1.60	12.5	120.925	100.0
20	55 13C5-PFHxA	318 > 272.9	1.34e4	1.34e4	0.1034	1.000	3.40	3.44	12.5	120.925	100.0
21	56 13C3-PFHxS	401.9 > 79.9	2.92e3	2.92e3	0.1034	1.000	4.17	4.18	12.5	120.925	100.0
22	57 13C8-PFOA	421.3 > 376	9.91e3	9.91e3	0.1034	1.000	4.54	4.59	12.5	120.925	100.0
23	58 13C9-PFNA	472.2 > 426.9	1.09e4	1.09e4	0.1034	1.000	4.97	5.01	12.5	120.925	100.0
24	59 13C4-PFOS	503 > 79.9	3.07e3	3.07e3	0.1034	1.000	5.05	5.06	12.5	120.925	100.0
25	60 13C6-PFDA	519.1 > 473.7	5.32e3	5.32e3	0.1034	1.000	5.34	5.38	12.5	120.925	100.0
26	61 13C7-PFUdA	570.1 > 524.8	9.58e3	9.58e3	0.1034	1.000	5.66	5.68	12.5	120.925	100.0
27	62 Total PFHxS	398.9 > 79.6	3.04e3	1.21e3	0.1034		4.17		31.3	137.739	
28	63 Total PFOA	413 > 368.7	5.17e3	9.85e3	0.1034		4.54		6.56	59.376	
29	64 Total PFOS	499 > 79.9	9.81e3	2.98e3	0.1034		5.05		41.1	390.405	
30	65 Total N-MeFOSAA	570.1 > 419	0.00e0	3.13e3	0.1034		5.49		0.000		
31	66 Total N-EtFOSAA	584.2 > 419	0.00e0	3.06e3	0.1034		5.64		0.000		

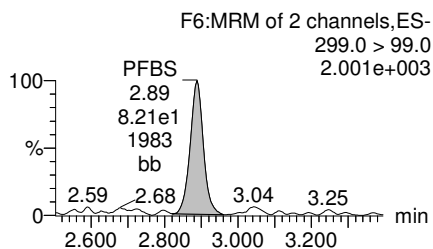
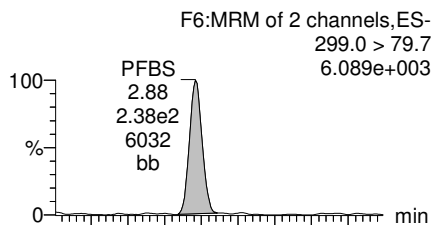
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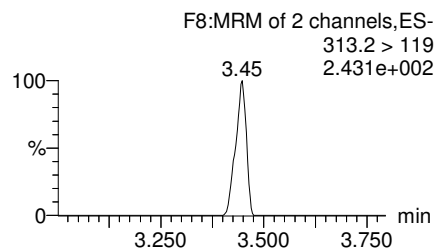
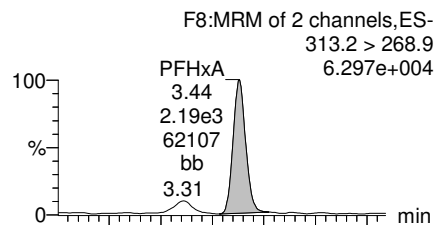
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Name: 171117M2\_31, Date: 17-Nov-2017, Time: 22:31:14, ID: 1701624-13 10W-AQ02-110717 0.10337, Description: 10W-AQ02-110717

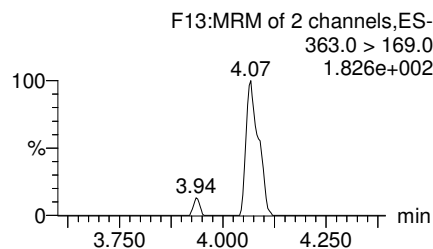
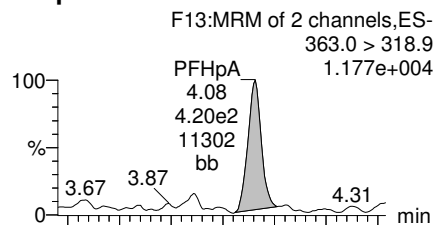
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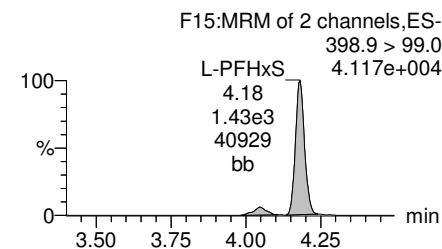
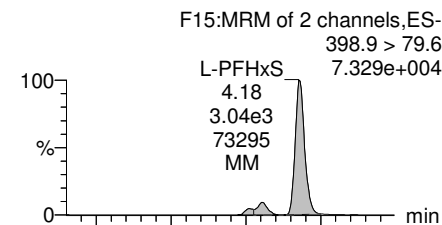
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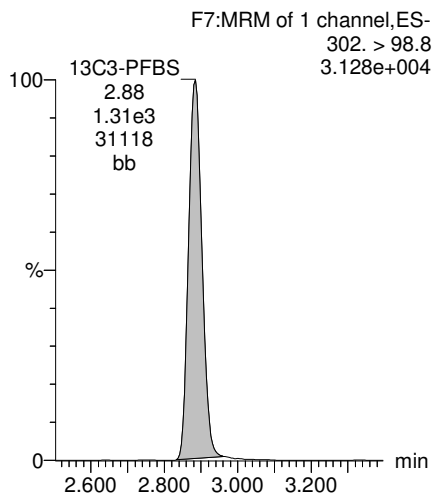
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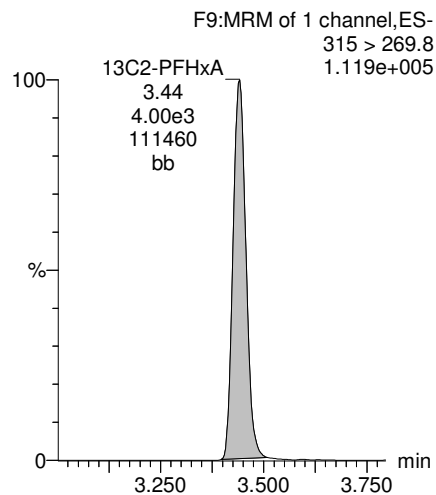
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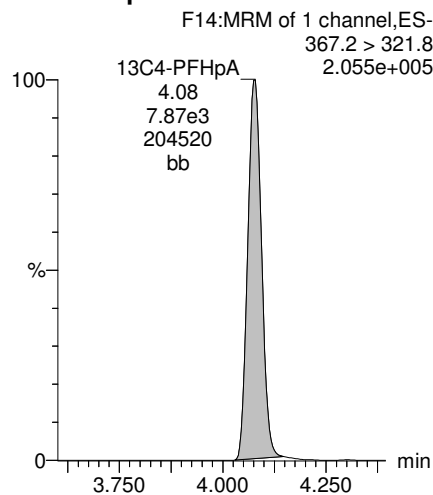
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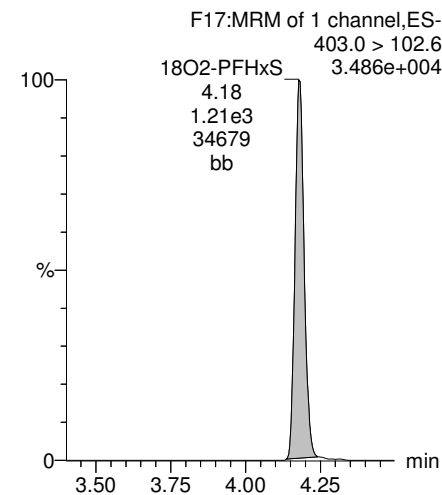
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**13C4-PFHpA**



**18O2-PFHxS**

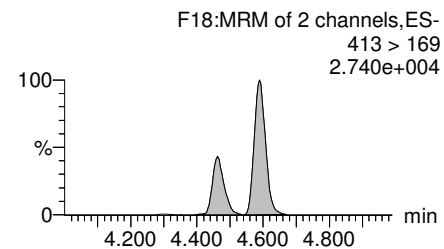
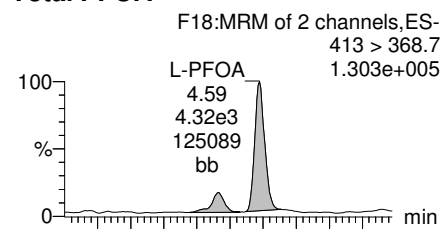


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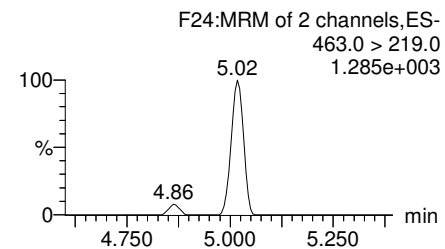
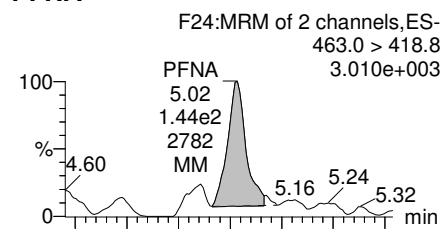
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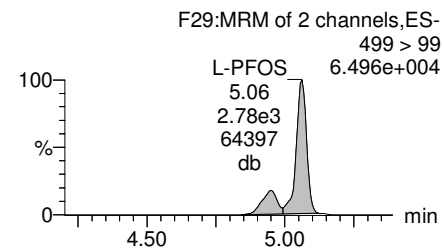
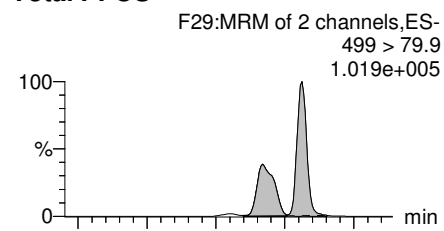
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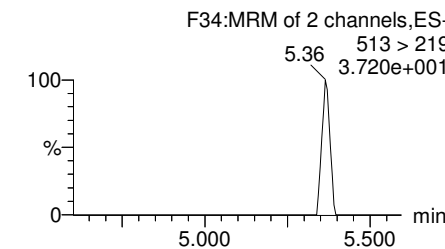
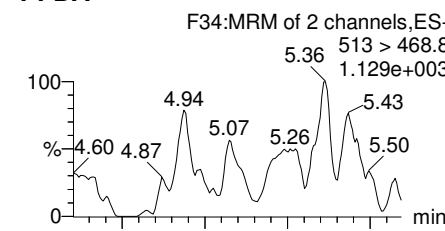
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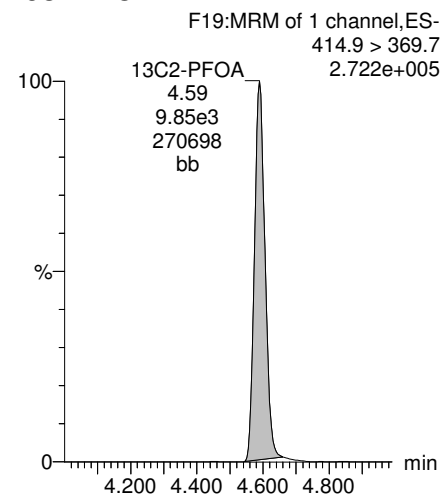
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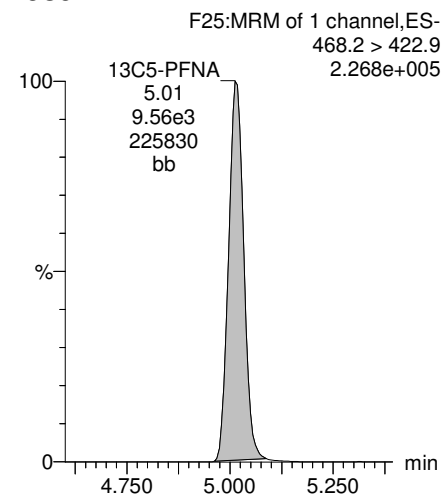
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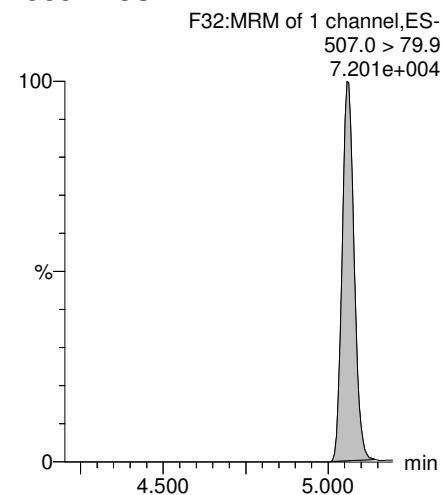
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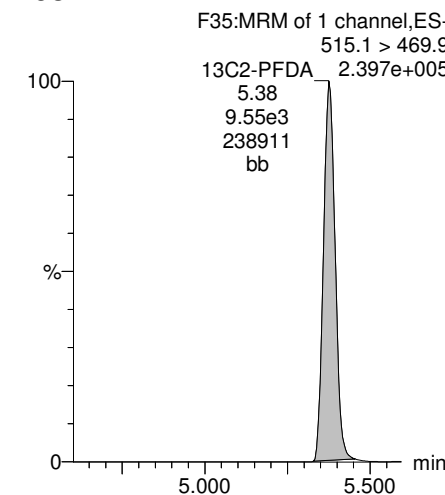
**13C5-PFNA**



**13C8-PFOS**



**13C2-PFDA**

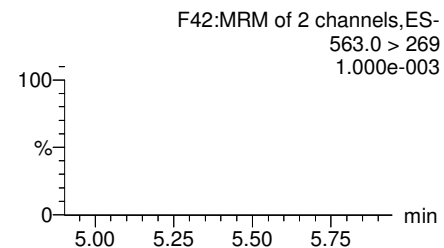
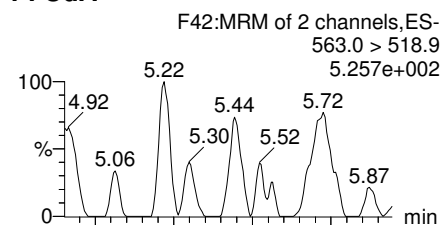


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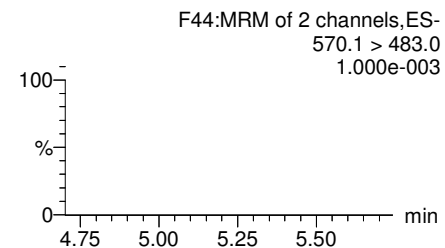
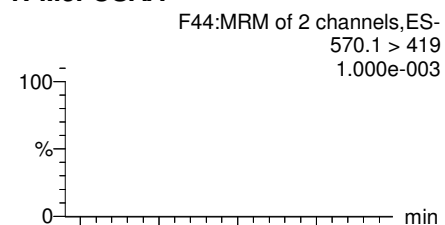
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Name: 171117M2\_31, Date: 17-Nov-2017, Time: 22:31:14, ID: 1701624-13 10W-AQ02-110717 0.10337, Description: 10W-AQ02-110717

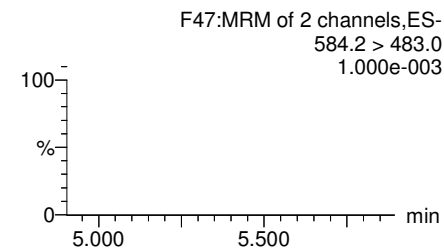
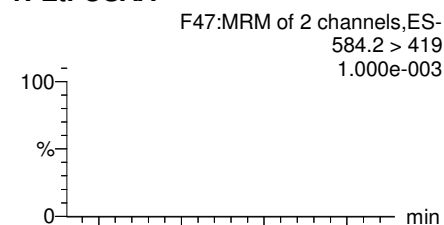
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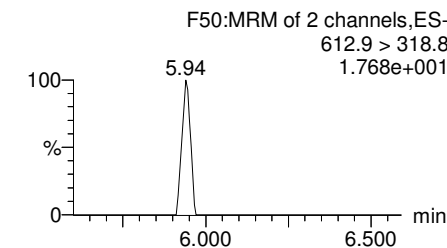
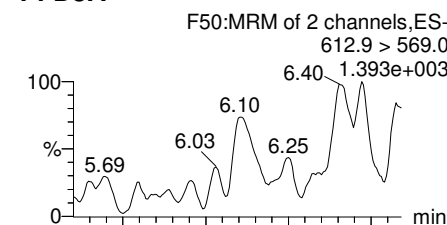
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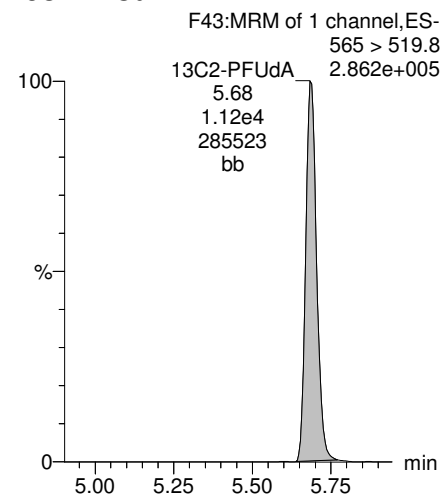
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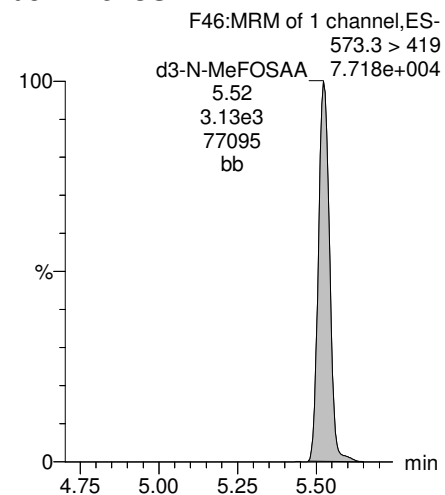
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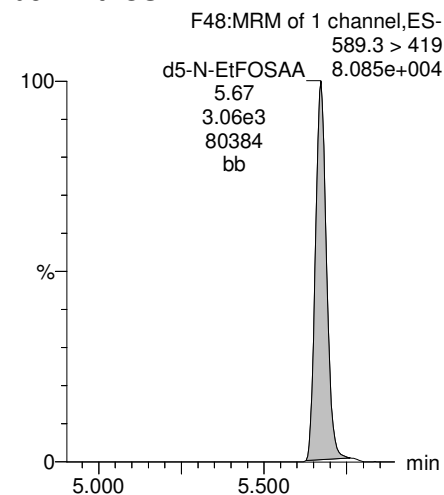
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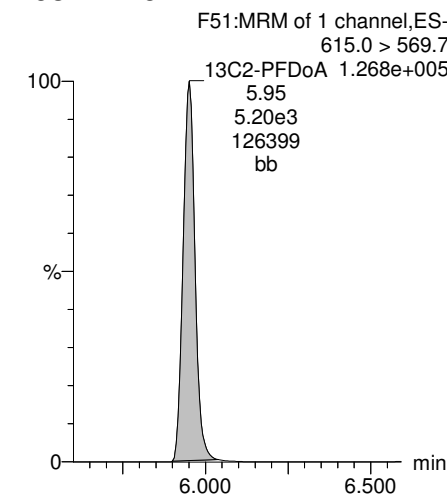
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**d5-N-EtFOSAA**



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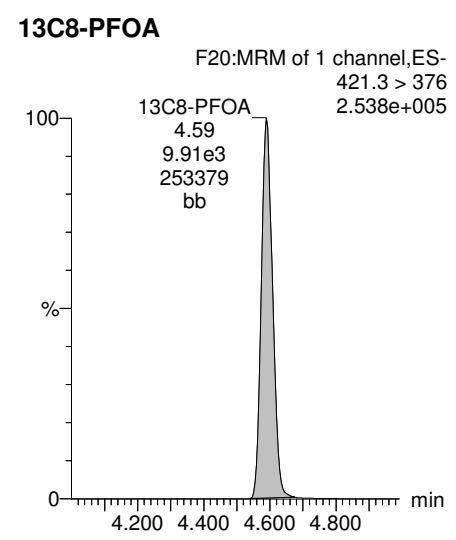
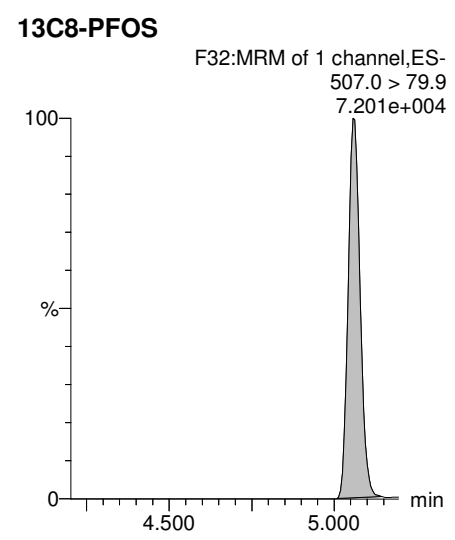
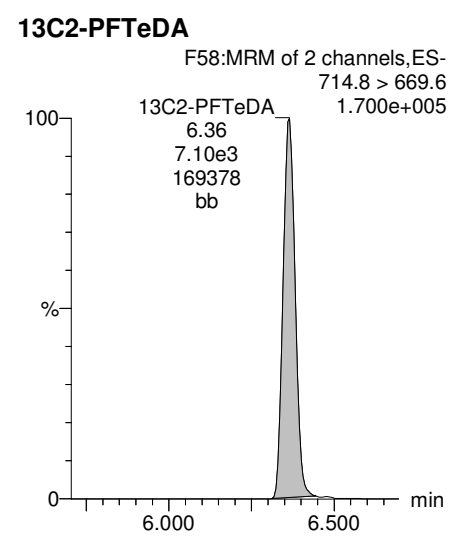
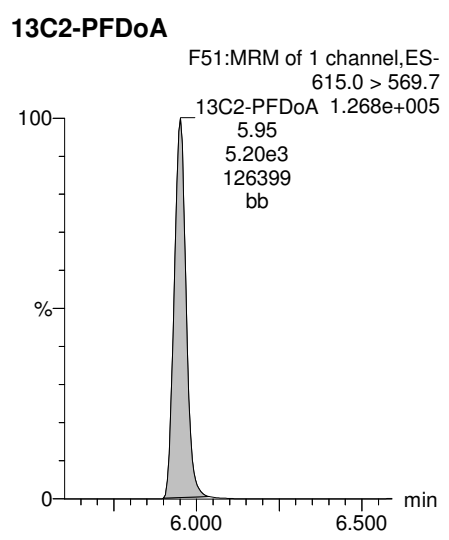
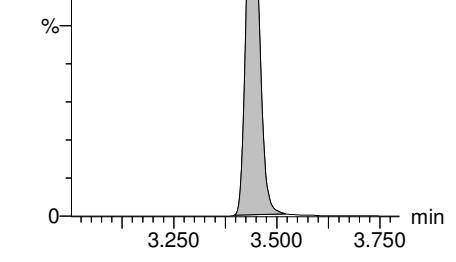
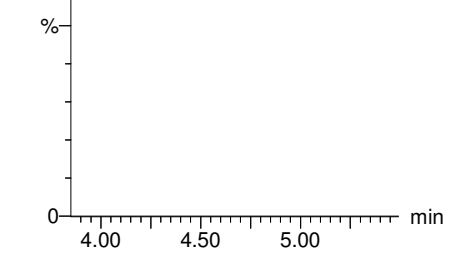
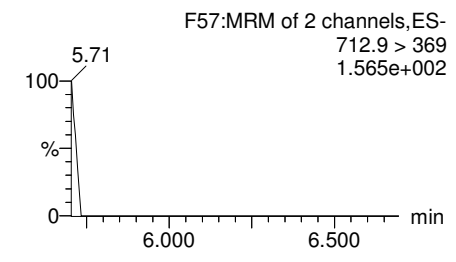
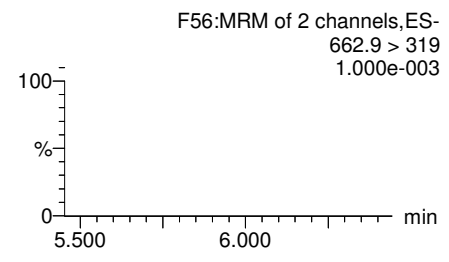
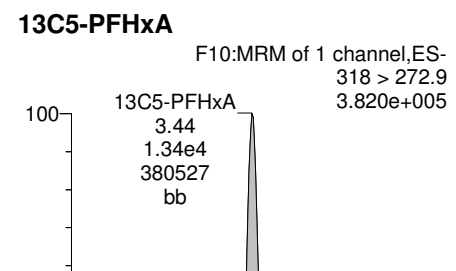
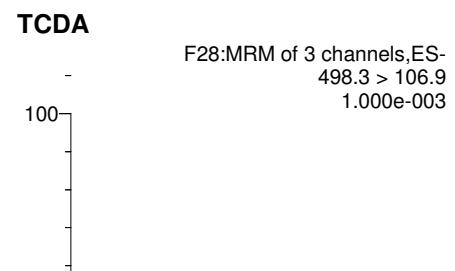
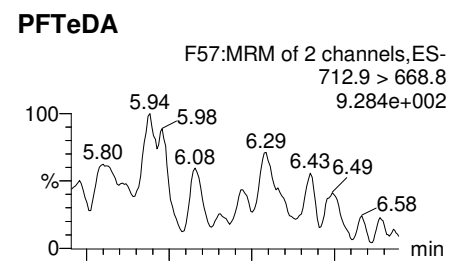
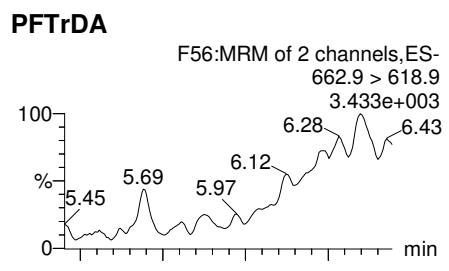




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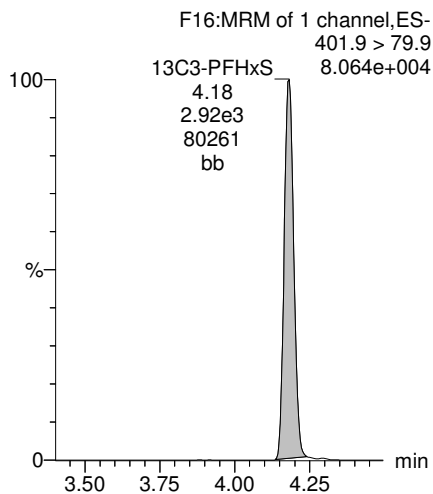


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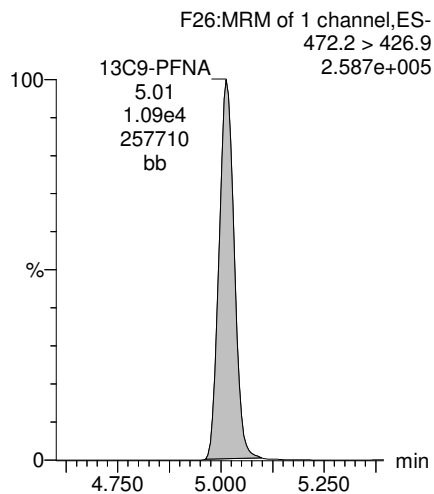
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Printed: Saturday, November 18, 2017 21:13:47 Pacific Standard Time

Name: 171117M2\_31, Date: 17-Nov-2017, Time: 22:31:14, ID: 1701624-13 10W-AQ02-110717 0.10337, Description: 10W-AQ02-110717

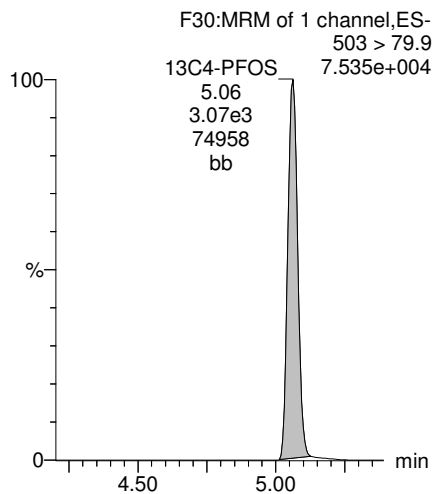
**13C3-PFHxS**



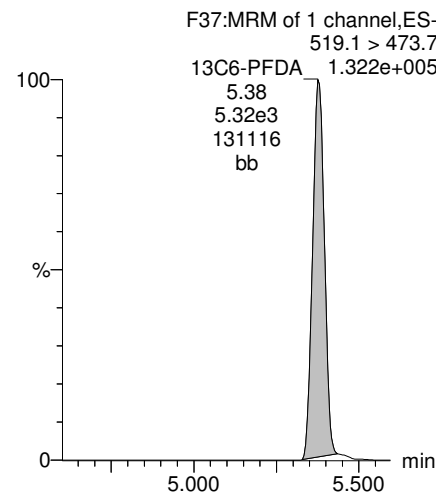
**13C9-PFNA**



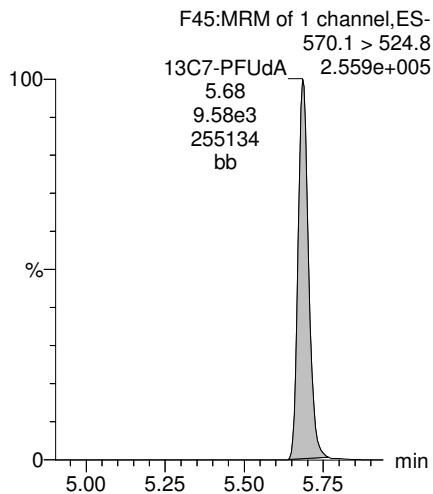
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUdA**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-32.qld

Last Altered: Saturday, November 18, 2017 21:18:20 Pacific Standard Time

Printed: Saturday, November 18, 2017 21:19:42 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_32, Date: 17-Nov-2017, Time: 22:42:24, ID: 1701624-14 10W-AQ03-110717 0.10786, Description: 10W-AQ03-110717

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7	3.30e2	1.11e3	0.1079		2.90	2.88	3.71	15.668	
2	4	PFHxA	313.2 > 268.9	4.09e3	3.79e3	0.1079		3.40	3.44	5.40	34.584	
3	5	PFHpA	363.0 > 318.9	6.88e2	7.72e3	0.1079		4.03	4.08	1.11	6.793	
4	6	L-PFHxS	398.9 > 79.6	7.23e3	1.08e3	0.1079		4.17	4.18	84.1	352.634	
5	9	L-PFOA	413 > 368.7	6.12e3	8.75e3	0.1079		4.54	4.59	8.74	81.839	
6	12	PFNA	463.0 > 418.8	9.77e1	9.20e3	0.1079		4.97	5.02	0.133		
7	14	L-PFOS	499 > 79.9	1.10e4	2.55e3	0.1079		5.05	5.06	53.9	490.448	
8	16	PFDA	513 > 468.8		7.70e3	0.1079		5.34				
9	18	N-MeFOSAA	570.1 > 419		2.86e3	0.1079		5.49				
10	19	N-EtFOSAA	584.2 > 419		3.07e3	0.1079		5.64				
11	20	PFUdA	563.0 > 518.9		7.84e3	0.1079		5.66				
12	22	PFDoA	612.9 > 569.0		5.63e3	0.1079		5.94				

Dataset: U:\Q4.PRO\results\171117M2\171117M2-32.qld

Last Altered: Saturday, November 18, 2017 21:18:20 Pacific Standard Time

Printed: Saturday, November 18, 2017 21:19:58 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_32, Date: 17-Nov-2017, Time: 22:42:24, ID: 1701624-14 10W-AQ03-110717 0.10786, Description: 10W-AQ03-110717

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9		5.63e3	0.1079		6.18				
2	25 PFTeDA	712.9 > 668.8		6.66e3	0.1079		6.37				
3	33 13C3-PFBS	302. > 98.8	1.11e3	1.26e4	0.1079	0.096	2.90	2.89	1.10	105.945	91.4
4	34 13C2-PFHxA	315 > 269.8	3.79e3	1.26e4	0.1079	0.767	3.40	3.44	3.76	45.414	98.0
5	35 13C4-PFHpA	367.2 > 321.8	7.72e3	1.26e4	0.1079	0.558	4.03	4.08	7.65	127.156	109.7
6	36 18O2-PFHxS	403.0 > 102.6	1.08e3	2.80e3	0.1079	0.430	4.17	4.18	4.80	103.451	89.3
7	37 13C2-6:2 FTS	429.1 > 408.9	1.63e3	9.09e3	0.1079	0.240	4.49	4.56	2.25	86.896	75.0
8	38 13C2-PFOA	414.9 > 369.7	8.75e3	9.09e3	0.1079	0.956	4.54	4.59	12.0	116.674	100.7
9	39 13C5-PFNA	468.2 > 422.9	9.20e3	1.11e4	0.1079	1.009	4.97	5.01	10.3	95.072	82.0
10	40 13C8-PFOSA	506.1 > 77.7	2.69e3	8.84e3	0.1079	0.524	5.02	5.06	3.80	67.134	57.9
11	41 13C8-PFOS	507.0 > 79.9	2.55e3	2.83e3	0.1079	1.080	5.05	5.06	11.2	96.386	83.2
12	42 13C2-PFDA	515.1 > 469.9	7.70e3	5.86e3	0.1079	1.982	5.34	5.38	16.4	76.868	66.3
13	43 13C2-8:2 FTS	529.1 > 508.7	7.75e2	1.26e4	0.1079	0.072	5.32	5.37	0.769	98.837	85.3
14	44 d3-N-MeFOSAA	573.3 > 419	2.86e3	8.84e3	0.1079	0.434	5.49	5.52	4.04	86.345	74.5
15	45 d5-N-EtFOSAA	589.3 > 419	3.07e3	8.84e3	0.1079	0.461	5.64	5.67	4.34	87.275	75.3
16	46 13C2-PFUdA	565 > 519.8	7.84e3	8.84e3	0.1079	1.171	5.66	5.69	11.1	87.754	75.7
17	47 13C2-PFDoA	615.0 > 569.7	5.63e3	8.84e3	0.1079	0.697	5.94	5.95	7.95	105.756	91.3
18	49 13C2-PFTeDA	714.8 > 669.6	6.66e3	8.84e3	0.1079	0.849	6.37	6.36	9.41	102.809	88.7
19	54 13C4-PFBA	217. > 171.8	7.94e3	7.94e3	0.1079	1.000	1.66	1.60	12.5	115.891	100.0
20	55 13C5-PFHxA	318 > 272.9	1.26e4	1.26e4	0.1079	1.000	3.40	3.44	12.5	115.891	100.0
21	56 13C3-PFHxS	401.9 > 79.9	2.80e3	2.80e3	0.1079	1.000	4.17	4.18	12.5	115.891	100.0
22	57 13C8-PFOA	421.3 > 376	9.09e3	9.09e3	0.1079	1.000	4.54	4.59	12.5	115.891	100.0
23	58 13C9-PFNA	472.2 > 426.9	1.11e4	1.11e4	0.1079	1.000	4.97	5.02	12.5	115.891	100.0
24	59 13C4-PFOS	503 > 79.9	2.83e3	2.83e3	0.1079	1.000	5.05	5.06	12.5	115.891	100.0
25	60 13C6-PFDA	519.1 > 473.7	5.86e3	5.86e3	0.1079	1.000	5.34	5.38	12.5	115.891	100.0
26	61 13C7-PFUdA	570.1 > 524.8	8.84e3	8.84e3	0.1079	1.000	5.66	5.69	12.5	115.891	100.0
27	62 Total PFHxS	398.9 > 79.6	7.23e3	1.08e3	0.1079		4.17		84.1	352.634	
28	63 Total PFOA	413 > 368.7	7.24e3	8.75e3	0.1079		4.54		10.3	93.942	
29	64 Total PFOS	499 > 79.9	1.10e4	2.55e3	0.1079		5.05		53.9	490.448	
30	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.86e3	0.1079		5.49		0.000		
31	66 Total N-EtFOSAA	584.2 > 419	0.00e0	3.07e3	0.1079		5.64		0.000		

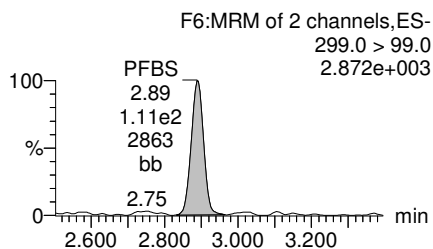
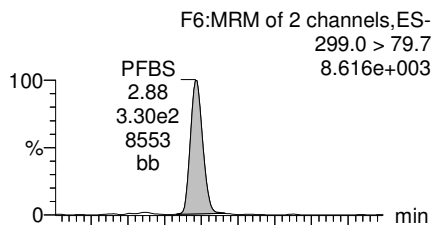
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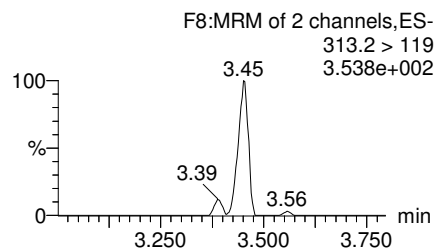
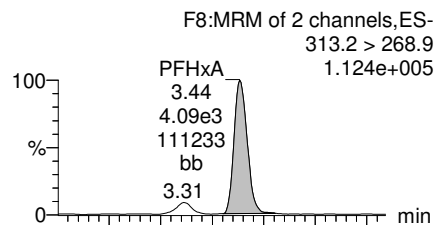
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Name: 171117M2\_32, Date: 17-Nov-2017, Time: 22:42:24, ID: 1701624-14 10W-AQ03-110717 0.10786, Description: 10W-AQ03-110717

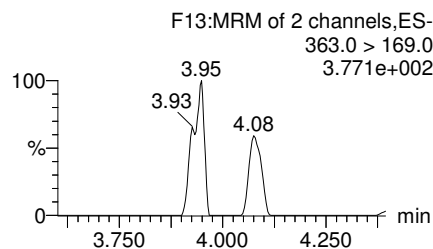
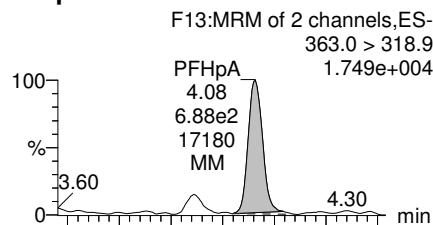
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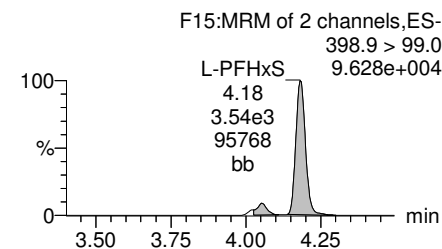
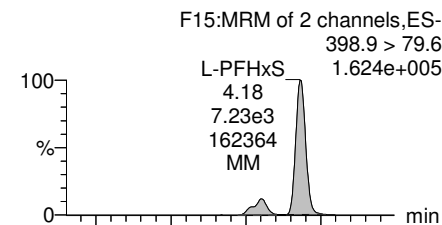
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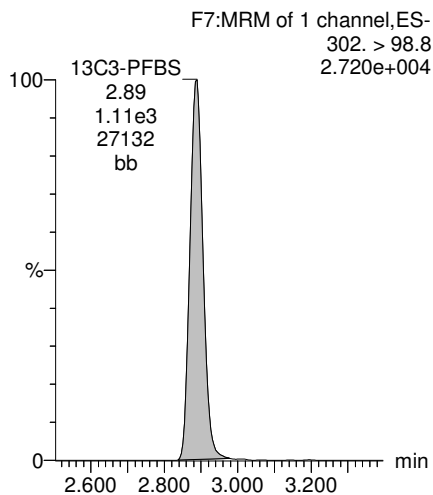
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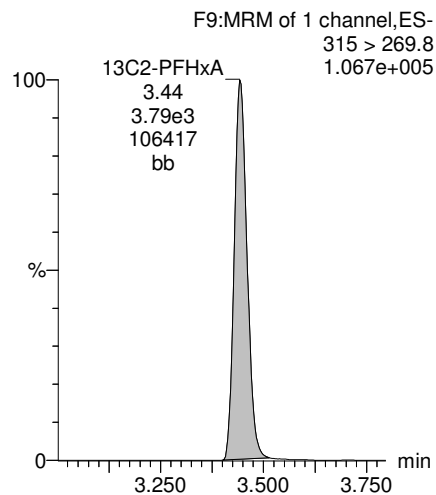
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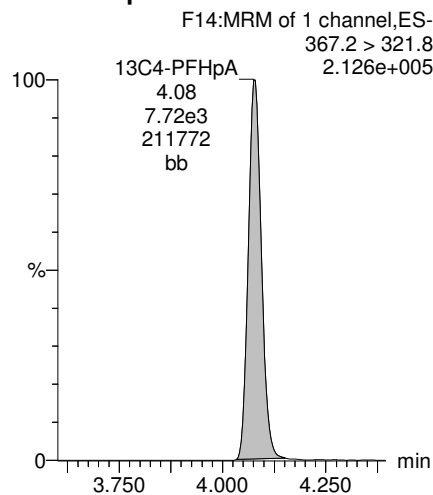
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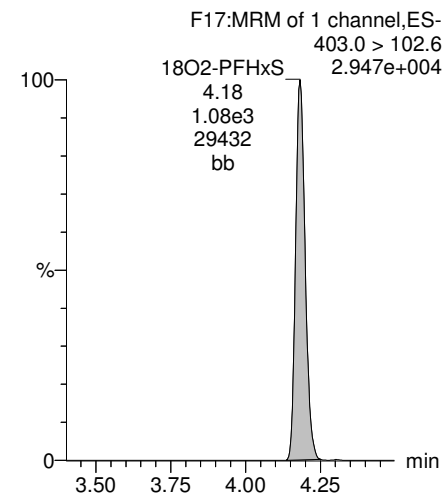
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**13C4-PFHpA**



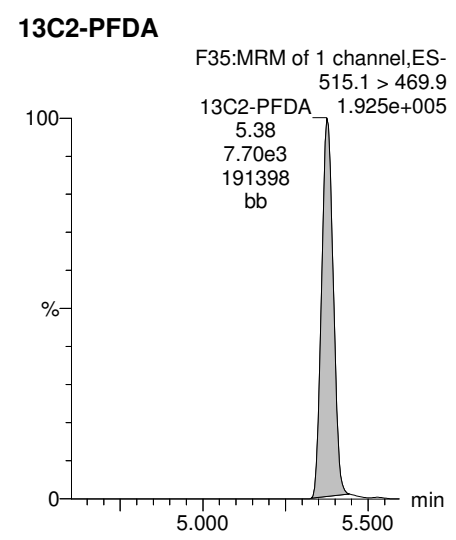
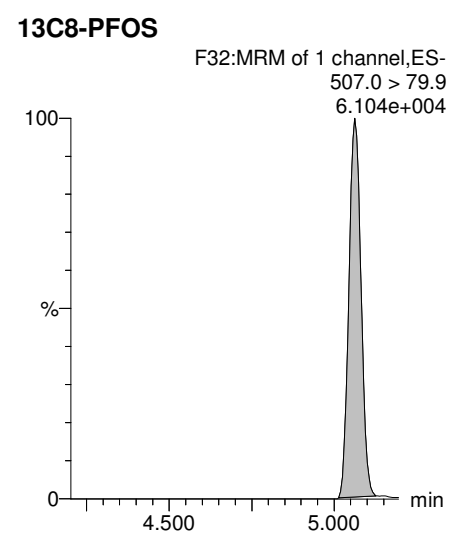
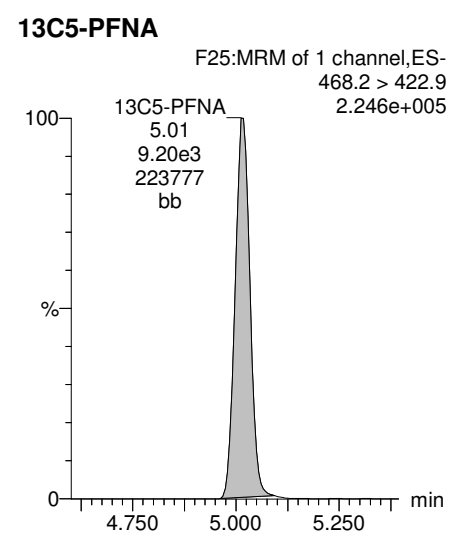
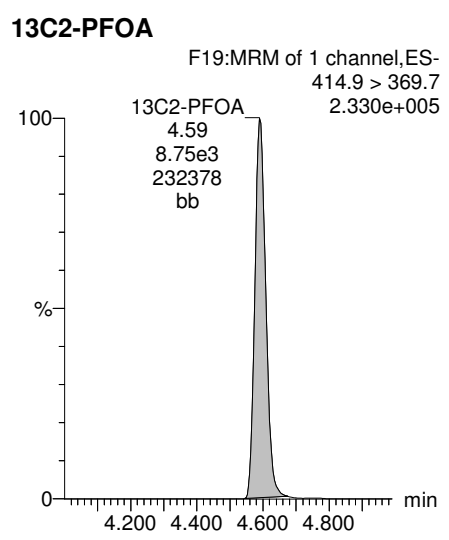
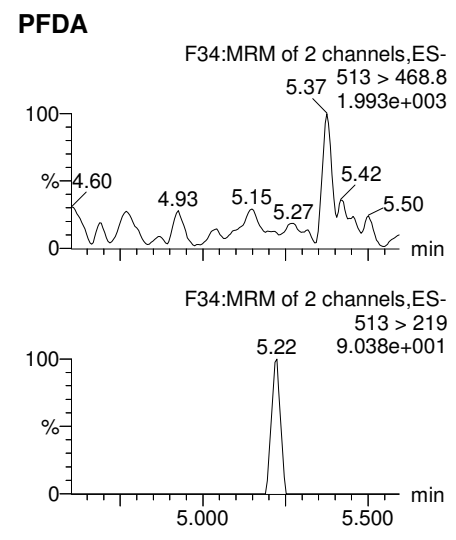
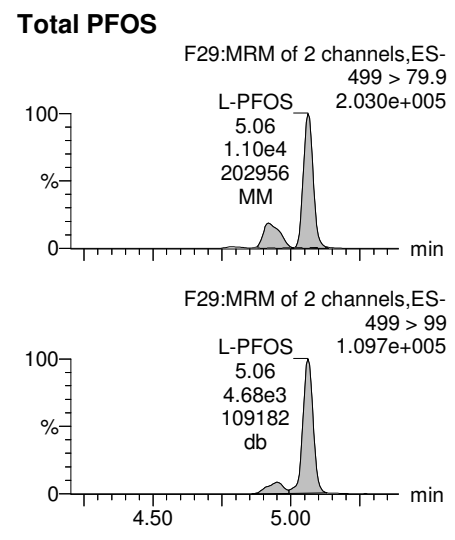
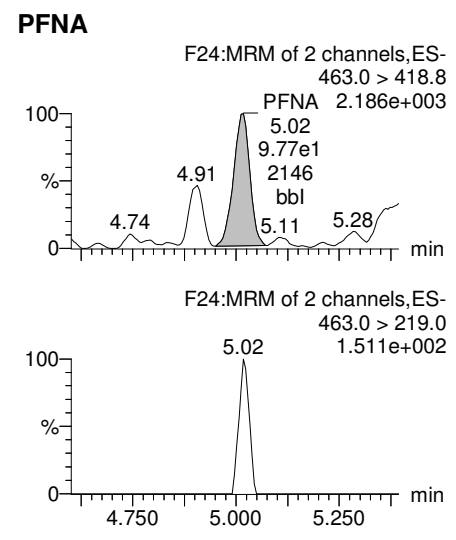
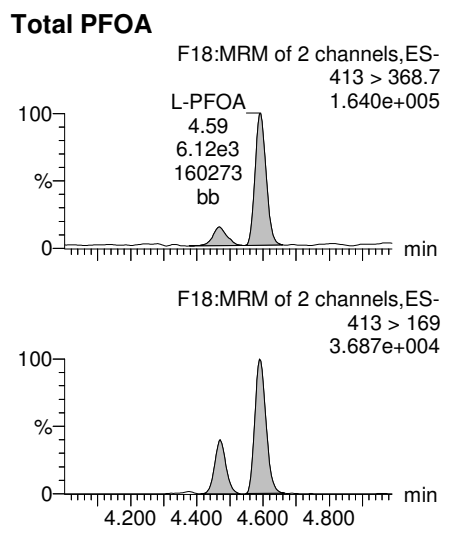
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Name: 171117M2\_32, Date: 17-Nov-2017, Time: 22:42:24, ID: 1701624-14 10W-AQ03-110717 0.10786, Description: 10W-AQ03-110717

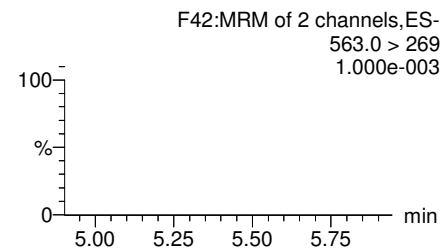
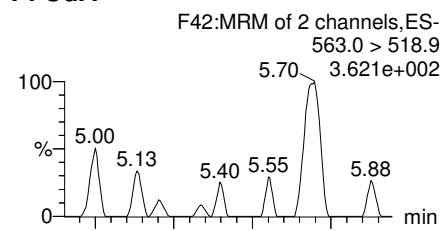


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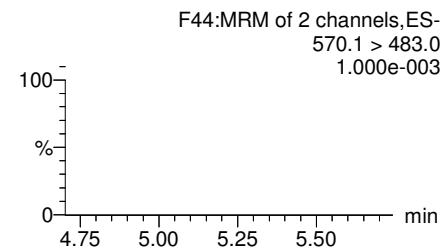
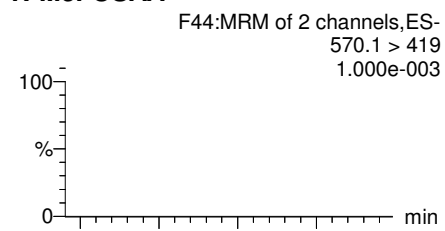
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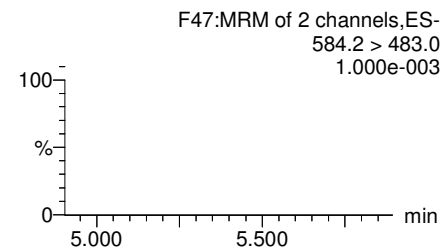
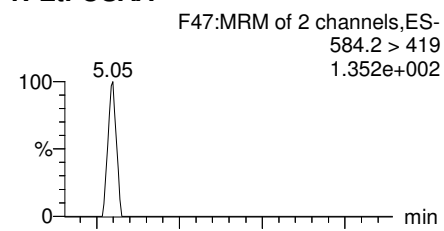
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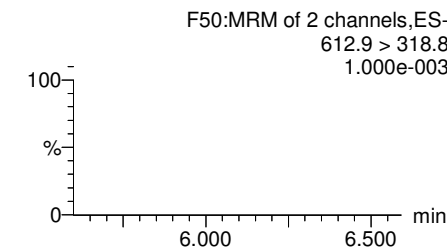
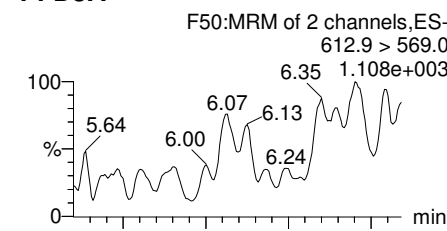
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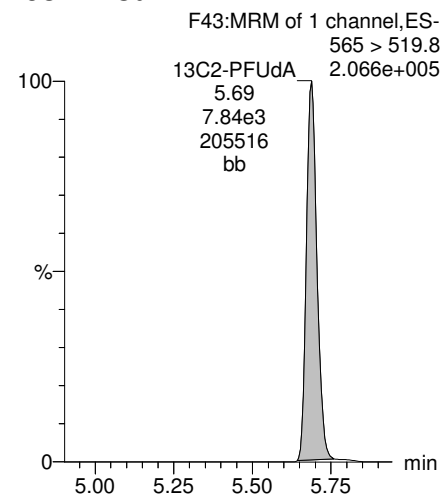
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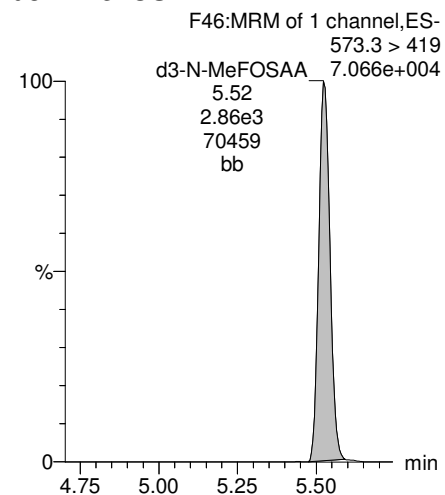
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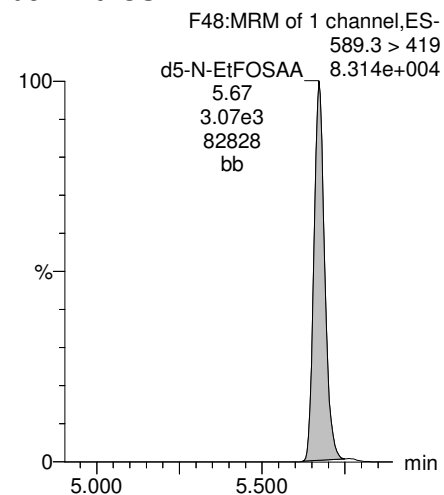
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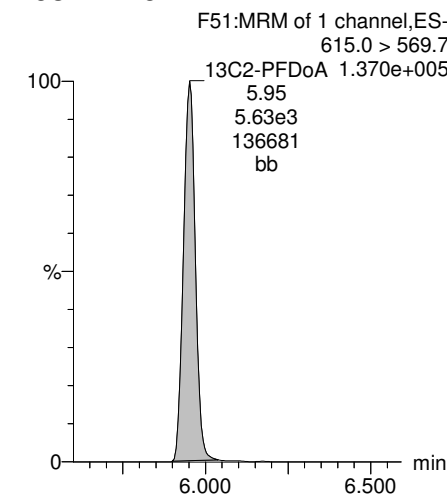
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**d5-N-EtFOSAA**



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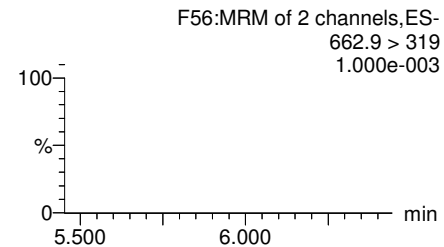
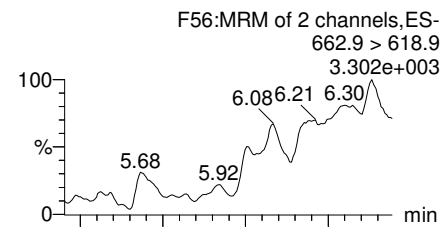


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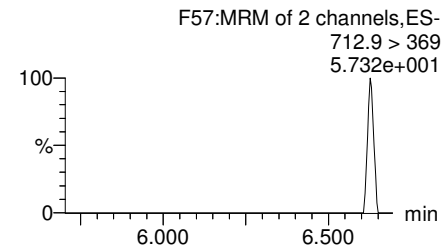
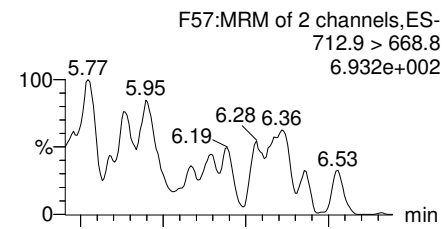
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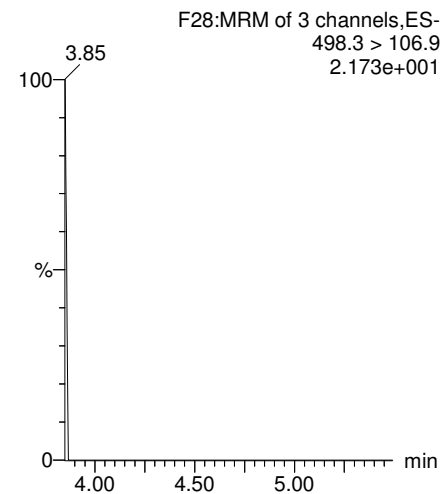
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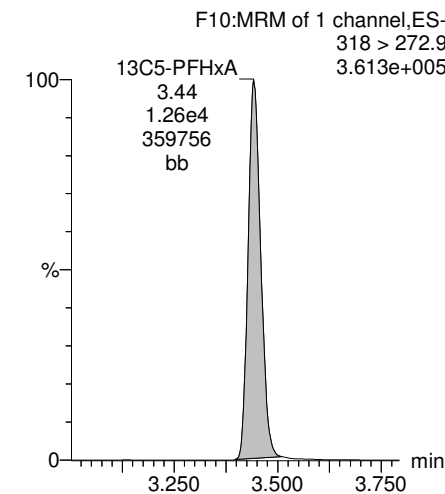
**PFTeDA**



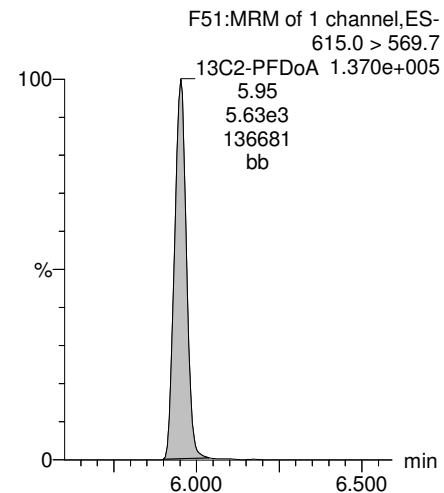
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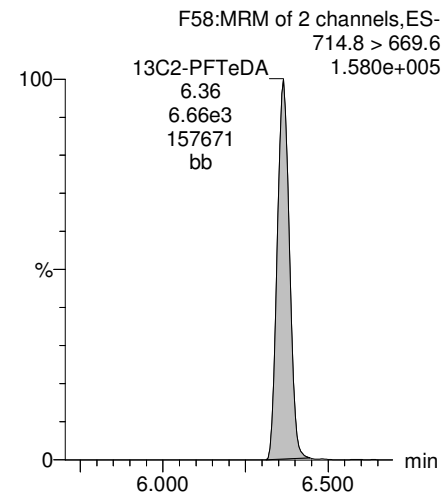
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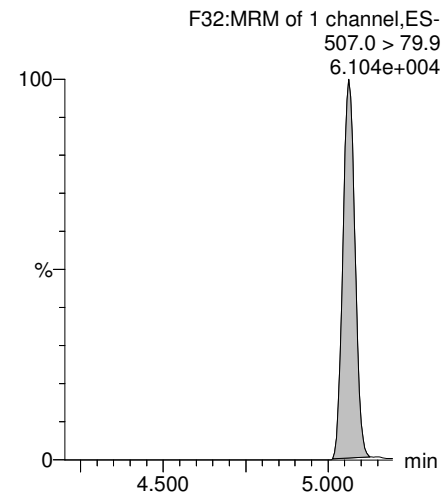
**13C2-PFDoA**



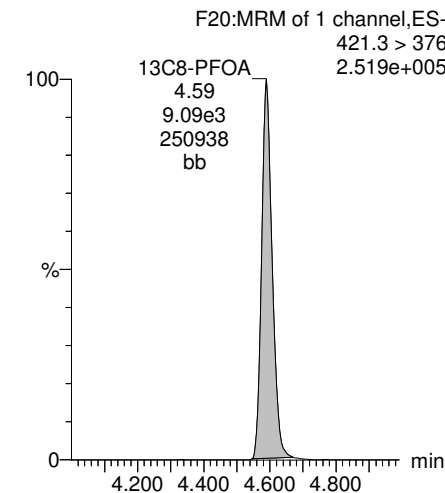
**13C2-PFTeDA**



**13C8-PFOS**



**13C8-PFOA**



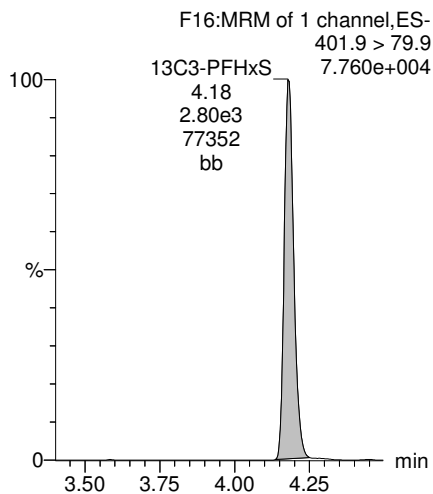


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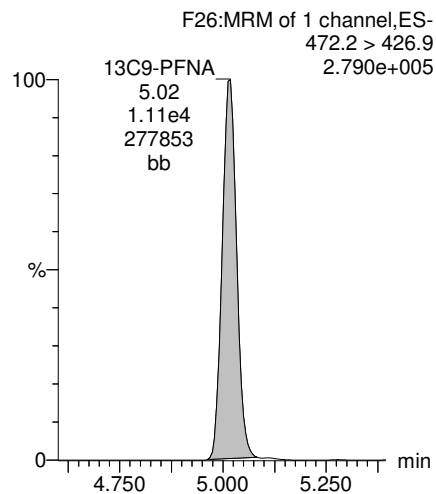
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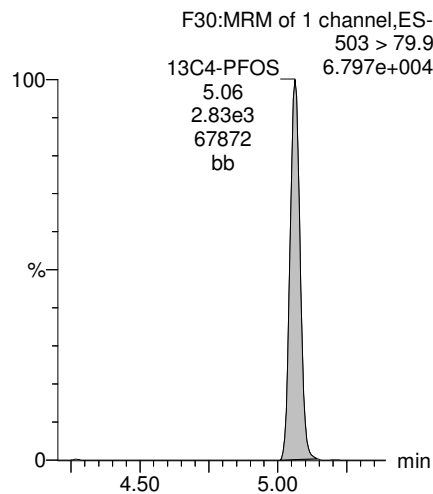
**13C3-PFHxS**



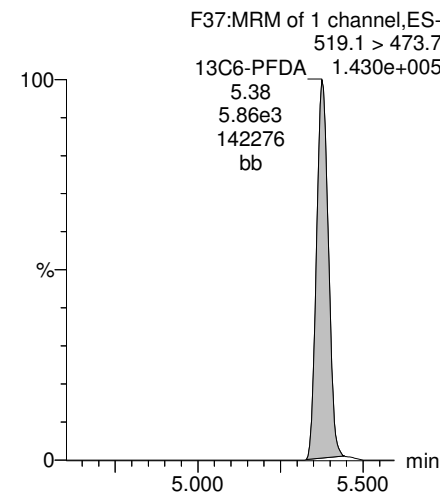
**13C9-PFNA**



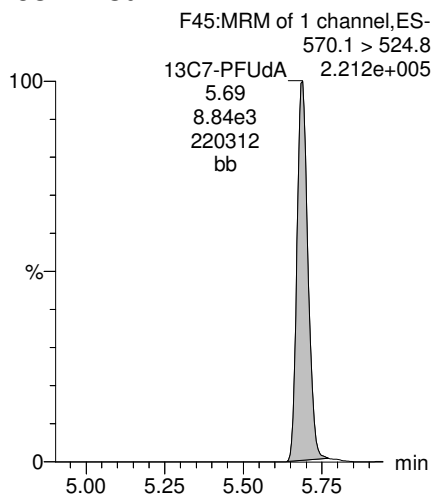
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUdA**



**INJECTION INTERNAL STANDARD (IIS) AREAS,  
INSTRUMENT BLANKS (IB)  
AND  
CONTINUING CALIBRATION VERIFICATIONS (CCV)**

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Method: U:\Q4.PRO\MethDB\PFAS\_RS-10-27-17.mdb 27 Oct 2017 14:32:48

Calibration: 17 Nov 2017 13:53:35

Name: 171116M3\_7, Date: 16-Nov-2017, Time: 17:27:12, ID: ST171116M3-6 PFC CS3 17K0834, Description: PFC CS3 17K0834

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	ST171116M3-6 PFC CS3 17K0834	1.07e4	100.0	NO
2	2 13C5-PFHxA	ST171116M3-6 PFC CS3 17K0834	1.55e4	100.0	NO
3	3 13C3-PFHxS	ST171116M3-6 PFC CS3 17K0834	2.76e3	100.0	NO
4	4 13C8-PFOA	ST171116M3-6 PFC CS3 17K0834	1.06e4	100.0	NO
5	5 13C9-PFNA	ST171116M3-6 PFC CS3 17K0834	1.01e4	100.0	NO
6	6 13C4-PFOS	ST171116M3-6 PFC CS3 17K0834	3.19e3	100.0	NO
7	7 13C6-PFDA	ST171116M3-6 PFC CS3 17K0834	4.51e3	100.0	NO
8	8 13C7-PFUnA	ST171116M3-6 PFC CS3 17K0834	6.75e3	100.0	NO

Name: 171116M3\_15, Date: 16-Nov-2017, Time: 18:56:37, ID: 1701602-21 FB1711021045JNR 0.25693,

Description: FB1711021045JNR

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-21 FB1711021045JNR 0.25693	6.91e3	64.4	NO
2	2 13C5-PFHxA	1701602-21 FB1711021045JNR 0.25693	1.04e4	67.4	NO
3	3 13C3-PFHxS	1701602-21 FB1711021045JNR 0.25693	2.02e3	73.0	NO
4	4 13C8-PFOA	1701602-21 FB1711021045JNR 0.25693	7.86e3	74.0	NO
5	5 13C9-PFNA	1701602-21 FB1711021045JNR 0.25693	6.52e3	64.5	NO
6	6 13C4-PFOS	1701602-21 FB1711021045JNR 0.25693	2.19e3	68.6	NO
7	7 13C6-PFDA	1701602-21 FB1711021045JNR 0.25693	3.12e3	69.1	NO
8	8 13C7-PFUnA	1701602-21 FB1711021045JNR 0.25693	4.52e3	67.1	NO

Name: 171116M3\_16, Date: 16-Nov-2017, Time: 19:07:48, ID: 1701602-22 WT1711021110JNR 0.25133,

Description: WT1711021110JNR

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-22 WT1711021110JNR 0.25133	6.99e3	65.2	NO
2	2 13C5-PFHxA	1701602-22 WT1711021110JNR 0.25133	9.50e3	61.4	NO
3	3 13C3-PFHxS	1701602-22 WT1711021110JNR 0.25133	1.84e3	66.6	NO
4	4 13C8-PFOA	1701602-22 WT1711021110JNR 0.25133	6.07e3	57.1	NO
5	5 13C9-PFNA	1701602-22 WT1711021110JNR 0.25133	6.40e3	63.2	NO
6	6 13C4-PFOS	1701602-22 WT1711021110JNR 0.25133	1.99e3	62.5	NO
7	7 13C6-PFDA	1701602-22 WT1711021110JNR 0.25133	2.91e3	64.4	NO
8	8 13C7-PFUnA	1701602-22 WT1711021110JNR 0.25133	3.39e3	50.2	NO

Name: 171116M3\_17, Date: 16-Nov-2017, Time: 19:18:59, ID: B7K0078-BS1 OPR 0.125, Description: OPR

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	B7K0078-BS1 OPR 0.125	7.39e3	68.8	NO
2	2 13C5-PFHxA	B7K0078-BS1 OPR 0.125	1.11e4	72.0	NO
3	3 13C3-PFHxS	B7K0078-BS1 OPR 0.125	2.50e3	90.3	NO
4	4 13C8-PFOA	B7K0078-BS1 OPR 0.125	7.27e3	68.4	NO
5	5 13C9-PFNA	B7K0078-BS1 OPR 0.125	8.09e3	79.9	NO
6	6 13C4-PFOS	B7K0078-BS1 OPR 0.125	2.67e3	83.6	NO
7	7 13C6-PFDA	B7K0078-BS1 OPR 0.125	3.83e3	84.9	NO

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**Name: 171116M3\_17, Date: 16-Nov-2017, Time: 19:18:59, ID: B7K0078-BS1 OPR 0.125, Description: OPR**

#	Name	ID	Area	%Rec	Area Out
8	13C7-PFUnA	B7K0078-BS1 OPR 0.125	5.36e3	79.5	NO

**Name: 171116M3\_18, Date: 16-Nov-2017, Time: 19:30:10, ID: IPA, Description: IPA**

#	Name	ID	Area	%Rec	Area Out
1	13C4-PFBA	IPA			NO
2	13C5-PFHxA	IPA			NO
3	13C3-PFHxS	IPA			NO
4	13C8-PFOA	IPA			NO
5	13C9-PFNA	IPA			NO
6	13C4-PFOS	IPA			NO
7	13C6-PFDA	IPA			NO
8	13C7-PFUnA	IPA			NO

**Name: 171116M3\_19, Date: 16-Nov-2017, Time: 19:41:20, ID: B7K0078-BLK1 Method Blank 0.125, Description: Method Blank**

#	Name	ID	Area	%Rec	Area Out
1	13C4-PFBA	B7K0078-BLK1 Method Blank 0.125	8.66e3	80.7	NO
2	13C5-PFHxA	B7K0078-BLK1 Method Blank 0.125	1.33e4	86.1	NO
3	13C3-PFHxS	B7K0078-BLK1 Method Blank 0.125	2.49e3	90.2	NO
4	13C8-PFOA	B7K0078-BLK1 Method Blank 0.125	8.38e3	78.9	NO
5	13C9-PFNA	B7K0078-BLK1 Method Blank 0.125	7.26e3	71.7	NO
6	13C4-PFOS	B7K0078-BLK1 Method Blank 0.125	3.25e3	101.7	NO
7	13C6-PFDA	B7K0078-BLK1 Method Blank 0.125	3.09e3	68.4	NO
8	13C7-PFUnA	B7K0078-BLK1 Method Blank 0.125	5.61e3	83.1	NO

**Name: 171116M3\_20, Date: 16-Nov-2017, Time: 19:52:31, ID: 1701645-01 WR1711091315JLB 0.125, Description: WR1711091315JLB**

#	Name	ID	Area	%Rec	Area Out
1	13C4-PFBA	1701645-01 WR1711091315JLB 0.125	6.98e3	65.1	NO
2	13C5-PFHxA	1701645-01 WR1711091315JLB 0.125	1.04e4	67.1	NO
3	13C3-PFHxS	1701645-01 WR1711091315JLB 0.125	2.19e3	79.1	NO
4	13C8-PFOA	1701645-01 WR1711091315JLB 0.125	7.73e3	72.7	NO
5	13C9-PFNA	1701645-01 WR1711091315JLB 0.125	7.27e3	71.9	NO
6	13C4-PFOS	1701645-01 WR1711091315JLB 0.125	2.45e3	76.6	NO
7	13C6-PFDA	1701645-01 WR1711091315JLB 0.125	3.57e3	79.0	NO
8	13C7-PFUnA	1701645-01 WR1711091315JLB 0.125	4.85e3	71.9	NO

**Name: 171116M3\_21, Date: 16-Nov-2017, Time: 20:03:42, ID: 1701646-01 WR1711081120JLB 0.125, Description: WR1711081120JLB**

#	Name	ID	Area	%Rec	Area Out
1	13C4-PFBA	1701646-01 WR1711081120JLB 0.125	6.96e3	64.9	NO
2	13C5-PFHxA	1701646-01 WR1711081120JLB 0.125	1.05e4	68.2	NO
3	13C3-PFHxS	1701646-01 WR1711081120JLB 0.125	2.41e3	87.3	NO
4	13C8-PFOA	1701646-01 WR1711081120JLB 0.125	7.19e3	67.7	NO
5	13C9-PFNA	1701646-01 WR1711081120JLB 0.125	7.11e3	70.2	NO

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**Name: 171116M3\_21, Date: 16-Nov-2017, Time: 20:03:42, ID: 1701646-01 WR1711081120JLB 0.125, Description: WR1711081120JLB**

	# Name	ID	Area	%Rec	Area Out
6	6 13C4-PFOS	1701646-01 WR1711081120JLB 0.125	2.77e3	86.7	NO
7	7 13C6-PFDA	1701646-01 WR1711081120JLB 0.125	3.01e3	66.6	NO
8	8 13C7-PFUnA	1701646-01 WR1711081120JLB 0.125	3.93e3	58.3	NO

**Name: 171116M3\_22, Date: 16-Nov-2017, Time: 20:14:53, ID: 1701646-02 WR1711081130JLB 0.125, Description: WR1711081130JLB**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701646-02 WR1711081130JLB 0.125	6.69e3	62.3	NO
2	2 13C5-PFHxA	1701646-02 WR1711081130JLB 0.125	9.82e3	63.4	NO
3	3 13C3-PFHxS	1701646-02 WR1711081130JLB 0.125	2.04e3	73.7	NO
4	4 13C8-PFOA	1701646-02 WR1711081130JLB 0.125	7.22e3	68.0	NO
5	5 13C9-PFNA	1701646-02 WR1711081130JLB 0.125	7.44e3	73.5	NO
6	6 13C4-PFOS	1701646-02 WR1711081130JLB 0.125	2.60e3	81.6	NO
7	7 13C6-PFDA	1701646-02 WR1711081130JLB 0.125	3.08e3	68.2	NO
8	8 13C7-PFUnA	1701646-02 WR1711081130JLB 0.125	4.25e3	63.0	NO

**Name: 171116M3\_23, Date: 16-Nov-2017, Time: 20:26:03, ID: 1701646-03 WR1711081235JLB 0.125, Description: WR1711081235JLB**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701646-03 WR1711081235JLB 0.125	8.28e3	77.2	NO
2	2 13C5-PFHxA	1701646-03 WR1711081235JLB 0.125	1.28e4	82.6	NO
3	3 13C3-PFHxS	1701646-03 WR1711081235JLB 0.125	2.38e3	86.3	NO
4	4 13C8-PFOA	1701646-03 WR1711081235JLB 0.125	8.85e3	83.3	NO
5	5 13C9-PFNA	1701646-03 WR1711081235JLB 0.125	8.23e3	81.3	NO
6	6 13C4-PFOS	1701646-03 WR1711081235JLB 0.125	2.88e3	90.4	NO
7	7 13C6-PFDA	1701646-03 WR1711081235JLB 0.125	3.38e3	74.9	NO
8	8 13C7-PFUnA	1701646-03 WR1711081235JLB 0.125	4.17e3	61.8	NO

**Name: 171116M3\_24, Date: 16-Nov-2017, Time: 20:37:14, ID: 1701647-01 MtBE\_7228 0.125, Description: MtBE\_7228**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701647-01 MtBE_7228 0.125	7.18e3	66.9	NO
2	2 13C5-PFHxA	1701647-01 MtBE_7228 0.125	1.08e4	69.6	NO
3	3 13C3-PFHxS	1701647-01 MtBE_7228 0.125	2.11e3	76.5	NO
4	4 13C8-PFOA	1701647-01 MtBE_7228 0.125	7.33e3	69.0	NO
5	5 13C9-PFNA	1701647-01 MtBE_7228 0.125	7.37e3	72.8	NO
6	6 13C4-PFOS	1701647-01 MtBE_7228 0.125	2.36e3	74.1	NO
7	7 13C6-PFDA	1701647-01 MtBE_7228 0.125	3.27e3	72.3	NO
8	8 13C7-PFUnA	1701647-01 MtBE_7228 0.125	5.28e3	78.3	NO

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**Name: 171116M3\_25, Date: 16-Nov-2017, Time: 20:48:24, ID: 1701671-01 WT1711090840JNR 0.125, Description: WT1711090840JNR**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701671-01 WT1711090840JNR 0.125	8.20e3	76.5	NO
2	2 13C5-PFHxA	1701671-01 WT1711090840JNR 0.125	1.27e4	82.4	NO
3	3 13C3-PFHxS	1701671-01 WT1711090840JNR 0.125	2.51e3	90.7	NO
4	4 13C8-PFOA	1701671-01 WT1711090840JNR 0.125	7.18e3	67.6	NO
5	5 13C9-PFNA	1701671-01 WT1711090840JNR 0.125	9.35e3	92.3	NO
6	6 13C4-PFOS	1701671-01 WT1711090840JNR 0.125	2.96e3	92.8	NO
7	7 13C6-PFDA	1701671-01 WT1711090840JNR 0.125	3.40e3	75.3	NO
8	8 13C7-PFUnA	1701671-01 WT1711090840JNR 0.125	5.45e3	80.8	NO

**Name: 171116M3\_26, Date: 16-Nov-2017, Time: 20:59:35, ID: B7K0059-BS1 OPR 0.125, Description: OPR**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	B7K0059-BS1 OPR 0.125	6.10e3	56.9	NO
2	2 13C5-PFHxA	B7K0059-BS1 OPR 0.125	8.91e3	57.6	NO
3	3 13C3-PFHxS	B7K0059-BS1 OPR 0.125	1.79e3	64.9	NO
4	4 13C8-PFOA	B7K0059-BS1 OPR 0.125	6.55e3	61.7	NO
5	5 13C9-PFNA	B7K0059-BS1 OPR 0.125	5.97e3	59.0	NO
6	6 13C4-PFOS	B7K0059-BS1 OPR 0.125	1.82e3	57.0	NO
7	7 13C6-PFDA	B7K0059-BS1 OPR 0.125	2.56e3	56.8	NO
8	8 13C7-PFUnA	B7K0059-BS1 OPR 0.125	4.49e3	66.5	NO

**Name: 171116M3\_27, Date: 16-Nov-2017, Time: 21:10:46, ID: IPA, Description: IPA**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUnA	IPA			NO

**Name: 171116M3\_28, Date: 16-Nov-2017, Time: 21:21:57, ID: B7K0059-BLK1 Method Blank 0.125, Description: Method Blank**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	B7K0059-BLK1 Method Blank 0.125	6.64e3	61.9	NO
2	2 13C5-PFHxA	B7K0059-BLK1 Method Blank 0.125	9.92e3	64.1	NO
3	3 13C3-PFHxS	B7K0059-BLK1 Method Blank 0.125	1.99e3	72.1	NO
4	4 13C8-PFOA	B7K0059-BLK1 Method Blank 0.125	6.90e3	65.0	NO
5	5 13C9-PFNA	B7K0059-BLK1 Method Blank 0.125	5.69e3	56.2	NO
6	6 13C4-PFOS	B7K0059-BLK1 Method Blank 0.125	2.26e3	70.8	NO
7	7 13C6-PFDA	B7K0059-BLK1 Method Blank 0.125	3.16e3	69.9	NO
8	8 13C7-PFUnA	B7K0059-BLK1 Method Blank 0.125	4.79e3	71.0	NO

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**Name: 171116M3\_29, Date: 16-Nov-2017, Time: 21:33:07, ID: B7K0059-MS1 Matrix Spike 0.11181, Description: Matrix Spike**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	B7K0059-MS1 Matrix Spike 0.11181	6.69e3	62.4	NO
2	2 13C5-PFHxA	B7K0059-MS1 Matrix Spike 0.11181	9.40e3	60.7	NO
3	3 13C3-PFHxS	B7K0059-MS1 Matrix Spike 0.11181	1.89e3	68.3	NO
4	4 13C8-PFOA	B7K0059-MS1 Matrix Spike 0.11181	6.11e3	57.6	NO
5	5 13C9-PFNA	B7K0059-MS1 Matrix Spike 0.11181	7.32e3	72.3	NO
6	6 13C4-PFOS	B7K0059-MS1 Matrix Spike 0.11181	2.42e3	75.7	NO
7	7 13C6-PFDA	B7K0059-MS1 Matrix Spike 0.11181	3.23e3	71.5	NO
8	8 13C7-PFUnA	B7K0059-MS1 Matrix Spike 0.11181	4.52e3	67.0	NO

**Name: 171116M3\_30, Date: 16-Nov-2017, Time: 21:44:18, ID: B7K0059-MSD1 Matrix Spike Dup 0.11415, Description: Matrix Spike Dup**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	B7K0059-MSD1 Matrix Spike Dup 0.114...	6.33e3	59.0	NO
2	2 13C5-PFHxA	B7K0059-MSD1 Matrix Spike Dup 0.114...	8.93e3	57.7	NO
3	3 13C3-PFHxS	B7K0059-MSD1 Matrix Spike Dup 0.114...	1.90e3	68.7	NO
4	4 13C8-PFOA	B7K0059-MSD1 Matrix Spike Dup 0.114...	6.54e3	61.6	NO
5	5 13C9-PFNA	B7K0059-MSD1 Matrix Spike Dup 0.114...	7.19e3	71.0	NO
6	6 13C4-PFOS	B7K0059-MSD1 Matrix Spike Dup 0.114...	2.37e3	74.4	NO
7	7 13C6-PFDA	B7K0059-MSD1 Matrix Spike Dup 0.114...	2.39e3	53.0	NO
8	8 13C7-PFUnA	B7K0059-MSD1 Matrix Spike Dup 0.114...	4.04e3	59.8	NO

**Name: 171116M3\_31, Date: 16-Nov-2017, Time: 21:55:29, ID: 1701621-01 MBS-EFF-001 0.11391, Description: MBS-EFF-001**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701621-01 MBS-EFF-001 0.11391	7.32e3	68.2	NO
2	2 13C5-PFHxA	1701621-01 MBS-EFF-001 0.11391	9.67e3	62.5	NO
3	3 13C3-PFHxS	1701621-01 MBS-EFF-001 0.11391	2.11e3	76.4	NO
4	4 13C8-PFOA	1701621-01 MBS-EFF-001 0.11391	6.48e3	61.0	NO
5	5 13C9-PFNA	1701621-01 MBS-EFF-001 0.11391	6.44e3	63.7	NO
6	6 13C4-PFOS	1701621-01 MBS-EFF-001 0.11391	2.16e3	67.5	NO
7	7 13C6-PFDA	1701621-01 MBS-EFF-001 0.11391	3.73e3	82.6	NO
8	8 13C7-PFUnA	1701621-01 MBS-EFF-001 0.11391	4.67e3	69.2	NO

**Name: 171116M3\_32, Date: 16-Nov-2017, Time: 22:06:39, ID: 1701621-02 MBS-EFF-002 0.11579, Description: MBS-EFF-002**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701621-02 MBS-EFF-002 0.11579	7.74e3	72.1	NO
2	2 13C5-PFHxA	1701621-02 MBS-EFF-002 0.11579	1.19e4	76.8	NO
3	3 13C3-PFHxS	1701621-02 MBS-EFF-002 0.11579	2.17e3	78.5	NO
4	4 13C8-PFOA	1701621-02 MBS-EFF-002 0.11579	7.86e3	74.0	NO
5	5 13C9-PFNA	1701621-02 MBS-EFF-002 0.11579	9.12e3	90.1	NO
6	6 13C4-PFOS	1701621-02 MBS-EFF-002 0.11579	2.35e3	73.5	NO
7	7 13C6-PFDA	1701621-02 MBS-EFF-002 0.11579	4.59e3	101.7	NO
8	8 13C7-PFUnA	1701621-02 MBS-EFF-002 0.11579	6.77e3	100.3	NO

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**Name: 171116M3\_33, Date: 16-Nov-2017, Time: 22:17:52, ID: 1701621-03 MBS-IN-003 0.11618, Description: MBS-IN-003**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701621-03 MBS-IN-003 0.11618	7.18e3	66.9	NO
2	2 13C5-PFHxA	1701621-03 MBS-IN-003 0.11618	1.11e4	71.5	NO
3	3 13C3-PFHxS	1701621-03 MBS-IN-003 0.11618	1.87e3	67.6	NO
4	4 13C8-PFOA	1701621-03 MBS-IN-003 0.11618	6.97e3	65.6	NO
5	5 13C9-PFNA	1701621-03 MBS-IN-003 0.11618	7.37e3	72.8	NO
6	6 13C4-PFOS	1701621-03 MBS-IN-003 0.11618	2.50e3	78.5	NO
7	7 13C6-PFDA	1701621-03 MBS-IN-003 0.11618	3.13e3	69.4	NO
8	8 13C7-PFUnA	1701621-03 MBS-IN-003 0.11618	4.12e3	61.1	NO

**Name: 171116M3\_34, Date: 16-Nov-2017, Time: 22:29:01, ID: IPA, Description: IPA**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUnA	IPA			NO

**Name: 171116M3\_35, Date: 16-Nov-2017, Time: 22:40:12, ID: ST171116M3-11 PFC CS3 17K0834, Description: PFC CS3 17K0834**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	ST171116M3-11 PFC CS3 17K0834	1.12e4	104.0	NO
2	2 13C5-PFHxA	ST171116M3-11 PFC CS3 17K0834	1.59e4	102.5	NO
3	3 13C3-PFHxS	ST171116M3-11 PFC CS3 17K0834	2.69e3	97.5	NO
4	4 13C8-PFOA	ST171116M3-11 PFC CS3 17K0834	1.18e4	111.3	NO
5	5 13C9-PFNA	ST171116M3-11 PFC CS3 17K0834	1.02e4	100.9	NO
6	6 13C4-PFOS	ST171116M3-11 PFC CS3 17K0834	2.80e3	87.6	NO
7	7 13C6-PFDA	ST171116M3-11 PFC CS3 17K0834	4.80e3	106.3	NO
8	8 13C7-PFUnA	ST171116M3-11 PFC CS3 17K0834	7.92e3	117.4	NO

**Name: 171116M3\_36, Date: 16-Nov-2017, Time: 22:51:23, ID: IPA, Description: IPA**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUnA	IPA			NO



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**Name: 171116M3\_37, Date: 16-Nov-2017, Time: 23:02:33, ID: 1701624-01 OF-MW20-1117 0.10651, Description: OF-MW20-1117**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-01 OF-MW20-1117 0.10651	6.60e3	61.5	NO
2	2 13C5-PFHxA	1701624-01 OF-MW20-1117 0.10651	9.86e3	63.7	NO
3	3 13C3-PFHxS	1701624-01 OF-MW20-1117 0.10651	1.80e3	65.2	NO
4	4 13C8-PFOA	1701624-01 OF-MW20-1117 0.10651	6.20e3	58.3	NO
5	5 13C9-PFNA	1701624-01 OF-MW20-1117 0.10651	6.96e3	68.7	NO
6	6 13C4-PFOS	1701624-01 OF-MW20-1117 0.10651	2.06e3	64.5	NO
7	7 13C6-PFDA	1701624-01 OF-MW20-1117 0.10651	2.76e3	61.1	NO
8	8 13C7-PFUnA	1701624-01 OF-MW20-1117 0.10651	4.17e3	61.8	NO

**Name: 171116M3\_38, Date: 16-Nov-2017, Time: 23:13:44, ID: 1701624-02 OF-MW20P-1117 0.11409, Description: OF-MW20P-1117**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-02 OF-MW20P-1117 0.11409	6.66e3	62.1	NO
2	2 13C5-PFHxA	1701624-02 OF-MW20P-1117 0.11409	1.00e4	64.6	NO
3	3 13C3-PFHxS	1701624-02 OF-MW20P-1117 0.11409	1.79e3	64.7	NO
4	4 13C8-PFOA	1701624-02 OF-MW20P-1117 0.11409	6.18e3	58.1	NO
5	5 13C9-PFNA	1701624-02 OF-MW20P-1117 0.11409	6.88e3	68.0	NO
6	6 13C4-PFOS	1701624-02 OF-MW20P-1117 0.11409	2.11e3	66.0	NO
7	7 13C6-PFDA	1701624-02 OF-MW20P-1117 0.11409	2.71e3	60.0	NO
8	8 13C7-PFUnA	1701624-02 OF-MW20P-1117 0.11409	3.83e3	56.8	NO

**Name: 171116M3\_39, Date: 16-Nov-2017, Time: 23:24:55, ID: 1701624-03 OF-MW22-1117 0.10407, Description: OF-MW22-1117**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-03 OF-MW22-1117 0.10407	6.90e3	64.3	NO
2	2 13C5-PFHxA	1701624-03 OF-MW22-1117 0.10407	1.06e4	68.5	NO
3	3 13C3-PFHxS	1701624-03 OF-MW22-1117 0.10407	2.10e3	75.9	NO
4	4 13C8-PFOA	1701624-03 OF-MW22-1117 0.10407	6.75e3	63.6	NO
5	5 13C9-PFNA	1701624-03 OF-MW22-1117 0.10407	7.33e3	72.4	NO
6	6 13C4-PFOS	1701624-03 OF-MW22-1117 0.10407	2.24e3	70.3	NO
7	7 13C6-PFDA	1701624-03 OF-MW22-1117 0.10407	3.01e3	66.7	NO
8	8 13C7-PFUnA	1701624-03 OF-MW22-1117 0.10407	3.83e3	56.8	NO

**Name: 171116M3\_40, Date: 16-Nov-2017, Time: 23:36:05, ID: 1701624-04 OF-MW22D-1117 0.11272, Description: OF-MW22D-1117**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-04 OF-MW22D-1117 0.11272	6.21e3	57.9	NO
2	2 13C5-PFHxA	1701624-04 OF-MW22D-1117 0.11272	8.21e3	53.1	NO
3	3 13C3-PFHxS	1701624-04 OF-MW22D-1117 0.11272	1.73e3	62.7	NO
4	4 13C8-PFOA	1701624-04 OF-MW22D-1117 0.11272	5.31e3	50.0	NO
5	5 13C9-PFNA	1701624-04 OF-MW22D-1117 0.11272	5.17e3	51.1	NO
6	6 13C4-PFOS	1701624-04 OF-MW22D-1117 0.11272	2.12e3	66.5	NO
7	7 13C6-PFDA	1701624-04 OF-MW22D-1117 0.11272	2.18e3	48.3	YES
8	8 13C7-PFUnA	1701624-04 OF-MW22D-1117 0.11272	4.03e3	59.8	NO

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**Name: 171116M3\_41, Date: 16-Nov-2017, Time: 23:47:16, ID: 1701624-05 OF-MW19-1117 0.11045, Description: OF-MW19-1117**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-05 OF-MW19-1117 0.11045	6.22e3	58.0	NO
2	2 13C5-PFHxA	1701624-05 OF-MW19-1117 0.11045	8.64e3	55.8	NO
3	3 13C3-PFHxS	1701624-05 OF-MW19-1117 0.11045	1.55e3	55.9	NO
4	4 13C8-PFOA	1701624-05 OF-MW19-1117 0.11045	6.48e3	61.0	NO
5	5 13C9-PFNA	1701624-05 OF-MW19-1117 0.11045	6.05e3	59.7	NO
6	6 13C4-PFOS	1701624-05 OF-MW19-1117 0.11045	1.90e3	59.4	NO
7	7 13C6-PFDA	1701624-05 OF-MW19-1117 0.11045	2.62e3	57.9	NO
8	8 13C7-PFUnA	1701624-05 OF-MW19-1117 0.11045	3.79e3	56.1	NO

**Name: 171116M3\_42, Date: 16-Nov-2017, Time: 23:58:27, ID: 1701624-06 OF-MW190-1117 0.10982, Description: OF-MW190-1117**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-06 OF-MW190-1117 0.10982	7.17e3	66.8	NO
2	2 13C5-PFHxA	1701624-06 OF-MW190-1117 0.10982	1.06e4	68.5	NO
3	3 13C3-PFHxS	1701624-06 OF-MW190-1117 0.10982	2.07e3	74.9	NO
4	4 13C8-PFOA	1701624-06 OF-MW190-1117 0.10982	7.03e3	66.2	NO
5	5 13C9-PFNA	1701624-06 OF-MW190-1117 0.10982	6.71e3	66.3	NO
6	6 13C4-PFOS	1701624-06 OF-MW190-1117 0.10982	2.37e3	74.3	NO
7	7 13C6-PFDA	1701624-06 OF-MW190-1117 0.10982	2.96e3	65.5	NO
8	8 13C7-PFUnA	1701624-06 OF-MW190-1117 0.10982	4.52e3	67.0	NO

**Name: 171116M3\_43, Date: 17-Nov-2017, Time: 00:09:38, ID: 1701624-07 OF-MW21-1117 0.1119, Description: OF-MW21-1117**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-07 OF-MW21-1117 0.1119	6.69e3	62.3	NO
2	2 13C5-PFHxA	1701624-07 OF-MW21-1117 0.1119	9.62e3	62.2	NO
3	3 13C3-PFHxS	1701624-07 OF-MW21-1117 0.1119	1.67e3	60.3	NO
4	4 13C8-PFOA	1701624-07 OF-MW21-1117 0.1119	6.66e3	62.7	NO
5	5 13C9-PFNA	1701624-07 OF-MW21-1117 0.1119	6.91e3	68.3	NO
6	6 13C4-PFOS	1701624-07 OF-MW21-1117 0.1119	1.90e3	59.5	NO
7	7 13C6-PFDA	1701624-07 OF-MW21-1117 0.1119	3.20e3	71.0	NO
8	8 13C7-PFUnA	1701624-07 OF-MW21-1117 0.1119	4.64e3	68.7	NO

**Name: 171116M3\_44, Date: 17-Nov-2017, Time: 00:20:54, ID: 1701624-08 OF-MW33-1117 0.10266, Description: OF-MW33-1117**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-08 OF-MW33-1117 0.10266	6.36e3	59.3	NO
2	2 13C5-PFHxA	1701624-08 OF-MW33-1117 0.10266	9.37e3	60.5	NO
3	3 13C3-PFHxS	1701624-08 OF-MW33-1117 0.10266	1.86e3	67.5	NO
4	4 13C8-PFOA	1701624-08 OF-MW33-1117 0.10266	7.09e3	66.8	NO
5	5 13C9-PFNA	1701624-08 OF-MW33-1117 0.10266	6.64e3	65.6	NO
6	6 13C4-PFOS	1701624-08 OF-MW33-1117 0.10266	1.65e3	51.7	NO
7	7 13C6-PFDA	1701624-08 OF-MW33-1117 0.10266	2.71e3	60.1	NO
8	8 13C7-PFUnA	1701624-08 OF-MW33-1117 0.10266	3.84e3	56.9	NO

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**Name: 171116M3\_45, Date: 17-Nov-2017, Time: 00:32:13, ID: 1701624-09 OF-MW33D-1117 0.11041, Description: OF-MW33D-1117**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-09 OF-MW33D-1117 0.11041	6.81e3	63.5	NO
2	2 13C5-PFHxA	1701624-09 OF-MW33D-1117 0.11041	1.06e4	68.5	NO
3	3 13C3-PFHxS	1701624-09 OF-MW33D-1117 0.11041	2.04e3	73.8	NO
4	4 13C8-PFOA	1701624-09 OF-MW33D-1117 0.11041	7.20e3	67.7	NO
5	5 13C9-PFNA	1701624-09 OF-MW33D-1117 0.11041	6.49e3	64.1	NO
6	6 13C4-PFOS	1701624-09 OF-MW33D-1117 0.11041	2.52e3	79.1	NO
7	7 13C6-PFDA	1701624-09 OF-MW33D-1117 0.11041	2.80e3	61.9	NO
8	8 13C7-PFUnA	1701624-09 OF-MW33D-1117 0.11041	4.68e3	69.4	NO

**Name: 171116M3\_46, Date: 17-Nov-2017, Time: 00:43:26, ID: 1701624-10 OF-EB110717 0.11441, Description: OF-EB110717**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-10 OF-EB110717 0.11441	7.24e3	67.5	NO
2	2 13C5-PFHxA	1701624-10 OF-EB110717 0.11441	9.30e3	60.1	NO
3	3 13C3-PFHxS	1701624-10 OF-EB110717 0.11441	2.00e3	72.3	NO
4	4 13C8-PFOA	1701624-10 OF-EB110717 0.11441	7.00e3	65.9	NO
5	5 13C9-PFNA	1701624-10 OF-EB110717 0.11441	6.97e3	68.9	NO
6	6 13C4-PFOS	1701624-10 OF-EB110717 0.11441	2.03e3	63.7	NO
7	7 13C6-PFDA	1701624-10 OF-EB110717 0.11441	2.54e3	56.3	NO
8	8 13C7-PFUnA	1701624-10 OF-EB110717 0.11441	4.42e3	65.5	NO

**Name: 171116M3\_47, Date: 17-Nov-2017, Time: 00:54:37, ID: 1701624-11 OF-FB110717 0.11442, Description: OF-FB110717**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-11 OF-FB110717 0.11442	7.35e3	68.5	NO
2	2 13C5-PFHxA	1701624-11 OF-FB110717 0.11442	1.09e4	70.6	NO
3	3 13C3-PFHxS	1701624-11 OF-FB110717 0.11442	1.84e3	66.5	NO
4	4 13C8-PFOA	1701624-11 OF-FB110717 0.11442	6.44e3	60.6	NO
5	5 13C9-PFNA	1701624-11 OF-FB110717 0.11442	6.84e3	67.6	NO
6	6 13C4-PFOS	1701624-11 OF-FB110717 0.11442	2.13e3	66.6	NO
7	7 13C6-PFDA	1701624-11 OF-FB110717 0.11442	3.33e3	73.7	NO
8	8 13C7-PFUnA	1701624-11 OF-FB110717 0.11442	4.82e3	71.5	NO

**Name: 171116M3\_48, Date: 17-Nov-2017, Time: 01:05:48, ID: IPA, Description: IPA**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUnA	IPA			NO

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Name: 171116M3\_49, Date: 17-Nov-2017, Time: 01:16:58, ID: ST171116M3-12 PFC CS3 17K0834, Description: PFC CS3 17K0834

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	ST171116M3-12 PFC CS3 17K0834	1.12e4	104.7	NO
2	2 13C5-PFHxA	ST171116M3-12 PFC CS3 17K0834	1.70e4	109.6	NO
3	3 13C3-PFHxS	ST171116M3-12 PFC CS3 17K0834	3.08e3	111.3	NO
4	4 13C8-PFOA	ST171116M3-12 PFC CS3 17K0834	1.17e4	110.1	NO
5	5 13C9-PFNA	ST171116M3-12 PFC CS3 17K0834	1.09e4	107.3	NO
6	6 13C4-PFOS	ST171116M3-12 PFC CS3 17K0834	3.39e3	106.2	NO
7	7 13C6-PFDA	ST171116M3-12 PFC CS3 17K0834	4.92e3	109.0	NO
8	8 13C7-PFUnA	ST171116M3-12 PFC CS3 17K0834	7.69e3	114.0	NO

Name: 171116M3\_50, Date: 17-Nov-2017, Time: 01:28:09, ID: IPA, Description: IPA

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA	5.08e0	0.0	NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUnA	IPA			NO

Name: 171116M3\_51, Date: 17-Nov-2017, Time: 01:39:20, ID: 1701624-12 10W-AQ01-110717 0.11031, Description: 10W-AQ01-110717

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-12 10W-AQ01-110717 0.11031	7.71e3	71.9	NO
2	2 13C5-PFHxA	1701624-12 10W-AQ01-110717 0.11031	1.09e4	70.1	NO
3	3 13C3-PFHxS	1701624-12 10W-AQ01-110717 0.11031	1.87e3	67.6	NO
4	4 13C8-PFOA	1701624-12 10W-AQ01-110717 0.11031	7.26e3	68.3	NO
5	5 13C9-PFNA	1701624-12 10W-AQ01-110717 0.11031	7.30e3	72.1	NO
6	6 13C4-PFOS	1701624-12 10W-AQ01-110717 0.11031	2.32e3	72.6	NO
7	7 13C6-PFDA	1701624-12 10W-AQ01-110717 0.11031	2.90e3	64.2	NO
8	8 13C7-PFUnA	1701624-12 10W-AQ01-110717 0.11031	4.60e3	68.2	NO

Name: 171116M3\_52, Date: 17-Nov-2017, Time: 01:50:31, ID: 1701624-13 10W-AQ02-110717 0.10337, Description: 10W-AQ02-110717

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-13 10W-AQ02-110717 0.10337	7.11e3	66.3	NO
2	2 13C5-PFHxA	1701624-13 10W-AQ02-110717 0.10337	1.07e4	69.3	NO
3	3 13C3-PFHxS	1701624-13 10W-AQ02-110717 0.10337	1.99e3	71.9	NO
4	4 13C8-PFOA	1701624-13 10W-AQ02-110717 0.10337	6.79e3	63.9	NO
5	5 13C9-PFNA	1701624-13 10W-AQ02-110717 0.10337	7.83e3	77.3	NO
6	6 13C4-PFOS	1701624-13 10W-AQ02-110717 0.10337	1.92e3	60.1	NO
7	7 13C6-PFDA	1701624-13 10W-AQ02-110717 0.10337	3.09e3	68.5	NO
8	8 13C7-PFUnA	1701624-13 10W-AQ02-110717 0.10337	4.84e3	71.8	NO

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**Name: 171116M3\_53, Date: 17-Nov-2017, Time: 02:01:41, ID: 1701624-14 10W-AQ03-110717 0.10786, Description: 10W-AQ03-110717**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-14 10W-AQ03-110717 0.10786	6.43e3	59.9	NO
2	2 13C5-PFHxA	1701624-14 10W-AQ03-110717 0.10786	9.37e3	60.5	NO
3	3 13C3-PFHxS	1701624-14 10W-AQ03-110717 0.10786	1.58e3	57.0	NO
4	4 13C8-PFOA	1701624-14 10W-AQ03-110717 0.10786	5.62e3	52.9	NO
5	5 13C9-PFNA	1701624-14 10W-AQ03-110717 0.10786	6.48e3	64.0	NO
6	6 13C4-PFOS	1701624-14 10W-AQ03-110717 0.10786	1.76e3	55.1	NO
7	7 13C6-PFDA	1701624-14 10W-AQ03-110717 0.10786	3.42e3	75.7	NO
8	8 13C7-PFUnA	1701624-14 10W-AQ03-110717 0.10786	4.80e3	71.2	NO

**Name: 171116M3\_54, Date: 17-Nov-2017, Time: 02:12:52, ID: B7K0031-BS1 OPR 0.25, Description: OPR**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	B7K0031-BS1 OPR 0.25	6.60e3	61.5	NO
2	2 13C5-PFHxA	B7K0031-BS1 OPR 0.25	9.42e3	60.9	NO
3	3 13C3-PFHxS	B7K0031-BS1 OPR 0.25	1.98e3	71.6	NO
4	4 13C8-PFOA	B7K0031-BS1 OPR 0.25	6.06e3	57.1	NO
5	5 13C9-PFNA	B7K0031-BS1 OPR 0.25	5.70e3	56.3	NO
6	6 13C4-PFOS	B7K0031-BS1 OPR 0.25	2.24e3	70.0	NO
7	7 13C6-PFDA	B7K0031-BS1 OPR 0.25	3.00e3	66.5	NO
8	8 13C7-PFUnA	B7K0031-BS1 OPR 0.25	3.40e3	50.4	NO

**Name: 171116M3\_55, Date: 17-Nov-2017, Time: 02:24:02, ID: IPA, Description: IPA**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUnA	IPA			NO

**Name: 171116M3\_56, Date: 17-Nov-2017, Time: 02:35:13, ID: B7K0031-BLK1 Method Blank 0.25, Description: Method Blank**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	B7K0031-BLK1 Method Blank 0.25	6.76e3	63.0	NO
2	2 13C5-PFHxA	B7K0031-BLK1 Method Blank 0.25	9.99e3	64.5	NO
3	3 13C3-PFHxS	B7K0031-BLK1 Method Blank 0.25	1.96e3	71.0	NO
4	4 13C8-PFOA	B7K0031-BLK1 Method Blank 0.25	6.51e3	61.3	NO
5	5 13C9-PFNA	B7K0031-BLK1 Method Blank 0.25	7.27e3	71.8	NO
6	6 13C4-PFOS	B7K0031-BLK1 Method Blank 0.25	1.94e3	60.8	NO
7	7 13C6-PFDA	B7K0031-BLK1 Method Blank 0.25	2.98e3	66.0	NO
8	8 13C7-PFUnA	B7K0031-BLK1 Method Blank 0.25	4.57e3	67.7	NO

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**Name: 171116M3\_57, Date: 17-Nov-2017, Time: 02:46:24, ID: 1701563-01RE1 MTBE\_4995 0.26962, Description: MTBE\_4995**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701563-01RE1 MTBE_4995 0.26962	7.08e3	66.0	NO
2	2 13C5-PFHxA	1701563-01RE1 MTBE_4995 0.26962	1.05e4	68.0	NO
3	3 13C3-PFHxS	1701563-01RE1 MTBE_4995 0.26962	1.76e3	63.8	NO
4	4 13C8-PFOA	1701563-01RE1 MTBE_4995 0.26962	6.44e3	60.6	NO
5	5 13C9-PFNA	1701563-01RE1 MTBE_4995 0.26962	6.90e3	68.1	NO
6	6 13C4-PFOS	1701563-01RE1 MTBE_4995 0.26962	2.04e3	64.1	NO
7	7 13C6-PFDA	1701563-01RE1 MTBE_4995 0.26962	2.77e3	61.4	NO
8	8 13C7-PFUnA	1701563-01RE1 MTBE_4995 0.26962	4.24e3	62.9	NO

**Name: 171116M3\_58, Date: 17-Nov-2017, Time: 02:57:35, ID: 1701563-02RE1 MTBE\_4996 0.26061, Description: MTBE\_4996**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701563-02RE1 MTBE_4996 0.26061	5.86e3	54.6	NO
2	2 13C5-PFHxA	1701563-02RE1 MTBE_4996 0.26061	8.54e3	55.2	NO
3	3 13C3-PFHxS	1701563-02RE1 MTBE_4996 0.26061	1.69e3	61.2	NO
4	4 13C8-PFOA	1701563-02RE1 MTBE_4996 0.26061	5.99e3	56.4	NO
5	5 13C9-PFNA	1701563-02RE1 MTBE_4996 0.26061	6.16e3	60.8	NO
6	6 13C4-PFOS	1701563-02RE1 MTBE_4996 0.26061	1.82e3	57.1	NO
7	7 13C6-PFDA	1701563-02RE1 MTBE_4996 0.26061	2.82e3	62.4	NO
8	8 13C7-PFUnA	1701563-02RE1 MTBE_4996 0.26061	4.22e3	62.5	NO

**Name: 171116M3\_59, Date: 17-Nov-2017, Time: 03:08:45, ID: 1701564-01RE1 MTBE\_4994 0.2582, Description: MTBE\_4994**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701564-01RE1 MTBE_4994 0.2582	7.24e3	67.5	NO
2	2 13C5-PFHxA	1701564-01RE1 MTBE_4994 0.2582	1.08e4	70.0	NO
3	3 13C3-PFHxS	1701564-01RE1 MTBE_4994 0.2582	1.90e3	68.8	NO
4	4 13C8-PFOA	1701564-01RE1 MTBE_4994 0.2582	7.52e3	70.8	NO
5	5 13C9-PFNA	1701564-01RE1 MTBE_4994 0.2582	6.21e3	61.3	NO
6	6 13C4-PFOS	1701564-01RE1 MTBE_4994 0.2582	2.33e3	73.1	NO
7	7 13C6-PFDA	1701564-01RE1 MTBE_4994 0.2582	3.18e3	70.5	NO
8	8 13C7-PFUnA	1701564-01RE1 MTBE_4994 0.2582	5.45e3	80.8	NO

**Name: 171116M3\_60, Date: 17-Nov-2017, Time: 03:19:56, ID: 1701602-01 WT1711011420JNR 0.26647, Description: WT1711011420JNR**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-01 WT1711011420JNR 0.26647	6.94e3	64.6	NO
2	2 13C5-PFHxA	1701602-01 WT1711011420JNR 0.26647	1.08e4	70.1	NO
3	3 13C3-PFHxS	1701602-01 WT1711011420JNR 0.26647	1.99e3	72.1	NO
4	4 13C8-PFOA	1701602-01 WT1711011420JNR 0.26647	6.43e3	60.5	NO
5	5 13C9-PFNA	1701602-01 WT1711011420JNR 0.26647	6.50e3	64.3	NO
6	6 13C4-PFOS	1701602-01 WT1711011420JNR 0.26647	2.18e3	68.3	NO
7	7 13C6-PFDA	1701602-01 WT1711011420JNR 0.26647	3.75e3	83.0	NO
8	8 13C7-PFUnA	1701602-01 WT1711011420JNR 0.26647	4.08e3	60.5	NO

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**Name: 171116M3\_61, Date: 17-Nov-2017, Time: 03:31:07, ID: 1701602-02 WT1711011430JNR 0.26496, Description: WT1711011430JNR**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-02 WT1711011430JNR 0.26496	6.78e3	63.2	NO
2	2 13C5-PFHxA	1701602-02 WT1711011430JNR 0.26496	1.00e4	64.9	NO
3	3 13C3-PFHxS	1701602-02 WT1711011430JNR 0.26496	1.97e3	71.1	NO
4	4 13C8-PFOA	1701602-02 WT1711011430JNR 0.26496	6.48e3	61.0	NO
5	5 13C9-PFNA	1701602-02 WT1711011430JNR 0.26496	6.94e3	68.6	NO
6	6 13C4-PFOS	1701602-02 WT1711011430JNR 0.26496	2.30e3	71.9	NO
7	7 13C6-PFDA	1701602-02 WT1711011430JNR 0.26496	2.72e3	60.3	NO
8	8 13C7-PFUnA	1701602-02 WT1711011430JNR 0.26496	4.05e3	60.0	NO

**Name: 171116M3\_62, Date: 17-Nov-2017, Time: 03:42:18, ID: 1701602-03 WT1711011440JNR 0.27031, Description: WT1711011440JNR**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-03 WT1711011440JNR 0.27031	6.68e3	62.3	NO
2	2 13C5-PFHxA	1701602-03 WT1711011440JNR 0.27031	9.97e3	64.4	NO
3	3 13C3-PFHxS	1701602-03 WT1711011440JNR 0.27031	1.81e3	65.5	NO
4	4 13C8-PFOA	1701602-03 WT1711011440JNR 0.27031	6.38e3	60.1	NO
5	5 13C9-PFNA	1701602-03 WT1711011440JNR 0.27031	6.88e3	67.9	NO
6	6 13C4-PFOS	1701602-03 WT1711011440JNR 0.27031	2.10e3	65.7	NO
7	7 13C6-PFDA	1701602-03 WT1711011440JNR 0.27031	3.00e3	66.4	NO
8	8 13C7-PFUnA	1701602-03 WT1711011440JNR 0.27031	4.87e3	72.2	NO

**Name: 171116M3\_63, Date: 17-Nov-2017, Time: 03:53:28, ID: 1701602-04 WT1711011455JNR 0.26213, Description: WT1711011455JNR**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-04 WT1711011455JNR 0.26213	7.05e3	65.7	NO
2	2 13C5-PFHxA	1701602-04 WT1711011455JNR 0.26213	1.07e4	69.2	NO
3	3 13C3-PFHxS	1701602-04 WT1711011455JNR 0.26213	1.93e3	69.9	NO
4	4 13C8-PFOA	1701602-04 WT1711011455JNR 0.26213	7.58e3	71.3	NO
5	5 13C9-PFNA	1701602-04 WT1711011455JNR 0.26213	7.10e3	70.2	NO
6	6 13C4-PFOS	1701602-04 WT1711011455JNR 0.26213	2.20e3	68.9	NO
7	7 13C6-PFDA	1701602-04 WT1711011455JNR 0.26213	3.44e3	76.3	NO
8	8 13C7-PFUnA	1701602-04 WT1711011455JNR 0.26213	5.10e3	75.6	NO

**Name: 171116M3\_64, Date: 17-Nov-2017, Time: 04:04:39, ID: IPA, Description: IPA**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUnA	IPA			NO

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**Name: 171116M3\_65, Date: 17-Nov-2017, Time: 04:15:50, ID: ST171116M3-13 PFC CS0 17K0832, Description: PFC CS0 17K0832**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	ST171116M3-13 PFC CS0 17K0832	1.09e4	101.8	NO
2	2 13C5-PFHxA	ST171116M3-13 PFC CS0 17K0832	1.61e4	104.0	NO
3	3 13C3-PFHxS	ST171116M3-13 PFC CS0 17K0832	2.79e3	101.0	NO
4	4 13C8-PFOA	ST171116M3-13 PFC CS0 17K0832	1.02e4	95.8	NO
5	5 13C9-PFNA	ST171116M3-13 PFC CS0 17K0832	1.11e4	109.4	NO
6	6 13C4-PFOS	ST171116M3-13 PFC CS0 17K0832	3.59e3	112.6	NO
7	7 13C6-PFDA	ST171116M3-13 PFC CS0 17K0832	4.17e3	92.3	NO
8	8 13C7-PFUnA	ST171116M3-13 PFC CS0 17K0832	6.87e3	101.9	NO

**Name: 171116M3\_66, Date: 17-Nov-2017, Time: 04:27:01, ID: IPA, Description: IPA**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUnA	IPA			NO

**Name: 171116M3\_67, Date: 17-Nov-2017, Time: 04:38:11, ID: 1701602-05 WRO1711011530JNR 0.25859, Description: WRO1711011530JNR**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-05 WRO1711011530JNR 0.25...	7.90e3	73.6	NO
2	2 13C5-PFHxA	1701602-05 WRO1711011530JNR 0.25...	1.19e4	76.8	NO
3	3 13C3-PFHxS	1701602-05 WRO1711011530JNR 0.25...	2.04e3	73.9	NO
4	4 13C8-PFOA	1701602-05 WRO1711011530JNR 0.25...	7.98e3	75.2	NO
5	5 13C9-PFNA	1701602-05 WRO1711011530JNR 0.25...	7.38e3	72.9	NO
6	6 13C4-PFOS	1701602-05 WRO1711011530JNR 0.25...	2.07e3	64.9	NO
7	7 13C6-PFDA	1701602-05 WRO1711011530JNR 0.25...	3.26e3	72.3	NO
8	8 13C7-PFUnA	1701602-05 WRO1711011530JNR 0.25...	5.13e3	76.0	NO

**Name: 171116M3\_68, Date: 17-Nov-2017, Time: 04:49:22, ID: 1701602-06 WR1711011555JNR 0.25678, Description: WR1711011555JNR**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-06 WR1711011555JNR 0.25678	7.40e3	69.0	NO
2	2 13C5-PFHxA	1701602-06 WR1711011555JNR 0.25678	1.10e4	71.4	NO
3	3 13C3-PFHxS	1701602-06 WR1711011555JNR 0.25678	1.88e3	68.1	NO
4	4 13C8-PFOA	1701602-06 WR1711011555JNR 0.25678	6.51e3	61.3	NO
5	5 13C9-PFNA	1701602-06 WR1711011555JNR 0.25678	7.11e3	70.3	NO
6	6 13C4-PFOS	1701602-06 WR1711011555JNR 0.25678	1.95e3	61.2	NO
7	7 13C6-PFDA	1701602-06 WR1711011555JNR 0.25678	2.96e3	65.6	NO
8	8 13C7-PFUnA	1701602-06 WR1711011555JNR 0.25678	4.77e3	70.8	NO



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**Name: 171116M3\_69, Date: 17-Nov-2017, Time: 05:00:33, ID: 1701602-07 WT1711011610JNR 0.26094, Description: WT1711011610JNR**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-07 WT1711011610JNR 0.26094	7.03e3	65.5	NO
2	2 13C5-PFHxA	1701602-07 WT1711011610JNR 0.26094	1.04e4	67.0	NO
3	3 13C3-PFHxS	1701602-07 WT1711011610JNR 0.26094	1.79e3	64.9	NO
4	4 13C8-PFOA	1701602-07 WT1711011610JNR 0.26094	7.07e3	66.6	NO
5	5 13C9-PFNA	1701602-07 WT1711011610JNR 0.26094	6.52e3	64.4	NO
6	6 13C4-PFOS	1701602-07 WT1711011610JNR 0.26094	1.95e3	61.2	NO
7	7 13C6-PFDA	1701602-07 WT1711011610JNR 0.26094	3.45e3	76.4	NO
8	8 13C7-PFUnA	1701602-07 WT1711011610JNR 0.26094	4.36e3	64.7	NO

**Name: 171116M3\_70, Date: 17-Nov-2017, Time: 05:11:44, ID: 1701602-08 WT1711011625JNR 0.26446, Description: WT1711011625JNR**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-08 WT1711011625JNR 0.26446	7.05e3	65.7	NO
2	2 13C5-PFHxA	1701602-08 WT1711011625JNR 0.26446	1.05e4	68.2	NO
3	3 13C3-PFHxS	1701602-08 WT1711011625JNR 0.26446	1.86e3	67.4	NO
4	4 13C8-PFOA	1701602-08 WT1711011625JNR 0.26446	7.43e3	69.9	NO
5	5 13C9-PFNA	1701602-08 WT1711011625JNR 0.26446	7.02e3	69.4	NO
6	6 13C4-PFOS	1701602-08 WT1711011625JNR 0.26446	2.21e3	69.2	NO
7	7 13C6-PFDA	1701602-08 WT1711011625JNR 0.26446	2.95e3	65.3	NO
8	8 13C7-PFUnA	1701602-08 WT1711011625JNR 0.26446	4.42e3	65.5	NO

**Name: 171116M3\_71, Date: 17-Nov-2017, Time: 05:22:55, ID: 1701602-09 WT1711011630JNR 0.26264, Description: WT1711011630JNR**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-09 WT1711011630JNR 0.26264	6.54e3	61.0	NO
2	2 13C5-PFHxA	1701602-09 WT1711011630JNR 0.26264	9.89e3	63.9	NO
3	3 13C3-PFHxS	1701602-09 WT1711011630JNR 0.26264	1.71e3	61.8	NO
4	4 13C8-PFOA	1701602-09 WT1711011630JNR 0.26264	6.16e3	58.0	NO
5	5 13C9-PFNA	1701602-09 WT1711011630JNR 0.26264	6.55e3	64.7	NO
6	6 13C4-PFOS	1701602-09 WT1711011630JNR 0.26264	2.06e3	64.6	NO
7	7 13C6-PFDA	1701602-09 WT1711011630JNR 0.26264	2.11e3	46.8	YES
8	8 13C7-PFUnA	1701602-09 WT1711011630JNR 0.26264	3.87e3	57.3	NO

**Name: 171116M3\_72, Date: 17-Nov-2017, Time: 05:34:05, ID: 1701610-01 MTBE\_4998 0.25736, Description: MTBE\_4998**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701610-01 MTBE_4998 0.25736	6.87e3	64.1	NO
2	2 13C5-PFHxA	1701610-01 MTBE_4998 0.25736	1.03e4	66.4	NO
3	3 13C3-PFHxS	1701610-01 MTBE_4998 0.25736	1.69e3	61.2	NO
4	4 13C8-PFOA	1701610-01 MTBE_4998 0.25736	6.37e3	60.0	NO
5	5 13C9-PFNA	1701610-01 MTBE_4998 0.25736	6.27e3	61.9	NO
6	6 13C4-PFOS	1701610-01 MTBE_4998 0.25736	1.89e3	59.2	NO
7	7 13C6-PFDA	1701610-01 MTBE_4998 0.25736	2.34e3	51.9	NO
8	8 13C7-PFUnA	1701610-01 MTBE_4998 0.25736	4.28e3	63.5	NO

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**Name: 171116M3\_73, Date: 17-Nov-2017, Time: 05:45:16, ID: 1701611-01 MTBE\_4997 0.25926, Description: MTBE\_4997**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701611-01 MTBE_4997 0.25926	7.49e3	69.8	NO
2	2 13C5-PFHxA	1701611-01 MTBE_4997 0.25926	1.09e4	70.6	NO
3	3 13C3-PFHxS	1701611-01 MTBE_4997 0.25926	2.02e3	73.2	NO
4	4 13C8-PFOA	1701611-01 MTBE_4997 0.25926	7.81e3	73.6	NO
5	5 13C9-PFNA	1701611-01 MTBE_4997 0.25926	8.12e3	80.3	NO
6	6 13C4-PFOS	1701611-01 MTBE_4997 0.25926	2.21e3	69.4	NO
7	7 13C6-PFDA	1701611-01 MTBE_4997 0.25926	2.58e3	57.1	NO
8	8 13C7-PFUnA	1701611-01 MTBE_4997 0.25926	5.06e3	75.0	NO

**Name: 171116M3\_74, Date: 17-Nov-2017, Time: 05:56:26, ID: 1701626-01 MTBE\_4999 0.24638, Description: MTBE\_4999**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701626-01 MTBE_4999 0.24638	7.45e3	69.4	NO
2	2 13C5-PFHxA	1701626-01 MTBE_4999 0.24638	1.04e4	67.4	NO
3	3 13C3-PFHxS	1701626-01 MTBE_4999 0.24638	1.80e3	65.2	NO
4	4 13C8-PFOA	1701626-01 MTBE_4999 0.24638	7.28e3	68.5	NO
5	5 13C9-PFNA	1701626-01 MTBE_4999 0.24638	6.29e3	62.1	NO
6	6 13C4-PFOS	1701626-01 MTBE_4999 0.24638	2.07e3	64.7	NO
7	7 13C6-PFDA	1701626-01 MTBE_4999 0.24638	3.44e3	76.1	NO
8	8 13C7-PFUnA	1701626-01 MTBE_4999 0.24638	4.49e3	66.6	NO

**Name: 171116M3\_75, Date: 17-Nov-2017, Time: 06:07:37, ID: 1701627-01 MTBE\_9001 0.25481, Description: MTBE\_9001**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701627-01 MTBE_9001 0.25481	6.63e3	61.8	NO
2	2 13C5-PFHxA	1701627-01 MTBE_9001 0.25481	9.13e3	59.0	NO
3	3 13C3-PFHxS	1701627-01 MTBE_9001 0.25481	1.77e3	63.9	NO
4	4 13C8-PFOA	1701627-01 MTBE_9001 0.25481	6.03e3	56.8	NO
5	5 13C9-PFNA	1701627-01 MTBE_9001 0.25481	6.74e3	66.5	NO
6	6 13C4-PFOS	1701627-01 MTBE_9001 0.25481	2.23e3	69.9	NO
7	7 13C6-PFDA	1701627-01 MTBE_9001 0.25481	2.43e3	53.9	NO
8	8 13C7-PFUnA	1701627-01 MTBE_9001 0.25481	3.81e3	56.4	NO

**Name: 171116M3\_76, Date: 17-Nov-2017, Time: 06:18:48, ID: IPA, Description: IPA**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUnA	IPA			NO

Dataset: U:\Q4.PRO\results\171116M3\171116M3-IIS AREAS.qld

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Printed: Friday, November 17, 2017 13:58:57 Pacific Standard Time

**Name: 171116M3\_77, Date: 17-Nov-2017, Time: 06:29:59, ID: ST171116M3-14 PFC CS3 17K0834, Description: PFC CS3 17K0834**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	ST171116M3-14 PFC CS3 17K0834	1.22e4	114.0	NO
2	2 13C5-PFHxA	ST171116M3-14 PFC CS3 17K0834	1.69e4	109.0	NO
3	3 13C3-PFHxS	ST171116M3-14 PFC CS3 17K0834	3.20e3	115.7	NO
4	4 13C8-PFOA	ST171116M3-14 PFC CS3 17K0834	1.08e4	101.8	NO
5	5 13C9-PFNA	ST171116M3-14 PFC CS3 17K0834	1.14e4	112.8	NO
6	6 13C4-PFOS	ST171116M3-14 PFC CS3 17K0834	3.45e3	108.1	NO
7	7 13C6-PFDA	ST171116M3-14 PFC CS3 17K0834	4.93e3	109.2	NO
8	8 13C7-PFUnA	ST171116M3-14 PFC CS3 17K0834	7.38e3	109.4	NO

**Name: 171116M3\_78, Date: 17-Nov-2017, Time: 06:41:09, ID: IPA, Description: IPA**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUnA	IPA			NO

Dataset: Untitled

Last Altered: Monday, November 20, 2017 07:50:15 Pacific Standard Time

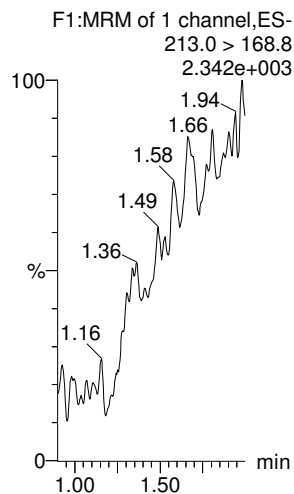
Printed: Monday, November 20, 2017 07:51:07 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

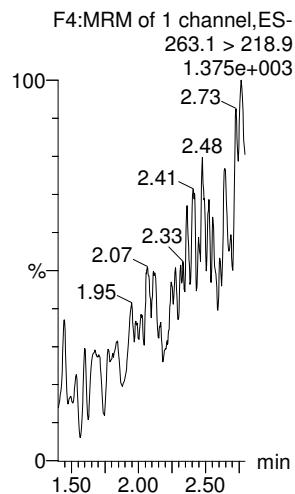
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Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

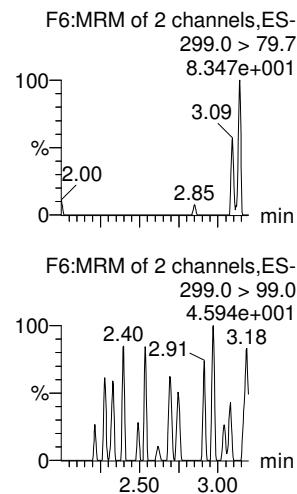
**PFBA**



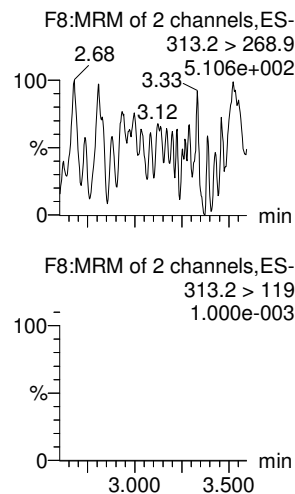
**PFPeA**



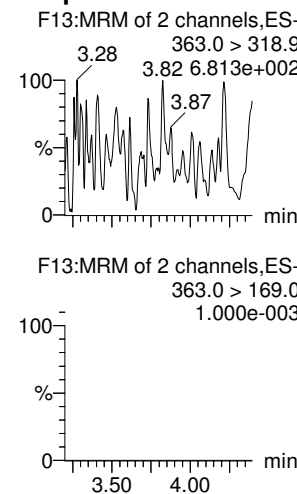
**PFBS**



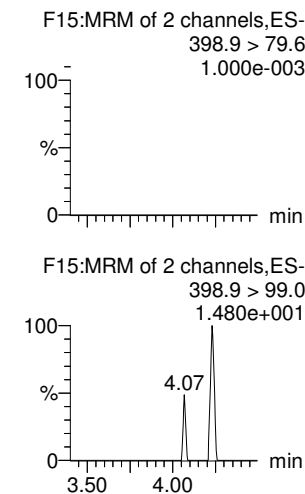
**PFHxA**



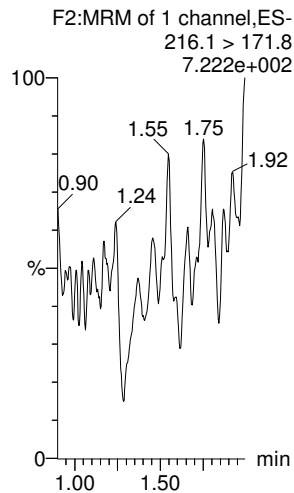
**PFHpA**



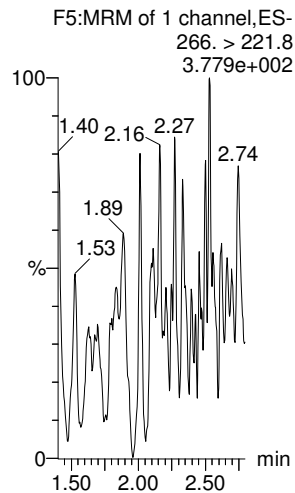
**L-PFHxS**



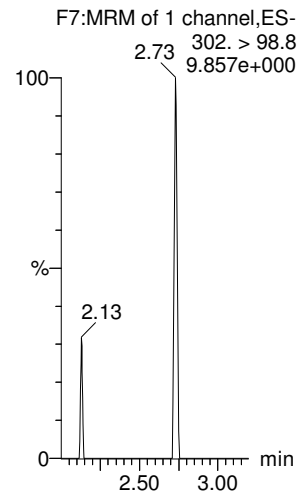
**13C3-PFBA**



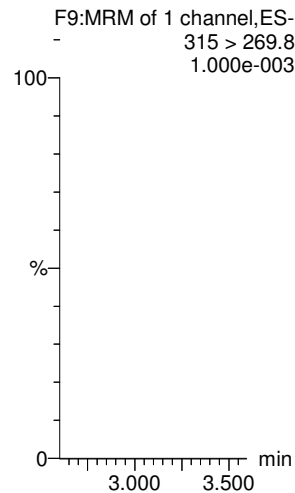
**13C3-PFPeA**



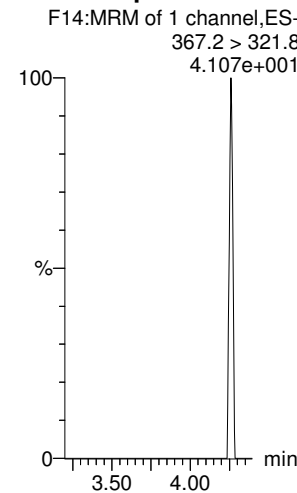
**13C3-PFBS**



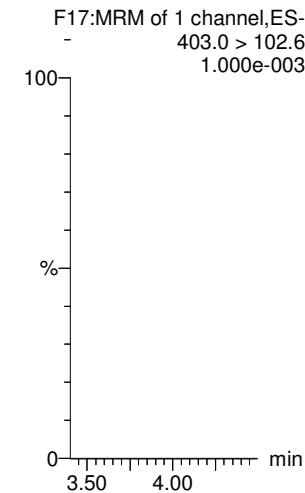
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



Dataset: Untitled

Last Altered: Monday, November 20, 2017 07:50:15 Pacific Standard Time

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Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

**6:2 FTS**

**L-PFOA**

**PFHpS**

**PFNA**

**PFOSA**

**L-PFOS**

F21:MRM of 2 channels,ES-  
427.1 > 407  
1.000e-003

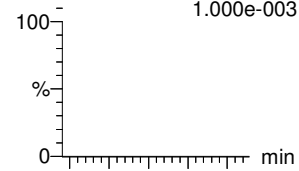
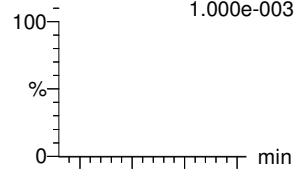
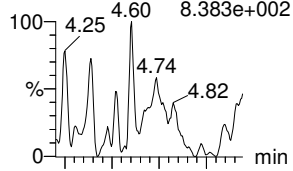
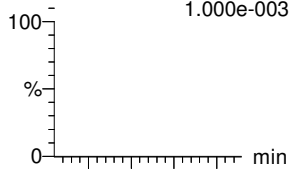
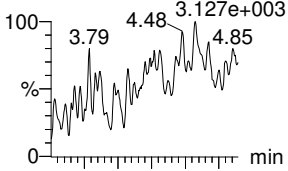
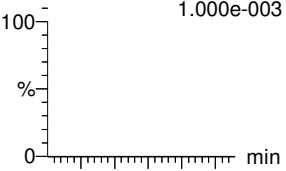
F18:MRM of 2 channels,ES-  
413 > 368.7  
3.127e+003

F23:MRM of 2 channels,ES-  
449 > 80.0  
1.000e-003

F24:MRM of 2 channels,ES-  
463.0 > 418.8  
8.383e+002

F27:MRM of 2 channels,ES-  
498.1 > 77.8  
1.000e-003

F29:MRM of 2 channels,ES-  
499 > 79.9  
1.000e-003



F21:MRM of 2 channels,ES-  
427.1 > 80  
1.000e-003

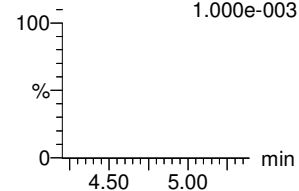
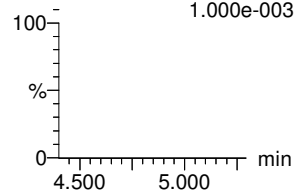
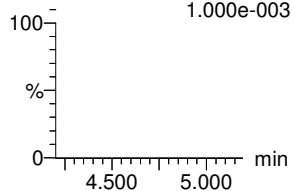
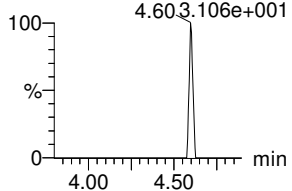
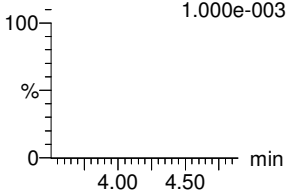
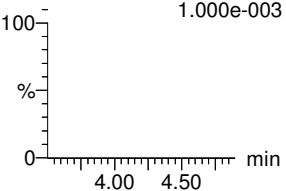
F18:MRM of 2 channels,ES-  
413 > 169  
1.000e-003

F23:MRM of 2 channels,ES-  
449 > 98.7  
3.106e+001

F24:MRM of 2 channels,ES-  
463.0 > 219.0  
1.000e-003

F27:MRM of 2 channels,ES-  
498.1 > 478  
1.000e-003

F29:MRM of 2 channels,ES-  
499 > 99  
1.000e-003



**13C2-6:2 FTS**

**13C2-PFOA**

**13C3-PFBS**

**13C5-PFNA**

**13C8-PFOSA**

**13C8-PFOS**

F22:MRM of 1 channel,ES-  
429.1 > 408.9  
1.000e-003

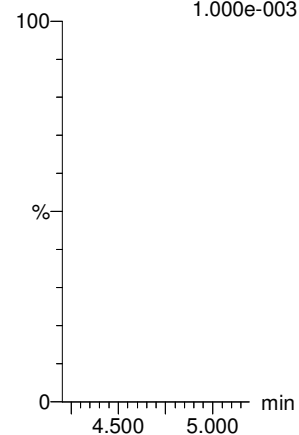
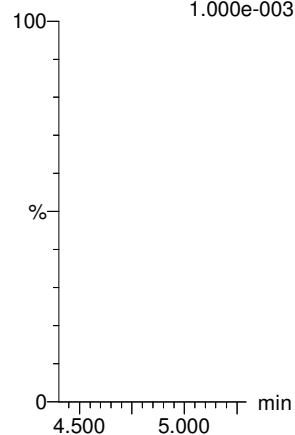
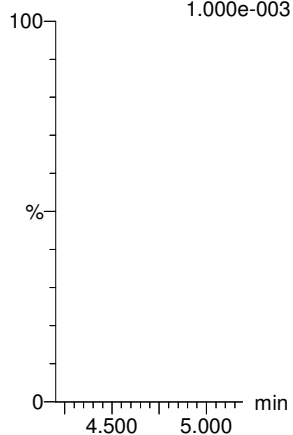
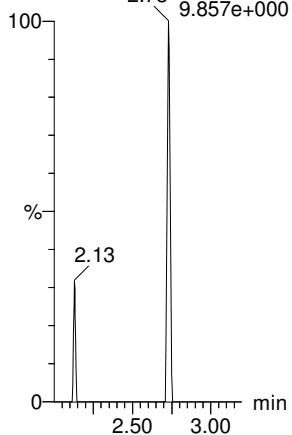
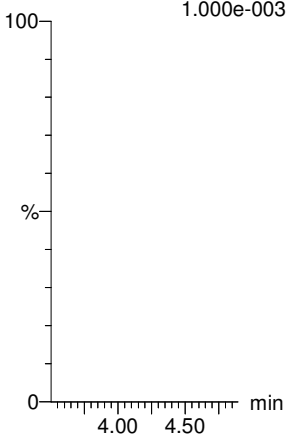
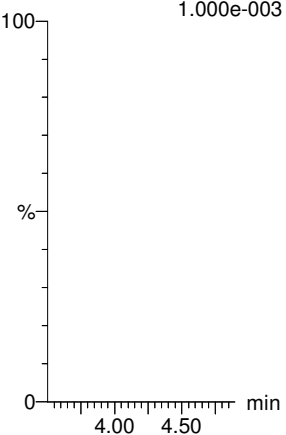
F19:MRM of 1 channel,ES-  
414.9 > 369.7  
1.000e-003

F7:MRM of 1 channel,ES-  
302. > 98.8  
9.857e+000

F25:MRM of 1 channel,ES-  
468.2 > 422.9  
1.000e-003

F31:MRM of 1 channel,ES-  
506.1 > 77.7  
1.000e-003

F32:MRM of 1 channel,ES-  
507.0 > 79.9  
1.000e-003



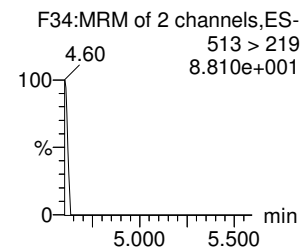
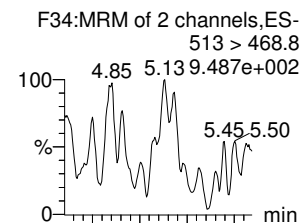
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Last Altered: Monday, November 20, 2017 07:50:15 Pacific Standard Time

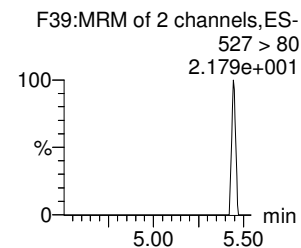
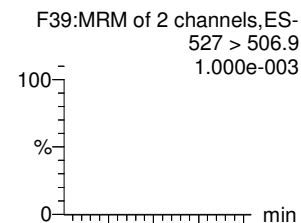
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Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

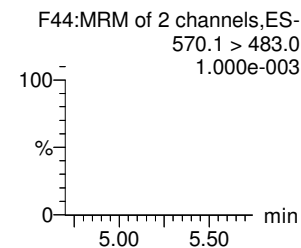
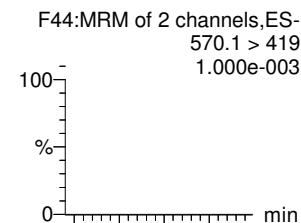
**PFDA**



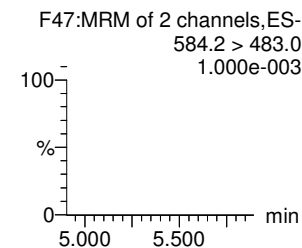
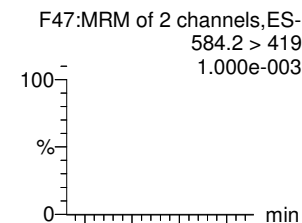
**8:2 FTS**



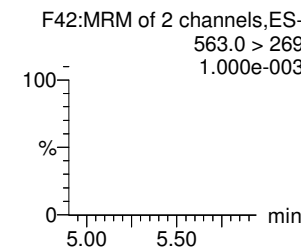
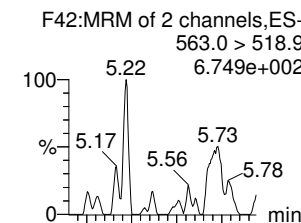
**N-MeFOSAA**



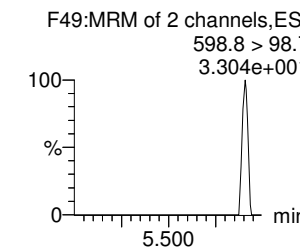
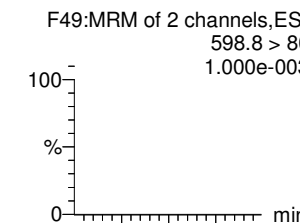
**N-EtFOSAA**



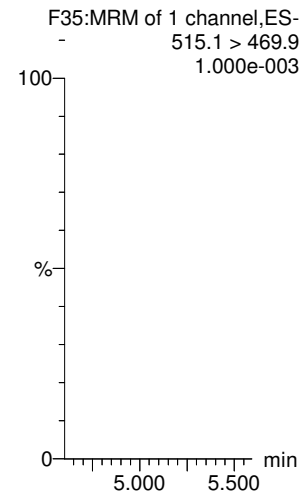
**PFUdA**



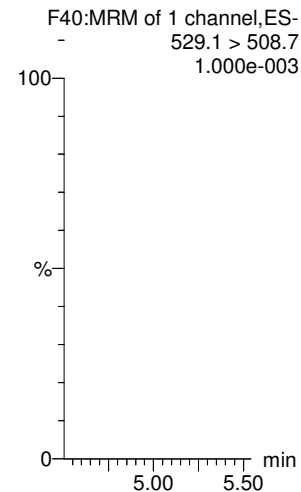
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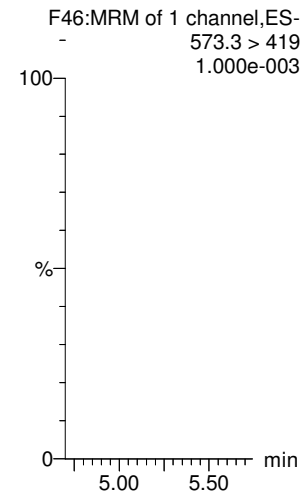
**13C2-PFDA**



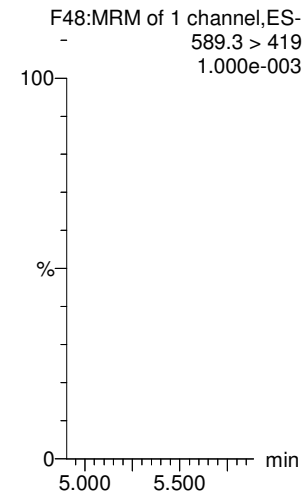
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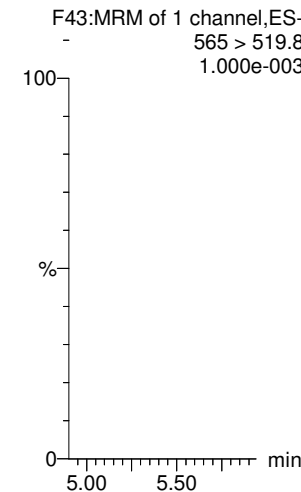
**d3-N-MeFOSAA**



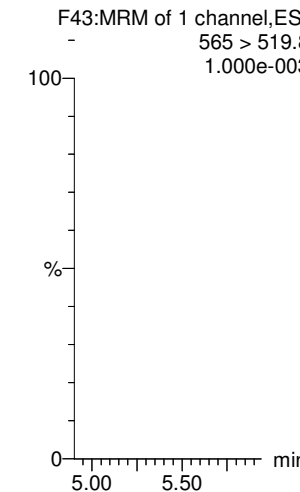
**d5-N-EtFOSAA**



**13C2-PFUdA**



**13C2-PFUdA**



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Last Altered: Monday, November 20, 2017 07:50:15 Pacific Standard Time

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Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

**PFDoA**

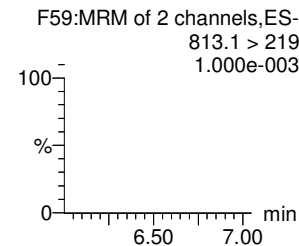
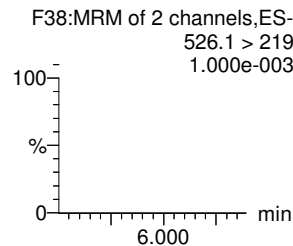
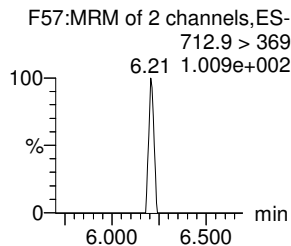
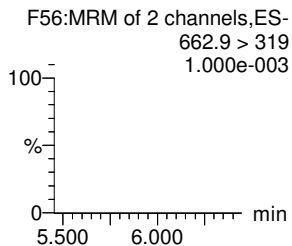
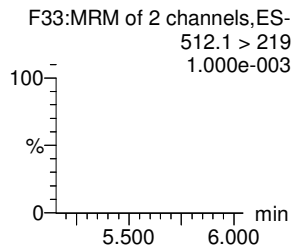
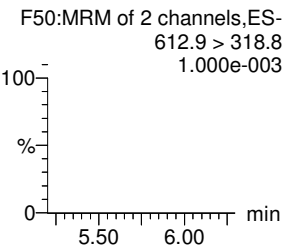
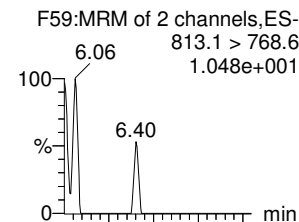
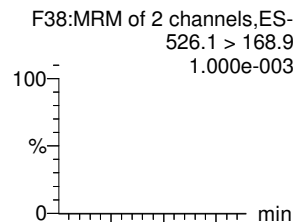
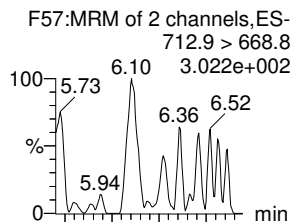
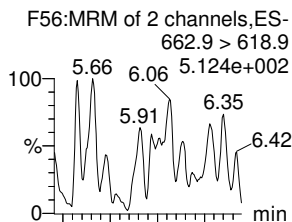
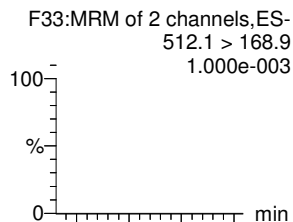
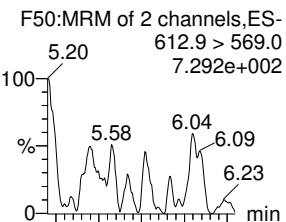
**N-MeFOSA**

**PFTrDA**

**PFTeDA**

**N-EtFOSA**

**PFHxDA**



**13C2-PFDoA**

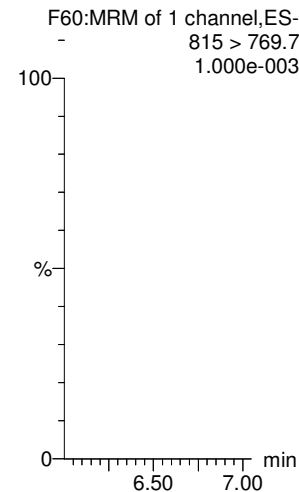
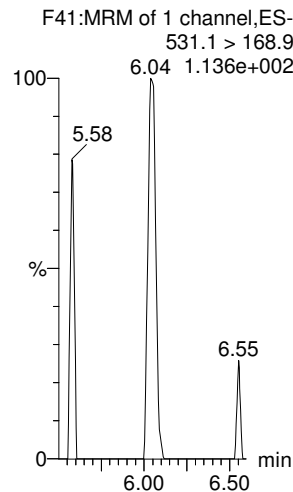
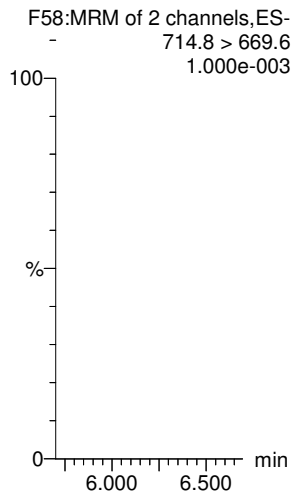
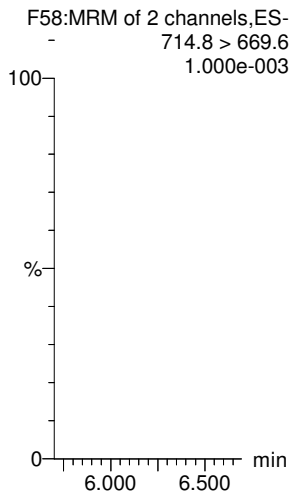
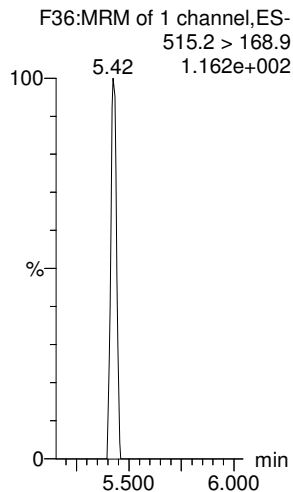
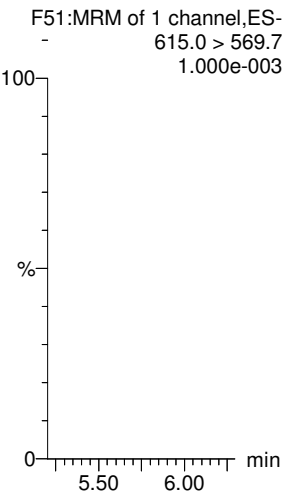
**d3-N-MeFOSA**

**13C2-PFTeDA**

**13C2-PFTeDA**

**d5-N-ETFOSA**

**13C2-PFHxDA**



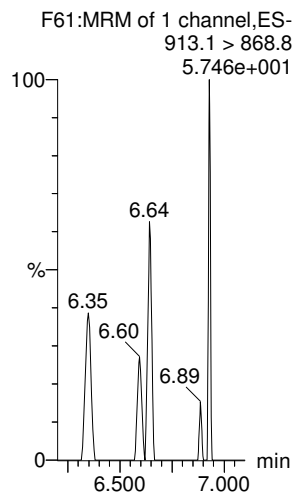
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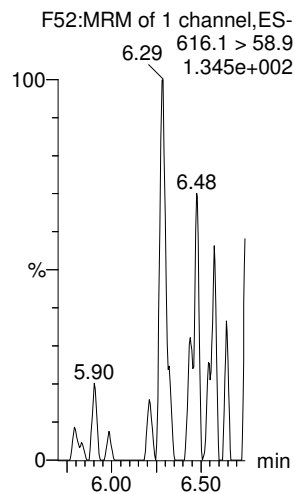
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Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

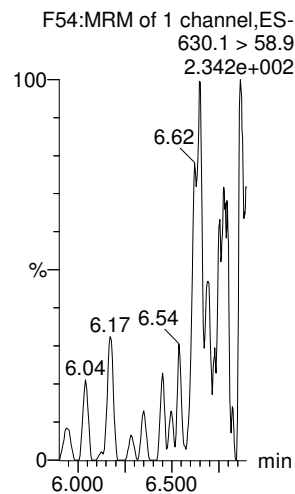
**PFODA**



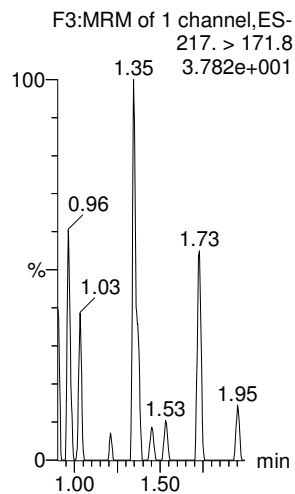
**N-MeFOSE**



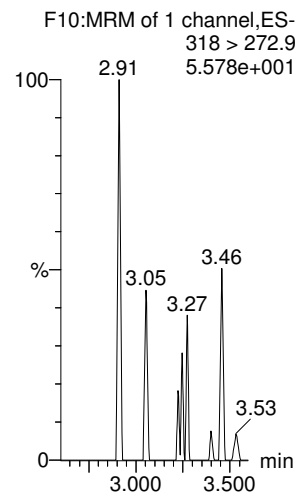
**N-EtFOSE**



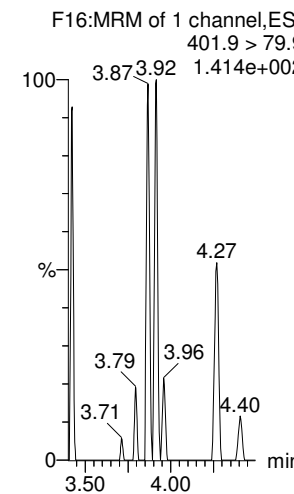
**13C4-PFBA**



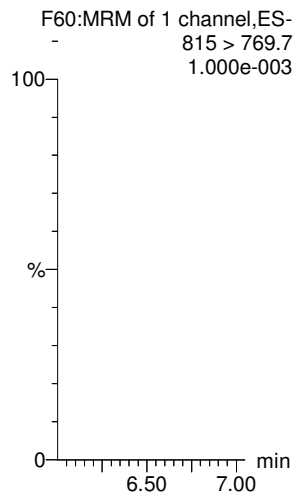
**13C5-PFHxA**



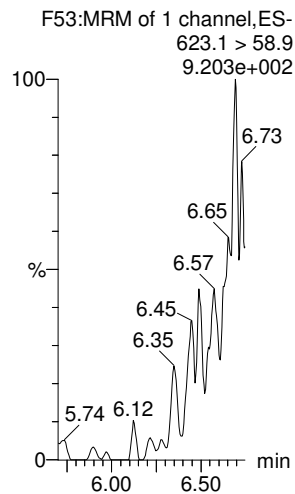
**13C3-PFHxS**



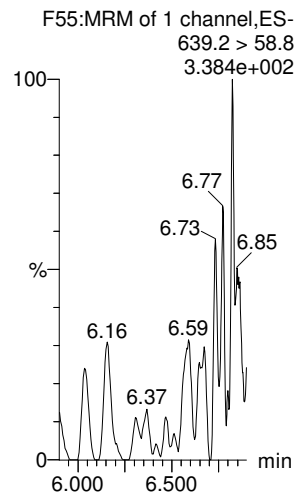
**13C2-PFHxDA**



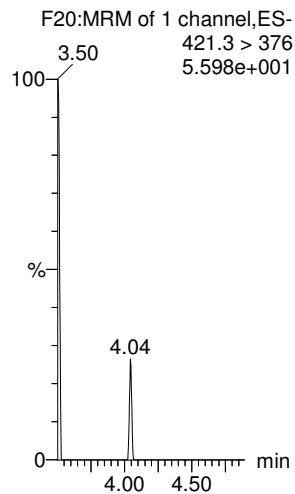
**d7-N-MeFOSE**



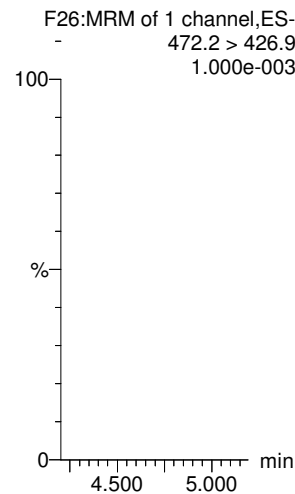
**d9-N-EtFOSE**



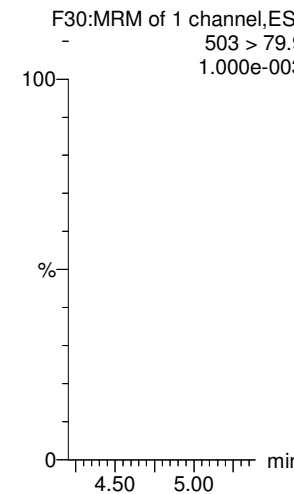
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**





Dataset: Untitled

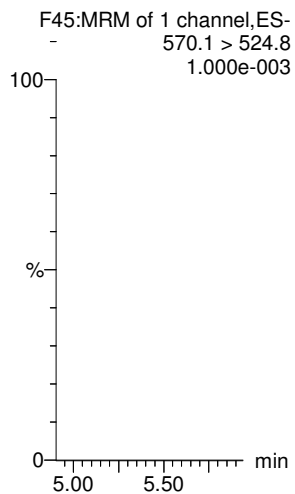
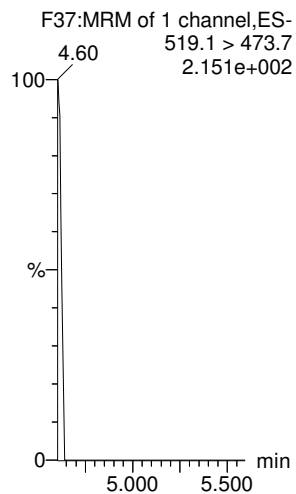
Last Altered: Monday, November 20, 2017 07:50:15 Pacific Standard Time

Printed: Monday, November 20, 2017 07:51:07 Pacific Standard Time

Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

13C6-PFDA

13C7-PFUdA



Dataset: U:\Q4.PRO\results\171116M3\171116M3-35.qld

Last Altered: Saturday, November 18, 2017 11:41:16 Pacific Standard Time  
Printed: Saturday, November 18, 2017 11:42:02 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_35, Date: 16-Nov-2017, Time: 22:40:12, ID: ST171116M3-11 PFC CS3 17K0834, Description: PFC CS3 17K0834

AC  
11/18/17

J.A.  
11/20/2017

#	Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	8.85e3	9.89e3	1.0000		1.28	1.26	11.2	10.506	105.1
2	2 PFPeA	263.1 > 218.9	1.13e4	1.37e4	1.0000		2.32	2.22	10.3	10.691	106.9
3	3 PFBS	299.0 > 79.7	2.75e3	1.68e3	1.0000		2.55	2.51	20.5	9.615	96.2
4	4 PFHxA	313.2 > 268.9	1.48e4	4.96e3	1.0000		3.01	3.00	14.9	10.441	104.4
5	5 PFHpA	363.0 > 318.9	9.93e3	9.41e3	1.0000		3.71	3.63	13.2	9.831	98.3
6	6 L-PFHxS	398.9 > 79.6	2.03e3	1.26e3	1.0000		3.86	3.78	20.1	10.419	104.2
7	8 6:2 FTS	427.1 > 407	2.05e3	2.72e3	1.0000		4.16	4.09	9.40	9.916	99.2
8	9 L-PFOA	413 > 368.7	7.81e3	9.94e3	1.0000		4.22	4.15	9.81	9.587	95.9
9	11 PFHpS	449 > 80.0	2.20e3	9.94e3	1.0000		4.32	4.27	2.77	8.841	88.4
10	12 PFNA	463.0 > 418.8	9.87e3	1.01e4	1.0000		4.66	4.59	12.2	10.876	108.8
11	13 PFOSA	498.1 > 77.8	3.73e3	4.64e3	1.0000		4.73	4.65	10.0	9.632	96.3
12	14 L-PFOS	499 > 79.9	2.94e3	3.44e3	1.0000		4.74	4.68	10.7	8.423	84.2
13	16 PFDA	513 > 468.8	7.30e3	9.55e3	1.0000		5.01	4.97	9.55	10.087	100.9
14	17 8:2 FTS	527 > 506.9	2.12e3	1.04e3	1.0000		4.88	4.94	25.5	10.767	107.7
15	18 N-MeFOSAA	570.1 > 419	5.00e3	3.61e3	1.0000		5.17	5.12	17.3	9.614	96.1
16	19 N-EtFOSAA	584.2 > 419	3.95e3	3.74e3	1.0000		5.32	5.28	13.2	12.277	122.8
17	20 PFUdA	563.0 > 518.9	9.15e3	8.75e3	1.0000		5.45	5.30	13.1	10.116	101.2
18	21 PFDS	598.8 > 80	3.73e3	8.75e3	1.0000		5.39	5.34	5.34	12.364	123.6
19	22 PFDoA	612.9 > 569.0	1.18e4	4.33e3	1.0000		5.62	5.59	34.1	11.135	111.3
20	23 N-MeFOSA	512.1 > 168.9	7.06e3	2.01e4	1.0000		5.68	5.64	52.7	55.546	111.1
21	24 PFTrDA	662.9 > 618.9	1.12e4	4.33e3	1.0000		5.87	5.83	32.2	12.755	127.5
22	25 PFTeDA	712.9 > 668.8	5.72e3	5.49e3	1.0000		6.01	6.05	13.0	11.486	114.9
23	26 N-EtFOSA	526.1 > 168.9	7.66e3	2.38e4	1.0000		6.09	6.06	48.2	51.982	104.0
24	27 PFHxDA	813.1 > 768.6	1.99e3	1.63e3	1.0000		6.42	6.39	6.12	12.883	128.8
25	28 PFODA	913.1 > 868.8	6.36e2	1.63e3	1.0000		6.65	6.63	1.95	7.872	78.7
26	29 N-MeFOSE	616.1 > 58.9	7.67e3	2.62e4	1.0000		6.30	6.27	43.9	47.166	94.3
27	30 N-EtFOSE	630.1 > 58.9	8.77e3	2.40e4	1.0000		6.42	6.42	54.8	54.942	109.9
28	31 13C3-PFBA	216.1 > 171.8	9.89e3	1.12e4	1.0000	0.887	1.28	1.25	11.1	12.478	99.8
29	32 13C3-PFPeA	266. > 221.8	1.37e4	1.59e4	1.0000	0.820	2.32	2.22	10.8	13.166	105.3
30	33 13C3-PFBS	302. > 98.8	1.68e3	1.59e4	1.0000	0.096	2.55	2.51	1.32	13.731	109.8
31	Work Order 171116M3-35	315 > 269.8	4.96e3	1.59e4	1.0000	0.728	3.01	3.00	3.91	5.367	107.8

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Dataset: U:\Q4.PRO\results\171116M3\171116M3-35.qld

Last Altered: Saturday, November 18, 2017 11:41:16 Pacific Standard Time

Printed: Saturday, November 18, 2017 11:42:02 Pacific Standard Time

Name: 171116M3\_35, Date: 16-Nov-2017, Time: 22:40:12, ID: ST171116M3-11 PFC CS3 17K0834, Description: PFC CS3 17K0834

#	Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	9.41e3	1.59e4	1.0000	0.550	3.71	3.62	7.41	13.492	107.9
33	36 18O2-PFHxS	403.0 > 102.6	1.26e3	2.69e3	1.0000	0.432	3.86	3.78	5.85	13.559	108.5
34	37 13C2-6.2 FTS	429.1 > 408.9	2.72e3	1.19e4	1.0000	0.217	4.16	4.09	2.86	13.177	105.4
35	38 13C2-PFOA	414.9 > 369.7	9.94e3	1.19e4	1.0000	0.840	4.22	4.15	10.5	12.448	99.6
36	39 13C5-PFNA	468.2 > 422.9	1.01e4	1.02e4	1.0000	0.967	4.66	4.59	12.4	12.800	102.4
37	40 13C8-PFOSA	506.1 > 77.7	4.64e3	7.91e3	1.0000	0.786	4.73	4.65	7.34	9.335	74.7
38	41 13C8-PFOS	507.0 > 79.9	3.44e3	2.80e3	1.0000	0.991	4.73	4.67	15.4	15.523	124.2
39	42 13C2-PFDA	515.1 > 469.9	9.55e3	4.80e3	1.0000	2.153	5.01	4.97	24.9	11.546	92.4
40	43 13C2-8.2 FTS	529.1 > 508.7	1.04e3	1.59e4	1.0000	0.058	4.88	4.94	0.819	14.069	112.6
41	44 d3-N-MeFOSAA	573.3 > 419	3.61e3	7.91e3	1.0000	0.667	5.17	5.12	5.71	8.552	68.4
42	45 d5-N-EtFOSAA	589.3 > 419	3.74e3	7.91e3	1.0000	0.698	5.32	5.28	5.91	8.475	67.8
43	46 13C2-PFUdA	565 > 519.8	8.75e3	7.91e3	1.0000	1.261	5.45	5.30	13.8	10.970	87.8
44	47 13C2-PFDoA	615.0 > 569.7	4.33e3	7.91e3	1.0000	0.695	5.62	5.58	6.85	9.857	78.9
45	48 d3-N-MeFOSA	515.2 > 168.9	2.01e4	7.91e3	1.0000	0.271	5.68	5.67	31.8	117.054	78.0
46	49 13C2-PFTeDA	714.8 > 669.6	5.49e3	7.91e3	1.0000	0.762	6.01	6.05	8.68	11.384	91.1
47	50 d5-N-ETFOSA	531.1 > 168.9	2.38e4	7.91e3	1.0000	0.325	6.09	6.08	37.7	116.068	77.4
48	51 13C2-PFHxDA	815 > 769.7	1.63e3	7.91e3	1.0000	0.563	6.42	6.39	2.57	4.569	91.4
49	52 d7-N-MeFOSE	623.1 > 58.9	2.62e4	7.91e3	1.0000	0.317	6.30	6.26	41.5	130.696	87.1
50	53 d9-N-EtFOSE	639.2 > 58.8	2.40e4	7.91e3	1.0000	0.322	6.42	6.41	37.9	117.882	78.6
51	54 13C4-PFBA	217. > 171.8	1.12e4	1.12e4	1.0000	1.000	1.28	1.25	12.5	12.500	100.0
52	55 13C5-PFHxA	318 > 272.9	1.59e4	1.59e4	1.0000	1.000	3.01	3.00	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	2.69e3	2.69e3	1.0000	1.000	3.86	3.78	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.19e4	1.19e4	1.0000	1.000	4.22	4.15	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.02e4	1.02e4	1.0000	1.000	4.66	4.59	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	2.80e3	2.80e3	1.0000	1.000	4.73	4.68	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	4.80e3	4.80e3	1.0000	1.000	5.01	4.97	12.5	12.500	100.0
58	61 13C7-PFUdA	570.1 > 524.8	7.91e3	7.91e3	1.0000	1.000	5.45	5.30	12.5	12.500	100.0

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Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Saturday, November 18, 2017 12:20:36 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:21:53 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08  
 Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1				
2				
3				
4	171116M3_1	IPA	16-Nov-17	16:20:10
5	171116M3_2	ST171116M3-1 PFC CS-2 17K0830	16-Nov-17	16:31:18
6	171116M3_3	ST171116M3-2 PFC CS-1 17K0831	16-Nov-17	16:42:29
7	171116M3_4	ST171116M3-3 PFC CS0 17K0832	16-Nov-17	16:53:40
8	171116M3_5	ST171116M3-4 PFC CS1 17K0838	16-Nov-17	17:04:50
9	171116M3_6	ST171116M3-5 PFC CS2 17K0833	16-Nov-17	17:16:01
10	171116M3_7	ST171116M3-6 PFC CS3 17K0834	16-Nov-17	17:27:12
11	171116M3_8	ST171116M3-7 PFC CS4 17K0835	16-Nov-17	17:38:23
12	171116M3_9	ST171116M3-8 PFC CS5 17K0836	16-Nov-17	17:49:33
13	171116M3_10	ST171116M3-9 PFC CS6 17K1303	16-Nov-17	18:00:44
14	171116M3_11	ST171116M3-10 PFC CS7 17K1304	16-Nov-17	18:11:54
15	171116M3_12	IPA	16-Nov-17	18:23:06
16	171116M3_13	ICV171116M3-1 PFC ICV 17K0837	16-Nov-17	18:34:16
17	171116M3_14	IPA	16-Nov-17	18:45:27
18	171116M3_15	1701602-21 FB1711021045JNR 0.25693	16-Nov-17	18:56:37
19	171116M3_16	1701602-22 WT1711021110JNR 0.25133	16-Nov-17	19:07:48
20	171116M3_17	B7K0078-BS1 OPR 0.125	16-Nov-17	19:18:59
21	171116M3_18	IPA	16-Nov-17	19:30:10
22	171116M3_19	B7K0078-BLK1 Method Blank 0.125	16-Nov-17	19:41:20
23	171116M3_20	1701645-01 WR1711091315JLB 0.125	16-Nov-17	19:52:31
24	171116M3_21	1701646-01 WR1711081120JLB 0.125	16-Nov-17	20:03:42
25	171116M3_22	1701646-02 WR1711081130JLB 0.125	16-Nov-17	20:14:53
26	171116M3_23	1701646-03 WR1711081235JLB 0.125	16-Nov-17	20:26:03
27	171116M3_24	1701647-01 MIBE_7228 0.125	16-Nov-17	20:37:14
28	171116M3_25	1701671-01 WT1711090840JNR 0.125	16-Nov-17	20:48:24
29	171116M3_26	B7K0059-BS1 OPR 0.125	16-Nov-17	20:59:35
30	171116M3_27	IPA	16-Nov-17	21:10:46
31	171116M3_28	B7K0059-BLK1 Method Blank 0.125	16-Nov-17	21:21:57

Dataset: Untitled

Last Altered: Saturday, November 18, 2017 12:20:36 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:21:53 Pacific Standard Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	171116M3_29	B7K0059-MS1 Matrix Spike 0.11181	16-Nov-17	21:33:07
33	171116M3_30	B7K0059-MSD1 Matrix Spike Dup 0.11415	16-Nov-17	21:44:18
34	171116M3_31	1701621-01 MBS-EFF-001 0.11391	16-Nov-17	21:55:29
35	171116M3_32	1701621-02 MBS-EFF-002 0.11579	16-Nov-17	22:06:39
36	171116M3_33	1701621-03 MBS-IN-003 0.11618	16-Nov-17	22:17:52
37	171116M3_34	IPA	16-Nov-17	22:29:01
38	171116M3_35	ST171116M3-11 PFC CS3 17K0834	16-Nov-17	22:40:12
39	171116M3_36	IPA	16-Nov-17	22:51:23
40	171116M3_37	1701624-01 OF-MW20-1117 0.10651	16-Nov-17	23:02:33
41	171116M3_38	1701624-02 OF-MW20P-1117 0.11409	16-Nov-17	23:13:44
42	171116M3_39	1701624-03 OF-MW22-1117 0.10407	16-Nov-17	23:24:55
43	171116M3_40	1701624-04 OF-MW22D-1117 0.11272	16-Nov-17	23:36:05
44	171116M3_41	1701624-05 OF-MW19-1117 0.11045	16-Nov-17	23:47:16
45	171116M3_42	1701624-06 OF-MW190-1117 0.10982	16-Nov-17	23:58:27
46	171116M3_43	1701624-07 OF-MW21-1117 0.1119	17-Nov-17	00:09:38
47	171116M3_44	1701624-08 OF-MW33-1117 0.10266	17-Nov-17	00:20:54
48	171116M3_45	1701624-09 OF-MW33D-1117 0.11041	17-Nov-17	00:32:13
49	171116M3_46	1701624-10 OF-EB110717 0.11441	17-Nov-17	00:43:26
50	171116M3_47	1701624-11 OF-FB110717 0.11442	17-Nov-17	00:54:37
51	171116M3_48	IPA	17-Nov-17	01:05:48
52	171116M3_49	ST171116M3-12 PFC CS3 17K0834	17-Nov-17	01:16:58
53	171116M3_50	IPA	17-Nov-17	01:28:09
54	171116M3_51	1701624-12 10W-AQ01-110717 0.11031	17-Nov-17	01:39:20
55	171116M3_52	1701624-13 10W-AQ02-110717 0.10337	17-Nov-17	01:50:31
56	171116M3_53	1701624-14 10W-AQ03-110717 0.10786	17-Nov-17	02:01:41
57	171116M3_54	B7K0031-BS1 OPR 0.25	17-Nov-17	02:12:52
58	171116M3_55	IPA	17-Nov-17	02:24:02
59	171116M3_56	B7K0031-BLK1 Method Blank 0.25	17-Nov-17	02:35:13
60	171116M3_57	1701563-01RE1 MTBE_4995 0.26962	17-Nov-17	02:46:24
61	171116M3_58	1701563-02RE1 MTBE_4996 0.26061	17-Nov-17	02:57:35
62	171116M3_59	1701564-01RE1 MTBE_4994 0.2582	17-Nov-17	03:08:45
63	171116M3_60	1701602-01 WT1711011420JNR 0.26647	17-Nov-17	03:19:56
64	171116M3_61	1701602-02 WT1711011430JNR 0.26496	17-Nov-17	03:31:07
65	171116M3_62	1701602-03 WT1711011440JNR 0.27031	17-Nov-17	03:42:18

Dataset: Untitled

Last Altered: Saturday, November 18, 2017 12:20:36 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:21:53 Pacific Standard Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	171116M3_63	1701602-04 WT1711011455JNR 0.26213	17-Nov-17	03:53:28
67	171116M3_64	IPA	17-Nov-17	04:04:39
68	171116M3_65	ST171116M3-13 PFC CS0 17K0832	17-Nov-17	04:15:50
69	171116M3_66	IPA	17-Nov-17	04:27:01
70	171116M3_67	1701602-05 WRO1711011530JNR 0.25859	17-Nov-17	04:38:11
71	171116M3_68	1701602-06 WR1711011555JNR 0.25678	17-Nov-17	04:49:22
72	171116M3_69	1701602-07 WT1711011610JNR 0.26094	17-Nov-17	05:00:33
73	171116M3_70	1701602-08 WT1711011625JNR 0.26446	17-Nov-17	05:11:44
74	171116M3_71	1701602-09 WT1711011630JNR 0.26264	17-Nov-17	05:22:55
75	171116M3_72	1701610-01 MTBE_4998 0.25736	17-Nov-17	05:34:05
76	171116M3_73	1701611-01 MTBE_4997 0.25926	17-Nov-17	05:45:16
77	171116M3_74	1701626-01 MTBE_4999 0.24638	17-Nov-17	05:56:26
78	171116M3_75	1701627-01 MTBE_9001 0.25481	17-Nov-17	06:07:37
79	171116M3_76	IPA	17-Nov-17	06:18:48
80	171116M3_77	ST171116M3-14 PFC CS3 17K0834	17-Nov-17	06:29:59
81	171116M3_78	IPA	17-Nov-17	06:41:09

## LC Calibration Standards Review Checklist

Q4

Calibration ID:	ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	
ST77116M3-11 <u>LMH</u>	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
↓ -12 <u>LMH</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/> (B)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	↓
↓ -13 <u>LMH</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/> (B)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	↓
↓ -14 <u>LMH</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (A)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	↓
_____ <u>LMH</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	□
_____ <u>LMH</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	□
_____ <u>LMH</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	□
_____ <u>LMH</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	□
_____ <u>LMH</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	□
_____ <u>LMH</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	□

Full Mass Cal. Date: 11/14/17

Run Log Present:

# of Samples per Sequence Checked:

Reviewed By: JA. 11/20/2017  
Initials/Date

**Comments:**  
 (A) PFEDA < 10% recovery  
 (B) N-MEFSAA, PFTEDA outside limits.  
 AC 11/18/17

ICAL not valid for 6:2 FTS or PFDS. AC 11/20/17

Dataset: U:\Q4.PRO\results\171116M3\171116M3-35.qld

Last Altered: Saturday, November 18, 2017 11:41:16 Pacific Standard Time

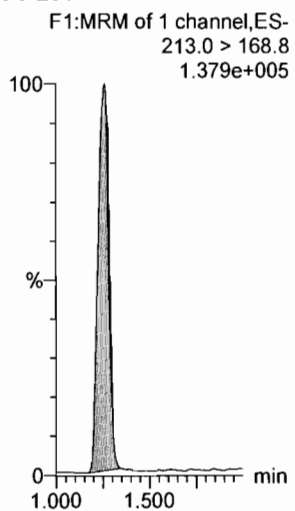
Printed: Saturday, November 18, 2017 11:42:02 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

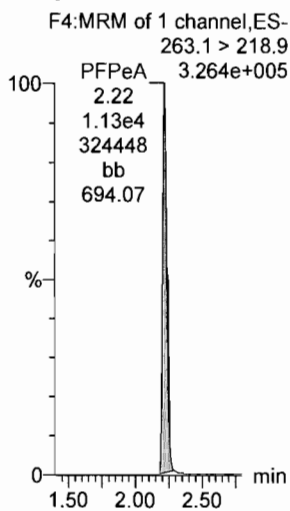
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_35, Date: 16-Nov-2017, Time: 22:40:12, ID: ST171116M3-11 PFC CS3 17K0834, Description: PFC CS3 17K0834

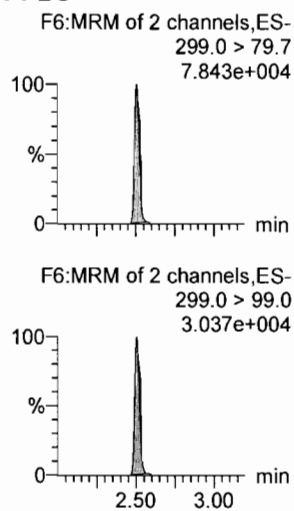
**PFBA**



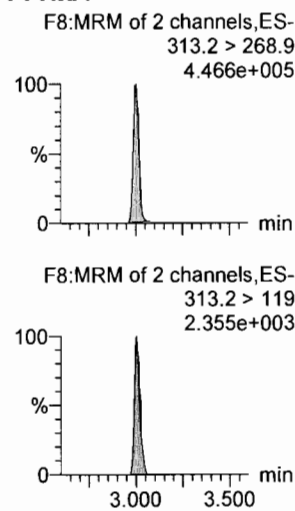
**PFPeA**



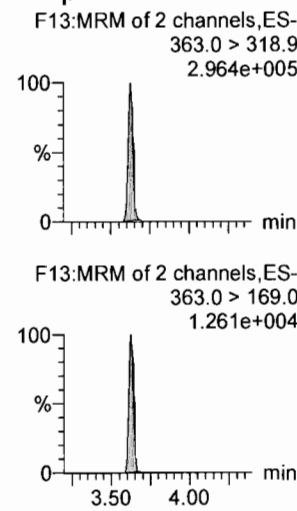
**PFBS**



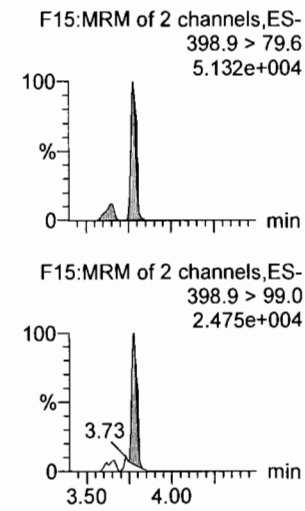
**PFHxA**



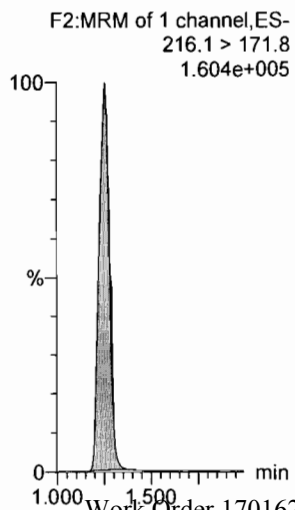
**PFHpA**



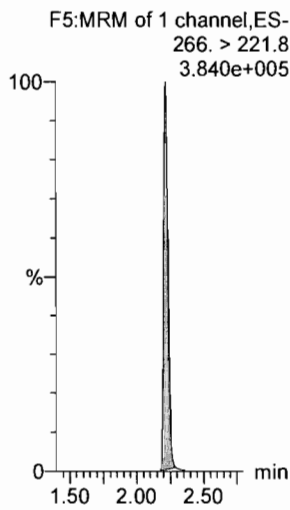
**L-PFHxS**



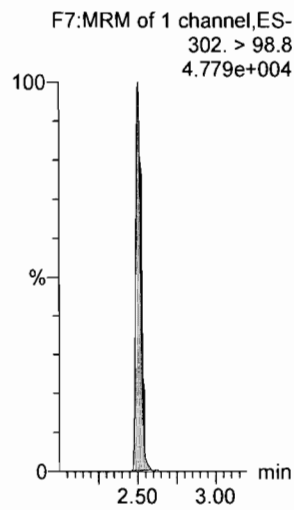
**13C3-PFBA**



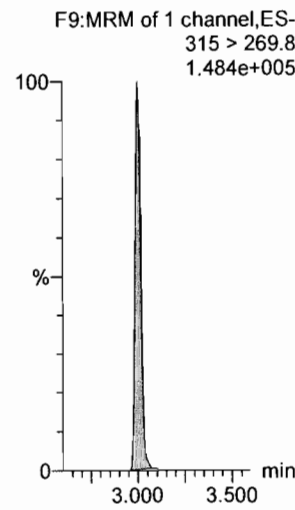
**13C3-PFPeA**



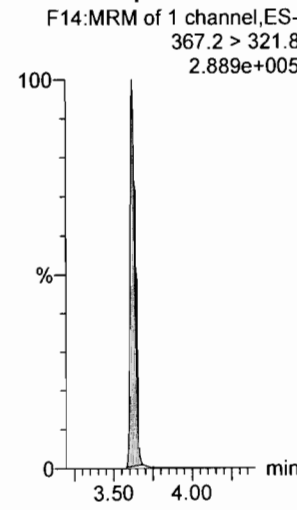
**13C3-PFBS**



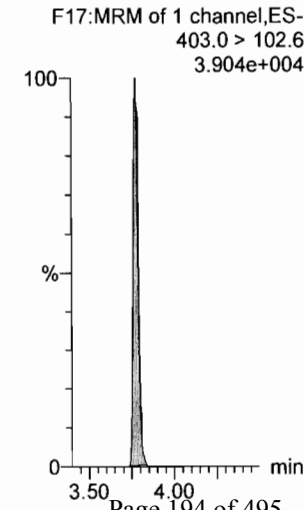
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



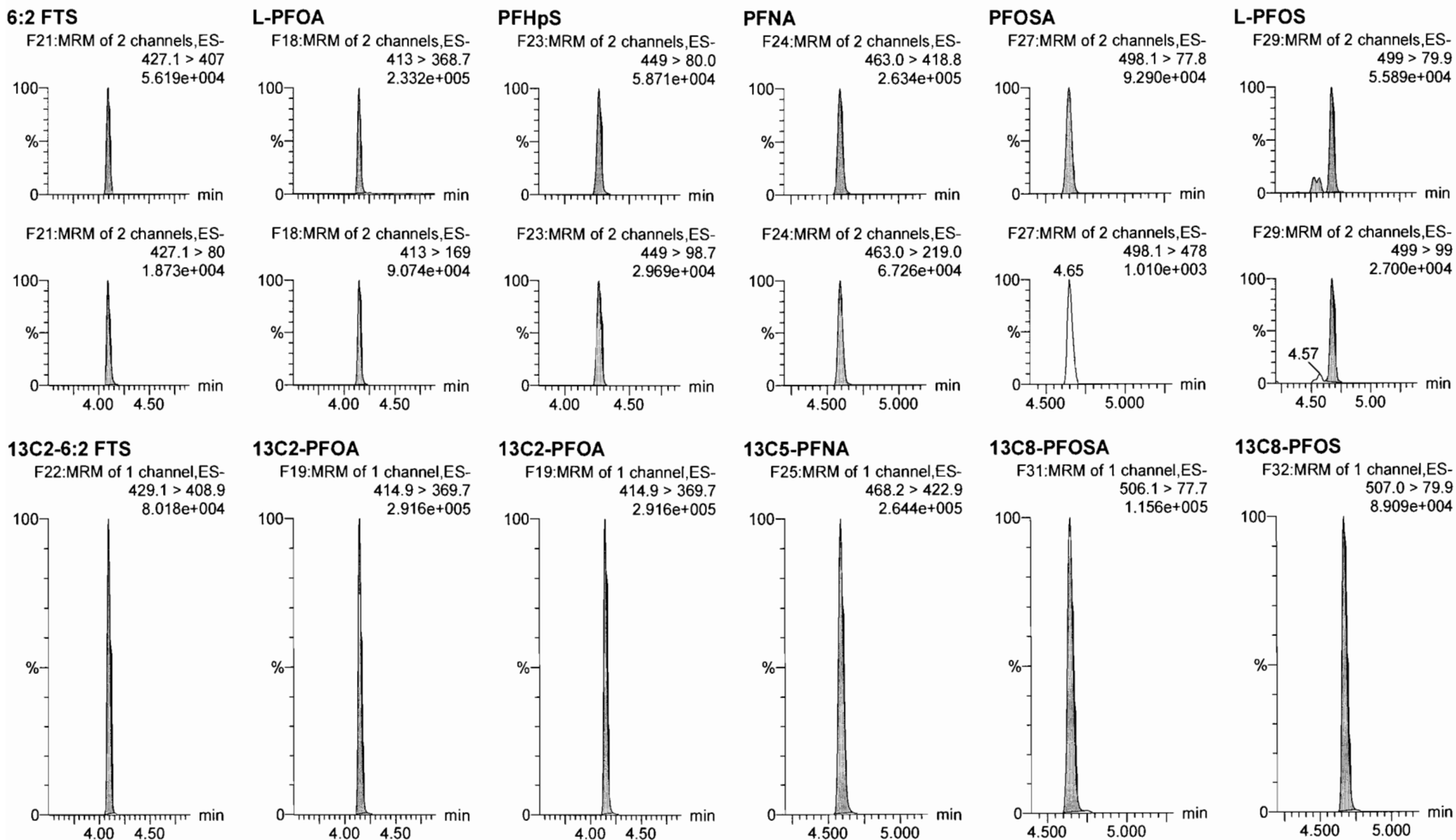


Dataset: U:\Q4.PRO\results\171116M3\171116M3-35.qld

Last Altered: Saturday, November 18, 2017 11:41:16 Pacific Standard Time

Printed: Saturday, November 18, 2017 11:42:02 Pacific Standard Time

Name: 171116M3\_35, Date: 16-Nov-2017, Time: 22:40:12, ID: ST171116M3-11 PFC CS3 17K0834, Description: PFC CS3 17K0834

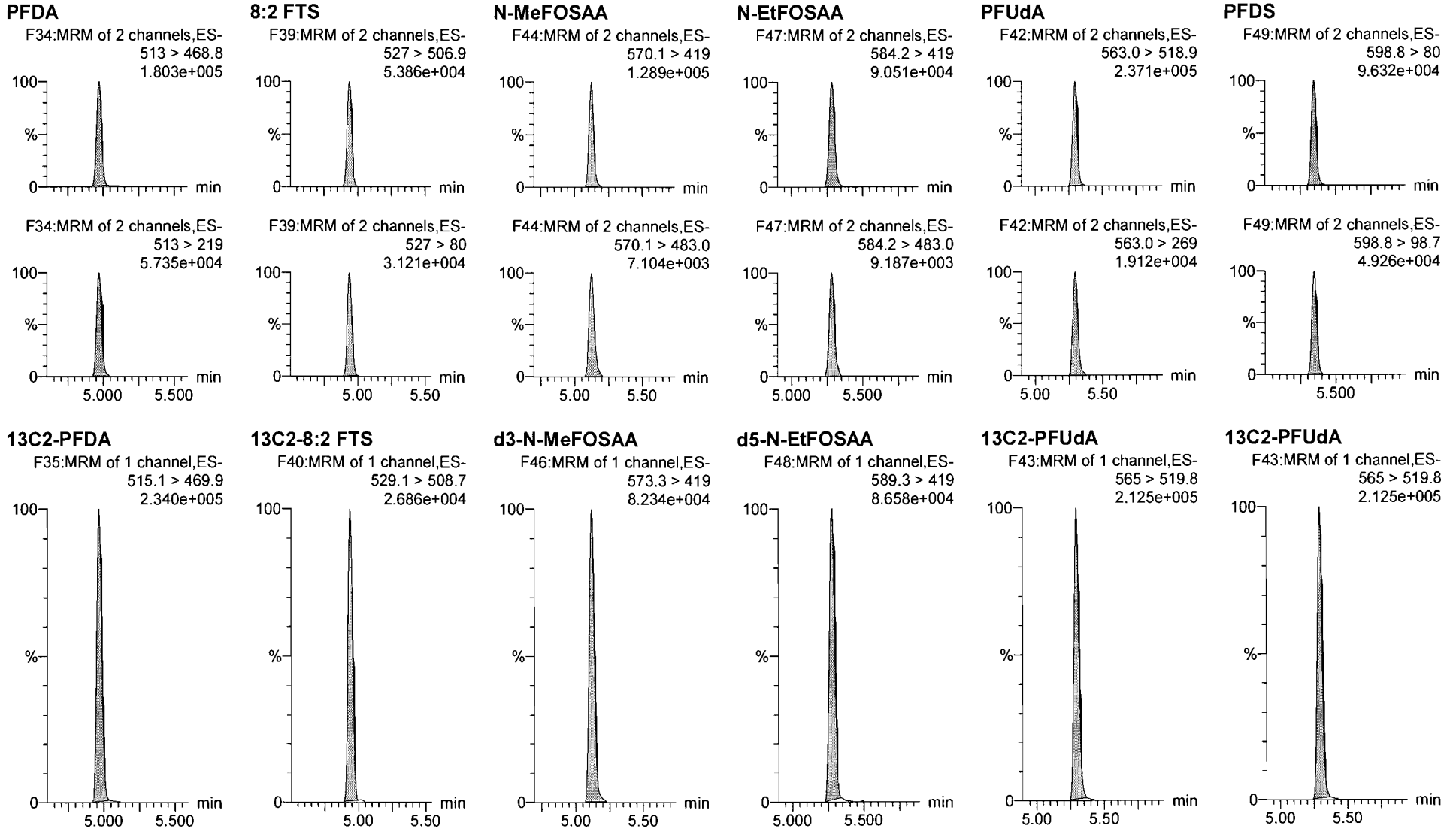


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Last Altered: Saturday, November 18, 2017 11:41:16 Pacific Standard Time

Printed: Saturday, November 18, 2017 11:42:02 Pacific Standard Time

Name: 171116M3\_35, Date: 16-Nov-2017, Time: 22:40:12, ID: ST171116M3-11 PFC CS3 17K0834, Description: PFC CS3 17K0834



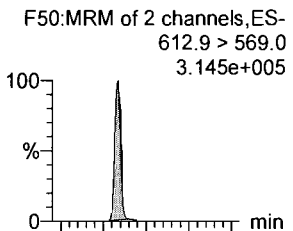
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Last Altered: Saturday, November 18, 2017 11:41:16 Pacific Standard Time

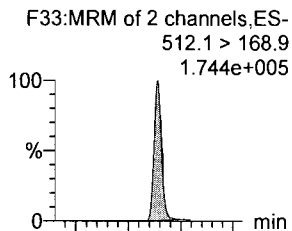
Printed: Saturday, November 18, 2017 11:42:02 Pacific Standard Time

Name: 171116M3\_35, Date: 16-Nov-2017, Time: 22:40:12, ID: ST171116M3-11 PFC CS3 17K0834, Description: PFC CS3 17K0834

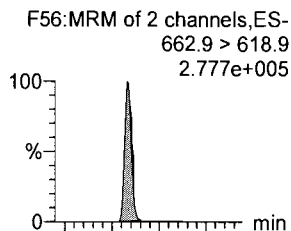
**PFD<sub>o</sub>A**



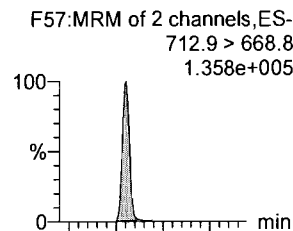
**N-MeFOSA**



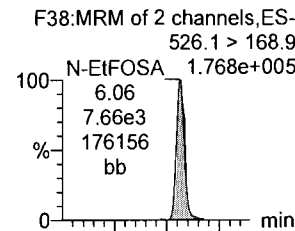
**PFT<sub>r</sub>DA**



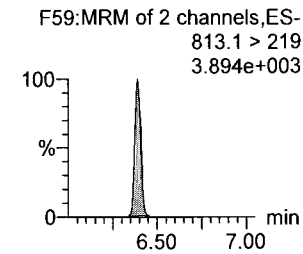
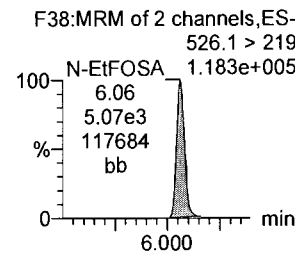
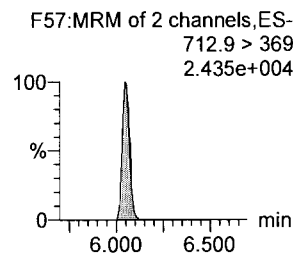
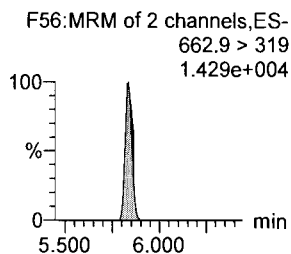
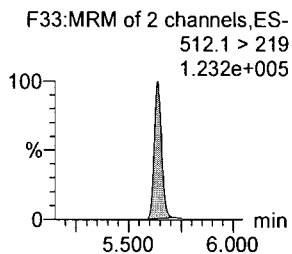
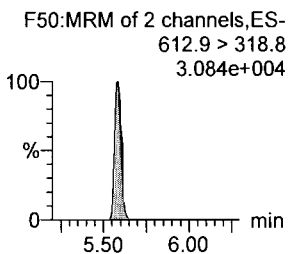
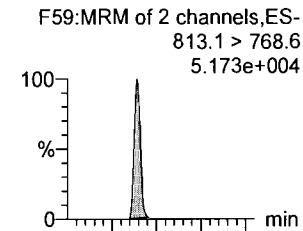
**PFT<sub>e</sub>DA**



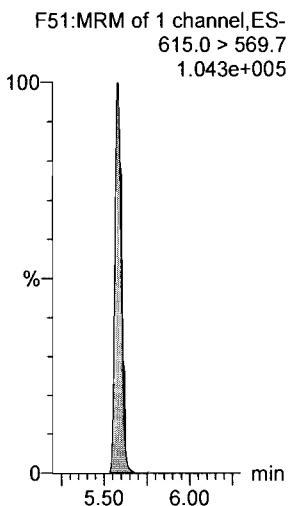
**N-EtFOSA**



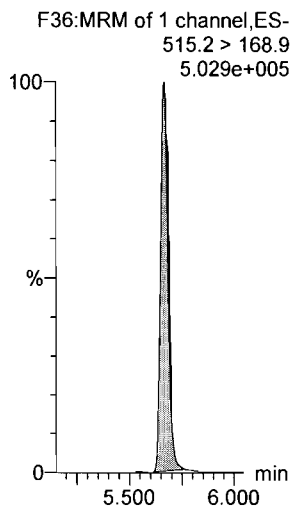
**PFH<sub>x</sub>DA**



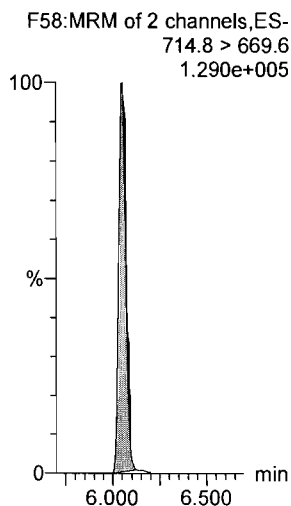
**13C2-PFD<sub>o</sub>A**



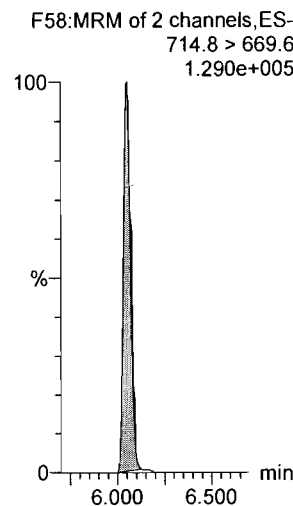
**d3-N-MeFOSA**



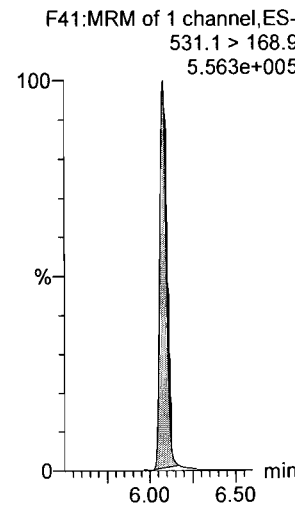
**13C2-PFT<sub>r</sub>DA**



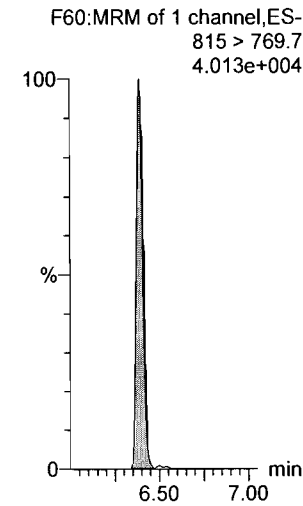
**13C2-PFT<sub>e</sub>DA**



**d5-N-ETFOSA**



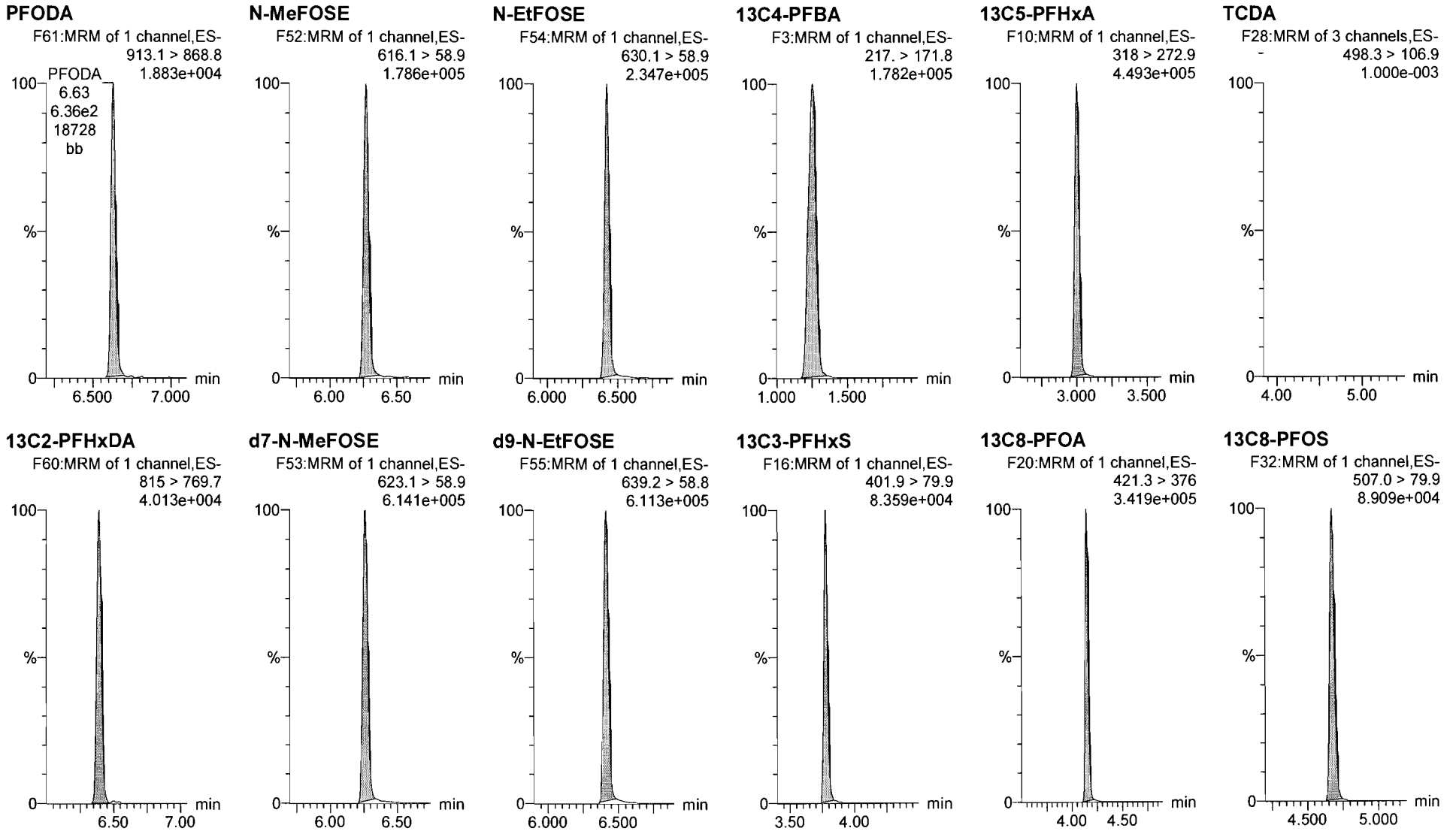
**13C2-PFH<sub>x</sub>DA**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-35.qld

Last Altered: Saturday, November 18, 2017 11:41:16 Pacific Standard Time  
Printed: Saturday, November 18, 2017 11:42:02 Pacific Standard Time

Name: 171116M3\_35, Date: 16-Nov-2017, Time: 22:40:12, ID: ST171116M3-11 PFC CS3 17K0834, Description: PFC CS3 17K0834



Dataset: U:\Q4.PRO\results\171116M3\171116M3-35.qld

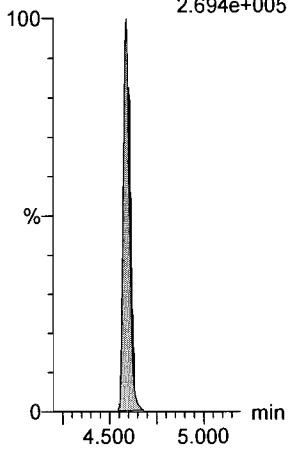
Last Altered: Saturday, November 18, 2017 11:41:16 Pacific Standard Time

Printed: Saturday, November 18, 2017 11:42:02 Pacific Standard Time

Name: 171116M3\_35, Date: 16-Nov-2017, Time: 22:40:12, ID: ST171116M3-11 PFC CS3 17K0834, Description: PFC CS3 17K0834

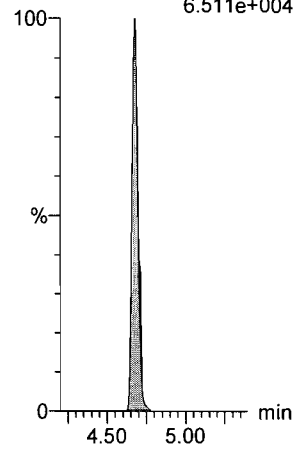
**13C9-PFNA**

F26:MRM of 1 channel,ES-  
472.2 > 426.9  
2.694e+005



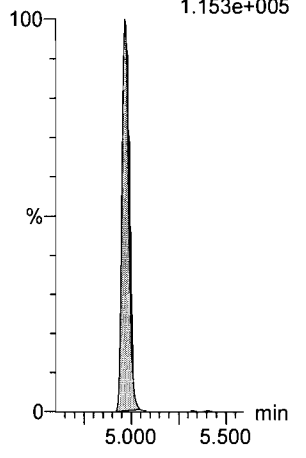
**13C4-PFOS**

F30:MRM of 1 channel,ES-  
503 > 79.9  
6.511e+004



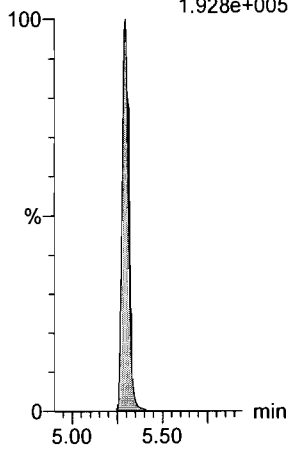
**13C6-PFDA**

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.153e+005



**13C7-PFUdA**

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
1.928e+005



Dataset: U:\Q4.PRO\results\171116M3\171116M3-49.qld

Last Altered: Saturday, November 18, 2017 11:45:26 Pacific Standard Time  
Printed: Saturday, November 18, 2017 11:45:56 Pacific Standard Time

PFODA < 70% recovery

AC  
11/18/17  
JA  
11/20/2017

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_49, Date: 17-Nov-2017, Time: 01:16:58, ID: ST171116M3-12 PFC CS3 17K0834, Description: PFC CS3 17K0834

#	Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	9.21e3	1.01e4	1.0000		1.28	1.26	11.4	10.674	106.7
2	2 PFPeA	263.1 > 218.9	1.11e4	1.45e4	1.0000		2.32	2.22	9.53	9.883	98.8
3	3 PFBS	299.0 > 79.7	3.00e3	1.60e3	1.0000		2.55	2.51	23.4	10.973	109.7
4	4 PFHxA	313.2 > 268.9	1.56e4	5.09e3	1.0000		3.01	3.00	15.3	10.733	107.3
5	5 PFHpA	363.0 > 318.9	1.03e4	9.05e3	1.0000		3.71	3.62	14.2	10.594	105.9
6	6 L-PFHxS	398.9 > 79.6	2.01e3	1.11e3	1.0000		3.86	3.77	22.7	11.744	117.4
7	8 6:2 FTS	427.1 > 407	1.85e3	2.21e3	1.0000		4.16	4.09	10.4	11.084	110.8
8	9 L-PFOA	413 > 368.7	8.25e3	1.13e4	1.0000		4.22	4.15	9.16	8.928	89.3
9	11 PFHpS	449 > 80.0	3.06e3	1.13e4	1.0000		4.32	4.26	3.40	10.937	109.4
10	12 PFNA	463.0 > 418.8	8.74e3	1.06e4	1.0000		4.66	4.58	10.3	9.170	91.7
11	13 PFOSA	498.1 > 77.8	4.08e3	5.21e3	1.0000		4.73	4.64	9.79	9.397	94.0
12	14 L-PFOS	499 > 79.9	3.13e3	3.93e3	1.0000		4.74	4.67	9.94	7.844	78.4
13	16 PFDA	513 > 468.8	7.00e3	8.76e3	1.0000		5.01	4.96	9.98	10.552	105.5
14	17 8:2 FTS	527 > 506.9	1.51e3	6.61e2	1.0000		4.88	4.93	28.5	12.085	120.8
15	18 N-MeFOSAA	570.1 > 419	6.13e3	5.04e3	1.0000		5.17	5.12	15.2	8.494	84.9
16	19 N-EiFOSAA	584.2 > 419	4.67e3	4.78e3	1.0000		5.32	5.28	12.2	11.348	113.5
17	20 PFUdA	563.0 > 518.9	9.19e3	9.33e3	1.0000		5.45	5.30	12.3	9.520	95.2
18	21 PFDS	598.8 > 80	3.51e3	9.33e3	1.0000		5.39	5.34	4.70	10.946	109.5
19	22 PFDoA	612.9 > 569.0	1.25e4	5.53e3	1.0000		5.62	5.58	28.3	9.178	91.8
20	23 N-MeFOSA	512.1 > 168.9	6.82e3	2.01e4	1.0000		5.68	5.64	50.9	53.683	107.4
21	24 PFTrDA	662.9 > 618.9	1.09e4	5.53e3	1.0000		5.87	5.83	24.7	9.772	97.7
22	25 PFTeDA	712.9 > 668.8	5.69e3	5.72e3	1.0000		6.01	6.05	12.4	10.944	109.4
23	26 N-EiFOSA	526.1 > 168.9	7.39e3	2.33e4	1.0000		6.09	6.06	47.6	51.372	102.7
24	27 PFHxDA	813.1 > 768.6	1.85e3	1.75e3	1.0000		6.42	6.39	5.29	11.079	110.8
25	28 PFODA	913.1 > 868.8	5.21e2	1.75e3	1.0000		6.65	6.63	1.49	5.977	59.8
26	29 N-MeFOSE	616.1 > 58.9	7.94e3	2.41e4	1.0000		6.30	6.27	49.4	53.102	106.2
27	30 N-EiFOSE	630.1 > 58.9	8.42e3	2.51e4	1.0000		6.42	6.42	50.4	50.440	100.9
28	31 13C3-PFBA	216.1 > 171.8	1.01e4	1.12e4	1.0000	0.887	1.28	1.26	11.3	12.698	101.6
29	32 13C3-PFPeA	266. > 221.8	1.45e4	1.70e4	1.0000	0.820	2.32	2.22	10.7	13.037	104.3
30	33 13C3-PFBS	302. > 98.8	1.60e3	1.70e4	1.0000	0.096	2.55	2.51	1.18	12.278	98.2
31	Work Order 13C2701624	315 > 269.8	5.09e3	1.70e4	1.0000	0.728	3.01	3.00	3.75	5.154	103.3

70-130

50-150

Dataset: U:\Q4.PRO\results\171116M3\171116M3-49.qld

Last Altered: Saturday, November 18, 2017 11:45:26 Pacific Standard Time

Printed: Saturday, November 18, 2017 11:45:56 Pacific Standard Time

Name: 171116M3\_49, Date: 17-Nov-2017, Time: 01:16:58, ID: ST171116M3-12 PFC CS3 17K0834, Description: PFC CS3 17K0834

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	9.05e3	1.70e4	1.0000	0.550	3.71	3.62	6.67	12.135	97.1
33	36 18O2-PFHxS	403.0 > 102.6	1.11e3	3.08e3	1.0000	0.432	3.86	3.78	4.50	10.439	83.5
34	37 13C2-6:2 FTS	429.1 > 408.9	2.21e3	1.17e4	1.0000	0.217	4.16	4.09	2.36	10.878	87.0
35	38 13C2-PFOA	414.9 > 369.7	1.13e4	1.17e4	1.0000	0.840	4.22	4.15	12.0	14.336	114.7
36	39 13C5-PFNA	468.2 > 422.9	1.06e4	1.09e4	1.0000	0.967	4.66	4.59	12.2	12.605	100.8
37	40 13C8-PFOSA	506.1 > 77.7	5.21e3	7.69e3	1.0000	0.786	4.73	4.64	8.46	10.765	86.1
38	41 13C8-PFOS	507.0 > 79.9	3.93e3	3.39e3	1.0000	0.991	4.73	4.67	14.5	14.633	117.1
39	42 13C2-PFDA	515.1 > 469.9	8.76e3	4.92e3	1.0000	2.153	5.01	4.96	22.3	10.337	82.7
40	43 13C2-8:2 FTS	529.1 > 508.7	6.61e2	1.70e4	1.0000	0.058	4.88	4.94	0.487	8.370	67.0
41	44 d3-N-MeFOSAA	573.3 > 419	5.04e3	7.69e3	1.0000	0.667	5.17	5.12	8.20	12.281	98.2
42	45 d5-N-EtFOSAA	589.3 > 419	4.78e3	7.69e3	1.0000	0.698	5.32	5.27	7.76	11.130	89.0
43	46 13C2-PFUdA	565 > 519.8	9.33e3	7.69e3	1.0000	1.261	5.45	5.30	15.2	12.029	96.2
44	47 13C2-PFDoA	615.0 > 569.7	5.53e3	7.69e3	1.0000	0.695	5.62	5.58	8.98	12.934	103.5
45	48 d3-N-MeFOSA	515.2 > 168.9	2.01e4	7.69e3	1.0000	0.271	5.68	5.66	32.6	120.285	80.2
46	49 13C2-PFTeDA	714.8 > 669.6	5.72e3	7.69e3	1.0000	0.762	6.01	6.05	9.30	12.200	97.6
47	50 d5-N-ETFOSA	531.1 > 168.9	2.33e4	7.69e3	1.0000	0.325	6.09	6.08	37.8	116.499	77.7
48	51 13C2-PFHxDA	815 > 769.7	1.75e3	7.69e3	1.0000	0.563	6.42	6.39	2.84	5.044	100.9
49	52 d7-N-MeFOSE	623.1 > 58.9	2.41e4	7.69e3	1.0000	0.317	6.30	6.26	39.2	123.544	82.4
50	53 d9-N-EtFOSE	639.2 > 58.8	2.51e4	7.69e3	1.0000	0.322	6.42	6.41	40.8	126.674	84.4
51	54 13C4-PFBA	217. > 171.8	1.12e4	1.12e4	1.0000	1.000	1.28	1.25	12.5	12.500	100.0
52	55 13C5-PFHxA	318 > 272.9	1.70e4	1.70e4	1.0000	1.000	3.01	3.00	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	3.08e3	3.08e3	1.0000	1.000	3.86	3.77	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.17e4	1.17e4	1.0000	1.000	4.22	4.15	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.09e4	1.09e4	1.0000	1.000	4.66	4.59	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	3.39e3	3.39e3	1.0000	1.000	4.73	4.67	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	4.92e3	4.92e3	1.0000	1.000	5.01	4.96	12.5	12.500	100.0
58	61 13C7-PFUdA	570.1 > 524.8	7.69e3	7.69e3	1.0000	1.000	5.45	5.29	12.5	12.500	100.0

50-50  
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Dataset: Untitled

Last Altered: Saturday, November 18, 2017 12:20:36 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:21:53 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1				
2				
3				
4	171116M3_1	IPA	16-Nov-17	16:20:10
5	171116M3_2	ST171116M3-1 PFC CS-2 17K0830	16-Nov-17	16:31:18
6	171116M3_3	ST171116M3-2 PFC CS-1 17K0831	16-Nov-17	16:42:29
7	171116M3_4	ST171116M3-3 PFC CS0 17K0832	16-Nov-17	16:53:40
8	171116M3_5	ST171116M3-4 PFC CS1 17K0838	16-Nov-17	17:04:50
9	171116M3_6	ST171116M3-5 PFC CS2 17K0833	16-Nov-17	17:16:01
10	171116M3_7	ST171116M3-6 PFC CS3 17K0834	16-Nov-17	17:27:12
11	171116M3_8	ST171116M3-7 PFC CS4 17K0835	16-Nov-17	17:38:23
12	171116M3_9	ST171116M3-8 PFC CS5 17K0836	16-Nov-17	17:49:33
13	171116M3_10	ST171116M3-9 PFC CS6 17K1303	16-Nov-17	18:00:44
14	171116M3_11	ST171116M3-10 PFC CS7 17K1304	16-Nov-17	18:11:54
15	171116M3_12	IPA	16-Nov-17	18:23:06
16	171116M3_13	ICV171116M3-1 PFC ICV 17K0837	16-Nov-17	18:34:16
17	171116M3_14	IPA	16-Nov-17	18:45:27
18	171116M3_15	1701602-21 FB1711021045JNR 0.25693	16-Nov-17	18:56:37
19	171116M3_16	1701602-22 WT1711021110JNR 0.25133	16-Nov-17	19:07:48
20	171116M3_17	B7K0078-BS1 OPR 0.125	16-Nov-17	19:18:59
21	171116M3_18	IPA	16-Nov-17	19:30:10
22	171116M3_19	B7K0078-BLK1 Method Blank 0.125	16-Nov-17	19:41:20
23	171116M3_20	1701645-01 WR1711091315JLB 0.125	16-Nov-17	19:52:31
24	171116M3_21	1701646-01 WR1711081120JLB 0.125	16-Nov-17	20:03:42
25	171116M3_22	1701646-02 WR1711081130JLB 0.125	16-Nov-17	20:14:53
26	171116M3_23	1701646-03 WR1711081235JLB 0.125	16-Nov-17	20:26:03
27	171116M3_24	1701647-01 MBE_7228 0.125	16-Nov-17	20:37:14
28	171116M3_25	1701671-01 WT1711090840JNR 0.125	16-Nov-17	20:48:24
29	171116M3_26	B7K0059-BS1 OPR 0.125	16-Nov-17	20:59:35
30	171116M3_27	IPA	16-Nov-17	21:10:46
31	171116M3_28	B7K0059-BLK1 Method Blank 0.125	16-Nov-17	21:21:57



Dataset: Untitled

Last Altered: Saturday, November 18, 2017 12:20:36 Pacific Standard Time  
 Printed: Saturday, November 18, 2017 12:21:53 Pacific Standard Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	171116M3_29	B7K0059-MS1 Matrix Spike 0.11181	16-Nov-17	21:33:07
33	171116M3_30	B7K0059-MSD1 Matrix Spike Dup 0.11415	16-Nov-17	21:44:18
34	171116M3_31	1701621-01 MBS-EFF-001 0.11391	16-Nov-17	21:55:29
35	171116M3_32	1701621-02 MBS-EFF-002 0.11579	16-Nov-17	22:06:39
36	171116M3_33	1701621-03 MBS-IN-003 0.11618	16-Nov-17	22:17:52
37	171116M3_34	IPA	16-Nov-17	22:29:01
38	171116M3_35	ST171116M3-11 PFC CS3 17K0834	16-Nov-17	22:40:12
39	171116M3_36	IPA	16-Nov-17	22:51:23
40	171116M3_37	1701624-01 OF-MW20-1117 0.10651	16-Nov-17	23:02:33
41	171116M3_38	1701624-02 OF-MW20P-1117 0.11409	16-Nov-17	23:13:44
42	171116M3_39	1701624-03 OF-MW22-1117 0.10407	16-Nov-17	23:24:55
43	171116M3_40	1701624-04 OF-MW22D-1117 0.11272	16-Nov-17	23:36:05
44	171116M3_41	1701624-05 OF-MW19-1117 0.11045	16-Nov-17	23:47:16
45	171116M3_42	1701624-06 OF-MW190-1117 0.10982	16-Nov-17	23:58:27
46	171116M3_43	1701624-07 OF-MW21-1117 0.11119	17-Nov-17	00:09:38
47	171116M3_44	1701624-08 OF-MW33-1117 0.10266	17-Nov-17	00:20:54
48	171116M3_45	1701624-09 OF-MW33D-1117 0.11041	17-Nov-17	00:32:13
49	171116M3_46	1701624-10 OF-EB110717 0.11441	17-Nov-17	00:43:26
50	171116M3_47	1701624-11 OF-FB110717 0.11442	17-Nov-17	00:54:37
51	171116M3_48	IPA	17-Nov-17	01:05:48
52	171116M3_49	ST171116M3-12 PFC CS3 17K0834	17-Nov-17	01:16:58
53	171116M3_50	IPA	17-Nov-17	01:28:09
54	171116M3_51	1701624-12 10W-AQ01-110717 0.11031	17-Nov-17	01:39:20
55	171116M3_52	1701624-13 10W-AQ02-110717 0.10337	17-Nov-17	01:50:31
56	171116M3_53	1701624-14 10W-AQ03-110717 0.10786	17-Nov-17	02:01:41
57	171116M3_54	B7K0031-BS1 OPR 0.25	17-Nov-17	02:12:52
58	171116M3_55	IPA	17-Nov-17	02:24:02
59	171116M3_56	B7K0031-BLK1 Method Blank 0.25	17-Nov-17	02:35:13
60	171116M3_57	1701563-01RE1 MTBE_4995 0.26962	17-Nov-17	02:46:24
61	171116M3_58	1701563-02RE1 MTBE_4996 0.26061	17-Nov-17	02:57:35
62	171116M3_59	1701564-01RE1 MTBE_4994 0.2582	17-Nov-17	03:08:45
63	171116M3_60	1701602-01 WT1711011420JNR 0.26647	17-Nov-17	03:19:56
64	171116M3_61	1701602-02 WT1711011430JNR 0.26496	17-Nov-17	03:31:07
65	171116M3_62	1701602-03 WT1711011440JNR 0.27031	17-Nov-17	03:42:18

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Last Altered: Saturday, November 18, 2017 12:20:36 Pacific Standard Time

Printed: Saturday, November 18, 2017 12:21:53 Pacific Standard Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	171116M3_63	1701602-04 WT1711011455JNR 0.26213	17-Nov-17	03:53:28
67	171116M3_64	IPA	17-Nov-17	04:04:39
68	171116M3_65	ST171116M3-13 PFC CS0 17K0832	17-Nov-17	04:15:50
69	171116M3_66	IPA	17-Nov-17	04:27:01
70	171116M3_67	1701602-05 WRO1711011530JNR 0.25859	17-Nov-17	04:38:11
71	171116M3_68	1701602-06 WR1711011555JNR 0.25678	17-Nov-17	04:49:22
72	171116M3_69	1701602-07 WT1711011610JNR 0.26094	17-Nov-17	05:00:33
73	171116M3_70	1701602-08 WT1711011625JNR 0.26446	17-Nov-17	05:11:44
74	171116M3_71	1701602-09 WT1711011630JNR 0.26264	17-Nov-17	05:22:55
75	171116M3_72	1701610-01 MTBE_4998 0.25736	17-Nov-17	05:34:05
76	171116M3_73	1701611-01 MTBE_4997 0.25926	17-Nov-17	05:45:16
77	171116M3_74	1701626-01 MTBE_4999 0.24638	17-Nov-17	05:56:26
78	171116M3_75	1701627-01 MTBE_9001 0.25481	17-Nov-17	06:07:37
79	171116M3_76	IPA	17-Nov-17	06:18:48
80	171116M3_77	ST171116M3-14 PFC CS3 17K0834	17-Nov-17	06:29:59
81	171116M3_78	IPA	17-Nov-17	06:41:09

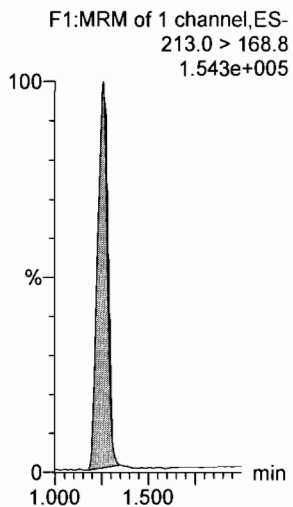
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Printed: Saturday, November 18, 2017 11:45:56 Pacific Standard Time

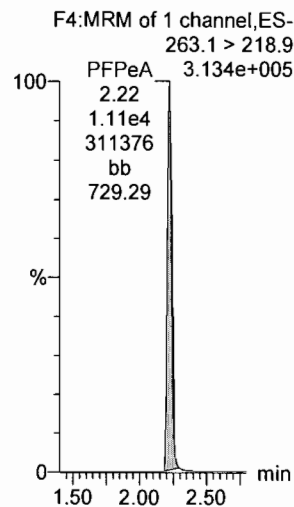
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_49, Date: 17-Nov-2017, Time: 01:16:58, ID: ST171116M3-12 PFC CS3 17K0834, Description: PFC CS3 17K0834

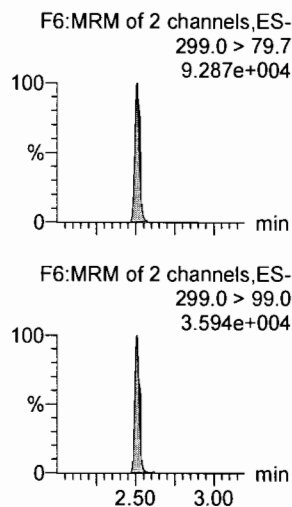
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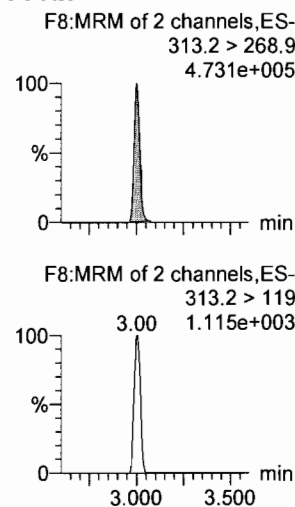
**PFPeA**



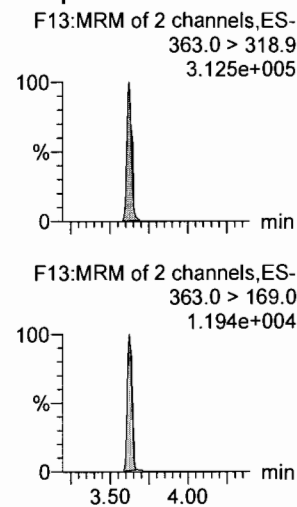
**PFBS**



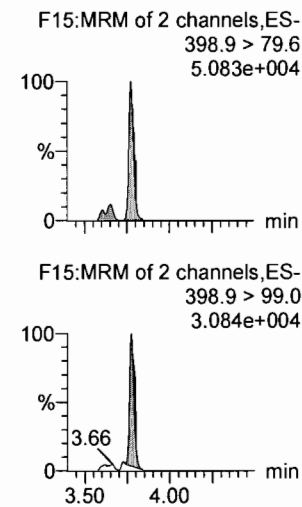
**PFHxA**



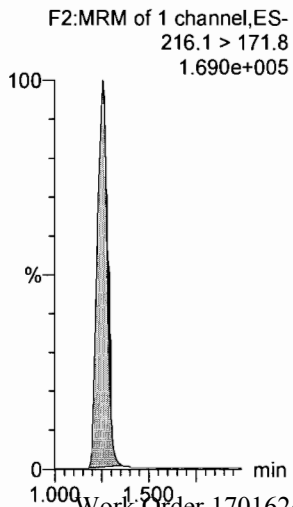
**PFHpA**



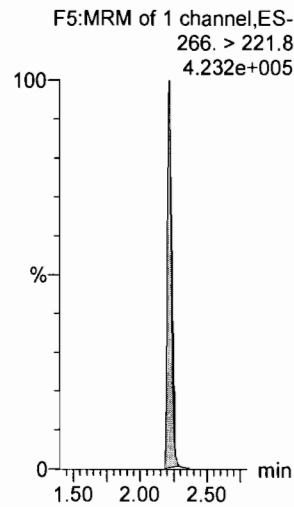
**L-PFHxS**



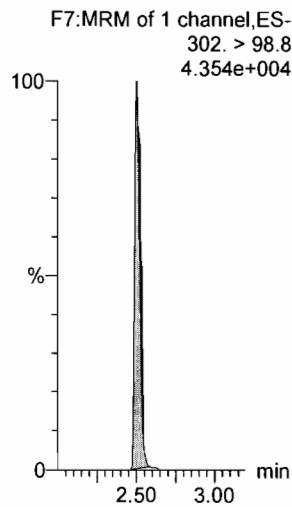
**13C3-PFBA**



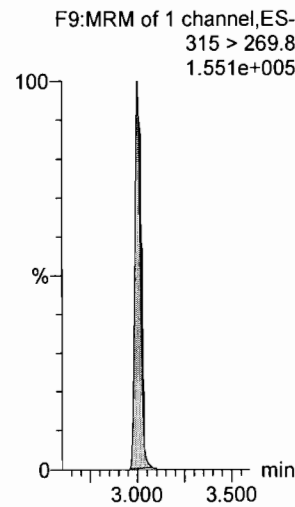
**13C3-PFPeA**



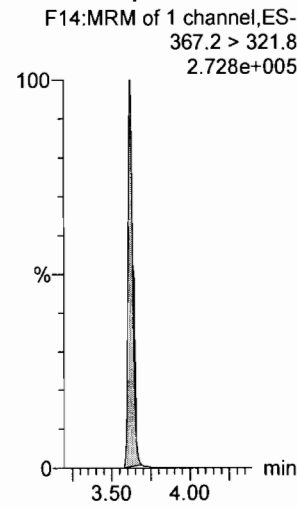
**13C3-PFBS**



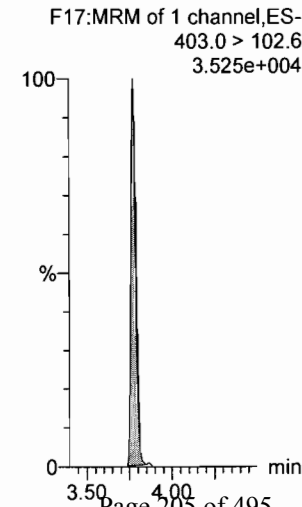
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

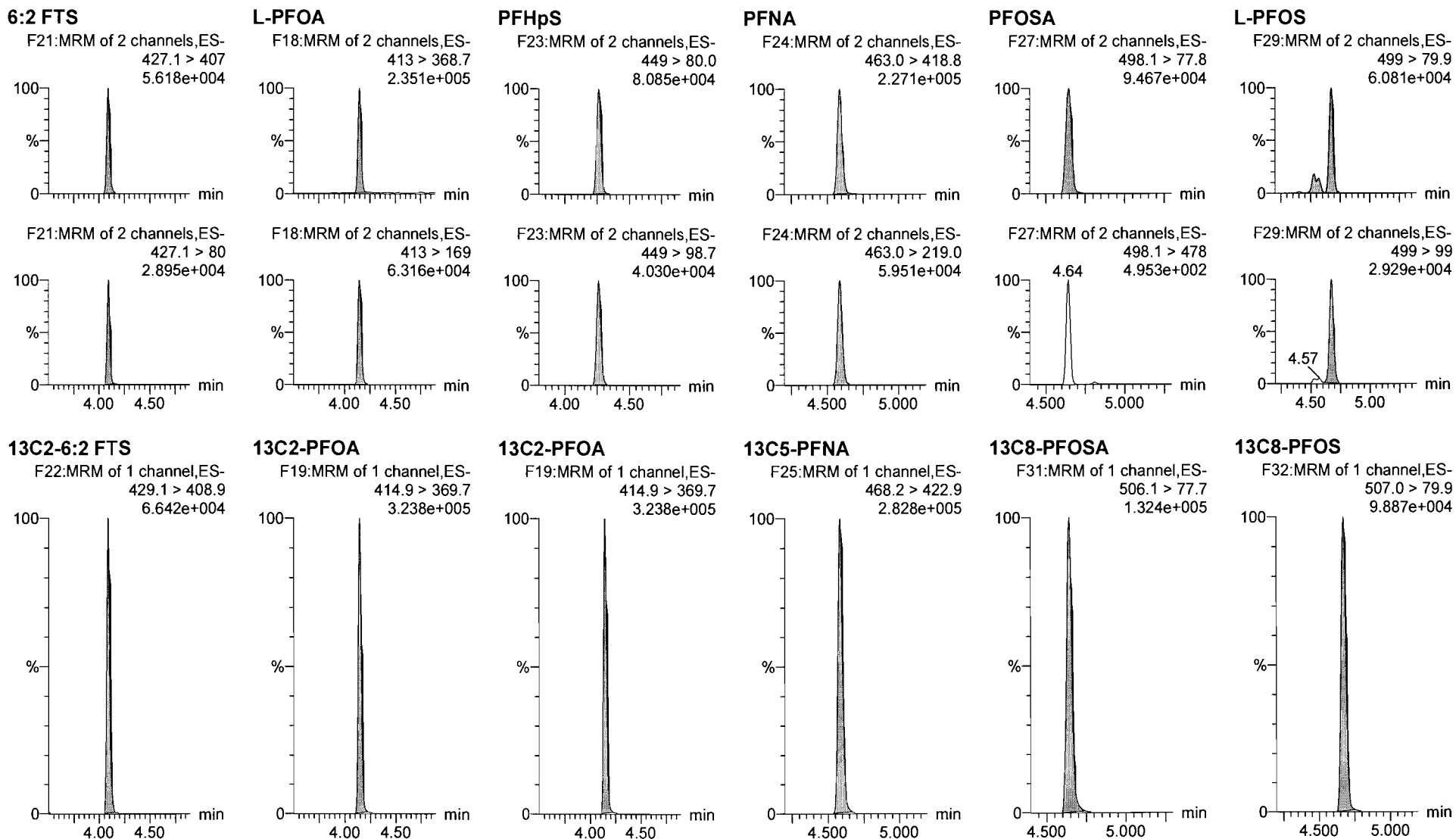


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Last Altered: Saturday, November 18, 2017 11:45:26 Pacific Standard Time

Printed: Saturday, November 18, 2017 11:45:56 Pacific Standard Time

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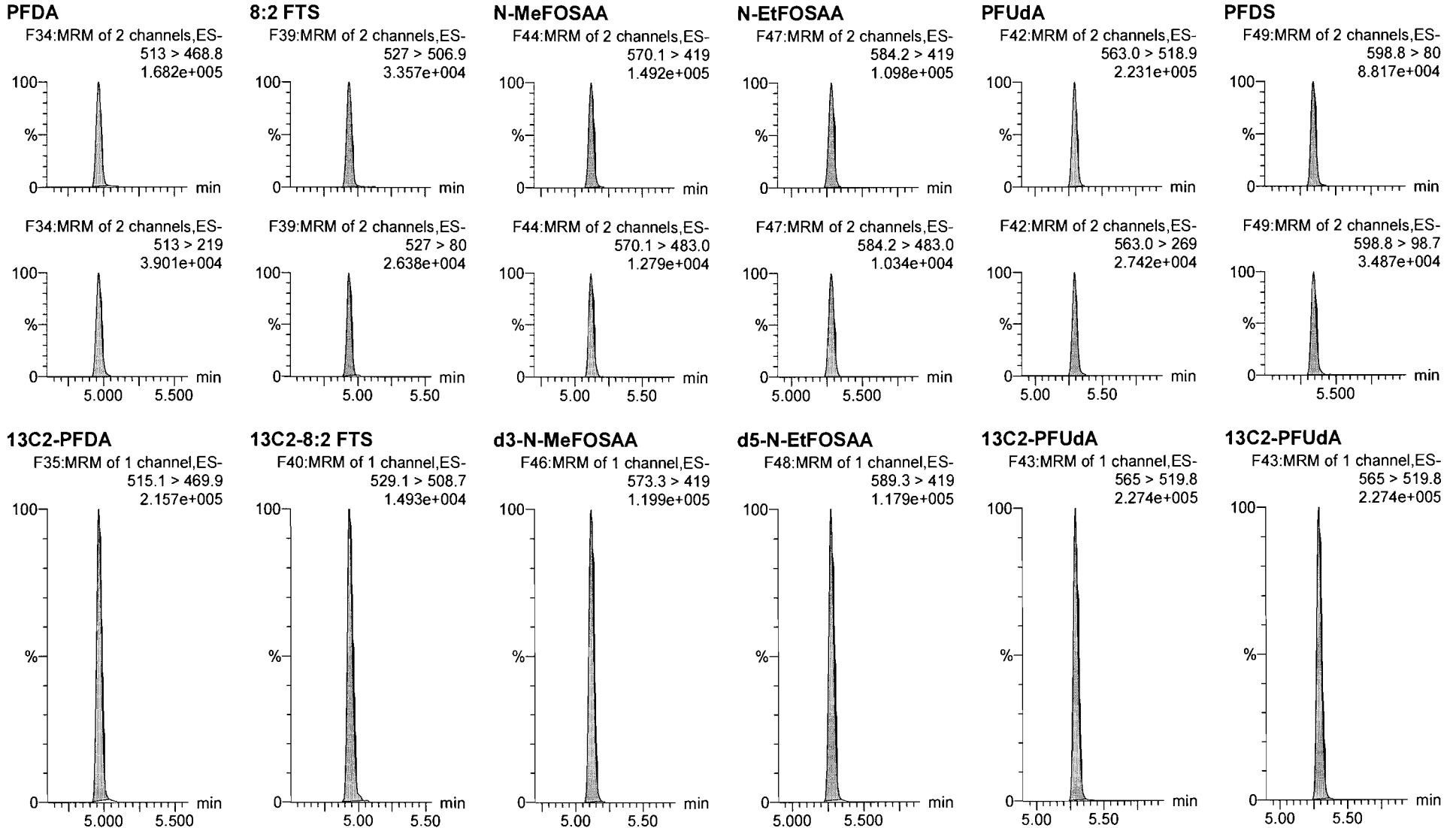


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Printed: Saturday, November 18, 2017 11:45:56 Pacific Standard Time

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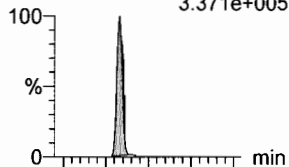
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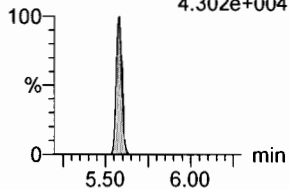
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**PFDoA**

F50:MRM of 2 channels,ES-  
612.9 > 569.0  
3.371e+005

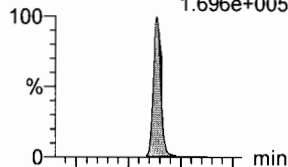


F50:MRM of 2 channels,ES-  
612.9 > 318.8  
4.302e+004

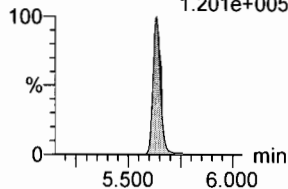


**N-MeFOSA**

F33:MRM of 2 channels,ES-  
512.1 > 168.9  
1.696e+005

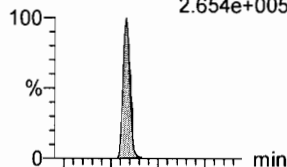


F33:MRM of 2 channels,ES-  
512.1 > 219  
1.201e+005

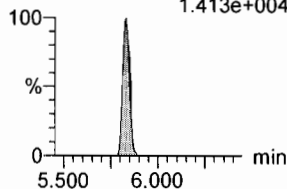


**PFTrDA**

F56:MRM of 2 channels,ES-  
662.9 > 618.9  
2.654e+005

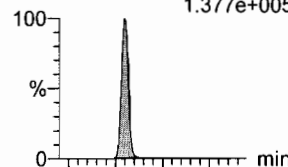


F56:MRM of 2 channels,ES-  
662.9 > 319  
1.413e+004

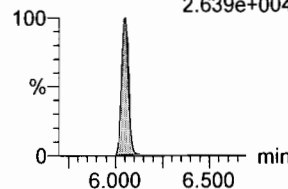


**PFTeDA**

F57:MRM of 2 channels,ES-  
712.9 > 668.8  
1.377e+005

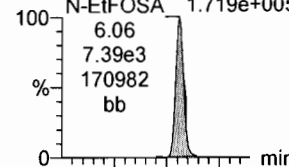


F57:MRM of 2 channels,ES-  
712.9 > 369  
2.639e+004

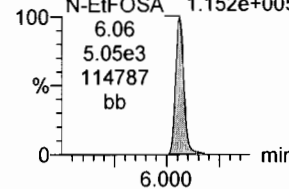


**N-EtFOSA**

F38:MRM of 2 channels,ES-  
526.1 > 168.9  
1.719e+005

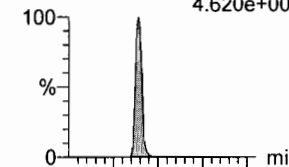


F38:MRM of 2 channels,ES-  
526.1 > 219  
1.152e+005

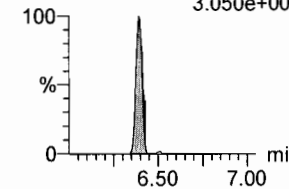


**PFHxDA**

F59:MRM of 2 channels,ES-  
813.1 > 768.6  
4.620e+004

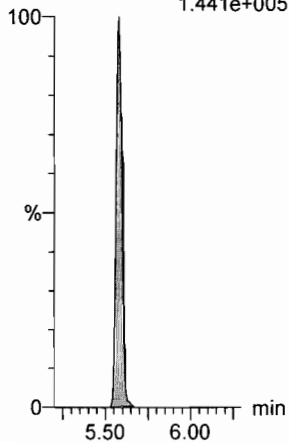


F59:MRM of 2 channels,ES-  
813.1 > 219  
3.050e+003



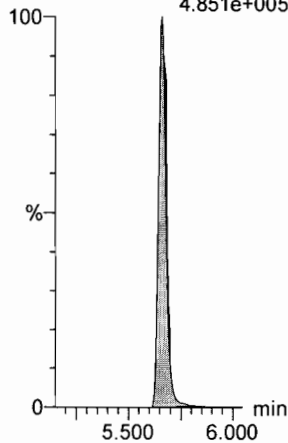
**13C2-PFDoA**

F51:MRM of 1 channel,ES-  
615.0 > 569.7  
1.441e+005



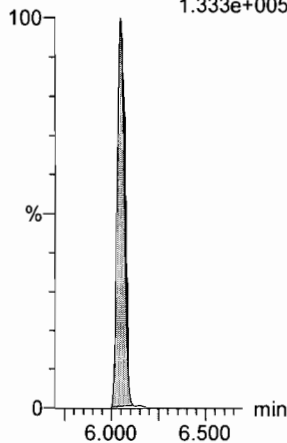
**d3-N-MeFOSA**

F36:MRM of 1 channel,ES-  
515.2 > 168.9  
4.851e+005



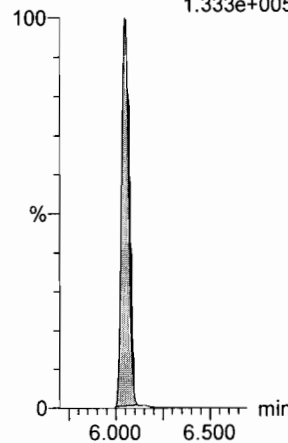
**13C2-PFTeDA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
1.333e+005



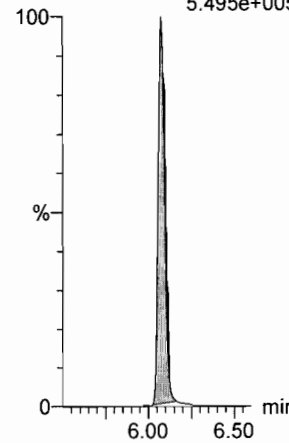
**13C2-PFTeDA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
1.333e+005



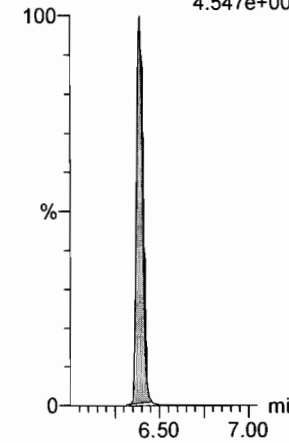
**d5-N-ETFOSA**

F41:MRM of 1 channel,ES-  
531.1 > 168.9  
5.495e+005



**13C2-PFHxDA**

F60:MRM of 1 channel,ES-  
815 > 769.7  
4.547e+004

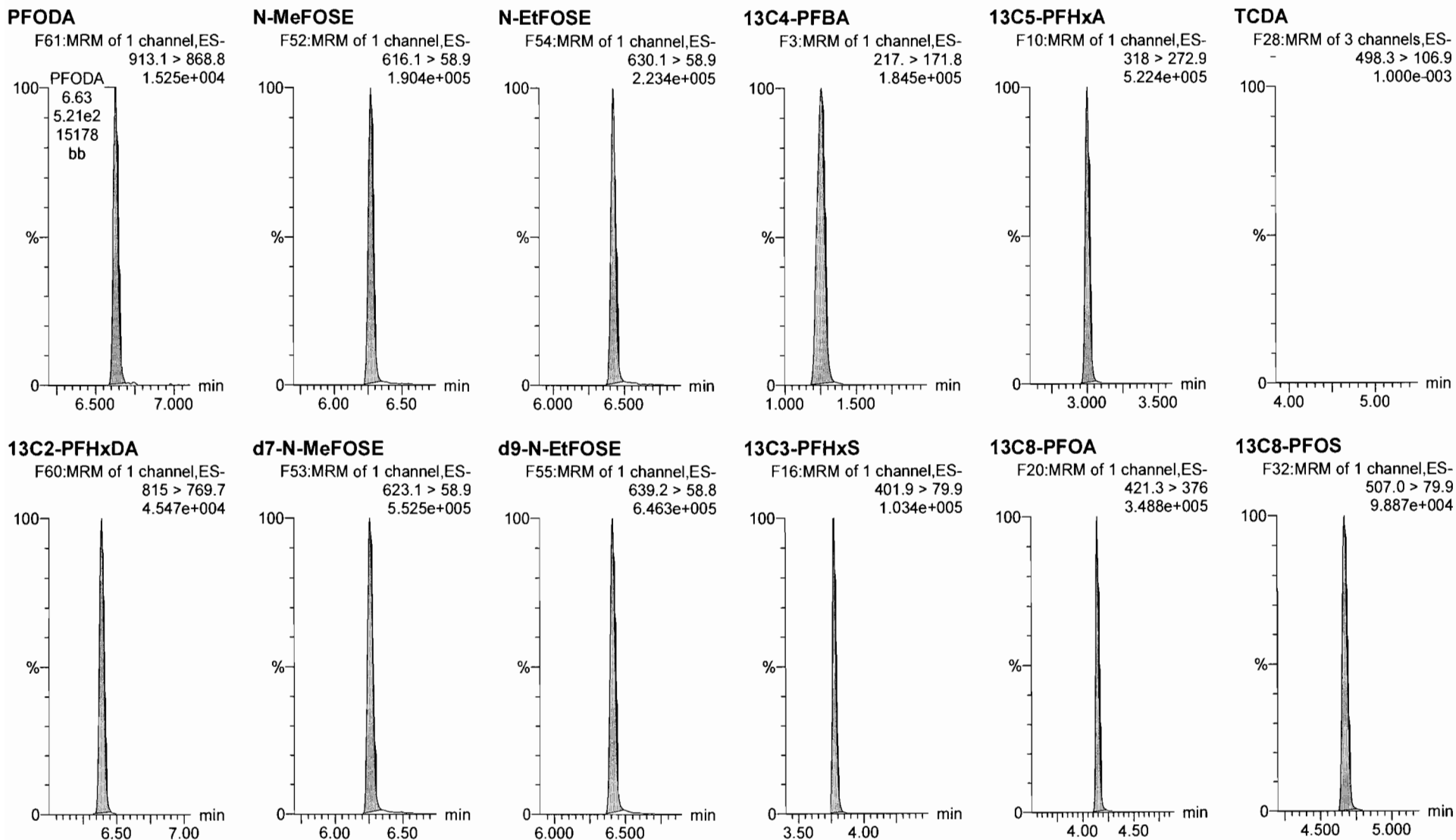


Dataset: U:\Q4.PRO\results\171116M3\171116M3-49.qld

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Name: 171116M3\_49, Date: 17-Nov-2017, Time: 01:16:58, ID: ST171116M3-12 PFC CS3 17K0834, Description: PFC CS3 17K0834



Dataset: U:\Q4.PRO\results\171116M3\171116M3-49.qld

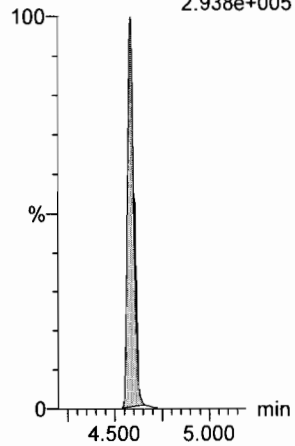
Last Altered: Saturday, November 18, 2017 11:45:26 Pacific Standard Time

Printed: Saturday, November 18, 2017 11:45:56 Pacific Standard Time

Name: 171116M3\_49, Date: 17-Nov-2017, Time: 01:16:58, ID: ST171116M3-12 PFC CS3 17K0834, Description: PFC CS3 17K0834

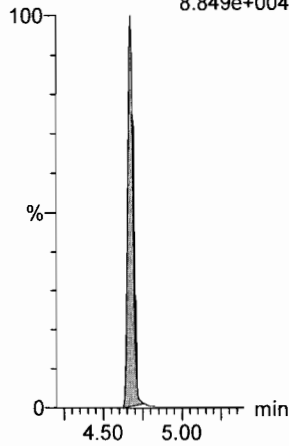
**13C9-PFNA**

F26:MRM of 1 channel,ES-  
472.2 > 426.9  
2.938e+005



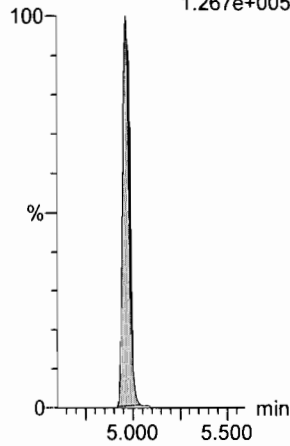
**13C4-PFOS**

F30:MRM of 1 channel,ES-  
503 > 79.9  
8.849e+004



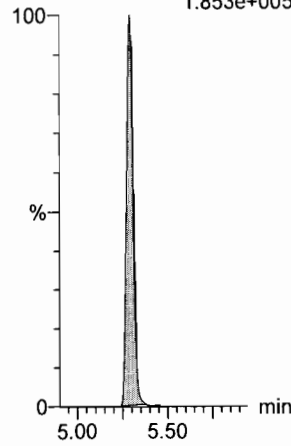
**13C6-PFDA**

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.267e+005



**13C7-PFUDa**

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
1.853e+005





Dataset: U:\Q4.PRO\results\171117M2\171117M2-IIS AREAS.qld

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Method: U:\Q4.PRO\MethDB\PFAS\_RS-11-18-17.mdb 19 Nov 2017 11:17:03  
Calibration: 21 Nov 2017 11:10:41

Name: 171117M2\_7, Date: 17-Nov-2017, Time: 18:03:00, ID: ST171117M2-6 PFC CS3 17K1708, Description: PFC CS3 17K1708

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	ST171117M2-6 PFC CS3 17K1708	1.26e4	100.0	NO
2	2 13C5-PFHxA	ST171117M2-6 PFC CS3 17K1708	1.87e4	100.0	NO
3	3 13C3-PFHxS	ST171117M2-6 PFC CS3 17K1708	3.23e3	100.0	NO
4	4 13C8-PFOA	ST171117M2-6 PFC CS3 17K1708	1.28e4	100.0	NO
5	5 13C9-PFNA	ST171117M2-6 PFC CS3 17K1708	1.60e4	100.0	NO
6	6 13C4-PFOS	ST171117M2-6 PFC CS3 17K1708	3.34e3	100.0	NO
7	7 13C6-PFDA	ST171117M2-6 PFC CS3 17K1708	7.73e3	100.0	NO
8	8 13C7-PFUDa	ST171117M2-6 PFC CS3 17K1708	1.08e4	100.0	NO

Name: 171117M2\_15, Date: 17-Nov-2017, Time: 19:32:23, ID: 1701602-21 FB1711021045JNR 0.25693, Description: FB1711021045JNR

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-21 FB1711021045JNR 0.25693	8.66e3	68.7	NO
2	2 13C5-PFHxA	1701602-21 FB1711021045JNR 0.25693	1.23e4	66.0	NO
3	3 13C3-PFHxS	1701602-21 FB1711021045JNR 0.25693	2.43e3	75.0	NO
4	4 13C8-PFOA	1701602-21 FB1711021045JNR 0.25693	8.51e3	66.4	NO
5	5 13C9-PFNA	1701602-21 FB1711021045JNR 0.25693	7.85e3	48.9	YES
6	6 13C4-PFOS	1701602-21 FB1711021045JNR 0.25693	2.09e3	62.6	NO
7	7 13C6-PFDA	1701602-21 FB1711021045JNR 0.25693	4.83e3	62.4	NO
8	8 13C7-PFUDa	1701602-21 FB1711021045JNR 0.25693	6.36e3	58.9	NO

Name: 171117M2\_16, Date: 17-Nov-2017, Time: 19:43:34, ID: 1701602-22 WT1711021110JNR 0.25133, Description: WT1711021110JNR

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701602-22 WT1711021110JNR 0.25133	8.32e3	66.0	NO
2	2 13C5-PFHxA	1701602-22 WT1711021110JNR 0.25133	1.20e4	63.9	NO
3	3 13C3-PFHxS	1701602-22 WT1711021110JNR 0.25133	2.25e3	69.5	NO
4	4 13C8-PFOA	1701602-22 WT1711021110JNR 0.25133	7.97e3	62.2	NO
5	5 13C9-PFNA	1701602-22 WT1711021110JNR 0.25133	9.24e3	57.6	NO
6	6 13C4-PFOS	1701602-22 WT1711021110JNR 0.25133	2.46e3	73.5	NO
7	7 13C6-PFDA	1701602-22 WT1711021110JNR 0.25133	4.26e3	55.1	NO
8	8 13C7-PFUDa	1701602-22 WT1711021110JNR 0.25133	8.00e3	74.0	NO

Name: 171117M2\_17, Date: 17-Nov-2017, Time: 19:54:45, ID: B7K0078-BS1 OPR 0.125, Description: OPR

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	B7K0078-BS1 OPR 0.125	8.79e3	69.6	NO
2	2 13C5-PFHxA	B7K0078-BS1 OPR 0.125	1.43e4	76.5	NO
3	3 13C3-PFHxS	B7K0078-BS1 OPR 0.125	2.67e3	82.6	NO
4	4 13C8-PFOA	B7K0078-BS1 OPR 0.125	9.73e3	75.9	NO
5	5 13C9-PFNA	B7K0078-BS1 OPR 0.125	9.38e3	58.4	NO
6	6 13C4-PFOS	B7K0078-BS1 OPR 0.125	3.17e3	95.0	NO
7	7 13C6-PFDA	B7K0078-BS1 OPR 0.125	5.30e3	68.6	NO

Dataset: U:\Q4.PRO\results\171117M2\171117M2-IIS AREAS.qld

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Name: 171117M2\_17, Date: 17-Nov-2017, Time: 19:54:45, ID: B7K0078-BS1 OPR 0.125, Description: OPR

#	Name	ID	Area	%Rec	Area Out
8	13C7-PFUdA	B7K0078-BS1 OPR 0.125	1.01e4	93.4	NO

Name: 171117M2\_18, Date: 17-Nov-2017, Time: 20:05:56, ID: IPA, Description: IPA

#	Name	ID	Area	%Rec	Area Out
1	13C4-PFBA	IPA			NO
2	13C5-PFHxA	IPA			NO
3	13C3-PFHxS	IPA			NO
4	13C8-PFOA	IPA			NO
5	13C9-PFNA	IPA			NO
6	13C4-PFOS	IPA			NO
7	13C6-PFDA	IPA			NO
8	13C7-PFUdA	IPA			NO

Name: 171117M2\_19, Date: 17-Nov-2017, Time: 20:17:05, ID: B7K0078-BLK1 Method Blank 0.125, Description: Method Blank

#	Name	ID	Area	%Rec	Area Out
1	13C4-PFBA	B7K0078-BLK1 Method Blank 0.125	1.08e4	85.3	NO
2	13C5-PFHxA	B7K0078-BLK1 Method Blank 0.125	1.65e4	88.4	NO
3	13C3-PFHxS	B7K0078-BLK1 Method Blank 0.125	3.04e3	94.1	NO
4	13C8-PFOA	B7K0078-BLK1 Method Blank 0.125	1.12e4	87.1	NO
5	13C9-PFNA	B7K0078-BLK1 Method Blank 0.125	1.09e4	67.7	NO
6	13C4-PFOS	B7K0078-BLK1 Method Blank 0.125	2.99e3	89.5	NO
7	13C6-PFDA	B7K0078-BLK1 Method Blank 0.125	6.71e3	86.8	NO
8	13C7-PFUdA	B7K0078-BLK1 Method Blank 0.125	1.09e4	100.6	NO

Name: 171117M2\_20, Date: 17-Nov-2017, Time: 20:28:16, ID: 1701645-01 WR1711091315JLB 0.125, Description: WR1711091315JLB

#	Name	ID	Area	%Rec	Area Out
1	13C4-PFBA	1701645-01 WR1711091315JLB 0.125	8.25e3	65.4	NO
2	13C5-PFHxA	1701645-01 WR1711091315JLB 0.125	1.31e4	69.9	NO
3	13C3-PFHxS	1701645-01 WR1711091315JLB 0.125	2.71e3	83.7	NO
4	13C8-PFOA	1701645-01 WR1711091315JLB 0.125	9.82e3	76.6	NO
5	13C9-PFNA	1701645-01 WR1711091315JLB 0.125	1.03e4	64.3	NO
6	13C4-PFOS	1701645-01 WR1711091315JLB 0.125	3.11e3	93.1	NO
7	13C6-PFDA	1701645-01 WR1711091315JLB 0.125	6.55e3	84.7	NO
8	13C7-PFUdA	1701645-01 WR1711091315JLB 0.125	8.32e3	77.0	NO

Name: 171117M2\_21, Date: 17-Nov-2017, Time: 20:39:27, ID: 1701646-01 WR1711081120JLB 0.125, Description: WR1711081120JLB

#	Name	ID	Area	%Rec	Area Out
1	13C4-PFBA	1701646-01 WR1711081120JLB 0.125	8.09e3	64.1	NO
2	13C5-PFHxA	1701646-01 WR1711081120JLB 0.125	1.31e4	70.0	NO
3	13C3-PFHxS	1701646-01 WR1711081120JLB 0.125	2.62e3	80.9	NO
4	13C8-PFOA	1701646-01 WR1711081120JLB 0.125	7.58e3	59.1	NO
5	13C9-PFNA	1701646-01 WR1711081120JLB 0.125	8.58e3	53.5	NO

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**Name: 171117M2\_21, Date: 17-Nov-2017, Time: 20:39:27, ID: 1701646-01 WR1711081120JLB 0.125, Description: WR1711081120JLB**

	# Name	ID	Area	%Rec	Area Out
6	6 13C4-PFOS	1701646-01 WR1711081120JLB 0.125	2.87e3	85.9	NO
7	7 13C6-PFDA	1701646-01 WR1711081120JLB 0.125	5.25e3	67.9	NO
8	8 13C7-PFUDa	1701646-01 WR1711081120JLB 0.125	7.91e3	73.2	NO

**Name: 171117M2\_22, Date: 17-Nov-2017, Time: 20:50:38, ID: 1701646-02 WR1711081130JLB 0.125, Description: WR1711081130JLB**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701646-02 WR1711081130JLB 0.125	8.48e3	67.2	NO
2	2 13C5-PFHxA	1701646-02 WR1711081130JLB 0.125	1.28e4	68.7	NO
3	3 13C3-PFHxS	1701646-02 WR1711081130JLB 0.125	2.52e3	78.0	NO
4	4 13C8-PFOA	1701646-02 WR1711081130JLB 0.125	9.08e3	70.9	NO
5	5 13C9-PFNA	1701646-02 WR1711081130JLB 0.125	1.02e4	63.4	NO
6	6 13C4-PFOS	1701646-02 WR1711081130JLB 0.125	3.08e3	92.1	NO
7	7 13C6-PFDA	1701646-02 WR1711081130JLB 0.125	5.00e3	64.7	NO
8	8 13C7-PFUDa	1701646-02 WR1711081130JLB 0.125	8.91e3	82.4	NO

**Name: 171117M2\_23, Date: 17-Nov-2017, Time: 21:01:49, ID: 1701646-03 WR1711081235JLB 0.125, Description: WR1711081235JLB**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701646-03 WR1711081235JLB 0.125	1.02e4	81.0	NO
2	2 13C5-PFHxA	1701646-03 WR1711081235JLB 0.125	1.45e4	77.4	NO
3	3 13C3-PFHxS	1701646-03 WR1711081235JLB 0.125	2.96e3	91.4	NO
4	4 13C8-PFOA	1701646-03 WR1711081235JLB 0.125	9.84e3	76.8	NO
5	5 13C9-PFNA	1701646-03 WR1711081235JLB 0.125	1.11e4	69.5	NO
6	6 13C4-PFOS	1701646-03 WR1711081235JLB 0.125	3.01e3	90.2	NO
7	7 13C6-PFDA	1701646-03 WR1711081235JLB 0.125	5.91e3	76.4	NO
8	8 13C7-PFUDa	1701646-03 WR1711081235JLB 0.125	9.01e3	83.4	NO

**Name: 171117M2\_24, Date: 17-Nov-2017, Time: 21:12:59, ID: 1701647-01 MtBE\_7228 0.125, Description: MtBE\_7228**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701647-01 MtBE_7228 0.125	8.54e3	67.7	NO
2	2 13C5-PFHxA	1701647-01 MtBE_7228 0.125	1.37e4	73.1	NO
3	3 13C3-PFHxS	1701647-01 MtBE_7228 0.125	2.77e3	85.6	NO
4	4 13C8-PFOA	1701647-01 MtBE_7228 0.125	9.29e3	72.5	NO
5	5 13C9-PFNA	1701647-01 MtBE_7228 0.125	1.09e4	67.9	NO
6	6 13C4-PFOS	1701647-01 MtBE_7228 0.125	2.80e3	83.9	NO
7	7 13C6-PFDA	1701647-01 MtBE_7228 0.125	4.61e3	59.6	NO
8	8 13C7-PFUDa	1701647-01 MtBE_7228 0.125	8.86e3	82.0	NO

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**Name: 171117M2\_25, Date: 17-Nov-2017, Time: 21:24:10, ID: 1701671-01 WT1711090840JNR 0.125, Description: WT1711090840JNR**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701671-01 WT1711090840JNR 0.125	1.03e4	81.6	NO
2	2 13C5-PFHxA	1701671-01 WT1711090840JNR 0.125	1.48e4	78.9	NO
3	3 13C3-PFHxS	1701671-01 WT1711090840JNR 0.125	2.68e3	82.8	NO
4	4 13C8-PFOA	1701671-01 WT1711090840JNR 0.125	9.93e3	77.5	NO
5	5 13C9-PFNA	1701671-01 WT1711090840JNR 0.125	1.05e4	65.1	NO
6	6 13C4-PFOS	1701671-01 WT1711090840JNR 0.125	2.97e3	89.0	NO
7	7 13C6-PFDA	1701671-01 WT1711090840JNR 0.125	6.63e3	85.7	NO
8	8 13C7-PFUdA	1701671-01 WT1711090840JNR 0.125	9.56e3	88.5	NO

**Name: 171117M2\_26, Date: 17-Nov-2017, Time: 21:35:21, ID: 1701624-04 OF-MW22D-1117 0.11272, Description: OF-MW22D-1117**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-04 OF-MW22D-1117 0.11272	7.03e3	55.7	NO
2	2 13C5-PFHxA	1701624-04 OF-MW22D-1117 0.11272	1.07e4	57.3	NO
3	3 13C3-PFHxS	1701624-04 OF-MW22D-1117 0.11272	1.81e3	56.1	NO
4	4 13C8-PFOA	1701624-04 OF-MW22D-1117 0.11272	7.53e3	58.7	NO
5	5 13C9-PFNA	1701624-04 OF-MW22D-1117 0.11272	8.71e3	54.3	NO
6	6 13C4-PFOS	1701624-04 OF-MW22D-1117 0.11272	2.15e3	64.3	NO
7	7 13C6-PFDA	1701624-04 OF-MW22D-1117 0.11272	4.28e3	55.4	NO
8	8 13C7-PFUdA	1701624-04 OF-MW22D-1117 0.11272	6.81e3	63.0	NO

**Name: 171117M2\_27, Date: 17-Nov-2017, Time: 21:46:31, ID: 1701624-12 10W-AQ01-110717 0.11031, Description: 10W-AQ01-110717**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-12 10W-AQ01-110717 0.11031	8.94e3	70.9	NO
2	2 13C5-PFHxA	1701624-12 10W-AQ01-110717 0.11031	1.36e4	73.0	NO
3	3 13C3-PFHxS	1701624-12 10W-AQ01-110717 0.11031	2.55e3	78.8	NO
4	4 13C8-PFOA	1701624-12 10W-AQ01-110717 0.11031	9.41e3	73.4	NO
5	5 13C9-PFNA	1701624-12 10W-AQ01-110717 0.11031	9.94e3	62.0	NO
6	6 13C4-PFOS	1701624-12 10W-AQ01-110717 0.11031	2.47e3	74.0	NO
7	7 13C6-PFDA	1701624-12 10W-AQ01-110717 0.11031	4.53e3	58.5	NO
8	8 13C7-PFUdA	1701624-12 10W-AQ01-110717 0.11031	7.99e3	73.9	NO

**Name: 171117M2\_28, Date: 17-Nov-2017, Time: 21:57:42, ID: IPA, Description: IPA**

#	Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUdA	IPA			NO

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**Name: 171117M2\_29, Date: 17-Nov-2017, Time: 22:08:53, ID: ST171117M2-11 PFC CS0 17K1705, Description: PFC CS0 17K1705**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	ST171117M2-11 PFC CS0 17K1705	1.36e4	108.0	NO
2	2 13C5-PFHxA	ST171117M2-11 PFC CS0 17K1705	2.03e4	108.6	NO
3	3 13C3-PFHxS	ST171117M2-11 PFC CS0 17K1705	3.81e3	117.7	NO
4	4 13C8-PFOA	ST171117M2-11 PFC CS0 17K1705	1.48e4	115.8	NO
5	5 13C9-PFNA	ST171117M2-11 PFC CS0 17K1705	1.47e4	91.3	NO
6	6 13C4-PFOS	ST171117M2-11 PFC CS0 17K1705	4.10e3	122.9	NO
7	7 13C6-PFDA	ST171117M2-11 PFC CS0 17K1705	7.46e3	96.4	NO
8	8 13C7-PFUDa	ST171117M2-11 PFC CS0 17K1705	1.30e4	120.5	NO

**Name: 171117M2\_30, Date: 17-Nov-2017, Time: 22:20:04, ID: IPA, Description: IPA**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	IPA			NO
2	2 13C5-PFHxA	IPA			NO
3	3 13C3-PFHxS	IPA			NO
4	4 13C8-PFOA	IPA			NO
5	5 13C9-PFNA	IPA			NO
6	6 13C4-PFOS	IPA			NO
7	7 13C6-PFDA	IPA			NO
8	8 13C7-PFUDa	IPA			NO

**Name: 171117M2\_31, Date: 17-Nov-2017, Time: 22:31:14, ID: 1701624-13 10W-AQ02-110717 0.10337, Description: 10W-AQ02-110717**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-13 10W-AQ02-110717 0.10337	8.91e3	70.6	NO
2	2 13C5-PFHxA	1701624-13 10W-AQ02-110717 0.10337	1.34e4	71.9	NO
3	3 13C3-PFHxS	1701624-13 10W-AQ02-110717 0.10337	2.92e3	90.2	NO
4	4 13C8-PFOA	1701624-13 10W-AQ02-110717 0.10337	9.91e3	77.3	NO
5	5 13C9-PFNA	1701624-13 10W-AQ02-110717 0.10337	1.09e4	68.1	NO
6	6 13C4-PFOS	1701624-13 10W-AQ02-110717 0.10337	3.07e3	91.9	NO
7	7 13C6-PFDA	1701624-13 10W-AQ02-110717 0.10337	5.32e3	68.7	NO
8	8 13C7-PFUDa	1701624-13 10W-AQ02-110717 0.10337	9.58e3	88.6	NO

**Name: 171117M2\_32, Date: 17-Nov-2017, Time: 22:42:24, ID: 1701624-14 10W-AQ03-110717 0.10786, Description: 10W-AQ03-110717**

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701624-14 10W-AQ03-110717 0.10786	7.94e3	62.9	NO
2	2 13C5-PFHxA	1701624-14 10W-AQ03-110717 0.10786	1.26e4	67.4	NO
3	3 13C3-PFHxS	1701624-14 10W-AQ03-110717 0.10786	2.80e3	86.5	NO
4	4 13C8-PFOA	1701624-14 10W-AQ03-110717 0.10786	9.09e3	70.9	NO
5	5 13C9-PFNA	1701624-14 10W-AQ03-110717 0.10786	1.11e4	69.3	NO
6	6 13C4-PFOS	1701624-14 10W-AQ03-110717 0.10786	2.83e3	84.8	NO
7	7 13C6-PFDA	1701624-14 10W-AQ03-110717 0.10786	5.86e3	75.7	NO
8	8 13C7-PFUDa	1701624-14 10W-AQ03-110717 0.10786	8.84e3	81.8	NO

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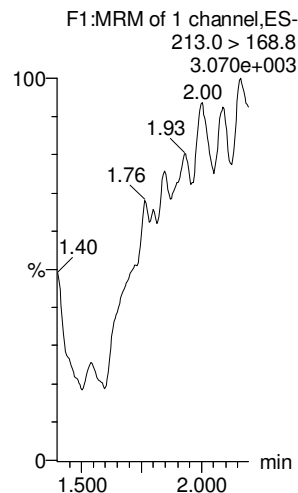
Last Altered: Saturday, November 18, 2017 10:59:52 Pacific Standard Time

Printed: Saturday, November 18, 2017 11:03:40 Pacific Standard Time

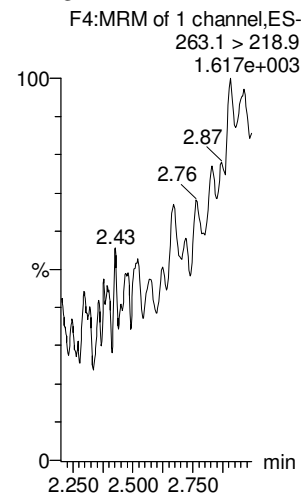
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Name: 171117M2\_12, Date: 17-Nov-2017, Time: 18:58:51, ID: IPA, Description: IPA

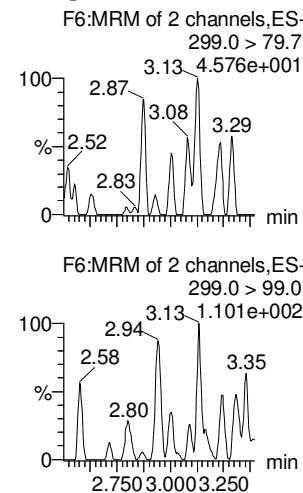
**PFBA**



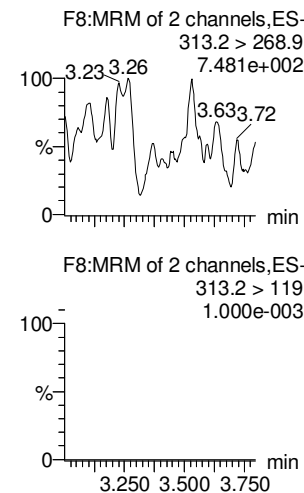
**PFPeA**



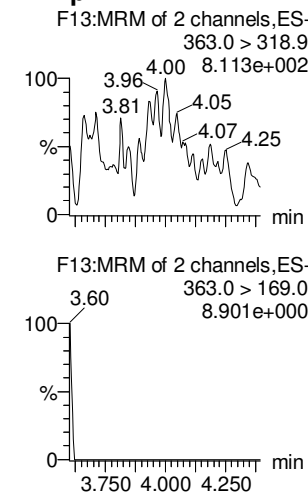
**PFBS**



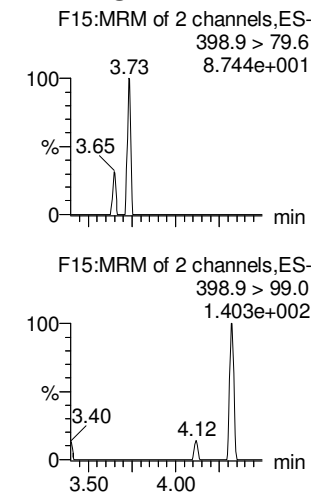
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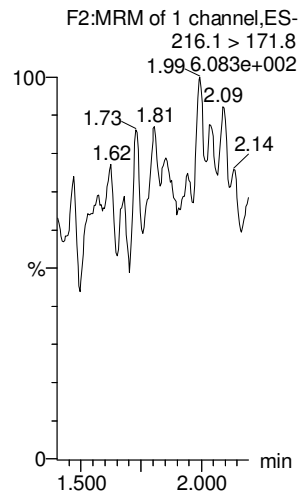
**PFHpA**



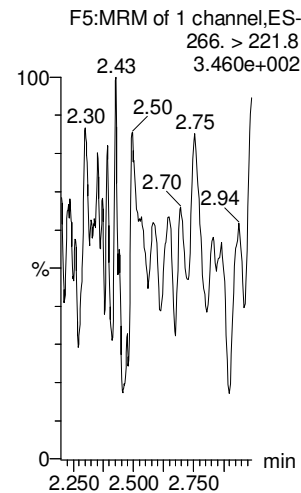
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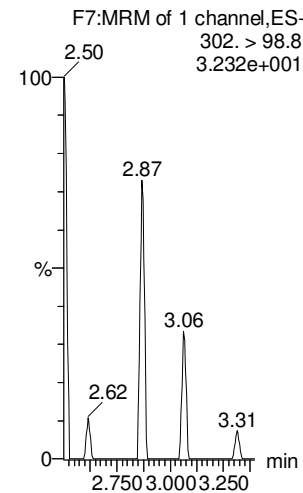
**13C3-PFBA**



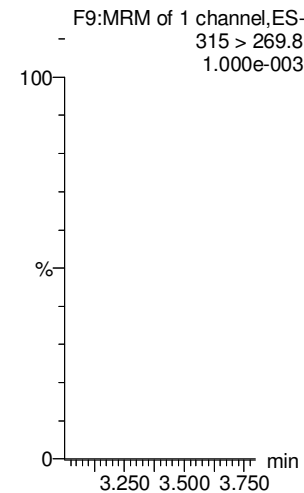
**13C3-PFPeA**



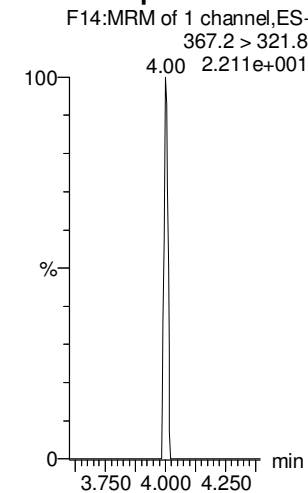
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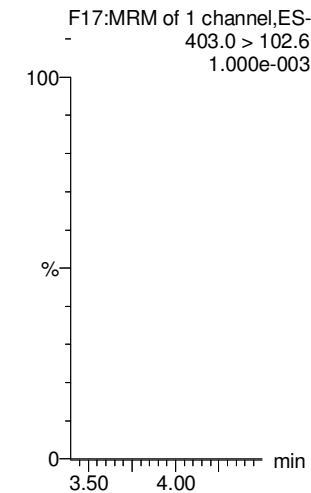
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



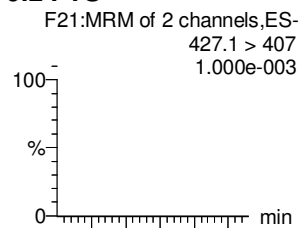
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Last Altered: Saturday, November 18, 2017 10:59:52 Pacific Standard Time

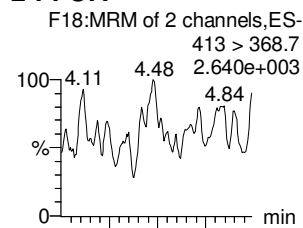
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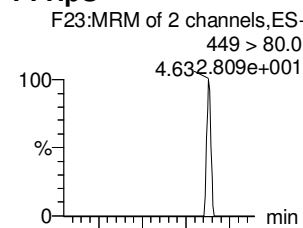
**6:2 FTS**



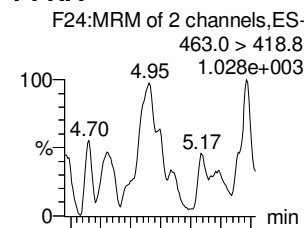
**L-PFOA**



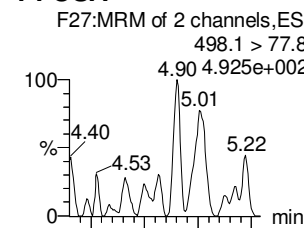
**PFHpS**



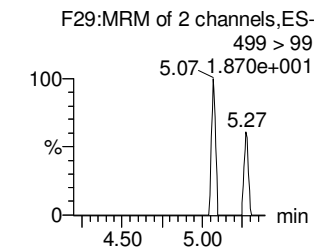
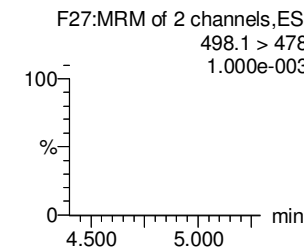
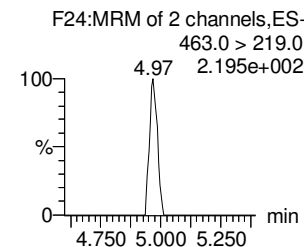
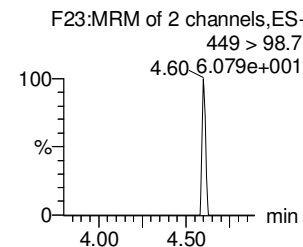
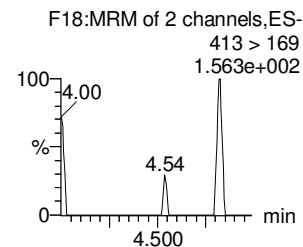
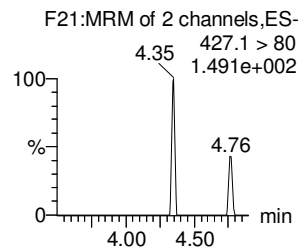
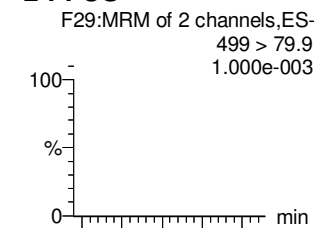
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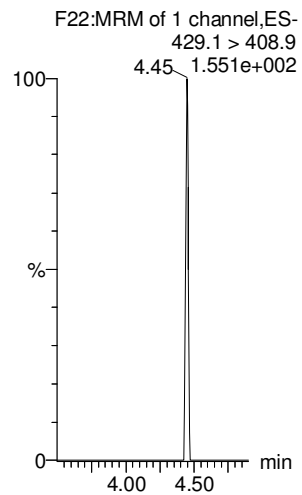
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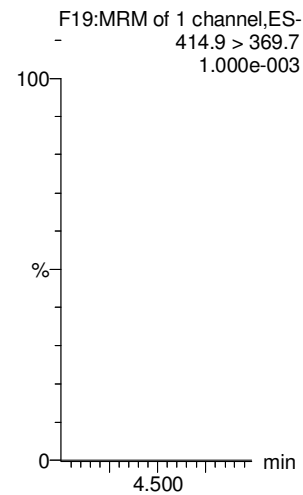
**L-PFOS**



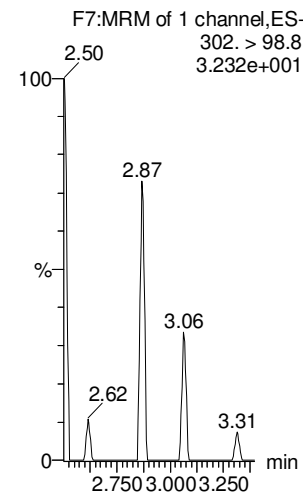
**13C2-6:2 FTS**



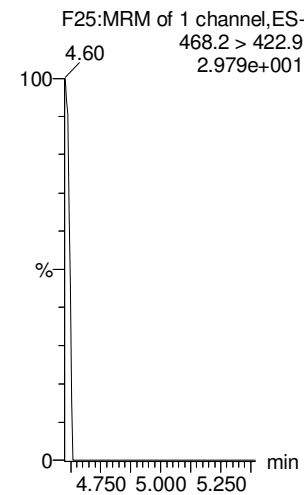
**13C2-PFOA**



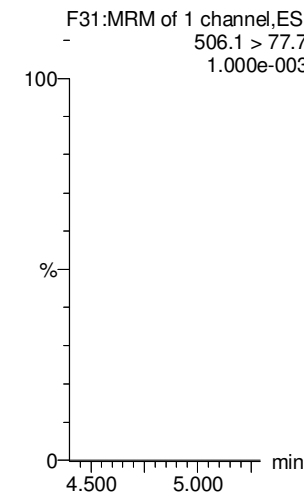
**13C3-PFBS**



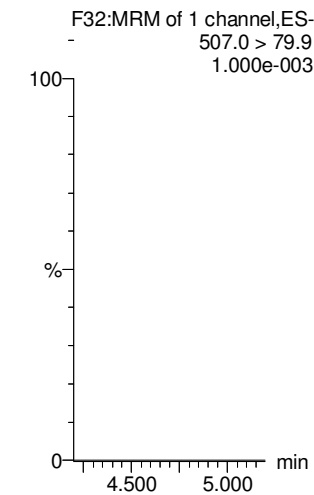
**13C5-PFNA**



**13C8-PFOSA**



**13C8-PFOS**



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Name: 171117M2\_12, Date: 17-Nov-2017, Time: 18:58:51, ID: IPA, Description: IPA

**PFDA**

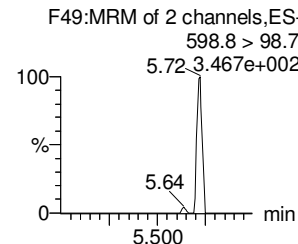
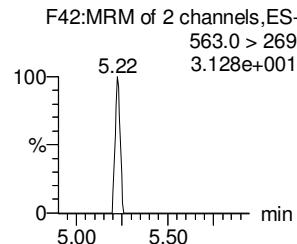
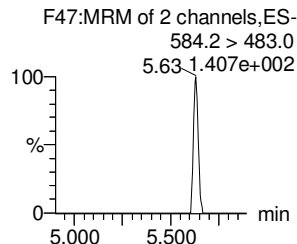
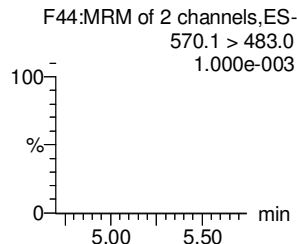
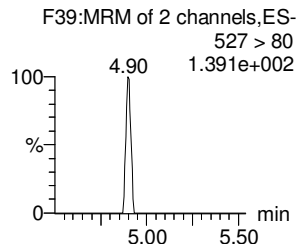
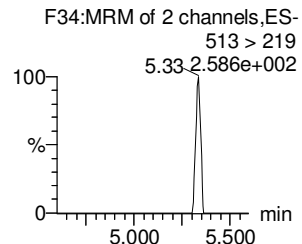
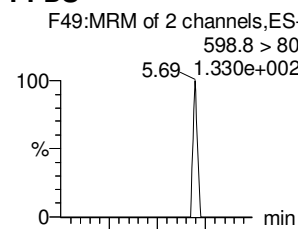
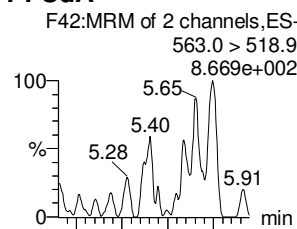
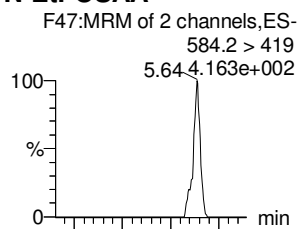
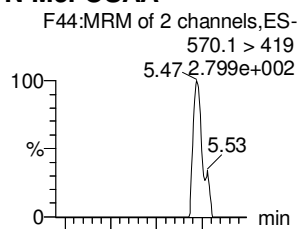
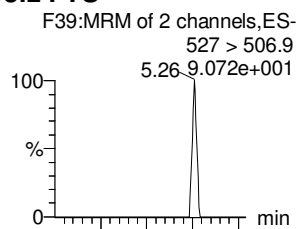
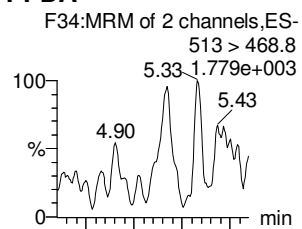
**8:2 FTS**

**N-MeFOSAA**

**N-EtFOSAA**

**PFUdA**

**PFDS**



**13C2-PFDA**

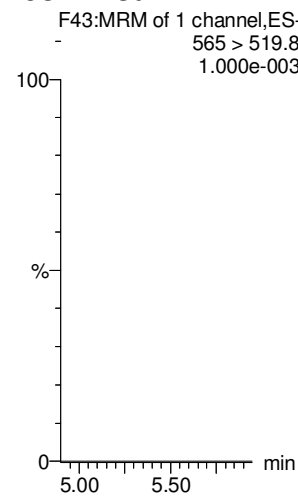
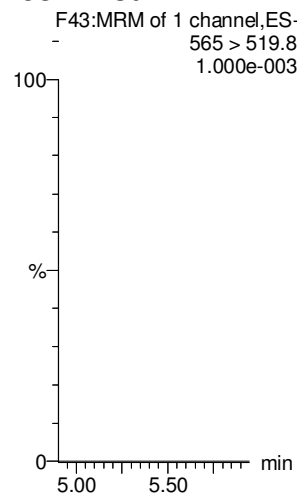
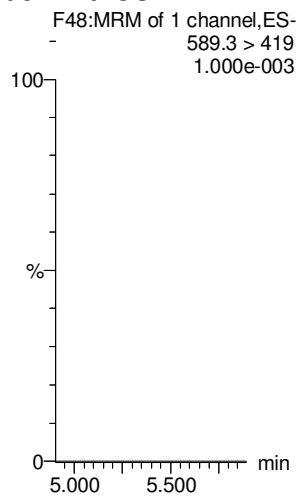
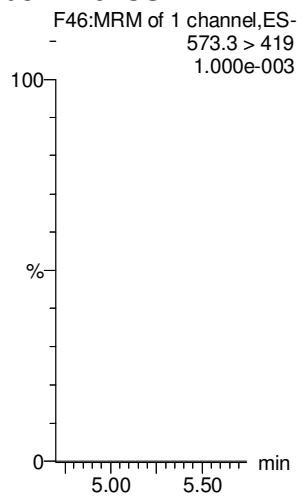
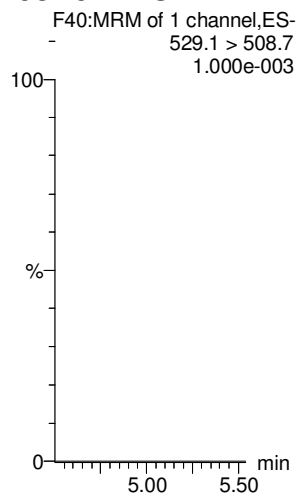
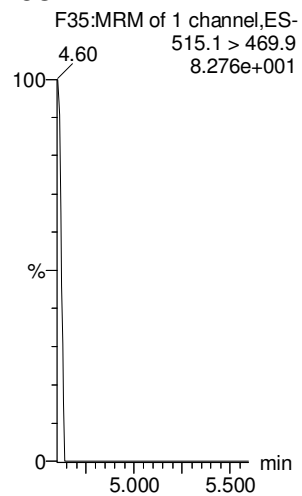
**13C2-8:2 FTS**

**d3-N-MeFOSAA**

**d5-N-EtFOSAA**

**13C2-PFUdA**

**13C2-PFUdA**





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**PFDaA**

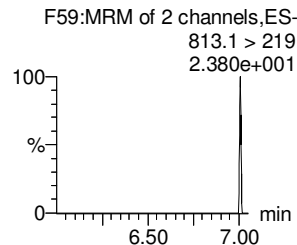
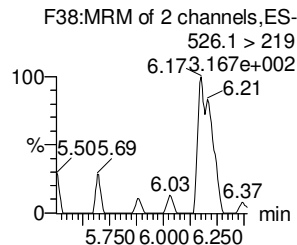
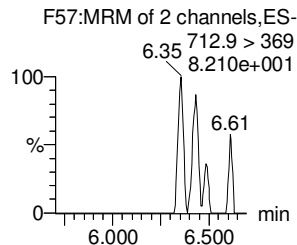
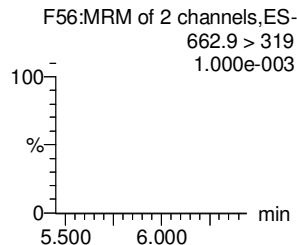
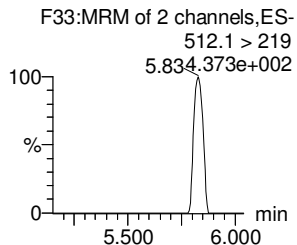
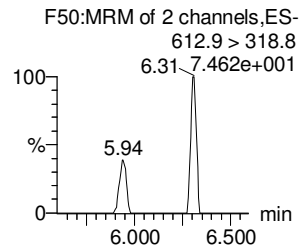
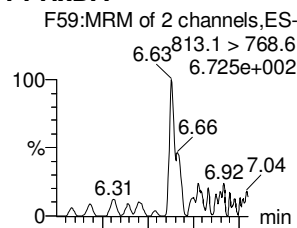
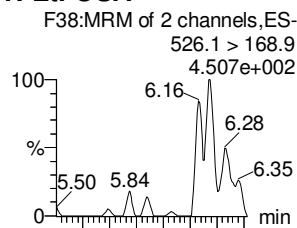
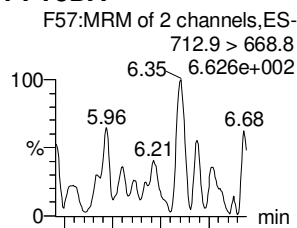
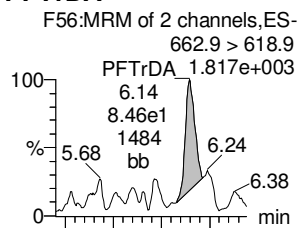
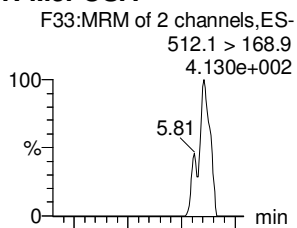
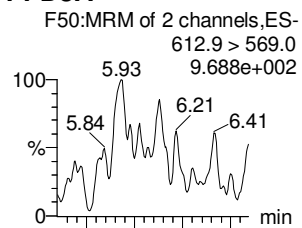
**N-MeFOSA**

**PFTrDA**

**PFTeDA**

**N-EtFOSA**

**PFHxDA**



**13C2-PFDaA**

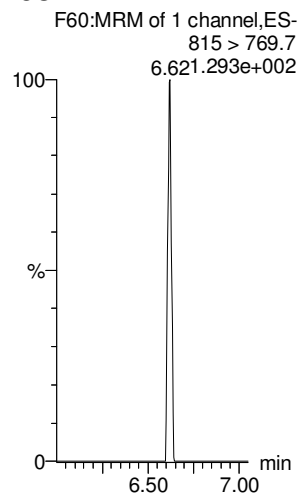
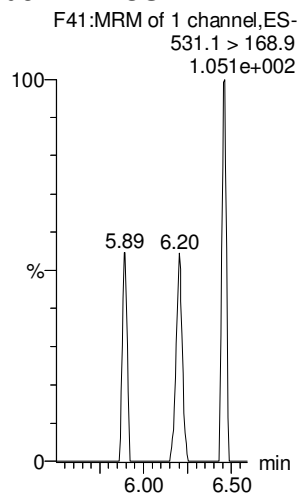
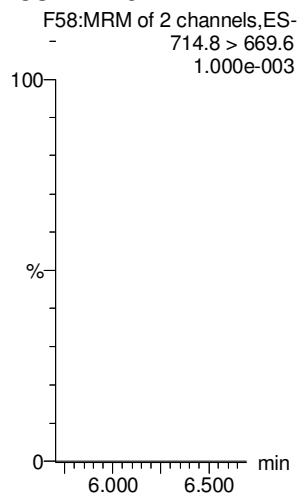
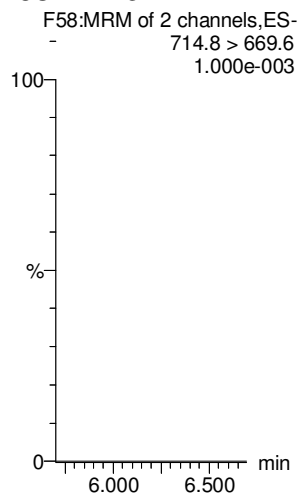
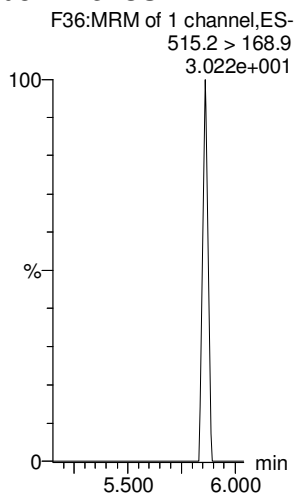
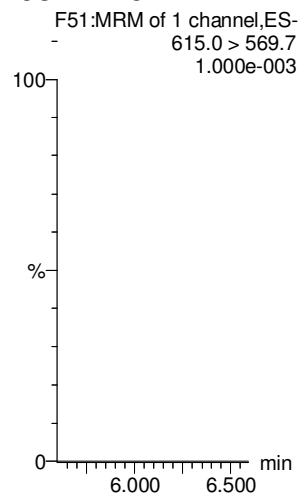
**d3-N-MeFOSA**

**13C2-PFTeDA**

**13C2-PFTeDA**

**d5-N-ETFOSA**

**13C2-PFHxDA**



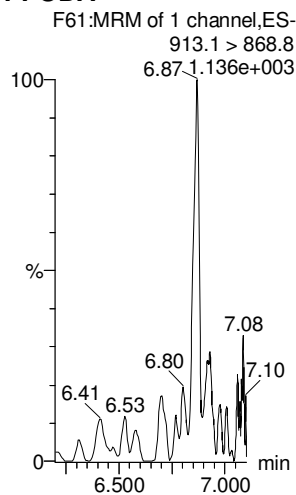
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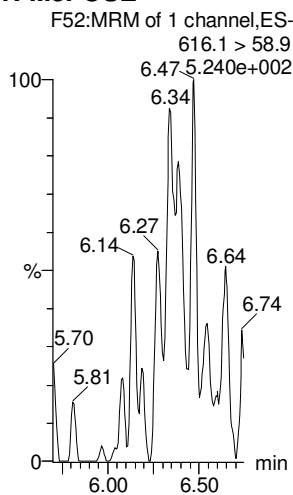
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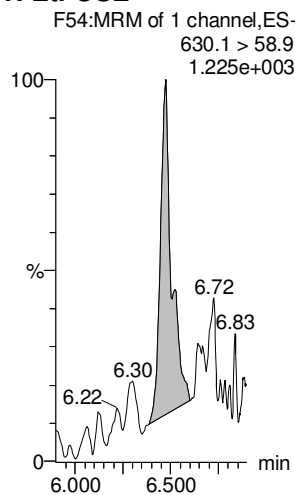
**PFODA**



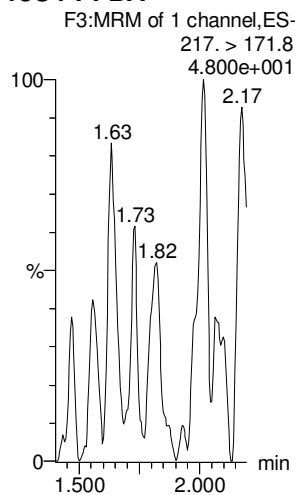
**N-MeFOSE**



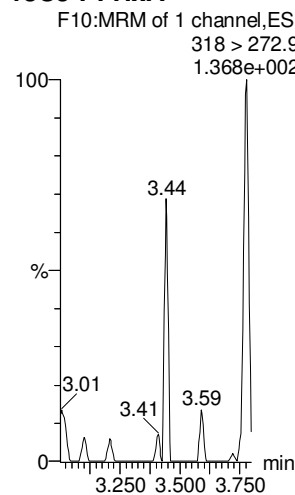
**N-EtFOSE**



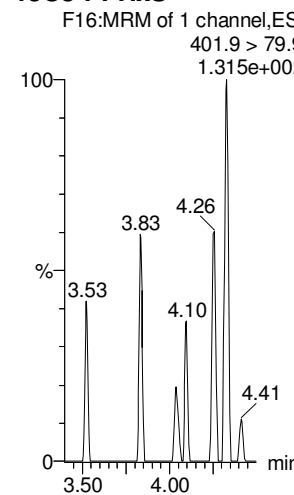
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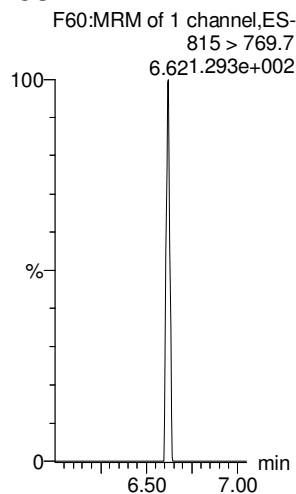
**13C5-PFHxA**



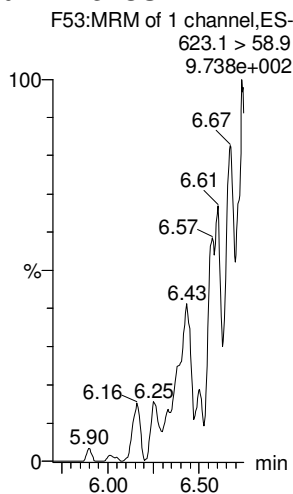
**13C3-PFHxS**



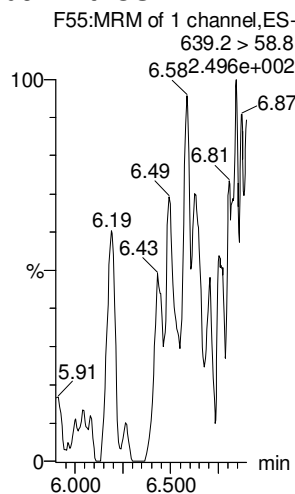
**13C2-PFHxDA**



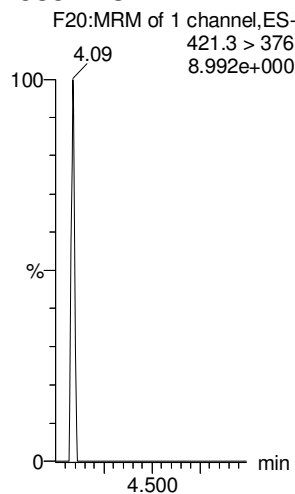
**d7-N-MeFOSE**



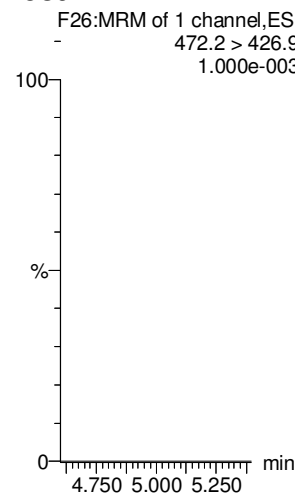
**d9-N-EtFOSE**



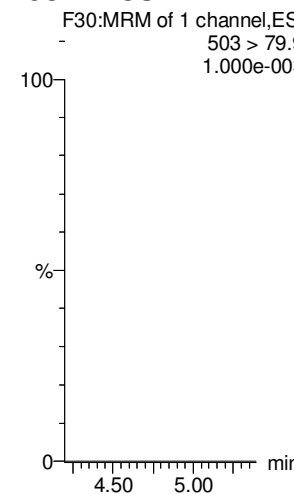
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-12.qld

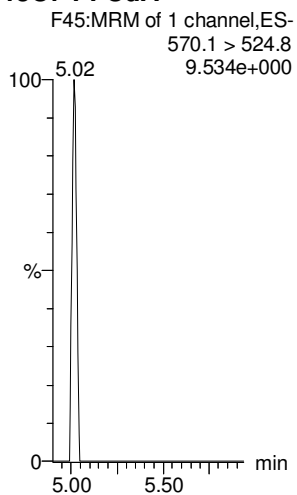
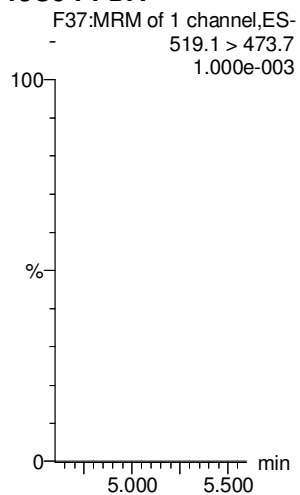
Last Altered: Saturday, November 18, 2017 10:59:52 Pacific Standard Time

Printed: Saturday, November 18, 2017 11:03:40 Pacific Standard Time

Name: 171117M2\_12, Date: 17-Nov-2017, Time: 18:58:51, ID: IPA, Description: IPA

13C6-PFDA

13C7-PFUdA



Dataset: U:\Q4.PRO\results\171117M2\171117M2-29.qld

70  
8:2 FTS, N-EtFOSAA 2130%  
recovery. Not used. AC 11/20/17

Last Altered: Monday, November 20, 2017 14:42:31 Pacific Standard Time  
Printed: Monday, November 20, 2017 14:42:51 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

AC 11/20/17  
11/20/17  
JWA  
11/20/2017

Name: 171117M2\_29, Date: 17-Nov-2017, Time: 22:08:53, ID: ST171117M2-11 PFC CS0 17K1705, Description: PFC CS0 17K1705

#	Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.10e3	1.21e4	1.0000		1.66	1.61	1.13	0.996	99.6
2	2 PFPeA	263.1 > 218.9	1.46e3	1.70e4	1.0000		2.63	2.64	1.07	1.030	103.0
3	3 PFBS	299.0 > 79.7	3.68e2	1.91e3	1.0000		2.90	2.88	2.41	1.087	108.7
4	4 PFHxA	313.2 > 268.9	1.95e3	5.98e3	1.0000		3.40	3.43	1.63	1.058	105.8
5	5 PFHpA	363.0 > 318.9	1.28e3	1.24e4	1.0000		4.03	4.07	1.29	0.866	86.6
6	6 L-PFHxS	398.9 > 79.6	2.69e2	1.49e3	1.0000		4.17	4.17	2.25	1.108	110.8
7	8 6:2 FTS	427.1 > 407	2.38e2	2.49e3	1.0000		4.49	4.55	1.20	1.192	119.2
8	9 L-PFOA	413 > 368.7	1.49e3	1.42e4	1.0000		4.54	4.58	1.31	0.997	99.7
9	11 PFHpS	449 > 80.0	3.58e2	1.42e4	1.0000		4.65	4.66	0.314	0.880	88.0
10	12 PFNA	463.0 > 418.8	1.50e3	1.53e4	1.0000		4.97	5.01	1.23	1.126	112.6
11	13 PFOSA	498.1 > 77.8	6.60e2	7.21e3	1.0000		5.02	5.06	1.14	0.962	96.2
12	14 L-PFOS	499 > 79.9	4.01e2	4.19e3	1.0000		5.05	5.06	1.20	1.173	117.3
13	16 PFDA	513 > 468.8	1.64e3	1.69e4	1.0000		5.34	5.37	1.21	1.071	107.1
14	17 8:2 FTS	527 > 506.9	2.04e2	1.42e4	1.0000		5.32	5.37	0.179	0.469	46.9
15	18 N-MeFOSAA	570.1 > 419	6.65e2	5.09e3	1.0000		5.49	5.52	1.63	1.095	109.5
16	19 N-EtFOSAA	584.2 > 419	3.32e2	6.16e3	1.0000		5.64	5.67	0.674	0.612	61.2
17	20 PFUdA	563.0 > 518.9	1.68e3	1.56e4	1.0000		5.66	5.68	1.35	1.105	110.5
18	21 PFDS	598.8 > 80	5.06e2	1.56e4	1.0000		5.70	5.70	0.407	1.183	118.3
19	22 PFDoA	612.9 > 569.0	2.17e3	8.15e3	1.0000		5.94	5.95	3.33	1.259	125.9
20	23 N-MeFOSA	512.1 > 168.9	1.13e3	2.77e4	1.0000		5.85	5.88	6.11	5.315	106.3
21	24 PFTTrDA	662.9 > 618.9	2.00e3	8.15e3	1.0000		6.18	6.17	3.07	0.706	70.6
22	25 PFTeDA	712.9 > 668.8	1.29e3	1.10e4	1.0000		6.37	6.36	1.47	0.802	80.2
23	26 N-EtFOSA	526.1 > 168.9	1.25e3	3.43e4	1.0000		6.21	6.23	5.46	5.192	103.8
24	27 PFHxDA	813.1 > 768.6	5.78e2	4.30e3	1.0000		6.66	6.64	0.672	0.923	92.3
25	28 PFODA	913.1 > 868.8	6.47e2	4.30e3	1.0000		6.87	6.84	0.753	1.054	105.4
26	29 N-MeFOSE	616.1 > 58.9	1.04e3	2.95e4	1.0000		6.30	6.34	5.31	4.861	97.2
27	30 N-EtFOSE	630.1 > 58.9	1.27e3	2.94e4	1.0000		6.42	6.48	6.49	5.549	111.0
28	31 13C3-PFBA	216.1 > 171.8	1.21e4	1.36e4	1.0000	0.914	1.66	1.60	11.1	12.185	97.5
29	32 13C3-PFPeA	266. > 221.8	1.70e4	2.03e4	1.0000	0.833	2.63	2.63	10.5	12.618	100.9
30	33 13C3-PFBS	302. > 98.8	1.91e3	2.03e4	1.0000	0.096	2.90	2.88	1.18	12.201	97.6
31	Work 34 13C3-PFUDA	315 > 269.8	5.98e3	2.03e4	1.0000	0.767	3.40	3.43	3.69	4.811	96.2

70-130  
↓  
50-150  
↓

Dataset: U:\Q4.PRO\results\171117M2\171117M2-29.qld

Last Altered: Monday, November 20, 2017 14:42:31 Pacific Standard Time

Printed: Monday, November 20, 2017 14:42:51 Pacific Standard Time

Name: 171117M2\_29, Date: 17-Nov-2017, Time: 22:08:53, ID: ST171117M2-11 PFC CS0 17K1705, Description: PFC CS0 17K1705

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	1.24e4	2.03e4	1.0000	0.558	4.03	4.07	7.64	13.703	109.6
33	36 18O2-PFHxS	403.0 > 102.6	1.49e3	3.81e3	1.0000	0.430	4.17	4.17	4.90	11.395	91.2
34	37 13C2-6:2 FTS	429.1 > 408.9	2.49e3	1.48e4	1.0000	0.240	4.49	4.55	2.10	8.739	69.9
35	38 13C2-PFOA	414.9 > 369.7	1.42e4	1.48e4	1.0000	0.956	4.54	4.58	12.0	12.534	100.3
36	39 13C5-PFNA	468.2 > 422.9	1.53e4	1.47e4	1.0000	1.009	4.97	5.01	13.0	12.906	103.2
37	40 13C8-PFOSA	506.1 > 77.7	7.21e3	1.30e4	1.0000	0.524	5.02	5.05	6.92	13.193	105.5
38	41 13C8-PFOS	507.0 > 79.9	4.19e3	4.10e3	1.0000	1.080	5.05	5.06	12.8	11.814	94.5
39	42 13C2-PFDA	515.1 > 469.9	1.69e4	7.46e3	1.0000	1.982	5.34	5.38	28.3	14.302	114.4
40	43 13C2-8:2 FTS	529.1 > 508.7	1.24e3	2.03e4	1.0000	0.072	5.32	5.37	0.767	10.642	85.1
41	44 d3-N-MeFOSAA	573.3 > 419	5.09e3	1.30e4	1.0000	0.434	5.49	5.52	4.89	11.282	90.3
42	45 d5-N-EtFOSAA	589.3 > 419	6.16e3	1.30e4	1.0000	0.461	5.64	5.67	5.91	12.816	102.5
43	46 13C2-PFUdA	565 > 519.8	1.56e4	1.30e4	1.0000	1.171	5.66	5.68	14.9	12.751	102.0
44	47 13C2-PFDoA	615.0 > 569.7	8.15e3	1.30e4	1.0000	0.697	5.94	5.95	7.83	11.225	89.8
45	48 d3-N-MeFOSA	515.2 > 168.9	2.77e4	1.30e4	1.0000	0.150	5.85	5.90	26.6	177.276	118.2
46	49 13C2-PFTeDA	714.8 > 669.6	1.10e4	1.30e4	1.0000	0.849	6.37	6.36	10.5	12.388	99.1
47	50 d5-N-ETFOSA	531.1 > 168.9	3.43e4	1.30e4	1.0000	0.178	6.21	6.23	32.9	184.494	123.0
48	51 13C2-PFHxDA	815 > 769.7	4.30e3	1.30e4	1.0000	0.864	6.66	6.64	4.13	4.781	95.6
49	52 d7-N-MeFOSE	623.1 > 58.9	2.95e4	1.30e4	1.0000	0.155	6.30	6.33	28.3	182.560	121.7
50	53 d9-N-EtFOSE	639.2 > 58.8	2.94e4	1.30e4	1.0000	0.154	6.42	6.47	28.3	183.181	122.1
51	54 13C4-PFBA	217. > 171.8	1.36e4	1.36e4	1.0000	1.000	1.66	1.61	12.5	12.500	100.0
52	55 13C5-PFHxA	318 > 272.9	2.03e4	2.03e4	1.0000	1.000	3.40	3.43	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	3.81e3	3.81e3	1.0000	1.000	4.17	4.17	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.48e4	1.48e4	1.0000	1.000	4.54	4.58	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.47e4	1.47e4	1.0000	1.000	4.97	5.01	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	4.10e3	4.10e3	1.0000	1.000	5.05	5.06	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	7.46e3	7.46e3	1.0000	1.000	5.34	5.38	12.5	12.500	100.0
58	61 13C7-PFUdA	570.1 > 524.8	1.30e4	1.30e4	1.0000	1.000	5.66	5.68	12.5	12.500	100.0

50-50  
↓

LC Calibration Standards Review Checklist

Q4

Calibration ID:	ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	
STM111M2-11 LMH	N/A	✓ (A) (B)	✓	✓	✓	✓	N/A
↓ -12 LMH	↓	✓	✓	✓	✓	✓	↓
↓ -13 LMH	↓	✓ (A)	✓	✓	✓	✓	↓
LMH	□	□	□	□	□	□	□
LMH	□	□	□	□	□	□	□
LMH	□	□	□	□	□	□	□
LMH	□	□	□	□	□	□	□
LMH	□	□	□	□	□	□	□
LMH	□	□	□	□	□	□	□
LMH	□	□	□	□	□	□	□

Full Mass Cal. Date: 11/14/17

Run Log Present:

# of Samples per Sequence Checked:

Reviewed By: JA, 11/20/2017  
 Initials/Date

Comments:  
 (A) 8:2 FTS < 70% rec. not used.  
 (B) N-MeFOSAA < 70% rec. not used.  
 re-up 11/17

Dataset: Untitled

Last Altered: Monday, November 20, 2017 15:20:31 Pacific Standard Time  
Printed: Monday, November 20, 2017 15:21:26 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	171117M2_1	IPA	17-Nov-17	16:55:44
2	171117M2_2	ST171117M2-1 PFC CS-2 17K1701	17-Nov-17	17:07:02
3	171117M2_3	ST171117M2-2 PFC CS-1 17K1704	17-Nov-17	17:18:14
4	171117M2_4	ST171117M2-3 PFC CS0 17K1705	17-Nov-17	17:29:24
5	171117M2_5	ST171117M2-4 PFC CS1 17K1706	17-Nov-17	17:40:35
6	171117M2_6	ST171117M2-5 PFC CS2 17K1707	17-Nov-17	17:51:45
7	171117M2_7	ST171117M2-6 PFC CS3 17K1708	17-Nov-17	18:03:00
8	171117M2_8	ST171117M2-7 PFC CS4 17K1709	17-Nov-17	18:14:08
9	171117M2_9	ST171117M2-8 PFC CS5 17K1710	17-Nov-17	18:25:19
10	171117M2_10	ST171117M2-9 PFC CS6 17K1712	17-Nov-17	18:36:30
11	171117M2_11	ST171117M2-10 PFC CS7 17K1713	17-Nov-17	18:47:41
12	171117M2_12	IPA	17-Nov-17	18:58:51
13	171117M2_13	ICV171117M2-1 PFC ICV 17K1711	17-Nov-17	19:10:02
14	171117M2_14	IPA	17-Nov-17	19:21:12
15	171117M2_15	1701602-21 FB1711021045JNR 0.25693	17-Nov-17	19:32:23
16	171117M2_16	1701602-22 WT1711021110JNR 0.25133	17-Nov-17	19:43:34
17	171117M2_17	B7K0078-BS1 OPR 0.125	17-Nov-17	19:54:45
18	171117M2_18	IPA	17-Nov-17	20:05:56
19	171117M2_19	B7K0078-BLK1 Method Blank 0.125	17-Nov-17	20:17:05
20	171117M2_20	1701645-01 WR1711091315JLB 0.125	17-Nov-17	20:28:16
21	171117M2_21	1701646-01 WR1711081120JLB 0.125	17-Nov-17	20:39:27
22	171117M2_22	1701646-02 WR1711081130JLB 0.125	17-Nov-17	20:50:38
23	171117M2_23	1701646-03 WR1711081235JLB 0.125	17-Nov-17	21:01:49
24	171117M2_24	1701647-01 MiBE_7228 0.125	17-Nov-17	21:12:59
25	171117M2_25	1701671-01 WT1711090840JNR 0.125	17-Nov-17	21:24:10
26	171117M2_26	1701624-04 OF-MW22D-1117 0.11272	17-Nov-17	21:35:21
27	171117M2_27	1701624-12 10W-AQ01-110717 0.11031	17-Nov-17	21:46:31
28	171117M2_28	IPA	17-Nov-17	21:57:42
29	171117M2_29	ST171117M2-11 PFC CS0 17K1705	17-Nov-17	22:08:53
30	171117M2_30	IPA	17-Nov-17	22:20:04
31	171117M2_31	1701624-13 10W-AQ02-110717 0.10337	17-Nov-17	22:31:14

Dataset: Untitled

Last Altered: Monday, November 20, 2017 15:20:31 Pacific Standard Time

Printed: Monday, November 20, 2017 15:21:26 Pacific Standard Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	171117M2_32	1701624-14 10W-AQ03-110717 0.10786	17-Nov-17	22:42:24
33	171117M2_33	B7K0031-BS1 OPR 0.25	17-Nov-17	22:53:35
34	171117M2_34	IPA	17-Nov-17	23:04:48
35	171117M2_35	B7K0031-BLK1 Method Blank 0.25	17-Nov-17	23:15:58
36	171117M2_36	1701563-01RE1 MTBE_4995 0.26962	17-Nov-17	23:27:09
37	171117M2_37	1701563-02RE1 MTBE_4996 0.26061	17-Nov-17	23:38:20
38	171117M2_38	1701564-01RE1 MTBE_4994 0.2582	17-Nov-17	23:49:30
39	171117M2_39	1701602-01 WT1711011420JNR 0.26647	18-Nov-17	00:00:41
40	171117M2_40	1701602-02 WT1711011430JNR 0.26496	18-Nov-17	00:11:52
41	171117M2_41	1701602-03 WT1711011440JNR 0.27031	18-Nov-17	00:23:02
42	171117M2_42	1701602-04 WT1711011455JNR 0.26213	18-Nov-17	00:34:13
43	171117M2_43	1701602-05 WRO1711011530JNR 0.25859	18-Nov-17	00:45:24
44	171117M2_44	(B) 1701602-05 WRO1711011530JNR 0.25859	18-Nov-17	00:56:34
45	171117M2_45	(A) 1701602-06 WR1711011555JNR 0.25678	18-Nov-17	01:07:45
46	171117M2_46	IPA	18-Nov-17	01:18:56
47	171117M2_47	ST171117M2-12 PFC CS3 17K1708	18-Nov-17	01:30:07
48	171117M2_48	IPA	18-Nov-17	01:41:17
49	171117M2_49	1701602-07 WT1711011610JNR 0.26094	18-Nov-17	01:52:28
50	171117M2_50	1701602-08 WT1711011625JNR 0.26446	18-Nov-17	02:03:38
51	171117M2_51	1701602-09 WT1711011630JNR 0.26264	18-Nov-17	02:14:50
52	171117M2_52	1701610-01 MTBE_4998 0.25736	18-Nov-17	02:26:00
53	171117M2_53	1701611-01 MTBE_4997 0.25926	18-Nov-17	02:37:11
54	171117M2_54	1701626-01 MTBE_4999 0.24638	18-Nov-17	02:48:21
55	171117M2_55	1701627-01 MTBE_9001 0.25481	18-Nov-17	02:59:32
56	171117M2_56	IPA	18-Nov-17	03:10:43
57	171117M2_57	ST171117M2-13 PFC CS3 17K1708	18-Nov-17	03:21:54
58	171117M2_58	IPA	18-Nov-17	03:33:04

(B) Not used.

(A) more than 10 samples before ccal, RI.

AC 11/20/17



Dataset: U:\Q4.PRO\results\171117M2\171117M2-29.qld

Last Altered: Monday, November 20, 2017 14:42:31 Pacific Standard Time

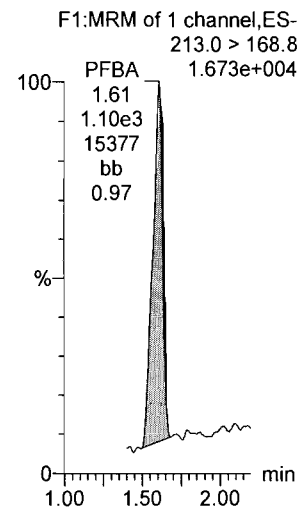
Printed: Monday, November 20, 2017 14:42:51 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30

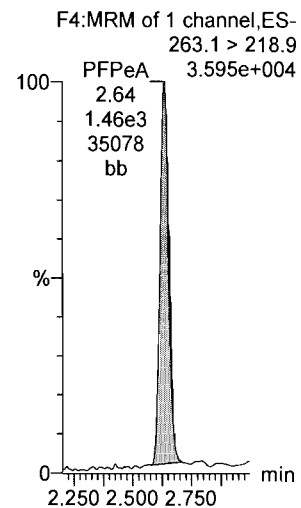
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Name: 171117M2\_29, Date: 17-Nov-2017, Time: 22:08:53, ID: ST171117M2-11 PFC CS0 17K1705, Description: PFC CS0 17K1705

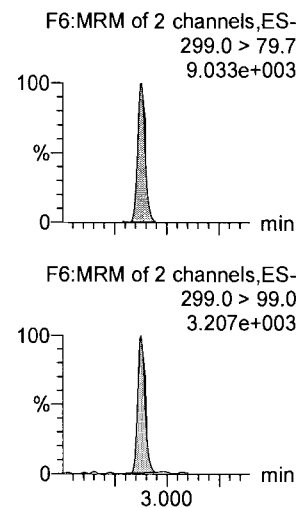
**PFBA**



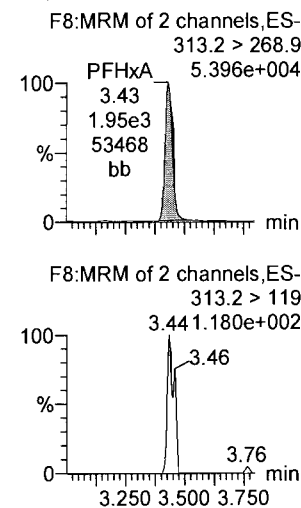
**PFPeA**



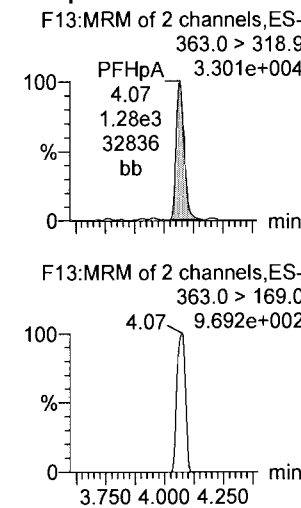
**PFBS**



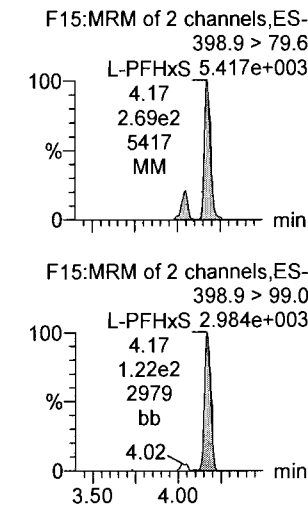
**PFHxA**



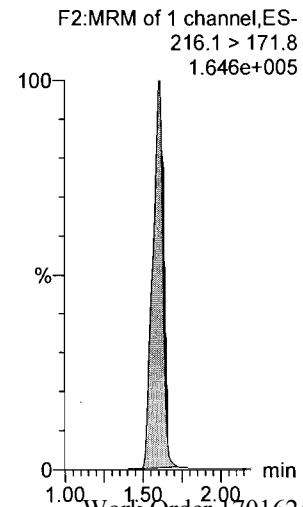
**PFHpA**



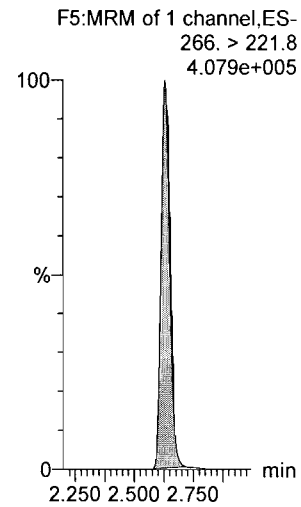
**L-PFHxS**



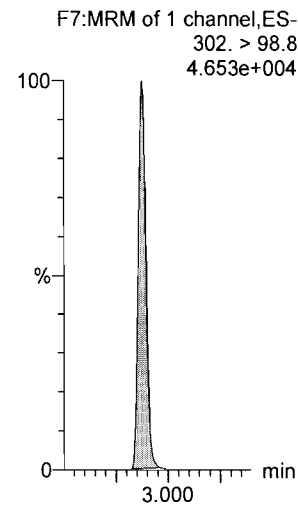
**13C3-PFBA**



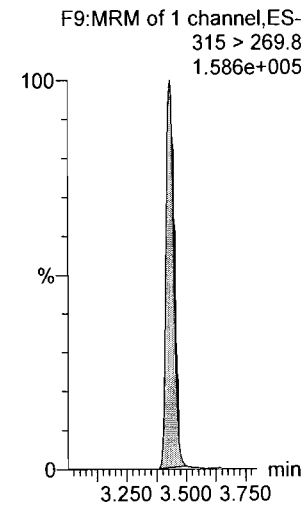
**13C3-PFPeA**



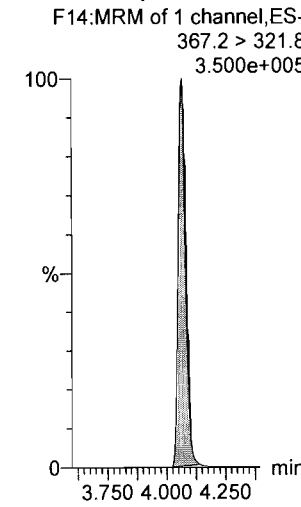
**13C3-PFBS**



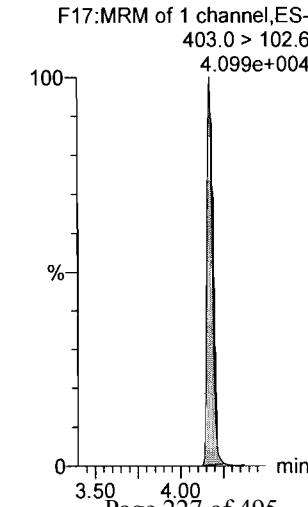
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



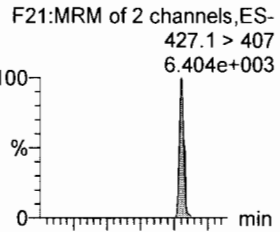
Dataset: U:\Q4.PRO\results\171117M2\171117M2-29.qld

Last Altered: Monday, November 20, 2017 14:42:31 Pacific Standard Time

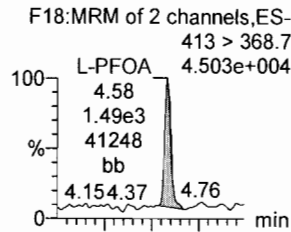
Printed: Monday, November 20, 2017 14:42:51 Pacific Standard Time

Name: 171117M2\_29, Date: 17-Nov-2017, Time: 22:08:53, ID: ST171117M2-11 PFC CS0 17K1705, Description: PFC CS0 17K1705

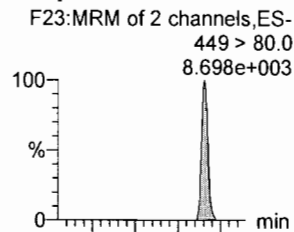
**6:2 FTS**



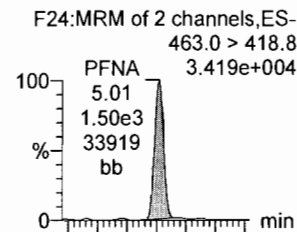
**L-PFOA**



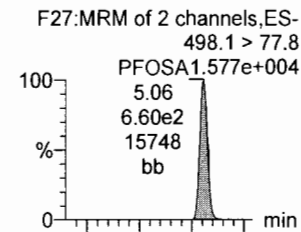
**PFHpS**



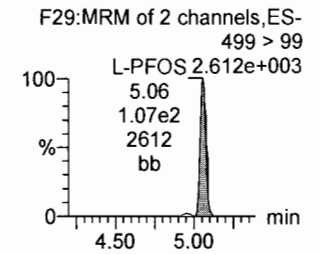
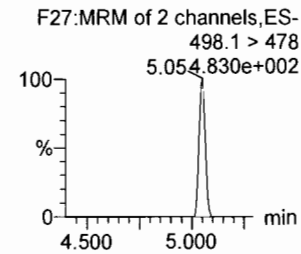
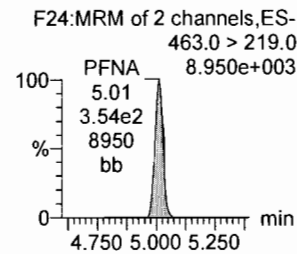
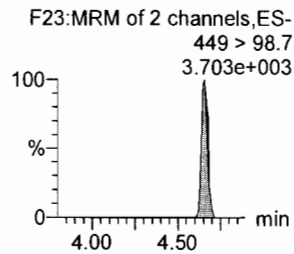
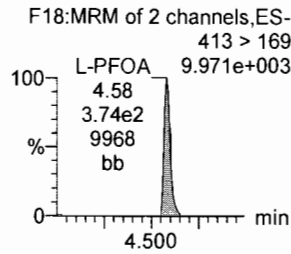
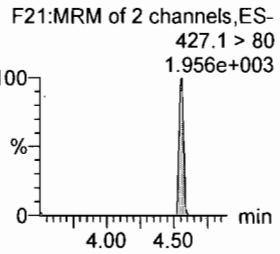
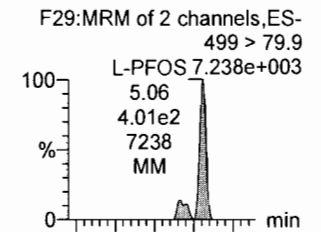
**PFNA**



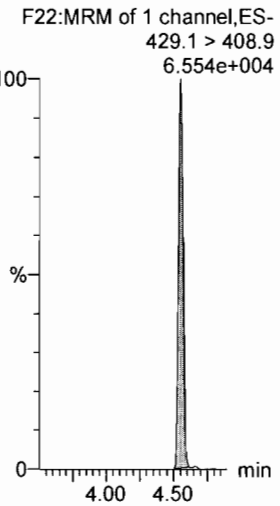
**PFOSA**



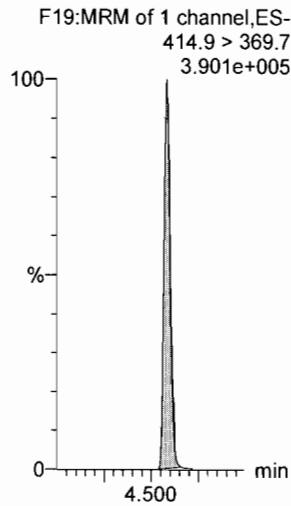
**L-PFOS**



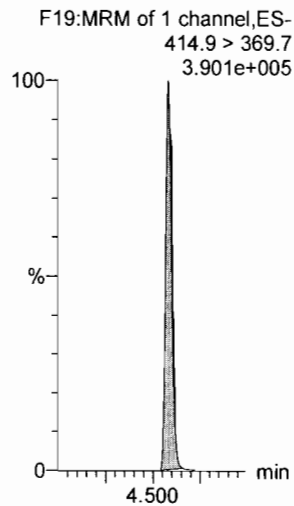
**13C2-6:2 FTS**



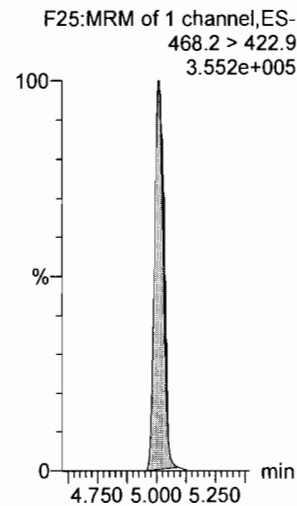
**13C2-PFOA**



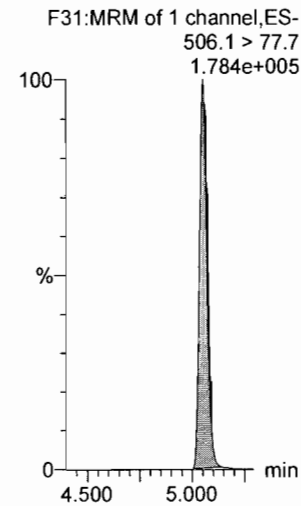
**13C2-PFOA**



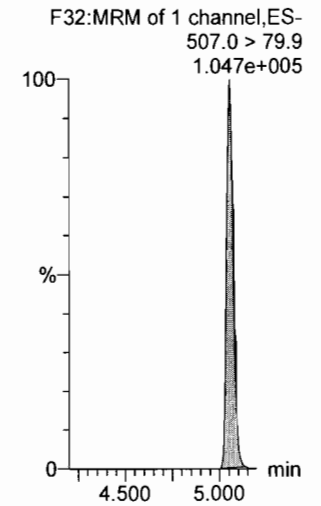
**13C5-PFNA**



**13C8-PFOA**



**13C8-PFOS**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-29.qld

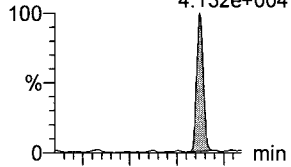
Last Altered: Monday, November 20, 2017 14:42:31 Pacific Standard Time

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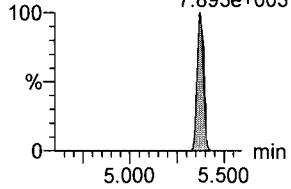
Name: 171117M2\_29, Date: 17-Nov-2017, Time: 22:08:53, ID: ST171117M2-11 PFC CS0 17K1705, Description: PFC CS0 17K1705

**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
4.132e+004

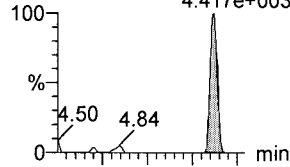


F34:MRM of 2 channels,ES-  
513 > 219  
7.893e+003

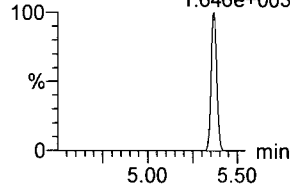


**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
4.417e+003

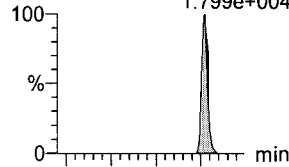


F39:MRM of 2 channels,ES-  
527 > 80  
1.646e+003

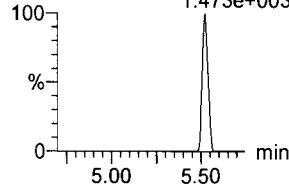


**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
1.799e+004

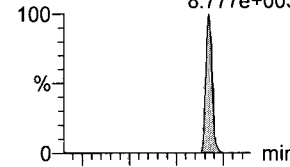


F44:MRM of 2 channels,ES-  
570.1 > 483.0  
1.473e+003

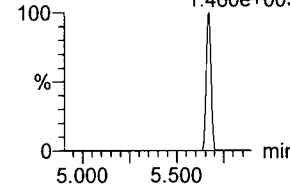


**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
8.777e+003

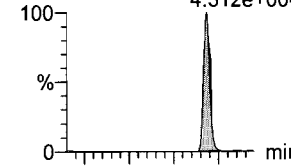


F47:MRM of 2 channels,ES-  
584.2 > 483.0  
1.460e+003

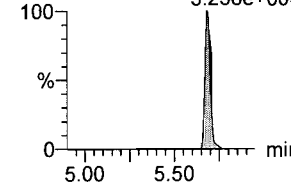


**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
4.312e+004

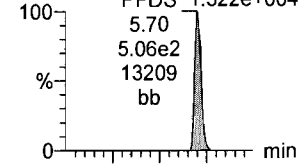


F42:MRM of 2 channels,ES-  
563.0 > 269  
3.258e+003

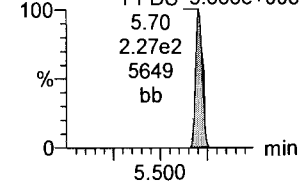


**PFDS**

F49:MRM of 2 channels,ES-  
598.8 > 80  
1.322e+004

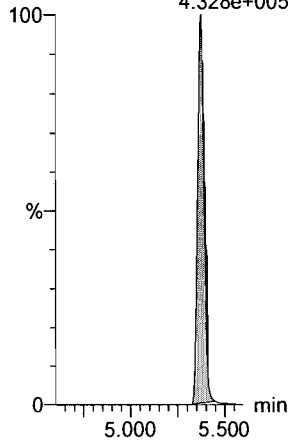


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
5.666e+003



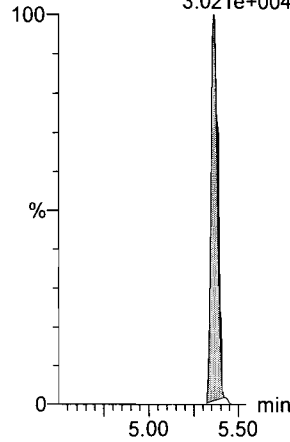
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
4.328e+005



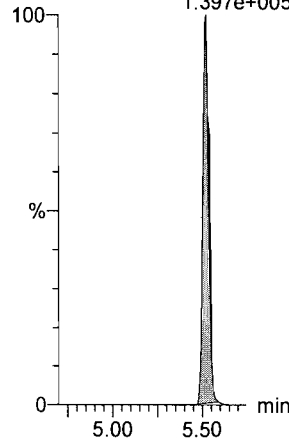
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
3.021e+004



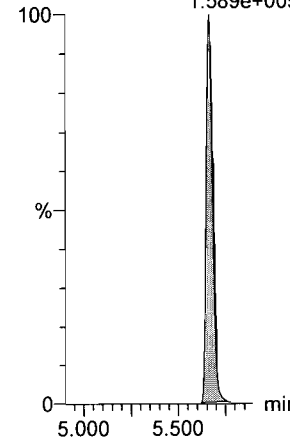
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
1.397e+005



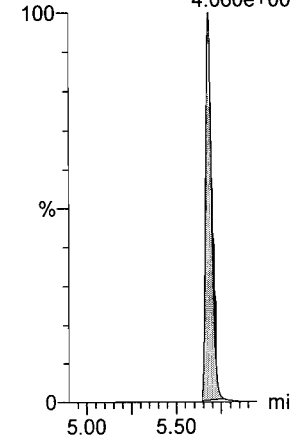
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
1.589e+005



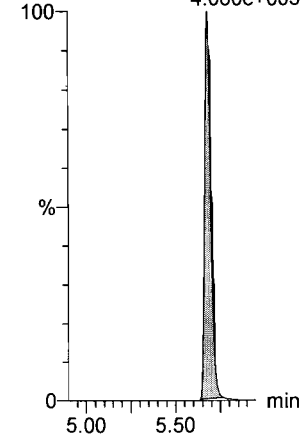
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
4.060e+005



**13C2-PFUdA**

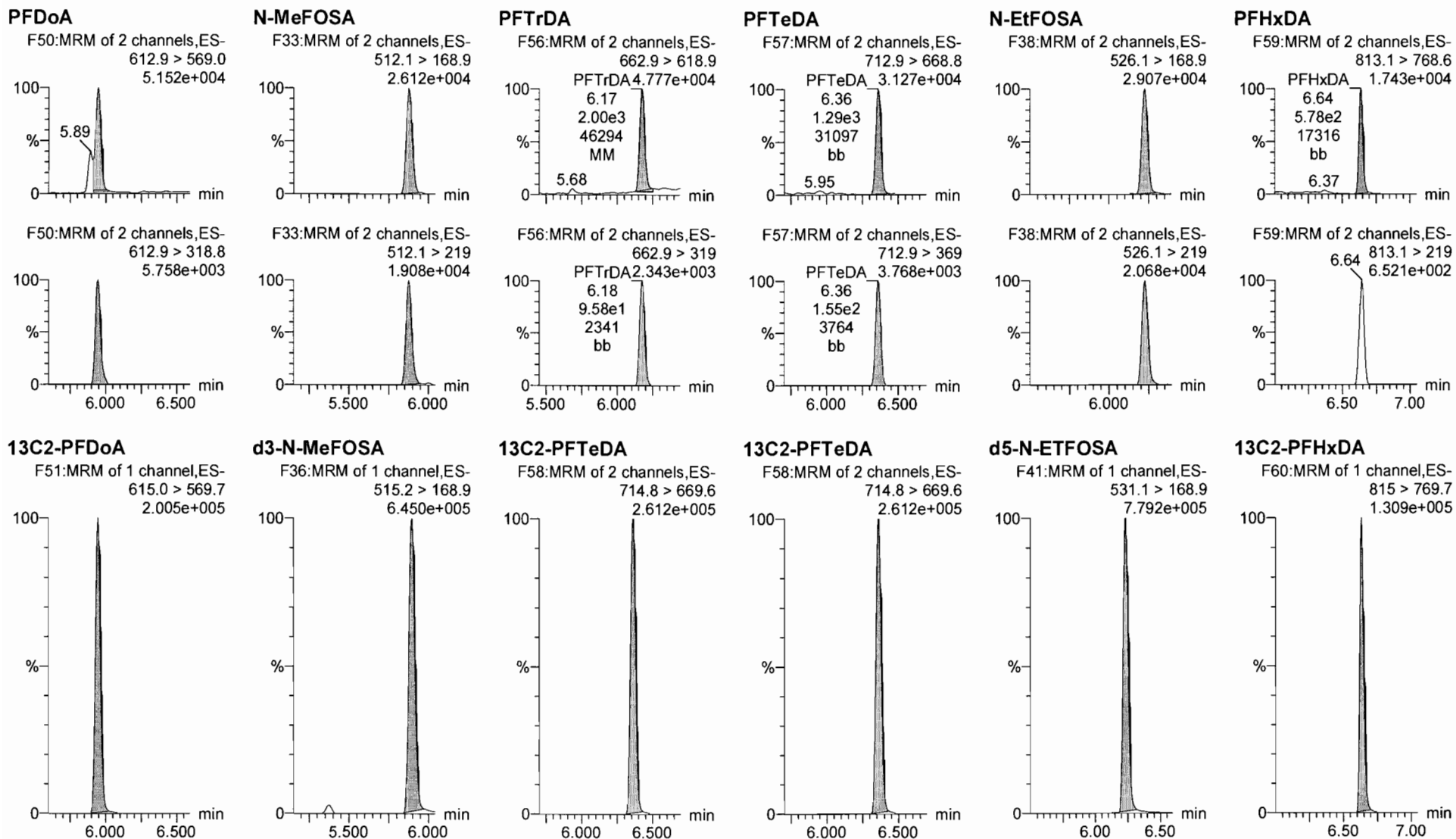
F43:MRM of 1 channel,ES-  
565 > 519.8  
4.060e+005



Dataset: U:\Q4.PRO\results\171117M2\171117M2-29.qld

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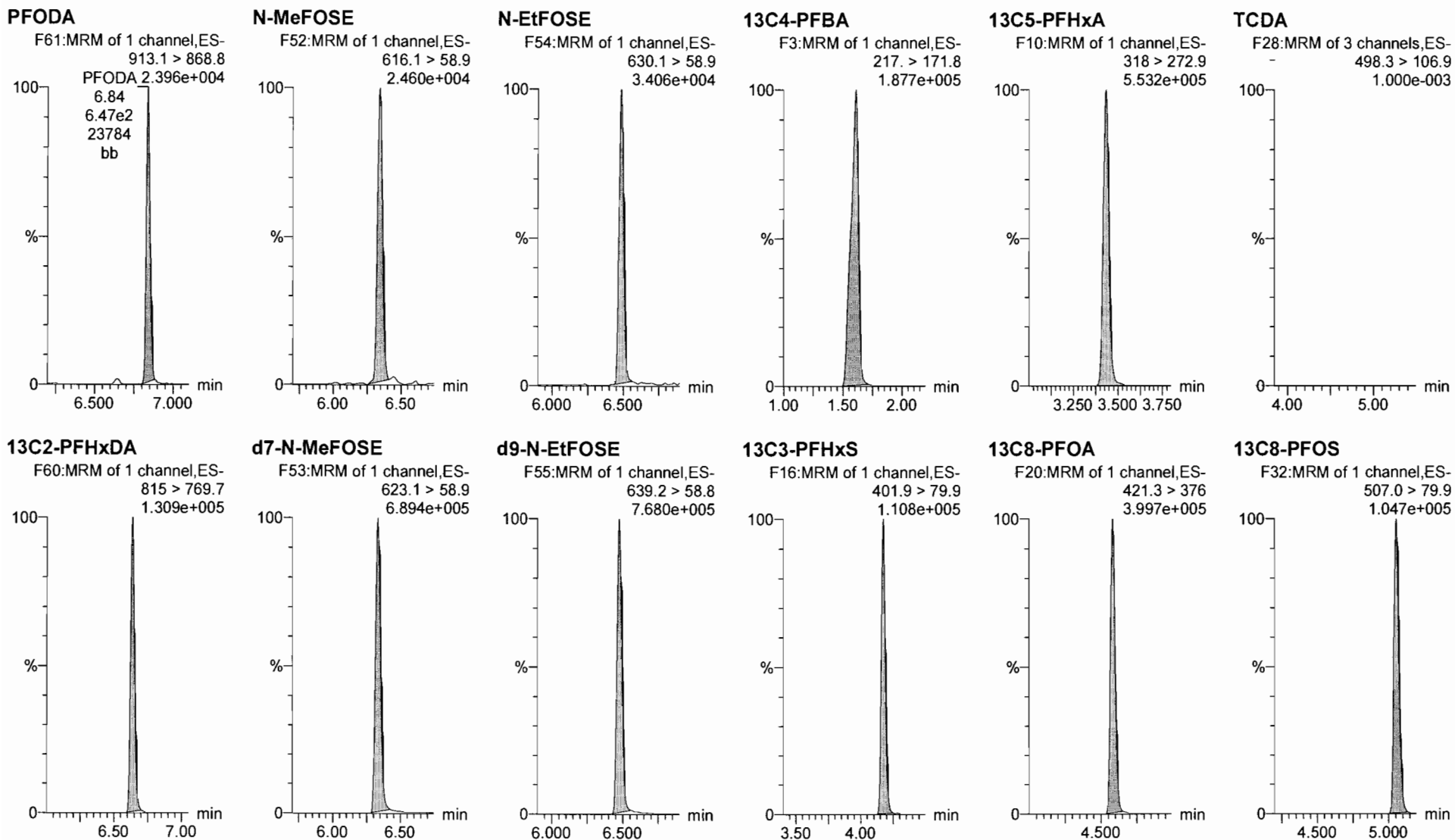
Name: 171117M2\_29, Date: 17-Nov-2017, Time: 22:08:53, ID: ST171117M2-11 PFC CS0 17K1705, Description: PFC CS0 17K1705



Dataset: U:\Q4.PRO\results\171117M2\171117M2-29.qld

Last Altered: Monday, November 20, 2017 14:42:31 Pacific Standard Time  
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Name: 171117M2\_29, Date: 17-Nov-2017, Time: 22:08:53, ID: ST171117M2-11 PFC CS0 17K1705, Description: PFC CS0 17K1705



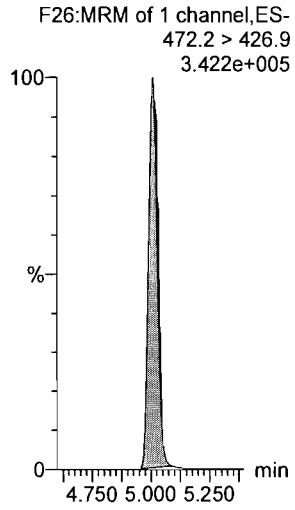
Dataset: U:\Q4.PRO\results\171117M2\171117M2-29.qld

Last Altered: Monday, November 20, 2017 14:42:31 Pacific Standard Time

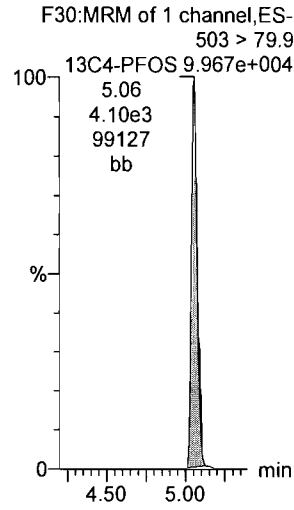
Printed: Monday, November 20, 2017 14:42:51 Pacific Standard Time

Name: 171117M2\_29, Date: 17-Nov-2017, Time: 22:08:53, ID: ST171117M2-11 PFC CS0 17K1705, Description: PFC CS0 17K1705

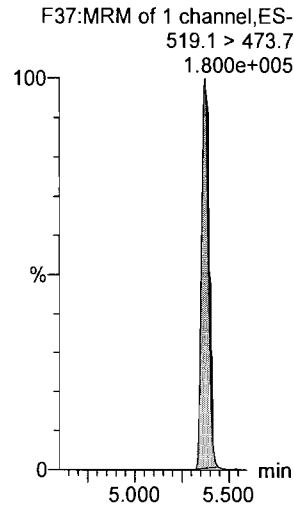
**13C9-PFNA**



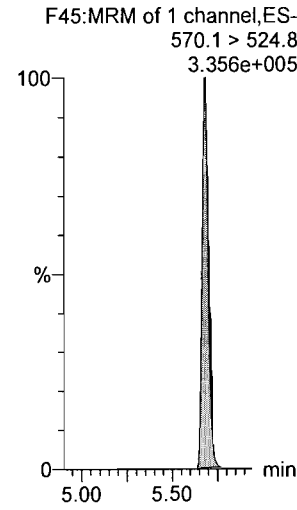
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUDa**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-47.qld

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Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_47, Date: 18-Nov-2017, Time: 01:30:07, ID: ST171117M2-12 PFC CS3 17K1708, Description: PFC CS3 17K1708

AC  
11/20/17  
JHA  
11/20/2017

#	Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.18e4	1.28e4	1.0000		1.66	1.59	11.5	10.270	102.7
2	2 PFPeA	263.1 > 218.9	1.56e4	1.78e4	1.0000		2.63	2.62	11.0	11.045	110.4
3	3 PFBS	299.0 > 79.7	3.64e3	2.03e3	1.0000		2.90	2.87	22.5	10.400	104.0
4	4 PFHxA	313.2 > 268.9	2.07e4	6.49e3	1.0000		3.40	3.42	16.0	11.218	112.2
5	5 PFHpA	363.0 > 318.9	1.53e4	1.19e4	1.0000		4.03	4.06	16.1	11.863	118.6
6	6 L-PFHxS	398.9 > 79.6	3.11e3	1.55e3	1.0000		4.17	4.16	25.0	11.395	113.9
7	8 6:2 FTS	427.1 > 407	2.57e3	3.25e3	1.0000		4.49	4.54	9.90	10.563	105.6
8	9 L-PFOA	413 > 368.7	1.26e4	1.53e4	1.0000		4.54	4.57	10.3	10.458	104.6
9	11 PFHpS	449 > 80.0	3.76e3	1.53e4	1.0000		4.65	4.64	3.07	12.262	122.6
10	12 PFNA	463.0 > 418.8	1.44e4	1.59e4	1.0000		4.97	5.00	11.3	10.790	107.9
11	13 PFOSA	498.1 > 77.8	6.73e3	7.93e3	1.0000		5.02	5.04	10.6	11.608	116.1
12	14 L-PFOS	499 > 79.9	3.91e3	4.32e3	1.0000		5.05	5.04	11.3	11.099	111.0
13	16 PFDA	513 > 468.8	1.51e4	1.48e4	1.0000		5.34	5.36	12.8	10.713	107.1
14	17 8:2 FTS	527 > 506.9	2.21e3	1.53e4	1.0000		5.32	5.35	1.81	7.540	75.4
15	18 N-MeFOSAA	570.1 > 419	7.56e3	5.56e3	1.0000		5.49	5.51	17.0	11.531	115.3
16	19 N-EtFOSAA	584.2 > 419	5.67e3	5.16e3	1.0000		5.64	5.66	13.7	11.549	115.5
17	20 PFUdA	563.0 > 518.9	1.53e4	1.52e4	1.0000		5.66	5.67	12.6	10.314	103.1
18	21 PFDS	598.8 > 80	4.68e3	1.52e4	1.0000		5.70	5.69	3.85	11.144	111.4
19	22 PFDoA	612.9 > 569.0	2.35e4	9.34e3	1.0000		5.94	5.93	31.4	12.100	121.0
20	23 N-MeFOSA	512.1 > 168.9	1.16e4	2.89e4	1.0000		5.85	5.87	60.0	55.530	111.1
21	24 PFTTrDA	662.9 > 618.9	1.92e4	9.34e3	1.0000		6.18	6.16	25.7	12.957	129.6
22	25 PFTeDA	712.9 > 668.8	1.26e4	9.61e3	1.0000		6.37	6.35	16.4	11.779	117.8
23	26 N-EtFOSA	526.1 > 168.9	1.26e4	3.68e4	1.0000		6.21	6.22	51.2	51.804	103.6
24	27 PFHxDA	813.1 > 768.6	6.81e3	4.90e3	1.0000		6.66	6.63	6.95	9.842	98.4
25	28 PFODA	913.1 > 868.8	7.02e3	4.90e3	1.0000		6.87	6.83	7.17	10.319	103.2
26	29 N-MeFOSE	616.1 > 58.9	1.11e4	3.24e4	1.0000		6.30	6.34	51.3	47.969	95.9
27	30 N-EtFOSE	630.1 > 58.9	1.33e4	3.26e4	1.0000		6.42	6.49	61.2	52.793	105.6
28	31 13C3-PFBA	216.1 > 171.8	1.28e4	1.40e4	1.0000	0.914	1.66	1.60	11.5	12.579	100.6
29	32 13C3-PFPeA	266. > 221.8	1.78e4	2.07e4	1.0000	0.833	2.63	2.62	10.7	12.901	103.2
30	33 13C3-PFBS	302. > 98.8	2.03e3	2.07e4	1.0000	0.096	2.90	2.87	1.22	12.697	101.6
31	34 13C3-PFHxA	315 > 269.8	6.49e3	2.07e4	1.0000	0.767	3.40	3.42	3.92	5.108	103.2

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↓  
50750  
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Dataset: U:\Q4.PRO\results\171117M2\171117M2-47.qld

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Name: 171117M2\_47, Date: 18-Nov-2017, Time: 01:30:07, ID: ST171117M2-12 PFC CS3 17K1708, Description: PFC CS3 17K1708

#	Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	1.19e4	2.07e4	1.0000	0.558	4.03	4.06	7.19	12.884	103.1
33	36 18O2-PFHxS	403.0 > 102.6	1.55e3	3.44e3	1.0000	0.430	4.17	4.16	5.64	13.114	104.9
34	37 13C2-6:2 FTS	429.1 > 408.9	3.25e3	1.61e4	1.0000	0.240	4.49	4.54	2.52	10.514	84.1
35	38 13C2-PFOA	414.9 > 369.7	1.53e4	1.61e4	1.0000	0.956	4.54	4.57	11.9	12.422	99.4
36	39 13C5-PFNA	468.2 > 422.9	1.59e4	1.66e4	1.0000	1.009	4.97	5.00	12.0	11.854	94.8
37	40 13C8-PFOA	506.1 > 77.7	7.93e3	1.38e4	1.0000	0.524	5.02	5.04	7.16	13.654	109.2
38	41 13C8-PFOS	507.0 > 79.9	4.32e3	4.43e3	1.0000	1.080	5.05	5.04	12.2	11.288	90.3
39	42 13C2-PFDA	515.1 > 469.9	1.48e4	8.96e3	1.0000	1.982	5.34	5.36	20.6	10.401	83.2
40	43 13C2-8:2 FTS	529.1 > 508.7	1.44e3	2.07e4	1.0000	0.072	5.32	5.35	0.870	12.063	96.5
41	44 d3-N-MeFOSAA	573.3 > 419	5.56e3	1.38e4	1.0000	0.434	5.49	5.51	5.03	11.591	92.7
42	45 d5-N-EtFOSAA	589.3 > 419	5.16e3	1.38e4	1.0000	0.461	5.64	5.65	4.66	10.115	80.9
43	46 13C2-PFUdA	565 > 519.8	1.52e4	1.38e4	1.0000	1.171	5.66	5.67	13.7	11.722	93.8
44	47 13C2-PFDoA	615.0 > 569.7	9.34e3	1.38e4	1.0000	0.697	5.94	5.93	8.43	12.097	96.8
45	48 d3-N-MeFOSA	515.2 > 168.9	2.89e4	1.38e4	1.0000	0.150	5.85	5.89	26.1	174.134	116.1
46	49 13C2-PFTeDA	714.8 > 669.6	9.61e3	1.38e4	1.0000	0.849	6.37	6.35	8.68	10.228	81.8
47	50 d5-N-ETFOSA	531.1 > 168.9	3.68e4	1.38e4	1.0000	0.178	6.21	6.23	33.3	186.369	124.2
48	51 13C2-PFHxDA	815 > 769.7	4.90e3	1.38e4	1.0000	0.864	6.66	6.63	4.43	5.124	102.5
49	52 d7-N-MeFOSE	623.1 > 58.9	3.24e4	1.38e4	1.0000	0.155	6.30	6.34	29.3	188.574	125.7
50	53 d9-N-EtFOSE	639.2 > 58.8	3.26e4	1.38e4	1.0000	0.154	6.42	6.48	29.4	190.886	127.3
51	54 13C4-PFBA	217. > 171.8	1.40e4	1.40e4	1.0000	1.000	1.66	1.60	12.5	12.500	100.0
52	55 13C5-PFHxA	318 > 272.9	2.07e4	2.07e4	1.0000	1.000	3.40	3.42	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	3.44e3	3.44e3	1.0000	1.000	4.17	4.16	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.61e4	1.61e4	1.0000	1.000	4.54	4.57	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.66e4	1.66e4	1.0000	1.000	4.97	5.00	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	4.43e3	4.43e3	1.0000	1.000	5.05	5.04	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	8.96e3	8.96e3	1.0000	1.000	5.34	5.36	12.5	12.500	100.0
58	61 13C7-PFUdA	570.1 > 524.8	1.38e4	1.38e4	1.0000	1.000	5.66	5.67	12.5	12.500	100.0

50-150  
↓



Dataset: Untitled

Last Altered: Monday, November 20, 2017 15:20:31 Pacific Standard Time

Printed: Monday, November 20, 2017 15:21:26 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 18 Nov 2017 11:34:30

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	171117M2_1	IPA	17-Nov-17	16:55:44
2	171117M2_2	ST171117M2-1 PFC CS-2 17K1701	17-Nov-17	17:07:02
3	171117M2_3	ST171117M2-2 PFC CS-1 17K1704	17-Nov-17	17:18:14
4	171117M2_4	ST171117M2-3 PFC CS0 17K1705	17-Nov-17	17:29:24
5	171117M2_5	ST171117M2-4 PFC CS1 17K1706	17-Nov-17	17:40:35
6	171117M2_6	ST171117M2-5 PFC CS2 17K1707	17-Nov-17	17:51:45
7	171117M2_7	ST171117M2-6 PFC CS3 17K1708	17-Nov-17	18:03:00
8	171117M2_8	ST171117M2-7 PFC CS4 17K1709	17-Nov-17	18:14:08
9	171117M2_9	ST171117M2-8 PFC CS5 17K1710	17-Nov-17	18:25:19
10	171117M2_10	ST171117M2-9 PFC CS6 17K1712	17-Nov-17	18:36:30
11	171117M2_11	ST171117M2-10 PFC CS7 17K1713	17-Nov-17	18:47:41
12	171117M2_12	IPA	17-Nov-17	18:58:51
13	171117M2_13	ICV171117M2-1 PFC ICV 17K1711	17-Nov-17	19:10:02
14	171117M2_14	IPA	17-Nov-17	19:21:12
15	171117M2_15	1701602-21 FB1711021045JNR 0.25693	17-Nov-17	19:32:23
16	171117M2_16	1701602-22 WT1711021110JNR 0.25133	17-Nov-17	19:43:34
17	171117M2_17	B7K0078-BS1 OPR 0.125	17-Nov-17	19:54:45
18	171117M2_18	IPA	17-Nov-17	20:05:56
19	171117M2_19	B7K0078-BLK1 Method Blank 0.125	17-Nov-17	20:17:05
20	171117M2_20	1701645-01 WR1711091315JLB 0.125	17-Nov-17	20:28:16
21	171117M2_21	1701646-01 WR1711081120JLB 0.125	17-Nov-17	20:39:27
22	171117M2_22	1701646-02 WR1711081130JLB 0.125	17-Nov-17	20:50:38
23	171117M2_23	1701646-03 WR1711081235JLB 0.125	17-Nov-17	21:01:49
24	171117M2_24	1701647-01 MiBE_7228 0.125	17-Nov-17	21:12:59
25	171117M2_25	1701671-01 WT1711090840JNR 0.125	17-Nov-17	21:24:10
26	171117M2_26	1701624-04 OF-MW22D-1117 0.11272	17-Nov-17	21:35:21
27	171117M2_27	1701624-12 10W-AQ01-110717 0.11031	17-Nov-17	21:46:31
28	171117M2_28	IPA	17-Nov-17	21:57:42
29	171117M2_29	ST171117M2-11 PFC CS0 17K1705	17-Nov-17	22:08:53
30	171117M2_30	IPA	17-Nov-17	22:20:04
31	171117M2_31	1701624-13 10W-AQ02-110717 0.10337	17-Nov-17	22:31:14

Dataset: Untitled

Last Altered: Monday, November 20, 2017 15:20:31 Pacific Standard Time  
 Printed: Monday, November 20, 2017 15:21:26 Pacific Standard Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	171117M2_32	1701624-14 10W-AQ03-110717 0.10786	17-Nov-17	22:42:24
33	171117M2_33	B7K0031-BS1 OPR 0.25	17-Nov-17	22:53:35
34	171117M2_34	IPA	17-Nov-17	23:04:48
35	171117M2_35	B7K0031-BLK1 Method Blank 0.25	17-Nov-17	23:15:58
36	171117M2_36	1701563-01RE1 MTBE_4995 0.26962	17-Nov-17	23:27:09
37	171117M2_37	1701563-02RE1 MTBE_4996 0.26061	17-Nov-17	23:38:20
38	171117M2_38	1701564-01RE1 MTBE_4994 0.2582	17-Nov-17	23:49:30
39	171117M2_39	1701602-01 WT1711011420JNR 0.26647	18-Nov-17	00:00:41
40	171117M2_40	1701602-02 WT1711011430JNR 0.26496	18-Nov-17	00:11:52
41	171117M2_41	1701602-03 WT1711011440JNR 0.27031	18-Nov-17	00:23:02
42	171117M2_42	1701602-04 WT1711011455JNR 0.26213	18-Nov-17	00:34:13
43	171117M2_43	1701602-05 WRO1711011530JNR 0.25859	18-Nov-17	00:45:24
44	171117M2_44	(B) 1701602-05 WRO1711011530JNR 0.25859	18-Nov-17	00:56:34
45	171117M2_45	(A) 1701602-06 WR1711011555JNR 0.25678	18-Nov-17	01:07:45
46	171117M2_46	IPA	18-Nov-17	01:18:56
47	171117M2_47	ST171117M2-12 PFC CS3 17K1708	18-Nov-17	01:30:07
48	171117M2_48	IPA	18-Nov-17	01:41:17
49	171117M2_49	1701602-07 WT1711011610JNR 0.26094	18-Nov-17	01:52:28
50	171117M2_50	1701602-08 WT1711011625JNR 0.26446	18-Nov-17	02:03:38
51	171117M2_51	1701602-09 WT1711011630JNR 0.26264	18-Nov-17	02:14:50
52	171117M2_52	1701610-01 MTBE_4998 0.25736	18-Nov-17	02:26:00
53	171117M2_53	1701611-01 MTBE_4997 0.25926	18-Nov-17	02:37:11
54	171117M2_54	1701626-01 MTBE_4999 0.24638	18-Nov-17	02:48:21
55	171117M2_55	1701627-01 MTBE_9001 0.25481	18-Nov-17	02:59:32
56	171117M2_56	IPA	18-Nov-17	03:10:43
57	171117M2_57	ST171117M2-13 PFC CS3 17K1708	18-Nov-17	03:21:54
58	171117M2_58	IPA	18-Nov-17	03:33:04

(B) Not used.

(A) more than 10 samples  
 before cal, RI.

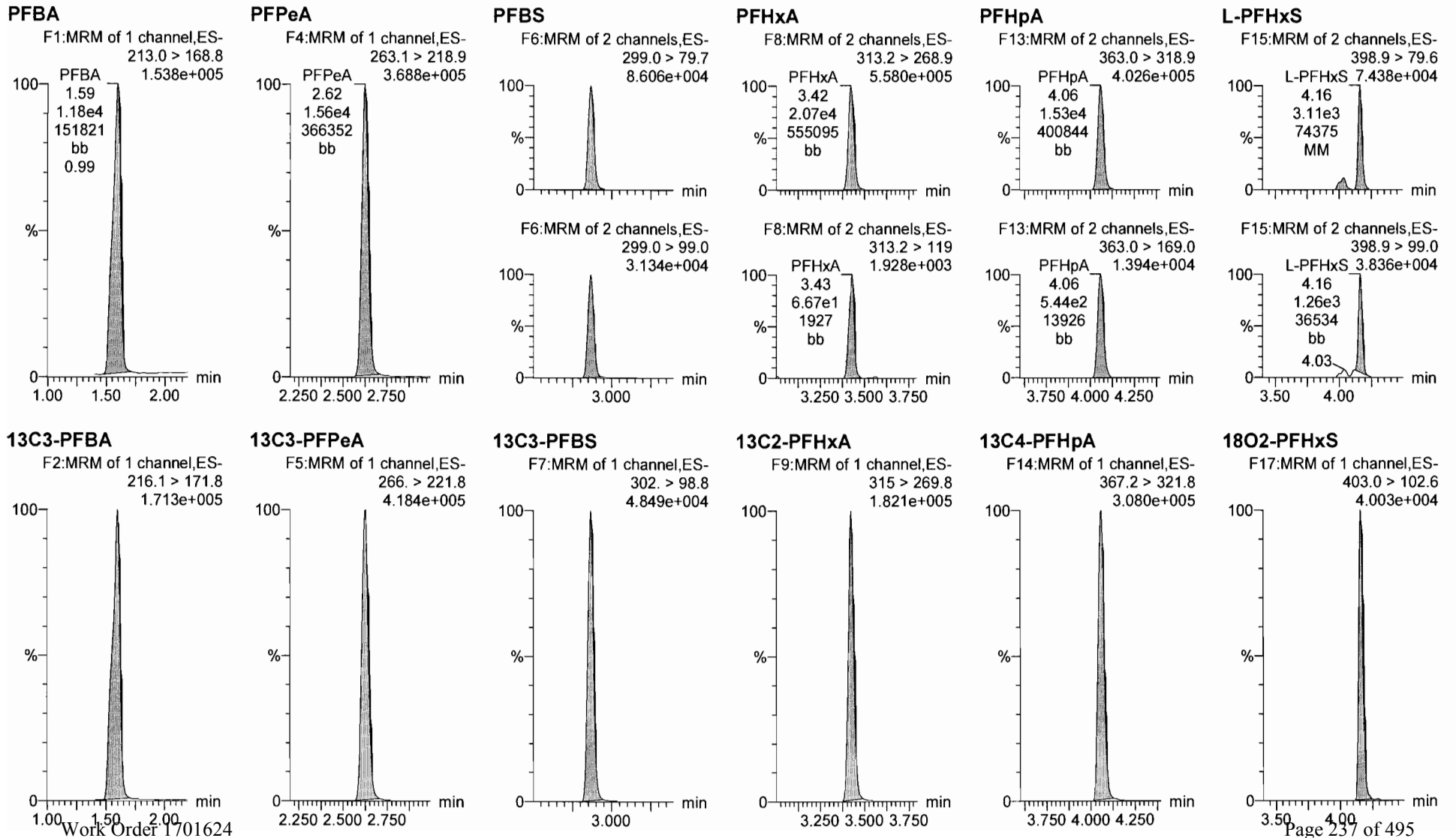
AC 11/20/17

Dataset: U:\Q4.PRO\results\171117M2\171117M2-47.qld

Last Altered: Monday, November 20, 2017 14:45:33 Pacific Standard Time  
Printed: Monday, November 20, 2017 14:45:52 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_47, Date: 18-Nov-2017, Time: 01:30:07, ID: ST171117M2-12 PFC CS3 17K1708, Description: PFC CS3 17K1708



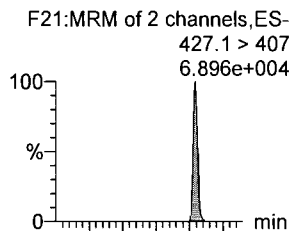
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Last Altered: Monday, November 20, 2017 14:45:33 Pacific Standard Time

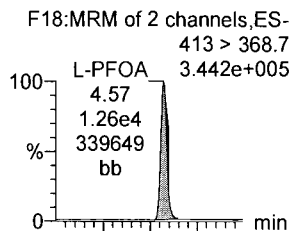
Printed: Monday, November 20, 2017 14:45:52 Pacific Standard Time

Name: 171117M2\_47, Date: 18-Nov-2017, Time: 01:30:07, ID: ST171117M2-12 PFC CS3 17K1708, Description: PFC CS3 17K1708

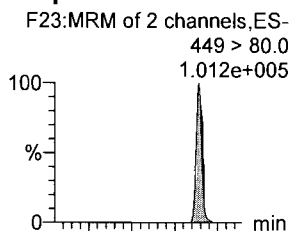
**6:2 FTS**



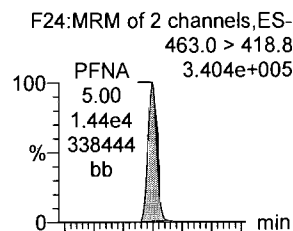
**L-PFOA**



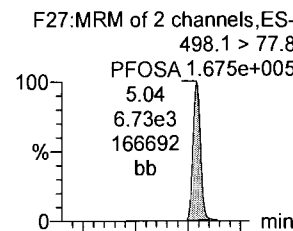
**PFHpS**



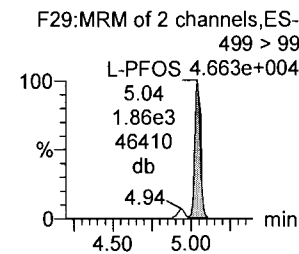
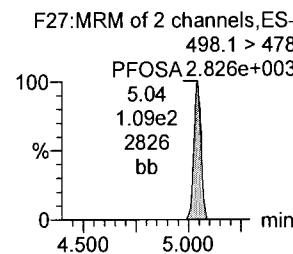
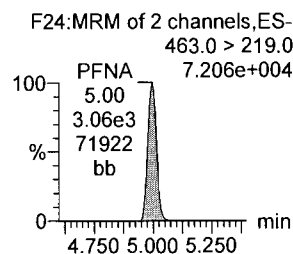
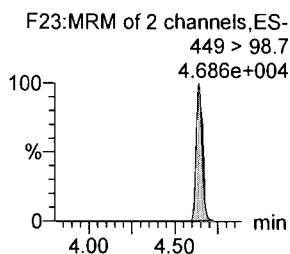
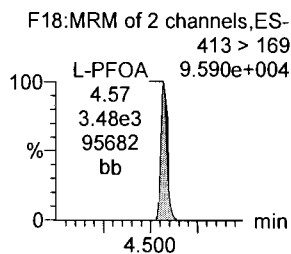
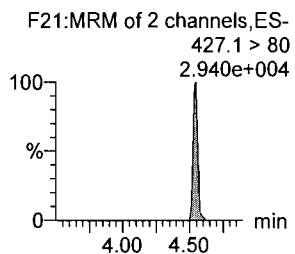
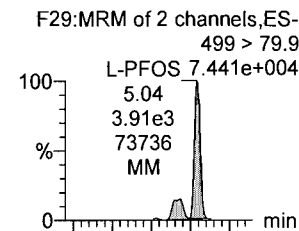
**PFNA**



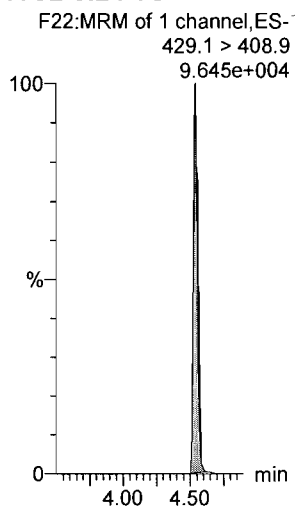
**PFOSA**



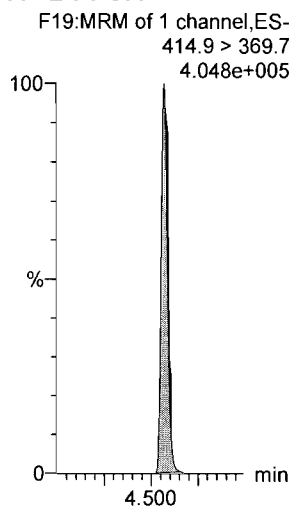
**L-PFOS**



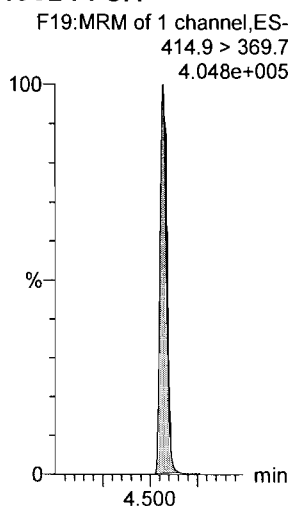
**13C2-6:2 FTS**



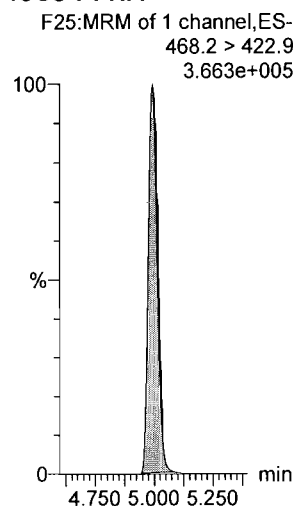
**13C2-PFOA**



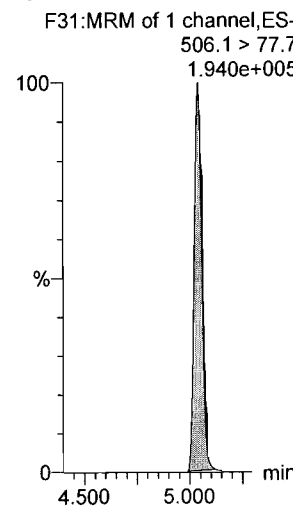
**13C2-PFOA**



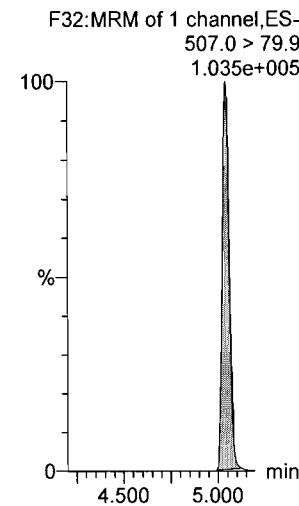
**13C5-PFNA**



**13C8-PFOA**



**13C8-PFOS**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-47.qld

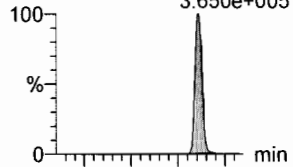
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Printed: Monday, November 20, 2017 14:45:52 Pacific Standard Time

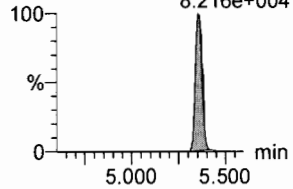
Name: 171117M2\_47, Date: 18-Nov-2017, Time: 01:30:07, ID: ST171117M2-12 PFC CS3 17K1708, Description: PFC CS3 17K1708

**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
3.650e+005

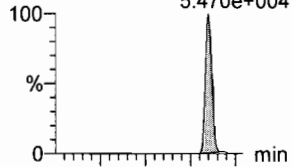


F34:MRM of 2 channels,ES-  
513 > 219  
8.216e+004

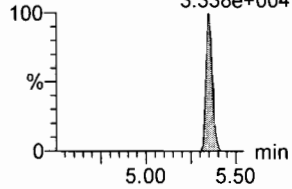


**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
5.470e+004

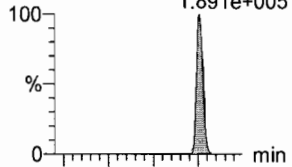


F39:MRM of 2 channels,ES-  
527 > 80  
3.338e+004

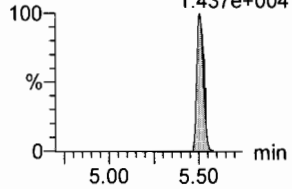


**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
1.891e+005

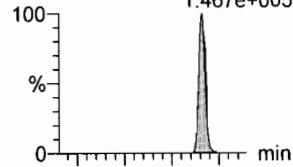


F44:MRM of 2 channels,ES-  
570.1 > 483.0  
1.437e+004

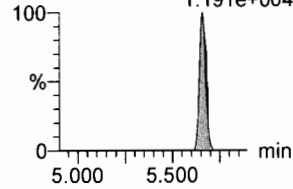


**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
1.467e+005

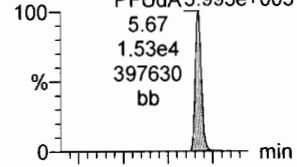


F47:MRM of 2 channels,ES-  
584.2 > 483.0  
1.191e+004

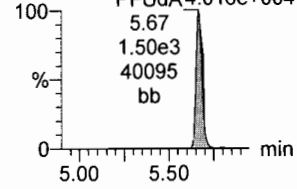


**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
PFUdA 3.993e+005

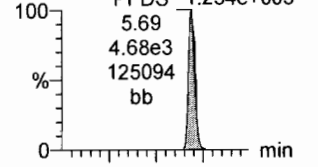


F42:MRM of 2 channels,ES-  
563.0 > 269  
PFUdA 4.016e+004

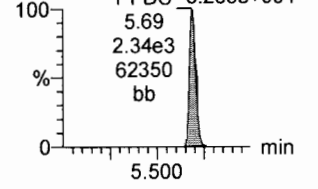


**PFDS**

F49:MRM of 2 channels,ES-  
598.8 > 80  
PFDS 1.254e+005

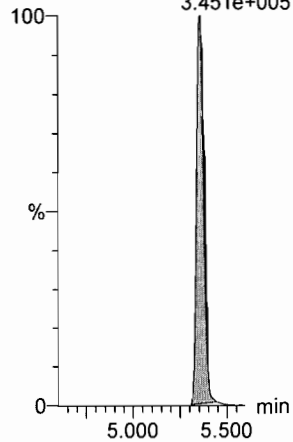


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
PFDS 6.265e+004



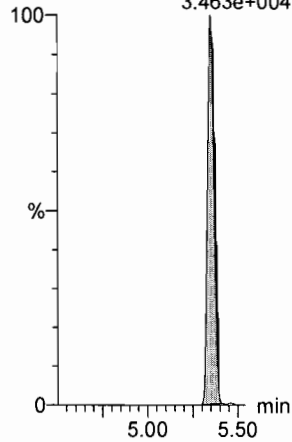
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
3.451e+005



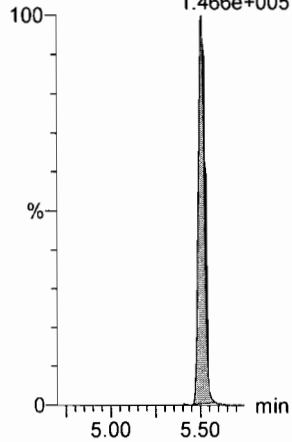
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
3.463e+004



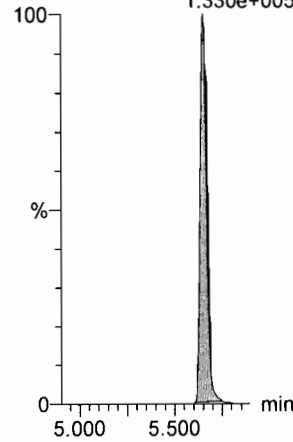
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
1.466e+005



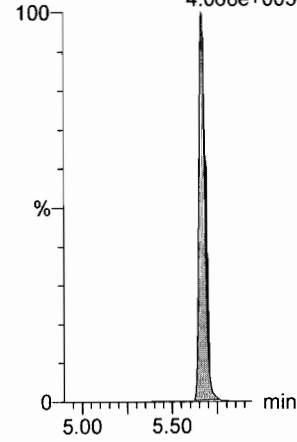
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
1.330e+005



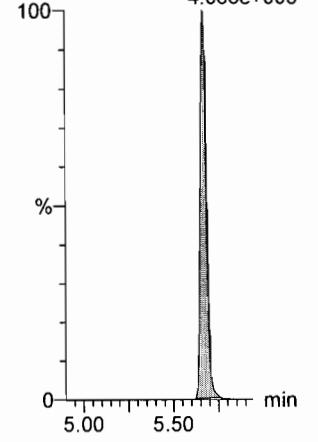
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
4.068e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
4.068e+005

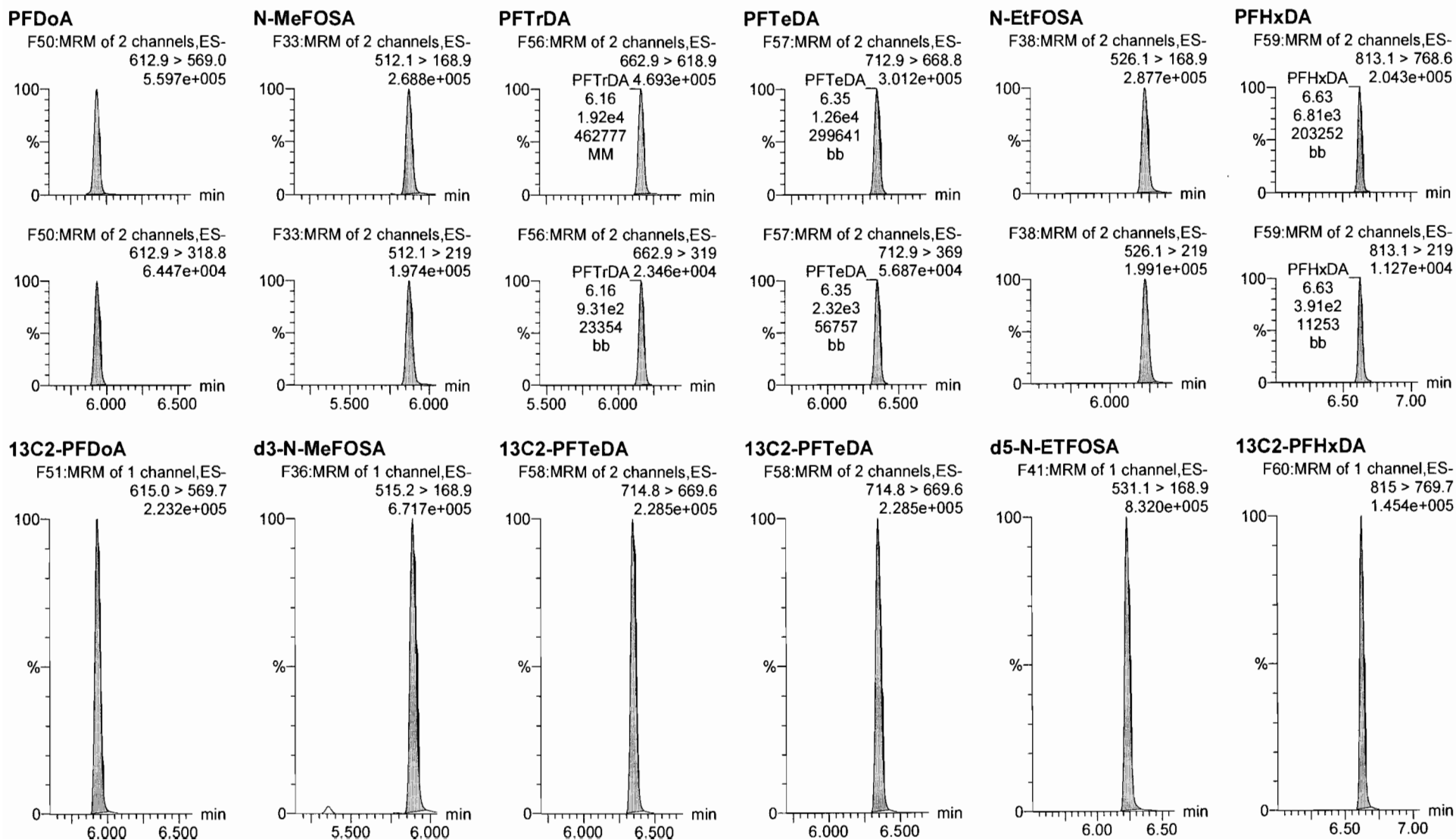


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Last Altered: Monday, November 20, 2017 14:45:33 Pacific Standard Time

Printed: Monday, November 20, 2017 14:45:52 Pacific Standard Time

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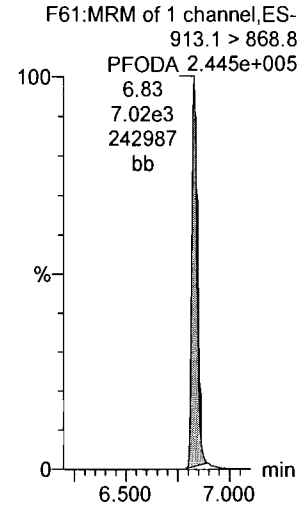
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Last Altered: Monday, November 20, 2017 14:45:33 Pacific Standard Time

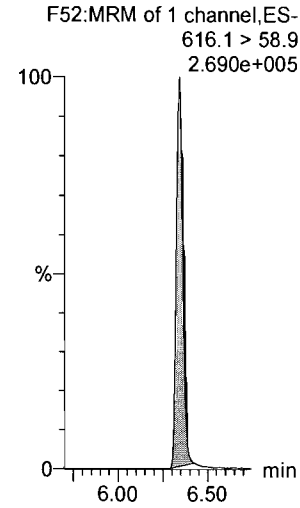
Printed: Monday, November 20, 2017 14:45:52 Pacific Standard Time

Name: 171117M2\_47, Date: 18-Nov-2017, Time: 01:30:07, ID: ST171117M2-12 PFC CS3 17K1708, Description: PFC CS3 17K1708

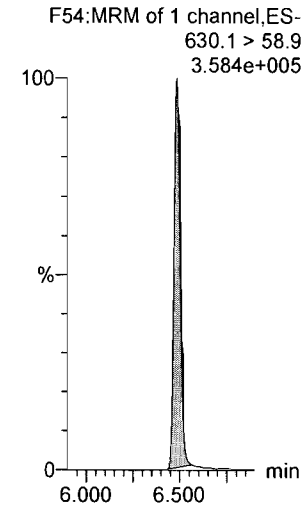
**PFODA**



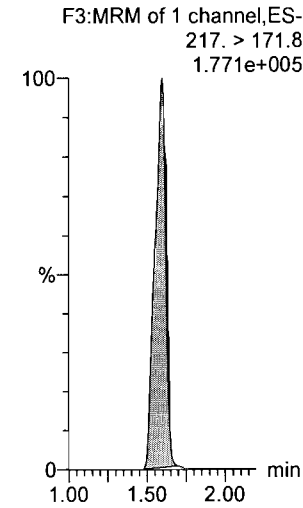
**N-MeFOSE**



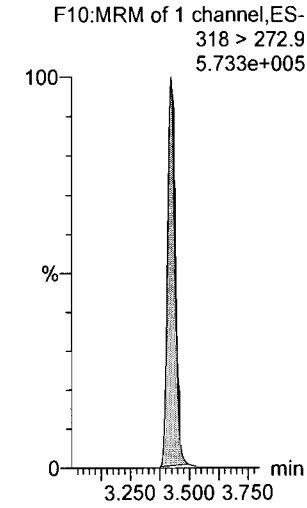
**N-EtFOSE**



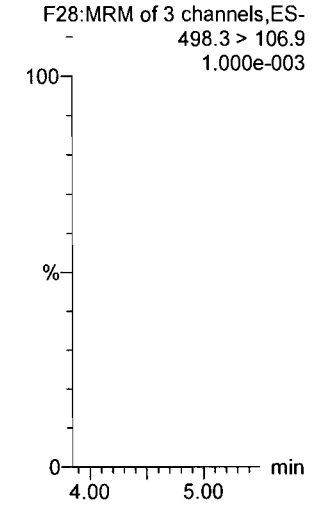
**13C4-PFBA**



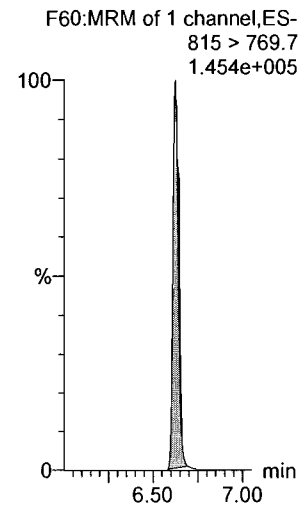
**13C5-PFHxA**



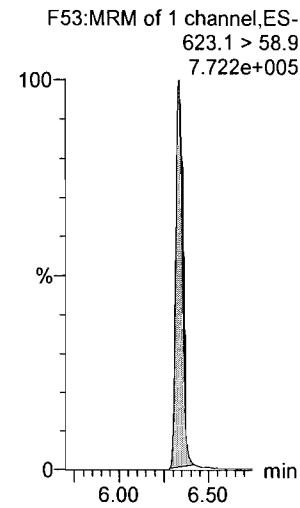
**TCDA**



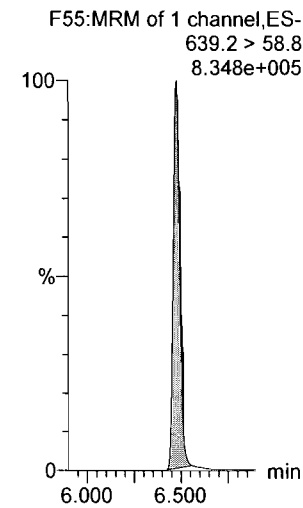
**13C2-PFHxDA**



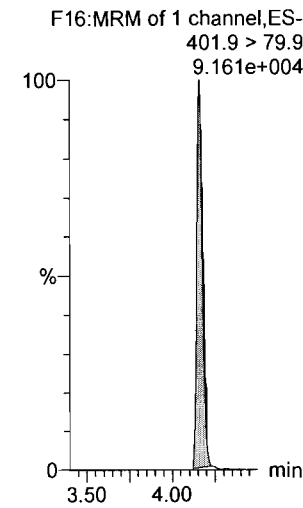
**d7-N-MeFOSE**



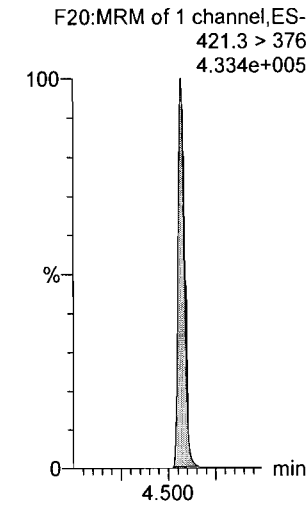
**d9-N-EtFOSE**



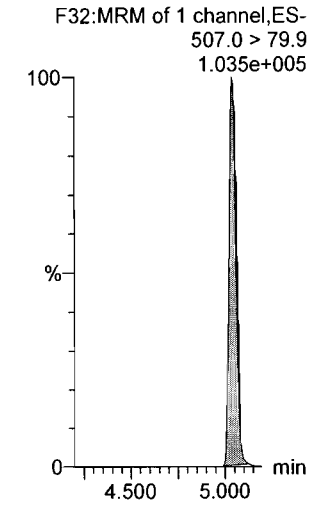
**13C3-PFHxS**



**13C8-PFOA**



**13C8-PFOS**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-47.qld

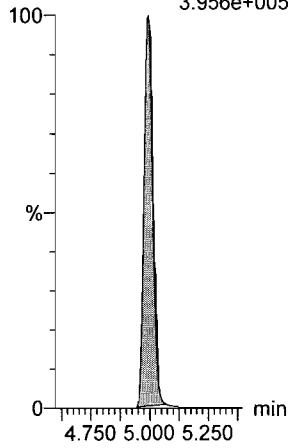
Last Altered: Monday, November 20, 2017 14:45:33 Pacific Standard Time

Printed: Monday, November 20, 2017 14:45:52 Pacific Standard Time

Name: 171117M2\_47, Date: 18-Nov-2017, Time: 01:30:07, ID: ST171117M2-12 PFC CS3 17K1708, Description: PFC CS3 17K1708

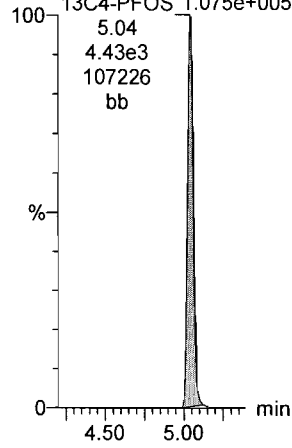
**13C9-PFNA**

F26:MRM of 1 channel,ES-  
472.2 > 426.9  
3.956e+005



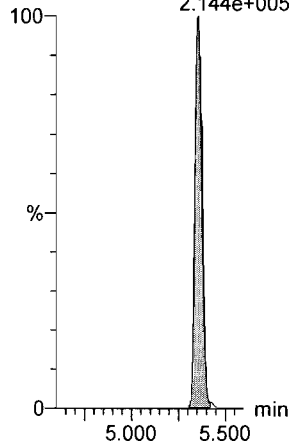
**13C4-PFOS**

F30:MRM of 1 channel,ES-  
503 > 79.9  
1.075e+005



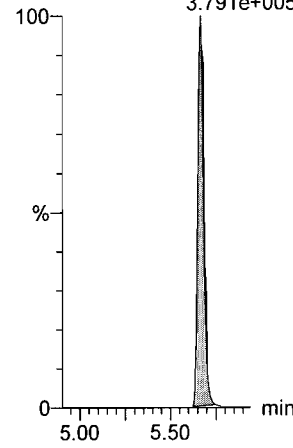
**13C6-PFDA**

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
2.144e+005



**13C7-PFUdA**

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
3.791e+005





**INITIAL CALIBRATION (ICAL)**  
**INCLUDING ASSOCIATED**  
**INITIAL CALIBRATION VERIFICATION (ICV) AND INSTRUMENT BLANK (IB)**

Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

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(A) curve not used for PFDS  
 (B) ICV not valid for 0:2 FTS

AC  
 11/17/17

JHA  
 11/20/2017

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08  
 Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

**Compound name: PFBA**

Correlation coefficient:  $r = 0.999329$ ,  $r^2 = 0.998658$

Calibration curve:  $1.05915 * x + 0.0656962$

Response type: Internal Std ( Ref 31 ), 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 171116M3_2	Standard	0.250	1.26	255.028	10383.313	0.307	0.2	-8.9	NO	0.999	NO	MM
2	2 171116M3_3	Standard	0.500	1.25	387.783	9154.816	0.529	0.4	-12.4	NO	0.999	NO	MM
3	3 171116M3_4	Standard	1.000	1.26	900.291	9121.311	1.234	1.1	10.3	NO	0.999	NO	MM
4	4 171116M3_5	Standard	2.000	1.25	1827.569	8865.786	2.577	2.4	18.5	NO	0.999	NO	bb
5	5 171116M3_6	Standard	5.000	1.25	4089.890	9100.381	5.618	5.2	4.8	NO	0.999	NO	bb
6	6 171116M3_7	Standard	10.000	1.25	8484.029	9299.645	11.404	10.7	7.0	NO	0.999	NO	bb
7	7 171116M3_8	Standard	50.000	1.25	39499.742	8823.007	55.961	52.8	5.5	NO	0.999	NO	bb
8	8 171116M3_9	Standard	100.000	1.26	76064.227	8755.845	108.591	102.5	2.5	NO	0.999	NO	bb
9	9 171116M3_10	Standard	250.000	1.25	191748.578	9294.170	257.888	243.4	-2.6	NO	0.999	NO	bb

**Compound name: PFPeA**

Correlation coefficient:  $r = 0.999741$ ,  $r^2 = 0.999481$

Calibration curve:  $0.951313 * x + 0.125042$

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 171116M3_2	Standard	0.250	2.21	380.249	13935.553	0.341	0.2	-9.2	NO	0.999	NO	bb
2	2 171116M3_3	Standard	0.500	2.22	538.491	12453.879	0.540	0.4	-12.7	NO	0.999	NO	bb
3	3 171116M3_4	Standard	1.000	2.22	1101.829	12114.806	1.137	1.1	6.4	NO	0.999	NO	bb
4	4 171116M3_5	Standard	2.000	2.22	2185.215	12050.069	2.267	2.3	12.6	NO	0.999	NO	bb
5	5 171116M3_6	Standard	5.000	2.22	4894.709	12228.604	5.003	5.1	2.6	NO	0.999	NO	bb
6	6 171116M3_7	Standard	10.000	2.22	10199.028	12650.171	10.078	10.5	4.6	NO	0.999	NO	bb
7	7 171116M3_8	Standard	50.000	2.22	45531.512	12578.404	45.248	47.4	-5.1	NO	0.999	NO	bb
8	8 171116M3_9	Standard	100.000	2.22	91408.297	11965.773	95.489	100.2	0.2	NO	0.999	NO	bb
9	9 171116M3_10	Standard	250.000	2.22	224332.031	11714.026	239.384	251.5	0.6	NO	0.999	NO	bb

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Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

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**Compound name: PFBS**

Correlation coefficient:  $r = 0.998712$ ,  $r^2 = 0.997426$

Calibration curve:  $2.12345 * x + 0.102967$

Response type: Internal Std ( Ref 33 ), 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 171116M3_2	Standard	0.250	2.50	90.035	1707.184	0.659	0.3	4.8	NO	0.997	NO	bb
2	2 171116M3_3	Standard	0.500	2.50	122.890	1418.348	1.083	0.5	-7.7	NO	0.997	NO	bb
3	3 171116M3_4	Standard	1.000	2.50	274.323	1553.941	2.207	1.0	-0.9	NO	0.997	NO	bb
4	4 171116M3_5	Standard	2.000	2.51	514.276	1527.679	4.208	1.9	-3.3	NO	0.997	NO	bb
5	5 171116M3_6	Standard	5.000	2.51	1237.621	1421.827	10.881	5.1	1.5	NO	0.997	NO	bb
6	6 171116M3_7	Standard	10.000	2.50	2533.516	1513.782	20.920	9.8	-2.0	NO	0.997	NO	bb
7	7 171116M3_8	Standard	50.000	2.50	12569.448	1310.296	119.910	56.4	12.8	NO	0.997	NO	bb
8	8 171116M3_9	Standard	100.000	2.50	21390.379	1318.633	202.770	95.4	-4.6	NO	0.997	NO	bb
9	9 171116M3_10	Standard	250.000	2.50	56911.250	1348.654	527.482	248.4	-0.7	NO	0.997	NO	bb

**Compound name: PFHxA**

Correlation coefficient:  $r = 0.997417$ ,  $r^2 = 0.994840$

Calibration curve:  $1.40907 * x + 0.222003$

Response type: Internal Std ( Ref 34 ), 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 171116M3_2	Standard	0.250	3.00	451.673	4666.342	0.484	0.2	-25.6	NO	0.995	NO	bb
2	2 171116M3_3	Standard	0.500	3.00	714.179	4588.676	0.778	0.4	-21.1	NO	0.995	NO	bb
3	3 171116M3_4	Standard	1.000	3.00	1525.710	4579.752	1.666	1.0	2.5	NO	0.995	NO	bb
4	4 171116M3_5	Standard	2.000	3.00	3017.587	4329.123	3.485	2.3	15.8	NO	0.995	NO	bb
5	5 171116M3_6	Standard	5.000	3.00	6689.158	4424.545	7.559	5.2	4.1	NO	0.995	NO	bb
6	6 171116M3_7	Standard	10.000	3.00	14066.829	4252.346	16.540	11.6	15.8	NO	0.995	NO	bb
7	7 171116M3_8	Standard	50.000	3.00	61424.285	4162.696	73.779	52.2	4.4	NO	0.995	NO	bb
8	8 171116M3_9	Standard	100.000	3.00	125972.648	4073.348	154.630	109.6	9.6	NO	0.995	NO	bb
9	9 171116M3_10	Standard	250.000	3.00	304791.156	4574.726	333.125	236.3	-5.5	NO	0.995	NO	bb

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**Compound name: PFHpA**

Correlation coefficient:  $r = 0.997971$ ,  $r^2 = 0.995947$

Calibration curve:  $1.32476 * x + 0.170962$

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 171116M3_2	Standard	0.250	3.62	378.889	9634.613	0.492	0.2	-3.2	NO	0.996	NO	bb
2	2 171116M3_3	Standard	0.500	3.62	525.705	8189.869	0.802	0.5	-4.7	NO	0.996	NO	bb
3	3 171116M3_4	Standard	1.000	3.62	1034.893	9234.159	1.401	0.9	-7.2	NO	0.996	NO	bb
4	4 171116M3_5	Standard	2.000	3.62	1961.223	8083.236	3.033	2.2	8.0	NO	0.996	NO	bb
5	5 171116M3_6	Standard	5.000	3.62	4648.493	8233.017	7.058	5.2	4.0	NO	0.996	NO	bb
6	6 171116M3_7	Standard	10.000	3.62	8866.853	8367.013	13.247	9.9	-1.3	NO	0.996	NO	bb
7	7 171116M3_8	Standard	50.000	3.62	41173.547	7970.939	64.568	48.6	-2.8	NO	0.996	NO	bb
8	8 171116M3_9	Standard	100.000	3.62	83879.422	7120.859	147.242	111.0	11.0	NO	0.996	NO	bb
9	9 171116M3_10	Standard	250.000	3.62	208646.500	8190.252	318.437	240.2	-3.9	NO	0.996	NO	bb

**Compound name: L-PFHxS**

Correlation coefficient:  $r = 0.999354$ ,  $r^2 = 0.998709$

Calibration curve:  $1.92489 * x + 0.085109$

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 171116M3_2	Standard	0.250	3.78	53.208	1208.810	0.550	0.2	-3.3	NO	0.999	NO	MM
2	2 171116M3_3	Standard	0.500	3.77	97.980	1204.557	1.017	0.5	-3.2	NO	0.999	NO	MM
3	3 171116M3_4	Standard	1.000	3.77	175.811	1130.752	1.944	1.0	-3.5	NO	0.999	NO	MM
4	4 171116M3_5	Standard	2.000	3.77	381.862	1203.477	3.966	2.0	0.8	NO	0.999	NO	MM
5	5 171116M3_6	Standard	5.000	3.78	925.475	1011.809	11.433	5.9	17.9	NO	0.999	NO	MM
6	6 171116M3_7	Standard	10.000	3.77	1837.407	1332.213	17.240	8.9	-10.9	NO	0.999	NO	MM
7	7 171116M3_8	Standard	50.000	3.77	9014.897	1113.144	101.232	52.5	5.1	NO	0.999	NO	MM
8	8 171116M3_9	Standard	100.000	3.77	17364.805	1166.318	186.107	96.6	-3.4	NO	0.999	NO	MM
9	9 171116M3_10	Standard	250.000	3.77	42108.449	1089.037	483.322	251.0	0.4	NO	0.999	NO	MM

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**Compound name: 6:2 FTS**

Coefficient of Determination:  $R^2 = 0.993434$

Calibration curve:  $-0.00112973 * x^2 + 0.911744 * x + 0.474146$

Response type: Internal Std ( Ref 37 ), 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 171116M3_2	Standard	0.250	4.09	52.783	2334.362	0.283			NO	0.993	NO	MMXI
2	2 171116M3_3	Standard	0.500	4.09	64.941	2336.509	0.347			NO	0.993	NO	bbXI
3	3 171116M3_4	Standard	1.000	4.09	222.467	2012.231	1.382	1.0	-0.3	NO	0.993	NO	bb
4	4 171116M3_5	Standard	2.000	4.09	316.448	2200.357	1.798	1.5	-27.3	NO	0.993	NO	bb
5	5 171116M3_6	Standard	5.000	4.09	710.344	1537.631	5.775	5.9	17.1	NO	0.993	NO	bb
6	6 171116M3_7	Standard	10.000	4.09	1796.530	2055.698	10.924	11.6	16.3	NO	0.993	NO	bb
7	7 171116M3_8	Standard	50.000	4.09	7830.220	2437.884	40.149	46.2	-7.7	NO	0.993	NO	bb
8	8 171116M3_9	Standard	100.000	4.09	16057.109	2456.046	81.722	102.0	2.0	NO	0.993	NO	bb
9	9 171116M3_10	Standard	250.000	4.09	41591.020	3609.213	144.045	214.5	-14.2	NO	0.993	NO	bbX

**Compound name: L-PFOA**

Correlation coefficient:  $r = 0.998661$ ,  $r^2 = 0.997324$

Calibration curve:  $0.995927 * x + 0.263886$

Response type: Internal Std ( Ref 38 ), 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 171116M3_2	Standard	0.250	4.14	363.118	9958.682	0.456	0.2	-22.9	NO	0.997	NO	bb
2	2 171116M3_3	Standard	0.500	4.14	549.569	8722.788	0.788	0.5	5.2	NO	0.997	NO	bb
3	3 171116M3_4	Standard	1.000	4.15	883.108	8327.367	1.326	1.1	6.6	NO	0.997	NO	bb
4	4 171116M3_5	Standard	2.000	4.14	1546.762	8643.124	2.237	2.0	-0.9	NO	0.997	NO	bb
5	5 171116M3_6	Standard	5.000	4.15	3551.929	8616.993	5.153	4.9	-1.8	NO	0.997	NO	bd
6	6 171116M3_7	Standard	10.000	4.14	6862.909	7983.038	10.746	10.5	5.3	NO	0.997	NO	bb
7	7 171116M3_8	Standard	50.000	4.14	34580.090	7623.307	56.701	56.7	13.3	NO	0.997	NO	bb
8	8 171116M3_9	Standard	100.000	4.15	62830.863	8109.088	96.853	97.0	-3.0	NO	0.997	NO	bb
9	9 171116M3_10	Standard	250.000	4.14	150213.172	7658.896	245.161	245.9	-1.6	NO	0.997	NO	bb

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**Compound name: PFHpS**

Coefficient of Determination:  $R^2 = 0.994237$   
 Calibration curve:  $0.000180176 * x^2 + 0.295394 * x + 0.144222$   
 Response type: Internal Std ( Ref 38 ), 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 171116M3_2	Standard	0.250	4.26	51.499	9958.682	0.065			NO	0.994	NO	MMXI
2	2 171116M3_3	Standard	0.500	4.26	90.217	8722.788	0.129			NO	0.994	NO	bbXI
3	3 171116M3_4	Standard	1.000	4.26	268.412	8327.367	0.403	0.9	-12.5	NO	0.994	NO	bb
4	4 171116M3_5	Standard	2.000	4.26	489.937	8643.124	0.709	1.9	-4.6	NO	0.994	NO	bb
5	5 171116M3_6	Standard	5.000	4.26	1134.506	8616.993	1.646	5.1	1.3	NO	0.994	NO	bb
6	6 171116M3_7	Standard	10.000	4.26	2192.099	7983.038	3.432	11.1	10.6	NO	0.994	NO	bb
7	7 171116M3_8	Standard	50.000	4.26	10782.295	7623.307	17.680	57.4	14.7	NO	0.994	NO	bb
8	8 171116M3_9	Standard	100.000	4.26	18141.984	8109.088	27.966	89.3	-10.7	NO	0.994	NO	bb
9	9 171116M3_10	Standard	250.000	4.26	52807.102	7658.896	86.186	252.4	1.0	NO	0.994	NO	bb

**Compound name: PFNA**

Correlation coefficient:  $r = 0.998830$ ,  $r^2 = 0.997662$   
 Calibration curve:  $1.10248 * x + 0.211895$   
 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 171116M3_2	Standard	0.250	4.59	298.820	11388.718	0.328	0.1	-57.9	NO	0.998	NO	bbX
2	2 171116M3_3	Standard	0.500	4.58	640.295	9089.116	0.881	0.6	21.3	NO	0.998	NO	bb
3	3 171116M3_4	Standard	1.000	4.58	984.073	8760.521	1.404	1.1	8.1	NO	0.998	NO	bb
4	4 171116M3_5	Standard	2.000	4.58	1647.960	9305.246	2.214	1.8	-9.2	NO	0.998	NO	bb
5	5 171116M3_6	Standard	5.000	4.59	3911.913	9782.692	4.999	4.3	-13.2	NO	0.998	NO	bb
6	6 171116M3_7	Standard	10.000	4.58	8433.280	9635.249	10.941	9.7	-2.7	NO	0.998	NO	bb
7	7 171116M3_8	Standard	50.000	4.59	37746.949	8573.270	55.036	49.7	-0.5	NO	0.998	NO	bb
8	8 171116M3_9	Standard	100.000	4.59	66524.398	8110.818	102.524	92.8	-7.2	NO	0.998	NO	bb
9	9 171116M3_10	Standard	250.000	4.58	186521.813	8178.355	285.085	258.4	3.4	NO	0.998	NO	bb

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**Compound name: PFOSA**

Coefficient of Determination: R<sup>2</sup> = 0.999698

Calibration curve:  $-0.000646575 * x^2 + 1.05411 * x + -0.0628216$

Response type: Internal Std ( Ref 40 ), 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 171116M3_2	Standard	0.250	4.64	160.810	5346.627	0.376	0.4	66.5	NO	1.000	NO	bbX
2	2 171116M3_3	Standard	0.500	4.65	152.370	4709.282	0.404	0.4	-11.3	NO	1.000	NO	bb
3	3 171116M3_4	Standard	1.000	4.64	451.336	4782.512	1.180	1.2	18.0	NO	1.000	NO	bb
4	4 171116M3_5	Standard	2.000	4.64	780.554	4880.817	1.999	2.0	-2.1	NO	1.000	NO	bb
5	5 171116M3_6	Standard	5.000	4.64	1783.620	4222.773	5.280	5.1	1.7	NO	1.000	NO	bb
6	6 171116M3_7	Standard	10.000	4.64	4122.615	5329.838	9.669	9.3	-7.2	NO	1.000	NO	bb
7	7 171116M3_8	Standard	50.000	4.65	17475.365	4267.630	51.186	50.2	0.3	NO	1.000	NO	bb
8	8 171116M3_9	Standard	100.000	4.64	36064.797	4527.322	99.575	100.7	0.7	NO	1.000	NO	bb
9	9 171116M3_10	Standard	250.000	4.64	81952.906	4598.462	222.773	249.6	-0.2	NO	1.000	NO	bb

**Compound name: L-PFOS**

Coefficient of Determination: R<sup>2</sup> = 0.994821

Calibration curve:  $-0.00473098 * x^2 + 1.31802 * x + -0.109838$

Response type: Internal Std ( Ref 41 ), 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 171116M3_2	Standard	0.250	4.67	126.522	3377.606	0.468	0.4	75.7	NO	0.995	NO	MMX
2	2 171116M3_3	Standard	0.500	4.67	165.238	3534.729	0.584	0.5	5.5	NO	0.995	NO	MM
3	3 171116M3_4	Standard	1.000	4.67	339.557	3276.564	1.295	1.1	7.0	NO	0.995	NO	MM
4	4 171116M3_5	Standard	2.000	4.67	529.939	3040.744	2.178	1.7	-12.6	NO	0.995	NO	MM
5	5 171116M3_6	Standard	5.000	4.68	1403.065	3135.291	5.594	4.4	-12.1	NO	0.995	NO	MM
6	6 171116M3_7	Standard	10.000	4.67	2980.976	3301.966	11.285	8.9	-10.7	NO	0.995	NO	MM
7	7 171116M3_8	Standard	50.000	4.67	12346.947	2652.959	58.175	55.1	10.3	NO	0.995	NO	MM
8	8 171116M3_9	Standard	100.000	4.67	20178.076	3059.088	82.451	95.1	-4.9	NO	0.995	NO	MM
9	9 171116M3_10	Standard	250.000	4.67	55637.211	2512.903	276.758			NO	0.995	NO	MMXI

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**Compound name: Br-PFOS**

see L-PFOS

Coefficient of Determination: R<sup>2</sup> = 0.994821

Calibration curve: -0.00473098 \* x<sup>2</sup> + 1.31802 \* x + -0.109838

Response type: Internal Std ( Ref 41 ), 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	171116M3_2	Standard	0.250			3377.606				NO	0.999	NO	
2	171116M3_3	Standard	0.500			3534.729				NO	0.999	NO	
3	171116M3_4	Standard	1.000			3276.564				NO	0.999	NO	
4	171116M3_5	Standard	2.000			3040.744				NO	0.999	NO	
5	171116M3_6	Standard	5.000	4.57	165.136	3135.291	0.658	0.6	-88.3	NO	0.999	NO	db
6	171116M3_7	Standard	10.000			3301.966				NO	0.999	NO	
7	171116M3_8	Standard	50.000	4.56	1236.641	2652.959	5.827	4.6	-90.8	NO	0.999	NO	db
8	171116M3_9	Standard	100.000	4.56	3005.205	3059.088	12.280	9.7	-90.3	NO	0.999	NO	dd
9	171116M3_10	Standard	250.000	4.56	5458.466	2512.903	27.152	22.5	-91.0	NO	0.999	NO	db

**Compound name: PFDA**

Coefficient of Determination: R<sup>2</sup> = 0.998328

Calibration curve: -0.000443502 \* x<sup>2</sup> + 0.938935 \* x + 0.125072

Response type: Internal Std ( Ref 42 ), 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	171116M3_2	Standard	0.250	4.96	246.062	10511.931	0.293	0.2	-28.6	NO	0.998	NO	MM
2	171116M3_3	Standard	0.500	4.97	545.223	9465.389	0.720	0.6	26.8	NO	0.998	NO	bb
3	171116M3_4	Standard	1.000	4.96	799.180	9275.509	1.077	1.0	1.4	NO	0.998	NO	bb
4	171116M3_5	Standard	2.000	4.96	1671.788	9908.377	2.109	2.1	5.8	NO	0.998	NO	bb
5	171116M3_6	Standard	5.000	4.96	3317.241	8436.430	4.915	5.1	2.3	NO	0.998	NO	bb
6	171116M3_7	Standard	10.000	4.96	6649.221	9915.085	8.383	8.8	-11.7	NO	0.998	NO	bb
7	171116M3_8	Standard	50.000	4.96	37972.844	9625.680	49.312	53.8	7.5	NO	0.998	NO	bb
8	171116M3_9	Standard	100.000	4.96	55156.438	7981.035	86.387	96.2	-3.8	NO	0.998	NO	bb
9	171116M3_10	Standard	250.000	4.96	158930.766	9560.818	207.789	250.9	0.4	NO	0.998	NO	bb



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**Compound name: 8:2 FTS**

Coefficient of Determination: R<sup>2</sup> = 0.997637

Calibration curve:  $-0.00819225 * x^2 + 2.47201 * x + -0.132905$

Response type: Internal Std ( Ref 43 ), 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 171116M3_2	Standard	0.250	4.94	22.359	768.296	0.364	0.2	-19.6	NO	0.998	NO	MM
2	2 171116M3_3	Standard	0.500	4.94	103.169	1106.793	1.165	0.5	5.2	NO	0.998	NO	bb
3	3 171116M3_4	Standard	1.000	4.94	129.110	761.187	2.120	0.9	-8.6	NO	0.998	NO	bb
4	4 171116M3_5	Standard	2.000	4.94	326.283	883.776	4.615	1.9	-3.3	NO	0.998	NO	bb
5	5 171116M3_6	Standard	5.000	4.94	842.933	924.293	11.400	4.7	-5.2	NO	0.998	NO	bb
6	6 171116M3_7	Standard	10.000	4.93	1732.151	811.639	26.677	11.3	12.7	NO	0.998	NO	bb
7	7 171116M3_8	Standard	50.000	4.93	7843.444	982.543	99.785	48.1	-3.8	NO	0.998	NO	bb
8	8 171116M3_9	Standard	100.000	4.93	14646.299	1099.625	166.492	101.6	1.6	NO	0.998	NO	bb
9	9 171116M3_10	Standard	250.000	4.93	36661.488	1509.289	303.632			NO	0.998	NO	bbXI

**Compound name: N-MeFOSAA**

Coefficient of Determination: R<sup>2</sup> = 0.995207

Calibration curve:  $-0.00178252 * x^2 + 1.9401 * x + -1.17095$

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 171116M3_2	Standard	0.250	5.12	129.005	4752.367	0.339	0.8	211.6	NO	0.995	NO	bbX
2	2 171116M3_3	Standard	0.500	5.12	208.770	4227.920	0.617	0.9	84.5	NO	0.995	NO	bbX
3	3 171116M3_4	Standard	1.000	5.12	295.387	4791.982	0.771	1.0	0.2	NO	0.995	NO	bb
4	4 171116M3_5	Standard	2.000	5.12	1064.161	3640.088	3.654	2.5	24.6	NO	0.995	NO	bb
5	5 171116M3_6	Standard	5.000	5.12	2072.100	3970.241	6.524	4.0	-20.4	NO	0.995	NO	bb
6	6 171116M3_7	Standard	10.000	5.12	4910.604	3464.802	17.716	9.8	-1.8	NO	0.995	NO	bb
7	7 171116M3_8	Standard	50.000	5.12	27488.842	4169.885	82.403	44.9	-10.1	NO	0.995	NO	bb
8	8 171116M3_9	Standard	100.000	5.12	48692.039	3217.984	189.140	109.0	9.0	NO	0.995	NO	bb
9	9 171116M3_10	Standard	250.000	5.12	112357.758	3809.932	368.634	246.4	-1.4	NO	0.995	NO	bb

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**Compound name: N-EtFOSAA**

Correlation coefficient:  $r = 0.996882$ ,  $r^2 = 0.993774$

Calibration curve:  $1.0476 * x + 0.344449$

Response type: Internal Std ( Ref 45 ), 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 171116M3_2	Standard	0.250	5.28	166.876	5272.274	0.396	0.0	-80.5	NO	0.994	NO	bbX
2	2 171116M3_3	Standard	0.500	5.27	149.888	4963.151	0.378	0.0	-93.7	NO	0.994	NO	bbX
3	3 171116M3_4	Standard	1.000	5.28	460.975	4454.549	1.294	0.9	-9.4	NO	0.994	NO	bb
4	4 171116M3_5	Standard	2.000	5.27	580.111	3466.036	2.092	1.7	-16.6	NO	0.994	NO	bb
5	5 171116M3_6	Standard	5.000	5.28	2045.785	3611.624	7.081	6.4	28.6	NO	0.994	NO	bb
6	6 171116M3_7	Standard	10.000	5.28	4043.241	4541.916	11.128	10.3	2.9	NO	0.994	NO	bb
7	7 171116M3_8	Standard	50.000	5.28	14749.098	3819.061	48.275	45.8	-8.5	NO	0.994	NO	bb
8	8 171116M3_9	Standard	100.000	5.28	35531.645	4105.066	108.194	102.9	2.9	NO	0.994	NO	bb
9	9 171116M3_10	Standard	250.000	5.28	93895.508	3577.604	328.067	312.8	25.1	NO	0.994	NO	bbX

**Compound name: PFUdA**

Coefficient of Determination:  $R^2 = 0.993805$

Calibration curve:  $-0.000482134 * x^2 + 1.26913 * x + 0.275877$

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 171116M3_2	Standard	0.250	5.29	275.098	8916.486	0.386	0.1	-65.4	NO	0.994	NO	bbX
2	2 171116M3_3	Standard	0.500	5.30	424.324	7207.037	0.736	0.4	-27.5	NO	0.994	NO	bbX
3	3 171116M3_4	Standard	1.000	5.29	942.079	8551.045	1.377	0.9	-13.2	NO	0.994	NO	bb
4	4 171116M3_5	Standard	2.000	5.29	1886.750	6660.523	3.541	2.6	28.8	NO	0.994	NO	bb
5	5 171116M3_6	Standard	5.000	5.29	3865.552	7927.295	6.095	4.6	-8.1	NO	0.994	NO	bb
6	6 171116M3_7	Standard	10.000	5.30	7589.963	7499.116	12.651	9.8	-2.1	NO	0.994	NO	bb
7	7 171116M3_8	Standard	50.000	5.29	32186.076	7487.154	53.735	42.8	-14.4	NO	0.994	NO	bb
8	8 171116M3_9	Standard	100.000	5.30	63545.238	5908.784	134.430	110.3	10.3	NO	0.994	NO	bb
9	9 171116M3_10	Standard	250.000	5.29	182560.391	8024.690	284.373	247.0	-1.2	NO	0.994	NO	bb

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**Compound name: PFDS**

Coefficient of Determination:  $R^2 = 0.997990$

Calibration curve:  $0.00156078 * x^2 + 0.410303 * x + 0.0239655$

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

*not used.*

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171116M3_2	Standard	0.250	5.34	65.335	8916.486	0.092	0.2	-34.1	NO	0.998	NO	bb
2	2 171116M3_3	Standard	0.500	5.34	144.533	7207.037	0.251	0.6	10.3	NO	0.998	NO	bb
3	3 171116M3_4	Standard	1.000	5.34	272.162	8551.045	0.398	0.9	-9.2	NO	0.998	NO	bb
4	4 171116M3_5	Standard	2.000	5.34	552.988	6660.523	1.038	2.4	22.4	NO	0.998	NO	bb
5	5 171116M3_6	Standard	5.000	5.34	1369.390	7927.295	2.159	5.1	2.1	NO	0.998	NO	bb
6	6 171116M3_7	Standard	10.000	5.34	2891.582	7499.116	4.820	11.2	12.1	NO	0.998	NO	bb
7	7 171116M3_8	Standard	50.000	5.34	13851.974	7487.154	23.126	47.7	-4.7	NO	0.998	NO	bb
8	8 171116M3_9	Standard	100.000	5.34	27067.080	5908.784	57.260	100.8	0.8	NO	0.998	NO	bb
9	9 171116M3_10	Standard	250.000	5.34	63098.398	8024.690	98.288	151.8	-39.3	NO	0.998	NO	bbX

**Compound name: PFDoA**

Coefficient of Determination:  $R^2 = 0.999297$

Calibration curve:  $-0.00336988 * x^2 + 3.08327 * x + 0.235388$

Response type: Internal Std ( Ref 47 ), 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 171116M3_2	Standard	0.250	5.58	416.208	4603.836	1.130	0.3	16.1	NO	0.999	NO	bd
2	2 171116M3_3	Standard	0.500	5.58	527.865	4230.716	1.560	0.4	-14.1	NO	0.999	NO	bd
3	3 171116M3_4	Standard	1.000	5.58	1105.861	4450.487	3.106	0.9	-6.8	NO	0.999	NO	bb
4	4 171116M3_5	Standard	2.000	5.58	2166.667	3916.289	6.916	2.2	8.6	NO	0.999	NO	bd
5	5 171116M3_6	Standard	5.000	5.58	5138.984	4589.262	13.997	4.5	-10.3	NO	0.999	NO	bd
6	6 171116M3_7	Standard	10.000	5.58	11008.915	4243.761	32.427	10.6	5.6	NO	0.999	NO	bb
7	7 171116M3_8	Standard	50.000	5.58	45570.023	3799.498	149.921	51.4	2.9	NO	0.999	NO	bb
8	8 171116M3_9	Standard	100.000	5.58	81570.531	3789.297	269.082	97.6	-2.4	NO	0.999	NO	bb
9	9 171116M3_10	Standard	250.000	5.58	175676.000	3907.947	561.919	251.1	0.4	NO	0.999	NO	bb

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**Compound name: N-MeFOSA**

Correlation coefficient:  $r = 0.997855$ ,  $r^2 = 0.995715$

Calibration curve:  $0.932675 * x + 0.874923$

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 171116M3_2	Standard	1.250	5.63	172.573	23116.625	1.120	0.3	-79.0	NO	0.996	NO	bbX
2	2 171116M3_3	Standard	2.500	5.63	396.983	19633.727	3.033	2.3	-7.4	NO	0.996	NO	bb
3	3 171116M3_4	Standard	5.000	5.63	764.846	19461.920	5.895	5.4	7.6	NO	0.996	NO	bb
4	4 171116M3_5	Standard	10.000	5.63	1439.970	19684.971	10.973	10.8	8.3	NO	0.996	NO	bb
5	5 171116M3_6	Standard	25.000	5.63	3211.398	18339.857	26.266	27.2	8.9	NO	0.996	NO	bb
6	6 171116M3_7	Standard	50.000	5.63	6943.870	19753.275	52.730	55.6	11.2	NO	0.996	NO	bb
7	7 171116M3_8	Standard	250.000	5.63	31156.242	18834.779	248.128	265.1	6.0	NO	0.996	NO	bb
8	8 171116M3_9	Standard	500.000	5.63	60573.746	17997.084	504.863	540.4	8.1	NO	0.996	NO	bb
9	9 171116M3_10	Standard	1250.000	5.63	142492.719	19312.568	1106.736	1185.7	-5.1	NO	0.996	NO	bb

**Compound name: PFTrDA**

Coefficient of Determination:  $R^2 = 0.999156$

Calibration curve:  $-0.000627584 * x^2 + 2.54423 * x + -0.12097$

Response type: Internal Std ( Ref 47 ), 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 171116M3_2	Standard	0.250	5.83	151.798	4603.836	0.412	0.2	-16.2	NO	0.999	NO	MM
2	2 171116M3_3	Standard	0.500	5.83	450.121	4230.716	1.330	0.6	14.1	NO	0.999	NO	bb
3	3 171116M3_4	Standard	1.000	5.83	840.504	4450.487	2.361	1.0	-2.4	NO	0.999	NO	bb
4	4 171116M3_5	Standard	2.000	5.83	1418.009	3916.289	4.526	1.8	-8.6	NO	0.999	NO	bb
5	5 171116M3_6	Standard	5.000	5.83	4612.114	4589.262	12.562	5.0	-0.2	NO	0.999	NO	bb
6	6 171116M3_7	Standard	10.000	5.83	9953.354	4243.761	29.318	11.6	16.0	NO	0.999	NO	bb
7	7 171116M3_8	Standard	50.000	5.83	37493.910	3799.498	123.352	49.1	-1.7	NO	0.999	NO	bb
8	8 171116M3_9	Standard	100.000	5.83	74319.570	3789.297	245.163	98.8	-1.2	NO	0.999	NO	bb
9	9 171116M3_10	Standard	250.000	5.83	186997.469	3907.947	598.132	250.6	0.3	NO	0.999	NO	bb

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**Compound name: PFTeDA**

Correlation coefficient:  $r = 0.995610$ ,  $r^2 = 0.991239$

Calibration curve:  $1.06175 * x + 0.81363$

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 171116M3_2	Standard	0.250	6.05	174.249	4692.433	0.464			NO	0.991	NO	bbXI
2	2 171116M3_3	Standard	0.500	6.05	349.174	5308.945	0.822	0.0	-98.4	NO	0.991	NO	bbX
3	3 171116M3_4	Standard	1.000	6.05	637.359	4752.948	1.676	0.8	-18.8	NO	0.991	NO	bb
4	4 171116M3_5	Standard	2.000	6.05	883.919	4032.162	2.740	1.8	-9.3	NO	0.991	NO	bb
5	5 171116M3_6	Standard	5.000	6.05	2436.426	4303.053	7.078	5.9	18.0	NO	0.991	NO	bb
6	6 171116M3_7	Standard	10.000	6.05	5185.774	5023.855	12.903	11.4	13.9	NO	0.991	NO	bb
7	7 171116M3_8	Standard	50.000	6.05	21380.328	5152.389	51.870	48.1	-3.8	NO	0.991	NO	bb
8	8 171116M3_9	Standard	100.000	6.05	43986.082	3617.973	151.971	142.4	42.4	NO	0.991	NO	bbX
9	9 171116M3_10	Standard	250.000	6.05	97284.539	4205.409	289.165	271.6	8.6	NO	0.991	NO	bbX

**Compound name: N-EtFOSA**

Coefficient of Determination:  $R^2 = 0.999850$

Calibration curve:  $-8.12911e-005 * x^2 + 0.92708 * x + 0.232163$

Response type: Internal Std ( Ref 50 ), 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 171116M3_2	Standard	1.250	6.06	235.461	28179.984	1.253	1.1	-11.9	NO	1.000	NO	bb
2	2 171116M3_3	Standard	2.500	6.06	416.338	24007.236	2.601	2.6	2.2	NO	1.000	NO	bb
3	3 171116M3_4	Standard	5.000	6.06	835.495	23742.266	5.279	5.4	8.9	NO	1.000	NO	bb
4	4 171116M3_5	Standard	10.000	6.06	1528.920	23147.875	9.908	10.4	4.5	NO	1.000	NO	bb
5	5 171116M3_6	Standard	25.000	6.06	3431.285	22730.953	22.643	24.2	-3.1	NO	1.000	NO	bb
6	6 171116M3_7	Standard	50.000	6.06	7256.934	23854.502	45.632	49.2	-1.6	NO	1.000	NO	bb
7	7 171116M3_8	Standard	250.000	6.06	34184.656	22166.139	231.330	255.0	2.0	NO	1.000	NO	bb
8	8 171116M3_9	Standard	500.000	6.06	62433.203	21346.393	438.715	494.4	-1.1	NO	1.000	NO	bb
9	9 171116M3_10	Standard	1250.000	6.06	149339.766	21682.916	1033.116	1251.5	0.1	NO	1.000	NO	bb

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**Compound name: PFHxDA**

Coefficient of Determination: R^2 = 0.999121

Calibration curve:  $-0.000672199 * x^2 + 0.480206 * x + 0.0498191$

Response type: Internal Std ( Ref 51 ), 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 171116M3_2	Standard	0.250	6.39	47.863	1627.946	0.147	0.2	-19.0	NO	0.999	NO	MM
2	2 171116M3_3	Standard	0.500	6.39	84.551	1281.343	0.330	0.6	16.8	NO	0.999	NO	bb
3	3 171116M3_4	Standard	1.000	6.39	152.415	1267.406	0.601	1.2	15.0	NO	0.999	NO	bb
4	4 171116M3_5	Standard	2.000	6.39	276.259	1443.765	0.957	1.9	-5.3	NO	0.999	NO	bb
5	5 171116M3_6	Standard	5.000	6.39	776.641	1578.236	2.460	5.1	1.1	NO	0.999	NO	bb
6	6 171116M3_7	Standard	10.000	6.39	1424.470	1670.423	4.264	8.9	-11.1	NO	0.999	NO	bb
7	7 171116M3_8	Standard	50.000	6.39	5444.918	1183.219	23.009	51.5	3.1	NO	0.999	NO	bb
8	8 171116M3_9	Standard	100.000	6.39	9655.450	1170.774	41.235	99.7	-0.3	NO	0.999	NO	bb
9	9 171116M3_10	Standard	250.000	6.39	15476.348	991.710	78.029	249.6	-0.2	NO	0.999	NO	bb

**Compound name: PFODA**

Coefficient of Determination: R^2 = 0.996574

Calibration curve:  $0.000549065 * x^2 + 0.236117 * x + 0.0599137$

Response type: Internal Std ( Ref 51 ), 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 171116M3_2	Standard	0.250	6.62	14.934	1627.946	0.046			NO	0.997	NO	MMXI
2	2 171116M3_3	Standard	0.500	6.62	51.360	1281.343	0.200	0.6	18.8	NO	0.997	NO	MM
3	3 171116M3_4	Standard	1.000	6.62	71.965	1267.406	0.284	0.9	-5.3	NO	0.997	NO	bb
4	4 171116M3_5	Standard	2.000	6.62	177.170	1443.765	0.614	2.3	16.6	NO	0.997	NO	bb
5	5 171116M3_6	Standard	5.000	6.63	497.448	1578.236	1.576	6.3	26.6	NO	0.997	NO	bb
6	6 171116M3_7	Standard	10.000	6.62	808.137	1670.423	2.419	9.8	-2.3	NO	0.997	NO	bb
7	7 171116M3_8	Standard	50.000	6.62	2971.108	1183.219	12.555	47.6	-4.7	NO	0.997	NO	bb
8	8 171116M3_9	Standard	100.000	6.62	6905.671	1170.774	29.492	101.0	1.0	NO	0.997	NO	bb
9	9 171116M3_10	Standard	250.000	6.62	38458.836	991.710	193.902	416.9	66.7	NO	0.997	NO	bbX

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**Compound name: N-MeFOSE**

Correlation coefficient:  $r = 0.999003$ ,  $r^2 = 0.998008$

Calibration curve:  $0.925566 * x + 0.236529$

Response type: Internal Std ( Ref 52 ), 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 171116M3_2	Standard	1.250	6.26	239.671	29250.744	1.229	1.1	-14.2	NO	0.998	NO	bb
2	2 171116M3_3	Standard	2.500	6.26	390.218	23973.582	2.442	2.4	-4.7	NO	0.998	NO	bb
3	3 171116M3_4	Standard	5.000	6.26	748.583	23704.221	4.737	4.9	-2.8	NO	0.998	NO	bb
4	4 171116M3_5	Standard	10.000	6.26	1630.344	23314.975	10.489	11.1	10.8	NO	0.998	NO	bb
5	5 171116M3_6	Standard	25.000	6.27	3565.306	23061.850	23.190	24.8	-0.8	NO	0.998	NO	bb
6	6 171116M3_7	Standard	50.000	6.27	6926.621	21791.514	47.679	51.3	2.5	NO	0.998	NO	bb
7	7 171116M3_8	Standard	250.000	6.27	35345.324	20837.102	254.440	274.6	9.9	NO	0.998	NO	bb
8	8 171116M3_9	Standard	500.000	6.26	65090.777	20593.545	474.111	512.0	2.4	NO	0.998	NO	bb
9	9 171116M3_10	Standard	1250.000	6.26	147331.031	19701.645	1121.716	1211.7	-3.1	NO	0.998	NO	bb

**Compound name: N-EtFOSE**

Correlation coefficient:  $r = 0.999870$ ,  $r^2 = 0.999741$

Calibration curve:  $0.986962 * x + 0.587953$

Response type: Internal Std ( Ref 53 ), 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 171116M3_2	Standard	1.250	6.42	291.124	27361.996	1.596	1.0	-18.3	NO	1.000	NO	bb
2	2 171116M3_3	Standard	2.500	6.41	462.659	24000.256	2.892	2.3	-6.6	NO	1.000	NO	bb
3	3 171116M3_4	Standard	5.000	6.42	923.632	22155.137	6.253	5.7	14.8	NO	1.000	NO	bb
4	4 171116M3_5	Standard	10.000	6.42	1721.630	22507.807	11.474	11.0	10.3	NO	1.000	NO	bb
5	5 171116M3_6	Standard	25.000	6.42	3772.860	21665.676	26.121	25.9	3.5	NO	1.000	NO	bb
6	6 171116M3_7	Standard	50.000	6.42	7458.047	23485.551	47.634	47.7	-4.7	NO	1.000	NO	bb
7	7 171116M3_8	Standard	250.000	6.42	36632.836	21808.357	251.964	254.7	1.9	NO	1.000	NO	bb
8	8 171116M3_9	Standard	500.000	6.42	74994.070	22957.143	490.005	495.9	-0.8	NO	1.000	NO	bb
9	9 171116M3_10	Standard	1250.000	6.42	186946.563	22728.053	1233.805	1249.5	-0.0	NO	1.000	NO	bb

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**Compound name: 13C3-PFBA**

Response Factor: 0.887366

RRF SD: 0.0188287, Relative SD: 2.12186

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 171116M3_2	Standard	12.500	1.25	10383.313	11794.205	11.005	12.4	-0.8	NO		NO	bb
2	2 171116M3_3	Standard	12.500	1.25	9154.816	10369.757	11.035	12.4	-0.5	NO		NO	bb
3	3 171116M3_4	Standard	12.500	1.25	9121.311	10227.754	11.148	12.6	0.5	NO		NO	bb
4	4 171116M3_5	Standard	12.500	1.26	8865.786	10387.705	10.669	12.0	-3.8	NO		NO	bb
5	5 171116M3_6	Standard	12.500	1.25	9100.381	10056.477	11.312	12.7	2.0	NO		NO	bb
6	6 171116M3_7	Standard	12.500	1.25	9299.645	10729.380	10.834	12.2	-2.3	NO		NO	bb
7	7 171116M3_8	Standard	12.500	1.25	8823.007	9746.647	11.315	12.8	2.0	NO		NO	bb
8	8 171116M3_9	Standard	12.500	1.25	8755.845	9834.561	11.129	12.5	0.3	NO		NO	bb
9	9 171116M3_10	Standard	12.500	1.25	9294.170	10207.167	11.382	12.8	2.6	NO		NO	bb

**Compound name: 13C3-PFPeA**

Response Factor: 0.819762

RRF SD: 0.0286269, Relative SD: 3.4921

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 171116M3_2	Standard	12.500	2.22	13935.553	17550.938	9.925	12.1	-3.1	NO		NO	bb
2	2 171116M3_3	Standard	12.500	2.22	12453.879	15085.463	10.319	12.6	0.7	NO		NO	bb
3	3 171116M3_4	Standard	12.500	2.22	12114.806	15841.882	9.559	11.7	-6.7	NO		NO	bb
4	4 171116M3_5	Standard	12.500	2.22	12050.069	14504.867	10.385	12.7	1.3	NO		NO	bb
5	5 171116M3_6	Standard	12.500	2.22	12228.604	14441.603	10.585	12.9	3.3	NO		NO	bb
6	6 171116M3_7	Standard	12.500	2.22	12650.171	15476.345	10.217	12.5	-0.3	NO		NO	bb
7	7 171116M3_8	Standard	12.500	2.22	12578.404	15129.754	10.392	12.7	1.4	NO		NO	bb
8	8 171116M3_9	Standard	12.500	2.22	11965.773	13903.718	10.758	13.1	5.0	NO		NO	bb
9	9 171116M3_10	Standard	12.500	2.22	11714.026	14521.476	10.083	12.3	-1.6	NO		NO	bb



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**Compound name: 13C3-PFBS**

Response Factor: 0.096143

RRF SD: 0.00506617, Relative SD: 5.26941

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 171116M3_2	Standard	12.500	2.50	1707.184	17550.938	1.216	12.6	1.2	NO		NO	bb
2	2 171116M3_3	Standard	12.500	2.50	1418.348	15085.463	1.175	12.2	-2.2	NO		NO	bb
3	3 171116M3_4	Standard	12.500	2.50	1553.941	15841.882	1.226	12.8	2.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	2.50	1527.679	14504.867	1.317	13.7	9.5	NO		NO	bb
5	5 171116M3_6	Standard	12.500	2.50	1421.827	14441.603	1.231	12.8	2.4	NO		NO	bb
6	6 171116M3_7	Standard	12.500	2.50	1513.782	15476.345	1.223	12.7	1.7	NO		NO	bb
7	7 171116M3_8	Standard	12.500	2.50	1310.296	15129.754	1.083	11.3	-9.9	NO		NO	bb
8	8 171116M3_9	Standard	12.500	2.50	1318.633	13903.718	1.186	12.3	-1.4	NO		NO	bb
9	9 171116M3_10	Standard	12.500	2.50	1348.654	14521.476	1.161	12.1	-3.4	NO		NO	bb

**Compound name: 13C2-PFHxA**

Response Factor: 0.728299

RRF SD: 0.0414249, Relative SD: 5.68789

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 171116M3_2	Standard	5.000	3.00	4666.342	17550.938	3.323	4.6	-8.7	NO		NO	bb
2	2 171116M3_3	Standard	5.000	3.00	4588.676	15085.463	3.802	5.2	4.4	NO		NO	bb
3	3 171116M3_4	Standard	5.000	3.00	4579.752	15841.882	3.614	5.0	-0.8	NO		NO	bb
4	4 171116M3_5	Standard	5.000	3.00	4329.123	14504.867	3.731	5.1	2.5	NO		NO	bb
5	5 171116M3_6	Standard	5.000	3.00	4424.545	14441.603	3.830	5.3	5.2	NO		NO	bb
6	6 171116M3_7	Standard	5.000	3.00	4252.346	15476.345	3.435	4.7	-5.7	NO		NO	bb
7	7 171116M3_8	Standard	5.000	3.00	4162.696	15129.754	3.439	4.7	-5.6	NO		NO	bb
8	8 171116M3_9	Standard	5.000	3.00	4073.348	13903.718	3.662	5.0	0.6	NO		NO	bb
9	9 171116M3_10	Standard	5.000	3.00	4574.726	14521.476	3.938	5.4	8.1	NO		NO	bb

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**Compound name: 13C4-PFHpA**

Response Factor: 0.549528

RRF SD: 0.0219115, Relative SD: 3.98734

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 171116M3_2	Standard	12.500	3.62	9634.613	17550.938	6.862	12.5	-0.1	NO		NO	bb
2	2 171116M3_3	Standard	12.500	3.62	8189.869	15085.463	6.786	12.3	-1.2	NO		NO	bb
3	3 171116M3_4	Standard	12.500	3.62	9234.159	15841.882	7.286	13.3	6.1	NO		NO	bb
4	4 171116M3_5	Standard	12.500	3.62	8083.236	14504.867	6.966	12.7	1.4	NO		NO	bb
5	5 171116M3_6	Standard	12.500	3.62	8233.017	14441.603	7.126	13.0	3.7	NO		NO	bb
6	6 171116M3_7	Standard	12.500	3.62	8367.013	15476.345	6.758	12.3	-1.6	NO		NO	bb
7	7 171116M3_8	Standard	12.500	3.62	7970.939	15129.754	6.585	12.0	-4.1	NO		NO	bb
8	8 171116M3_9	Standard	12.500	3.62	7120.859	13903.718	6.402	11.6	-6.8	NO		NO	bb
9	9 171116M3_10	Standard	12.500	3.62	8190.252	14521.476	7.050	12.8	2.6	NO		NO	bb

**Compound name: 18O2-PFHxS**

Response Factor: 0.431542

RRF SD: 0.0487176, Relative SD: 11.2892

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 171116M3_2	Standard	12.500	3.77	1208.810	3273.795	4.615	10.7	-14.4	NO		NO	bb
2	2 171116M3_3	Standard	12.500	3.77	1204.557	2915.598	5.164	12.0	-4.3	NO		NO	bb
3	3 171116M3_4	Standard	12.500	3.77	1130.752	2888.735	4.893	11.3	-9.3	NO		NO	bb
4	4 171116M3_5	Standard	12.500	3.77	1203.477	2478.476	6.070	14.1	12.5	NO		NO	bb
5	5 171116M3_6	Standard	12.500	3.78	1011.809	2749.665	4.600	10.7	-14.7	NO		NO	bb
6	6 171116M3_7	Standard	12.500	3.77	1332.213	2763.460	6.026	14.0	11.7	NO		NO	bb
7	7 171116M3_8	Standard	12.500	3.78	1113.144	2353.300	5.913	13.7	9.6	NO		NO	bb
8	8 171116M3_9	Standard	12.500	3.77	1166.318	2454.904	5.939	13.8	10.1	NO		NO	bb
9	9 171116M3_10	Standard	12.500	3.78	1089.037	2554.463	5.329	12.3	-1.2	NO		NO	bb

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**Compound name: 13C2-6:2 FTS**

Response Factor: 0.217034  
 RRF SD: 0.0365348, Relative SD: 16.8337  
 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 171116M3_2	Standard	12.500	4.09	2334.362	12226.540	2.387	11.0	-12.0	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.09	2336.509	10513.806	2.778	12.8	2.4	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.09	2012.231	10160.642	2.476	11.4	-8.8	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.09	2200.357	9355.665	2.940	13.5	8.4	NO		NO	bb
5	5 171116M3_6	Standard	12.500	4.09	1537.631	9304.129	2.066	9.5	-23.9	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.09	2055.698	10621.332	2.419	11.1	-10.8	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.09	2437.884	9248.657	3.295	15.2	21.5	NO		NO	bb
8	8 171116M3_9	Standard	12.500	4.09	2456.046	9182.166	3.344	15.4	23.2	NO		NO	bb
9	9 171116M3_10	Standard	12.500	4.09	3609.213	9782.822	4.612	21.2	70.0	NO		NO	bbX

**Compound name: 13C2-PFOA**

Response Factor: 0.839513  
 RRF SD: 0.0600058, Relative SD: 7.14769  
 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 171116M3_2	Standard	12.500	4.14	9958.682	12226.540	10.181	12.1	-3.0	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.14	8722.788	10513.806	10.371	12.4	-1.2	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.14	8327.367	10160.642	10.245	12.2	-2.4	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.15	8643.124	9355.665	11.548	13.8	10.0	NO		NO	bb
5	5 171116M3_6	Standard	12.500	4.15	8616.993	9304.129	11.577	13.8	10.3	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.14	7983.038	10621.332	9.395	11.2	-10.5	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.15	7623.307	9248.657	10.303	12.3	-1.8	NO		NO	bd
8	8 171116M3_9	Standard	12.500	4.14	8109.088	9182.166	11.039	13.1	5.2	NO		NO	bb
9	9 171116M3_10	Standard	12.500	4.14	7658.896	9782.822	9.786	11.7	-6.7	NO		NO	bb

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**Compound name: 13C5-PFNA**

Response Factor: 0.966975

RRF SD: 0.0877144, Relative SD: 9.07101

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 171116M3_2	Standard	12.500	4.59	11388.718	10510.196	13.545	14.0	12.1	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.58	9089.116	10655.993	10.662	11.0	-11.8	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.59	8760.521	9210.298	11.890	12.3	-1.6	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.58	9305.246	8782.755	13.244	13.7	9.6	NO		NO	bb
5	5 171116M3_6	Standard	12.500	4.59	9782.692	9652.299	12.669	13.1	4.8	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.59	9635.249	10123.244	11.897	12.3	-1.6	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.58	8573.270	10273.473	10.431	10.8	-13.7	NO		NO	bb
8	8 171116M3_9	Standard	12.500	4.59	8110.818	7855.694	12.906	13.3	6.8	NO		NO	bb
9	9 171116M3_10	Standard	12.500	4.59	8178.355	8857.873	11.541	11.9	-4.5	NO		NO	bb

**Compound name: 13C8-PFOA**

Response Factor: 0.786267

RRF SD: 0.0620928, Relative SD: 7.89716

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	12.500	4.64	5346.627	6641.158	10.063	12.8	2.4	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.64	4709.282	6249.443	9.419	12.0	-4.2	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.64	4782.512	6653.736	8.985	11.4	-8.6	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.64	4880.817	6739.601	9.052	11.5	-7.9	NO		NO	bb
5	5 171116M3_6	Standard	12.500	4.64	4222.773	5381.214	9.809	12.5	-0.2	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.64	5329.838	6745.436	9.877	12.6	0.5	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.64	4267.630	4752.979	11.224	14.3	14.2	NO		NO	bb
8	8 171116M3_9	Standard	12.500	4.64	4527.322	5235.896	10.808	13.7	10.0	NO		NO	bb
9	9 171116M3_10	Standard	12.500	4.64	4598.462	6236.137	9.217	11.7	-6.2	NO		NO	bb

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**Compound name: 13C8-PFOS**

Response Factor: 0.99147

RRF SD: 0.0715412, Relative SD: 7.21567

Response type: Internal Std ( Ref 59 ), 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 171116M3_2	Standard	12.500	4.67	3377.606	3493.536	12.085	12.2	-2.5	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.67	3534.729	3773.102	11.710	11.8	-5.5	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.67	3276.564	3412.004	12.004	12.1	-3.1	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.67	3040.744	2900.248	13.106	13.2	5.7	NO		NO	bb
5	5 171116M3_6	Standard	12.500	4.68	3135.291	3116.483	12.575	12.7	1.5	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.67	3301.966	3191.410	12.933	13.0	4.4	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.67	2652.959	3071.667	10.796	10.9	-12.9	NO		NO	bb
8	8 171116M3_9	Standard	12.500	4.67	3059.088	2748.963	13.910	14.0	12.2	NO		NO	bb
9	9 171116M3_10	Standard	12.500	4.67	2512.903	2528.917	12.421	12.5	0.2	NO		NO	bb

**Compound name: 13C2-PFDA**

Response Factor: 2.1534

RRF SD: 0.186717, Relative SD: 8.67083

Response type: Internal Std ( Ref 60 ), 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 171116M3_2	Standard	12.500	4.96	10511.931	5255.234	25.003	11.6	-7.1	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.96	9465.389	5059.304	23.386	10.9	-13.1	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.96	9275.509	4477.286	25.896	12.0	-3.8	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.96	9908.377	3975.294	31.156	14.5	15.7	NO		NO	bb
5	5 171116M3_6	Standard	12.500	4.97	8436.430	4044.456	26.074	12.1	-3.1	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.96	9915.085	4514.382	27.454	12.7	2.0	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.96	9625.680	4059.359	29.640	13.8	10.1	NO		NO	bb
8	8 171116M3_9	Standard	12.500	4.96	7981.035	3725.766	26.776	12.4	-0.5	NO		NO	bb
9	9 171116M3_10	Standard	12.500	4.96	9560.818	4447.676	26.870	12.5	-0.2	NO		NO	bb

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**Compound name: 13C2-8:2 FTS**

Response Factor: 0.0582156

RRF SD: 0.0104951, Relative SD: 18.028

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 171116M3_2	Standard	12.500	4.94	768.296	17550.938	0.547	9.4	-24.8	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.93	1106.793	15085.463	0.917	15.8	26.0	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.93	761.187	15841.882	0.601	10.3	-17.5	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.93	883.776	14504.867	0.762	13.1	4.7	NO		NO	bb
5	5 171116M3_6	Standard	12.500	4.93	924.293	14441.603	0.800	13.7	9.9	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.93	811.639	15476.345	0.656	11.3	-9.9	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.94	982.543	15129.754	0.812	13.9	11.6	NO		NO	bb
8	8 171116M3_9	Standard	12.500	4.93	1099.625	13903.718	0.989	17.0	35.9	NO		NO	bbX
9	9 171116M3_10	Standard	12.500	4.93	1509.289	14521.476	1.299	22.3	78.5	NO		NO	bbX

**Compound name: d3-N-MeFOSAA**

Response Factor: 0.667415

RRF SD: 0.111822, Relative SD: 16.7545

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	12.500	5.12	4752.367	6641.158	8.945	13.4	7.2	NO		NO	bb
2	2 171116M3_3	Standard	12.500	5.11	4227.920	6249.443	8.457	12.7	1.4	NO		NO	bb
3	3 171116M3_4	Standard	12.500	5.11	4791.982	6653.736	9.002	13.5	7.9	NO		NO	bb
4	4 171116M3_5	Standard	12.500	5.11	3640.088	6739.601	6.751	10.1	-19.1	NO		NO	bb
5	5 171116M3_6	Standard	12.500	5.12	3970.241	5381.214	9.222	13.8	10.5	NO		NO	bb
6	6 171116M3_7	Standard	12.500	5.12	3464.802	6745.436	6.421	9.6	-23.0	NO		NO	bb
7	7 171116M3_8	Standard	12.500	5.12	4169.885	4752.979	10.967	16.4	31.5	NO		NO	bb
8	8 171116M3_9	Standard	12.500	5.12	3217.984	5235.896	7.683	11.5	-7.9	NO		NO	bb
9	9 171116M3_10	Standard	12.500	5.11	3809.932	6236.137	7.637	11.4	-8.5	NO		NO	bb

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**Compound name: d5-N-EtFOSAA**

Response Factor: 0.697502

RRF SD: 0.105072, Relative SD: 15.0641

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	12.500	5.27	5272.274	6641.158	9.923	14.2	13.8	NO		NO	bb
2	2 171116M3_3	Standard	12.500	5.27	4963.151	6249.443	9.927	14.2	13.9	NO		NO	bb
3	3 171116M3_4	Standard	12.500	5.27	4454.549	6653.736	8.369	12.0	-4.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	5.27	3466.036	6739.601	6.428	9.2	-26.3	NO		NO	bb
5	5 171116M3_6	Standard	12.500	5.28	3611.624	5381.214	8.389	12.0	-3.8	NO		NO	bb
6	6 171116M3_7	Standard	12.500	5.27	4541.916	6745.436	8.417	12.1	-3.5	NO		NO	bb
7	7 171116M3_8	Standard	12.500	5.27	3819.061	4752.979	10.044	14.4	15.2	NO		NO	bb
8	8 171116M3_9	Standard	12.500	5.27	4105.066	5235.896	9.800	14.1	12.4	NO		NO	bb
9	9 171116M3_10	Standard	12.500	5.27	3577.604	6236.137	7.171	10.3	-17.8	NO		NO	bb

**Compound name: 13C2-PFUDa**

Response Factor: 1.26052

RRF SD: 0.186246, Relative SD: 14.7753

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	12.500	5.29	8916.486	6641.158	16.783	13.3	6.5	NO		NO	bb
2	2 171116M3_3	Standard	12.500	5.29	7207.037	6249.443	14.415	11.4	-8.5	NO		NO	bb
3	3 171116M3_4	Standard	12.500	5.29	8551.045	6653.736	16.064	12.7	2.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	5.29	6660.523	6739.601	12.353	9.8	-21.6	NO		NO	MM
5	5 171116M3_6	Standard	12.500	5.29	7927.295	5381.214	18.414	14.6	16.9	NO		NO	bb
6	6 171116M3_7	Standard	12.500	5.30	7499.116	6745.436	13.897	11.0	-11.8	NO		NO	bb
7	7 171116M3_8	Standard	12.500	5.29	7487.154	4752.979	19.691	15.6	25.0	NO		NO	bb
8	8 171116M3_9	Standard	12.500	5.29	5908.784	5235.896	14.106	11.2	-10.5	NO		NO	bb
9	9 171116M3_10	Standard	12.500	5.29	8024.690	6236.137	16.085	12.8	2.1	NO		NO	bb

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**Compound name: 13C2-PFDoA**

Response Factor: 0.694654

RRF SD: 0.0863335, Relative SD: 12.4283

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	12.500	5.58	4603.836	6641.158	8.665	12.5	-0.2	NO		NO	bb
2	2 171116M3_3	Standard	12.500	5.58	4230.716	6249.443	8.462	12.2	-2.5	NO		NO	bb
3	3 171116M3_4	Standard	12.500	5.58	4450.487	6653.736	8.361	12.0	-3.7	NO		NO	bd
4	4 171116M3_5	Standard	12.500	5.58	3916.289	6739.601	7.264	10.5	-16.3	NO		NO	bb
5	5 171116M3_6	Standard	12.500	5.58	4589.262	5381.214	10.660	15.3	22.8	NO		NO	bb
6	6 171116M3_7	Standard	12.500	5.58	4243.761	6745.436	7.864	11.3	-9.4	NO		NO	bb
7	7 171116M3_8	Standard	12.500	5.58	3799.498	4752.979	9.992	14.4	15.1	NO		NO	bb
8	8 171116M3_9	Standard	12.500	5.58	3789.297	5235.896	9.046	13.0	4.2	NO		NO	bb
9	9 171116M3_10	Standard	12.500	5.58	3907.947	6236.137	7.833	11.3	-9.8	NO		NO	bb

**Compound name: d3-N-MeFOSA**

Response Factor: 0.271311

RRF SD: 0.0290723, Relative SD: 10.7155

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	150.000	5.66	23116.625	6641.158	43.510	160.4	6.9	NO		NO	bb
2	2 171116M3_3	Standard	150.000	5.66	19633.727	6249.443	39.271	144.7	-3.5	NO		NO	bb
3	3 171116M3_4	Standard	150.000	5.66	19461.920	6653.736	36.562	134.8	-10.2	NO		NO	bb
4	4 171116M3_5	Standard	150.000	5.66	19684.971	6739.601	36.510	134.6	-10.3	NO		NO	bb
5	5 171116M3_6	Standard	150.000	5.66	18339.857	5381.214	42.602	157.0	4.7	NO		NO	bb
6	6 171116M3_7	Standard	150.000	5.66	19753.275	6745.436	36.605	134.9	-10.1	NO		NO	bb
7	7 171116M3_8	Standard	150.000	5.66	18834.779	4752.979	49.534	182.6	21.7	NO		NO	bb
8	8 171116M3_9	Standard	150.000	5.66	17997.084	5235.896	42.966	158.4	5.6	NO		NO	bb
9	9 171116M3_10	Standard	150.000	5.66	19312.568	6236.137	38.711	142.7	-4.9	NO		NO	bb



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**Compound name: 13C2-PFTeDA**

Response Factor: 0.762499

RRF SD: 0.140511, Relative SD: 18.4277

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	12.500	6.05	4692.433	6641.158	8.832	11.6	-7.3	NO		NO	bb
2	2 171116M3_3	Standard	12.500	6.05	5308.945	6249.443	10.619	13.9	11.4	NO		NO	bb
3	3 171116M3_4	Standard	12.500	6.05	4752.948	6653.736	8.929	11.7	-6.3	NO		NO	bb
4	4 171116M3_5	Standard	12.500	6.05	4032.162	6739.601	7.478	9.8	-21.5	NO		NO	bb
5	5 171116M3_6	Standard	12.500	6.05	4303.053	5381.214	9.996	13.1	4.9	NO		NO	bb
6	6 171116M3_7	Standard	12.500	6.05	5023.855	6745.436	9.310	12.2	-2.3	NO		NO	bb
7	7 171116M3_8	Standard	12.500	6.05	5152.389	4752.979	13.550	17.8	42.2	NO		NO	bb
8	8 171116M3_9	Standard	12.500	6.05	3617.973	5235.896	8.637	11.3	-9.4	NO		NO	bb
9	9 171116M3_10	Standard	12.500	6.05	4205.409	6236.137	8.430	11.1	-11.6	NO		NO	bb

**Compound name: d5-N-ETFOSA**

Response Factor: 0.324682

RRF SD: 0.0358236, Relative SD: 11.0334

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	150.000	6.07	28179.984	6641.158	53.040	163.4	8.9	NO		NO	bb
2	2 171116M3_3	Standard	150.000	6.07	24007.236	6249.443	48.019	147.9	-1.4	NO		NO	bb
3	3 171116M3_4	Standard	150.000	6.07	23742.266	6653.736	44.603	137.4	-8.4	NO		NO	bb
4	4 171116M3_5	Standard	150.000	6.07	23147.875	6739.601	42.933	132.2	-11.8	NO		NO	bb
5	5 171116M3_6	Standard	150.000	6.08	22730.953	5381.214	52.802	162.6	8.4	NO		NO	bb
6	6 171116M3_7	Standard	150.000	6.08	23854.502	6745.436	44.205	136.1	-9.2	NO		NO	bb
7	7 171116M3_8	Standard	150.000	6.07	22166.139	4752.979	58.295	179.5	19.7	NO		NO	bb
8	8 171116M3_9	Standard	150.000	6.07	21346.393	5235.896	50.962	157.0	4.6	NO		NO	bb
9	9 171116M3_10	Standard	150.000	6.07	21682.916	6236.137	43.462	133.9	-10.8	NO		NO	bb

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**Compound name: 13C2-PFHxDA**

Response Factor: 0.563156

RRF SD: 0.0976851, Relative SD: 17.346

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	5.000	6.39	1627.946	6641.158	3.064	5.4	8.8	NO		NO	bb
2	2 171116M3_3	Standard	5.000	6.39	1281.343	6249.443	2.563	4.6	-9.0	NO		NO	bb
3	3 171116M3_4	Standard	5.000	6.39	1267.406	6653.736	2.381	4.2	-15.4	NO		NO	bb
4	4 171116M3_5	Standard	5.000	6.39	1443.765	6739.601	2.678	4.8	-4.9	NO		NO	bb
5	5 171116M3_6	Standard	5.000	6.39	1578.236	5381.214	3.666	6.5	30.2	NO		NO	bb
6	6 171116M3_7	Standard	5.000	6.39	1670.423	6745.436	3.095	5.5	9.9	NO		NO	bb
7	7 171116M3_8	Standard	5.000	6.39	1183.219	4752.979	3.112	5.5	10.5	NO		NO	bb
8	8 171116M3_9	Standard	5.000	6.39	1170.774	5235.896	2.795	5.0	-0.7	NO		NO	bb
9	9 171116M3_10	Standard	5.000	6.39	991.710	6236.137	1.988	3.5	-29.4	NO		NO	bb

**Compound name: d7-N-MeFOSE**

Response Factor: 0.317177

RRF SD: 0.0402699, Relative SD: 12.6964

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	150.000	6.26	29250.744	6641.158	55.056	173.6	15.7	NO		NO	bb
2	2 171116M3_3	Standard	150.000	6.26	23973.582	6249.443	47.951	151.2	0.8	NO		NO	bb
3	3 171116M3_4	Standard	150.000	6.26	23704.221	6653.736	44.532	140.4	-6.4	NO		NO	bb
4	4 171116M3_5	Standard	150.000	6.26	23314.975	6739.601	43.242	136.3	-9.1	NO		NO	bb
5	5 171116M3_6	Standard	150.000	6.26	23061.850	5381.214	53.570	168.9	12.6	NO		NO	bb
6	6 171116M3_7	Standard	150.000	6.26	21791.514	6745.436	40.382	127.3	-15.1	NO		NO	bb
7	7 171116M3_8	Standard	150.000	6.26	20837.102	4752.979	54.800	172.8	15.2	NO		NO	bb
8	8 171116M3_9	Standard	150.000	6.26	20593.545	5235.896	49.164	155.0	3.3	NO		NO	bb
9	9 171116M3_10	Standard	150.000	6.26	19701.645	6236.137	39.491	124.5	-17.0	NO		NO	bb

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**Compound name: d9-N-EtFOSE**

Response Factor: 0.321807

RRF SD: 0.0377626, Relative SD: 11.7345

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	150.000	6.41	27361.996	6641.158	51.501	160.0	6.7	NO		NO	bb
2	2 171116M3_3	Standard	150.000	6.41	24000.256	6249.443	48.005	149.2	-0.6	NO		NO	bb
3	3 171116M3_4	Standard	150.000	6.41	22155.137	6653.736	41.622	129.3	-13.8	NO		NO	bb
4	4 171116M3_5	Standard	150.000	6.41	22507.807	6739.601	41.745	129.7	-13.5	NO		NO	bb
5	5 171116M3_6	Standard	150.000	6.41	21665.676	5381.214	50.327	156.4	4.3	NO		NO	bb
6	6 171116M3_7	Standard	150.000	6.41	23485.551	6745.436	43.521	135.2	-9.8	NO		NO	bb
7	7 171116M3_8	Standard	150.000	6.41	21808.357	4752.979	57.354	178.2	18.8	NO		NO	bb
8	8 171116M3_9	Standard	150.000	6.41	22957.143	5235.896	54.807	170.3	13.5	NO		NO	bb
9	9 171116M3_10	Standard	150.000	6.41	22728.053	6236.137	45.557	141.6	-5.6	NO		NO	bb

**Compound name: 13C4-PFBA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

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 171116M3_2	Standard	12.500	1.25	11794.205	11794.205	12.500	12.5	0.0	NO		NO	bb
2	2 171116M3_3	Standard	12.500	1.25	10369.757	10369.757	12.500	12.5	0.0	NO		NO	bb
3	3 171116M3_4	Standard	12.500	1.25	10227.754	10227.754	12.500	12.5	0.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	1.25	10387.705	10387.705	12.500	12.5	0.0	NO		NO	bb
5	5 171116M3_6	Standard	12.500	1.25	10056.477	10056.477	12.500	12.5	0.0	NO		NO	bb
6	6 171116M3_7	Standard	12.500	1.25	10729.380	10729.380	12.500	12.5	0.0	NO		NO	bb
7	7 171116M3_8	Standard	12.500	1.25	9746.647	9746.647	12.500	12.5	0.0	NO		NO	bb
8	8 171116M3_9	Standard	12.500	1.25	9834.561	9834.561	12.500	12.5	0.0	NO		NO	bb
9	9 171116M3_10	Standard	12.500	1.25	10207.167	10207.167	12.500	12.5	0.0	NO		NO	bb

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**Compound name: 13C5-PFHxA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

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 171116M3_2	Standard	12.500	3.00	17550.938	17550.938	12.500	12.5	0.0	NO		NO	bb
2	2 171116M3_3	Standard	12.500	3.00	15085.463	15085.463	12.500	12.5	0.0	NO		NO	bb
3	3 171116M3_4	Standard	12.500	3.00	15841.882	15841.882	12.500	12.5	0.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	3.00	14504.867	14504.867	12.500	12.5	0.0	NO		NO	bb
5	5 171116M3_6	Standard	12.500	3.00	14441.603	14441.603	12.500	12.5	0.0	NO		NO	bb
6	6 171116M3_7	Standard	12.500	3.00	15476.345	15476.345	12.500	12.5	0.0	NO		NO	bb
7	7 171116M3_8	Standard	12.500	3.00	15129.754	15129.754	12.500	12.5	0.0	NO		NO	bb
8	8 171116M3_9	Standard	12.500	3.00	13903.718	13903.718	12.500	12.5	0.0	NO		NO	bb
9	9 171116M3_10	Standard	12.500	3.00	14521.476	14521.476	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C3-PFHxS**

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 171116M3_2	Standard	12.500	3.77	3273.795	3273.795	12.500	12.5	0.0	NO		NO	bb
2	2 171116M3_3	Standard	12.500	3.77	2915.598	2915.598	12.500	12.5	0.0	NO		NO	bb
3	3 171116M3_4	Standard	12.500	3.77	2888.735	2888.735	12.500	12.5	0.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	3.77	2478.476	2478.476	12.500	12.5	0.0	NO		NO	bb
5	5 171116M3_6	Standard	12.500	3.78	2749.665	2749.665	12.500	12.5	0.0	NO		NO	bb
6	6 171116M3_7	Standard	12.500	3.77	2763.460	2763.460	12.500	12.5	0.0	NO		NO	bb
7	7 171116M3_8	Standard	12.500	3.78	2353.300	2353.300	12.500	12.5	0.0	NO		NO	bb
8	8 171116M3_9	Standard	12.500	3.77	2454.904	2454.904	12.500	12.5	0.0	NO		NO	bb
9	9 171116M3_10	Standard	12.500	3.77	2554.463	2554.463	12.500	12.5	0.0	NO		NO	bb

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**Compound name: 13C8-PFOA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

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 171116M3_2	Standard	12.500	4.14	12226.540	12226.540	12.500	12.5	0.0	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.14	10513.806	10513.806	12.500	12.5	0.0	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.14	10160.642	10160.642	12.500	12.5	0.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.15	9355.665	9355.665	12.500	12.5	0.0	NO		NO	bd
5	5 171116M3_6	Standard	12.500	4.14	9304.129	9304.129	12.500	12.5	0.0	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.15	10621.332	10621.332	12.500	12.5	0.0	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.15	9248.657	9248.657	12.500	12.5	0.0	NO		NO	bb
8	8 171116M3_9	Standard	12.500	4.14	9182.166	9182.166	12.500	12.5	0.0	NO		NO	bb
9	9 171116M3_10	Standard	12.500	4.14	9782.822	9782.822	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C9-PFNA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

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 171116M3_2	Standard	12.500	4.59	10510.196	10510.196	12.500	12.5	0.0	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.59	10655.993	10655.993	12.500	12.5	0.0	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.59	9210.298	9210.298	12.500	12.5	0.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.59	8782.755	8782.755	12.500	12.5	0.0	NO		NO	bb
5	5 171116M3_6	Standard	12.500	4.59	9652.299	9652.299	12.500	12.5	0.0	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.59	10123.244	10123.244	12.500	12.5	0.0	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.59	10273.473	10273.473	12.500	12.5	0.0	NO		NO	bb
8	8 171116M3_9	Standard	12.500	4.59	7855.694	7855.694	12.500	12.5	0.0	NO		NO	bb
9	9 171116M3_10	Standard	12.500	4.59	8857.873	8857.873	12.500	12.5	0.0	NO		NO	bb

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**Compound name: 13C4-PFOS**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 59 ), 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 171116M3_2	Standard	12.500	4.67	3493.536	3493.536	12.500	12.5	0.0	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.67	3773.102	3773.102	12.500	12.5	0.0	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.67	3412.004	3412.004	12.500	12.5	0.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.67	2900.248	2900.248	12.500	12.5	0.0	NO		NO	bb
5	5 171116M3_6	Standard	12.500	4.68	3116.483	3116.483	12.500	12.5	0.0	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.67	3191.410	3191.410	12.500	12.5	0.0	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.67	3071.667	3071.667	12.500	12.5	0.0	NO		NO	bb
8	8 171116M3_9	Standard	12.500	4.67	2748.963	2748.963	12.500	12.5	0.0	NO		NO	bb
9	9 171116M3_10	Standard	12.500	4.67	2528.917	2528.917	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C6-PFDA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 60 ), 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 171116M3_2	Standard	12.500	4.96	5255.234	5255.234	12.500	12.5	0.0	NO		NO	bb
2	2 171116M3_3	Standard	12.500	4.96	5059.304	5059.304	12.500	12.5	0.0	NO		NO	bb
3	3 171116M3_4	Standard	12.500	4.97	4477.286	4477.286	12.500	12.5	0.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	4.96	3975.294	3975.294	12.500	12.5	0.0	NO		NO	bb
5	5 171116M3_6	Standard	12.500	4.96	4044.456	4044.456	12.500	12.5	0.0	NO		NO	bb
6	6 171116M3_7	Standard	12.500	4.96	4514.382	4514.382	12.500	12.5	0.0	NO		NO	bb
7	7 171116M3_8	Standard	12.500	4.96	4059.359	4059.359	12.500	12.5	0.0	NO		NO	bb
8	8 171116M3_9	Standard	12.500	4.96	3725.766	3725.766	12.500	12.5	0.0	NO		NO	bb
9	9 171116M3_10	Standard	12.500	4.96	4447.676	4447.676	12.500	12.5	0.0	NO		NO	bb

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**Compound name: 13C7-PFUdA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 61 ), 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 171116M3_2	Standard	12.500	5.29	6641.158	6641.158	12.500	12.5	0.0	NO		NO	bb
2	2 171116M3_3	Standard	12.500	5.29	6249.443	6249.443	12.500	12.5	0.0	NO		NO	bb
3	3 171116M3_4	Standard	12.500	5.29	6653.736	6653.736	12.500	12.5	0.0	NO		NO	bb
4	4 171116M3_5	Standard	12.500	5.29	6739.601	6739.601	12.500	12.5	0.0	NO		NO	bb
5	5 171116M3_6	Standard	12.500	5.29	5381.214	5381.214	12.500	12.5	0.0	NO		NO	bb
6	6 171116M3_7	Standard	12.500	5.30	6745.436	6745.436	12.500	12.5	0.0	NO		NO	bb
7	7 171116M3_8	Standard	12.500	5.29	4752.979	4752.979	12.500	12.5	0.0	NO		NO	bb
8	8 171116M3_9	Standard	12.500	5.29	5235.896	5235.896	12.500	12.5	0.0	NO		NO	bb
9	9 171116M3_10	Standard	12.500	5.29	6236.137	6236.137	12.500	12.5	0.0	NO		NO	bb

Dataset: Untitled

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Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	171116M3_1	IPA	16-Nov-17	16:20:10
2	171116M3_2	ST171116M3-1 PFC CS-2 17K0830	16-Nov-17	16:31:18
3	171116M3_3	ST171116M3-2 PFC CS-1 17K0831	16-Nov-17	16:42:29
4	171116M3_4	ST171116M3-3 PFC CS0 17K0832	16-Nov-17	16:53:40
5	171116M3_5	ST171116M3-4 PFC CS1 17K0838	16-Nov-17	17:04:50
6	171116M3_6	ST171116M3-5 PFC CS2 17K0833	16-Nov-17	17:16:01
7	171116M3_7	ST171116M3-6 PFC CS3 17K0834	16-Nov-17	17:27:12
8	171116M3_8	ST171116M3-7 PFC CS4 17K0835	16-Nov-17	17:38:23
9	171116M3_9	ST171116M3-8 PFC CS5 17K0836	16-Nov-17	17:49:33
10	171116M3_10	ST171116M3-9 PFC CS6 17K1303	16-Nov-17	18:00:44
11	171116M3_11	ST171116M3-10 PFC CS7 17K1304	16-Nov-17	18:11:54
12	171116M3_12	IPA	16-Nov-17	18:23:06
13	171116M3_13	ICV171116M3-1 PFC ICV 17K0837	16-Nov-17	18:34:16
14	171116M3_14	IPA	16-Nov-17	18:45:27



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

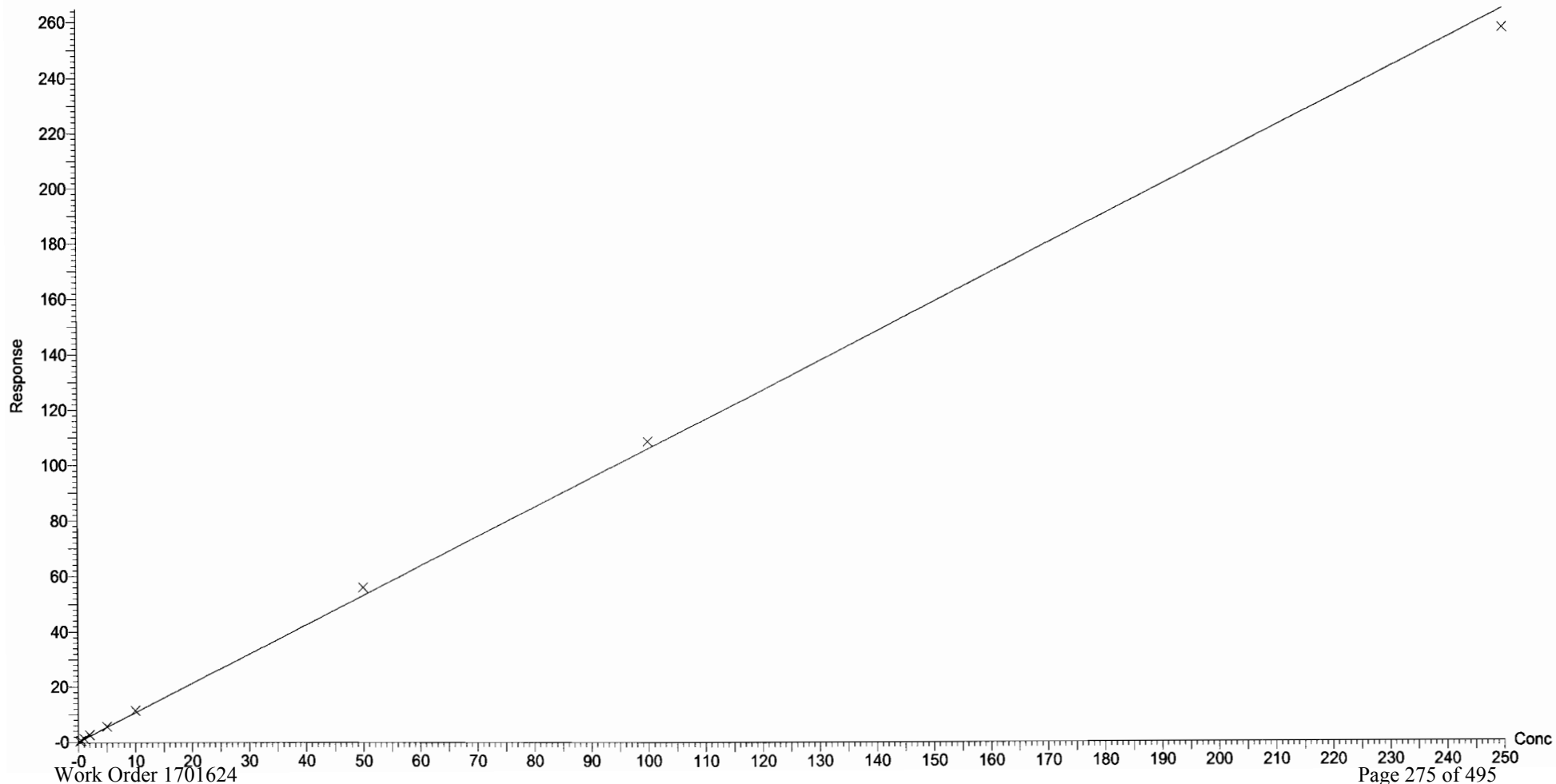
Compound name: PFBA

Correlation coefficient:  $r = 0.999329$ ,  $r^2 = 0.998658$

Calibration curve:  $1.05915 * x + 0.0656962$

Response type: Internal Std ( Ref 31 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

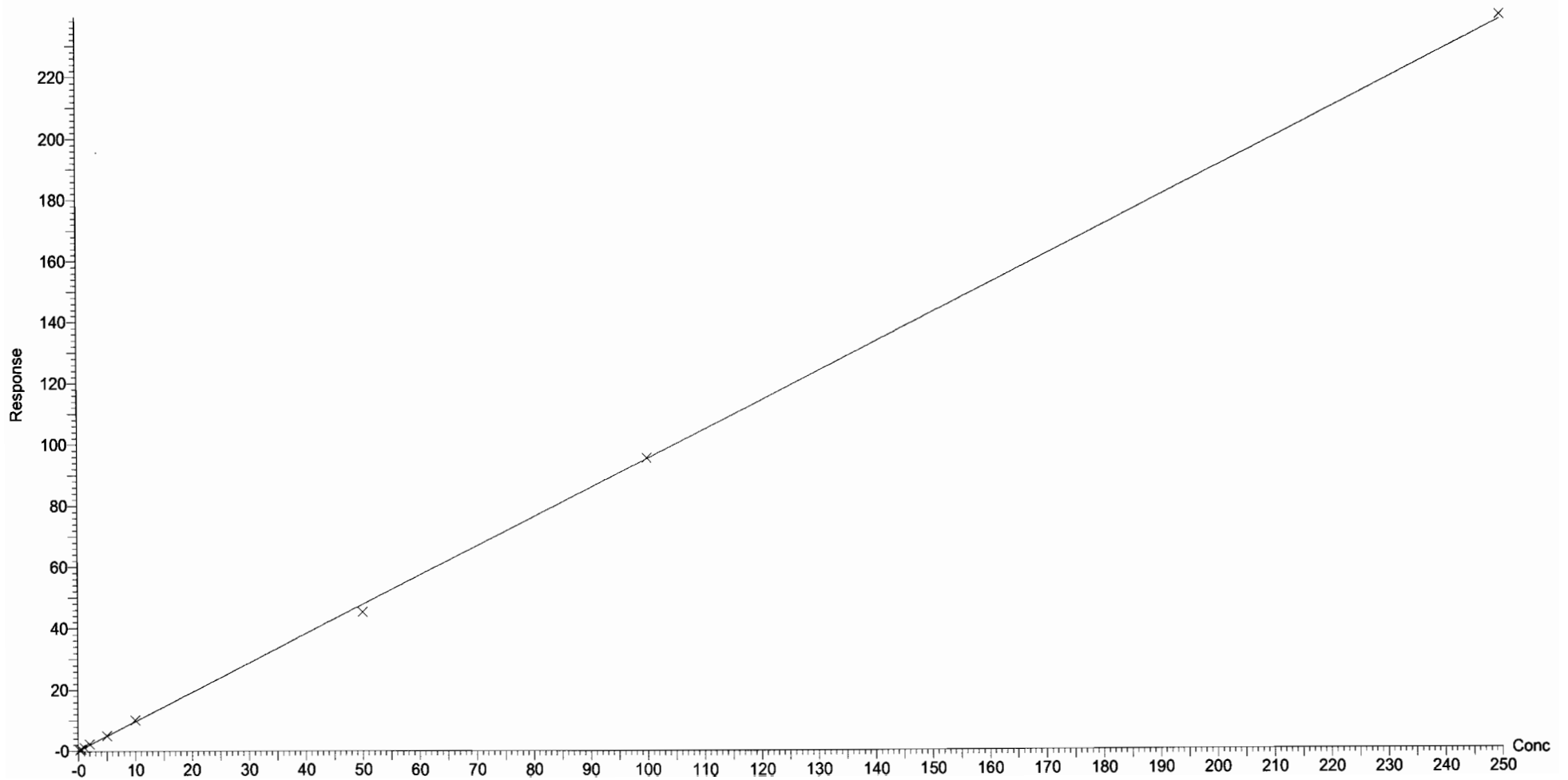
Compound name: PFPeA

Correlation coefficient:  $r = 0.999741$ ,  $r^2 = 0.999481$

Calibration curve:  $0.951313 * x + 0.125042$

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\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

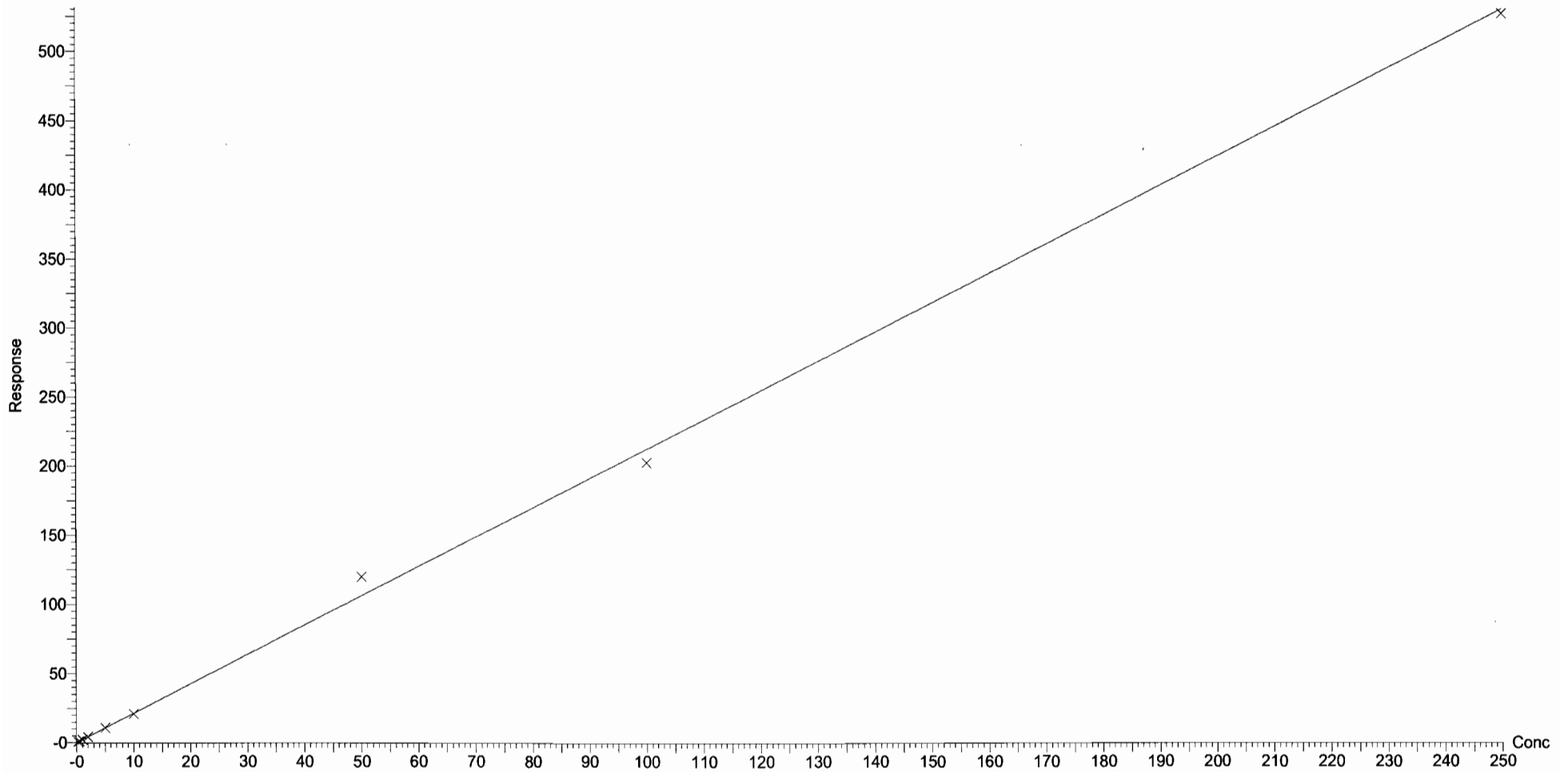
Compound name: PFBS

Correlation coefficient:  $r = 0.998712$ ,  $r^2 = 0.997426$

Calibration curve:  $2.12345 * x + 0.102967$

Response type: Internal Std ( Ref 33 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

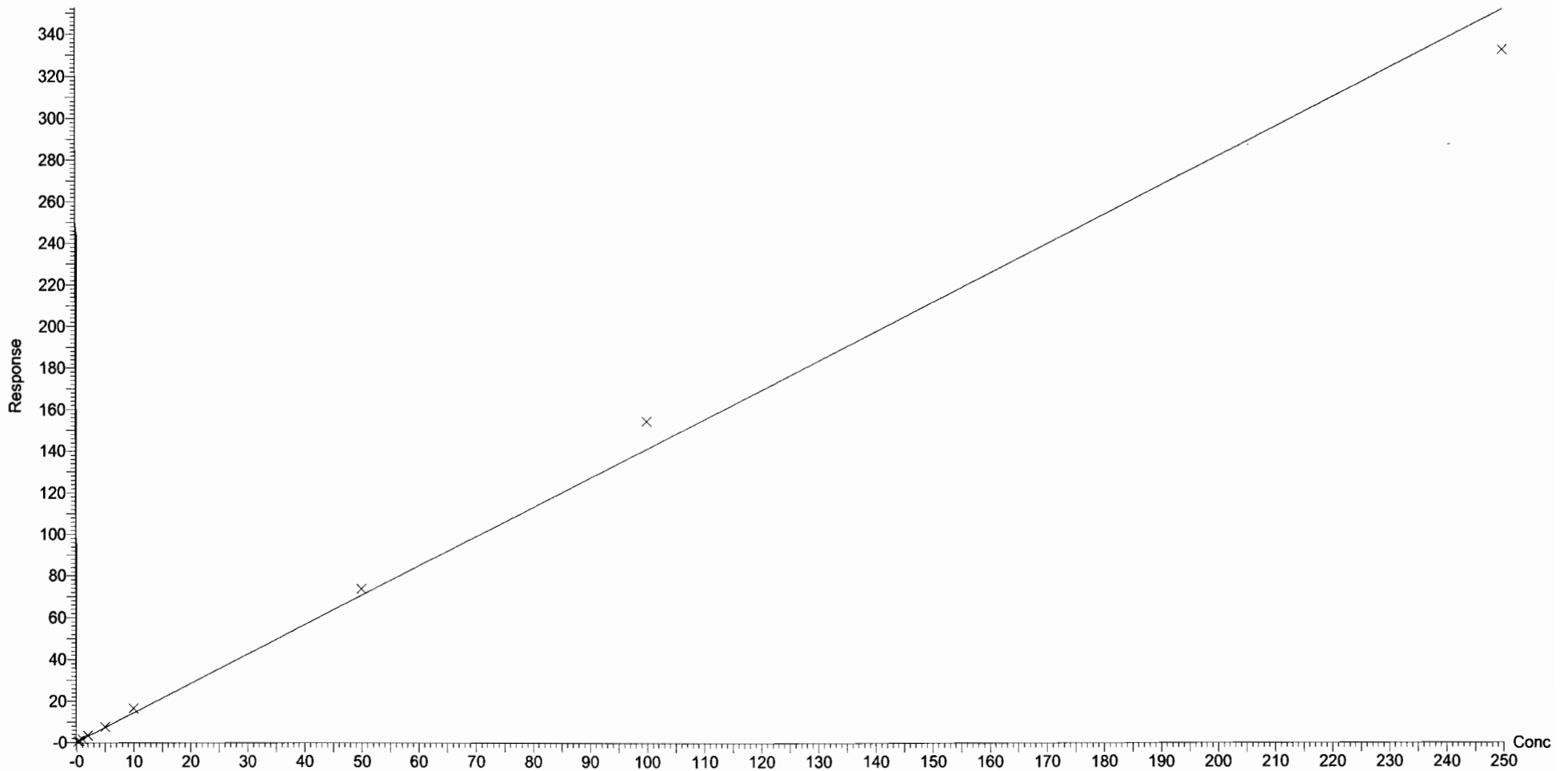
Compound name: PFHxA

Correlation coefficient:  $r = 0.997417$ ,  $r^2 = 0.994840$

Calibration curve:  $1.40907 * x + 0.222003$

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

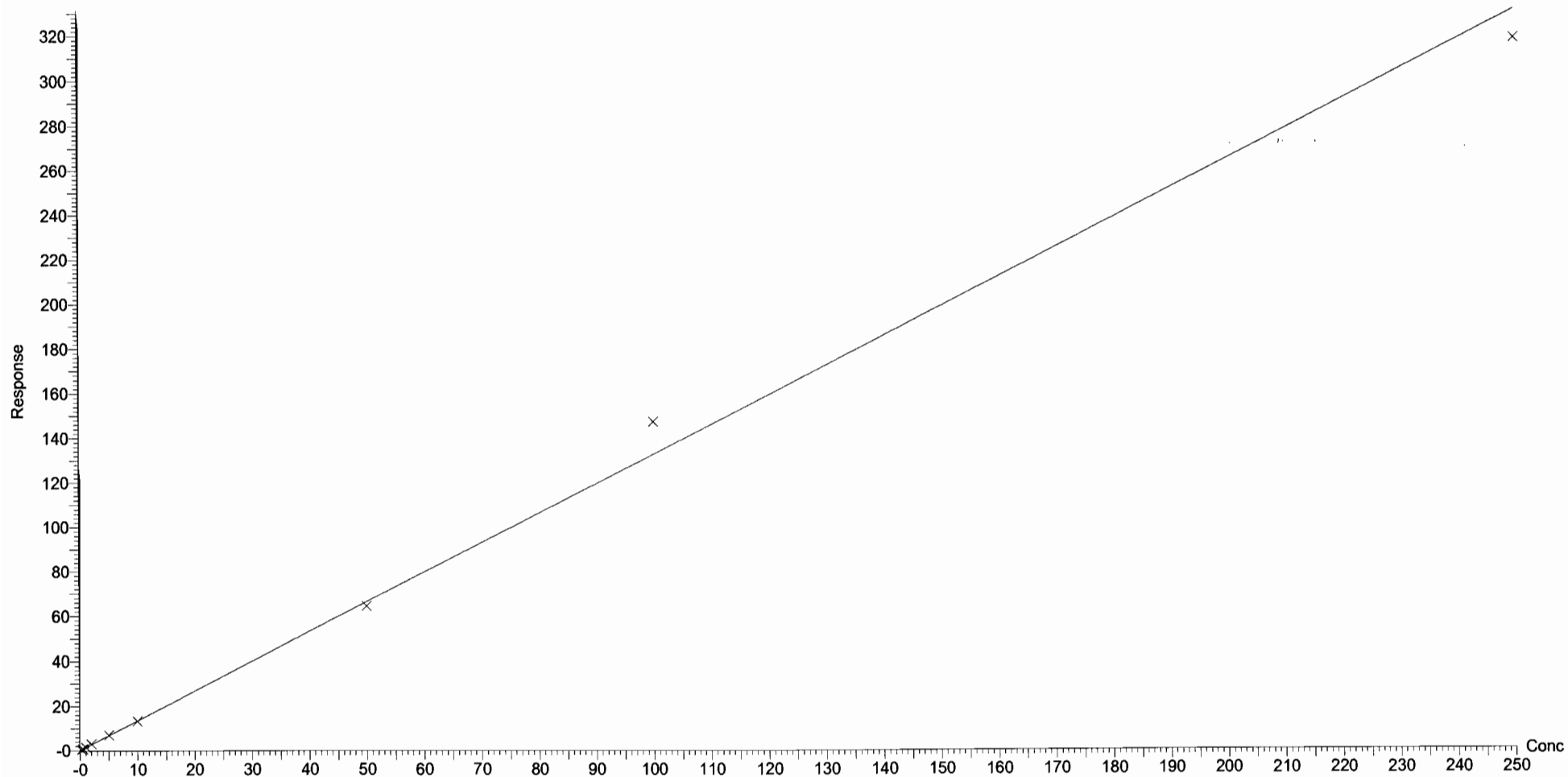
Compound name: PFHpA

Correlation coefficient:  $r = 0.997971$ ,  $r^2 = 0.995947$

Calibration curve:  $1.32476 * x + 0.170962$

Response type: Internal Std ( Ref 35 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

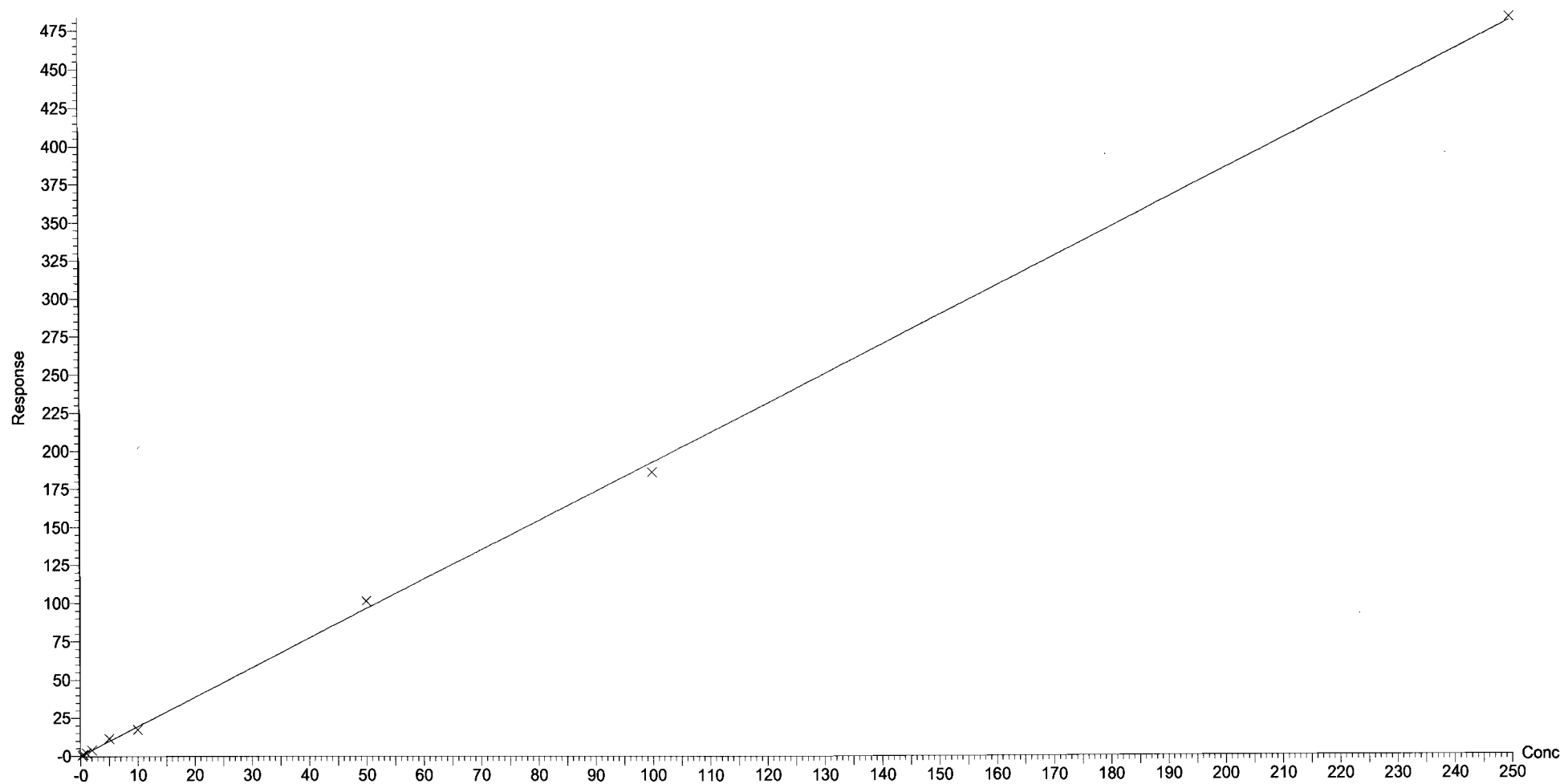
Compound name: L-PFHxS

Correlation coefficient:  $r = 0.999354$ ,  $r^2 = 0.998709$

Calibration curve:  $1.92489 * x + 0.085109$

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\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

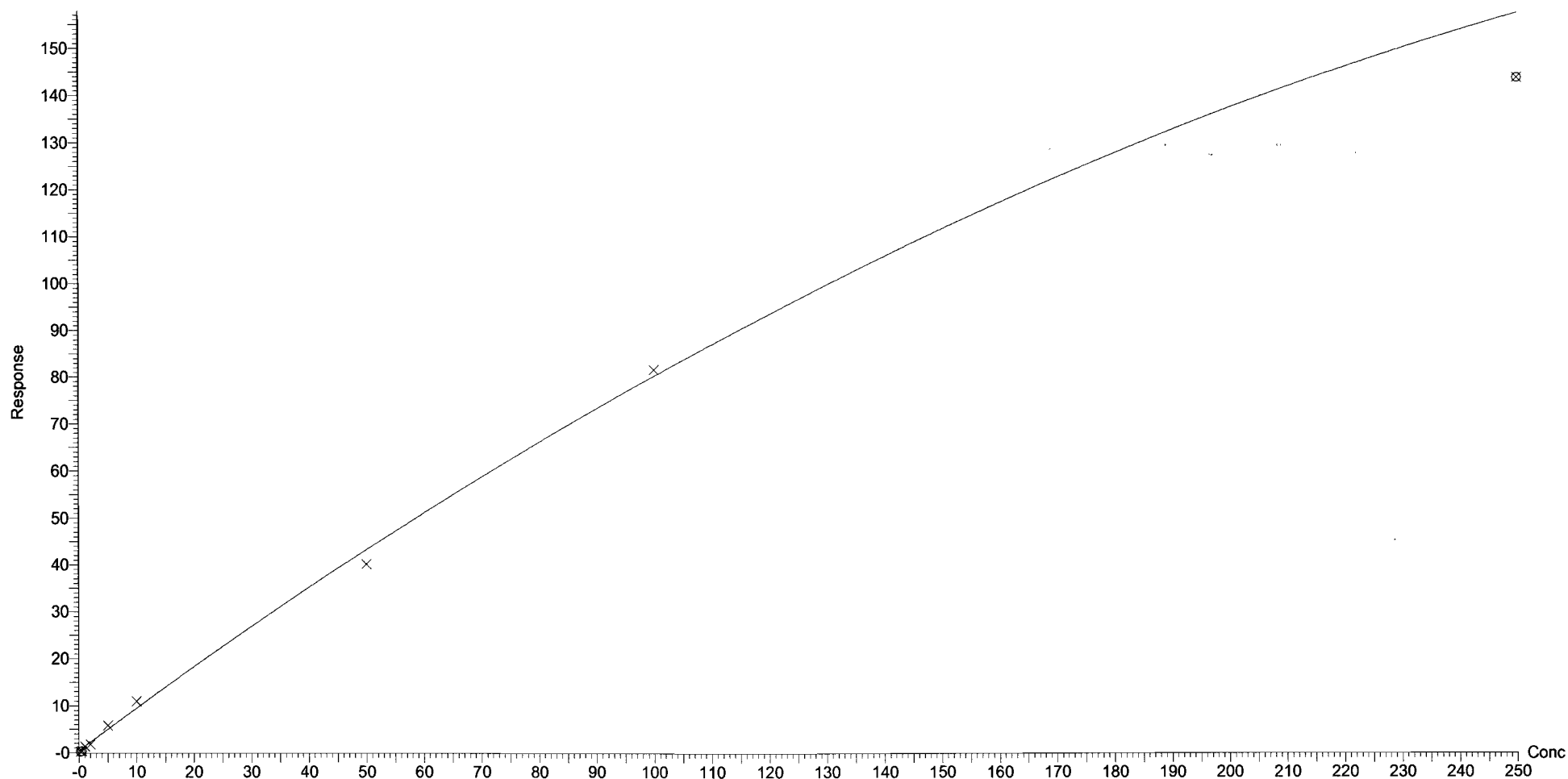
Compound name: 6:2 FTS

Coefficient of Determination:  $R^2 = 0.993434$

Calibration curve:  $-0.00112973 * x^2 + 0.911744 * x + 0.474146$

Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

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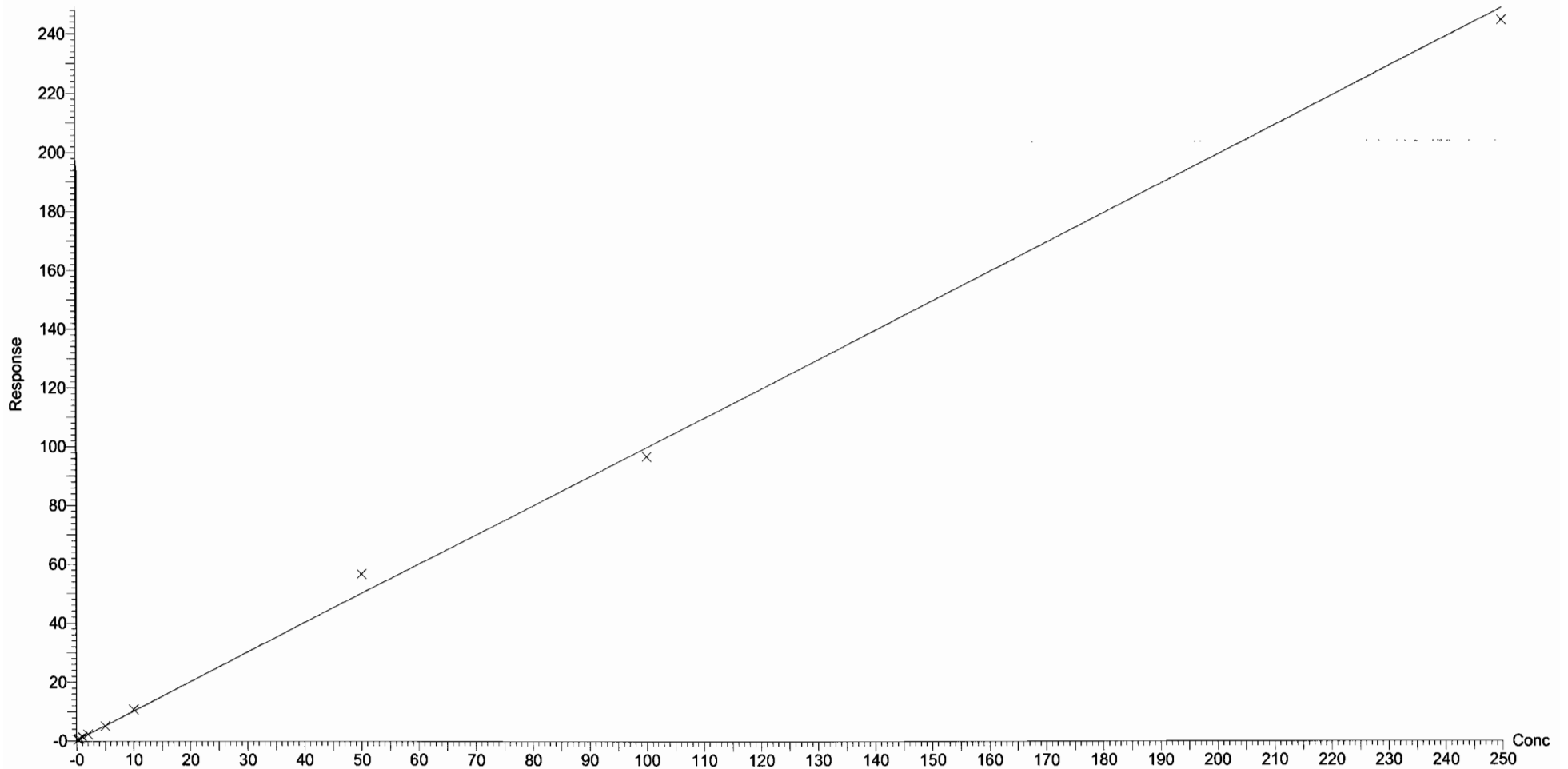
Compound name: L-PFOA

Correlation coefficient:  $r = 0.998661$ ,  $r^2 = 0.997324$

Calibration curve:  $0.995927 * x + 0.263886$

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None





Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

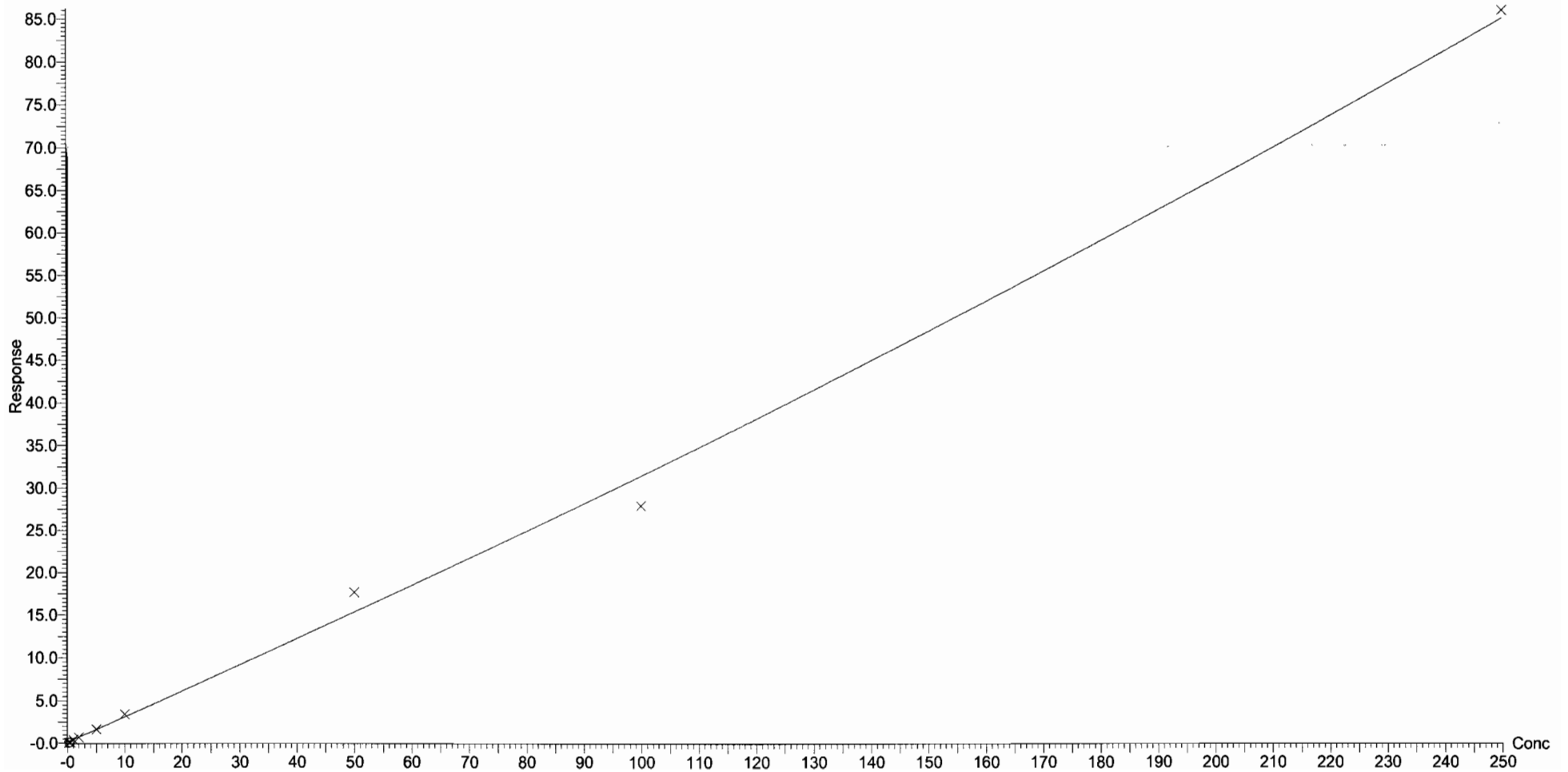
Compound name: PFHpS

Coefficient of Determination:  $R^2 = 0.994237$

Calibration curve:  $0.000180176 * x^2 + 0.295394 * x + 0.144222$

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

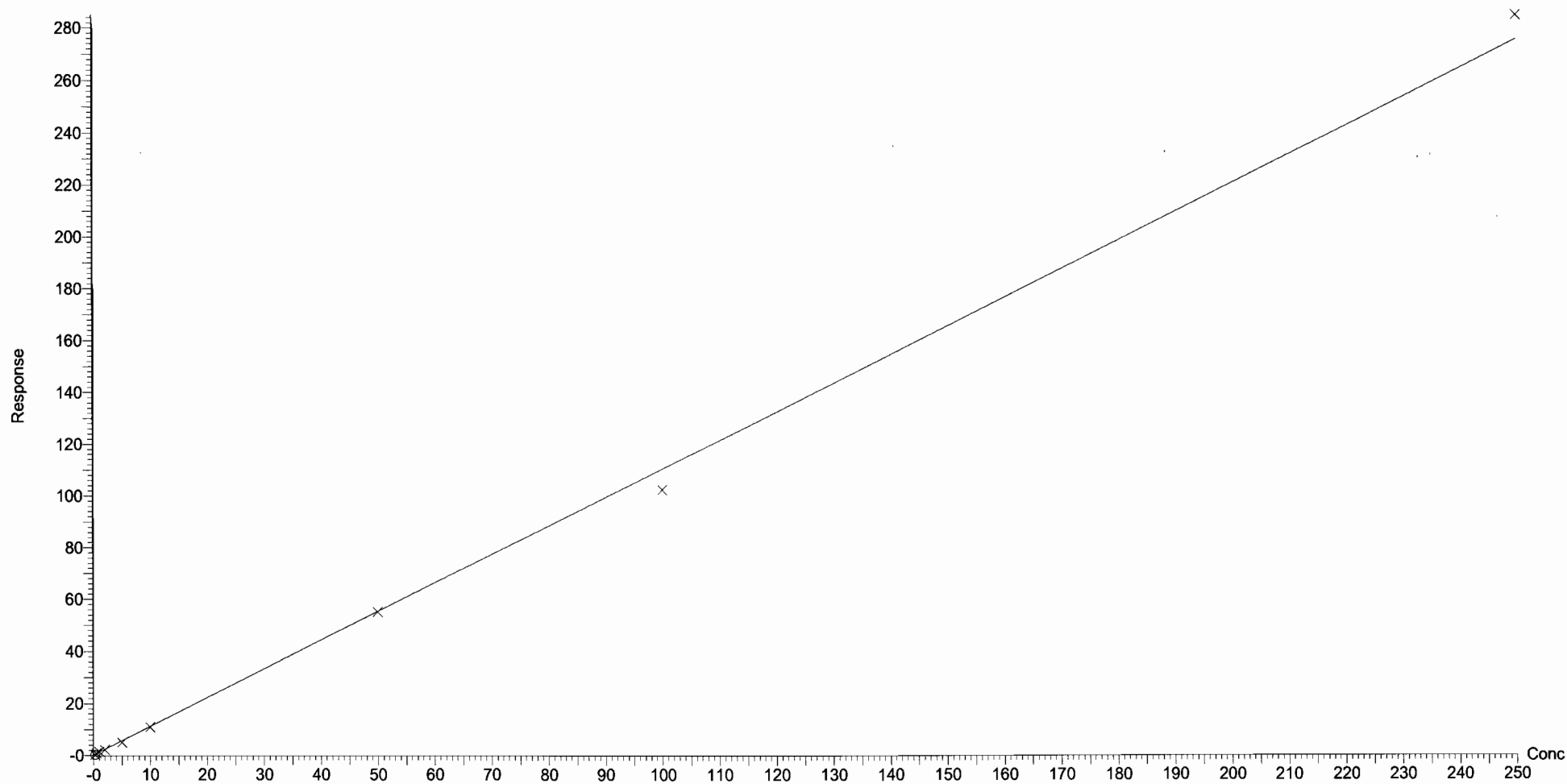
Compound name: PFNA

Correlation coefficient:  $r = 0.998830$ ,  $r^2 = 0.997662$

Calibration curve:  $1.10248 * x + 0.211895$

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\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

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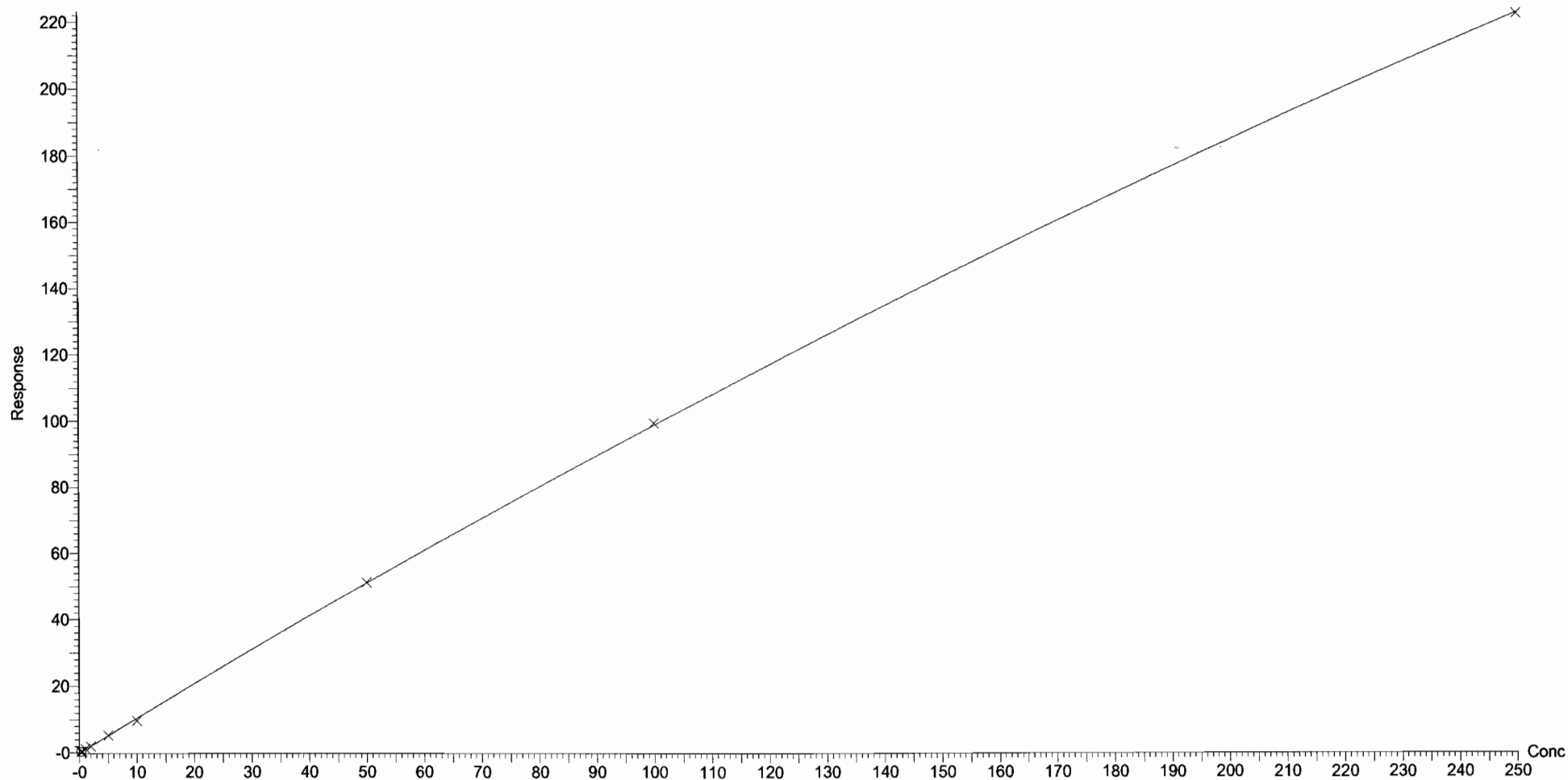
Compound name: PFOSA

Coefficient of Determination:  $R^2 = 0.999698$

Calibration curve:  $-0.000646575 * x^2 + 1.05411 * x - 0.0628216$

Response type: Internal Std ( Ref 40 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

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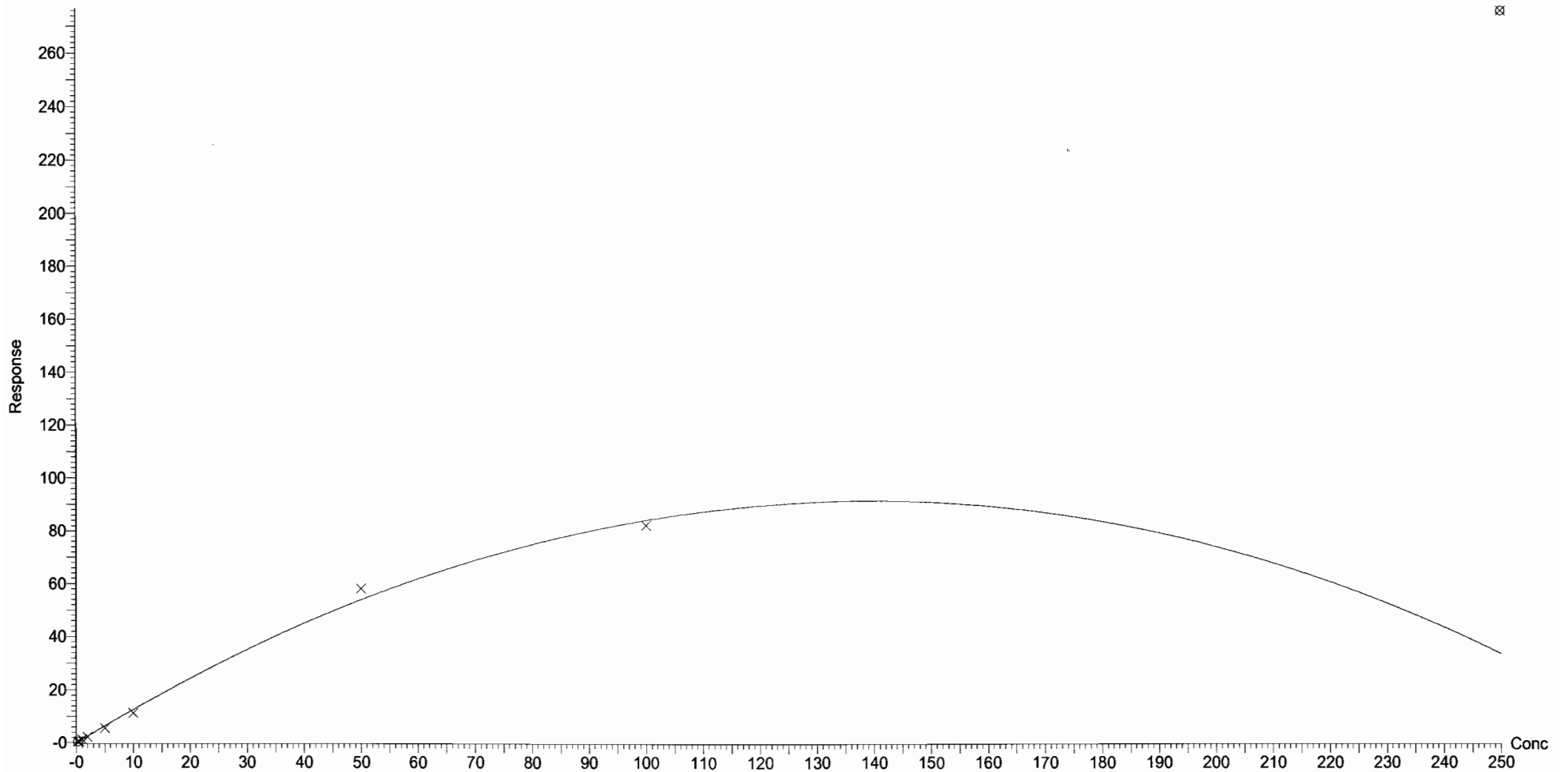
Compound name: L-PFOS

Coefficient of Determination:  $R^2 = 0.994821$

Calibration curve:  $-0.00473098 * x^2 + 1.31802 * x + -0.109838$

Response type: Internal Std ( Ref 41 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

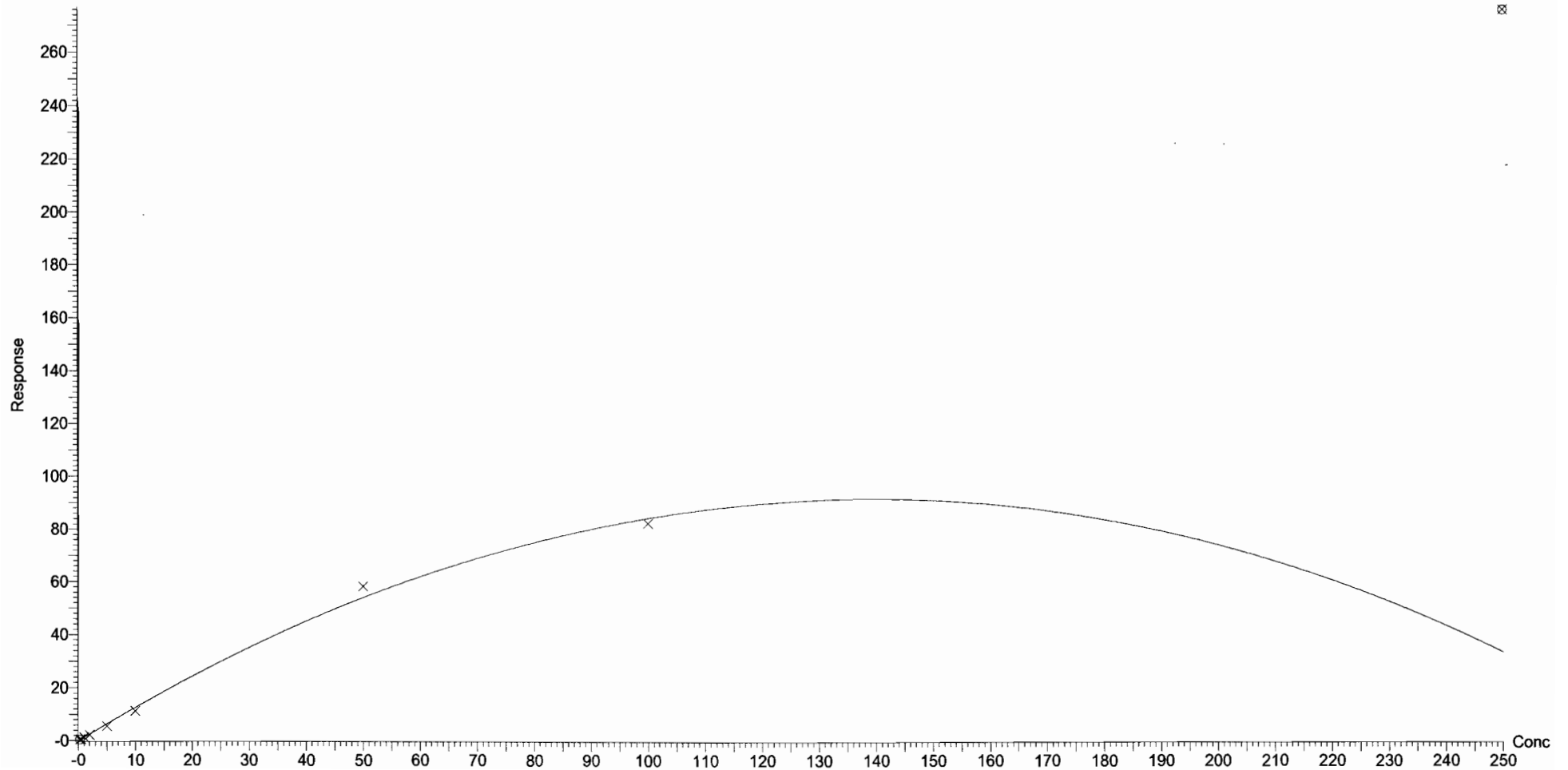
Compound name: L-PFOS

Coefficient of Determination:  $R^2 = 0.994821$

Calibration curve:  $-0.00473098 * x^2 + 1.31802 * x + -0.109838$

Response type: Internal Std ( Ref 41 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

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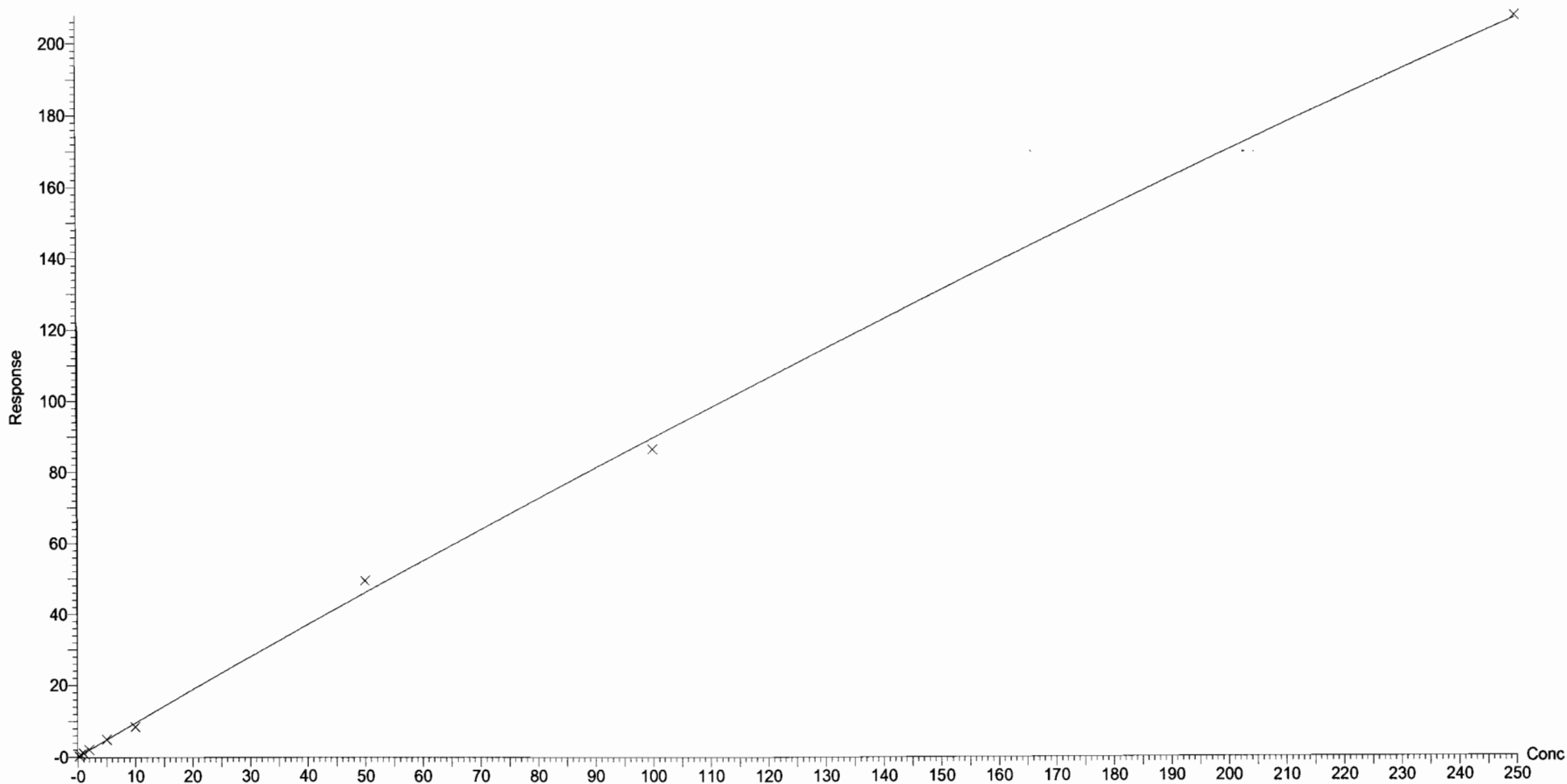
Compound name: PFDA

Coefficient of Determination:  $R^2 = 0.998328$

Calibration curve:  $-0.000443502 * x^2 + 0.938935 * x + 0.125072$

Response type: Internal Std ( Ref 42 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

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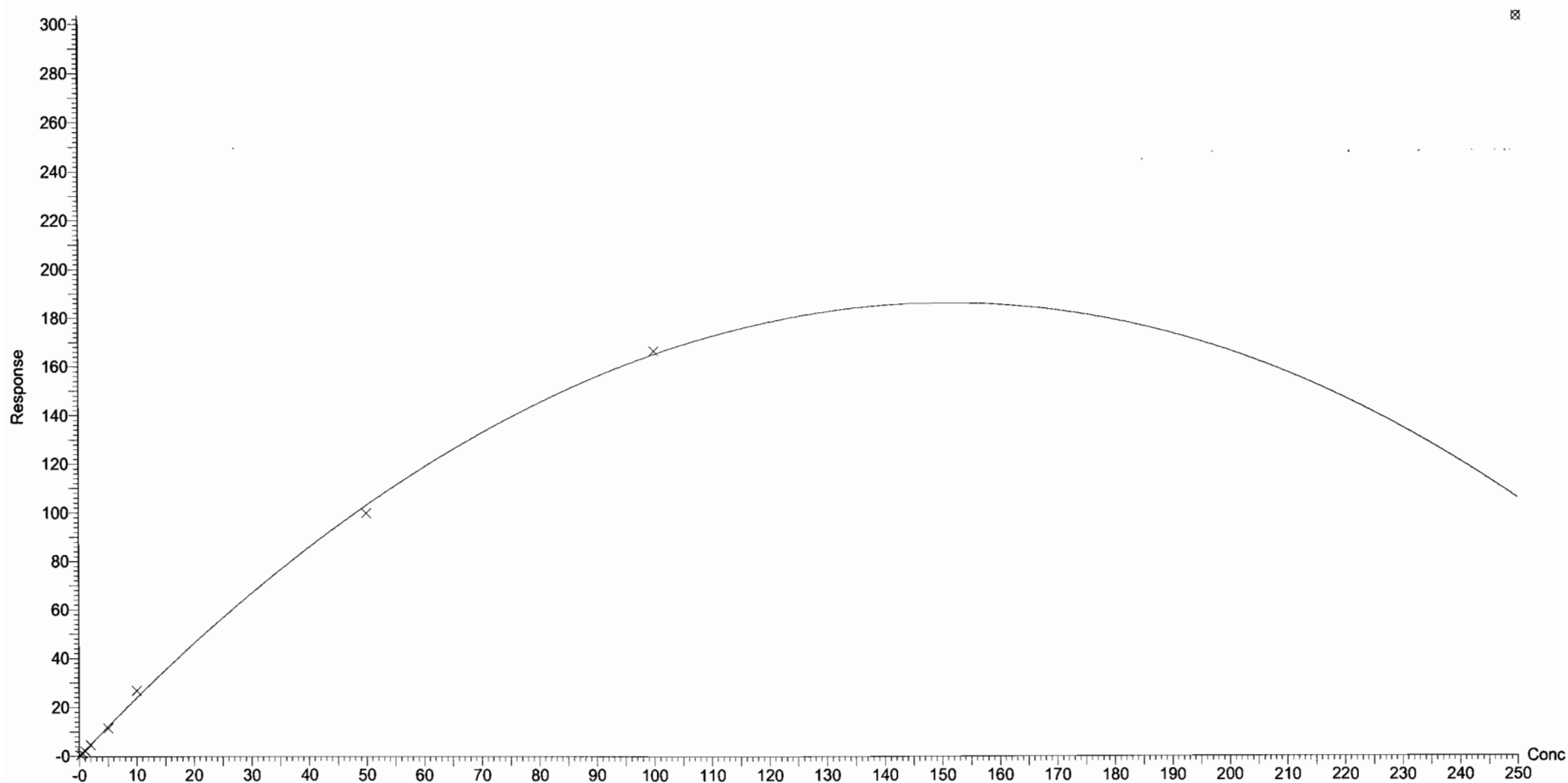
Compound name: 8:2 FTS

Coefficient of Determination:  $R^2 = 0.997637$

Calibration curve:  $-0.00819225 * x^2 + 2.47201 * x + -0.132905$

Response type: Internal Std ( Ref 43 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

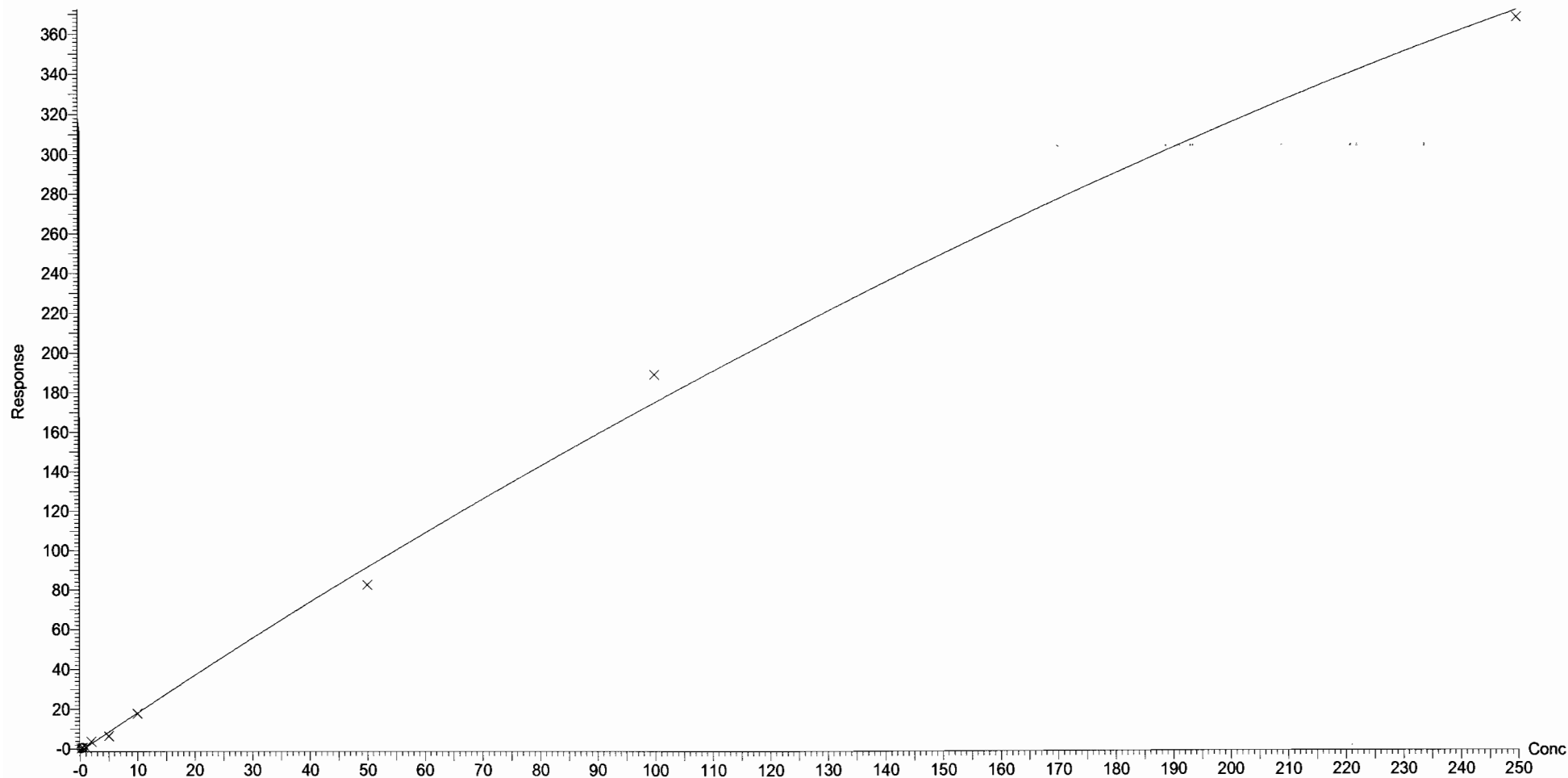
Compound name: N-MeFOSAA

Coefficient of Determination:  $R^2 = 0.995207$

Calibration curve:  $-0.00178252 * x^2 + 1.9401 * x + -1.17095$

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\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

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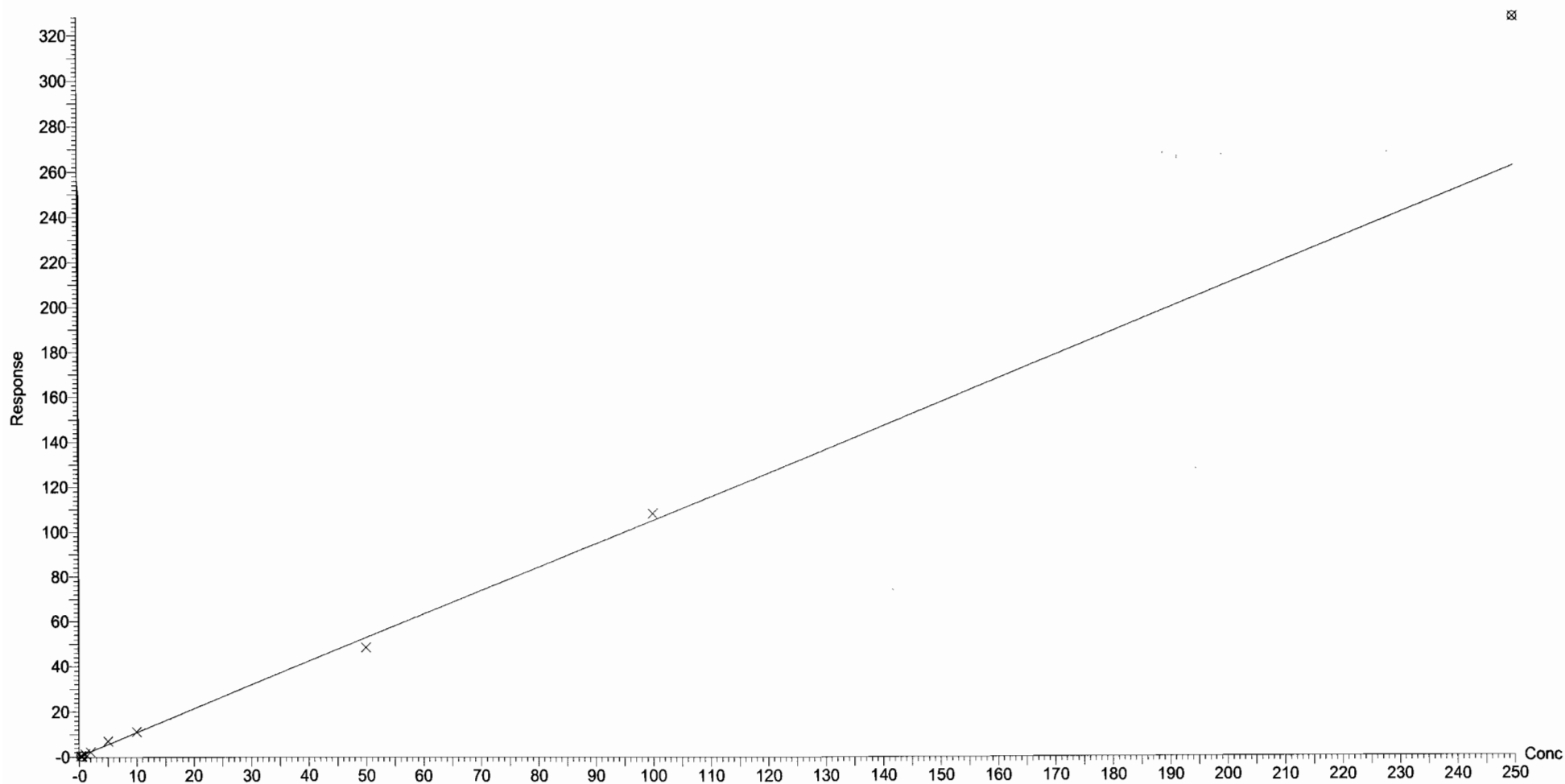
Compound name: N-EtFOSAA

Correlation coefficient:  $r = 0.996882$ ,  $r^2 = 0.993774$

Calibration curve:  $1.0476 * x + 0.344449$

Response type: Internal Std ( Ref 45 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

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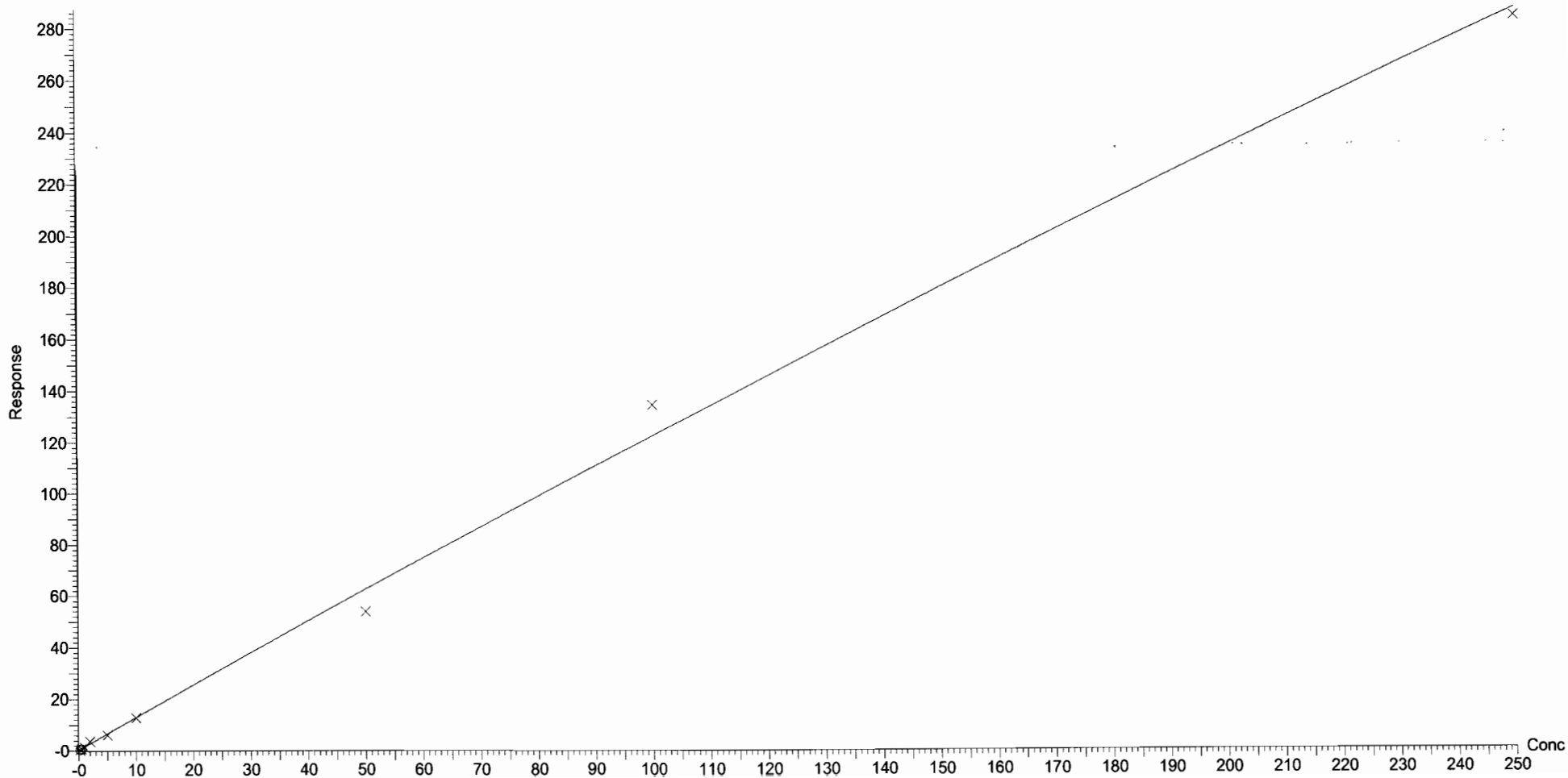
Compound name: PFUdA

Coefficient of Determination:  $R^2 = 0.993805$

Calibration curve:  $-0.000482134 * x^2 + 1.26913 * x + 0.275877$

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\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

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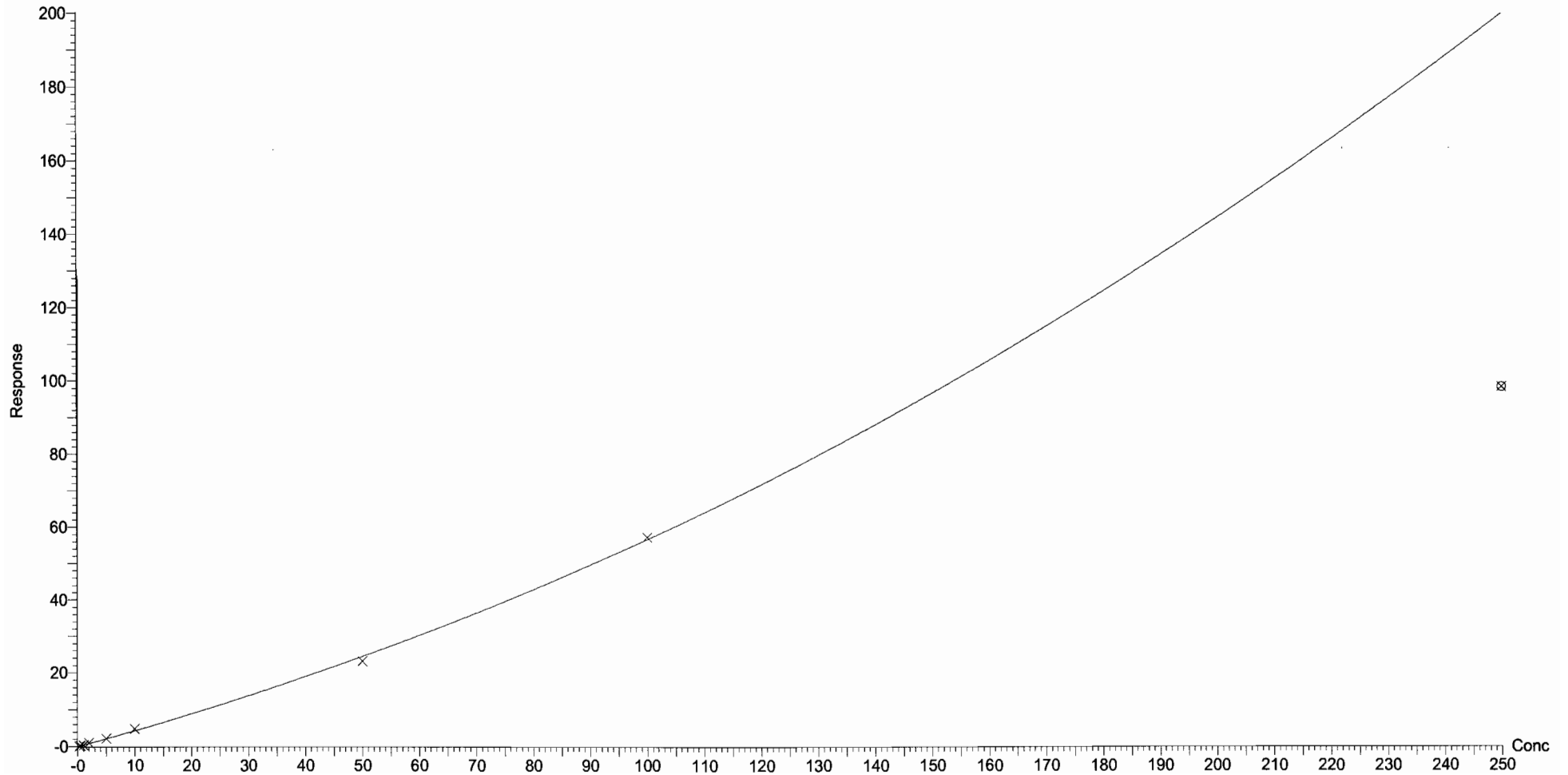
Compound name: PFDS

Coefficient of Determination:  $R^2 = 0.997990$

Calibration curve:  $0.00156078 * x^2 + 0.410303 * x + 0.0239655$

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



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Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

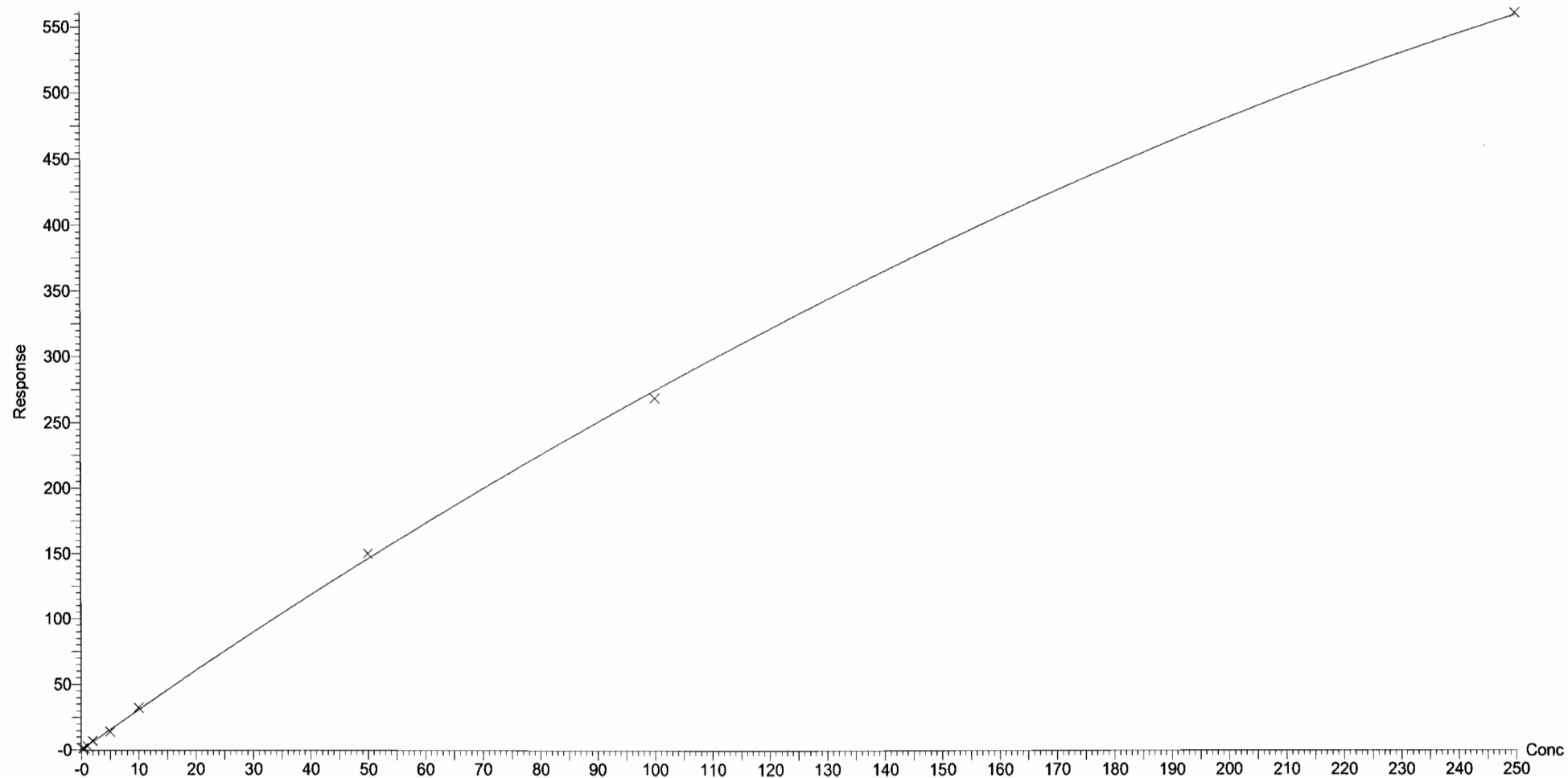
Compound name: PFDoA

Coefficient of Determination:  $R^2 = 0.999297$

Calibration curve:  $-0.00336988 * x^2 + 3.08327 * x + 0.235388$

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

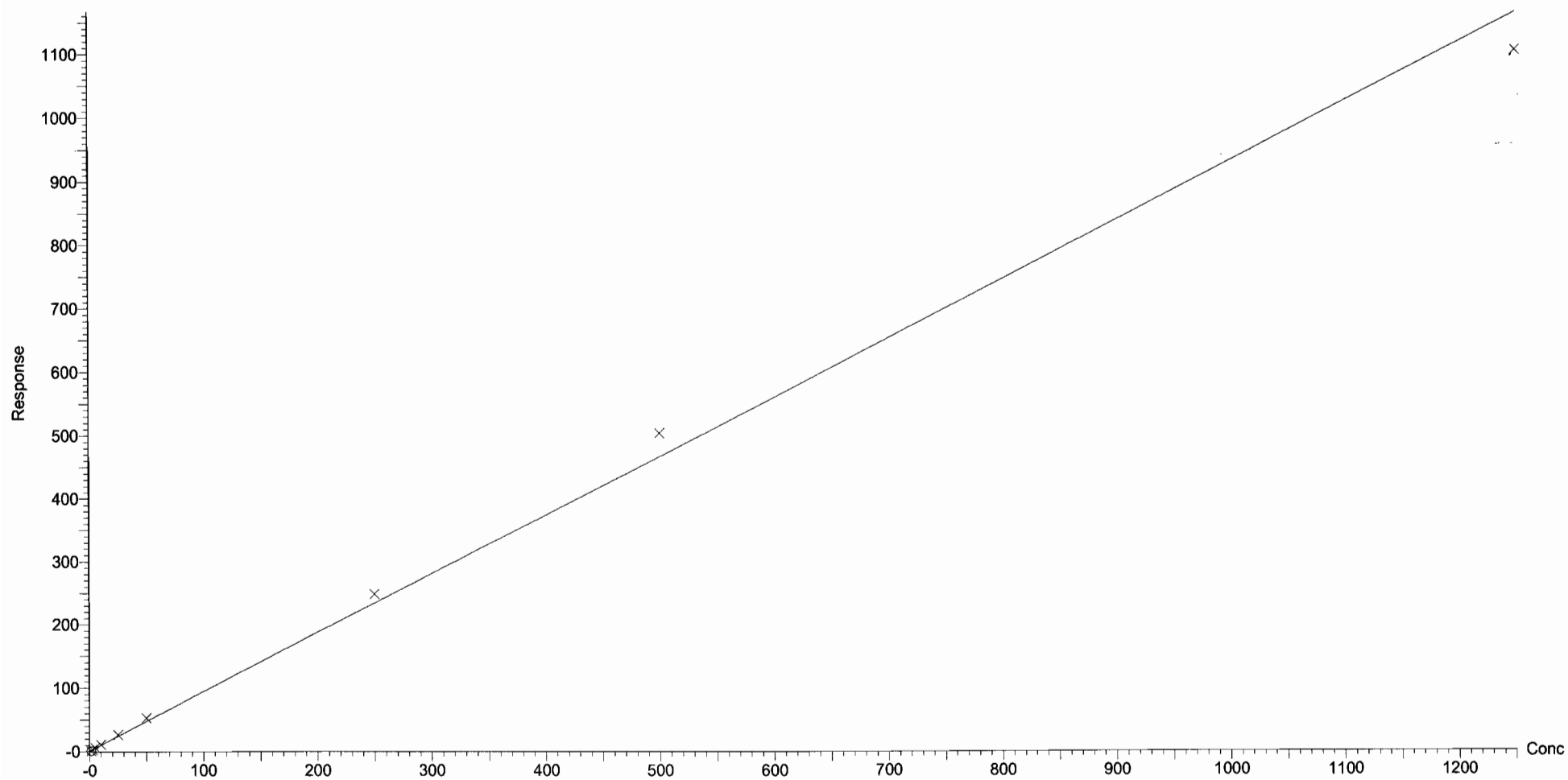
Compound name: N-MeFOSA

Correlation coefficient:  $r = 0.997855$ ,  $r^2 = 0.995715$

Calibration curve:  $0.932675 * x + 0.874923$

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\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

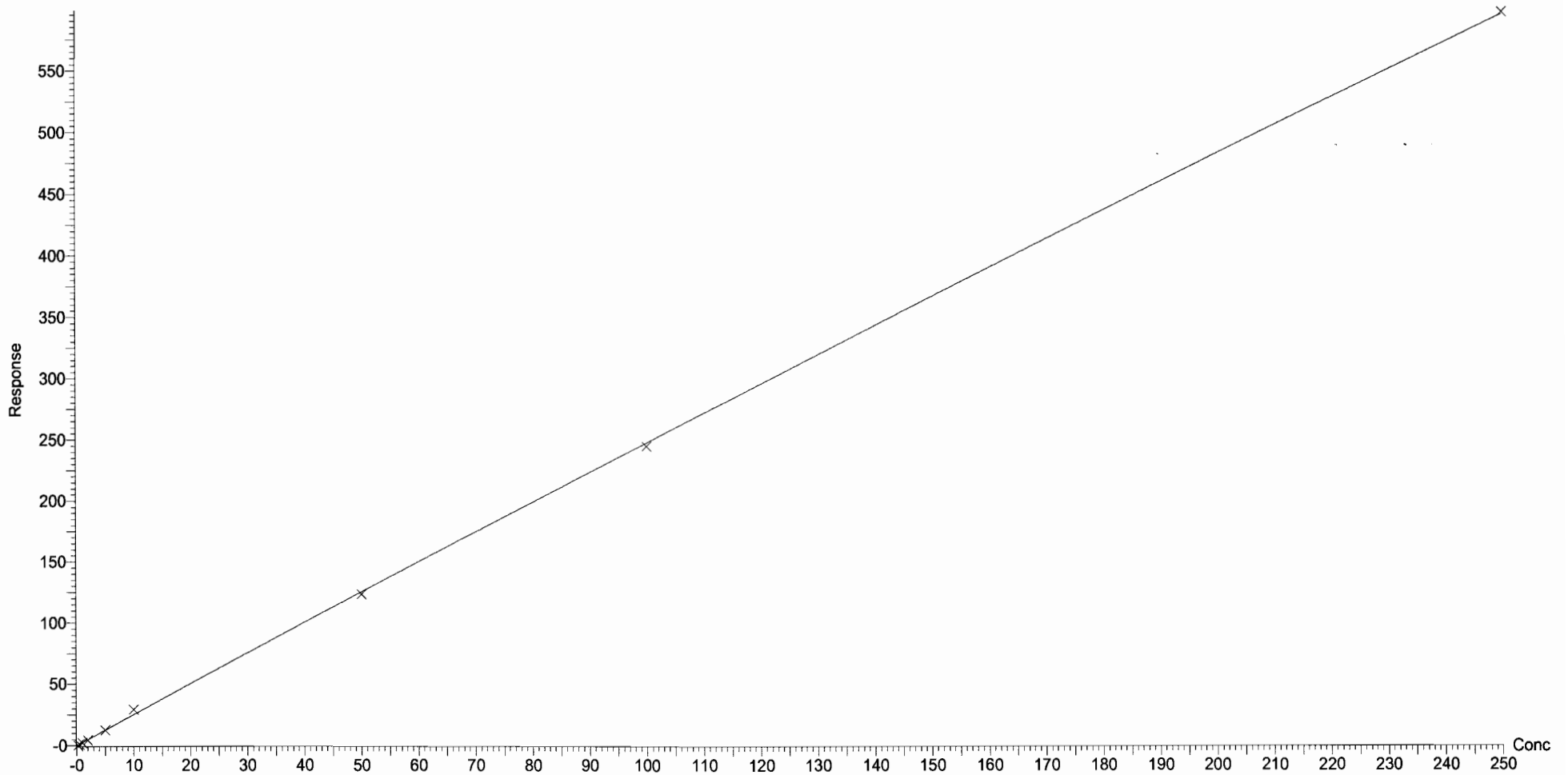
Compound name: PFTTrDA

Coefficient of Determination:  $R^2 = 0.999156$

Calibration curve:  $-0.000627584 * x^2 + 2.54423 * x + -0.12097$

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

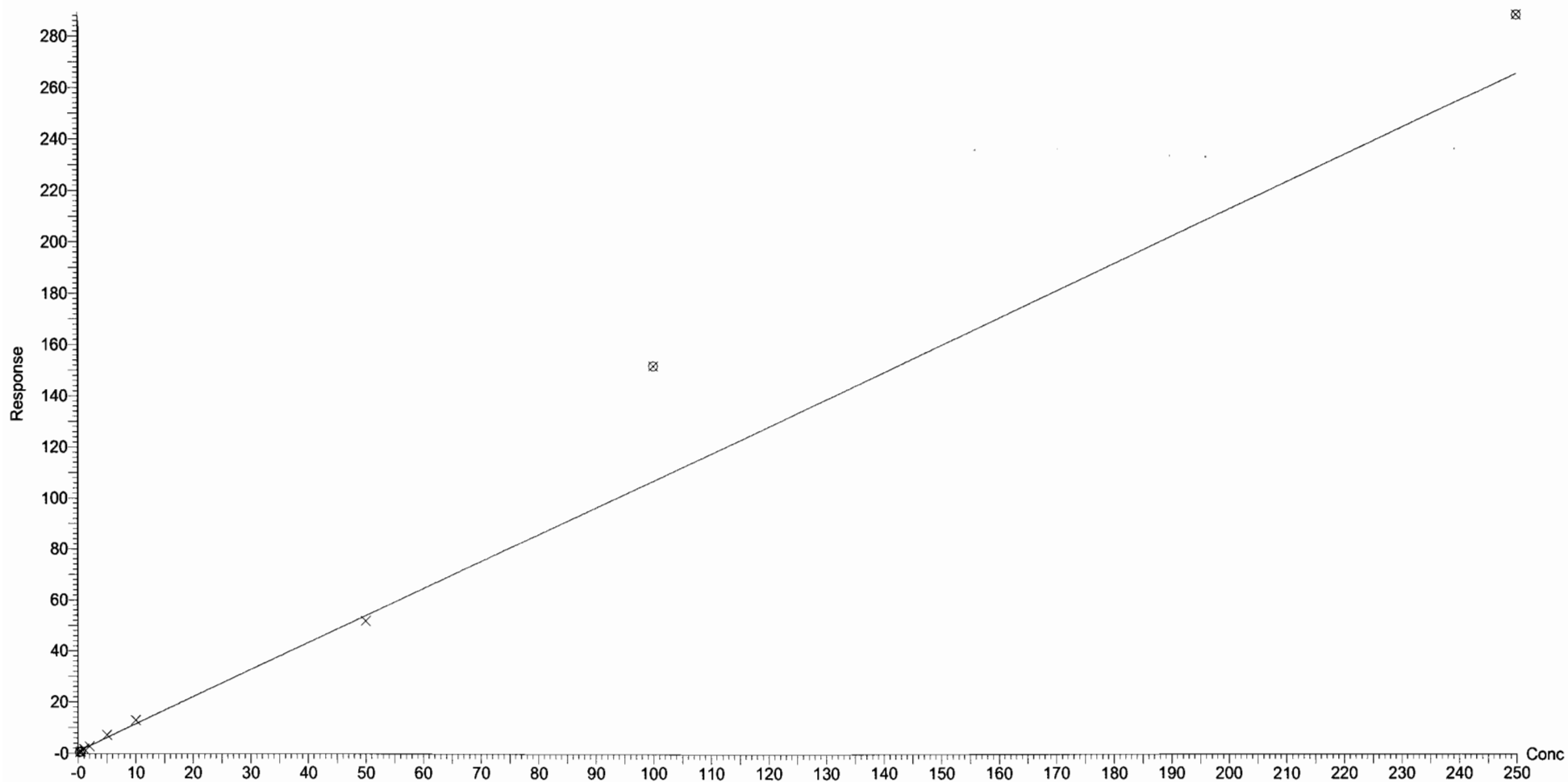
Compound name: PFTeDA

Correlation coefficient:  $r = 0.995610$ ,  $r^2 = 0.991239$

Calibration curve:  $1.06175 * x + 0.81363$

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\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

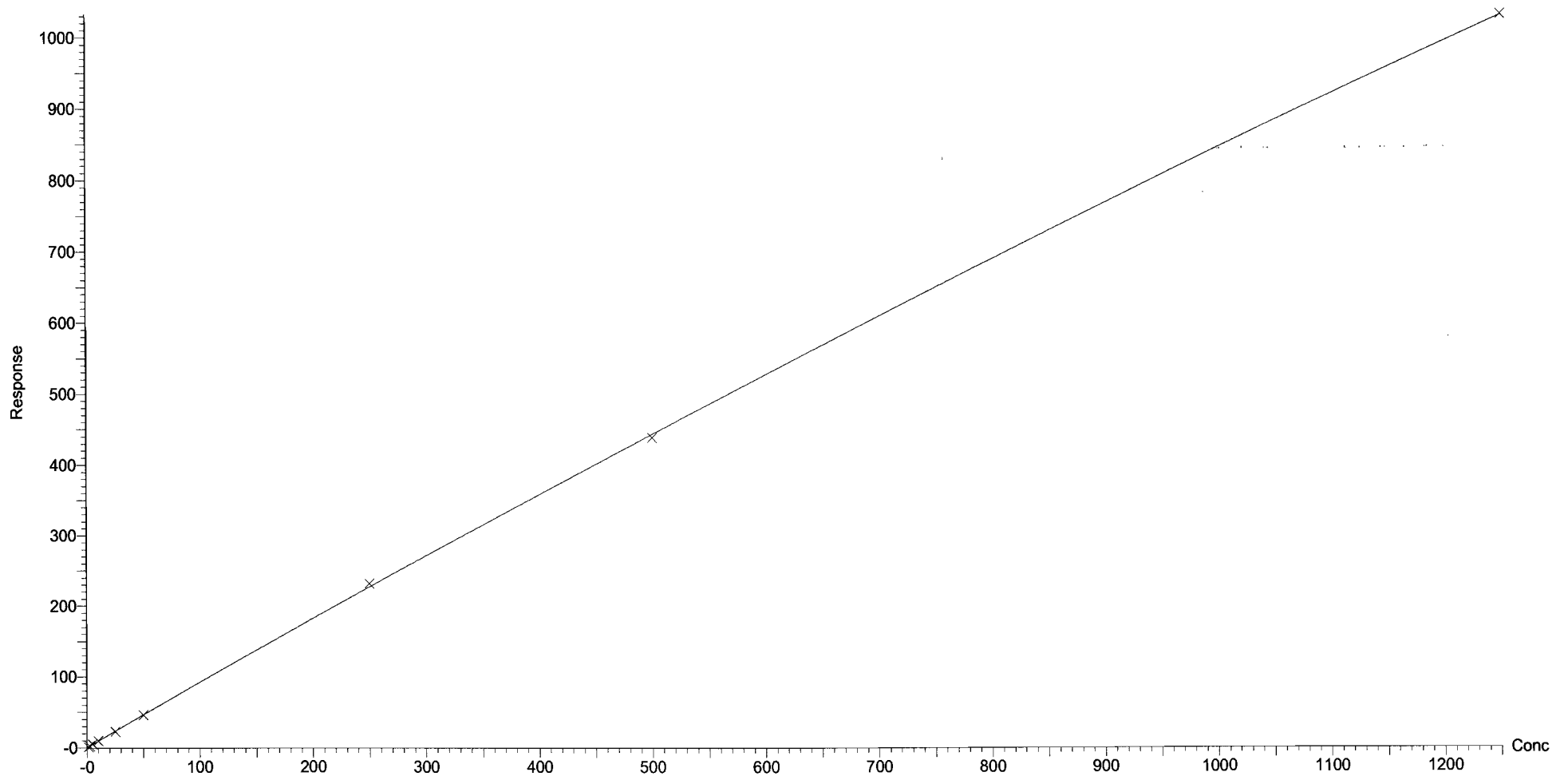
Compound name: N-EtFOSA

Coefficient of Determination:  $R^2 = 0.999850$

Calibration curve:  $-8.12911e-005 * x^2 + 0.92708 * x + 0.232163$

Response type: Internal Std ( Ref 50 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None





Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

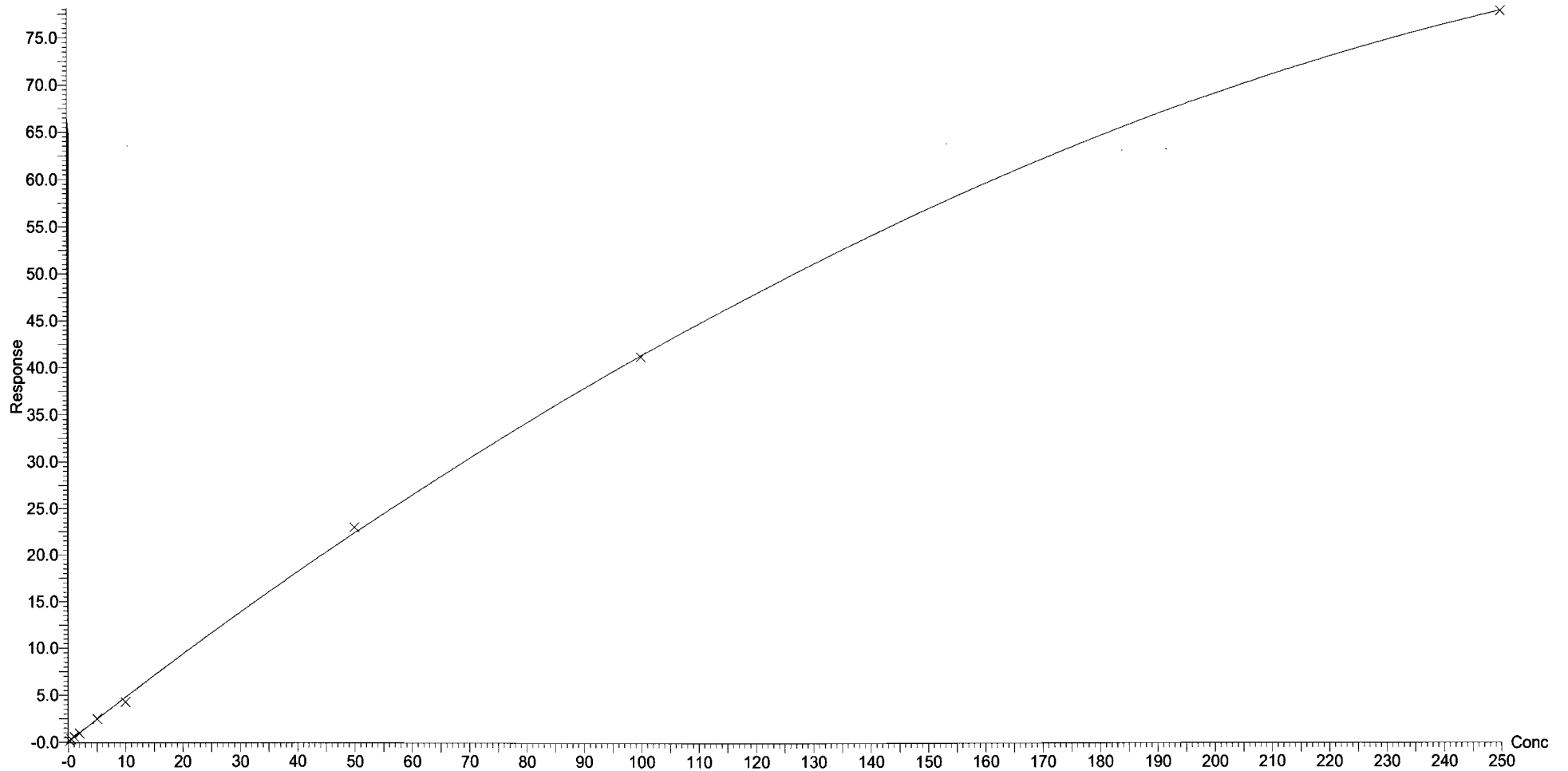
Compound name: PFHxDA

Coefficient of Determination:  $R^2 = 0.999121$

Calibration curve:  $-0.000672199 * x^2 + 0.480206 * x + 0.0498191$

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

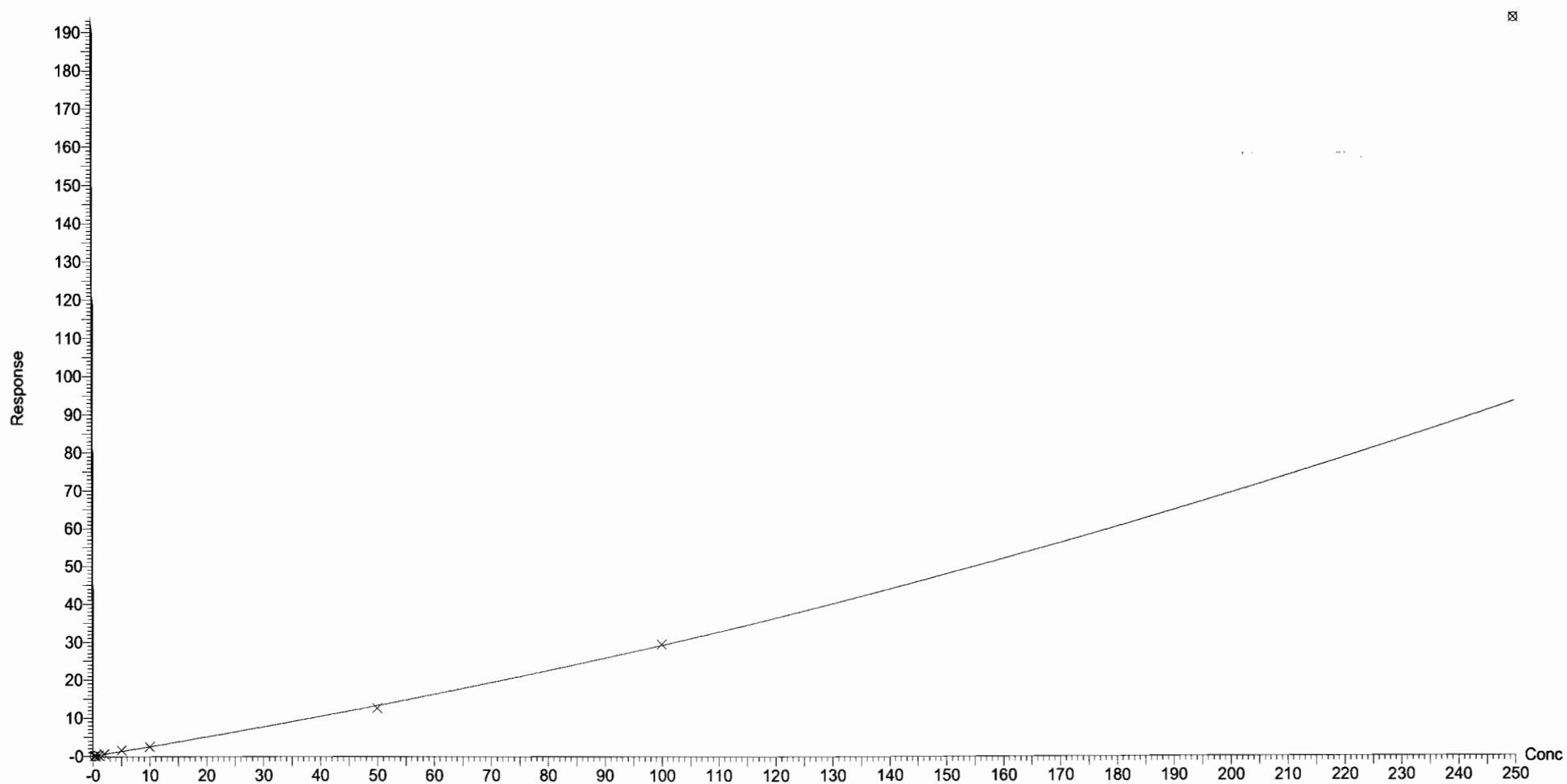
Compound name: PFODA

Coefficient of Determination:  $R^2 = 0.996574$

Calibration curve:  $0.000549065 * x^2 + 0.236117 * x + 0.0599137$

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

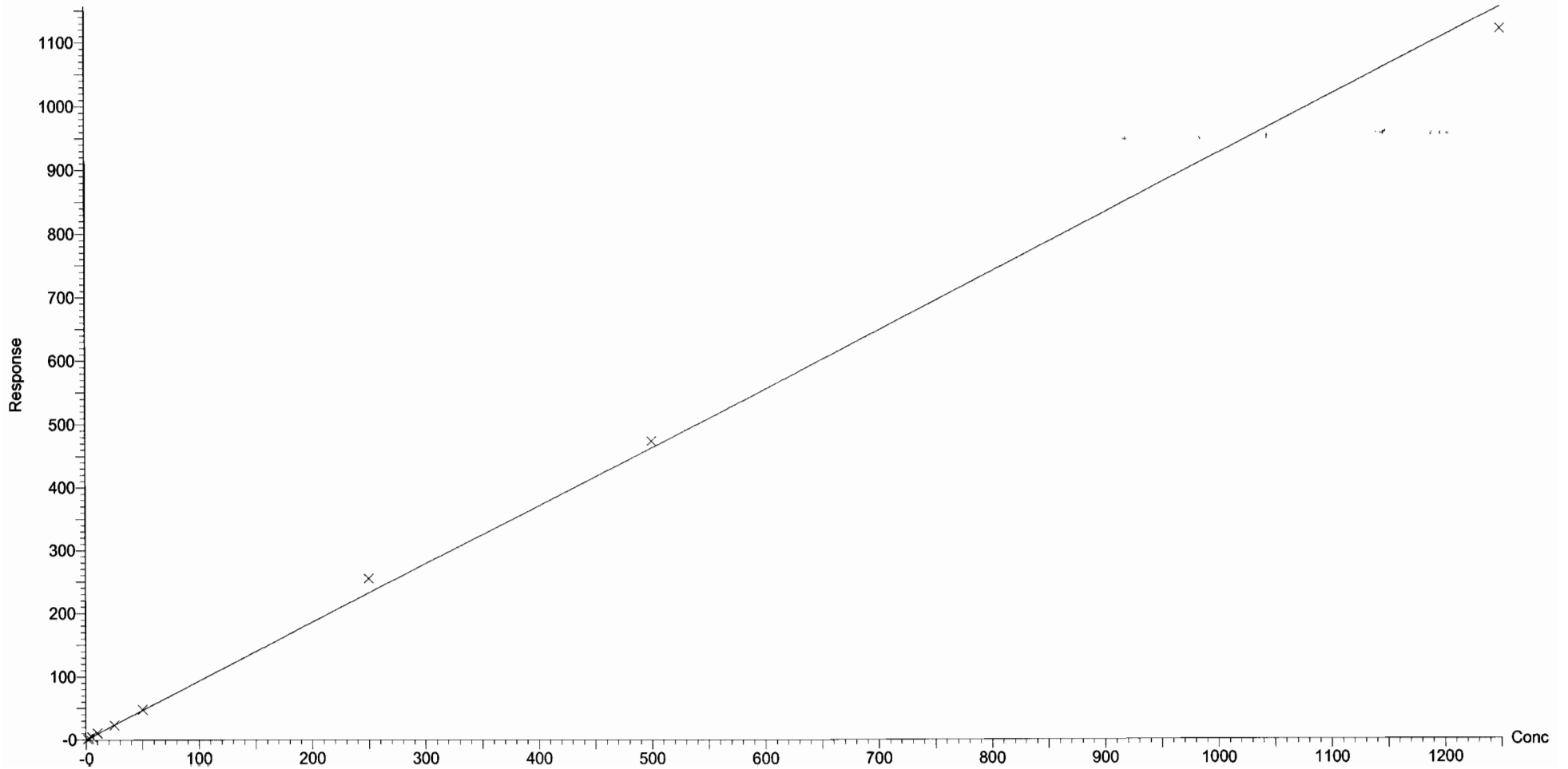
Compound name: N-MeFOSE

Correlation coefficient:  $r = 0.999003$ ,  $r^2 = 0.998008$

Calibration curve:  $0.925566 * x + 0.236529$

Response type: Internal Std ( Ref 52 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

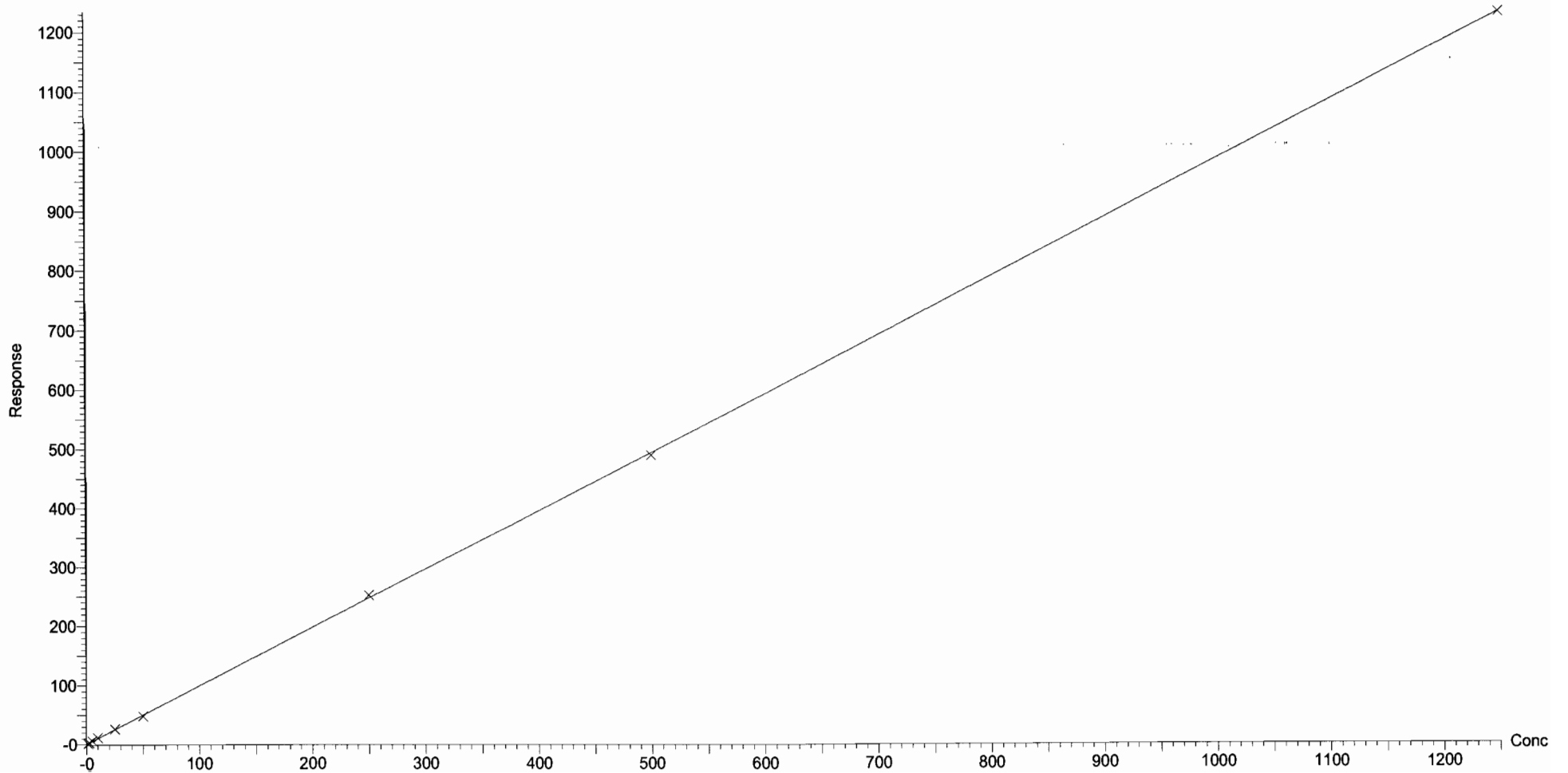


Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 15:39:16 Pacific Standard Time

Printed: Friday, November 17, 2017 15:42:45 Pacific Standard Time

Compound name: N-EtFOSE  
Correlation coefficient:  $r = 0.999870$ ,  $r^2 = 0.999741$   
Calibration curve:  $0.986962 * x + 0.587953$   
Response type: Internal Std ( Ref 53 ), Area \* ( IS Conc. / IS Area )  
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

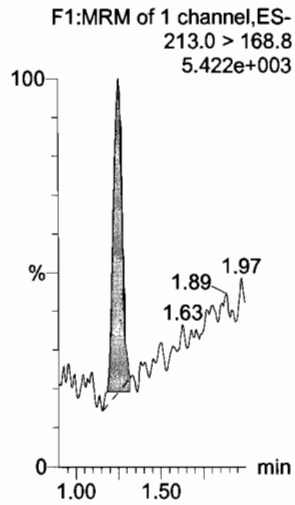
Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

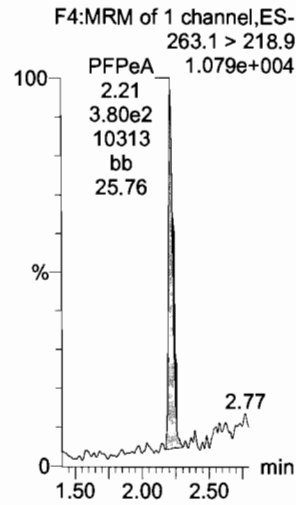
Calibration: U:\Q4.PRO\CurveDB\11-16-TEST-NEW.cdb 17 Nov 2017 10:20:32

Name: 171116M3\_2, Date: 16-Nov-2017, Time: 16:31:18, ID: ST171116M3-1 PFC CS-2 17K0830, Description: PFC CS-2 17K0830

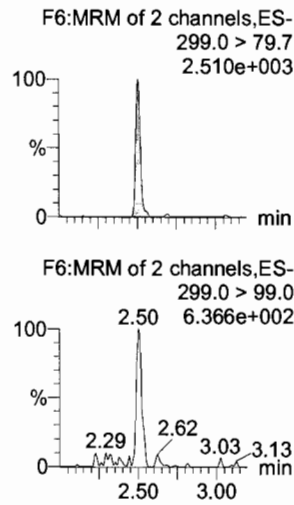
**PFBA**



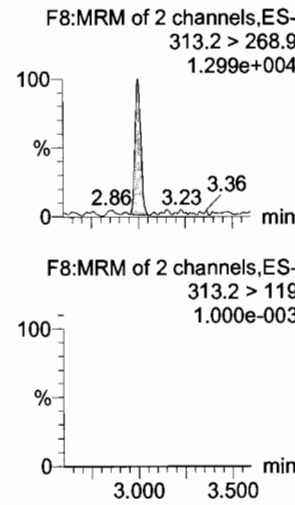
**PFPeA**



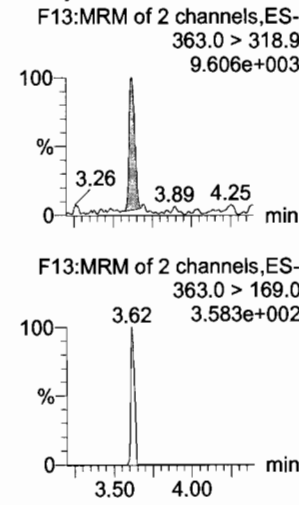
**PFBS**



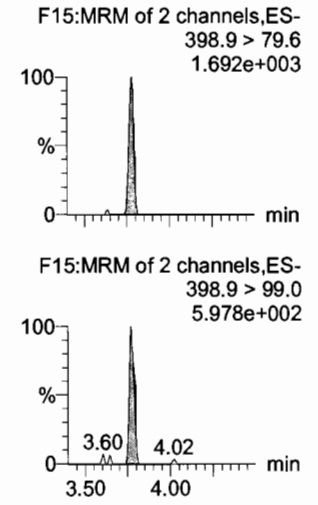
**PFHxA**



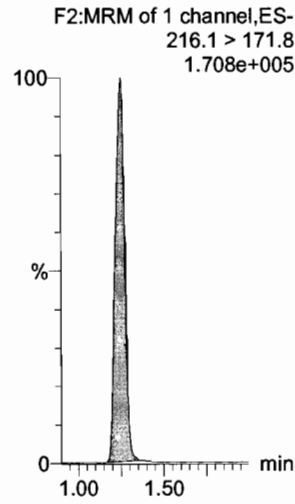
**PFHpA**



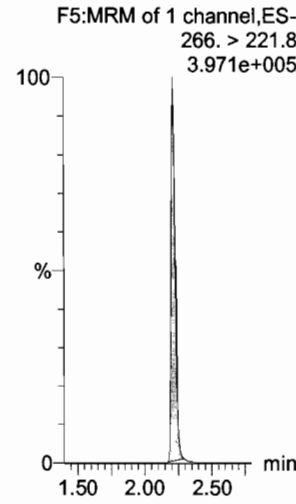
**L-PFHxS**



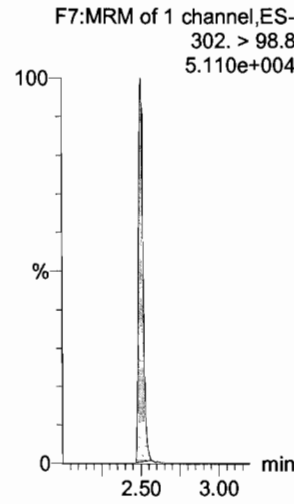
**13C3-PFBA**



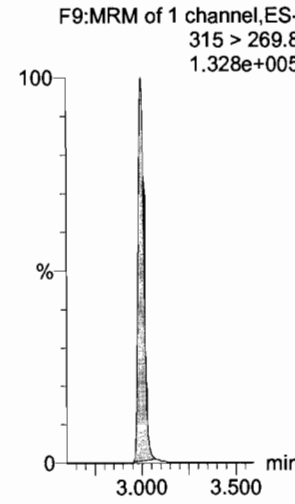
**13C3-PFPeA**



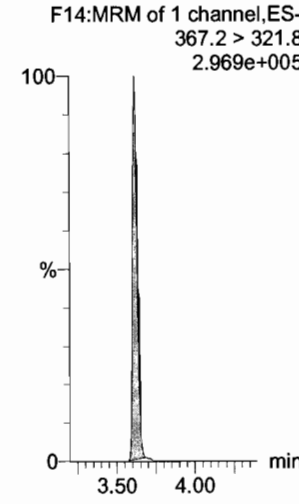
**13C3-PFBS**



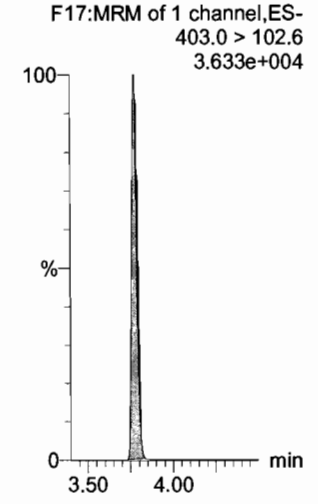
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

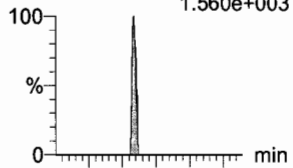
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_2, Date: 16-Nov-2017, Time: 16:31:18, ID: ST171116M3-1 PFC CS-2 17K0830, Description: PFC CS-2 17K0830

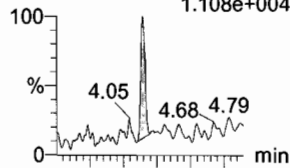
6:2 FTS

F21:MRM of 2 channels,ES-  
427.1 > 407  
1.560e+003



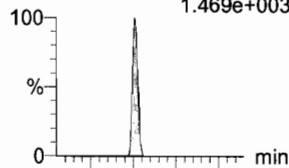
L-PFOA

F18:MRM of 2 channels,ES-  
413 > 368.7  
1.108e+004



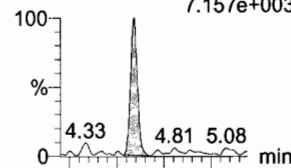
PFHpS

F23:MRM of 2 channels,ES-  
449 > 80.0  
1.469e+003



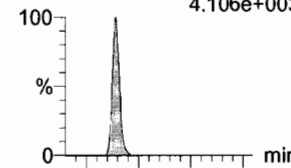
PFNA

F24:MRM of 2 channels,ES-  
463.0 > 418.8  
7.157e+003



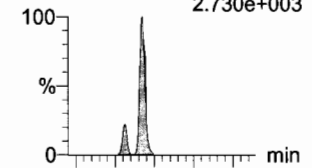
PFOSA

F27:MRM of 2 channels,ES-  
498.1 > 77.8  
4.106e+003

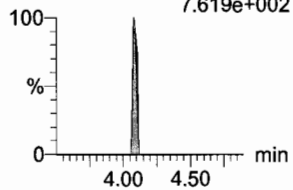


L-PFOS

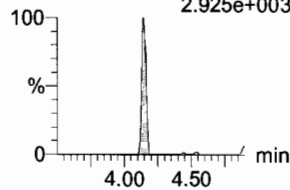
F29:MRM of 2 channels,ES-  
499 > 79.9  
2.730e+003



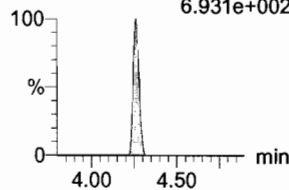
F21:MRM of 2 channels,ES-  
427.1 > 80  
7.619e+002



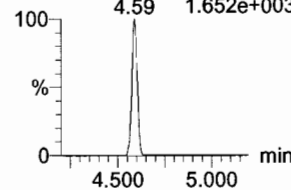
F18:MRM of 2 channels,ES-  
413 > 169  
2.925e+003



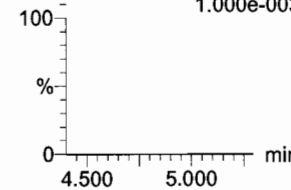
F23:MRM of 2 channels,ES-  
449 > 98.7  
6.931e+002



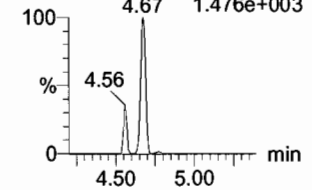
F24:MRM of 2 channels,ES-  
463.0 > 219.0  
1.652e+003



F27:MRM of 2 channels,ES-  
498.1 > 478  
1.000e-003

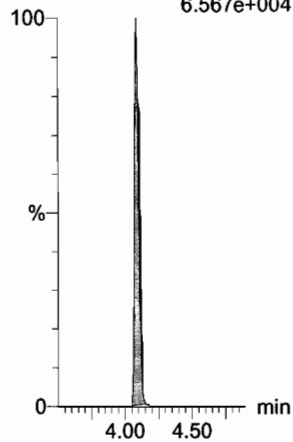


F29:MRM of 2 channels,ES-  
499 > 99  
1.476e+003



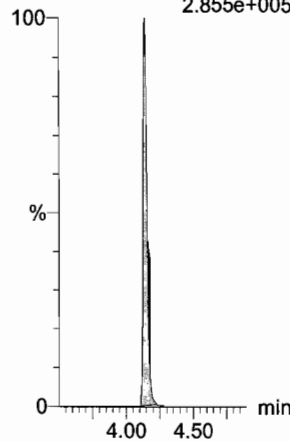
13C2-6:2 FTS

F22:MRM of 1 channel,ES-  
429.1 > 408.9  
6.567e+004



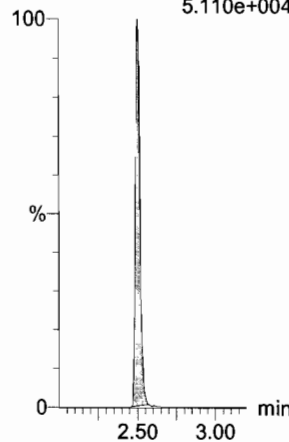
13C2-PFOA

F19:MRM of 1 channel,ES-  
414.9 > 369.7  
2.855e+005



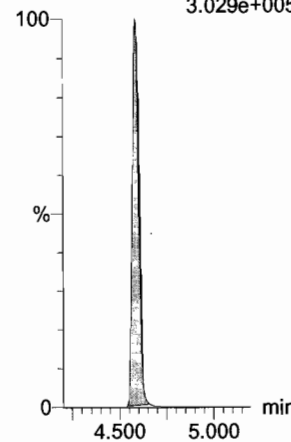
13C3-PFBS

F7:MRM of 1 channel,ES-  
302. > 98.8  
5.110e+004



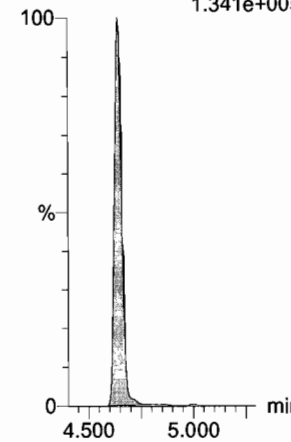
13C5-PFNA

F25:MRM of 1 channel,ES-  
468.2 > 422.9  
3.029e+005



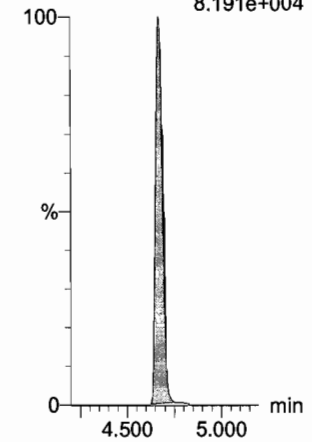
13C8-PFOA

F31:MRM of 1 channel,ES-  
506.1 > 77.7  
1.341e+005



13C8-PFOS

F32:MRM of 1 channel,ES-  
507.0 > 79.9  
8.191e+004



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

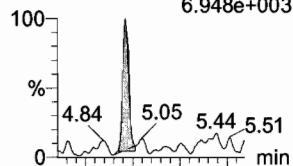
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

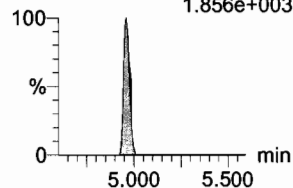
Name: 171116M3\_2, Date: 16-Nov-2017, Time: 16:31:18, ID: ST171116M3-1 PFC CS-2 17K0830, Description: PFC CS-2 17K0830

**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
6.948e+003

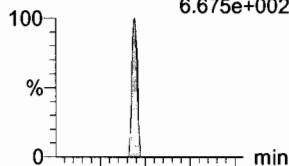


F34:MRM of 2 channels,ES-  
513 > 219  
1.856e+003

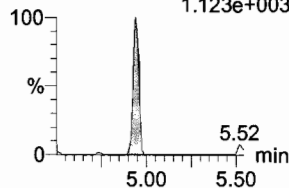


**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
6.675e+002

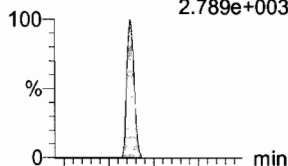


F39:MRM of 2 channels,ES-  
527 > 80  
1.123e+003

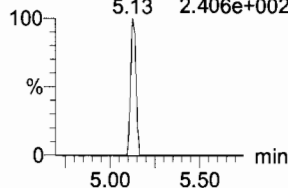


**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
2.789e+003

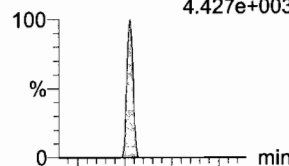


F44:MRM of 2 channels,ES-  
570.1 > 483.0  
2.406e+002

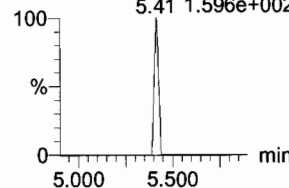


**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
4.427e+003

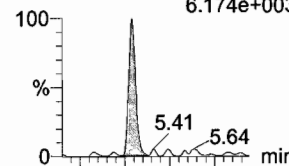


F47:MRM of 2 channels,ES-  
584.2 > 483.0  
1.596e+002

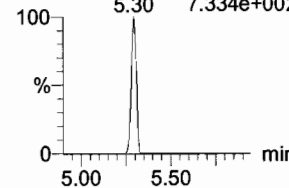


**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
6.174e+003

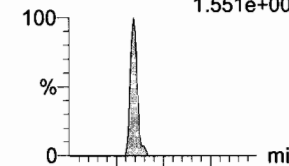


F42:MRM of 2 channels,ES-  
563.0 > 269  
7.334e+002

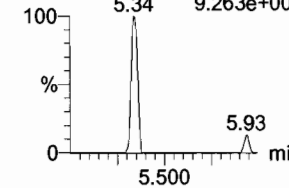


**PFDS**

F49:MRM of 2 channels,ES-  
598.8 > 80  
1.551e+003

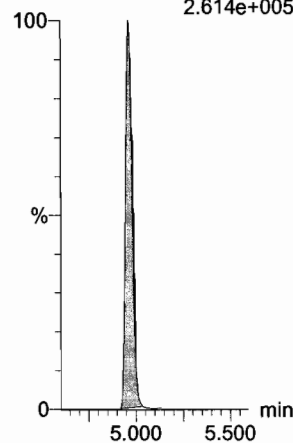


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
9.263e+002



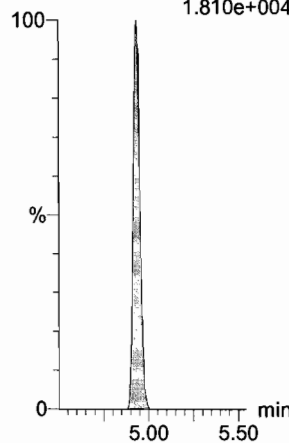
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
2.614e+005



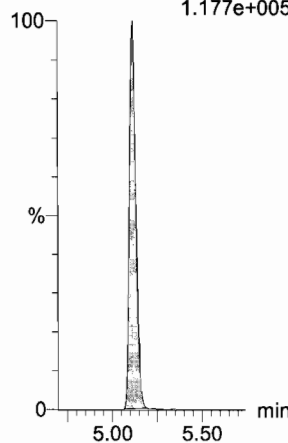
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
1.810e+004



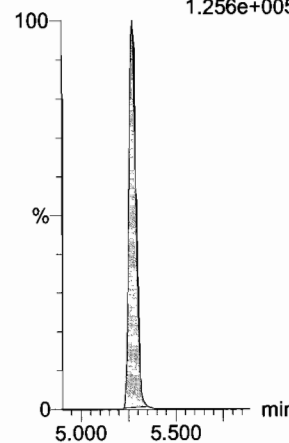
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
1.177e+005



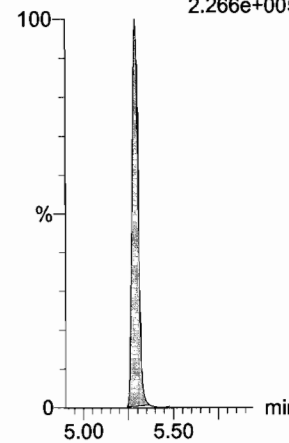
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
1.256e+005



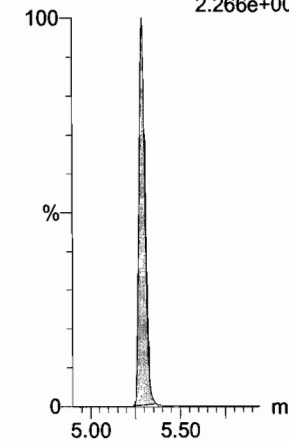
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
2.266e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
2.266e+005



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

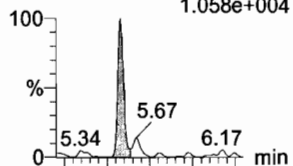
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

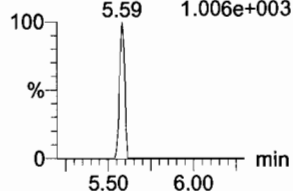
Name: 171116M3\_2, Date: 16-Nov-2017, Time: 16:31:18, ID: ST171116M3-1 PFC CS-2 17K0830, Description: PFC CS-2 17K0830

**PFDoA**

F50:MRM of 2 channels,ES-  
612.9 > 569.0  
1.058e+004

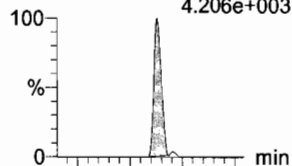


F50:MRM of 2 channels,ES-  
612.9 > 318.8  
1.006e+003

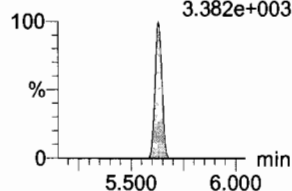


**N-MeFOSA**

F33:MRM of 2 channels,ES-  
512.1 > 168.9  
4.206e+003

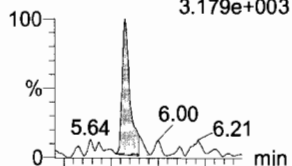


F33:MRM of 2 channels,ES-  
512.1 > 219  
3.382e+003

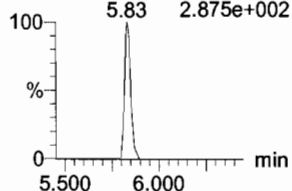


**PFTrDA**

F56:MRM of 2 channels,ES-  
662.9 > 618.9  
3.179e+003

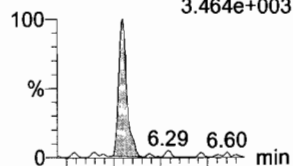


F56:MRM of 2 channels,ES-  
662.9 > 319  
2.875e+002

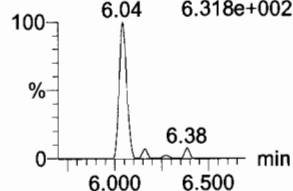


**PFTeDA**

F57:MRM of 2 channels,ES-  
712.9 > 668.8  
3.464e+003

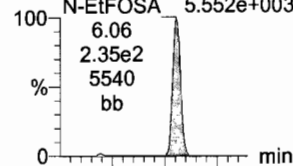


F57:MRM of 2 channels,ES-  
712.9 > 369  
6.318e+002

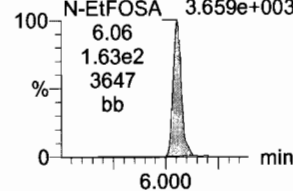


**N-EtFOSA**

F38:MRM of 2 channels,ES-  
526.1 > 168.9  
5.552e+003

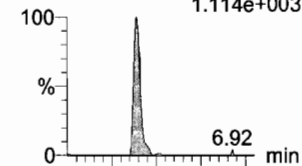


F38:MRM of 2 channels,ES-  
526.1 > 219  
3.659e+003

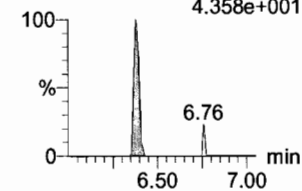


**PFHxDA**

F59:MRM of 2 channels,ES-  
813.1 > 768.6  
1.114e+003

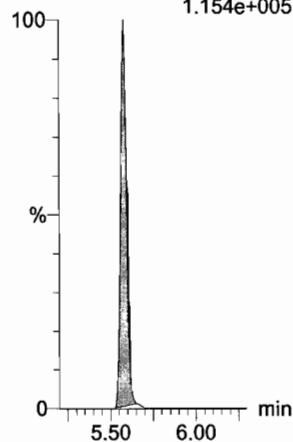


F59:MRM of 2 channels,ES-  
813.1 > 219  
4.358e+001



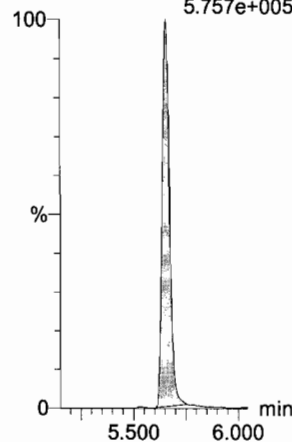
**13C2-PFDoA**

F51:MRM of 1 channel,ES-  
615.0 > 569.7  
1.154e+005



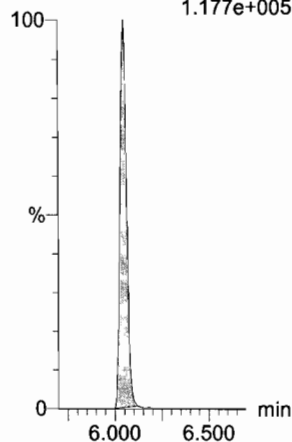
**d3-N-MeFOSA**

F36:MRM of 1 channel,ES-  
515.2 > 168.9  
5.757e+005



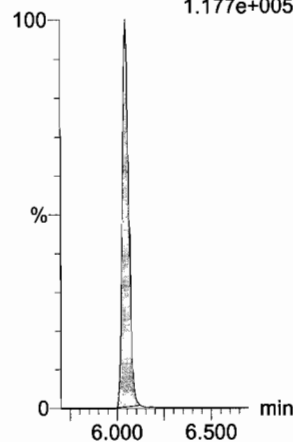
**13C2-PFTeDA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
1.177e+005



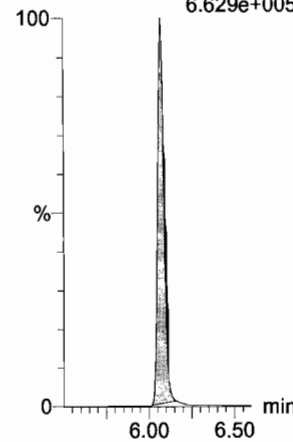
**13C2-PFTeDA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
1.177e+005



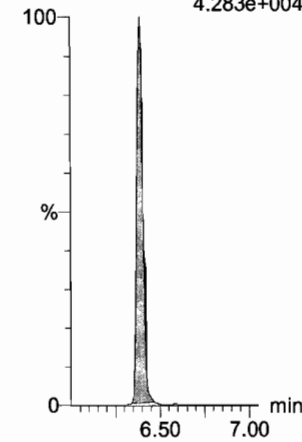
**d5-N-ETFOSA**

F41:MRM of 1 channel,ES-  
531.1 > 168.9  
6.629e+005



**13C2-PFHxDA**

F60:MRM of 1 channel,ES-  
815 > 769.7  
4.283e+004



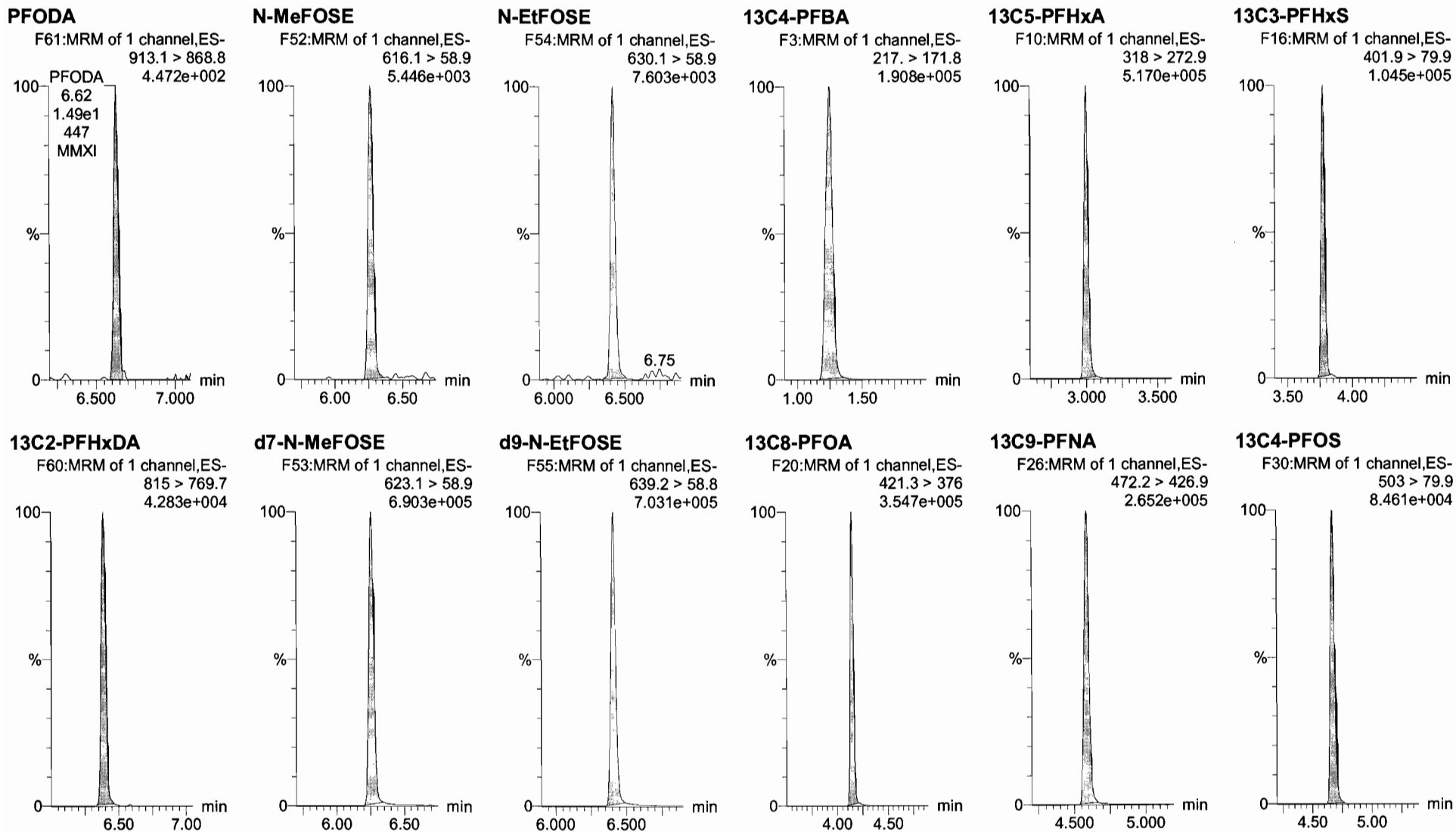


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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_2, Date: 16-Nov-2017, Time: 16:31:18, ID: ST171116M3-1 PFC CS-2 17K0830, Description: PFC CS-2 17K0830



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

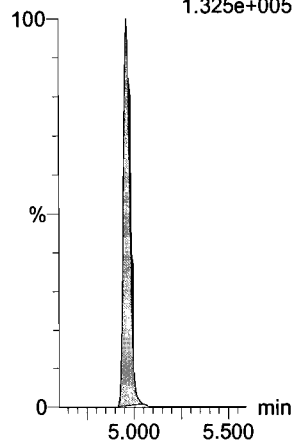
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_2, Date: 16-Nov-2017, Time: 16:31:18, ID: ST171116M3-1 PFC CS-2 17K0830, Description: PFC CS-2 17K0830

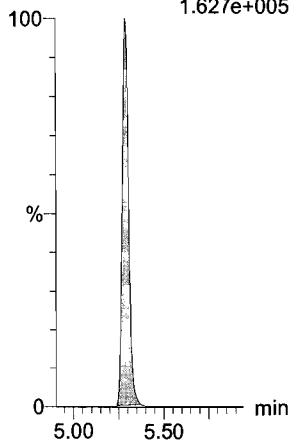
13C6-PFDA

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.325e+005



13C7-PFUdA

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
1.627e+005



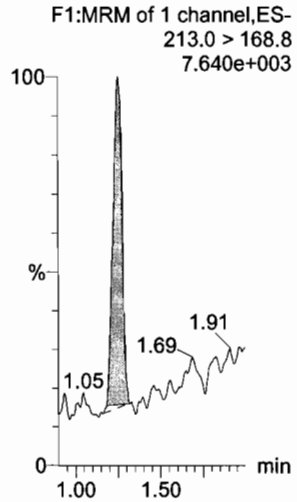
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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

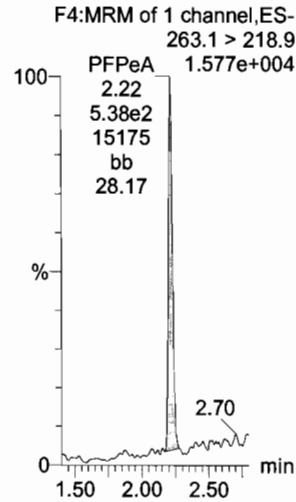
Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_3, Date: 16-Nov-2017, Time: 16:42:29, ID: ST171116M3-2 PFC CS-1 17K0831, Description: PFC CS-1 17K0831

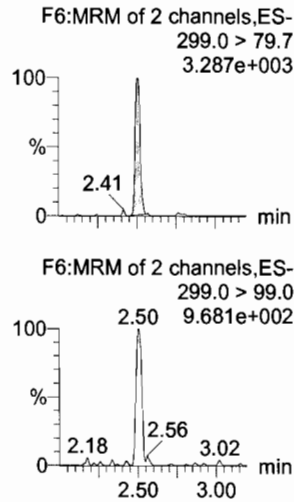
**PFBA**



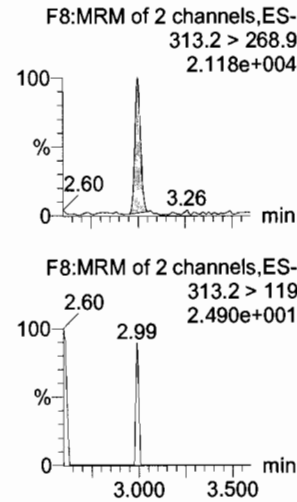
**PFPeA**



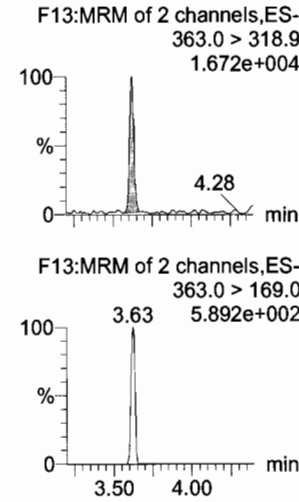
**PFBS**



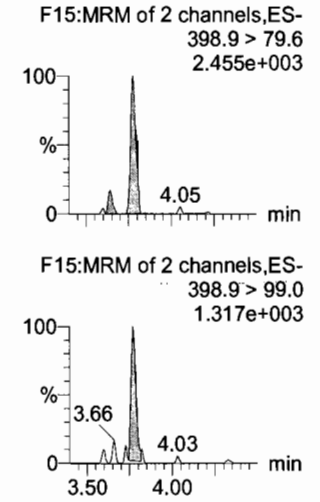
**PFHxA**



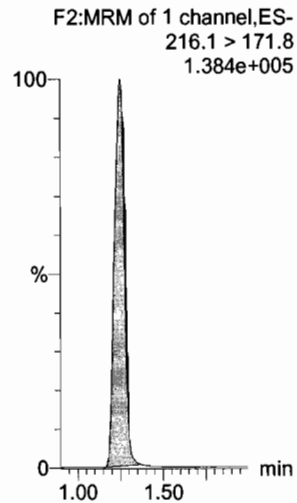
**PFHpA**



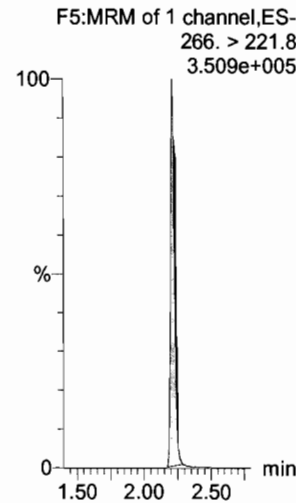
**L-PFHxS**



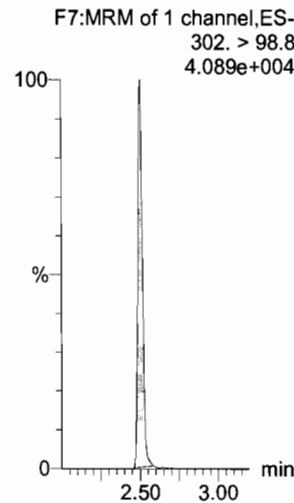
**13C3-PFBA**



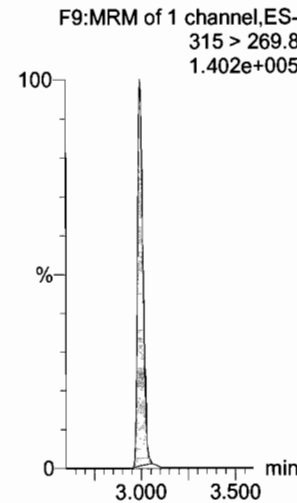
**13C3-PFPeA**



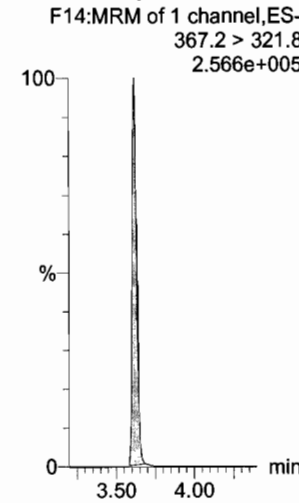
**13C3-PFBS**



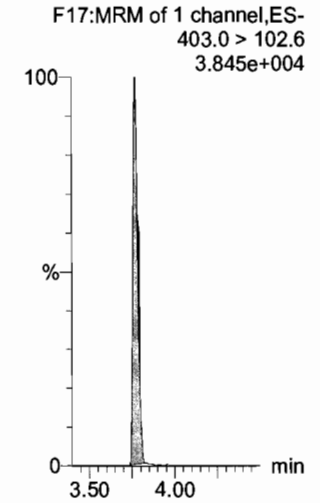
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

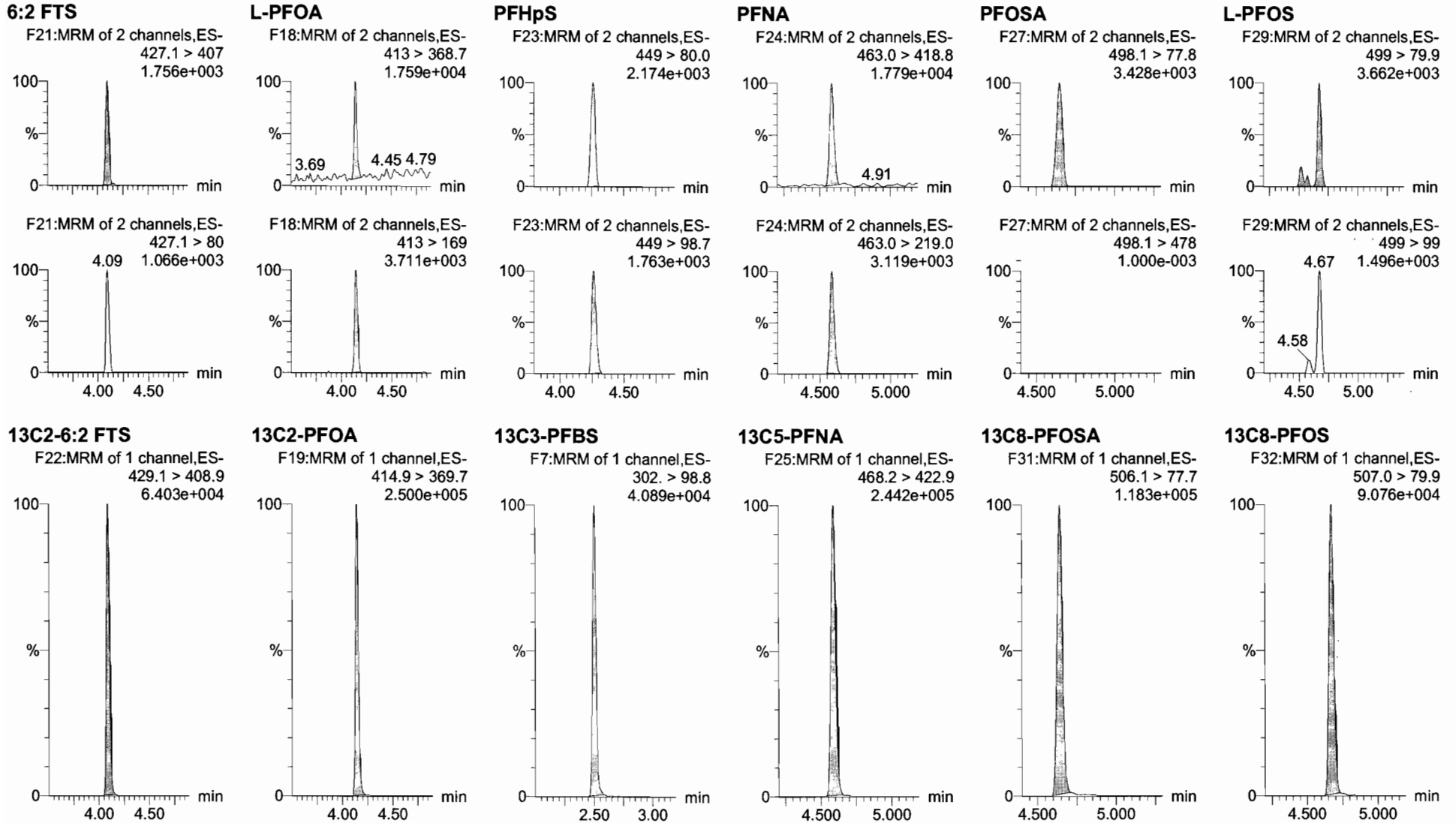


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Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

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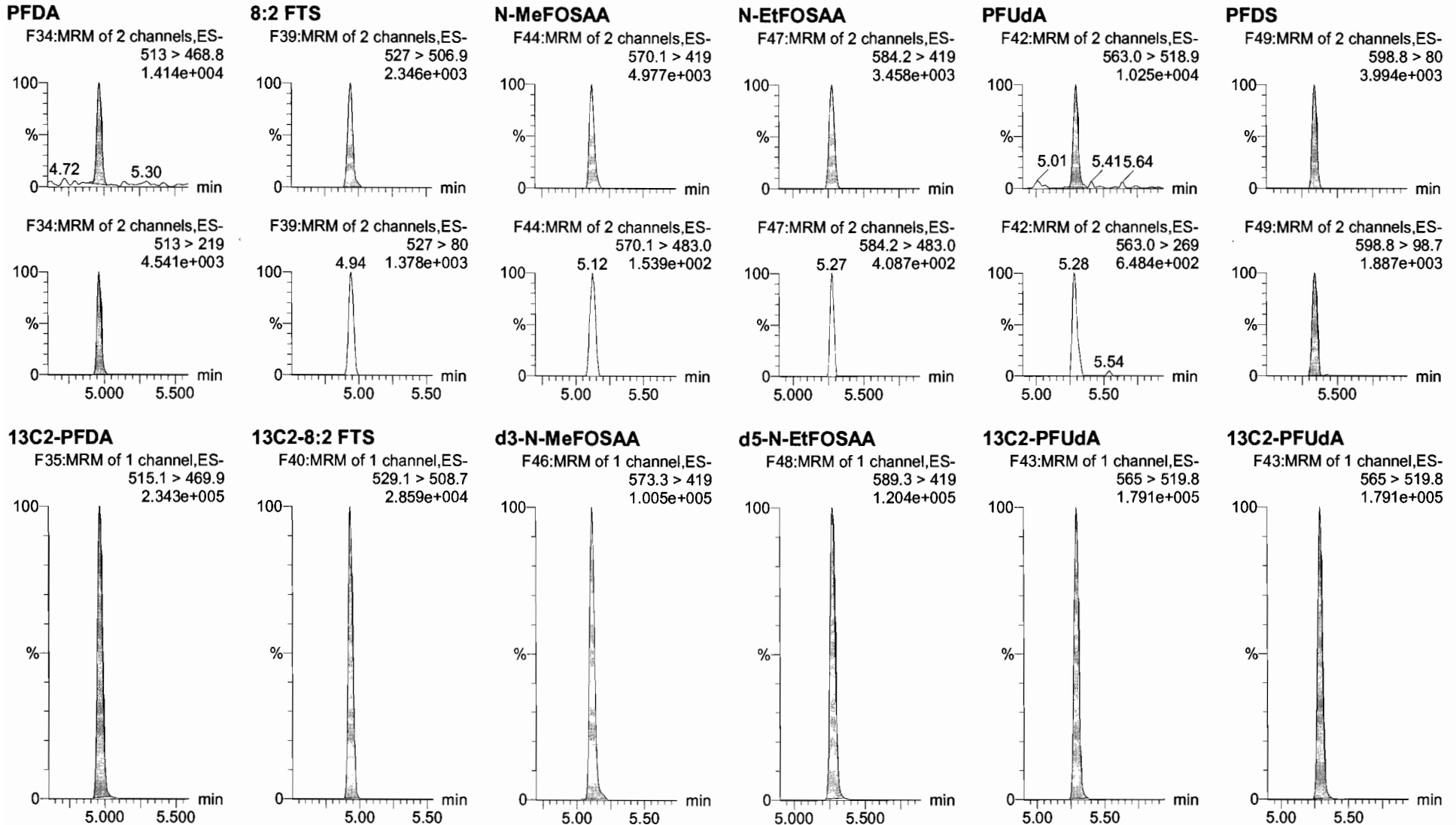


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Name: 171116M3\_3, Date: 16-Nov-2017, Time: 16:42:29, ID: ST171116M3-2 PFC CS-1 17K0831, Description: PFC CS-1 17K0831

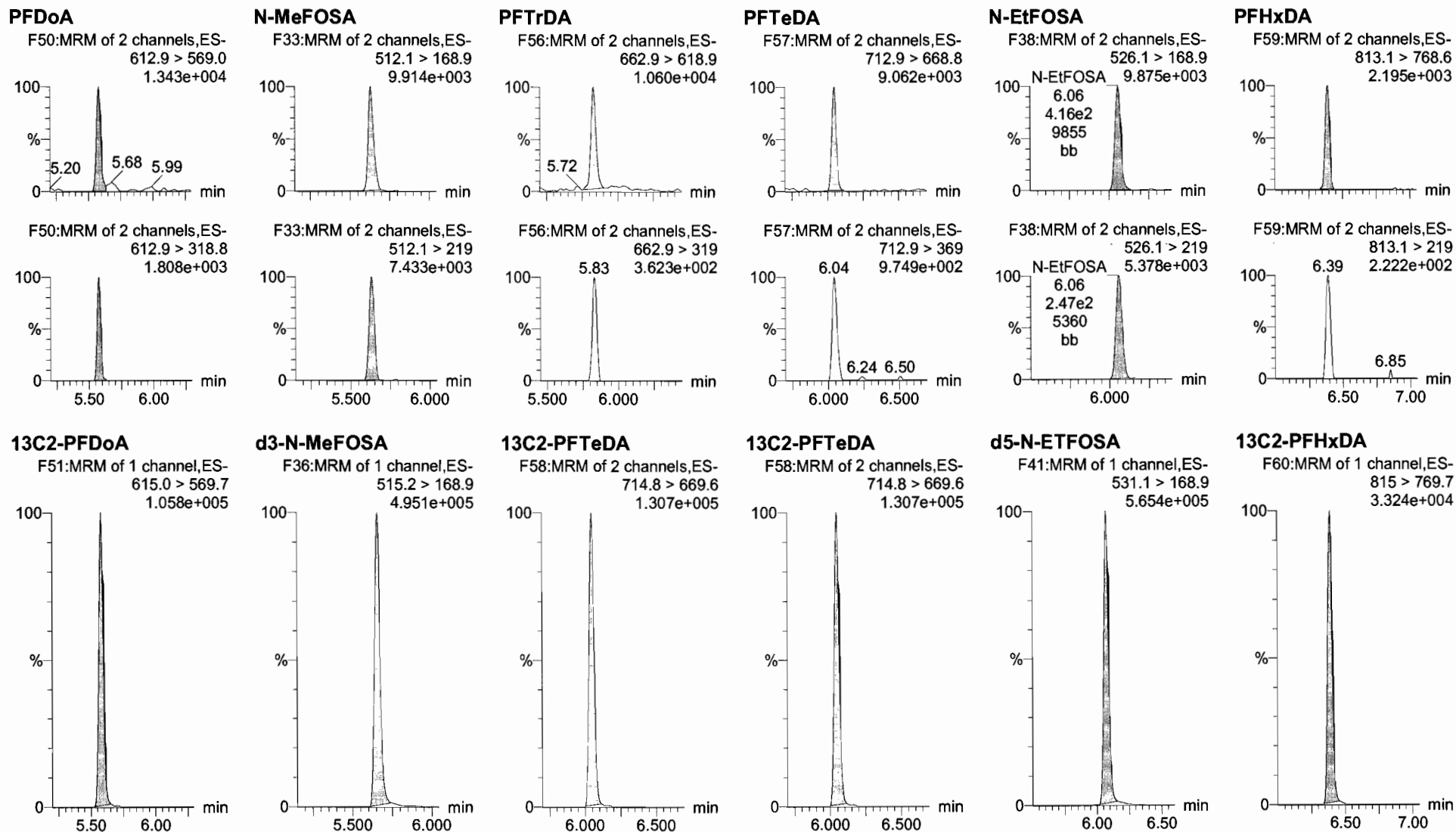


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Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_3, Date: 16-Nov-2017, Time: 16:42:29, ID: ST171116M3-2 PFC CS-1 17K0831, Description: PFC CS-1 17K0831

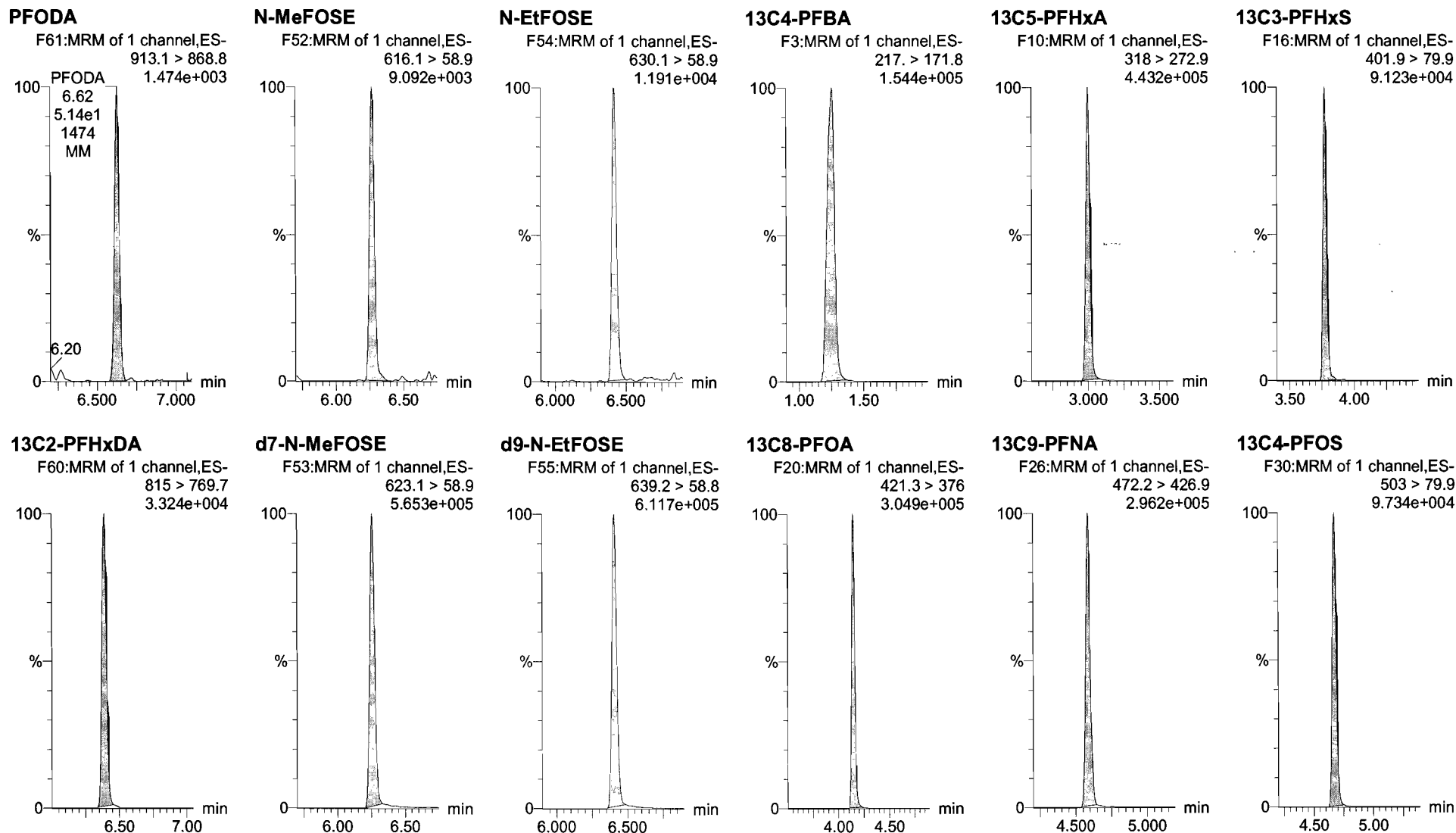


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Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_3, Date: 16-Nov-2017, Time: 16:42:29, ID: ST171116M3-2 PFC CS-1 17K0831, Description: PFC CS-1 17K0831



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

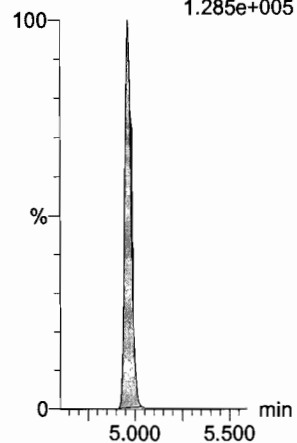
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

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Name: 171116M3\_3, Date: 16-Nov-2017, Time: 16:42:29, ID: ST171116M3-2 PFC CS-1 17K0831, Description: PFC CS-1 17K0831

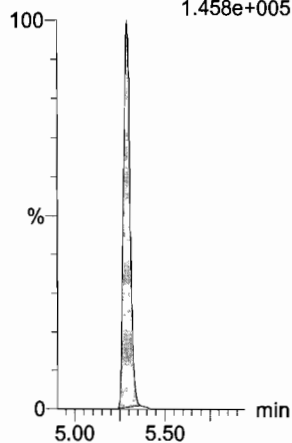
**13C6-PFDA**

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.285e+005



**13C7-PFUdA**

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
1.458e+005

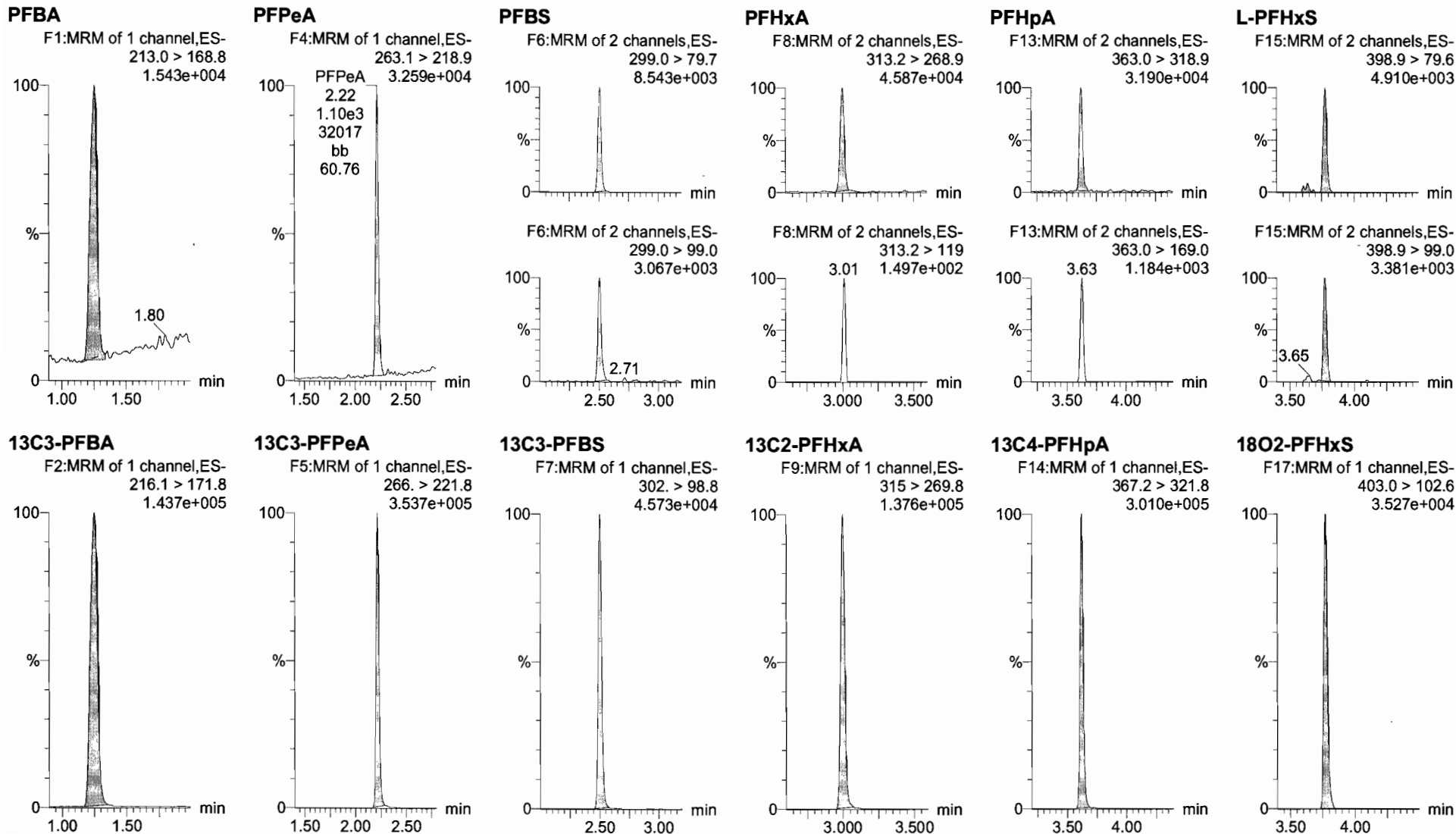




Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time  
Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_4, Date: 16-Nov-2017, Time: 16:53:40, ID: ST171116M3-3 PFC CS0 17K0832, Description: PFC CS0 17K0832

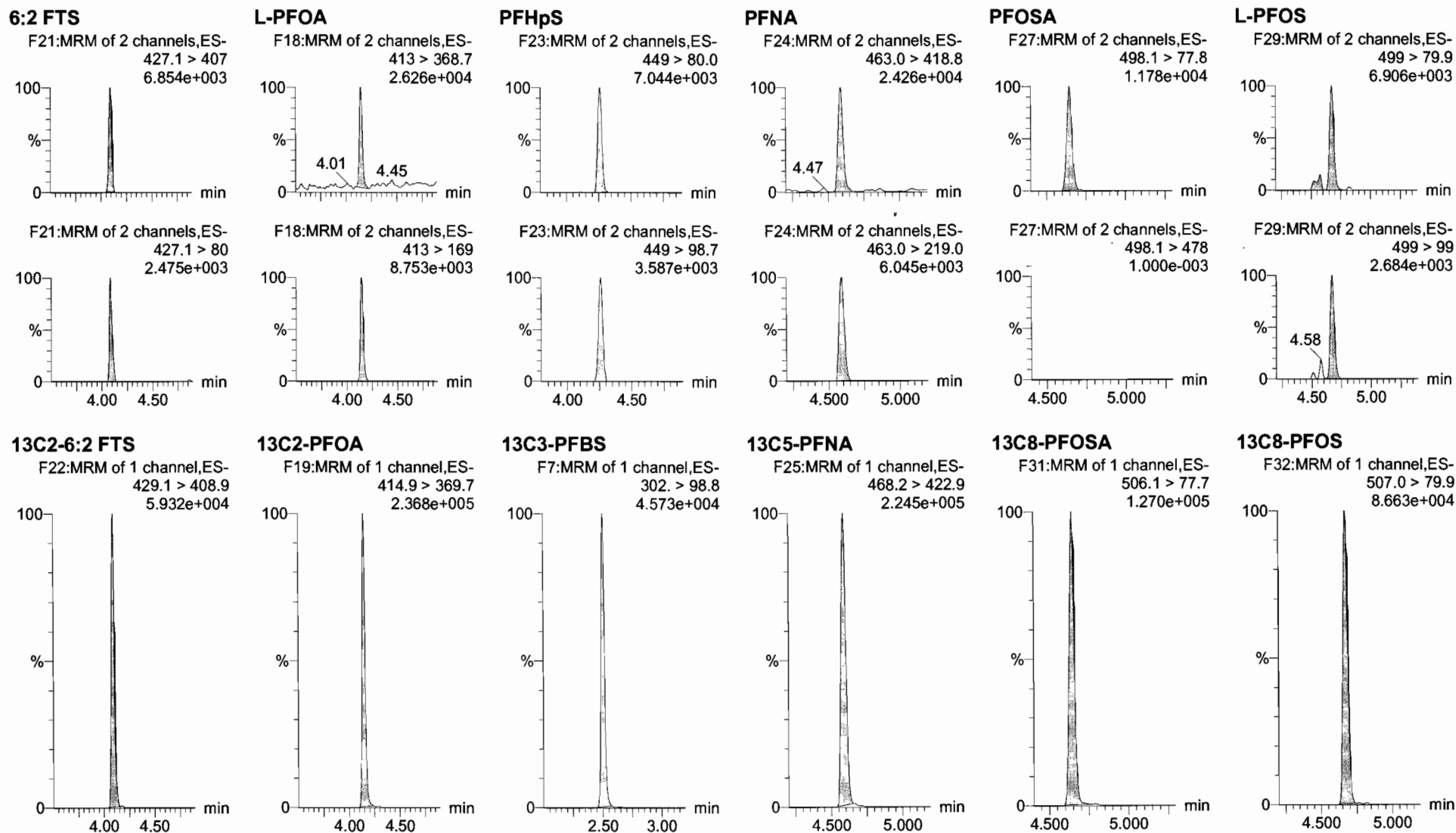


Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_4, Date: 16-Nov-2017, Time: 16:53:40, ID: ST171116M3-3 PFC CS0 17K0832, Description: PFC CS0 17K0832



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

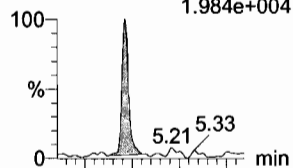
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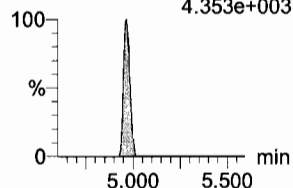
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**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
1.984e+004

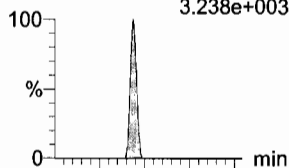


F34:MRM of 2 channels,ES-  
513 > 219  
4.353e+003

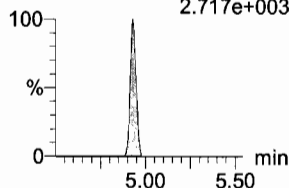


**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
3.238e+003

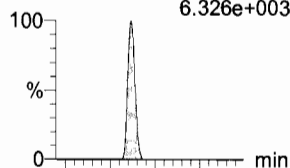


F39:MRM of 2 channels,ES-  
527 > 80  
2.717e+003

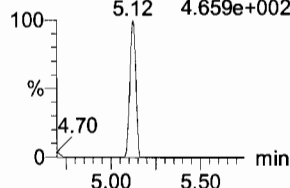


**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
6.326e+003

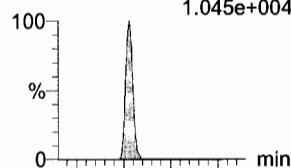


F44:MRM of 2 channels,ES-  
570.1 > 483.0  
4.659e+002

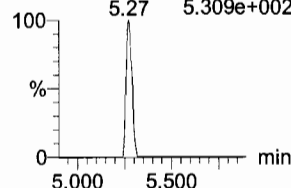


**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
1.045e+004

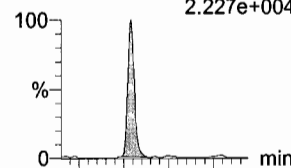


F47:MRM of 2 channels,ES-  
584.2 > 483.0  
5.309e+002

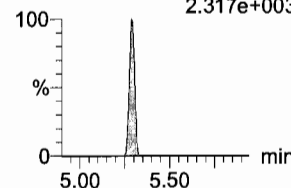


**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
2.227e+004

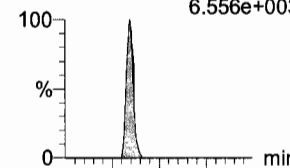


F42:MRM of 2 channels,ES-  
563.0 > 269  
2.317e+003

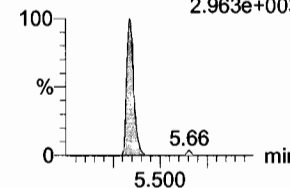


**PFDS**

F49:MRM of 2 channels,ES-  
598.8 > 80  
6.556e+003

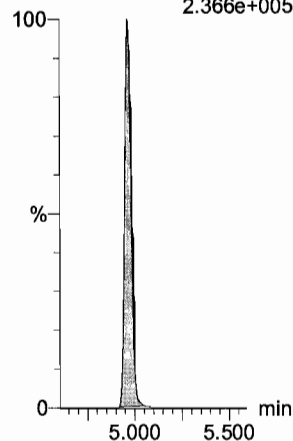


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
2.963e+003



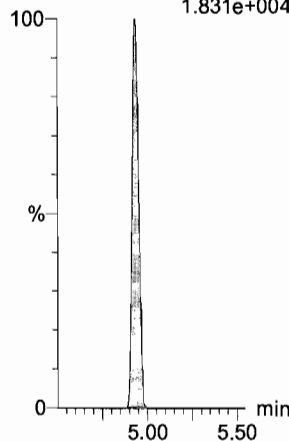
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
2.366e+005



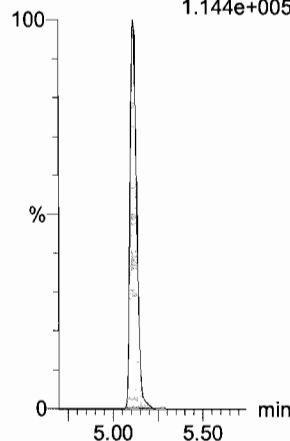
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
1.831e+004



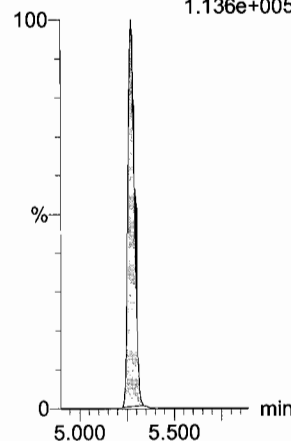
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
1.144e+005



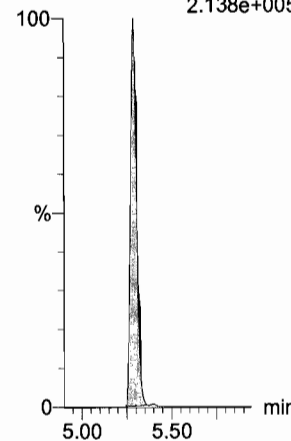
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
1.136e+005



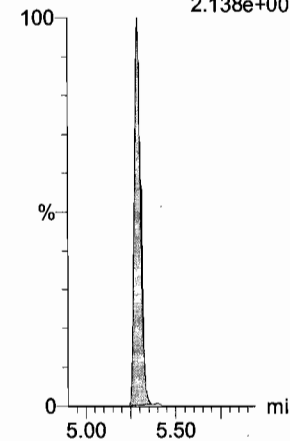
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
2.138e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
2.138e+005

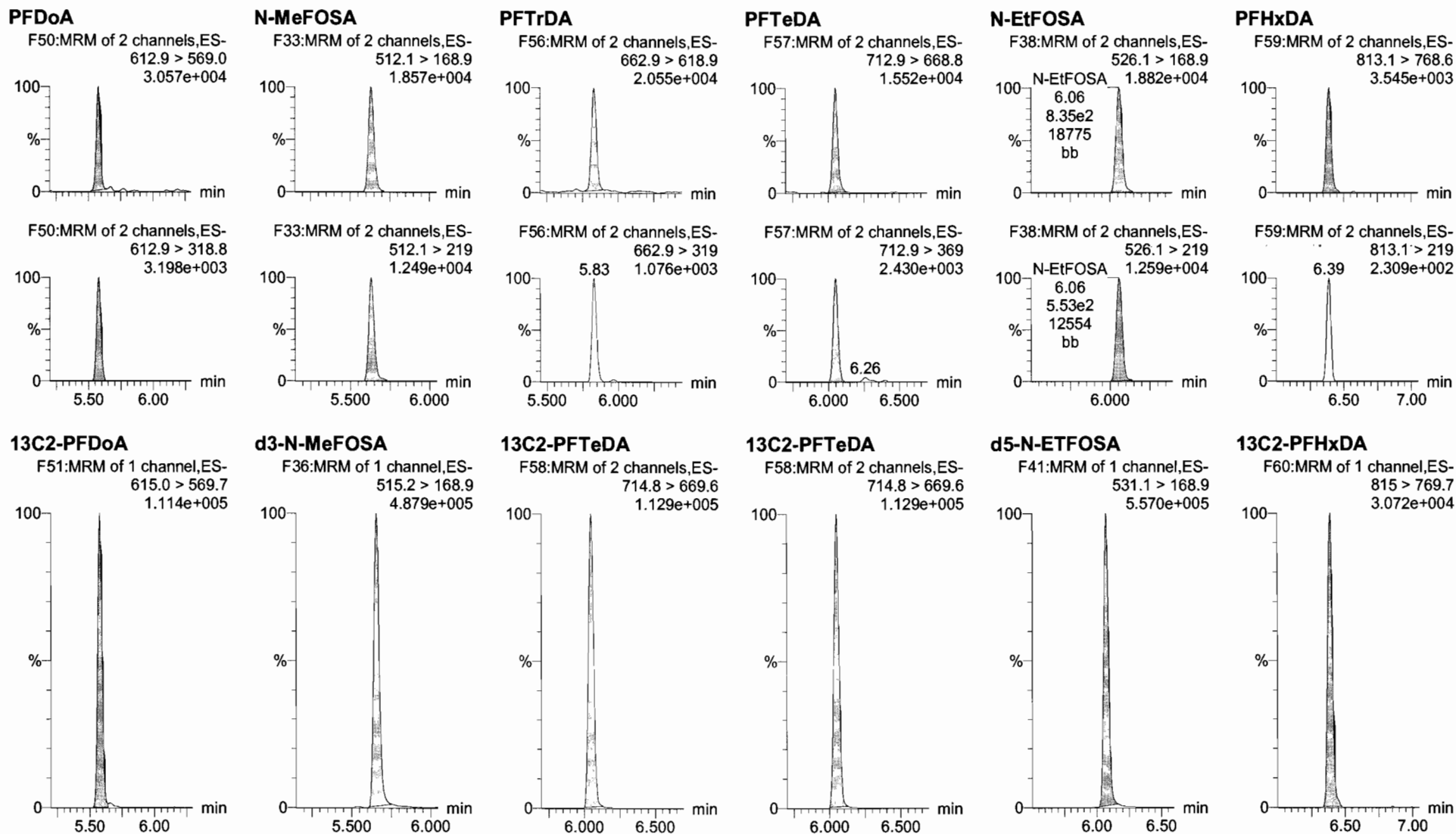


Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_4, Date: 16-Nov-2017, Time: 16:53:40, ID: ST171116M3-3 PFC CS0 17K0832, Description: PFC CS0 17K0832

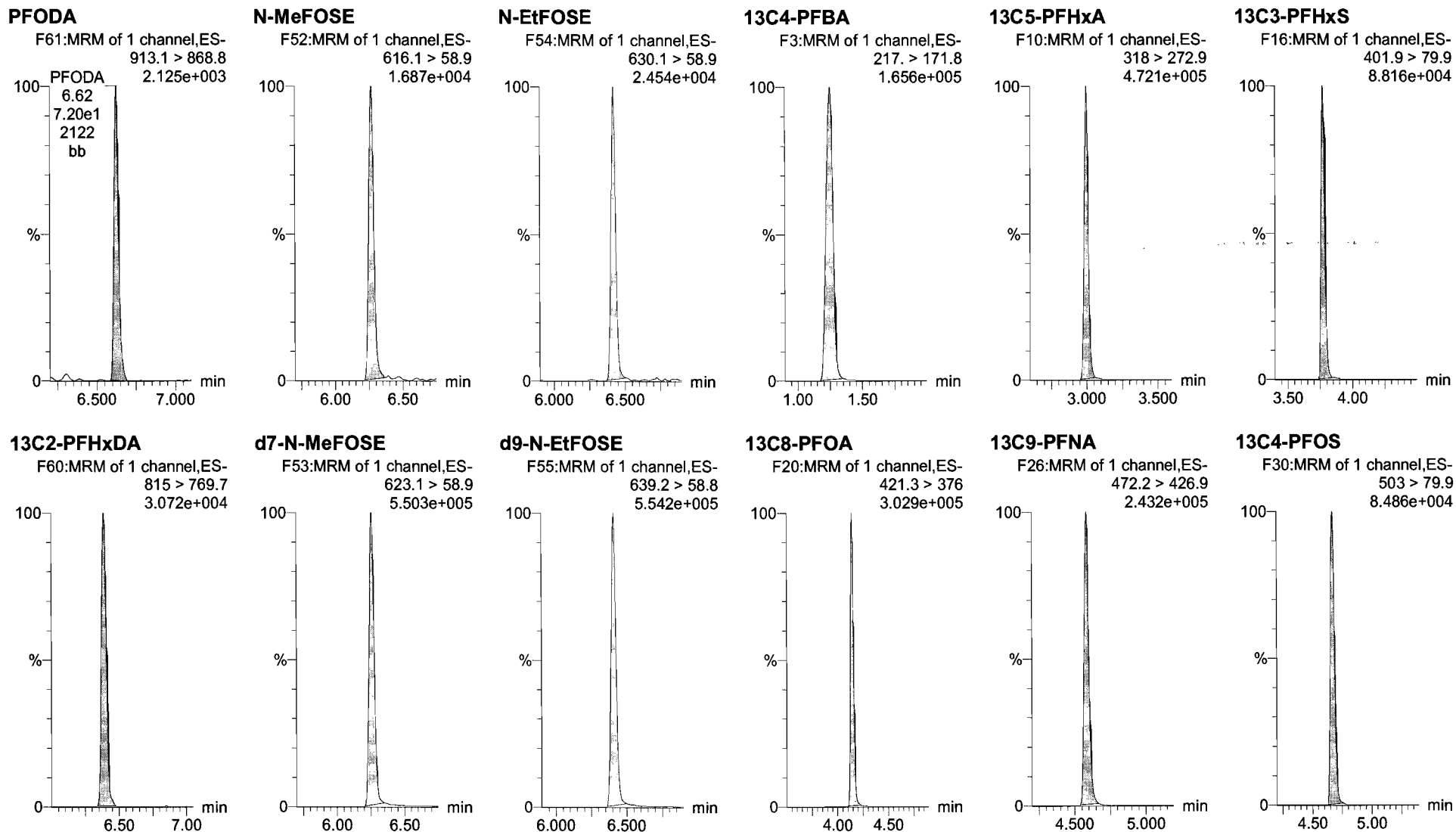


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Name: 171116M3\_4, Date: 16-Nov-2017, Time: 16:53:40, ID: ST171116M3-3 PFC CS0 17K0832, Description: PFC CS0 17K0832



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

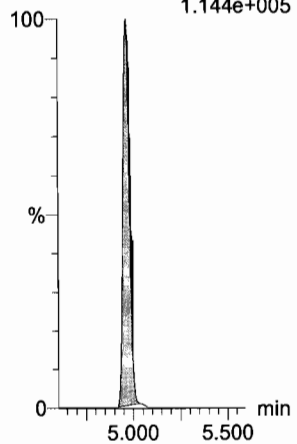
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Name: 171116M3\_4, Date: 16-Nov-2017, Time: 16:53:40, ID: ST171116M3-3 PFC CS0 17K0832, Description: PFC CS0 17K0832

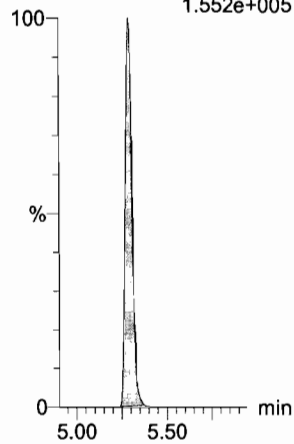
13C6-PFDA

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.144e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
1.552e+005

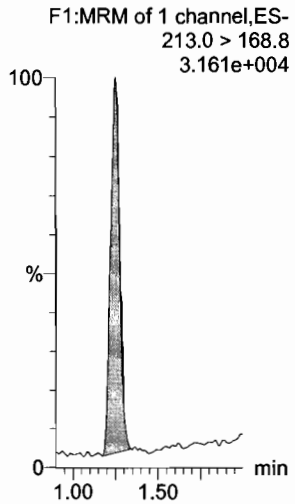


Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

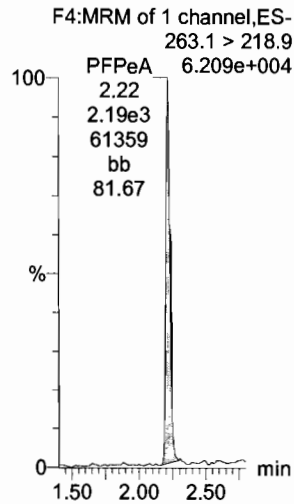
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time  
Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_5, Date: 16-Nov-2017, Time: 17:04:50, ID: ST171116M3-4 PFC CS1 17K0838, Description: PFC CS1 17K0838

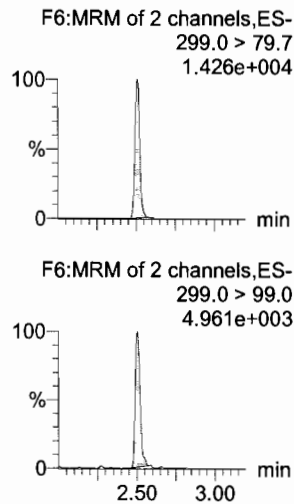
**PFBA**



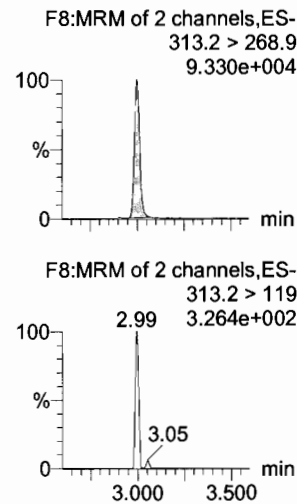
**PFPeA**



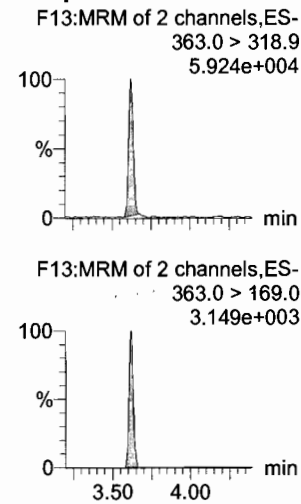
**PFBS**



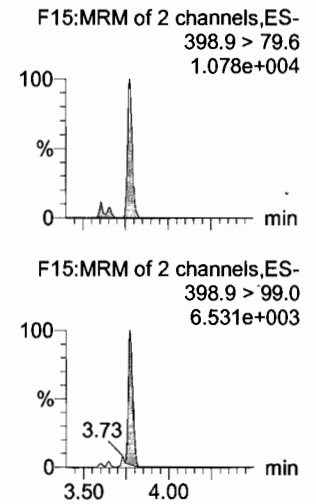
**PFHxA**



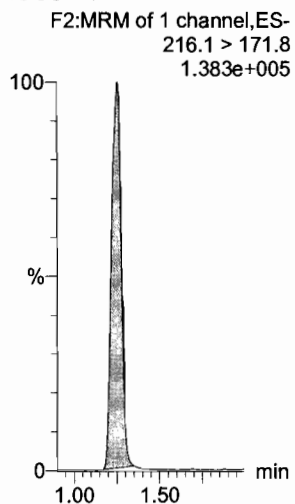
**PFHpA**



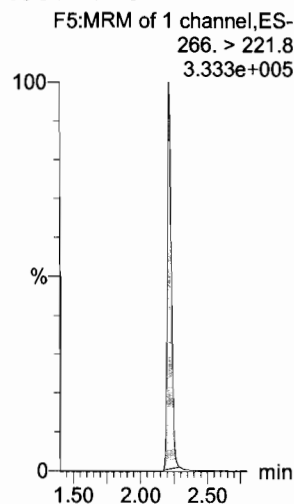
**L-PFHxS**



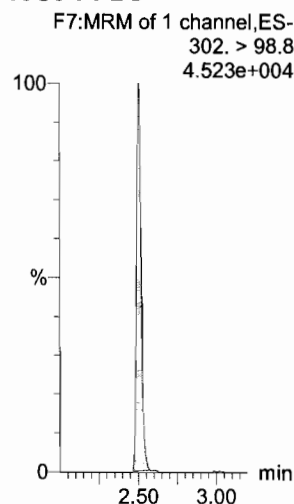
**13C3-PFBA**



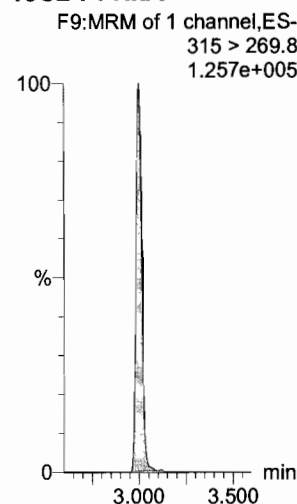
**13C3-PFPeA**



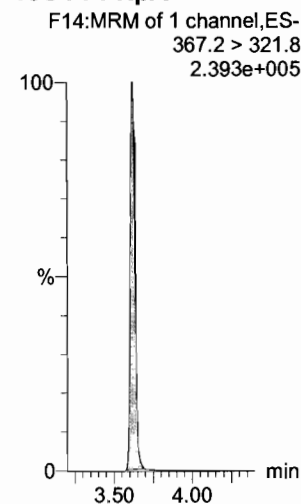
**13C3-PFBS**



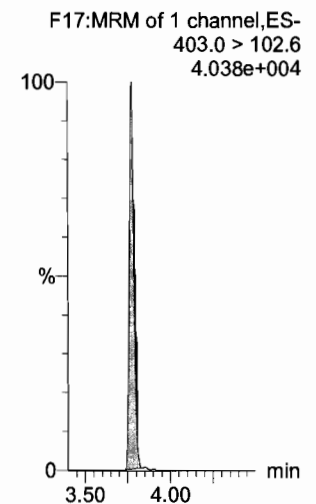
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

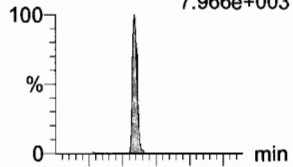
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

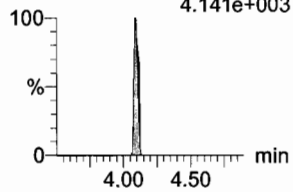
Name: 171116M3\_5, Date: 16-Nov-2017, Time: 17:04:50, ID: ST171116M3-4 PFC CS1 17K0838, Description: PFC CS1 17K0838

**6:2 FTS**

F21:MRM of 2 channels,ES-  
427.1 > 407  
7.966e+003

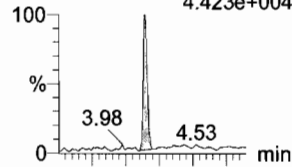


F21:MRM of 2 channels,ES-  
427.1 > 80  
4.141e+003

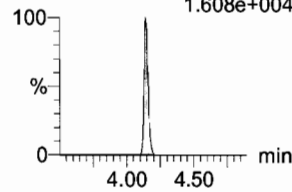


**L-PFOA**

F18:MRM of 2 channels,ES-  
413 > 368.7  
4.423e+004

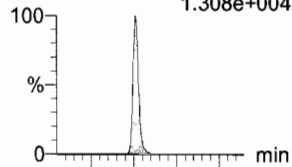


F18:MRM of 2 channels,ES-  
413 > 169  
1.608e+004

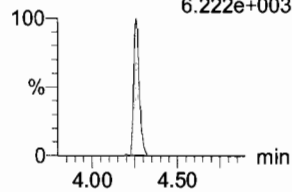


**PFHpS**

F23:MRM of 2 channels,ES-  
449 > 80.0  
1.308e+004

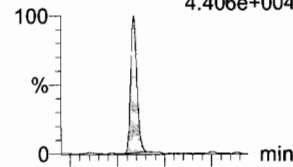


F23:MRM of 2 channels,ES-  
449 > 98.7  
6.222e+003

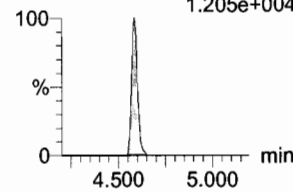


**PFNA**

F24:MRM of 2 channels,ES-  
463.0 > 418.8  
4.406e+004

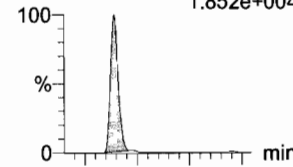


F24:MRM of 2 channels,ES-  
463.0 > 219.0  
1.205e+004

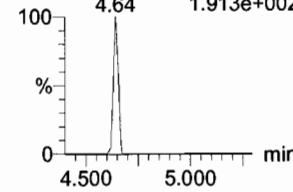


**PFOSA**

F27:MRM of 2 channels,ES-  
498.1 > 77.8  
1.852e+004

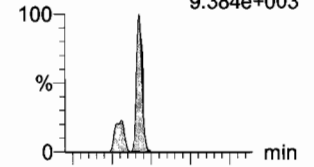


F27:MRM of 2 channels,ES-  
498.1 > 478  
1.913e+002

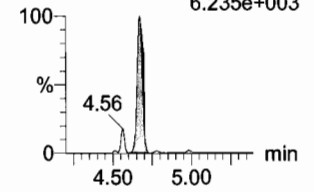


**L-PFOS**

F29:MRM of 2 channels,ES-  
499 > 79.9  
9.384e+003

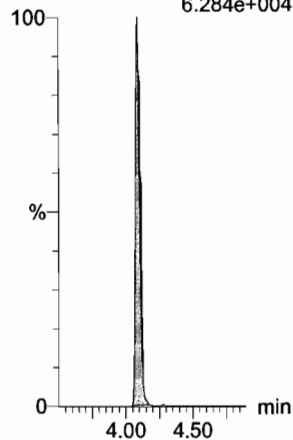


F29:MRM of 2 channels,ES-  
499 > 99  
6.235e+003



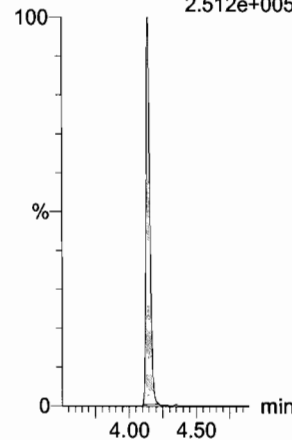
**13C2-6:2 FTS**

F22:MRM of 1 channel,ES-  
429.1 > 408.9  
6.284e+004



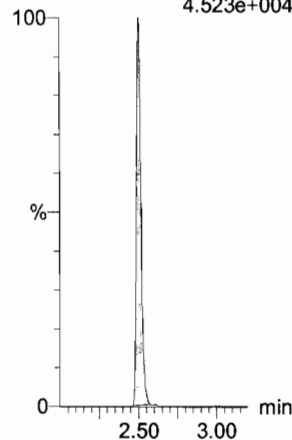
**13C2-PFOA**

F19:MRM of 1 channel,ES-  
414.9 > 369.7  
2.512e+005



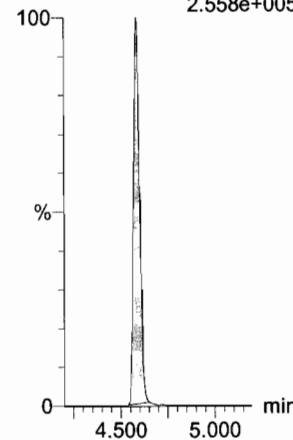
**13C3-PFBS**

F7:MRM of 1 channel,ES-  
302. > 98.8  
4.523e+004



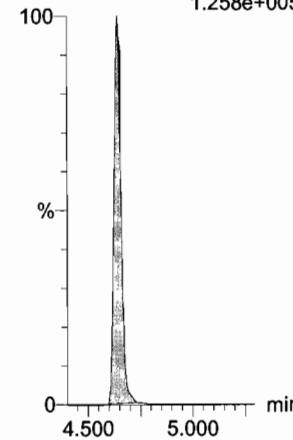
**13C5-PFNA**

F25:MRM of 1 channel,ES-  
468.2 > 422.9  
2.558e+005



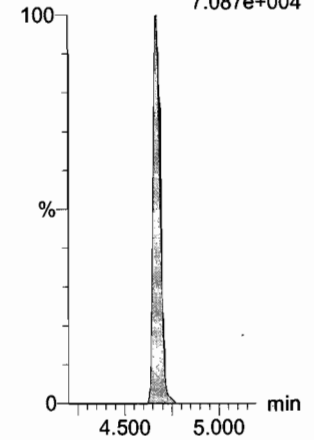
**13C8-PFOA**

F31:MRM of 1 channel,ES-  
506.1 > 77.7  
1.258e+005



**13C8-PFOS**

F32:MRM of 1 channel,ES-  
507.0 > 79.9  
7.087e+004





Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

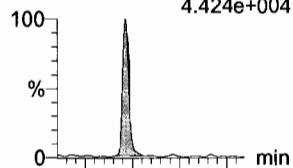
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Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_5, Date: 16-Nov-2017, Time: 17:04:50, ID: ST171116M3-4 PFC CS1 17K0838, Description: PFC CS1 17K0838

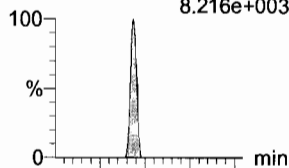
**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
4.424e+004



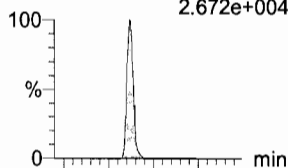
**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
8.216e+003



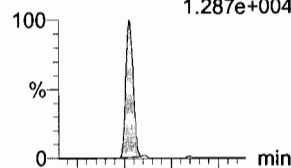
**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
2.672e+004



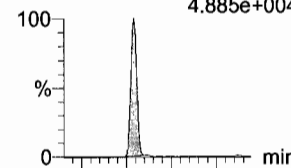
**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
1.287e+004



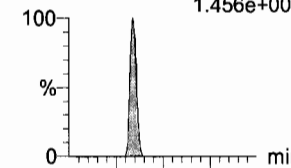
**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
4.885e+004

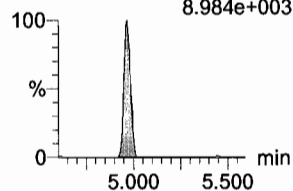


**PFDS**

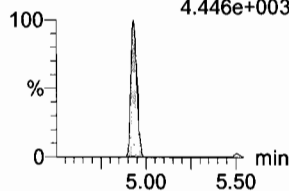
F49:MRM of 2 channels,ES-  
598.8 > 80  
1.456e+004



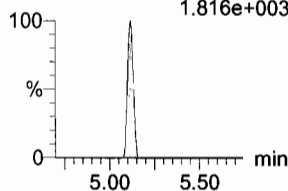
F34:MRM of 2 channels,ES-  
513 > 219  
8.984e+003



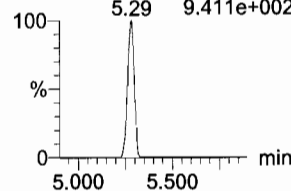
F39:MRM of 2 channels,ES-  
527 > 80  
4.446e+003



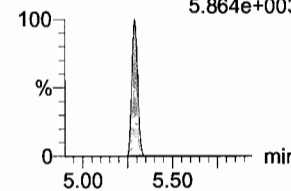
F44:MRM of 2 channels,ES-  
570.1 > 483.0  
1.816e+003



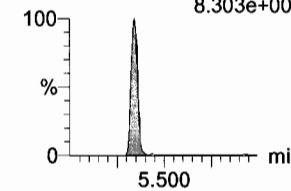
F47:MRM of 2 channels,ES-  
584.2 > 483.0  
9.411e+002



F42:MRM of 2 channels,ES-  
563.0 > 269  
5.864e+003

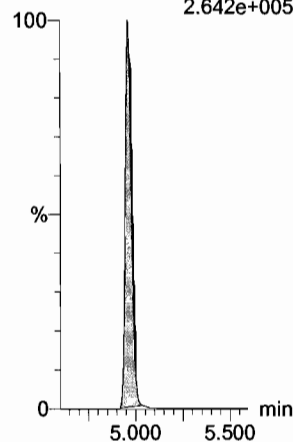


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
8.303e+003



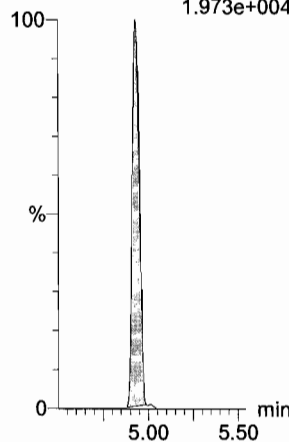
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
2.642e+005



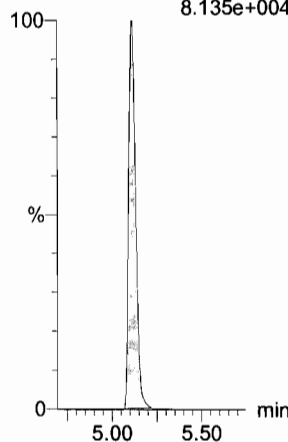
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
1.973e+004



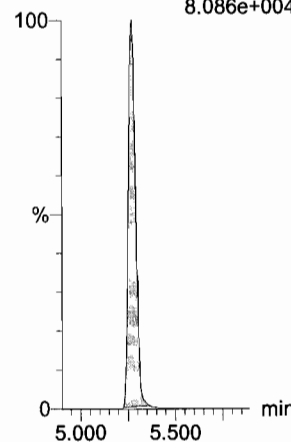
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
8.135e+004



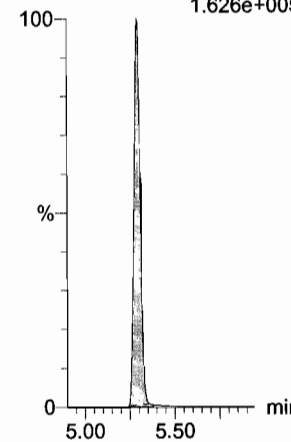
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
8.086e+004



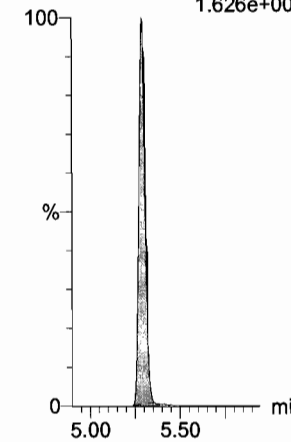
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
1.626e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
1.626e+005

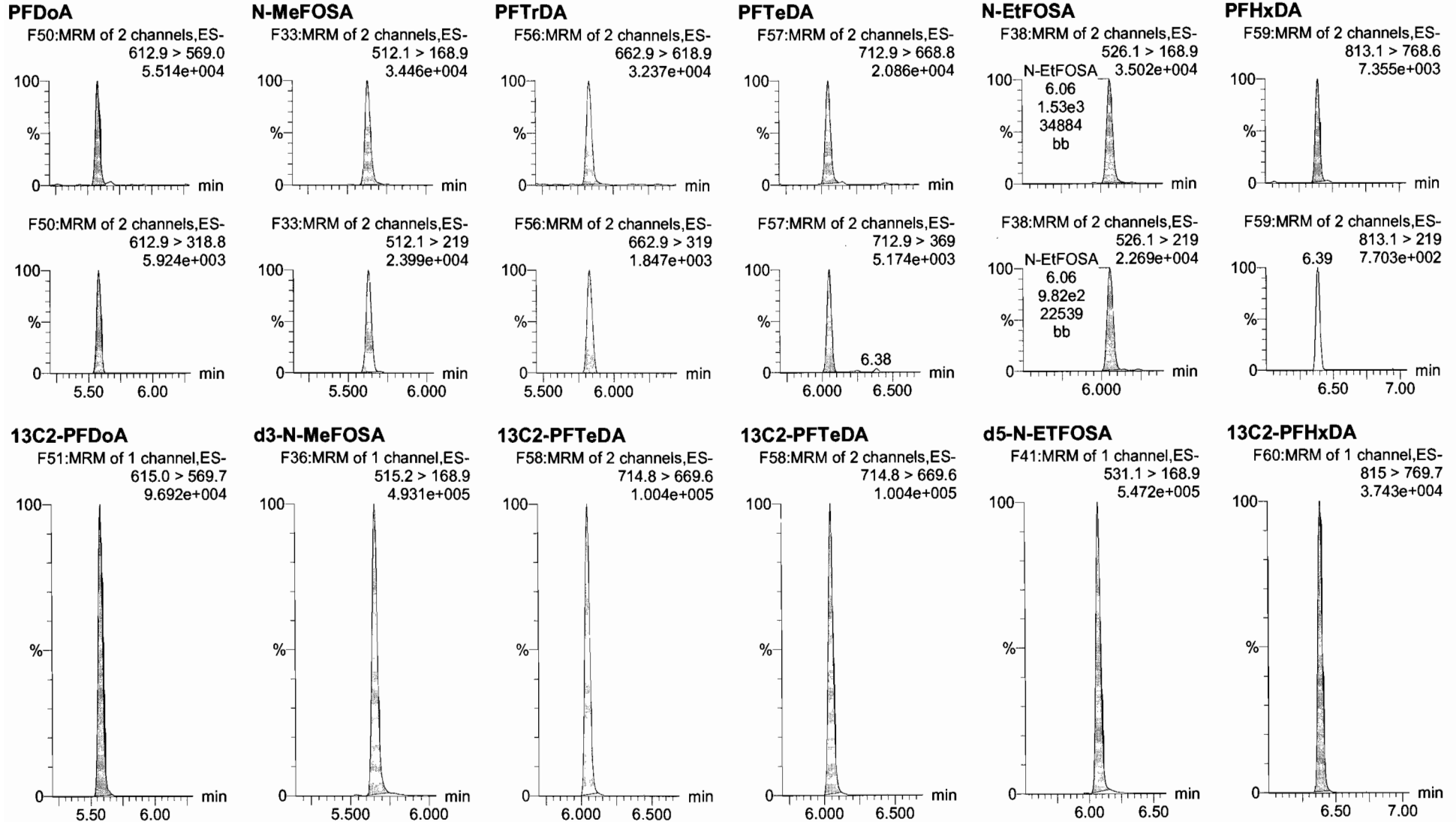


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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_5, Date: 16-Nov-2017, Time: 17:04:50, ID: ST171116M3-4 PFC CS1 17K0838, Description: PFC CS1 17K0838



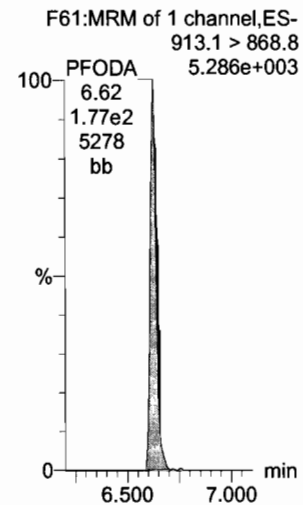
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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

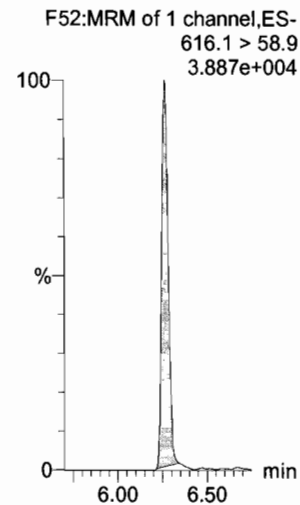
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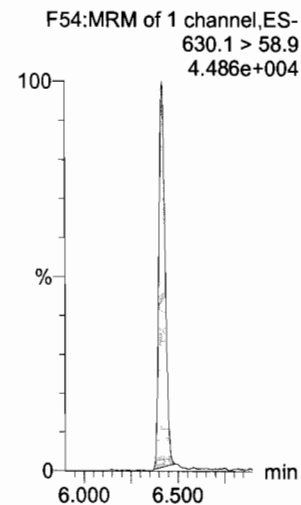
**PFODA**



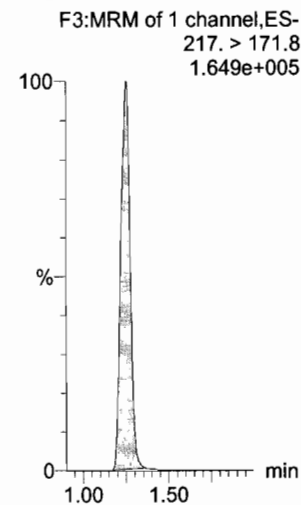
**N-MeFOSE**



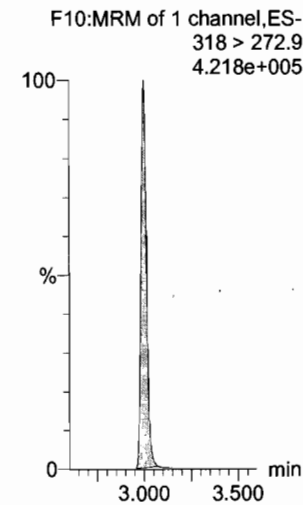
**N-EtFOSE**



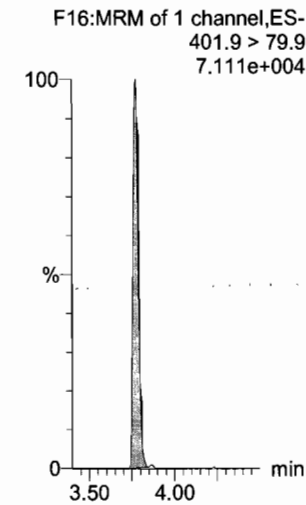
**13C4-PFBA**



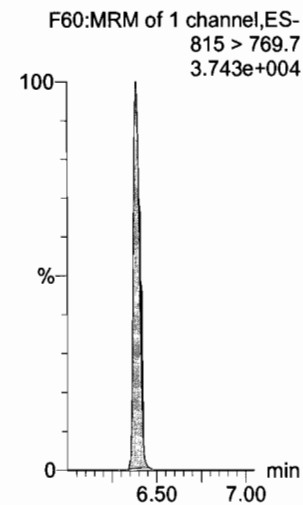
**13C5-PFHxA**



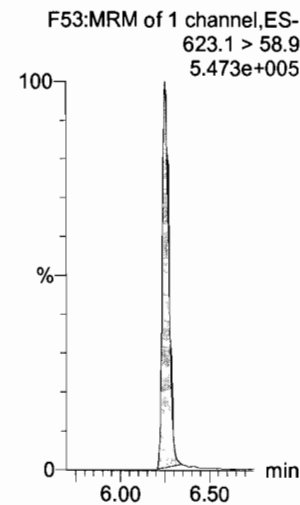
**13C3-PFHxS**



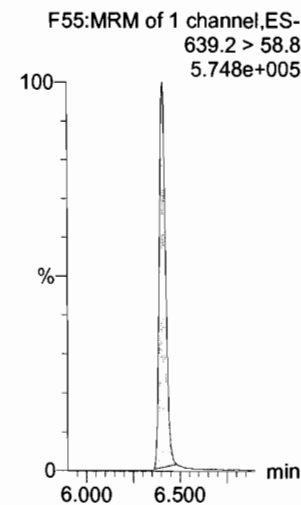
**13C2-PFHxDA**



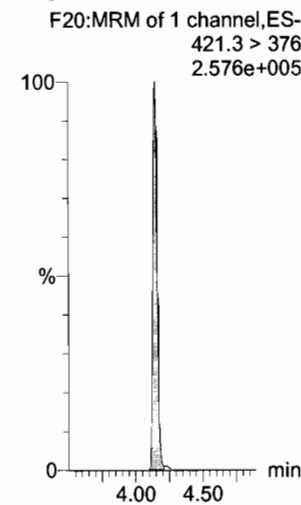
**d7-N-MeFOSE**



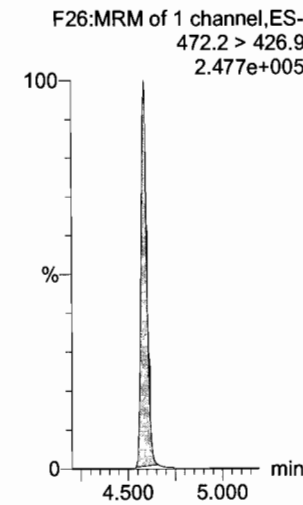
**d9-N-EtFOSE**



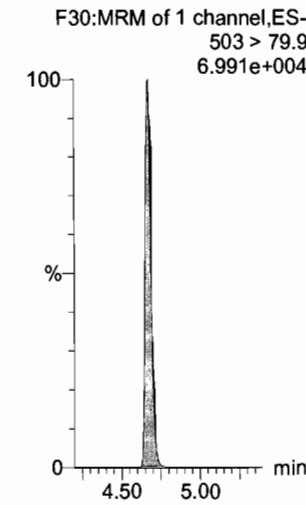
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

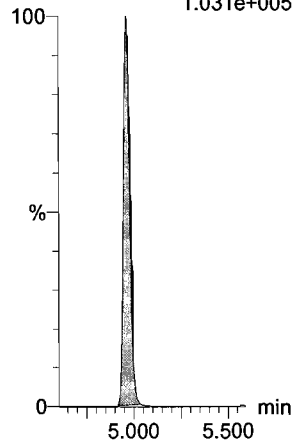
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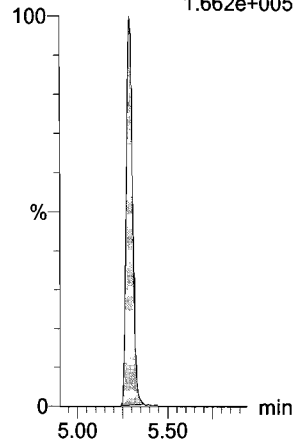
**13C6-PFDA**

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.031e+005



**13C7-PFUdA**

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
1.662e+005



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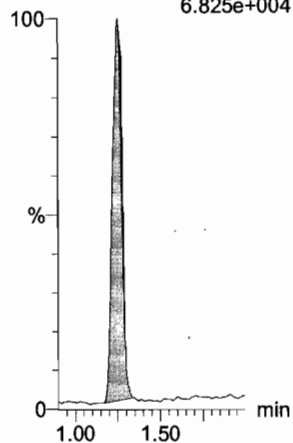
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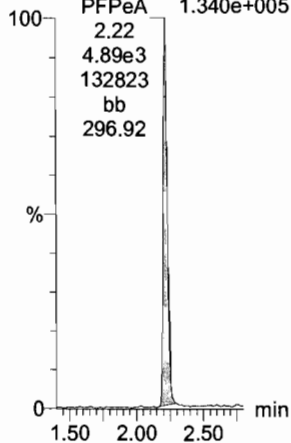
**PFBA**

F1:MRM of 1 channel,ES-  
213.0 > 168.8  
6.825e+004



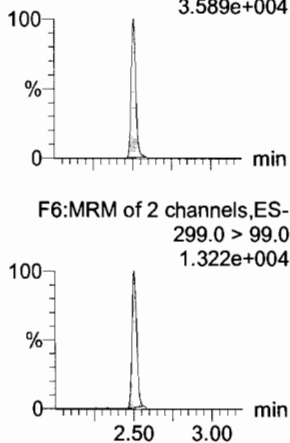
**PFPeA**

F4:MRM of 1 channel,ES-  
263.1 > 218.9  
1.340e+005



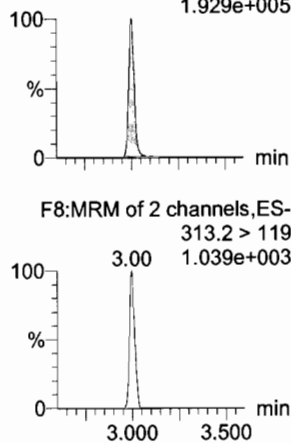
**PFBS**

F6:MRM of 2 channels,ES-  
299.0 > 79.7  
3.589e+004



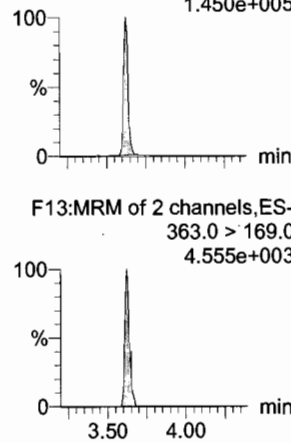
**PFHxA**

F8:MRM of 2 channels,ES-  
313.2 > 268.9  
1.929e+005



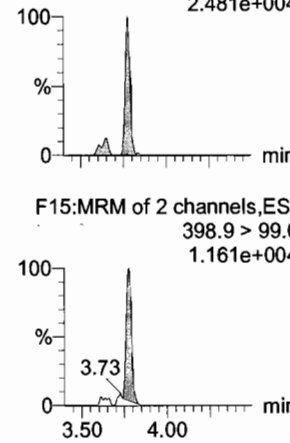
**PFHpA**

F13:MRM of 2 channels,ES-  
363.0 > 318.9  
1.450e+005



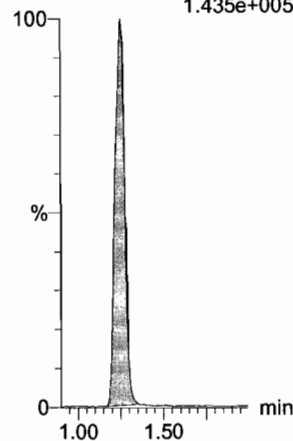
**L-PFHxS**

F15:MRM of 2 channels,ES-  
398.9 > 79.6  
2.481e+004



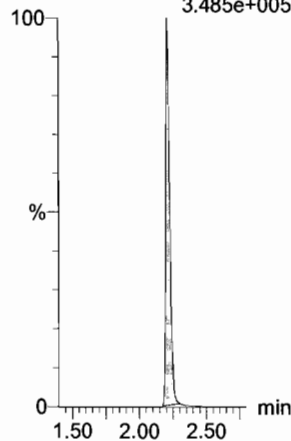
**13C3-PFBA**

F2:MRM of 1 channel,ES-  
216.1 > 171.8  
1.435e+005



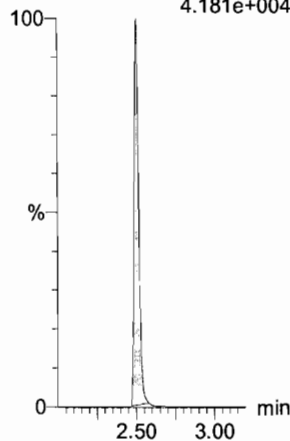
**13C3-PFPeA**

F5:MRM of 1 channel,ES-  
266. > 221.8  
3.485e+005



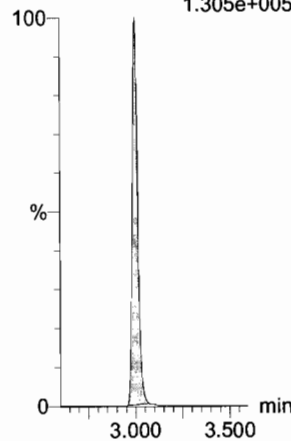
**13C3-PFBS**

F7:MRM of 1 channel,ES-  
302. > 98.8  
4.181e+004



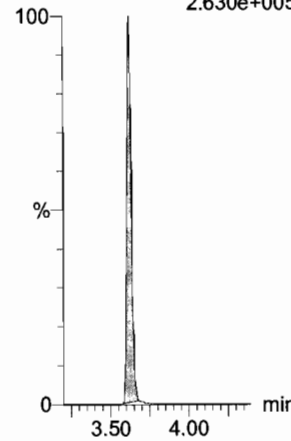
**13C2-PFHxA**

F9:MRM of 1 channel,ES-  
315 > 269.8  
1.305e+005



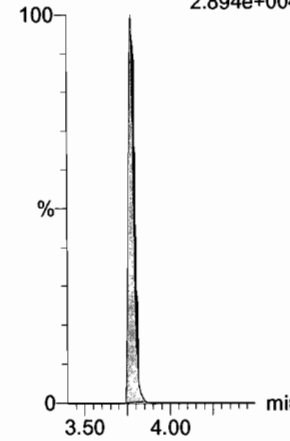
**13C4-PFHpA**

F14:MRM of 1 channel,ES-  
367.2 > 321.8  
2.630e+005



**18O2-PFHxS**

F17:MRM of 1 channel,ES-  
403.0 > 102.6  
2.894e+004

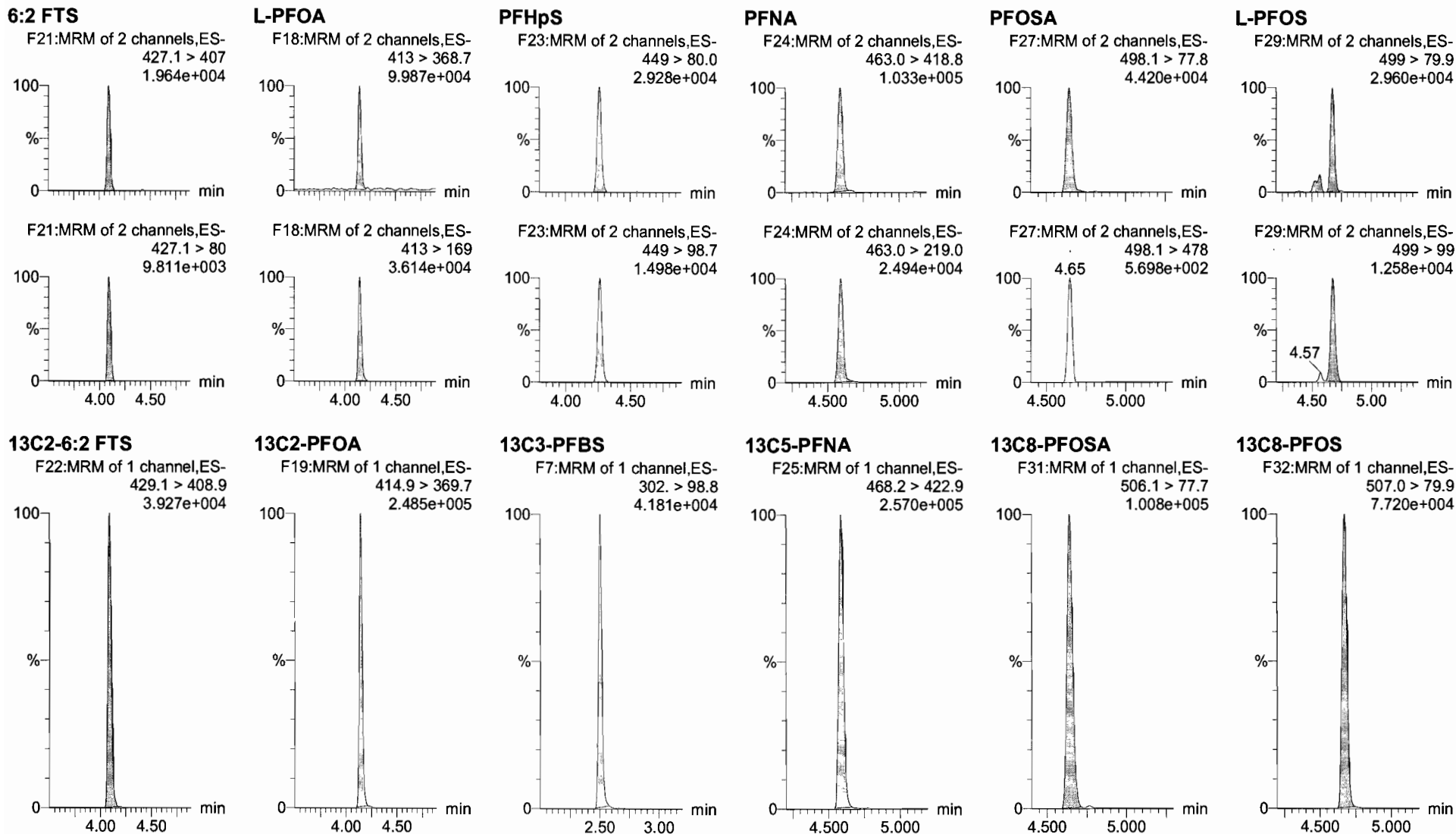


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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_6, Date: 16-Nov-2017, Time: 17:16:01, ID: ST171116M3-5 PFC CS2 17K0833, Description: PFC CS2 17K0833



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

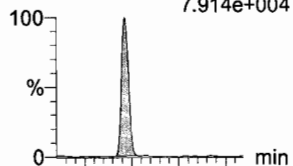
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

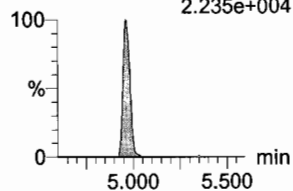
Name: 171116M3\_6, Date: 16-Nov-2017, Time: 17:16:01, ID: ST171116M3-5 PFC CS2 17K0833, Description: PFC CS2 17K0833

**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
7.914e+004

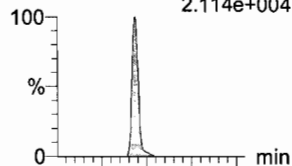


F34:MRM of 2 channels,ES-  
513 > 219  
2.235e+004

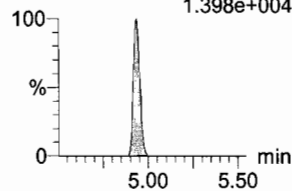


**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
2.114e+004

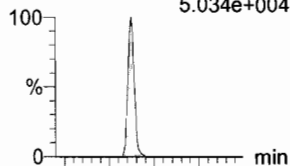


F39:MRM of 2 channels,ES-  
527 > 80  
1.398e+004

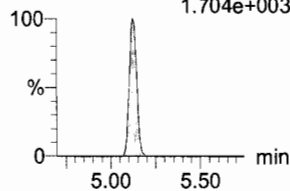


**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
5.034e+004

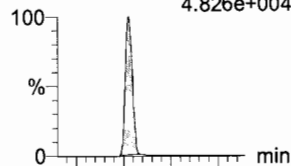


F44:MRM of 2 channels,ES-  
570.1 > 483.0  
1.704e+003

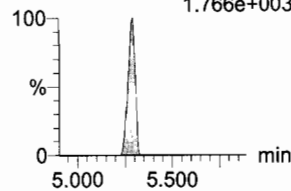


**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
4.826e+004

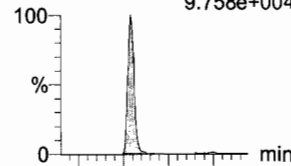


F47:MRM of 2 channels,ES-  
584.2 > 483.0  
1.766e+003

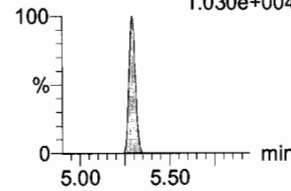


**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
9.758e+004

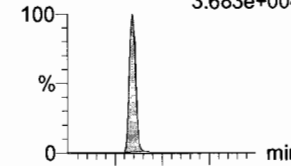


F42:MRM of 2 channels,ES-  
563.0 > 269  
1.030e+004

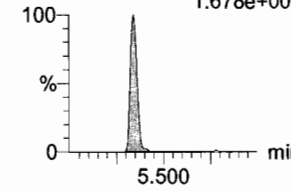


**PFDS**

F49:MRM of 2 channels,ES-  
598.8 > 80  
3.683e+004

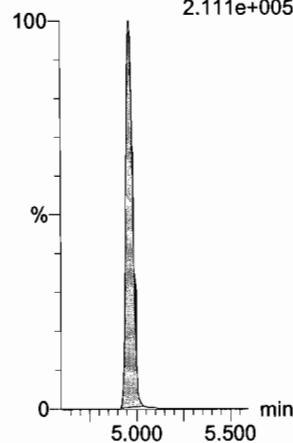


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
1.678e+004



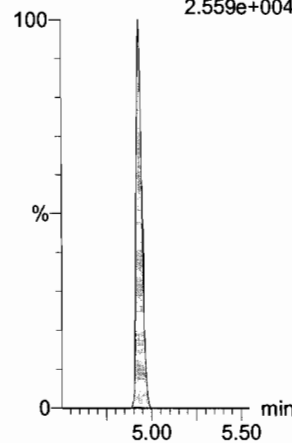
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
2.111e+005



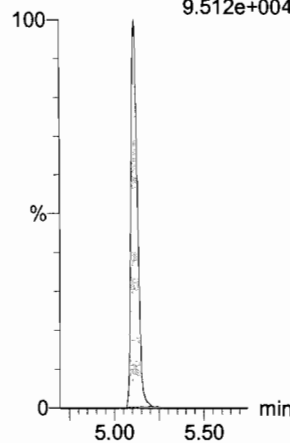
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
2.559e+004



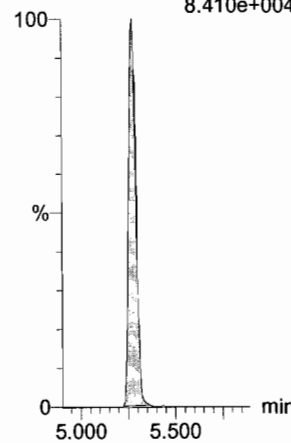
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
9.512e+004



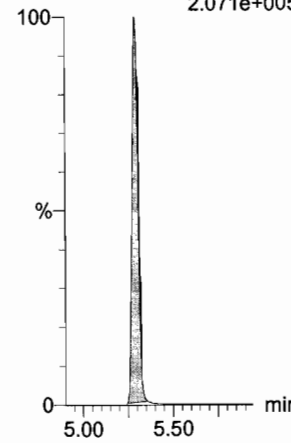
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
8.410e+004



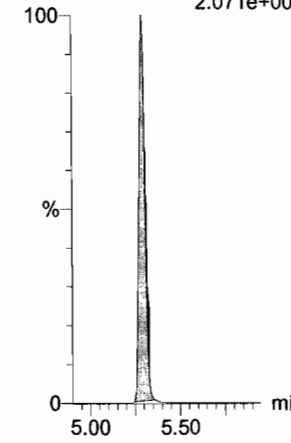
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
2.071e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
2.071e+005



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

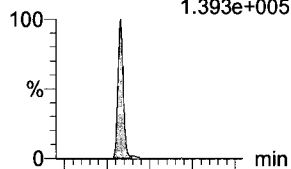
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_6, Date: 16-Nov-2017, Time: 17:16:01, ID: ST171116M3-5 PFC CS2 17K0833, Description: PFC CS2 17K0833

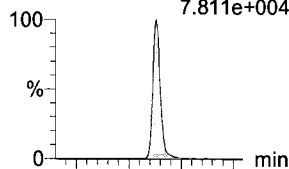
**PFDoA**

F50:MRM of 2 channels,ES-  
612.9 > 569.0  
1.393e+005



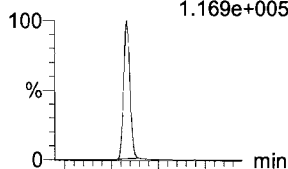
**N-MeFOSA**

F33:MRM of 2 channels,ES-  
512.1 > 168.9  
7.811e+004



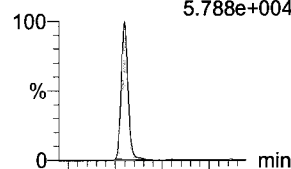
**PFTrDA**

F56:MRM of 2 channels,ES-  
662.9 > 618.9  
1.169e+005



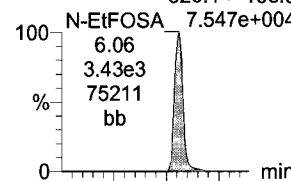
**PFTeDA**

F57:MRM of 2 channels,ES-  
712.9 > 668.8  
5.788e+004



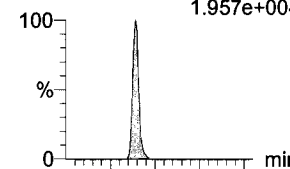
**N-EtFOSA**

F38:MRM of 2 channels,ES-  
526.1 > 168.9  
7.547e+004

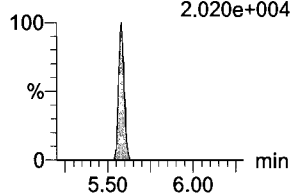


**PfHxDA**

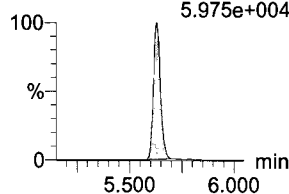
F59:MRM of 2 channels,ES-  
813.1 > 768.6  
1.957e+004



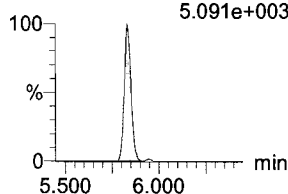
F50:MRM of 2 channels,ES-  
612.9 > 318.8  
2.020e+004



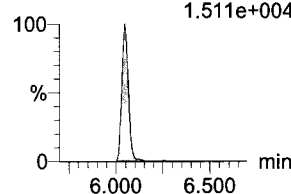
F33:MRM of 2 channels,ES-  
512.1 > 219  
5.975e+004



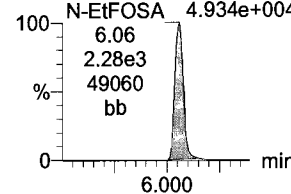
F56:MRM of 2 channels,ES-  
662.9 > 319  
5.091e+003



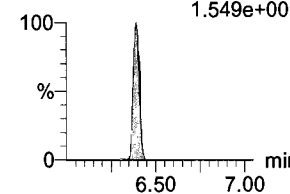
F57:MRM of 2 channels,ES-  
712.9 > 369  
1.511e+004



F38:MRM of 2 channels,ES-  
526.1 > 219  
4.934e+004

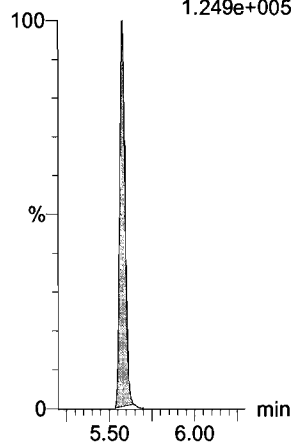


F59:MRM of 2 channels,ES-  
813.1 > 219  
1.549e+003



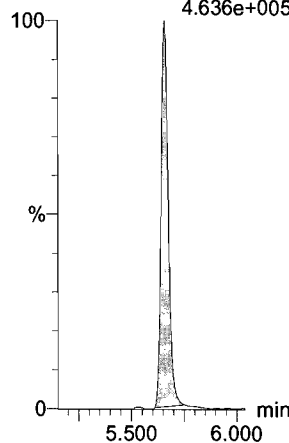
**13C2-PFDoA**

F51:MRM of 1 channel,ES-  
615.0 > 569.7  
1.249e+005



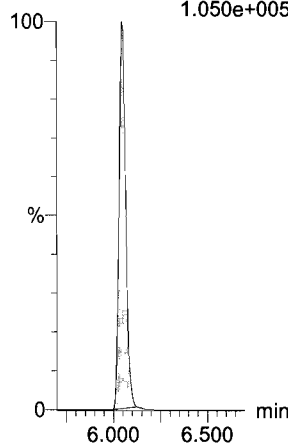
**d3-N-MeFOSA**

F36:MRM of 1 channel,ES-  
515.2 > 168.9  
4.636e+005



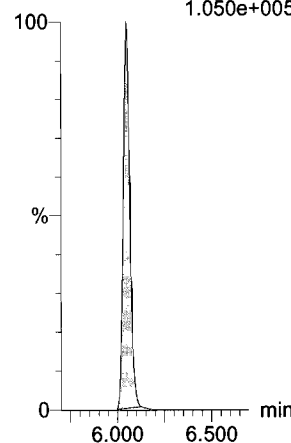
**13C2-PFTeDA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
1.050e+005



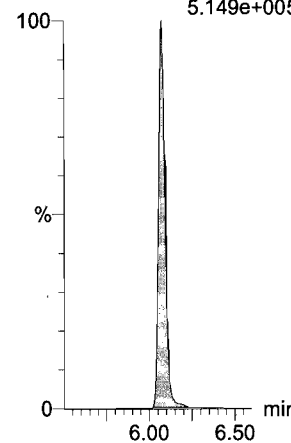
**13C2-PFTeDA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
1.050e+005



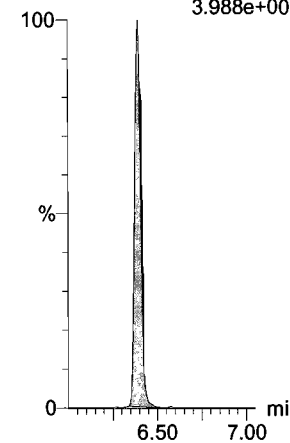
**d5-N-ETFOSA**

F41:MRM of 1 channel,ES-  
531.1 > 168.9  
5.149e+005



**13C2-PfHxDA**

F60:MRM of 1 channel,ES-  
815 > 769.7  
3.988e+004





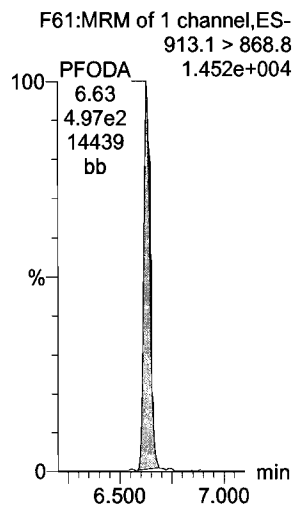
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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

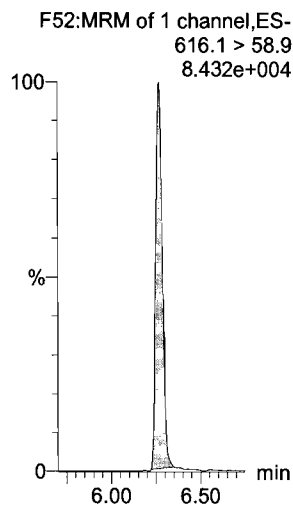
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Name: 171116M3\_6, Date: 16-Nov-2017, Time: 17:16:01, ID: ST171116M3-5 PFC CS2 17K0833, Description: PFC CS2 17K0833

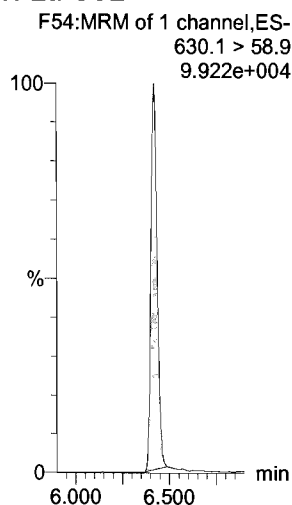
**PFODA**



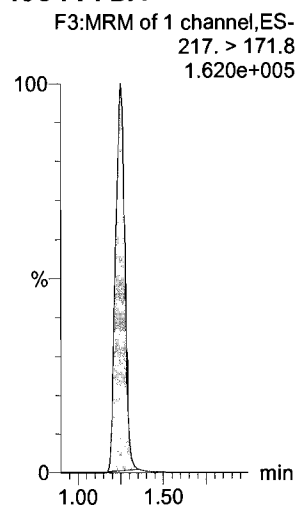
**N-MeFOSE**



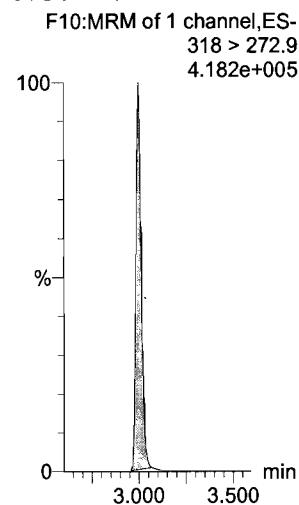
**N-EtFOSE**



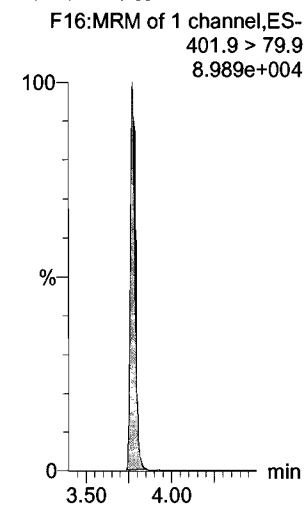
**13C4-PFBA**



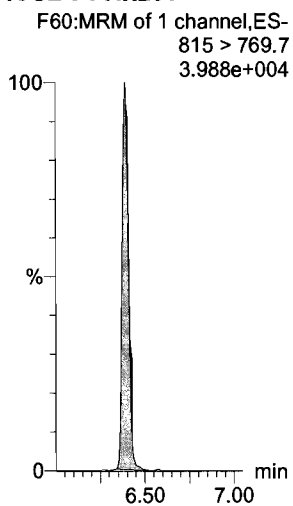
**13C5-PFHxA**



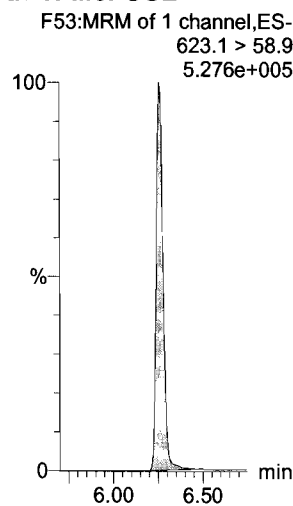
**13C3-PFHxS**



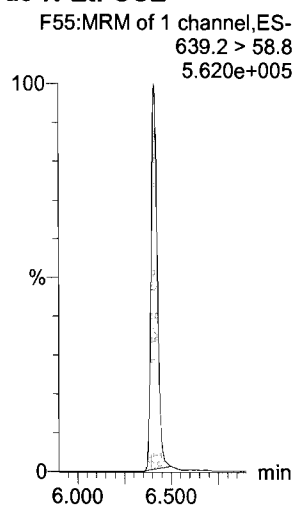
**13C2-PFHxDA**



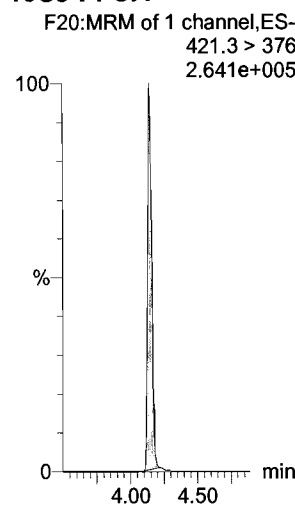
**d7-N-MeFOSE**



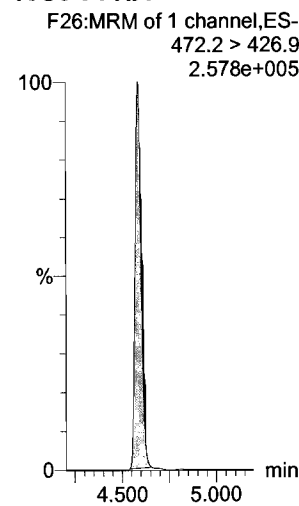
**d9-N-EtFOSE**



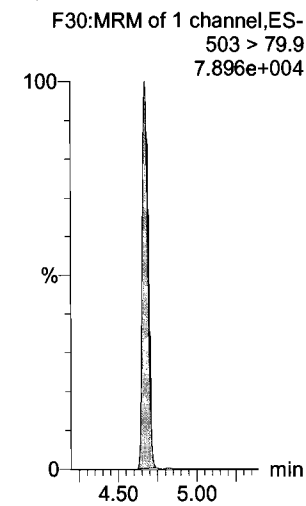
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



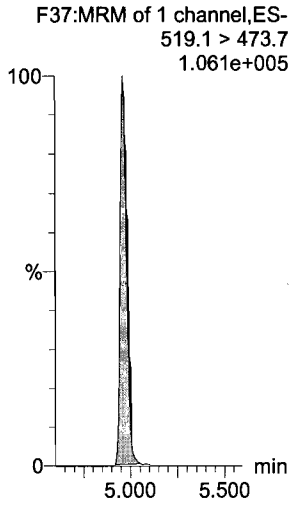
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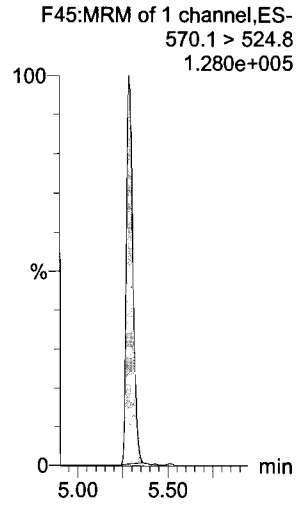
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Name: 171116M3\_6, Date: 16-Nov-2017, Time: 17:16:01, ID: ST171116M3-5 PFC CS2 17K0833, Description: PFC CS2 17K0833

**13C6-PFDA**



**13C7-PFUdA**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

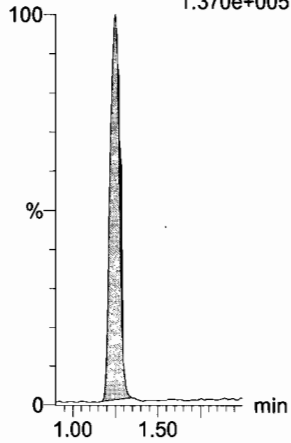
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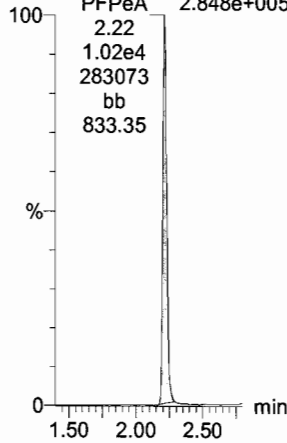
**PFBA**

F1:MRM of 1 channel,ES-  
213.0 > 168.8  
1.370e+005



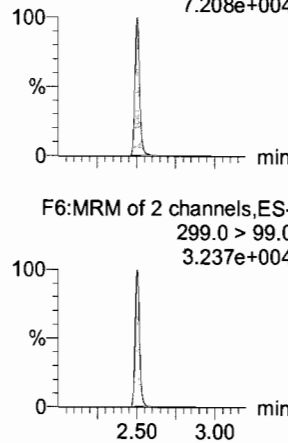
**PFPeA**

F4:MRM of 1 channel,ES-  
263.1 > 218.9  
2.848e+005



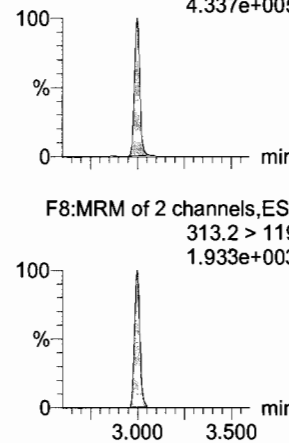
**PFBS**

F6:MRM of 2 channels,ES-  
299.0 > 79.7  
7.208e+004



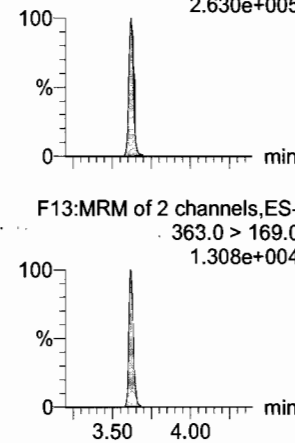
**PFHxA**

F8:MRM of 2 channels,ES-  
313.2 > 268.9  
4.337e+005



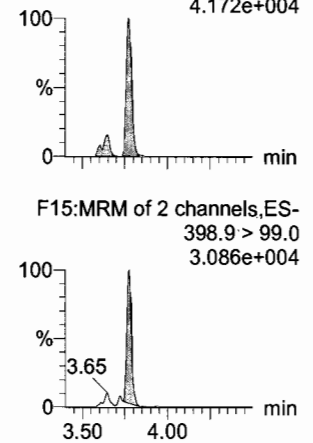
**PFHpA**

F13:MRM of 2 channels,ES-  
363.0 > 318.9  
2.630e+005



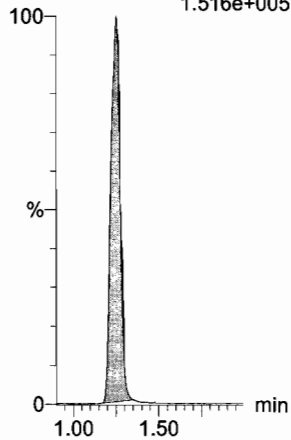
**L-PFHxS**

F15:MRM of 2 channels,ES-  
398.9 > 79.6  
4.172e+004



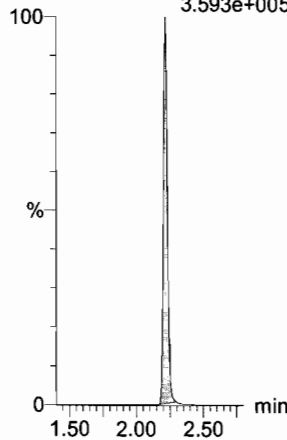
**13C3-PFBA**

F2:MRM of 1 channel,ES-  
216.1 > 171.8  
1.516e+005



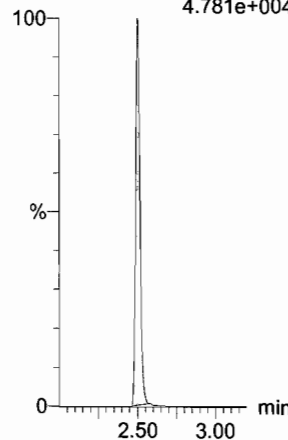
**13C3-PFPeA**

F5:MRM of 1 channel,ES-  
266. > 221.8  
3.593e+005



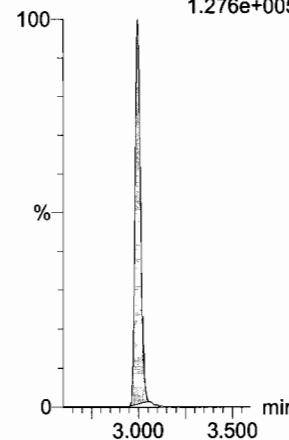
**13C3-PFBS**

F7:MRM of 1 channel,ES-  
302. > 98.8  
4.781e+004



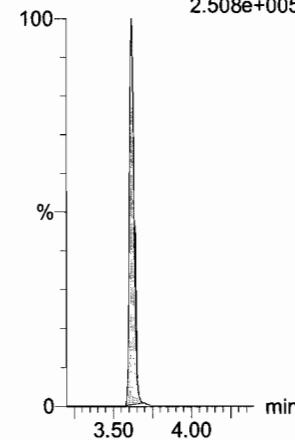
**13C2-PFHxA**

F9:MRM of 1 channel,ES-  
315 > 269.8  
1.276e+005



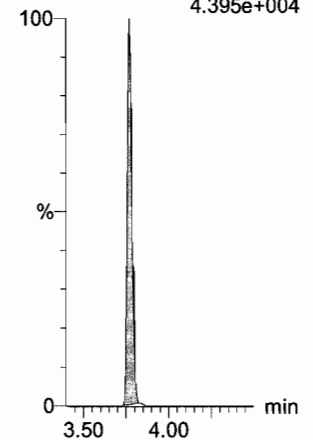
**13C4-PFHpA**

F14:MRM of 1 channel,ES-  
367.2 > 321.8  
2.508e+005



**18O2-PFHxS**

F17:MRM of 1 channel,ES-  
403.0 > 102.6  
4.395e+004

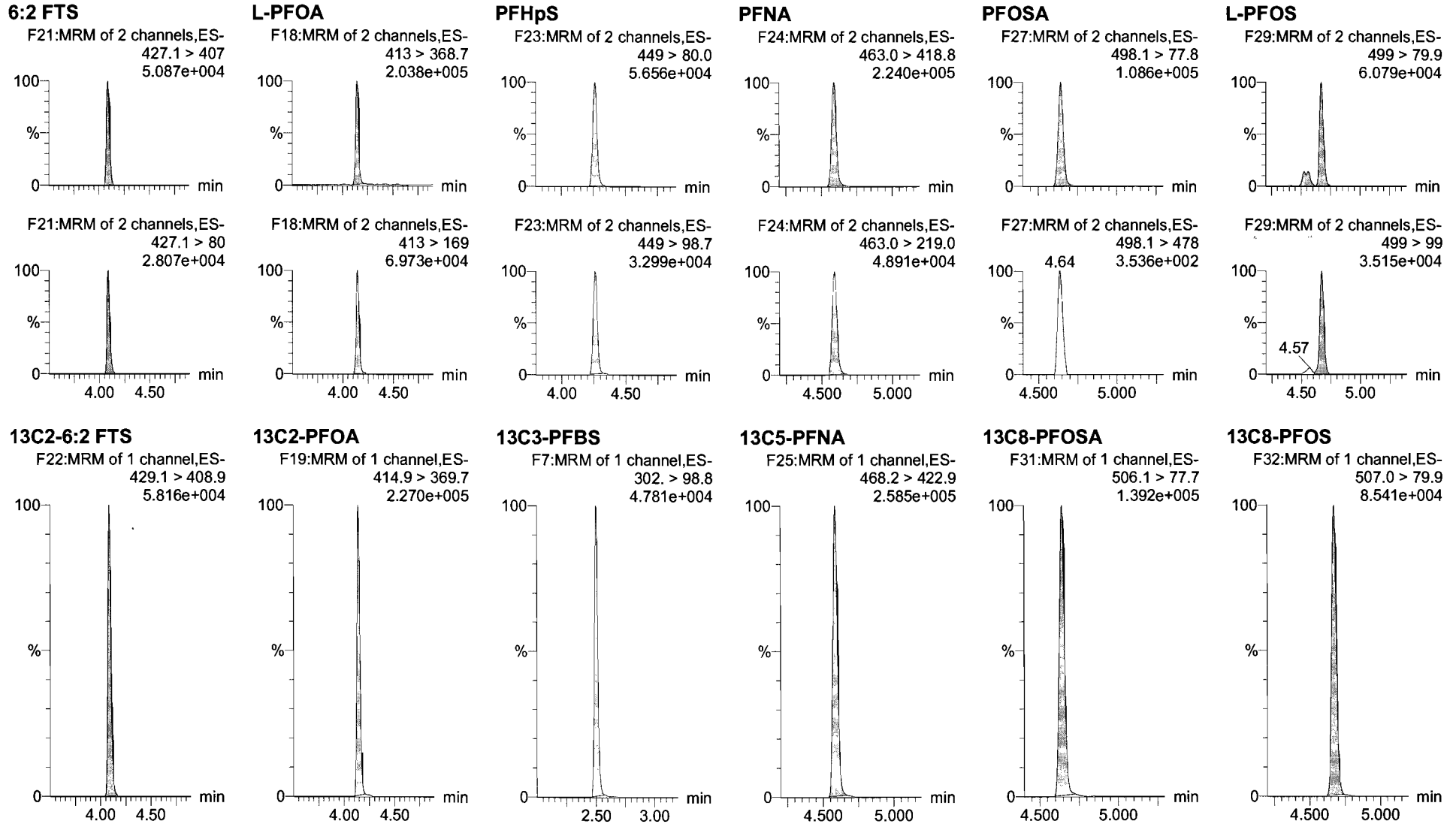


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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_7, Date: 16-Nov-2017, Time: 17:27:12, ID: ST171116M3-6 PFC CS3 17K0834, Description: PFC CS3 17K0834



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

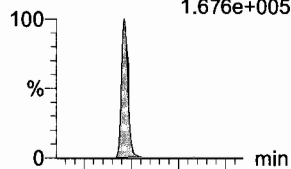
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_7, Date: 16-Nov-2017, Time: 17:27:12, ID: ST171116M3-6 PFC CS3 17K0834, Description: PFC CS3 17K0834

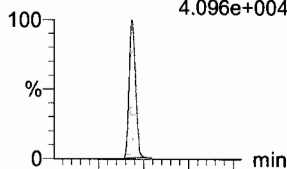
**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
1.676e+005



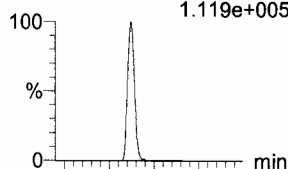
**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
4.096e+004



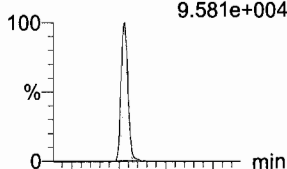
**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
1.119e+005



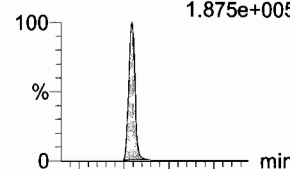
**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
9.581e+004



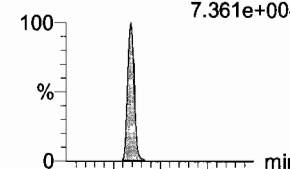
**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
1.875e+005

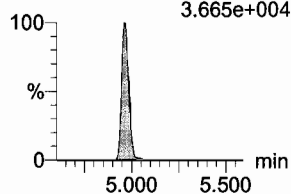


**PFDS**

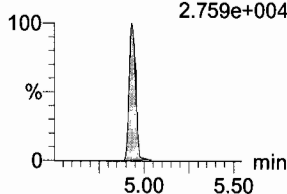
F49:MRM of 2 channels,ES-  
598.8 > 80  
7.361e+004



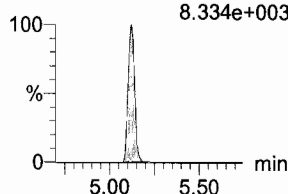
F34:MRM of 2 channels,ES-  
513 > 219  
3.665e+004



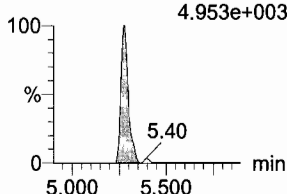
F39:MRM of 2 channels,ES-  
527 > 80  
2.759e+004



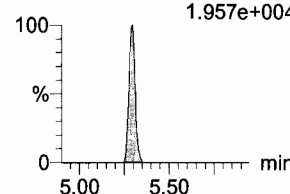
F44:MRM of 2 channels,ES-  
570.1 > 483.0  
8.334e+003



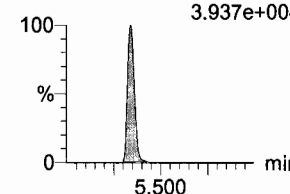
F47:MRM of 2 channels,ES-  
584.2 > 483.0  
4.953e+003



F42:MRM of 2 channels,ES-  
563.0 > 269  
1.957e+004

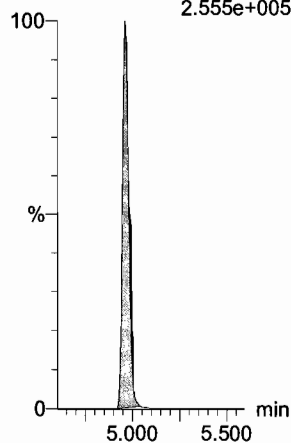


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
3.937e+004



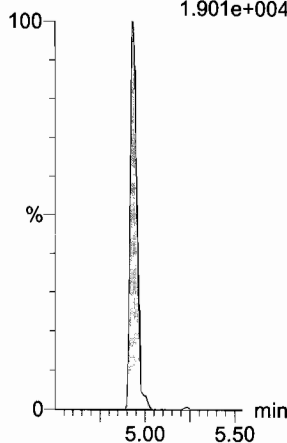
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
2.555e+005



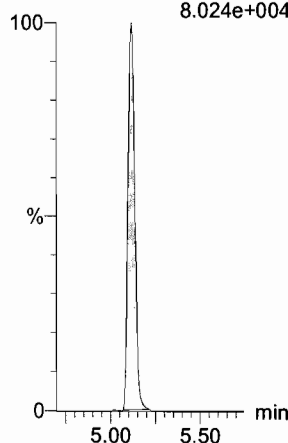
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
1.901e+004



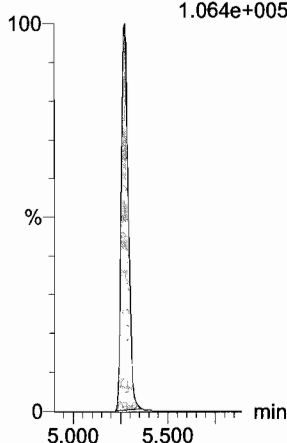
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
8.024e+004



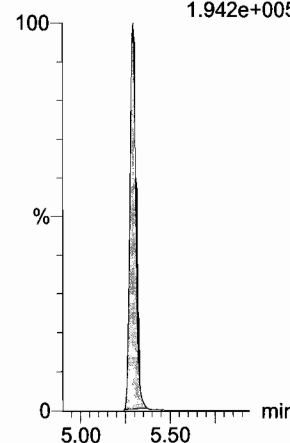
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
1.064e+005



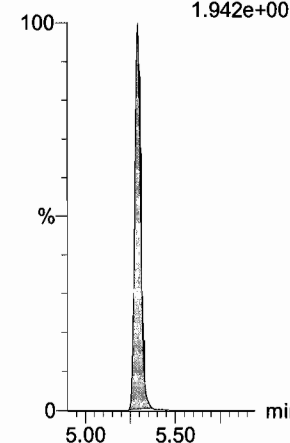
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
1.942e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
1.942e+005

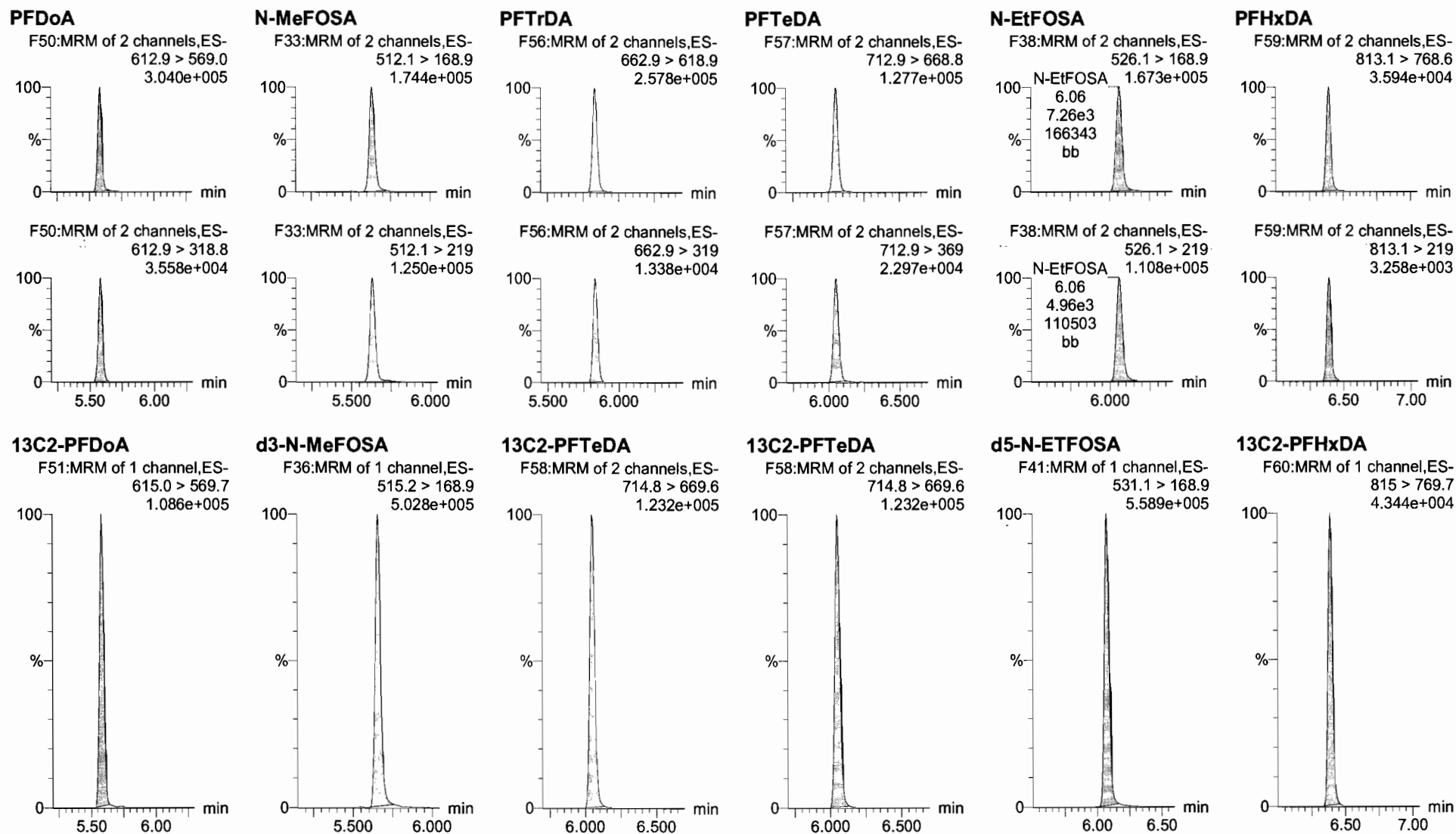


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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

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Name: 171116M3\_7, Date: 16-Nov-2017, Time: 17:27:12, ID: ST171116M3-6 PFC CS3 17K0834, Description: PFC CS3 17K0834

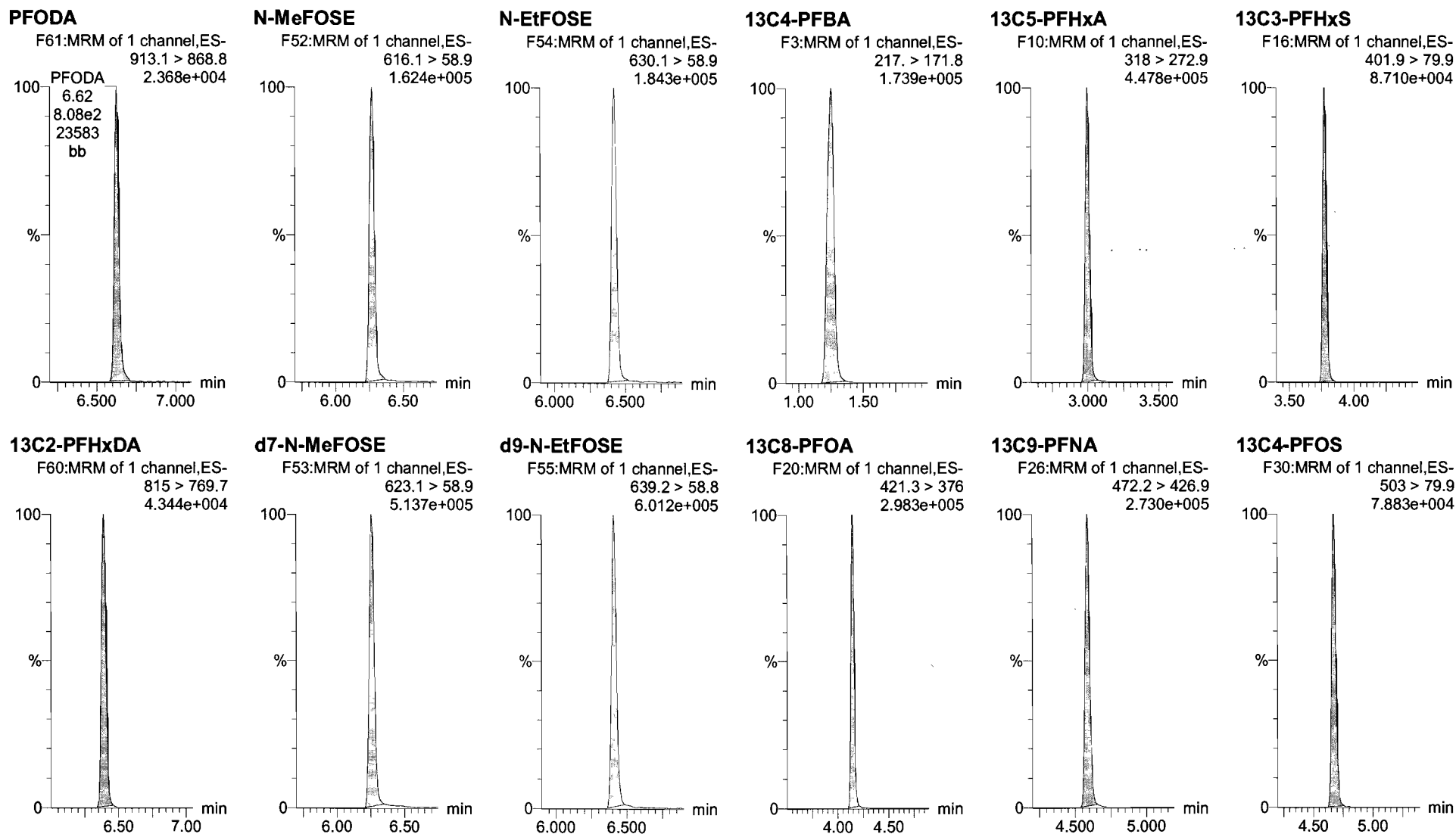


Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

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Name: 171116M3\_7, Date: 16-Nov-2017, Time: 17:27:12, ID: ST171116M3-6 PFC CS3 17K0834, Description: PFC CS3 17K0834



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

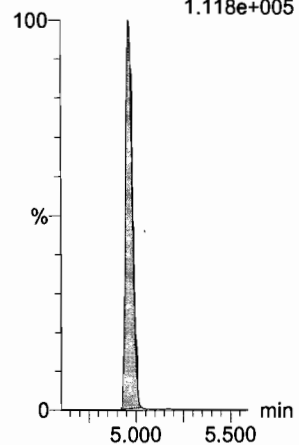
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Name: 171116M3\_7, Date: 16-Nov-2017, Time: 17:27:12, ID: ST171116M3-6 PFC CS3 17K0834, Description: PFC CS3 17K0834

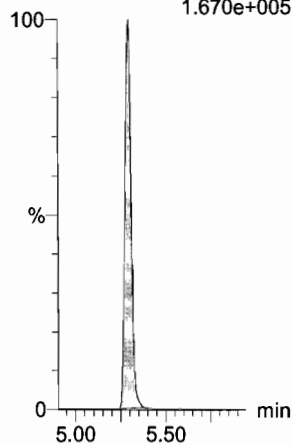
13C6-PFDA

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.118e+005



13C7-PFUdA

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
1.670e+005





Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

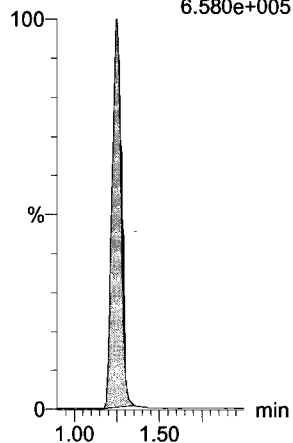
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

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Name: 171116M3\_8, Date: 16-Nov-2017, Time: 17:38:23, ID: ST171116M3-7 PFC CS4 17K0835, Description: PFC CS4 17K0835

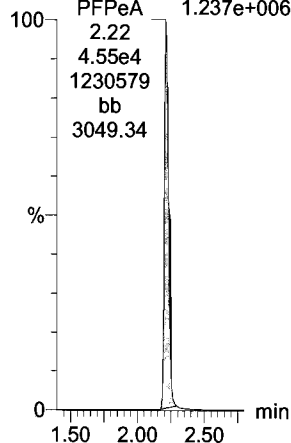
**PFBA**

F1:MRM of 1 channel,ES-  
213.0 > 168.8  
6.580e+005



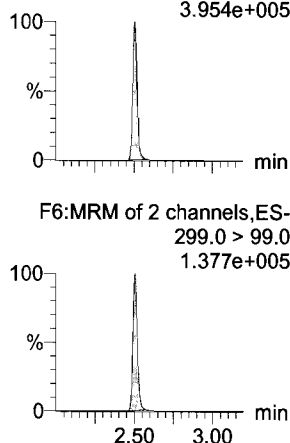
**PFPeA**

F4:MRM of 1 channel,ES-  
263.1 > 218.9  
1.237e+006



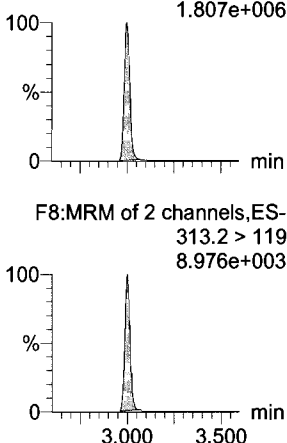
**PFBS**

F6:MRM of 2 channels,ES-  
299.0 > 79.7  
3.954e+005



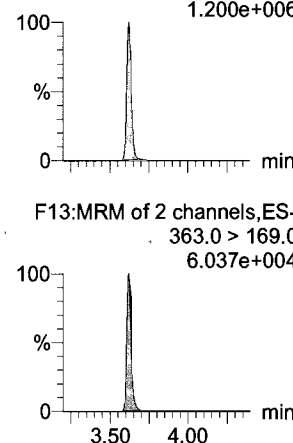
**PFHxA**

F8:MRM of 2 channels,ES-  
313.2 > 268.9  
1.807e+006



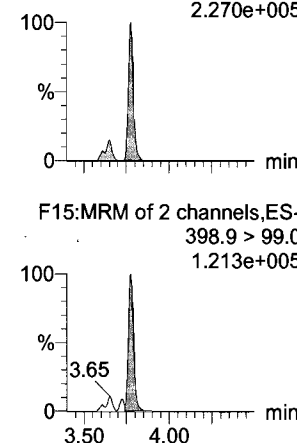
**PFHpA**

F13:MRM of 2 channels,ES-  
363.0 > 318.9  
1.200e+006



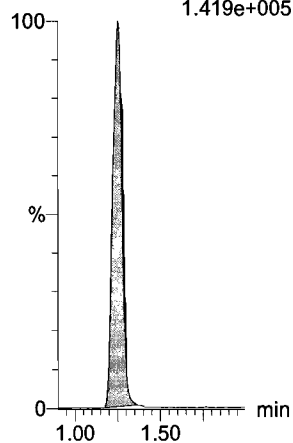
**L-PFHxS**

F15:MRM of 2 channels,ES-  
398.9 > 79.6  
2.270e+005



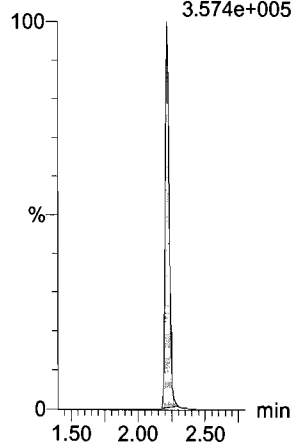
**13C3-PFBA**

F2:MRM of 1 channel,ES-  
216.1 > 171.8  
1.419e+005



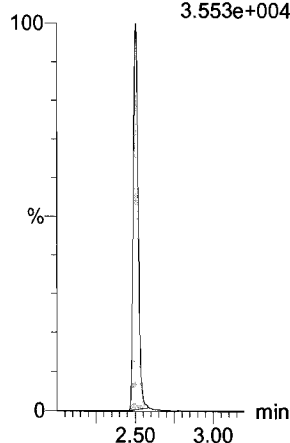
**13C3-PFPeA**

F5:MRM of 1 channel,ES-  
266. > 221.8  
3.574e+005



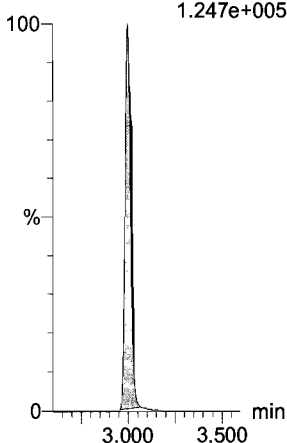
**13C3-PFBS**

F7:MRM of 1 channel,ES-  
302. > 98.8  
3.553e+004



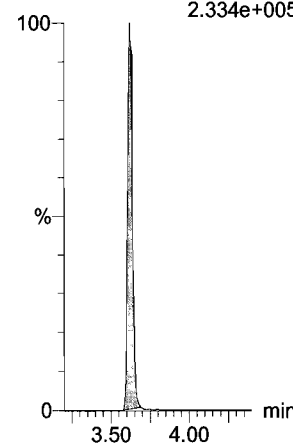
**13C2-PFHxA**

F9:MRM of 1 channel,ES-  
315 > 269.8  
1.247e+005



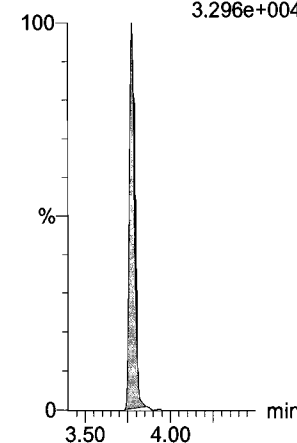
**13C4-PFHpA**

F14:MRM of 1 channel,ES-  
367.2 > 321.8  
2.334e+005



**18O2-PFHxS**

F17:MRM of 1 channel,ES-  
403.0 > 102.6  
3.296e+004

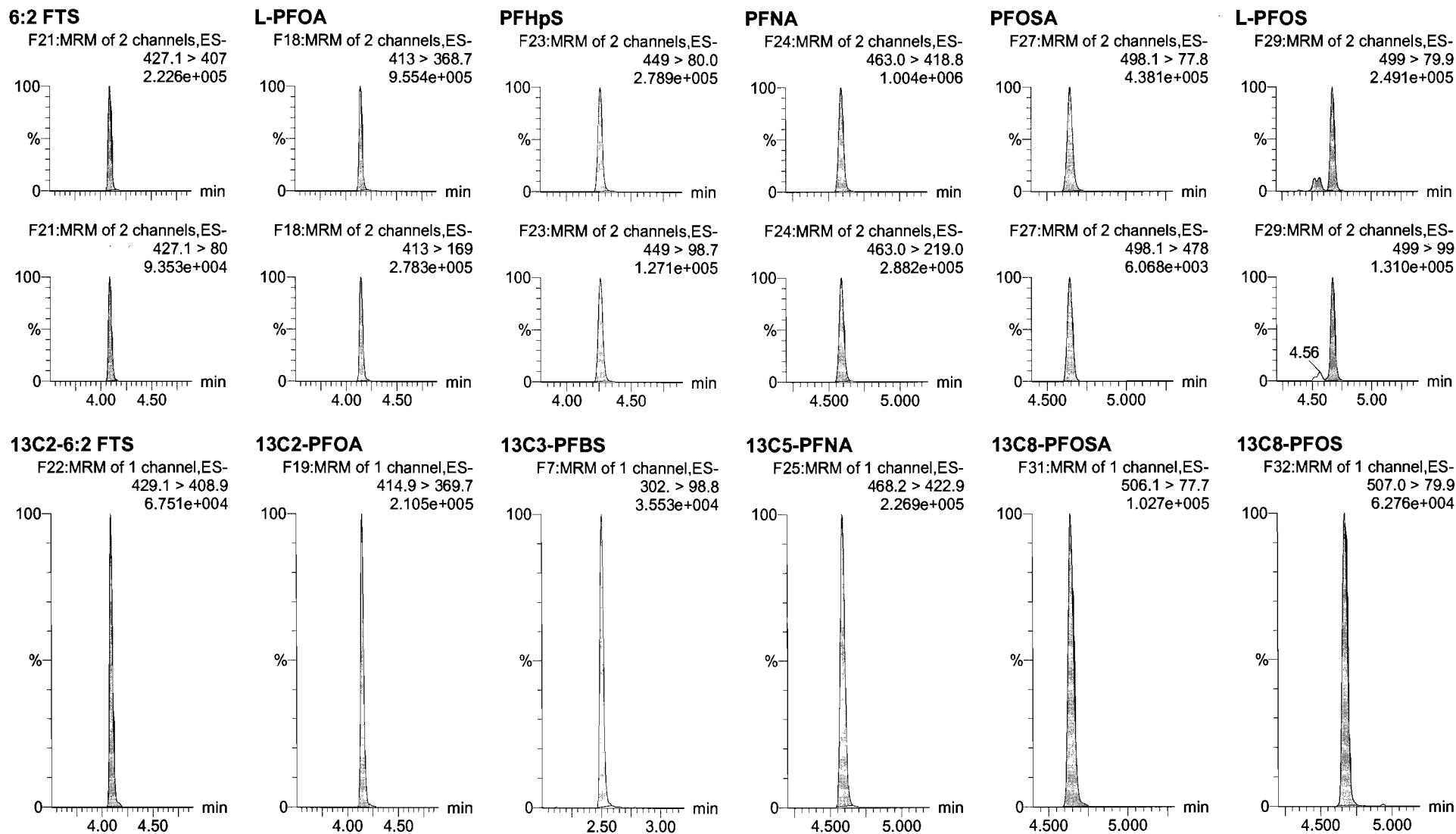


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Name: 171116M3\_8, Date: 16-Nov-2017, Time: 17:38:23, ID: ST171116M3-7 PFC CS4 17K0835, Description: PFC CS4 17K0835



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

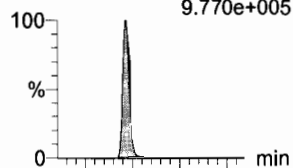
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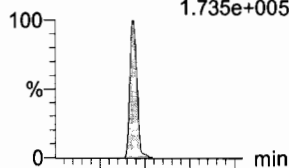
**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
9.770e+005



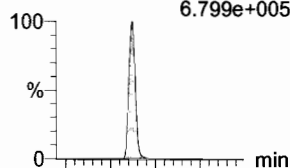
**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
1.735e+005



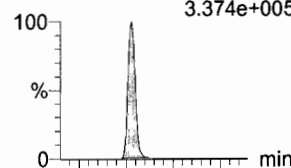
**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
6.799e+005



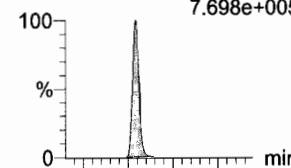
**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
3.374e+005



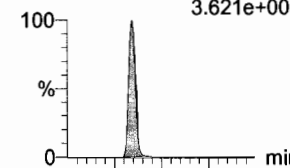
**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
7.698e+005

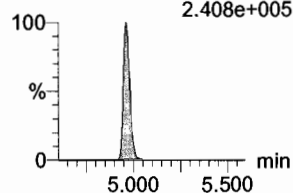


**PFDS**

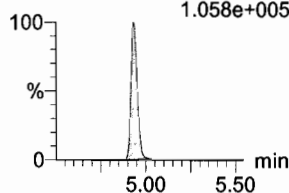
F49:MRM of 2 channels,ES-  
598.8 > 80  
3.621e+005



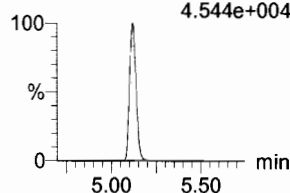
F34:MRM of 2 channels,ES-  
513 > 219  
2.408e+005



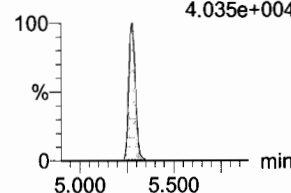
F39:MRM of 2 channels,ES-  
527 > 80  
1.058e+005



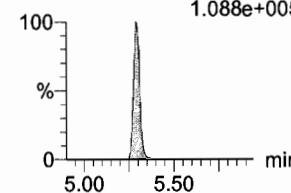
F44:MRM of 2 channels,ES-  
570.1 > 483.0  
4.544e+004



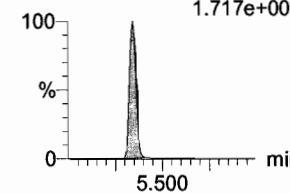
F47:MRM of 2 channels,ES-  
584.2 > 483.0  
4.035e+004



F42:MRM of 2 channels,ES-  
563.0 > 269  
1.088e+005

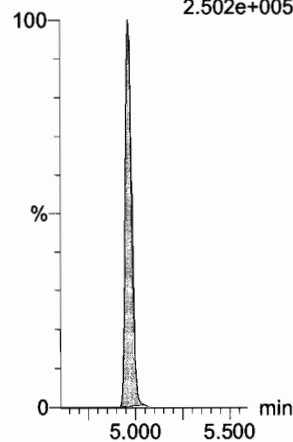


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
1.717e+005



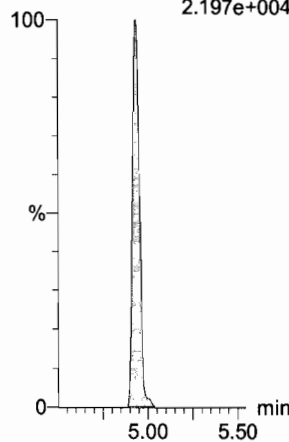
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
2.502e+005



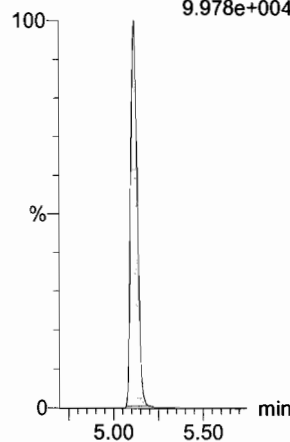
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
2.197e+004



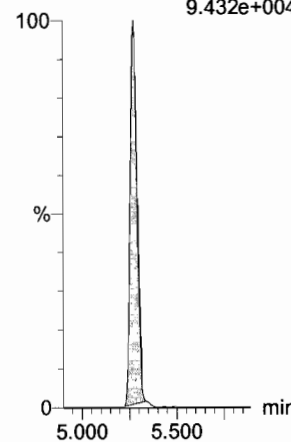
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
9.978e+004



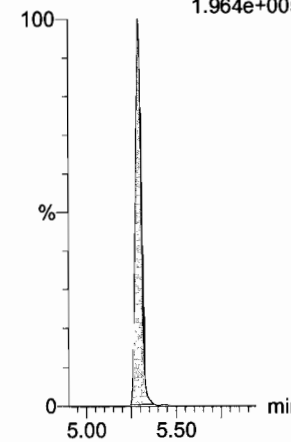
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
9.432e+004



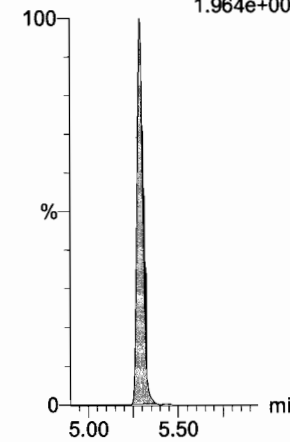
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
1.964e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
1.964e+005

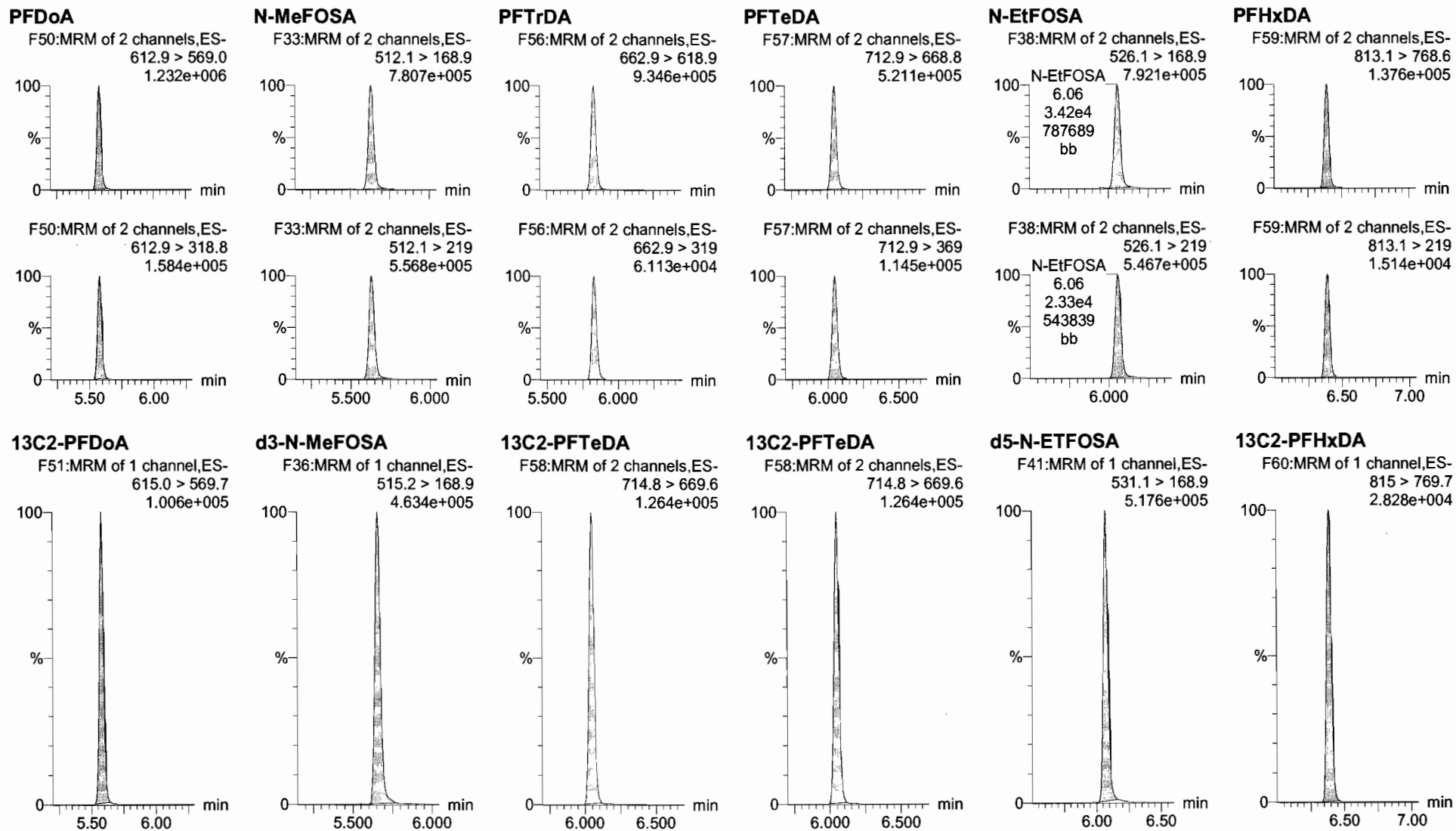


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Name: 171116M3\_8, Date: 16-Nov-2017, Time: 17:38:23, ID: ST171116M3-7 PFC CS4 17K0835, Description: PFC CS4 17K0835

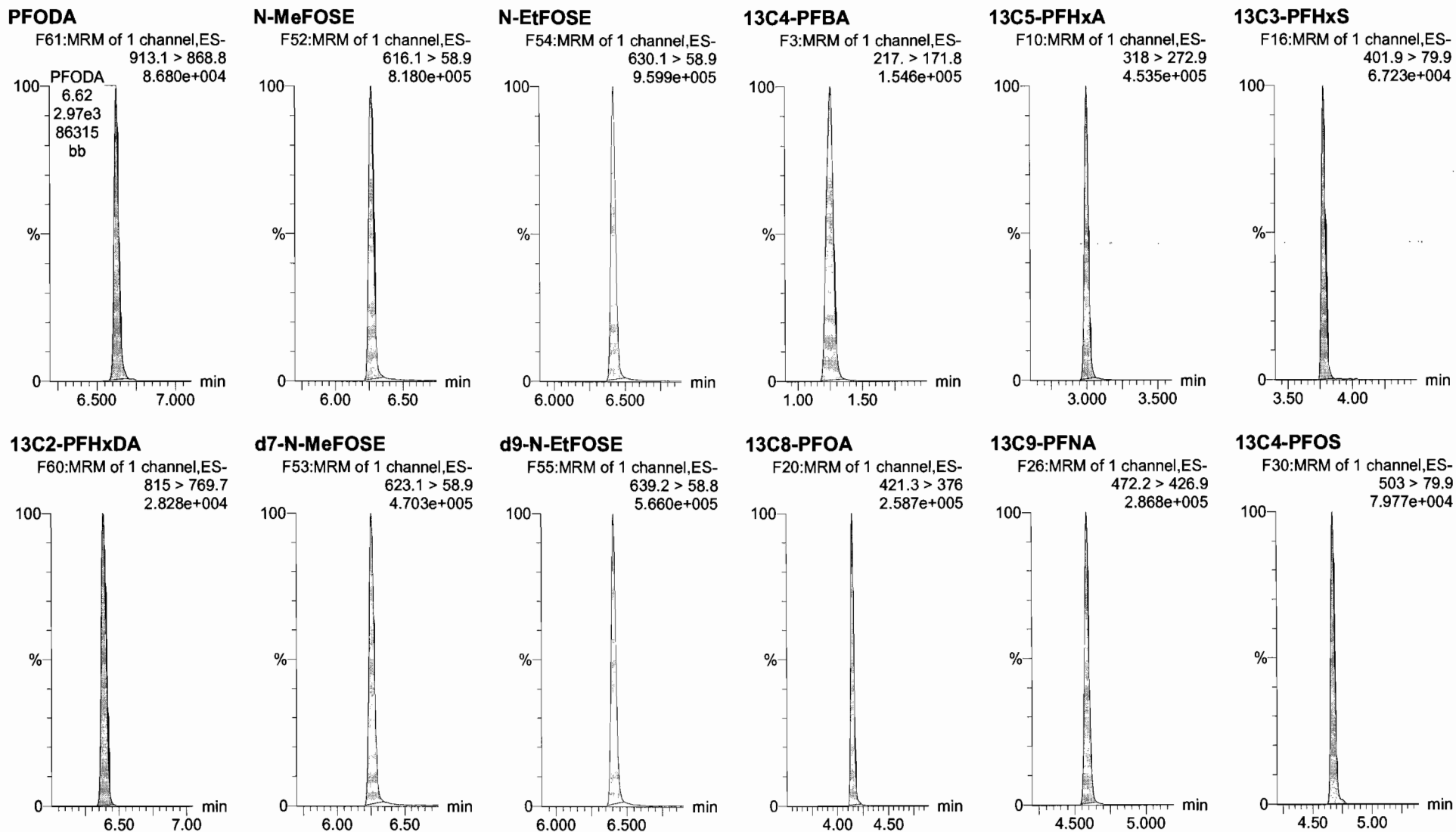


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Name: 171116M3\_8, Date: 16-Nov-2017, Time: 17:38:23, ID: ST171116M3-7 PFC CS4 17K0835, Description: PFC CS4 17K0835



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

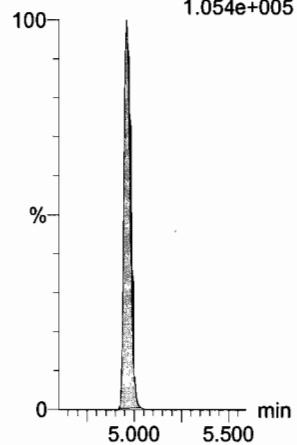
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Name: 171116M3\_8, Date: 16-Nov-2017, Time: 17:38:23, ID: ST171116M3-7 PFC CS4 17K0835, Description: PFC CS4 17K0835

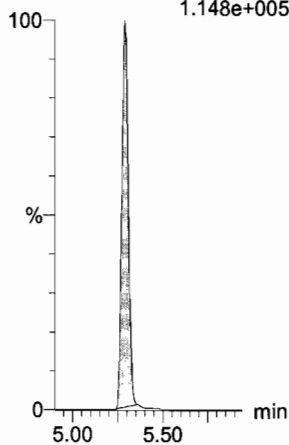
13C6-PFDA

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.054e+005



13C7-PFUdA

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
1.148e+005



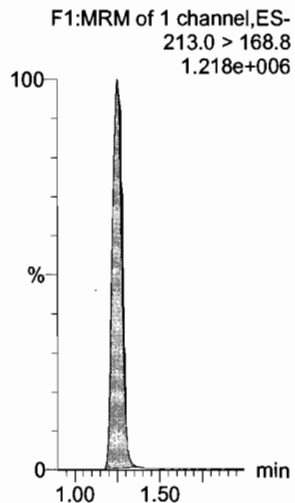
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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

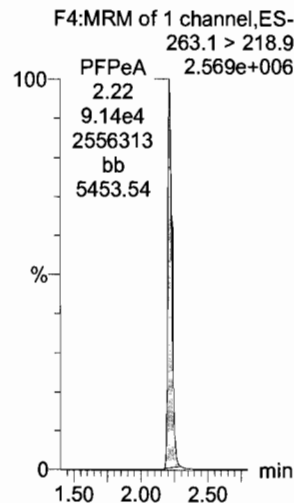
Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_9, Date: 16-Nov-2017, Time: 17:49:33, ID: ST171116M3-8 PFC CS5 17K0836, Description: PFC CS5 17K0836

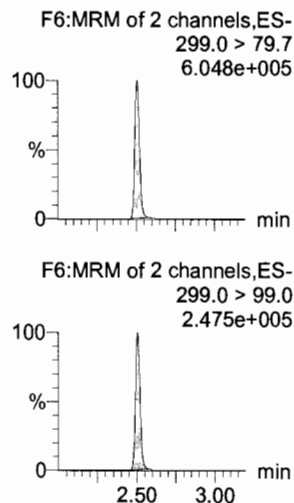
**PFBA**



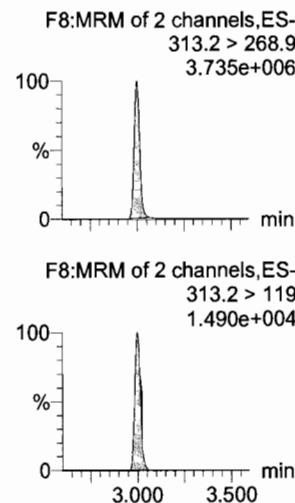
**PFPeA**



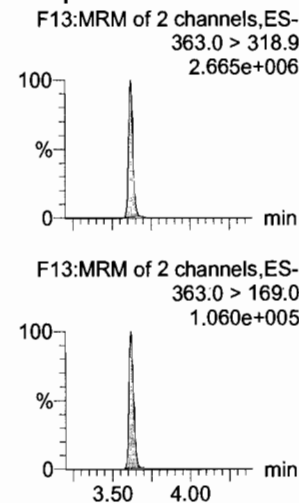
**PFBS**



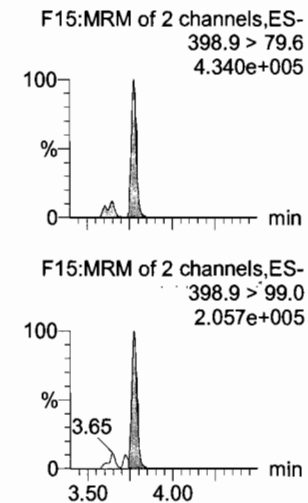
**PFHxA**



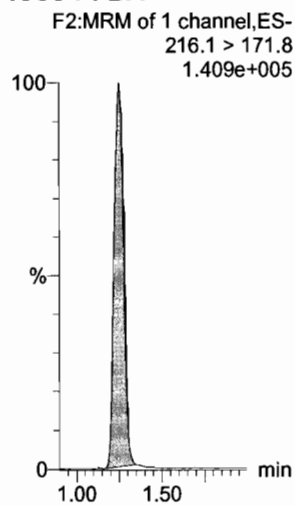
**PFHpA**



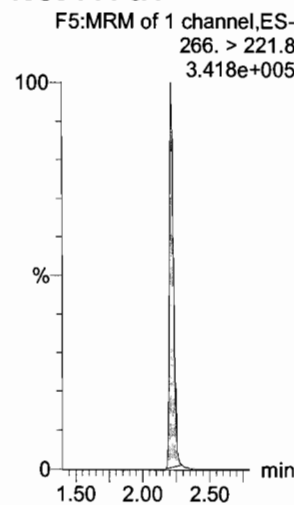
**L-PFHxS**



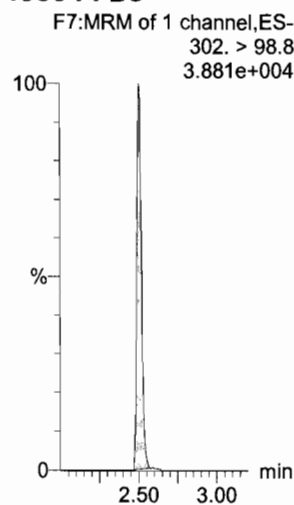
**13C3-PFBA**



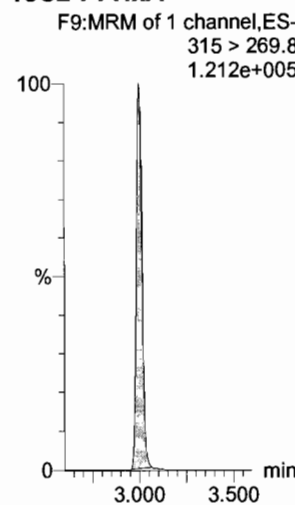
**13C3-PFPeA**



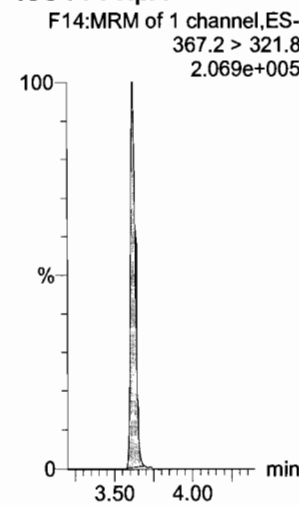
**13C3-PFBS**



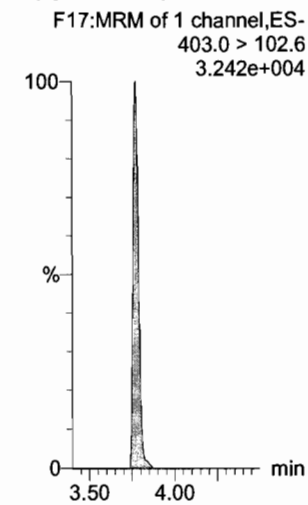
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

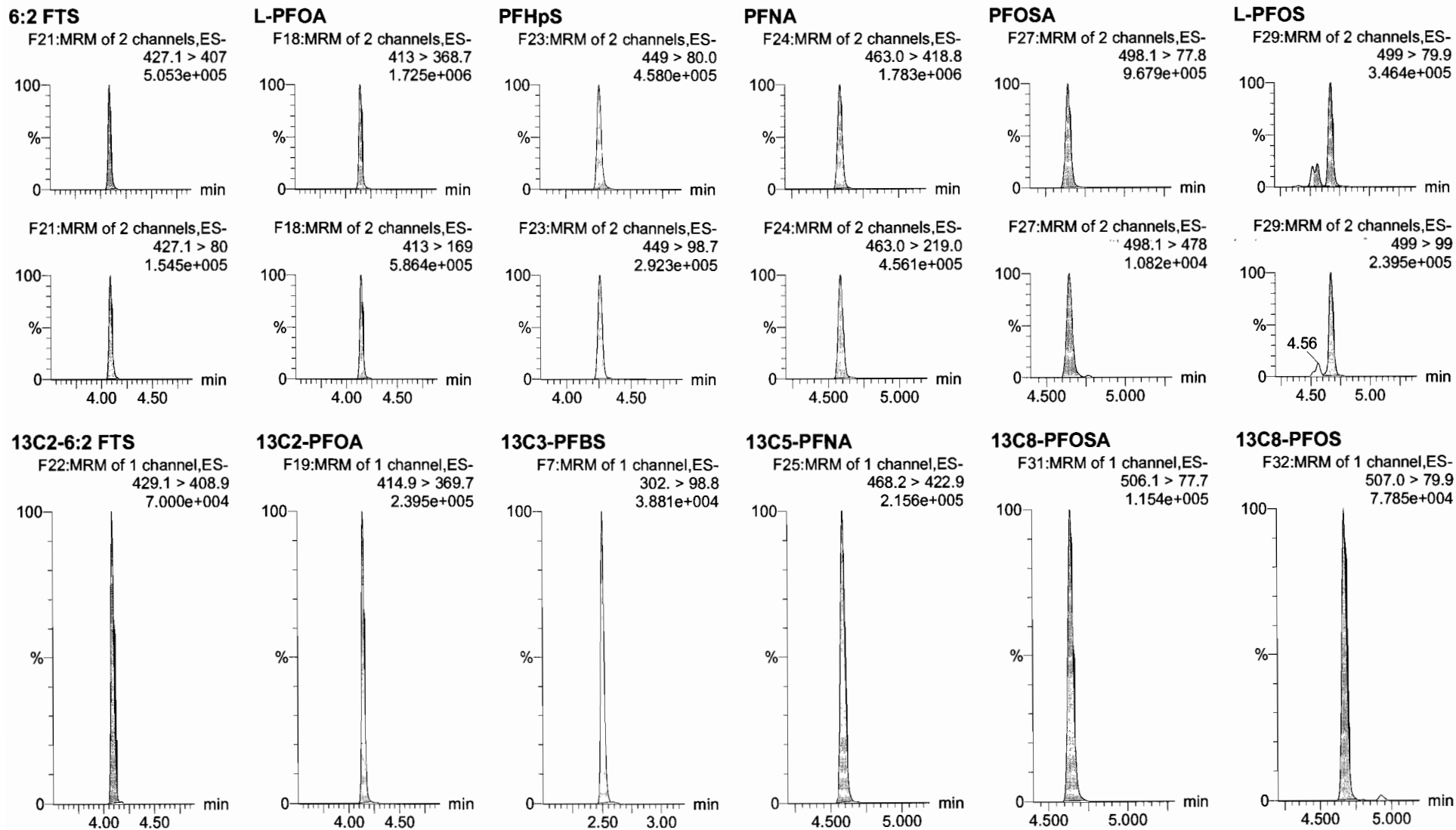


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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_9, Date: 16-Nov-2017, Time: 17:49:33, ID: ST171116M3-8 PFC CS5 17K0836, Description: PFC CS5 17K0836





Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

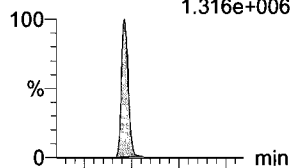
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Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

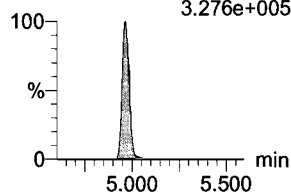
Name: 171116M3\_9, Date: 16-Nov-2017, Time: 17:49:33, ID: ST171116M3-8 PFC CS5 17K0836, Description: PFC CS5 17K0836

**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
1.316e+006

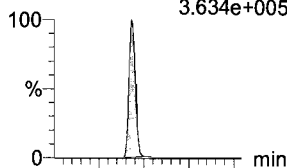


F34:MRM of 2 channels,ES-  
513 > 219  
3.276e+005

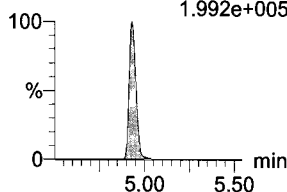


**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
3.634e+005

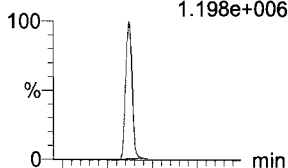


F39:MRM of 2 channels,ES-  
527 > 80  
1.992e+005

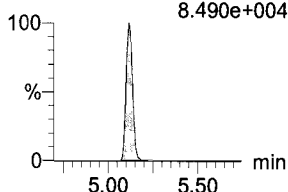


**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
1.198e+006

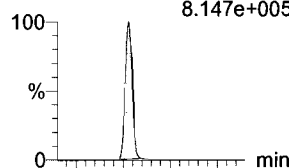


F44:MRM of 2 channels,ES-  
570.1 > 483.0  
8.490e+004

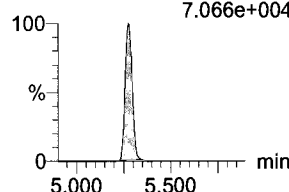


**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
8.147e+005

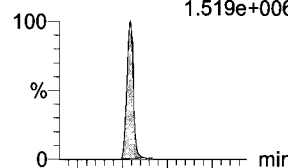


F47:MRM of 2 channels,ES-  
584.2 > 483.0  
7.066e+004

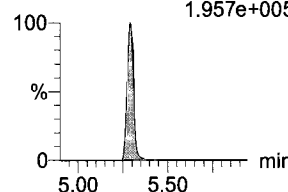


**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
1.519e+006

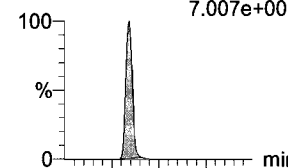


F42:MRM of 2 channels,ES-  
563.0 > 269  
1.957e+005

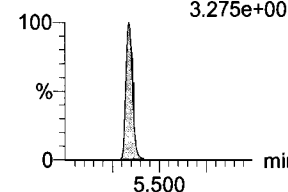


**PFDS**

F49:MRM of 2 channels,ES-  
598.8 > 80  
7.007e+005

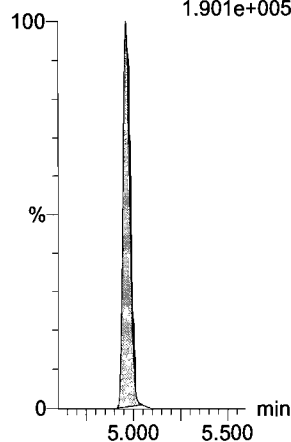


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
3.275e+005



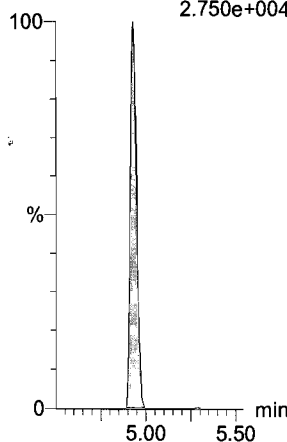
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
1.901e+005



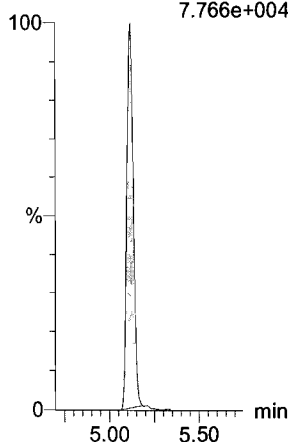
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
2.750e+004



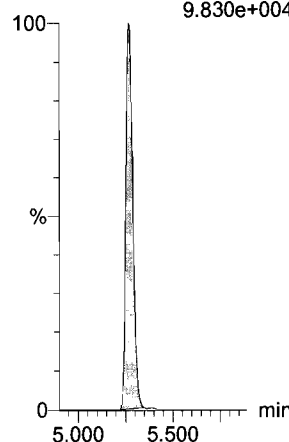
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
7.766e+004



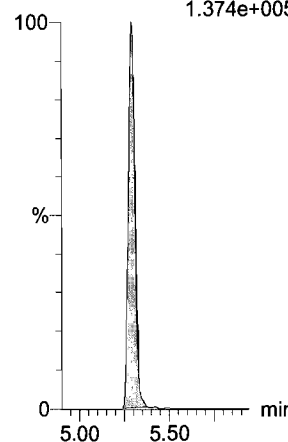
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
9.830e+004



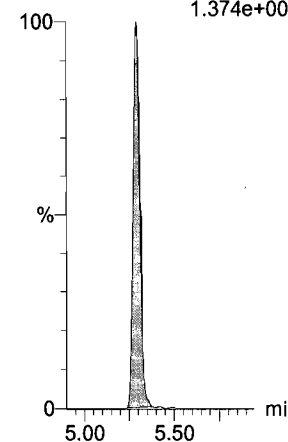
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
1.374e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
1.374e+005



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

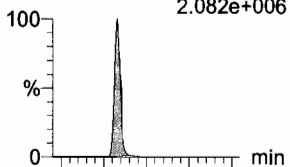
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_9, Date: 16-Nov-2017, Time: 17:49:33, ID: ST171116M3-8 PFC CS5 17K0836, Description: PFC CS5 17K0836

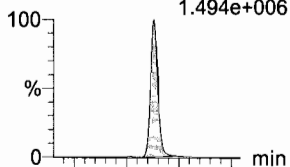
**PFDoA**

F50:MRM of 2 channels,ES-  
612.9 > 569.0  
2.082e+006



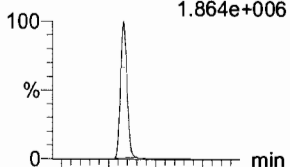
**N-MeFOSA**

F33:MRM of 2 channels,ES-  
512.1 > 168.9  
1.494e+006



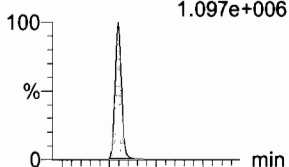
**PFTrDA**

F56:MRM of 2 channels,ES-  
662.9 > 618.9  
1.864e+006



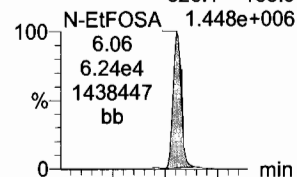
**PFTeDA**

F57:MRM of 2 channels,ES-  
712.9 > 668.8  
1.097e+006



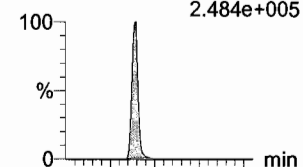
**N-EtFOSA**

F38:MRM of 2 channels,ES-  
526.1 > 168.9  
1.448e+006

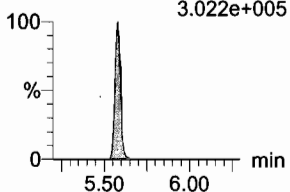


**PFHxDA**

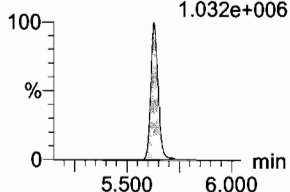
F59:MRM of 2 channels,ES-  
813.1 > 768.6  
2.484e+005



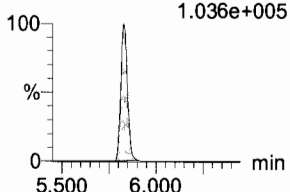
F50:MRM of 2 channels,ES-  
612.9 > 318.8  
3.022e+005



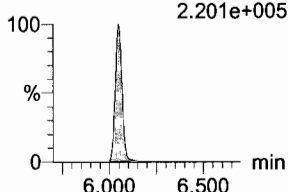
F33:MRM of 2 channels,ES-  
512.1 > 219  
1.032e+006



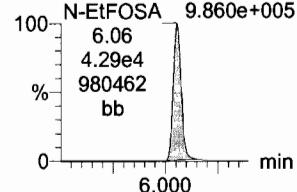
F56:MRM of 2 channels,ES-  
662.9 > 319  
1.036e+005



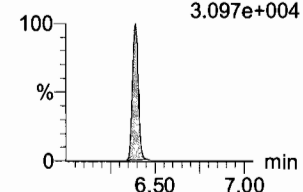
F57:MRM of 2 channels,ES-  
712.9 > 369  
2.201e+005



F38:MRM of 2 channels,ES-  
526.1 > 219  
9.860e+005

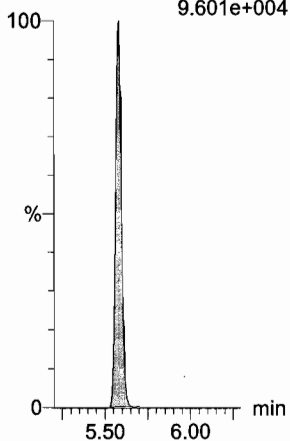


F59:MRM of 2 channels,ES-  
813.1 > 219  
3.097e+004



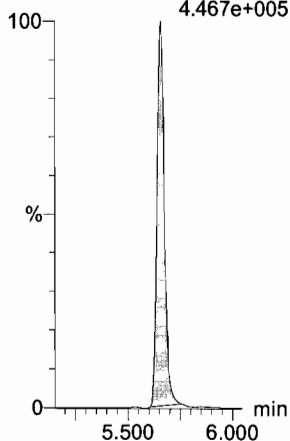
**13C2-PFDoA**

F51:MRM of 1 channel,ES-  
615.0 > 569.7  
9.601e+004



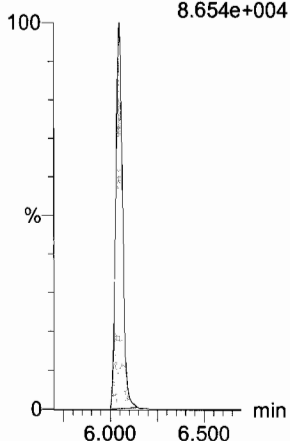
**d3-N-MeFOSA**

F36:MRM of 1 channel,ES-  
515.2 > 168.9  
4.467e+005



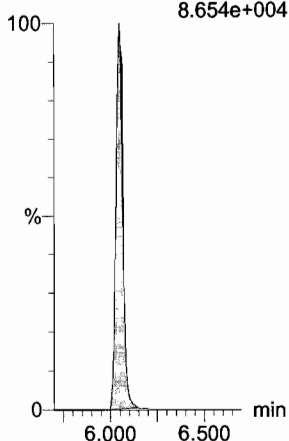
**13C2-PFTeDA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
8.654e+004



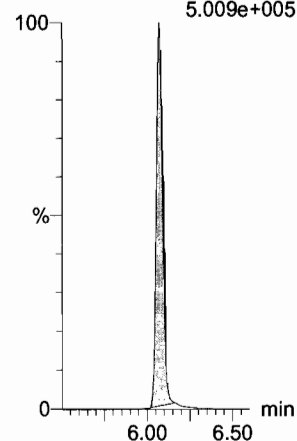
**13C2-PFTeDA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
8.654e+004



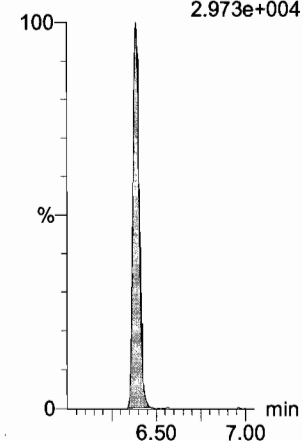
**d5-N-ETFOSA**

F41:MRM of 1 channel,ES-  
531.1 > 168.9  
5.009e+005



**13C2-PFHxDA**

F60:MRM of 1 channel,ES-  
815 > 769.7  
2.973e+004

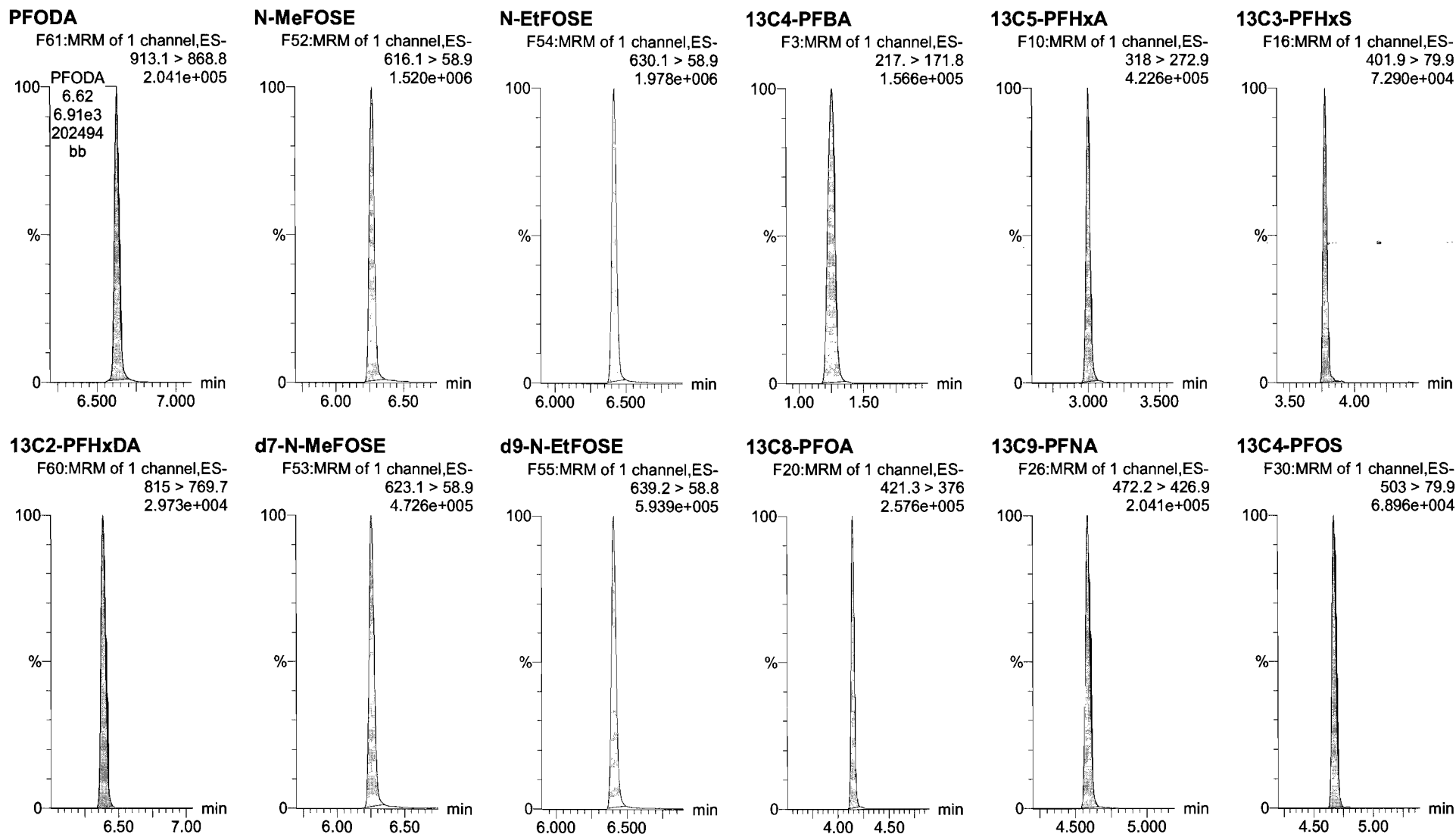


Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

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Name: 171116M3\_9, Date: 16-Nov-2017, Time: 17:49:33, ID: ST171116M3-8 PFC CS5 17K0836, Description: PFC CS5 17K0836



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

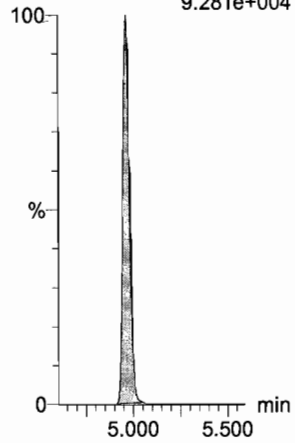
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_9, Date: 16-Nov-2017, Time: 17:49:33, ID: ST171116M3-8 PFC CS5 17K0836, Description: PFC CS5 17K0836

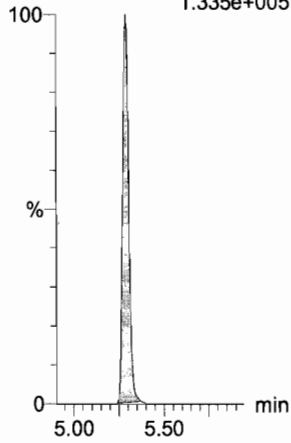
13C6-PFDA

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
9.281e+004



13C7-PFUdA

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
1.335e+005



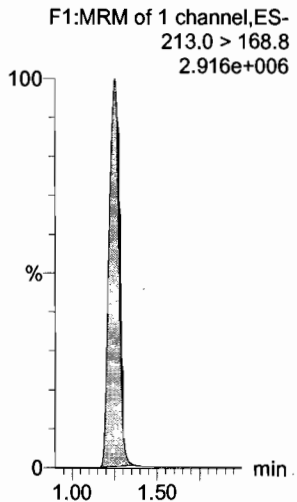
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Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

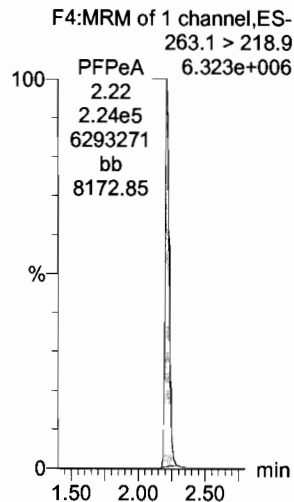
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Name: 171116M3\_10, Date: 16-Nov-2017, Time: 18:00:44, ID: ST171116M3-9 PFC CS6 17K1303, Description: PFC CS6 17K1303

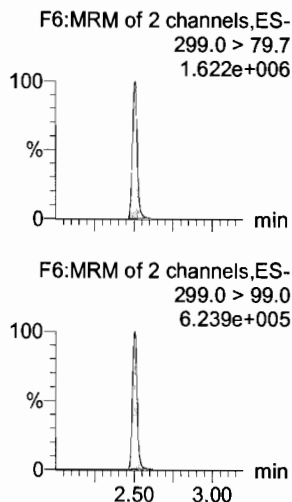
**PFBA**



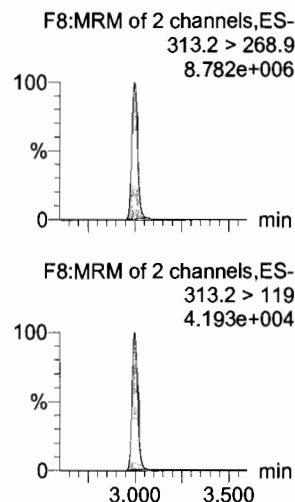
**PFPeA**



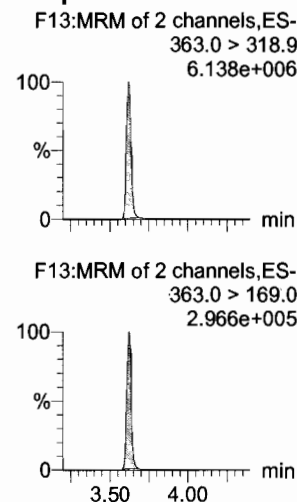
**PFBS**



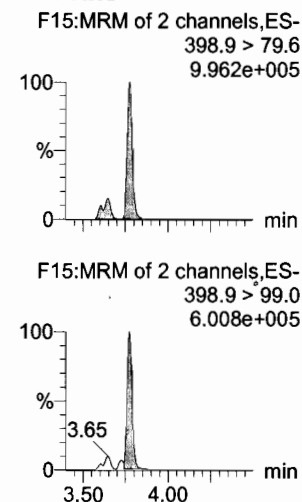
**PFHxA**



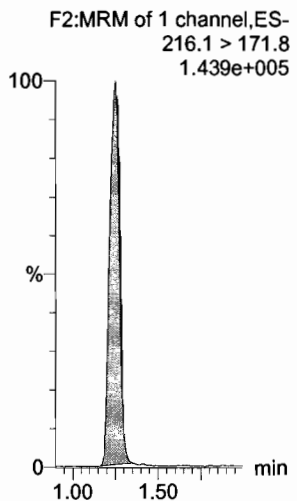
**PFHpA**



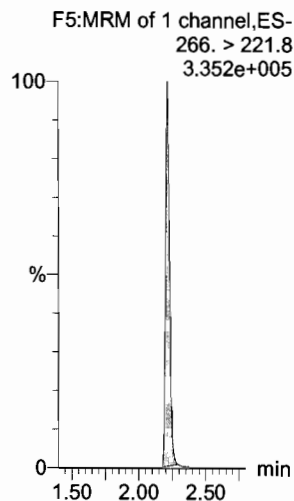
**L-PFHxS**



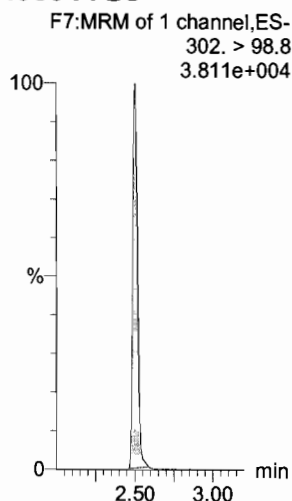
**13C3-PFBA**



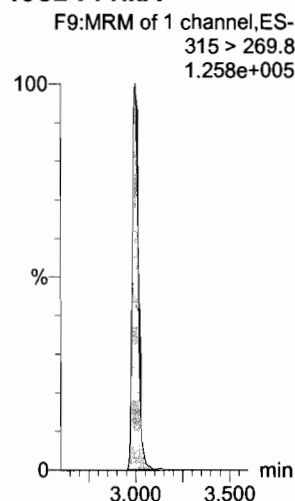
**13C3-PFPeA**



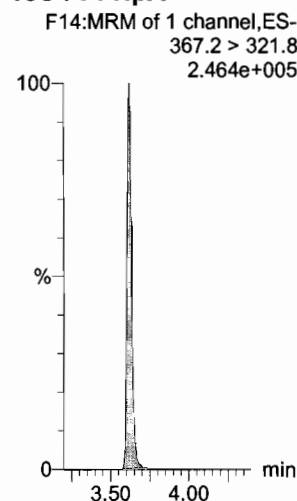
**13C3-PFBS**



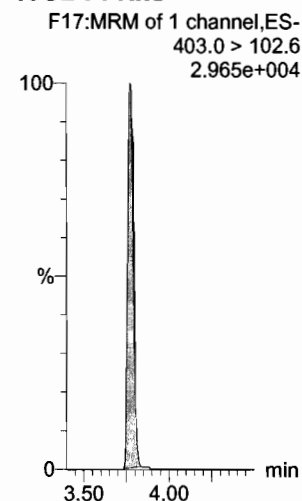
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

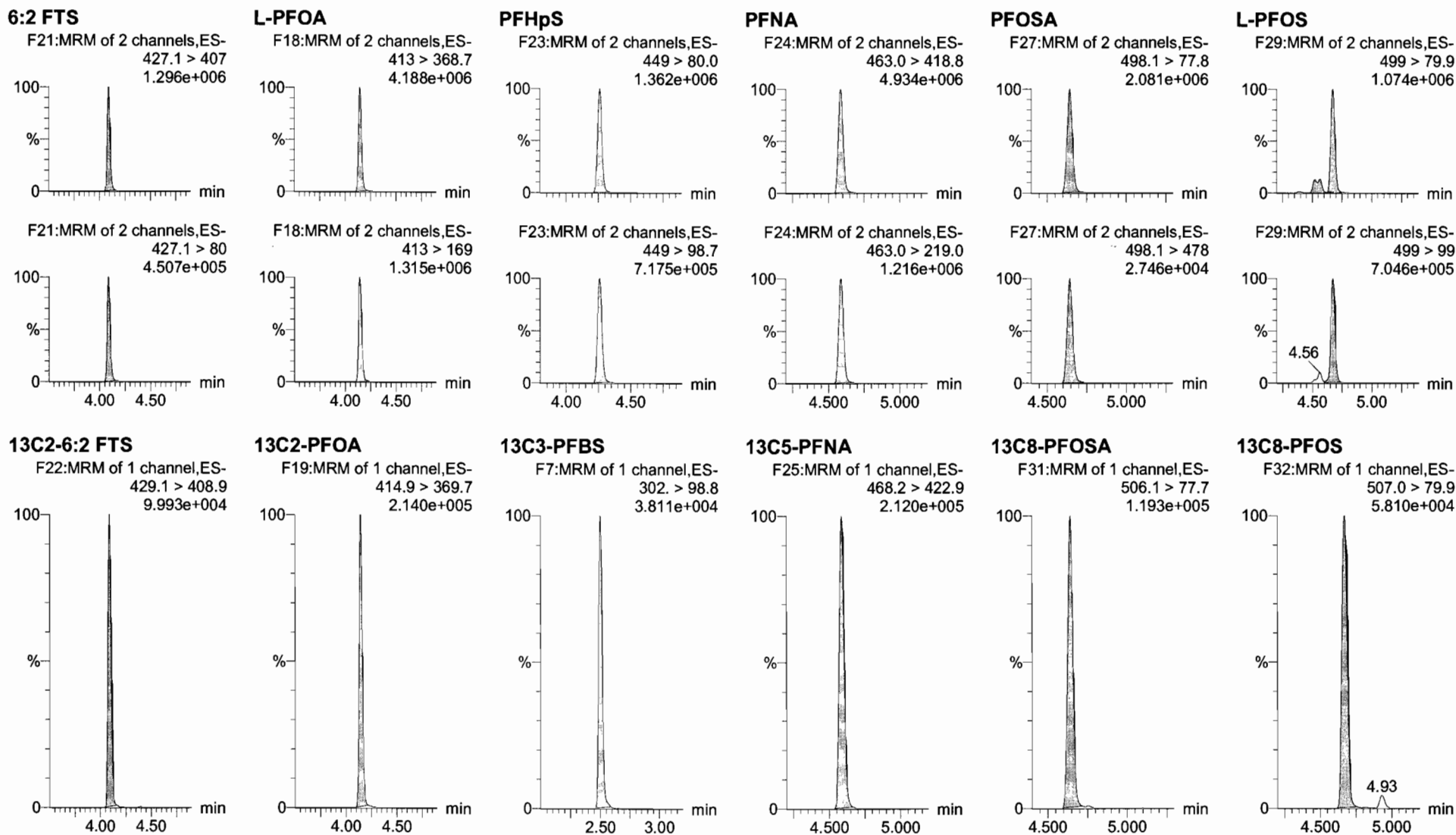


Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_10, Date: 16-Nov-2017, Time: 18:00:44, ID: ST171116M3-9 PFC CS6 17K1303, Description: PFC CS6 17K1303



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

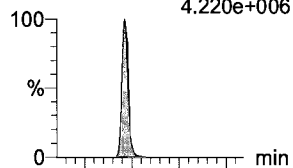
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_10, Date: 16-Nov-2017, Time: 18:00:44, ID: ST171116M3-9 PFC CS6 17K1303, Description: PFC CS6 17K1303

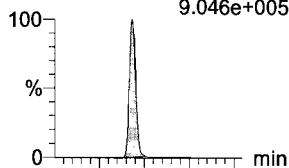
**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
4.220e+006



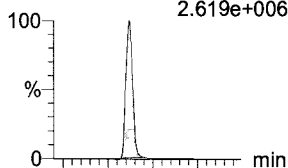
**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
9.046e+005



**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
2.619e+006



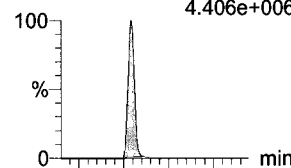
**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
2.275e+006



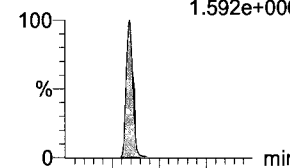
**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
4.406e+006

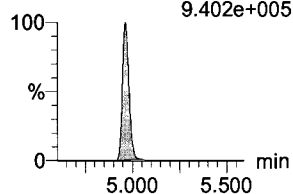


**PFDS**

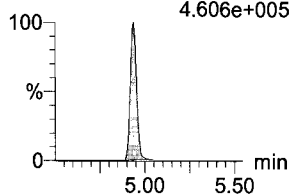
F49:MRM of 2 channels,ES-  
598.8 > 80  
1.592e+006



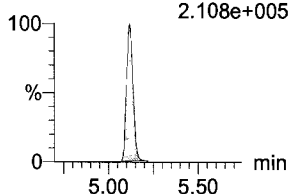
F34:MRM of 2 channels,ES-  
513 > 219  
9.402e+005



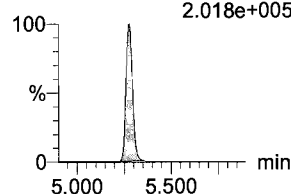
F39:MRM of 2 channels,ES-  
527 > 80  
4.606e+005



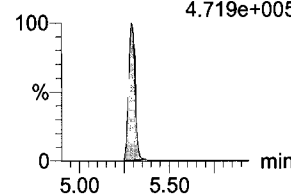
F44:MRM of 2 channels,ES-  
570.1 > 483.0  
2.108e+005



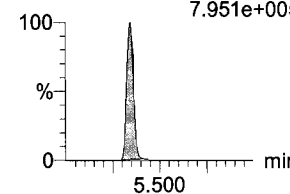
F47:MRM of 2 channels,ES-  
584.2 > 483.0  
2.018e+005



F42:MRM of 2 channels,ES-  
563.0 > 269  
4.719e+005

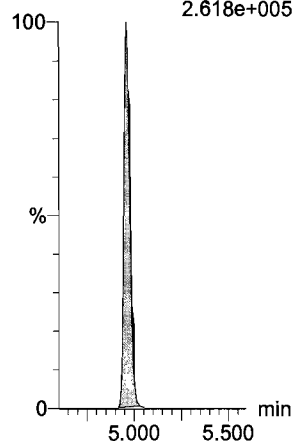


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
7.951e+005



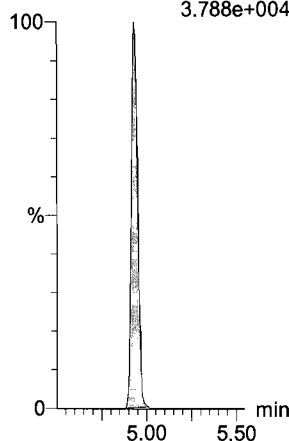
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
2.618e+005



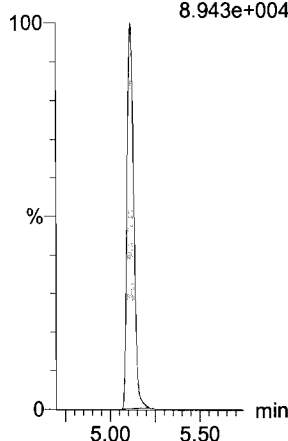
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
3.788e+004



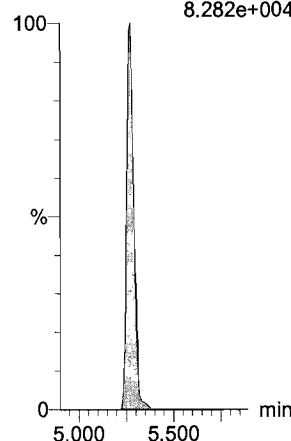
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
8.943e+004



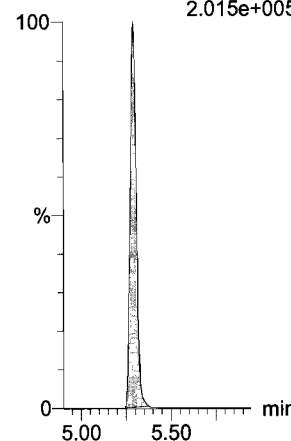
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
8.282e+004



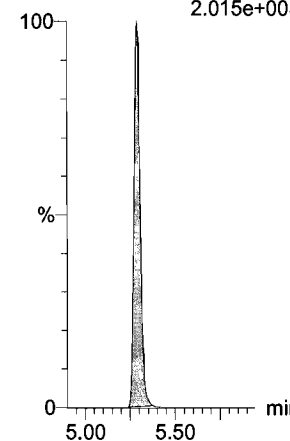
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
2.015e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
2.015e+005

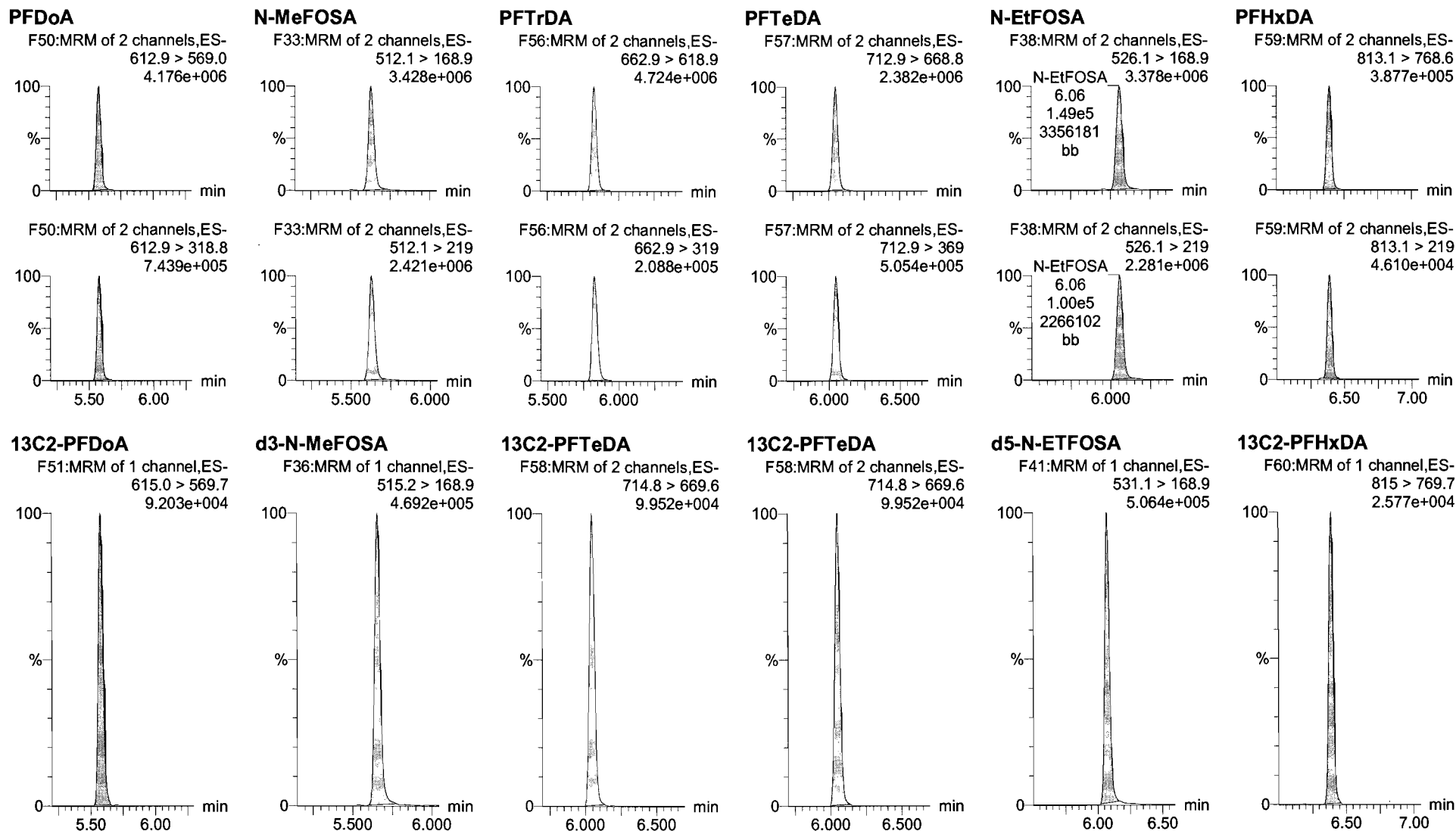


Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_10, Date: 16-Nov-2017, Time: 18:00:44, ID: ST171116M3-9 PFC CS6 17K1303, Description: PFC CS6 17K1303





Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

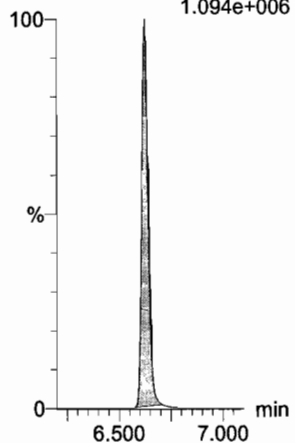
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_10, Date: 16-Nov-2017, Time: 18:00:44, ID: ST171116M3-9 PFC CS6 17K1303, Description: PFC CS6 17K1303

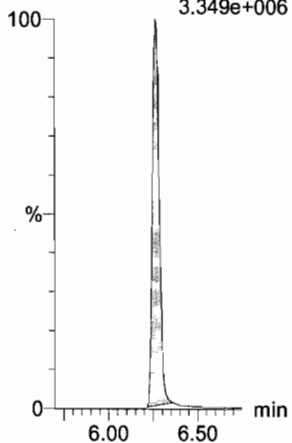
**PFODA**

F61:MRM of 1 channel,ES-  
913.1 > 868.8  
1.094e+006



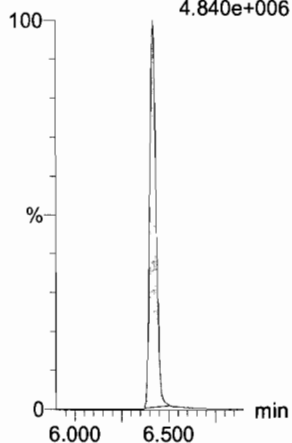
**N-MeFOSE**

F52:MRM of 1 channel,ES-  
616.1 > 58.9  
3.349e+006



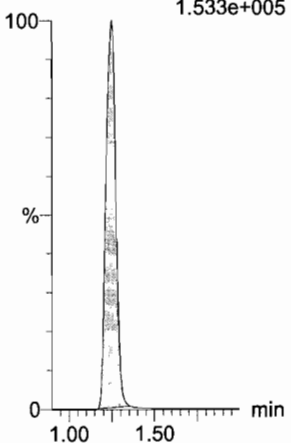
**N-EtFOSE**

F54:MRM of 1 channel,ES-  
630.1 > 58.9  
4.840e+006



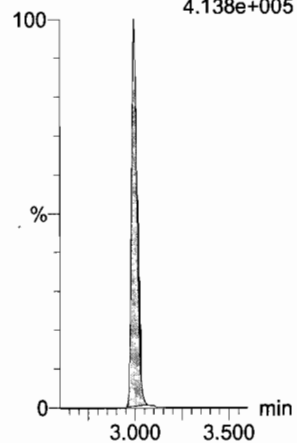
**13C4-PFBA**

F3:MRM of 1 channel,ES-  
217. > 171.8  
1.533e+005



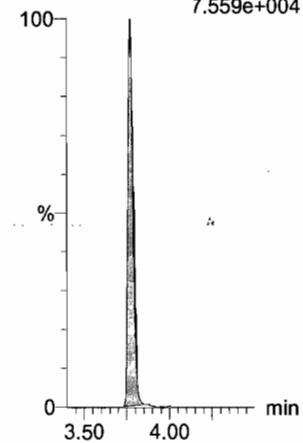
**13C5-PFHxA**

F10:MRM of 1 channel,ES-  
318 > 272.9  
4.138e+005



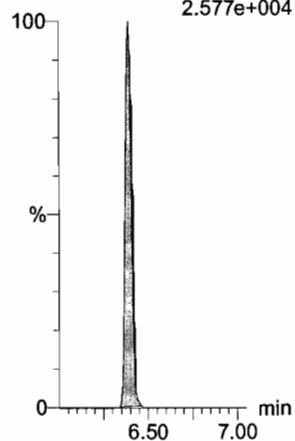
**13C3-PFHxS**

F16:MRM of 1 channel,ES-  
401.9 > 79.9  
7.559e+004



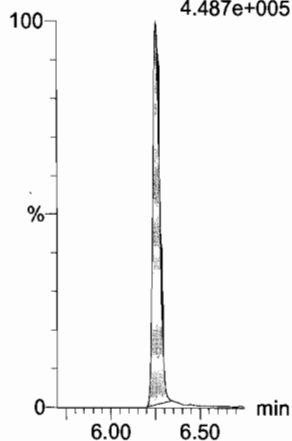
**13C2-PFHxDA**

F60:MRM of 1 channel,ES-  
815 > 769.7  
2.577e+004



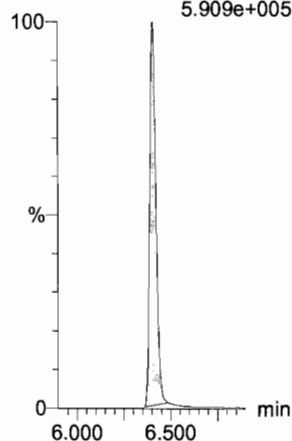
**d7-N-MeFOSE**

F53:MRM of 1 channel,ES-  
623.1 > 58.9  
4.487e+005



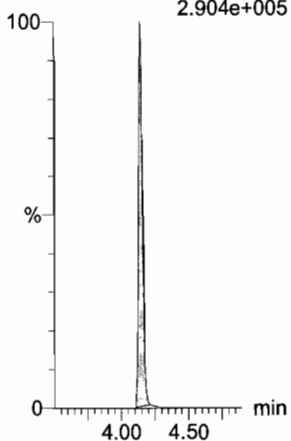
**d9-N-EtFOSE**

F55:MRM of 1 channel,ES-  
639.2 > 58.8  
5.909e+005



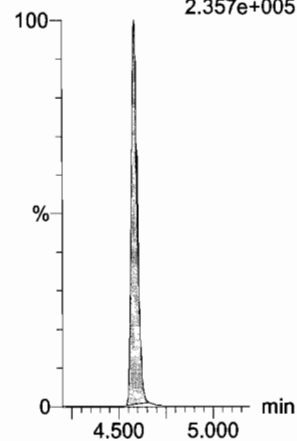
**13C8-PFOA**

F20:MRM of 1 channel,ES-  
421.3 > 376  
2.904e+005



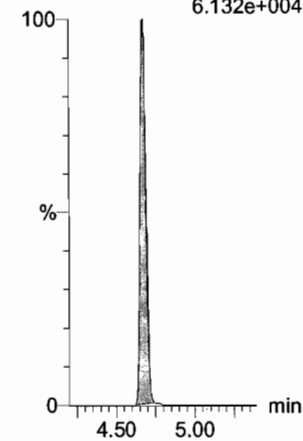
**13C9-PFNA**

F26:MRM of 1 channel,ES-  
472.2 > 426.9  
2.357e+005



**13C4-PFOS**

F30:MRM of 1 channel,ES-  
503 > 79.9  
6.132e+004



Dataset: U:\Q4.PRO\results\171116M3\171116M3-CRV.qld

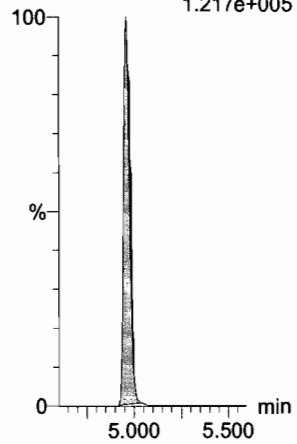
Last Altered: Friday, November 17, 2017 10:20:32 Pacific Standard Time

Printed: Friday, November 17, 2017 15:28:38 Pacific Standard Time

Name: 171116M3\_10, Date: 16-Nov-2017, Time: 18:00:44, ID: ST171116M3-9 PFC CS6 17K1303, Description: PFC CS6 17K1303

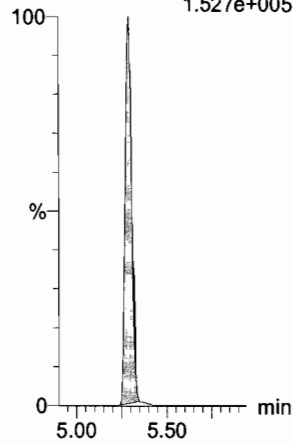
**13C6-PFDA**

F37:MRM of 1 channel, ES-  
519.1 > 473.7  
1.217e+005



**13C7-PFUdA**

F45:MRM of 1 channel, ES-  
570.1 > 524.8  
1.527e+005



Dataset: U:\Q4.PRO\results\171116M3\171116M3-13.qld

Last Altered: Friday, November 17, 2017 15:53:44 Pacific Standard Time

Printed: Friday, November 17, 2017 15:55:28 Pacific Standard Time

Ⓐ Not in ICV.  
Ⓑ outside method limits. Not used.

AC 11/17/17

✓ JFA 11/20/2017

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_13, Date: 16-Nov-2017, Time: 18:34:16, ID: ICV171116M3-1 PFC ICV 17K0837, Description: PFC ICV 17K0837

#	Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	8.28e3	8.91e3	1.0000		1.28	1.25	11.6	10.905	109.1
2	2 PFPeA	263.1 > 218.9	1.05e4	1.21e4	1.0000		2.32	2.22	10.8	11.221	112.2
3	3 PFBS	299.0 > 79.7	2.33e3	1.41e3	1.0000		2.55	2.50	20.6	9.640	96.4
4	4 PFHxA	313.2 > 268.9	1.34e4	4.03e3	1.0000		3.01	3.00	16.6	11.589	115.9
5	5 PFHpA	363.0 > 318.9	9.97e3	8.15e3	1.0000		3.71	3.62	15.3	11.426	114.3
6	6 L-PFHxS	398.9 > 79.6	1.93e3	1.33e3	1.0000		3.86	3.77	18.2	9.425	94.2
7	8 6:2 FTS	427.1 > 407	1.84e3	1.70e3	1.0000		4.16	4.09	13.5	14.574	Ⓑ 145.7
8	9 L-PFOA	413 > 368.7	7.58e3	8.80e3	1.0000		4.22	4.15	10.8	10.546	Ⓑ 105.5
9	11 PFHpS	449 > 80.0	2.56e3	8.80e3	1.0000		4.32	4.26	3.63	11.720	117.2
10	12 PFNA	463.0 > 418.8	9.12e3	8.62e3	1.0000		4.66	4.58	13.2	11.808	118.1
11	13 PFOSA	498.1 > 77.8	3.83e3	4.96e3	1.0000		4.73	4.64	9.66	9.281	92.8
12	14 L-PFOS	499 > 79.9	2.61e3	3.25e3	1.0000		4.74	4.67	10.0	7.924	79.2
13	16 PFDA	513 > 468.8	6.08e3	7.92e3	1.0000		5.01	4.96	9.59	10.132	101.3
14	17 8:2 FTS	527 > 506.9	1.46e3	9.98e2	1.0000		4.88	4.94	18.3	7.630	76.3
15	18 N-MeFOSAA	570.1 > 419	6.32e3	4.22e3	1.0000		5.17	5.12	18.7	10.355	103.6
16	19 N-EtFOSAA	584.2 > 419	3.89e3	3.68e3	1.0000		5.32	5.28	13.2	12.271	122.7
17	20 PFUDa	563.0 > 518.9	7.62e3	7.38e3	1.0000		5.45	5.29	12.9	9.988	99.9
18	21 PFDS	598.8 > 80	3.04e3	7.38e3	1.0000		5.39	5.34	5.15	11.948	119.5
19	22 PFDoA	612.9 > 569.0	8.99e3	3.71e3	1.0000		5.62	5.58	30.3	9.852	98.5
20	23 N-MeFOSA	512.1 > 168.9		1.90e4	1.0000		5.68				Ⓐ 123.0
21	24 PFTrDA	662.9 > 618.9	9.22e3	3.71e3	1.0000		5.87	5.83	31.1	12.298	Ⓐ 123.0
22	25 PFTeDA	712.9 > 668.8	4.58e3	4.52e3	1.0000		6.01	6.05	12.7	11.161	111.6
23	26 N-EtFOSA	526.1 > 168.9		2.22e4	1.0000		6.09				Ⓑ 105.0
24	27 PFHxDA	813.1 > 768.6		1.54e3	1.0000		6.42				Ⓐ 123.0
25	28 PFODA	913.1 > 868.8		1.54e3	1.0000		6.65				Ⓐ 123.0
26	29 N-MeFOSE	616.1 > 58.9		2.27e4	1.0000		6.30				Ⓐ 123.0
27	30 N-EtFOSE	630.1 > 58.9		2.26e4	1.0000		6.42				Ⓐ 123.0
28	31 13C3-PFBA	216.1 > 171.8	8.91e3	9.96e3	1.0000	0.887	1.28	1.25	11.2	12.605	100.8
29	32 13C3-PFPeA	266. > 221.8	1.21e4	1.32e4	1.0000	0.820	2.32	2.21	11.5	14.036	112.3
30	33 13C3-PFBS	302. > 98.8	1.41e3	1.32e4	1.0000	0.096	2.55	2.50	1.34	13.948	111.6
31	34 13C2-PFHxA	315 > 269.8	4.03e3	1.32e4	1.0000	0.728	3.01	3.00	3.82	5.249	105.0

70-120  
Ⓐ  
Ⓑ

Dataset: U:\Q4.PRO\results\171116M3\171116M3-13.qld

Last Altered: Friday, November 17, 2017 15:53:44 Pacific Standard Time

Printed: Friday, November 17, 2017 15:55:28 Pacific Standard Time

Name: 171116M3\_13, Date: 16-Nov-2017, Time: 18:34:16, ID: ICV171116M3-1 PFC ICV 17K0837, Description: PFC ICV 17K0837

#	Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	
32	35	13C4-PFHpA	367.2 > 321.8	8.15e3	1.32e4	1.0000	0.550	3.71	3.62	7.72	14.047	112.4
33	36	18O2-PFHxS	403.0 > 102.6	1.33e3	2.51e3	1.0000	0.432	3.86	3.77	6.61	15.312	122.5
34	37	13C2-6:2 FTS	429.1 > 408.9	1.70e3	9.40e3	1.0000	0.217	4.16	4.09	2.26	10.397	83.2
35	38	13C2-PFOA	414.9 > 369.7	8.80e3	9.40e3	1.0000	0.840	4.22	4.14	11.7	13.938	111.5
36	39	13C5-PFNA	468.2 > 422.9	8.62e3	8.60e3	1.0000	0.967	4.66	4.59	12.5	12.956	103.6
37	40	13C8-PFOA	506.1 > 77.7	4.96e3	5.37e3	1.0000	0.786	4.73	4.64	11.5	14.680	117.4
38	41	13C8-PFOS	507.0 > 79.9	3.25e3	2.87e3	1.0000	0.991	4.73	4.67	14.1	14.262	114.1
39	42	13C2-PFDA	515.1 > 469.9	7.92e3	4.36e3	1.0000	2.153	5.01	4.96	22.7	10.551	84.4
40	43	13C2-8:2 FTS	529.1 > 508.7	9.98e2	1.32e4	1.0000	0.058	4.88	4.93	0.946	16.243	129.9
41	44	d3-N-MeFOSAA	573.3 > 419	4.22e3	5.37e3	1.0000	0.667	5.17	5.11	9.82	14.713	117.7
42	45	d5-N-EtFOSAA	589.3 > 419	3.68e3	5.37e3	1.0000	0.698	5.32	5.27	8.57	12.289	98.3
43	46	13C2-PFUdA	565 > 519.8	7.38e3	5.37e3	1.0000	1.261	5.45	5.30	17.2	13.630	109.0
44	47	13C2-PFDoA	615.0 > 569.7	3.71e3	5.37e3	1.0000	0.695	5.62	5.58	8.64	12.437	99.5
45	48	d3-N-MeFOSA	515.2 > 168.9	1.90e4	5.37e3	1.0000	0.271	5.68	5.66	44.2	162.768	108.5
46	49	13C2-PFTeDA	714.8 > 669.6	4.52e3	5.37e3	1.0000	0.762	6.01	6.05	10.5	13.792	110.3
47	50	d5-N-ETFOSA	531.1 > 168.9	2.22e4	5.37e3	1.0000	0.325	6.09	6.08	51.8	159.394	106.3
48	51	13C2-PFHxDA	815 > 769.7	1.54e3	5.37e3	1.0000	0.563	6.42	6.39	3.59	6.381	127.6
49	52	d7-N-MeFOSE	623.1 > 58.9	2.27e4	5.37e3	1.0000	0.317	6.30	6.26	52.8	166.602	111.1
50	53	d9-N-EtFOSE	639.2 > 58.8	2.26e4	5.37e3	1.0000	0.322	6.42	6.41	52.5	163.241	108.8
51	54	13C4-PFBA	217. > 171.8	9.96e3	9.96e3	1.0000	1.000	1.28	1.25	12.5	12.500	100.0
52	55	13C5-PFHxA	318 > 272.9	1.32e4	1.32e4	1.0000	1.000	3.01	3.00	12.5	12.500	100.0
53	56	13C3-PFHxS	401.9 > 79.9	2.51e3	2.51e3	1.0000	1.000	3.86	3.77	12.5	12.500	100.0
54	57	13C8-PFOA	421.3 > 376	9.40e3	9.40e3	1.0000	1.000	4.22	4.14	12.5	12.500	100.0
55	58	13C9-PFNA	472.2 > 426.9	8.60e3	8.60e3	1.0000	1.000	4.66	4.59	12.5	12.500	100.0
56	59	13C4-PFOS	503 > 79.9	2.87e3	2.87e3	1.0000	1.000	4.73	4.67	12.5	12.500	100.0
57	60	13C6-PFDA	519.1 > 473.7	4.36e3	4.36e3	1.0000	1.000	5.01	4.96	12.5	12.500	100.0
58	61	13C7-PFUdA	570.1 > 524.8	5.37e3	5.37e3	1.0000	1.000	5.45	5.29	12.5	12.500	100.0

Dataset: U:\Q4.PRO\results\171116M3\171116M3-13.qld

Last Altered: Friday, November 17, 2017 15:53:44 Pacific Standard Time

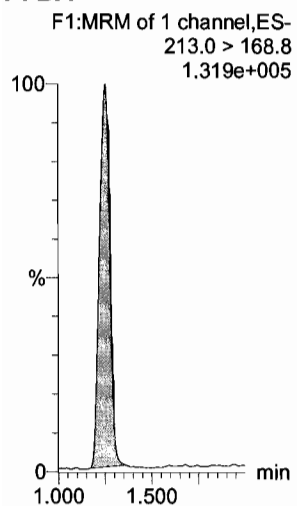
Printed: Friday, November 17, 2017 15:55:28 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111517.mdb 15 Nov 2017 11:38:08

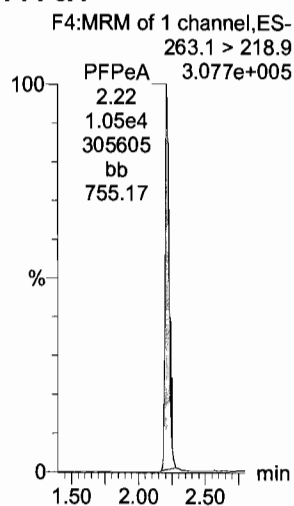
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-16-17\_FULL.cdb 17 Nov 2017 15:39:16

Name: 171116M3\_13, Date: 16-Nov-2017, Time: 18:34:16, ID: ICV171116M3-1 PFC ICV 17K0837, Description: PFC ICV 17K0837

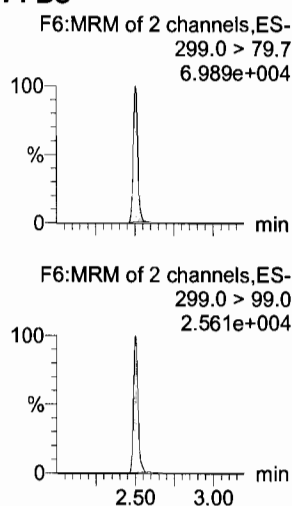
**PFBA**



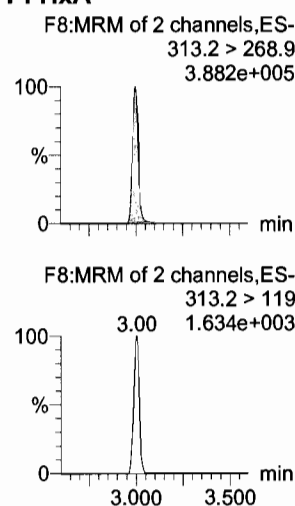
**PFPeA**



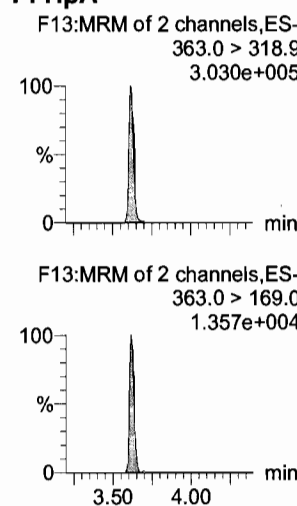
**PFBS**



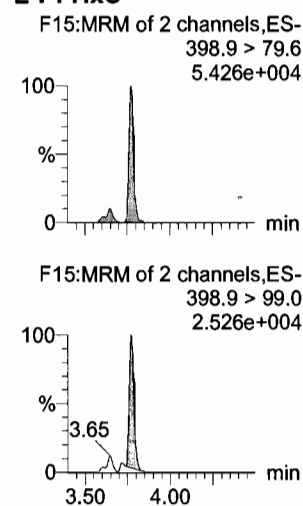
**PFHxA**



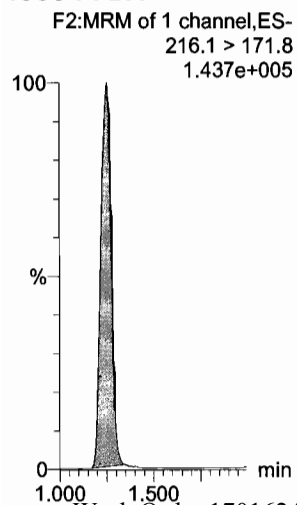
**PFHpA**



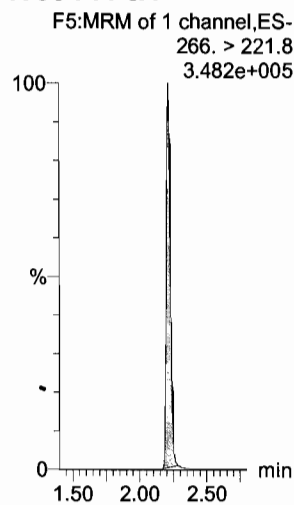
**L-PFHxS**



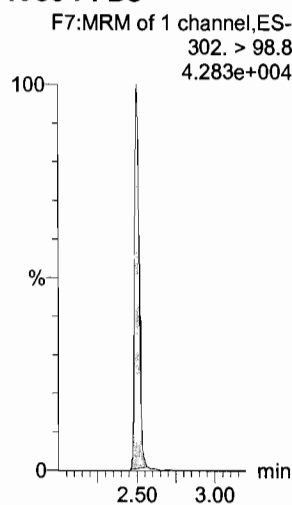
**13C3-PFBA**



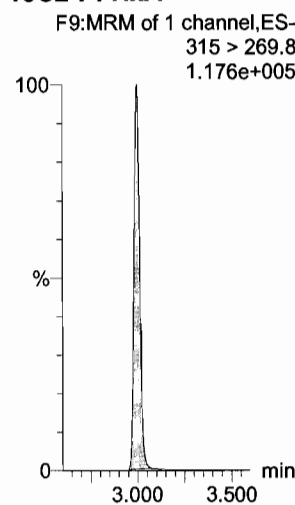
**13C3-PFPeA**



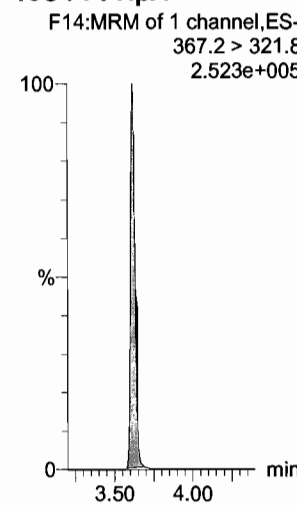
**13C3-PFBS**



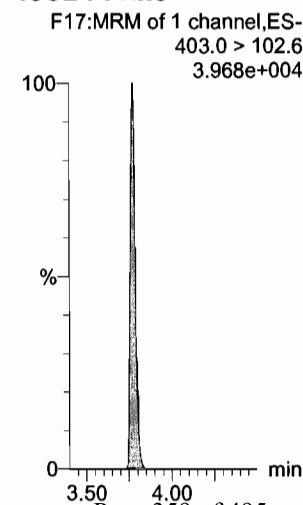
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



Dataset: U:\Q4.PRO\results\171116M3\171116M3-13.qld

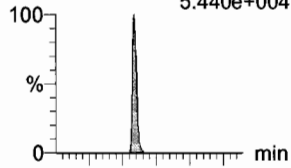
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Printed: Friday, November 17, 2017 15:55:28 Pacific Standard Time

Name: 171116M3\_13, Date: 16-Nov-2017, Time: 18:34:16, ID: ICV171116M3-1 PFC ICV 17K0837, Description: PFC ICV 17K0837

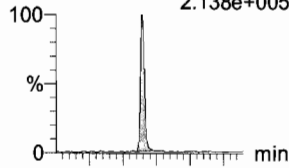
**6:2 FTS**

F21:MRM of 2 channels,ES-  
427.1 > 407  
5.440e+004



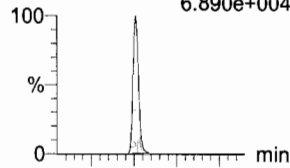
**L-PFOA**

F18:MRM of 2 channels,ES-  
413 > 368.7  
2.138e+005



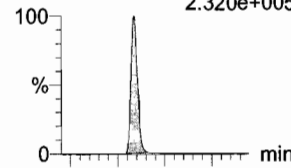
**PFHpS**

F23:MRM of 2 channels,ES-  
449 > 80.0  
6.890e+004



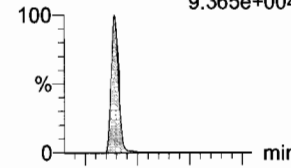
**PFNA**

F24:MRM of 2 channels,ES-  
463.0 > 418.8  
2.320e+005



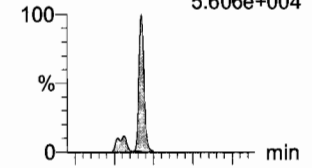
**PFOSA**

F27:MRM of 2 channels,ES-  
498.1 > 77.8  
9.365e+004

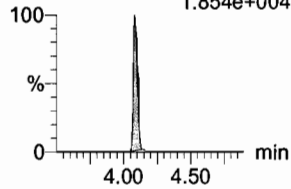


**L-PFOS**

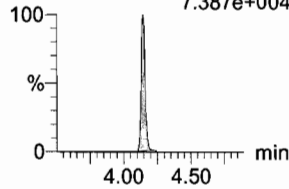
F29:MRM of 2 channels,ES-  
499 > 79.9  
5.606e+004



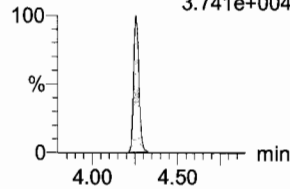
F21:MRM of 2 channels,ES-  
427.1 > 80  
1.854e+004



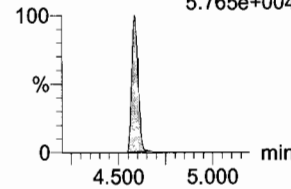
F18:MRM of 2 channels,ES-  
413 > 169  
7.387e+004



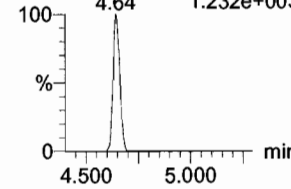
F23:MRM of 2 channels,ES-  
449 > 98.7  
3.741e+004



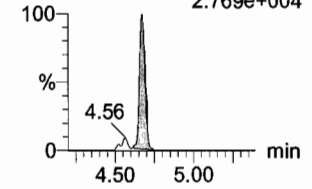
F24:MRM of 2 channels,ES-  
463.0 > 219.0  
5.765e+004



F27:MRM of 2 channels,ES-  
498.1 > 478  
1.232e+003

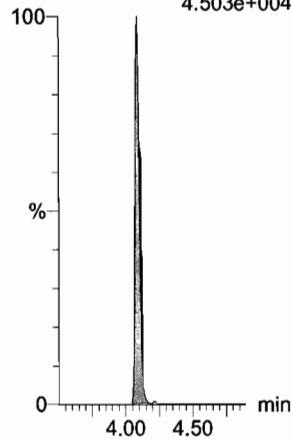


F29:MRM of 2 channels,ES-  
499 > 99  
2.769e+004



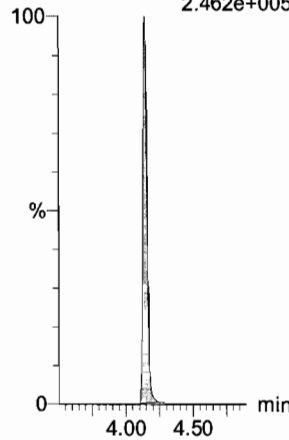
**13C2-6:2 FTS**

F22:MRM of 1 channel,ES-  
429.1 > 408.9  
4.503e+004



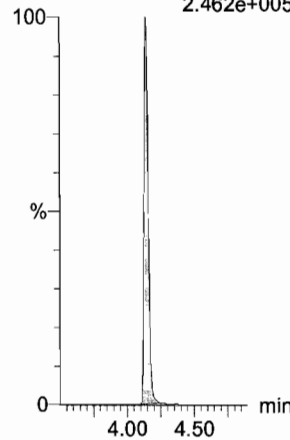
**13C2-PFOA**

F19:MRM of 1 channel,ES-  
414.9 > 369.7  
2.462e+005



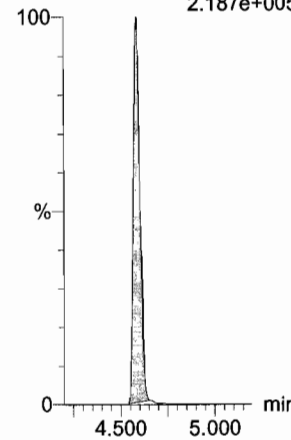
**13C2-PFOA**

F19:MRM of 1 channel,ES-  
414.9 > 369.7  
2.462e+005



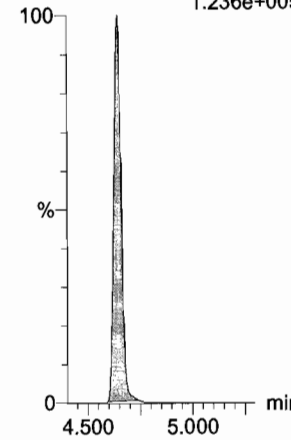
**13C5-PFNA**

F25:MRM of 1 channel,ES-  
468.2 > 422.9  
2.187e+005



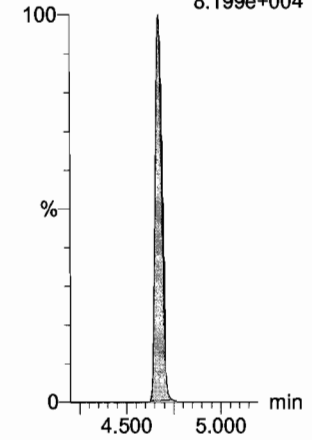
**13C8-PFOSA**

F31:MRM of 1 channel,ES-  
506.1 > 77.7  
1.236e+005



**13C8-PFOS**

F32:MRM of 1 channel,ES-  
507.0 > 79.9  
8.199e+004



Dataset: U:\Q4.PRO\results\171116M3\171116M3-13.qld

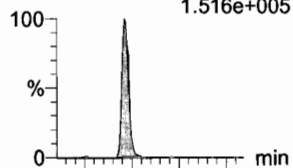
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Printed: Friday, November 17, 2017 15:55:28 Pacific Standard Time

Name: 171116M3\_13, Date: 16-Nov-2017, Time: 18:34:16, ID: ICV171116M3-1 PFC ICV 17K0837, Description: PFC ICV 17K0837

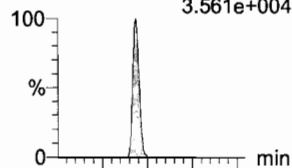
**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
1.516e+005



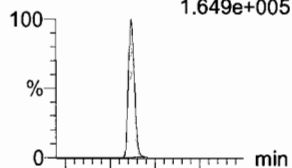
**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
3.561e+004



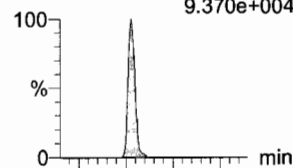
**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
1.649e+005



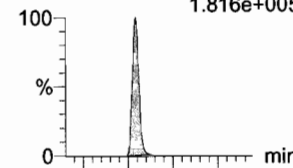
**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
9.370e+004



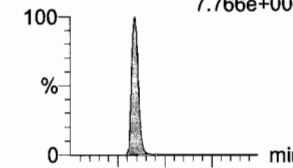
**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
1.816e+005

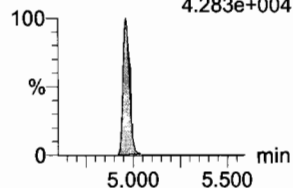


**PFDS**

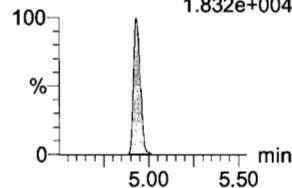
F49:MRM of 2 channels,ES-  
598.8 > 80  
7.766e+004



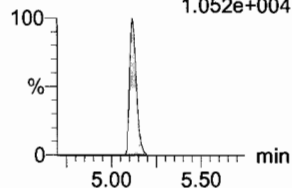
F34:MRM of 2 channels,ES-  
513 > 219  
4.283e+004



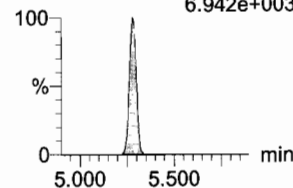
F39:MRM of 2 channels,ES-  
527 > 80  
1.832e+004



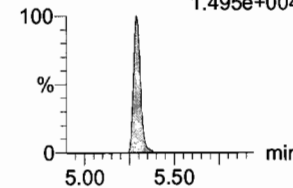
F44:MRM of 2 channels,ES-  
570.1 > 483.0  
1.052e+004



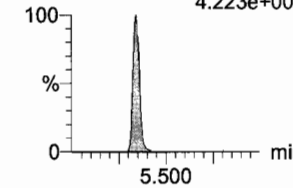
F47:MRM of 2 channels,ES-  
584.2 > 483.0  
6.942e+003



F42:MRM of 2 channels,ES-  
563.0 > 269  
1.495e+004

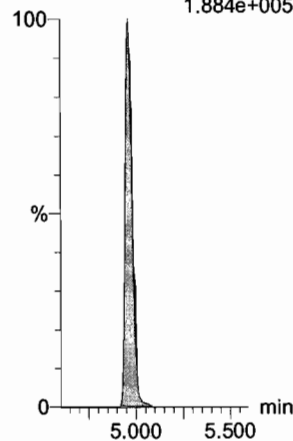


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
4.223e+004



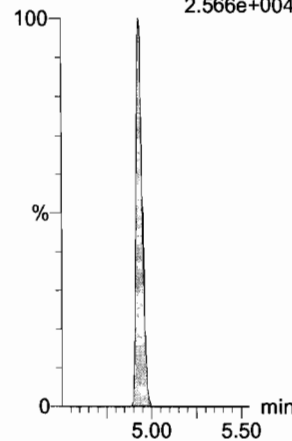
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
1.884e+005



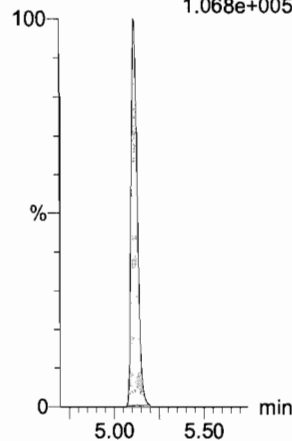
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
2.566e+004



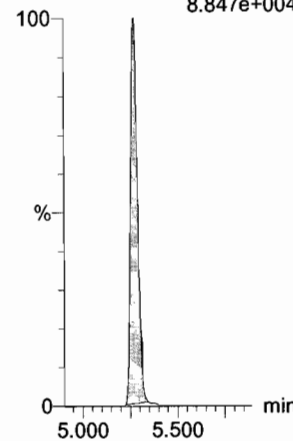
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
1.068e+005



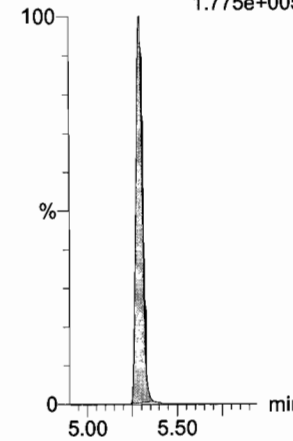
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
8.847e+004



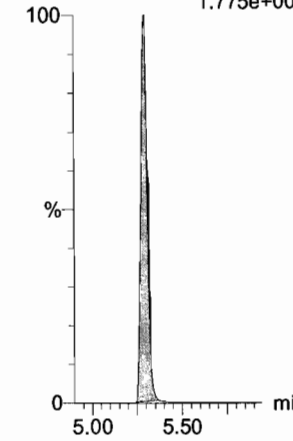
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
1.775e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
1.775e+005



Dataset: U:\Q4.PRO\results\171116M3\171116M3-13.qld

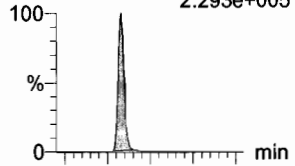
Last Altered: Friday, November 17, 2017 15:53:44 Pacific Standard Time

Printed: Friday, November 17, 2017 15:55:28 Pacific Standard Time

Name: 171116M3\_13, Date: 16-Nov-2017, Time: 18:34:16, ID: ICV171116M3-1 PFC ICV 17K0837, Description: PFC ICV 17K0837

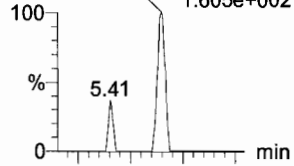
**PFD<sub>o</sub>A**

F50:MRM of 2 channels,ES-  
612.9 > 569.0  
2.293e+005



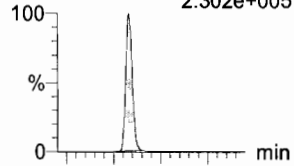
**N-MeFOSA**

F33:MRM of 2 channels,ES-  
512.1 > 168.9  
1.605e+002



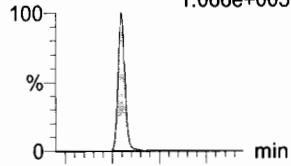
**PFT<sub>r</sub>DA**

F56:MRM of 2 channels,ES-  
662.9 > 618.9  
2.302e+005



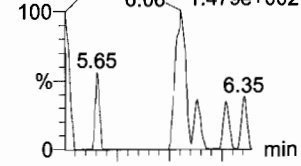
**PFT<sub>e</sub>DA**

F57:MRM of 2 channels,ES-  
712.9 > 668.8  
1.066e+005



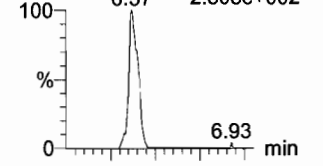
**N-EtFOSA**

F38:MRM of 2 channels,ES-  
526.1 > 168.9  
1.479e+002

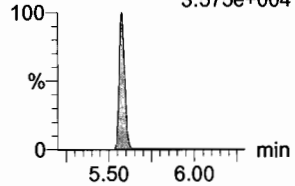


**PFH<sub>x</sub>DA**

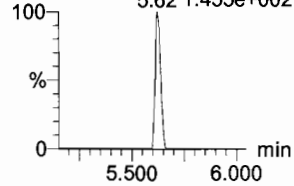
F59:MRM of 2 channels,ES-  
813.1 > 768.6  
2.808e+002



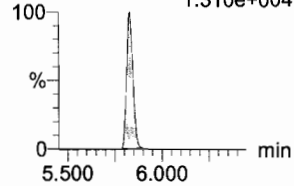
F50:MRM of 2 channels,ES-  
612.9 > 318.8  
3.575e+004



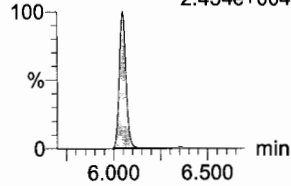
F33:MRM of 2 channels,ES-  
512.1 > 219  
1.455e+002



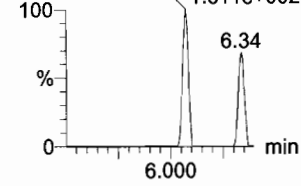
F56:MRM of 2 channels,ES-  
662.9 > 319  
1.310e+004



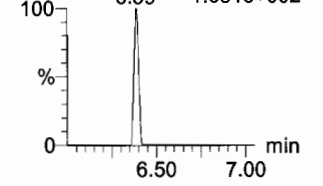
F57:MRM of 2 channels,ES-  
712.9 > 369  
2.454e+004



F38:MRM of 2 channels,ES-  
526.1 > 219  
1.611e+002

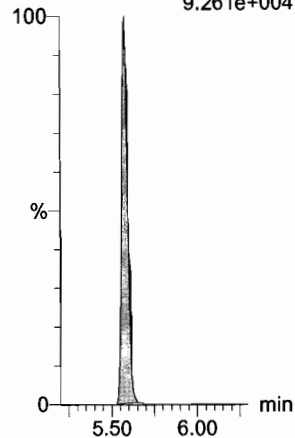


F59:MRM of 2 channels,ES-  
813.1 > 219  
1.651e+002



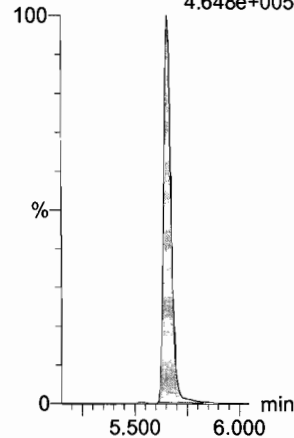
**13C2-PFD<sub>o</sub>A**

F51:MRM of 1 channel,ES-  
615.0 > 569.7  
9.261e+004



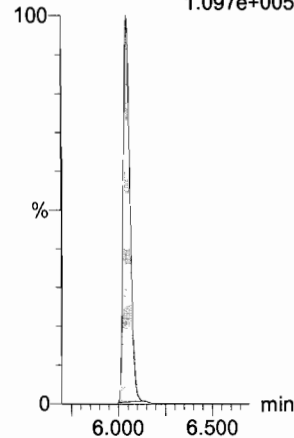
**d3-N-MeFOSA**

F36:MRM of 1 channel,ES-  
515.2 > 168.9  
4.648e+005



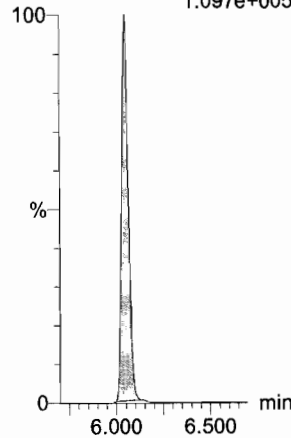
**13C2-PFT<sub>r</sub>DA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
1.097e+005



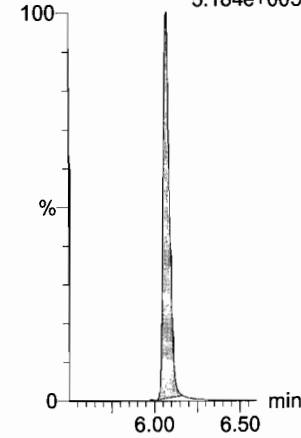
**13C2-PFT<sub>e</sub>DA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
1.097e+005



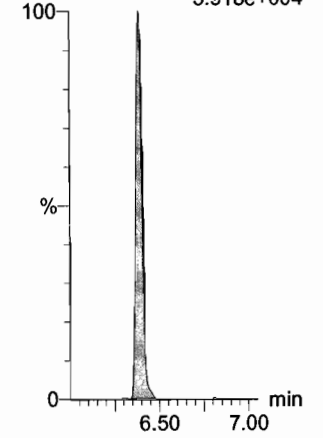
**d5-N-ETFOSA**

F41:MRM of 1 channel,ES-  
531.1 > 168.9  
5.184e+005



**13C2-PFH<sub>x</sub>DA**

F60:MRM of 1 channel,ES-  
815 > 769.7  
3.918e+004



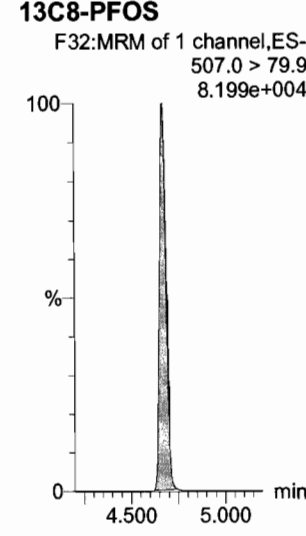
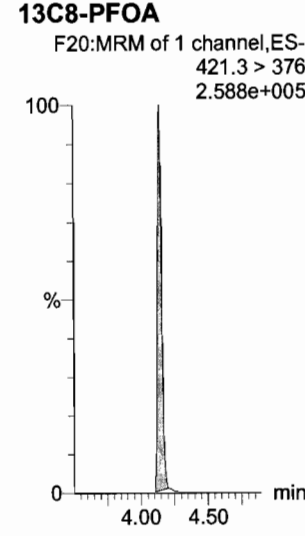
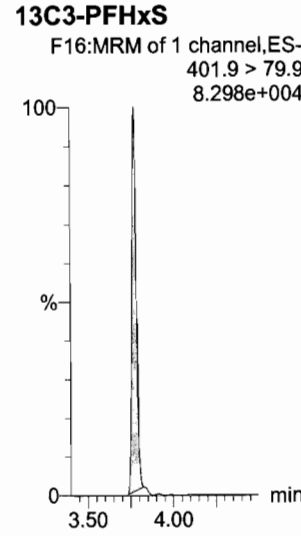
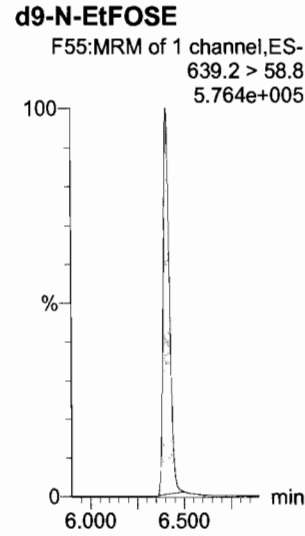
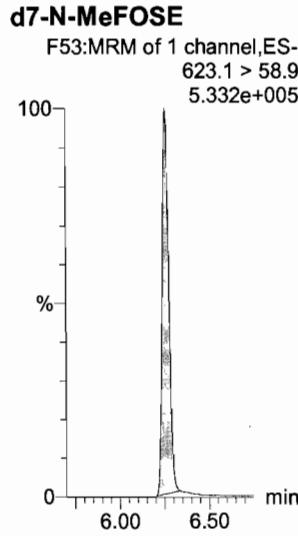
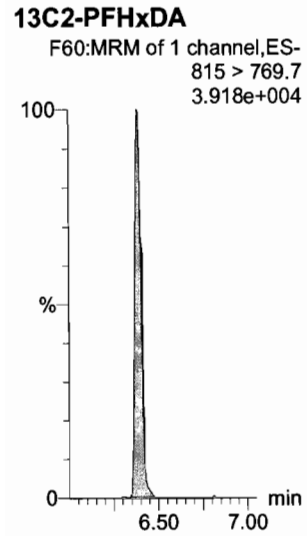
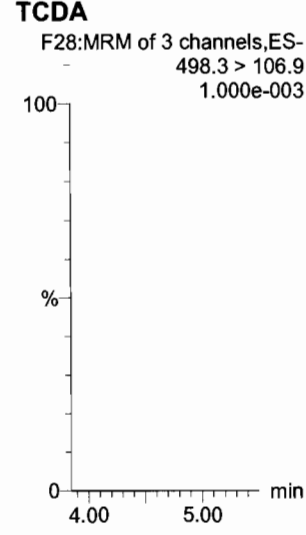
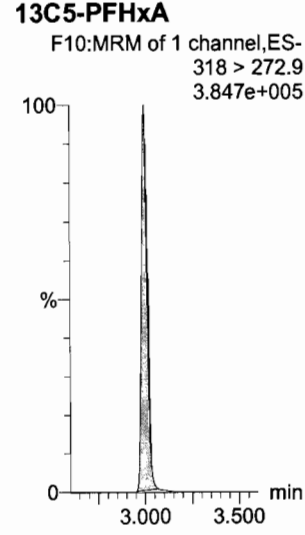
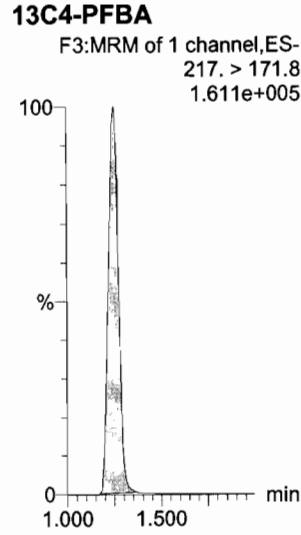
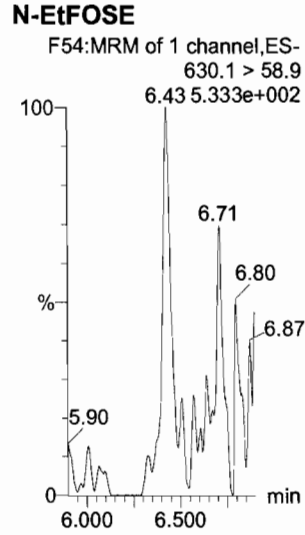
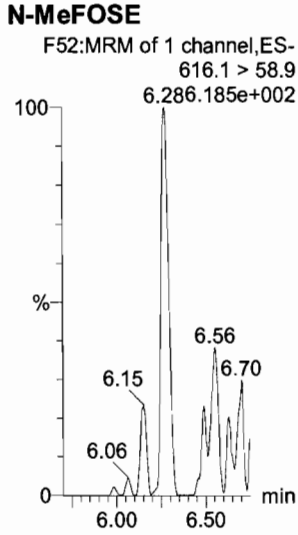
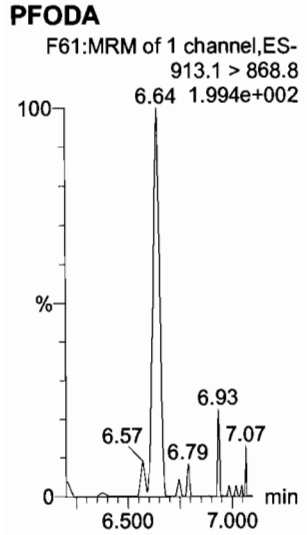


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Last Altered: Friday, November 17, 2017 15:53:44 Pacific Standard Time

Printed: Friday, November 17, 2017 15:55:28 Pacific Standard Time

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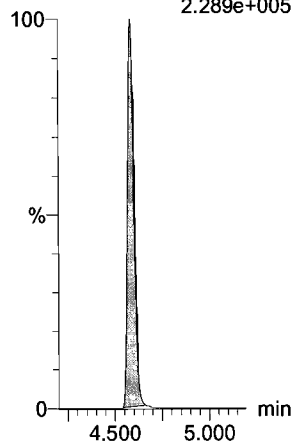
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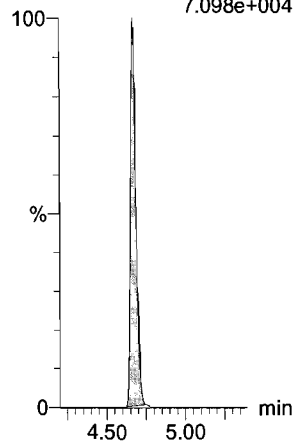
**13C9-PFNA**

F26:MRM of 1 channel,ES-  
472.2 > 426.9  
2.289e+005



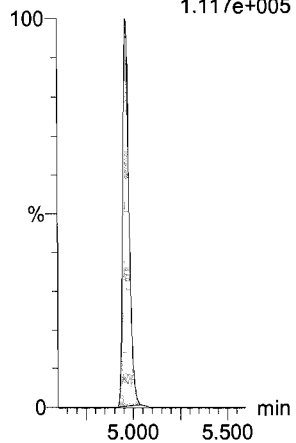
**13C4-PFOS**

F30:MRM of 1 channel,ES-  
503 > 79.9  
7.098e+004



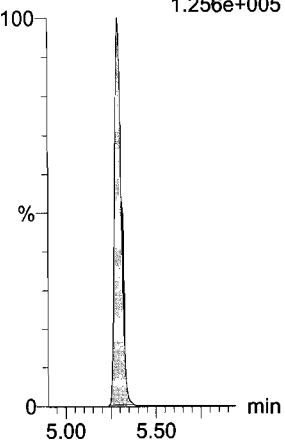
**13C6-PFDA**

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.117e+005



**13C7-PFUdA**

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
1.256e+005



Dataset: Untitled

Last Altered: Monday, November 20, 2017 07:50:15 Pacific Standard Time

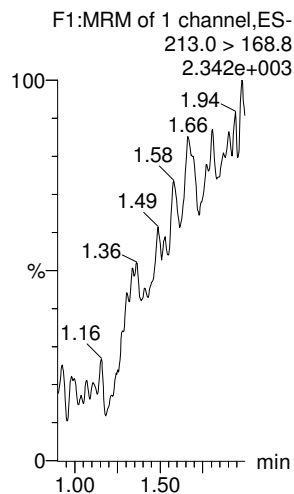
Printed: Monday, November 20, 2017 07:51:07 Pacific Standard Time

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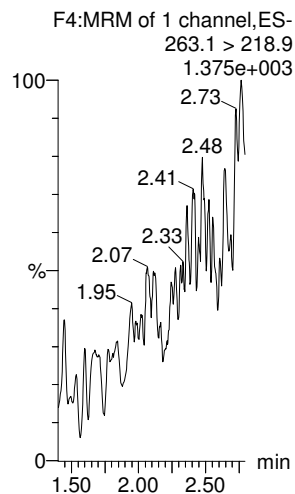
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Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

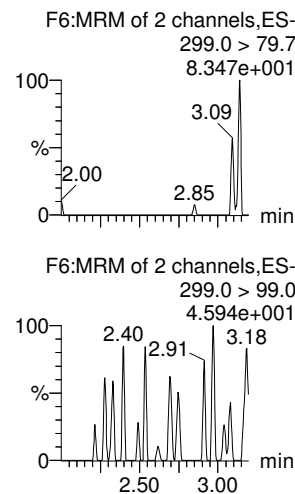
**PFBA**



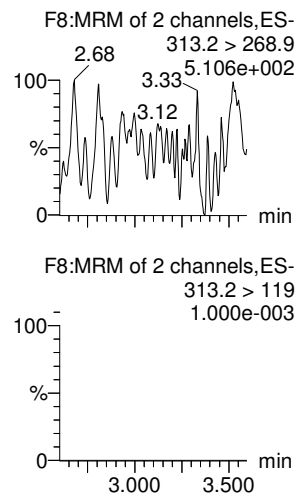
**PFPeA**



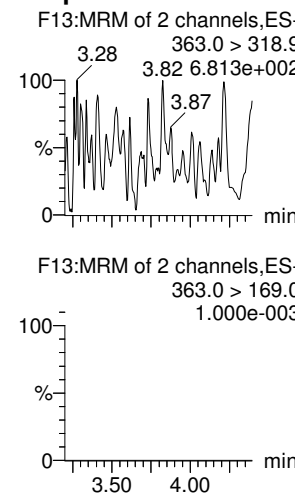
**PFBS**



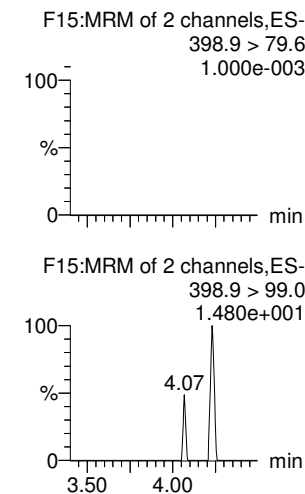
**PFHxA**



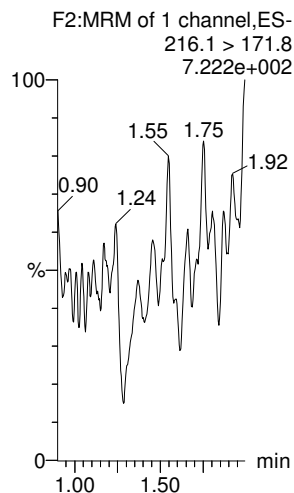
**PFHpA**



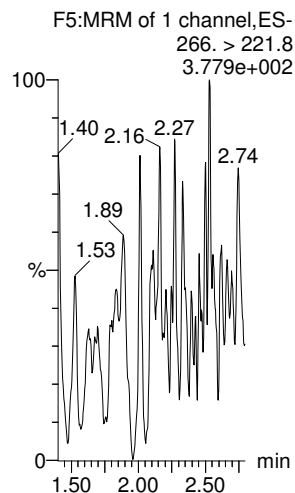
**L-PFHxS**



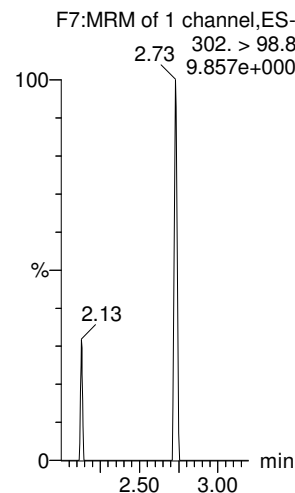
**13C3-PFBA**



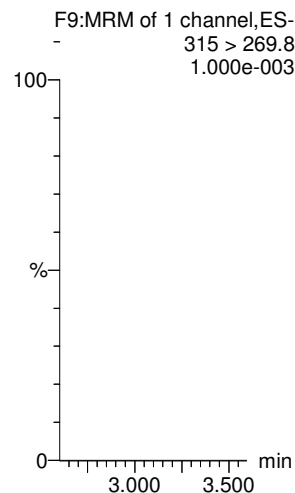
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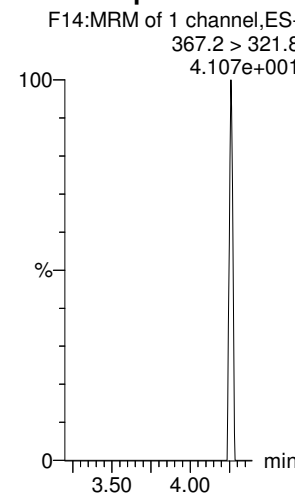
**13C3-PFBS**



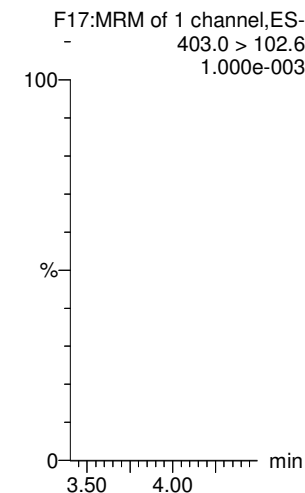
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



Dataset: Untitled

Last Altered: Monday, November 20, 2017 07:50:15 Pacific Standard Time

Printed: Monday, November 20, 2017 07:51:07 Pacific Standard Time

Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

**6:2 FTS**

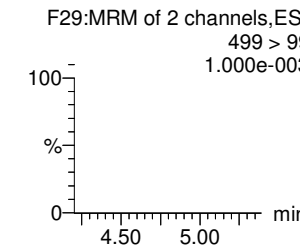
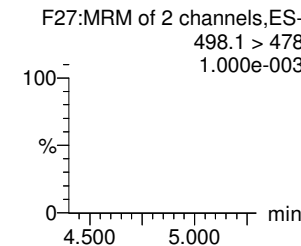
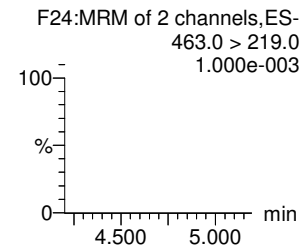
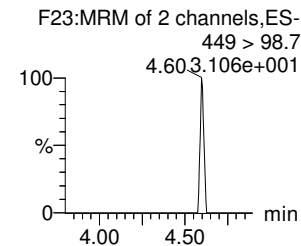
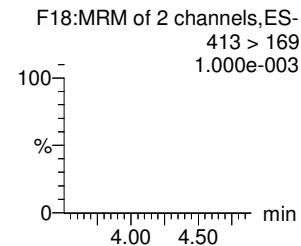
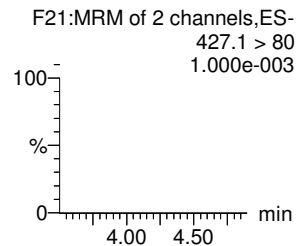
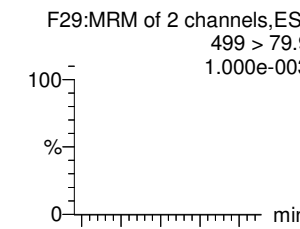
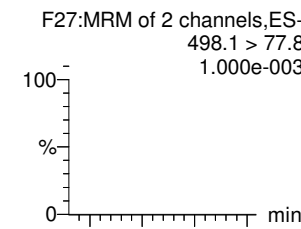
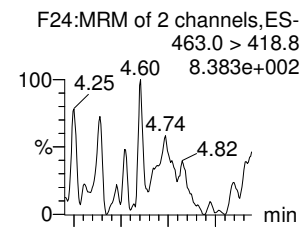
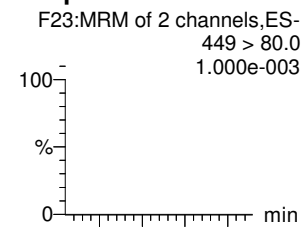
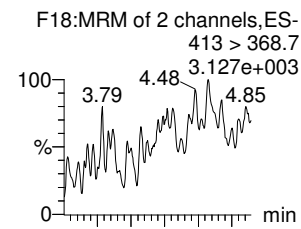
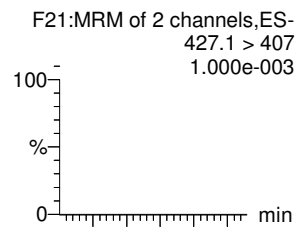
**L-PFOA**

**PFHpS**

**PFNA**

**PFOSA**

**L-PFOS**



**13C2-6:2 FTS**

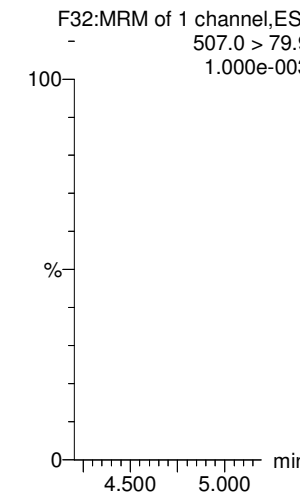
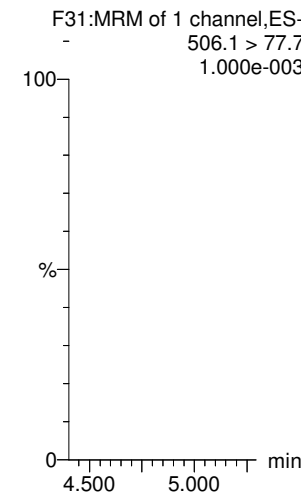
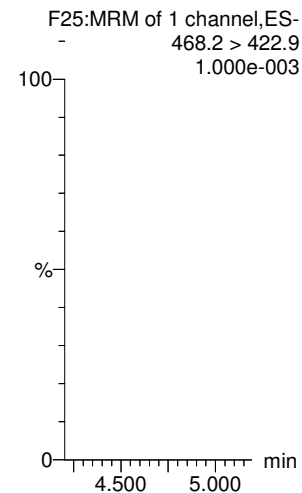
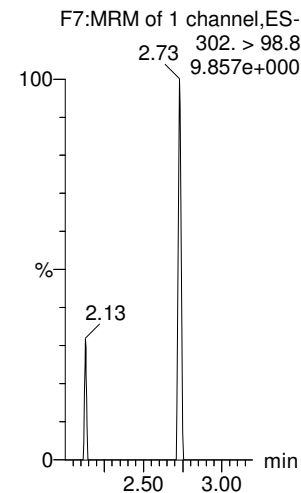
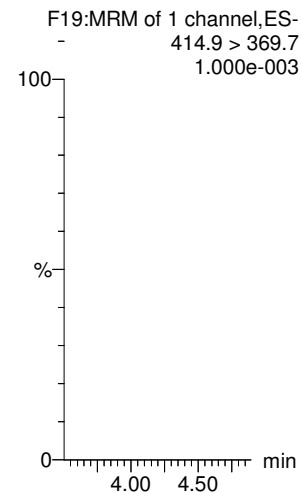
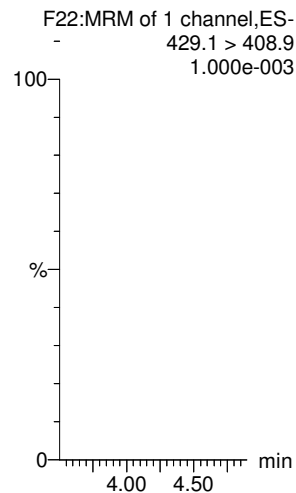
**13C2-PFOA**

**13C3-PFBS**

**13C5-PFNA**

**13C8-PFOA**

**13C8-PFOS**



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Last Altered: Monday, November 20, 2017 07:50:15 Pacific Standard Time

Printed: Monday, November 20, 2017 07:51:07 Pacific Standard Time

Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

**PFDA**

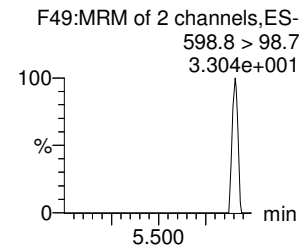
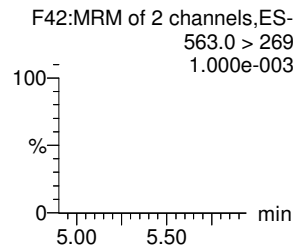
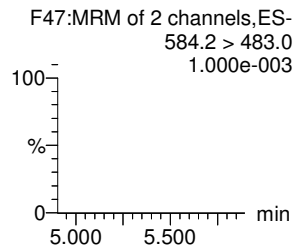
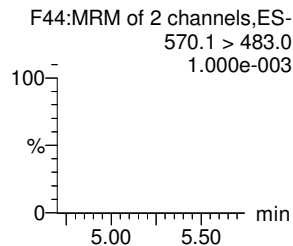
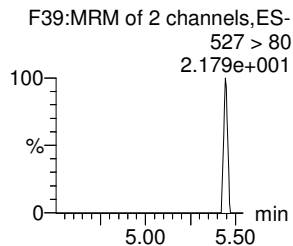
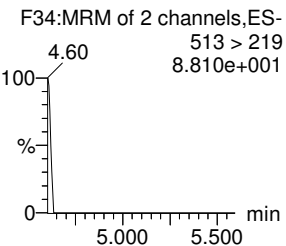
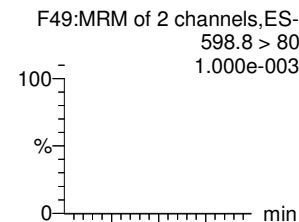
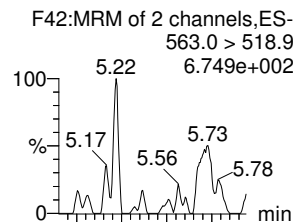
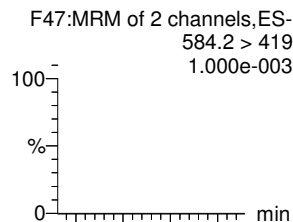
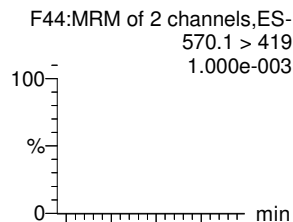
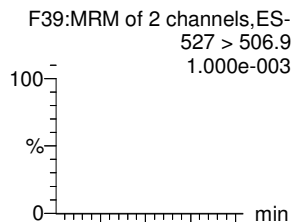
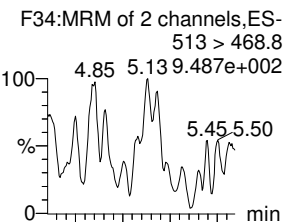
**8:2 FTS**

**N-MeFOSAA**

**N-EtFOSAA**

**PFUdA**

**PFDS**



**13C2-PFDA**

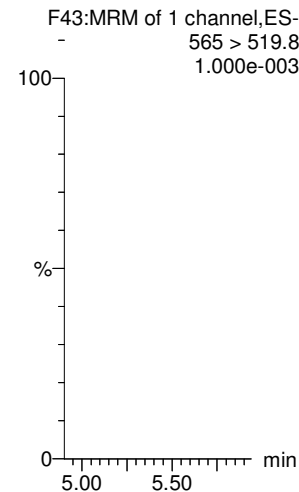
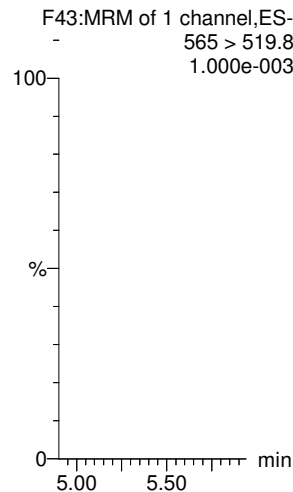
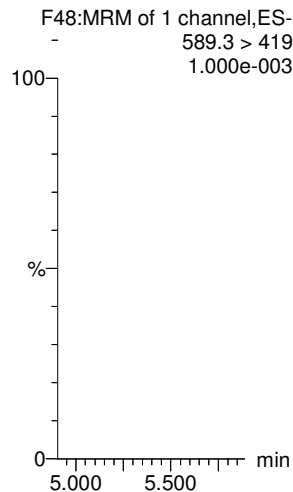
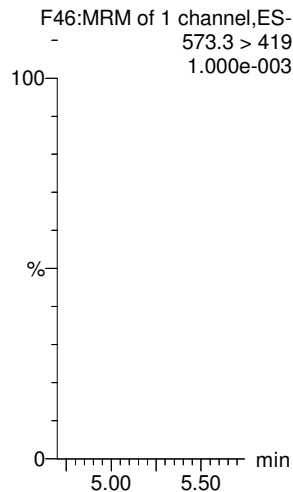
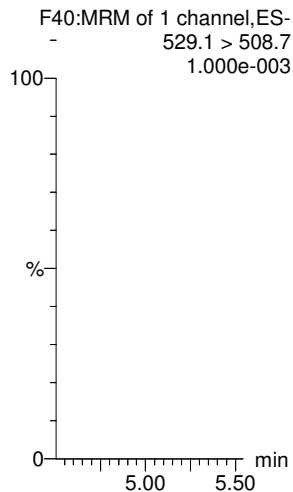
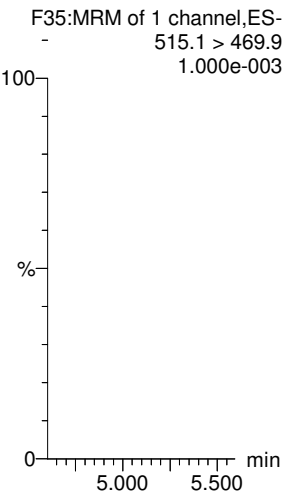
**13C2-8:2 FTS**

**d3-N-MeFOSAA**

**d5-N-EtFOSAA**

**13C2-PFUdA**

**13C2-PFUdA**



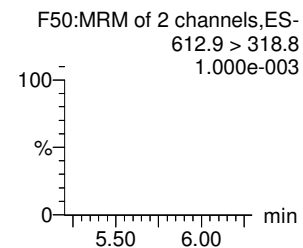
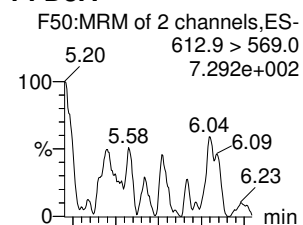
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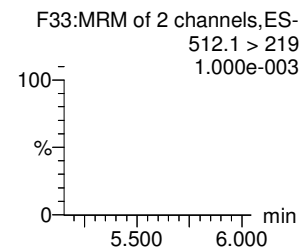
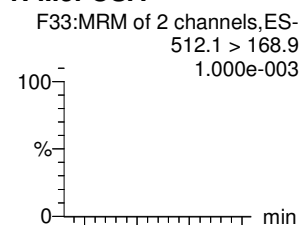
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Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

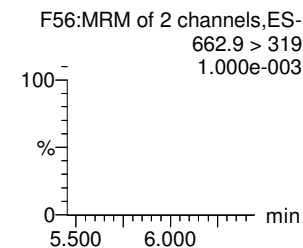
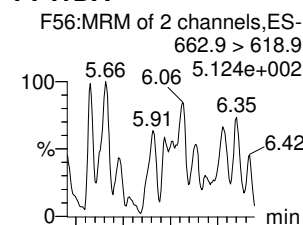
**PFDoA**



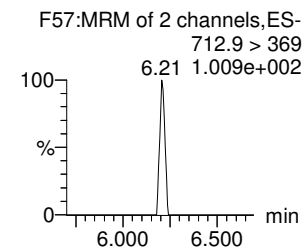
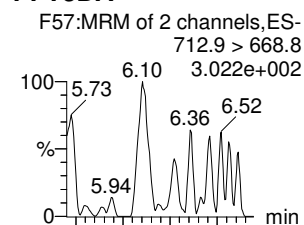
**N-MeFOSA**



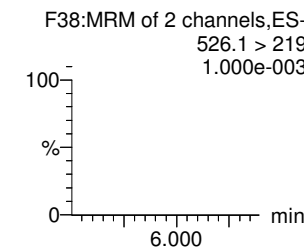
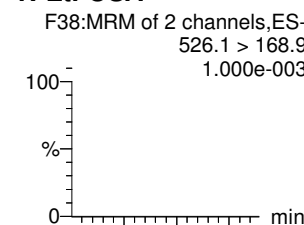
**PFTrDA**



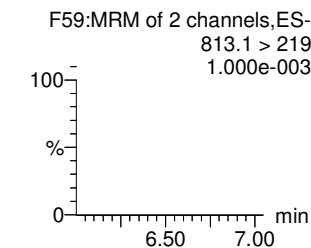
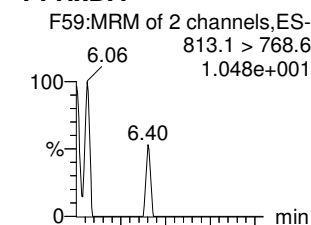
**PFTeDA**



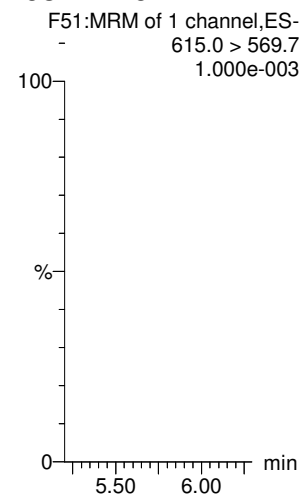
**N-EtFOSA**



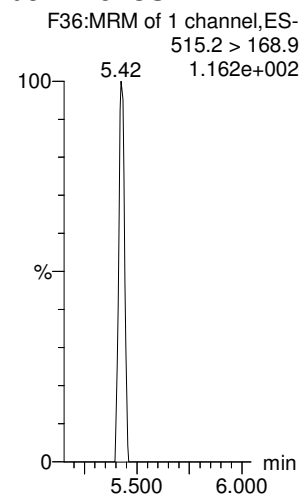
**PFHxDA**



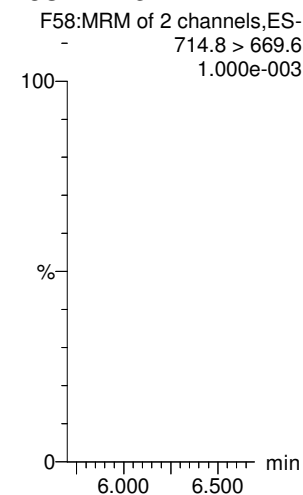
**13C2-PFDoA**



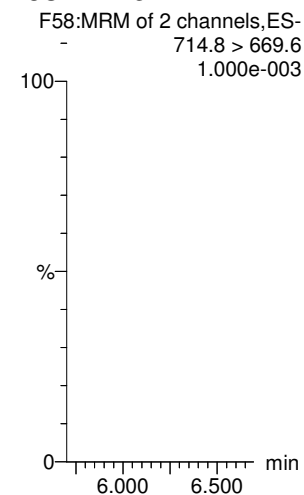
**d3-N-MeFOSA**



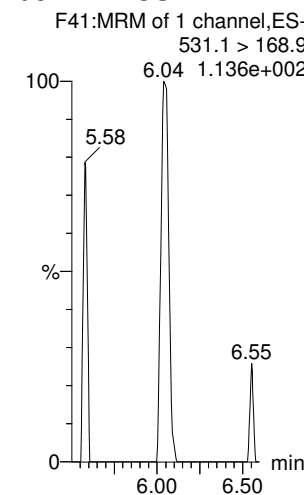
**13C2-PFTeDA**



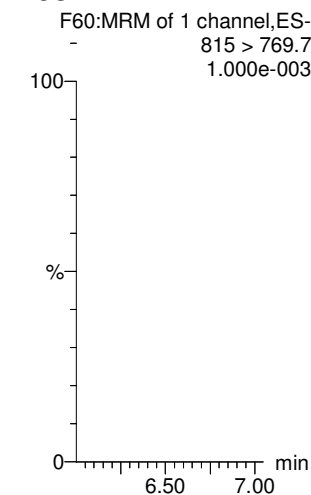
**13C2-PFTeDA**



**d5-N-ETFOSA**



**13C2-PFHxDA**



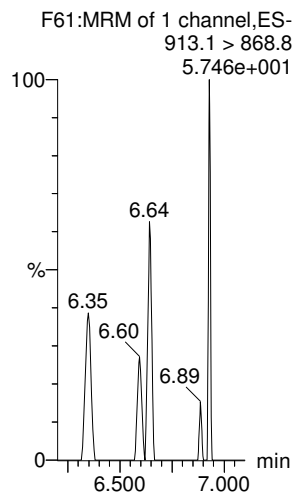
Dataset: Untitled

Last Altered: Monday, November 20, 2017 07:50:15 Pacific Standard Time

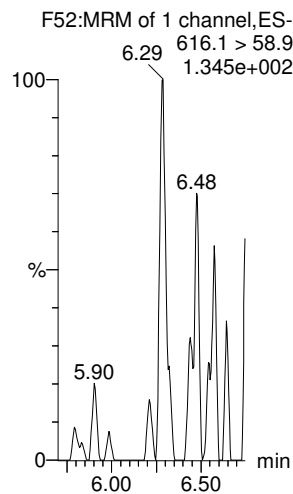
Printed: Monday, November 20, 2017 07:51:07 Pacific Standard Time

Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

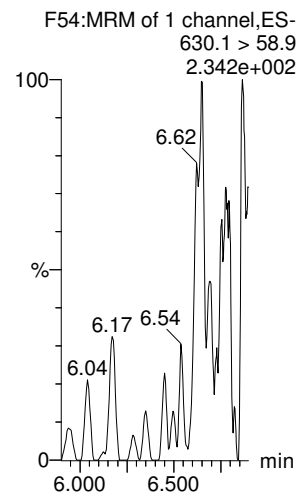
**PFODA**



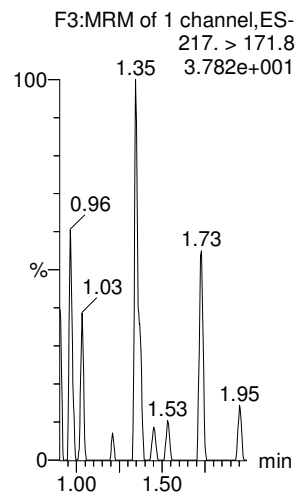
**N-MeFOSE**



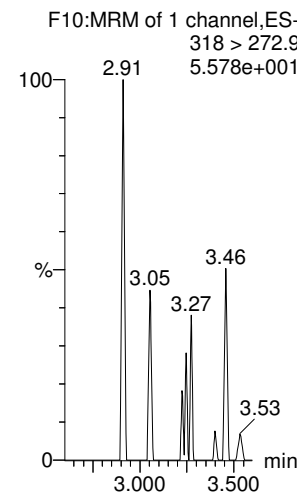
**N-EtFOSE**



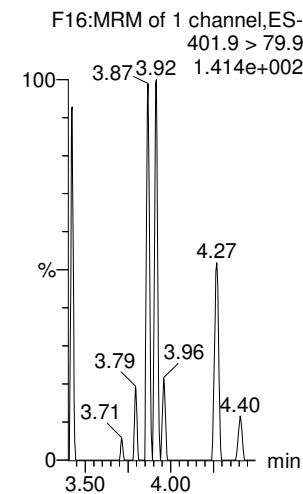
**13C4-PFBA**



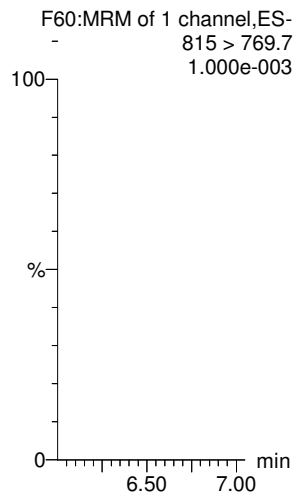
**13C5-PFHxA**



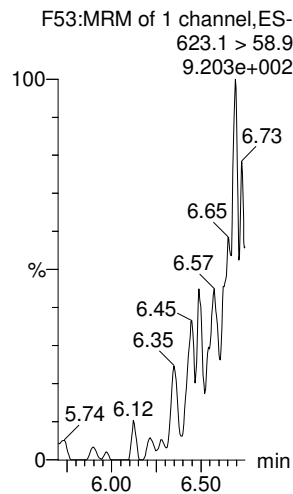
**13C3-PFHxS**



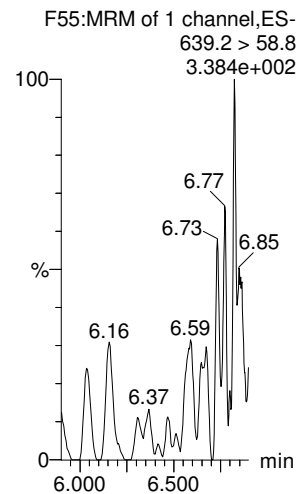
**13C2-PFHxDA**



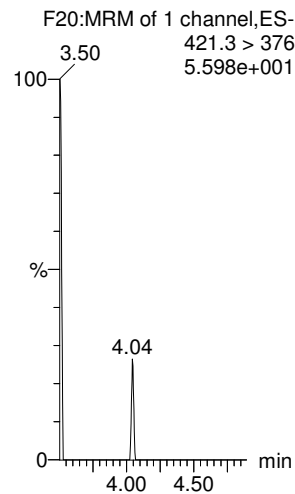
**d7-N-MeFOSE**



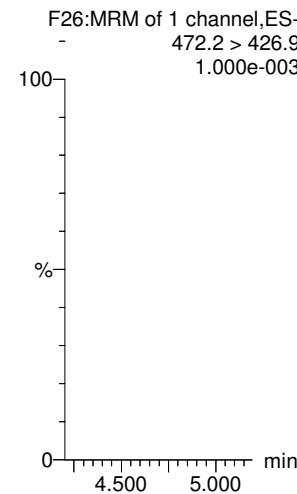
**d9-N-EtFOSE**



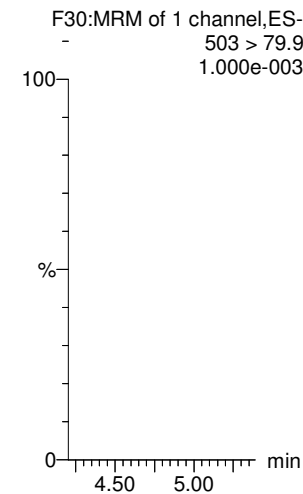
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



Dataset: Untitled

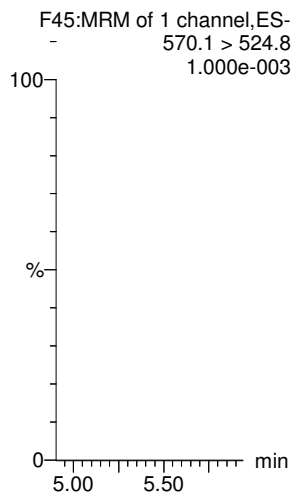
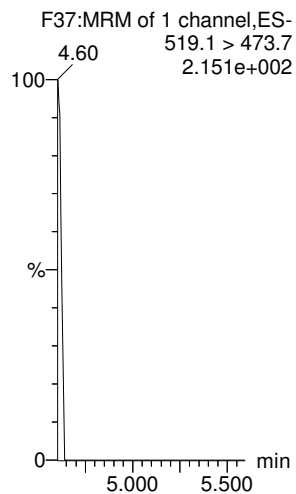
Last Altered: Monday, November 20, 2017 07:50:15 Pacific Standard Time

Printed: Monday, November 20, 2017 07:51:07 Pacific Standard Time

Name: 171116M1\_3, Date: 16-Nov-2017, Time: 10:37:54, ID: IPA, Description: IPA

13C6-PFDA

13C7-PFUdA





Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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 Printed: Saturday, November 18, 2017 10:39:08 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 17 Nov 2017 20:08:15  
 Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

AC  
 11/18/17  
 JHA 11/20/2017

**Compound name: PFBA**

Correlation coefficient:  $r = 0.999950$ ,  $r^2 = 0.999899$   
 Calibration curve:  $1.11743 * x + 0.0207684$   
 Response type: Internal Std ( Ref 31 ), 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 171117M2_2	Standard	0.250	1.66	260.565	11099.909	0.293	0.2	-2.4	NO	1.000	NO	MM
2	2 171117M2_3	Standard	0.500	1.65	520.976	10788.375	0.604	0.5	4.3	NO	1.000	NO	MM
3	3 171117M2_4	Standard	1.000	1.65	1016.320	11684.233	1.087	1.0	-4.6	NO	1.000	NO	bb
4	4 171117M2_5	Standard	2.000	1.64	2188.278	11307.033	2.419	2.1	7.3	NO	1.000	NO	bb
5	5 171117M2_6	Standard	5.000	1.65	5165.309	11222.632	5.753	5.1	2.6	NO	1.000	NO	bb
6	6 171117M2_7	Standard	10.000	1.64	10472.938	11472.631	11.411	10.2	1.9	NO	1.000	NO	bb
7	7 171117M2_8	Standard	50.000	1.65	51030.020	11620.472	54.892	49.1	-1.8	NO	1.000	NO	bb
8	8 171117M2_9	Standard	100.000	1.64	100278.852	11248.135	111.436	99.7	-0.3	NO	1.000	NO	bb
9	9 171117M2_10	Standard	250.000	1.64	247988.531	11062.536	280.212	250.7	0.3	NO	1.000	NO	bb

**Compound name: PFPeA**

Correlation coefficient:  $r = 0.999860$ ,  $r^2 = 0.999720$   
 Calibration curve:  $0.989567 * x + 0.0505676$   
 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 171117M2_2	Standard	0.250	2.63	326.813	14898.082	0.274	0.2	-9.6	NO	1.000	NO	bb
2	2 171117M2_3	Standard	0.500	2.63	641.659	15518.482	0.517	0.5	-5.8	NO	1.000	NO	bb
3	3 171117M2_4	Standard	1.000	2.63	1339.650	15902.483	1.053	1.0	1.3	NO	1.000	NO	bb
4	4 171117M2_5	Standard	2.000	2.62	2642.629	15191.427	2.174	2.1	7.3	NO	1.000	NO	bb
5	5 171117M2_6	Standard	5.000	2.63	6496.970	15558.536	5.220	5.2	4.5	NO	1.000	NO	bb
6	6 171117M2_7	Standard	10.000	2.62	12570.583	15822.217	9.931	10.0	-0.2	NO	1.000	NO	bb
7	7 171117M2_8	Standard	50.000	2.63	62112.980	15402.809	50.407	50.9	1.8	NO	1.000	NO	bb
8	8 171117M2_9	Standard	100.000	2.62	119625.977	14824.115	100.871	101.9	1.9	NO	1.000	NO	bb
9	9 171117M2_10	Standard	250.000	2.62	295921.281	15135.806	244.388	246.9	-1.2	NO	1.000	NO	bb

Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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**Compound name: PFBS**

Correlation coefficient:  $r = 0.999772$ ,  $r^2 = 0.999544$

Calibration curve:  $2.15306 * x + 0.0690817$

Response type: Internal Std ( Ref 33 ), 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 171117M2_2	Standard	0.250	2.90	75.326	1789.673	0.526	0.2	-15.1	NO	1.000	NO	bb
2	2 171117M2_3	Standard	0.500	2.90	146.912	1745.821	1.052	0.5	-8.7	NO	1.000	NO	bb
3	3 171117M2_4	Standard	1.000	2.90	348.120	1782.738	2.441	1.1	10.2	NO	1.000	NO	bb
4	4 171117M2_5	Standard	2.000	2.89	696.779	1892.214	4.603	2.1	5.3	NO	1.000	NO	bb
5	5 171117M2_6	Standard	5.000	2.90	1580.429	1766.445	11.184	5.2	3.2	NO	1.000	NO	bb
6	6 171117M2_7	Standard	10.000	2.89	3217.863	1816.402	22.144	10.3	2.5	NO	1.000	NO	bb
7	7 171117M2_8	Standard	50.000	2.89	16252.816	1800.082	112.862	52.4	4.8	NO	1.000	NO	bb
8	8 171117M2_9	Standard	100.000	2.88	28921.279	1707.862	211.678	98.3	-1.7	NO	1.000	NO	bb
9	9 171117M2_10	Standard	250.000	2.88	73387.367	1712.337	535.725	248.8	-0.5	NO	1.000	NO	bb

**Compound name: PFHxA**

Correlation coefficient:  $r = 0.999571$ ,  $r^2 = 0.999142$

Calibration curve:  $1.41307 * x + 0.132916$

Response type: Internal Std ( Ref 34 ), 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 171117M2_2	Standard	0.250	3.40	475.037	5534.224	0.429	0.2	-16.1	NO	0.999	NO	bb
2	2 171117M2_3	Standard	0.500	3.40	927.075	5445.653	0.851	0.5	1.7	NO	0.999	NO	bb
3	3 171117M2_4	Standard	1.000	3.40	1799.388	5598.818	1.607	1.0	4.3	NO	0.999	NO	bb
4	4 171117M2_5	Standard	2.000	3.40	3554.951	5694.663	3.121	2.1	5.7	NO	0.999	NO	bb
5	5 171117M2_6	Standard	5.000	3.40	8186.043	5402.658	7.576	5.3	5.3	NO	0.999	NO	bb
6	6 171117M2_7	Standard	10.000	3.40	17602.113	6126.828	14.365	10.1	0.7	NO	0.999	NO	bb
7	7 171117M2_8	Standard	50.000	3.40	84444.617	5851.731	72.154	51.0	1.9	NO	0.999	NO	bb
8	8 171117M2_9	Standard	100.000	3.38	155965.875	5803.993	134.361	95.0	-5.0	NO	0.999	NO	bb
9	9 171117M2_10	Standard	250.000	3.39	388982.969	5425.820	358.455	253.6	1.4	NO	0.999	NO	bb

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**Compound name: PFHpA**

Correlation coefficient:  $r = 0.998981$ ,  $r^2 = 0.997964$

Calibration curve:  $1.34611 * x + 0.12749$

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 171117M2_2	Standard	0.250	4.03	341.889	10608.956	0.403	0.2	-18.2	NO	0.998	NO	bb
2	2 171117M2_3	Standard	0.500	4.03	575.637	10262.094	0.701	0.4	-14.8	NO	0.998	NO	bb
3	3 171117M2_4	Standard	1.000	4.02	1329.164	10009.601	1.660	1.1	13.8	NO	0.998	NO	bb
4	4 171117M2_5	Standard	2.000	4.03	2749.115	11011.087	3.121	2.2	11.2	NO	0.998	NO	bb
5	5 171117M2_6	Standard	5.000	4.03	5485.827	10074.952	6.806	5.0	-0.8	NO	0.998	NO	bb
6	6 171117M2_7	Standard	10.000	4.02	12333.700	10818.055	14.251	10.5	4.9	NO	0.998	NO	bb
7	7 171117M2_8	Standard	50.000	4.03	57813.238	9809.162	73.672	54.6	9.3	NO	0.998	NO	bb
8	8 171117M2_9	Standard	100.000	4.01	101702.391	9996.040	127.178	94.4	-5.6	NO	0.998	NO	bb
9	9 171117M2_10	Standard	250.000	4.02	269892.656	10009.780	337.036	250.3	0.1	NO	0.998	NO	bb

**Compound name: L-PFHxS**

Correlation coefficient:  $r = 0.998297$ ,  $r^2 = 0.996597$

Calibration curve:  $2.21587 * x + -0.202998$

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 171117M2_2	Standard	0.250	4.17	87.697	1409.975	0.777	0.4	77.0	NO	0.997	NO	MMX
2	2 171117M2_3	Standard	0.500	4.17	94.253	1501.516	0.785	0.4	-10.9	NO	0.997	NO	MM
3	3 171117M2_4	Standard	1.000	4.17	258.631	1628.451	1.985	1.0	-1.2	NO	0.997	NO	MM
4	4 171117M2_5	Standard	2.000	4.17	574.251	1334.450	5.379	2.5	26.0	NO	0.997	NO	MM
5	5 171117M2_6	Standard	5.000	4.17	1114.903	1280.166	10.886	5.0	0.1	NO	0.997	NO	MM
6	6 171117M2_7	Standard	10.000	4.16	2439.069	1453.473	20.976	9.6	-4.4	NO	0.997	NO	MM
7	7 171117M2_8	Standard	50.000	4.17	11130.690	1470.534	94.614	42.8	-14.4	NO	0.997	NO	MM
8	8 171117M2_9	Standard	100.000	4.15	23800.512	1300.057	228.841	103.4	3.4	NO	0.997	NO	MM
9	9 171117M2_10	Standard	250.000	4.16	60338.758	1341.453	562.252	253.8	1.5	NO	0.997	NO	MM

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**Compound name: 6:2 FTS**

Coefficient of Determination: R<sup>2</sup> = 0.999493

Calibration curve: -0.000641006 \* x<sup>2</sup> + 0.935849 \* x + 0.0821205

Response type: Internal Std ( Ref 37 ), 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 171117M2_2	Standard	0.250	4.49	60.580	2632.218	0.288	0.2	-12.1	NO	0.999	NO	bb
2	2 171117M2_3	Standard	0.500	4.49	126.932	2941.125	0.539	0.5	-2.2	NO	0.999	NO	bb
3	3 171117M2_4	Standard	1.000	4.49	250.496	2622.126	1.194	1.2	18.9	NO	0.999	NO	bb
4	4 171117M2_5	Standard	2.000	4.49	482.492	3108.271	1.940	2.0	-0.6	NO	0.999	NO	bb
5	5 171117M2_6	Standard	5.000	4.49	1024.815	2893.106	4.428	4.7	-6.8	NO	0.999	NO	bb
6	6 171117M2_7	Standard	10.000	4.49	2200.811	2845.559	9.668	10.3	3.2	NO	0.999	NO	bb
7	7 171117M2_8	Standard	50.000	4.49	11593.639	3213.341	45.100	49.8	-0.4	NO	0.999	NO	bb
8	8 171117M2_9	Standard	100.000	4.48	23528.799	3367.860	87.328	100.1	0.1	NO	0.999	NO	bb
9	9 171117M2_10	Standard	250.000	4.48	55475.473	6098.677	113.704	133.6	-46.5	NO	0.999	NO	bbX

**Compound name: L-PFOA**

Correlation coefficient: r = 0.997158, r<sup>2</sup> = 0.994325

Calibration curve: 0.949385 \* x + 0.364132

Response type: Internal Std ( Ref 38 ), 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 171117M2_2	Standard	0.250	4.54	697.297	11618.854	0.750	0.4	62.7	NO	0.994	NO	bbX
2	2 171117M2_3	Standard	0.500	4.54	744.197	11917.626	0.781	0.4	-12.3	NO	0.994	NO	bb
3	3 171117M2_4	Standard	1.000	4.54	1259.669	12665.440	1.243	0.9	-7.4	NO	0.994	NO	bb
4	4 171117M2_5	Standard	2.000	4.54	2291.707	12634.853	2.267	2.0	0.2	NO	0.994	NO	bb
5	5 171117M2_6	Standard	5.000	4.54	5164.269	11325.155	5.700	5.6	12.4	NO	0.994	NO	bb
6	6 171117M2_7	Standard	10.000	4.53	9575.407	11910.154	10.050	10.2	2.0	NO	0.994	NO	bb
7	7 171117M2_8	Standard	50.000	4.54	47368.391	12737.526	46.485	48.6	-2.8	NO	0.994	NO	bb
8	8 171117M2_9	Standard	100.000	4.53	88954.445	10364.176	107.286	112.6	12.6	NO	0.994	NO	bb
9	9 171117M2_10	Standard	250.000	4.53	222518.484	12284.660	226.419	238.1	-4.8	NO	0.994	NO	bb

Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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**Compound name: PFHpS**

Coefficient of Determination: R<sup>2</sup> = 0.994710

Calibration curve: 0.00159379 \* x<sup>2</sup> + 0.221155 \* x + 0.11824

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 171117M2_2	Standard	0.250	4.65	68.448	11618.854	0.074			NO	0.995	NO	bbXI
2	2 171117M2_3	Standard	0.500	4.65	84.521	11917.626	0.089			NO	0.995	NO	bbXI
3	3 171117M2_4	Standard	1.000	4.65	359.613	12665.440	0.355	1.1	6.2	NO	0.995	NO	bb
4	4 171117M2_5	Standard	2.000	4.65	651.669	12634.853	0.645	2.3	17.1	NO	0.995	NO	bb
5	5 171117M2_6	Standard	5.000	4.65	1297.257	11325.155	1.432	5.7	14.1	NO	0.995	NO	bb
6	6 171117M2_7	Standard	10.000	4.64	2893.283	11910.154	3.037	12.1	21.3	NO	0.995	NO	bb
7	7 171117M2_8	Standard	50.000	4.65	13935.800	12737.526	13.676	46.0	-7.9	NO	0.995	NO	bb
8	8 171117M2_9	Standard	100.000	4.64	32211.051	10364.176	38.849	101.3	1.3	NO	0.995	NO	bb
9	9 171117M2_10	Standard	250.000	4.64	70363.820	12284.660	71.597	153.5	-38.6	NO	0.995	NO	bbX

**Compound name: PFNA**

Coefficient of Determination: R<sup>2</sup> = 0.990580

Calibration curve: 0.00807066 \* x<sup>2</sup> + 0.946588 \* x + 0.156897

Response type: Internal Std ( Ref 39 ), 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 171117M2_2	Standard	0.250	4.97	384.743	14500.669	0.332	0.2	-26.3	NO	0.991	NO	bbX
2	2 171117M2_3	Standard	0.500	4.97	687.133	14584.946	0.589	0.5	-9.1	NO	0.991	NO	bb
3	3 171117M2_4	Standard	1.000	4.97	1286.249	12347.789	1.302	1.2	19.8	NO	0.991	NO	bb
4	4 171117M2_5	Standard	2.000	4.97	2681.530	14345.739	2.337	2.3	13.0	NO	0.991	NO	bb
5	5 171117M2_6	Standard	5.000	4.97	6429.986	12305.917	6.531	6.4	27.7	NO	0.991	NO	bb
6	6 171117M2_7	Standard	10.000	4.97	10348.448	15537.776	8.325	8.1	-19.3	NO	0.991	NO	bb
7	7 171117M2_8	Standard	50.000	4.97	60335.125	11103.045	67.926	50.2	0.3	NO	0.991	NO	bb
8	8 171117M2_9	Standard	100.000	4.96	112712.875	12545.687	112.302	73.0	-27.0	NO	0.991	NO	bbX
9	9 171117M2_10	Standard	250.000	4.96	251663.516	13180.868	238.664	123.0	-50.8	NO	0.991	NO	bbX

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**Compound name: PFOSA**

Correlation coefficient:  $r = 0.998879$ ,  $r^2 = 0.997760$

Calibration curve:  $0.888796 * x + 0.289421$

Response type: Internal Std ( Ref 40 ), 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 171117M2_2	Standard	0.250	5.02	100.220	5449.085	0.230			NO	0.998	NO	bbXI
2	2 171117M2_3	Standard	0.500	5.02	293.135	6039.344	0.607	0.4	-28.6	NO	0.998	NO	bb
3	3 171117M2_4	Standard	1.000	5.02	621.356	6320.764	1.229	1.1	5.7	NO	0.998	NO	bb
4	4 171117M2_5	Standard	2.000	5.02	1075.967	5862.556	2.294	2.3	12.8	NO	0.998	NO	bb
5	5 171117M2_6	Standard	5.000	5.02	2510.740	6867.646	4.570	4.8	-3.7	NO	0.998	NO	bb
6	6 171117M2_7	Standard	10.000	5.02	4728.222	5895.298	10.025	11.0	9.5	NO	0.998	NO	bb
7	7 171117M2_8	Standard	50.000	5.02	24595.486	6272.673	49.013	54.8	9.6	NO	0.998	NO	bb
8	8 171117M2_9	Standard	100.000	5.01	40571.984	5992.799	84.627	94.9	-5.1	NO	0.998	NO	bb
9	9 171117M2_10	Standard	250.000	5.01	112413.008	6332.080	221.912	249.4	-0.3	NO	0.998	NO	bb

**Compound name: L-PFOS**

Correlation coefficient:  $r = 0.999736$ ,  $r^2 = 0.999473$

Calibration curve:  $1.01872 * x + 0.00317499$

Response type: Internal Std ( Ref 41 ), 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 171117M2_2	Standard	0.250	5.05	68.579	4121.683	0.208	0.2	-19.6	NO	0.999	NO	MM
2	2 171117M2_3	Standard	0.500	5.05	186.172	4403.079	0.529	0.5	3.1	NO	0.999	NO	MM
3	3 171117M2_4	Standard	1.000	5.05	343.806	3769.311	1.140	1.1	11.6	NO	0.999	NO	MM
4	4 171117M2_5	Standard	2.000	5.05	708.396	4170.288	2.123	2.1	4.1	NO	0.999	NO	MM
5	5 171117M2_6	Standard	5.000	5.05	1666.276	4052.045	5.140	5.0	0.9	NO	0.999	NO	MM
6	6 171117M2_7	Standard	10.000	5.05	3311.611	4026.358	10.281	10.1	0.9	NO	0.999	NO	MM
7	7 171117M2_8	Standard	50.000	5.05	17203.451	4318.164	49.800	48.9	-2.2	NO	0.999	NO	MM
8	8 171117M2_9	Standard	100.000	5.03	32407.260	3836.698	105.583	103.6	3.6	NO	0.999	NO	MM
9	9 171117M2_10	Standard	250.000	5.04	74794.852	3712.826	251.812	247.2	-1.1	NO	0.999	NO	MM

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**Compound name: PFDA**

Coefficient of Determination:  $R^2 = 0.998572$

Calibration curve:  $-0.00767999 * x^2 + 1.29241 * x + -0.160647$

Response type: Internal Std ( Ref 42 ), 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 171117M2_2	Standard	0.250	5.34	323.385	14226.737	0.284	0.3	37.9	NO	0.999	NO	MMX
2	2 171117M2_3	Standard	0.500	5.34	504.000	10840.368	0.581	0.6	15.2	NO	0.999	NO	bb
3	3 171117M2_4	Standard	1.000	5.34	1200.566	14893.438	1.008	0.9	-9.1	NO	0.999	NO	bb
4	4 171117M2_5	Standard	2.000	5.34	2207.211	12308.530	2.242	1.9	-6.0	NO	0.999	NO	bb
5	5 171117M2_6	Standard	5.000	5.34	6135.249	13085.556	5.861	4.8	-4.1	NO	0.999	NO	bb
6	6 171117M2_7	Standard	10.000	5.34	12754.780	12775.641	12.480	10.4	4.3	NO	0.999	NO	bb
7	7 171117M2_8	Standard	50.000	5.34	59654.805	16499.063	45.196	49.9	-0.2	NO	0.999	NO	bb
8	8 171117M2_9	Standard	100.000	5.33	132854.750	13411.427	123.826			NO	0.999	NO	bbXI
9	9 171117M2_10	Standard	250.000	5.33	285509.000	14730.406	242.279			NO	0.999	NO	bbXI

**Compound name: 8:2 FTS**

Coefficient of Determination:  $R^2 = 0.993242$

Calibration curve:  $0.000589312 * x^2 + 0.22535 * x + 0.0730683$

Response type: Internal Std ( Ref 38 ), 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 171117M2_2	Standard	0.250	5.32	44.116	11618.854	0.047			NO	0.993	NO	MMXI
2	2 171117M2_3	Standard	0.500	5.32	160.268	11917.626	0.168	0.4	-15.8	NO	0.993	NO	bb
3	3 171117M2_4	Standard	1.000	5.31	302.462	12665.440	0.299	1.0	-0.2	NO	0.993	NO	bb
4	4 171117M2_5	Standard	2.000	5.31	584.565	12634.853	0.578	2.2	11.5	NO	0.993	NO	bb
5	5 171117M2_6	Standard	5.000	5.31	891.796	11325.155	0.984	4.0	-20.0	NO	0.993	NO	bb
6	6 171117M2_7	Standard	10.000	5.31	2939.205	11910.154	3.085	12.9	29.3	NO	0.993	NO	bb
7	7 171117M2_8	Standard	50.000	5.32	12153.322	12737.526	11.927	46.9	-6.3	NO	0.993	NO	bb
8	8 171117M2_9	Standard	100.000	5.31	23949.859	10364.176	28.885	101.1	1.1	NO	0.993	NO	bb
9	9 171117M2_10	Standard	250.000	5.30	47297.723	12284.660	48.127	152.5	-39.0	NO	0.993	NO	bbX

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**Compound name: N-MeFOSAA**

Correlation coefficient:  $r = 0.998202$ ,  $r^2 = 0.996406$

Calibration curve:  $1.47229 * x + 0.0178079$

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 171117M2_2	Standard	0.250	5.49	127.592	4876.297	0.327	0.2	-16.0	NO	0.996	NO	bb
2	2 171117M2_3	Standard	0.500	5.49	318.602	5115.376	0.779	0.5	3.3	NO	0.996	NO	bb
3	3 171117M2_4	Standard	1.000	5.49	574.803	5152.388	1.395	0.9	-6.5	NO	0.996	NO	bb
4	4 171117M2_5	Standard	2.000	5.49	1317.163	4743.066	3.471	2.3	17.3	NO	0.996	NO	bb
5	5 171117M2_6	Standard	5.000	5.49	2942.134	4701.645	7.822	5.3	6.0	NO	0.996	NO	bb
6	6 171117M2_7	Standard	10.000	5.49	6138.858	5242.671	14.637	9.9	-0.7	NO	0.996	NO	bb
7	7 171117M2_8	Standard	50.000	5.49	28165.617	5349.206	65.817	44.7	-10.6	NO	0.996	NO	bb
8	8 171117M2_9	Standard	100.000	5.48	64117.848	5006.820	160.076	108.7	8.7	NO	0.996	NO	bb
9	9 171117M2_10	Standard	250.000	5.48	155761.922	5373.179	362.360	246.1	-1.6	NO	0.996	NO	bb

**Compound name: N-EtFOSAA**

Coefficient of Determination:  $R^2 = 0.999243$

Calibration curve:  $0.000280366 * x^2 + 1.1902 * x + -0.0536011$

Response type: Internal Std ( Ref 45 ), 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 171117M2_2	Standard	0.250	5.64	102.418	5769.231	0.222	0.2	-7.4	NO	0.999	NO	bb
2	2 171117M2_3	Standard	0.500	5.64	256.803	5359.872	0.599	0.5	9.6	NO	0.999	NO	bb
3	3 171117M2_4	Standard	1.000	5.64	475.347	5072.408	1.171	1.0	2.9	NO	0.999	NO	bb
4	4 171117M2_5	Standard	2.000	5.64	1041.337	5966.996	2.181	1.9	-6.1	NO	0.999	NO	bb
5	5 171117M2_6	Standard	5.000	5.64	2094.333	5038.560	5.196	4.4	-11.9	NO	0.999	NO	bb
6	6 171117M2_7	Standard	10.000	5.64	5044.412	5863.503	10.754	9.1	-9.4	NO	0.999	NO	bb
7	7 171117M2_8	Standard	50.000	5.64	26155.375	5158.601	63.378	52.6	5.3	NO	0.999	NO	bb
8	8 171117M2_9	Standard	100.000	5.64	49925.586	5176.610	120.556	99.0	-1.0	NO	0.999	NO	bb
9	9 171117M2_10	Standard	250.000	5.64	129778.734	5151.240	314.921	249.9	-0.0	NO	0.999	NO	bb



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**Compound name: PFUDa**

Coefficient of Determination: R<sup>2</sup> = 0.998970

Calibration curve: -3.95873e-005 \* x<sup>2</sup> + 1.22225 \* x + 0.00168019

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 171117M2_2	Standard	0.250	5.66	330.419	14529.358	0.284	0.2	-7.5	NO	0.999	NO	bb
2	2 171117M2_3	Standard	0.500	5.66	832.592	15395.585	0.676	0.6	10.3	NO	0.999	NO	bb
3	3 171117M2_4	Standard	1.000	5.67	1301.918	14342.255	1.135	0.9	-7.3	NO	0.999	NO	bb
4	4 171117M2_5	Standard	2.000	5.66	2767.246	14603.713	2.369	1.9	-3.2	NO	0.999	NO	bb
5	5 171117M2_6	Standard	5.000	5.66	6024.731	12903.529	5.836	4.8	-4.5	NO	0.999	NO	bb
6	6 171117M2_7	Standard	10.000	5.66	14627.673	12916.277	14.156	11.6	15.9	NO	0.999	NO	bb
7	7 171117M2_8	Standard	50.000	5.66	65872.969	14202.125	57.978	47.5	-5.0	NO	0.999	NO	bb
8	8 171117M2_9	Standard	100.000	5.65	130046.297	13168.664	123.443	101.3	1.3	NO	0.999	NO	bb
9	9 171117M2_10	Standard	250.000	5.65	280745.063	11582.546	302.983	249.9	-0.0	NO	0.999	NO	bb

**Compound name: PFDS**

Coefficient of Determination: R<sup>2</sup> = 0.997604

Calibration curve: 0.000104214 \* x<sup>2</sup> + 0.344024 \* x + -0.000712016

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 171117M2_2	Standard	0.250	5.70	73.817	14529.358	0.064	0.2	-25.3	NO	0.998	NO	bb
2	2 171117M2_3	Standard	0.500	5.70	223.545	15395.585	0.182	0.5	5.9	NO	0.998	NO	bb
3	3 171117M2_4	Standard	1.000	5.70	431.447	14342.255	0.376	1.1	9.5	NO	0.998	NO	bb
4	4 171117M2_5	Standard	2.000	5.70	781.053	14603.713	0.669	1.9	-2.8	NO	0.998	NO	bb
5	5 171117M2_6	Standard	5.000	5.70	1881.567	12903.529	1.823	5.3	5.8	NO	0.998	NO	bb
6	6 171117M2_7	Standard	10.000	5.70	4049.393	12916.277	3.919	11.4	13.5	NO	0.998	NO	bb
7	7 171117M2_8	Standard	50.000	5.70	17647.984	14202.125	15.533	44.6	-10.9	NO	0.998	NO	bb
8	8 171117M2_9	Standard	100.000	5.69	39081.258	13168.664	37.097	104.5	4.5	NO	0.998	NO	bb
9	9 171117M2_10	Standard	250.000	5.69	85453.469	11582.546	92.222	249.3	-0.3	NO	0.998	NO	bb

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**Compound name: PFDoA**

Coefficient of Determination: R<sup>2</sup> = 0.999663

Calibration curve: 0.000250534 \* x<sup>2</sup> + 2.58648 \* x + 0.0762049

Response type: Internal Std ( Ref 47 ), 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 171117M2_2	Standard	0.250	5.94	402.155	8342.075	0.603	0.2	-18.6	NO	1.000	NO	db
2	2 171117M2_3	Standard	0.500	5.94	751.700	7117.666	1.320	0.5	-3.8	NO	1.000	NO	db
3	3 171117M2_4	Standard	1.000	5.94	1806.990	7671.149	2.944	1.1	10.9	NO	1.000	NO	bb
4	4 171117M2_5	Standard	2.000	5.94	4129.088	8531.166	6.050	2.3	15.5	NO	1.000	NO	bb
5	5 171117M2_6	Standard	5.000	5.93	8849.716	8955.928	12.352	4.7	-5.1	NO	1.000	NO	db
6	6 171117M2_7	Standard	10.000	5.93	18622.012	8923.304	26.086	10.0	0.5	NO	1.000	NO	bb
7	7 171117M2_8	Standard	50.000	5.93	85873.039	8068.548	133.037	51.2	2.3	NO	1.000	NO	bb
8	8 171117M2_9	Standard	100.000	5.93	152872.156	7446.998	256.600	98.2	-1.8	NO	1.000	NO	bb
9	9 171117M2_10	Standard	250.000	5.93	425636.063	8017.476	663.607	250.5	0.2	NO	1.000	NO	bb

**Compound name: N-MeFOSA**

Correlation coefficient: r = 0.998733, r<sup>2</sup> = 0.997468

Calibration curve: 1.07239 \* x + 0.411047

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 171117M2_2	Standard	1.250	5.85	222.350	20638.033	1.616	1.1	-10.1	NO	0.997	NO	bb
2	2 171117M2_3	Standard	2.500	5.85	452.044	21138.570	3.208	2.6	4.3	NO	0.997	NO	bb
3	3 171117M2_4	Standard	5.000	5.85	834.668	21864.377	5.726	5.0	-0.9	NO	0.997	NO	bb
4	4 171117M2_5	Standard	10.000	5.86	1783.816	21674.043	12.345	11.1	11.3	NO	0.997	NO	bb
5	5 171117M2_6	Standard	25.000	5.85	4091.980	20650.887	29.723	27.3	9.3	NO	0.997	NO	bb
6	6 171117M2_7	Standard	50.000	5.85	8255.056	20887.973	59.281	54.9	9.8	NO	0.997	NO	bb
7	7 171117M2_8	Standard	250.000	5.85	40187.469	21337.396	282.514	263.1	5.2	NO	0.997	NO	bb
8	8 171117M2_9	Standard	500.000	5.85	76938.070	20353.184	567.022	528.4	5.7	NO	0.997	NO	bb
9	9 171117M2_10	Standard	1250.000	5.85	179291.047	20886.844	1287.588	1200.3	-4.0	NO	0.997	NO	bb

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**Compound name: PFTrDA**

Coefficient of Determination:  $R^2 = 0.995969$

Calibration curve:  $0.0105132 * x^2 + 1.70153 * x + 1.86482$

Response type: Internal Std ( Ref 47 ), 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 171117M2_2	Standard	0.250	6.18	465.015	8342.075	0.697			NO	0.996	NO	bbXI
2	2 171117M2_3	Standard	0.500	6.18	908.480	7117.666	1.595			NO	0.996	NO	bbXI
3	3 171117M2_4	Standard	1.000	6.18	1879.616	7671.149	3.063	0.7	-29.9	NO	0.996	NO	bb
4	4 171117M2_5	Standard	2.000	6.17	3561.341	8531.166	5.218	1.9	-2.6	NO	0.996	NO	bb
5	5 171117M2_6	Standard	5.000	6.17	8696.263	8955.928	12.138	5.8	16.6	NO	0.996	NO	bb
6	6 171117M2_7	Standard	10.000	6.17	17054.621	8923.304	23.891	12.0	20.5	NO	0.996	NO	bb
7	7 171117M2_8	Standard	50.000	6.17	67415.500	8068.548	104.442	46.8	-6.5	NO	0.996	NO	bb
8	8 171117M2_9	Standard	100.000	6.17	167454.938	7446.998	281.078	101.0	1.0	NO	0.996	NO	bb
9	9 171117M2_10	Standard	250.000	6.17	352987.188	8017.476	550.340	161.4	-35.4	NO	0.996	NO	bbX

**Compound name: PFTeDA**

Coefficient of Determination:  $R^2 = 0.995075$

Calibration curve:  $-0.00290976 * x^2 + 1.39411 * x + 0.354244$

Response type: Internal Std ( Ref 49 ), 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 171117M2_2	Standard	0.250	6.37	320.875	9695.774	0.414	0.0	-82.9	NO	0.995	NO	bbX
2	2 171117M2_3	Standard	0.500	6.37	583.202	10060.497	0.725	0.3	-46.8	NO	0.995	NO	bbX
3	3 171117M2_4	Standard	1.000	6.37	1054.261	9916.345	1.329	0.7	-30.0	NO	0.995	NO	bb
4	4 171117M2_5	Standard	2.000	6.37	2416.980	8262.181	3.657	2.4	19.0	NO	0.995	NO	bb
5	5 171117M2_6	Standard	5.000	6.36	6453.651	9193.859	8.774	6.1	22.4	NO	0.995	NO	bb
6	6 171117M2_7	Standard	10.000	6.36	11202.847	11144.358	12.566	8.9	-10.7	NO	0.995	NO	bb
7	7 171117M2_8	Standard	50.000	6.36	51131.703	10262.983	62.277	49.5	-0.9	NO	0.995	NO	bb
8	8 171117M2_9	Standard	100.000	6.36	93534.180	10534.681	110.984	100.4	0.4	NO	0.995	NO	bb
9	9 171117M2_10	Standard	250.000	6.36	227573.047	10049.372	283.069			NO	0.995	NO	bbXI

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**Compound name: N-EtFOSA**

Coefficient of Determination: R<sup>2</sup> = 0.999431

Calibration curve:  $-1.70392e-005 * x^2 + 0.982925 * x + 0.354998$

Response type: Internal Std ( Ref 50 ), 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 171117M2_2	Standard	1.250	6.21	233.340	24038.256	1.456	1.1	-10.4	NO	0.999	NO	bb
2	2 171117M2_3	Standard	2.500	6.21	441.304	24377.238	2.715	2.4	-3.9	NO	0.999	NO	bb
3	3 171117M2_4	Standard	5.000	6.21	876.903	26357.070	4.991	4.7	-5.7	NO	0.999	NO	bb
4	4 171117M2_5	Standard	10.000	6.21	1896.722	26151.363	10.879	10.7	7.1	NO	0.999	NO	bb
5	5 171117M2_6	Standard	25.000	6.21	4385.231	24563.375	26.779	26.9	7.6	NO	0.999	NO	bb
6	6 171117M2_7	Standard	50.000	6.21	8806.193	25293.232	52.225	52.8	5.6	NO	0.999	NO	bb
7	7 171117M2_8	Standard	250.000	6.21	42412.320	25304.500	251.412	256.6	2.6	NO	0.999	NO	bb
8	8 171117M2_9	Standard	500.000	6.20	78971.953	25136.713	471.255	483.1	-3.4	NO	0.999	NO	bb
9	9 171117M2_10	Standard	1250.000	6.20	195193.141	24248.033	1207.478	1255.4	0.4	NO	0.999	NO	bb

**Compound name: PFHxDA**

Coefficient of Determination: R<sup>2</sup> = 0.998714

Calibration curve:  $-0.000742914 * x^2 + 0.711929 * x + 0.0156646$

Response type: Internal Std ( Ref 51 ), 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 171117M2_2	Standard	0.250	6.66	150.378	4048.851	0.186	0.2	-4.4	NO	0.999	NO	bb
2	2 171117M2_3	Standard	0.500	6.66	260.770	3900.188	0.334	0.4	-10.4	NO	0.999	NO	bb
3	3 171117M2_4	Standard	1.000	6.66	595.020	4072.103	0.731	1.0	0.5	NO	0.999	NO	bb
4	4 171117M2_5	Standard	2.000	6.66	1283.998	4130.272	1.554	2.2	8.3	NO	0.999	NO	bb
5	5 171117M2_6	Standard	5.000	6.66	2847.711	4081.614	3.488	4.9	-1.9	NO	0.999	NO	bb
6	6 171117M2_7	Standard	10.000	6.66	5810.741	3836.182	7.574	10.7	7.4	NO	0.999	NO	bb
7	7 171117M2_8	Standard	50.000	6.66	27871.764	3943.761	35.337	52.5	5.0	NO	0.999	NO	bb
8	8 171117M2_9	Standard	100.000	6.65	50581.613	4157.265	60.835	94.8	-5.2	NO	0.999	NO	bb
9	9 171117M2_10	Standard	250.000	6.65	111167.625	4197.948	132.407	252.5	1.0	NO	0.999	NO	bb

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**Compound name: PFODA**

Coefficient of Determination:  $R^2 = 0.998640$

Calibration curve:  $-8.49332e-005 * x^2 + 0.693288 * x + 0.0220723$

Response type: Internal Std ( Ref 51 ), 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 171117M2_2	Standard	0.250	6.87	143.369	4048.851	0.177	0.2	-10.6	NO	0.999	NO	bb
2	2 171117M2_3	Standard	0.500	6.87	282.342	3900.188	0.362	0.5	-1.9	NO	0.999	NO	bb
3	3 171117M2_4	Standard	1.000	6.87	571.674	4072.103	0.702	1.0	-1.9	NO	0.999	NO	bb
4	4 171117M2_5	Standard	2.000	6.87	1185.803	4130.272	1.436	2.0	2.0	NO	0.999	NO	bb
5	5 171117M2_6	Standard	5.000	6.87	3121.994	4081.614	3.824	5.5	9.8	NO	0.999	NO	bb
6	6 171117M2_7	Standard	10.000	6.87	6339.866	3836.182	8.263	11.9	19.0	NO	0.999	NO	bb
7	7 171117M2_8	Standard	50.000	6.87	26992.725	3943.761	34.222	49.6	-0.7	NO	0.999	NO	bb
8	8 171117M2_9	Standard	100.000	6.87	55040.176	4157.265	66.198	96.6	-3.4	NO	0.999	NO	bd
9	9 171117M2_10	Standard	250.000	6.87	141847.219	4197.948	168.948	251.4	0.6	NO	0.999	NO	bb

**Compound name: N-MeFOSE**

Correlation coefficient:  $r = 0.999363$ ,  $r^2 = 0.998727$

Calibration curve:  $1.06615 * x + 0.127128$

Response type: Internal Std ( Ref 52 ), 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 171117M2_2	Standard	1.250	6.32	200.102	21305.631	1.409	1.2	-3.8	NO	0.999	NO	bb
2	2 171117M2_3	Standard	2.500	6.32	374.699	21128.275	2.660	2.4	-5.0	NO	0.999	NO	bb
3	3 171117M2_4	Standard	5.000	6.32	760.382	22160.484	5.147	4.7	-5.8	NO	0.999	NO	bb
4	4 171117M2_5	Standard	10.000	6.32	1704.381	22968.805	11.131	10.3	3.2	NO	0.999	NO	bb
5	5 171117M2_6	Standard	25.000	6.32	4225.444	20846.105	30.405	28.4	13.6	NO	0.999	NO	bb
6	6 171117M2_7	Standard	50.000	6.32	8037.004	22344.258	53.953	50.5	1.0	NO	0.999	NO	bb
7	7 171117M2_8	Standard	250.000	6.32	39681.504	23936.719	248.665	233.1	-6.8	NO	0.999	NO	bd
8	8 171117M2_9	Standard	500.000	6.32	73020.414	19702.980	555.909	521.3	4.3	NO	0.999	NO	bb
9	9 171117M2_10	Standard	1250.000	6.32	188135.109	21312.359	1324.127	1241.8	-0.7	NO	0.999	NO	bb

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**Compound name: N-EtFOSE**

Correlation coefficient:  $r = 0.999483$ ,  $r^2 = 0.998966$

Calibration curve:  $1.15711 * x + 0.072994$

Response type: Internal Std ( Ref 53 ), 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 171117M2_2	Standard	1.250	6.47	217.718	20789.707	1.571	1.3	3.6	NO	0.999	NO	bb
2	2 171117M2_3	Standard	2.500	6.47	454.388	21502.777	3.170	2.7	7.1	NO	0.999	NO	bb
3	3 171117M2_4	Standard	5.000	6.47	851.410	22741.080	5.616	4.8	-4.2	NO	0.999	NO	bb
4	4 171117M2_5	Standard	10.000	6.47	1737.563	21681.939	12.021	10.3	3.3	NO	0.999	NO	bb
5	5 171117M2_6	Standard	25.000	6.47	3673.400	19883.680	27.712	23.9	-4.5	NO	0.999	NO	bb
6	6 171117M2_7	Standard	50.000	6.47	8362.123	21834.893	57.446	49.6	-0.8	NO	0.999	NO	bb
7	7 171117M2_8	Standard	250.000	6.47	40275.641	22660.139	266.607	230.3	-7.9	NO	0.999	NO	bb
8	8 171117M2_9	Standard	500.000	6.47	84943.414	21375.383	596.083	515.1	3.0	NO	0.999	NO	bd
9	9 171117M2_10	Standard	1250.000	6.47	216152.688	22312.600	1453.121	1255.8	0.5	NO	0.999	NO	bb

**Compound name: 13C3-PFBA**

Response Factor: 0.914199

RRF SD: 0.0208752, Relative SD: 2.28344

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 171117M2_2	Standard	12.500	1.65	11099.909	11616.328	11.944	13.1	4.5	NO		NO	bb
2	2 171117M2_3	Standard	12.500	1.65	10788.375	11713.211	11.513	12.6	0.7	NO		NO	bb
3	3 171117M2_4	Standard	12.500	1.65	11684.233	12664.379	11.533	12.6	0.9	NO		NO	bb
4	4 171117M2_5	Standard	12.500	1.64	11307.033	12698.978	11.130	12.2	-2.6	NO		NO	bb
5	5 171117M2_6	Standard	12.500	1.66	11222.632	12331.497	11.376	12.4	-0.5	NO		NO	bb
6	6 171117M2_7	Standard	12.500	1.65	11472.631	12620.746	11.363	12.4	-0.6	NO		NO	bb
7	7 171117M2_8	Standard	12.500	1.65	11620.472	12530.163	11.592	12.7	1.4	NO		NO	bb
8	8 171117M2_9	Standard	12.500	1.64	11248.135	12416.841	11.323	12.4	-0.9	NO		NO	bb
9	9 171117M2_10	Standard	12.500	1.64	11062.536	12488.417	11.073	12.1	-3.1	NO		NO	bb

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**Compound name: 13C3-PFPeA**

Response Factor: 0.83292

RRF SD: 0.0322715, Relative SD: 3.87451

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 171117M2_2	Standard	12.500	2.63	14898.082	18684.918	9.967	12.0	-4.3	NO		NO	bb
2	2 171117M2_3	Standard	12.500	2.63	15518.482	18623.752	10.416	12.5	0.0	NO		NO	bb
3	3 171117M2_4	Standard	12.500	2.63	15902.483	20028.580	9.925	11.9	-4.7	NO		NO	bb
4	4 171117M2_5	Standard	12.500	2.62	15191.427	18976.438	10.007	12.0	-3.9	NO		NO	bb
5	5 171117M2_6	Standard	12.500	2.63	15558.536	18197.197	10.687	12.8	2.7	NO		NO	bb
6	6 171117M2_7	Standard	12.500	2.62	15822.217	18695.125	10.579	12.7	1.6	NO		NO	bb
7	7 171117M2_8	Standard	12.500	2.63	15402.809	17790.234	10.823	13.0	3.9	NO		NO	bb
8	8 171117M2_9	Standard	12.500	2.62	14824.115	18073.672	10.253	12.3	-1.5	NO		NO	bb
9	9 171117M2_10	Standard	12.500	2.62	15135.806	17125.396	11.048	13.3	6.1	NO		NO	bb

**Compound name: 13C3-PFBS**

Response Factor: 0.0964605

RRF SD: 0.00376551, Relative SD: 3.90368

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 171117M2_2	Standard	12.500	2.90	1789.673	18684.918	1.197	12.4	-0.7	NO		NO	bb
2	2 171117M2_3	Standard	12.500	2.89	1745.821	18623.752	1.172	12.1	-2.8	NO		NO	bb
3	3 171117M2_4	Standard	12.500	2.89	1782.738	20028.580	1.113	11.5	-7.7	NO		NO	bb
4	4 171117M2_5	Standard	12.500	2.89	1892.214	18976.438	1.246	12.9	3.4	NO		NO	bb
5	5 171117M2_6	Standard	12.500	2.90	1766.445	18197.197	1.213	12.6	0.6	NO		NO	bb
6	6 171117M2_7	Standard	12.500	2.89	1816.402	18695.125	1.214	12.6	0.7	NO		NO	bb
7	7 171117M2_8	Standard	12.500	2.89	1800.082	17790.234	1.265	13.1	4.9	NO		NO	bb
8	8 171117M2_9	Standard	12.500	2.88	1707.862	18073.672	1.181	12.2	-2.0	NO		NO	bb
9	9 171117M2_10	Standard	12.500	2.88	1712.337	17125.396	1.250	13.0	3.7	NO		NO	bb

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**Compound name: 13C2-PFHxA**

Response Factor: 0.766591

RRF SD: 0.0436536, Relative SD: 5.69451

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 171117M2_2	Standard	5.000	3.40	5534.224	18684.918	3.702	4.8	-3.4	NO		NO	bb
2	2 171117M2_3	Standard	5.000	3.40	5445.653	18623.752	3.655	4.8	-4.6	NO		NO	bb
3	3 171117M2_4	Standard	5.000	3.40	5598.818	20028.580	3.494	4.6	-8.8	NO		NO	bb
4	4 171117M2_5	Standard	5.000	3.40	5694.663	18976.438	3.751	4.9	-2.1	NO		NO	bb
5	5 171117M2_6	Standard	5.000	3.40	5402.658	18197.197	3.711	4.8	-3.2	NO		NO	bb
6	6 171117M2_7	Standard	5.000	3.39	6126.828	18695.125	4.097	5.3	6.9	NO		NO	bb
7	7 171117M2_8	Standard	5.000	3.40	5851.731	17790.234	4.112	5.4	7.3	NO		NO	bb
8	8 171117M2_9	Standard	5.000	3.38	5803.993	18073.672	4.014	5.2	4.7	NO		NO	bb
9	9 171117M2_10	Standard	5.000	3.39	5425.820	17125.396	3.960	5.2	3.3	NO		NO	bb

**Compound name: 13C4-PFHpA**

Response Factor: 0.557787

RRF SD: 0.025608, Relative SD: 4.59101

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 171117M2_2	Standard	12.500	4.03	10608.956	18684.918	7.097	12.7	1.8	NO		NO	bb
2	2 171117M2_3	Standard	12.500	4.03	10262.094	18623.752	6.888	12.3	-1.2	NO		NO	bb
3	3 171117M2_4	Standard	12.500	4.03	10009.601	20028.580	6.247	11.2	-10.4	NO		NO	bb
4	4 171117M2_5	Standard	12.500	4.03	11011.087	18976.438	7.253	13.0	4.0	NO		NO	bb
5	5 171117M2_6	Standard	12.500	4.03	10074.952	18197.197	6.921	12.4	-0.7	NO		NO	bb
6	6 171117M2_7	Standard	12.500	4.02	10818.055	18695.125	7.233	13.0	3.7	NO		NO	bb
7	7 171117M2_8	Standard	12.500	4.02	9809.162	17790.234	6.892	12.4	-1.1	NO		NO	bb
8	8 171117M2_9	Standard	12.500	4.01	9996.040	18073.672	6.913	12.4	-0.8	NO		NO	bb
9	9 171117M2_10	Standard	12.500	4.02	10009.780	17125.396	7.306	13.1	4.8	NO		NO	bb



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**Compound name: 18O2-PFHxS**

Response Factor: 0.430334

RRF SD: 0.0319001, Relative SD: 7.41288

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 171117M2_2	Standard	12.500	4.17	1409.975	3218.494	5.476	12.7	1.8	NO		NO	bb
2	2 171117M2_3	Standard	12.500	4.17	1501.516	3381.589	5.550	12.9	3.2	NO		NO	bb
3	3 171117M2_4	Standard	12.500	4.17	1628.451	3635.838	5.599	13.0	4.1	NO		NO	bb
4	4 171117M2_5	Standard	12.500	4.17	1334.450	3226.160	5.170	12.0	-3.9	NO		NO	bb
5	5 171117M2_6	Standard	12.500	4.17	1280.166	3507.529	4.562	10.6	-15.2	NO		NO	bb
6	6 171117M2_7	Standard	12.500	4.16	1453.473	3234.798	5.617	13.1	4.4	NO		NO	bb
7	7 171117M2_8	Standard	12.500	4.17	1470.534	3078.517	5.971	13.9	11.0	NO		NO	bb
8	8 171117M2_9	Standard	12.500	4.16	1300.057	3039.700	5.346	12.4	-0.6	NO		NO	bb
9	9 171117M2_10	Standard	12.500	4.16	1341.453	3274.249	5.121	11.9	-4.8	NO		NO	bb

**Compound name: 13C2-6:2 FTS**

Response Factor: 0.239786

RRF SD: 0.0286205, Relative SD: 11.9358

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 171117M2_2	Standard	12.500	4.49	2632.218	12662.355	2.598	10.8	-13.3	NO		NO	bb
2	2 171117M2_3	Standard	12.500	4.49	2941.125	11413.759	3.221	13.4	7.5	NO		NO	bb
3	3 171117M2_4	Standard	12.500	4.49	2622.126	12658.641	2.589	10.8	-13.6	NO		NO	bb
4	4 171117M2_5	Standard	12.500	4.49	3108.271	12975.192	2.994	12.5	-0.1	NO		NO	bb
5	5 171117M2_6	Standard	12.500	4.49	2893.106	11657.218	3.102	12.9	3.5	NO		NO	bb
6	6 171117M2_7	Standard	12.500	4.49	2845.559	12817.383	2.775	11.6	-7.4	NO		NO	bb
7	7 171117M2_8	Standard	12.500	4.49	3213.341	13286.604	3.023	12.6	0.9	NO		NO	bb
8	8 171117M2_9	Standard	12.500	4.48	3367.860	11455.381	3.675	15.3	22.6	NO		NO	bb
9	9 171117M2_10	Standard	12.500	4.48	6098.677	13581.681	5.613	23.4	87.3	NO		NO	bbX

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**Compound name: 13C2-PFOA**

Response Factor: 0.956077

RRF SD: 0.0471548, Relative SD: 4.93211

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 171117M2_2	Standard	12.500	4.54	11618.854	12662.355	11.470	12.0	-4.0	NO		NO	bb
2	2 171117M2_3	Standard	12.500	4.54	11917.626	11413.759	13.052	13.7	9.2	NO		NO	bb
3	3 171117M2_4	Standard	12.500	4.54	12665.440	12658.641	12.507	13.1	4.7	NO		NO	bb
4	4 171117M2_5	Standard	12.500	4.54	12634.853	12975.192	12.172	12.7	1.9	NO		NO	bb
5	5 171117M2_6	Standard	12.500	4.54	11325.155	11657.218	12.144	12.7	1.6	NO		NO	bb
6	6 171117M2_7	Standard	12.500	4.54	11910.154	12817.383	11.615	12.1	-2.8	NO		NO	bb
7	7 171117M2_8	Standard	12.500	4.54	12737.526	13286.604	11.983	12.5	0.3	NO		NO	bb
8	8 171117M2_9	Standard	12.500	4.53	10364.176	11455.381	11.309	11.8	-5.4	NO		NO	bb
9	9 171117M2_10	Standard	12.500	4.53	12284.660	13581.681	11.306	11.8	-5.4	NO		NO	bb

**Compound name: 13C5-PFNA**

Response Factor: 1.00858

RRF SD: 0.0979557, Relative SD: 9.71221

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 171117M2_2	Standard	12.500	4.97	14500.669	13838.622	13.098	13.0	3.9	NO		NO	bb
2	2 171117M2_3	Standard	12.500	4.97	14584.946	13791.014	13.220	13.1	4.9	NO		NO	MM
3	3 171117M2_4	Standard	12.500	4.97	12347.789	12182.290	12.670	12.6	0.5	NO		NO	bb
4	4 171117M2_5	Standard	12.500	4.97	14345.739	13210.473	13.574	13.5	7.7	NO		NO	bb
5	5 171117M2_6	Standard	12.500	4.97	12305.917	13052.478	11.785	11.7	-6.5	NO		NO	MM
6	6 171117M2_7	Standard	12.500	4.97	15537.776	16044.813	12.105	12.0	-4.0	NO		NO	MM
7	7 171117M2_8	Standard	12.500	4.97	11103.045	13705.722	10.126	10.0	-19.7	NO		NO	bb
8	8 171117M2_9	Standard	12.500	4.96	12545.687	10865.601	14.433	14.3	14.5	NO		NO	bb
9	9 171117M2_10	Standard	12.500	4.96	13180.868	13228.759	12.455	12.3	-1.2	NO		NO	bb

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**Compound name: 13C8-PFOSA**

Response Factor: 0.524361

RRF SD: 0.0726764, Relative SD: 13.86

Response type: Internal Std ( Ref 61 ), 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 171117M2_2	Standard	12.500	5.02	5449.085	12293.438	5.541	10.6	-15.5	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.02	6039.344	12499.639	6.040	11.5	-7.9	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.02	6320.764	13663.421	5.783	11.0	-11.8	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.02	5862.556	12598.913	5.817	11.1	-11.3	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.02	6867.646	10539.817	8.145	15.5	24.3	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.02	5895.298	10807.426	6.819	13.0	4.0	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.02	6272.673	10321.155	7.597	14.5	15.9	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.01	5992.799	12201.937	6.139	11.7	-6.3	NO		NO	bb
9	9 171117M2_10	Standard	12.500	5.01	6332.080	11129.420	7.112	13.6	8.5	NO		NO	bb

**Compound name: 13C8-PFOS**

Response Factor: 1.0798

RRF SD: 0.108889, Relative SD: 10.0842

Response type: Internal Std ( Ref 59 ), 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 171117M2_2	Standard	12.500	5.05	4121.683	3566.763	14.445	13.4	7.0	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.05	4403.079	3605.316	15.266	14.1	13.1	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.05	3769.311	3871.246	12.171	11.3	-9.8	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.05	4170.288	3852.820	13.530	12.5	0.2	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.05	4052.045	3774.167	13.420	12.4	-0.6	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.05	4026.358	3340.242	15.068	14.0	11.6	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.05	4318.164	3827.443	14.103	13.1	4.5	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.04	3836.698	4072.931	11.775	10.9	-12.8	NO		NO	bb
9	9 171117M2_10	Standard	12.500	5.04	3712.826	3966.688	11.700	10.8	-13.3	NO		NO	bb

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**Compound name: 13C2-PFDA**

Response Factor: 1.98169

RRF SD: 0.396069, Relative SD: 19.9864

Response type: Internal Std ( Ref 60 ), 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 171117M2_2	Standard	12.500	5.34	14226.737	7573.486	23.481	11.8	-5.2	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.34	10840.368	6586.087	20.574	10.4	-16.9	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.34	14893.438	7231.485	25.744	13.0	3.9	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.34	12308.530	7555.599	20.363	10.3	-17.8	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.34	13085.556	6271.824	26.080	13.2	5.3	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.34	12775.641	7734.969	20.646	10.4	-16.7	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.34	16499.063	5802.223	35.545	17.9	43.5	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.33	13411.427	7620.118	22.000	11.1	-11.2	NO		NO	bb
9	9 171117M2_10	Standard	12.500	5.33	14730.406	6459.136	28.507	14.4	15.1	NO		NO	bb

**Compound name: 13C2-8:2 FTS**

Response Factor: 0.072115

RRF SD: 0.0113994, Relative SD: 15.8072

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 171117M2_2	Standard	12.500	5.32	1561.134	18684.918	1.044	14.5	15.9	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.32	1314.392	18623.752	0.882	12.2	-2.1	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.31	1185.852	20028.580	0.740	10.3	-17.9	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.31	1221.042	18976.438	0.804	11.2	-10.8	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.31	1298.236	18197.197	0.892	12.4	-1.1	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.31	1208.078	18695.125	0.808	11.2	-10.4	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.32	1621.801	17790.234	1.140	15.8	26.4	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.31	1881.143	18073.672	1.301	18.0	44.3	NO		NO	bbX
9	9 171117M2_10	Standard	12.500	5.30	3095.274	17125.396	2.259	31.3	150.6	NO		NO	bbX

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**Compound name: d3-N-MeFOSAA**

Response Factor: 0.43356  
 RRF SD: 0.0516653, Relative SD: 11.9165  
 Response type: Internal Std ( Ref 61 ), 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 171117M2_2	Standard	12.500	5.49	4876.297	12293.438	4.958	11.4	-8.5	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.48	5115.376	12499.639	5.116	11.8	-5.6	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.49	5152.388	13663.421	4.714	10.9	-13.0	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.48	4743.066	12598.913	4.706	10.9	-13.2	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.48	4701.645	10539.817	5.576	12.9	2.9	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.48	5242.671	10807.426	6.064	14.0	11.9	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.48	5349.206	10321.155	6.478	14.9	19.5	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.48	5006.820	12201.937	5.129	11.8	-5.4	NO		NO	bb
9	9 171117M2_10	Standard	12.500	5.48	5373.179	11129.42C	6.035	13.9	11.4	NO		NO	bb

**Compound name: d5-N-EtFOSAA**

Response Factor: 0.46116  
 RRF SD: 0.0488899, Relative SD: 10.6015  
 Response type: Internal Std ( Ref 61 ), 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 171117M2_2	Standard	12.500	5.64	5769.231	12293.438	5.866	12.7	1.8	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.64	5359.872	12499.639	5.360	11.6	-7.0	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.64	5072.408	13663.421	4.640	10.1	-19.5	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.64	5966.996	12598.913	5.920	12.8	2.7	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.64	5038.560	10539.817	5.976	13.0	3.7	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.63	5863.503	10807.426	6.782	14.7	17.6	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.64	5158.601	10321.155	6.248	13.5	8.4	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.63	5176.610	12201.937	5.303	11.5	-8.0	NO		NO	bb
9	9 171117M2_10	Standard	12.500	5.63	5151.240	11129.42C	5.786	12.5	0.4	NO		NO	bb

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**Compound name: 13C2-PFUdA**

Response Factor: 1.17086

RRF SD: 0.105776, Relative SD: 9.03408

Response type: Internal Std ( Ref 61 ), 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 171117M2_2	Standard	12.500	5.66	14529.358	12293.438	14.773	12.6	0.9	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.67	15395.585	12499.639	15.396	13.1	5.2	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.66	14342.255	13663.421	13.121	11.2	-10.3	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.66	14603.713	12598.913	14.489	12.4	-1.0	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.66	12903.529	10539.817	15.303	13.1	4.6	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.66	12916.277	10807.426	14.939	12.8	2.1	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.66	14202.125	10321.155	17.200	14.7	17.5	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.65	13168.664	12201.937	13.490	11.5	-7.8	NO		NO	bb
9	9 171117M2_10	Standard	12.500	5.65	11582.546	11129.420	13.009	11.1	-11.1	NO		NO	bb

**Compound name: 13C2-PFDoA**

Response Factor: 0.697157

RRF SD: 0.106365, Relative SD: 15.2569

Response type: Internal Std ( Ref 61 ), 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 171117M2_2	Standard	12.500	5.94	8342.075	12293.438	8.482	12.2	-2.7	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.94	7117.666	12499.639	7.118	10.2	-18.3	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.94	7671.149	13663.421	7.018	10.1	-19.5	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.94	8531.166	12598.913	8.464	12.1	-2.9	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.93	8955.928	10539.817	10.622	15.2	21.9	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.93	8923.304	10807.426	10.321	14.8	18.4	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.93	8068.548	10321.155	9.772	14.0	12.1	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.93	7446.998	12201.937	7.629	10.9	-12.5	NO		NO	bb
9	9 171117M2_10	Standard	12.500	5.93	8017.476	11129.420	9.005	12.9	3.3	NO		NO	bb

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**Compound name: d3-N-MeFOSA**

Response Factor: 0.14995

RRF SD: 0.0135204, Relative SD: 9.01662

Response type: Internal Std ( Ref 61 ), 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	171117M2_2	Standard	150.000	5.88	20638.033	12293.438	20.985	139.9	-6.7	NO		NO	bb
2	171117M2_3	Standard	150.000	5.88	21138.570	12499.639	21.139	141.0	-6.0	NO		NO	bb
3	171117M2_4	Standard	150.000	5.88	21864.377	13663.421	20.003	133.4	-11.1	NO		NO	bb
4	171117M2_5	Standard	150.000	5.88	21674.043	12598.913	21.504	143.4	-4.4	NO		NO	bb
5	171117M2_6	Standard	150.000	5.88	20650.887	10539.817	24.492	163.3	8.9	NO		NO	bb
6	171117M2_7	Standard	150.000	5.88	20887.973	10807.426	24.159	161.1	7.4	NO		NO	bb
7	171117M2_8	Standard	150.000	5.88	21337.396	10321.155	25.842	172.3	14.9	NO		NO	bb
8	171117M2_9	Standard	150.000	5.87	20353.184	12201.937	20.850	139.0	-7.3	NO		NO	bb
9	171117M2_10	Standard	150.000	5.87	20886.844	11129.420	23.459	156.4	4.3	NO		NO	bb

**Compound name: 13C2-PFTeDA**

Response Factor: 0.848806

RRF SD: 0.120459, Relative SD: 14.1916

Response type: Internal Std ( Ref 61 ), 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	171117M2_2	Standard	12.500	6.37	9695.774	12293.438	9.859	11.6	-7.1	NO		NO	bb
2	171117M2_3	Standard	12.500	6.37	10060.497	12499.639	10.061	11.9	-5.2	NO		NO	bb
3	171117M2_4	Standard	12.500	6.37	9916.345	13663.421	9.072	10.7	-14.5	NO		NO	bb
4	171117M2_5	Standard	12.500	6.37	8262.181	12598.913	8.197	9.7	-22.7	NO		NO	bb
5	171117M2_6	Standard	12.500	6.36	9193.859	10539.817	10.904	12.8	2.8	NO		NO	bb
6	171117M2_7	Standard	12.500	6.36	11144.358	10807.426	12.890	15.2	21.5	NO		NO	bb
7	171117M2_8	Standard	12.500	6.36	10262.983	10321.155	12.430	14.6	17.1	NO		NO	bb
8	171117M2_9	Standard	12.500	6.36	10534.681	12201.937	10.792	12.7	1.7	NO		NO	bb
9	171117M2_10	Standard	12.500	6.36	10049.372	11129.420	11.287	13.3	6.4	NO		NO	bb

Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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**Compound name: d5-N-ETFOSA**

Response Factor: 0.178442

RRF SD: 0.0161436, Relative SD: 9.047

Response type: Internal Std ( Ref 61 ), 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 171117M2_2	Standard	150.000	6.22	24038.256	12293.438	24.442	137.0	-8.7	NO		NO	bb
2	2 171117M2_3	Standard	150.000	6.22	24377.238	12499.639	24.378	136.6	-8.9	NO		NO	bb
3	3 171117M2_4	Standard	150.000	6.22	26357.070	13663.421	24.113	135.1	-9.9	NO		NO	bb
4	4 171117M2_5	Standard	150.000	6.22	26151.363	12598.913	25.946	145.4	-3.1	NO		NO	bb
5	5 171117M2_6	Standard	150.000	6.22	24563.375	10539.817	29.132	163.3	8.8	NO		NO	bb
6	6 171117M2_7	Standard	150.000	6.22	25293.232	10807.426	29.254	163.9	9.3	NO		NO	bb
7	7 171117M2_8	Standard	150.000	6.22	25304.500	10321.155	30.646	171.7	14.5	NO		NO	bb
8	8 171117M2_9	Standard	150.000	6.21	25136.713	12201.937	25.751	144.3	-3.8	NO		NO	bb
9	9 171117M2_10	Standard	150.000	6.21	24248.033	11129.420	27.234	152.6	1.7	NO		NO	bb

**Compound name: 13C2-PFHxDA**

Response Factor: 0.863736

RRF SD: 0.0797832, Relative SD: 9.23698

Response type: Internal Std ( Ref 61 ), 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 171117M2_2	Standard	5.000	6.66	4048.851	12293.438	4.117	4.8	-4.7	NO		NO	bb
2	2 171117M2_3	Standard	5.000	6.66	3900.188	12499.639	3.900	4.5	-9.7	NO		NO	bb
3	3 171117M2_4	Standard	5.000	6.66	4072.103	13663.421	3.725	4.3	-13.7	NO		NO	bb
4	4 171117M2_5	Standard	5.000	6.66	4130.272	12598.913	4.098	4.7	-5.1	NO		NO	bb
5	5 171117M2_6	Standard	5.000	6.66	4081.614	10539.817	4.841	5.6	12.1	NO		NO	bb
6	6 171117M2_7	Standard	5.000	6.66	3836.182	10807.426	4.437	5.1	2.7	NO		NO	bb
7	7 171117M2_8	Standard	5.000	6.66	3943.761	10321.155	4.776	5.5	10.6	NO		NO	bb
8	8 171117M2_9	Standard	5.000	6.65	4157.265	12201.937	4.259	4.9	-1.4	NO		NO	bb
9	9 171117M2_10	Standard	5.000	6.65	4197.948	11129.420	4.715	5.5	9.2	NO		NO	bb



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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**Compound name: d7-N-MeFOSE**

Response Factor: 0.155209

RRF SD: 0.0194069, Relative SD: 12.5037

Response type: Internal Std ( Ref 61 ), 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 171117M2_2	Standard	150.000	6.31	21305.631	12293.438	21.664	139.6	-6.9	NO		NO	bb
2	2 171117M2_3	Standard	150.000	6.32	21128.275	12499.639	21.129	136.1	-9.2	NO		NO	bb
3	3 171117M2_4	Standard	150.000	6.31	22160.484	13663.421	20.274	130.6	-12.9	NO		NO	bb
4	4 171117M2_5	Standard	150.000	6.32	22968.805	12598.913	22.788	146.8	-2.1	NO		NO	bb
5	5 171117M2_6	Standard	150.000	6.32	20846.105	10539.817	24.723	159.3	6.2	NO		NO	bb
6	6 171117M2_7	Standard	150.000	6.32	22344.258	10807.426	25.844	166.5	11.0	NO		NO	bb
7	7 171117M2_8	Standard	150.000	6.32	23936.719	10321.155	28.990	186.8	24.5	NO		NO	bb
8	8 171117M2_9	Standard	150.000	6.31	19702.980	12201.937	20.184	130.0	-13.3	NO		NO	bb
9	9 171117M2_10	Standard	150.000	6.31	21312.359	11129.420	23.937	154.2	2.8	NO		NO	bb

**Compound name: d9-N-EtFOSE**

Response Factor: 0.15422

RRF SD: 0.0154932, Relative SD: 10.0462

Response type: Internal Std ( Ref 61 ), 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 171117M2_2	Standard	150.000	6.46	20789.707	12293.438	21.139	137.1	-8.6	NO		NO	bb
2	2 171117M2_3	Standard	150.000	6.46	21502.777	12499.639	21.503	139.4	-7.0	NO		NO	bb
3	3 171117M2_4	Standard	150.000	6.46	22741.080	13663.421	20.805	134.9	-10.1	NO		NO	bb
4	4 171117M2_5	Standard	150.000	6.46	21681.939	12598.913	21.512	139.5	-7.0	NO		NO	bb
5	5 171117M2_6	Standard	150.000	6.46	19883.680	10539.817	23.582	152.9	1.9	NO		NO	bb
6	6 171117M2_7	Standard	150.000	6.46	21834.893	10807.426	25.255	163.8	9.2	NO		NO	bb
7	7 171117M2_8	Standard	150.000	6.46	22660.139	10321.155	27.444	178.0	18.6	NO		NO	bb
8	8 171117M2_9	Standard	150.000	6.46	21375.383	12201.937	21.898	142.0	-5.3	NO		NO	bb
9	9 171117M2_10	Standard	150.000	6.46	22312.600	11129.420	25.060	162.5	8.3	NO		NO	bb

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**Compound name: 13C4-PFBA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

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 171117M2_2	Standard	12.500	1.66	11616.328	11616.328	12.500	12.5	0.0	NO		NO	bb
2	2 171117M2_3	Standard	12.500	1.65	11713.211	11713.211	12.500	12.5	0.0	NO		NO	bb
3	3 171117M2_4	Standard	12.500	1.65	12664.379	12664.379	12.500	12.5	0.0	NO		NO	bb
4	4 171117M2_5	Standard	12.500	1.64	12698.978	12698.978	12.500	12.5	0.0	NO		NO	bb
5	5 171117M2_6	Standard	12.500	1.66	12331.497	12331.497	12.500	12.5	0.0	NO		NO	bb
6	6 171117M2_7	Standard	12.500	1.65	12620.746	12620.746	12.500	12.5	0.0	NO		NO	bb
7	7 171117M2_8	Standard	12.500	1.65	12530.163	12530.163	12.500	12.5	0.0	NO		NO	bb
8	8 171117M2_9	Standard	12.500	1.64	12416.841	12416.841	12.500	12.5	0.0	NO		NO	bb
9	9 171117M2_10	Standard	12.500	1.64	12488.417	12488.417	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C5-PFHxA**

Response Factor: 1

RRF SD: 3.92523e-017, Relative SD: 3.92523e-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 171117M2_2	Standard	12.500	3.40	18684.918	18684.918	12.500	12.5	0.0	NO		NO	bb
2	2 171117M2_3	Standard	12.500	3.40	18623.752	18623.752	12.500	12.5	0.0	NO		NO	bb
3	3 171117M2_4	Standard	12.500	3.40	20028.580	20028.580	12.500	12.5	0.0	NO		NO	bb
4	4 171117M2_5	Standard	12.500	3.40	18976.438	18976.438	12.500	12.5	0.0	NO		NO	bb
5	5 171117M2_6	Standard	12.500	3.40	18197.197	18197.197	12.500	12.5	0.0	NO		NO	bb
6	6 171117M2_7	Standard	12.500	3.39	18695.125	18695.125	12.500	12.5	0.0	NO		NO	bb
7	7 171117M2_8	Standard	12.500	3.40	17790.234	17790.234	12.500	12.5	0.0	NO		NO	bb
8	8 171117M2_9	Standard	12.500	3.38	18073.672	18073.672	12.500	12.5	0.0	NO		NO	bb
9	9 171117M2_10	Standard	12.500	3.39	17125.396	17125.396	12.500	12.5	0.0	NO		NO	bb

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**Compound name: 13C3-PFHxS**

Response Factor: 1

RRF SD: 1.03852e-016, Relative SD: 1.03852e-014

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 171117M2_2	Standard	12.500	4.17	3218.494	3218.494	12.500	12.5	0.0	NO		NO	bb
2	2 171117M2_3	Standard	12.500	4.17	3381.589	3381.589	12.500	12.5	0.0	NO		NO	bb
3	3 171117M2_4	Standard	12.500	4.17	3635.838	3635.838	12.500	12.5	0.0	NO		NO	bb
4	4 171117M2_5	Standard	12.500	4.17	3226.160	3226.160	12.500	12.5	0.0	NO		NO	bb
5	5 171117M2_6	Standard	12.500	4.17	3507.529	3507.529	12.500	12.5	0.0	NO		NO	bb
6	6 171117M2_7	Standard	12.500	4.16	3234.798	3234.798	12.500	12.5	0.0	NO		NO	bb
7	7 171117M2_8	Standard	12.500	4.17	3078.517	3078.517	12.500	12.5	0.0	NO		NO	bb
8	8 171117M2_9	Standard	12.500	4.16	3039.700	3039.700	12.500	12.5	0.0	NO		NO	bb
9	9 171117M2_10	Standard	12.500	4.16	3274.249	3274.249	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C8-PFOA**

Response Factor: 1

RRF SD: 3.92523e-017, Relative SD: 3.92523e-015

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 171117M2_2	Standard	12.500	4.54	12662.355	12662.355	12.500	12.5	0.0	NO		NO	bb
2	2 171117M2_3	Standard	12.500	4.54	11413.759	11413.759	12.500	12.5	0.0	NO		NO	bb
3	3 171117M2_4	Standard	12.500	4.54	12658.641	12658.641	12.500	12.5	0.0	NO		NO	bb
4	4 171117M2_5	Standard	12.500	4.54	12975.192	12975.192	12.500	12.5	0.0	NO		NO	bb
5	5 171117M2_6	Standard	12.500	4.54	11657.218	11657.218	12.500	12.5	0.0	NO		NO	bb
6	6 171117M2_7	Standard	12.500	4.54	12817.383	12817.383	12.500	12.5	0.0	NO		NO	bb
7	7 171117M2_8	Standard	12.500	4.54	13286.604	13286.604	12.500	12.5	0.0	NO		NO	bb
8	8 171117M2_9	Standard	12.500	4.53	11455.381	11455.381	12.500	12.5	0.0	NO		NO	bb
9	9 171117M2_10	Standard	12.500	4.53	13581.681	13581.681	12.500	12.5	0.0	NO		NO	bb

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Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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**Compound name: 13C9-PFNA**

Response Factor: 1

RRF SD: 1.11022e-016, Relative SD: 1.11022e-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 171117M2_2	Standard	12.500	4.97	13838.622	13838.622	12.500	12.5	0.0	NO		NO	bb
2	2 171117M2_3	Standard	12.500	4.97	13791.014	13791.014	12.500	12.5	0.0	NO		NO	bb
3	3 171117M2_4	Standard	12.500	4.97	12182.290	12182.290	12.500	12.5	0.0	NO		NO	bb
4	4 171117M2_5	Standard	12.500	4.97	13210.473	13210.473	12.500	12.5	0.0	NO		NO	bb
5	5 171117M2_6	Standard	12.500	4.97	13052.478	13052.478	12.500	12.5	0.0	NO		NO	bb
6	6 171117M2_7	Standard	12.500	4.97	16044.813	16044.813	12.500	12.5	0.0	NO		NO	bb
7	7 171117M2_8	Standard	12.500	4.97	13705.722	13705.722	12.500	12.5	0.0	NO		NO	bb
8	8 171117M2_9	Standard	12.500	4.96	10865.601	10865.601	12.500	12.5	0.0	NO		NO	bb
9	9 171117M2_10	Standard	12.500	4.96	13228.759	13228.759	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C4-PFOS**

Response Factor: 1

RRF SD: 1.17757e-016, Relative SD: 1.17757e-014

Response type: Internal Std ( Ref 59 ), 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 171117M2_2	Standard	12.500	5.05	3566.763	3566.763	12.500	12.5	0.0	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.05	3605.316	3605.316	12.500	12.5	0.0	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.05	3871.246	3871.246	12.500	12.5	0.0	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.05	3852.820	3852.820	12.500	12.5	0.0	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.05	3774.167	3774.167	12.500	12.5	0.0	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.05	3340.242	3340.242	12.500	12.5	0.0	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.05	3827.443	3827.443	12.500	12.5	0.0	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.04	4072.931	4072.931	12.500	12.5	0.0	NO		NO	bb
9	9 171117M2_10	Standard	12.500	5.04	3966.688	3966.688	12.500	12.5	0.0	NO		NO	bb

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Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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**Compound name: 13C6-PFDA**

Response Factor: 1

RRF SD: 3.92523e-017, Relative SD: 3.92523e-015

Response type: Internal Std ( Ref 60 ), 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 171117M2_2	Standard	12.500	5.34	7573.486	7573.486	12.500	12.5	0.0	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.34	6586.087	6586.087	12.500	12.5	0.0	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.34	7231.485	7231.485	12.500	12.5	0.0	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.34	7555.599	7555.599	12.500	12.5	0.0	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.34	6271.824	6271.824	12.500	12.5	0.0	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.33	7734.969	7734.969	12.500	12.5	0.0	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.34	5802.223	5802.223	12.500	12.5	0.0	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.33	7620.118	7620.118	12.500	12.5	0.0	NO		NO	bb
9	9 171117M2_10	Standard	12.500	5.33	6459.136	6459.136	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C7-PFUdA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 61 ), 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 171117M2_2	Standard	12.500	5.66	12293.438	12293.438	12.500	12.5	0.0	NO		NO	bb
2	2 171117M2_3	Standard	12.500	5.66	12499.639	12499.639	12.500	12.5	0.0	NO		NO	bb
3	3 171117M2_4	Standard	12.500	5.66	13663.421	13663.421	12.500	12.5	0.0	NO		NO	bb
4	4 171117M2_5	Standard	12.500	5.66	12598.913	12598.913	12.500	12.5	0.0	NO		NO	bb
5	5 171117M2_6	Standard	12.500	5.66	10539.817	10539.817	12.500	12.5	0.0	NO		NO	bb
6	6 171117M2_7	Standard	12.500	5.66	10807.426	10807.426	12.500	12.5	0.0	NO		NO	bb
7	7 171117M2_8	Standard	12.500	5.66	10321.155	10321.155	12.500	12.5	0.0	NO		NO	bb
8	8 171117M2_9	Standard	12.500	5.65	12201.937	12201.937	12.500	12.5	0.0	NO		NO	bb
9	9 171117M2_10	Standard	12.500	5.65	11129.42C	11129.42C	12.500	12.5	0.0	NO		NO	bb

Dataset: Untitled

Last Altered: Saturday, November 18, 2017 10:47:10 Pacific Standard Time

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Method: U:\Q4.PROMethDB\PFAS\_FULL\_80C\_111717.mdb 17 Nov 2017 20:08:15  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	171117M2_1	IPA	17-Nov-17	16:55:44
2	171117M2_2	ST171117M2-1 PFC CS-2 17K1701	17-Nov-17	17:07:02
3	171117M2_3	ST171117M2-2 PFC CS-1 17K1704	17-Nov-17	17:18:14
4	171117M2_4	ST171117M2-3 PFC CS0 17K1705	17-Nov-17	17:29:24
5	171117M2_5	ST171117M2-4 PFC CS1 17K1706	17-Nov-17	17:40:35
6	171117M2_6	ST171117M2-5 PFC CS2 17K1707	17-Nov-17	17:51:45
7	171117M2_7	ST171117M2-6 PFC CS3 17K1708	17-Nov-17	18:03:00
8	171117M2_8	ST171117M2-7 PFC CS4 17K1709	17-Nov-17	18:14:08
9	171117M2_9	ST171117M2-8 PFC CS5 17K1710	17-Nov-17	18:25:19
10	171117M2_10	ST171117M2-9 PFC CS6 17K1712	17-Nov-17	18:36:30
11	171117M2_11	ST171117M2-10 PFC CS7 17K1713	17-Nov-17	18:47:41
12	171117M2_12	IPA	17-Nov-17	18:58:51
13	171117M2_13	ICV171117M2-1 PFC ICV 17K1711	17-Nov-17	19:10:02
14	171117M2_14	IPA	17-Nov-17	19:21:12

Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 17 Nov 2017 20:08:15

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

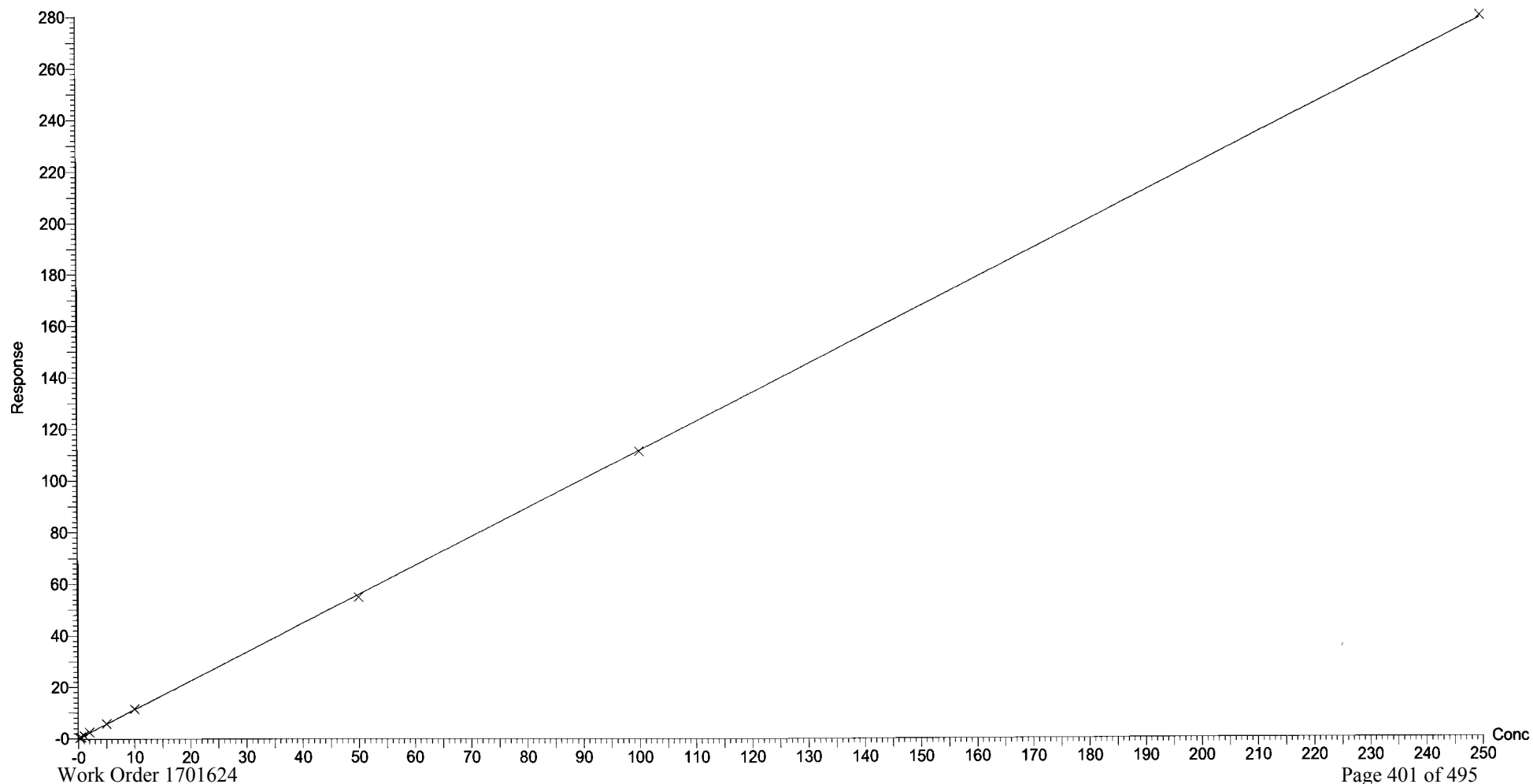
Compound name: PFBA

Correlation coefficient:  $r = 0.999950$ ,  $r^2 = 0.999899$

Calibration curve:  $1.11743 * x + 0.0207684$

Response type: Internal Std ( Ref 31 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

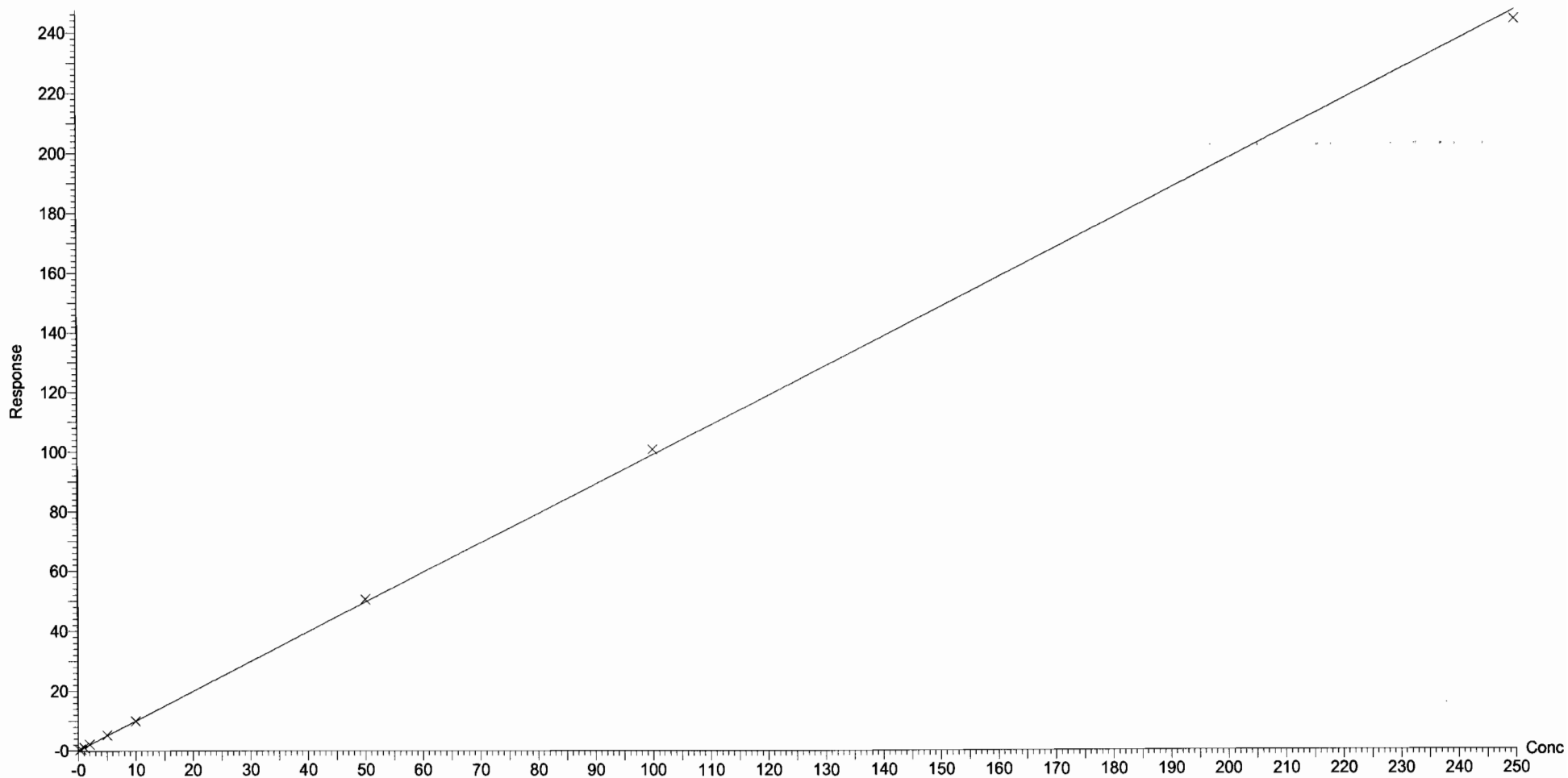
Compound name: PFPeA

Correlation coefficient:  $r = 0.999860$ ,  $r^2 = 0.999720$

Calibration curve:  $0.989567 * x + 0.0505676$

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\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

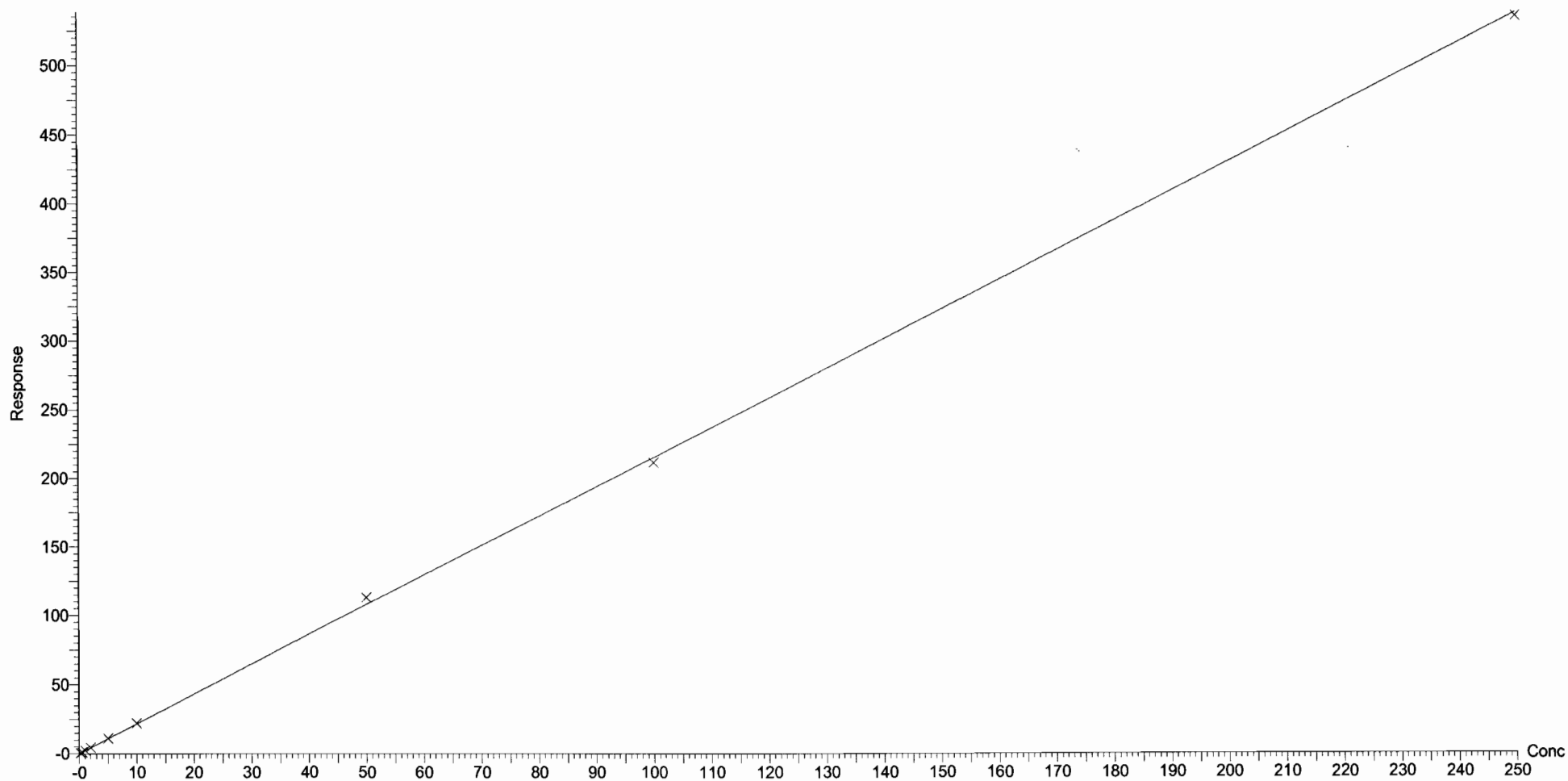
Compound name: PFBS

Correlation coefficient:  $r = 0.999772$ ,  $r^2 = 0.999544$

Calibration curve:  $2.15306 * x + 0.0690817$

Response type: Internal Std ( Ref 33 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

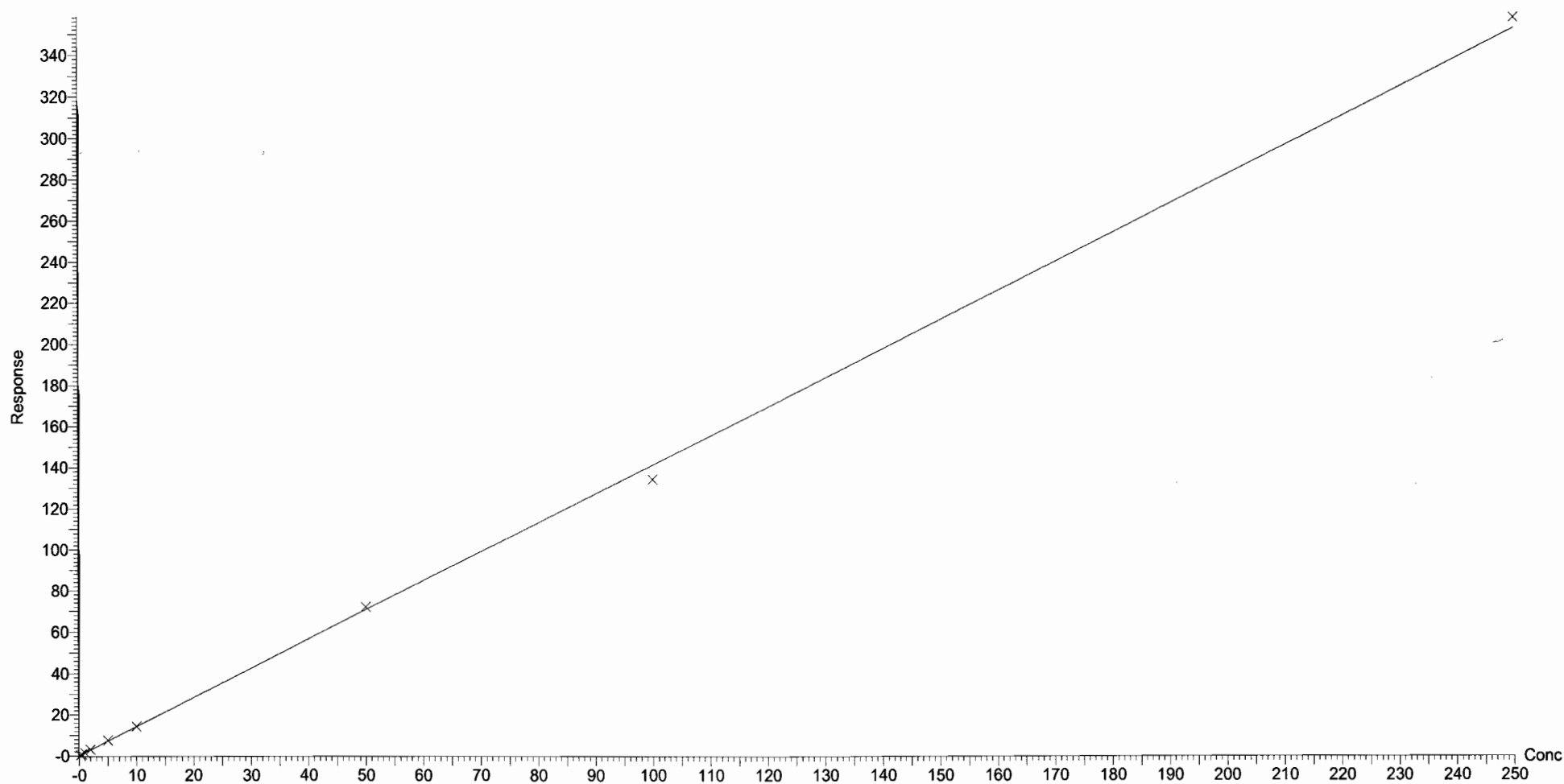
Compound name: PFHxA

Correlation coefficient:  $r = 0.999571$ ,  $r^2 = 0.999142$

Calibration curve:  $1.41307 * x + 0.132916$

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

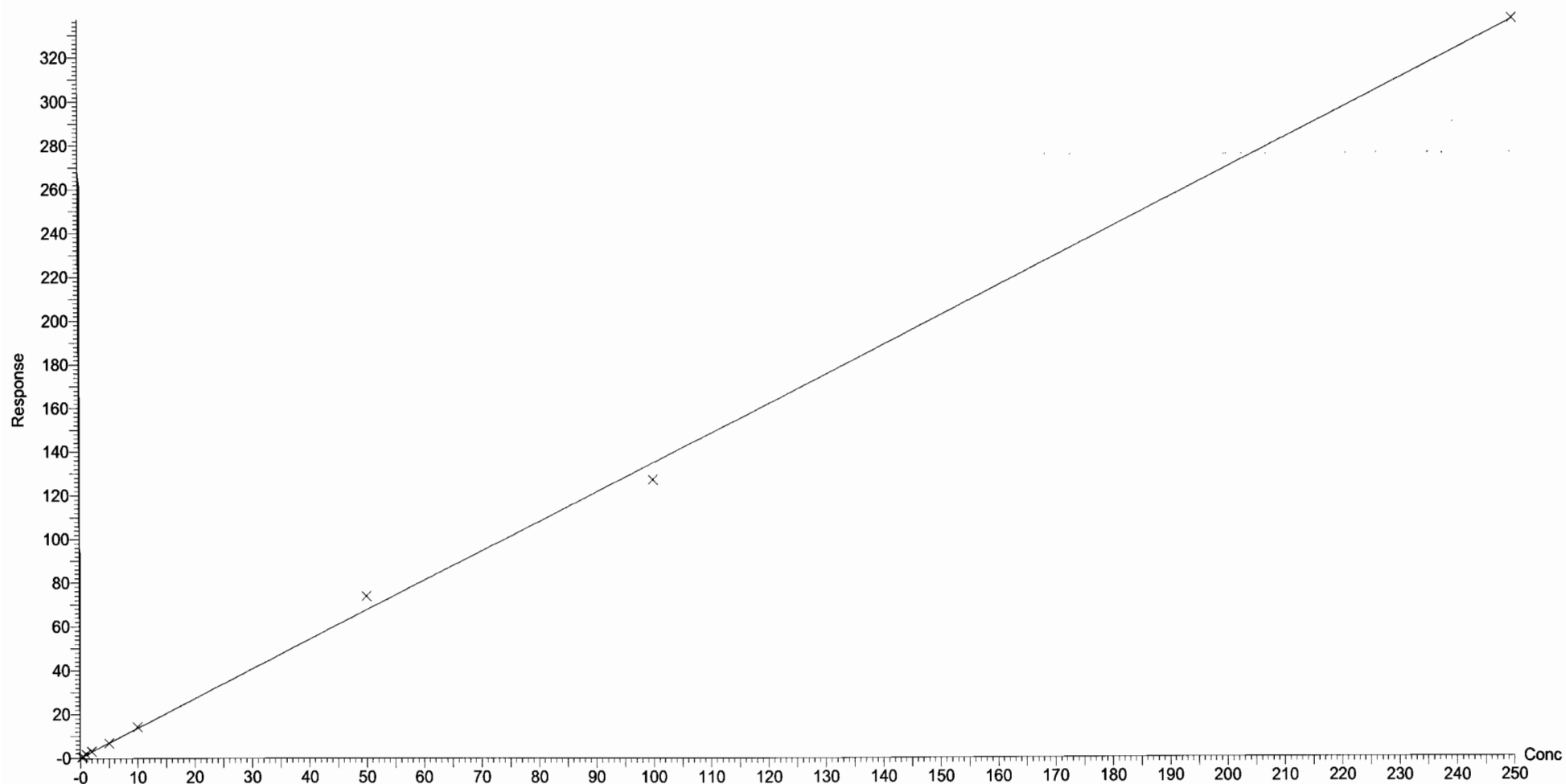
Compound name: PFHpA

Correlation coefficient:  $r = 0.998981$ ,  $r^2 = 0.997964$

Calibration curve:  $1.34611 * x + 0.12749$

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\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

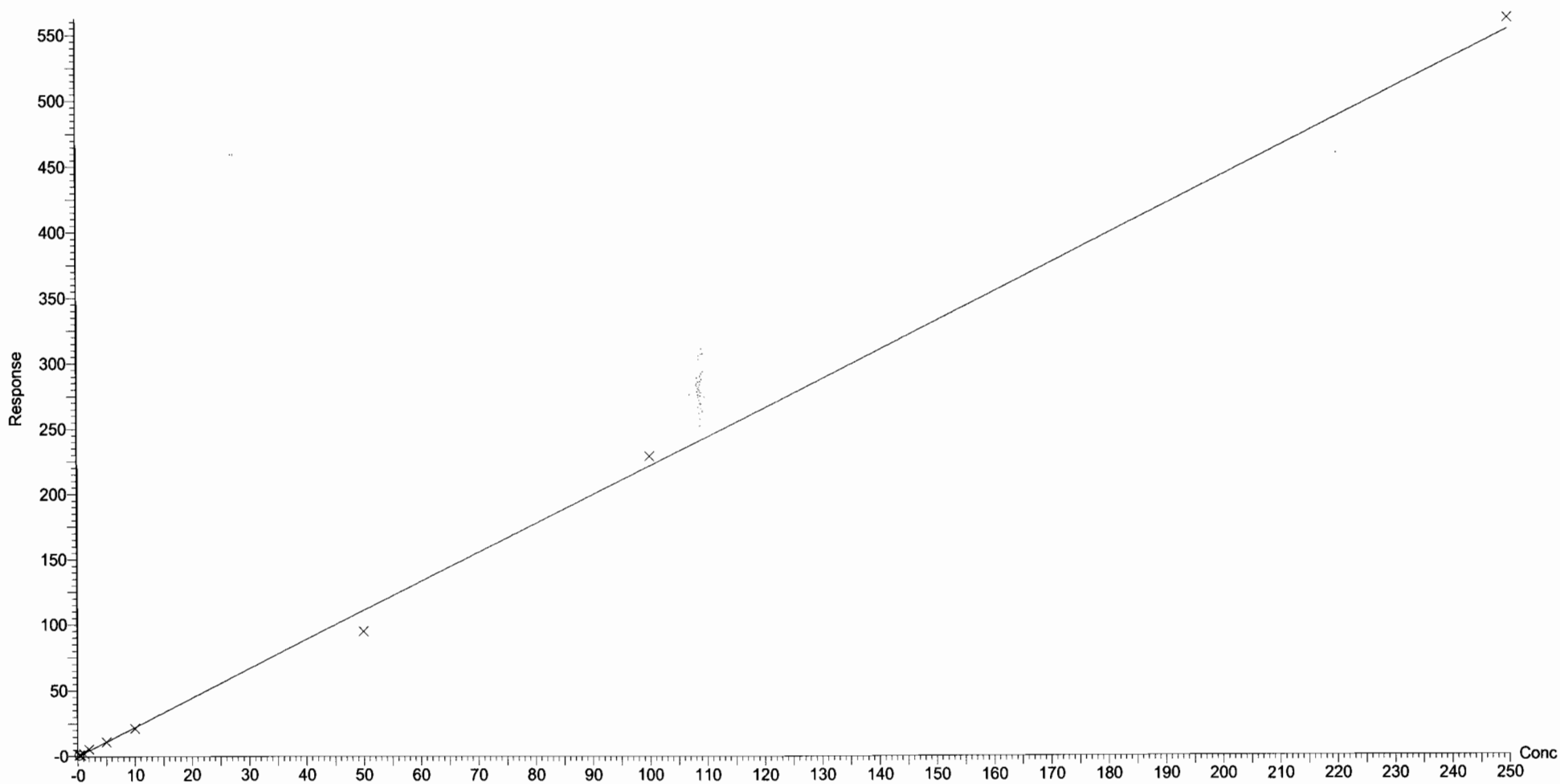
Compound name: L-PFHxS

Correlation coefficient:  $r = 0.998297$ ,  $r^2 = 0.996597$

Calibration curve:  $2.21587 * x + -0.202998$

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

Compound name: 6:2 FTS

Coefficient of Determination:  $R^2 = 0.999493$

Calibration curve:  $-0.000641006 * x^2 + 0.935849 * x + 0.0821205$

Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

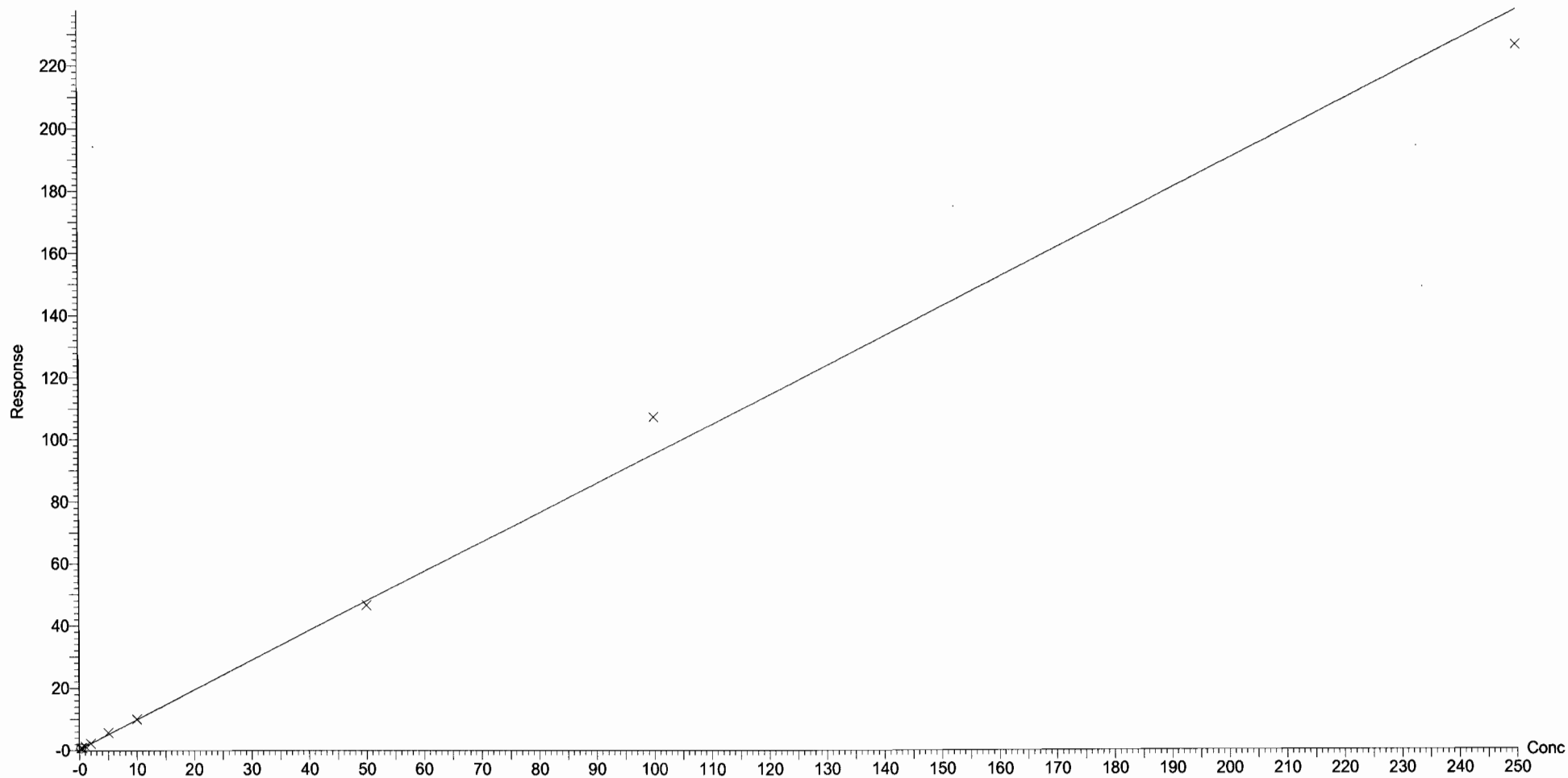
Compound name: L-PFOA

Correlation coefficient:  $r = 0.997158$ ,  $r^2 = 0.994325$

Calibration curve:  $0.949385 * x + 0.364132$

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

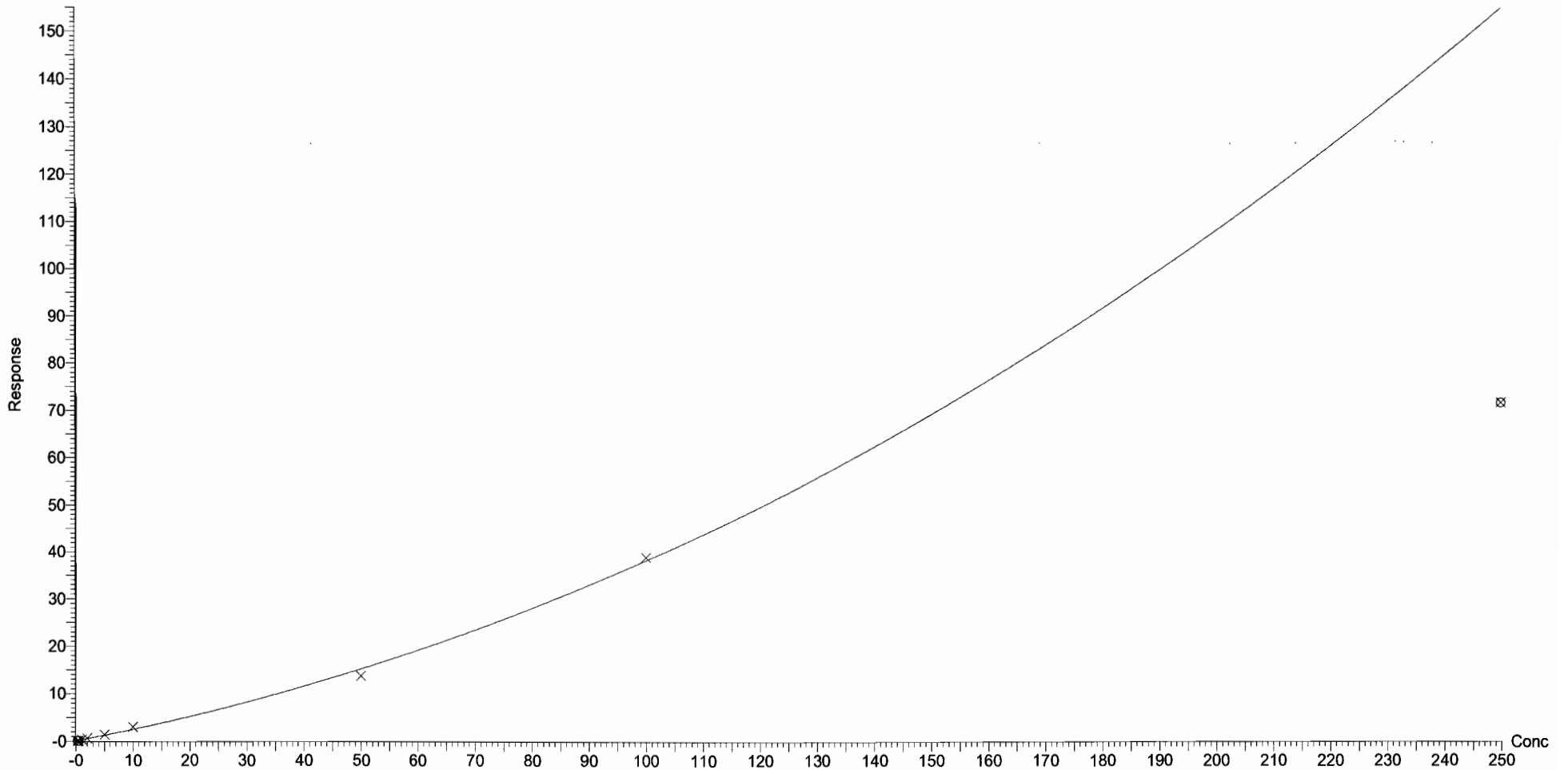
Compound name: PFHpS

Coefficient of Determination:  $R^2 = 0.994710$

Calibration curve:  $0.00159379 * x^2 + 0.221155 * x + 0.11824$

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\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

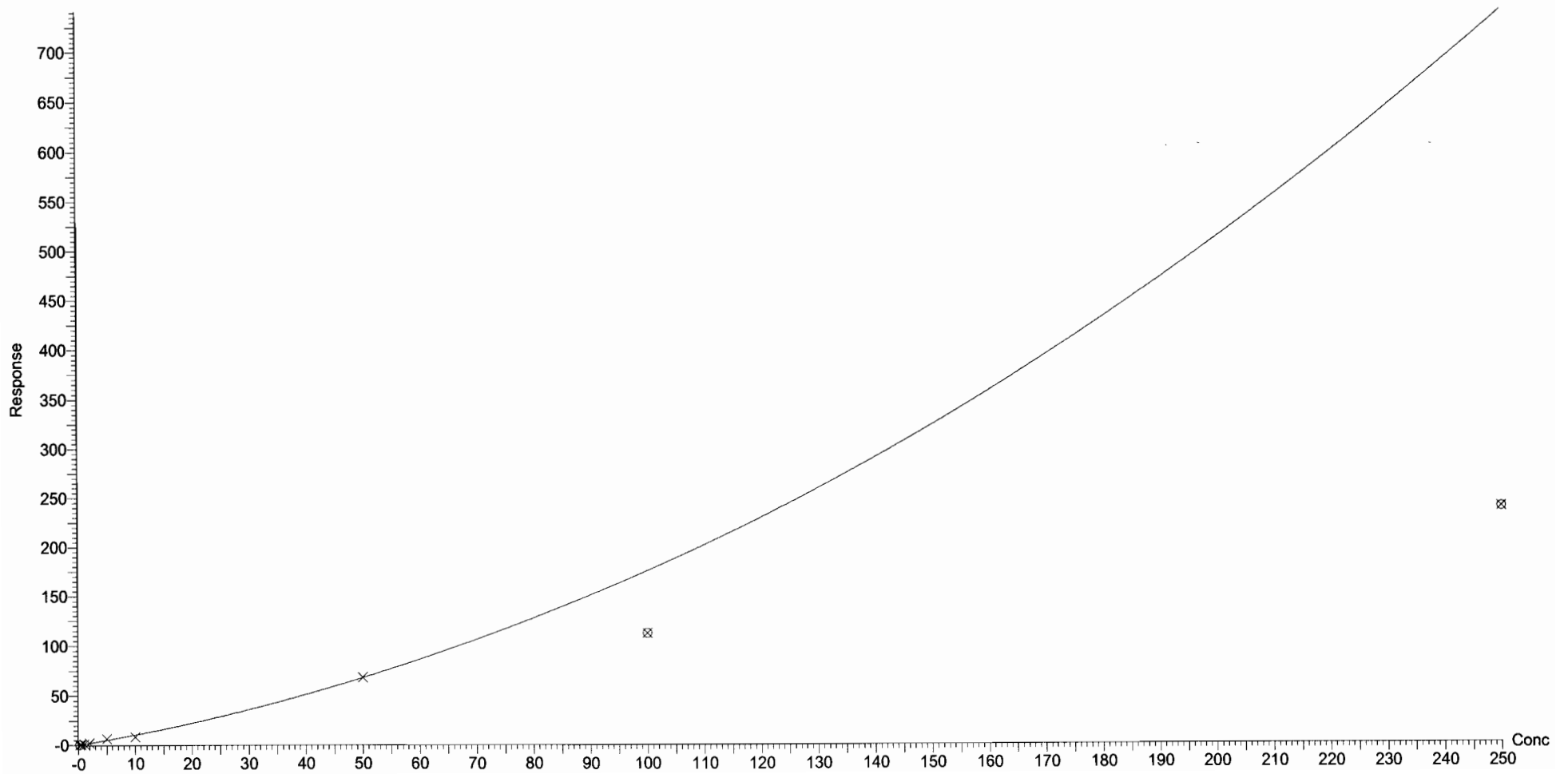
Compound name: PFNA

Coefficient of Determination:  $R^2 = 0.990580$

Calibration curve:  $0.00807066 * x^2 + 0.946588 * x + 0.156897$

Response type: Internal Std ( Ref 39 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

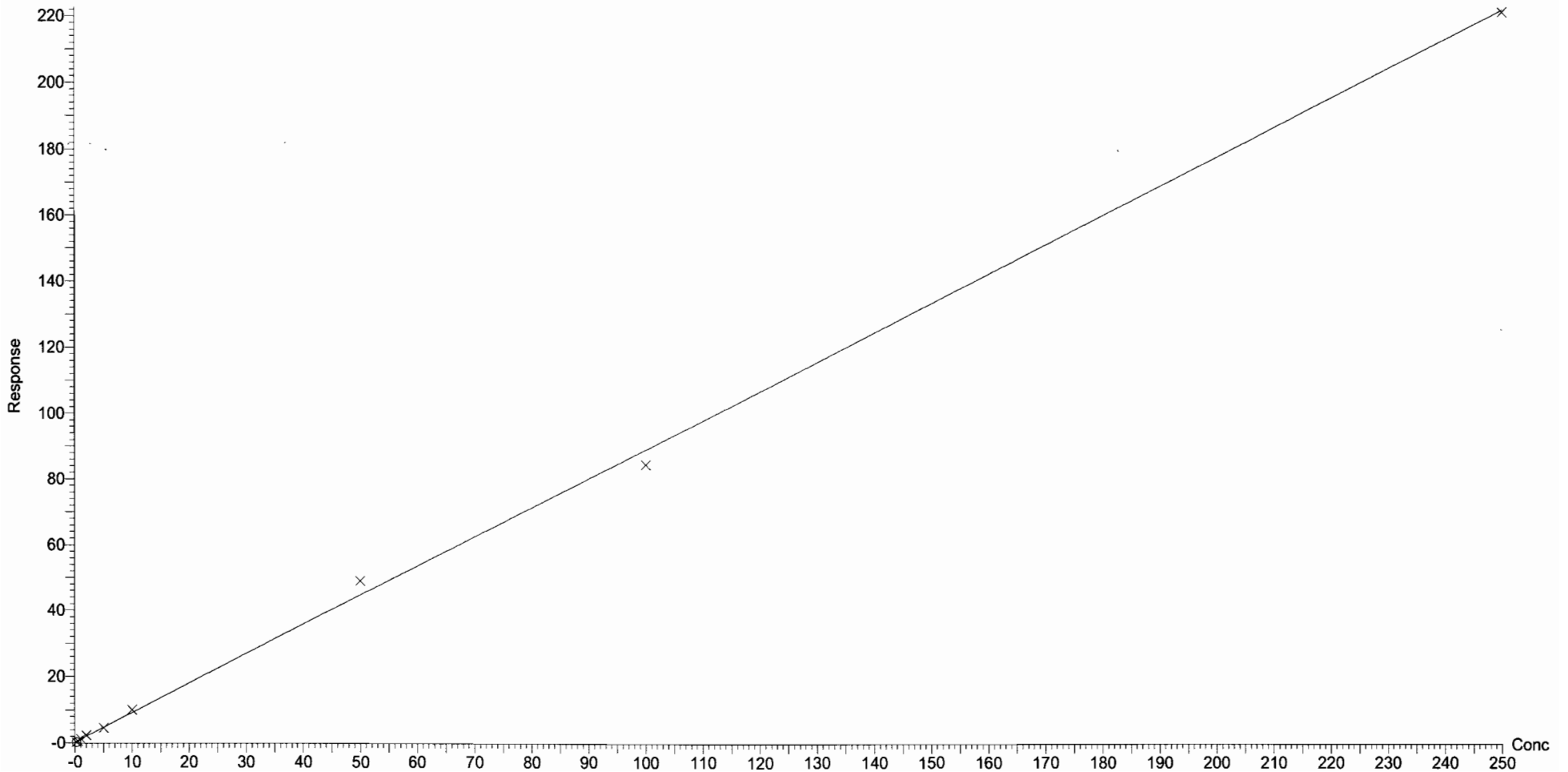




Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

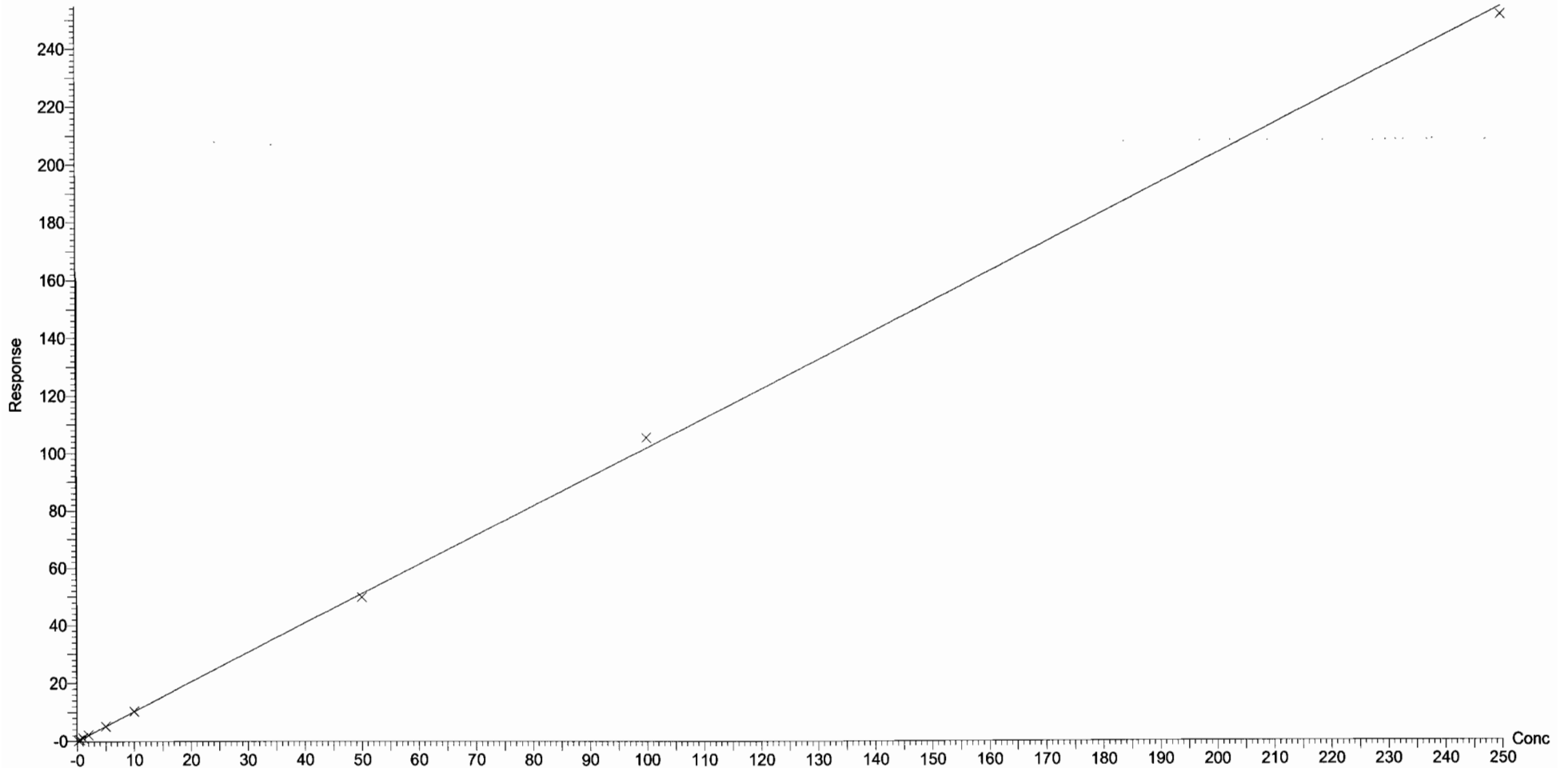
Compound name: PFOSA  
Correlation coefficient:  $r = 0.998879$ ,  $r^2 = 0.997760$   
Calibration curve:  $0.888796 * x + 0.289421$   
Response type: Internal Std ( Ref 40 ), Area \* ( IS Conc. / IS Area )  
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

Compound name: L-PFOS  
Correlation coefficient:  $r = 0.999736$ ,  $r^2 = 0.999473$   
Calibration curve:  $1.01872 * x + 0.00317499$   
Response type: Internal Std ( Ref 41 ), Area \* ( IS Conc. / IS Area )  
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

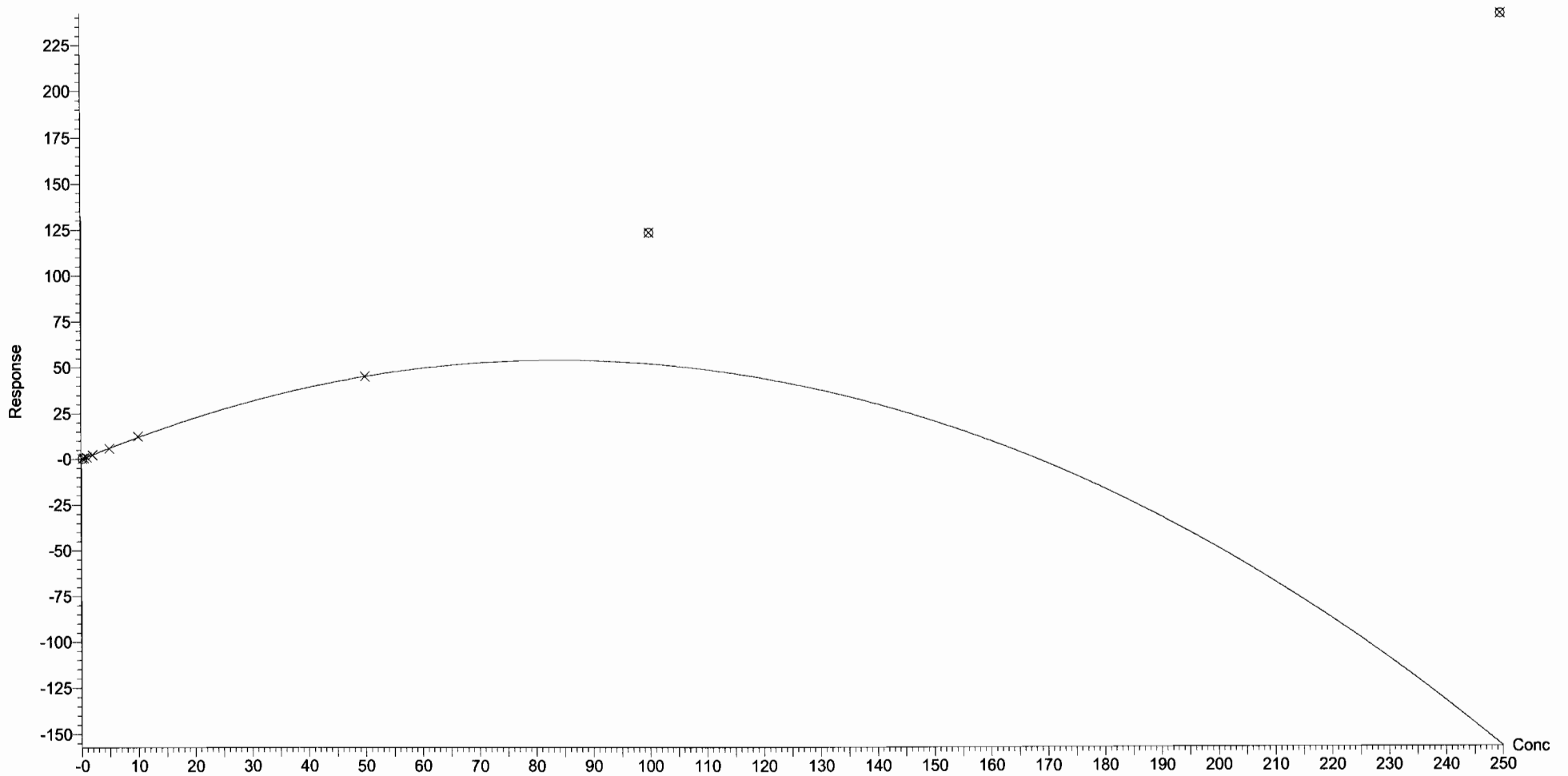
Compound name: PFDA

Coefficient of Determination:  $R^2 = 0.998572$

Calibration curve:  $-0.00767999 * x^2 + 1.29241 * x + -0.160647$

Response type: Internal Std ( Ref 42 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

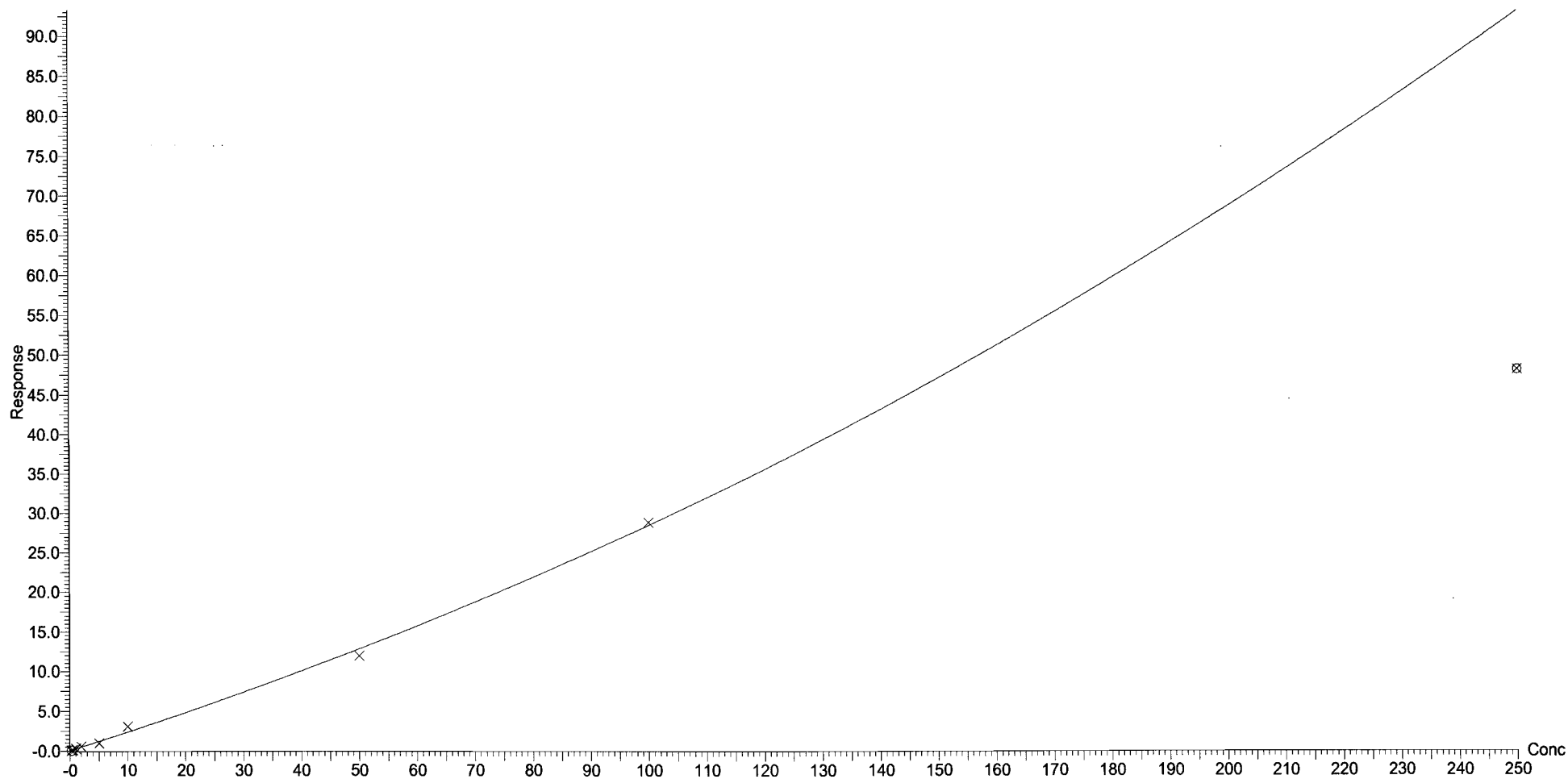
Compound name: 8:2 FTS

Coefficient of Determination:  $R^2 = 0.993242$

Calibration curve:  $0.000589312 * x^2 + 0.22535 * x + 0.0730683$

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

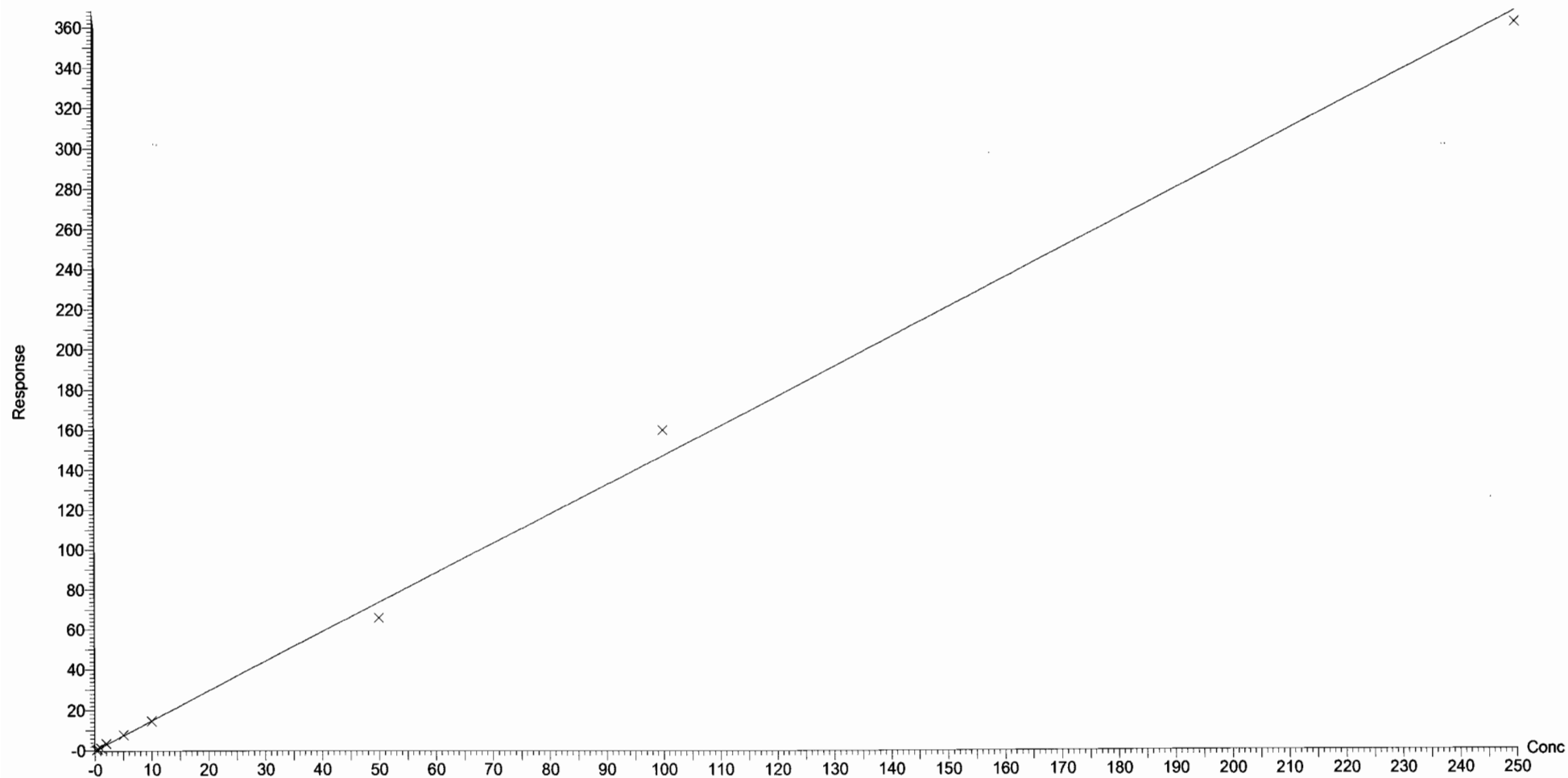
Compound name: N-MeFOSAA

Correlation coefficient:  $r = 0.998202$ ,  $r^2 = 0.996406$

Calibration curve:  $1.47229 * x + 0.0178079$

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\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

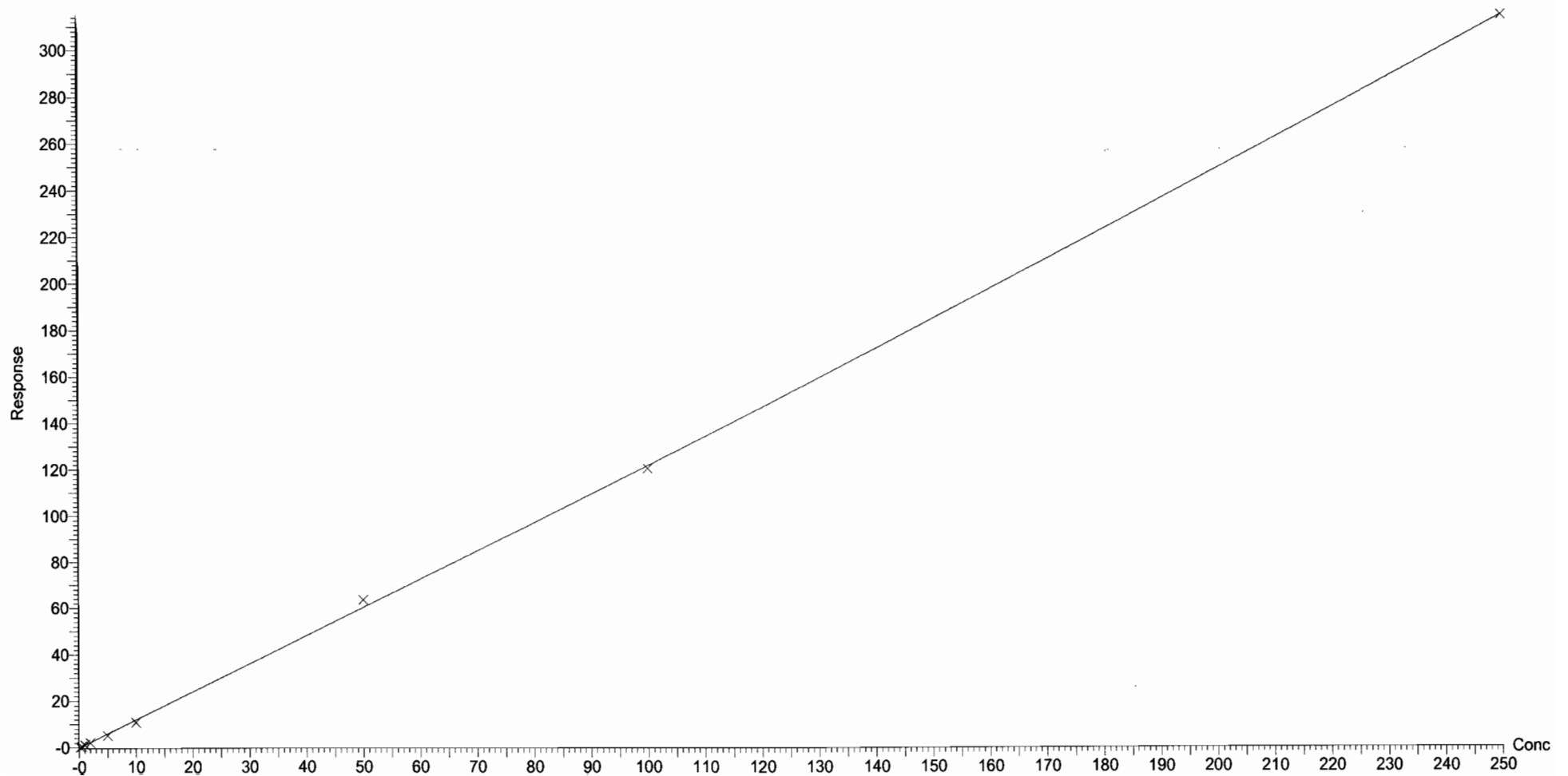
Compound name: N-EtFOSAA

Coefficient of Determination:  $R^2 = 0.999243$

Calibration curve:  $0.000280366 * x^2 + 1.1902 * x + -0.0536011$

Response type: Internal Std ( Ref 45 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

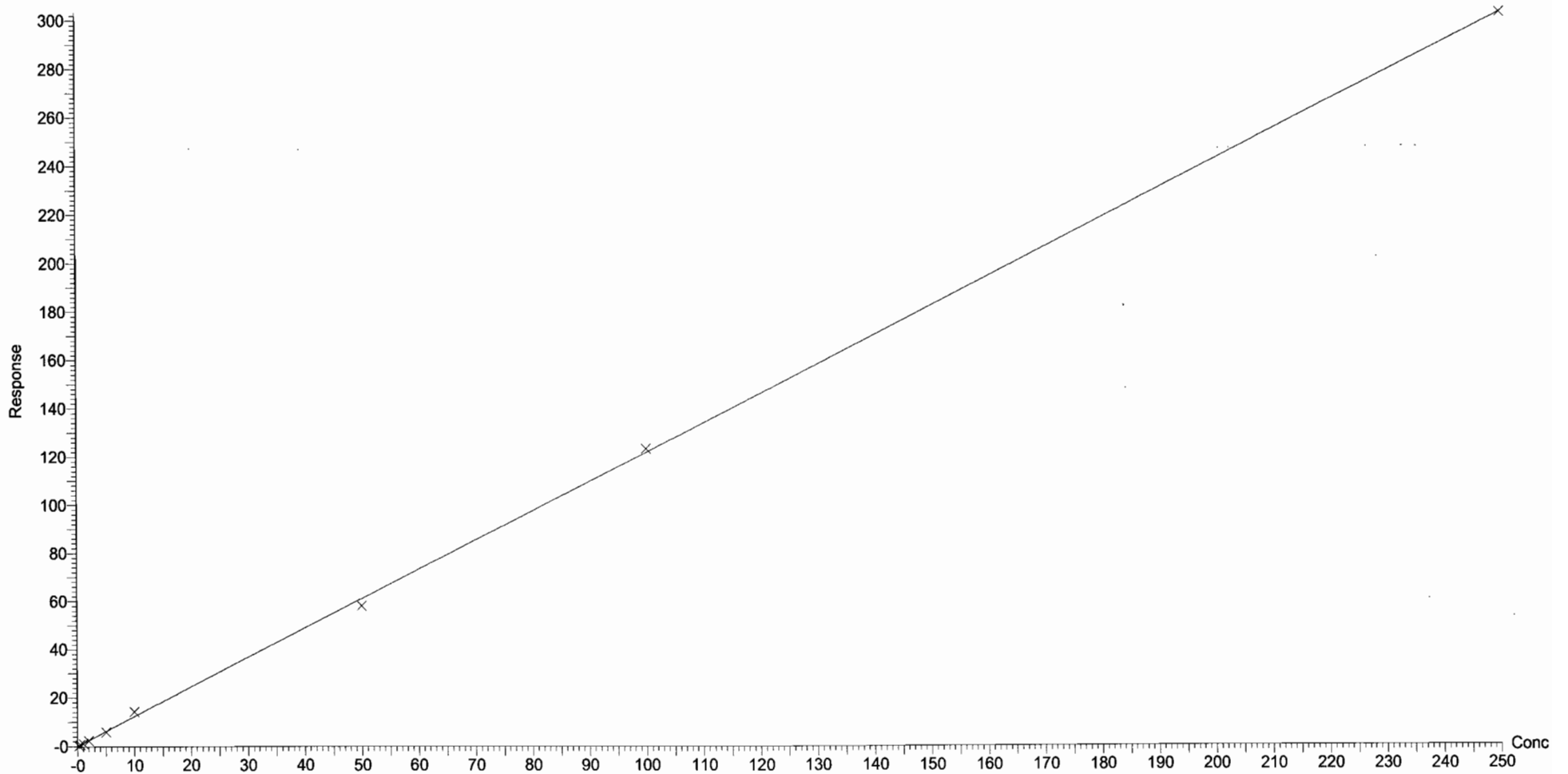
Compound name: PFUdA

Coefficient of Determination:  $R^2 = 0.998970$

Calibration curve:  $-3.95873e-005 * x^2 + 1.22225 * x + 0.00168019$

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\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

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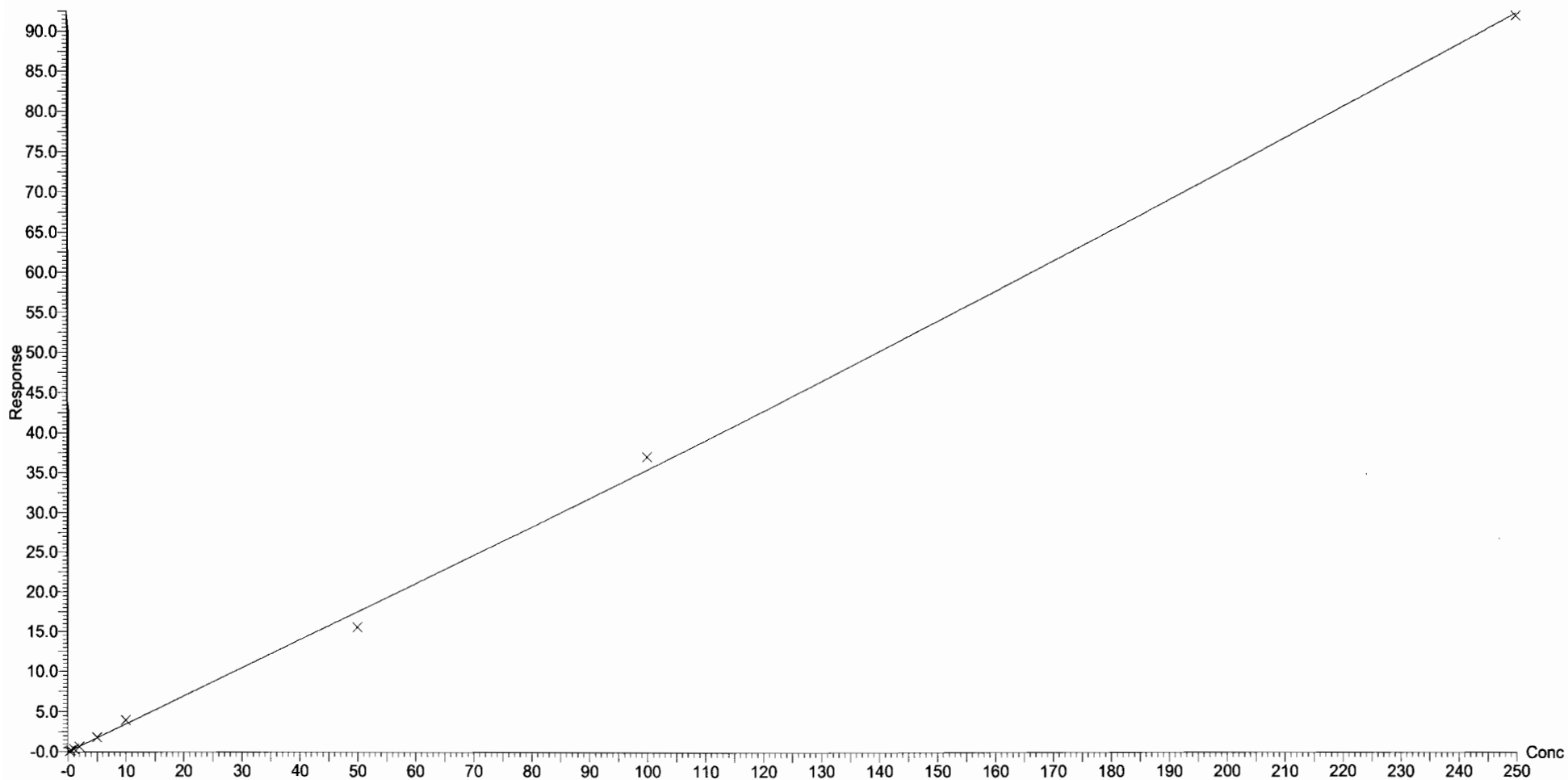
Compound name: PFDS

Coefficient of Determination:  $R^2 = 0.997604$

Calibration curve:  $0.000104214 * x^2 + 0.344024 * x + -0.000712016$

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

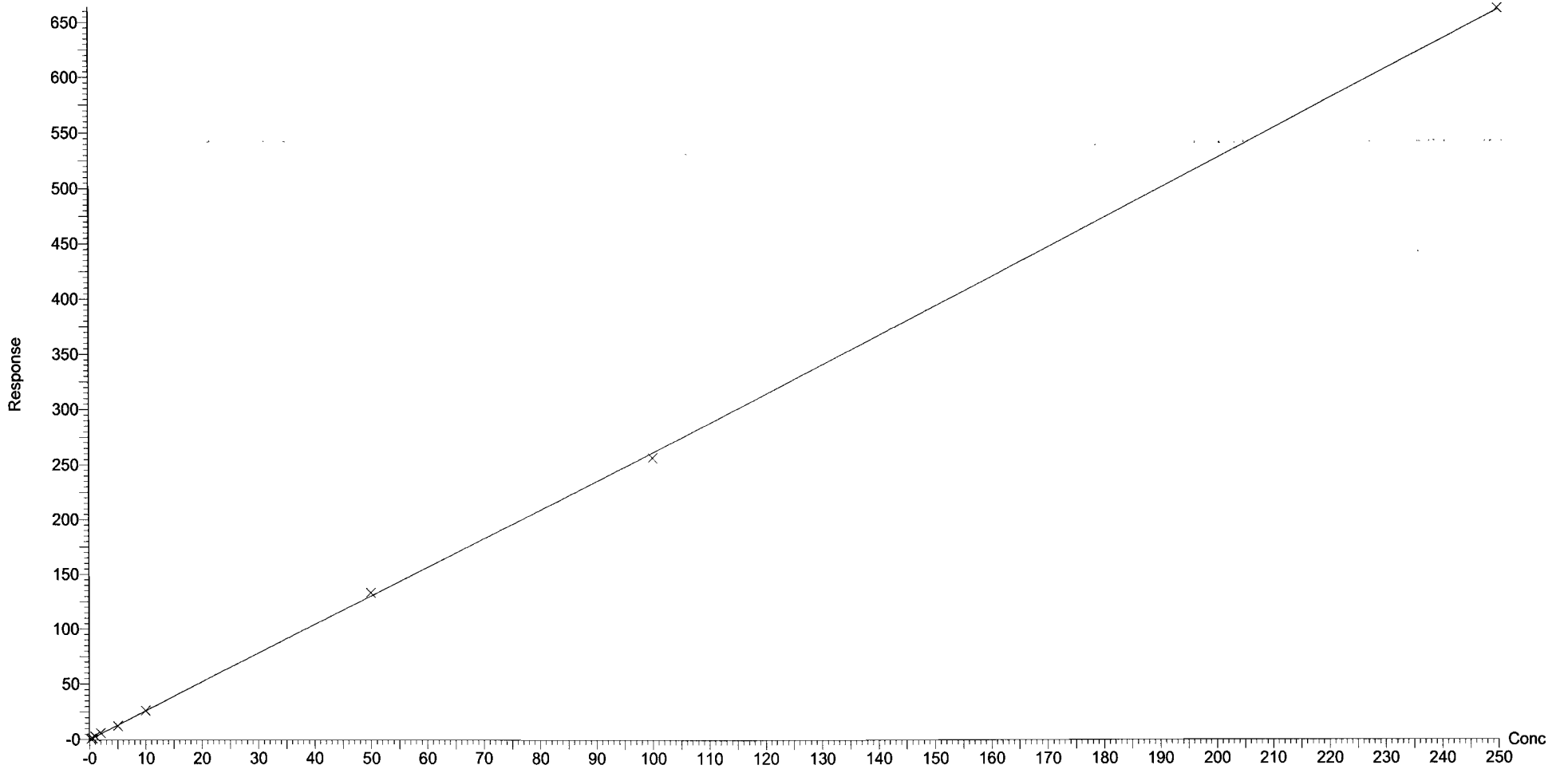




Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

Compound name: PFDoA  
Coefficient of Determination:  $R^2 = 0.999663$   
Calibration curve:  $0.000250534 * x^2 + 2.58648 * x + 0.0762049$   
Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

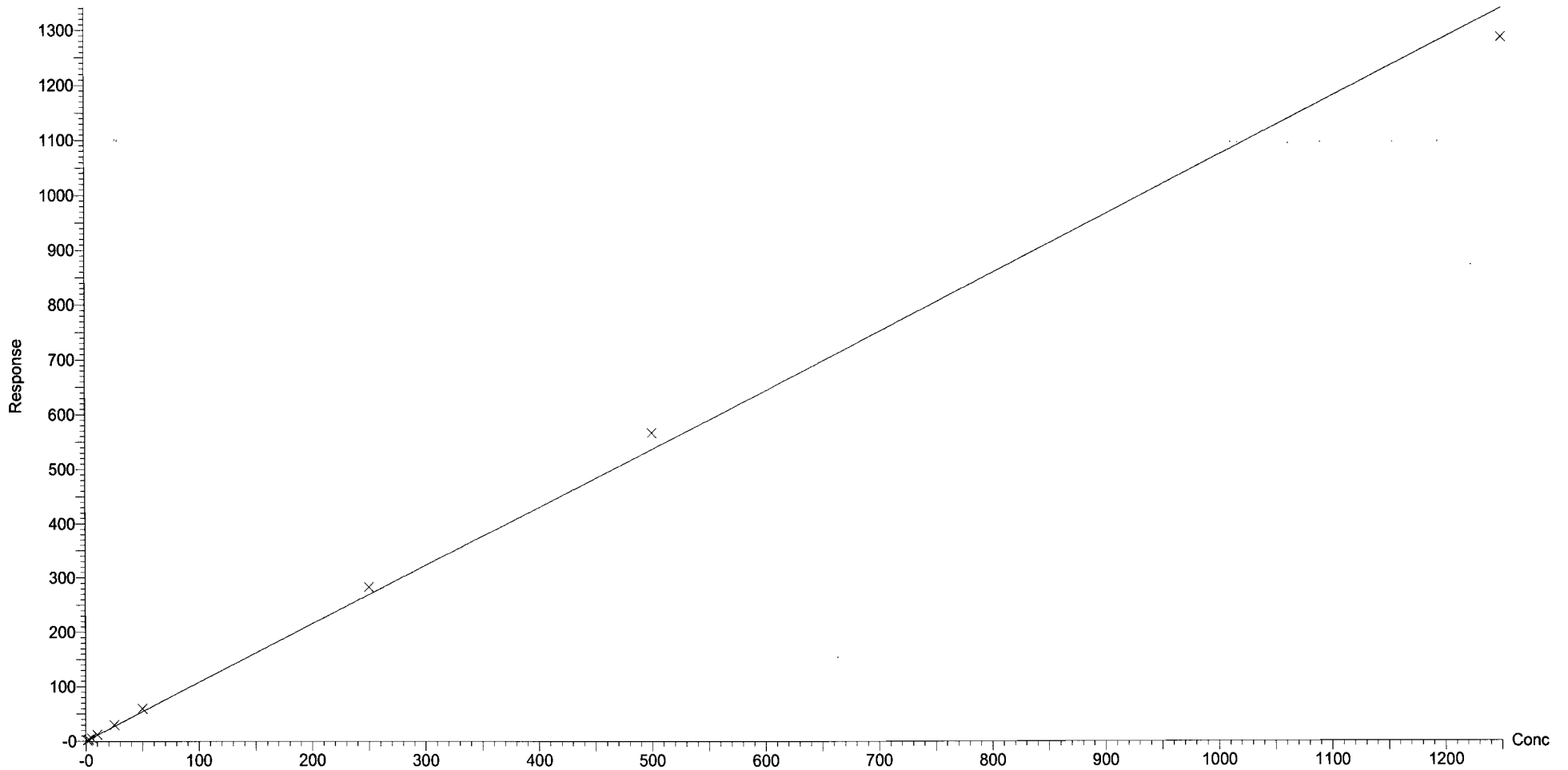
Compound name: N-MeFOSA

Correlation coefficient:  $r = 0.998733$ ,  $r^2 = 0.997468$

Calibration curve:  $1.07239 * x + 0.411047$

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\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

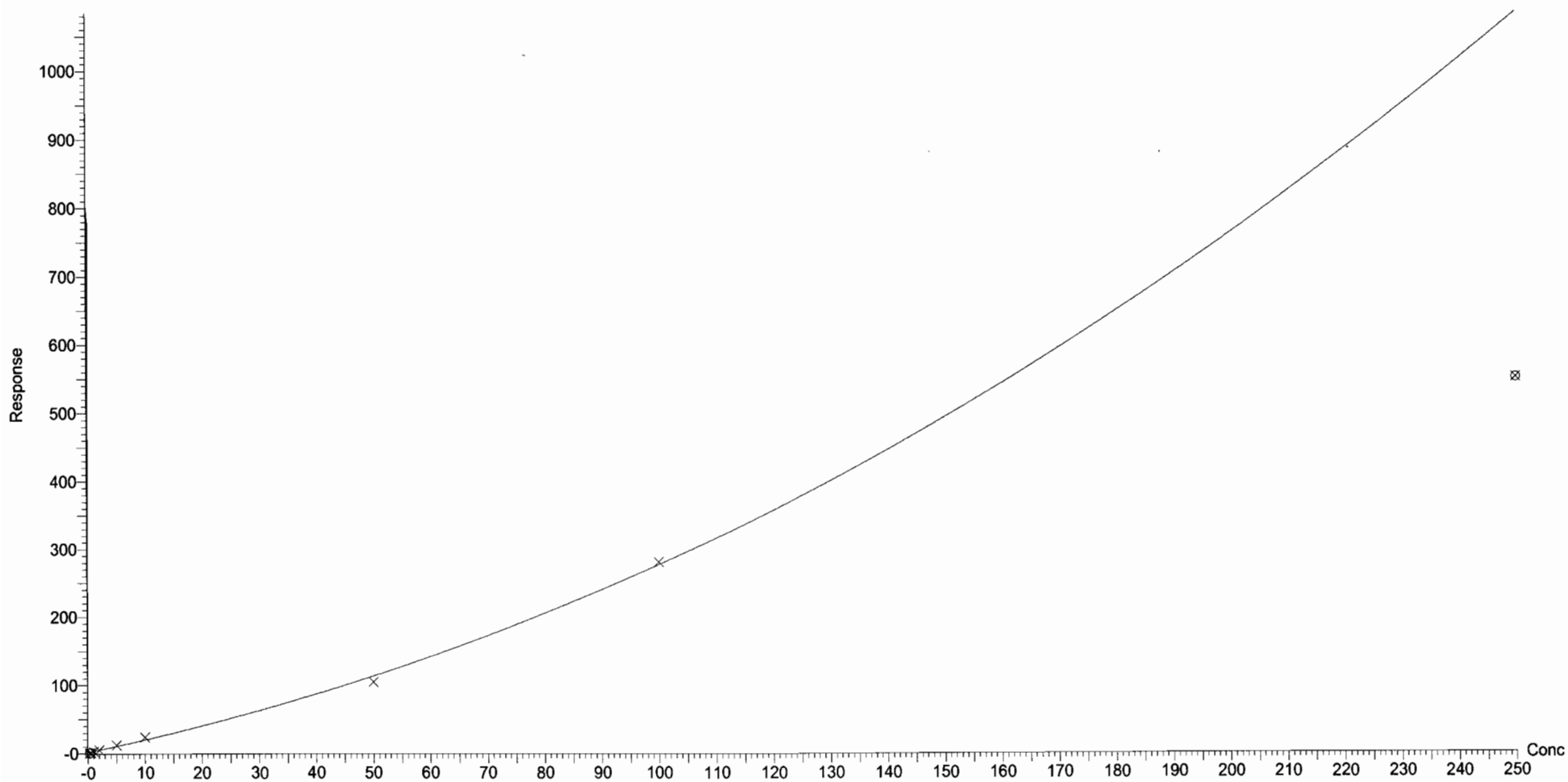
Compound name: PFT<sub>r</sub>DA

Coefficient of Determination: R<sup>2</sup> = 0.995969

Calibration curve:  $0.0105132 * x^2 + 1.70153 * x + 1.86482$

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

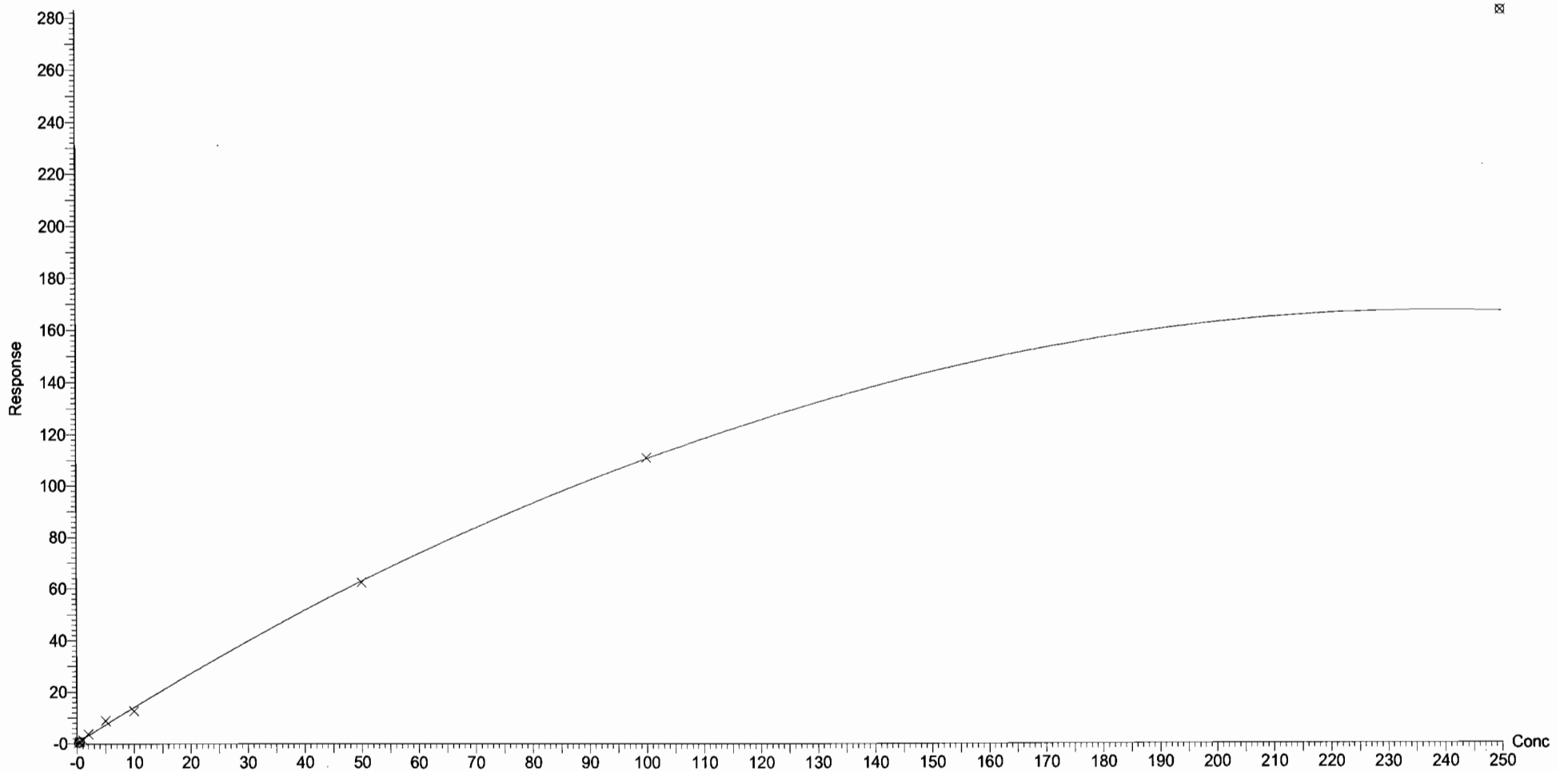
Compound name: PFTeDA

Coefficient of Determination:  $R^2 = 0.995075$

Calibration curve:  $-0.00290976 * x^2 + 1.39411 * x + 0.354244$

Response type: Internal Std ( Ref 49 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

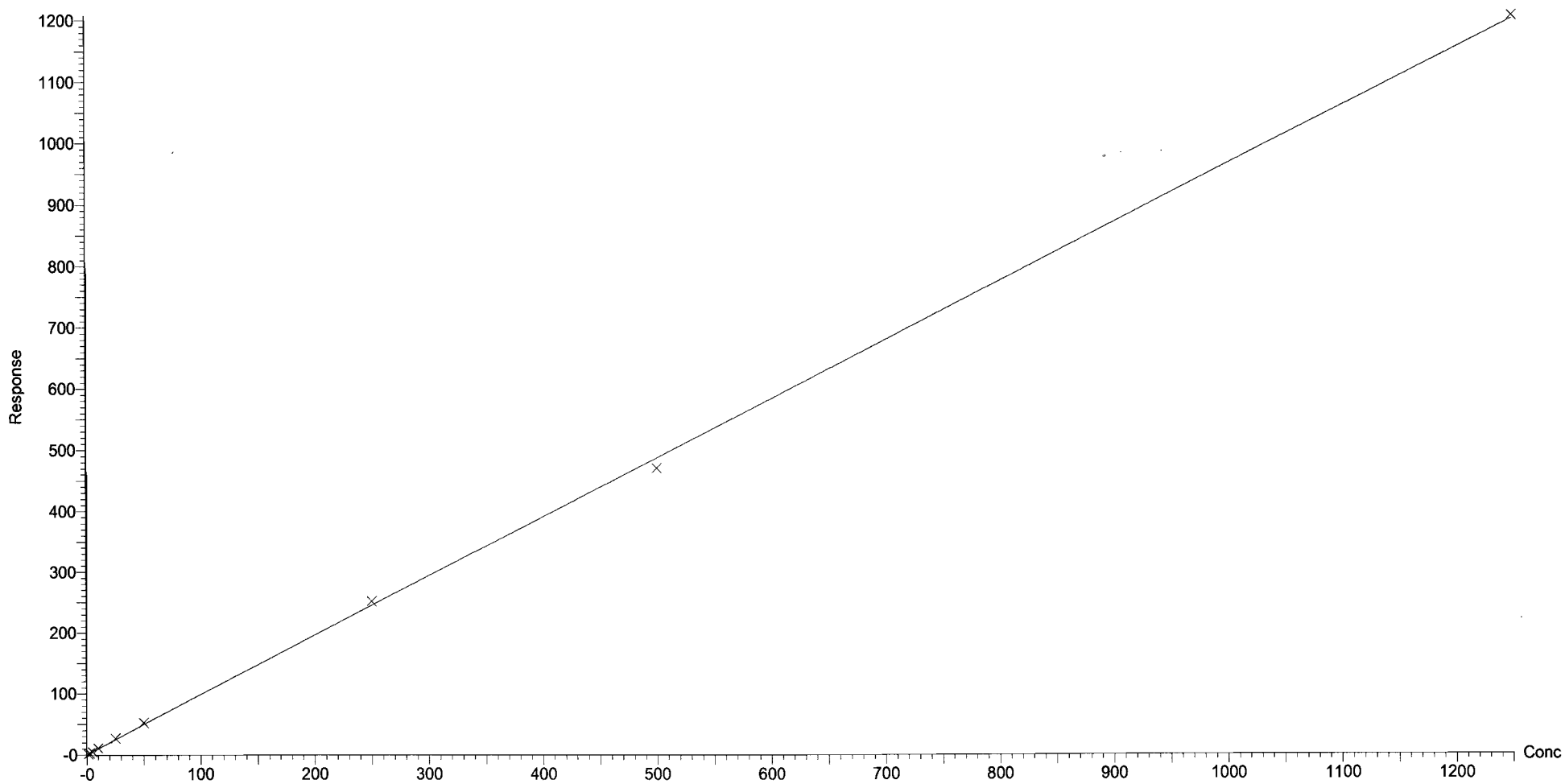
Compound name: N-EtFOSA

Coefficient of Determination:  $R^2 = 0.999431$

Calibration curve:  $-1.70392e-005 * x^2 + 0.982925 * x + 0.354998$

Response type: Internal Std ( Ref 50 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

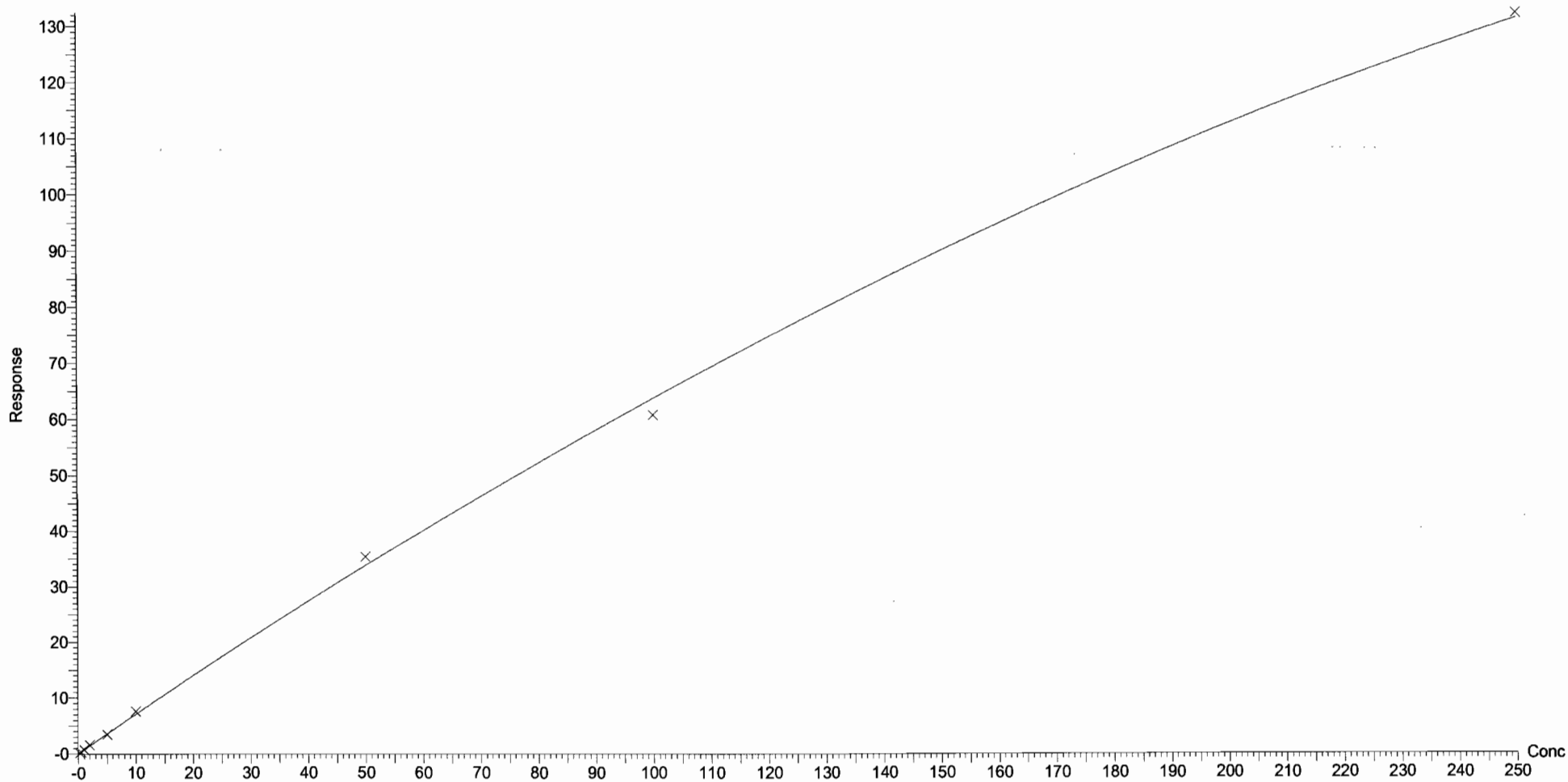
Compound name: PFHxDA

Coefficient of Determination:  $R^2 = 0.998714$

Calibration curve:  $-0.000742914 * x^2 + 0.711929 * x + 0.0156646$

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

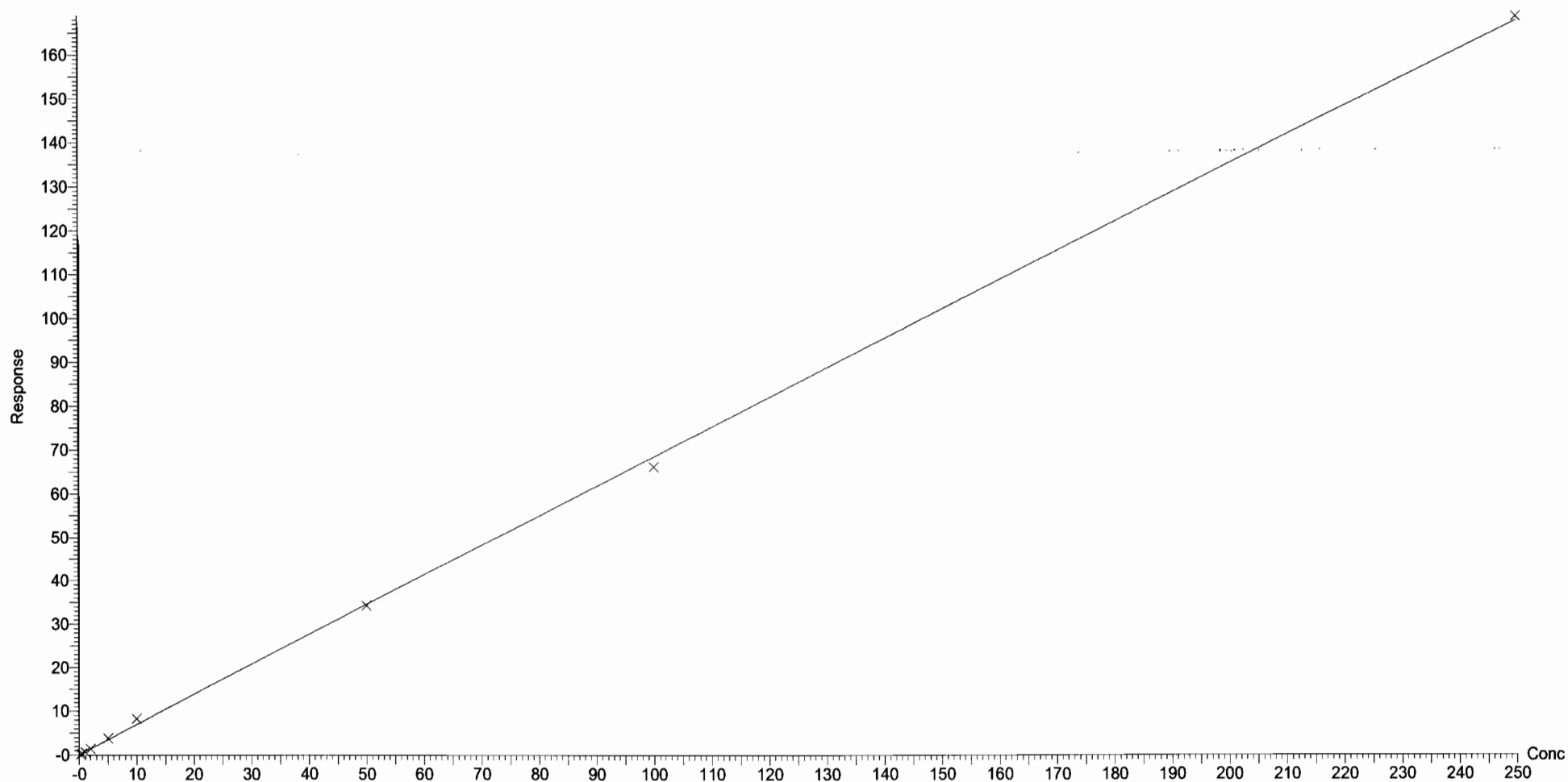
Compound name: PFODA

Coefficient of Determination:  $R^2 = 0.998640$

Calibration curve:  $-8.49332e-005 * x^2 + 0.693288 * x + 0.0220723$

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

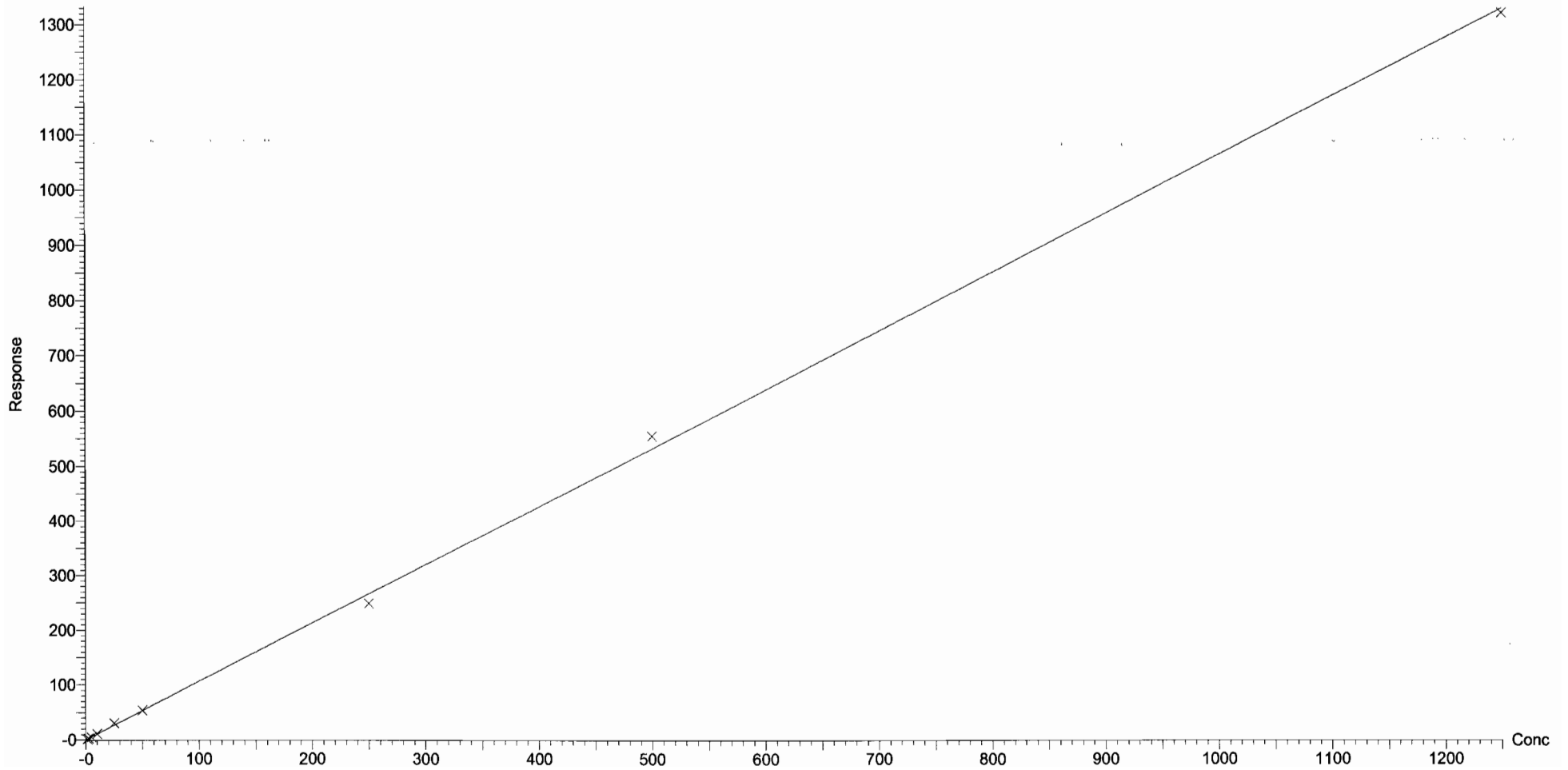
Compound name: N-MeFOSE

Correlation coefficient:  $r = 0.999363$ ,  $r^2 = 0.998727$

Calibration curve:  $1.06615 * x + 0.127128$

Response type: Internal Std ( Ref 52 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

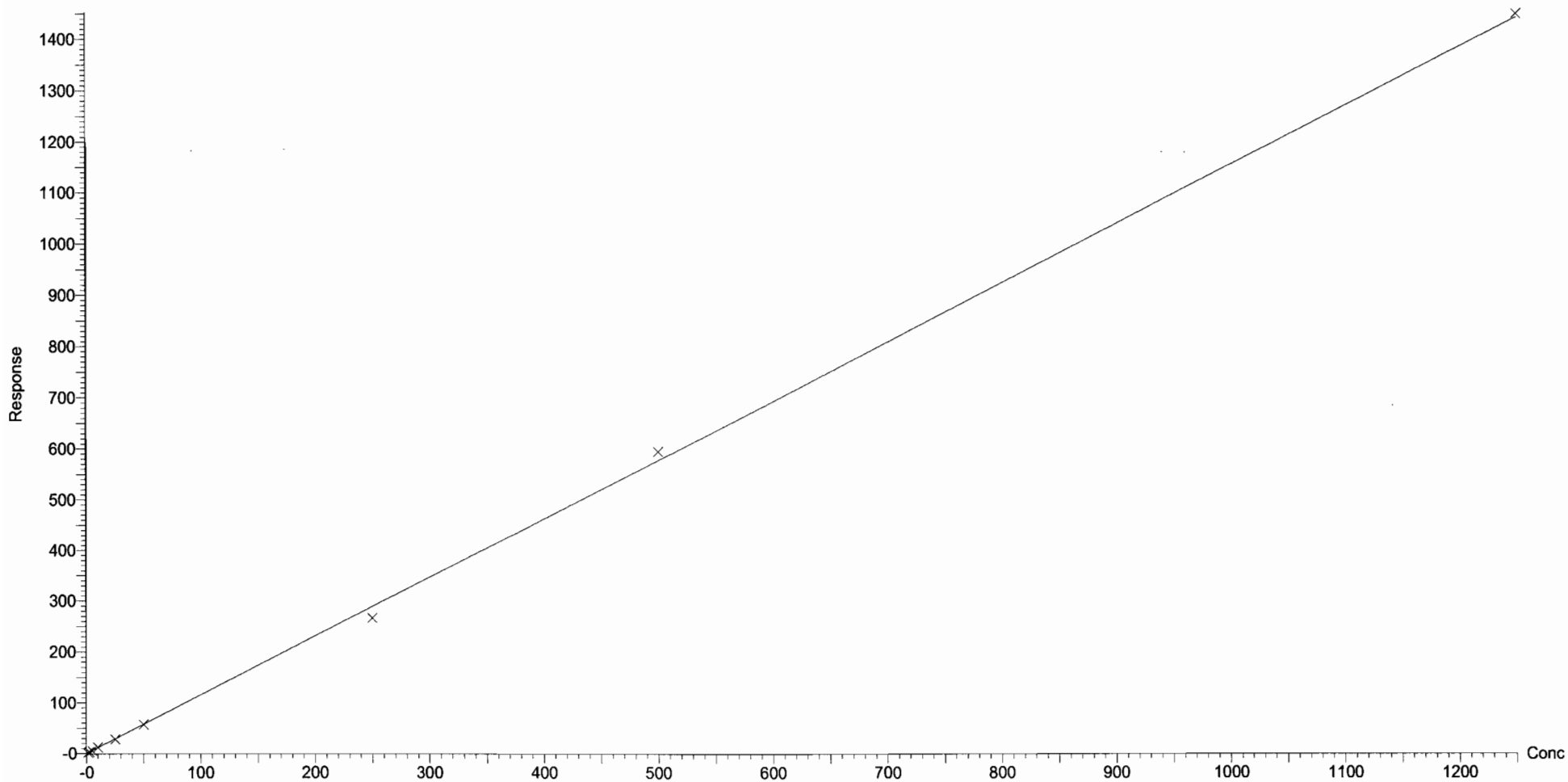




Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:35:35 Pacific Standard Time

Compound name: N-EtFOSE  
Correlation coefficient:  $r = 0.999483$ ,  $r^2 = 0.998966$   
Calibration curve:  $1.15711 * x + 0.072994$   
Response type: Internal Std ( Ref 53 ), Area \* ( IS Conc. / IS Area )  
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

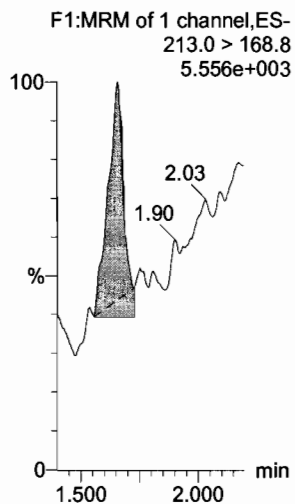
Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 17 Nov 2017 20:08:15

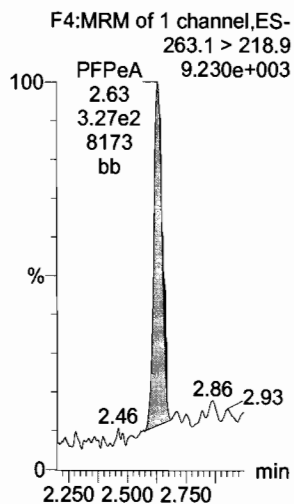
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_2, Date: 17-Nov-2017, Time: 17:07:02, ID: ST171117M2-1 PFC CS-2 17K1701, Description: PFC CS-2 17K1701

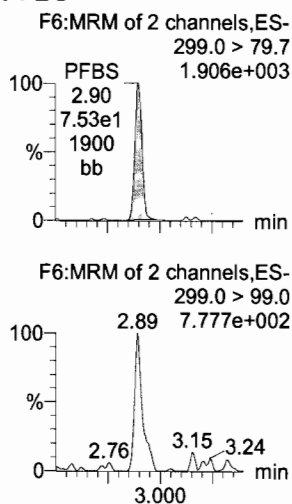
**PFBA**



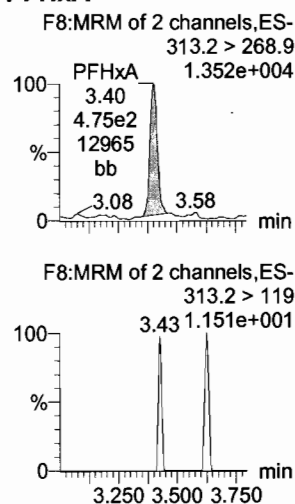
**PFPeA**



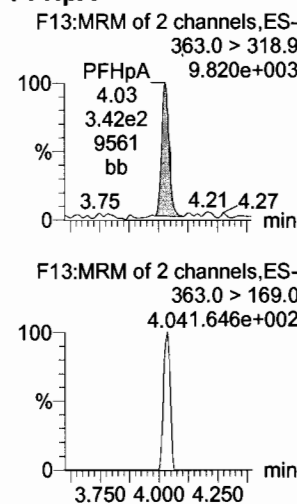
**PFBS**



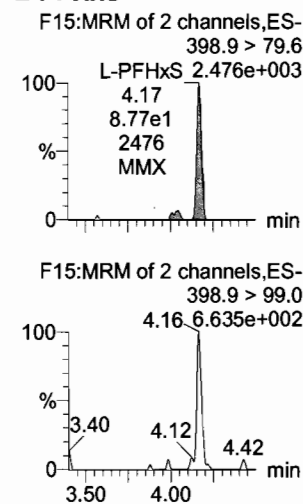
**PFHxA**



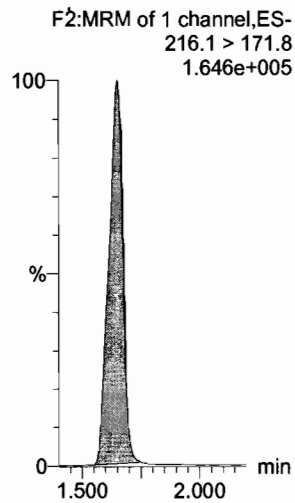
**PFHpA**



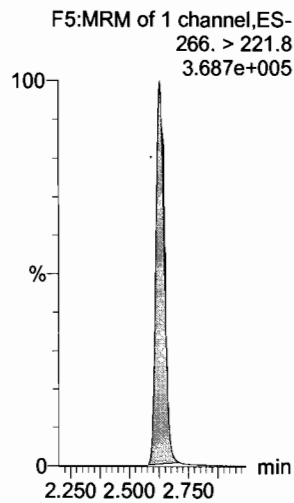
**L-PFHxS**



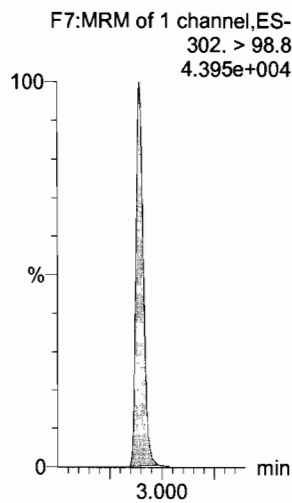
**13C3-PFBA**



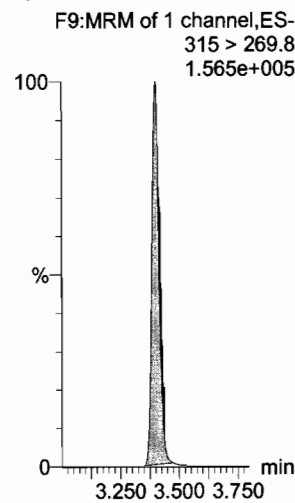
**13C3-PFPeA**



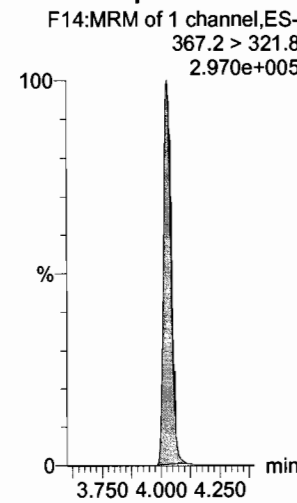
**13C3-PFBS**



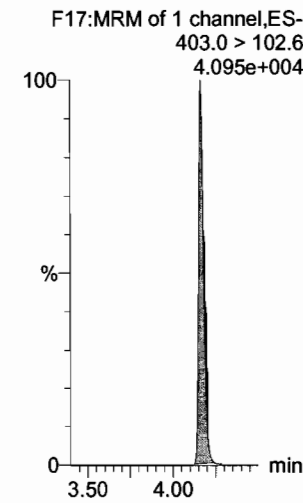
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

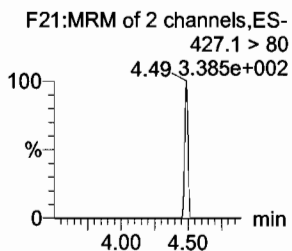
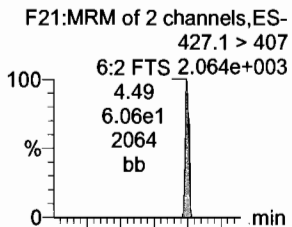


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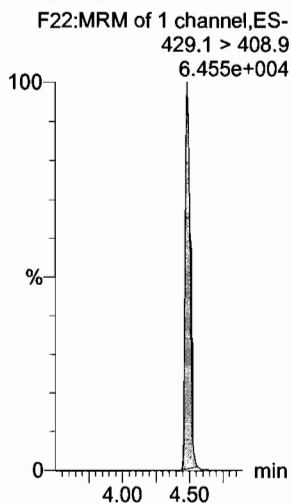
Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_2, Date: 17-Nov-2017, Time: 17:07:02, ID: ST171117M2-1 PFC CS-2 17K1701, Description: PFC CS-2 17K1701

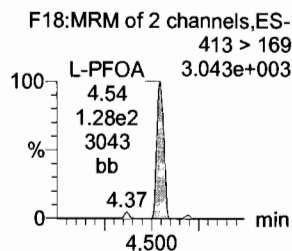
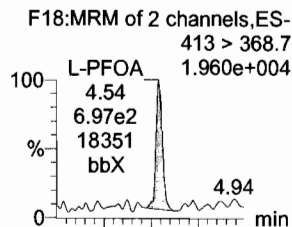
**6:2 FTS**



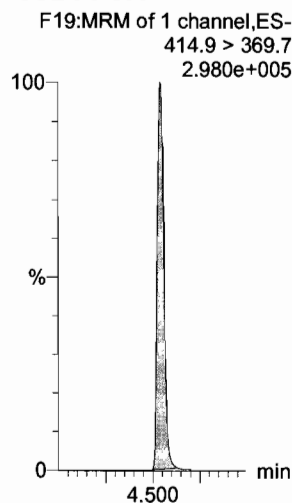
**13C2-6:2 FTS**



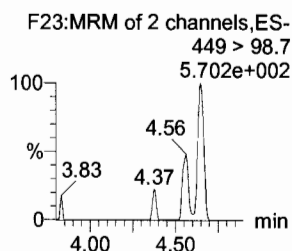
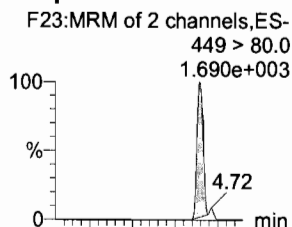
**L-PFOA**



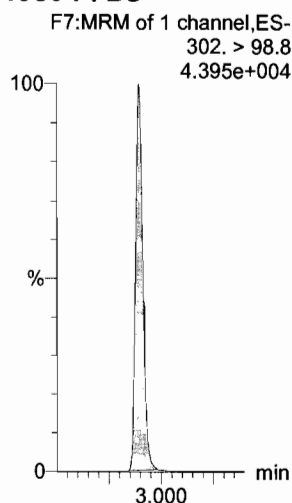
**13C2-PFOA**



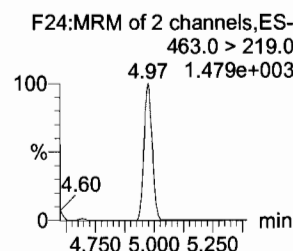
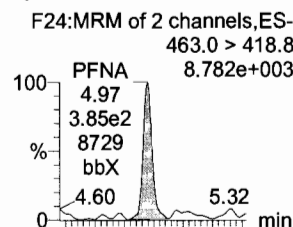
**PFHpS**



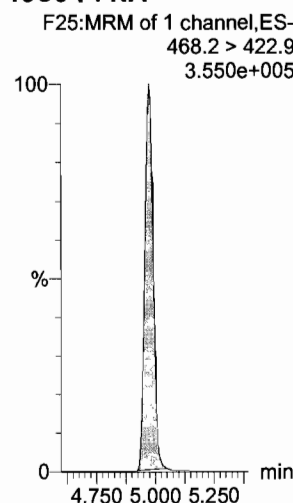
**13C3-PFBS**



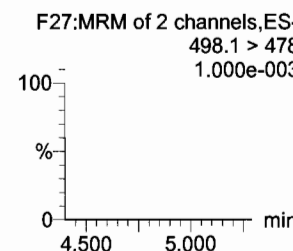
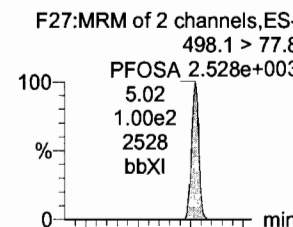
**PFNA**



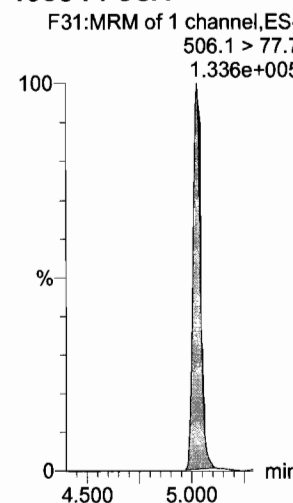
**13C5-PFNA**



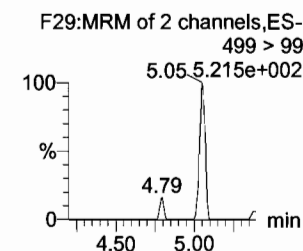
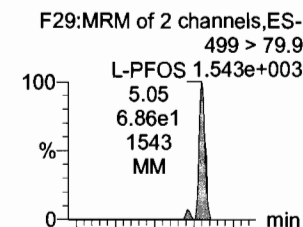
**PFOSA**



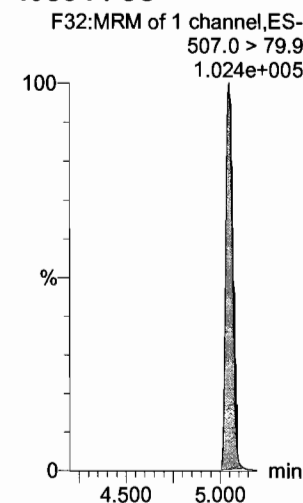
**13C8-PFOA**



**L-PFOS**



**13C8-PFOS**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

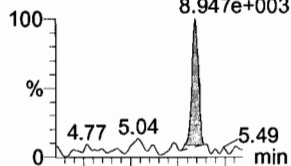
Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_2, Date: 17-Nov-2017, Time: 17:07:02, ID: ST171117M2-1 PFC CS-2 17K1701, Description: PFC CS-2 17K1701

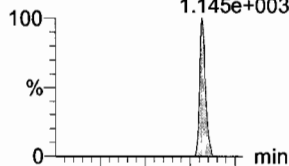
**PFDA**

F34:MRM of 2 channels,ES-  
513 > 468.8  
8.947e+003



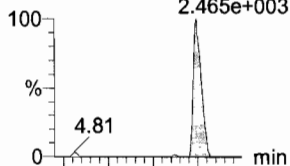
**8:2 FTS**

F39:MRM of 2 channels,ES-  
527 > 506.9  
1.145e+003



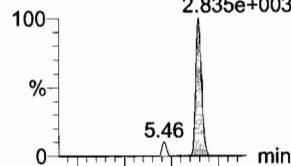
**N-MeFOSAA**

F44:MRM of 2 channels,ES-  
570.1 > 419  
2.465e+003



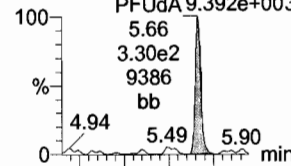
**N-EtFOSAA**

F47:MRM of 2 channels,ES-  
584.2 > 419  
2.835e+003



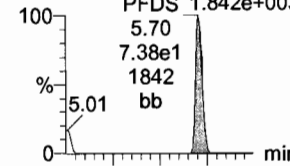
**PFUdA**

F42:MRM of 2 channels,ES-  
563.0 > 518.9  
PFUdA 9.392e+003

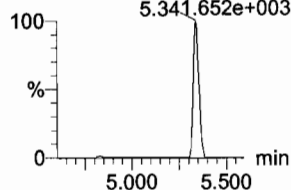


**PFDS**

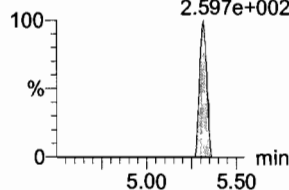
F49:MRM of 2 channels,ES-  
598.8 > 80  
PFDS 1.842e+003



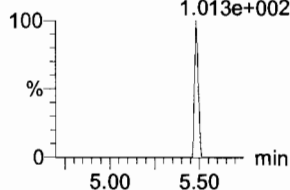
F34:MRM of 2 channels,ES-  
513 > 219  
5.341,652e+003



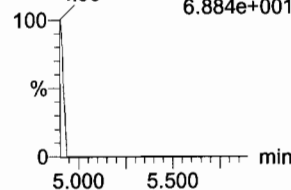
F39:MRM of 2 channels,ES-  
527 > 80  
2.597e+002



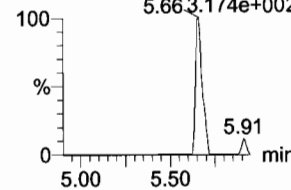
F44:MRM of 2 channels,ES-  
570.1 > 483.0  
1.013e+002



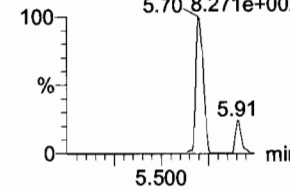
F47:MRM of 2 channels,ES-  
584.2 > 483.0  
6.884e+001



F42:MRM of 2 channels,ES-  
563.0 > 269  
5.663,174e+002

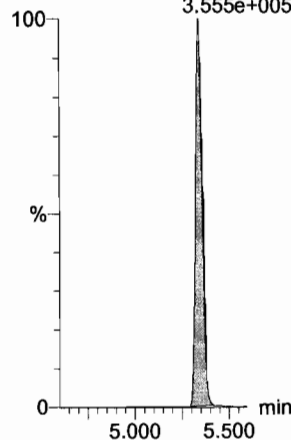


F49:MRM of 2 channels,ES-  
598.8 > 98.7  
5.70, 8.271e+002



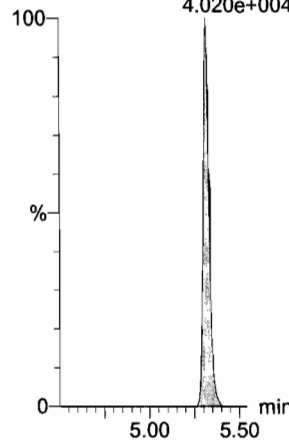
**13C2-PFDA**

F35:MRM of 1 channel,ES-  
515.1 > 469.9  
3.555e+005



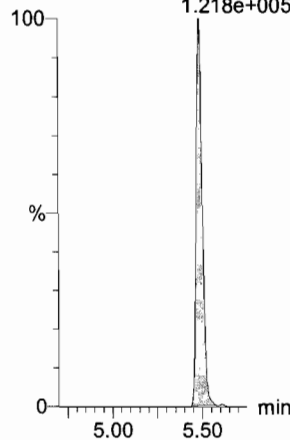
**13C2-8:2 FTS**

F40:MRM of 1 channel,ES-  
529.1 > 508.7  
4.020e+004



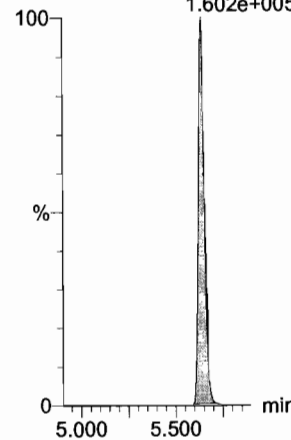
**d3-N-MeFOSAA**

F46:MRM of 1 channel,ES-  
573.3 > 419  
1.218e+005



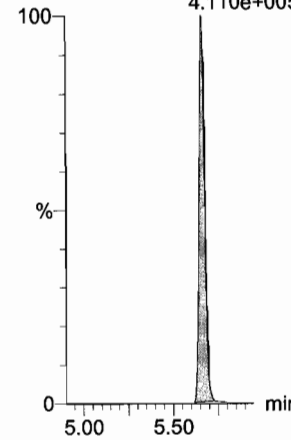
**d5-N-EtFOSAA**

F48:MRM of 1 channel,ES-  
589.3 > 419  
1.602e+005



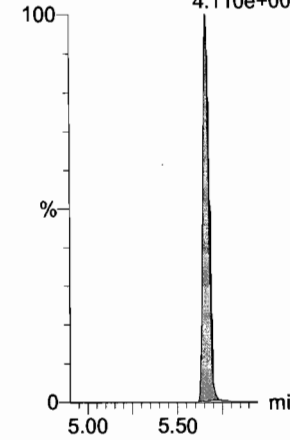
**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
4.110e+005



**13C2-PFUdA**

F43:MRM of 1 channel,ES-  
565 > 519.8  
4.110e+005

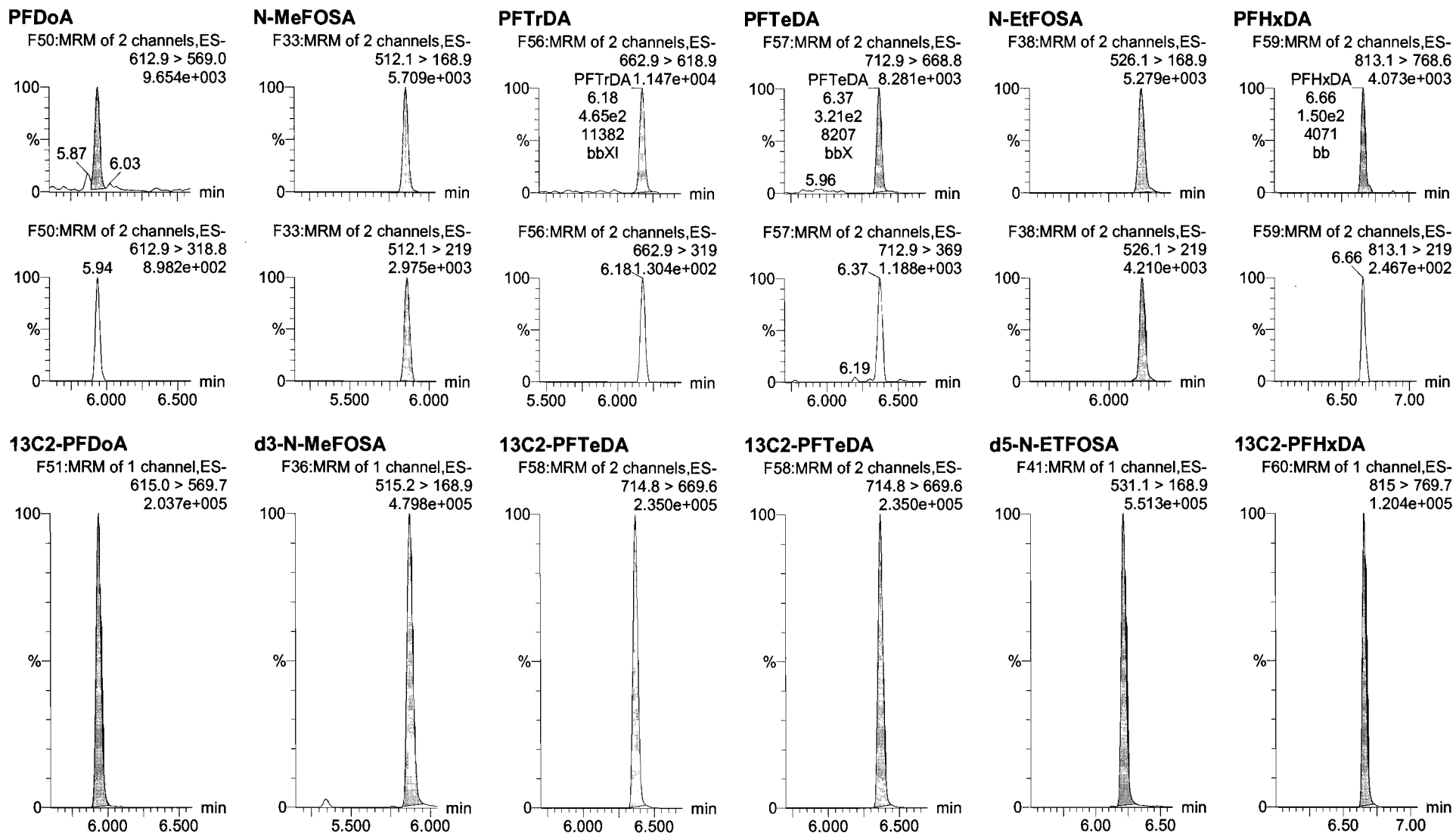


Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_2, Date: 17-Nov-2017, Time: 17:07:02, ID: ST171117M2-1 PFC CS-2 17K1701, Description: PFC CS-2 17K1701

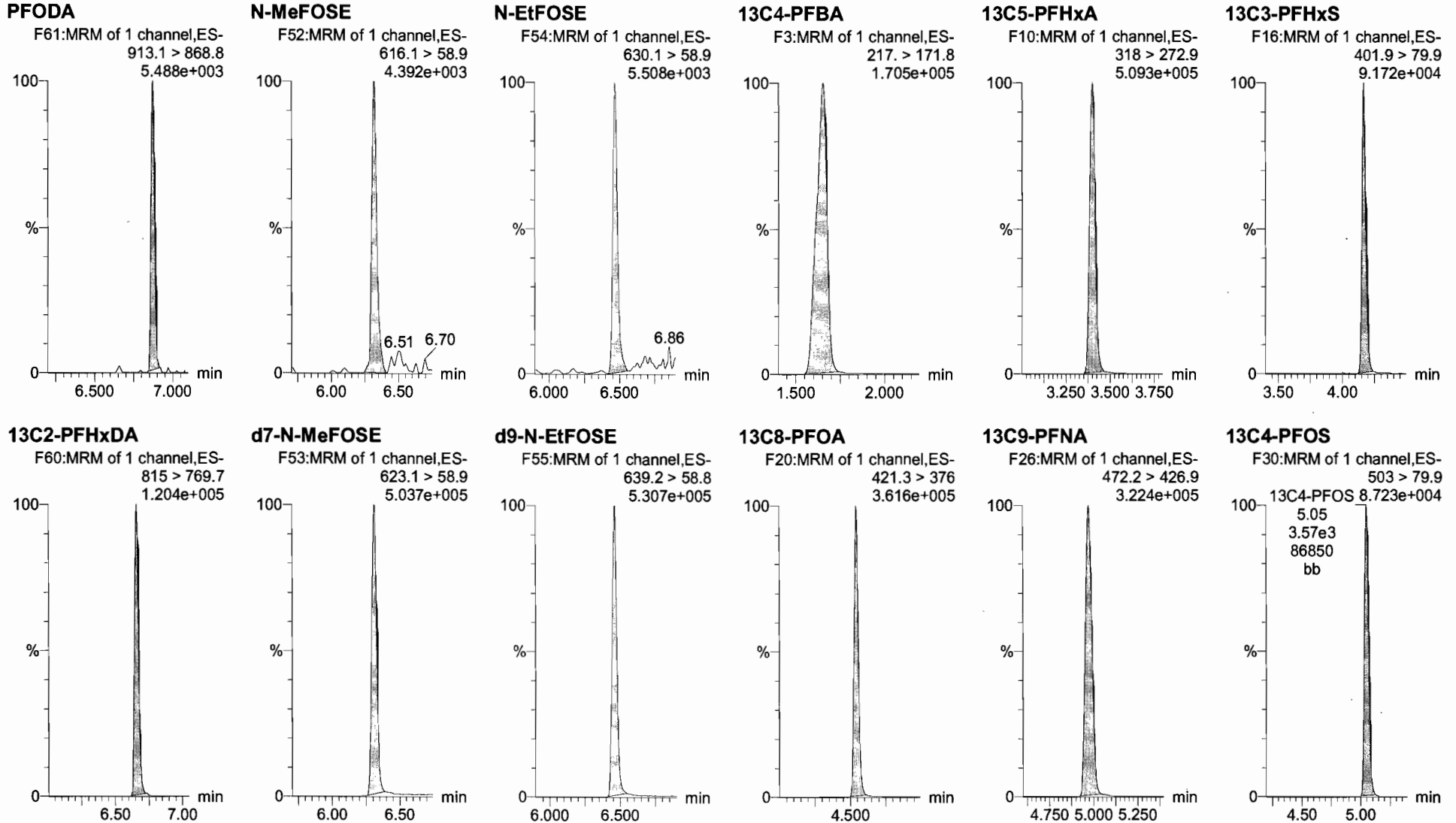


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Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_2, Date: 17-Nov-2017, Time: 17:07:02, ID: ST171117M2-1 PFC CS-2 17K1701, Description: PFC CS-2 17K1701



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

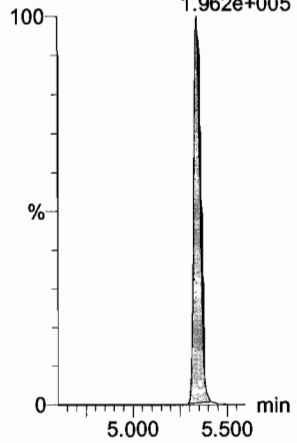
Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

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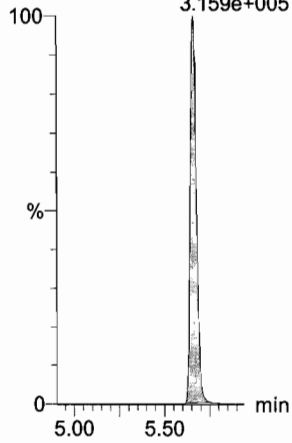
13C6-PFDA

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.962e+005



13C7-PFUdA

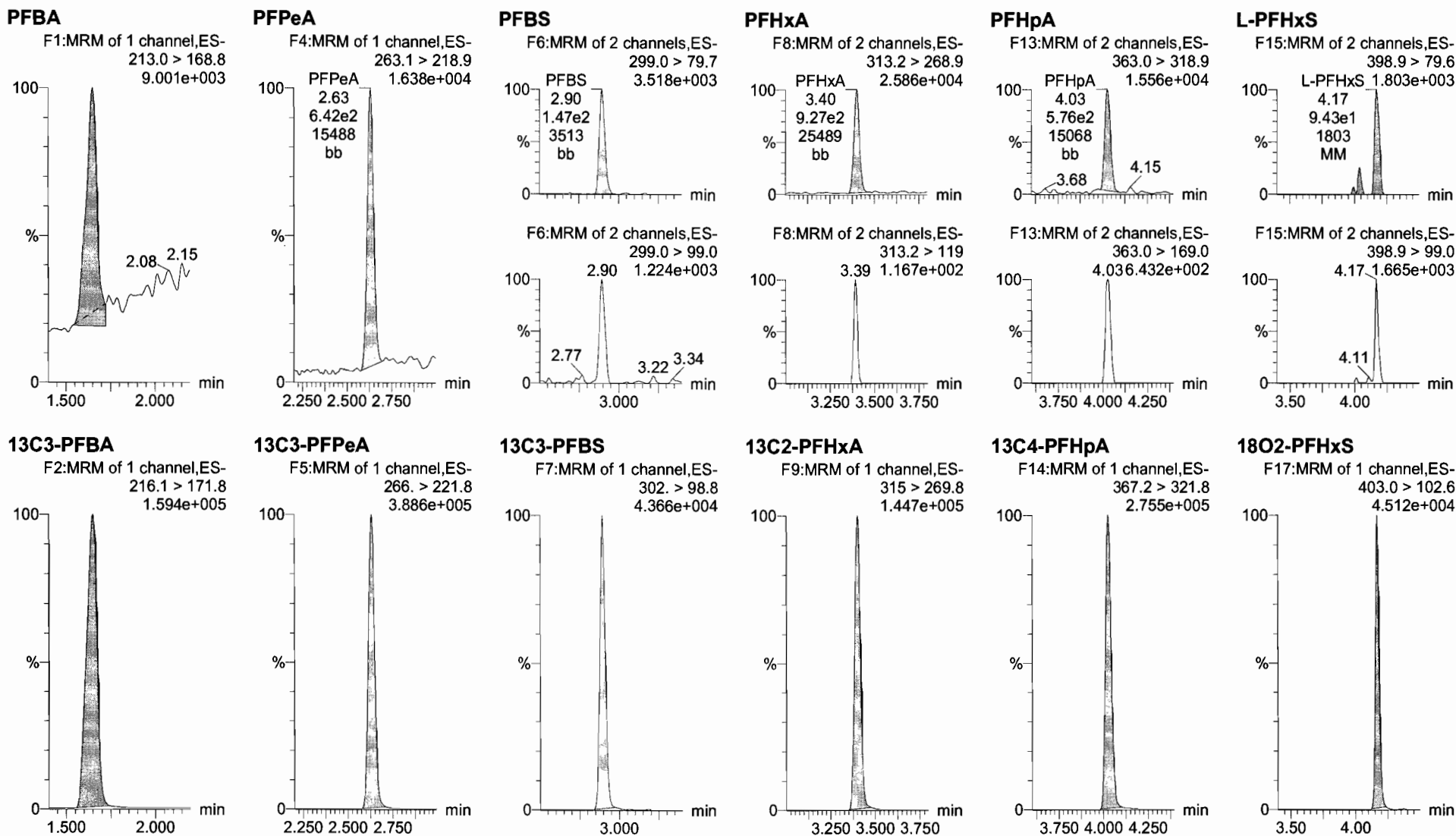
F45:MRM of 1 channel,ES-  
570.1 > 524.8  
3.159e+005



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_3, Date: 17-Nov-2017, Time: 17:18:14, ID: ST171117M2-2 PFC CS-1 17K1704, Description: PFC CS-1 17K1704

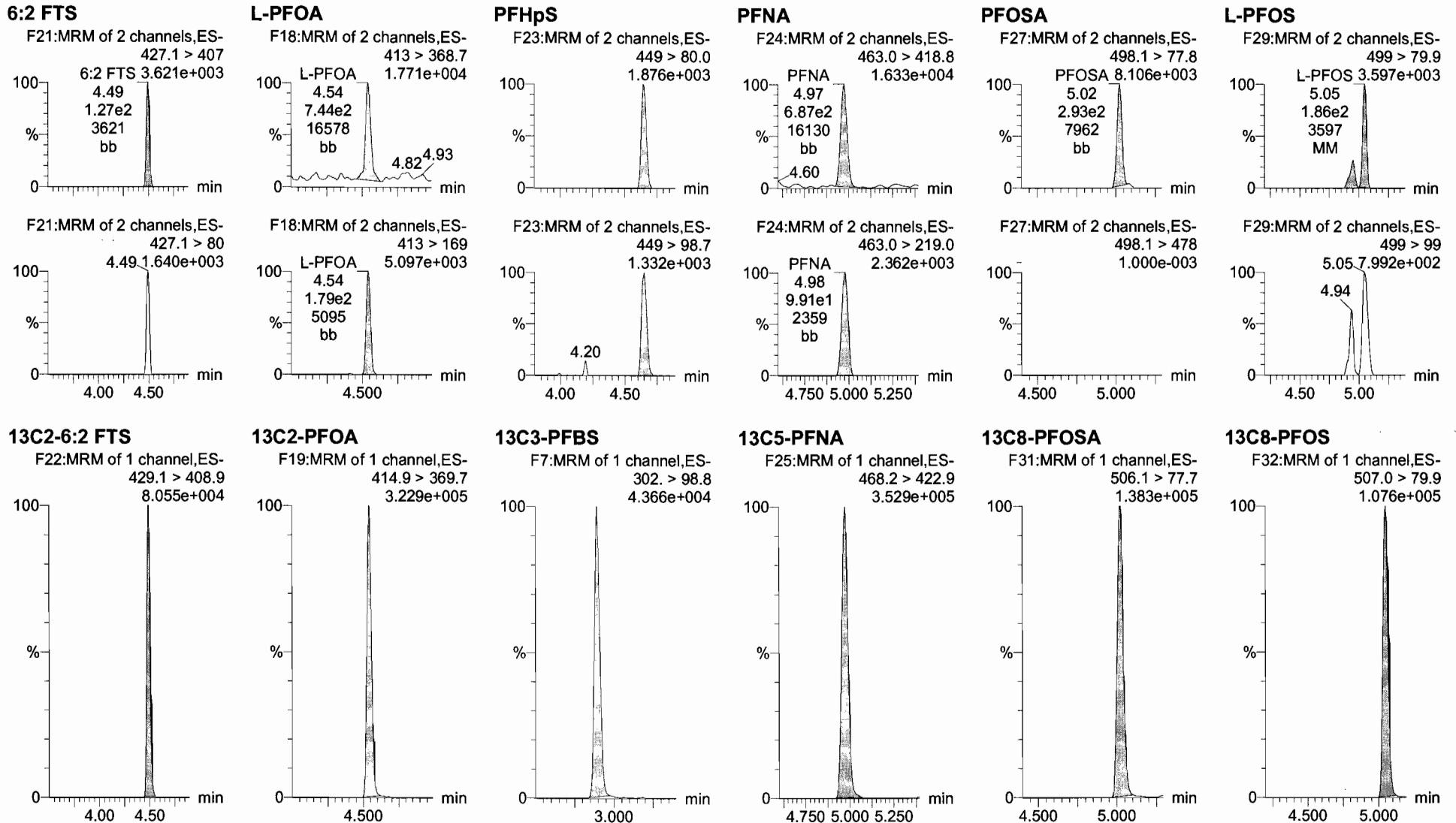




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Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_3, Date: 17-Nov-2017, Time: 17:18:14, ID: ST171117M2-2 PFC CS-1 17K1704, Description: PFC CS-1 17K1704

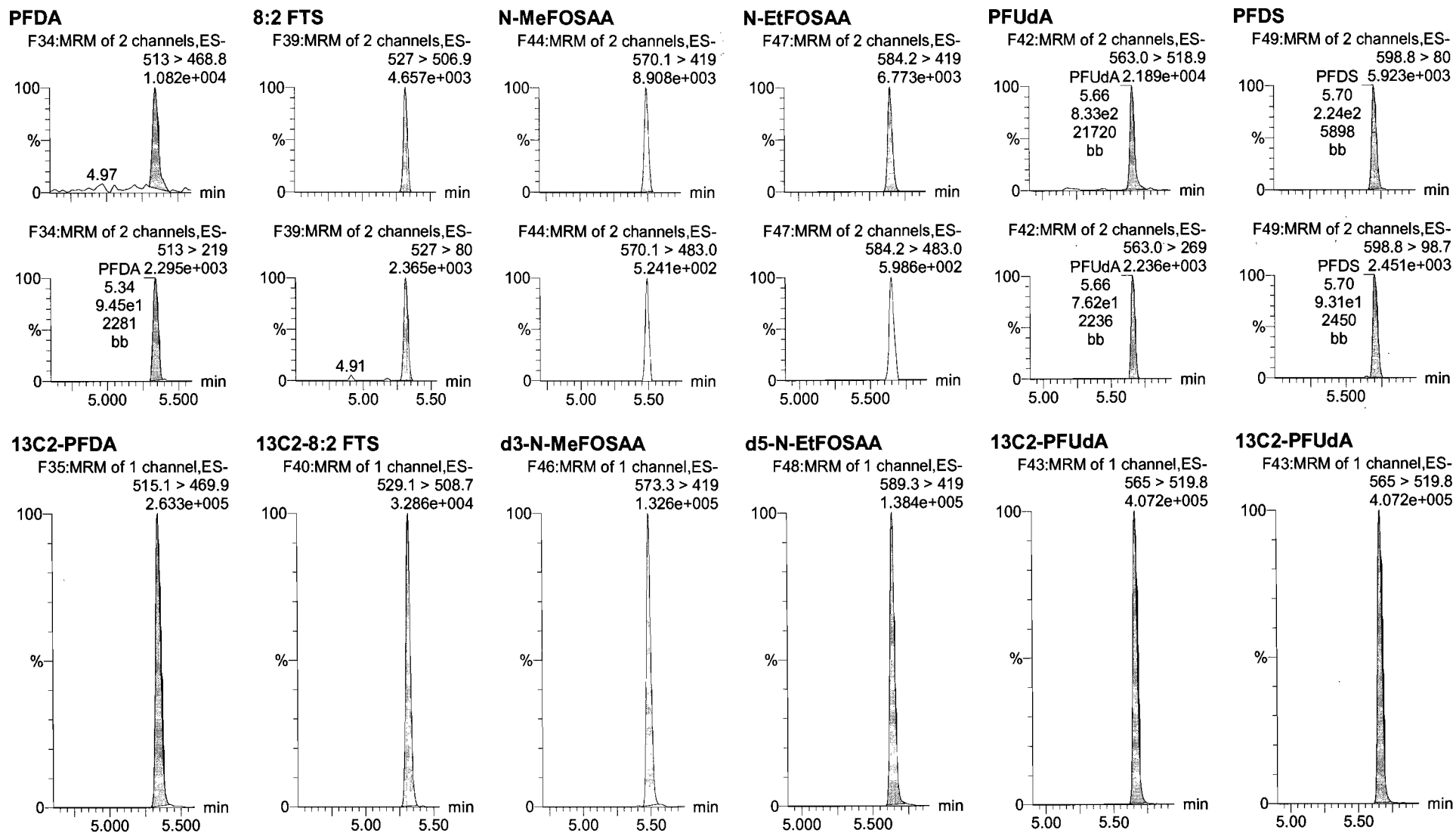


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Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

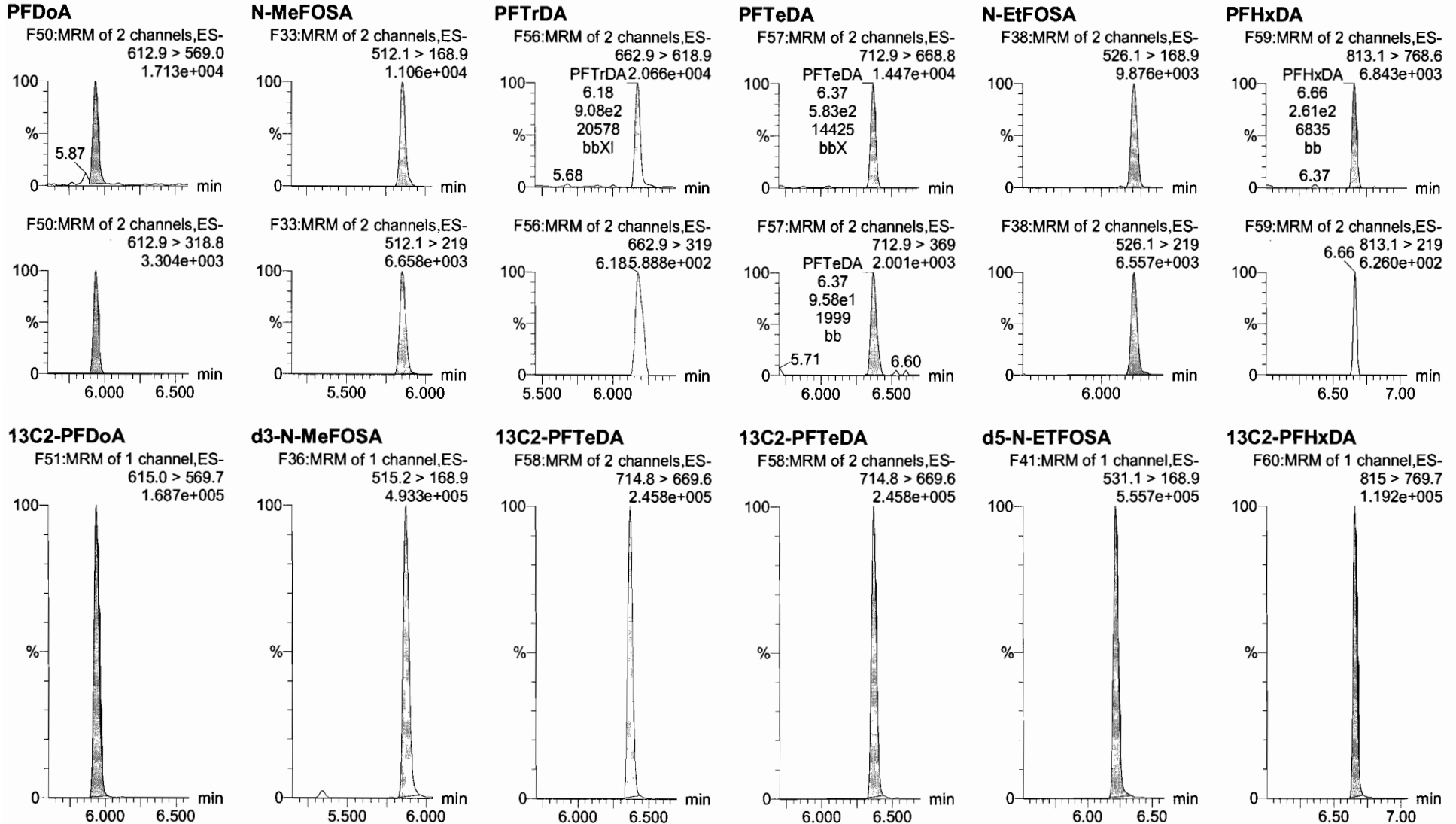
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Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_3, Date: 17-Nov-2017, Time: 17:18:14, ID: ST171117M2-2 PFC CS-1 17K1704, Description: PFC CS-1 17K1704

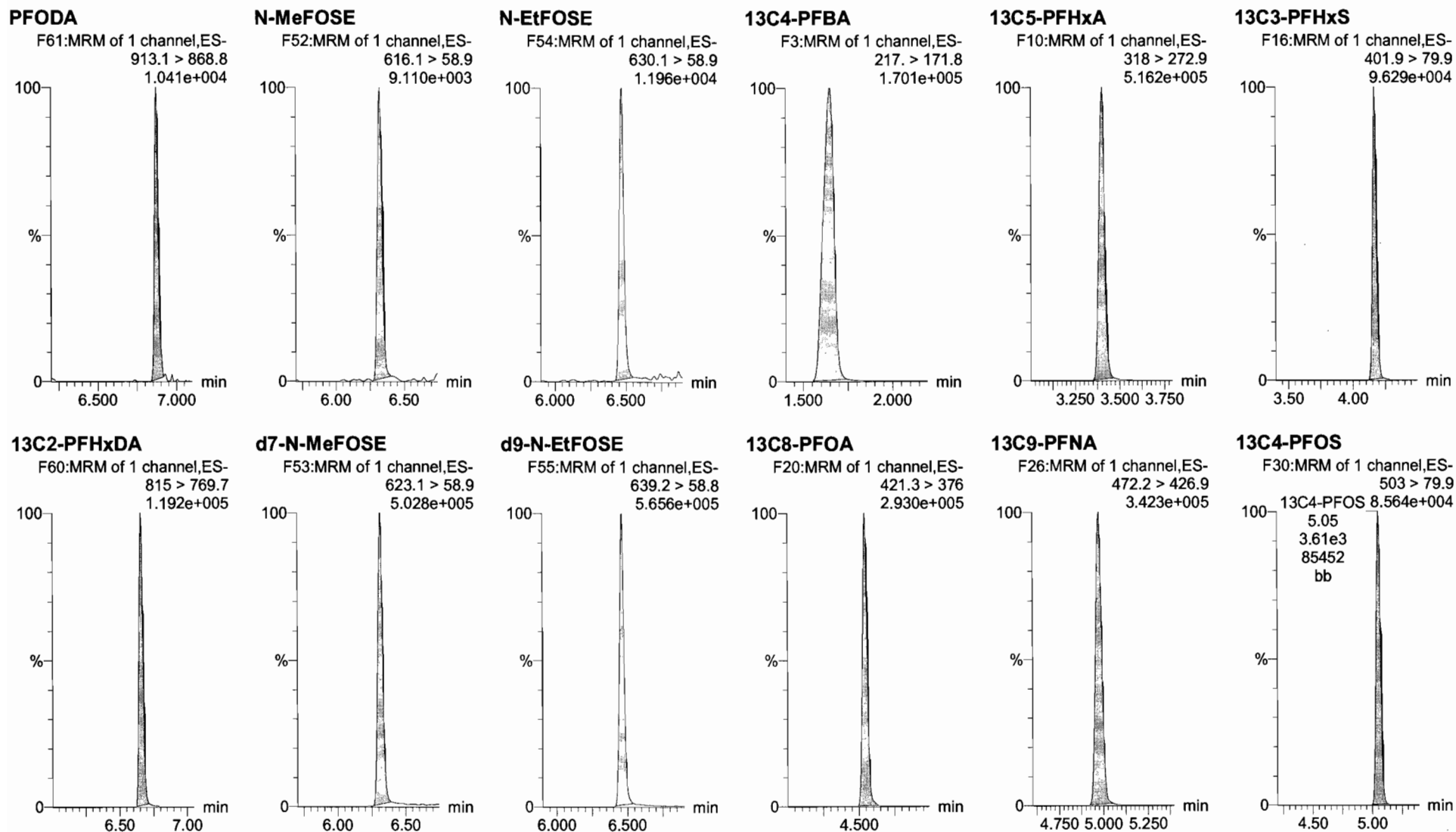


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Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_3, Date: 17-Nov-2017, Time: 17:18:14, ID: ST171117M2-2 PFC CS-1 17K1704, Description: PFC CS-1 17K1704



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

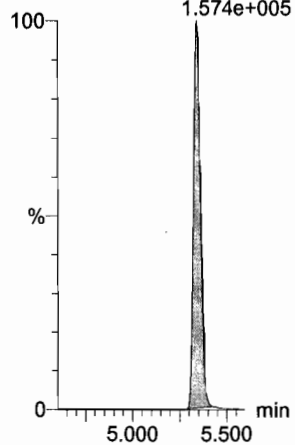
Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

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Name: 171117M2\_3, Date: 17-Nov-2017, Time: 17:18:14, ID: ST171117M2-2 PFC CS-1 17K1704, Description: PFC CS-1 17K1704

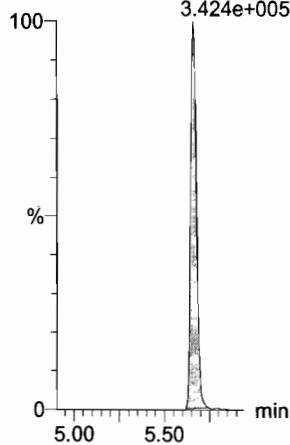
13C6-PFDA

F37:MRM of 1 channel,ES-  
519.1 > 473.7  
1.574e+005



13C7-PFUdA

F45:MRM of 1 channel,ES-  
570.1 > 524.8  
3.424e+005

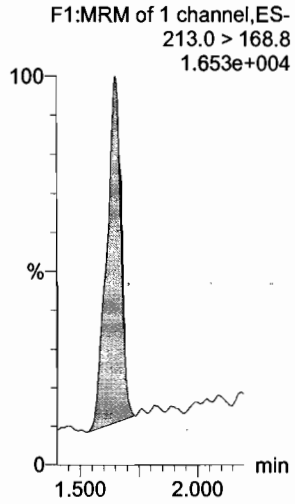


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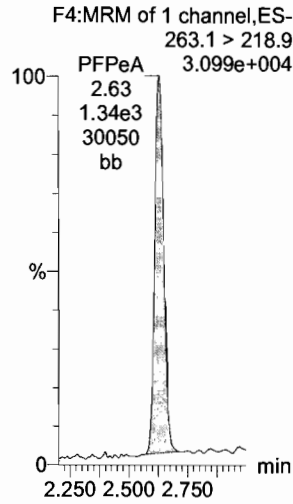
Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_4, Date: 17-Nov-2017, Time: 17:29:24, ID: ST171117M2-3 PFC CS0 17K1705, Description: PFC CS0 17K1705

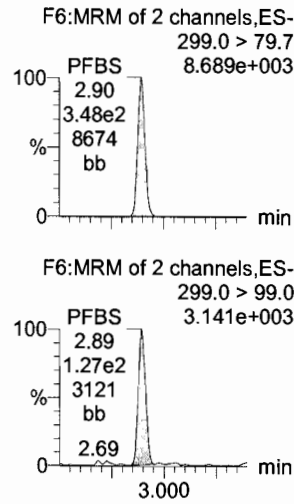
**PFBA**



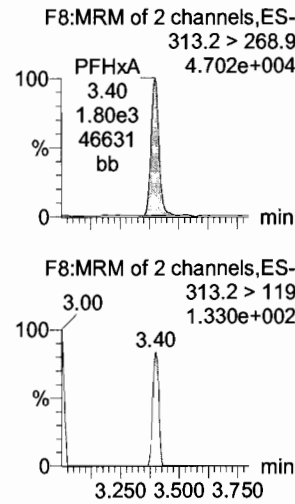
**PFPeA**



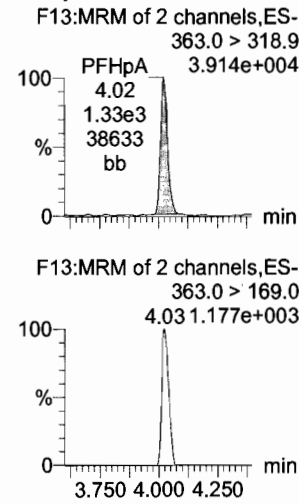
**PFBS**



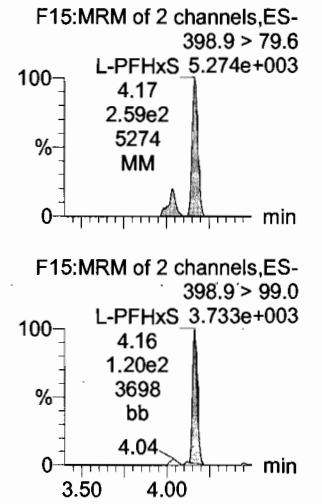
**PFHxA**



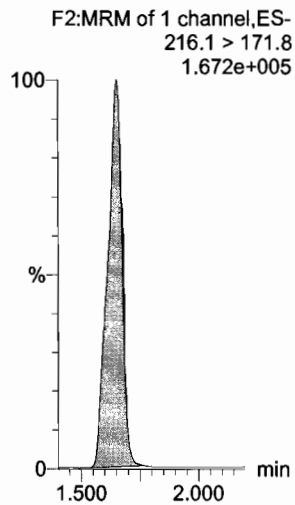
**PFHpA**



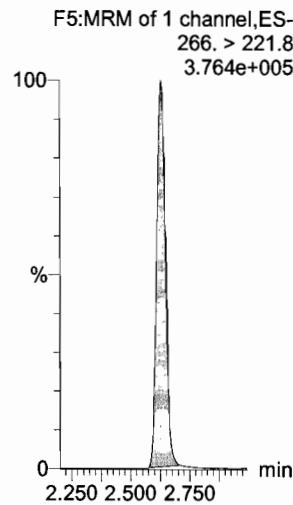
**L-PFHxS**



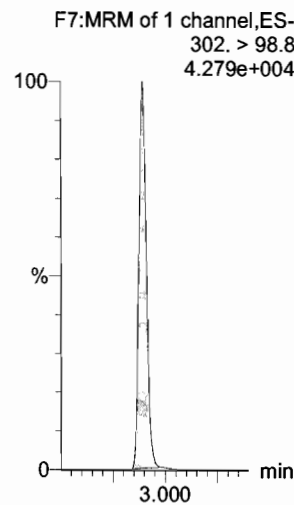
**13C3-PFBA**



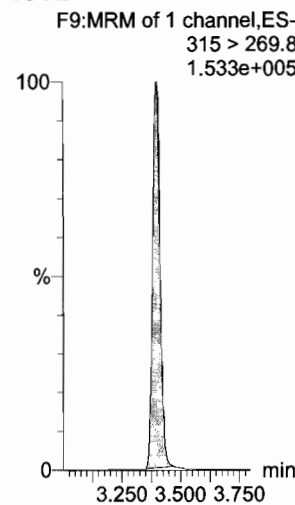
**13C3-PFPeA**



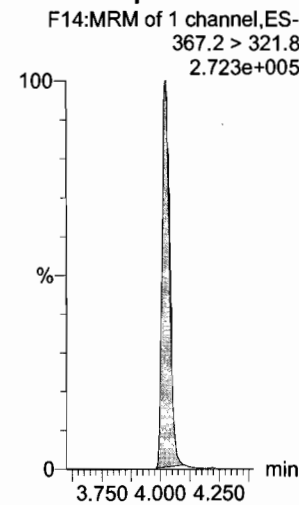
**13C3-PFBS**



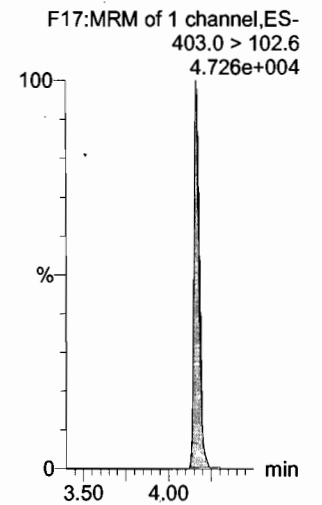
**13C2-PFHxA**



**13C4-PFHpA**



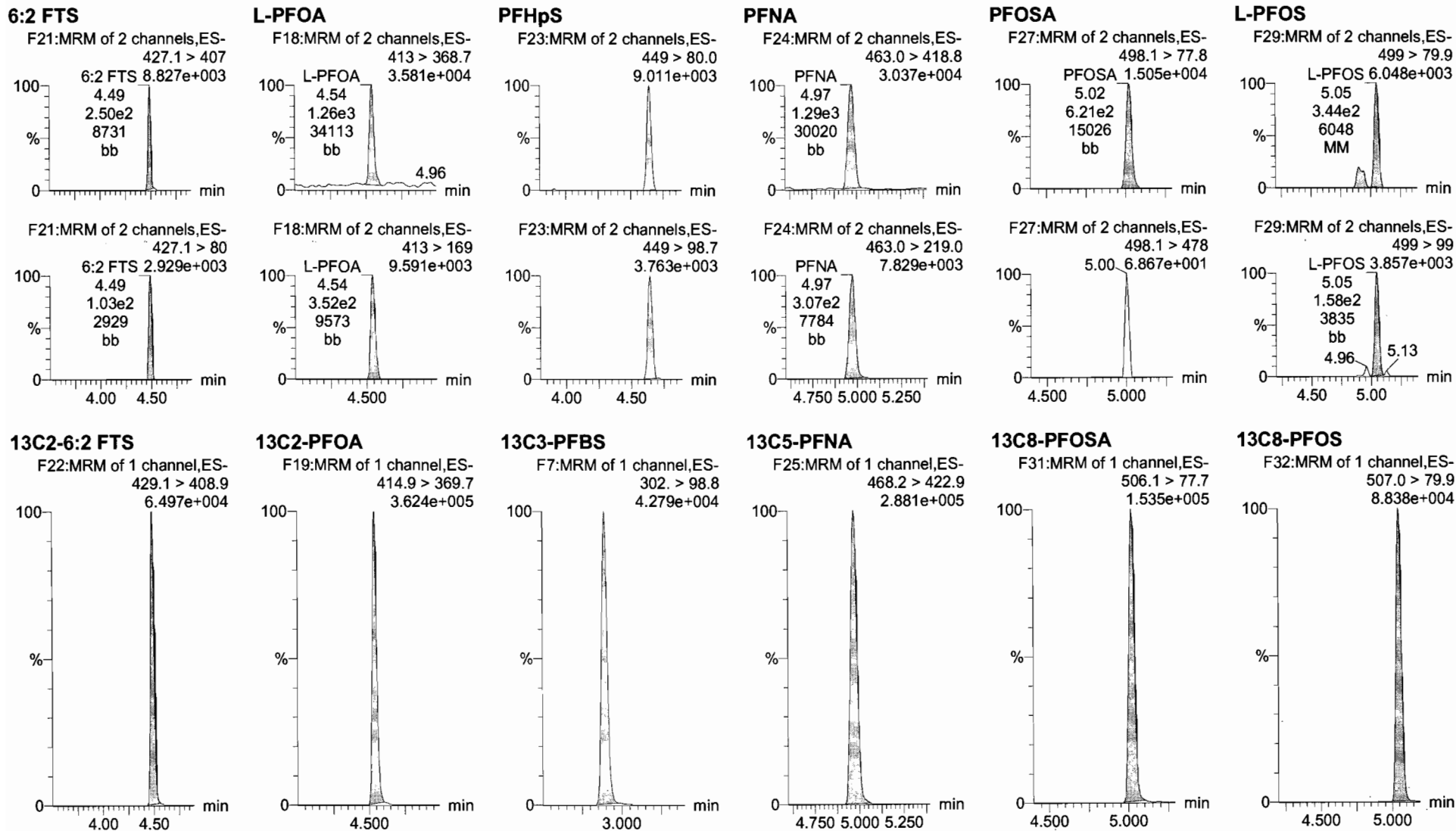
**18O2-PFHxS**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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Name: 171117M2\_4, Date: 17-Nov-2017, Time: 17:29:24, ID: ST171117M2-3 PFC CS0 17K1705, Description: PFC CS0 17K1705



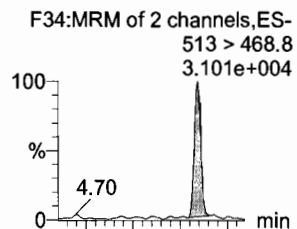
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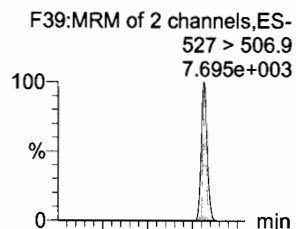
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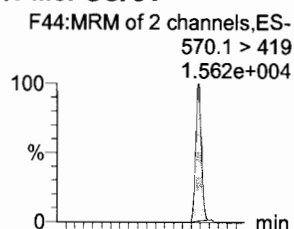
**PFDA**



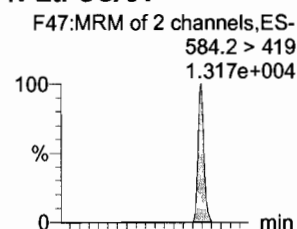
**8:2 FTS**



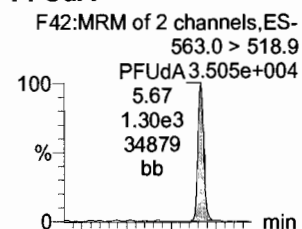
**N-MeFOSAA**



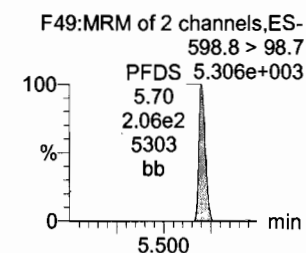
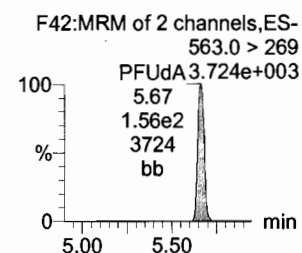
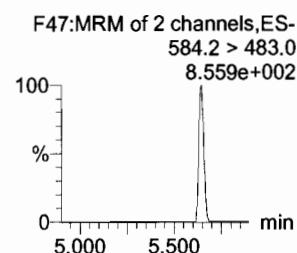
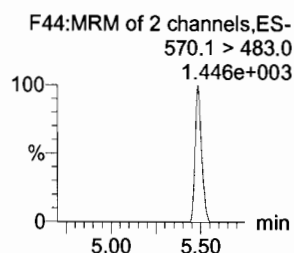
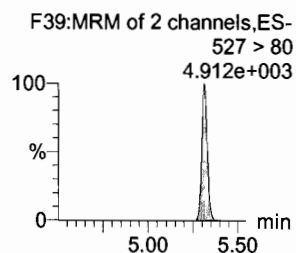
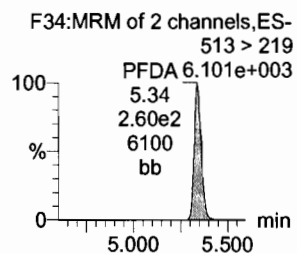
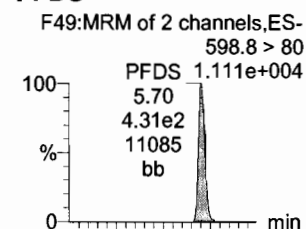
**N-EtFOSAA**



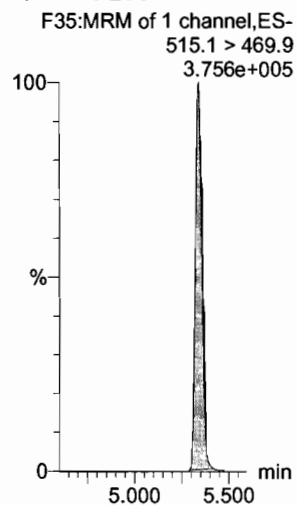
**PFUdA**



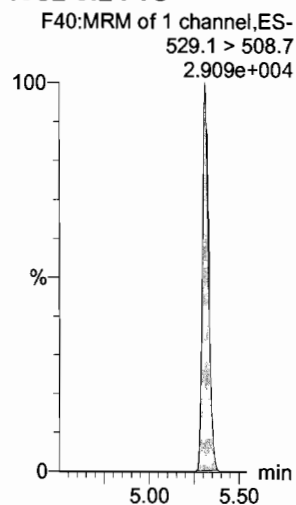
**PFDS**



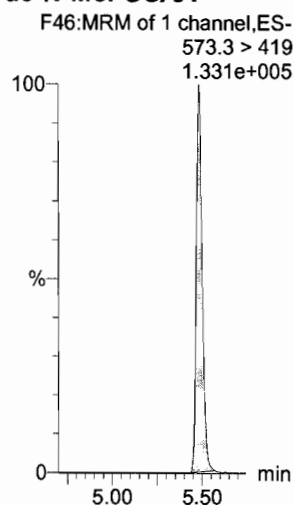
**13C2-PFDA**



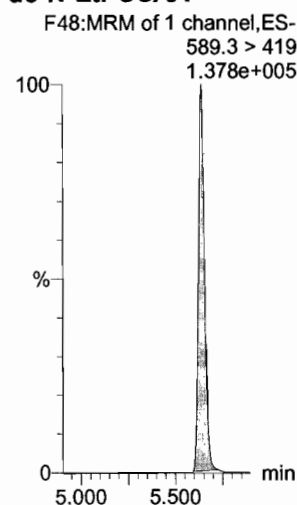
**13C2-8:2 FTS**



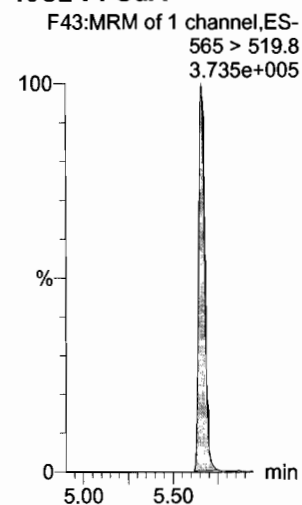
**d3-N-MeFOSAA**



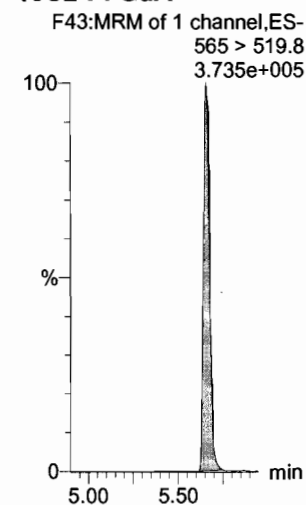
**d5-N-EtFOSAA**



**13C2-PFUdA**



**13C2-PFUdA**



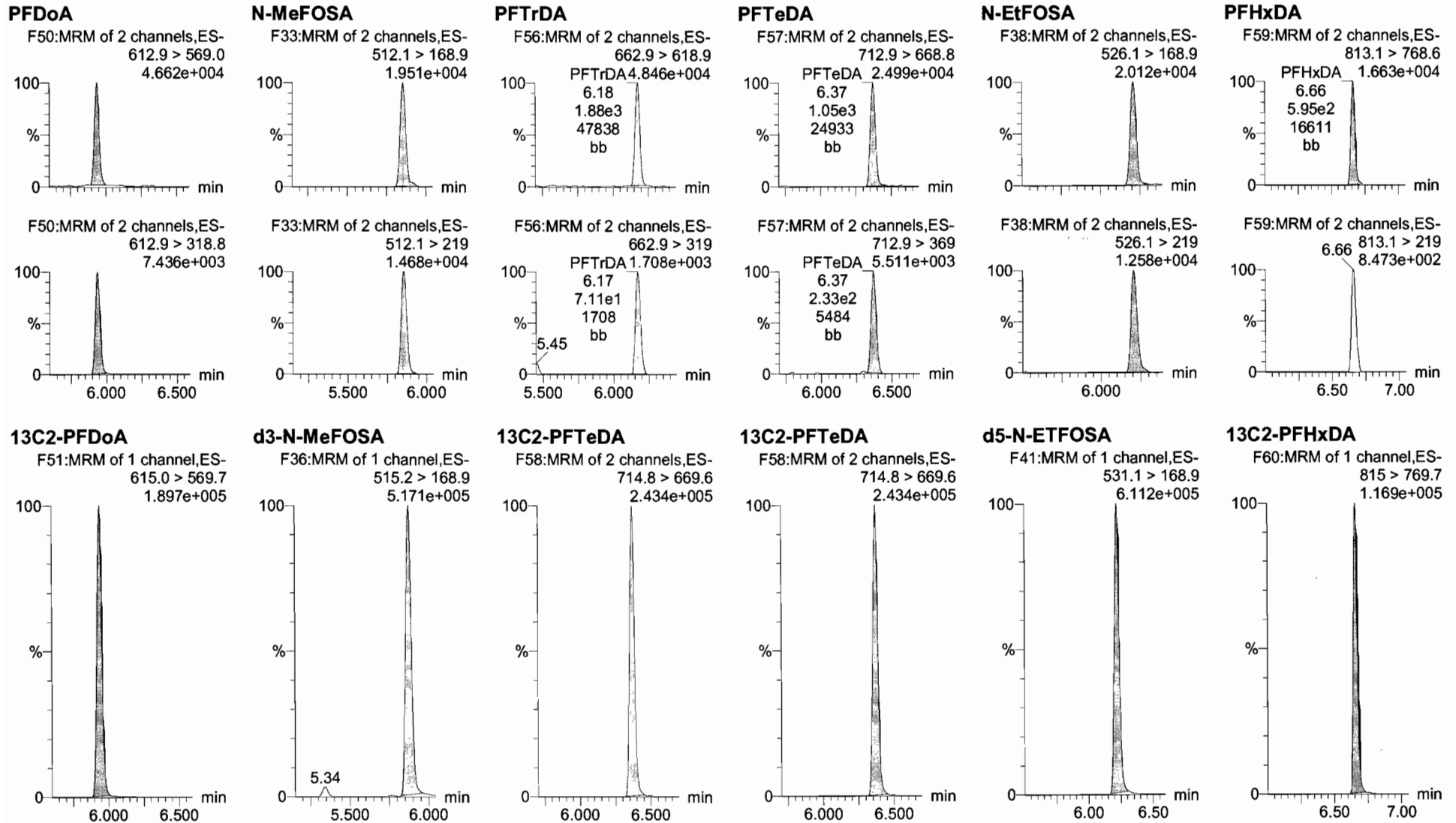


Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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Name: 171117M2\_4, Date: 17-Nov-2017, Time: 17:29:24, ID: ST171117M2-3 PFC CS0 17K1705, Description: PFC CS0 17K1705



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

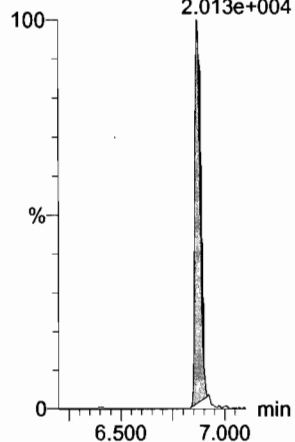
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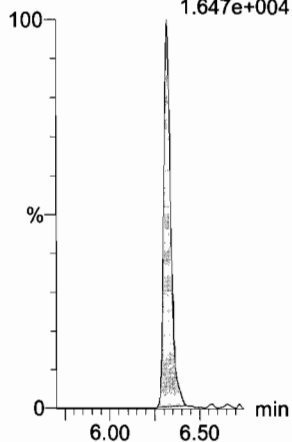
**PFODA**

F61:MRM of 1 channel,ES-  
913.1 > 868.8  
2.013e+004



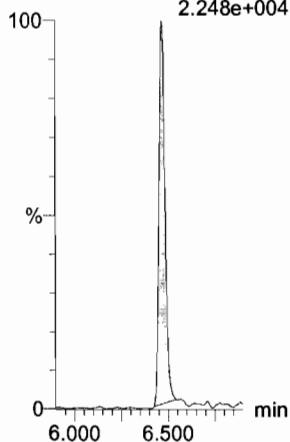
**N-MeFOSE**

F52:MRM of 1 channel,ES-  
616.1 > 58.9  
1.647e+004



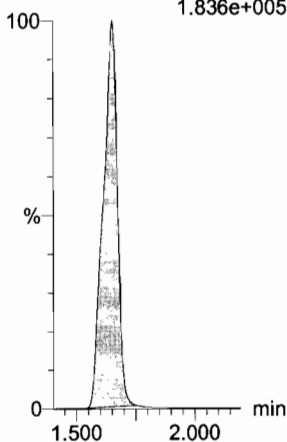
**N-EtFOSE**

F54:MRM of 1 channel,ES-  
630.1 > 58.9  
2.248e+004



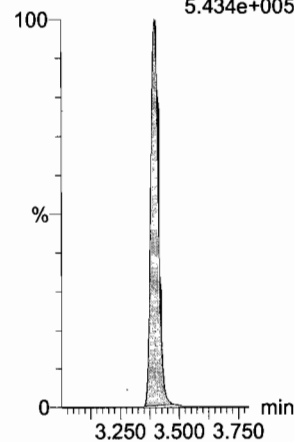
**13C4-PFBA**

F3:MRM of 1 channel,ES-  
217. > 171.8  
1.836e+005



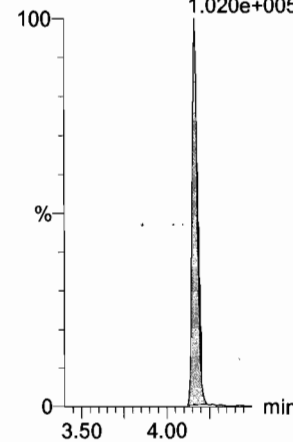
**13C5-PFHxA**

F10:MRM of 1 channel,ES-  
318 > 272.9  
5.434e+005



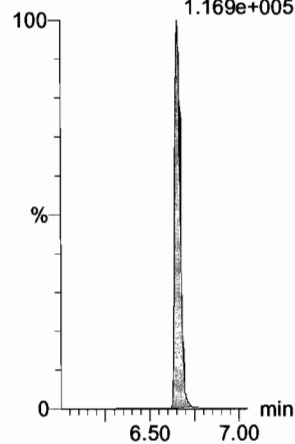
**13C3-PFHxS**

F16:MRM of 1 channel,ES-  
401.9 > 79.9  
1.020e+005



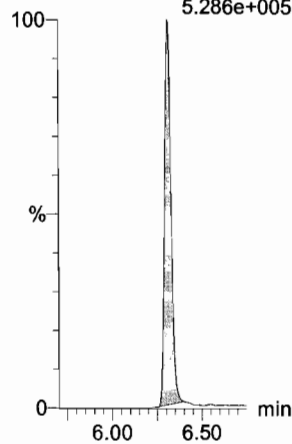
**13C2-PFHxDA**

F60:MRM of 1 channel,ES-  
815 > 769.7  
1.169e+005



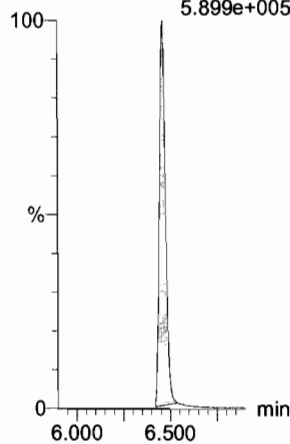
**d7-N-MeFOSE**

F53:MRM of 1 channel,ES-  
623.1 > 58.9  
5.286e+005



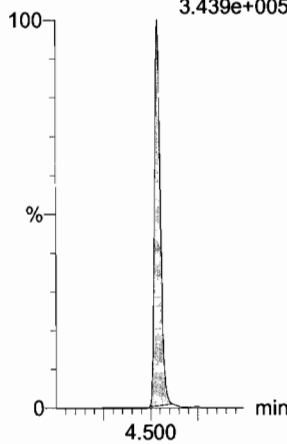
**d9-N-EtFOSE**

F55:MRM of 1 channel,ES-  
639.2 > 58.8  
5.899e+005



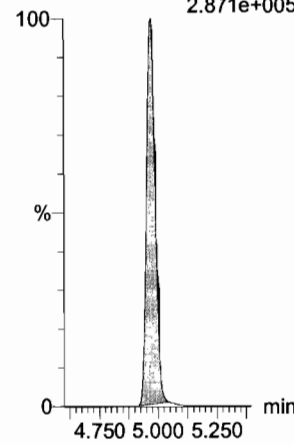
**13C8-PFOA**

F20:MRM of 1 channel,ES-  
421.3 > 376  
3.439e+005



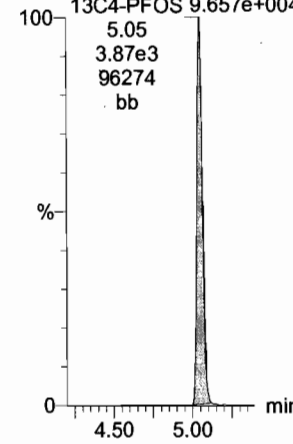
**13C9-PFNA**

F26:MRM of 1 channel,ES-  
472.2 > 426.9  
2.871e+005



**13C4-PFOS**

F30:MRM of 1 channel,ES-  
503 > 79.9  
9.657e+004



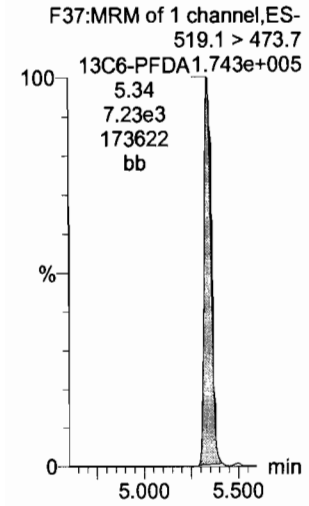
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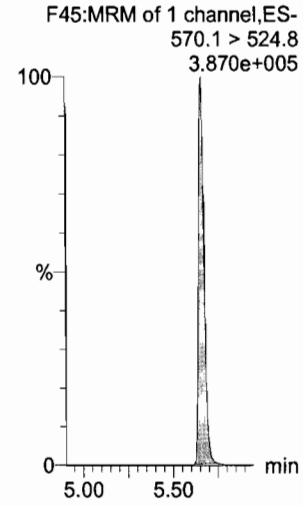
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Name: 171117M2\_4, Date: 17-Nov-2017, Time: 17:29:24, ID: ST171117M2-3 PFC CS0 17K1705, Description: PFC CS0 17K1705

13C6-PFDA



13C7-PFUdA

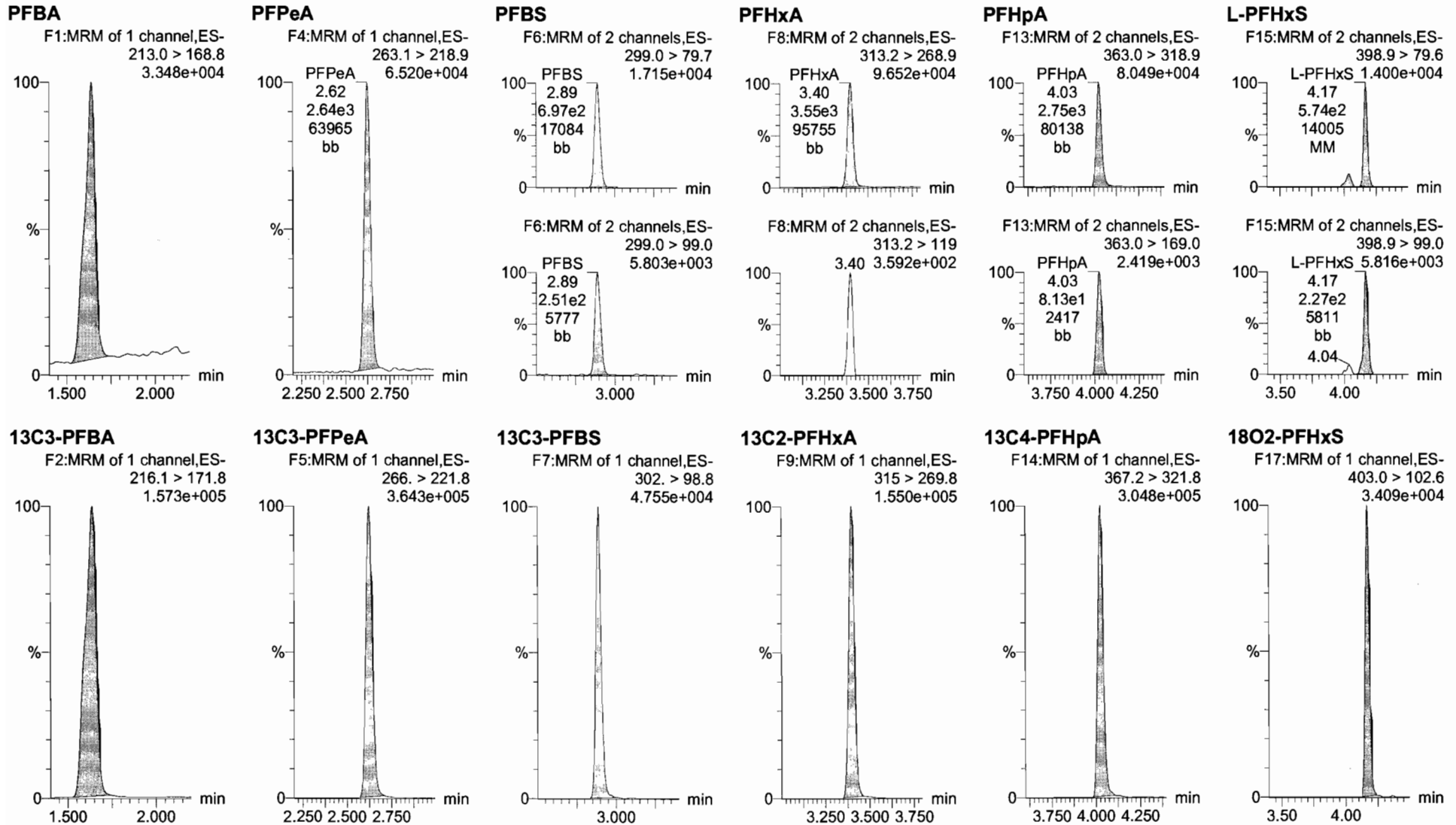


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Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

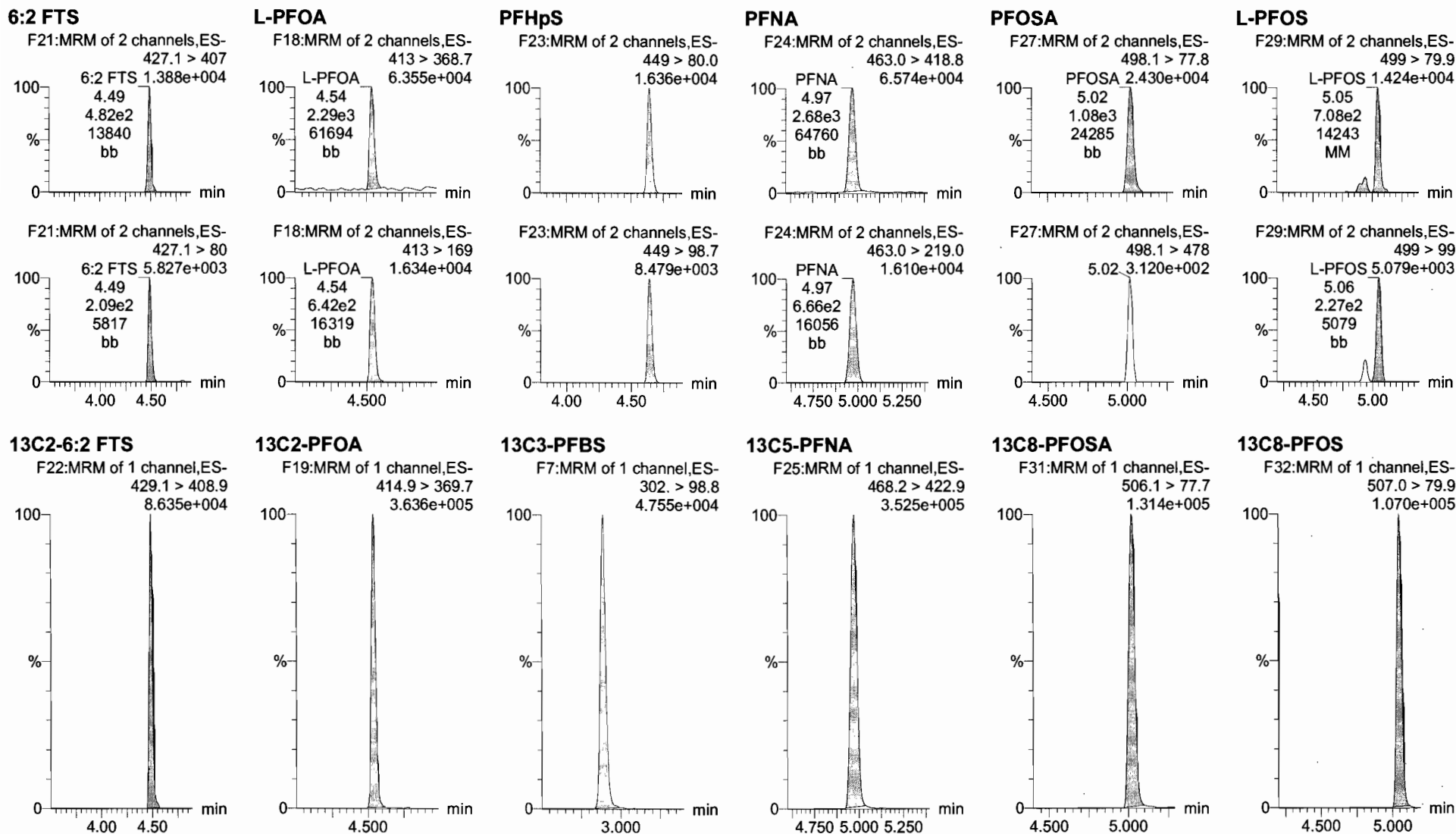
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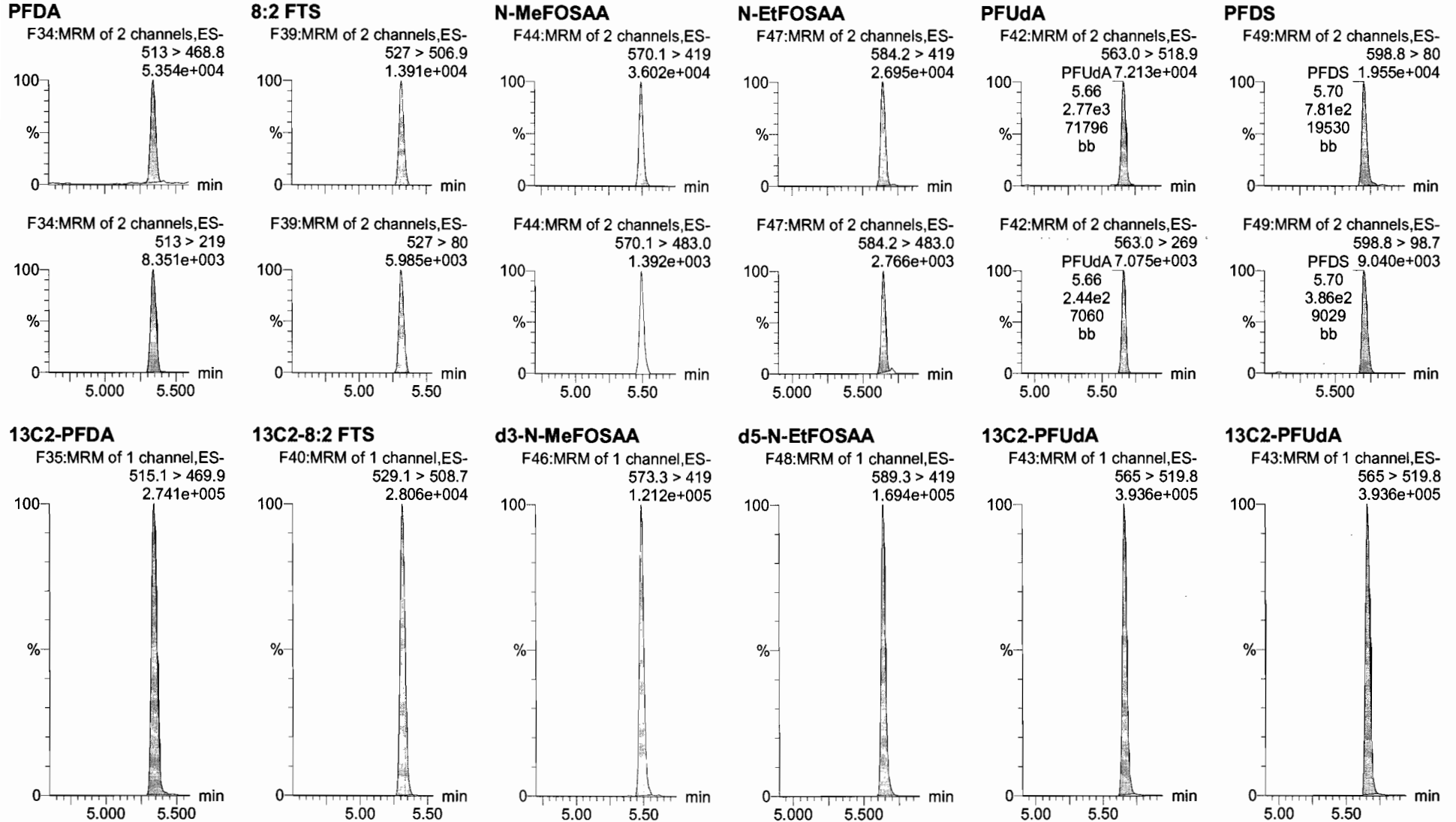


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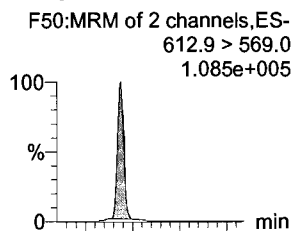
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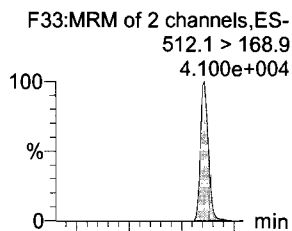
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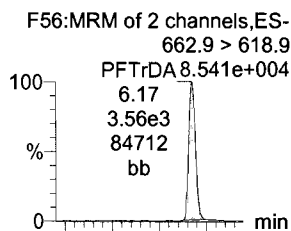
**PFDaA**



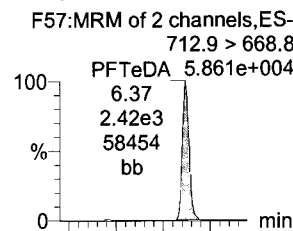
**N-MeFOSA**



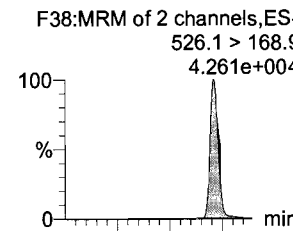
**PFTrDA**



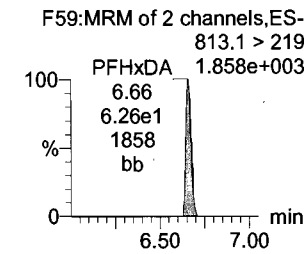
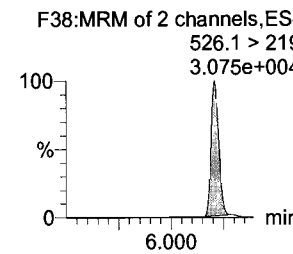
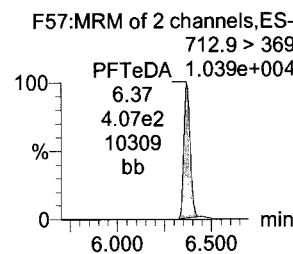
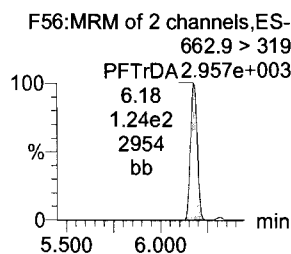
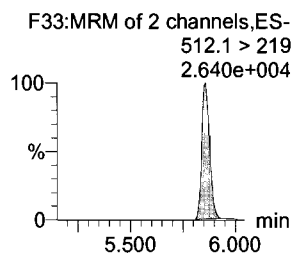
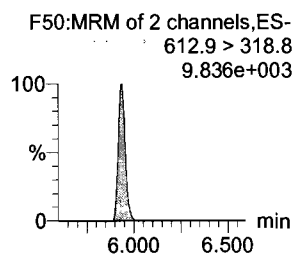
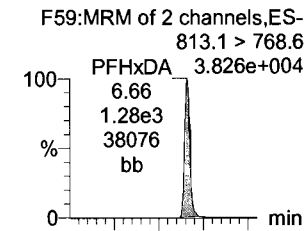
**PFTeDA**



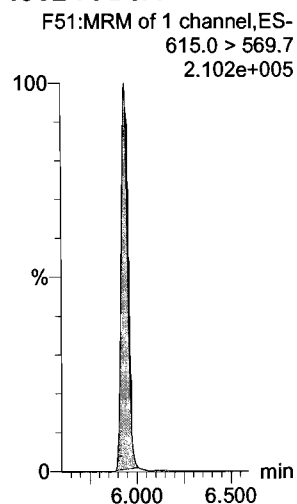
**N-EtFOSA**



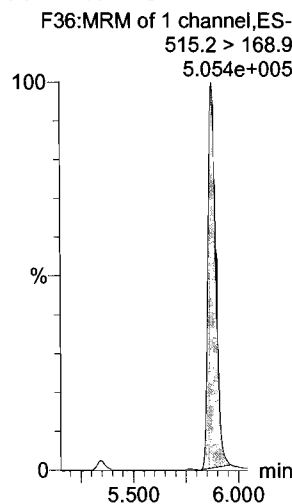
**PFHxDA**



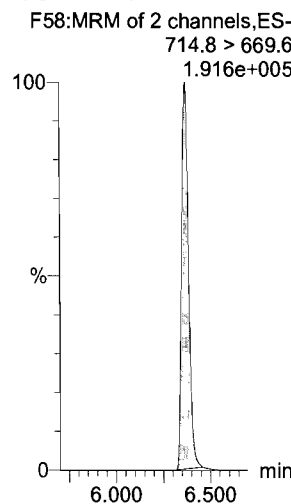
**13C2-PFDaA**



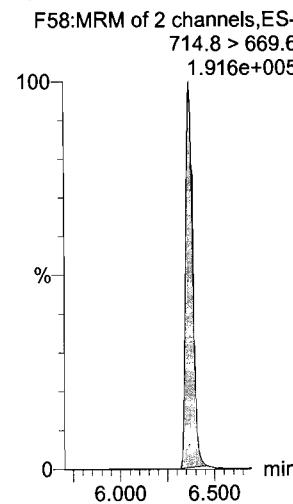
**d3-N-MeFOSA**



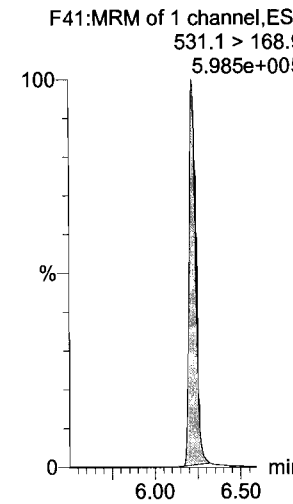
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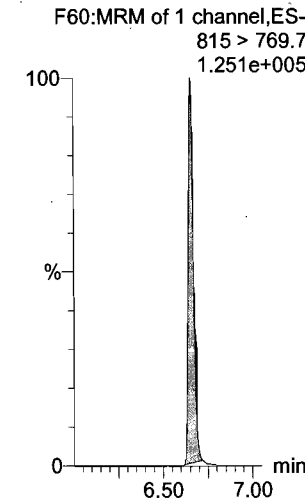
**13C2-PFTeDA**



**d5-N-ETFOSA**



**13C2-PFHxDA**

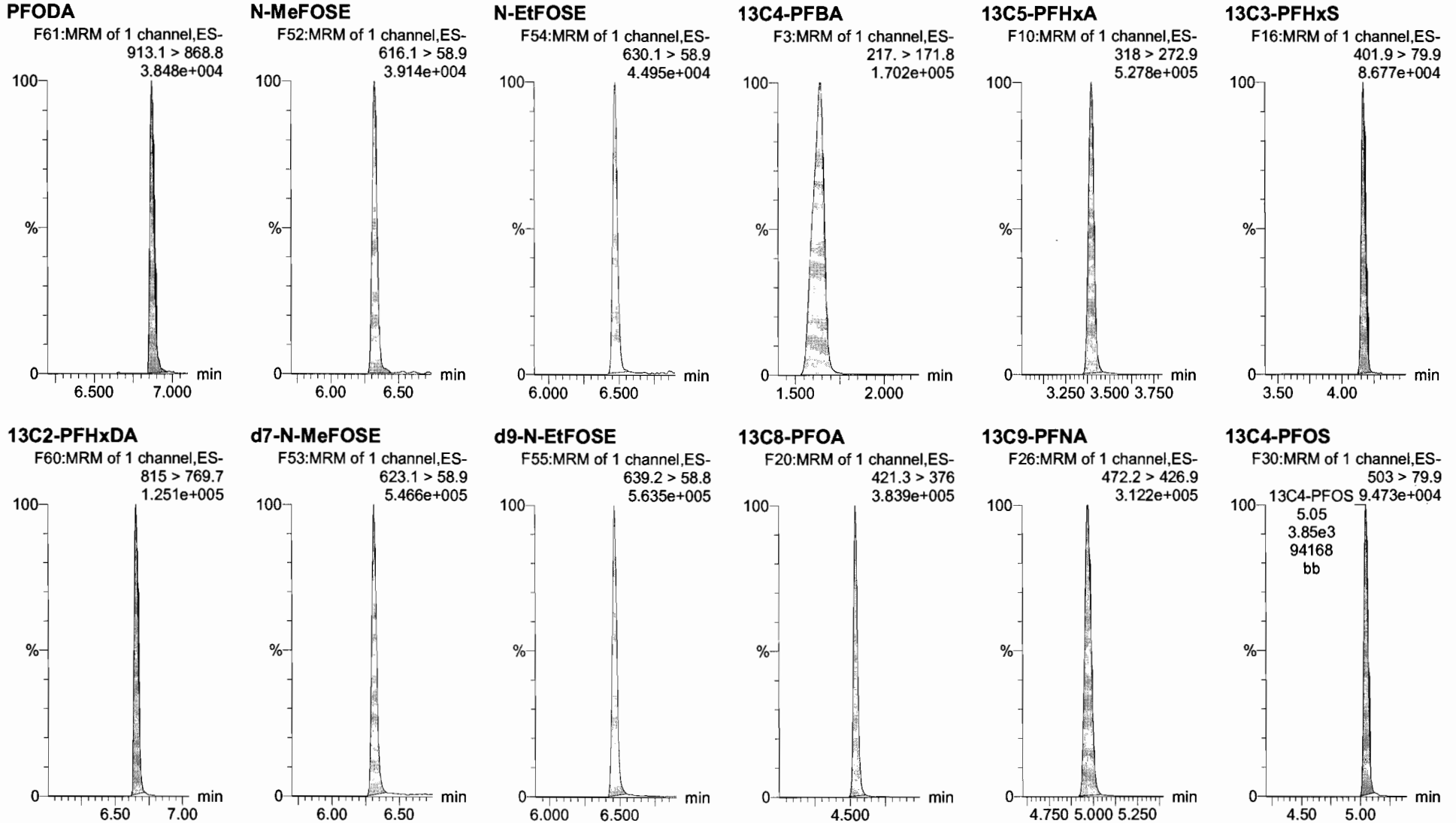


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Name: 171117M2\_5, Date: 17-Nov-2017, Time: 17:40:35, ID: ST171117M2-4 PFC CS1 17K1706, Description: PFC CS1 17K1706





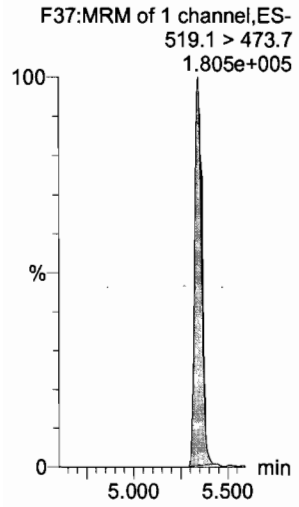
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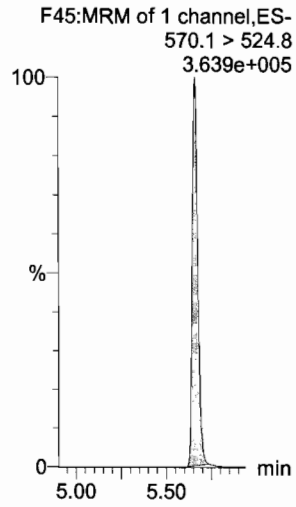
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Name: 171117M2\_5, Date: 17-Nov-2017, Time: 17:40:35, ID: ST171117M2-4 PFC CS1 17K1706, Description: PFC CS1 17K1706

13C6-PFDA



13C7-PFUdA



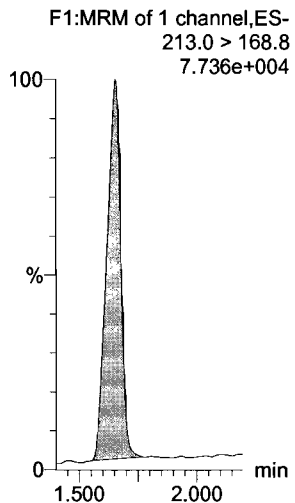
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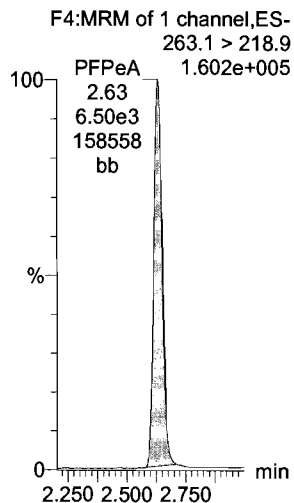
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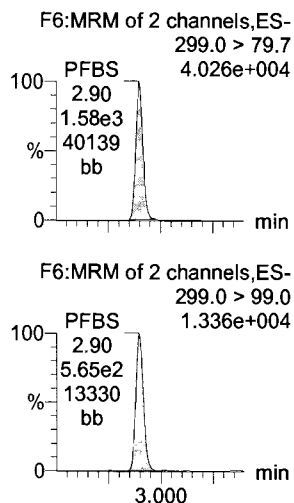
**PFBA**



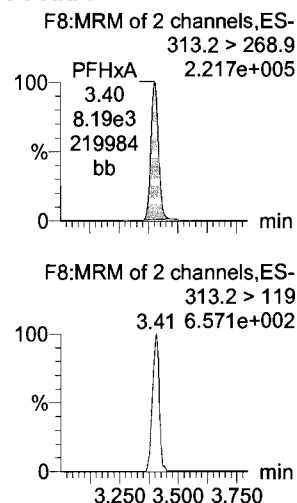
**PFPeA**



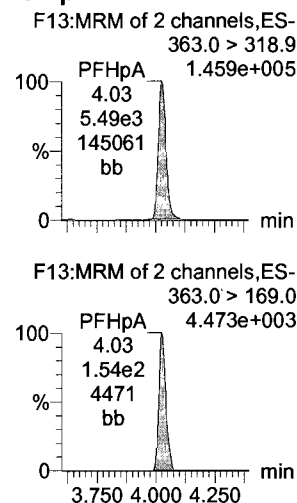
**PFBS**



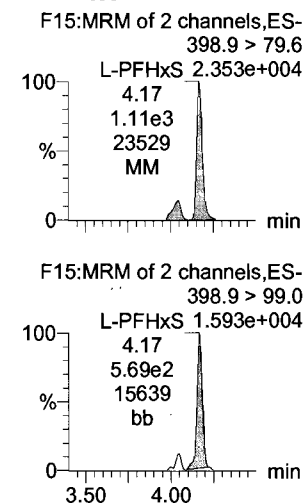
**PFHxA**



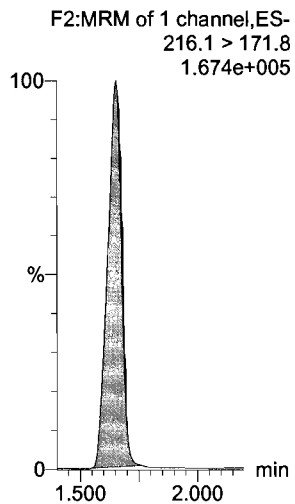
**PFHpA**



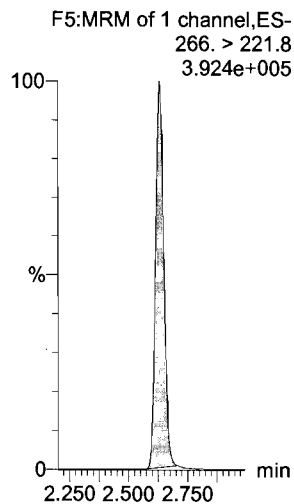
**L-PFHxS**



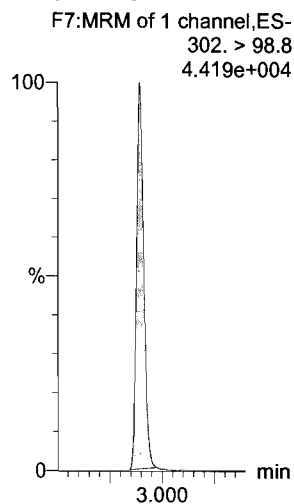
**13C3-PFBA**



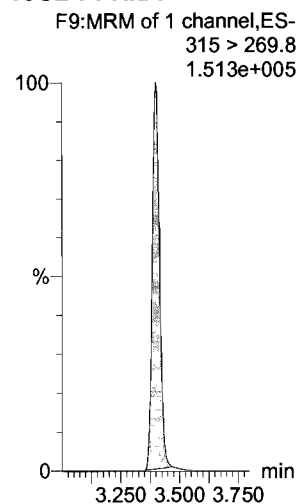
**13C3-PFPeA**



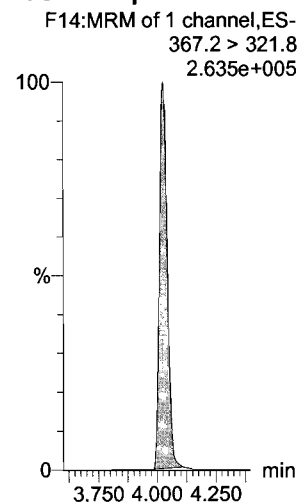
**13C3-PFBS**



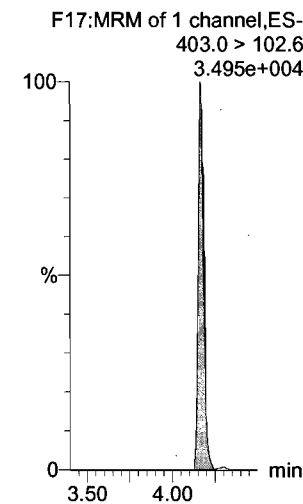
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

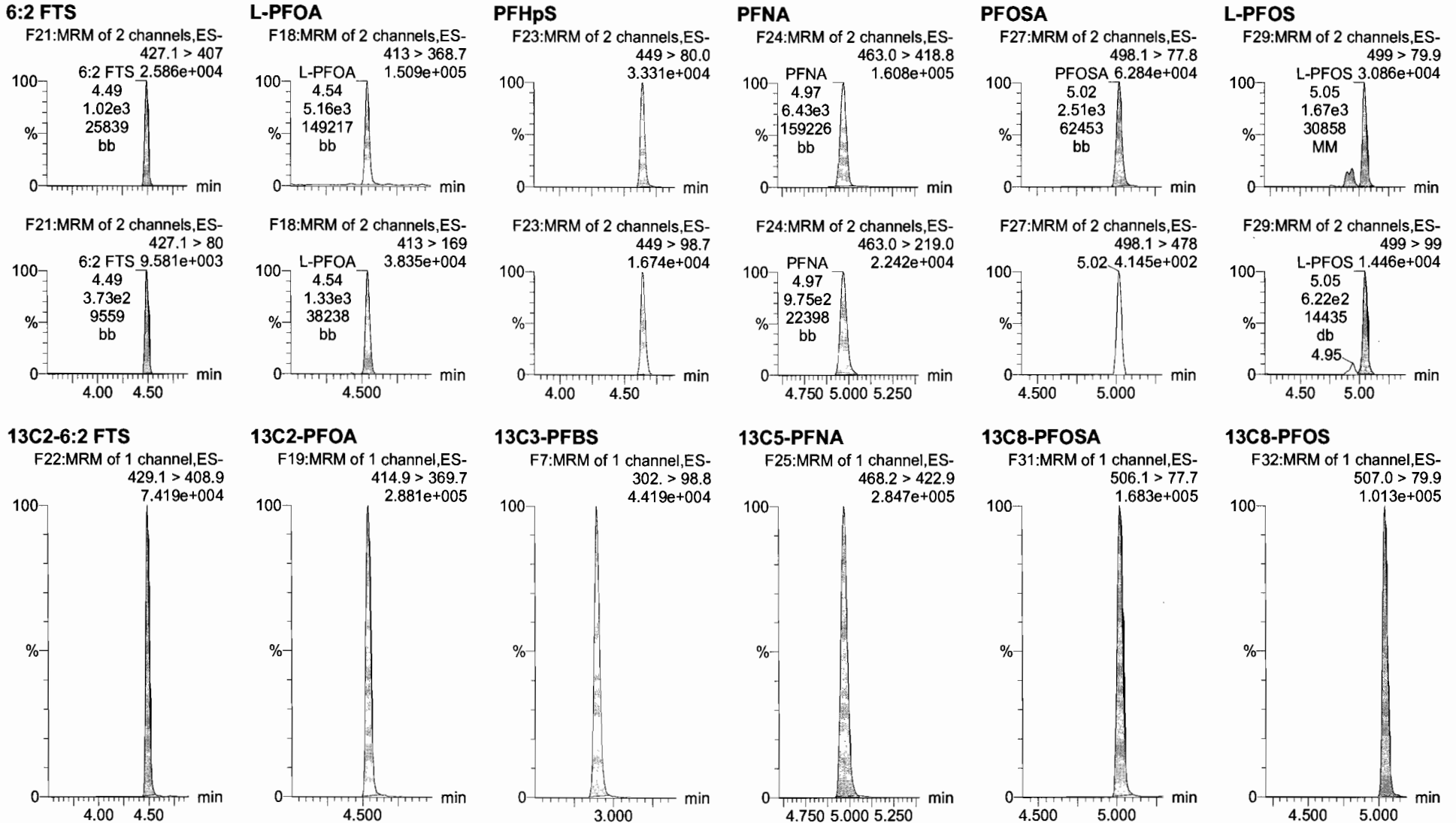


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Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_6, Date: 17-Nov-2017, Time: 17:51:45, ID: ST171117M2-5 PFC CS2 17K1707, Description: PFC CS2 17K1707

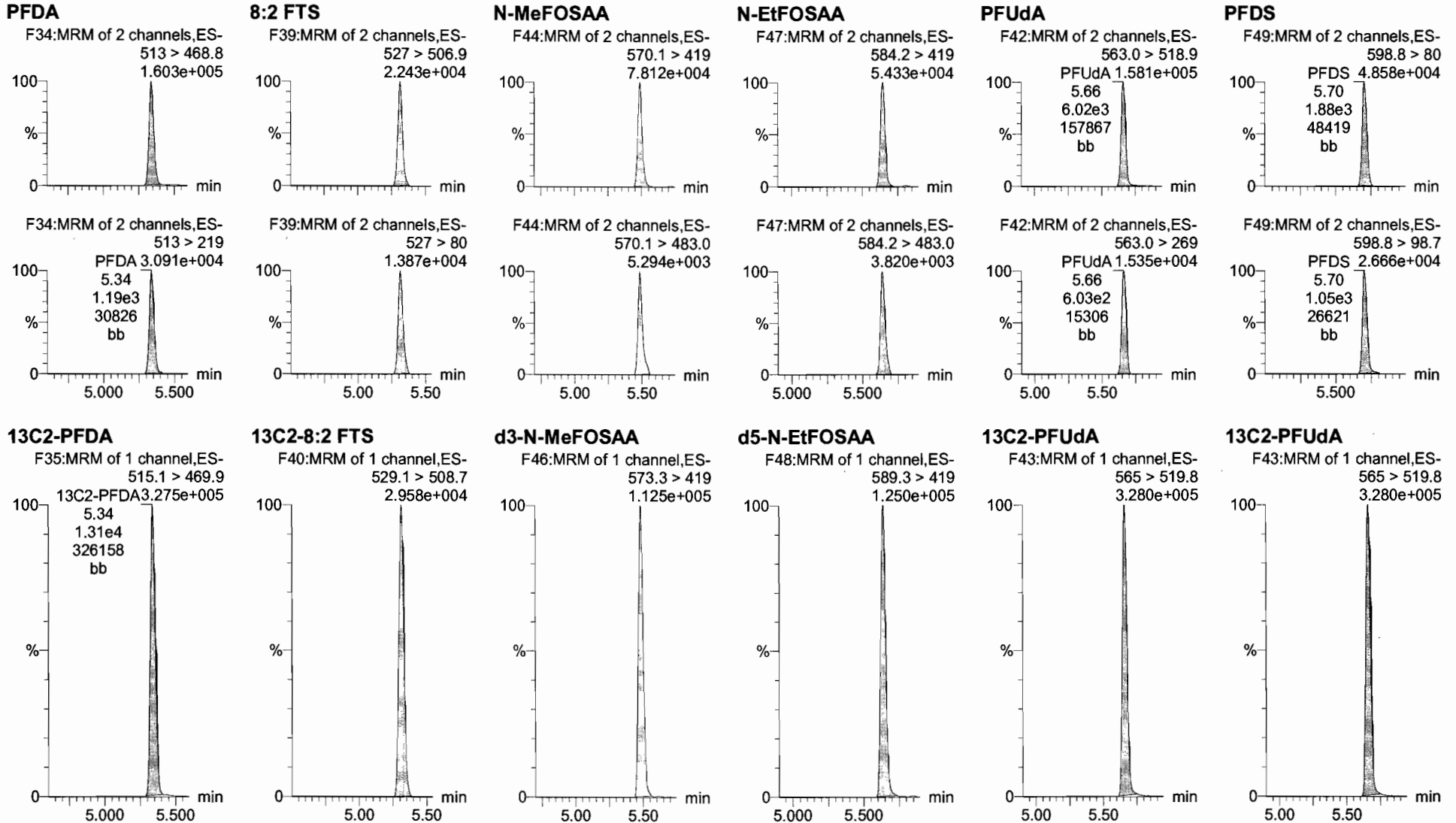


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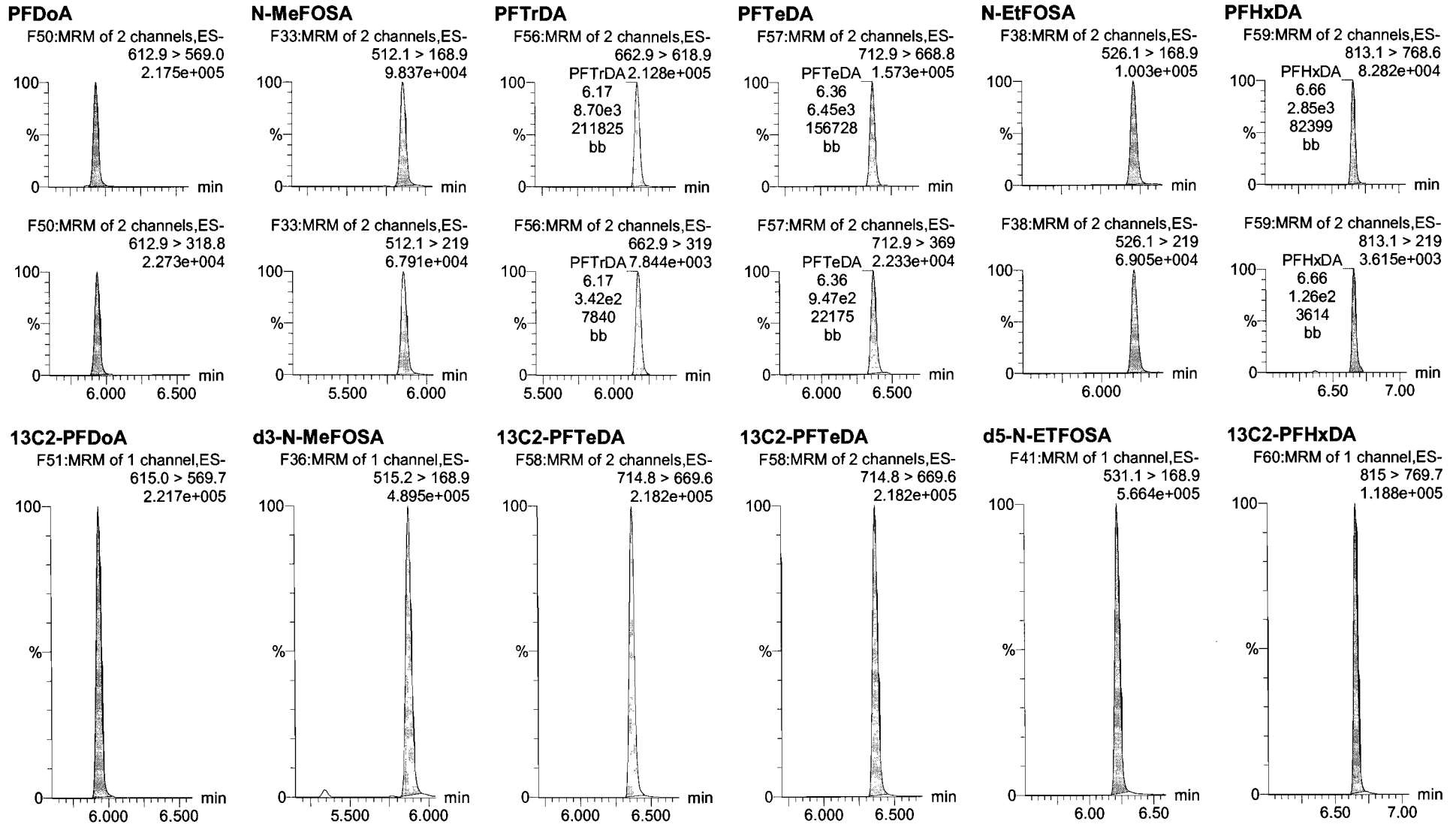


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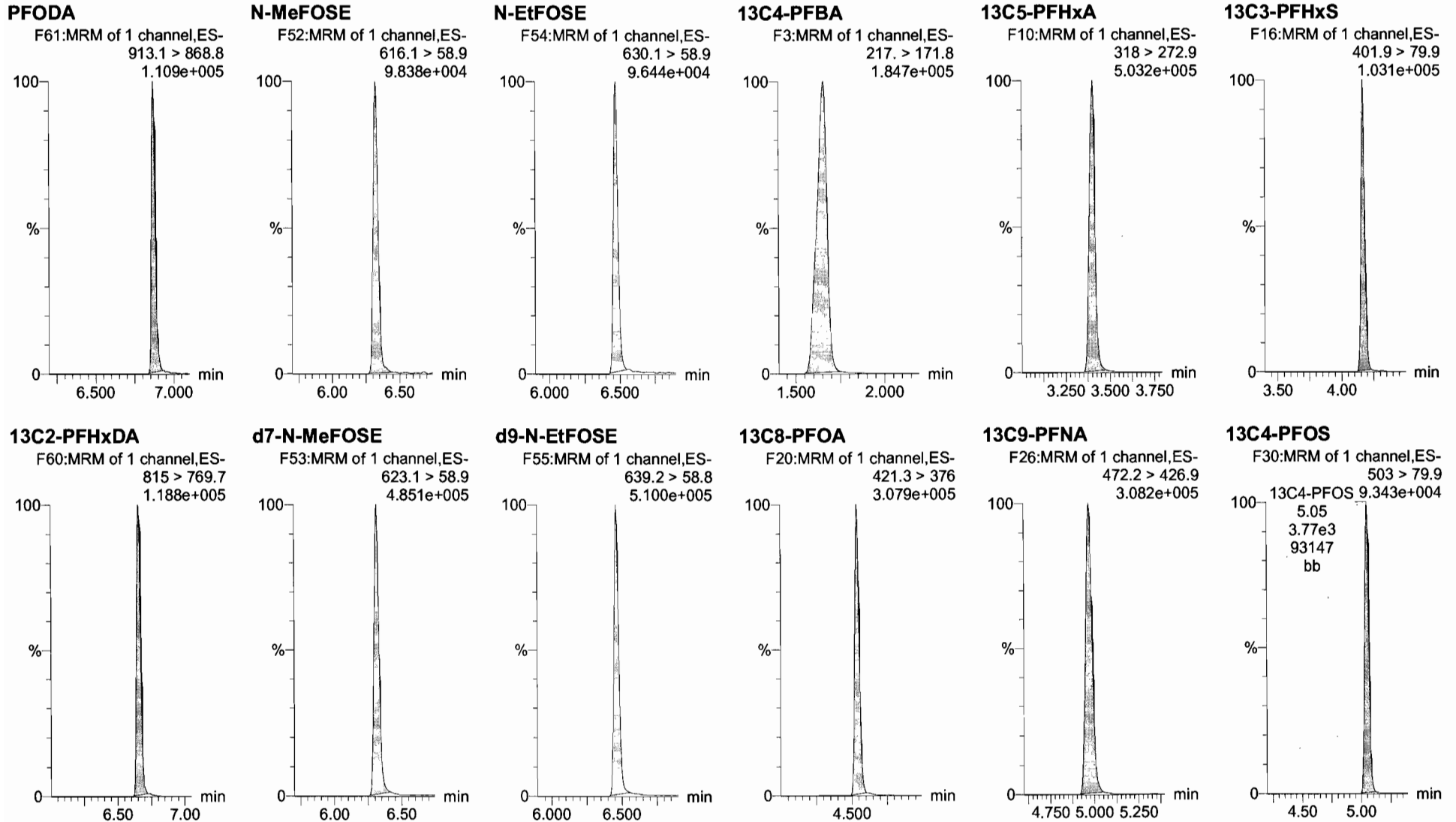


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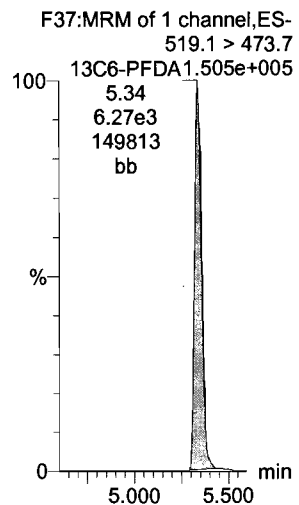
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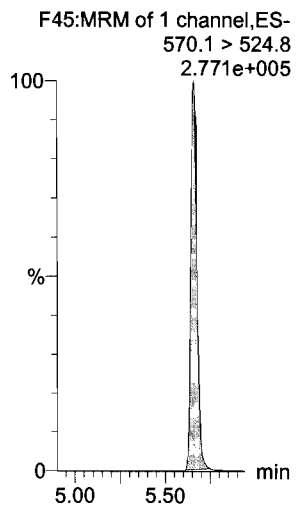
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**13C6-PFDA**



**13C7-PFUdA**

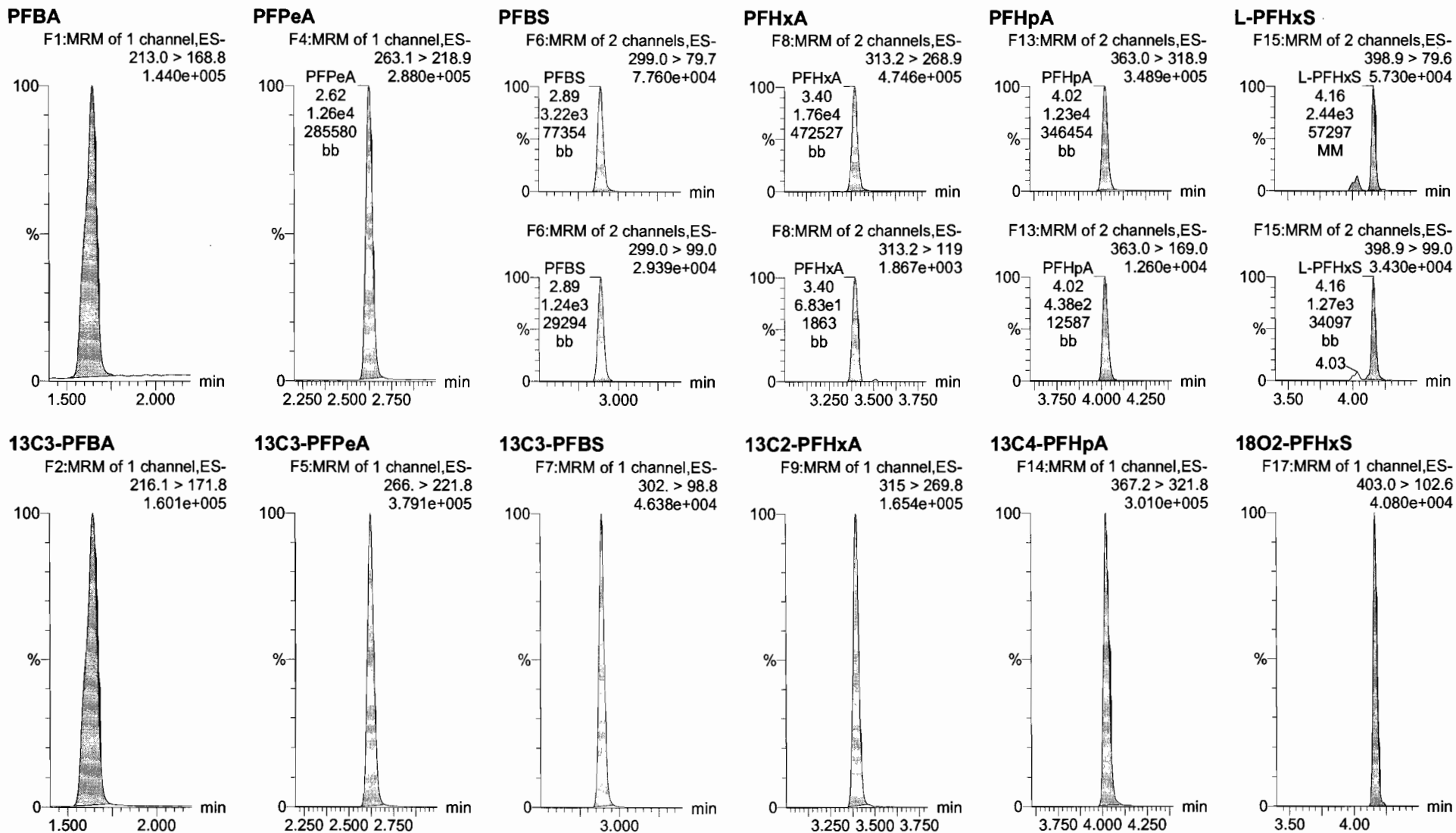


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Name: 171117M2\_7, Date: 17-Nov-2017, Time: 18:03:00, ID: ST171117M2-6 PFC CS3 17K1708, Description: PFC CS3 17K1708





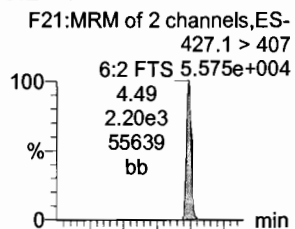
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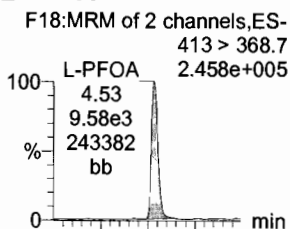
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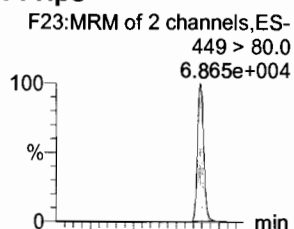
**6:2 FTS**



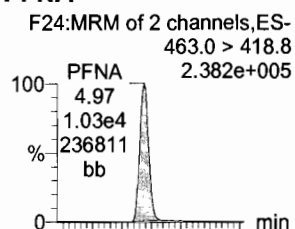
**L-PFOA**



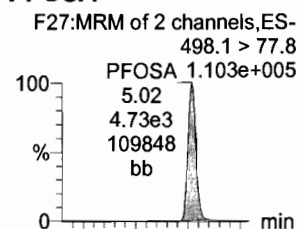
**PFHps**



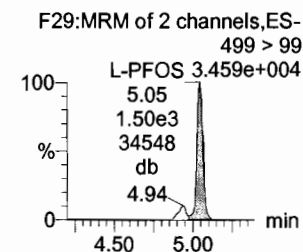
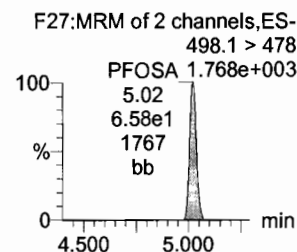
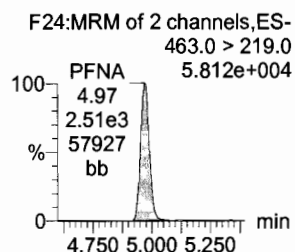
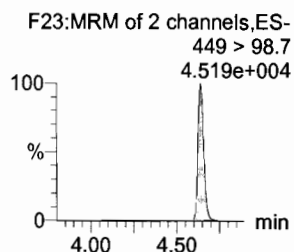
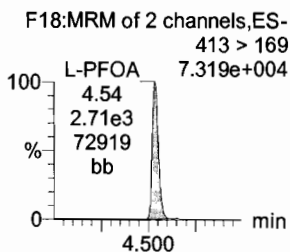
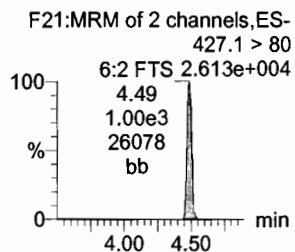
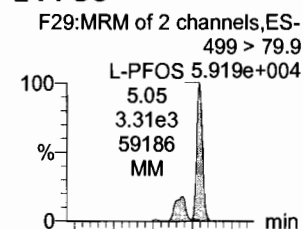
**PFNA**



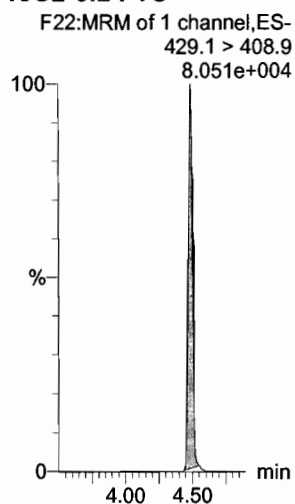
**PFOSA**



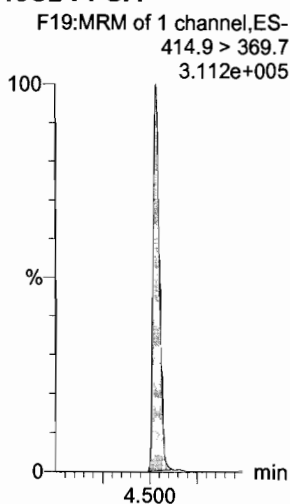
**L-PFOS**



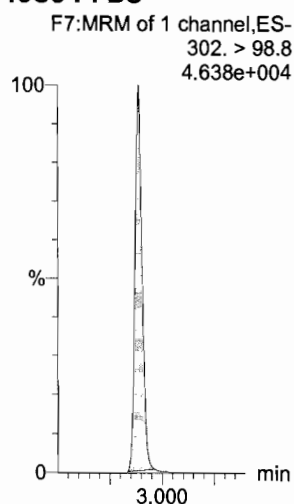
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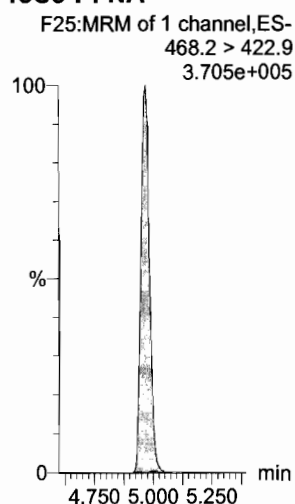
**13C2-PFOA**



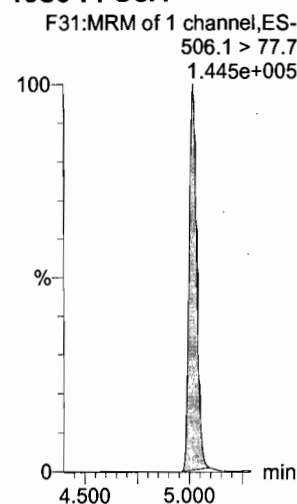
**13C3-PFBS**



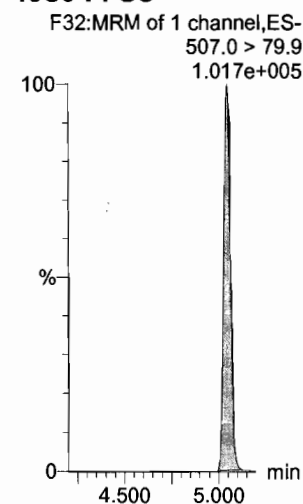
**13C5-PFNA**



**13C8-PFOSA**



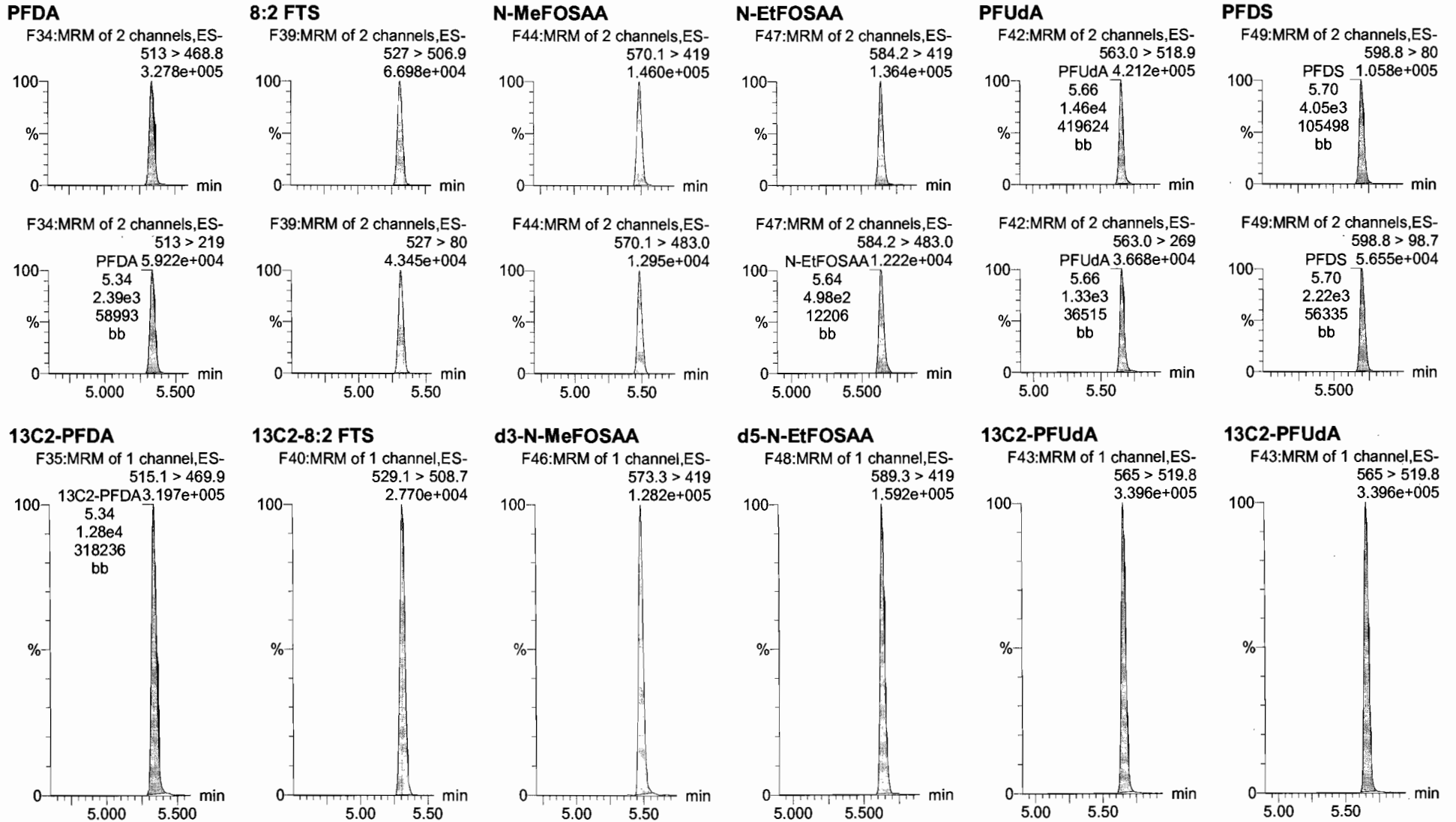
**13C8-PFOS**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

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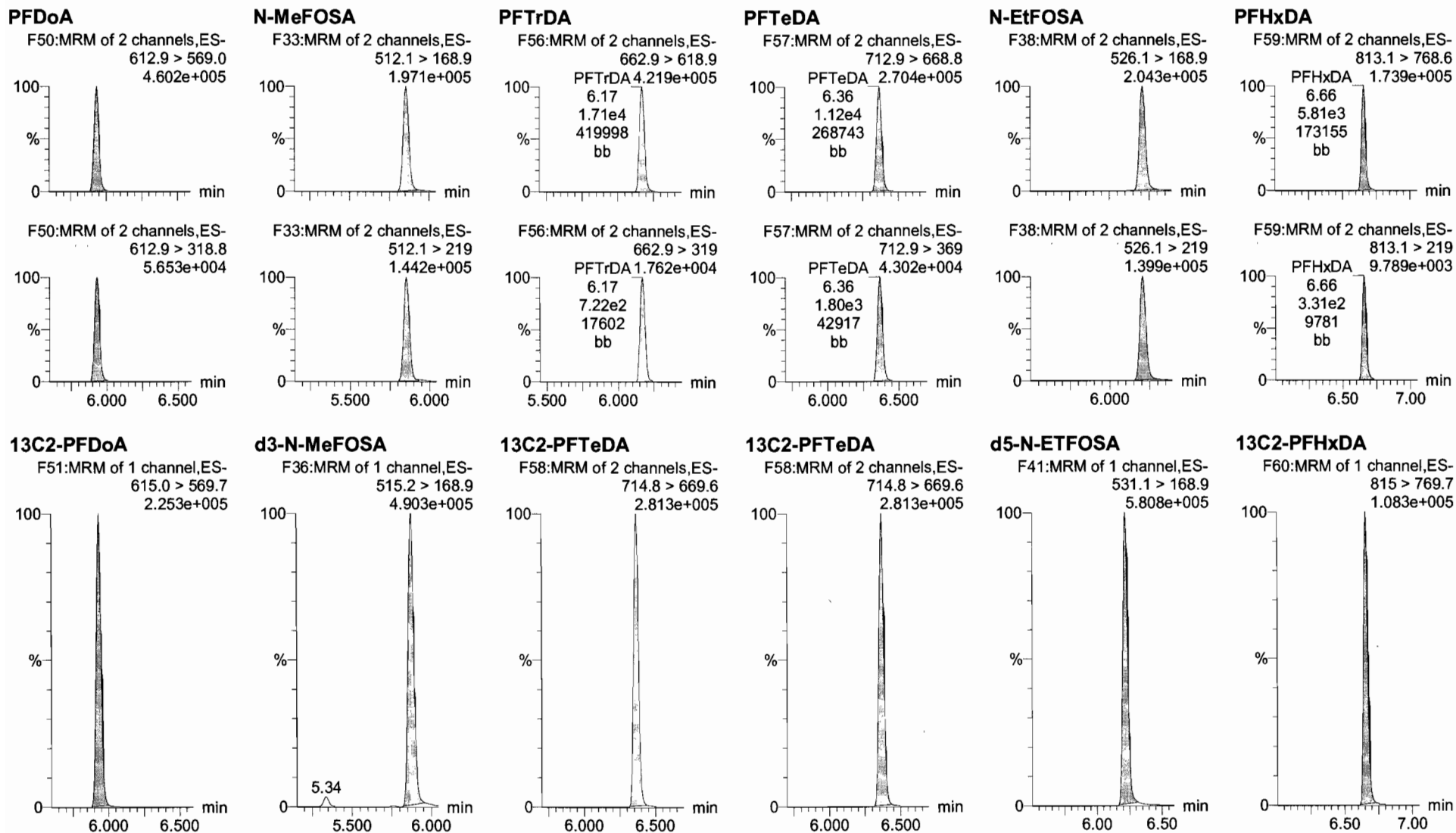


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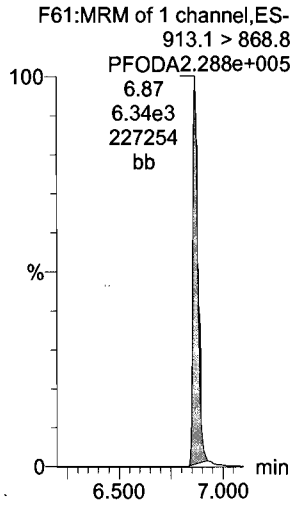
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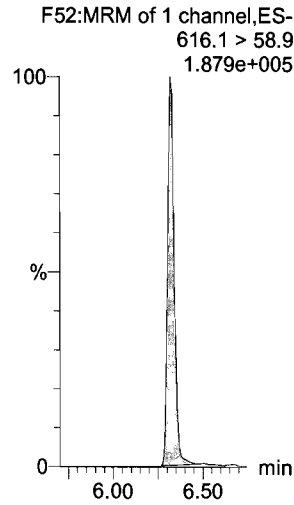
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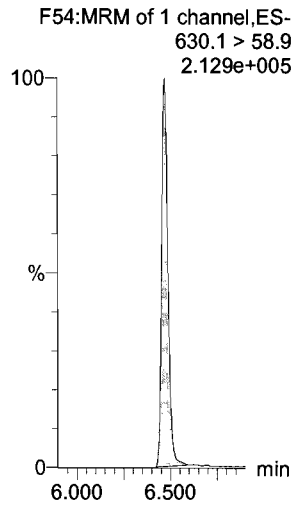
**PFODA**



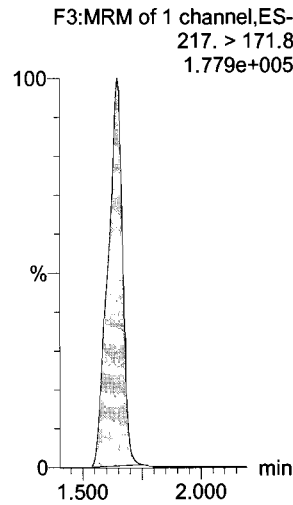
**N-MeFOSE**



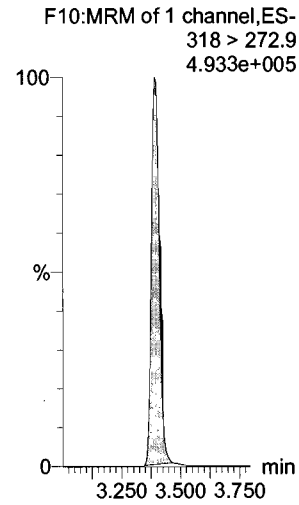
**N-EtFOSE**



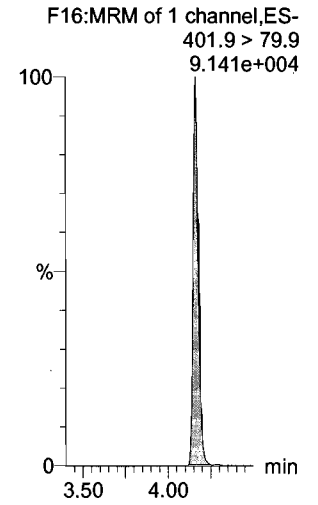
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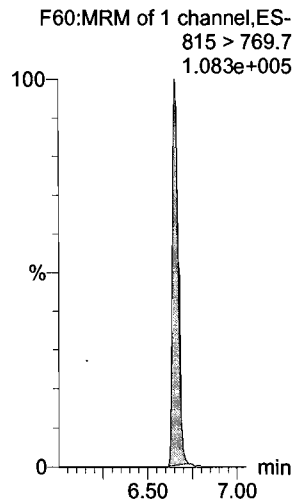
**13C5-PFHxA**



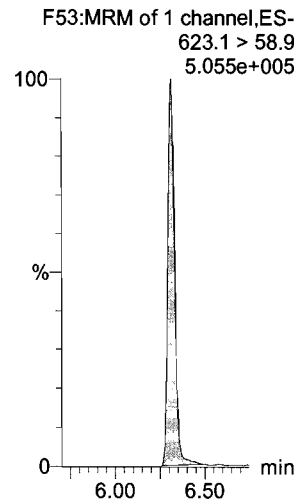
**13C3-PFHxS**



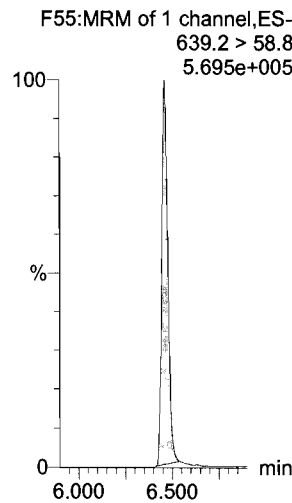
**13C2-PFHxDA**



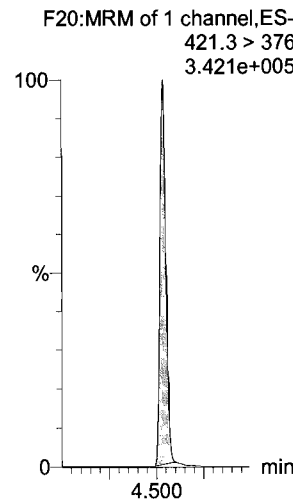
**d7-N-MeFOSE**



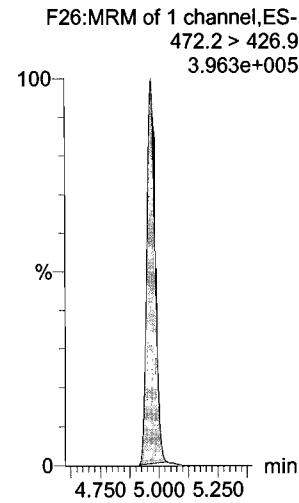
**d9-N-EtFOSE**



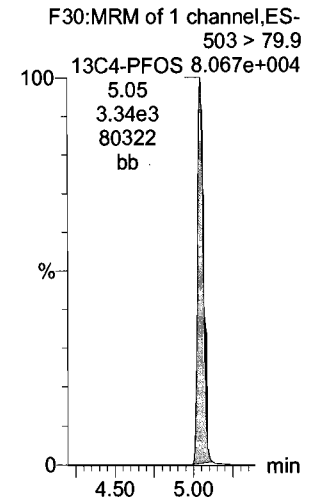
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

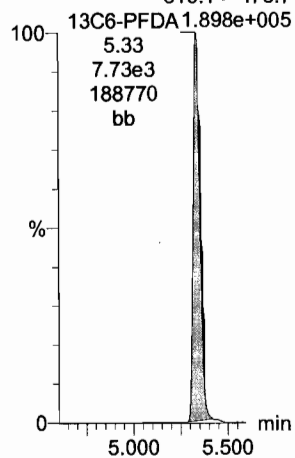
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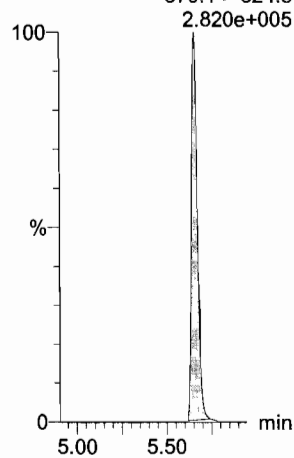
13C6-PFDA

F37:MRM of 1 channel,ES-  
519.1 > 473.7



13C7-PFUdA

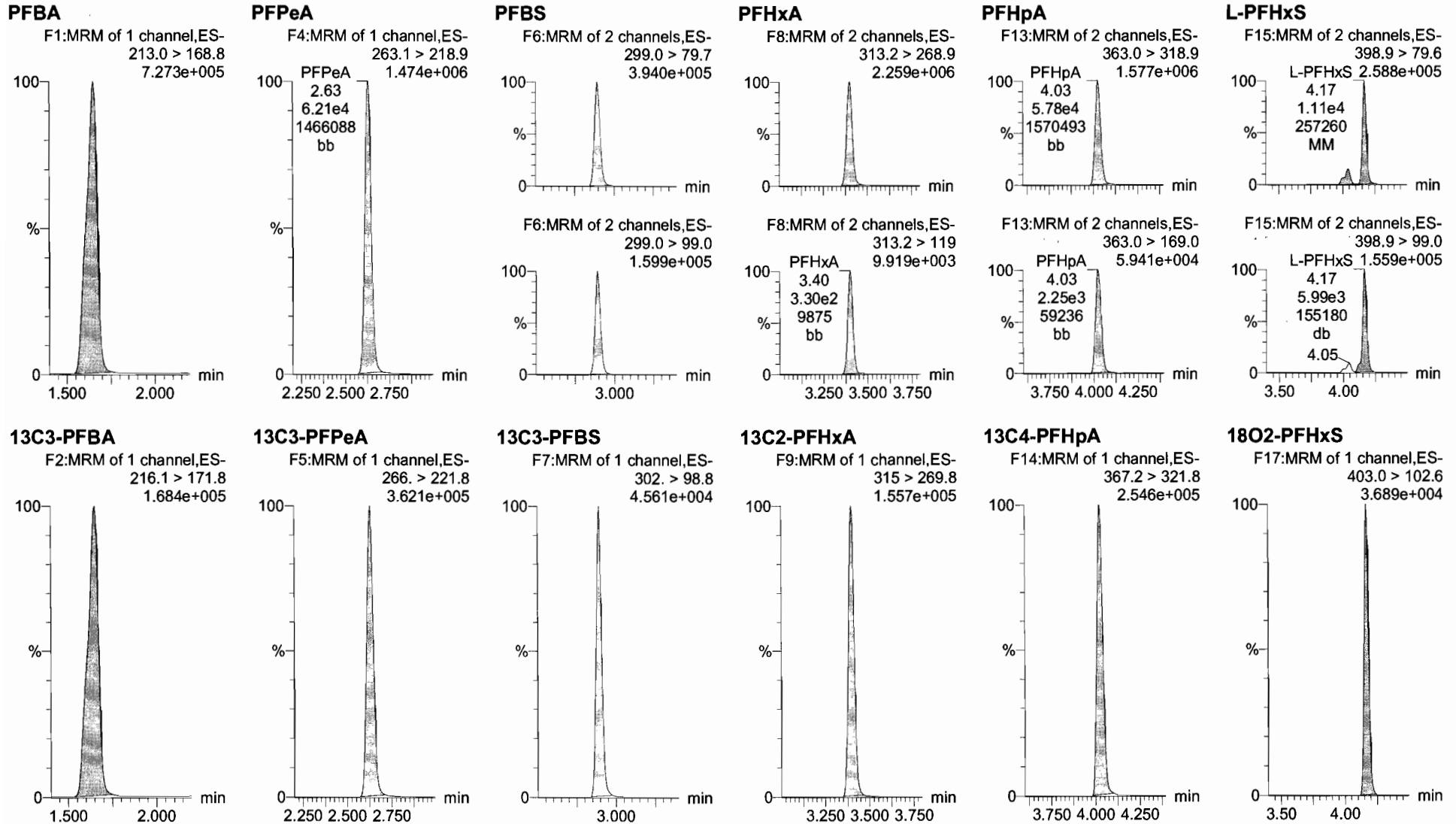
F45:MRM of 1 channel,ES-  
570.1 > 524.8



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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Name: 171117M2\_8, Date: 17-Nov-2017, Time: 18:14:08, ID: ST171117M2-7 PFC CS4 17K1709, Description: PFC CS4 17K1709

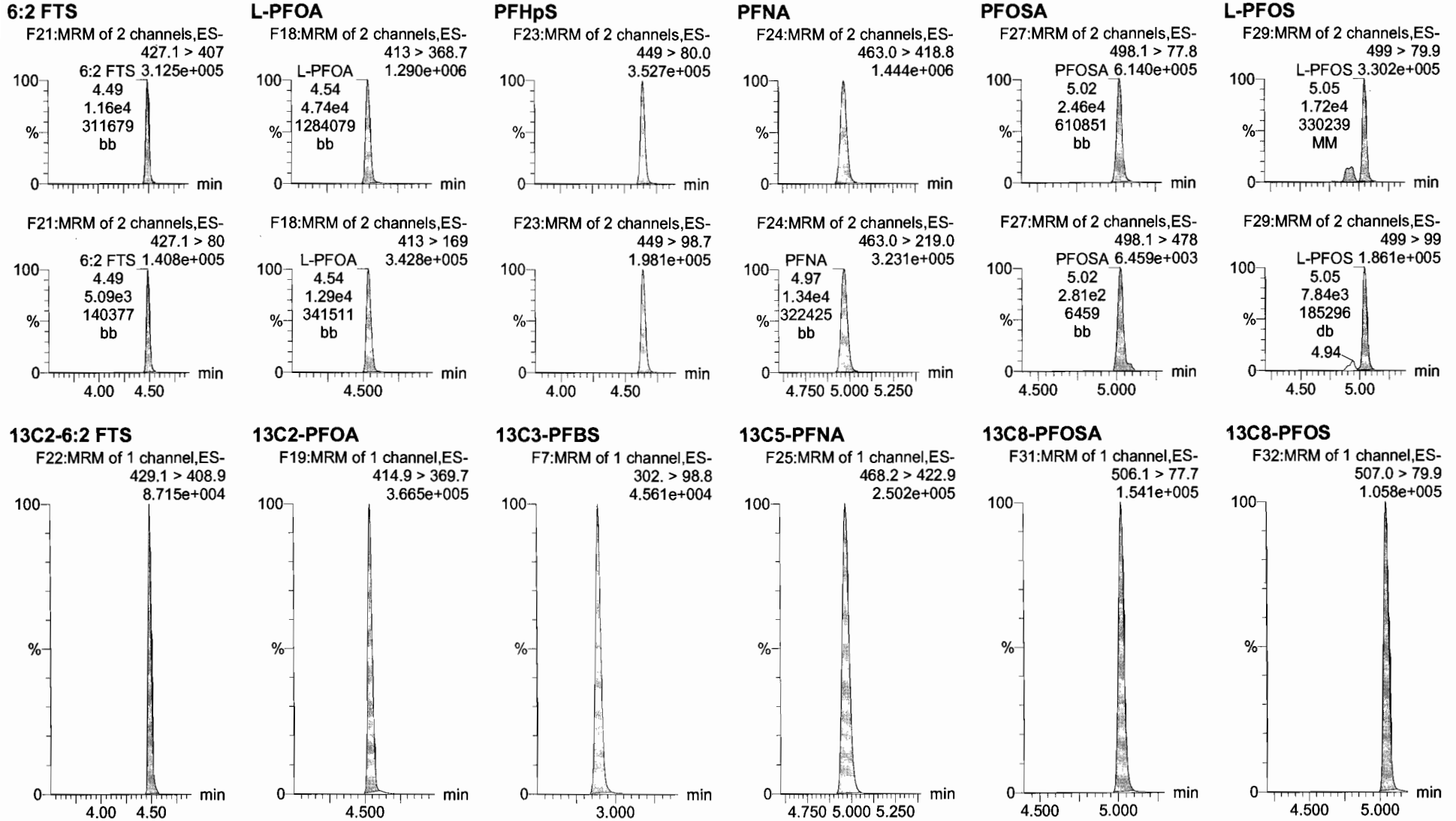


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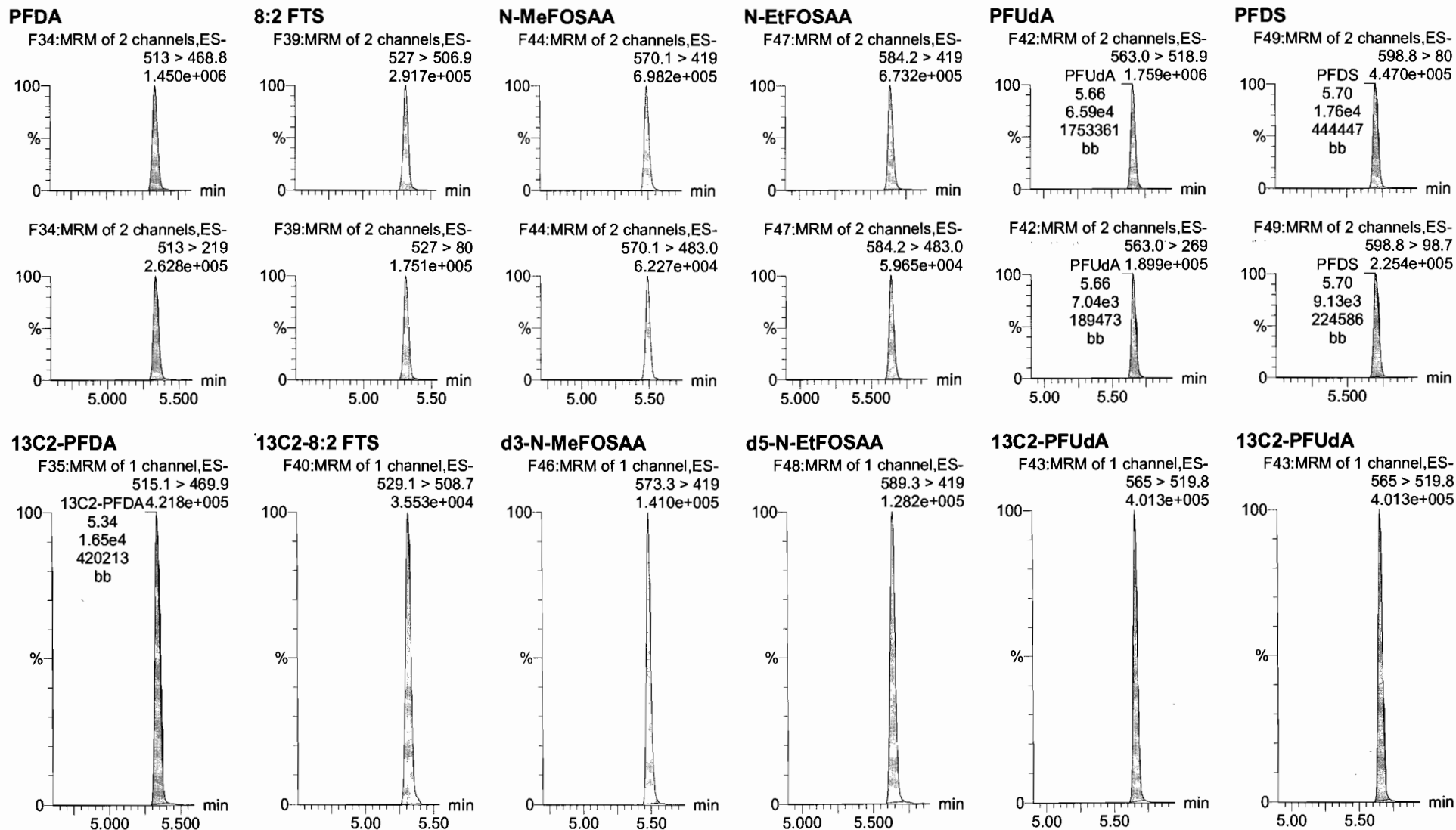


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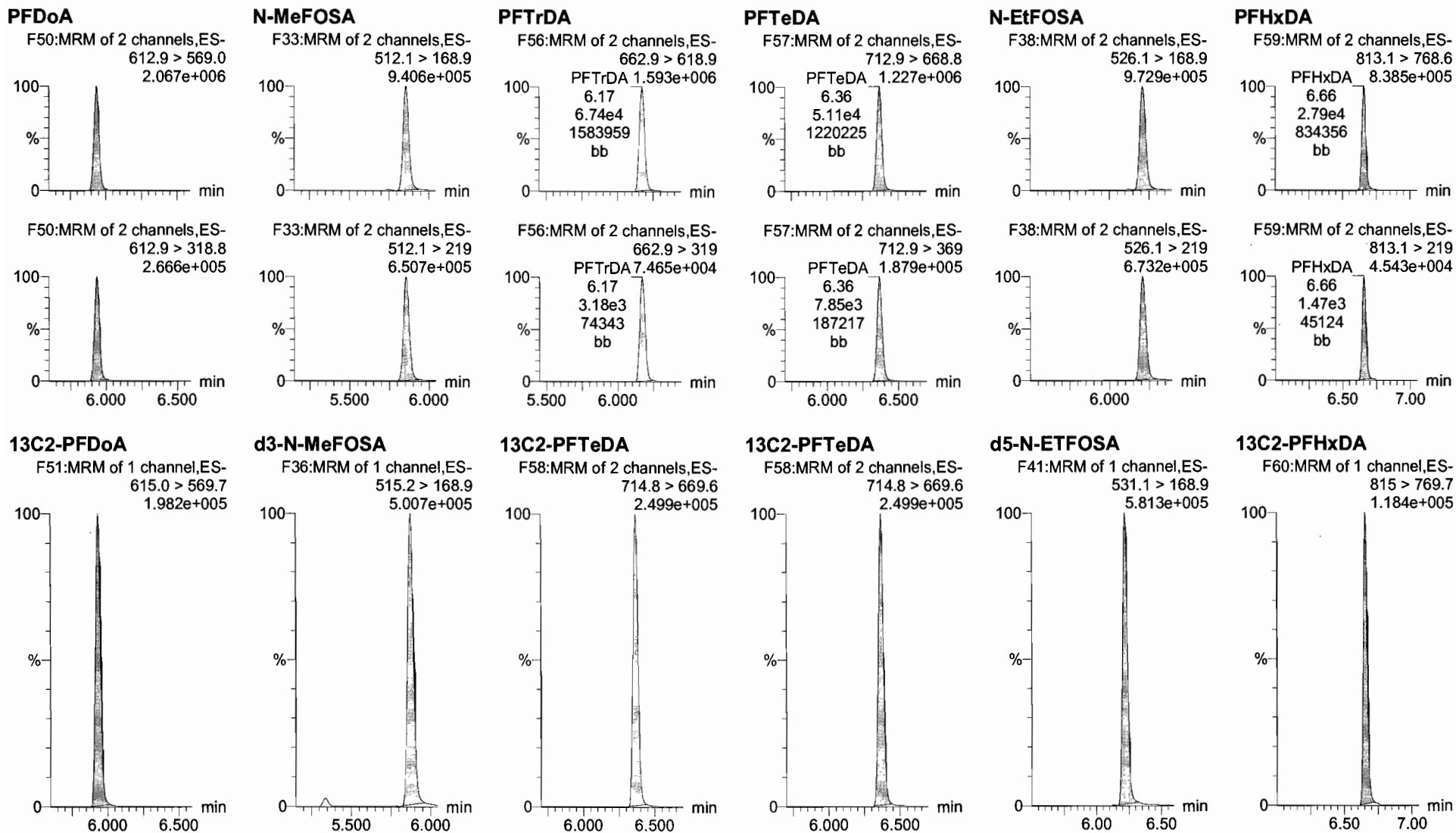


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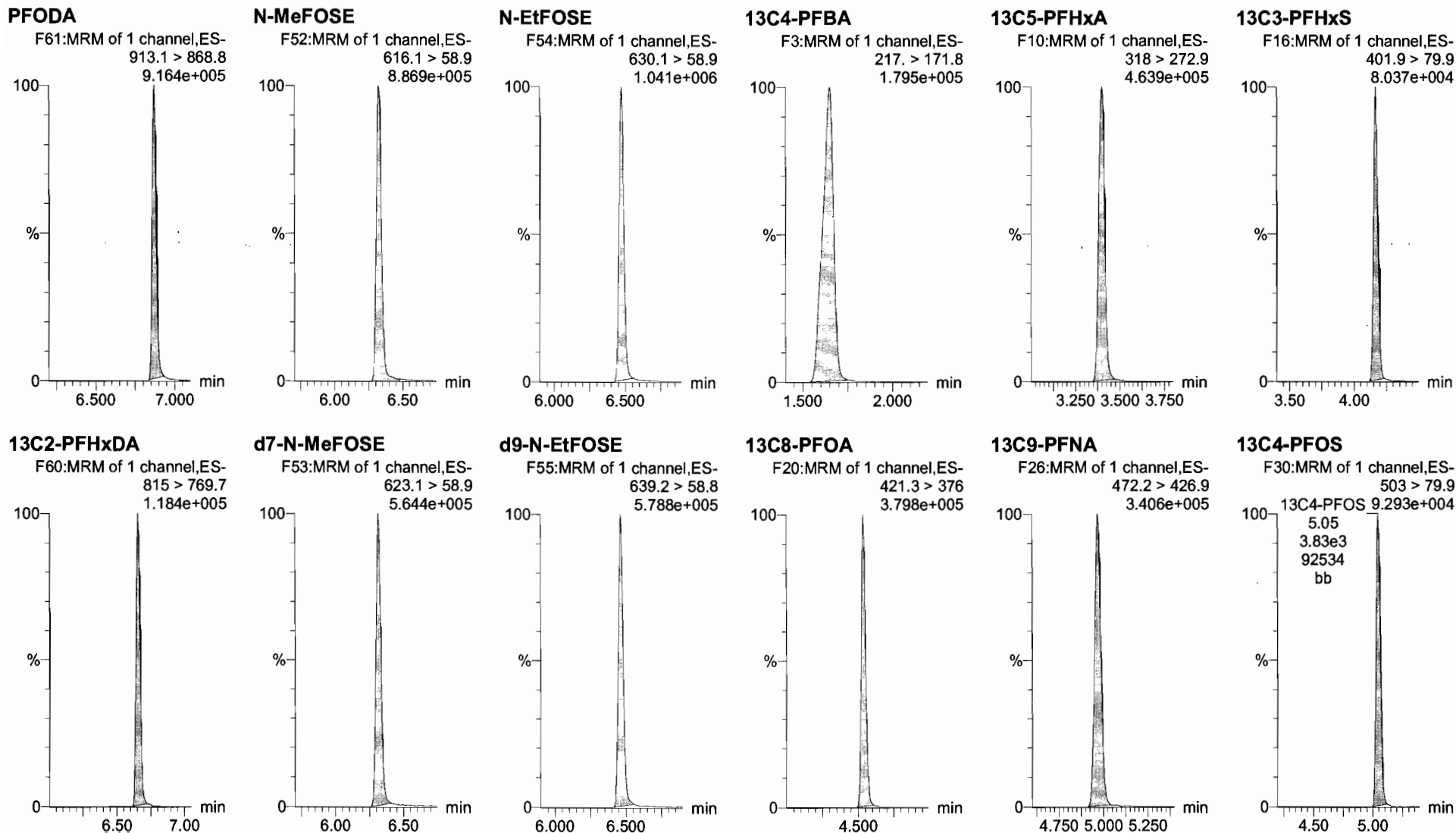


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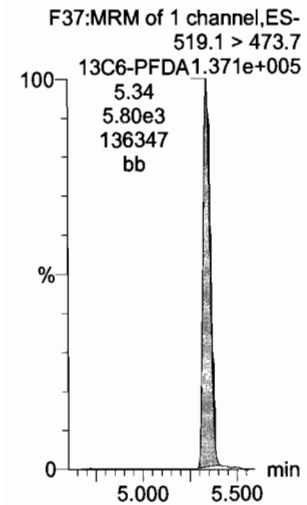
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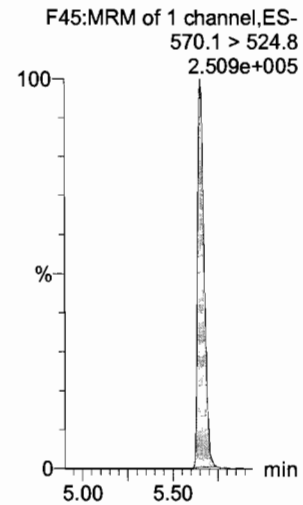
Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

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13C6-PFDA



13C7-PFUDa



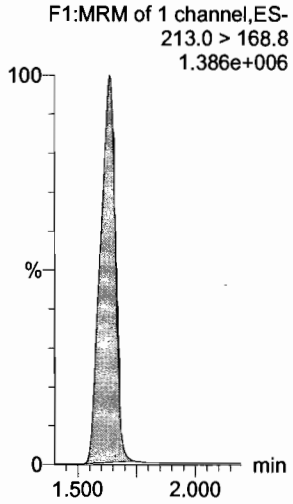
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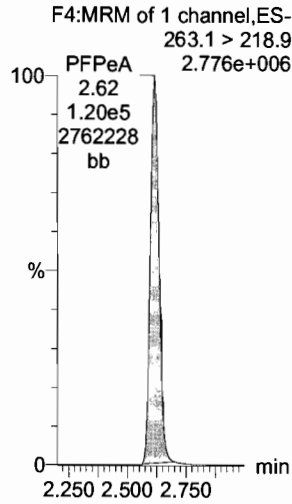
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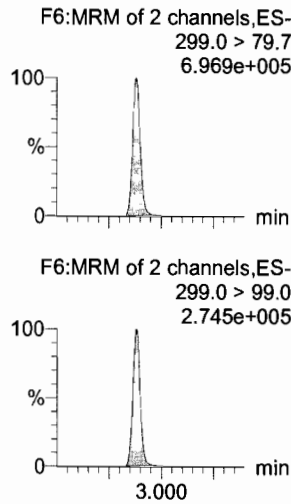
**PFBA**



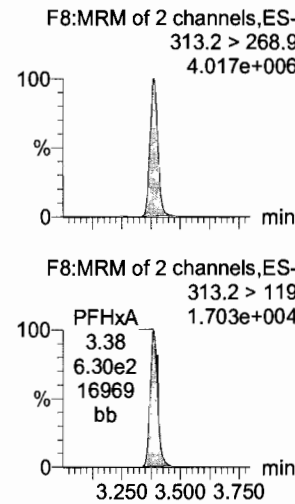
**PFPeA**



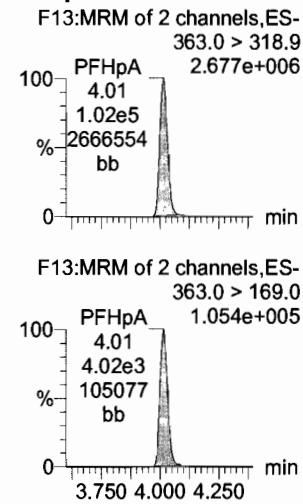
**PFBS**



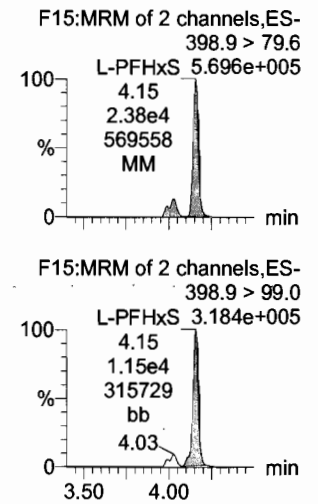
**PFHxA**



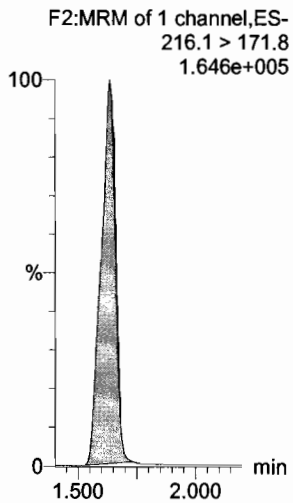
**PFHpA**



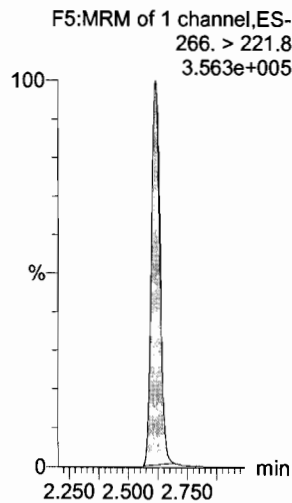
**L-PFHxS**



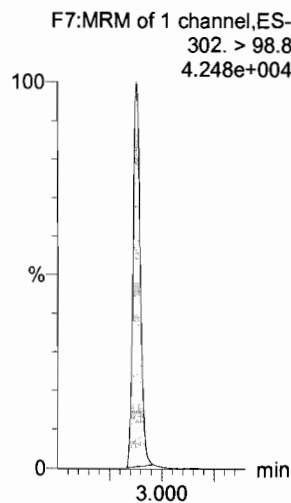
**13C3-PFBA**



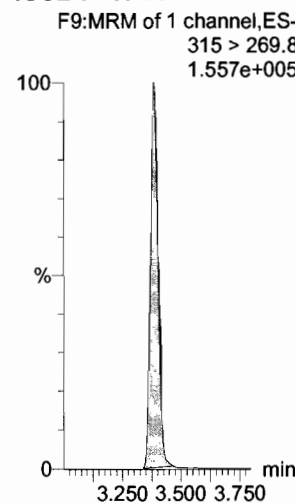
**13C3-PFPeA**



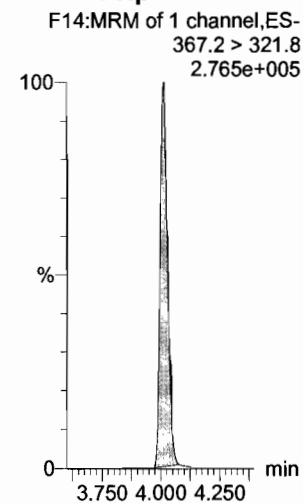
**13C3-PFBS**



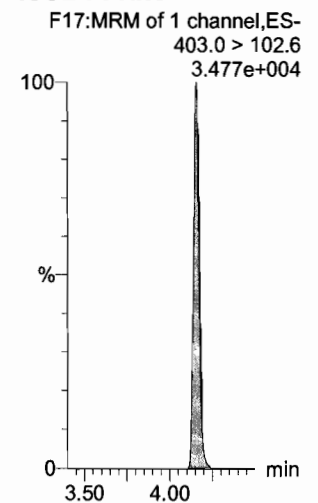
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



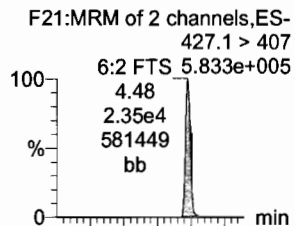
Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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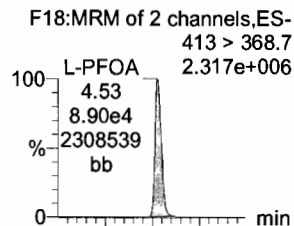
Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_9, Date: 17-Nov-2017, Time: 18:25:19, ID: ST171117M2-8 PFC CS5 17K1710, Description: PFC CS5 17K1710

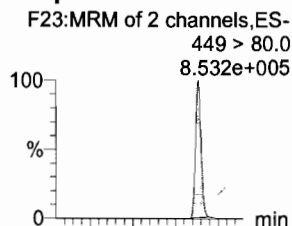
**6:2 FTS**



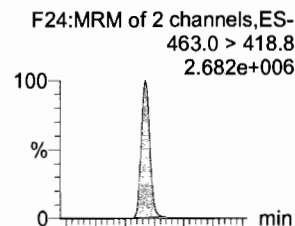
**L-PFOA**



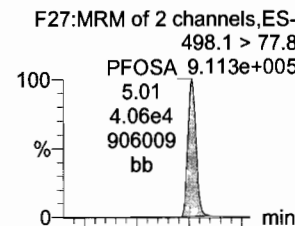
**PFHpS**



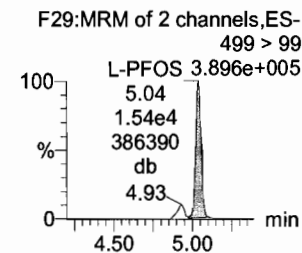
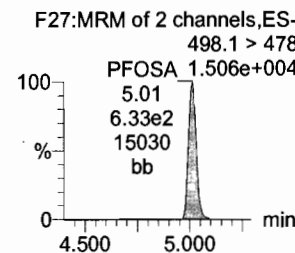
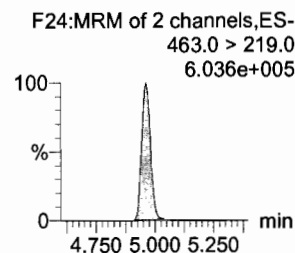
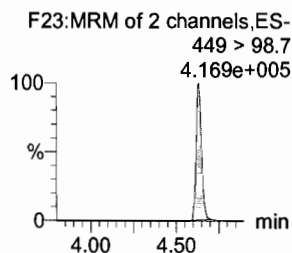
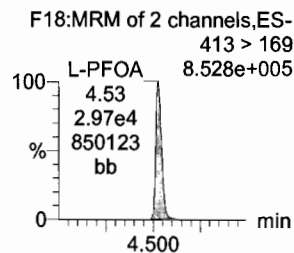
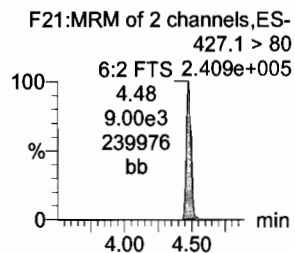
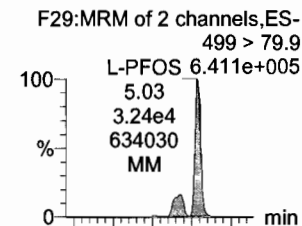
**PFNA**



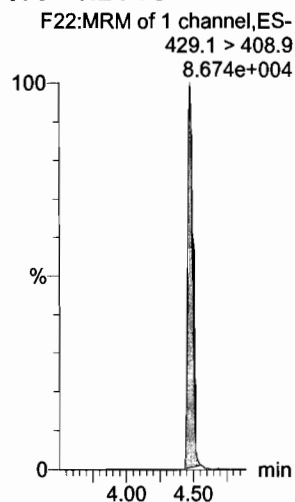
**PFOSA**



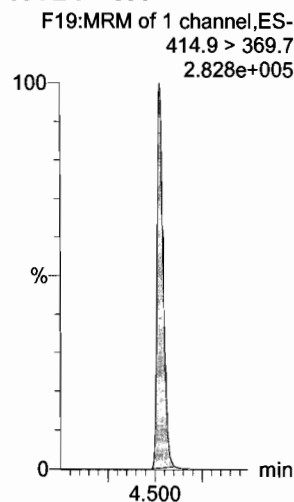
**L-PFOS**



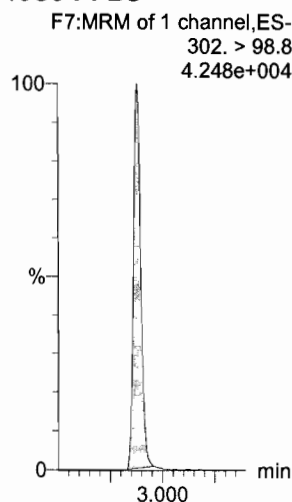
**13C2-6:2 FTS**



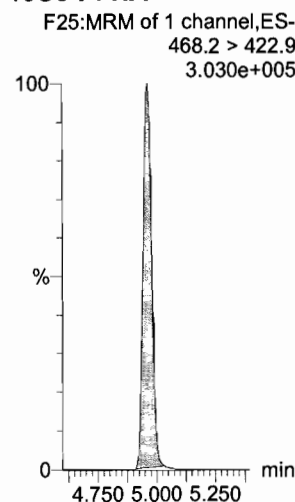
**13C2-PFOA**



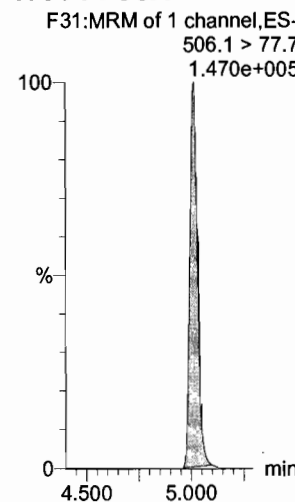
**13C3-PFBS**



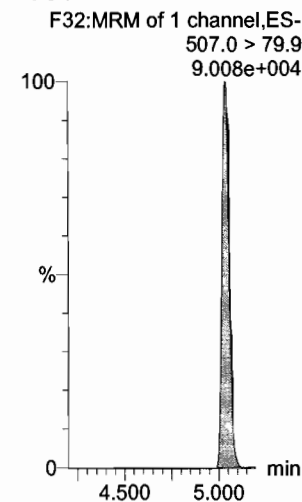
**13C5-PFNA**



**13C8-PFOSA**



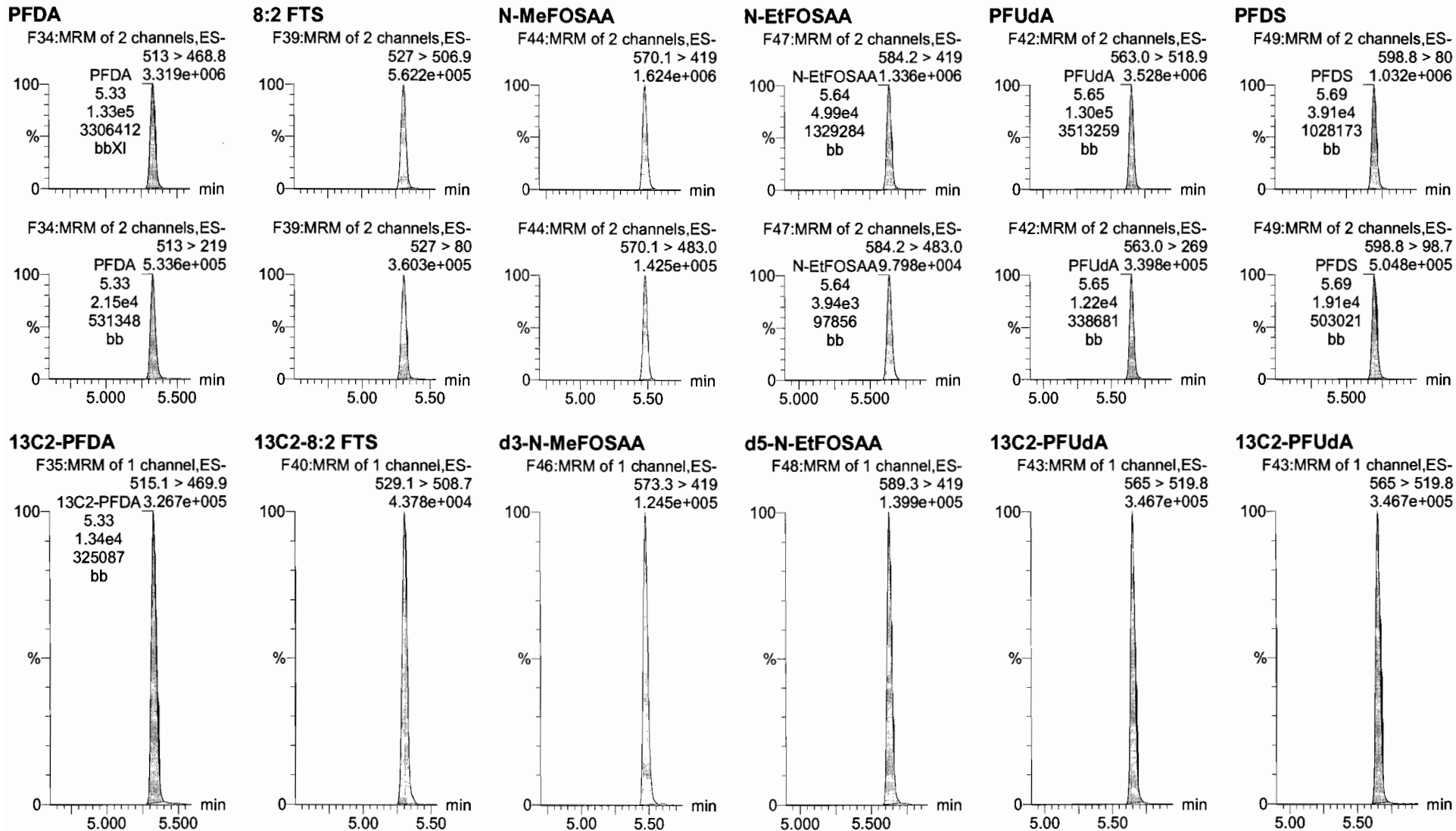
**13C8-PFOS**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time  
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Name: 171117M2\_9, Date: 17-Nov-2017, Time: 18:25:19, ID: ST171117M2-8 PFC CS5 17K1710, Description: PFC CS5 17K1710

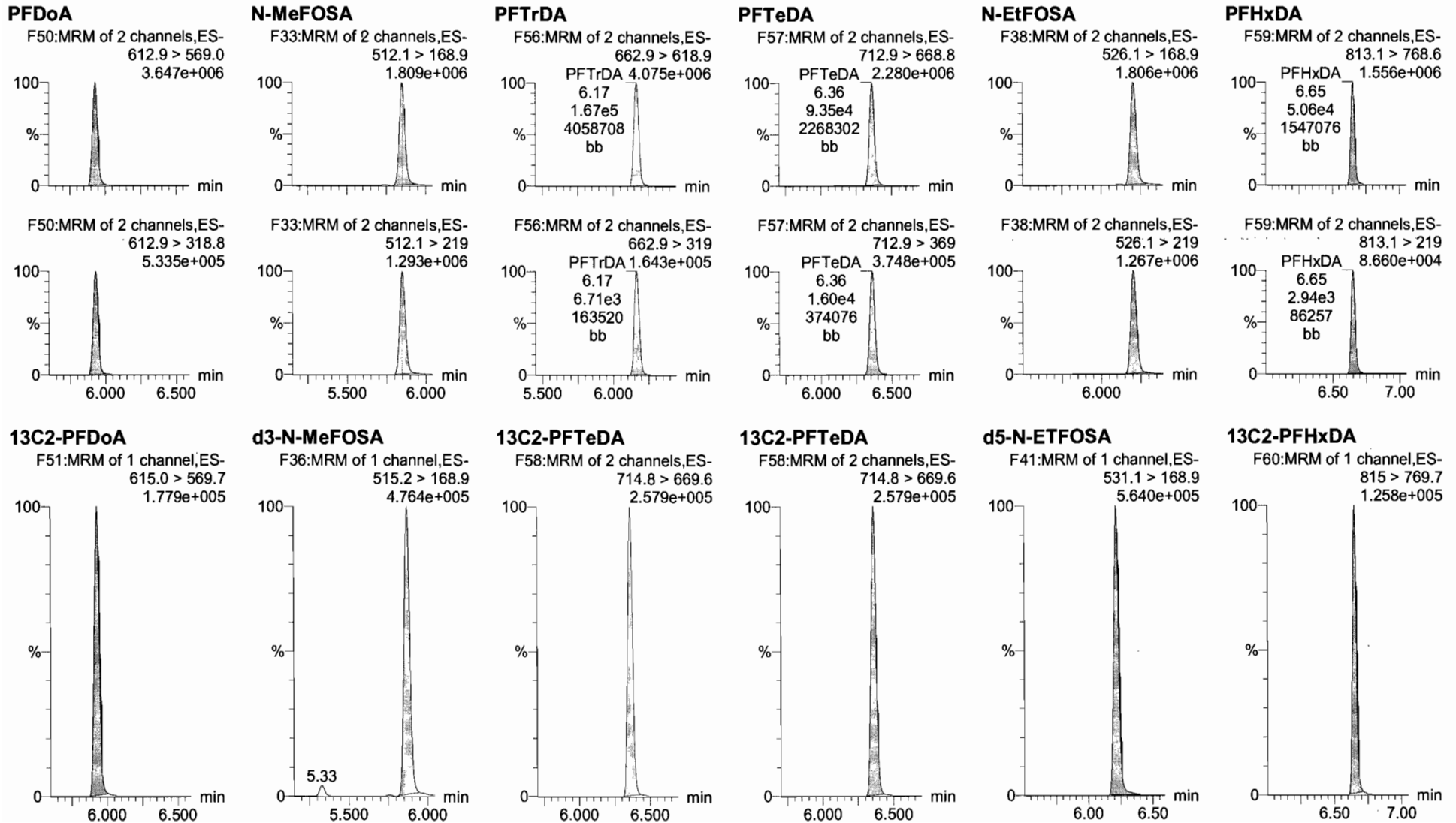


Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

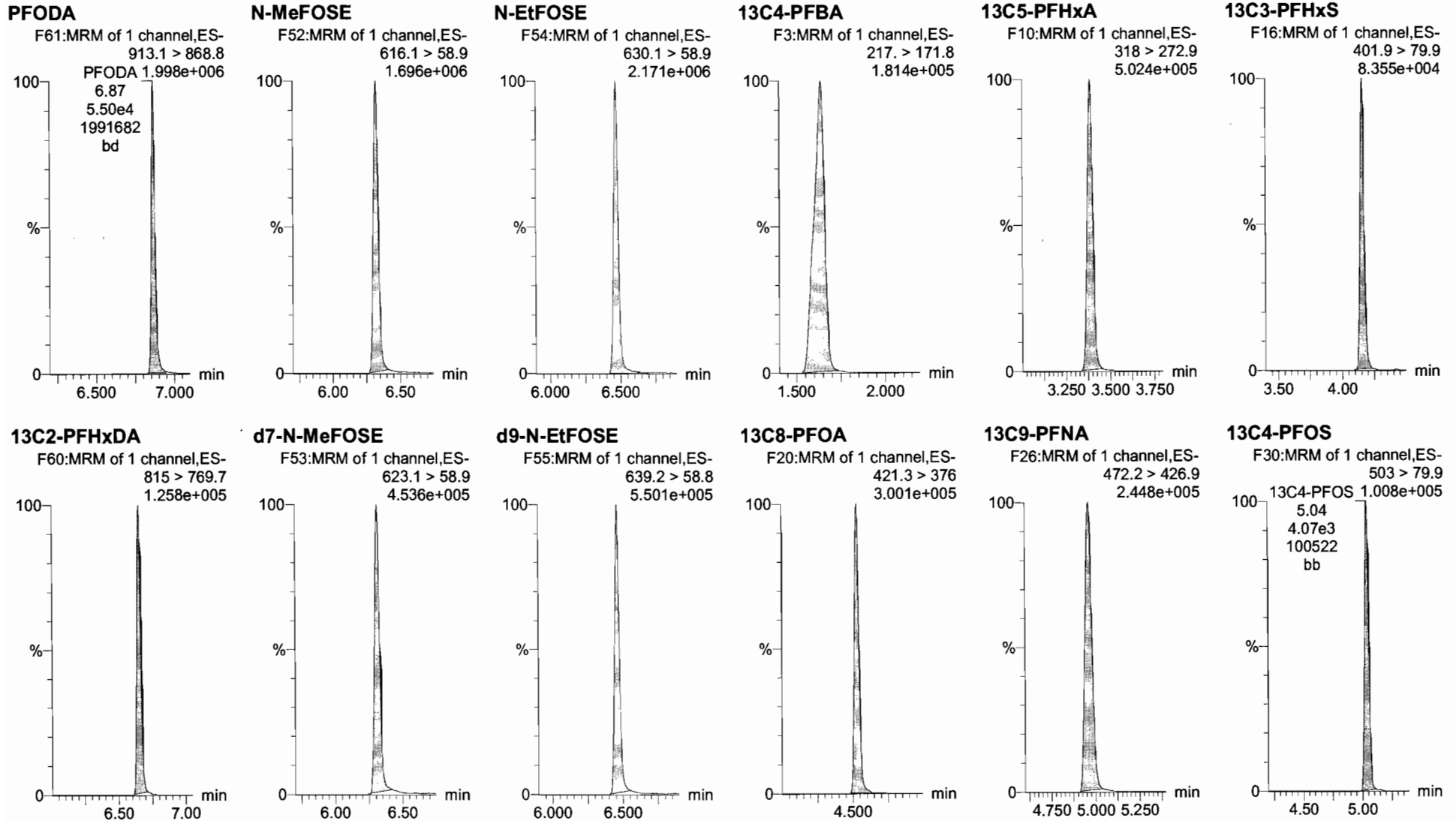
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Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_9, Date: 17-Nov-2017, Time: 18:25:19, ID: ST171117M2-8 PFC CS5 17K1710, Description: PFC CS5 17K1710





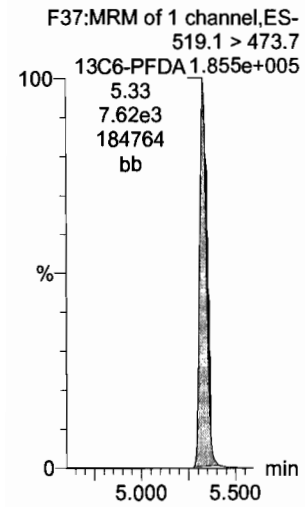
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Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

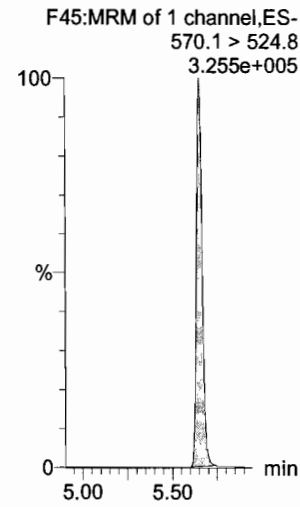
Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_9, Date: 17-Nov-2017, Time: 18:25:19, ID: ST171117M2-8 PFC CS5 17K1710, Description: PFC CS5 17K1710

13C6-PFDA



13C7-PFUdA

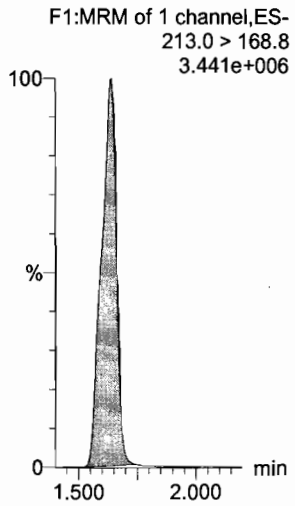


Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

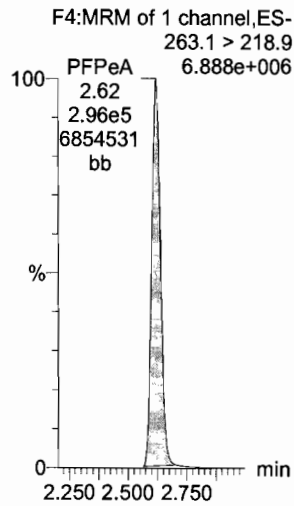
Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_10, Date: 17-Nov-2017, Time: 18:36:30, ID: ST171117M2-9 PFC CS6 17K1712, Description: PFC CS6 17K1712

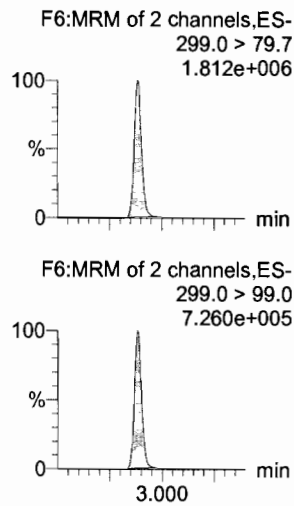
**PFBA**



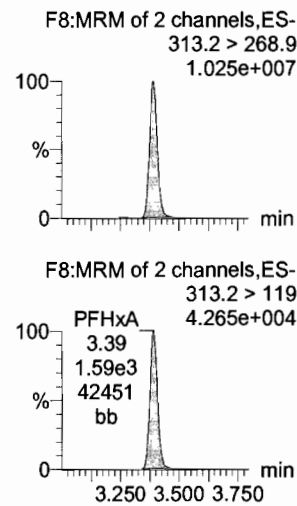
**PFPeA**



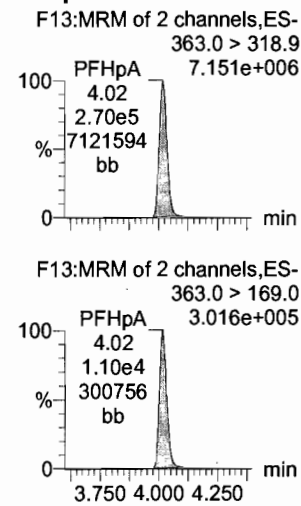
**PFBS**



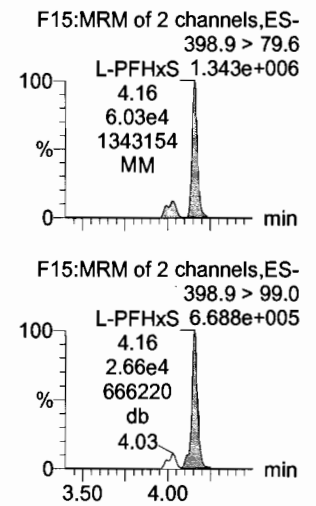
**PFHxA**



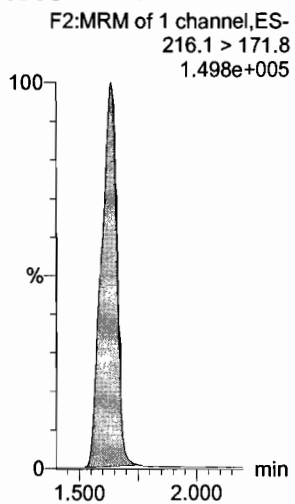
**PFHpA**



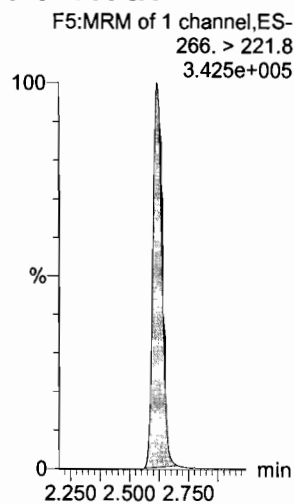
**L-PFHxS**



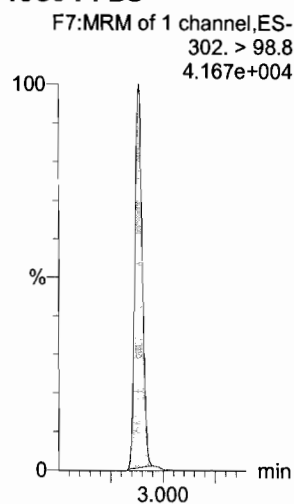
**13C3-PFBA**



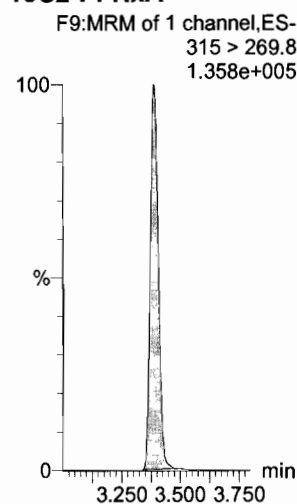
**13C3-PFPeA**



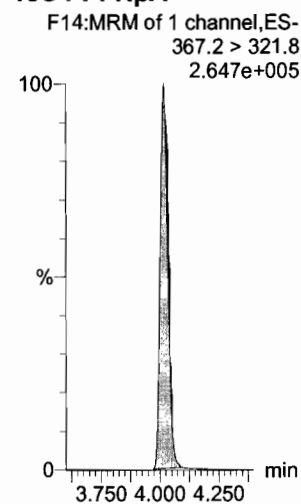
**13C3-PFBS**



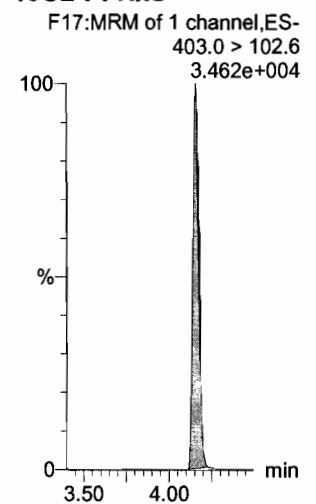
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**

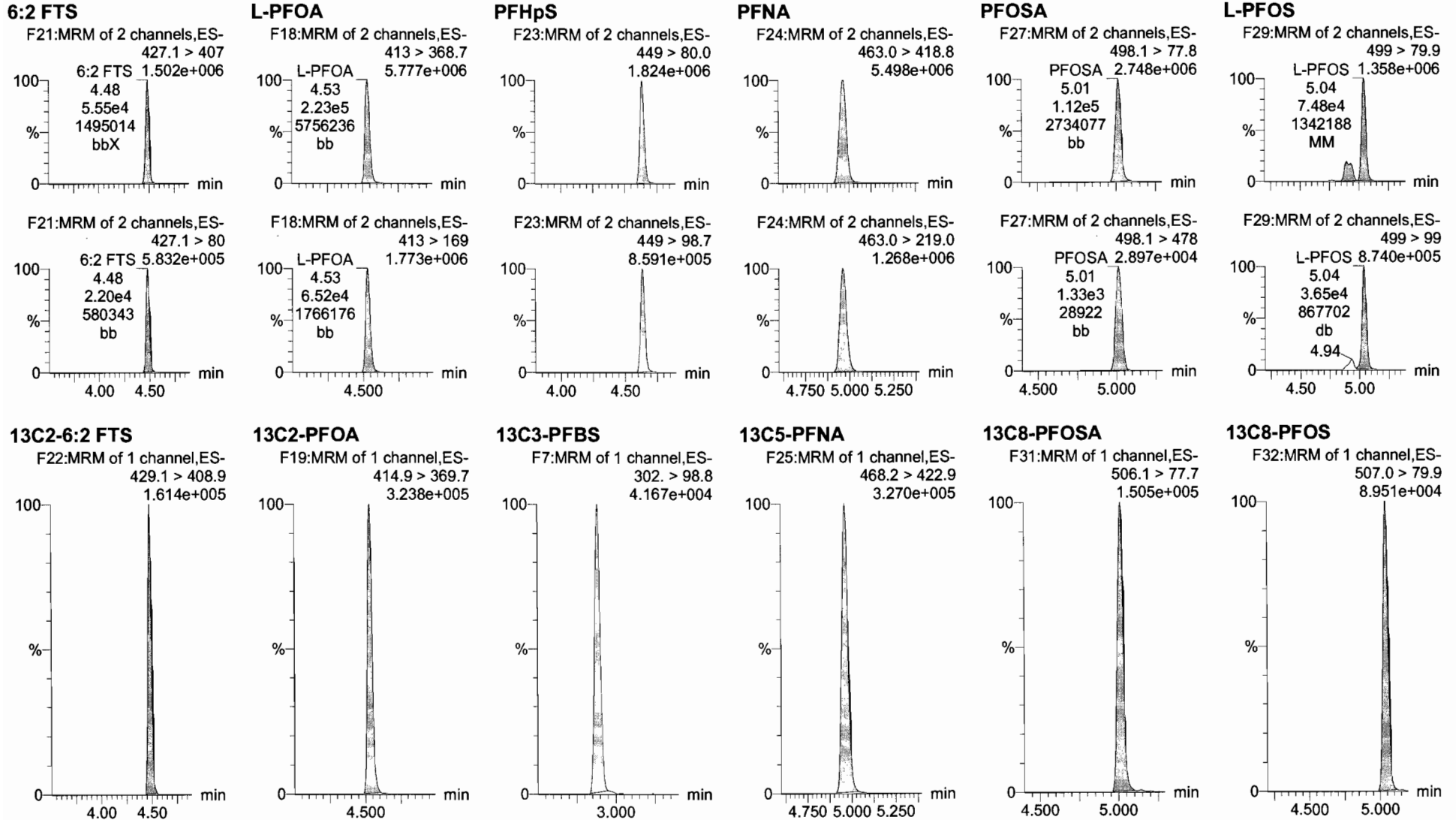


Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

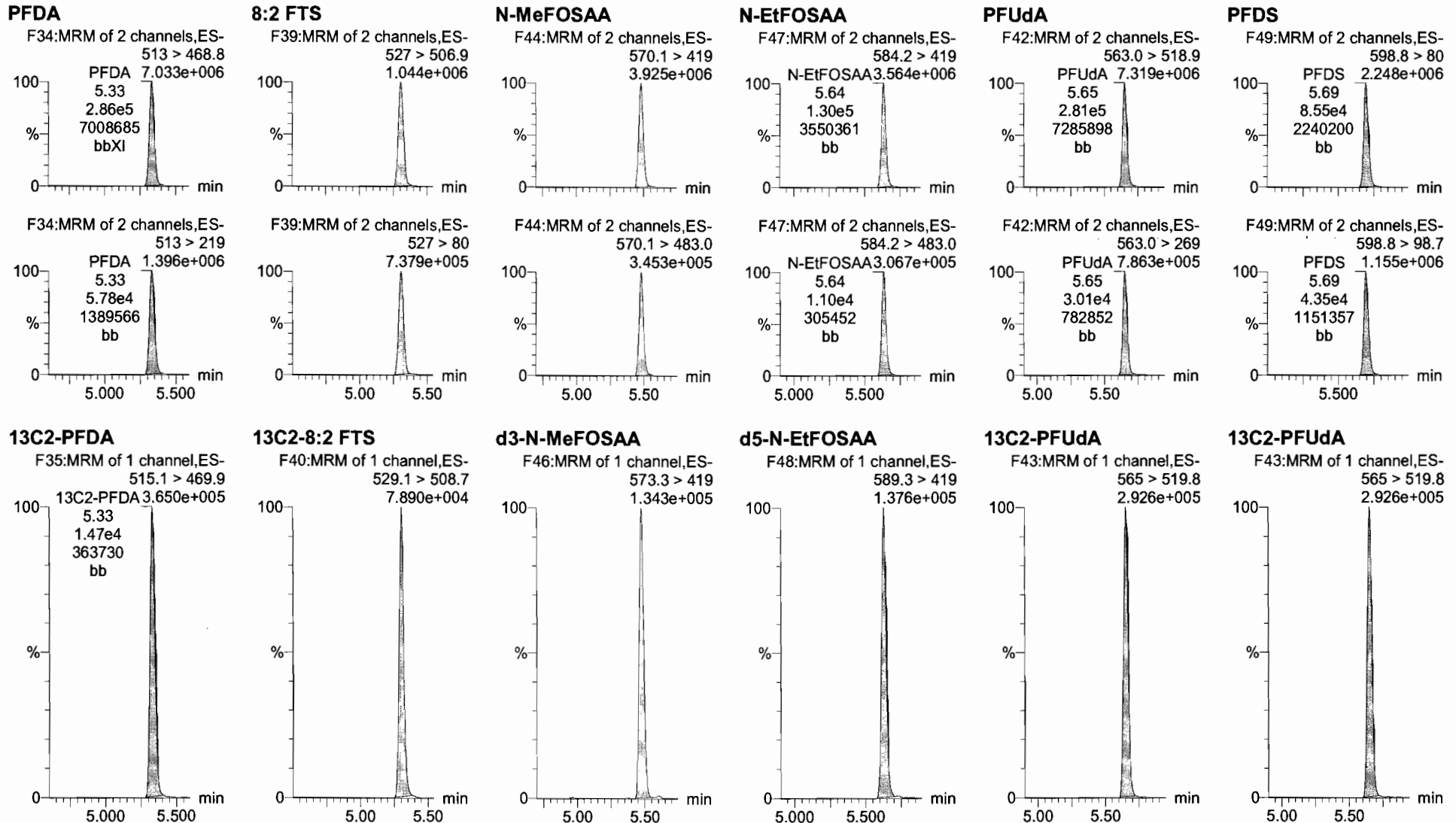
Name: 171117M2\_10, Date: 17-Nov-2017, Time: 18:36:30, ID: ST171117M2-9 PFC CS6 17K1712, Description: PFC CS6 17K1712



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

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Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_10, Date: 17-Nov-2017, Time: 18:36:30, ID: ST171117M2-9 PFC CS6 17K1712, Description: PFC CS6 17K1712

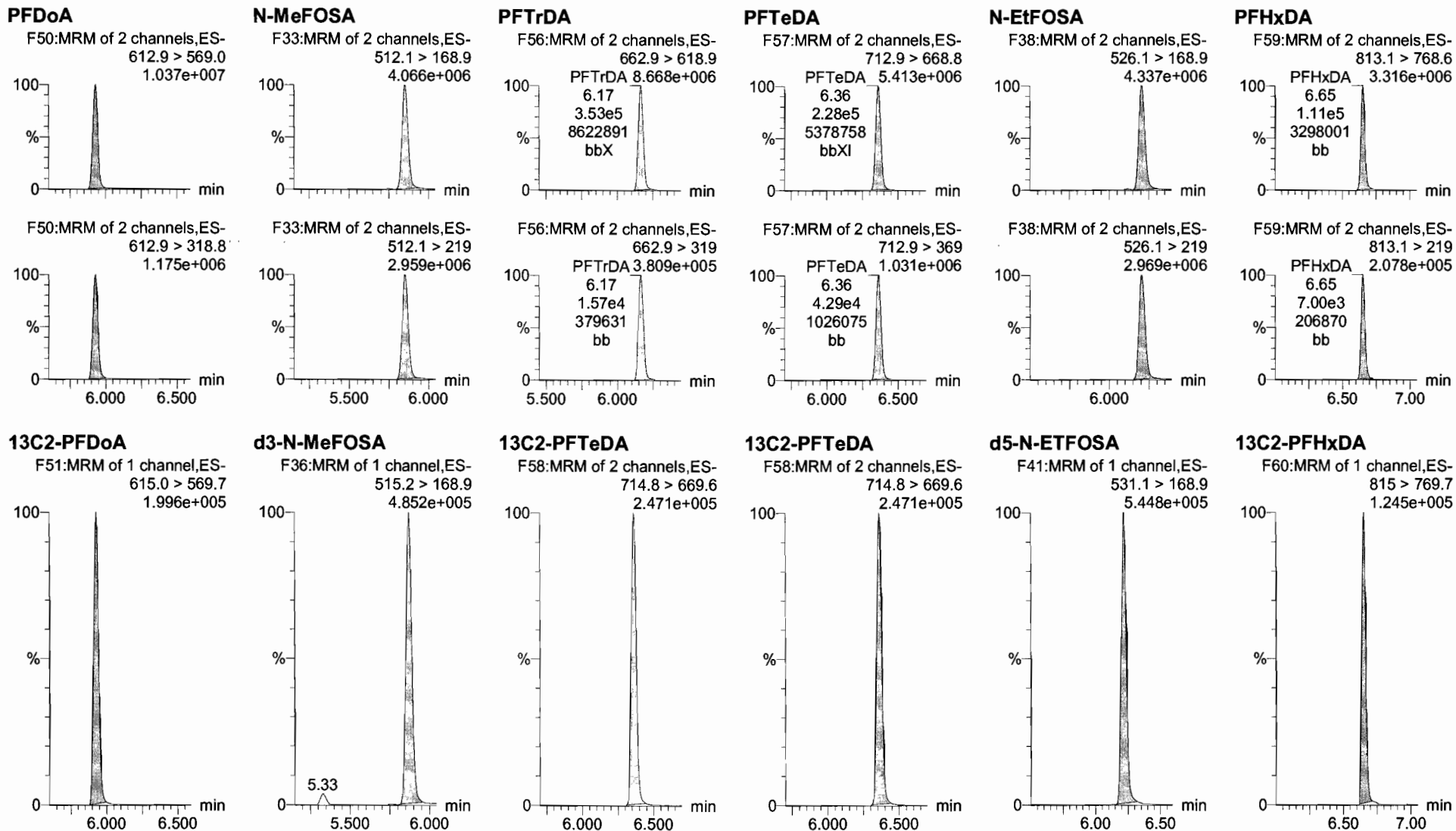


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Last Altered: Saturday, November 18, 2017 10:30:53 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_10, Date: 17-Nov-2017, Time: 18:36:30, ID: ST171117M2-9 PFC CS6 17K1712, Description: PFC CS6 17K1712

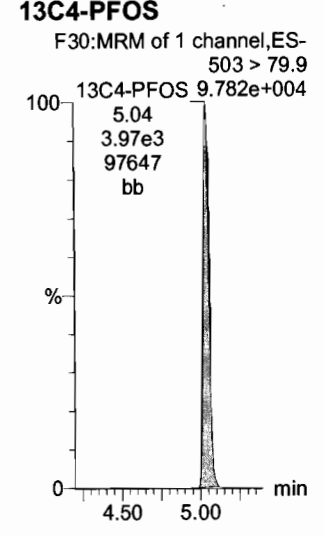
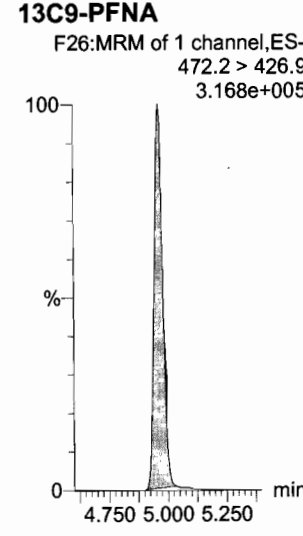
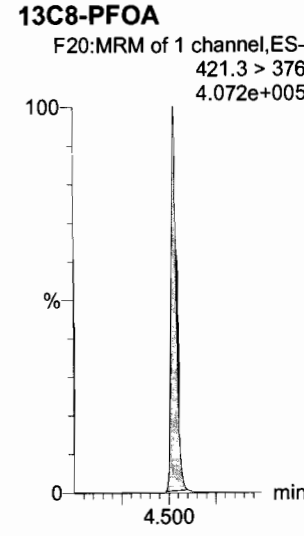
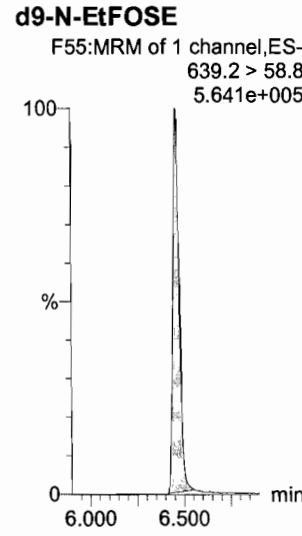
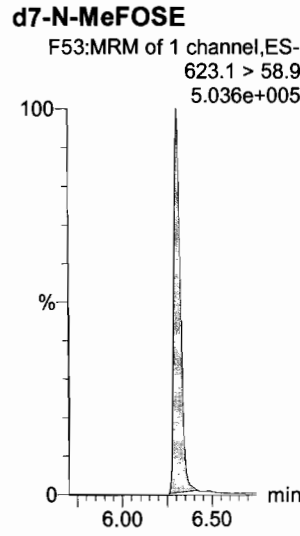
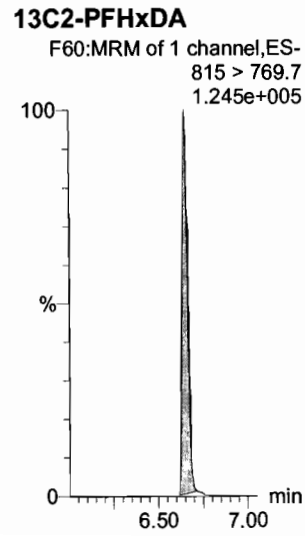
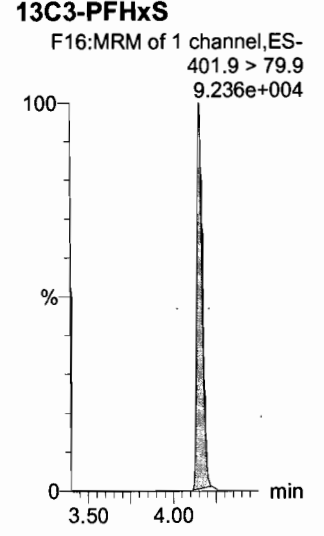
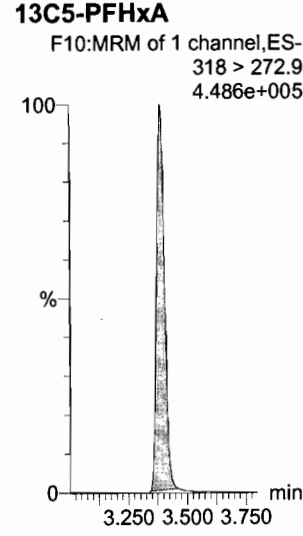
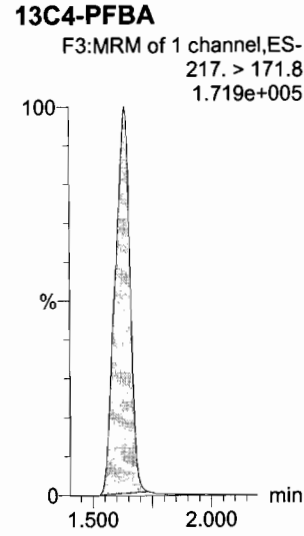
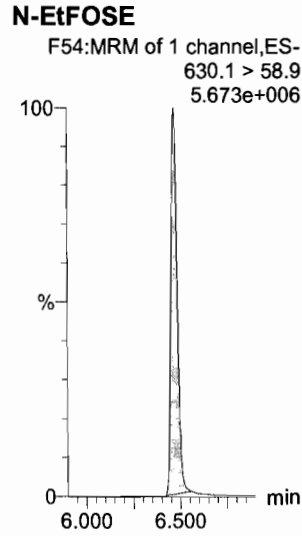
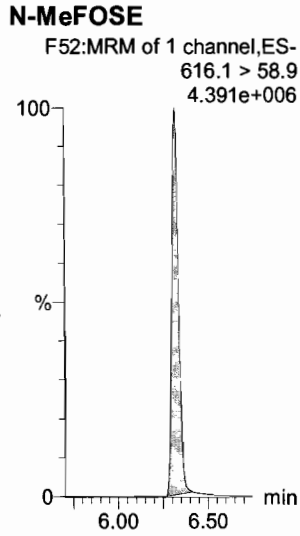
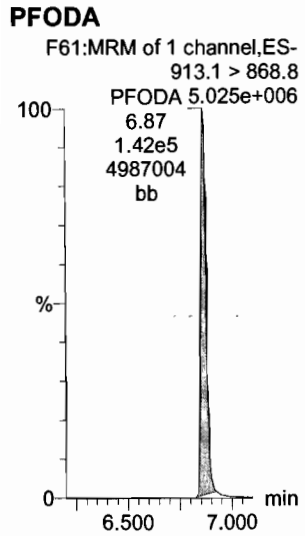


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Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

Name: 171117M2\_10, Date: 17-Nov-2017, Time: 18:36:30, ID: ST171117M2-9 PFC CS6 17K1712, Description: PFC CS6 17K1712



Dataset: U:\Q4.PRO\results\171117M2\171117M2-CRV.qld

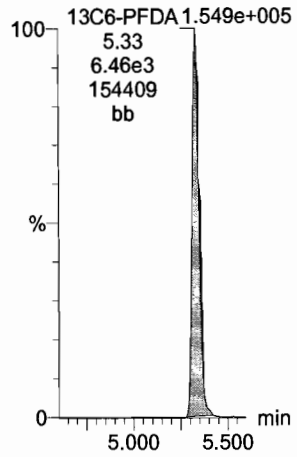
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Printed: Saturday, November 18, 2017 10:32:41 Pacific Standard Time

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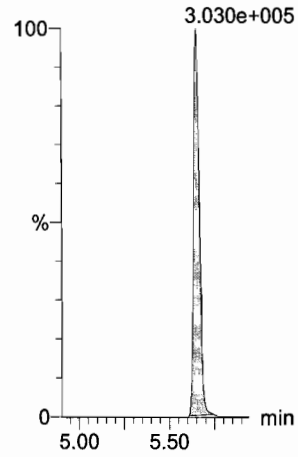
13C6-PFDA

F37:MRM of 1 channel,ES-  
519.1 > 473.7



13C7-PFUdA

F45:MRM of 1 channel,ES-  
570.1 > 524.8



Dataset: U:\Q4.PRO\results\171117M2\171117M2-13.qld

Last Altered: Saturday, November 18, 2017 10:55:50 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:57:40 Pacific Standard Time

Ⓐ Not in ICV.

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 17 Nov 2017 20:08:15  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

AC  
11/18/17  
JHA  
11/20/2017

Name: 171117M2\_13, Date: 17-Nov-2017, Time: 19:10:02, ID: ICV171117M2-1 PFC ICV 17K1711, Description: PFC ICV 17K1711

#	Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.09e4	1.20e4	1.0000		1.66	1.65	11.4	10.166	101.7
2	2 PFPeA	263.1 > 218.9	1.37e4	1.64e4	1.0000		2.63	2.62	10.5	10.524	105.2
3	3 PFBS	299.0 > 79.7	2.92e3	1.77e3	1.0000		2.90	2.89	20.6	9.523	95.2
4	4 PFHxA	313.2 > 268.9	1.79e4	6.03e3	1.0000		3.40	3.39	14.9	10.436	104.4
5	5 PFHpA	363.0 > 318.9	1.27e4	1.15e4	1.0000		4.03	4.02	13.8	10.174	101.7
6	6 L-PFHxS	398.9 > 79.6	2.41e3	1.56e3	1.0000		4.17	4.16	19.4	8.835	88.3
7	8 6:2 FTS	427.1 > 407	2.71e3	3.26e3	1.0000		4.49	4.48	10.4	11.100	111.0
8	9 L-PFOA	413 > 368.7	9.98e3	1.47e4	1.0000		4.54	4.53	8.51	8.582	85.8
9	11 PFHpS	449 > 80.0	2.82e3	1.47e4	1.0000		4.65	4.63	2.41	9.685	96.9
10	12 PFNA	463.0 > 418.8	1.28e4	1.35e4	1.0000		4.97	4.96	11.8	11.260	112.6
11	13 PFOSA	498.1 > 77.8	5.92e3	6.53e3	1.0000		5.02	5.01	11.3	12.422	124.2
12	14 L-PFOS	499 > 79.9	3.10e3	4.10e3	1.0000		5.05	5.04	9.46	9.279	92.8
13	16 PFDA	513 > 468.8	1.18e4	1.54e4	1.0000		5.34	5.33	9.61	7.932	79.3
14	17 8:2 FTS	527 > 506.9	2.76e3	1.47e4	1.0000		5.32	5.30	2.36	9.879	98.8
15	18 N-MeFOSAA	570.1 > 419	7.45e3	5.43e3	1.0000		5.49	5.48	17.2	11.637	116.4
16	19 N-EtFOSAA	584.2 > 419	5.09e3	5.69e3	1.0000		5.64	5.64	11.2	9.415	94.2
17	20 PFUdA	563.0 > 518.9	1.44e4	1.44e4	1.0000		5.66	5.65	12.5	10.266	102.7
18	21 PFDS	598.8 > 80	3.87e3	1.44e4	1.0000		5.70	5.69	3.37	9.757	97.6
19	22 PFDoA	612.9 > 569.0	1.87e4	8.47e3	1.0000		5.94	5.93	27.6	10.620	106.2
20	23 N-MeFOSA	512.1 > 168.9		2.32e4	1.0000		5.85				
21	24 PFTTrDA	662.9 > 618.9	1.74e4	8.47e3	1.0000		6.18	6.17	25.7	12.957	129.6
22	25 PFTeDA	712.9 > 668.8	1.16e4	1.19e4	1.0000		6.37	6.36	12.2	8.665	86.7
23	26 N-EtFOSA	526.1 > 168.9		2.75e4	1.0000		6.21				
24	27 PFHxDA	813.1 > 768.6	6.70e1	4.66e3	1.0000		6.66	6.65	0.0719	0.079	Ⓐ 0.8
25	28 PFOA	913.1 > 868.8		4.66e3	1.0000		6.87				
26	29 N-MeFOSE	616.1 > 58.9		2.41e4	1.0000		6.30				
27	30 N-EtFOSE	630.1 > 58.9		2.30e4	1.0000		6.42				
28	31 13C3-PFBA	216.1 > 171.8	1.20e4	1.35e4	1.0000	0.914	1.66	1.65	11.1	12.111	96.9
29	32 13C3-PFPeA	266. > 221.8	1.64e4	2.05e4	1.0000	0.833	2.63	2.62	9.99	11.991	95.9
30	33 13C3-PFBS	302. > 98.8	1.77e3	2.05e4	1.0000	0.096	2.90	2.89	1.08	11.223	89.8
31	Work Order 171117M2-13	315 > 269.8	6.03e3	2.05e4	1.0000	0.767	3.40	3.39	3.68	4.798	96.0

70-130  
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Dataset: U:\Q4.PRO\results\171117M2\171117M2-13.qld

Last Altered: Saturday, November 18, 2017 10:55:50 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:57:40 Pacific Standard Time

Name: 171117M2\_13, Date: 17-Nov-2017, Time: 19:10:02, ID: ICV171117M2-1 PFC ICV 17K1711, Description: PFC ICV 17K1711

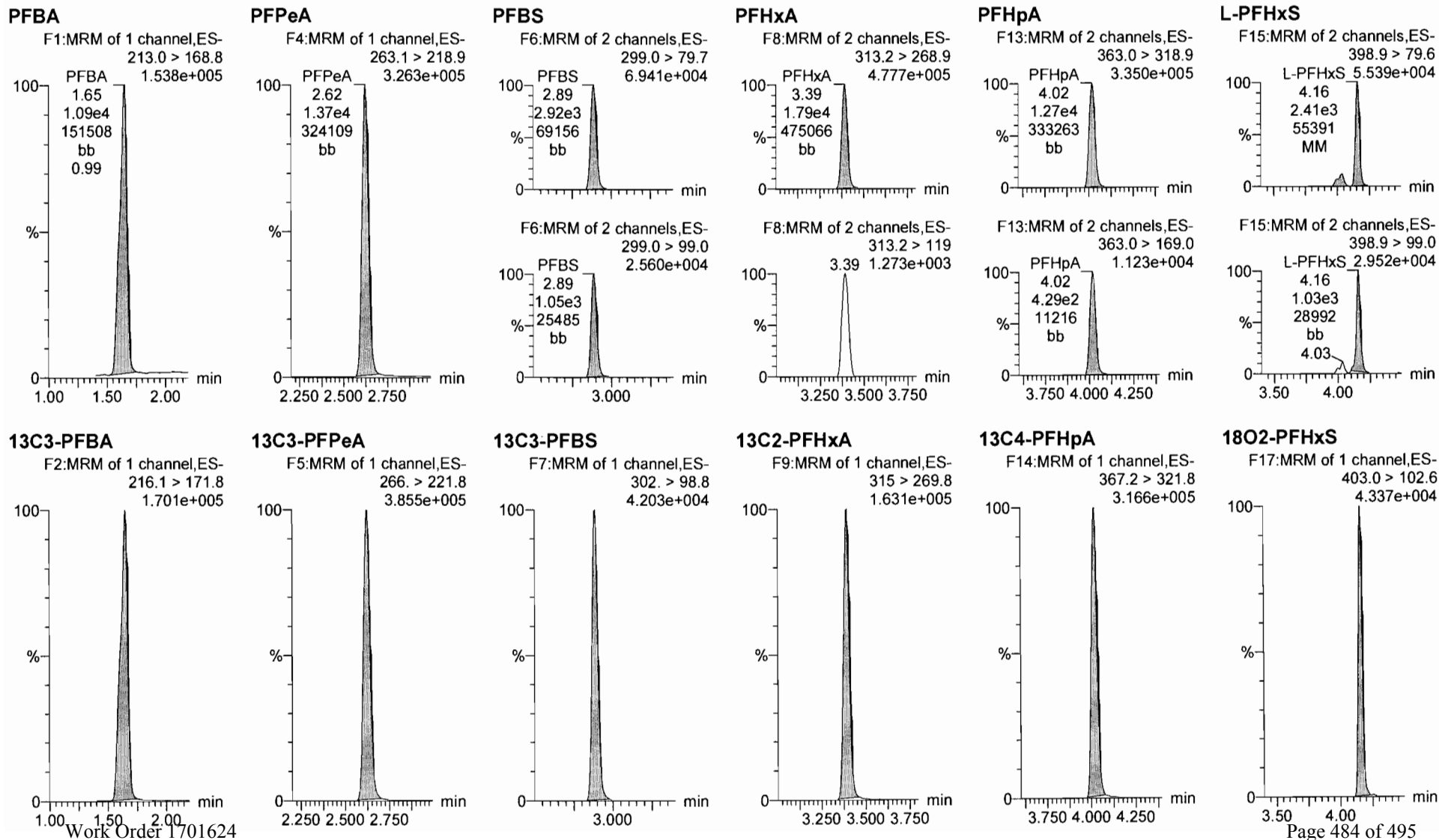
	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	1.15e4	2.05e4	1.0000	0.558	4.03	4.02	7.03	12.600	100.8
33	36 18O2-PFHxS	403.0 > 102.6	1.56e3	3.32e3	1.0000	0.430	4.17	4.16	5.86	13.617	108.9
34	37 13C2-6:2 FTS	429.1 > 408.9	3.26e3	1.52e4	1.0000	0.240	4.49	4.48	2.69	11.215	89.7
35	38 13C2-PFOA	414.9 > 369.7	1.47e4	1.52e4	1.0000	0.956	4.54	4.53	12.1	12.633	101.1
36	39 13C5-PFNA	468.2 > 422.9	1.35e4	1.55e4	1.0000	1.009	4.97	4.96	10.9	10.821	86.6
37	40 13C8-PFOSA	506.1 > 77.7	6.53e3	1.10e4	1.0000	0.524	5.02	5.01	7.43	14.164	113.3
38	41 13C8-PFOS	507.0 > 79.9	4.10e3	4.07e3	1.0000	1.080	5.05	5.04	12.6	11.649	93.2
39	42 13C2-PFDA	515.1 > 469.9	1.54e4	8.83e3	1.0000	1.982	5.34	5.33	21.8	10.981	87.8
40	43 13C2-8:2 FTS	529.1 > 508.7	1.67e3	2.05e4	1.0000	0.072	5.32	5.30	1.02	14.093	112.7
41	44 d3-N-MeFOSAA	573.3 > 419	5.43e3	1.10e4	1.0000	0.434	5.49	5.48	6.18	14.243	113.9
42	45 d5-N-EtFOSAA	589.3 > 419	5.69e3	1.10e4	1.0000	0.461	5.64	5.63	6.48	14.051	112.4
43	46 13C2-PFUdA	565 > 519.8	1.44e4	1.10e4	1.0000	1.171	5.66	5.65	16.4	13.985	111.9
44	47 13C2-PFDoA	615.0 > 569.7	8.47e3	1.10e4	1.0000	0.697	5.94	5.93	9.63	13.818	110.5
45	48 d3-N-MeFOSA	515.2 > 168.9	2.32e4	1.10e4	1.0000	0.150	5.85	5.87	26.4	176.075	117.4
46	49 13C2-PFTeDA	714.8 > 669.6	1.19e4	1.10e4	1.0000	0.849	6.37	6.36	13.6	15.967	127.7
47	50 d5-N-ETFOSA	531.1 > 168.9	2.75e4	1.10e4	1.0000	0.178	6.21	6.22	31.3	175.321	116.9
48	51 13C2-PFHxDA	815 > 769.7	4.66e3	1.10e4	1.0000	0.864	6.66	6.65	5.30	6.140	122.8
49	52 d7-N-MeFOSE	623.1 > 58.9	2.41e4	1.10e4	1.0000	0.155	6.30	6.32	27.4	176.719	117.8
50	53 d9-N-EtFOSE	639.2 > 58.8	2.30e4	1.10e4	1.0000	0.154	6.42	6.46	26.1	169.561	113.0
51	54 13C4-PFBA	217. > 171.8	1.35e4	1.35e4	1.0000	1.000	1.66	1.65	12.5	12.500	100.0
52	55 13C5-PFHxA	318 > 272.9	2.05e4	2.05e4	1.0000	1.000	3.40	3.39	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	3.32e3	3.32e3	1.0000	1.000	4.17	4.16	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.52e4	1.52e4	1.0000	1.000	4.54	4.53	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.55e4	1.55e4	1.0000	1.000	4.97	4.96	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	4.07e3	4.07e3	1.0000	1.000	5.05	5.04	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	8.83e3	8.83e3	1.0000	1.000	5.34	5.33	12.5	12.500	100.0
58	61 13C7-PFUdA	570.1 > 524.8	1.10e4	1.10e4	1.0000	1.000	5.66	5.65	12.5	12.500	100.0

Dataset: U:\Q4.PRO\results\171117M2\171117M2-13.qld

Last Altered: Saturday, November 18, 2017 10:55:50 Pacific Standard Time  
Printed: Saturday, November 18, 2017 10:57:40 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_111717.mdb 17 Nov 2017 20:08:15  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_13, Date: 17-Nov-2017, Time: 19:10:02, ID: ICV171117M2-1 PFC ICV 17K1711, Description: PFC ICV 17K1711

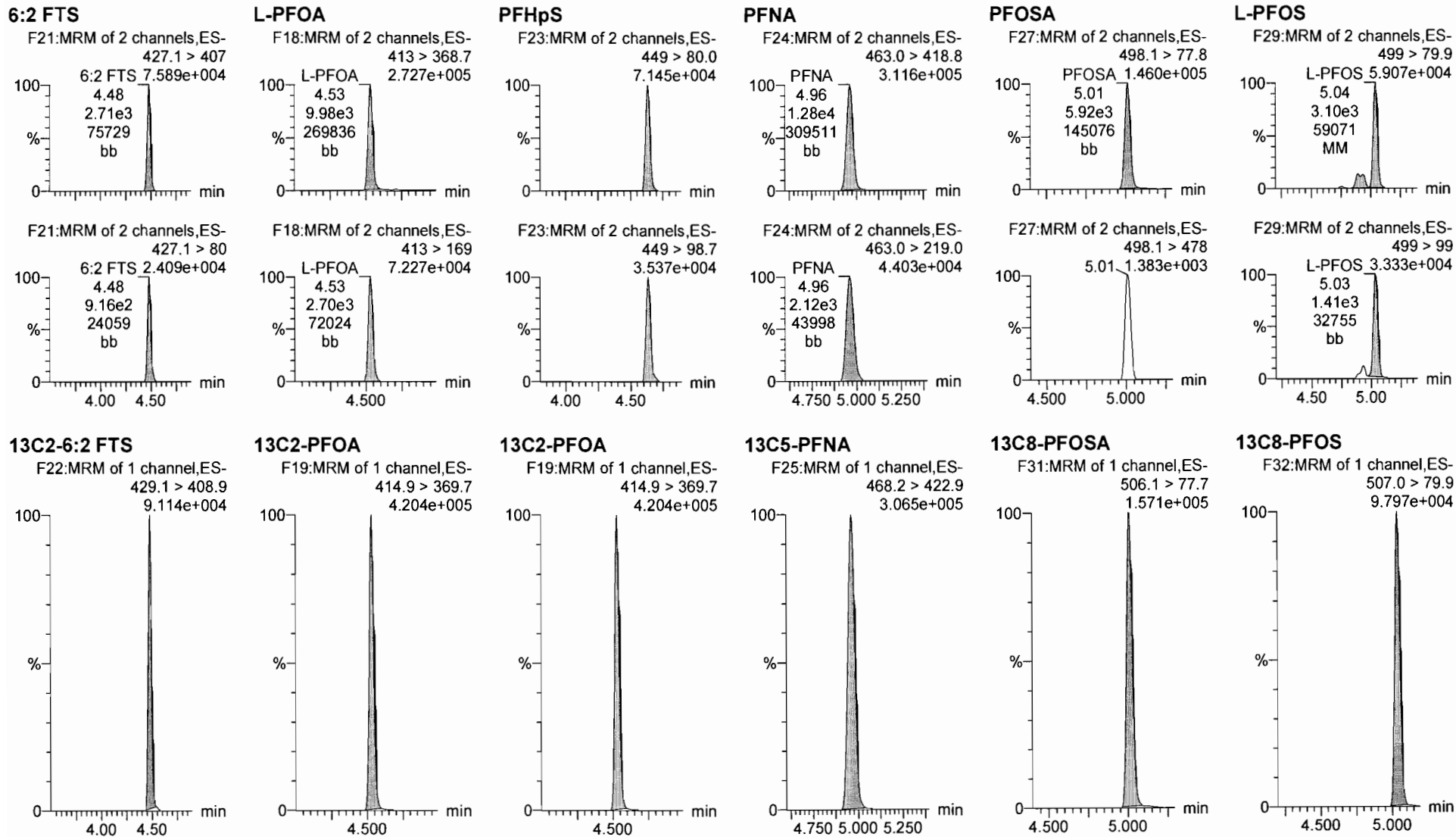


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Last Altered: Saturday, November 18, 2017 10:55:50 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:57:40 Pacific Standard Time

Name: 171117M2\_13, Date: 17-Nov-2017, Time: 19:10:02, ID: ICV171117M2-1 PFC ICV 17K1711, Description: PFC ICV 17K1711

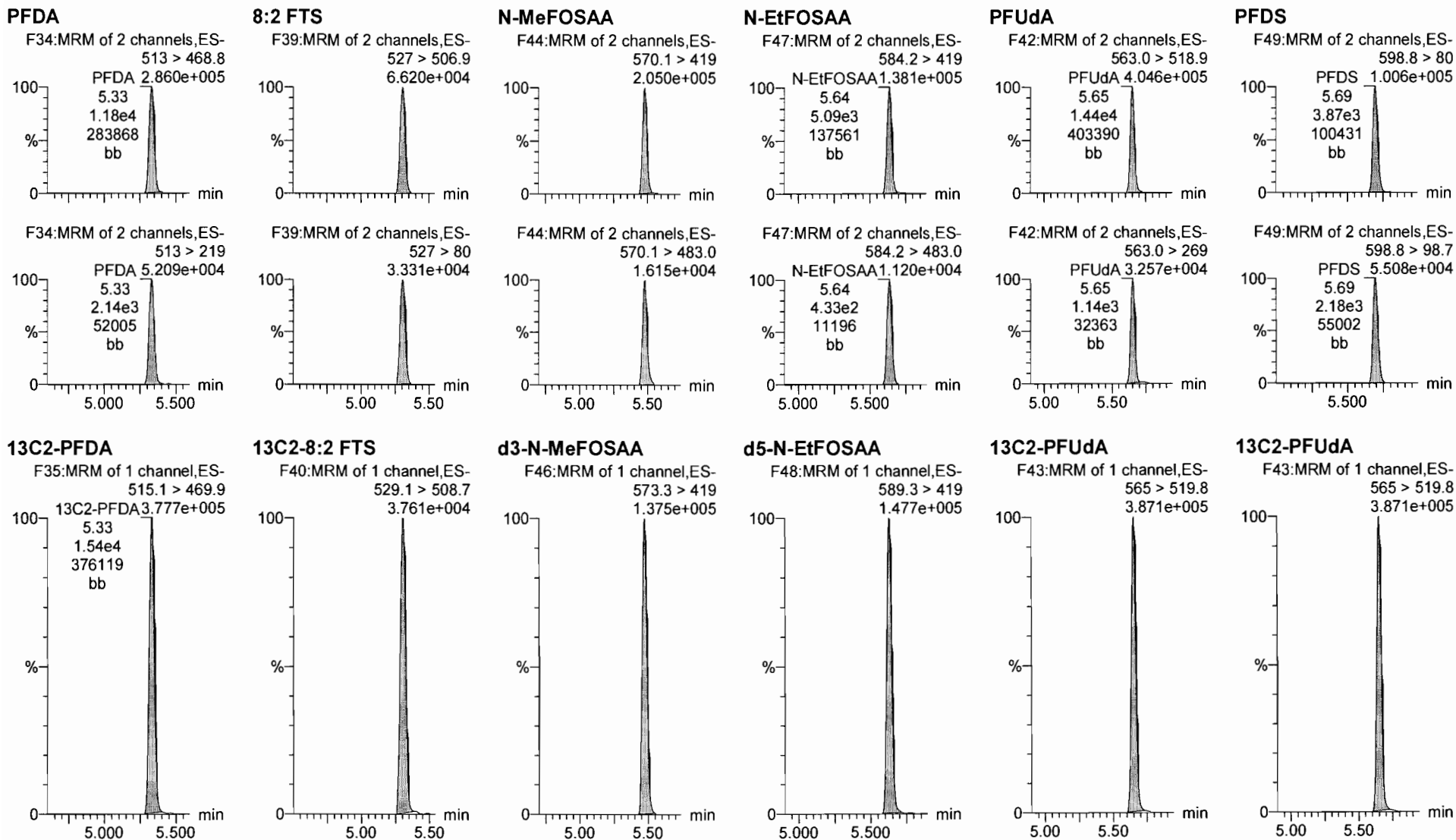


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Last Altered: Saturday, November 18, 2017 10:55:50 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:57:40 Pacific Standard Time

Name: 171117M2\_13, Date: 17-Nov-2017, Time: 19:10:02, ID: ICV171117M2-1 PFC ICV 17K1711, Description: PFC ICV 17K1711



Dataset: U:\Q4.PRO\results\171117M2\171117M2-13.qld

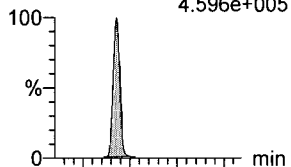
Last Altered: Saturday, November 18, 2017 10:55:50 Pacific Standard Time

Printed: Saturday, November 18, 2017 10:57:40 Pacific Standard Time

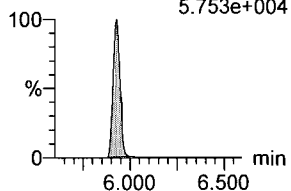
Name: 171117M2\_13, Date: 17-Nov-2017, Time: 19:10:02, ID: ICV171117M2-1 PFC ICV 17K1711, Description: PFC ICV 17K1711

**PFD<sub>o</sub>A**

F50:MRM of 2 channels,ES-  
612.9 > 569.0  
4.596e+005

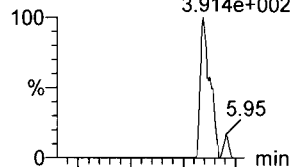


F50:MRM of 2 channels,ES-  
612.9 > 318.8  
5.753e+004

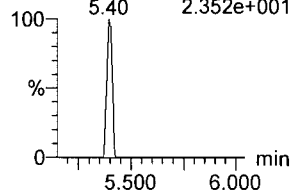


**N-MeFOSA**

F33:MRM of 2 channels,ES-  
512.1 > 168.9  
3.914e+002

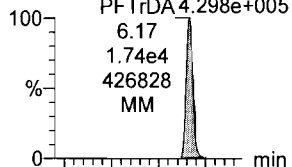


F33:MRM of 2 channels,ES-  
512.1 > 219  
2.352e+001

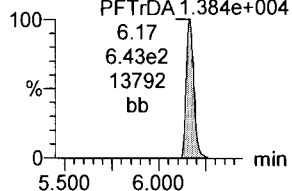


**PFT<sub>r</sub>DA**

F56:MRM of 2 channels,ES-  
662.9 > 618.9  
4.298e+005

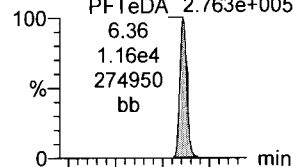


F56:MRM of 2 channels,ES-  
662.9 > 319  
1.384e+004

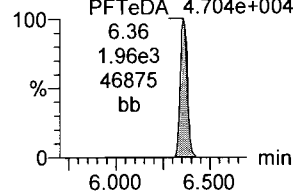


**PFT<sub>e</sub>DA**

F57:MRM of 2 channels,ES-  
712.9 > 668.8  
2.763e+005

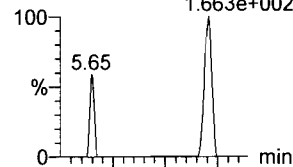


F57:MRM of 2 channels,ES-  
712.9 > 369  
4.704e+004

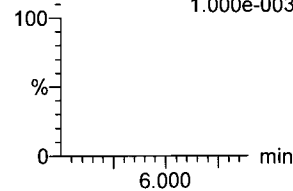


**N-EtFOSA**

F38:MRM of 2 channels,ES-  
526.1 > 168.9  
1.663e+002

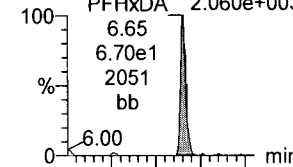


F38:MRM of 2 channels,ES-  
526.1 > 219  
1.000e-003

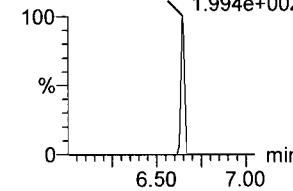


**PFH<sub>x</sub>DA**

F59:MRM of 2 channels,ES-  
813.1 > 768.6  
2.060e+003

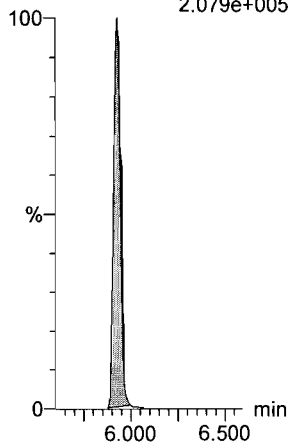


F59:MRM of 2 channels,ES-  
813.1 > 219  
1.994e+002



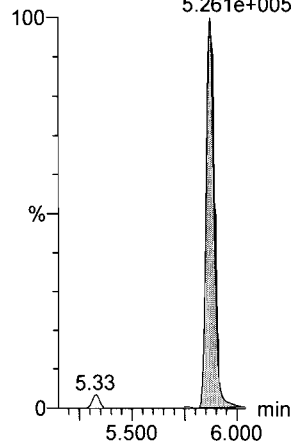
**13C2-PFD<sub>o</sub>A**

F51:MRM of 1 channel,ES-  
615.0 > 569.7  
2.079e+005



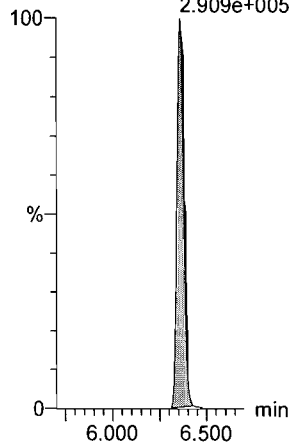
**d3-N-MeFOSA**

F36:MRM of 1 channel,ES-  
515.2 > 168.9  
5.261e+005



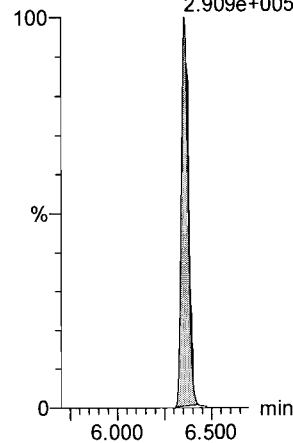
**13C2-PFT<sub>e</sub>DA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
2.909e+005



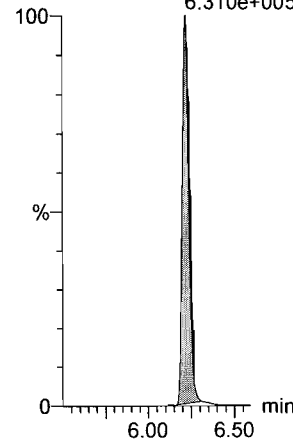
**13C2-PFT<sub>e</sub>DA**

F58:MRM of 2 channels,ES-  
714.8 > 669.6  
2.909e+005



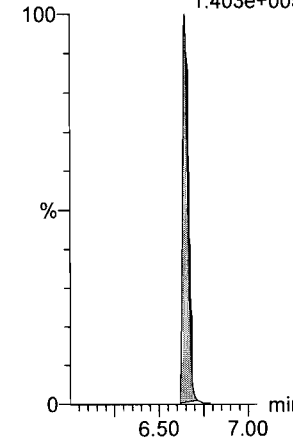
**d5-N-ETFOSA**

F41:MRM of 1 channel,ES-  
531.1 > 168.9  
6.310e+005



**13C2-PFH<sub>x</sub>DA**

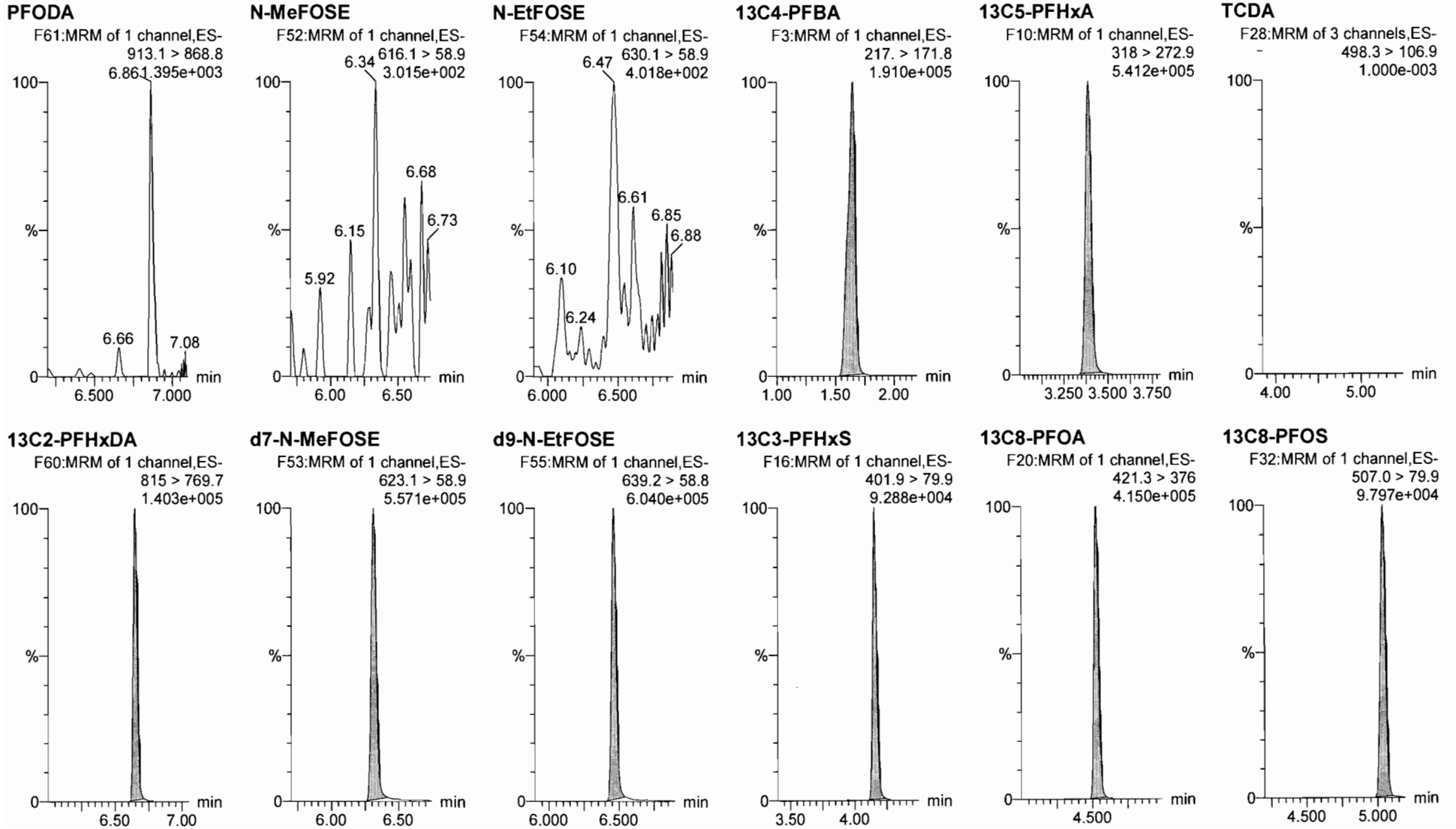
F60:MRM of 1 channel,ES-  
815 > 769.7  
1.403e+005



Dataset: U:\Q4.PRO\results\171117M2\171117M2-13.qld

Last Altered: Saturday, November 18, 2017 10:55:50 Pacific Standard Time  
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Name: 171117M2\_13, Date: 17-Nov-2017, Time: 19:10:02, ID: ICV171117M2-1 PFC ICV 17K1711, Description: PFC ICV 17K1711



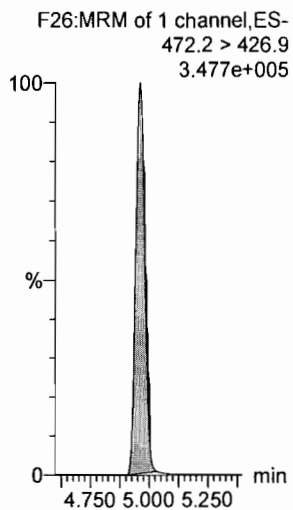
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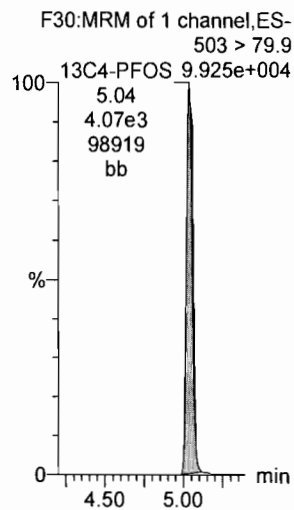
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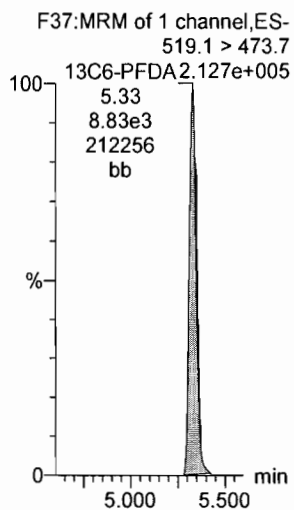
**13C9-PFNA**



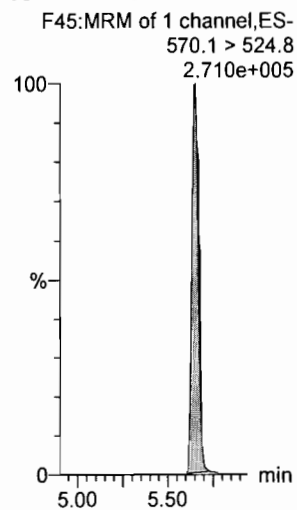
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUdA**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-12.qld

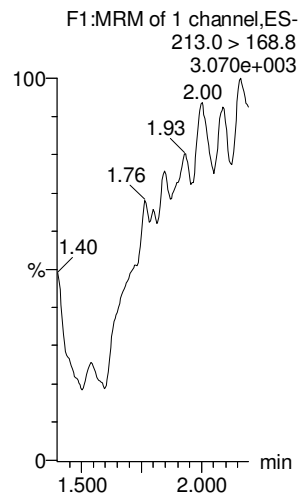
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Printed: Saturday, November 18, 2017 11:03:40 Pacific Standard Time

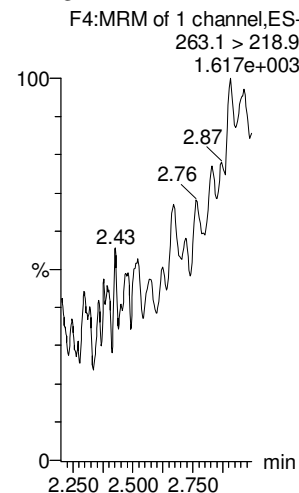
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_11-17-17\_FULL.cdb 18 Nov 2017 10:30:53

Name: 171117M2\_12, Date: 17-Nov-2017, Time: 18:58:51, ID: IPA, Description: IPA

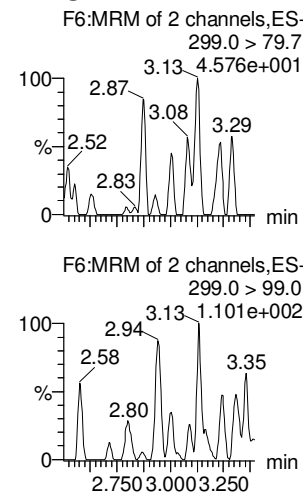
**PFBA**



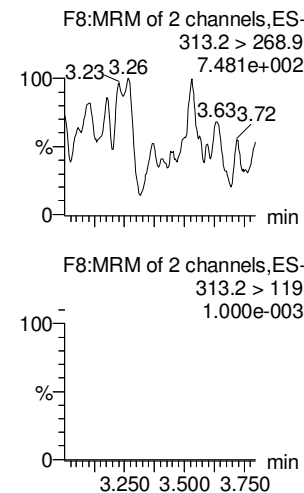
**PFPeA**



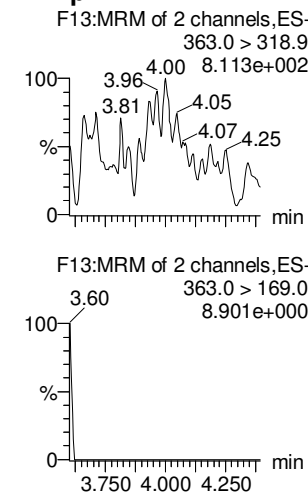
**PFBS**



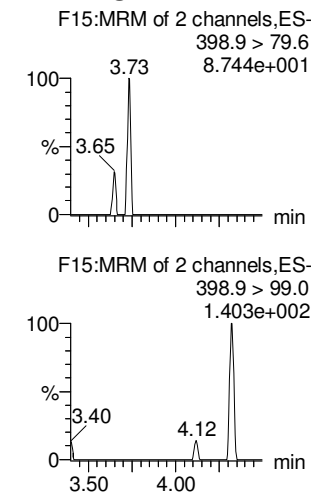
**PFHxA**



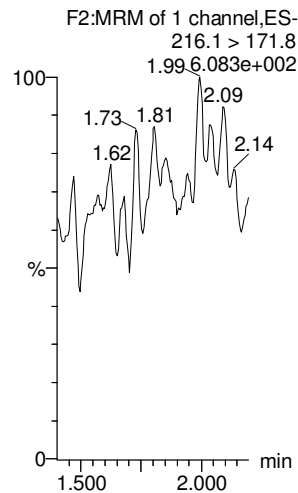
**PFHpA**



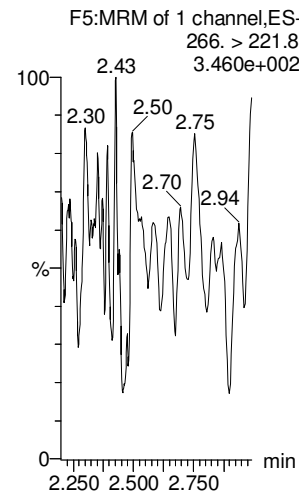
**L-PFHxS**



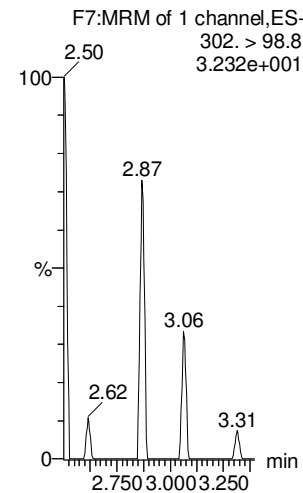
**13C3-PFBA**



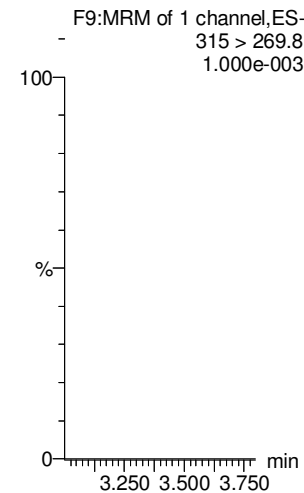
**13C3-PFPeA**



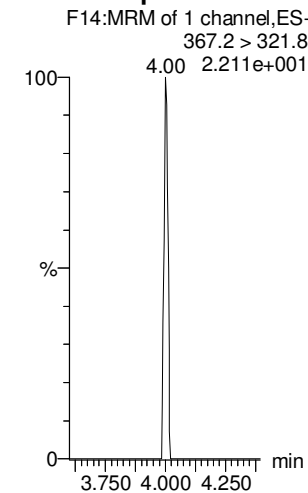
**13C3-PFBS**



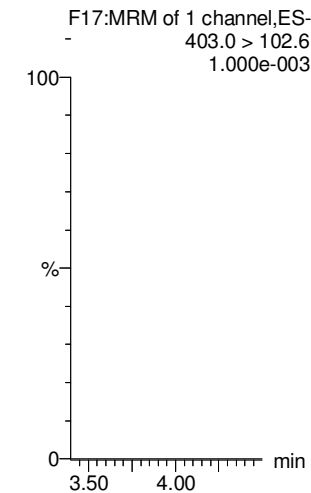
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**





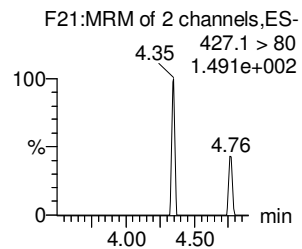
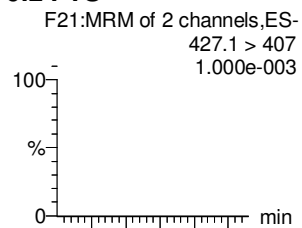
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Last Altered: Saturday, November 18, 2017 10:59:52 Pacific Standard Time

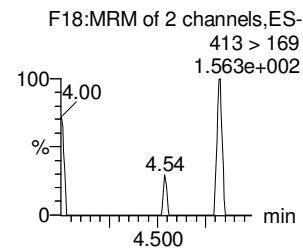
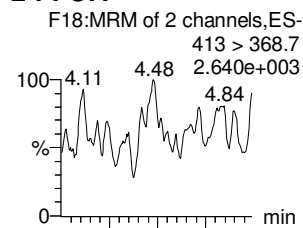
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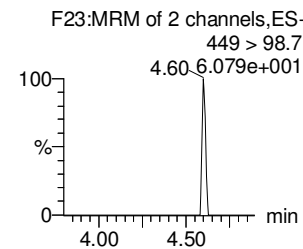
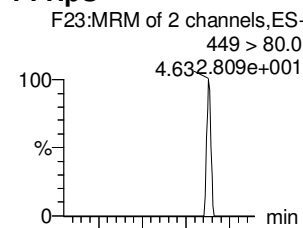
**6:2 FTS**



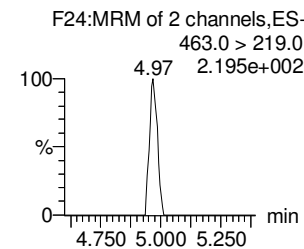
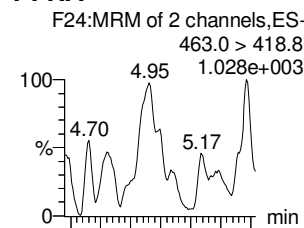
**L-PFOA**



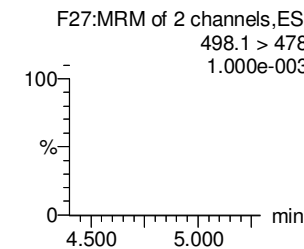
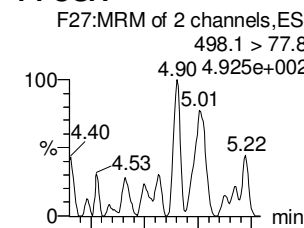
**PFHpS**



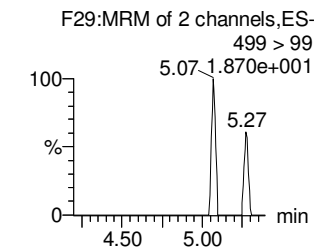
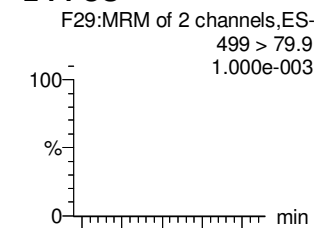
**PFNA**



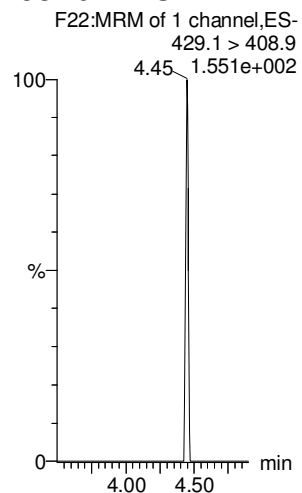
**PFOSA**



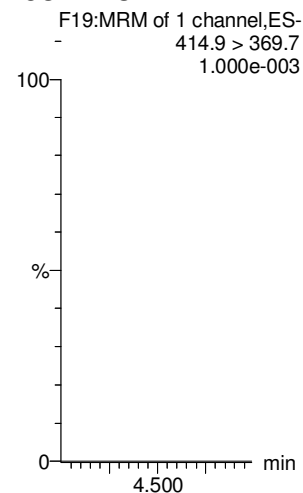
**L-PFOS**



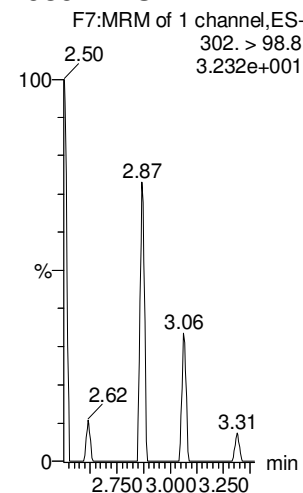
**13C2-6:2 FTS**



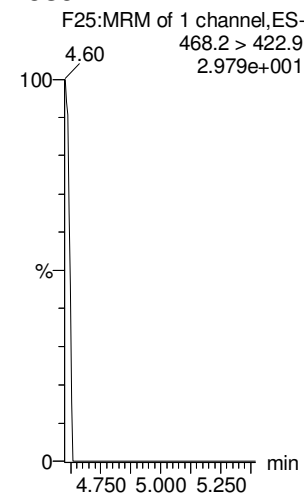
**13C2-PFOA**



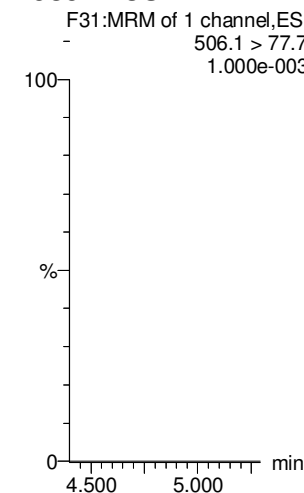
**13C3-PFBS**



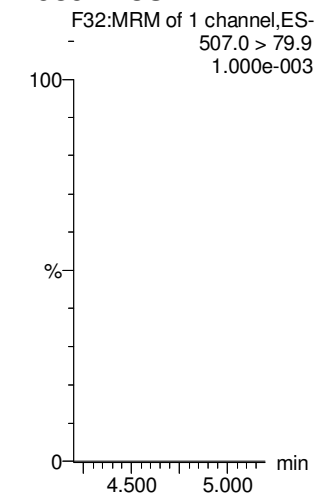
**13C5-PFNA**



**13C8-PFOSA**



**13C8-PFOS**



Dataset: U:\Q4.PRO\results\171117M2\171117M2-12.qld

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**PFDA**

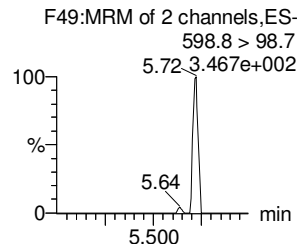
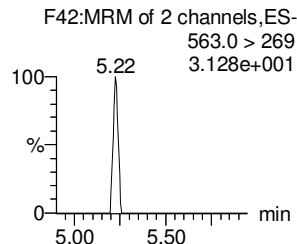
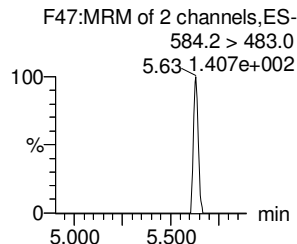
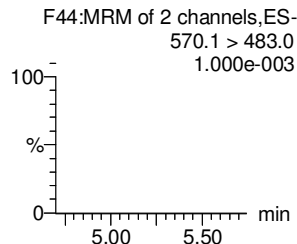
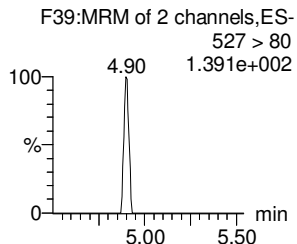
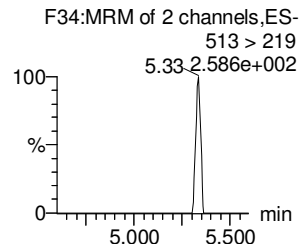
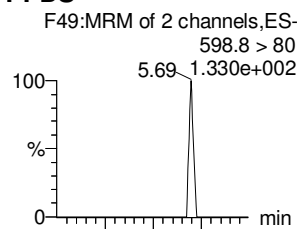
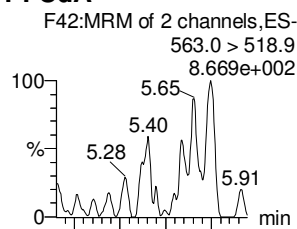
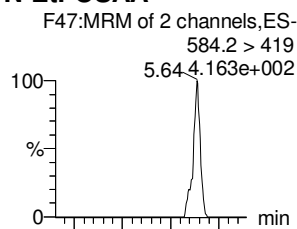
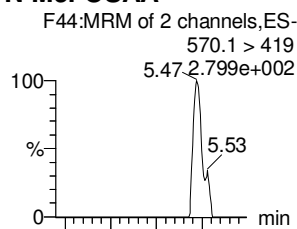
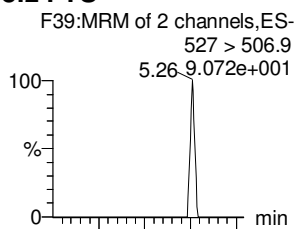
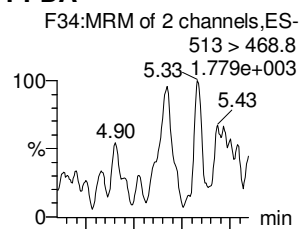
**8:2 FTS**

**N-MeFOSAA**

**N-EtFOSAA**

**PFUdA**

**PFDS**



**13C2-PFDA**

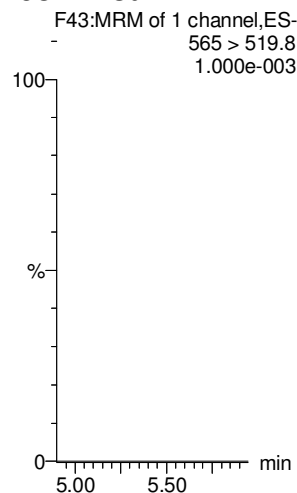
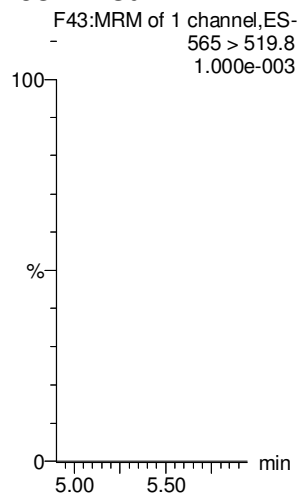
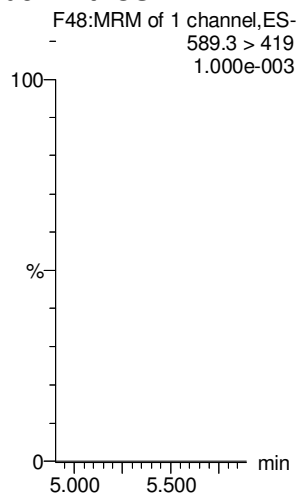
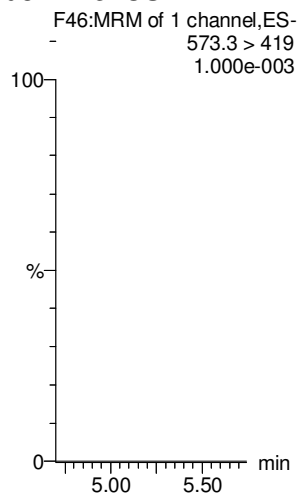
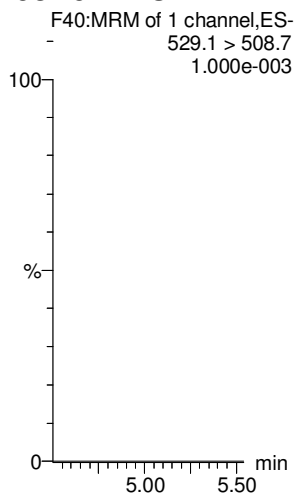
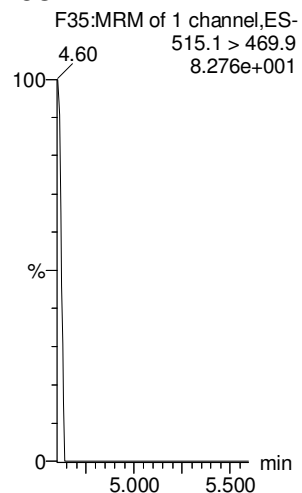
**13C2-8:2 FTS**

**d3-N-MeFOSAA**

**d5-N-EtFOSAA**

**13C2-PFUdA**

**13C2-PFUdA**



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**PFDaA**

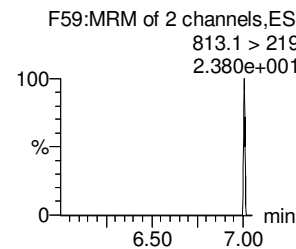
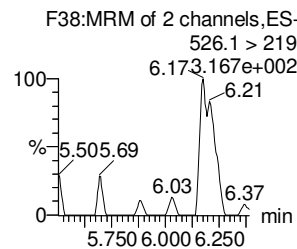
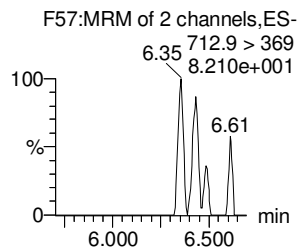
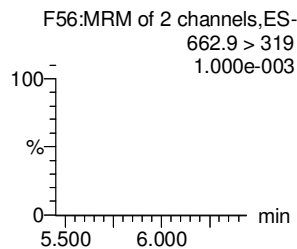
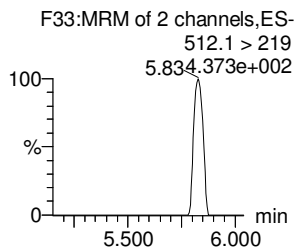
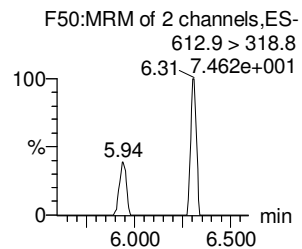
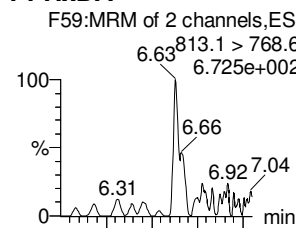
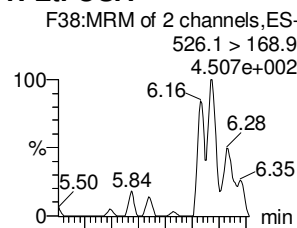
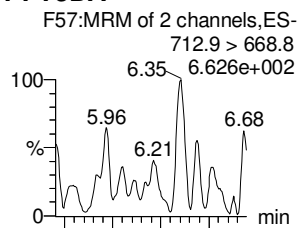
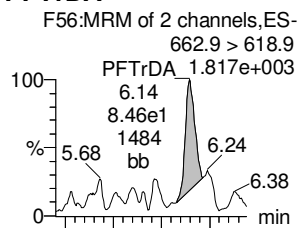
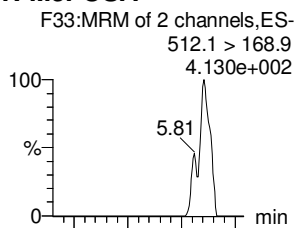
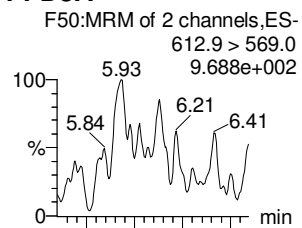
**N-MeFOSA**

**PFTrDA**

**PFTeDA**

**N-EtFOSA**

**PFHxDA**



**13C2-PFDaA**

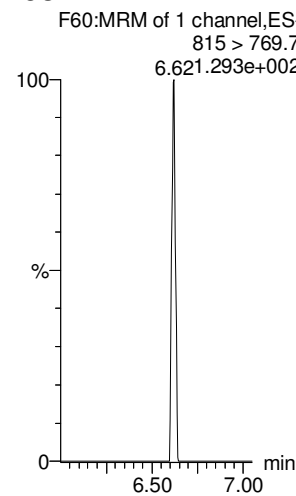
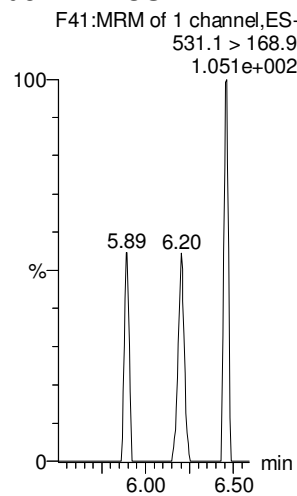
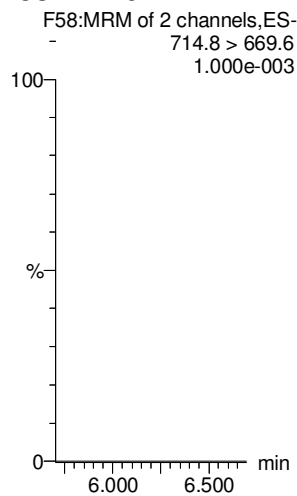
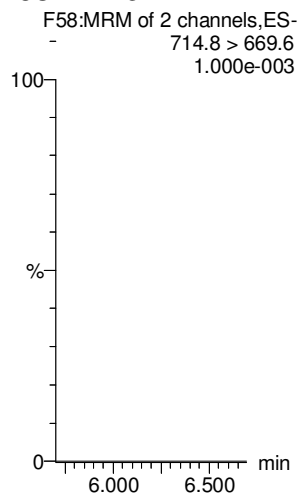
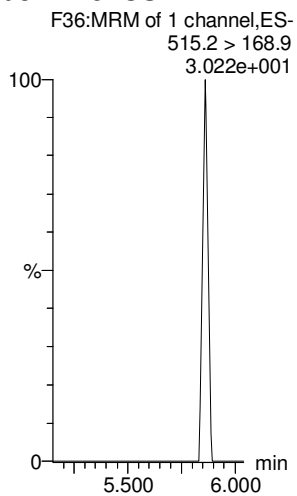
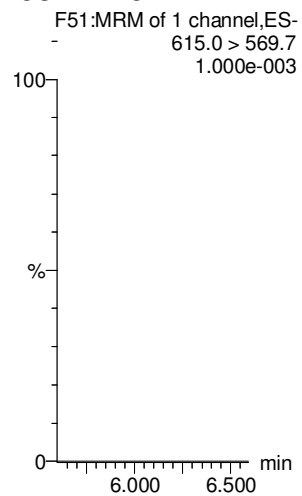
**d3-N-MeFOSA**

**13C2-PFTeDA**

**13C2-PFTeDA**

**d5-N-ETFOSA**

**13C2-PFHxDA**



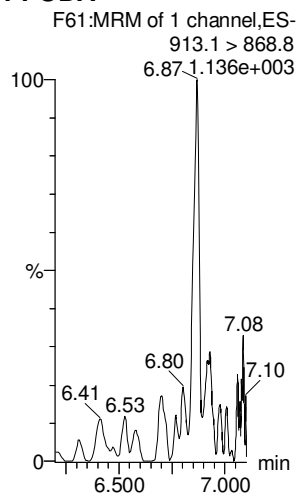
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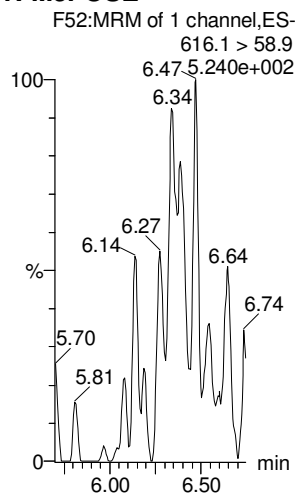
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Name: 171117M2\_12, Date: 17-Nov-2017, Time: 18:58:51, ID: IPA, Description: IPA

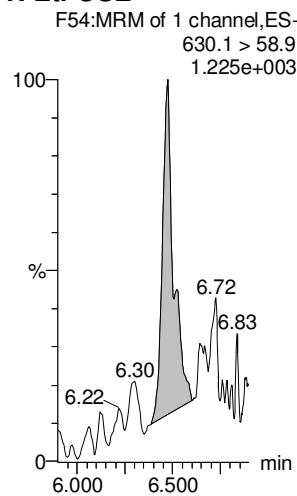
**PFODA**



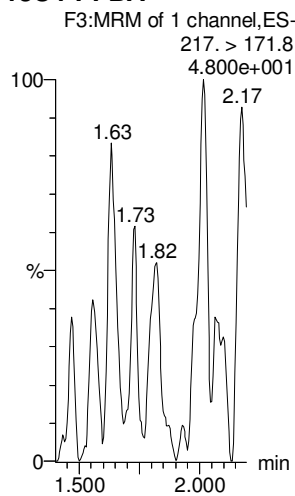
**N-MeFOSE**



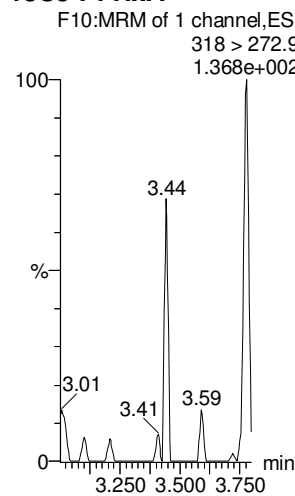
**N-EtFOSE**



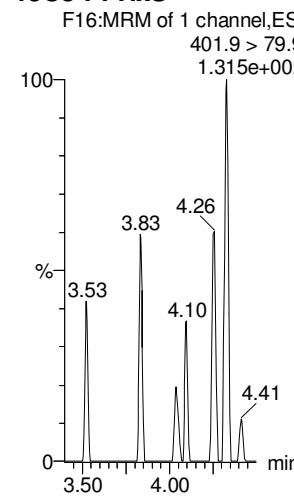
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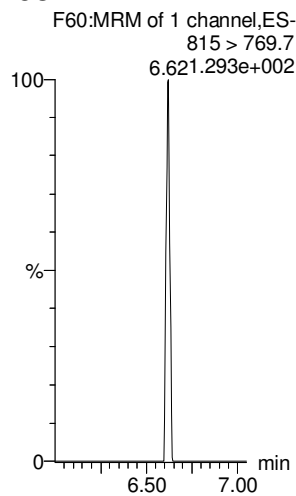
**13C5-PFHxA**



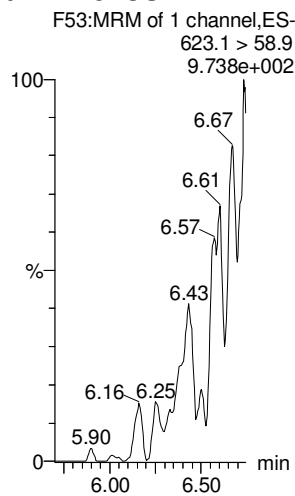
**13C3-PFHxS**



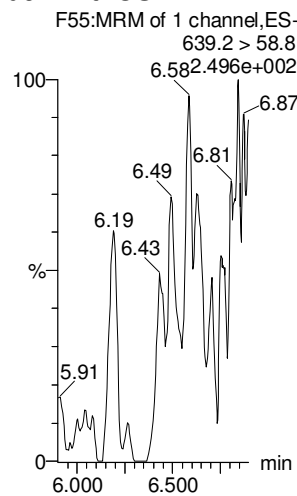
**13C2-PFHxDA**



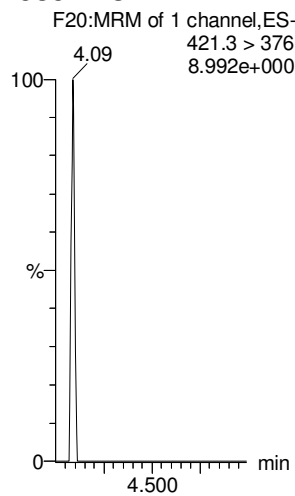
**d7-N-MeFOSE**



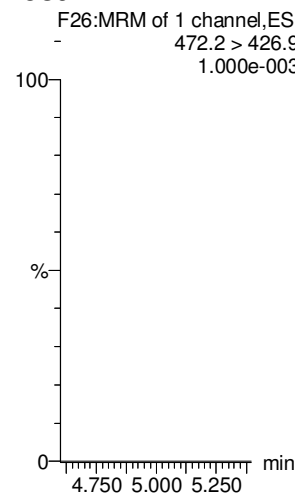
**d9-N-EtFOSE**



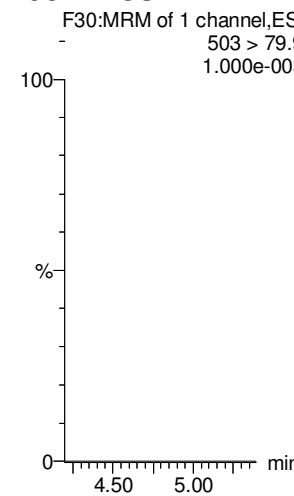
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



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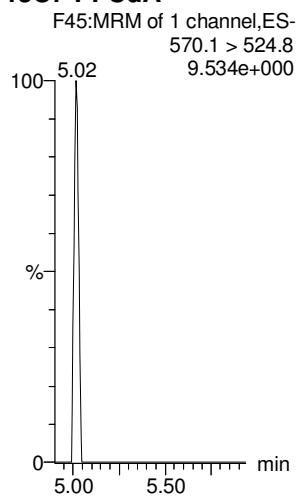
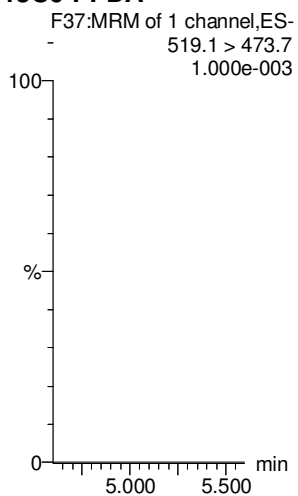
Last Altered: Saturday, November 18, 2017 10:59:52 Pacific Standard Time

Printed: Saturday, November 18, 2017 11:03:40 Pacific Standard Time

Name: 171117M2\_12, Date: 17-Nov-2017, Time: 18:58:51, ID: IPA, Description: IPA

13C6-PFDA

13C7-PFUdA







**DATA VALIDATION SUMMARY REPORT  
NALF FENTRESS, VIRGINIA**

Client: CH2M HILL, Inc., Corvallis, Oregon  
 SDG: 1701624  
 Laboratory: Vista Analytical Laboratory, El Dorado Hills, California  
 Site: NALF Fentress, Off-Base Wells, Virginia  
 Date: January 3, 2018

PFCs			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	OF-MW20-1117	1701624-01	Water
2	OF-MW20P-1117	1701624-02	Water
3	OF-MW22-1117	1701624-03	Water
4	OF-MW22D-1117	1701624-04	Water
5	OF-MW19-1117	1701624-05	Water
5MS	OF-MW19-1117MS	1701624-05MS	Water
5MSD	OF-MW19-1117MSD	1701624-05MSD	Water
6	OF-MW19D-1117	1701624-06	Water
7	OF-MW21-1117	1701624-07	Water
8	OF-MW33-1117	1701624-08	Water
9	OF-MW33D-1117	1701624-09	Water
10	OF-EB110717	1701624-10	Water
11	OF-FB110717	1701624-11	Water

A full data validation was performed on the analytical data for nine water samples, one aqueous equipment blank sample, and one aqueous field blank sample collected on November 6-7, 2017 by CH2M HILL at the NALF Fentress site in Chesapeake, Virginia. The samples were analyzed under the EPA Method “Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)”.

Specific method references are as follows:

Analysis  
PFCs

Method References  
USEPA Method 537 Modified

The data have been validated according to the protocols and quality control (QC) requirements of the analytical method, and the U.S. Department of Defense (DoD) Quality Systems Manual (QSM), Version 5.0 (July 2013) and the USEPA National Functional Guidelines for Organic Data Review as follows:

- The USEPA “Contract Laboratories Program National Functional Guidelines for Superfund Organic Methods Data Review,” January 2017;
- and the reviewer's professional judgment.



The following data quality indicators were reviewed for this report:

### ***Organics***

- Date Completeness, Case Narrative & Custody Documentation
- Holding times
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

A full (Level IV) data validation was performed with this review including a recalculation of 10% of the detected results in the samples.

### **Data Usability Assessment**

There were no rejections of data.

Overall the data is acceptable for the intended purposes. There were no qualifications.

### **Perfluorinated Compounds (PFCs)**

#### **Data Completeness, Case Narrative & Custody Documentation**

- The case narrative and chain-of-custody documentation were included in the data package as required. All criteria were met.

#### **Holding Times**

- All samples were extracted within 14 days for water samples and analyzed within 28 days.

#### **LC/MS Tuning**

- All criteria were met.

### Initial Calibration

- All relative standard deviation (%RSD) and/or correlation coefficients criteria were met.

### Continuing Calibration

- All percent difference (%D) and RRF criteria were met.

### Method Blank

- The method blanks were free of contamination.

### Field QC Blank

- Field QC results are summarized below.

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
OF-EB110717	None - ND	-	-	-
OF-FB110717	None - ND	-	-	-

### Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values except for the following.

MS/MSD Sample	Compound	MS %R/MSD %R/ RPD	Qualifier	Affected Samples
5	PFDA	133%/OK/OK	None	Sample ND
	PFTtDA	OK/OK/39.6	None	For RPD Alone

### Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

### Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

### Target Compound Identification

- All mass spectra and quantitation criteria were met.

### Compound Quantitation

- All criteria were met.

### Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

Compound	OF-MW20-1117 ng/L	OF-MW20P-1117 ng/L	RPD	Qualifier
None	ND	ND	-	-

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: Nancy Weaver  
Nancy Weaver  
Senior Chemist

Dated: 1/5/18

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.



**Sample ID: OF-MW20-1117**

**Modified EPA Method 537**

Client Data		Laboratory Data								
Name:	CH2M Hill	Lab Sample:	1701624-01	Column:	BEH C18					
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 09:50	Date Received:	08-Nov-17 10:07					
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.10	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFHxA	ND	2.56	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFHpA	ND	0.694	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFHxS	ND	1.11	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFOA	ND	0.764	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFOS	ND	0.947	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFNA	ND	0.951	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFDA	ND	1.75	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
MeFOSAA	ND	1.94	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFUnA	ND	1.23	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
EtFOSAA	ND	1.61	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFDoA	ND	0.929	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFTtDA	ND	0.580	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
PFTeDA	ND	0.886	5.84	9.39		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBS	IS	104	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
13C2-PFHxA	IS	90.5	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
13C4-PFHpA	IS	94.6	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
18O2-PFHxS	IS	108	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
13C2-PFOA	IS	89.6	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
13C8-PFOS	IS	101	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
13C5-PFNA	IS	80.5	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
13C2-PFDA	IS	67.8	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
d3-MeFOSAA	IS	76.7	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
13C2-PFUnA	IS	77.2	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
d5-EtFOSAA	IS	102	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
13C2-PFDoA	IS	62.8	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	
13C2-PFTeDA	IS	92.6	50 - 150		B7K0059	10-Nov-17	0.107 L	16-Nov-17 23:02	1	

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation  
 LCL-UCL- Lower control limit - upper control limit  
 Results reported to the DL  
 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers  
 Only the linear isomer is reported for all other analytes

mw1318

Sample ID: OF-MW20P-1117

Modified EPA Method 537

Client Data		Laboratory Data			
Name:	CH2M Hill	Lab Sample:	1701624-02	Column:	BEH C18
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 09:55	Date Received:	08-Nov-17 10:07
Matrix:	Groundwater				

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.96	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFHxA	ND	2.39	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFHpA	ND	0.648	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFHxS	ND	1.04	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFOA	ND	0.713	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFOS	ND	0.884	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFNA	ND	0.887	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFDA	ND	1.63	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
MeFOSAA	ND	1.81	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFUnA	ND	1.15	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
EtFOSAA	ND	1.50	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFDoA	ND	0.868	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFTrDA	ND	0.541	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
PFTeDA	ND	0.827	5.48	8.77		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBS	IS	92.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
13C2-PFHxA	IS	84.5	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
13C4-PFHpA	IS	83.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
18O2-PFHxS	IS	110	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
13C2-PFOA	IS	81.1	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
13C8-PFOS	IS	102	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
13C5-PFNA	IS	73.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
13C2-PFDA	IS	75.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
d3-MeFOSAA	IS	78.6	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
13C2-PFUnA	IS	80.3	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
d5-EtFOSAA	IS	66.5	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
13C2-PFDoA	IS	70.9	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	
13C2-PFTeDA	IS	85.1	50 - 150		B7K0059	10-Nov-17	0.114 L	16-Nov-17 23:13	1	

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation  
 LCL-UCL - Lower control limit - upper control limit  
 Results reported to the DL  
 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers  
 Only the linear isomer is reported for all other analytes

11/13/18

Sample ID: OF-MW22-1117										Modified EPA Method 537										
Client Data					Laboratory Data															
Name:	CH2M Hill	Matrix:	Groundwater		Lab Sample:	1701624-03	Column:	BEH C18												
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 11:10		Date Received:	08-Nov-17 10:07														
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution										
PFBS	19.4	2.15	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFHxA	44.9	2.62	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFHpA	9.15	0.710	6.01	9.61	J	B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFHxS	408	1.14	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFOA	126	0.782	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFOS	829	0.969	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFNA	ND	0.973	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFDA	ND	1.79	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
MeFOSAA	ND	1.98	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFUnA	ND	1.26	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
EiFOSAA	ND	1.65	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFDoA	ND	0.951	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFTrDA	ND	0.593	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
PFTeDA	ND	0.907	6.01	9.61		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1										
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution											
13C3-PFBS	IS	102	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
13C2-PFHxA	IS	88.1	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
13C4-PFHpA	IS	87.1	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
18O2-PFHxS	IS	79.5	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
13C2-PFOA	IS	94.5	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
13C8-PFOS	IS	81.3	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
13C5-PFNA	IS	80.0	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
13C2-PFDA	IS	85.4	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
d3-MeFOSAA	IS	95.8	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
13C2-PFUnA	IS	77.5	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
d5-EiFOSAA	IS	81.3	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
13C2-PFDoA	IS	82.8	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											
13C2-PFTeDA	IS	75.0	50 - 150		B7K0059	10-Nov-17	0.104 L	16-Nov-17 23:24	1											

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation  
 LCL-UCL- Lower control limit - upper control limit  
 Results reported to the DL  
 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers  
 Only the linear isomer is reported for all other analytes

11/31/18



**Sample ID: OF-MW22D-1117**

**Modified EPA Method 537**

Client Data		Laboratory Data								
Name:	CH2M Hill	Lab Sample:	1701624-04							
Project:	Fentress Offbase Wells	Date Received:	08-Nov-17 10:07							
Matrix:	Groundwater	Column:	BEH C18							
Date Collected:	06-Nov-17 12:00									
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.99	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFHxA	ND	2.42	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFHpA	ND	0.655	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFHxS	14.7	1.05	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFOA	4.85	0.722	5.53	8.87	J	B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFOS	59.5	0.895	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFNA	ND	0.898	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFDA	ND	1.65	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
MeFOSAA	ND	1.83	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFUnA	ND	1.16	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
EtFOSAA	ND	1.52	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFDoA	ND	0.878	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFTrDA	ND	0.548	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
PFTeDA	ND	0.837	5.53	8.87		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBS	IS	93.5	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
13C2-PFHxA	IS	91.1	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
13C4-PFHpA	IS	102	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
18O2-PFHxS	IS	88.9	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
13C2-PFOA	IS	92.7	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
13C8-PFOS	IS	67.7	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
13C5-PFNA	IS	90.2	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
13C2-PFDA	IS	87.1	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
d3-MeFOSAA	IS	91.3	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
13C2-PFUnA	IS	93.8	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
d5-EtFOSAA	IS	86.6	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
13C2-PFDoA	IS	87.4	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	
13C2-PFTeDA	IS	89.3	50 - 150		B7K0059	10-Nov-17	0.113 L	17-Nov-17 21:35	1	

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation  
 LCL-UCL - Lower control limit - upper control limit  
 Results reported to the DL  
 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers  
 Only the linear isomer is reported for all other analytes

1131.8

**Sample ID: OF-MW19-1117**

**Modified EPA Method 537**

Client Data		Laboratory Data								
Name:	CH2M Hill	Lab Sample:	1701624-05	Column:	BEH C18					
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 13:15	Date Received:	08-Nov-17 10:07					
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	2.52	2.03	5.68	9.05	J	B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFHxA	ND	2.47	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFHpA	ND	0.669	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFHxS	13.7	1.07	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFOA	8.10	0.737	5.68	9.05	J	B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFOS	ND	0.913	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFNA	ND	0.917	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFDA	ND	1.69	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
MeFOSAA	ND	1.87	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFUnA	ND	1.19	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
EfOSAA	ND	1.55	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFDoA	ND	0.896	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFTrDA	ND	0.559	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
PFTeDA	ND	0.854	5.68	9.05		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBS	IS	104	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
13C2-PFHxA	IS	90.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
13C4-PFHpA	IS	93.5	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
18O2-PFHxS	IS	96.3	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
13C2-PFOA	IS	85.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
13C8-PFOS	IS	91.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
13C5-PFNA	IS	81.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
13C2-PFDA	IS	74.3	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
d3-MeFOSAA	IS	70.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
13C2-PFUnA	IS	73.2	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
d5-EfOSAA	IS	79.5	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
13C2-PFDoA	IS	81.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	
13C2-PFTeDA	IS	76.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:47	I	

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation  
 LCL-UCL - Lower control limit - upper control limit  
 Results reported to the DL  
 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers  
 Only the linear isomer is reported for all other analytes

mw11318

Client Data		Laboratory Data									
Name:	CH2M Hill	Matrix:	Groundwater	Lab Sample:	1701624-06	Column:	BEH C18	Sample ID:	Modified EPA Method 537		
Project:	Fentress Offbase Wells	Date Collected:	06-Nov-17 13:45	Date Received:	08-Nov-17 10:07	Batch:		Extracted:	Samp Size:	Analyzed:	Dilution:
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
PFBS	ND	2.04	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFHxA	ND	2.48	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFHpA	ND	0.673	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFHxS	ND	1.08	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFOA	ND	0.741	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFOS	ND	0.919	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFNA	ND	0.922	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFDA	ND	1.70	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
MeFOSAA	ND	1.88	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFUnA	ND	1.20	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
EtFOSAA	ND	1.56	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFDoA	ND	0.901	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFTriDA	ND	0.562	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
PFTeDA	ND	0.859	5.68	9.11		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1	
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution		
13C3-PFBS	IS	91.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
13C2-PFHxA	IS	94.7	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
13C4-PFHpA	IS	88.2	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
18O2-PFHxS	IS	88.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
13C2-PFOA	IS	87.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
13C8-PFOS	IS	80.9	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
13C5-PFNA	IS	73.0	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
13C2-PFDA	IS	80.2	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
d3-MeFOSAA	IS	81.8	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
13C2-PFUnA	IS	68.3	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
d5-EtFOSAA	IS	66.5	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
13C2-PFDoA	IS	66.9	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		
13C2-PFTeDA	IS	90.4	50 - 150		B7K0059	10-Nov-17	0.110 L	16-Nov-17 23:58	1		

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation  
 LCL-UCL- Lower control limit - upper control limit  
 Results reported to the DL  
 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers  
 Only the linear isomer is reported for all other analytes

11/3/18

Sample ID: OF-MW21-1117

Modified EPA Method 537

Client Data		Laboratory Data								
Name:	CH2M Hill	Lab Sample:	1701624-07							
Project:	Fentress Offbase Wells	Date Received:	08-Nov-17 10:07							
Matrix:	Groundwater	Column:	BEH C18							
Date Collected:	06-Nov-17 14:55									
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	40.0	2.00	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFHxA	96.1	2.44	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFHpA	15.9	0.660	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFHxS	1370	1.06	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOA	243	0.727	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFOS	ND	0.901	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFNA	1.09	0.905	5.58	8.94	J	B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFDA	ND	1.66	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
MeFOSAA	ND	1.84	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFUnA	ND	1.17	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
EtFOSAA	ND	1.53	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFDoA	ND	0.885	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFTrDA	ND	0.552	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
PFTeDA	ND	0.843	5.58	8.94		B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
Labeled Standards	% Recovery	DL	Limits	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	97.3		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFHxA	99.3		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C4-PFHpA	99.7		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
18O2-PFHxS	77.9		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFOA	81.6		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C8-PFOS	92.7		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C5-PFNA	74.8		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFDA	78.6		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
d3-MeFOSAA	76.3		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFUnA	70.7		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
d5-EtFOSAA	55.4		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFDoA	64.2		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1
13C2-PFTeDA	91.9		50 - 150			B7K0059	10-Nov-17	0.112 L	17-Nov-17 00:09	1

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation  
 LCL-UCL- Lower control limit - upper control limit  
 Results reported to the DL  
 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers  
 Only the linear isomer is reported for all other analytes

1701624-07

**Sample ID: OF-MW33-1117**

**Modified EPA Method 537**

Client Data		Laboratory Data	
Name:	CH2M Hill	Lab Sample:	1701624-08
Project:	Fentress Offbase Wells	Date Received:	08-Nov-17 10:07
Matrix:	Groundwater	Column:	BEH C18
Date Collected:	07-Nov-17 08:45		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.18	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFHxA	ND	2.65	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFHpA	ND	0.720	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFHxS	ND	1.15	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOA	ND	0.793	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFOS	ND	0.983	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFNA	ND	0.986	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFDA	ND	1.81	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
MeFOSAA	ND	2.01	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFUnA	ND	1.28	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
EtFOSAA	ND	1.67	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFDoA	ND	0.964	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFTrDA	ND	0.602	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
PFTeDA	ND	0.919	6.07	9.74		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBS	IS	91.9	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
13C2-PFHxA	IS	99.4	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
13C4-PFHpA	IS	96.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
18O2-PFHxS	IS	84.9	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
13C2-PFOA	IS	87.0	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
13C8-PFOS	IS	106	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
13C5-PFNA	IS	89.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
13C2-PFDA	IS	85.3	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
d3-MeFOSAA	IS	90.4	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
13C2-PFUnA	IS	73.8	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
d5-EtFOSAA	IS	84.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
13C2-PFDoA	IS	89.2	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	
13C2-PFTeDA	IS	98.1	50 - 150		B7K0059	10-Nov-17	0.103 L	17-Nov-17 00:20	1	

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation  
 LCL-UCL - Lower control limit - upper control limit  
 Results reported to the DL  
 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers  
 Only the linear isomer is reported for all other analytes

11/13/18

**Sample ID: OF-MW33D-1117**

**Modified EPA Method 537**

Client Data		Laboratory Data	
Name:	CH2M Hill	Lab Sample:	1701624-09
Project:	Fentress Offbase Wells	Date Received:	08-Nov-17 10:07
Matrix:	Groundwater	Column:	BEH C18
Date Collected:	07-Nov-17 09:20		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	2.03	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFHxA	ND	2.47	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFHpA	ND	0.669	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFHxS	ND	1.07	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFOA	ND	0.737	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFOS	ND	0.914	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFNA	ND	0.917	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFDA	ND	1.69	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
MeFOSAA	ND	1.87	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFUnA	ND	1.19	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
EtFOSAA	ND	1.55	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFDoA	ND	0.897	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFTeDA	ND	0.559	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
PFTeDA	ND	0.855	5.68	9.06		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBS	IS	95.3	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
13C2-PFHxA	IS	92.2	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
13C4-PFHpA	IS	86.8	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
18O2-PFHxS	IS	83.6	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
13C2-PFOA	IS	87.0	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
13C8-PFOS	IS	85.4	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
13C5-PFNA	IS	94.4	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
13C2-PFDA	IS	92.9	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
d3-MeFOSAA	IS	65.7	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
13C2-PFUnA	IS	88.0	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
d5-EtFOSAA	IS	80.5	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
13C2-PFDoA	IS	86.0	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	
13C2-PFTeDA	IS	92.2	50 - 150		B7K0059	10-Nov-17	0.110 L	17-Nov-17 00:32	1	

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation  
 LCL-UCL- Lower control limit - upper control limit  
 Results reported to the DL  
 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers  
 Only the linear isomer is reported for all other analytes

New 131.8

**Sample ID: OF-EB110717**

**Modified EPA Method 537**

Client Data		Laboratory Data	
Name:	CH2M Hill	Lab Sample:	1701624-10
Project:	Fentress Offbase Wells	Date Received:	08-Nov-17 10:07
Matrix:	QC Water	Column:	BEH C18
Date Collected:	07-Nov-17 09:45		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.96	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFHxA	ND	2.38	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFHpA	ND	0.646	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFHxS	ND	1.03	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOA	ND	0.711	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFOS	ND	0.882	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFNA	ND	0.885	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFDA	ND	1.63	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
MeFOSAA	ND	1.80	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFUnA	ND	1.15	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
EtFOSAA	ND	1.50	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFDoA	ND	0.865	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFTtDA	ND	0.540	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
PFTeDA	ND	0.825	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1
Labeled Standards	% Recovery	DL	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBS	108		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
13C2-PFHxA	103		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
13C4-PFHpA	105		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
18O2-PFHxS	85.5		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
13C2-PFOA	99.2		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
13C8-PFOS	92.9		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
13C5-PFNA	86.5		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
13C2-PFDA	85.2		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
d3-MeFOSAA	73.5		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
13C2-PFUnA	79.5		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
d5-EtFOSAA	84.7		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
13C2-PFDoA	87.2		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	
13C2-PFTeDA	92.9		50 - 150		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:43	1	

DL - Detection Limit  
 LOD - Limit of Detection  
 LOQ - Limit of quantitation  
 LCL-UCL - Lower control limit - upper control limit  
 Results reported to the DL  
 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers  
 Only the linear isomer is reported for all other analytes

new 131-8

**Sample ID: OF-FB110717** **Modified EPA Method 537**

<b>Client Data</b>	<b>Laboratory Data</b>	
Name: CH2M Hill	Lab Sample: 1701624-11	Column: BEH C18
Project: Pentress Offbase Wells	Date Collected: 07-Nov-17 09:50	Date Received: 08-Nov-17 10:07
Matrix: QC Water		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
Labeled Standards	% Recovery	Limits								
PFBS	ND	1.96	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFHxA	ND	2.38	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFHpA	ND	0.646	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFHxS	ND	1.03	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFOA	ND	0.711	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFOS	ND	0.882	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFNA	ND	0.885	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFDA	ND	1.63	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
MeFOSAA	ND	1.80	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFUnA	ND	1.15	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
EtFOSAA	ND	1.50	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFDoA	ND	0.865	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFTrDA	ND	0.540	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
PFTeDA	ND	0.825	5.48	8.74		B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
<b>Labeled Standards</b>	<b>% Recovery</b>	<b>Limits</b>								
13C3-PFBS	99.3	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFHxA	99.0	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C4-PFHpA	96.4	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
18O2-PFHxS	102	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFOA	92.3	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C8-PFOS	106	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C5-PFNA	97.5	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFDA	70.0	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
d3-MeFOSAA	57.5	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFUnA	67.1	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
d5-EtFOSAA	69.7	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PEDoA	71.4	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1
13C2-PFTeDA	72.0	50 - 150				B7K0059	10-Nov-17	0.114 L	17-Nov-17 00:54	1

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

new 131.8









LOCATION_NAME	SITE_NAME	INSTALLATION_ID	LOCATION_TYPE	LOCATION_TYPE_DESC	SDG	COORD_X	COORD_Y	ANALYTICAL_METHOD_GRP_DESC	SAMPLE_NAME	SAMPLE_MATRIX	SAMPLE_MATRIX_DESC	COLLECT_DATE
OF-MW19	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12177261.6	3427097.5	Perfluoroalkyl Compounds	OF-MW19-1117	WG	Ground water	06-Nov-17
OF-MW33	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12185006.6	3422312.8	Perfluoroalkyl Compounds	OF-MW33-1117	WG	Ground water	07-Nov-17
OF-MW21	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12177904.8	3426321.8	Perfluoroalkyl Compounds	OF-MW21-1117	WG	Ground water	06-Nov-17
		OCEANA_NAS			1701624			Perfluoroalkyl Compounds	OF-FB110717	WQ	Water for QC samples	07-Nov-17
OF-MW21	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12177904.8	3426321.8	Perfluoroalkyl Compounds	OF-MW21-1117	WG	Ground water	06-Nov-17
OF-MW20	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12175882.2	3426721.2	Perfluoroalkyl Compounds	OF-MW20-1117	WG	Ground water	06-Nov-17
		OCEANA_NAS			1701624			Perfluoroalkyl Compounds	OF-EB110717	WQ	Water for QC samples	07-Nov-17
OF-MW22D	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12179037.6	3426482.4	Perfluoroalkyl Compounds	OF-MW22D-1117	WG	Ground water	06-Nov-17
OF-MW19D	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12177261.6	3427097.5	Perfluoroalkyl Compounds	OF-MW19D-1117	WG	Ground water	06-Nov-17
		OCEANA_NAS			1701624			Perfluoroalkyl Compounds	OF-FB110717	WQ	Water for QC samples	07-Nov-17
OF-MW20	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12175882.2	3426721.2	Perfluoroalkyl Compounds	OF-MW20-1117	WG	Ground water	06-Nov-17
OF-MW21	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12177904.8	3426321.8	Perfluoroalkyl Compounds	OF-MW21-1117	WG	Ground water	06-Nov-17
OF-MW20	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12175882.2	3426721.2	Perfluoroalkyl Compounds	OF-MW20-1117	WG	Ground water	06-Nov-17
		OCEANA_NAS			1701624			Perfluoroalkyl Compounds	OF-FB110717	WQ	Water for QC samples	07-Nov-17
OF-MW22D	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12179037.6	3426482.4	Perfluoroalkyl Compounds	OF-MW22D-1117	WG	Ground water	06-Nov-17
OF-MW22	SITE 00017	OCEANA_NAS	WLM	Monitoring well	1701624	12179037.6	3426482.4	Perfluoroalkyl Compounds	OF-MW22-1117	WG	Ground water	06-Nov-17