



**Groundwater Sample Results,  
Level 2 Laboratory Report, Level 4 Laboratory Report,  
Electronic Data Deliverable, Data Validation Report,  
and the Sample Location Report, SDG 1700681**

*Naval Air Station Oceana  
Virginia Beach, Virginia*

July 2019



June 27, 2017

**Vista Work Order No. 1700681**

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 June 02, 2017. This sample set was analyzed on a rush turn-around time, under your Project Name '674207.51.51'.

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,

A handwritten signature in black ink that reads "Martha Maier" with a small flourish at the end.

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. 1700681

### Case Narrative

#### Sample Condition on Receipt:

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

#### Analytical Notes:

##### Modified EPA Method 537

Sample "OF17-MW04-0617" contained particulate and was centrifuged prior to extraction.

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

##### Holding Times

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

##### Quality Control

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

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

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

As requested, an MS/MSD was performed on sample "OF17-MW03-0517".

An "E" flag on the PFOS result in sample "OF17-MW04-0617" indicates that the analyte concentration is greater than the high point in the initial calibration curve, and there is greater uncertainty in the calculated value. An additional dilution would not have adequate response of the internal standard for quantification.

#### QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
1700681-02	OF17-MW03-0517	Modified EPA Method 537	18O2-PFHxS	H	162
1700681-03	OF17-MW01-0617	Modified EPA Method 537	13C3-PFBS	H	158
1700681-04	OF17-MW01P-0617	Modified EPA Method 537	13C3-PFBS	H	157
1700681-06	OF17-MW04-0617	Modified EPA Method 537	13C3-PFBS	H	164
B7F0010-BLK1	B7F0010-BLK1	Modified EPA Method 537	13C3-PFBS	H	155

H = Recovery was outside laboratory acceptance criteria.

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# Sample Inventory Report

Vista Sample ID	Client Sample ID		Sampled	Received	Components/Containers
1700681-01	OF17-MW02-0517		31-May-17 12:20	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-02	OF17-MW03-0517	MS/MSD	31-May-17 14:05	02-Jun-17 09:00	HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
1700681-03	OF17-MW01-0617		01-Jun-17 11:45	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-04	OF17-MW01P-0617		01-Jun-17 11:50	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-05	OF17-FB060117		01-Jun-17 12:30	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-06	OF17-MW04-0617		01-Jun-17 13:10	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-07	OF-EB060117		01-Jun-17 13:20	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL

## **ANALYTICAL RESULTS**

Sample ID: Method Blank						Modified EPA Method 537			
Matrix: Aqueous Sample Size: 0.125 L		QC Batch: B7F0010 Date Extracted: 08-Jun-2017 8:19		Lab Sample: B7F0010-BLK1 Date Analyzed: 09-Jun-17 05:56 Column: BEH C18					
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.79	5.00	8.00		IS 13C3-PFBS	155	50 - 150	H
PFHpA	ND	0.591	5.00	8.00		IS 13C4-PFHpA	129	50 - 150	
PFHxS	ND	0.947	5.00	8.00		IS 18O2-PFHxS	128	50 - 150	
PFOA	ND	0.651	5.00	8.00		IS 13C2-PFOA	112	50 - 150	
PFOS	ND	0.807	5.00	8.00		IS 13C8-PFOS	117	50 - 150	
PFNA	ND	0.810	5.00	8.00		IS 13C5-PFNA	125	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

**Sample ID: OPR**

**Modified EPA Method 537**

Matrix: Aqueous Sample Size: 0.125 L	QC Batch: B7F0010 Date Extracted: 08-Jun-2017 8:19	Lab Sample: B7F0010-BS1 Date Analyzed: 09-Jun-17 05:33 Column: BEH C18					
Analyte	Amt Found (ng/L)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL
PFBS	78.7	80.0	98.4	70 - 130	IS 13C3-PFBS	143	50 - 150
PFHpA	76.5	80.0	95.7	70 - 130	IS 13C4-PFHpA	124	50 - 150
PFHxS	77.5	80.0	96.9	70 - 130	IS 18O2-PFHxS	136	50 - 150
PFOA	86.1	80.0	108	70 - 130	IS 13C2-PFOA	111	50 - 150
PFOS	76.3	80.0	95.4	70 - 130	IS 13C8-PFOS	143	50 - 150
PFNA	74.5	80.0	93.2	70 - 130	IS 13C5-PFNA	121	50 - 150

LCL-UCL - Lower control limit - upper control limit



**Sample ID: OF17-MW02-0517**

**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-01	Date Received:	02-Jun-2017 9:00		
Project:	674207.51.51	Sample Size:	0.116 L	QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19		
Date Collected:	31-May-2017 12:20			Date Analyzed:	09-Jun-17 06:53	Column:	BEH C18		
Location:	NALF SITE 17				23-Jun-17 14:24	Column:	BEH C18		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	67.9	1.94	5.39	8.65		IS 13C3-PFBS	146	50 - 150	
PFHpA	672	0.639	5.39	8.65		IS 13C4-PFHpA	125	50 - 150	
PFHxS	3850	25.6	135	216	D	IS 18O2-PFHxS	94.1	50 - 150	D
PFOA	816	0.704	5.39	8.65		IS 13C2-PFOA	107	50 - 150	
PFOS	8770	8.73	53.9	86.5	D	IS 13C8-PFOS	102	50 - 150	D
PFNA	292	0.876	5.39	8.65		IS 13C5-PFNA	118	50 - 150	

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

**Sample ID: OF17-MW03-0517**

**Modified EPA Method 537**

Client Data			Sample Data			Laboratory Data			
Name:	CH2M Hill		Matrix:	Aqueous		Lab Sample:	1700681-02	Date Received:	02-Jun-2017 9:00
Project:	674207.51.51		Sample Size:	0.114 L		QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19
Date Collected:	31-May-2017 14:05					Date Analyzed:	09-Jun-17 07:04	Column:	BEH C18
Location:	NALF SITE 17						16-Jun-17 08:29	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	739	1.97	5.48	8.79		IS 13C3-PFBS	148	50 - 150	
PFHpA	1750	16.2	137	220	D	IS 13C4-PFHpA	102	50 - 150	D
PFHxS	11100	52.0	274	439	D	IS 18O2-PFHxS	162	50 - 150	D, H
PFOA	2760	17.9	137	220	D	IS 13C2-PFOA	96.7	50 - 150	D
PFOS	10400	22.2	137	220	D	IS 13C8-PFOS	114	50 - 150	D
PFNA	714	0.890	5.48	8.79		IS 13C5-PFNA	128	50 - 150	

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

**Matrix Spike Results**

**Modified EPA Method 537**

Source Client ID: OF17-MW03-0517	QC Batch: B7F0010	Lab Sample: B7F0010-MS1/B7F0010-MSD1
Source LabNumber: 1700681-02	Date Extracted: 08-Jun-2017 8:19	Date Analyzed: 16-Jun-17 08:52 Column: BEH C18
Matrix: Aqueous		16-Jun-17 09:16 Column: BEH C18
Sample Size: 0.113/0.121 L		

Analyte	Spike-MS (ng/L)	MS %R	MS Qual.	Spike-MSD (ng/L)	MSD %R	MSD RPD	MSD Qual.	%R Limit	%RPD Limit	Labeled Standard	MS %R	MS Qualifiers	MSD %R	MS Qual.
PFBS	88.9	66.0	H	82.8	228	110	D, H	70 - 130	25	IS 13C3-PFBS	148		92.5	D
PFHpA	88.9	-11.2	D, H	82.8	263	218	D, H	70 - 130	25	IS 13C4-PFHpA	112	D	103	D
PFHxS	88.9	1480	D, H	82.8	6220	123	D, H	70 - 130	25	IS 18O2-PFHxS	97.0	D	74.6	D
PFOA	88.9	219	D, H	82.8	-172	1660	D, H	70 - 130	25	IS 13C2-PFOA	130	D	131	D
PFOS	88.9	1930	D, H	82.8	-405	306	D, H	70 - 130	25	IS 13C8-PFOS	113	D	97.1	D
PFNA	88.9	53.9	H	82.8	73.9	31.3	H	70 - 130	25	IS 13C5-PFNA	121		126	

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

**Sample ID: OF17-MW01-0617**

**Modified EPA Method 537**

Client Data			Sample Data			Laboratory Data			
Name:	CH2M Hill		Matrix:	Aqueous		Lab Sample:	1700681-03	Date Received:	02-Jun-2017 9:00
Project:	674207.51.51		Sample Size:	0.114 L		QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19
Date Collected:	01-Jun-2017 11:45					Date Analyzed:	09-Jun-17 07:39	Column:	BEH C18
Location:	NALF SITE 17						23-Jun-17 14:35	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	181	1.95	5.48	8.74		IS 13C3-PFBS	158	50 - 150	H
PFHpA	1390	32.3	274	437	D	IS 13C4-PFHpA	102	50 - 150	D
PFHxS	4590	51.7	274	437	D	IS 18O2-PFHxS	67.6	50 - 150	D
PFOA	1840	35.5	274	437	D	IS 13C2-PFOA	113	50 - 150	D
PFOS	14000	17.6	110	175	D	IS 13C8-PFOS	129	50 - 150	D
PFNA	403	0.884	5.48	8.74		IS 13C5-PFNA	120	50 - 150	

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

**Sample ID: OF17-MW01P-0617**

**Modified EPA Method 537**

Client Data			Sample Data			Laboratory Data			
Name:	CH2M Hill		Matrix:	Aqueous		Lab Sample:	1700681-04	Date Received:	02-Jun-2017 9:00
Project:	674207.51.51		Sample Size:	0.122 L		QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19
Date Collected:	01-Jun-2017 11:50					Date Analyzed:	09-Jun-17 08:27	Column:	BEH C18
Location:	NALF SITE 17						16-Jun-17 06:22	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	184	1.84	5.12	8.22		IS 13C3-PFBS	157	50 - 150	H
PFHpA	1500	12.1	102	164	D	IS 13C4-PFHpA	100	50 - 150	D
PFHxS	3640	48.6	256	411	D	IS 18O2-PFHxS	111	50 - 150	D
PFOA	1710	13.4	102	164	D	IS 13C2-PFOA	112	50 - 150	D
PFOS	13000	16.6	102	164	D	IS 13C8-PFOS	121	50 - 150	D
PFNA	388	0.832	5.12	8.22		IS 13C5-PFNA	124	50 - 150	

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

**Sample ID: OF17-FB060117**

**Modified EPA Method 537**

Client Data		Sample Data			Laboratory Data				
Name:	CH2M Hill	Matrix:	Aqueous		Lab Sample:	1700681-05	Date Received:	02-Jun-2017 9:00	
Project:	674207.51.51	Sample Size:	0.121 L		QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19	
Date Collected:	01-Jun-2017 12:30				Date Analyzed:	09-Jun-17 08:38 Column: BEH C18			
Location:	NALF SITE 17								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.85	5.17	8.26		IS 13C3-PFBS	143	50 - 150	
PFHpA	ND	0.610	5.17	8.26		IS 13C4-PFHpA	120	50 - 150	
PFHxS	ND	0.977	5.17	8.26		IS 18O2-PFHxS	128	50 - 150	
PFOA	ND	0.672	5.17	8.26		IS 13C2-PFOA	108	50 - 150	
PFOS	ND	0.833	5.17	8.26		IS 13C8-PFOS	119	50 - 150	
PFNA	ND	0.836	5.17	8.26		IS 13C5-PFNA	111	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

**Sample ID: OF17-MW04-0617**

**Modified EPA Method 537**

Client Data			Sample Data			Laboratory Data			
Name:	CH2M Hill		Matrix:	Aqueous		Lab Sample:	1700681-06	Date Received:	02-Jun-2017 9:00
Project:	674207.51.51		Sample Size:	0.116 L		QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19
Date Collected:	01-Jun-2017 13:10					Date Analyzed:	09-Jun-17 08:49	Column:	BEH C18
Location:	NALF SITE 17						16-Jun-17 06:46	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	156	1.93	5.39	8.61		IS 13C3-PFBS	164	50 - 150	H
PFHpA	2340	6.36	53.9	86.1	D	IS 13C4-PFHpA	108	50 - 150	D
PFHxS	3770	51.0	269	431	D	IS 18O2-PFHxS	108	50 - 150	D
PFOA	3400	7.01	53.9	86.1	D	IS 13C2-PFOA	119	50 - 150	D
PFOS	44500	43.4	269	431	E, D	IS 13C8-PFOS	140	50 - 150	D
PFNA	627	0.872	5.39	8.61		IS 13C5-PFNA	128	50 - 150	

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

**Sample ID: OF-EB060117** **Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-07	Date Received:	02-Jun-2017 9:00
Project:	674207.51.51	Sample Size:	0.118 L	QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19
Date Collected:	01-Jun-2017 13:20			Date Analyzed:	09-Jun-17 09:01	Column:	BEH C18
Location:	NALF SITE 17						

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.89	5.30	8.45		IS 13C3-PFBS	141	50 - 150	
PFHpA	ND	0.624	5.30	8.45		IS 13C4-PFHpA	133	50 - 150	
PFHxS	ND	1.00	5.30	8.45		IS 18O2-PFHxS	133	50 - 150	
PFOA	ND	0.688	5.30	8.45		IS 13C2-PFOA	109	50 - 150	
PFOS	ND	0.852	5.30	8.45		IS 13C8-PFOS	126	50 - 150	
PFNA	ND	0.856	5.30	8.45		IS 13C5-PFNA	129	50 - 150	

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



## **DATA QUALIFIERS & ABBREVIATIONS**

<b>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>

**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
Nevada Division of Environmental Protection	CA004132017-1
New Hampshire Environmental Accreditation Program	207716
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-008
Pennsylvania Department of Environmental Protection	013
Texas Commission on Environmental Quality	T104704189-17-8
Virginia Department of General Services	8621
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

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

## NELAP Accredited Test Methods

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

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

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

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

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

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

# CHAIN OF CUSTODY

**For Laboratory Use Only**  
 Laboratory Project ID: 1700681 Temp: 0.4 °C  
 Storage ID: WR-7 Storage Secured: Yes  No

Project ID: 674207.SI.SI PO#: \_\_\_\_\_ Sampler: R. McELHANNY  
 (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 City VIRGINIA BEACH State VA Ph# 541-768-3109 Fax# \_\_\_\_\_

Relinquished by (printed name and signature) ROBERT McELHANNY Date 5/11/17 Time 1430 Received by (printed name and signature) Sydney Roughton Date 6/2/17 Time 0905

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

Add Analysis(es) Requested			Container(s)													Comments			
Quantity	Type	Matrix	2378-TCDD	2378-TCDD/TCDF	PCDD/PCDF	2378-TCDD	2378-TCDD/TCDF	PCDD/PCDF	2378-TCDD	2378-TCDD/TCDF	PCDD/PCDF	TOTALS	COPLANAR PCB's	209 CONGENERS	PBDE		PAH	WHO-29	Mod. EPA 537

Sample ID	Date	Time	Location/Sample Description	Quantity	Type	Matrix	2378-TCDD	2378-TCDD/TCDF	PCDD/PCDF	2378-TCDD	2378-TCDD/TCDF	PCDD/PCDF	TOTALS	COPLANAR PCB's	209 CONGENERS	PBDE	PAH	WHO-29	Mod. EPA 537	Unmodified 537	Comments	
OF17-MW02-0517	5/31/17	1220	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW03-0517	5/31/17	1405	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW03-0517-MS	5/31/17	1405	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW03-0517-SD	5/31/17	1405	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW01-0617	6/1/17	1145	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW01P-0617	6/1/17	1150	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF-FB060117	6/1/17	1230	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW04-0617	6/1/17	1310	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF-EB060117	6/1/17	1320	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
*IDW-AQ-01-0617	6/1/17	1340	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)

Special Instructions/Comments: 1 COOLER

SEND DOCUMENTATION AND RESULTS TO:

Name: SAME AS INVOICE  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Email: TIFFANY.HILL@CH2M.COM

\* 1700682



### Sample Log-in Checklist

Vista Work Order #: 1700681 TAT 14

Samples Arrival:	Date/Time 6/2/17 0900	Initials: SR	Location: WR-2
			Shelf/Rack: N/A
Logged In:	Date/Time 06/02/17 1119	Initials: CBB	Location: WR-2
			Shelf/Rack: E6
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> On Trac
		<input type="checkbox"/> GSO	<input type="checkbox"/> DHL
		<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Other
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
	<input type="checkbox"/> None		
Temp °C:	0.1 (uncorrected)	Time: 0904	Thermometer ID: IR-1
Temp °C:	0.4 (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 #	7867 4659 1390		
Sample Container Intact?	<input checked="" type="checkbox"/>		
Sample Custody Seals Intact?			<input checked="" type="checkbox"/>
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>		
COC Anomaly/Sample Acceptance Form completed?		<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 type="checkbox"/> None
	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
Shipping Container	<input checked="" type="checkbox"/> Vista	<input type="checkbox"/> Client	<input type="checkbox"/> Retain
	<input type="checkbox"/> Return	<input type="checkbox"/> Dispose	

Comments:

June 27, 2017

**Vista Work Order No. 1700681**

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 June 02, 2017. This sample set was analyzed on a rush turn-around time, under your Project Name '674207.51.51'.

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. 1700681

### Case Narrative

#### Sample Condition on Receipt:

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

#### Analytical Notes:

##### Modified EPA Method 537

Sample "OF17-MW04-0617" contained particulate and was centrifuged prior to extraction.

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

##### Holding Times

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

##### Quality Control

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

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

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

As requested, an MS/MSD was performed on sample "OF17-MW03-0517".

An "E" flag on the PFOS result in sample "OF17-MW04-0617" indicates that the analyte concentration is greater than the high point in the initial calibration curve, and there is greater uncertainty in the calculated value. An additional dilution would not have adequate response of the internal standard for quantification.

#### QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
1700681-02	OF17-MW03-0517	Modified EPA Method 537	18O2-PFHxS	H	162
1700681-03	OF17-MW01-0617	Modified EPA Method 537	13C3-PFBS	H	158
1700681-04	OF17-MW01P-0617	Modified EPA Method 537	13C3-PFBS	H	157
1700681-06	OF17-MW04-0617	Modified EPA Method 537	13C3-PFBS	H	164
B7F0010-BLK1	B7F0010-BLK1	Modified EPA Method 537	13C3-PFBS	H	155

H = Recovery was outside laboratory acceptance criteria.



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# Sample Inventory Report

Vista Sample ID	Client Sample ID		Sampled	Received	Components/Containers
1700681-01	OF17-MW02-0517		31-May-17 12:20	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-02	OF17-MW03-0517	MS/MSD MS/MSD MS/MSD MS/MSD MS/MSD MS/MSD	31-May-17 14:05	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-03	OF17-MW01-0617		01-Jun-17 11:45	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-04	OF17-MW01P-0617		01-Jun-17 11:50	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-05	OF17-FB060117		01-Jun-17 12:30	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-06	OF17-MW04-0617		01-Jun-17 13:10	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700681-07	OF-EB060117		01-Jun-17 13:20	02-Jun-17 09:00	HDPE Bottle, 125 mL HDPE Bottle, 125 mL

## **ANALYTICAL RESULTS**

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

Matrix: Aqueous	QC Batch: B7F0010	Lab Sample: B7F0010-BLK1
Sample Size: 0.125 L	Date Extracted: 08-Jun-2017 8:19	Date Analyzed: 09-Jun-17 05:56 Column: BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.79	5.00	8.00		IS 13C3-PFBS	155	50 - 150	H
PFHpA	ND	0.591	5.00	8.00		IS 13C4-PFHpA	129	50 - 150	
PFHxS	ND	0.947	5.00	8.00		IS 18O2-PFHxS	128	50 - 150	
PFOA	ND	0.651	5.00	8.00		IS 13C2-PFOA	112	50 - 150	
PFOS	ND	0.807	5.00	8.00		IS 13C8-PFOS	117	50 - 150	
PFNA	ND	0.810	5.00	8.00		IS 13C5-PFNA	125	50 - 150	

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

**Sample ID: OPR**

**Modified EPA Method 537**

Matrix: Aqueous Sample Size: 0.125 L	QC Batch: B7F0010 Date Extracted: 08-Jun-2017 8:19	Lab Sample: B7F0010-BS1 Date Analyzed: 09-Jun-17 05:33 Column: BEH C18					
Analyte	Amt Found (ng/L)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL
PFBS	78.7	80.0	98.4	70 - 130	IS 13C3-PFBS	143	50 - 150
PFHpA	76.5	80.0	95.7	70 - 130	IS 13C4-PFHpA	124	50 - 150
PFHxS	77.5	80.0	96.9	70 - 130	IS 18O2-PFHxS	136	50 - 150
PFOA	86.1	80.0	108	70 - 130	IS 13C2-PFOA	111	50 - 150
PFOS	76.3	80.0	95.4	70 - 130	IS 13C8-PFOS	143	50 - 150
PFNA	74.5	80.0	93.2	70 - 130	IS 13C5-PFNA	121	50 - 150

LCL-UCL - Lower control limit - upper control limit

**Sample ID: OF17-MW02-0517**

**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-01	Date Received:	02-Jun-2017 9:00		
Project:	674207.51.51	Sample Size:	0.116 L	QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19		
Date Collected:	31-May-2017 12:20			Date Analyzed:	09-Jun-17 06:53	Column:	BEH C18		
Location:	NALF SITE 17				23-Jun-17 14:24	Column:	BEH C18		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	67.9	1.94	5.39	8.65		IS 13C3-PFBS	146	50 - 150	
PFHpA	672	0.639	5.39	8.65		IS 13C4-PFHpA	125	50 - 150	
PFHxS	3850	25.6	135	216	D	IS 18O2-PFHxS	94.1	50 - 150	D
PFOA	816	0.704	5.39	8.65		IS 13C2-PFOA	107	50 - 150	
PFOS	8770	8.73	53.9	86.5	D	IS 13C8-PFOS	102	50 - 150	D
PFNA	292	0.876	5.39	8.65		IS 13C5-PFNA	118	50 - 150	

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

**Sample ID: OF17-MW03-0517**

**Modified EPA Method 537**

Client Data			Sample Data			Laboratory Data			
Name:	CH2M Hill		Matrix:	Aqueous		Lab Sample:	1700681-02	Date Received:	02-Jun-2017 9:00
Project:	674207.51.51		Sample Size:	0.114 L		QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19
Date Collected:	31-May-2017 14:05					Date Analyzed:	09-Jun-17 07:04	Column:	BEH C18
Location:	NALF SITE 17						16-Jun-17 08:29	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	739	1.97	5.48	8.79		IS 13C3-PFBS	148	50 - 150	
PFHpA	1750	16.2	137	220	D	IS 13C4-PFHpA	102	50 - 150	D
PFHxS	11100	52.0	274	439	D	IS 18O2-PFHxS	162	50 - 150	D, H
PFOA	2760	17.9	137	220	D	IS 13C2-PFOA	96.7	50 - 150	D
PFOS	10400	22.2	137	220	D	IS 13C8-PFOS	114	50 - 150	D
PFNA	714	0.890	5.48	8.79		IS 13C5-PFNA	128	50 - 150	

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

**Matrix Spike Results**

**Modified EPA Method 537**

Source Client ID: OF17-MW03-0517	QC Batch: B7F0010	Lab Sample: B7F0010-MS1/B7F0010-MSD1
Source LabNumber: 1700681-02	Date Extracted: 08-Jun-2017 8:19	Date Analyzed: 16-Jun-17 08:52 Column: BEH C18
Matrix: Aqueous		16-Jun-17 09:16 Column: BEH C18
Sample Size: 0.113/0.121 L		

Analyte	Spike-MS (ng/L)	MS %R	MS Qual.	Spike-MSD (ng/L)	MSD %R	MSD RPD	MSD Qual.	%R Limit	%RPD Limit	Labeled Standard	MS %R	MS Qualifiers	MSD %R	MS Qual.
PFBS	88.9	66.0	H	82.8	228	110	D, H	70 - 130	25	IS 13C3-PFBS	148		92.5	D
PFHpA	88.9	-11.2	D, H	82.8	263	218	D, H	70 - 130	25	IS 13C4-PFHpA	112	D	103	D
PFHxS	88.9	1480	D, H	82.8	6220	123	D, H	70 - 130	25	IS 18O2-PFHxS	97.0	D	74.6	D
PFOA	88.9	219	D, H	82.8	-172	1660	D, H	70 - 130	25	IS 13C2-PFOA	130	D	131	D
PFOS	88.9	1930	D, H	82.8	-405	306	D, H	70 - 130	25	IS 13C8-PFOS	113	D	97.1	D
PFNA	88.9	53.9	H	82.8	73.9	31.3	H	70 - 130	25	IS 13C5-PFNA	121		126	

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



**Sample ID: OF17-MW01-0617**

**Modified EPA Method 537**

Client Data			Sample Data			Laboratory Data			
Name:	CH2M Hill		Matrix:	Aqueous		Lab Sample:	1700681-03	Date Received:	02-Jun-2017 9:00
Project:	674207.51.51		Sample Size:	0.114 L		QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19
Date Collected:	01-Jun-2017 11:45					Date Analyzed:	09-Jun-17 07:39	Column:	BEH C18
Location:	NALF SITE 17						23-Jun-17 14:35	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	181	1.95	5.48	8.74		IS 13C3-PFBS	158	50 - 150	H
PFHpA	1390	32.3	274	437	D	IS 13C4-PFHpA	102	50 - 150	D
PFHxS	4590	51.7	274	437	D	IS 18O2-PFHxS	67.6	50 - 150	D
PFOA	1840	35.5	274	437	D	IS 13C2-PFOA	113	50 - 150	D
PFOS	14000	17.6	110	175	D	IS 13C8-PFOS	129	50 - 150	D
PFNA	403	0.884	5.48	8.74		IS 13C5-PFNA	120	50 - 150	

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

**Sample ID: OF17-MW01P-0617**

**Modified EPA Method 537**

Client Data			Sample Data			Laboratory Data			
Name:	CH2M Hill		Matrix:	Aqueous		Lab Sample:	1700681-04	Date Received:	02-Jun-2017 9:00
Project:	674207.51.51		Sample Size:	0.122 L		QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19
Date Collected:	01-Jun-2017 11:50					Date Analyzed:	09-Jun-17 08:27	Column:	BEH C18
Location:	NALF SITE 17						16-Jun-17 06:22	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	184	1.84	5.12	8.22		IS 13C3-PFBS	157	50 - 150	H
PFHpA	1500	12.1	102	164	D	IS 13C4-PFHpA	100	50 - 150	D
PFHxS	3640	48.6	256	411	D	IS 18O2-PFHxS	111	50 - 150	D
PFOA	1710	13.4	102	164	D	IS 13C2-PFOA	112	50 - 150	D
PFOS	13000	16.6	102	164	D	IS 13C8-PFOS	121	50 - 150	D
PFNA	388	0.832	5.12	8.22		IS 13C5-PFNA	124	50 - 150	

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

**Sample ID: OF17-FB060117**

**Modified EPA Method 537**

Client Data		Sample Data			Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous		Lab Sample:	1700681-05	Date Received:	02-Jun-2017 9:00		
Project:	674207.51.51	Sample Size:	0.121 L		QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19		
Date Collected:	01-Jun-2017 12:30	Date Analyzed: 09-Jun-17 08:38 Column: BEH C18								
Location:	NALF SITE 17									

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.85	5.17	8.26		IS 13C3-PFBS	143	50 - 150	
PFHpA	ND	0.610	5.17	8.26		IS 13C4-PFHpA	120	50 - 150	
PFHxS	ND	0.977	5.17	8.26		IS 18O2-PFHxS	128	50 - 150	
PFOA	ND	0.672	5.17	8.26		IS 13C2-PFOA	108	50 - 150	
PFOS	ND	0.833	5.17	8.26		IS 13C8-PFOS	119	50 - 150	
PFNA	ND	0.836	5.17	8.26		IS 13C5-PFNA	111	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

**Sample ID: OF17-MW04-0617**

**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-06	Date Received:	02-Jun-2017 9:00		
Project:	674207.51.51	Sample Size:	0.116 L	QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19		
Date Collected:	01-Jun-2017 13:10			Date Analyzed:	09-Jun-17 08:49	Column:	BEH C18		
Location:	NALF SITE 17				16-Jun-17 06:46	Column:	BEH C18		

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	156	1.93	5.39	8.61		IS 13C3-PFBS	164	50 - 150	H
PFHpA	2340	6.36	53.9	86.1	D	IS 13C4-PFHpA	108	50 - 150	D
PFHxS	3770	51.0	269	431	D	IS 18O2-PFHxS	108	50 - 150	D
PFOA	3400	7.01	53.9	86.1	D	IS 13C2-PFOA	119	50 - 150	D
PFOS	44500	43.4	269	431	E, D	IS 13C8-PFOS	140	50 - 150	D
PFNA	627	0.872	5.39	8.61		IS 13C5-PFNA	128	50 - 150	

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

**Sample ID: OF-EB060117**

**Modified EPA Method 537**

Client Data		Sample Data			Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous		Lab Sample:	1700681-07	Date Received:	02-Jun-2017 9:00		
Project:	674207.51.51	Sample Size:	0.118 L		QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19		
Date Collected:	01-Jun-2017 13:20				Date Analyzed:	09-Jun-17 09:01 Column: BEH C18				
Location:	NALF SITE 17									

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.89	5.30	8.45		IS 13C3-PFBS	141	50 - 150	
PFHpA	ND	0.624	5.30	8.45		IS 13C4-PFHpA	133	50 - 150	
PFHxS	ND	1.00	5.30	8.45		IS 18O2-PFHxS	133	50 - 150	
PFOA	ND	0.688	5.30	8.45		IS 13C2-PFOA	109	50 - 150	
PFOS	ND	0.852	5.30	8.45		IS 13C8-PFOS	126	50 - 150	
PFNA	ND	0.856	5.30	8.45		IS 13C5-PFNA	129	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

## **DATA QUALIFIERS & ABBREVIATIONS**

<b>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>

**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
Nevada Division of Environmental Protection	CA004132017-1
New Hampshire Environmental Accreditation Program	207716
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-008
Pennsylvania Department of Environmental Protection	013
Texas Commission on Environmental Quality	T104704189-17-8
Virginia Department of General Services	8621
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

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

## NELAP Accredited Test Methods

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

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

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

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

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



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

# CHAIN OF CUSTODY

**For Laboratory Use Only**  
 Laboratory Project ID: 1700681 Temp: 0.4 °C  
 Storage ID: WR-7 Storage Secured: Yes  No

Project ID: 674207.SI.SI PO#: \_\_\_\_\_ Sampler: R. McELHANNY  
 (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 City VIRGINIA BEACH State VA Ph# 541-768-3109 Fax# \_\_\_\_\_

Relinquished by (printed name and signature) ROBERT McELHANNY Date 5/11/17 Time 1430 Received by (printed name and signature) Sydney Roughton Date 6/2/17 Time 0905

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

Add Analysis(es) Requested			Container(s)		EPA 1613 EPA 8290 EPA 8280 EPA 1668 EPA 1614 CARB429														
Quantity	Type	Matrix	2378-TCDD	2378-TCDD/TCDF	PCDD/PCDF	2378-TCDD	2378-TCDD/TCDF	PCDD/PCDF	2378-TCDD	2378-TCDD/TCDF	PCDD/PCDF	TOTALS	COP/LAMAR PCB's	209 CONGENERS	PBDE	PAH	WHO-29	Mod. EPA 537	Unmodified 537

Sample ID	Date	Time	Location/Sample Description	Quantity	Type	Matrix	2378-TCDD	2378-TCDD/TCDF	PCDD/PCDF	2378-TCDD	2378-TCDD/TCDF	PCDD/PCDF	TOTALS	COP/LAMAR PCB's	209 CONGENERS	PBDE	PAH	WHO-29	Mod. EPA 537	Unmodified 537	Comments	
OF17-MW02-0517	5/31/17	1220	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW03-0517	5/31/17	1405	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW03-0517-MS	5/31/17	1405	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW03-0517-SD	5/31/17	1405	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW01-0617	6/1/17	1145	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW01P-0617	6/1/17	1150	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF-FB060117	6/1/17	1230	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF17-MW04-0617	6/1/17	1310	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
OF-EB060117	6/1/17	1320	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)
*IDW-AQ-01-0617	6/1/17	1340	NALF SITE 17	2	0	AQ															X	PFASs (UCLR3 LIST)

Special Instructions/Comments: 1 COOLER

SEND DOCUMENTATION AND RESULTS TO:

Name: SAME AS INVOICE  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Email: TIFFANY.HILL@CH2M.COM

\* 1700682



### Sample Log-in Checklist

Vista Work Order #: 1700681 TAT 14

Samples Arrival:	Date/Time 6/2/17 0900	Initials: SR	Location: WR-2
			Shelf/Rack: N/A
Logged In:	Date/Time 06/02/17 1119	Initials: PBB	Location: WR-2
			Shelf/Rack: E6
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> On Trac
		<input type="checkbox"/> GSO	<input type="checkbox"/> DHL
		<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Other
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
	<input type="checkbox"/> None		
Temp °C:	0.1 (uncorrected)	Time: 0904	Thermometer ID: IR-1
Temp °C:	0.4 (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 #	7867 4659 1390		
Sample Container Intact?	<input checked="" type="checkbox"/>		
Sample Custody Seals Intact?			<input checked="" type="checkbox"/>
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>		
COC Anomaly/Sample Acceptance Form completed?		<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 type="checkbox"/> None
	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
Shipping Container	<input checked="" type="checkbox"/> Vista	<input type="checkbox"/> Client	<input type="checkbox"/> Retain
	<input type="checkbox"/> Return	<input type="checkbox"/> Dispose	

Comments:

## **EXTRACTION INFORMATION**

Process Sheet

Workorder: 1700681

June 16

Workorder Due: ~~23-Jun-17~~ 00:00

Prep Expiration: 2017-Jun-14

Client: CH2M Hill

TAT: 21

Method: 537M PFAS DOD (LOQ as mRL)

Matrix: Aqueous

Prep Batch: B7F0010

Prep Data Entered: HB 6/19/17  
Date and Initials

Version: UCMR 3 (6 Analyte)

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

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1700681-01 (A)	<input checked="" type="checkbox"/>	OF17-MW02-0517	02-Jun-17 09:00	WR-2 E-6	
1700681-02 (ABC)	<input checked="" type="checkbox"/>	OF17-MW03-0517	02-Jun-17 09:00	WR-2 E-6	MS/MSD
1700681-03 (R)	<input checked="" type="checkbox"/>	OF17-MW01-0617	02-Jun-17 09:00	WR-2 E-6	
1700681-04 (R)	<input checked="" type="checkbox"/>	OF17-MW01P-0617	02-Jun-17 09:00	WR-2 E-6	
1700681-05 (A)	<input checked="" type="checkbox"/>	OF17-FB060117	02-Jun-17 09:00	WR-2 E-6	
1700681-06 (A)	<input checked="" type="checkbox"/>	OF17-MW04-0617	02-Jun-17 09:00	WR-2 E-6	
1700681-07 (R)	<input checked="" type="checkbox"/>	OF-EB060117	02-Jun-17 09:00	WR-2 E-6	

WO Comments: List of 6.

Vista PM: Martha Maier

Vial Box ID: Wildebeats

Sample Reconciled By: [Signature] 6/15/17

# Percent Solids



Project: B7F0010

Balance ID: NA

Sample ID	Chemist: <u>NA</u> Date: <u>        </u> Time: <u>        </u>		Chemist: <u>NA</u> Date: <u>        </u> Time: <u>        </u>		Chemist/Date <u>BR 6.5.17</u>	
	Boat Wt.	Sample + Boat Wt.	Residue + Boat Wt.	pH before	pH* after	Cl
1700669-1 (b)				6	2	0
1700671-1 (B)				6	2	0
- 2 (A)				5	2	0
1700681-1 (B)				6	2	0
- 2A (A)				5	2	0
- 2B (A)				5	2	0
- 2C (A)				5	2	0
- 3 (A)				5	2	0
- 4 (A)				5	2	0
- 5 (A)				5	2	0
- 6 (A)				5	2	0
- 7 (A)				5	2	0
1700682-1 (A)				5	2	0
1700690-1 (C)(D)				6	2	0
1700668-3 (C)(D)				5	2	0

**Procedure:**

- Tare the balance.
- Record Boat Weight.
- Add 2 - 10 g of sample.
- Record Wet Wt. + Boat Wt.
- Dry in oven overnight at 107°C.
- Tare the balance.
- Record Residue + Boat Wt.

**Notes:**

- (A) 2 drops HCl added to adjust pH to 2.0
- (B) 3 drops HCl added to adjust pH to 2.0
- (C) samples prepped 6/7/17. HB 6/7/17
- (D) 5 drops HCl added to adjust pH 6/5/17
- Methods 8280, 613, 1613, 8290, 1614 - pH < 9
- Methods 1668/PCN - pH 2-3
- NCASI 551 - pH 1

Batch: B7F0010

Matrix: Aqueous

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1700668-03	0.8983 ✓	NA	NA	1000	05-Jun-17 08:19	BAP			Water	537M PFAS DOD (LOQ as
1700669-01	0.1069 ✓			1000	05-Jun-17 08:19	BAP			Water	537M PFAS
1700671-01	0.12347 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS
1700671-02	0.11487 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS
1700681-01	0.11557 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS DOD (LOQ as
1700681-02	0.11382 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS DOD (LOQ as
1700681-02	0.11382 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS
1700681-03	0.11448 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS DOD (LOQ as
1700681-04	0.12168 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS DOD (LOQ as
1700681-05	0.12112 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS DOD (LOQ as
1700681-06	0.11609 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS DOD (LOQ as
1700681-07	0.11834 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS DOD (LOQ as
1700682-01	0.11683 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS DOD (LOQ as
1700690-01	0.25634 ✓			1000	05-Jun-17 08:19	BAP			Aqueous	537M PFAS
B7F0010-BLK1	0.125 ✓			1000	05-Jun-17 08:19	BAP				QC
B7F0010-BS1	0.125 ✓			1000	05-Jun-17 08:19	BAP	17D2705 ✓	10 ✓		QC
B7F0010-MS1	0.125 ✓			1000	05-Jun-17 08:19	BAP	17D2705 ✓	10 ✓		QC
B7F0010-MSD1	0.125 ✓			1000	05-Jun-17 08:19	BAP	17D2705 ✓	10 ✓		QC

HB 6/9/17

Matrix: Aqueous

Method: 537M PFAS

Method: 537M PFAS DOD (LOO as mR)

B7F0010

Chemist: BP

Prep Date/Time: 05-Jun-17 08:19

Prepared using: LCMS - SPE Extraction-LCMS

6-8-17 JTC

C	VISTA Sample ID	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
<input type="checkbox"/>	B7F0010-BLK1 (C)	(0.125) BP 6-5-17	NA	(0.125)	BP	JTC BP 6-8-17	BP OBF 6-8-17
<input type="checkbox"/>	B7F0010-BS1 (C)						
<input type="checkbox"/>	B7F0010-MS1 1700681-02	139.40	26.89	0.11251			
<input type="checkbox"/>	B7F0010-MSD1 1700681-02	147.62	26.80	0.12082			
<input type="checkbox"/>	1700669-01 (A)(30)	133.80	26.90	0.10690			
<input type="checkbox"/>	1700671-01 (B)	150.37	26.90	0.12347			
<input type="checkbox"/>	1700671-02	141.92	27.05	0.11487			
<input type="checkbox"/>	1700681-01	142.40	26.83	0.11557			
<input type="checkbox"/>	1700681-02	140.73	26.91	0.11382			
<input type="checkbox"/>	1700681-03	141.55	27.07	0.11448			
<input type="checkbox"/>	1700681-04	148.61	26.93	0.12168			
<input type="checkbox"/>	1700681-05	148.08	26.96	0.12112			
<input type="checkbox"/>	1700681-06 (3)	142.98	26.89	0.11609			
<input type="checkbox"/>	1700681-07	145.42	27.08	0.11834			
<input type="checkbox"/>	1700682-01 (5)	143.58	26.75	0.11683			

(A) Sample from BP 6-5-17  
 (B) Centrifuged to remove particulate BP 6-5-17

IS Name <u>17E2617, 10ul</u> (V5)	NS Name <u>17D2705, 10ul</u> (V4)	RS Name <u>17E1907, 10ul</u> (3)	SPE Chem: <u>Strata X-AW 33µm 200mg</u> 6ul Ele SOLV: <u>0.5% NH<sub>4</sub>OH in MeOH/MeOH</u> Final Volume(s) <u>1ul</u>	Check Out: <u>NA</u> Chemist/Date: <u>MB 6/5/17</u> Check In: <u>MB 6/5/17</u> Chemist/Date: <u>MB 6/5/17</u> Balance ID: <u>HKMS-0</u>
---	---	--	---	---

6/5/17 MB NM

Comments: Assume 1 g = 1 mL

(C) 0.625g Trireme added to QCS BP 6-5-17  
 (D) Particulate was still in sample after the first time centrifuging, so it was centrifuged again. Particles were floating in sample so the sample was pipetted out to avoid as much particulate as possible. Sample was then microcentrifuged. BP 6-5-17



PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS

Method: 537M PFAS DOD (LOO as mR)

B7F0010

Chemist: BP

Prep Date/Time: 05 Jun-17 08:19

~~6-7-17~~  
6-8-17 HC

Prepared using: LCMS - SPE Extraction-LCMS

C	VISTA Sample ID	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
<input type="checkbox"/>	1700690-01 (A)(B)(E)	283.54	27.20	0.25684	BP HC 6.8.17	[7F0044] HC BP 6.8.17	BP HC 6.8.17

(E) During SPE, cartridge clogged after 100 mL, nitrogen used to push sample through. 2<sup>nd</sup> cartridge used 6.8.17 for half sample with nitrogen as well

IS Name	NS Name	RS Name	SPE Chem:	Check Out:
17E2617, 10 µL (V5)	17P2705 10 µL (V4)	17E1907, 10 µL (B)	Strata X-AW 33µm 200µg Ele SOLV: 0.5% NH <sub>4</sub> OH in MeOH/ <sup>10µL</sup> ACOH Final Volume(s) 1 mL	Chemist/Date: HB 6/7/17 Check In: HB 6/7/17 Chemist/Date: HB 6/7/17 Balance ID: HRMFG

Comments: Assume 1 g = 1 mL (A) sample prepped 6/7/17. 6/7/17 HB (B) sample was partially frozen HB 6/7/17

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS

Method: 537M PFAS DOD (LOO as mR)

B7F0010

Chemist: BP

Prep Date/Time: 05-Jun-17 08:19

Prepared using: LCMS - SPE Extraction-LCMS

C7F0044

HC 6-8-17

C	VISTA Sample ID	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
<input checked="" type="checkbox"/>	B7F0010-BLK1						
<input type="checkbox"/>	B7F0010-BS1						
<input type="checkbox"/>	B7F0010-MS1 1700681-02						
<input type="checkbox"/>	B7F0010-MSD1 1700681-02						
<input type="checkbox"/>	1700668-03 (A)	107.30	17.47	0.89830	BP HC 6-8-17	HC BP 6-8-17	BP 05/6-8-17
<input type="checkbox"/>	1700669-01						
<input type="checkbox"/>	1700671-01						
<input type="checkbox"/>	1700671-02						
<input type="checkbox"/>	1700681-01						
<input type="checkbox"/>	1700681-02						
<input type="checkbox"/>	1700681-03						
<input type="checkbox"/>	1700681-04						
<input type="checkbox"/>	1700681-05						
<input type="checkbox"/>	1700681-06						
<input type="checkbox"/>	1700681-07						
<input type="checkbox"/>	1700682-01						

IS Name <u>17E261710</u> HC 6-8-17 10pc VS	NS Name <u>17D270510</u> VY	RS Name <u>17E1907, 10u</u> L	SPE Chem: <u>Strota X-AW 33um 200ug</u> 6ul Ele SOLV: <u>0.5% NH4OH in MeOH/wolf</u> Final Volume(s) <u>1ul</u>	Check Out: <u>6/7/17 HB</u> Chemist/Date: Check In: <u>6/7/17 HB</u> Chemist/Date: Balance ID: <u>HRM-8</u>
--	-----------------------------------	-------------------------------------	--	---

Comments: Assume 1 g = 1 mL (A) sample prep'd 6/7/17. HB 6/7/17

**SAMPLE DATA – MODIFIED EPA METHOD 537**

Dataset: U:\Q4.PRO\results\170608m5\170608M5-34.qld

Last Altered: Wednesday, June 14, 2017 08:49:09 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:49:16 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_34, Date: 09-Jun-2017, Time: 05:56:06, ID: B7F0010-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	1 PFBA	213.0 > 168.8		2.10e4	0.1250		1.50				
2	2 PFPeA	263.1 > 218.9		2.92e4	0.1250		2.84				
3	3 PFBS	299 > 79.7	2.32e0	3.15e3	0.1250		3.30	3.16	0.00921		
4	4 PFHxA	313.2 > 268.9		1.15e4	0.1250		3.67				
5	5 PFHpA	363 > 318.9		2.57e4	0.1250		4.06				
6	6 PFHxS	398.9 > 79.6	1.50e1	2.22e3	0.1250		4.20	4.07	0.0844		
7	8 PFOA	413 > 368.7		3.18e4	0.1250		4.36				
8	9 PFNA	462.9 > 418.8		2.45e4	0.1250		4.68				
9	10 PFOS	499 > 79.9		5.42e3	0.1250		4.70				
10	19 13C3-PFBA	216.1 > 171.8	2.10e4	2.34e4	0.1250	0.724	1.50	1.53	11.2	124	124.1
11	20 13C3-PFPeA	266 > 221.8	2.92e4	1.15e4	0.1250	0.854	2.85	2.84	12.7	119	119.1
12	21 13C3-PFBS	302 > 98.8	3.15e3	3.38e4	0.1250	0.024	3.30	3.15	0.466	155	155.3
13	22 13C2-PFHxA	315 > 269.8	1.15e4	3.38e4	0.1250	0.264	3.67	3.53	1.70	51.5	128.6
14	23 13C4-PFHpA	367.2 > 321.8	2.57e4	3.38e4	0.1250	0.235	4.06	3.96	3.81	129	129.4
15	24 18O2-PFHxS	403 > 102.6	2.22e3	5.03e3	0.1250	0.345	4.20	4.07	5.52	128	128.2
16	25 13C2-6:2 FTS	429.1 > 408.9	4.35e3	5.11e3	0.1250	0.329	4.30	4.27	4.26	103	103.4
17	26 13C2-PFOA	414.9 > 369.7	3.18e4	2.47e4	0.1250	1.148	4.40	4.28	16.1	112	112.0
18	27 13C5-PFNA	468.2 > 422.9	2.45e4	2.71e4	0.1250	0.724	4.68	4.58	11.3	125	124.9
19	28 13C8-PFOS	507 > 79.9	5.42e3	5.32e3	0.1250	0.868	4.78	4.67	12.7	117	117.2
20	36 13C4-PFBA	217 > 171.8	2.34e4	2.34e4	0.1250	1.000	1.53	1.53	12.5	100	100.0
21	39 13C3-PFHxS	401.9 > 79.9	5.03e3	5.03e3	0.1250	1.000	4.20	4.07	12.5	100	100.0
22	40 13C8-PFOA	421.3 > 376	2.47e4	2.47e4	0.1250	1.000	4.40	4.28	12.5	100	100.0
23	41 13C9-PFNA	472.2 > 426.9	2.71e4	2.71e4	0.1250	1.000	4.68	4.58	12.5	100	100.0
24	42 13C4-PFOS	503 > 79.9	5.32e3	5.32e3	0.1250	1.000	4.78	4.67	12.5	100	100.0
25	43 13C6-PFDA	519.1 > 473.7	2.43e4	2.43e4	0.1250	1.000	4.95	4.85	12.5	100	100.0
26	44 13C7-PFUnA	570.1 > 524.8	2.41e4	2.41e4	0.1250	1.000	5.20	5.10	12.5	100	100.0
27	45 Total PFBS	299 > 79.7	2.32e0	3.15e3	0.1250		3.30		0.000		
28	46 Total PFHxS	398.9 > 79.6	1.50e1	2.22e3	0.1250		4.05		0.000		
29	47 Total PFOA	413 > 368.7	0.00e0	3.18e4	0.1250		4.30		0.000		
30	48 Total PFOS	499 > 79.9	0.00e0	5.42e3	0.1250		4.60		0.000		

Dataset: U:\Q4.PRO\results\170608m5\170608M5-34.qld

Last Altered: Wednesday, June 14, 2017 08:49:09 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:49:16 Pacific Daylight Time

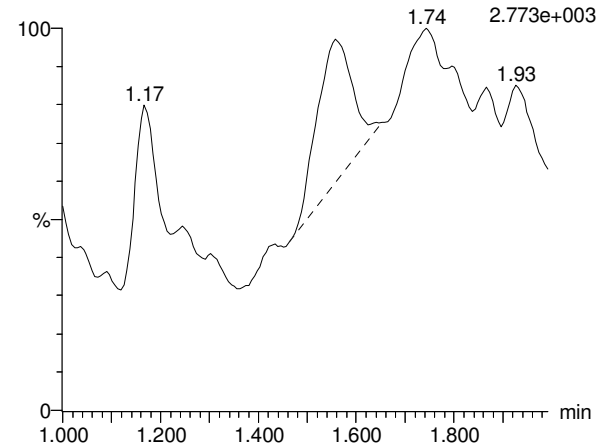
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_34, Date: 09-Jun-2017, Time: 05:56:06, ID: B7F0010-BLK1 Method Blank 0.125, Description: Method Blank

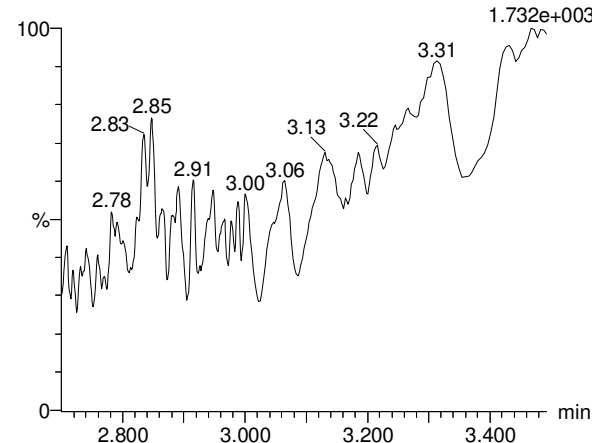
**PFBA**

170608M5\_34 Smooth(Mn,1x2) F1:MRM of 2 channels,ES-  
Method Blank B7F0010-BLK1 Method Blank 0.125 213.0 > 168.8



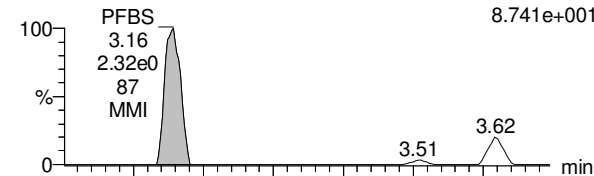
**PFPeA**

170608M5\_34 Smooth(Mn,1x2) F4:MRM of 1 channel,ES-  
Method Blank B7F0010-BLK1 Method Blank 0.125 263.1 > 218.9

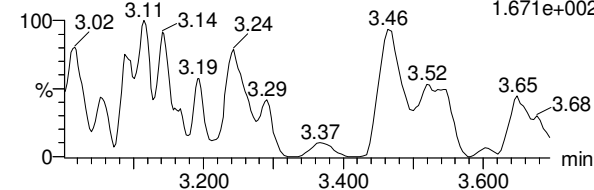


**PFBS**

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Method Blank B7F0010-BLK1 Method Blank 0.125 299 > 79.7  
8.741e+001

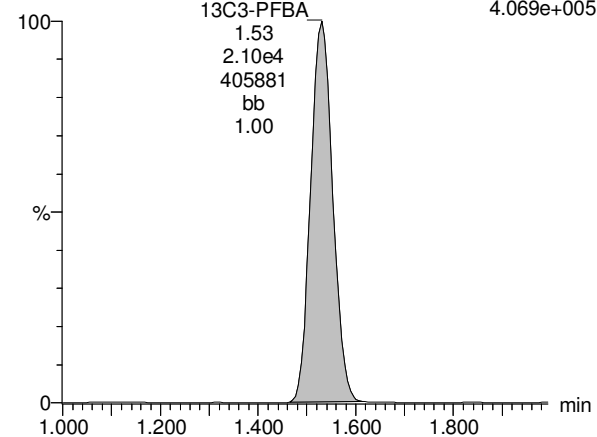


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Method Blank B7F0010-BLK1 Method Blank 0.125 299 > 99  
1.671e+002



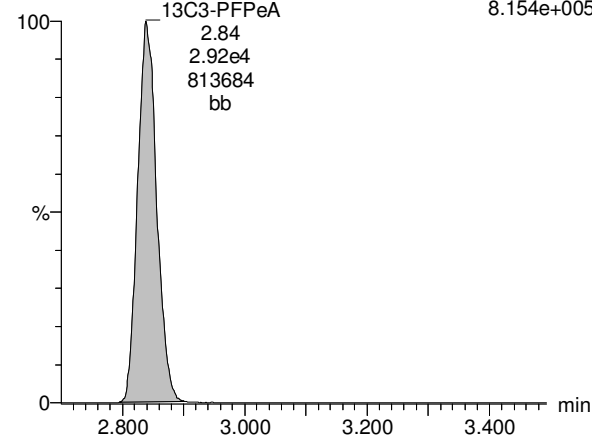
**13C3-PFBA**

170608M5\_34 Smooth(Mn,1x2) F2:MRM of 1 channel,ES-  
Method Blank B7F0010-BLK1 Method Blank 0.125 216.1 > 171.8  
4.069e+005



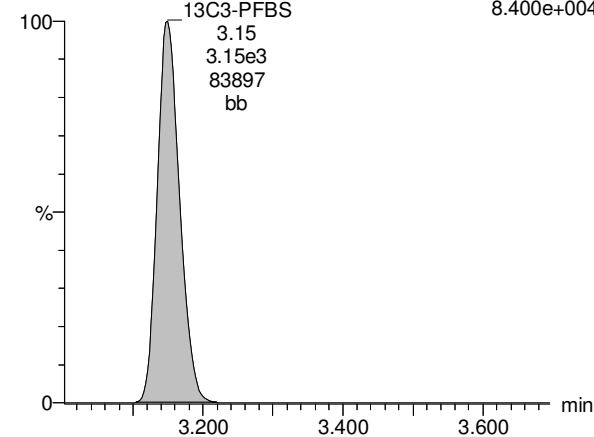
**13C3-PFPeA**

170608M5\_34 Smooth(Mn,1x2) F5:MRM of 1 channel,ES-  
Method Blank B7F0010-BLK1 Method Blank 0.125 266 > 221.8  
8.154e+005



**13C3-PFBS**

170608M5\_34 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-  
Method Blank B7F0010-BLK1 Method Blank 0.125 302 > 98.8  
8.400e+004



Rev'd: MM 6/14/17

AP 6/14/2017

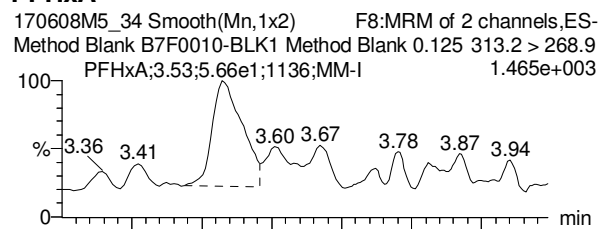
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Last Altered: Wednesday, June 14, 2017 08:49:09 Pacific Daylight Time

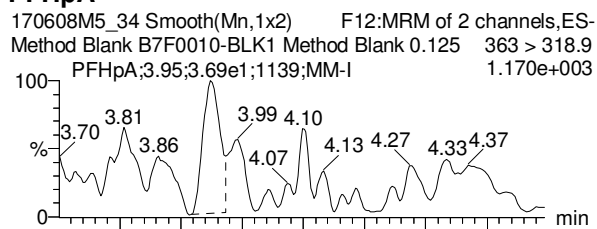
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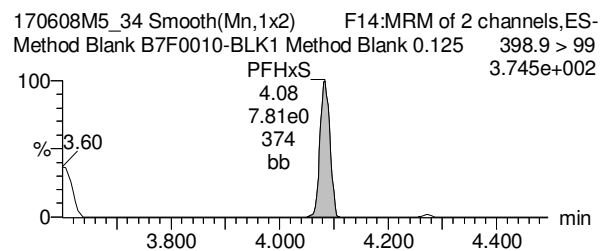
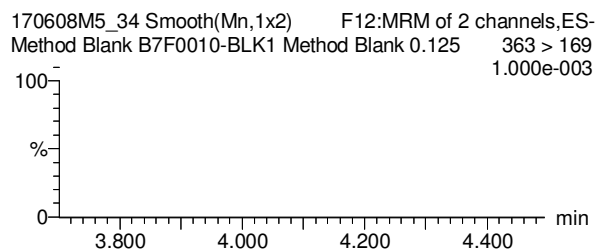
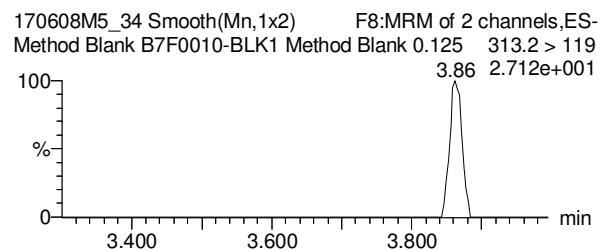
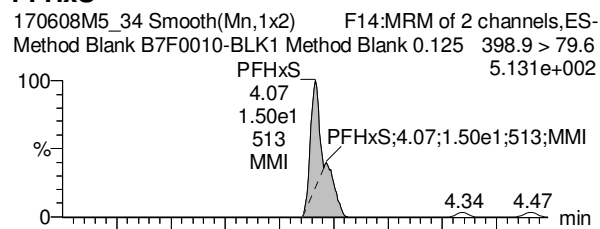
**PFHxA**



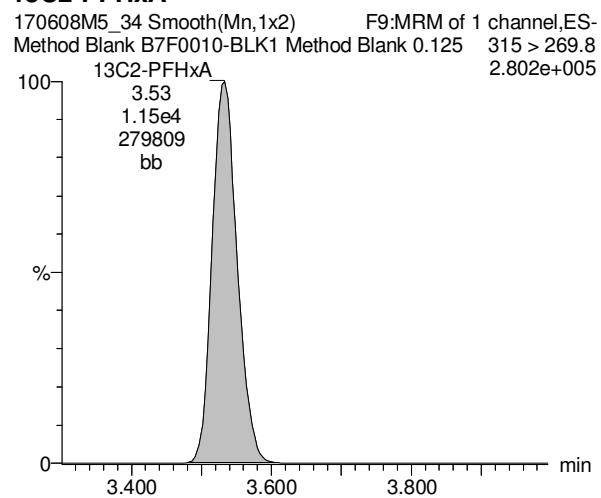
**PFHpA**



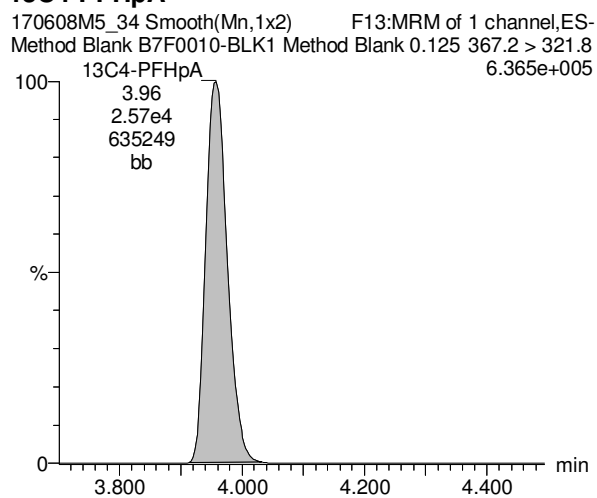
**PFHxS**



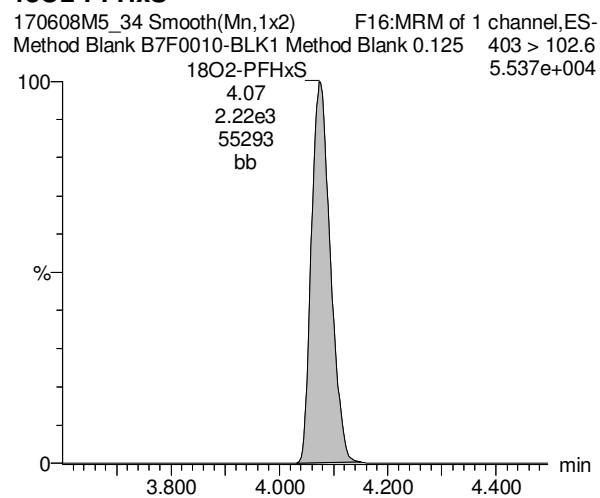
**13C2-PFHxA**



**13C4-PFHpA**



**18O2-PFHxS**



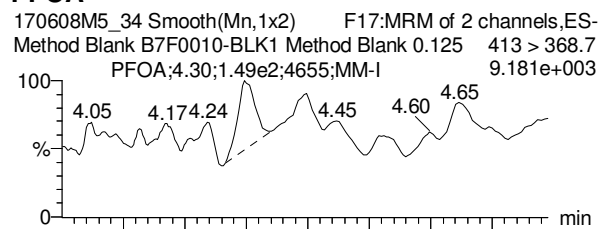
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Last Altered: Wednesday, June 14, 2017 08:49:09 Pacific Daylight Time

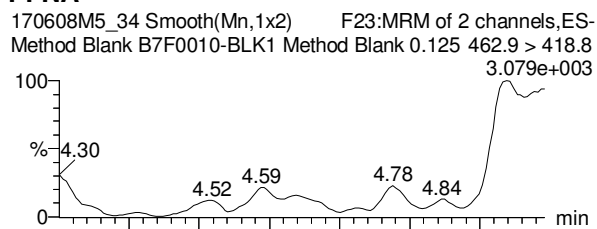
Printed: Wednesday, June 14, 2017 08:49:16 Pacific Daylight Time

Name: 170608M5\_34, Date: 09-Jun-2017, Time: 05:56:06, ID: B7F0010-BLK1 Method Blank 0.125, Description: Method Blank

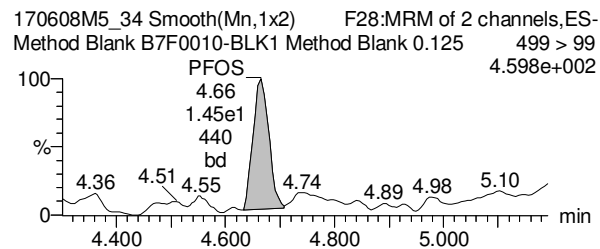
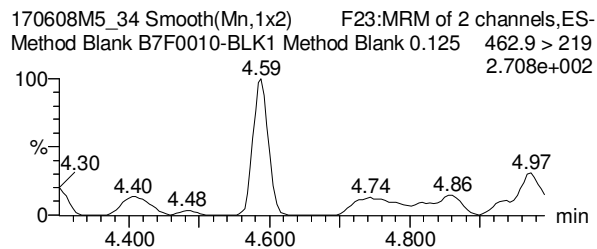
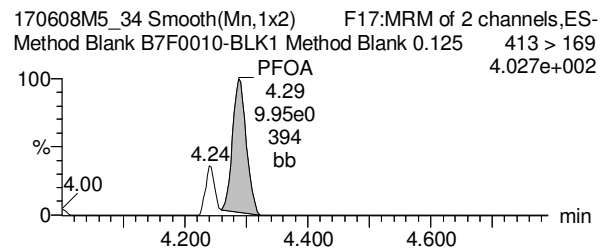
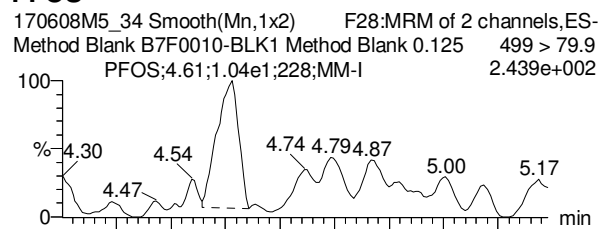
**PFOA**



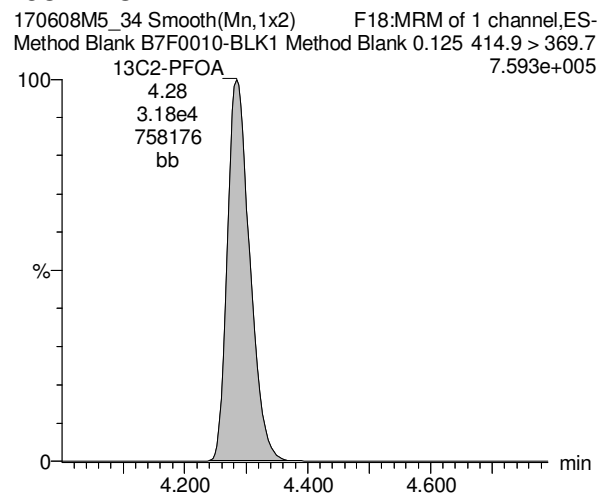
**PFNA**



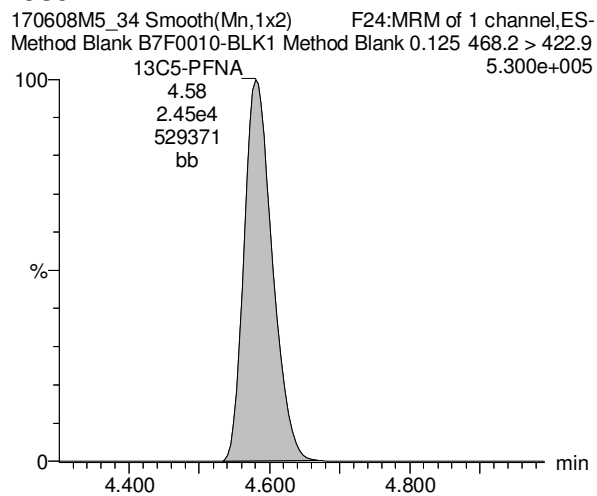
**PFOS**



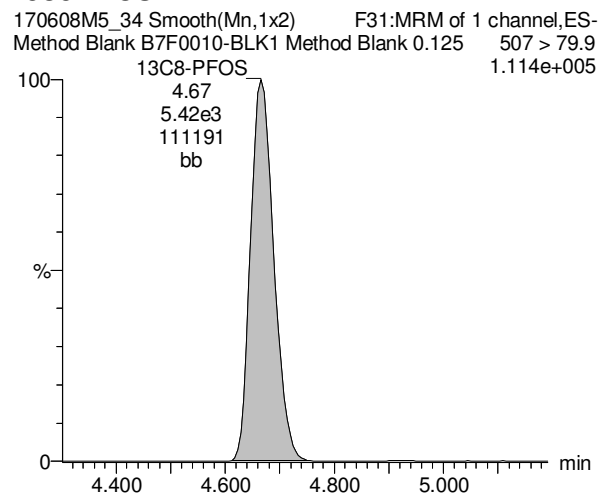
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



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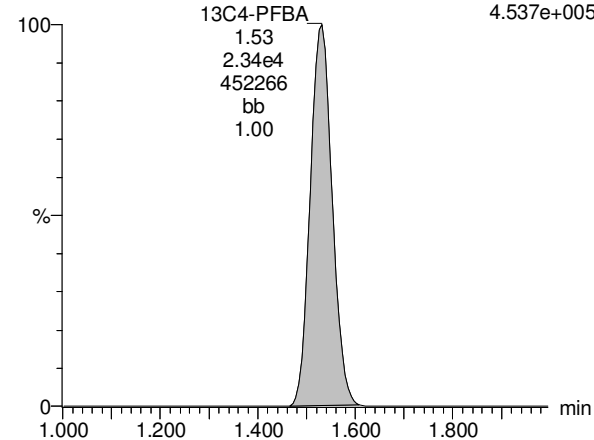
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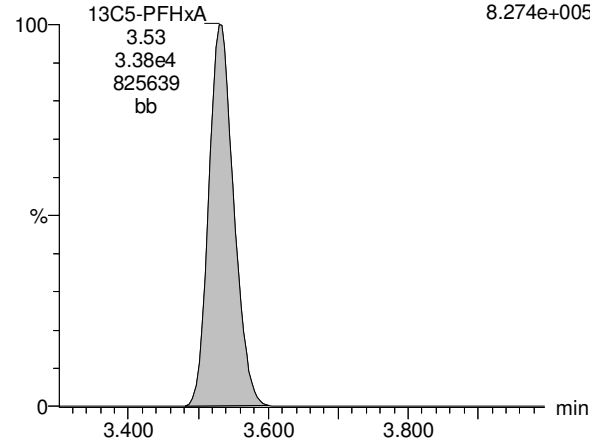
**13C4-PFBA**

170608M5\_34 Smooth(Mn,1x2) F3:MRM of 1 channel,ES-  
Method Blank B7F0010-BLK1 Method Blank 0.125 217 > 171.8  
4.537e+005



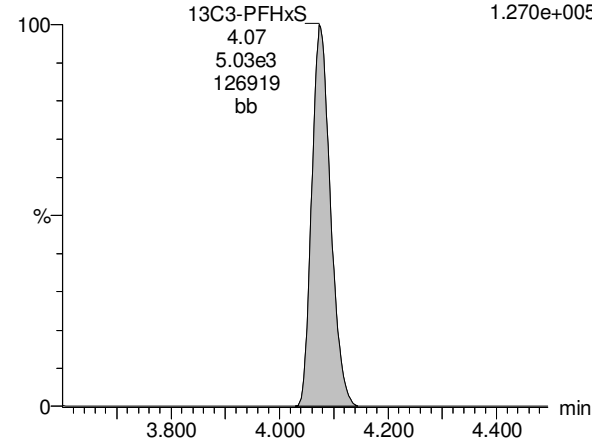
**13C5-PFHxA**

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8.274e+005



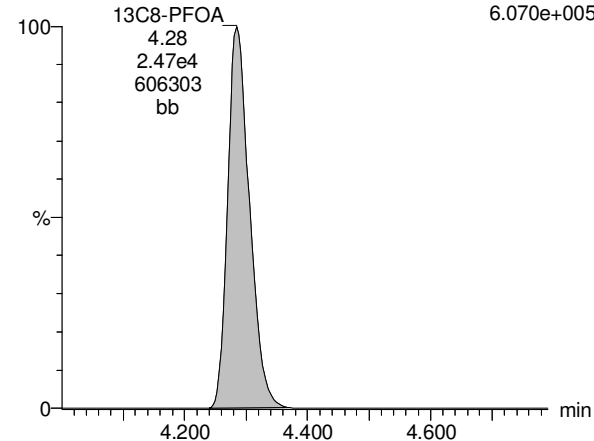
**13C3-PFHxS**

170608M5\_34 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-  
Method Blank B7F0010-BLK1 Method Blank 0.125 401.9 > 79.9  
1.270e+005



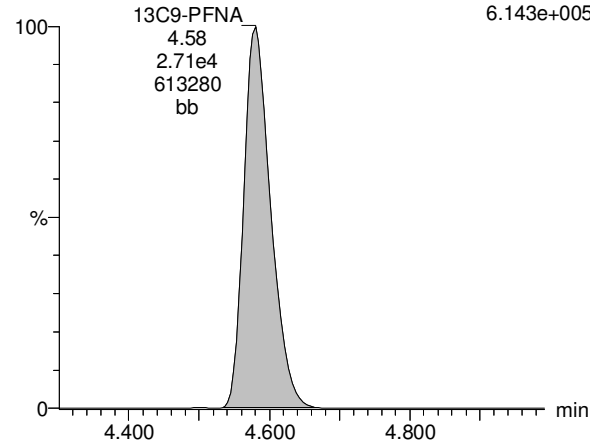
**13C8-PFOA**

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Method Blank B7F0010-BLK1 Method Blank 0.125 421.3 > 376  
6.070e+005



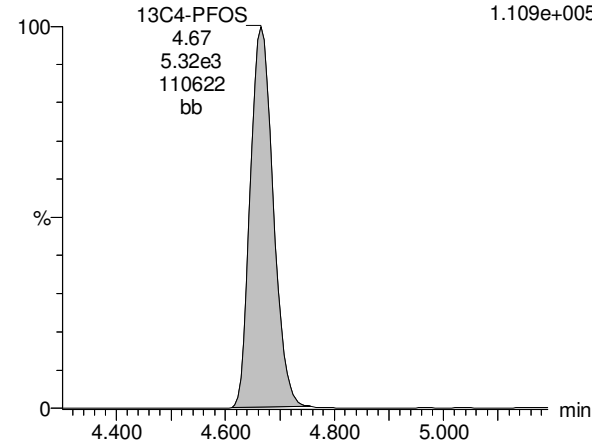
**13C9-PFNA**

170608M5\_34 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-  
Method Blank B7F0010-BLK1 Method Blank 0.125 472.2 > 426.9  
6.143e+005



**13C4-PFOS**

170608M5\_34 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-  
Method Blank B7F0010-BLK1 Method Blank 0.125 503 > 79.9  
1.109e+005





Dataset: U:\Q4.PRO\results\170608m5\170608M5-32.qld

Last Altered: Wednesday, June 14, 2017 08:42:46 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:45:41 Pacific Daylight Time

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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_32, Date: 09-Jun-2017, Time: 05:33:12, ID: B7F0010-BS1 OPR 0.125, Description: OPR

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	2.21e4	2.51e4	0.1250		1.50	1.53	11.0	77.3	96.6
2	2 PFPeA	263.1 > 218.9	2.62e4	3.53e4	0.1250		2.84	2.84	9.29	78.4	97.9
3	3 PFBS	299 > 79.7	5.71e3	3.57e3	0.1250		3.30	3.15	20.0	78.7	98.4
4	4 PFHxA	313.2 > 268.9	3.47e4	1.35e4	0.1250		3.67	3.53	12.9	74.3	92.9
5	5 PFHpA	363 > 318.9	2.81e4	3.04e4	0.1250		4.06	3.96	11.5	76.5	95.7
6	6 PFHxS	398.9 > 79.6	4.13e3	2.88e3	0.1250		4.20	4.08	17.9	77.5	96.9
7	8 PFOA	413 > 368.7	3.19e4	3.73e4	0.1250		4.36	4.29	10.7	86.1	107.6
8	9 PFNA	462.9 > 418.8	2.92e4	3.21e4	0.1250		4.68	4.58	11.4	74.5	93.2
9	10 PFOS	499 > 79.9	5.53e3	6.71e3	0.1250		4.70	4.66	10.3	76.3	95.4
10	19 13C3-PFBA	216.1 > 171.8	2.51e4	2.80e4	0.1250	0.724	1.50	1.53	11.2	124	124.0
11	20 13C3-PFPeA	266 > 221.8	3.53e4	1.35e4	0.1250	0.854	2.85	2.84	13.1	123	122.8
12	21 13C3-PFBS	302 > 98.8	3.57e3	4.16e4	0.1250	0.024	3.30	3.15	0.429	143	142.9
13	22 13C2-PFHxA	315 > 269.8	1.35e4	4.16e4	0.1250	0.264	3.67	3.53	1.62	49.0	122.6
14	23 13C4-PFHpA	367.2 > 321.8	3.04e4	4.16e4	0.1250	0.235	4.06	3.96	3.66	124	124.3
15	24 18O2-PFHxS	403 > 102.6	2.88e3	6.14e3	0.1250	0.345	4.20	4.07	5.86	136	136.0
16	25 13C2-6:2 FTS	429.1 > 408.9	5.76e3	6.13e3	0.1250	0.329	4.30	4.27	4.70	114	114.2
17	26 13C2-PFOA	414.9 > 369.7	3.73e4	2.92e4	0.1250	1.148	4.40	4.28	15.9	111	111.2
18	27 13C5-PFNA	468.2 > 422.9	3.21e4	3.67e4	0.1250	0.724	4.68	4.58	10.9	121	120.7
19	28 13C8-PFOS	507 > 79.9	6.71e3	5.42e3	0.1250	0.868	4.78	4.66	15.5	143	142.7
20	36 13C4-PFBA	217 > 171.8	2.80e4	2.80e4	0.1250	1.000	1.53	1.53	12.5	100	100.0
21	39 13C3-PFHxS	401.9 > 79.9	6.14e3	6.14e3	0.1250	1.000	4.20	4.07	12.5	100	100.0
22	40 13C8-PFOA	421.3 > 376	2.92e4	2.92e4	0.1250	1.000	4.40	4.28	12.5	100	100.0
23	41 13C9-PFNA	472.2 > 426.9	3.67e4	3.67e4	0.1250	1.000	4.68	4.58	12.5	100	100.0
24	42 13C4-PFOS	503 > 79.9	5.42e3	5.42e3	0.1250	1.000	4.78	4.66	12.5	100	100.0

Dataset: U:\Q4.PRO\results\170608m5\170608M5-32.qld

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Printed: Wednesday, June 14, 2017 08:45:41 Pacific Daylight Time

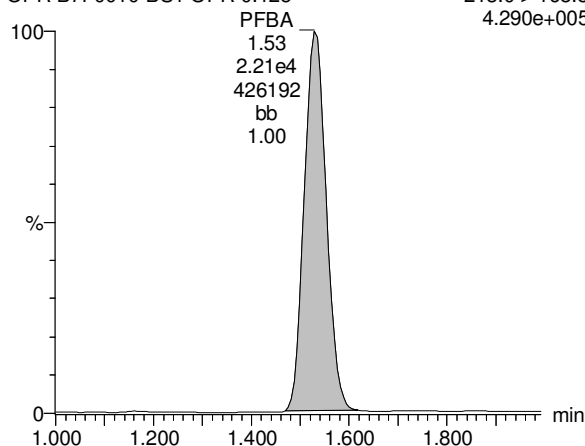
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_32, Date: 09-Jun-2017, Time: 05:33:12, ID: B7F0010-BS1 OPR 0.125, Description: OPR

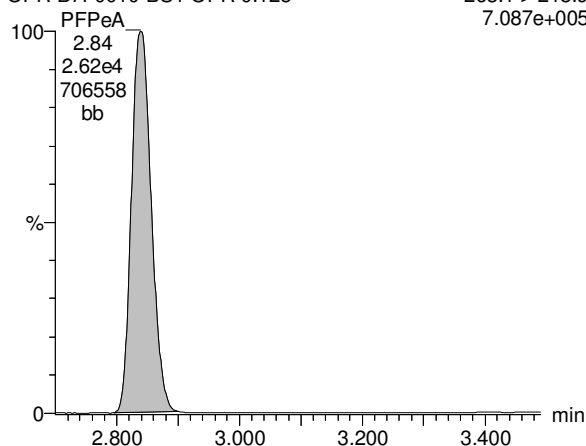
**PFBA**

170608M5\_32 Smooth(Mn,1x2) F1:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 213.0 > 168.8  
4.290e+005



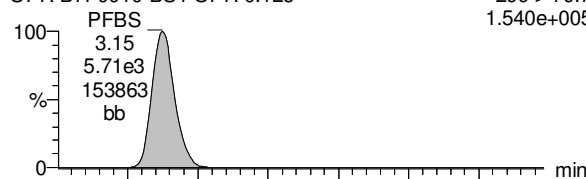
**PFPeA**

170608M5\_32 Smooth(Mn,1x2) F4:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 263.1 > 218.9  
7.087e+005

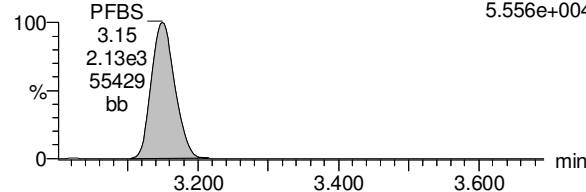


**PFBS**

170608M5\_32 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 299 > 79.7  
1.540e+005

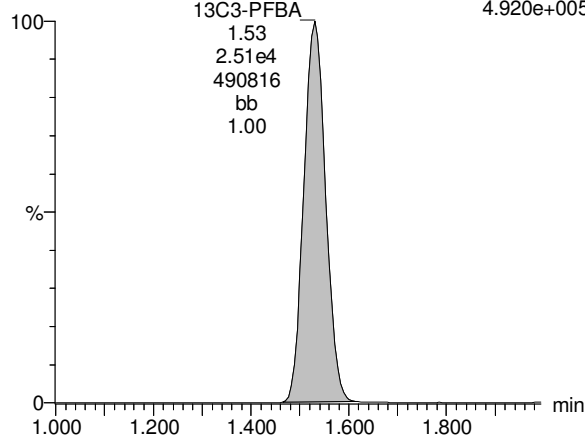


170608M5\_32 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 299 > 99  
5.556e+004



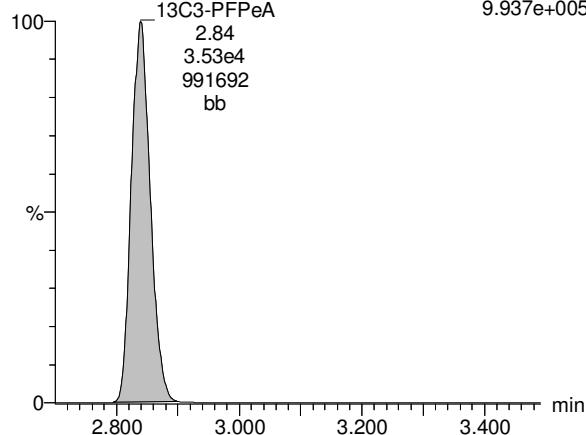
**13C3-PFBA**

170608M5\_32 Smooth(Mn,1x2) F2:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 216.1 > 171.8  
4.920e+005



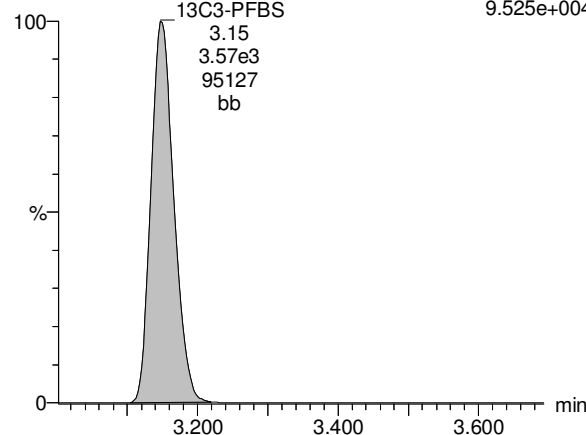
**13C3-PFPeA**

170608M5\_32 Smooth(Mn,1x2) F5:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 266 > 221.8  
9.937e+005



**13C3-PFBS**

170608M5\_32 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 302 > 98.8  
9.525e+004



Dataset: U:\Q4.PRO\results\170608m5\170608M5-32.qld

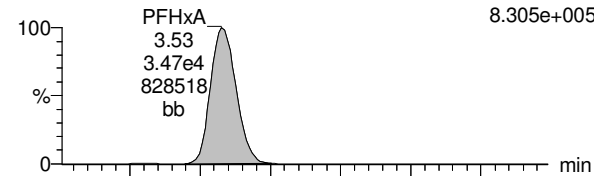
Last Altered: Wednesday, June 14, 2017 08:42:46 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:45:41 Pacific Daylight Time

Name: 170608M5\_32, Date: 09-Jun-2017, Time: 05:33:12, ID: B7F0010-BS1 OPR 0.125, Description: OPR

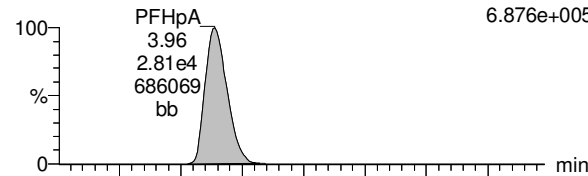
**PFHxA**

170608M5\_32 Smooth(Mn,1x2) F8:MRM of 2 channels,ES-  
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8.305e+005



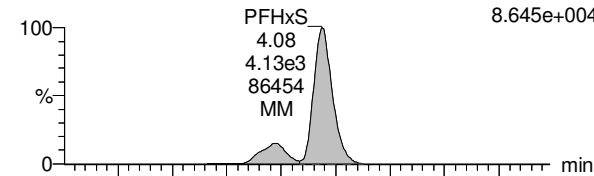
**PFHpA**

170608M5\_32 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 363 > 318.9  
6.876e+005

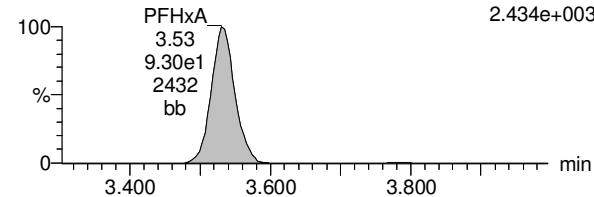


**PFHxS**

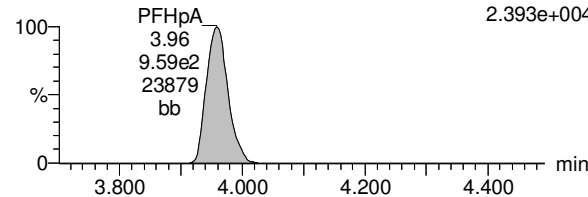
170608M5\_32 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 398.9 > 79.6  
8.645e+004



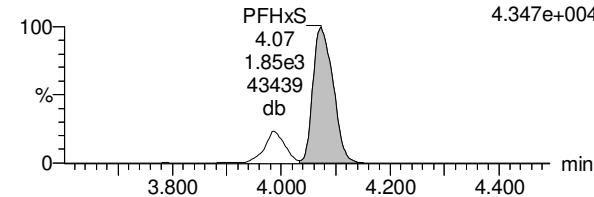
170608M5\_32 Smooth(Mn,1x2) F8:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 313.2 > 119  
2.434e+003



170608M5\_32 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 363 > 169  
2.393e+004

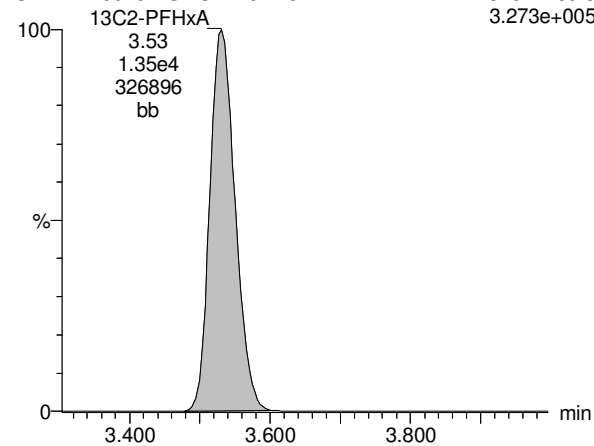


170608M5\_32 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 398.9 > 99  
4.347e+004



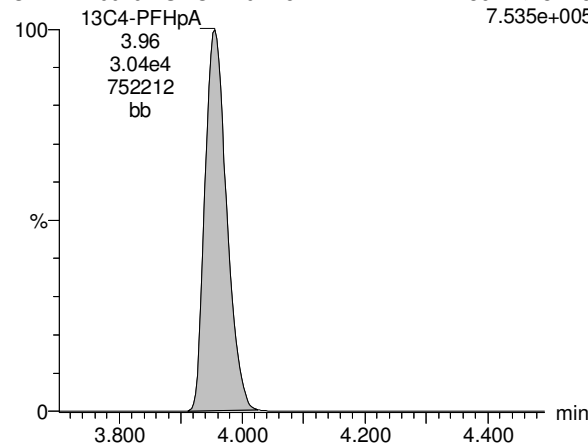
**13C2-PFHxA**

170608M5\_32 Smooth(Mn,1x2) F9:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 315 > 269.8  
3.273e+005



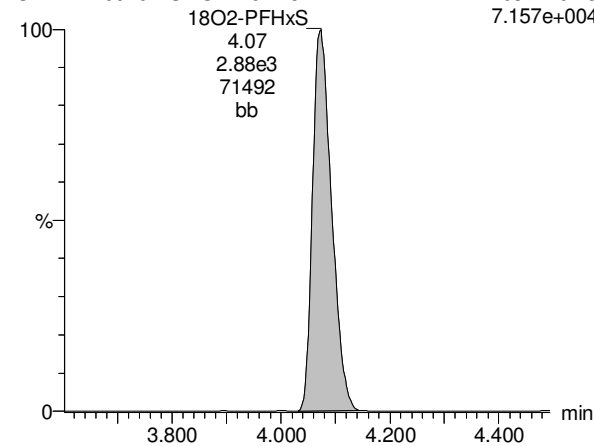
**13C4-PFHpA**

170608M5\_32 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 367.2 > 321.8  
7.535e+005



**18O2-PFHxS**

170608M5\_32 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 403 > 102.6  
7.157e+004



Dataset: U:\Q4.PRO\results\170608m5\170608M5-32.qld

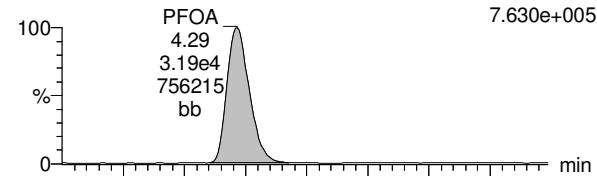
Last Altered: Wednesday, June 14, 2017 08:42:46 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:45:41 Pacific Daylight Time

Name: 170608M5\_32, Date: 09-Jun-2017, Time: 05:33:12, ID: B7F0010-BS1 OPR 0.125, Description: OPR

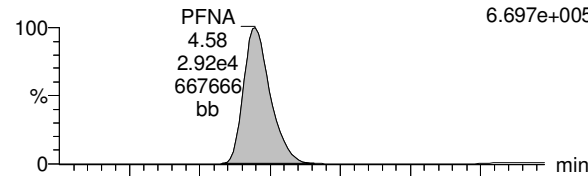
**PFOA**

170608M5\_32 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 413 > 368.7  
7.630e+005



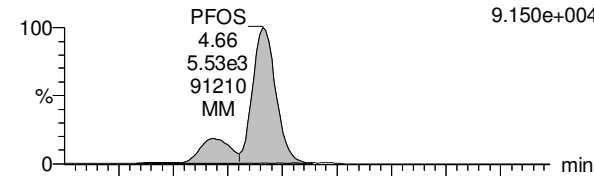
**PFNA**

170608M5\_32 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 462.9 > 418.8  
6.697e+005

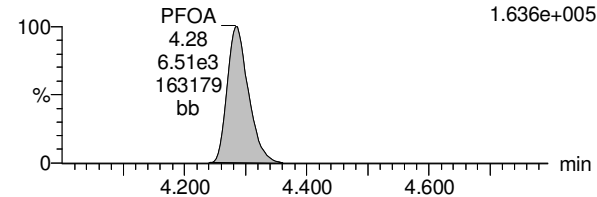


**PFOS**

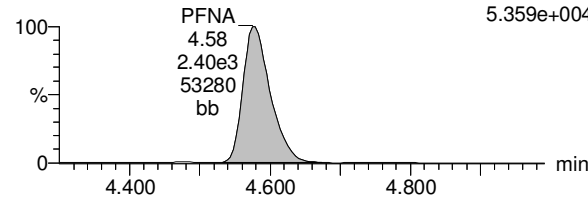
170608M5\_32 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 499 > 79.9  
9.150e+004



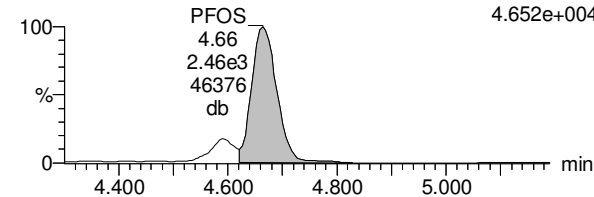
170608M5\_32 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 413 > 169  
1.636e+005



170608M5\_32 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 462.9 > 219  
5.359e+004

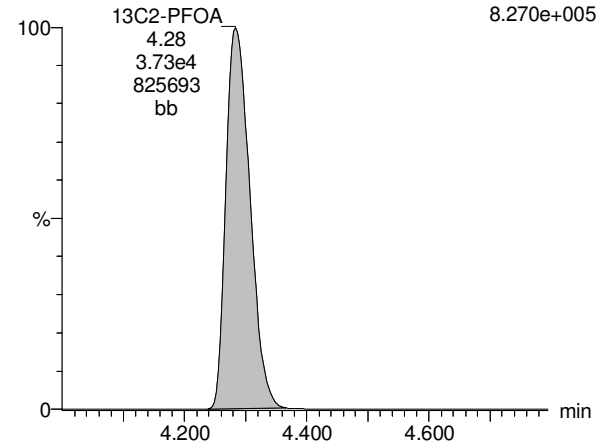


170608M5\_32 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
OPR B7F0010-BS1 OPR 0.125 499 > 99  
4.652e+004



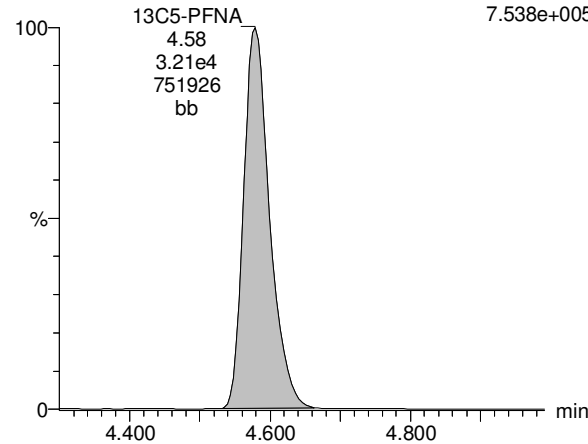
**13C2-PFOA**

170608M5\_32 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 414.9 > 369.7  
8.270e+005



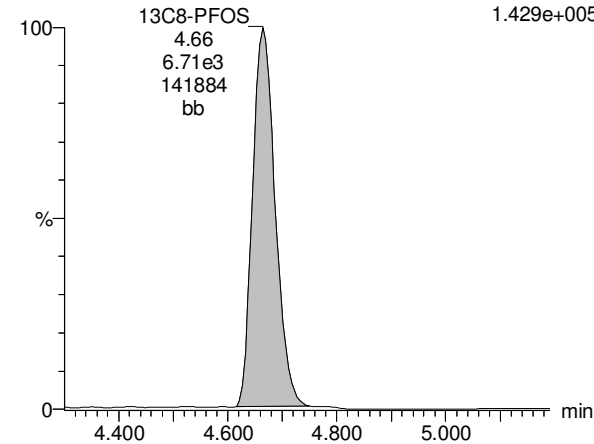
**13C5-PFNA**

170608M5\_32 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 468.2 > 422.9  
7.538e+005



**13C8-PFOS**

170608M5\_32 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 507 > 79.9  
1.429e+005



Dataset: U:\Q4.PRO\results\170608m5\170608M5-32.qld

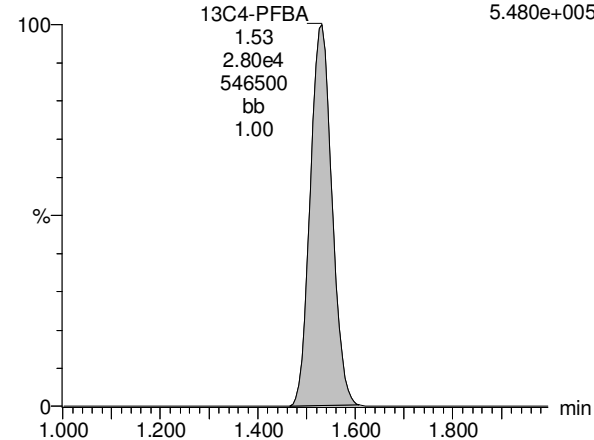
Last Altered: Wednesday, June 14, 2017 08:42:46 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:45:41 Pacific Daylight Time

Name: 170608M5\_32, Date: 09-Jun-2017, Time: 05:33:12, ID: B7F0010-BS1 OPR 0.125, Description: OPR

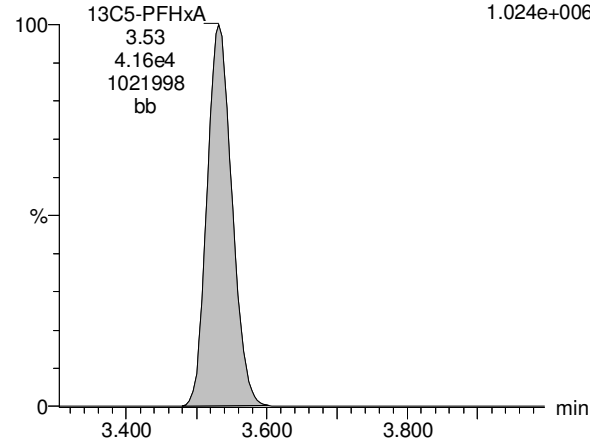
**13C4-PFBA**

170608M5\_32 Smooth(Mn,1x2) F3:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 217 > 171.8  
5.480e+005



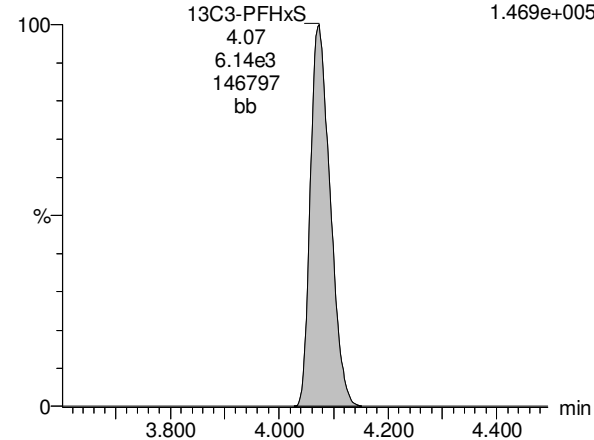
**13C5-PFHxA**

170608M5\_32 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 318 > 272.9  
1.024e+006



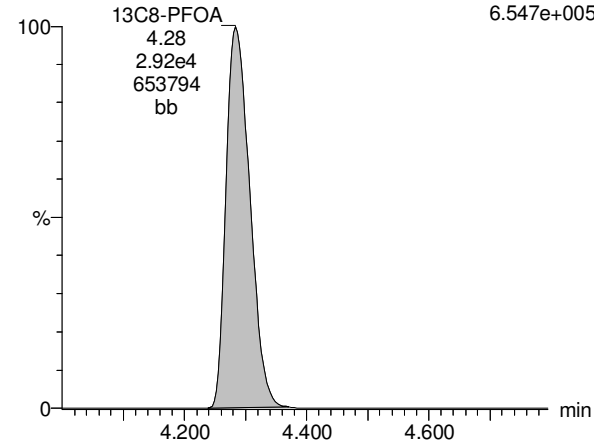
**13C3-PFHxS**

170608M5\_32 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 401.9 > 79.9  
1.469e+005



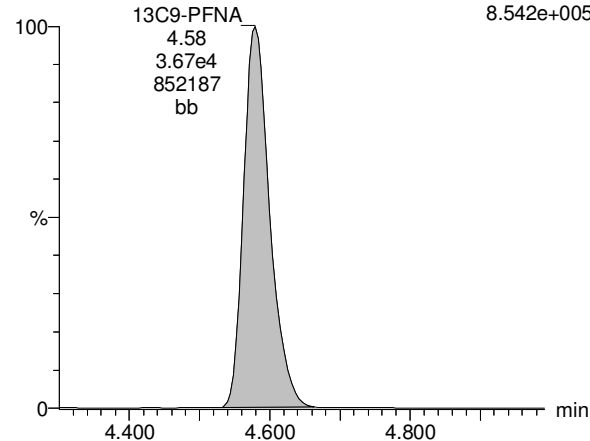
**13C8-PFOA**

170608M5\_32 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 421.3 > 376  
6.547e+005



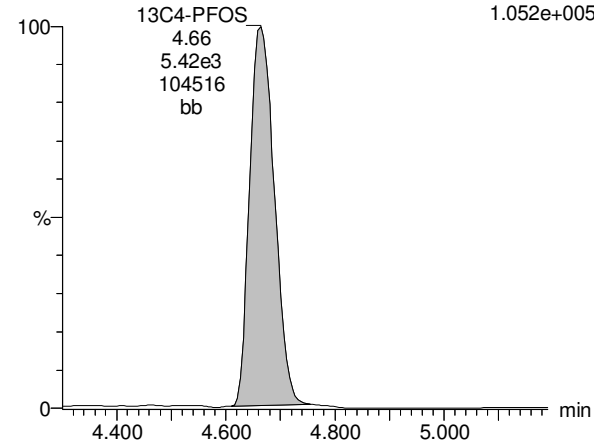
**13C9-PFNA**

170608M5\_32 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 472.2 > 426.9  
8.542e+005



**13C4-PFOS**

170608M5\_32 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-  
OPR B7F0010-BS1 OPR 0.125 503 > 79.9  
1.052e+005



Dataset: U:\Q4.PRO\results\170608m5\170608M5-39.qld

Last Altered: Friday, June 16, 2017 11:50:13 Pacific Daylight Time

Printed: Friday, June 16, 2017 14:51:39 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_39, Date: 09-Jun-2017, Time: 06:53:20, ID: 1700681-01 OF17-MW02-0517 0.125, Description: OF17-MW02-0517

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	3.75e3	2.94e3		0.1156	3.30	3.15	16.0	67.9	
2	5 PFHpA	363 > 318.9	1.83e5	2.46e4		0.1156	4.06	3.96	93.2	672	
3	6 PFHxS	398.9 > 79.6	7.18e4	2.10e3		0.1156	4.20	4.08	428	1900 <sup>E</sup>	
4	8 PFOA	413 > 368.7	2.30e5	3.18e4		0.1156	4.36	4.29	90.3	795	
5	9 PFNA	462.9 > 418.8	8.36e4	2.54e4		0.1156	4.68	4.58	41.1	292	
6	10 PFOS	499 > 79.9	3.91e5	4.05e3		0.1156	4.70	4.67	1210	9860 <sup>E</sup>	
7	21 13C3-PFBS	302 > 98.8	2.94e3	3.35e4	0.024	0.1156	3.30	3.15	0.439	158	146.0
8	23 13C4-PFHpA	367.2 > 321.8	2.46e4	3.35e4	0.235	0.1156	4.06	3.96	3.67	135	124.9
9	24 18O2-PFHxS	403 > 102.6	2.10e3	4.57e3	0.345	0.1156	4.20	4.08	5.74	144	133.1
10	25 13C2-6:2 FTS	429.1 > 408.9	5.81e3	5.41e3	0.329	0.1156	4.30	4.27	5.36	141	130.3
11	26 13C2-PFOA	414.9 > 369.7	3.18e4	2.60e4	1.148	0.1156	4.40	4.29	15.3	115	106.5
12	27 13C5-PFNA	468.2 > 422.9	2.54e4	2.96e4	0.724	0.1156	4.68	4.58	10.7	128	118.4
13	28 13C8-PFOS	507 > 79.9	4.05e3	3.61e3	0.868	0.1156	4.78	4.66	14.0	140	129.2
14	38 13C5-PFHxA	318 > 272.9	3.35e4	3.35e4	1.000	0.1156	3.67	3.53	5.00	43.3	100.0
15	39 13C3-PFHxS	401.9 > 79.9	4.57e3	4.57e3	1.000	0.1156	4.20	4.08	12.5	108	100.0
16	40 13C8-PFOA	421.3 > 376	2.60e4	2.60e4	1.000	0.1156	4.40	4.28	12.5	108	100.0
17	41 13C9-PFNA	472.2 > 426.9	2.96e4	2.96e4	1.000	0.1156	4.68	4.58	12.5	108	100.0
18	42 13C4-PFOS	503 > 79.9	3.61e3	3.61e3	1.000	0.1156	4.78	4.66	12.5	108	100.0
19	43 13C6-PFDA	519.1 > 473.7	2.42e4	2.42e4	1.000	0.1156	4.95	4.85	12.5	108	100.0
20	44 13C7-PFUnA	570.1 > 524.8	2.27e4	2.27e4	1.000	0.1156	5.20	5.10	12.5	108	100.0
21	45 Total PFBS	299 > 79.7	3.75e3	2.94e3		0.1156	3.30		16.0	67.9	
22	46 Total PFHxS	398.9 > 79.6	7.18e4	2.10e3		0.1156	4.05		428	1900	
23	47 Total PFOA	413 > 368.7	2.36e5	3.18e4		0.1156	4.30		92.8	816	
24	48 Total PFOS	499 > 79.9	3.91e5	4.05e3		0.1156	4.60		1210	9860	

Dataset: U:\Q4.PRO\results\170608m5\170608M5-39.qld

Last Altered: Friday, June 16, 2017 11:50:13 Pacific Daylight Time

Printed: Friday, June 16, 2017 14:51:39 Pacific Daylight Time

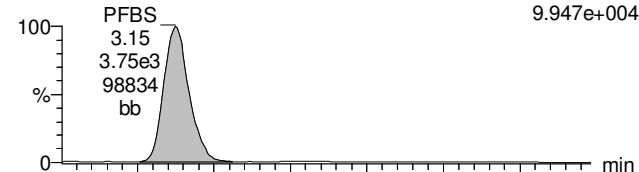
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

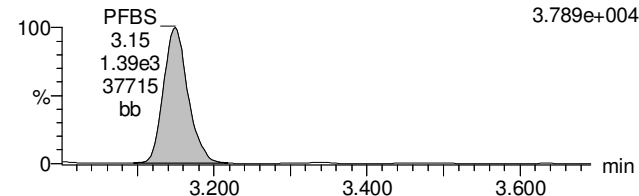
Name: 170608M5\_39, Date: 09-Jun-2017, Time: 06:53:20, ID: 1700681-01 OF17-MW02-0517 0.125, Description: OF17-MW02-0517

### Total PFBS

170608M5\_39 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125 299 > 79.7 9.947e+004

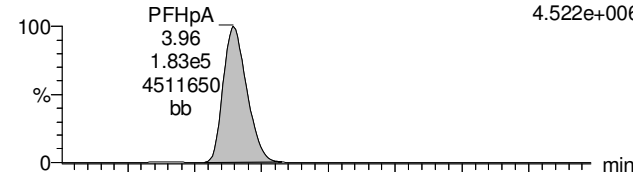


170608M5\_39 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125 299 > 99 3.789e+004

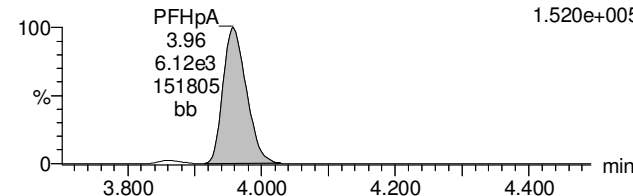


### PFHpA

170608M5\_39 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125363 > 318.9 4.522e+006

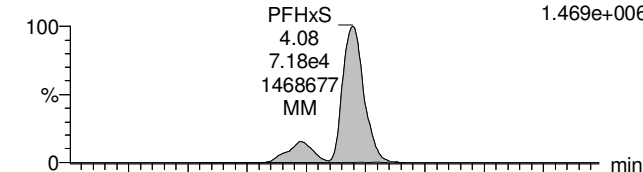


170608M5\_39 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125 363 > 169 1.520e+005

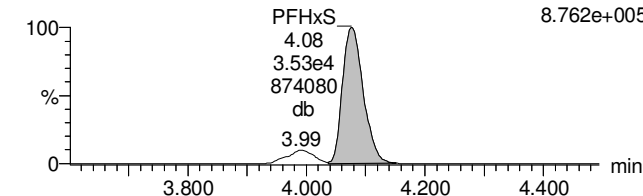


### Total PFHxS

170608M5\_39 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125398.9 > 79.6 1.469e+006

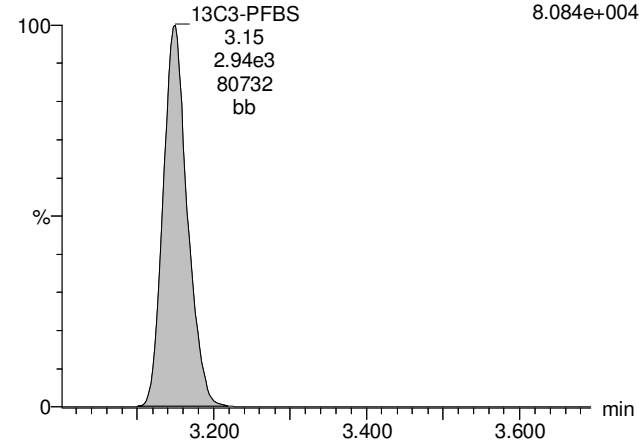


170608M5\_39 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125 398.9 > 99 8.762e+005



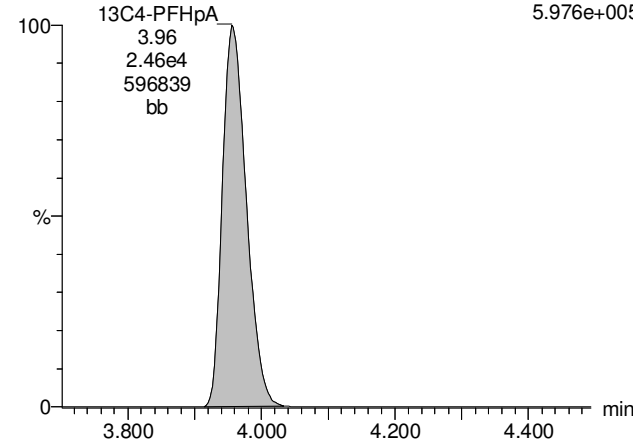
### 13C3-PFBS

170608M5\_39 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125 302 > 98.8 8.084e+004



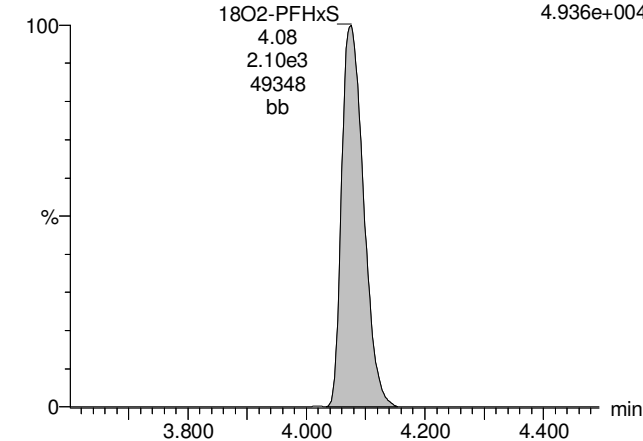
### 13C4-PFHpA

170608M5\_39 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125403 > 321.8 5.976e+005



### 18O2-PFHxS

170608M5\_39 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125403 > 102.6 4.936e+004



Dataset: U:\Q4.PRO\results\170608m5\170608M5-39.qld

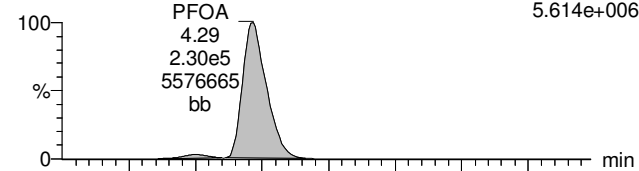
Last Altered: Friday, June 16, 2017 11:50:13 Pacific Daylight Time

Printed: Friday, June 16, 2017 14:51:39 Pacific Daylight Time

Name: 170608M5\_39, Date: 09-Jun-2017, Time: 06:53:20, ID: 1700681-01 OF17-MW02-0517 0.125, Description: OF17-MW02-0517

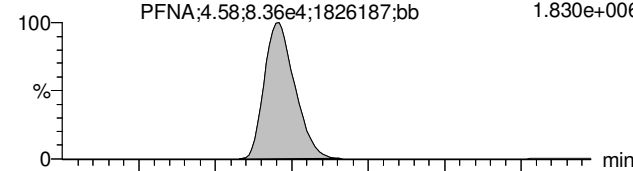
**Total PFOA**

170608M5\_39 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125413 > 368.7  
PFOA 4.29 5.614e+006  
2.30e5  
5576665  
bb



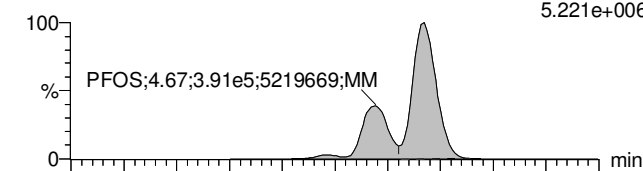
**PFNA**

170608M5\_39 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-462.9 > 418.8  
PFNA;4.58;3.36e4;1826187;bb 1.830e+006

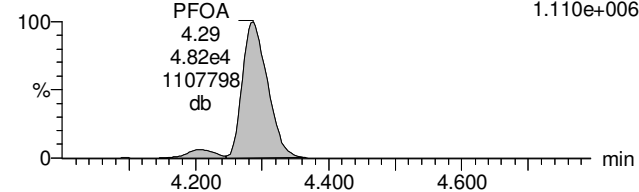


**Total PFOS**

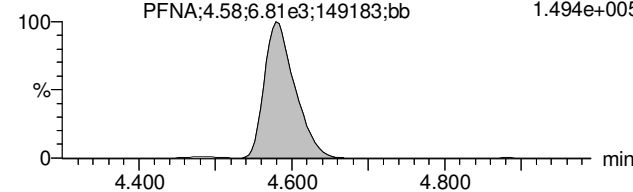
170608M5\_39 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125 499 > 79.9  
PFOS;4.67;3.91e5;5219669;MM 5.221e+006



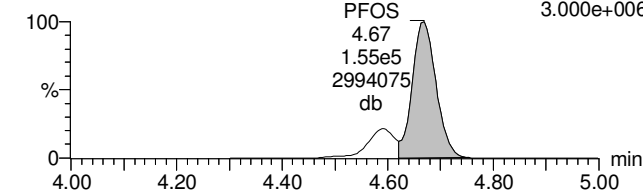
170608M5\_39 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125 413 > 169  
PFOA 4.29 1.110e+006  
4.82e4  
1107798  
db



170608M5\_39 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125462.9 > 219  
PFNA;4.58;6.81e3;149183;bb 1.494e+005

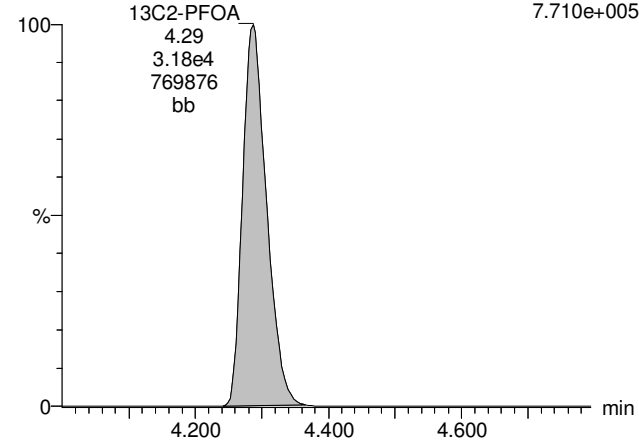


170608M5\_39 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125 499 > 99  
PFOS 4.67 3.000e+006  
1.55e5  
2994075  
db



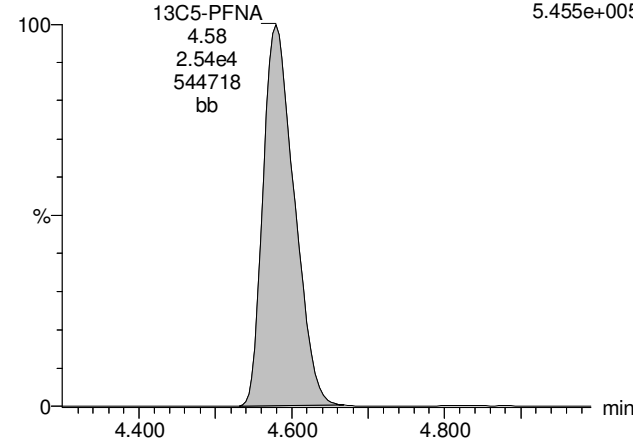
**13C2-PFOA**

170608M5\_39 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-414.9 > 369.7  
13C2-PFOA 4.29 7.710e+005  
3.18e4  
769876  
bb



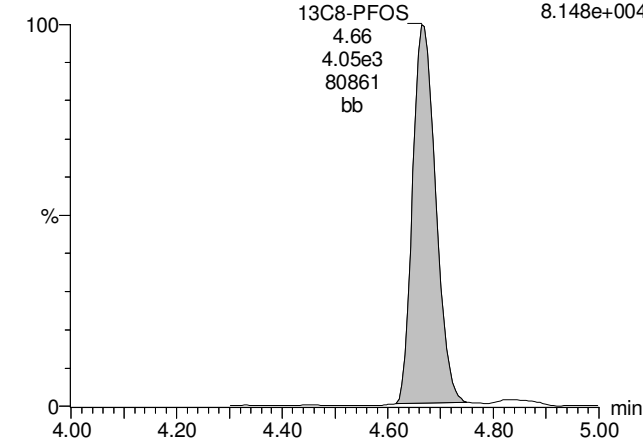
**13C5-PFNA**

170608M5\_39 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-468.2 > 422.9  
13C5-PFNA 4.58 5.455e+005  
2.54e4  
544718  
bb



**13C8-PFOS**

170608M5\_39 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125 507 > 79.9  
13C8-PFOS 4.66 8.148e+004  
4.05e3  
80861  
bb





Dataset: U:\Q4.PRO\results\170608m5\170608M5-39.qld

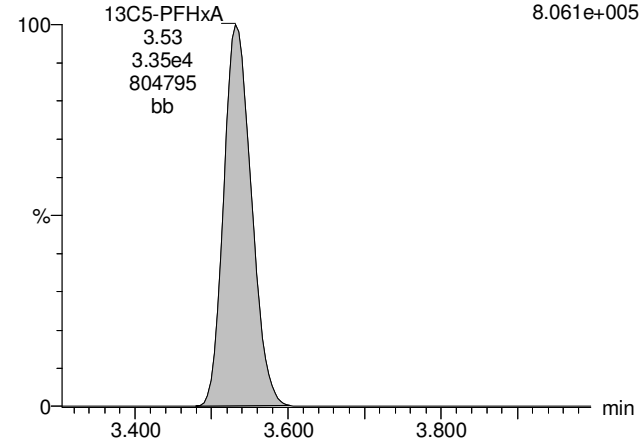
Last Altered: Friday, June 16, 2017 11:50:13 Pacific Daylight Time

Printed: Friday, June 16, 2017 14:51:39 Pacific Daylight Time

Name: 170608M5\_39, Date: 09-Jun-2017, Time: 06:53:20, ID: 1700681-01 OF17-MW02-0517 0.125, Description: OF17-MW02-0517

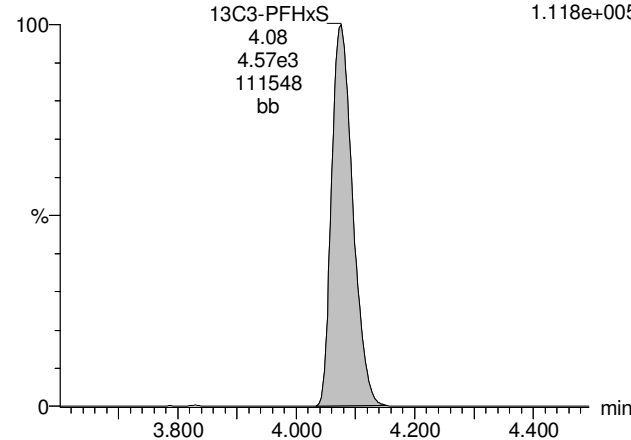
**13C5-PFHxA**

170608M5\_39 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125318 > 272.9 8.061e+005



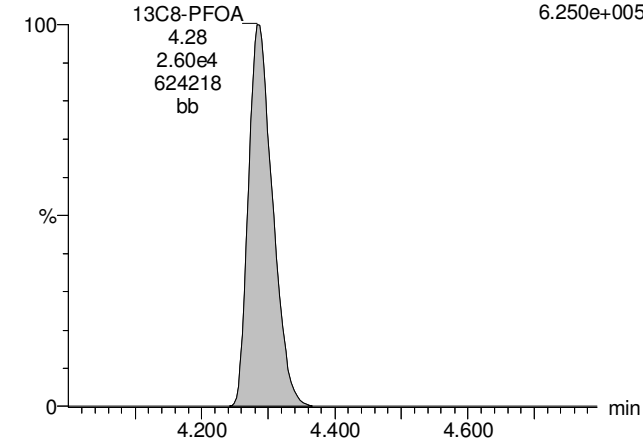
**13C3-PFHxS**

170608M5\_39 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125101.9 > 79.9 1.118e+005



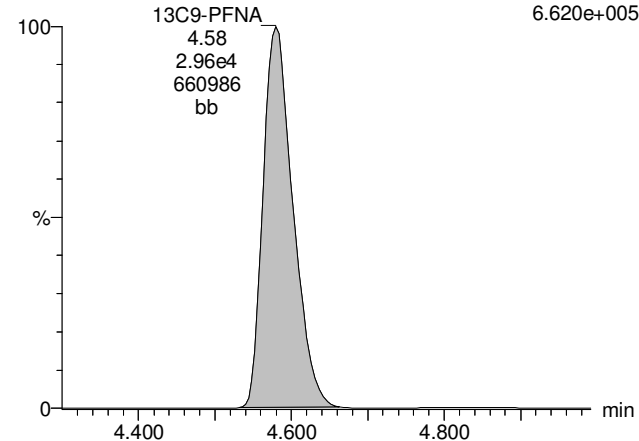
**13C8-PFOA**

170608M5\_39 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125421.3 > 376 6.250e+005



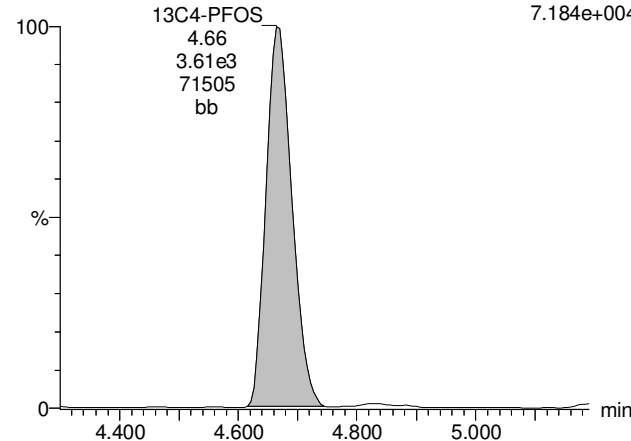
**13C9-PFNA**

170608M5\_39 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-472.2 > 426.9 6.620e+005



**13C4-PFOS**

170608M5\_39 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-OF17-MW02-0517 1700681-01 OF17-MW02-0517 0.125 503 > 79.9 7.184e+004



Dataset: U:\Q4.PRO\results\170623M1\170623M1-20.qld

Last Altered: Tuesday, June 27, 2017 09:41:16 Pacific Daylight Time

Printed: Tuesday, June 27, 2017 09:59:38 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

Name: 170623M1\_20, Date: 23-Jun-2017, Time: 14:24:18, ID: 1700681-01@10X OF17-MW02-0517 0.125, Description: OF17-MW02-0517

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	19 L-PFOS	499 > 79.9	2.20e4	3.04e2	0.1156		4.43	4.45	905	7850	
2	20 Br-PFOS	499 > 79.9	1.21e4	1.33e3	0.1156		4.43	4.36	114	915	
3	34 13C8-PFOS	507 > 79.9	3.04e2	2.73e2	0.1156	1.090	4.43	4.45	13.9	110	102.1
4	42 13C4-PFOS	503 > 79.9	2.73e2	2.73e2	0.1156	1.000	4.43	4.45	12.5	108	100.0
5	54 Total PFOS	499 > 79.9	3.41e4	3.04e2	0.1156		4.43		1020	8770	

Dataset: U:\Q4.PRO\results\170623M1\170623M1-20.qld

Last Altered: Tuesday, June 27, 2017 09:41:16 Pacific Daylight Time

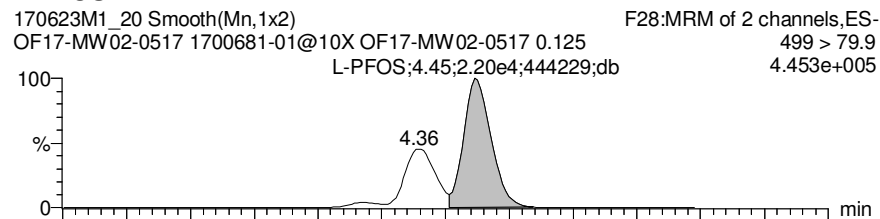
Printed: Tuesday, June 27, 2017 09:59:38 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

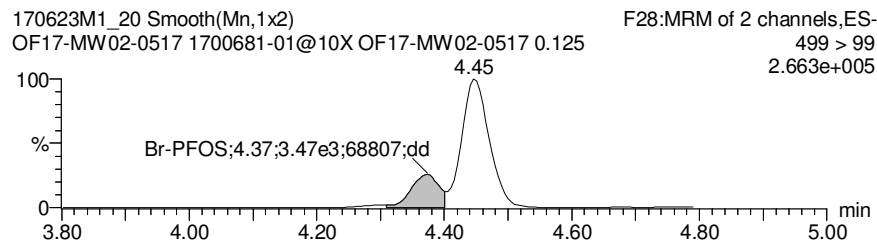
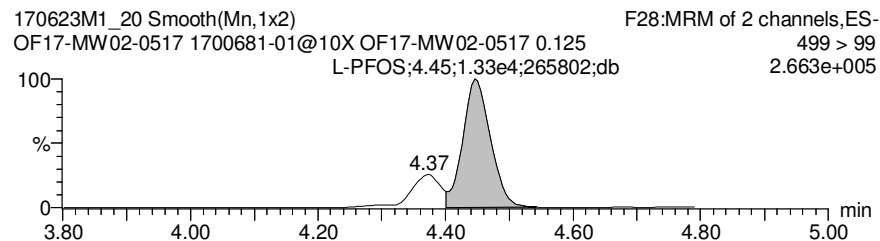
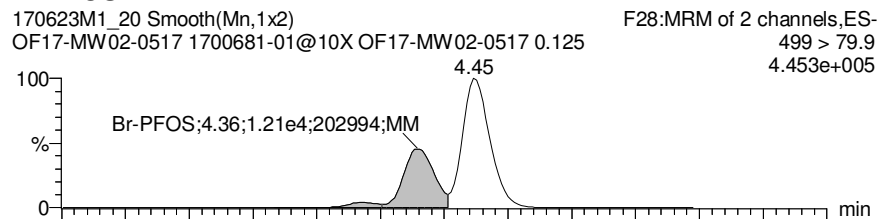
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

Name: 170623M1\_20, Date: 23-Jun-2017, Time: 14:24:18, ID: 1700681-01@10X OF17-MW02-0517 0.125, Description: OF17-MW02-0517

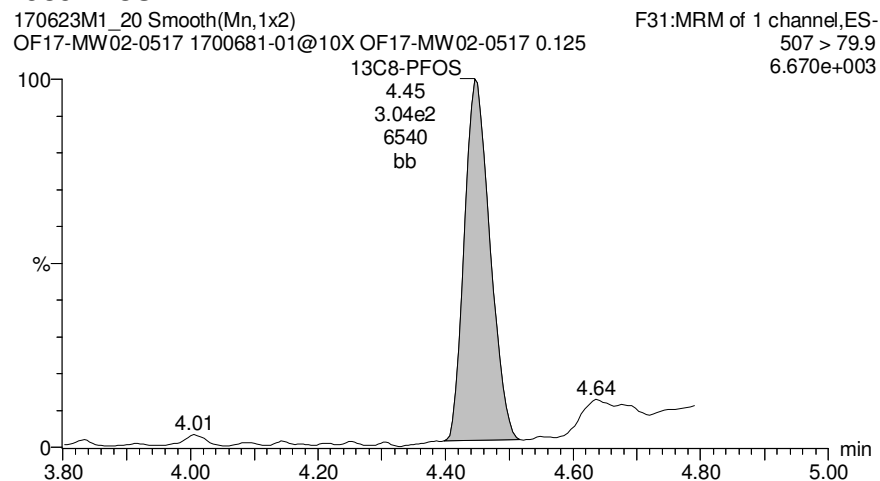
### L-PFOS



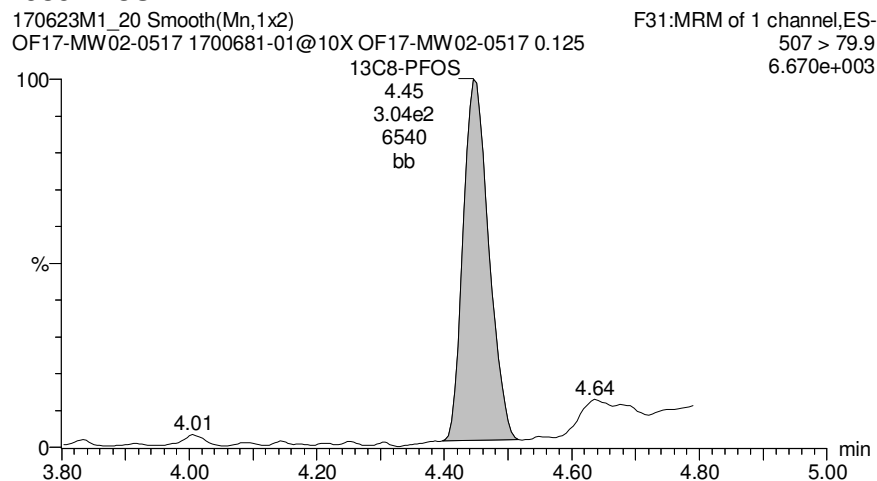
### Br-PFOS



### 13C8-PFOS



### 13C8-PFOS



Dataset: U:\Q4.PRO\results\170623M1\170623M1-20.qld

Last Altered: Tuesday, June 27, 2017 09:41:16 Pacific Daylight Time

Printed: Tuesday, June 27, 2017 09:59:38 Pacific Daylight Time

Name: 170623M1\_20, Date: 23-Jun-2017, Time: 14:24:18, ID: 1700681-01@10X OF17-MW02-0517 0.125, Description: OF17-MW02-0517

13C8-PFOS

170623M1\_20 Smooth(Mn,1x2)

F31:MRM of 1 channel,ES-

OF17-MW02-0517 1700681-01@10X OF17-MW02-0517 0.125

507 > 79.9

6.670e+003

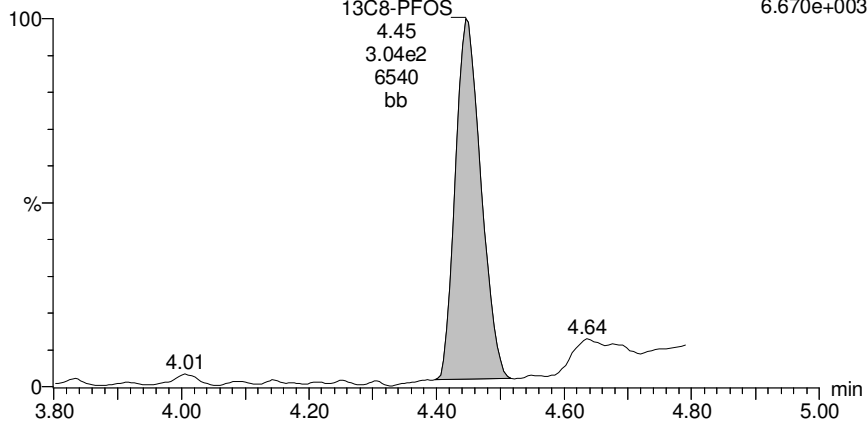
13C8-PFOS

4.45

3.04e2

6540

bb



Dataset: U:\Q4.PRO\results\170623M1\170623M1-20.qld

Last Altered: Tuesday, June 27, 2017 09:41:16 Pacific Daylight Time

Printed: Tuesday, June 27, 2017 09:59:38 Pacific Daylight Time

Name: 170623M1\_20, Date: 23-Jun-2017, Time: 14:24:18, ID: 1700681-01@10X OF17-MW02-0517 0.125, Description: OF17-MW02-0517

**13C4-PFOS**

170623M1\_20 Smooth(Mn,1x2)

F29:MRM of 1 channel,ES-

OF17-MW02-0517 1700681-01@10X OF17-MW02-0517 0.125

503 > 79.9

5.542e+003

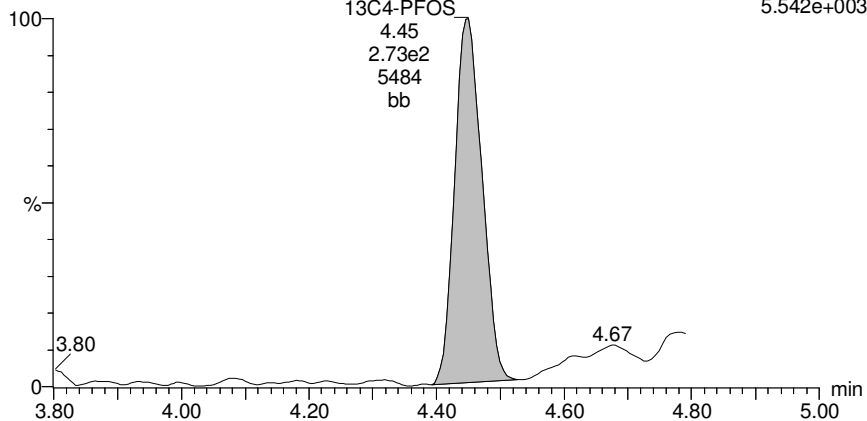
13C4-PFOS

4.45

2.73e2

5484

bb



Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_51.qld

Last Altered: Monday, June 19, 2017 11:51:15 Pacific Daylight Time

Printed: Monday, June 19, 2017 11:52:40 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_51, Date: 16-Jun-2017, Time: 08:06:03, ID: 1700681-01@25X OF17-MW02-0517 0.125, Description: OF17-MW02-0517

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	6 PFHxS	398.9 > 79.6	2.72e3	5.60e1		0.1156	4.20	4.22	607	3850	
2	10 PFOS	499 > 79.9	1.15e4	1.55e2		0.1156	4.80	4.81	928	5790	
3	24 18O2-PFHxS	403 > 102.6	5.60e1	1.80e2	0.331	0.1156	4.20	4.22	3.90	102	94.1
4	28 13C8-PFOS	507 > 79.9	1.55e2	8.67e1	0.911	0.1156	4.80	4.81	22.4	212	196.3
5	39 13C3-PFHxS	401.9 > 79.9	1.80e2	1.80e2	1.000	0.1156	4.20	4.23	12.5	108	100.0
6	42 13C4-PFOS	503 > 79.9	8.67e1	8.67e1	1.000	0.1156	4.80	4.82	12.5	108	100.0
7	46 Total PFHxS	398.9 > 79.6	2.72e3	5.60e1		0.1156	4.10		607	3850	
8	48 Total PFOS	499 > 79.9	1.15e4	1.55e2		0.1156	4.60		928	5790	

Report from 1:10

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_51.qld

Last Altered: Monday, June 19, 2017 11:51:15 Pacific Daylight Time

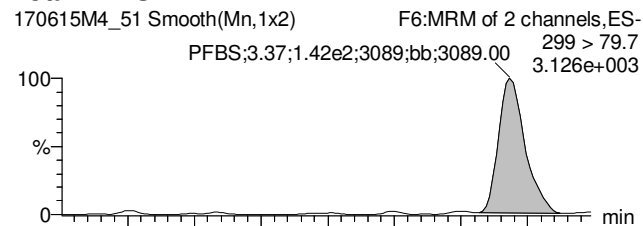
Printed: Monday, June 19, 2017 11:52:40 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

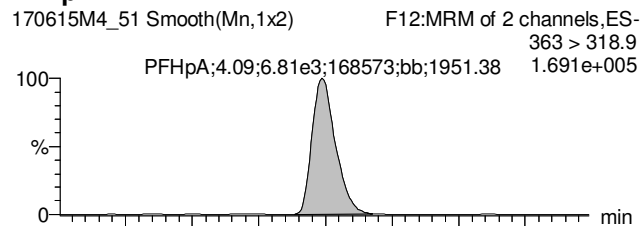
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_51, Date: 16-Jun-2017, Time: 08:06:03, ID: 1700681-01@25X OF17-MW02-0517 0.125, Description: OF17-MW02-0517

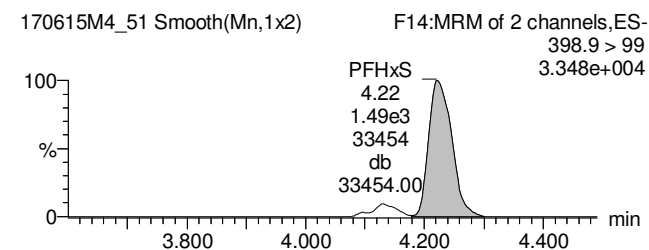
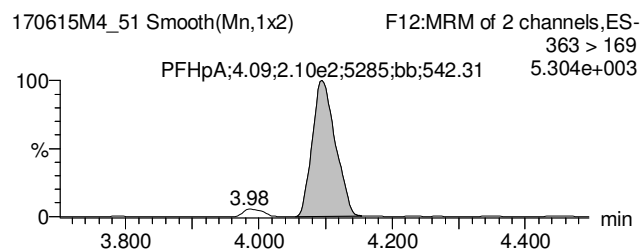
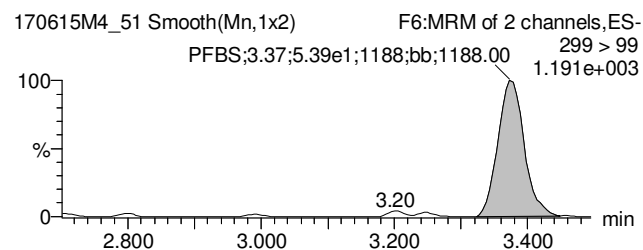
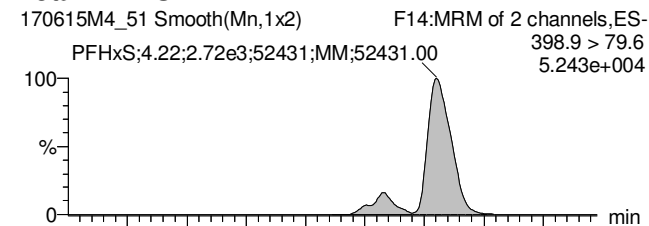
**Total PFBS**



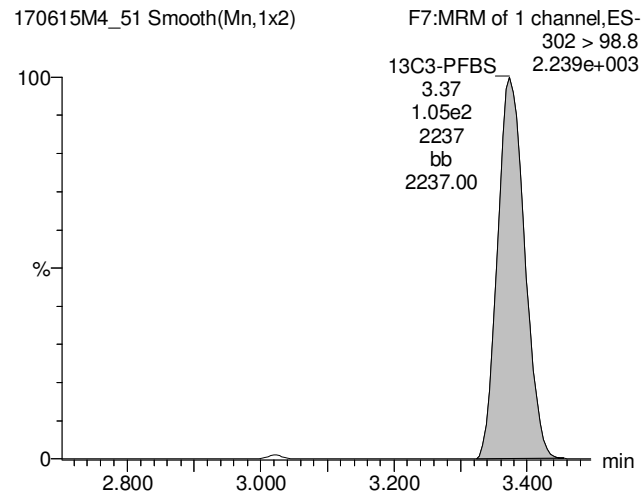
**PFHpA**



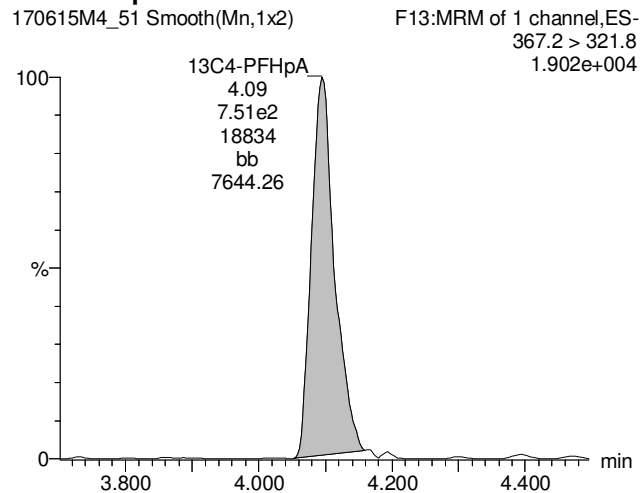
**Total PFHxS**



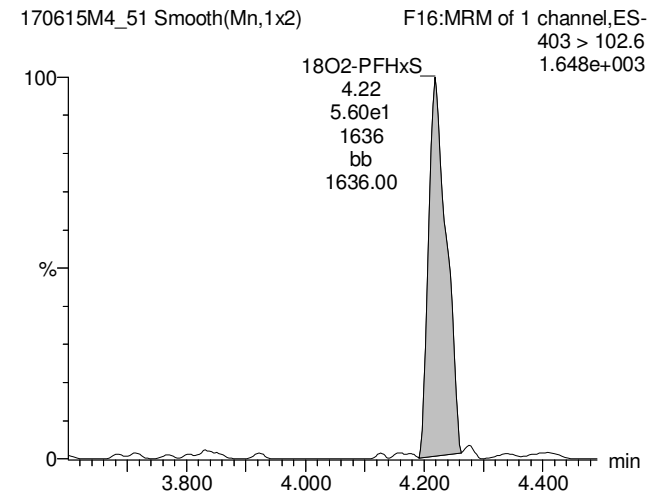
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**



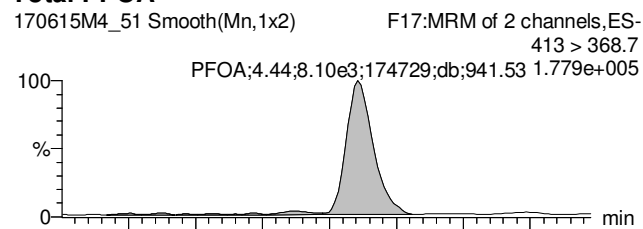
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Last Altered: Monday, June 19, 2017 11:51:15 Pacific Daylight Time

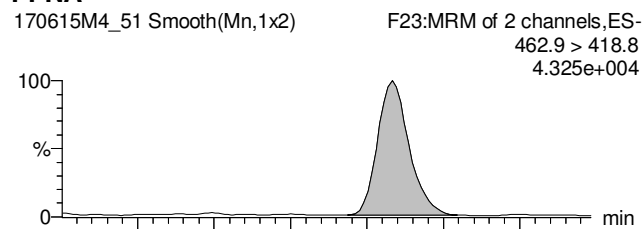
Printed: Monday, June 19, 2017 11:52:40 Pacific Daylight Time

Name: 170615M4\_51, Date: 16-Jun-2017, Time: 08:06:03, ID: 1700681-01@25X OF17-MW02-0517 0.125, Description: OF17-MW02-0517

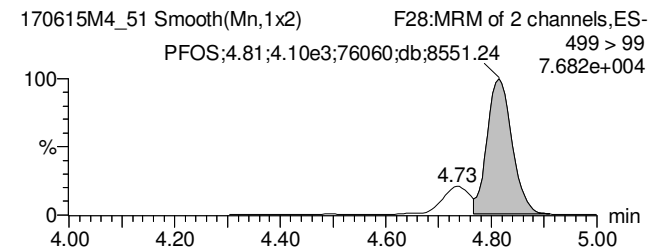
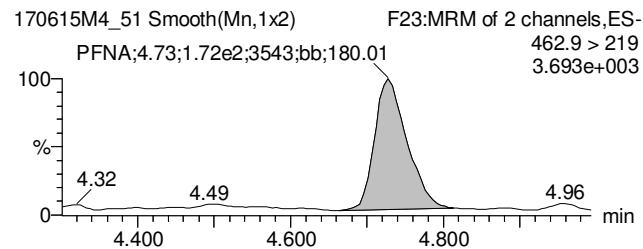
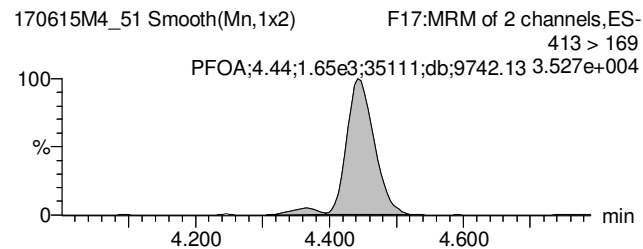
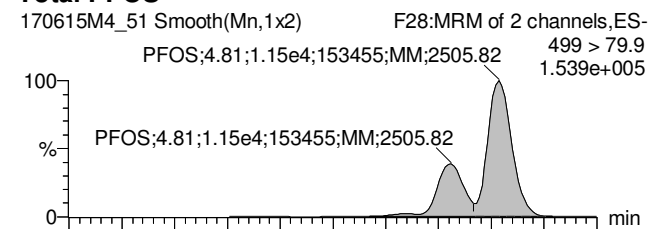
### Total PFOA



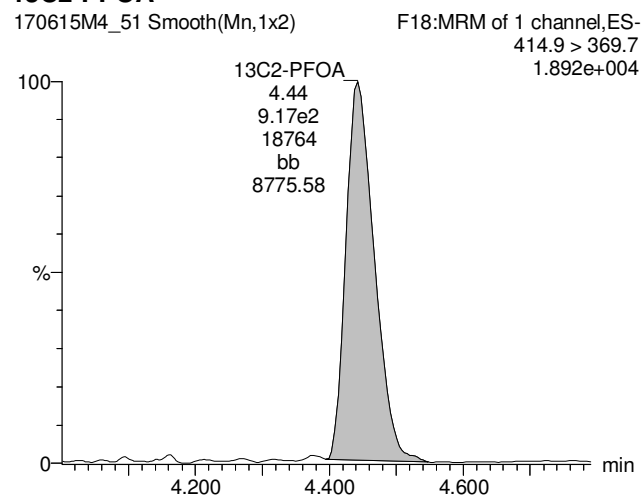
### PFNA



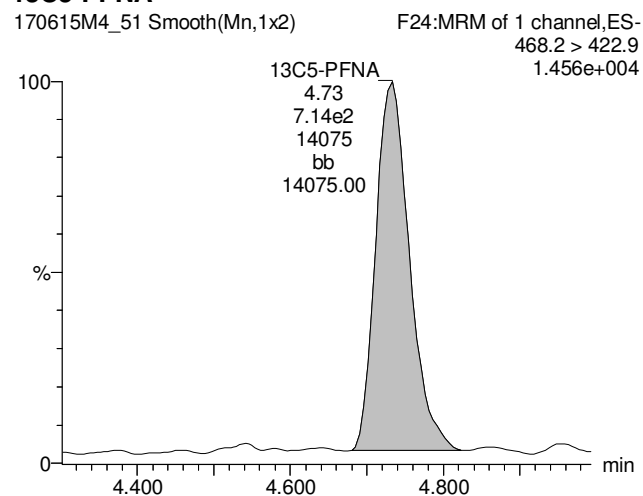
### Total PFOS



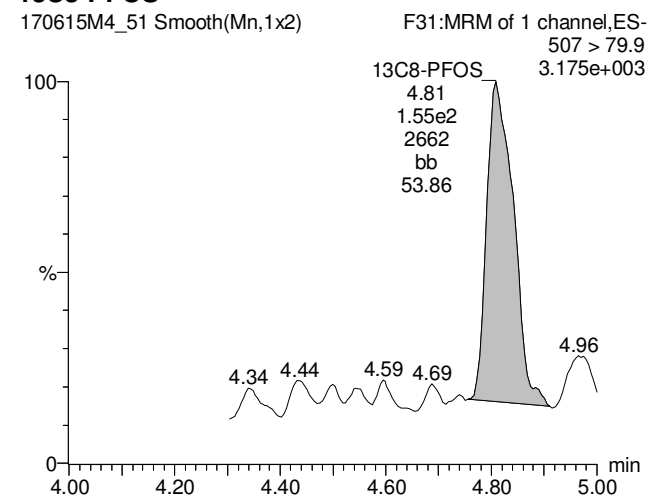
### 13C2-PFOA



### 13C5-PFNA



### 13C8-PFOS





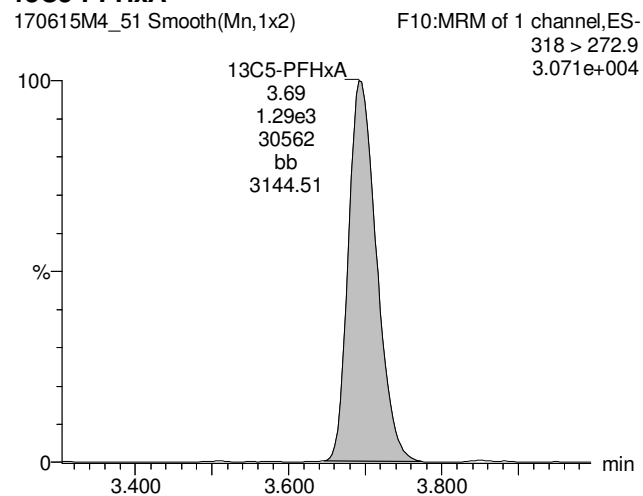
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_51.qld

Last Altered: Monday, June 19, 2017 11:51:15 Pacific Daylight Time

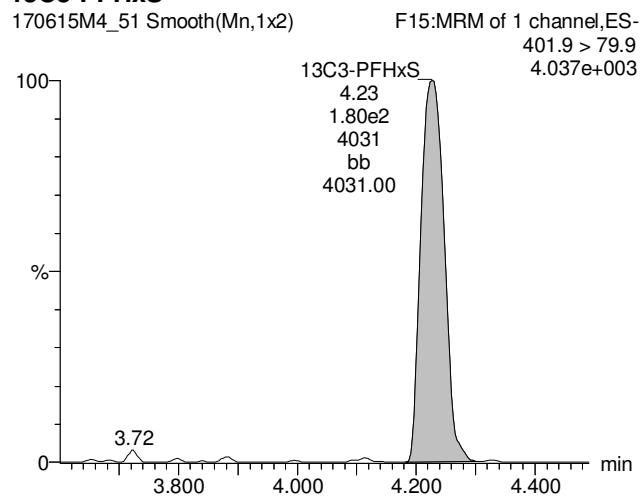
Printed: Monday, June 19, 2017 11:52:40 Pacific Daylight Time

Name: 170615M4\_51, Date: 16-Jun-2017, Time: 08:06:03, ID: 1700681-01@25X OF17-MW02-0517 0.125, Description: OF17-MW02-0517

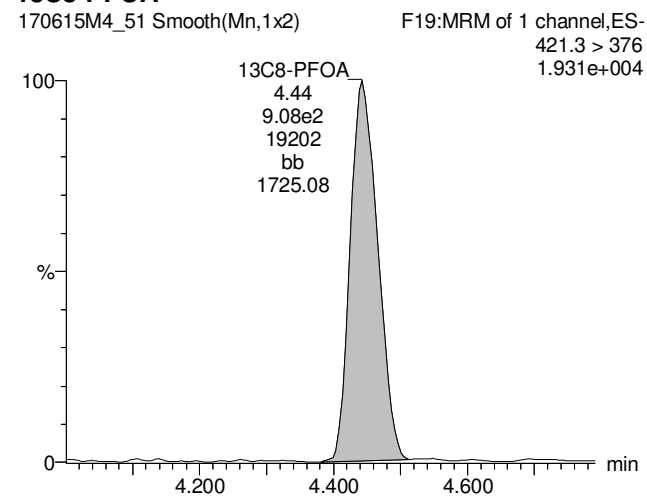
**13C5-PFHxA**



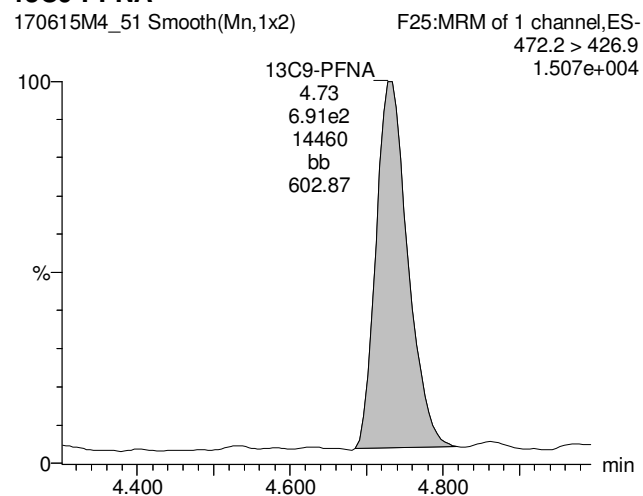
**13C3-PFHxS**



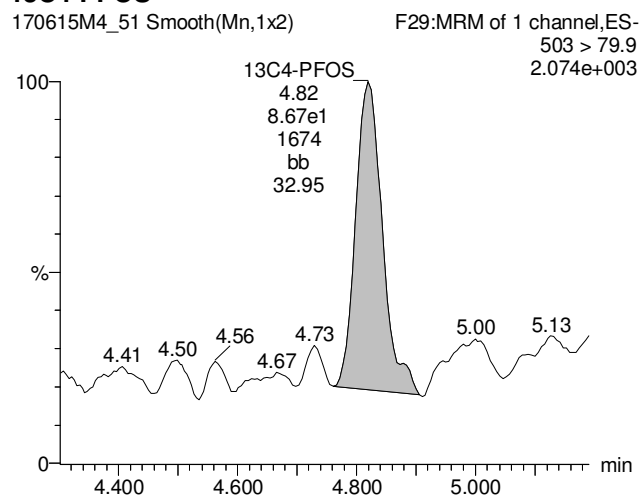
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



Dataset: U:\Q4.PRO\results\170608m5\170608M5-40.qld

Last Altered: Friday, June 16, 2017 14:24:24 Pacific Daylight Time

Printed: Friday, June 16, 2017 14:50:37 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_40, Date: 09-Jun-2017, Time: 07:04:47, ID: 1700681-02 OF17-MW03-0517 0.125, Description: OF17-MW03-0517

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	3.93e4	2.89e3		0.1138	3.30	3.15	170	739	
2	5 PFHpA	363 > 318.9	4.42e5	2.39e4		0.1138	4.06	3.95	231	1690 <sup>E</sup>	
3	6 PFHxS	398.9 > 79.6	3.23e5	1.61e3		0.1138	4.20	4.07	2500	9170 <sup>E</sup>	
4	8 PFOA	413 > 368.7	7.54e5	3.57e4		0.1138	4.36	4.28	264	2360 <sup>E</sup>	
5	9 PFNA	462.9 > 418.8	1.89e5	2.38e4		0.1138	4.68	4.58	99.0	714	
6	10 PFOS	499 > 79.9	5.92e5	3.85e3		0.1138	4.70	4.66	1920	16100 <sup>E</sup>	
7	21 13C3-PFBS	302 > 98.8	2.89e3	3.25e4	0.024	0.1138	3.30	3.15	0.445	163	148.0
8	23 13C4-PFHpA	367.2 > 321.8	2.39e4	3.25e4	0.235	0.1138	4.06	3.95	3.68	137	125.2
9	24 18O2-PFHxS	403 > 102.6	1.61e3	3.61e3	0.345	0.1138	4.20	4.07	5.58	142	129.5
10	25 13C2-6:2 FTS	429.1 > 408.9	1.22e4	5.20e3	0.329	0.1138	4.30	4.27	11.7	312	284.2
11	26 13C2-PFOA	414.9 > 369.7	3.57e4	2.58e4	1.148	0.1138	4.40	4.28	17.3	132	120.6
12	27 13C5-PFNA	468.2 > 422.9	2.38e4	2.58e4	0.724	0.1138	4.68	4.58	11.6	140	127.6
13	28 13C8-PFOS	507 > 79.9	3.85e3	3.58e3	0.868	0.1138	4.78	4.67	13.5	136	124.0
14	38 13C5-PFHxA	318 > 272.9	3.25e4	3.25e4	1.000	0.1138	3.67	3.53	5.00	43.9	100.0
15	39 13C3-PFHxS	401.9 > 79.9	3.61e3	3.61e3	1.000	0.1138	4.20	4.07	12.5	110	100.0
16	40 13C8-PFOA	421.3 > 376	2.58e4	2.58e4	1.000	0.1138	4.40	4.28	12.5	110	100.0
17	41 13C9-PFNA	472.2 > 426.9	2.58e4	2.58e4	1.000	0.1138	4.68	4.58	12.5	110	100.0
18	42 13C4-PFOS	503 > 79.9	3.58e3	3.58e3	1.000	0.1138	4.78	4.67	12.5	110	100.0
19	43 13C6-PFDA	519.1 > 473.7	2.49e4	2.49e4	1.000	0.1138	4.95	4.85	12.5	110	100.0
20	44 13C7-PFUnA	570.1 > 524.8	2.66e4	2.66e4	1.000	0.1138	5.20	5.09	12.5	110	100.0
21	45 Total PFBS	299 > 79.7	3.93e4	2.89e3		0.1138	3.30		170	739	
22	46 Total PFHxS	398.9 > 79.6	3.23e5	1.61e3		0.1138	4.05		2500	9170 <sup>E</sup>	
23	47 Total PFOA	413 > 368.7	8.03e5	3.57e4		0.1138	4.30		281	2510 <sup>E</sup>	
24	48 Total PFOS	499 > 79.9	5.92e5	3.85e3		0.1138	4.60		1920	16100 <sup>E</sup>	

Dataset: U:\Q4.PRO\results\170608m5\170608M5-40.qld

Last Altered: Friday, June 16, 2017 14:24:24 Pacific Daylight Time

Printed: Friday, June 16, 2017 14:50:37 Pacific Daylight Time

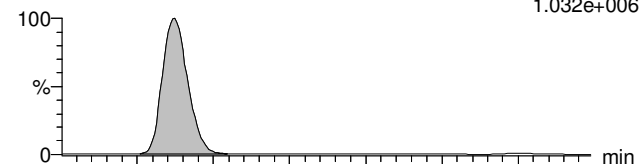
Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

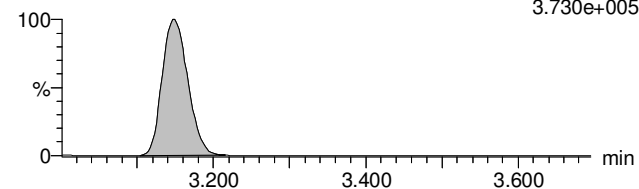
Name: 170608M5\_40, Date: 09-Jun-2017, Time: 07:04:47, ID: 1700681-02 OF17-MW03-0517 0.125, Description: OF17-MW03-0517

**Total PFBS**

170608M5\_40 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 299 > 79.7 1.032e+006

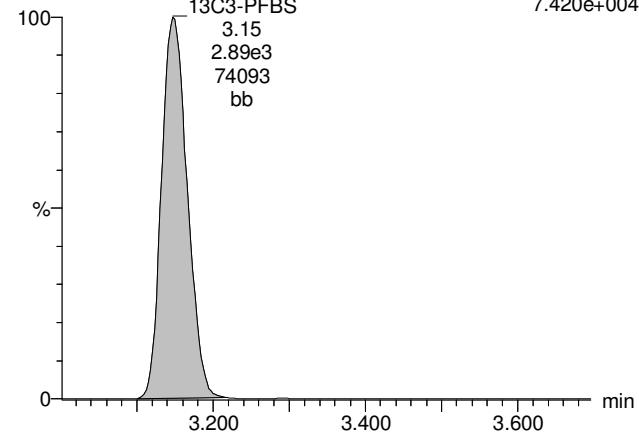


170608M5\_40 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 299 > 99 3.730e+005



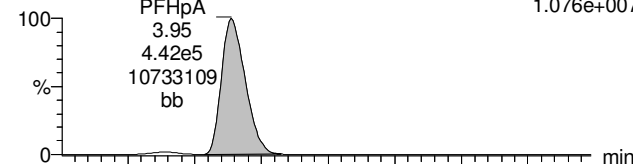
**13C3-PFBS**

170608M5\_40 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 302 > 98.8 7.420e+004

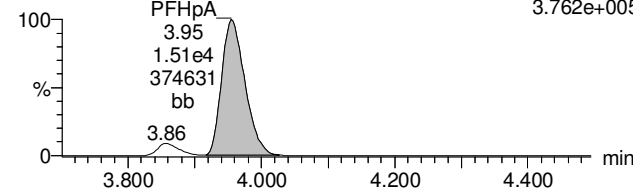


**PFHpA**

170608M5\_40 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125363 > 318.9 1.076e+007

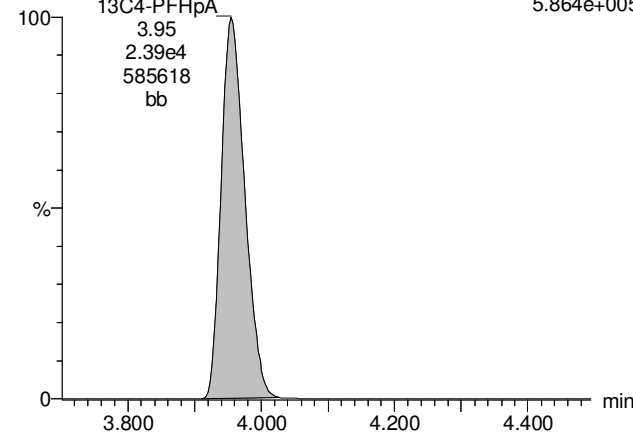


170608M5\_40 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 363 > 169 3.762e+005



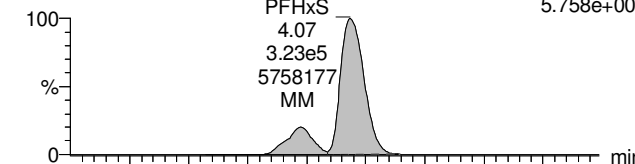
**13C4-PFHpA**

170608M5\_40 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 367.2 > 321.8 5.864e+005

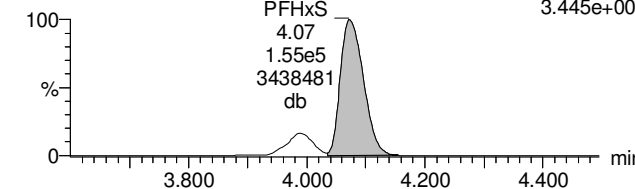


**Total PFHxS**

170608M5\_40 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125398.9 > 79.6 5.758e+006

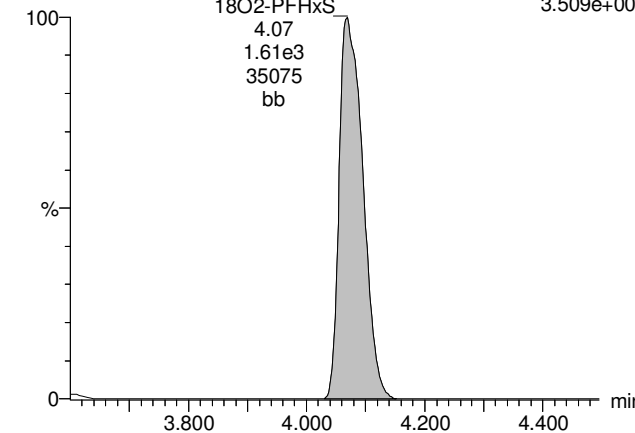


170608M5\_40 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 398.9 > 99 3.445e+006



**18O2-PFHxS**

170608M5\_40 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125403 > 102.6 3.509e+004



Dataset: U:\Q4.PRO\results\170608m5\170608M5-40.qld

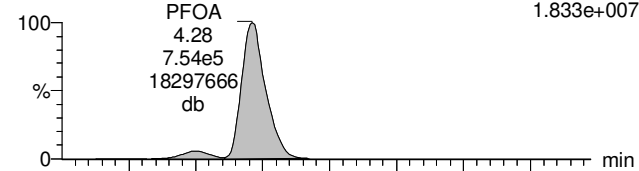
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Printed: Friday, June 16, 2017 14:50:37 Pacific Daylight Time

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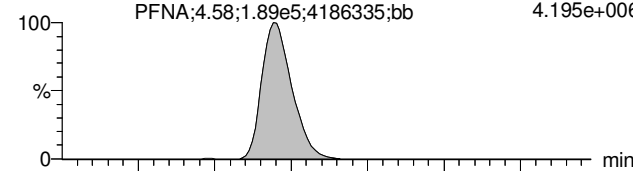
**Total PFOA**

170608M5\_40 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125413 > 368.7  
PFOA 4.28 1.833e+007  
7.54e5  
18297666  
db



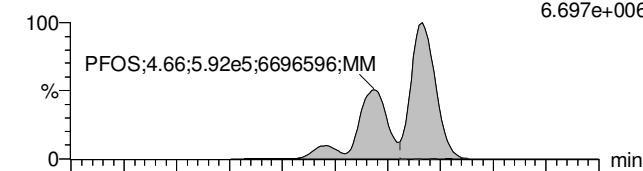
**PFNA**

170608M5\_40 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-462.9 > 418.8  
PFNA;4.58;1.89e5;4186335;bb 4.195e+006

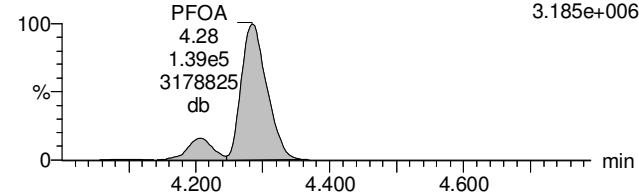


**Total PFOS**

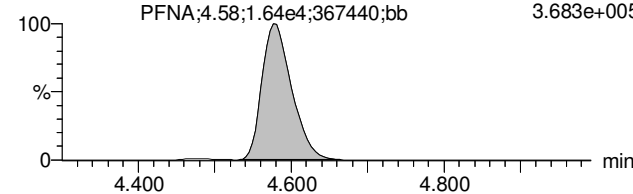
170608M5\_40 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 499 > 79.9  
PFOS;4.66;5.92e5;6696596;MM 6.697e+006



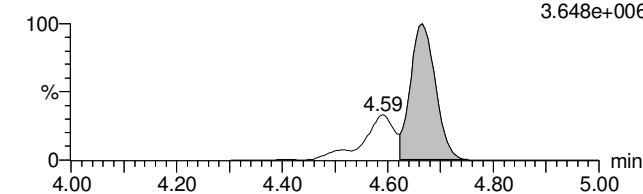
170608M5\_40 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 413 > 169  
PFOA 4.28 3.185e+006  
1.39e5  
3178825  
db



170608M5\_40 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125462.9 > 219  
PFNA;4.58;1.64e4;367440;bb 3.683e+005

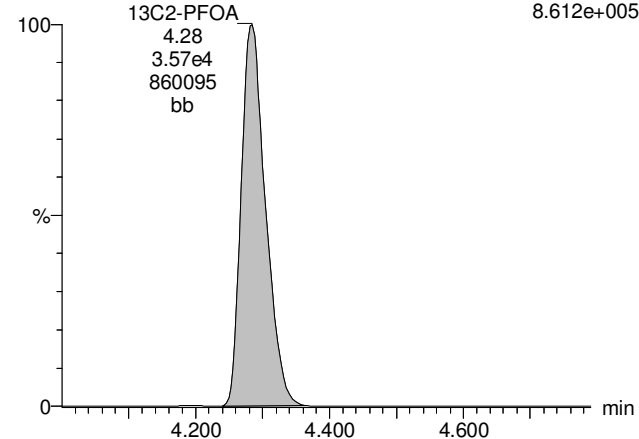


170608M5\_40 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 499 > 99  
PFOS;4.66;5.92e5;6696596;MM 3.648e+006



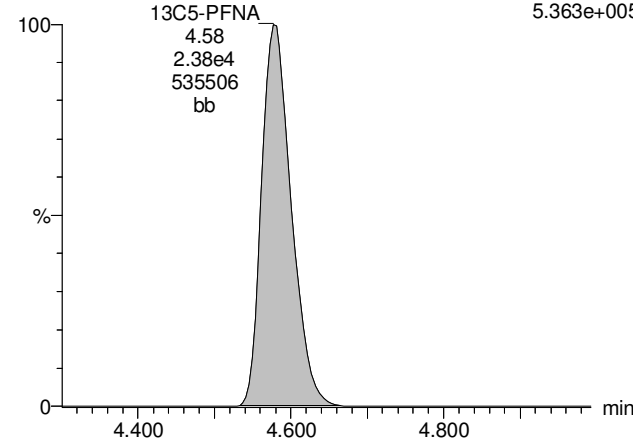
**13C2-PFOA**

170608M5\_40 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-414.9 > 369.7  
13C2-PFOA 4.28 8.612e+005  
3.57e4  
860095  
bb



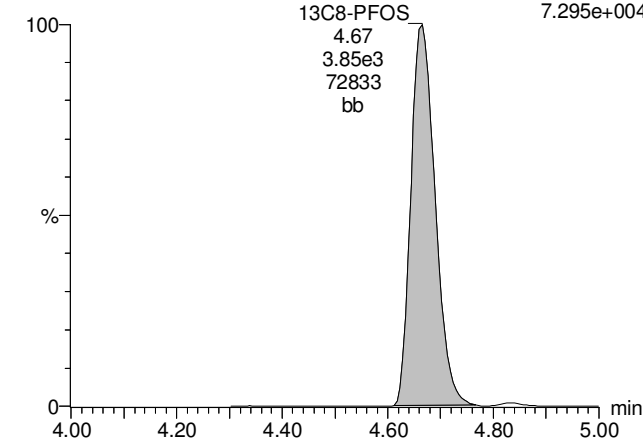
**13C5-PFNA**

170608M5\_40 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-468.2 > 422.9  
13C5-PFNA 4.58 5.363e+005  
2.38e4  
535506  
bb



**13C8-PFOS**

170608M5\_40 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 507 > 79.9  
13C8-PFOS 4.67 7.295e+004  
3.85e3  
72833  
bb



Dataset: U:\Q4.PRO\results\170608m5\170608M5-40.qld

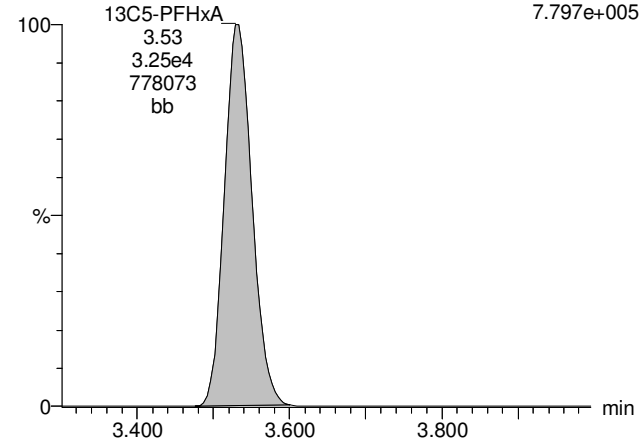
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Printed: Friday, June 16, 2017 14:50:37 Pacific Daylight Time

Name: 170608M5\_40, Date: 09-Jun-2017, Time: 07:04:47, ID: 1700681-02 OF17-MW03-0517 0.125, Description: OF17-MW03-0517

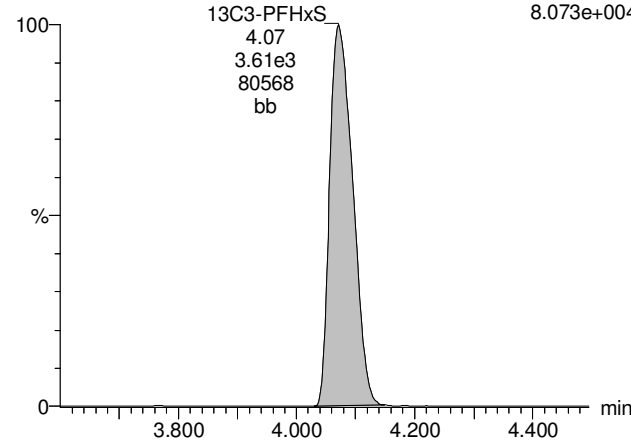
**13C5-PFHxA**

170608M5\_40 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125318 > 272.9 7.797e+005



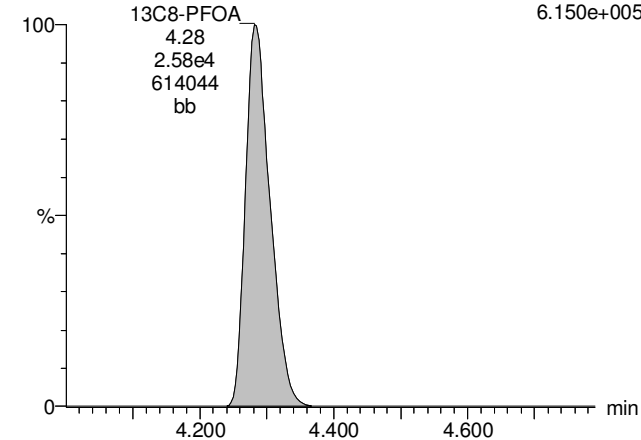
**13C3-PFHxS**

170608M5\_40 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125101.9 > 79.9 8.073e+004



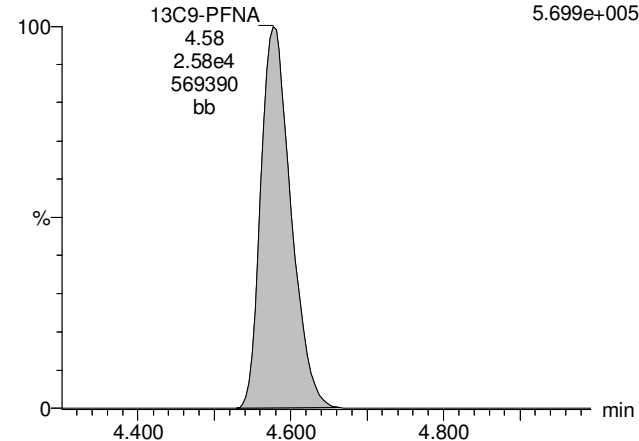
**13C8-PFOA**

170608M5\_40 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125421.3 > 376 6.150e+005



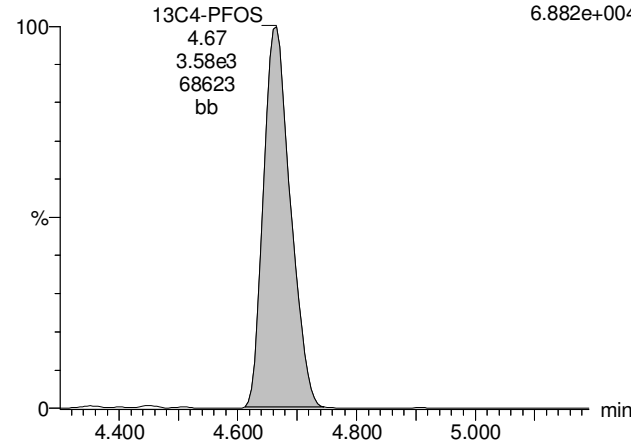
**13C9-PFNA**

170608M5\_40 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-472.2 > 426.9 5.699e+005



**13C4-PFOS**

170608M5\_40 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-OF17-MW03-0517 1700681-02 OF17-MW03-0517 0.125 503 > 79.9 6.882e+004



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_53.qld

Last Altered: Monday, June 19, 2017 11:57:43 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:02:31 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_53, Date: 16-Jun-2017, Time: 08:29:12, ID: 1700681-02@25X OF17-MW03-0517 0.125, Description: OF17-MW03-0517

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5 PFHpA	363 > 318.9	1.66e4	8.30e2		0.1138	4.07	4.09	250	1750	
2	8 PFOA	413 > 368.7	2.60e4	1.10e3		0.1138	4.42	4.44	295	2620	
3	10 PFOS	499 > 79.9	1.81e4	1.15e2		0.1138	4.80	4.81	1960	10400	
4	23 13C4-PFHpA	367.2 > 321.8	8.30e2	1.28e3	0.254	0.1138	4.07	4.09	3.24	112	102.0
5	26 13C2-PFOA	414.9 > 369.7	1.10e3	1.08e3	1.060	0.1138	4.26	4.44	12.8	106	96.7
6	28 13C8-PFOS	507 > 79.9	1.15e2	1.11e2	0.911	0.1138	4.80	4.81	12.9	125	113.6
7	38 13C5-PFHxA	318 > 272.9	1.28e3	1.28e3	1.000	0.1138	3.66	3.69	5.00	43.9	100.0
8	39 13C3-PFHxS	401.9 > 79.9	1.76e2	1.76e2	1.000	0.1138	4.20	4.21	12.5	110	100.0
9	40 13C8-PFOA	421.3 > 376	1.08e3	1.08e3	1.000	0.1138	4.42	4.44	12.5	110	100.0
10	42 13C4-PFOS	503 > 79.9	1.11e2	1.11e2	1.000	0.1138	4.80	4.81	12.5	110	100.0

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_53.qld

Last Altered: Monday, June 19, 2017 11:57:43 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:02:56 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_53, Date: 16-Jun-2017, Time: 08:29:12, ID: 1700681-02@25X OF17-MW03-0517 0.125, Description: OF17-MW03-0517

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	47 Total PFOA	413 > 368.7	2.73e4	1.10e3		0.1138	4.30		310	2760	
2	48 Total PFOS	499 > 79.9	1.81e4	1.15e2		0.1138	4.60		1960	10400	

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_53.qld

Last Altered: Monday, June 19, 2017 11:57:43 Pacific Daylight Time

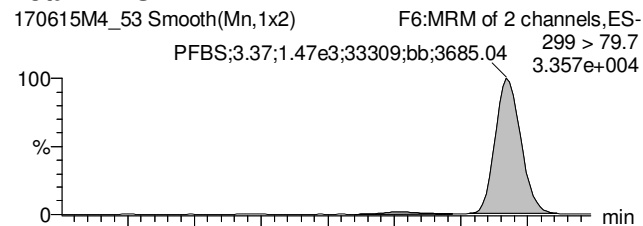
Printed: Monday, June 19, 2017 12:02:31 Pacific Daylight Time

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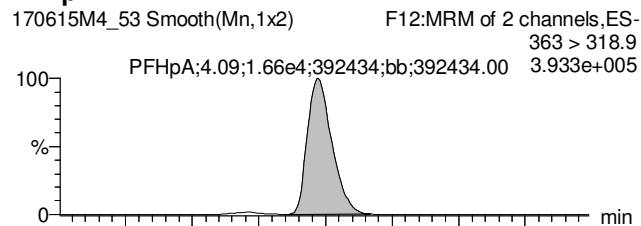
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_53, Date: 16-Jun-2017, Time: 08:29:12, ID: 1700681-02@25X OF17-MW03-0517 0.125, Description: OF17-MW03-0517

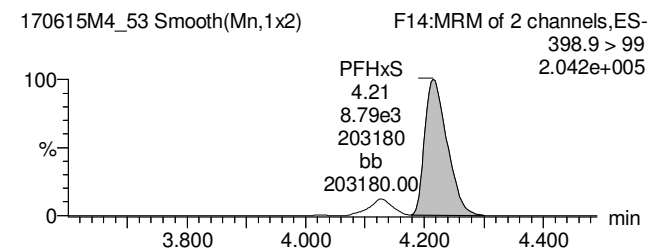
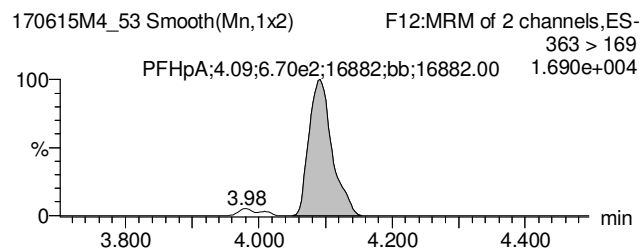
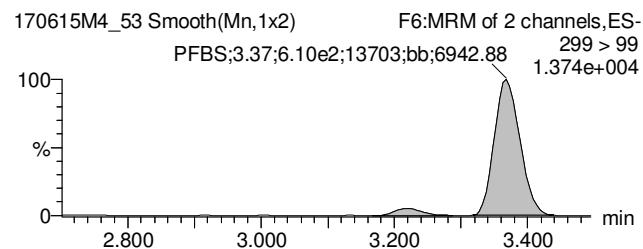
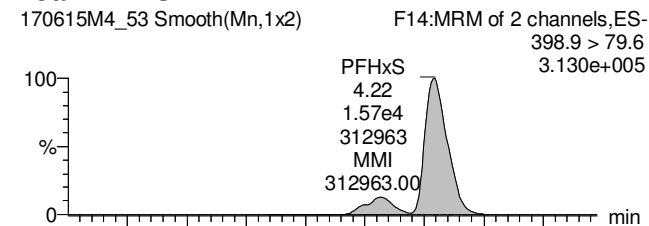
**Total PFBS**



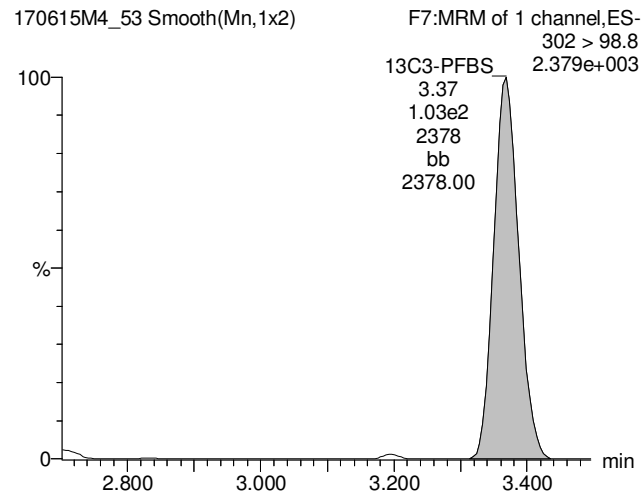
**PFHpA**



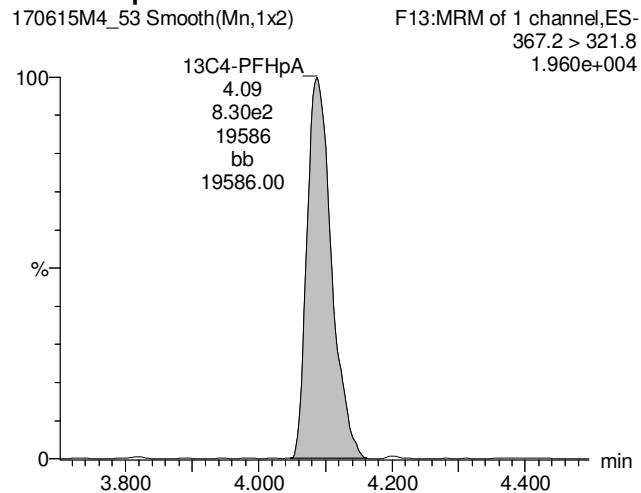
**Total PFHxS**



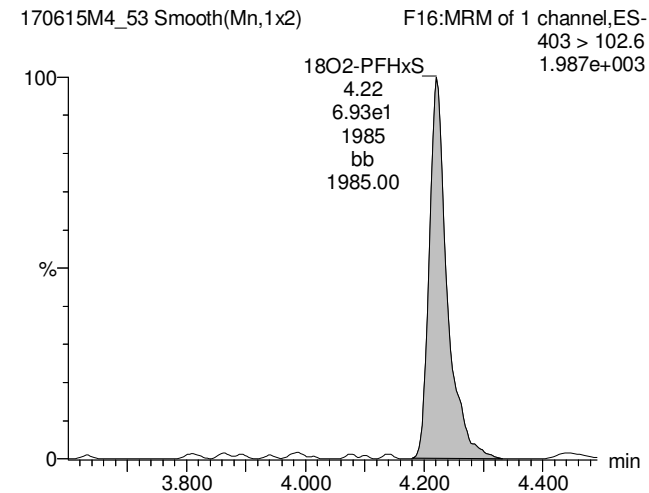
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**





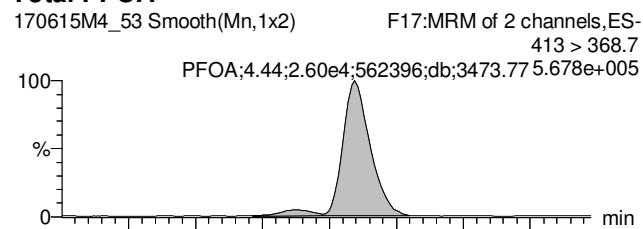
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Last Altered: Monday, June 19, 2017 11:57:43 Pacific Daylight Time

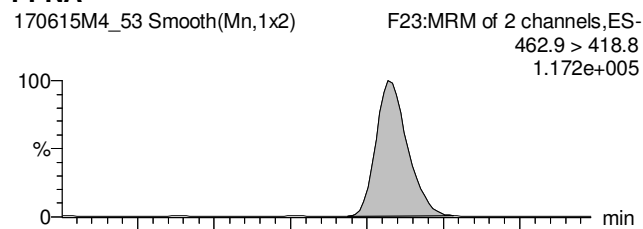
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Name: 170615M4\_53, Date: 16-Jun-2017, Time: 08:29:12, ID: 1700681-02@25X OF17-MW03-0517 0.125, Description: OF17-MW03-0517

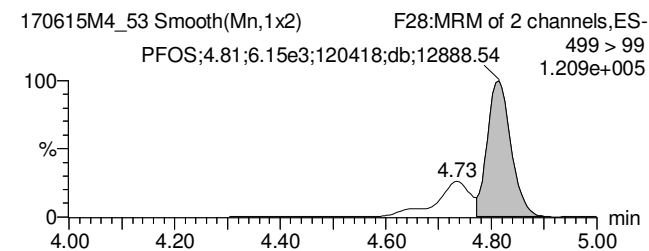
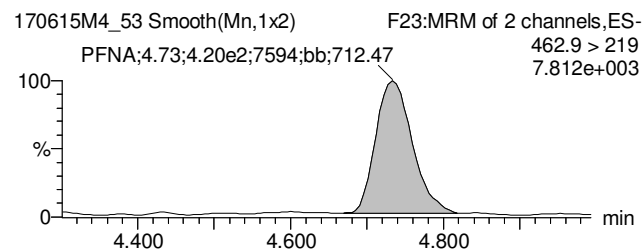
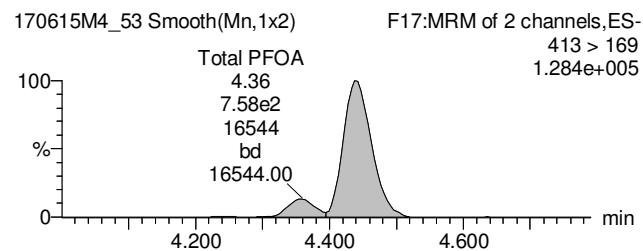
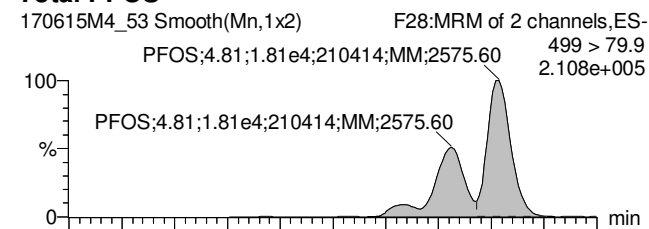
### Total PFOA



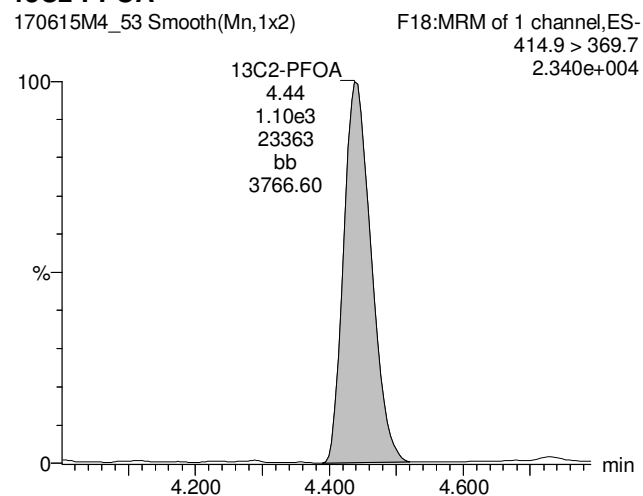
### PFNA



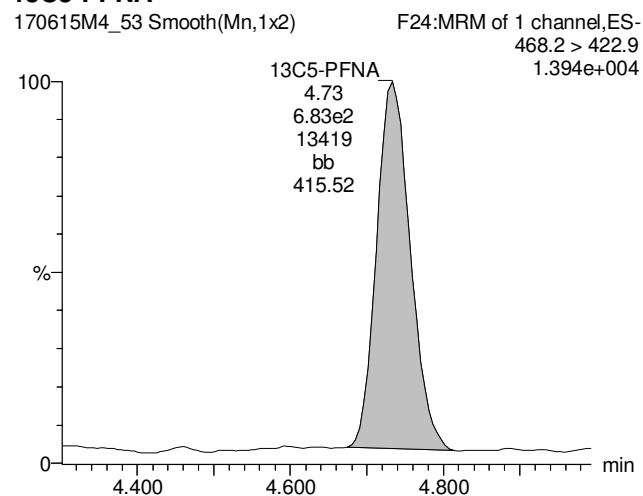
### Total PFOS



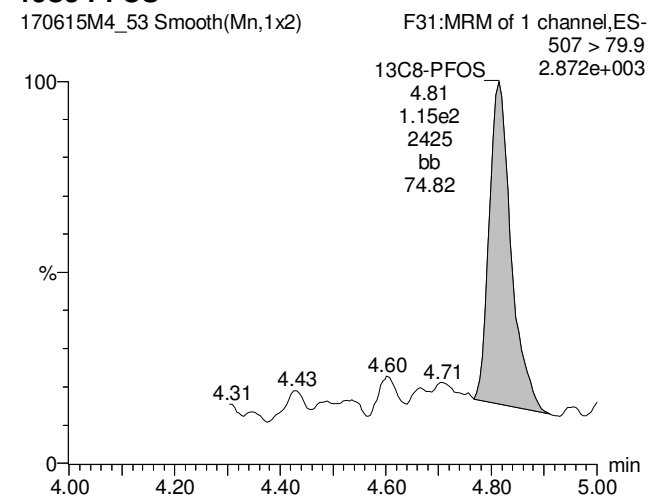
### 13C2-PFOA



### 13C5-PFNA



### 13C8-PFOS



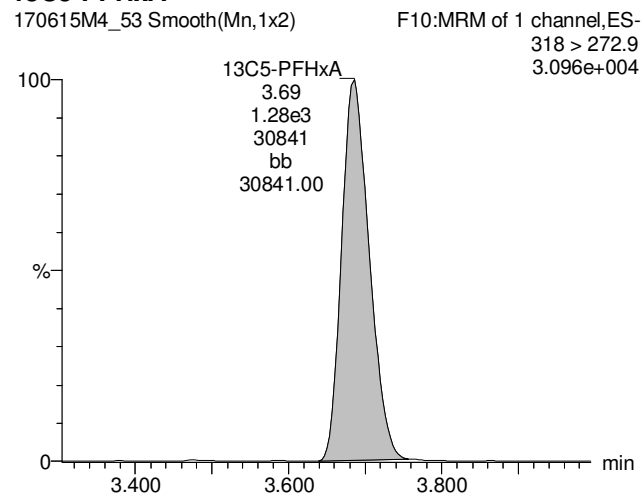
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Last Altered: Monday, June 19, 2017 11:57:43 Pacific Daylight Time

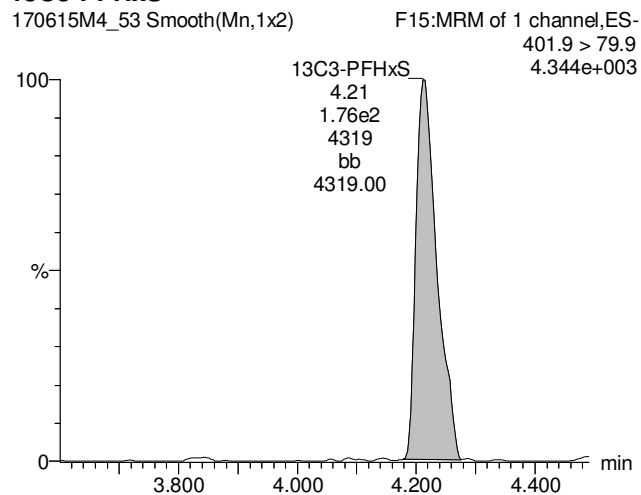
Printed: Monday, June 19, 2017 12:02:31 Pacific Daylight Time

Name: 170615M4\_53, Date: 16-Jun-2017, Time: 08:29:12, ID: 1700681-02@25X OF17-MW03-0517 0.125, Description: OF17-MW03-0517

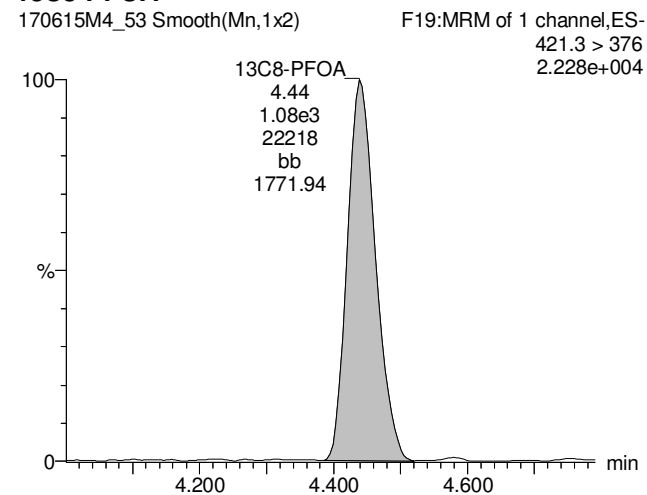
**13C5-PFHxA**



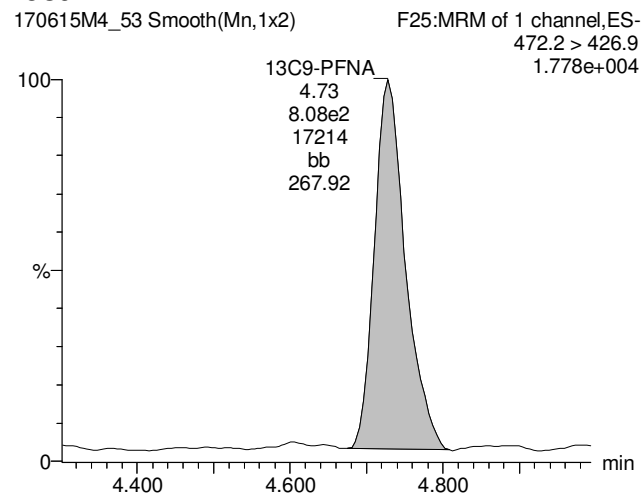
**13C3-PFHxS**



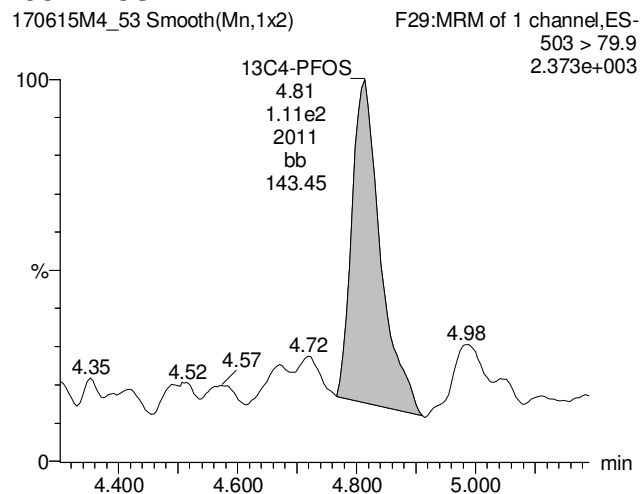
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_52.qld

Last Altered: Monday, June 19, 2017 12:16:03 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:16:25 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

UNITS ARE IN ug/L

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_52, Date: 16-Jun-2017, Time: 08:17:45, ID: 1700681-02@50X OF17-MW03-0517 0.125, Description: OF17-MW03-0517

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	6 PFHxS	398.9 > 79.6	7.50e3	3.74e1		0.1138	4.20	4.22	2.51	11.1	
2	24 18O2-PFHxS	403 > 102.6	3.74e1	6.96e1	0.331	0.1138	4.20	4.23	0.00671	0.178	162.1
3	39 13C3-PFHxS	401.9 > 79.9	6.96e1	6.96e1	1.000	0.1138	4.20	4.23	0.0125	0.110	100.0
4	46 Total PFHxS	398.9 > 79.6	7.50e3	3.74e1		0.1138	4.10		2.51	11.1	

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_52.qld

Last Altered: Monday, June 19, 2017 12:16:03 Pacific Daylight Time

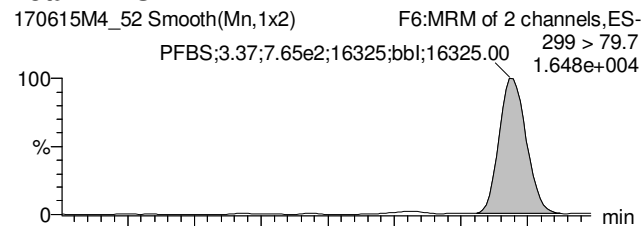
Printed: Monday, June 19, 2017 12:16:25 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

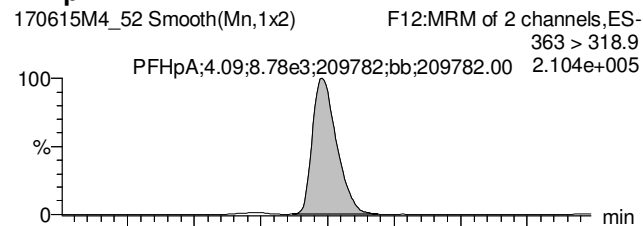
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Name: 170615M4\_52, Date: 16-Jun-2017, Time: 08:17:45, ID: 1700681-02@50X OF17-MW03-0517 0.125, Description: OF17-MW03-0517

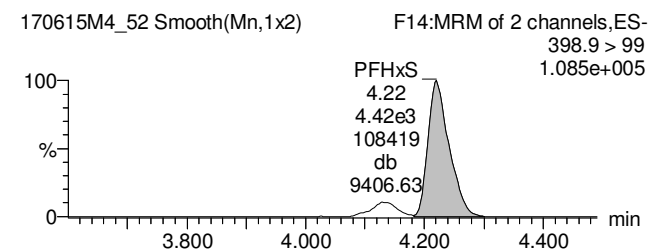
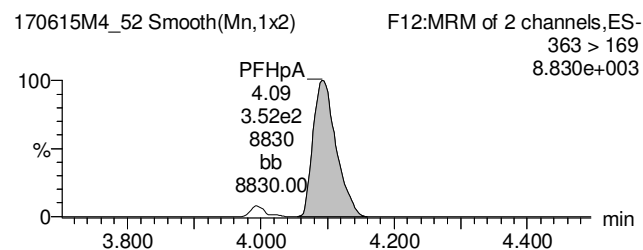
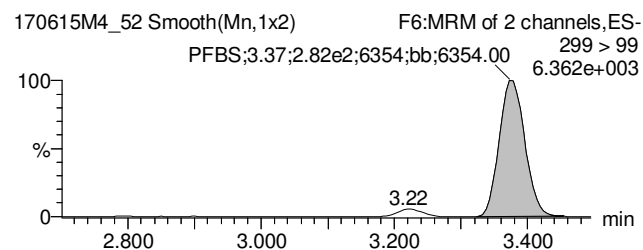
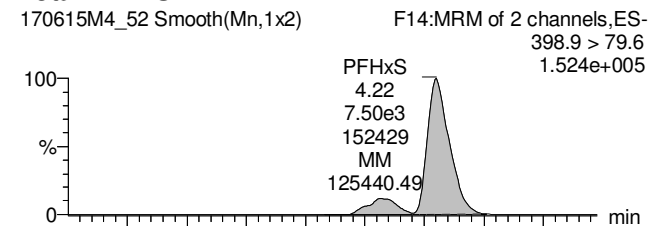
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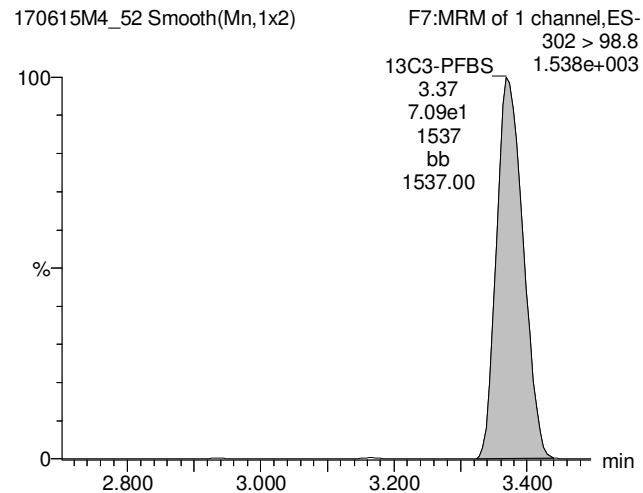
**PFHpA**



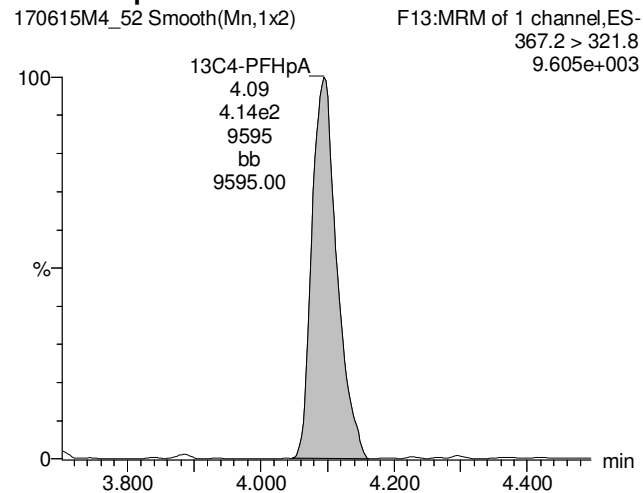
**Total PFHxS**



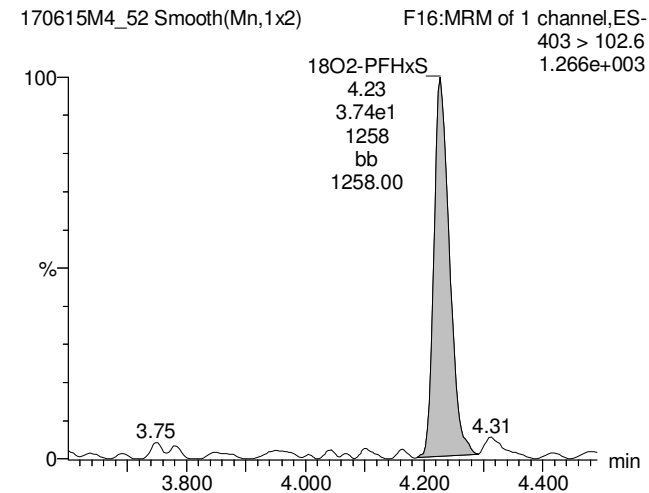
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**



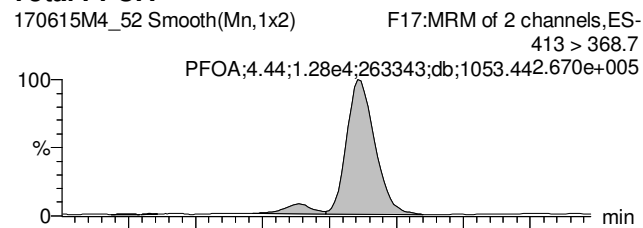
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Last Altered: Monday, June 19, 2017 12:16:03 Pacific Daylight Time

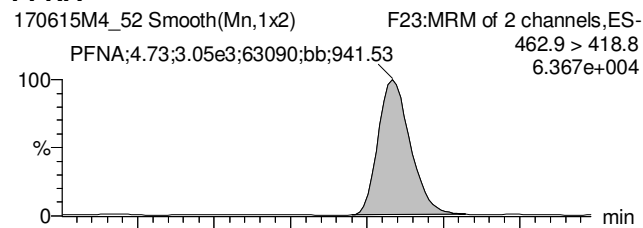
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Name: 170615M4\_52, Date: 16-Jun-2017, Time: 08:17:45, ID: 1700681-02@50X OF17-MW03-0517 0.125, Description: OF17-MW03-0517

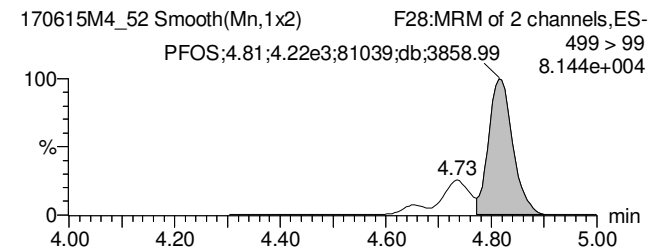
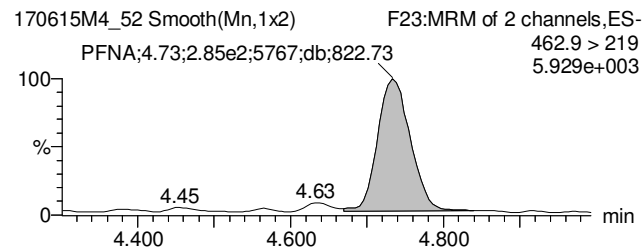
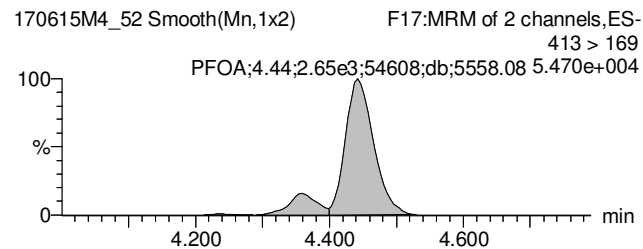
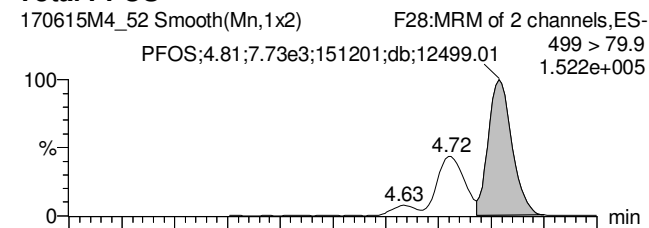
**Total PFOA**



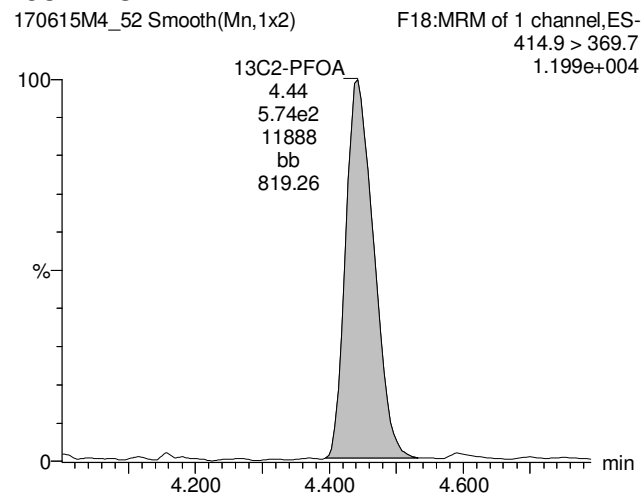
**PFNA**



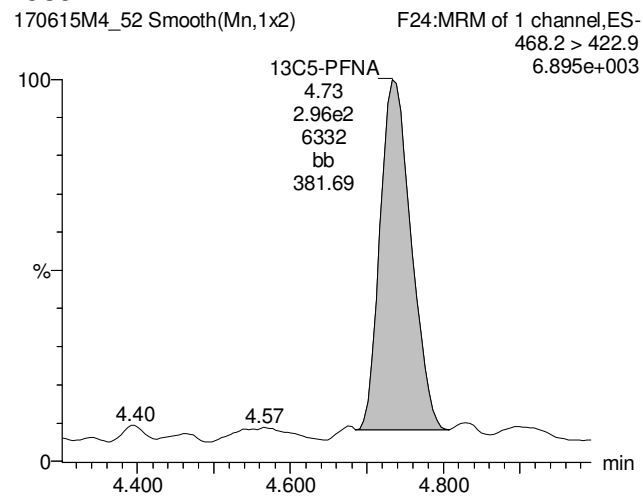
**Total PFOS**



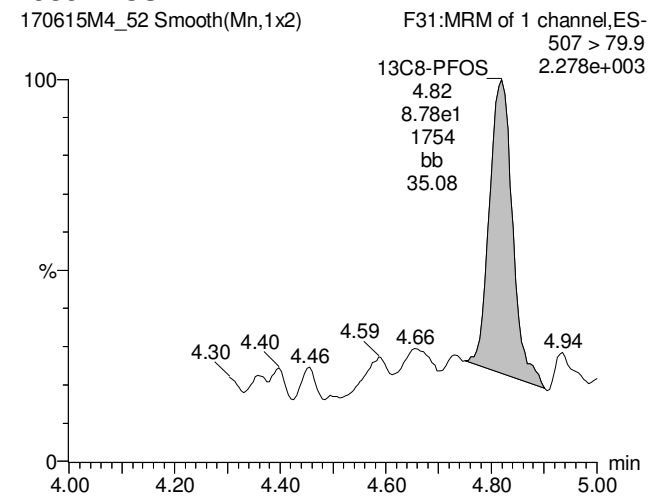
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



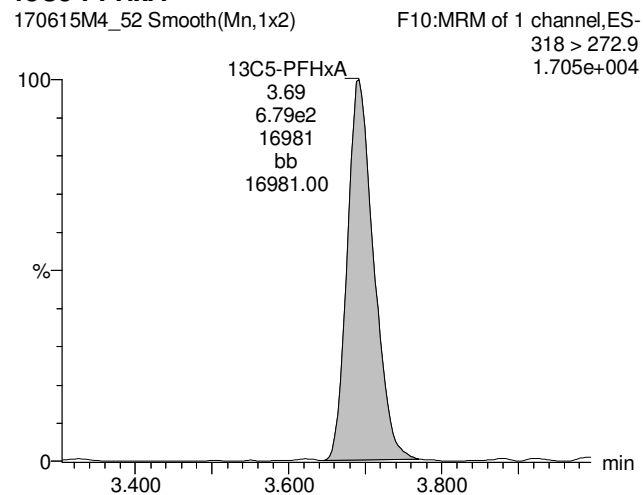
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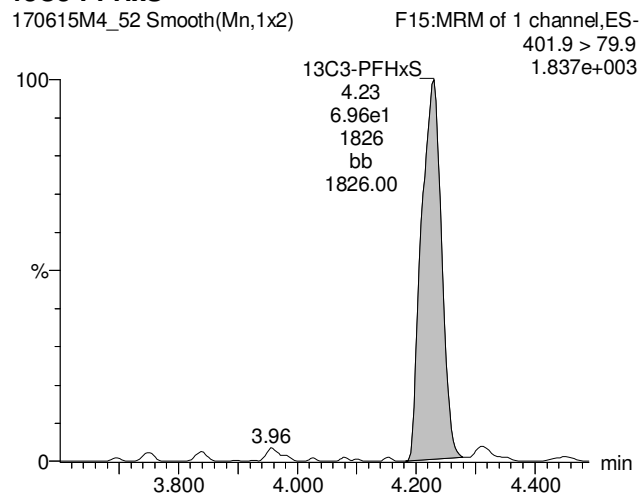
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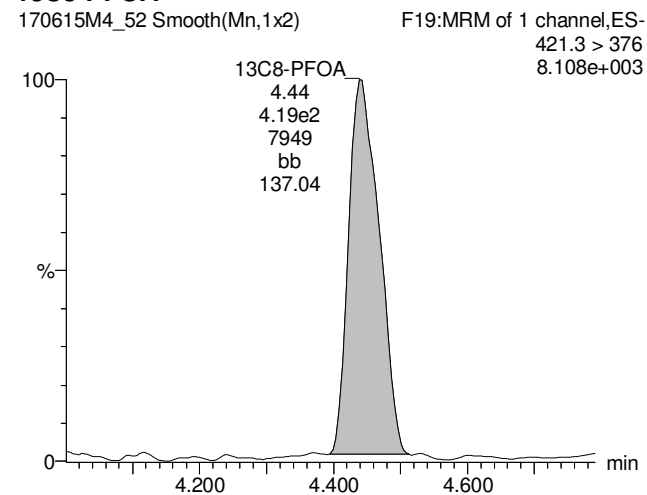
**13C5-PFHxA**



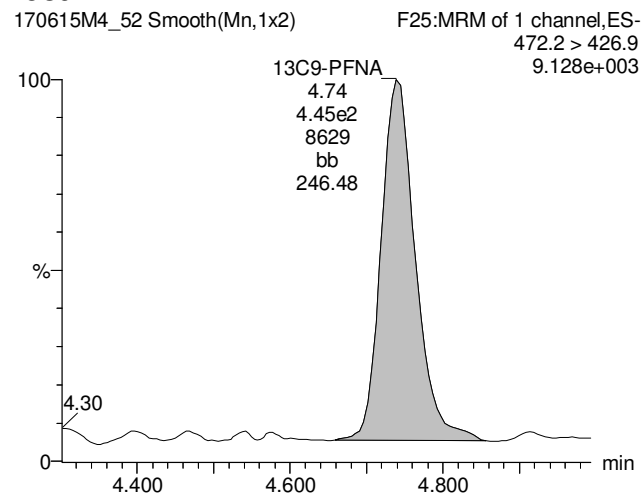
**13C3-PFHxS**



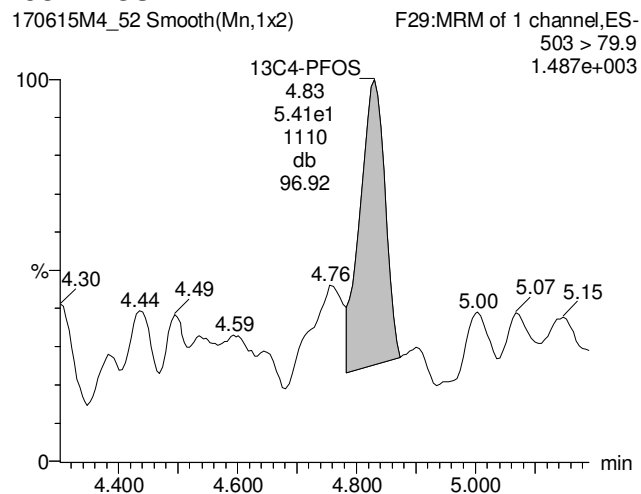
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



Dataset: U:\Q4.PRO\results\170608m5\170608M5-41.qld

Last Altered: Friday, June 16, 2017 14:58:13 Pacific Daylight Time

Printed: Friday, June 16, 2017 14:58:26 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_41, Date: 09-Jun-2017, Time: 07:16:17, ID: B7F0010-MS1 Matrix Spike 0.125, Description: Matrix Spike

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	4.30e4	2.96e3		0.1125	3.30	3.15	182	798	
2	5 PFHpA	363 > 318.9	4.51e5	2.36e4		0.1125	4.06	3.95	238	1770 <sup>E</sup>	
3	6 PFHxS	398.9 > 79.6	3.14e5	1.64e3		0.1125	4.20	4.07	2390	8940 <sup>E</sup>	
4	8 PFOA	413 > 368.7	7.15e5	3.25e4		0.1125	4.36	4.28	275	2490 <sup>E</sup>	
5	9 PFNA	462.9 > 418.8	2.05e5	2.45e4		0.1125	4.68	4.58	104	762	
6	10 PFOS	499 > 79.9	5.73e5	3.65e3		0.1125	4.70	4.66	1960	16700 <sup>E</sup>	
7	21 13C3-PFBS	302 > 98.8	2.96e3	3.33e4	0.024	0.1125	3.30	3.15	0.445	165	148.2
8	23 13C4-PFHpA	367.2 > 321.8	2.36e4	3.33e4	0.235	0.1125	4.06	3.95	3.55	134	120.8
9	24 18O2-PFHxS	403 > 102.6	1.64e3	3.45e3	0.345	0.1125	4.20	4.07	5.95	153	137.9
10	25 13C2-6:2 FTS	429.1 > 408.9	1.20e4	5.00e3	0.329	0.1125	4.30	4.27	12.0	324	291.8
11	26 13C2-PFOA	414.9 > 369.7	3.25e4	2.36e4	1.148	0.1125	4.40	4.28	17.2	133	120.1
12	27 13C5-PFNA	468.2 > 422.9	2.45e4	2.80e4	0.724	0.1125	4.68	4.58	10.9	134	120.8
13	28 13C8-PFOS	507 > 79.9	3.65e3	3.48e3	0.868	0.1125	4.78	4.67	13.1	134	120.7
14	38 13C5-PFHxA	318 > 272.9	3.33e4	3.33e4	1.000	0.1125	3.67	3.53	5.00	44.4	100.0
15	39 13C3-PFHxS	401.9 > 79.9	3.45e3	3.45e3	1.000	0.1125	4.20	4.07	12.5	111	100.0
16	40 13C8-PFOA	421.3 > 376	2.36e4	2.36e4	1.000	0.1125	4.40	4.28	12.5	111	100.0
17	41 13C9-PFNA	472.2 > 426.9	2.80e4	2.80e4	1.000	0.1125	4.68	4.58	12.5	111	100.0
18	42 13C4-PFOS	503 > 79.9	3.48e3	3.48e3	1.000	0.1125	4.78	4.67	12.5	111	100.0
19	43 13C6-PFDA	519.1 > 473.7	2.59e4	2.59e4	1.000	0.1125	4.95	4.85	12.5	111	100.0
20	44 13C7-PFUnA	570.1 > 524.8	2.46e4	2.46e4	1.000	0.1125	5.20	5.09	12.5	111	100.0
21	45 Total PFBS	299 > 79.7	4.30e4	2.96e3		0.1125	3.30		182	798	
22	46 Total PFHxS	398.9 > 79.6	3.14e5	1.64e3		0.1125	4.05		2390	8940 <sup>E</sup>	
23	47 Total PFOA	413 > 368.7	7.59e5	3.25e4		0.1125	4.30		292	2650 <sup>E</sup>	
24	48 Total PFOS	499 > 79.9	5.73e5	3.65e3		0.1125	4.60		1960	16700 <sup>E</sup>	

Dataset: U:\Q4.PRO\results\170608m5\170608M5-41.qld

Last Altered: Friday, June 16, 2017 14:58:13 Pacific Daylight Time

Printed: Friday, June 16, 2017 14:58:26 Pacific Daylight Time

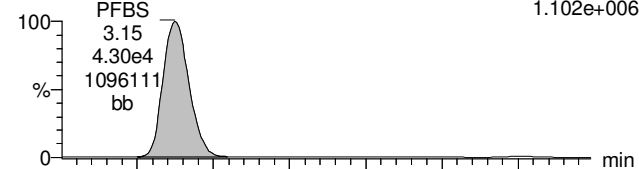
Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_41, Date: 09-Jun-2017, Time: 07:16:17, ID: B7F0010-MS1 Matrix Spike 0.125, Description: Matrix Spike

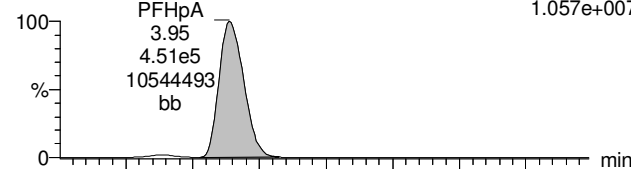
**Total PFBS**

170608M5\_41 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 299 > 79.7  
1.102e+006



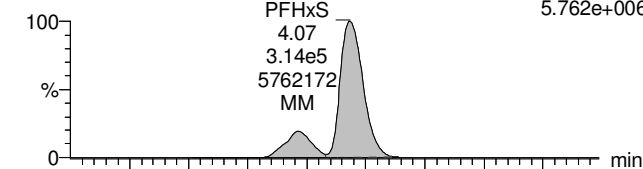
**PFHpA**

170608M5\_41 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 363 > 318.9  
1.057e+007

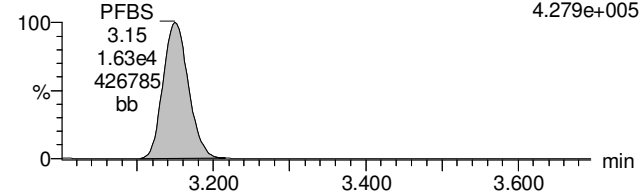


**Total PFHxS**

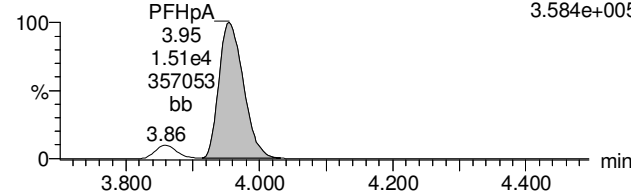
170608M5\_41 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 398.9 > 79.6  
5.762e+006



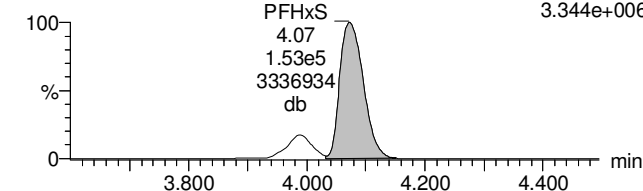
170608M5\_41 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 299 > 99  
4.279e+005



170608M5\_41 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 363 > 169  
3.584e+005

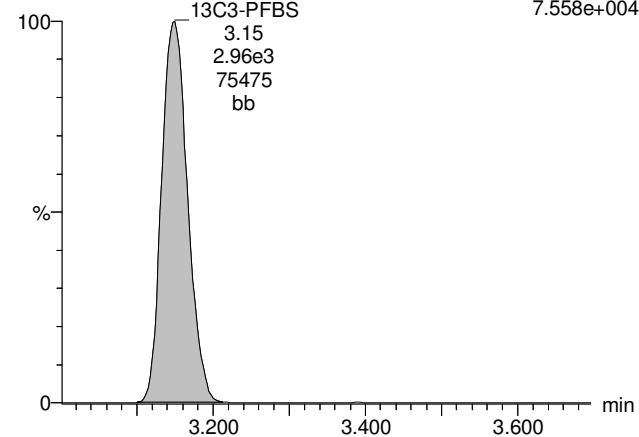


170608M5\_41 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 398.9 > 99  
3.344e+006



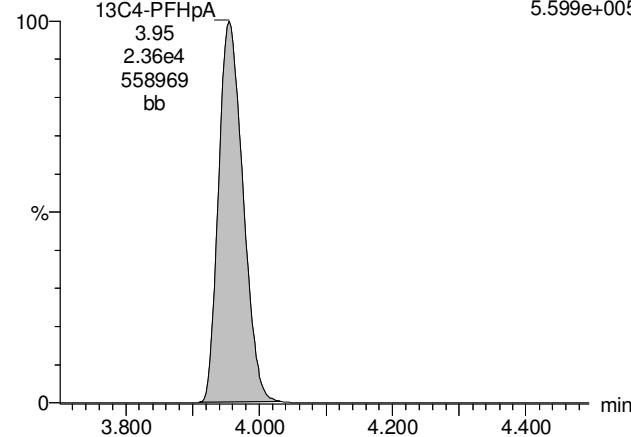
**13C3-PFBS**

170608M5\_41 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 302 > 98.8  
7.558e+004



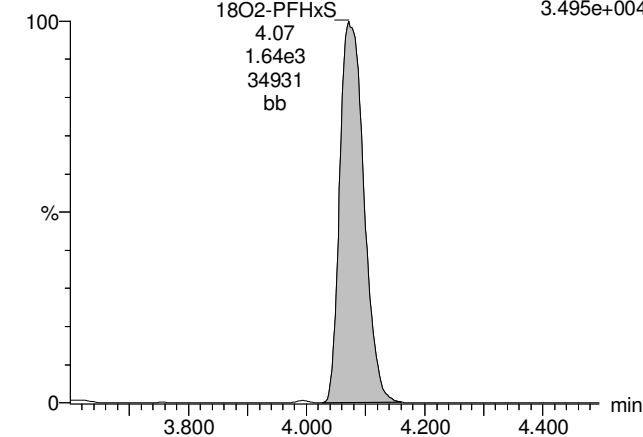
**13C4-PFHpa**

170608M5\_41 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 367.2 > 321.8  
5.599e+005



**18O2-PFHxS**

170608M5\_41 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 403 > 102.6  
3.495e+004





Dataset: U:\Q4.PRO\results\170608m5\170608M5-41.qld

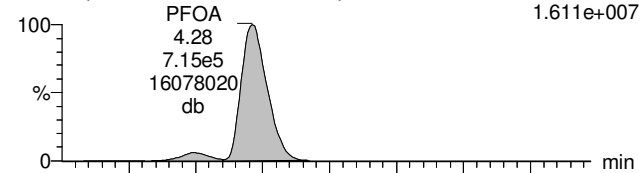
Last Altered: Friday, June 16, 2017 14:58:13 Pacific Daylight Time

Printed: Friday, June 16, 2017 14:58:26 Pacific Daylight Time

Name: 170608M5\_41, Date: 09-Jun-2017, Time: 07:16:17, ID: B7F0010-MS1 Matrix Spike 0.125, Description: Matrix Spike

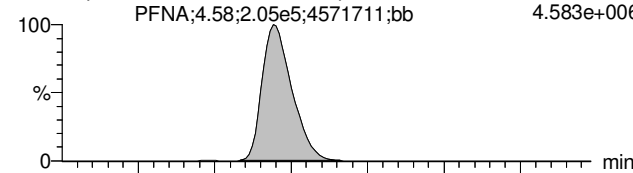
**Total PFOA**

170608M5\_41 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 413 > 368.7  
1.611e+007



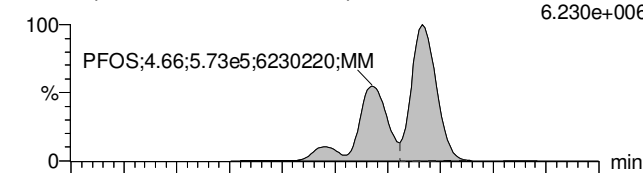
**PFNA**

170608M5\_41 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 462.9 > 418.8  
4.583e+006

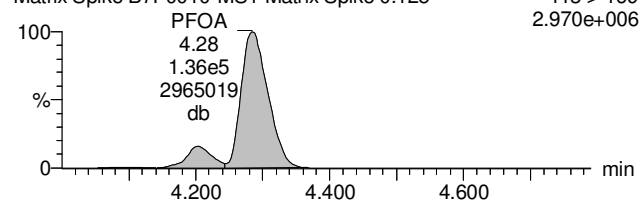


**Total PFOS**

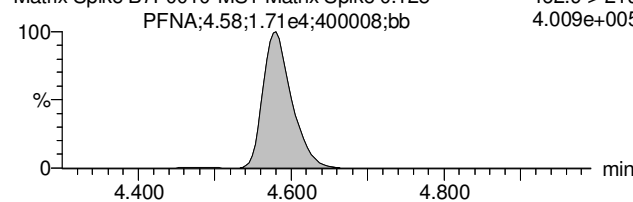
170608M5\_41 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 499 > 79.9  
6.230e+006



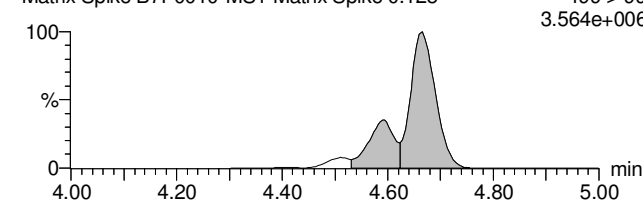
170608M5\_41 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 413 > 169  
2.970e+006



170608M5\_41 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 462.9 > 219  
4.009e+005

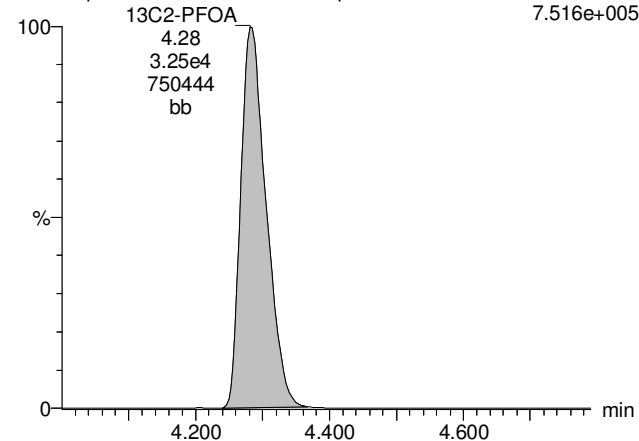


170608M5\_41 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 499 > 99  
3.564e+006



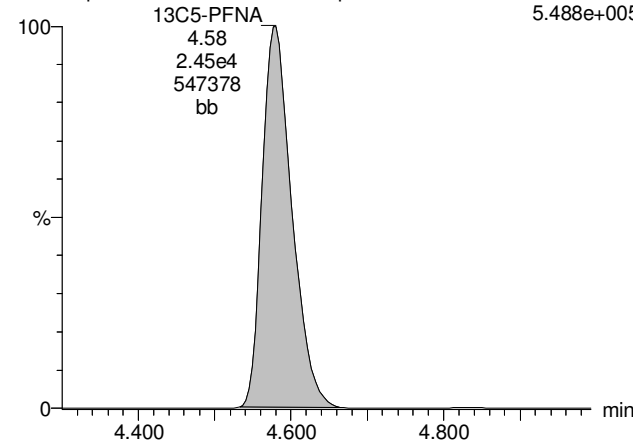
**13C2-PFOA**

170608M5\_41 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 414.9 > 369.7  
7.516e+005



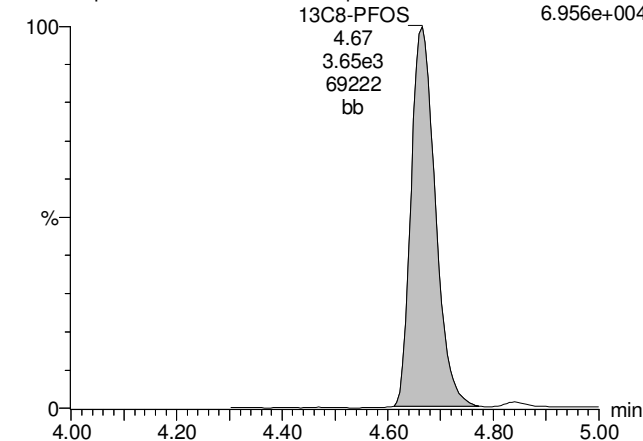
**13C5-PFNA**

170608M5\_41 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 468.2 > 422.9  
5.488e+005



**13C8-PFOS**

170608M5\_41 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 507 > 79.9  
6.956e+004



Dataset: U:\Q4.PRO\results\170608m5\170608M5-41.qld

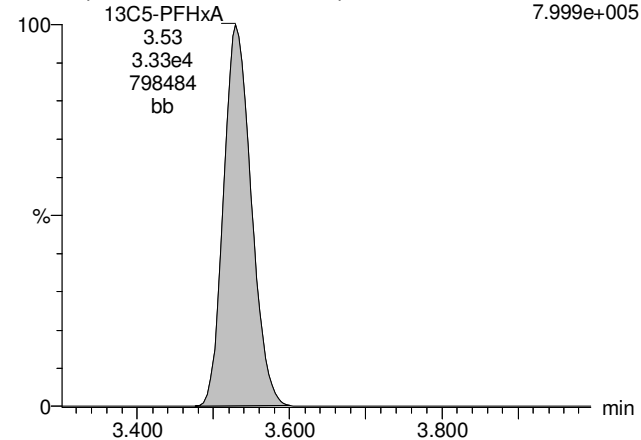
Last Altered: Friday, June 16, 2017 14:58:13 Pacific Daylight Time

Printed: Friday, June 16, 2017 14:58:26 Pacific Daylight Time

Name: 170608M5\_41, Date: 09-Jun-2017, Time: 07:16:17, ID: B7F0010-MS1 Matrix Spike 0.125, Description: Matrix Spike

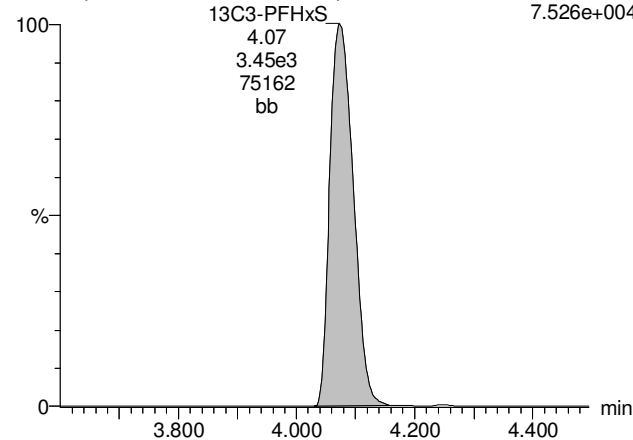
**13C5-PFHxA**

170608M5\_41 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 318 > 272.9  
7.999e+005



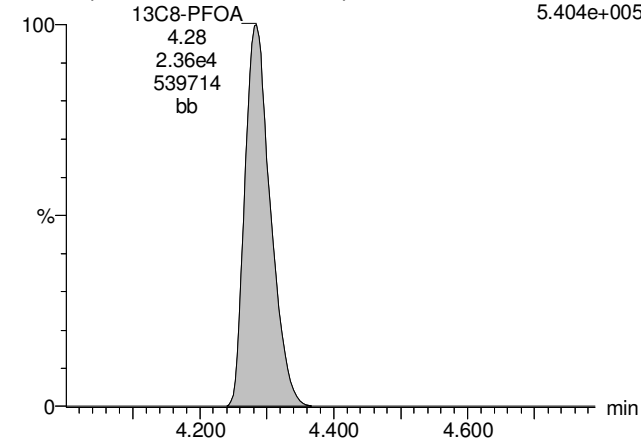
**13C3-PFHxS**

170608M5\_41 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 401.9 > 79.9  
7.526e+004



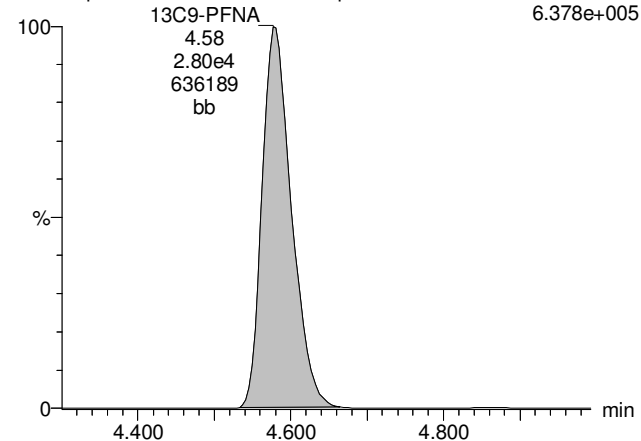
**13C8-PFOA**

170608M5\_41 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 421.3 > 376  
5.404e+005



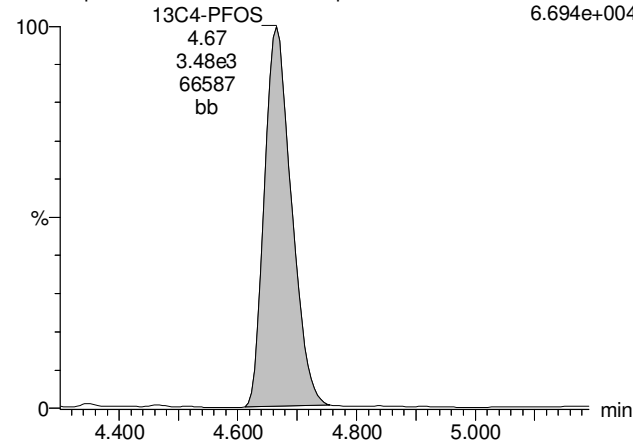
**13C9-PFNA**

170608M5\_41 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 472.2 > 426.9  
6.378e+005



**13C4-PFOS**

170608M5\_41 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1 Matrix Spike 0.125 503 > 79.9  
6.694e+004



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_55.qld

Last Altered: Monday, June 19, 2017 12:27:20 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:28:19 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_55, Date: 16-Jun-2017, Time: 08:52:39, ID: B7F0010-MS1@25X Matrix Spike 0.125, Description: Matrix Spike

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5 PFHpA	363 > 318.9	1.68e4	8.52e2		0.1125	4.07	4.09	246	1740	
2	8 PFOA	413 > 368.7	2.39e4	9.57e2		0.1125	4.42	4.44	312	2810	
3	10 PFOS	499 > 79.9	1.90e4	9.94e1		0.1125	4.80	4.81	2390	12200	
4	23 13C4-PFHpA	367.2 > 321.8	8.52e2	1.20e3	0.254	0.1125	4.07	4.09	3.55	124	111.7
5	26 13C2-PFOA	414.9 > 369.7	9.57e2	6.92e2	1.060	0.1125	4.26	4.44	17.3	145	130.4
6	28 13C8-PFOS	507 > 79.9	9.94e1	9.66e1	0.911	0.1125	4.80	4.82	12.9	126	113.0
7	38 13C5-PFHxA	318 > 272.9	1.20e3	1.20e3	1.000	0.1125	3.66	3.69	5.00	44.4	100.0
8	39 13C3-PFHxS	401.9 > 79.9	1.54e2	1.54e2	1.000	0.1125	4.20	4.22	12.5	111	100.0
9	40 13C8-PFOA	421.3 > 376	6.92e2	6.92e2	1.000	0.1125	4.42	4.44	12.5	111	100.0
10	42 13C4-PFOS	503 > 79.9	9.66e1	9.66e1	1.000	0.1125	4.80	4.82	12.5	111	100.0

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_55.qld

Last Altered: Monday, June 19, 2017 12:27:20 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:32:34 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_55, Date: 16-Jun-2017, Time: 08:52:39, ID: B7F0010-MS1@25X Matrix Spike 0.125, Description: Matrix Spike

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	47 Total PFOA	413 > 368.7	2.51e4	9.57e2		0.1125	4.30		328	2950	
2	48 Total PFOS	499 > 79.9	1.90e4	9.94e1		0.1125	4.60		2390	12200	

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_55.qld

Last Altered: Monday, June 19, 2017 12:27:20 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:32:34 Pacific Daylight Time

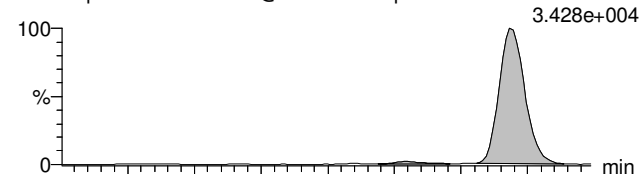
Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

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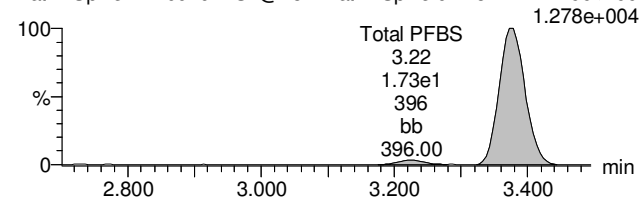
Name: 170615M4\_55, Date: 16-Jun-2017, Time: 08:52:39, ID: B7F0010-MS1@25X Matrix Spike 0.125, Description: Matrix Spike

**Total PFBS**

170615M4\_55 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 299 > 79.7  
3.428e+004

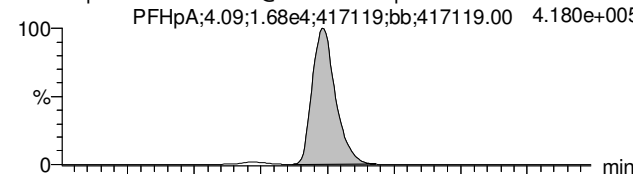


170615M4\_55 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 299 > 99  
1.278e+004

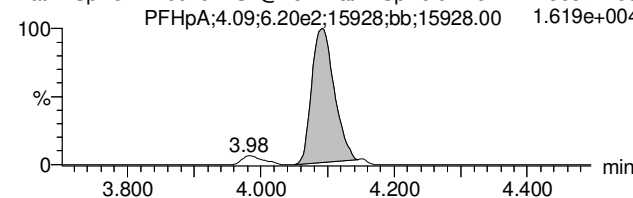


**PFHpA**

170615M4\_55 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 363 > 318.9  
4.180e+005

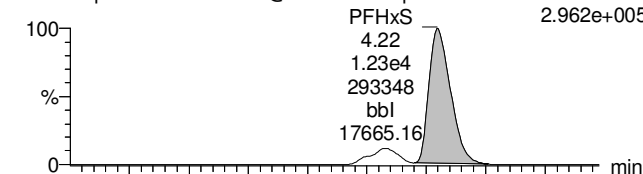


170615M4\_55 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 363 > 169  
1.619e+004

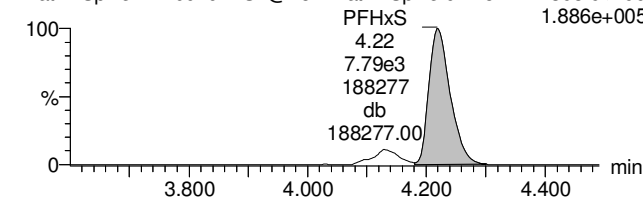


**Total PFHxS**

170615M4\_55 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 398.9 > 79.6  
2.962e+005

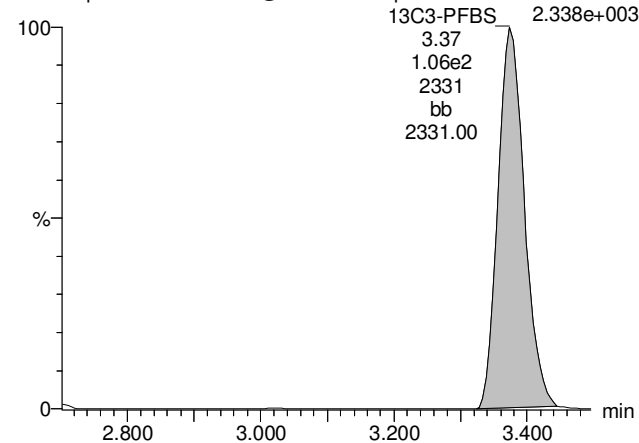


170615M4\_55 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 398.9 > 99  
1.886e+005



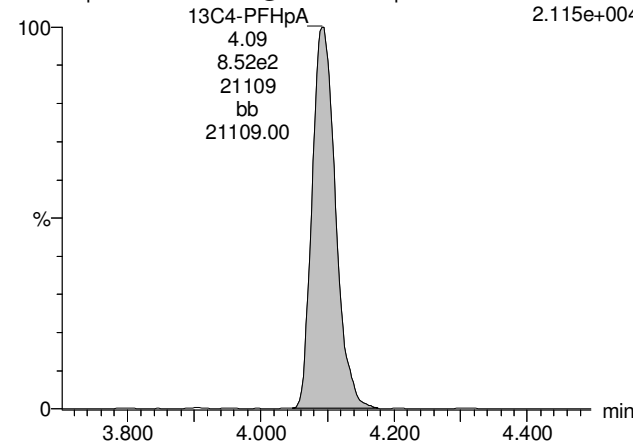
**13C3-PFBS**

170615M4\_55 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 302 > 98.8  
2.338e+003



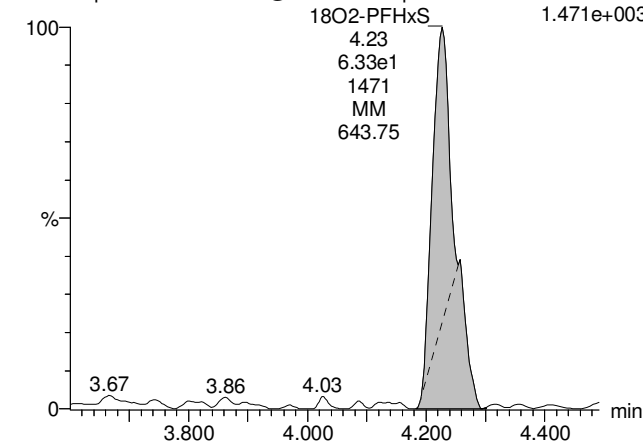
**13C4-PFHpA**

170615M4\_55 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 367.2 > 321.8  
2.115e+004



**18O2-PFHxS**

170615M4\_55 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 403 > 102.6  
1.471e+003



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_55.qld

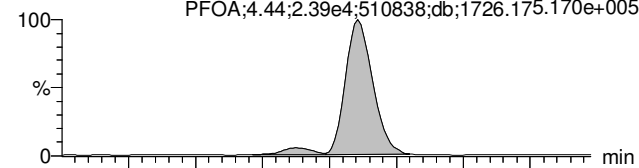
Last Altered: Monday, June 19, 2017 12:27:20 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:32:34 Pacific Daylight Time

Name: 170615M4\_55, Date: 16-Jun-2017, Time: 08:52:39, ID: B7F0010-MS1@25X Matrix Spike 0.125, Description: Matrix Spike

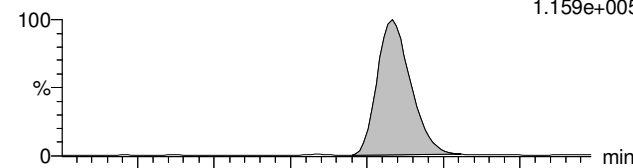
**Total PFOA**

170615M4\_55 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 413 > 368.7  
PFOA;4.44;2.39e4;510838;db;1726.175.170e+005



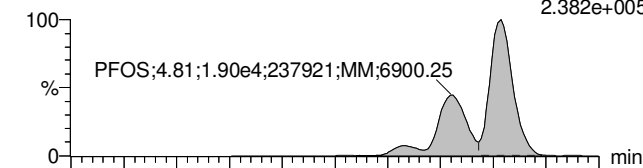
**PFNA**

170615M4\_55 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 462.9 > 418.8  
1.159e+005

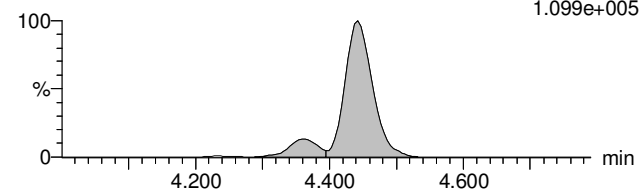


**Total PFOS**

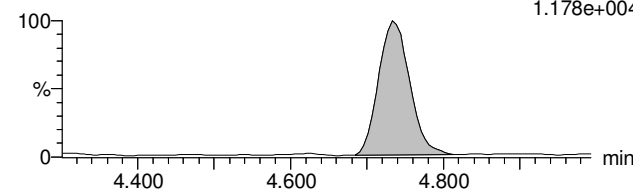
170615M4\_55 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 499 > 79.9  
2.382e+005



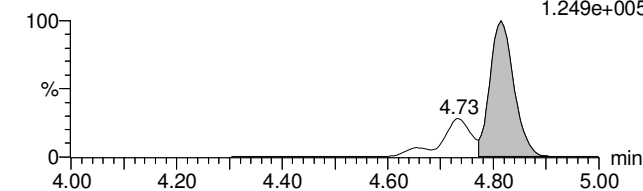
170615M4\_55 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 413 > 169  
1.099e+005



170615M4\_55 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 462.9 > 219  
1.178e+004

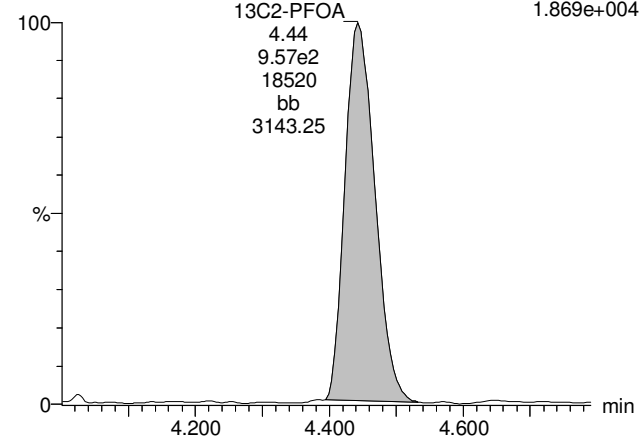


170615M4\_55 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 499 > 99  
1.249e+005



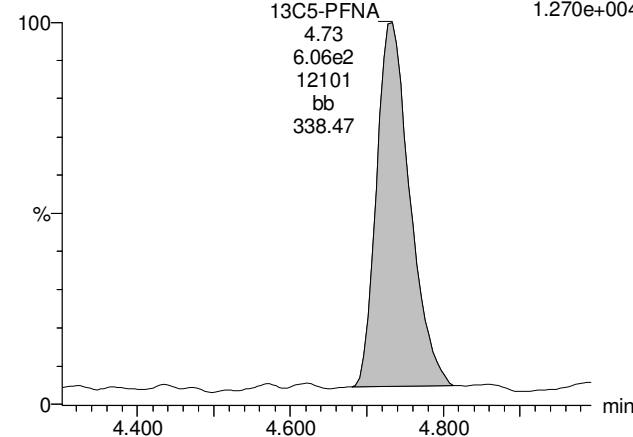
**13C2-PFOA**

170615M4\_55 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 414.9 > 369.7  
1.869e+004



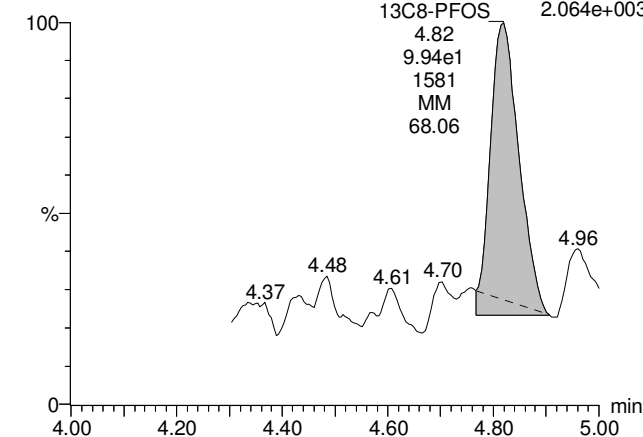
**13C5-PFNA**

170615M4\_55 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 468.2 > 422.9  
1.270e+004



**13C8-PFOS**

170615M4\_55 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 507 > 79.9  
2.064e+003



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_55.qld

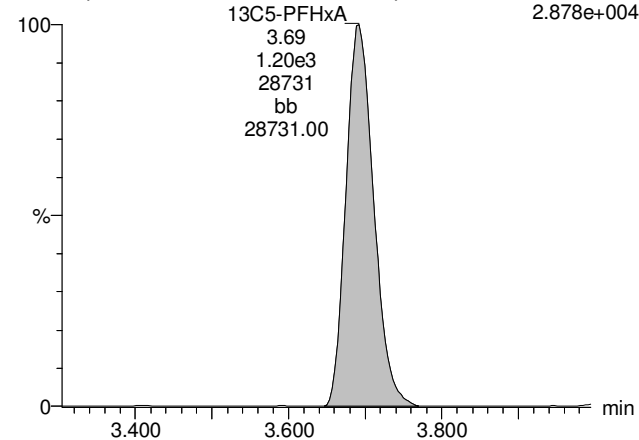
Last Altered: Monday, June 19, 2017 12:27:20 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:32:34 Pacific Daylight Time

Name: 170615M4\_55, Date: 16-Jun-2017, Time: 08:52:39, ID: B7F0010-MS1@25X Matrix Spike 0.125, Description: Matrix Spike

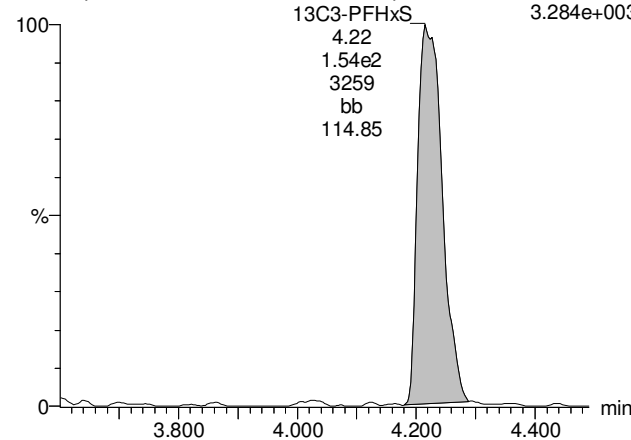
### 13C5-PFHxA

170615M4\_55 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 318 > 272.9  
2.878e+004



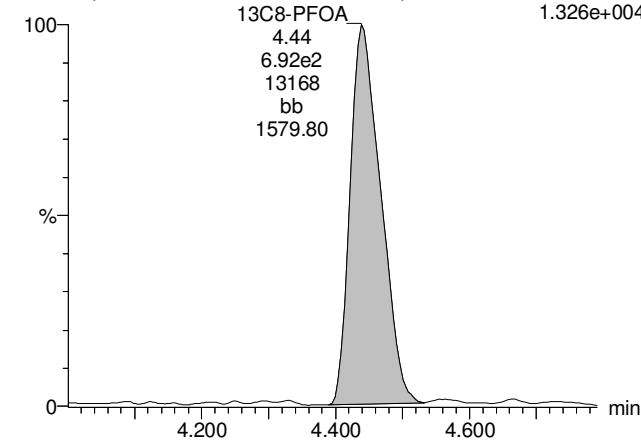
### 13C3-PFHxS

170615M4\_55 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 401.9 > 79.9  
3.284e+003



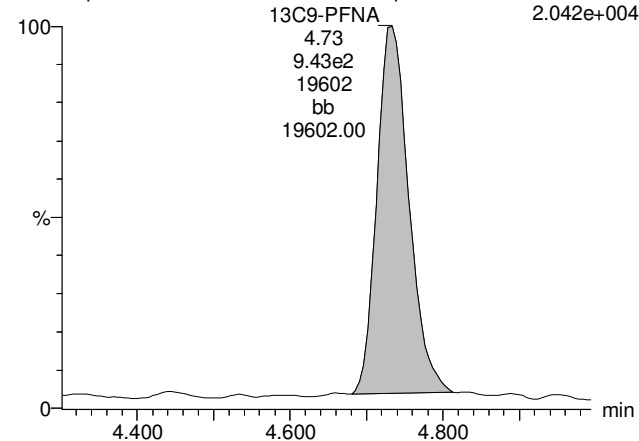
### 13C8-PFOA

170615M4\_55 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 421.3 > 376  
1.326e+004



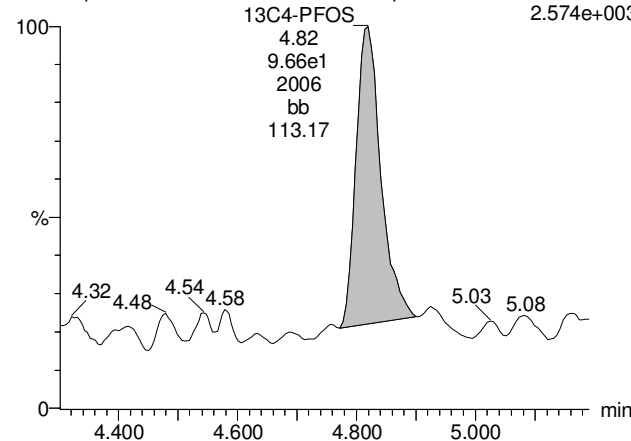
### 13C9-PFNA

170615M4\_55 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 472.2 > 426.9  
2.042e+004



### 13C4-PFOS

170615M4\_55 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@25X Matrix Spike 0.125 503 > 79.9  
2.574e+003



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_54.qld

Last Altered: Monday, June 19, 2017 12:34:39 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:35:06 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

UNITS ARE IN ug/L

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_54, Date: 16-Jun-2017, Time: 08:40:55, ID: B7F0010-MS1@50X Matrix Spike 0.125, Description: Matrix Spike

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	6 PFHxS	398.9 > 79.6	7.49e3	3.37e1		0.1125	4.20	4.22	2.78	12.4	
2	24 18O2-PFHxS	403 > 102.6	3.37e1	1.05e2	0.331	0.1125	4.20	4.22	0.00401	0.108	97.0
3	39 13C3-PFHxS	401.9 > 79.9	1.05e2	1.05e2	1.000	0.1125	4.20	4.22	0.0125	0.111	100.0
4	46 Total PFHxS	398.9 > 79.6	7.49e3	3.37e1		0.1125	4.10		2.78	12.4	



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_54.qld

Last Altered: Monday, June 19, 2017 12:34:39 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:35:06 Pacific Daylight Time

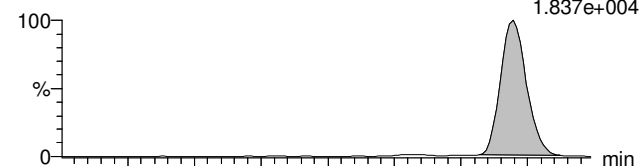
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

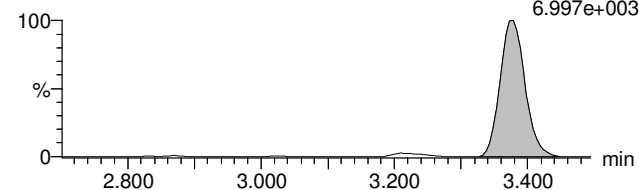
Name: 170615M4\_54, Date: 16-Jun-2017, Time: 08:40:55, ID: B7F0010-MS1@50X Matrix Spike 0.125, Description: Matrix Spike

### Total PFBS

170615M4\_54 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 299 > 79.7  
1.837e+004

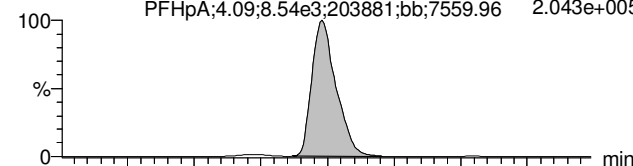


170615M4\_54 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 299 > 99  
6.997e+003

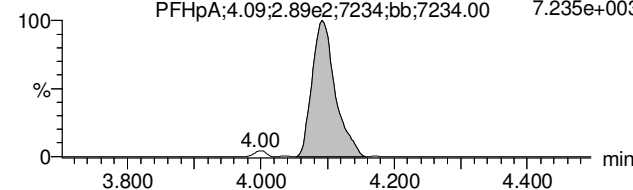


### PFHpA

170615M4\_54 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 363 > 318.9  
PFHpA;4.09;8.54e3;203881;bb;7559.96 2.043e+005

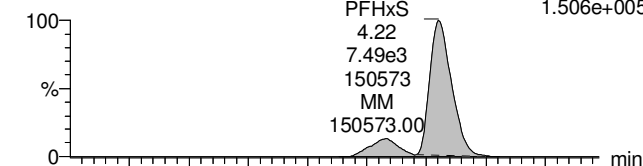


170615M4\_54 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 363 > 169  
PFHpA;4.09;2.89e2;7234;bb;7234.00 7.235e+003

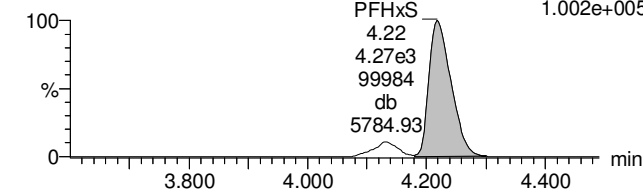


### Total PFHxS

170615M4\_54 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 398.9 > 79.6  
PFHxS 1.506e+005  
4.22  
7.49e3  
150573  
MM  
150573.00

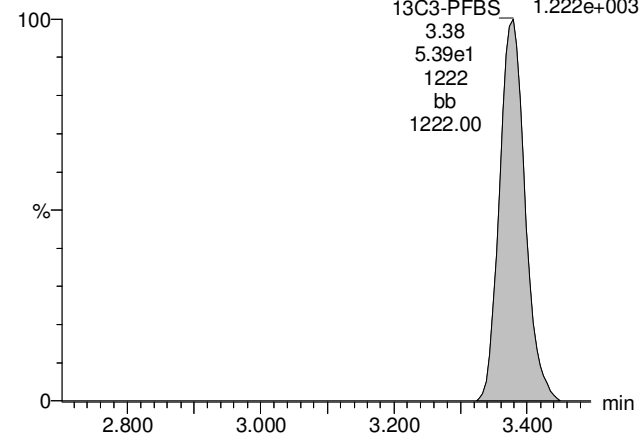


170615M4\_54 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 398.9 > 99  
PFHxS 1.002e+005  
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4.27e3  
99984  
db  
5784.93



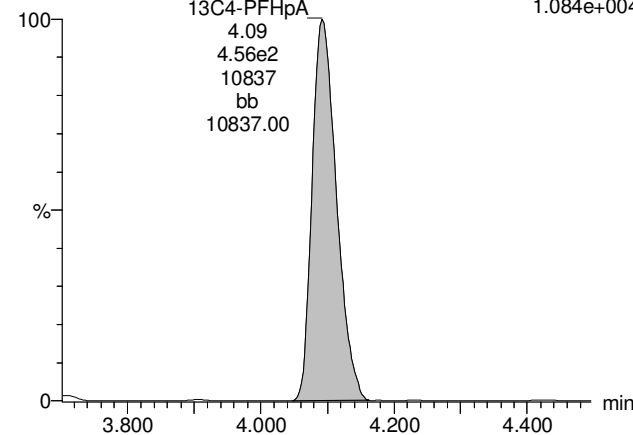
### 13C3-PFBS

170615M4\_54 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 302 > 98.8  
13C3-PFBS 1.222e+003  
3.38  
5.39e1  
1222  
bb  
1222.00



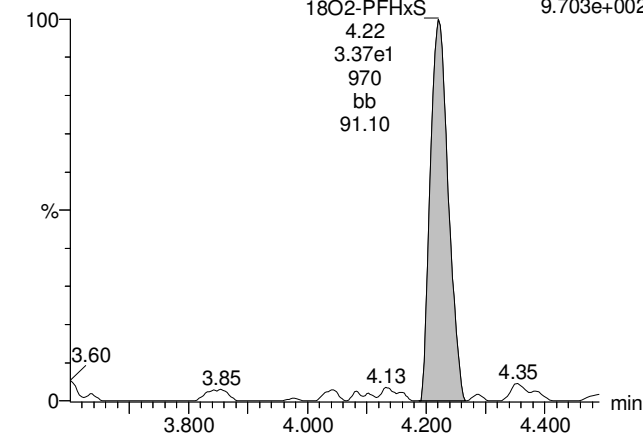
### 13C4-PFHpA

170615M4\_54 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 367.2 > 321.8  
13C4-PFHpA 1.084e+004  
4.09  
4.56e2  
10837  
bb  
10837.00



### 18O2-PFHxS

170615M4\_54 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 403 > 102.6  
18O2-PFHxS 9.703e+002  
4.22  
3.37e1  
970  
bb  
91.10



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_54.qld

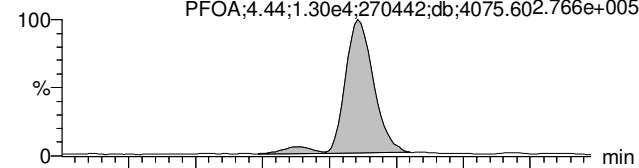
Last Altered: Monday, June 19, 2017 12:34:39 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:35:06 Pacific Daylight Time

Name: 170615M4\_54, Date: 16-Jun-2017, Time: 08:40:55, ID: B7F0010-MS1@50X Matrix Spike 0.125, Description: Matrix Spike

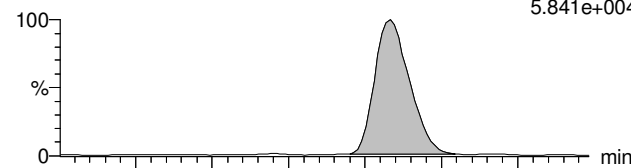
**Total PFOA**

170615M4\_54 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 413 > 368.7  
PFOA;4.44;1.30e4;270442;db;4075.602.766e+005



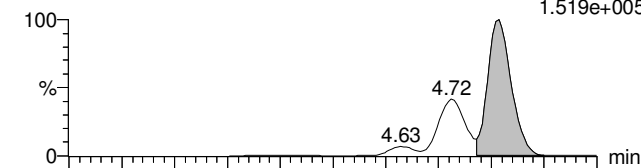
**PFNA**

170615M4\_54 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 462.9 > 418.8  
5.841e+004

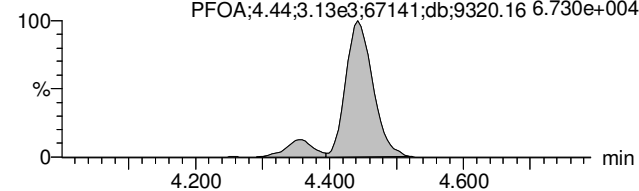


**Total PFOS**

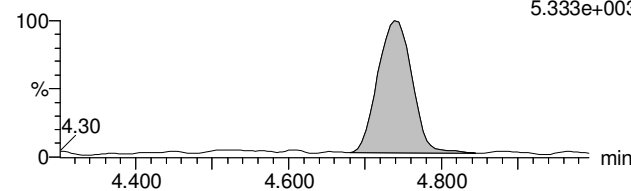
170615M4\_54 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 499 > 79.9  
1.519e+005



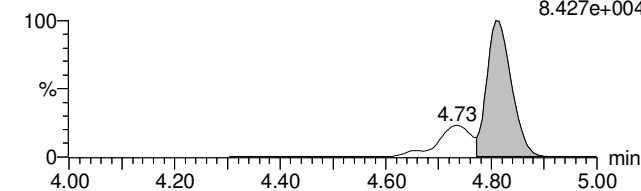
170615M4\_54 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 413 > 169  
PFOA;4.44;3.13e3;67141;db;9320.16 6.730e+004



170615M4\_54 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 462.9 > 219  
5.333e+003

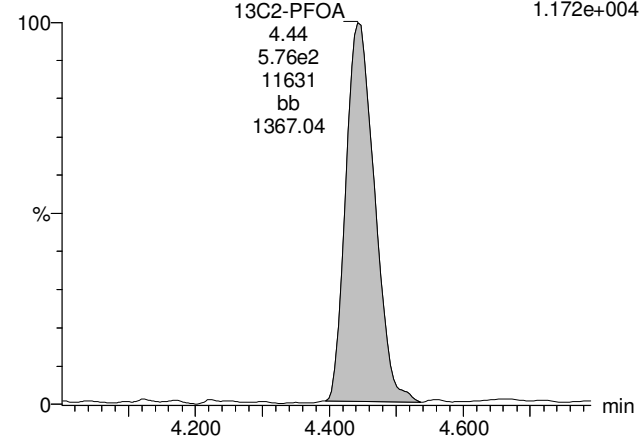


170615M4\_54 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 499 > 99  
8.427e+004



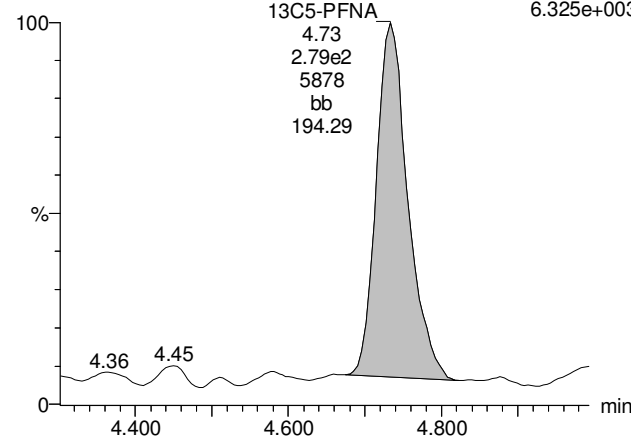
**13C2-PFOA**

170615M4\_54 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 414.9 > 369.7  
1.172e+004



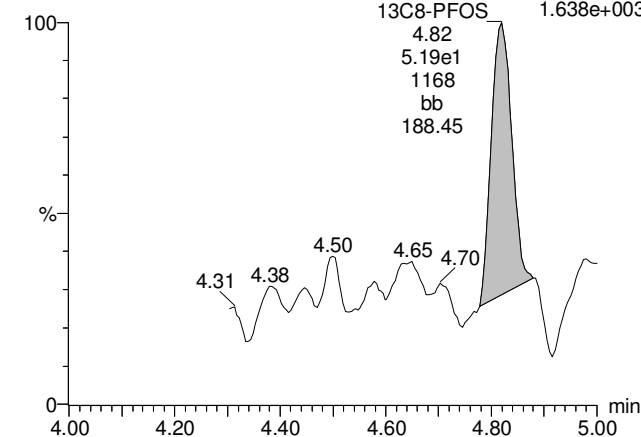
**13C5-PFNA**

170615M4\_54 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 468.2 > 422.9  
6.325e+003



**13C8-PFOS**

170615M4\_54 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 507 > 79.9  
1.638e+003



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_54.qld

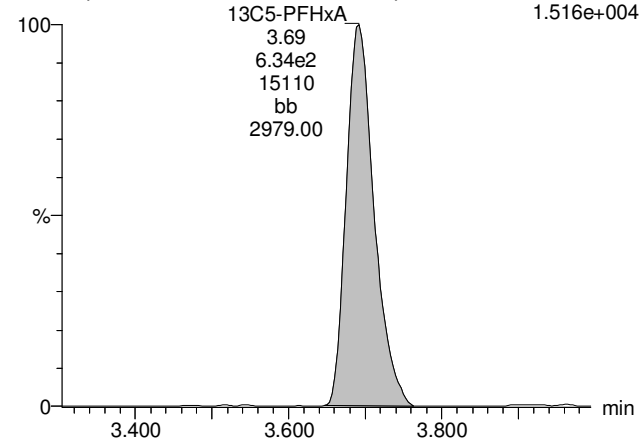
Last Altered: Monday, June 19, 2017 12:34:39 Pacific Daylight Time

Printed: Monday, June 19, 2017 12:35:06 Pacific Daylight Time

Name: 170615M4\_54, Date: 16-Jun-2017, Time: 08:40:55, ID: B7F0010-MS1@50X Matrix Spike 0.125, Description: Matrix Spike

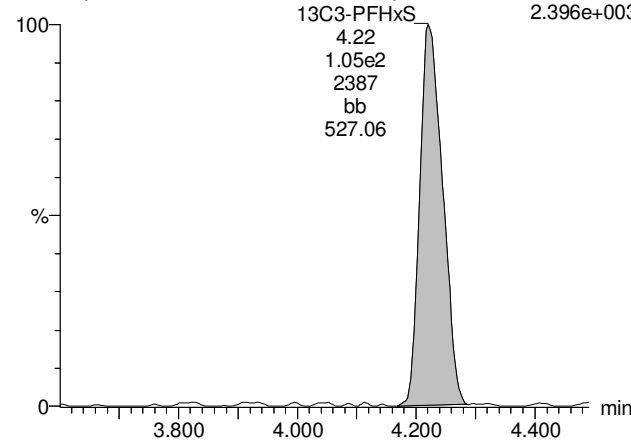
### 13C5-PFHxA

170615M4\_54 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 318 > 272.9  
1.516e+004



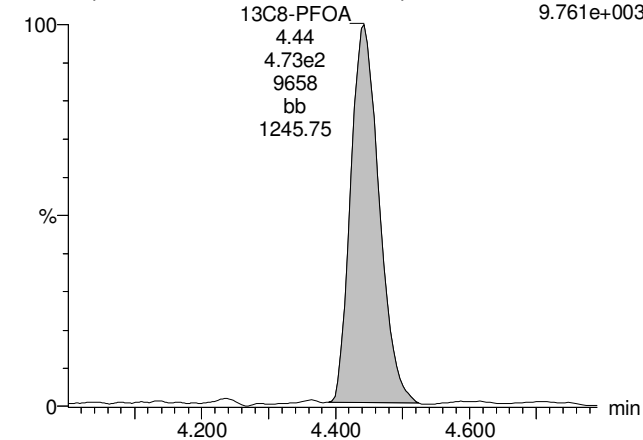
### 13C3-PFHxS

170615M4\_54 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 401.9 > 79.9  
2.396e+003



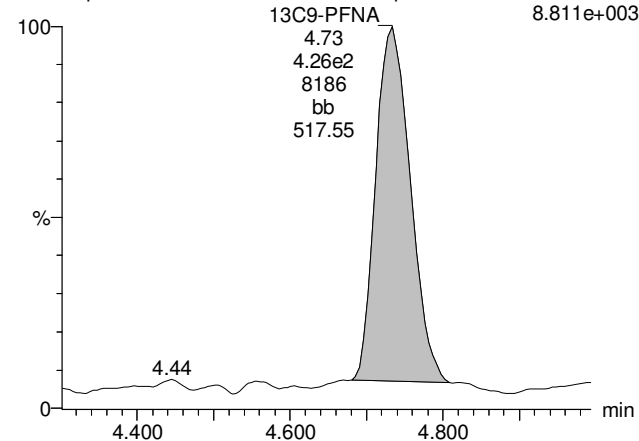
### 13C8-PFOA

170615M4\_54 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 421.3 > 376  
9.761e+003



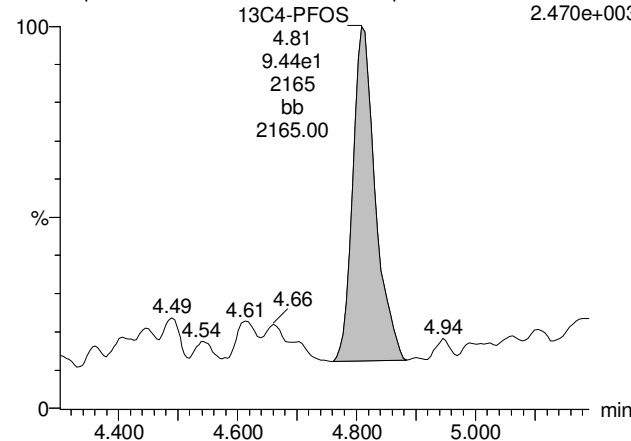
### 13C9-PFNA

170615M4\_54 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 472.2 > 426.9  
8.811e+003



### 13C4-PFOS

170615M4\_54 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-  
Matrix Spike B7F0010-MS1@50X Matrix Spike 0.125 503 > 79.9  
2.470e+003



Dataset: U:\Q4.PRO\results\170608m5\170608M5-42.qld

Last Altered: Friday, June 16, 2017 15:02:41 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:02:49 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_42, Date: 09-Jun-2017, Time: 07:27:44, ID: B7F0010-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	4.61e4	2.79e3		0.1208	3.30	3.15	206	844 E	
2	5 PFHpA	363 > 318.9	4.99e5	2.28e4		0.1208	4.06	3.96	274	1890 E	
3	6 PFHxS	398.9 > 79.6	3.30e5	1.63e3		0.1208	4.20	4.07	2540	8730 E	
4	8 PFOA	413 > 368.7	7.58e5	3.11e4		0.1208	4.36	4.29	305	2570 E	
5	9 PFNA	462.9 > 418.8	2.13e5	2.34e4		0.1208	4.68	4.58	114	775	
6	10 PFOS	499 > 79.9	6.12e5	3.75e3		0.1208	4.70	4.66	2040	16200 E	
7	21 13C3-PFBS	302 > 98.8	2.79e3	3.23e4	0.024	0.1208	3.30	3.15	0.432	149	143.9
8	23 13C4-PFHpA	367.2 > 321.8	2.28e4	3.23e4	0.235	0.1208	4.06	3.96	3.52	124	119.8
9	24 18O2-PFHxS	403 > 102.6	1.63e3	3.51e3	0.345	0.1208	4.20	4.07	5.80	139	134.4
10	25 13C2-6:2 FTS	429.1 > 408.9	1.32e4	5.26e3	0.329	0.1208	4.30	4.27	12.5	315	304.5
11	26 13C2-PFOA	414.9 > 369.7	3.11e4	2.54e4	1.148	0.1208	4.40	4.28	15.3	110	106.7
12	27 13C5-PFNA	468.2 > 422.9	2.34e4	2.57e4	0.724	0.1208	4.68	4.58	11.4	130	125.8
13	28 13C8-PFOS	507 > 79.9	3.75e3	3.72e3	0.868	0.1208	4.78	4.66	12.6	120	116.1
14	38 13C5-PFHxA	318 > 272.9	3.23e4	3.23e4	1.000	0.1208	3.67	3.53	5.00	41.4	100.0
15	39 13C3-PFHxS	401.9 > 79.9	3.51e3	3.51e3	1.000	0.1208	4.20	4.07	12.5	103	100.0
16	40 13C8-PFOA	421.3 > 376	2.54e4	2.54e4	1.000	0.1208	4.40	4.28	12.5	103	100.0
17	41 13C9-PFNA	472.2 > 426.9	2.57e4	2.57e4	1.000	0.1208	4.68	4.58	12.5	103	100.0
18	42 13C4-PFOS	503 > 79.9	3.72e3	3.72e3	1.000	0.1208	4.78	4.66	12.5	103	100.0
19	43 13C6-PFDA	519.1 > 473.7	2.56e4	2.56e4	1.000	0.1208	4.95	4.85	12.5	103	100.0
20	44 13C7-PFUnA	570.1 > 524.8	2.47e4	2.47e4	1.000	0.1208	5.20	5.10	12.5	103	100.0
21	45 Total PFBS	299 > 79.7	4.61e4	2.79e3		0.1208	3.30		206	844 E	
22	46 Total PFHxS	398.9 > 79.6	3.30e5	1.63e3		0.1208	4.05		2540	8730 E	
23	47 Total PFOA	413 > 368.7	8.08e5	3.11e4		0.1208	4.30		325	2740 E	
24	48 Total PFOS	499 > 79.9	6.12e5	3.75e3		0.1208	4.60		2040	16200 E	

Dataset: U:\Q4.PRO\results\170608m5\170608M5-42.qld

Last Altered: Friday, June 16, 2017 15:02:41 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:02:49 Pacific Daylight Time

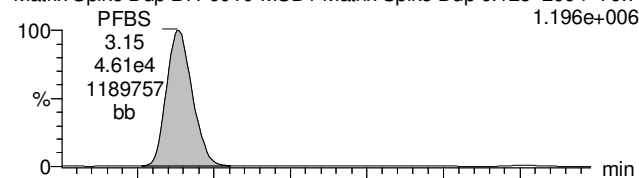
Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

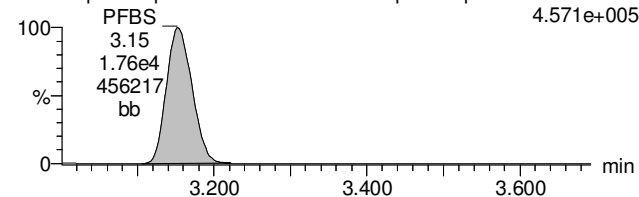
Name: 170608M5\_42, Date: 09-Jun-2017, Time: 07:27:44, ID: B7F0010-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup

**Total PFBS**

170608M5\_42 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 299 > 79.7  
1.196e+006

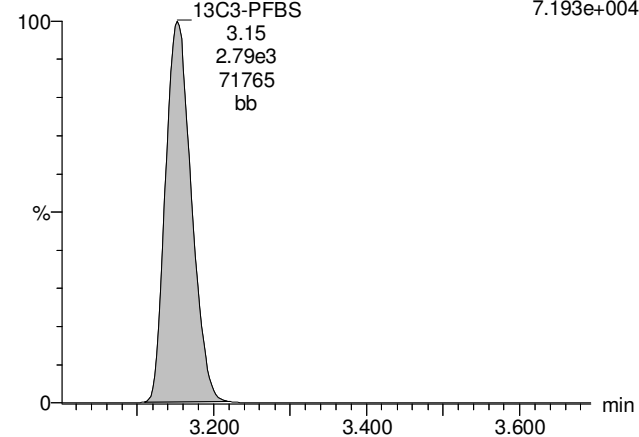


170608M5\_42 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 299 > 99  
4.571e+005



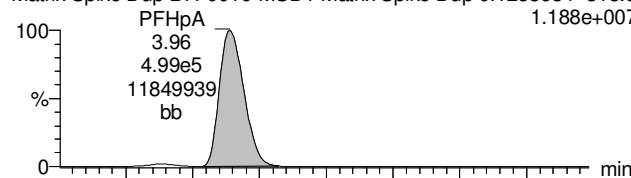
**13C3-PFBS**

170608M5\_42 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 302 > 98.8  
7.193e+004

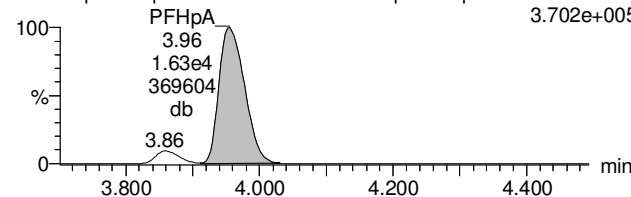


**PFHpA**

170608M5\_42 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125363 > 318.9  
1.188e+007

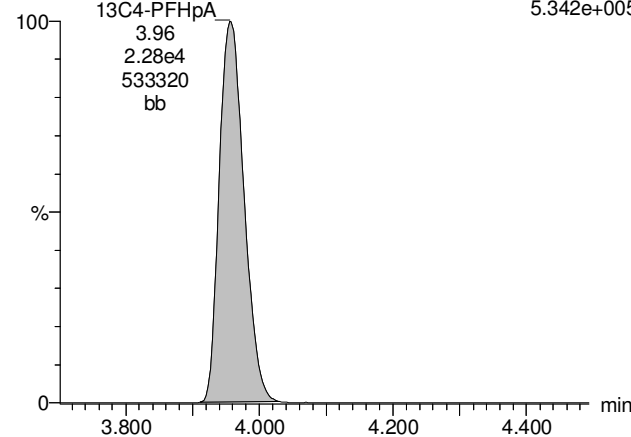


170608M5\_42 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 363 > 169  
3.702e+005



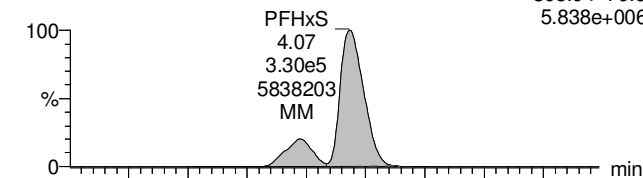
**13C4-PFHpA**

170608M5\_42 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125403 > 321.8  
5.342e+005

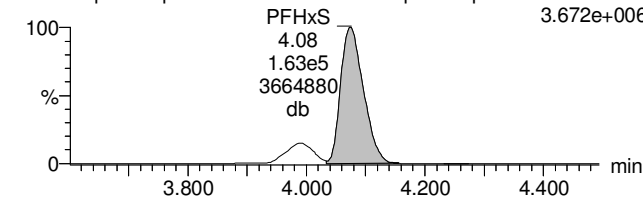


**Total PFHxS**

170608M5\_42 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 398.9 > 79.6  
5.838e+006

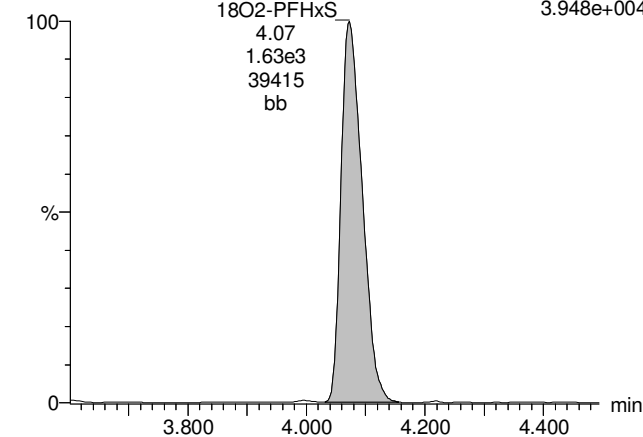


170608M5\_42 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 398.9 > 99  
3.672e+006



**18O2-PFHxS**

170608M5\_42 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125403 > 102.6  
3.948e+004



Dataset: U:\Q4.PRO\results\170608m5\170608M5-42.qld

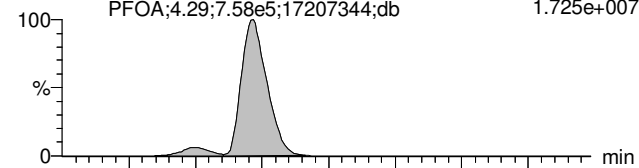
Last Altered: Friday, June 16, 2017 15:02:41 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:02:49 Pacific Daylight Time

Name: 170608M5\_42, Date: 09-Jun-2017, Time: 07:27:44, ID: B7F0010-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup

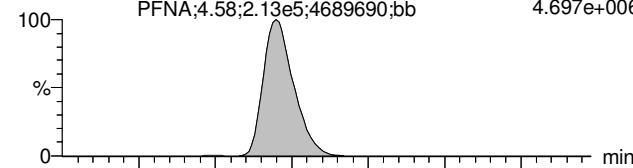
**Total PFOA**

170608M5\_42 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125413 > 368.7  
PFOA;4.29;7.58e5;17207344;db 1.725e+007



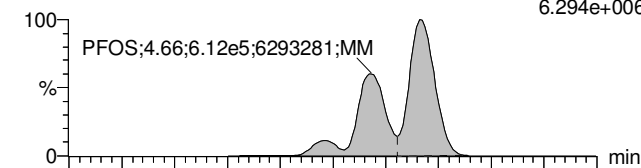
**PFNA**

170608M5\_42 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-  
462.9 > 418.8  
PFNA;4.58;2.13e5;4689690;bb 4.697e+006

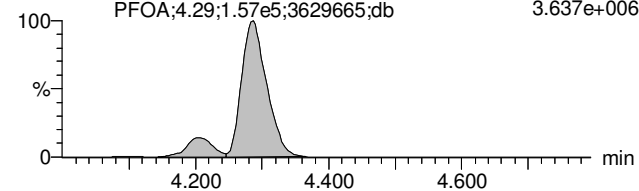


**Total PFOS**

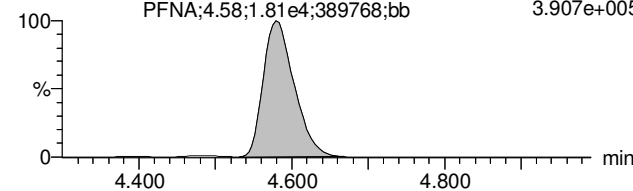
170608M5\_42 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 499 > 79.9  
PFOS;4.66;6.12e5;6293281;MM 6.294e+006



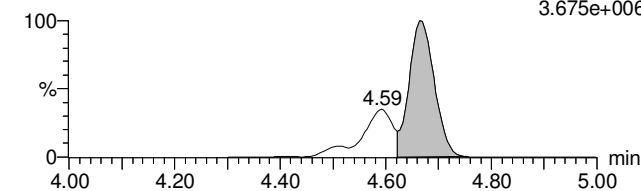
170608M5\_42 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 413 > 169  
PFOA;4.29;1.57e5;3629665;db 3.637e+006



170608M5\_42 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125462.9 > 219  
PFNA;4.58;1.81e4;389768;bb 3.907e+005

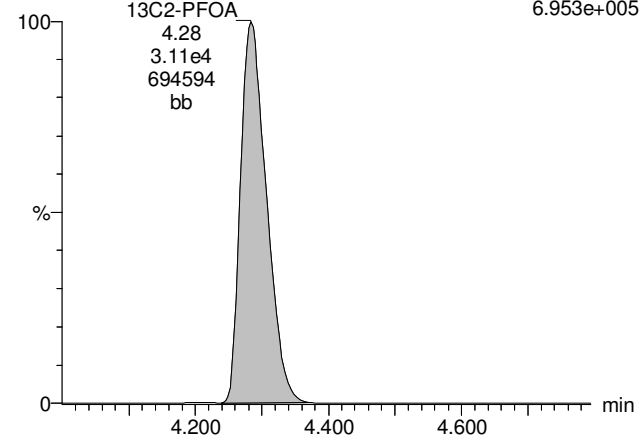


170608M5\_42 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 499 > 99  
3.675e+006



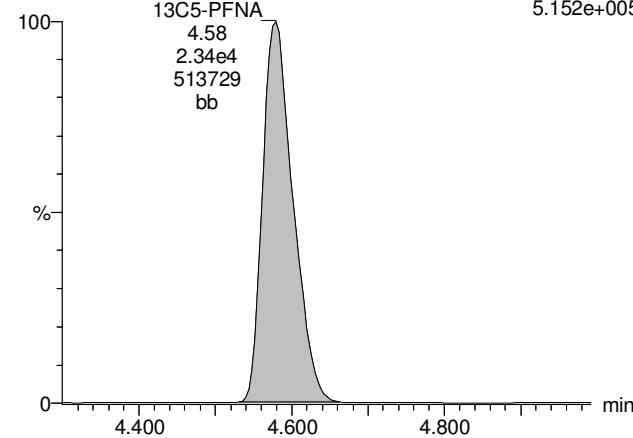
**13C2-PFOA**

170608M5\_42 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-  
414.9 > 369.7  
13C2-PFOA 4.28  
3.11e4  
694594  
bb 6.953e+005



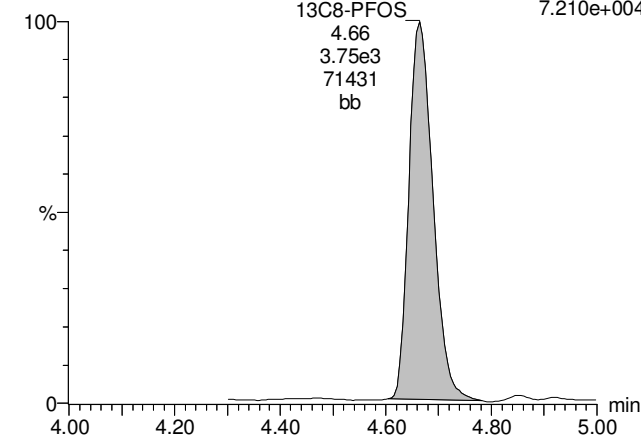
**13C5-PFNA**

170608M5\_42 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-  
468.2 > 422.9  
13C5-PFNA 4.58  
2.34e4  
513729  
bb 5.152e+005



**13C8-PFOS**

170608M5\_42 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 507 > 79.9  
13C8-PFOS 4.66  
3.75e3  
71431  
bb 7.210e+004



Dataset: U:\Q4.PRO\results\170608m5\170608M5-42.qld

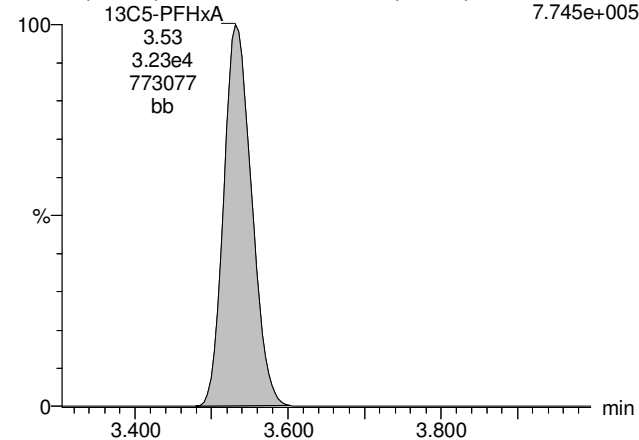
Last Altered: Friday, June 16, 2017 15:02:41 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:02:49 Pacific Daylight Time

Name: 170608M5\_42, Date: 09-Jun-2017, Time: 07:27:44, ID: B7F0010-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup

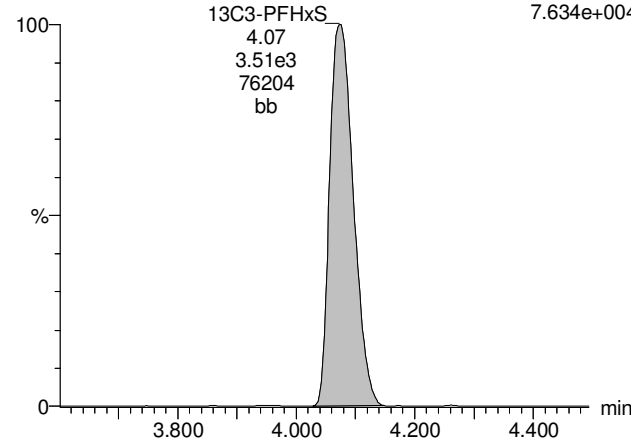
**13C5-PFHxA**

170608M5\_42 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125318 > 272.9  
7.745e+005



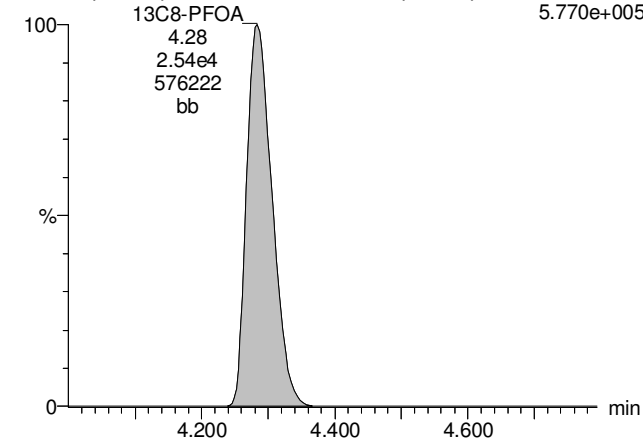
**13C3-PFHxS**

170608M5\_42 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-  
401.9 > 79.9  
7.634e+004



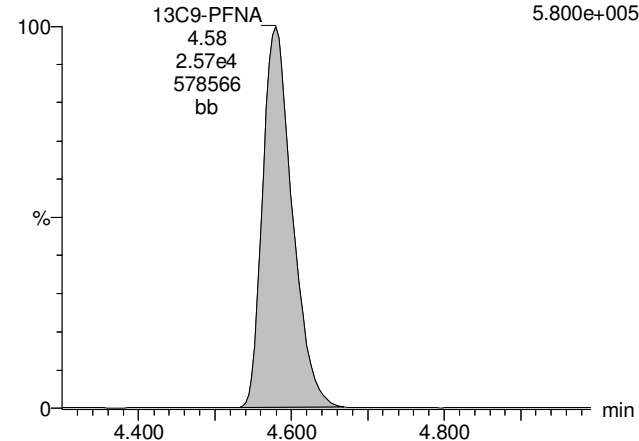
**13C8-PFOA**

170608M5\_42 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125421.3 > 376  
5.770e+005



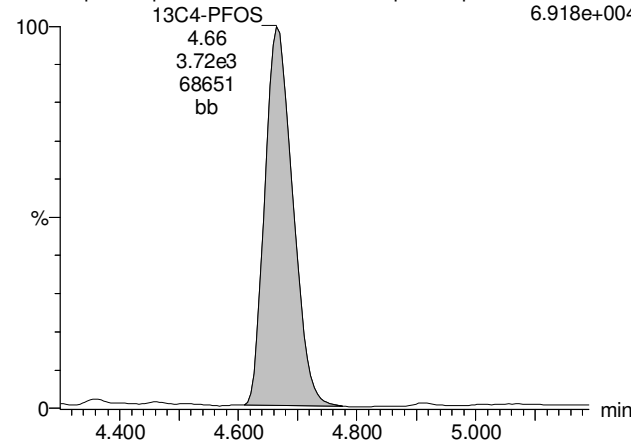
**13C9-PFNA**

170608M5\_42 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-  
472.2 > 426.9  
5.800e+005



**13C4-PFOS**

170608M5\_42 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-  
Matrix Spike Dup B7F0010-MSD1 Matrix Spike Dup 0.125 503 > 79.9  
6.918e+004



**Quantify Sample Summary Report****MassLynx MassLynx V4.1 SCN 945**

Vista Analytical Laboratory

Rev'd: MM 6/20/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_57.qld

Last Altered: Monday, June 19, 2017 13:54:13 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:54:50 Pacific Daylight Time

**Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12****Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58****Name: 170615M4\_57, Date: 16-Jun-2017, Time: 09:16:04, ID: B7F0010-MSD1@25X Matrix Spike Dup 0.125, Description: Matrix Spike Dup**

	#	Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299 > 79.7	1.84e3	1.05e2		0.1208	3.34	3.38	220	928	
2	5	PFHpA	363 > 318.9	2.02e4	8.47e2		0.1208	4.07	4.09	299	1960	
3	8	PFOA	413 > 368.7	2.86e4	1.22e3		0.1208	4.42	4.44	294	2460	
4	10	PFOS	499 > 79.9	1.93e4	1.19e2		0.1208	4.80	4.81	2040	10100	
5	21	13C3-PFBS	302 > 98.8	1.05e2	8.67e2	0.130	0.1208	3.33	3.38	1.51	95.7	92.5
6	23	13C4-PFHpA	367.2 > 321.8	8.47e2	1.30e3	0.254	0.1208	4.07	4.09	3.26	106	102.7
7	26	13C2-PFOA	414.9 > 369.7	1.22e3	8.75e2	1.060	0.1208	4.26	4.44	17.4	136	131.2
8	28	13C8-PFOS	507 > 79.9	1.19e2	1.34e2	0.911	0.1208	4.80	4.81	11.1	100	97.1
9	36	13C4-PFBA	217 > 171.8	8.67e2	8.67e2	1.000	0.1208	1.89	1.93	12.5	103	100.0



**Quantify Sample Summary Report****MassLynx MassLynx V4.1 SCN 945**

Vista Analytical Laboratory

Rev'd: MM 6/20/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_57.qld

Last Altered: Monday, June 19, 2017 13:54:13 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:55:26 Pacific Daylight Time

**Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12****Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58****Name: 170615M4\_57, Date: 16-Jun-2017, Time: 09:16:04, ID: B7F0010-MSD1@25X Matrix Spike Dup 0.125, Description: Matrix Spike Dup**

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	38 13C5-PFHxA	318 > 272.9	1.30e3	1.30e3	1.000	0.1208	3.66	3.69	5.00	41.4	100.0
2	39 13C3-PFHxS	401.9 > 79.9	2.19e2	2.19e2	1.000	0.1208	4.20	4.21	12.5	103	100.0
3	40 13C8-PFOA	421.3 > 376	8.75e2	8.75e2	1.000	0.1208	4.42	4.44	12.5	103	100.0
4	42 13C4-PFOS	503 > 79.9	1.34e2	1.34e2	1.000	0.1208	4.80	4.80	12.5	103	100.0
5	45 Total PFBS	299 > 79.7	1.84e3	1.05e2		0.1208	3.20		220	928	
6	47 Total PFOA	413 > 368.7	3.04e4	1.22e3		0.1208	4.30		312	2610	
7	48 Total PFOS	499 > 79.9	1.93e4	1.19e2		0.1208	4.60		2040	10100	

AP 6/20/2017

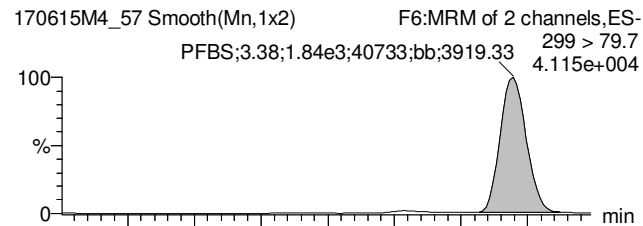
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_57.qld

Last Altered: Monday, June 19, 2017 13:54:13 Pacific Daylight Time  
Printed: Monday, June 19, 2017 13:55:26 Pacific Daylight Time

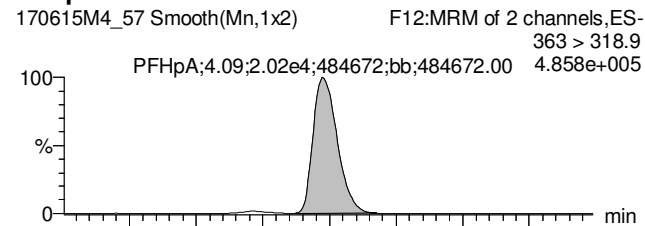
Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_57, Date: 16-Jun-2017, Time: 09:16:04, ID: B7F0010-MSD1@25X Matrix Spike Dup 0.125, Description: Matrix Spike Dup

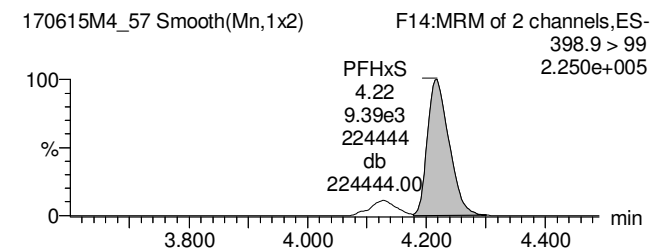
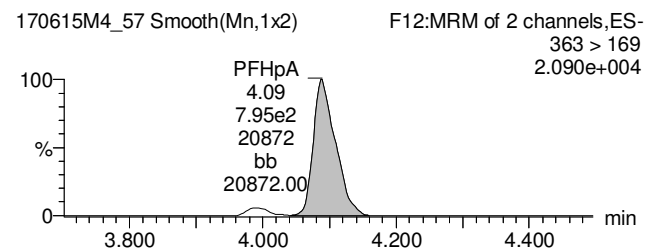
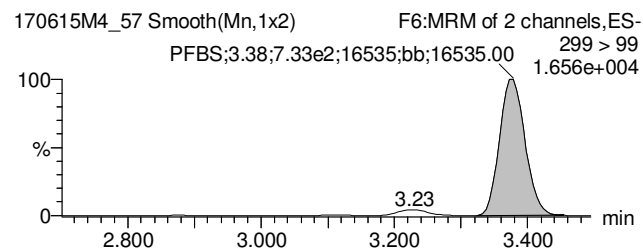
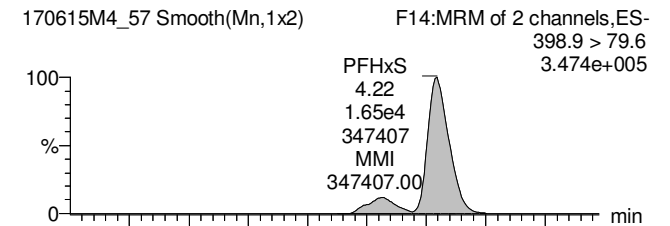
**Total PFBS**



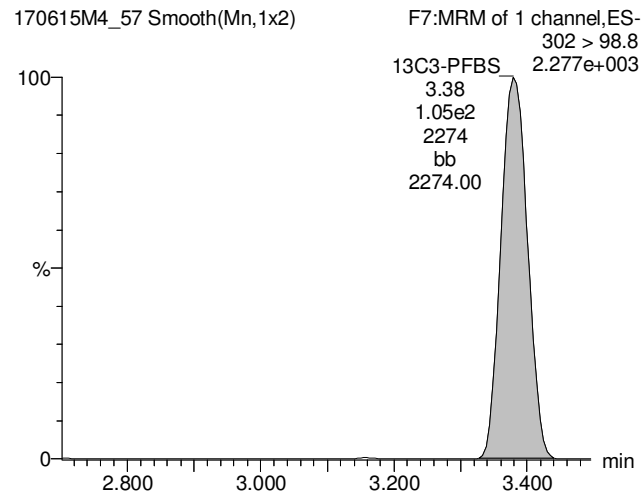
**PFHpA**



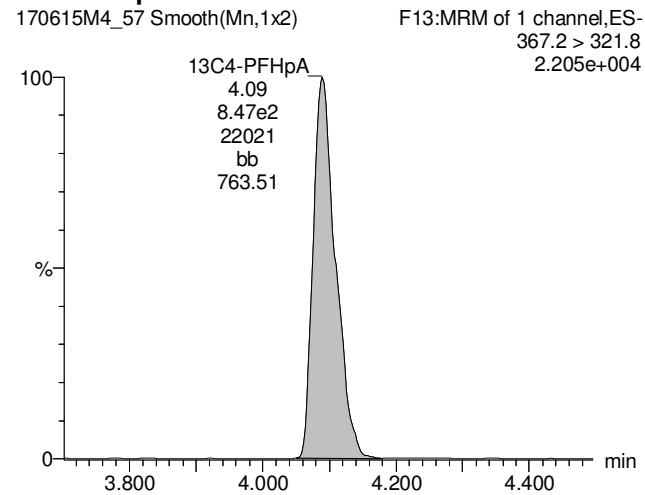
**Total PFHxS**



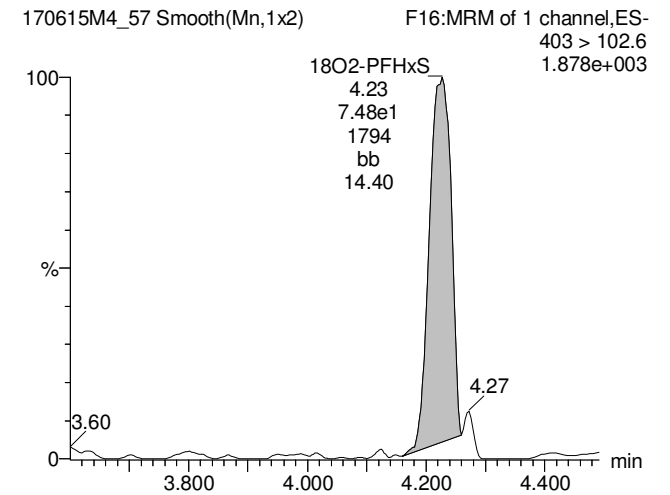
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**



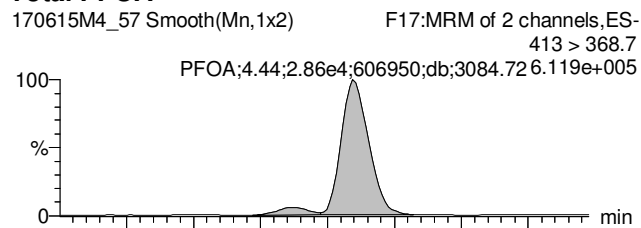
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_57.qld

Last Altered: Monday, June 19, 2017 13:54:13 Pacific Daylight Time

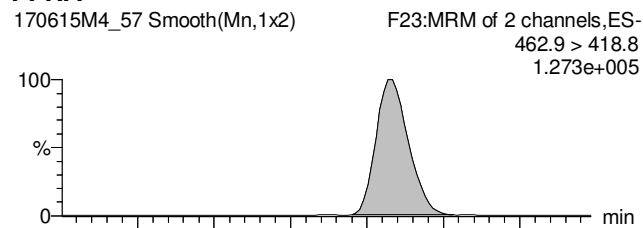
Printed: Monday, June 19, 2017 13:55:26 Pacific Daylight Time

Name: 170615M4\_57, Date: 16-Jun-2017, Time: 09:16:04, ID: B7F0010-MSD1@25X Matrix Spike Dup 0.125, Description: Matrix Spike Dup

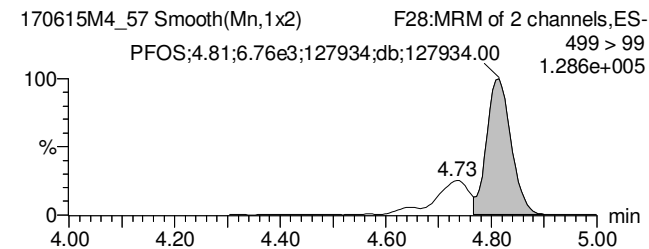
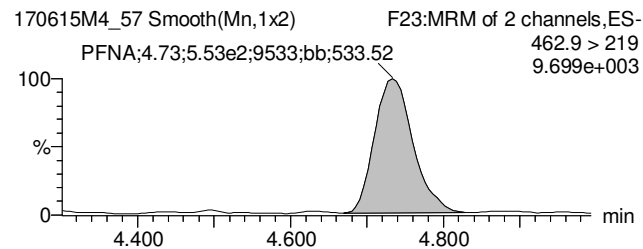
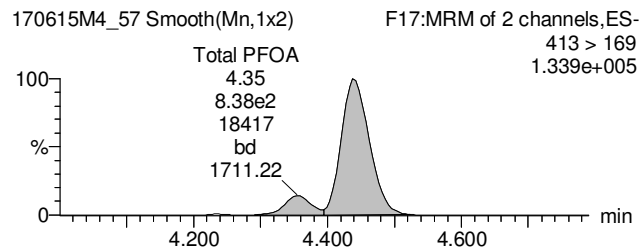
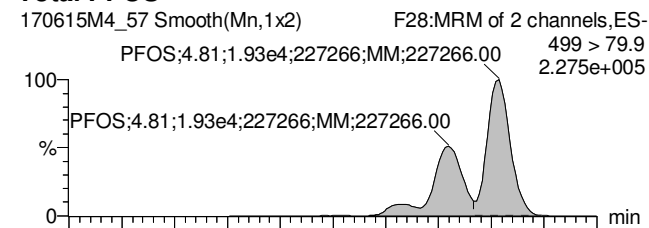
**Total PFOA**



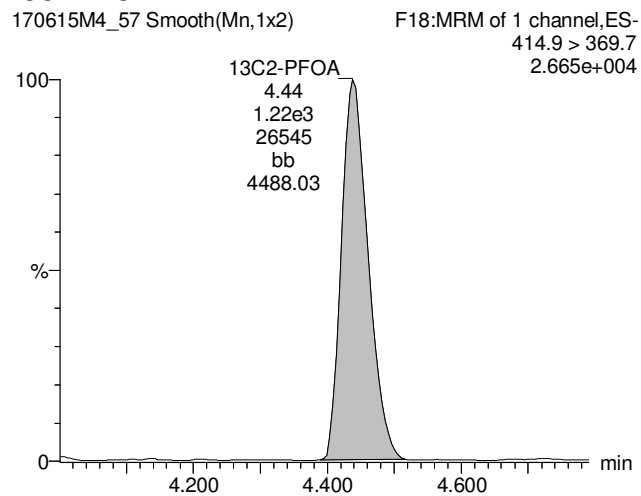
**PFNA**



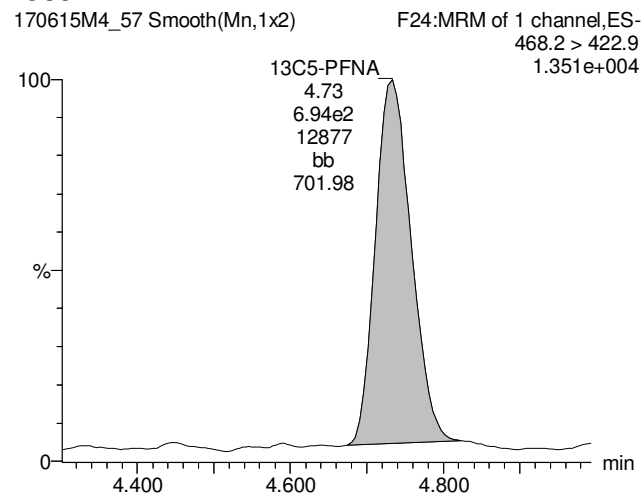
**Total PFOS**



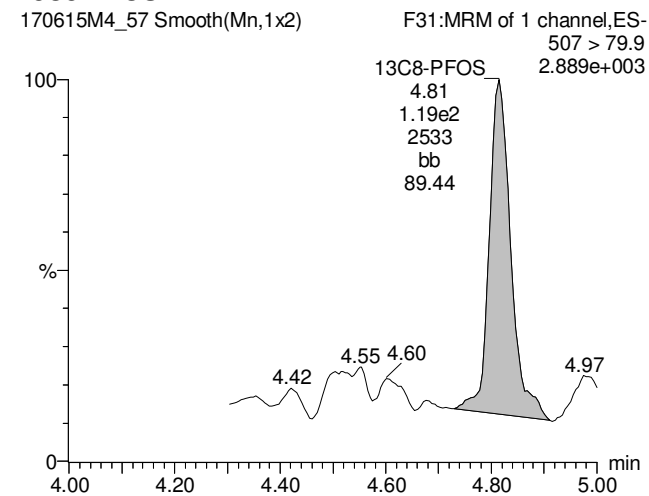
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_57.qld

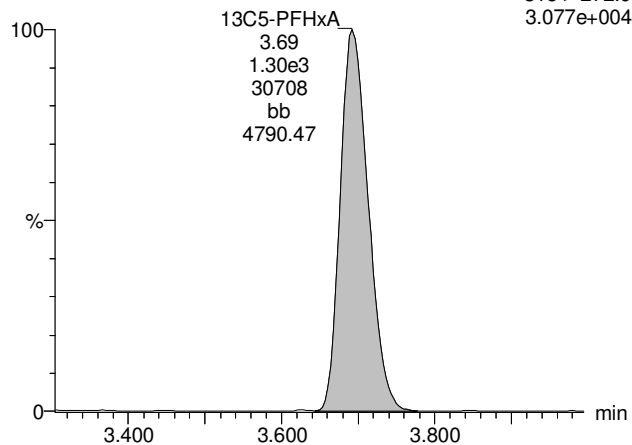
Last Altered: Monday, June 19, 2017 13:54:13 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:55:26 Pacific Daylight Time

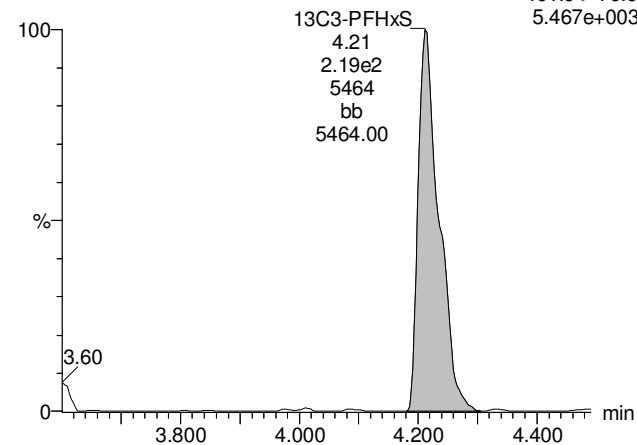
Name: 170615M4\_57, Date: 16-Jun-2017, Time: 09:16:04, ID: B7F0010-MSD1@25X Matrix Spike Dup 0.125, Description: Matrix Spike Dup

**13C5-PFHxA**

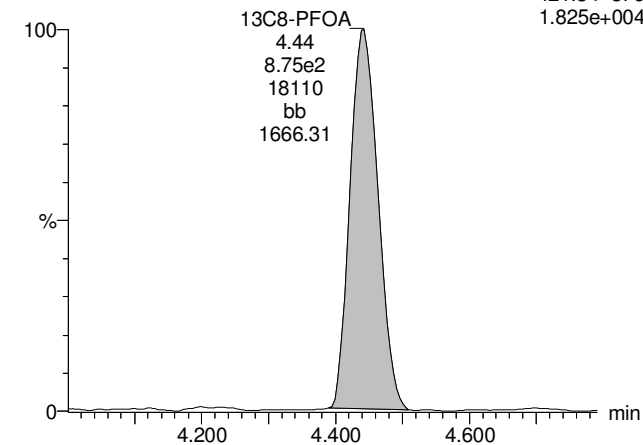
170615M4\_57 Smooth(Mn,1x2)

F10:MRM of 1 channel,ES-  
318 > 272.9  
3.077e+004**13C3-PFHxS**

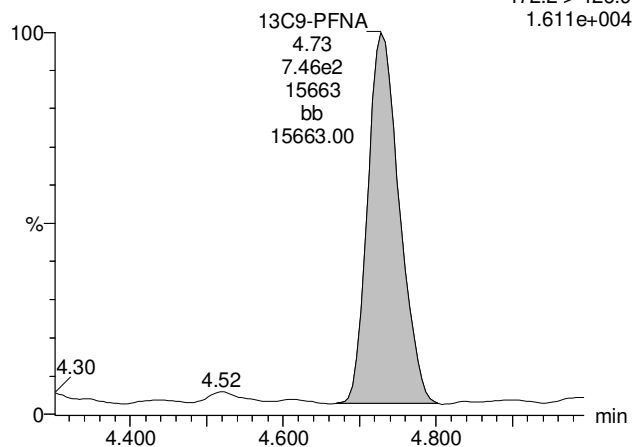
170615M4\_57 Smooth(Mn,1x2)

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
5.467e+003**13C8-PFOA**

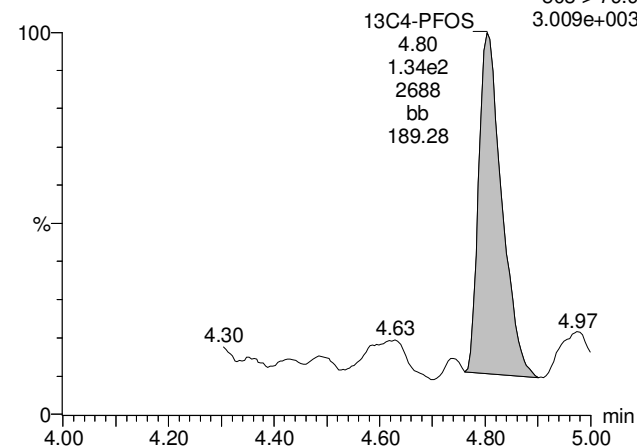
170615M4\_57 Smooth(Mn,1x2)

F19:MRM of 1 channel,ES-  
421.3 > 376  
1.825e+004**13C9-PFNA**

170615M4\_57 Smooth(Mn,1x2)

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.611e+004**13C4-PFOS**

170615M4\_57 Smooth(Mn,1x2)

F29:MRM of 1 channel,ES-  
503 > 79.9  
3.009e+003

**Quantify Sample Summary Report****MassLynx MassLynx V4.1 SCN 945**

Vista Analytical Laboratory

Rev'd: MM 6/20/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_56.qld

Last Altered: Monday, June 19, 2017 13:49:50 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:50:23 Pacific Daylight Time

**Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12****Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58**

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**Name: 170615M4\_56, Date: 16-Jun-2017, Time: 09:04:21, ID: B7F0010-MSD1@50X Matrix Spike Dup 0.125, Description: Matrix Spike Dup**

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	6 PFHxS	398.9 > 79.6	7.72e3	2.47e1		0.1208	4.20	4.21	3.91	16.3	
2	24 18O2-PFHxS	403 > 102.6	2.47e1	9.98e1	0.331	0.1208	4.20	4.22	0.00309	0.0772	74.6
3	39 13C3-PFHxS	401.9 > 79.9	9.98e1	9.98e1	1.000	0.1208	4.20	4.21	0.0125	0.103	100.0
4	46 Total PFHxS	398.9 > 79.6	7.72e3	2.47e1		0.1208	4.10		3.91	16.3	

AP 6/19/2017

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_56.qld

Last Altered: Monday, June 19, 2017 13:49:50 Pacific Daylight Time

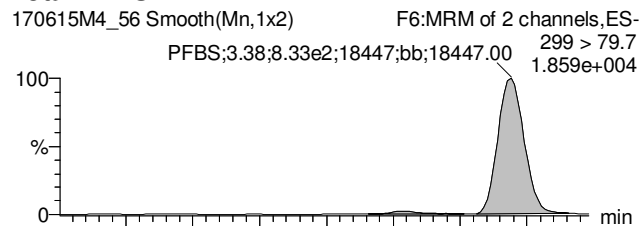
Printed: Monday, June 19, 2017 13:50:23 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

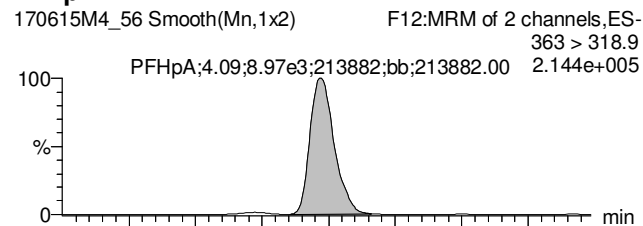
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_56, Date: 16-Jun-2017, Time: 09:04:21, ID: B7F0010-MSD1@50X Matrix Spike Dup 0.125, Description: Matrix Spike Dup

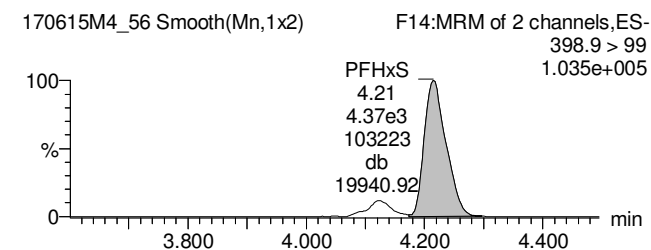
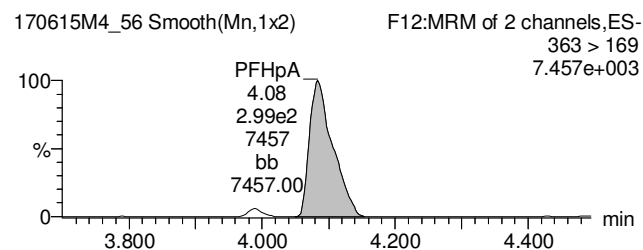
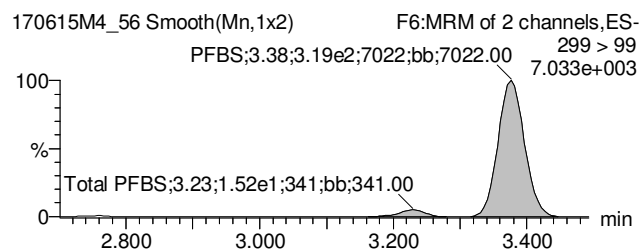
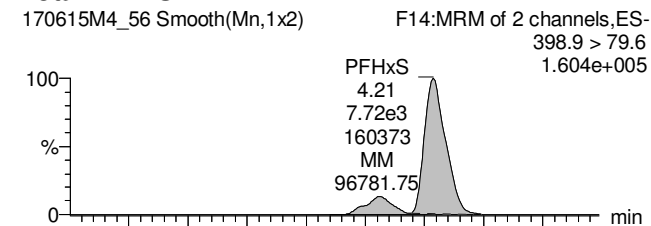
**Total PFBS**



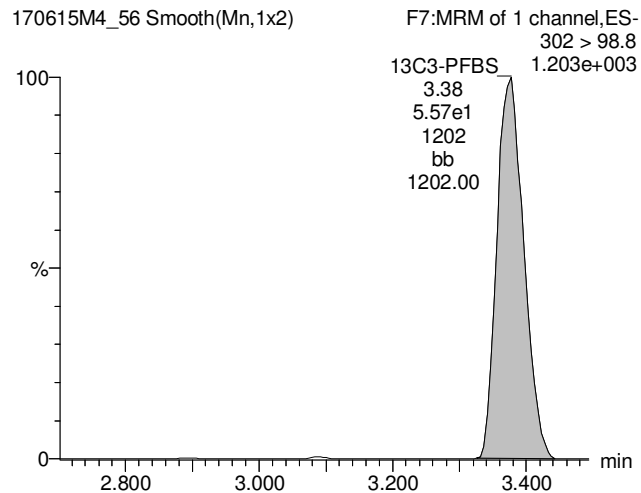
**PFHpA**



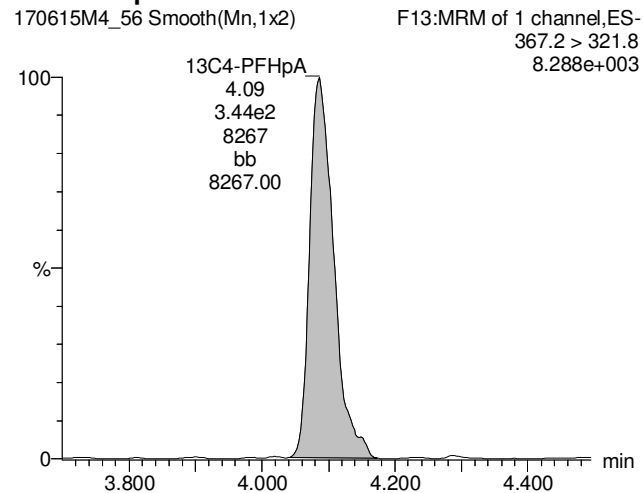
**Total PFHxS**



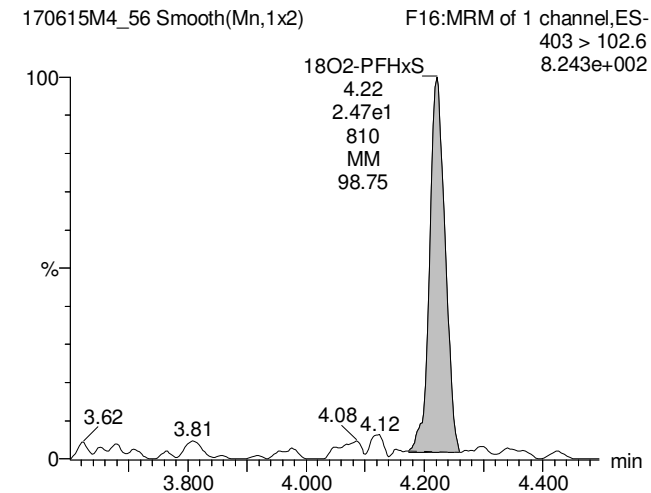
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**



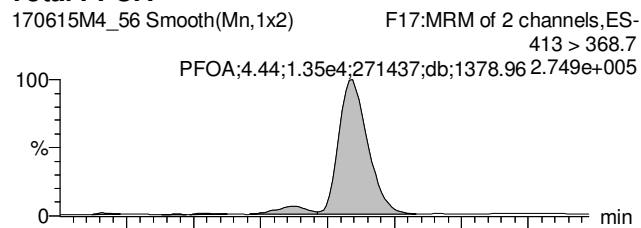
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_56.qld

Last Altered: Monday, June 19, 2017 13:49:50 Pacific Daylight Time

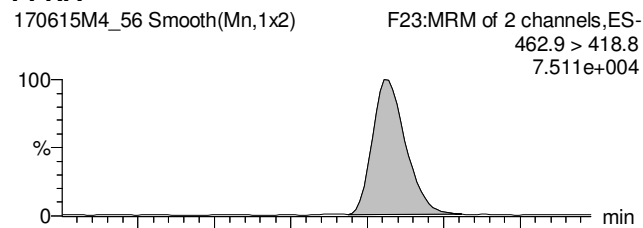
Printed: Monday, June 19, 2017 13:50:23 Pacific Daylight Time

Name: 170615M4\_56, Date: 16-Jun-2017, Time: 09:04:21, ID: B7F0010-MSD1@50X Matrix Spike Dup 0.125, Description: Matrix Spike Dup

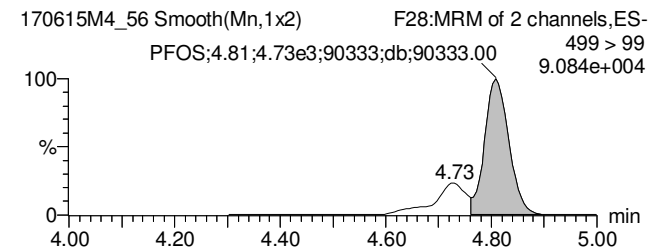
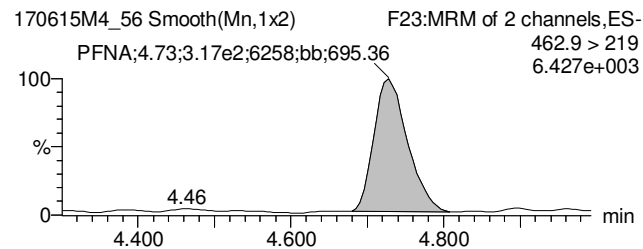
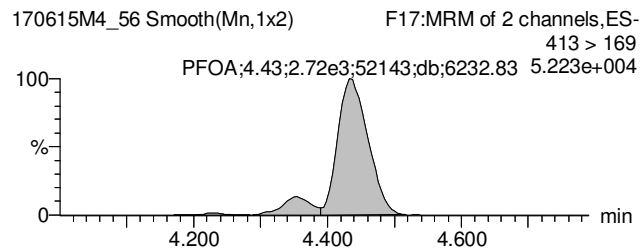
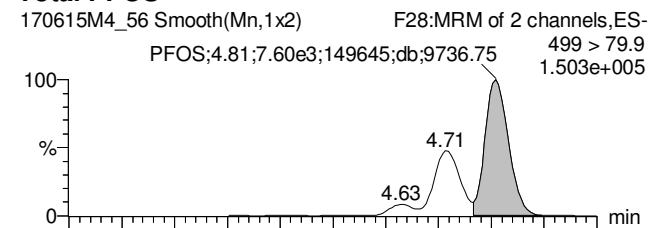
**Total PFOA**



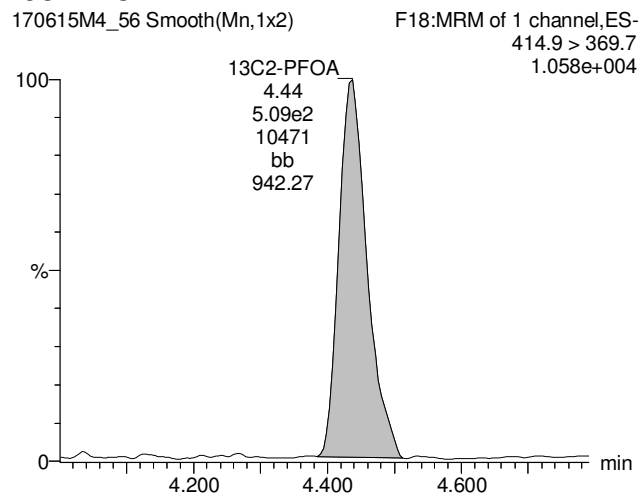
**PFNA**



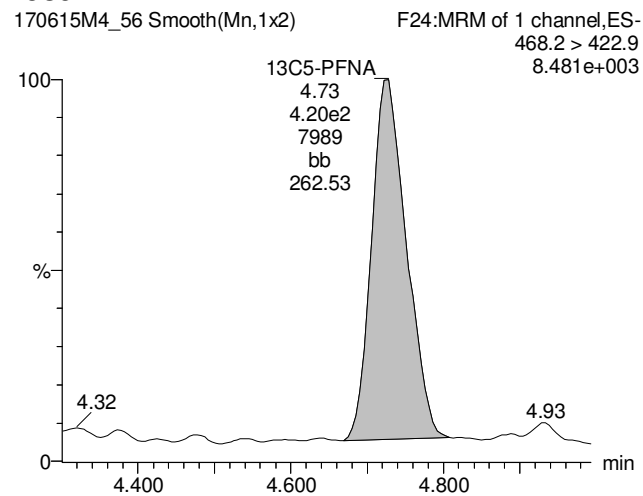
**Total PFOS**



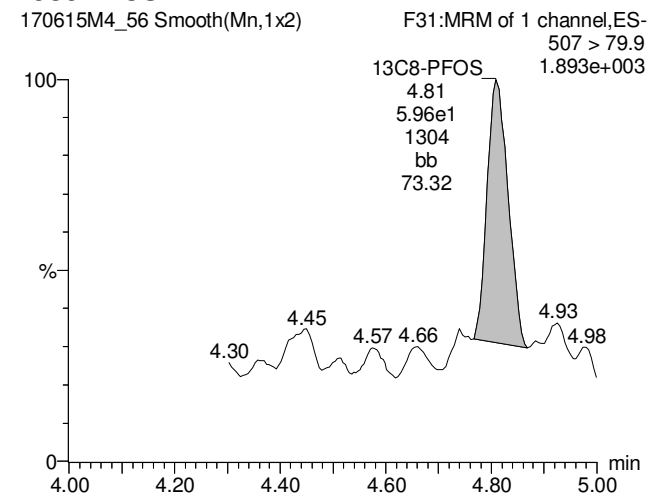
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_56.qld

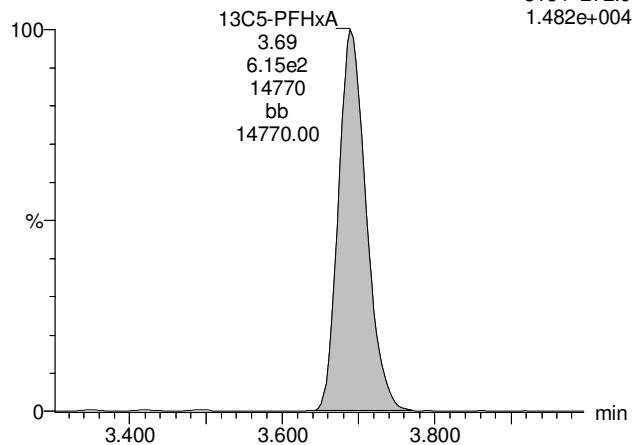
Last Altered: Monday, June 19, 2017 13:49:50 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:50:23 Pacific Daylight Time

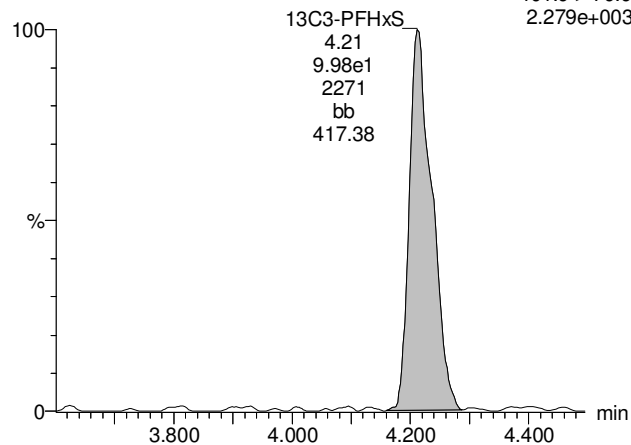
Name: 170615M4\_56, Date: 16-Jun-2017, Time: 09:04:21, ID: B7F0010-MSD1@50X Matrix Spike Dup 0.125, Description: Matrix Spike Dup

**13C5-PFHxA**

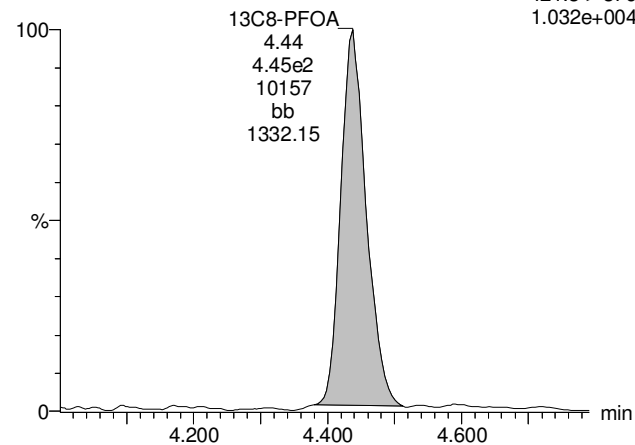
170615M4\_56 Smooth(Mn,1x2)

F10:MRM of 1 channel,ES-  
318 > 272.9  
1.482e+004**13C3-PFHxS**

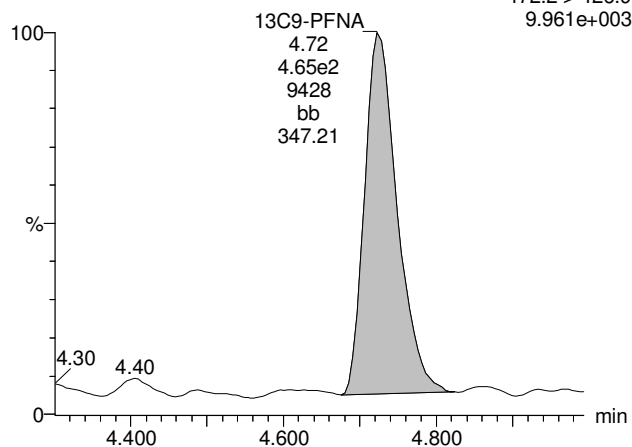
170615M4\_56 Smooth(Mn,1x2)

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
2.279e+003**13C8-PFOA**

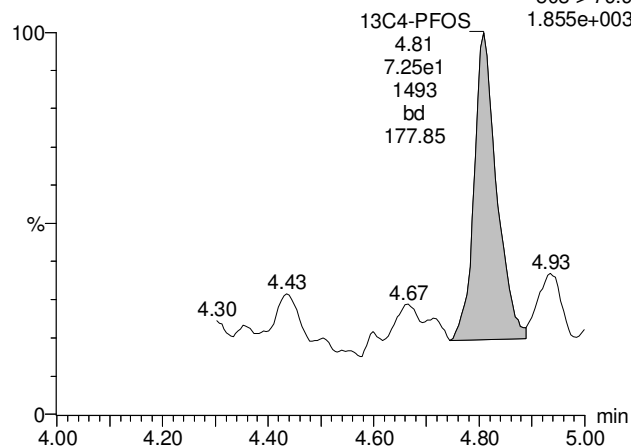
170615M4\_56 Smooth(Mn,1x2)

F19:MRM of 1 channel,ES-  
421.3 > 376  
1.032e+004**13C9-PFNA**

170615M4\_56 Smooth(Mn,1x2)

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
9.961e+003**13C4-PFOS**

170615M4\_56 Smooth(Mn,1x2)

F29:MRM of 1 channel,ES-  
503 > 79.9  
1.855e+003



Dataset: U:\Q4.PRO\results\170608m5\170608M5-43.qld

Last Altered: Friday, June 16, 2017 15:05:38 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:05:43 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_43, Date: 09-Jun-2017, Time: 07:39:11, ID: 1700681-03 OF17-MW01-0617 0.125, Description: OF17-MW01-0617

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	1.13e4	3.36e3		0.1145	3.30	3.15	41.9	181	
2	5 PFHpA	363 > 318.9	4.02e5	2.59e4		0.1145	4.06	3.96	194	1410 <sup>E</sup>	
3	6 PFHxS	398.9 > 79.6	1.14e5	2.18e3		0.1145	4.20	4.08	656	2860 <sup>E</sup>	
4	8 PFOA	413 > 368.7	5.46e5	3.57e4		0.1145	4.36	4.28	191	1700 <sup>E</sup>	
5	9 PFNA	462.9 > 418.8	1.17e5	2.60e4		0.1145	4.68	4.58	56.2	403	
6	10 PFOS	499 > 79.9	7.38e5	3.34e3		0.1145	4.70	4.66	2760	23400 <sup>E</sup>	
7	21 13C3-PFBS	302 > 98.8	3.36e3	3.54e4	0.024	0.1145	3.30	3.15	0.474	172	158.0
8	23 13C4-PFHpA	367.2 > 321.8	2.59e4	3.54e4	0.235	0.1145	4.06	3.96	3.66	136	124.4
9	24 18O2-PFHxS	403 > 102.6	2.18e3	4.84e3	0.345	0.1145	4.20	4.08	5.63	142	130.5
10	25 13C2-6:2 FTS	429.1 > 408.9	5.00e3	5.12e3	0.329	0.1145	4.30	4.26	4.88	129	118.5
11	26 13C2-PFOA	414.9 > 369.7	3.57e4	2.75e4	1.148	0.1145	4.40	4.28	16.2	124	113.1
12	27 13C5-PFNA	468.2 > 422.9	2.60e4	3.01e4	0.724	0.1145	4.68	4.58	10.8	130	119.5
13	28 13C8-PFOS	507 > 79.9	3.34e3	3.26e3	0.868	0.1145	4.78	4.66	12.8	129	118.0
14	38 13C5-PFHxA	318 > 272.9	3.54e4	3.54e4	1.000	0.1145	3.67	3.53	5.00	43.7	100.0
15	39 13C3-PFHxS	401.9 > 79.9	4.84e3	4.84e3	1.000	0.1145	4.20	4.07	12.5	109	100.0
16	40 13C8-PFOA	421.3 > 376	2.75e4	2.75e4	1.000	0.1145	4.40	4.29	12.5	109	100.0
17	41 13C9-PFNA	472.2 > 426.9	3.01e4	3.01e4	1.000	0.1145	4.68	4.58	12.5	109	100.0
18	42 13C4-PFOS	503 > 79.9	3.26e3	3.26e3	1.000	0.1145	4.78	4.66	12.5	109	100.0
19	43 13C6-PFDA	519.1 > 473.7	2.84e4	2.84e4	1.000	0.1145	4.95	4.85	12.5	109	100.0
20	44 13C7-PFUnA	570.1 > 524.8	2.88e4	2.88e4	1.000	0.1145	5.20	5.10	12.5	109	100.0
21	45 Total PFBS	299 > 79.7	1.13e4	3.36e3		0.1145	3.30		41.9	181	
22	46 Total PFHxS	398.9 > 79.6	1.14e5	2.18e3		0.1145	4.05		656	2860 <sup>E</sup>	
23	47 Total PFOA	413 > 368.7	5.52e5	3.57e4		0.1145	4.30		193	1720 <sup>E</sup>	
24	48 Total PFOS	499 > 79.9	7.38e5	3.34e3		0.1145	4.60		2760	23400 <sup>E</sup>	

Dataset: U:\Q4.PRO\results\170608m5\170608M5-43.qld

Last Altered: Friday, June 16, 2017 15:05:38 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:05:43 Pacific Daylight Time

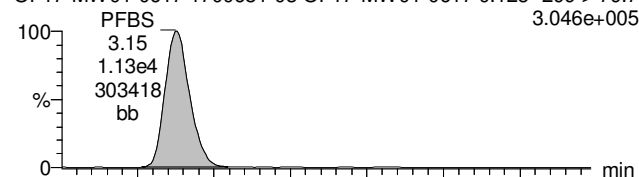
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

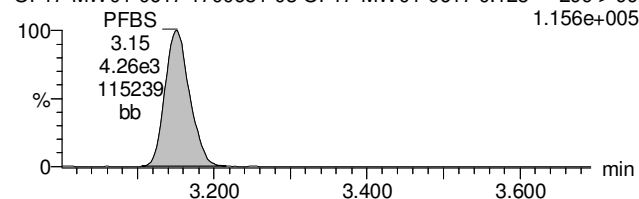
Name: 170608M5\_43, Date: 09-Jun-2017, Time: 07:39:11, ID: 1700681-03 OF17-MW01-0617 0.125, Description: OF17-MW01-0617

**Total PFBS**

170608M5\_43 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125 299 > 79.7 3.046e+005

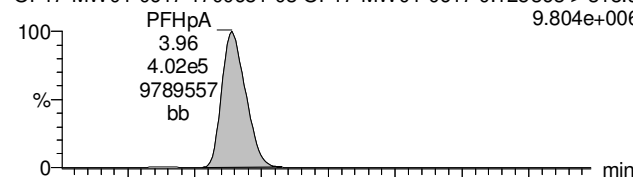


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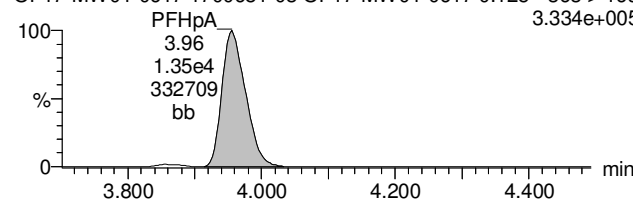


**PFHpA**

170608M5\_43 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125363 > 318.9 9.804e+006

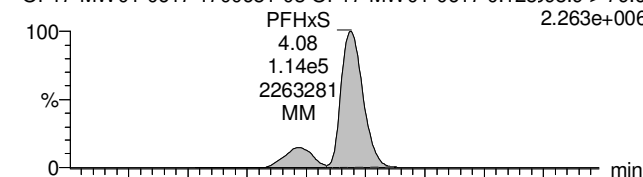


170608M5\_43 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125 363 > 169 3.334e+005

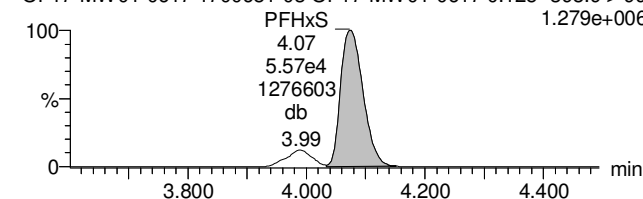


**Total PFHxS**

170608M5\_43 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125398.9 > 79.6 2.263e+006

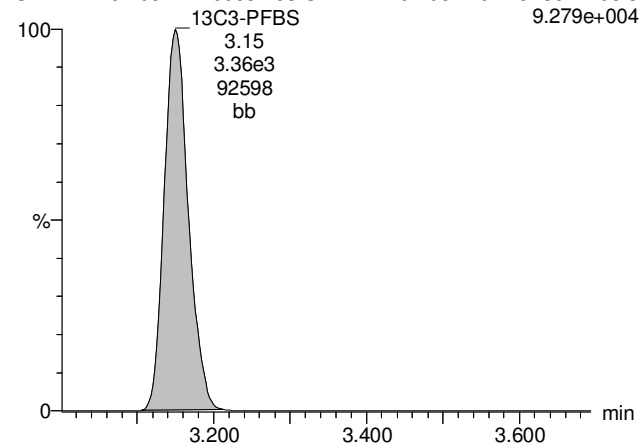


170608M5\_43 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125 398.9 > 99 1.279e+006



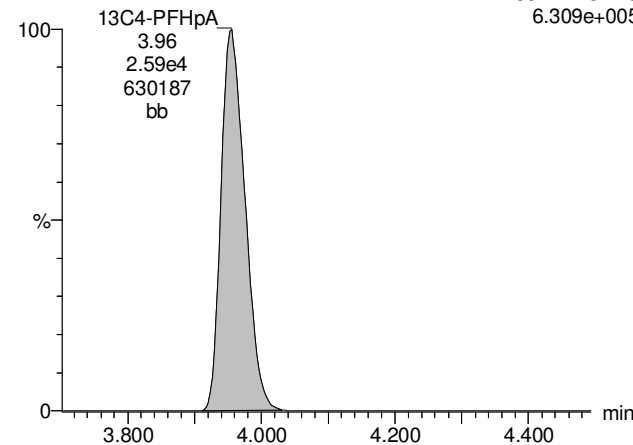
**13C3-PFBS**

170608M5\_43 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125 302 > 98.8 9.279e+004



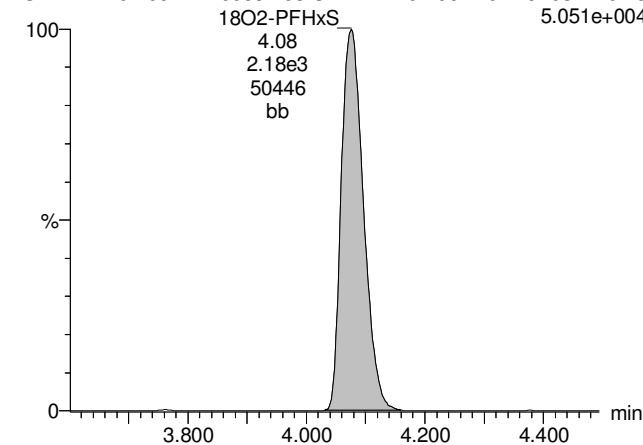
**13C4-PFHpA**

170608M5\_43 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125403 > 321.8 6.309e+005



**18O2-PFHxS**

170608M5\_43 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125403 > 102.6 5.051e+004



Dataset: U:\Q4.PRO\results\170608m5\170608M5-43.qld

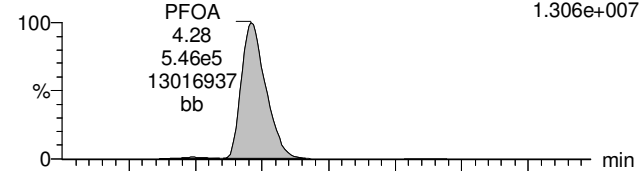
Last Altered: Friday, June 16, 2017 15:05:38 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:05:43 Pacific Daylight Time

Name: 170608M5\_43, Date: 09-Jun-2017, Time: 07:39:11, ID: 1700681-03 OF17-MW01-0617 0.125, Description: OF17-MW01-0617

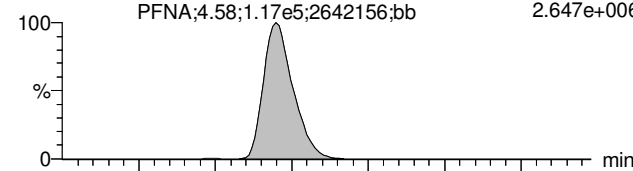
**Total PFOA**

170608M5\_43 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125413 > 368.7  
PFOA 4.28 1.306e+007  
5.46e5  
13016937  
bb



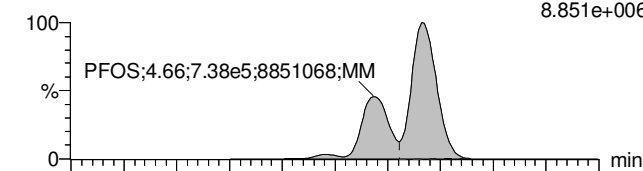
**PFNA**

170608M5\_43 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-462.9 > 418.8  
PFNA;4.58;1.17e5;2642156;bb 2.647e+006

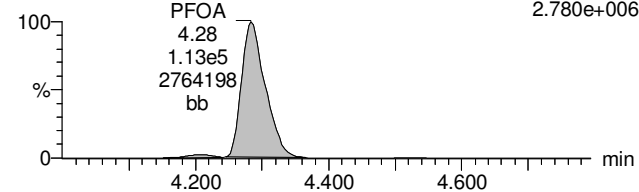


**Total PFOS**

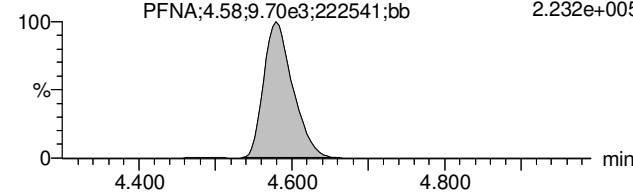
170608M5\_43 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125 499 > 79.9  
PFOS;4.66;7.38e5;8851068;MM 8.851e+006



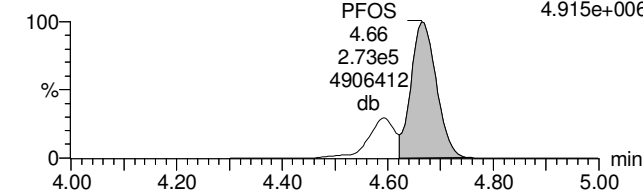
170608M5\_43 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125 413 > 169  
PFOA 4.28 2.780e+006  
1.13e5  
2764198  
bb



170608M5\_43 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125462.9 > 219  
PFNA;4.58;9.70e3;222541;bb 2.232e+005

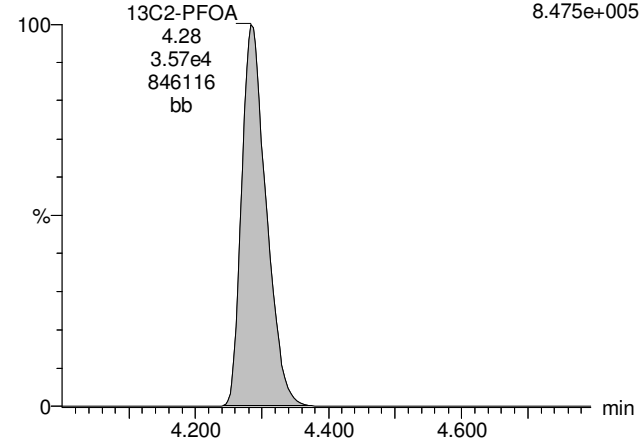


170608M5\_43 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125 499 > 99  
PFOS 4.66 4.915e+006  
2.73e5  
4906412  
db



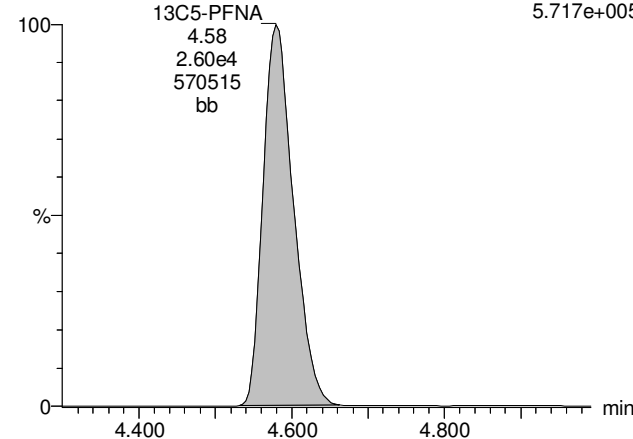
**13C2-PFOA**

170608M5\_43 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-414.9 > 369.7  
13C2-PFOA 4.28 8.475e+005  
3.57e4  
846116  
bb



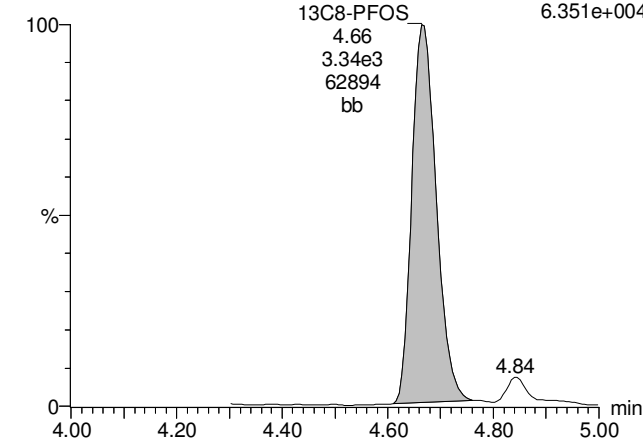
**13C5-PFNA**

170608M5\_43 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-468.2 > 422.9  
13C5-PFNA 4.58 5.717e+005  
2.60e4  
570515  
bb



**13C8-PFOS**

170608M5\_43 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125 507 > 79.9  
13C8-PFOS 4.66 6.351e+004  
3.34e3  
62894  
bb



Dataset: U:\Q4.PRO\results\170608m5\170608M5-43.qld

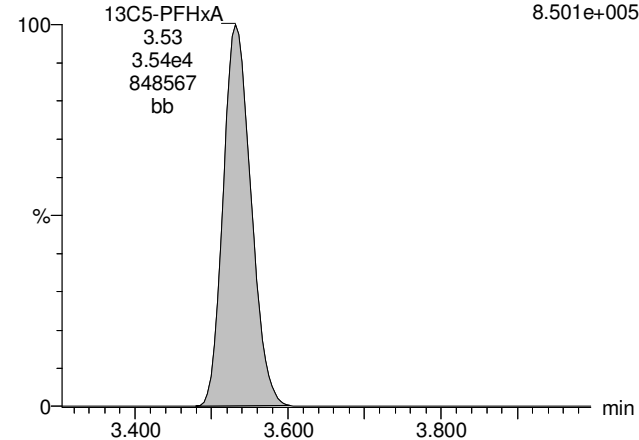
Last Altered: Friday, June 16, 2017 15:05:38 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:05:43 Pacific Daylight Time

Name: 170608M5\_43, Date: 09-Jun-2017, Time: 07:39:11, ID: 1700681-03 OF17-MW01-0617 0.125, Description: OF17-MW01-0617

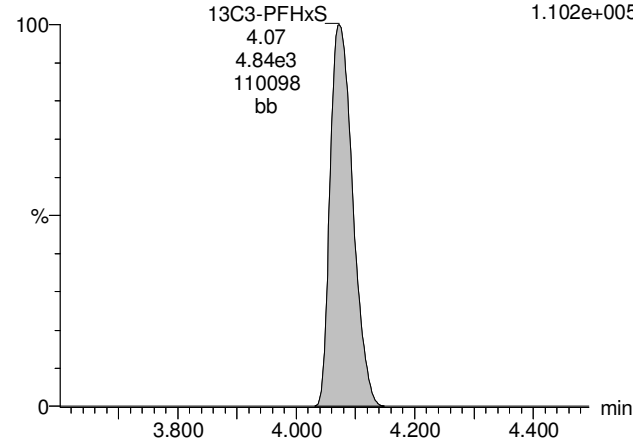
**13C5-PFHxA**

170608M5\_43 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125318 > 272.9 8.501e+005



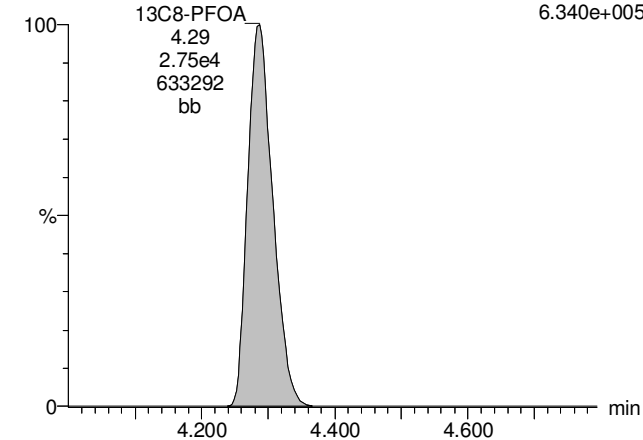
**13C3-PFHxS**

170608M5\_43 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125101.9 > 79.9 1.102e+005



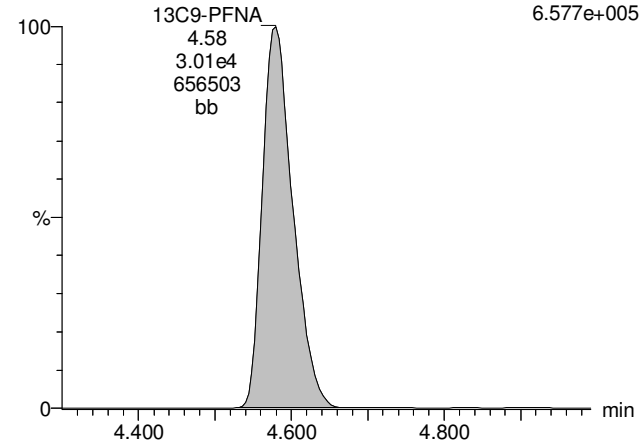
**13C8-PFOA**

170608M5\_43 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125421.3 > 376 6.340e+005



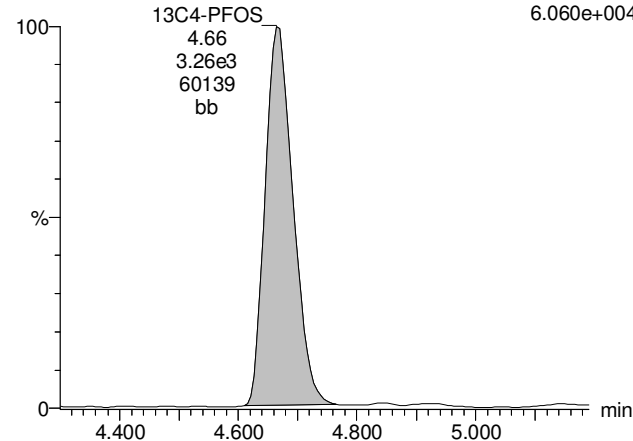
**13C9-PFNA**

170608M5\_43 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-472.2 > 426.9 6.577e+005



**13C4-PFOS**

170608M5\_43 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-OF17-MW01-0617 1700681-03 OF17-MW01-0617 0.125 503 > 79.9 6.060e+004



Dataset: U:\Q4.PRO\results\170623M1\170623M1-21.qld

Last Altered: Tuesday, June 27, 2017 13:29:54 Pacific Daylight Time

Printed: Tuesday, June 27, 2017 13:31:31 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

Name: 170623M1\_21, Date: 23-Jun-2017, Time: 14:35:42, ID: 1700681-03@20X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	19 L-PFOS	499 > 79.9	2.38e4	2.24e2	0.1145		4.43	4.45	1330	12200	
2	20 Br-PFOS	499 > 79.9	1.16e4	6.66e2	0.1145		4.43	4.36	218	1790	
3	34 13C8-PFOS	507 > 79.9	2.24e2	1.60e2	0.1145	1.090	4.43	4.45	17.5	141	128.8
4	42 13C4-PFOS	503 > 79.9	1.60e2	1.60e2	0.1145	1.000	4.43	4.45	12.5	109	100.0
5	54 Total PFOS	499 > 79.9	3.54e4	2.24e2	0.1145		4.43		1550	14000	

Dataset: U:\Q4.PRO\results\170623M1\170623M1-21.qld

Last Altered: Tuesday, June 27, 2017 13:29:54 Pacific Daylight Time

Printed: Tuesday, June 27, 2017 13:31:31 Pacific Daylight Time

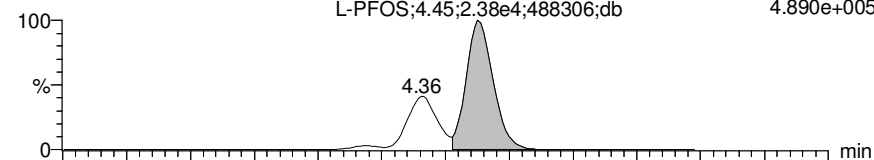
Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

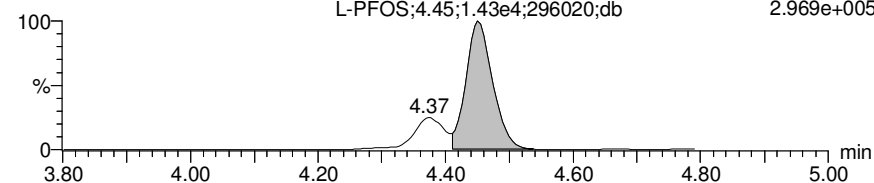
Name: 170623M1\_21, Date: 23-Jun-2017, Time: 14:35:42, ID: 1700681-03@20X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

### L-PFOS

170623M1\_21 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
OF17-MW01-0617 1700681-03@20X OF17-MW01-0617 0.125 499 > 79.9  
L-PFOS;4.45;2.38e4;488306;db 4.890e+005

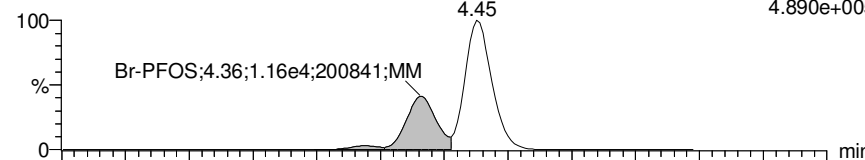


170623M1\_21 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
OF17-MW01-0617 1700681-03@20X OF17-MW01-0617 0.125 499 > 99  
L-PFOS;4.45;1.43e4;296020;db 2.969e+005

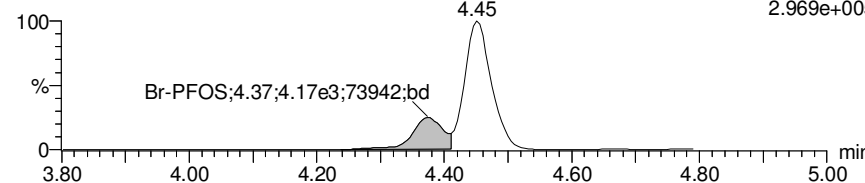


### Br-PFOS

170623M1\_21 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
OF17-MW01-0617 1700681-03@20X OF17-MW01-0617 0.125 499 > 79.9  
Br-PFOS;4.36;1.16e4;200841;MM 4.890e+005

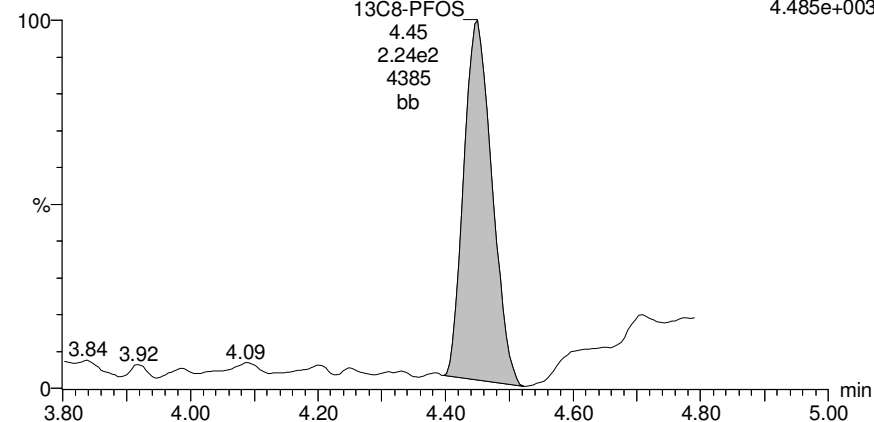


170623M1\_21 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-  
OF17-MW01-0617 1700681-03@20X OF17-MW01-0617 0.125 499 > 99  
Br-PFOS;4.37;4.17e3;73942;bd 2.969e+005



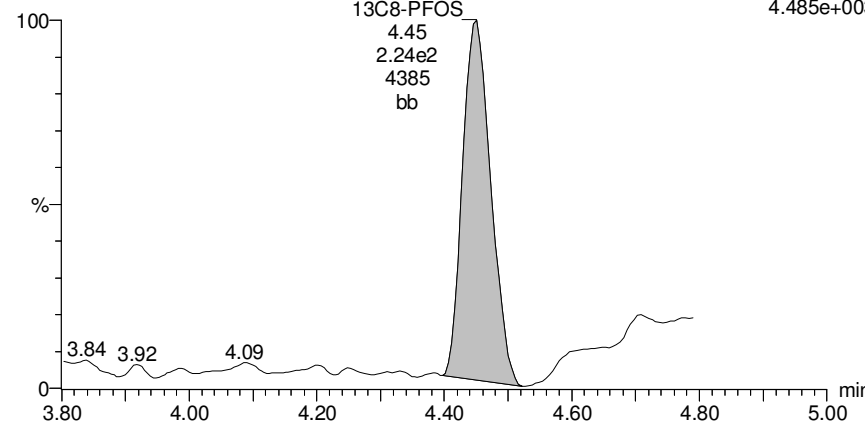
### 13C8-PFOS

170623M1\_21 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-  
OF17-MW01-0617 1700681-03@20X OF17-MW01-0617 0.125 507 > 79.9  
13C8-PFOS 4.45  
2.24e2 4385  
bb 4.485e+003



### 13C8-PFOS

170623M1\_21 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-  
OF17-MW01-0617 1700681-03@20X OF17-MW01-0617 0.125 507 > 79.9  
13C8-PFOS 4.45  
2.24e2 4385  
bb 4.485e+003



Dataset: U:\Q4.PRO\results\170623M1\170623M1-21.qld

Last Altered: Tuesday, June 27, 2017 13:29:54 Pacific Daylight Time

Printed: Tuesday, June 27, 2017 13:31:31 Pacific Daylight Time

Name: 170623M1\_21, Date: 23-Jun-2017, Time: 14:35:42, ID: 1700681-03@20X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

13C8-PFOS

170623M1\_21 Smooth(Mn,1x2)

F31:MRM of 1 channel,ES-

OF17-MW01-0617 1700681-03@20X OF17-MW01-0617 0.125

507 > 79.9

4.485e+003

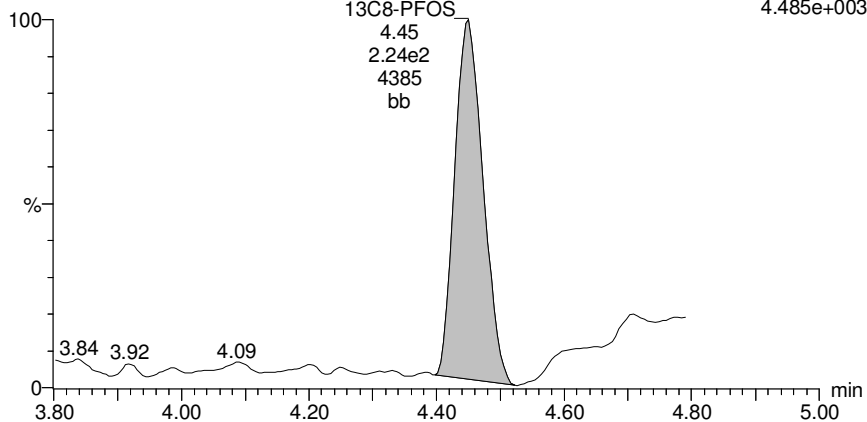
13C8-PFOS

4.45

2.24e2

4385

bb



Dataset: U:\Q4.PRO\results\170623M1\170623M1-21.qld

Last Altered: Tuesday, June 27, 2017 13:29:54 Pacific Daylight Time

Printed: Tuesday, June 27, 2017 13:31:31 Pacific Daylight Time

Name: 170623M1\_21, Date: 23-Jun-2017, Time: 14:35:42, ID: 1700681-03@20X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

13C4-PFOS

170623M1\_21 Smooth(Mn,1x2)

F29:MRM of 1 channel,ES-

OF17-MW01-0617 1700681-03@20X OF17-MW01-0617 0.125

503 > 79.9

3.529e+003

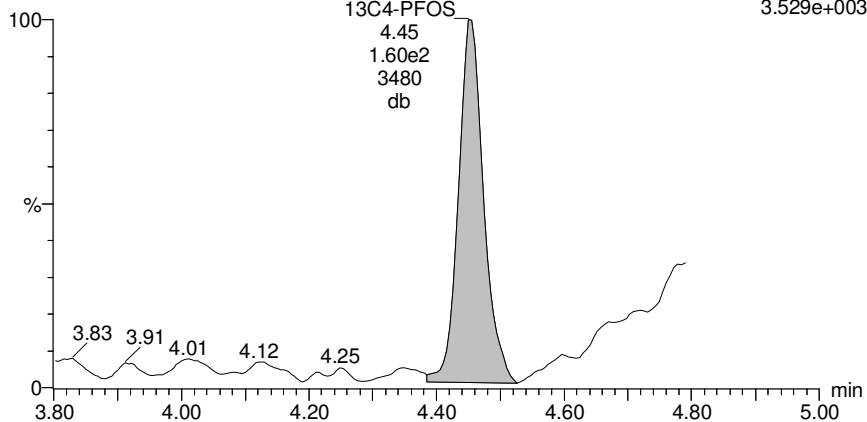
13C4-PFOS

4.45

1.60e2

3480

db





## Quantify Sample Summary Report

MassLynx MassLynx V4.1 SCN 945

Vista Analytical Laboratory

Rev'd: MM 6/27/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_58.qld

Last Altered: Monday, June 19, 2017 13:16:41 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:19:37 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_58, Date: 16-Jun-2017, Time: 09:27:48, ID: 1700681-03@50X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5 PFHpA	363 > 318.9	5.92e3	3.69e2		0.1145	4.07	4.10	201	1390	
2	8 PFOA	413 > 368.7	8.54e3	5.12e2		0.1145	4.42	4.45	209	1840	
3	10 PFOS	499 > 79.9	1.43e4	7.23e1		0.1145	4.80	4.82	2480	12300	
4	23 13C4-PFHpA	367.2 > 321.8	3.69e2	5.72e2	0.254	0.1145	4.07	4.09	3.23	111	101.7
5	26 13C2-PFOA	414.9 > 369.7	5.12e2	4.27e2	1.060	0.1145	4.26	4.45	15.0	123	113.1
6	28 13C8-PFOS	507 > 79.9	7.23e1	4.73e1	0.911	0.1145	4.80	4.82	19.1	183	167.9
7	38 13C5-PFHxA	318 > 272.9	5.72e2	5.72e2	1.000	0.1145	3.66	3.70	5.00	43.7	100.0
8	39 13C3-PFHxS	401.9 > 79.9	9.84e1	9.84e1	1.000	0.1145	4.20	4.22	12.5	109	100.0
9	40 13C8-PFOA	421.3 > 376	4.27e2	4.27e2	1.000	0.1145	4.42	4.45	12.5	109	100.0
10	42 13C4-PFOS	503 > 79.9	4.73e1	4.73e1	1.000	0.1145	4.80	4.82	12.5	109	100.0

ANP 6/23/17

**Quantify Sample Summary Report****MassLynx MassLynx V4.1 SCN 945**

Vista Analytical Laboratory

Rev'd: MM 6/27/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_58.qld

Last Altered: Monday, June 19, 2017 13:16:41 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:19:55 Pacific Daylight Time

**Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12****Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58****Name: 170615M4\_58, Date: 16-Jun-2017, Time: 09:27:48, ID: 1700681-03@50X OF17-MW01-0617 0.125, Description: OF17-MW01-0617**

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	47 Total PFOA	413 > 368.7	8.54e3	5.12e2	0.1145		4.30		209	1840	
2	48 Total PFOS	499 > 79.9	1.43e4	7.23e1	0.1145		4.60		2480	12300	

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_58.qld

Last Altered: Monday, June 19, 2017 13:16:41 Pacific Daylight Time

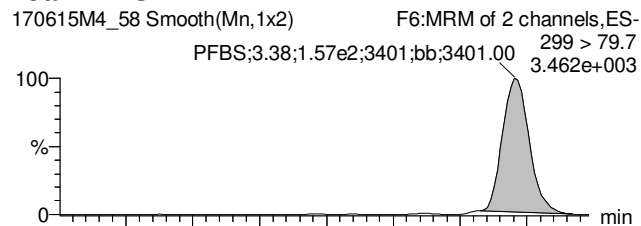
Printed: Monday, June 19, 2017 13:19:55 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

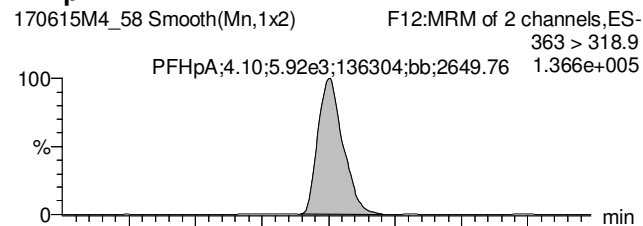
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_58, Date: 16-Jun-2017, Time: 09:27:48, ID: 1700681-03@50X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

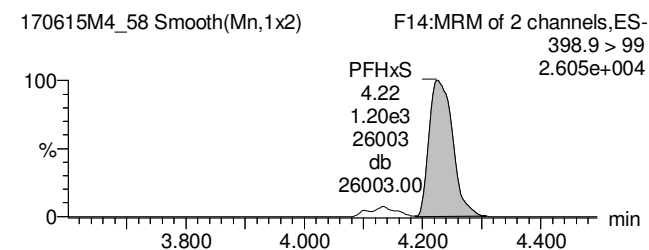
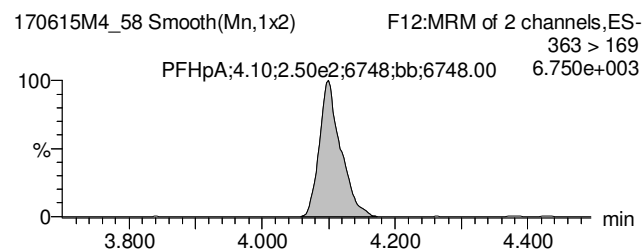
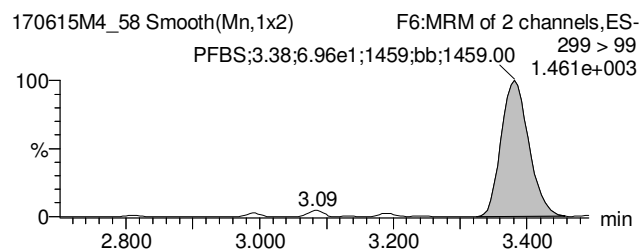
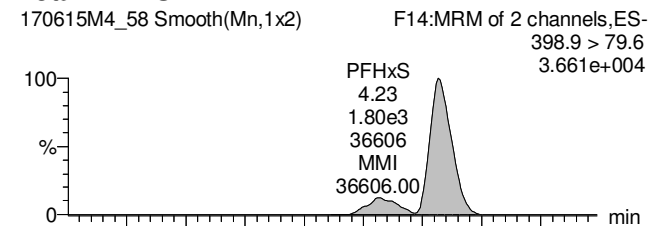
**Total PFBS**



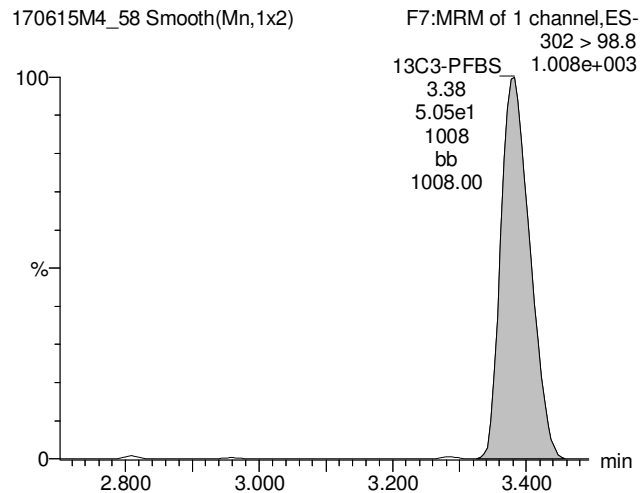
**PFHpA**



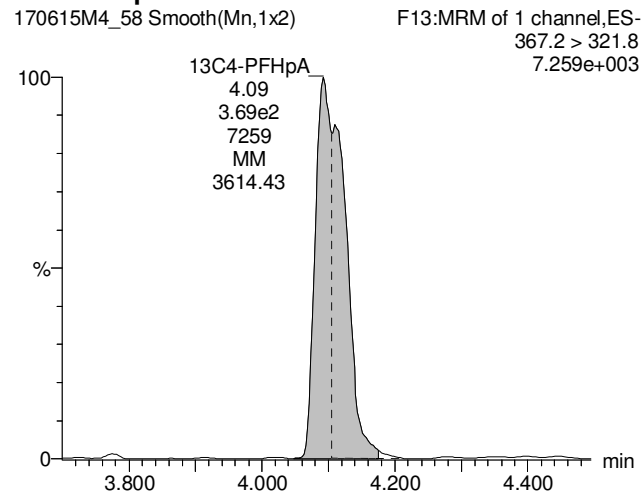
**Total PFHxS**



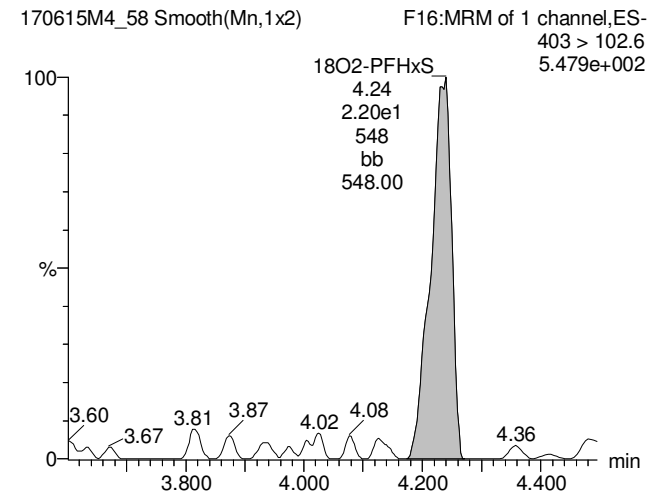
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**



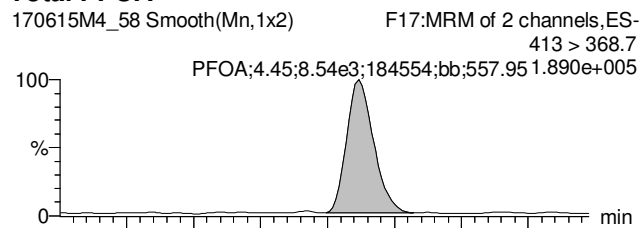
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_58.qld

Last Altered: Monday, June 19, 2017 13:16:41 Pacific Daylight Time

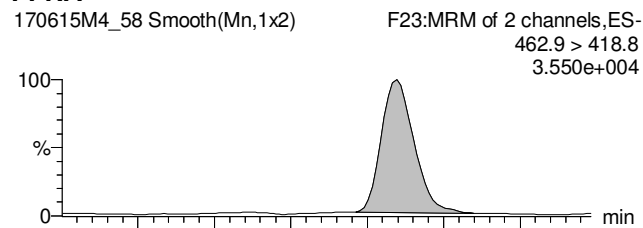
Printed: Monday, June 19, 2017 13:19:55 Pacific Daylight Time

Name: 170615M4\_58, Date: 16-Jun-2017, Time: 09:27:48, ID: 1700681-03@50X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

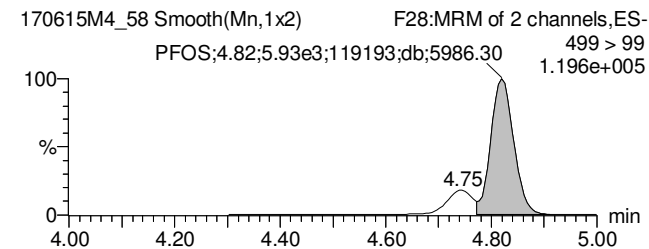
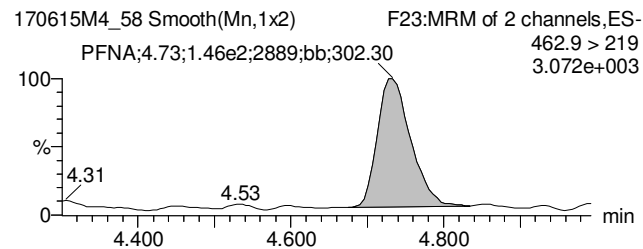
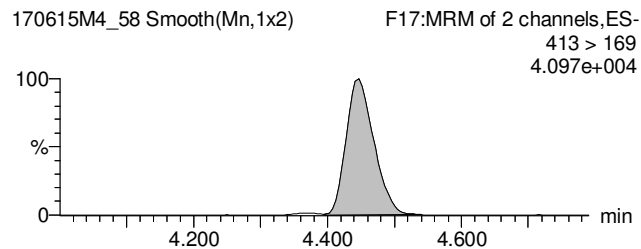
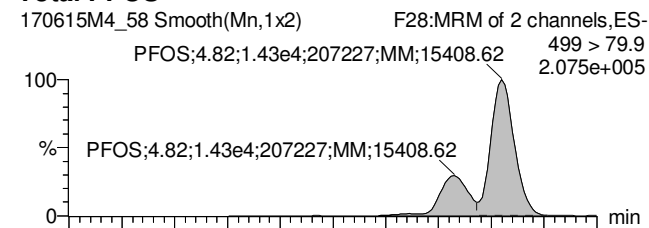
**Total PFOA**



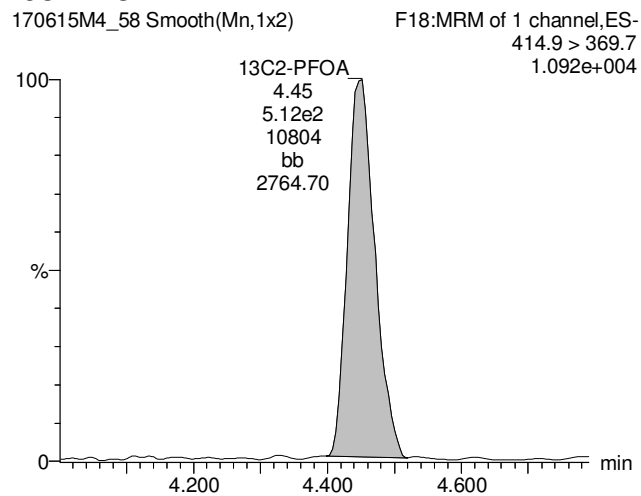
**PFNA**



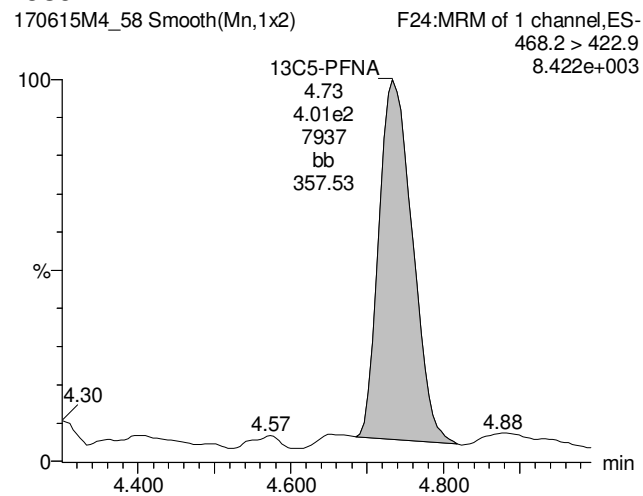
**Total PFOS**



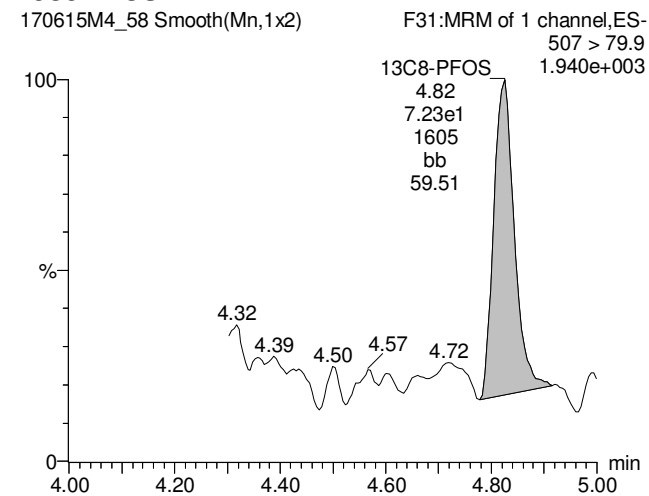
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



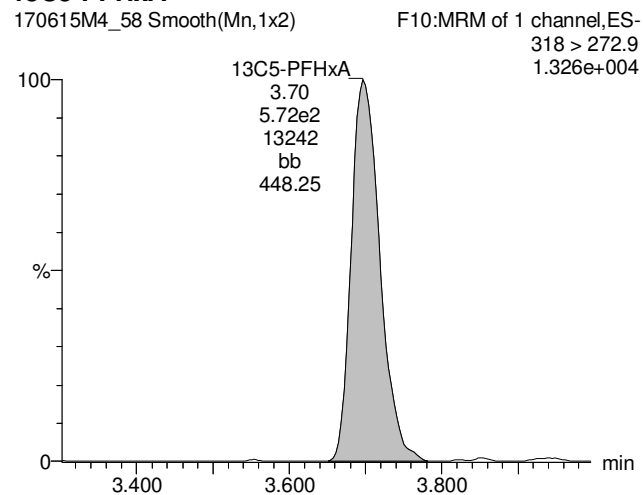
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_58.qld

Last Altered: Monday, June 19, 2017 13:16:41 Pacific Daylight Time

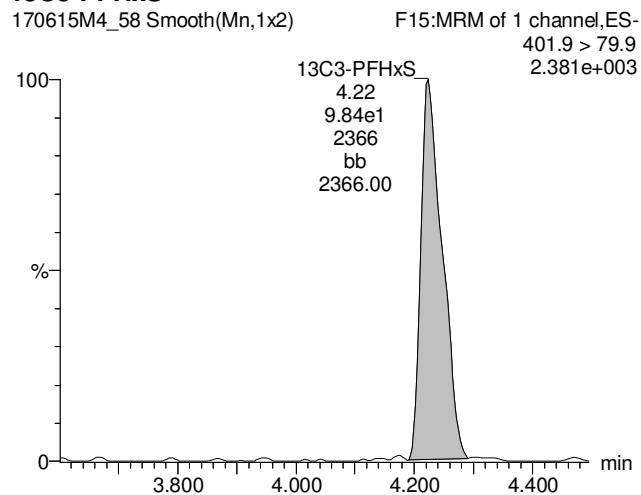
Printed: Monday, June 19, 2017 13:19:55 Pacific Daylight Time

Name: 170615M4\_58, Date: 16-Jun-2017, Time: 09:27:48, ID: 1700681-03@50X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

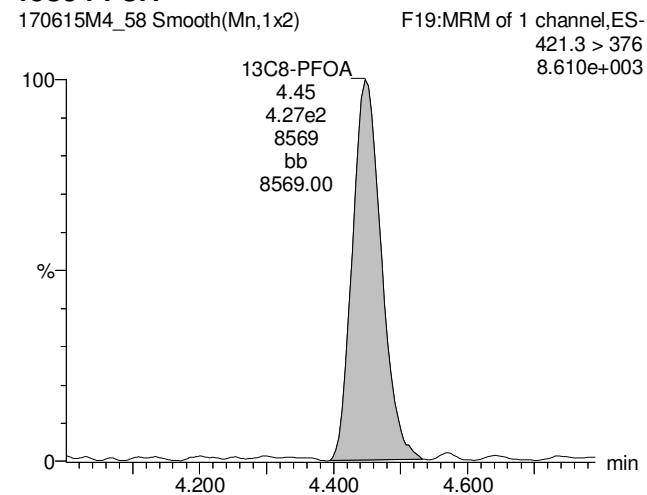
**13C5-PFHxA**



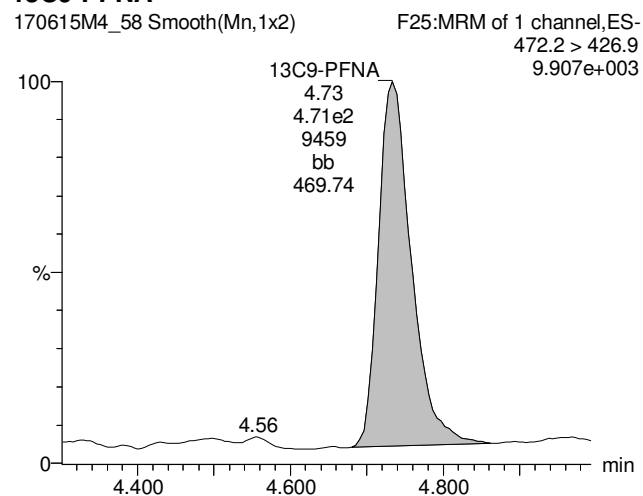
**13C3-PFHxS**



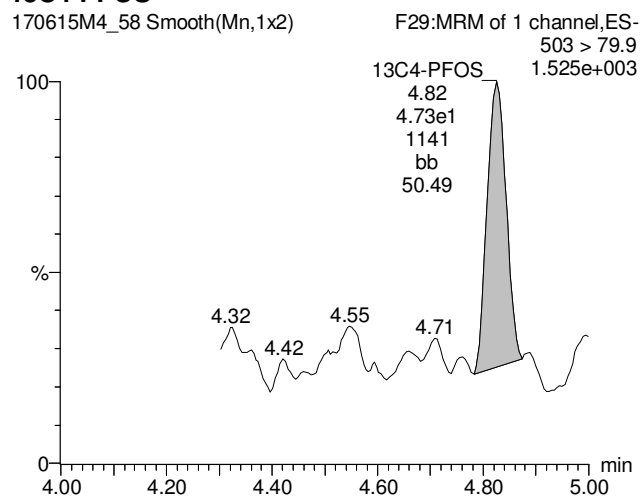
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



**Quantify Sample Summary Report****MassLynx MassLynx V4.1 SCN 945**

Vista Analytical Laboratory

Rev'd: MM 6/27/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_58-UG.qld

Last Altered: Monday, June 19, 2017 13:22:42 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:23:14 Pacific Daylight Time

**Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12**

UNITS ARE IN ug/L

**Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58****Name: 170615M4\_58, Date: 16-Jun-2017, Time: 09:27:48, ID: 1700681-03@50X OF17-MW01-0617 0.125, Description: OF17-MW01-0617**

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	6 PFHxS	398.9 > 79.6	1.80e3	2.20e1		0.1145	4.20	4.23	1.02	4.59	
2	24 18O2-PFHxS	403 > 102.6	2.20e1	9.84e1	0.331	0.1145	4.20	4.24	0.00280	0.0738	67.6
3	39 13C3-PFHxS	401.9 > 79.9	9.84e1	9.84e1	1.000	0.1145	4.20	4.22	0.0125	0.109	100.0
4	46 Total PFHxS	398.9 > 79.6	1.80e3	2.20e1		0.1145	4.10		1.02	4.59	

AP 6/19/2017

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_58-UG.qld

Last Altered: Monday, June 19, 2017 13:22:42 Pacific Daylight Time

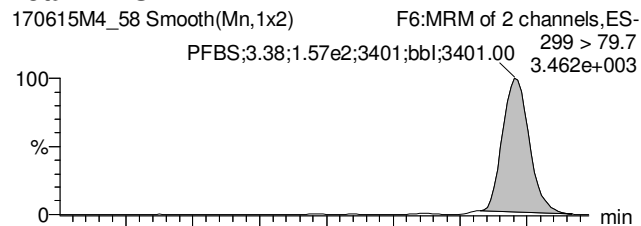
Printed: Monday, June 19, 2017 13:23:14 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

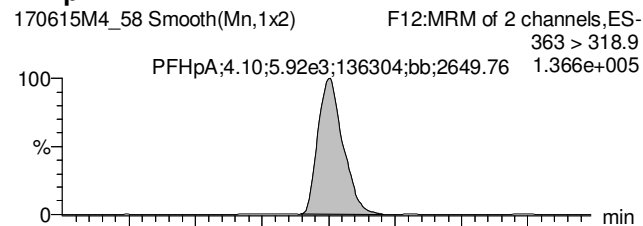
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_58, Date: 16-Jun-2017, Time: 09:27:48, ID: 1700681-03@50X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

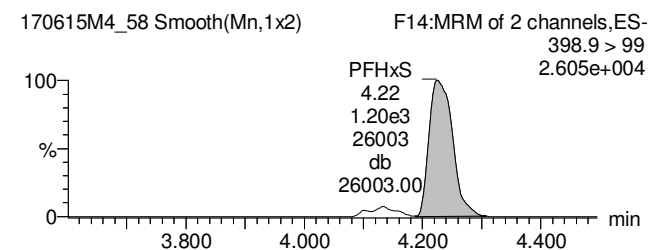
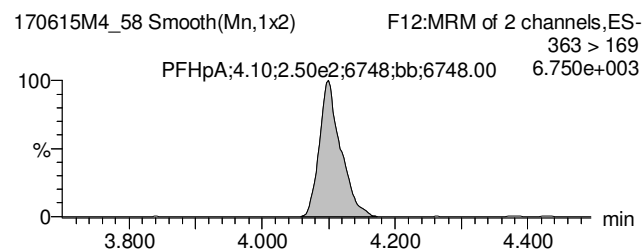
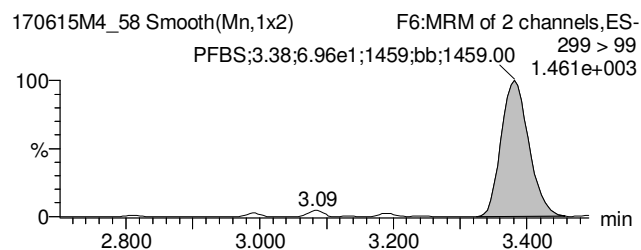
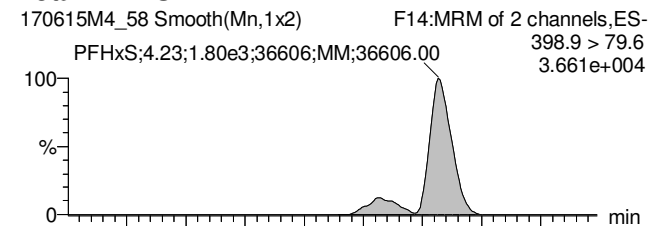
**Total PFBS**



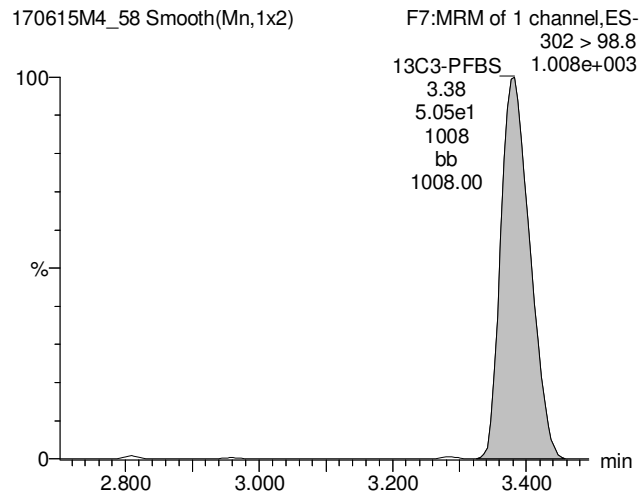
**PFHpA**



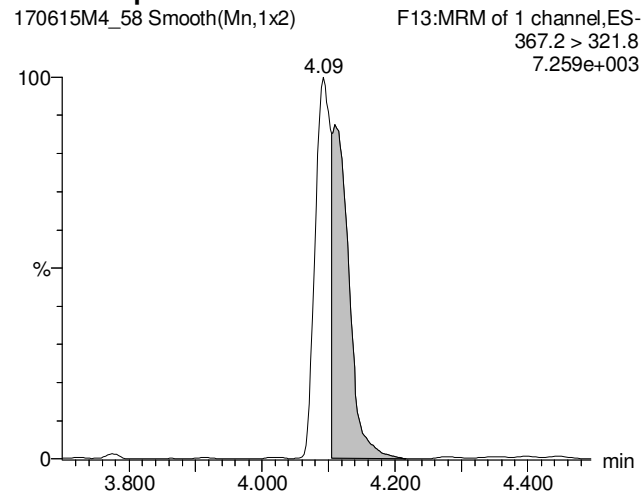
**Total PFHxS**



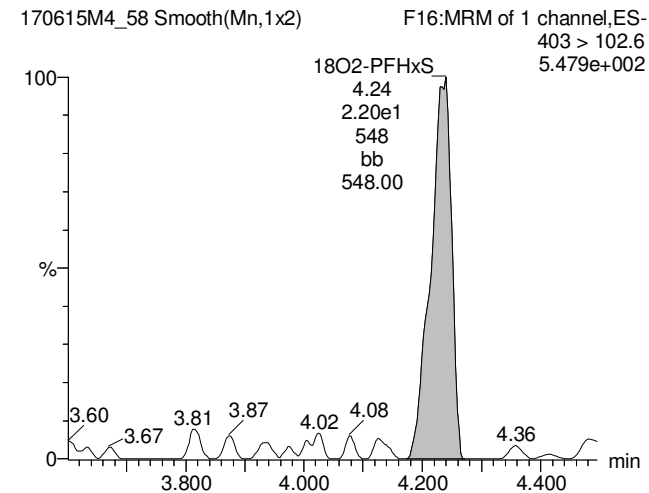
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**



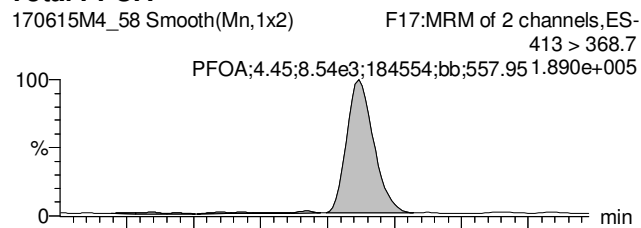
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_58-UG.qld

Last Altered: Monday, June 19, 2017 13:22:42 Pacific Daylight Time

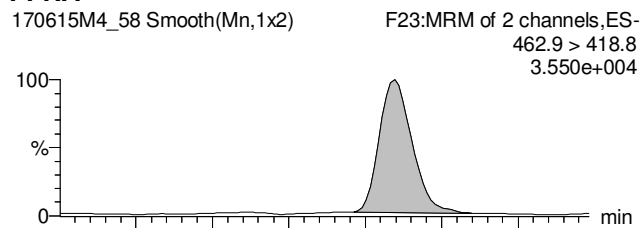
Printed: Monday, June 19, 2017 13:23:14 Pacific Daylight Time

Name: 170615M4\_58, Date: 16-Jun-2017, Time: 09:27:48, ID: 1700681-03@50X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

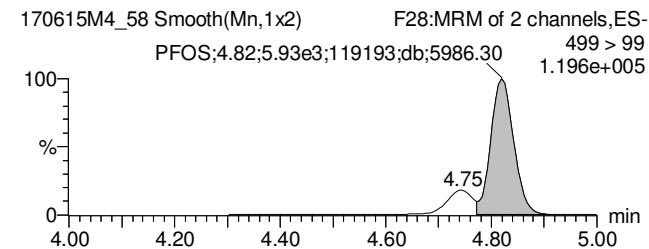
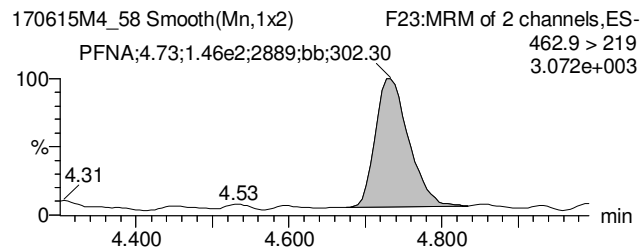
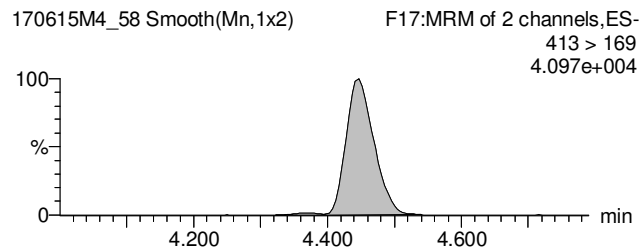
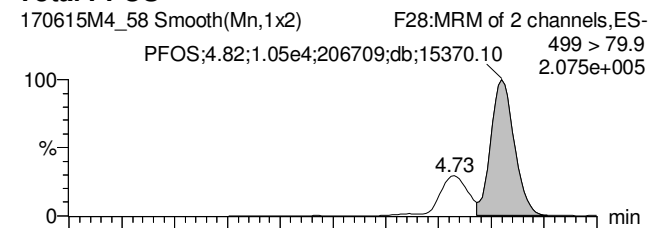
**Total PFOA**



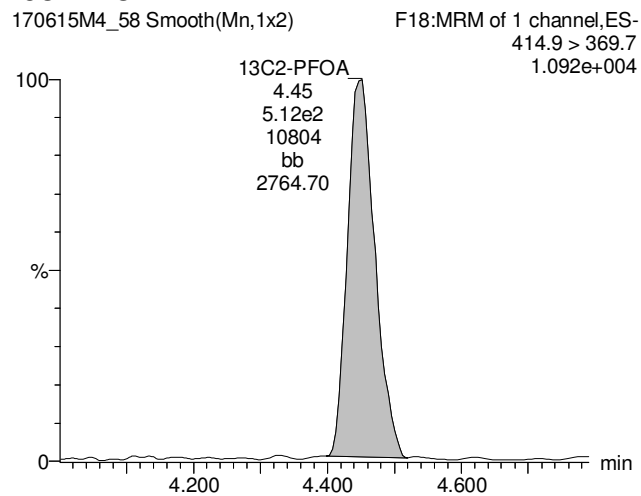
**PFNA**



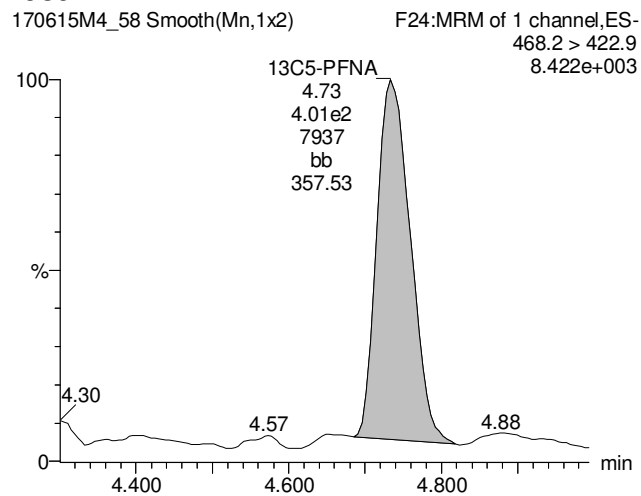
**Total PFOS**



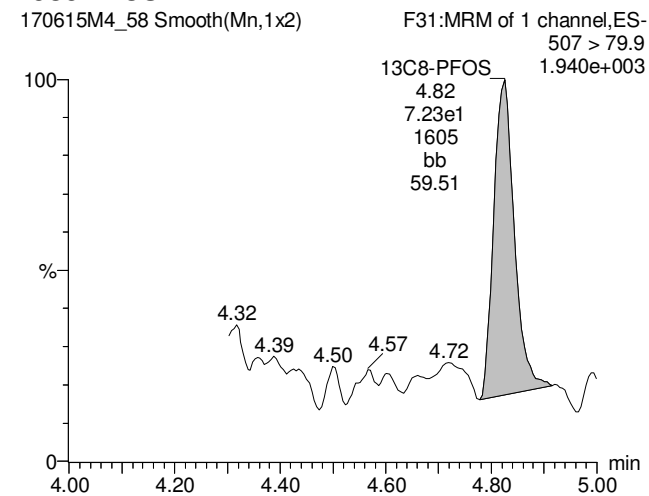
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**





Dataset: U:\Q4.PRO\results\170615M4\170615M4\_58-UG.qld

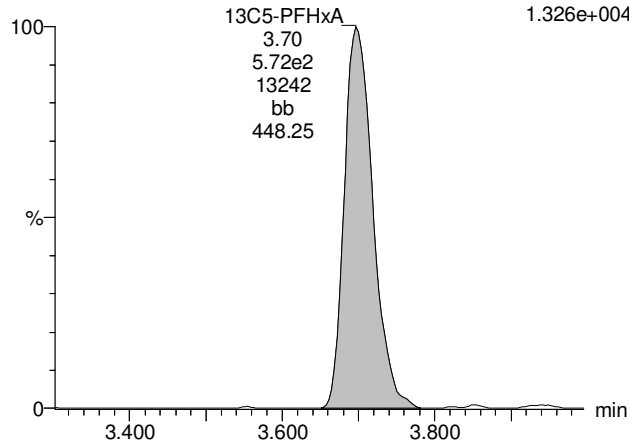
Last Altered: Monday, June 19, 2017 13:22:42 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:23:14 Pacific Daylight Time

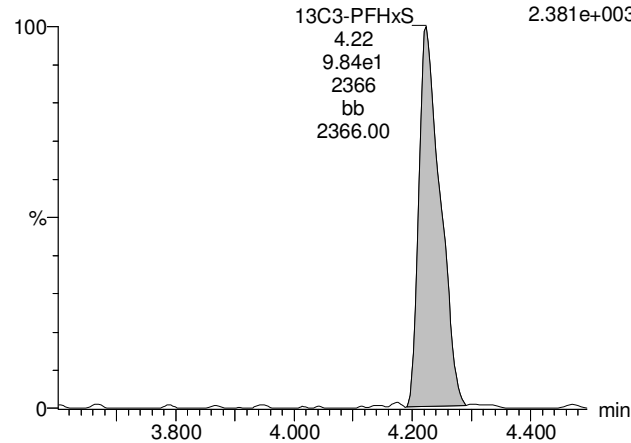
Name: 170615M4\_58, Date: 16-Jun-2017, Time: 09:27:48, ID: 1700681-03@50X OF17-MW01-0617 0.125, Description: OF17-MW01-0617

**13C5-PFHxA**

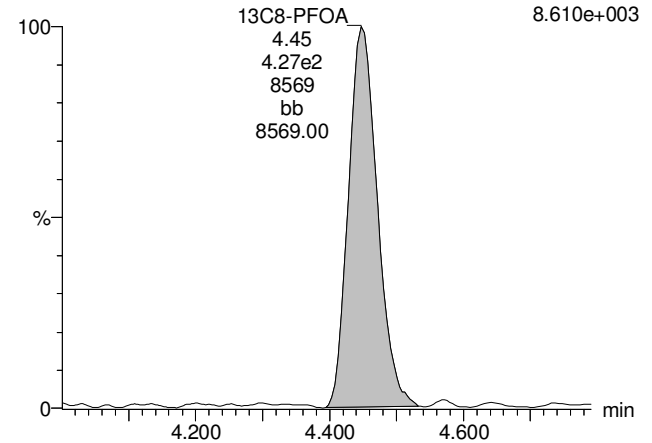
170615M4\_58 Smooth(Mn,1x2)

F10:MRM of 1 channel,ES-  
318 > 272.9  
1.326e+004**13C3-PFHxS**

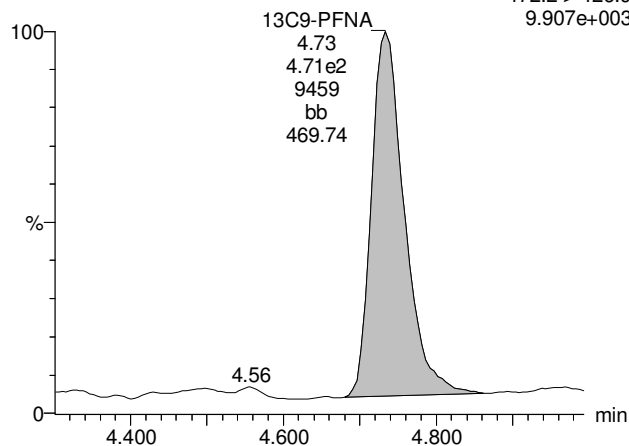
170615M4\_58 Smooth(Mn,1x2)

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
2.381e+003**13C8-PFOA**

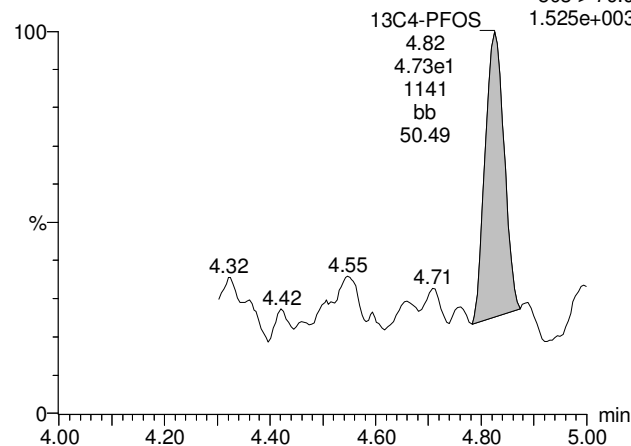
170615M4\_58 Smooth(Mn,1x2)

F19:MRM of 1 channel,ES-  
421.3 > 376  
8.610e+003**13C9-PFNA**

170615M4\_58 Smooth(Mn,1x2)

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
9.907e+003**13C4-PFOS**

170615M4\_58 Smooth(Mn,1x2)

F29:MRM of 1 channel,ES-  
503 > 79.9  
1.525e+003

Dataset: U:\Q4.PRO\results\170608m5\170608M5-44.qld

Last Altered: Friday, June 16, 2017 15:09:24 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:09:32 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_44, Date: 09-Jun-2017, Time: 08:27:03, ID: 1700681-04 OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	1.06e4	2.92e3		0.1217	3.30	3.14	45.4	184	
2	5 PFHpA	363 > 318.9	3.60e5	2.34e4		0.1217	4.06	3.95	192	1320 E	
3	6 PFHxS	398.9 > 79.6	1.25e5	2.13e3		0.1217	4.20	4.07	733	2970 E	
4	8 PFOA	413 > 368.7	4.65e5	2.89e4		0.1217	4.36	4.27	201	1690 E	
5	9 PFNA	462.9 > 418.8	8.87e4	1.93e4		0.1217	4.68	4.57	57.5	388	
6	10 PFOS	499 > 79.9	8.32e5	3.94e3		0.1217	4.70	4.66	2640	21000 E	
7	21 13C3-PFBS	302 > 98.8	2.92e3	3.11e4	0.024	0.1217	3.30	3.14	0.470	161	156.5
8	23 13C4-PFHpA	367.2 > 321.8	2.34e4	3.11e4	0.235	0.1217	4.06	3.95	3.77	132	128.3
9	24 18O2-PFHxS	403 > 102.6	2.13e3	4.71e3	0.345	0.1217	4.20	4.07	5.65	135	131.0
10	25 13C2-6:2 FTS	429.1 > 408.9	9.20e3	6.06e3	0.329	0.1217	4.30	4.26	7.60	190	184.6
11	26 13C2-PFOA	414.9 > 369.7	2.89e4	2.05e4	1.148	0.1217	4.40	4.27	17.6	126	122.5
12	27 13C5-PFNA	468.2 > 422.9	1.93e4	2.15e4	0.724	0.1217	4.68	4.57	11.2	127	123.7
13	28 13C8-PFOS	507 > 79.9	3.94e3	3.38e3	0.868	0.1217	4.78	4.66	14.6	138	134.3
14	38 13C5-PFHxA	318 > 272.9	3.11e4	3.11e4	1.000	0.1217	3.67	3.52	5.00	41.1	100.0
15	39 13C3-PFHxS	401.9 > 79.9	4.71e3	4.71e3	1.000	0.1217	4.20	4.07	12.5	103	100.0
16	40 13C8-PFOA	421.3 > 376	2.05e4	2.05e4	1.000	0.1217	4.40	4.27	12.5	103	100.0
17	41 13C9-PFNA	472.2 > 426.9	2.15e4	2.15e4	1.000	0.1217	4.68	4.57	12.5	103	100.0
18	42 13C4-PFOS	503 > 79.9	3.38e3	3.38e3	1.000	0.1217	4.78	4.66	12.5	103	100.0
19	43 13C6-PFDA	519.1 > 473.7	2.15e4	2.15e4	1.000	0.1217	4.95	4.84	12.5	103	100.0
20	44 13C7-PFUnA	570.1 > 524.8	2.12e4	2.12e4	1.000	0.1217	5.20	5.08	12.5	103	100.0
21	45 Total PFBS	299 > 79.7	1.06e4	2.92e3		0.1217	3.30		45.4	184	
22	46 Total PFHxS	398.9 > 79.6	1.25e5	2.13e3		0.1217	4.05		733	2970 E	
23	47 Total PFOA	413 > 368.7	4.69e5	2.89e4		0.1217	4.30		203	1700 E	
24	48 Total PFOS	499 > 79.9	8.32e5	3.94e3		0.1217	4.60		2640	21000 E	

Dataset: U:\Q4.PRO\results\170608m5\170608M5-44.qld

Last Altered: Friday, June 16, 2017 15:09:24 Pacific Daylight Time

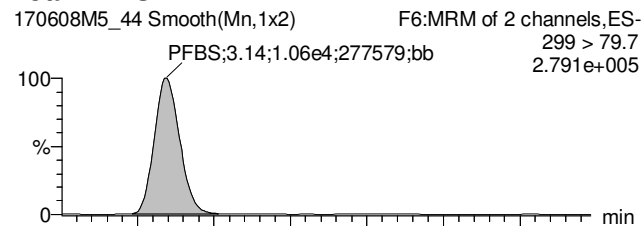
Printed: Friday, June 16, 2017 15:09:32 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

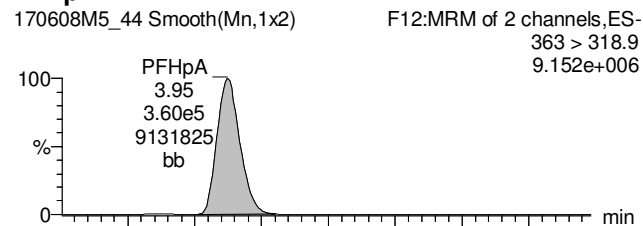
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_44, Date: 09-Jun-2017, Time: 08:27:03, ID: 1700681-04 OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617

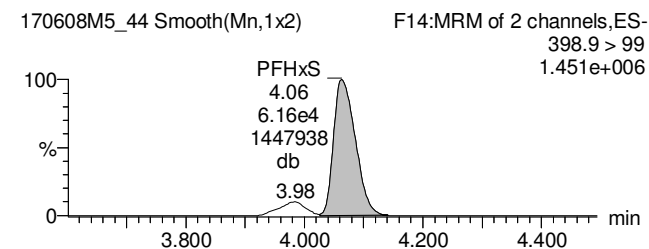
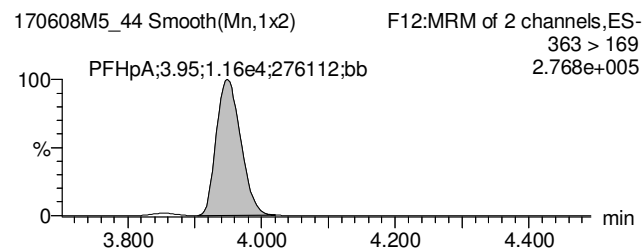
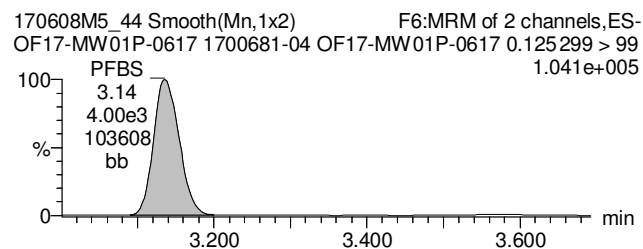
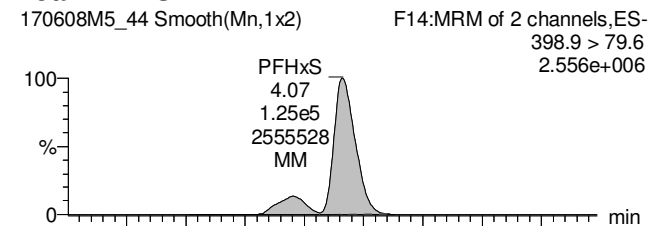
**Total PFBS**



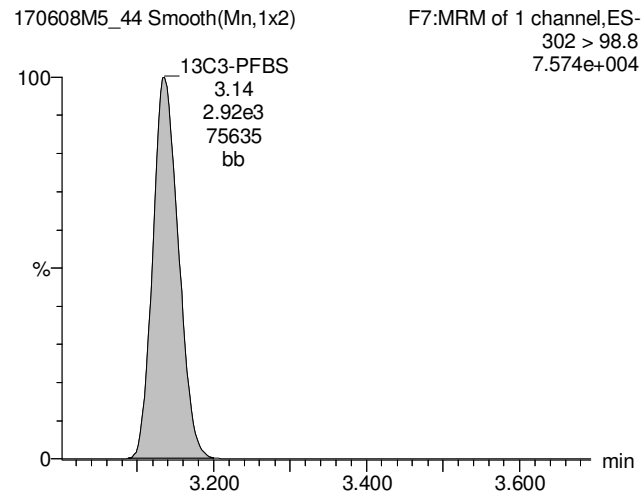
**PFHpA**



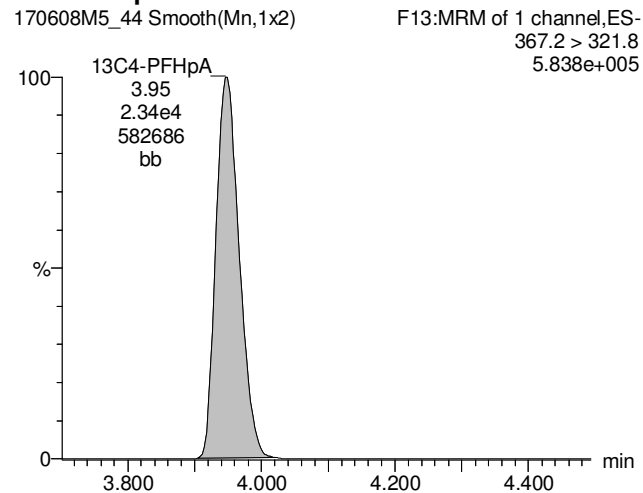
**Total PFHxS**



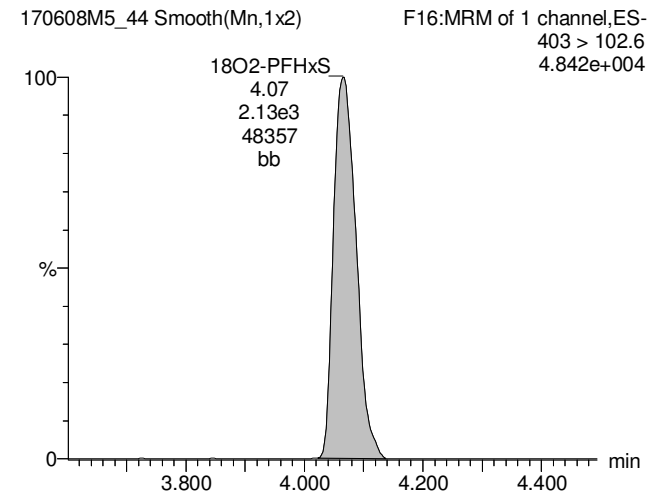
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**



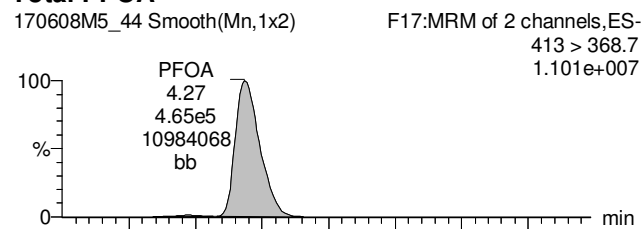
Dataset: U:\Q4.PRO\results\170608m5\170608M5-44.qld

Last Altered: Friday, June 16, 2017 15:09:24 Pacific Daylight Time

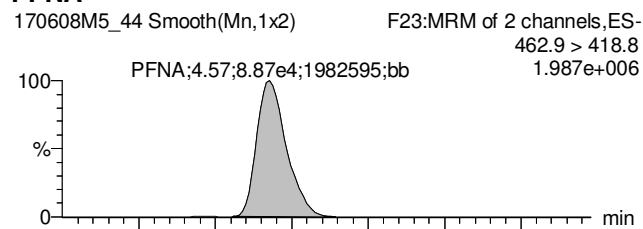
Printed: Friday, June 16, 2017 15:09:32 Pacific Daylight Time

Name: 170608M5\_44, Date: 09-Jun-2017, Time: 08:27:03, ID: 1700681-04 OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617

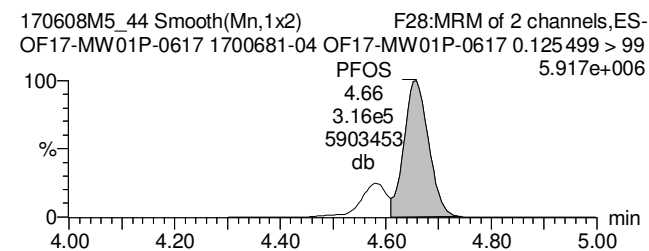
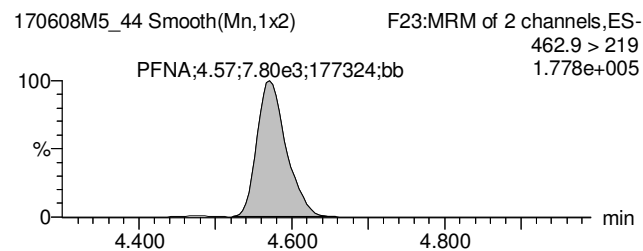
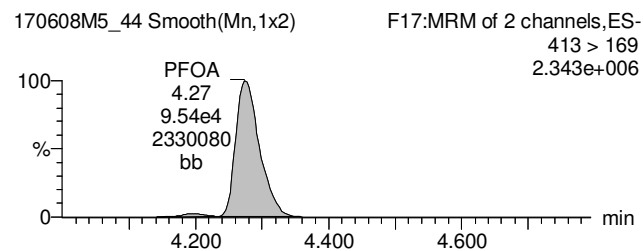
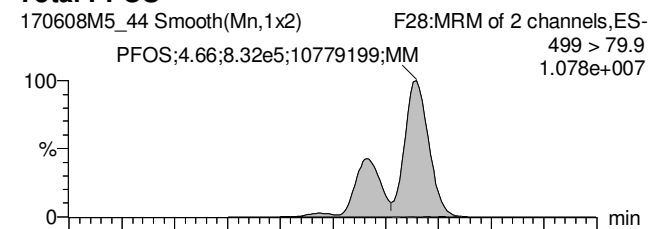
**Total PFOA**



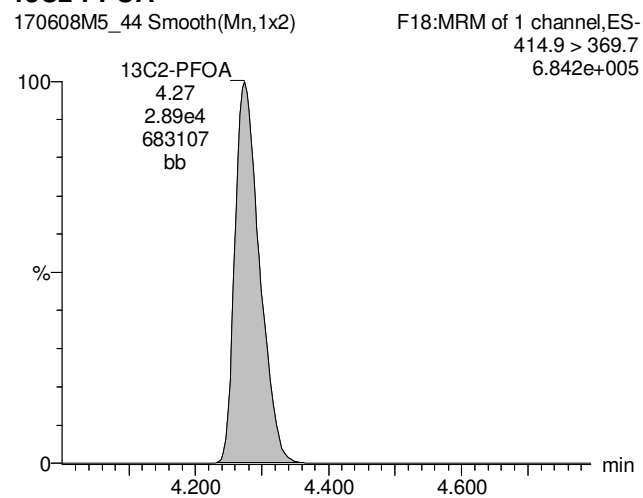
**PFNA**



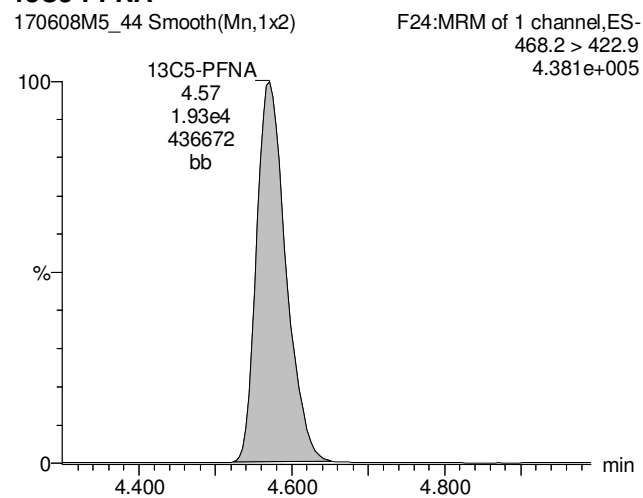
**Total PFOS**



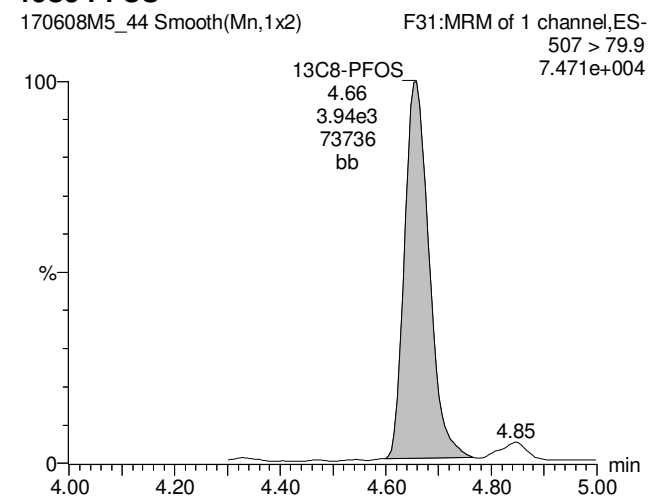
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



Dataset: U:\Q4.PRO\results\170608m5\170608M5-44.qld

Last Altered: Friday, June 16, 2017 15:09:24 Pacific Daylight Time

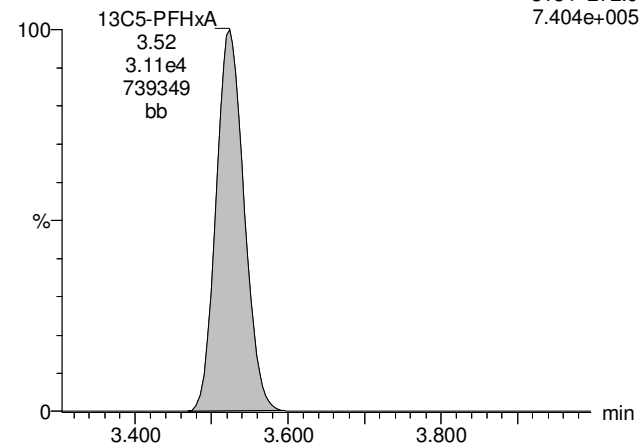
Printed: Friday, June 16, 2017 15:09:32 Pacific Daylight Time

Name: 170608M5\_44, Date: 09-Jun-2017, Time: 08:27:03, ID: 1700681-04 OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617

**13C5-PFHxA**

170608M5\_44 Smooth(Mn,1x2)

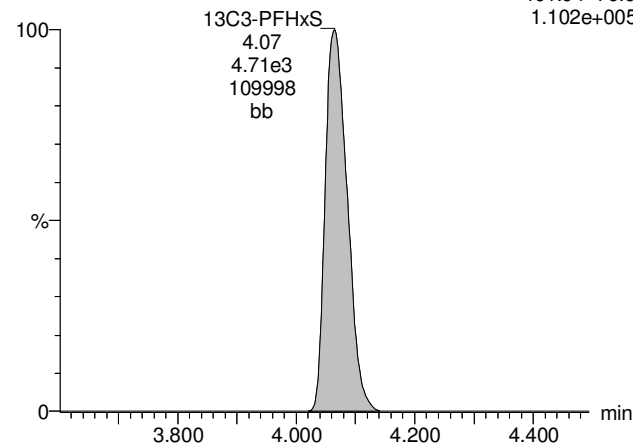
F10:MRM of 1 channel,ES-  
318 > 272.9  
7.404e+005



**13C3-PFHxS**

170608M5\_44 Smooth(Mn,1x2)

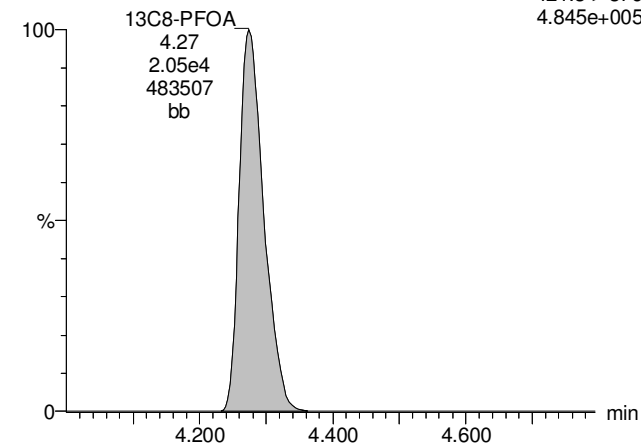
F15:MRM of 1 channel,ES-  
401.9 > 79.9  
1.102e+005



**13C8-PFOA**

170608M5\_44 Smooth(Mn,1x2)

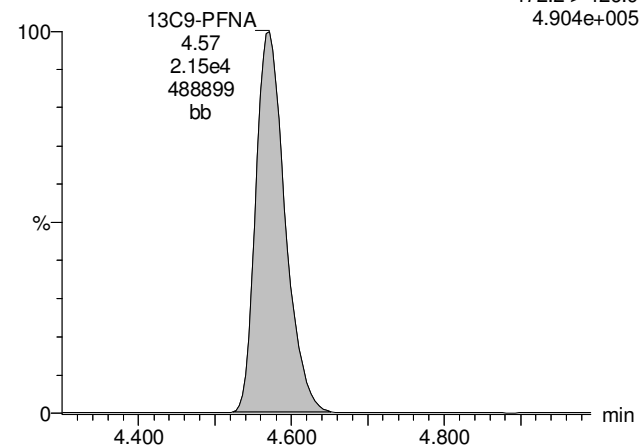
F19:MRM of 1 channel,ES-  
421.3 > 376  
4.845e+005



**13C9-PFNA**

170608M5\_44 Smooth(Mn,1x2)

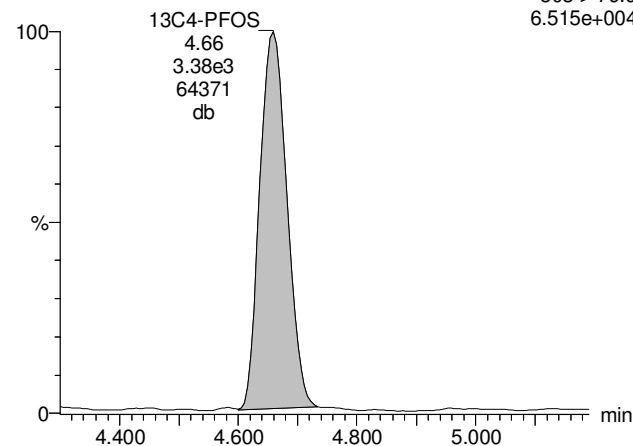
F25:MRM of 1 channel,ES-  
472.2 > 426.9  
4.904e+005



**13C4-PFOS**

170608M5\_44 Smooth(Mn,1x2)

F29:MRM of 1 channel,ES-  
503 > 79.9  
6.515e+004



**Quantify Sample Summary Report****MassLynx MassLynx V4.1 SCN 945**

Vista Analytical Laboratory

Rev'd: MM 6/27/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_43.qld

Last Altered: Monday, June 19, 2017 13:27:55 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:29:16 Pacific Daylight Time

**Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12****Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58****Name: 170615M4\_43, Date: 16-Jun-2017, Time: 06:22:41, ID: 1700681-04@20X OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617**

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5 PFHpA	363 > 318.9	3.40e4	1.85e3		0.1217	4.07	4.10	229	1500	
2	8 PFOA	413 > 368.7	4.20e4	2.58e3		0.1217	4.42	4.45	204	1700	
3	10 PFOS	499 > 79.9	5.21e4	2.21e2		0.1217	4.80	4.82	2950	13000	
4	23 13C4-PFHpA	367.2 > 321.8	1.85e3	2.92e3	0.254	0.1217	4.07	4.11	3.18	103	100.0
5	26 13C2-PFOA	414.9 > 369.7	2.58e3	2.16e3	1.060	0.1217	4.26	4.45	14.9	115	112.4
6	28 13C8-PFOS	507 > 79.9	2.21e2	2.00e2	0.911	0.1217	4.80	4.82	13.8	124	121.1
7	38 13C5-PFHxA	318 > 272.9	2.92e3	2.92e3	1.000	0.1217	3.66	3.70	5.00	41.1	100.0
8	39 13C3-PFHxS	401.9 > 79.9	4.15e2	4.15e2	1.000	0.1217	4.20	4.23	12.5	103	100.0
9	40 13C8-PFOA	421.3 > 376	2.16e3	2.16e3	1.000	0.1217	4.42	4.45	12.5	103	100.0
10	42 13C4-PFOS	503 > 79.9	2.00e2	2.00e2	1.000	0.1217	4.80	4.82	12.5	103	100.0

AP 6/19/2017

**Quantify Sample Summary Report****MassLynx MassLynx V4.1 SCN 945**

Vista Analytical Laboratory

Rev'd: MM 6/27/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_43.qld

Last Altered: Monday, June 19, 2017 13:27:55 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:29:29 Pacific Daylight Time

**Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12****Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58****Name: 170615M4\_43, Date: 16-Jun-2017, Time: 06:22:41, ID: 1700681-04@20X OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617**

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	47 Total PFOA	413 > 368.7	4.24e4	2.58e3	0.1217		4.30		206	1710	
2	48 Total PFOS	499 > 79.9	5.21e4	2.21e2	0.1217		4.60		2950	13000	

AP 6/19/2017

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_43.qld

Last Altered: Monday, June 19, 2017 13:27:55 Pacific Daylight Time

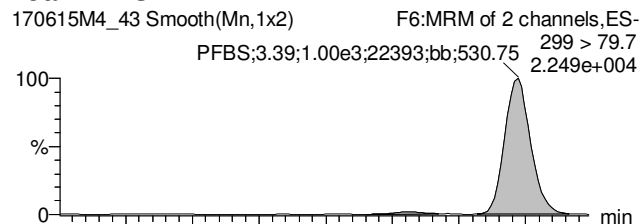
Printed: Monday, June 19, 2017 13:29:29 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

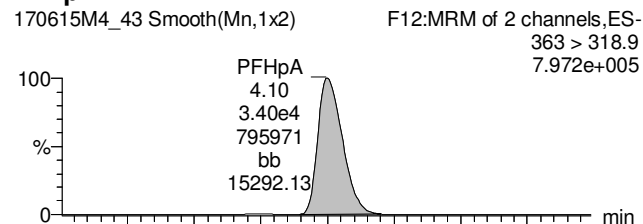
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_43, Date: 16-Jun-2017, Time: 06:22:41, ID: 1700681-04@20X OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617

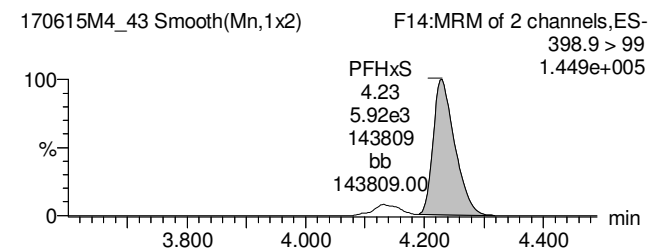
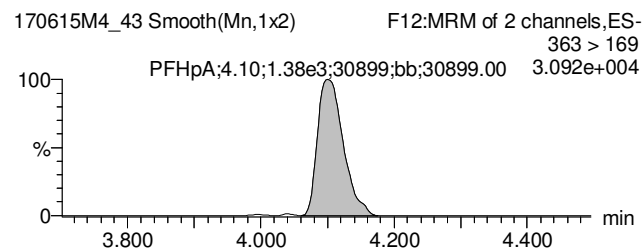
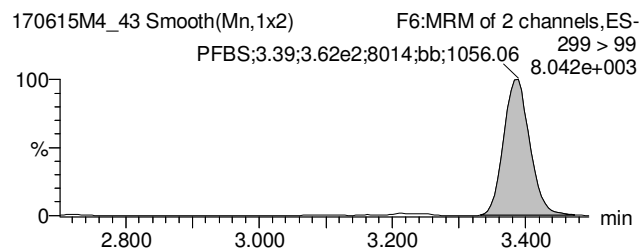
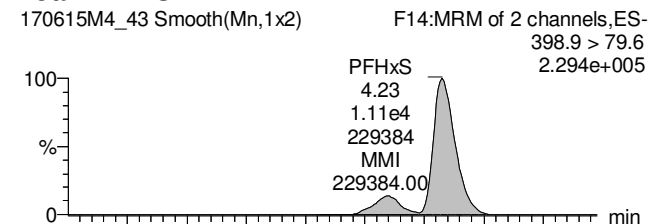
**Total PFBS**



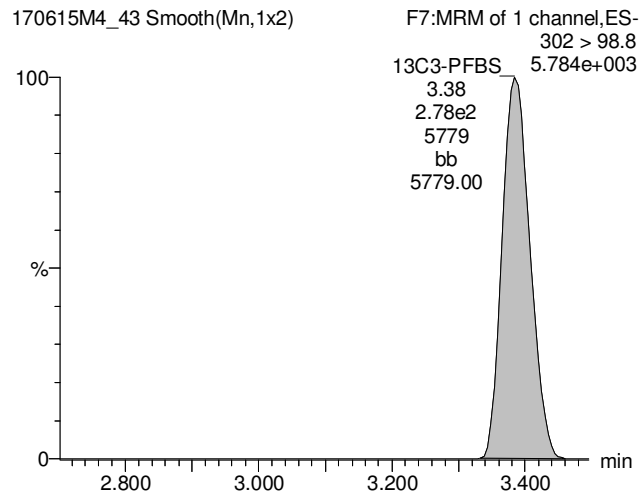
**PFHpA**



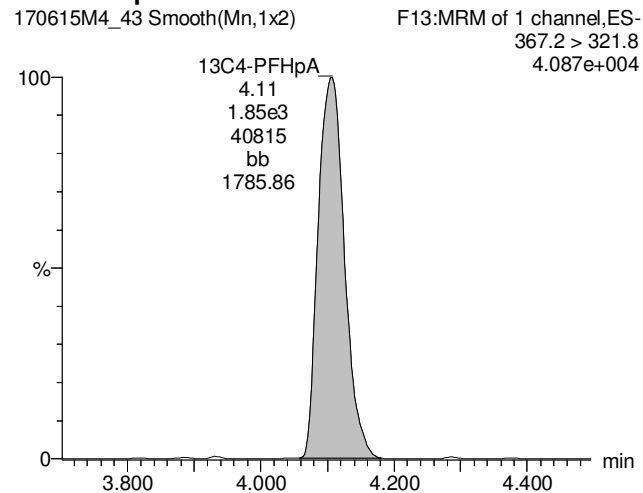
**Total PFHxS**



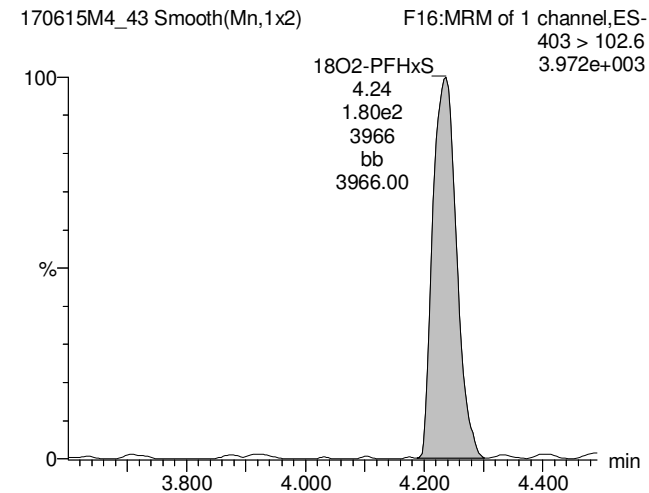
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**





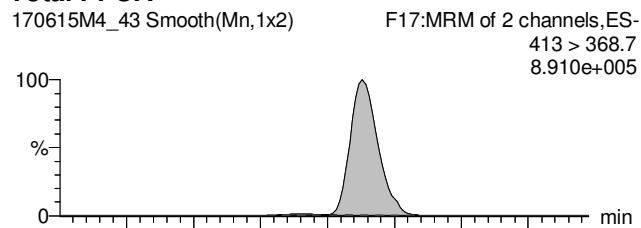
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Last Altered: Monday, June 19, 2017 13:27:55 Pacific Daylight Time

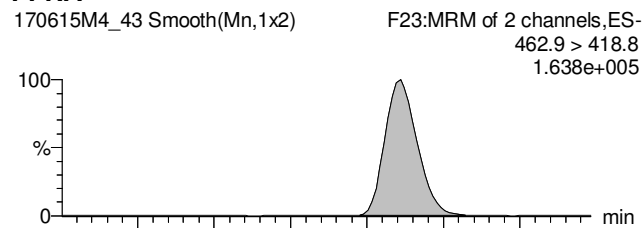
Printed: Monday, June 19, 2017 13:29:29 Pacific Daylight Time

Name: 170615M4\_43, Date: 16-Jun-2017, Time: 06:22:41, ID: 1700681-04@20X OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617

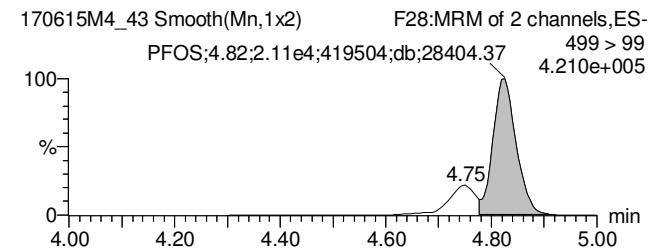
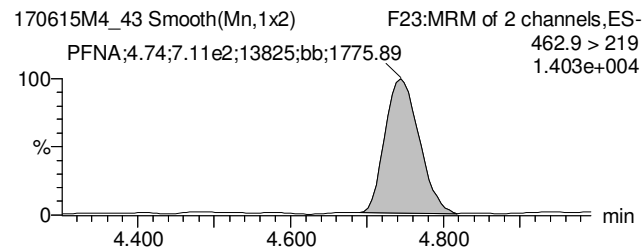
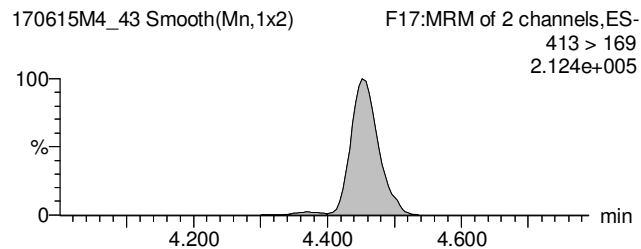
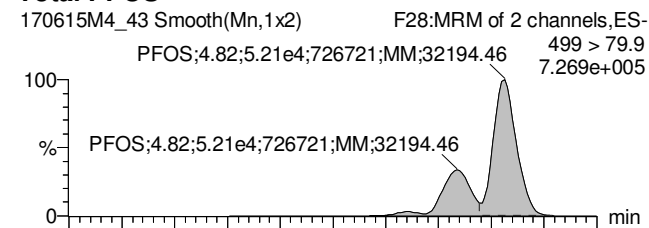
**Total PFOA**



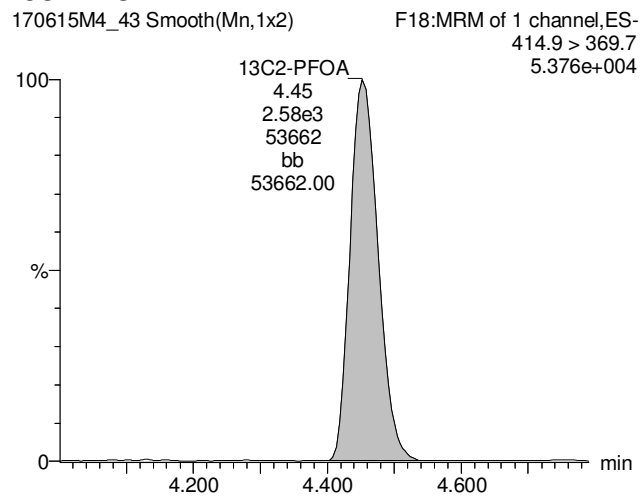
**PFNA**



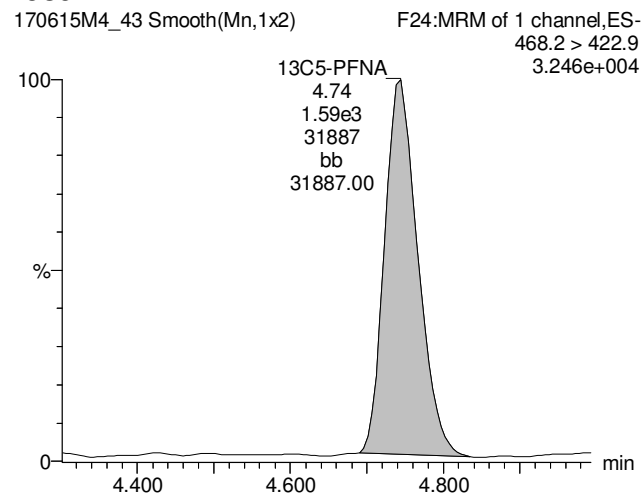
**Total PFOS**



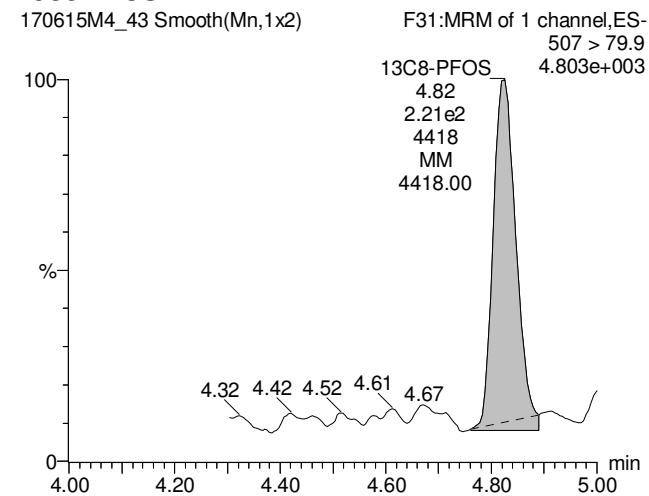
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



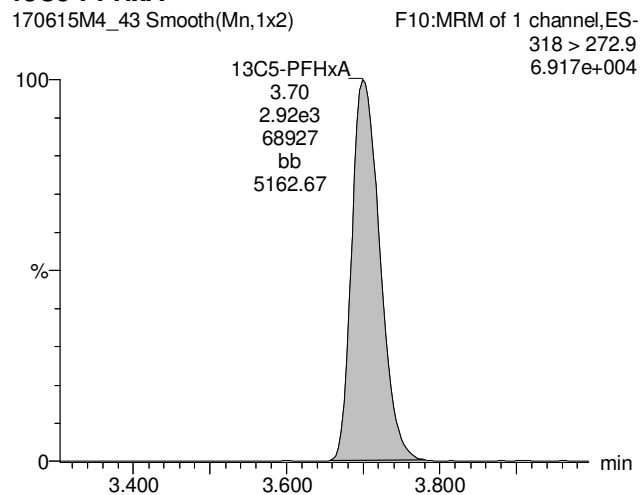
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_43.qld

Last Altered: Monday, June 19, 2017 13:27:55 Pacific Daylight Time

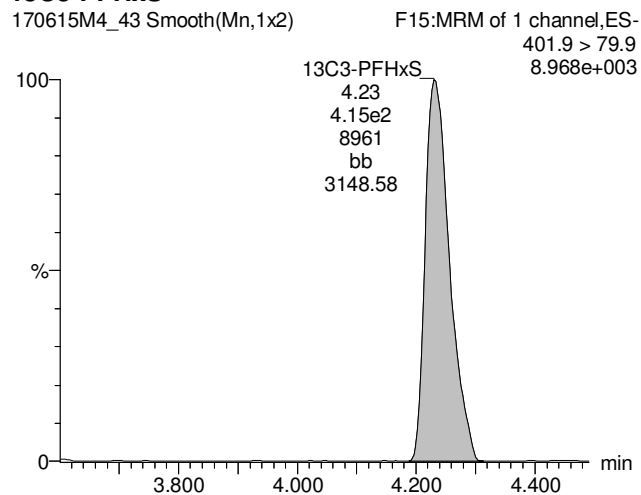
Printed: Monday, June 19, 2017 13:29:29 Pacific Daylight Time

Name: 170615M4\_43, Date: 16-Jun-2017, Time: 06:22:41, ID: 1700681-04@20X OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617

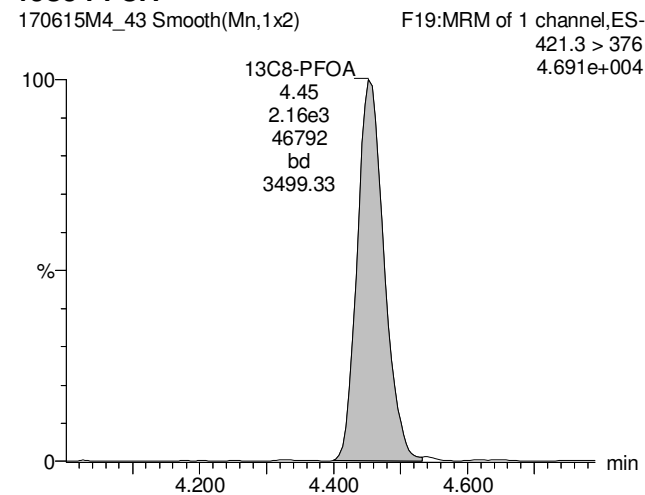
**13C5-PFHxA**



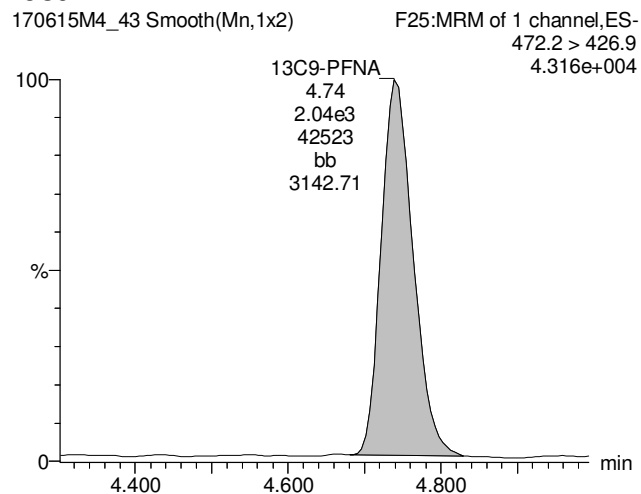
**13C3-PFHxS**



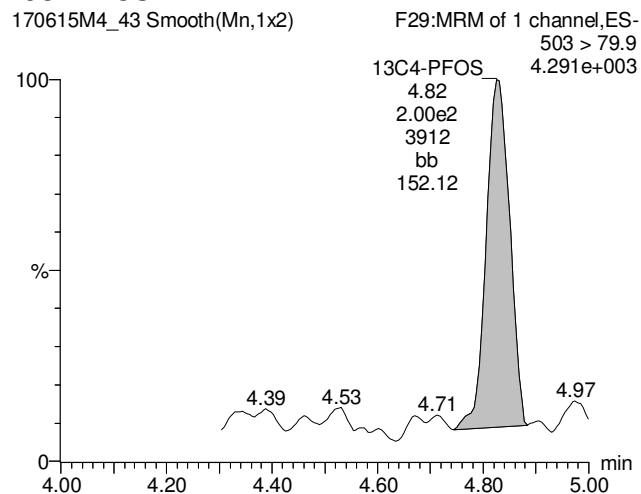
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



**Quantify Sample Summary Report****MassLynx MassLynx V4.1 SCN 945**

Vista Analytical Laboratory

Rev'd: MM 6/27/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_42.qld

Last Altered: Monday, June 19, 2017 13:34:22 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:46:40 Pacific Daylight Time

**Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12**

UNITS ARE IN ug/L

**Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58****Name: 170615M4\_42, Date: 16-Jun-2017, Time: 06:10:59, ID: 1700681-04@50X OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617**

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	6 PFHxS	398.9 > 79.6	3.87e3	5.63e1		0.1217	4.20	4.24	0.859	3.64	
2	24 18O2-PFHxS	403 > 102.6	5.63e1	1.53e2	0.331	0.1217	4.20	4.24	0.00461	0.114	111.4
3	39 13C3-PFHxS	401.9 > 79.9	1.53e2	1.53e2	1.000	0.1217	4.20	4.23	0.0125	0.103	100.0
4	46 Total PFHxS	398.9 > 79.6	3.87e3	5.63e1		0.1217	4.10		0.859	3.64	

AP 6/19/2017

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_42.qld

Last Altered: Monday, June 19, 2017 13:34:22 Pacific Daylight Time

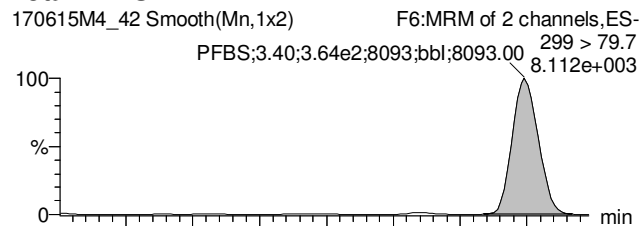
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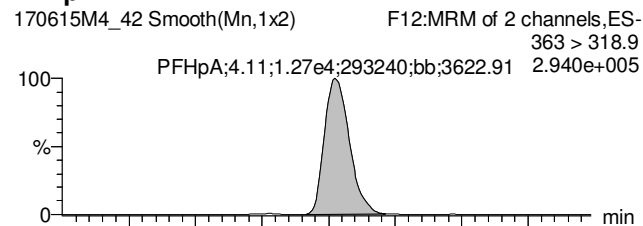
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_42, Date: 16-Jun-2017, Time: 06:10:59, ID: 1700681-04@50X OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617

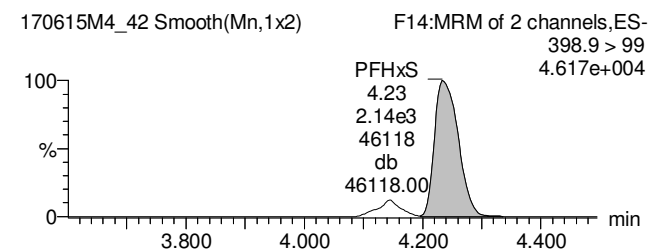
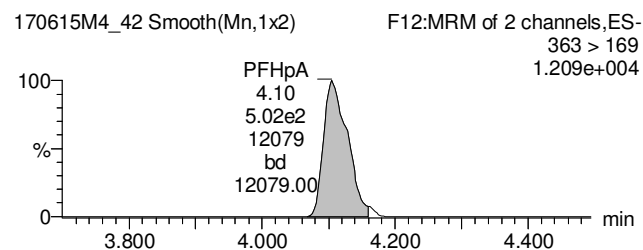
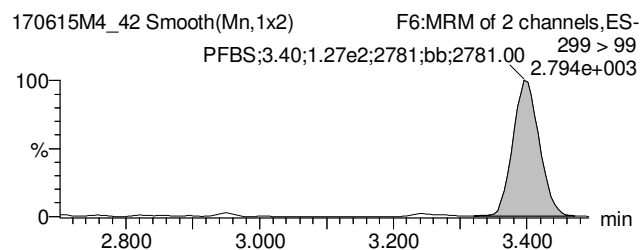
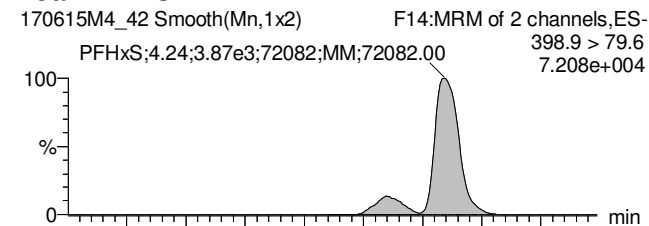
**Total PFBS**



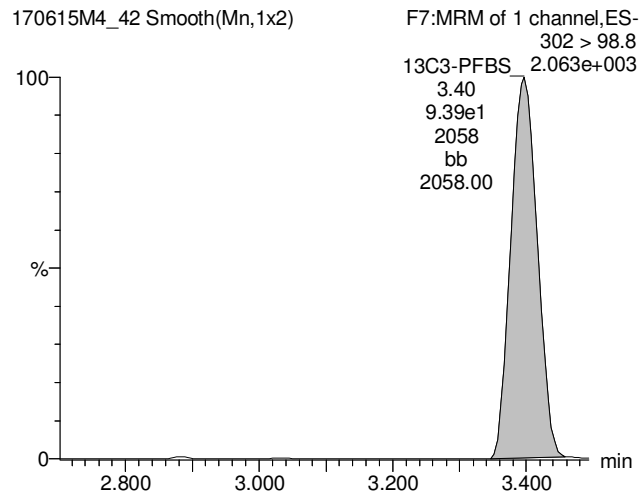
**PFHpA**



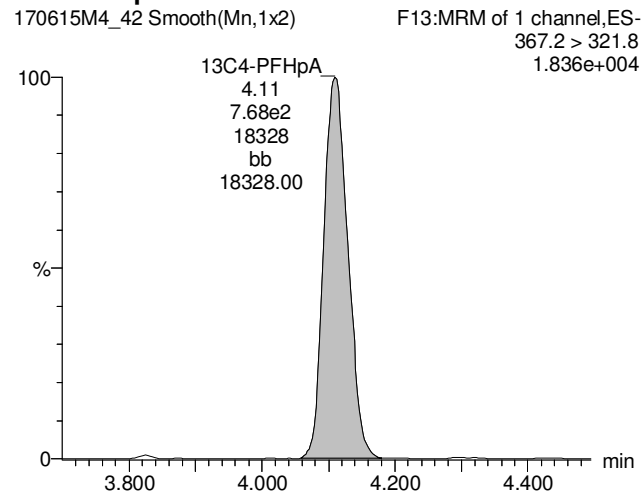
**Total PFHxS**



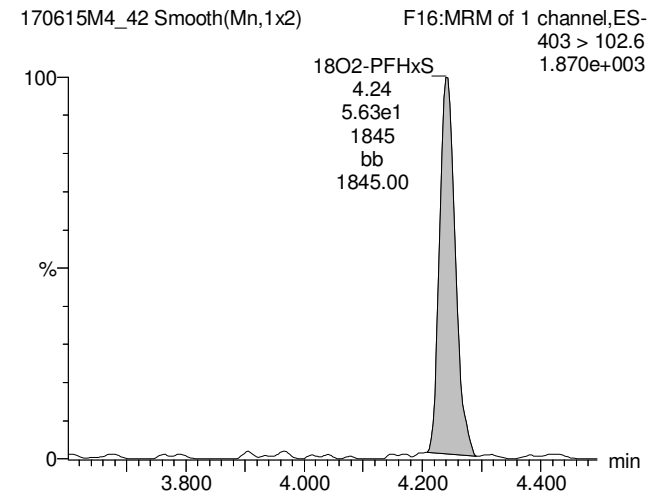
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**



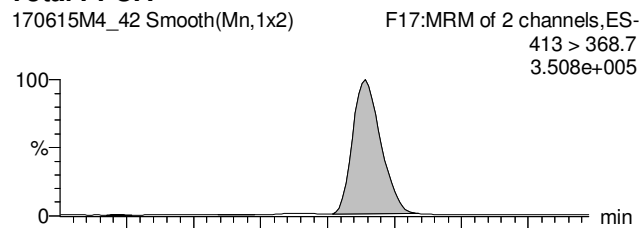
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Last Altered: Monday, June 19, 2017 13:34:22 Pacific Daylight Time

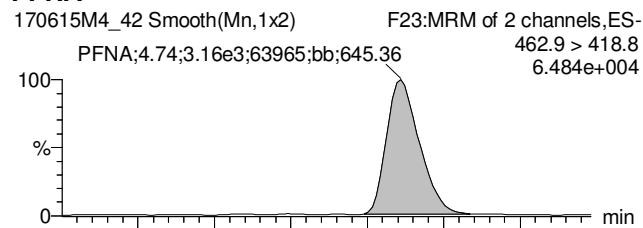
Printed: Monday, June 19, 2017 13:46:40 Pacific Daylight Time

Name: 170615M4\_42, Date: 16-Jun-2017, Time: 06:10:59, ID: 1700681-04@50X OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617

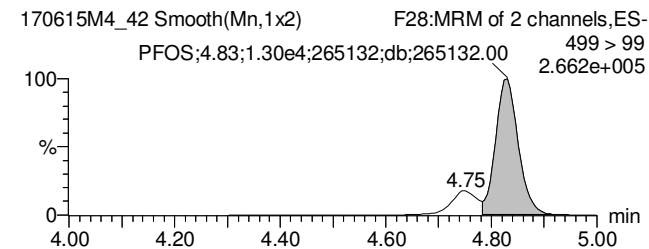
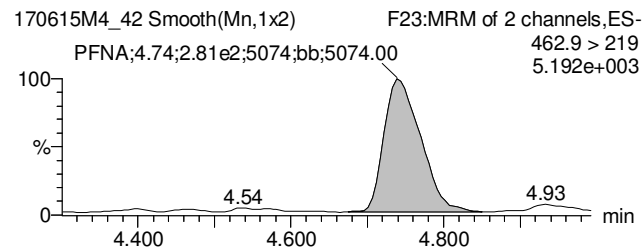
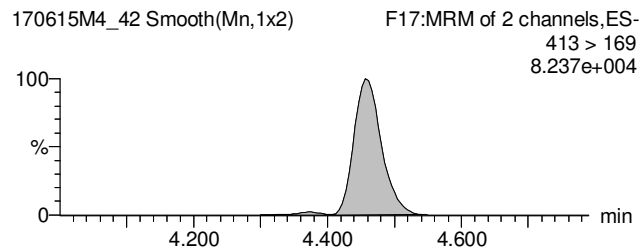
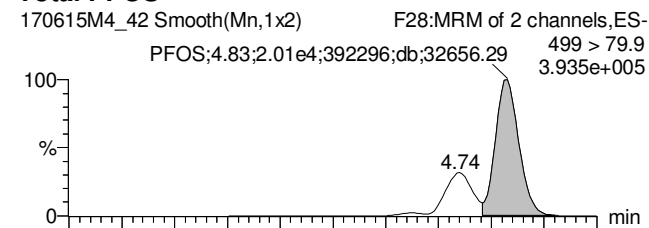
**Total PFOA**



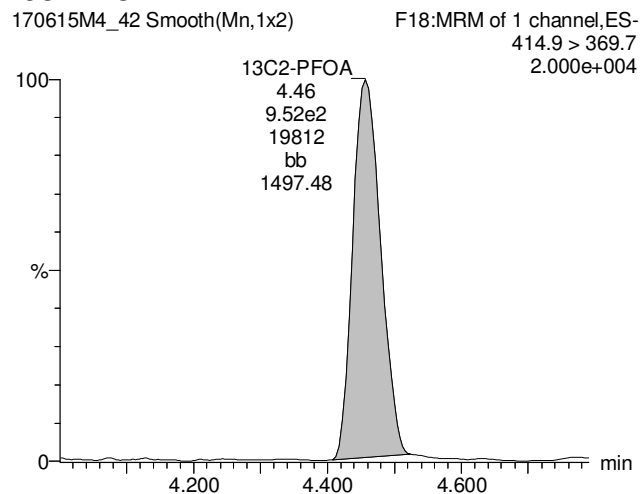
**PFNA**



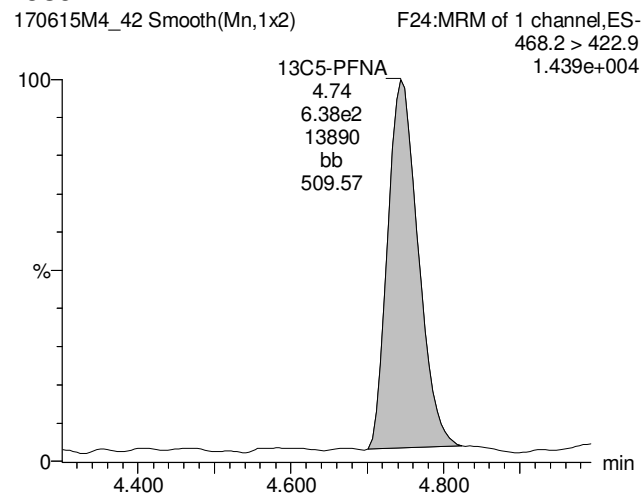
**Total PFOS**



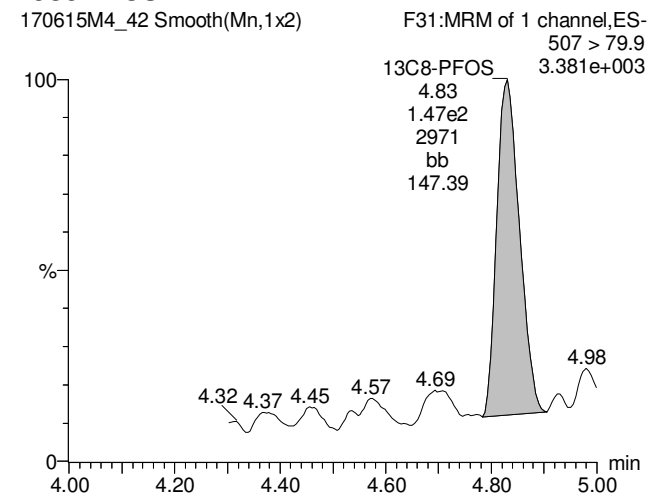
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_42.qld

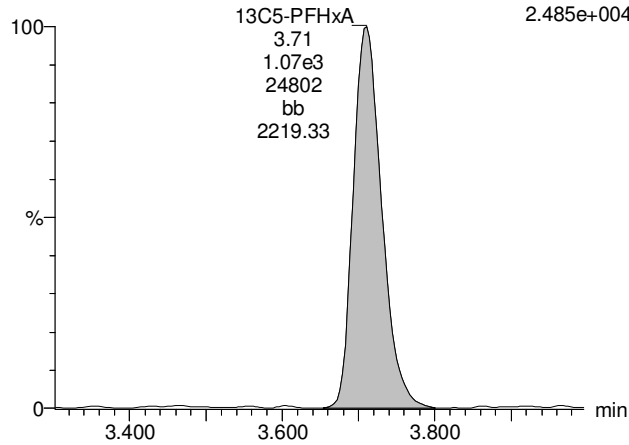
Last Altered: Monday, June 19, 2017 13:34:22 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:46:40 Pacific Daylight Time

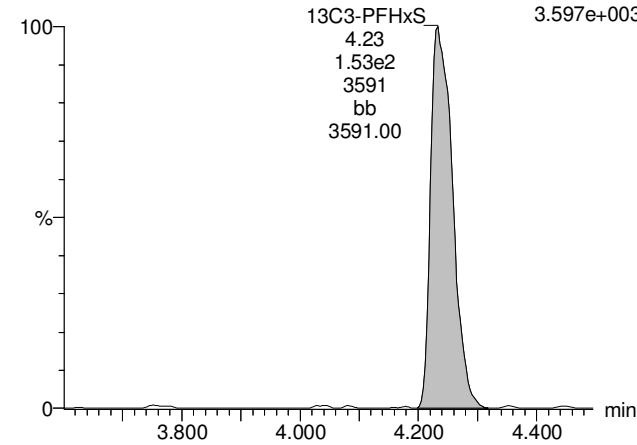
Name: 170615M4\_42, Date: 16-Jun-2017, Time: 06:10:59, ID: 1700681-04@50X OF17-MW01P-0617 0.125, Description: OF17-MW01P-0617

**13C5-PFHxA**

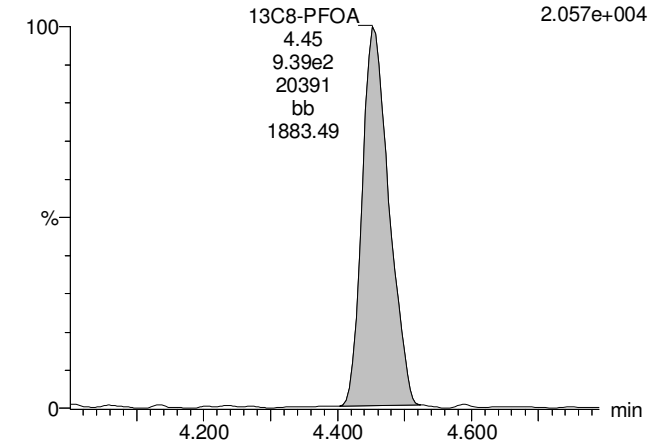
170615M4\_42 Smooth(Mn,1x2)

F10:MRM of 1 channel,ES-  
318 > 272.9  
2.485e+004**13C3-PFHxS**

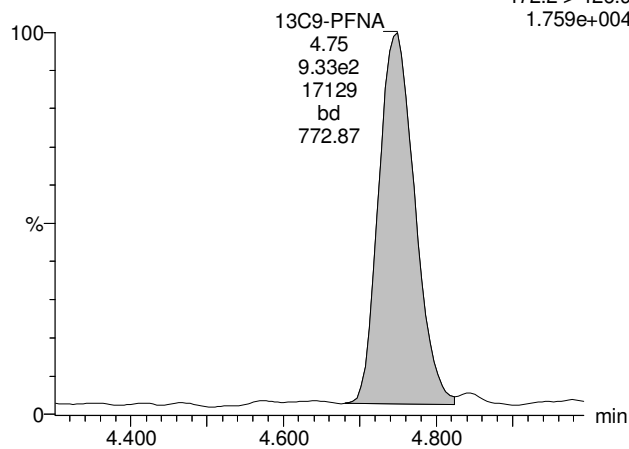
170615M4\_42 Smooth(Mn,1x2)

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
3.597e+003**13C8-PFOA**

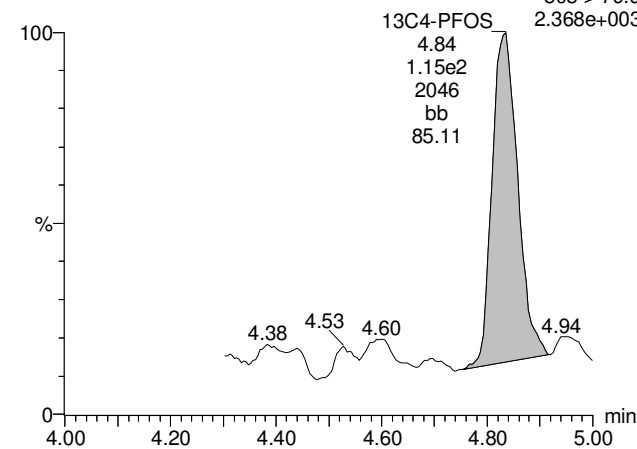
170615M4\_42 Smooth(Mn,1x2)

F19:MRM of 1 channel,ES-  
421.3 > 376  
2.057e+004**13C9-PFNA**

170615M4\_42 Smooth(Mn,1x2)

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.759e+004**13C4-PFOS**

170615M4\_42 Smooth(Mn,1x2)

F29:MRM of 1 channel,ES-  
503 > 79.9  
2.368e+003

Dataset: U:\Q4.PRO\results\170608m5\170608M5-45.qld

Last Altered: Friday, June 16, 2017 15:12:19 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:12:25 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_45, Date: 09-Jun-2017, Time: 08:38:27, ID: 1700681-05 OF17-FB060117 0.125, Description: OF17-FB060117

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7		3.17e3		0.1211	3.30				
2	5 PFHpA	363 > 318.9		2.61e4		0.1211	4.06				
3	6 PFHxS	398.9 > 79.6	1.19e1	2.42e3		0.1211	4.20	4.08	0.0613		
4	8 PFOA	413 > 368.7		3.21e4		0.1211	4.36				
5	9 PFNA	462.9 > 418.8		2.36e4		0.1211	4.68				
6	10 PFOS	499 > 79.9	2.86e1	5.63e3		0.1211	4.70	4.92	0.0634	0.298	
7	21 13C3-PFBS	302 > 98.8	3.17e3	3.68e4	0.024	0.1211	3.30	3.14	0.430	148	143.1
8	23 13C4-PFHpA	367.2 > 321.8	2.61e4	3.68e4	0.235	0.1211	4.06	3.95	3.54	124	120.4
9	24 18O2-PFHxS	403 > 102.6	2.42e3	5.47e3	0.345	0.1211	4.20	4.07	5.53	132	128.2
10	25 13C2-6:2 FTS	429.1 > 408.9	4.84e3	5.65e3	0.329	0.1211	4.30	4.26	4.29	107	104.1
11	26 13C2-PFOA	414.9 > 369.7	3.21e4	2.60e4	1.148	0.1211	4.40	4.27	15.5	111	107.8
12	27 13C5-PFNA	468.2 > 422.9	2.36e4	2.94e4	0.724	0.1211	4.68	4.57	10.0	114	110.9
13	28 13C8-PFOS	507 > 79.9	5.63e3	5.43e3	0.868	0.1211	4.78	4.65	13.0	123	119.4
14	38 13C5-PFHxA	318 > 272.9	3.68e4	3.68e4	1.000	0.1211	3.67	3.52	5.00	41.3	100.0
15	39 13C3-PFHxS	401.9 > 79.9	5.47e3	5.47e3	1.000	0.1211	4.20	4.07	12.5	103	100.0
16	40 13C8-PFOA	421.3 > 376	2.60e4	2.60e4	1.000	0.1211	4.40	4.28	12.5	103	100.0
17	41 13C9-PFNA	472.2 > 426.9	2.94e4	2.94e4	1.000	0.1211	4.68	4.57	12.5	103	100.0
18	42 13C4-PFOS	503 > 79.9	5.43e3	5.43e3	1.000	0.1211	4.78	4.66	12.5	103	100.0
19	43 13C6-PFDA	519.1 > 473.7	2.65e4	2.65e4	1.000	0.1211	4.95	4.84	12.5	103	100.0
20	44 13C7-PFUnA	570.1 > 524.8	2.37e4	2.37e4	1.000	0.1211	5.20	5.09	12.5	103	100.0
21	45 Total PFBS	299 > 79.7	0.00e0	3.17e3		0.1211	3.30		0.000		
22	46 Total PFHxS	398.9 > 79.6	1.19e1	2.42e3		0.1211	4.05		0.000		
23	47 Total PFOA	413 > 368.7	0.00e0	3.21e4		0.1211	4.30		0.000		
24	48 Total PFOS	499 > 79.9	0.00e0	5.63e3		0.1211	4.60		0.000		

Dataset: U:\Q4.PRO\results\170608m5\170608M5-45.qld

Last Altered: Friday, June 16, 2017 15:12:19 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:12:25 Pacific Daylight Time

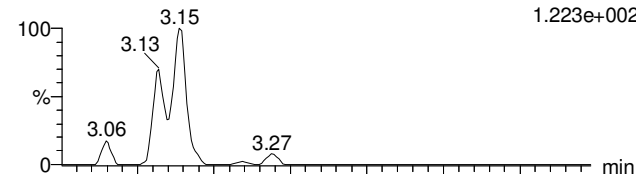
Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

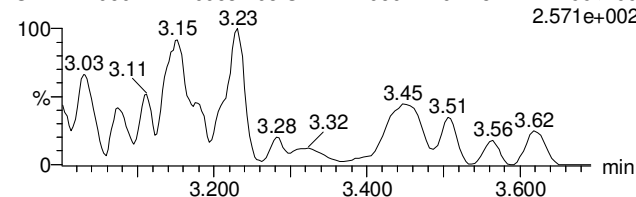
Name: 170608M5\_45, Date: 09-Jun-2017, Time: 08:38:27, ID: 1700681-05 OF17-FB060117 0.125, Description: OF17-FB060117

**Total PFBS**

170608M5\_45 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-OF17-FB060117 1700681-05 OF17-FB060117 0.125 299 > 79.7 1.223e+002

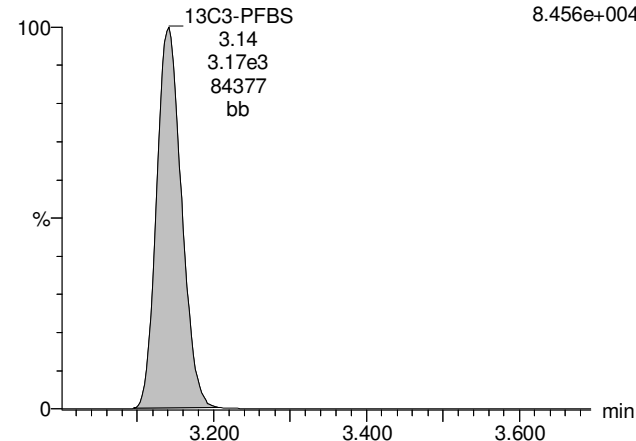


170608M5\_45 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-OF17-FB060117 1700681-05 OF17-FB060117 0.125 299 > 99 2.571e+002



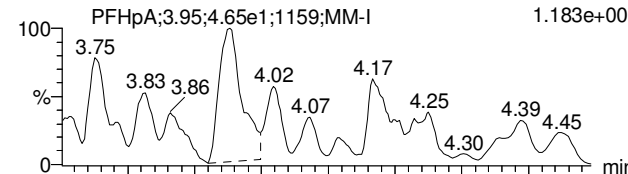
**13C3-PFBS**

170608M5\_45 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-OF17-FB060117 1700681-05 OF17-FB060117 0.125 302 > 98.8 8.456e+004

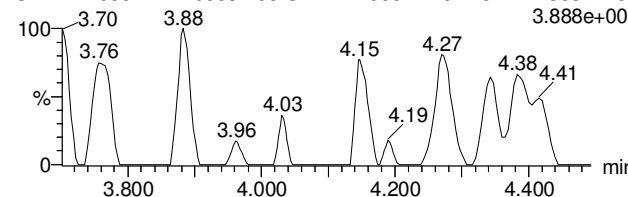


**PFHpA**

170608M5\_45 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-OF17-FB060117 1700681-05 OF17-FB060117 0.125 363 > 318.9 1.183e+003

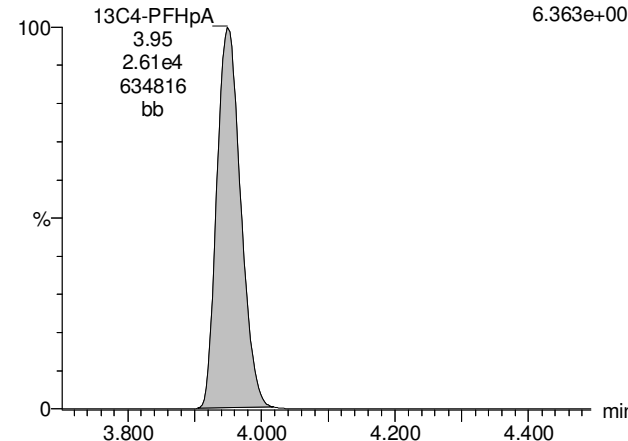


170608M5\_45 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-OF17-FB060117 1700681-05 OF17-FB060117 0.125 363 > 169 3.888e+001



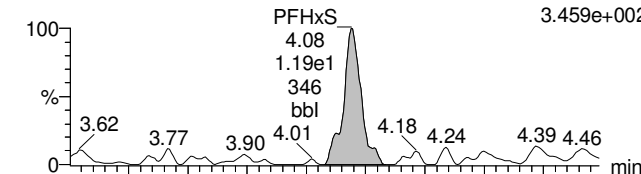
**13C4-PFHpA**

170608M5\_45 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-OF17-FB060117 1700681-05 OF17-FB060117 0.125 367.2 > 321.8 6.363e+005

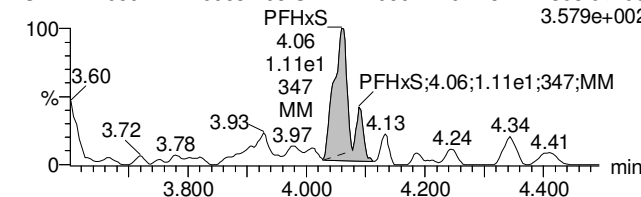


**Total PFHxS**

170608M5\_45 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-OF17-FB060117 1700681-05 OF17-FB060117 0.125 398.9 > 79.6 3.459e+002

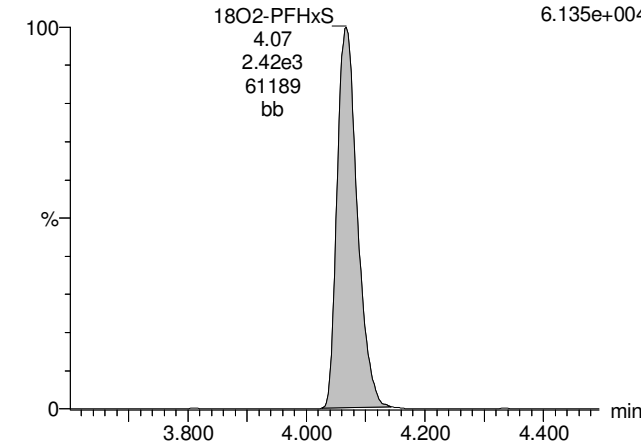


170608M5\_45 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-OF17-FB060117 1700681-05 OF17-FB060117 0.125 398.9 > 99 3.579e+002



**18O2-PFHxS**

170608M5\_45 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-OF17-FB060117 1700681-05 OF17-FB060117 0.125 403 > 102.6 6.135e+004





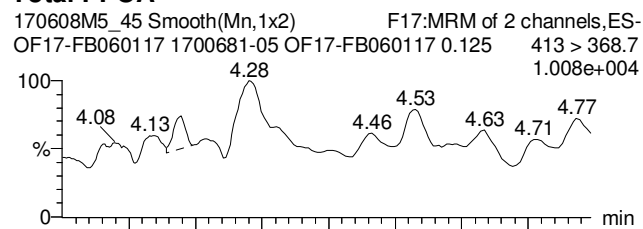
Dataset: U:\Q4.PRO\results\170608m5\170608M5-45.qld

Last Altered: Friday, June 16, 2017 15:12:19 Pacific Daylight Time

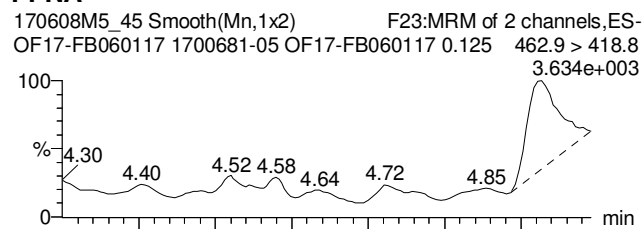
Printed: Friday, June 16, 2017 15:12:25 Pacific Daylight Time

Name: 170608M5\_45, Date: 09-Jun-2017, Time: 08:38:27, ID: 1700681-05 OF17-FB060117 0.125, Description: OF17-FB060117

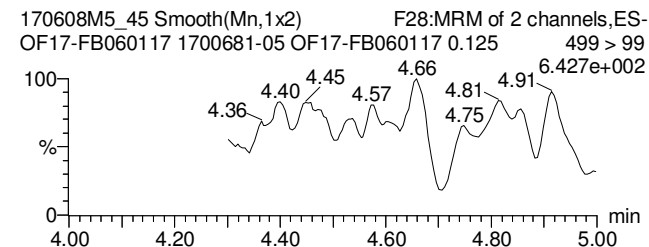
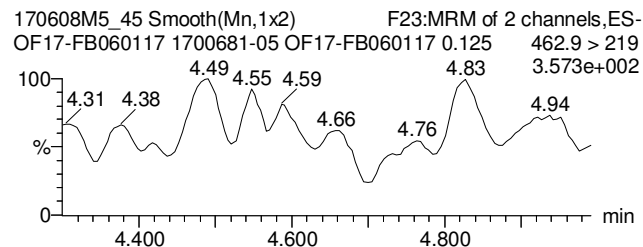
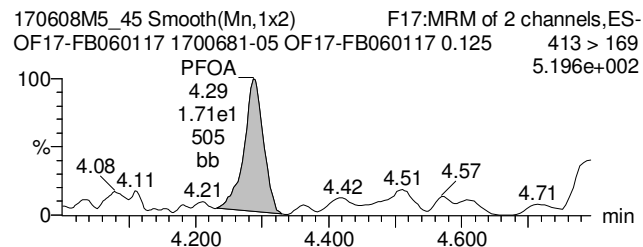
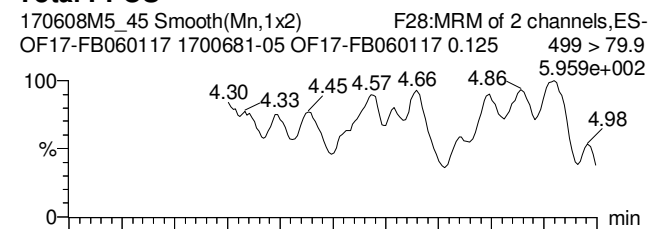
**Total PFOA**



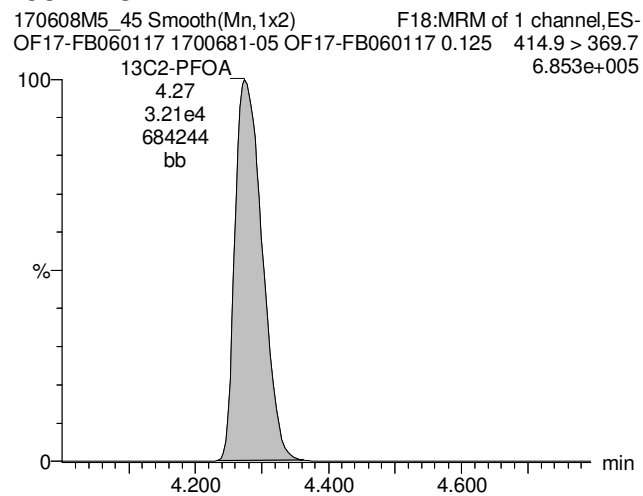
**PFNA**



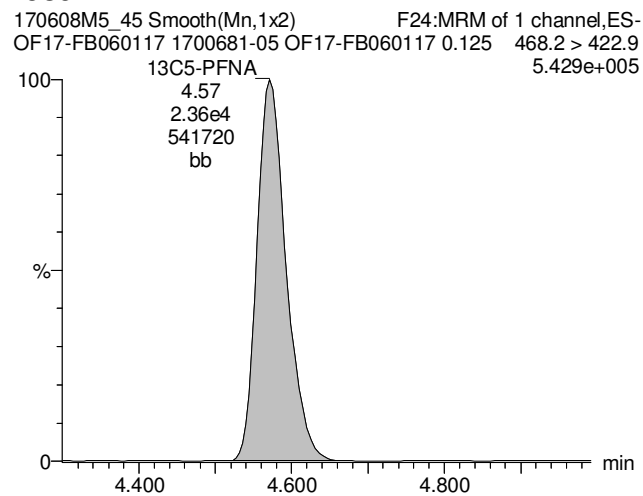
**Total PFOS**



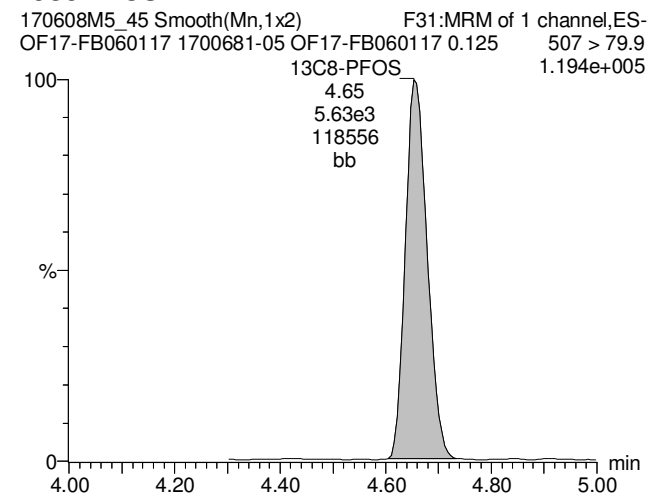
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



Dataset: U:\Q4.PRO\results\170608m5\170608M5-45.qld

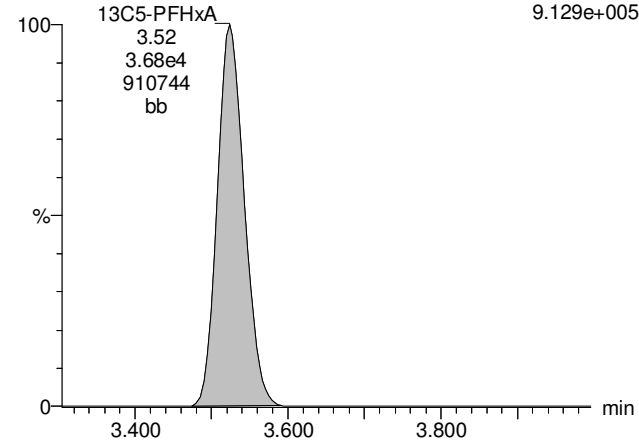
Last Altered: Friday, June 16, 2017 15:12:19 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:12:25 Pacific Daylight Time

Name: 170608M5\_45, Date: 09-Jun-2017, Time: 08:38:27, ID: 1700681-05 OF17-FB060117 0.125, Description: OF17-FB060117

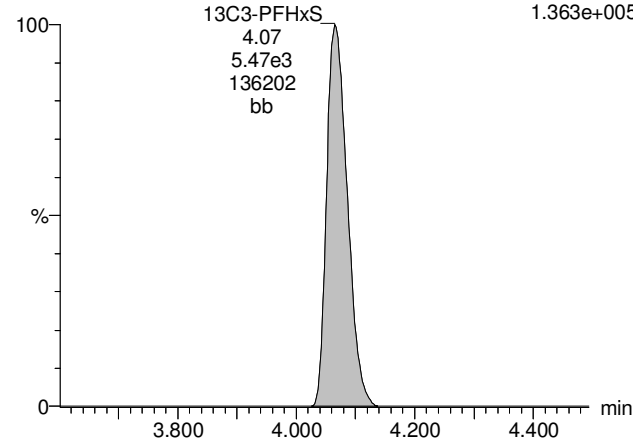
**13C5-PFHxA**

170608M5\_45 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-  
OF17-FB060117 1700681-05 OF17-FB060117 0.125 318 > 272.9  
9.129e+005



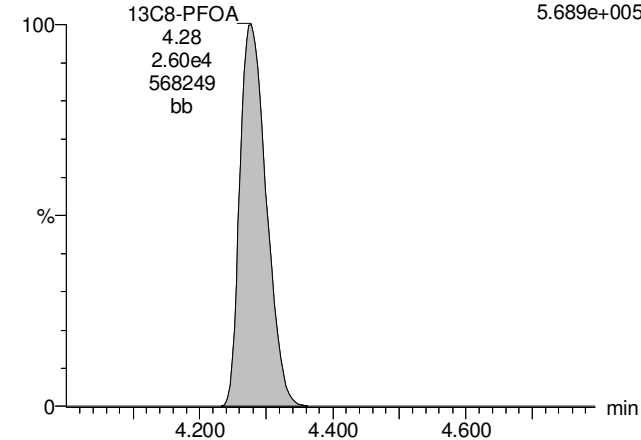
**13C3-PFHxS**

170608M5\_45 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-  
OF17-FB060117 1700681-05 OF17-FB060117 0.125 401.9 > 79.9  
1.363e+005



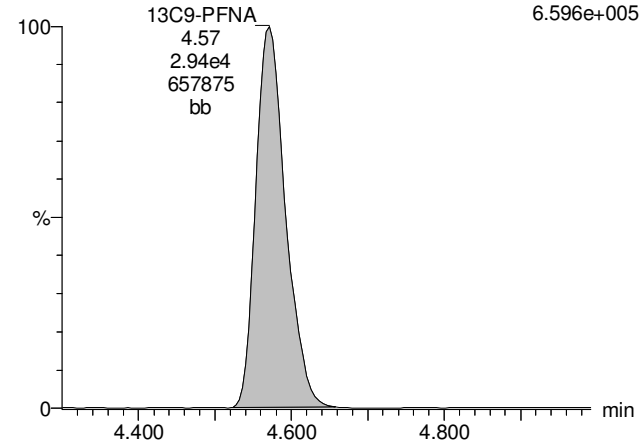
**13C8-PFOA**

170608M5\_45 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-  
OF17-FB060117 1700681-05 OF17-FB060117 0.125 421.3 > 376  
5.689e+005



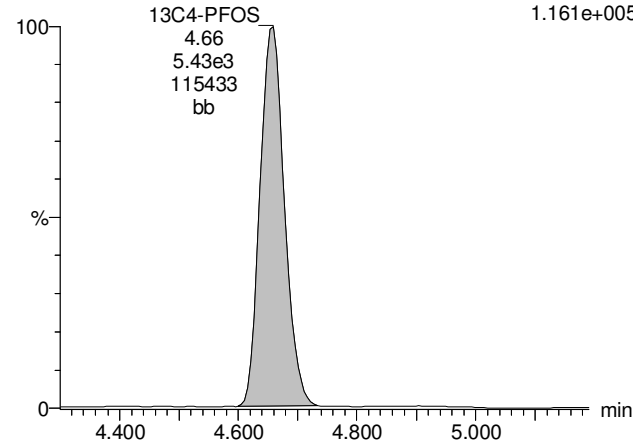
**13C9-PFNA**

170608M5\_45 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-  
OF17-FB060117 1700681-05 OF17-FB060117 0.125 472.2 > 426.9  
6.596e+005



**13C4-PFOS**

170608M5\_45 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-  
OF17-FB060117 1700681-05 OF17-FB060117 0.125 503 > 79.9  
1.161e+005



Dataset: U:\Q4.PRO\results\170608m5\170608M5-46.qld

Last Altered: Friday, June 16, 2017 15:18:43 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:18:49 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_46, Date: 09-Jun-2017, Time: 08:49:54, ID: 1700681-06 OF17-MW04-0617 0.125, Description: OF17-MW04-0617

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7	9.32e3	3.17e3		0.1161	3.30	3.14	36.7	156	
2	5 PFHpA	363 > 318.9	5.83e5	2.33e4		0.1161	4.06	3.95	312	2240 E	
3	6 PFHxS	398.9 > 79.6	1.48e5	2.04e3		0.1161	4.20	4.07	910	3790 E	
4	8 PFOA	413 > 368.7	1.01e6	3.38e4		0.1161	4.36	4.28	373	3270 E	
5	9 PFNA	462.9 > 418.8	1.57e5	2.21e4		0.1161	4.68	4.57	88.7	627	
6	10 PFOS	499 > 79.9	1.22e6	2.54e3		0.1161	4.70	4.66	6020	53200 E	
7	21 13C3-PFBS	302 > 98.8	3.17e3	3.22e4	0.024	0.1161	3.30	3.14	0.492	176	163.9
8	23 13C4-PFHpA	367.2 > 321.8	2.33e4	3.22e4	0.235	0.1161	4.06	3.95	3.62	133	123.2
9	24 18O2-PFHxS	403 > 102.6	2.04e3	4.35e3	0.345	0.1161	4.20	4.07	5.86	146	135.9
10	25 13C2-6:2 FTS	429.1 > 408.9	6.75e3	5.22e3	0.329	0.1161	4.30	4.26	6.46	169	157.0
11	26 13C2-PFOA	414.9 > 369.7	3.38e4	2.28e4	1.148	0.1161	4.40	4.28	18.5	139	128.9
12	27 13C5-PFNA	468.2 > 422.9	2.21e4	2.38e4	0.724	0.1161	4.68	4.57	11.6	138	128.3
13	28 13C8-PFOS	507 > 79.9	2.54e3	2.22e3	0.868	0.1161	4.78	4.66	14.3	142	131.9
14	38 13C5-PFHxA	318 > 272.9	3.22e4	3.22e4	1.000	0.1161	3.67	3.53	5.00	43.1	100.0
15	39 13C3-PFHxS	401.9 > 79.9	4.35e3	4.35e3	1.000	0.1161	4.20	4.07	12.5	108	100.0
16	40 13C8-PFOA	421.3 > 376	2.28e4	2.28e4	1.000	0.1161	4.40	4.28	12.5	108	100.0
17	41 13C9-PFNA	472.2 > 426.9	2.38e4	2.38e4	1.000	0.1161	4.68	4.57	12.5	108	100.0
18	42 13C4-PFOS	503 > 79.9	2.22e3	2.22e3	1.000	0.1161	4.78	4.66	12.5	108	100.0
19	43 13C6-PFDA	519.1 > 473.7	2.61e4	2.61e4	1.000	0.1161	4.95	4.84	12.5	108	100.0
20	44 13C7-PFUnA	570.1 > 524.8	2.50e4	2.50e4	1.000	0.1161	5.20	5.09	12.5	108	100.0
21	45 Total PFBS	299 > 79.7	9.32e3	3.17e3		0.1161	3.30		36.7	156	
22	46 Total PFHxS	398.9 > 79.6	1.48e5	2.04e3		0.1161	4.05		910	3790 E	
23	47 Total PFOA	413 > 368.7	1.02e6	3.38e4		0.1161	4.30		376	3300 E	
24	48 Total PFOS	499 > 79.9	1.22e6	2.54e3		0.1161	4.60		6020	53200 E	

Dataset: U:\Q4.PRO\results\170608m5\170608M5-46.qld

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Printed: Friday, June 16, 2017 15:18:49 Pacific Daylight Time

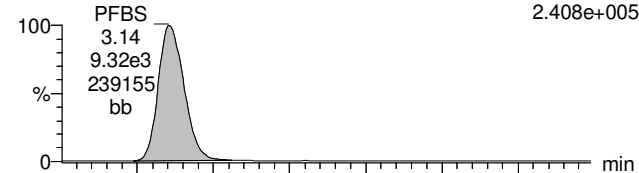
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

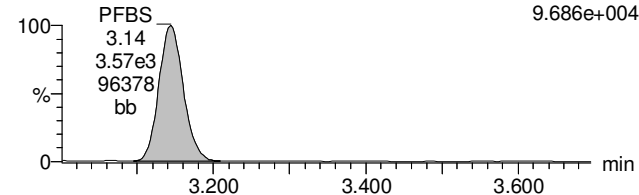
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**Total PFBS**

170608M5\_46 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125 299 > 79.7 2.408e+005

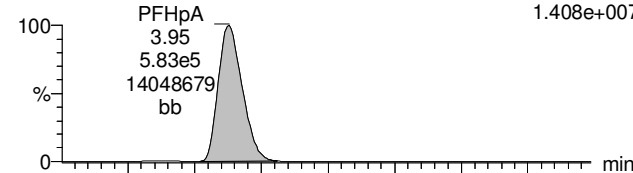


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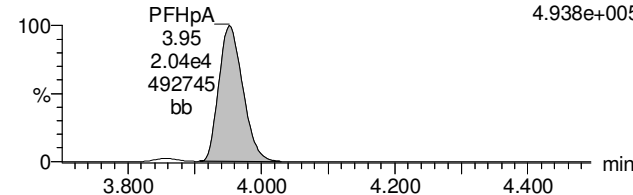


**PFHpA**

170608M5\_46 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125363 > 318.9 1.408e+007

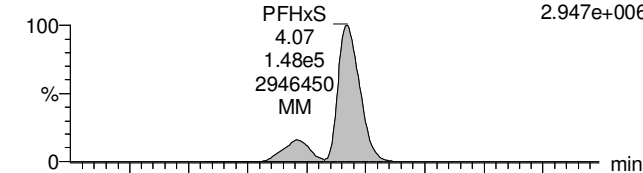


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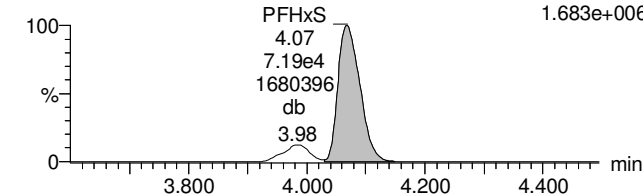


**Total PFHxS**

170608M5\_46 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125398.9 > 79.6 2.947e+006

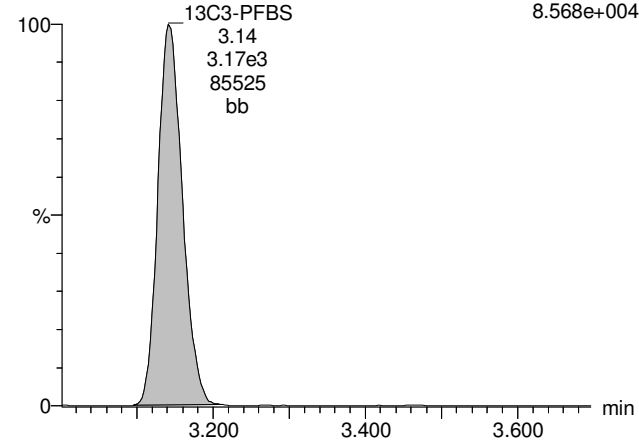


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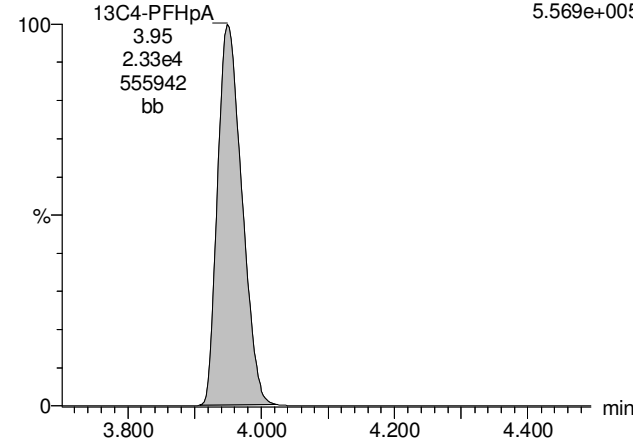
**13C3-PFBS**

170608M5\_46 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125 302 > 98.8 8.568e+004



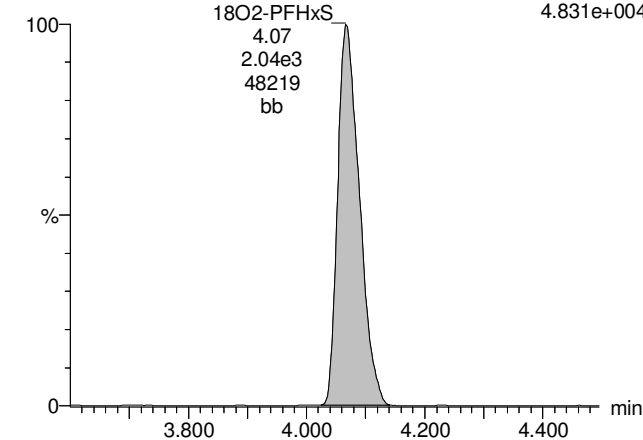
**13C4-PFHpA**

170608M5\_46 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-367.2 > 321.8 5.569e+005



**18O2-PFHxS**

170608M5\_46 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125403 > 102.6 4.831e+004



Dataset: U:\Q4.PRO\results\170608m5\170608M5-46.qld

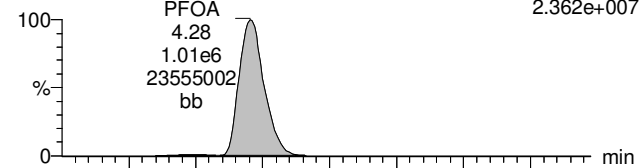
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Printed: Friday, June 16, 2017 15:18:49 Pacific Daylight Time

Name: 170608M5\_46, Date: 09-Jun-2017, Time: 08:49:54, ID: 1700681-06 OF17-MW04-0617 0.125, Description: OF17-MW04-0617

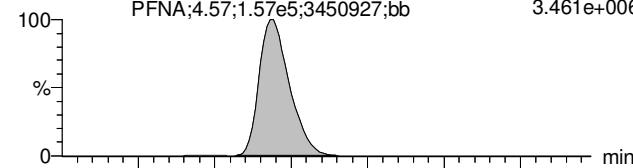
**Total PFOA**

170608M5\_46 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125413 > 368.7  
PFOA 4.28 2.362e+007  
1.01e6  
23555002  
bb



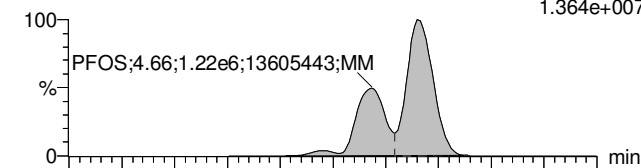
**PFNA**

170608M5\_46 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-462.9 > 418.8  
PFNA;4.57;1.57e5;3450927;bb 3.461e+006

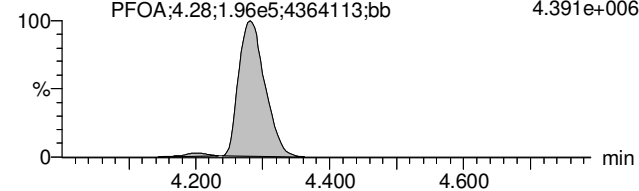


**Total PFOS**

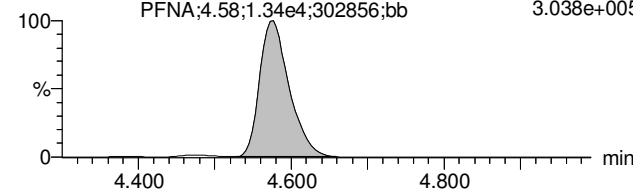
170608M5\_46 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125 499 > 79.9  
PFOS;4.66;1.22e6;13605443;MM 1.364e+007



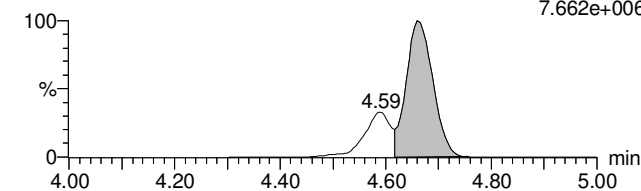
170608M5\_46 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125 413 > 169  
PFOA;4.28;1.96e5;4364113;bb 4.391e+006



170608M5\_46 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125462.9 > 219  
PFNA;4.58;1.34e4;302856;bb 3.038e+005

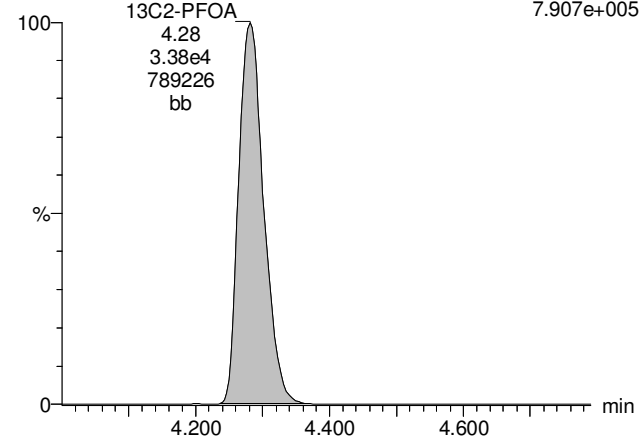


170608M5\_46 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125 499 > 99  
PFOS;4.66;1.22e6;13605443;MM 7.662e+006



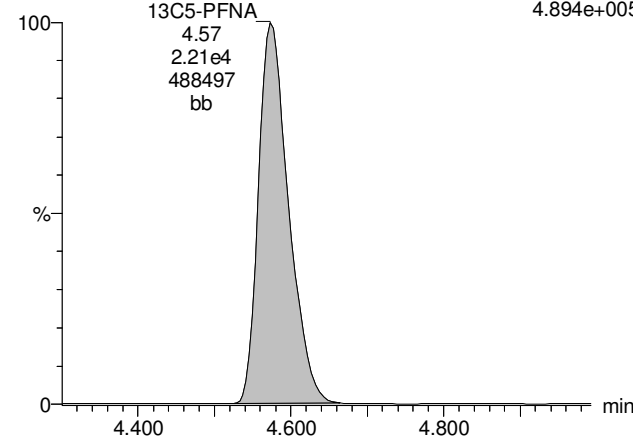
**13C2-PFOA**

170608M5\_46 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-414.9 > 369.7  
13C2-PFOA 4.28 7.907e+005  
3.38e4  
789226  
bb



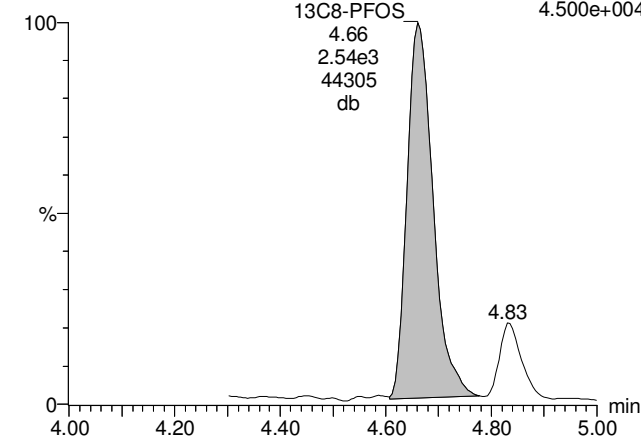
**13C5-PFNA**

170608M5\_46 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-468.2 > 422.9  
13C5-PFNA 4.57 4.894e+005  
2.21e4  
488497  
bb



**13C8-PFOS**

170608M5\_46 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125 507 > 79.9  
13C8-PFOS 4.66 4.500e+004  
2.54e3  
44305  
db



Dataset: U:\Q4.PRO\results\170608m5\170608M5-46.qld

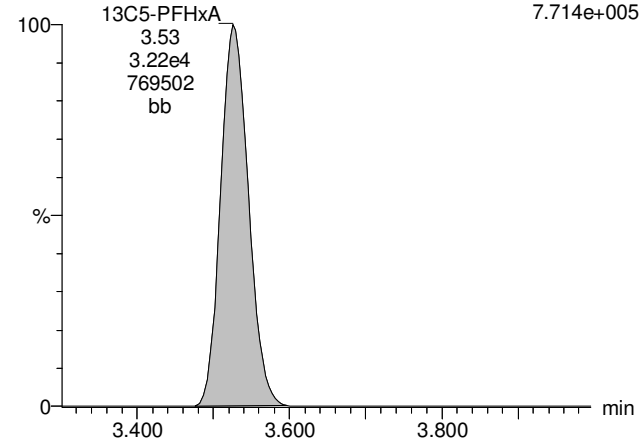
Last Altered: Friday, June 16, 2017 15:18:43 Pacific Daylight Time

Printed: Friday, June 16, 2017 15:18:49 Pacific Daylight Time

Name: 170608M5\_46, Date: 09-Jun-2017, Time: 08:49:54, ID: 1700681-06 OF17-MW04-0617 0.125, Description: OF17-MW04-0617

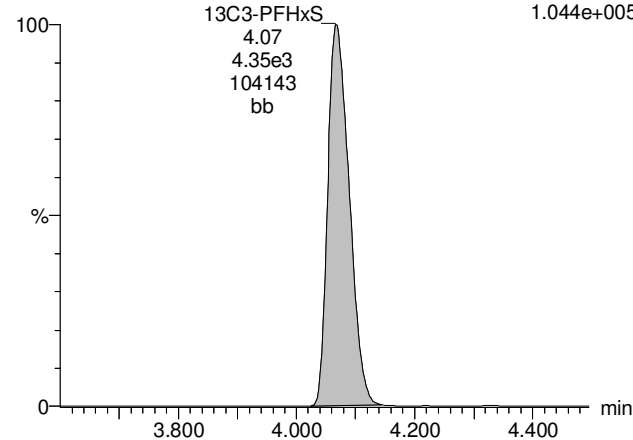
**13C5-PFHxA**

170608M5\_46 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125318 > 272.9 7.714e+005



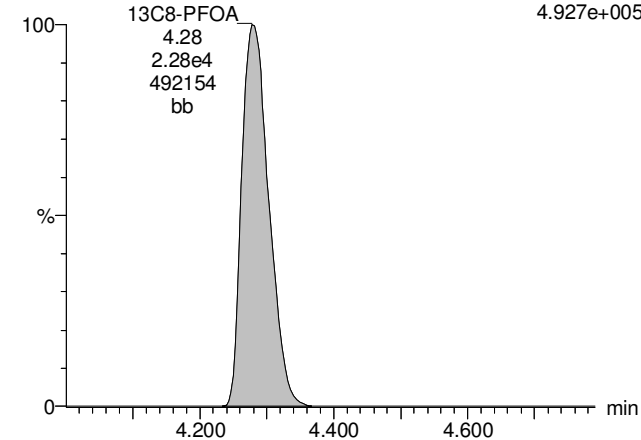
**13C3-PFHxS**

170608M5\_46 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125101.9 > 79.9 1.044e+005



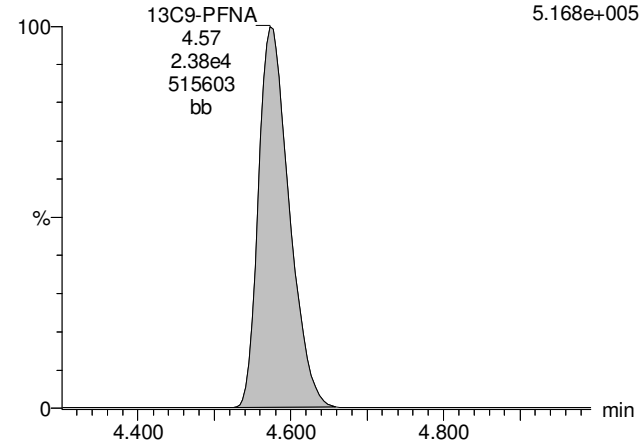
**13C8-PFOA**

170608M5\_46 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125421.3 > 376 4.927e+005



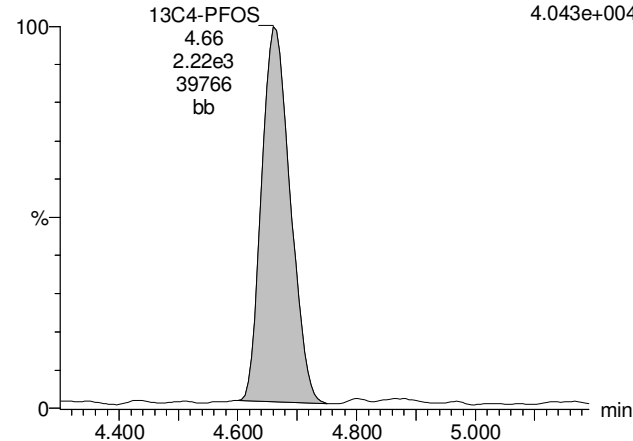
**13C9-PFNA**

170608M5\_46 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-472.2 > 426.9 5.168e+005



**13C4-PFOS**

170608M5\_46 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-OF17-MW04-0617 1700681-06 OF17-MW04-0617 0.125 503 > 79.9 4.043e+004



**Quantify Sample Summary Report****MassLynx MassLynx V4.1 SCN 945**

Vista Analytical Laboratory

Rev'd: MM 6/27/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_45.qld

Last Altered: Monday, June 19, 2017 13:41:24 Pacific Daylight Time

Printed: Monday, June 19, 2017 13:43:19 Pacific Daylight Time

**Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12****Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58****Name: 170615M4\_45, Date: 16-Jun-2017, Time: 06:46:19, ID: 1700681-06@10X OF17-MW04-0617 0.125, Description: OF17-MW04-0617**

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	5 PFHpA	363 > 318.9	1.23e5	4.50e3		0.1161	4.07	4.09	343	2340	
2	8 PFOA	413 > 368.7	1.81e5	5.88e3		0.1161	4.42	4.45	386	3370	
3	23 13C4-PFHpA	367.2 > 321.8	4.50e3	6.56e3	0.254	0.1161	4.07	4.10	3.43	116	108.0
4	26 13C2-PFOA	414.9 > 369.7	5.88e3	4.65e3	1.060	0.1161	4.26	4.45	15.8	128	119.2
5	38 13C5-PFHxA	318 > 272.9	6.56e3	6.56e3	1.000	0.1161	3.66	3.70	5.00	43.1	100.0
6	40 13C8-PFOA	421.3 > 376	4.65e3	4.65e3	1.000	0.1161	4.42	4.45	12.5	108	100.0
7	47 Total PFOA	413 > 368.7	1.83e5	5.88e3		0.1161	4.30		390	3400	

AP 6/19/2017

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_45.qld

Last Altered: Monday, June 19, 2017 13:41:24 Pacific Daylight Time

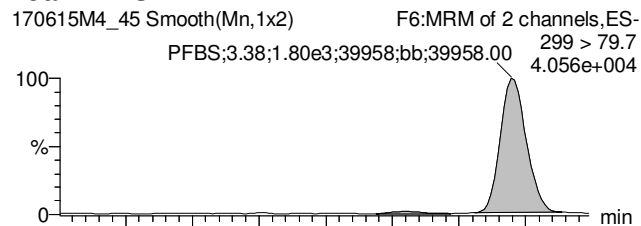
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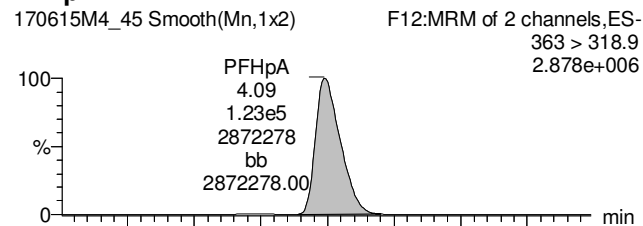
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Name: 170615M4\_45, Date: 16-Jun-2017, Time: 06:46:19, ID: 1700681-06@10X OF17-MW04-0617 0.125, Description: OF17-MW04-0617

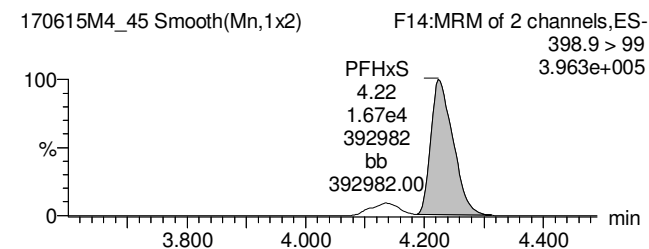
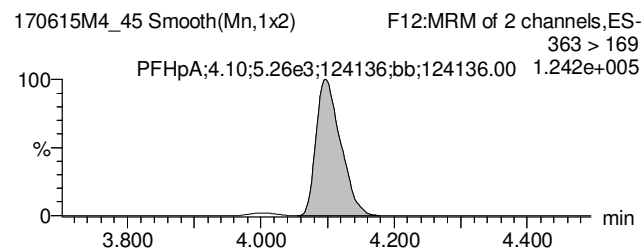
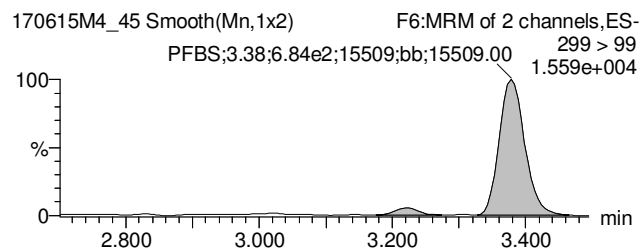
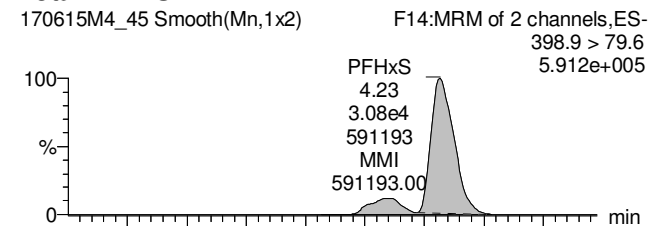
**Total PFBS**



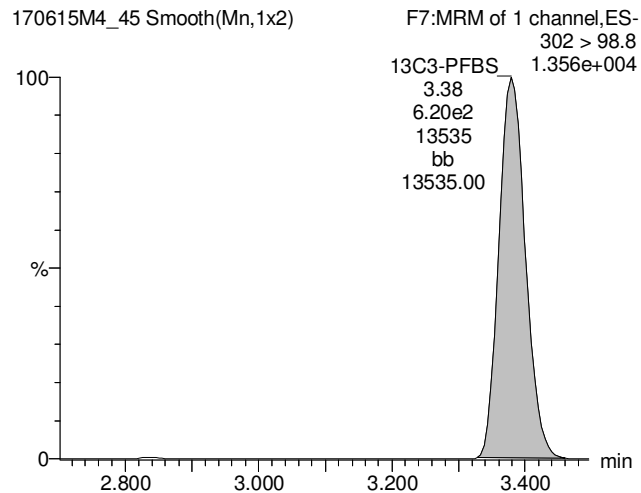
**PFHpA**



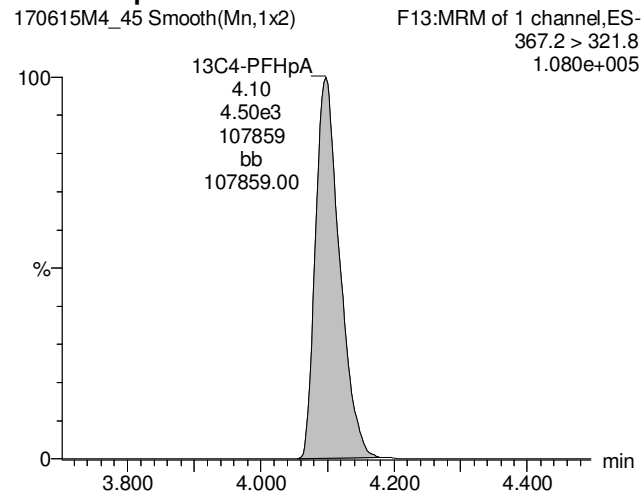
**Total PFHxS**



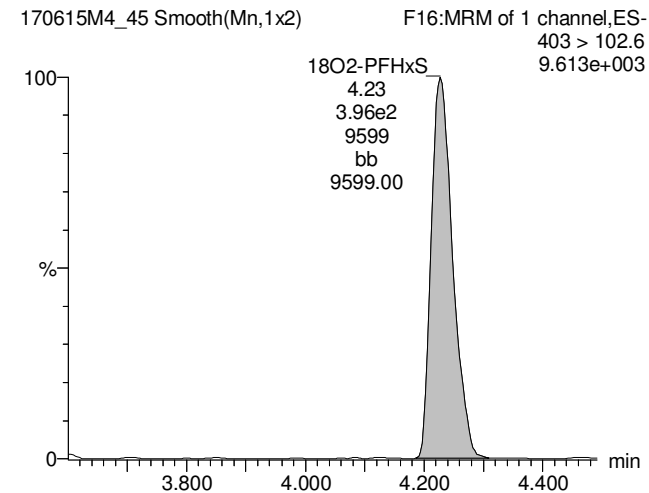
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**





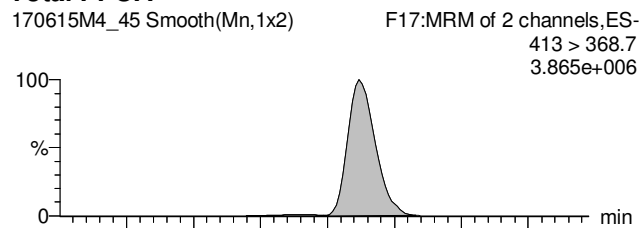
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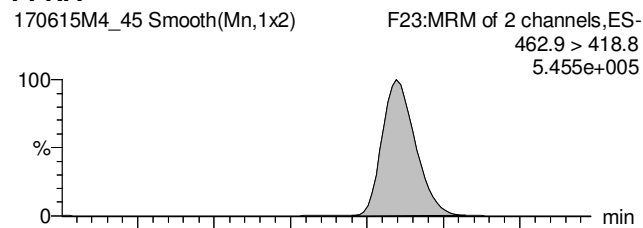
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Name: 170615M4\_45, Date: 16-Jun-2017, Time: 06:46:19, ID: 1700681-06@10X OF17-MW04-0617 0.125, Description: OF17-MW04-0617

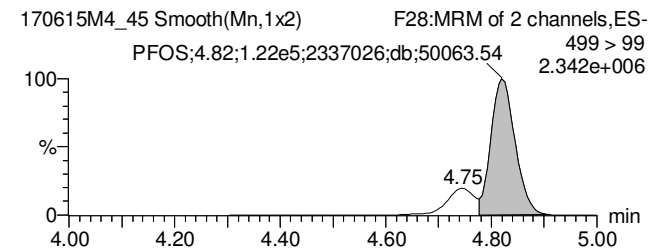
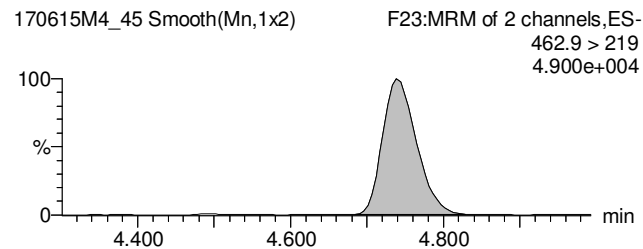
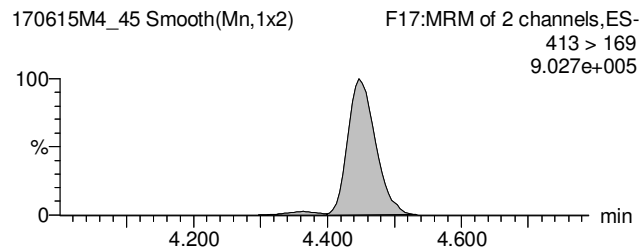
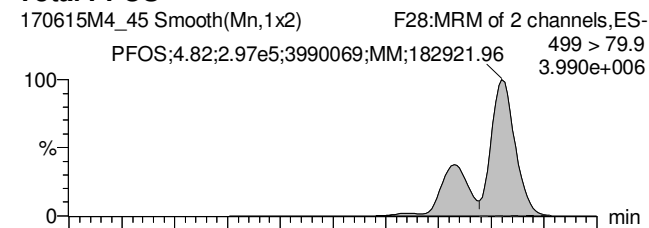
**Total PFOA**



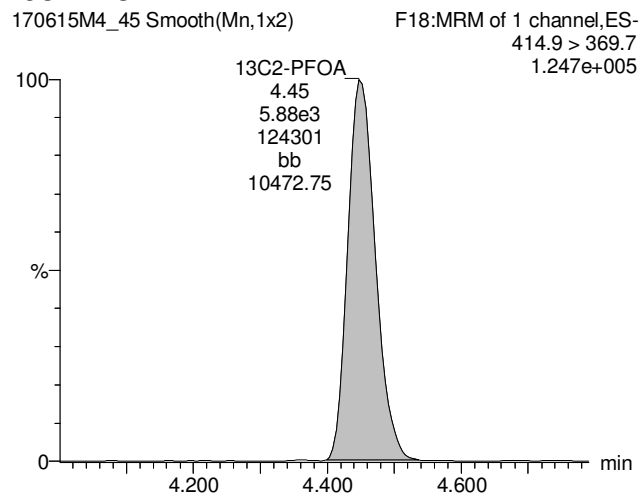
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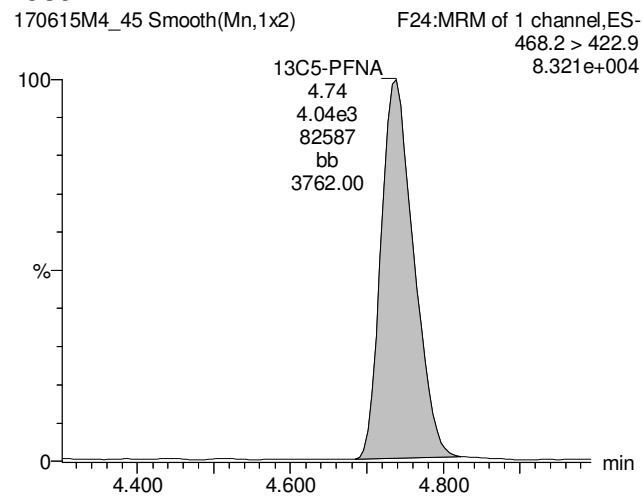
**Total PFOS**



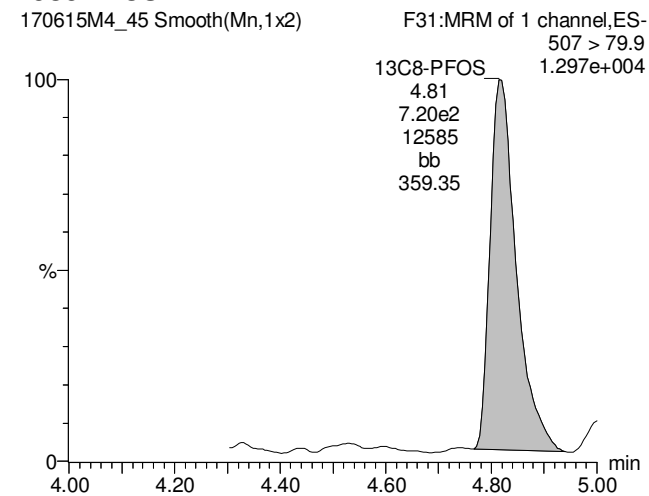
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



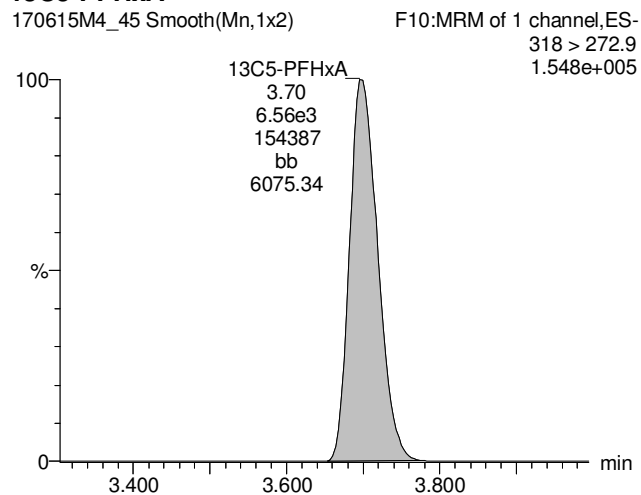
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Last Altered: Monday, June 19, 2017 13:41:24 Pacific Daylight Time

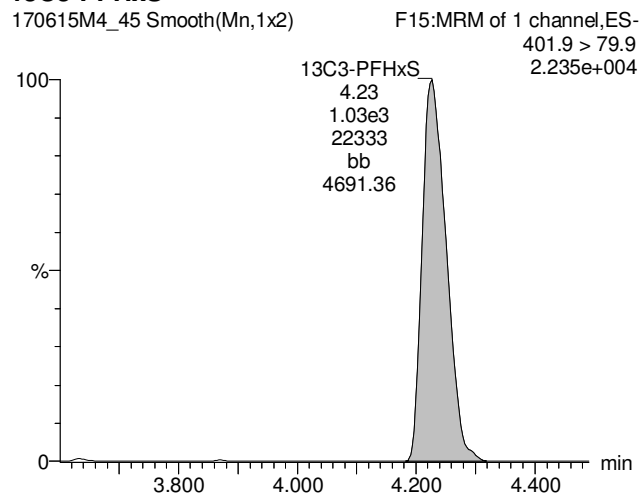
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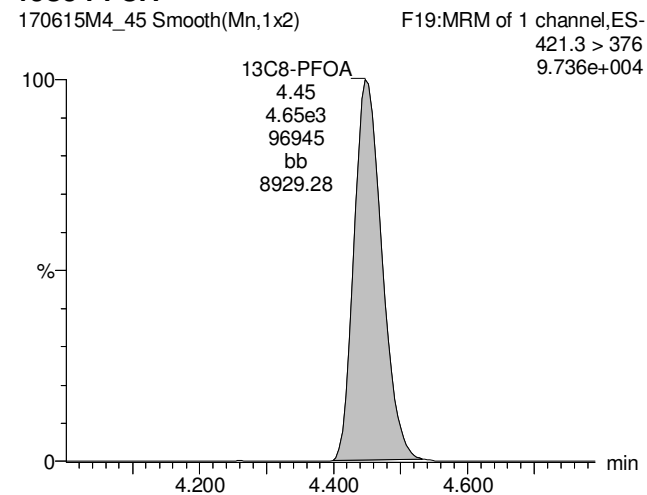
**13C5-PFHxA**



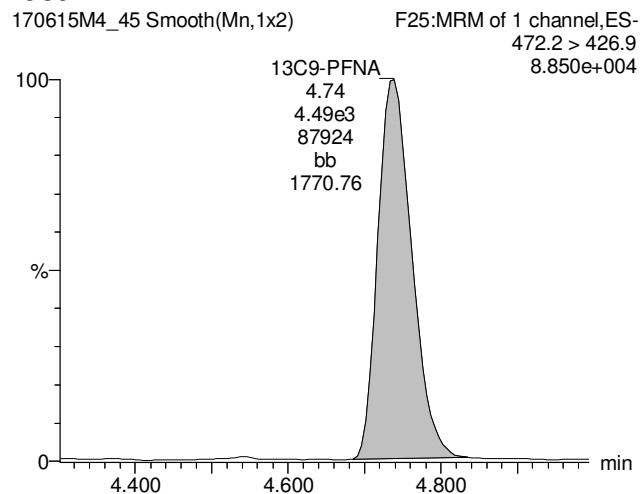
**13C3-PFHxS**



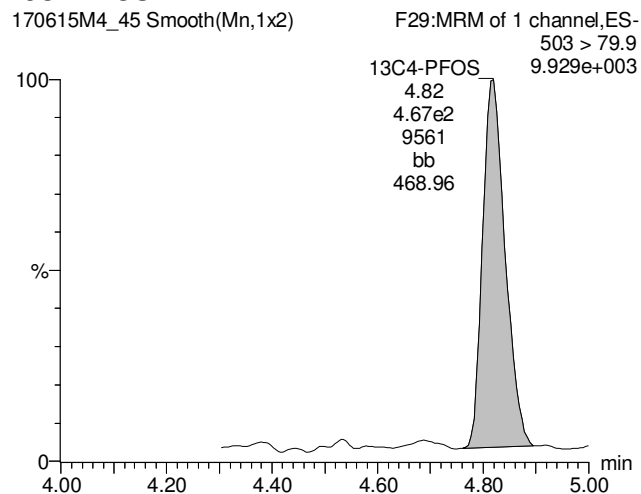
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



**Quantify Sample Summary Report****MassLynx MassLynx V4.1 SCN 945**

Vista Analytical Laboratory

Rev'd: MM 6/27/17

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_44.qld

Last Altered: Monday, June 19, 2017 13:59:13 Pacific Daylight Time

Printed: Monday, June 19, 2017 14:00:46 Pacific Daylight Time

**Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12**

UNITS ARE IN ug/L

**Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58****Name: 170615M4\_44, Date: 16-Jun-2017, Time: 06:34:24, ID: 1700681-06@50X OF17-MW04-0617 0.125, Description: OF17-MW04-0617**

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	6 PFHxS	398.9 > 79.6	5.02e3	7.39e1		0.1161	4.20	4.24	0.850	3.77	
2	10 PFOS	499 > 79.9	6.77e4	1.57e2		0.1161	4.80	4.83	5.39	44.5	
3	24 18O2-PFHxS	403 > 102.6	7.39e1	2.07e2	0.331	0.1161	4.20	4.24	0.00447	0.116	108.0
4	28 13C8-PFOS	507 > 79.9	1.57e2	1.23e2	0.911	0.1161	4.80	4.83	0.0160	0.151	140.2
5	39 13C3-PFHxS	401.9 > 79.9	2.07e2	2.07e2	1.000	0.1161	4.20	4.24	0.0125	0.108	100.0
6	42 13C4-PFOS	503 > 79.9	1.23e2	1.23e2	1.000	0.1161	4.80	4.82	0.0125	0.108	100.0
7	46 Total PFHxS	398.9 > 79.6	5.02e3	7.39e1		0.1161	4.10		0.850	3.77	
8	48 Total PFOS	499 > 79.9	6.77e4	1.57e2		0.1161	4.60		5.39	44.5	

AP 6/19/2017

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_44.qld

Last Altered: Monday, June 19, 2017 13:59:13 Pacific Daylight Time

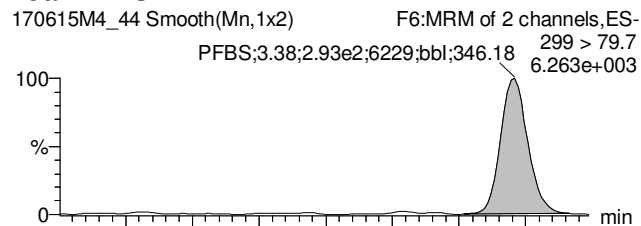
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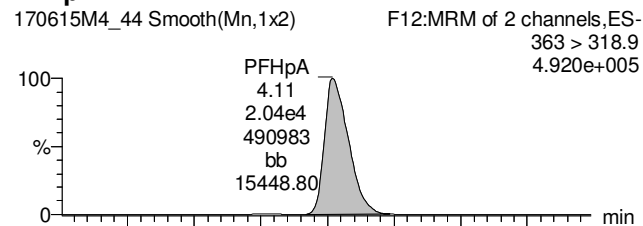
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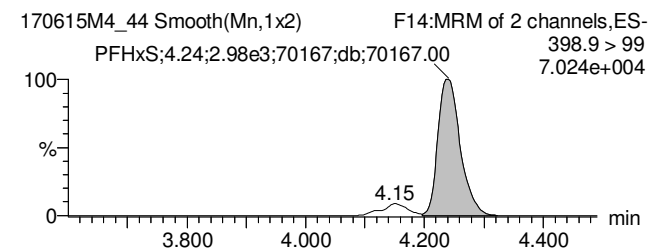
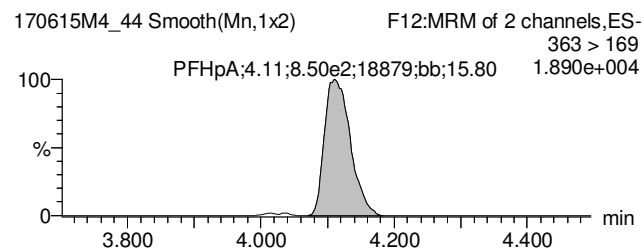
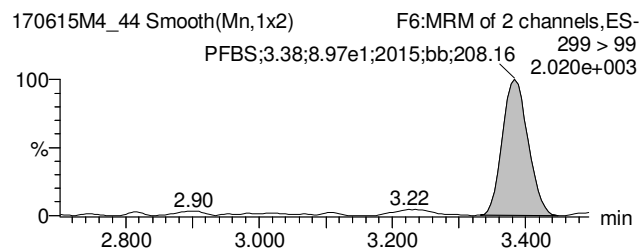
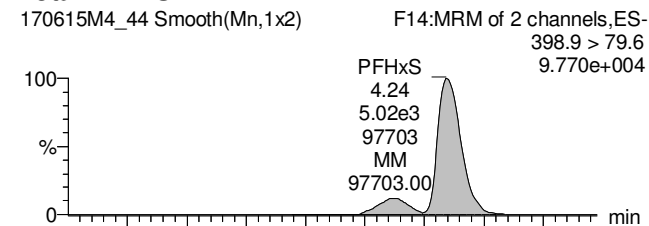
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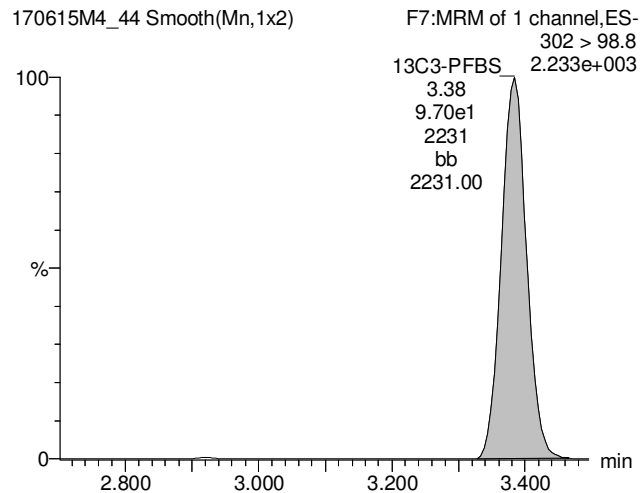
**PFHpA**



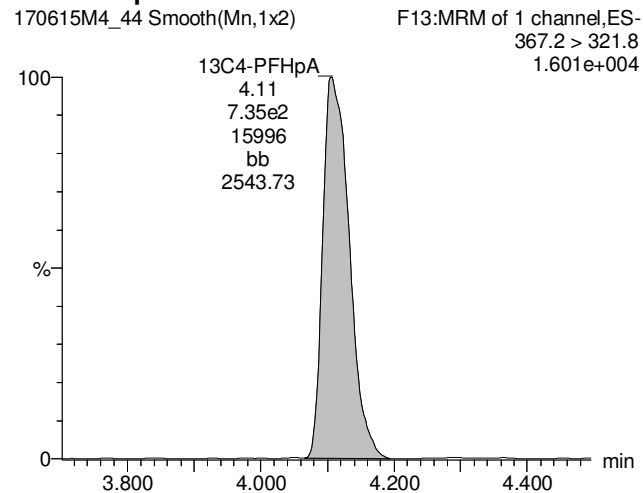
**Total PFHxS**



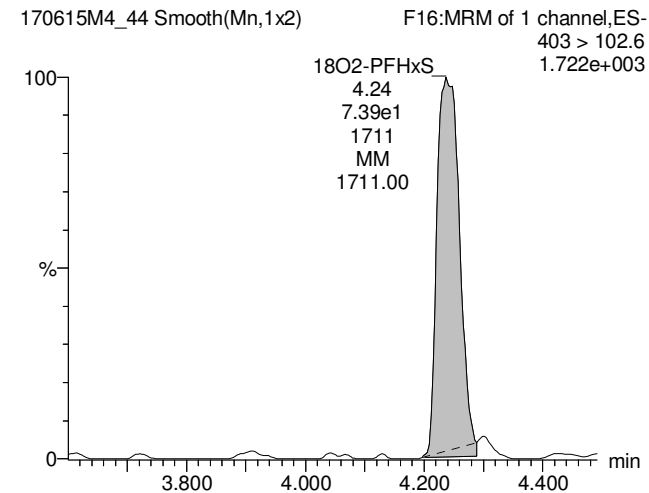
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**



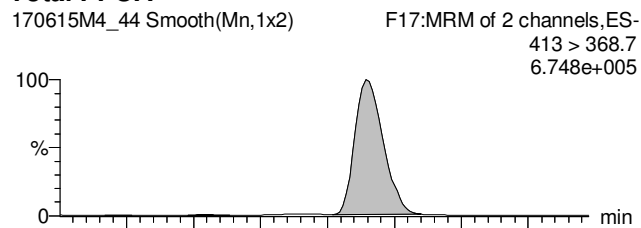
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Last Altered: Monday, June 19, 2017 13:59:13 Pacific Daylight Time

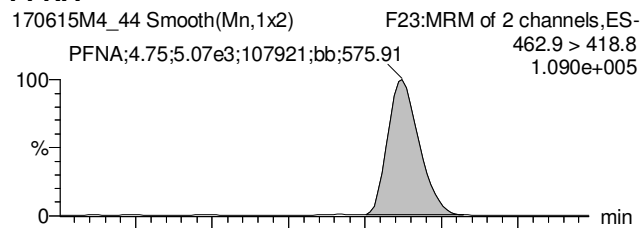
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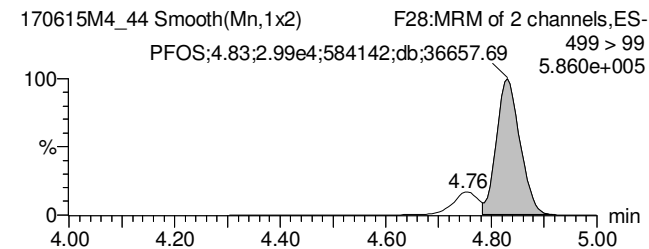
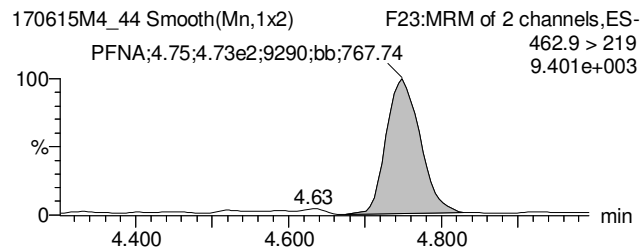
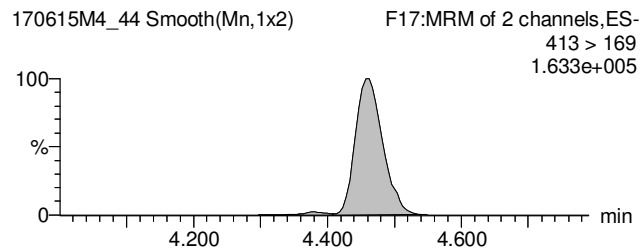
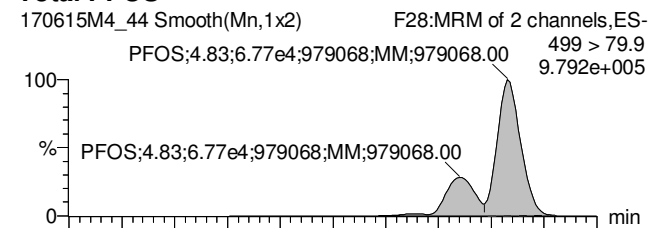
**Total PFOA**



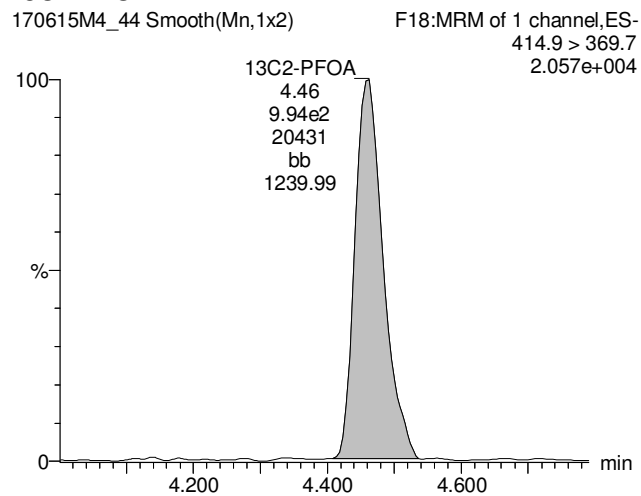
**PFNA**



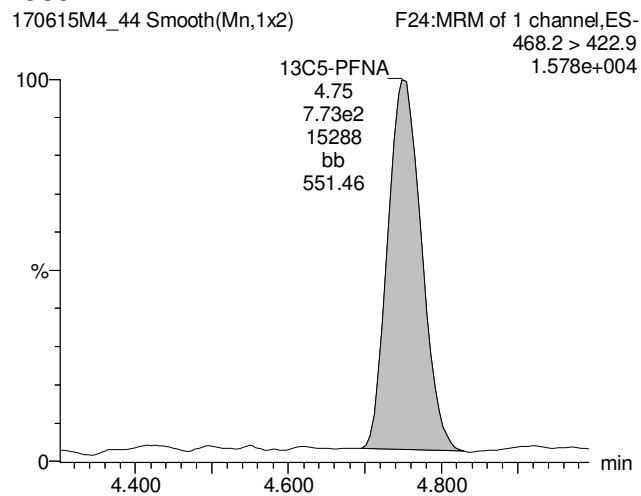
**Total PFOS**



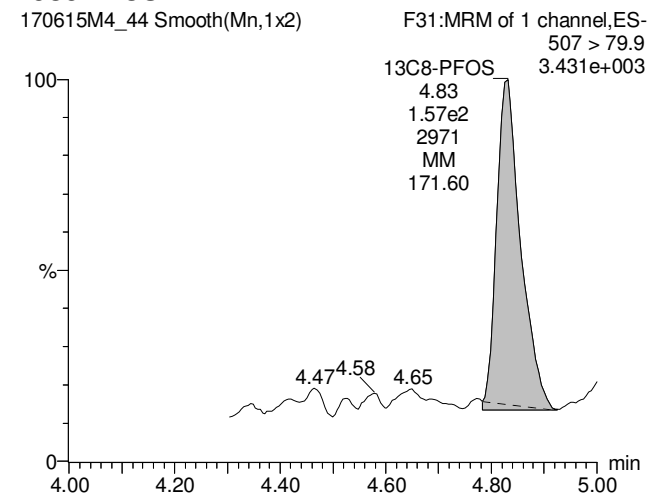
**13C2-PFOA**



**13C5-PFNA**



**13C8-PFOS**



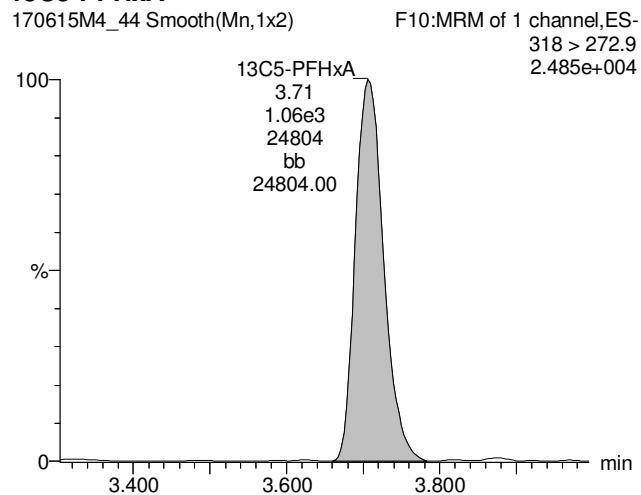
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Last Altered: Monday, June 19, 2017 13:59:13 Pacific Daylight Time

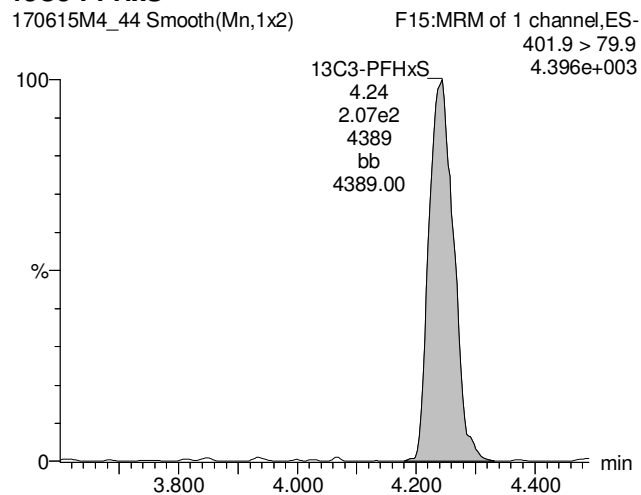
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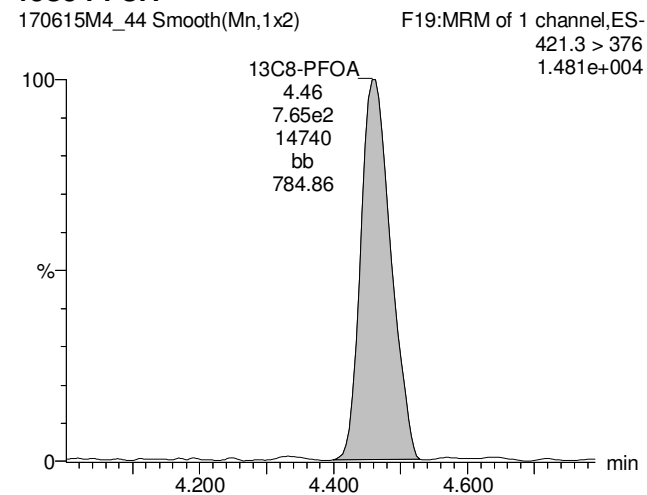
**13C5-PFHxA**



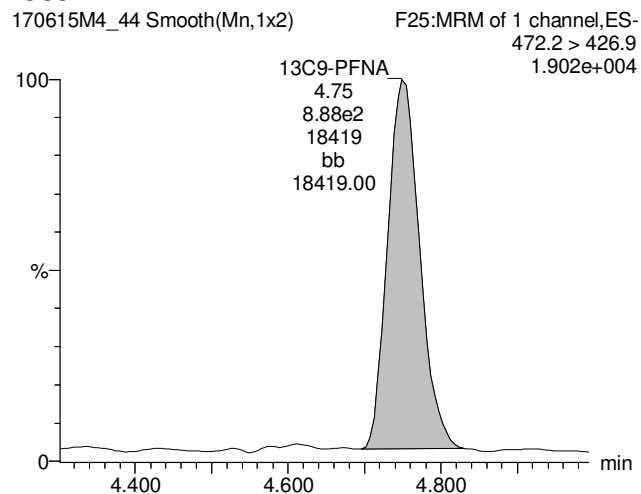
**13C3-PFHxS**



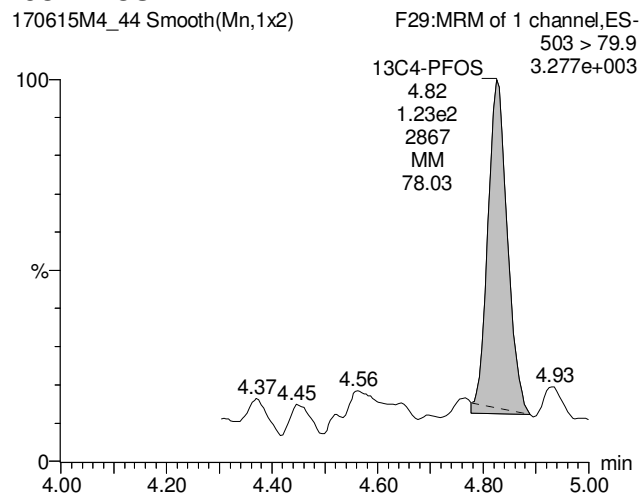
**13C8-PFOA**



**13C9-PFNA**



**13C4-PFOS**



Dataset: U:\Q4.PRO\results\170608m5\170608M5-47.qld

Last Altered: Friday, June 16, 2017 15:30:48 Pacific Daylight Time

Printed: Tuesday, June 27, 2017 13:44:53 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_47, Date: 09-Jun-2017, Time: 09:01:21, ID: 1700681-07 OF-EB060117 0.125, Description: OF-EB060117

	# Name	Trace	Area	IS Area	RRF	Divisor1	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299 > 79.7		2.95e3		0.1183	3.30				
2	5 PFHpA	363 > 318.9		2.73e4		0.1183	4.06				
3	6 PFHxS	398.9 > 79.6	2.54e1	2.35e3		0.1183	4.20	4.08	0.135		
4	8 PFOA	413 > 368.7		3.40e4		0.1183	4.36				
5	9 PFNA	462.9 > 418.8		2.67e4		0.1183	4.68				
6	10 PFOS	499 > 79.9		5.77e3		0.1183	4.70				
7	21 13C3-PFBS	302 > 98.8	2.95e3	3.48e4	0.024	0.1183	3.30	3.15	0.424	149	141.2
8	23 13C4-PFHpA	367.2 > 321.8	2.73e4	3.48e4	0.235	0.1183	4.06	3.95	3.92	141	133.3
9	24 18O2-PFHxS	403 > 102.6	2.35e3	5.12e3	0.345	0.1183	4.20	4.07	5.75	141	133.4
10	25 13C2-6:2 FTS	429.1 > 408.9	4.65e3	5.39e3	0.329	0.1183	4.30	4.26	4.31	111	104.7
11	26 13C2-PFOA	414.9 > 369.7	3.40e4	2.71e4	1.148	0.1183	4.40	4.28	15.7	115	109.1
12	27 13C5-PFNA	468.2 > 422.9	2.67e4	2.87e4	0.724	0.1183	4.68	4.58	11.6	136	128.6
13	28 13C8-PFOS	507 > 79.9	5.77e3	5.27e3	0.868	0.1183	4.78	4.66	13.7	133	126.2
14	38 13C5-PFHxA	318 > 272.9	3.48e4	3.48e4	1.000	0.1183	3.67	3.53	5.00	42.3	100.0
15	39 13C3-PFHxS	401.9 > 79.9	5.12e3	5.12e3	1.000	0.1183	4.20	4.07	12.5	106	100.0
16	40 13C8-PFOA	421.3 > 376	2.71e4	2.71e4	1.000	0.1183	4.40	4.28	12.5	106	100.0
17	41 13C9-PFNA	472.2 > 426.9	2.87e4	2.87e4	1.000	0.1183	4.68	4.58	12.5	106	100.0
18	42 13C4-PFOS	503 > 79.9	5.27e3	5.27e3	1.000	0.1183	4.78	4.66	12.5	106	100.0
19	43 13C6-PFDA	519.1 > 473.7	2.72e4	2.72e4	1.000	0.1183	4.95	4.85	12.5	106	100.0
20	44 13C7-PFUnA	570.1 > 524.8	2.48e4	2.48e4	1.000	0.1183	5.20	5.09	12.5	106	100.0
21	45 Total PFBS	299 > 79.7	0.00e0	2.95e3		0.1183	3.30		0.000		
22	46 Total PFHxS	398.9 > 79.6	2.54e1	2.35e3		0.1183	4.05		0.000		
23	47 Total PFOA	413 > 368.7	0.00e0	3.40e4		0.1183	4.30		0.000		
24	48 Total PFOS	499 > 79.9	0.00e0	5.77e3		0.1183	4.60		0.000		

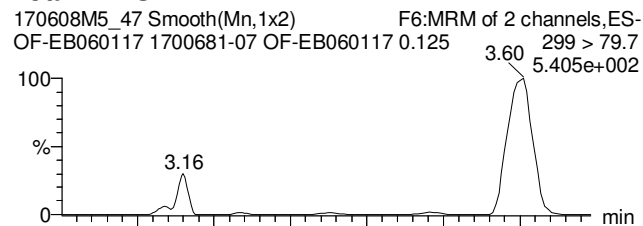
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Last Altered: Friday, June 16, 2017 15:30:48 Pacific Daylight Time  
Printed: Tuesday, June 27, 2017 13:44:53 Pacific Daylight Time

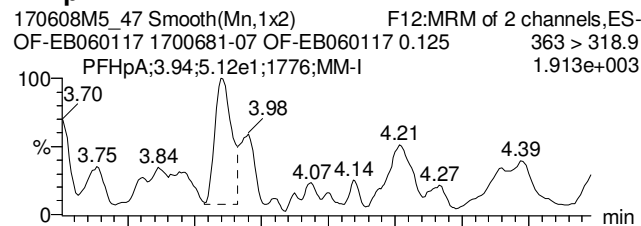
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_47, Date: 09-Jun-2017, Time: 09:01:21, ID: 1700681-07 OF-EB060117 0.125, Description: OF-EB060117

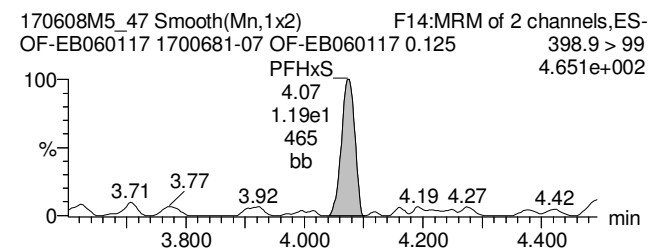
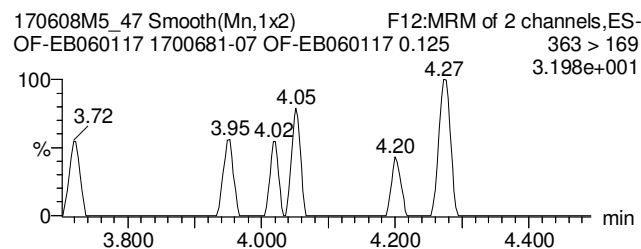
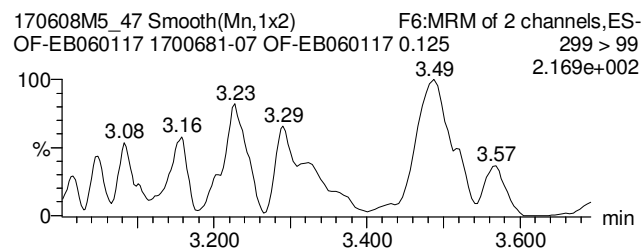
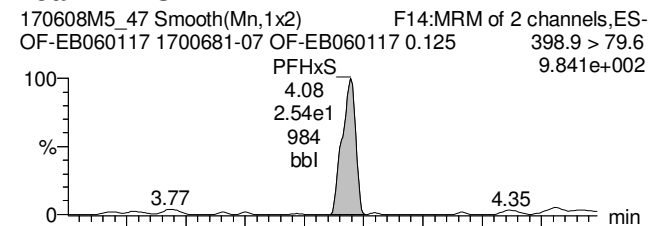
**Total PFBS**



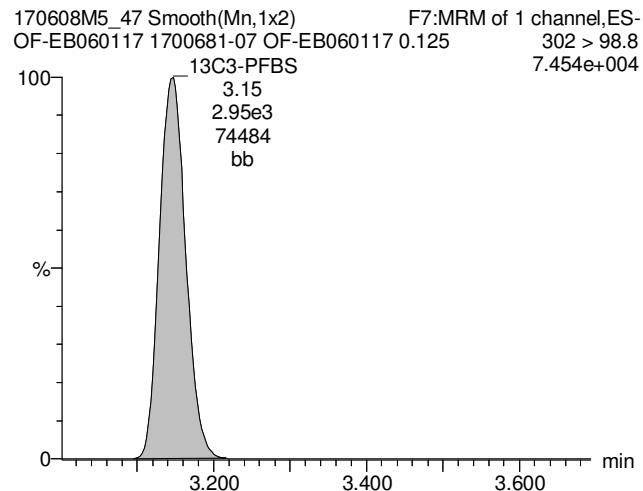
**PFHpA**



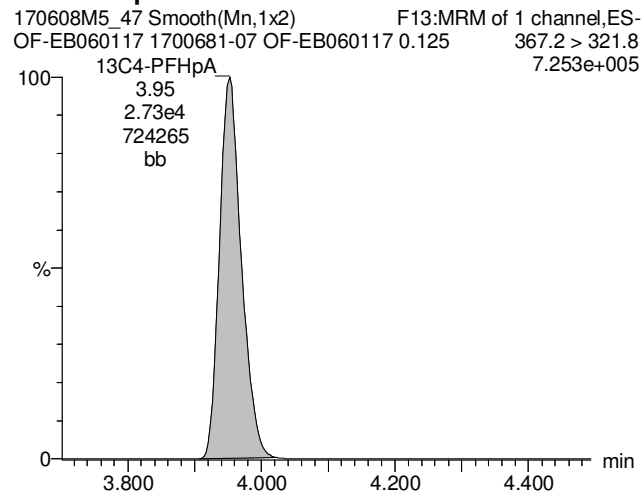
**Total PFHxS**



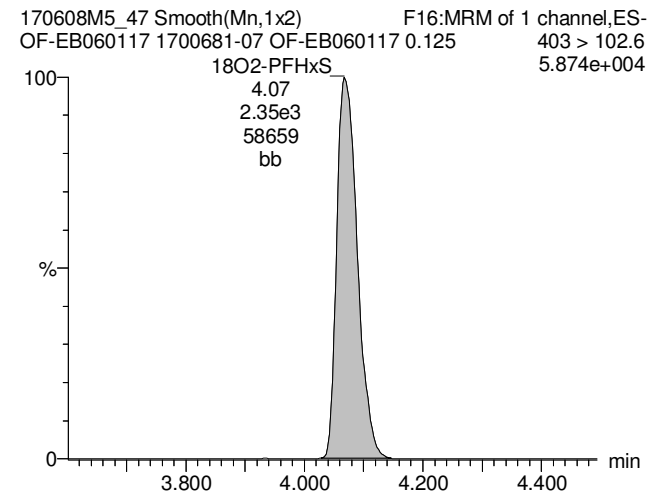
**13C3-PFBS**



**13C4-PFHpA**



**18O2-PFHxS**



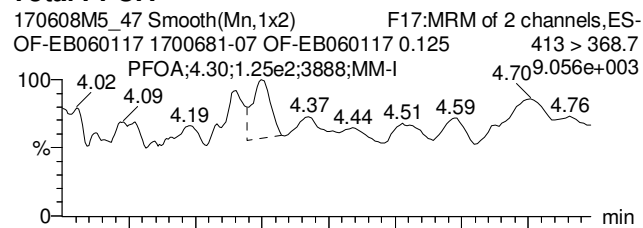


Dataset: U:\Q4.PRO\results\170608m5\170608M5-47.qld

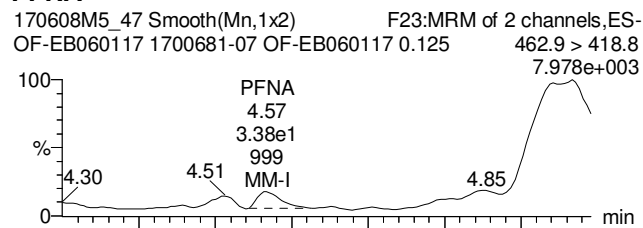
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Printed: Tuesday, June 27, 2017 13:44:53 Pacific Daylight Time

Name: 170608M5\_47, Date: 09-Jun-2017, Time: 09:01:21, ID: 1700681-07 OF-EB060117 0.125, Description: OF-EB060117

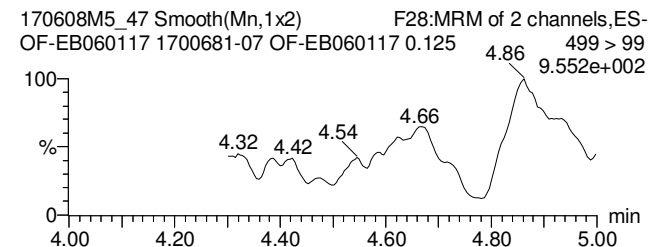
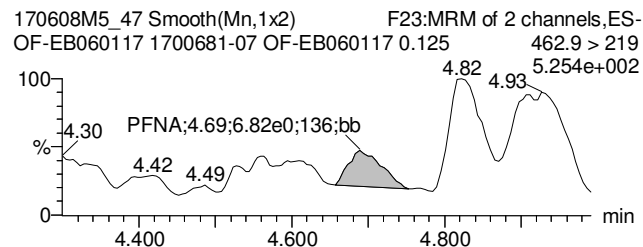
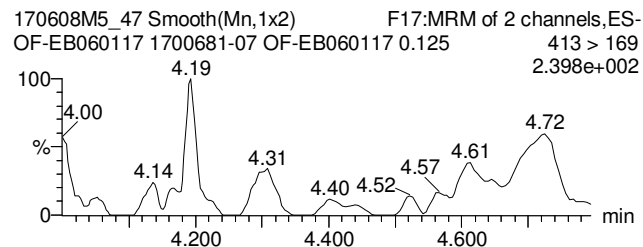
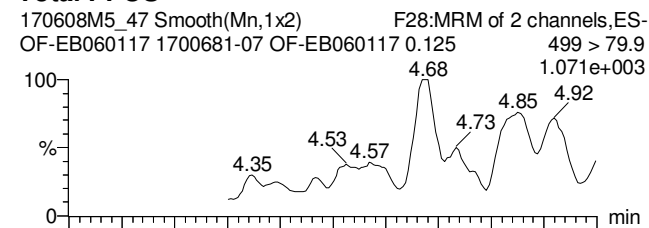
### Total PFOA



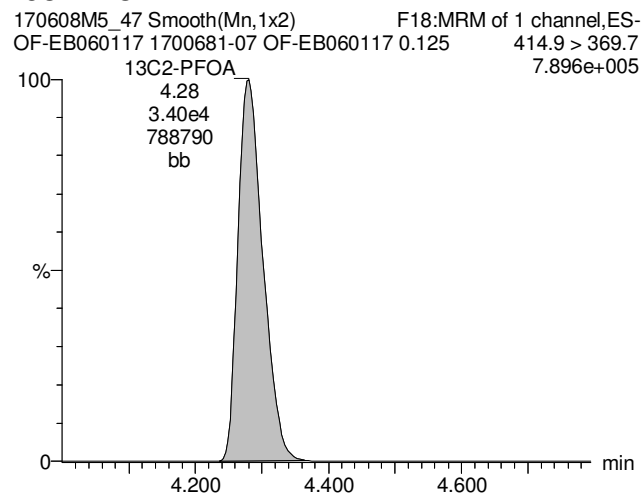
### PFNA



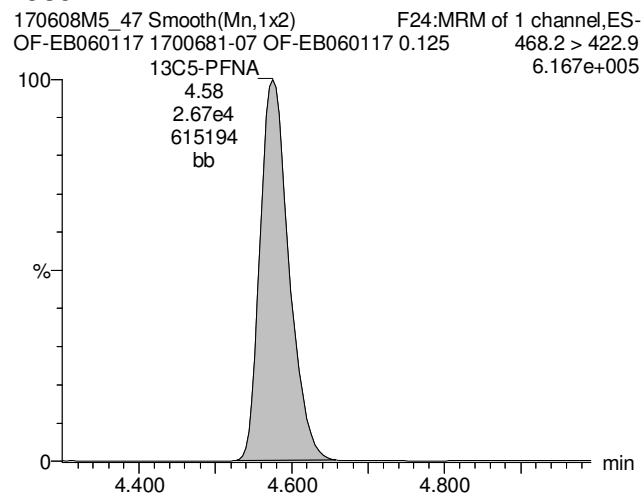
### Total PFOS



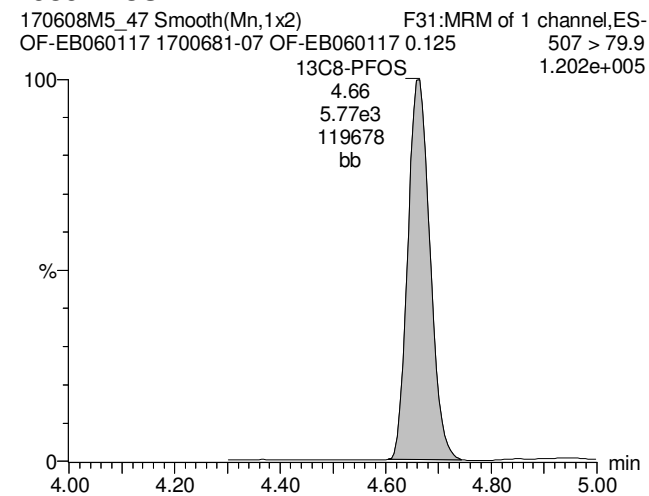
### 13C2-PFOA



### 13C5-PFNA



### 13C8-PFOS



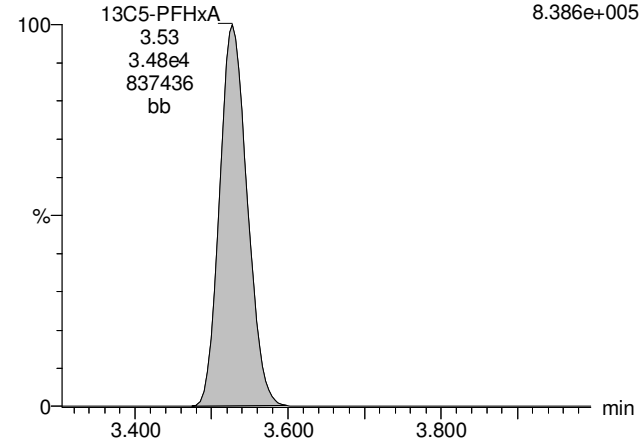
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Printed: Tuesday, June 27, 2017 13:44:53 Pacific Daylight Time

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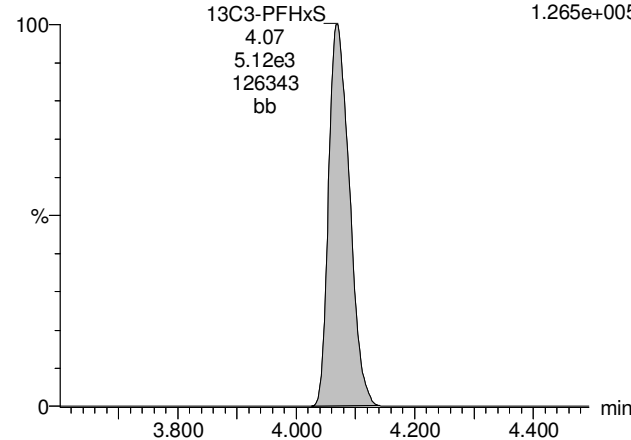
**13C5-PFHxA**

170608M5\_47 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-  
OF-EB060117 1700681-07 OF-EB060117 0.125 318 > 272.9  
8.386e+005



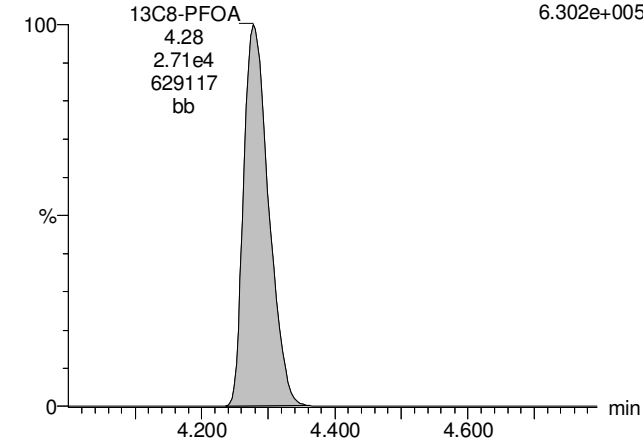
**13C3-PFHxS**

170608M5\_47 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-  
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1.265e+005



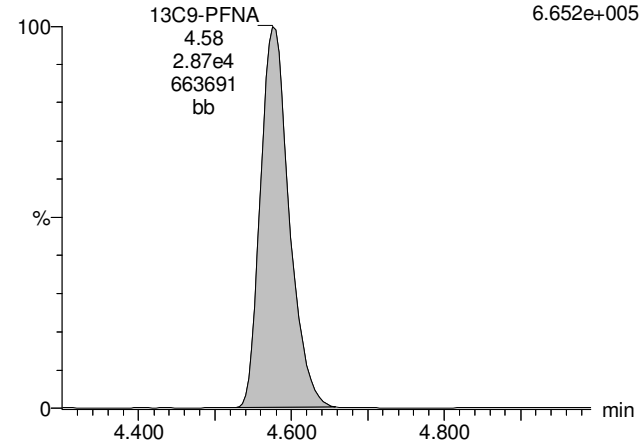
**13C8-PFOA**

170608M5\_47 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-  
OF-EB060117 1700681-07 OF-EB060117 0.125 421.3 > 376  
6.302e+005



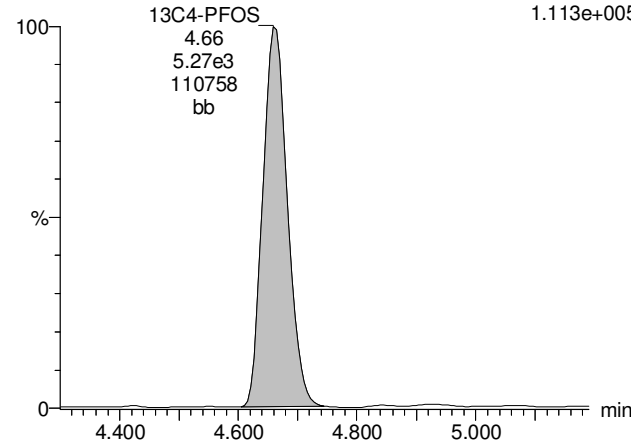
**13C9-PFNA**

170608M5\_47 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-  
OF-EB060117 1700681-07 OF-EB060117 0.125 472.2 > 426.9  
6.652e+005



**13C4-PFOS**

170608M5\_47 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-  
OF-EB060117 1700681-07 OF-EB060117 0.125 503 > 79.9  
1.113e+005



## **CONTINUING CALIBRATION**

Dataset: U:\Q4.PRO\results\170608m5\170608M5-30.qld

Last Altered: Wednesday, June 14, 2017 08:10:55 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 08:13:38 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

*CP 6/14/17*

Name: 170608M5\_30, Date: 09-Jun-2017, Time: 05:10:18, ID: ST170608M5-3 PFC CS3 17F0714, Description: PFC CS3 17F0714

#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	14723.528	18023.629		1.000	1.53	8.98	89.78
2	2 PFPeA	263.1 > 218.9	26992.701	40260.914		1.000	2.84	8.83	88.27
3	3 PFBS	299 > 79.7	6779.203	4648.955		1.000	3.15	8.97	89.66
4	4 PFHxA	313.2 > 268.9	44955.605	18817.408		1.000	3.53	8.61	86.07
5	5 PFHpA	363 > 318.9	35733.688	42393.453		1.000	3.95	8.73	87.26
6	6 PFHxS	398.9 > 79.6	4960.892	3807.316		1.000	4.07	8.80	88.02
7	8 PFOA	413 > 368.7	41203.617	54959.813		1.000	4.28	9.44	94.36
8	9 PFNA	462.9 > 418.8	38041.383	44578.852		1.000	4.58	8.73	87.26
9	10 PFOS	499 > 79.9	6920.247	9197.809		1.000	4.66	8.71	87.07
10	19 13C3-PFBA	216.1 > 171.8	18023.629	21566.658	0.724	1.000	1.52	14.42	115.36
11	20 13C3-PFPeA	266 > 221.8	40260.914	18817.408	0.854	1.000	2.84	12.53	100.26
12	21 13C3-PFBS	302 > 98.8	4648.955	60280.625	0.024	1.000	3.14	16.05	128.38
13	22 13C2-PFHxA	315 > 269.8	18817.408	60280.625	0.264	1.000	3.53	5.91	118.30
14	23 13C4-PFHpA	367.2 > 321.8	42393.453	60280.625	0.235	1.000	3.95	14.94	119.56
15	24 18O2-PFHxS	403 > 102.6	3807.316	8443.089	0.345	1.000	4.07	16.34	130.76
16	25 13C2-6:2 FTS	429.1 > 408.9	7304.240	8776.273	0.329	1.000	4.27	12.64	101.11
17	26 13C2-PFOA	414.9 > 369.7	54959.813	42012.441	1.148	1.000	4.28	14.25	113.98
18	27 13C5-PFNA	468.2 > 422.9	44578.852	46596.746	0.724	1.000	4.58	16.51	132.06
19	28 13C8-PFOS	507 > 79.9	9197.809	8645.237	0.868	1.000	4.66	15.32	122.54
20	36 13C4-PFBA	217 > 171.8	21566.658	21566.658	1.000	1.000	1.53	12.50	100.00
21	39 13C3-PFHxS	401.9 > 79.9	8443.089	8443.089	1.000	1.000	4.07	12.50	100.00
22	40 13C8-PFOA	421.3 > 376	42012.441	42012.441	1.000	1.000	4.28	12.50	100.00
23	41 13C9-PFNA	472.2 > 426.9	46596.746	46596.746	1.000	1.000	4.58	12.50	100.00
24	42 13C4-PFOS	503 > 79.9	8645.237	8645.237	1.000	1.000	4.66	12.50	100.00

*75-125*

*60-150*

*50-150*

*50-150*

Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 08:16:35 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:16:49 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11  
 Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	170608M5_30	ST170608M5-3 PFC CS3 17F0714	09-Jun-17	05:10:18
2	170608M5_31	IPA	09-Jun-17	05:21:45
3	170608M5_32	B7F0010-BS1 OPR 0.125	09-Jun-17	05:33:12
4	170608M5_33	IPA	09-Jun-17	05:44:39
5	170608M5_34	B7F0010-BLK1 Method Blank 0.125	09-Jun-17	05:56:06
6	170608M5_35	• 1700668-03 Stoneridge Water Sample 0.125	09-Jun-17	06:07:33
7	170608M5_36	• 1700669-01 Refurb Totes (420-121418-1) 0.125	09-Jun-17	06:18:59
8	170608M5_37	• 1700671-01 MW-3 0.125	09-Jun-17	06:30:26
9	170608M5_38	• 1700671-02 MW-102 0.125	09-Jun-17	06:41:53
10	170608M5_39	• 1700681-01 OF17-MW02-0517 0.125	09-Jun-17	06:53:20
11	170608M5_40	• 1700681-02 OF17-MW03-0517 0.125	09-Jun-17	07:04:47
12	170608M5_41	B7F0010-MS1 Matrix Spike 0.125	09-Jun-17	07:16:17
13	170608M5_42	B7F0010-MSD1 Matrix Spike Dup 0.125	09-Jun-17	07:27:44
14	170608M5_43	• 1700681-03 OF17-MW01-0617 0.125	09-Jun-17	07:39:11
15	170608M5_44	• 1700681-04 OF17-MW01P-0617 0.125	09-Jun-17	08:27:03
16	170608M5_45	• 1700681-05 OF17-FB060117 0.125	09-Jun-17	08:38:27
17	170608M5_46	• 1700681-06 OF17-MW04-0617 0.125	09-Jun-17	08:49:54
18	170608M5_47	1700681-07 OF-EB060117 0.125	09-Jun-17	09:01:21
19	170608M5_48	• 1700682-01 IDW-AQ-01-0617 0.125	09-Jun-17	09:12:48
20	170608M5_49	ⓐ 1700690-01 36 0.125	09-Jun-17	09:24:15
21	170608M5_50	IPA	09-Jun-17	09:35:41
22	170608M5_51	ST170608M5-4 PFC CS3 17F0714	09-Jun-17	09:47:08
23	170608M5_52	IPA	09-Jun-17	09:58:35

ⓐ > 10 samples, RI 6/14/17

# LC Calibration Standards Review Checklist Q4

Calibration ID:	L M H	ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	
<u>ST170608M5-3</u>	LMH	NA <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NA <input type="checkbox"/>
<u>ST170608M5-4</u>	LMH	↓ <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	↓ <input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Full Mass Cal. Date: 4/18/17

Run Log Present:

# of Samples per Sequence Checked:  1

Reviewed By: JM 4/14/17  
Initials/Date

**Comments:**  
 (A) RI 170690-1 (P/G/14/17)

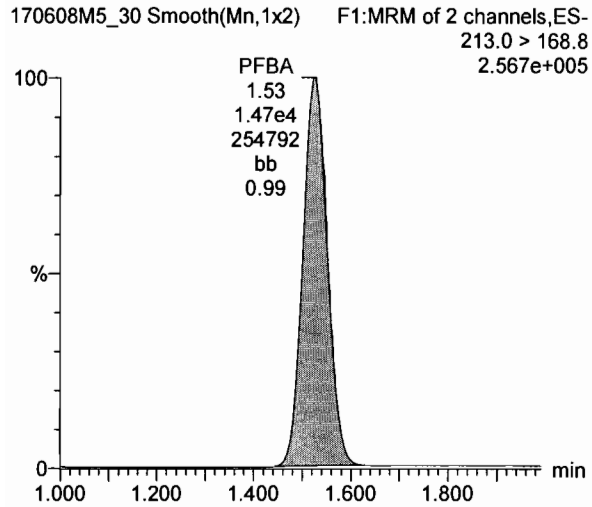
Dataset: U:\Q4.PRO\results\170608m5\170608M5-30.qld

Last Altered: Wednesday, June 14, 2017 07:29:26 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 08:09:16 Pacific Daylight Time

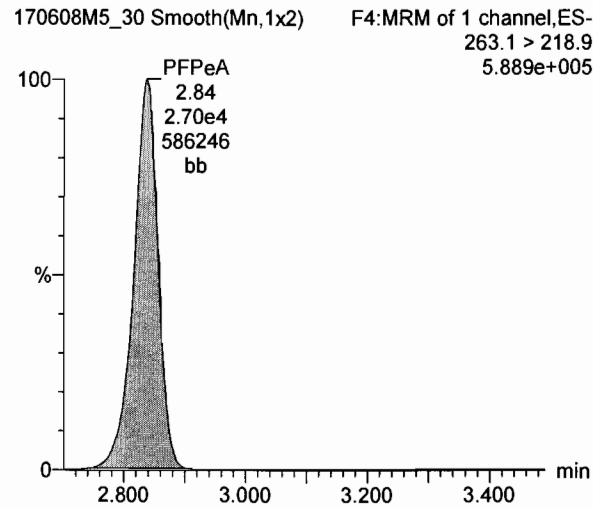
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_30, Date: 09-Jun-2017, Time: 05:10:18, ID: ST170608M5-3 PFC CS3 17F0714, Description: PFC CS3 17F0714

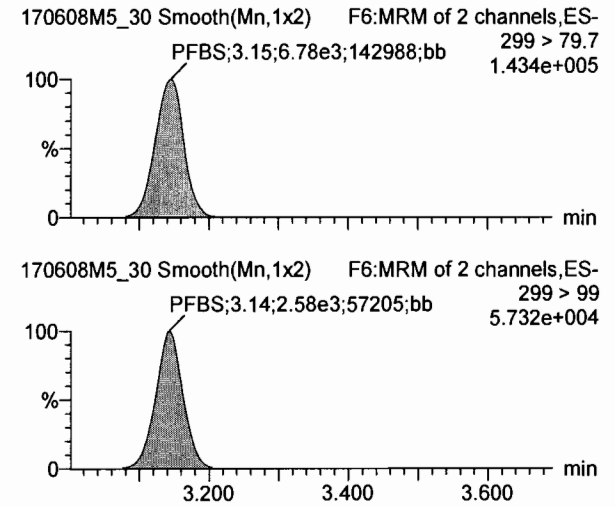
**PFBA**



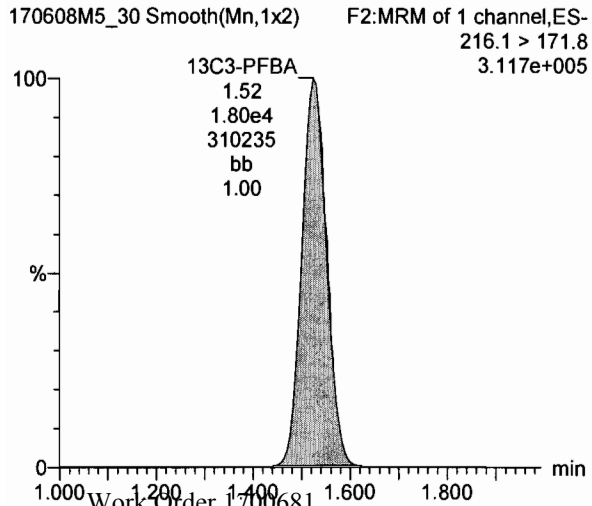
**PFPeA**



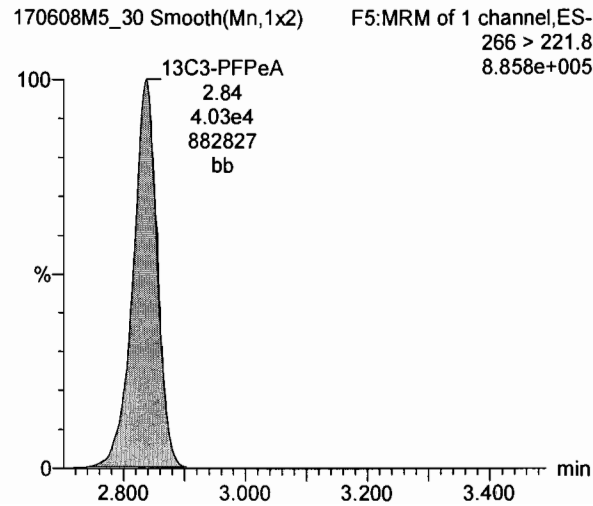
**PFBS**



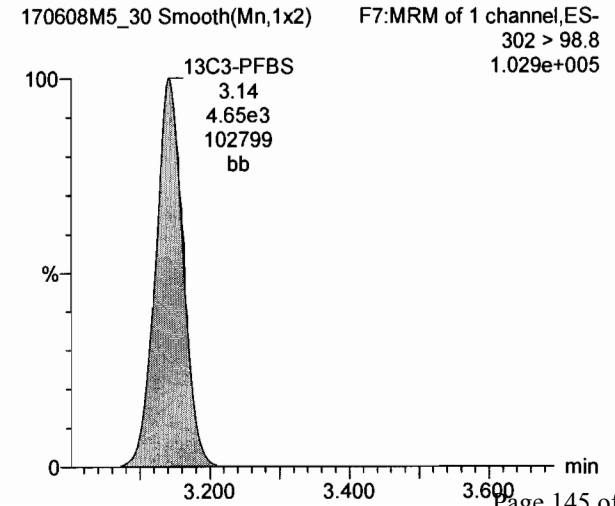
**13C3-PFBA**



**13C3-PFPeA**



**13C3-PFBS**



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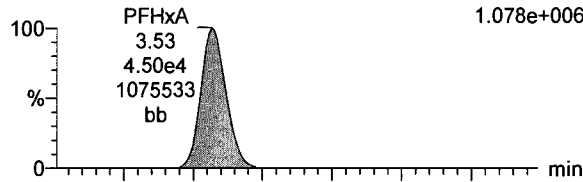
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Printed: Wednesday, June 14, 2017 08:09:16 Pacific Daylight Time

Name: 170608M5\_30, Date: 09-Jun-2017, Time: 05:10:18, ID: ST170608M5-3 PFC CS3 17F0714, Description: PFC CS3 17F0714

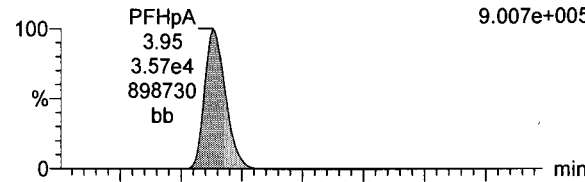
**PFHxA**

170608M5\_30 Smooth(Mn,1x2) F8:MRM of 2 channels,ES-313.2 > 268.9  
1.078e+006



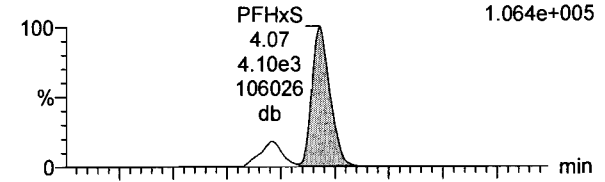
**PFHpA**

170608M5\_30 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-363 > 318.9  
9.007e+005

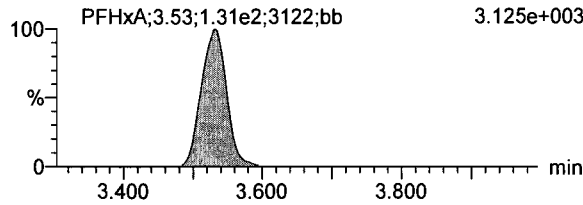


**PFHxS**

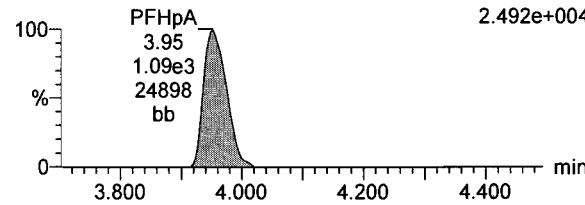
170608M5\_30 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-398.9 > 79.6  
1.064e+005



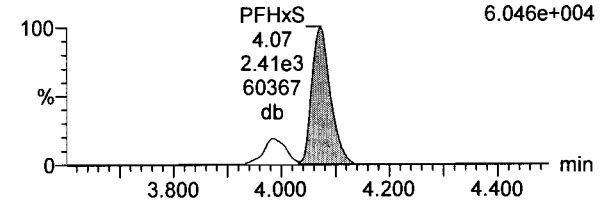
170608M5\_30 Smooth(Mn,1x2) F8:MRM of 2 channels,ES-313.2 > 119  
3.125e+003



170608M5\_30 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-363 > 169  
2.492e+004

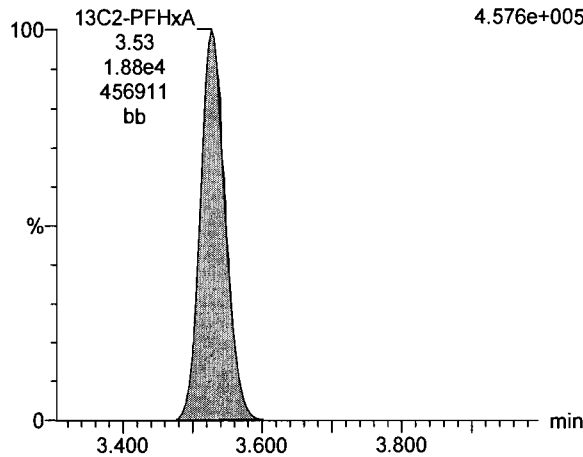


170608M5\_30 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-398.9 > 99  
6.046e+004



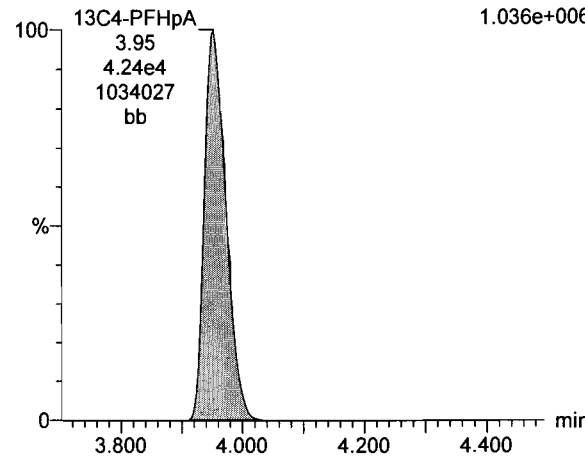
**13C2-PFHxA**

170608M5\_30 Smooth(Mn,1x2) F9:MRM of 1 channel,ES-315 > 269.8  
4.576e+005



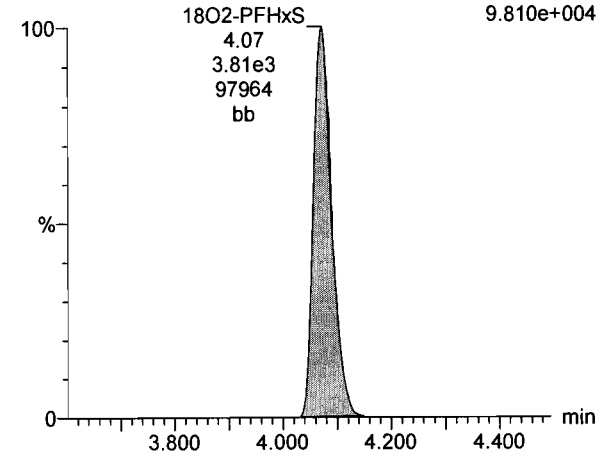
**13C4-PFHpA**

170608M5\_30 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-367.2 > 321.8  
1.036e+006

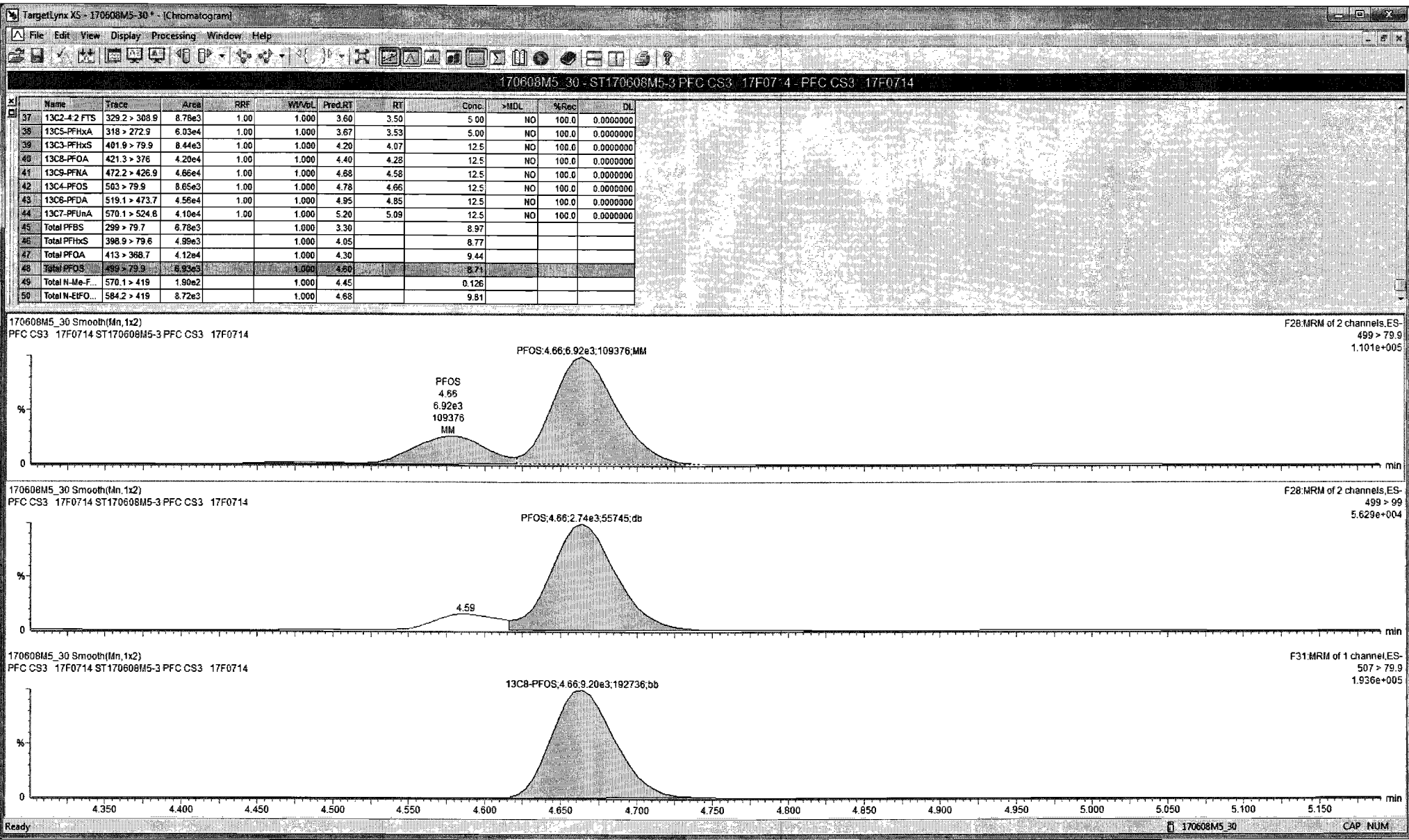


**18O2-PFHxS**

170608M5\_30 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-403 > 102.6  
9.810e+004







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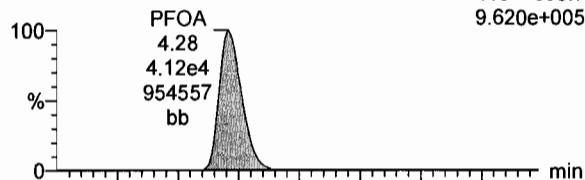
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Printed: Wednesday, June 14, 2017 08:09:16 Pacific Daylight Time

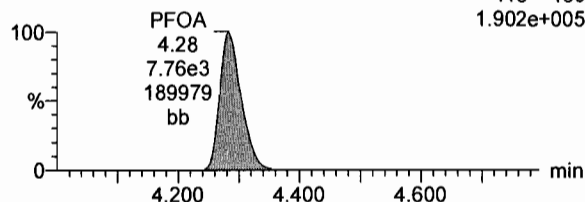
Name: 170608M5\_30, Date: 09-Jun-2017, Time: 05:10:18, ID: ST170608M5-3 PFC CS3 17F0714, Description: PFC CS3 17F0714

**PFOA**

170608M5\_30 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-413 > 368.7  
9.620e+005

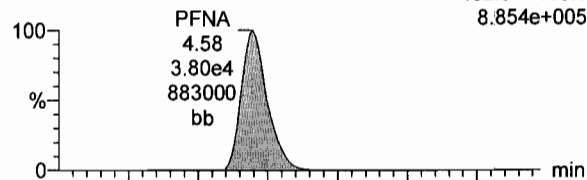


170608M5\_30 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-413 > 169  
1.902e+005

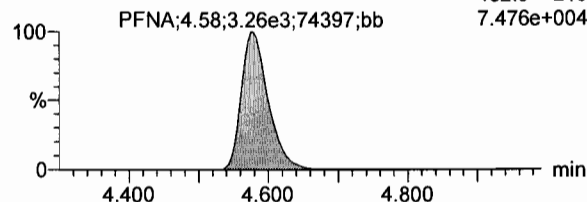


**PFNA**

170608M5\_30 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-462.9 > 418.8  
8.854e+005

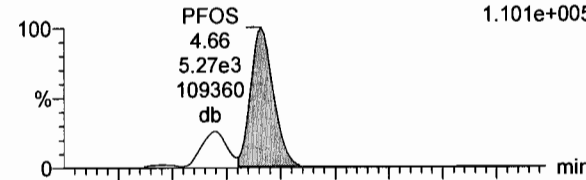


170608M5\_30 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-462.9 > 219  
7.476e+004

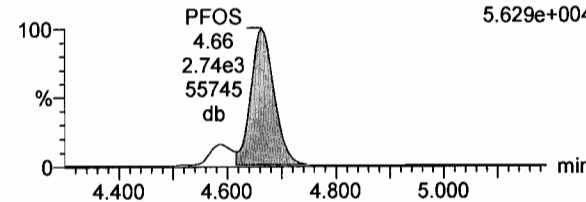


**PFOS**

170608M5\_30 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-499 > 79.9  
1.101e+005

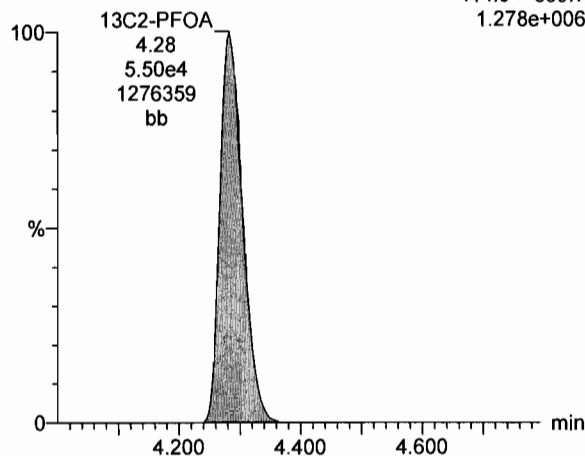


170608M5\_30 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-499 > 99  
5.629e+004



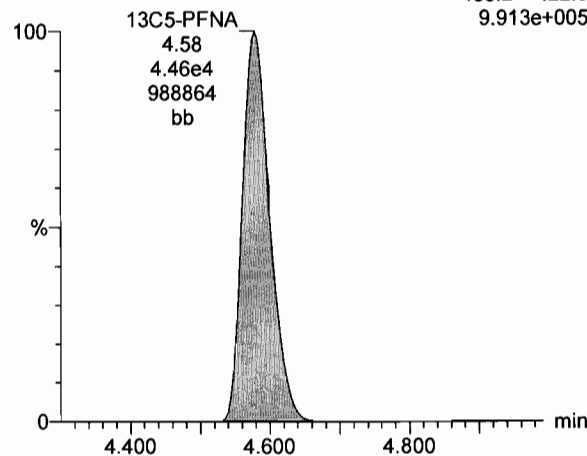
**13C2-PFOA**

170608M5\_30 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-414.9 > 369.7  
1.278e+006



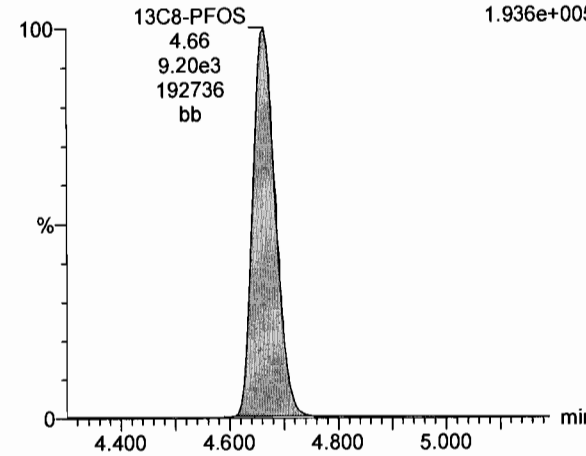
**13C5-PFNA**

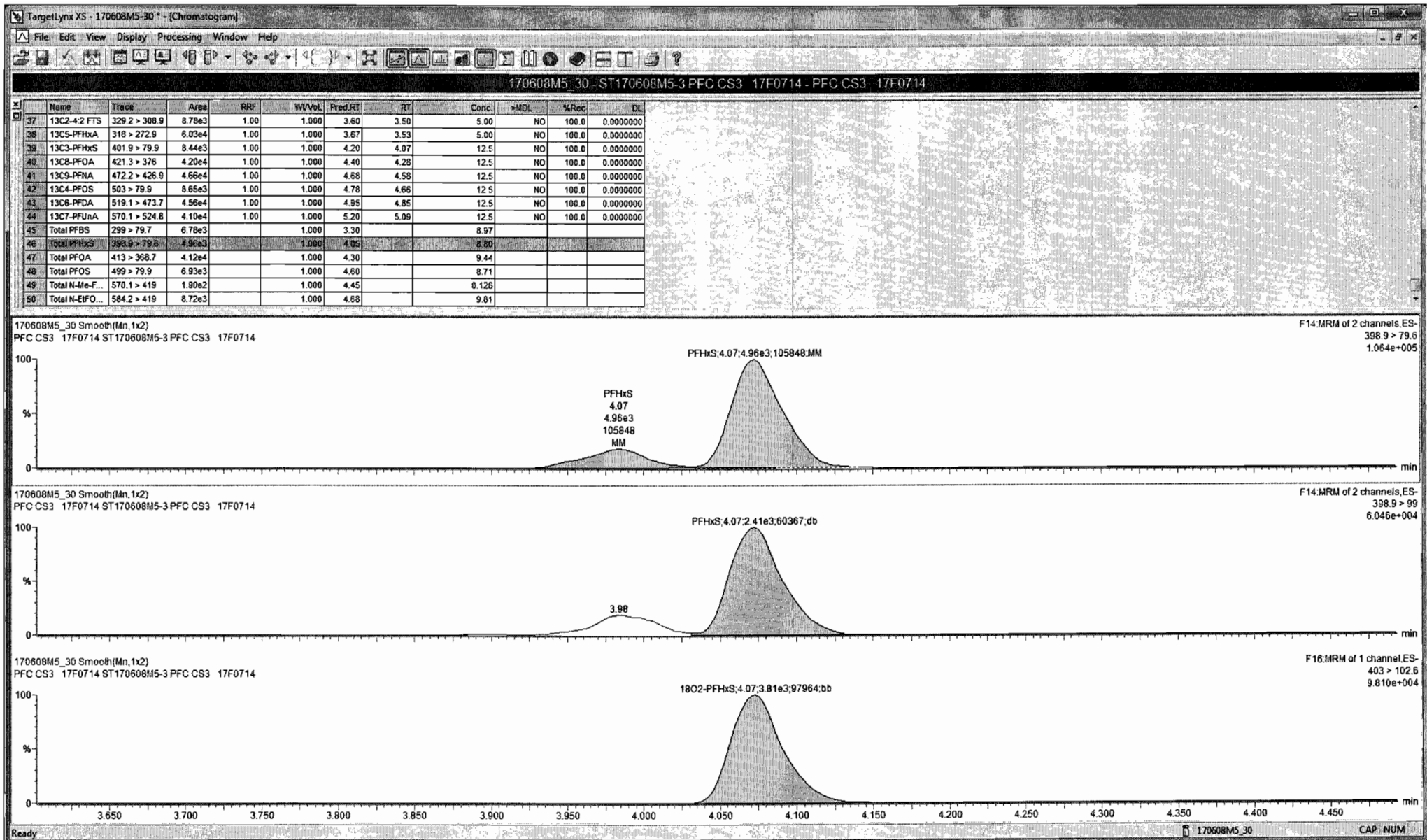
170608M5\_30 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-468.2 > 422.9  
9.913e+005



**13C8-PFOS**

170608M5\_30 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-507 > 79.9  
1.936e+005





Dataset: U:\Q4.PRO\results\170608m5\170608M5-30.qld

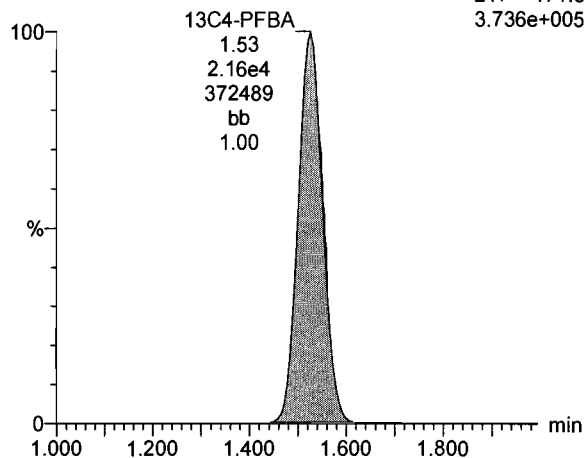
Last Altered: Wednesday, June 14, 2017 07:29:26 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:09:16 Pacific Daylight Time

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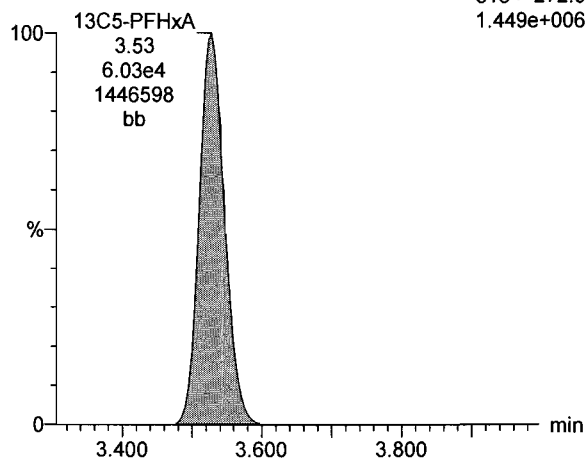
**13C4-PFBA**

170608M5\_30 Smooth(Mn,1x2) F3:MRM of 1 channel,ES-  
217 > 171.8  
3.736e+005



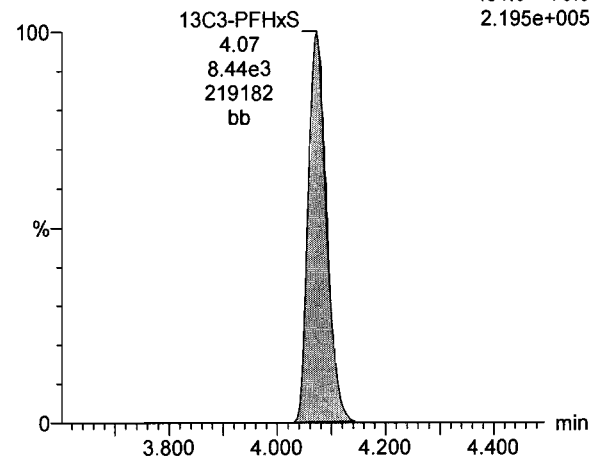
**13C5-PFHxA**

170608M5\_30 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-  
318 > 272.9  
1.449e+006



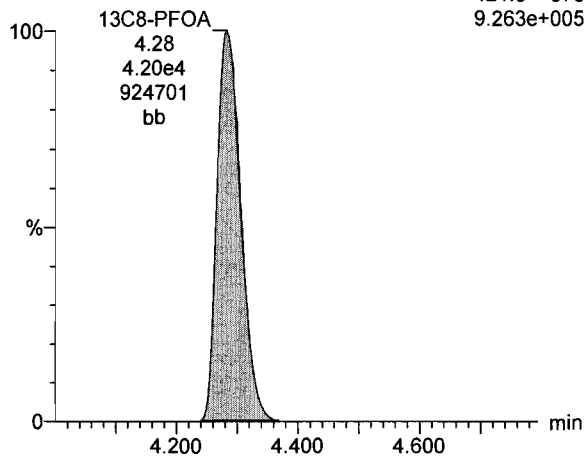
**13C3-PFHxS**

170608M5\_30 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-  
401.9 > 79.9  
2.195e+005



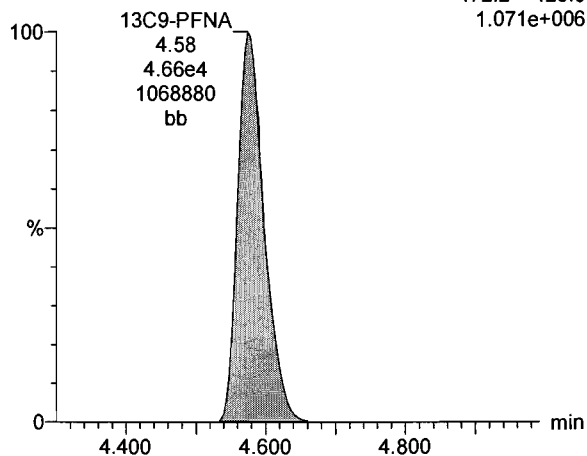
**13C8-PFOA**

170608M5\_30 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-  
421.3 > 376  
9.263e+005



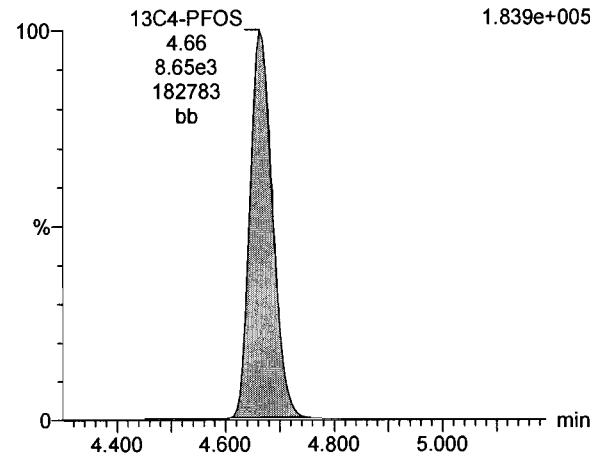
**13C9-PFNA**

170608M5\_30 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.071e+006



**13C4-PFOS**

170608M5\_30 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-  
503 > 79.9  
1.839e+005



Dataset: U:\Q4.PRO\results\170608m5\170608M5-51.qld

Last Altered: Wednesday, June 14, 2017 08:24:36 Pacific Daylight Time  
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Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

*CP 6/14/17*

Name: 170608M5\_51, Date: 09-Jun-2017, Time: 09:47:08, ID: ST170608M5-4 PFC CS3 17F0714, Description: PFC CS3 17F0714

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1	1 PFBA	213.0 > 168.8	15604.486	19527.182		1.000	1.53	8.78	87.80
2	2 PFPeA	263.1 > 218.9	30846.725	44792.902		1.000	2.84	9.07	90.68
3	3 PFBS	299 > 79.7	7194.101	4980.885		1.000	3.14	8.88	88.81
4	4 PFHxA	313.2 > 268.9	47302.234	19273.734		1.000	3.53	8.84	88.44
5	5 PFHpA	363 > 318.9	37653.914	42370.871		1.000	3.95	9.20	92.03
6	6 PFHxS	398.9 > 79.6	4800.956	3921.510		1.000	4.07	8.27	82.66
7	8 PFOA	413 > 368.7	40307.418	56997.973		1.000	4.28	8.89	88.94
8	9 PFNA	462.9 > 418.8	40318.168	44852.367		1.000	4.57	9.19	91.94
9	10 PFOS	499 > 79.9	6716.371	9330.651		1.000	4.66	8.33	83.30
10	19 13C3-PFBA	216.1 > 171.8	19527.182	22393.461	0.724	1.000	1.52	15.05	120.37
11	20 13C3-PFPeA	266 > 221.8	44792.902	19273.734	0.854	1.000	2.84	13.61	108.90
12	21 13C3-PFBS	302 > 98.8	4980.885	62269.363	0.024	1.000	3.14	16.64	133.16
13	22 13C2-PFHxA	315 > 269.8	19273.734	62269.363	0.264	1.000	3.53	5.86	117.30
14	23 13C4-PFHpA	367.2 > 321.8	42370.871	62269.363	0.235	1.000	3.95	14.46	115.68
15	24 18O2-PFHxS	403 > 102.6	3921.510	9296.753	0.345	1.000	4.07	15.29	122.31
16	25 13C2-6:2 FTS	429.1 > 408.9	7512.375	9027.515	0.329	1.000	4.26	12.64	101.09
17	26 13C2-PFOA	414.9 > 369.7	56997.973	43907.199	1.148	1.000	4.28	14.14	113.11
18	27 13C5-PFNA	468.2 > 422.9	44852.367	50389.785	0.724	1.000	4.58	15.36	122.87
19	28 13C8-PFOS	507 > 79.9	9330.651	9181.041	0.868	1.000	4.66	14.63	117.06
20	36 13C4-PFBA	217 > 171.8	22393.461	22393.461	1.000	1.000	1.53	12.50	100.00
21	39 13C3-PFHxS	401.9 > 79.9	9296.753	9296.753	1.000	1.000	4.07	12.50	100.00
22	40 13C8-PFOA	421.3 > 376	43907.199	43907.199	1.000	1.000	4.28	12.50	100.00
23	41 13C9-PFNA	472.2 > 426.9	50389.785	50389.785	1.000	1.000	4.58	12.50	100.00
24	42 13C4-PFOS	503 > 79.9	9181.041	9181.041	1.000	1.000	4.66	12.50	100.00

*75-125*  
↓  
*60-150*  
↓  
*50-150*  
*60-150*

Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 08:16:35 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:16:49 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Compound name: PFBA

Name	ID	Acq.Date	Acq.Time
170608M5_30	ST170608M5-3 PFC CS3 17F0714	09-Jun-17	05:10:18
170608M5_31	IPA	09-Jun-17	05:21:45
170608M5_32	B7F0010-BS1 OPR 0.125	09-Jun-17	05:33:12
170608M5_33	IPA	09-Jun-17	05:44:39
170608M5_34	B7F0010-BLK1 Method Blank 0.125	09-Jun-17	05:56:06
170608M5_35	* 1700668-03 Stoneridge Water Sample 0.125	09-Jun-17	06:07:33
170608M5_36	* 1700669-01 Refurb Totes (420-121418-1) 0.125	09-Jun-17	06:18:59
170608M5_37	* 1700671-01 MW-3 0.125	09-Jun-17	06:30:26
170608M5_38	* 1700671-02 MW-102 0.125	09-Jun-17	06:41:53
170608M5_39	* 1700681-01 OF17-MW02-0517 0.125	09-Jun-17	06:53:20
170608M5_40	* 1700681-02 OF17-MW03-0517 0.125	09-Jun-17	07:04:47
170608M5_41	B7F0010-MS1 Matrix Spike 0.125	09-Jun-17	07:16:17
170608M5_42	B7F0010-MSD1 Matrix Spike Dup 0.125	09-Jun-17	07:27:44
170608M5_43	* 1700681-03 OF17-MW01-0617 0.125	09-Jun-17	07:39:11
170608M5_44	* 1700681-04 OF17-MW01P-0617 0.125	09-Jun-17	08:27:03
170608M5_45	* 1700681-05 OF17-FB060117 0.125	09-Jun-17	08:38:27
170608M5_46	* 1700681-06 OF17-MW04-0617 0.125	09-Jun-17	08:49:54
170608M5_47	1700681-07 OF-EB060117 0.125	09-Jun-17	09:01:21
170608M5_48	* 1700682-01 IDW-AQ-01-0617 0.125	09-Jun-17	09:12:48
170608M5_49	ⓐ 1700690-01 36 0.125	09-Jun-17	09:24:15
170608M5_50	IPA	09-Jun-17	09:35:41
170608M5_51	ST170608M5-4 PFC CS3 17F0714	09-Jun-17	09:47:08
170608M5_52	IPA	09-Jun-17	09:58:35

ⓐ > 10 samples, RI 6/14/17

Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 08:21:55 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:22:37 Pacific Daylight Time

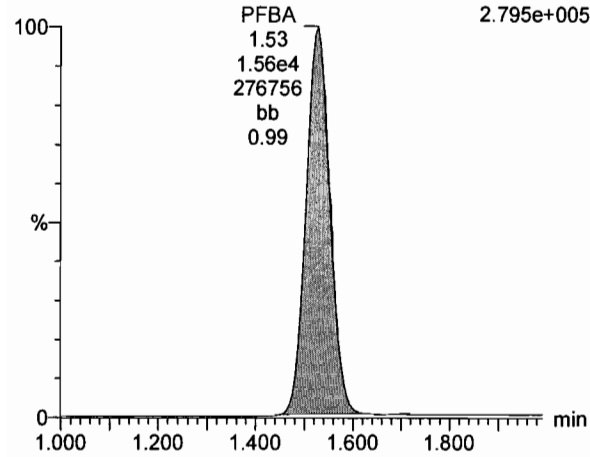
Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

Name: 170608M5\_51, Date: 09-Jun-2017, Time: 09:47:08, ID: ST170608M5-4 PFC CS3 17F0714, Description: PFC CS3 17F0714

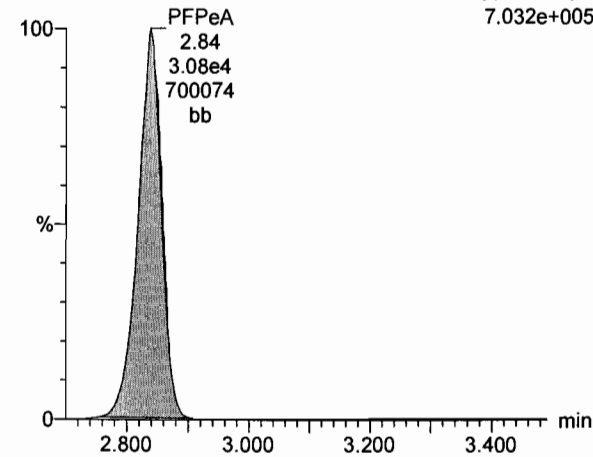
**PFBA**

170608M5\_51 Smooth(Mn,1x2) F1:MRM of 2 channels,ES-  
213.0 > 168.8  
2.795e+005



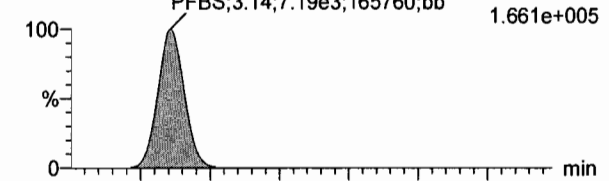
**PFPeA**

170608M5\_51 Smooth(Mn,1x2) F4:MRM of 1 channel,ES-  
263.1 > 218.9  
7.032e+005

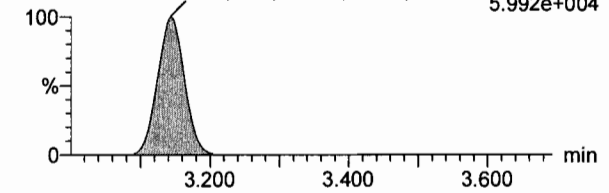


**PFBS**

170608M5\_51 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
299 > 79.7  
1.661e+005

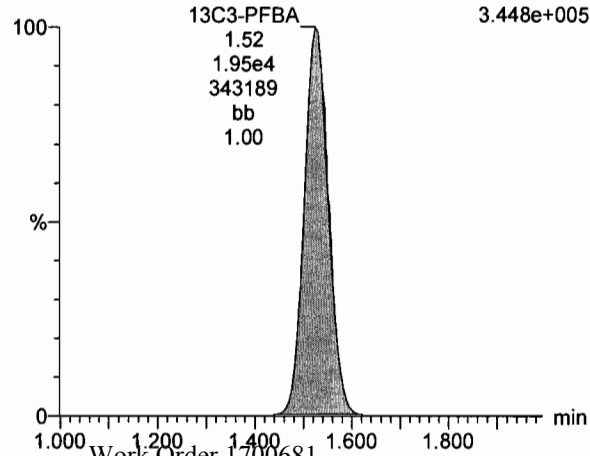


170608M5\_51 Smooth(Mn,1x2) F6:MRM of 2 channels,ES-  
299 > 99  
5.992e+004



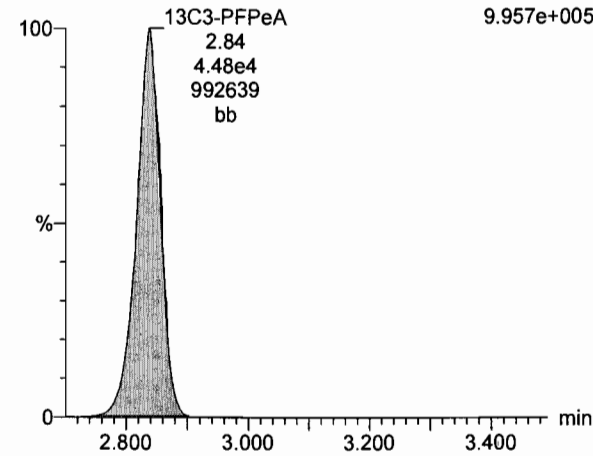
**13C3-PFBA**

170608M5\_51 Smooth(Mn,1x2) F2:MRM of 1 channel,ES-  
216.1 > 171.8  
3.448e+005



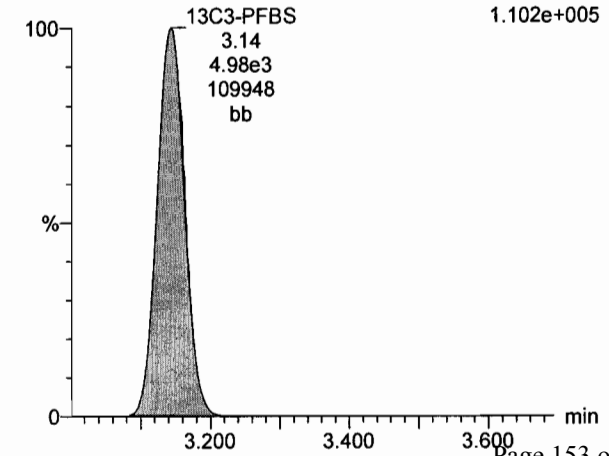
**13C3-PFPeA**

170608M5\_51 Smooth(Mn,1x2) F5:MRM of 1 channel,ES-  
266 > 221.8  
9.957e+005



**13C3-PFBS**

170608M5\_51 Smooth(Mn,1x2) F7:MRM of 1 channel,ES-  
302 > 98.8  
1.102e+005



Dataset: Untitled

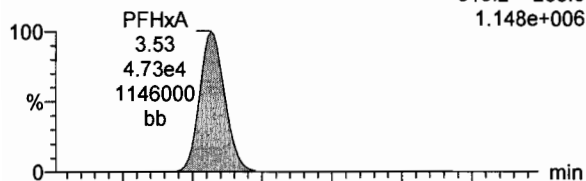
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Printed: Wednesday, June 14, 2017 08:22:37 Pacific Daylight Time

Name: 170608M5\_51, Date: 09-Jun-2017, Time: 09:47:08, ID: ST170608M5-4 PFC CS3 17F0714, Description: PFC CS3 17F0714

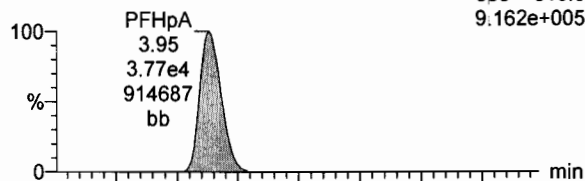
**PFHxA**

170608M5\_51 Smooth(Mn,1x2) F8:MRM of 2 channels,ES-313.2 > 268.9  
1.148e+006



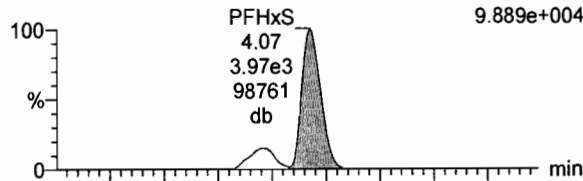
**PFHpA**

170608M5\_51 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-363 > 318.9  
9.162e+005

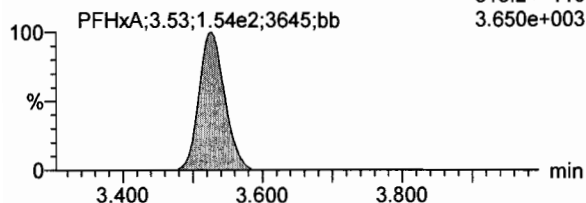


**PFHxS**

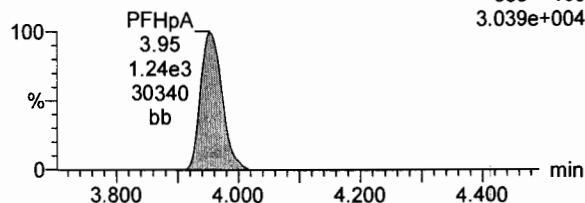
170608M5\_51 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-398.9 > 79.6  
9.889e+004



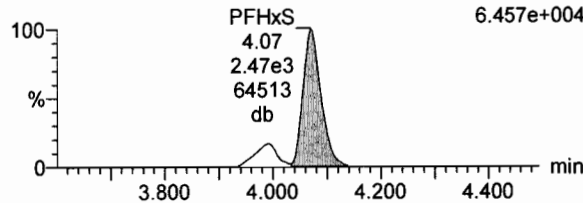
170608M5\_51 Smooth(Mn,1x2) F8:MRM of 2 channels,ES-313.2 > 119  
3.650e+003



170608M5\_51 Smooth(Mn,1x2) F12:MRM of 2 channels,ES-363 > 169  
3.039e+004

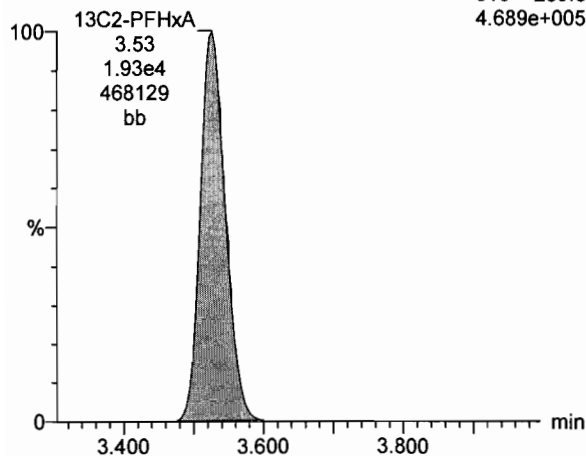


170608M5\_51 Smooth(Mn,1x2) F14:MRM of 2 channels,ES-398.9 > 99  
6.457e+004



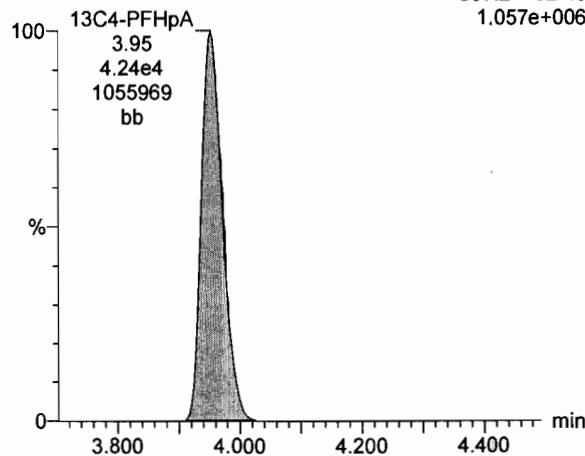
**13C2-PFHxA**

170608M5\_51 Smooth(Mn,1x2) F9:MRM of 1 channel,ES-315 > 269.8  
4.689e+005



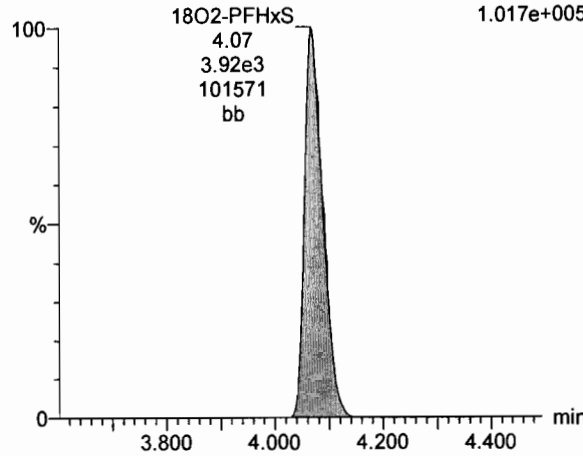
**13C4-PFHpA**

170608M5\_51 Smooth(Mn,1x2) F13:MRM of 1 channel,ES-367.2 > 321.8  
1.057e+006

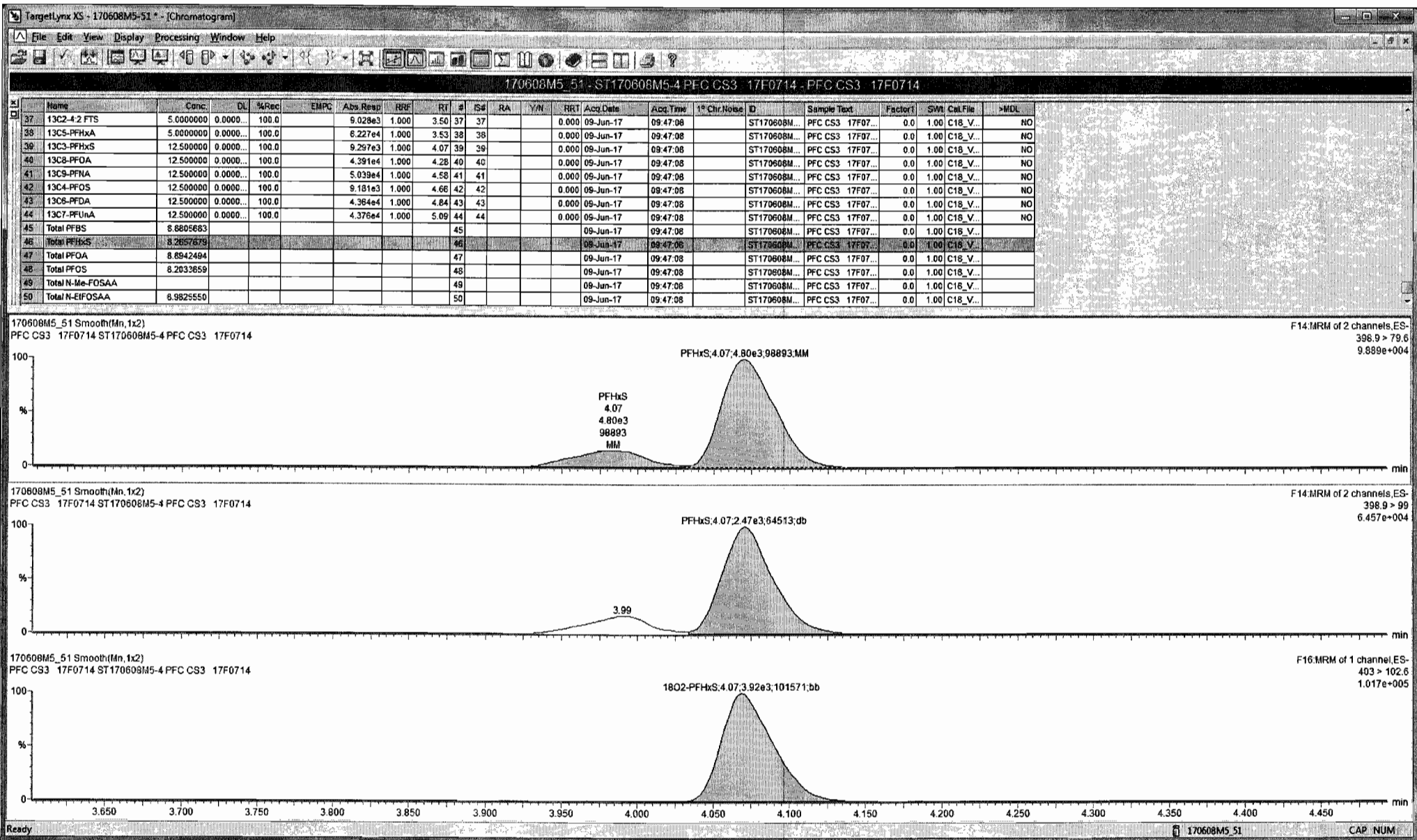


**18O2-PFHxS**

170608M5\_51 Smooth(Mn,1x2) F16:MRM of 1 channel,ES-403 > 102.6  
1.017e+005







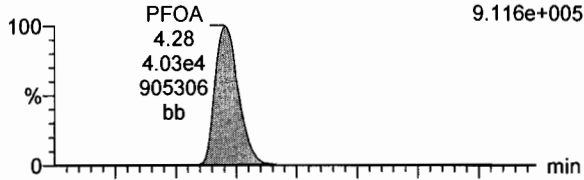
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Printed: Wednesday, June 14, 2017 08:22:37 Pacific Daylight Time

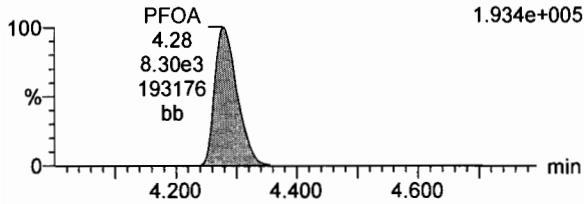
Name: 170608M5\_51, Date: 09-Jun-2017, Time: 09:47:08, ID: ST170608M5-4 PFC CS3 17F0714, Description: PFC CS3 17F0714

**PFOA**

170608M5\_51 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-413 > 368.7  
9.116e+005

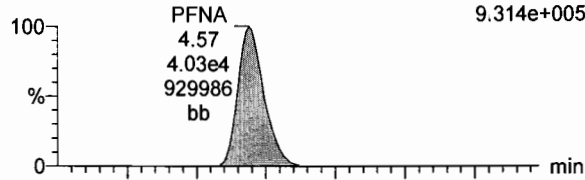


170608M5\_51 Smooth(Mn,1x2) F17:MRM of 2 channels,ES-413 > 169  
1.934e+005

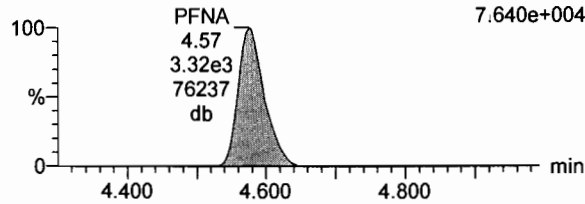


**PFNA**

170608M5\_51 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-462.9 > 418.8  
9.314e+005

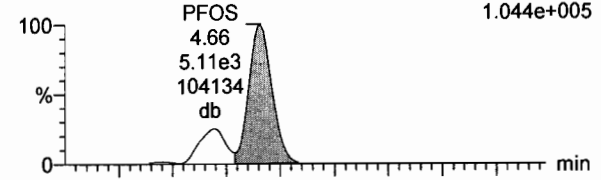


170608M5\_51 Smooth(Mn,1x2) F23:MRM of 2 channels,ES-462.9 > 219  
7.640e+004

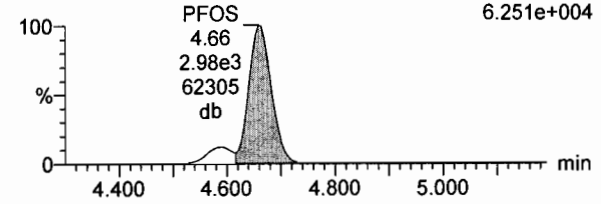


**PFOS**

170608M5\_51 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-499 > 79.9  
1.044e+005

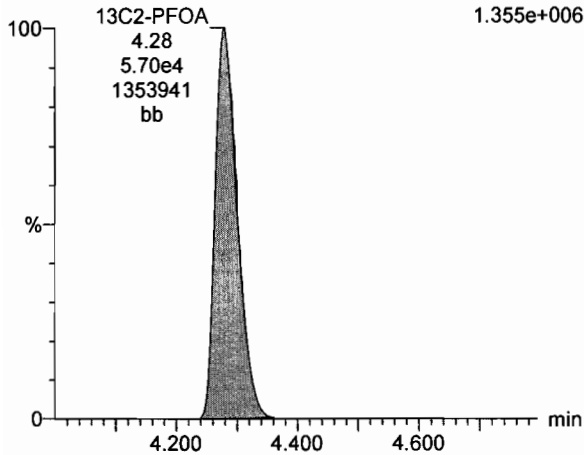


170608M5\_51 Smooth(Mn,1x2) F28:MRM of 2 channels,ES-499 > 99  
6.251e+004



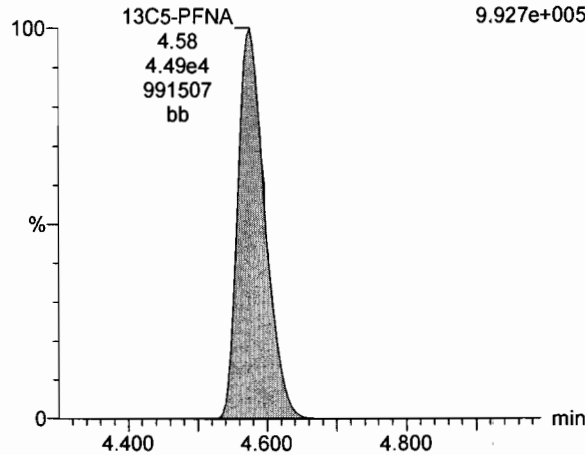
**13C2-PFOA**

170608M5\_51 Smooth(Mn,1x2) F18:MRM of 1 channel,ES-414.9 > 369.7  
1.355e+006



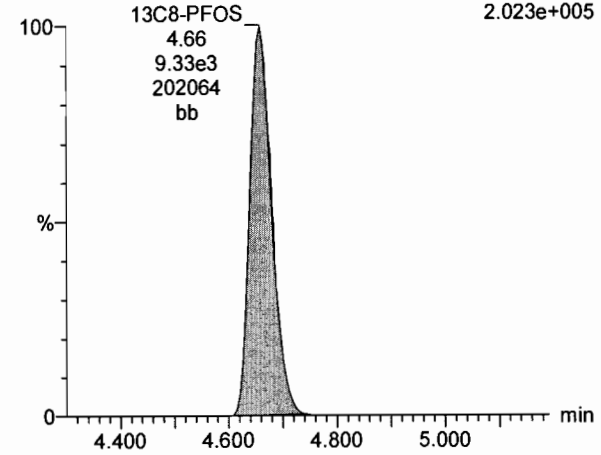
**13C5-PFNA**

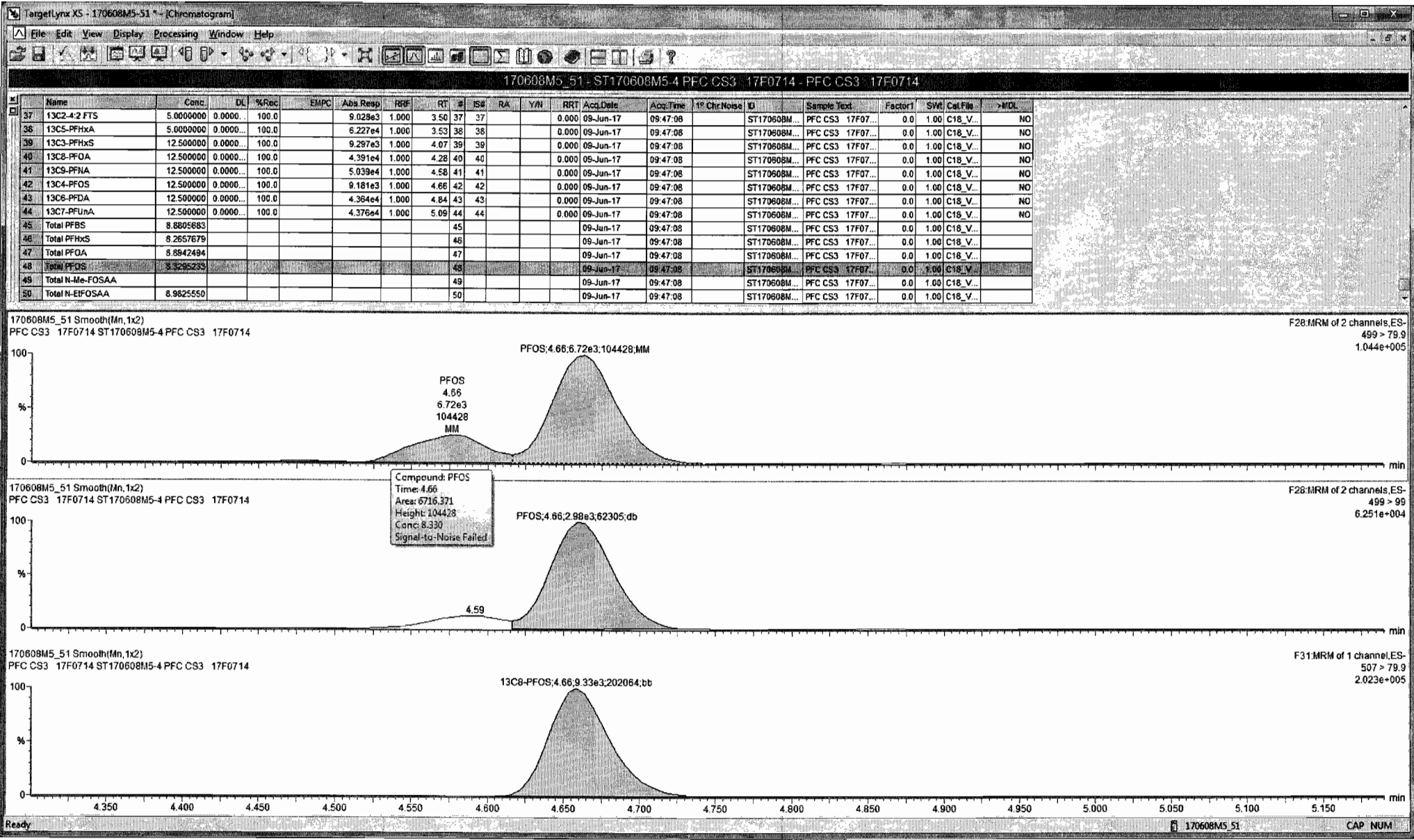
170608M5\_51 Smooth(Mn,1x2) F24:MRM of 1 channel,ES-468.2 > 422.9  
9.927e+005



**13C8-PFOS**

170608M5\_51 Smooth(Mn,1x2) F31:MRM of 1 channel,ES-507 > 79.9  
2.023e+005





Dataset: Untitled

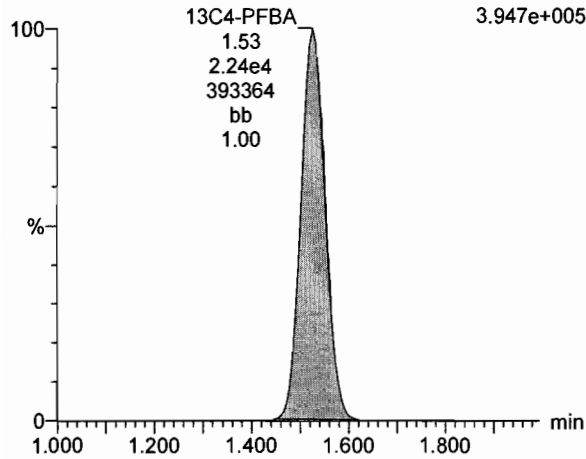
Last Altered: Wednesday, June 14, 2017 08:21:55 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 08:22:37 Pacific Daylight Time

Name: 170608M5\_51, Date: 09-Jun-2017, Time: 09:47:08, ID: ST170608M5-4 PFC CS3 17F0714, Description: PFC CS3 17F0714

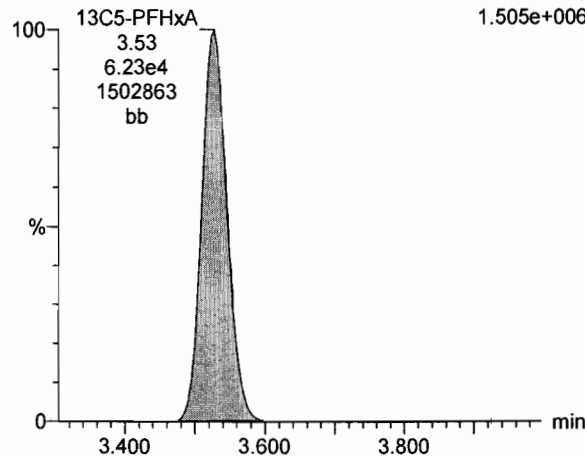
**13C4-PFBA**

170608M5\_51 Smooth(Mn,1x2) F3:MRM of 1 channel,ES-217 > 171.8  
3.947e+005



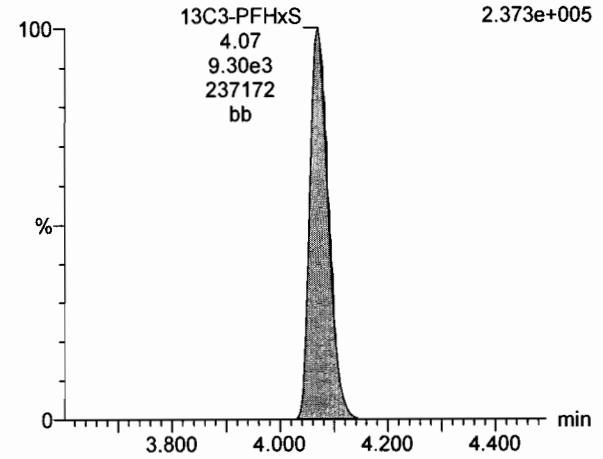
**13C5-PFHxA**

170608M5\_51 Smooth(Mn,1x2) F10:MRM of 1 channel,ES-318 > 272.9  
1.505e+006



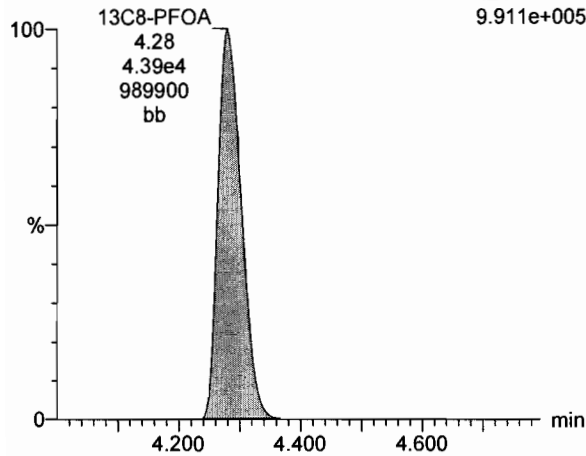
**13C3-PFHxS**

170608M5\_51 Smooth(Mn,1x2) F15:MRM of 1 channel,ES-401.9 > 79.9  
2.373e+005



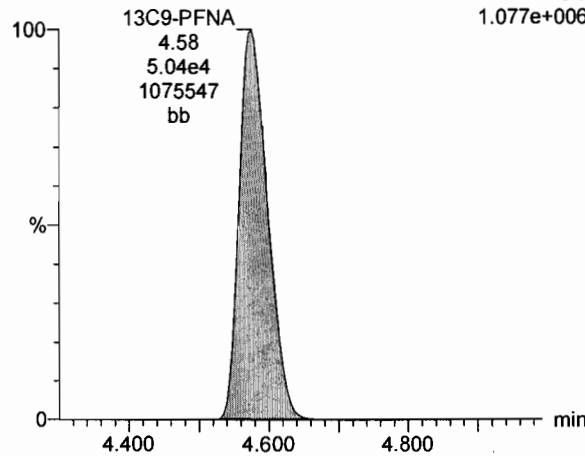
**13C8-PFOA**

170608M5\_51 Smooth(Mn,1x2) F19:MRM of 1 channel,ES-421.3 > 376  
9.911e+005



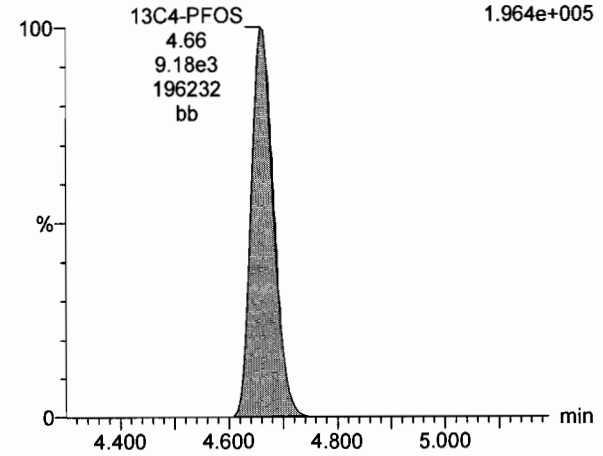
**13C9-PFNA**

170608M5\_51 Smooth(Mn,1x2) F25:MRM of 1 channel,ES-472.2 > 426.9  
1.077e+006



**13C4-PFOS**

170608M5\_51 Smooth(Mn,1x2) F29:MRM of 1 channel,ES-503 > 79.9  
1.964e+005



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_30.qld

Last Altered: Friday, June 16, 2017 08:12:38 Pacific Daylight Time

Printed: Friday, June 16, 2017 08:13:03 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_30, Date: 16-Jun-2017, Time: 03:49:09, ID: ST170615M4-10 PFC CS3 17F1512, Description: PFC CS3 17F1512

*CP 6/16/17*

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred. RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.64e4	1.90e4	1.0000		1.85	1.93	10.8	9.41	94.1
2	2 PFPeA	263.1 > 218.9	2.48e4	3.48e4	1.0000		3.07	3.11	8.90	9.22	92.2
3	3 PFBS	299 > 79.7	5.32e3	3.56e3	1.0000		3.34	3.37	18.7	9.45	94.5
4	4 PFHxA	313.2 > 268.9	3.85e4	1.41e4	1.0000		3.66	3.69	13.6	9.55	95.5
5	5 PFHpA	363 > 318.9	3.53e4	3.64e4	1.0000		4.07	4.08	12.1	9.55	95.5
6	6 PFHxS	398.9 > 79.6	4.88e3	3.27e3	1.0000		4.20	4.21	18.7	9.36	93.6
7	7 6:2 FTS	427.1 > 407	1.17e4	1.52e4	1.0000		4.40	4.41	9.64	10.7	106.5
8	8 PFOA	413 > 368.7	5.08e4	6.59e4	1.0000		4.42	4.43	9.64	9.66	96.6
9	9 PFNA	462.9 > 418.8	5.39e4	6.27e4	1.0000		4.68	4.72	10.7	9.06	90.6
10	10 PFOS	499 > 79.9	1.13e4	1.44e4	1.0000		4.80	4.81	9.80	9.37	93.7
11	11 PFDA	513 > 468.8	5.75e4	5.93e4	1.0000		4.98	4.99	12.1	9.81	98.1
12	12 8:2 FTS	527 > 506.9	1.61e4	1.05e4	1.0000		5.00	4.98	19.1	10.4	104.0
13	13 PFUnA	562.9 > 518.9	3.95e4	7.33e4	1.0000		5.22	5.24	6.73	8.82	88.2
14	14 N-MeFOSAA	570.1 > 419	1.65e4	1.27e4	1.0000		5.00	5.04	16.2	9.83	98.3
15	15 N-EtFOSAA	584.2 > 419	1.27e4	1.53e4	1.0000		5.12	5.14	10.4	9.49	94.9
16	16 PFDoA	612.9 > 318.8	5.56e3	7.00e3	1.0000		5.47	5.48	9.93	10.1	100.8
17	17 PFTrDA	662.9 > 618.9	6.35e4	7.00e3	1.0000		5.70	5.71	113	10.0	100.2
18	18 PFTeDA	712.9 > 668.8	4.22e4	3.78e4	1.0000		5.92	5.93	14.0	10.3	103.4
19	19 13C3-PFBA	216.1 > 171.8	1.90e4	2.10e4	1.0000	0.734	1.89	1.93	11.3	15.4	123.2
20	20 13C3-PFPeA	266 > 221.8	3.48e4	2.10e4	1.0000	1.273	3.07	3.11	20.7	16.2	130.0
21	21 13C3-PFBS	302 > 98.8	3.56e3	2.10e4	1.0000	0.130	3.33	3.37	2.12	16.2	129.8
22	22 13C2-PFHxA	315 > 269.8	1.41e4	4.52e4	1.0000	0.258	3.66	3.69	1.56	6.06	121.2
23	23 13C4-PFHpA	367.2 > 321.8	3.64e4	4.52e4	1.0000	0.254	4.07	4.08	4.03	15.9	126.9
24	24 18O2-PFHxS	403 > 102.6	3.27e3	8.41e3	1.0000	0.331	4.20	4.21	4.86	14.7	117.5
25	25 13C2-6:2 FTS	429.1 > 408.9	1.52e4	5.21e4	1.0000	0.328	4.40	4.41	3.65	11.1	89.0
26	26 13C2-PFOA	414.9 > 369.7	6.59e4	5.21e4	1.0000	1.060	4.26	4.43	15.8	14.9	119.3
27	27 13C5-PFNA	468.2 > 422.9	6.27e4	6.55e4	1.0000	0.757	4.68	4.72	12.0	15.8	126.5
28	28 13C8-PFOS	507 > 79.9	1.44e4	1.34e4	1.0000	0.911	4.80	4.81	13.4	14.7	117.6
29	29 13C2-PFDA	515.1 > 469.9	5.93e4	5.36e4	1.0000	0.826	5.00	4.99	13.8	16.7	133.9
30	30 13C2-8:2 FTS	529.1 > 508.7	1.05e4	5.36e4	1.0000	0.204	5.00	4.98	2.45	12.0	96.2
31	31 13C2-PFOA	565 > 519.8	7.33e4	5.96e4	1.0000	0.879	5.22	5.24	15.4	17.5	148.8

*75-125*  
*AC*  
*6/16/17*  
*50-150*  
*50-150*  
*60-150*

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_30.qld

Last Altered: Friday, June 16, 2017 08:12:38 Pacific Daylight Time

Printed: Friday, June 16, 2017 08:13:03 Pacific Daylight Time

Name: 170615M4\_30, Date: 16-Jun-2017, Time: 03:49:09, ID: ST170615M4-10 PFC CS3 17F1512, Description: PFC CS3 17F1512

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	32 d3-N-MeFOSAA	573.3 > 419	1.27e4	5.96e4	1.0000	0.177	4.88	5.03	2.66	15.0	120.1
33	33 d5-N-EtFOSAA	589.3 > 419	1.53e4	5.96e4	1.0000	0.217	5.10	5.13	3.21	14.8	118.2
34	34 13C2-PFDoA	615 > 569.7	7.00e3	5.96e4	1.0000	0.102	5.47	5.48	1.47	14.4	115.4
35	35 13C2-PFTeDA	714.8 > 669.6	3.78e4	5.96e4	1.0000	0.589	5.92	5.93	7.94	13.5	107.7
36	36 13C4-PFBA	217 > 171.8	2.10e4	2.10e4	1.0000	1.000	1.89	1.93	12.5	12.5	100.0
37	37 13C2-4:2 FTS	329.2 > 308.9	8.12e3	8.12e3	1.0000	1.000	3.62	3.64	5.00	5.00	100.0
38	38 13C5-PFHxA	318 > 272.9	4.52e4	4.52e4	1.0000	1.000	3.66	3.69	5.00	5.00	100.0
39	39 13C3-PFHxS	401.9 > 79.9	8.41e3	8.41e3	1.0000	1.000	4.20	4.21	12.5	12.5	100.0
40	40 13C8-PFOA	421.3 > 376	5.21e4	5.21e4	1.0000	1.000	4.42	4.44	12.5	12.5	100.0
41	41 13C9-PFNA	472.2 > 426.9	6.55e4	6.55e4	1.0000	1.000	4.70	4.72	12.5	12.5	100.0
42	42 13C4-PFOS	503 > 79.9	1.34e4	1.34e4	1.0000	1.000	4.80	4.80	12.5	12.5	100.0
43	43 13C6-PFDA	519.1 > 473.7	5.36e4	5.36e4	1.0000	1.000	5.00	4.99	12.5	12.5	100.0
44	44 13C7-PFUnA	570.1 > 524.8	5.96e4	5.96e4	1.0000	1.000	5.22	5.24	12.5	12.5	100.0

20-150  
↓  
30-150  
20-150

Dataset: Untitled

Last Altered: Friday, June 16, 2017 10:16:04 Pacific Daylight Time

Printed: Friday, June 16, 2017 10:16:34 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	170615M4_1	IPA	15-Jun-17	22:09:24
2	170615M4_2	IPA	15-Jun-17	22:21:12
3	170615M4_3	ST170615M4-1 PFC CS-2 17F1506	15-Jun-17	22:32:47
4	170615M4_4	ST170615M4-2 PFC CS-1 17F1507	15-Jun-17	22:44:30
5	170615M4_5	ST170615M4-3 PFC CS0 17F1508	15-Jun-17	22:56:13
6	170615M4_6	ST170615M4-4 PFC CS1 17F1509	15-Jun-17	23:07:56
7	170615M4_7	ST170615M4-5 PFC CS2 17F1510	15-Jun-17	23:19:39
8	170615M4_8	ST170615M4-6 PFC CS3 17F1512	15-Jun-17	23:31:22
9	170615M4_9	ST170615M4-7 PFC CS4 17F1513	15-Jun-17	23:43:05
10	170615M4_10	ST170615M4-8 PFC CS5 17F1514	15-Jun-17	23:54:48
11	170615M4_11	IPA	16-Jun-17	00:06:31
12	170615M4_12	SS170615M4-1 PFC SSS 17F1505	16-Jun-17	00:18:14
13	170615M4_13	IPA	16-Jun-17	00:29:58
14	170615M4_14	IPA	16-Jun-17	00:41:44
15	170615M4_15	B7F0027-BS1 OPR 0.125	16-Jun-17	00:53:27
16	170615M4_16	IPA	16-Jun-17	01:05:06
17	170615M4_17	B7F0027-BLK1 Method Blank 0.125	16-Jun-17	01:16:50
18	170615M4_18	1700683-01 LORNG-EB051MHL-053117 0.125	16-Jun-17	01:28:32
19	170615M4_19	1700683-02 LORNG-EB052DSL-053117 0.125	16-Jun-17	01:40:15
20	170615M4_20	1700683-03 LORNG-JMW0882-053117 0.125	16-Jun-17	01:51:59
21	170615M4_21	1700683-04 LORNG-JMW0891-060117 0.125	16-Jun-17	02:03:41
22	170615M4_22	1700683-05 LORNG-JMW0961-053117 0.125	16-Jun-17	02:15:24
23	170615M4_23	1700683-06 LORNG-LF2MW1-053117 0.125	16-Jun-17	02:27:07
24	170615M4_24	1700683-07 LORNG-LF2MW2-053117 0.125	16-Jun-17	02:38:51
25	170615M4_25	1700683-08 LORNG-LF2MW3-053117 0.125	16-Jun-17	02:50:34
26	170615M4_26	1700683-09 LORNG-MMW0002-060117 0.125	16-Jun-17	03:02:16
27	170615M4_27	1700683-10 LORNG-RES04-BLK-053117 0.125	16-Jun-17	03:14:00
28	170615M4_28	1700683-11 LORNG-RES04-FAU-053117 0.125	16-Jun-17	03:25:43
29	170615M4_29	IPA	16-Jun-17	03:37:26
30	170615M4_30	ST170615M4-10 PFC CS3 17F1512	16-Jun-17	03:49:09
31	170615M4_31	IPA	16-Jun-17	04:00:51

Dataset: Untitled

Last Altered: Friday, June 16, 2017 10:16:04 Pacific Daylight Time

Printed: Friday, June 16, 2017 10:16:34 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170615M4_32	1700683-12 LORNG-RES04-WH-053117 0.125	16-Jun-17	04:12:35
33	170615M4_33	1700683-13 LORNG-EB053MHL-060117 0.125	16-Jun-17	04:24:19
34	170615M4_34	1700683-14 LORNG-EB054DSL-060117 0.125	16-Jun-17	04:36:04
35	170615M4_35	1700683-15 LORNG-JMW0801B-060117 0.125	16-Jun-17	04:47:44
36	170615M4_36	1700683-16 LORNG-JMW0806-060117 0.125	16-Jun-17	04:59:27
37	170615M4_37	1700683-17 LORNG-LF2MW6-060117 0.125	16-Jun-17	05:11:10
38	170615M4_38	B7F0027-MS1 Matrix Spike 0.125	16-Jun-17	05:22:53
39	170615M4_39	B7F0027-MSD1 Matrix Spike Dup 0.125	16-Jun-17	05:34:36
40	170615M4_40	1700683-18 LORNG-LF2MW6-060117FD 0.125	16-Jun-17	05:46:19
41	170615M4_41	1700681-03@25X OF17-MW01-0617 0.125	16-Jun-17	05:59:23
42	170615M4_42	1700681-04@50X OF17-MW01P-0617 0.125	16-Jun-17	06:10:59
43	170615M4_43	1700681-04@20X OF17-MW01P-0617 0.125	16-Jun-17	06:22:41
44	170615M4_44	1700681-06@50X OF17-MW04-0617 0.125	16-Jun-17	06:34:24
45	170615M4_45	1700681-06@10X OF17-MW04-0617 0.125	16-Jun-17	06:46:19
46	170615M4_46	IPA	16-Jun-17	06:57:58
47	170615M4_47	ST170615M5-11 PFC CS3 17F2228	16-Jun-17	07:09:33
48	170615M4_48	IPA	16-Jun-17	07:21:16
49	170615M4_49	1700690-01 36 0.125	16-Jun-17	07:40:47
50	170615M4_50	IPA	16-Jun-17	07:52:15
51	170615M4_51	1700681-01@25X OF17-MW02-0517 0.125	16-Jun-17	08:06:03
52	170615M4_52	1700681-02@50X OF17-MW03-0517 0.125	16-Jun-17	08:17:45
53	170615M4_53	1700681-02@25X OF17-MW03-0517 0.125	16-Jun-17	08:29:12
54	170615M4_54	B7F0010-MS1@50X Matrix Spike 0.125	16-Jun-17	08:40:55
55	170615M4_55	B7F0010-MS1@25X Matrix Spike 0.125	16-Jun-17	08:52:39
56	170615M4_56	B7F0010-MSD1@50X Matrix Spike Dup 0.125	16-Jun-17	09:04:21
57	170615M4_57	B7F0010-MSD1@25X Matrix Spike Dup 0.125	16-Jun-17	09:16:04
58	170615M4_58	1700681-03@50X OF17-MW01-0617 0.125	16-Jun-17	09:27:48
59	170615M4_59	ST170615M5-12 PFC CS3 17F1512	16-Jun-17	09:39:31



# LC Calibration Standards Review Checklist QH

Calibration ID:	L M H	ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	
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-11	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
-12	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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NA

Full Mass Cal. Date: 6/12/17

Run Log Present:

# of Samples per Sequence Checked:

Reviewed By: AC 6/16/17  
Initials/Date

**Comments:**

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_30.qld

Last Altered: Friday, June 16, 2017 08:12:38 Pacific Daylight Time

Printed: Friday, June 16, 2017 08:13:03 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_30, Date: 16-Jun-2017, Time: 03:49:09, ID: ST170615M4-10 PFC CS3 17F1512, Description: PFC CS3 17F1512

**Total PFBS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.37	5322.070	3555.866	18.709	bb	9.5

**Total PFHxS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	4.21	4881.694	3271.142	18.654	MM	9.4

**Total PFOA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	4.43	50799.277	65880.039	9.639	bb	9.7
2	47 Total PFOA	413 > 368.7	4.26	32.599	65880.039	0.006	bbI	
3	47 Total PFOA	413 > 368.7	4.16	79.462	65880.039	0.015	dbI	
4	47 Total PFOA	413 > 368.7	4.11	16.966	65880.039	0.003	ddI	
5	47 Total PFOA	413 > 368.7	4.08	10.550	65880.039	0.002	bdI	

**Total PFOS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	10 PFOS	499 > 79.9	4.81	11270.816	14378.104	9.799	MM	9.4

**Total N-Me-FOSAA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	14 N-MeFOSAA	570.1 > 419	5.04	16484.322	12694.532	16.232	bb	9.8

**Total N-EtFOSAA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	15 N-EtFOSAA	584.2 > 419	5.14	12685.169	15291.417	10.370	bb	9.5

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_30.qld

Last Altered: Friday, June 16, 2017 08:12:38 Pacific Daylight Time

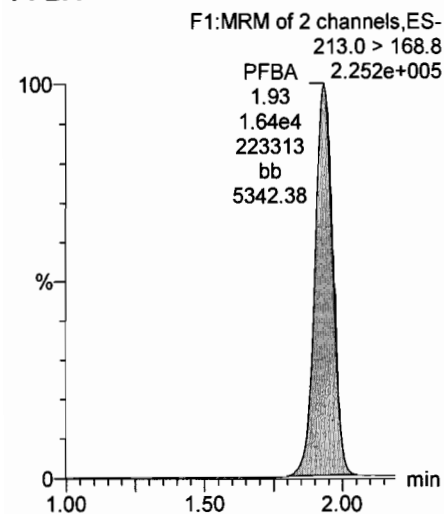
Printed: Friday, June 16, 2017 08:13:03 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

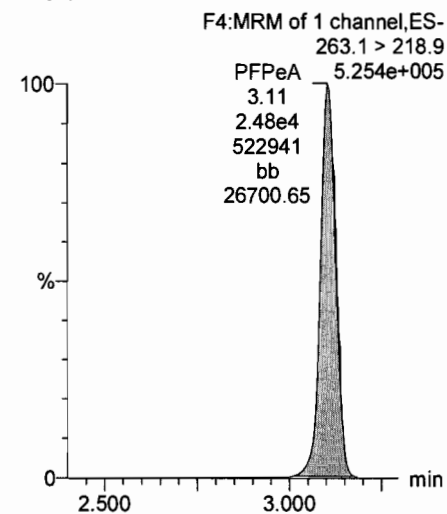
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_30, Date: 16-Jun-2017, Time: 03:49:09, ID: ST170615M4-10 PFC CS3 17F1512, Description: PFC CS3 17F1512

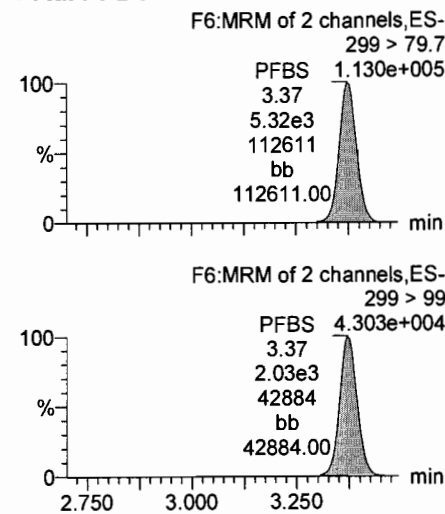
**PFBA**



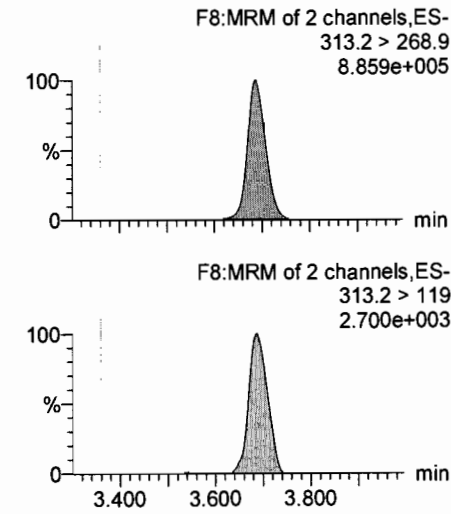
**PFPeA**



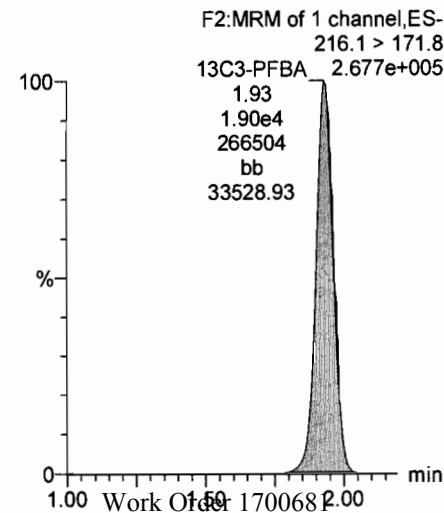
**Total PFBS**



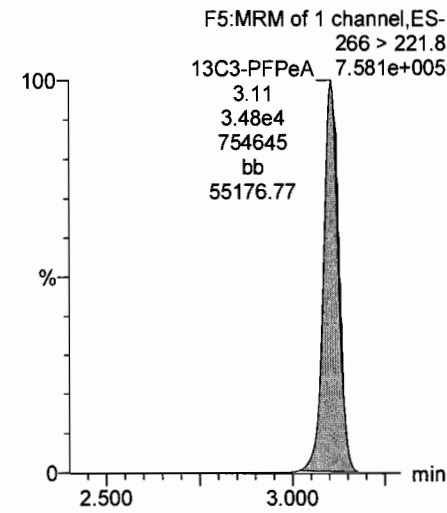
**PFHxA**



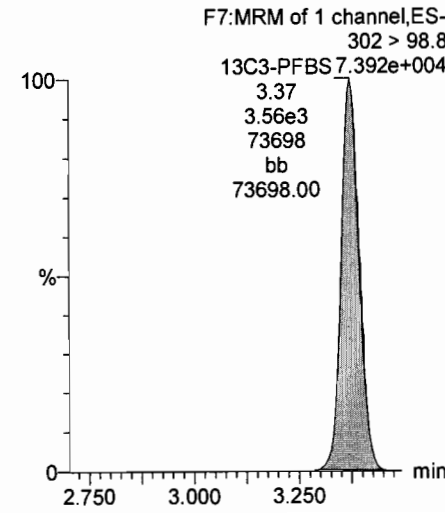
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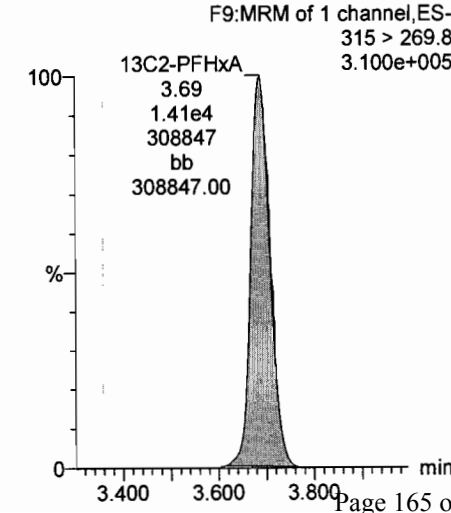
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**13C3-PFBS**



**13C2-PFHxA**



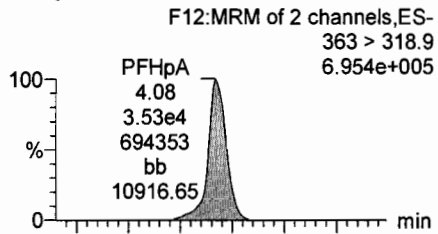
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Last Altered: Friday, June 16, 2017 08:12:38 Pacific Daylight Time

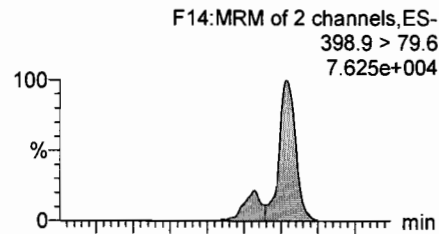
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Name: 170615M4\_30, Date: 16-Jun-2017, Time: 03:49:09, ID: ST170615M4-10 PFC CS3 17F1512, Description: PFC CS3 17F1512

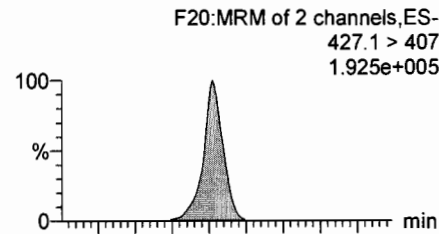
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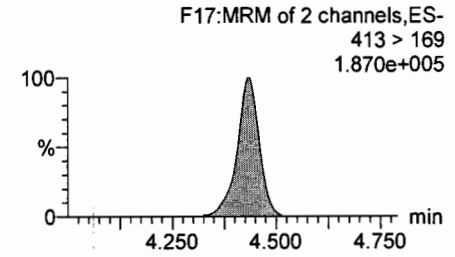
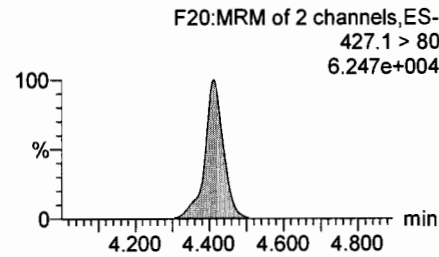
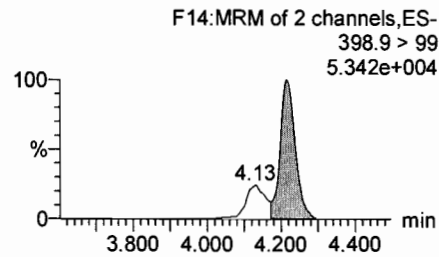
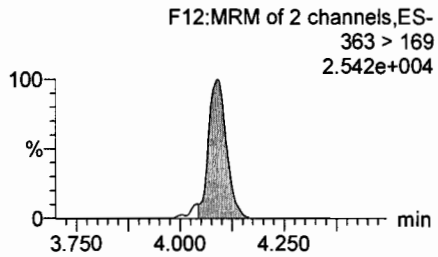
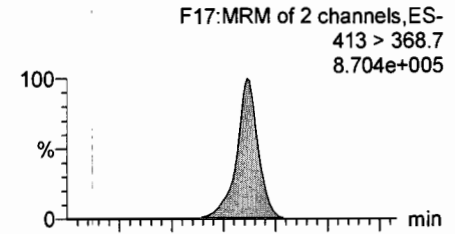
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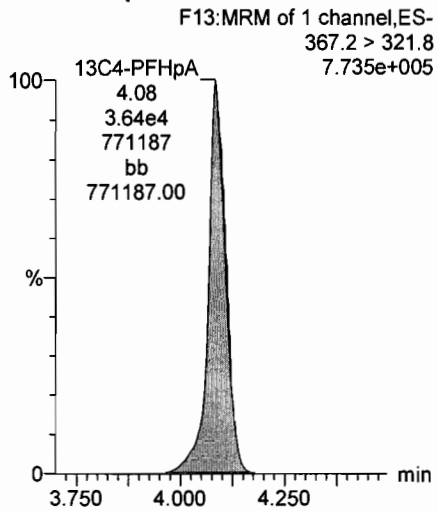
**6:2 FTS**



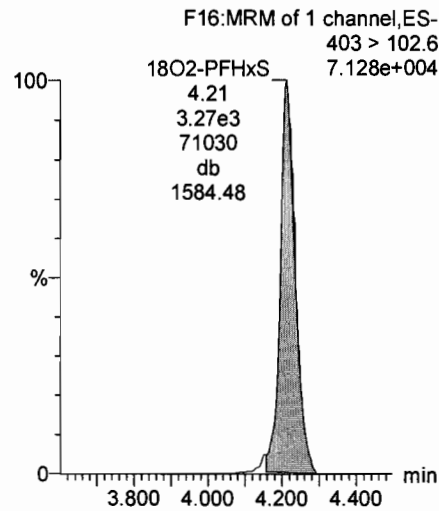
**Total PFOA**



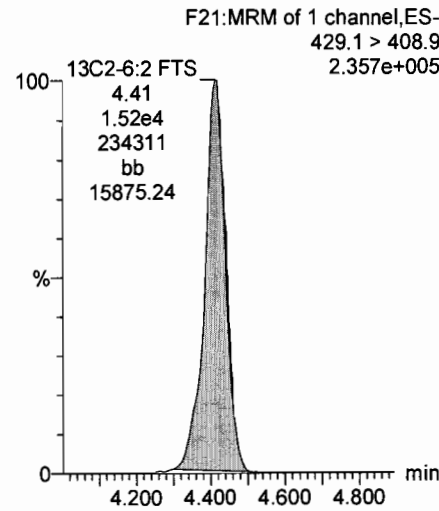
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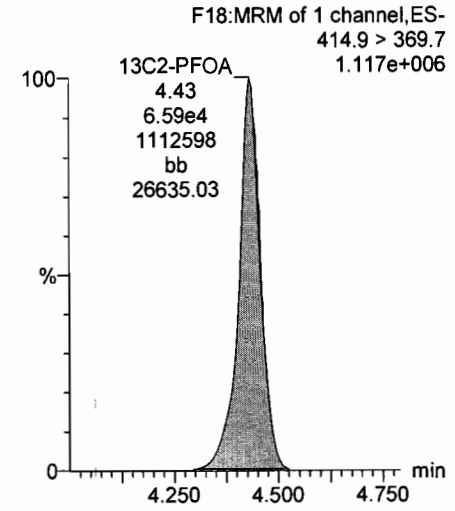
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



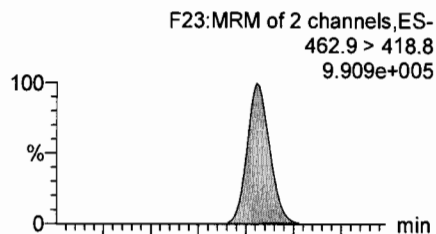
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Last Altered: Friday, June 16, 2017 08:12:38 Pacific Daylight Time

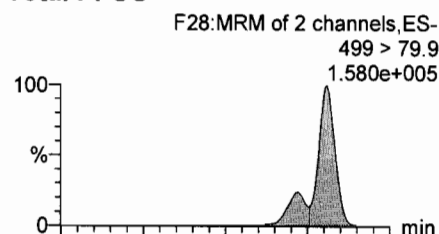
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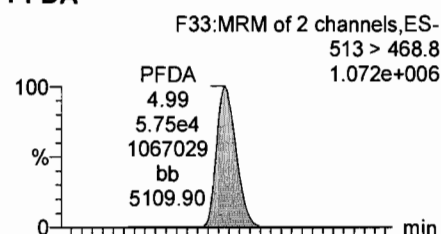
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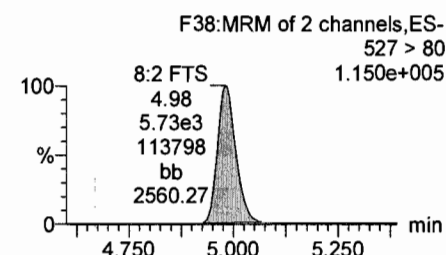
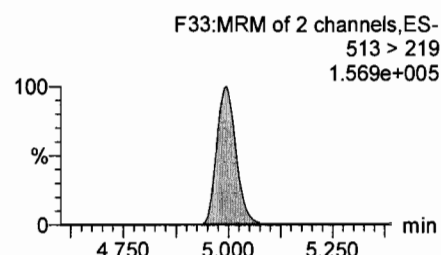
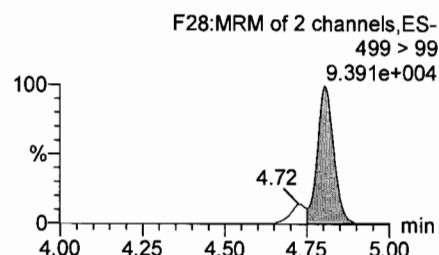
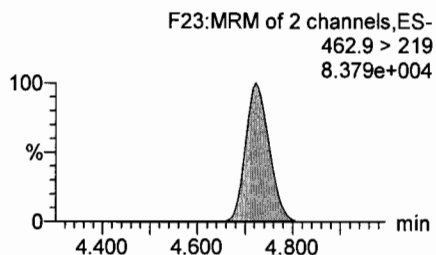
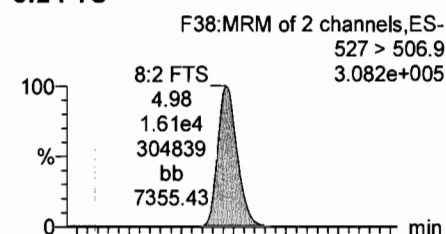
Total PFOS



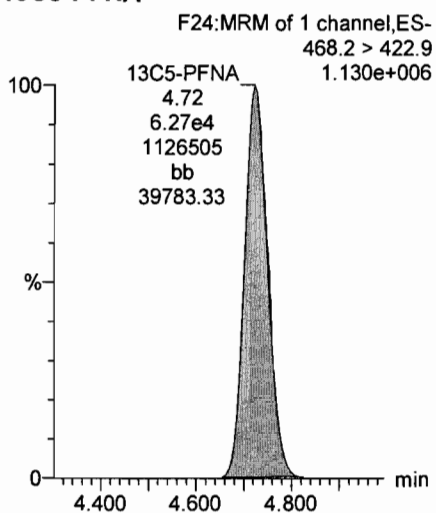
PFDA



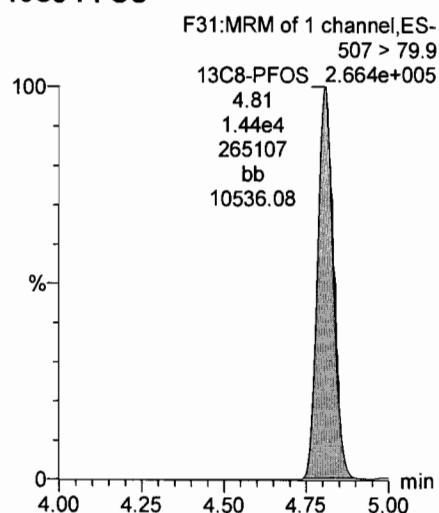
8:2 FTS



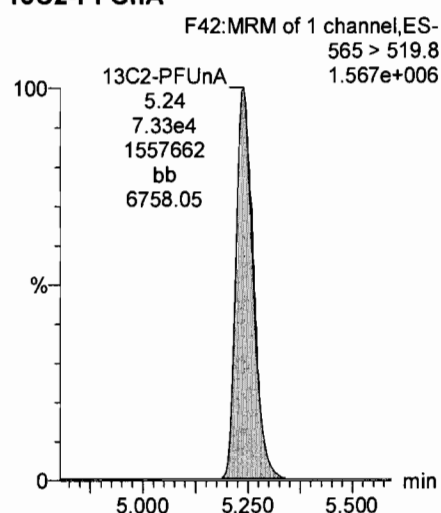
13C5-PFNA



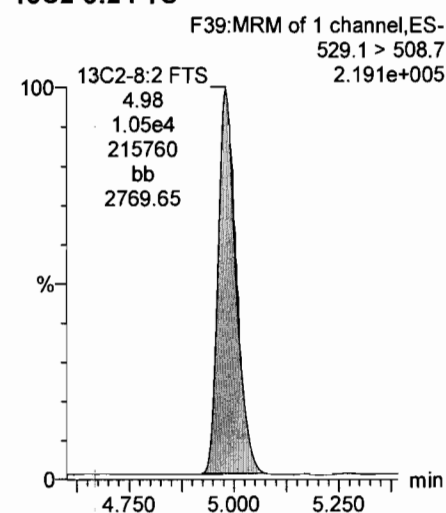
13C8-PFOS



13C2-PFUnA



13C2-8:2 FTS



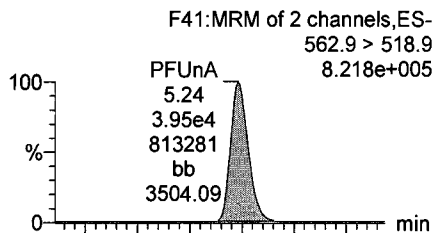
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_30.qld

Last Altered: Friday, June 16, 2017 08:12:38 Pacific Daylight Time

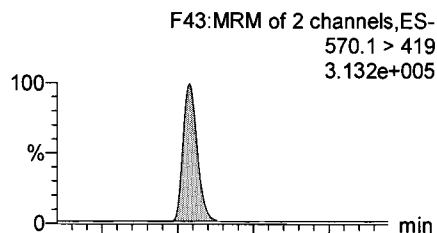
Printed: Friday, June 16, 2017 08:13:03 Pacific Daylight Time

Name: 170615M4\_30, Date: 16-Jun-2017, Time: 03:49:09, ID: ST170615M4-10 PFC CS3 17F1512, Description: PFC CS3 17F1512

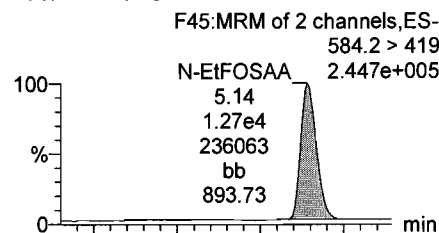
**PFUnA**



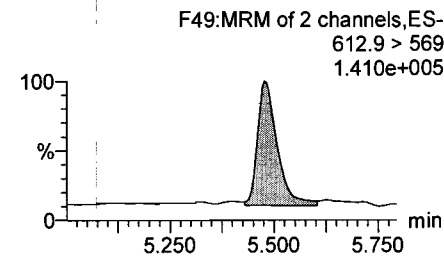
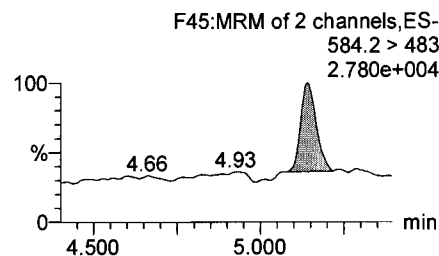
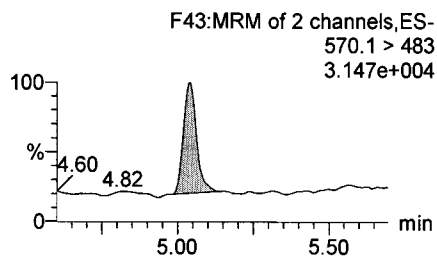
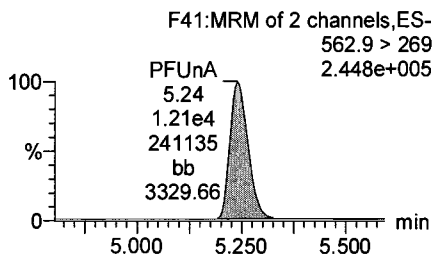
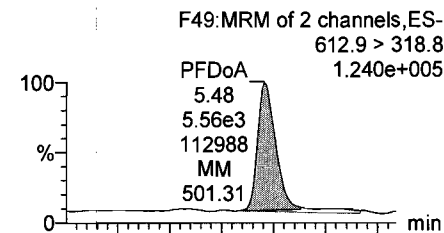
**Total N-Me-FOSAA**



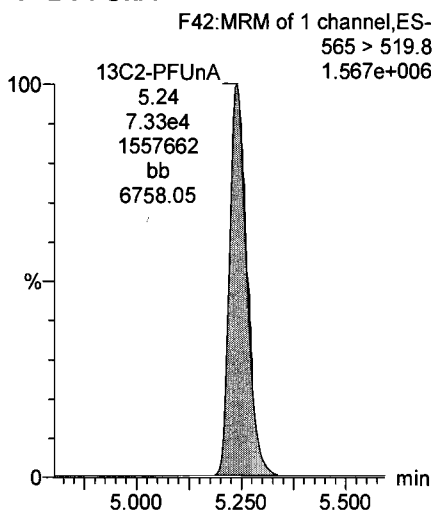
**Total N-EtFOSAA**



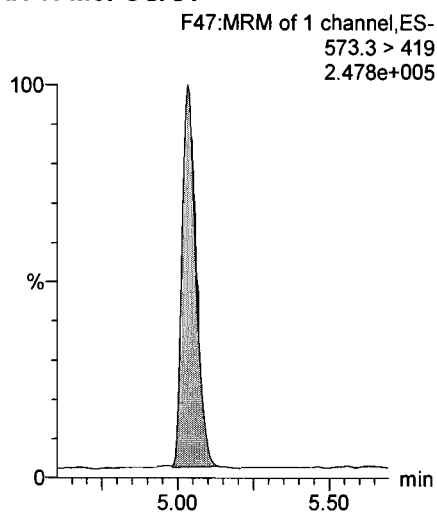
**PFDoA**



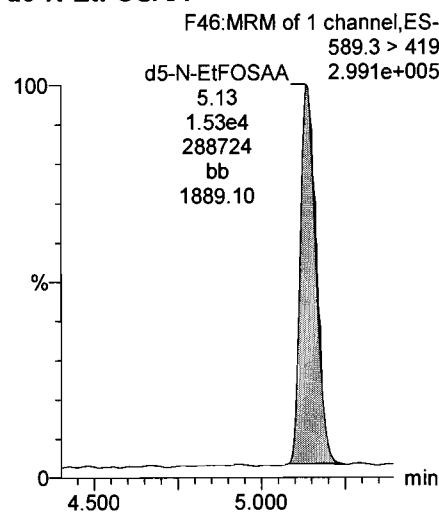
**13C2-PFUnA**



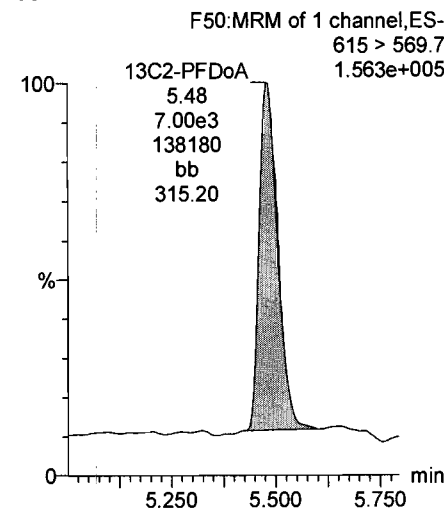
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



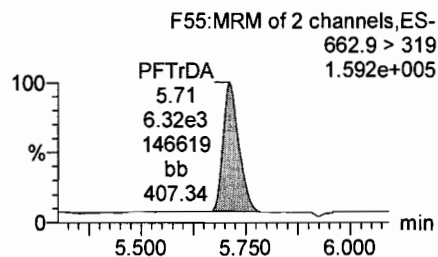
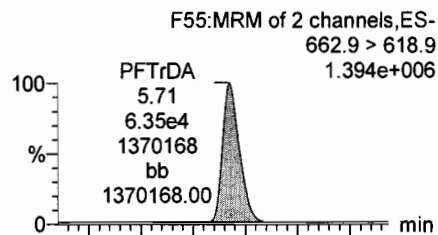
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_30.qld

Last Altered: Friday, June 16, 2017 08:12:38 Pacific Daylight Time

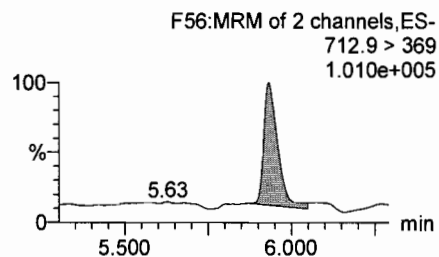
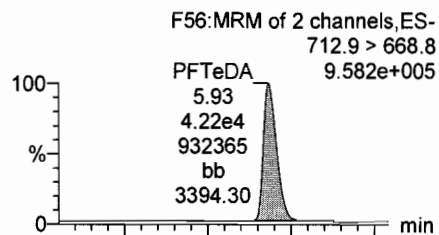
Printed: Friday, June 16, 2017 08:13:03 Pacific Daylight Time

Name: 170615M4\_30, Date: 16-Jun-2017, Time: 03:49:09, ID: ST170615M4-10 PFC CS3 17F1512, Description: PFC CS3 17F1512

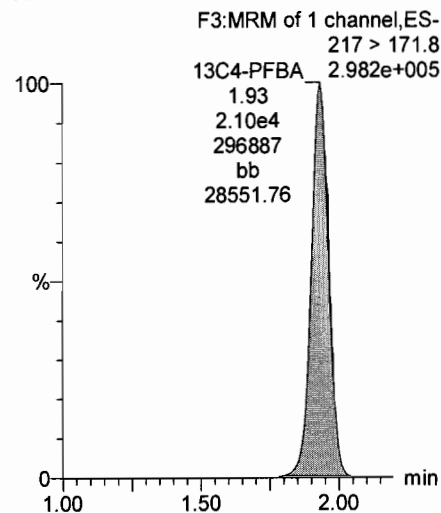
**PFTrDA**



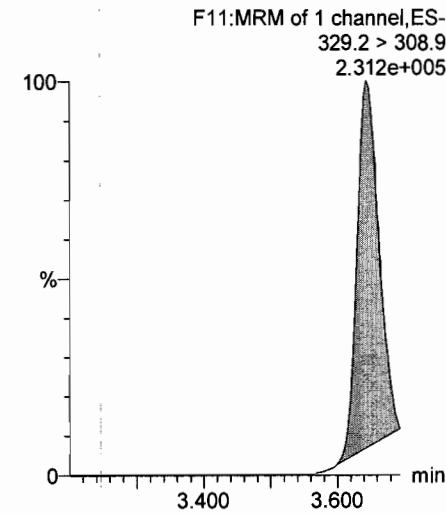
**PFTeDA**



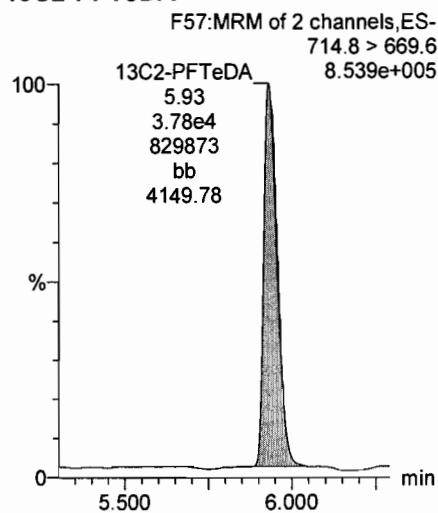
**13C4-PFBA**



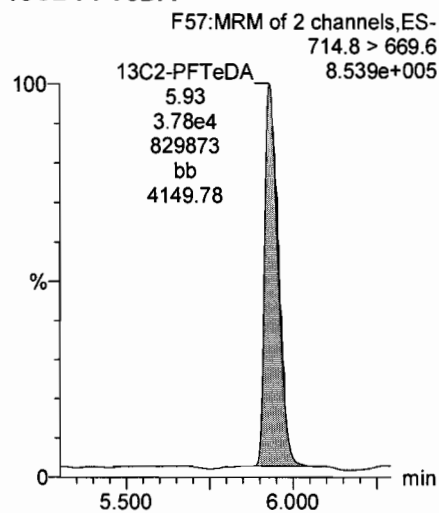
**13C2-4:2 FTS**



**13C2-PFTeDA**



**13C2-PFTeDA**



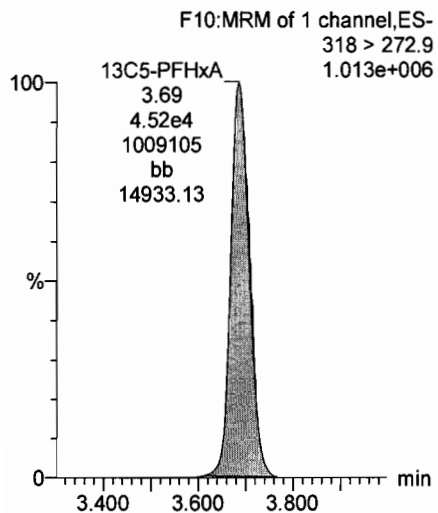
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_30.qld

Last Altered: Friday, June 16, 2017 08:12:38 Pacific Daylight Time

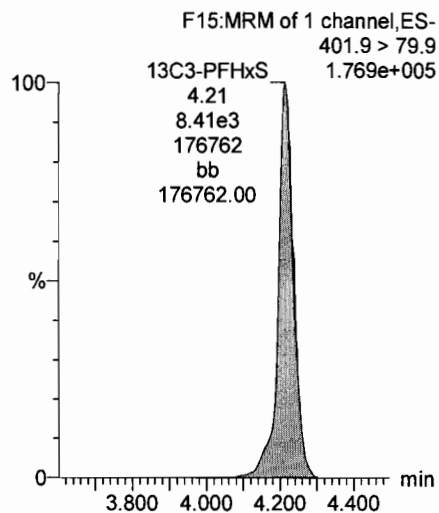
Printed: Friday, June 16, 2017 08:13:03 Pacific Daylight Time

Name: 170615M4\_30, Date: 16-Jun-2017, Time: 03:49:09, ID: ST170615M4-10 PFC CS3 17F1512, Description: PFC CS3 17F1512

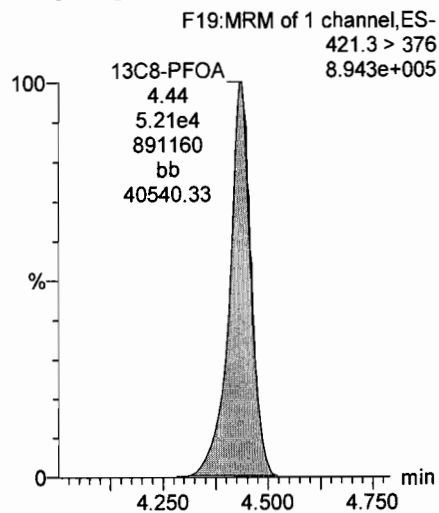
**13C5-PFHxA**



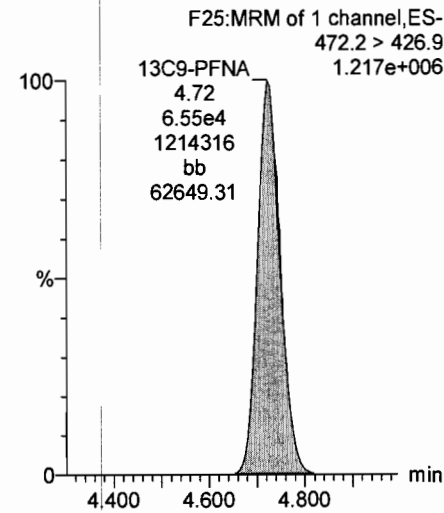
**13C3-PFHxS**



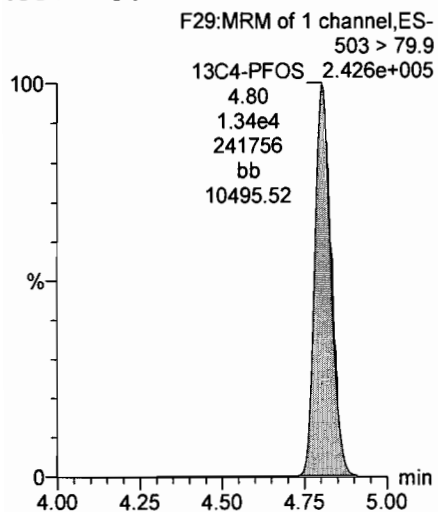
**13C8-PFOA**



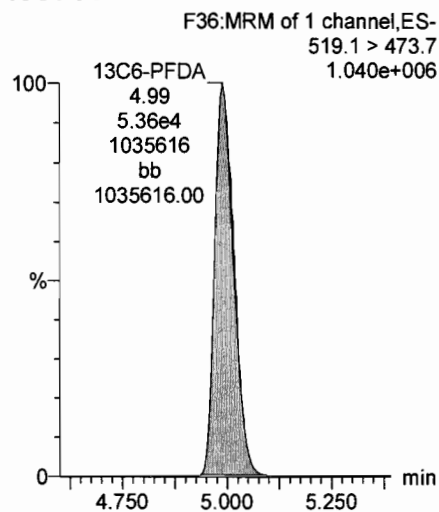
**13C9-PFNA**



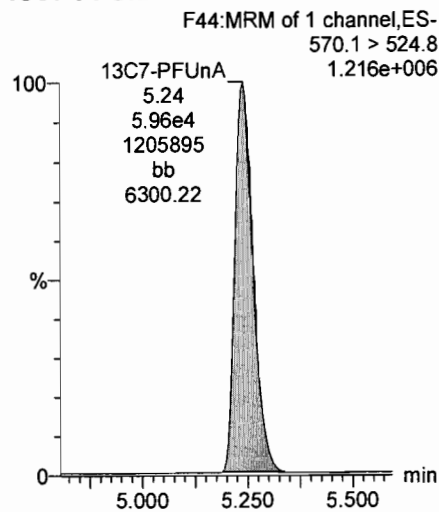
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUnA**





Dataset: U:\Q4.PRO\results\170615M4\170615M4\_47.qld

Last Altered: Friday, June 16, 2017 08:21:11 Pacific Daylight Time

Printed: Friday, June 16, 2017 08:21:26 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_47, Date: 16-Jun-2017, Time: 07:09:33, ID: ST170615M4-11 PFC CS3 17F2228, Description: PFC CS3 17F2228

*CP 6/16/17*

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.63e4	1.92e4	1.0000		1.85	1.96	10.6	9.23	92.3
2	2 PFPeA	263.1 > 218.9	2.45e4	3.43e4	1.0000		3.07	3.12	8.95	9.27	92.7
3	3 PFBS	299 > 79.7	5.06e3	3.36e3	1.0000		3.34	3.38	18.8	9.52	95.2
4	4 PFHxA	313.2 > 268.9	3.70e4	1.40e4	1.0000		3.66	3.69	13.2	9.26	92.6
5	5 PFHpA	363 > 318.9	3.44e4	3.59e4	1.0000		4.07	4.09	12.0	9.43	94.3
6	6 PFHxS	398.9 > 79.6	5.01e3	3.83e3	1.0000		4.20	4.22	16.3	8.20	82.0
7	7 6:2 FTS	427.1 > 407	1.12e4	1.73e4	1.0000		4.40	4.42	8.10	8.89	88.9
8	8 PFOA	413 > 368.7	5.12e4	7.23e4	1.0000		4.42	4.45	8.85	8.86	88.6
9	9 PFNA	462.9 > 418.8	5.15e4	6.19e4	1.0000		4.68	4.74	10.4	8.77	87.7
10	10 PFOS	499 > 79.9	1.10e4	1.39e4	1.0000		4.80	4.82	9.93	9.49	94.9
11	11 PFDA	513 > 468.8	5.12e4	5.52e4	1.0000		4.98	5.00	11.6	9.40	94.0
12	12 8:2 FTS	527 > 506.9	1.66e4	1.03e4	1.0000		5.00	4.99	20.3	11.1	110.8
13	13 PFUnA	562.9 > 518.9	3.87e4	6.03e4	1.0000		5.22	5.25	8.02	10.5	105.4
14	14 N-MeFOSAA	570.1 > 419	1.77e4	1.38e4	1.0000		5.00	5.05	16.1	9.75	97.5
15	15 N-EtFOSAA	584.2 > 419	1.32e4	1.56e4	1.0000		5.12	5.16	10.6	9.69	96.9
16	16 PFDoA	612.9 > 318.8	5.44e3	7.53e3	1.0000		5.47	5.49	9.03	9.14	91.4
17	17 PFTrDA	662.9 > 618.9	6.16e4	7.53e3	1.0000		5.70	5.72	102	9.03	90.3
18	18 PFTeDA	712.9 > 668.8	4.15e4	3.17e4	1.0000		5.92	5.95	16.3	12.2	121.5
19	19 13C3-PFBA	216.1 > 171.8	1.92e4	2.04e4	1.0000	0.734	1.89	1.95	11.8	16.1	128.5
20	20 13C3-PFPeA	266 > 221.8	3.43e4	2.04e4	1.0000	1.273	3.07	3.11	21.0	16.5	132.0
21	21 13C3-PFBS	302 > 98.8	3.36e3	2.04e4	1.0000	0.130	3.33	3.38	2.06	15.8	126.3
22	22 13C2-PFHxA	315 > 269.8	1.40e4	4.40e4	1.0000	0.258	3.66	3.70	1.59	6.16	123.2
23	23 13C4-PFHpA	367.2 > 321.8	3.59e4	4.40e4	1.0000	0.254	4.07	4.09	4.07	16.0	128.3
24	24 18O2-PFHxS	403 > 102.6	3.83e3	8.82e3	1.0000	0.331	4.20	4.22	5.43	16.4	131.2
25	25 13C2-6:2 FTS	429.1 > 408.9	1.73e4	5.65e4	1.0000	0.328	4.40	4.42	3.84	11.7	93.6
26	26 13C2-PFOA	414.9 > 369.7	7.23e4	5.65e4	1.0000	1.060	4.26	4.45	16.0	15.1	120.6
27	27 13C5-PFNA	468.2 > 422.9	6.19e4	6.63e4	1.0000	0.757	4.68	4.73	11.7	15.4	123.3
28	28 13C8-PFOS	507 > 79.9	1.39e4	1.22e4	1.0000	0.911	4.80	4.82	14.2	15.6	124.8
29	29 13C2-PFDA	515.1 > 469.9	5.52e4	5.34e4	1.0000	0.826	5.00	5.00	12.9	15.6	125.2
30	30 13C2-8:2 FTS	529.1 > 508.7	1.03e4	5.34e4	1.0000	0.204	5.00	4.99	2.41	11.8	94.3
31	31 13C2-7:0 FTS	565 > 519.8	6.03e4	5.62e4	1.0000	0.879	5.22	5.25	13.4	15.3	122.2

*75-125*  
*AC*  
*6/16/17*  
*60-150*  
*50-150*  
*60-150*

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_47.qld

Last Altered: Friday, June 16, 2017 08:21:11 Pacific Daylight Time

Printed: Friday, June 16, 2017 08:21:26 Pacific Daylight Time

Name: 170615M4\_47, Date: 16-Jun-2017, Time: 07:09:33, ID: ST170615M5-11 PFC CS3 17F2228, Description: PFC CS3 17F2228

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	d3-N-MeFOSAA	573.3 > 419	1.38e4	5.62e4	1.0000	0.177	4.88	5.04	3.06	17.3	138.1
33	d5-N-EtFOSAA	589.3 > 419	1.56e4	5.62e4	1.0000	0.217	5.10	5.15	3.46	16.0	127.7
34	13C2-PFDoA	615 > 569.7	7.53e3	5.62e4	1.0000	0.102	5.47	5.49	1.67	16.5	131.7
35	13C2-PFTeDA	714.8 > 669.6	3.17e4	5.62e4	1.0000	0.589	5.92	5.95	7.06	12.0	95.8
36	13C4-PFBA	217 > 171.8	2.04e4	2.04e4	1.0000	1.000	1.89	1.96	12.5	12.5	100.0
37	13C2-4:2 FTS	329.2 > 308.9	6.95e3	6.95e3	1.0000	1.000	3.62	3.66	5.00	5.00	100.0
38	13C5-PFHxA	318 > 272.9	4.40e4	4.40e4	1.0000	1.000	3.66	3.70	5.00	5.00	100.0
39	13C3-PFHxS	401.9 > 79.9	8.82e3	8.82e3	1.0000	1.000	4.20	4.22	12.5	12.5	100.0
40	13C8-PFOA	421.3 > 376	5.65e4	5.65e4	1.0000	1.000	4.42	4.44	12.5	12.5	100.0
41	13C9-PFNA	472.2 > 426.9	6.63e4	6.63e4	1.0000	1.000	4.70	4.73	12.5	12.5	100.0
42	13C4-PFOS	503 > 79.9	1.22e4	1.22e4	1.0000	1.000	4.80	4.82	12.5	12.5	100.0
43	13C6-PFDA	519.1 > 473.7	5.34e4	5.34e4	1.0000	1.000	5.00	5.01	12.5	12.5	100.0
44	13C7-PFUnA	570.1 > 524.8	5.62e4	5.62e4	1.0000	1.000	5.22	5.25	12.5	12.5	100.0

20-150  
 y  
 30-150  
 20-150

Dataset: Untitled

Last Altered: Friday, June 16, 2017 10:16:04 Pacific Daylight Time

Printed: Friday, June 16, 2017 10:16:34 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Compound name: PFBA

Name	ID	Acq.Date	Acq.Time
170615M4_1	IPA	15-Jun-17	22:09:24
170615M4_2	IPA	15-Jun-17	22:21:12
170615M4_3	ST170615M4-1 PFC CS-2 17F1506	15-Jun-17	22:32:47
170615M4_4	ST170615M4-2 PFC CS-1 17F1507	15-Jun-17	22:44:30
170615M4_5	ST170615M4-3 PFC CS0 17F1508	15-Jun-17	22:56:13
170615M4_6	ST170615M4-4 PFC CS1 17F1509	15-Jun-17	23:07:56
170615M4_7	ST170615M4-5 PFC CS2 17F1510	15-Jun-17	23:19:39
170615M4_8	ST170615M4-6 PFC CS3 17F1512	15-Jun-17	23:31:22
170615M4_9	ST170615M4-7 PFC CS4 17F1513	15-Jun-17	23:43:05
170615M4_10	ST170615M4-8 PFC CS5 17F1514	15-Jun-17	23:54:48
170615M4_11	IPA	16-Jun-17	00:06:31
170615M4_12	SS170615M4-1 PFC SSS 17F1505	16-Jun-17	00:18:14
170615M4_13	IPA	16-Jun-17	00:29:58
170615M4_14	IPA	16-Jun-17	00:41:44
170615M4_15	B7F0027-BS1 OPR 0.125	16-Jun-17	00:53:27
170615M4_16	IPA	16-Jun-17	01:05:06
170615M4_17	B7F0027-BLK1 Method Blank 0.125	16-Jun-17	01:16:50
170615M4_18	1700683-01 LORNG-EB051MHL-053117 0.125	16-Jun-17	01:28:32
170615M4_19	1700683-02 LORNG-EB052DSL-053117 0.125	16-Jun-17	01:40:15
170615M4_20	1700683-03 LORNG-JMW0882-053117 0.125	16-Jun-17	01:51:59
170615M4_21	1700683-04 LORNG-JMW0891-060117 0.125	16-Jun-17	02:03:41
170615M4_22	1700683-05 LORNG-JMW0961-053117 0.125	16-Jun-17	02:15:24
170615M4_23	1700683-06 LORNG-LF2MW1-053117 0.125	16-Jun-17	02:27:07
170615M4_24	1700683-07 LORNG-LF2MW2-053117 0.125	16-Jun-17	02:38:51
170615M4_25	1700683-08 LORNG-LF2MW3-053117 0.125	16-Jun-17	02:50:34
170615M4_26	1700683-09 LORNG-MMW0002-060117 0.125	16-Jun-17	03:02:16
170615M4_27	1700683-10 LORNG-RES04-BLK-053117 0.125	16-Jun-17	03:14:00
170615M4_28	1700683-11 LORNG-RES04-FAU-053117 0.125	16-Jun-17	03:25:43
170615M4_29	IPA	16-Jun-17	03:37:26
170615M4_30	ST170615M4-10 PFC CS3 17F1512	16-Jun-17	03:49:09
170615M4_31	IPA	16-Jun-17	04:00:51

Dataset: Untitled

Last Altered: Friday, June 16, 2017 10:16:04 Pacific Daylight Time

Printed: Friday, June 16, 2017 10:16:34 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170615M4_32	1700683-12 LORNG-RES04-WH-053117 0.125	16-Jun-17	04:12:35
33	170615M4_33	1700683-13 LORNG-EB053MHL-060117 0.125	16-Jun-17	04:24:19
34	170615M4_34	1700683-14 LORNG-EB054DSL-060117 0.125	16-Jun-17	04:36:04
35	170615M4_35	1700683-15 LORNG-JMW0801B-060117 0.125	16-Jun-17	04:47:44
36	170615M4_36	1700683-16 LORNG-JMW0806-060117 0.125	16-Jun-17	04:59:27
37	170615M4_37	1700683-17 LORNG-LF2MW6-060117 0.125	16-Jun-17	05:11:10
38	170615M4_38	B7F0027-MS1 Matrix Spike 0.125	16-Jun-17	05:22:53
39	170615M4_39	B7F0027-MSD1 Matrix Spike Dup 0.125	16-Jun-17	05:34:36
40	170615M4_40	1700683-18 LORNG-LF2MW6-060117FD 0.125	16-Jun-17	05:46:19
41	170615M4_41	1700681-03@25X OF17-MW01-0617 0.125	16-Jun-17	05:59:23
42	170615M4_42	1700681-04@50X OF17-MW01P-0617 0.125	16-Jun-17	06:10:59
43	170615M4_43	1700681-04@20X OF17-MW01P-0617 0.125	16-Jun-17	06:22:41
44	170615M4_44	1700681-06@50X OF17-MW04-0617 0.125	16-Jun-17	06:34:24
45	170615M4_45	1700681-06@10X OF17-MW04-0617 0.125	16-Jun-17	06:46:19
46	170615M4_46	IPA	16-Jun-17	06:57:58
47	170615M4_47	ST170615M5-11 PFC CS3 17F2228	16-Jun-17	07:09:33
48	170615M4_48	IPA	16-Jun-17	07:21:16
49	170615M4_49	1700690-01 36 0.125	16-Jun-17	07:40:47
50	170615M4_50	IPA	16-Jun-17	07:52:15
51	170615M4_51	1700681-01@25X OF17-MW02-0517 0.125	16-Jun-17	08:06:03
52	170615M4_52	1700681-02@50X OF17-MW03-0517 0.125	16-Jun-17	08:17:45
53	170615M4_53	1700681-02@25X OF17-MW03-0517 0.125	16-Jun-17	08:29:12
54	170615M4_54	B7F0010-MS1@50X Matrix Spike 0.125	16-Jun-17	08:40:55
55	170615M4_55	B7F0010-MS1@25X Matrix Spike 0.125	16-Jun-17	08:52:39
56	170615M4_56	B7F0010-MSD1@50X Matrix Spike Dup 0.125	16-Jun-17	09:04:21
57	170615M4_57	B7F0010-MSD1@25X Matrix Spike Dup 0.125	16-Jun-17	09:16:04
58	170615M4_58	1700681-03@50X OF17-MW01-0617 0.125	16-Jun-17	09:27:48
59	170615M4_59	ST170615M5-12 PFC CS3 17F1512	16-Jun-17	09:39:31

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Last Altered: Friday, June 16, 2017 08:21:11 Pacific Daylight Time

Printed: Friday, June 16, 2017 08:21:26 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_47, Date: 16-Jun-2017, Time: 07:09:33, ID: ST170615M5-11 PFC CS3 17F2228, Description: PFC CS3 17F2228

**Total PFBS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.38	5061.778	3358.322	18.840	bb	9.5

**Total PFHxS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	4.22	5008.773	3831.180	16.342	MM	8.2

**Total PFOA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	8 PFOA	413 > 368.7	4.45	51167.430	72262.586	8.851	bb	8.9
2	47 Total PFOA	413 > 368.7	4.18	16.846	72262.586	0.003	bbl	

**Total PFOS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	10 PFOS	499 > 79.9	4.82	11038.168	13891.274	9.933	MM	9.5

**Total N-Me-FOSAA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	14 N-MeFOSAA	570.1 > 419	5.05	17725.637	13764.147	16.098	bb	9.8

**Total N-EtFOSAA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	50 Total N-EtFOSAA	584.2 > 419	5.28	109.036	15573.042	0.088	bb	0.0
2	15 N-EtFOSAA	584.2 > 419	5.16	13192.820	15573.042	10.589	bb	9.7
3	50 Total N-EtFOSAA	584.2 > 419	4.56	34.475	15573.042	0.028	bbl	

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_47.qld

Last Altered: Friday, June 16, 2017 08:21:11 Pacific Daylight Time

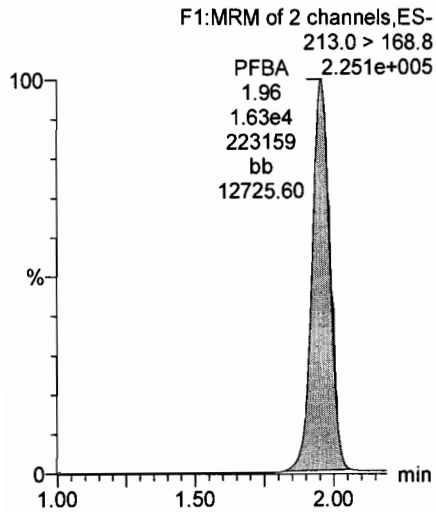
Printed: Friday, June 16, 2017 08:21:26 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

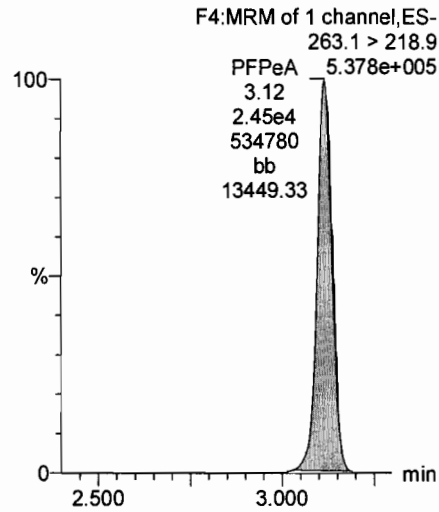
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_47, Date: 16-Jun-2017, Time: 07:09:33, ID: ST170615M5-11 PFC CS3 17F2228, Description: PFC CS3 17F2228

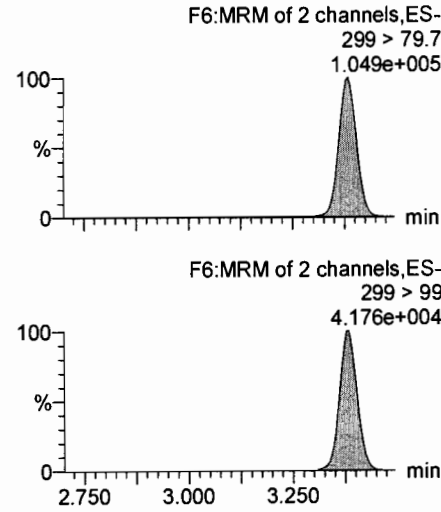
PFBA



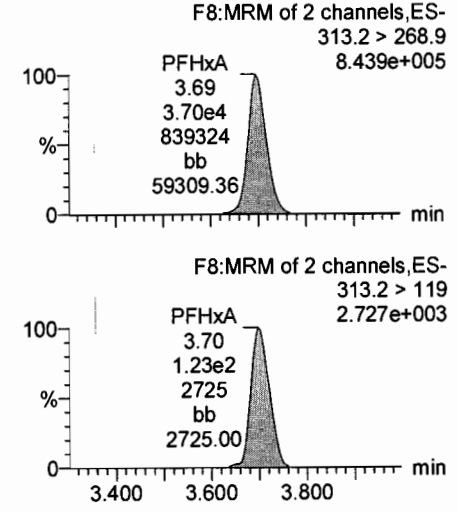
PFPeA



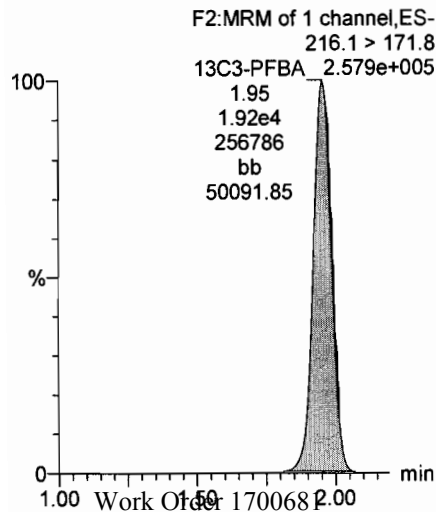
Total PFBS



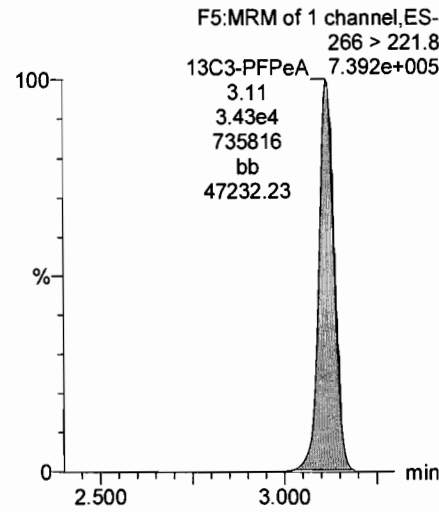
PFHxA



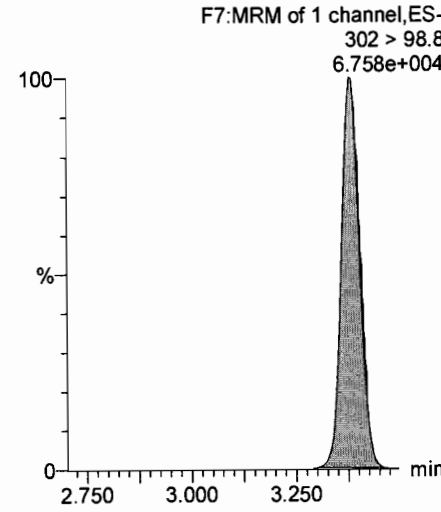
13C3-PFBA



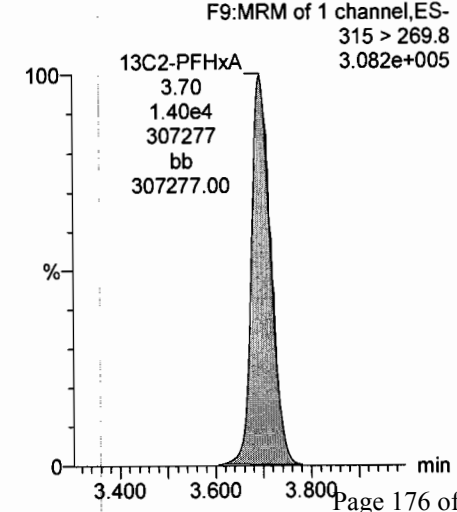
13C3-PFPeA



13C3-PFBS



13C2-PFHxA



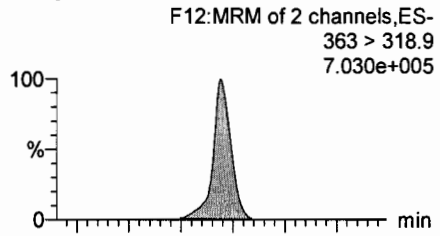
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Last Altered: Friday, June 16, 2017 08:21:11 Pacific Daylight Time

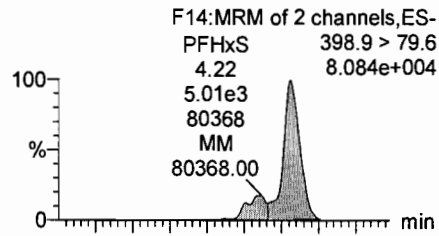
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Name: 170615M4\_47, Date: 16-Jun-2017, Time: 07:09:33, ID: ST170615M5-11 PFC CS3 17F2228, Description: PFC CS3 17F2228

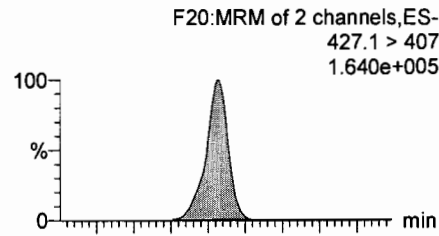
**PFHpA**



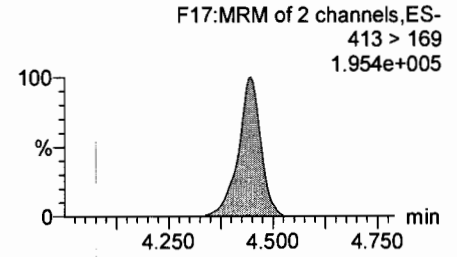
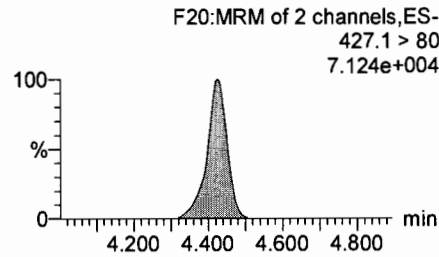
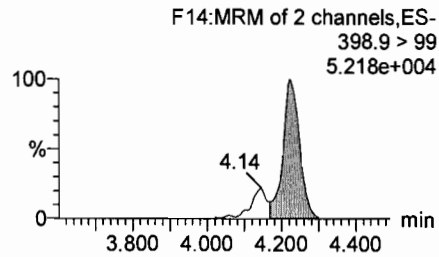
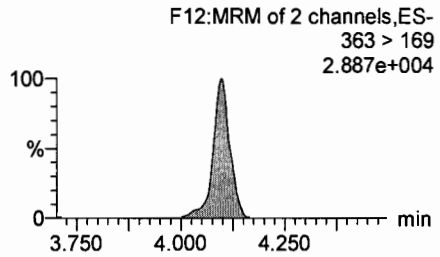
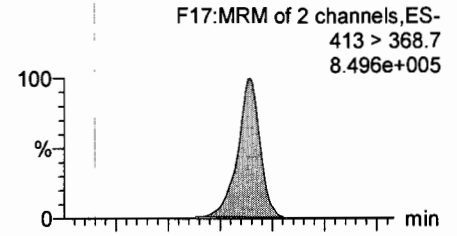
**Total PFHxS**



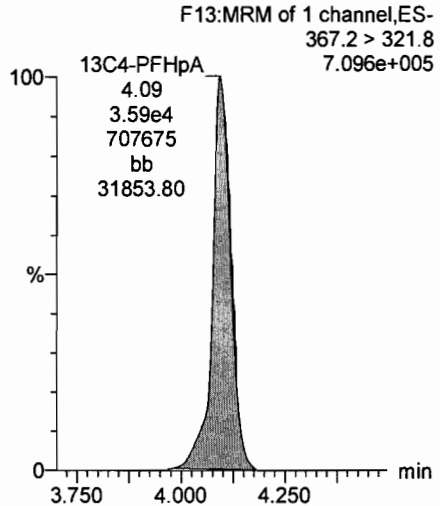
**6:2 FTS**



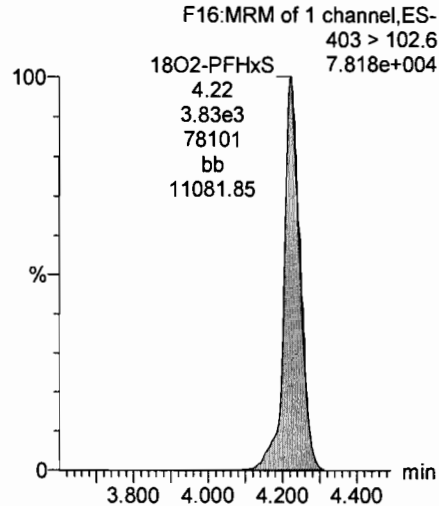
**Total PFOA**



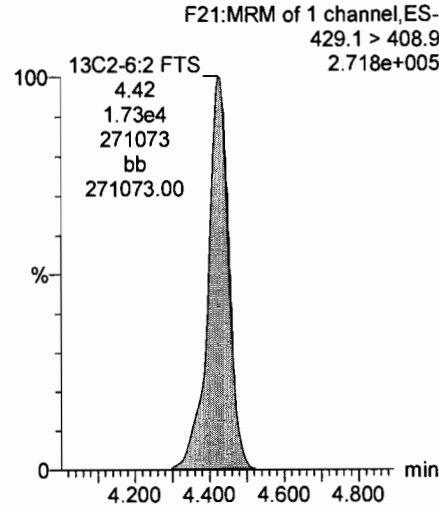
**13C4-PFHpa**



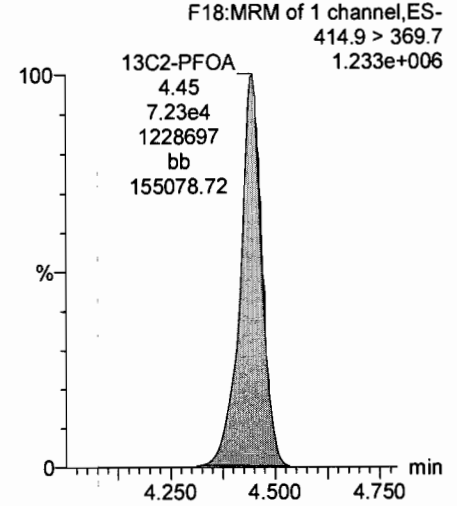
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



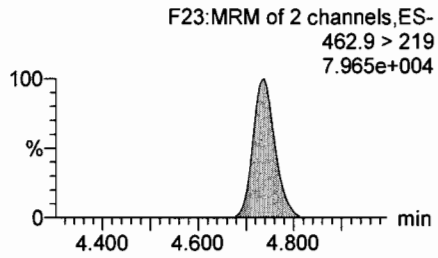
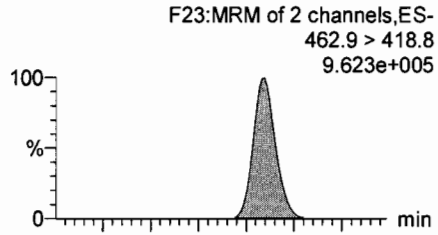
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Last Altered: Friday, June 16, 2017 08:21:11 Pacific Daylight Time

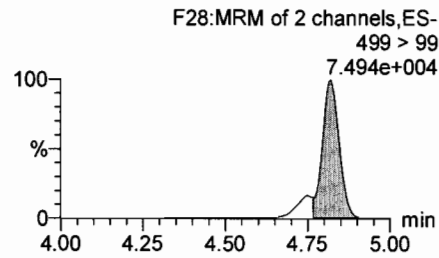
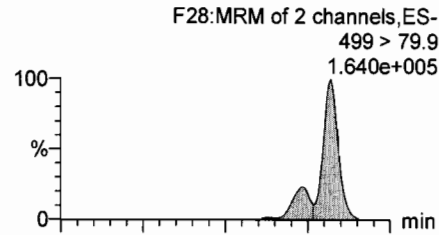
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Name: 170615M4\_47, Date: 16-Jun-2017, Time: 07:09:33, ID: ST170615M5-11 PFC CS3 17F2228, Description: PFC CS3 17F2228

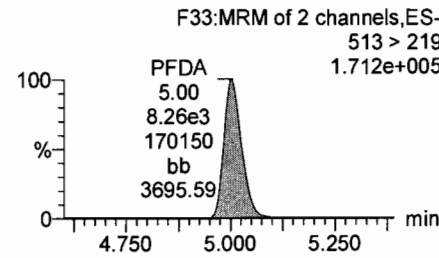
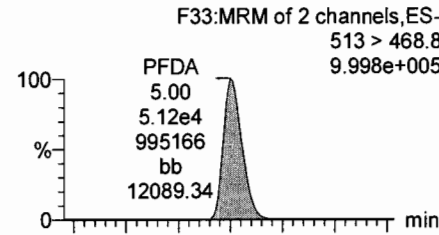
**PFNA**



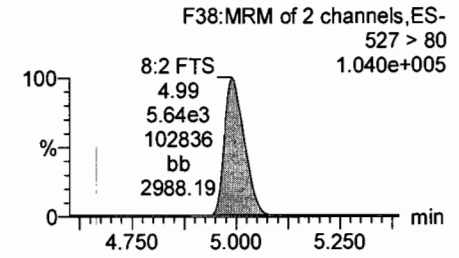
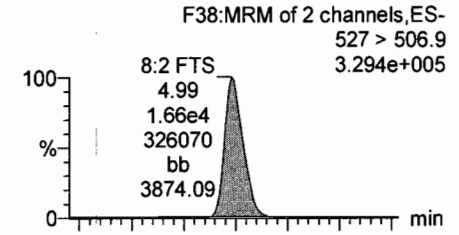
**Total PFOS**



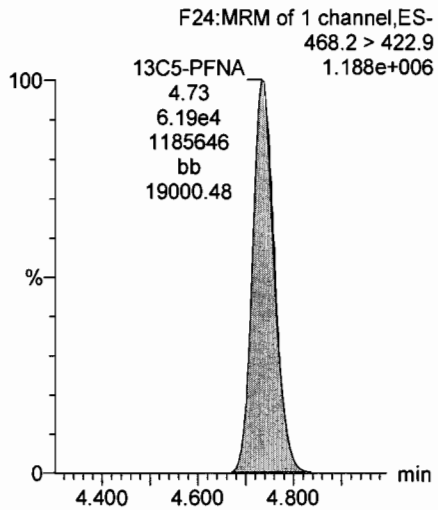
**PFDA**



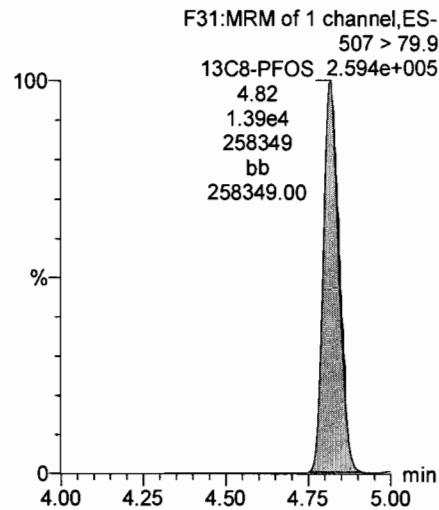
**8:2 FTS**



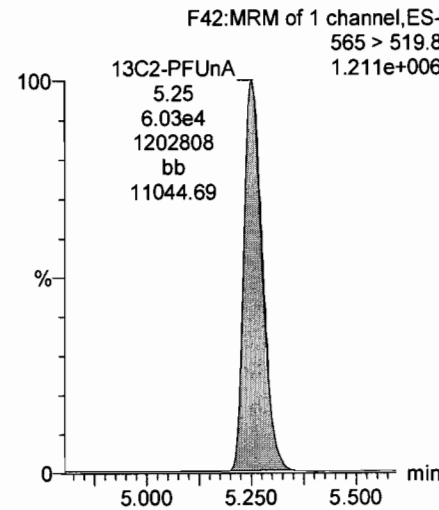
**13C5-PFNA**



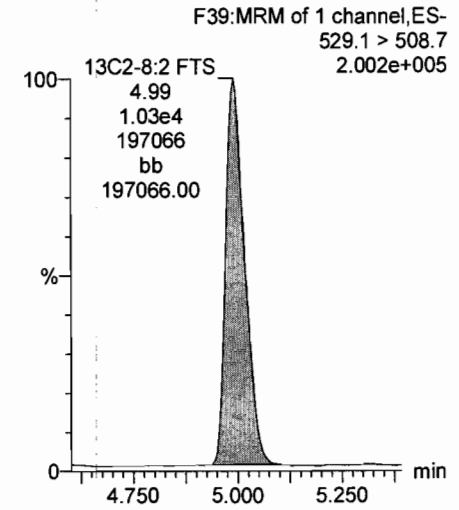
**13C8-PFOS**



**13C2-PFUnA**



**13C2-8:2 FTS**





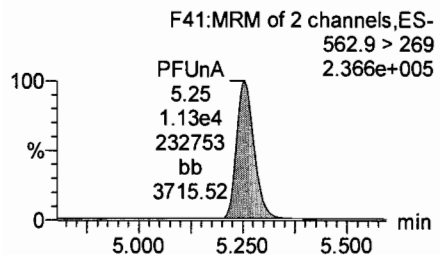
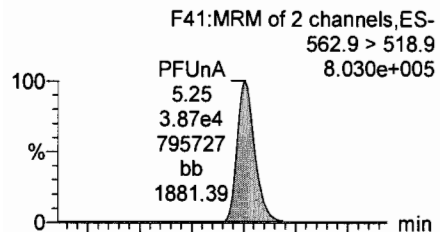
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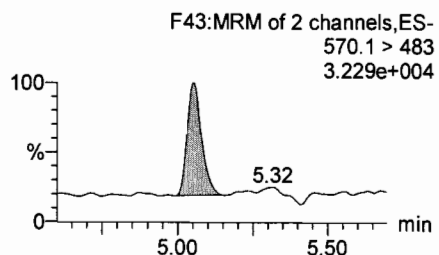
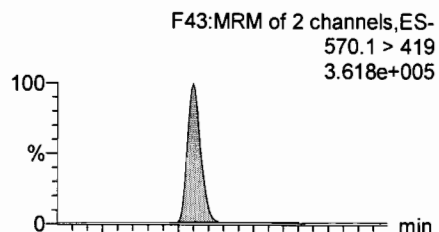
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Name: 170615M4\_47, Date: 16-Jun-2017, Time: 07:09:33, ID: ST170615M5-11 PFC CS3 17F2228, Description: PFC CS3 17F2228

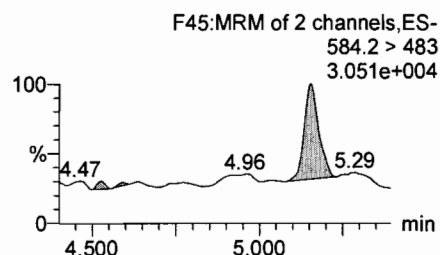
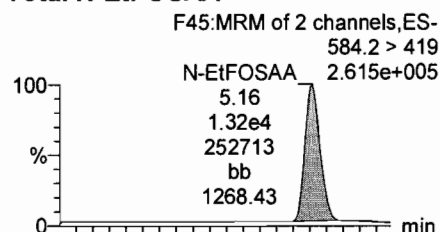
**PFUnA**



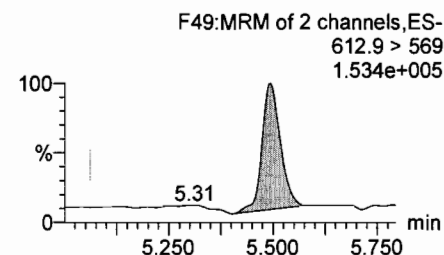
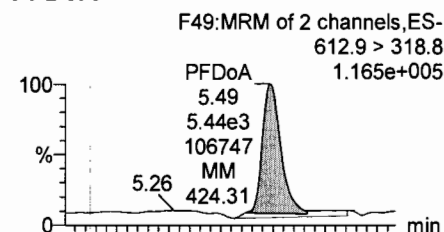
**Total N-Me-FOSAA**



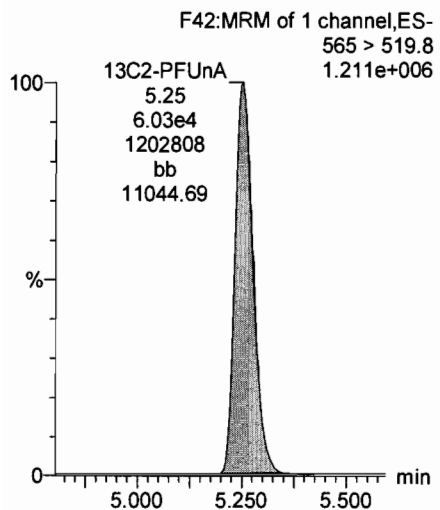
**Total N-EtFOSAA**



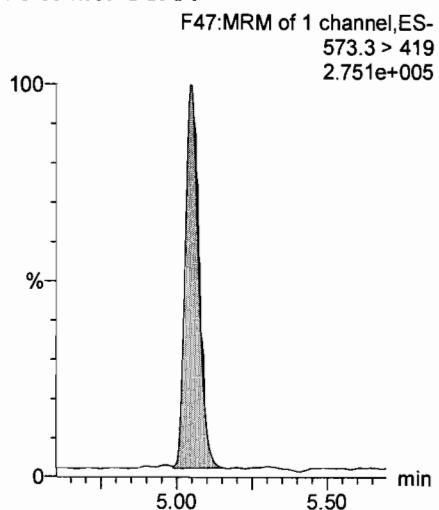
**PFDoA**



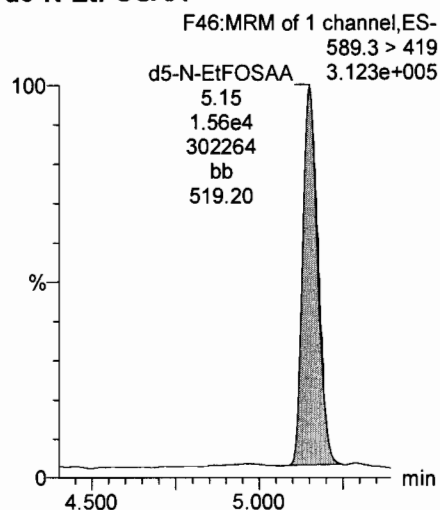
**13C2-PFUnA**



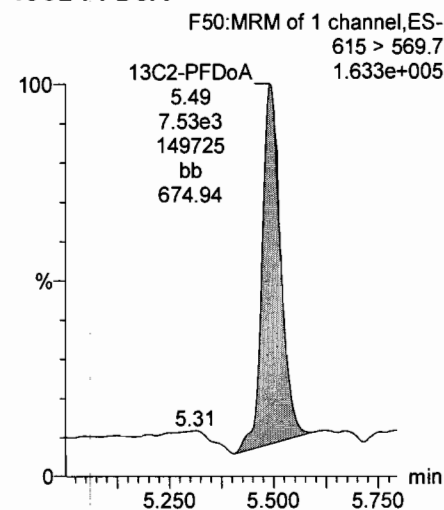
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



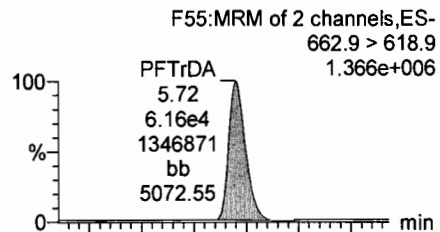
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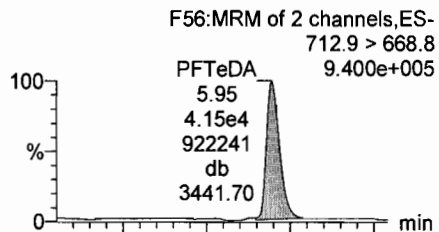
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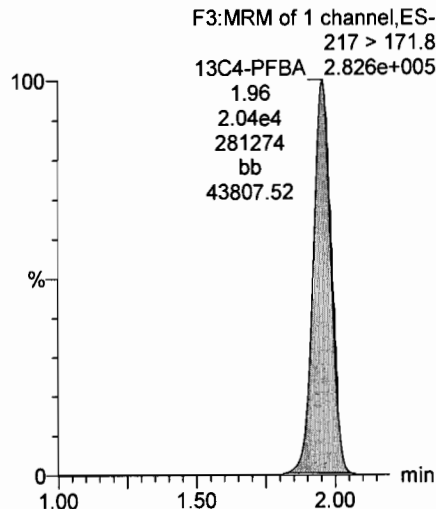
**PFTTrDA**



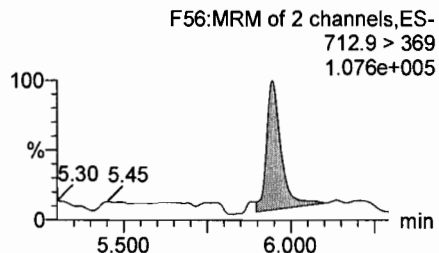
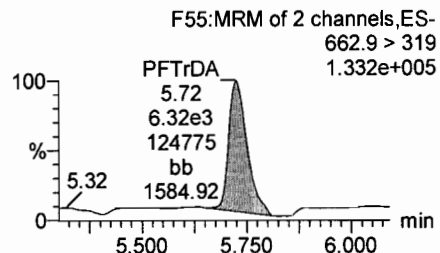
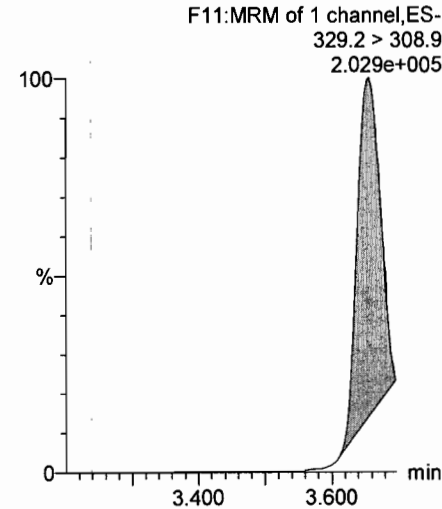
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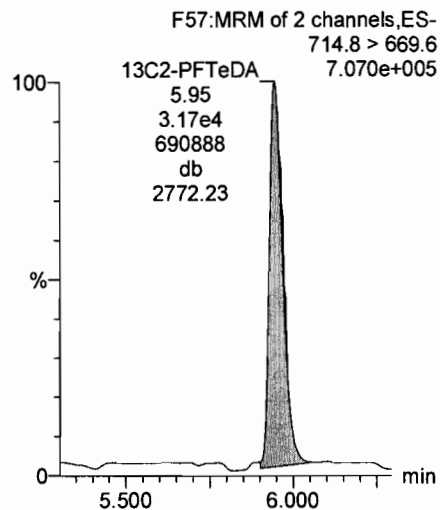
**13C4-PFBA**



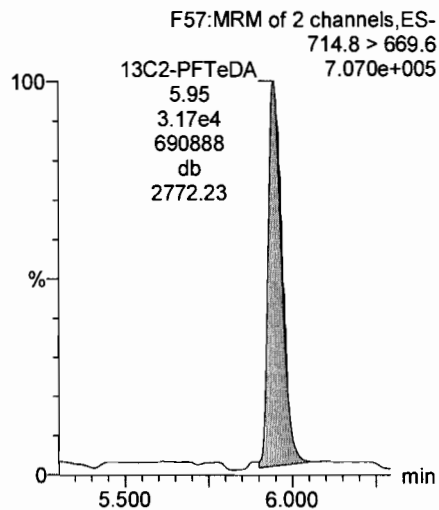
**13C2-4:2 FTS**



**13C2-PFTeDA**



**13C2-PFTeDA**



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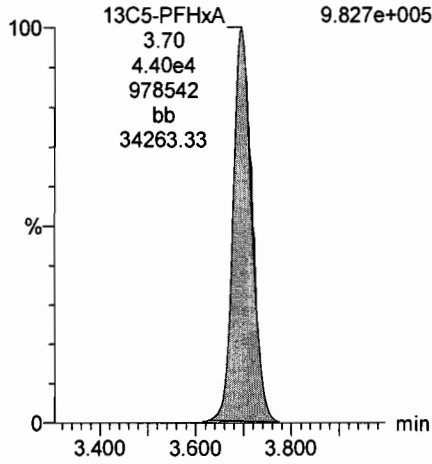
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Printed: Friday, June 16, 2017 08:21:26 Pacific Daylight Time

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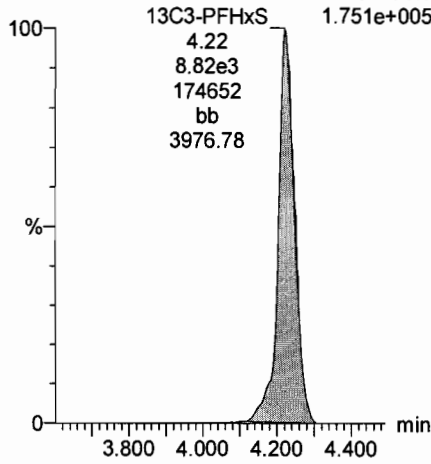
13C5-PFHxA

F10:MRM of 1 channel,ES-  
318 > 272.9  
9.827e+005



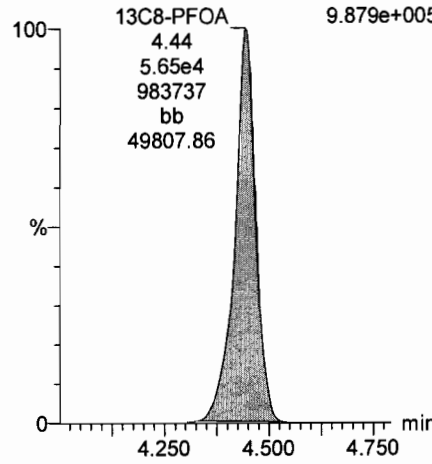
13C3-PFHxS

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
1.751e+005



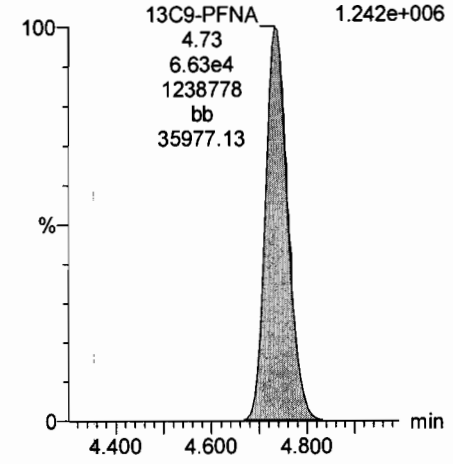
13C8-PFOA

F19:MRM of 1 channel,ES-  
421.3 > 376  
9.879e+005



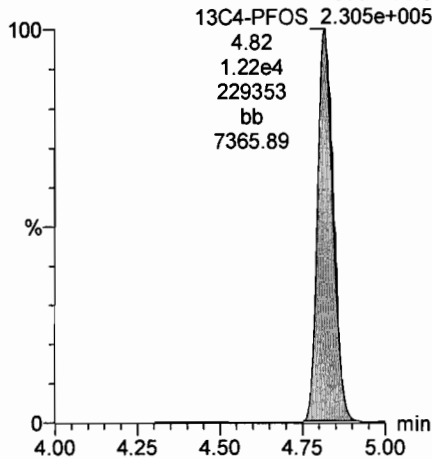
13C9-PFNA

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.242e+006



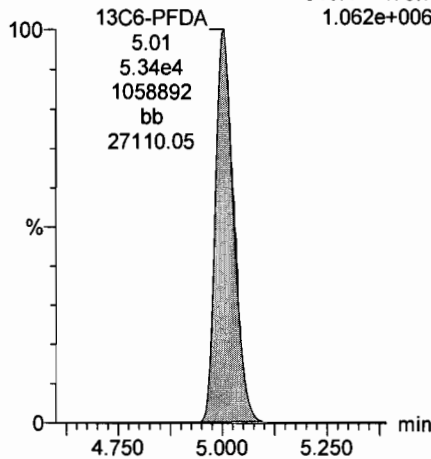
13C4-PFOS

F29:MRM of 1 channel,ES-  
503 > 79.9  
2.305e+005



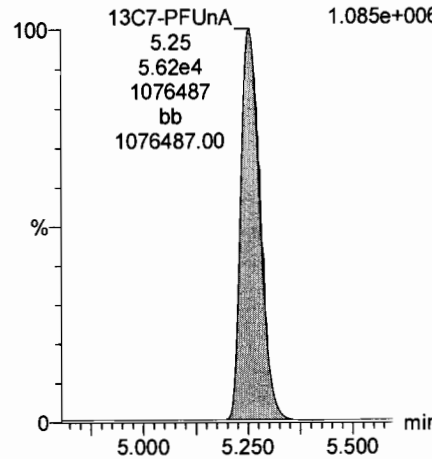
13C6-PFDA

F36:MRM of 1 channel,ES-  
519.1 > 473.7  
1.062e+006



13C7-PFUnA

F44:MRM of 1 channel,ES-  
570.1 > 524.8  
1.085e+006



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_59.qld

Last Altered: Friday, June 16, 2017 10:13:51 Pacific Daylight Time

Printed: Friday, June 16, 2017 10:14:11 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_59, Date: 16-Jun-2017, Time: 09:39:31, ID: ST170615M4-12 PFC CS3 17F1512, Description: PFC CS3 17F1512

*CP 6/16/17*  
*AC 6/16/17*

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.64e4	1.94e4	1.0000		1.85	1.95	10.6	9.24	92.4
2	2 PFPeA	263.1 > 218.9	2.46e4	3.49e4	1.0000		3.07	3.12	8.81	9.12	91.2
3	3 PFBS	299 > 79.7	5.24e3	3.71e3	1.0000		3.34	3.39	17.6	8.90	89.0
4	4 PFHxA	313.2 > 268.9	3.96e4	1.45e4	1.0000		3.66	3.69	13.6	9.54	95.4
5	5 PFHpA	363 > 318.9	3.82e4	4.05e4	1.0000		4.07	4.09	11.8	9.28	92.8
6	6 PFHxS	398.9 > 79.6	5.23e3	3.61e3	1.0000		4.20	4.22	18.1	9.10	91.0
7	7 6:2 FTS	427.1 > 407	1.29e4	1.92e4	1.0000		4.40	4.42	8.38	9.21	92.1
8	8 PFOA	413 > 368.7	5.58e4	7.35e4	1.0000		4.42	4.44	9.50	9.52	95.2
9	9 PFNA	462.9 > 418.8	5.14e4	6.26e4	1.0000		4.68	4.73	10.3	8.67	86.7
10	10 PFOS	499 > 79.9	1.13e4	1.43e4	1.0000		4.80	4.81	9.84	9.41	94.1
11	11 PFDA	513 > 468.8	5.60e4	5.79e4	1.0000		4.98	4.99	12.1	9.79	97.9
12	12 8:2 FTS	527 > 506.9	1.79e4	1.33e4	1.0000		5.00	4.99	16.8	9.11	91.1
13	13 PFUnA	562.9 > 518.9	3.99e4	6.30e4	1.0000		5.22	5.25	7.92	10.4	104.0
14	14 N-MeFOSAA	570.1 > 419	1.77e4	1.35e4	1.0000		5.00	5.04	16.4	9.92	99.2
15	15 N-EtFOSAA	584.2 > 419	1.32e4	1.44e4	1.0000		5.12	5.15	11.5	10.5	104.9
16	16 PFDaA	612.9 > 318.8	5.69e3	7.89e3	1.0000		5.47	5.49	9.01	9.13	91.3
17	17 PFTrDA	662.9 > 618.9	6.68e4	7.89e3	1.0000		5.70	5.72	106	9.34	93.4
18	18 PFTeDA	712.9 > 668.8	4.39e4	4.23e4	1.0000		5.92	5.94	13.0	9.60	96.0
19	19 13C3-PFBA	216.1 > 171.8	1.94e4	2.14e4	1.0000	0.734	1.89	1.95	11.3	15.4	123.2
20	20 13C3-PFPeA	266 > 221.8	3.49e4	2.14e4	1.0000	1.273	3.07	3.12	20.4	16.0	127.9
21	21 13C3-PFBS	302 > 98.8	3.71e3	2.14e4	1.0000	0.130	3.33	3.38	2.17	16.6	132.9
22	22 13C2-PFHxA	315 > 269.8	1.45e4	4.61e4	1.0000	0.258	3.66	3.69	1.58	6.13	122.5
23	23 13C4-PFHpA	367.2 > 321.8	4.05e4	4.61e4	1.0000	0.254	4.07	4.09	4.39	17.3	138.4
24	24 18O2-PFHxS	403 > 102.6	3.61e3	9.01e3	1.0000	0.331	4.20	4.22	5.00	15.1	120.9
25	25 13C2-6:2 FTS	429.1 > 408.9	1.92e4	5.39e4	1.0000	0.328	4.40	4.42	4.46	13.6	108.8
26	26 13C2-PFOA	414.9 > 369.7	7.35e4	5.39e4	1.0000	1.060	4.26	4.44	17.0	16.1	128.5
27	27 13C5-PFNA	468.2 > 422.9	6.26e4	6.59e4	1.0000	0.757	4.68	4.73	11.9	15.7	125.4
28	28 13C8-PFOS	507 > 79.9	1.43e4	1.31e4	1.0000	0.911	4.80	4.81	13.7	15.0	120.1
29	29 13C2-PFDA	515.1 > 469.9	5.79e4	5.62e4	1.0000	0.826	5.00	4.99	12.9	15.6	124.9
30	30 13C2-8:2 FTS	529.1 > 508.7	1.33e4	5.62e4	1.0000	0.204	5.00	4.99	2.97	14.6	116.5
31	31 13C2-170615M4	565 > 519.8	6.30e4	5.44e4	1.0000	0.879	5.22	5.24	14.5	16.5	182

*75-125*  
*60-150*  
*50-150*  
*60-150*

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_59.qld

Last Altered: Friday, June 16, 2017 10:13:51 Pacific Daylight Time

Printed: Friday, June 16, 2017 10:14:11 Pacific Daylight Time

Name: 170615M4\_59, Date: 16-Jun-2017, Time: 09:39:31, ID: ST170615M5-12 PFC CS3 17F1512, Description: PFC CS3 17F1512

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	d3-N-MeFOSAA	573.3 > 419	1.35e4	5.44e4	1.0000	0.177	4.88	5.04	3.10	17.5	139.8
33	d5-N-EtFOSAA	589.3 > 419	1.44e4	5.44e4	1.0000	0.217	5.10	5.14	3.30	15.2	121.7
34	13C2-PFDoA	615 > 569.7	7.89e3	5.44e4	1.0000	0.102	5.47	5.49	1.81	17.8	142.5
35	13C2-PFTeDA	714.8 > 669.6	4.23e4	5.44e4	1.0000	0.589	5.92	5.93	9.73	16.5	132.0
36	13C4-PFBA	217 > 171.8	2.14e4	2.14e4	1.0000	1.000	1.89	1.95	12.5	12.5	100.0
37	13C2-4:2 FTS	329.2 > 308.9	7.29e3	7.29e3	1.0000	1.000	3.62	3.65	5.00	5.00	100.0
38	13C5-PFHxA	318 > 272.9	4.61e4	4.61e4	1.0000	1.000	3.66	3.69	5.00	5.00	100.0
39	13C3-PFHxS	401.9 > 79.9	9.01e3	9.01e3	1.0000	1.000	4.20	4.22	12.5	12.5	100.0
40	13C8-PFOA	421.3 > 376	5.39e4	5.39e4	1.0000	1.000	4.42	4.44	12.5	12.5	100.0
41	13C9-PFNA	472.2 > 426.9	6.59e4	6.59e4	1.0000	1.000	4.70	4.73	12.5	12.5	100.0
42	13C4-PFOS	503 > 79.9	1.31e4	1.31e4	1.0000	1.000	4.80	4.81	12.5	12.5	100.0
43	13C6-PFDA	519.1 > 473.7	5.62e4	5.62e4	1.0000	1.000	5.00	4.99	12.5	12.5	100.0
44	13C7-PFUnA	570.1 > 524.8	5.44e4	5.44e4	1.0000	1.000	5.22	5.24	12.5	12.5	100.0

20-150  
↓  
30-150  
20-150

Dataset: Untitled

Last Altered: Friday, June 16, 2017 10:16:04 Pacific Daylight Time

Printed: Friday, June 16, 2017 10:16:34 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Compound name: PFBA

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1	170615M4_1	IPA	15-Jun-17	22:09:24
2	170615M4_2	IPA	15-Jun-17	22:21:12
3	170615M4_3	ST170615M4-1 PFC CS-2 17F1506	15-Jun-17	22:32:47
4	170615M4_4	ST170615M4-2 PFC CS-1 17F1507	15-Jun-17	22:44:30
5	170615M4_5	ST170615M4-3 PFC CS0 17F1508	15-Jun-17	22:56:13
6	170615M4_6	ST170615M4-4 PFC CS1 17F1509	15-Jun-17	23:07:56
7	170615M4_7	ST170615M4-5 PFC CS2 17F1510	15-Jun-17	23:19:39
8	170615M4_8	ST170615M4-6 PFC CS3 17F1512	15-Jun-17	23:31:22
9	170615M4_9	ST170615M4-7 PFC CS4 17F1513	15-Jun-17	23:43:05
10	170615M4_10	ST170615M4-8 PFC CS5 17F1514	15-Jun-17	23:54:48
11	170615M4_11	IPA	16-Jun-17	00:06:31
12	170615M4_12	SS170615M4-1 PFC SSS 17F1505	16-Jun-17	00:18:14
13	170615M4_13	IPA	16-Jun-17	00:29:58
14	170615M4_14	IPA	16-Jun-17	00:41:44
15	170615M4_15	B7F0027-BS1 OPR 0.125	16-Jun-17	00:53:27
16	170615M4_16	IPA	16-Jun-17	01:05:06
17	170615M4_17	B7F0027-BLK1 Method Blank 0.125	16-Jun-17	01:16:50
18	170615M4_18	1700683-01 LORNG-EB051MHL-053117 0.125	16-Jun-17	01:28:32
19	170615M4_19	1700683-02 LORNG-EB052DSL-053117 0.125	16-Jun-17	01:40:15
20	170615M4_20	1700683-03 LORNG-JMW0882-053117 0.125	16-Jun-17	01:51:59
21	170615M4_21	1700683-04 LORNG-JMW0891-060117 0.125	16-Jun-17	02:03:41
22	170615M4_22	1700683-05 LORNG-JMW0961-053117 0.125	16-Jun-17	02:15:24
23	170615M4_23	1700683-06 LORNG-LF2MW1-053117 0.125	16-Jun-17	02:27:07
24	170615M4_24	1700683-07 LORNG-LF2MW2-053117 0.125	16-Jun-17	02:38:51
25	170615M4_25	1700683-08 LORNG-LF2MW3-053117 0.125	16-Jun-17	02:50:34
26	170615M4_26	1700683-09 LORNG-MMW0002-060117 0.125	16-Jun-17	03:02:16
27	170615M4_27	1700683-10 LORNG-RES04-BLK-053117 0.125	16-Jun-17	03:14:00
28	170615M4_28	1700683-11 LORNG-RES04-FAU-053117 0.125	16-Jun-17	03:25:43
29	170615M4_29	IPA	16-Jun-17	03:37:26
30	170615M4_30	ST170615M4-10 PFC CS3 17F1512	16-Jun-17	03:49:09
31	170615M4_31	IPA	16-Jun-17	04:00:51

Dataset: Untitled

Last Altered: Friday, June 16, 2017 10:16:04 Pacific Daylight Time

Printed: Friday, June 16, 2017 10:16:34 Pacific Daylight Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	170615M4_32	1700683-12 LORNG-RES04-WH-053117 0.125	16-Jun-17	04:12:35
33	170615M4_33	1700683-13 LORNG-EB053MHL-060117 0.125	16-Jun-17	04:24:19
34	170615M4_34	1700683-14 LORNG-EB054DSL-060117 0.125	16-Jun-17	04:36:04
35	170615M4_35	1700683-15 LORNG-JMW0801B-060117 0.125	16-Jun-17	04:47:44
36	170615M4_36	1700683-16 LORNG-JMW0806-060117 0.125	16-Jun-17	04:59:27
37	170615M4_37	1700683-17 LORNG-LF2MW6-060117 0.125	16-Jun-17	05:11:10
38	170615M4_38	B7F0027-MS1 Matrix Spike 0.125	16-Jun-17	05:22:53
39	170615M4_39	B7F0027-MSD1 Matrix Spike Dup 0.125	16-Jun-17	05:34:36
40	170615M4_40	1700683-18 LORNG-LF2MW6-060117FD 0.125	16-Jun-17	05:46:19
41	170615M4_41	1700681-03@25X OF17-MW01-0617 0.125	16-Jun-17	05:59:23
42	170615M4_42	1700681-04@50X OF17-MW01P-0617 0.125	16-Jun-17	06:10:59
43	170615M4_43	1700681-04@20X OF17-MW01P-0617 0.125	16-Jun-17	06:22:41
44	170615M4_44	1700681-06@50X OF17-MW04-0617 0.125	16-Jun-17	06:34:24
45	170615M4_45	1700681-06@10X OF17-MW04-0617 0.125	16-Jun-17	06:46:19
46	170615M4_46	IPA	16-Jun-17	06:57:58
47	170615M4_47	ST170615M5-11 PFC CS3 17F2228	16-Jun-17	07:09:33
48	170615M4_48	IPA	16-Jun-17	07:21:16
49	170615M4_49	1700690-01 36 0.125	16-Jun-17	07:40:47
50	170615M4_50	IPA	16-Jun-17	07:52:15
51	170615M4_51	1700681-01@25X OF17-MW02-0517 0.125	16-Jun-17	08:06:03
52	170615M4_52	1700681-02@50X OF17-MW03-0517 0.125	16-Jun-17	08:17:45
53	170615M4_53	1700681-02@25X OF17-MW03-0517 0.125	16-Jun-17	08:29:12
54	170615M4_54	B7F0010-MS1@50X Matrix Spike 0.125	16-Jun-17	08:40:55
55	170615M4_55	B7F0010-MS1@25X Matrix Spike 0.125	16-Jun-17	08:52:39
56	170615M4_56	B7F0010-MSD1@50X Matrix Spike Dup 0.125	16-Jun-17	09:04:21
57	170615M4_57	B7F0010-MSD1@25X Matrix Spike Dup 0.125	16-Jun-17	09:16:04
58	170615M4_58	1700681-03@50X OF17-MW01-0617 0.125	16-Jun-17	09:27:48
59	170615M4_59	ST170615M5-12 PFC CS3 17F1512	16-Jun-17	09:39:31

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Last Altered: Friday, June 16, 2017 10:13:51 Pacific Daylight Time

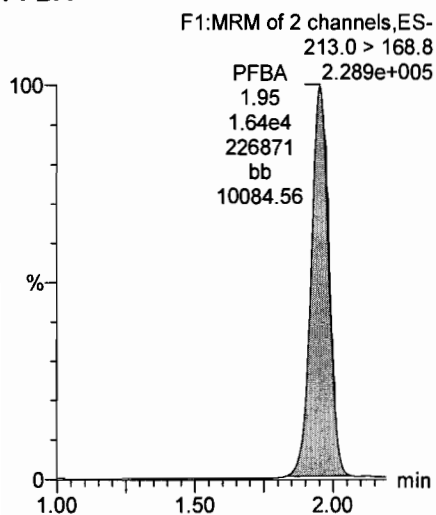
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Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

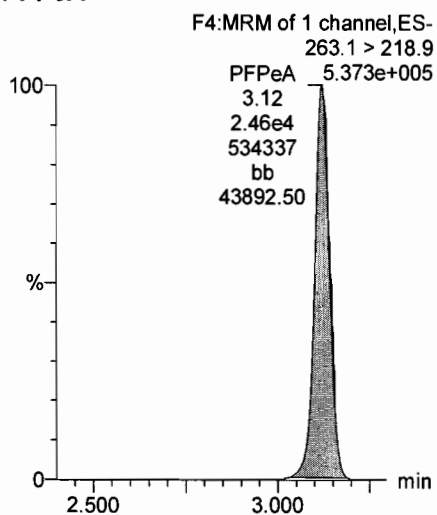
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Name: 170615M4\_59, Date: 16-Jun-2017, Time: 09:39:31, ID: ST170615M5-12 PFC CS3 17F1512, Description: PFC CS3 17F1512

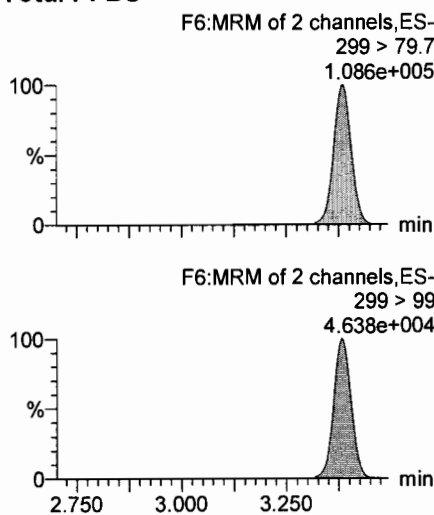
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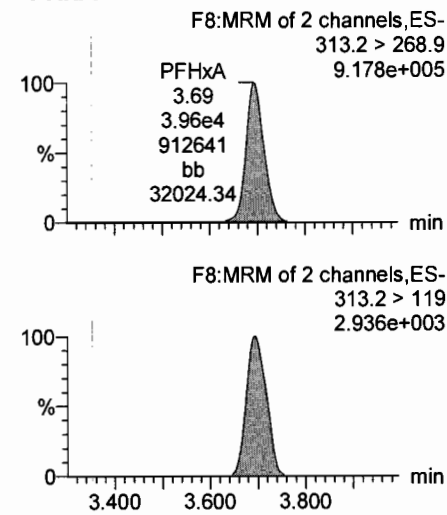
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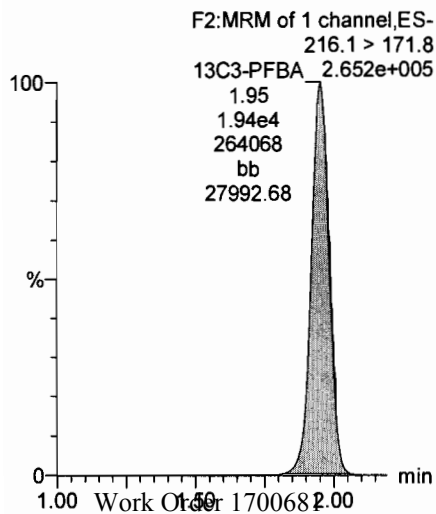
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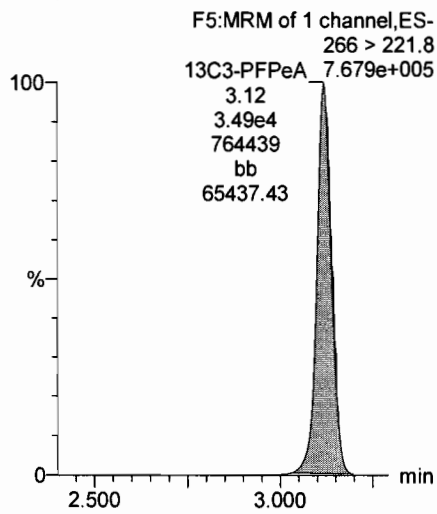
PFHxA



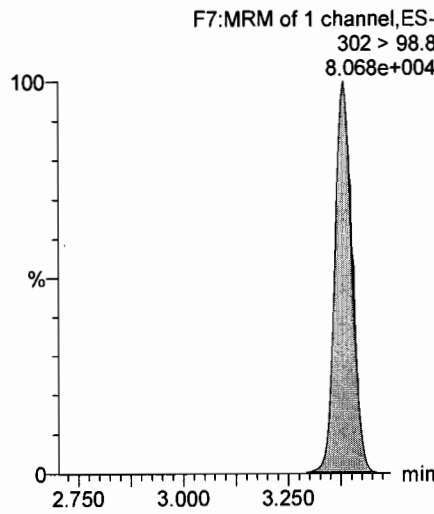
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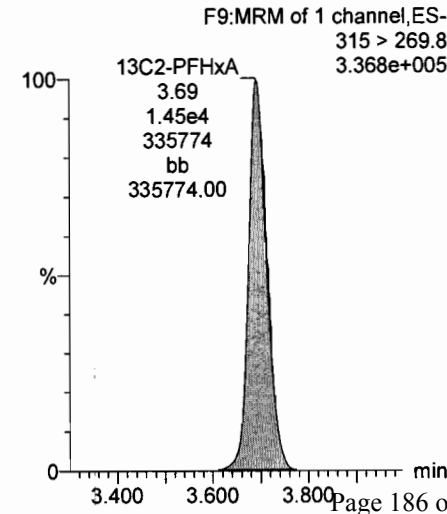
13C3-PFPeA



13C3-PFBS



13C2-PFHxA





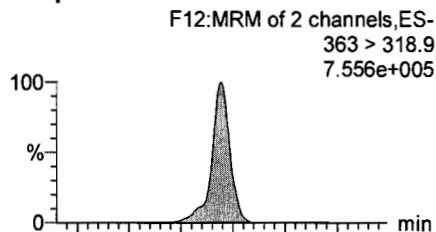
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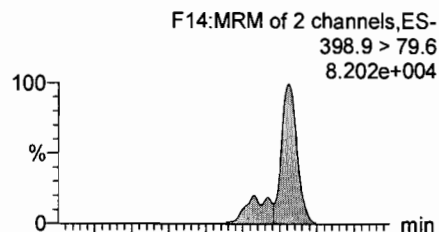
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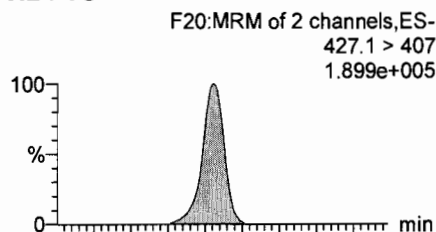
**PFHpA**



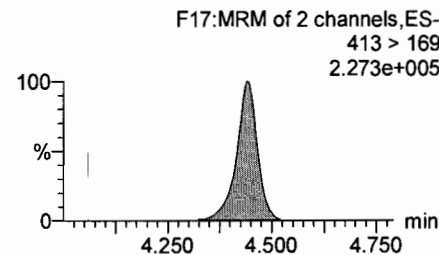
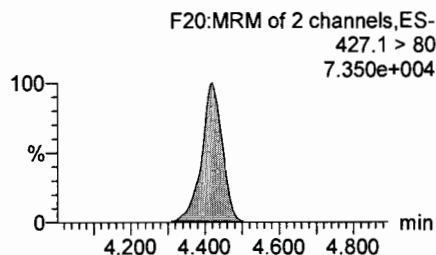
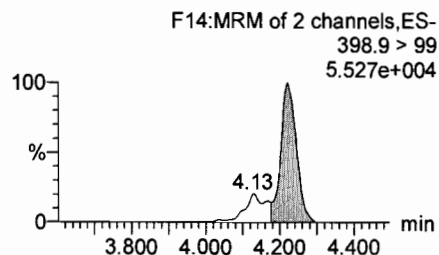
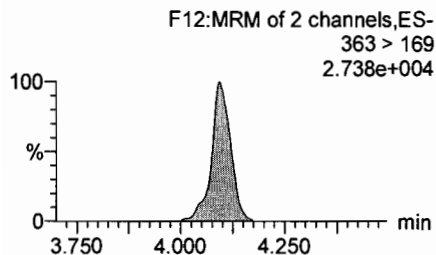
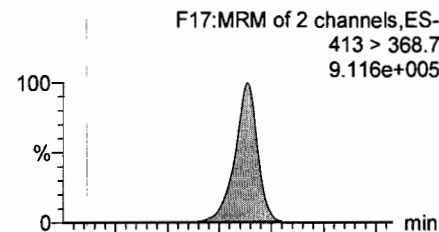
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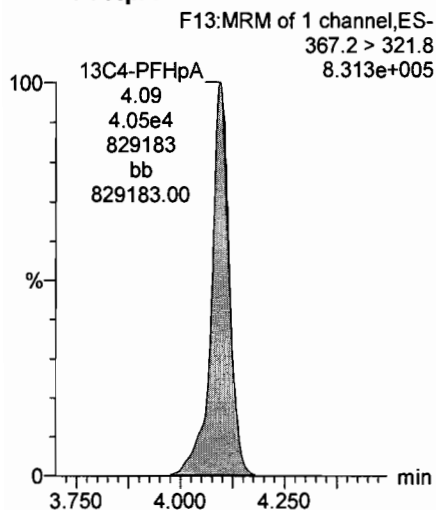
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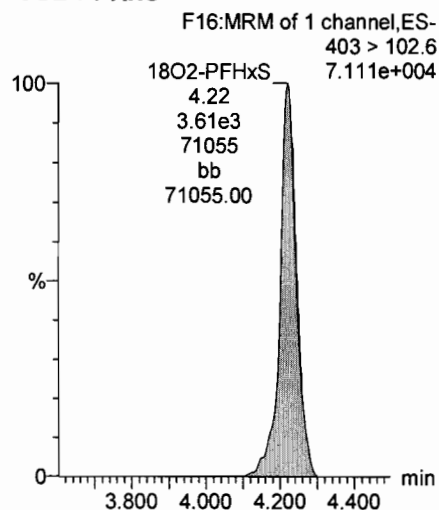
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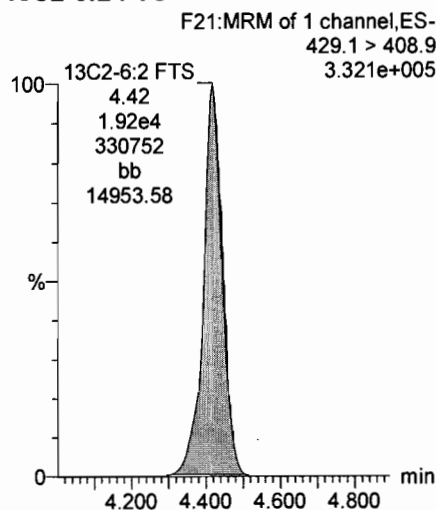
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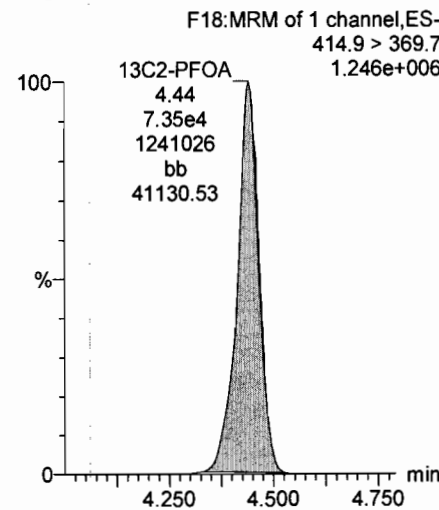
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



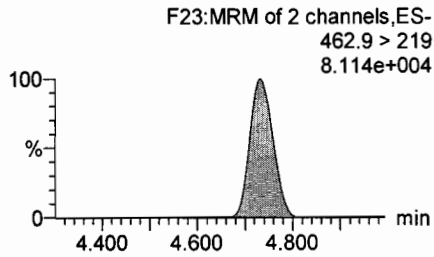
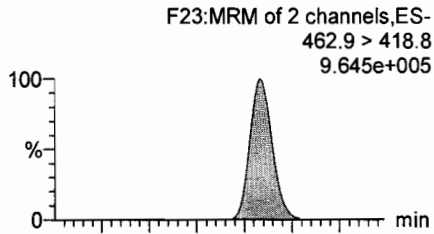
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Last Altered: Friday, June 16, 2017 10:13:51 Pacific Daylight Time

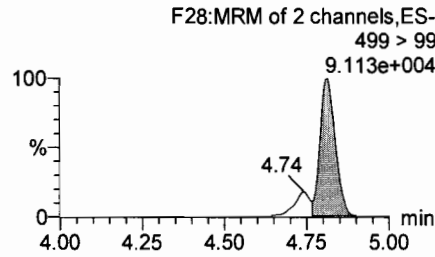
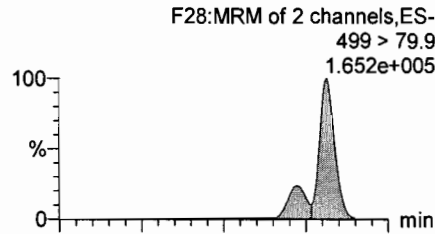
Printed: Friday, June 16, 2017 10:14:11 Pacific Daylight Time

Name: 170615M4\_59, Date: 16-Jun-2017, Time: 09:39:31, ID: ST170615M5-12 PFC CS3 17F1512, Description: PFC CS3 17F1512

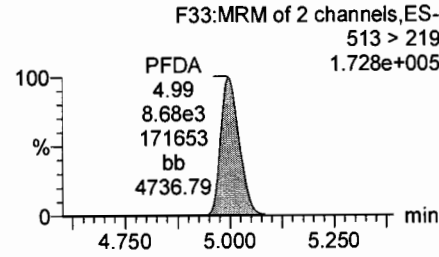
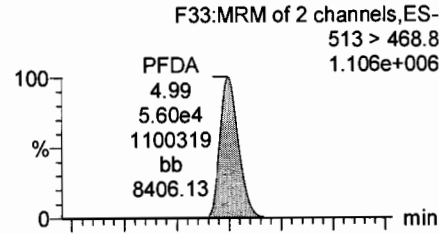
**PFNA**



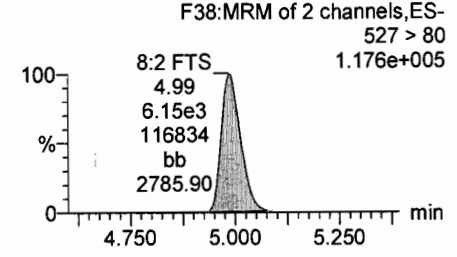
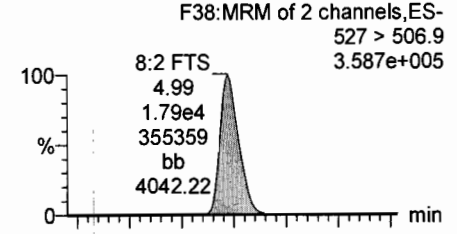
**Total PFOS**



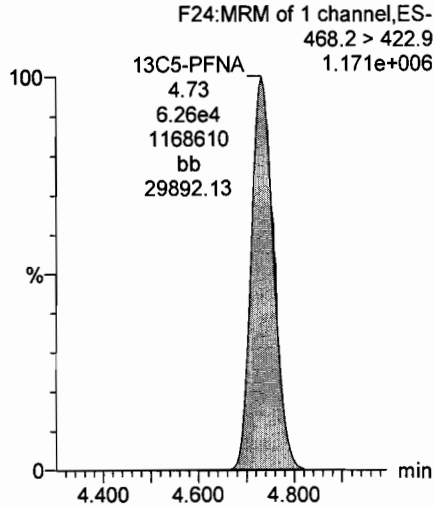
**PFDA**



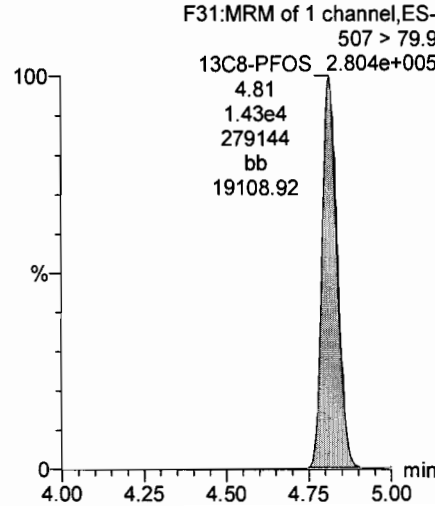
**8:2 FTS**



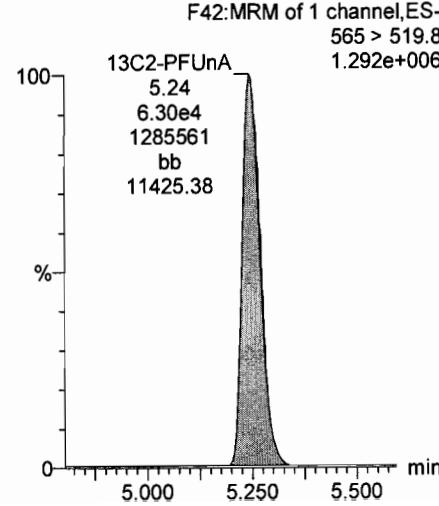
**13C5-PFNA**



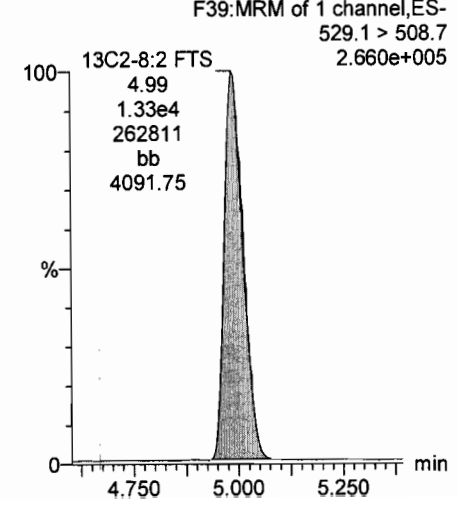
**13C8-PFOS**



**13C2-PFUnA**



**13C2-8:2 FTS**



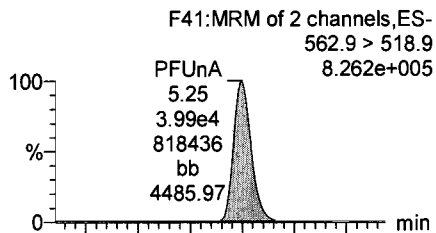
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_59.qld

Last Altered: Friday, June 16, 2017 10:13:51 Pacific Daylight Time

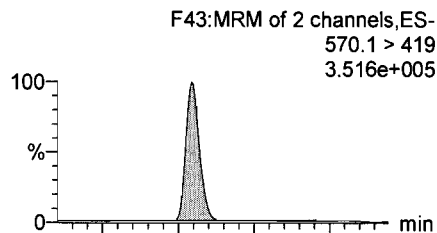
Printed: Friday, June 16, 2017 10:14:11 Pacific Daylight Time

Name: 170615M4\_59, Date: 16-Jun-2017, Time: 09:39:31, ID: ST170615M5-12 PFC CS3 17F1512, Description: PFC CS3 17F1512

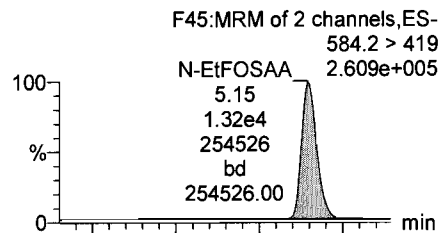
**PFUnA**



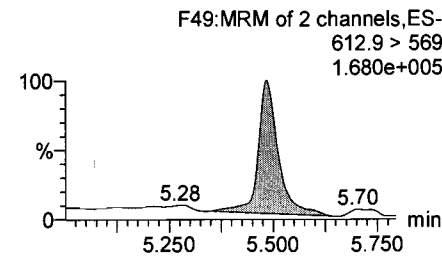
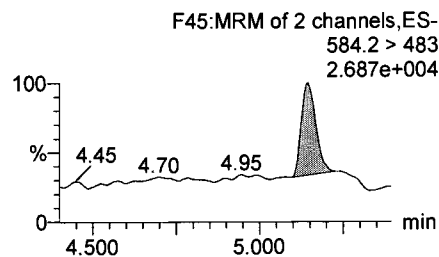
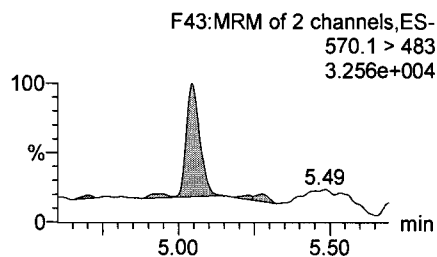
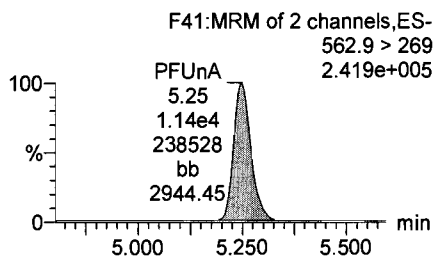
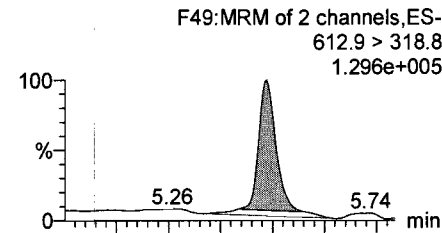
**Total N-Me-FOSAA**



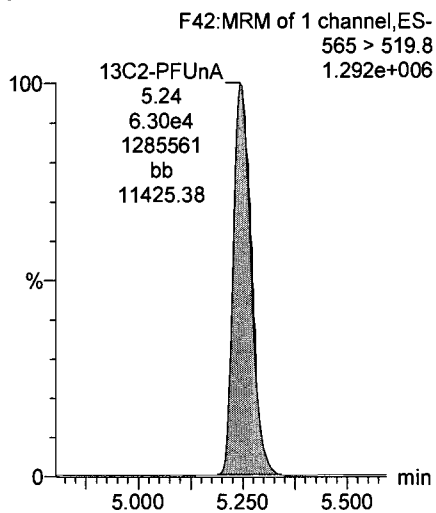
**Total N-EtFOSAA**



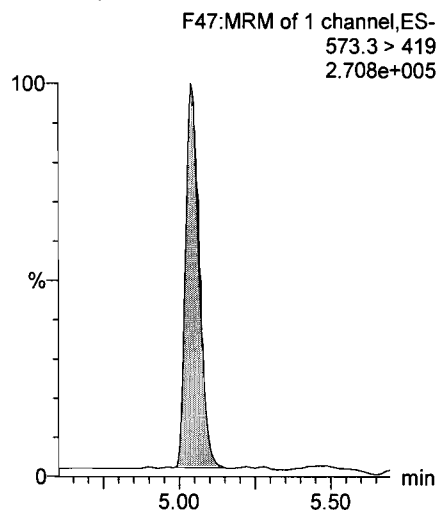
**PFDoA**



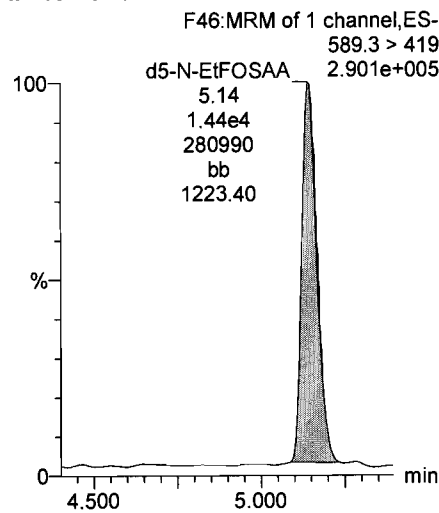
**13C2-PFUnA**



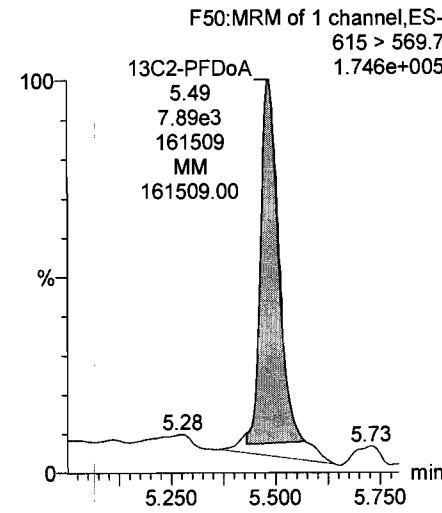
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



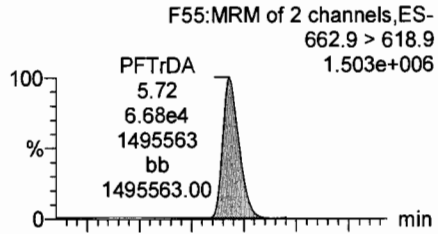
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_59.qld

Last Altered: Friday, June 16, 2017 10:13:51 Pacific Daylight Time

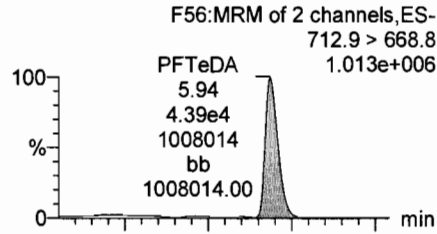
Printed: Friday, June 16, 2017 10:14:11 Pacific Daylight Time

Name: 170615M4\_59, Date: 16-Jun-2017, Time: 09:39:31, ID: ST170615M5-12 PFC CS3 17F1512, Description: PFC CS3 17F1512

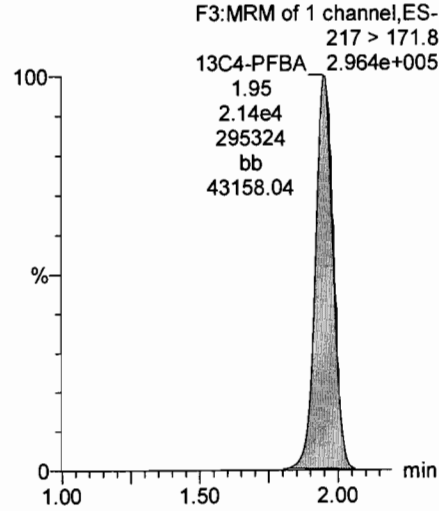
**PFTrDA**



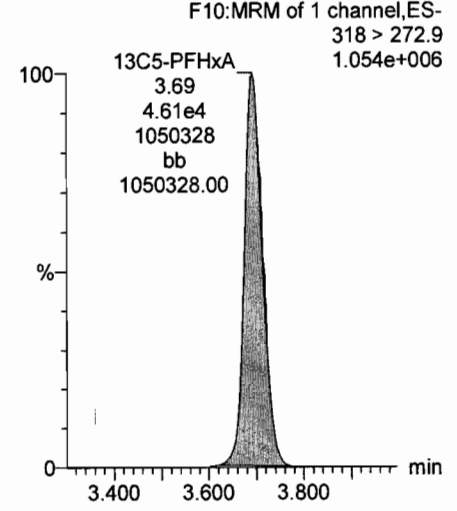
**PFTeDA**



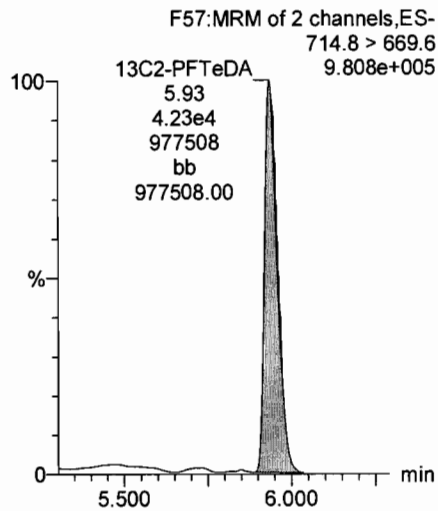
**13C4-PFBA**



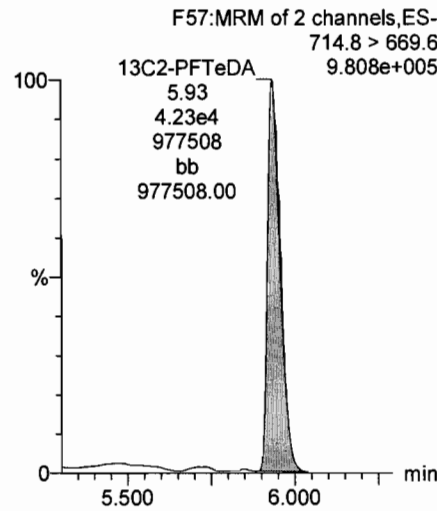
**13C5-PFHxA**



**13C2-PFTeDA**



**13C2-PFTeDA**



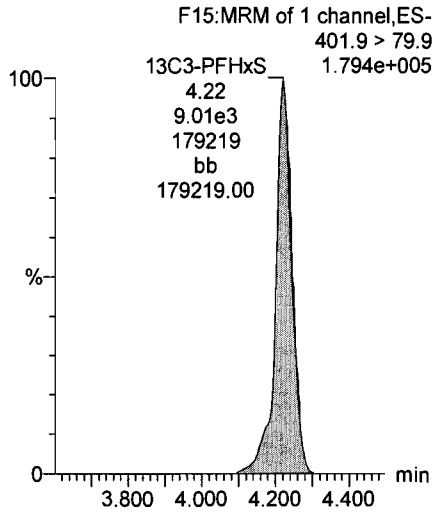
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_59.qld

Last Altered: Friday, June 16, 2017 10:13:51 Pacific Daylight Time

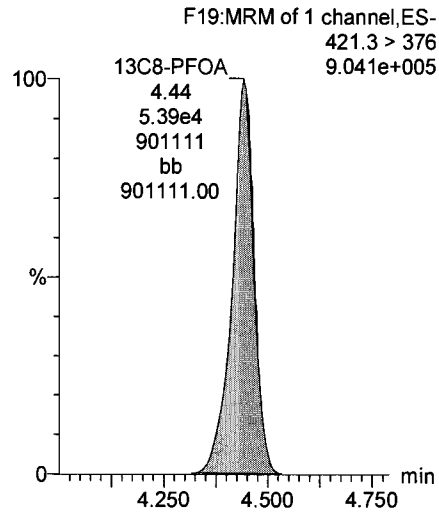
Printed: Friday, June 16, 2017 10:14:11 Pacific Daylight Time

Name: 170615M4\_59, Date: 16-Jun-2017, Time: 09:39:31, ID: ST170615M5-12 PFC CS3 17F1512, Description: PFC CS3 17F1512

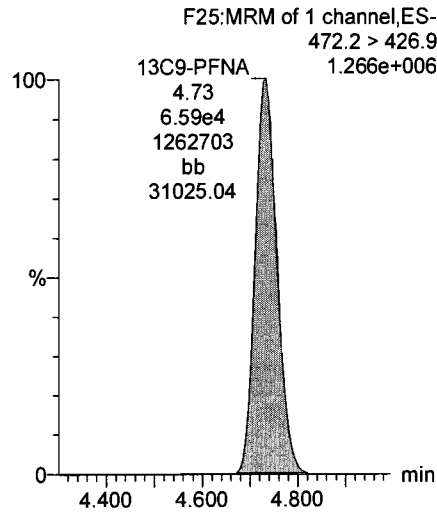
13C3-PFHxS



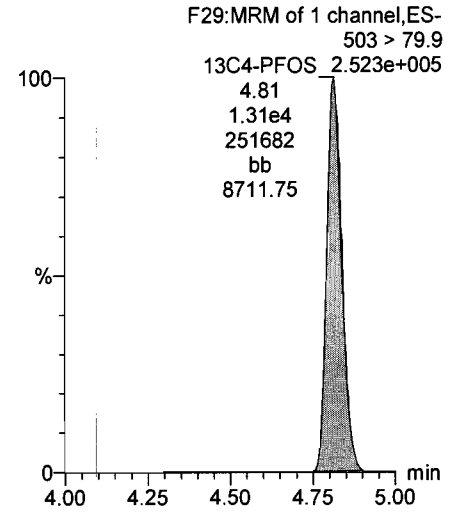
13C8-PFOA



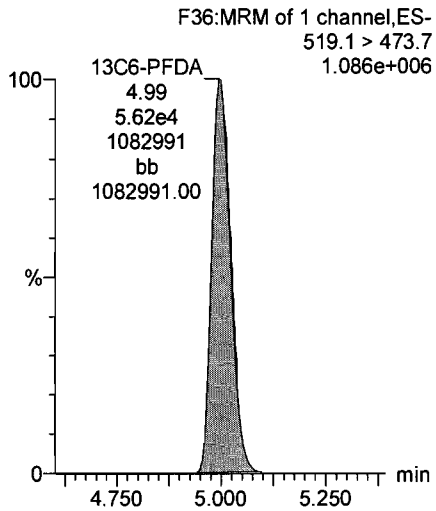
13C9-PFNA



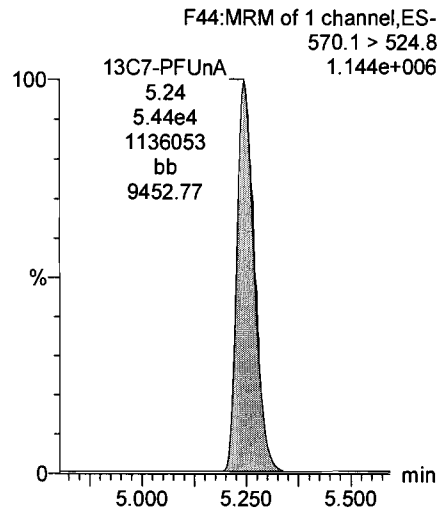
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Dataset: U:\Q4.PRO\results\170623M1\170623M1-22.qld

Last Altered: Friday, June 23, 2017 15:43:15 Pacific Daylight Time

Printed: Friday, June 23, 2017 15:47:51 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

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6/23/17

Name: 170623M1\_22, Date: 23-Jun-2017, Time: 14:46:58, ID: ST170623M1-9 PFC CS3 17F2218, Description: PFC CS3 17F2218

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 L-PFBA	213.0 > 168.8	1.46e4	1.65e4	1.0000		1.43	1.45	11.1	9.81	98.1
2	3 L-PFPeA	263.1 > 218.9	2.32e4	3.01e4	1.0000		2.64	2.66	9.63	9.83	98.3
3	5 L-PFBS	299 > 79.7	5.30e3	3.43e3	1.0000		2.94	2.95	19.3	10.1	101.2
4	7 L-PFHxA	313.2 > 268.9	3.51e4	1.19e4	1.0000		3.32	3.34	14.8	9.72	97.2
5	9 L-PFHpA	363 > 318.9	3.23e4	3.33e4	1.0000		3.75	3.75	12.1	9.74	97.4
6	11 L-PFHxS	398.9 > 79.6	4.70e3	3.58e3	1.0000		3.86	3.87	16.4	9.33	93.3
7	13 L-6:2 FTS	427.1 > 407	9.08e3	6.76e4	1.0000		4.07	4.06	1.68	9.86	98.6
8	15 L-PFOA	413 > 368.7	5.43e4	6.76e4	1.0000		4.06	4.07	10.0	10.0	100.4
9	17 L-PFNA	462.9 > 418.8	5.65e4	6.49e4	1.0000		4.36	4.36	10.9	9.93	99.3
10	19 L-PFOS	499 > 79.9	1.17e4	1.30e4	1.0000		4.43	4.44	11.3	10.3	103.3

70-130  
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Dataset: U:\Q4.PRO\results\170623M1\170623M1-22.qld

Last Altered: Friday, June 23, 2017 15:43:15 Pacific Daylight Time  
Printed: Friday, June 23, 2017 15:49:09 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

Name: 170623M1\_22, Date: 23-Jun-2017, Time: 14:46:58, ID: ST170623M1-9 PFC CS3 17F2218, Description: PFC CS3 17F2218

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 L-PFDA	513 > 468.8	5.94e4	6.05e4	1.0000		4.61	4.62	12.3	10.0	100.0
2	23 L-8:2 FTS	527 > 506.9	1.09e4	8.56e3	1.0000		4.61	4.62	16.0	8.38	83.8
3	25 13C3-PFBA	216.1 > 171.8	1.65e4	1.85e4	1.0000	0.880	1.43	1.45	11.1	12.6	101.2
4	26 13C3-PFPeA	266 > 221.8	3.01e4	1.85e4	1.0000	1.598	2.64	2.65	20.3	12.7	101.8
5	27 13C3-PFBS	302 > 98.8	3.43e3	1.85e4	1.0000	0.193	2.94	2.95	2.32	12.0	95.9
6	28 13C2-PFHxA	315 > 269.8	1.19e4	3.93e4	1.0000	0.314	3.32	3.34	1.51	4.81	96.3
7	29 13C4-PFHpA	367.2 > 321.8	3.33e4	3.93e4	1.0000	0.333	3.75	3.75	4.24	12.7	101.8
8	30 18O2-PFHxS	403 > 102.6	3.58e3	7.86e3	1.0000	0.465	3.86	3.87	5.69	12.2	97.9
9	31 13C2-6:2 FTS	429.1 > 408.9	1.07e4	6.76e4	1.0000	0.186	4.07	4.06	1.98	10.7	85.5
10	32 13C2-PFOA	414.9 > 369.7	6.76e4	6.09e4	1.0000	1.192	4.06	4.07	13.9	11.6	93.1
11	33 13C5-PFNA	468.2 > 422.9	6.49e4	7.13e4	1.0000	0.920	4.36	4.36	11.4	12.4	99.0
12	34 13C8-PFOS	507 > 79.9	1.30e4	1.26e4	1.0000	1.090	4.43	4.44	12.8	11.8	94.3
13	35 13C2-PFDA	515.1 > 469.9	6.05e4	6.45e4	1.0000	1.016	4.61	4.62	11.7	11.5	92.3
14	36 13C2-8:2 FTS	529.1 > 508.7	8.56e3	6.05e4	1.0000	0.167	4.61	4.62	1.77	10.6	85.0
15	37 13C4-PFBA	217 > 171.8	1.85e4	1.85e4	1.0000	1.000	1.43	1.45	12.5	12.5	100.0
16	38 13C5-PFHxA	318 > 272.9	3.93e4	3.93e4	1.0000	1.000	3.32	3.34	5.00	5.00	100.0
17	39 13C3-PFHxS	401.9 > 79.9	7.86e3	7.86e3	1.0000	1.000	3.86	3.87	12.5	12.5	100.0
18	40 13C8-PFOA	421.3 > 376	6.09e4	6.09e4	1.0000	1.000	4.06	4.07	12.5	12.5	100.0
19	41 13C9-PFNA	472.2 > 426.9	7.13e4	7.13e4	1.0000	1.000	4.36	4.36	12.5	12.5	100.0
20	42 13C4-PFOS	503 > 79.9	1.26e4	1.26e4	1.0000	1.000	4.43	4.44	12.5	12.5	100.0
21	43 13C6-PFDA	519.1 > 473.7	6.45e4	6.45e4	1.0000	1.000	4.61	4.63	12.5	12.5	100.0
22	44 13C7-PFUnA	570.1 > 524.8	6.41e4	6.41e4	1.0000	1.000	4.86	4.87	12.5	12.5	100.0

70-130  
↓  
50-150  
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Dataset: Untitled

Last Altered: Friday, June 23, 2017 15:52:41 Pacific Daylight Time

Printed: Friday, June 23, 2017 15:58:58 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

Compound name: L-PFBA

	Name	ID	Acq.Date	Acq.Time
1	170623M1_1	IPA	23-Jun-17	09:41:18
2	170623M1_2	QC170623M1-1 PFC CS3 17F2218 WINDOW...		
3	170623M1_3	ST170623M1-1 PFC CS-2 17F2213	23-Jun-17	10:39:23
4	170623M1_4	ST170623M1-2 PFC CS-1 17F2214	23-Jun-17	10:51:02
5	170623M1_5	ST170623M1-3 PFC CS0 17F2215	23-Jun-17	11:02:31
6	170623M1_6	ST170623M1-4 PFC CS1 17F2216	23-Jun-17	11:13:57
7	170623M1_7	ST170623M1-5 PFC CS2 17F2217	23-Jun-17	11:25:16
8	170623M1_8	ST170623M1-6 PFC CS3 17F2218	23-Jun-17	11:36:48
9	170623M1_9	ST170623M1-7 PFC CS4 17F2219	23-Jun-17	11:48:25
10	170623M1_10	ST170623M1-8 PFC CS5 17F2220	23-Jun-17	11:59:52
11	170623M1_11	IPA	23-Jun-17	12:41:21
12	170623M1_12	SS170623M1-1 PFC SSS 17F2212	23-Jun-17	12:53:03
13	170623M1_13	.1700670-01@5X POND 1-2 OF @ DAM-N 0.2...	23-Jun-17	13:04:30
14	170623M1_14	. 1700670-02@5X POND 1-2 OF @ DAM-S 0.2...	23-Jun-17	13:15:49
15	170623M1_15	. 1700670-03@5X POND 1-2 PD @ DAM 0.282...	23-Jun-17	13:27:08
16	170623M1_16	. 1700670-04@10X POND 2-3 OF @ DAM-W 0...	23-Jun-17	13:38:30
17	170623M1_17	. 1700670-05@10X POND 2-3 PD @ DAM 0.27...	23-Jun-17	13:49:56
18	170623M1_18	. 1700670-06@10X POND 3 OF @ DAM-W 0.2...	23-Jun-17	14:01:24
19	170623M1_19	. 1700670-07@10X POND 3 PD @ DAM 0.27482	23-Jun-17	14:12:51
20	170623M1_20	. 1700681-01@10X OF17-MW02-0517 0.125	23-Jun-17	14:24:18
21	170623M1_21	. 1700681-03@20X OF17-MW01-0617 0.125	23-Jun-17	14:35:42
22	170623M1_22	ST170623M1-9 PFC CS3 17F2218	23-Jun-17	14:46:58
23	170623M1_23	IPA	23-Jun-17	14:58:22



## LC Calibration Standards Review Checklist Q4

Calibration ID:	L M H	ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	
<u>ST170623M1-9</u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<u>14</u> <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>NA</u>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Full Mass Cal. Date:** \_\_\_\_\_

**Run Log Present:**

**# of Samples per Sequence Checked:**

**Reviewed By:** CPG/1/17  
Initials/Date

**Comments:**

Dataset: U:\Q4.PRO\results\170623M1\170623M1-22.qld

Last Altered: Friday, June 23, 2017 15:43:15 Pacific Daylight Time

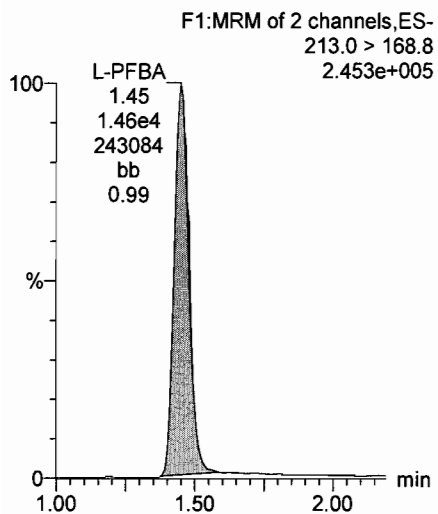
Printed: Friday, June 23, 2017 15:47:51 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

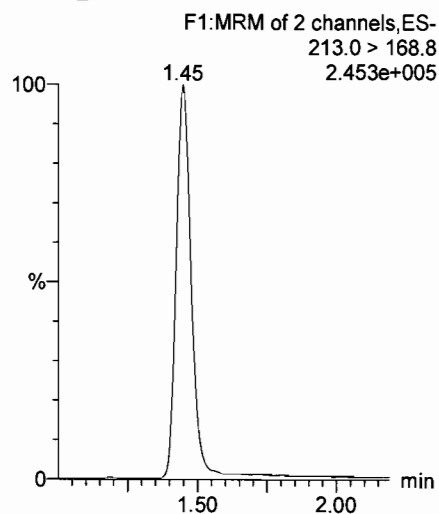
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

Name: 170623M1\_22, Date: 23-Jun-2017, Time: 14:46:58, ID: ST170623M1-9 PFC CS3 17F2218, Description: PFC CS3 17F2218

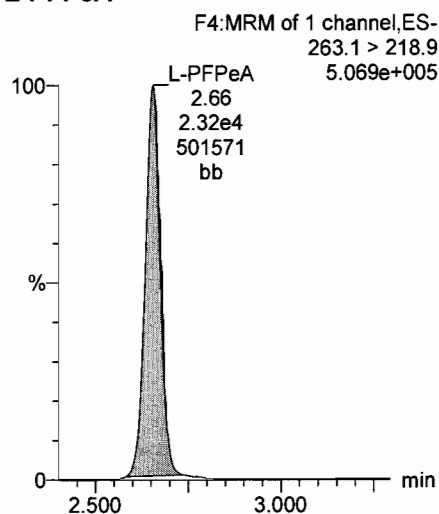
L-PFBA



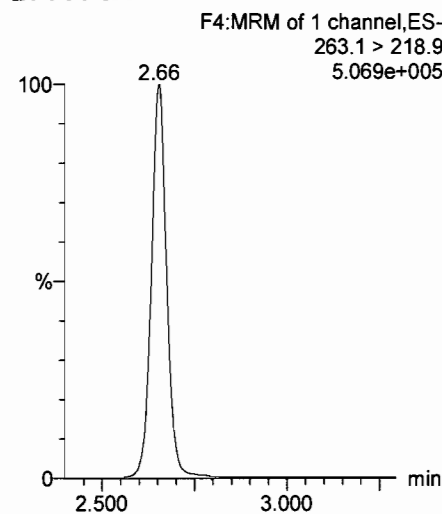
Br-PFBA



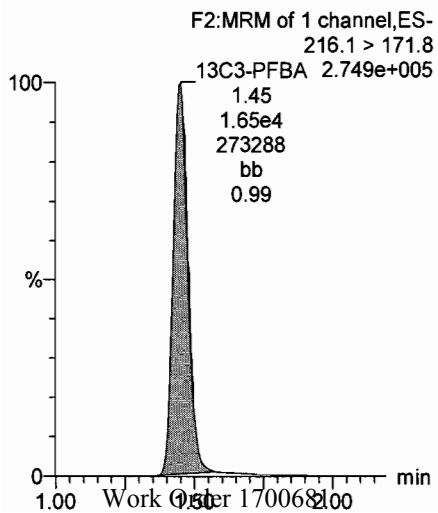
L-PFPeA



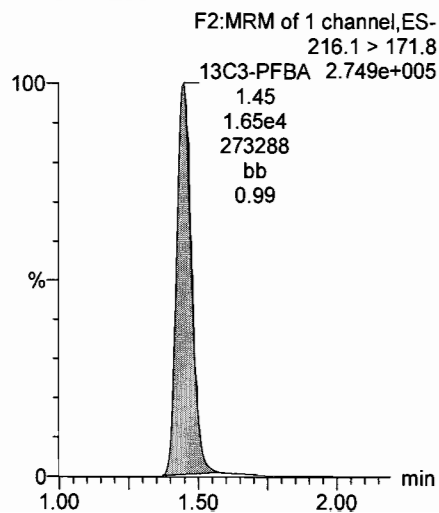
Br-PFPeA



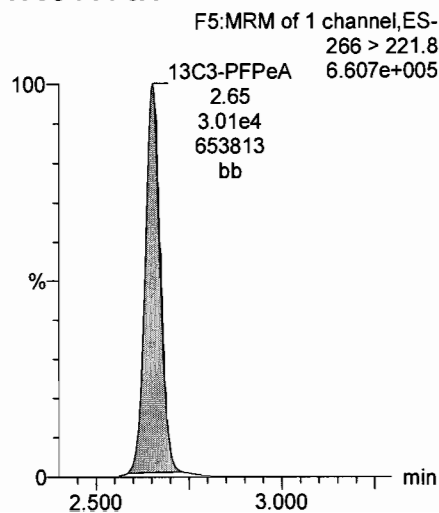
13C3-PFBA



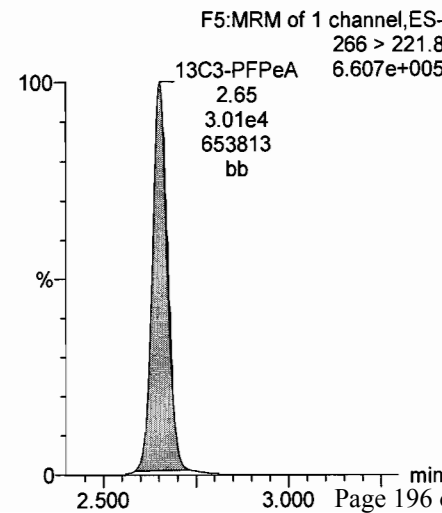
13C3-PFBA



13C3-PFPeA



13C3-PFPeA



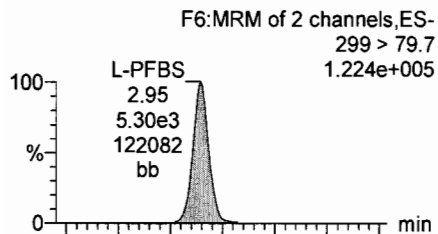
Dataset: U:\Q4.PRO\results\170623M1\170623M1-22.qld

Last Altered: Friday, June 23, 2017 15:43:15 Pacific Daylight Time

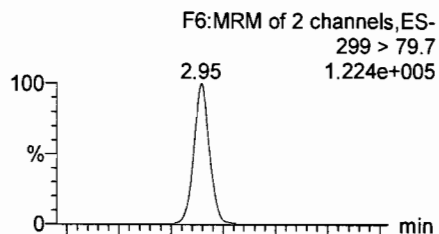
Printed: Friday, June 23, 2017 15:47:51 Pacific Daylight Time

Name: 170623M1\_22, Date: 23-Jun-2017, Time: 14:46:58, ID: ST170623M1-9 PFC CS3 17F2218, Description: PFC CS3 17F2218

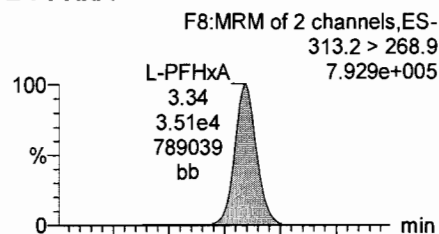
L-PFBS



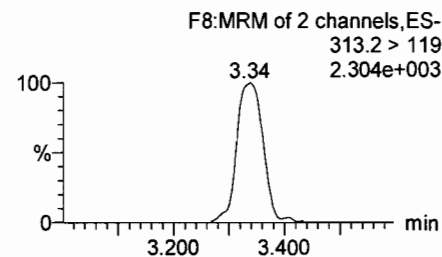
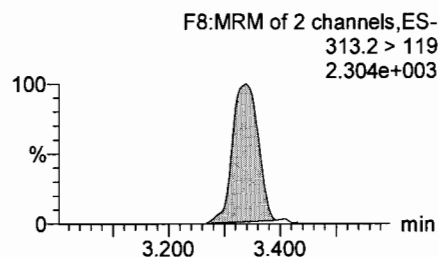
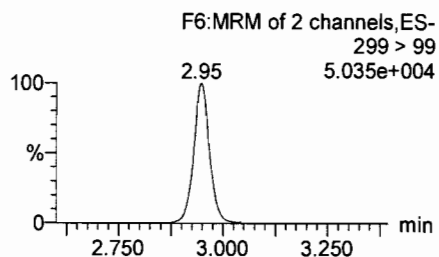
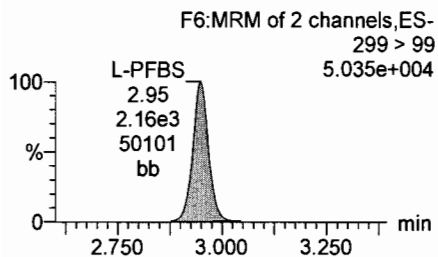
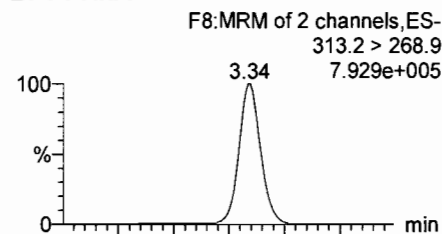
Br-PFBS



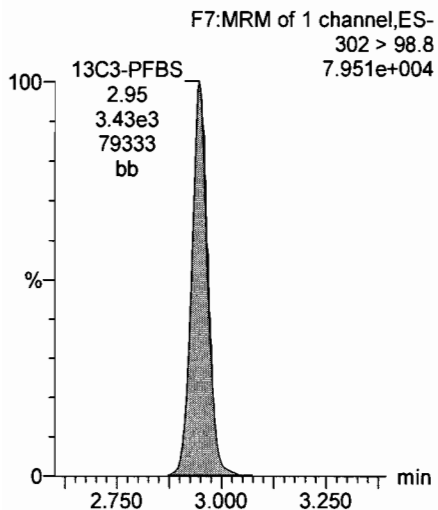
L-PFHxA



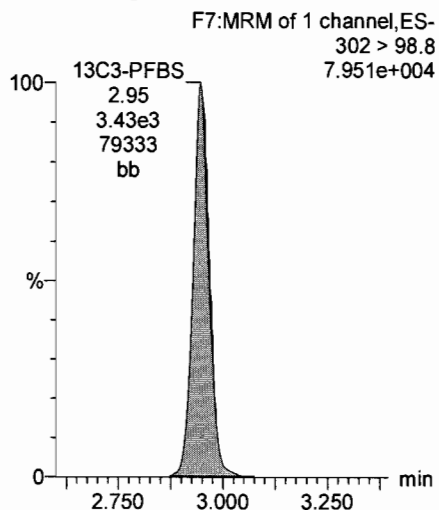
Br-PFHxA



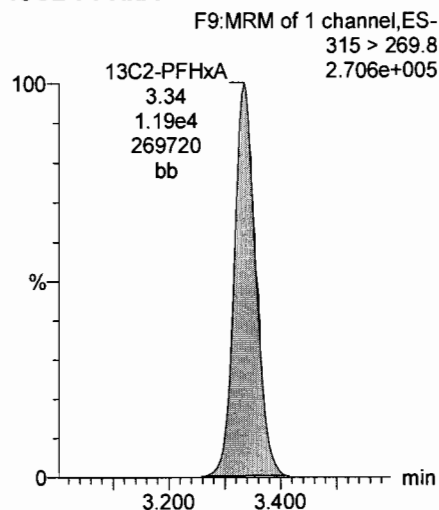
13C3-PFBS



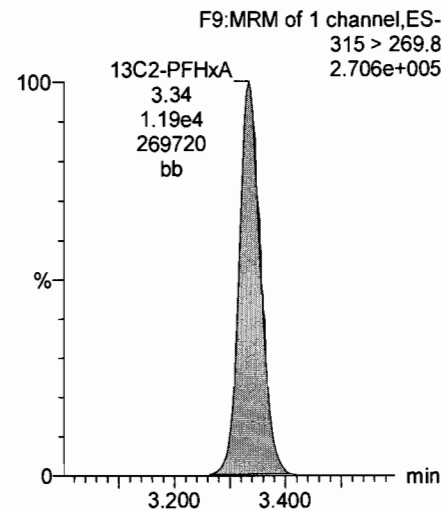
13C3-PFBS



13C2-PFHxA



13C2-PFHxA



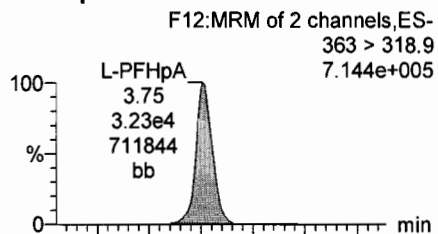
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Last Altered: Friday, June 23, 2017 15:43:15 Pacific Daylight Time

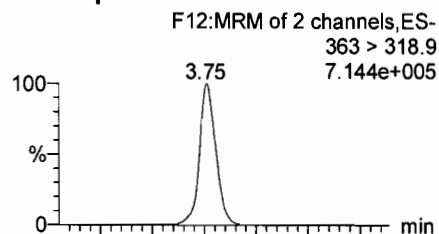
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Name: 170623M1\_22, Date: 23-Jun-2017, Time: 14:46:58, ID: ST170623M1-9 PFC CS3 17F2218, Description: PFC CS3 17F2218

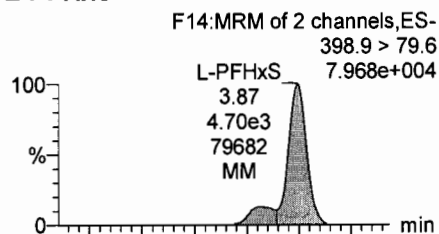
L-PFHpA



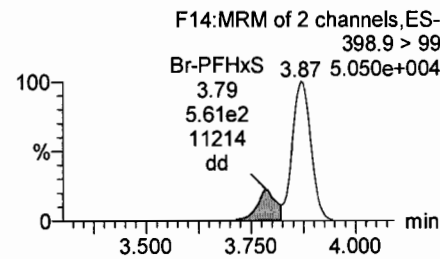
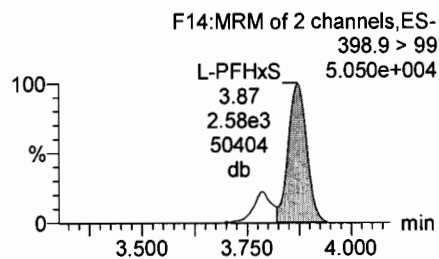
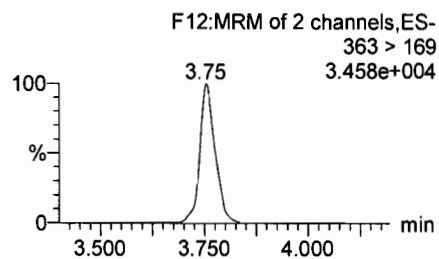
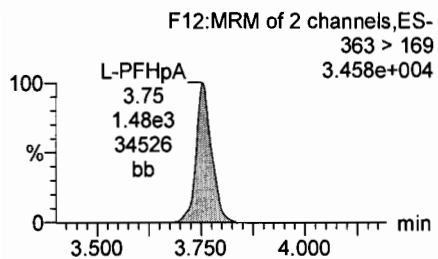
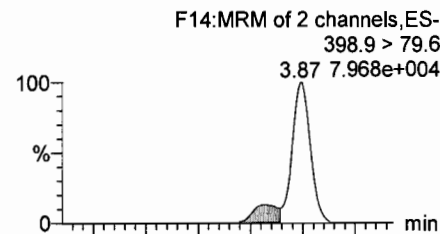
Br-PFHpA



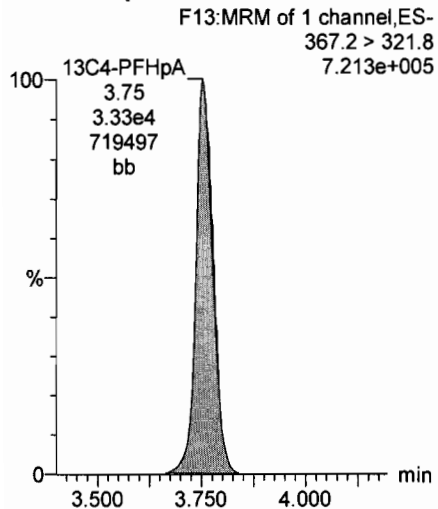
L-PFHxS



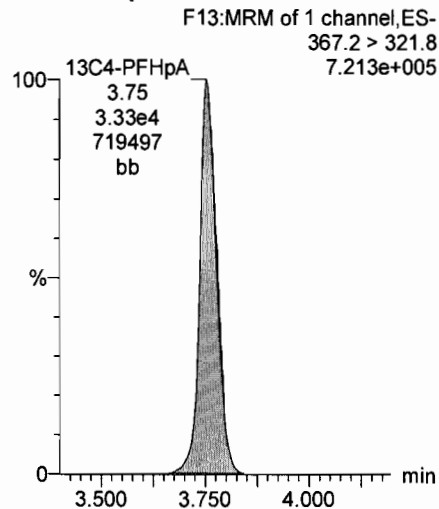
Br-PFHxS



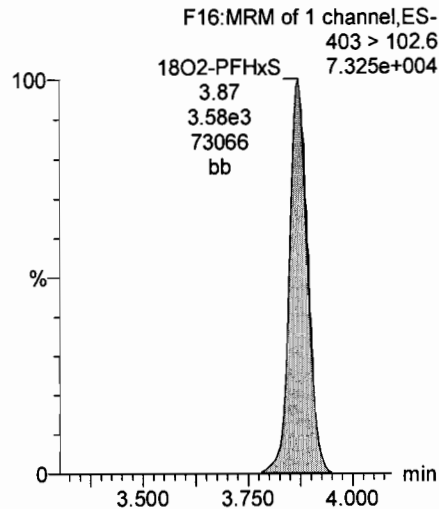
13C4-PFHpA



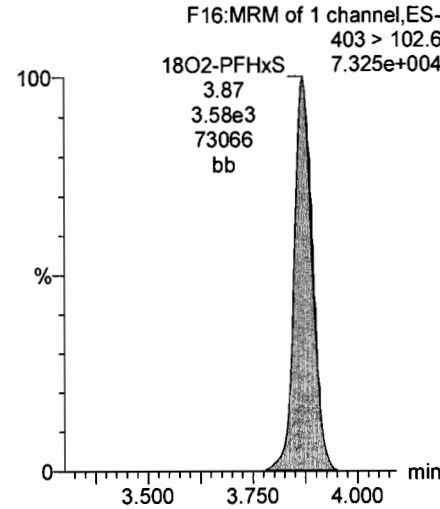
13C4-PFHpA



18O2-PFHxS



18O2-PFHxS



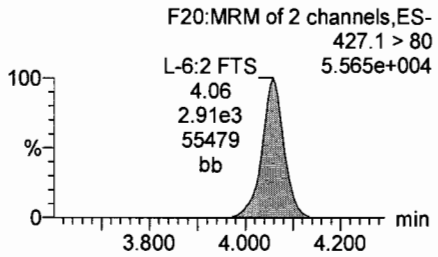
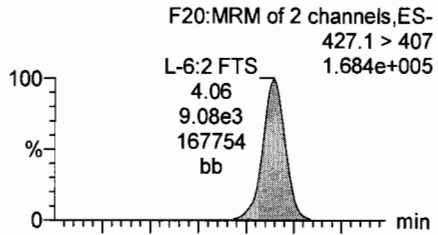
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Last Altered: Friday, June 23, 2017 15:43:15 Pacific Daylight Time

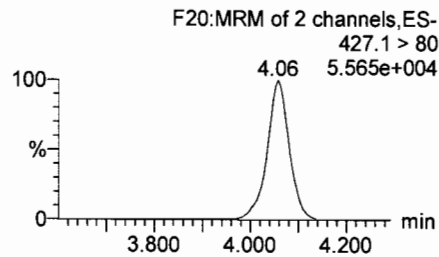
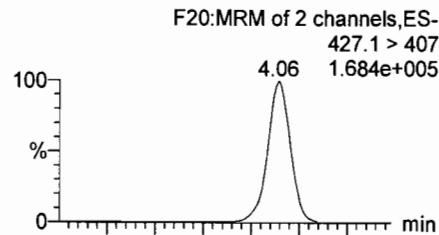
Printed: Friday, June 23, 2017 15:47:51 Pacific Daylight Time

Name: 170623M1\_22, Date: 23-Jun-2017, Time: 14:46:58, ID: ST170623M1-9 PFC CS3 17F2218, Description: PFC CS3 17F2218

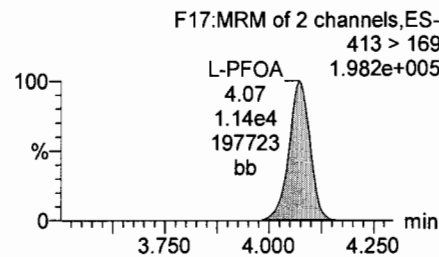
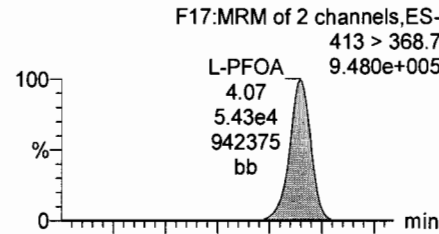
L-6:2 FTS



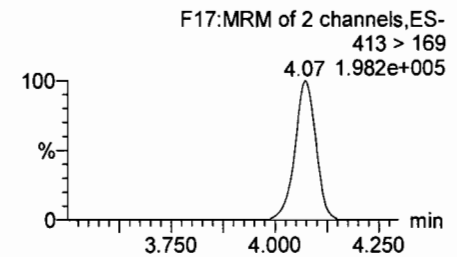
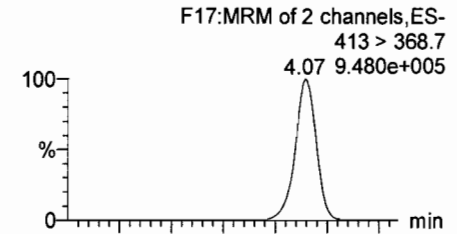
Br-6:2 FTS



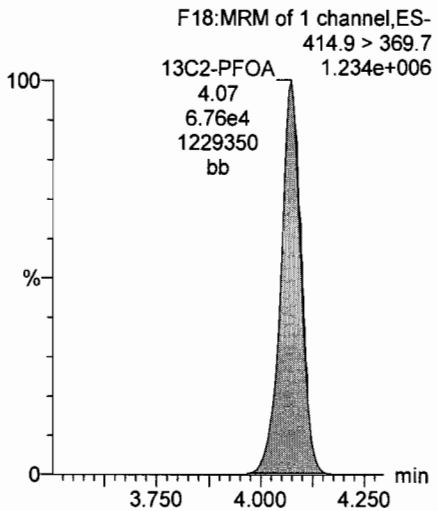
L-PFOA



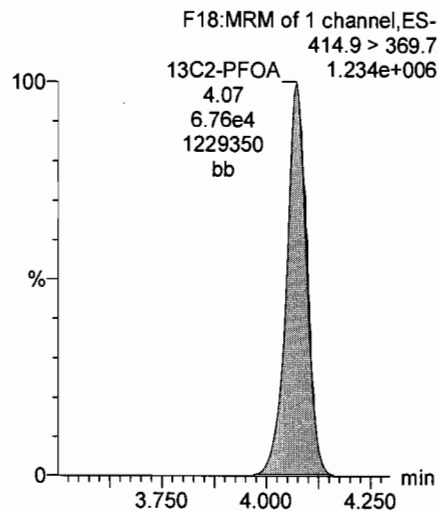
Br-PFOA



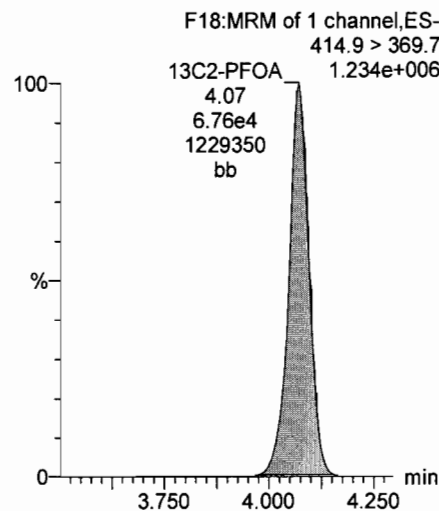
13C2-PFOA



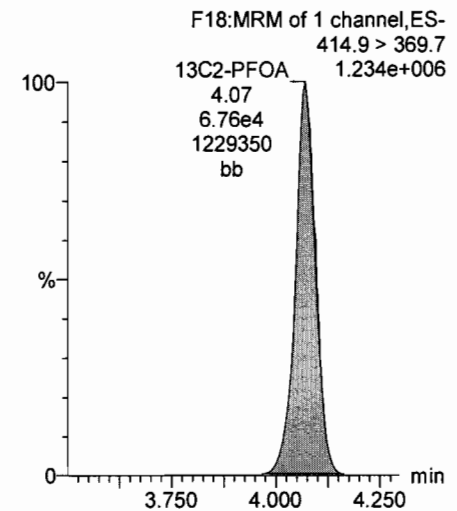
13C2-PFOA



13C2-PFOA



13C2-PFOA



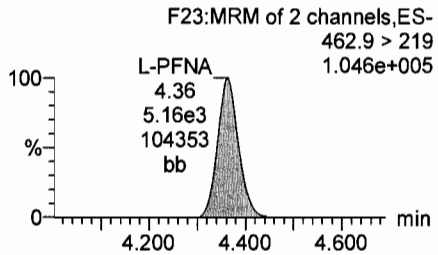
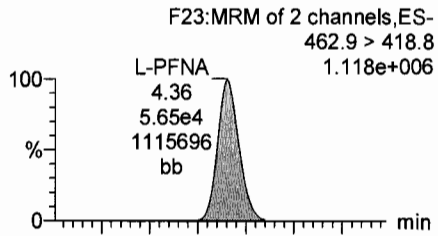
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Last Altered: Friday, June 23, 2017 15:43:15 Pacific Daylight Time

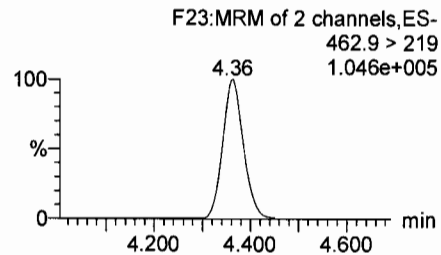
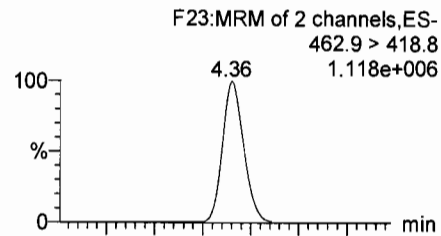
Printed: Friday, June 23, 2017 15:47:51 Pacific Daylight Time

Name: 170623M1\_22, Date: 23-Jun-2017, Time: 14:46:58, ID: ST170623M1-9 PFC CS3 17F2218, Description: PFC CS3 17F2218

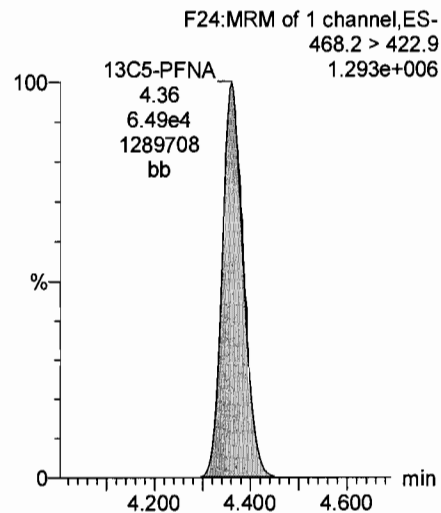
L-PFNA



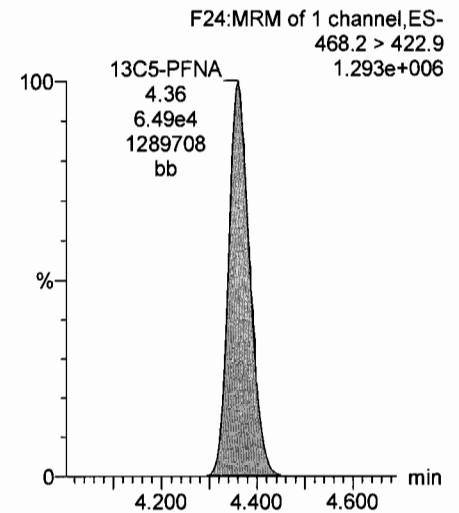
Br-PFNA



13C5-PFNA



13C5-PFNA



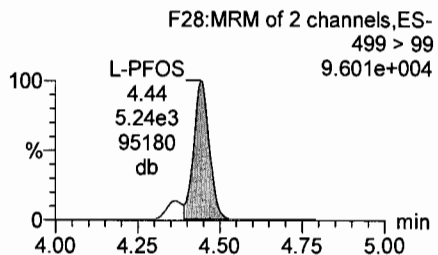
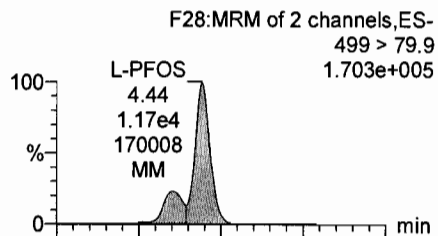
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Last Altered: Friday, June 23, 2017 15:43:15 Pacific Daylight Time

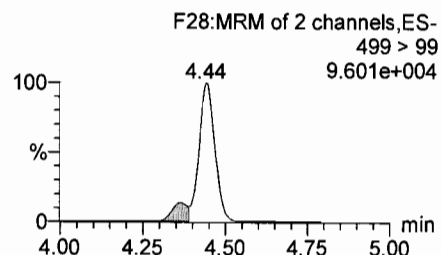
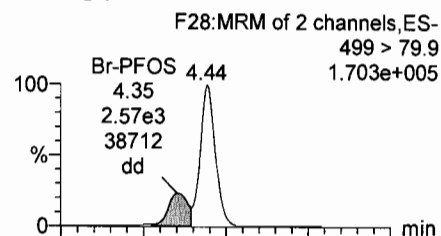
Printed: Friday, June 23, 2017 15:47:51 Pacific Daylight Time

Name: 170623M1\_22, Date: 23-Jun-2017, Time: 14:46:58, ID: ST170623M1-9 PFC CS3 17F2218, Description: PFC CS3 17F2218

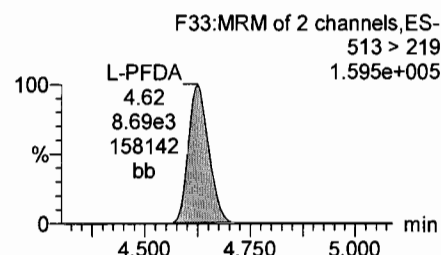
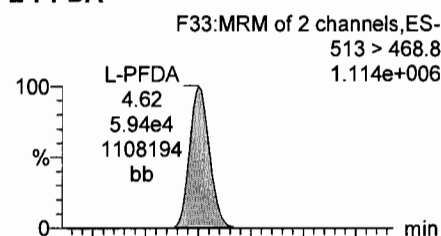
L-PFOS



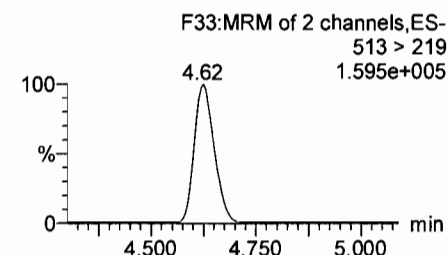
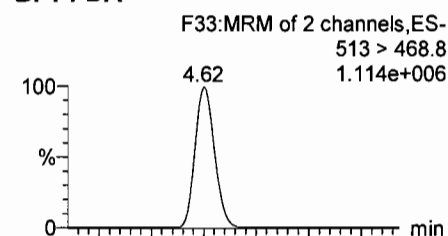
Br-PFOS



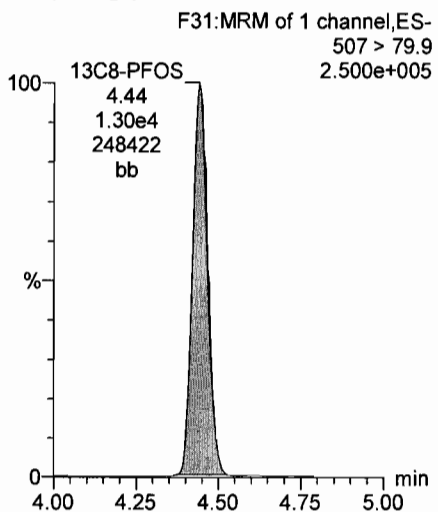
L-PFDA



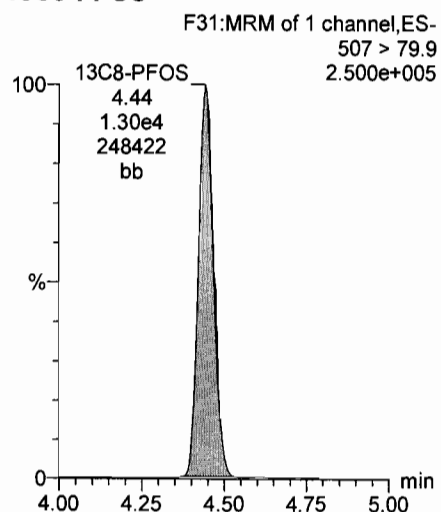
Br-PFDA



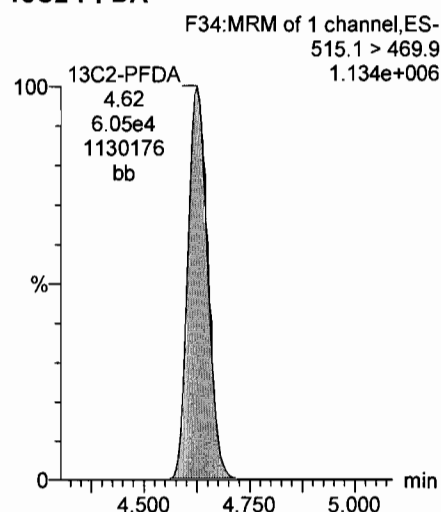
13C8-PFOS



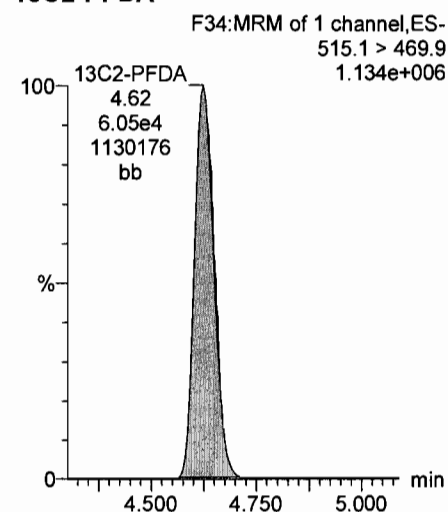
13C8-PFOS



13C2-PFDA



13C2-PFDA

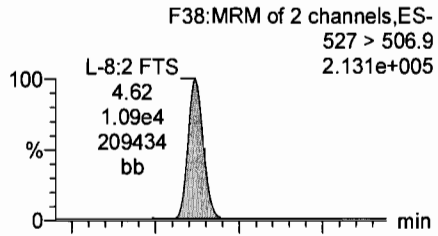


Dataset: U:\Q4.PRO\results\170623M1\170623M1-22.qld

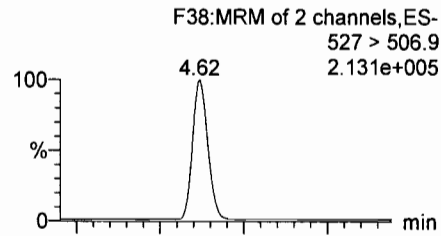
Last Altered: Friday, June 23, 2017 15:43:15 Pacific Daylight Time  
Printed: Friday, June 23, 2017 15:47:51 Pacific Daylight Time

Name: 170623M1\_22, Date: 23-Jun-2017, Time: 14:46:58, ID: ST170623M1-9 PFC CS3 17F2218, Description: PFC CS3 17F2218

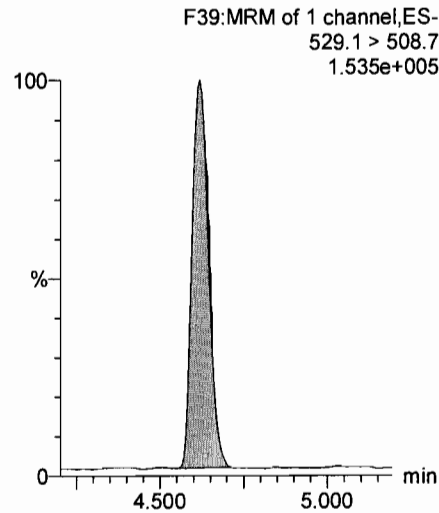
L-8:2 FTS



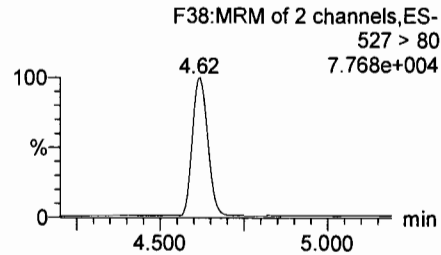
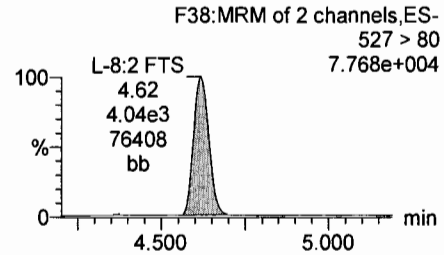
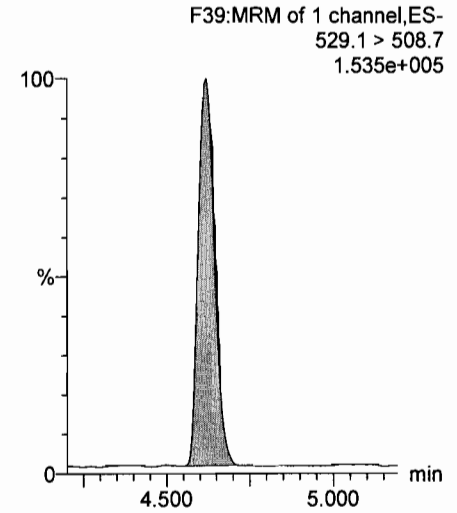
Br-8:2 FTS



13C2-8:2 FTS



13C2-8:2 FTS





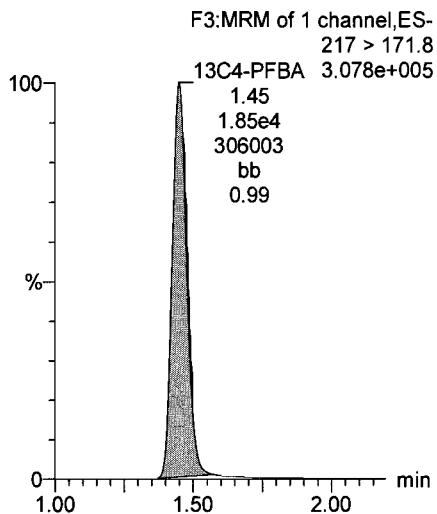
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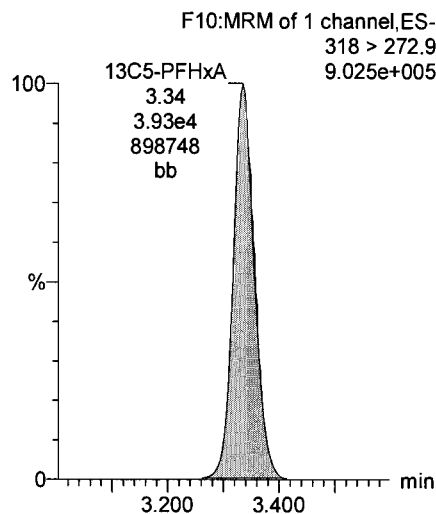
Printed: Friday, June 23, 2017 15:47:51 Pacific Daylight Time

Name: 170623M1\_22, Date: 23-Jun-2017, Time: 14:46:58, ID: ST170623M1-9 PFC CS3 17F2218, Description: PFC CS3 17F2218

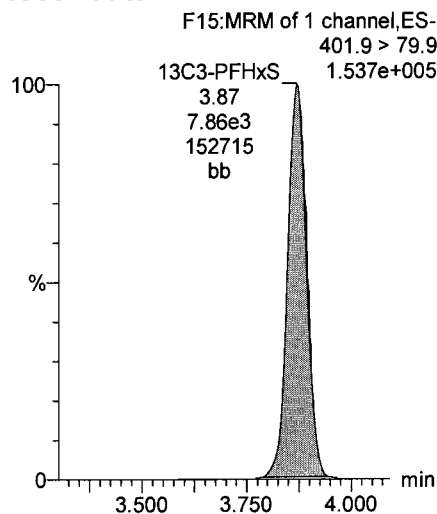
13C4-PFBA



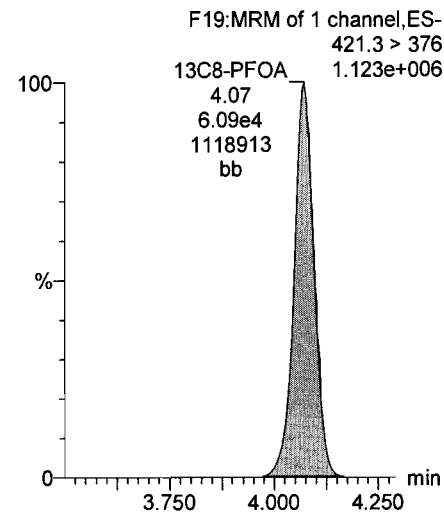
13C5-PFHxA



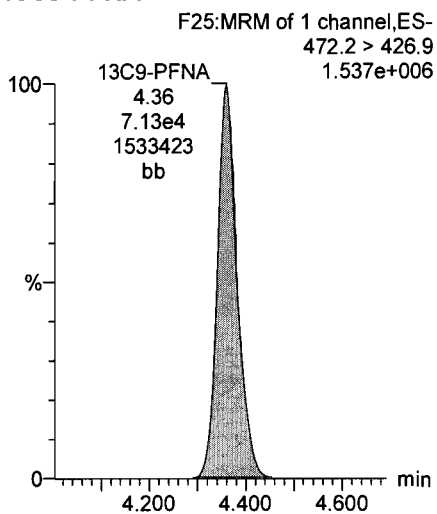
13C3-PFHxS



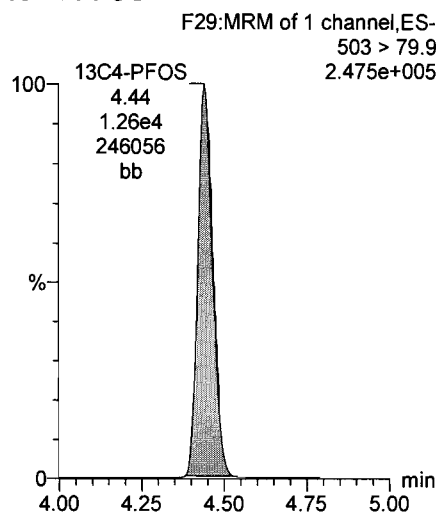
13C8-PFOA



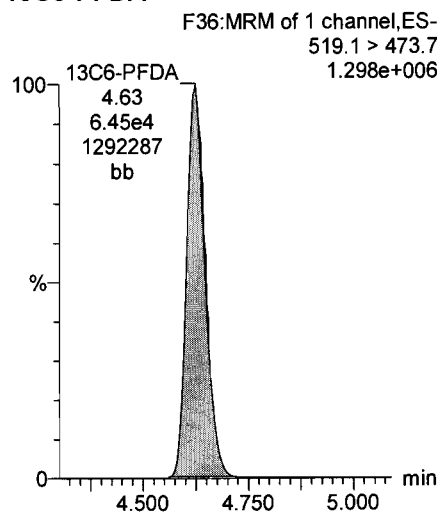
13C9-PFNA



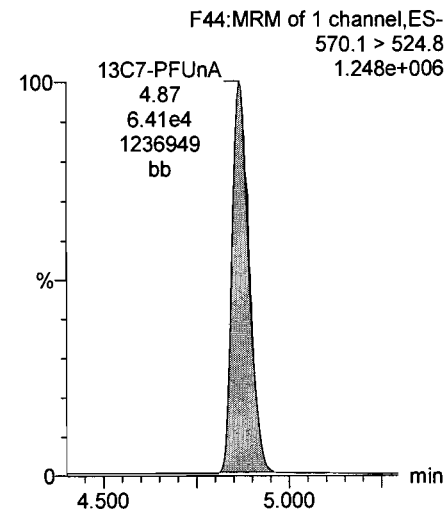
13C4-PFOS



13C6-PFDA



13C7-PFUnA



## **INITIAL CALIBRATION**

Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:50:20 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 08 Jun 2017 18:59:50

Calibration: F:\Projects\PFAS.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

**Compound name: PFBA**

Correlation coefficient:  $r = 0.999127$ ,  $r^2 = 0.998254$

Calibration curve:  $1.11991 * x + 0.156166$

Response type: Internal Std ( Ref 19 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

*CP 6/14/17*

*- Not used for PFTeDA*

*6/14/17  
6/14/17*

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	0.250	1.72	466.620	14039.360	0.415	0.2	-7.4	MM
2	2 170607M4_3	Standard	0.500	1.71	769.262	13752.710	0.699	0.5	-3.0	MM
3	3 170607M4_4	Standard	1.000	1.71	1442.240	13882.118	1.299	1.0	2.0	MM
4	4 170607M4_5	Standard	2.000	1.70	2906.419	14568.793	2.494	2.1	4.4	MM
5	5 170607M4_6	Standard	5.000	1.69	7427.261	14018.831	6.623	5.8	15.5	MM
6	6 170607M4_7	Standard	10.000	1.69	12219.794	15305.091	9.980	8.8	-12.3	bb
7	7 170607M4_8	Standard	50.000	1.69	60821.645	13418.197	56.660	50.5	0.9	bb
8	8 170607M4_9	Standard	100.000	1.69	115919.164	12929.851	112.065	99.9	-0.1	bb

**Compound name: PFPeA**

Correlation coefficient:  $r = 0.999125$ ,  $r^2 = 0.998252$

Calibration curve:  $0.942168 * x + 0.0643378$

Response type: Internal Std ( Ref 20 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	2.97	688.563	29345.711	0.293	0.2	-2.8	MM
2	2 170607M4_3	Standard	0.500	2.96	1168.442	27799.928	0.525	0.5	-2.1	bb
3	3 170607M4_4	Standard	1.000	2.96	2231.548	28287.332	0.986	1.0	-2.2	bb
4	4 170607M4_5	Standard	2.000	2.96	4520.718	29033.281	1.946	2.0	-0.1	bb
5	5 170607M4_6	Standard	5.000	2.96	12808.829	28558.336	5.606	5.9	17.6	bb
6	6 170607M4_7	Standard	10.000	2.95	21319.834	31556.904	8.445	8.9	-11.0	bb
7	7 170607M4_8	Standard	50.000	2.95	103707.828	27288.049	47.506	50.4	0.7	bb
8	8 170607M4_9	Standard	100.000	2.95	205404.094	27257.252	94.197	99.9	-0.1	bb

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**Compound name: PFBS**

Correlation coefficient:  $r = 0.998862$ ,  $r^2 = 0.997725$  ✓

Calibration curve:  $2.02158 * x + 0.101517$

Response type: Internal Std ( Ref 21 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	3.24	151.179	3176.984	0.595	0.2	-2.4	MM
2	2 170607M4_3	Standard	0.500	3.24	266.645	2856.039	1.167	0.5	5.4	bb
3	3 170607M4_4	Standard	1.000	3.23	485.451	2997.512	2.024	1.0	-4.9	bb
4	4 170607M4_5	Standard	2.000	3.23	1066.210	3192.780	4.174	2.0	0.7	bb
5	5 170607M4_6	Standard	5.000	3.23	2860.486	3054.049	11.708	5.7	14.8	bb
6	6 170607M4_7	Standard	10.000	3.23	4766.595	3356.539	17.751	8.7	-12.7	bb
7	7 170607M4_8	Standard	50.000	3.23	23104.129	2945.098	98.062	48.5	-3.1	bb
8	8 170607M4_9	Standard	100.000	3.23	47167.855	2855.583	206.472	102.1	2.1	bb

**Compound name: PFHxA**

Correlation coefficient:  $r = 0.999216$ ,  $r^2 = 0.998433$  ✓

Calibration curve:  $1.37538 * x + 0.107015$

Response type: Internal Std ( Ref 22 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	3.58	1108.943	13418.823	0.413	0.2	-11.0	bb
2	2 170607M4_3	Standard	0.500	3.58	2095.697	13242.712	0.791	0.5	-0.5	bb
3	3 170607M4_4	Standard	1.000	3.58	4039.936	13557.542	1.490	1.0	0.5	bb
4	4 170607M4_5	Standard	2.000	3.58	8039.401	13827.386	2.907	2.0	1.8	bb
5	5 170607M4_6	Standard	5.000	3.57	22139.070	13596.907	8.141	5.8	16.8	bb
6	6 170607M4_7	Standard	10.000	3.57	36820.715	14545.255	12.657	9.1	-8.8	bb
7	7 170607M4_8	Standard	50.000	3.57	177171.234	12607.034	70.267	51.0	2.0	bb
8	8 170607M4_9	Standard	100.000	3.57	343084.500	12587.086	136.284	99.0	-1.0	bb

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**Compound name: PFHpA**

Correlation coefficient:  $r = 0.999325$ ,  $r^2 = 0.998650$

Calibration curve:  $1.19846 * x + 0.0788096$

Response type: Internal Std ( Ref 23 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	3.98	862.634	29290.176	0.368	0.2	-3.4	bb
2	2 170607M4_3	Standard	0.500	3.98	1487.218	30723.662	0.605	0.4	-12.2	bb
3	3 170607M4_4	Standard	1.000	3.98	3289.989	30046.963	1.369	1.1	7.6	bb
4	4 170607M4_5	Standard	2.000	3.97	5851.830	28797.143	2.540	2.1	2.7	bb
5	5 170607M4_6	Standard	5.000	3.97	17070.447	31190.207	6.841	5.6	12.9	bb
6	6 170607M4_7	Standard	10.000	3.97	28723.953	32670.119	10.990	9.1	-9.0	bb
7	7 170607M4_8	Standard	50.000	3.97	140698.063	28621.436	61.448	51.2	2.4	bb
8	8 170607M4_9	Standard	100.000	3.97	265806.031	27989.029	118.710	99.0	-1.0	bb

**Compound name: PFHxS**

Coefficient of Determination:  $R^2 = 0.998671$

Calibration curve:  $0.000548771 * x^2 + 1.82567 * x + 0.175201$

Response type: Internal Std ( Ref 24 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	4.10	136.832	2603.877	0.657	0.3	5.5	MM
2	2 170607M4_3	Standard	0.500	4.09	188.346	2638.460	0.892	0.4	-21.5	MM
3	3 170607M4_4	Standard	1.000	4.09	445.224	2559.798	2.174	1.1	9.5	MM
4	4 170607M4_5	Standard	2.000	4.09	840.992	2764.802	3.802	2.0	-0.7	MM
5	5 170607M4_6	Standard	5.000	4.08	2371.655	2762.913	10.730	5.8	15.4	MM
6	6 170607M4_7	Standard	10.000	4.08	3666.508	2704.366	16.947	9.2	-8.4	MM
7	7 170607M4_8	Standard	50.000	4.08	18680.414	2511.682	92.968	50.1	0.1	MM
8	8 170607M4_9	Standard	100.000	4.08	36087.609	2396.323	188.245	100.0	0.0	MM

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**Compound name: 6:2 FTS**

Coefficient of Determination:  $R^2 = 0.987918$

Calibration curve:  $-0.00263278 * x^2 + 0.922166 * x + 0.125223$

Response type: Internal Std ( Ref 25 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	4.29	177.369	6594.488	0.336	0.2	-8.4	MM
2	2 170607M4_3	Standard	0.500	4.29	284.032	5860.202	0.606	0.5	4.4	bb
3	3 170607M4_4	Standard	1.000	4.29	404.733	5470.406	0.925	0.9	-13.1	bb
4	4 170607M4_5	Standard	2.000	4.28	1062.771	6507.597	2.041	2.1	4.5	bb
5	5 170607M4_6	Standard	5.000	4.27	2948.242	6237.786	5.908	6.4	27.7	bb
6	6 170607M4_7	Standard	10.000	4.28	4451.984	7191.502	7.738	8.5	-15.4	bb
7	7 170607M4_8	Standard	50.000	4.27	20642.629	6483.908	39.796	50.2	0.4	bb
8	8 170607M4_9	Standard	100.000	4.27	40812.586	7175.156	71.101	114.2	14.2	bbX

**Compound name: PFOA**

Correlation coefficient:  $r = 0.999403$ ,  $r^2 = 0.998806$

Calibration curve:  $0.980944 * x + 0.114901$

Response type: Internal Std ( Ref 26 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	4.30	1220.384	41379.738	0.369	0.3	3.5	MM
2	2 170607M4_3	Standard	0.500	4.30	1777.014	40914.184	0.543	0.4	-12.7	bb
3	3 170607M4_4	Standard	1.000	4.29	3449.034	40564.289	1.063	1.0	-3.4	bb
4	4 170607M4_5	Standard	2.000	4.29	7250.345	40655.012	2.229	2.2	7.8	bb
5	5 170607M4_6	Standard	5.000	4.29	20286.053	44581.332	5.688	5.7	13.6	bb
6	6 170607M4_7	Standard	10.000	4.29	33031.133	45392.254	9.096	9.2	-8.4	bb
7	7 170607M4_8	Standard	50.000	4.29	152232.906	39033.848	48.750	49.6	-0.8	bb
8	8 170607M4_9	Standard	100.000	4.29	304192.000	38518.730	98.716	100.5	0.5	bb

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**Compound name: PFNA**

Correlation coefficient:  $r = 0.999529$ ,  $r^2 = 0.999059$

Calibration curve:  $1.21787 * x + 0.0393668$

Response type: Internal Std ( Ref 27 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	4.59	686.468	27089.656	0.317	0.2	-8.9	db
2	2 170607M4_3	Standard	0.500	4.59	1522.205	26714.363	0.712	0.6	10.5	bb
3	3 170607M4_4	Standard	1.000	4.59	2654.925	27971.240	1.186	0.9	-5.8	bb
4	4 170607M4_5	Standard	2.000	4.58	6012.705	27890.553	2.695	2.2	9.0	bb
5	5 170607M4_6	Standard	5.000	4.58	15810.896	28396.238	6.960	5.7	13.7	bb
6	6 170607M4_7	Standard	10.000	4.58	27945.875	30183.080	11.573	9.5	-5.3	bb
7	7 170607M4_8	Standard	50.000	4.58	132135.672	27075.072	61.004	50.1	0.1	bb
8	8 170607M4_9	Standard	100.000	4.58	265468.219	27338.164	121.382	99.6	-0.4	bb

**Compound name: PFOS**

Coefficient of Determination:  $R^2 = 0.996877$

Calibration curve:  $-1.66961e-005 * x^2 + 1.07742 * x + 0.0245126$

Response type: Internal Std ( Ref 28 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	4.68	153.752	6444.428	0.298	0.3	1.6	MM
2	2 170607M4_3	Standard	0.500	4.67	295.299	6541.964	0.564	0.5	0.2	MM
3	3 170607M4_4	Standard	1.000	4.67	578.075	6274.638	1.152	1.0	4.6	MM
4	4 170607M4_5	Standard	2.000	4.67	1138.890	6909.919	2.060	1.9	-5.5	MM
5	5 170607M4_6	Standard	5.000	4.66	3376.184	6378.745	6.616	6.1	22.4	MM
6	6 170607M4_7	Standard	10.000	4.66	5361.505	7335.067	9.137	8.5	-15.4	MM
7	7 170607M4_8	Standard	50.000	4.66	27069.203	6188.442	54.677	50.8	1.5	MM
8	8 170607M4_9	Standard	100.000	4.66	53551.238	6238.770	107.295	99.7	-0.3	MM

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**Compound name: PFDA**

Coefficient of Determination:  $R^2 = 0.996861$

Calibration curve:  $-0.000903532 * x^2 + 1.42702 * x + 0.0937116$

Response type: Internal Std ( Ref 29 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	4.85	763.593	25043.840	0.381	0.2	-19.4	MM
2	2 170607M4_3	Standard	0.500	4.85	1721.048	25093.865	0.857	0.5	7.1	bb
3	3 170607M4_4	Standard	1.000	4.85	3440.621	24991.355	1.721	1.1	14.1	bb
4	4 170607M4_5	Standard	2.000	4.84	5888.776	26289.213	2.800	1.9	-5.1	bd
5	5 170607M4_6	Standard	5.000	4.84	18523.242	27460.000	8.432	5.9	17.3	bb
6	6 170607M4_7	Standard	10.000	4.83	28773.750	29876.691	12.039	8.4	-15.8	bb
7	7 170607M4_8	Standard	50.000	4.83	137176.141	24217.986	70.803	51.2	2.4	bb
8	8 170607M4_9	Standard	100.000	4.83	262923.094	24689.412	133.115	99.5	-0.5	bb

**Compound name: 8:2 FTS**

Coefficient of Determination:  $R^2 = 0.999138$

Calibration curve:  $-0.00391525 * x^2 + 1.62361 * x + 0.619181$

Response type: Internal Std ( Ref 30 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	4.84	218.013	5869.601	0.464			bbXI
2	2 170607M4_3	Standard	0.500	4.85	559.633	5134.727	1.362	0.5	-8.4	MM
3	3 170607M4_4	Standard	1.000	4.84	975.669	5720.240	2.132	0.9	-6.6	bb
4	4 170607M4_5	Standard	2.000	4.83	1914.484	5884.952	4.066	2.1	6.7	MM
5	5 170607M4_6	Standard	5.000	4.83	4628.627	6104.805	9.477	5.5	10.6	MM
6	6 170607M4_7	Standard	10.000	4.83	7511.893	5741.677	16.354	9.9	-0.7	bb
7	7 170607M4_8	Standard	50.000	4.82	34168.152	6054.729	70.540	48.8	-2.4	bb
8	8 170607M4_9	Standard	100.000	4.82	62463.344	6269.937	124.529	100.8	0.8	bb



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**Compound name: PFUnA**

Correlation coefficient:  $r = 0.995670$ ,  $r^2 = 0.991359$

Calibration curve:  $0.696176 * x + 0.0672972$

Response type: Internal Std ( Ref 31 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	0.250	5.09	595.946	28965.379	0.257	0.3	9.1	MM
2	2 170607M4_3	Standard	0.500	5.09	1090.418	32108.420	0.425	0.5	2.6	MM
3	3 170607M4_4	Standard	1.000	5.09	1702.287	28209.535	0.754	1.0	-1.3	MM
4	4 170607M4_5	Standard	2.000	5.09	3340.043	31399.334	1.330	1.8	-9.3	bb
5	5 170607M4_6	Standard	5.000	5.08	9748.309	28301.652	4.306	6.1	21.8	bb
6	6 170607M4_7	Standard	10.000	5.08	15086.386	33071.215	5.702	8.1	-19.1	bb
7	7 170607M4_8	Standard	50.000	5.08	72416.180	28673.381	31.569	45.3	-9.5	bb
8	8 170607M4_9	Standard	100.000	5.07	147894.813	25092.385	73.675	105.7	5.7	bb

**Compound name: N-MeFOSAA**

Coefficient of Determination:  $R^2 = 0.998596$

Calibration curve:  $0.00208873 * x^2 + 1.78603 * x + 0.0609171$

Response type: Internal Std ( Ref 32 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	4.89	141.766	3664.528	0.484	0.2	-5.4	bdX
2	2 170607M4_3	Standard	0.500	4.89	406.181	3661.879	1.387	0.7	48.3	MMX
3	3 170607M4_4	Standard	1.000	4.88	552.926	3682.605	1.877	1.0	1.6	bb
4	4 170607M4_5	Standard	2.000	4.88	1251.896	4098.244	3.818	2.1	4.9	MM
5	5 170607M4_6	Standard	5.000	4.87	2993.817	3834.409	9.760	5.4	7.9	bb
6	6 170607M4_7	Standard	10.000	4.87	5374.948	4267.642	15.743	8.7	-13.1	bd
7	7 170607M4_8	Standard	50.000	4.87	26962.010	3470.306	97.117	51.3	2.5	bb
8	8 170607M4_9	Standard	100.000	4.87	52887.859	3330.748	198.483	99.5	-0.5	bb

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**Compound name: N-EtFOSAA**

Coefficient of Determination:  $R^2 = 0.998967$

Calibration curve:  $0.00139323 * x^2 + 1.23678 * x + 0.25577$

Response type: Internal Std ( Ref 33 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	0.250	4.98	778.234	4841.985	2.009	1.4	466.2	bdX
2	2 170607M4_3	Standard	0.500	4.98	718.422	4589.637	1.957	1.4	174.6	ddX
3	3 170607M4_4	Standard	1.000	4.99	508.171	3977.701	1.597	1.1	8.3	MM
4	4 170607M4_5	Standard	2.000	4.97	991.023	4425.250	2.799	2.1	2.6	MM
5	5 170607M4_6	Standard	5.000	4.98	2384.746	4047.319	7.365	5.7	14.2	MM
6	6 170607M4_7	Standard	10.000	4.98	4183.496	4220.333	12.391	9.7	-2.9	bb
7	7 170607M4_8	Standard	50.000	4.97	19354.418	3766.933	64.225	49.0	-2.0	bb
8	8 170607M4_9	Standard	100.000	4.97	41804.664	3772.092	138.533	100.4	0.4	bb

**Compound name: PFDoA**

Coefficient of Determination:  $R^2 = 0.999928$

Calibration curve:  $0.00107952 * x^2 + 0.763002 * x + 0.393827$

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	0.250	5.33	694.094	4603.221	1.885	1.9	679.5	bdX
2	2 170607M4_3	Standard	0.500	5.36	1053.142	4590.677	2.868	3.2	545.5	bbX
3	3 170607M4_4	Standard	1.000	5.32	378.614	4169.430	1.135	1.0	-3.0	MM
4	4 170607M4_5	Standard	2.000	5.31	657.068	4279.941	1.919	2.0	-0.3	bb
5	5 170607M4_6	Standard	5.000	5.32	1456.198	4126.087	4.412	5.2	4.5	bb
6	6 170607M4_7	Standard	10.000	5.31	3425.854	5316.126	8.055	9.9	-1.0	MM
7	7 170607M4_8	Standard	50.000	5.31	12888.365	3919.661	41.102	49.8	-0.3	bb
8	8 170607M4_9	Standard	100.000	5.31	25876.713	3694.187	87.559	100.1	0.1	bb

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**Compound name: PFTrDA**

Correlation coefficient:  $r = 0.996483$ ,  $r^2 = 0.992978$

Calibration curve:  $10.23 * x + -0.0503443$

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	x=excluded
1	1 170607M4_2	Standard	0.250	5.80	1470.517	4603.221	3.993	0.4	58.1	dbX
2	2 170607M4_3	Standard	0.500	5.55	1883.179	4590.677	5.128	0.5	1.2	bd
3	3 170607M4_4	Standard	1.000	5.54	3614.614	4169.430	10.837	1.1	6.4	MM
4	4 170607M4_5	Standard	2.000	5.54	7004.178	4279.941	20.456	2.0	0.2	bb
5	5 170607M4_6	Standard	5.000	5.54	20193.463	4126.087	61.176	6.0	19.7	bb
6	6 170607M4_7	Standard	10.000	5.54	30685.873	5316.126	72.153	7.1	-29.4	bb
7	7 170607M4_8	Standard	50.000	5.54	160225.063	3919.661	510.966	50.0	-0.1	bb
8	8 170607M4_9	Standard	100.000	5.54	308148.906	3694.187	1042.682	101.9	1.9	bb

~~Compound name: PFTeDA~~

~~Coefficient of Determination:  $R^2 = 0.992489$~~

~~Calibration curve:  $0.000760925 * x^2 + 0.895427 * x + 0.750431$~~

~~Response type: Internal Std ( Ref 35 ), 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	x=excluded
1	1 170607M4_2	Standard	0.250	5.78	3055.342	30232.766	1.263	0.6	129.0	bd
2	2 170607M4_3	Standard	0.500	5.77	2335.177	29891.480	0.977	0.3	-49.5	db
3	3 170607M4_4	Standard	1.000	5.77	2464.630	29182.723	1.056	0.3	-65.9	db
4	4 170607M4_5	Standard	2.000	5.77	5014.621	30526.830	2.053	1.5	-27.3	bd
5	5 170607M4_6	Standard	5.000	5.77	14506.810	30056.975	6.033	5.9	17.4	bb
6	6 170607M4_7	Standard	10.000	5.77	23321.568	31612.656	9.222	9.4	-6.1	db
7	7 170607M4_8	Standard	50.000	5.77	113618.227	29023.508	48.934	51.6	3.1	bb
8	8 170607M4_9	Standard	100.000	5.76	221797.344	28529.098	97.180	99.3	-0.7	bb

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**Compound name: 13C3-PFBA**

Response Factor: 0.724447

RRF SD: 0.0574043, Relative SD: 7.92388

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	1.71	14039.360	19916.500	8.811	12.2	-2.7	bb
2	2 170607M4_3	Standard	12.500	1.71	13752.710	19087.035	9.007	12.4	-0.5	bb
3	3 170607M4_4	Standard	12.500	1.71	13882.118	19731.223	8.795	12.1	-2.9	bb
4	4 170607M4_5	Standard	12.500	1.70	14568.793	20366.600	8.942	12.3	-1.3	bb
5	5 170607M4_6	Standard	12.500	1.70	14018.831	19893.602	8.809	12.2	-2.7	bb
6	6 170607M4_7	Standard	12.500	1.70	15305.091	17711.072	10.802	14.9	19.3	bb
7	7 170607M4_8	Standard	12.500	1.70	13418.197	19301.654	8.690	12.0	-4.0	bb
8	8 170607M4_9	Standard	12.500	1.69	12929.851	18814.658	8.590	11.9	-5.1	bb

**Compound name: 13C3-PFPeA**

Response Factor: 0.853613

RRF SD: 0.0163965, Relative SD: 1.92083

Response type: Internal Std ( Ref 22 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	2.97	29345.711	13418.823	10.935	12.8	2.5	bb
2	2 170607M4_3	Standard	12.500	2.96	27799.928	13242.712	10.496	12.3	-1.6	bb
3	3 170607M4_4	Standard	12.500	2.96	28287.332	13557.542	10.432	12.2	-2.2	bb
4	4 170607M4_5	Standard	12.500	2.96	29033.281	13827.386	10.498	12.3	-1.6	bb
5	5 170607M4_6	Standard	12.500	2.95	28558.336	13596.907	10.502	12.3	-1.6	bb
6	6 170607M4_7	Standard	12.500	2.95	31556.904	14545.255	10.848	12.7	1.7	bb
7	7 170607M4_8	Standard	12.500	2.95	27288.049	12607.034	10.823	12.7	1.4	bb
8	8 170607M4_9	Standard	12.500	2.95	27257.252	12587.086	10.827	12.7	1.5	bb

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**Compound name: 13C3-PFBS**

Response Factor: 0.0240286

RRF SD: 0.00200891, Relative SD: 8.36052

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	3.24	3176.984	50943.816	0.312	13.0	3.8	bb
2	2 170607M4_3	Standard	12.500	3.24	2856.039	53049.016	0.269	11.2	-10.4	bb
3	3 170607M4_4	Standard	12.500	3.24	2997.512	51257.426	0.292	12.2	-2.7	bb
4	4 170607M4_5	Standard	12.500	3.23	3192.780	53483.816	0.298	12.4	-0.6	bb
5	5 170607M4_6	Standard	12.500	3.23	3054.049	53002.723	0.288	12.0	-4.1	bb
6	6 170607M4_7	Standard	12.500	3.23	3356.539	47248.348	0.355	14.8	18.3	bb
7	7 170607M4_8	Standard	12.500	3.23	2945.098	49972.316	0.295	12.3	-1.9	bb
8	8 170607M4_9	Standard	12.500	3.22	2855.583	48729.941	0.293	12.2	-2.4	bb

**Compound name: 13C2-PFHxA**

Response Factor: 0.263879

RRF SD: 0.0184582, Relative SD: 6.99495

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	5.000	3.58	13418.823	50943.816	1.317	5.0	-0.2	bb
2	2 170607M4_3	Standard	5.000	3.58	13242.712	53049.016	1.248	4.7	-5.4	bb
3	3 170607M4_4	Standard	5.000	3.58	13557.542	51257.426	1.322	5.0	0.2	bb
4	4 170607M4_5	Standard	5.000	3.57	13827.386	53483.816	1.293	4.9	-2.0	bb
5	5 170607M4_6	Standard	5.000	3.57	13596.907	53002.723	1.283	4.9	-2.8	bb
6	6 170607M4_7	Standard	5.000	3.57	14545.255	47248.348	1.539	5.8	16.7	bb
7	7 170607M4_8	Standard	5.000	3.57	12607.034	49972.316	1.261	4.8	-4.4	bb
8	8 170607M4_9	Standard	5.000	3.57	12587.086	48729.941	1.292	4.9	-2.1	bb

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**Compound name: 13C4-PFHpA**

Response Factor: 0.235288

RRF SD: 0.0177799, Relative SD: 7.55665

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	3.98	29290.176	50943.816	2.875	12.2	-2.3	bb
2	2 170607M4_3	Standard	12.500	3.97	30723.662	53049.016	2.896	12.3	-1.5	bb
3	3 170607M4_4	Standard	12.500	3.97	30046.963	51257.426	2.931	12.5	-0.3	bb
4	4 170607M4_5	Standard	12.500	3.97	28797.143	53483.816	2.692	11.4	-8.5	bb
5	5 170607M4_6	Standard	12.500	3.97	31190.207	53002.723	2.942	12.5	0.0	bb
6	6 170607M4_7	Standard	12.500	3.97	32670.119	47248.348	3.457	14.7	17.6	bb
7	7 170607M4_8	Standard	12.500	3.97	28621.436	49972.316	2.864	12.2	-2.6	bb
8	8 170607M4_9	Standard	12.500	3.96	27989.029	48729.941	2.872	12.2	-2.4	bb

**Compound name: 18O2-PFHxS**

Response Factor: 0.344872

RRF SD: 0.0262095, Relative SD: 7.59977

Response type: Internal Std ( Ref 39 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.09	2603.877	7749.896	4.200	12.2	-2.6	bb
2	2 170607M4_3	Standard	12.500	4.09	2638.460	8004.749	4.120	11.9	-4.4	bb
3	3 170607M4_4	Standard	12.500	4.09	2559.798	7814.118	4.095	11.9	-5.0	bb
4	4 170607M4_5	Standard	12.500	4.08	2764.802	8014.747	4.312	12.5	0.0	bb
5	5 170607M4_6	Standard	12.500	4.08	2762.913	8121.826	4.252	12.3	-1.4	bb
6	6 170607M4_7	Standard	12.500	4.08	2704.366	6623.522	5.104	14.8	18.4	bb
7	7 170607M4_8	Standard	12.500	4.08	2511.682	7492.855	4.190	12.1	-2.8	bb
8	8 170607M4_9	Standard	12.500	4.08	2396.323	7107.918	4.214	12.2	-2.2	bb

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**Compound name: 13C2-6:2 FTS**

Response Factor: 0.329264

RRF SD: 0.0451898, Relative SD: 13.7245

Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.28	6594.488	8189.055	4.026	12.2	-2.2	bb
2	2 170607M4_3	Standard	12.500	4.28	5860.202	7952.786	3.684	11.2	-10.5	bb
3	3 170607M4_4	Standard	12.500	4.28	5470.406	8253.792	3.314	10.1	-19.5	bb
4	4 170607M4_5	Standard	12.500	4.28	6507.597	8323.555	3.909	11.9	-5.0	bb
5	5 170607M4_6	Standard	12.500	4.27	6237.786	8010.866	3.893	11.8	-5.4	bb
6	6 170607M4_7	Standard	12.500	4.27	7191.502	7309.888	4.919	14.9	19.5	bb
7	7 170607M4_8	Standard	12.500	4.27	6483.908	7598.024	4.267	13.0	3.7	bb
8	8 170607M4_9	Standard	12.500	4.27	7175.156	7301.604	4.913	14.9	19.4	bb

**Compound name: 13C2-PFOA**

Response Factor: 1.14772

RRF SD: 0.0962205, Relative SD: 8.3836

Response type: Internal Std ( Ref 40 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.30	41379.738	38074.281	13.585	11.8	-5.3	bb
2	2 170607M4_3	Standard	12.500	4.30	40914.184	36385.398	14.056	12.2	-2.0	bb
3	3 170607M4_4	Standard	12.500	4.30	40564.289	35401.367	14.323	12.5	-0.2	bb
4	4 170607M4_5	Standard	12.500	4.29	40655.012	38390.336	13.237	11.5	-7.7	bb
5	5 170607M4_6	Standard	12.500	4.29	44581.332	38636.188	14.423	12.6	0.5	bb
6	6 170607M4_7	Standard	12.500	4.29	45392.254	33137.613	17.123	14.9	19.4	bb
7	7 170607M4_8	Standard	12.500	4.29	39033.848	33890.949	14.397	12.5	0.4	bb
8	8 170607M4_9	Standard	12.500	4.29	38518.730	35330.516	13.628	11.9	-5.0	bb

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**Compound name: 13C5-PFNA**

Response Factor: 0.724413

RRF SD: 0.0576433, Relative SD: 7.95723

Response type: Internal Std ( Ref 41 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.59	27089.656	38207.949	8.863	12.2	-2.1	bb
2	2 170607M4_3	Standard	12.500	4.59	26714.363	36818.066	9.070	12.5	0.2	bb
3	3 170607M4_4	Standard	12.500	4.59	27971.240	41807.980	8.363	11.5	-7.6	bb
4	4 170607M4_5	Standard	12.500	4.58	27890.553	39794.063	8.761	12.1	-3.2	bb
5	5 170607M4_6	Standard	12.500	4.58	28396.238	40172.586	8.836	12.2	-2.4	bb
6	6 170607M4_7	Standard	12.500	4.58	30183.080	35046.656	10.765	14.9	18.9	bb
7	7 170607M4_8	Standard	12.500	4.58	27075.072	37842.375	8.943	12.3	-1.2	bb
8	8 170607M4_9	Standard	12.500	4.57	27338.164	38653.719	8.841	12.2	-2.4	bb

**Compound name: 13C8-PFOS**

Response Factor: 0.868194

RRF SD: 0.082318, Relative SD: 9.48151

Response type: Internal Std ( Ref 42 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.67	6444.428	7791.939	10.338	11.9	-4.7	bb
2	2 170607M4_3	Standard	12.500	4.67	6541.964	7927.943	10.315	11.9	-5.0	bb
3	3 170607M4_4	Standard	12.500	4.67	6274.638	7714.244	10.167	11.7	-6.3	bb
4	4 170607M4_5	Standard	12.500	4.66	6909.919	7245.510	11.921	13.7	9.8	bb
5	5 170607M4_6	Standard	12.500	4.66	6378.745	7759.203	10.276	11.8	-5.3	bb
6	6 170607M4_7	Standard	12.500	4.66	7335.067	7080.097	12.950	14.9	19.3	bb
7	7 170607M4_8	Standard	12.500	4.66	6188.442	7619.893	10.152	11.7	-6.5	bb
8	8 170607M4_9	Standard	12.500	4.66	6238.770	7288.246	10.700	12.3	-1.4	bb



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**Compound name: 13C2-PFDA**

Response Factor: 0.713534

RRF SD: 0.0488835, Relative SD: 6.8509

Response type: Internal Std ( Ref 43 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.85	25043.840	35474.813	8.825	12.4	-1.1	bb
2	2 170607M4_3	Standard	12.500	4.85	25093.865	37457.781	8.374	11.7	-6.1	bb
3	3 170607M4_4	Standard	12.500	4.85	24991.355	36064.984	8.662	12.1	-2.9	bb
4	4 170607M4_5	Standard	12.500	4.85	26289.213	40797.375	8.055	11.3	-9.7	bb
5	5 170607M4_6	Standard	12.500	4.84	27460.000	36826.652	9.321	13.1	4.5	bb
6	6 170607M4_7	Standard	12.500	4.84	29876.691	37131.609	10.058	14.1	12.8	bb
7	7 170607M4_8	Standard	12.500	4.84	24217.986	33817.785	8.952	12.5	0.4	bb
8	8 170607M4_9	Standard	12.500	4.83	24689.412	33883.988	9.108	12.8	2.1	bb

**Compound name: 13C2-8:2 FTS**

Response Factor: 0.29828

RRF SD: 0.0271946, Relative SD: 9.11712

Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.84	5869.601	8189.055	3.584	12.0	-3.9	db
2	2 170607M4_3	Standard	12.500	4.84	5134.727	7952.786	3.228	10.8	-13.4	bb
3	3 170607M4_4	Standard	12.500	4.84	5720.240	8253.792	3.465	11.6	-7.1	bb
4	4 170607M4_5	Standard	12.500	4.83	5884.952	8323.555	3.535	11.9	-5.2	bb
5	5 170607M4_6	Standard	12.500	4.83	6104.805	8010.866	3.810	12.8	2.2	bb
6	6 170607M4_7	Standard	12.500	4.83	5741.677	7309.888	3.927	13.2	5.3	bb
7	7 170607M4_8	Standard	12.500	4.82	6054.729	7598.024	3.984	13.4	6.9	bb
8	8 170607M4_9	Standard	12.500	4.83	6269.937	7301.604	4.294	14.4	15.2	bb

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**Compound name: 13C2-PFUnA**

Response Factor: 0.833184

RRF SD: 0.0768094, Relative SD: 9.21879

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	5.09	28965.379	34868.547	10.384	12.5	-0.3	bb
2	2 170607M4_3	Standard	12.500	5.09	32108.420	36979.617	10.853	13.0	4.2	db
3	3 170607M4_4	Standard	12.500	5.09	28209.535	38515.293	9.155	11.0	-12.1	bb
4	4 170607M4_5	Standard	12.500	5.09	31399.334	33291.445	11.790	14.2	13.2	bb
5	5 170607M4_6	Standard	12.500	5.08	28301.652	36677.328	9.645	11.6	-7.4	bb
6	6 170607M4_7	Standard	12.500	5.08	33071.215	35456.590	11.659	14.0	11.9	bb
7	7 170607M4_8	Standard	12.500	5.08	28673.381	35189.379	10.185	12.2	-2.2	bb
8	8 170607M4_9	Standard	12.500	5.07	25092.385	32515.314	9.646	11.6	-7.4	bb

**Compound name: d3-N-MeFOSAA**

Response Factor: 0.1061

RRF SD: 0.0101794, Relative SD: 9.59417

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.89	3664.528	34868.547	1.314	12.4	-0.9	MM
2	2 170607M4_3	Standard	12.500	4.88	3661.879	36979.617	1.238	11.7	-6.7	MM
3	3 170607M4_4	Standard	12.500	4.88	3682.605	38515.293	1.195	11.3	-9.9	bb
4	4 170607M4_5	Standard	12.500	4.88	4098.244	33291.445	1.539	14.5	16.0	MM
5	5 170607M4_6	Standard	12.500	4.87	3834.409	36677.328	1.307	12.3	-1.5	MM
6	6 170607M4_7	Standard	12.500	4.87	4267.642	35456.590	1.505	14.2	13.4	MM
7	7 170607M4_8	Standard	12.500	4.87	3470.306	35189.379	1.233	11.6	-7.1	bb
8	8 170607M4_9	Standard	12.500	4.87	3330.748	32515.314	1.280	12.1	-3.5	bb

Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

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**Compound name: d5-N-EtFOSAA**

Response Factor: 0.118951

RRF SD: 0.0124698, Relative SD: 10.4831

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.98	4841.985	34868.547	1.736	14.6	16.7	MM
2	2 170607M4_3	Standard	12.500	4.98	4589.637	36979.617	1.551	13.0	4.3	dd
3	3 170607M4_4	Standard	12.500	4.98	3977.701	38515.293	1.291	10.9	-13.2	MM
4	4 170607M4_5	Standard	12.500	4.98	4425.250	33291.445	1.662	14.0	11.7	MM
5	5 170607M4_6	Standard	12.500	4.97	4047.319	36677.328	1.379	11.6	-7.2	MM
6	6 170607M4_7	Standard	12.500	4.97	4220.333	35456.590	1.488	12.5	0.1	bb
7	7 170607M4_8	Standard	12.500	4.97	3766.933	35189.379	1.338	11.2	-10.0	bb
8	8 170607M4_9	Standard	12.500	4.97	3772.092	32515.314	1.450	12.2	-2.5	bb

**Compound name: 13C2-PFDoA**

Response Factor: 0.12255

RRF SD: 0.0140814, Relative SD: 11.4903

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	5.32	4603.221	34868.547	1.650	13.5	7.7	MM
2	2 170607M4_3	Standard	12.500	5.32	4590.677	36979.617	1.552	12.7	1.3	MM
3	3 170607M4_4	Standard	12.500	5.32	4169.430	38515.293	1.353	11.0	-11.7	dd
4	4 170607M4_5	Standard	12.500	5.31	4279.941	33291.445	1.607	13.1	4.9	bb
5	5 170607M4_6	Standard	12.500	5.31	4126.087	36677.328	1.406	11.5	-8.2	bb
6	6 170607M4_7	Standard	12.500	5.31	5316.126	35456.590	1.874	15.3	22.3	MM
7	7 170607M4_8	Standard	12.500	5.31	3919.661	35189.379	1.392	11.4	-9.1	bb
8	8 170607M4_9	Standard	12.500	5.31	3694.187	32515.314	1.420	11.6	-7.3	bb

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**Compound name: 13C2-PFTeDA**

Response Factor: 0.845412

RRF SD: 0.0519757, Relative SD: 6.14797

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	5.78	30232.766	34868.547	10.838	12.8	2.6	db
2	2 170607M4_3	Standard	12.500	5.78	29891.480	36979.617	10.104	12.0	-4.4	db
3	3 170607M4_4	Standard	12.500	5.77	29182.723	38515.293	9.471	11.2	-10.4	bb
4	4 170607M4_5	Standard	12.500	5.77	30526.830	33291.445	11.462	13.6	8.5	bd
5	5 170607M4_6	Standard	12.500	5.77	30056.975	36677.328	10.244	12.1	-3.1	bb
6	6 170607M4_7	Standard	12.500	5.77	31612.656	35456.590	11.145	13.2	5.5	bb
7	7 170607M4_8	Standard	12.500	5.77	29023.508	35189.379	10.310	12.2	-2.4	bb
8	8 170607M4_9	Standard	12.500	5.76	28529.098	32515.314	10.968	13.0	3.8	bb

**Compound name: 13C4-PFBA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	1.72	19916.500	19916.500	12.500	12.5	0.0	bb
2	2 170607M4_3	Standard	12.500	1.71	19087.035	19087.035	12.500	12.5	0.0	bb
3	3 170607M4_4	Standard	12.500	1.70	19731.223	19731.223	12.500	12.5	0.0	bb
4	4 170607M4_5	Standard	12.500	1.70	20366.600	20366.600	12.500	12.5	0.0	bb
5	5 170607M4_6	Standard	12.500	1.70	19893.602	19893.602	12.500	12.5	0.0	bb
6	6 170607M4_7	Standard	12.500	1.70	17711.072	17711.072	12.500	12.5	0.0	bb
7	7 170607M4_8	Standard	12.500	1.69	19301.654	19301.654	12.500	12.5	0.0	bb
8	8 170607M4_9	Standard	12.500	1.69	18814.658	18814.658	12.500	12.5	0.0	bb

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**Compound name: 13C2-4:2 FTS**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 37 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	5.000	3.55	8189.055	8189.055	5.000	5.0	0.0	bb
2	2 170607M4_3	Standard	5.000	3.55	7952.786	7952.786	5.000	5.0	0.0	bb
3	3 170607M4_4	Standard	5.000	3.55	8253.792	8253.792	5.000	5.0	0.0	bb
4	4 170607M4_5	Standard	5.000	3.55	8323.555	8323.555	5.000	5.0	0.0	bb
5	5 170607M4_6	Standard	5.000	3.55	8010.866	8010.866	5.000	5.0	0.0	bb
6	6 170607M4_7	Standard	5.000	3.54	7309.888	7309.888	5.000	5.0	0.0	bb
7	7 170607M4_8	Standard	5.000	3.54	7598.024	7598.024	5.000	5.0	0.0	bb
8	8 170607M4_9	Standard	5.000	3.54	7301.604	7301.604	5.000	5.0	0.0	bb

**Compound name: 13C5-PFHxA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	5.000	3.58	50943.816	50943.816	5.000	5.0	0.0	bb
2	2 170607M4_3	Standard	5.000	3.58	53049.016	53049.016	5.000	5.0	0.0	bb
3	3 170607M4_4	Standard	5.000	3.58	51257.426	51257.426	5.000	5.0	0.0	bb
4	4 170607M4_5	Standard	5.000	3.57	53483.816	53483.816	5.000	5.0	0.0	bb
5	5 170607M4_6	Standard	5.000	3.57	53002.723	53002.723	5.000	5.0	0.0	bb
6	6 170607M4_7	Standard	5.000	3.57	47248.348	47248.348	5.000	5.0	0.0	bb
7	7 170607M4_8	Standard	5.000	3.57	49972.316	49972.316	5.000	5.0	0.0	bb
8	8 170607M4_9	Standard	5.000	3.57	48729.941	48729.941	5.000	5.0	0.0	bb

Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

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**Compound name: 13C3-PFHxS**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 39 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.09	7749.896	7749.896	12.500	12.5	0.0	bb
2	2 170607M4_3	Standard	12.500	4.09	8004.749	8004.749	12.500	12.5	0.0	bb
3	3 170607M4_4	Standard	12.500	4.09	7814.118	7814.118	12.500	12.5	0.0	bb
4	4 170607M4_5	Standard	12.500	4.08	8014.747	8014.747	12.500	12.5	0.0	bb
5	5 170607M4_6	Standard	12.500	4.08	8121.826	8121.826	12.500	12.5	0.0	bb
6	6 170607M4_7	Standard	12.500	4.08	6623.522	6623.522	12.500	12.5	0.0	bb
7	7 170607M4_8	Standard	12.500	4.08	7492.855	7492.855	12.500	12.5	0.0	bb
8	8 170607M4_9	Standard	12.500	4.08	7107.918	7107.918	12.500	12.5	0.0	bb

**Compound name: 13C8-PFOA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 40 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.30	38074.281	38074.281	12.500	12.5	0.0	bb
2	2 170607M4_3	Standard	12.500	4.30	36385.398	36385.398	12.500	12.5	0.0	bb
3	3 170607M4_4	Standard	12.500	4.30	35401.367	35401.367	12.500	12.5	0.0	bb
4	4 170607M4_5	Standard	12.500	4.29	38390.336	38390.336	12.500	12.5	0.0	bb
5	5 170607M4_6	Standard	12.500	4.29	38636.188	38636.188	12.500	12.5	0.0	bb
6	6 170607M4_7	Standard	12.500	4.29	33137.613	33137.613	12.500	12.5	0.0	bb
7	7 170607M4_8	Standard	12.500	4.29	33890.949	33890.949	12.500	12.5	0.0	bb
8	8 170607M4_9	Standard	12.500	4.29	35330.516	35330.516	12.500	12.5	0.0	bb

Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

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**Compound name: 13C9-PFNA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 41 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.59	38207.949	38207.949	12.500	12.5	0.0	bb
2	2 170607M4_3	Standard	12.500	4.59	36818.066	36818.066	12.500	12.5	0.0	bb
3	3 170607M4_4	Standard	12.500	4.59	41807.980	41807.980	12.500	12.5	0.0	bb
4	4 170607M4_5	Standard	12.500	4.58	39794.063	39794.063	12.500	12.5	0.0	bb
5	5 170607M4_6	Standard	12.500	4.58	40172.586	40172.586	12.500	12.5	0.0	bb
6	6 170607M4_7	Standard	12.500	4.58	35046.656	35046.656	12.500	12.5	0.0	bb
7	7 170607M4_8	Standard	12.500	4.58	37842.375	37842.375	12.500	12.5	0.0	bb
8	8 170607M4_9	Standard	12.500	4.58	38653.719	38653.719	12.500	12.5	0.0	bb

**Compound name: 13C4-PFOS**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 42 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.67	7791.939	7791.939	12.500	12.5	0.0	bb
2	2 170607M4_3	Standard	12.500	4.67	7927.943	7927.943	12.500	12.5	0.0	bb
3	3 170607M4_4	Standard	12.500	4.67	7714.244	7714.244	12.500	12.5	0.0	bb
4	4 170607M4_5	Standard	12.500	4.66	7245.510	7245.510	12.500	12.5	0.0	bb
5	5 170607M4_6	Standard	12.500	4.66	7759.203	7759.203	12.500	12.5	0.0	bb
6	6 170607M4_7	Standard	12.500	4.66	7080.097	7080.097	12.500	12.5	0.0	bb
7	7 170607M4_8	Standard	12.500	4.66	7619.893	7619.893	12.500	12.5	0.0	bb
8	8 170607M4_9	Standard	12.500	4.66	7288.246	7288.246	12.500	12.5	0.0	bb

Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

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**Compound name: 13C6-PFDA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 43 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	4.85	35474.813	35474.813	12.500	12.5	0.0	bb
2	2 170607M4_3	Standard	12.500	4.85	37457.781	37457.781	12.500	12.5	0.0	bb
3	3 170607M4_4	Standard	12.500	4.85	36064.984	36064.984	12.500	12.5	0.0	bb
4	4 170607M4_5	Standard	12.500	4.84	40797.375	40797.375	12.500	12.5	0.0	bb
5	5 170607M4_6	Standard	12.500	4.84	36826.652	36826.652	12.500	12.5	0.0	bb
6	6 170607M4_7	Standard	12.500	4.84	37131.609	37131.609	12.500	12.5	0.0	bb
7	7 170607M4_8	Standard	12.500	4.84	33817.785	33817.785	12.500	12.5	0.0	bb
8	8 170607M4_9	Standard	12.500	4.83	33883.988	33883.988	12.500	12.5	0.0	bb

**Compound name: 13C7-PFUnA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	x=excluded
1	1 170607M4_2	Standard	12.500	5.09	34868.547	34868.547	12.500	12.5	0.0	bb
2	2 170607M4_3	Standard	12.500	5.09	36979.617	36979.617	12.500	12.5	0.0	bb
3	3 170607M4_4	Standard	12.500	5.09	38515.293	38515.293	12.500	12.5	0.0	bb
4	4 170607M4_5	Standard	12.500	5.09	33291.445	33291.445	12.500	12.5	0.0	bb
5	5 170607M4_6	Standard	12.500	5.08	36677.328	36677.328	12.500	12.5	0.0	bb
6	6 170607M4_7	Standard	12.500	5.08	35456.590	35456.590	12.500	12.5	0.0	bb
7	7 170607M4_8	Standard	12.500	5.08	35189.379	35189.379	12.500	12.5	0.0	bb
8	8 170607M4_9	Standard	12.500	5.07	32515.314	32515.314	12.500	12.5	0.0	bb



Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 14:04:12 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 14:06:13 Pacific Daylight Time

Method: U:\Q4.PROMethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11

Calibration: 14 Jun 2017 14:04:12

Compound name: PFBA

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1	170607M4_1	IPA	07-Jun-17	21:04:05
2	170607M4_2	ST170607M4-1 PFC CS-2 17F0719	07-Jun-17	21:15:21
3	170607M4_3	ST170607M4-2 PFC CS-1 17F0718	07-Jun-17	21:26:32
4	170607M4_4	ST170607M4-3 PFC CS0 17F0717	07-Jun-17	21:37:42
5	170607M4_5	ST170607M4-4 PFC CS1 17F0716	07-Jun-17	21:48:53
6	170607M4_6	ST170607M4-5 PFC CS2 17F0715	07-Jun-17	22:00:04
7	170607M4_7	ST170607M4-6 PFC CS3 17F0714	07-Jun-17	22:11:15
8	170607M4_8	ST170607M4-7 PFC CS4 17F0713	07-Jun-17	22:22:25
9	170607M4_9	ST170607M4-8 PFC CS5 17F0712	07-Jun-17	22:33:36
10	170607M4_10	IPA	07-Jun-17	22:44:47
11	170607M4_11	SS170607M4-1 PFC SSS 17F0720	07-Jun-17	22:55:57

Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

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Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 08 Jun 2017 18:59:50

Calibration: F:\Projects\PFAS.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

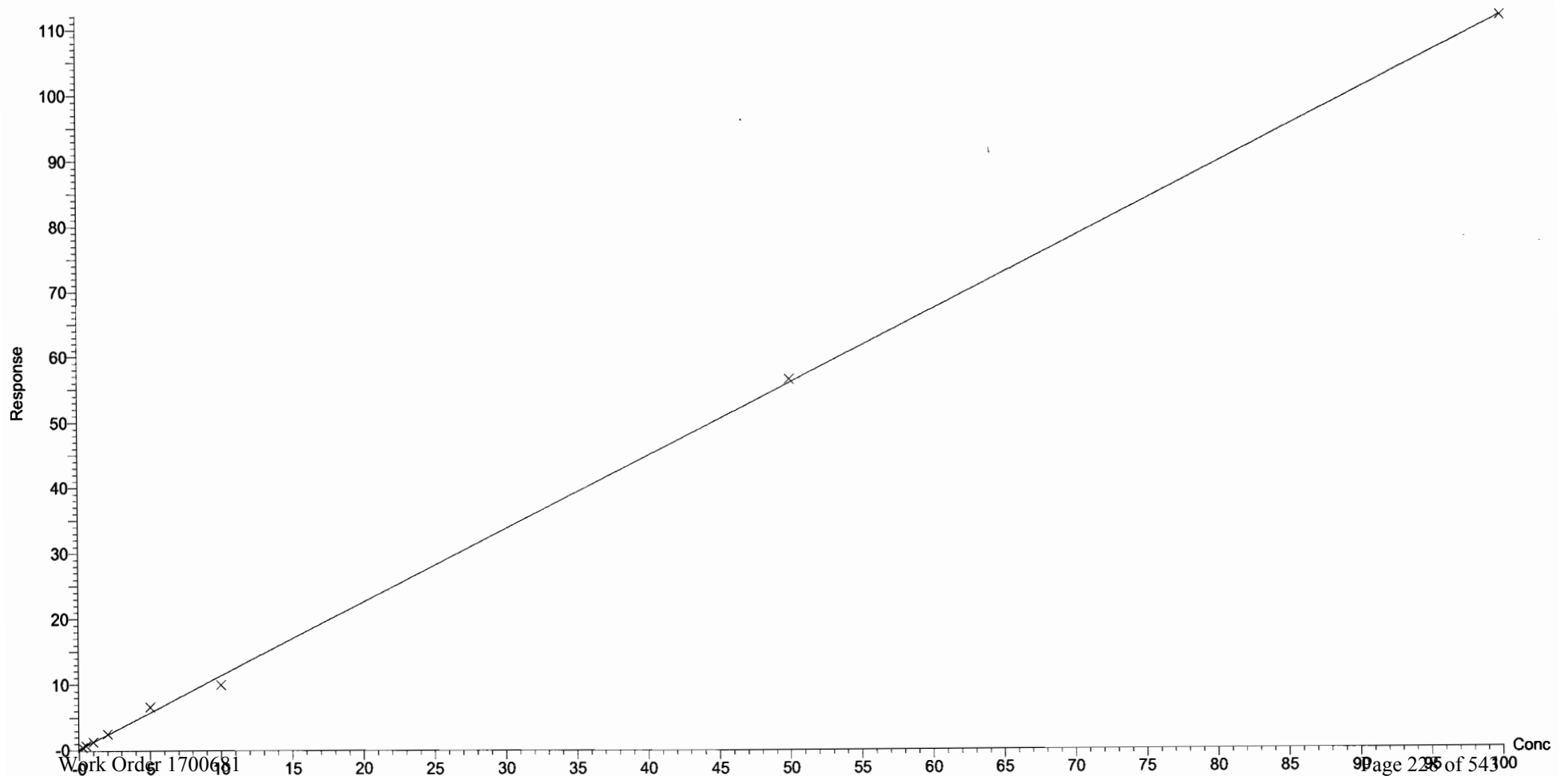
Compound name: PFBA

Correlation coefficient:  $r = 0.999127$ ,  $r^2 = 0.998254$

Calibration curve:  $1.11991 * x + 0.156166$

Response type: Internal Std ( Ref 19 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

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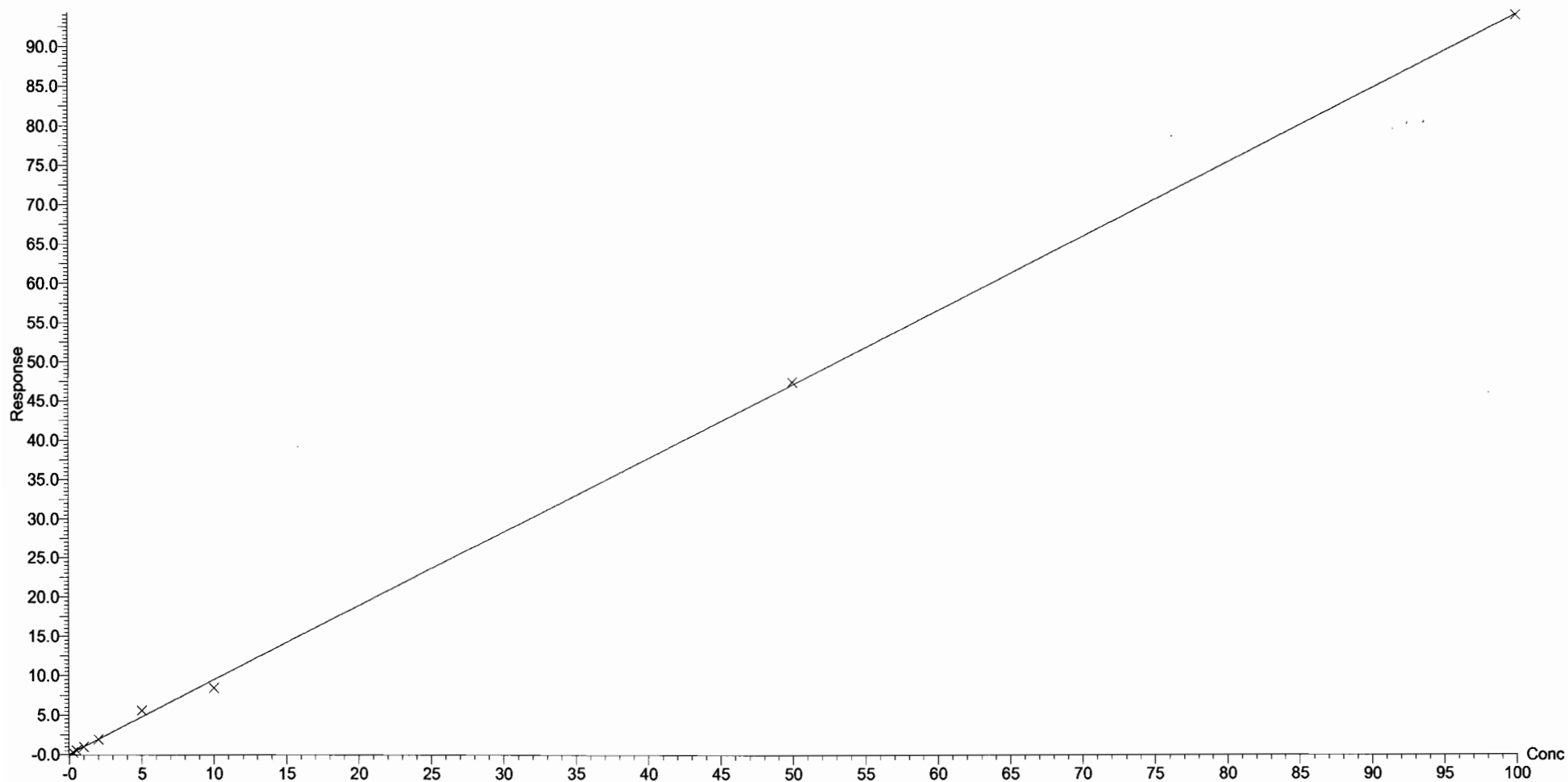
Compound name: PFPeA

Correlation coefficient:  $r = 0.999125$ ,  $r^2 = 0.998252$

Calibration curve:  $0.942168 * x + 0.0643378$

Response type: Internal Std ( Ref 20 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

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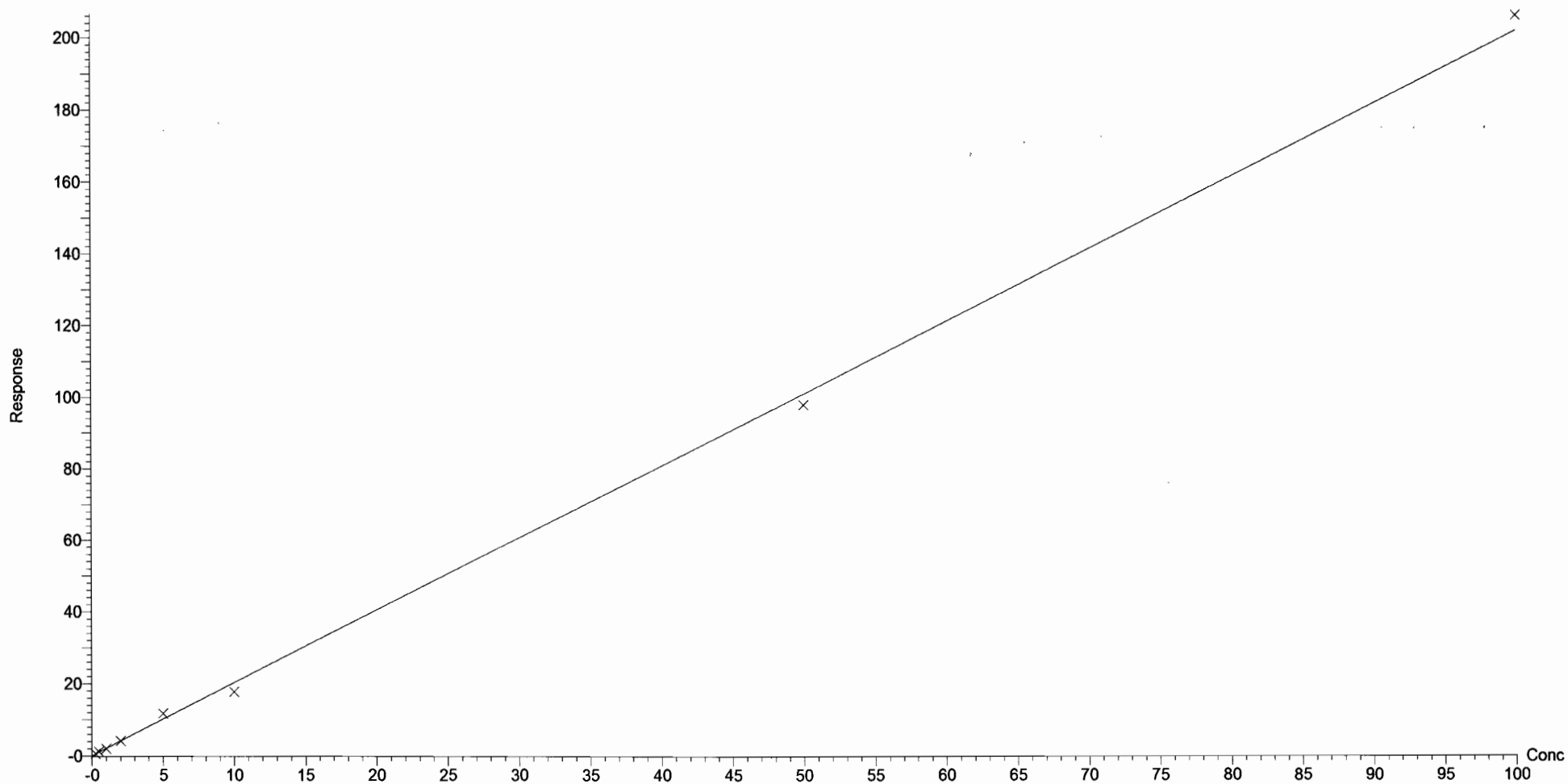
Compound name: PFBS

Correlation coefficient:  $r = 0.998862$ ,  $r^2 = 0.997725$

Calibration curve:  $2.02158 * x + 0.101517$

Response type: Internal Std ( Ref 21 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

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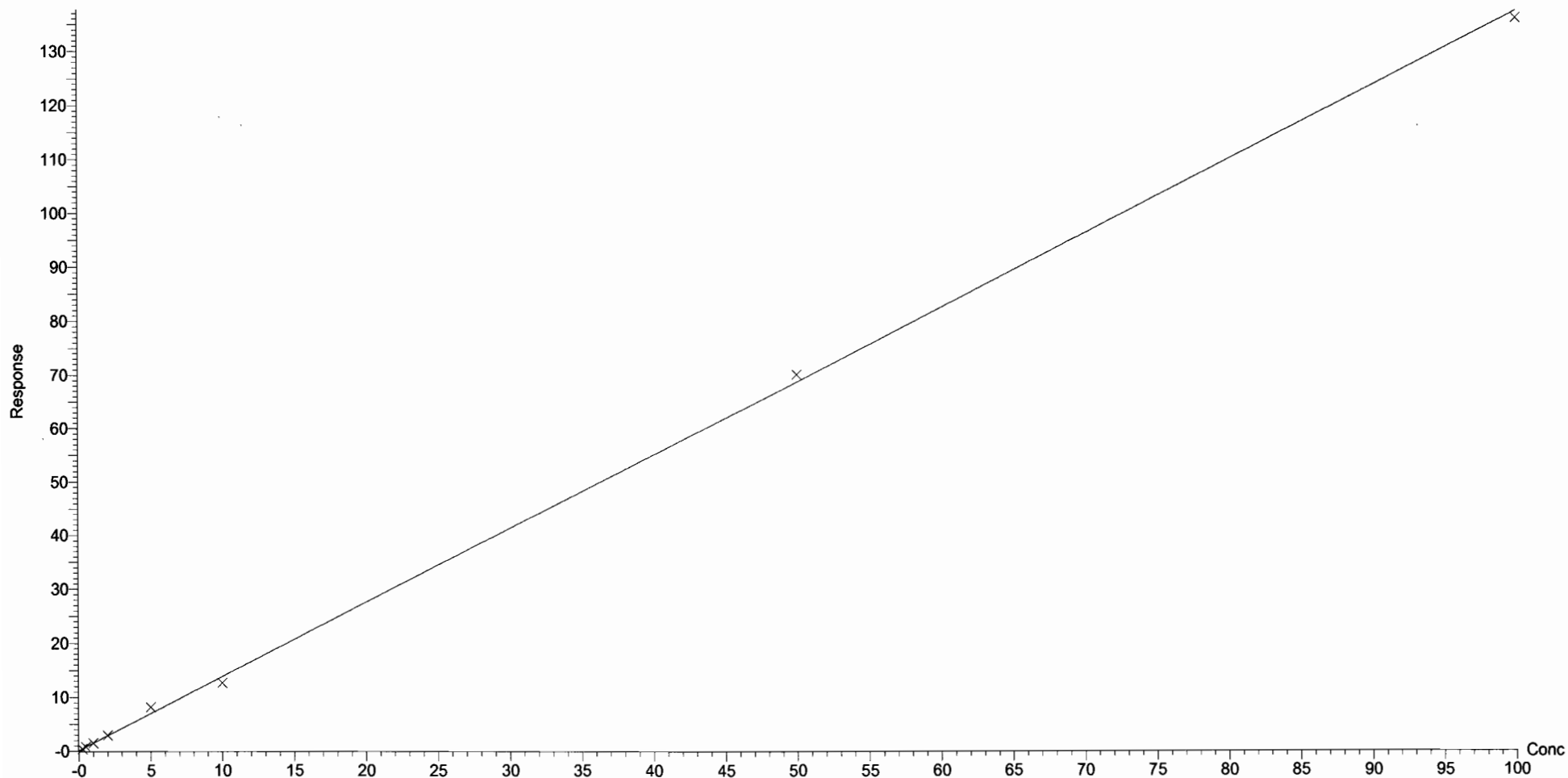
Compound name: PFHxA

Correlation coefficient:  $r = 0.999216$ ,  $r^2 = 0.998433$

Calibration curve:  $1.37538 * x + 0.107015$

Response type: Internal Std ( Ref 22 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

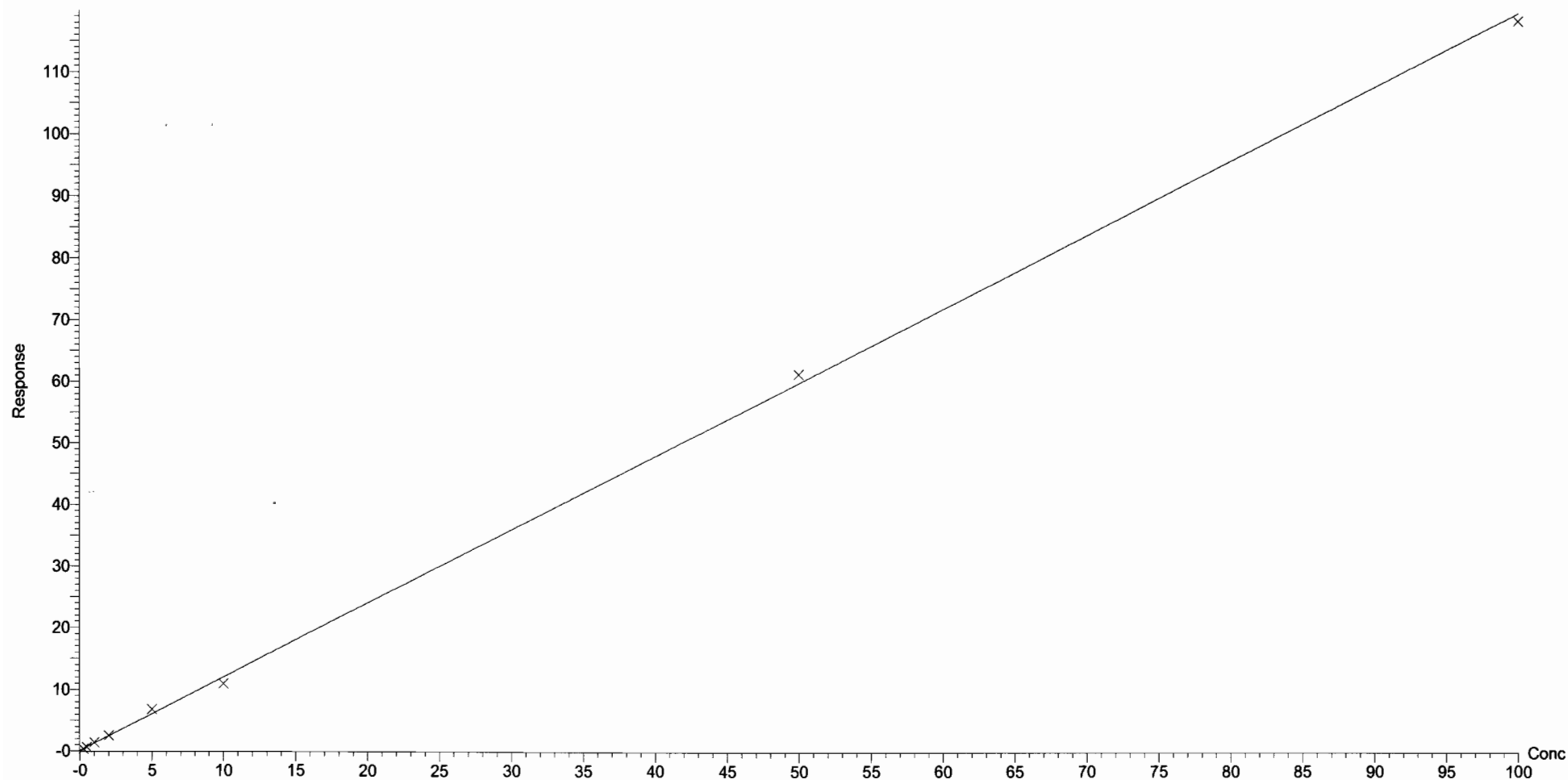
Compound name: PFHpA

Correlation coefficient:  $r = 0.999325$ ,  $r^2 = 0.998650$

Calibration curve:  $1.19846 * x + 0.0788096$

Response type: Internal Std ( Ref 23 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

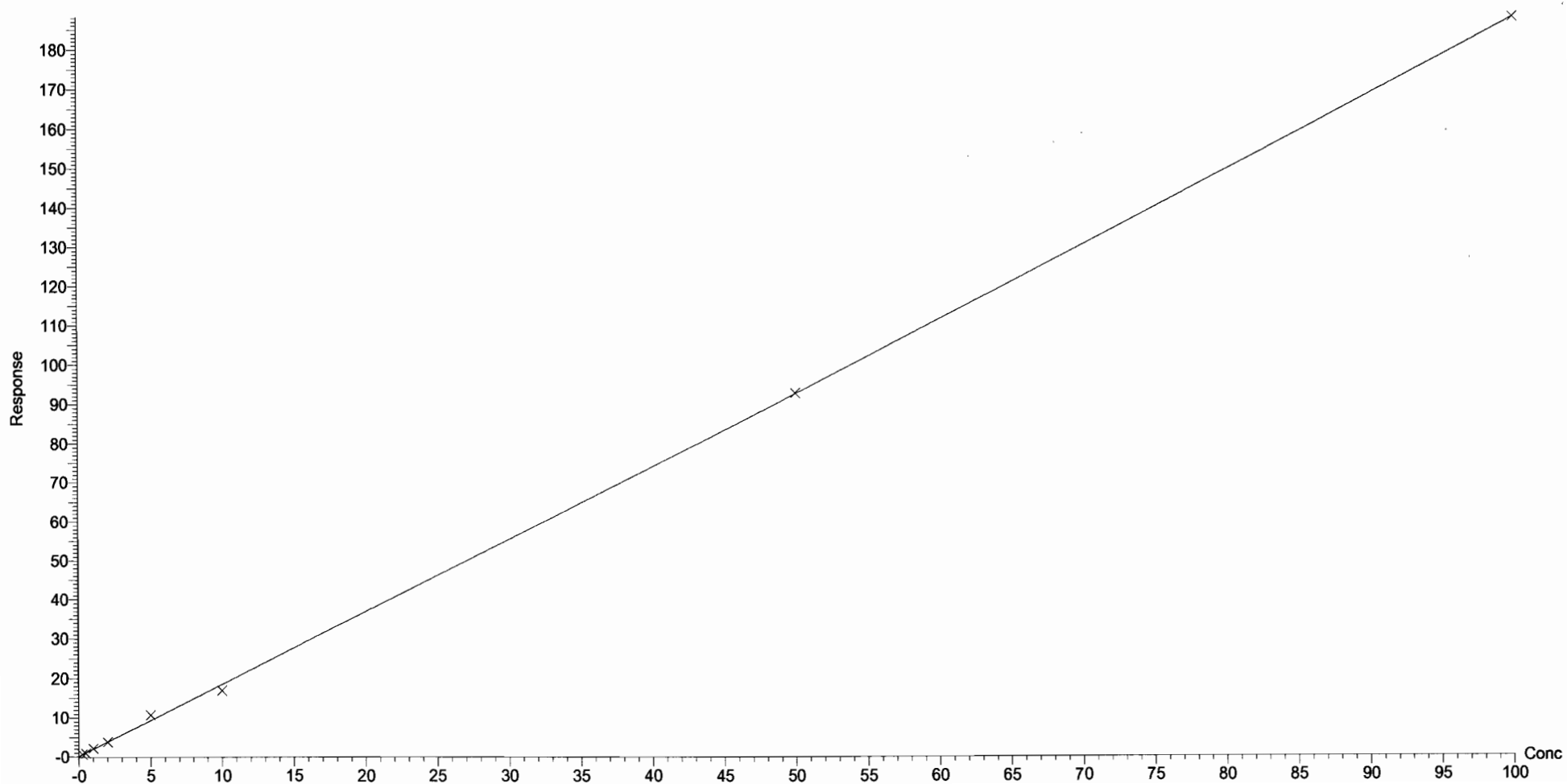
Compound name: PFHxS

Coefficient of Determination:  $R^2 = 0.998671$

Calibration curve:  $0.000548771 * x^2 + 1.82567 * x + 0.175201$

Response type: Internal Std ( Ref 24 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

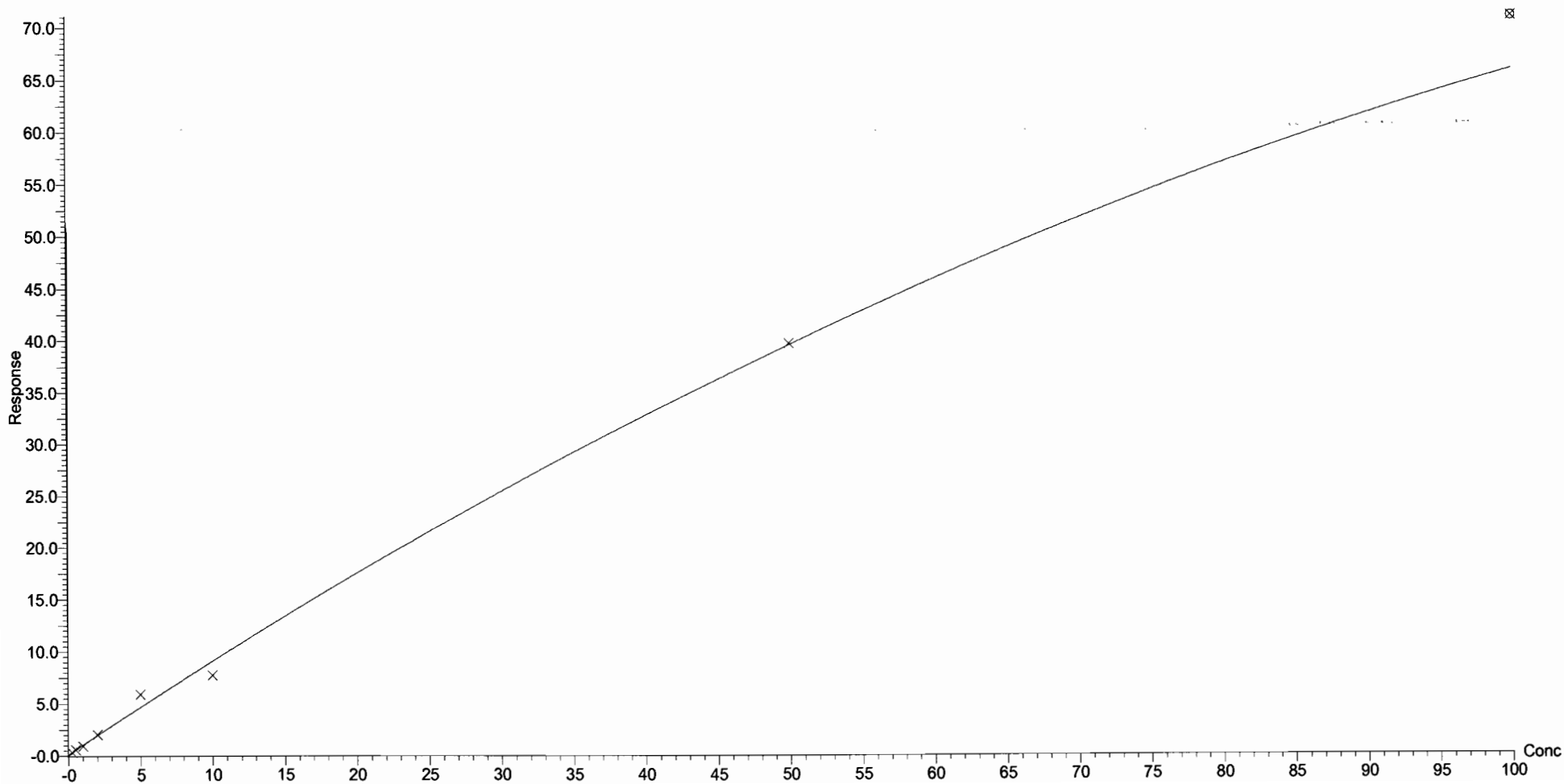
Compound name: 6:2 FTS

Coefficient of Determination:  $R^2 = 0.987918$

Calibration curve:  $-0.00263278 * x^2 + 0.922166 * x + 0.125223$

Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None





Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

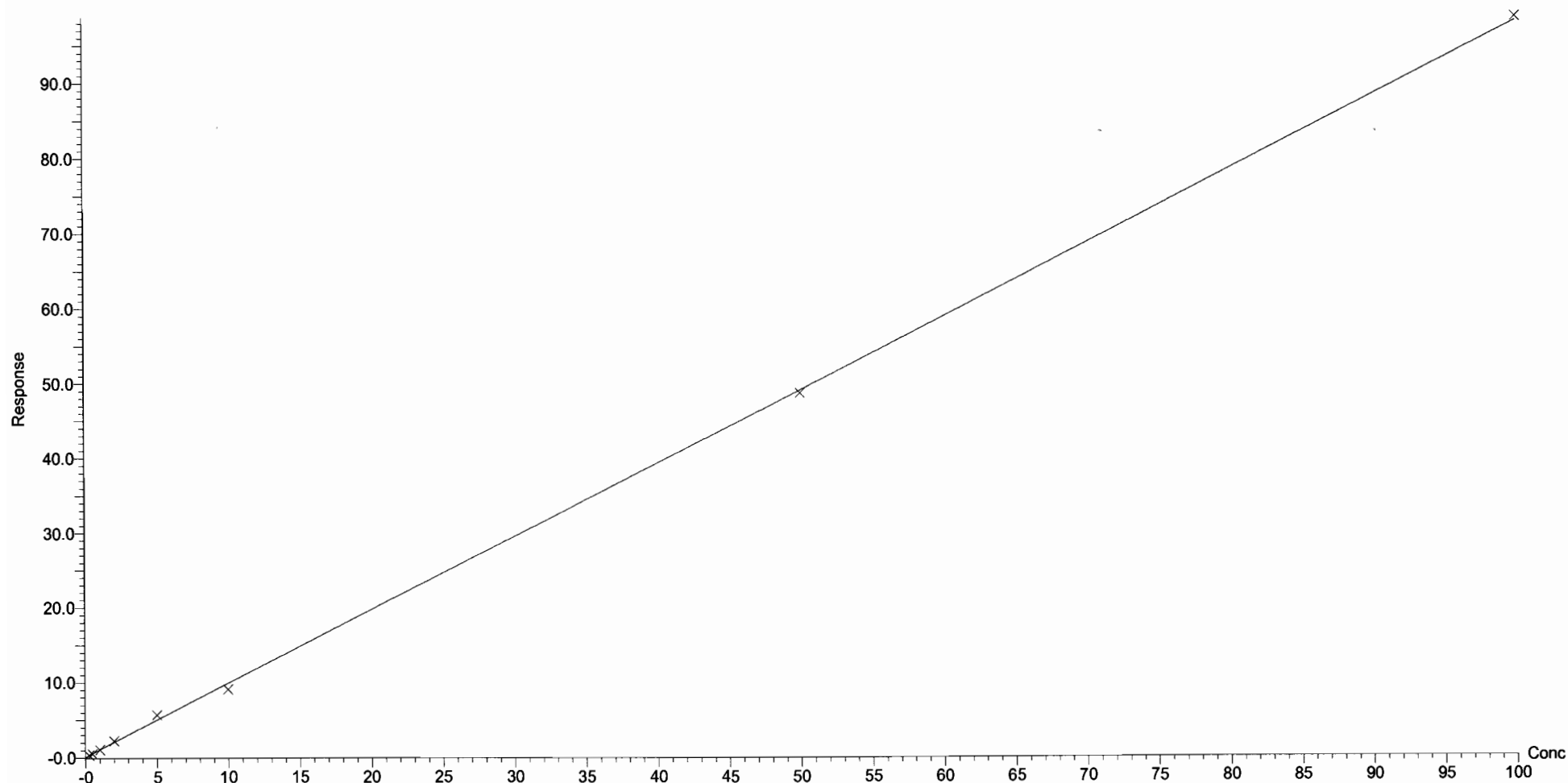
Compound name: PFOA

Correlation coefficient:  $r = 0.999403$ ,  $r^2 = 0.998806$

Calibration curve:  $0.980944 * x + 0.114901$

Response type: Internal Std ( Ref 26 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

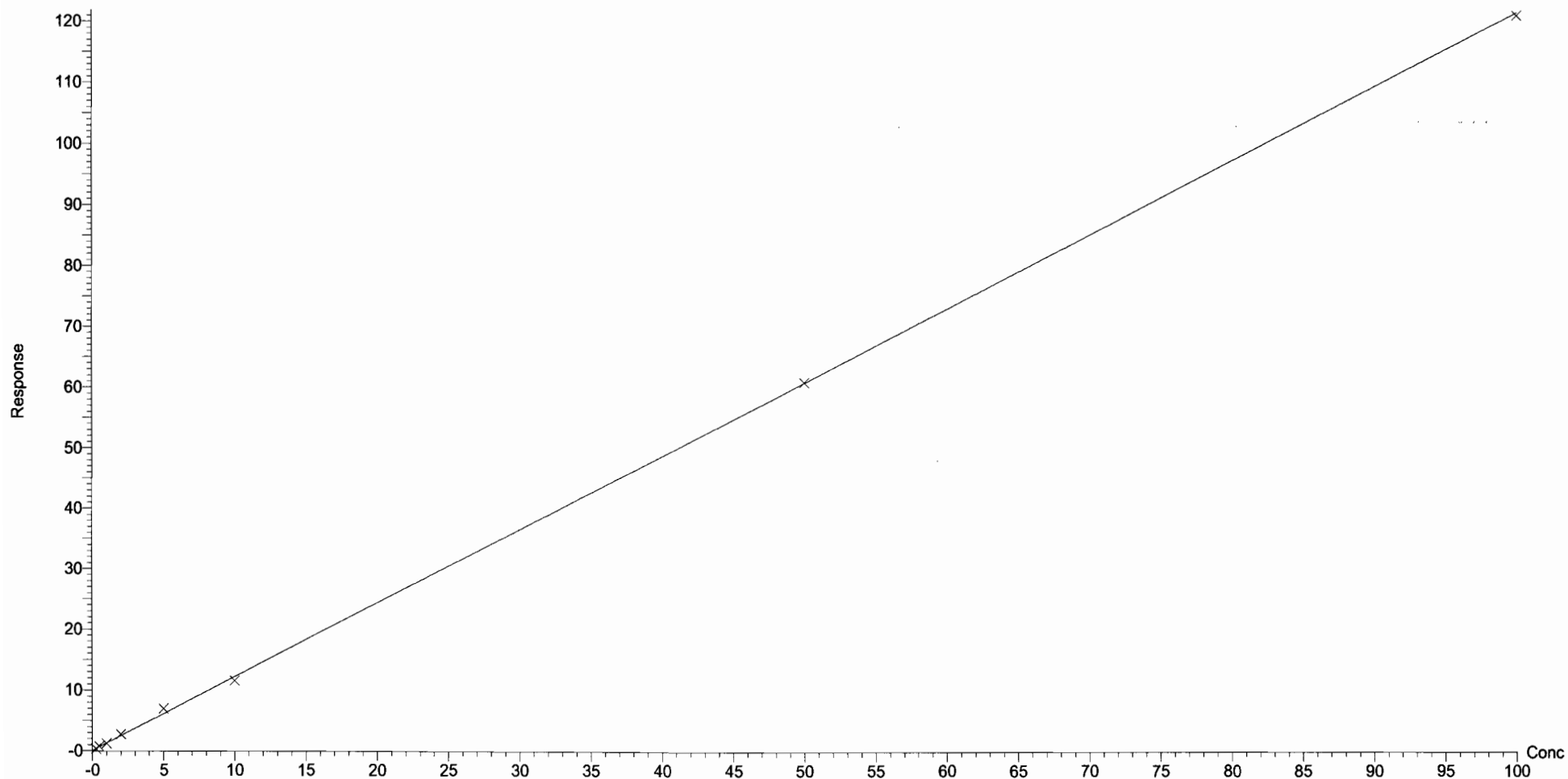
Compound name: PFNA

Correlation coefficient:  $r = 0.999529$ ,  $r^2 = 0.999059$

Calibration curve:  $1.21787 * x + 0.0393668$

Response type: Internal Std ( Ref 27 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

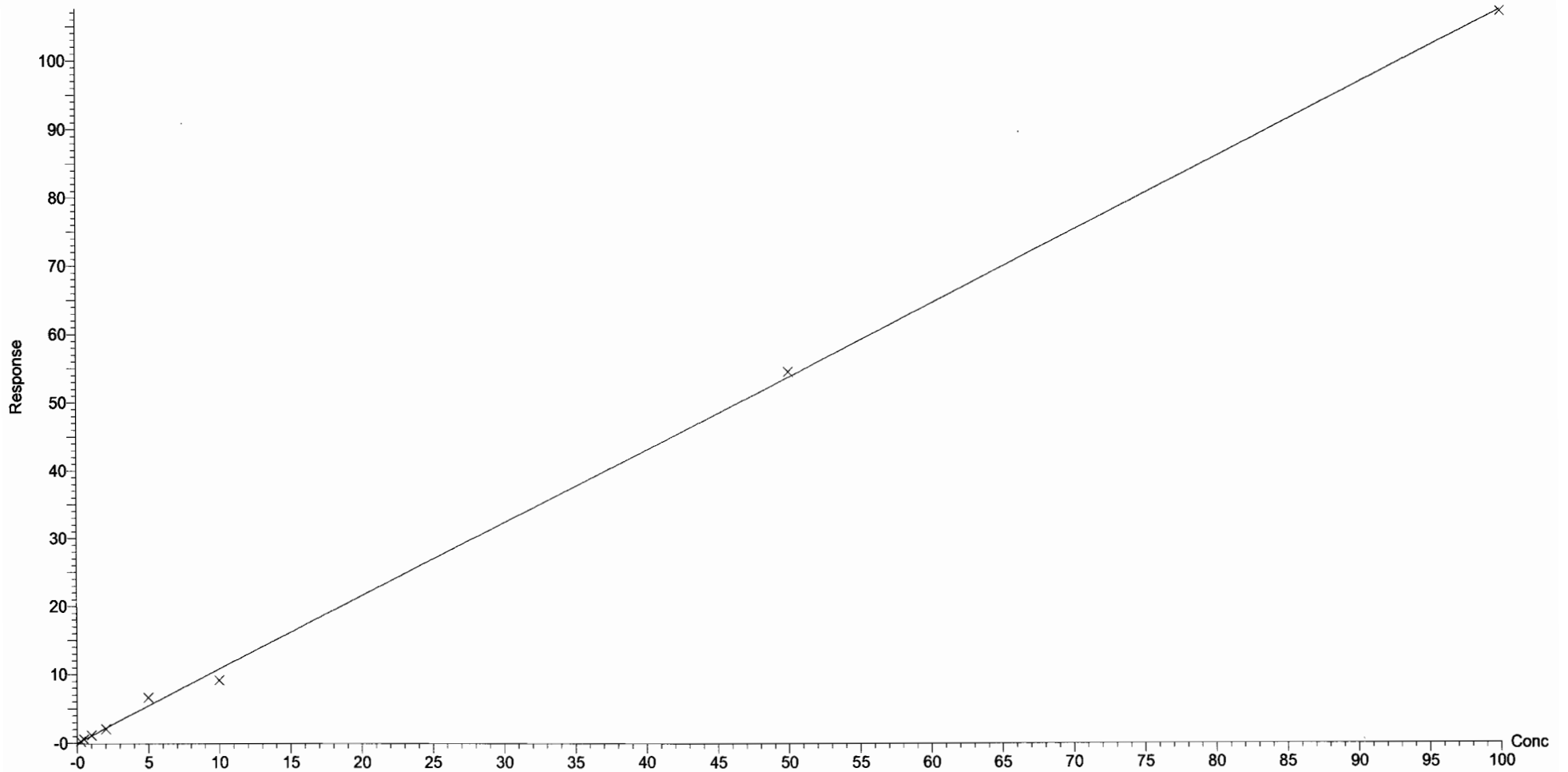
Compound name: PFOS

Coefficient of Determination:  $R^2 = 0.996877$

Calibration curve:  $-1.66961e-005 * x^2 + 1.07742 * x + 0.0245126$

Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

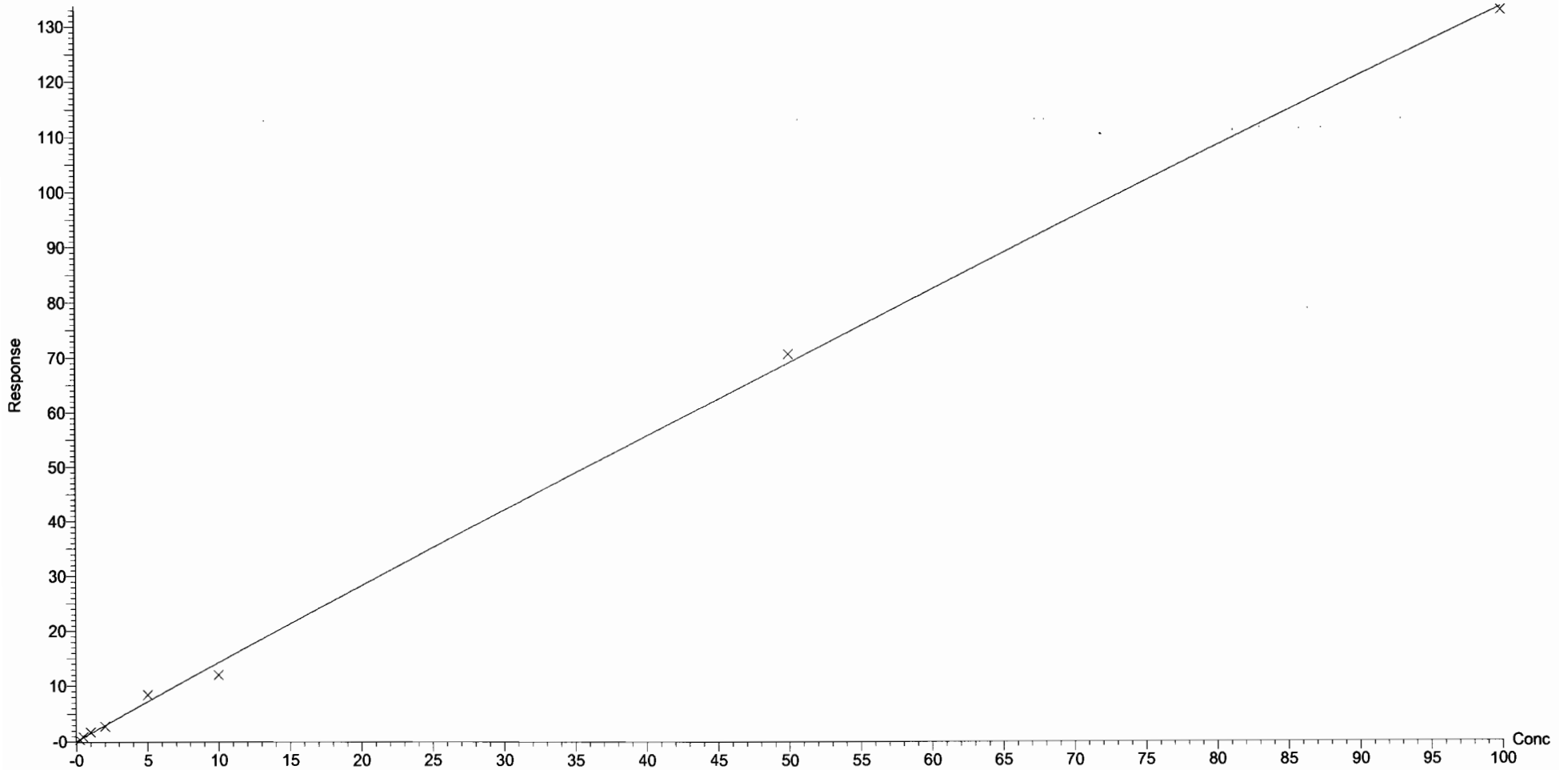


Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

Compound name: PFDA  
Coefficient of Determination:  $R^2 = 0.996861$   
Calibration curve:  $-0.000903532 * x^2 + 1.42702 * x + 0.0937116$   
Response type: Internal Std ( Ref 29 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

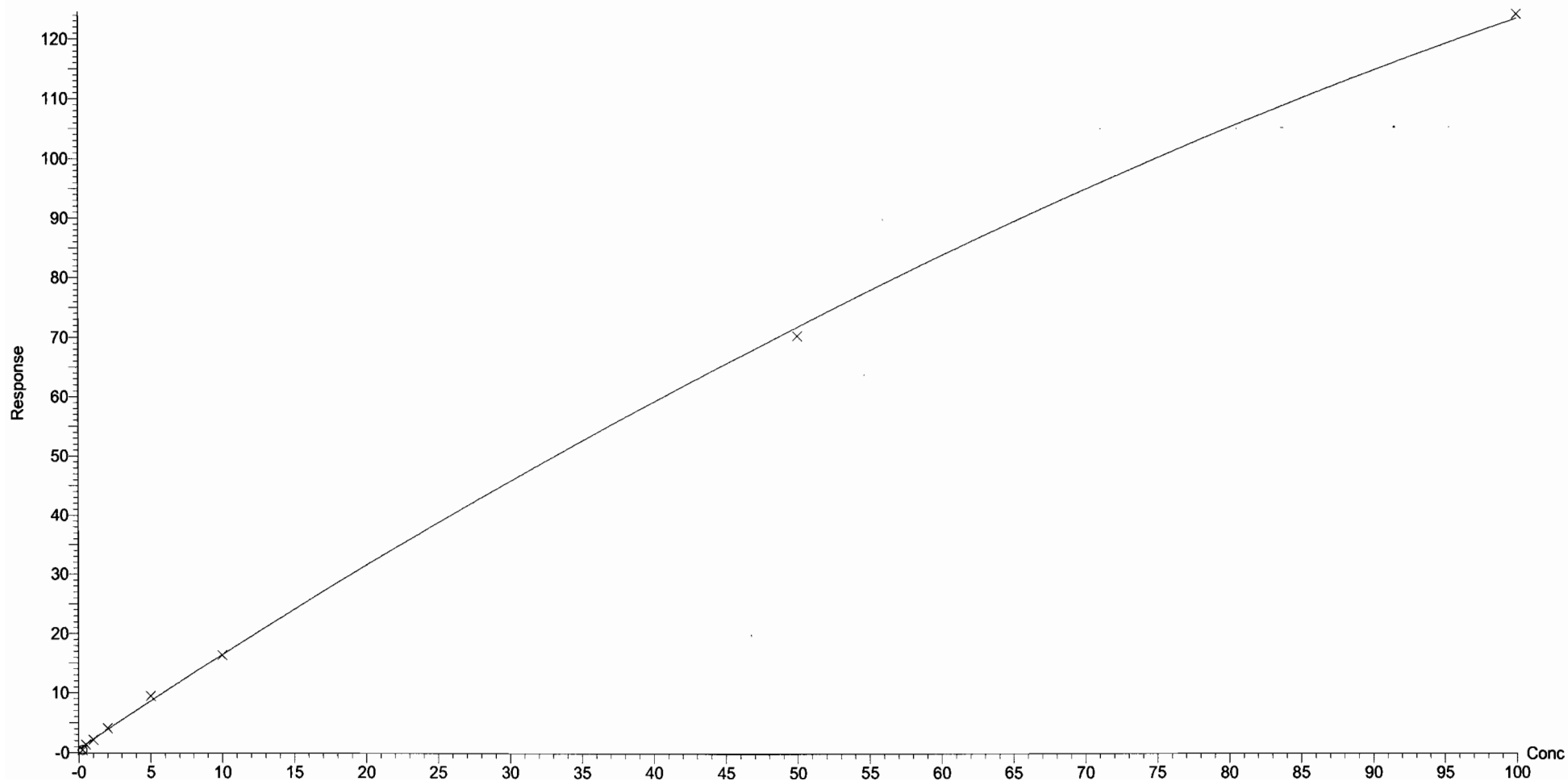
Compound name: 8:2 FTS

Coefficient of Determination:  $R^2 = 0.999138$

Calibration curve:  $-0.00391525 * x^2 + 1.62361 * x + 0.619181$

Response type: Internal Std ( Ref 30 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

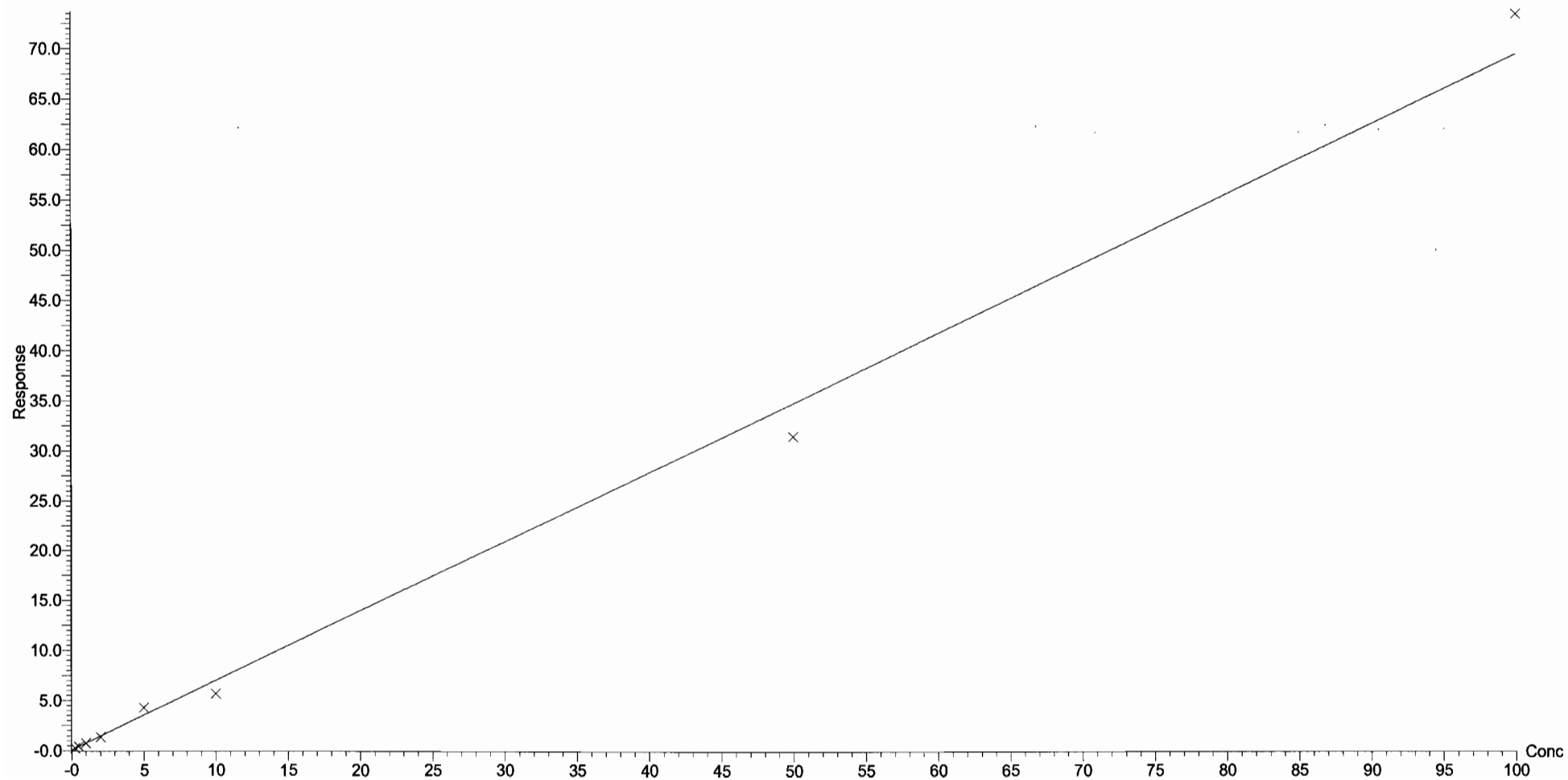
Compound name: PFUnA

Correlation coefficient:  $r = 0.995670$ ,  $r^2 = 0.991359$

Calibration curve:  $0.696176 * x + 0.0672972$

Response type: Internal Std ( Ref 31 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

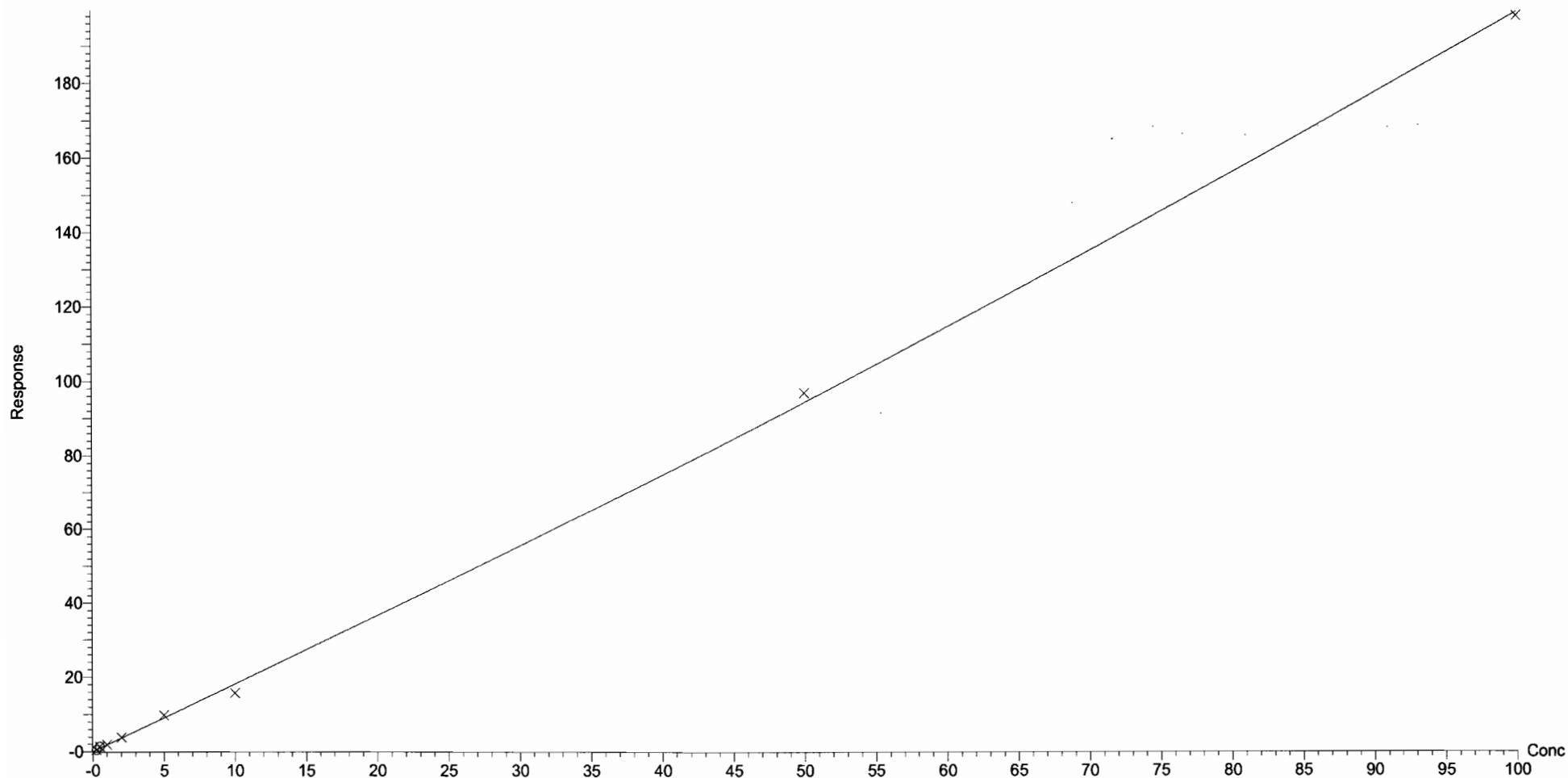
Compound name: N-MeFOSAA

Coefficient of Determination:  $R^2 = 0.998596$

Calibration curve:  $0.00208873 * x^2 + 1.78603 * x + 0.0609171$

Response type: Internal Std ( Ref 32 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

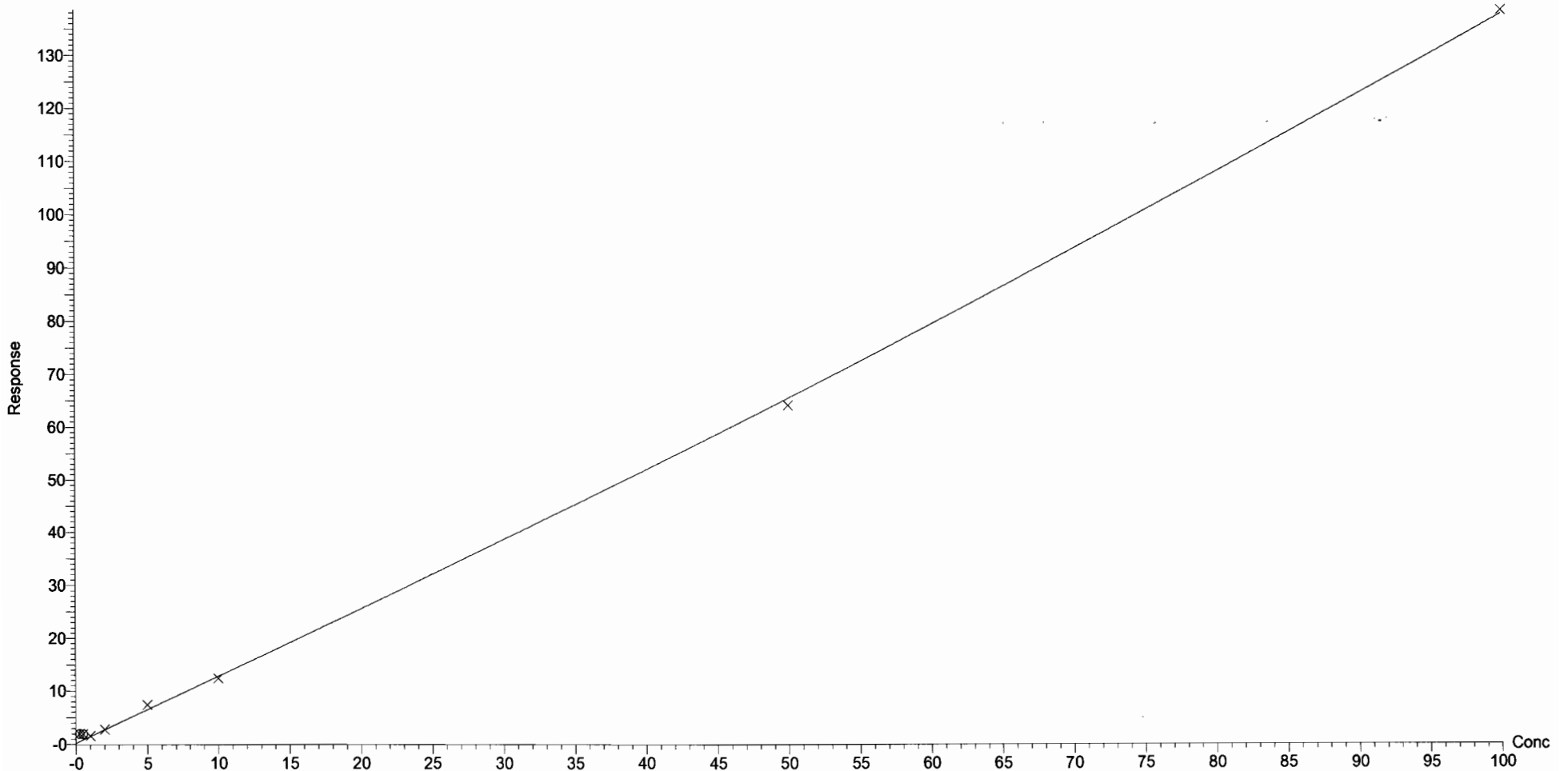


Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

Compound name: N-EtFOSAA  
Coefficient of Determination:  $R^2 = 0.998967$   
Calibration curve:  $0.00139323 * x^2 + 1.23678 * x + 0.25577$   
Response type: Internal Std ( Ref 33 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None





Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

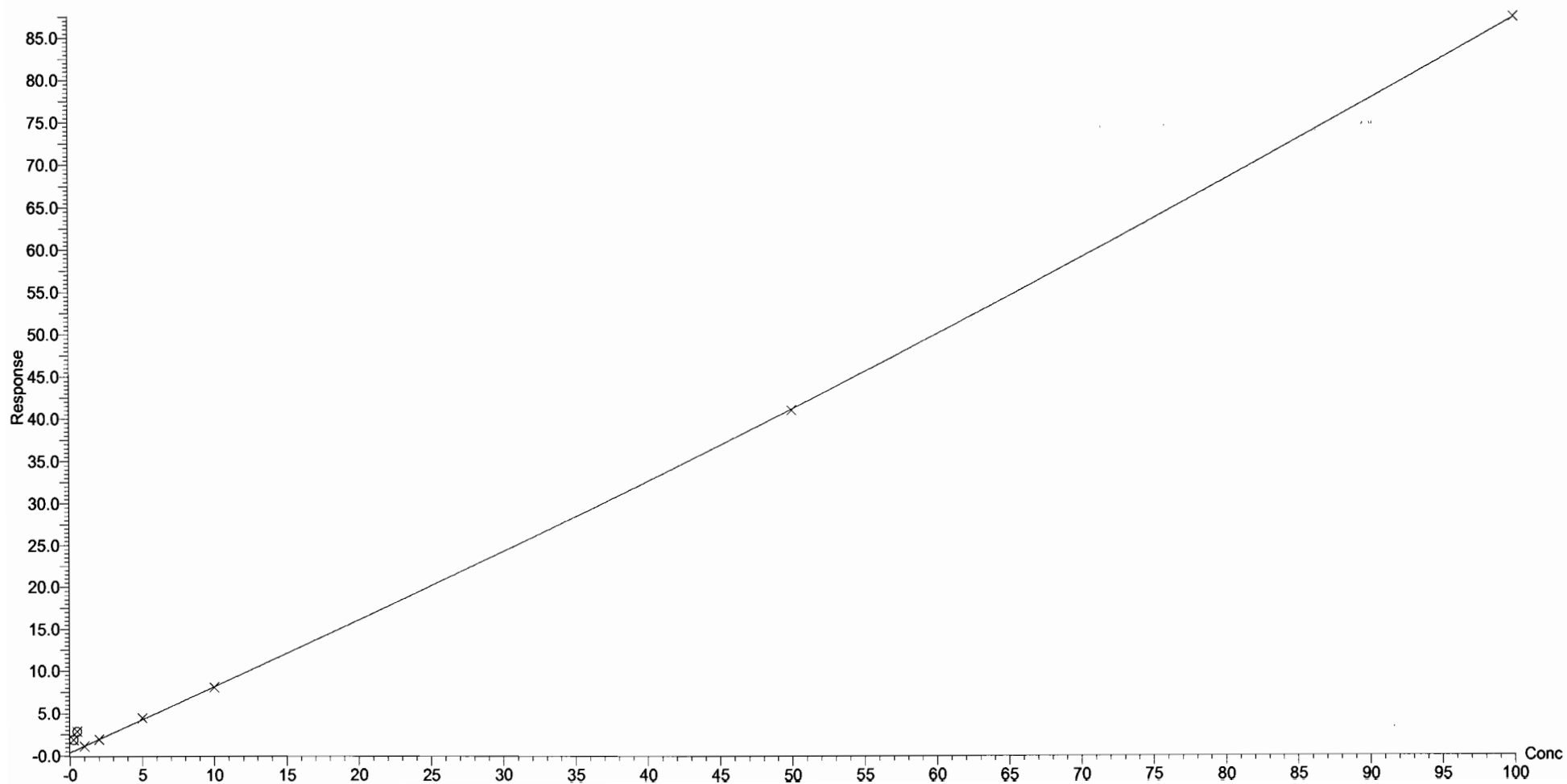
Compound name: PFD<sub>o</sub>A

Coefficient of Determination:  $R^2 = 0.999928$

Calibration curve:  $0.00107952 * x^2 + 0.763002 * x + 0.393827$

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

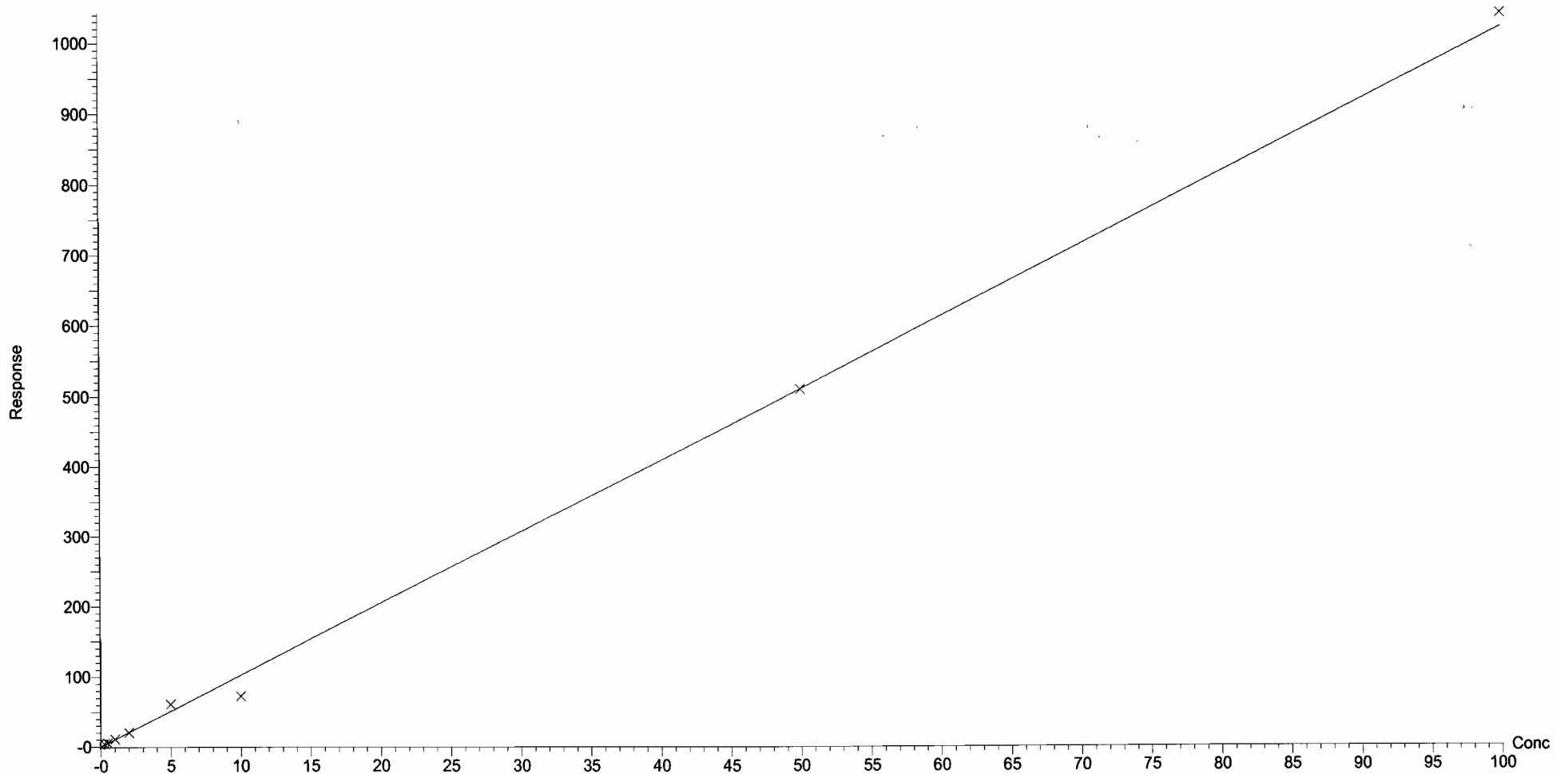
Compound name: PFT<sub>r</sub>DA

Correlation coefficient:  $r = 0.996483$ ,  $r^2 = 0.992978$

Calibration curve:  $10.23 * x + -0.0503443$

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

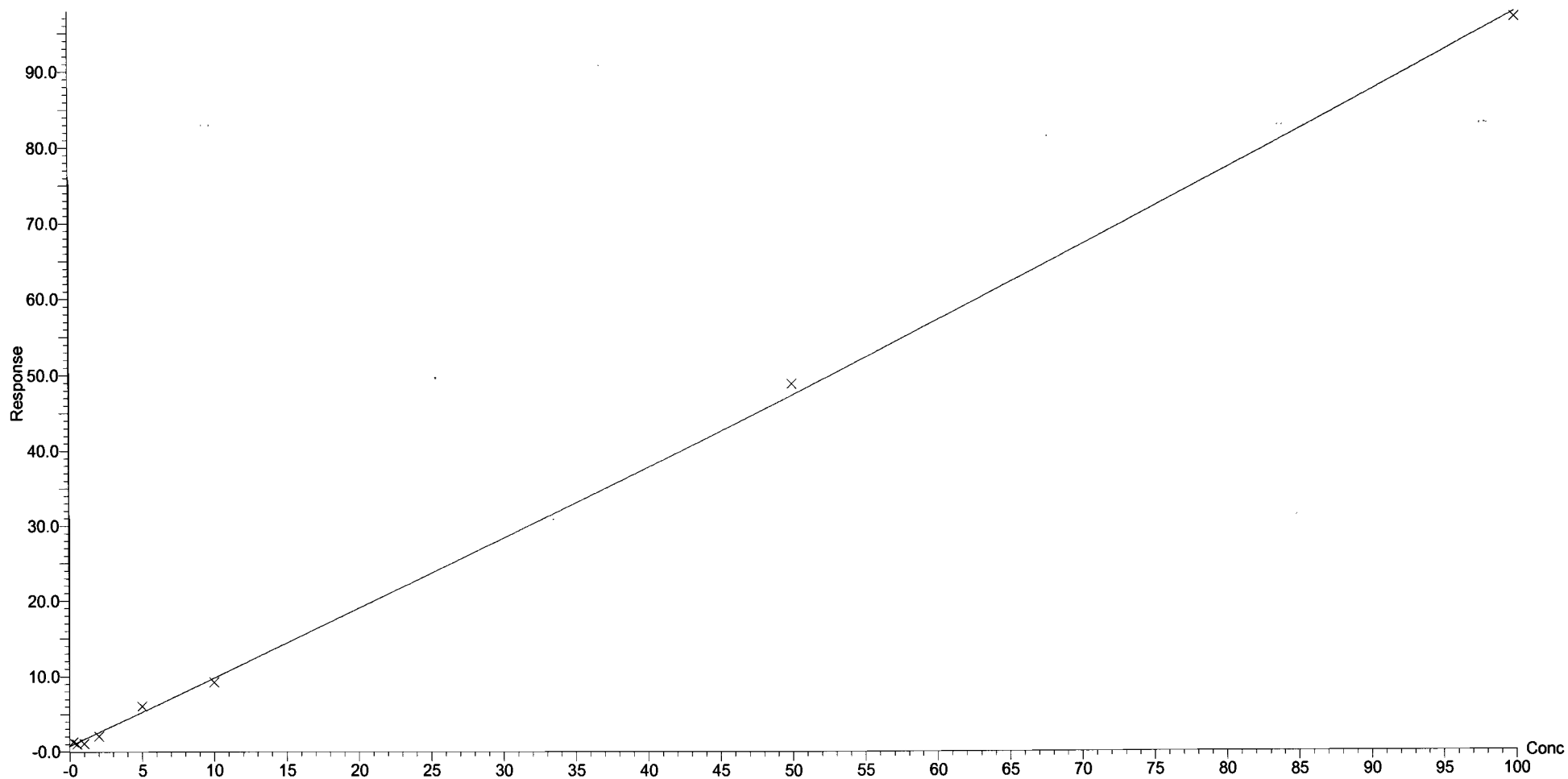


Dataset: U:\Q4.PRO\results\170607M4\170607M4-CRV-L18.qld

Last Altered: Friday, June 09, 2017 07:00:40 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 10:51:49 Pacific Daylight Time

Compound name: PFTeDA  
Coefficient of Determination:  $R^2 = 0.992489$   
Calibration curve:  $0.000760925 * x^2 + 0.895427 * x + 0.750431$   
Response type: Internal Std ( Ref 35 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



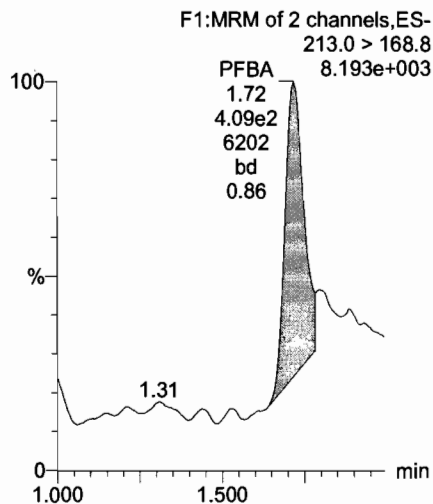
Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

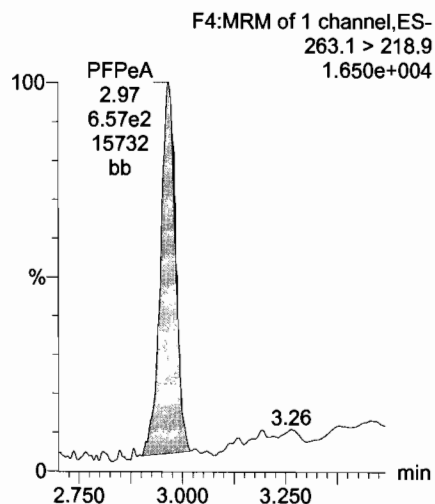
Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11  
Calibration: 14 Jun 2017 11:41:44

Name: 170607M4\_2, Date: 07-Jun-2017, Time: 21:15:21, ID: ST170607M4-1 PFC CS-2 17F0719, Description: PFC CS-2 17F0719

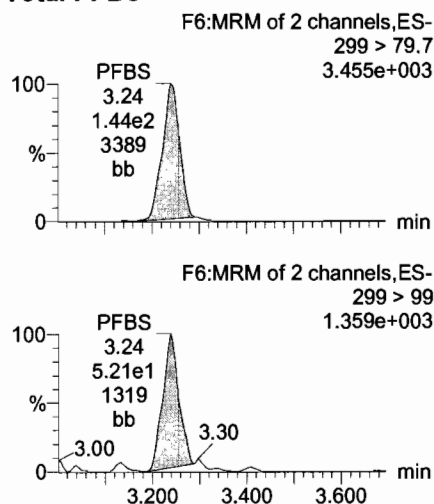
**PFBA**



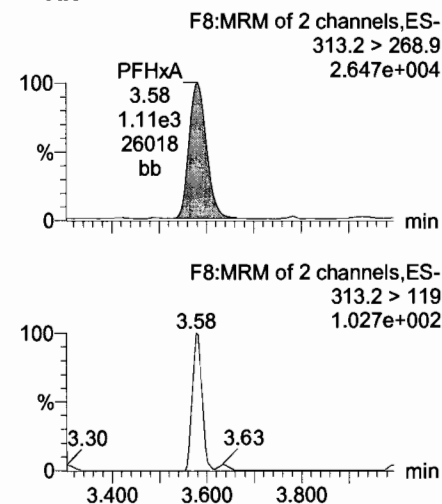
**PFPeA**



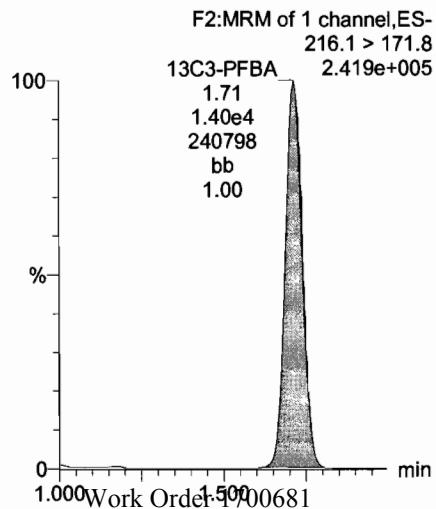
**Total PFBS**



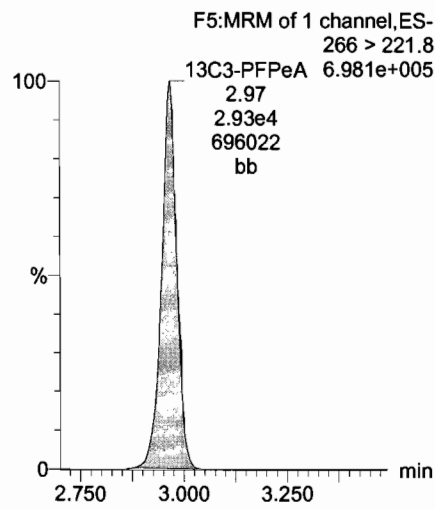
**PFHxA**



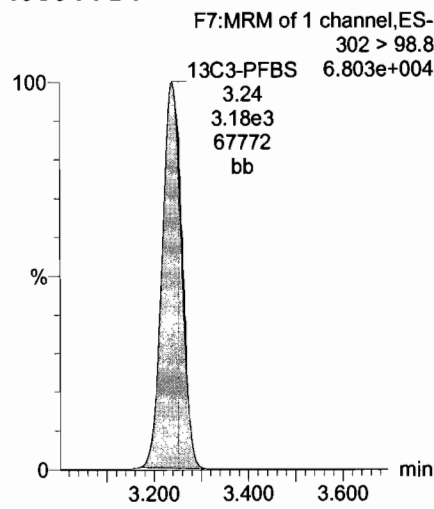
**13C3-PFBA**



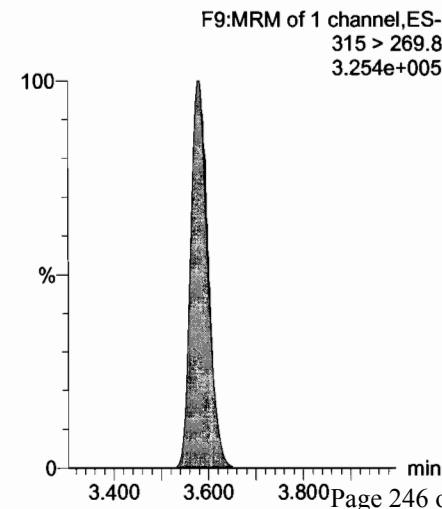
**13C3-PFPeA**

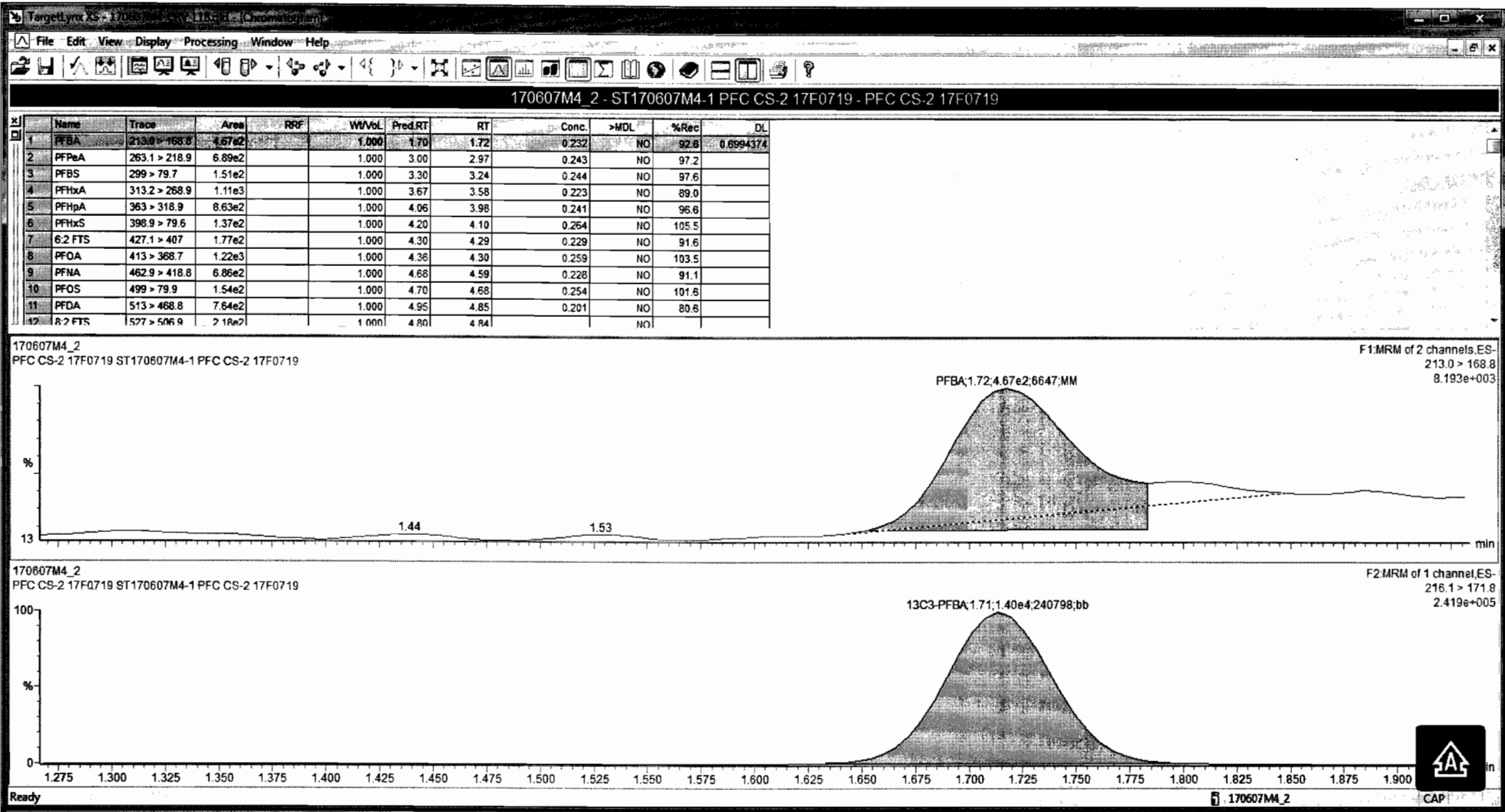


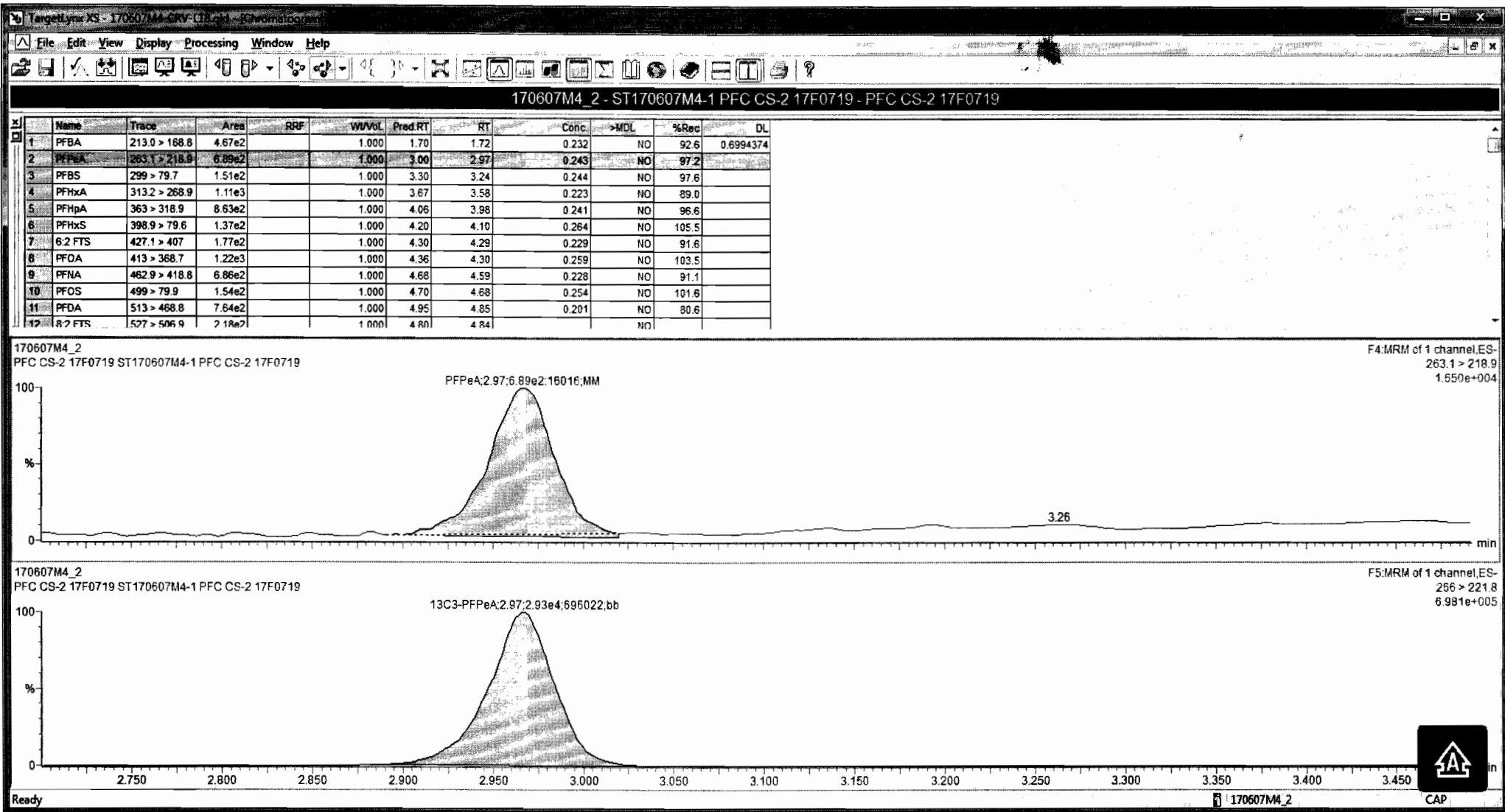
**13C3-PFBS**

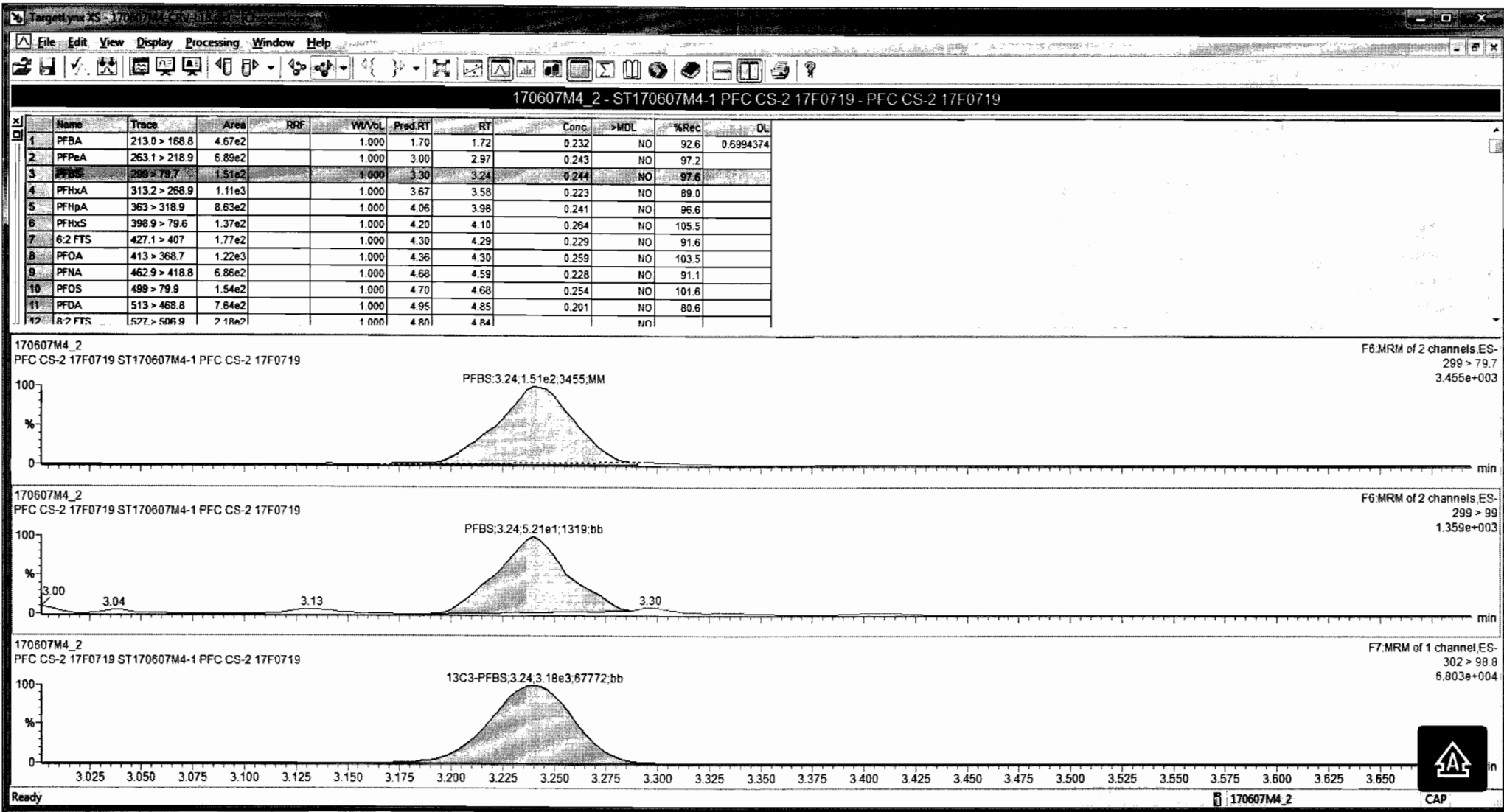


**13C2-PFHxA**







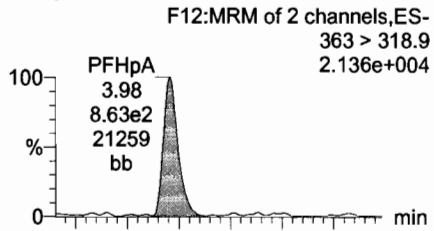


Dataset: Untitled

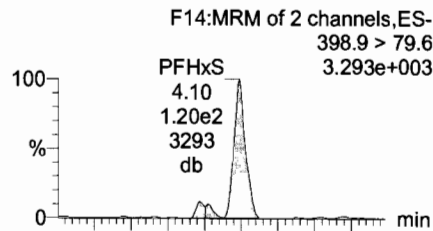
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_2, Date: 07-Jun-2017, Time: 21:15:21, ID: ST170607M4-1 PFC CS-2 17F0719, Description: PFC CS-2 17F0719

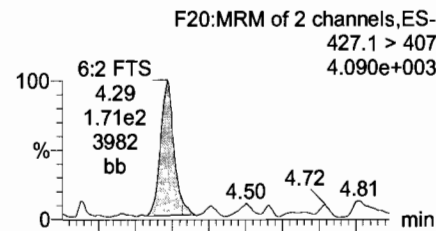
**PFHpA**



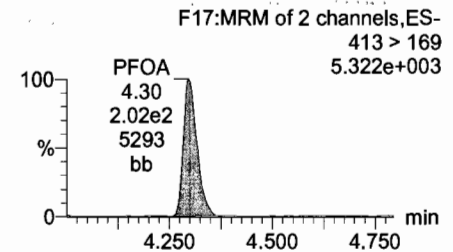
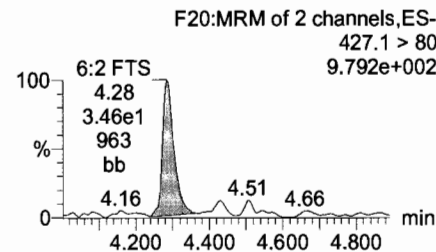
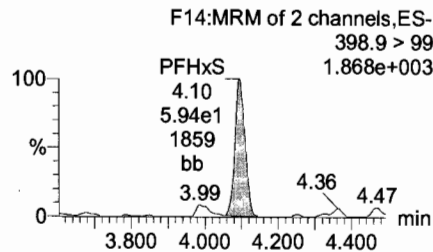
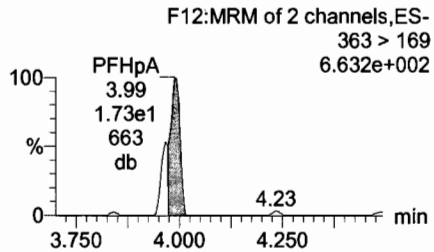
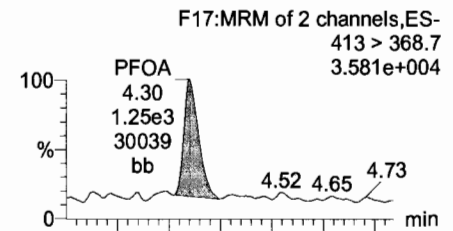
**Total PFHxS**



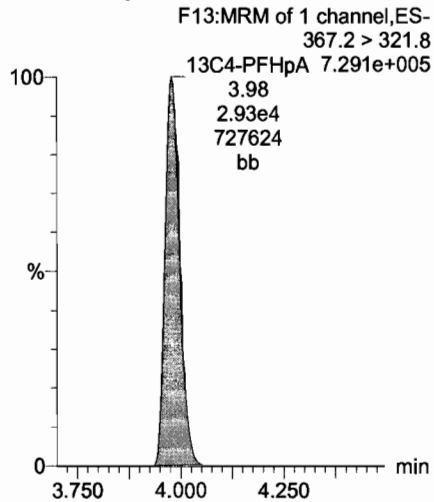
**6:2 FTS**



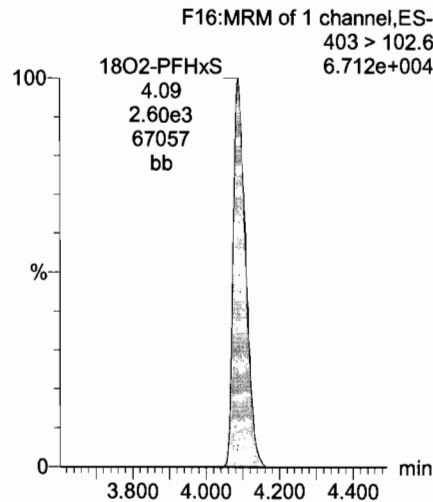
**Total PFOA**



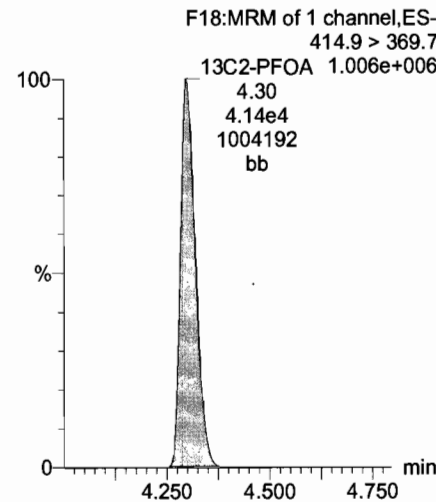
**13C4-PFHpA**



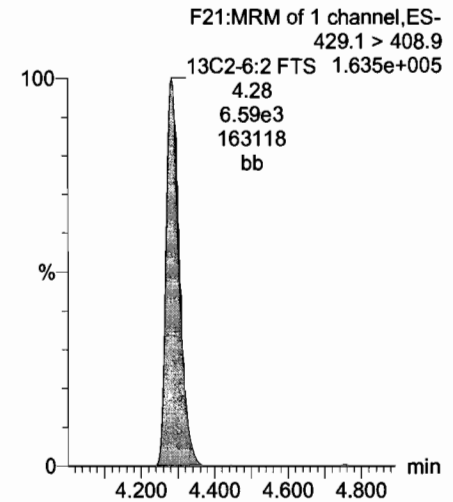
**18O2-PFHxS**



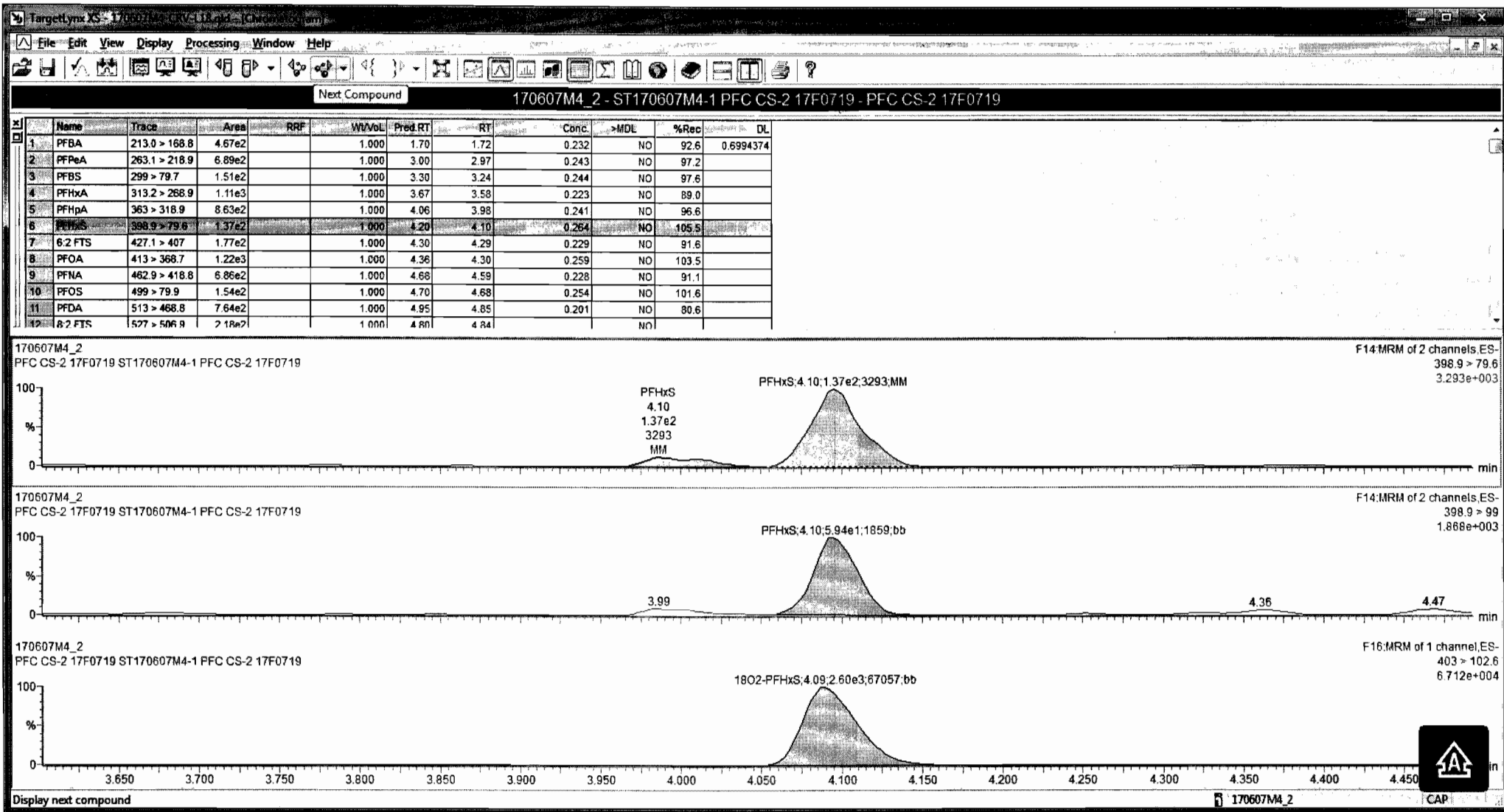
**13C2-PFOA**

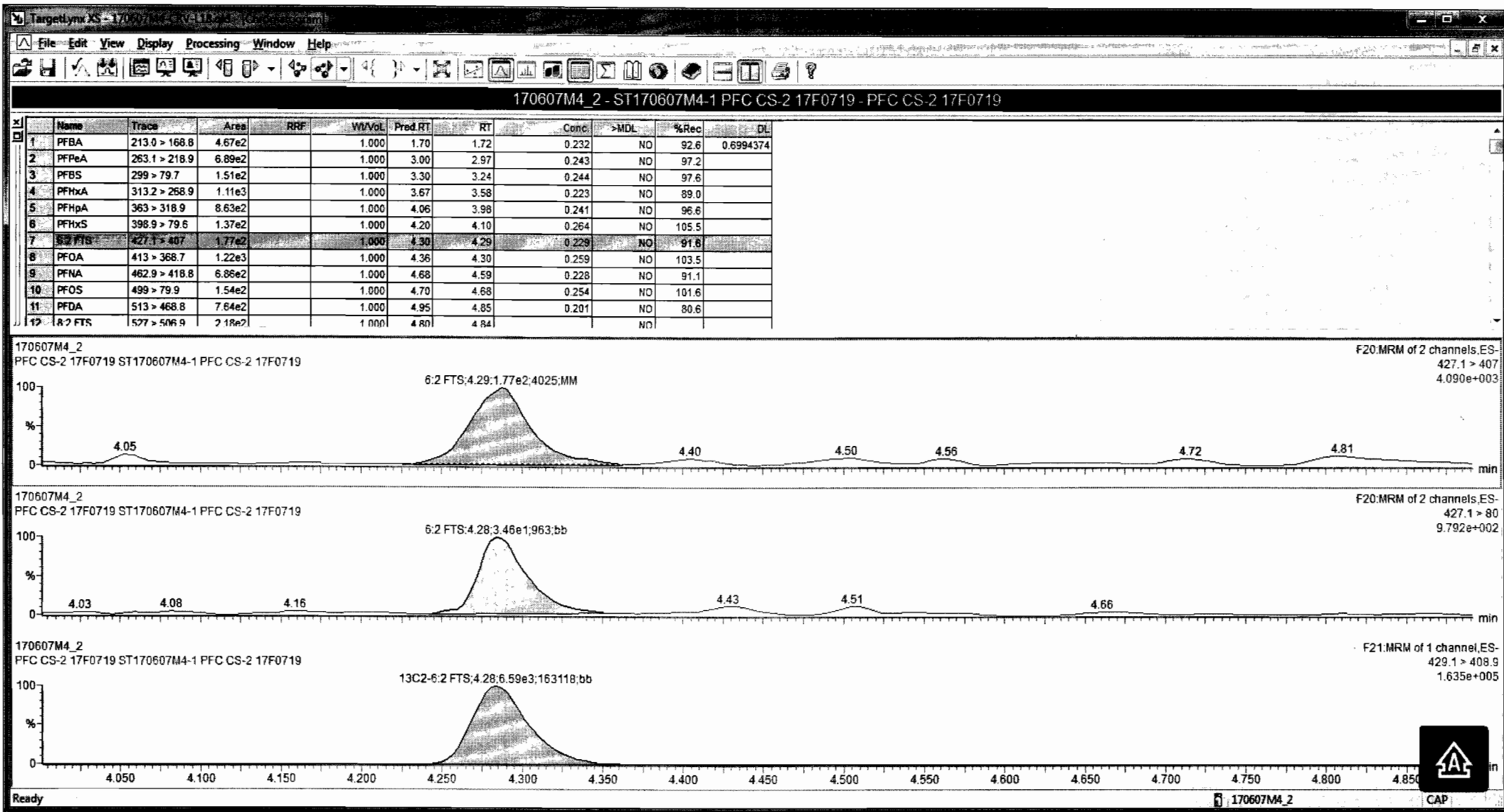


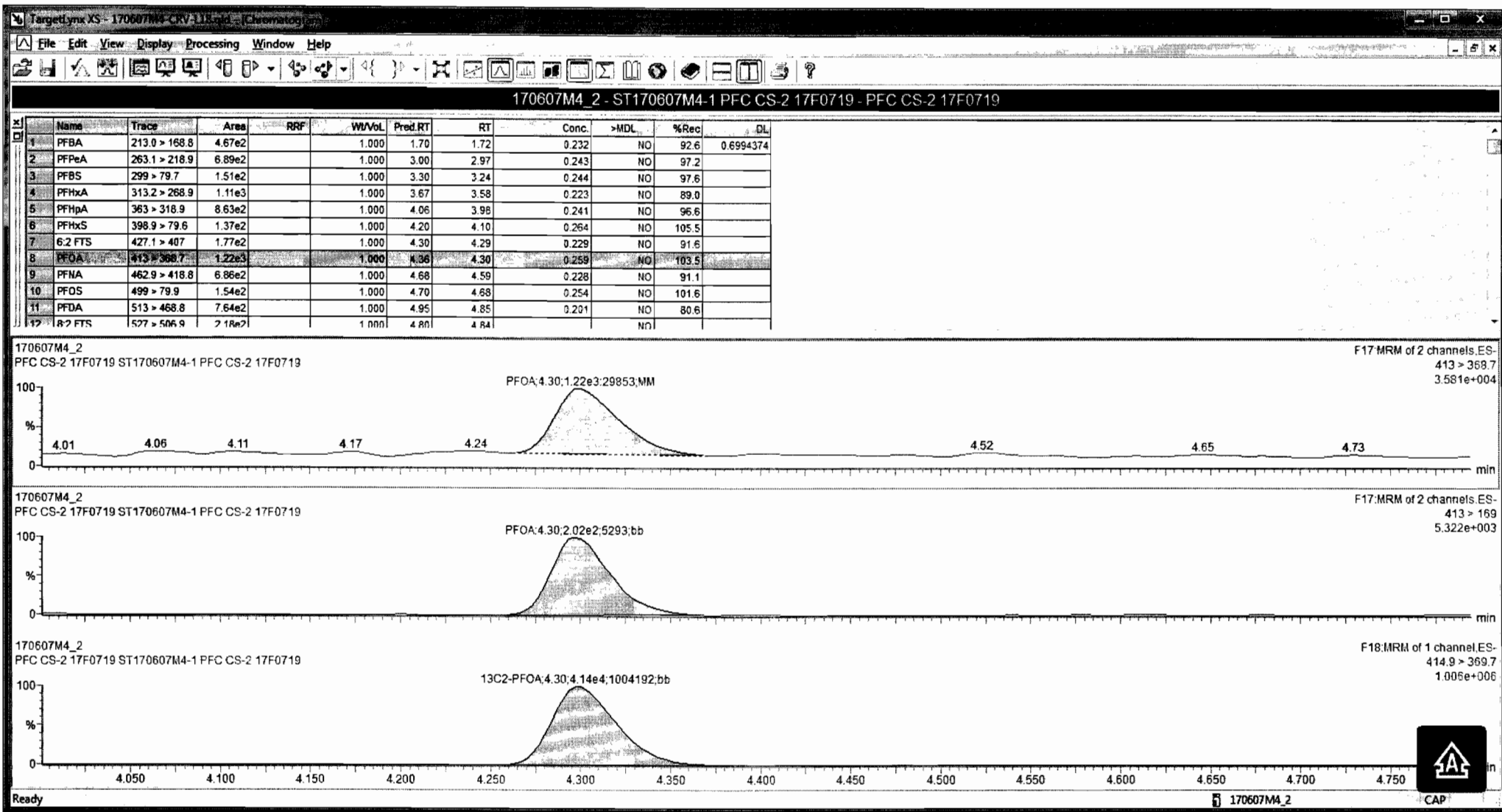
**13C2-6:2 FTS**









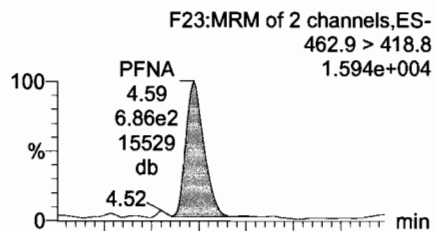


Dataset: Untitled

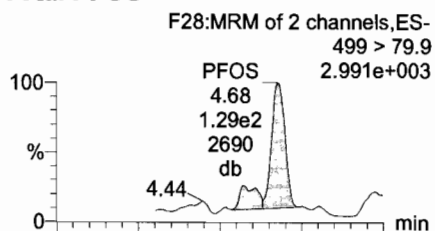
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_2, Date: 07-Jun-2017, Time: 21:15:21, ID: ST170607M4-1 PFC CS-2 17F0719, Description: PFC CS-2 17F0719

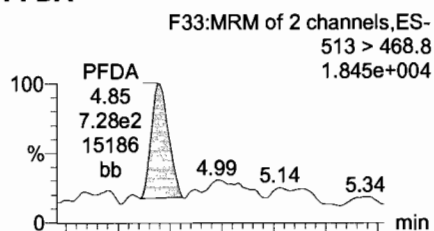
**PFNA**



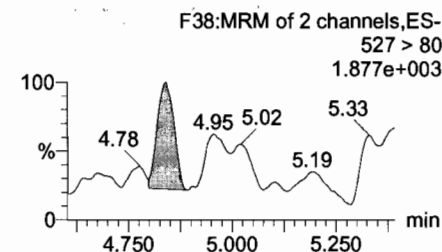
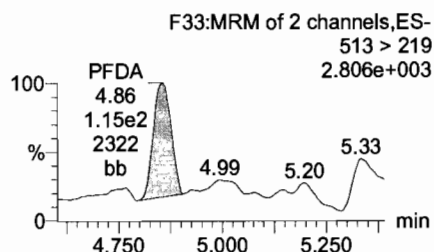
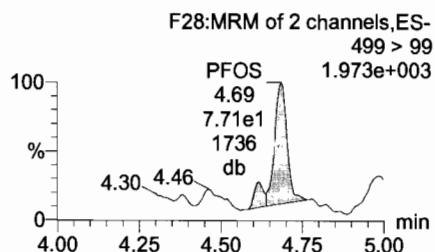
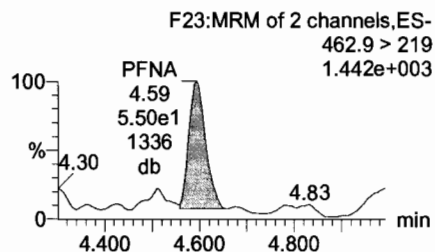
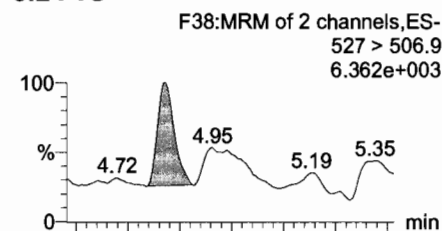
**Total PFOS**



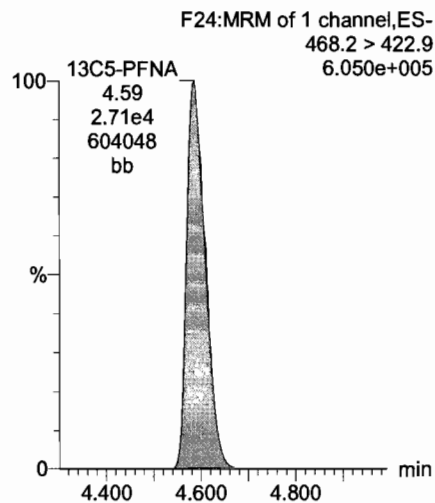
**PFDA**



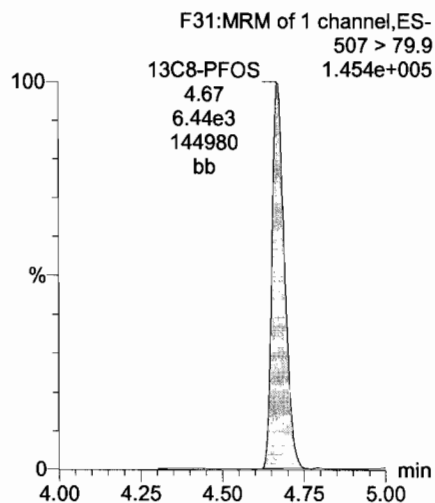
**8:2 FTS**



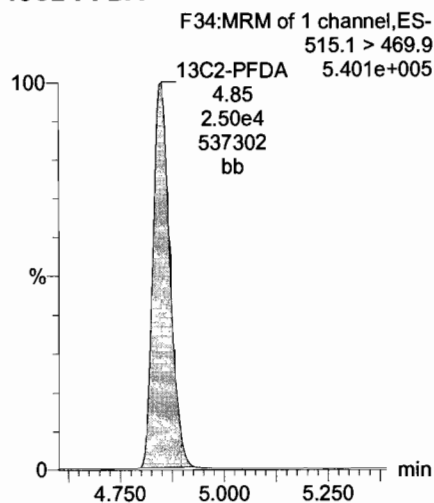
**13C5-PFNA**



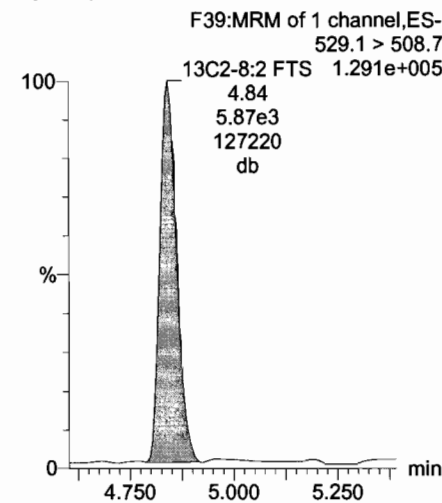
**13C8-PFOS**

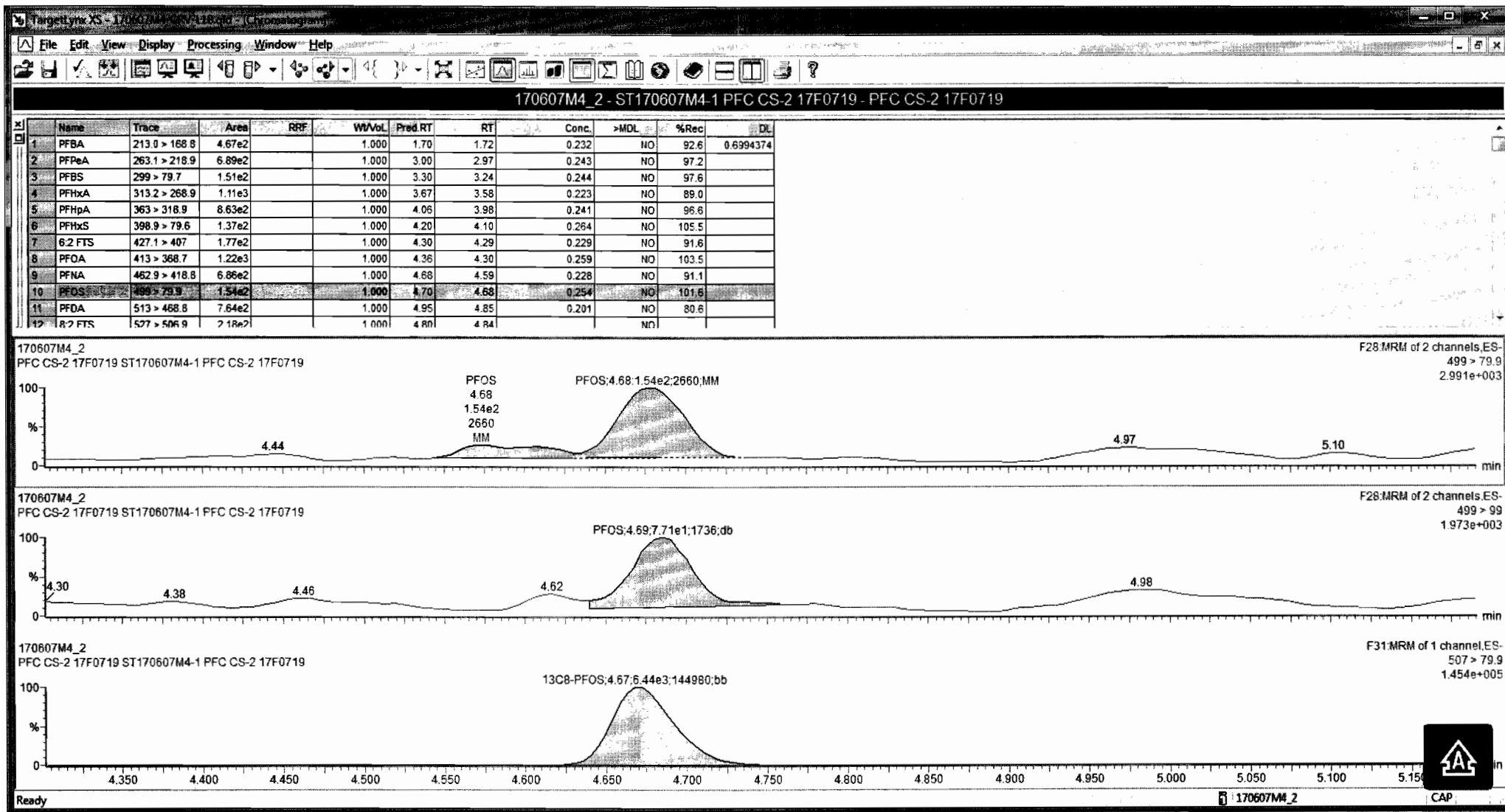


**13C2-PFDA**



**13C2-8:2 FTS**



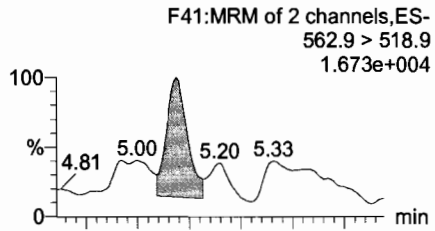


Dataset: Untitled

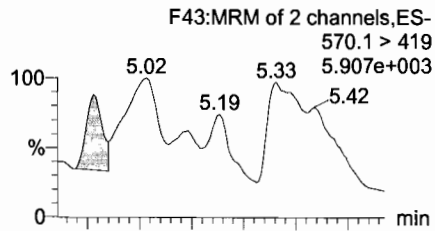
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_2, Date: 07-Jun-2017, Time: 21:15:21, ID: ST170607M4-1 PFC CS-2 17F0719, Description: PFC CS-2 17F0719

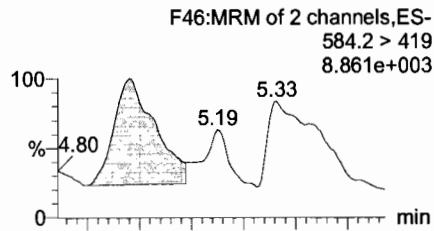
**PFUnA**



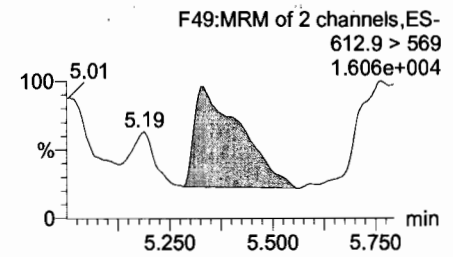
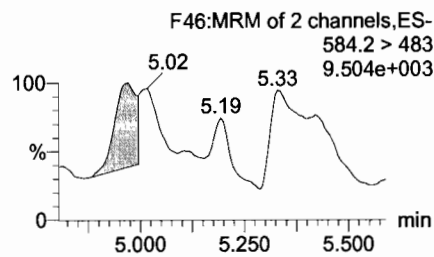
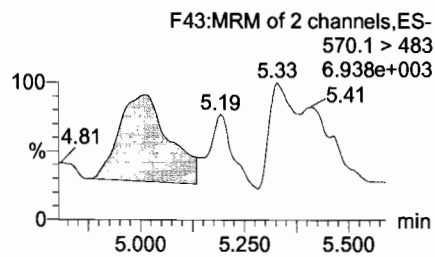
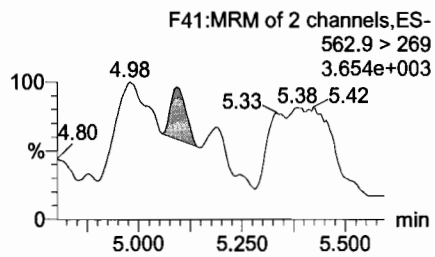
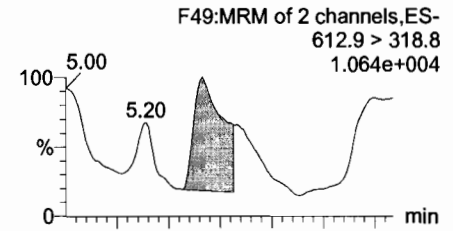
**N-MeFOSAA**



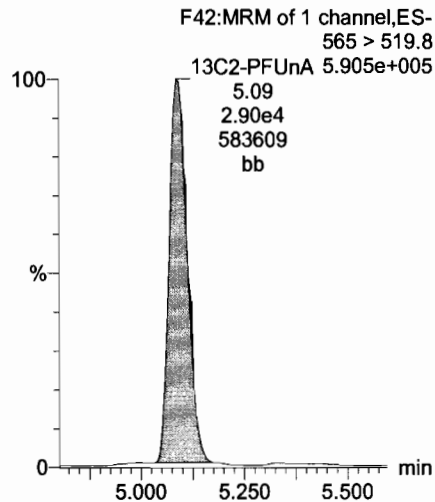
**N-EtFOSAA**



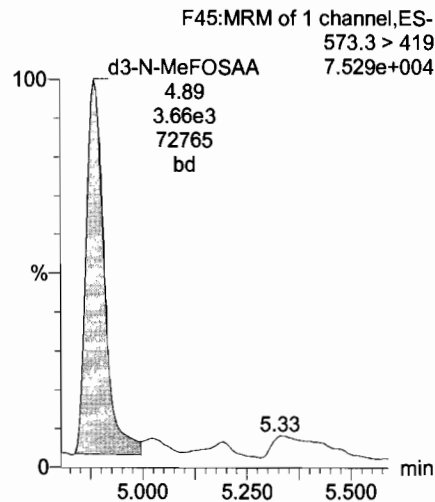
**PFDoA**



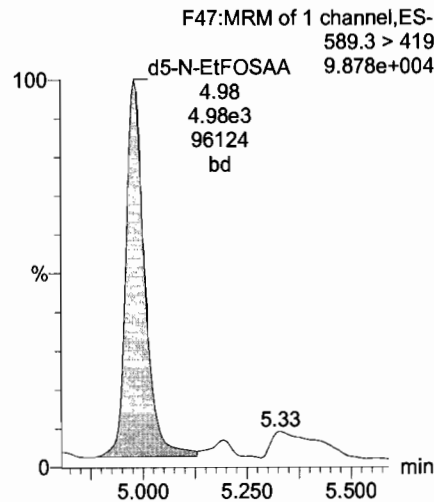
**13C2-PFUnA**



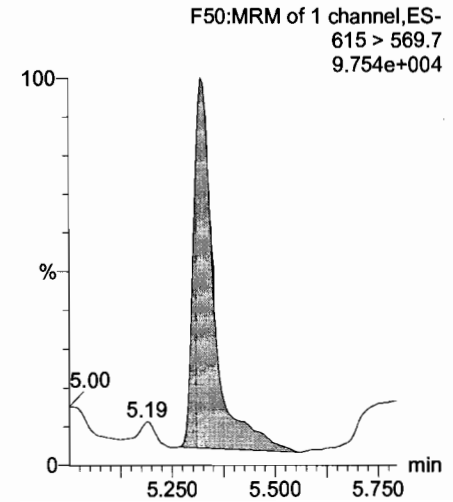
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**

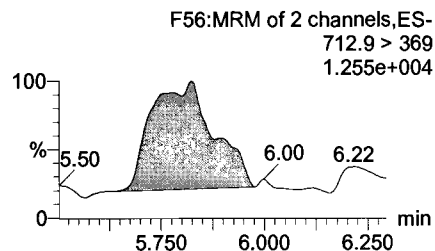
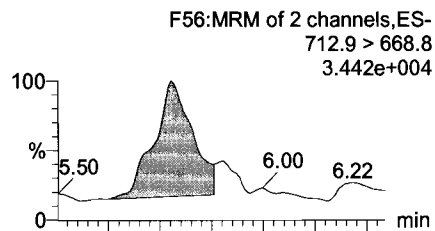


Dataset: Untitled

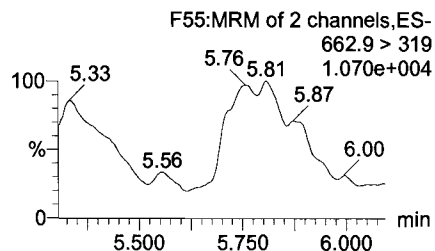
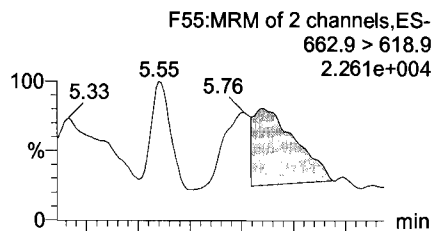
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_2, Date: 07-Jun-2017, Time: 21:15:21, ID: ST170607M4-1 PFC CS-2 17F0719, Description: PFC CS-2 17F0719

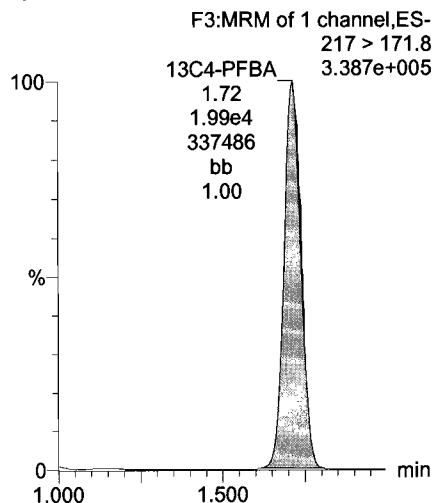
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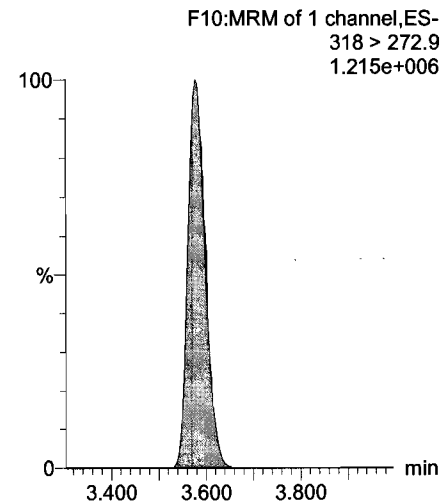
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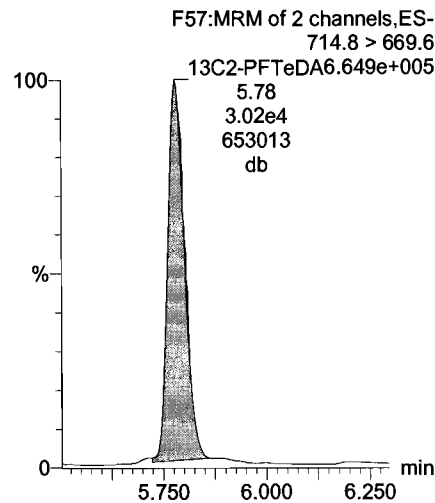
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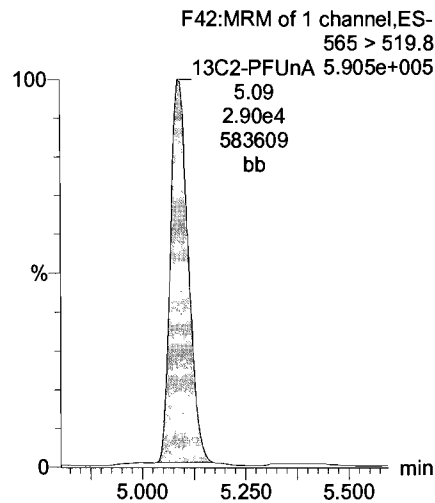
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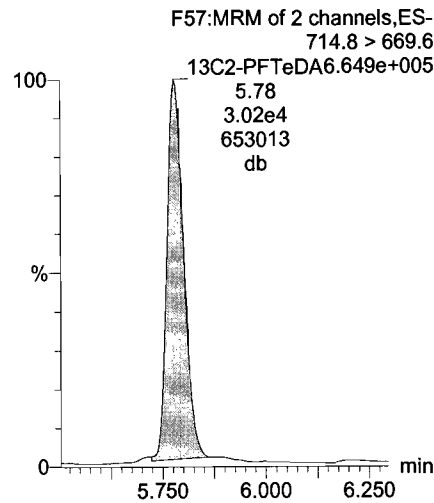
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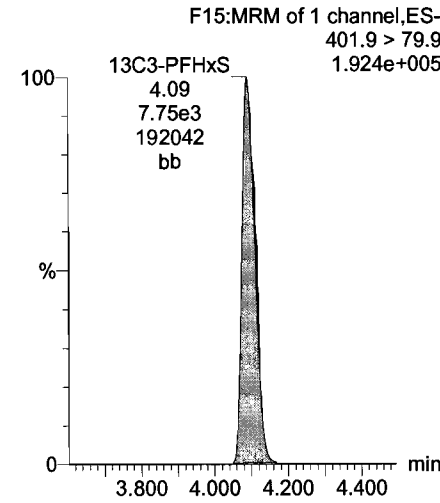
**13C2-PFUa**



**13C2-PFTeDA**



**13C3-PFHxS**

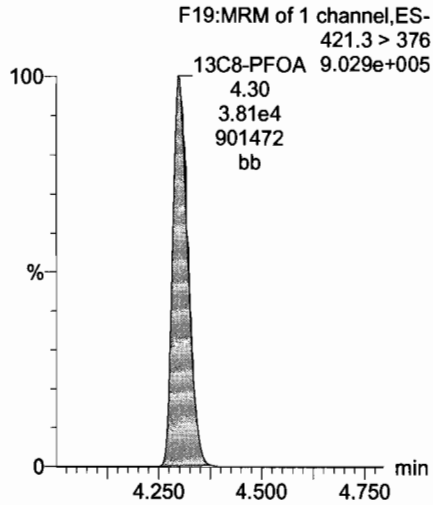


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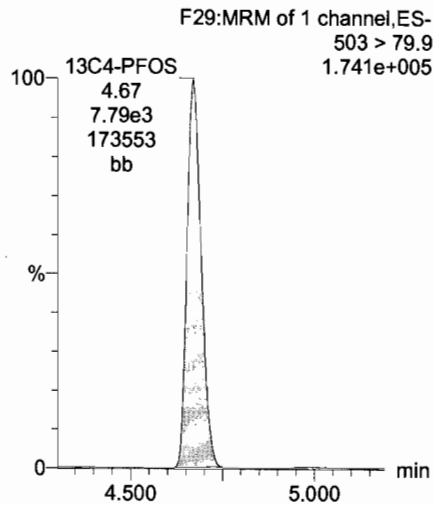
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_2, Date: 07-Jun-2017, Time: 21:15:21, ID: ST170607M4-1 PFC CS-2 17F0719, Description: PFC CS-2 17F0719

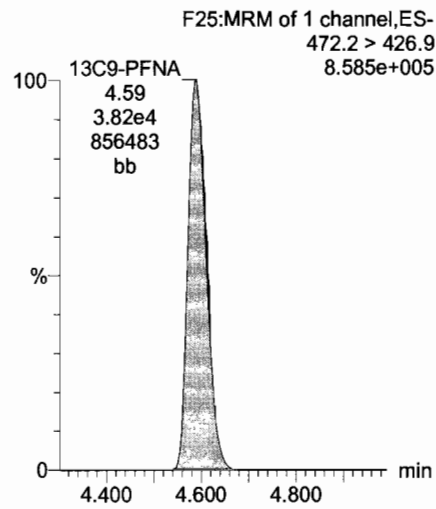
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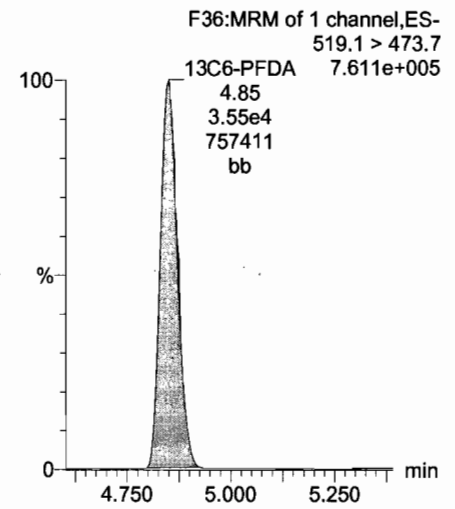
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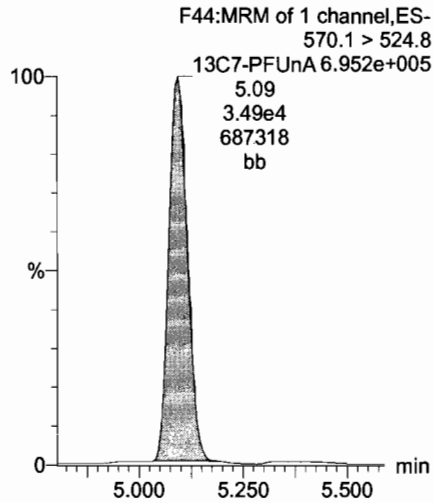
13C9-PFNA



13C6-PFDA



13C7-PFUnA



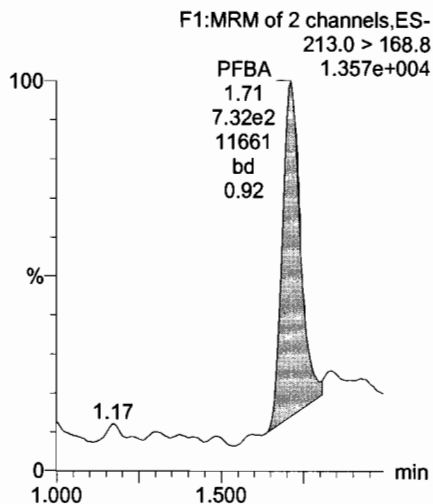


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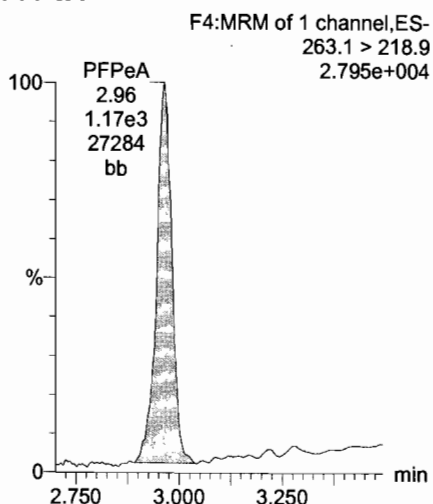
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_3, Date: 07-Jun-2017, Time: 21:26:32, ID: ST170607M4-2 PFC CS-1 17F0718, Description: PFC CS-1 17F0718

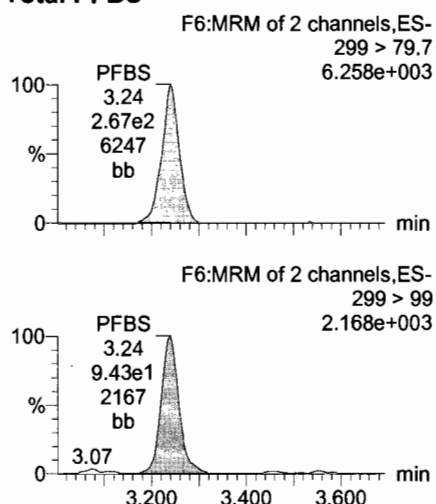
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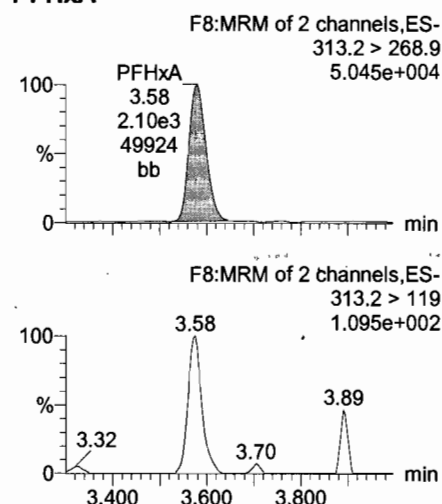
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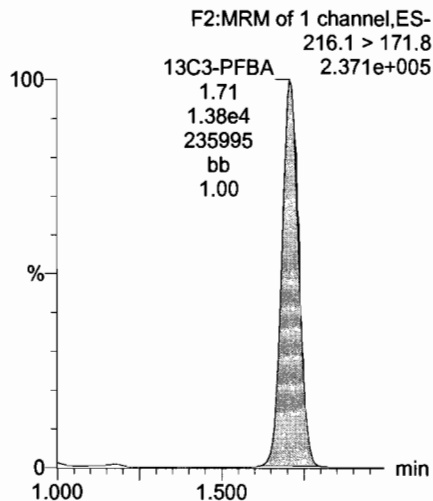
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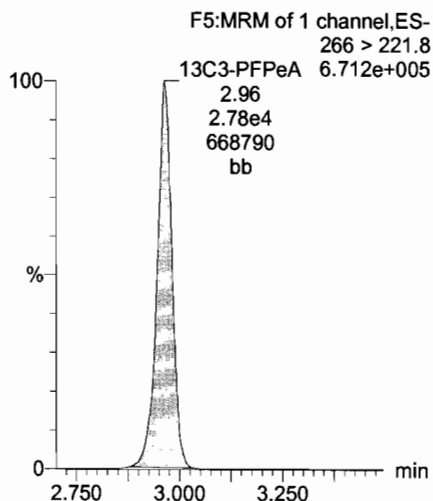
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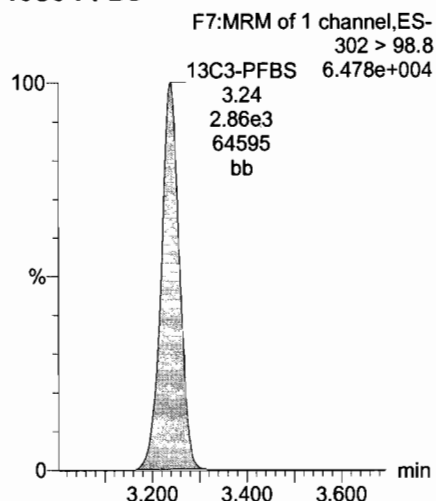
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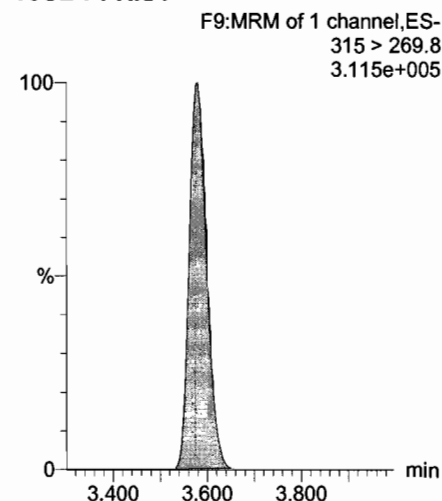
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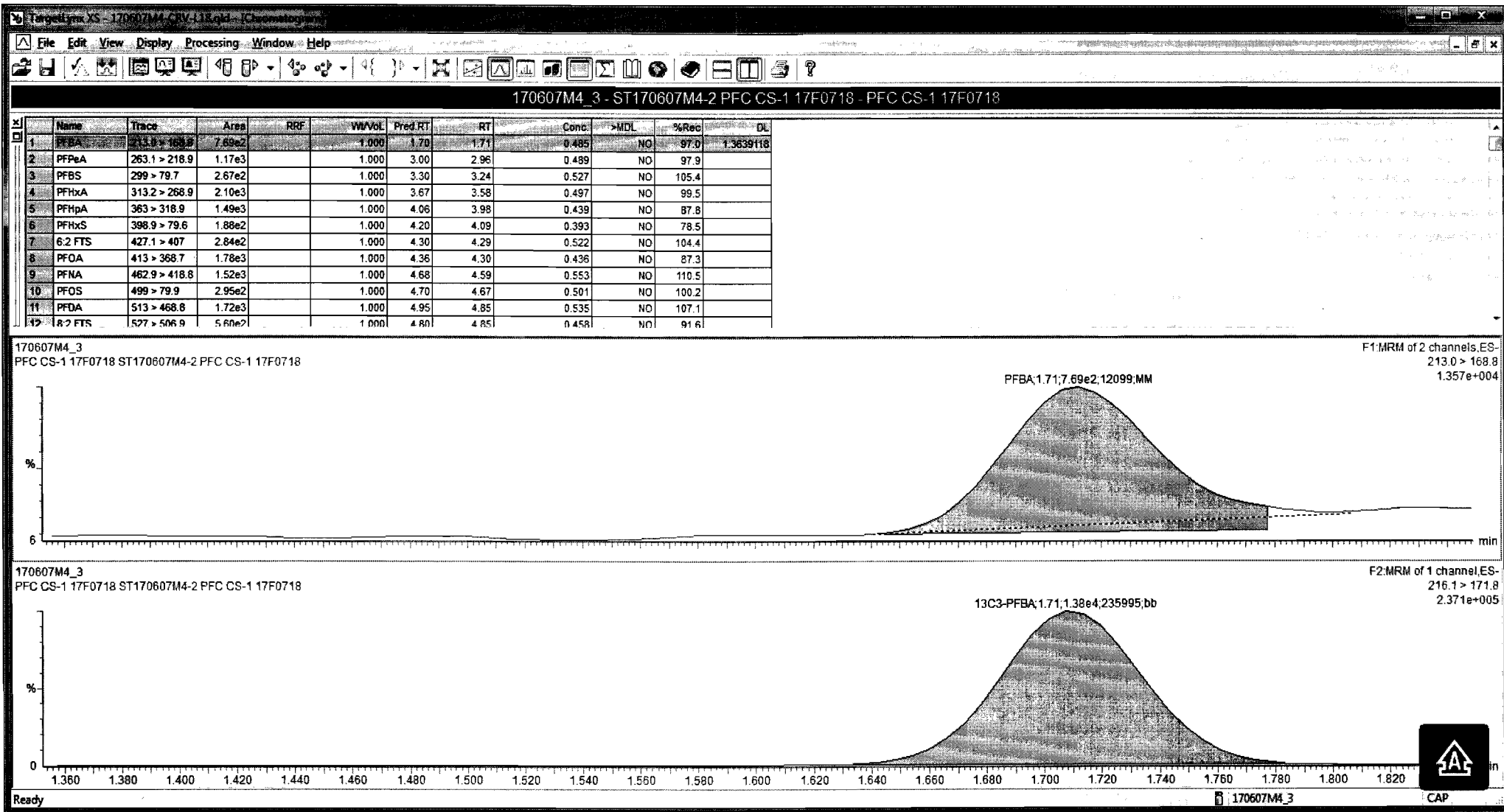


**13C3-PFBS**



**13C2-PFHxA**



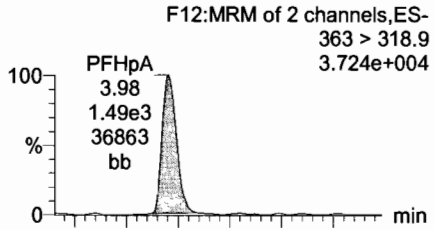


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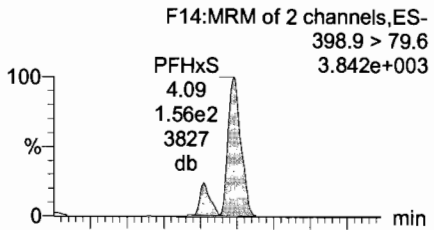
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_3, Date: 07-Jun-2017, Time: 21:26:32, ID: ST170607M4-2 PFC CS-1 17F0718, Description: PFC CS-1 17F0718

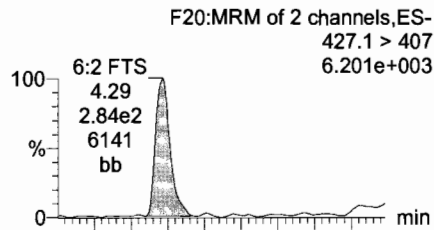
**PFHpA**



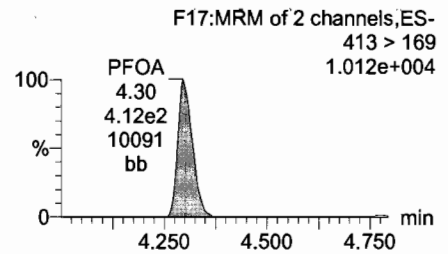
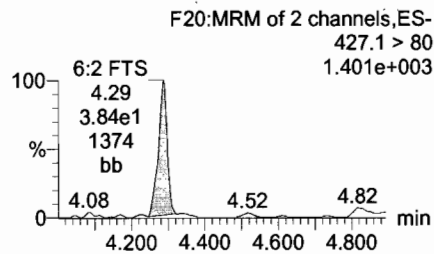
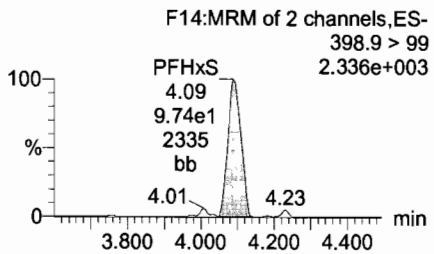
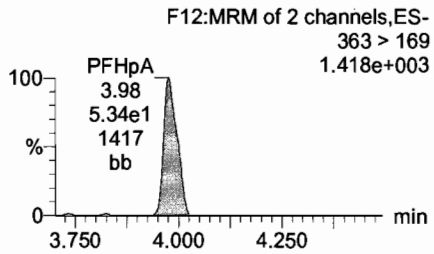
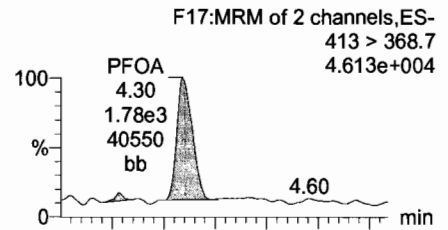
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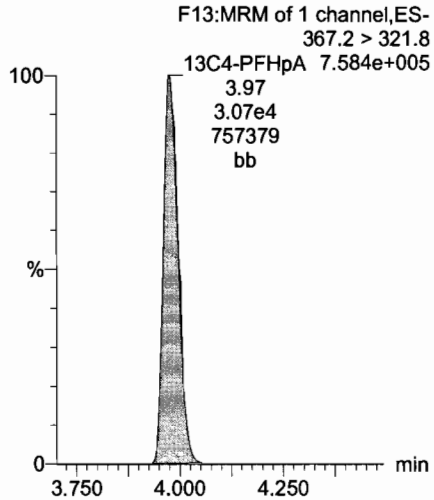
**6:2 FTS**



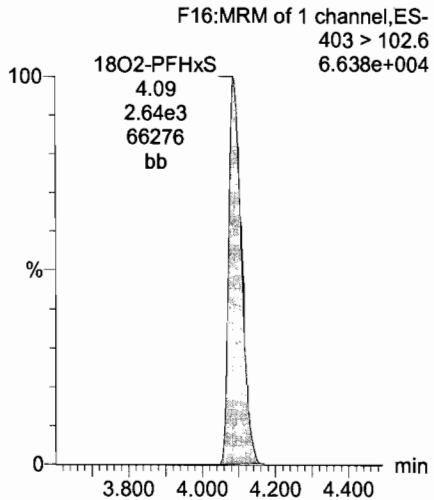
**Total PFOA**



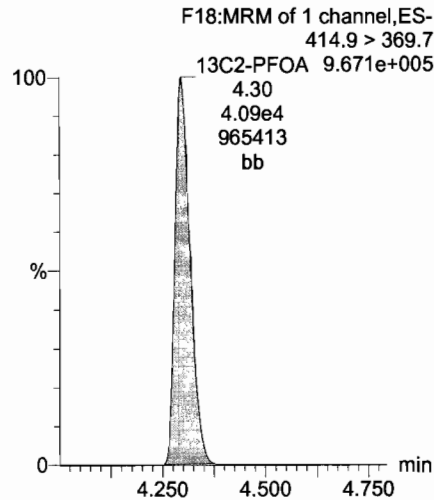
**13C4-PFHpA**



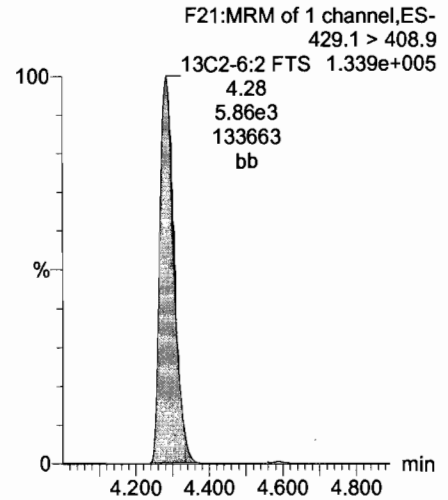
**18O2-PFHxS**



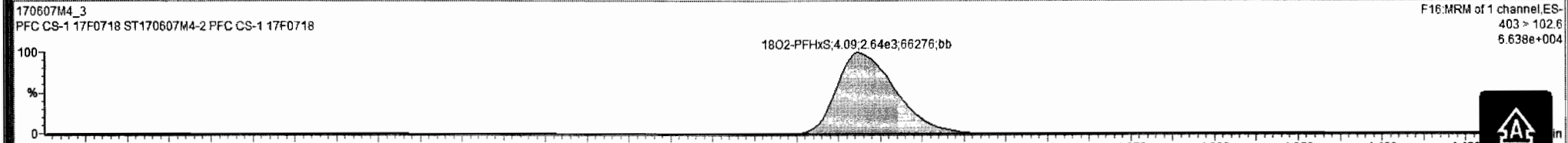
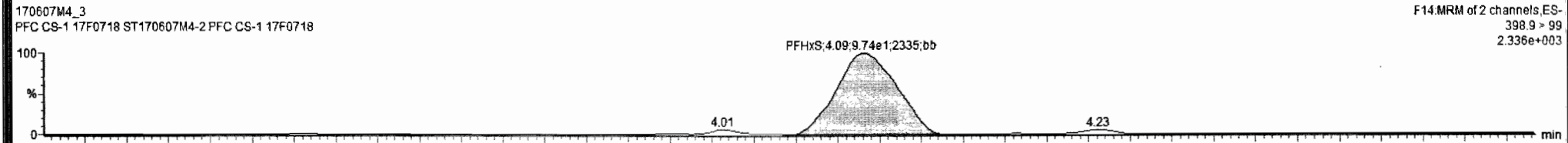
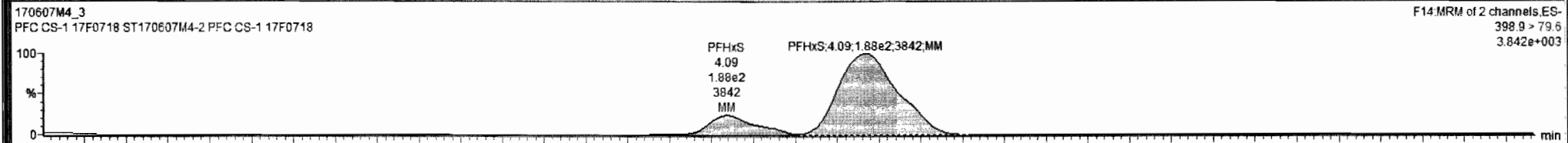
**13C2-PFOA**



**13C2-6:2 FTS**



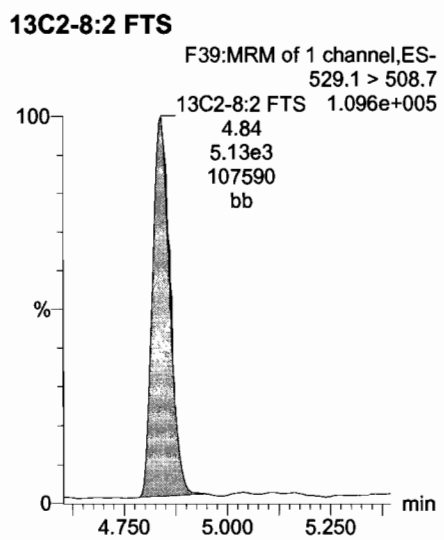
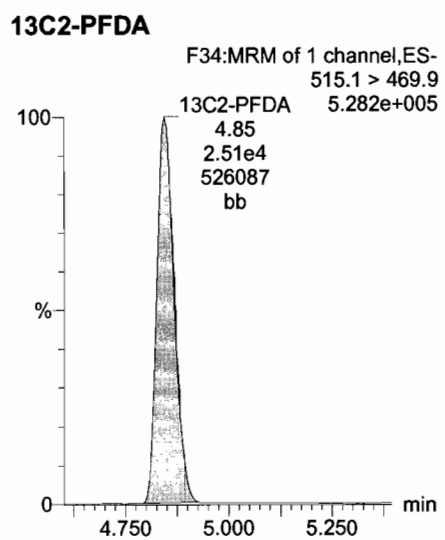
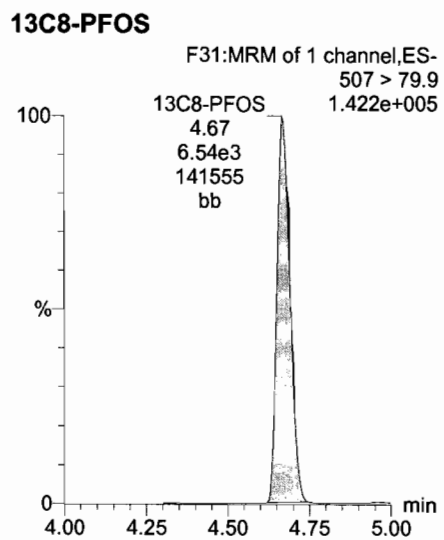
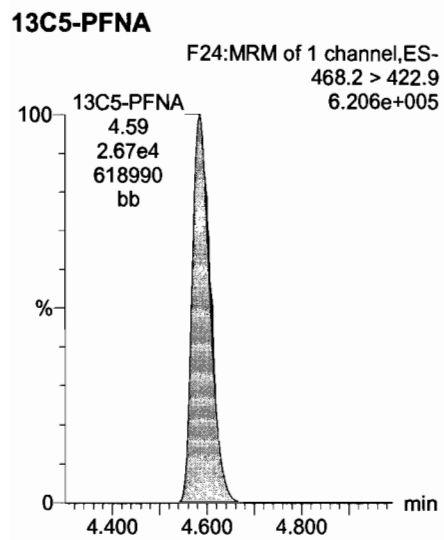
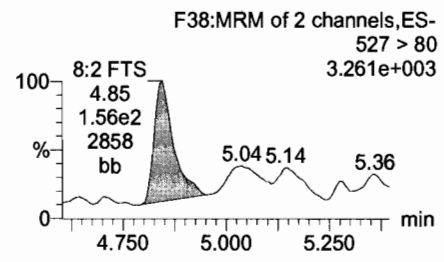
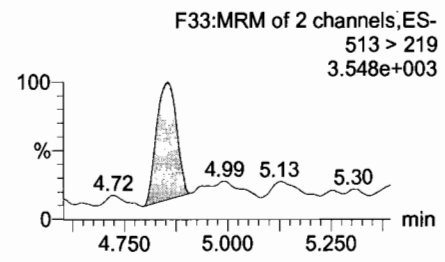
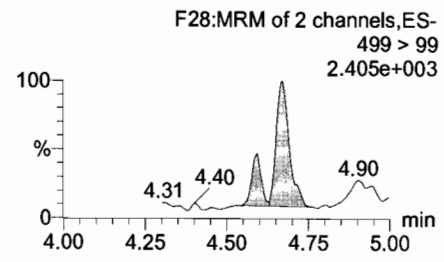
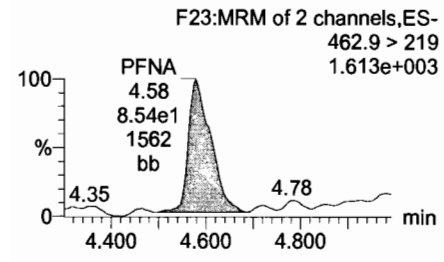
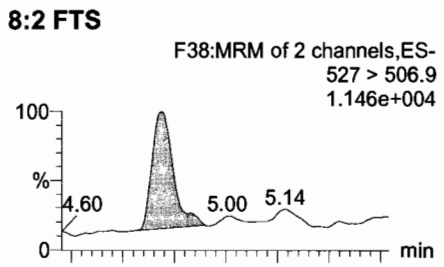
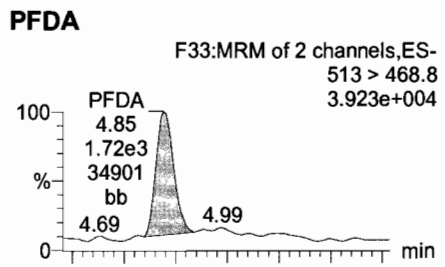
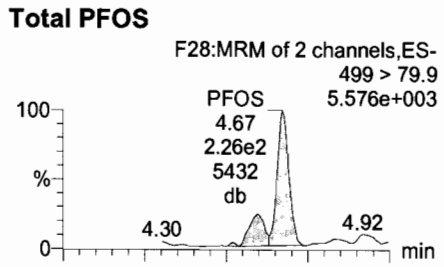
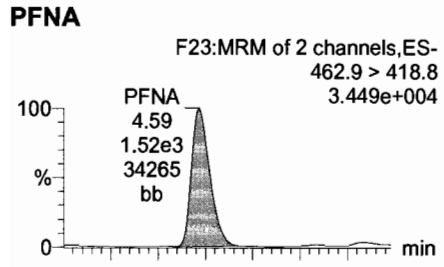
Name	Conc.	DL	%Rec	EMPC	Abs.Resp	RRF	RT	#	IS#	RA	YN	RRT	Acq.Date	Acq.Time	1 <sup>st</sup> Chr.Noise	ID	Sample Text	Factor1	SW1	Cal.File	>MDL
1 PFBA	0.48488149	1.36	97.0		7.693e2		1.71	1	19			0.000	07-Jun-17	21:26:32		ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
2 PFPeA	0.48934156		97.9		1.158e3		2.96	2	20			0.000	07-Jun-17	21:26:32		ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
3 PFBS	0.52706658		105.4		2.666e2		3.24	3	21	2.828	NO	0.000	07-Jun-17	21:26:32	0.000	ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
4 PFHxA	0.49749922		99.5		2.096e3		3.58	4	22			0.000	07-Jun-17	21:26:32	0.000	ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
5 PFHpA	0.43911961		87.8		1.487e3		3.98	5	23	27.860	NO	0.000	07-Jun-17	21:26:32	0.000	ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
6 PFHxS	0.38274545		78.5		1.883e2		4.09	6	24	1.934	NO	0.000	07-Jun-17	21:26:32	0.000	ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
7 6:2 FTS	0.52197081		104.4		2.840e2		4.29	7	25	7.405	NO	0.000	07-Jun-17	21:26:32	0.000	ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
8 PFOA	0.43632216		87.3		1.777e3		4.30	8	26	4.312	NO	0.000	07-Jun-17	21:26:32	0.000	ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
9 PFNA	0.55251833		110.5		1.522e3		4.59	9	27	17.831	NO	0.000	07-Jun-17	21:26:32	0.000	ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
10 PFOS	0.50094948		100.2		2.953e2		4.67	10	28	2.886	NO	0.000	07-Jun-17	21:26:32	0.000	ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
11 PFDA	0.53527691		107.1		1.721e3		4.85	11	29	9.990	NO	0.000	07-Jun-17	21:26:32	0.000	ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO
12 8:2 FTS	0.45824667		91.6		5.596e2		4.85	12	30	3.594	NO	0.000	07-Jun-17	21:26:32	0.000	ST170607M...	PFC CS-1 17F07...	1.0	1.00		NO

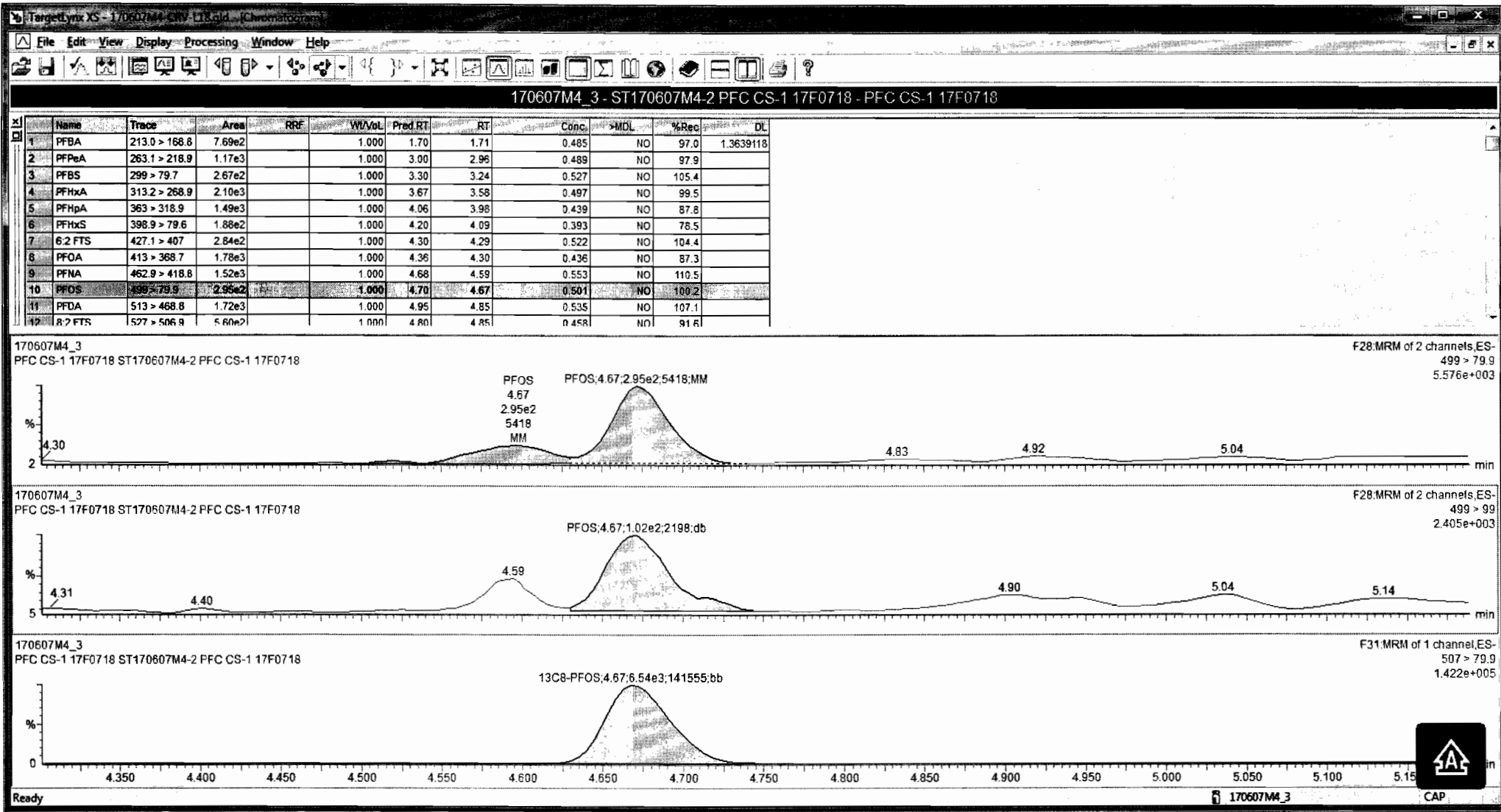


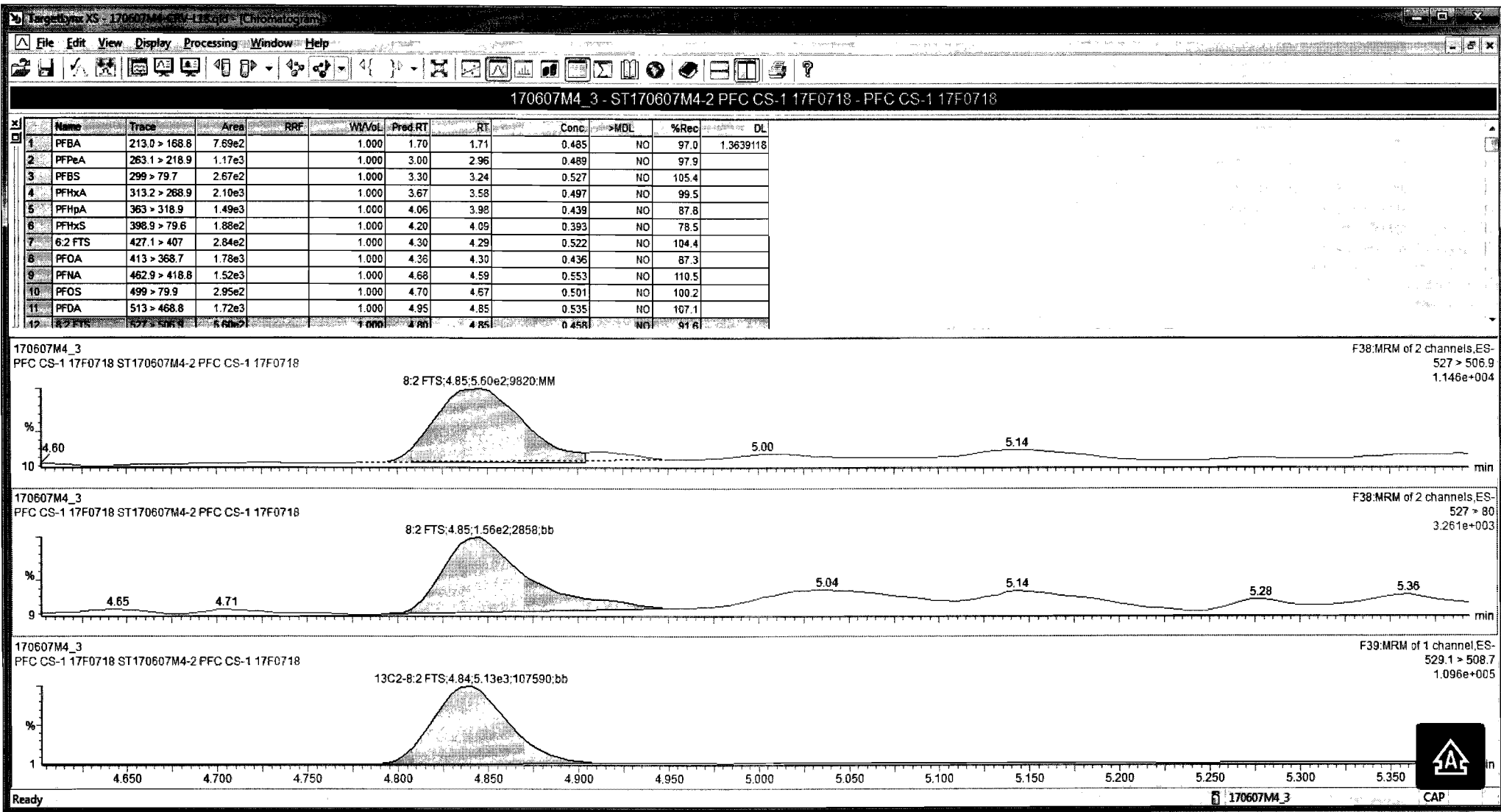
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Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_3, Date: 07-Jun-2017, Time: 21:26:32, ID: ST170607M4-2 PFC CS-1 17F0718, Description: PFC CS-1 17F0718





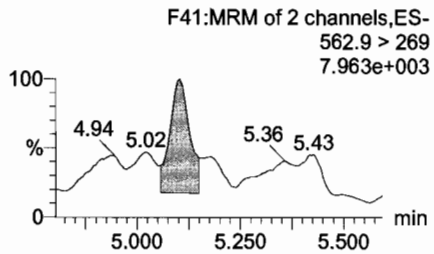
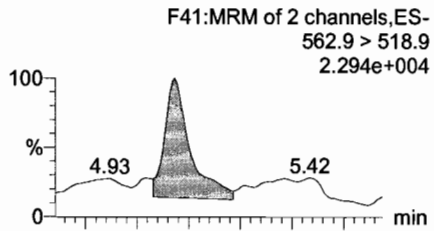


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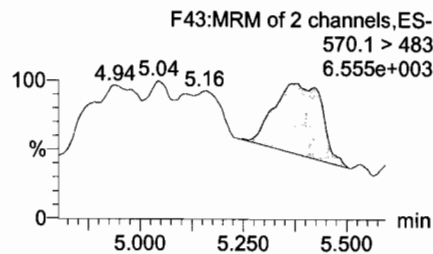
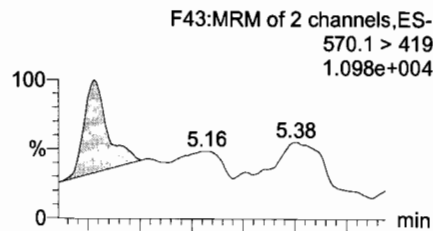
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_3, Date: 07-Jun-2017, Time: 21:26:32, ID: ST170607M4-2 PFC CS-1 17F0718, Description: PFC CS-1 17F0718

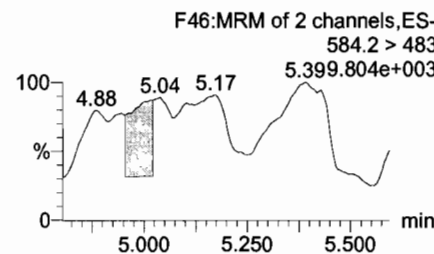
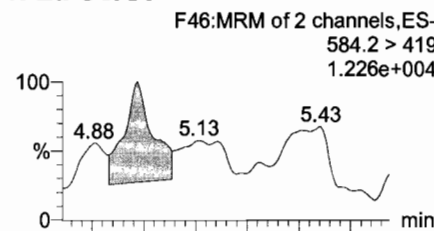
**PFUnA**



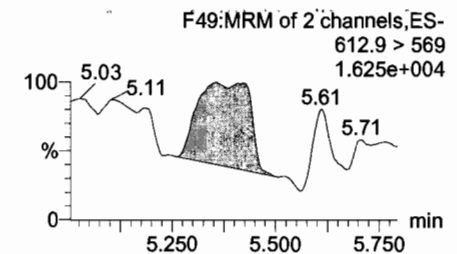
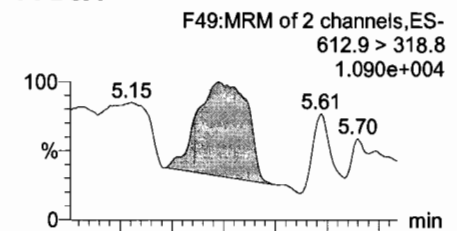
**N-MeFOSAA**



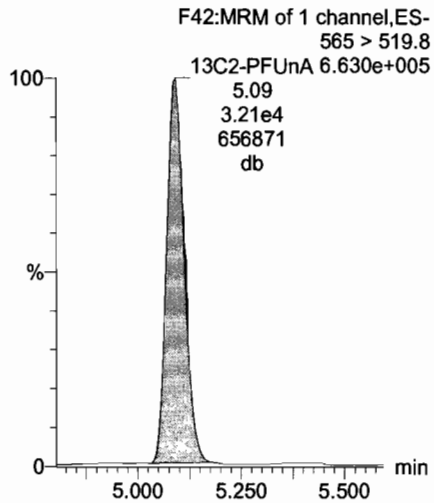
**N-EtFOSAA**



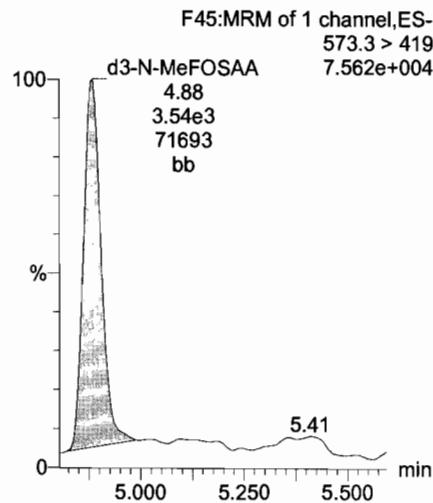
**PFDoA**



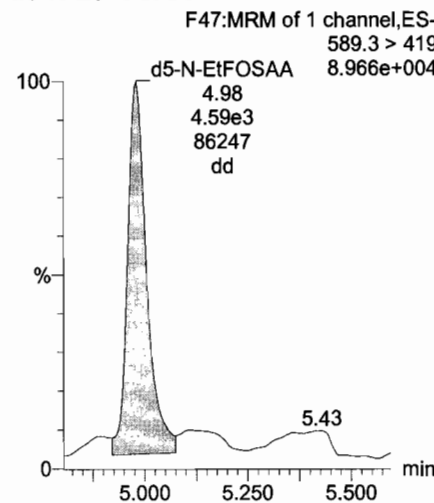
**13C2-PFUnA**



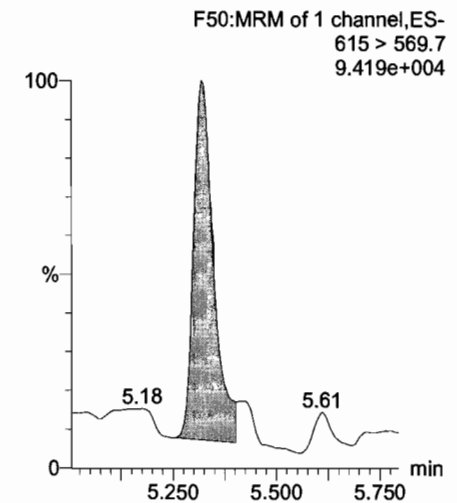
**d3-N-MeFOSAA**



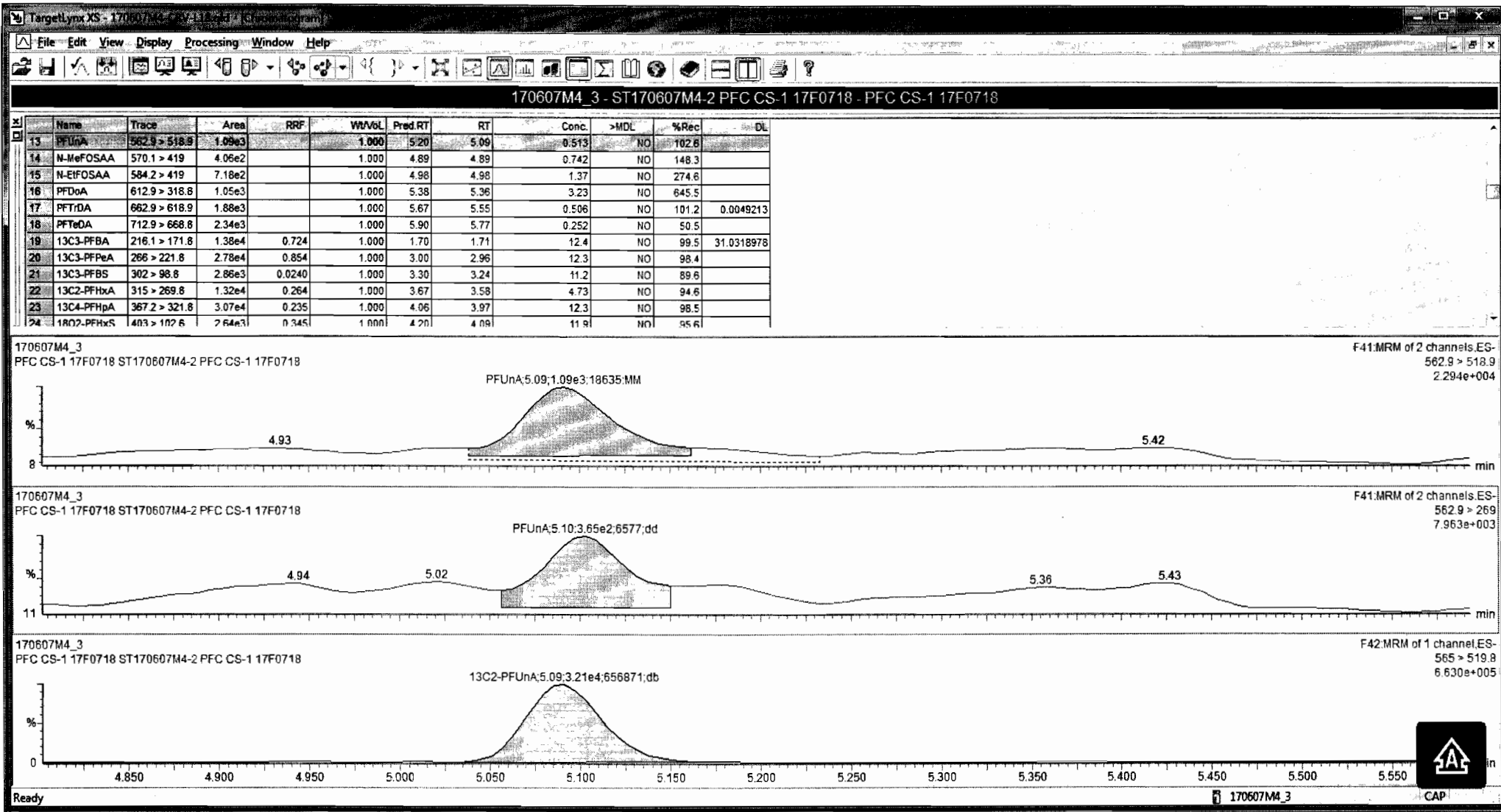
**d5-N-EtFOSAA**



**13C2-PFDoA**





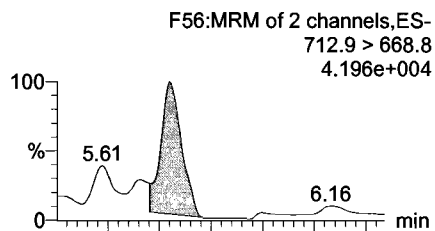


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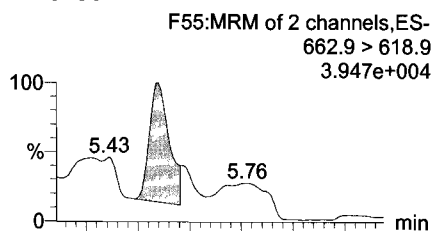
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_3, Date: 07-Jun-2017, Time: 21:26:32, ID: ST170607M4-2 PFC CS-1 17F0718, Description: PFC CS-1 17F0718

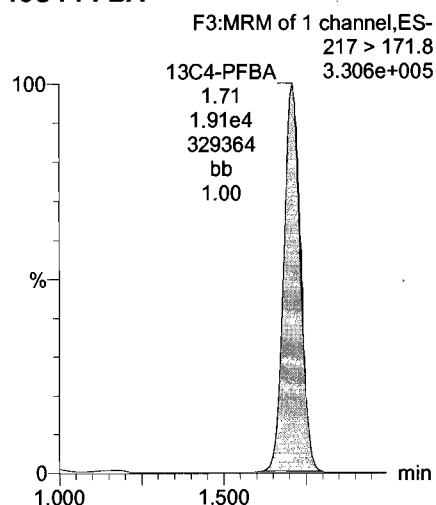
**PFTeDA**



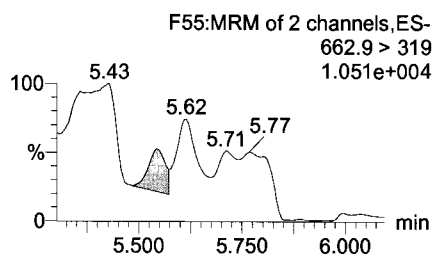
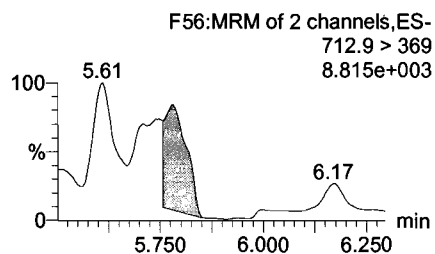
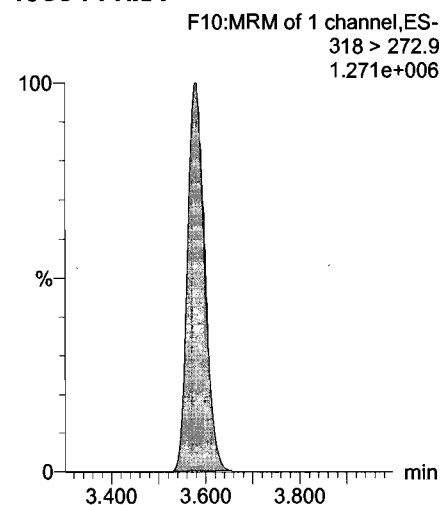
**PFTrDA**



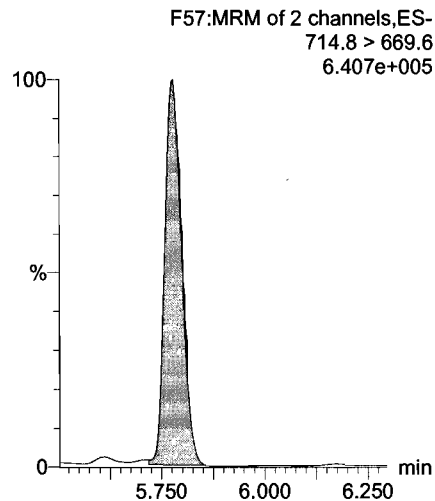
**13C4-PFBA**



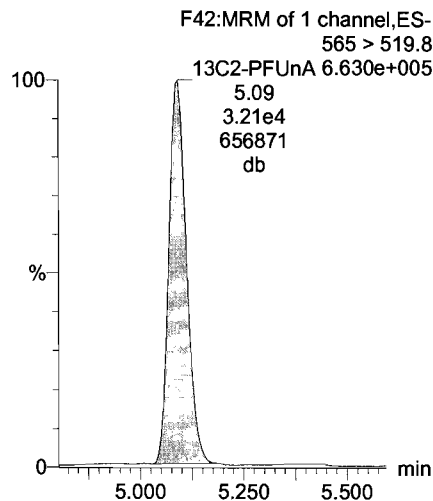
**13C5-PFHxA**



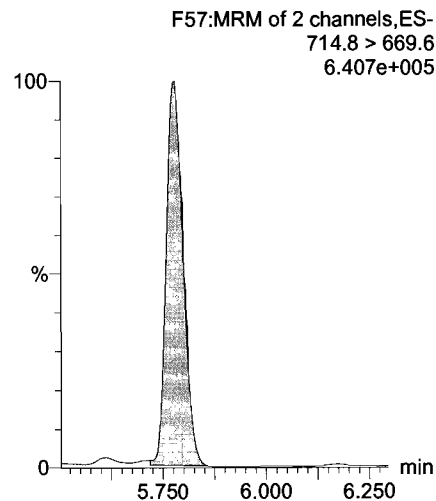
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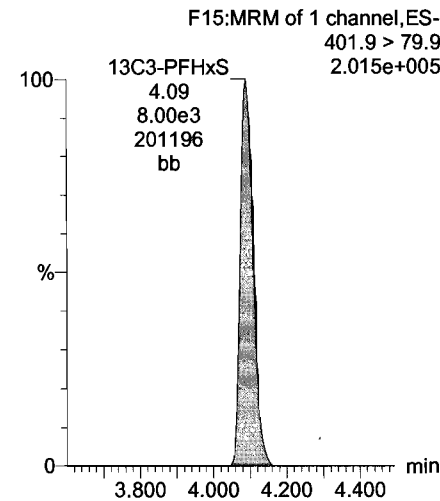
**13C2-PFUnA**



**13C2-PFTeDA**



**13C3-PFHxS**

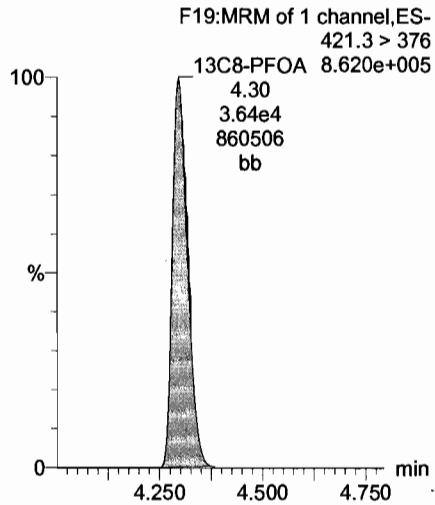


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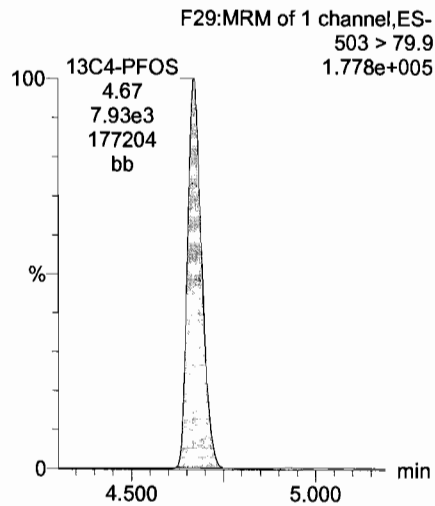
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_3, Date: 07-Jun-2017, Time: 21:26:32, ID: ST170607M4-2 PFC CS-1 17F0718, Description: PFC CS-1 17F0718

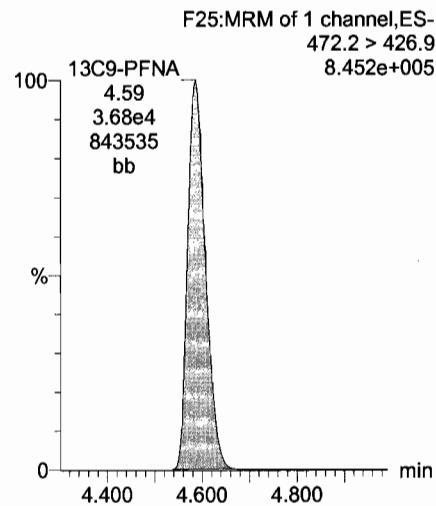
**13C8-PFOA**



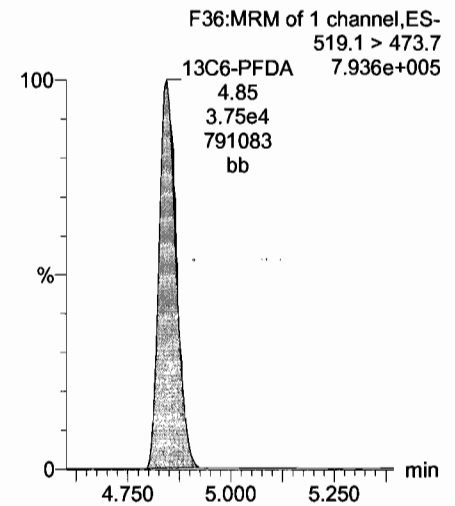
**13C4-PFOS**



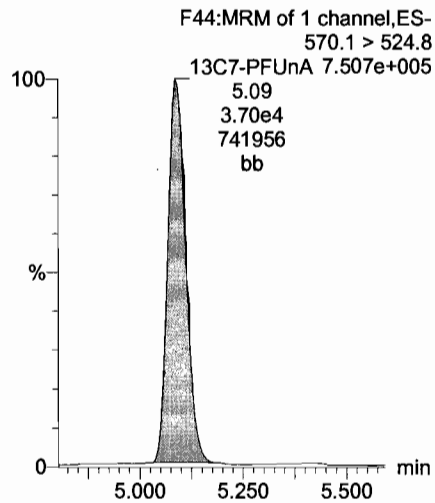
**13C9-PFNA**



**13C6-PFDA**



**13C7-PFUnA**

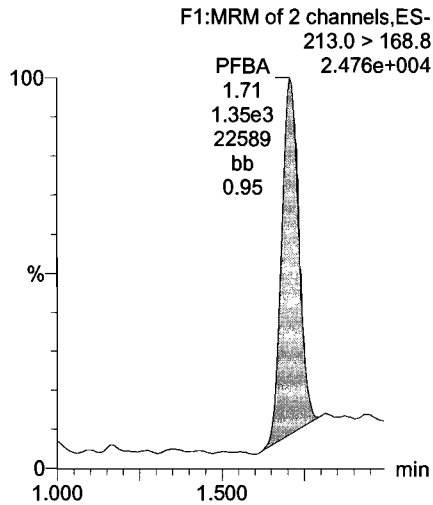


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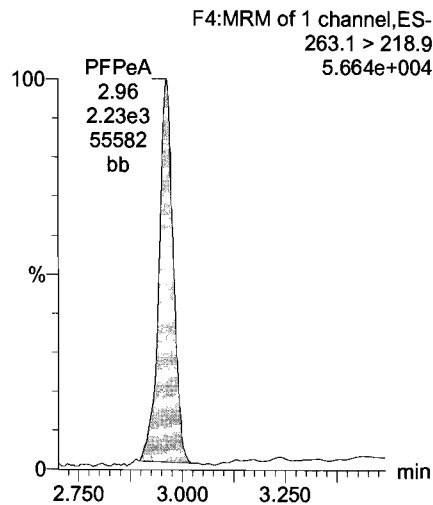
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_4, Date: 07-Jun-2017, Time: 21:37:42, ID: ST170607M4-3 PFC CS0 17F0717, Description: PFC CS0 17F0717

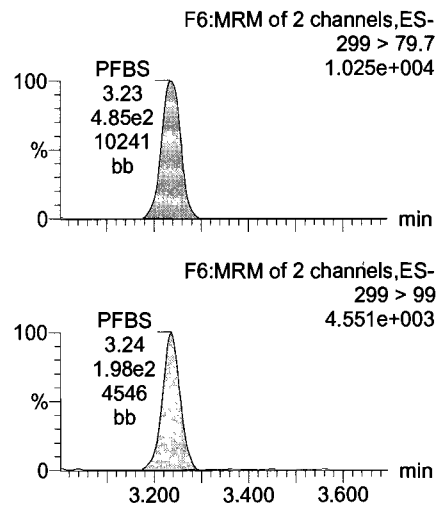
**PFBA**



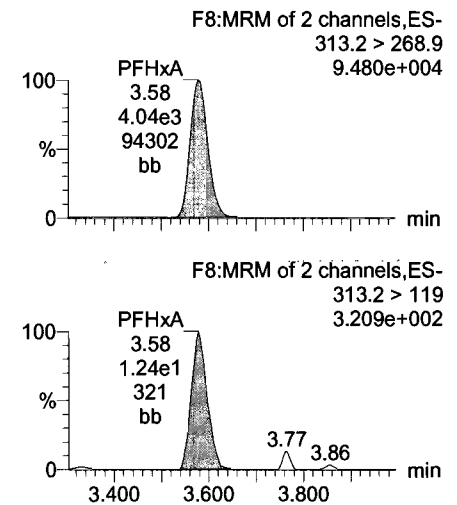
**PFPeA**



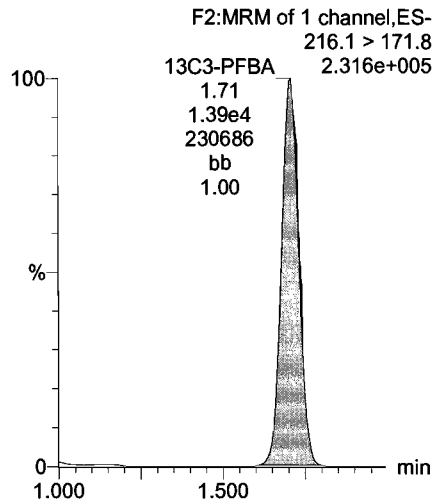
**Total PFBS**



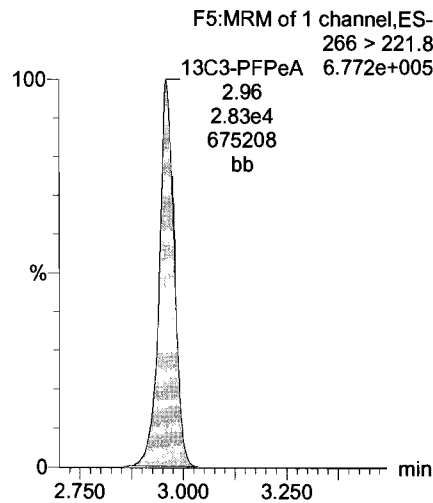
**PFHxA**



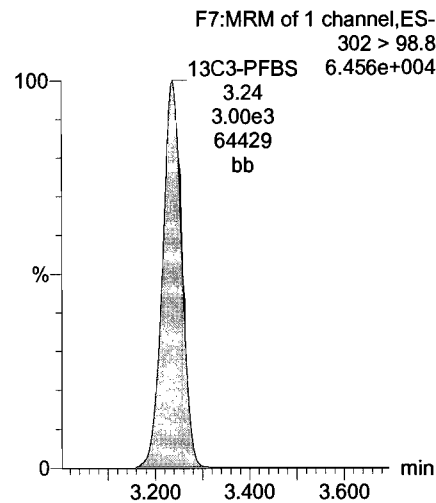
**13C3-PFBA**



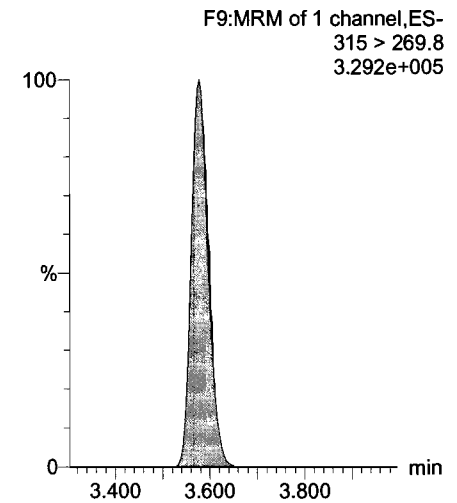
**13C3-PFPeA**

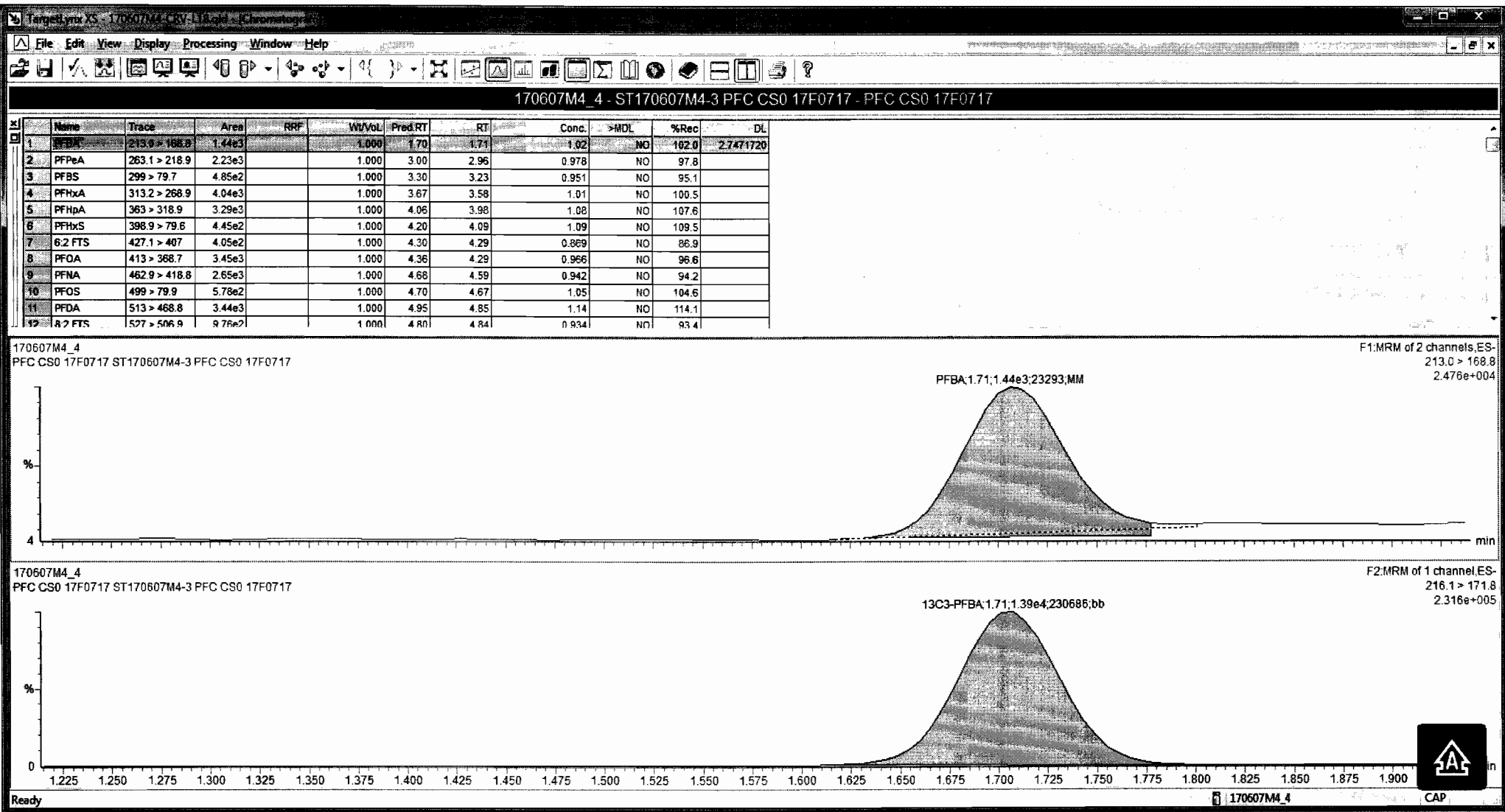


**13C3-PFBS**



**13C2-PFHxA**

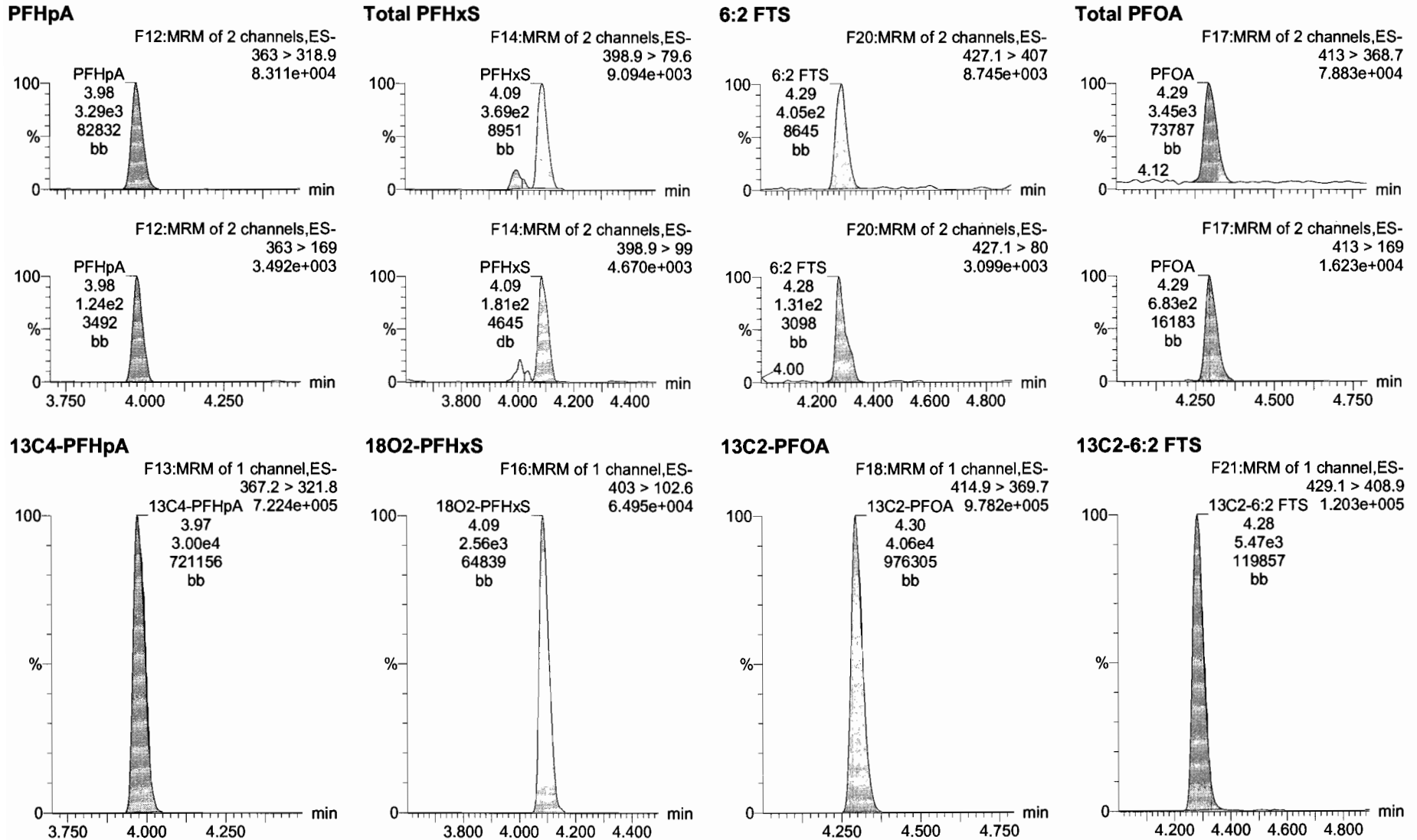


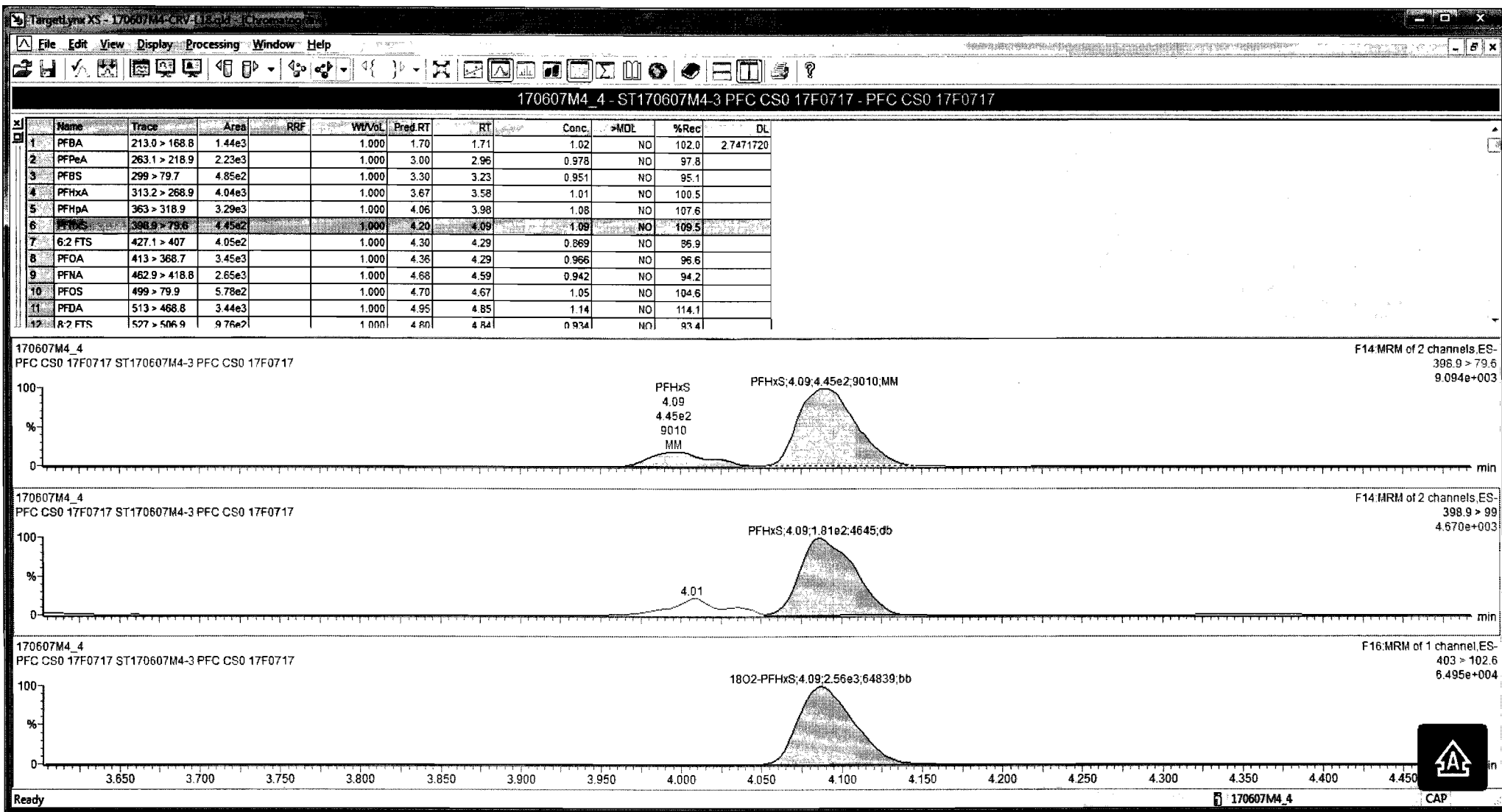


Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_4, Date: 07-Jun-2017, Time: 21:37:42, ID: ST170607M4-3 PFC CS0 17F0717, Description: PFC CS0 17F0717



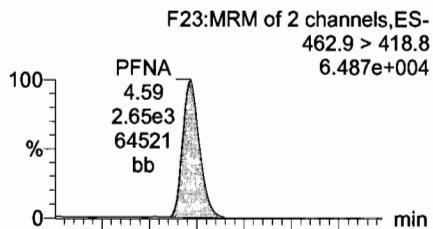


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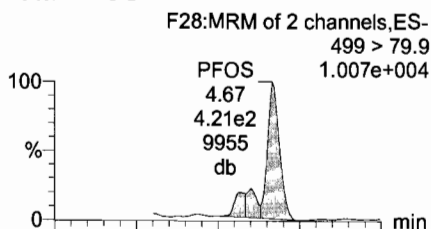
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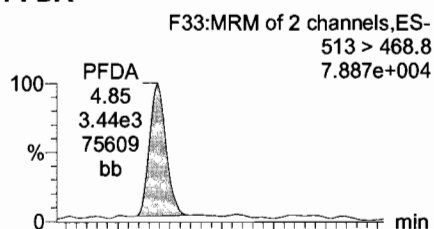
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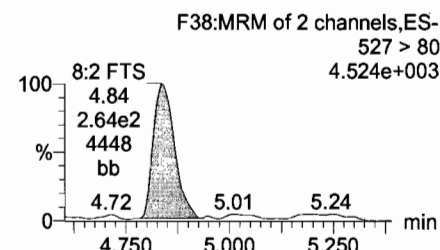
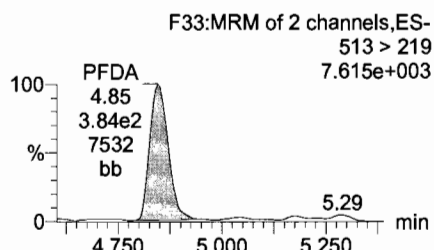
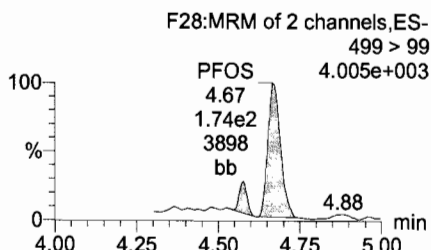
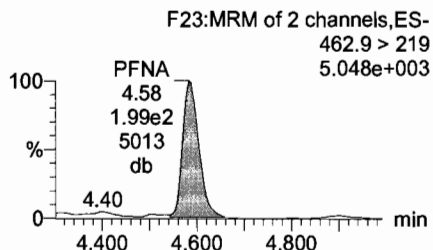
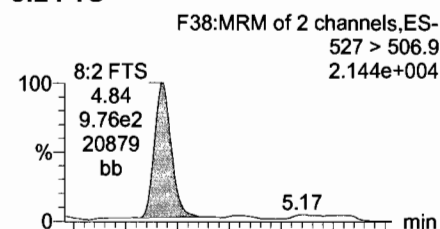
**Total PFOS**



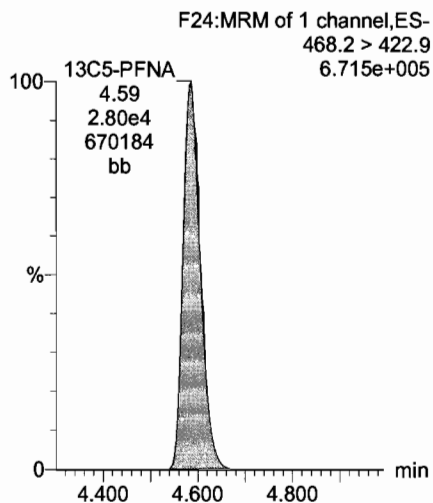
**PFDA**



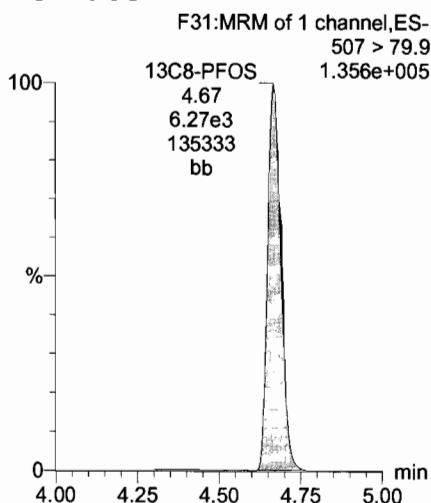
**8:2 FTS**



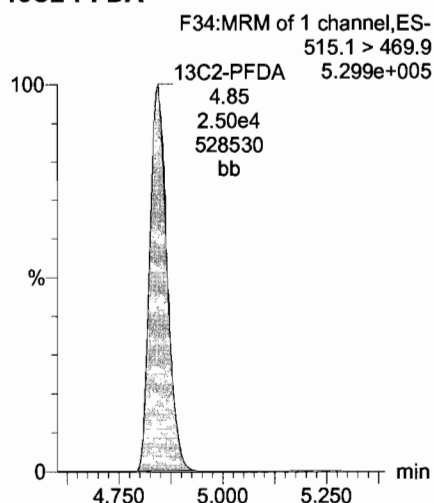
**13C5-PFNA**



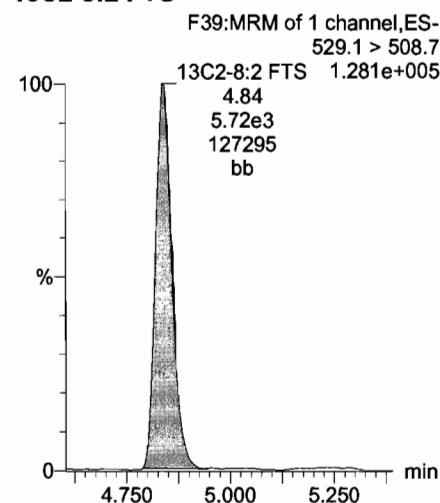
**13C8-PFOS**



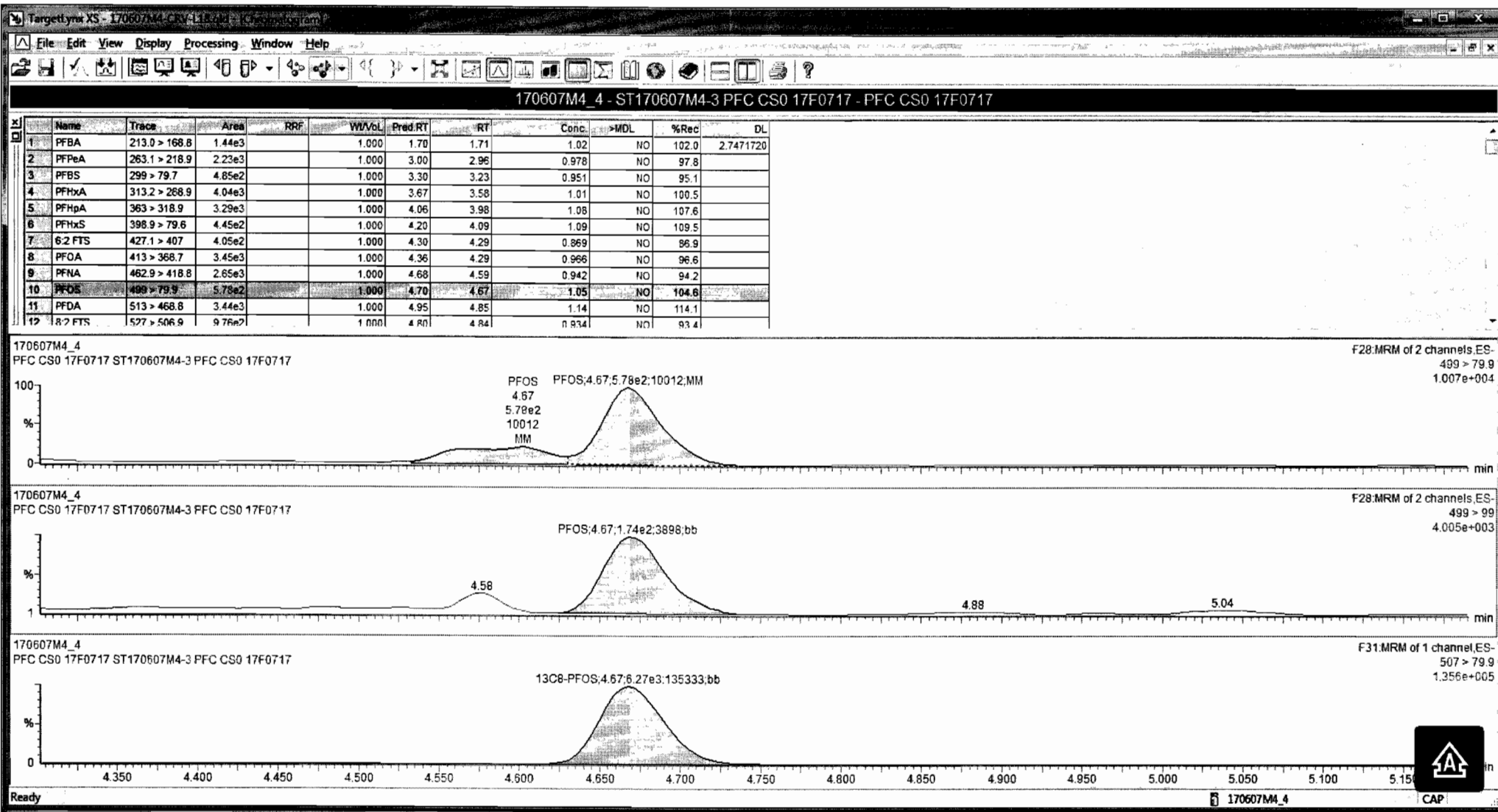
**13C2-PFDA**



**13C2-8:2 FTS**





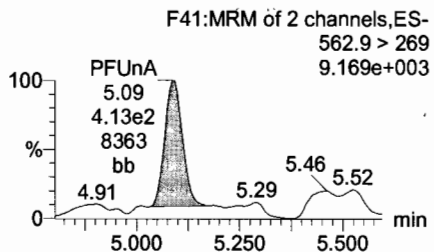
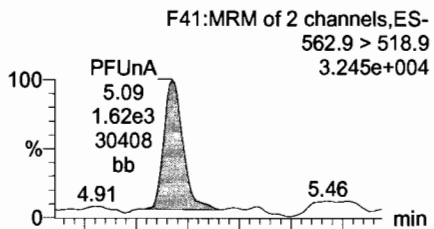


Dataset: Untitled

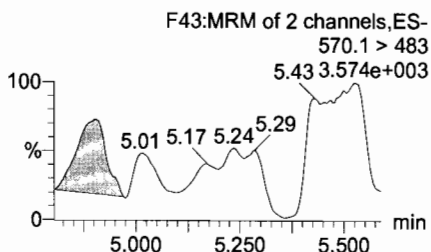
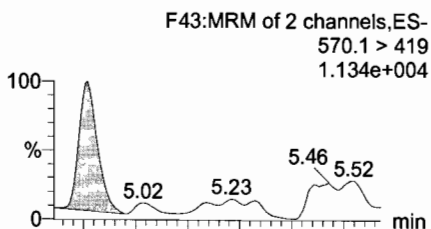
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_4, Date: 07-Jun-2017, Time: 21:37:42, ID: ST170607M4-3 PFC CS0 17F0717, Description: PFC CS0 17F0717

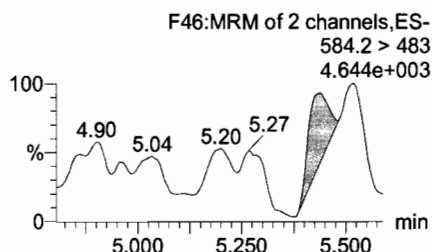
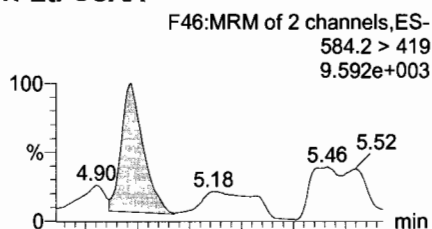
**PFUnA**



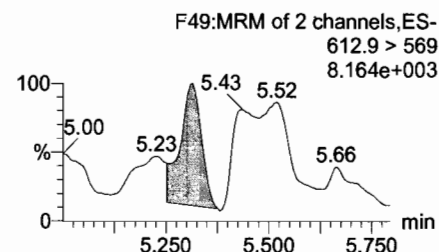
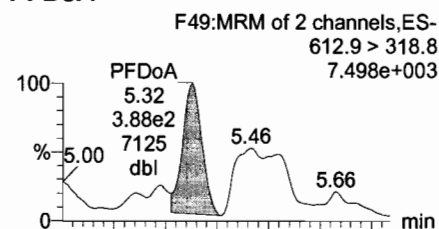
**N-MeFOSAA**



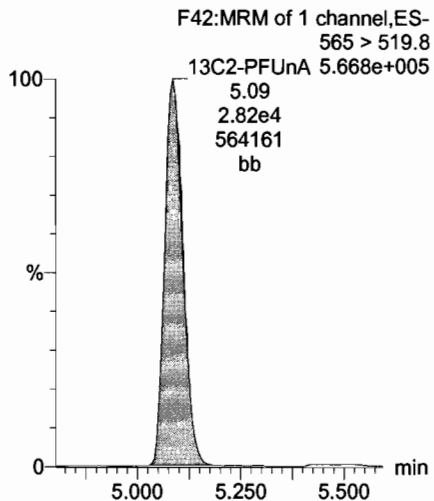
**N-EtFOSAA**



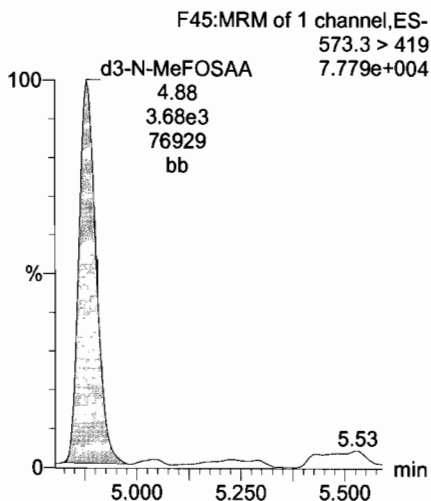
**PFDoA**



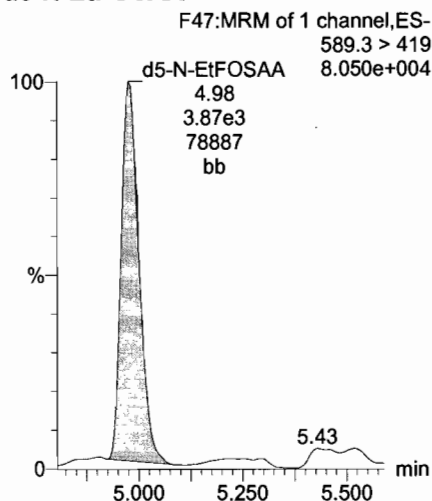
**13C2-PFUnA**



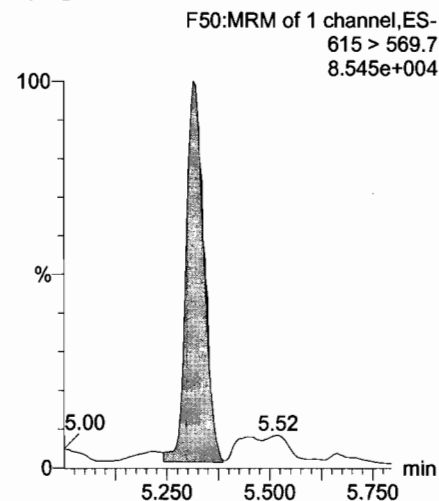
**d3-N-MeFOSAA**

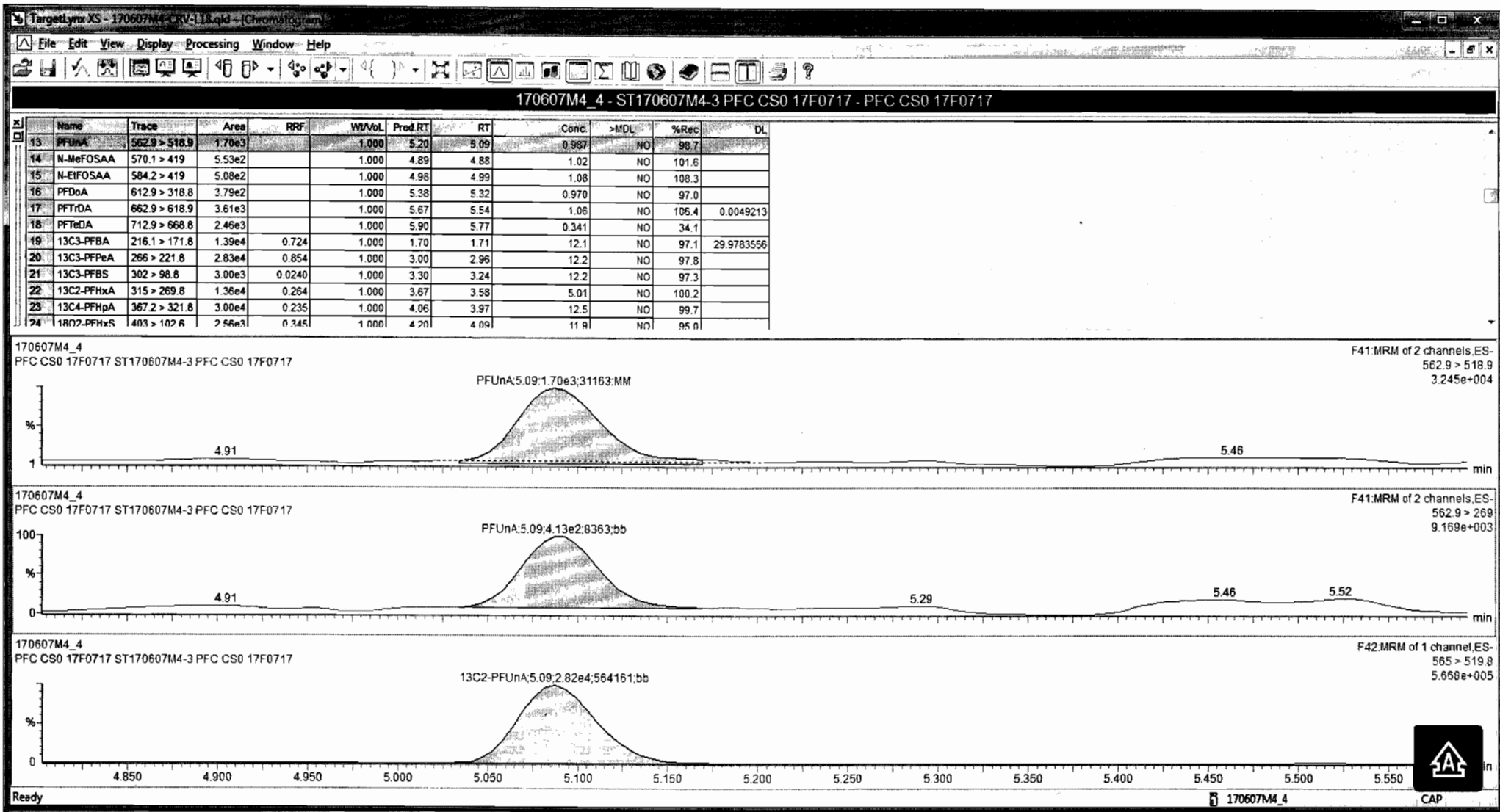


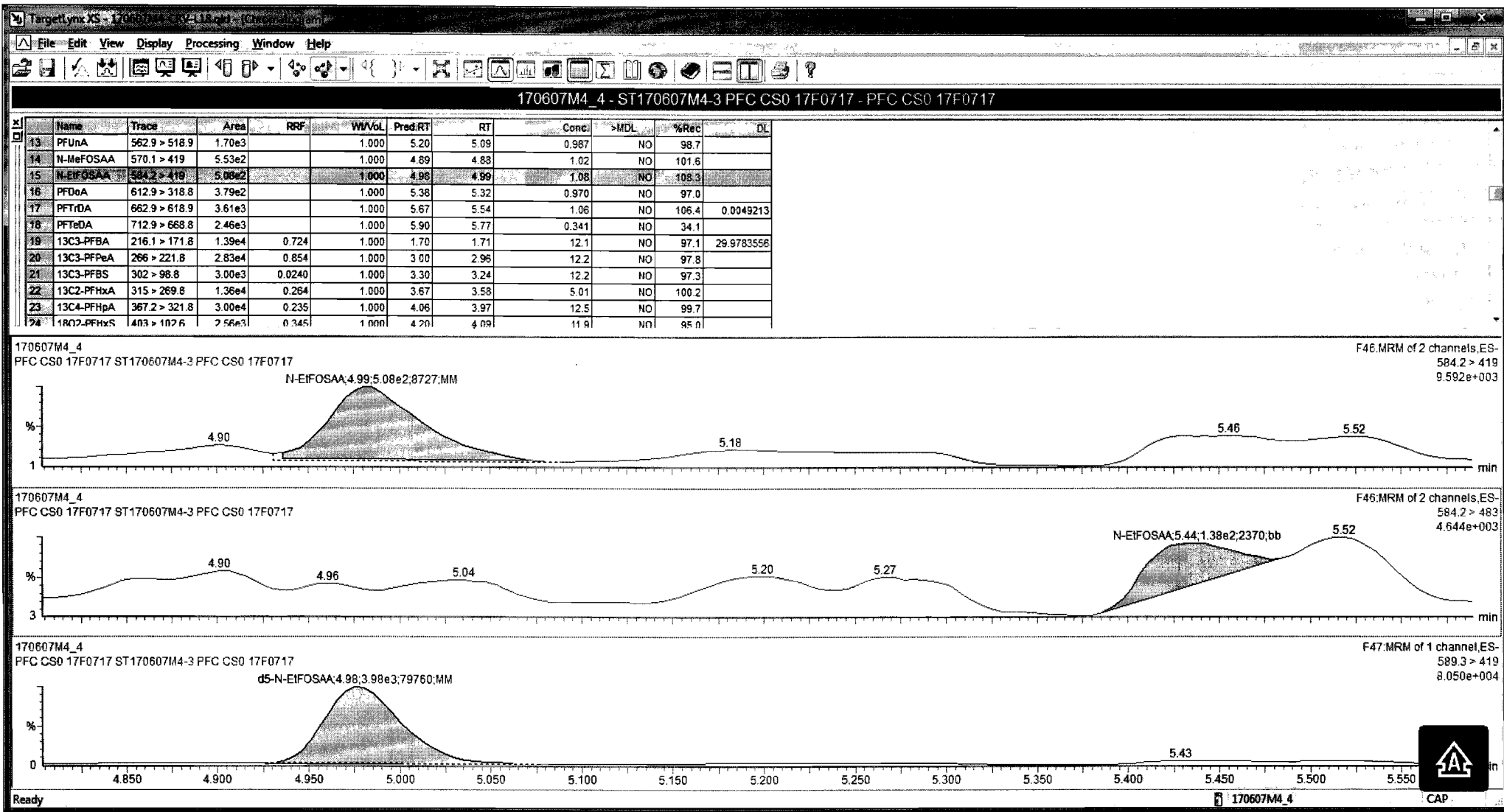
**d5-N-EtFOSAA**

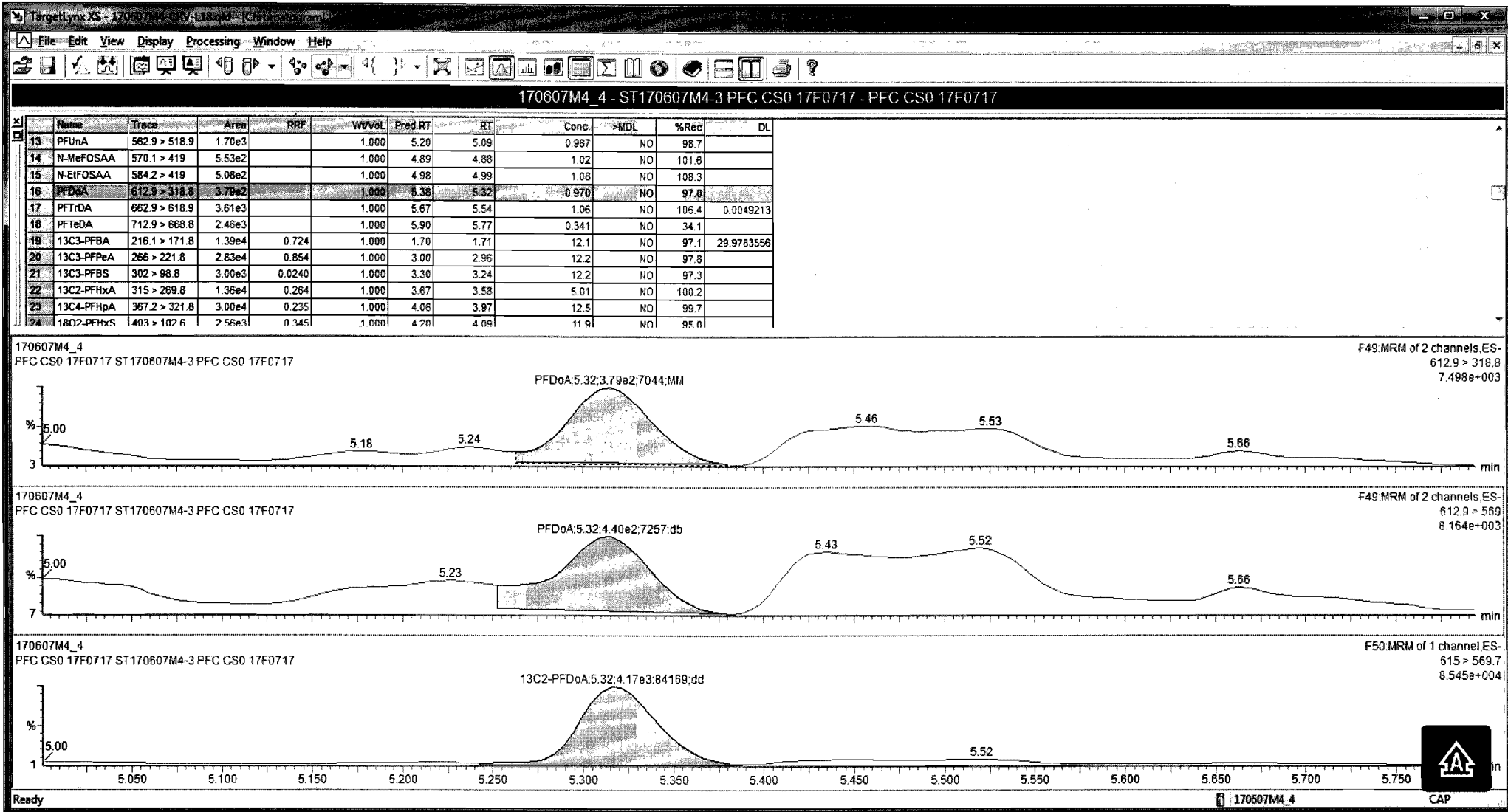


**13C2-PFDoA**







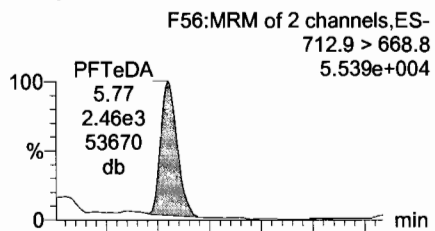


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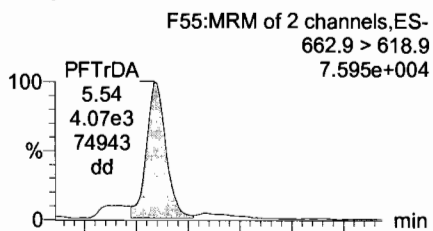
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Name: 170607M4\_4, Date: 07-Jun-2017, Time: 21:37:42, ID: ST170607M4-3 PFC CS0 17F0717, Description: PFC CS0 17F0717

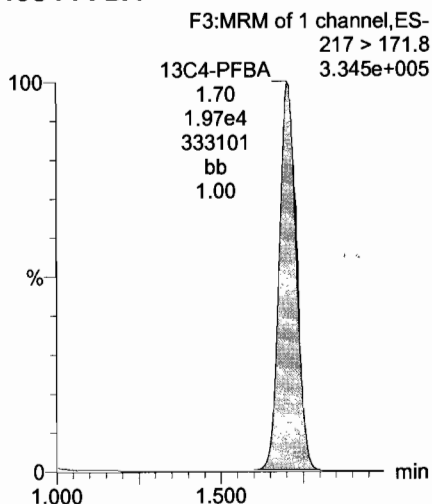
**PFTeDA**



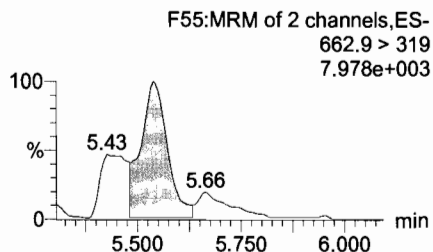
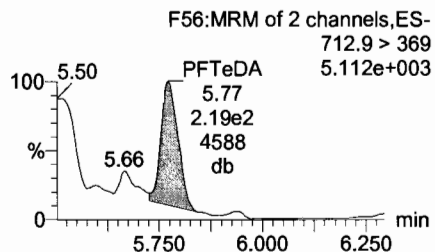
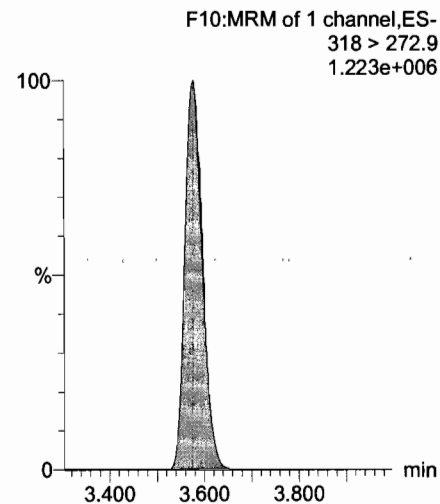
**PFTrDA**



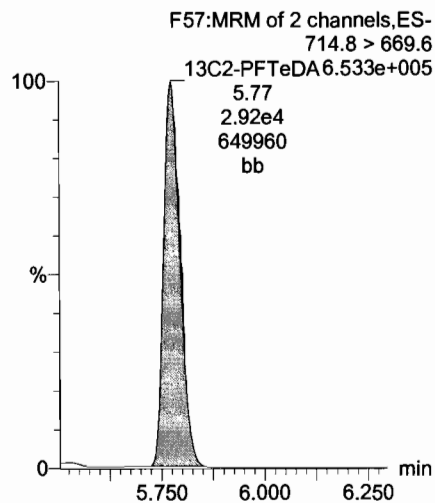
**13C4-PFBA**



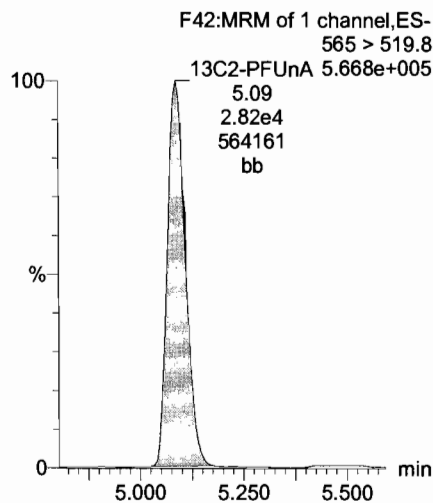
**13C5-PFHxA**



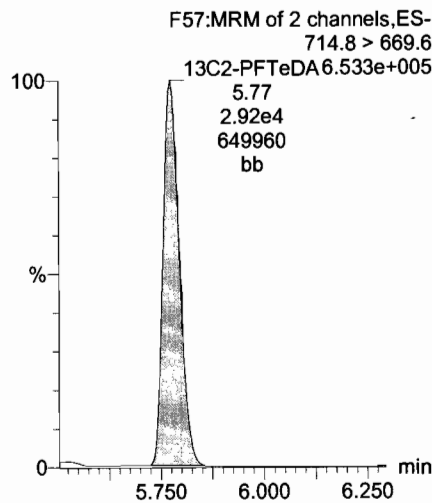
**13C2-PFTeDA**



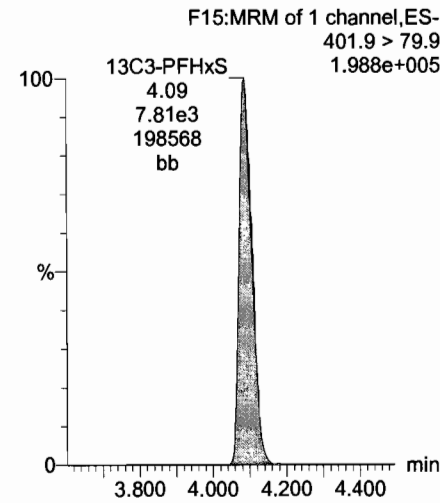
**13C2-PFUnA**

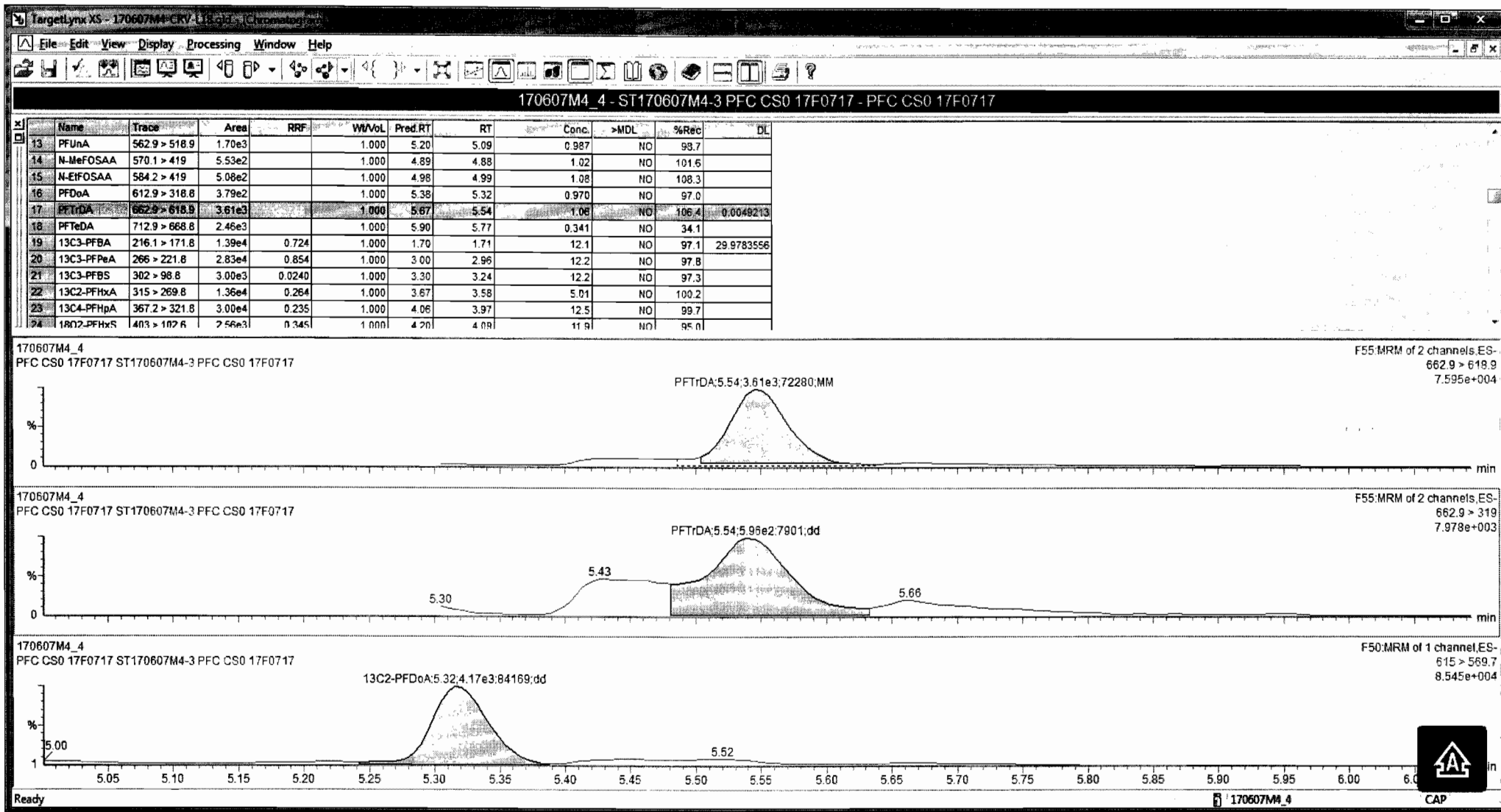


**13C2-PFTeDA**



**13C3-PFHxS**





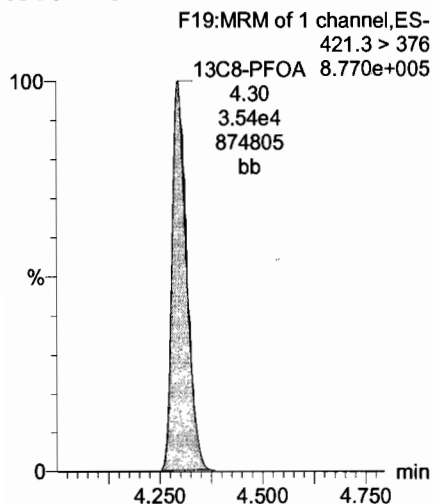
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Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time

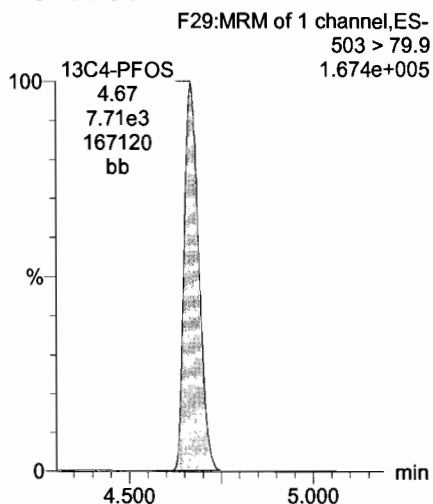
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Name: 170607M4\_4, Date: 07-Jun-2017, Time: 21:37:42, ID: ST170607M4-3 PFC CS0 17F0717, Description: PFC CS0 17F0717

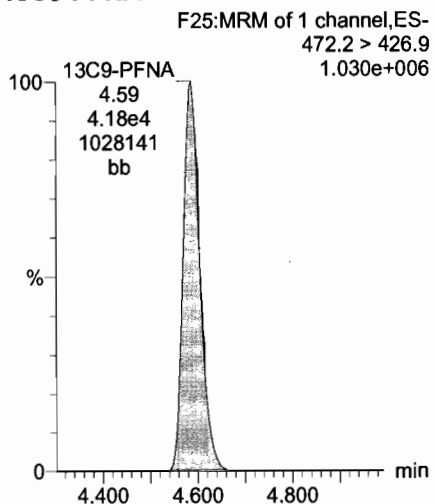
13C8-PFOA



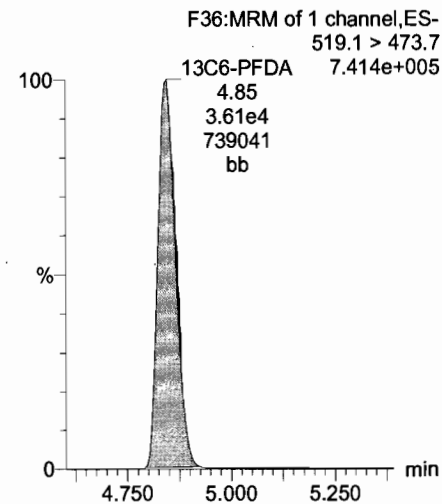
13C4-PFOS



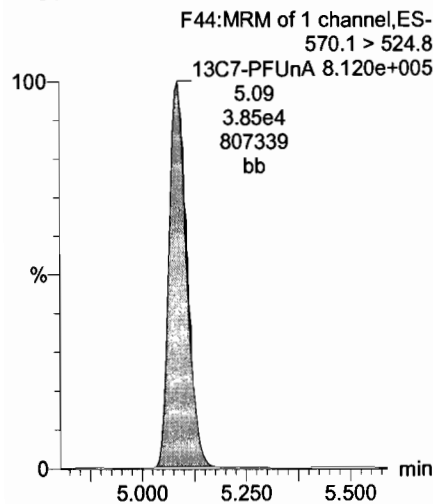
13C9-PFNA



13C6-PFDA



13C7-PFUa



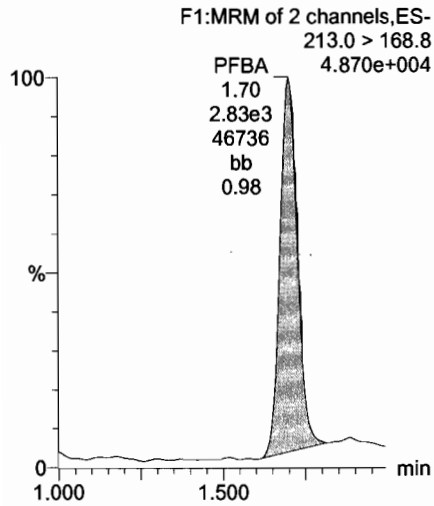


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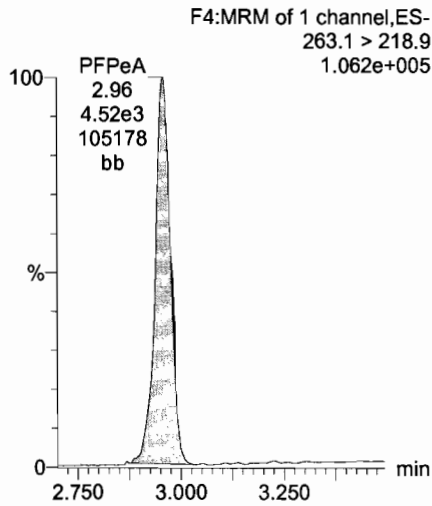
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_5, Date: 07-Jun-2017, Time: 21:48:53, ID: ST170607M4-4 PFC CS1 17F0716, Description: PFC CS1 17F0716

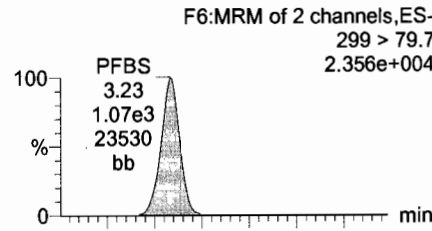
**PFBA**



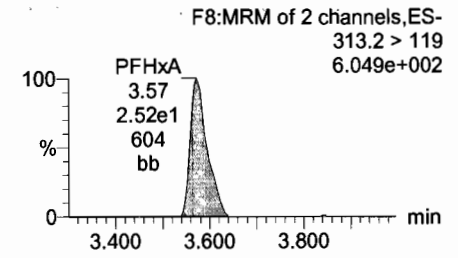
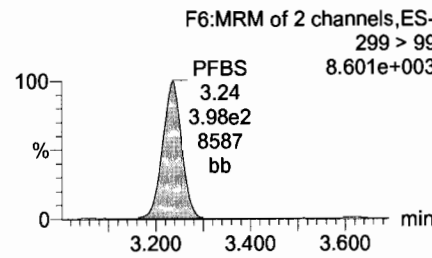
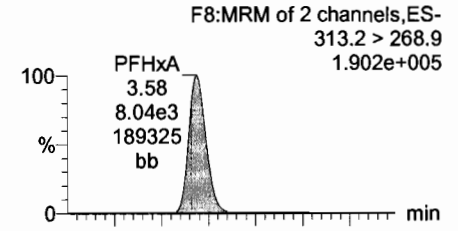
**PFPeA**



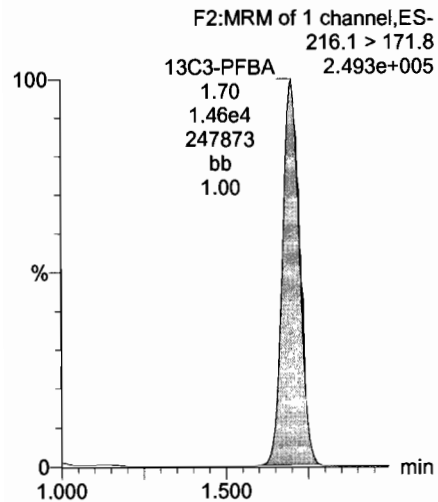
**Total PFBS**



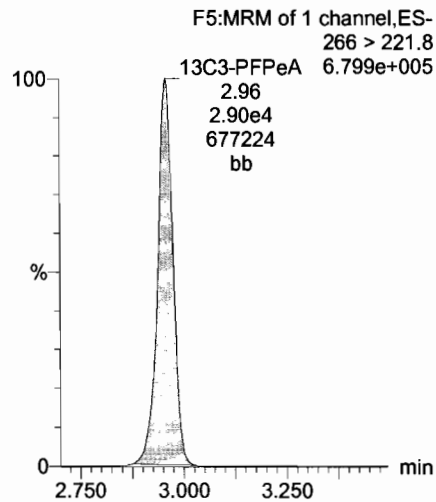
**PFHxA**



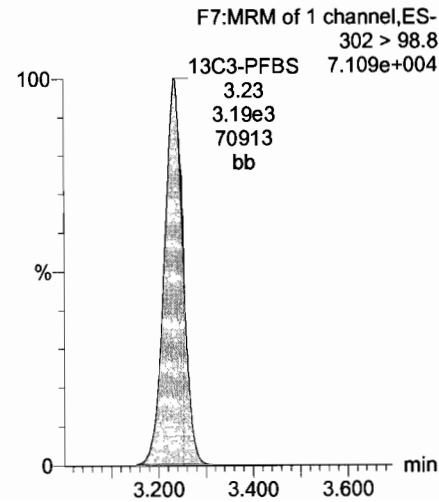
**13C3-PFBA**



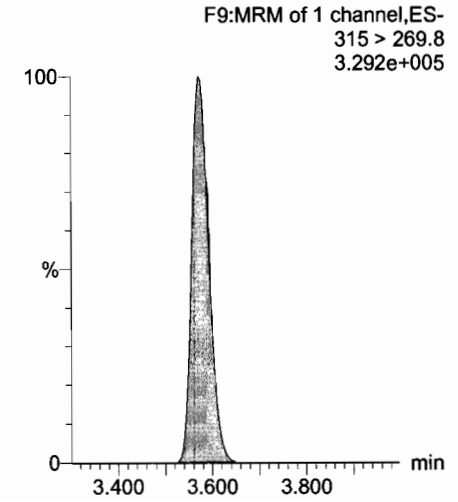
**13C3-PFPeA**



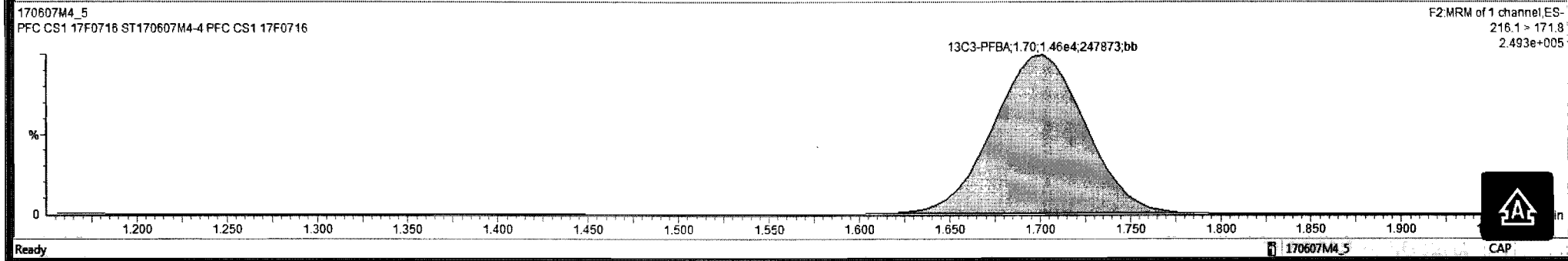
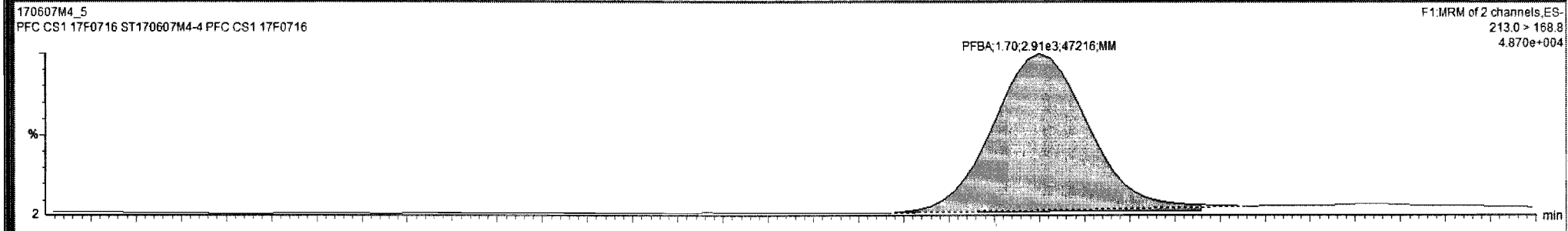
**13C3-PFBS**



**13C2-PFHxA**



Name	Trace	Area	RRF	Wt/Vol	Pred.RT	RT	Conc.	>MDL	%Rec	DL
1 PFBA	233.0 > 168.8	2.91e3		1.000	1.70	1.70	2.09	NO	104.4	5.2521790
2 PFPeA	263.1 > 218.9	4.52e3		1.000	3.00	2.96	2.00	NO	99.9	
3 PFBS	299 > 79.7	1.07e3		1.000	3.30	3.23	2.01	NO	100.7	
4 PFHxA	313.2 > 268.9	8.04e3		1.000	3.67	3.58	2.04	NO	101.8	
5 PFHpA	363 > 318.9	5.85e3		1.000	4.06	3.97	2.05	NO	102.7	
6 PFHxS	398.9 > 79.6	8.41e2		1.000	4.20	4.09	1.99	NO	99.3	
7 6:2 FTS	427.1 > 407	1.06e3		1.000	4.30	4.28	2.09	NO	104.5	
8 PFOA	413 > 368.7	7.25e3		1.000	4.36	4.29	2.16	NO	107.8	
9 PFNA	462.9 > 418.8	6.01e3		1.000	4.68	4.58	2.18	NO	109.0	
10 PFOS	499 > 79.9	1.14e3		1.000	4.70	4.67	1.89	NO	94.5	
11 PFDA	513 > 468.8	5.89e3		1.000	4.95	4.84	1.90	NO	94.9	
12 8:2 FTS	527 > 506.9	1.91e3		1.000	4.80	4.83	2.13	NO	106.7	

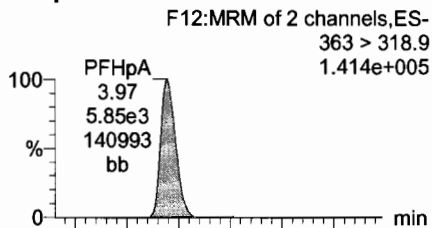


Dataset: Untitled

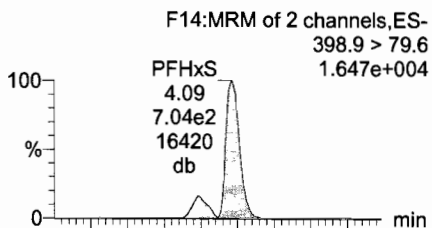
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_5, Date: 07-Jun-2017, Time: 21:48:53, ID: ST170607M4-4 PFC CS1 17F0716, Description: PFC CS1 17F0716

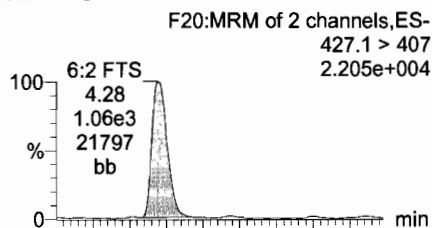
**PFHpA**



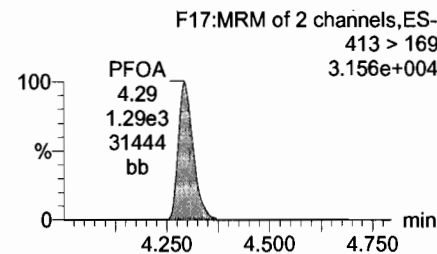
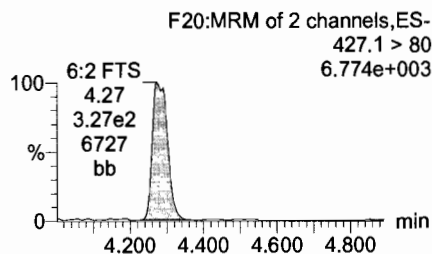
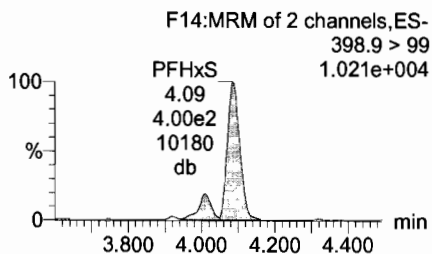
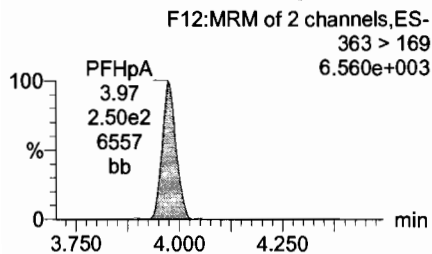
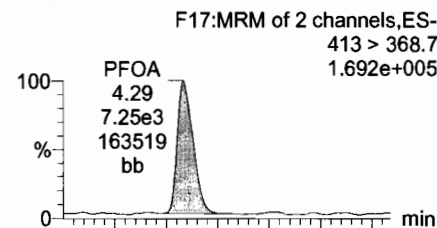
**Total PFHxS**



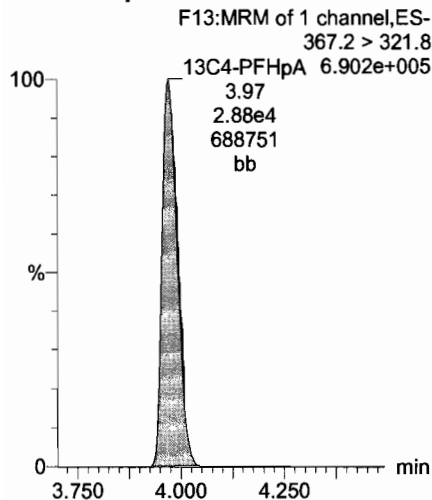
**6:2 FTS**



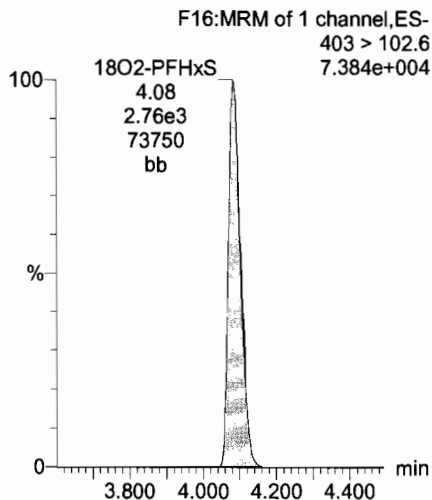
**Total PFOA**



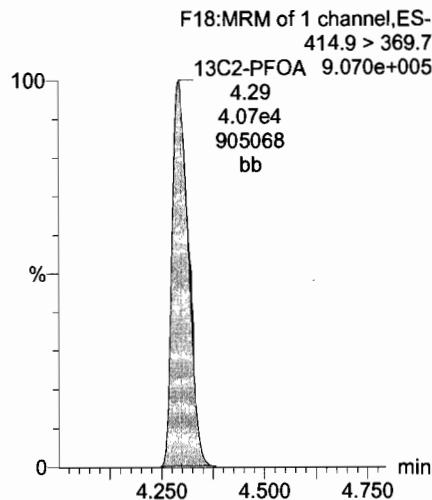
**13C4-PFHpa**



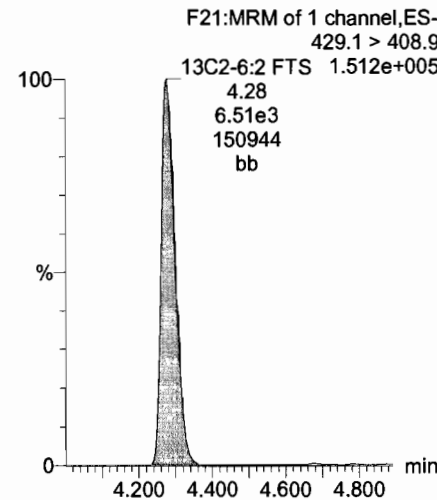
**18O2-PFHxS**

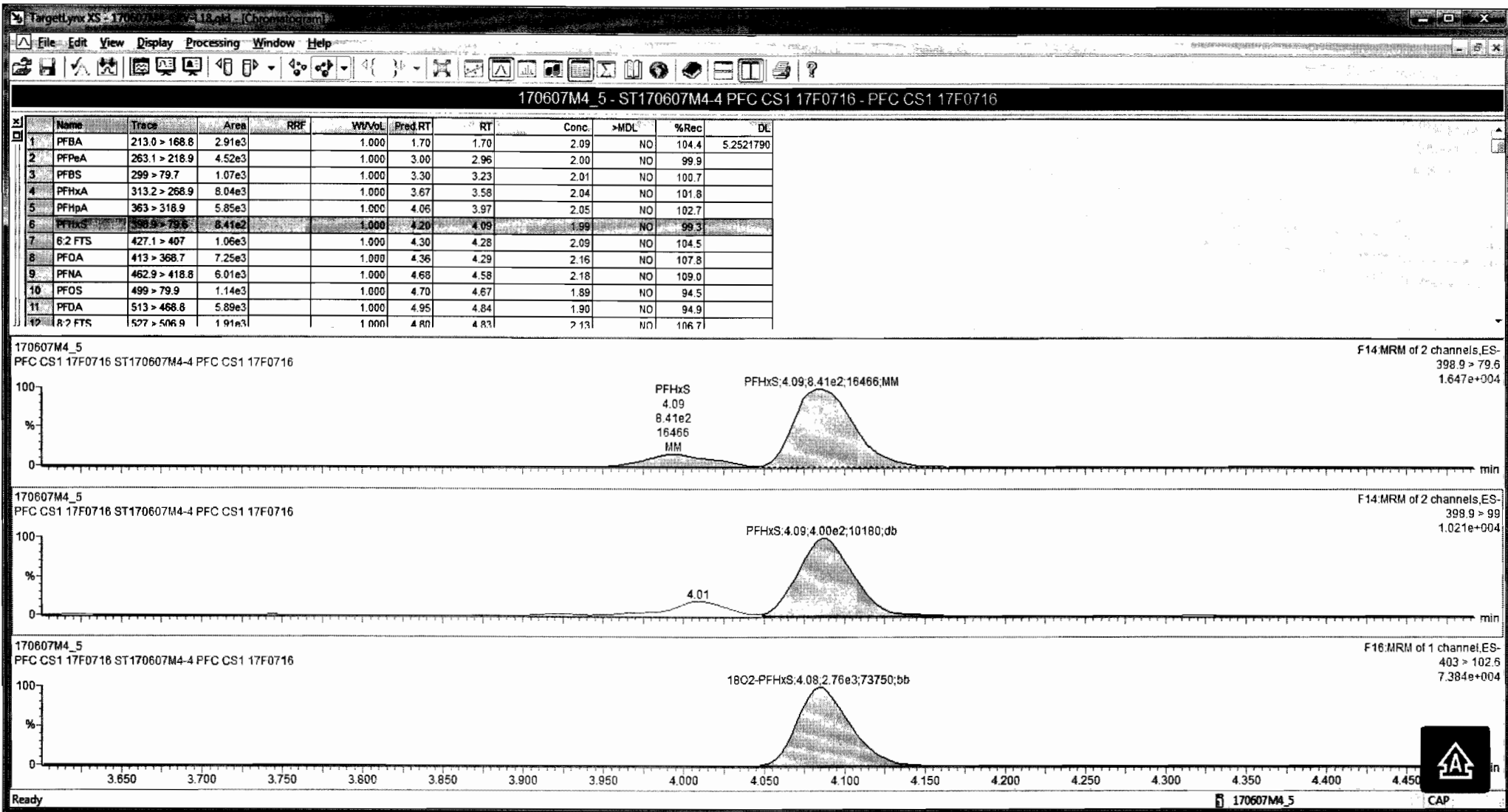


**13C2-PFOA**



**13C2-6:2 FTS**





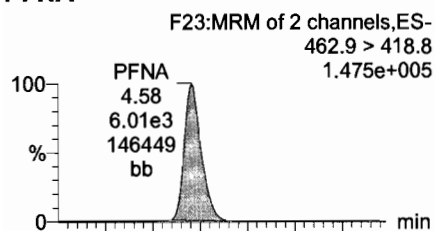
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Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time

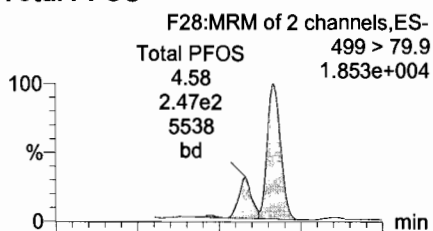
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_5, Date: 07-Jun-2017, Time: 21:48:53, ID: ST170607M4-4 PFC CS1 17F0716, Description: PFC CS1 17F0716

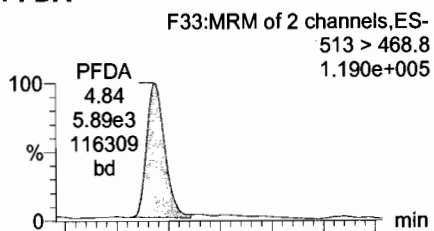
**PFNA**



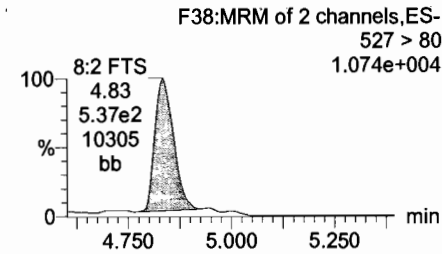
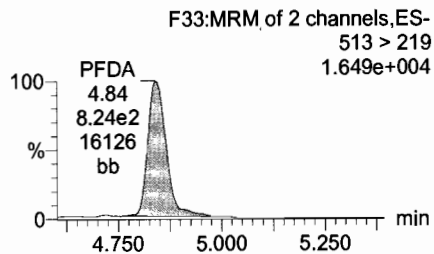
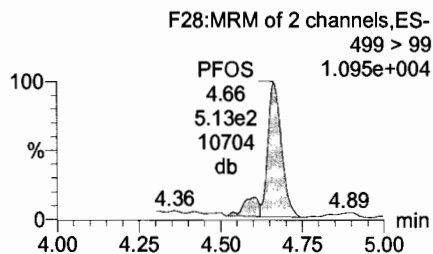
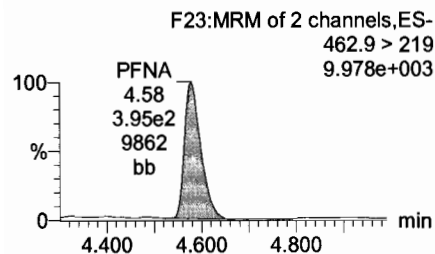
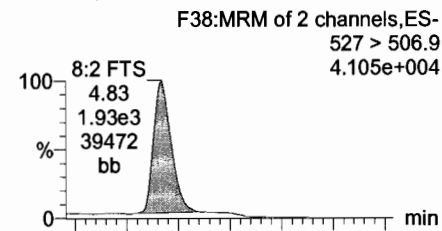
**Total PFOS**



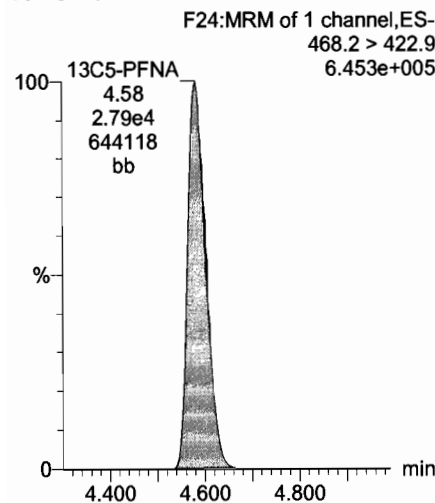
**PFDA**



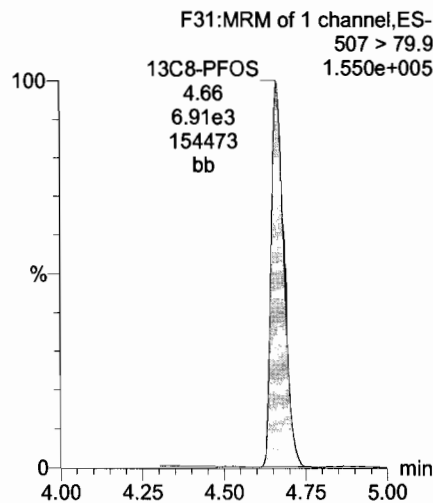
**8:2 FTS**



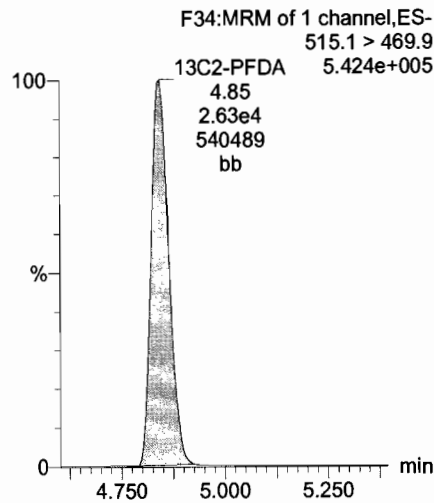
**13C5-PFNA**



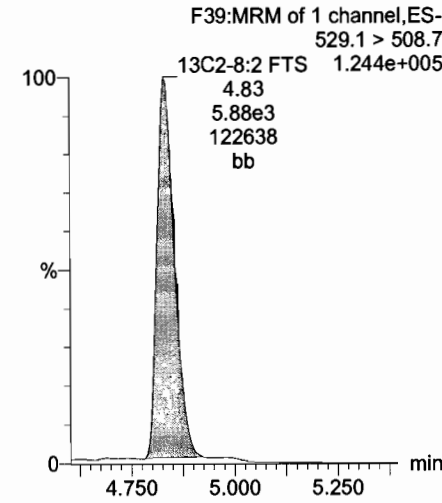
**13C8-PFOS**

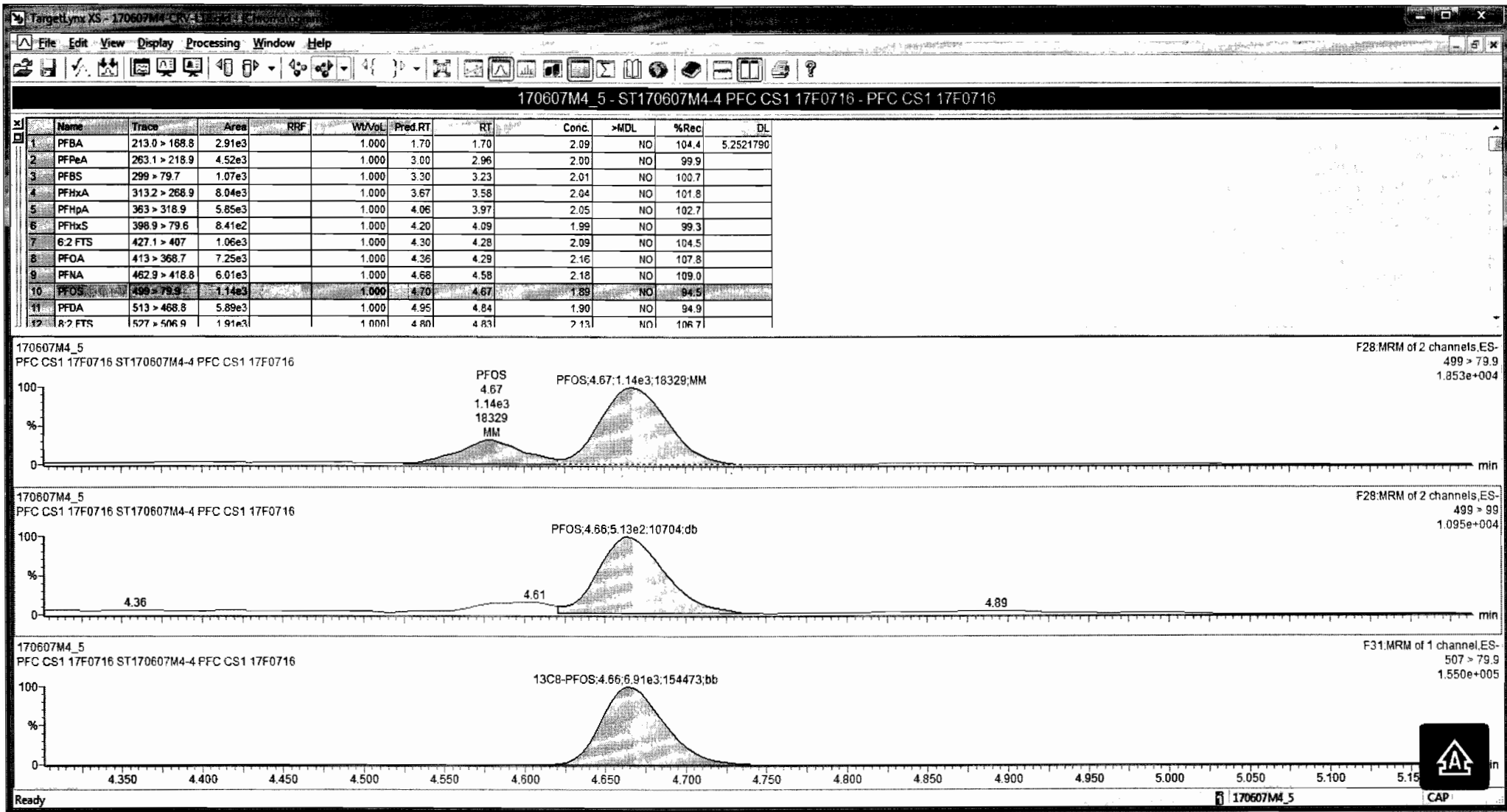


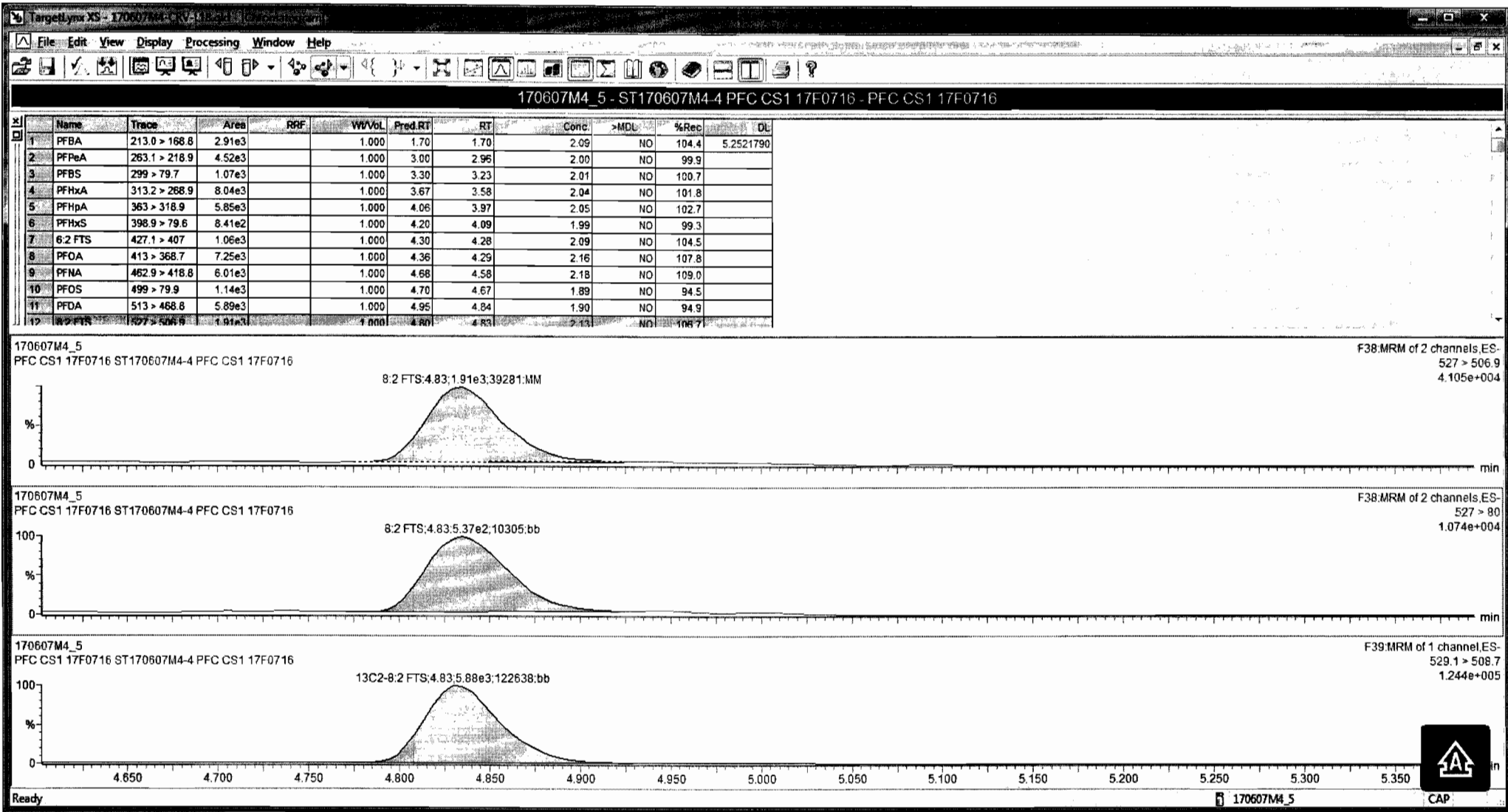
**13C2-PFDA**



**13C2-8:2 FTS**





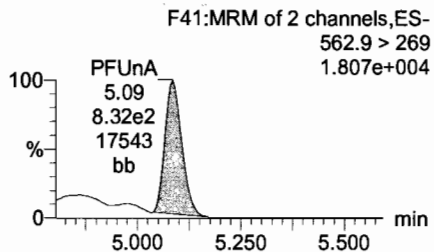
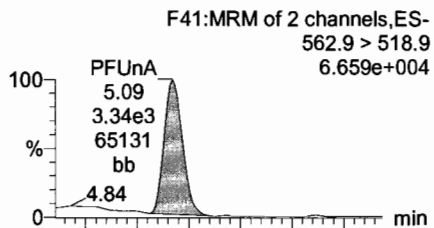


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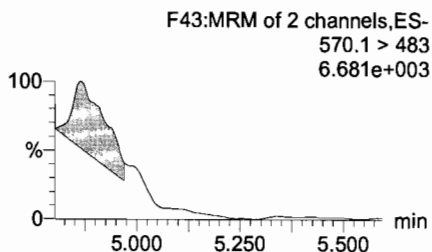
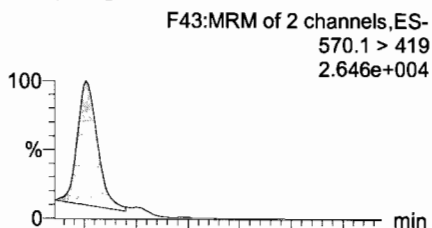
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_5, Date: 07-Jun-2017, Time: 21:48:53, ID: ST170607M4-4 PFC CS1 17F0716, Description: PFC CS1 17F0716

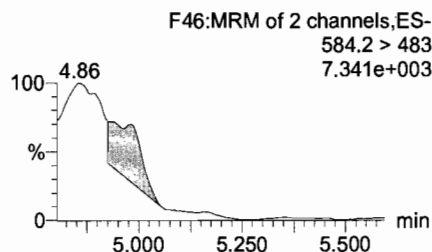
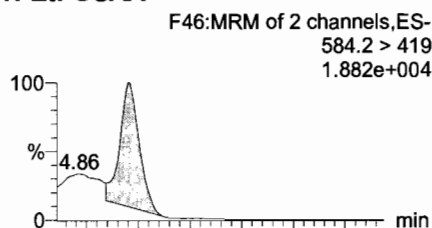
**PFUnA**



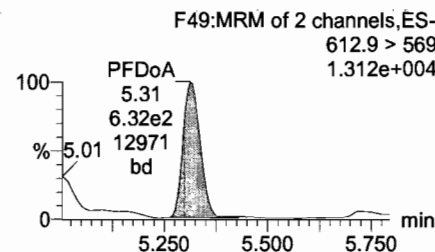
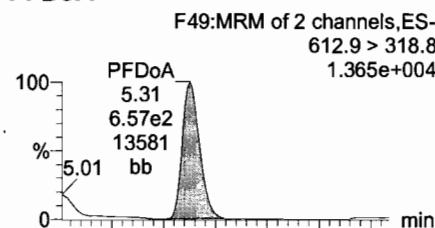
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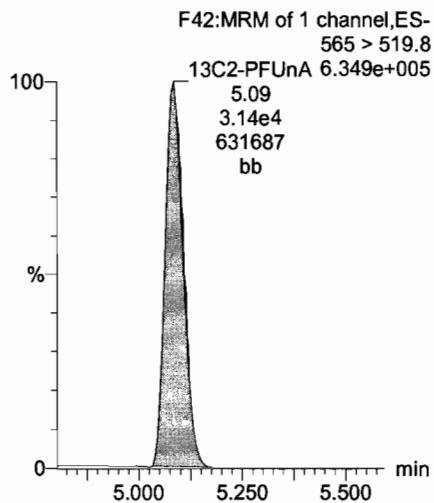
**N-EtFOSAA**



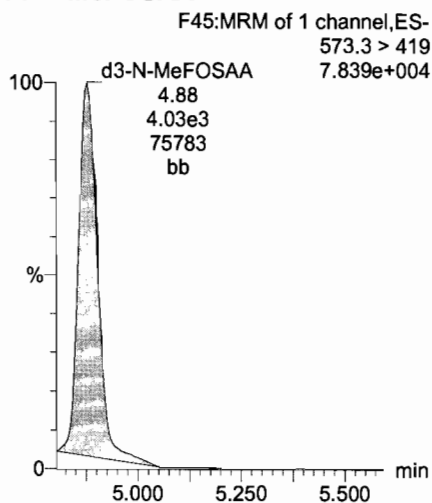
**PFDoA**



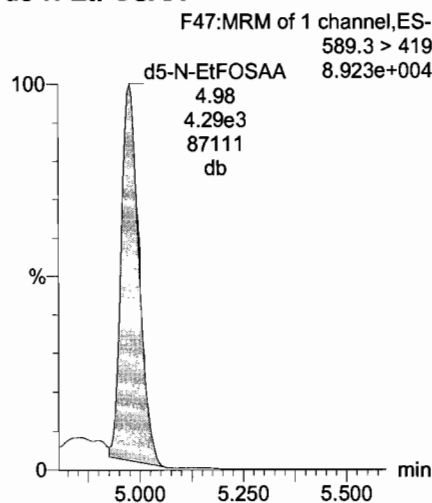
**13C2-PFUnA**



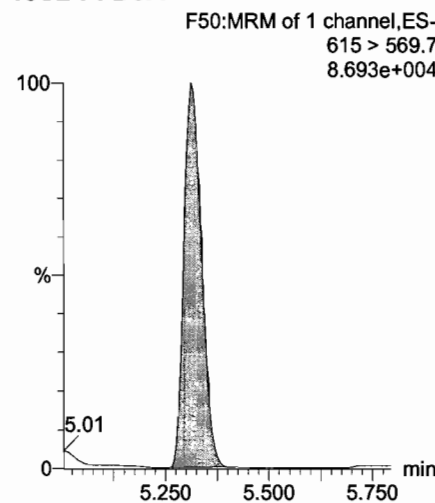
**d3-N-MeFOSAA**



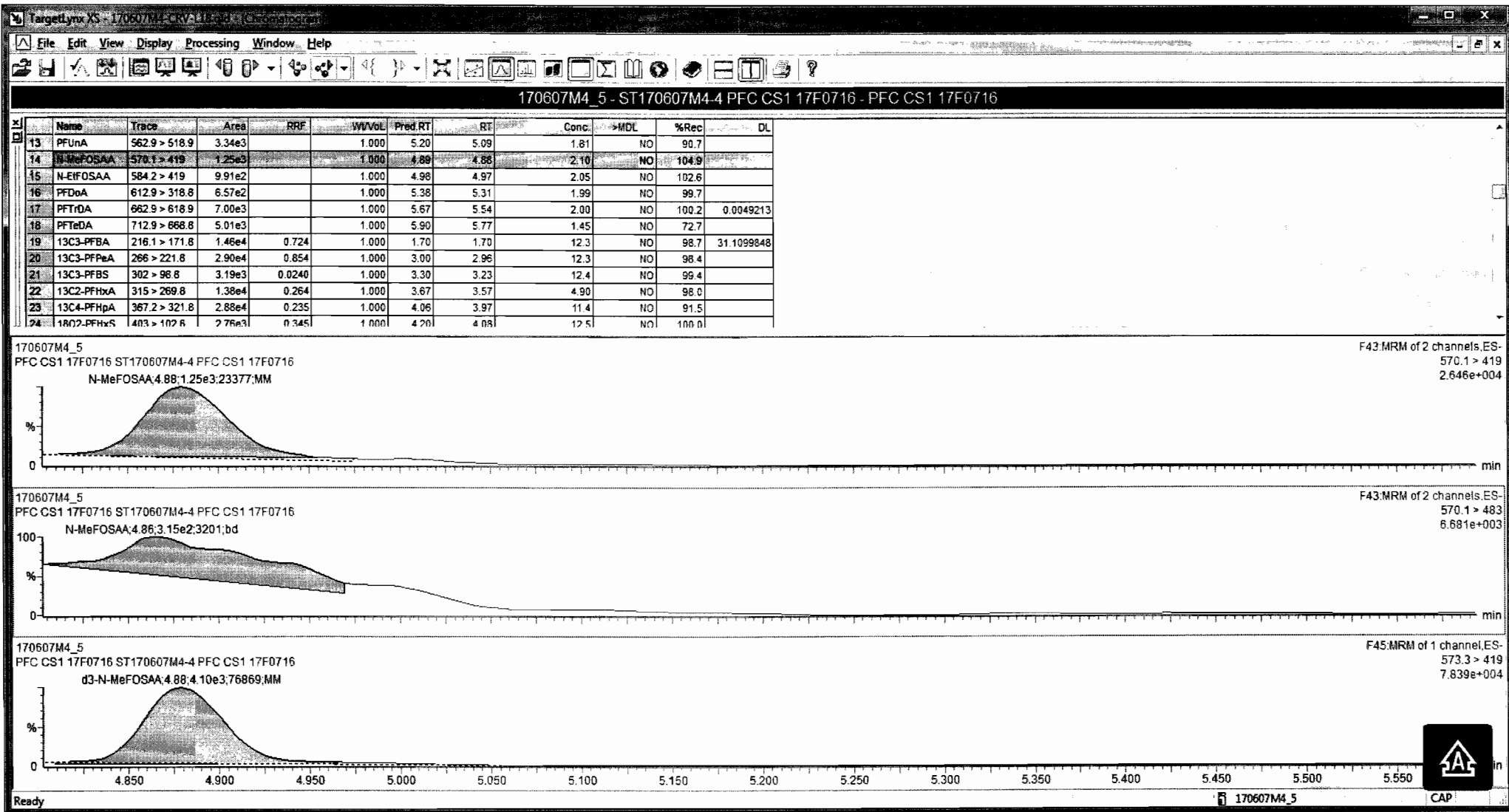
**d5-N-EtFOSAA**

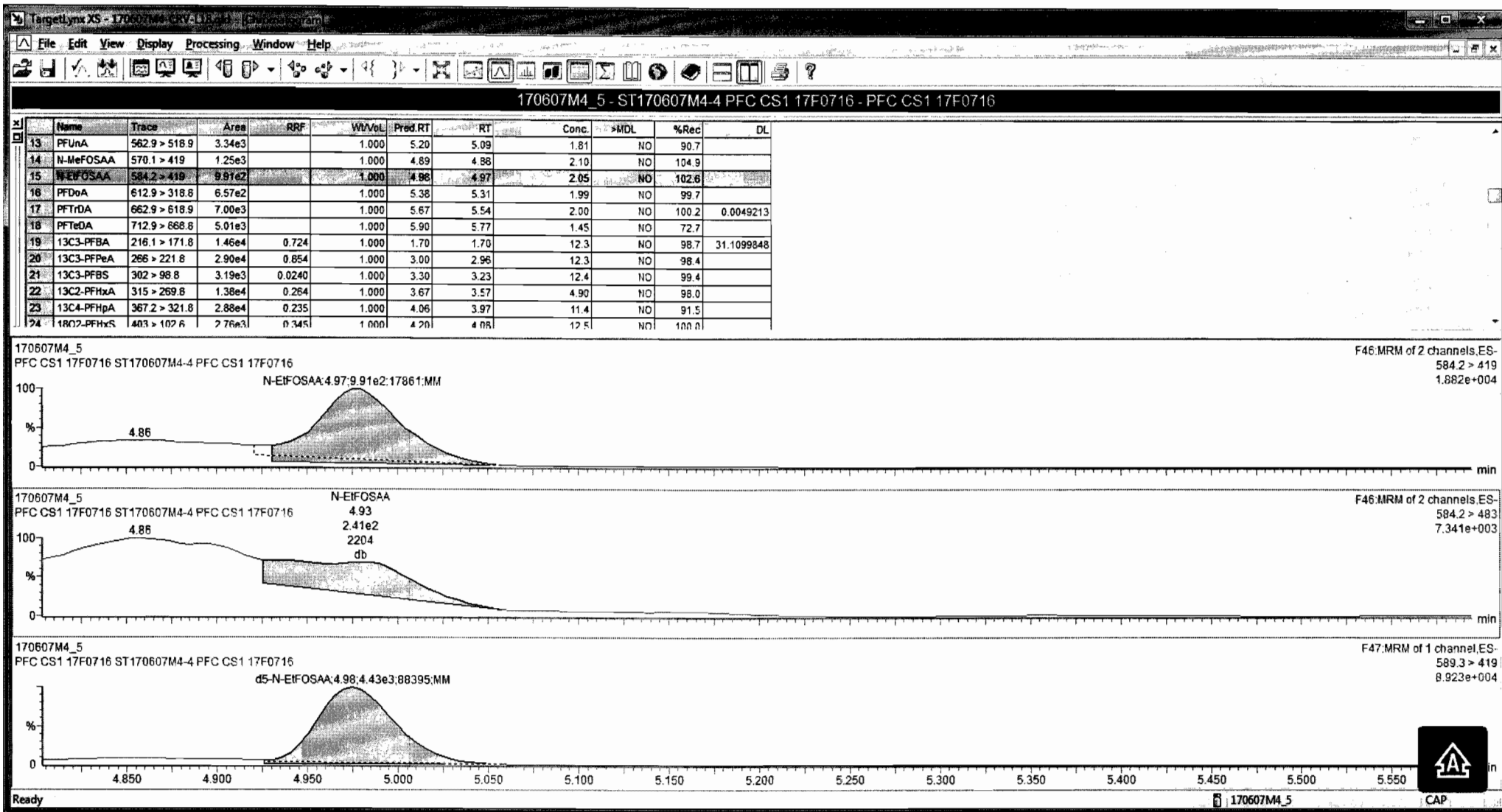


**13C2-PFDoA**







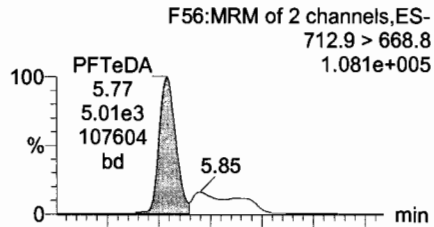


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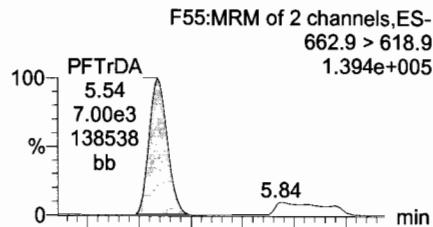
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Name: 170607M4\_5, Date: 07-Jun-2017, Time: 21:48:53, ID: ST170607M4-4 PFC CS1 17F0716, Description: PFC CS1 17F0716

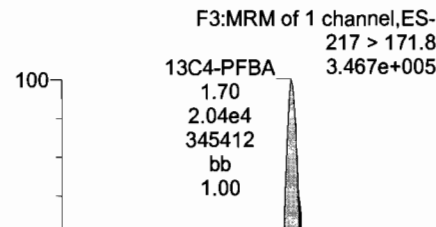
**PFTeDA**



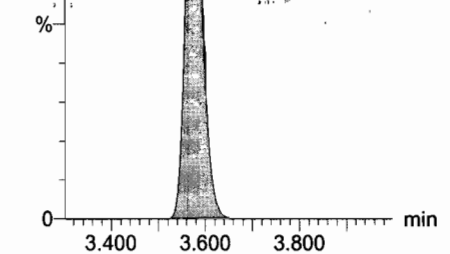
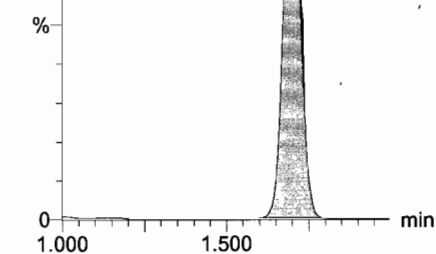
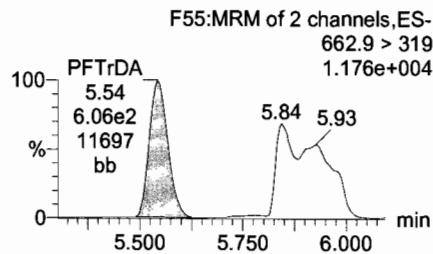
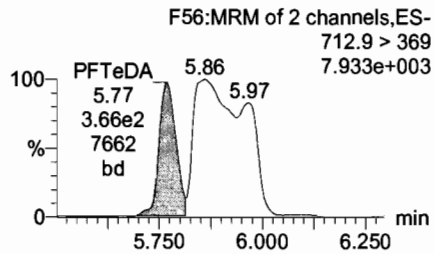
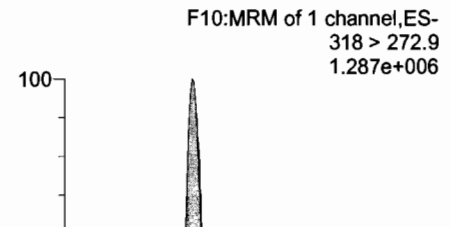
**PFTrDA**



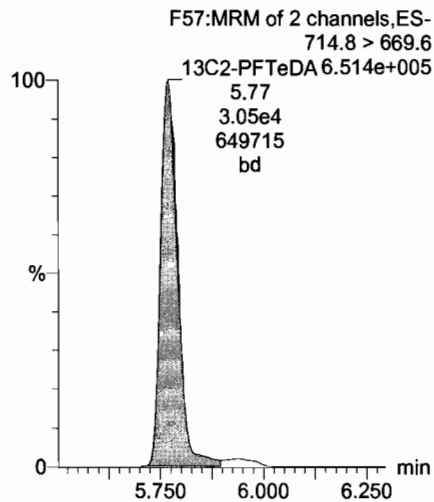
**13C4-PFBA**



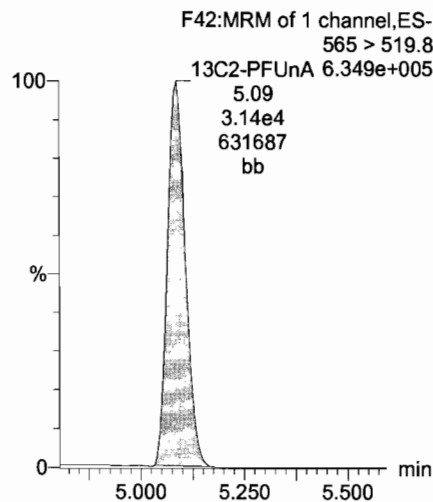
**13C5-PFHxA**



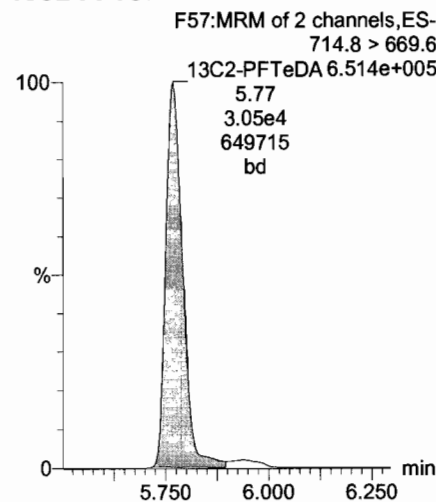
**13C2-PFTeDA**



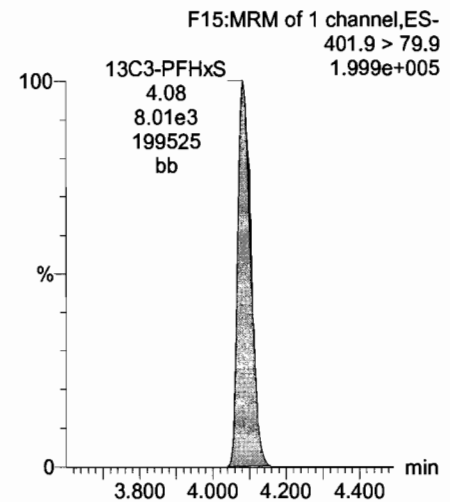
**13C2-PFUnA**



**13C2-PFTeDA**



**13C3-PFHxS**

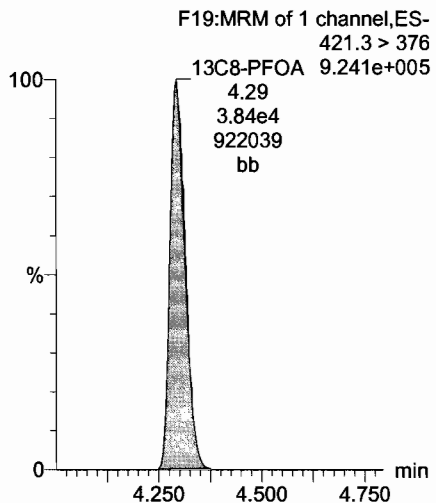


Dataset: Untitled

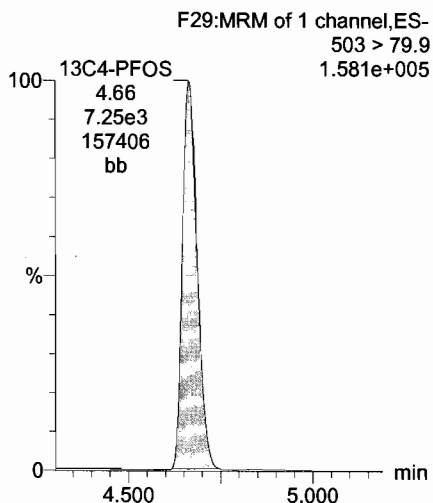
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_5, Date: 07-Jun-2017, Time: 21:48:53, ID: ST170607M4-4 PFC CS1 17F0716, Description: PFC CS1 17F0716

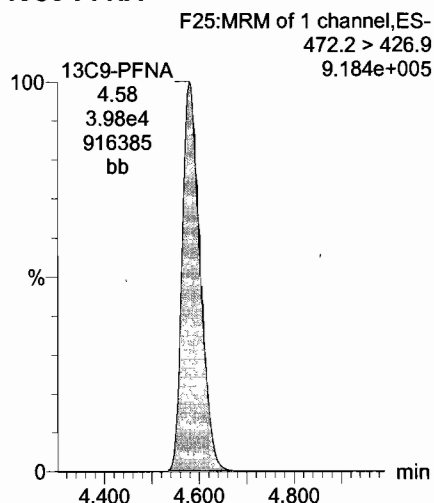
13C8-PFOA



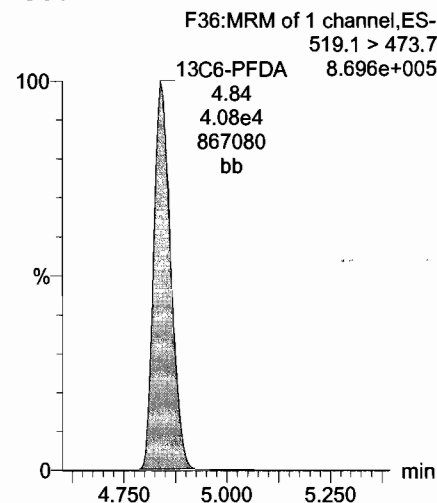
13C4-PFOS



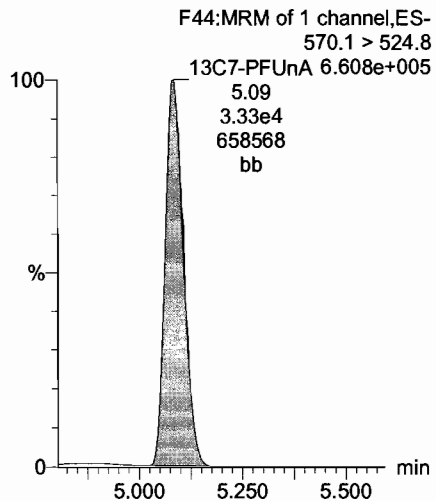
13C9-PFNA



13C6-PFDA



13C7-PFUnA

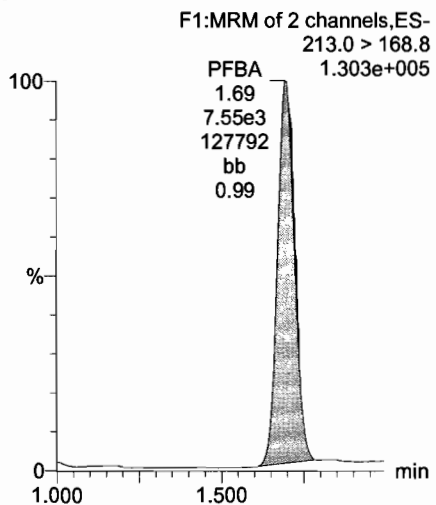


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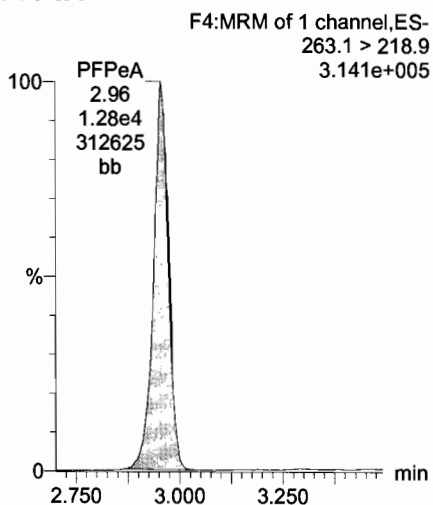
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_6, Date: 07-Jun-2017, Time: 22:00:04, ID: ST170607M4-5 PFC CS2 17F0715, Description: PFC CS2 17F0715

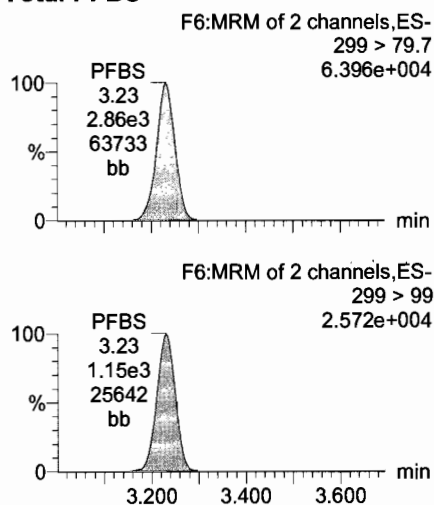
**PFBA**



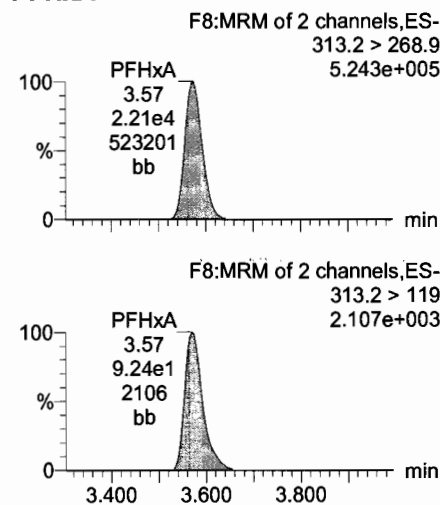
**PFPeA**



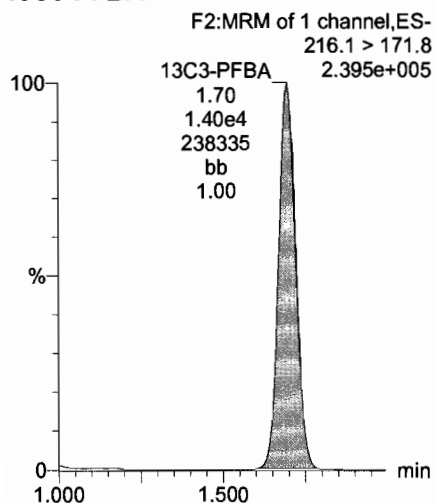
**Total PFBS**



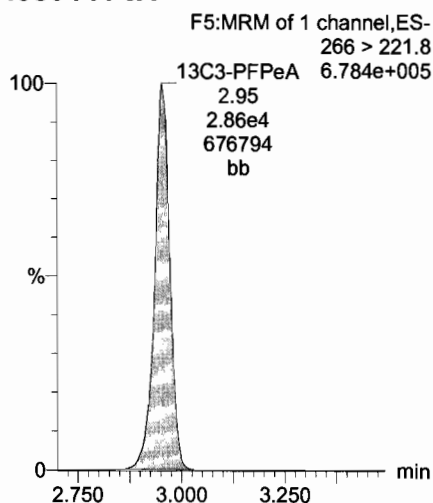
**PFHxA**



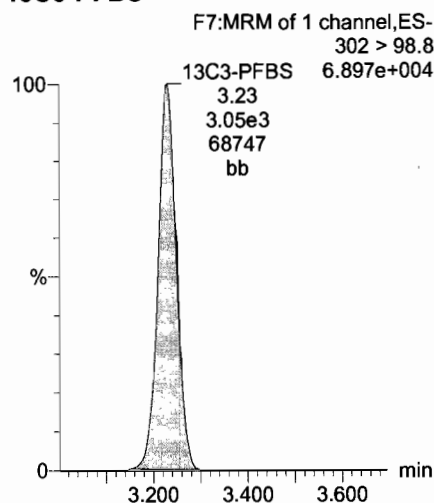
**13C3-PFBA**



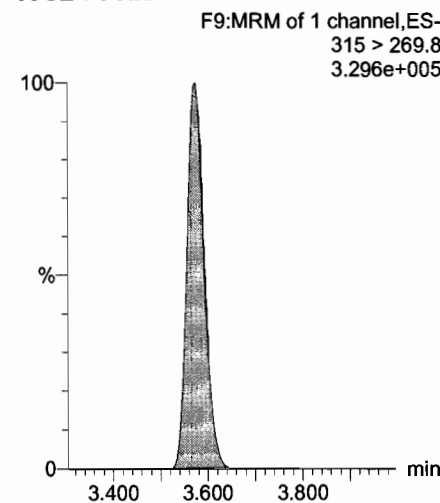
**13C3-PFPeA**

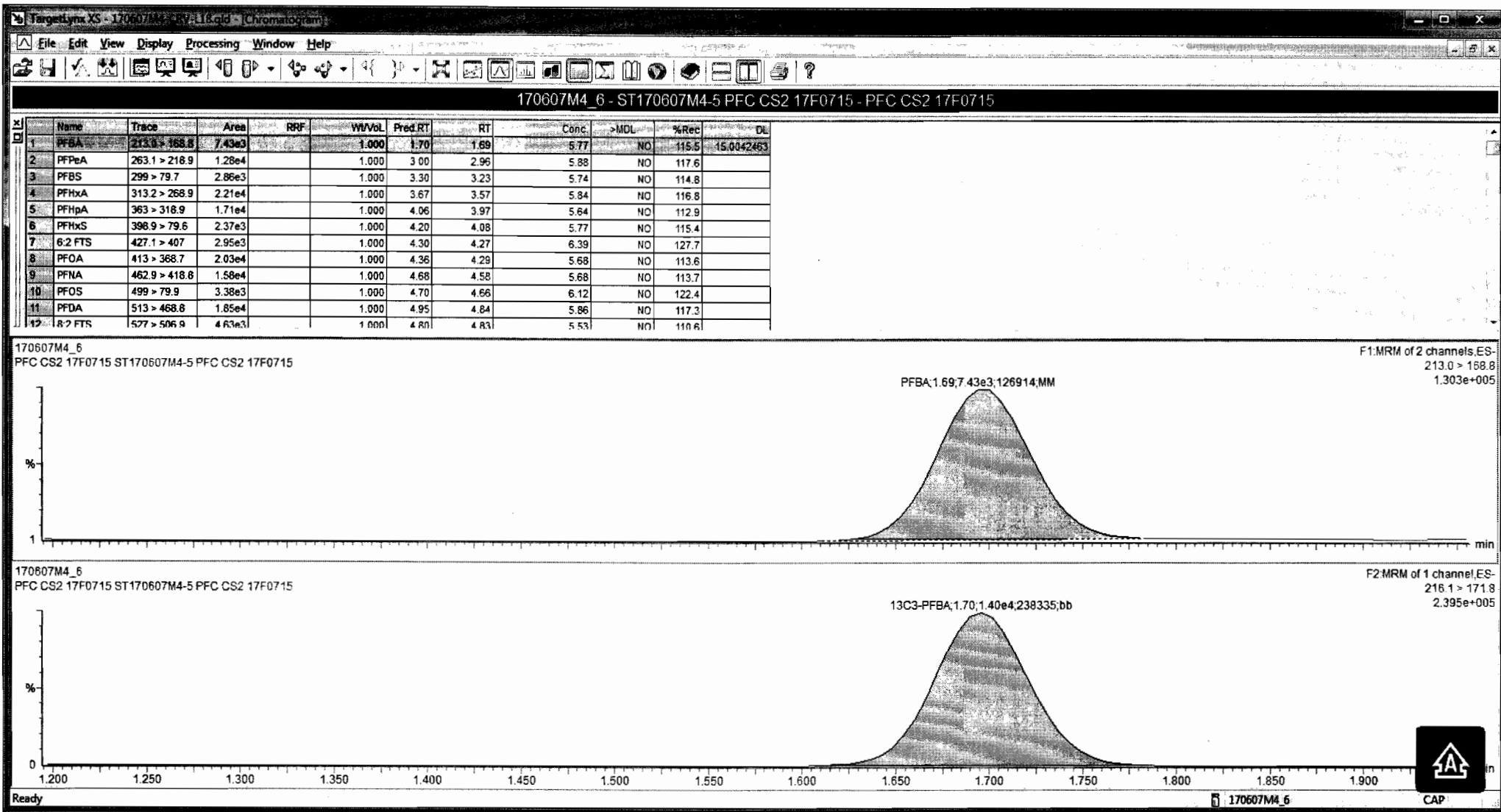


**13C3-PFBS**



**13C2-PFHxA**



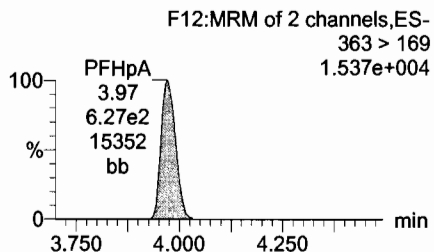
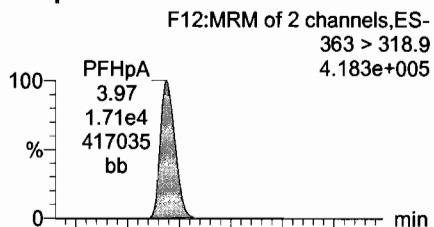


Dataset: Untitled

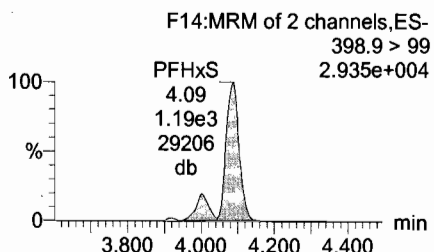
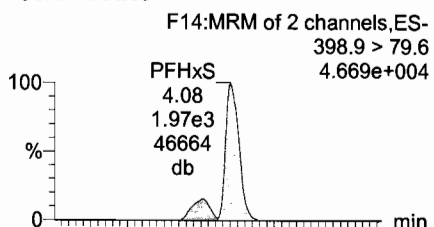
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_6, Date: 07-Jun-2017, Time: 22:00:04, ID: ST170607M4-5 PFC CS2 17F0715, Description: PFC CS2 17F0715

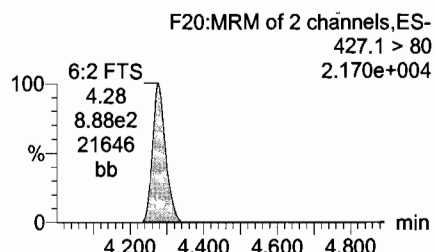
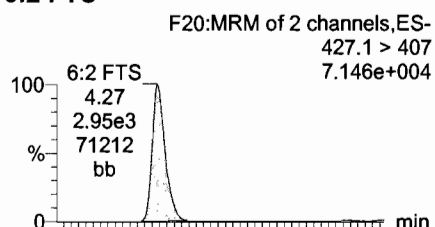
**PFHpA**



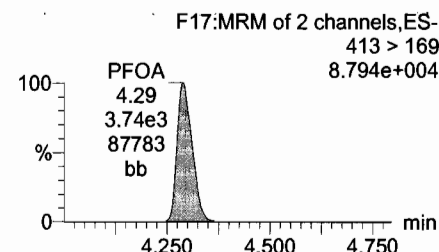
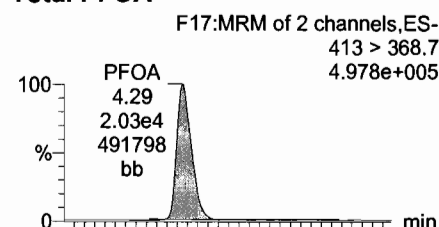
**Total PFHxS**



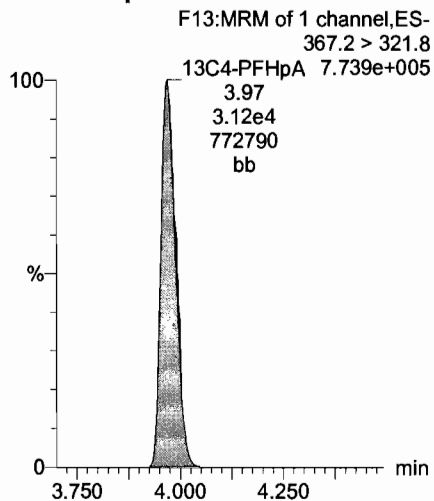
**6:2 FTS**



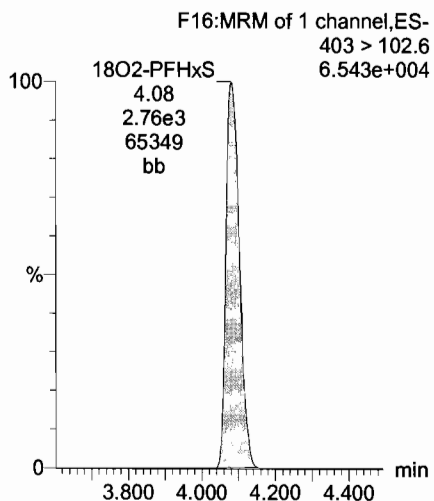
**Total PFOA**



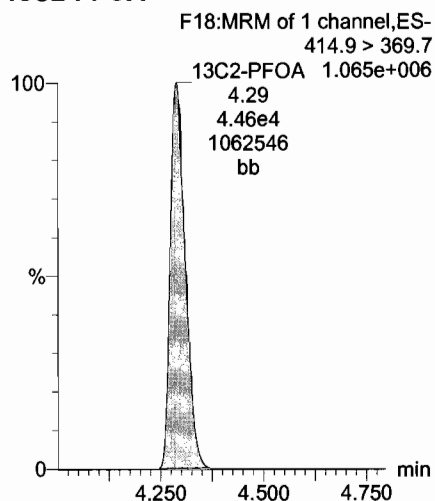
**13C4-PFHpa**



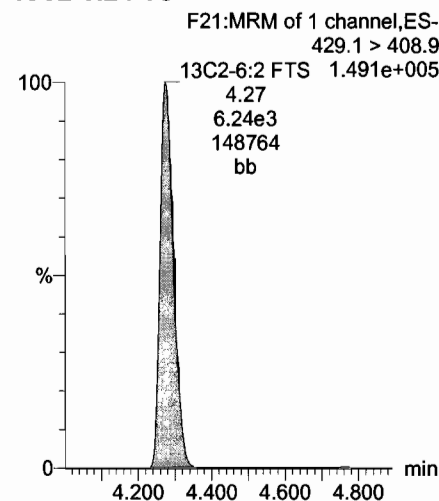
**18O2-PFHxS**

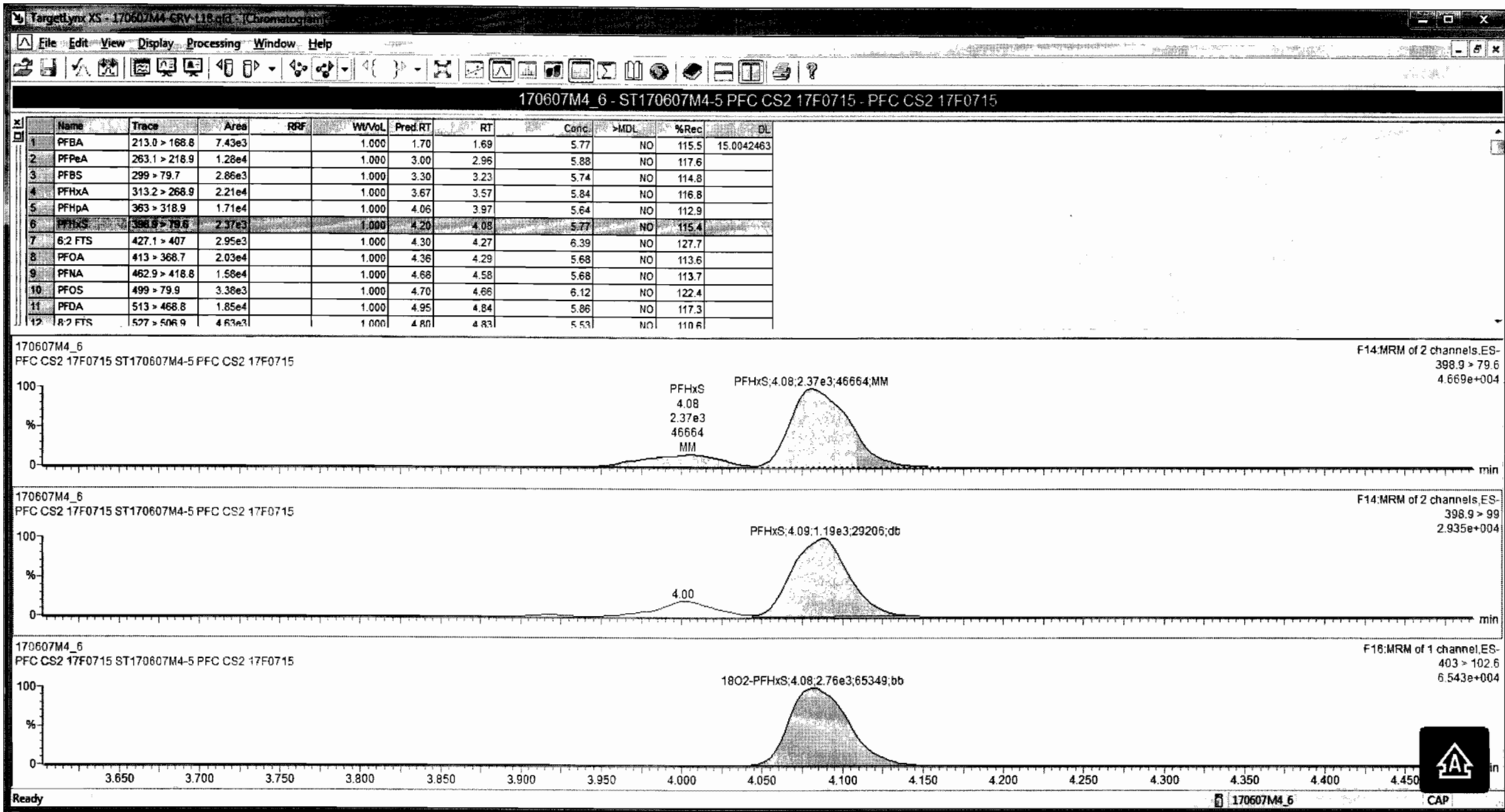


**13C2-PFOA**



**13C2-6:2 FTS**





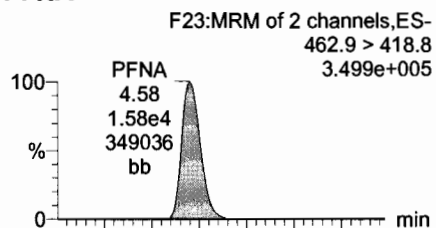


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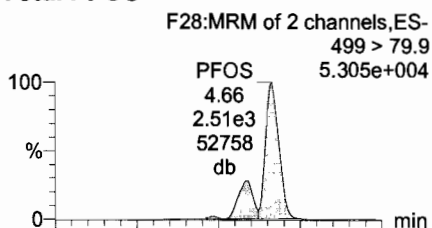
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_6, Date: 07-Jun-2017, Time: 22:00:04, ID: ST170607M4-5 PFC CS2 17F0715, Description: PFC CS2 17F0715

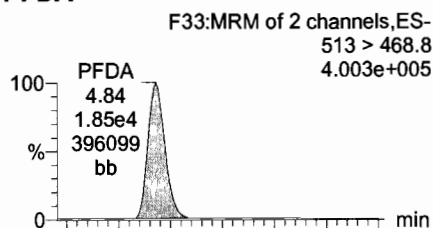
**PFNA**



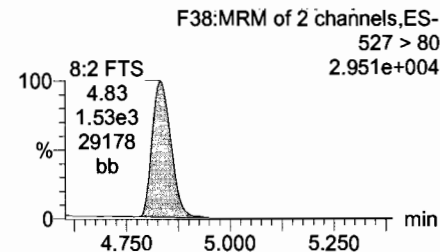
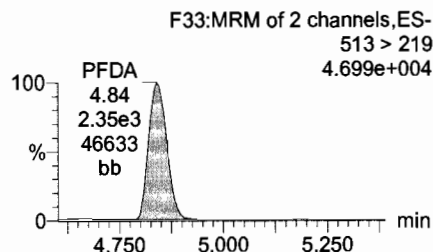
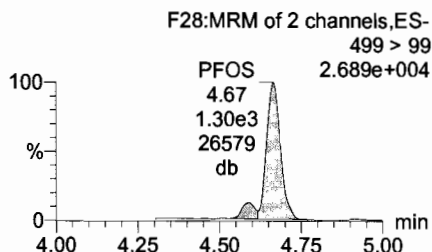
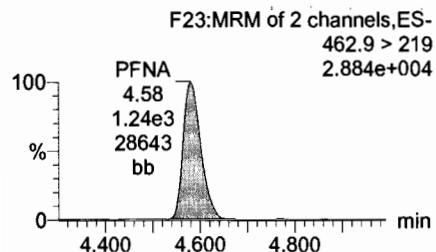
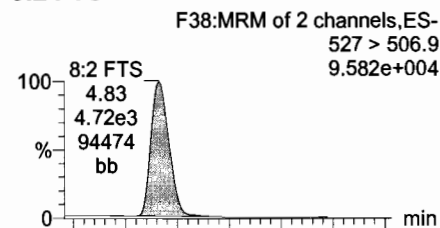
**Total PFOS**



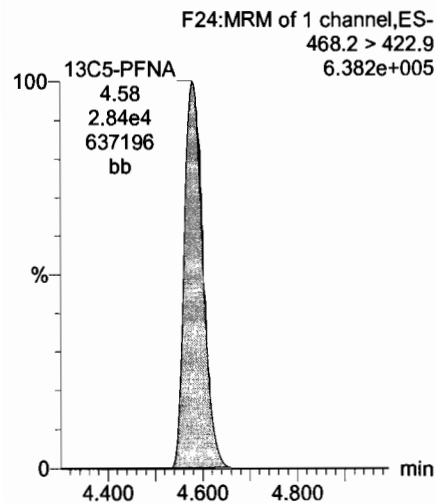
**PFDA**



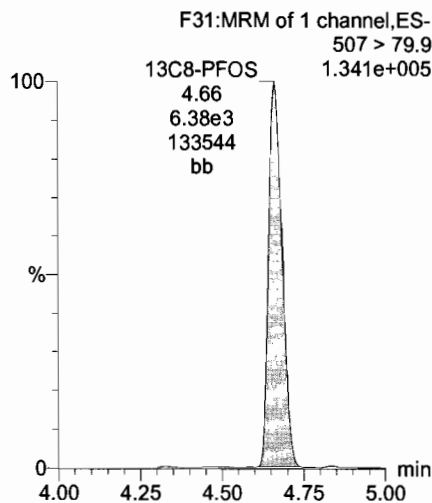
**8:2 FTS**



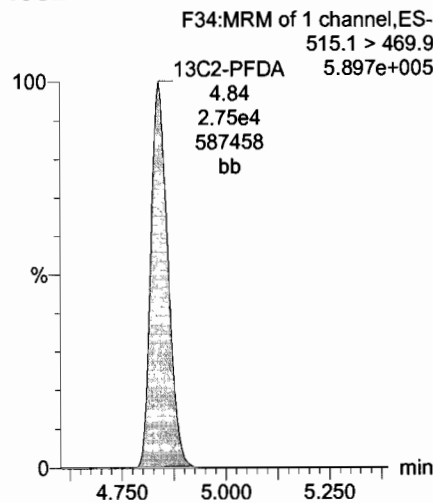
**13C5-PFNA**



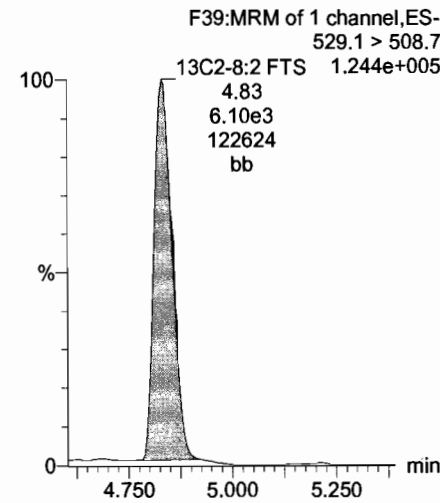
**13C8-PFOS**

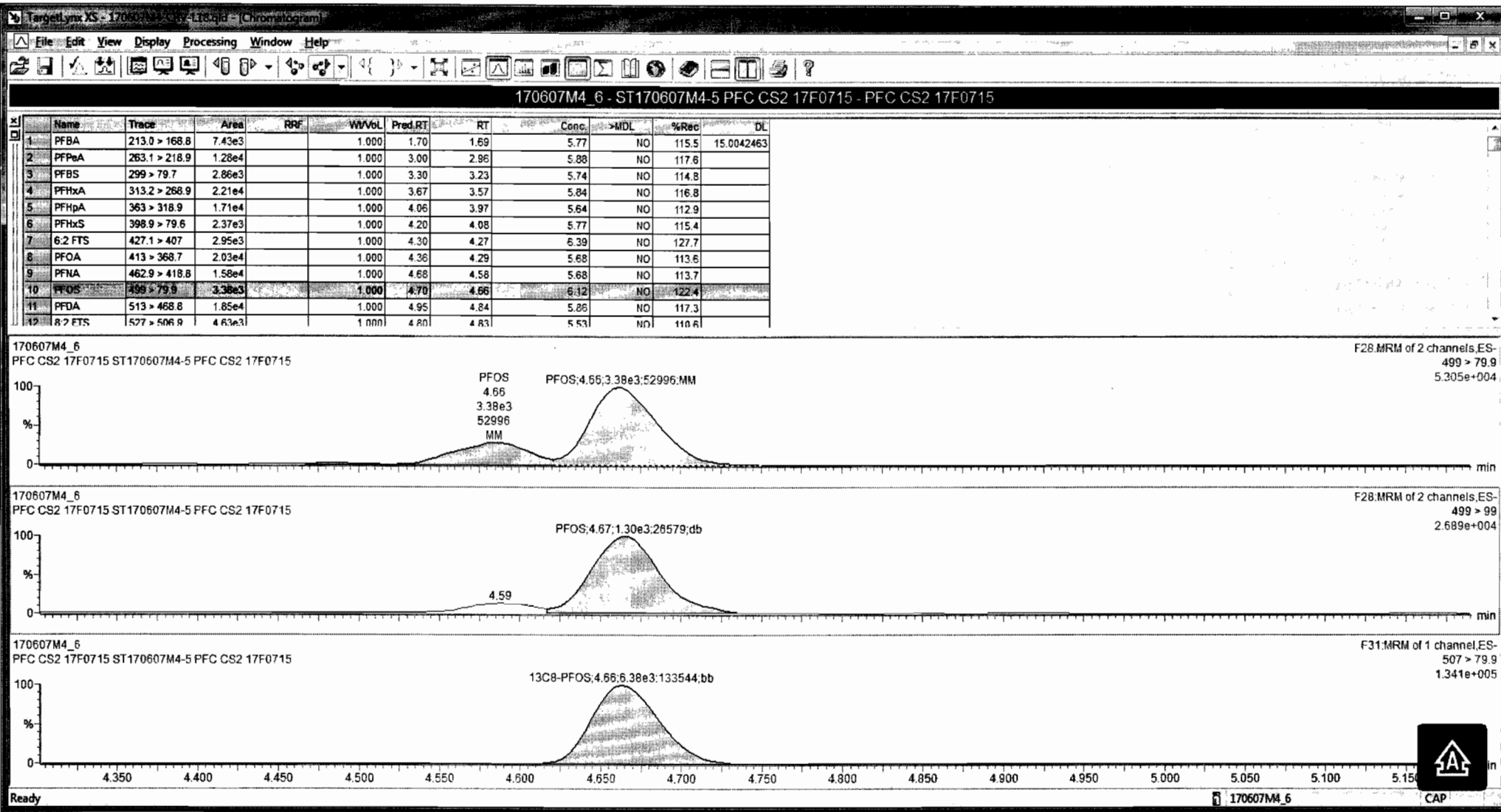


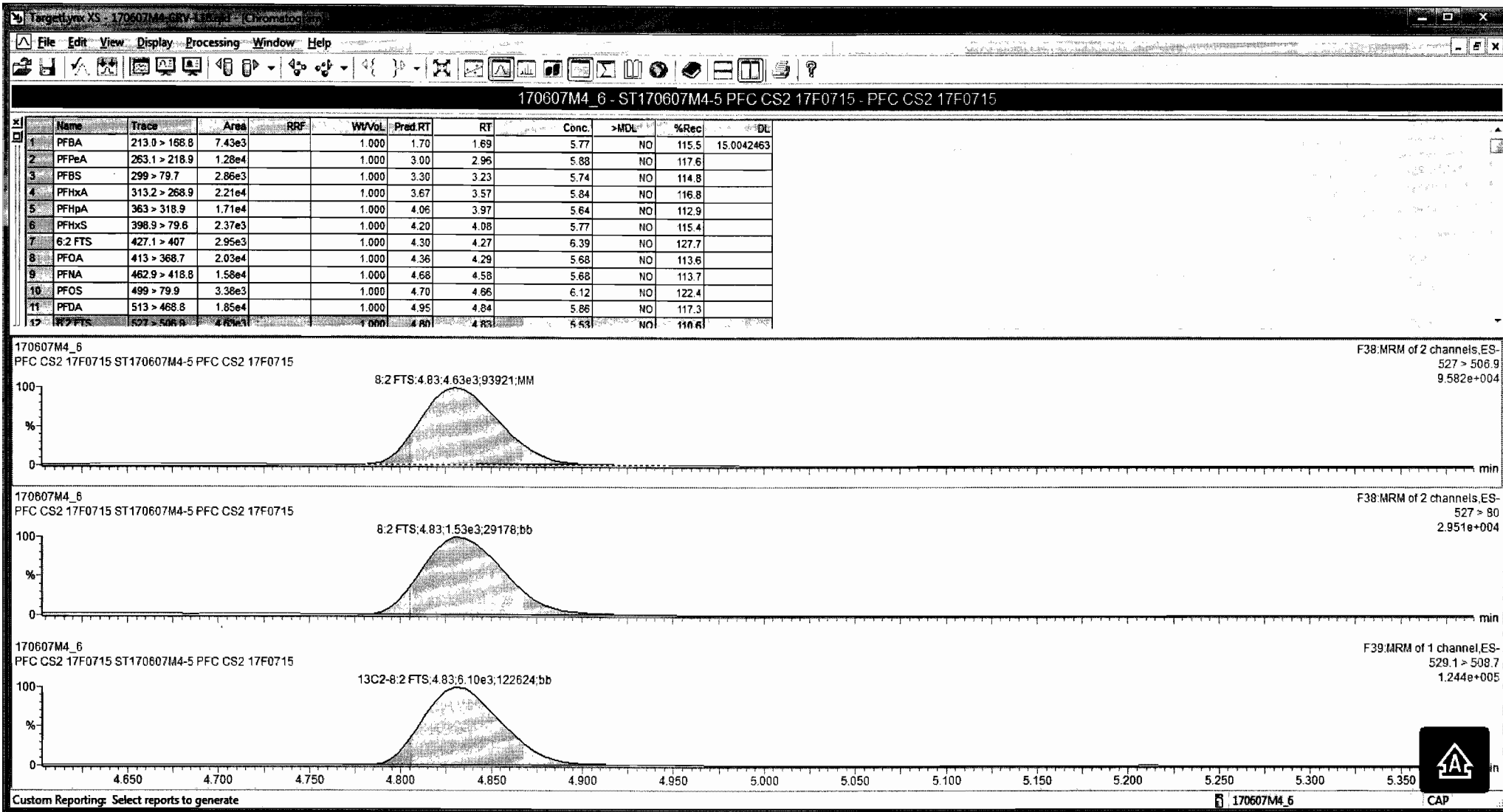
**13C2-PFDA**



**13C2-8:2 FTS**



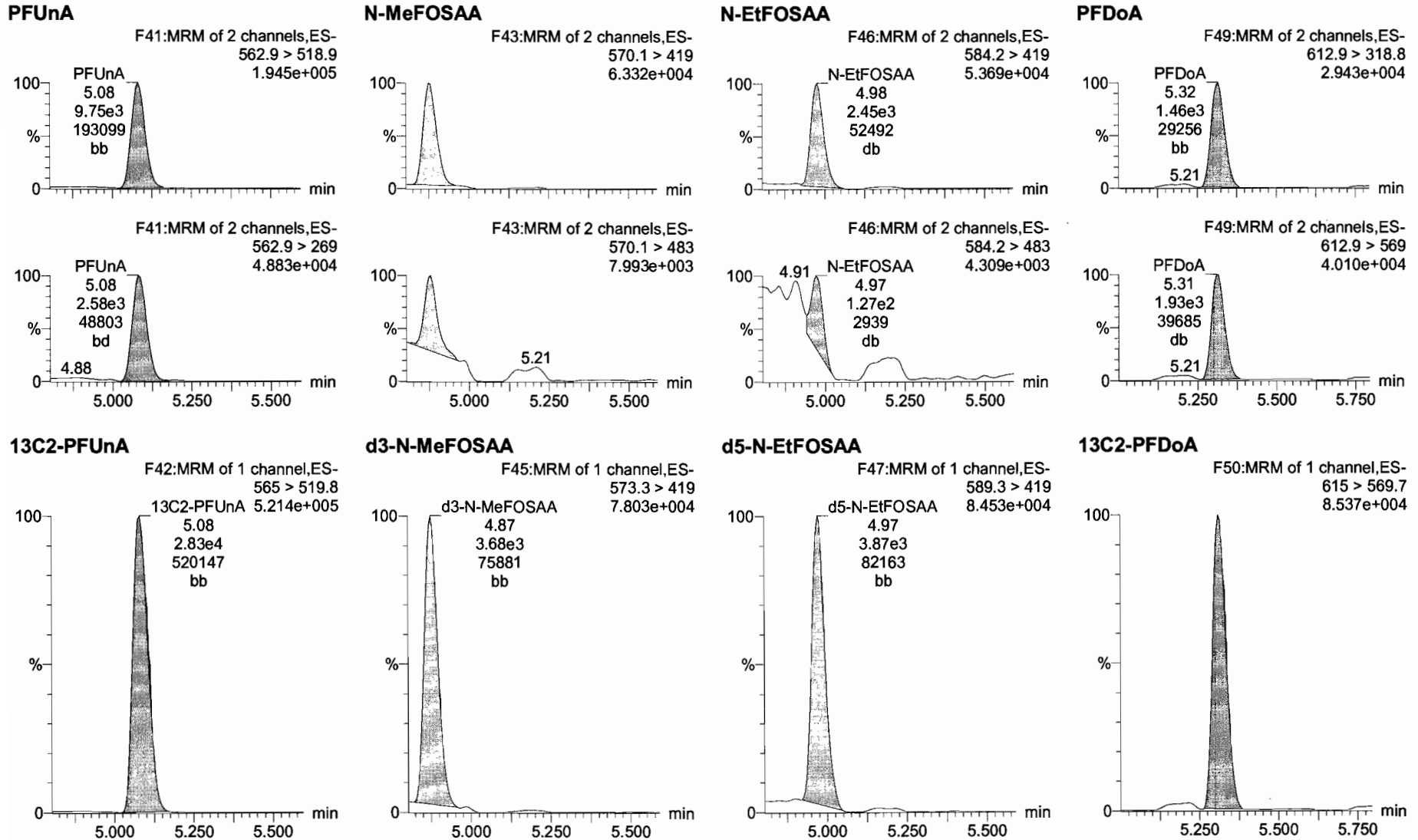


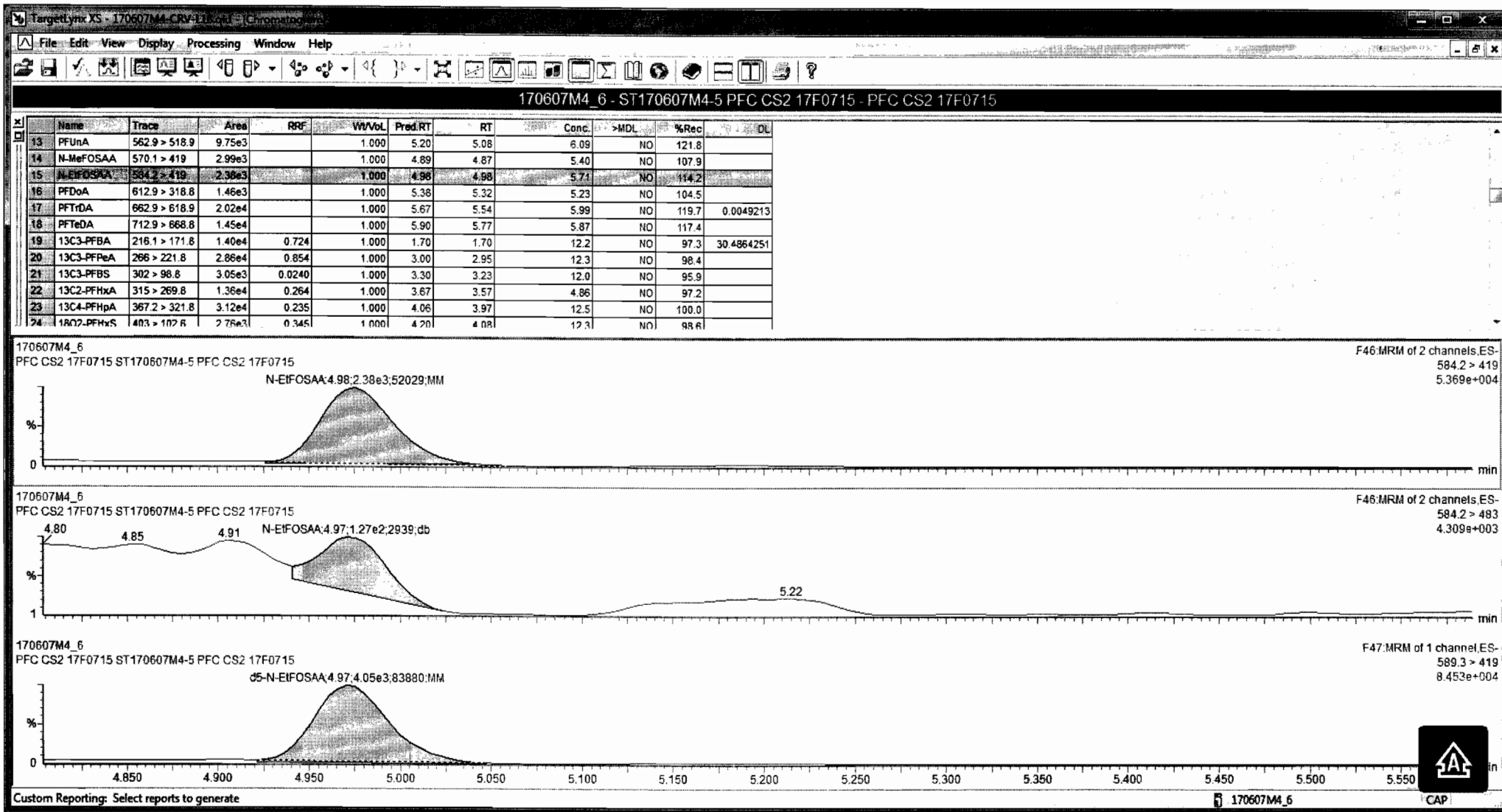


Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_6, Date: 07-Jun-2017, Time: 22:00:04, ID: ST170607M4-5 PFC CS2 17F0715, Description: PFC CS2 17F0715



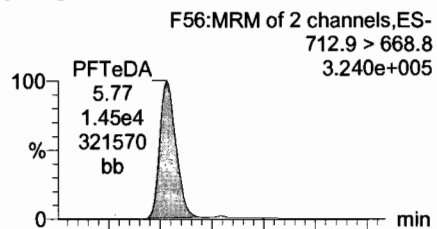


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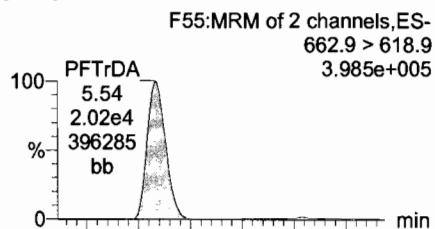
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_6, Date: 07-Jun-2017, Time: 22:00:04, ID: ST170607M4-5 PFC CS2 17F0715, Description: PFC CS2 17F0715

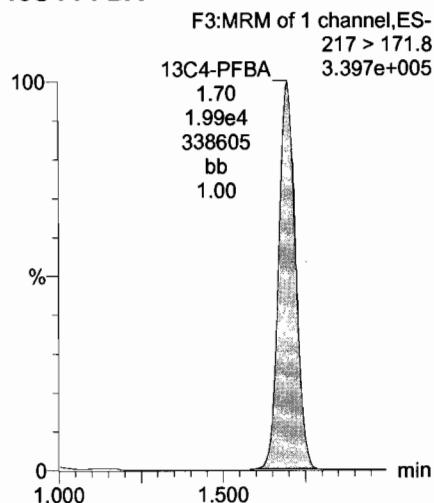
**PFTeDA**



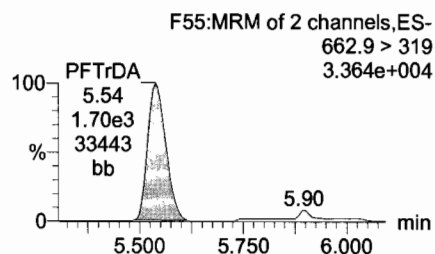
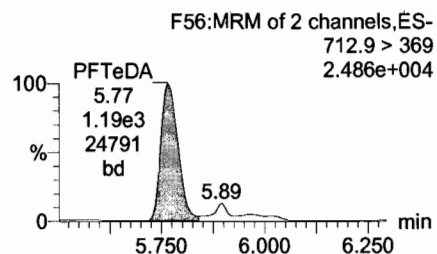
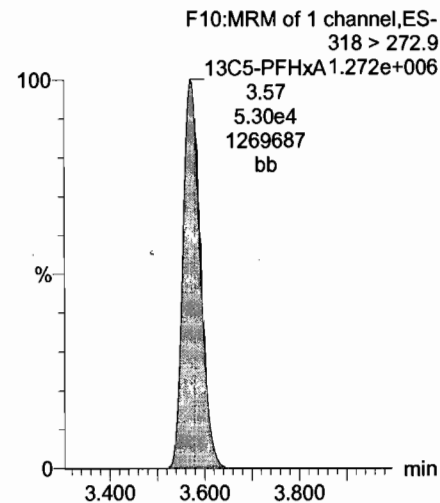
**PFTrDA**



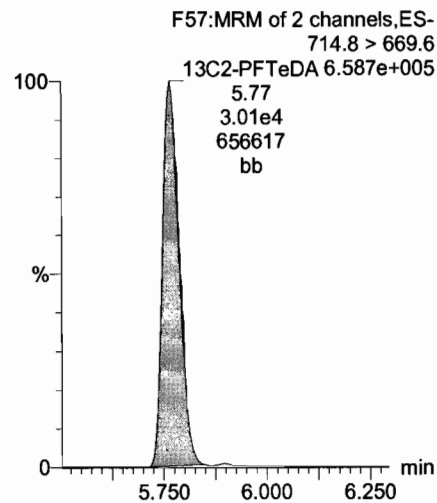
**13C4-PFBA**



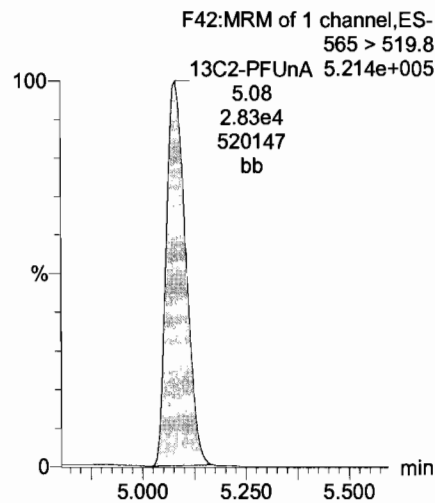
**13C5-PFHxA**



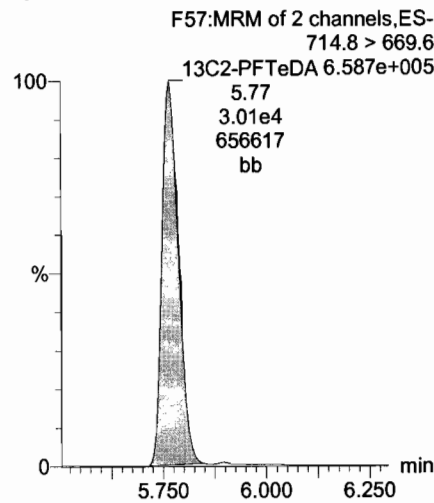
**13C2-PFTeDA**



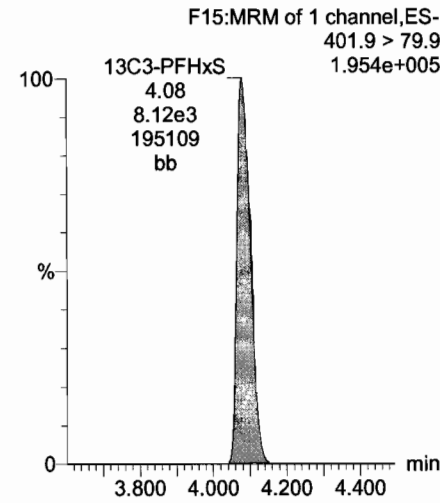
**13C2-PFUnA**



**13C2-PFTeDA**



**13C3-PFHxS**

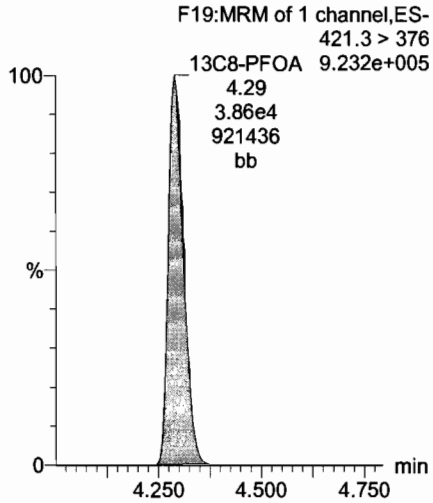


Dataset: Untitled

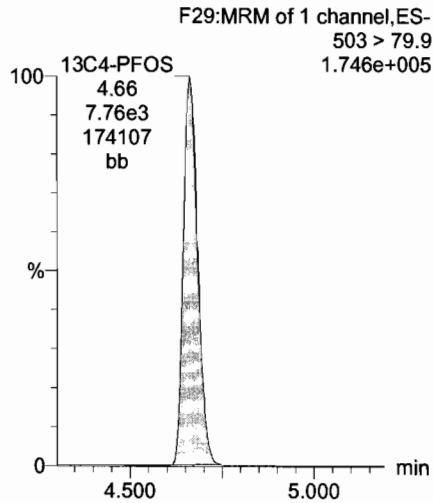
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_6, Date: 07-Jun-2017, Time: 22:00:04, ID: ST170607M4-5 PFC CS2 17F0715, Description: PFC CS2 17F0715

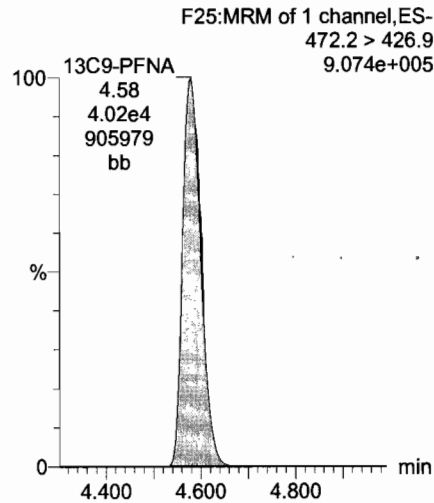
13C8-PFOA



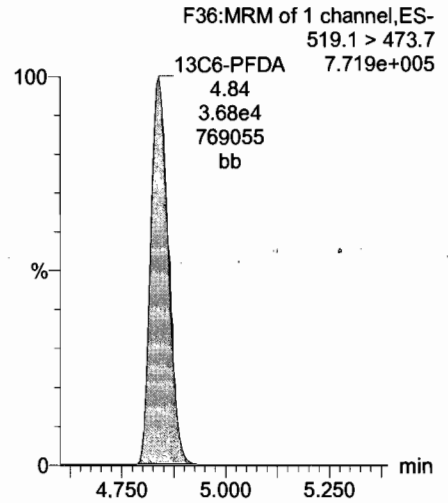
13C4-PFOS



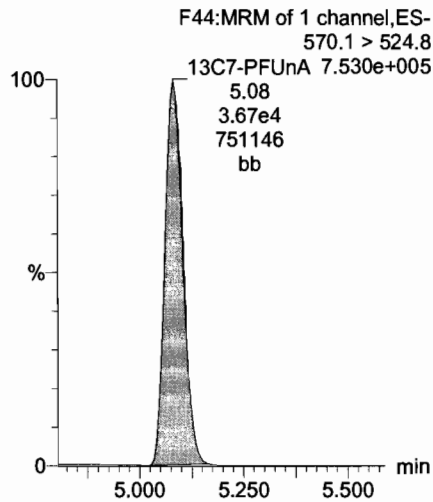
13C9-PFNA



13C6-PFDA



13C7-PFUnA

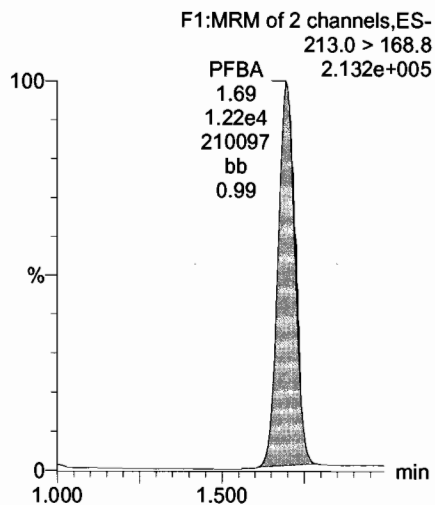


Dataset: Untitled

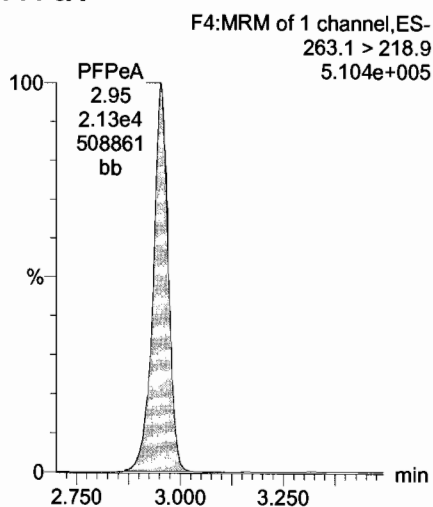
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_7, Date: 07-Jun-2017, Time: 22:11:15, ID: ST170607M4-6 PFC CS3 17F0714, Description: PFC CS3 17F0714

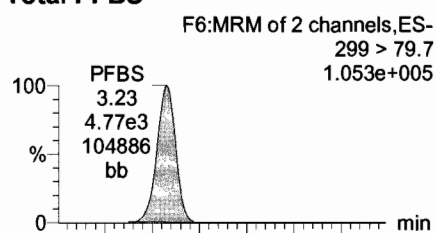
**PFBA**



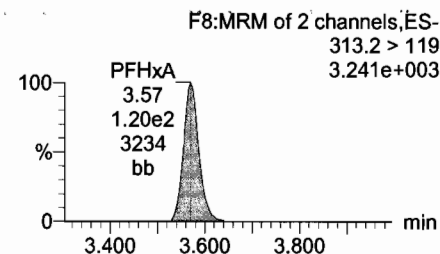
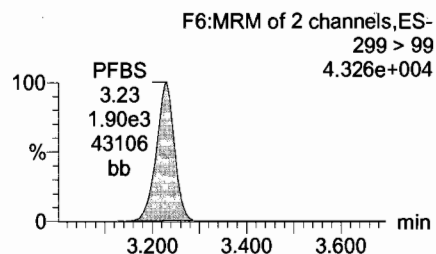
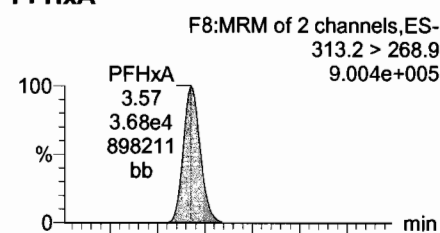
**PFPeA**



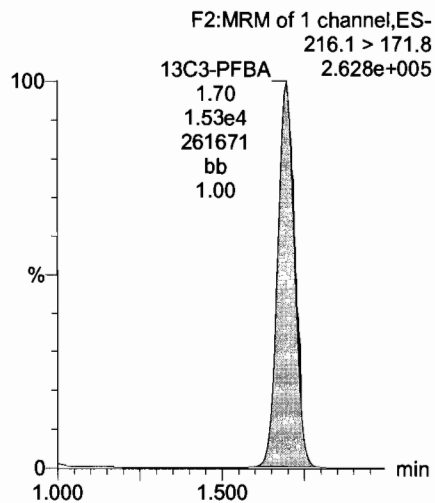
**Total PFBS**



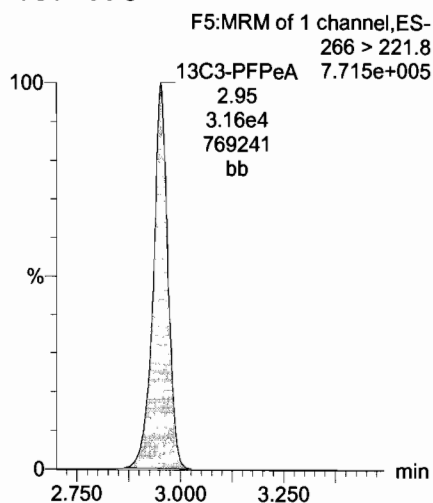
**PFHxA**



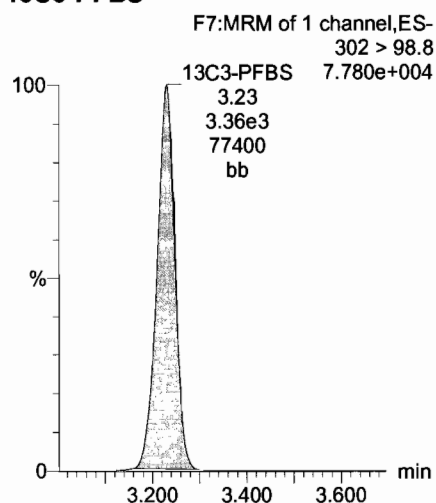
**13C3-PFBA**



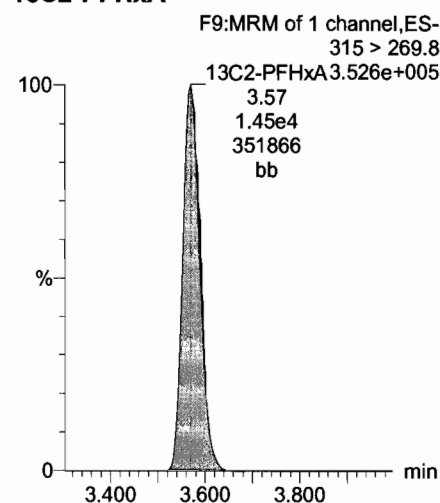
**13C3-PFPeA**



**13C3-PFBS**



**13C2-PFHxA**





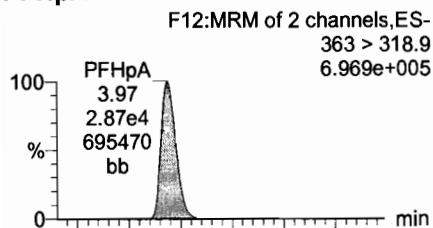
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Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time

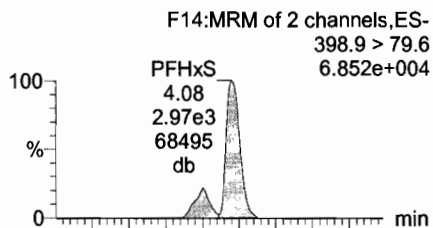
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_7, Date: 07-Jun-2017, Time: 22:11:15, ID: ST170607M4-6 PFC CS3 17F0714, Description: PFC CS3 17F0714

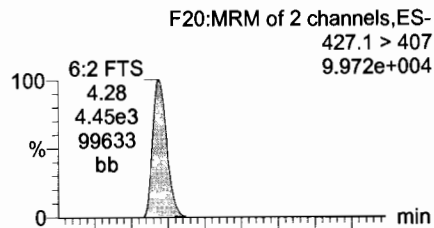
**PFHpA**



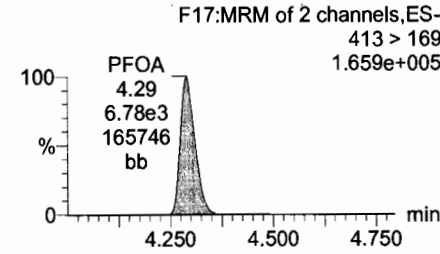
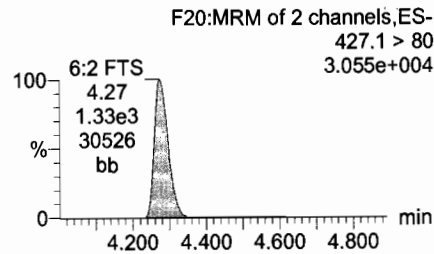
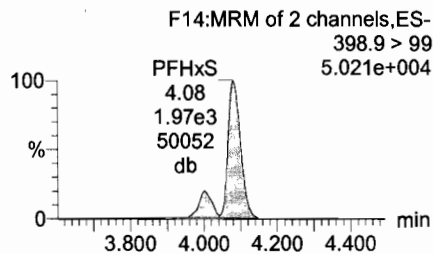
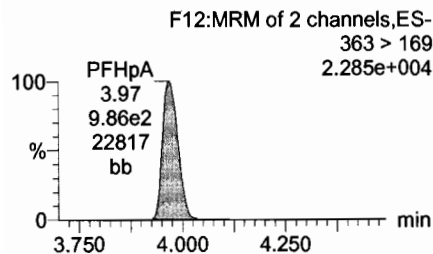
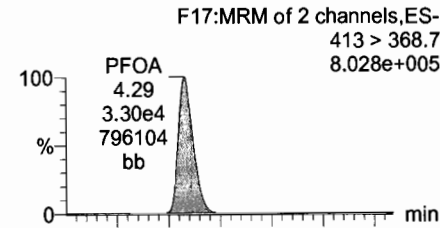
**Total PFHxS**



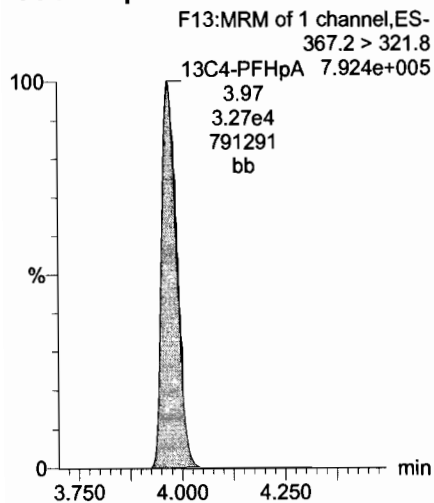
**6:2 FTS**



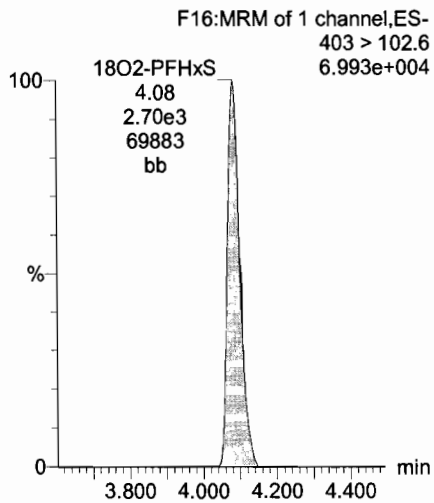
**Total PFOA**



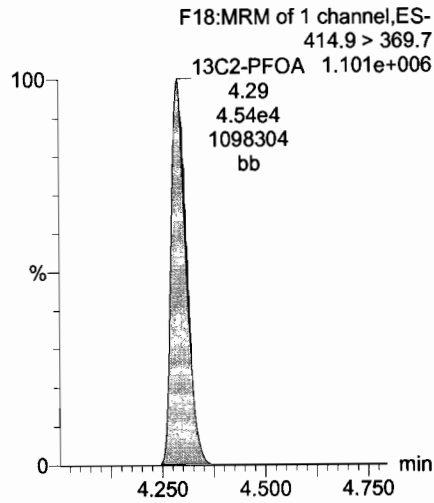
**13C4-PFHpA**



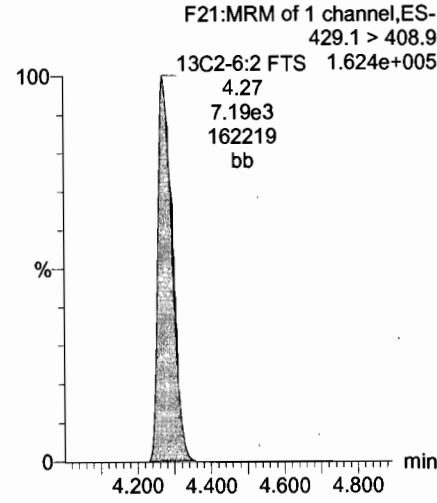
**18O2-PFHxS**

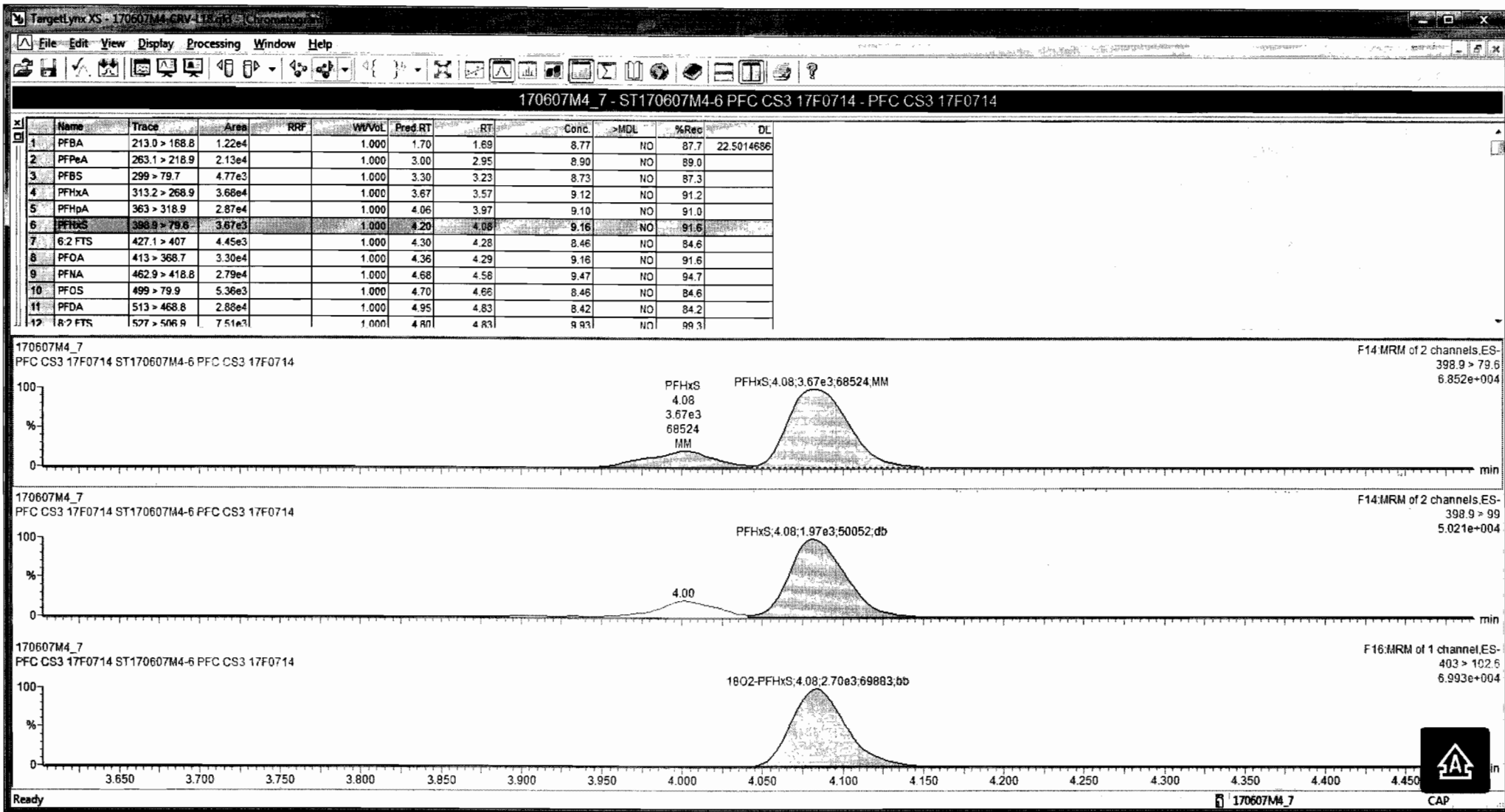


**13C2-PFOA**



**13C2-6:2 FTS**



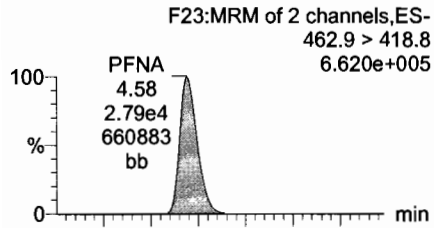


Dataset: Untitled

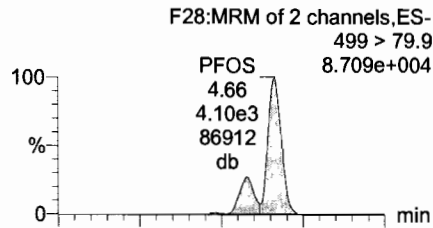
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_7, Date: 07-Jun-2017, Time: 22:11:15, ID: ST170607M4-6 PFC CS3 17F0714, Description: PFC CS3 17F0714

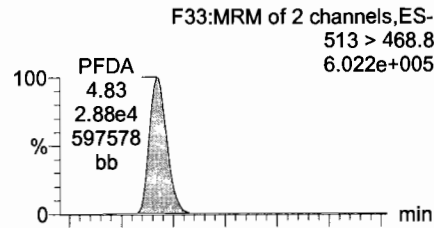
**PFNA**



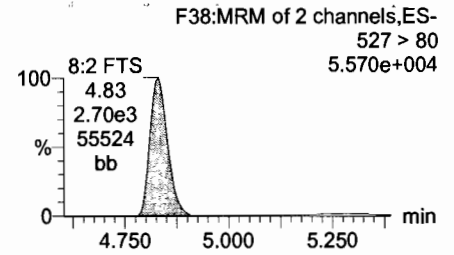
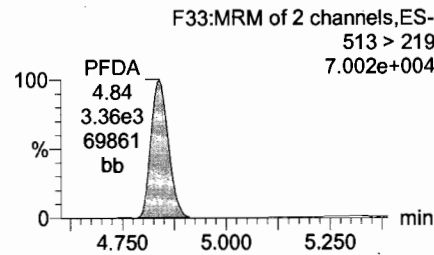
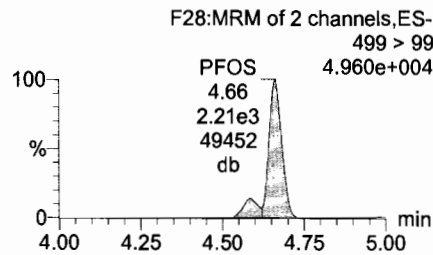
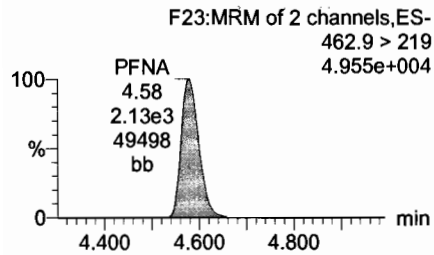
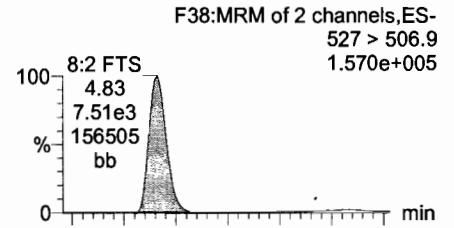
**Total PFOS**



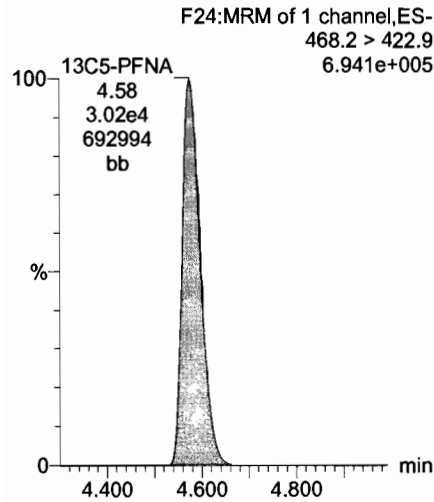
**PFDA**



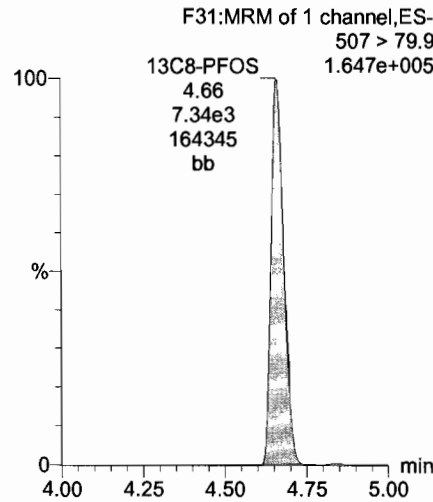
**8:2 FTS**



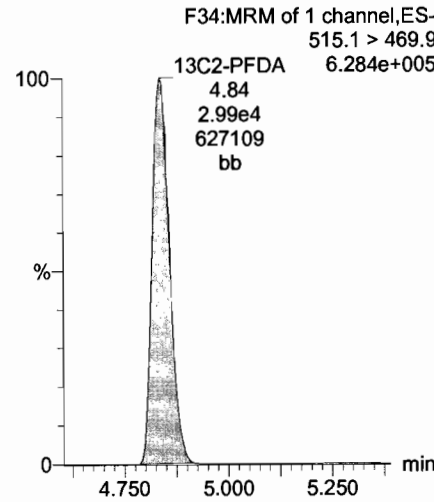
**13C5-PFNA**



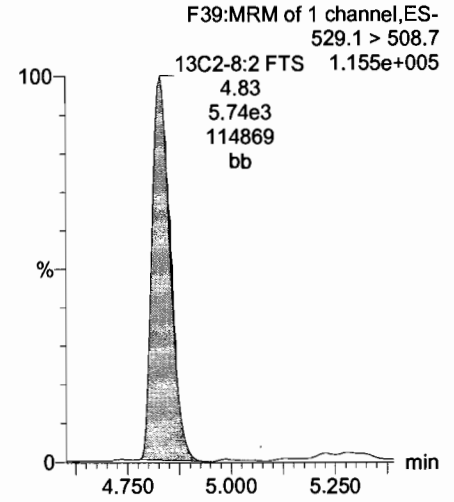
**13C8-PFOS**

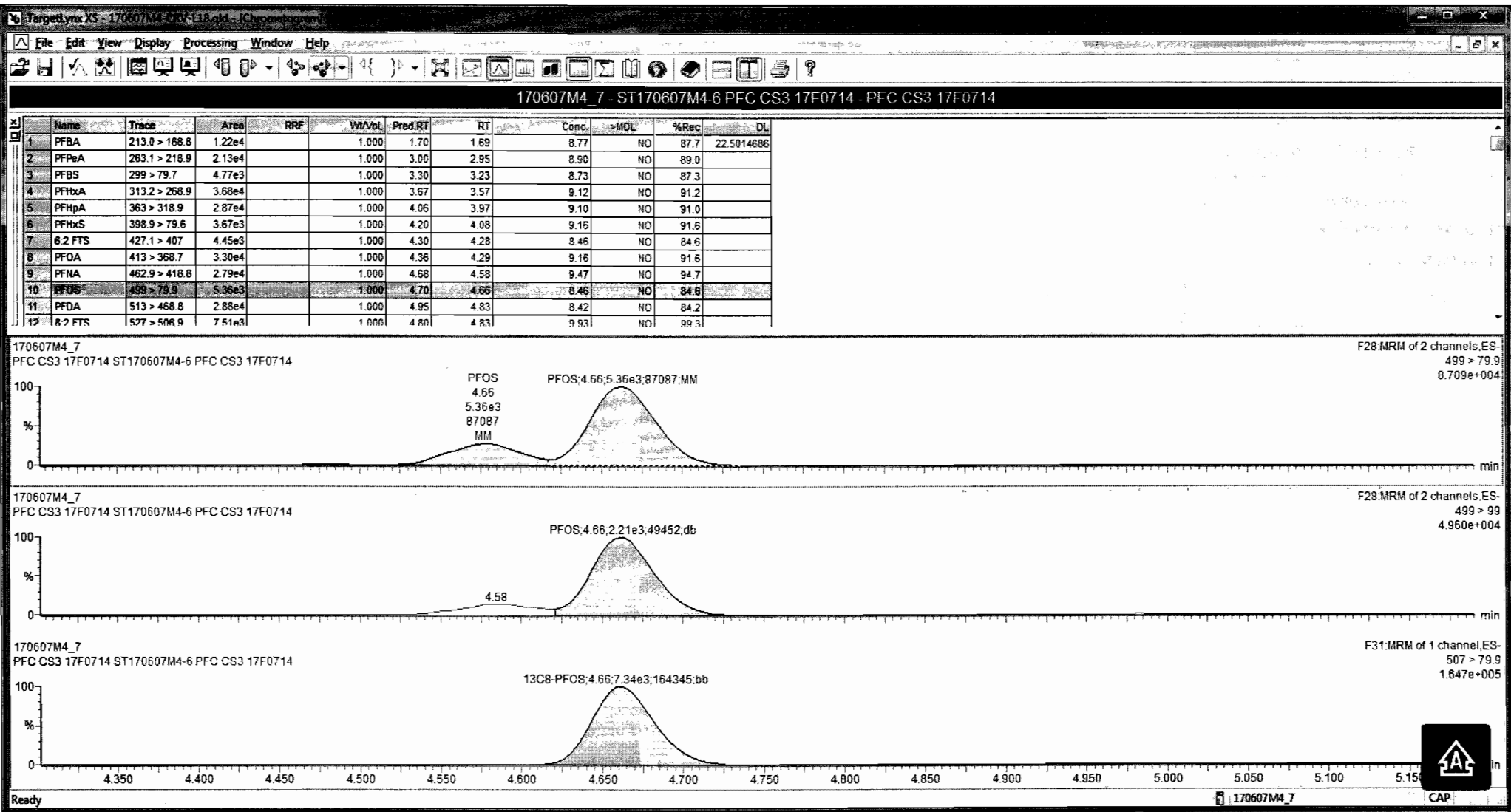


**13C2-PFDA**



**13C2-8:2 FTS**





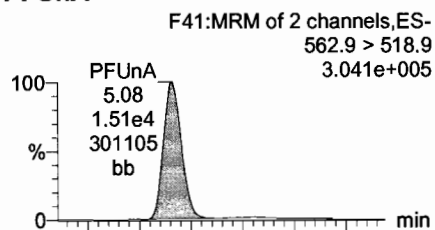
Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time

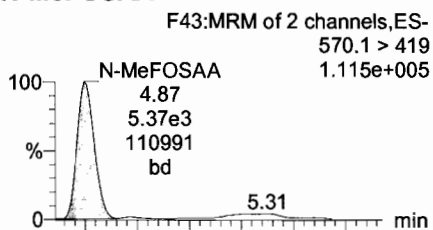
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_7, Date: 07-Jun-2017, Time: 22:11:15, ID: ST170607M4-6 PFC CS3 17F0714, Description: PFC CS3 17F0714

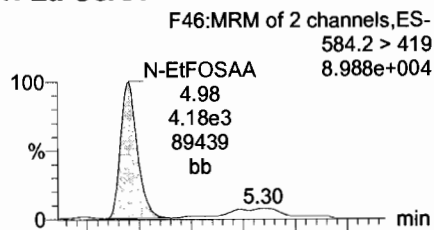
**PFUnA**



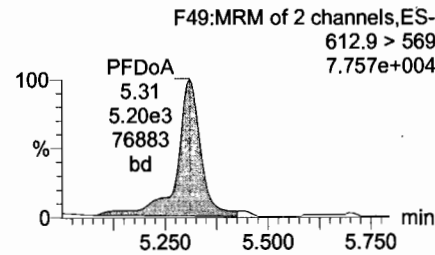
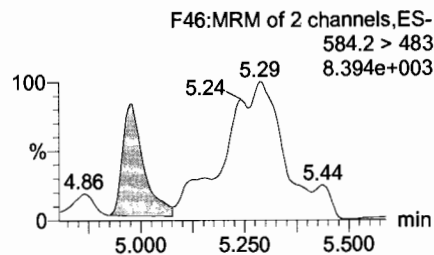
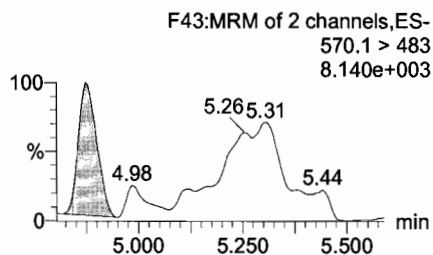
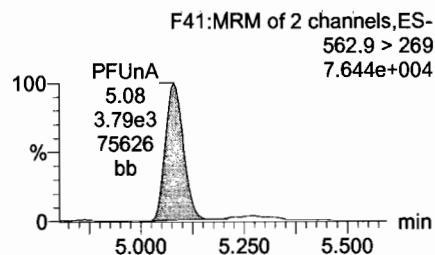
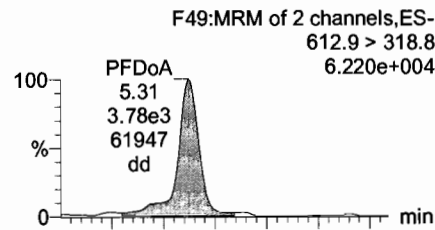
**N-MeFOSAA**



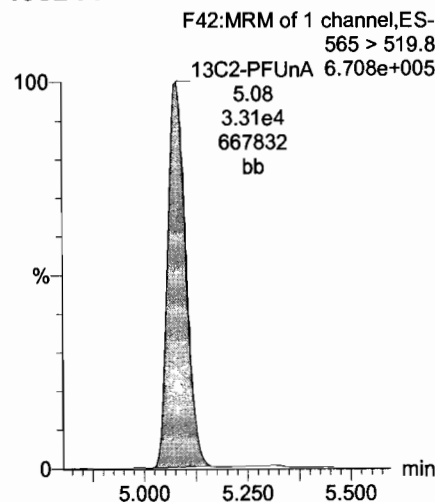
**N-EtFOSAA**



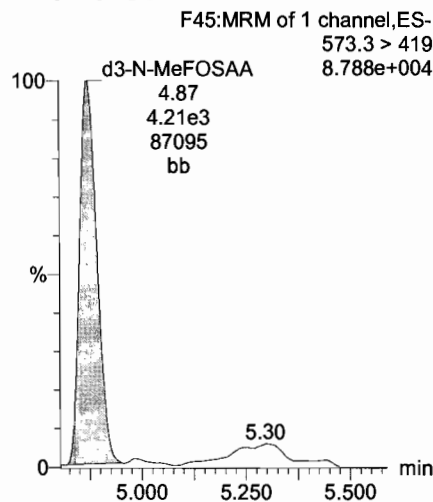
**PFDoA**



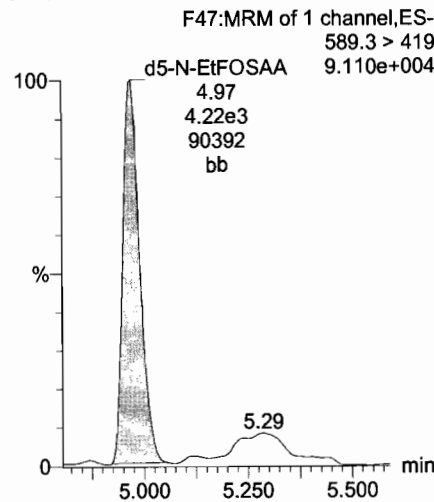
**13C2-PFUnA**



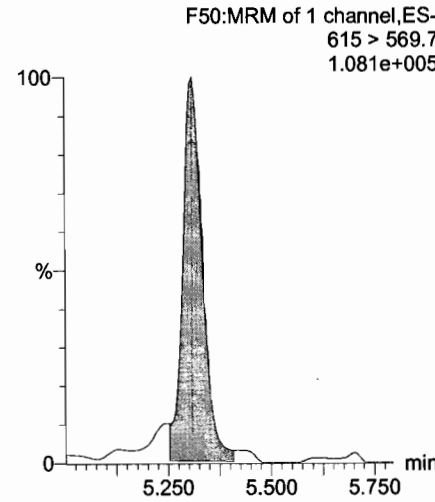
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



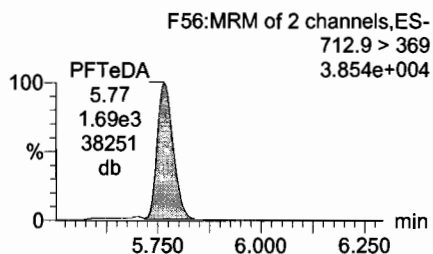
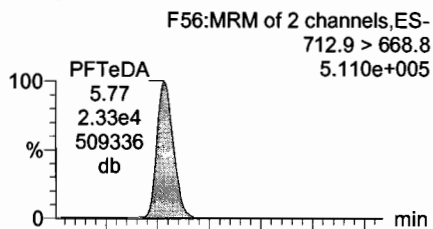
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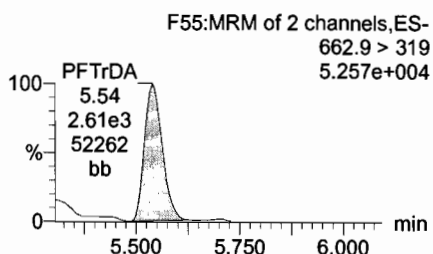
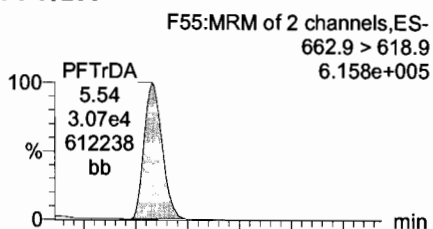
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_7, Date: 07-Jun-2017, Time: 22:11:15, ID: ST170607M4-6 PFC CS3 17F0714, Description: PFC CS3 17F0714

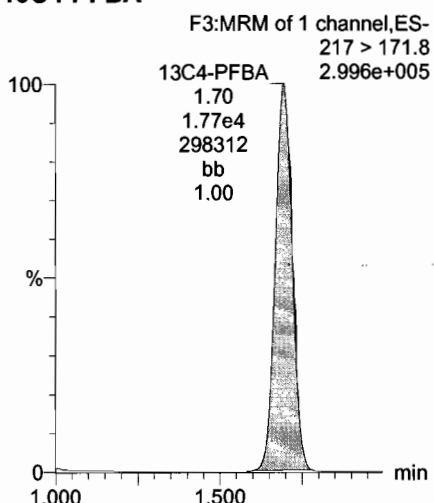
**PFTeDA**



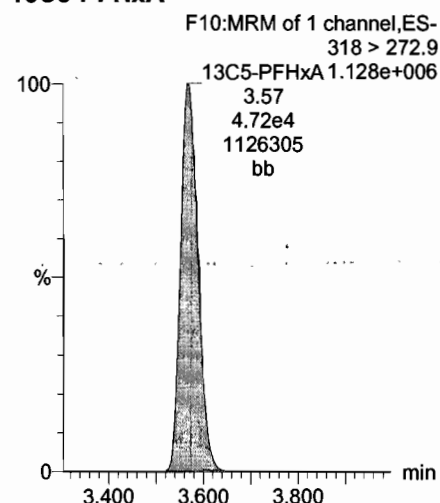
**PFTrDA**



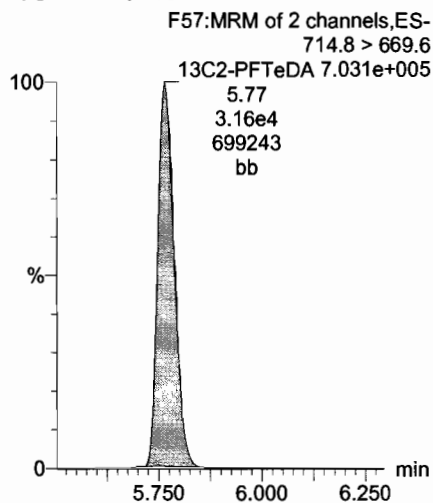
**13C4-PFBA**



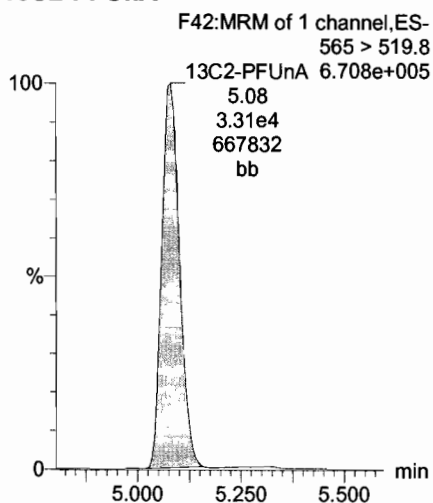
**13C5-PFHxA**



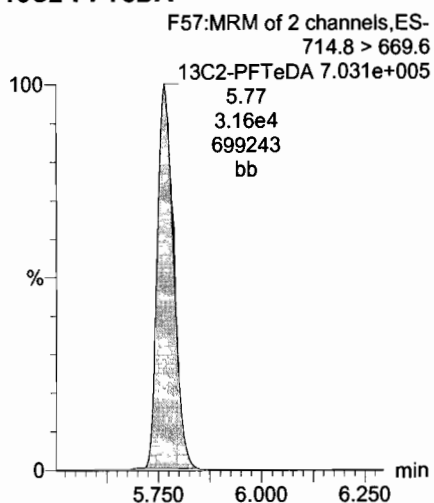
**13C2-PFTeDA**



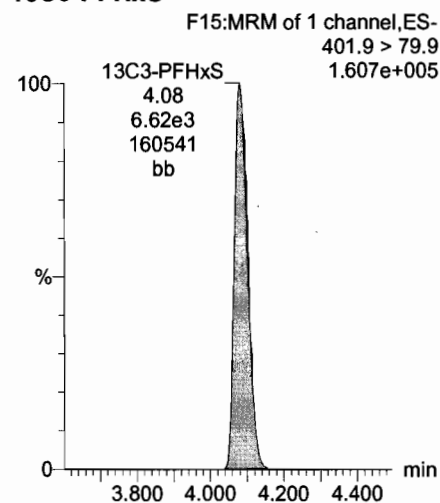
**13C2-PFUnA**



**13C2-PFTeDA**



**13C3-PFHxS**

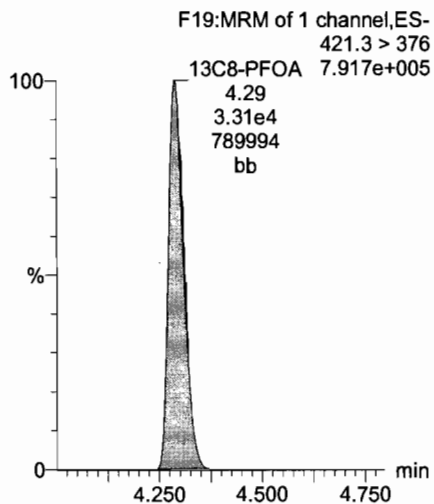


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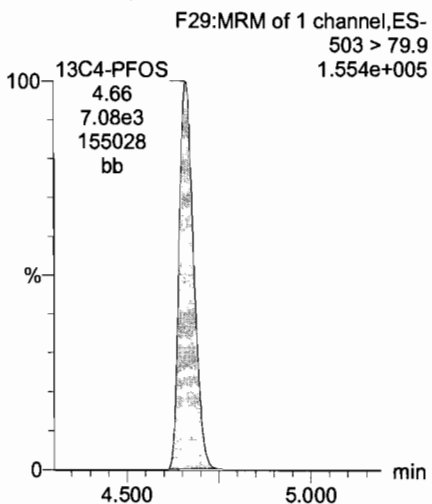
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_7, Date: 07-Jun-2017, Time: 22:11:15, ID: ST170607M4-6 PFC CS3 17F0714, Description: PFC CS3 17F0714

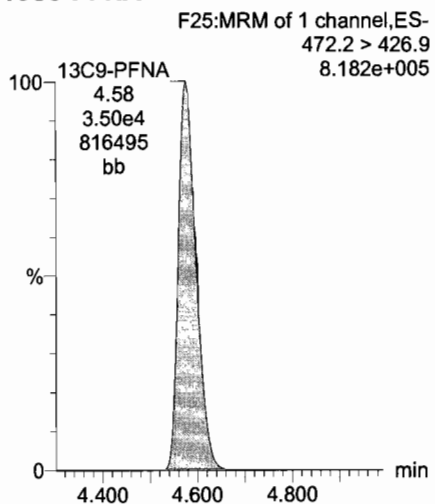
13C8-PFOA



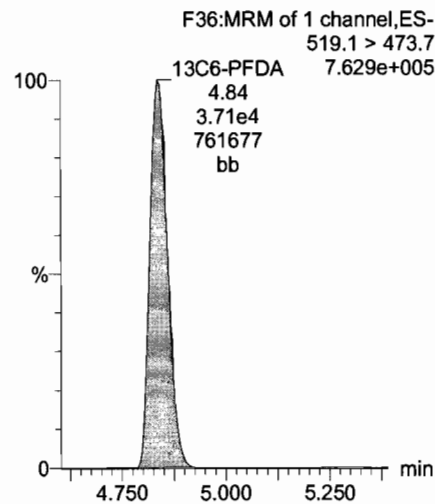
13C4-PFOS



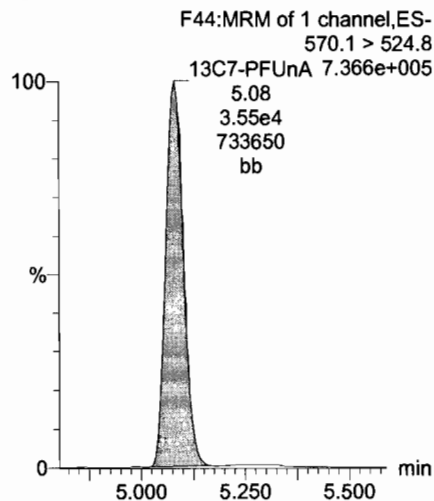
13C9-PFNA



13C6-PFDA



13C7-PFUnA

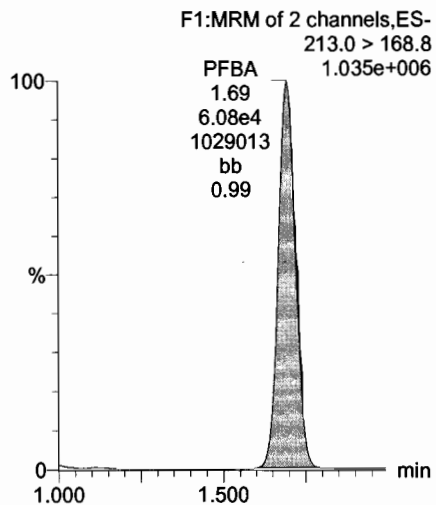


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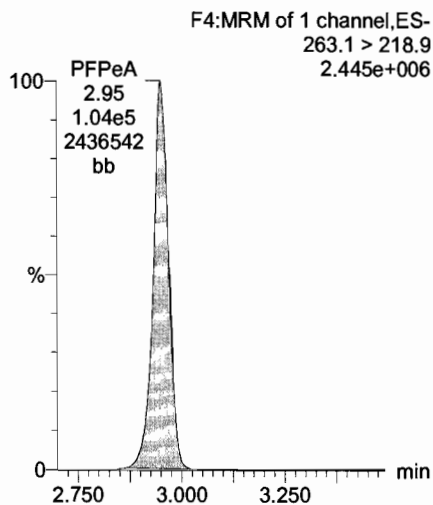
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_8, Date: 07-Jun-2017, Time: 22:22:25, ID: ST170607M4-7 PFC CS4 17F0713, Description: PFC CS4 17F0713

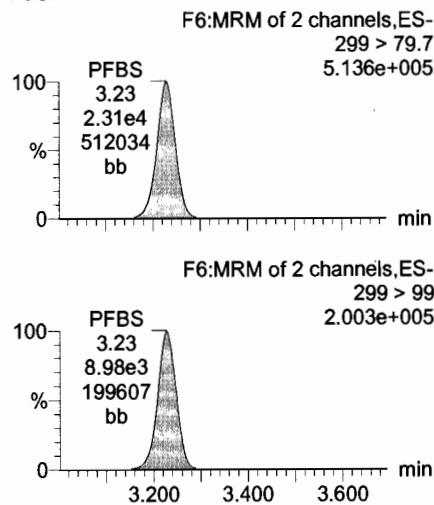
**PFBA**



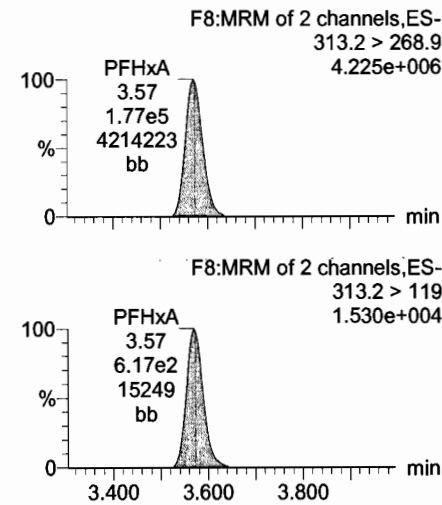
**PFPeA**



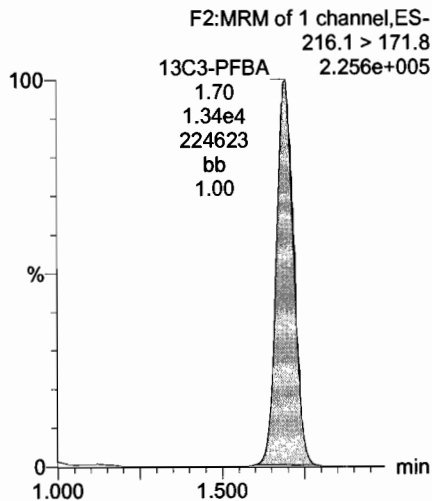
**Total PFBS**



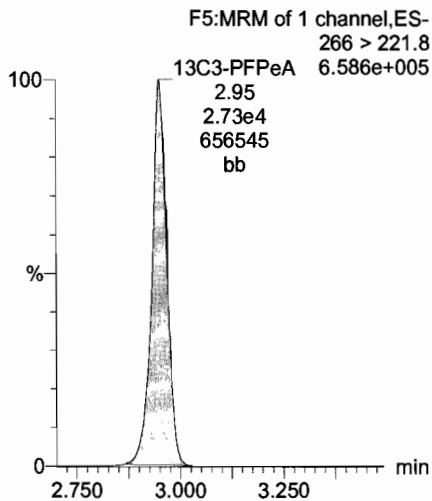
**PFHxA**



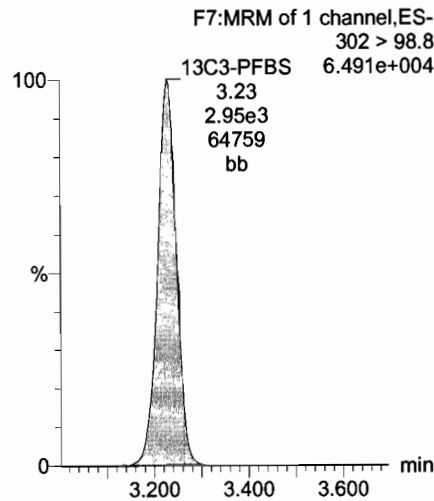
**13C3-PFBA**



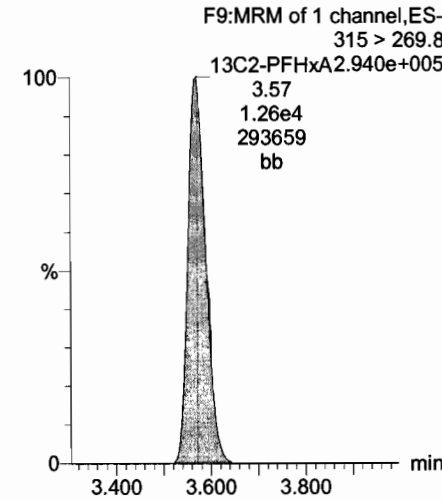
**13C3-PFPeA**



**13C3-PFBS**



**13C2-PFHxA**



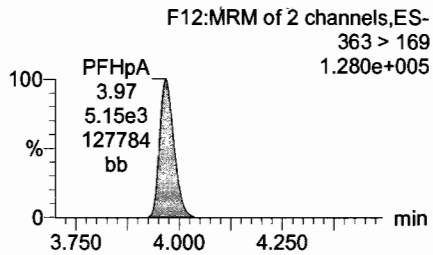
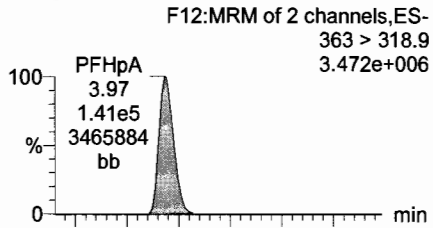


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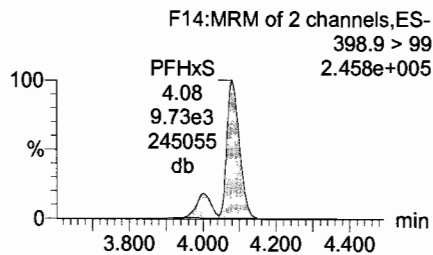
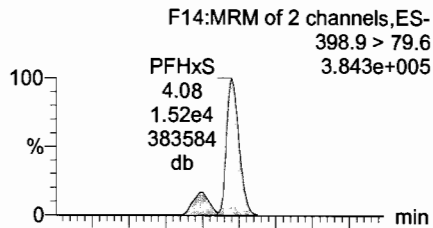
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_8, Date: 07-Jun-2017, Time: 22:22:25, ID: ST170607M4-7 PFC CS4 17F0713, Description: PFC CS4 17F0713

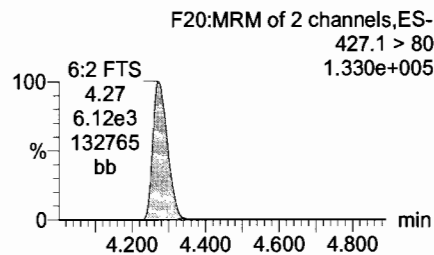
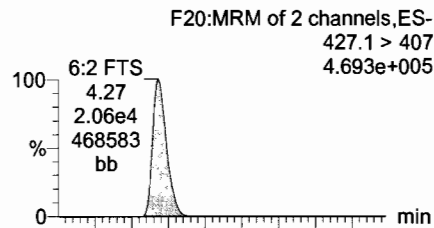
**PFHpA**



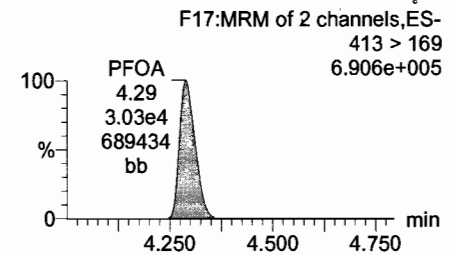
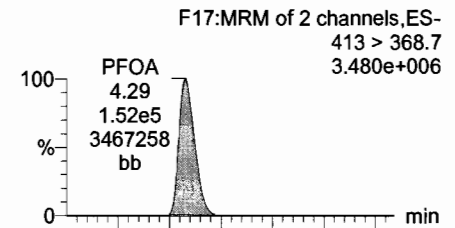
**Total PFHxS**



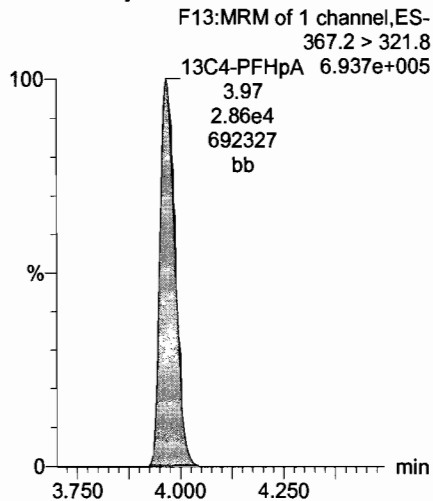
**6:2 FTS**



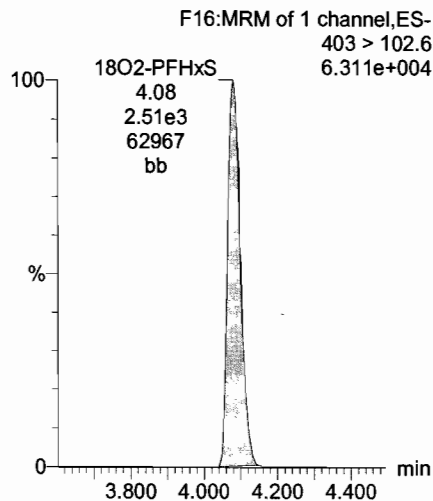
**Total PFOA**



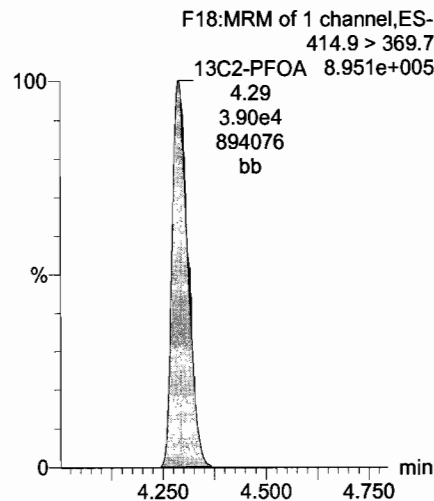
**13C4-PFHpA**



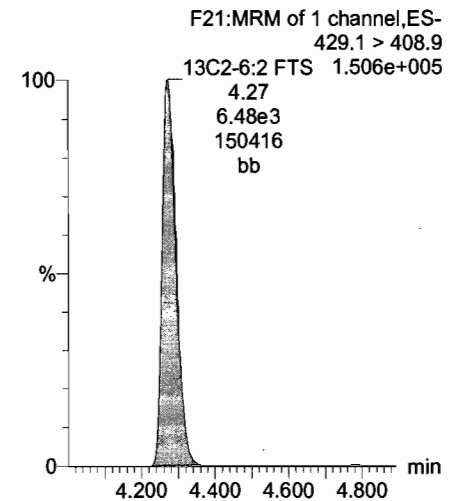
**18O2-PFHxS**

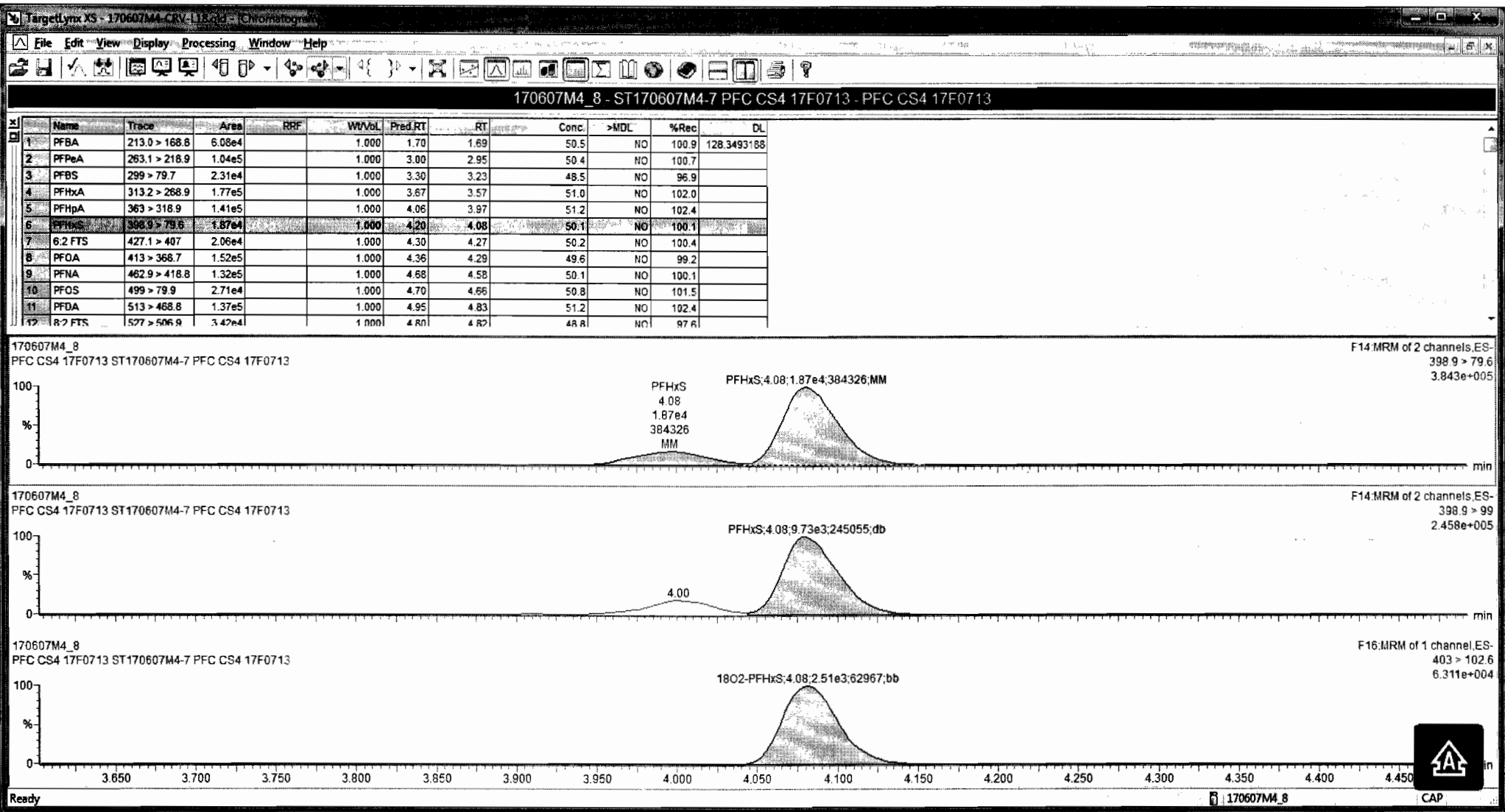


**13C2-PFOA**



**13C2-6:2 FTS**



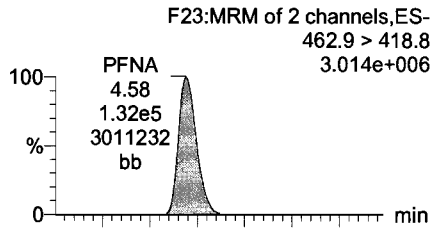


Dataset: Untitled

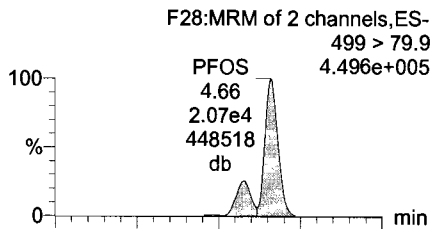
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_8, Date: 07-Jun-2017, Time: 22:22:25, ID: ST170607M4-7 PFC CS4 17F0713, Description: PFC CS4 17F0713

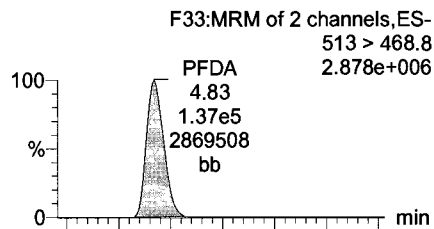
PFNA



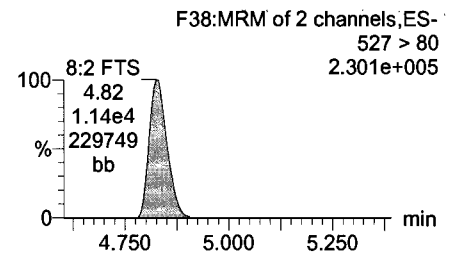
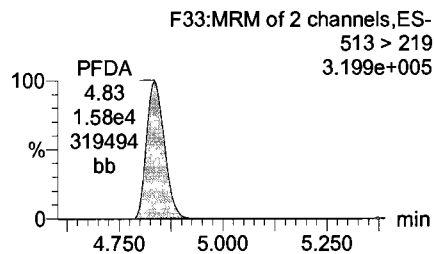
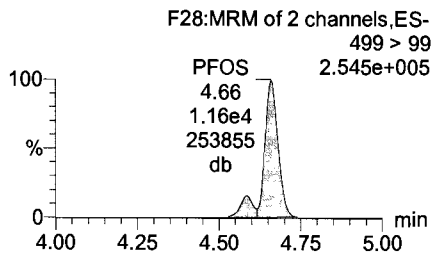
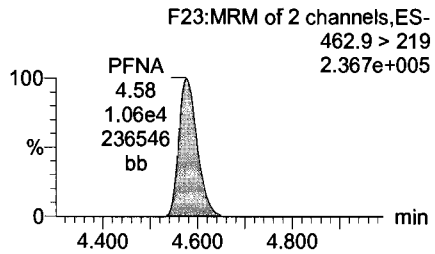
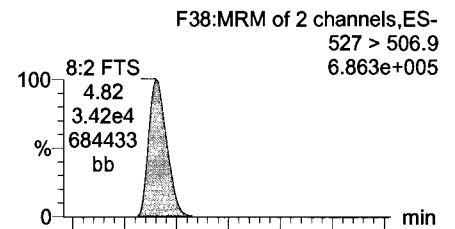
Total PFOS



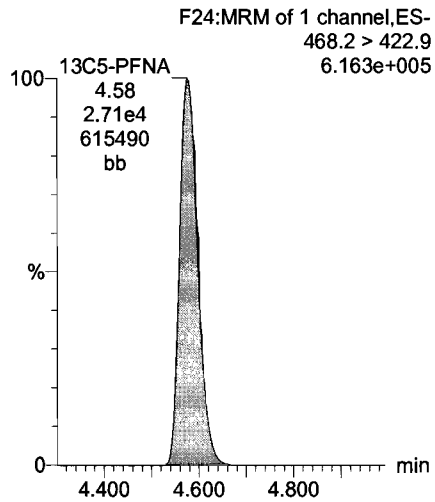
PFDA



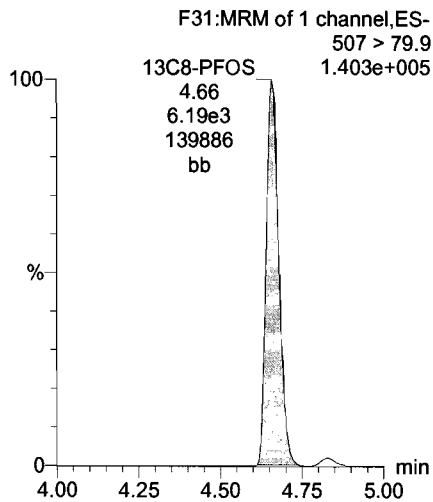
8:2 FTS



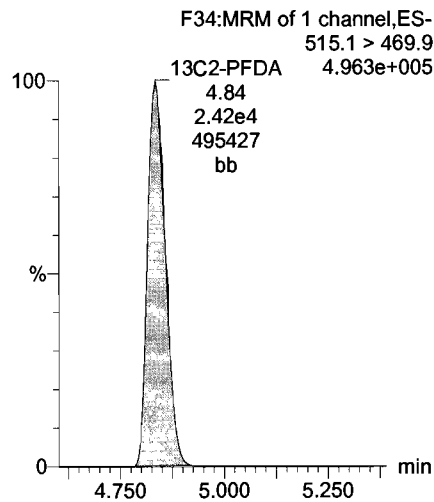
13C5-PFNA



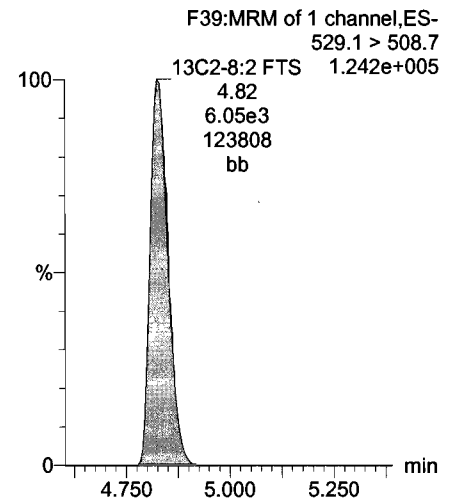
13C8-PFOS

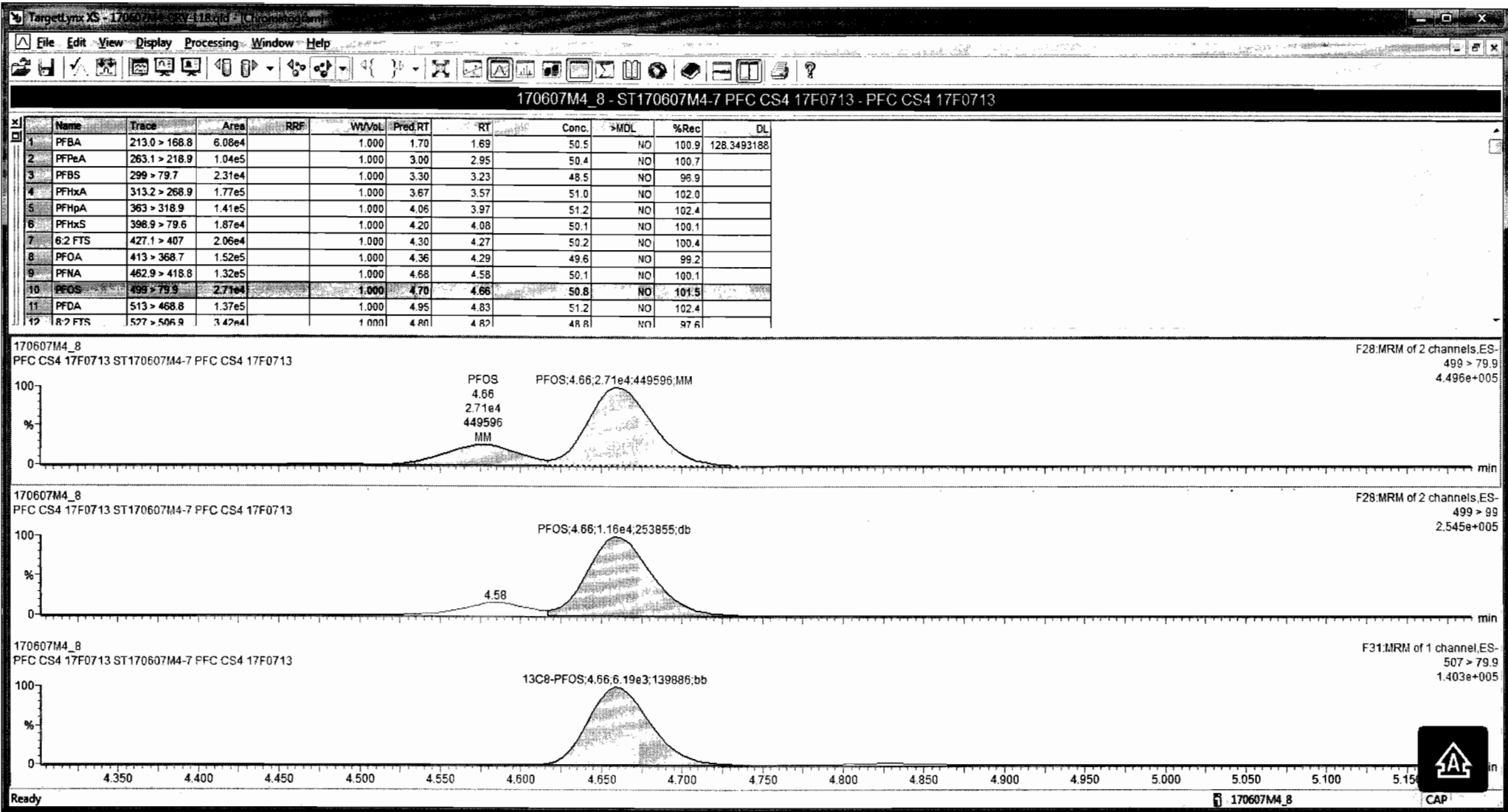


13C2-PFDA



13C2-8:2 FTS



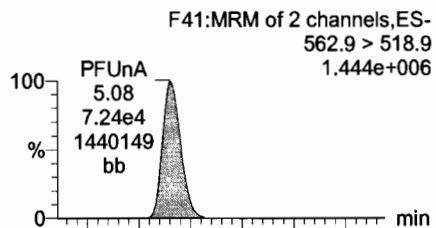


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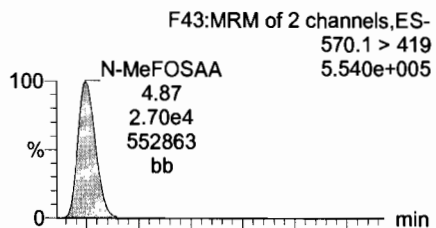
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_8, Date: 07-Jun-2017, Time: 22:22:25, ID: ST170607M4-7 PFC CS4 17F0713, Description: PFC CS4 17F0713

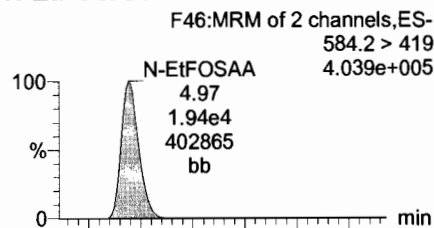
**PFUnA**



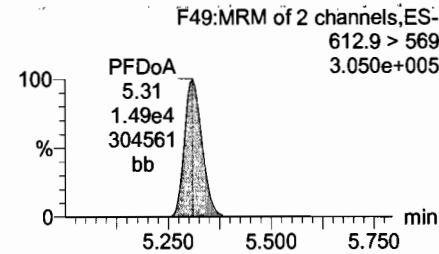
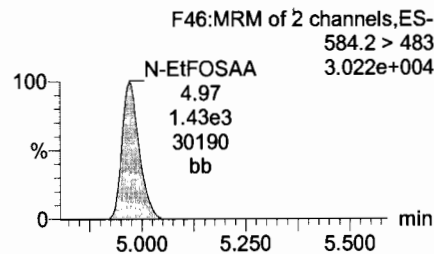
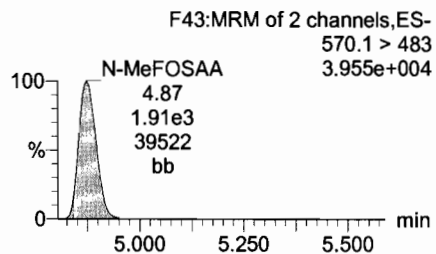
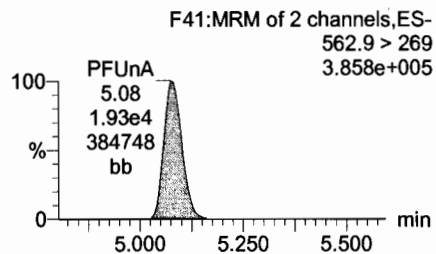
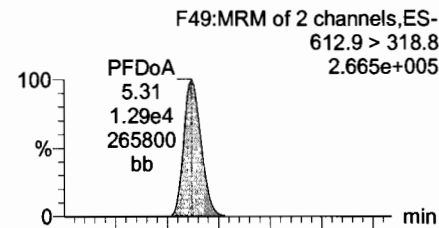
**N-MeFOSAA**



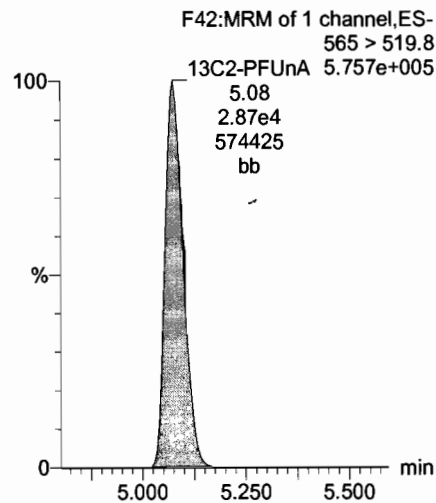
**N-EtFOSAA**



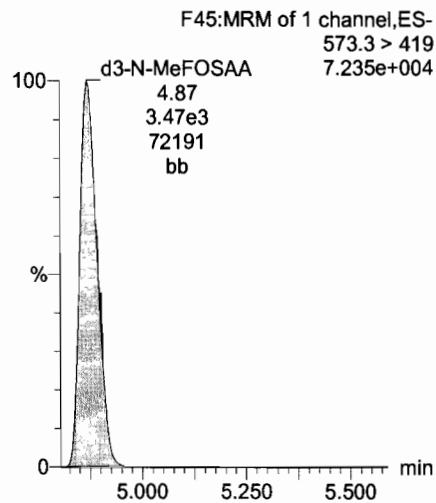
**PFDoA**



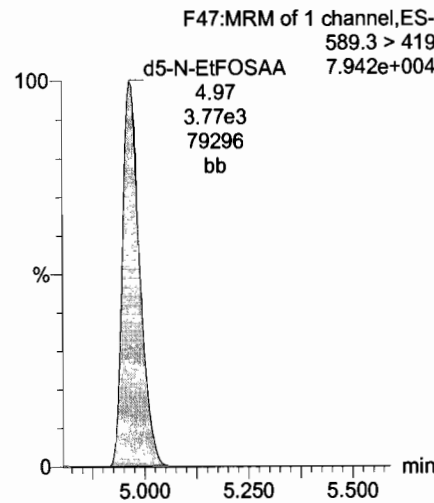
**13C2-PFUnA**



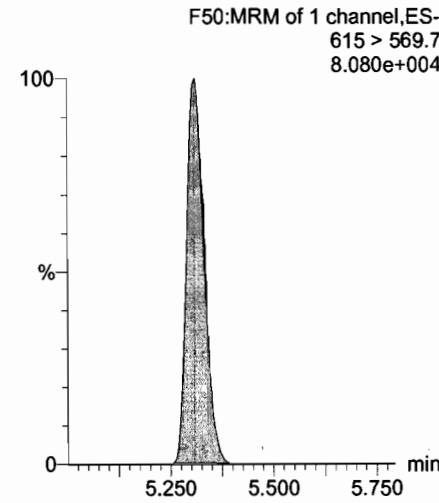
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



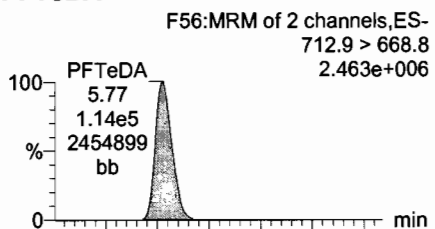
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Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time

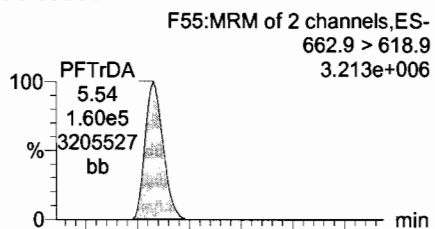
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Name: 170607M4\_8, Date: 07-Jun-2017, Time: 22:22:25, ID: ST170607M4-7 PFC CS4 17F0713, Description: PFC CS4 17F0713

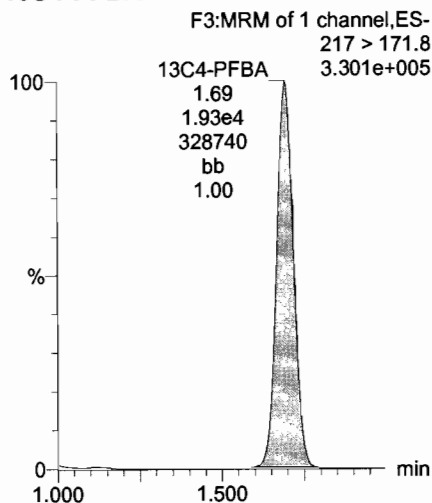
**PFTeDA**



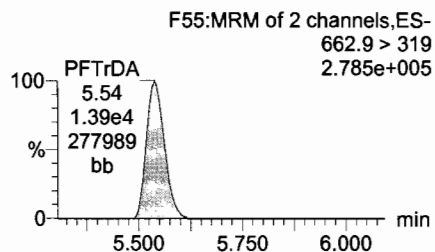
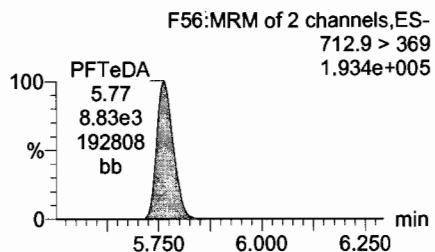
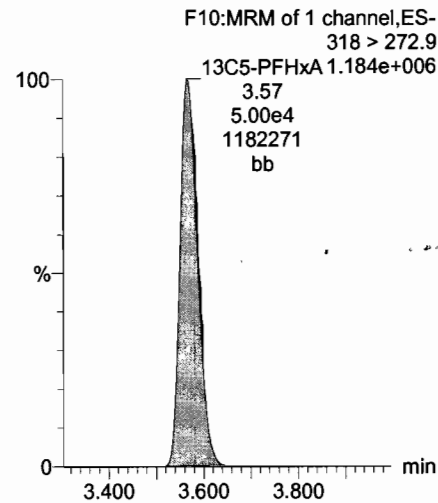
**PFTrDA**



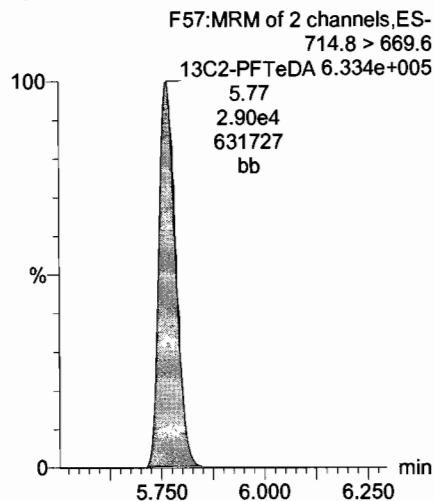
**13C4-PFBA**



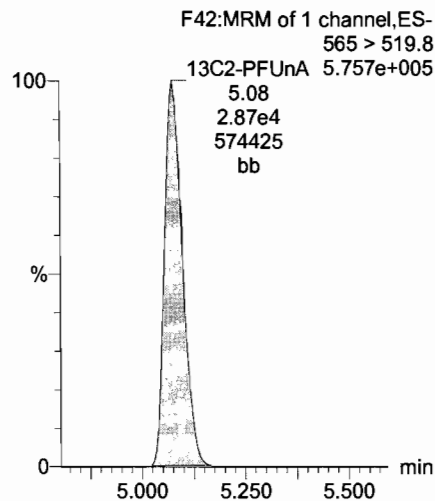
**13C5-PFHxA**



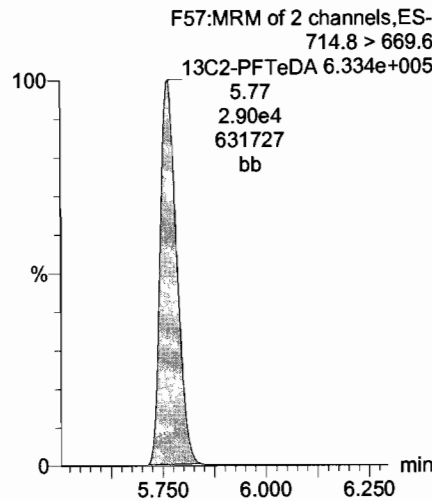
**13C2-PFTeDA**



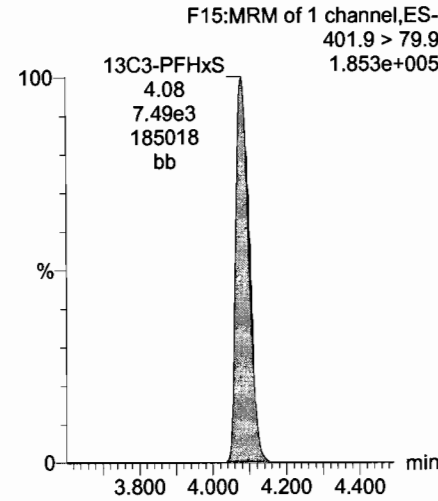
**13C2-PFUnA**



**13C2-PFTeDA**



**13C3-PFHxS**

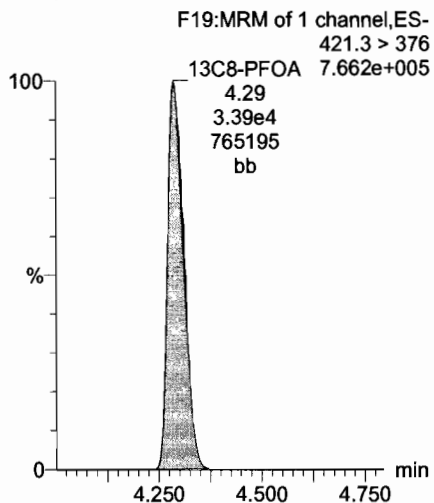


Dataset: Untitled

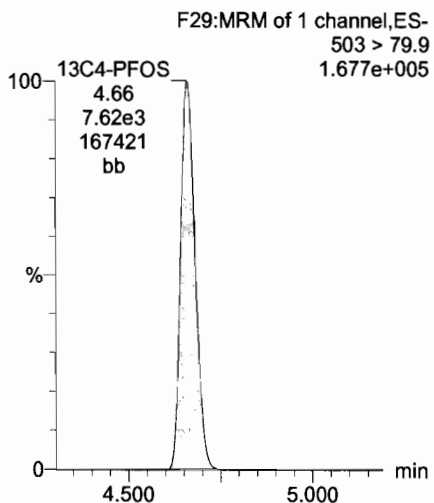
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_8, Date: 07-Jun-2017, Time: 22:22:25, ID: ST170607M4-7 PFC CS4 17F0713, Description: PFC CS4 17F0713

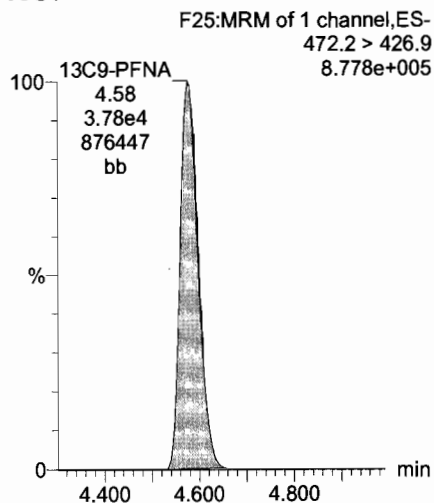
**13C8-PFOA**



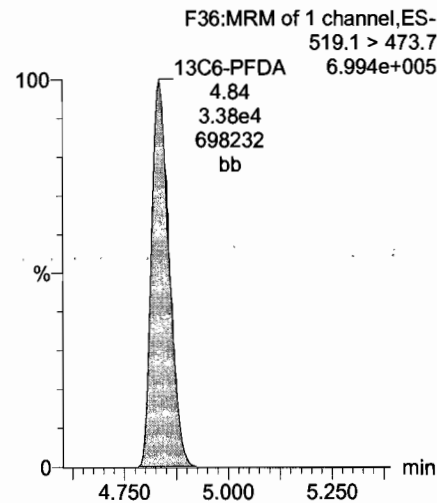
**13C4-PFOS**



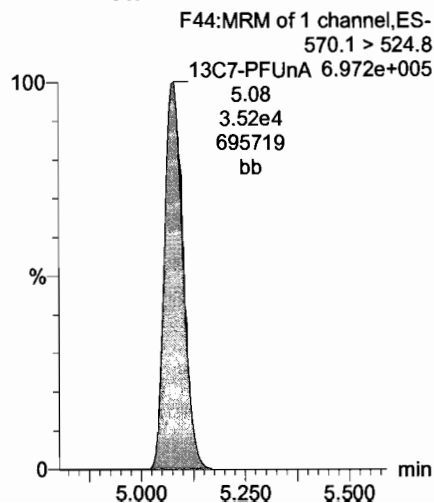
**13C9-PFNA**



**13C6-PFDA**



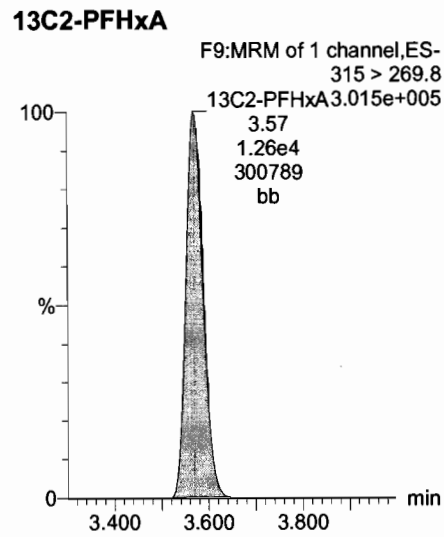
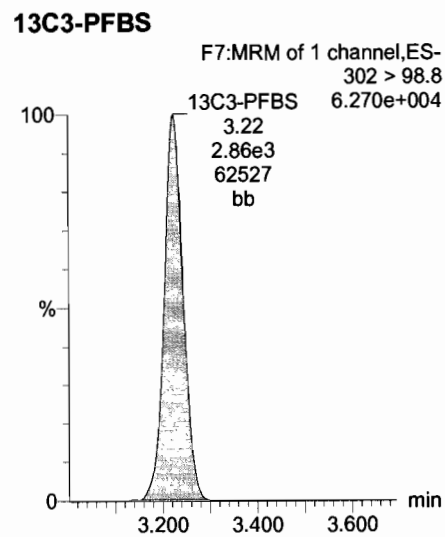
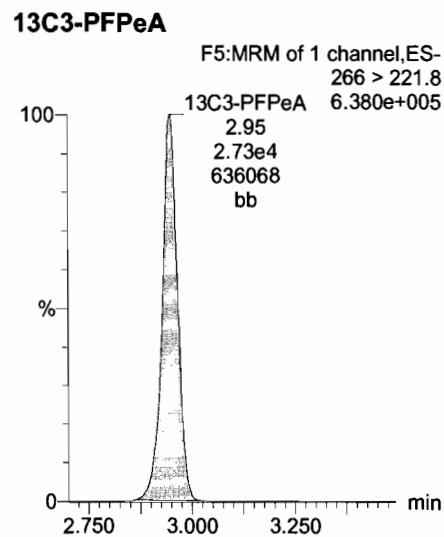
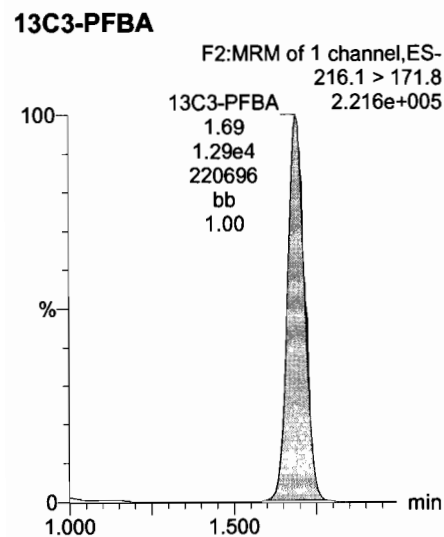
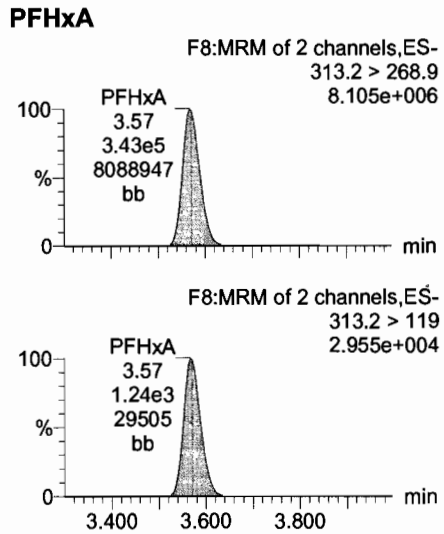
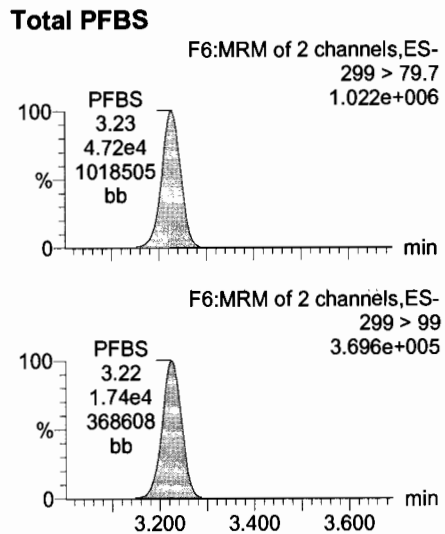
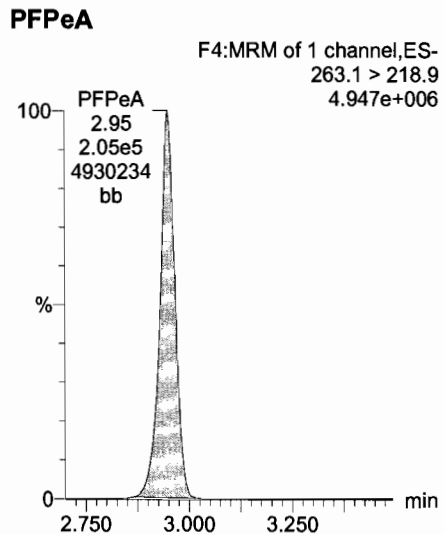
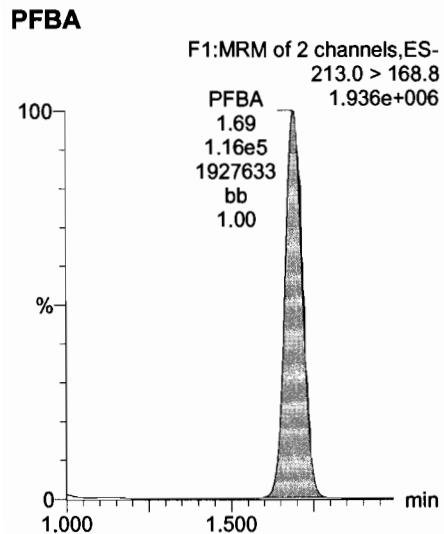
**13C7-PFUnA**



Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_9, Date: 07-Jun-2017, Time: 22:33:36, ID: ST170607M4-8 PFC CS5 17F0712, Description: PFC CS5 17F0712



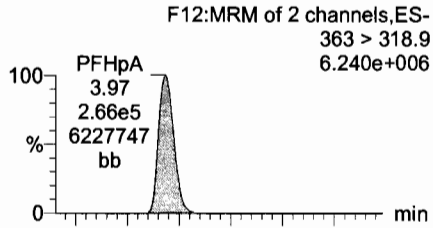


Dataset: Untitled

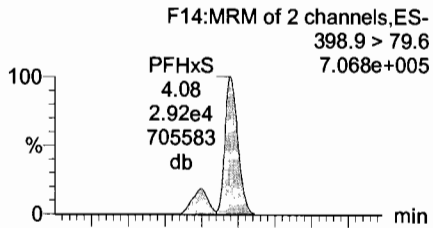
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_9, Date: 07-Jun-2017, Time: 22:33:36, ID: ST170607M4-8 PFC CS5 17F0712, Description: PFC CS5 17F0712

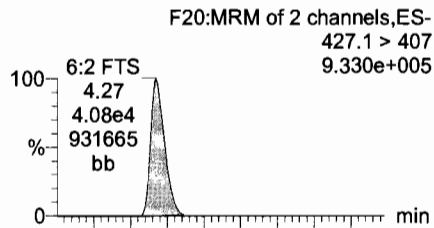
**PFHpA**



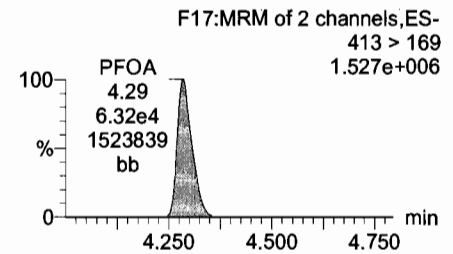
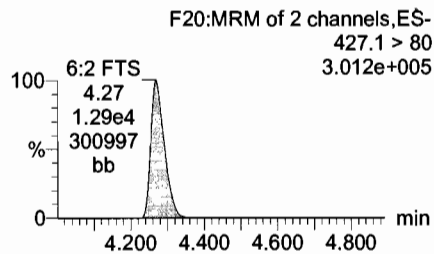
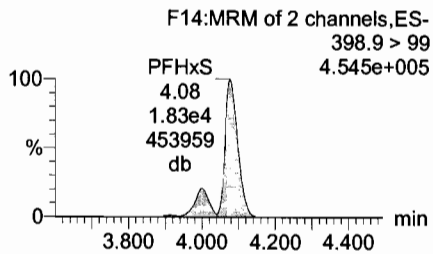
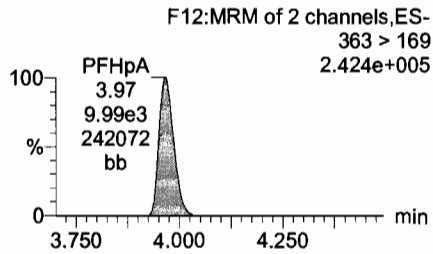
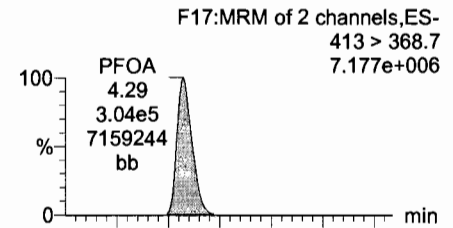
**Total PFHxS**



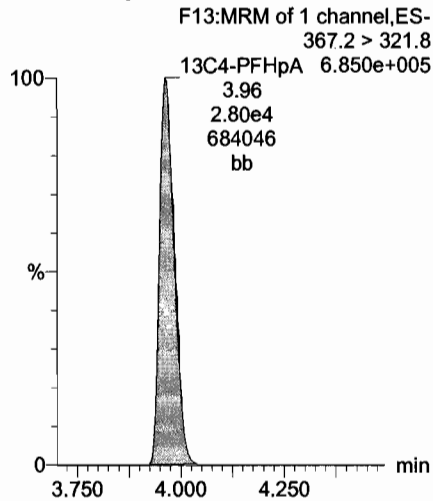
**6:2 FTS**



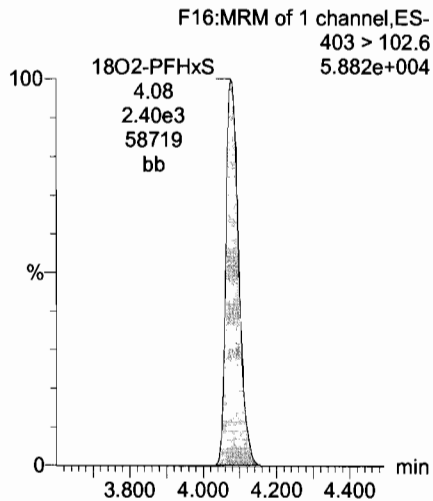
**Total PFOA**



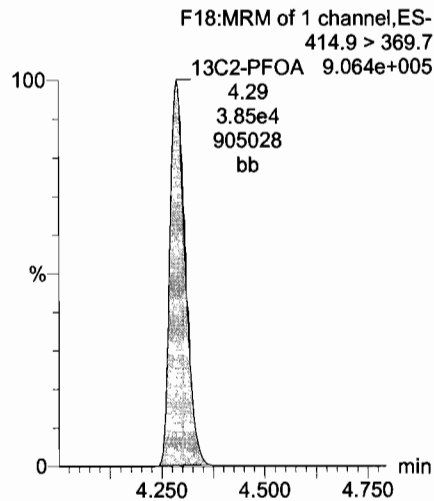
**13C4-PFHpA**



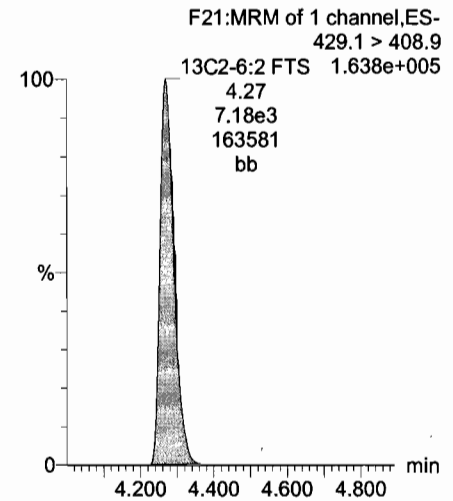
**18O2-PFHxS**



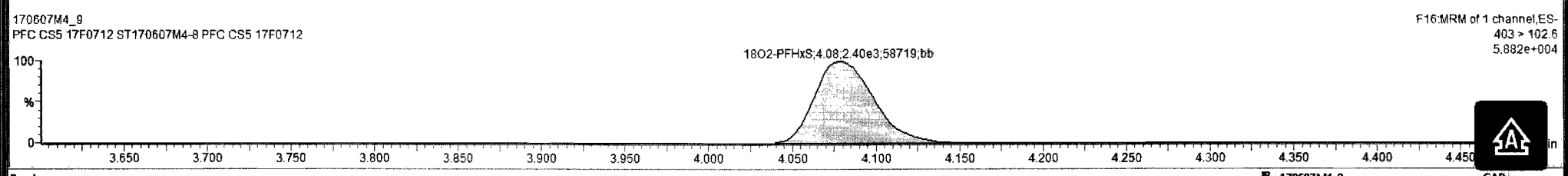
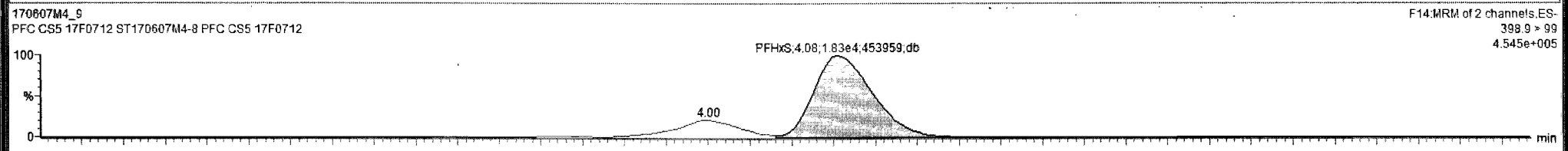
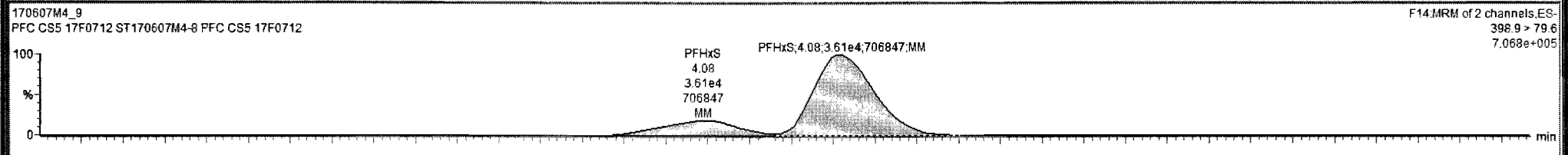
**13C2-PFOA**



**13C2-6:2 FTS**



Name	Trace	Area	RRF	WVWL	Pred.RT	RT	Conc	>MDL	%Rec	DL
1	PFBA	213.0 > 168.8	1.16e5	1.000	1.70	1.69	99.9	NO	99.9	244.5487162
2	PFPeA	263.1 > 218.9	2.05e5	1.000	3.00	2.95	99.9	NO	99.9	
3	PFBS	299 > 79.7	4.72e4	1.000	3.30	3.23	102	NO	102.1	
4	PFHxA	313.2 > 268.9	3.43e5	1.000	3.67	3.57	99.0	NO	99.0	
5	PFHpA	363 > 318.9	2.66e5	1.000	4.06	3.97	99.0	NO	99.0	
6	PFHxS	398.9 > 79.6	3.61e4	1.000	4.20	4.08	100	NO	100.0	
7	6.2 FTS	427.1 > 407	4.08e4	1.000	4.30	4.27	114	NO	114.2	
8	PFOA	413 > 368.7	3.04e5	1.000	4.36	4.29	101	NO	100.5	
9	PFNA	482.9 > 418.8	2.65e5	1.000	4.68	4.58	99.6	NO	99.6	
10	PFOS	499 > 79.9	5.36e4	1.000	4.70	4.66	99.7	NO	99.7	
11	PFDA	513 > 468.8	2.63e5	1.000	4.95	4.83	99.5	NO	99.5	
12	8.2 FTS	527 > 506.9	6.25e4	1.000	4.80	4.82	101	NO	100.8	

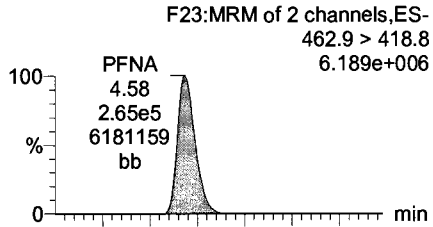


Dataset: Untitled

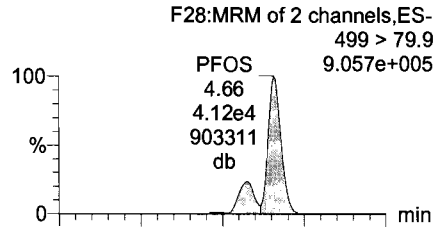
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_9, Date: 07-Jun-2017, Time: 22:33:36, ID: ST170607M4-8 PFC CS5 17F0712, Description: PFC CS5 17F0712

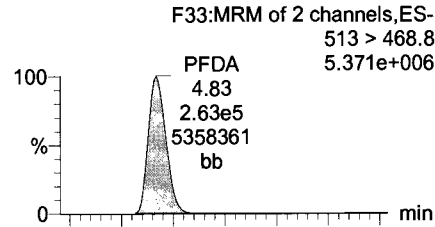
**PFNA**



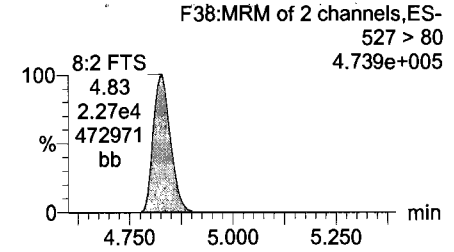
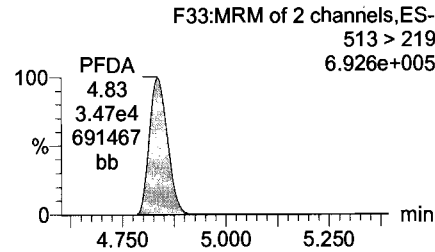
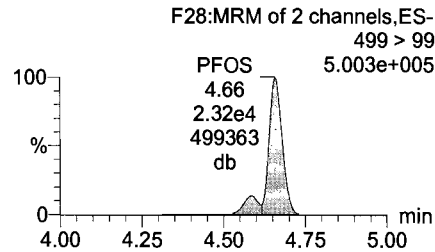
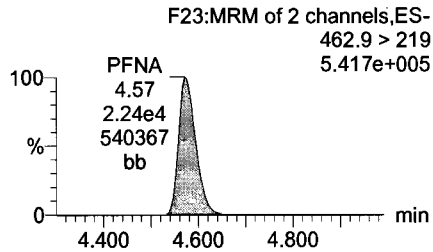
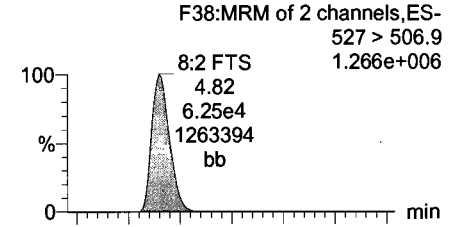
**Total PFOS**



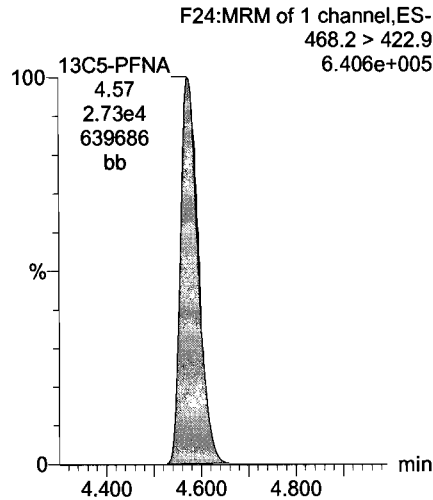
**PFDA**



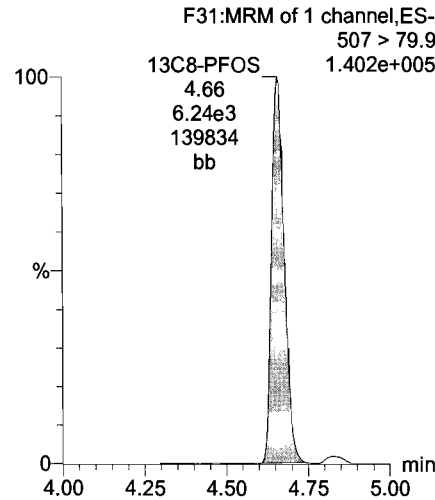
**8:2 FTS**



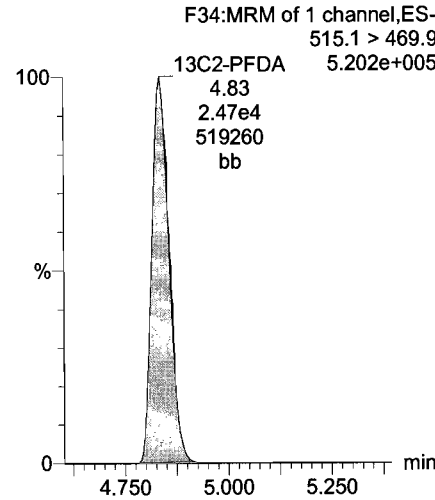
**13C5-PFNA**



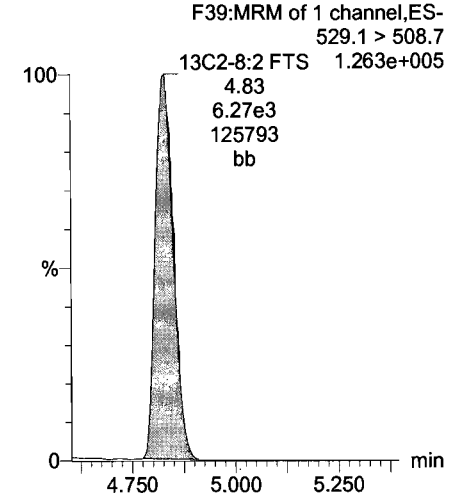
**13C8-PFOS**

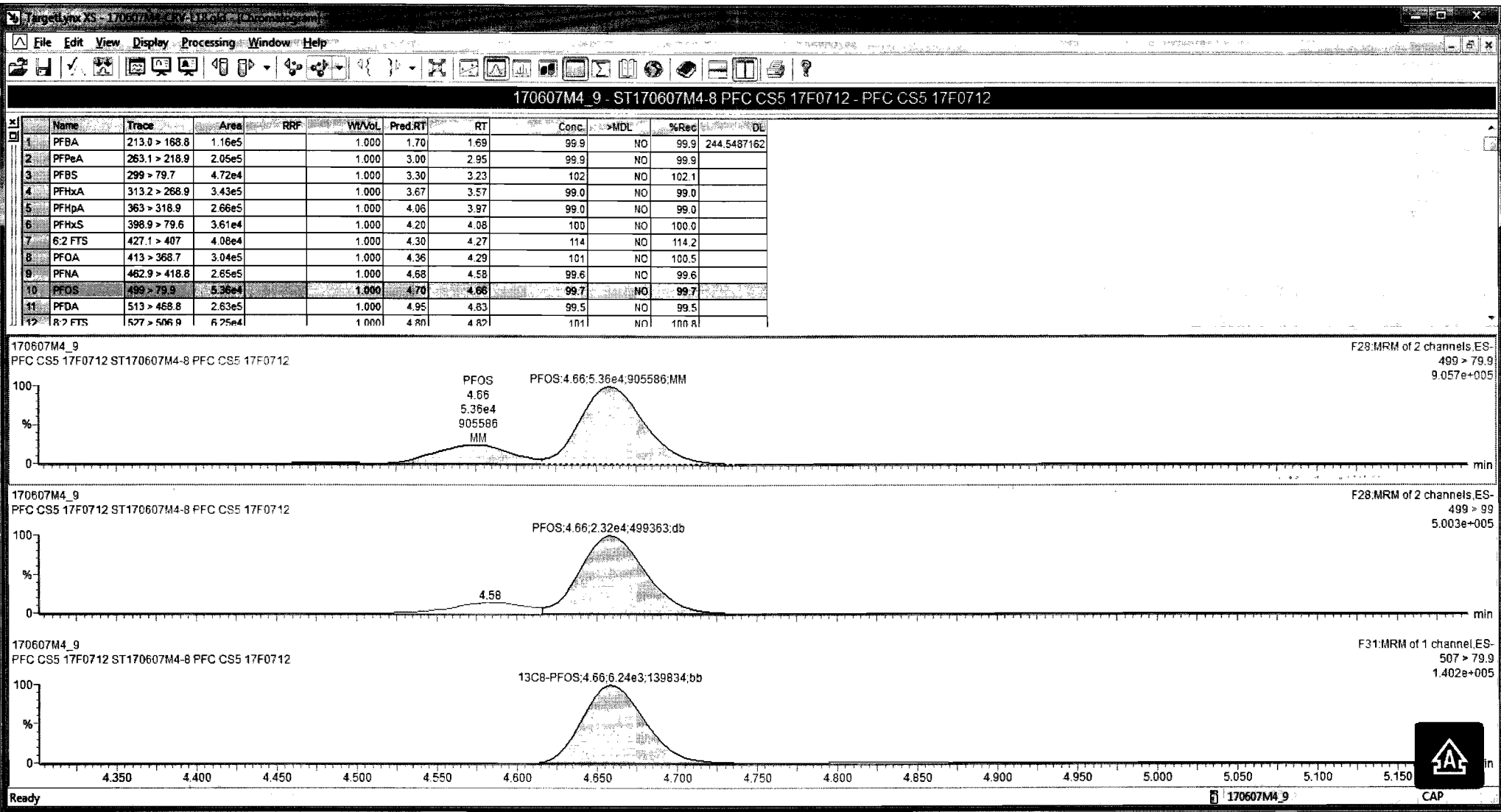


**13C2-PFDA**



**13C2-8:2 FTS**



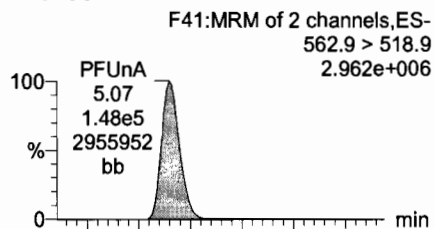


Dataset: Untitled

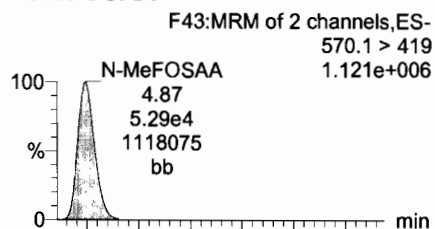
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_9, Date: 07-Jun-2017, Time: 22:33:36, ID: ST170607M4-8 PFC CS5 17F0712, Description: PFC CS5 17F0712

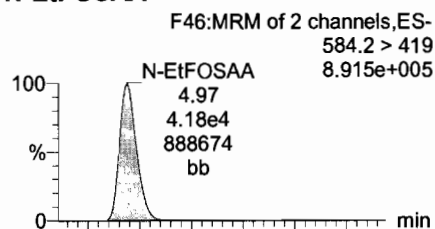
**PFUnA**



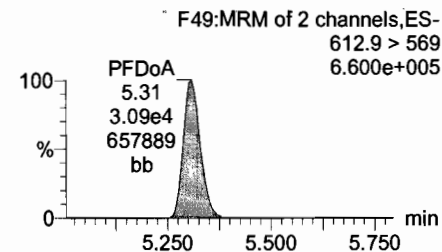
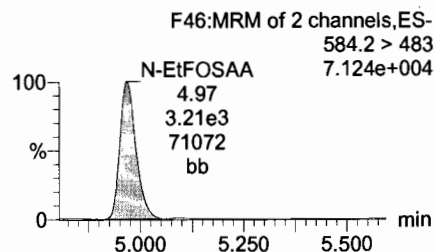
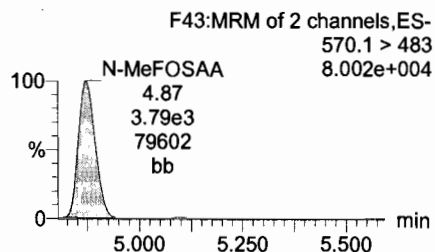
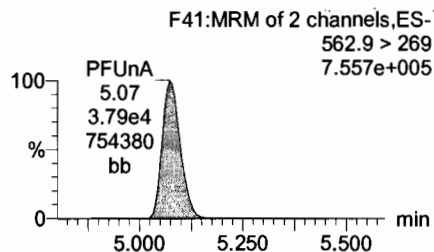
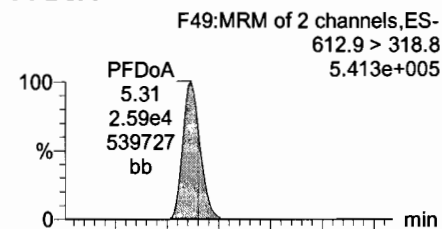
**N-MeFOSAA**



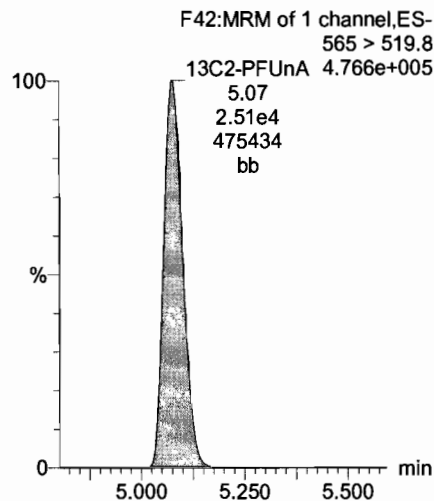
**N-EtFOSAA**



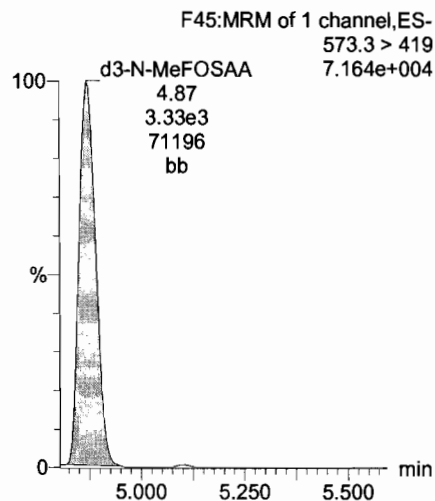
**PFDoA**



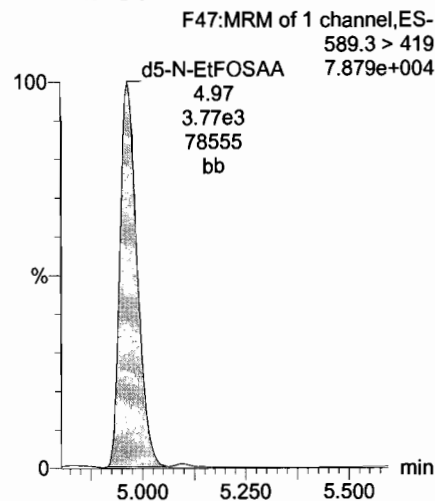
**13C2-PFUnA**



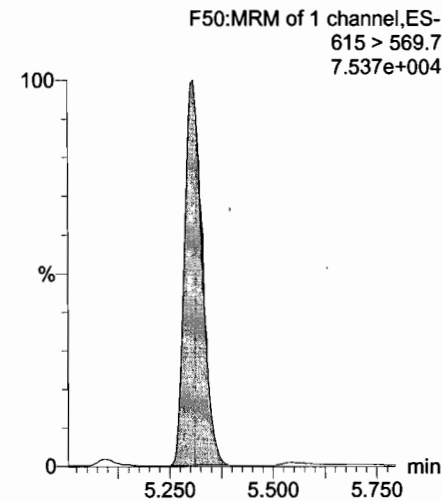
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



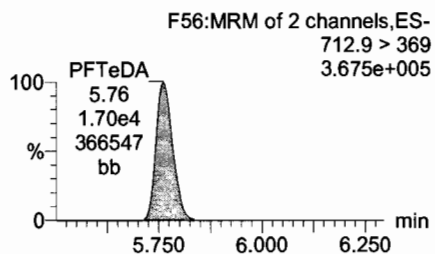
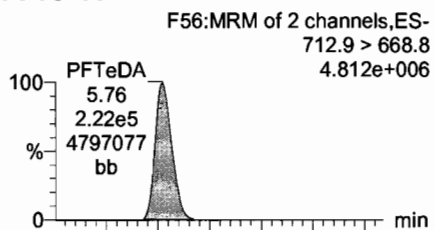
Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time

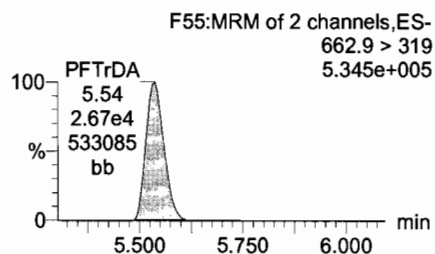
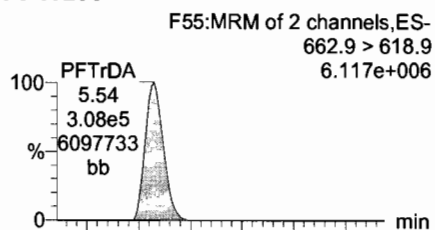
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_9, Date: 07-Jun-2017, Time: 22:33:36, ID: ST170607M4-8 PFC CS5 17F0712, Description: PFC CS5 17F0712

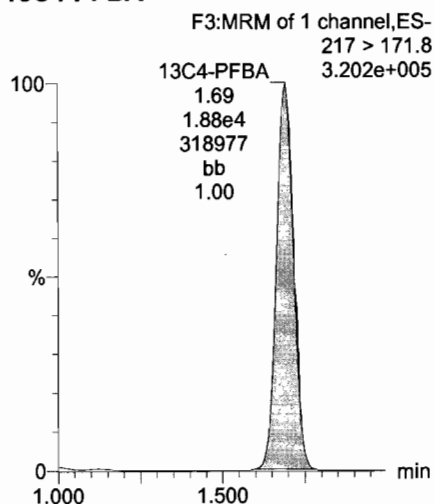
**PFTeDA**



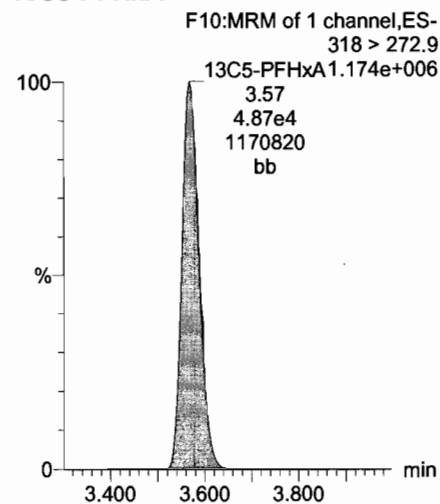
**PFTrDA**



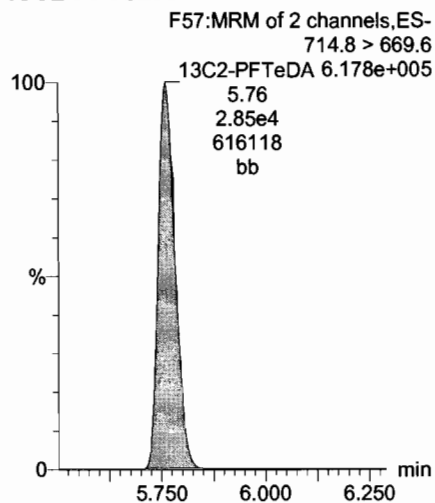
**13C4-PFBA**



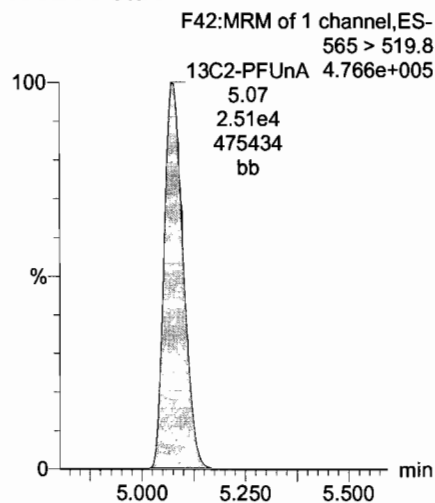
**13C5-PFHxA**



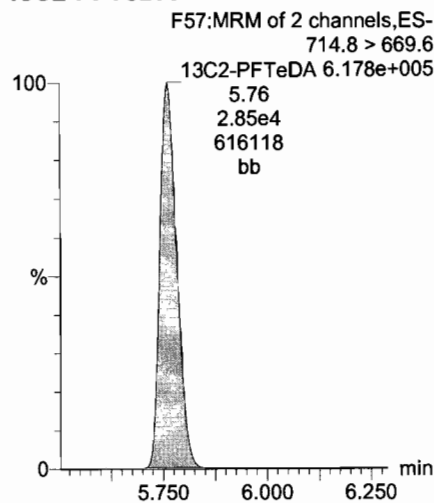
**13C2-PFTeDA**



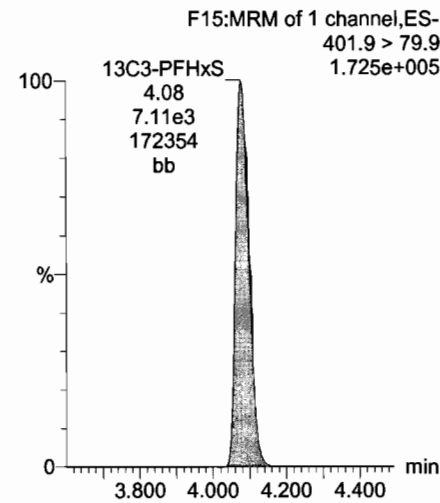
**13C2-PFUnA**



**13C2-PFTeDA**



**13C3-PFHxS**



Dataset: Untitled

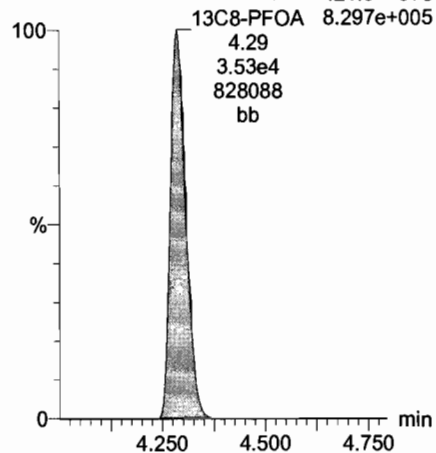
Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time

Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_9, Date: 07-Jun-2017, Time: 22:33:36, ID: ST170607M4-8 PFC CS5 17F0712, Description: PFC CS5 17F0712

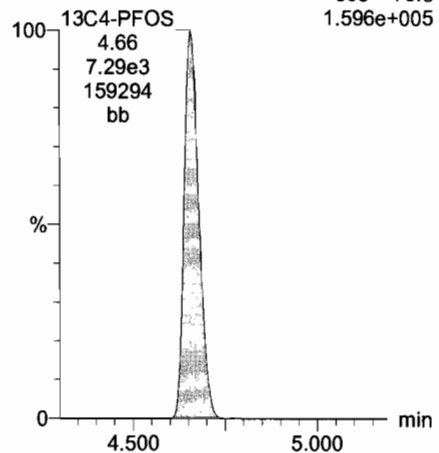
13C8-PFOA

F19:MRM of 1 channel,ES-  
421.3 > 376



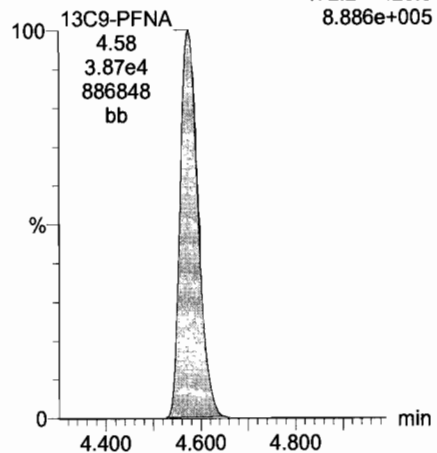
13C4-PFOS

F29:MRM of 1 channel,ES-  
503 > 79.9



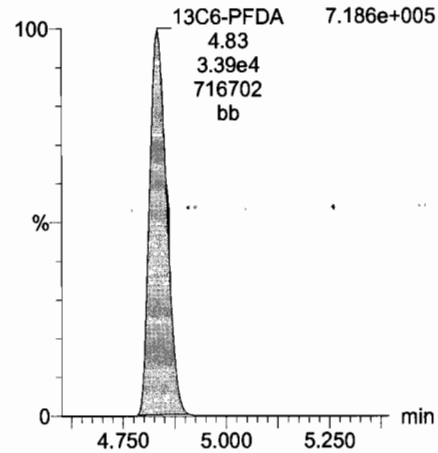
13C9-PFNA

F25:MRM of 1 channel,ES-  
472.2 > 426.9



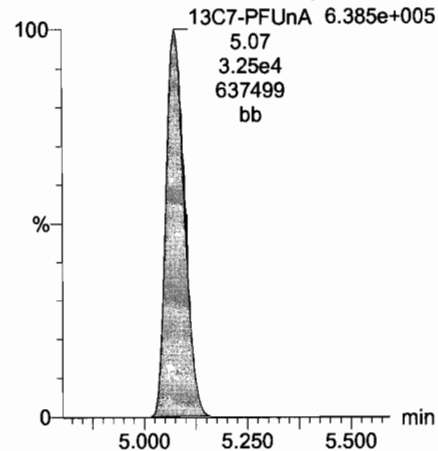
13C6-PFDA

F36:MRM of 1 channel,ES-  
519.1 > 473.7



13C7-PFUnA

F44:MRM of 1 channel,ES-  
570.1 > 524.8



Dataset: U:\Q4.PRO\results\170607M4\170607M4-11B.qld

Last Altered: Wednesday, June 14, 2017 12:07:03 Pacific Daylight Time  
Printed: Wednesday, June 14, 2017 12:07:17 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-7-17.mdb 09 Jun 2017 05:48:11  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-7-17-L18.cdb 09 Jun 2017 07:00:38

*CP 6/14/17*

Name: 170607M4\_11, Date: 07-Jun-2017, Time: 22:55:57, ID: SS170607M4-1 PFC SSS 17F0720, Description: PFC SSS 17F0720

#	Name	Trace	Area	IS Resp	RRF	Wt./Vol	RT	Conc	%Rec
1	1 PFBA	213.0 > 168.8	12061.532	13441.117		1.000	1.69	9.88	98.77
2	2 PFPeA	263.1 > 218.9	20242.338	25918.896		1.000	2.95	10.29	102.93
3	3 PFBS	299 > 79.7	4198.637	2854.917		1.000	3.23	9.04	90.43
4	4 PFHxA	313.2 > 268.9	35797.230	12919.623		1.000	3.57	9.99	99.95
5	5 PFHpA	363 > 318.9	28474.039	29633.113		1.000	3.97	9.96	99.56
6	6 PFHxS	398.9 > 79.6	3442.166	2483.189		1.000	4.08	9.37	93.69
7	7 6:2 FTS	427.1 > 407	4581.603	5876.734		1.000	4.27	10.76	107.63
8	8 PFOA	413 > 368.7	33367.594	42056.238		1.000	4.28	9.99	99.93
9	9 PFNA	462.9 > 418.8	28073.637	27360.580		1.000	4.58	10.50	104.99
10	10 PFOS	499 > 79.9	4864.389	6335.863		1.000	4.66	8.89	88.86
11	11 PFDA	513 > 468.8	26442.033	23053.619		1.000	4.83	10.05	100.45
12	12 8:2 FTS	527 > 506.9	7503.302	6153.524		1.000	4.82	9.21	92.11
13	13 PFUnA	562.9 > 518.9	14812.206	28435.959		1.000	5.08	9.26	92.56
14	14 N-MeFOSAA	570.1 > 419	5160.161	3441.119		1.000	4.87	10.34	103.36
15	15 N-EtFOSAA	584.2 > 419	4636.813	4277.111		1.000	4.97	10.62	106.23
16	16 PFDoA	612.9 > 318.8	2499.024	3774.089		1.000	5.30	10.18	101.85
17	17 PFTriDA	662.9 > 618.9	31743.092	3774.089		1.000	5.53	10.28	102.82
18	18 <del>PFTeDA</del>	712.9 > 668.8	22967.527	28125.494		1.000	5.76	10.47	104.69
19	19 13C3-PFBA	216.1 > 171.8	13441.117	18308.188	0.724	1.000	1.69	12.67	101.34
20	20 13C3-PFPeA	266 > 221.8	25918.896	12919.623	0.854	1.000	2.95	11.75	94.01
21	21 13C3-PFBS	302 > 98.8	2854.917	49890.957	0.024	1.000	3.22	11.91	95.26
22	22 13C2-PFHxA	315 > 269.8	12919.623	49890.957	0.264	1.000	3.57	4.91	98.13
23	23 13C4-PFHpA	367.2 > 321.8	29633.113	49890.957	0.235	1.000	3.97	12.62	100.98
24	24 18O2-PFHxS	403 > 102.6	2483.189	7324.396	0.345	1.000	4.08	12.29	98.31
25	25 13C2-6:2 FTS	429.1 > 408.9	5876.734	7655.885	0.329	1.000	4.27	11.66	93.25
26	26 13C2-PFOA	414.9 > 369.7	42056.238	37498.777	1.148	1.000	4.28	12.21	97.72
27	27 13C5-PFNA	468.2 > 422.9	27360.580	41251.207	0.724	1.000	4.57	11.44	91.56
28	28 13C8-PFOS	507 > 79.9	6335.863	7061.541	0.868	1.000	4.66	12.92	103.34
29	29 13C2-PFDA	515.1 > 469.9	23053.619	33802.609	0.714	1.000	4.84	11.95	95.58
30	30 13C2-8:2 FTS	529.1 > 508.7	6153.524	7655.885	0.298	1.000	4.82	13.47	107.79
31	31 13C2-PFUnA	565 > 519.8	28435.959	31715.537	0.833	1.000	5.08	13.45	107.61

70-130  
↓

*4/2/17/17*

ⓐ Not used for PFTeM



Dataset: U:\Q4.PRO\results\170607M4\170607M4-11B.qld

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Printed: Wednesday, June 14, 2017 12:07:17 Pacific Daylight Time

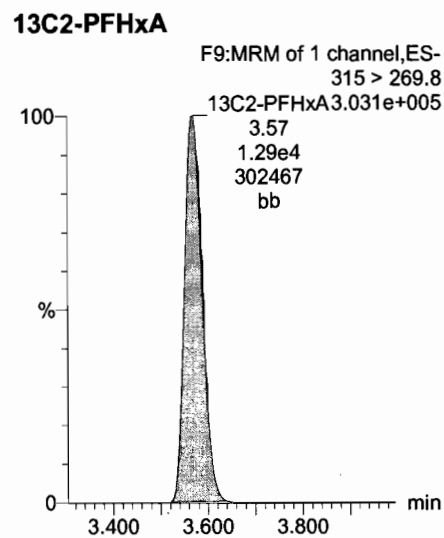
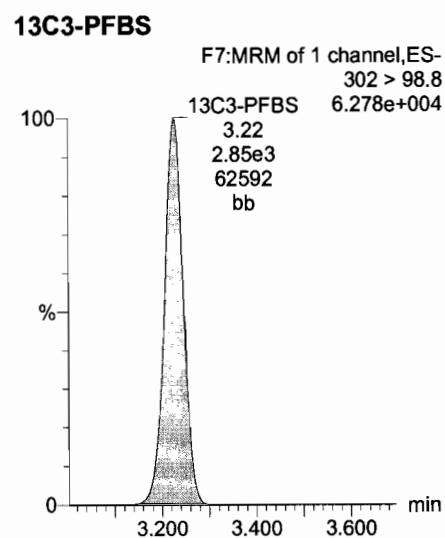
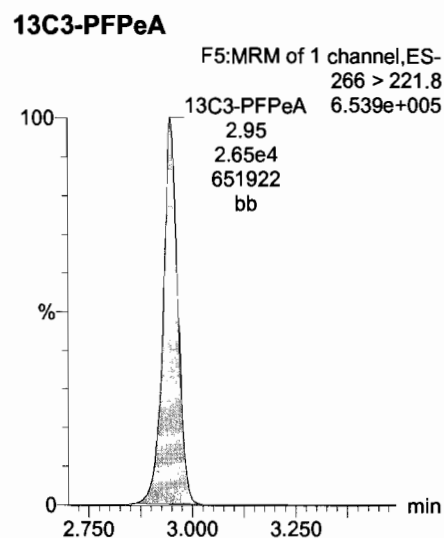
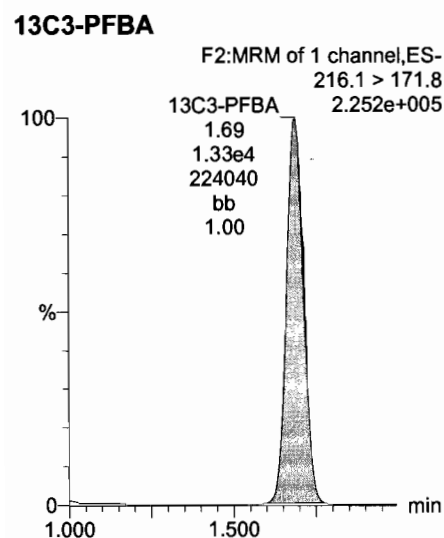
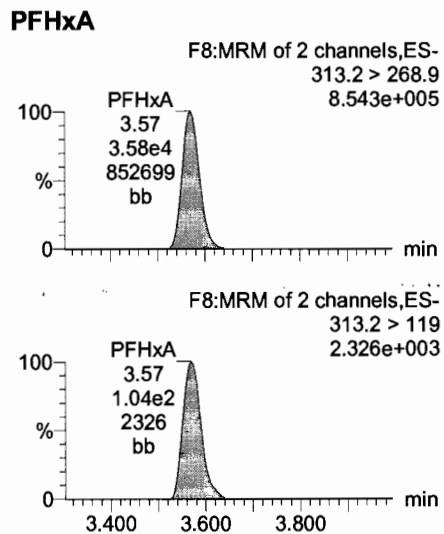
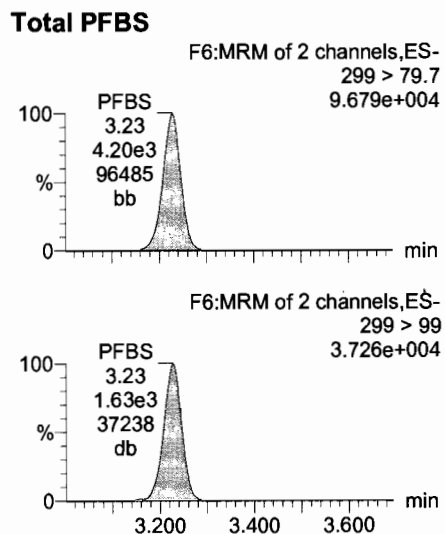
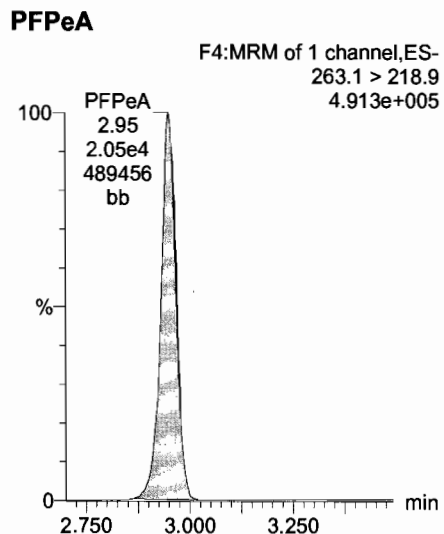
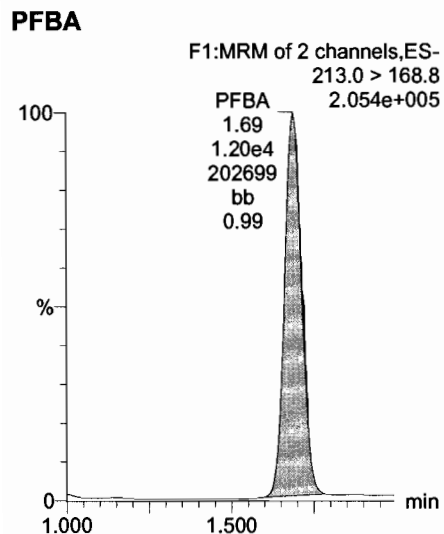
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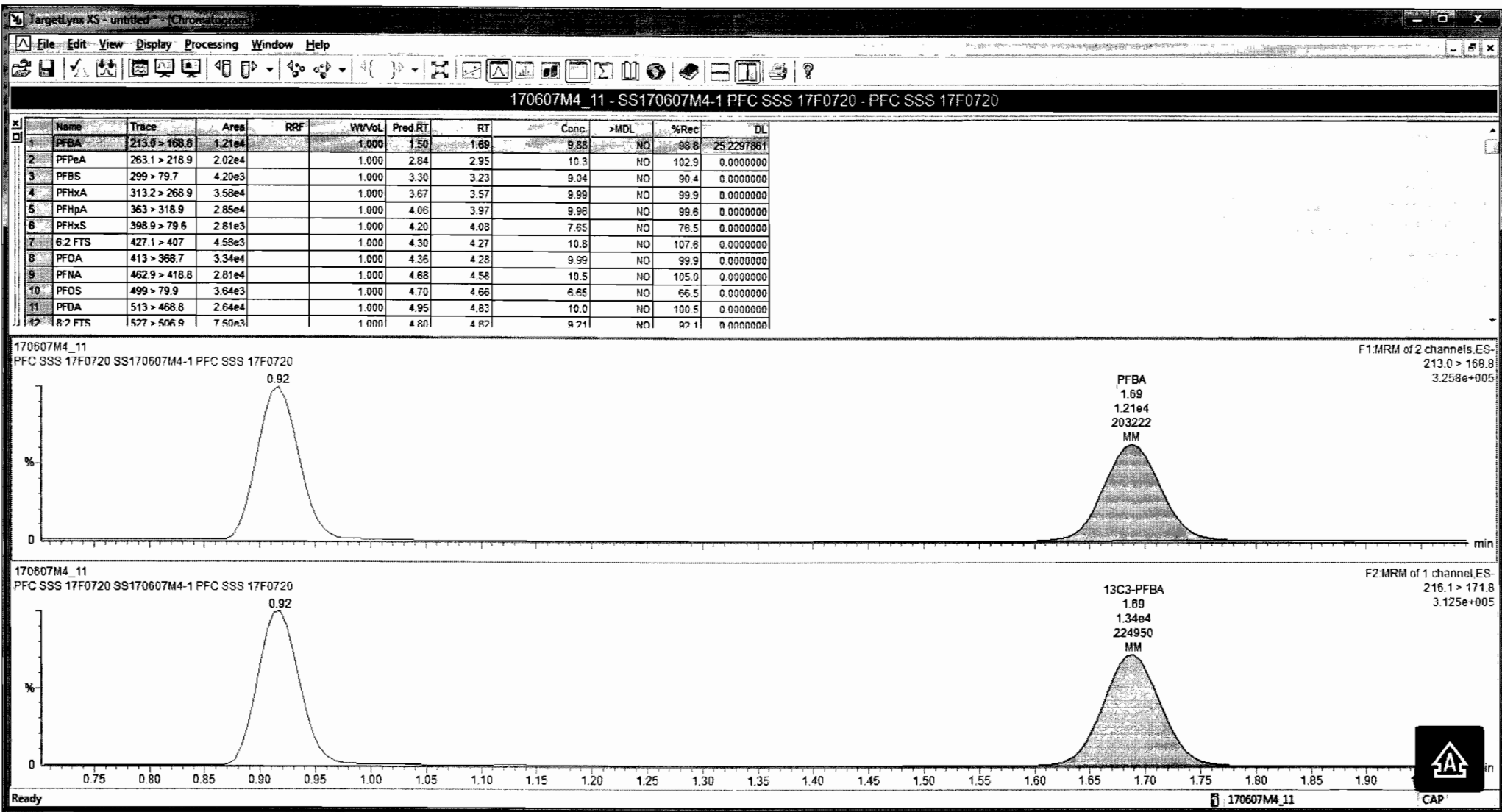
#	Name	Trace	Area	IS Resp	RRF	Wt/Vol	RT	Conc.	%Rec
32	32 d3-N-MeFOSAA	573.3 > 419	3441.119	31715.537	0.106	1.000	4.87	12.78	102.26
33	33 d5-N-EtFOSAA	589.3 > 419	4277.111	31715.537	0.119	1.000	4.97	14.17	113.37
34	34 13C2-PFDoA	615 > 569.7	3774.089	31715.537	0.123	1.000	5.30	12.14	97.10
35	35 13C2-PFTeDA	714.8 > 669.6	28125.494	31715.537	0.845	1.000	5.76	13.11	104.90
36	36 13C4-PFBA	217 > 171.8	18308.188	18308.188	1.000	1.000	1.69	12.50	100.00
37	37 13C2-4:2 FTS	329.2 > 308.9	7655.885	7655.885	1.000	1.000	3.54	5.00	100.00
38	38 13C5-PFHxA	318 > 272.9	49890.957	49890.957	1.000	1.000	3.57	5.00	100.00
39	39 13C3-PFHxS	401.9 > 79.9	7324.396	7324.396	1.000	1.000	4.08	12.50	100.00
40	40 13C8-PFOA	421.3 > 376	37498.777	37498.777	1.000	1.000	4.29	12.50	100.00
41	41 13C9-PFNA	472.2 > 426.9	41251.207	41251.207	1.000	1.000	4.57	12.50	100.00
42	42 13C4-PFOS	503 > 79.9	7061.541	7061.541	1.000	1.000	4.66	12.50	100.00
43	43 13C6-PFDA	519.1 > 473.7	33802.609	33802.609	1.000	1.000	4.84	12.50	100.00
44	44 13C7-PFUnA	570.1 > 524.8	31715.537	31715.537	1.000	1.000	5.08	12.50	100.00

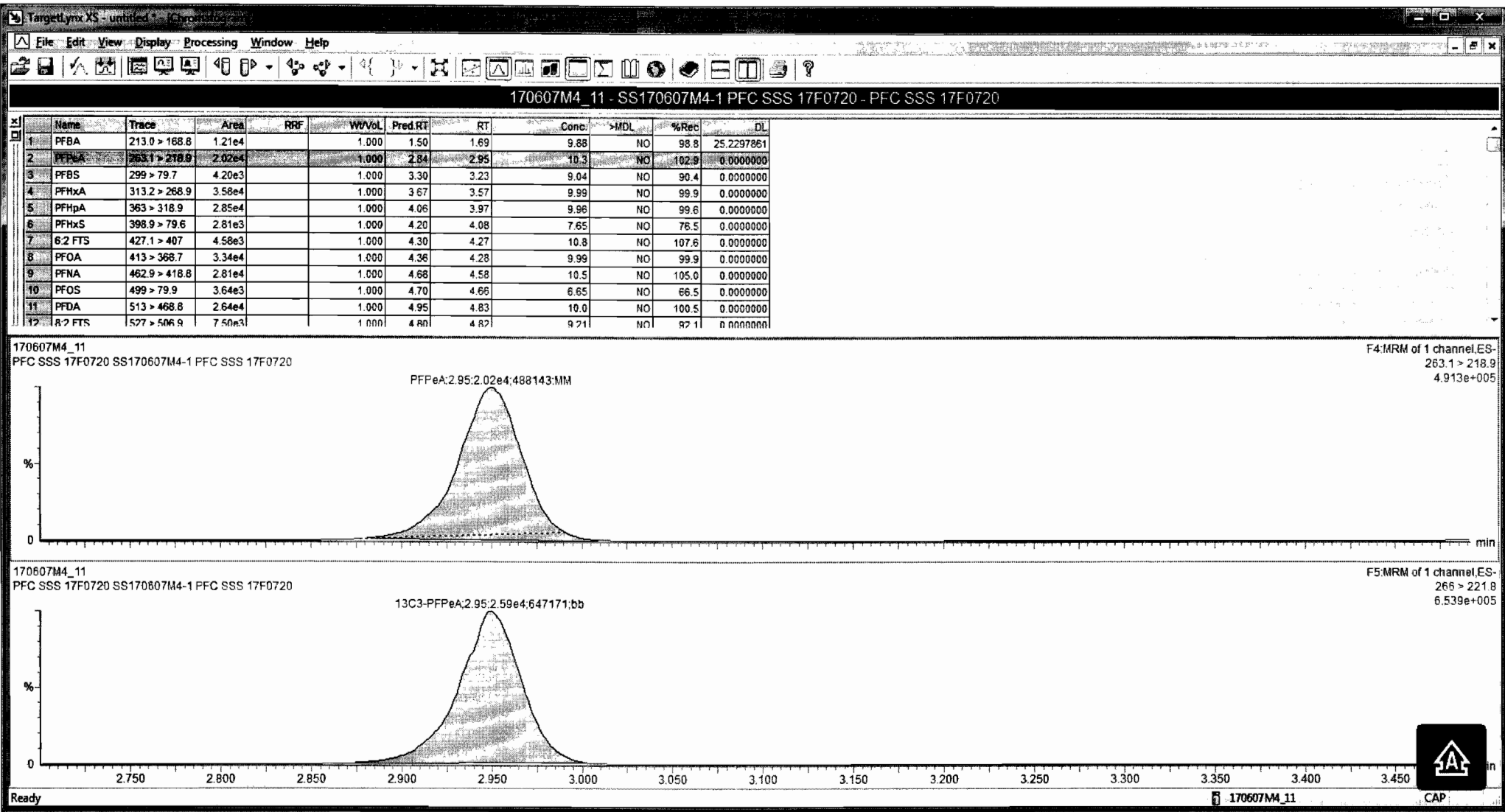
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

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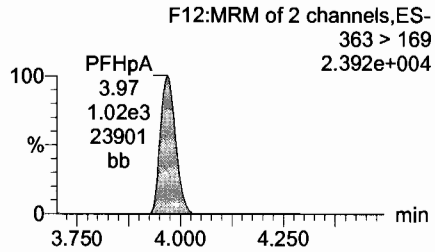
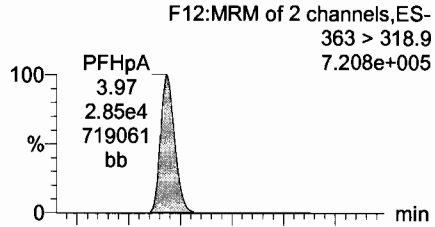


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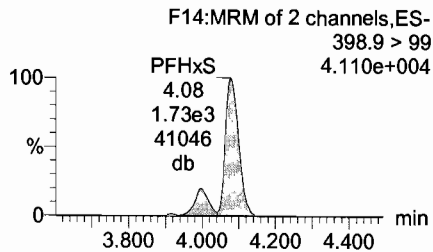
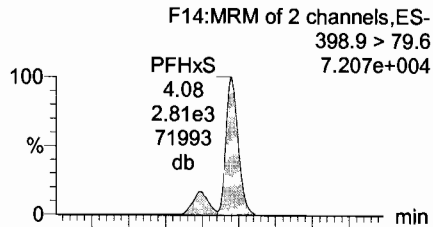
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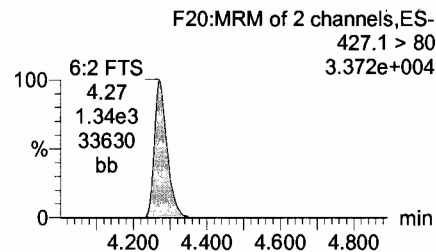
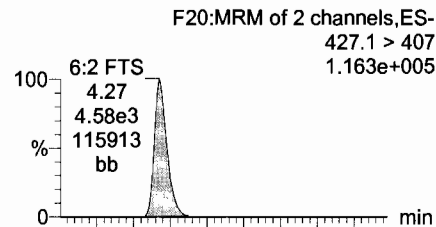
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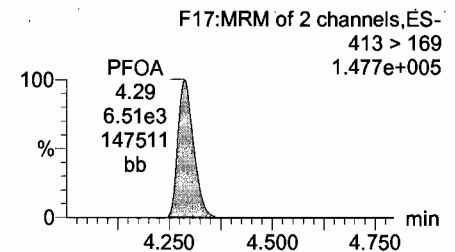
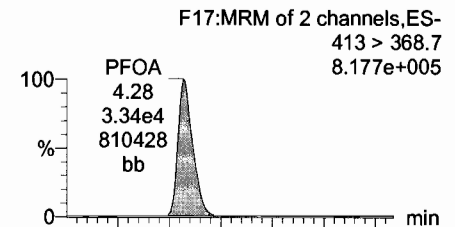
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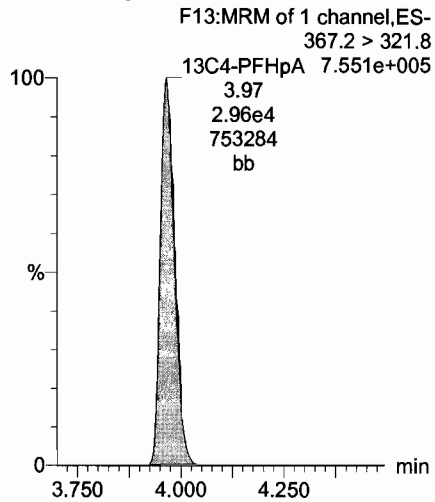
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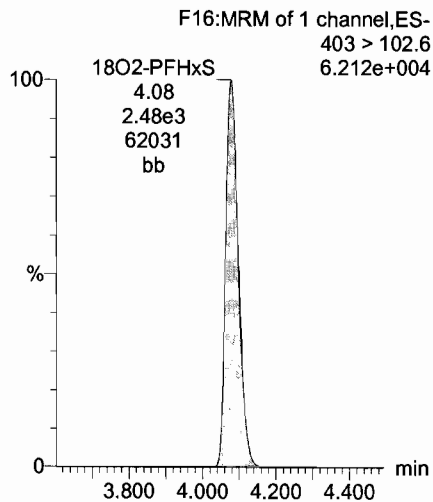
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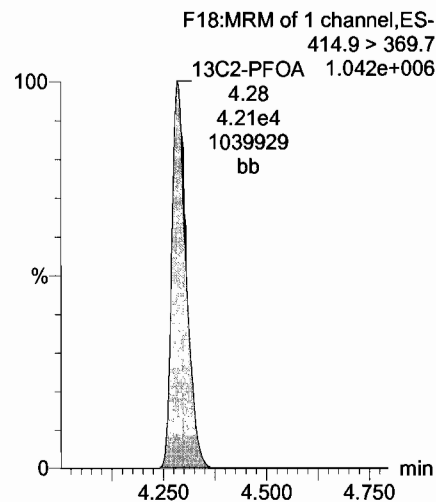
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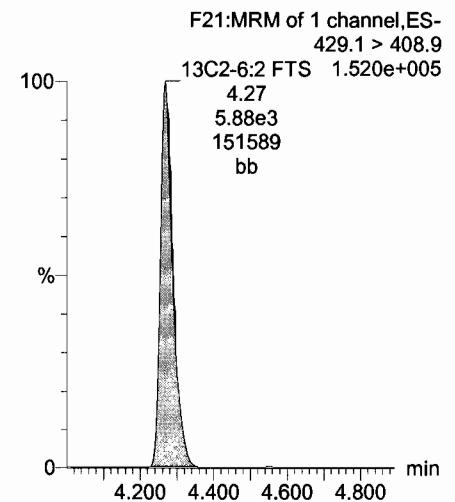
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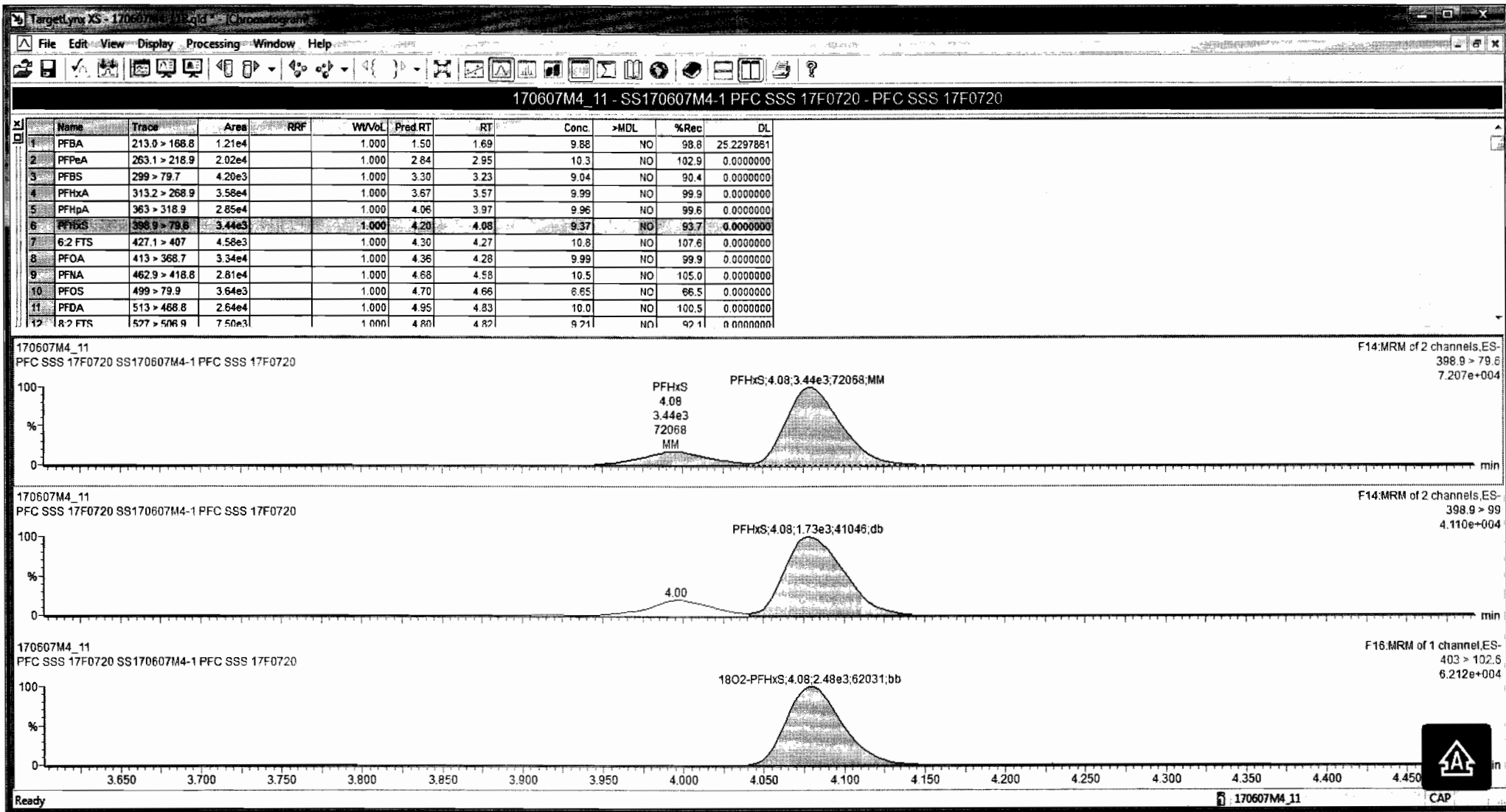


**13C2-PFOA**



**13C2-6:2 FTS**



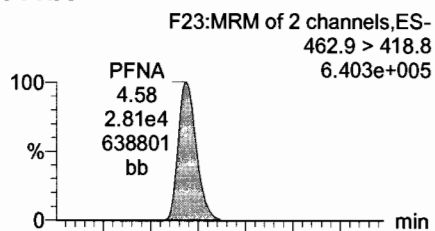


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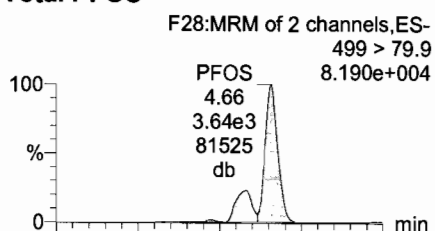
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Name: 170607M4\_11, Date: 07-Jun-2017, Time: 22:55:57, ID: SS170607M4-1 PFC SSS 17F0720, Description: PFC SSS 17F0720

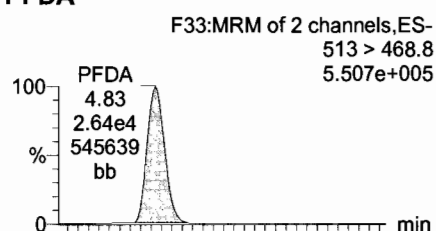
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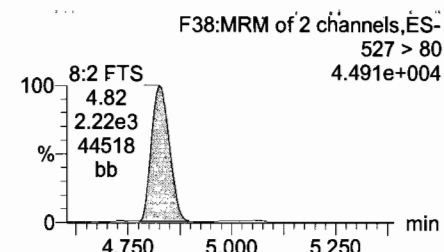
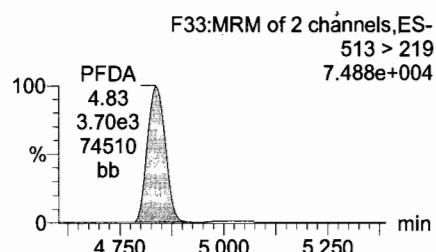
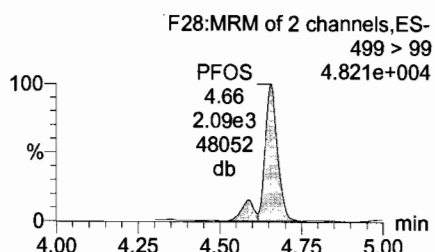
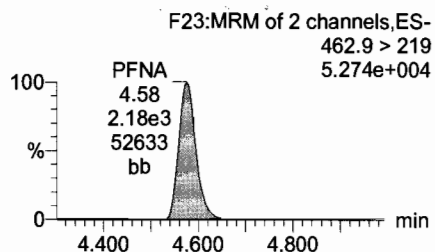
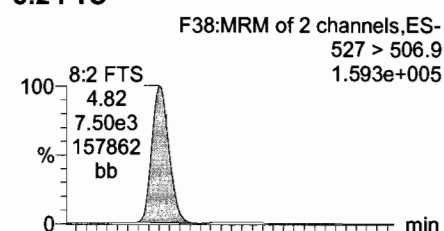
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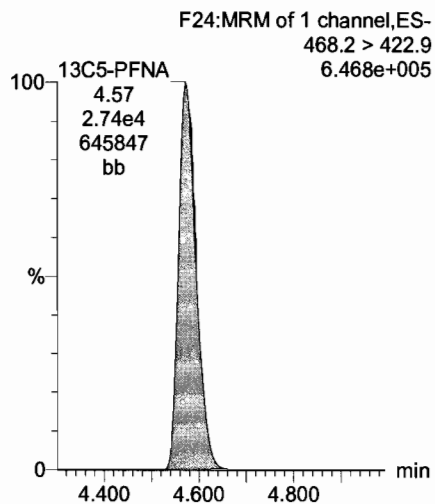
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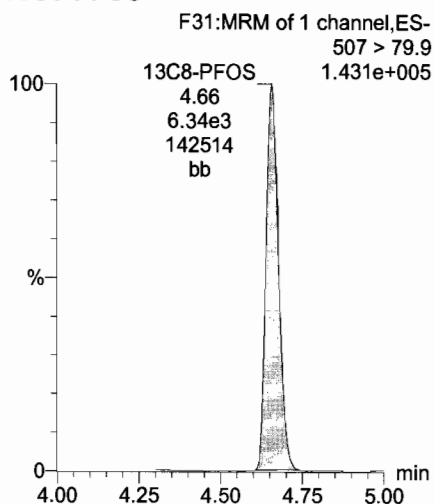
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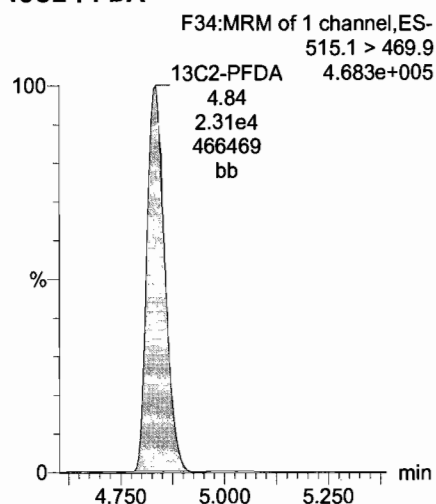
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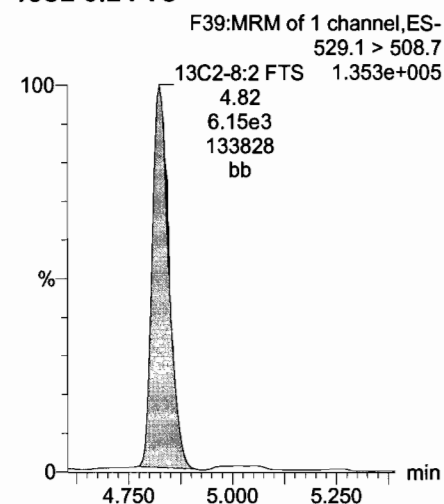
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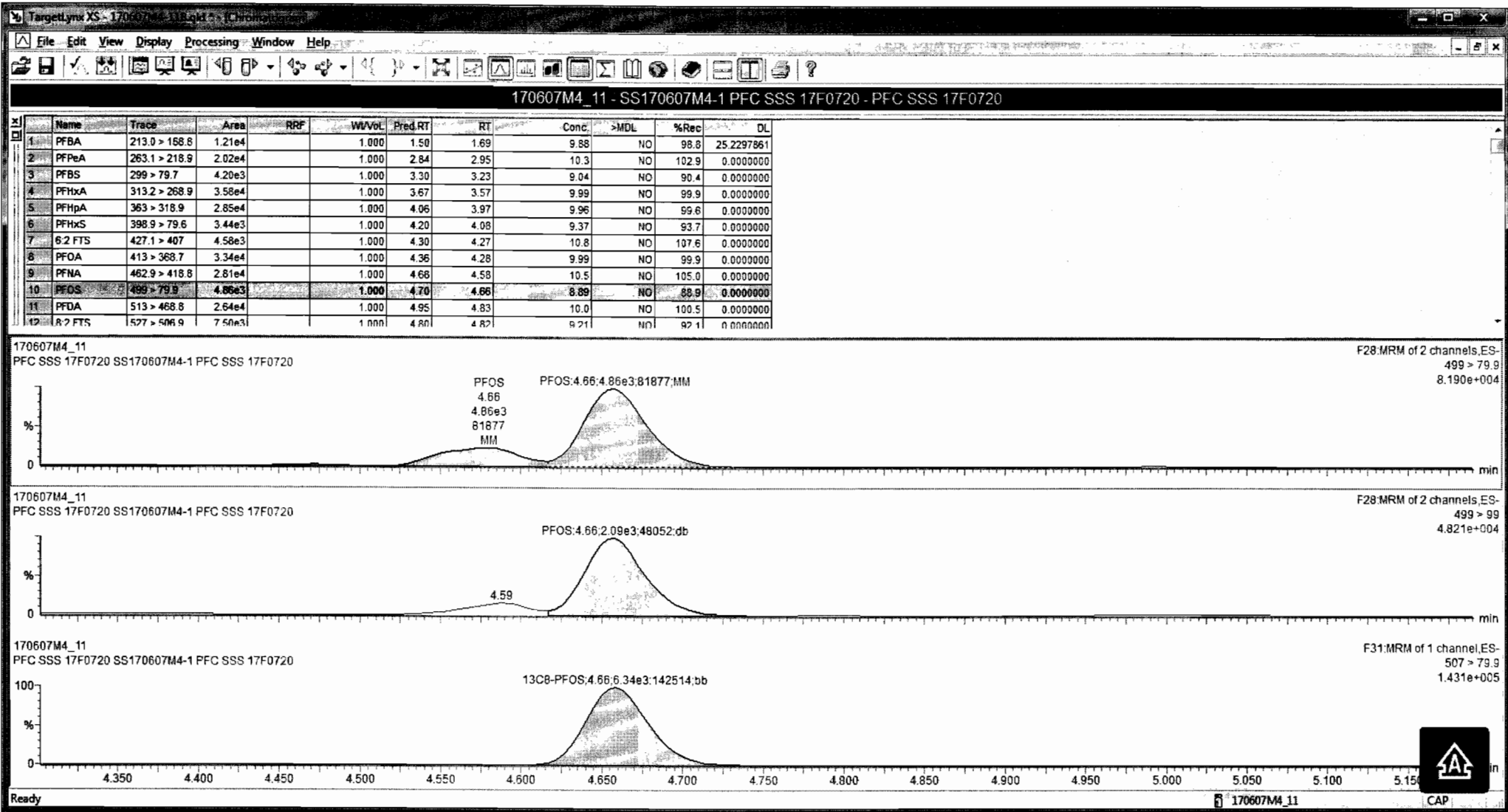


**13C2-PFDA**



**13C2-8:2 FTS**







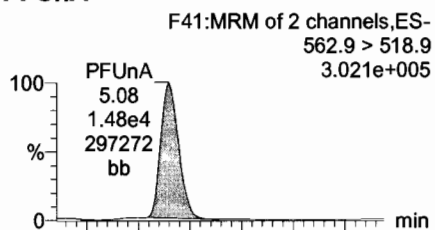
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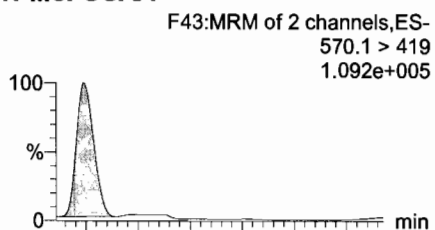
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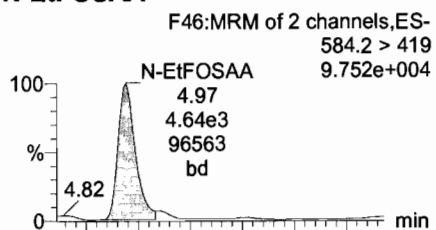
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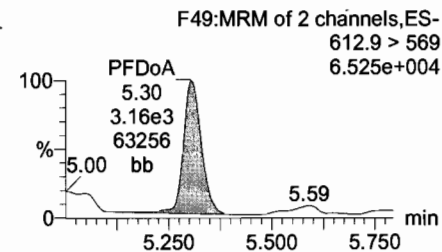
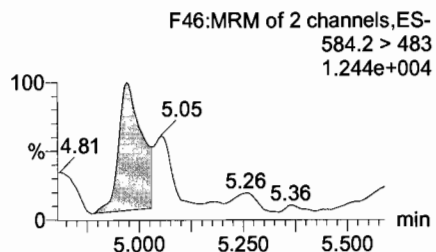
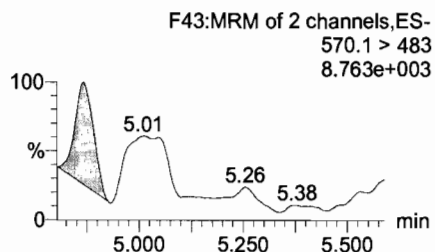
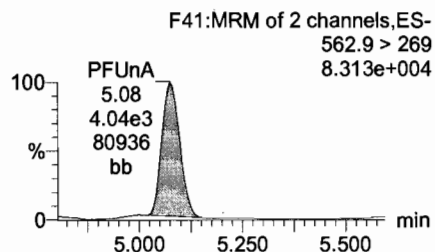
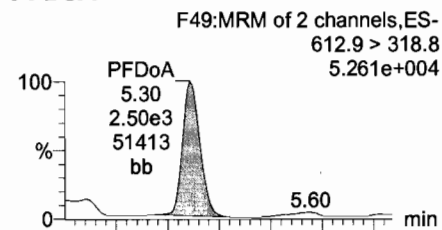
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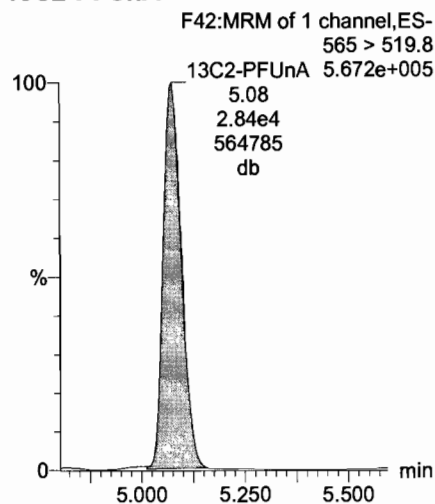
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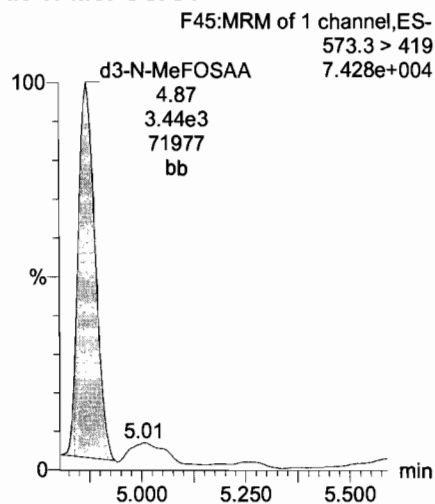
**PFDaA**



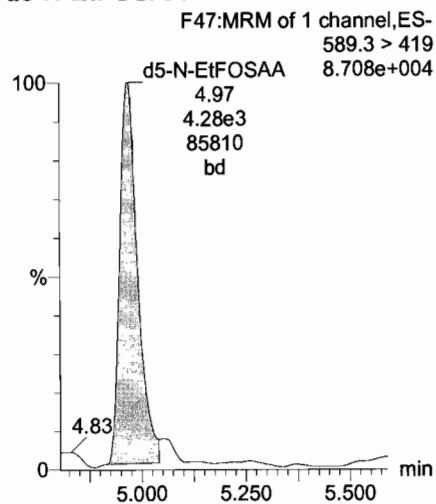
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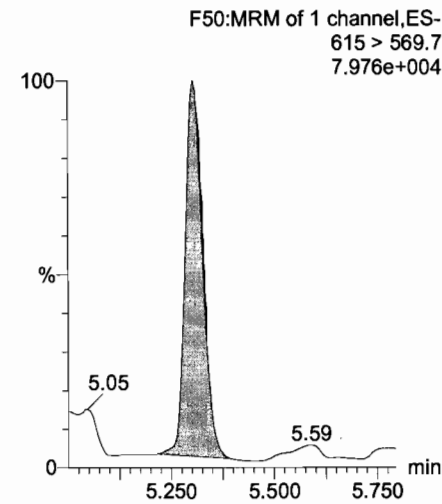
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDaA**

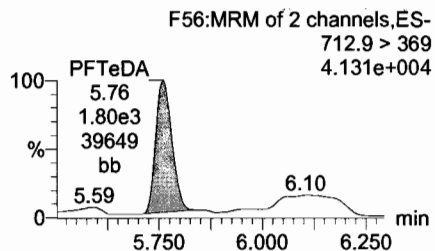
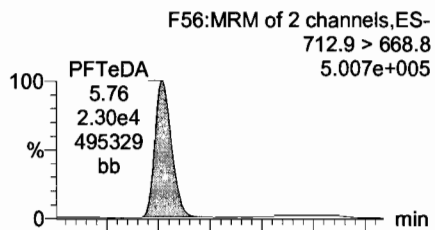


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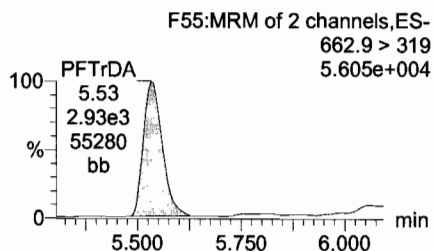
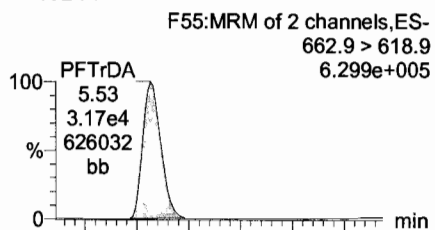
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Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_11, Date: 07-Jun-2017, Time: 22:55:57, ID: SS170607M4-1 PFC SSS 17F0720, Description: PFC SSS 17F0720

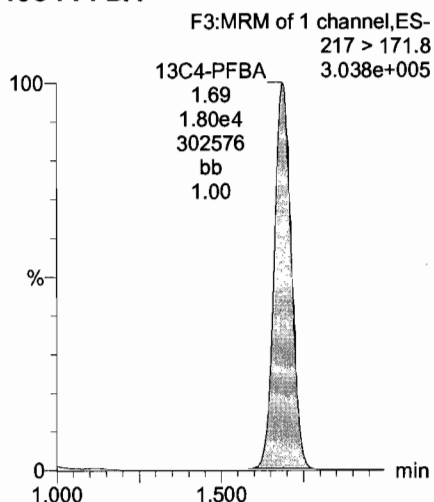
**PFTeDA**



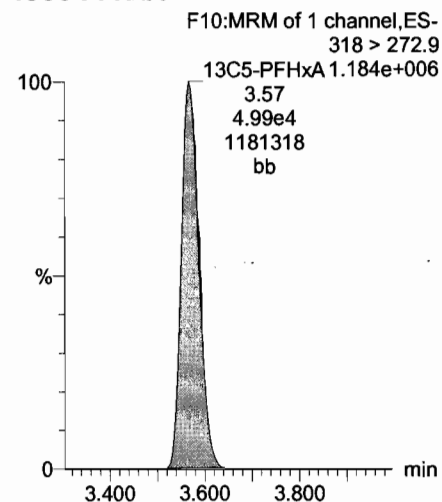
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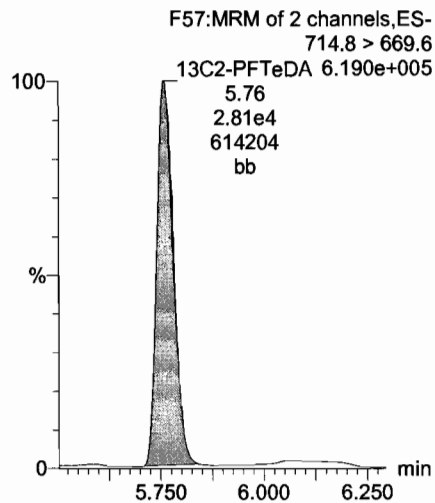
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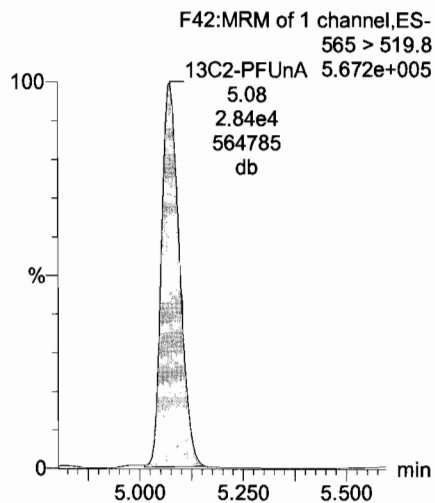
**13C5-PFHxA**



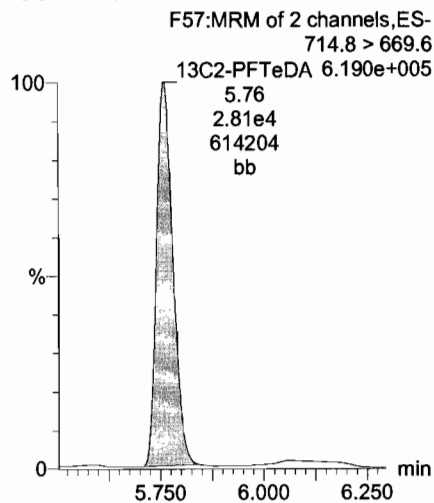
**13C2-PFTeDA**



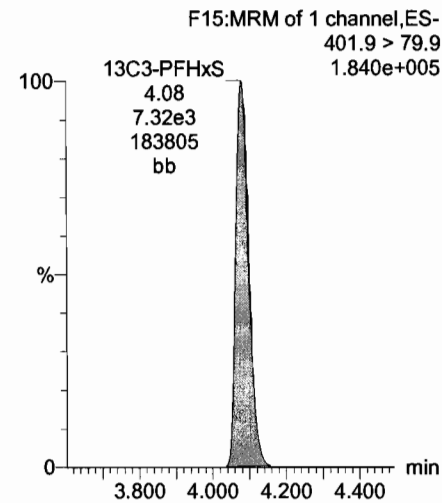
**13C2-PFUnA**

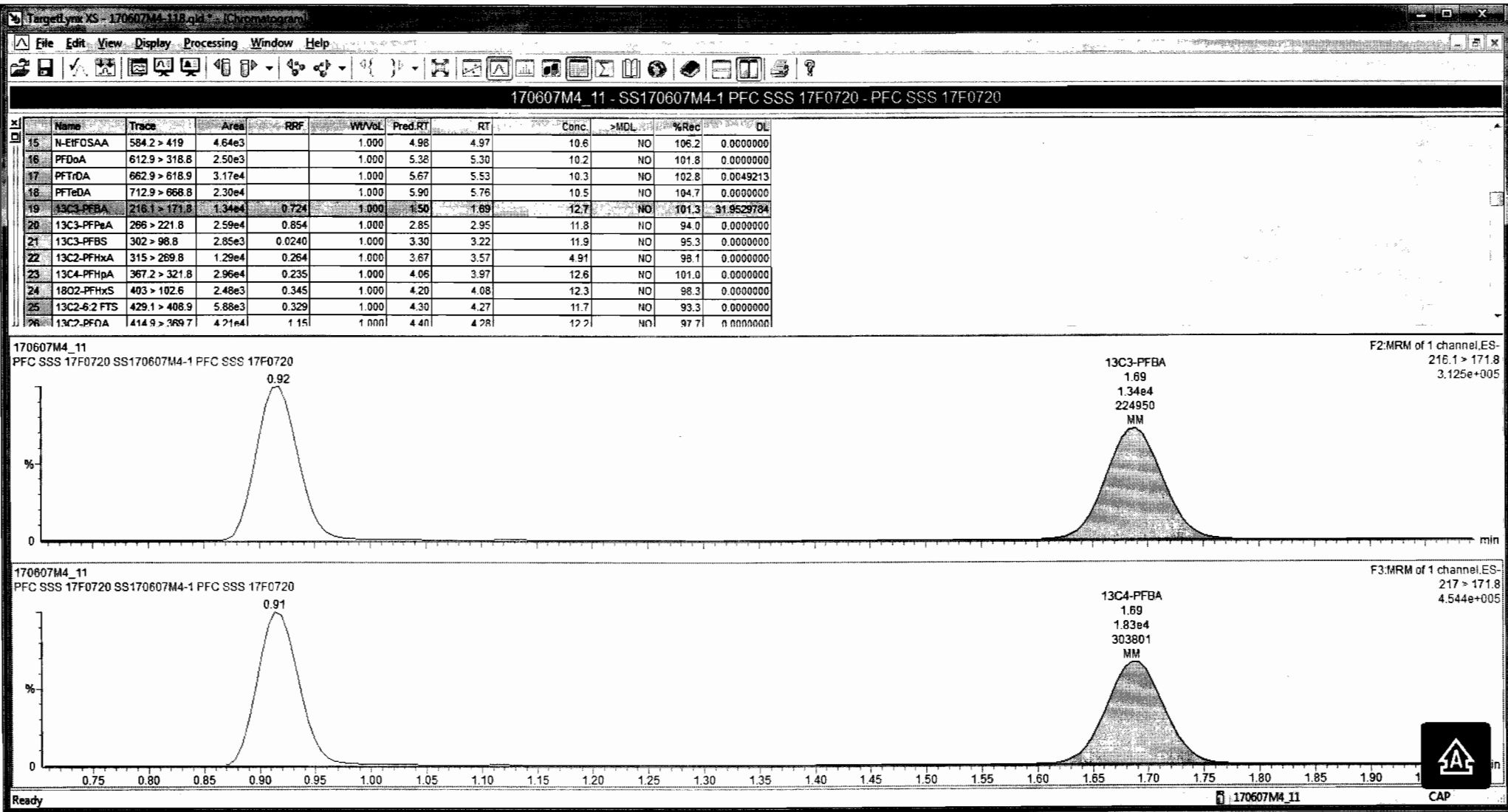


**13C2-PFTeDA**



**13C3-PFHxS**





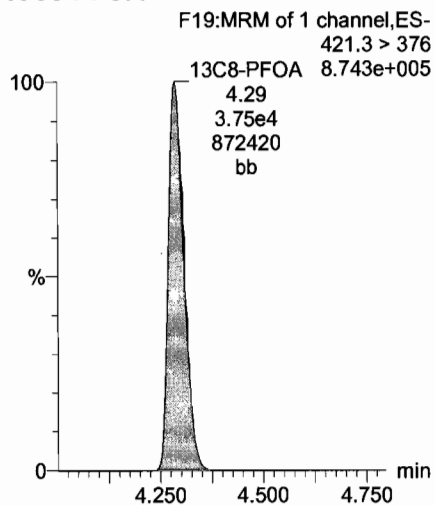
Dataset: Untitled

Last Altered: Wednesday, June 14, 2017 11:41:45 Pacific Daylight Time

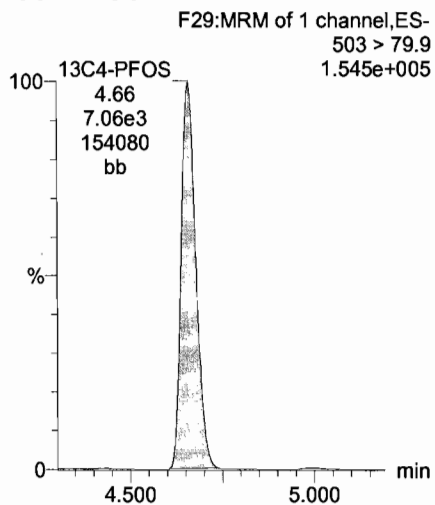
Printed: Wednesday, June 14, 2017 11:44:26 Pacific Daylight Time

Name: 170607M4\_11, Date: 07-Jun-2017, Time: 22:55:57, ID: SS170607M4-1 PFC SSS 17F0720, Description: PFC SSS 17F0720

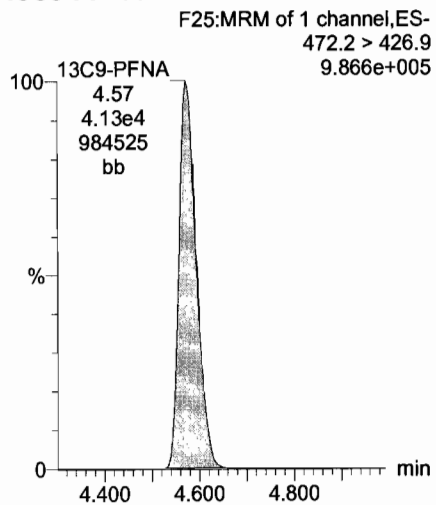
**13C8-PFOA**



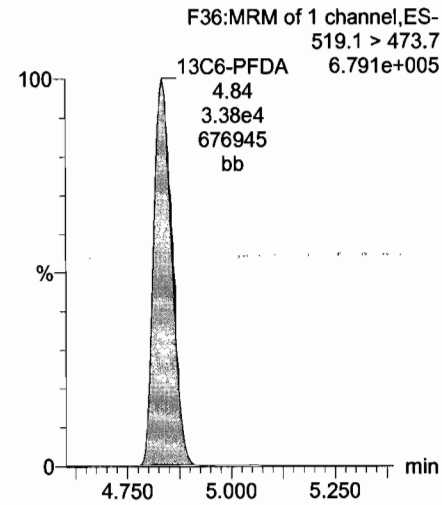
**13C4-PFOS**



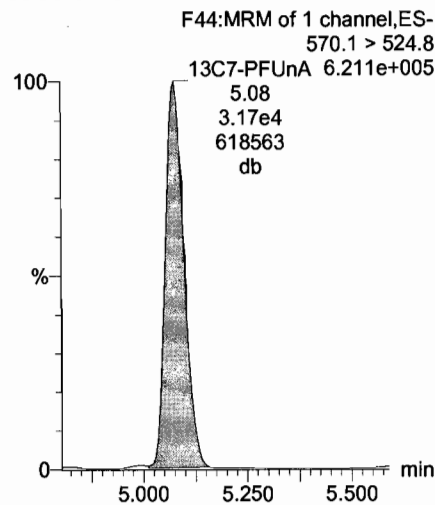
**13C9-PFNA**



**13C6-PFDA**



**13C7-PFUnA**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 06:53:54  
 Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

**Compound name: PFBA**

Correlation coefficient:  $r = 0.999425$ ,  $r^2 = 0.998850$

Calibration curve:  $1.129 * x + 0.161995$

Response type: Internal Std ( Ref 19 ), 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 170615M4_3	Standard	0.250	1.88	609.515	17223.510	0.442	0.2	-0.7	NO	0.999	NO	MM
2	2 170615M4_4	Standard	0.500	1.88	980.206	16559.154	0.740	0.5	2.4	NO	0.999	NO	MM
3	3 170615M4_5	Standard	1.000	1.88	1728.791	17852.176	1.210	0.9	-7.1	NO	0.999	NO	MM
4	4 170615M4_6	Standard	2.000	1.88	3304.979	16802.992	2.459	2.0	1.7	NO	0.999	NO	bb
5	5 170615M4_7	Standard	5.000	1.88	9305.631	17772.771	6.545	5.7	13.1	NO	0.999	NO	bb
6	6 170615M4_8	Standard	10.000	1.88	15574.929	18727.818	10.396	9.1	-9.4	NO	0.999	NO	bb
7	7 170615M4_9	Standard	50.000	1.88	79420.000	17646.799	56.257	49.7	-0.6	NO	0.999	NO	bb
8	8 170615M4_10	Standard	100.000	1.88	156338.313	17177.623	113.766	100.6	0.6	NO	0.999	NO	bb

**Compound name: PFPeA**

Correlation coefficient:  $r = 0.999299$ ,  $r^2 = 0.998598$

Calibration curve:  $0.959351 * x + 0.0564289$

Response type: Internal Std ( Ref 20 ), 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 170615M4_3	Standard	0.250	3.06	673.572	30016.100	0.281	0.2	-6.6	NO	0.999	NO	bb
2	2 170615M4_4	Standard	0.500	3.07	1231.149	29538.078	0.521	0.5	-3.1	NO	0.999	NO	bb
3	3 170615M4_5	Standard	1.000	3.06	2509.887	31387.781	1.000	1.0	-1.7	NO	0.999	NO	bb
4	4 170615M4_6	Standard	2.000	3.07	4720.868	29339.494	2.011	2.0	1.9	NO	0.999	NO	bb
5	5 170615M4_7	Standard	5.000	3.07	13985.355	30966.525	5.645	5.8	16.5	NO	0.999	NO	bb
6	6 170615M4_8	Standard	10.000	3.07	22708.131	31907.555	8.896	9.2	-7.9	NO	0.999	NO	bb
7	7 170615M4_9	Standard	50.000	3.07	116973.508	29909.584	48.886	50.9	1.8	NO	0.999	NO	bb
8	8 170615M4_10	Standard	100.000	3.07	224699.125	29534.033	95.102	99.1	-0.9	NO	0.999	NO	bb

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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**Compound name: PFBS**

Correlation coefficient:  $r = 0.998878$ ,  $r^2 = 0.997757$

Calibration curve:  $1.96117 * x + 0.171802$

Response type: Internal Std ( Ref 21 ), 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 170615M4_3	Standard	0.250	3.34	142.851	3026.937	0.590	0.2	-14.7	NO	0.998	NO	bb
2	2 170615M4_4	Standard	0.500	3.34	261.607	3066.356	1.066	0.5	-8.8	NO	0.998	NO	bb
3	3 170615M4_5	Standard	1.000	3.33	514.840	3188.414	2.018	0.9	-5.8	NO	0.998	NO	bb
4	4 170615M4_6	Standard	2.000	3.34	1040.704	3011.627	4.320	2.1	5.7	NO	0.998	NO	bb
5	5 170615M4_7	Standard	5.000	3.34	3045.010	3047.974	12.488	6.3	25.6	NO	0.998	NO	bb
6	6 170615M4_8	Standard	10.000	3.34	5122.284	3236.436	19.784	10.0	0.0	NO	0.998	NO	bb
7	7 170615M4_9	Standard	50.000	3.33	25128.578	3246.944	96.739	49.2	-1.5	NO	0.998	NO	bb
8	8 170615M4_10	Standard	100.000	3.34	47313.301	3027.974	195.317	99.5	-0.5	NO	0.998	NO	bb

**Compound name: PFHxA**

Correlation coefficient:  $r = 0.998725$ ,  $r^2 = 0.997452$

Calibration curve:  $1.4127 * x + 0.148671$

Response type: Internal Std ( Ref 22 ), 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 170615M4_3	Standard	0.250	3.66	1127.504	12508.458	0.451	0.2	-14.5	NO	0.997	NO	bb
2	2 170615M4_4	Standard	0.500	3.66	1955.932	11845.356	0.826	0.5	-4.2	NO	0.997	NO	bb
3	3 170615M4_5	Standard	1.000	3.66	3898.748	12789.261	1.524	1.0	-2.6	NO	0.997	NO	bb
4	4 170615M4_6	Standard	2.000	3.66	7199.705	11787.278	3.054	2.1	2.8	NO	0.997	NO	bb
5	5 170615M4_7	Standard	5.000	3.66	22119.631	12580.602	8.791	6.1	22.4	NO	0.997	NO	bb
6	6 170615M4_8	Standard	10.000	3.66	36117.215	13331.781	13.546	9.5	-5.2	NO	0.997	NO	bb
7	7 170615M4_9	Standard	50.000	3.65	177485.594	12094.553	73.374	51.8	3.7	NO	0.997	NO	bb
8	8 170615M4_10	Standard	100.000	3.66	337823.281	12238.488	138.017	97.6	-2.4	NO	0.997	NO	bb

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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**Compound name: PFHpA**

Correlation coefficient:  $r = 0.999282$ ,  $r^2 = 0.998565$

Calibration curve:  $1.25872 * x + 0.12203$

Response type: Internal Std ( Ref 23 ), 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 170615M4_3	Standard	0.250	4.07	959.572	29435.463	0.407	0.2	-9.3	NO	0.999	NO	MM
2	2 170615M4_4	Standard	0.500	4.07	1732.235	29925.174	0.724	0.5	-4.4	NO	0.999	NO	db
3	3 170615M4_5	Standard	1.000	4.06	3292.715	30430.977	1.353	1.0	-2.2	NO	0.999	NO	bb
4	4 170615M4_6	Standard	2.000	4.06	6495.051	29813.373	2.723	2.1	3.3	NO	0.999	NO	bb
5	5 170615M4_7	Standard	5.000	4.06	18219.879	30127.514	7.559	5.9	18.2	NO	0.999	NO	bb
6	6 170615M4_8	Standard	10.000	4.06	31682.930	33136.590	11.952	9.4	-6.0	NO	0.999	NO	bb
7	7 170615M4_9	Standard	50.000	4.06	155724.516	30401.055	64.029	50.8	1.5	NO	0.999	NO	bb
8	8 170615M4_10	Standard	100.000	4.06	307888.750	30878.199	124.638	98.9	-1.1	NO	0.999	NO	bb

**Compound name: PFHxS**

Coefficient of Determination:  $R^2 = 0.998516$

Calibration curve:  $-0.00145139 * x^2 + 2.009 * x + -0.030428$

Response type: Internal Std ( Ref 24 ), 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 170615M4_3	Standard	0.250	4.19	106.870	3110.386	0.429	0.2	-8.4	NO	0.999	NO	MM
2	2 170615M4_4	Standard	0.500	4.19	218.256	2926.854	0.932	0.5	-4.1	NO	0.999	NO	MM
3	3 170615M4_5	Standard	1.000	4.19	517.075	2902.640	2.227	1.1	12.4	NO	0.999	NO	MM
4	4 170615M4_6	Standard	2.000	4.19	839.311	2800.688	3.746	1.9	-5.9	NO	0.999	NO	MM
5	5 170615M4_7	Standard	5.000	4.19	2688.897	2940.086	11.432	5.7	14.6	NO	0.999	NO	MM
6	6 170615M4_8	Standard	10.000	4.19	4519.742	3120.457	18.105	9.1	-9.1	NO	0.999	NO	MM
7	7 170615M4_9	Standard	50.000	4.19	22281.012	2858.882	97.420	50.3	0.7	NO	0.999	NO	MM
8	8 170615M4_10	Standard	100.000	4.19	44362.547	2978.924	186.152	99.9	-0.1	NO	0.999	NO	MM

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**Compound name: 6:2 FTS**

Coefficient of Determination: R<sup>2</sup> = 0.993120

Calibration curve: -0.00294888 \* x<sup>2</sup> + 0.92938 \* x + 0.0722011

Response type: Internal Std ( Ref 25 ), 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 170615M4_3	Standard	0.250	4.40	392.659	17015.770	0.288	0.2	-6.9	NO	0.993	NO	MM
2	2 170615M4_4	Standard	0.500	4.40	603.076	15723.763	0.479	0.4	-12.2	NO	0.993	NO	MM
3	3 170615M4_5	Standard	1.000	4.39	1422.179	16784.041	1.059	1.1	6.6	NO	0.993	NO	MM
4	4 170615M4_6	Standard	2.000	4.39	2370.076	15601.062	1.899	2.0	-1.1	NO	0.993	NO	MM
5	5 170615M4_7	Standard	5.000	4.39	7633.252	15989.408	5.967	6.5	29.5	NO	0.993	NO	MM
6	6 170615M4_8	Standard	10.000	4.39	11602.106	18891.727	7.677	8.4	-15.9	NO	0.993	NO	MM
7	7 170615M4_9	Standard	50.000	4.39	56043.676	17856.793	39.231	50.1	0.2	NO	0.993	NO	bb
8	8 170615M4_10	Standard	100.000	4.38	103427.586	20339.377	63.564	100.1	0.1	NO	0.993	NO	bb

**Compound name: PFOA**

Correlation coefficient: r = 0.998545, r<sup>2</sup> = 0.997093

Calibration curve: 0.987068 \* x + 0.102027

Response type: Internal Std ( Ref 26 ), 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 170615M4_3	Standard	0.250	4.42	1560.733	56544.223	0.345	0.2	-1.5	NO	0.997	NO	MM
2	2 170615M4_4	Standard	0.500	4.42	2176.118	54215.504	0.502	0.4	-19.0	NO	0.997	NO	MM
3	3 170615M4_5	Standard	1.000	4.41	4468.239	54766.047	1.020	0.9	-7.0	NO	0.997	NO	MM
4	4 170615M4_6	Standard	2.000	4.41	9745.366	53819.367	2.263	2.2	9.5	NO	0.997	NO	MM
5	5 170615M4_7	Standard	5.000	4.41	27814.072	58284.727	5.965	5.9	18.8	NO	0.997	NO	MM
6	6 170615M4_8	Standard	10.000	4.41	45201.875	58170.977	9.713	9.7	-2.6	NO	0.997	NO	bb
7	7 170615M4_9	Standard	50.000	4.41	224763.750	54009.887	52.019	52.6	5.2	NO	0.997	NO	bb
8	8 170615M4_10	Standard	100.000	4.41	449181.469	58758.605	95.557	96.7	-3.3	NO	0.997	NO	bb



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**Compound name: PFNA**

Correlation coefficient:  $r = 0.999076$ ,  $r^2 = 0.998154$

Calibration curve:  $1.17885 * x + 0.0522937$

Response type: Internal Std ( Ref 27 ), 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 170615M4_3	Standard	0.250	4.71	1629.533	55840.023	0.365	0.3	6.0	NO	0.998	NO	bb
2	2 170615M4_4	Standard	0.500	4.71	3009.858	55363.645	0.680	0.5	6.4	NO	0.998	NO	bb
3	3 170615M4_5	Standard	1.000	4.71	5464.875	53765.129	1.271	1.0	3.3	NO	0.998	NO	bb
4	4 170615M4_6	Standard	2.000	4.71	9762.044	51441.160	2.372	2.0	-1.6	NO	0.998	NO	bb
5	5 170615M4_7	Standard	5.000	4.70	30755.320	55914.590	6.876	5.8	15.8	NO	0.998	NO	bb
6	6 170615M4_8	Standard	10.000	4.70	47519.227	57499.387	10.330	8.7	-12.8	NO	0.998	NO	bb
7	7 170615M4_9	Standard	50.000	4.70	239531.156	50586.133	59.189	50.2	0.3	NO	0.998	NO	bb
8	8 170615M4_10	Standard	100.000	4.70	481769.844	50919.410	118.268	100.3	0.3	NO	0.998	NO	bb

**Compound name: PFOS**

Coefficient of Determination:  $R^2 = 0.998221$

Calibration curve:  $0.000513416 * x^2 + 1.04236 * x + -0.00915921$

Response type: Internal Std ( Ref 28 ), 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 170615M4_3	Standard	0.250	4.79	284.705	13352.821	0.267	0.3	5.8	NO	0.998	NO	MM
2	2 170615M4_4	Standard	0.500	4.79	474.078	13361.875	0.443	0.4	-13.2	NO	0.998	NO	MM
3	3 170615M4_5	Standard	1.000	4.80	964.989	12771.218	0.944	0.9	-8.6	NO	0.998	NO	MM
4	4 170615M4_6	Standard	2.000	4.79	1978.427	12275.157	2.015	1.9	-3.0	NO	0.998	NO	MM
5	5 170615M4_7	Standard	5.000	4.78	6248.208	12241.666	6.380	6.1	22.2	NO	0.998	NO	MM
6	6 170615M4_8	Standard	10.000	4.78	10404.523	13200.461	9.852	9.4	-5.8	NO	0.998	NO	MM
7	7 170615M4_9	Standard	50.000	4.78	51883.008	12308.538	52.690	49.4	-1.3	NO	0.998	NO	MM
8	8 170615M4_10	Standard	100.000	4.78	98791.398	11255.217	109.717	100.3	0.3	NO	0.998	NO	MM

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**Compound name: PFDA**

Coefficient of Determination: R<sup>2</sup> = 0.998000

Calibration curve: 0.000868701 \* x<sup>2</sup> + 1.21468 \* x + 0.109272

Response type: Internal Std ( Ref 29 ), 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 170615M4_3	Standard	0.250	4.98	1669.599	51404.434	0.406	0.2	-2.3	NO	0.998	NO	bb
2	2 170615M4_4	Standard	0.500	4.98	2741.946	52110.523	0.658	0.5	-9.7	NO	0.998	NO	bb
3	3 170615M4_5	Standard	1.000	4.98	5198.657	50746.508	1.281	1.0	-3.6	NO	0.998	NO	bb
4	4 170615M4_6	Standard	2.000	4.97	10249.922	46506.453	2.755	2.2	8.7	NO	0.998	NO	bb
5	5 170615M4_7	Standard	5.000	4.97	34655.859	58912.727	7.353	5.9	18.8	NO	0.998	NO	bb
6	6 170615M4_8	Standard	10.000	4.97	48568.668	56089.582	10.824	8.8	-12.3	NO	0.998	NO	bb
7	7 170615M4_9	Standard	50.000	4.97	242293.422	47794.281	63.369	50.3	0.5	NO	0.998	NO	bb
8	8 170615M4_10	Standard	100.000	4.97	475828.594	45689.922	130.179	99.9	-0.1	NO	0.998	NO	bb

**Compound name: 8:2 FTS**

Coefficient of Determination: R<sup>2</sup> = 0.999680

Calibration curve: -0.0068603 \* x<sup>2</sup> + 1.90532 \* x

Response type: Internal Std ( Ref 30 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Force, 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 170615M4_3	Standard	0.250	4.97	617.814	14826.806	0.521	0.3	9.5	NO	1.000	NO	MM
2	2 170615M4_4	Standard	0.500	4.97	1047.159	13046.472	1.003	0.5	5.5	NO	1.000	NO	bb
3	3 170615M4_5	Standard	1.000	4.97	1764.446	12279.913	1.796	0.9	-5.4	NO	1.000	NO	bb
4	4 170615M4_6	Standard	2.000	4.96	3354.358	10583.649	3.962	2.1	4.8	NO	1.000	NO	MM
5	5 170615M4_7	Standard	5.000	4.96	9079.254	12337.263	9.199	4.9	-1.7	NO	1.000	NO	bb
6	6 170615M4_8	Standard	10.000	4.96	17252.193	12119.837	17.793	9.7	-3.2	NO	1.000	NO	bb
7	7 170615M4_9	Standard	50.000	4.96	78279.977	12369.878	79.103	50.8	1.6	NO	1.000	NO	bb
8	8 170615M4_10	Standard	100.000	4.96	131779.594	13557.926	121.497	99.2	-0.8	NO	1.000	NO	bb

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**Compound name: PFUnA**

Correlation coefficient:  $r = 0.999218$ ,  $r^2 = 0.998436$

Calibration curve:  $0.751381 * x + 0.102246$

Response type: Internal Std ( Ref 31 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170615M4_3	Standard	0.250	5.24	1217.565	58204.438	0.261	0.2	-15.2	NO	0.998	NO	MM
2	2 170615M4_4	Standard	0.500	5.24	2003.563	54899.152	0.456	0.5	-5.8	NO	0.998	NO	MM
3	3 170615M4_5	Standard	1.000	5.23	3901.915	57839.484	0.843	1.0	-1.4	NO	0.998	NO	bb
4	4 170615M4_6	Standard	2.000	5.22	7338.429	55607.680	1.650	2.1	3.0	NO	0.998	NO	MM
5	5 170615M4_7	Standard	5.000	5.22	20859.797	57187.137	4.560	5.9	18.6	NO	0.998	NO	bb
6	6 170615M4_8	Standard	10.000	5.22	36619.953	59717.820	7.665	10.1	0.7	NO	0.998	NO	bb
7	7 170615M4_9	Standard	50.000	5.22	172524.156	56009.098	38.504	51.1	2.2	NO	0.998	NO	bb
8	8 170615M4_10	Standard	100.000	5.22	335827.563	56978.137	73.675	97.9	-2.1	NO	0.998	NO	bb

**Compound name: N-MeFOSAA**

Coefficient of Determination:  $R^2 = 0.999566$

Calibration curve:  $0.00291692 * x^2 + 1.61325 * x + 0.0881258$

Response type: Internal Std ( Ref 32 ), 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 170615M4_3	Standard	0.250	5.03	466.419	11326.695	0.515	0.3	5.7	NO	1.000	NO	bb
2	2 170615M4_4	Standard	0.500	5.03	882.198	11897.144	0.927	0.5	3.9	NO	1.000	NO	MM
3	3 170615M4_5	Standard	1.000	5.03	1570.084	11236.310	1.747	1.0	2.6	NO	1.000	NO	MM
4	4 170615M4_6	Standard	2.000	5.02	3029.863	10854.752	3.489	2.1	5.0	NO	1.000	NO	MM
5	5 170615M4_7	Standard	5.000	5.02	8416.817	11670.782	9.015	5.5	9.6	NO	1.000	NO	bb
6	6 170615M4_8	Standard	10.000	5.01	16682.270	13224.163	15.769	9.6	-4.5	NO	1.000	NO	bb
7	7 170615M4_9	Standard	50.000	5.01	78629.641	11249.111	87.373	49.6	-0.7	NO	1.000	NO	bb
8	8 170615M4_10	Standard	100.000	5.01	161156.563	10549.771	190.948	100.2	0.2	NO	1.000	NO	bb

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**Compound name: N-EtFOSAA**

Coefficient of Determination: R<sup>2</sup> = 0.999251

Calibration curve: 0.00114175 \* x<sup>2</sup> + 1.0759 \* x + 0.0564946

Response type: Internal Std ( Ref 33 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170615M4_3	Standard	0.250	5.14	787.961	14387.841	0.685	0.6	133.4	YES	0.999	NO	bbX
2	2 170615M4_4	Standard	0.500	5.13	767.659	14267.943	0.673	0.6	14.4	NO	0.999	NO	MM
3	3 170615M4_5	Standard	1.000	5.13	1283.172	14400.363	1.114	1.0	-1.8	NO	0.999	NO	bb
4	4 170615M4_6	Standard	2.000	5.12	2335.035	13771.905	2.119	1.9	-4.3	NO	0.999	NO	bb
5	5 170615M4_7	Standard	5.000	5.12	6700.727	14030.702	5.970	5.5	9.3	NO	0.999	NO	bb
6	6 170615M4_8	Standard	10.000	5.12	12298.878	15302.597	10.046	9.2	-8.0	NO	0.999	NO	bb
7	7 170615M4_9	Standard	50.000	5.12	63918.762	13918.768	57.403	50.6	1.2	NO	0.999	NO	bb
8	8 170615M4_10	Standard	100.000	5.12	120073.836	12636.150	118.780	99.8	-0.2	NO	0.999	NO	bb

**Compound name: PFDoA**

Coefficient of Determination: R<sup>2</sup> = 0.998398

Calibration curve: 0.000701771 \* x<sup>2</sup> + 0.947233 \* x + 0.307203

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170615M4_3	Standard	0.250	5.48	127.718	6095.422	0.262			NO	0.998	NO	bbXI
2	2 170615M4_4	Standard	0.500	5.48	389.652	6296.703	0.774	0.5	-1.6	NO	0.998	NO	MM
3	3 170615M4_5	Standard	1.000	5.47	656.562	6888.731	1.191	0.9	-6.7	NO	0.998	NO	MM
4	4 170615M4_6	Standard	2.000	5.46	1176.811	6993.183	2.103	1.9	-5.3	NO	0.998	NO	MM
5	5 170615M4_7	Standard	5.000	5.46	3167.034	6537.961	6.055	6.0	20.8	NO	0.998	NO	MM
6	6 170615M4_8	Standard	10.000	5.46	5292.662	7181.770	9.212	9.3	-6.6	NO	0.998	NO	bb
7	7 170615M4_9	Standard	50.000	5.46	25629.365	6535.260	49.021	49.6	-0.8	NO	0.998	NO	bb
8	8 170615M4_10	Standard	100.000	5.46	51184.199	6256.261	102.266	100.2	0.2	NO	0.998	NO	bb

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**Compound name: PFTrDA**

Coefficient of Determination: R<sup>2</sup> = 0.997920

Calibration curve: -0.00191578 \* x<sup>2</sup> + 11.2409 \* x + 1.0088

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170615M4_3	Standard	0.250	5.71	1746.245	6095.422	3.581	0.2	-8.5	NO	0.998	NO	MM
2	2 170615M4_4	Standard	0.500	5.71	3446.226	6296.703	6.841	0.5	3.8	NO	0.998	NO	MM
3	3 170615M4_5	Standard	1.000	5.70	6654.571	6888.731	12.075	1.0	-1.5	NO	0.998	NO	bb
4	4 170615M4_6	Standard	2.000	5.70	12208.780	6993.183	21.823	1.9	-7.4	NO	0.998	NO	bb
5	5 170615M4_7	Standard	5.000	5.69	36404.375	6537.961	69.602	6.1	22.2	NO	0.998	NO	bb
6	6 170615M4_8	Standard	10.000	5.69	59845.219	7181.770	104.162	9.2	-8.1	NO	0.998	NO	bb
7	7 170615M4_9	Standard	50.000	5.69	289955.656	6535.260	554.599	49.7	-0.7	NO	0.998	NO	bb
8	8 170615M4_10	Standard	100.000	5.69	554601.438	6256.261	1108.093	100.2	0.2	NO	0.998	NO	bb

**Compound name: PFTeDA**

Coefficient of Determination: R<sup>2</sup> = 0.998286

Calibration curve: -0.00148933 \* x<sup>2</sup> + 1.35466 \* x + 0.108578

Response type: Internal Std ( Ref 35 ), 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 170615M4_3	Standard	0.250	5.94	1333.289	38748.922	0.430	0.2	-5.0	NO	0.998	NO	MM
2	2 170615M4_4	Standard	0.500	5.93	2254.042	38070.633	0.740	0.5	-6.7	NO	0.998	NO	MM
3	3 170615M4_5	Standard	1.000	5.93	4519.220	39563.559	1.428	1.0	-2.5	NO	0.998	NO	MM
4	4 170615M4_6	Standard	2.000	5.92	8262.015	35974.965	2.871	2.0	2.2	NO	0.998	NO	bb
5	5 170615M4_7	Standard	5.000	5.91	24567.703	37760.156	8.133	6.0	19.3	NO	0.998	NO	bb
6	6 170615M4_8	Standard	10.000	5.91	40540.930	39892.477	12.703	9.4	-6.1	NO	0.998	NO	bb
7	7 170615M4_9	Standard	50.000	5.91	195547.422	38680.738	63.193	49.2	-1.5	NO	0.998	NO	bb
8	8 170615M4_10	Standard	100.000	5.91	365072.094	37664.352	121.160	100.5	0.5	NO	0.998	NO	bb

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**Compound name: 13C3-PFBA**

Response Factor: 0.733921

RRF SD: 0.0839224, Relative SD: 11.4348

Response type: Internal Std ( Ref 36 ), 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 170615M4_3	Standard	12.500	1.87	17223.510	24934.213	8.634	11.8	-5.9	NO		NO	bb
2	2 170615M4_4	Standard	12.500	1.88	16559.154	23732.340	8.722	11.9	-4.9	NO		NO	bb
3	3 170615M4_5	Standard	12.500	1.88	17852.176	24432.361	9.133	12.4	-0.4	NO		NO	bb
4	4 170615M4_6	Standard	12.500	1.88	16802.992	24286.217	8.648	11.8	-5.7	NO		NO	bb
5	5 170615M4_7	Standard	12.500	1.88	17772.771	25099.107	8.851	12.1	-3.5	NO		NO	bb
6	6 170615M4_8	Standard	12.500	1.88	18727.818	19939.002	11.741	16.0	28.0	NO		NO	bb
7	7 170615M4_9	Standard	12.500	1.88	17646.799	24880.197	8.866	12.1	-3.4	NO		NO	bb
8	8 170615M4_10	Standard	12.500	1.88	17177.623	24410.949	8.796	12.0	-4.1	NO		NO	bb

**Compound name: 13C3-PFPeA**

Response Factor: 1.2734

RRF SD: 0.135006, Relative SD: 10.6019

Response type: Internal Std ( Ref 36 ), 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 170615M4_3	Standard	12.500	3.06	30016.100	24934.213	15.048	11.8	-5.5	NO		NO	bb
2	2 170615M4_4	Standard	12.500	3.07	29538.078	23732.340	15.558	12.2	-2.3	NO		NO	bb
3	3 170615M4_5	Standard	12.500	3.06	31387.781	24432.361	16.059	12.6	0.9	NO		NO	bb
4	4 170615M4_6	Standard	12.500	3.07	29339.494	24286.217	15.101	11.9	-5.1	NO		NO	bb
5	5 170615M4_7	Standard	12.500	3.07	30966.525	25099.107	15.422	12.1	-3.1	NO		NO	bb
6	6 170615M4_8	Standard	12.500	3.07	31907.555	19939.002	20.003	15.7	25.7	NO		NO	bb
7	7 170615M4_9	Standard	12.500	3.06	29909.584	24880.197	15.027	11.8	-5.6	NO		NO	bb
8	8 170615M4_10	Standard	12.500	3.07	29534.033	24410.949	15.123	11.9	-5.0	NO		NO	bb

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**Compound name: 13C3-PFBS**

Response Factor: 0.130426

RRF SD: 0.0134314, Relative SD: 10.2981

Response type: Internal Std ( Ref 36 ), 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 170615M4_3	Standard	12.500	3.33	3026.937	24934.213	1.517	11.6	-6.9	NO		NO	bb
2	2 170615M4_4	Standard	12.500	3.34	3066.356	23732.340	1.615	12.4	-0.9	NO		NO	bb
3	3 170615M4_5	Standard	12.500	3.33	3188.414	24432.361	1.631	12.5	0.1	NO		NO	bb
4	4 170615M4_6	Standard	12.500	3.34	3011.627	24286.217	1.550	11.9	-4.9	NO		NO	bb
5	5 170615M4_7	Standard	12.500	3.34	3047.974	25099.107	1.518	11.6	-6.9	NO		NO	bb
6	6 170615M4_8	Standard	12.500	3.33	3236.436	19939.002	2.029	15.6	24.5	NO		NO	bb
7	7 170615M4_9	Standard	12.500	3.33	3246.944	24880.197	1.631	12.5	0.1	NO		NO	bb
8	8 170615M4_10	Standard	12.500	3.33	3027.974	24410.949	1.551	11.9	-4.9	NO		NO	bb

**Compound name: 13C2-PFHxA**

Response Factor: 0.257651

RRF SD: 0.0289117, Relative SD: 11.2213

Response type: Internal Std ( Ref 38 ), 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 170615M4_3	Standard	5.000	3.66	12508.458	50191.184	1.246	4.8	-3.3	NO		NO	bb
2	2 170615M4_4	Standard	5.000	3.66	11845.356	47042.066	1.259	4.9	-2.3	NO		NO	bb
3	3 170615M4_5	Standard	5.000	3.66	12789.261	51883.668	1.232	4.8	-4.3	NO		NO	bb
4	4 170615M4_6	Standard	5.000	3.66	11787.278	47538.809	1.240	4.8	-3.8	NO		NO	bb
5	5 170615M4_7	Standard	5.000	3.66	12580.602	51047.258	1.232	4.8	-4.3	NO		NO	bb
6	6 170615M4_8	Standard	5.000	3.66	13331.781	40548.957	1.644	6.4	27.6	NO		NO	bb
7	7 170615M4_9	Standard	5.000	3.65	12094.553	50169.523	1.205	4.7	-6.4	NO		NO	bb
8	8 170615M4_10	Standard	5.000	3.66	12238.488	49064.512	1.247	4.8	-3.2	NO		NO	bb

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**Compound name: 13C4-PFHpA**

Response Factor: 0.253948

RRF SD: 0.0305561, Relative SD: 12.0324

Response type: Internal Std ( Ref 38 ), 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 170615M4_3	Standard	12.500	4.07	29435.463	50191.184	2.932	11.5	-7.6	NO		NO	MM
2	2 170615M4_4	Standard	12.500	4.07	29925.174	47042.066	3.181	12.5	0.2	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.06	30430.977	51883.668	2.933	11.5	-7.6	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.06	29813.373	47538.809	3.136	12.3	-1.2	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.06	30127.514	51047.258	2.951	11.6	-7.0	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.06	33136.590	40548.957	4.086	16.1	28.7	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.06	30401.055	50169.523	3.030	11.9	-4.6	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.06	30878.199	49064.512	3.147	12.4	-0.9	NO		NO	bb

**Compound name: 18O2-PFHxS**

Response Factor: 0.33113

RRF SD: 0.0265787, Relative SD: 8.02668

Response type: Internal Std ( Ref 39 ), 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 170615M4_3	Standard	12.500	4.20	3110.386	9401.822	4.135	12.5	-0.1	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.19	2926.854	9307.252	3.931	11.9	-5.0	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.19	2902.640	8756.916	4.143	12.5	0.1	NO		NO	db
4	4 170615M4_6	Standard	12.500	4.19	2800.688	8942.743	3.915	11.8	-5.4	NO		NO	db
5	5 170615M4_7	Standard	12.500	4.19	2940.086	9172.781	4.007	12.1	-3.2	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.18	3120.457	7991.384	4.881	14.7	17.9	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.18	2858.882	9325.039	3.832	11.6	-7.4	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.19	2978.924	8722.790	4.269	12.9	3.1	NO		NO	bb



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**Compound name: 13C2-6:2 FTS**

Response Factor: 0.327809

RRF SD: 0.0546283, Relative SD: 16.6647

Response type: Internal Std ( Ref 40 ), 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 170615M4_3	Standard	12.500	4.40	17015.770	55965.109	3.801	11.6	-7.3	NO		NO	MM
2	2 170615M4_4	Standard	12.500	4.40	15723.763	52861.047	3.718	11.3	-9.3	NO		NO	MM
3	3 170615M4_5	Standard	12.500	4.40	16784.041	57503.961	3.648	11.1	-11.0	NO		NO	MM
4	4 170615M4_6	Standard	12.500	4.39	15601.062	54734.063	3.563	10.9	-13.0	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.39	15989.408	57431.348	3.480	10.6	-15.1	NO		NO	MM
6	6 170615M4_8	Standard	12.500	4.39	18891.727	44226.453	5.339	16.3	30.3	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.39	17856.793	50607.090	4.411	13.5	7.6	NO		NO	MM
8	8 170615M4_10	Standard	12.500	4.39	20339.377	52741.531	4.821	14.7	17.6	NO		NO	bb

**Compound name: 13C2-PFOA**

Response Factor: 1.06039

RRF SD: 0.114208, Relative SD: 10.7703

Response type: Internal Std ( Ref 40 ), 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 170615M4_3	Standard	12.500	4.42	56544.223	55965.109	12.629	11.9	-4.7	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.42	54215.504	52861.047	12.820	12.1	-3.3	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.41	54766.047	57503.961	11.905	11.2	-10.2	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.41	53819.367	54734.063	12.291	11.6	-7.3	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.41	58284.727	57431.348	12.686	12.0	-4.3	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.41	58170.977	44226.453	16.441	15.5	24.0	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.41	54009.887	50607.090	13.340	12.6	0.6	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.41	58758.605	52741.531	13.926	13.1	5.1	NO		NO	bb

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**Compound name: 13C5-PFNA**

Response Factor: 0.757184

RRF SD: 0.0876808, Relative SD: 11.5798

Response type: Internal Std ( Ref 41 ), 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 170615M4_3	Standard	12.500	4.71	55840.023	75903.977	9.196	12.1	-2.8	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.71	55363.645	77274.156	8.956	11.8	-5.4	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.71	53765.129	73308.023	9.168	12.1	-3.1	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.70	51441.160	68545.727	9.381	12.4	-0.9	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.70	55914.590	76334.547	9.156	12.1	-3.3	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.70	57499.387	59204.016	12.140	16.0	28.3	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.70	50586.133	71467.961	8.848	11.7	-6.5	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.70	50919.410	71722.117	8.874	11.7	-6.2	NO		NO	bb

**Compound name: 13C8-PFOS**

Response Factor: 0.911344

RRF SD: 0.132583, Relative SD: 14.5481

Response type: Internal Std ( Ref 42 ), 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 170615M4_3	Standard	12.500	4.79	13352.821	14616.619	11.419	12.5	0.2	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.79	13361.875	14739.651	11.332	12.4	-0.5	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.79	12771.218	14534.609	10.983	12.1	-3.6	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.79	12275.157	14333.929	10.705	11.7	-6.0	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.78	12241.666	15251.228	10.033	11.0	-11.9	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.78	13200.461	10750.979	15.348	16.8	34.7	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.78	12308.538	14358.425	10.715	11.8	-5.9	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.78	11255.217	13274.149	10.599	11.6	-7.0	NO		NO	bb

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**Compound name: 13C2-PFDA**

Response Factor: 0.825763

RRF SD: 0.0928324, Relative SD: 11.242

Response type: Internal Std ( Ref 43 ), 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 170615M4_3	Standard	12.500	4.98	51404.434	64193.172	10.010	12.1	-3.0	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.98	52110.523	62259.250	10.462	12.7	1.4	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.98	50746.508	65018.383	9.756	11.8	-5.5	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.97	46506.453	56270.852	10.331	12.5	0.1	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.97	58912.727	71242.219	10.337	12.5	0.1	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.97	56089.582	54109.344	12.957	15.7	25.5	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.97	47794.281	66032.563	9.047	11.0	-12.3	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.97	45689.922	59028.246	9.675	11.7	-6.3	NO		NO	bb

**Compound name: 13C2-8:2 FTS**

Response Factor: 0.203956

RRF SD: 0.0224499, Relative SD: 11.0072

Response type: Internal Std ( Ref 43 ), 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 170615M4_3	Standard	12.500	4.98	14826.806	64193.172	2.887	14.2	13.2	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.97	13046.472	62259.250	2.619	12.8	2.7	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.97	12279.913	65018.383	2.361	11.6	-7.4	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.97	10583.649	56270.852	2.351	11.5	-7.8	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.96	12337.263	71242.219	2.165	10.6	-15.1	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.96	12119.837	54109.344	2.800	13.7	9.8	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.95	12369.878	66032.563	2.342	11.5	-8.2	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.96	13557.926	59028.246	2.871	14.1	12.6	NO		NO	bb

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**Compound name: 13C2-PFUnA**

Response Factor: 0.878552

RRF SD: 0.0653791, Relative SD: 7.44169

Response type: Internal Std ( Ref 44 ), 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 170615M4_3	Standard	12.500	5.24	58204.438	67632.016	10.758	12.2	-2.0	NO		NO	bb
2	2 170615M4_4	Standard	12.500	5.24	54899.152	66331.734	10.346	11.8	-5.8	NO		NO	bb
3	3 170615M4_5	Standard	12.500	5.23	57839.484	71258.547	10.146	11.5	-7.6	NO		NO	bb
4	4 170615M4_6	Standard	12.500	5.22	55607.680	61063.398	11.383	13.0	3.7	NO		NO	bb
5	5 170615M4_7	Standard	12.500	5.22	57187.137	65315.672	10.944	12.5	-0.3	NO		NO	bb
6	6 170615M4_8	Standard	12.500	5.22	59717.820	58402.410	12.782	14.5	16.4	NO		NO	bb
7	7 170615M4_9	Standard	12.500	5.21	56009.098	64686.566	10.823	12.3	-1.4	NO		NO	bb
8	8 170615M4_10	Standard	12.500	5.22	56978.137	66726.805	10.674	12.1	-2.8	NO		NO	bb

**Compound name: d3-N-MeFOSAA**

Response Factor: 0.177425

RRF SD: 0.0216516, Relative SD: 12.2032

Response type: Internal Std ( Ref 44 ), 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 170615M4_3	Standard	12.500	5.03	11326.695	67632.016	2.093	11.8	-5.6	NO		NO	db
2	2 170615M4_4	Standard	12.500	5.03	11897.144	66331.734	2.242	12.6	1.1	NO		NO	bb
3	3 170615M4_5	Standard	12.500	5.02	11236.310	71258.547	1.971	11.1	-11.1	NO		NO	db
4	4 170615M4_6	Standard	12.500	5.02	10854.752	61063.398	2.222	12.5	0.2	NO		NO	bb
5	5 170615M4_7	Standard	12.500	5.01	11670.782	65315.672	2.234	12.6	0.7	NO		NO	bb
6	6 170615M4_8	Standard	12.500	5.01	13224.163	58402.410	2.830	16.0	27.6	NO		NO	bb
7	7 170615M4_9	Standard	12.500	5.01	11249.111	64686.566	2.174	12.3	-2.0	NO		NO	bb
8	8 170615M4_10	Standard	12.500	5.01	10549.771	66726.805	1.976	11.1	-10.9	NO		NO	bb

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**Compound name: d5-N-EtFOSAA**

Response Factor: 0.217104

RRF SD: 0.0210957, Relative SD: 9.71687

Response type: Internal Std ( Ref 44 ), 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 170615M4_3	Standard	12.500	5.14	14387.841	67632.016	2.659	12.2	-2.0	NO		NO	bb
2	2 170615M4_4	Standard	12.500	5.13	14267.943	66331.734	2.689	12.4	-0.9	NO		NO	bb
3	3 170615M4_5	Standard	12.500	5.12	14400.363	71258.547	2.526	11.6	-6.9	NO		NO	bb
4	4 170615M4_6	Standard	12.500	5.12	13771.905	61063.398	2.819	13.0	3.9	NO		NO	bb
5	5 170615M4_7	Standard	12.500	5.11	14030.702	65315.672	2.685	12.4	-1.1	NO		NO	bb
6	6 170615M4_8	Standard	12.500	5.11	15302.597	58402.410	3.275	15.1	20.7	NO		NO	bb
7	7 170615M4_9	Standard	12.500	5.11	13918.768	64686.566	2.690	12.4	-0.9	NO		NO	bb
8	8 170615M4_10	Standard	12.500	5.11	12636.150	66726.805	2.367	10.9	-12.8	NO		NO	bb

**Compound name: 13C2-PFDoA**

Response Factor: 0.101763

RRF SD: 0.0112631, Relative SD: 11.0679

Response type: Internal Std ( Ref 44 ), 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 170615M4_3	Standard	12.500	5.48	6095.422	67632.016	1.127	11.1	-11.4	NO		NO	bb
2	2 170615M4_4	Standard	12.500	5.48	6296.703	66331.734	1.187	11.7	-6.7	NO		NO	bb
3	3 170615M4_5	Standard	12.500	5.47	6888.731	71258.547	1.208	11.9	-5.0	NO		NO	bb
4	4 170615M4_6	Standard	12.500	5.46	6993.183	61063.398	1.432	14.1	12.5	NO		NO	dd
5	5 170615M4_7	Standard	12.500	5.46	6537.961	65315.672	1.251	12.3	-1.6	NO		NO	bb
6	6 170615M4_8	Standard	12.500	5.46	7181.770	58402.410	1.537	15.1	20.8	NO		NO	bb
7	7 170615M4_9	Standard	12.500	5.46	6535.260	64686.566	1.263	12.4	-0.7	NO		NO	bb
8	8 170615M4_10	Standard	12.500	5.46	6256.261	66726.805	1.172	11.5	-7.9	NO		NO	bb

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**Compound name: 13C2-PFTeDA**

Response Factor: 0.589355

RRF SD: 0.0401326, Relative SD: 6.80959

Response type: Internal Std ( Ref 44 ), 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 170615M4_3	Standard	12.500	5.94	38748.922	67632.016	7.162	12.2	-2.8	NO		NO	bb
2	2 170615M4_4	Standard	12.500	5.93	38070.633	66331.734	7.174	12.2	-2.6	NO		NO	bb
3	3 170615M4_5	Standard	12.500	5.93	39563.559	71258.547	6.940	11.8	-5.8	NO		NO	bb
4	4 170615M4_6	Standard	12.500	5.92	35974.965	61063.398	7.364	12.5	-0.0	NO		NO	bb
5	5 170615M4_7	Standard	12.500	5.91	37760.156	65315.672	7.226	12.3	-1.9	NO		NO	bb
6	6 170615M4_8	Standard	12.500	5.91	39892.477	58402.410	8.538	14.5	15.9	NO		NO	bb
7	7 170615M4_9	Standard	12.500	5.91	38680.738	64686.566	7.475	12.7	1.5	NO		NO	bb
8	8 170615M4_10	Standard	12.500	5.91	37664.352	66726.805	7.056	12.0	-4.2	NO		NO	bb

**Compound name: 13C4-PFBA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 36 ), 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 170615M4_3	Standard	12.500	1.87	24934.213	24934.213	12.500	12.5	0.0	NO		NO	bb
2	2 170615M4_4	Standard	12.500	1.87	23732.340	23732.340	12.500	12.5	0.0	NO		NO	bb
3	3 170615M4_5	Standard	12.500	1.88	24432.361	24432.361	12.500	12.5	0.0	NO		NO	bb
4	4 170615M4_6	Standard	12.500	1.88	24286.217	24286.217	12.500	12.5	0.0	NO		NO	bb
5	5 170615M4_7	Standard	12.500	1.88	25099.107	25099.107	12.500	12.5	0.0	NO		NO	bb
6	6 170615M4_8	Standard	12.500	1.88	19939.002	19939.002	12.500	12.5	0.0	NO		NO	bb
7	7 170615M4_9	Standard	12.500	1.88	24880.197	24880.197	12.500	12.5	0.0	NO		NO	bb
8	8 170615M4_10	Standard	12.500	1.88	24410.949	24410.949	12.500	12.5	0.0	NO		NO	bb

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**Compound name: 13C2-4:2 FTS**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 37 ), 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 170615M4_3	Standard	5.000	3.62	12621.974	12621.974	5.000	5.0	0.0	NO		NO	bb
2	2 170615M4_4	Standard	5.000	3.62	11807.985	11807.985	5.000	5.0	0.0	NO		NO	bb
3	3 170615M4_5	Standard	5.000	3.62	12081.243	12081.243	5.000	5.0	0.0	NO		NO	bb
4	4 170615M4_6	Standard	5.000	3.62	11869.816	11869.816	5.000	5.0	0.0	NO		NO	bb
5	5 170615M4_7	Standard	5.000	3.62	12074.229	12074.229	5.000	5.0	0.0	NO		NO	bb
6	6 170615M4_8	Standard	5.000	3.62	9221.221	9221.221	5.000	5.0	0.0	NO		NO	bb
7	7 170615M4_9	Standard	5.000	3.62	12781.896	12781.896	5.000	5.0	0.0	NO		NO	bb
8	8 170615M4_10	Standard	5.000	3.62	12160.067	12160.067	5.000	5.0	0.0	NO		NO	bb

**Compound name: 13C5-PFHxA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 38 ), 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 170615M4_3	Standard	5.000	3.66	50191.184	50191.184	5.000	5.0	0.0	NO		NO	bb
2	2 170615M4_4	Standard	5.000	3.66	47042.066	47042.066	5.000	5.0	0.0	NO		NO	bb
3	3 170615M4_5	Standard	5.000	3.65	51883.668	51883.668	5.000	5.0	0.0	NO		NO	bb
4	4 170615M4_6	Standard	5.000	3.65	47538.809	47538.809	5.000	5.0	0.0	NO		NO	bb
5	5 170615M4_7	Standard	5.000	3.66	51047.258	51047.258	5.000	5.0	0.0	NO		NO	bb
6	6 170615M4_8	Standard	5.000	3.66	40548.957	40548.957	5.000	5.0	0.0	NO		NO	bb
7	7 170615M4_9	Standard	5.000	3.65	50169.523	50169.523	5.000	5.0	0.0	NO		NO	bb
8	8 170615M4_10	Standard	5.000	3.65	49064.512	49064.512	5.000	5.0	0.0	NO		NO	bb

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**Compound name: 13C3-PFHxS**

Response Factor: 1

RRF SD: 1.18688e-016, Relative SD: 1.18688e-014

Response type: Internal Std ( Ref 39 ), 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 170615M4_3	Standard	12.500	4.19	9401.822	9401.822	12.500	12.5	0.0	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.20	9307.252	9307.252	12.500	12.5	0.0	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.19	8756.916	8756.916	12.500	12.5	0.0	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.19	8942.743	8942.743	12.500	12.5	0.0	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.19	9172.781	9172.781	12.500	12.5	0.0	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.18	7991.384	7991.384	12.500	12.5	0.0	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.18	9325.039	9325.039	12.500	12.5	0.0	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.18	8722.790	8722.790	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C8-PFOA**

Response Factor: 1

RRF SD: 9.3831e-017, Relative SD: 9.3831e-015

Response type: Internal Std ( Ref 40 ), 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 170615M4_3	Standard	12.500	4.42	55965.109	55965.109	12.500	12.5	0.0	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.42	52861.047	52861.047	12.500	12.5	0.0	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.41	57503.961	57503.961	12.500	12.5	0.0	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.41	54734.063	54734.063	12.500	12.5	0.0	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.41	57431.348	57431.348	12.500	12.5	0.0	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.41	44226.453	44226.453	12.500	12.5	0.0	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.41	50607.090	50607.090	12.500	12.5	0.0	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.41	52741.531	52741.531	12.500	12.5	0.0	NO		NO	bb



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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**Compound name: 13C9-PFNA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 41 ), 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 170615M4_3	Standard	12.500	4.71	75903.977	75903.977	12.500	12.5	0.0	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.71	77274.156	77274.156	12.500	12.5	0.0	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.71	73308.023	73308.023	12.500	12.5	0.0	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.71	68545.727	68545.727	12.500	12.5	0.0	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.70	76334.547	76334.547	12.500	12.5	0.0	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.70	59204.016	59204.016	12.500	12.5	0.0	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.70	71467.961	71467.961	12.500	12.5	0.0	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.70	71722.117	71722.117	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C4-PFOS**

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std ( Ref 42 ), 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 170615M4_3	Standard	12.500	4.79	14616.619	14616.619	12.500	12.5	0.0	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.79	14739.651	14739.651	12.500	12.5	0.0	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.79	14534.609	14534.609	12.500	12.5	0.0	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.79	14333.929	14333.929	12.500	12.5	0.0	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.78	15251.228	15251.228	12.500	12.5	0.0	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.78	10750.979	10750.979	12.500	12.5	0.0	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.78	14358.425	14358.425	12.500	12.5	0.0	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.78	13274.149	13274.149	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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**Compound name: 13C6-PFDA**

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std ( Ref 43 ), 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 170615M4_3	Standard	12.500	4.99	64193.172	64193.172	12.500	12.5	0.0	NO		NO	bb
2	2 170615M4_4	Standard	12.500	4.99	62259.250	62259.250	12.500	12.5	0.0	NO		NO	bb
3	3 170615M4_5	Standard	12.500	4.98	65018.383	65018.383	12.500	12.5	0.0	NO		NO	bb
4	4 170615M4_6	Standard	12.500	4.97	56270.852	56270.852	12.500	12.5	0.0	NO		NO	bb
5	5 170615M4_7	Standard	12.500	4.97	71242.219	71242.219	12.500	12.5	0.0	NO		NO	bb
6	6 170615M4_8	Standard	12.500	4.97	54109.344	54109.344	12.500	12.5	0.0	NO		NO	bb
7	7 170615M4_9	Standard	12.500	4.97	66032.563	66032.563	12.500	12.5	0.0	NO		NO	bb
8	8 170615M4_10	Standard	12.500	4.97	59028.246	59028.246	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C7-PFUnA**

Response Factor: 1

RRF SD: 1.02787e-016, Relative SD: 1.02787e-014

Response type: Internal Std ( Ref 44 ), 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 170615M4_3	Standard	12.500	5.24	67632.016	67632.016	12.500	12.5	0.0	NO		NO	bb
2	2 170615M4_4	Standard	12.500	5.24	66331.734	66331.734	12.500	12.5	0.0	NO		NO	bb
3	3 170615M4_5	Standard	12.500	5.23	71258.547	71258.547	12.500	12.5	0.0	NO		NO	bb
4	4 170615M4_6	Standard	12.500	5.22	61063.398	61063.398	12.500	12.5	0.0	NO		NO	bb
5	5 170615M4_7	Standard	12.500	5.22	65315.672	65315.672	12.500	12.5	0.0	NO		NO	bb
6	6 170615M4_8	Standard	12.500	5.22	58402.410	58402.410	12.500	12.5	0.0	NO		NO	bb
7	7 170615M4_9	Standard	12.500	5.21	64686.566	64686.566	12.500	12.5	0.0	NO		NO	bb
8	8 170615M4_10	Standard	12.500	5.22	66726.805	66726.805	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 06:53:54

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

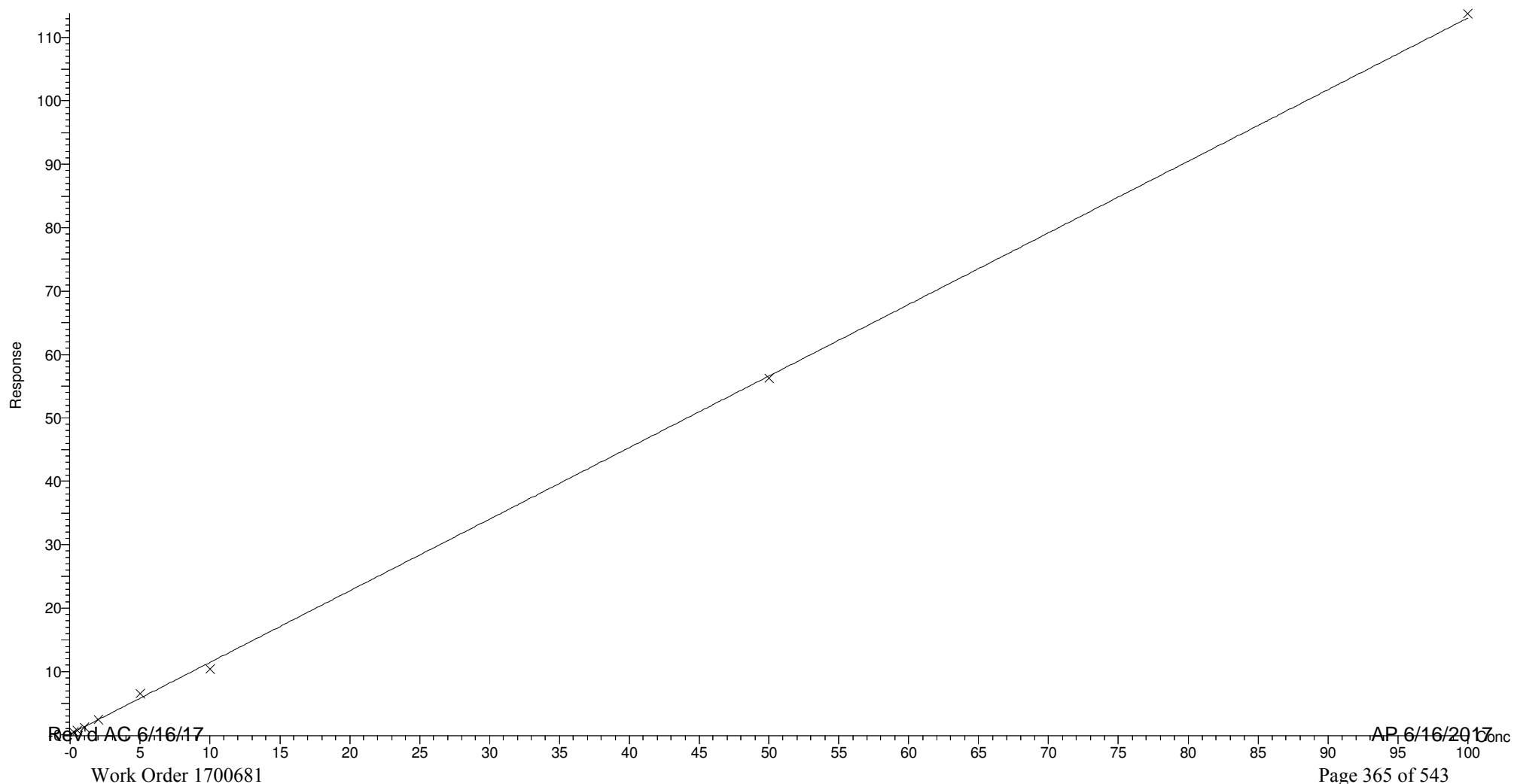
Compound name: PFBA

Correlation coefficient:  $r = 0.999425$ ,  $r^2 = 0.998850$

Calibration curve:  $1.129 * x + 0.161995$

Response type: Internal Std ( Ref 19 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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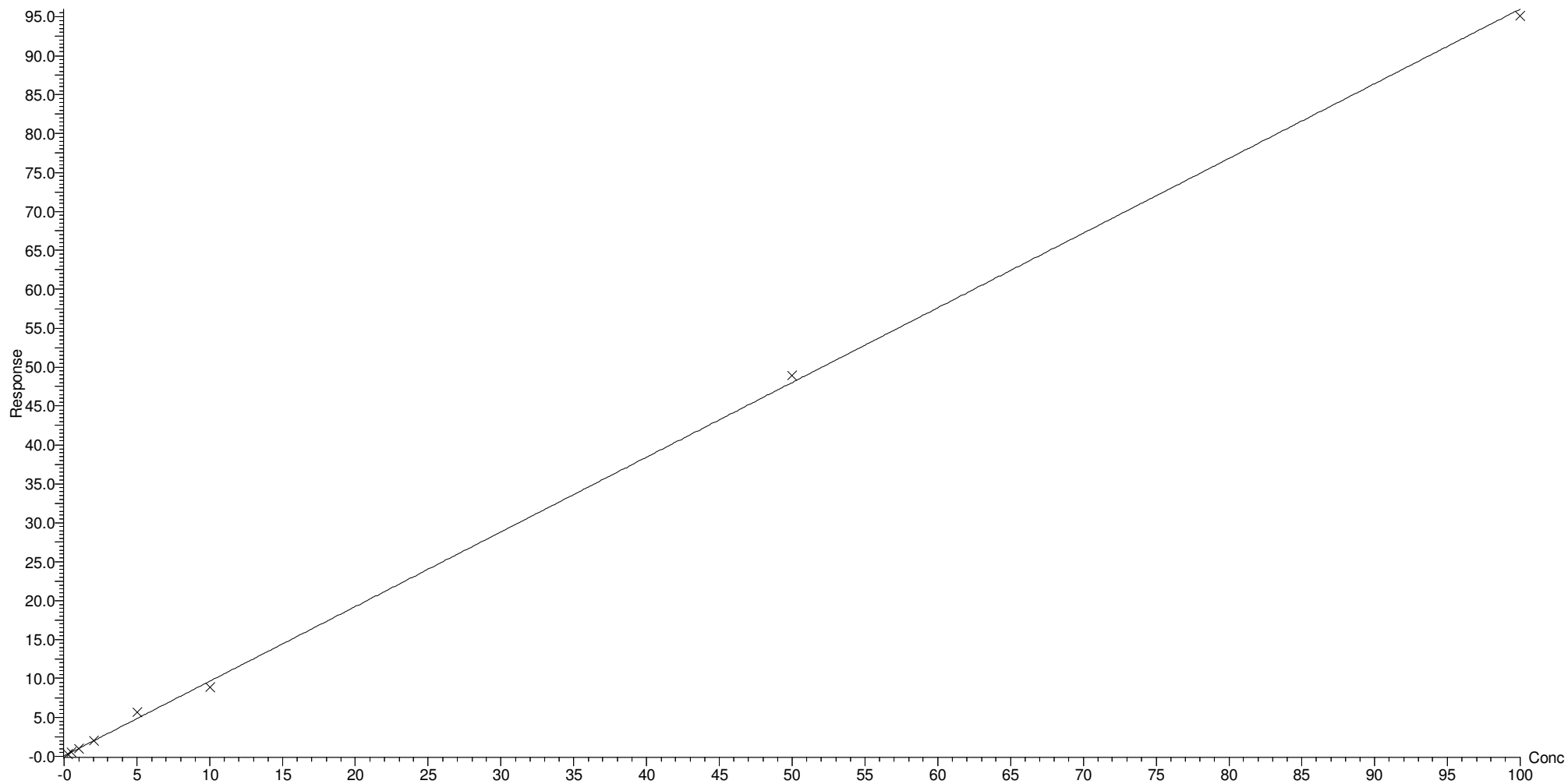
Compound name: PFPeA

Correlation coefficient:  $r = 0.999299$ ,  $r^2 = 0.998598$

Calibration curve:  $0.959351 * x + 0.0564289$

Response type: Internal Std ( Ref 20 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



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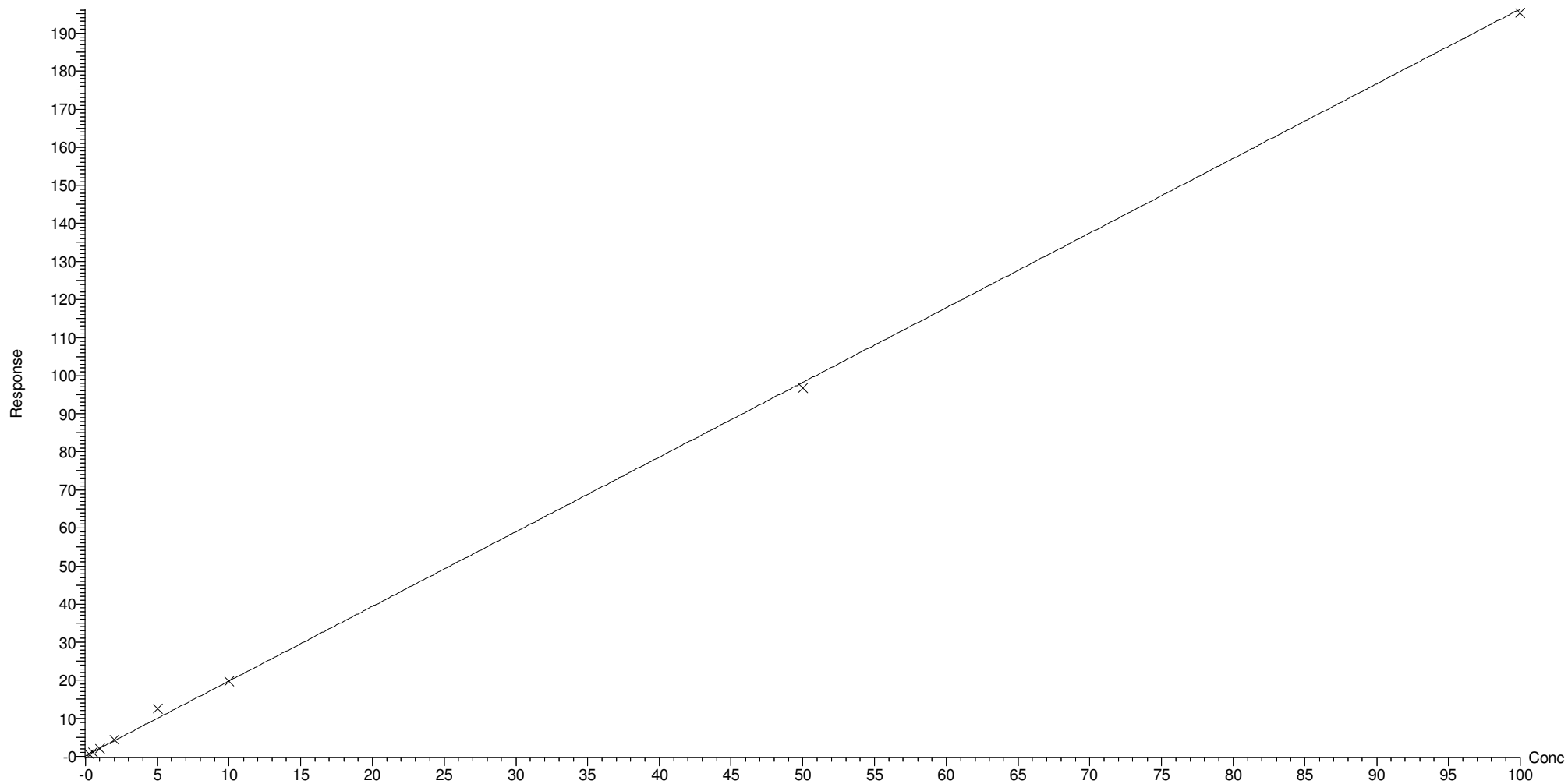
Compound name: PFBS

Correlation coefficient:  $r = 0.998878$ ,  $r^2 = 0.997757$

Calibration curve:  $1.96117 * x + 0.171802$

Response type: Internal Std ( Ref 21 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



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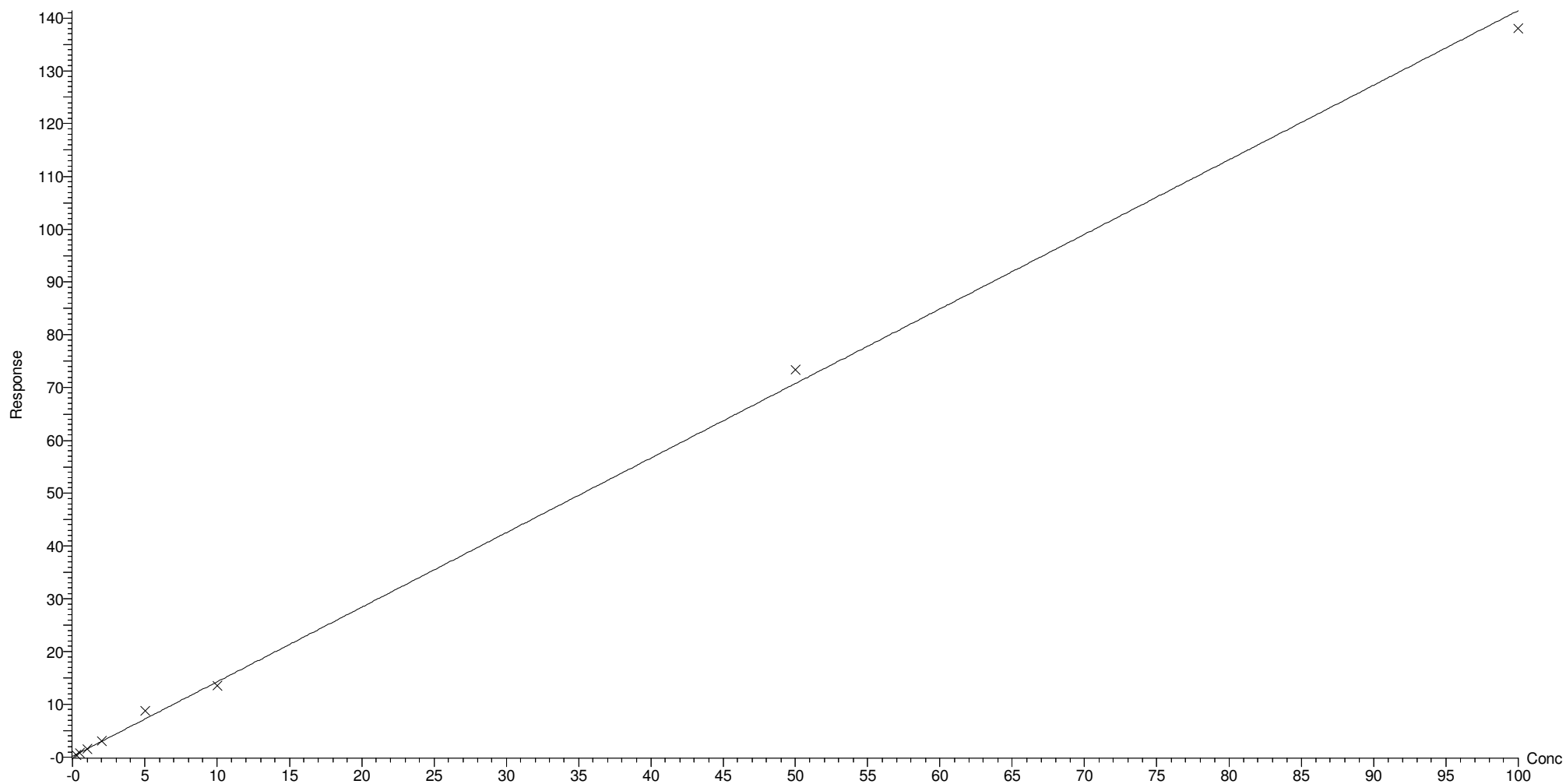
Compound name: PFHxA

Correlation coefficient:  $r = 0.998725$ ,  $r^2 = 0.997452$

Calibration curve:  $1.4127 * x + 0.148671$

Response type: Internal Std ( Ref 22 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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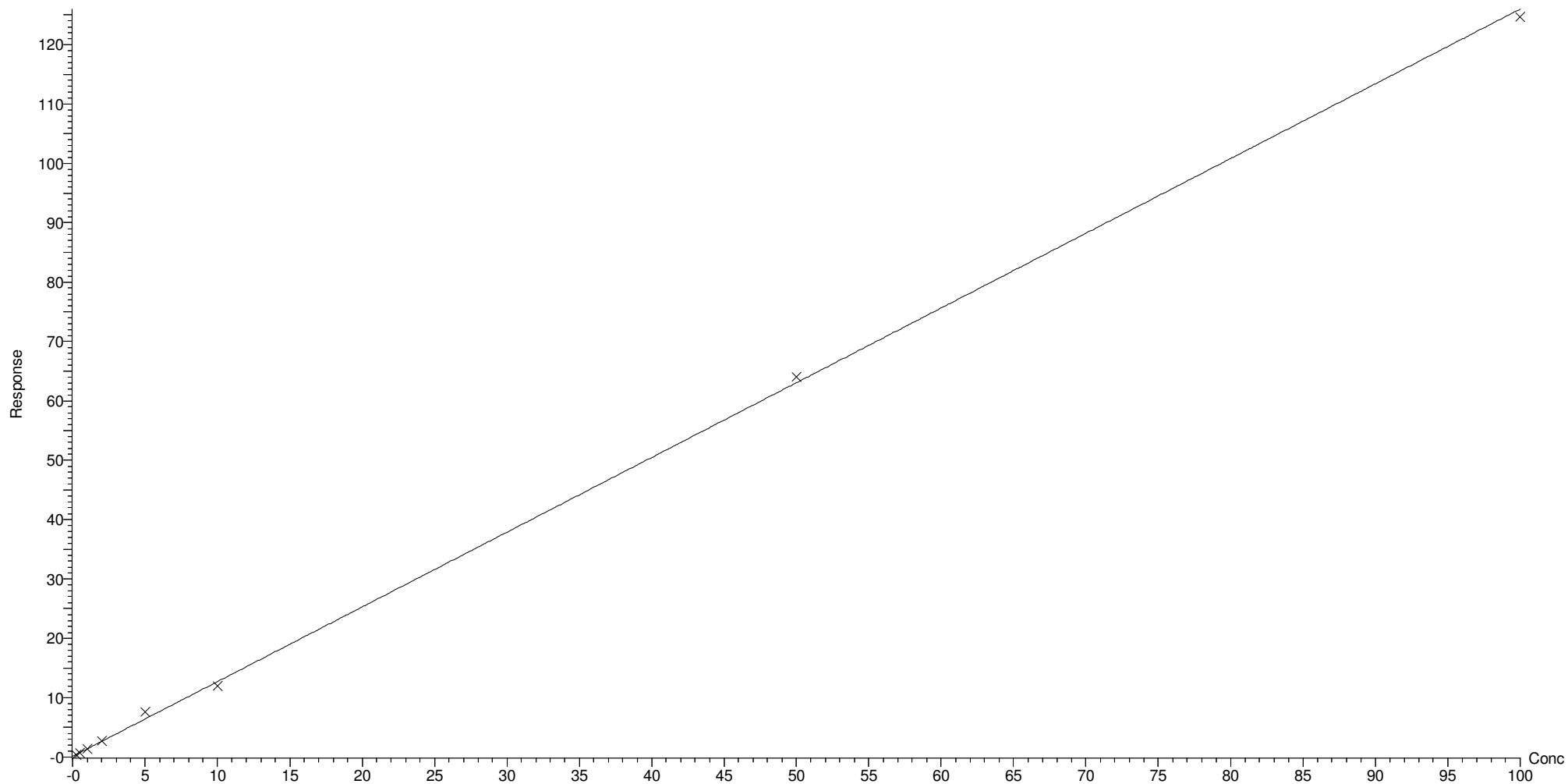
Compound name: PFHpA

Correlation coefficient:  $r = 0.999282$ ,  $r^2 = 0.998565$

Calibration curve:  $1.25872 * x + 0.12203$

Response type: Internal Std ( Ref 23 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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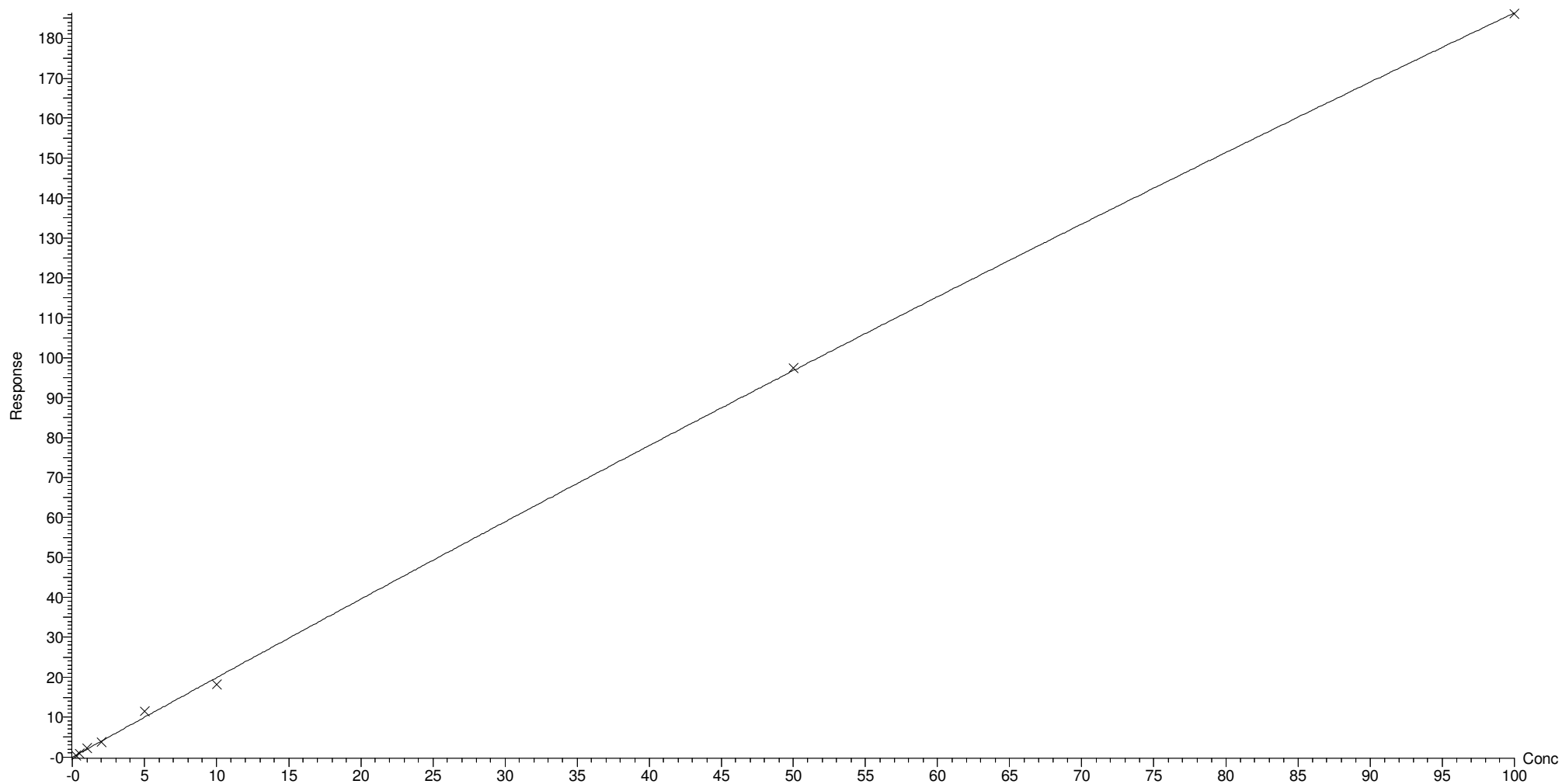
Compound name: PFHxS

Coefficient of Determination:  $R^2 = 0.998516$

Calibration curve:  $-0.00145139 * x^2 + 2.009 * x + -0.030428$

Response type: Internal Std ( Ref 24 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None





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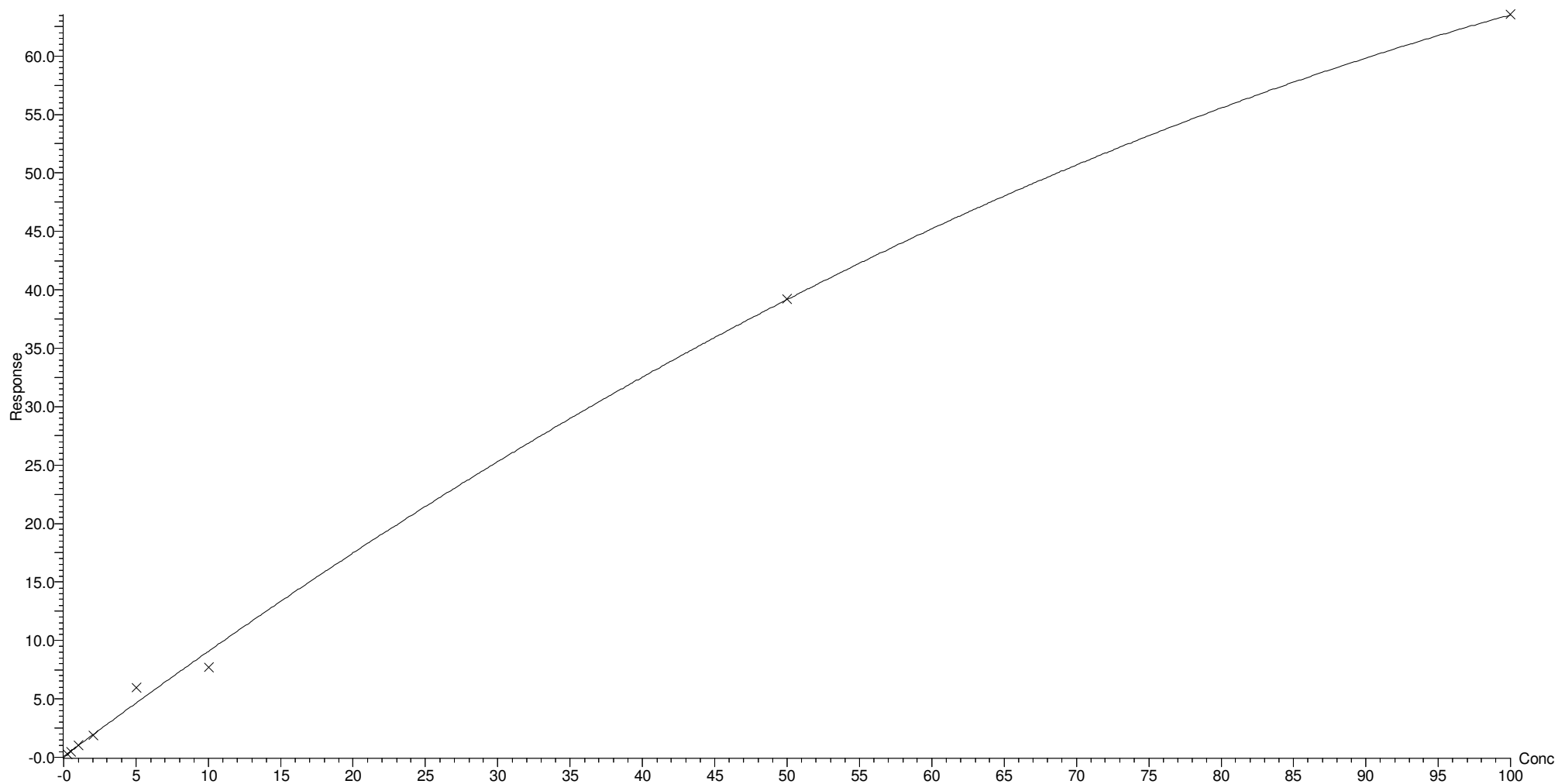
Compound name: 6:2 FTS

Coefficient of Determination:  $R^2 = 0.993120$

Calibration curve:  $-0.00294888 * x^2 + 0.92938 * x + 0.0722011$

Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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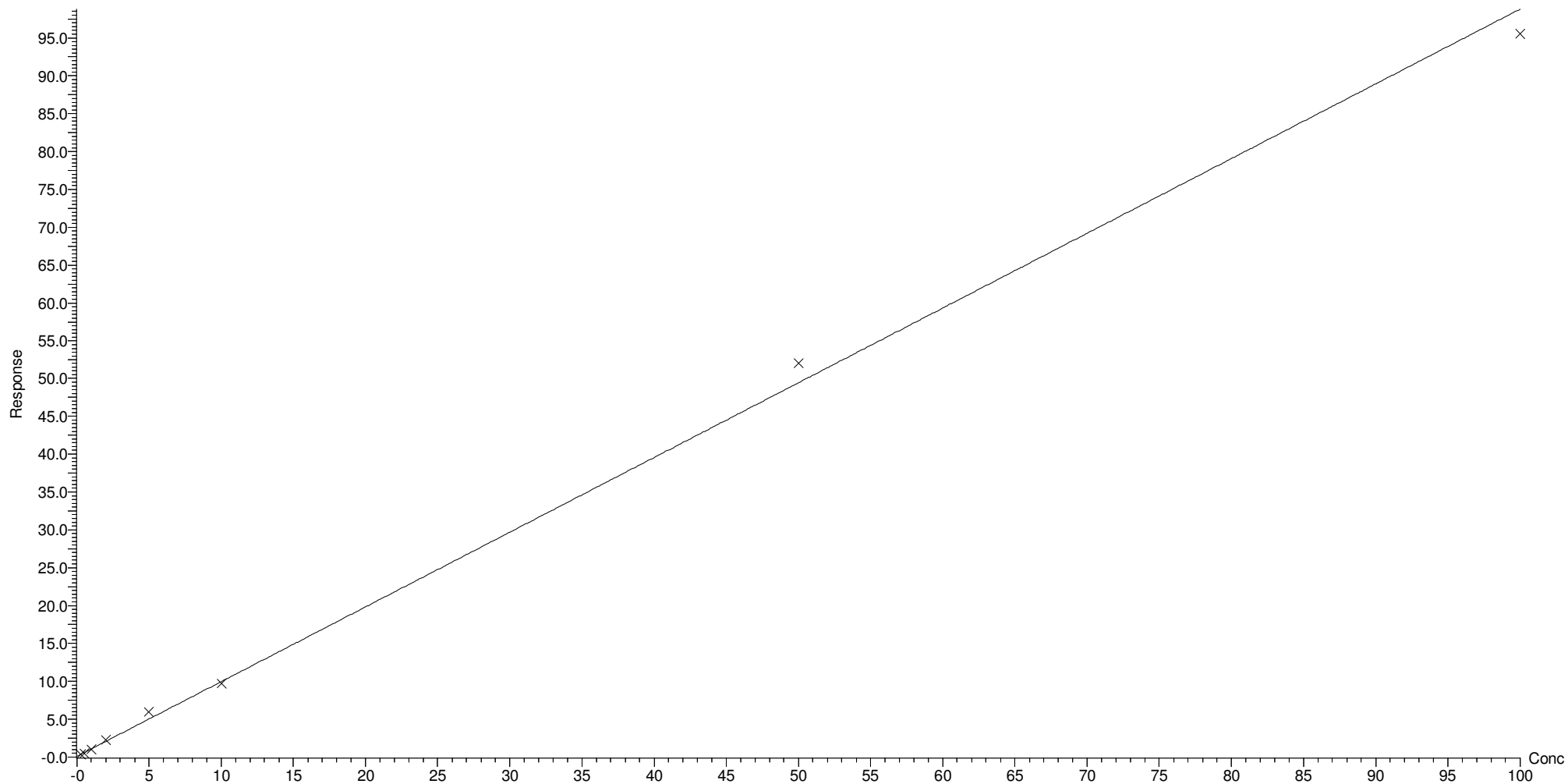
Compound name: PFOA

Correlation coefficient:  $r = 0.998545$ ,  $r^2 = 0.997093$

Calibration curve:  $0.987068 * x + 0.102027$

Response type: Internal Std ( Ref 26 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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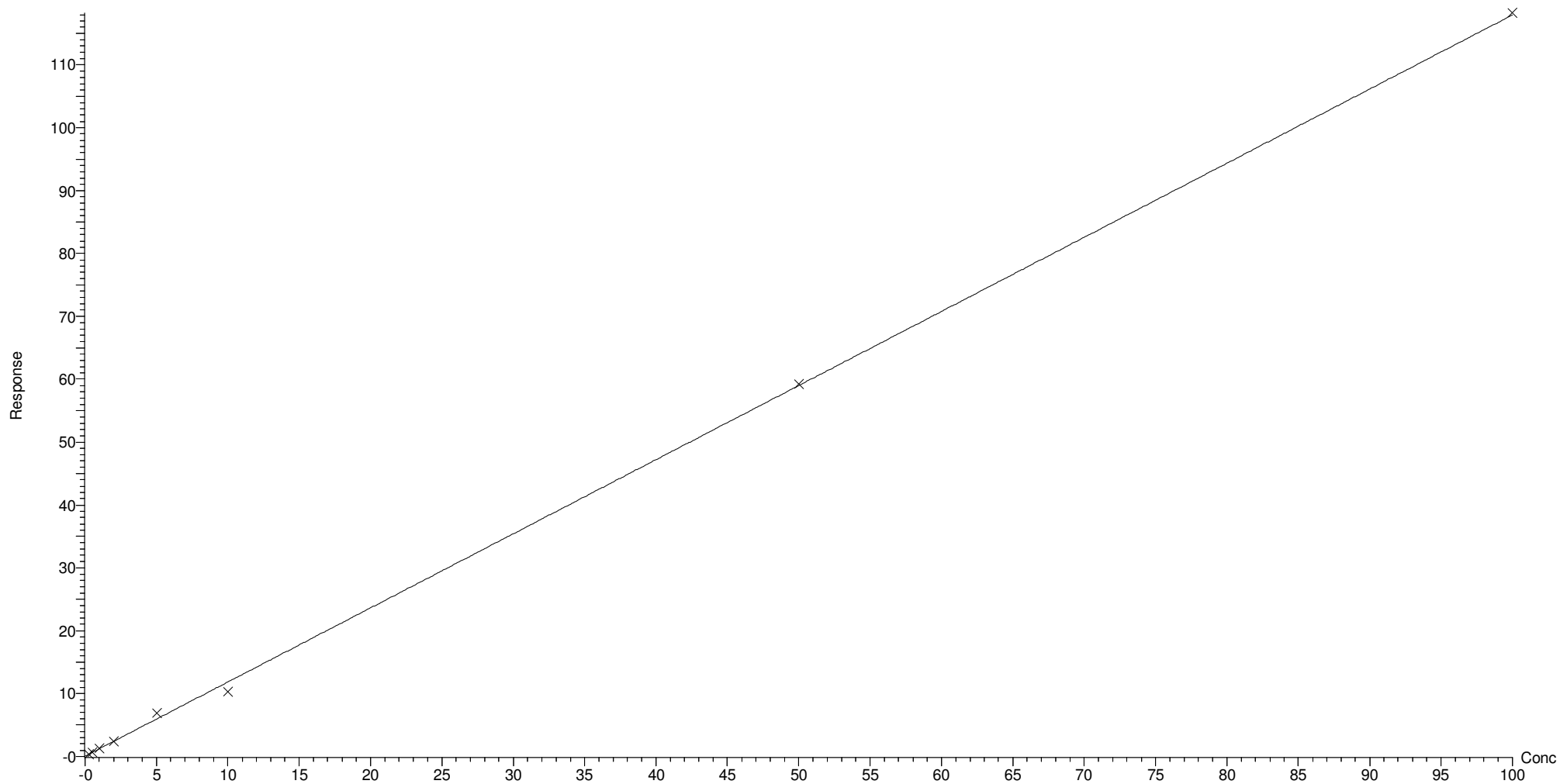
Compound name: PFNA

Correlation coefficient:  $r = 0.999076$ ,  $r^2 = 0.998154$

Calibration curve:  $1.17885 * x + 0.0522937$

Response type: Internal Std ( Ref 27 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

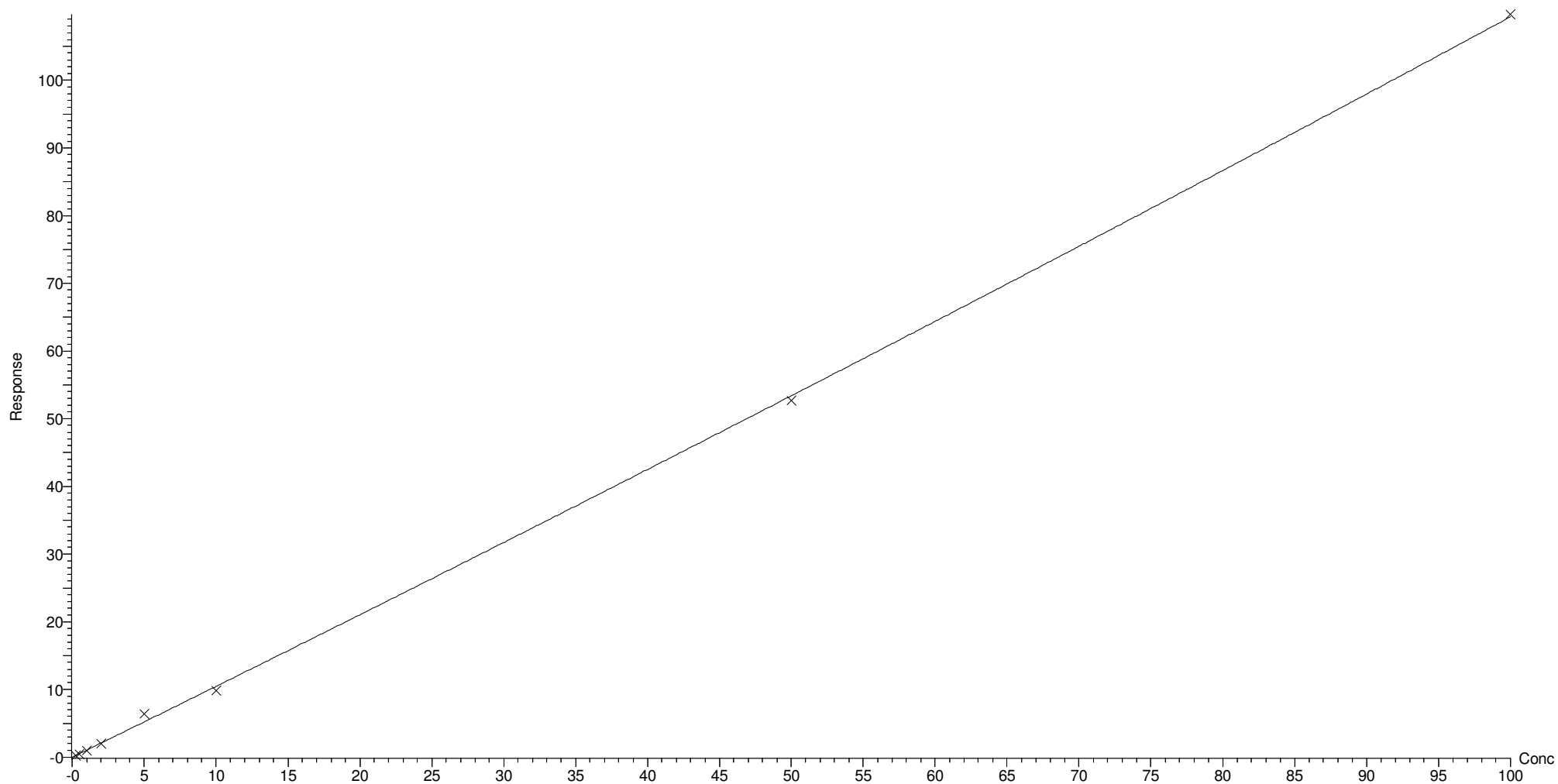


Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

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Compound name: PFOS  
Coefficient of Determination:  $R^2 = 0.998221$   
Calibration curve:  $0.000513416 * x^2 + 1.04236 * x + -0.00915921$   
Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

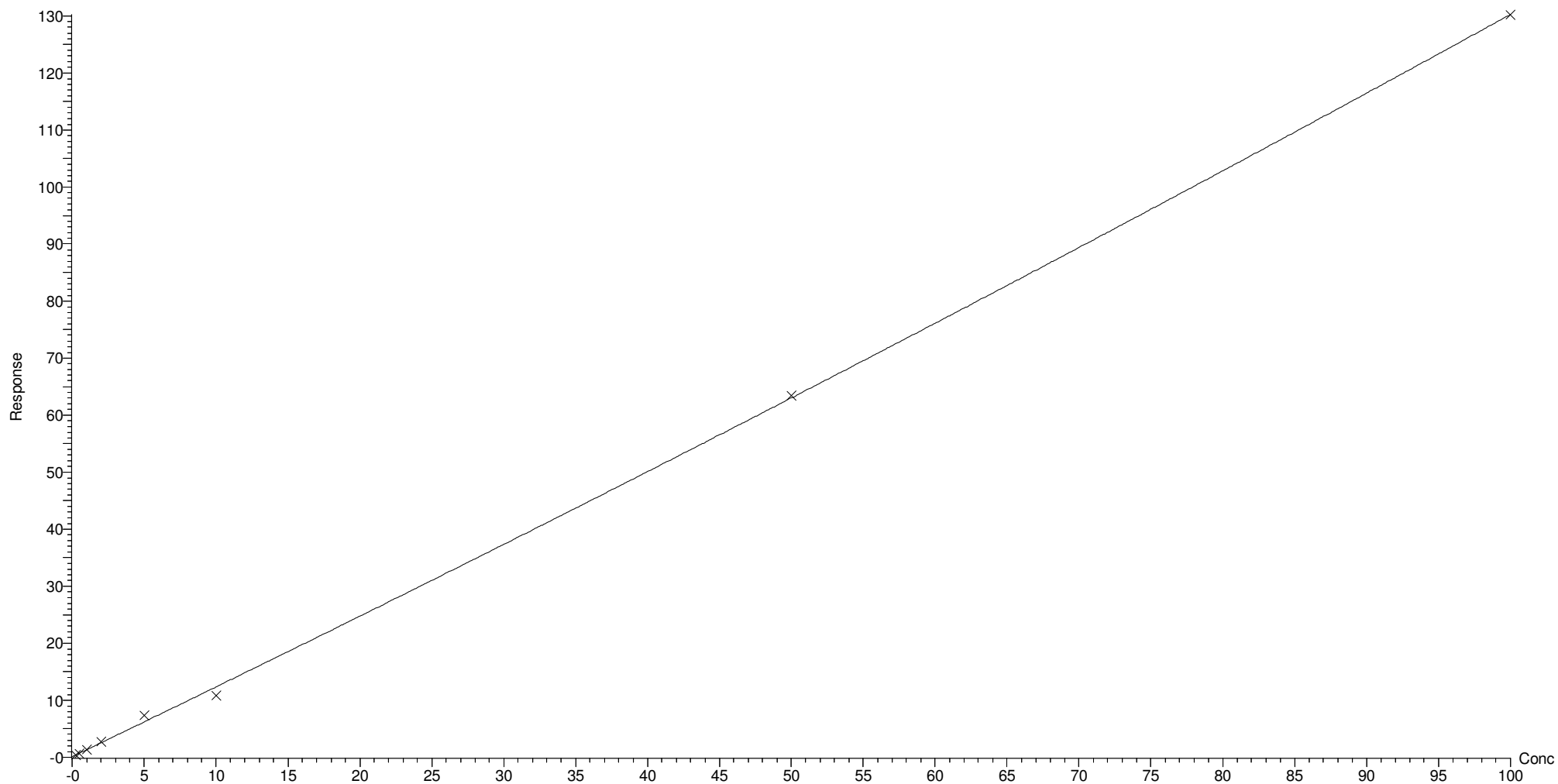


Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

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Compound name: PFDA  
Coefficient of Determination:  $R^2 = 0.998000$   
Calibration curve:  $0.000868701 * x^2 + 1.21468 * x + 0.109272$   
Response type: Internal Std ( Ref 29 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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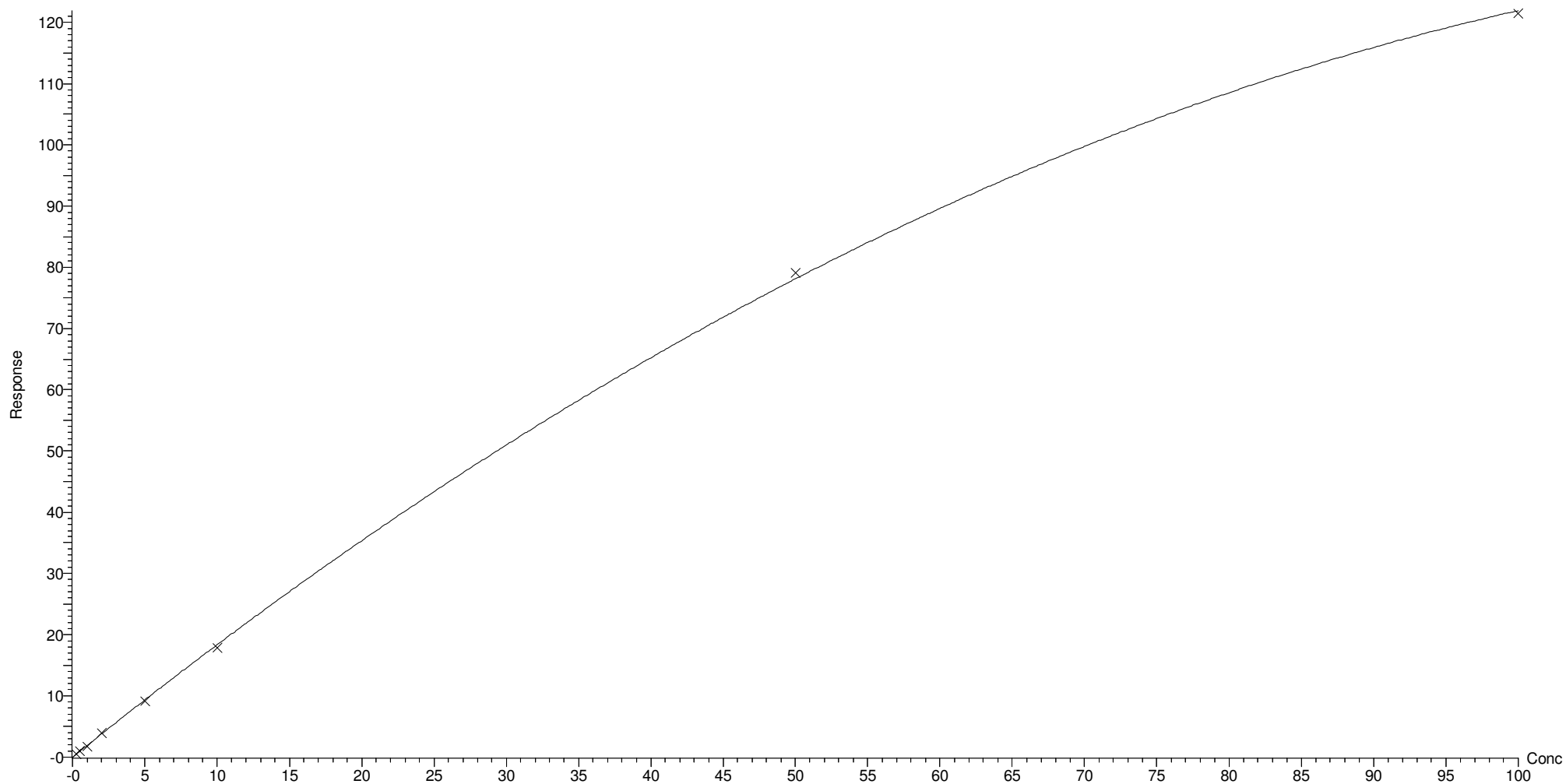
Compound name: 8:2 FTS

Coefficient of Determination:  $R^2 = 0.999680$

Calibration curve:  $-0.0068603 * x^2 + 1.90532 * x$

Response type: Internal Std ( Ref 30 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Force, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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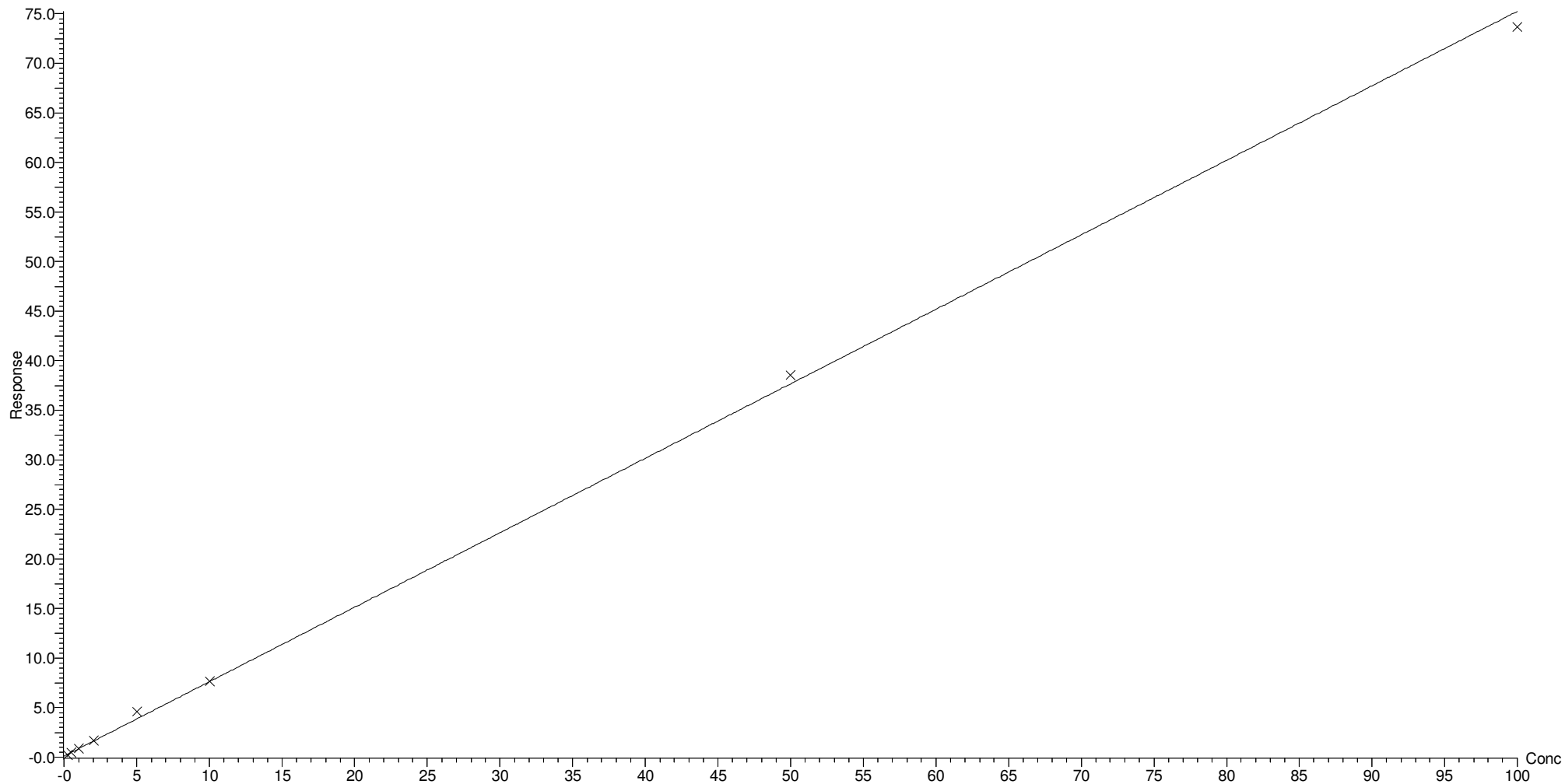
Compound name: PFUnA

Correlation coefficient:  $r = 0.999218$ ,  $r^2 = 0.998436$

Calibration curve:  $0.751381 * x + 0.102246$

Response type: Internal Std ( Ref 31 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

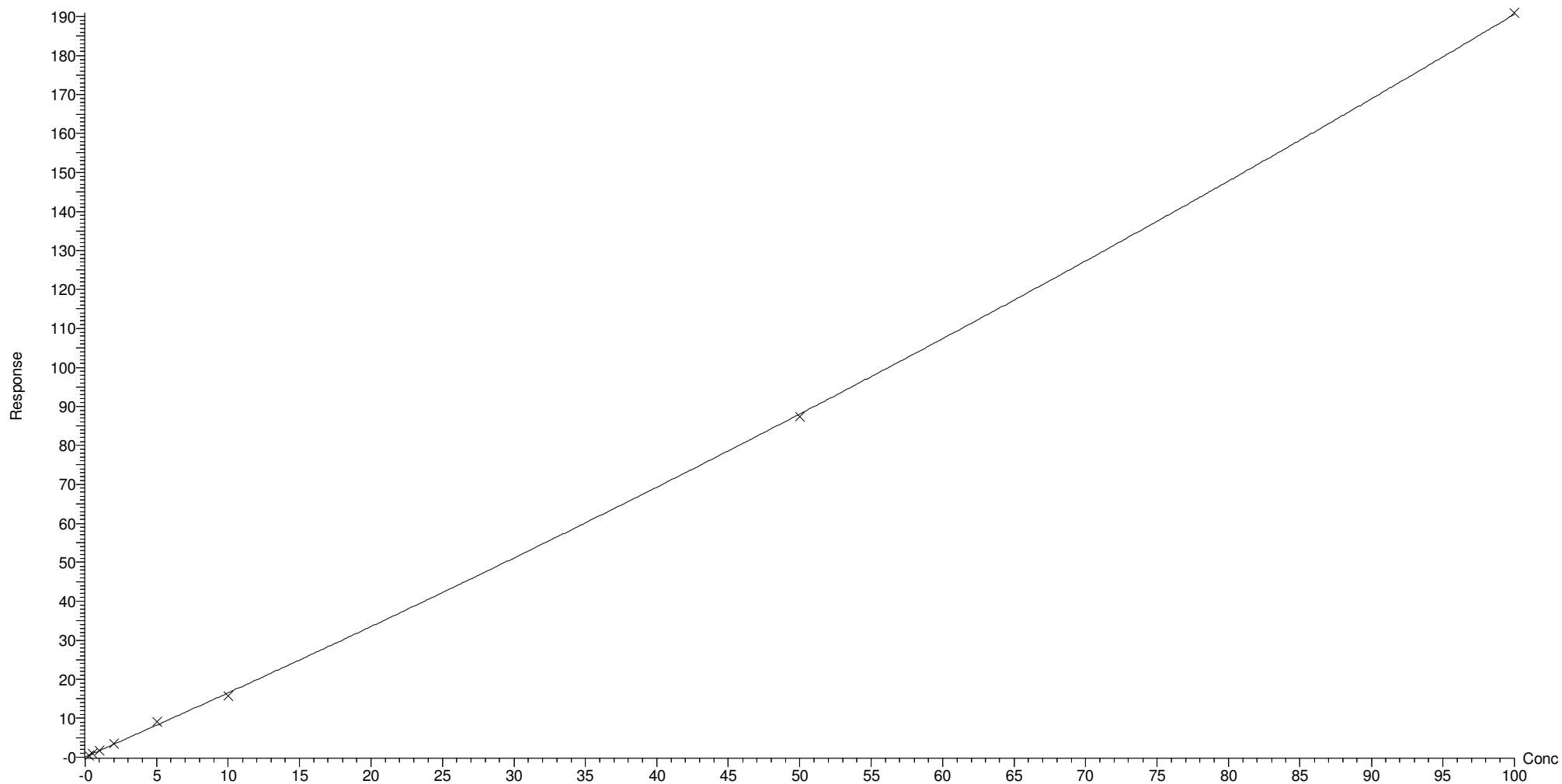


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Compound name: N-MeFOSAA  
Coefficient of Determination:  $R^2 = 0.999566$   
Calibration curve:  $0.00291692 * x^2 + 1.61325 * x + 0.0881258$   
Response type: Internal Std ( Ref 32 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



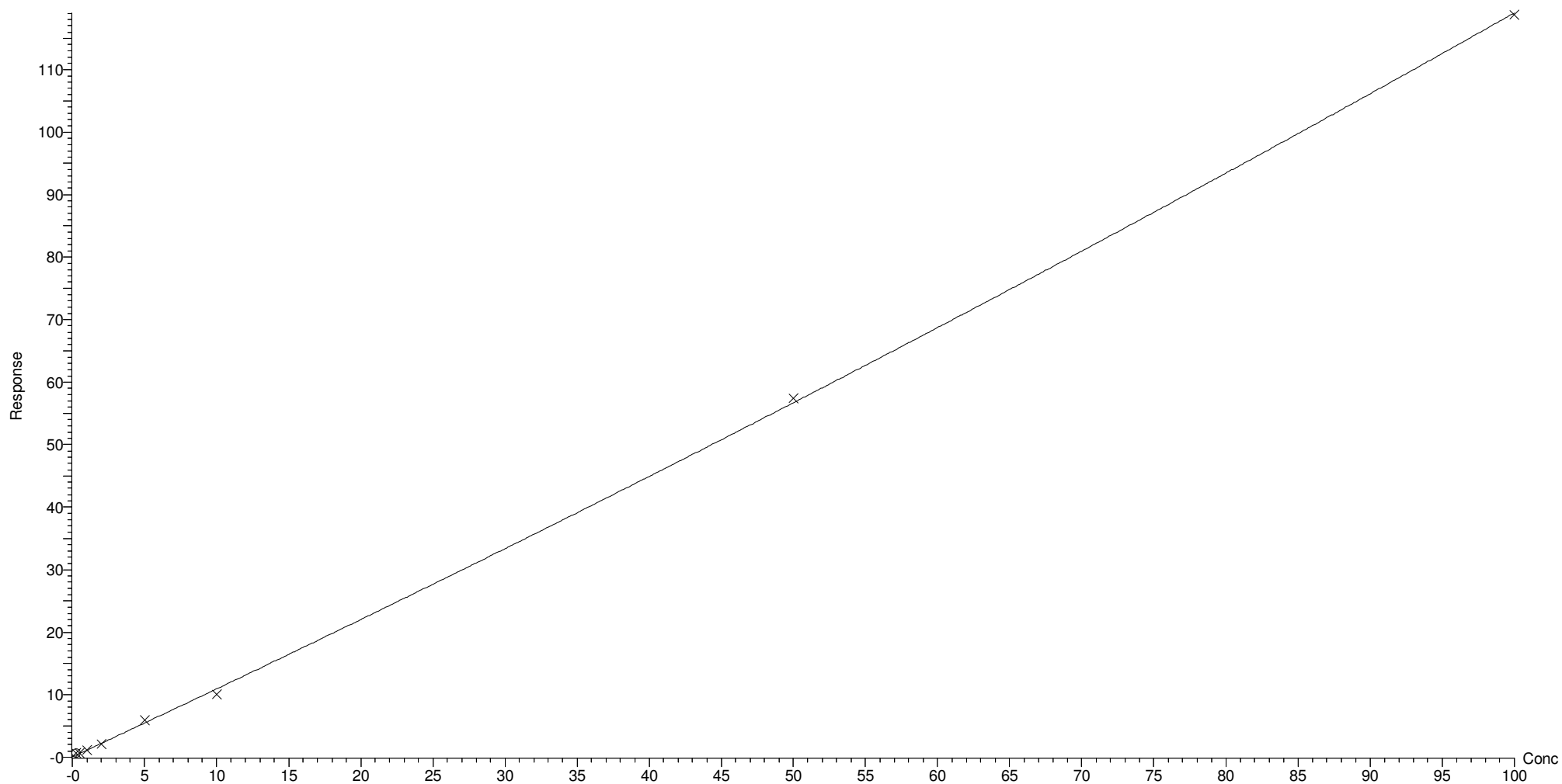


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Compound name: N-EtFOSAA  
Coefficient of Determination:  $R^2 = 0.999251$   
Calibration curve:  $0.00114175 * x^2 + 1.0759 * x + 0.0564946$   
Response type: Internal Std ( Ref 33 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

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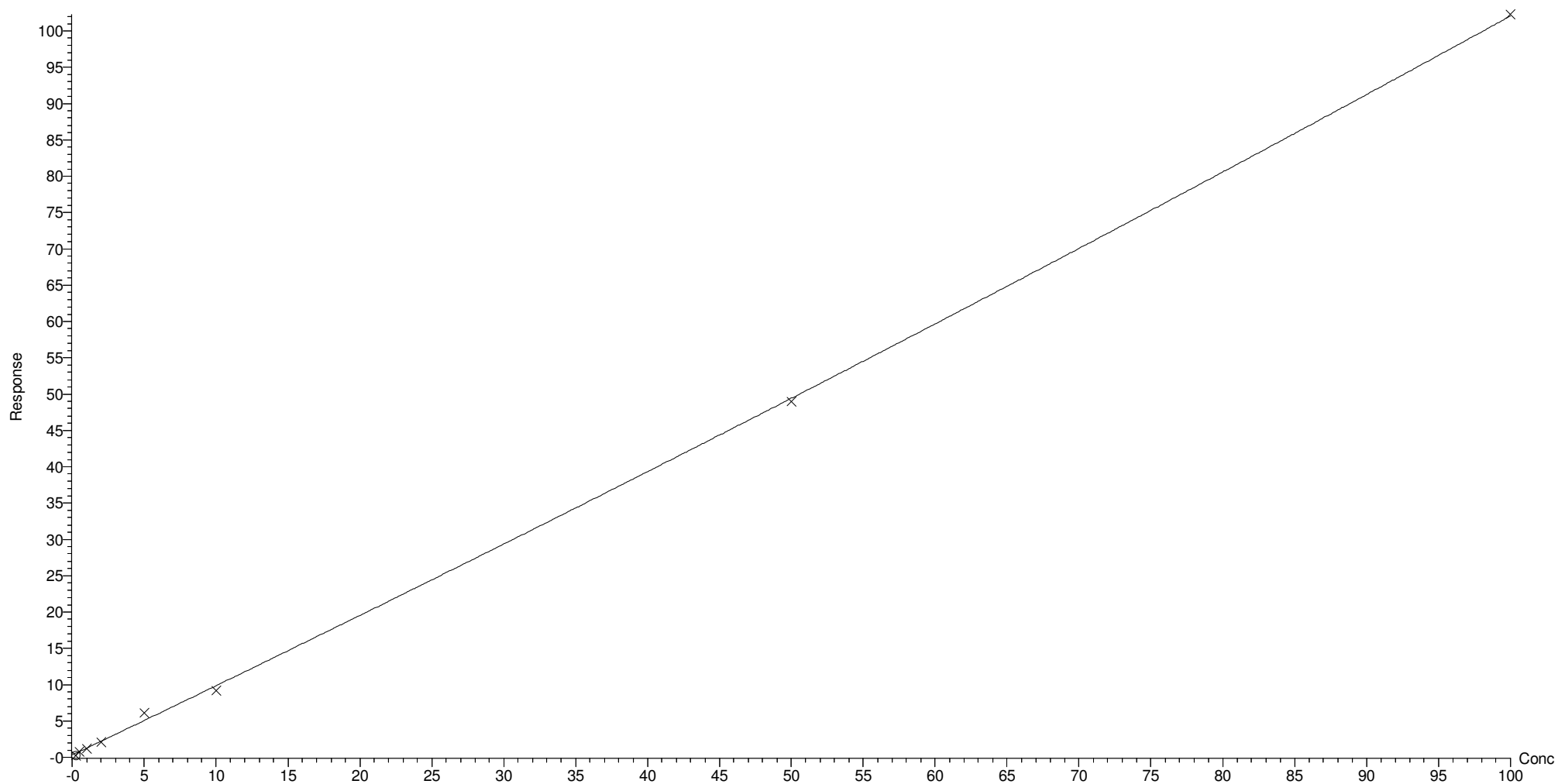
Compound name: PFDoA

Coefficient of Determination:  $R^2 = 0.998398$

Calibration curve:  $0.000701771 * x^2 + 0.947233 * x + 0.307203$

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

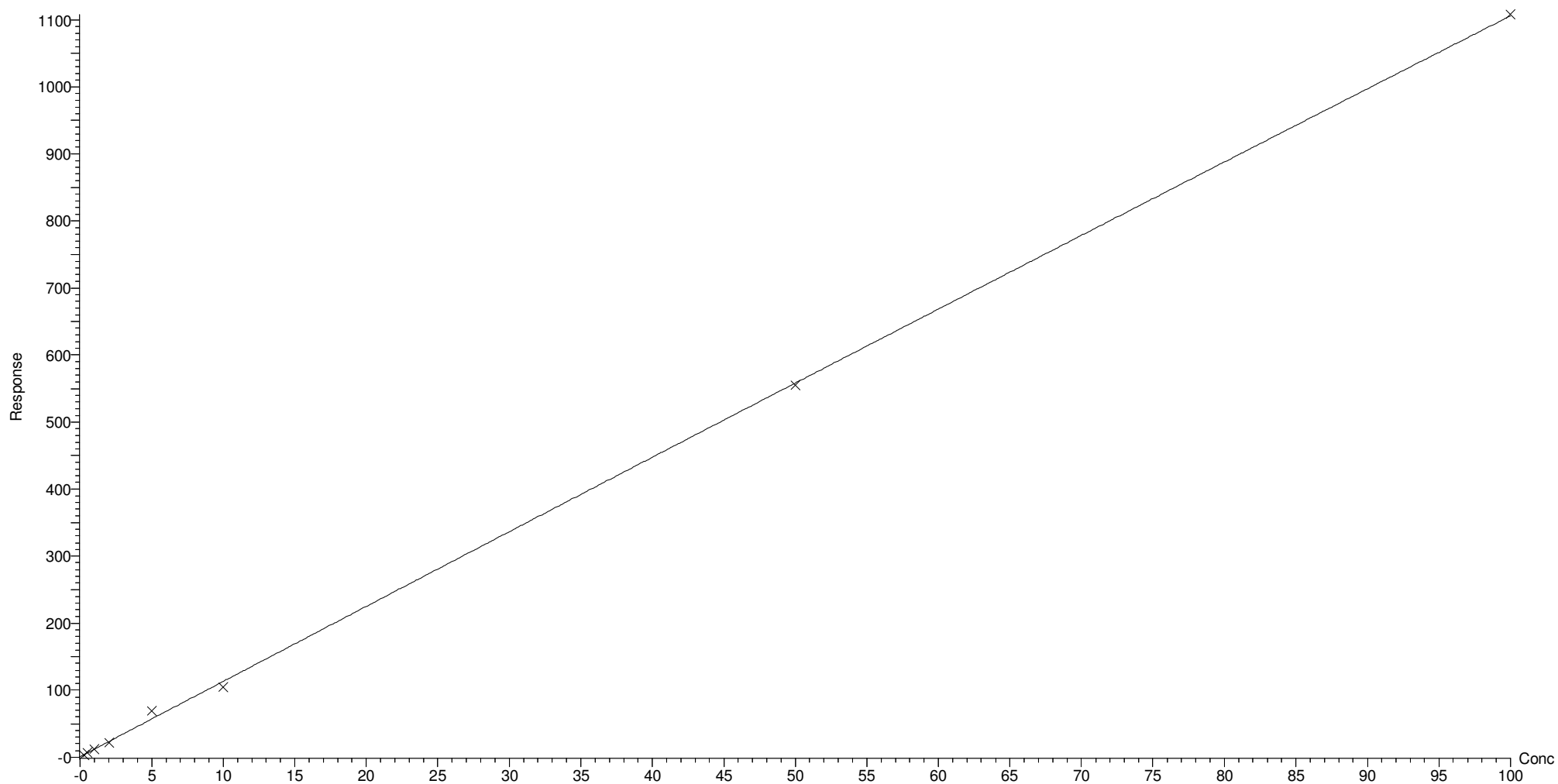


Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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Compound name: PFTTrDA  
Coefficient of Determination:  $R^2 = 0.997920$   
Calibration curve:  $-0.00191578 * x^2 + 11.2409 * x + 1.0088$   
Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

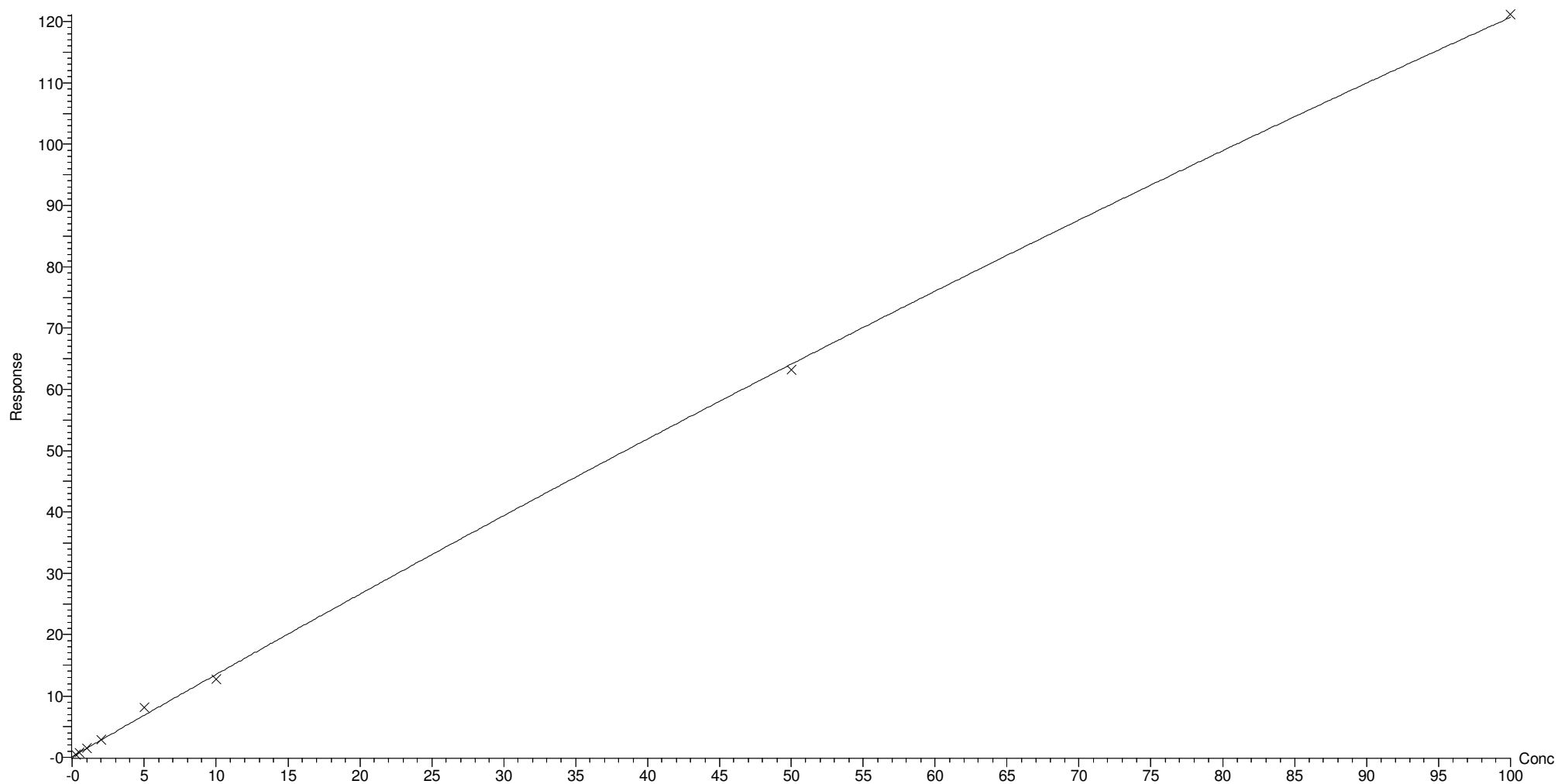


Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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Compound name: PFTeDA  
Coefficient of Determination:  $R^2 = 0.998286$   
Calibration curve:  $-0.00148933 * x^2 + 1.35466 * x + 0.108578$   
Response type: Internal Std ( Ref 35 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: Untitled

Last Altered: Friday, June 16, 2017 07:30:47 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:31:05 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	170615M4_1	IPA	15-Jun-17	22:09:24
2	170615M4_2	IPA	15-Jun-17	22:21:12
3	170615M4_3	ST170615M4-1 PFC CS-2 17F1506	15-Jun-17	22:32:47
4	170615M4_4	ST170615M4-2 PFC CS-1 17F1507	15-Jun-17	22:44:30
5	170615M4_5	ST170615M4-3 PFC CS0 17F1508	15-Jun-17	22:56:13
6	170615M4_6	ST170615M4-4 PFC CS1 17F1509	15-Jun-17	23:07:56
7	170615M4_7	ST170615M4-5 PFC CS2 17F1510	15-Jun-17	23:19:39
8	170615M4_8	ST170615M4-6 PFC CS3 17F1512	15-Jun-17	23:31:22
9	170615M4_9	ST170615M4-7 PFC CS4 17F1513	15-Jun-17	23:43:05
10	170615M4_10	ST170615M4-8 PFC CS5 17F1514	15-Jun-17	23:54:48
11	170615M4_11	IPA	16-Jun-17	00:06:31
12	170615M4_12	SS170615M4-1 PFC SSS 17F1505	16-Jun-17	00:18:14

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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

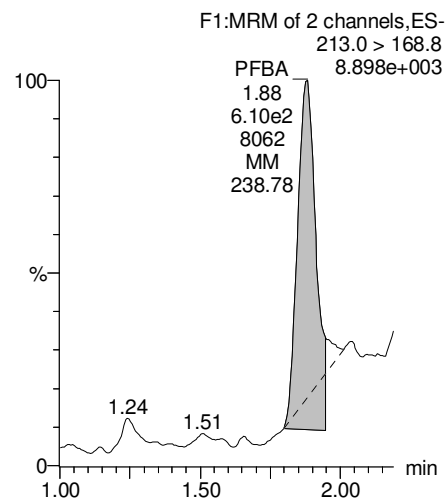
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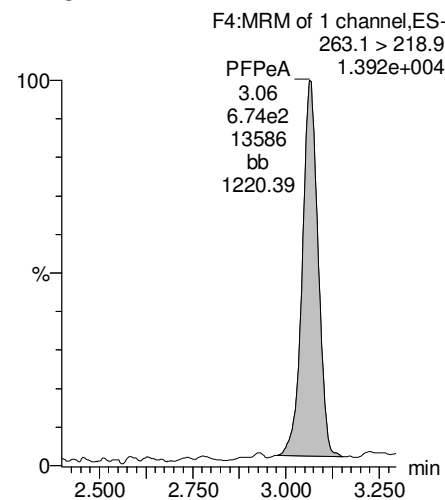
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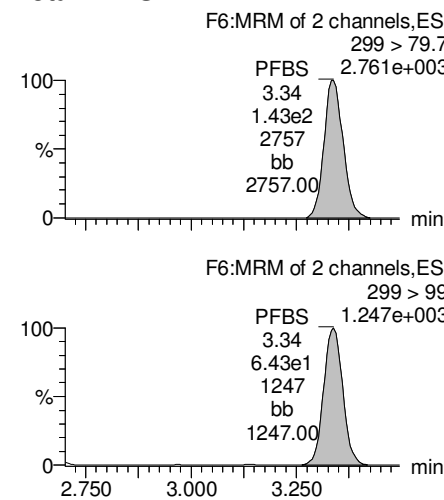
**PFBA**



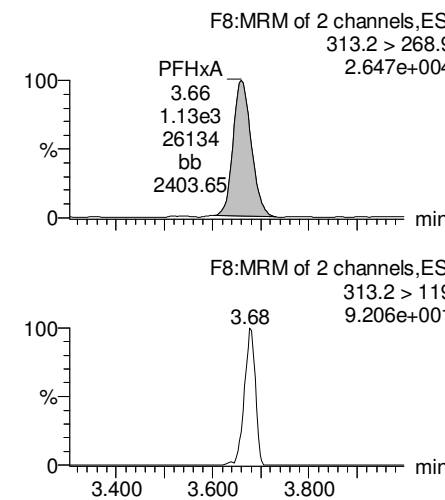
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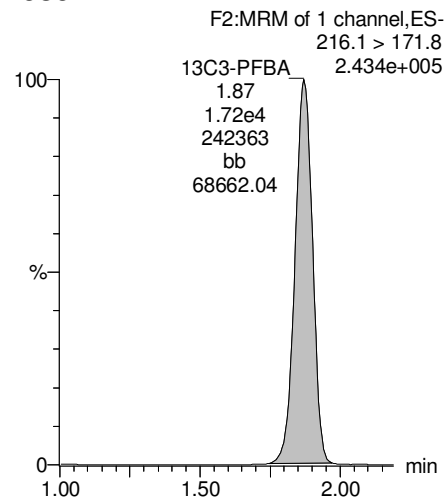
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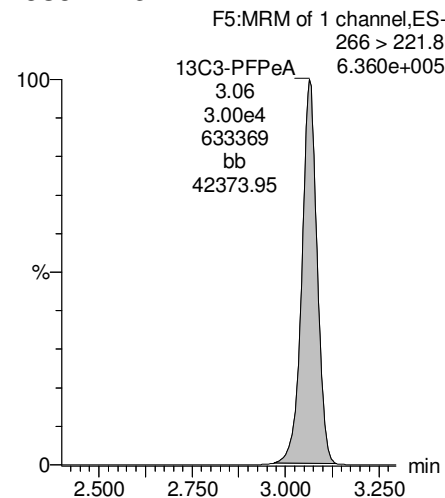
**PFHxA**



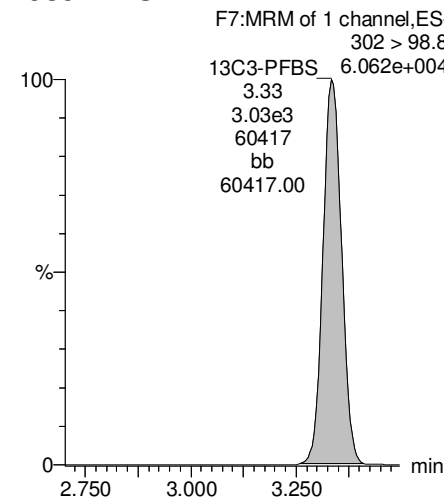
**13C3-PFBA**



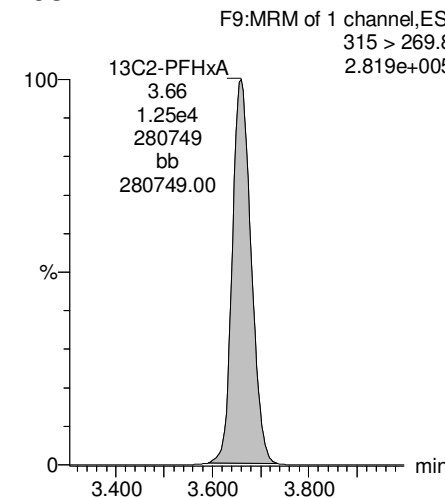
**13C3-PFPeA**



**13C3-PFBS**



**13C2-PFHxA**



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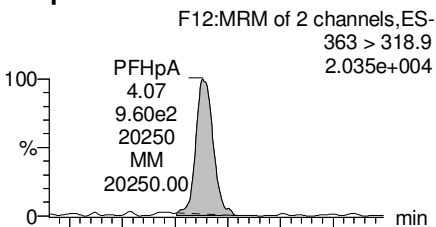
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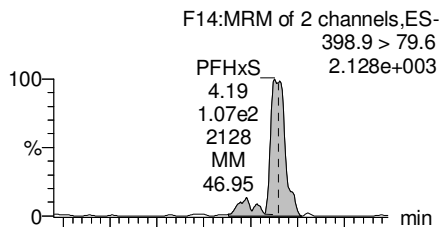
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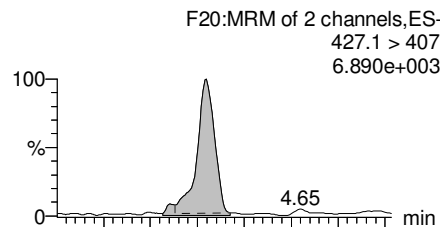
**PFHpA**



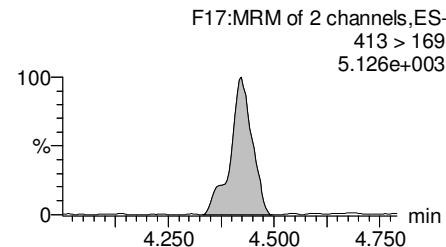
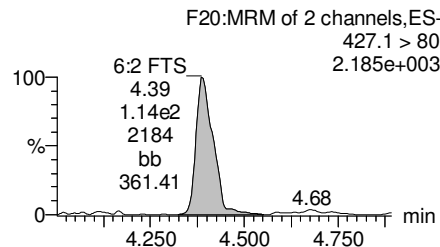
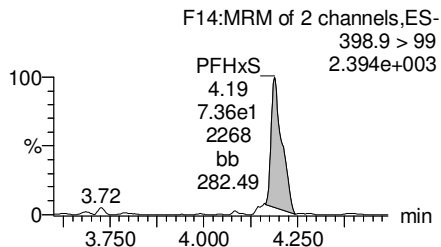
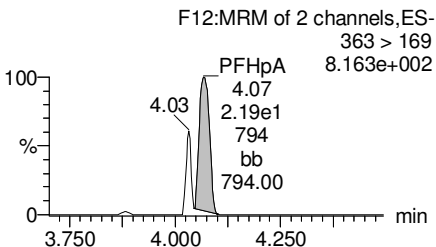
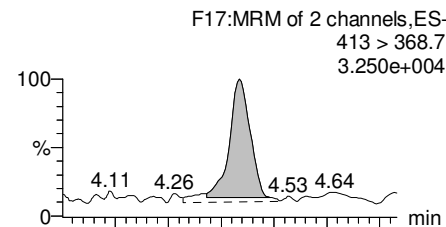
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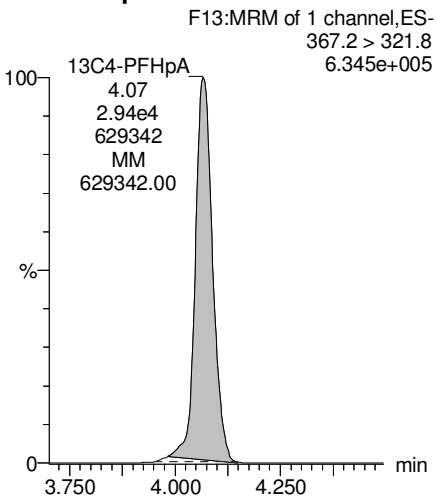
**6:2 FTS**



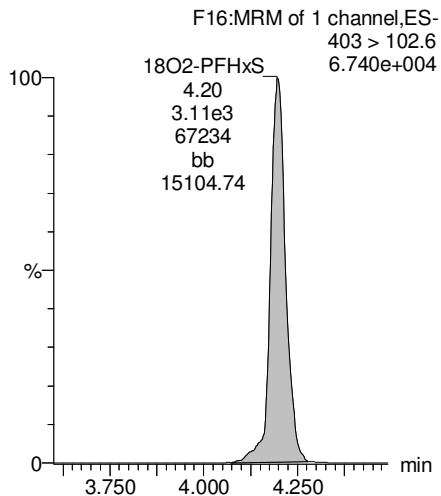
**Total PFOA**



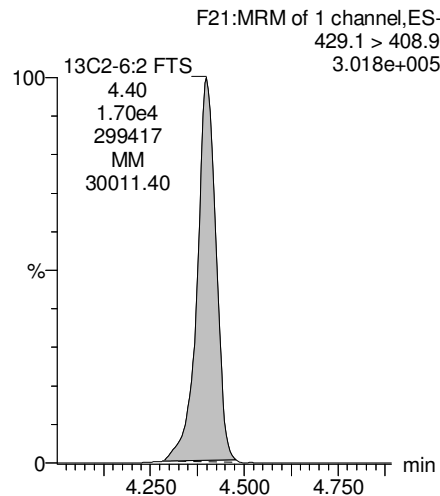
**13C4-PFHpA**



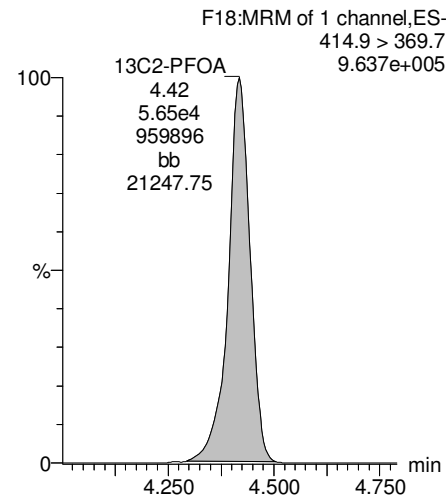
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



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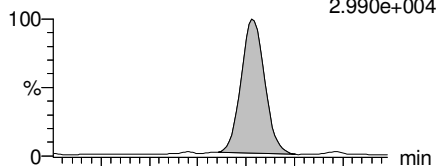
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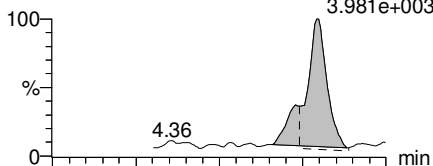
**PFNA**

F23:MRM of 2 channels,ES-  
462.9 > 418.8  
2.990e+004



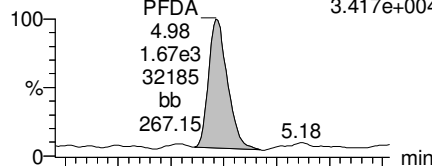
**Total PFOS**

F28:MRM of 2 channels,ES-  
499 > 79.9  
3.981e+003



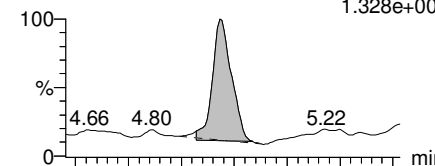
**PFDA**

F33:MRM of 2 channels,ES-  
513 > 468.8  
3.417e+004

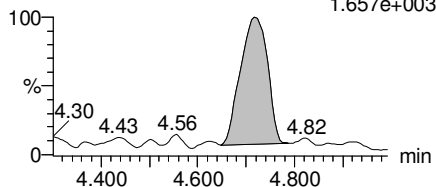


**8:2 FTS**

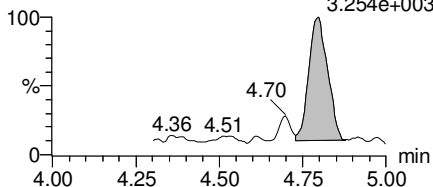
F38:MRM of 2 channels,ES-  
527 > 506.9  
1.328e+004



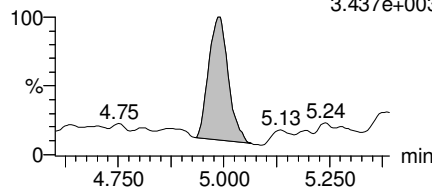
F23:MRM of 2 channels,ES-  
462.9 > 219  
1.657e+003



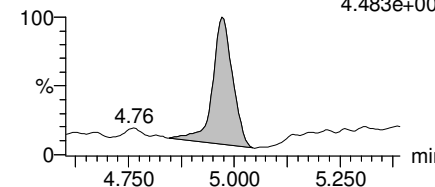
F28:MRM of 2 channels,ES-  
499 > 99  
3.254e+003



F33:MRM of 2 channels,ES-  
513 > 219  
3.437e+003

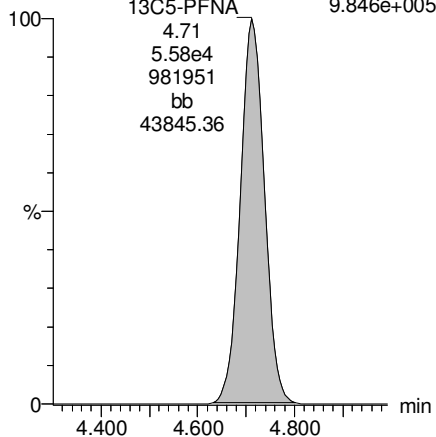


F38:MRM of 2 channels,ES-  
527 > 80  
4.483e+003



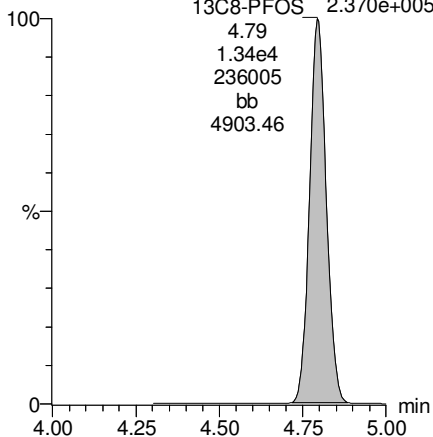
**13C5-PFNA**

F24:MRM of 1 channel,ES-  
468.2 > 422.9  
9.846e+005



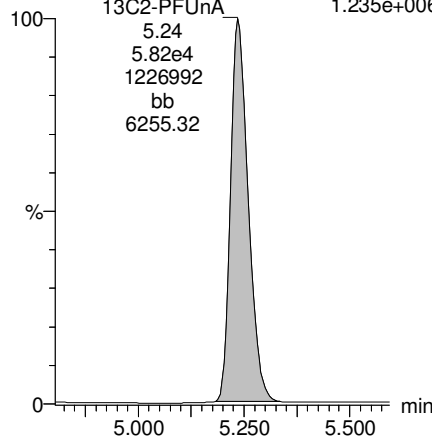
**13C8-PFOS**

F31:MRM of 1 channel,ES-  
507 > 79.9  
2.370e+005



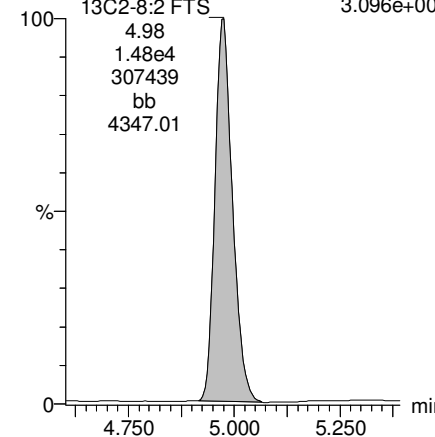
**13C2-PFUnA**

F42:MRM of 1 channel,ES-  
565 > 519.8  
1.235e+006



**13C2-8:2 FTS**

F39:MRM of 1 channel,ES-  
529.1 > 508.7  
3.096e+005





Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

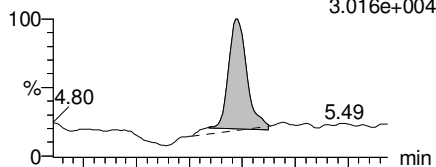
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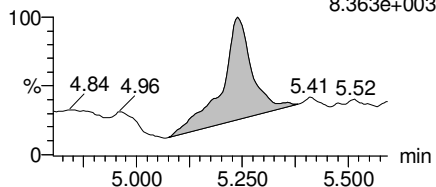
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**PFUnA**

F41:MRM of 2 channels,ES-  
562.9 > 518.9  
3.016e+004

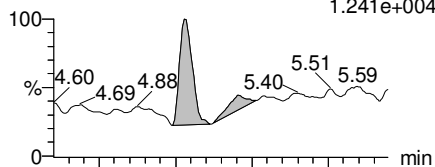


F41:MRM of 2 channels,ES-  
562.9 > 269  
8.363e+003

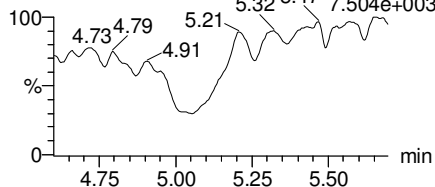


**Total N-Me-FOSAA**

F43:MRM of 2 channels,ES-  
570.1 > 419  
1.241e+004

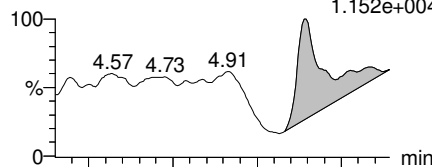


F43:MRM of 2 channels,ES-  
570.1 > 483  
7.504e+003

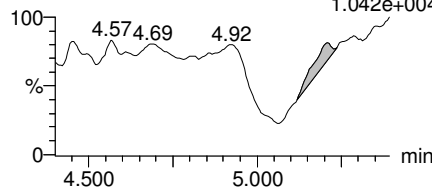


**Total N-EtFOSAA**

F45:MRM of 2 channels,ES-  
584.2 > 419  
1.152e+004

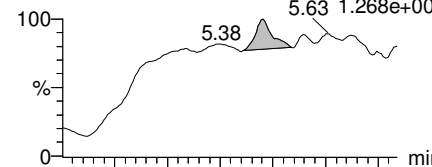


F45:MRM of 2 channels,ES-  
584.2 > 483  
1.042e+004

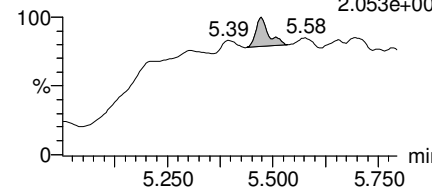


**PFDaA**

F49:MRM of 2 channels,ES-  
612.9 > 318.8  
1.268e+004

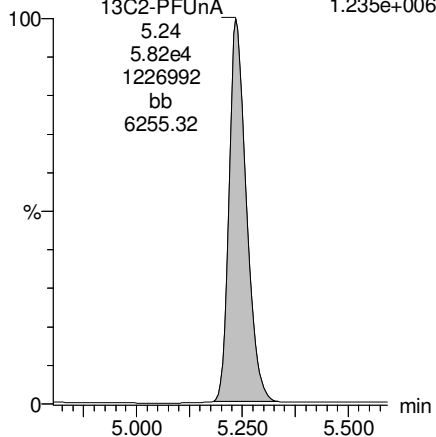


F49:MRM of 2 channels,ES-  
612.9 > 569  
2.053e+004



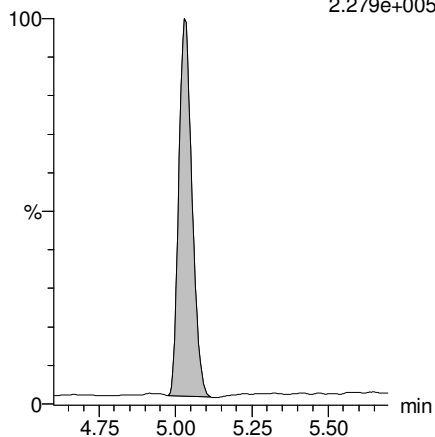
**13C2-PFUnA**

F42:MRM of 1 channel,ES-  
565 > 519.8  
1.235e+006



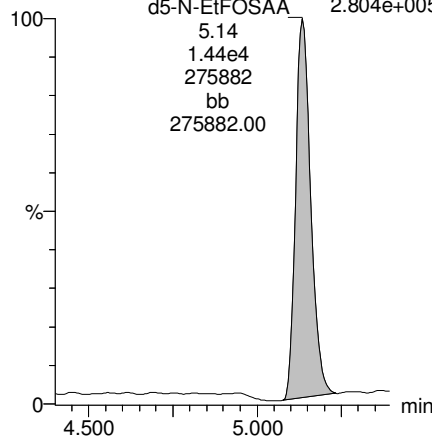
**d3-N-MeFOSAA**

F47:MRM of 1 channel,ES-  
573.3 > 419  
2.279e+005



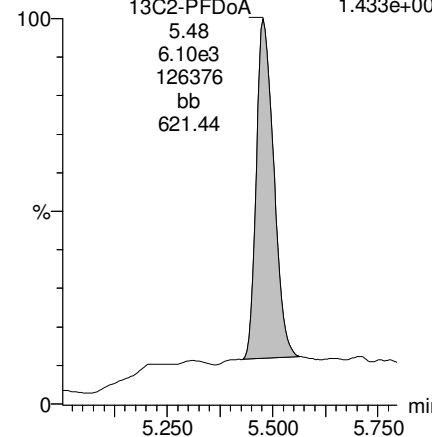
**d5-N-EtFOSAA**

F46:MRM of 1 channel,ES-  
589.3 > 419  
2.804e+005



**13C2-PFDaA**

F50:MRM of 1 channel,ES-  
615 > 569.7  
1.433e+005



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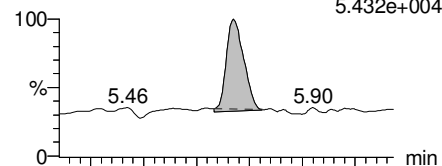
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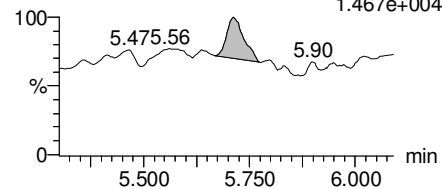
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**PFTrDA**

F55:MRM of 2 channels,ES-  
662.9 > 618.9  
5.432e+004

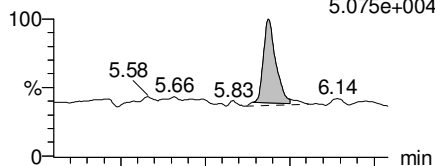


F55:MRM of 2 channels,ES-  
662.9 > 319  
1.467e+004

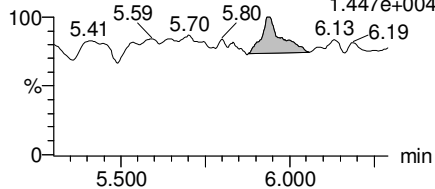


**PFTeDA**

F56:MRM of 2 channels,ES-  
712.9 > 668.8  
5.075e+004

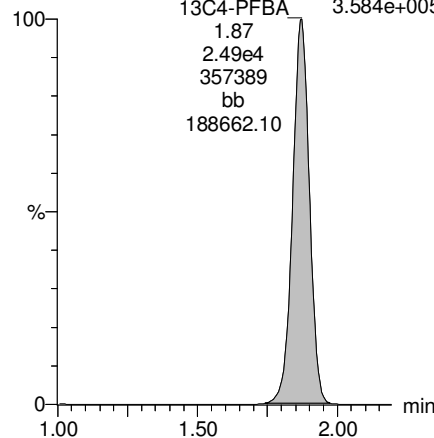


F56:MRM of 2 channels,ES-  
712.9 > 369  
1.447e+004



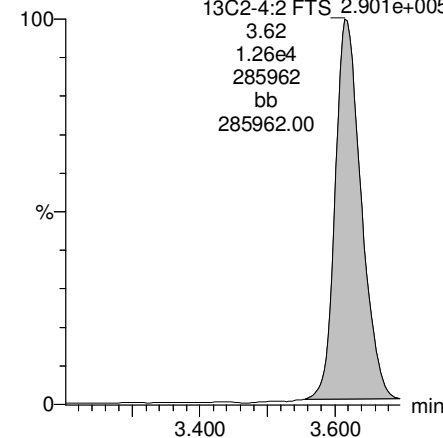
**13C4-PFBA**

F3:MRM of 1 channel,ES-  
217 > 171.8  
3.584e+005



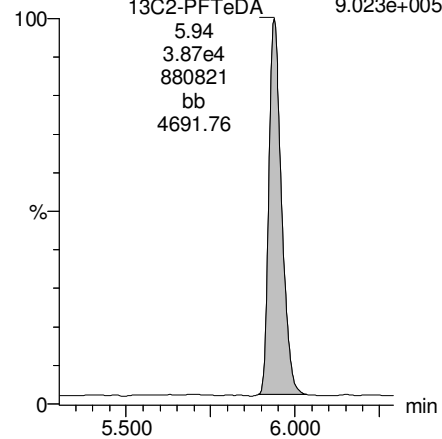
**13C2-4:2 FTS**

F11:MRM of 1 channel,ES-  
329.2 > 308.9  
2.901e+005



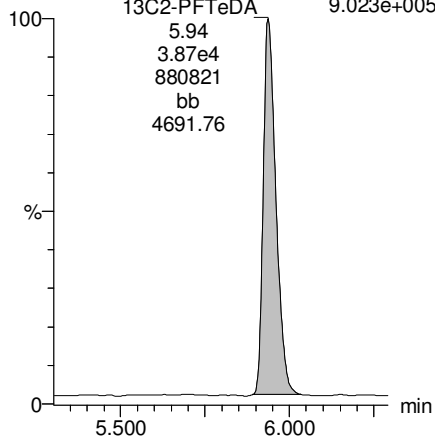
**13C2-PFTeDA**

F57:MRM of 2 channels,ES-  
714.8 > 669.6  
9.023e+005



**13C2-PFTeDA**

F57:MRM of 2 channels,ES-  
714.8 > 669.6  
9.023e+005



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

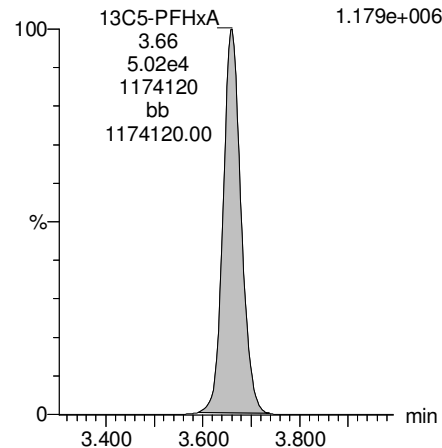
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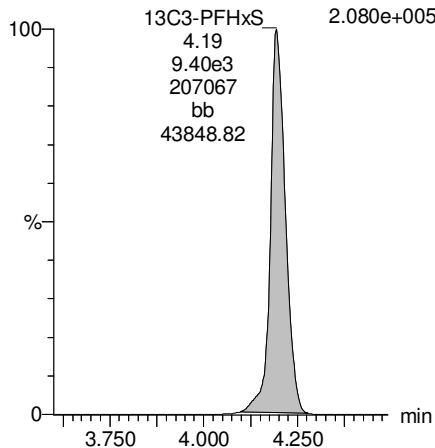
**13C5-PFHxA**

F10:MRM of 1 channel,ES-  
318 > 272.9  
1.179e+006



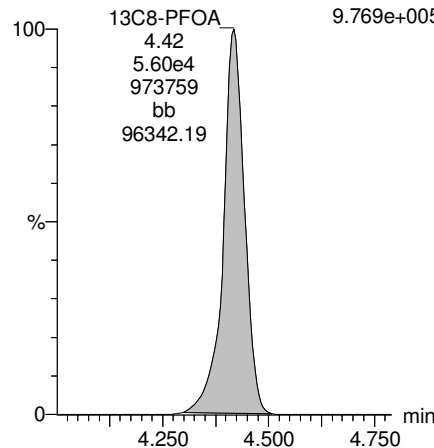
**13C3-PFHxS**

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
2.080e+005



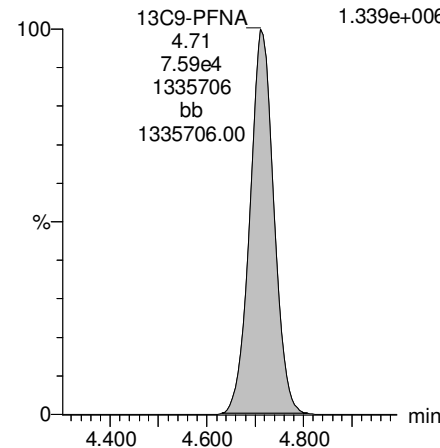
**13C8-PFOA**

F19:MRM of 1 channel,ES-  
421.3 > 376  
9.769e+005



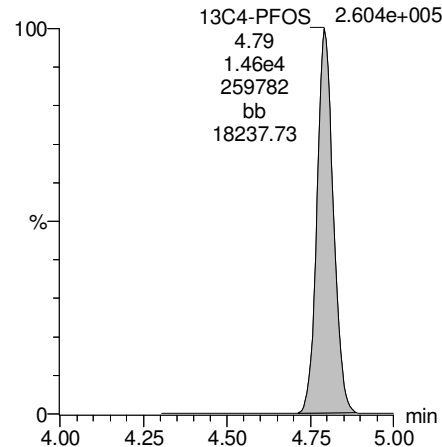
**13C9-PFNA**

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.339e+006



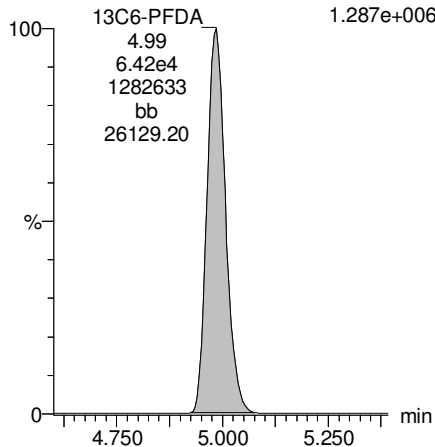
**13C4-PFOS**

F29:MRM of 1 channel,ES-  
503 > 79.9  
2.604e+005



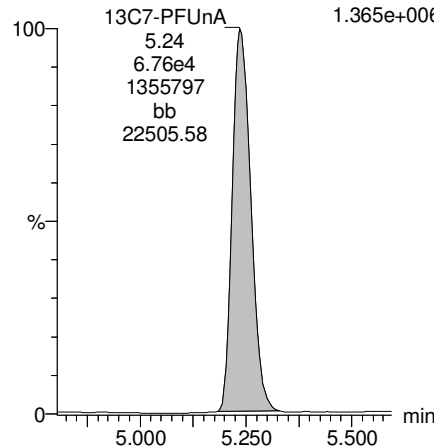
**13C6-PFDA**

F36:MRM of 1 channel,ES-  
519.1 > 473.7  
1.287e+006



**13C7-PFUnA**

F44:MRM of 1 channel,ES-  
570.1 > 524.8  
1.365e+006



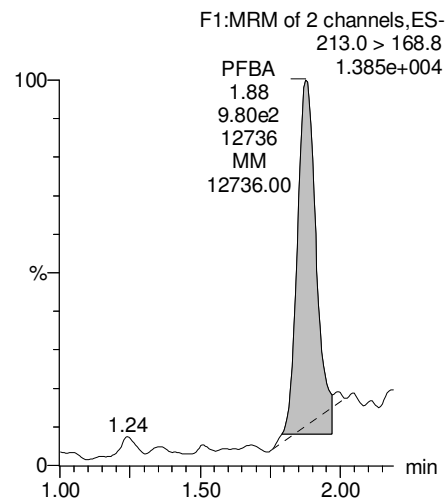
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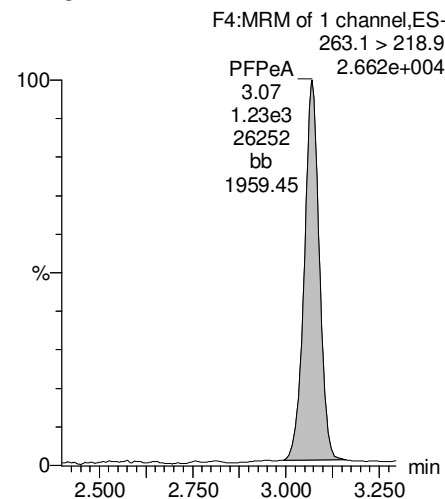
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_4, Date: 15-Jun-2017, Time: 22:44:30, ID: ST170615M4-2 PFC CS-1 17F1507, Description: PFC CS-1 17F1507

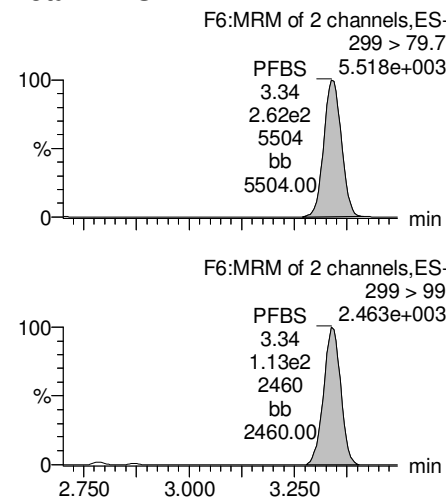
**PFBA**



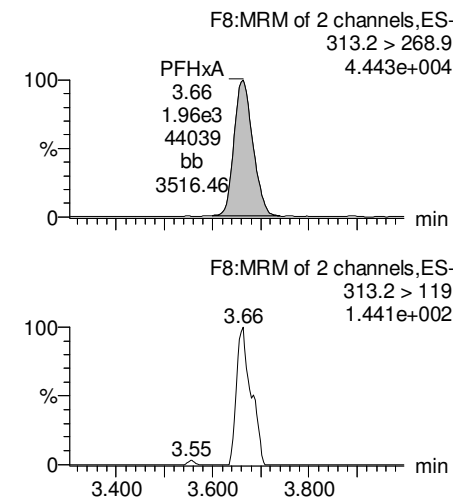
**PFPeA**



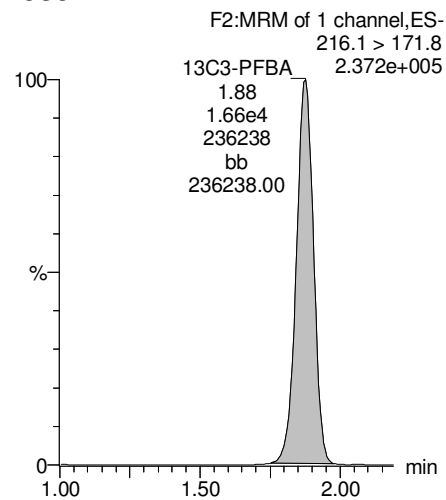
**Total PFBS**



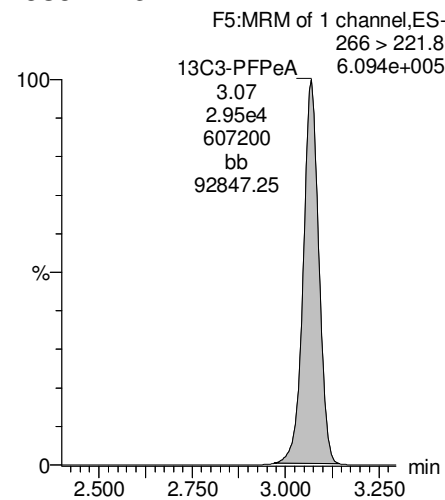
**PFHxA**



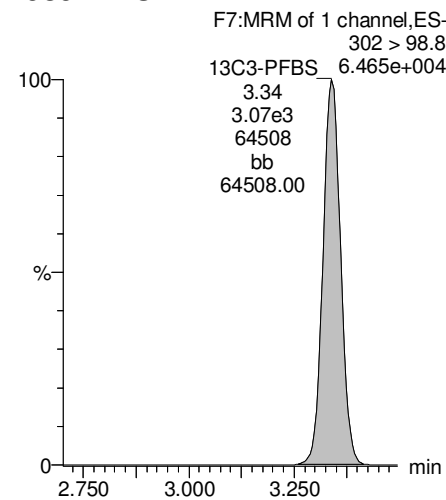
**13C3-PFBA**



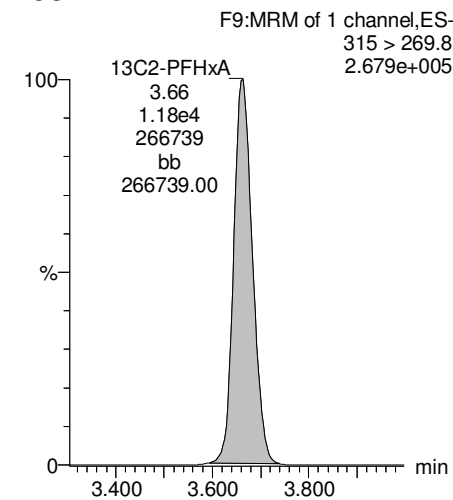
**13C3-PFPeA**



**13C3-PFBS**



**13C2-PFHxA**



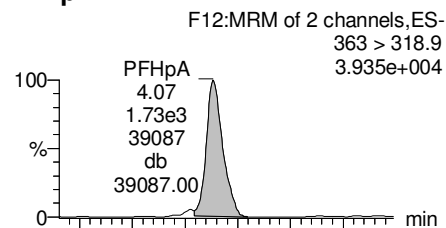
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

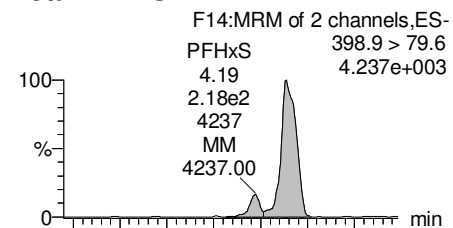
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_4, Date: 15-Jun-2017, Time: 22:44:30, ID: ST170615M4-2 PFC CS-1 17F1507, Description: PFC CS-1 17F1507

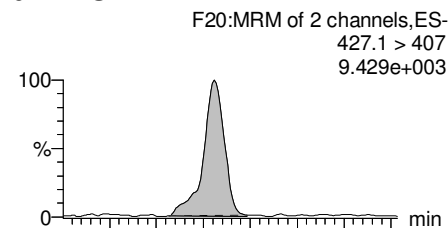
**PFHpA**



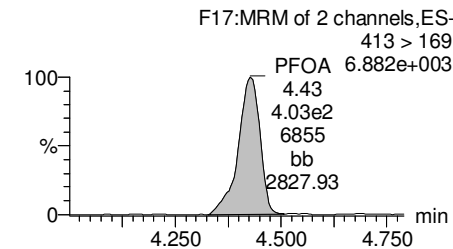
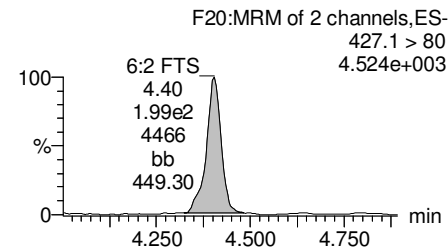
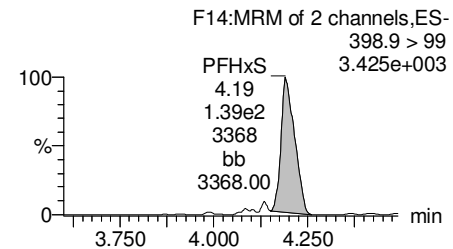
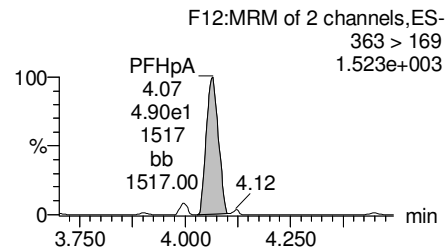
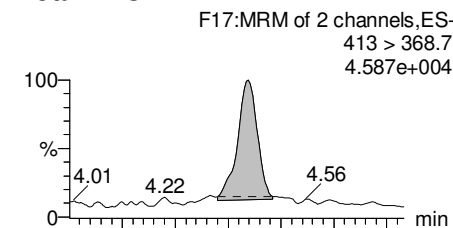
**Total PFHxS**



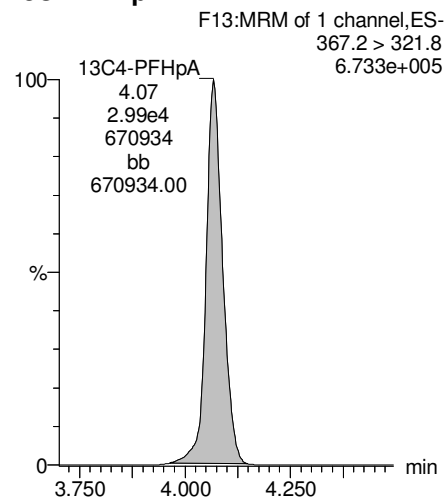
**6:2 FTS**



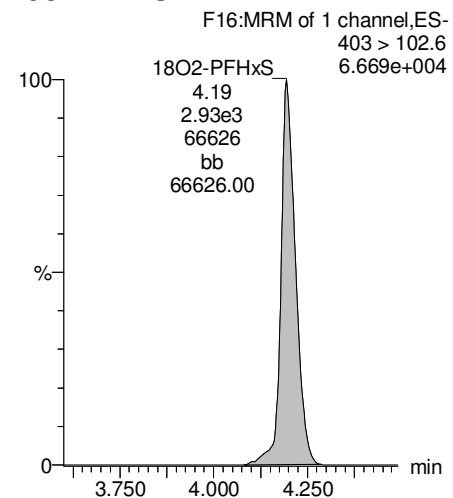
**Total PFOA**



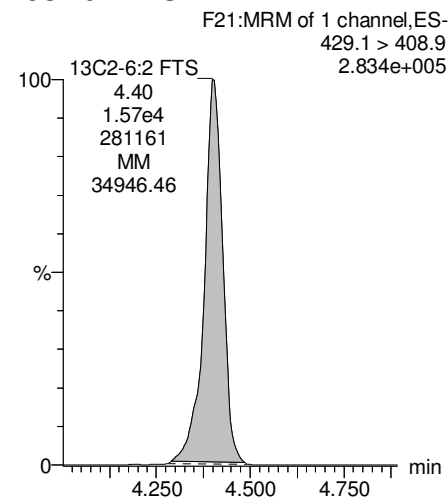
**13C4-PFHpA**



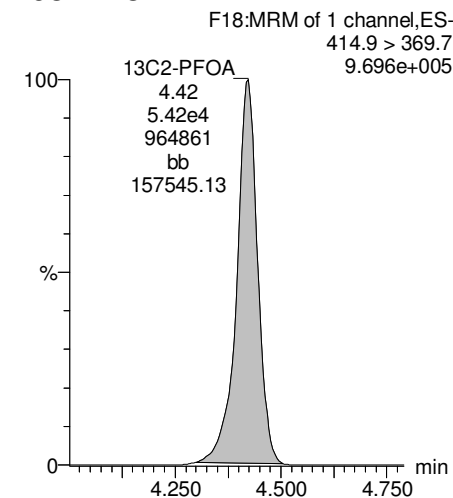
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



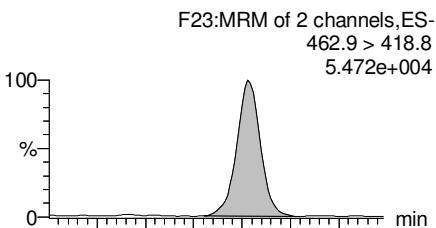
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

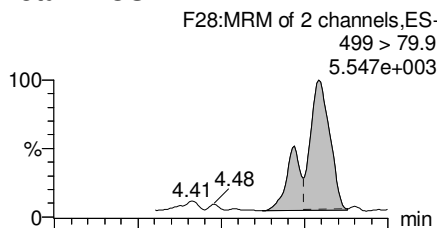
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_4, Date: 15-Jun-2017, Time: 22:44:30, ID: ST170615M4-2 PFC CS-1 17F1507, Description: PFC CS-1 17F1507

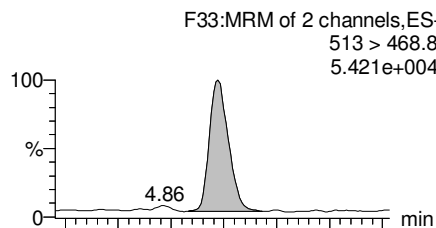
**PFNA**



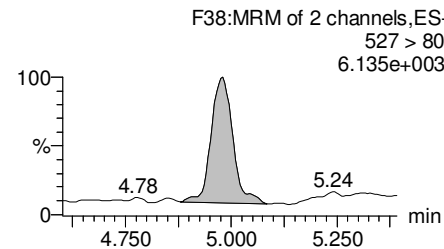
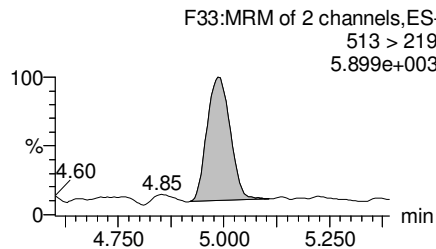
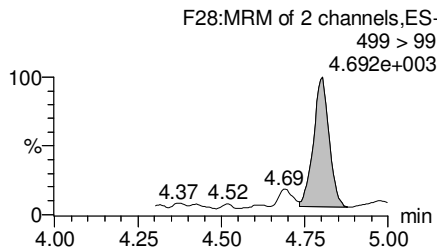
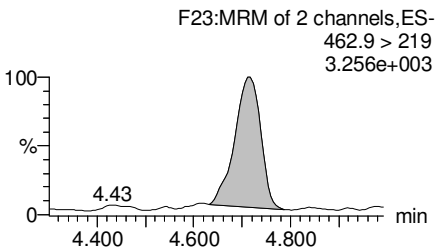
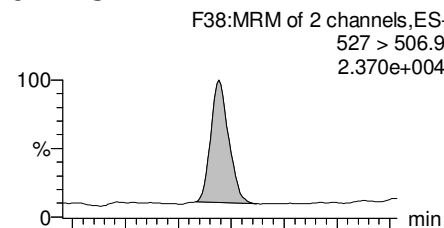
**Total PFOS**



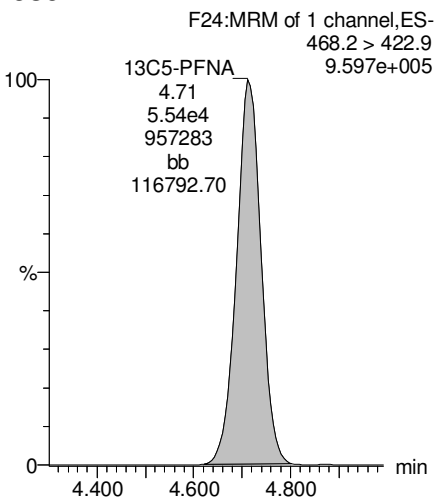
**PFDA**



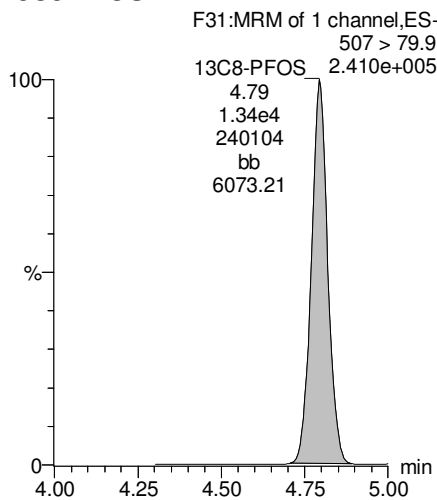
**8:2 FTS**



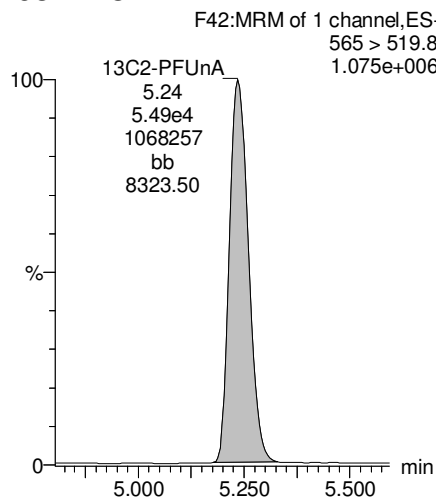
**13C5-PFNA**



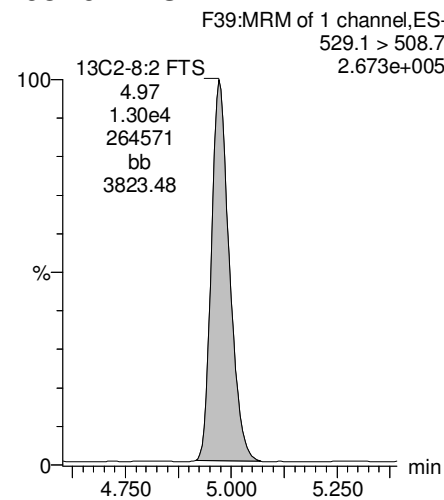
**13C8-PFOS**



**13C2-PFUnA**



**13C2-8:2 FTS**



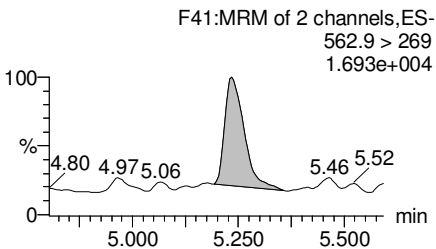
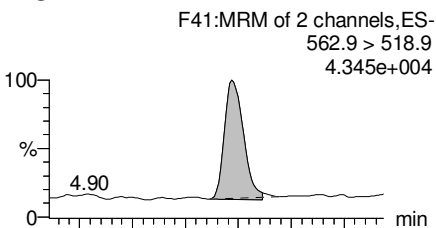
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

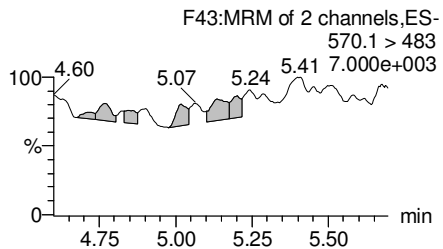
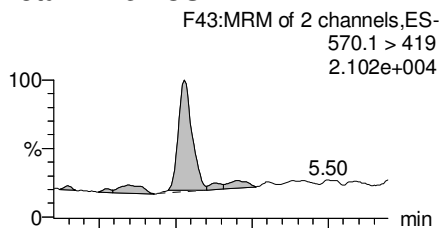
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_4, Date: 15-Jun-2017, Time: 22:44:30, ID: ST170615M4-2 PFC CS-1 17F1507, Description: PFC CS-1 17F1507

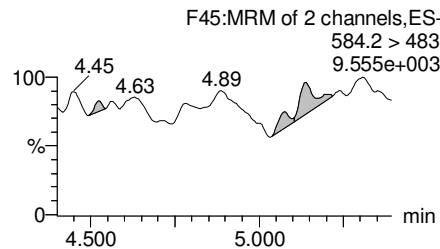
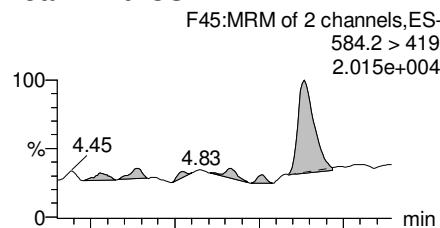
**PFUnA**



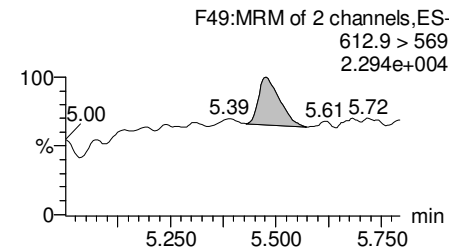
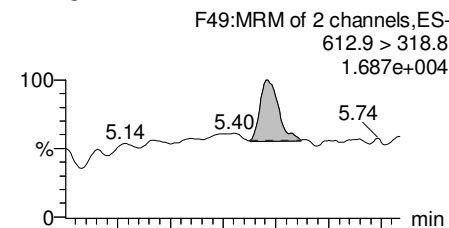
**Total N-Me-FOSAA**



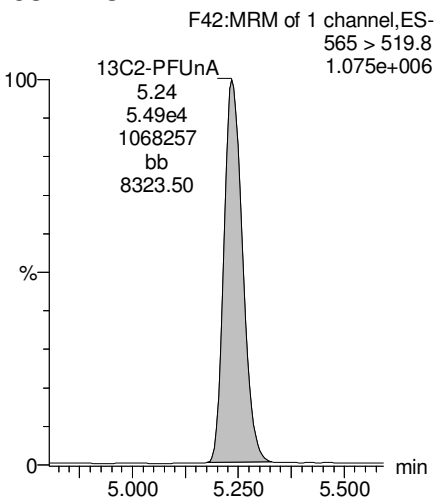
**Total N-EtFOSAA**



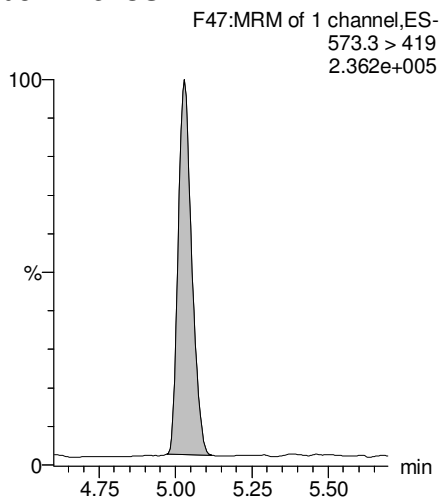
**PFDoA**



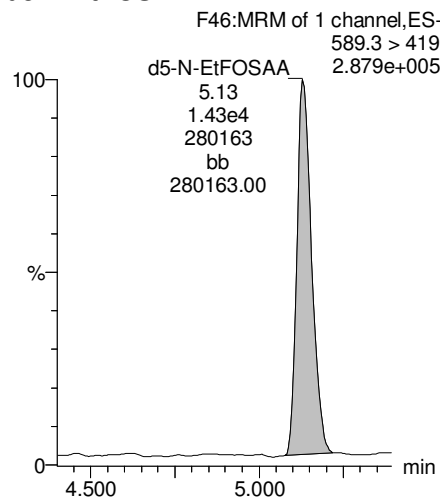
**13C2-PFUnA**



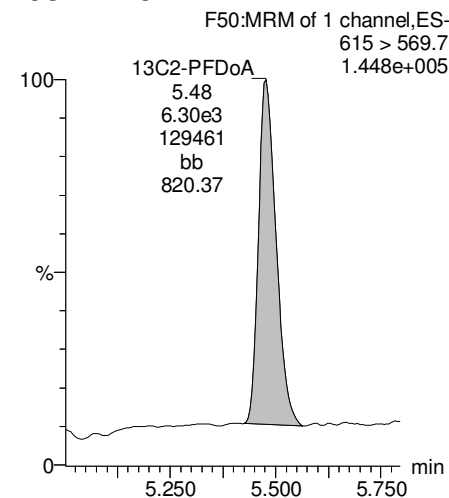
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

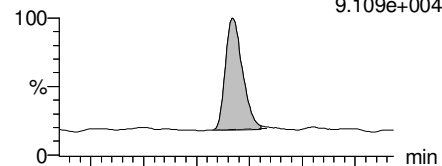
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

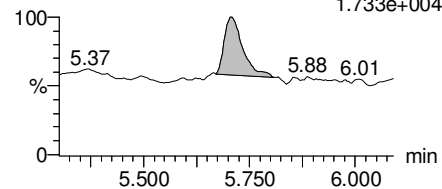
Name: 170615M4\_4, Date: 15-Jun-2017, Time: 22:44:30, ID: ST170615M4-2 PFC CS-1 17F1507, Description: PFC CS-1 17F1507

**PFTrDA**

F55:MRM of 2 channels,ES-  
662.9 > 618.9  
9.109e+004

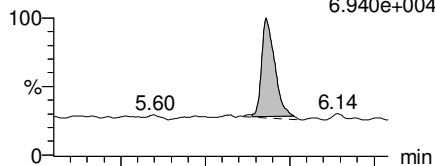


F55:MRM of 2 channels,ES-  
662.9 > 319  
1.733e+004

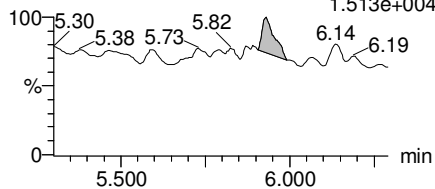


**PFTeDA**

F56:MRM of 2 channels,ES-  
712.9 > 668.8  
6.940e+004

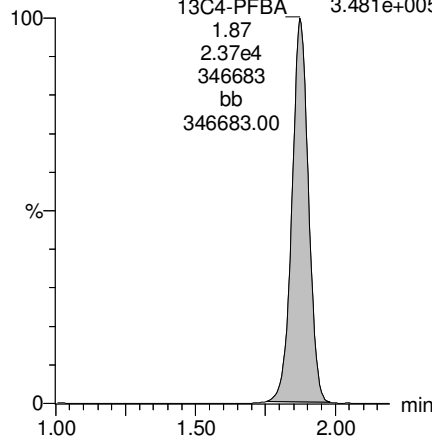


F56:MRM of 2 channels,ES-  
712.9 > 369  
1.513e+004



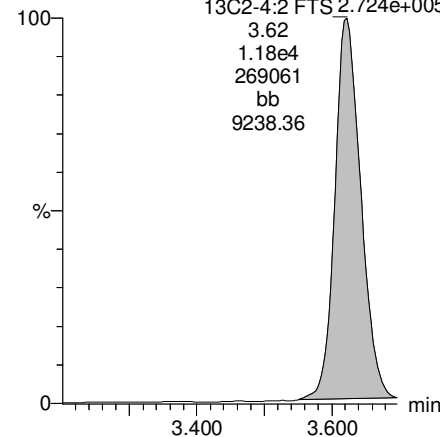
**13C4-PFBA**

F3:MRM of 1 channel,ES-  
217 > 171.8  
3.481e+005



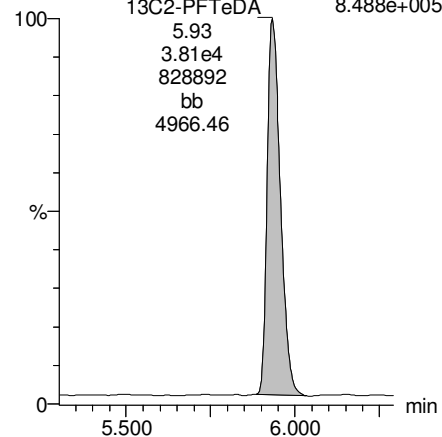
**13C2-4:2 FTS**

F11:MRM of 1 channel,ES-  
329.2 > 308.9  
13C2-4:2 FTS 2.724e+005



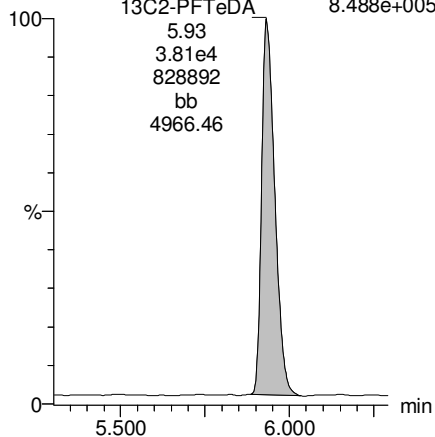
**13C2-PFTeDA**

F57:MRM of 2 channels,ES-  
714.8 > 669.6  
8.488e+005



**13C2-PFTeDA**

F57:MRM of 2 channels,ES-  
714.8 > 669.6  
8.488e+005





Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

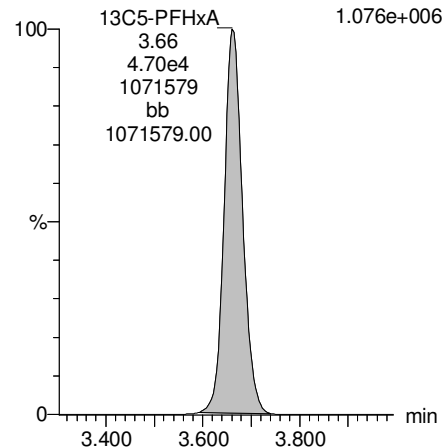
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_4, Date: 15-Jun-2017, Time: 22:44:30, ID: ST170615M4-2 PFC CS-1 17F1507, Description: PFC CS-1 17F1507

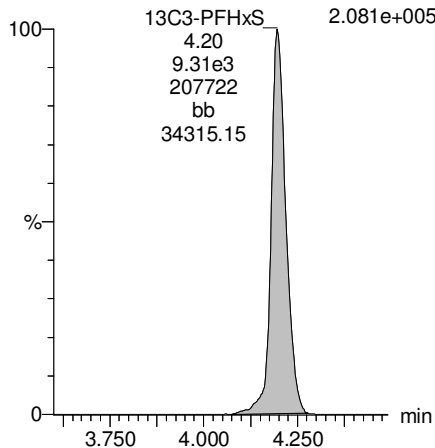
13C5-PFHxA

F10:MRM of 1 channel,ES-  
318 > 272.9  
1.076e+006



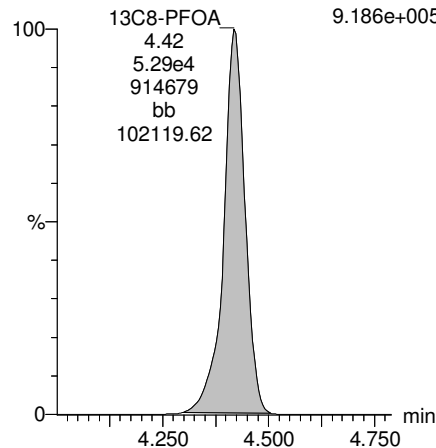
13C3-PFHxS

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
2.081e+005



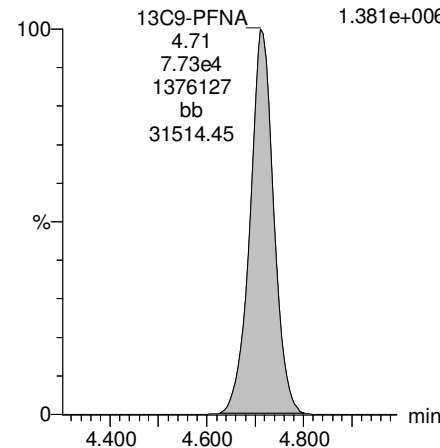
13C8-PFOA

F19:MRM of 1 channel,ES-  
421.3 > 376  
9.186e+005



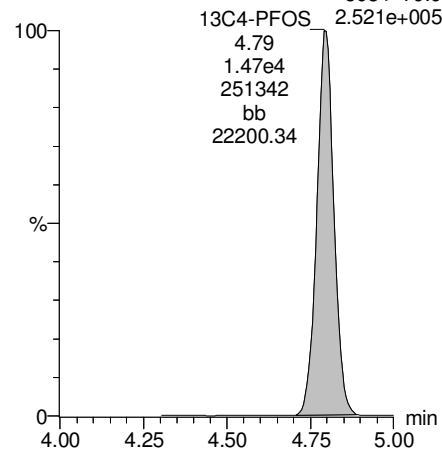
13C9-PFNA

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.381e+006



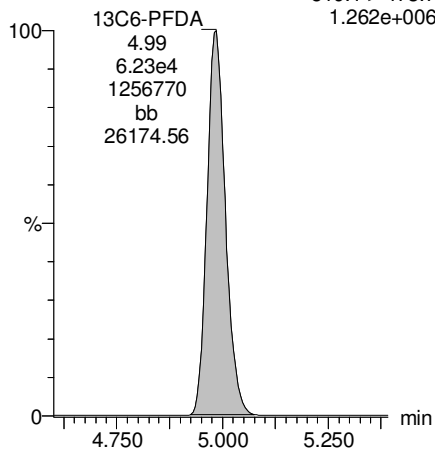
13C4-PFOS

F29:MRM of 1 channel,ES-  
503 > 79.9  
2.521e+005



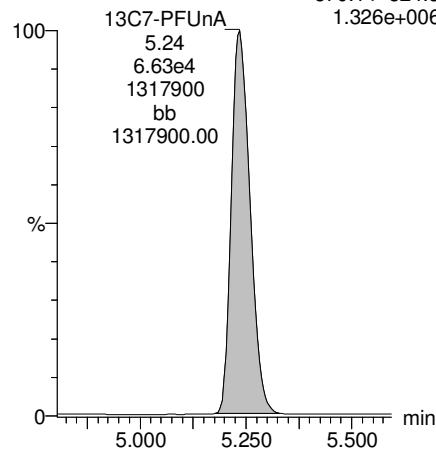
13C6-PFDA

F36:MRM of 1 channel,ES-  
519.1 > 473.7  
1.262e+006



13C7-PFUnA

F44:MRM of 1 channel,ES-  
570.1 > 524.8  
1.326e+006



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

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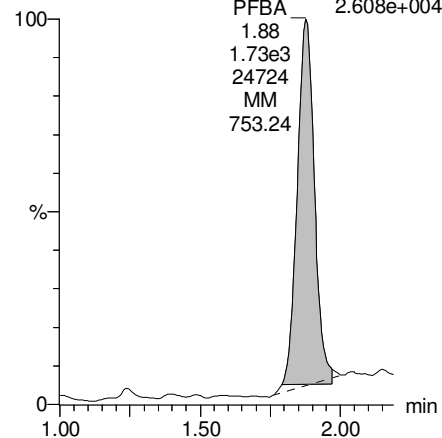
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_5, Date: 15-Jun-2017, Time: 22:56:13, ID: ST170615M4-3 PFC CS0 17F1508, Description: PFC CS0 17F1508

**PFBA**

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

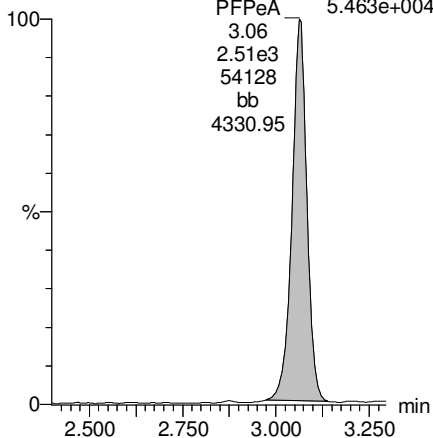
PFBA  
1.88  
1.73e3  
24724  
MM  
753.24



**PFPeA**

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

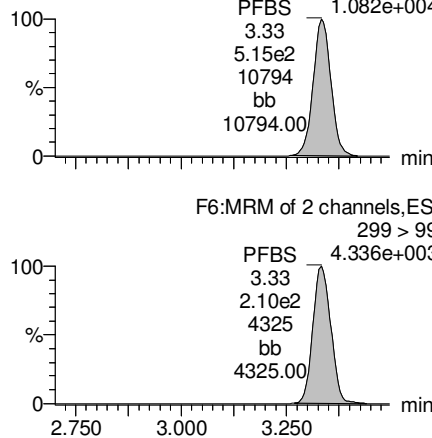
PFPeA  
3.06  
2.51e3  
54128  
bb  
4330.95



**Total PFBS**

F6:MRM of 2 channels,ES-  
299 > 79.7

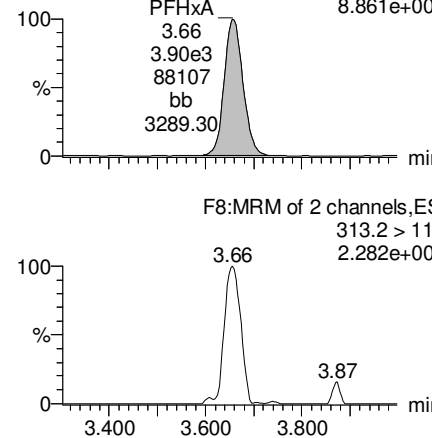
PFBS  
3.33  
5.15e2  
10794  
bb  
10794.00



**PFHxA**

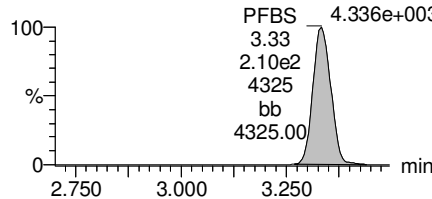
F8:MRM of 2 channels,ES-  
313.2 > 268.9

PFHxA  
3.66  
3.90e3  
88107  
bb  
3289.30



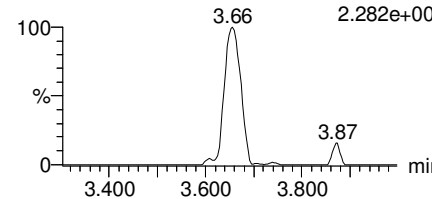
F6:MRM of 2 channels,ES-  
299 > 99

PFBS  
3.33  
2.10e2  
4325  
bb  
4325.00



F8:MRM of 2 channels,ES-  
313.2 > 119

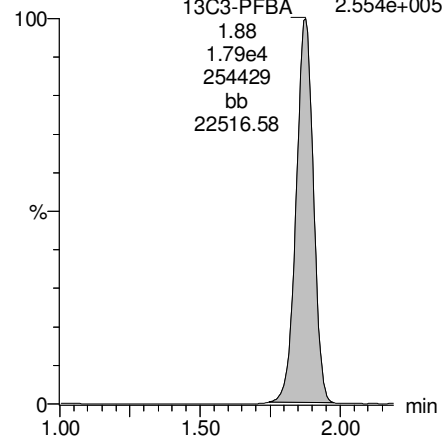
PFHxA  
3.66  
2.282e+002



**13C3-PFBA**

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

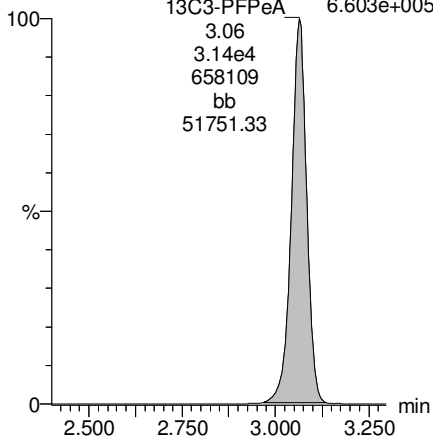
13C3-PFBA  
1.88  
1.79e4  
254429  
bb  
22516.58



**13C3-PFPeA**

F5:MRM of 1 channel,ES-  
266 > 221.8

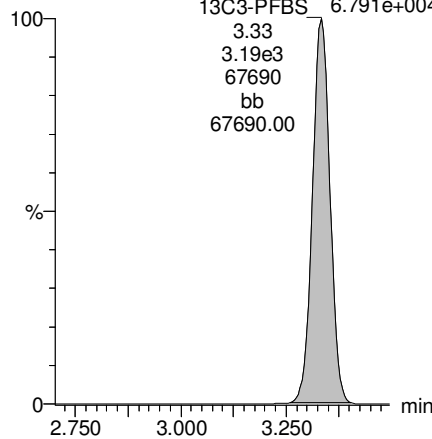
13C3-PFPeA  
3.06  
3.14e4  
658109  
bb  
51751.33



**13C3-PFBS**

F7:MRM of 1 channel,ES-  
302 > 98.8

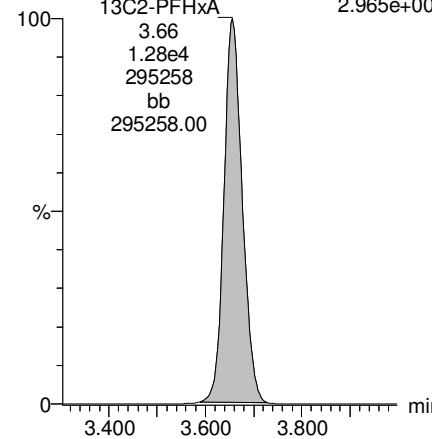
13C3-PFBS  
3.33  
3.19e3  
67690  
bb  
67690.00



**13C2-PFHxA**

F9:MRM of 1 channel,ES-  
315 > 269.8

13C2-PFHxA  
3.66  
1.28e4  
295258  
bb  
295258.00



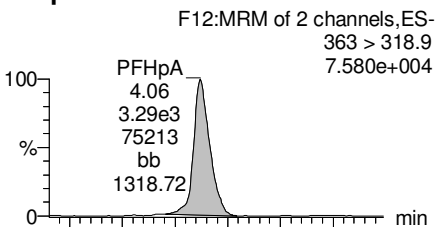
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

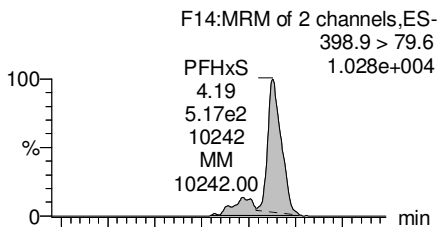
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_5, Date: 15-Jun-2017, Time: 22:56:13, ID: ST170615M4-3 PFC CS0 17F1508, Description: PFC CS0 17F1508

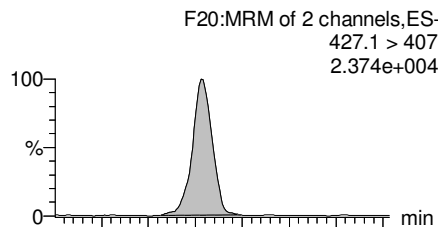
**PFHpA**



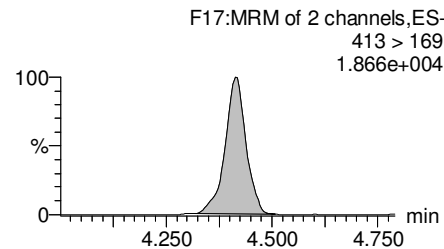
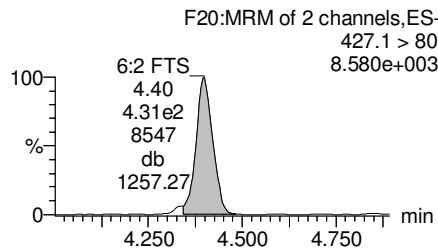
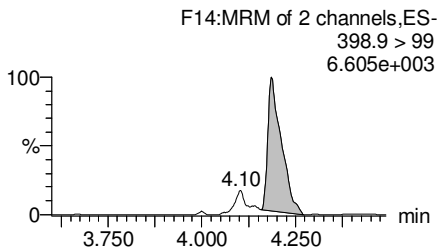
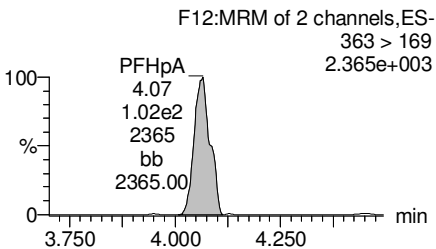
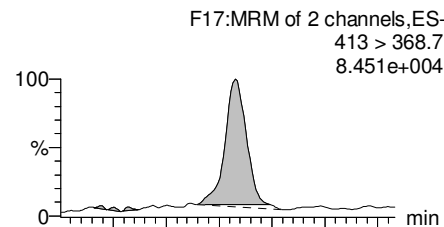
**Total PFHxS**



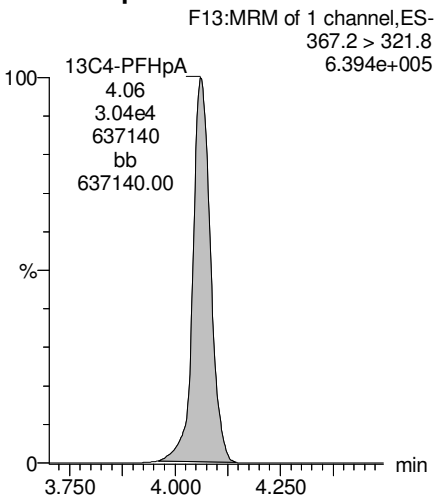
**6:2 FTS**



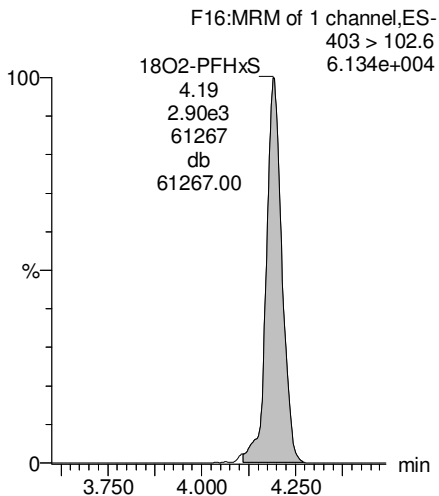
**Total PFOA**



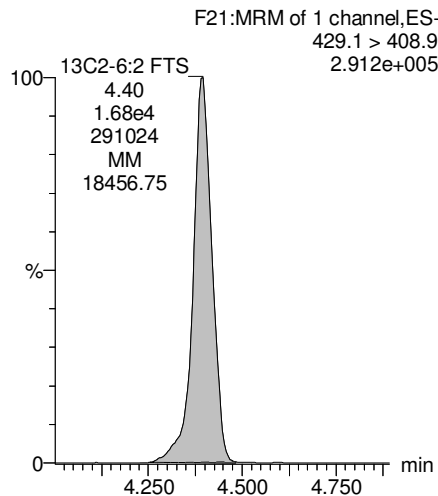
**13C4-PFHpA**



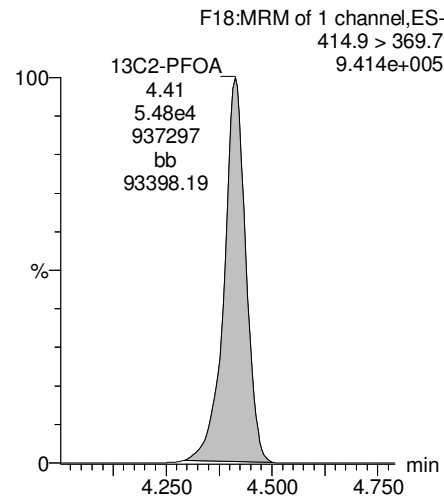
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



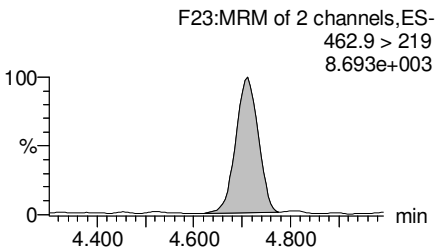
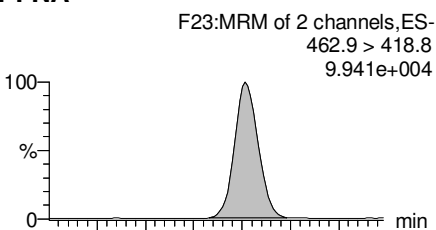
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

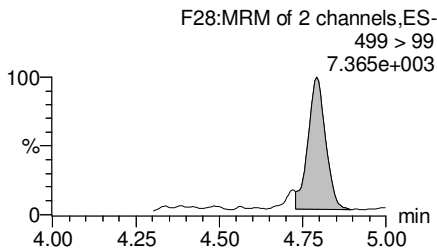
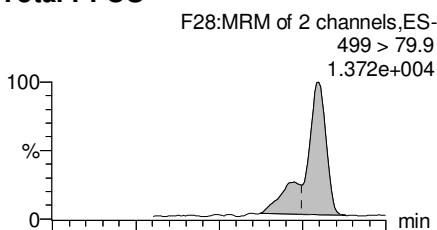
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_5, Date: 15-Jun-2017, Time: 22:56:13, ID: ST170615M4-3 PFC CS0 17F1508, Description: PFC CS0 17F1508

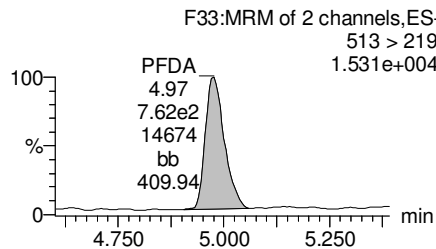
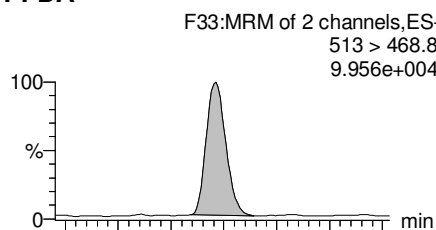
**PFNA**



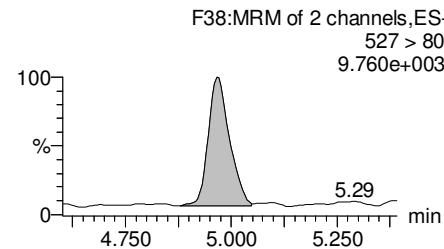
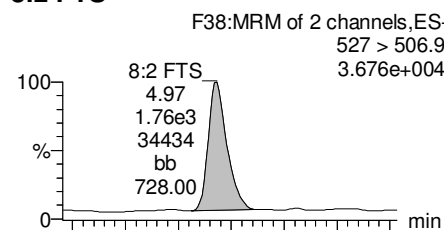
**Total PFOS**



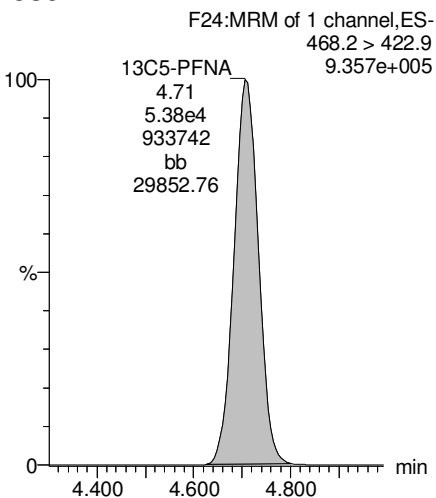
**PFDA**



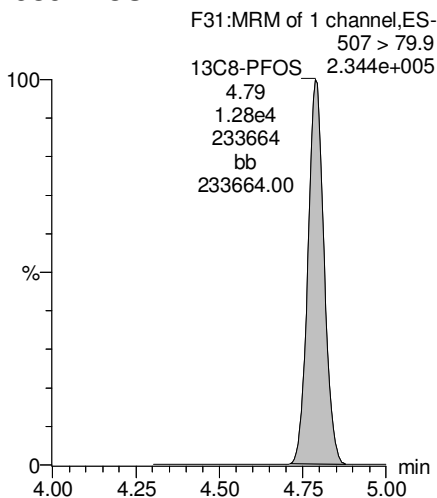
**8:2 FTS**



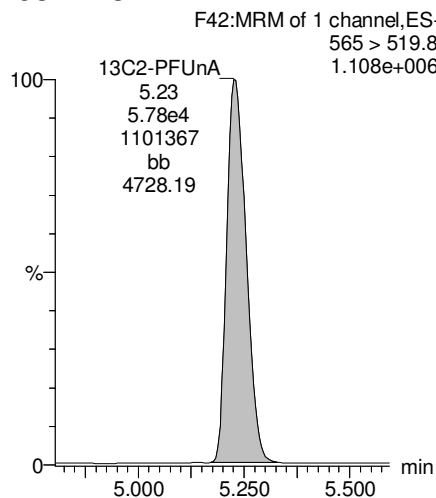
**13C5-PFNA**



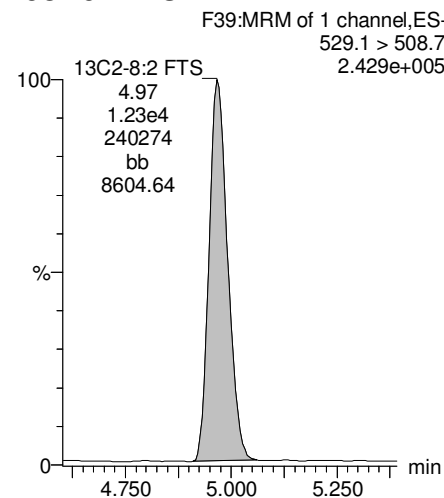
**13C8-PFOS**



**13C2-PFUnA**



**13C2-8:2 FTS**



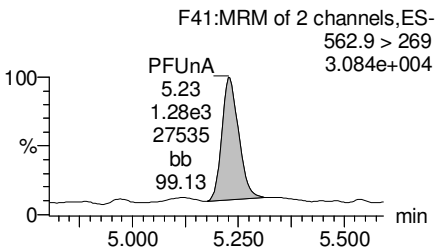
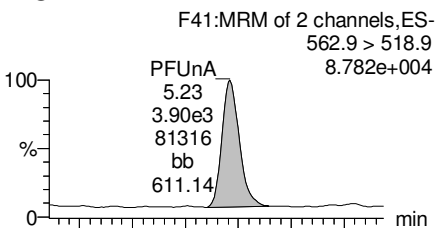
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

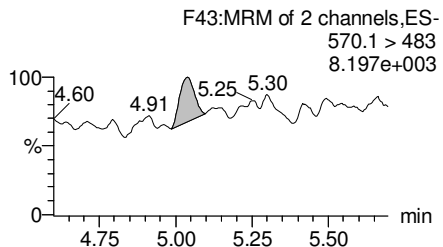
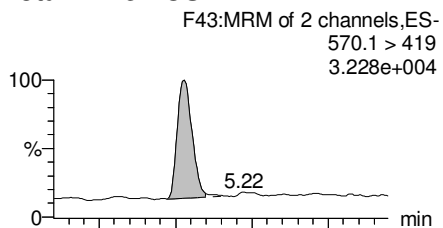
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_5, Date: 15-Jun-2017, Time: 22:56:13, ID: ST170615M4-3 PFC CS0 17F1508, Description: PFC CS0 17F1508

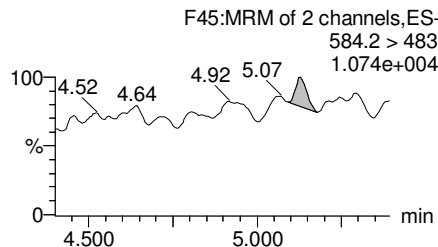
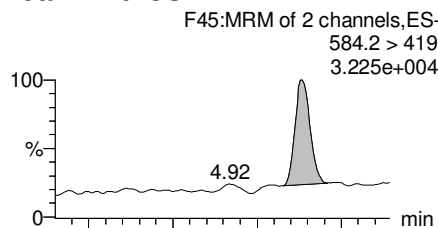
**PFUnA**



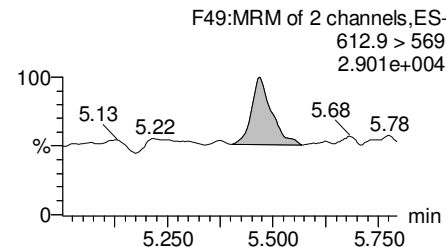
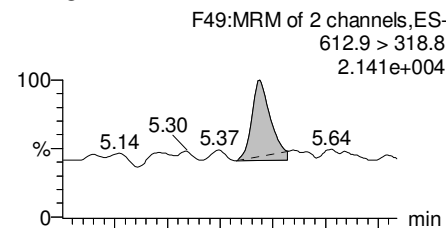
**Total N-Me-FOSAA**



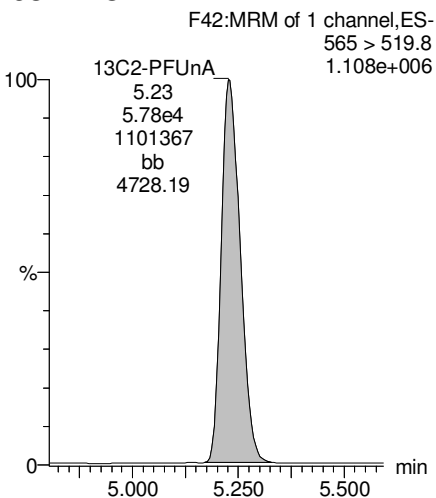
**Total N-EtFOSAA**



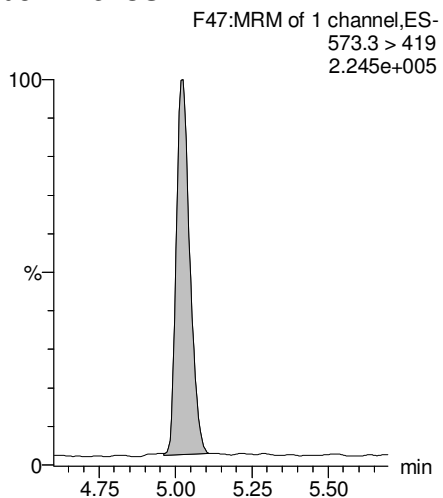
**PFDoA**



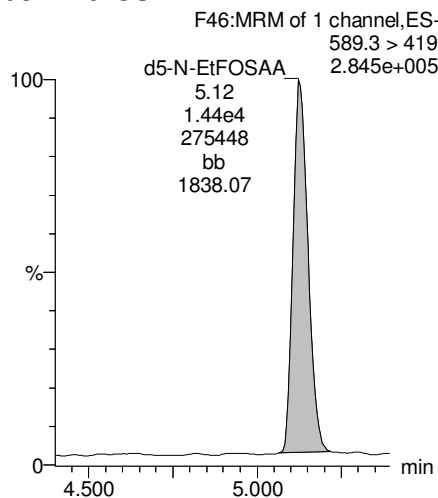
**13C2-PFUnA**



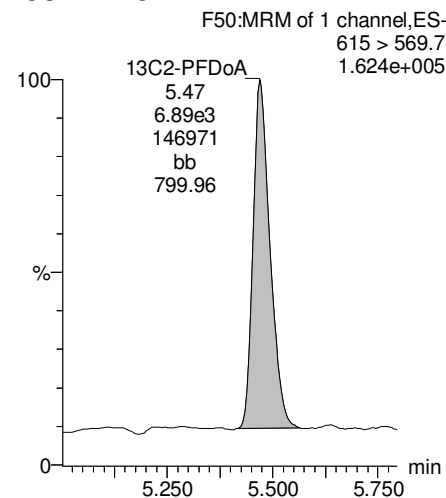
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



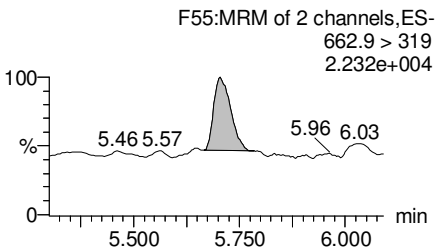
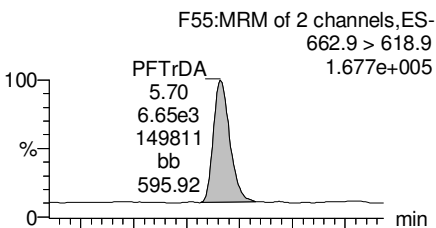
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

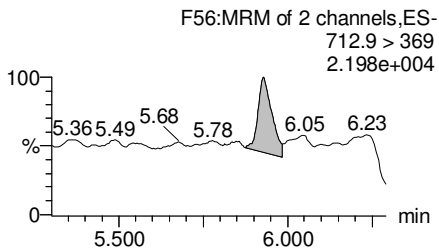
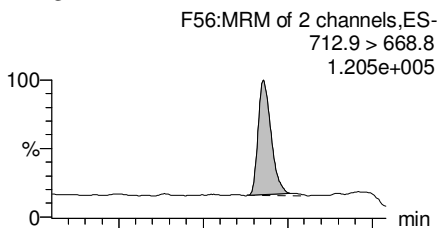
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_5, Date: 15-Jun-2017, Time: 22:56:13, ID: ST170615M4-3 PFC CS0 17F1508, Description: PFC CS0 17F1508

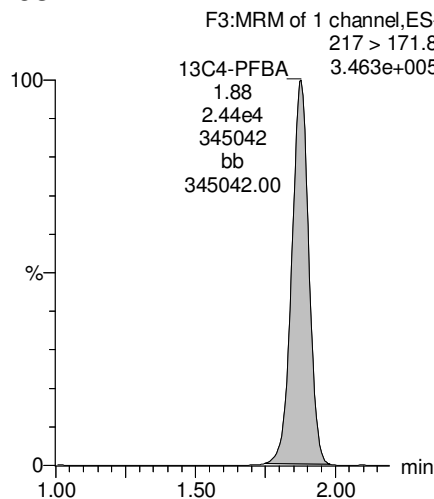
**PFTrDA**



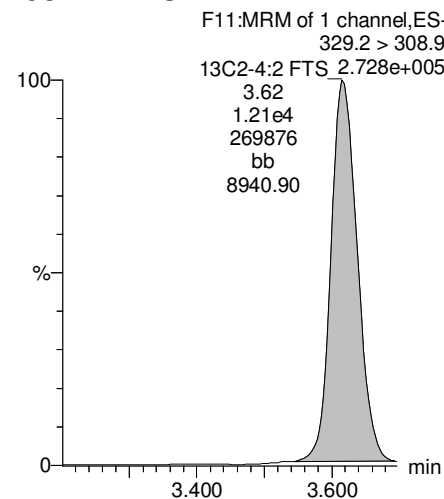
**PFTeDA**



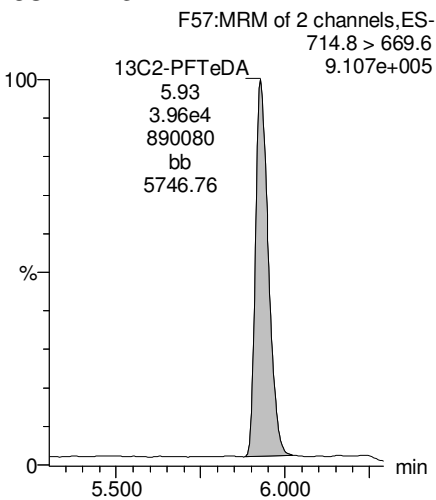
**13C4-PFBA**



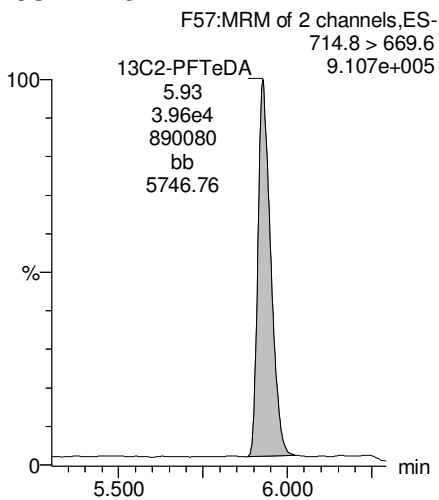
**13C2-4:2 FTS**



**13C2-PFTeDA**



**13C2-PFTeDA**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

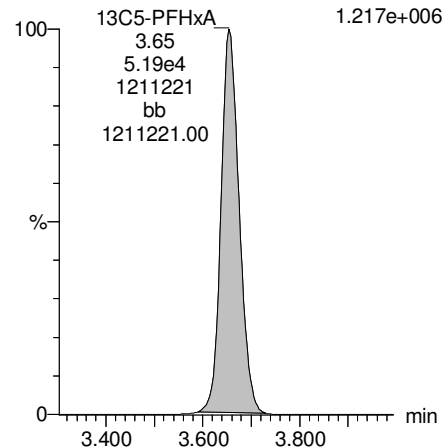
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_5, Date: 15-Jun-2017, Time: 22:56:13, ID: ST170615M4-3 PFC CS0 17F1508, Description: PFC CS0 17F1508

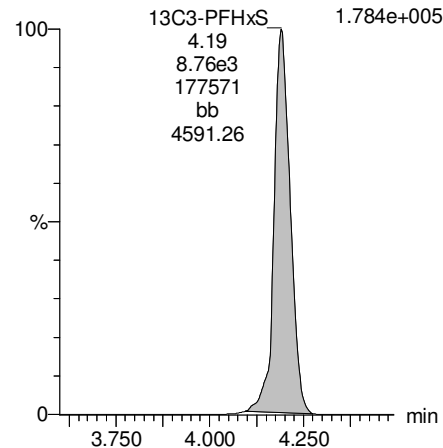
13C5-PFHxA

F10:MRM of 1 channel,ES-  
318 > 272.9  
1.217e+006



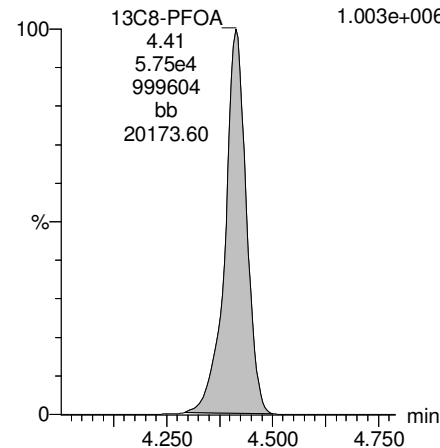
13C3-PFHxS

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
1.784e+005



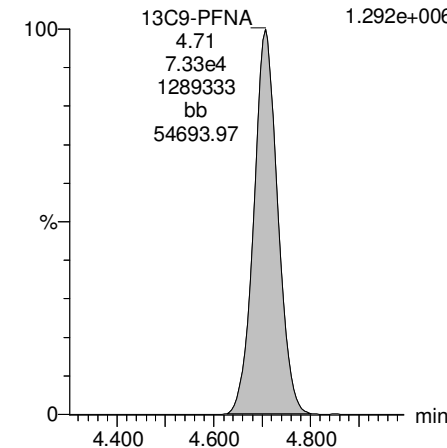
13C8-PFOA

F19:MRM of 1 channel,ES-  
421.3 > 376  
1.003e+006



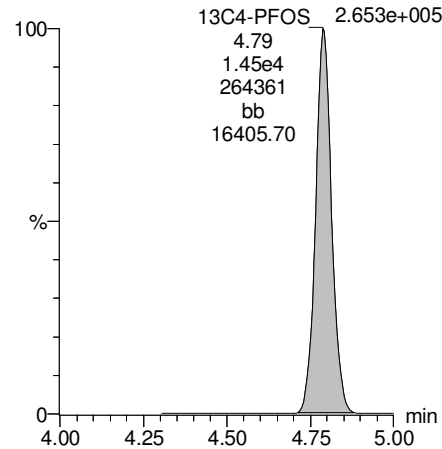
13C9-PFNA

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.292e+006



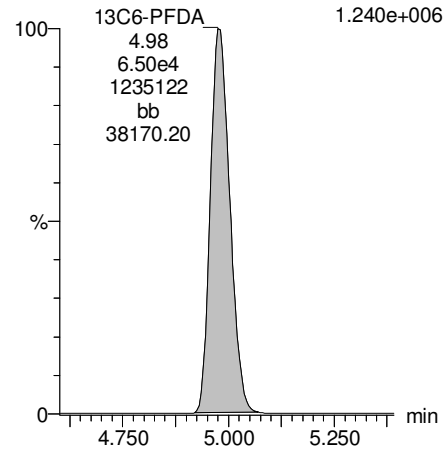
13C4-PFOS

F29:MRM of 1 channel,ES-  
503 > 79.9  
2.653e+005



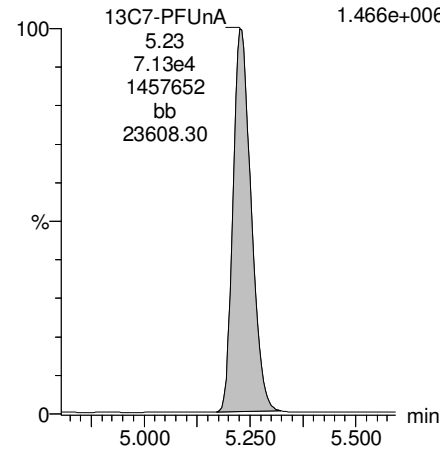
13C6-PFDA

F36:MRM of 1 channel,ES-  
519.1 > 473.7  
1.240e+006



13C7-PFUnA

F44:MRM of 1 channel,ES-  
570.1 > 524.8  
1.466e+006



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

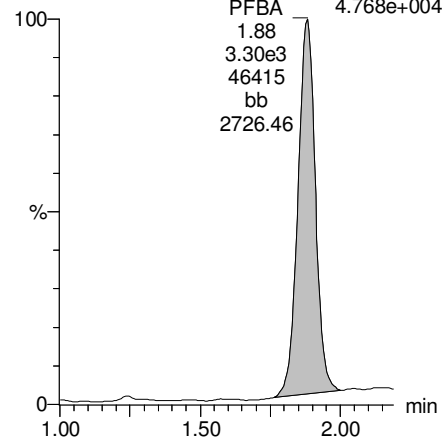
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_6, Date: 15-Jun-2017, Time: 23:07:56, ID: ST170615M4-4 PFC CS1 17F1509, Description: PFC CS1 17F1509

**PFBA**

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

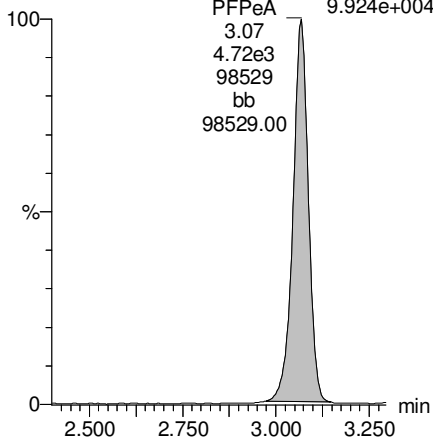
PFBA  
1.88  
3.30e3  
46415  
bb  
2726.46  
4.768e+004



**PFPeA**

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

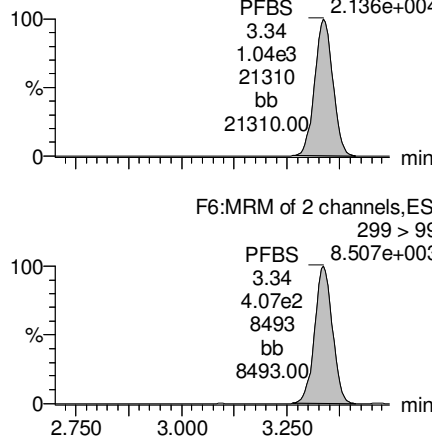
PFPeA  
3.07  
4.72e3  
98529  
bb  
98529.00  
9.924e+004



**Total PFBS**

F6:MRM of 2 channels,ES-  
299 > 79.7

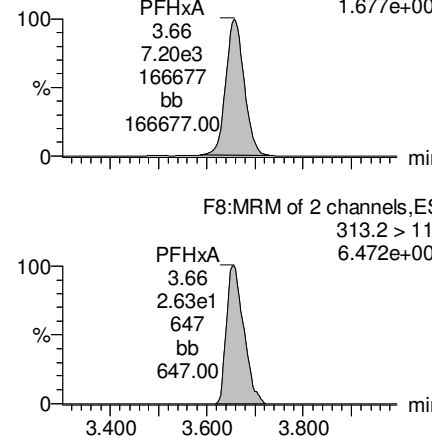
PFBS  
3.34  
1.04e3  
21310  
bb  
21310.00  
2.136e+004



**PFHxA**

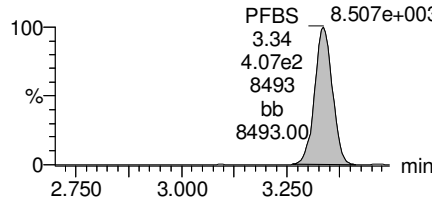
F8:MRM of 2 channels,ES-  
313.2 > 268.9

PFHxA  
3.66  
7.20e3  
166677  
bb  
166677.00  
1.677e+005



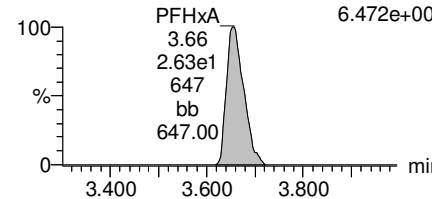
F6:MRM of 2 channels,ES-  
299 > 99

PFBS  
3.34  
4.07e2  
8493  
bb  
8493.00  
8.507e+003



F8:MRM of 2 channels,ES-  
313.2 > 119

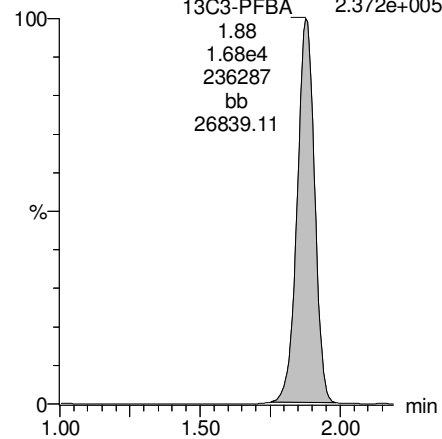
PFHxA  
3.66  
2.63e1  
647  
bb  
647.00  
6.472e+002



**13C3-PFBA**

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

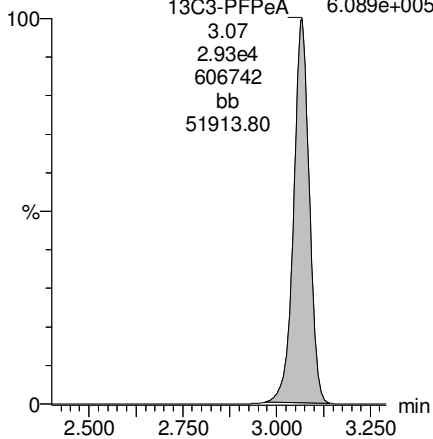
13C3-PFBA  
1.88  
1.68e4  
236287  
bb  
26839.11  
2.372e+005



**13C3-PFPeA**

F5:MRM of 1 channel,ES-  
266 > 221.8

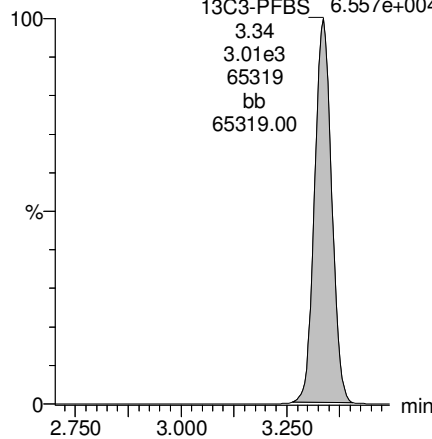
13C3-PFPeA  
3.07  
2.93e4  
606742  
bb  
51913.80  
6.089e+005



**13C3-PFBS**

F7:MRM of 1 channel,ES-  
302 > 98.8

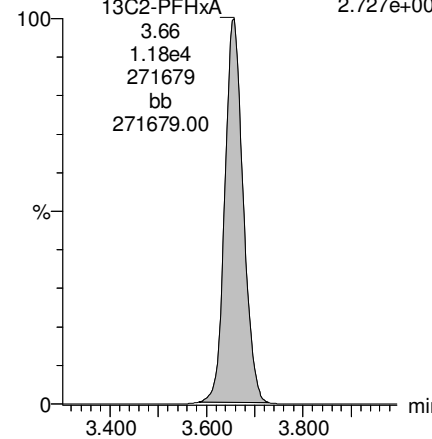
13C3-PFBS  
3.34  
3.01e3  
65319  
bb  
65319.00  
6.557e+004



**13C2-PFHxA**

F9:MRM of 1 channel,ES-  
315 > 269.8

13C2-PFHxA  
3.66  
1.18e4  
271679  
bb  
271679.00  
2.727e+005





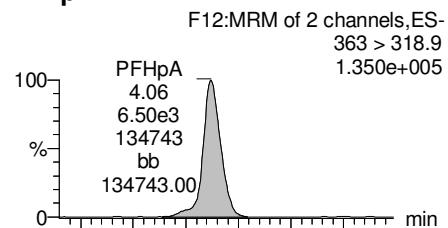
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

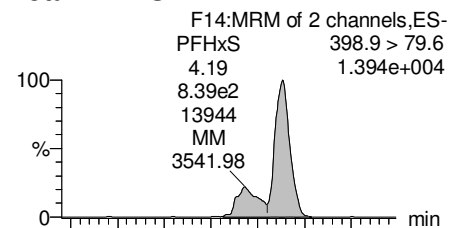
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_6, Date: 15-Jun-2017, Time: 23:07:56, ID: ST170615M4-4 PFC CS1 17F1509, Description: PFC CS1 17F1509

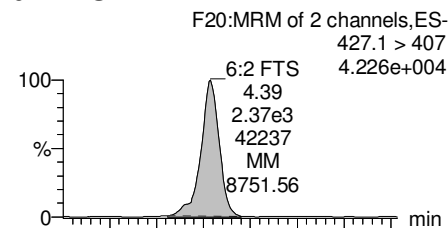
**PFHpA**



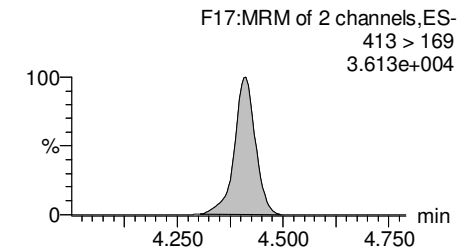
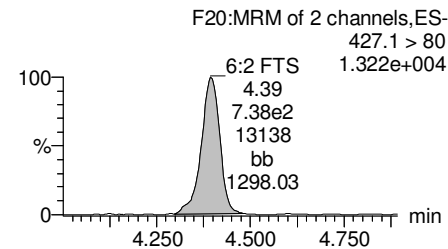
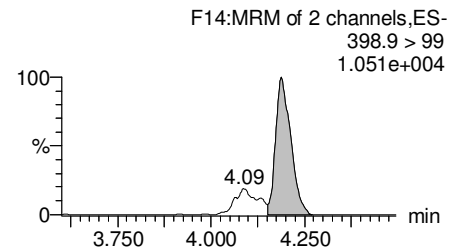
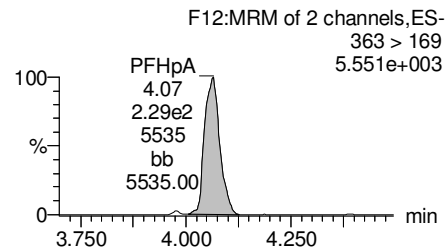
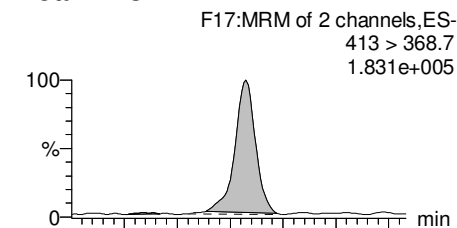
**Total PFHxS**



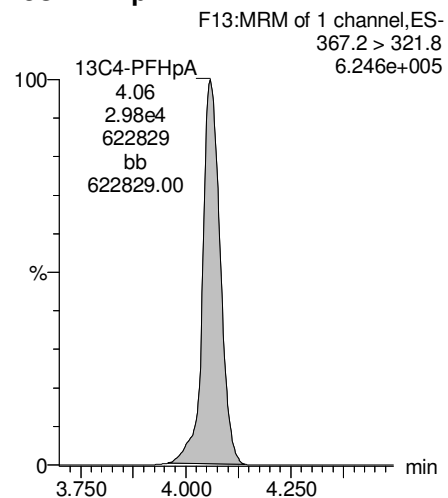
**6:2 FTS**



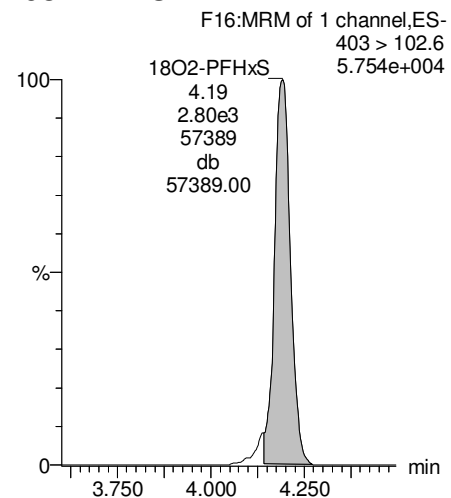
**Total PFOA**



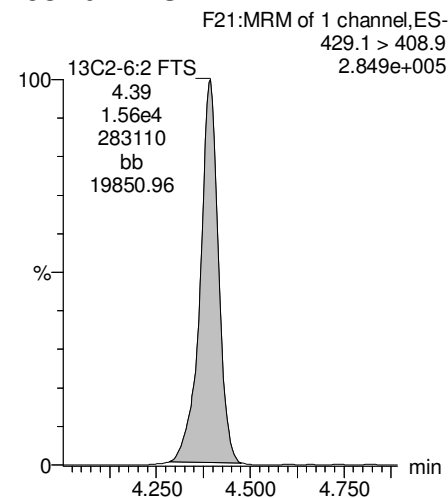
**13C4-PFHpA**



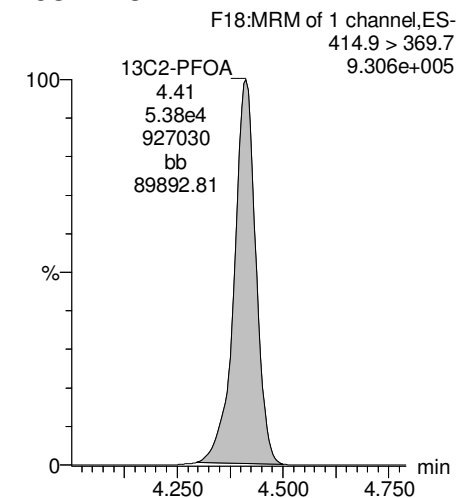
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



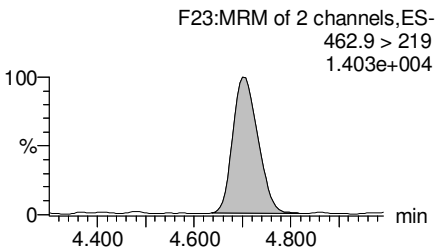
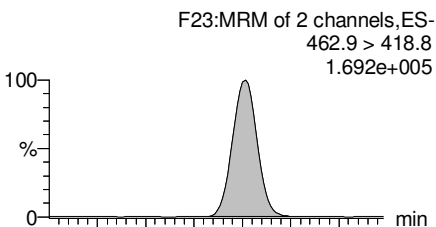
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

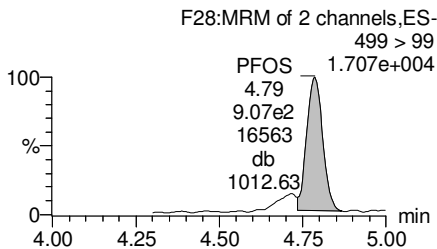
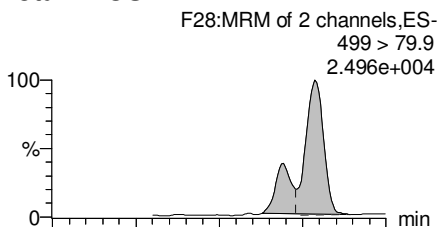
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_6, Date: 15-Jun-2017, Time: 23:07:56, ID: ST170615M4-4 PFC CS1 17F1509, Description: PFC CS1 17F1509

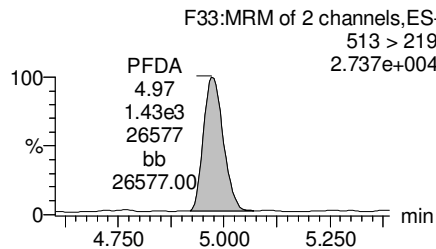
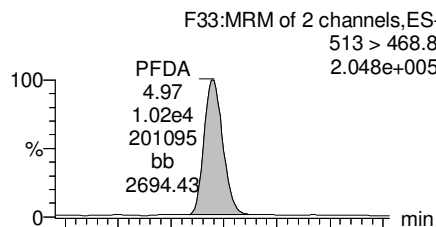
**PFNA**



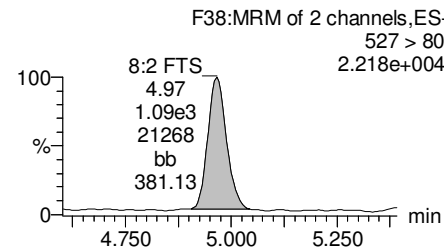
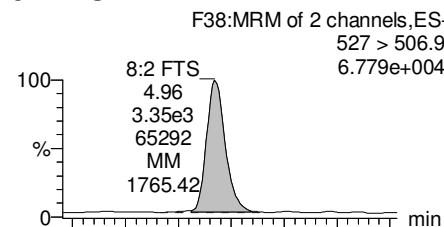
**Total PFOS**



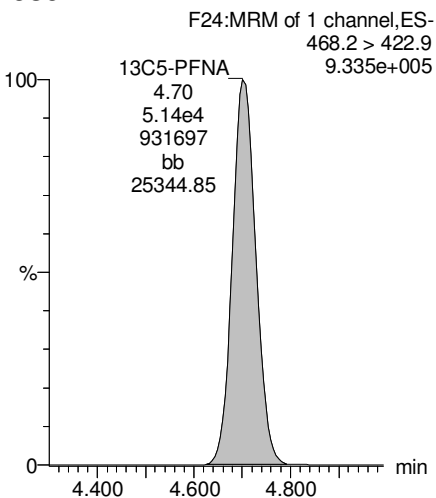
**PFDA**



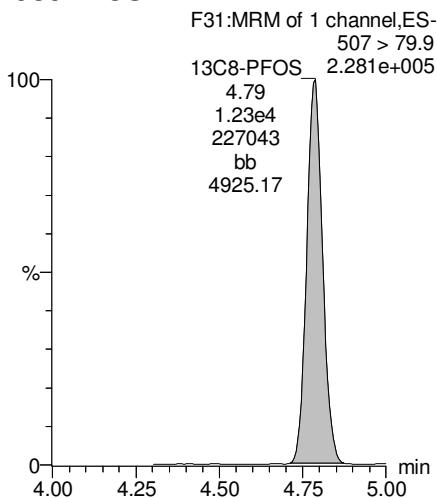
**8:2 FTS**



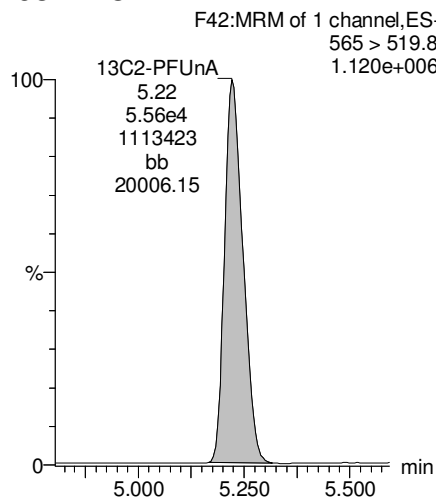
**13C5-PFNA**



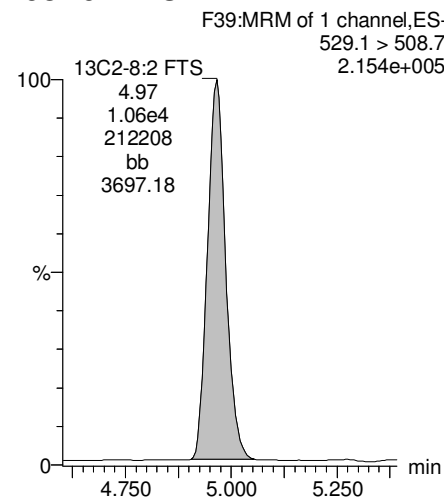
**13C8-PFOS**



**13C2-PFUnA**



**13C2-8:2 FTS**



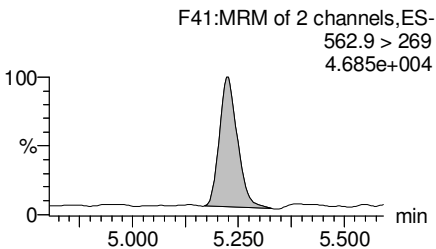
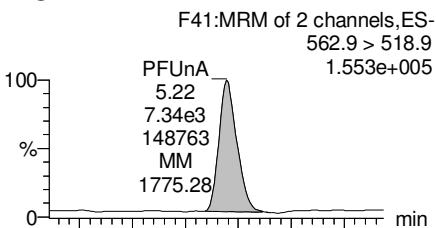
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

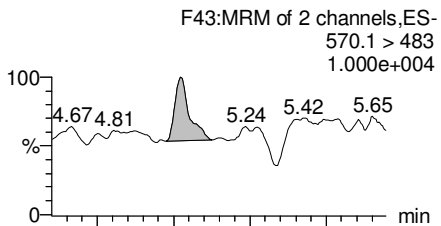
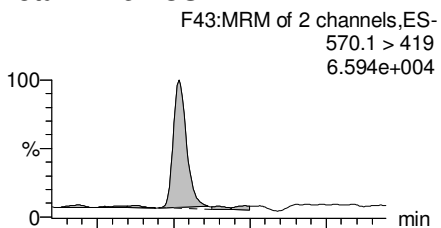
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Name: 170615M4\_6, Date: 15-Jun-2017, Time: 23:07:56, ID: ST170615M4-4 PFC CS1 17F1509, Description: PFC CS1 17F1509

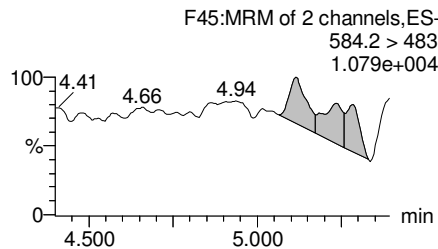
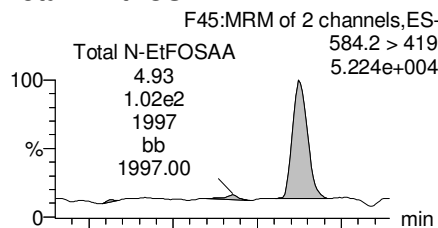
**PFUnA**



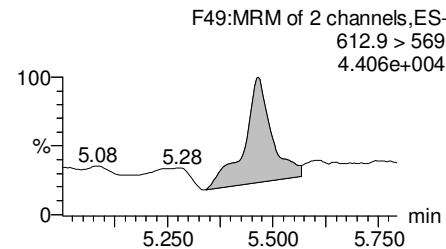
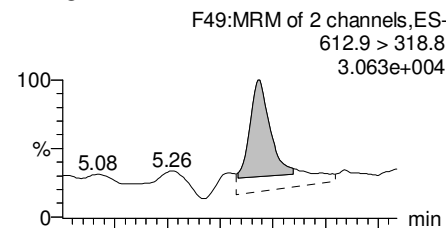
**Total N-Me-FOSAA**



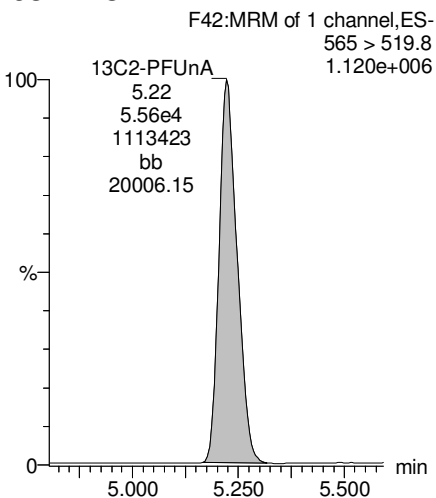
**Total N-EtFOSAA**



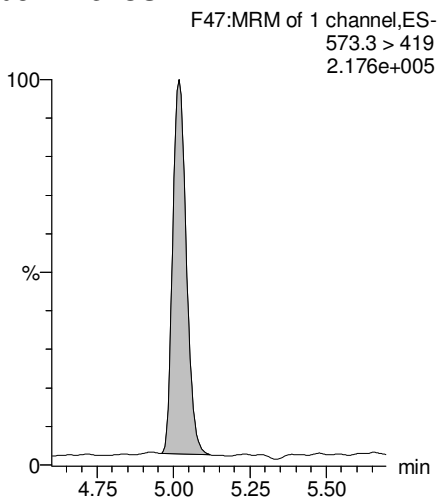
**PFDoA**



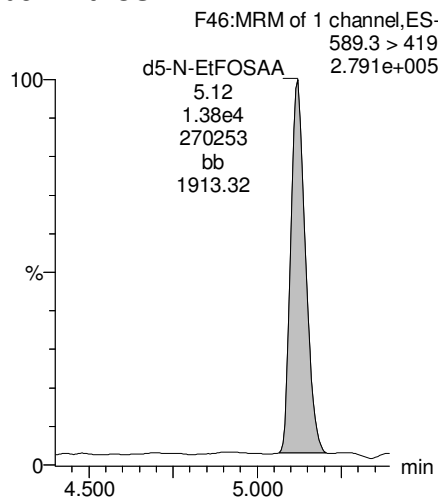
**13C2-PFUnA**



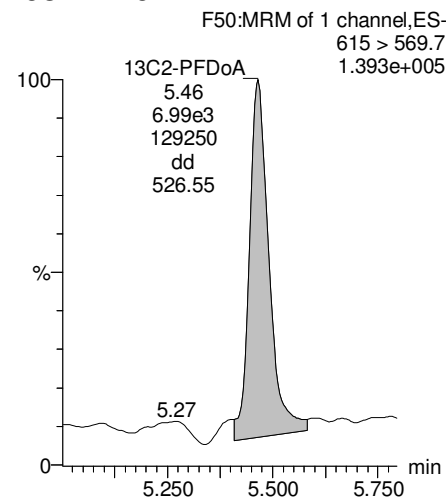
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



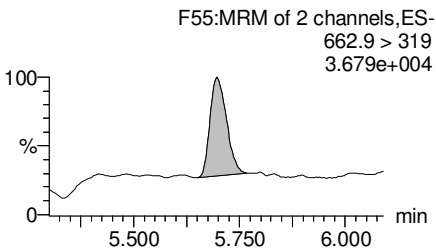
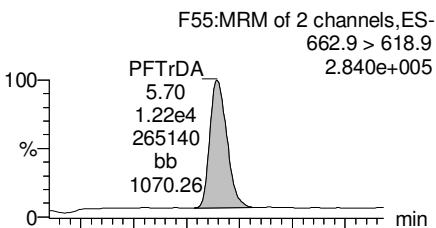
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

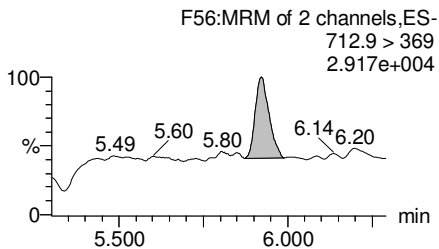
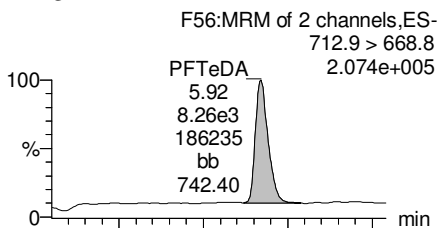
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_6, Date: 15-Jun-2017, Time: 23:07:56, ID: ST170615M4-4 PFC CS1 17F1509, Description: PFC CS1 17F1509

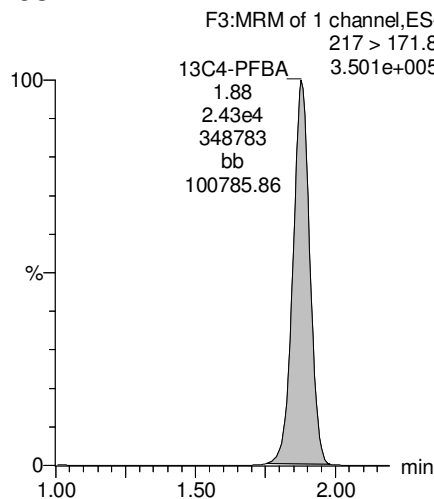
**PFTrDA**



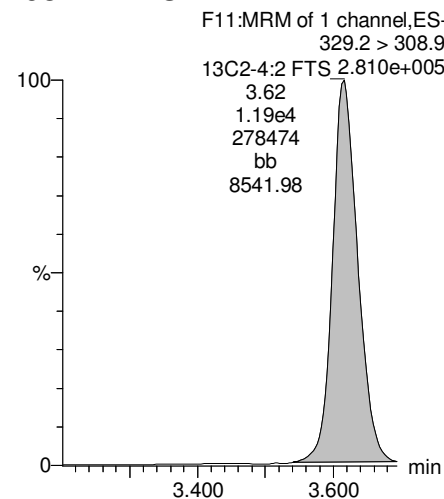
**PFTeDA**



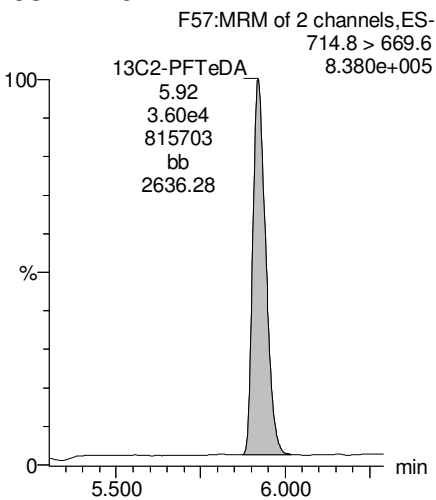
**13C4-PFBA**



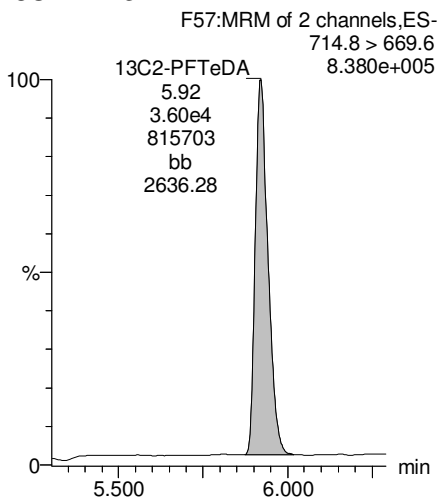
**13C2-4:2 FTS**



**13C2-PFTeDA**



**13C2-PFTeDA**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

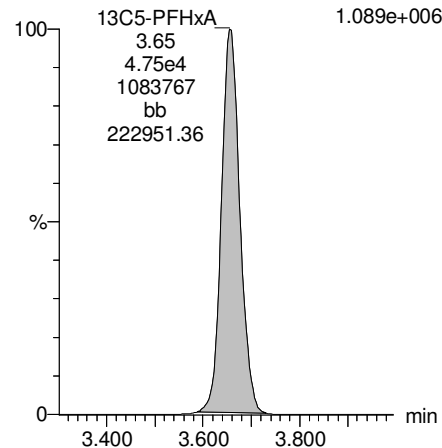
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_6, Date: 15-Jun-2017, Time: 23:07:56, ID: ST170615M4-4 PFC CS1 17F1509, Description: PFC CS1 17F1509

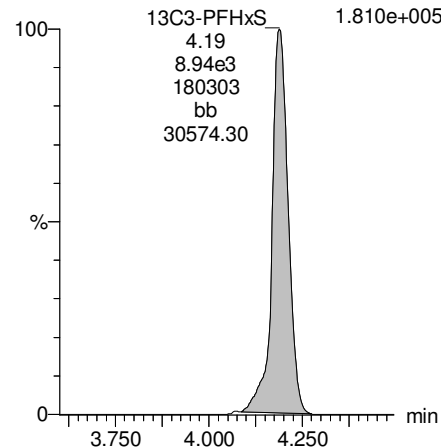
13C5-PFHxA

F10:MRM of 1 channel,ES-  
318 > 272.9  
1.089e+006



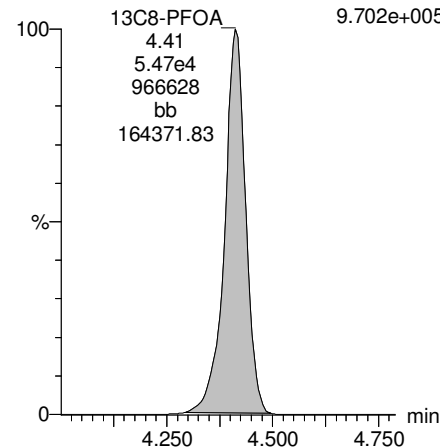
13C3-PFHxS

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
1.810e+005



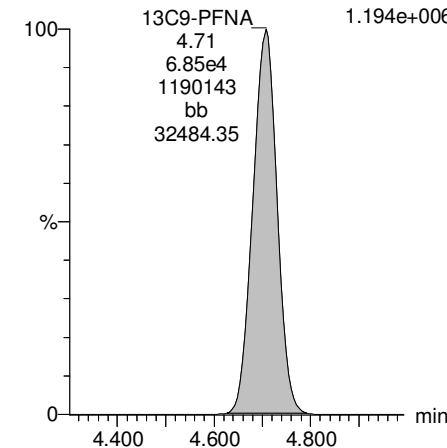
13C8-PFOA

F19:MRM of 1 channel,ES-  
421.3 > 376  
9.702e+005



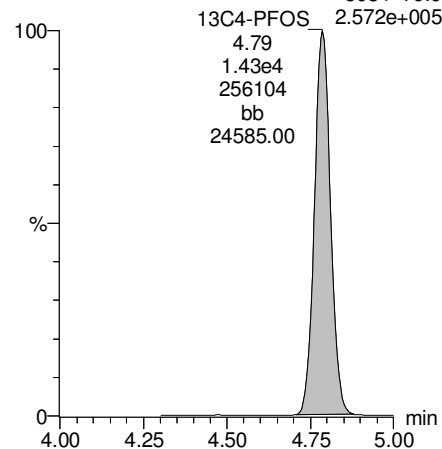
13C9-PFNA

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.194e+006



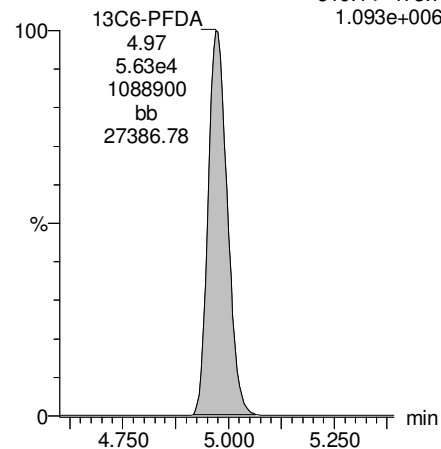
13C4-PFOS

F29:MRM of 1 channel,ES-  
503 > 79.9  
2.572e+005



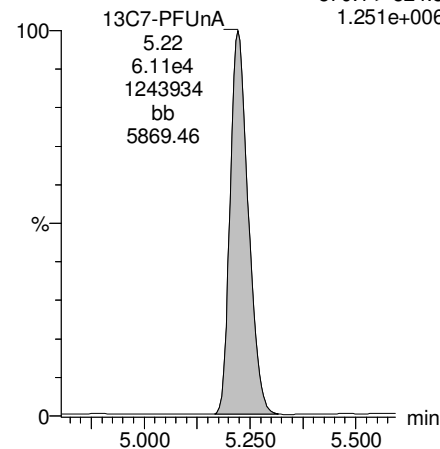
13C6-PFDA

F36:MRM of 1 channel,ES-  
519.1 > 473.7  
1.093e+006



13C7-PFUnA

F44:MRM of 1 channel,ES-  
570.1 > 524.8  
1.251e+006



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

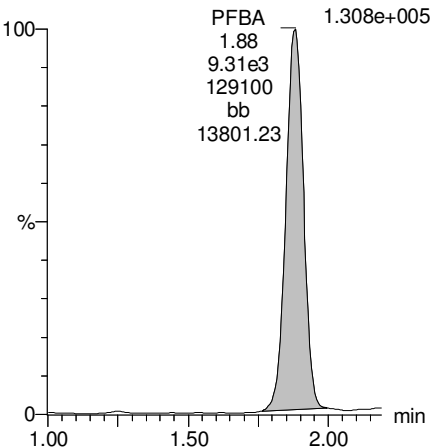
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_7, Date: 15-Jun-2017, Time: 23:19:39, ID: ST170615M4-5 PFC CS2 17F1510, Description: PFC CS2 17F1510

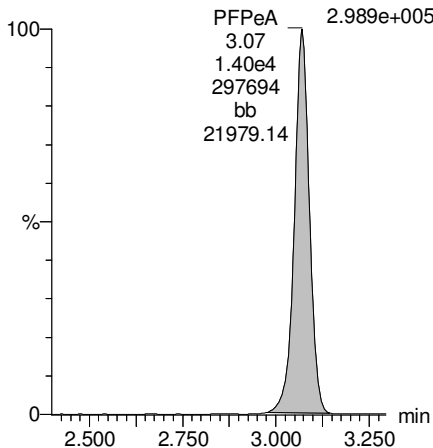
**PFBA**

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



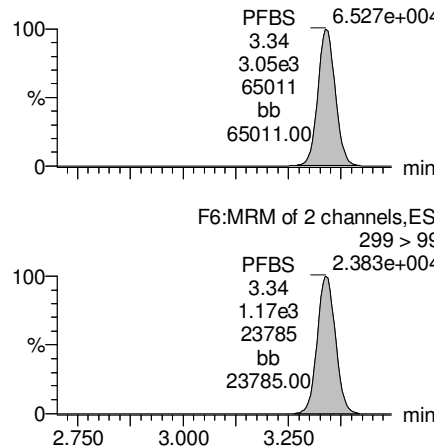
**PFPeA**

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



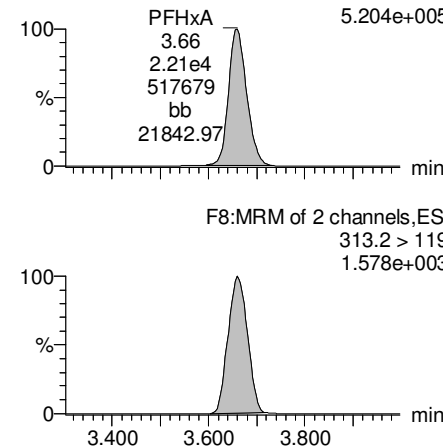
**Total PFBS**

F6:MRM of 2 channels,ES-  
299 > 79.7



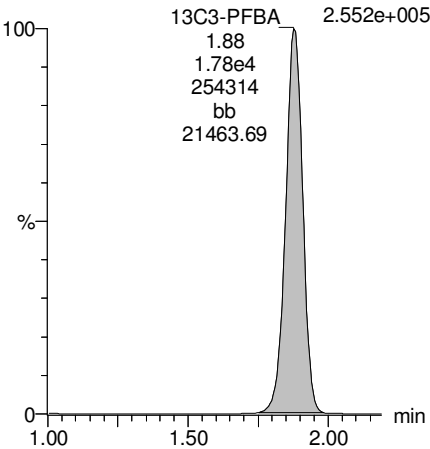
**PFHxA**

F8:MRM of 2 channels,ES-  
313.2 > 268.9



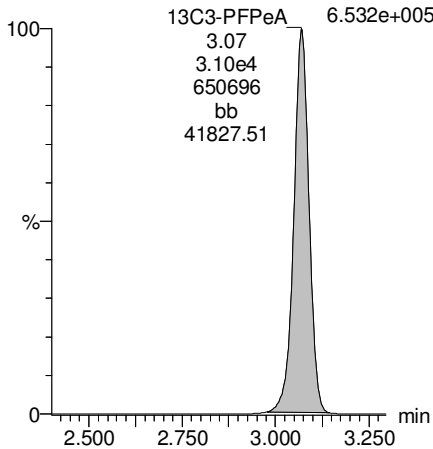
**13C3-PFBA**

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



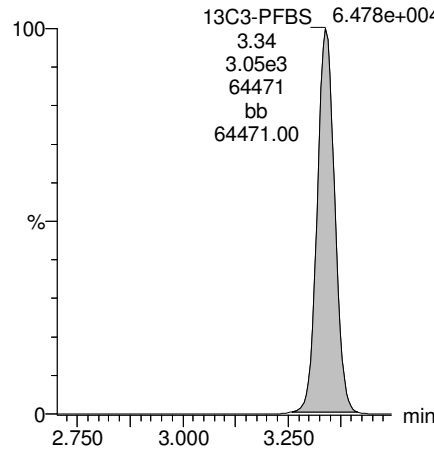
**13C3-PFPeA**

F5:MRM of 1 channel,ES-  
266 > 221.8



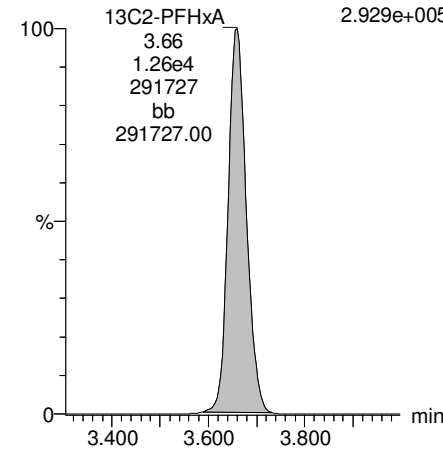
**13C3-PFBS**

F7:MRM of 1 channel,ES-  
302 > 98.8



**13C2-PFHxA**

F9:MRM of 1 channel,ES-  
315 > 269.8



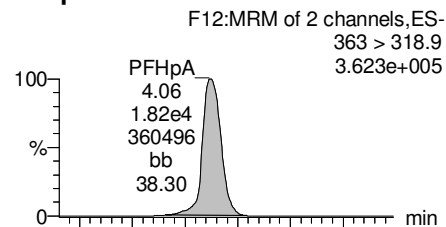
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

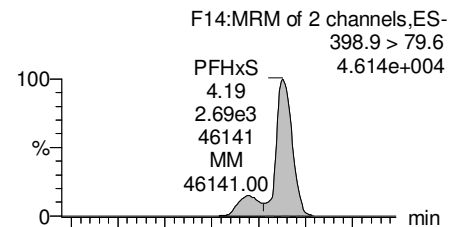
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Name: 170615M4\_7, Date: 15-Jun-2017, Time: 23:19:39, ID: ST170615M4-5 PFC CS2 17F1510, Description: PFC CS2 17F1510

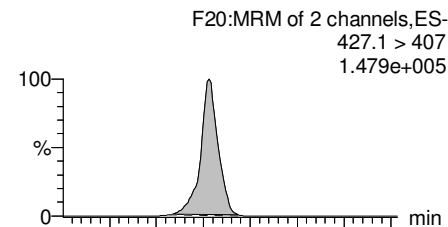
**PFHpA**



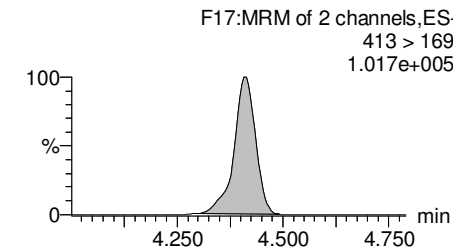
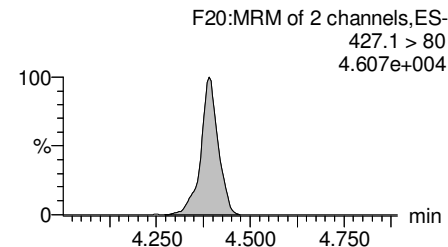
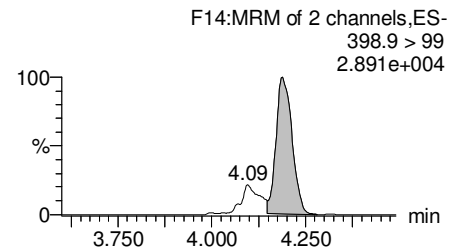
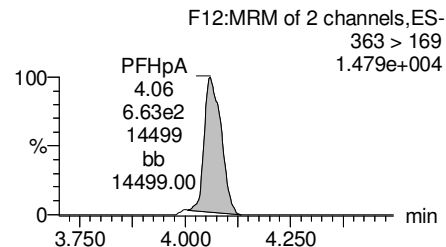
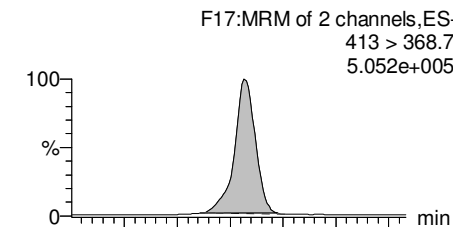
**Total PFHxS**



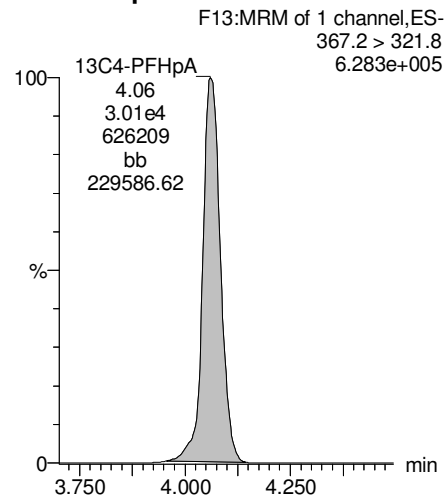
**6:2 FTS**



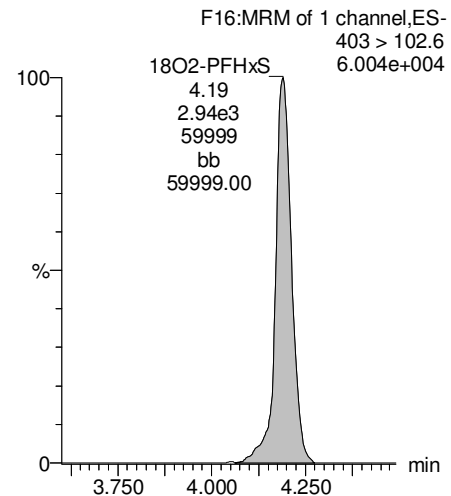
**Total PFOA**



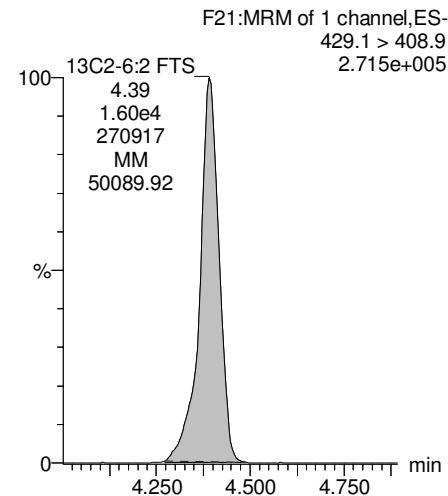
**13C4-PFHpA**



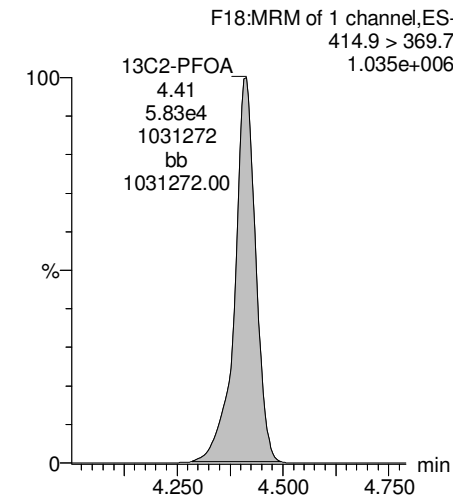
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



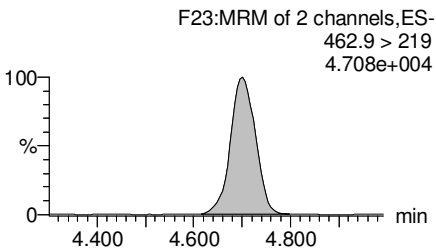
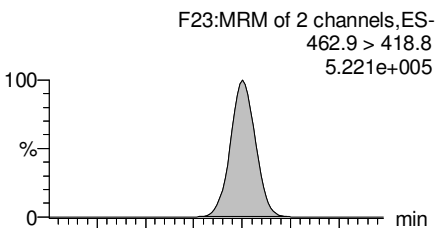
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

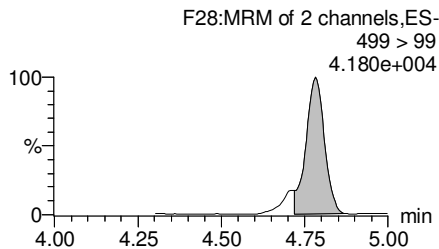
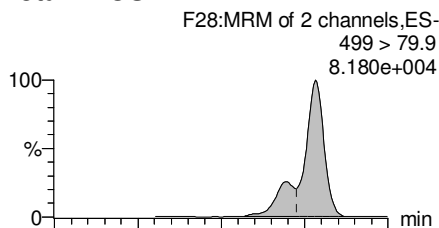
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_7, Date: 15-Jun-2017, Time: 23:19:39, ID: ST170615M4-5 PFC CS2 17F1510, Description: PFC CS2 17F1510

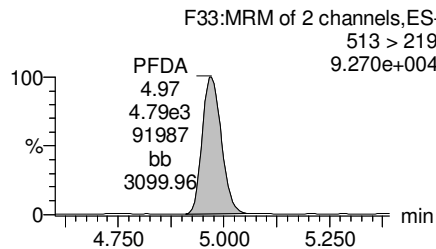
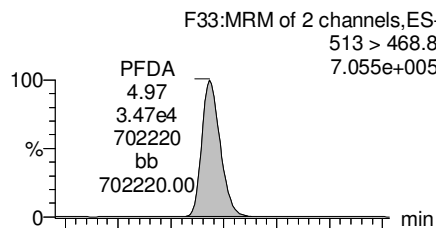
**PFNA**



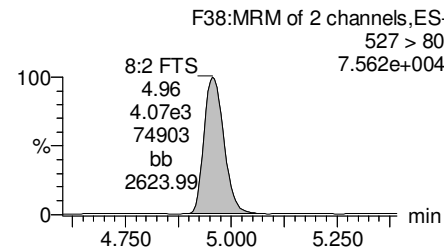
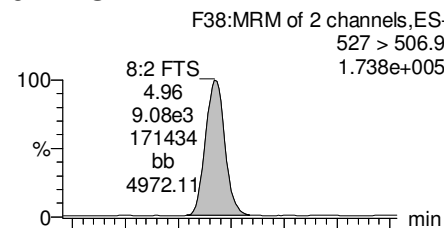
**Total PFOS**



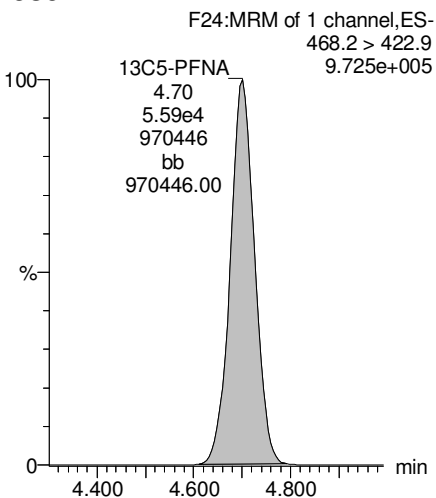
**PFDA**



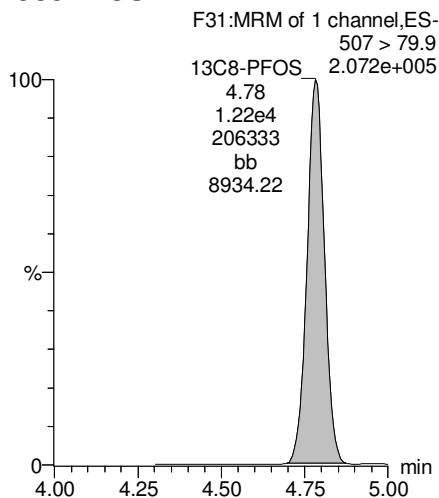
**8:2 FTS**



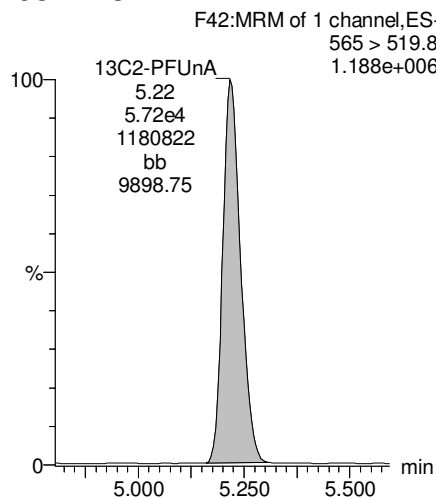
**13C5-PFNA**



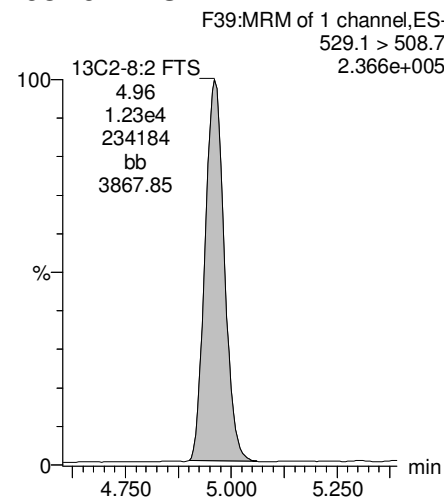
**13C8-PFOS**



**13C2-PFUnA**



**13C2-8:2 FTS**





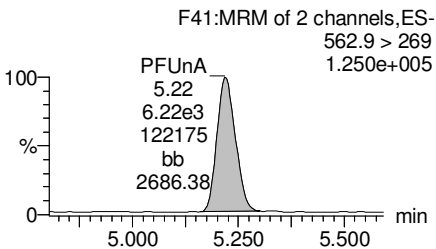
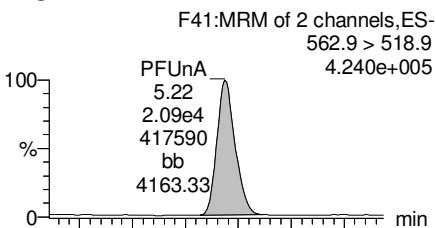
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

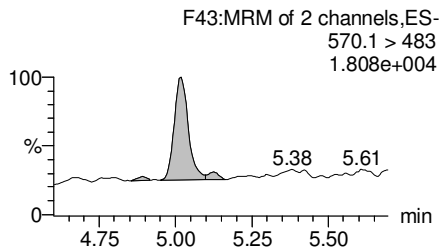
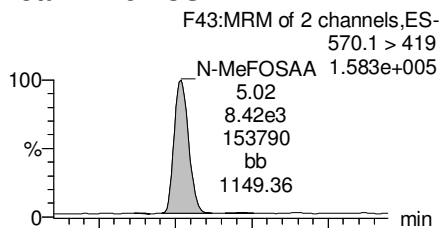
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_7, Date: 15-Jun-2017, Time: 23:19:39, ID: ST170615M4-5 PFC CS2 17F1510, Description: PFC CS2 17F1510

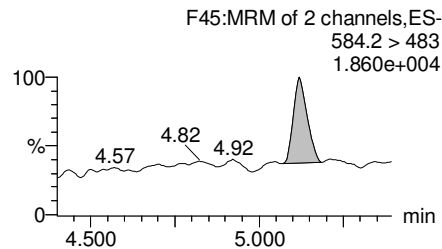
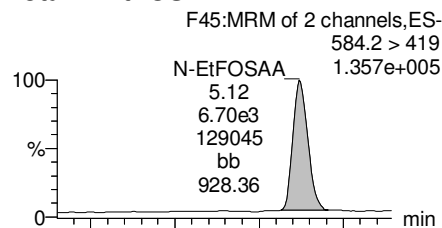
**PFUnA**



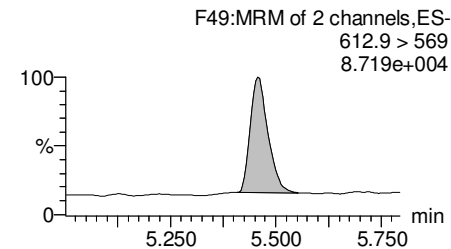
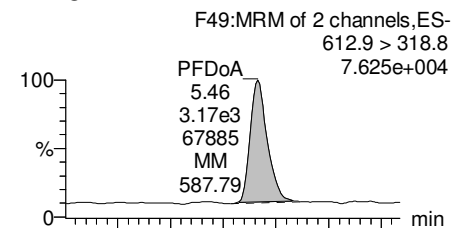
**Total N-Me-FOSAA**



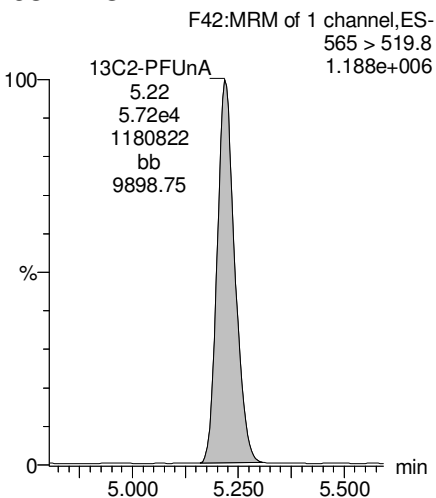
**Total N-EtFOSAA**



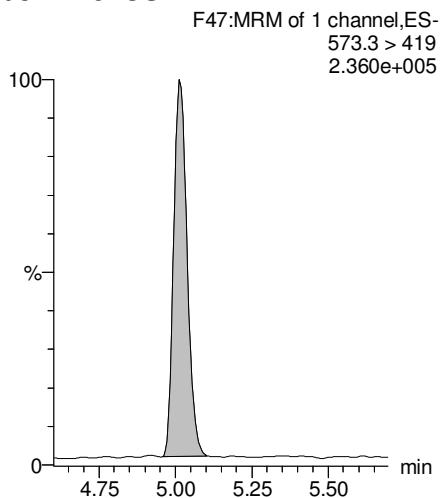
**PFDoA**



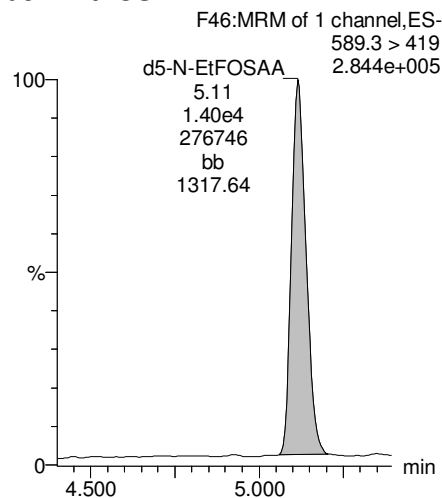
**13C2-PFUnA**



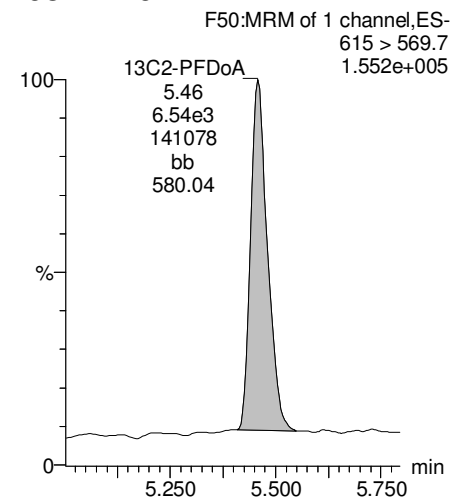
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



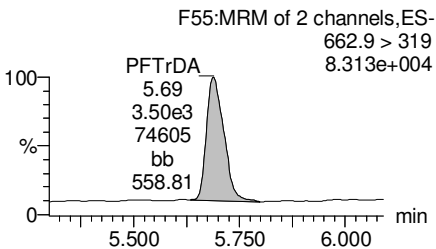
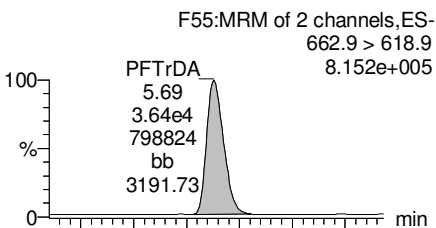
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

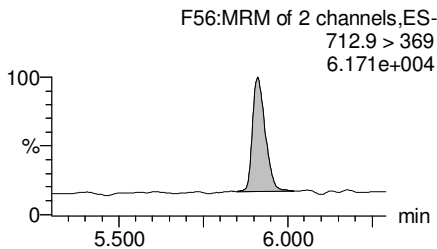
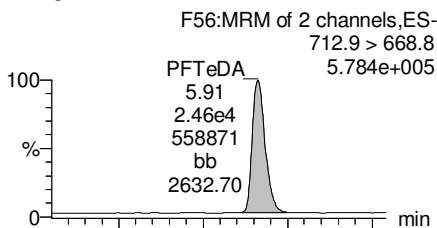
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_7, Date: 15-Jun-2017, Time: 23:19:39, ID: ST170615M4-5 PFC CS2 17F1510, Description: PFC CS2 17F1510

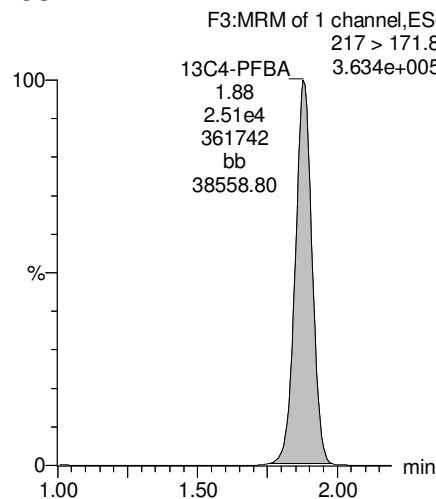
**PFTrDA**



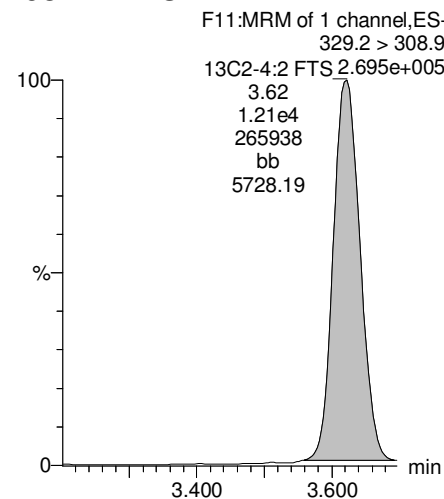
**PFTeDA**



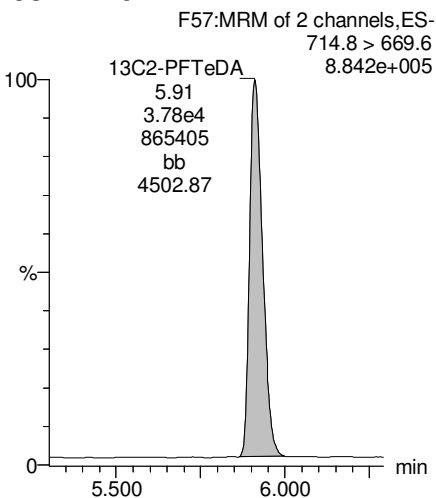
**13C4-PFBA**



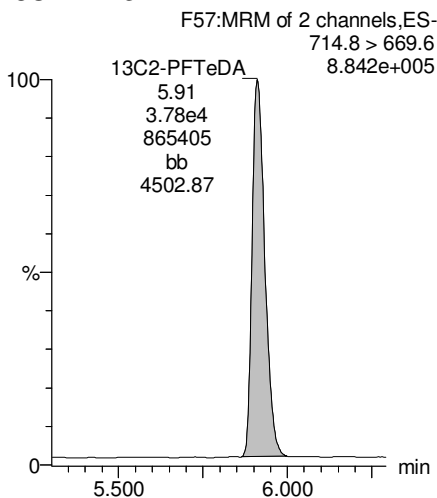
**13C2-4:2 FTS**



**13C2-PFTeDA**



**13C2-PFTeDA**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

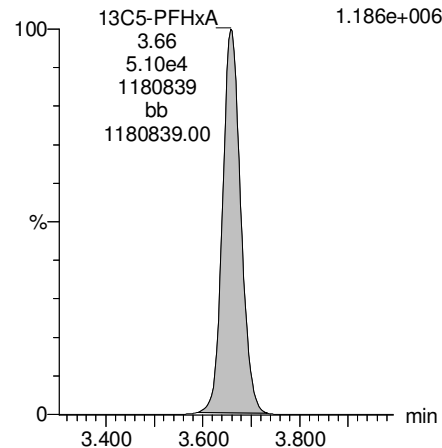
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_7, Date: 15-Jun-2017, Time: 23:19:39, ID: ST170615M4-5 PFC CS2 17F1510, Description: PFC CS2 17F1510

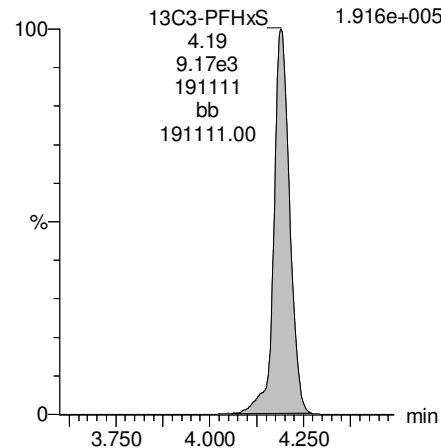
13C5-PFHxA

F10:MRM of 1 channel,ES-  
318 > 272.9  
1.186e+006



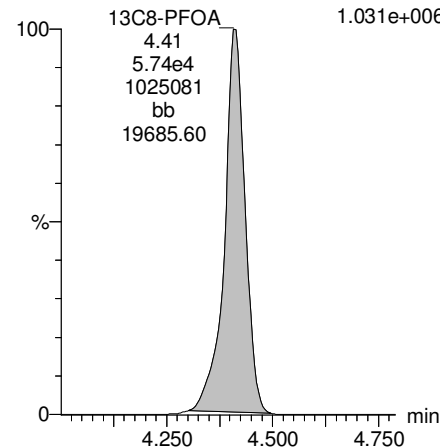
13C3-PFHxS

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
1.916e+005



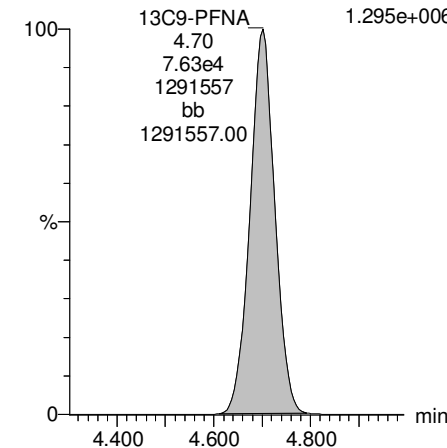
13C8-PFOA

F19:MRM of 1 channel,ES-  
421.3 > 376  
1.031e+006



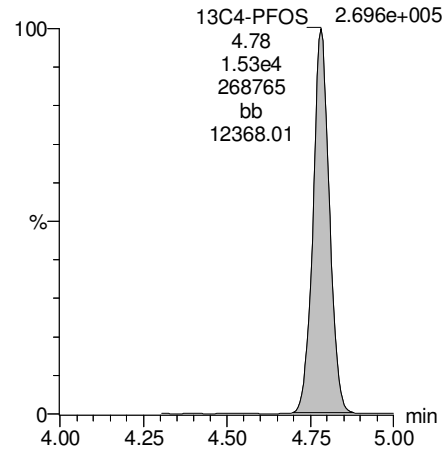
13C9-PFNA

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.295e+006



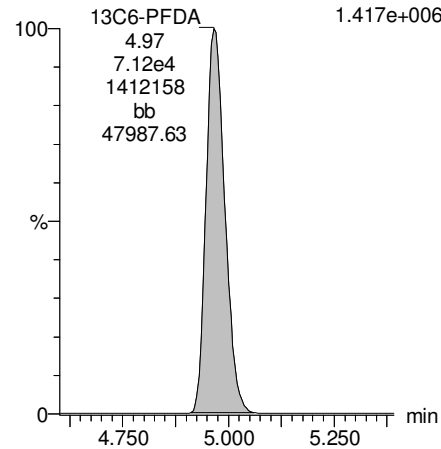
13C4-PFOS

F29:MRM of 1 channel,ES-  
503 > 79.9  
2.696e+005



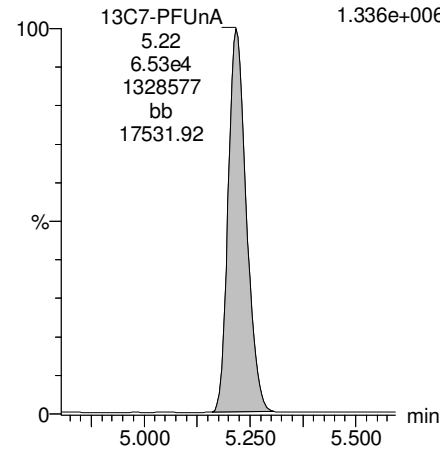
13C6-PFDA

F36:MRM of 1 channel,ES-  
519.1 > 473.7  
1.417e+006



13C7-PFUnA

F44:MRM of 1 channel,ES-  
570.1 > 524.8  
1.336e+006



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

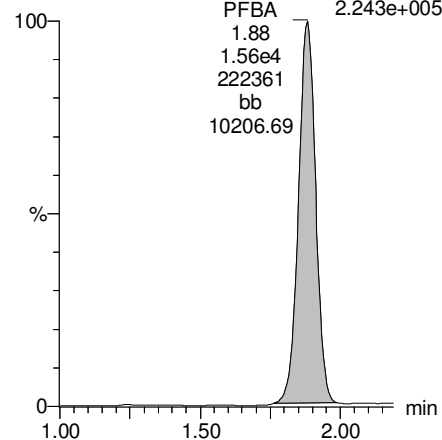
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_8, Date: 15-Jun-2017, Time: 23:31:22, ID: ST170615M4-6 PFC CS3 17F1512, Description: PFC CS3 17F1512

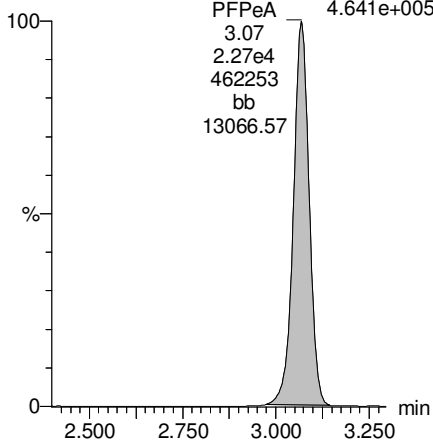
**PFBA**

F1:MRM of 2 channels,ES-  
213.0 > 168.8  
2.243e+005



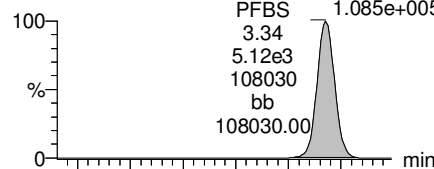
**PFPeA**

F4:MRM of 1 channel,ES-  
263.1 > 218.9  
4.641e+005



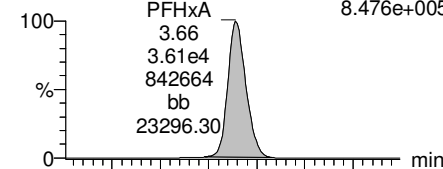
**Total PFBS**

F6:MRM of 2 channels,ES-  
299 > 79.7  
1.085e+005

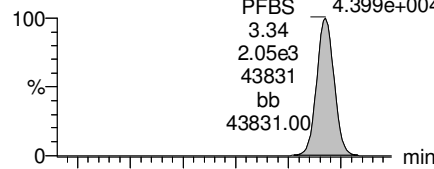


**PFHxA**

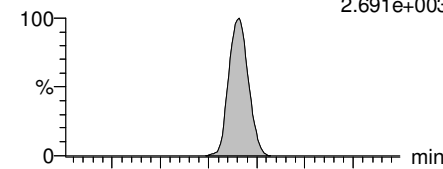
F8:MRM of 2 channels,ES-  
313.2 > 268.9  
8.476e+005



F6:MRM of 2 channels,ES-  
299 > 99  
4.399e+004

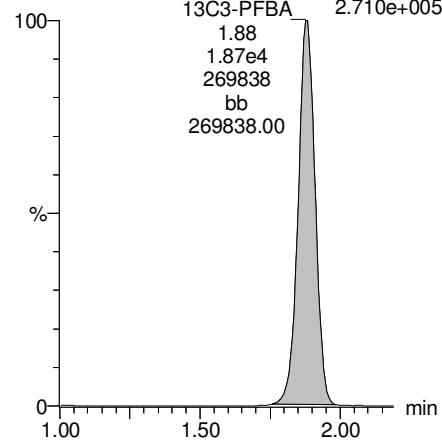


F8:MRM of 2 channels,ES-  
313.2 > 119  
2.691e+003



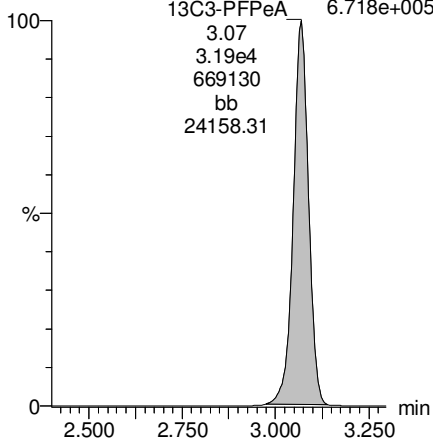
**13C3-PFBA**

F2:MRM of 1 channel,ES-  
216.1 > 171.8  
2.710e+005



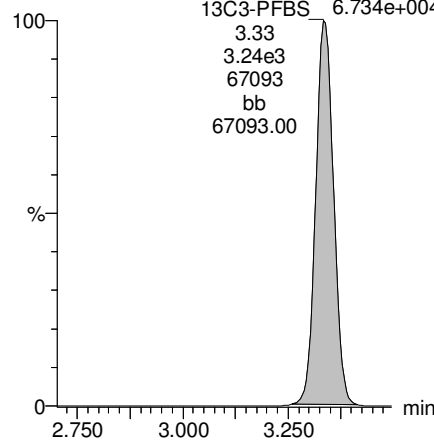
**13C3-PFPeA**

F5:MRM of 1 channel,ES-  
266 > 221.8  
6.718e+005



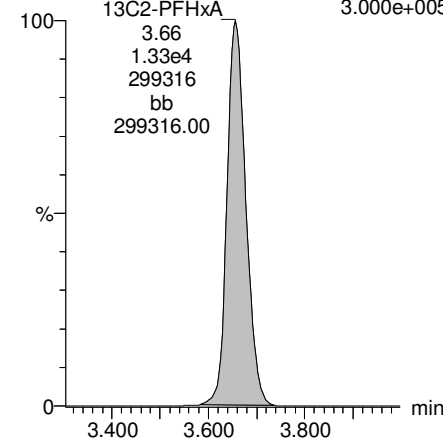
**13C3-PFBS**

F7:MRM of 1 channel,ES-  
302 > 98.8  
6.734e+004



**13C2-PFHxA**

F9:MRM of 1 channel,ES-  
315 > 269.8  
3.000e+005



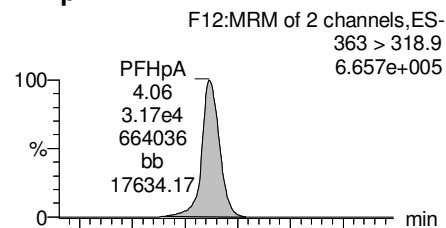
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

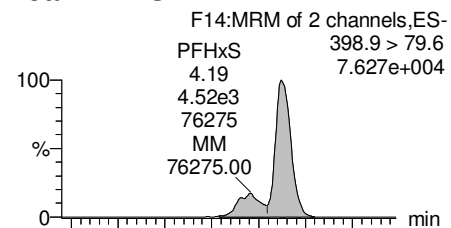
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_8, Date: 15-Jun-2017, Time: 23:31:22, ID: ST170615M4-6 PFC CS3 17F1512, Description: PFC CS3 17F1512

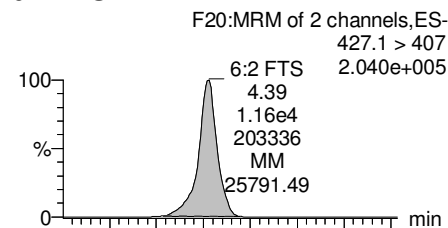
**PFHpA**



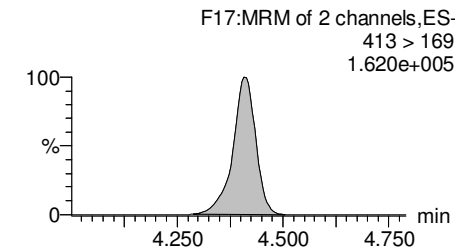
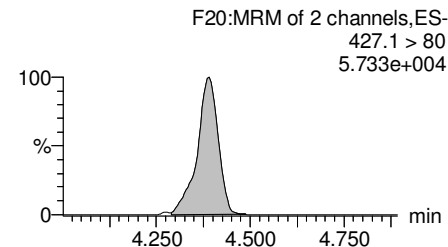
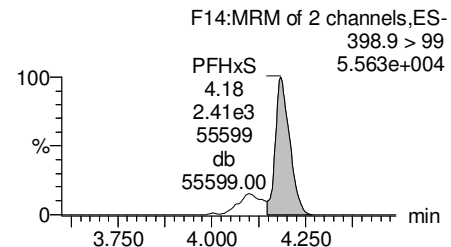
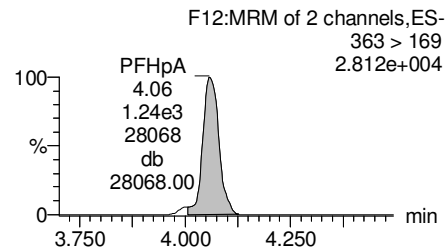
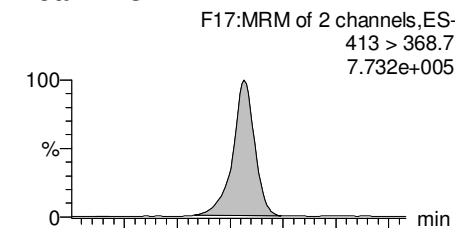
**Total PFHxS**



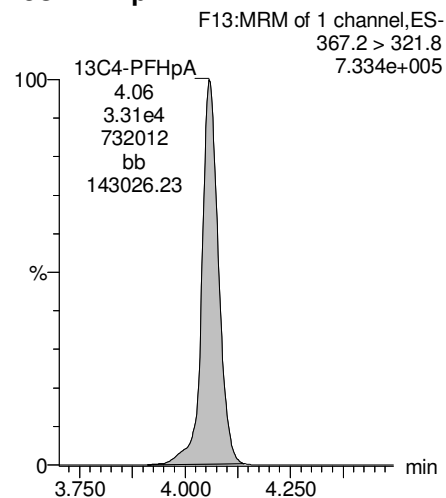
**6:2 FTS**



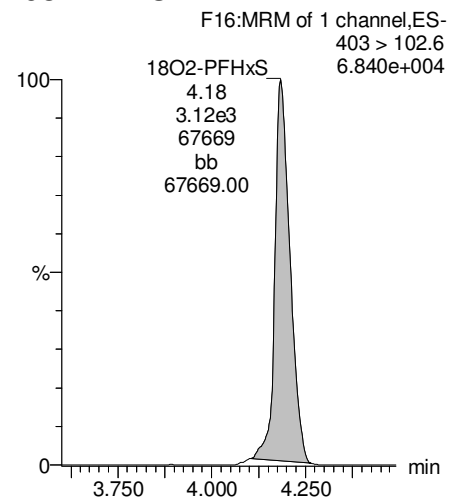
**Total PFOA**



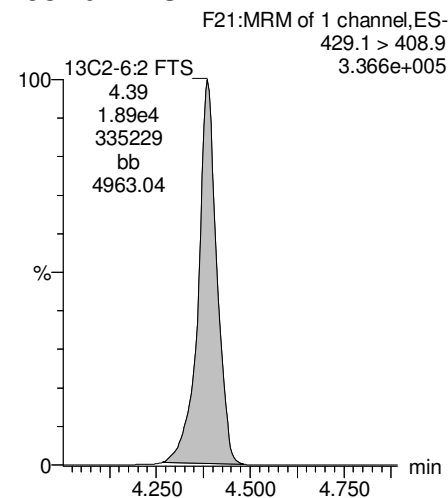
**13C4-PFHpa**



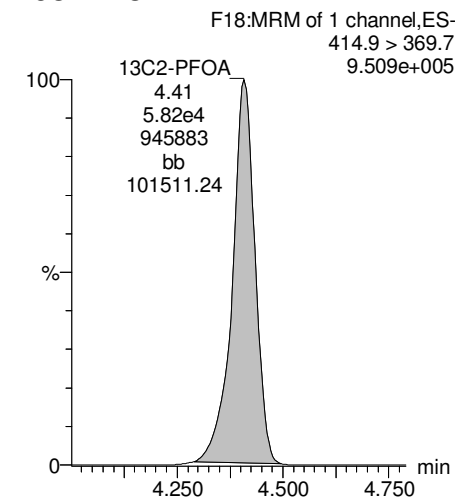
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



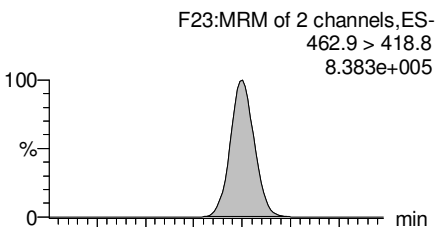
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

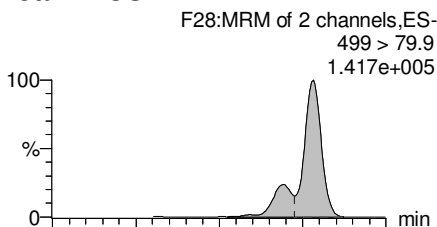
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_8, Date: 15-Jun-2017, Time: 23:31:22, ID: ST170615M4-6 PFC CS3 17F1512, Description: PFC CS3 17F1512

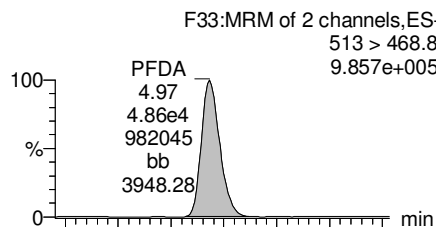
**PFNA**



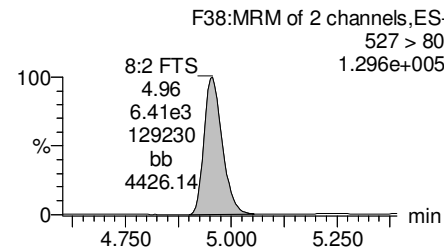
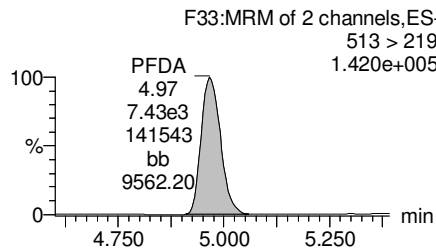
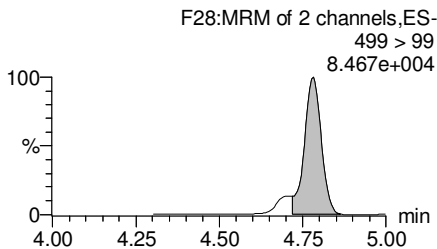
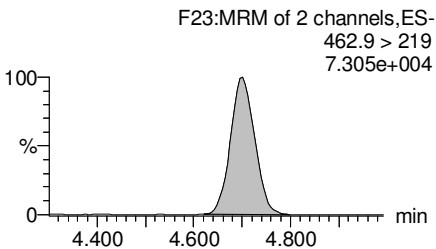
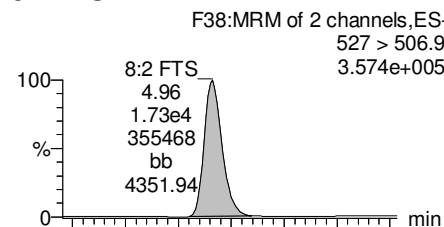
**Total PFOS**



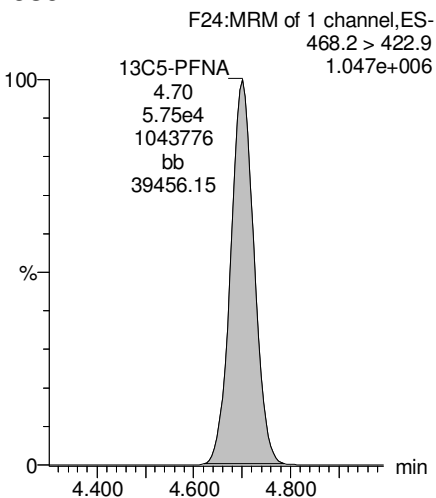
**PFDA**



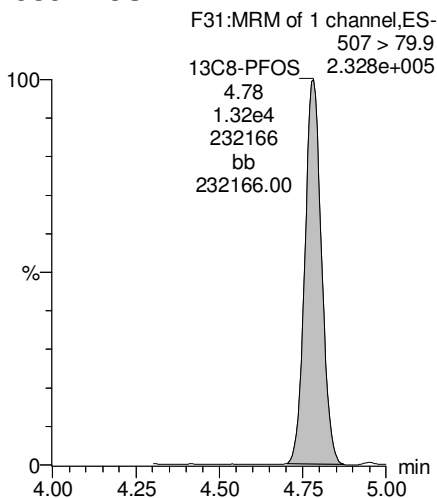
**8:2 FTS**



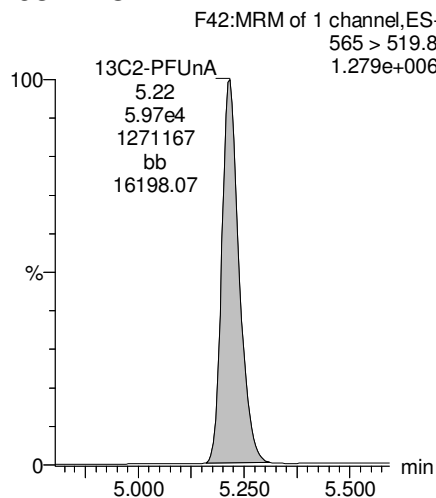
**13C5-PFNA**



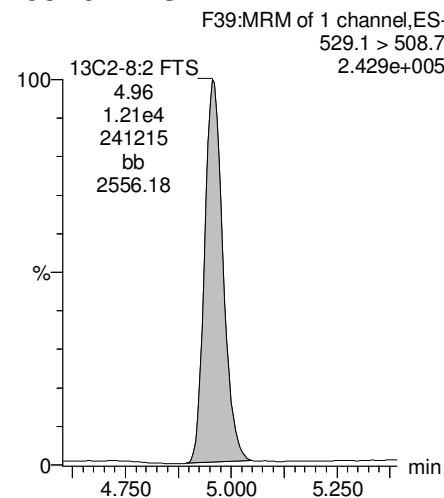
**13C8-PFOS**



**13C2-PFUnA**



**13C2-8:2 FTS**



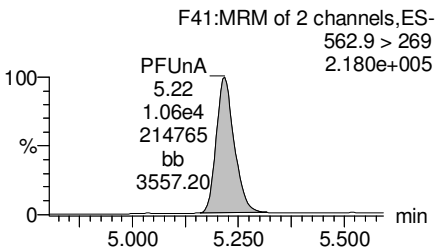
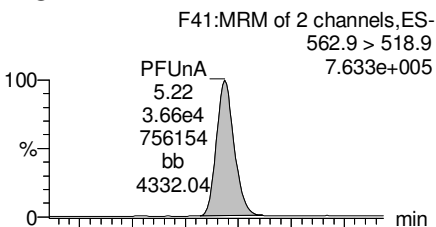
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

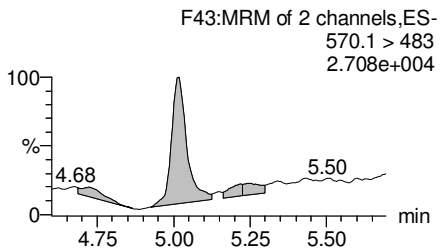
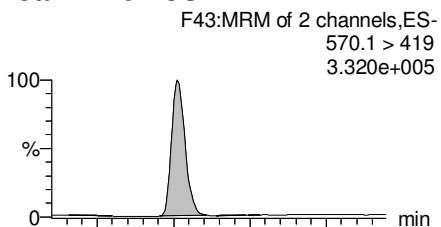
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Name: 170615M4\_8, Date: 15-Jun-2017, Time: 23:31:22, ID: ST170615M4-6 PFC CS3 17F1512, Description: PFC CS3 17F1512

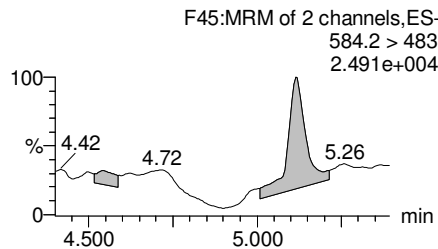
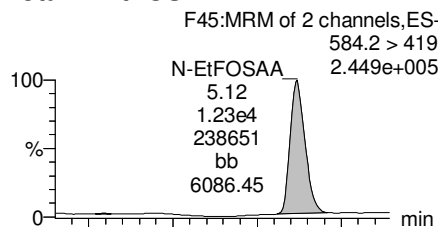
**PFUnA**



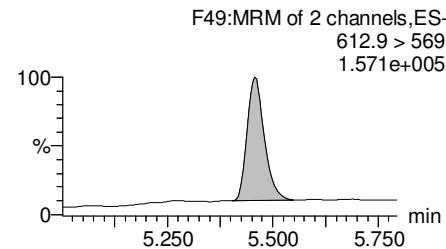
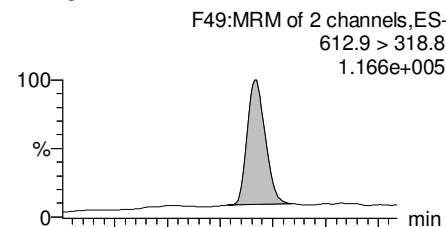
**Total N-Me-FOSAA**



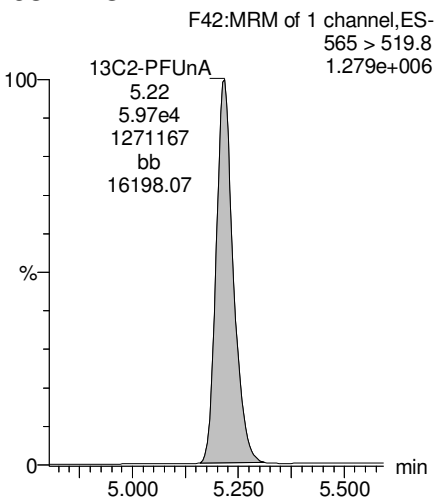
**Total N-EtFOSAA**



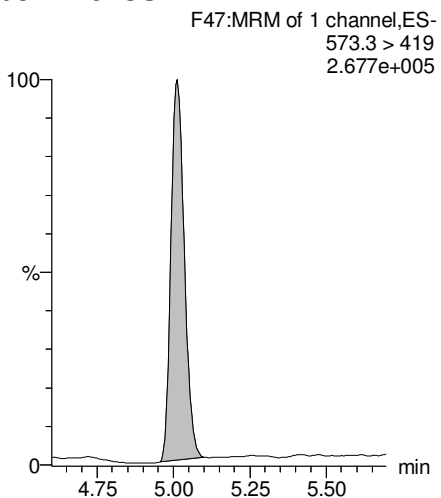
**PFDoA**



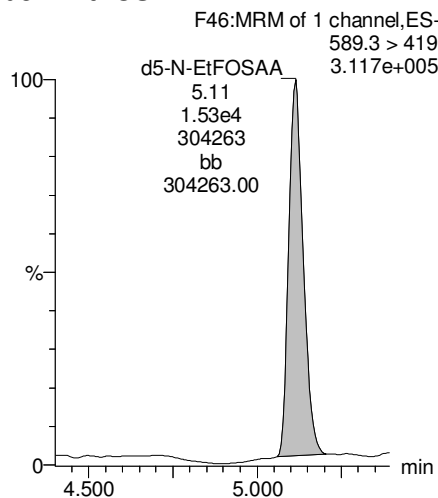
**13C2-PFUnA**



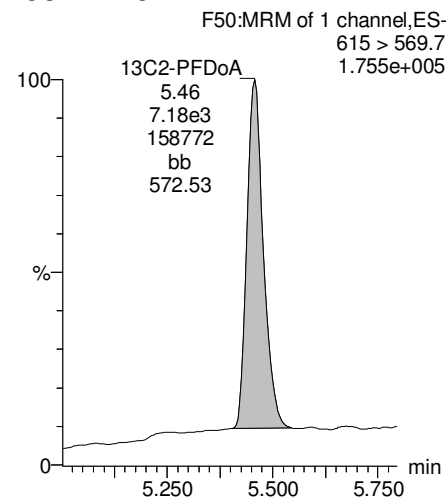
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

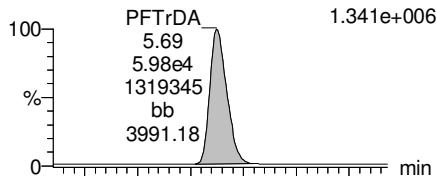
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_8, Date: 15-Jun-2017, Time: 23:31:22, ID: ST170615M4-6 PFC CS3 17F1512, Description: PFC CS3 17F1512

**PFTrDA**

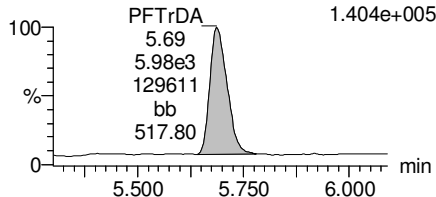
F55:MRM of 2 channels,ES-  
662.9 > 618.9

1.341e+006



F55:MRM of 2 channels,ES-  
662.9 > 319

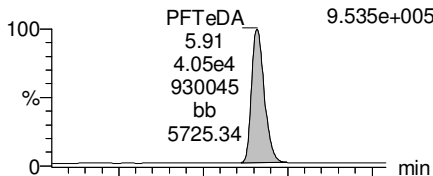
1.404e+005



**PFTeDA**

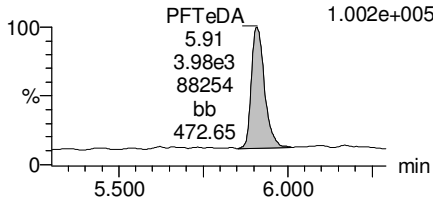
F56:MRM of 2 channels,ES-  
712.9 > 668.8

9.535e+005



F56:MRM of 2 channels,ES-  
712.9 > 369

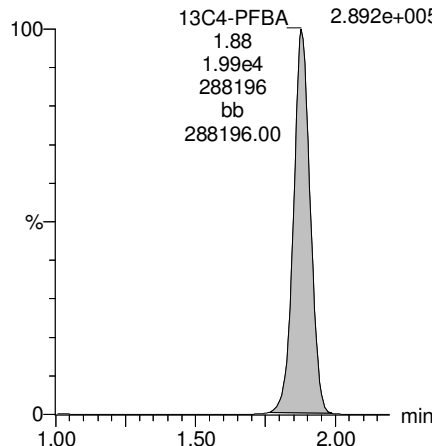
1.002e+005



**13C4-PFBA**

F3:MRM of 1 channel,ES-  
217 > 171.8

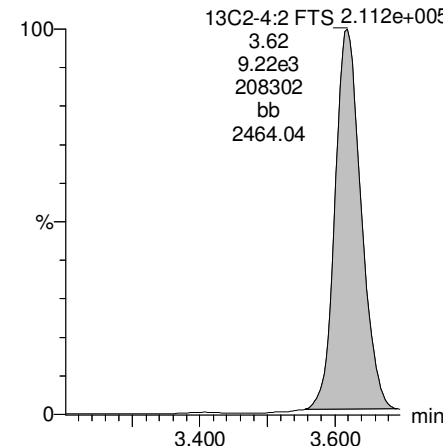
2.892e+005



**13C2-4:2 FTS**

F11:MRM of 1 channel,ES-  
329.2 > 308.9

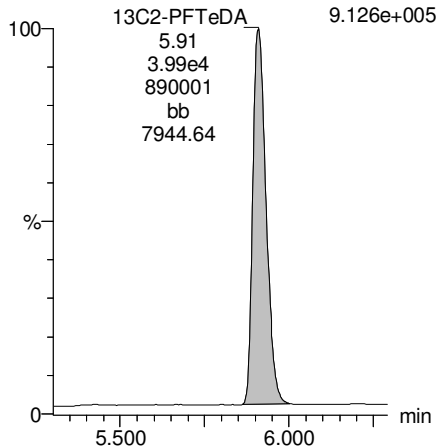
2.112e+005



**13C2-PFTeDA**

F57:MRM of 2 channels,ES-  
714.8 > 669.6

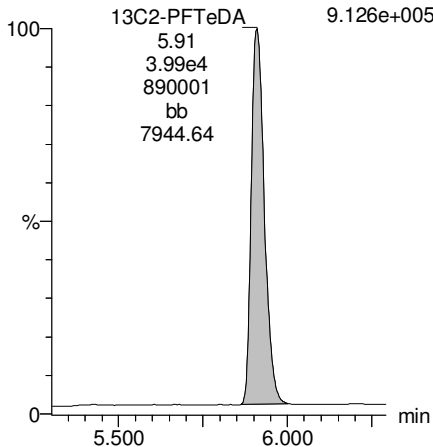
9.126e+005



**13C2-PFTeDA**

F57:MRM of 2 channels,ES-  
714.8 > 669.6

9.126e+005





Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

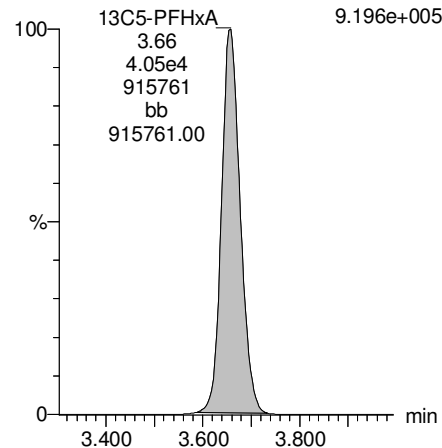
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_8, Date: 15-Jun-2017, Time: 23:31:22, ID: ST170615M4-6 PFC CS3 17F1512, Description: PFC CS3 17F1512

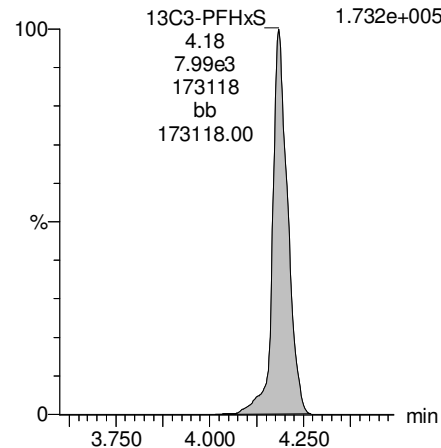
13C5-PFHxA

F10:MRM of 1 channel,ES-  
318 > 272.9  
9.196e+005



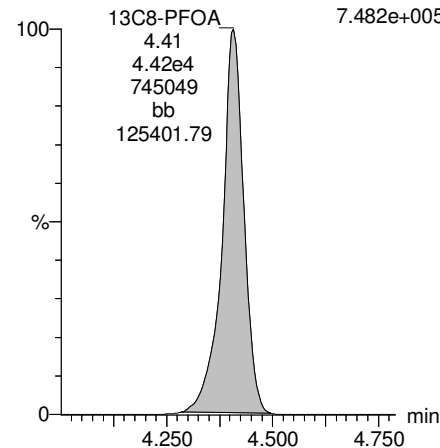
13C3-PFHxS

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
1.732e+005



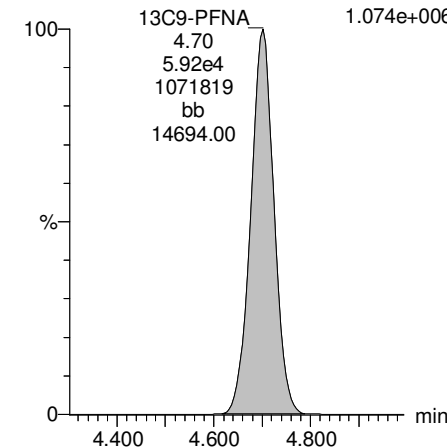
13C8-PFOA

F19:MRM of 1 channel,ES-  
421.3 > 376  
7.482e+005



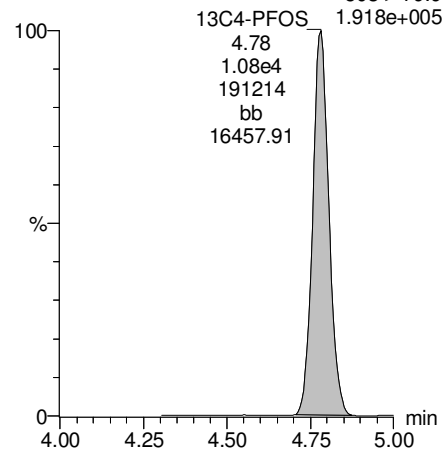
13C9-PFNA

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.074e+006



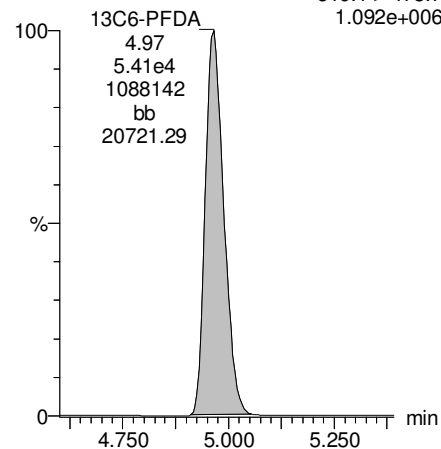
13C4-PFOS

F29:MRM of 1 channel,ES-  
503 > 79.9  
1.918e+005



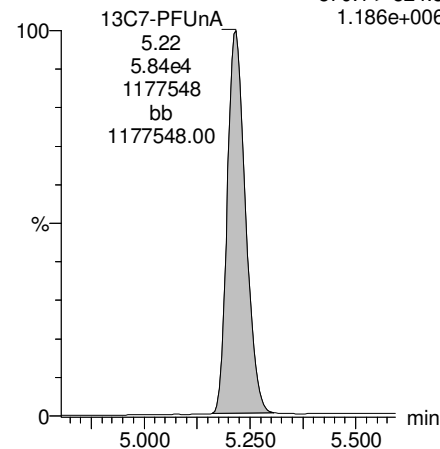
13C6-PFDA

F36:MRM of 1 channel,ES-  
519.1 > 473.7  
1.092e+006



13C7-PFUnA

F44:MRM of 1 channel,ES-  
570.1 > 524.8  
1.186e+006



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

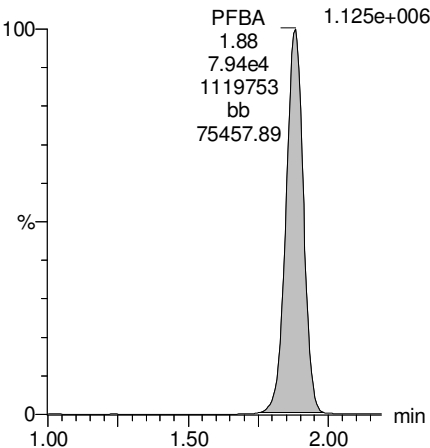
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_9, Date: 15-Jun-2017, Time: 23:43:05, ID: ST170615M4-7 PFC CS4 17F1513, Description: PFC CS4 17F1513

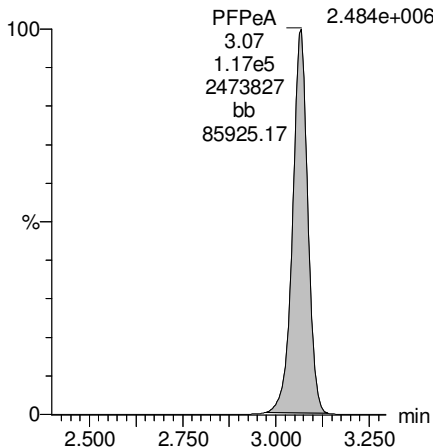
**PFBA**

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



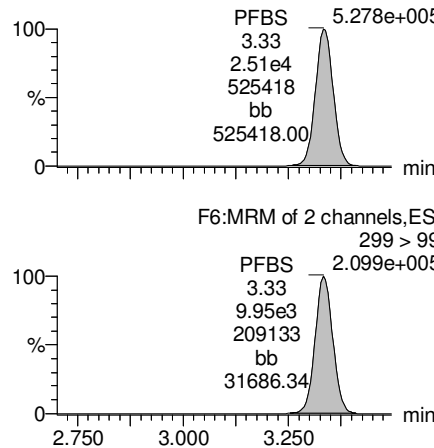
**PFPeA**

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



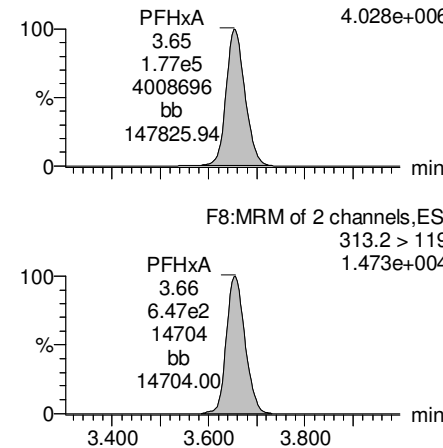
**Total PFBS**

F6:MRM of 2 channels,ES-  
299 > 79.7



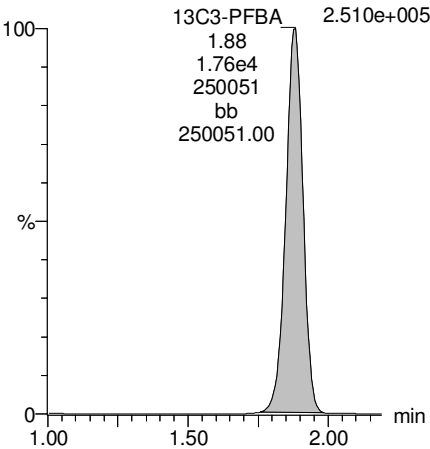
**PFHxA**

F8:MRM of 2 channels,ES-  
313.2 > 268.9



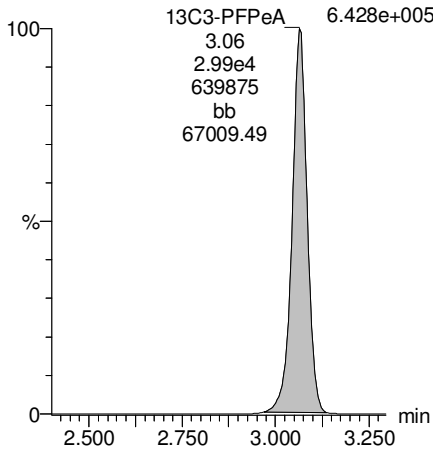
**13C3-PFBA**

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



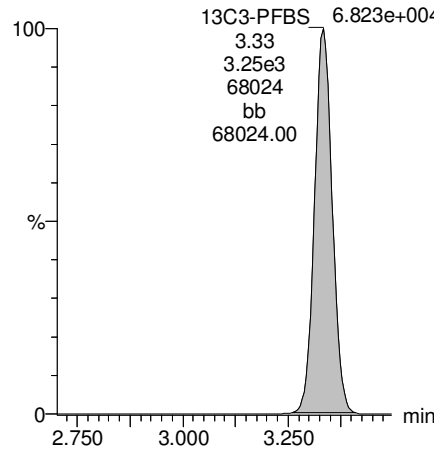
**13C3-PFPeA**

F5:MRM of 1 channel,ES-  
266 > 221.8



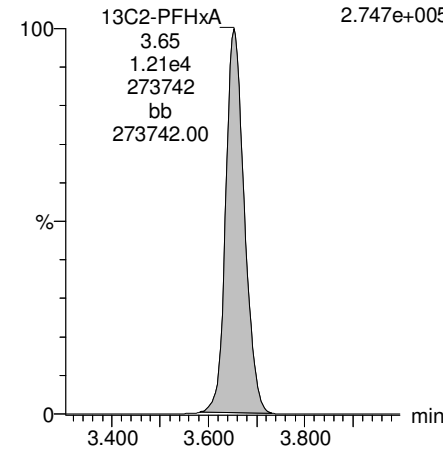
**13C3-PFBS**

F7:MRM of 1 channel,ES-  
302 > 98.8



**13C2-PFHxA**

F9:MRM of 1 channel,ES-  
315 > 269.8



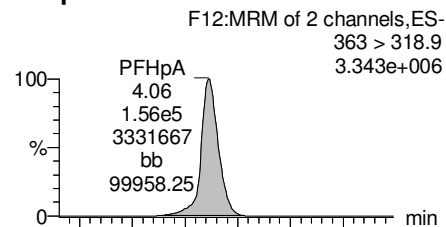
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

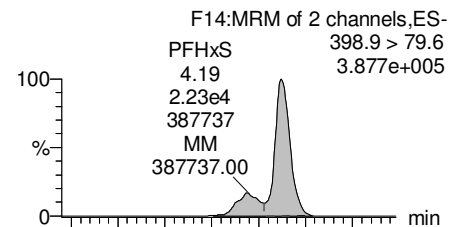
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_9, Date: 15-Jun-2017, Time: 23:43:05, ID: ST170615M4-7 PFC CS4 17F1513, Description: PFC CS4 17F1513

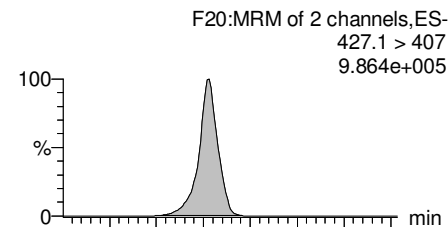
**PFHpA**



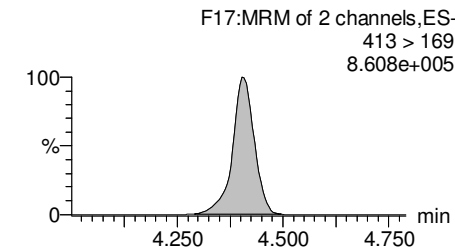
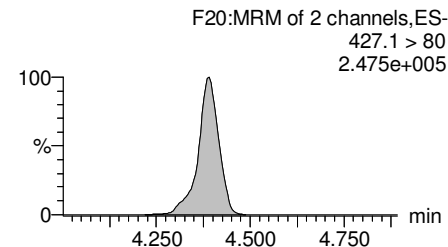
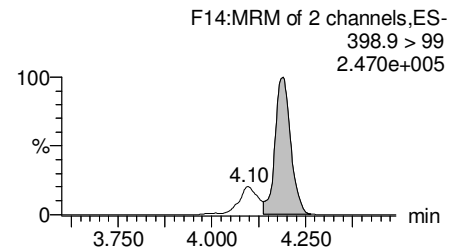
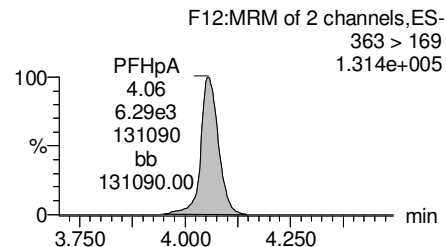
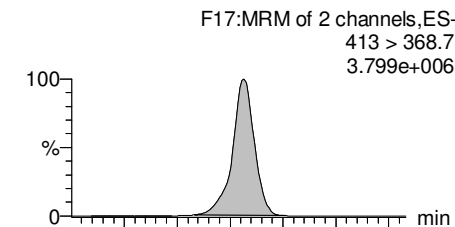
**Total PFHxS**



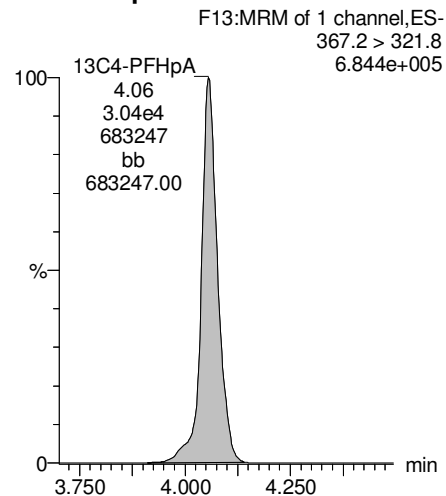
**6:2 FTS**



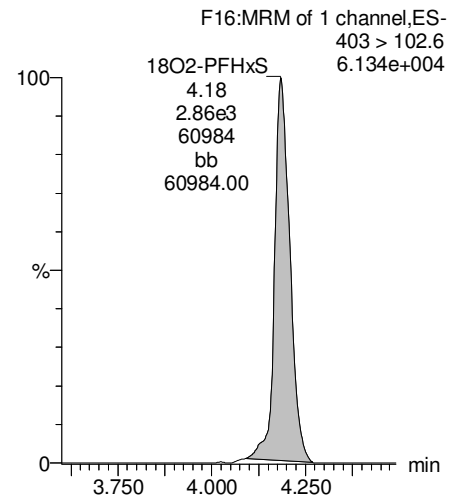
**Total PFOA**



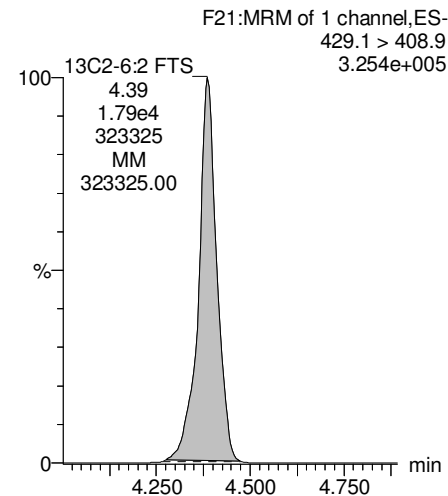
**13C4-PFHpa**



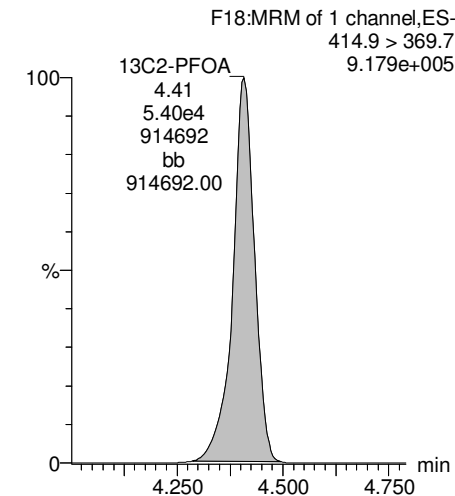
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



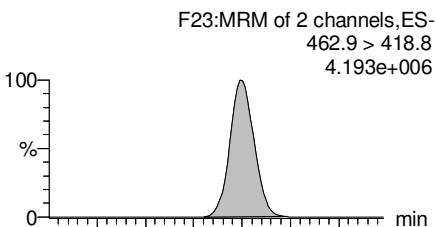
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

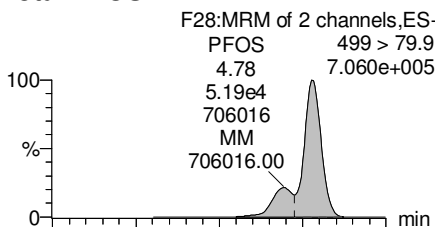
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_9, Date: 15-Jun-2017, Time: 23:43:05, ID: ST170615M4-7 PFC CS4 17F1513, Description: PFC CS4 17F1513

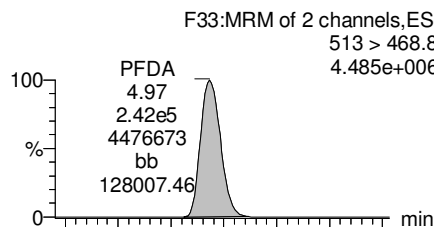
**PFNA**



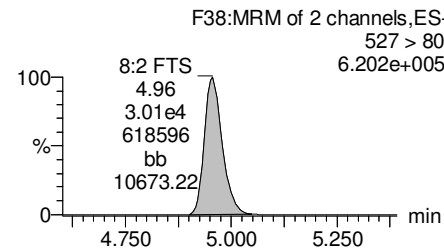
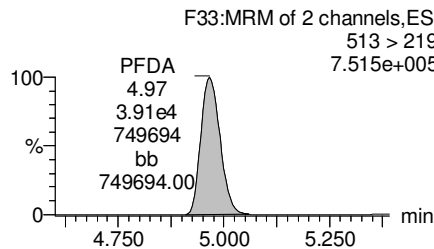
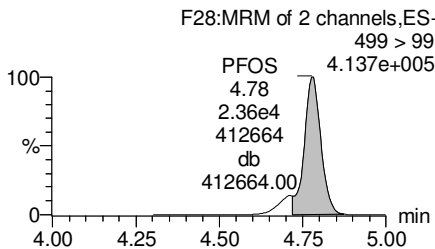
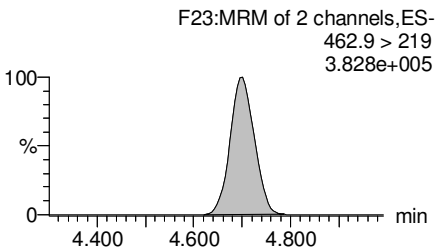
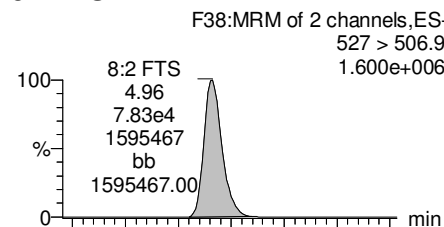
**Total PFOS**



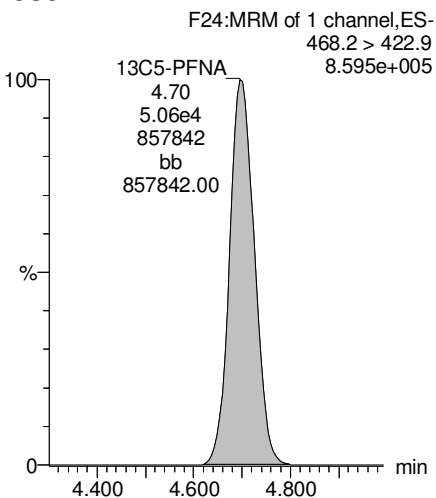
**PFDA**



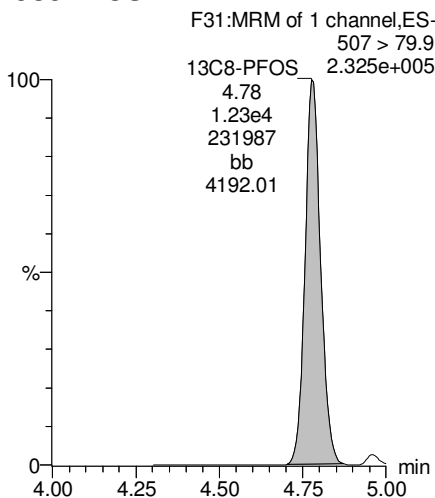
**8:2 FTS**



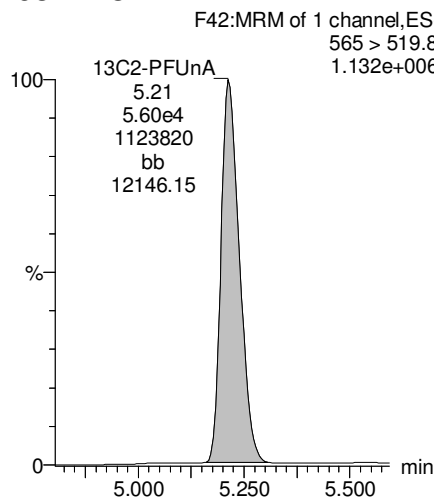
**13C5-PFNA**



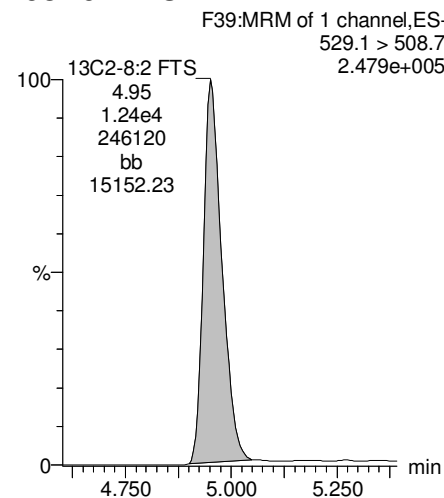
**13C8-PFOS**



**13C2-PFUnA**



**13C2-8:2 FTS**

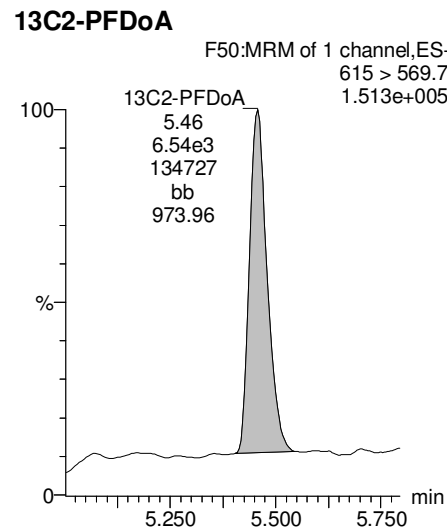
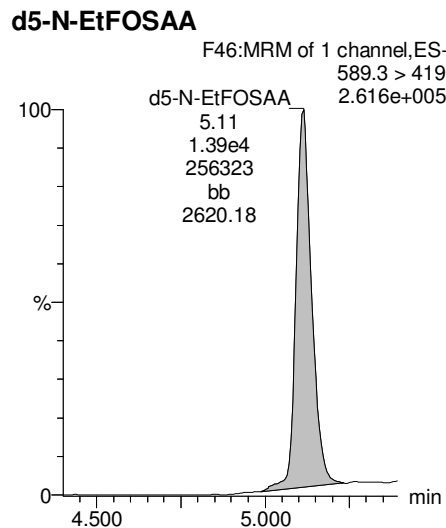
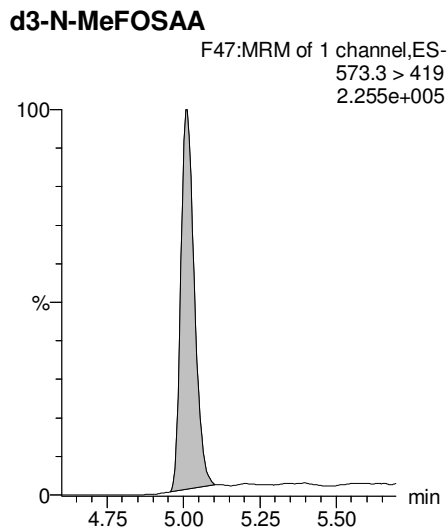
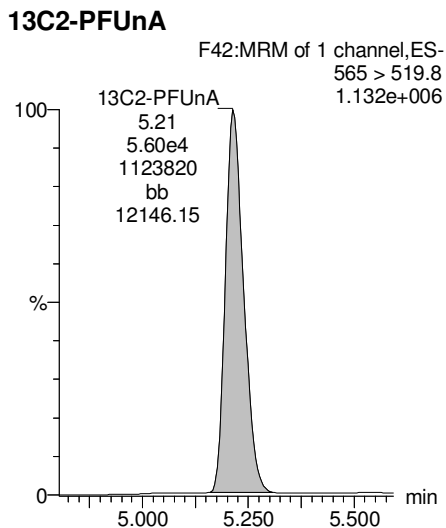
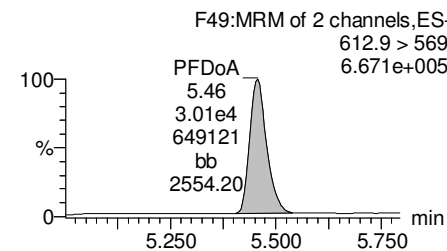
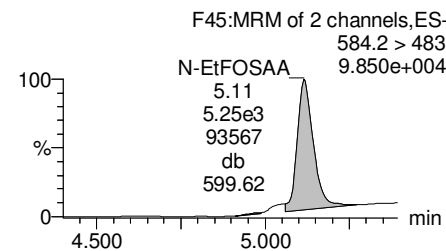
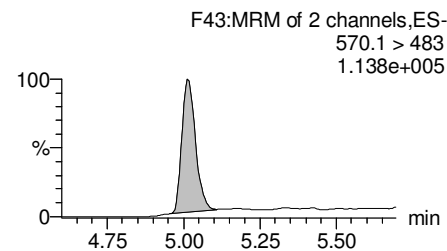
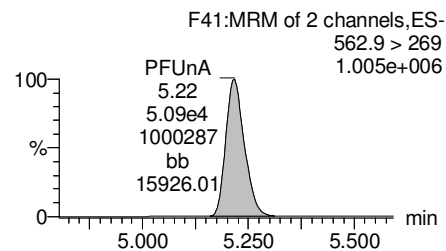
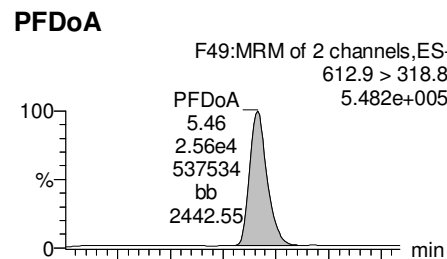
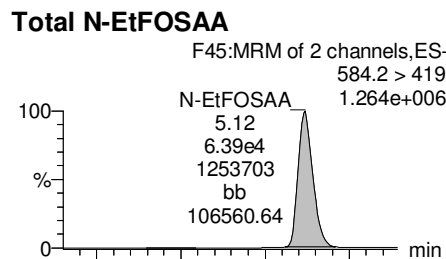
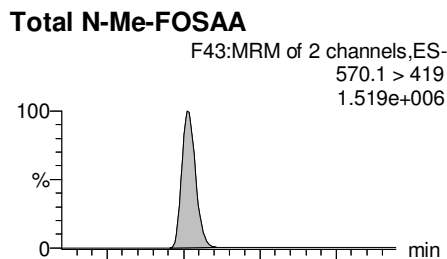
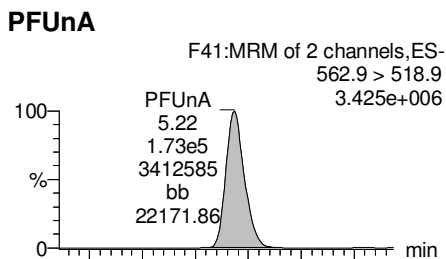


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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_9, Date: 15-Jun-2017, Time: 23:43:05, ID: ST170615M4-7 PFC CS4 17F1513, Description: PFC CS4 17F1513



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

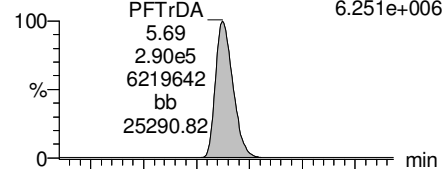
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

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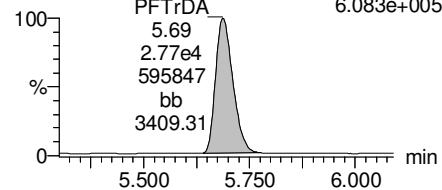
Name: 170615M4\_9, Date: 15-Jun-2017, Time: 23:43:05, ID: ST170615M4-7 PFC CS4 17F1513, Description: PFC CS4 17F1513

**PFTrDA**

F55:MRM of 2 channels,ES-  
662.9 > 618.9  
6.251e+006

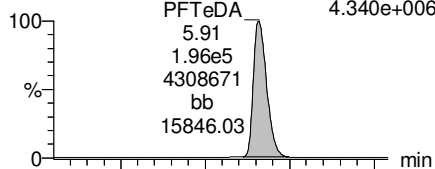


F55:MRM of 2 channels,ES-  
662.9 > 319  
6.083e+005

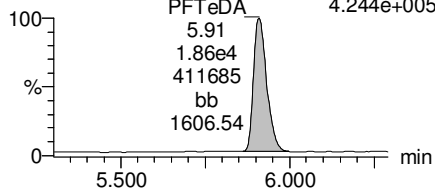


**PFTeDA**

F56:MRM of 2 channels,ES-  
712.9 > 668.8  
4.340e+006

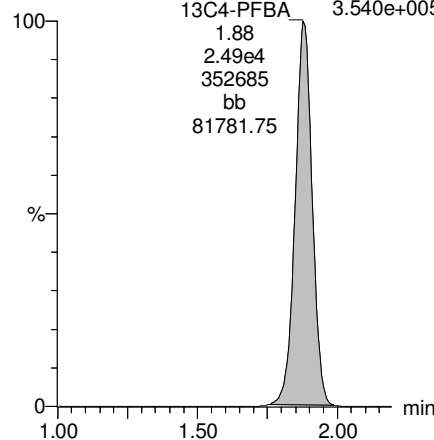


F56:MRM of 2 channels,ES-  
712.9 > 369  
4.244e+005



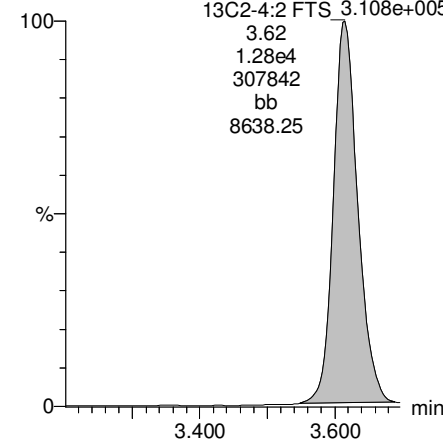
**13C4-PFBA**

F3:MRM of 1 channel,ES-  
217 > 171.8  
3.540e+005



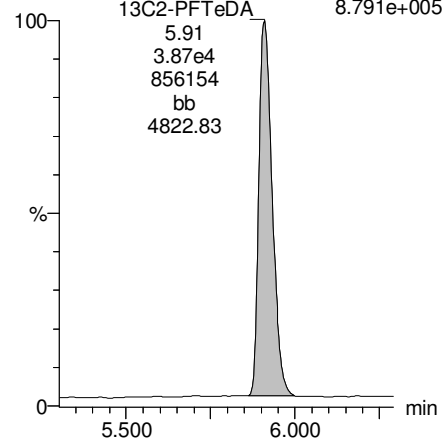
**13C2-4:2 FTS**

F11:MRM of 1 channel,ES-  
329.2 > 308.9  
3.108e+005



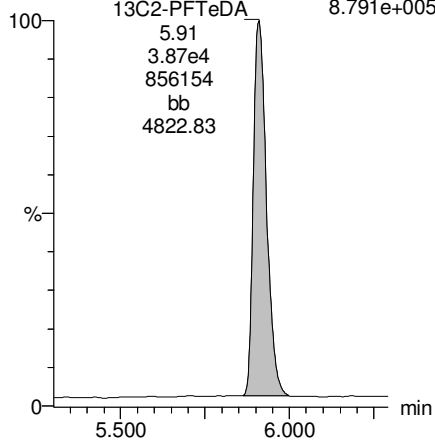
**13C2-PFTeDA**

F57:MRM of 2 channels,ES-  
714.8 > 669.6  
8.791e+005



**13C2-PFTeDA**

F57:MRM of 2 channels,ES-  
714.8 > 669.6  
8.791e+005



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

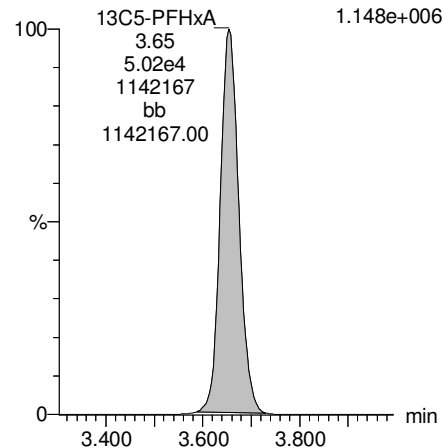
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_9, Date: 15-Jun-2017, Time: 23:43:05, ID: ST170615M4-7 PFC CS4 17F1513, Description: PFC CS4 17F1513

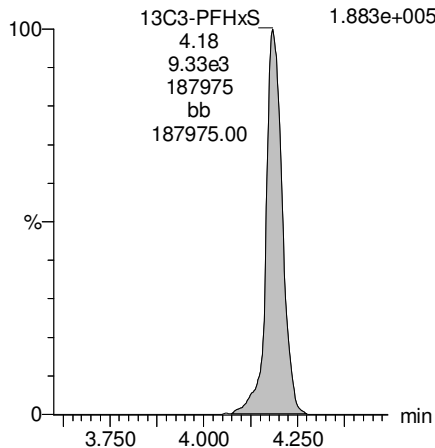
13C5-PFHxA

F10:MRM of 1 channel,ES-  
318 > 272.9  
1.148e+006



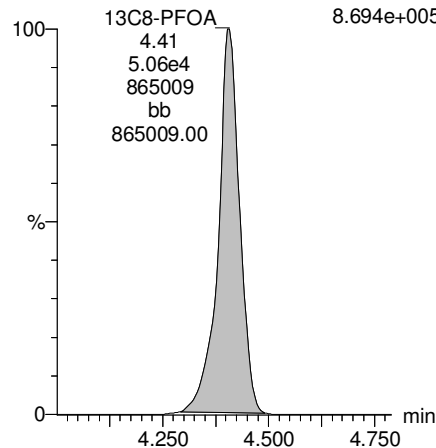
13C3-PFHxS

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
1.883e+005



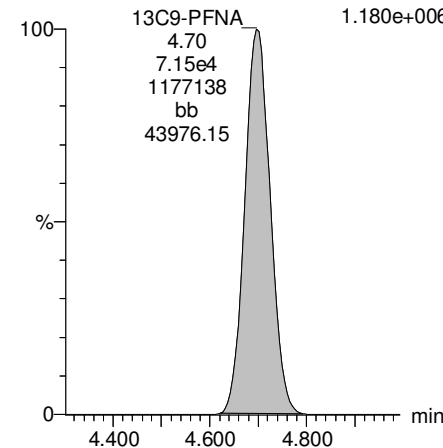
13C8-PFOA

F19:MRM of 1 channel,ES-  
421.3 > 376  
8.694e+005



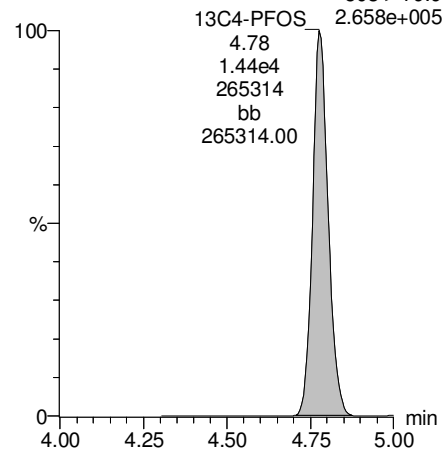
13C9-PFNA

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.180e+006



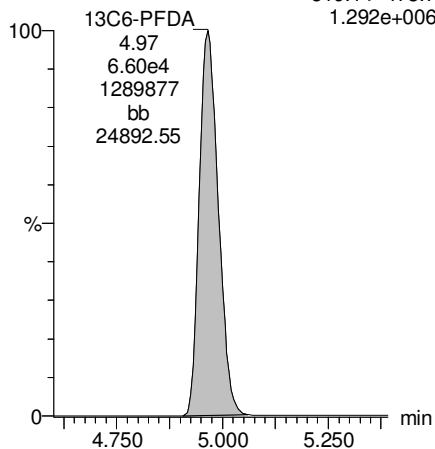
13C4-PFOS

F29:MRM of 1 channel,ES-  
503 > 79.9  
2.658e+005



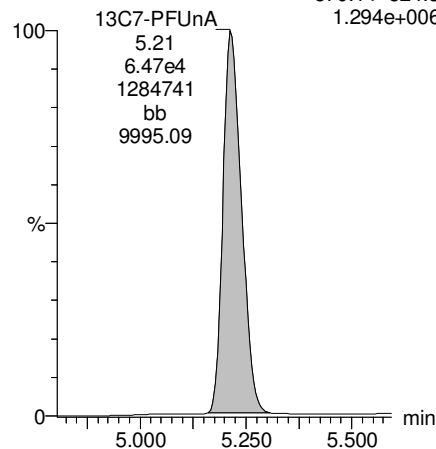
13C6-PFDA

F36:MRM of 1 channel,ES-  
519.1 > 473.7  
1.292e+006



13C7-PFUnA

F44:MRM of 1 channel,ES-  
570.1 > 524.8  
1.294e+006



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

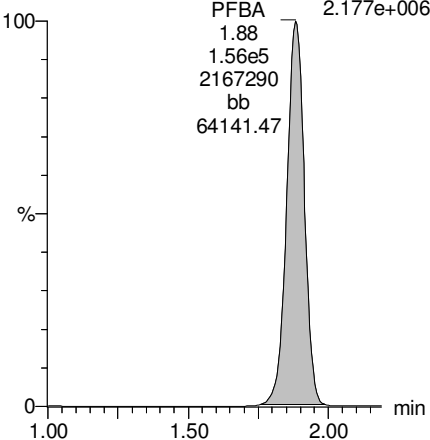
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_10, Date: 15-Jun-2017, Time: 23:54:48, ID: ST170615M4-8 PFC CS5 17F1514, Description: PFC CS5 17F1514

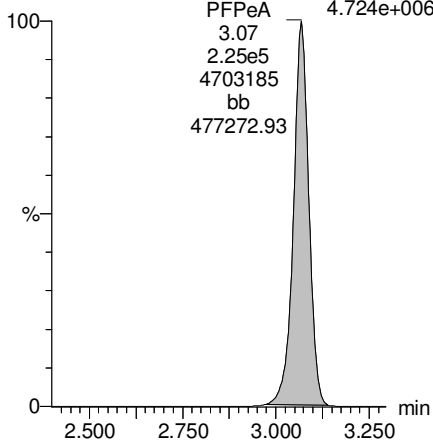
**PFBA**

F1:MRM of 2 channels,ES-  
213.0 > 168.8  
2.177e+006



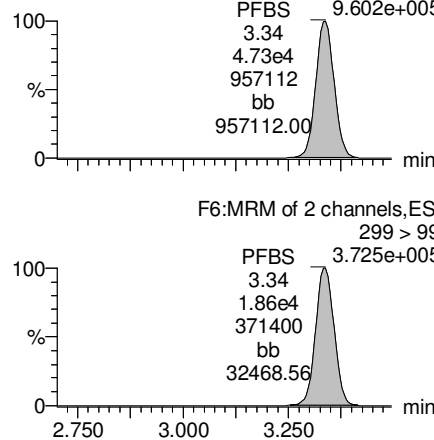
**PFPeA**

F4:MRM of 1 channel,ES-  
263.1 > 218.9  
4.724e+006



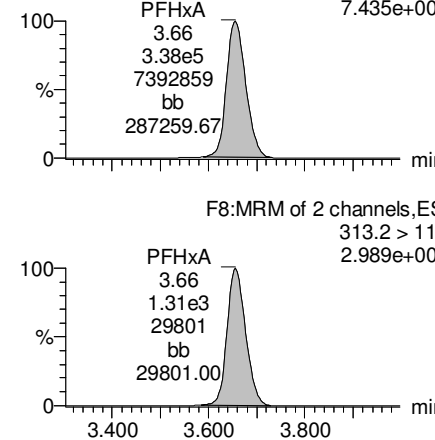
**Total PFBS**

F6:MRM of 2 channels,ES-  
299 > 79.7  
9.602e+005



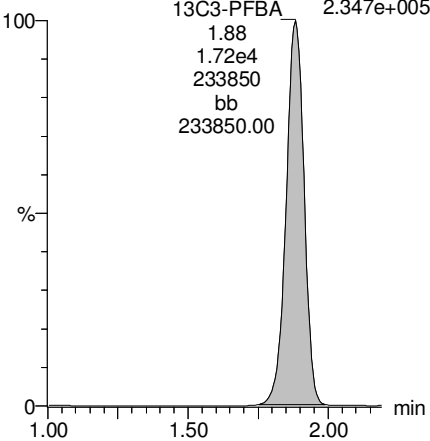
**PFHxA**

F8:MRM of 2 channels,ES-  
313.2 > 268.9  
7.435e+006



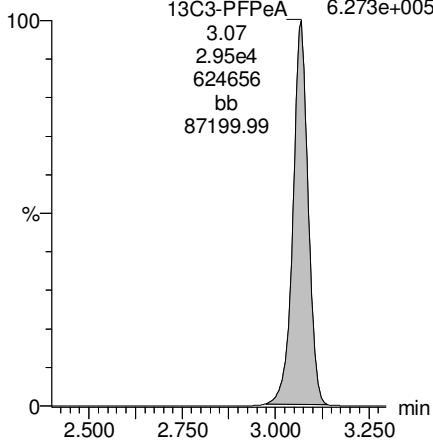
**13C3-PFBA**

F2:MRM of 1 channel,ES-  
216.1 > 171.8  
2.347e+005



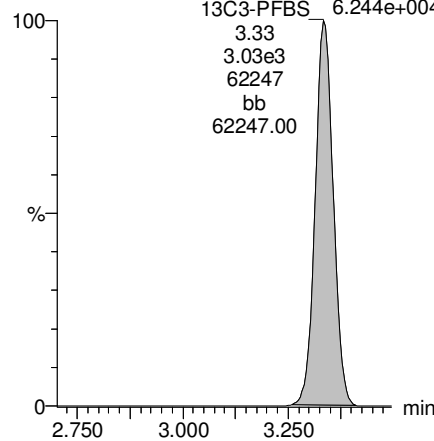
**13C3-PFPeA**

F5:MRM of 1 channel,ES-  
266 > 221.8  
6.273e+005



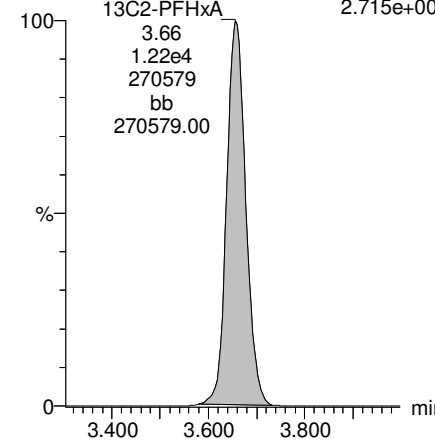
**13C3-PFBS**

F7:MRM of 1 channel,ES-  
302 > 98.8  
6.244e+004



**13C2-PFHxA**

F9:MRM of 1 channel,ES-  
315 > 269.8  
2.715e+005





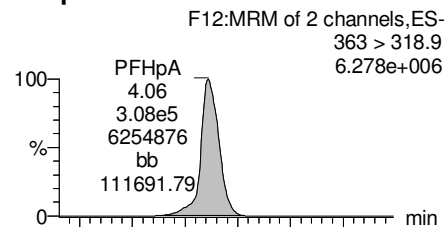
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

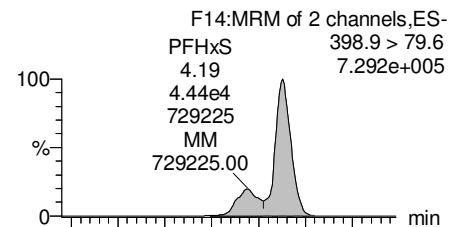
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_10, Date: 15-Jun-2017, Time: 23:54:48, ID: ST170615M4-8 PFC CS5 17F1514, Description: PFC CS5 17F1514

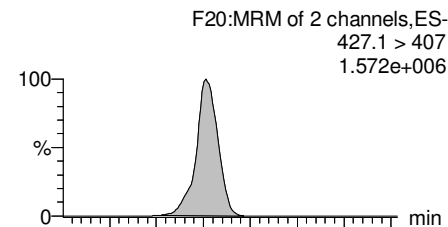
**PFHpA**



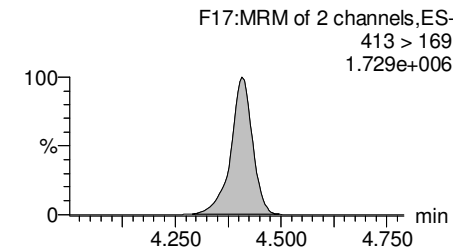
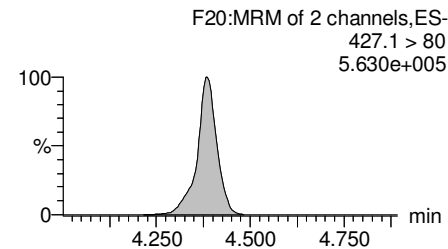
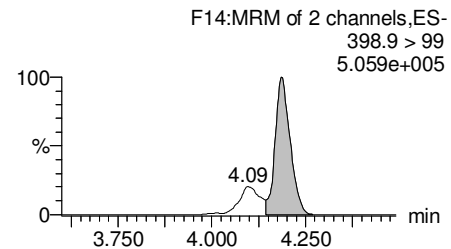
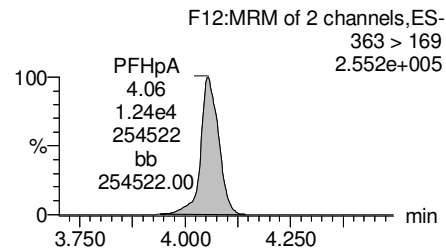
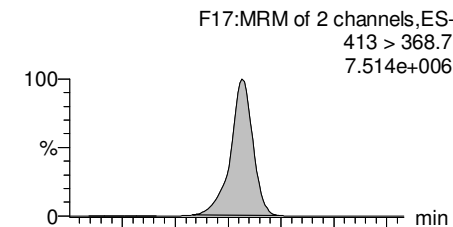
**Total PFHxS**



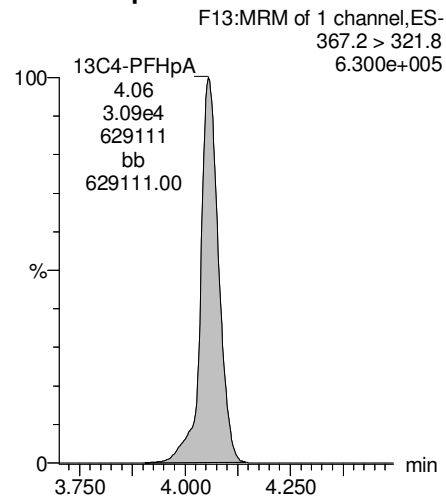
**6:2 FTS**



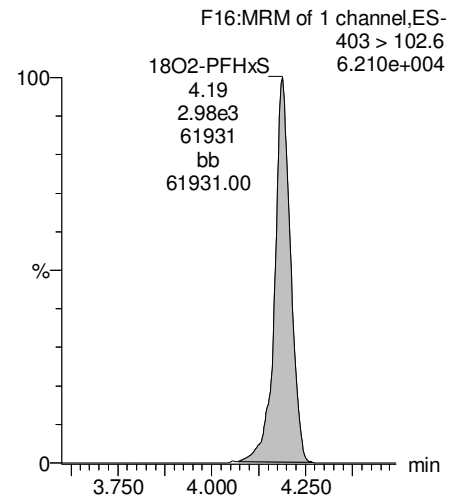
**Total PFOA**



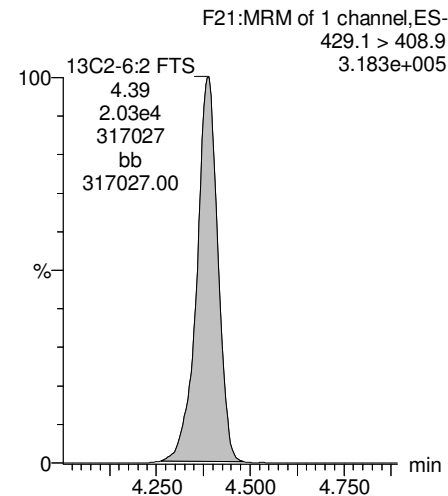
**13C4-PFHpA**



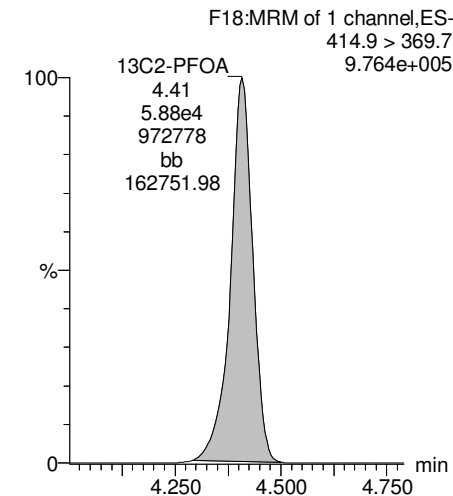
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



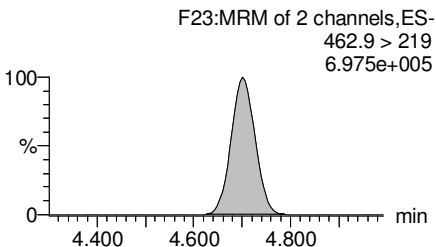
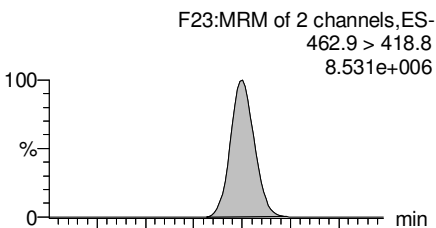
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

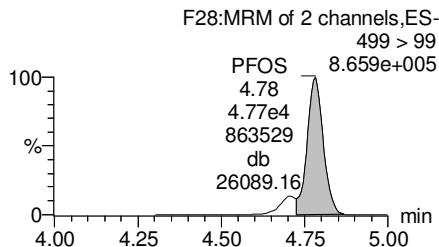
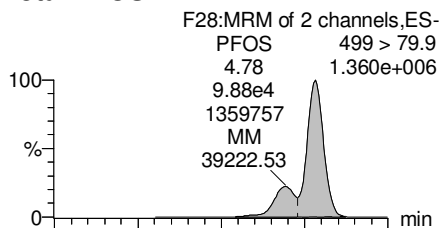
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_10, Date: 15-Jun-2017, Time: 23:54:48, ID: ST170615M4-8 PFC CS5 17F1514, Description: PFC CS5 17F1514

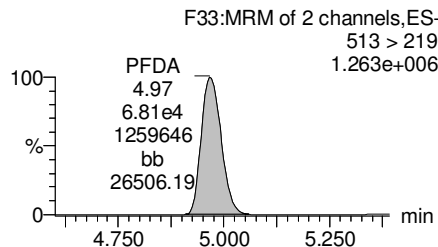
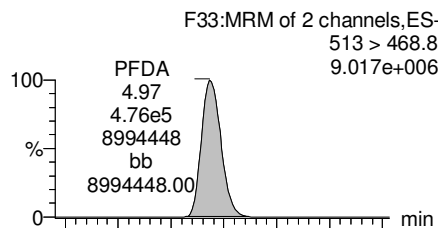
**PFNA**



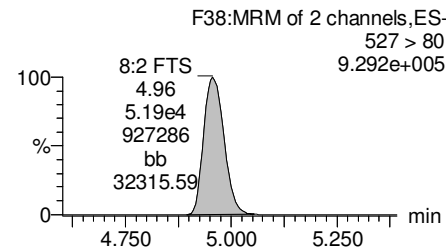
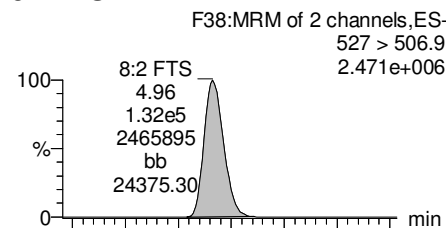
**Total PFOS**



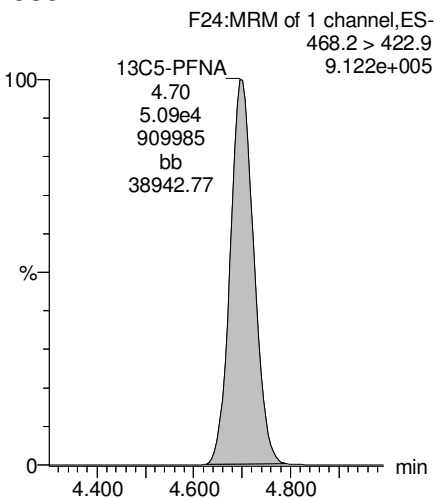
**PFDA**



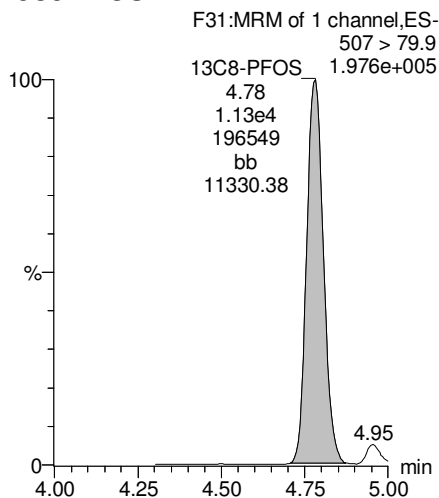
**8:2 FTS**



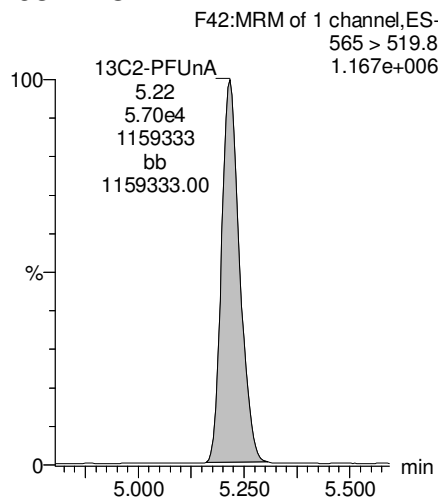
**13C5-PFNA**



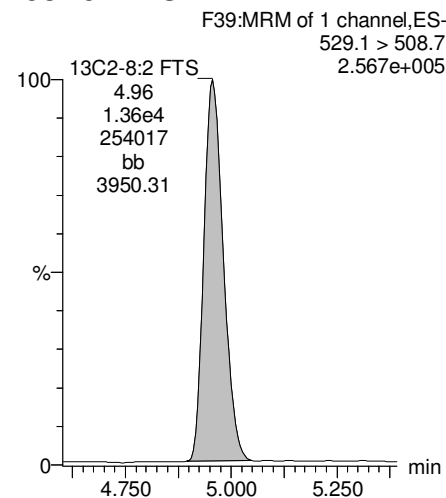
**13C8-PFOS**



**13C2-PFUnA**



**13C2-8:2 FTS**



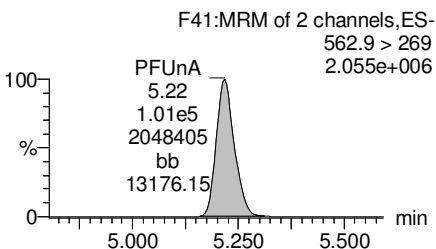
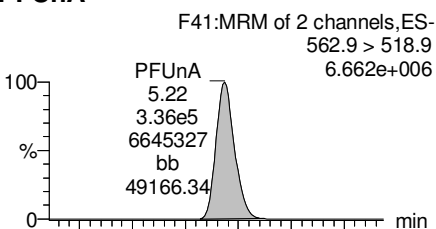
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

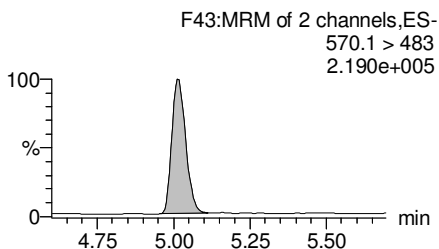
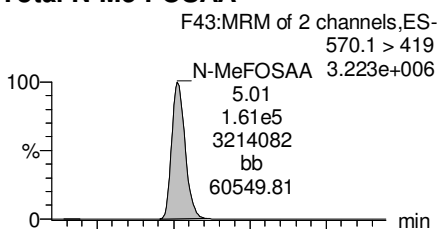
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_10, Date: 15-Jun-2017, Time: 23:54:48, ID: ST170615M4-8 PFC CS5 17F1514, Description: PFC CS5 17F1514

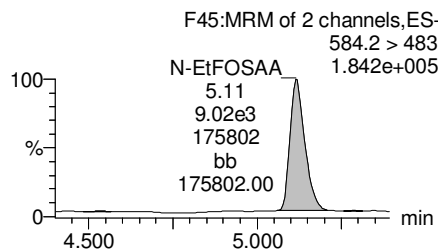
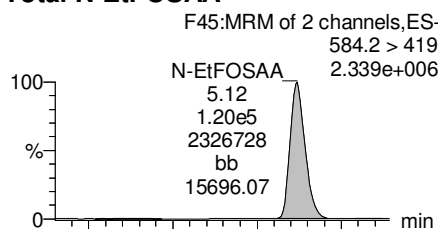
**PFUnA**



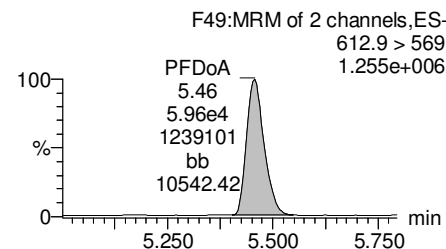
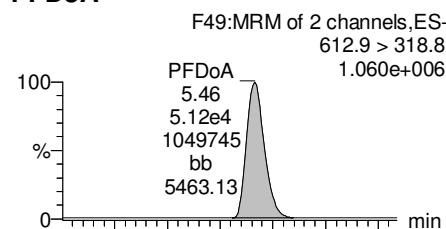
**Total N-Me-FOSAA**



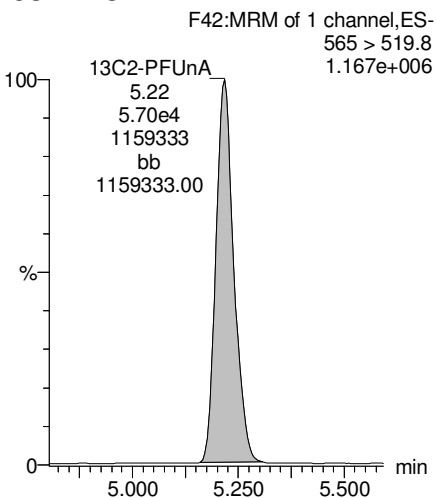
**Total N-EtFOSAA**



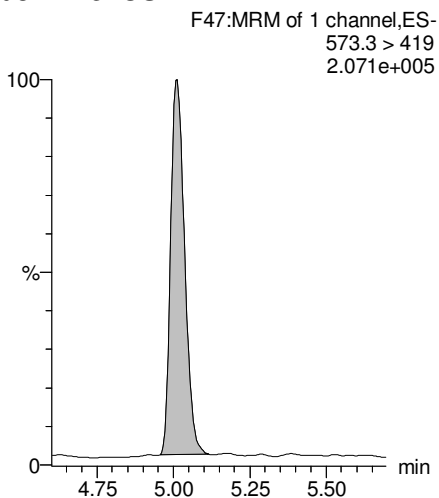
**PFDoA**



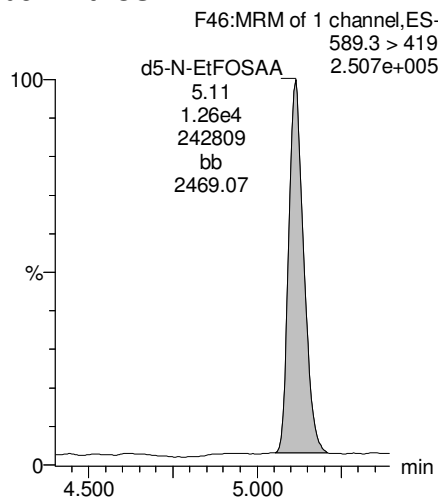
**13C2-PFUnA**



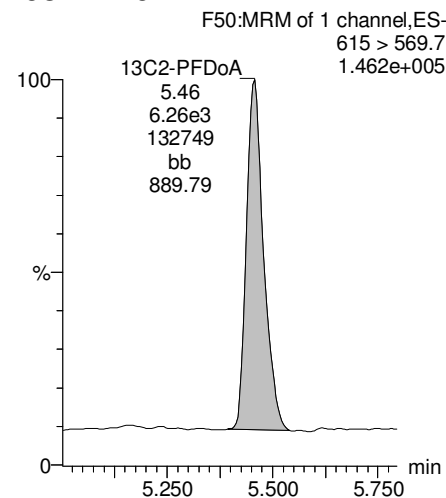
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



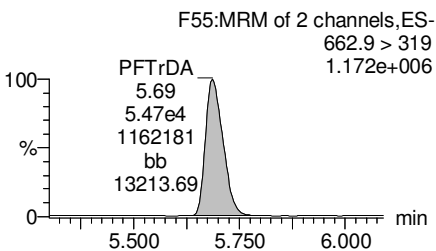
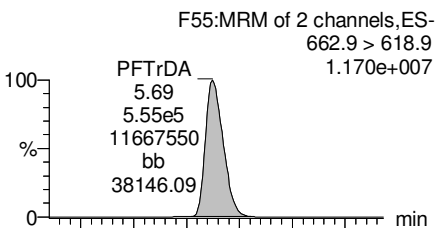
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Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

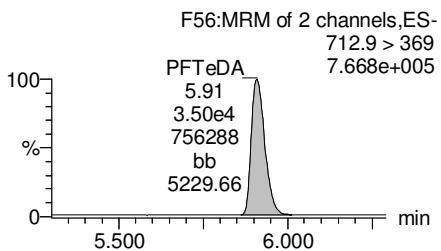
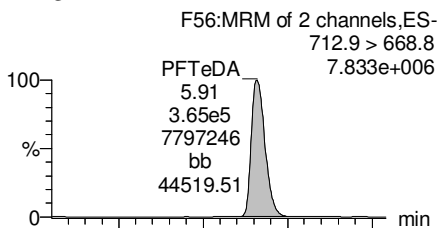
Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_10, Date: 15-Jun-2017, Time: 23:54:48, ID: ST170615M4-8 PFC CS5 17F1514, Description: PFC CS5 17F1514

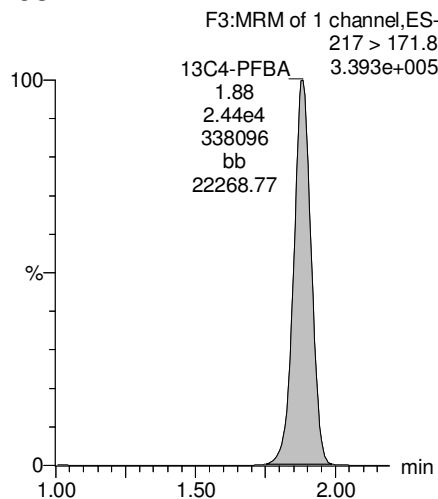
**PFTrDA**



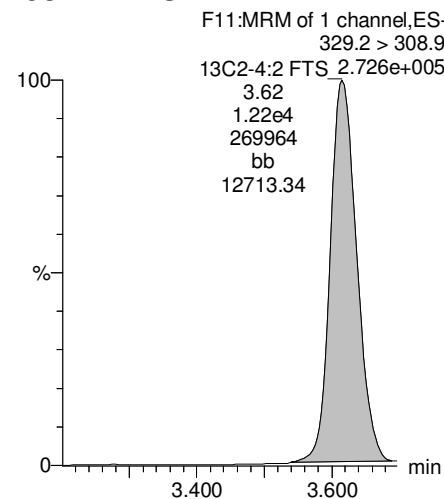
**PFTeDA**



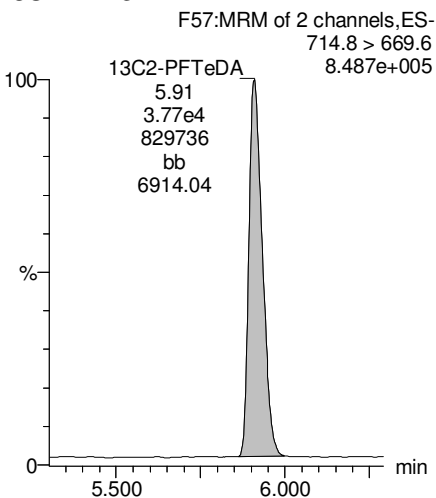
**13C4-PFBA**



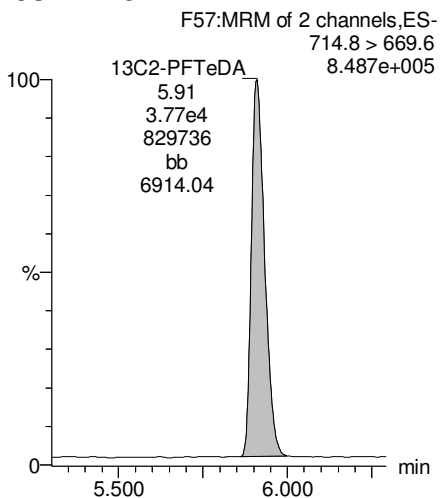
**13C2-4:2 FTS**



**13C2-PFTeDA**



**13C2-PFTeDA**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_crv.qld

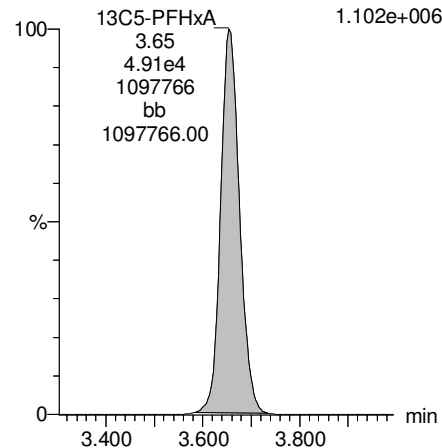
Last Altered: Friday, June 16, 2017 07:26:00 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:33:21 Pacific Daylight Time

Name: 170615M4\_10, Date: 15-Jun-2017, Time: 23:54:48, ID: ST170615M4-8 PFC CS5 17F1514, Description: PFC CS5 17F1514

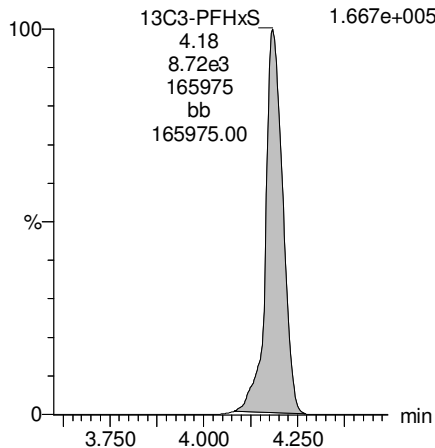
13C5-PFHxA

F10:MRM of 1 channel,ES-  
318 > 272.9  
1.102e+006



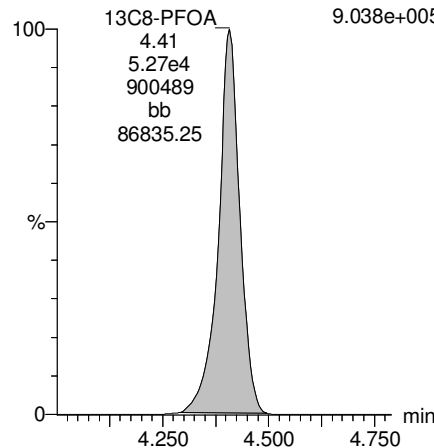
13C3-PFHxS

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
1.667e+005



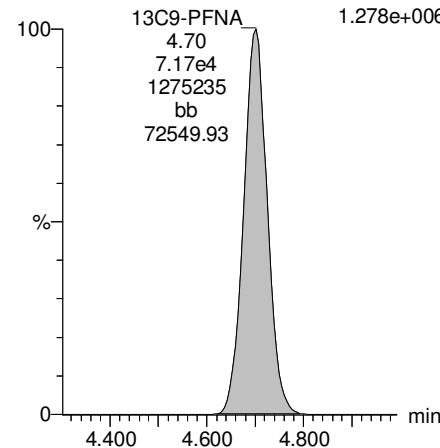
13C8-PFOA

F19:MRM of 1 channel,ES-  
421.3 > 376  
9.038e+005



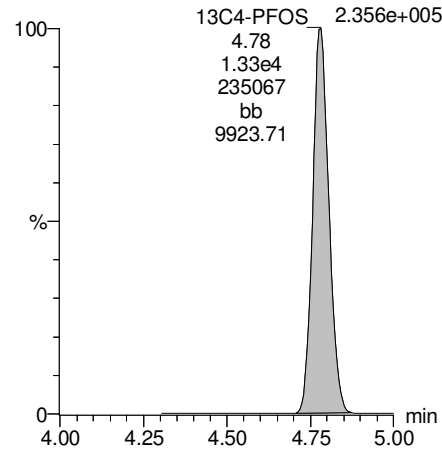
13C9-PFNA

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.278e+006



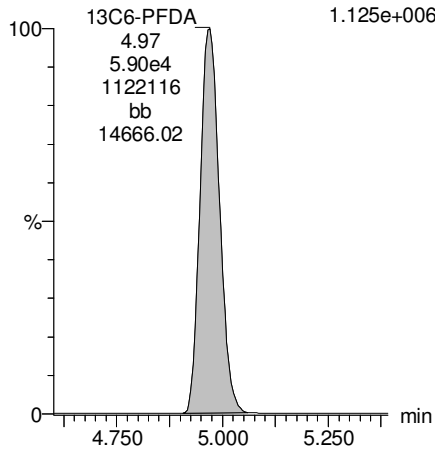
13C4-PFOS

F29:MRM of 1 channel,ES-  
503 > 79.9  
2.356e+005



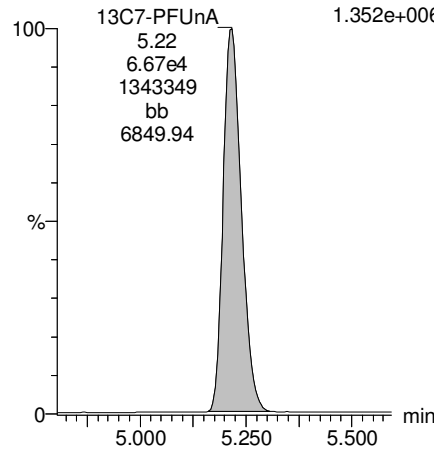
13C6-PFDA

F36:MRM of 1 channel,ES-  
519.1 > 473.7  
1.125e+006



13C7-PFUnA

F44:MRM of 1 channel,ES-  
570.1 > 524.8  
1.352e+006



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_12.qld

Last Altered: Friday, June 16, 2017 07:36:21 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:36:51 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_12, Date: 16-Jun-2017, Time: 00:18:14, ID: SS170615M4-1 PFC SSS 17F1505, Description: PFC SSS 17F1505

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.51e4	1.62e4	1.0000		1.85	1.88	11.7	10.2	101.9
2	2 PFPeA	263.1 > 218.9	2.38e4	2.95e4	1.0000		3.07	3.07	10.1	10.4	104.3
3	3 PFBS	299 > 79.7	4.41e3	3.10e3	1.0000		3.34	3.34	17.8	8.99	89.9
4	4 PFHxA	313.2 > 268.9	3.52e4	1.21e4	1.0000		3.66	3.66	14.5	10.2	101.7
5	5 PFHpA	363 > 318.9	3.06e4	2.88e4	1.0000		4.07	4.06	13.3	10.5	104.6
6	6 PFHxS	398.9 > 79.6	3.96e3	2.89e3	1.0000		4.20	4.19	17.1	8.59	85.9
7	7 6:2 FTS	427.1 > 407	1.19e4	1.46e4	1.0000		4.40	4.39	10.2	11.3	113.0
8	8 PFOA	413 > 368.7	4.51e4	5.36e4	1.0000		4.42	4.41	10.5	10.5	105.5
9	9 PFNA	462.9 > 418.8	4.91e4	4.90e4	1.0000		4.68	4.70	12.5	10.6	105.8
10	10 PFOS	499 > 79.9	9.55e3	1.25e4	1.0000		4.80	4.78	9.53	9.11	91.1
11	11 PFDA	513 > 468.8	5.31e4	4.80e4	1.0000		4.98	4.97	13.8	11.2	112.1
12	12 8:2 FTS	527 > 506.9	1.53e4	1.16e4	1.0000		5.00	4.96	16.5	8.97	89.7
13	13 PFUnA	562.9 > 518.9	3.74e4	5.40e4	1.0000		5.22	5.22	8.66	11.4	113.9
14	14 N-MeFOSAA	570.1 > 419	1.62e4	1.08e4	1.0000		5.00	5.01	18.7	11.3	113.2
15	15 N-EtFOSAA	584.2 > 419	1.24e4	1.31e4	1.0000		5.12	5.12	11.8	10.8	108.3
16	16 PFDoA	612.9 > 318.8	4.89e3	5.91e3	1.0000		5.47	5.46	10.3	10.5	105.1
17	17 PFTrDA	662.9 > 618.9	6.04e4	5.91e3	1.0000		5.70	5.69	128	11.3	113.1
18	18 PFTeDA	712.9 > 668.8	3.96e4	3.78e4	1.0000		5.92	5.91	13.1	9.68	96.8
19	19 13C3-PFBA	216.1 > 171.8	1.62e4	2.32e4	1.0000	0.734	1.89	1.88	8.69	11.8	94.7
20	20 13C3-PFPeA	266 > 221.8	2.95e4	2.32e4	1.0000	1.273	3.07	3.07	15.9	12.5	99.7
21	21 13C3-PFBS	302 > 98.8	3.10e3	2.32e4	1.0000	0.130	3.33	3.34	1.67	12.8	102.2
22	22 13C2-PFHxA	315 > 269.8	1.21e4	4.84e4	1.0000	0.258	3.66	3.66	1.25	4.86	97.2
23	23 13C4-PFHpA	367.2 > 321.8	2.88e4	4.84e4	1.0000	0.254	4.07	4.06	2.97	11.7	93.7
24	24 18O2-PFHxS	403 > 102.6	2.89e3	9.18e3	1.0000	0.331	4.20	4.19	3.94	11.9	95.2
25	25 13C2-6:2 FTS	429.1 > 408.9	1.46e4	4.85e4	1.0000	0.328	4.40	4.39	3.76	11.5	91.8
26	26 13C2-PFOA	414.9 > 369.7	5.36e4	4.85e4	1.0000	1.060	4.26	4.41	13.8	13.0	104.1
27	27 13C5-PFNA	468.2 > 422.9	4.90e4	6.82e4	1.0000	0.757	4.68	4.70	8.98	11.9	94.9
28	28 13C8-PFOS	507 > 79.9	1.25e4	1.41e4	1.0000	0.911	4.80	4.78	11.1	12.1	97.2
29	29 13C2-PFDA	515.1 > 469.9	4.80e4	5.74e4	1.0000	0.826	5.00	4.97	10.4	12.6	101.2
30	30 13C2-8:2 FTS	529.1 > 508.7	1.16e4	5.74e4	1.0000	0.204	5.00	4.95	2.52	12.3	98.7
31	31 13C2-PFUnA	565 > 519.8	5.40e4	6.40e4	1.0000	0.879	5.22	5.22	10.5	12.0	96.0
32	32 d3-N-MeFOSAA	573.3 > 419	1.08e4	6.40e4	1.0000	0.177	4.88	5.01	2.11	11.9	95.3

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Dataset: U:\Q4.PRO\results\170615M4\170615M4\_12.qld

Last Altered: Friday, June 16, 2017 07:36:21 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:36:51 Pacific Daylight Time

Name: 170615M4\_12, Date: 16-Jun-2017, Time: 00:18:14, ID: SS170615M4-1 PFC SSS 17F1505, Description: PFC SSS 17F1505

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
33	33 d5-N-EtFOSAA	589.3 > 419	1.31e4	6.40e4	1.0000	0.217	5.10	5.11	2.55	11.8	94.1
34	34 13C2-PFDoA	615 > 569.7	5.91e3	6.40e4	1.0000	0.102	5.47	5.46	1.15	11.3	90.7
35	35 13C2-PFTeDA	714.8 > 669.6	3.78e4	6.40e4	1.0000	0.589	5.92	5.91	7.39	12.5	100.3
36	36 13C4-PFBA	217 > 171.8	2.32e4	2.32e4	1.0000	1.000	1.89	1.88	12.5	12.5	100.0
37	37 13C2-4:2 FTS	329.2 > 308.9	1.21e4	1.21e4	1.0000	1.000	3.62	3.62	5.00	5.00	100.0
38	38 13C5-PFHxA	318 > 272.9	4.84e4	4.84e4	1.0000	1.000	3.66	3.66	5.00	5.00	100.0
39	39 13C3-PFHxS	401.9 > 79.9	9.18e3	9.18e3	1.0000	1.000	4.20	4.19	12.5	12.5	100.0
40	40 13C8-PFOA	421.3 > 376	4.85e4	4.85e4	1.0000	1.000	4.42	4.41	12.5	12.5	100.0
41	41 13C9-PFNA	472.2 > 426.9	6.82e4	6.82e4	1.0000	1.000	4.70	4.70	12.5	12.5	100.0
42	42 13C4-PFOS	503 > 79.9	1.41e4	1.41e4	1.0000	1.000	4.80	4.78	12.5	12.5	100.0
43	43 13C6-PFDA	519.1 > 473.7	5.74e4	5.74e4	1.0000	1.000	5.00	4.97	12.5	12.5	100.0
44	44 13C7-PFUnA	570.1 > 524.8	6.40e4	6.40e4	1.0000	1.000	5.22	5.22	12.5	12.5	100.0

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Dataset: U:\Q4.PRO\results\170615M4\170615M4\_12.qld

Last Altered: Friday, June 16, 2017 07:36:21 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:36:51 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L18-6-15-17.mdb 16 Jun 2017 07:17:12

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFOS\_Q4\_6-15-17-L18.cdb 16 Jun 2017 07:25:58

Name: 170615M4\_12, Date: 16-Jun-2017, Time: 00:18:14, ID: SS170615M4-1 PFC SSS 17F1505, Description: PFC SSS 17F1505

**Total PFBS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	3 PFBS	299 > 79.7	3.34	4414.343	3098.217	17.810	bb	9.0

**Total PFHxS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	6 PFHxS	398.9 > 79.6	4.19	3963.049	2892.481	17.127	MM	8.6

**Total PFOA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	47 Total PFOA	413 > 368.7	4.11	50.215	53579.234	0.012	bbl	
2	8 PFOA	413 > 368.7	4.41	45067.719	53579.234	10.514	bb	10.5
3	47 Total PFOA	413 > 368.7	4.26	31.533	53579.234	0.007	bbl	

**Total PFOS**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	10 PFOS	499 > 79.9	4.78	9551.910	12531.921	9.528	MM	9.1

**Total N-Me-FOSAA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	14 N-MeFOSAA	570.1 > 419	5.01	16195.245	10811.786	18.724	bb	11.3

**Total N-EtFOSAA**

#	Name	Trace	RT	Area	IS Area	Response	Primary Flags	Conc.
1	50 Total N-EtFOSAA	584.2 > 419	5.25	12.040	13063.991	0.012	bbl	
2	15 N-EtFOSAA	584.2 > 419	5.12	12381.349	13063.991	11.847	bb	10.8
3	50 Total N-EtFOSAA	584.2 > 419	4.71	23.988	13063.991	0.023	bbl	
4	50 Total N-EtFOSAA	584.2 > 419	4.62	18.266	13063.991	0.017	bbl	



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Last Altered: Friday, June 16, 2017 07:36:21 Pacific Daylight Time

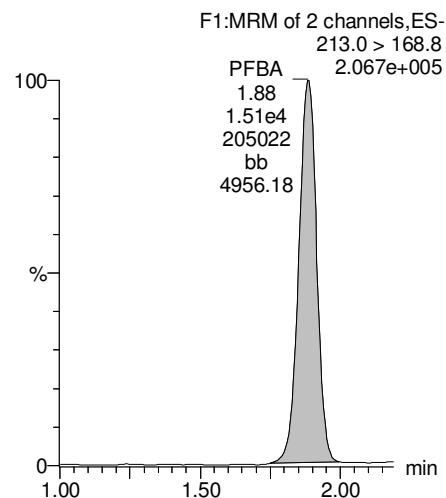
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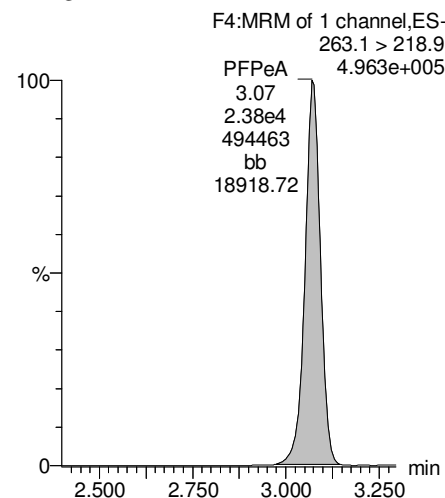
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Name: 170615M4\_12, Date: 16-Jun-2017, Time: 00:18:14, ID: SS170615M4-1 PFC SSS 17F1505, Description: PFC SSS 17F1505

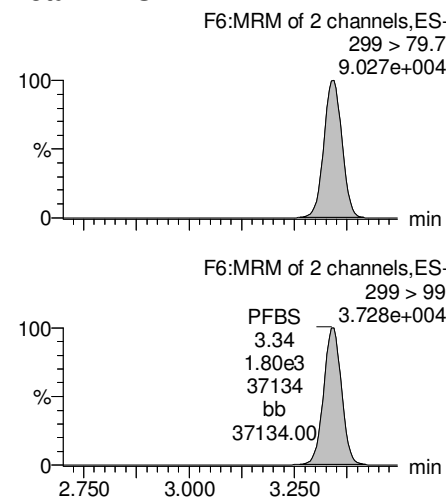
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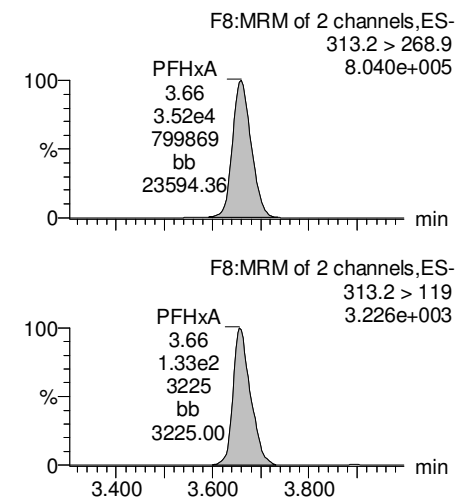
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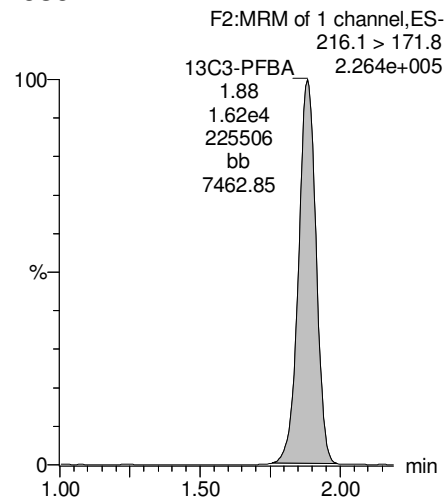
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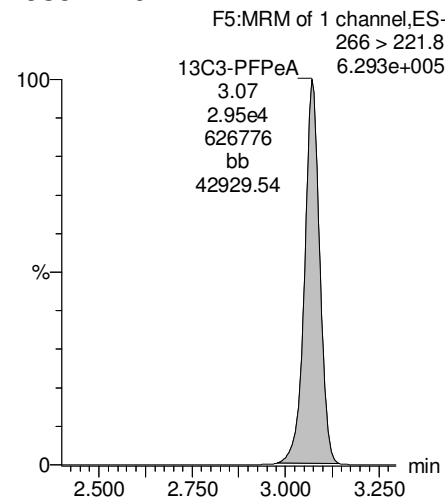
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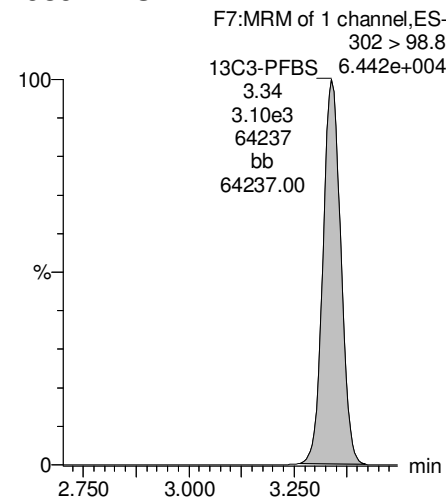
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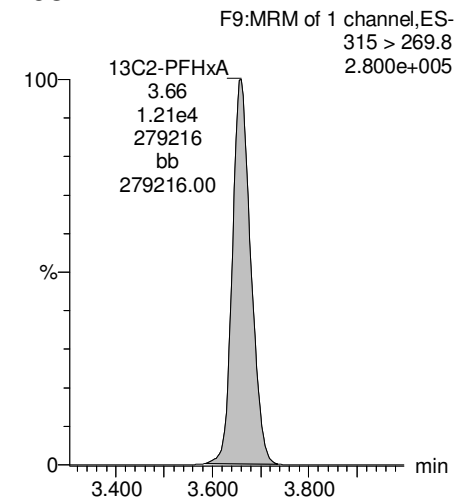
**13C3-PFPeA**



**13C3-PFBS**



**13C2-PFHxA**



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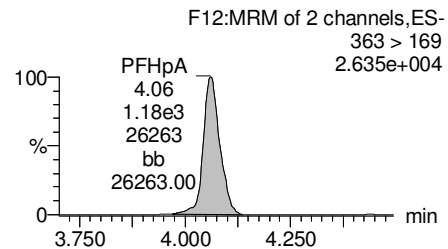
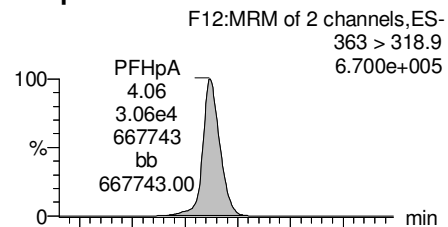
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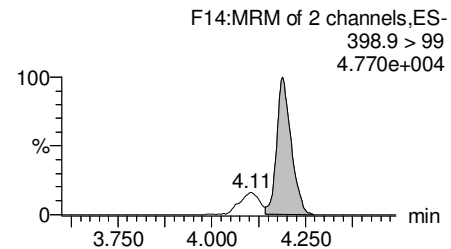
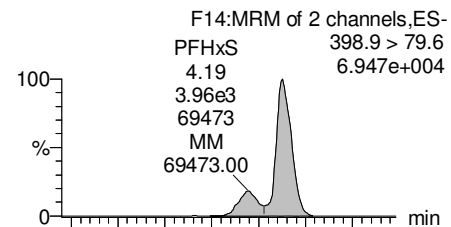
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Name: 170615M4\_12, Date: 16-Jun-2017, Time: 00:18:14, ID: SS170615M4-1 PFC SSS 17F1505, Description: PFC SSS 17F1505

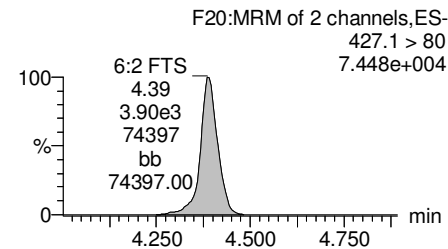
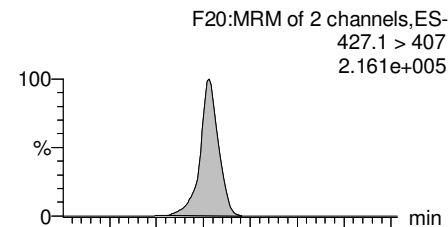
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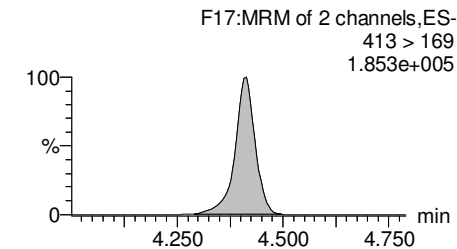
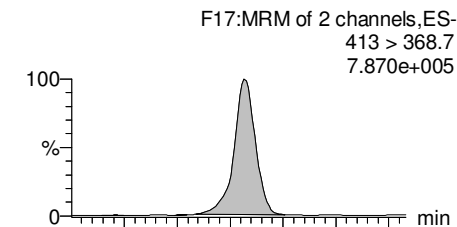
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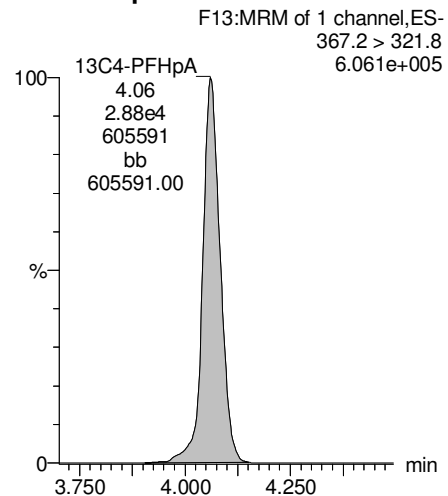
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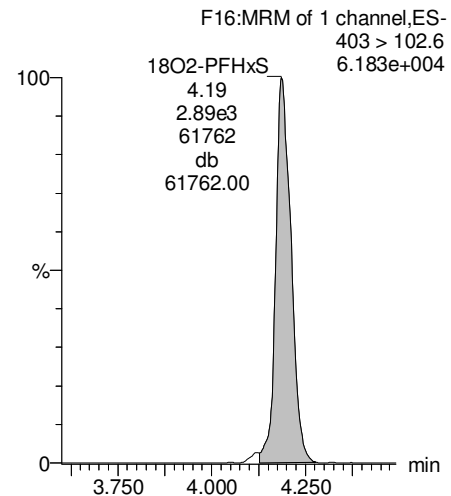
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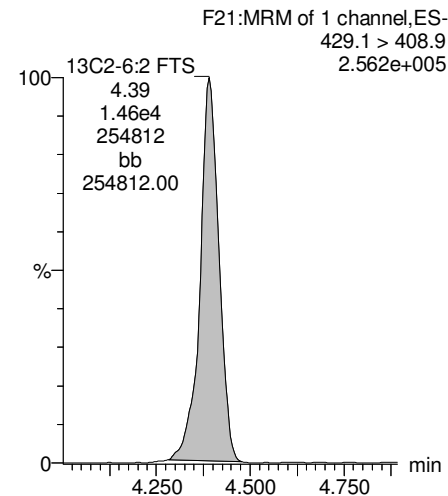
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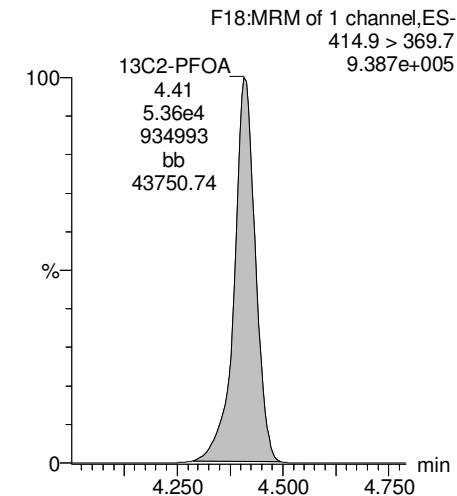
**18O2-PFHxS**



**13C2-6:2 FTS**



**13C2-PFOA**



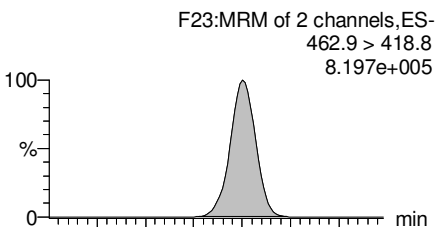
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Last Altered: Friday, June 16, 2017 07:36:21 Pacific Daylight Time

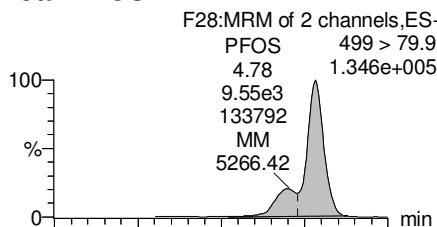
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Name: 170615M4\_12, Date: 16-Jun-2017, Time: 00:18:14, ID: SS170615M4-1 PFC SSS 17F1505, Description: PFC SSS 17F1505

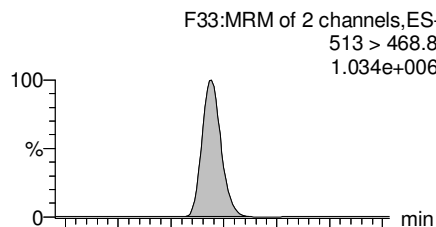
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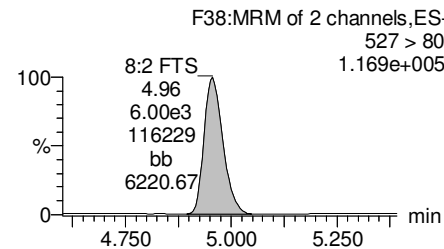
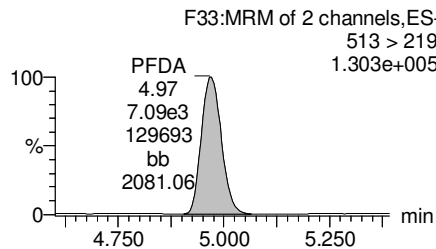
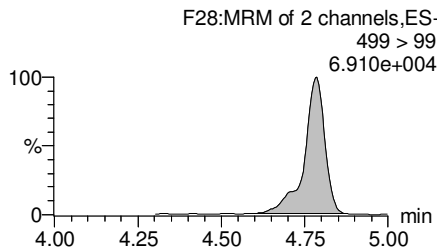
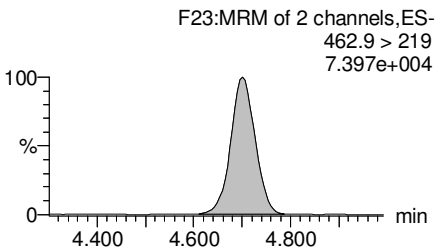
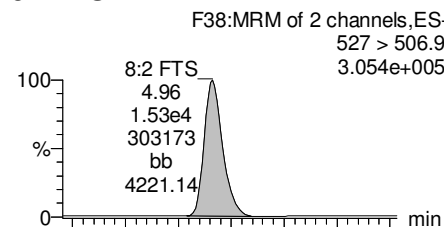
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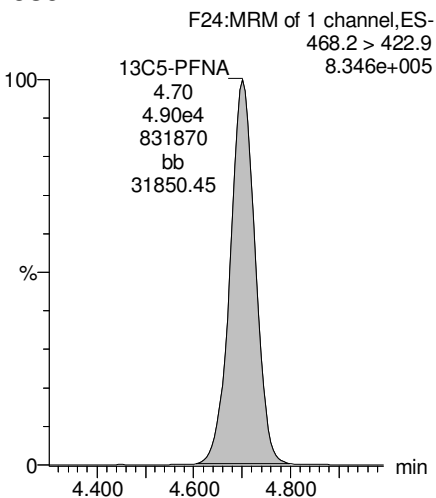
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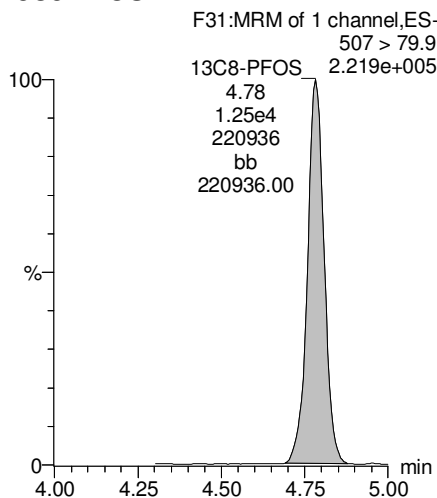
**8:2 FTS**



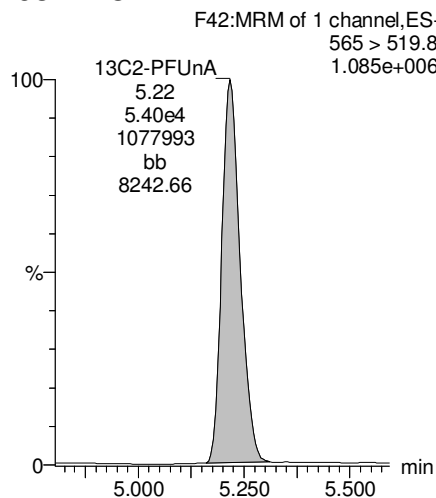
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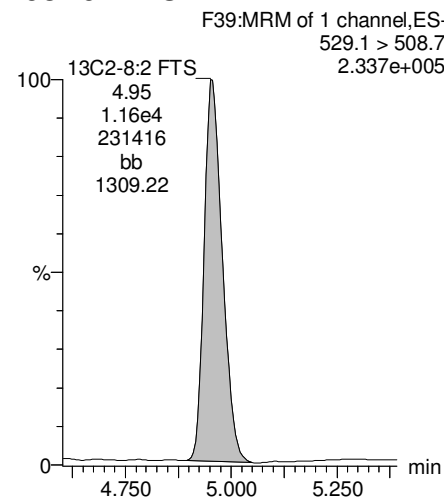
**13C8-PFOS**



**13C2-PFUnA**



**13C2-8:2 FTS**



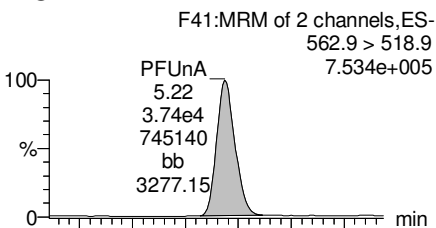
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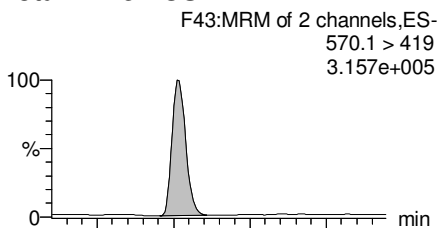
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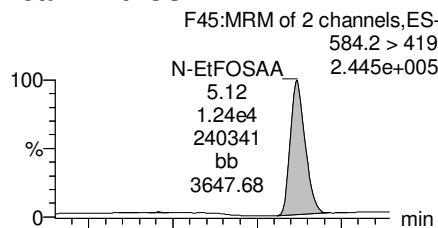
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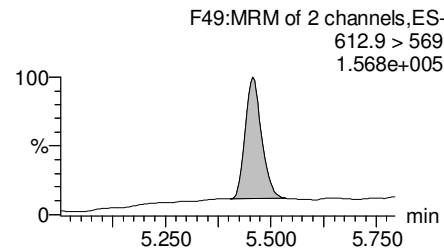
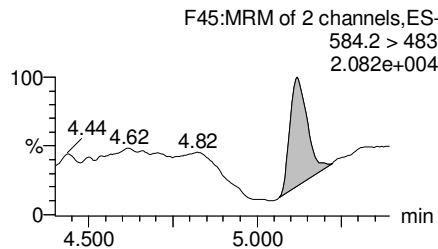
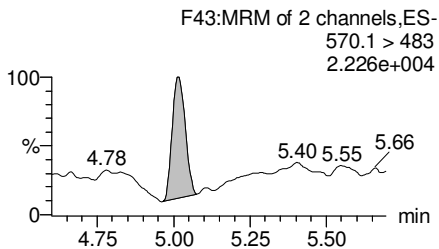
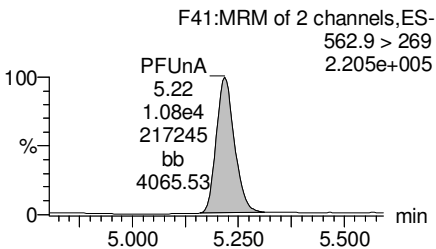
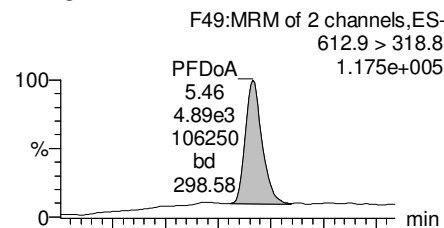
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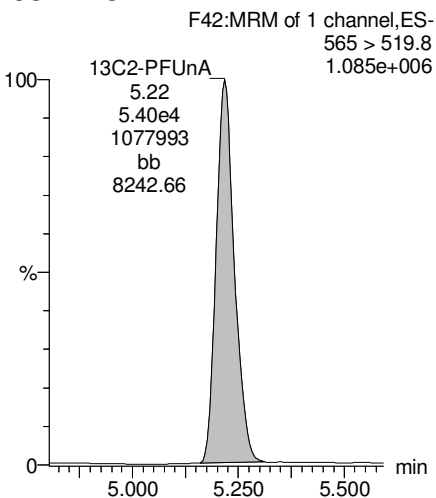
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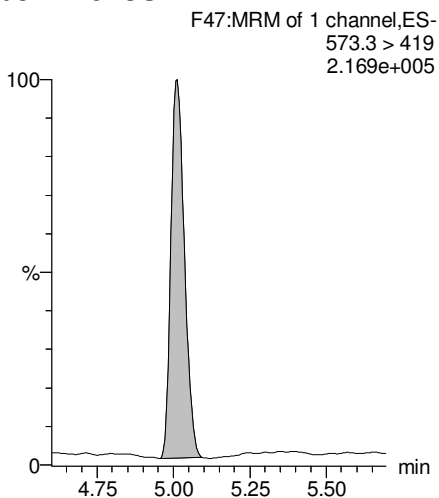
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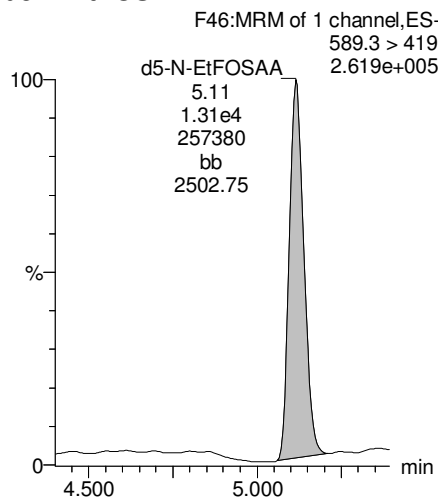
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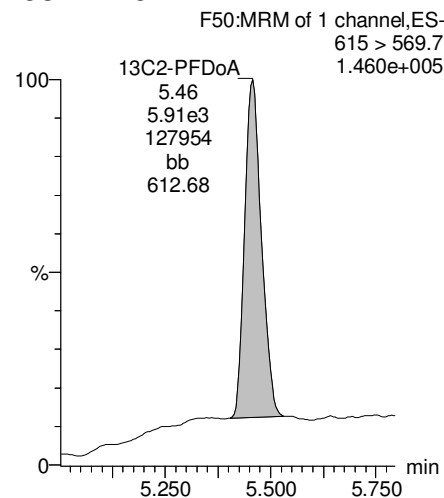
**d3-N-MeFOSAA**



**d5-N-EtFOSAA**



**13C2-PFDoA**



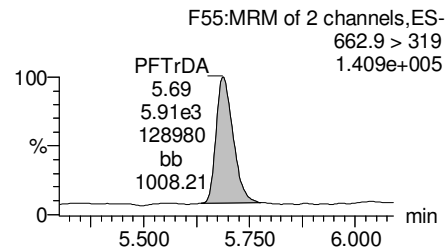
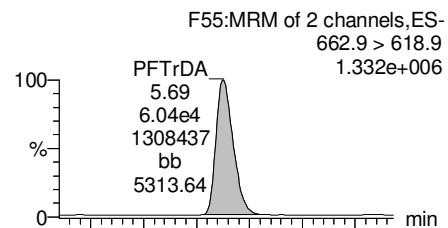
Dataset: U:\Q4.PRO\results\170615M4\170615M4\_12.qld

Last Altered: Friday, June 16, 2017 07:36:21 Pacific Daylight Time

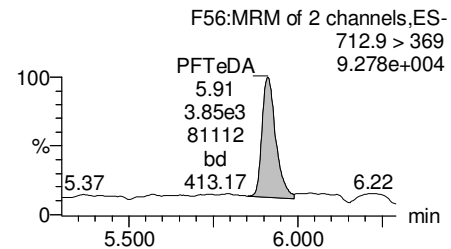
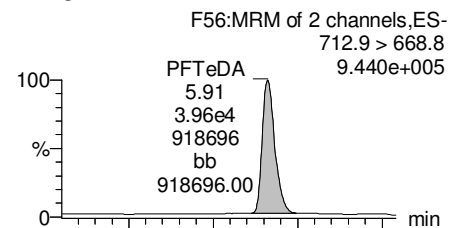
Printed: Friday, June 16, 2017 07:36:51 Pacific Daylight Time

Name: 170615M4\_12, Date: 16-Jun-2017, Time: 00:18:14, ID: SS170615M4-1 PFC SSS 17F1505, Description: PFC SSS 17F1505

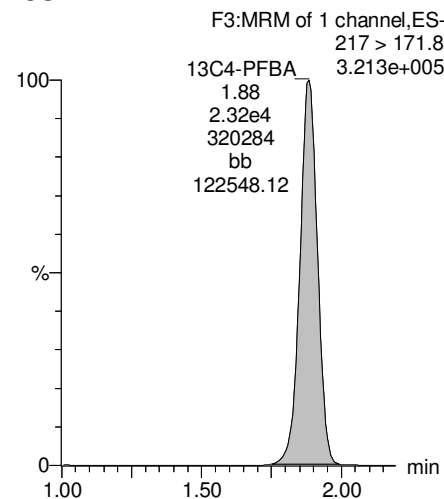
**PFTrDA**



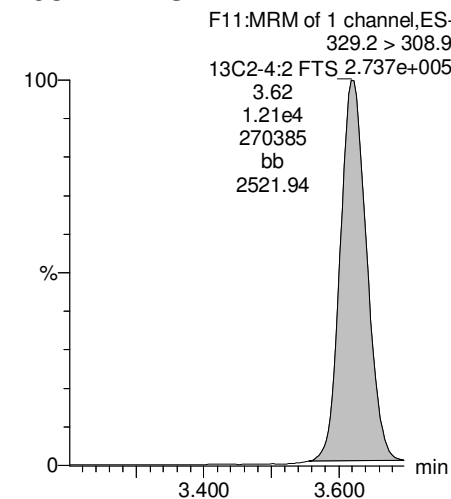
**PFTeDA**



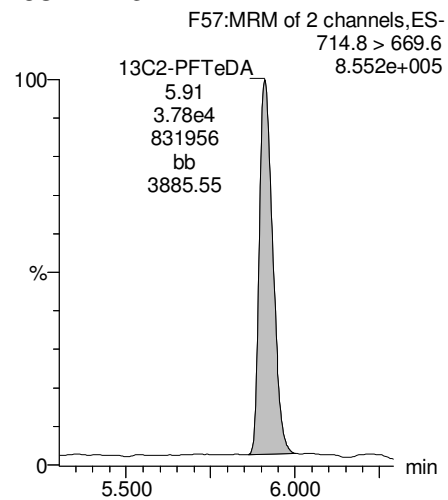
**13C4-PFBA**



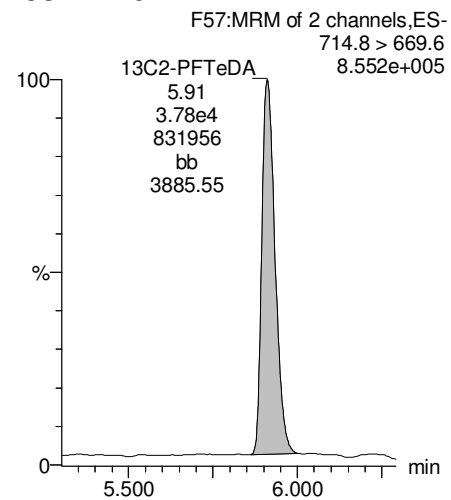
**13C2-4:2 FTS**



**13C2-PFTeDA**



**13C2-PFTeDA**



Dataset: U:\Q4.PRO\results\170615M4\170615M4\_12.qld

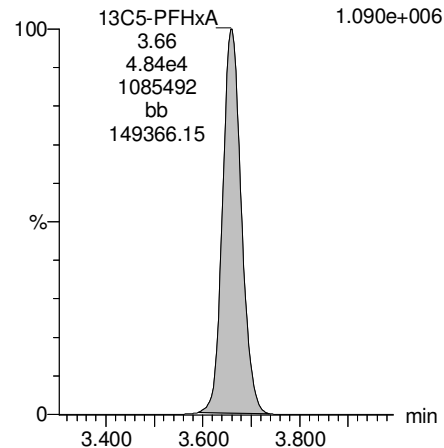
Last Altered: Friday, June 16, 2017 07:36:21 Pacific Daylight Time

Printed: Friday, June 16, 2017 07:36:51 Pacific Daylight Time

Name: 170615M4\_12, Date: 16-Jun-2017, Time: 00:18:14, ID: SS170615M4-1 PFC SSS 17F1505, Description: PFC SSS 17F1505

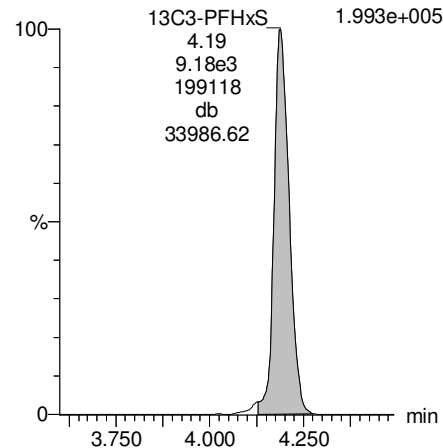
**13C5-PFHxA**

F10:MRM of 1 channel,ES-  
318 > 272.9  
1.090e+006



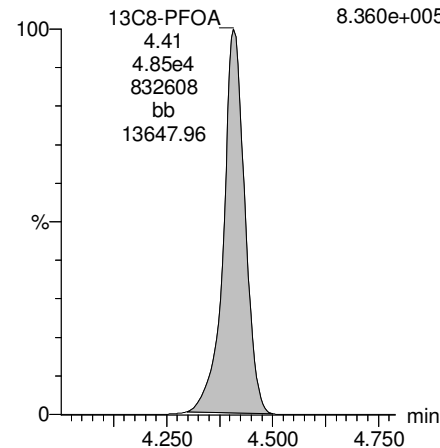
**13C3-PFHxS**

F15:MRM of 1 channel,ES-  
401.9 > 79.9  
1.993e+005



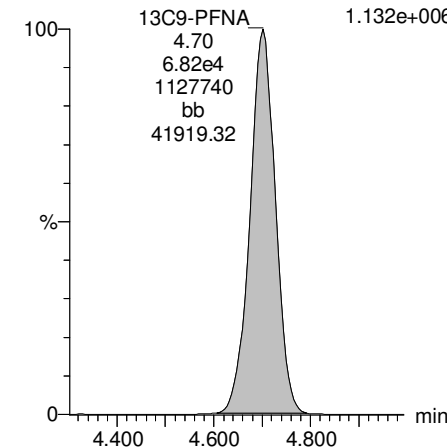
**13C8-PFOA**

F19:MRM of 1 channel,ES-  
421.3 > 376  
8.360e+005



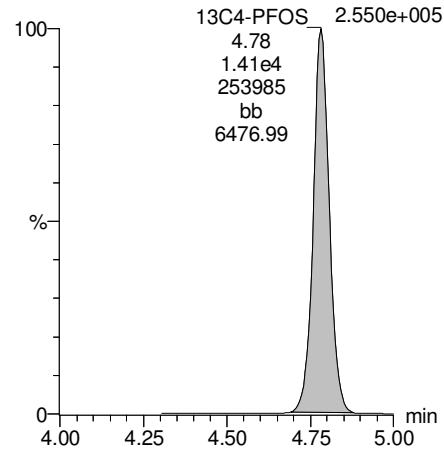
**13C9-PFNA**

F25:MRM of 1 channel,ES-  
472.2 > 426.9  
1.132e+006



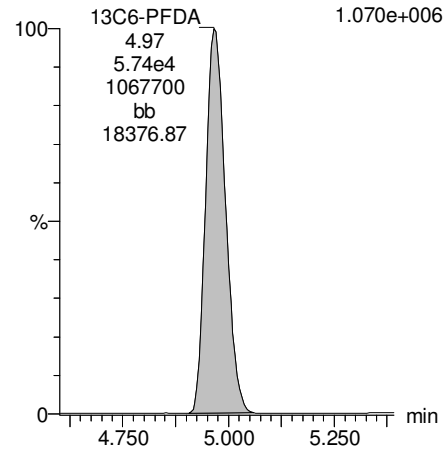
**13C4-PFOS**

F29:MRM of 1 channel,ES-  
503 > 79.9  
2.550e+005



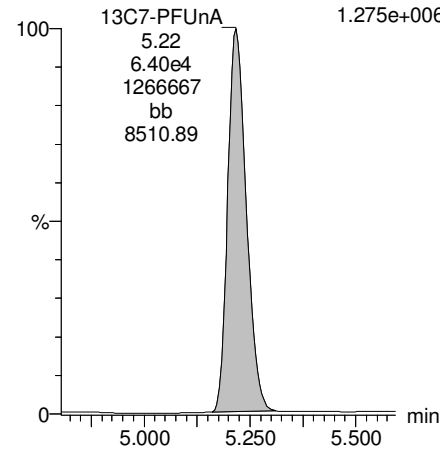
**13C6-PFDA**

F36:MRM of 1 channel,ES-  
519.1 > 473.7  
1.070e+006



**13C7-PFUnA**

F44:MRM of 1 channel,ES-  
570.1 > 524.8  
1.275e+006



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Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 13:30:47 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

Compound name: L-PFBA

Correlation coefficient:  $r = 0.999700$ ,  $r^2 = 0.999401$

Calibration curve:  $1.11709 * x + 0.116843$

Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

*AC  
6/23/17  
1/CP 6/27/17 - 5.0 QSM limits*

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 170623M1_3	Standard	0.250	1.43	396.944	14610.506	0.340	0.2	-20.2	NO	0.999	NO	MM
2	2 170623M1_4	Standard	0.500	1.43	834.398	15645.663	0.667	0.5	-1.6	NO	0.999	NO	MM
3	3 170623M1_5	Standard	1.000	1.44	1553.223	15382.719	1.262	1.0	2.5	NO	0.999	NO	bb
4	4 170623M1_6	Standard	2.000	1.44	3352.975	16493.660	2.541	2.2	8.5	NO	0.999	NO	bb
5	5 170623M1_7	Standard	5.000	1.44	8000.884	15784.449	6.336	5.6	11.3	NO	0.999	NO	bb
6	6 170623M1_8	Standard	10.000	1.44	14135.991	15646.629	11.293	10.0	0.0	NO	0.999	NO	bb
7	7 170623M1_9	Standard	50.000	1.44	69479.555	15491.414	56.063	50.1	0.2	NO	0.999	NO	bb
8	8 170623M1_10	Standard	100.000	1.44	136680.609	15399.994	110.942	99.2	-0.8	NO	0.999	NO	bb

Compound name: L-PFPeA

Correlation coefficient:  $r = 0.999617$ ,  $r^2 = 0.999234$

Calibration curve:  $0.973105 * x + 0.0635727$

Response type: Internal Std ( Ref 26 ), 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 170623M1_3	Standard	0.250	2.64	556.491	26535.848	0.262	0.2	-18.4	NO	0.999	NO	bb
2	2 170623M1_4	Standard	0.500	2.64	1243.333	28275.996	0.550	0.5	-0.1	NO	0.999	NO	bb
3	3 170623M1_5	Standard	1.000	2.64	2372.598	28160.555	1.053	1.0	1.7	NO	0.999	NO	bb
4	4 170623M1_6	Standard	2.000	2.64	5142.824	29953.928	2.146	2.1	7.0	NO	0.999	NO	bb
5	5 170623M1_7	Standard	5.000	2.65	12381.991	28657.799	5.401	5.5	9.7	NO	0.999	NO	bb
6	6 170623M1_8	Standard	10.000	2.65	22076.453	28330.287	9.741	9.9	-0.6	NO	0.999	NO	bb
7	7 170623M1_9	Standard	50.000	2.65	110460.664	27690.367	49.864	51.2	2.4	NO	0.999	NO	bb
8	8 170623M1_10	Standard	100.000	2.65	217979.922	28470.779	95.703	98.3	-1.7	NO	0.999	NO	bb

Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time  
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**Compound name: L-PFBS**

Correlation coefficient:  $r = 0.999330$ ,  $r^2 = 0.998660$

Calibration curve:  $1.90312 * x + 0.0961458$

Response type: Internal Std ( Ref 27 ), 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 170623M1_3	Standard	0.250	2.94	118.098	3229.013	0.457	0.2	-24.1	NO	0.999	NO	bb
2	2 170623M1_4	Standard	0.500	2.94	295.463	3362.057	1.099	0.5	5.3	NO	0.999	NO	bb
3	3 170623M1_5	Standard	1.000	2.94	569.427	3363.171	2.116	1.1	6.2	NO	0.999	NO	bb
4	4 170623M1_6	Standard	2.000	2.94	1211.995	3723.057	4.069	2.1	4.4	NO	0.999	NO	bb
5	5 170623M1_7	Standard	5.000	2.94	2985.413	3393.872	10.996	5.7	14.5	NO	0.999	NO	bb
6	6 170623M1_8	Standard	10.000	2.94	5051.672	3556.337	17.756	9.3	-7.2	NO	0.999	NO	bb
7	7 170623M1_9	Standard	50.000	2.95	26078.096	3353.598	97.202	51.0	2.0	NO	0.999	NO	bb
8	8 170623M1_10	Standard	100.000	2.95	50583.488	3359.235	188.225	98.9	-1.1	NO	0.999	NO	bb

**Compound name: L-PFHxA**

Correlation coefficient:  $r = 0.999595$ ,  $r^2 = 0.999189$

Calibration curve:  $1.50653 * x + 0.152805$

Response type: Internal Std ( Ref 28 ), 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 170623M1_3	Standard	0.250	3.32	989.082	10540.923	0.469	0.2	-16.0	NO	0.999	NO	bb
2	2 170623M1_4	Standard	0.500	3.33	1989.934	11246.726	0.885	0.5	-2.8	NO	0.999	NO	bb
3	3 170623M1_5	Standard	1.000	3.33	3692.397	10759.994	1.716	1.0	3.7	NO	0.999	NO	bb
4	4 170623M1_6	Standard	2.000	3.33	7980.921	11955.489	3.338	2.1	5.7	NO	0.999	NO	bb
5	5 170623M1_7	Standard	5.000	3.33	19256.752	11220.964	8.581	5.6	11.9	NO	0.999	NO	bb
6	6 170623M1_8	Standard	10.000	3.33	33383.262	11017.260	15.150	10.0	-0.4	NO	0.999	NO	bb
7	7 170623M1_9	Standard	50.000	3.33	162226.844	11054.986	73.373	48.6	-2.8	NO	0.999	NO	bb
8	8 170623M1_10	Standard	100.000	3.33	328797.688	10820.131	151.938	100.8	0.8	NO	0.999	NO	bb



Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

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**Compound name: L-PFHpA**

Correlation coefficient:  $r = 0.999320$ ,  $r^2 = 0.998640$

Calibration curve:  $1.22728 * x + 0.149874$

Response type: Internal Std ( Ref 29 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	170623M1_3	Standard	0.250	3.75	850.928	27617.527	0.385	0.2	-23.3	NO	0.999	NO	bb
2	170623M1_4	Standard	0.500	3.75	1832.070	30450.340	0.752	0.5	-1.9	NO	0.999	NO	db
3	170623M1_5	Standard	1.000	3.74	3206.873	28576.010	1.403	1.0	2.1	NO	0.999	NO	bb
4	170623M1_6	Standard	2.000	3.75	6982.723	31881.623	2.738	2.1	5.4	NO	0.999	NO	bb
5	170623M1_7	Standard	5.000	3.75	16714.119	28022.529	7.456	6.0	19.1	NO	0.999	NO	bb
6	170623M1_8	Standard	10.000	3.76	29261.441	29656.914	12.333	9.9	-0.7	NO	0.999	NO	bb
7	170623M1_9	Standard	50.000	3.76	148406.406	29988.510	61.860	50.3	0.6	NO	0.999	NO	bb
8	170623M1_10	Standard	100.000	3.76	283538.688	29200.258	121.377	98.8	-1.2	NO	0.999	NO	bb

**Compound name: L-PFHxS**

Correlation coefficient:  $r = 0.999800$ ,  $r^2 = 0.999599$

Calibration curve:  $1.75459 * x + 0.0368775$

Response type: Internal Std ( Ref 30 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	170623M1_3	Standard	0.250	3.86	125.195	3320.073	0.471	0.2	-1.0	NO	1.000	NO	bb
2	170623M1_4	Standard	0.500	3.87	254.917	3525.209	0.904	0.5	-1.2	NO	1.000	NO	MM
3	170623M1_5	Standard	1.000	3.87	513.750	3468.212	1.852	1.0	3.4	NO	1.000	NO	MM
4	170623M1_6	Standard	2.000	3.87	1033.525	3475.095	3.718	2.1	4.9	NO	1.000	NO	MM
5	170623M1_7	Standard	5.000	3.87	2608.315	3699.590	8.813	5.0	0.0	NO	1.000	NO	MM
6	170623M1_8	Standard	10.000	3.87	4710.945	3564.433	16.521	9.4	-6.1	NO	1.000	NO	MM
7	170623M1_9	Standard	50.000	3.87	23000.447	3319.544	86.610	49.3	-1.3	NO	1.000	NO	MM
8	170623M1_10	Standard	100.000	3.87	44595.406	3140.630	177.494	101.1	1.1	NO	1.000	NO	MM

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Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

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**Compound name: L-6:2 FTS**

Coefficient of Determination: R<sup>2</sup> = 0.997340

Calibration curve:  $-4.66565e-005 * x^2 + 0.168246 * x + 0.0227594$

Response type: Internal Std ( Ref 32 ), 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 170623M1_3	Standard	0.250	4.07	270.766	53837.672	0.063	0.2	-4.6	NO	0.997	NO	bd
2	2 170623M1_4	Standard	0.500	4.05	438.952	60203.141	0.091	0.4	-18.7	NO	0.997	NO	bb
3	3 170623M1_5	Standard	1.000	4.05	808.469	57108.832	0.177	0.9	-8.3	NO	0.997	NO	bb
4	4 170623M1_6	Standard	2.000	4.05	1950.320	60667.906	0.402	2.3	12.7	NO	0.997	NO	bb
5	5 170623M1_7	Standard	5.000	4.06	4655.188	55977.980	1.040	6.1	21.1	NO	0.997	NO	bb
6	6 170623M1_8	Standard	10.000	4.05	8436.126	61019.582	1.728	10.2	1.6	NO	0.997	NO	bb
7	7 170623M1_9	Standard	50.000	4.06	38221.926	60385.129	7.912	47.5	-5.0	NO	0.997	NO	bb
8	8 170623M1_10	Standard	100.000	4.06	79957.883	60311.863	16.572	101.2	1.2	NO	0.997	NO	bb

**Compound name: L-PFOA**

Correlation coefficient: r = 0.999123, r<sup>2</sup> = 0.998248

Calibration curve:  $0.973769 * x + 0.266807$

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 170623M1_3	Standard	0.250	4.06	1409.090	53837.672	0.327	0.1	-75.2	NO	0.998	NO	bbX
2	2 170623M1_4	Standard	0.500	4.07	3034.996	60203.141	0.630	0.4	-25.4	NO	0.998	NO	bb
3	3 170623M1_5	Standard	1.000	4.07	5708.302	57108.832	1.249	1.0	0.9	NO	0.998	NO	bb
4	4 170623M1_6	Standard	2.000	4.07	11658.547	60667.906	2.402	2.2	9.6	NO	0.998	NO	bb
5	5 170623M1_7	Standard	5.000	4.07	27361.264	55977.980	6.110	6.0	20.0	NO	0.998	NO	bb
6	6 170623M1_8	Standard	10.000	4.07	46740.402	61019.582	9.575	9.6	-4.4	NO	0.998	NO	bb
7	7 170623M1_9	Standard	50.000	4.08	235827.547	60385.129	48.817	49.9	-0.3	NO	0.998	NO	bb
8	8 170623M1_10	Standard	100.000	4.08	468810.813	60311.863	97.164	99.5	-0.5	NO	0.998	NO	bb

Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

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**Compound name: L-PFNA**

Correlation coefficient:  $r = 0.999227$ ,  $r^2 = 0.998455$

Calibration curve:  $1.08444 * x + 0.101689$

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 170623M1_3	Standard	0.250	4.36	1331.940	50819.563	0.328	0.2	-16.7	NO	0.998	NO	bb
2	2 170623M1_4	Standard	0.500	4.36	3083.063	64400.051	0.598	0.5	-8.4	NO	0.998	NO	bb
3	3 170623M1_5	Standard	1.000	4.36	5827.584	64829.570	1.124	0.9	-5.8	NO	0.998	NO	bb
4	4 170623M1_6	Standard	2.000	4.36	12480.928	63522.305	2.456	2.2	8.6	NO	0.998	NO	bb
5	5 170623M1_7	Standard	5.000	4.36	31658.012	60687.434	6.521	5.9	18.4	NO	0.998	NO	bb
6	6 170623M1_8	Standard	10.000	4.36	56134.969	60545.461	11.589	10.6	5.9	NO	0.998	NO	bb
7	7 170623M1_9	Standard	50.000	4.36	258432.156	60073.906	53.774	49.5	-1.0	NO	0.998	NO	bb
8	8 170623M1_10	Standard	100.000	4.36	525554.313	61154.859	107.423	99.0	-1.0	NO	0.998	NO	bb

**Compound name: L-PFOS**

Coefficient of Determination:  $R^2 = 0.998123$

Calibration curve:  $-9.58981e-005 * x^2 + 1.08488 * x + 0.0685717$

Response type: Internal Std ( Ref 34 ), 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 170623M1_3	Standard	0.250	4.43	348.617	13144.879	0.332	0.2	-3.1	NO	0.998	NO	MM
2	2 170623M1_4	Standard	0.500	4.44	726.701	13903.268	0.653	0.5	7.8	NO	0.998	NO	MM
3	3 170623M1_5	Standard	1.000	4.43	1303.884	13461.477	1.211	1.1	5.3	NO	0.998	NO	MM
4	4 170623M1_6	Standard	2.000	4.44	2566.926	14342.541	2.237	2.0	-0.0	NO	0.998	NO	MM
5	5 170623M1_7	Standard	5.000	4.44	6618.802	12503.477	6.617	6.0	20.8	NO	0.998	NO	MM
6	6 170623M1_8	Standard	10.000	4.44	10865.388	12848.228	10.571	9.7	-3.1	NO	0.998	NO	MM
7	7 170623M1_9	Standard	50.000	4.45	55497.145	13249.084	52.359	48.4	-3.2	NO	0.998	NO	MM
8	8 170623M1_10	Standard	100.000	4.45	109352.000	12606.139	108.431	100.8	0.8	NO	0.998	NO	MM

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Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

**Compound name: L-PFDA**

Correlation coefficient:  $r = 0.998521$ ,  $r^2 = 0.997044$

Calibration curve:  $1.17168 * x + 0.568446$

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 170623M1_3	Standard	0.250	4.61	1391.244	48470.711	0.359			NO	0.997	NO	bbXI
2	2 170623M1_4	Standard	0.500	4.61	3080.375	53466.125	0.720	0.1	-74.1	NO	0.997	NO	bbX
3	3 170623M1_5	Standard	1.000	4.62	6547.981	54527.695	1.501	0.8	-20.4	NO	0.997	NO	db
4	4 170623M1_6	Standard	2.000	4.62	12388.126	55126.668	2.809	1.9	-4.4	NO	0.997	NO	bb
5	5 170623M1_7	Standard	5.000	4.62	35038.832	56324.457	7.776	6.2	23.0	NO	0.997	NO	bb
6	6 170623M1_8	Standard	10.000	4.62	58163.059	58606.301	12.405	10.1	1.0	NO	0.997	NO	bb
7	7 170623M1_9	Standard	50.000	4.62	295594.719	60436.465	61.137	51.7	3.4	NO	0.997	NO	bb
8	8 170623M1_10	Standard	100.000	4.62	537161.313	58578.852	114.624	97.3	-2.7	NO	0.997	NO	bb

**Compound name: L-8:2 FTS**

Coefficient of Determination:  $R^2 = 0.989104$

Calibration curve:  $-0.0125012 * x^2 + 1.99376 * x + 0.12945$

Response type: Internal Std ( Ref 36 ), 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 170623M1_3	Standard	0.250	4.61	574.241	11568.697	0.620	0.2	-1.3	NO	0.989	NO	bb
2	2 170623M1_4	Standard	0.500	4.61	697.171	8428.362	1.034	0.5	-9.0	NO	0.989	NO	db
3	3 170623M1_5	Standard	1.000	4.61	1458.513	8699.347	2.096	1.0	-0.8	NO	0.989	NO	bb
4	4 170623M1_6	Standard	2.000	4.61	3181.527	9721.940	4.091	2.0	0.6	NO	0.989	NO	bd
5	5 170623M1_7	Standard	5.000	4.61	6908.989	7207.270	11.983	6.2	23.7	NO	0.989	NO	bb
6	6 170623M1_8	Standard	10.000	4.61	10587.748	8043.505	16.454	8.7	-13.4	NO	0.989	NO	bb
7	7 170623M1_9	Standard	50.000	4.61	51070.879	9276.533	68.817	50.3	0.7	NO	0.989	NO	bb
8	8 170623M1_10	Standard	100.000	4.62	92232.758	10608.317	108.680			NO	0.989	NO	bbXI

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**Compound name: 13C3-PFBA**

Response Factor: 0.879672

RRF SD: 0.00688502, Relative SD: 0.78268

Response type: Internal Std ( Ref 37 ), 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 170623M1_3	Standard	12.500	1.43	14610.506	16371.311	11.156	12.7	1.5	NO		NO	bb
2	2 170623M1_4	Standard	12.500	1.43	15645.663	17829.246	10.969	12.5	-0.2	NO		NO	bb
3	3 170623M1_5	Standard	12.500	1.43	15382.719	17441.783	11.024	12.5	0.3	NO		NO	bb
4	4 170623M1_6	Standard	12.500	1.43	16493.660	18806.240	10.963	12.5	-0.3	NO		NO	bb
5	5 170623M1_7	Standard	12.500	1.44	15784.449	17880.537	11.035	12.5	0.4	NO		NO	bb
6	6 170623M1_8	Standard	12.500	1.44	15646.629	17935.484	10.905	12.4	-0.8	NO		NO	bb
7	7 170623M1_9	Standard	12.500	1.44	15491.414	17792.168	10.884	12.4	-1.0	NO		NO	bb
8	8 170623M1_10	Standard	12.500	1.44	15399.994	17448.828	11.032	12.5	0.3	NO		NO	bb

**Compound name: 13C3-PFPeA**

Response Factor: 1.59805

RRF SD: 0.0245038, Relative SD: 1.53335

Response type: Internal Std ( Ref 37 ), 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 170623M1_3	Standard	12.500	2.64	26535.848	16371.311	20.261	12.7	1.4	NO		NO	bb
2	2 170623M1_4	Standard	12.500	2.64	28275.996	17829.246	19.824	12.4	-0.8	NO		NO	bb
3	3 170623M1_5	Standard	12.500	2.64	28160.555	17441.783	20.182	12.6	1.0	NO		NO	bb
4	4 170623M1_6	Standard	12.500	2.64	29953.928	18806.240	19.910	12.5	-0.3	NO		NO	bb
5	5 170623M1_7	Standard	12.500	2.65	28657.799	17880.537	20.034	12.5	0.3	NO		NO	bb
6	6 170623M1_8	Standard	12.500	2.64	28330.287	17935.484	19.745	12.4	-1.2	NO		NO	bb
7	7 170623M1_9	Standard	12.500	2.65	27690.367	17792.168	19.454	12.2	-2.6	NO		NO	bb
8	8 170623M1_10	Standard	12.500	2.65	28470.779	17448.828	20.396	12.8	2.1	NO		NO	bb

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**Compound name: 13C3-PFBS**

Response Factor: 0.193212

RRF SD: 0.00415159, Relative SD: 2.14872

Response type: Internal Std ( Ref 37 ), 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 170623M1_3	Standard	12.500	2.94	3229.013	16371.311	2.465	12.8	2.1	NO		NO	bb
2	2 170623M1_4	Standard	12.500	2.94	3362.057	17829.246	2.357	12.2	-2.4	NO		NO	bb
3	3 170623M1_5	Standard	12.500	2.93	3363.171	17441.783	2.410	12.5	-0.2	NO		NO	bb
4	4 170623M1_6	Standard	12.500	2.94	3723.057	18806.240	2.475	12.8	2.5	NO		NO	bb
5	5 170623M1_7	Standard	12.500	2.94	3393.872	17880.537	2.373	12.3	-1.8	NO		NO	bb
6	6 170623M1_8	Standard	12.500	2.94	3556.337	17935.484	2.479	12.8	2.6	NO		NO	bb
7	7 170623M1_9	Standard	12.500	2.95	3353.598	17792.168	2.356	12.2	-2.4	NO		NO	bb
8	8 170623M1_10	Standard	12.500	2.94	3359.235	17448.828	2.406	12.5	-0.4	NO		NO	bb

**Compound name: 13C2-PFHxA**

Response Factor: 0.313743

RRF SD: 0.00620868, Relative SD: 1.97891

Response type: Internal Std ( Ref 38 ), 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 170623M1_3	Standard	5.000	3.32	10540.923	33567.645	1.570	5.0	0.1	NO		NO	bb
2	2 170623M1_4	Standard	5.000	3.33	11246.726	36311.797	1.549	4.9	-1.3	NO		NO	bb
3	3 170623M1_5	Standard	5.000	3.32	10759.994	35108.363	1.532	4.9	-2.3	NO		NO	bb
4	4 170623M1_6	Standard	5.000	3.33	11955.489	37225.582	1.606	5.1	2.4	NO		NO	bb
5	5 170623M1_7	Standard	5.000	3.33	11220.964	36365.656	1.543	4.9	-1.7	NO		NO	bb
6	6 170623M1_8	Standard	5.000	3.33	11017.260	35438.516	1.554	5.0	-0.9	NO		NO	bb
7	7 170623M1_9	Standard	5.000	3.34	11054.986	35105.238	1.575	5.0	0.4	NO		NO	bb
8	8 170623M1_10	Standard	5.000	3.33	10820.131	33374.613	1.621	5.2	3.3	NO		NO	bb

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**Compound name: 13C4-PFHpA**

Response Factor: 0.333415

RRF SD: 0.0127996, Relative SD: 3.83895

Response type: Internal Std ( Ref 38 ), 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 170623M1_3	Standard	12.500	3.75	27617.527	33567.645	4.114	12.3	-1.3	NO		NO	bb
2	2 170623M1_4	Standard	12.500	3.75	30450.340	36311.797	4.193	12.6	0.6	NO		NO	bb
3	3 170623M1_5	Standard	12.500	3.75	28576.010	35108.363	4.070	12.2	-2.4	NO		NO	bb
4	4 170623M1_6	Standard	12.500	3.75	31881.623	37225.582	4.282	12.8	2.7	NO		NO	bb
5	5 170623M1_7	Standard	12.500	3.75	28022.529	36365.656	3.853	11.6	-7.6	NO		NO	bb
6	6 170623M1_8	Standard	12.500	3.75	29656.914	35438.516	4.184	12.5	0.4	NO		NO	bb
7	7 170623M1_9	Standard	12.500	3.76	29988.510	35105.238	4.271	12.8	2.5	NO		NO	bb
8	8 170623M1_10	Standard	12.500	3.76	29200.258	33374.613	4.375	13.1	5.0	NO		NO	bb

**Compound name: 18O2-PFHxS**

Response Factor: 0.465299

RRF SD: 0.0242305, Relative SD: 5.20752

Response type: Internal Std ( Ref 39 ), 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 170623M1_3	Standard	12.500	3.86	3320.073	6987.399	5.939	12.8	2.1	NO		NO	bb
2	2 170623M1_4	Standard	12.500	3.86	3525.209	7803.775	5.647	12.1	-2.9	NO		NO	bb
3	3 170623M1_5	Standard	12.500	3.86	3468.212	7053.441	6.146	13.2	5.7	NO		NO	bb
4	4 170623M1_6	Standard	12.500	3.86	3475.095	7626.329	5.696	12.2	-2.1	NO		NO	bb
5	5 170623M1_7	Standard	12.500	3.87	3699.590	7549.324	6.126	13.2	5.3	NO		NO	bb
6	6 170623M1_8	Standard	12.500	3.87	3564.433	7327.215	6.081	13.1	4.5	NO		NO	bb
7	7 170623M1_9	Standard	12.500	3.87	3319.544	7430.994	5.584	12.0	-4.0	NO		NO	bb
8	8 170623M1_10	Standard	12.500	3.87	3140.630	7391.540	5.311	11.4	-8.7	NO		NO	bb

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**Compound name: 13C2-6:2 FTS**

Response Factor: 0.18551

RRF SD: 0.0261879, Relative SD: 14.1167

Response type: Internal Std ( Ref 32 ), 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 170623M1_3	Standard	12.500	4.05	12596.835	53837.672	2.925	15.8	26.1	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.05	10383.773	60203.141	2.156	11.6	-7.0	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.05	10201.402	57108.832	2.233	12.0	-3.7	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.05	9577.050	60667.906	1.973	10.6	-14.9	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.05	9813.154	55977.980	2.191	11.8	-5.5	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.05	10046.775	61019.582	2.058	11.1	-11.2	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.06	11181.305	60385.129	2.315	12.5	-0.2	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.06	13028.054	60311.863	2.700	14.6	16.4	NO		NO	bb

**Compound name: 13C2-PFOA**

Response Factor: 1.1921

RRF SD: 0.0372684, Relative SD: 3.12629

Response type: Internal Std ( Ref 40 ), 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 170623M1_3	Standard	12.500	4.07	53837.672	44046.641	15.279	12.8	2.5	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.06	60203.141	48662.023	15.465	13.0	3.8	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.07	57108.832	47464.465	15.040	12.6	0.9	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.07	60667.906	52359.688	14.483	12.1	-2.8	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.07	55977.980	49383.406	14.169	11.9	-4.9	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.07	61019.582	52575.250	14.508	12.2	-2.6	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.08	60385.129	50490.406	14.950	12.5	0.3	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.08	60311.863	49221.059	15.317	12.8	2.8	NO		NO	bb



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**Compound name: 13C5-PFNA**

Response Factor: 0.920369

RRF SD: 0.0229011, Relative SD: 2.48825

Response type: Internal Std ( Ref 41 ), 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 170623M1_3	Standard	12.500	4.35	50819.563	54897.504	11.571	12.6	0.6	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.35	64400.051	68876.656	11.688	12.7	1.6	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.35	64829.570	71007.945	11.412	12.4	-0.8	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.36	63522.305	68431.195	11.603	12.6	0.9	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.36	60687.434	67174.375	11.293	12.3	-1.8	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.36	60545.461	64749.379	11.688	12.7	1.6	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.36	60073.906	68664.406	10.936	11.9	-4.9	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.36	61154.859	64538.148	11.845	12.9	3.0	NO		NO	bb

**Compound name: 13C8-PFOS**

Response Factor: 1.08961

RRF SD: 0.0580543, Relative SD: 5.328

Response type: Internal Std ( Ref 42 ), 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 170623M1_3	Standard	12.500	4.44	13144.879	11286.224	14.559	13.4	6.9	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.43	13903.268	11963.953	14.526	13.3	6.7	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.44	13461.477	12231.320	13.757	12.6	1.0	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.44	14342.541	13543.358	13.238	12.1	-2.8	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.44	12503.477	12373.757	12.631	11.6	-7.3	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.44	12848.228	12601.168	12.745	11.7	-6.4	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.44	13249.084	12168.316	13.610	12.5	-0.1	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.45	12606.139	11340.672	13.895	12.8	2.0	NO		NO	bb

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**Compound name: 13C2-PFDA**

Response Factor: 1.01609

RRF SD: 0.0493383, Relative SD: 4.8557

Response type: Internal Std ( Ref 43 ), 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 170623M1_3	Standard	12.500	4.62	48470.711	46140.289	13.131	12.9	3.4	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.62	53466.125	56607.023	11.806	11.6	-7.0	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.61	54527.695	55780.023	12.219	12.0	-3.8	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.62	55126.668	53419.875	12.899	12.7	1.6	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.62	56324.457	52966.645	13.292	13.1	4.7	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.62	58606.301	53965.492	13.575	13.4	6.9	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.62	60436.465	61872.227	12.210	12.0	-3.9	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.62	58578.852	58695.055	12.475	12.3	-1.8	NO		NO	bb

**Compound name: 13C2-8:2 FTS**

Response Factor: 0.1665

RRF SD: 0.0341352, Relative SD: 20.5016

Response type: Internal Std ( Ref 35 ), 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 170623M1_3	Standard	12.500	4.61	11568.697	48470.711	2.983	17.9	43.3	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.61	8428.362	53466.125	1.970	11.8	-5.3	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.60	8699.347	54527.695	1.994	12.0	-4.2	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.61	9721.940	55126.668	2.204	13.2	5.9	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.61	7207.270	56324.457	1.599	9.6	-23.1	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.61	8043.505	58606.301	1.716	10.3	-17.6	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.61	9276.533	60436.465	1.919	11.5	-7.8	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.62	10608.317	58578.852	2.264	13.6	8.8	NO		NO	bb

Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

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**Compound name: 13C4-PFBA**

Response Factor: 1

RRF SD: 9.3831e-017, Relative SD: 9.3831e-015

Response type: Internal Std ( Ref 37 ), 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 170623M1_3	Standard	12.500	1.43	16371.311	16371.311	12.500	12.5	0.0	NO		NO	bb
2	2 170623M1_4	Standard	12.500	1.43	17829.246	17829.246	12.500	12.5	0.0	NO		NO	bb
3	3 170623M1_5	Standard	12.500	1.43	17441.783	17441.783	12.500	12.5	0.0	NO		NO	bb
4	4 170623M1_6	Standard	12.500	1.43	18806.240	18806.240	12.500	12.5	0.0	NO		NO	bb
5	5 170623M1_7	Standard	12.500	1.44	17880.537	17880.537	12.500	12.5	0.0	NO		NO	bb
6	6 170623M1_8	Standard	12.500	1.44	17935.484	17935.484	12.500	12.5	0.0	NO		NO	bb
7	7 170623M1_9	Standard	12.500	1.44	17792.168	17792.168	12.500	12.5	0.0	NO		NO	bb
8	8 170623M1_10	Standard	12.500	1.44	17448.828	17448.828	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C5-PFHxA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 38 ), 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 170623M1_3	Standard	5.000	3.32	33567.645	33567.645	5.000	5.0	0.0	NO		NO	bb
2	2 170623M1_4	Standard	5.000	3.33	36311.797	36311.797	5.000	5.0	0.0	NO		NO	bb
3	3 170623M1_5	Standard	5.000	3.32	35108.363	35108.363	5.000	5.0	0.0	NO		NO	bb
4	4 170623M1_6	Standard	5.000	3.33	37225.582	37225.582	5.000	5.0	0.0	NO		NO	bb
5	5 170623M1_7	Standard	5.000	3.33	36365.656	36365.656	5.000	5.0	0.0	NO		NO	bb
6	6 170623M1_8	Standard	5.000	3.33	35438.516	35438.516	5.000	5.0	0.0	NO		NO	bb
7	7 170623M1_9	Standard	5.000	3.34	35105.238	35105.238	5.000	5.0	0.0	NO		NO	bb
8	8 170623M1_10	Standard	5.000	3.33	33374.613	33374.613	5.000	5.0	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

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**Compound name: 13C3-PFHxS**

Response Factor: 1

RRF SD: 5.93439e-017, Relative SD: 5.93439e-015

Response type: Internal Std ( Ref 39 ), 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 170623M1_3	Standard	12.500	3.86	6987.399	6987.399	12.500	12.5	0.0	NO		NO	bb
2	2 170623M1_4	Standard	12.500	3.86	7803.775	7803.775	12.500	12.5	0.0	NO		NO	bb
3	3 170623M1_5	Standard	12.500	3.87	7053.441	7053.441	12.500	12.5	0.0	NO		NO	bb
4	4 170623M1_6	Standard	12.500	3.87	7626.329	7626.329	12.500	12.5	0.0	NO		NO	bb
5	5 170623M1_7	Standard	12.500	3.87	7549.324	7549.324	12.500	12.5	0.0	NO		NO	bb
6	6 170623M1_8	Standard	12.500	3.87	7327.215	7327.215	12.500	12.5	0.0	NO		NO	bb
7	7 170623M1_9	Standard	12.500	3.87	7430.994	7430.994	12.500	12.5	0.0	NO		NO	bb
8	8 170623M1_10	Standard	12.500	3.87	7391.540	7391.540	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C8-PFOA**

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std ( Ref 40 ), 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 170623M1_3	Standard	12.500	4.07	44046.641	44046.641	12.500	12.5	0.0	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.07	48662.023	48662.023	12.500	12.5	0.0	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.07	47464.465	47464.465	12.500	12.5	0.0	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.07	52359.688	52359.688	12.500	12.5	0.0	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.07	49383.406	49383.406	12.500	12.5	0.0	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.07	52575.250	52575.250	12.500	12.5	0.0	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.07	50490.406	50490.406	12.500	12.5	0.0	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.08	49221.059	49221.059	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

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**Compound name: 13C9-PFNA**

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std ( Ref 41 ), 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 170623M1_3	Standard	12.500	4.35	54897.504	54897.504	12.500	12.5	0.0	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.35	68876.656	68876.656	12.500	12.5	0.0	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.35	71007.945	71007.945	12.500	12.5	0.0	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.36	68431.195	68431.195	12.500	12.5	0.0	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.36	67174.375	67174.375	12.500	12.5	0.0	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.36	64749.379	64749.379	12.500	12.5	0.0	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.36	68664.406	68664.406	12.500	12.5	0.0	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.36	64538.148	64538.148	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C4-PFOS**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 42 ), 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 170623M1_3	Standard	12.500	4.44	11286.224	11286.224	12.500	12.5	0.0	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.44	11963.953	11963.953	12.500	12.5	0.0	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.44	12231.320	12231.320	12.500	12.5	0.0	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.44	13543.358	13543.358	12.500	12.5	0.0	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.44	12373.757	12373.757	12.500	12.5	0.0	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.44	12601.168	12601.168	12.500	12.5	0.0	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.45	12168.316	12168.316	12.500	12.5	0.0	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.45	11340.672	11340.672	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

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**Compound name: 13C6-PFDA**

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std ( Ref 43 ), 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 170623M1_3	Standard	12.500	4.61	46140.289	46140.289	12.500	12.5	0.0	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.61	56607.023	56607.023	12.500	12.5	0.0	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.61	55780.023	55780.023	12.500	12.5	0.0	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.62	53419.875	53419.875	12.500	12.5	0.0	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.62	52966.645	52966.645	12.500	12.5	0.0	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.62	53965.492	53965.492	12.500	12.5	0.0	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.63	61872.227	61872.227	12.500	12.5	0.0	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.63	58695.055	58695.055	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C7-PFUnA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 44 ), 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 170623M1_3	Standard	12.500	4.86	59558.957	59558.957	12.500	12.5	0.0	NO		NO	bb
2	2 170623M1_4	Standard	12.500	4.86	60169.242	60169.242	12.500	12.5	0.0	NO		NO	bb
3	3 170623M1_5	Standard	12.500	4.86	61374.789	61374.789	12.500	12.5	0.0	NO		NO	bb
4	4 170623M1_6	Standard	12.500	4.86	61731.703	61731.703	12.500	12.5	0.0	NO		NO	bb
5	5 170623M1_7	Standard	12.500	4.86	68955.281	68955.281	12.500	12.5	0.0	NO		NO	bb
6	6 170623M1_8	Standard	12.500	4.87	62909.539	62909.539	12.500	12.5	0.0	NO		NO	bb
7	7 170623M1_9	Standard	12.500	4.87	58940.504	58940.504	12.500	12.5	0.0	NO		NO	bb
8	8 170623M1_10	Standard	12.500	4.87	61350.563	61350.563	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

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Printed: Friday, June 23, 2017 14:19:00 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

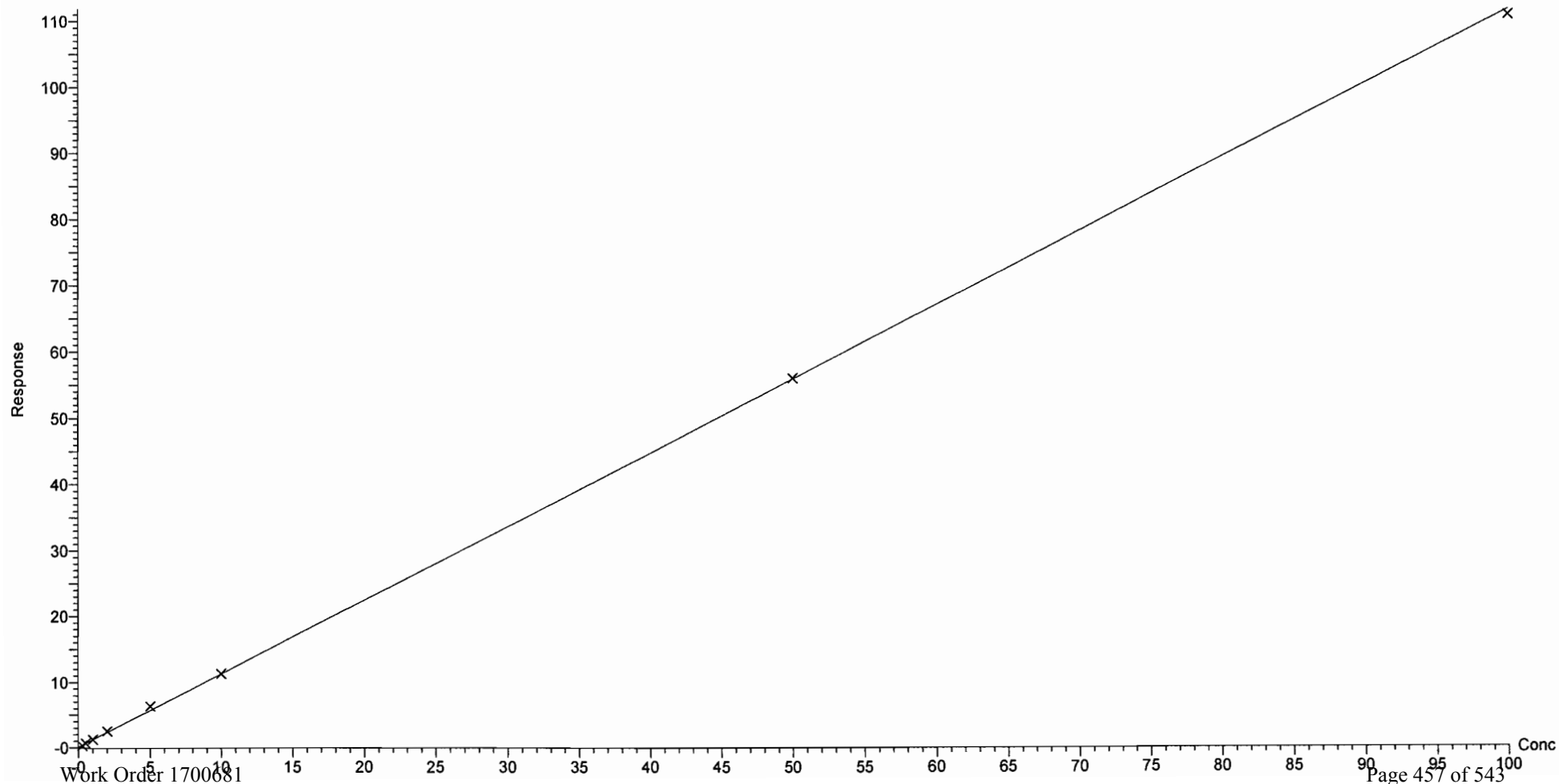
Compound name: L-PFBA

Correlation coefficient:  $r = 0.999700$ ,  $r^2 = 0.999401$

Calibration curve:  $1.11709 * x + 0.116843$

Response type: Internal Std ( Ref 25 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:19:00 Pacific Daylight Time

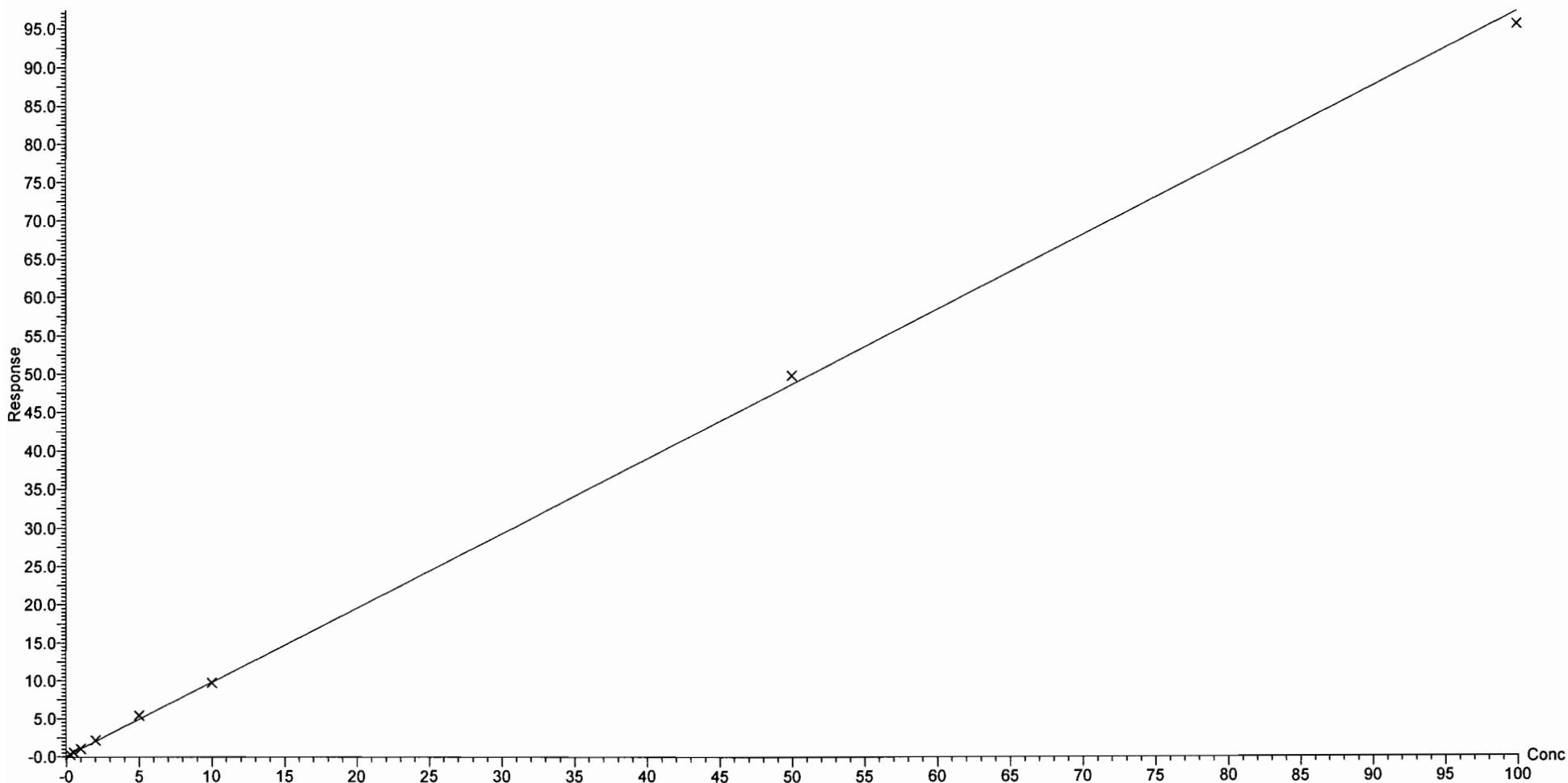
Compound name: L-PFPeA

Correlation coefficient:  $r = 0.999617$ ,  $r^2 = 0.999234$

Calibration curve:  $0.973105 * x + 0.0635727$

Response type: Internal Std ( Ref 26 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None





Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

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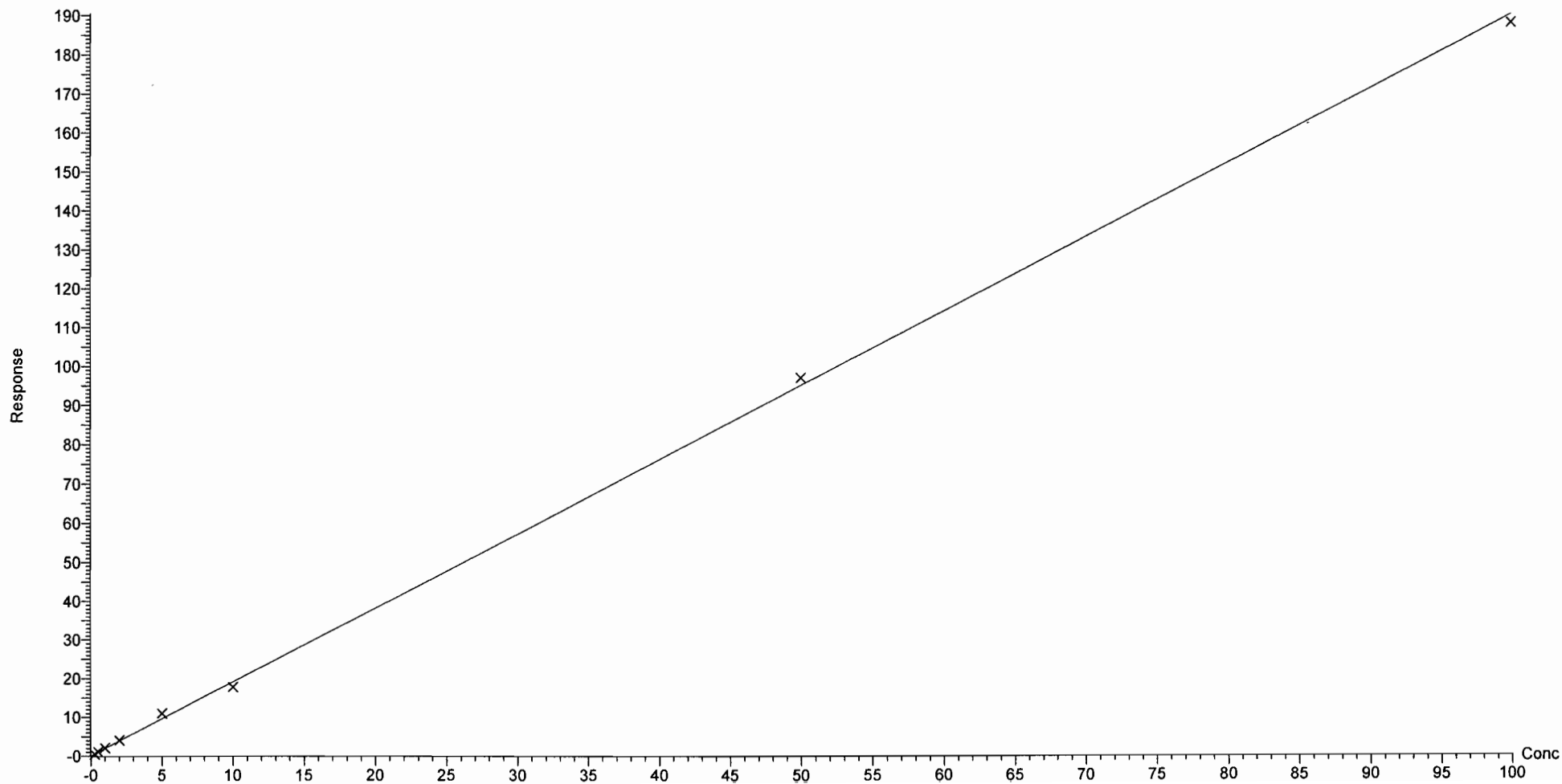
Compound name: L-PFBS

Correlation coefficient:  $r = 0.999330$ ,  $r^2 = 0.998660$

Calibration curve:  $1.90312 * x + 0.0961458$

Response type: Internal Std ( Ref 27 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:19:00 Pacific Daylight Time

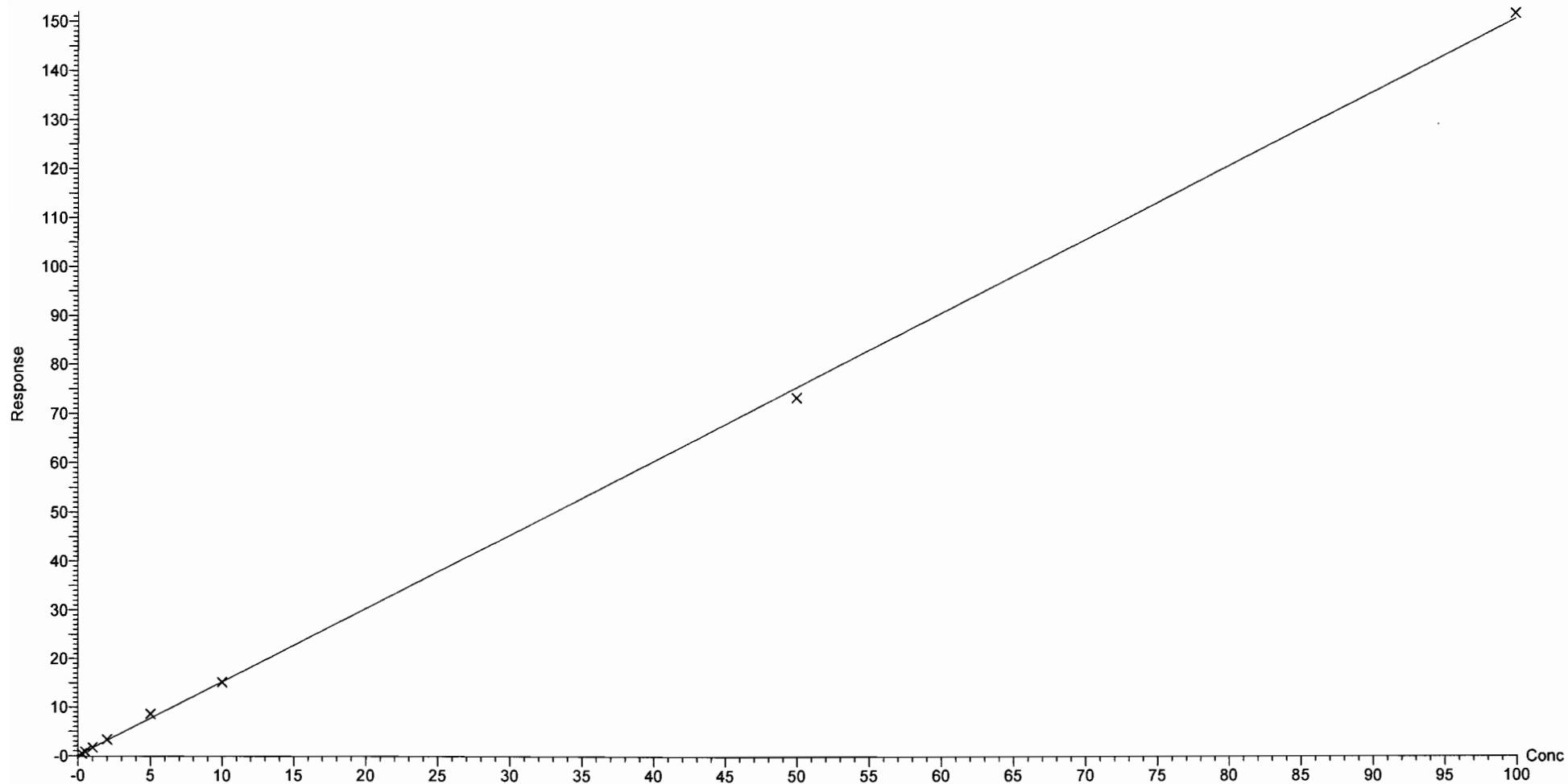
Compound name: L-PFHxA

Correlation coefficient:  $r = 0.999595$ ,  $r^2 = 0.999189$

Calibration curve:  $1.50653 * x + 0.152805$

Response type: Internal Std ( Ref 28 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:19:00 Pacific Daylight Time

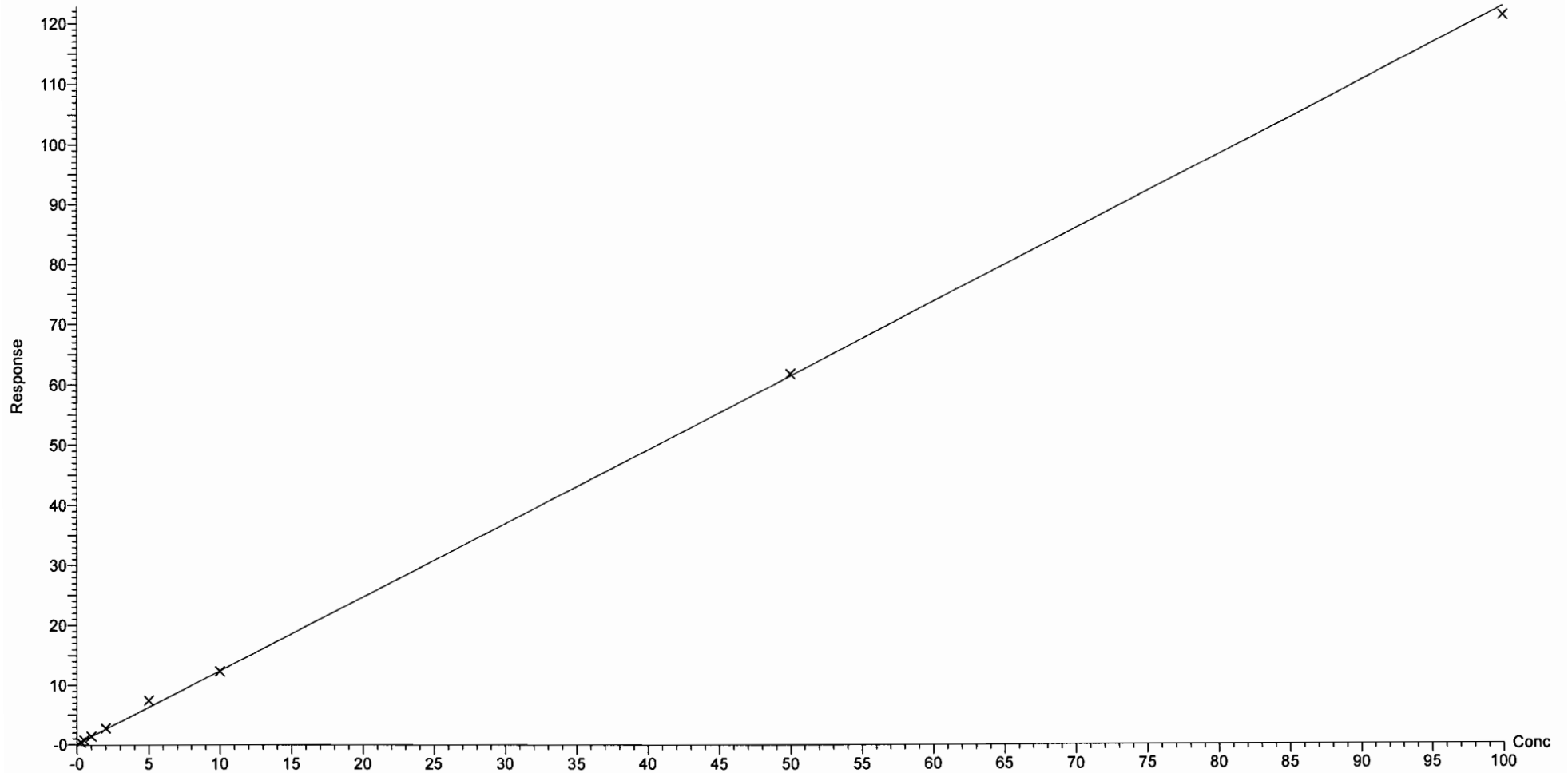
Compound name: L-PFHpA

Correlation coefficient:  $r = 0.999320$ ,  $r^2 = 0.998640$

Calibration curve:  $1.22728 * x + 0.149874$

Response type: Internal Std ( Ref 29 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:19:00 Pacific Daylight Time

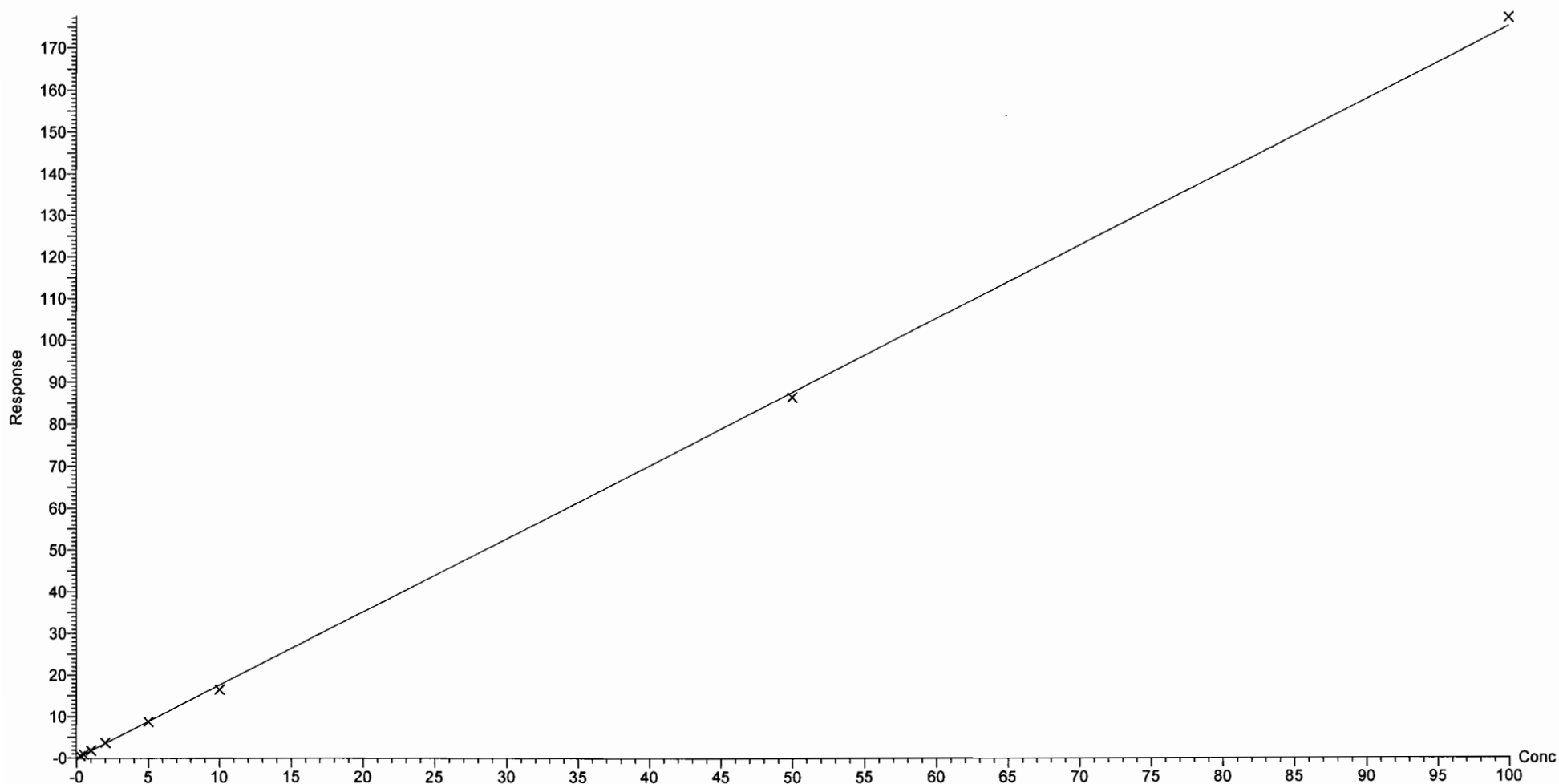
Compound name: L-PFHxS

Correlation coefficient:  $r = 0.999800$ ,  $r^2 = 0.999599$

Calibration curve:  $1.75459 * x + 0.0368775$

Response type: Internal Std ( Ref 30 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

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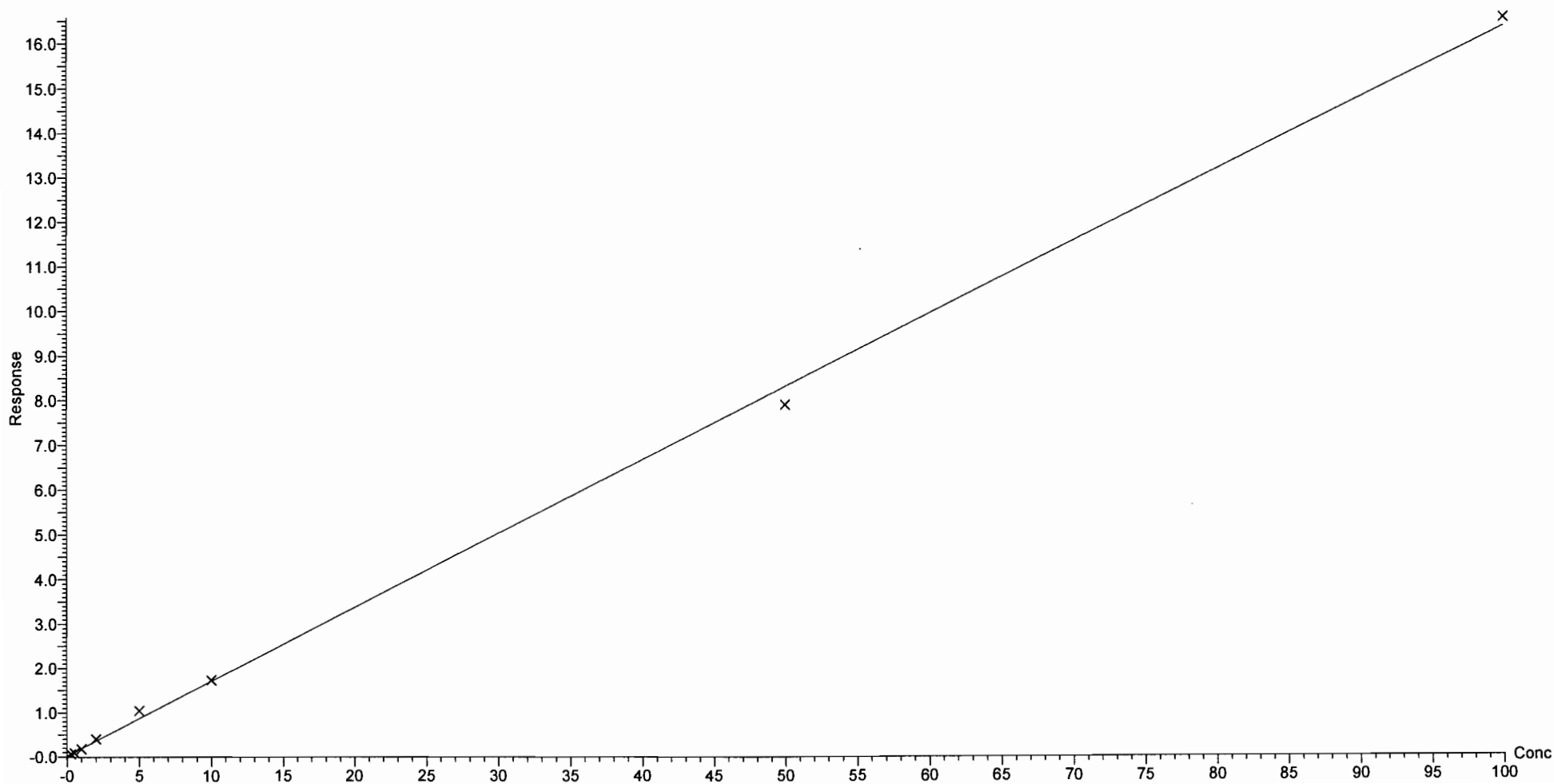
Compound name: L-6:2 FTS

Coefficient of Determination:  $R^2 = 0.997340$

Calibration curve:  $-4.66565e-005 * x^2 + 0.168246 * x + 0.0227594$

Response type: Internal Std ( Ref 32 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:19:00 Pacific Daylight Time

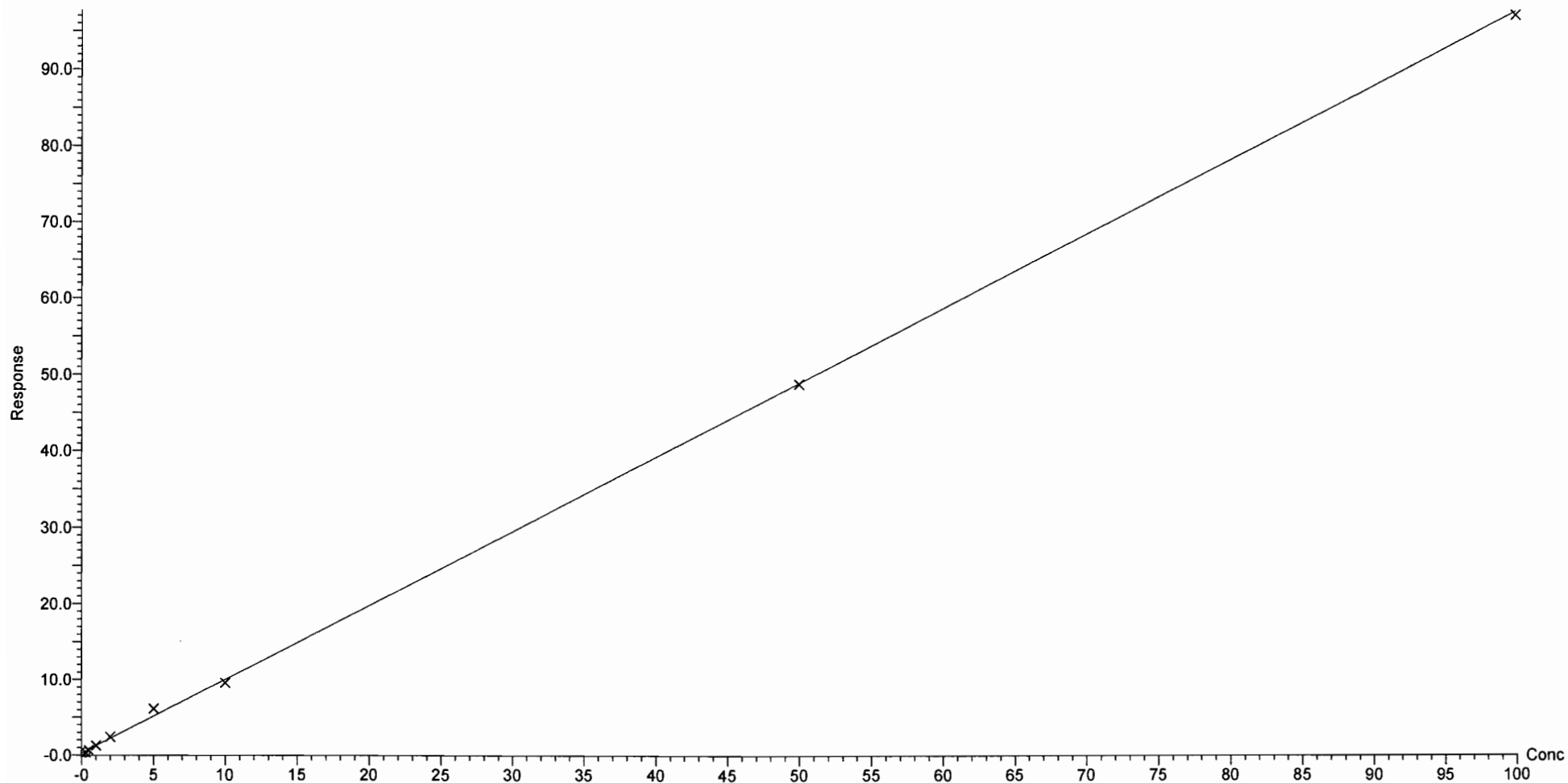
Compound name: L-PFOA

Correlation coefficient:  $r = 0.999123$ ,  $r^2 = 0.998248$

Calibration curve:  $0.973769 * x + 0.266807$

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\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:19:00 Pacific Daylight Time

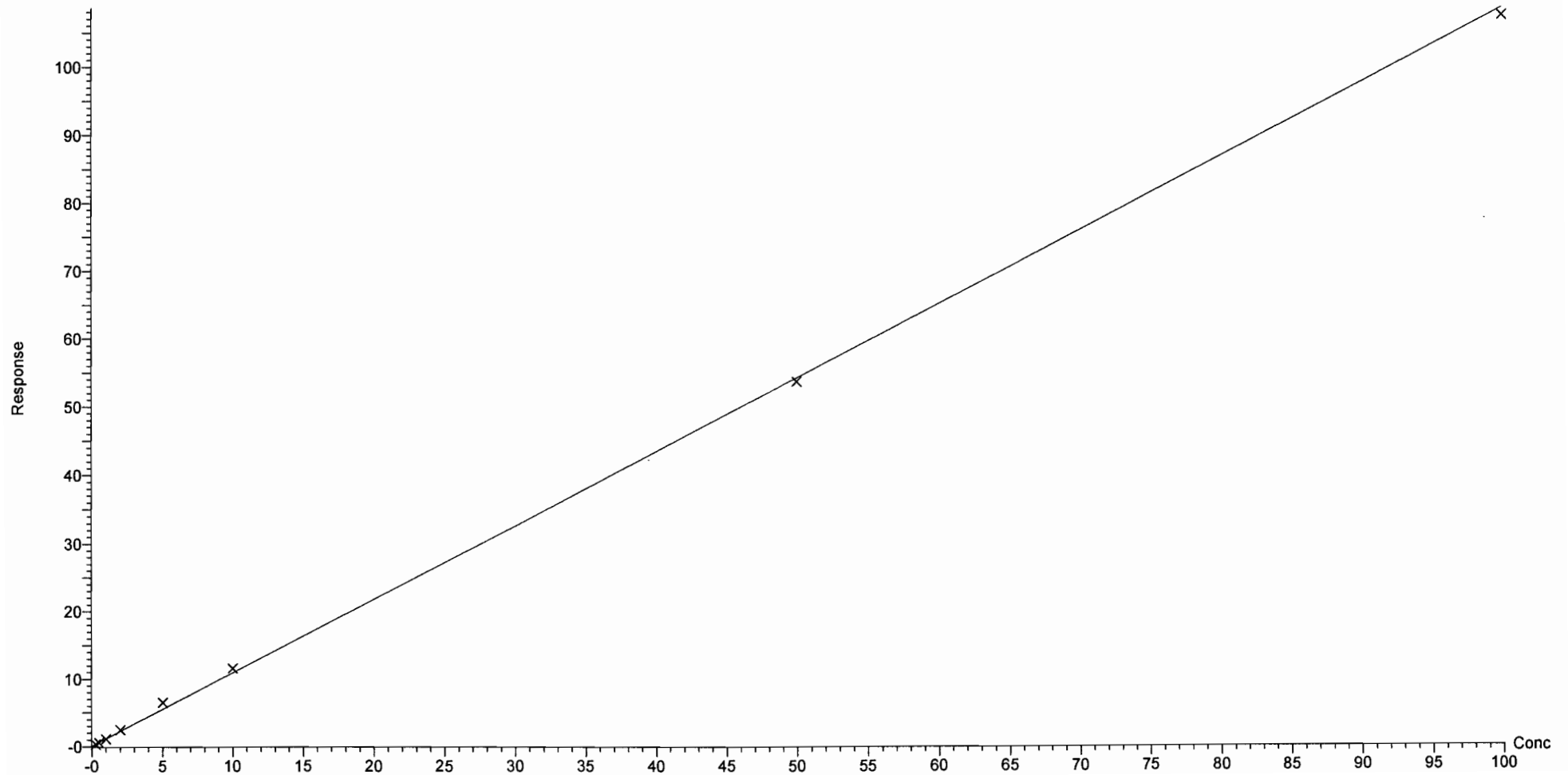
Compound name: L-PFNA

Correlation coefficient:  $r = 0.999227$ ,  $r^2 = 0.998455$

Calibration curve:  $1.08444 * x + 0.101689$

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\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:19:00 Pacific Daylight Time

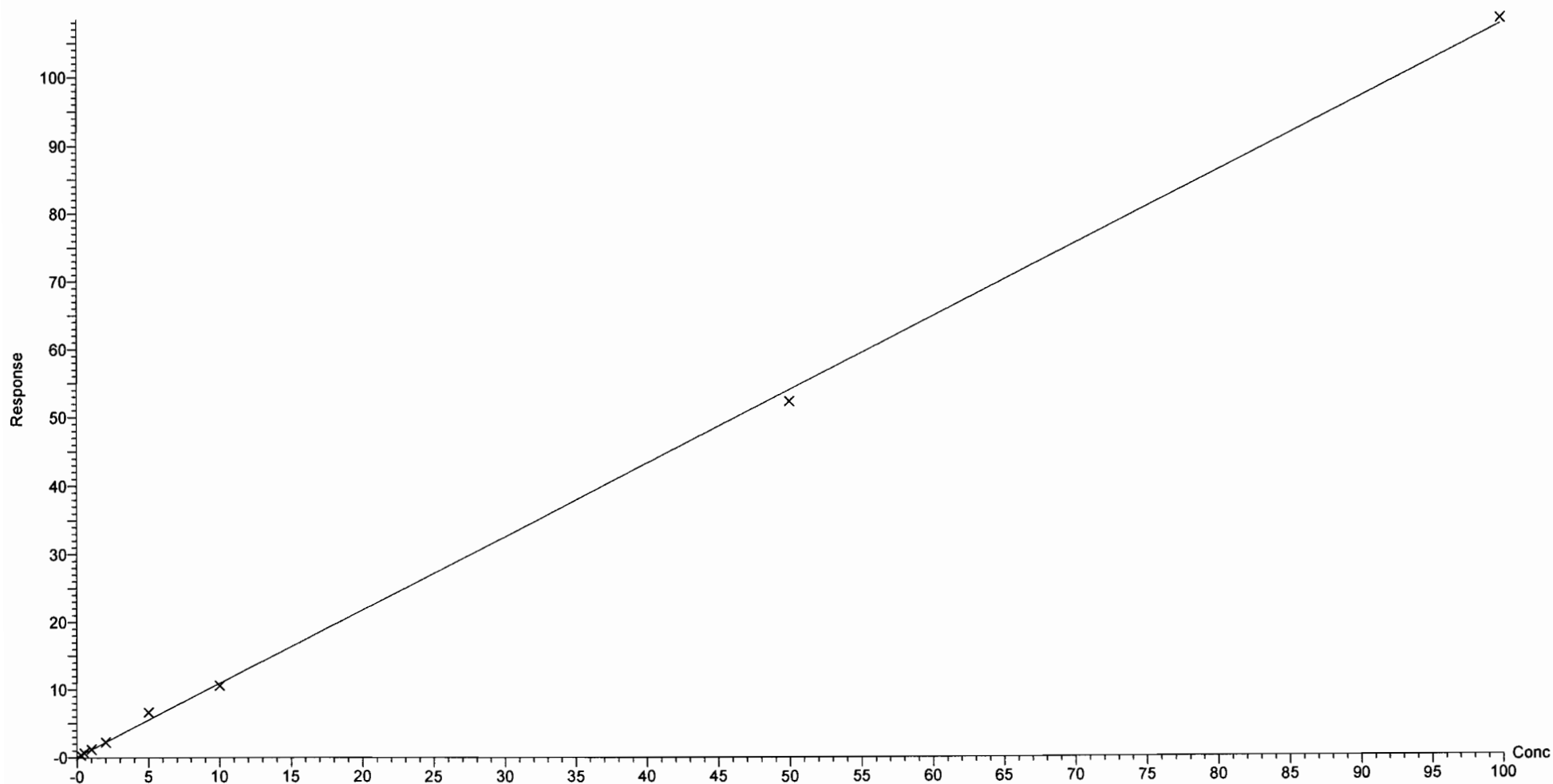
Compound name: L-PFOS

Coefficient of Determination:  $R^2 = 0.998123$

Calibration curve:  $-9.58981e-005 * x^2 + 1.08488 * x + 0.0685717$

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None





Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:19:31 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

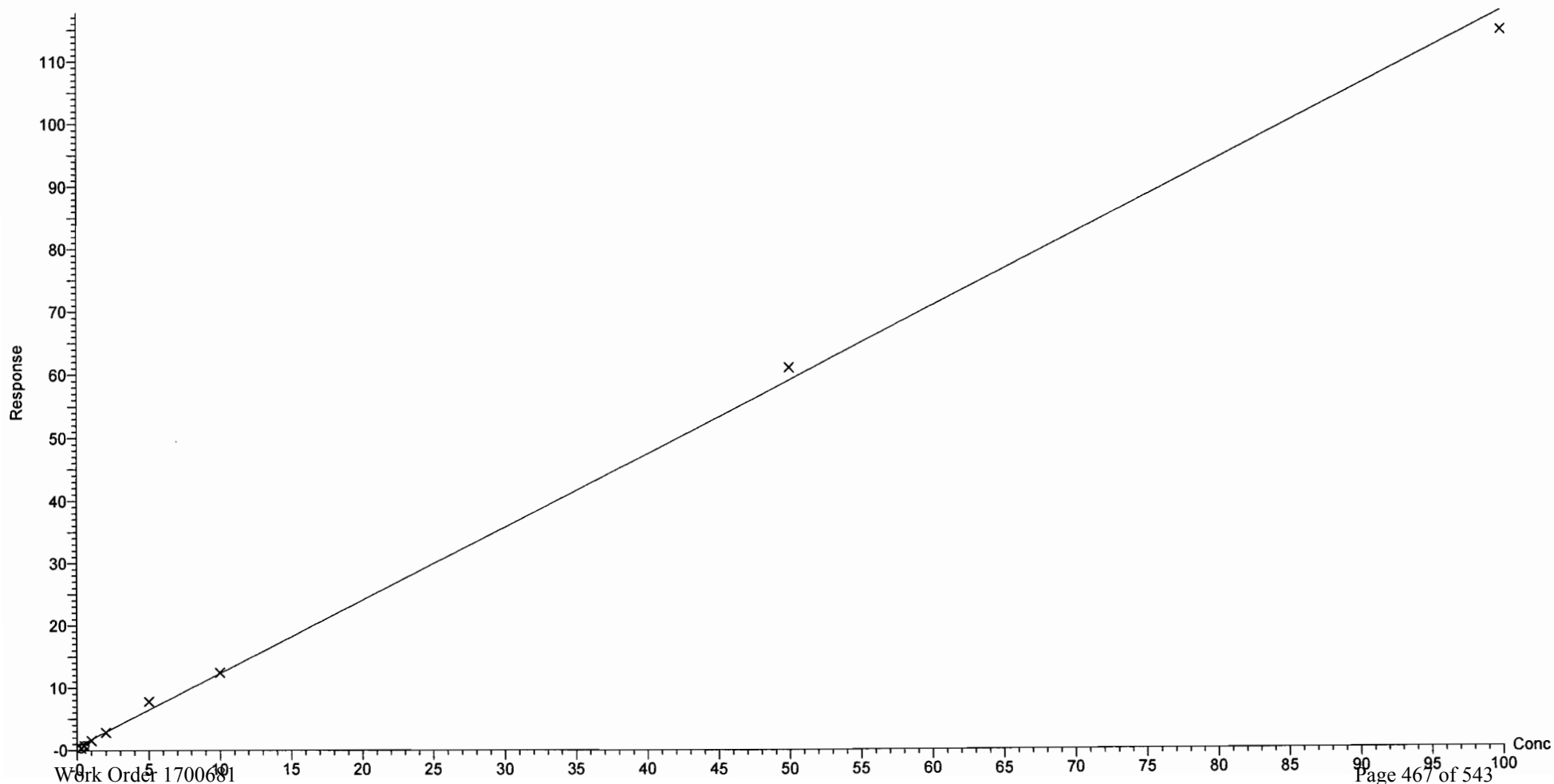
Compound name: L-PFDA

Correlation coefficient:  $r = 0.998521$ ,  $r^2 = 0.997044$

Calibration curve:  $1.17168 * x + 0.568446$

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\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:19:31 Pacific Daylight Time

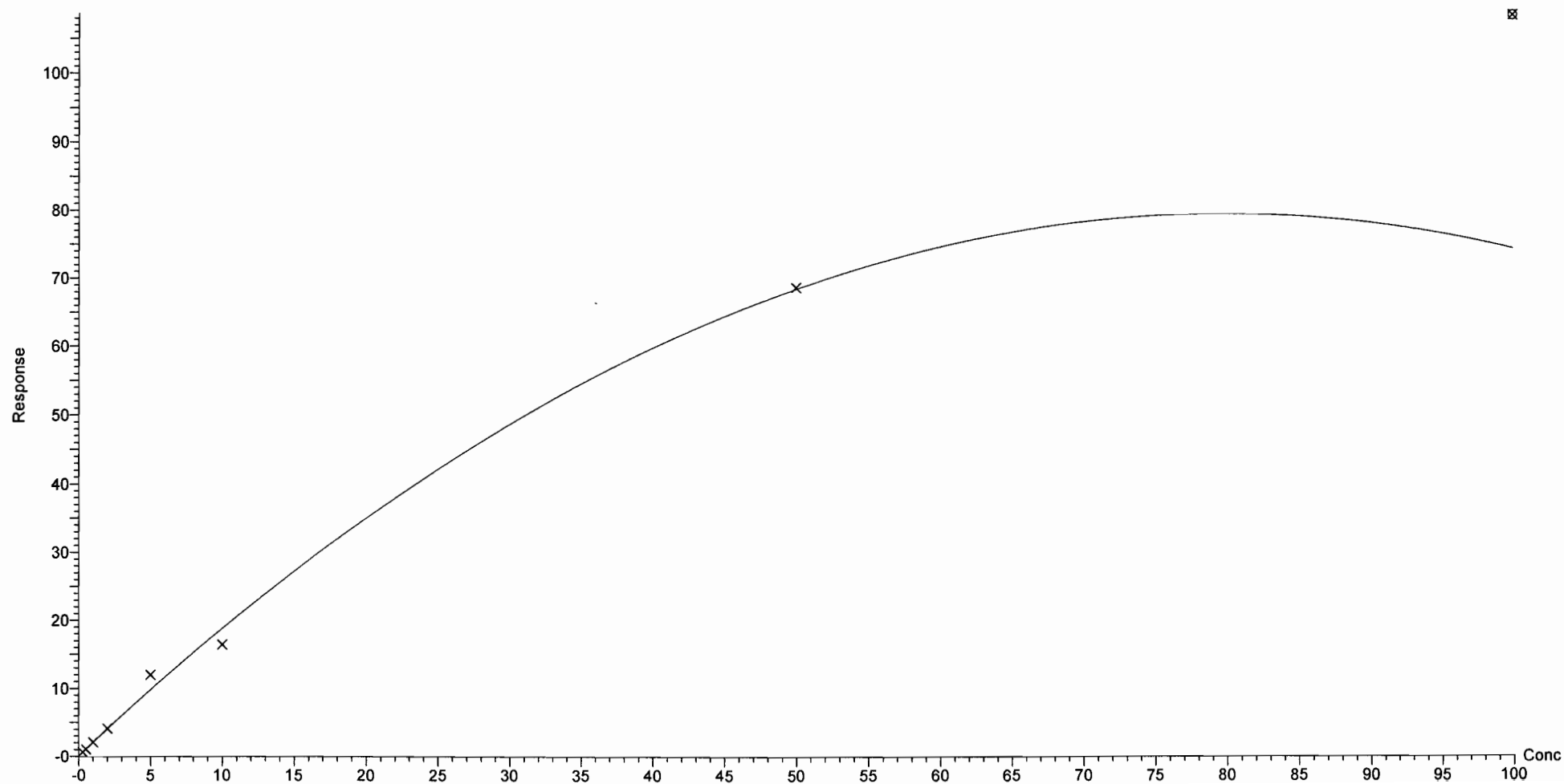
Compound name: L-8:2 FTS

Coefficient of Determination:  $R^2 = 0.989104$

Calibration curve:  $-0.0125012 * x^2 + 1.99376 * x + 0.12945$

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Tuesday, June 27, 2017 09:02:17 Pacific Daylight Time

Printed: Tuesday, June 27, 2017 09:02:55 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: 27 Jun 2017 09:02:17

Compound name: L-PFBA

	Name	ID	Acq.Date	Acq.Time
1	170623M1_3	ST170623M1-1 PFC CS-2 17F2213	23-Jun-17	10:39:23
2	170623M1_4	ST170623M1-2 PFC CS-1 17F2214	23-Jun-17	10:51:02
3	170623M1_5	ST170623M1-3 PFC CS0 17F2215	23-Jun-17	11:02:31
4	170623M1_6	ST170623M1-4 PFC CS1 17F2216	23-Jun-17	11:13:57
5	170623M1_7	ST170623M1-5 PFC CS2 17F2217	23-Jun-17	11:25:16
6	170623M1_8	ST170623M1-6 PFC CS3 17F2218	23-Jun-17	11:36:48
7	170623M1_9	ST170623M1-7 PFC CS4 17F2219	23-Jun-17	11:48:25
8	170623M1_10	ST170623M1-8 PFC CS5 17F2220	23-Jun-17	11:59:52
9	170623M1_11	IPA	23-Jun-17	12:41:21
10	170623M1_12	SS170623M1-1 PFC SSS 17F2212	23-Jun-17	12:53:03
11	170623M1_13	1700670-01@5X POND 1-2 OF @ DAM-N 0.2...	23-Jun-17	13:04:30
12	170623M1_14	1700670-02@5X POND 1-2 OF @ DAM-S 0.2...	23-Jun-17	13:15:49
13	170623M1_15	1700670-03@5X POND 1-2 PD @ DAM 0.282...	23-Jun-17	13:27:08
14	170623M1_16	1700670-04@10X POND 2-3 OF @ DAM-W 0...	23-Jun-17	13:38:30
15	170623M1_17	1700670-05@10X POND 2-3 PD @ DAM 0.27...	23-Jun-17	13:49:56
16	170623M1_18	1700670-06@10X POND 3 OF @ DAM-W 0.2...	23-Jun-17	14:01:24
17	170623M1_19	1700670-07@10X POND 3 PD @ DAM 0.27482	23-Jun-17	14:12:51
18	170623M1_20	1700681-01@10X OF17-MW02-0517 0.125	23-Jun-17	14:24:18
19	170623M1_21	1700681-03@20X OF17-MW01-0617 0.125	23-Jun-17	14:35:42
20	170623M1_22	ST170623M1-9 PFC CS3 17F2218	23-Jun-17	14:46:58
21	170623M1_23	IPA	23-Jun-17	14:58:22
22	170623M1_24	0.1% FA IN 50:50 MEOH: H2O	23-Jun-17	15:09:50
23	170623M1_25	0.1% FA IN 50:50 MEOH: H2O	23-Jun-17	15:21:16
24	170623M1_26	IPA	23-Jun-17	15:32:43
25	170623M1_27	IPA	23-Jun-17	15:44:08

Dataset: U:\Q4.PRO\results\170623M1\170623M1-CRV.qld

Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

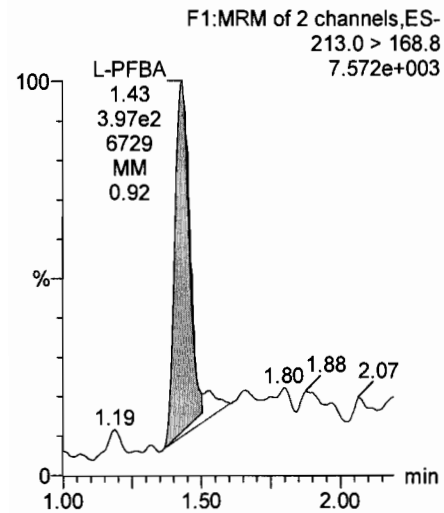
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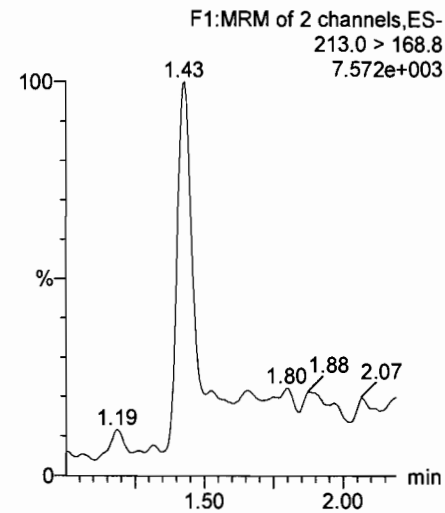
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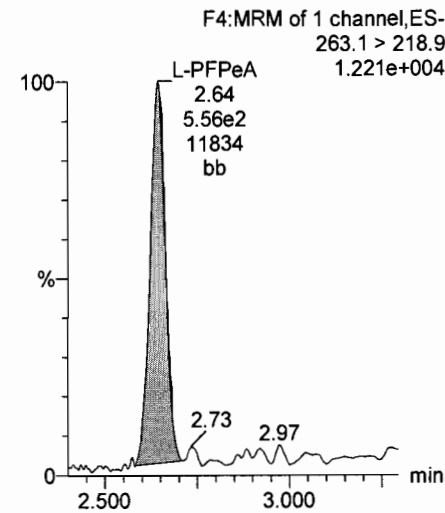
L-PFBA



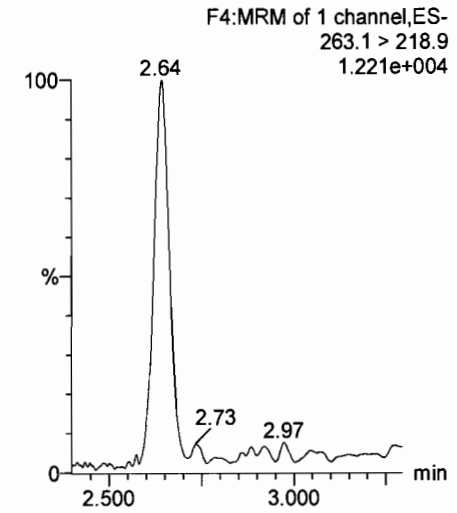
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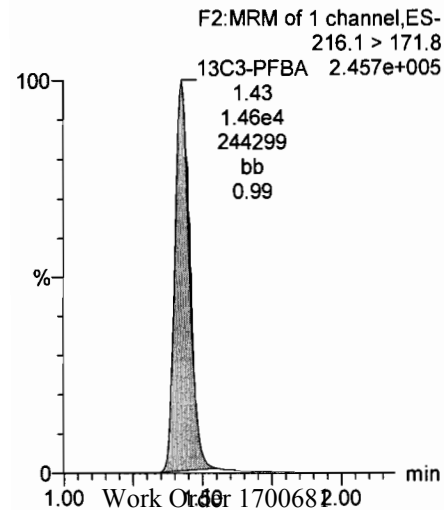
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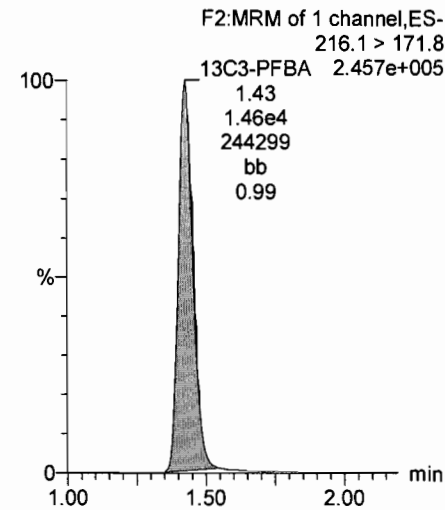
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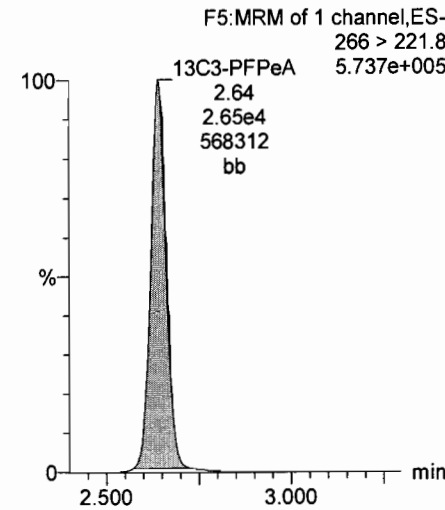
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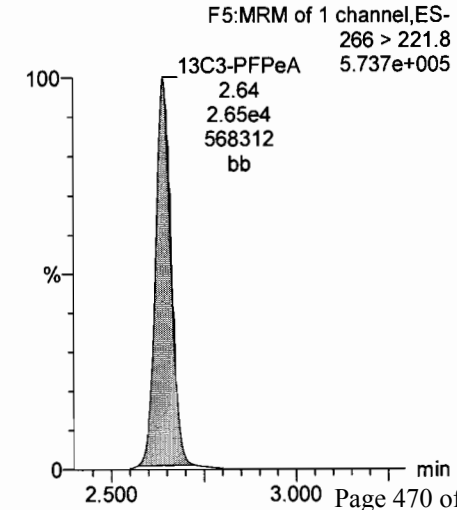
13C3-PFBA



13C3-PFPeA



13C3-PFPeA



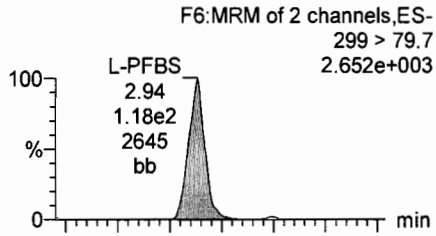
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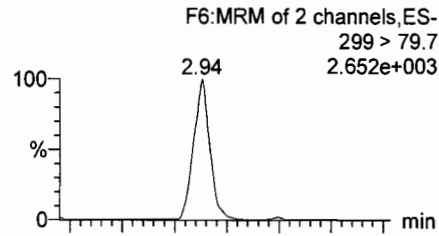
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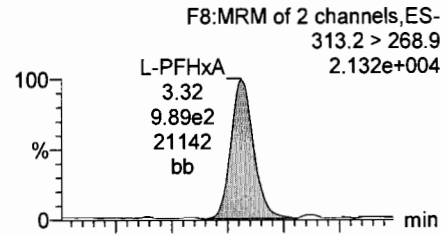
L-PFBS



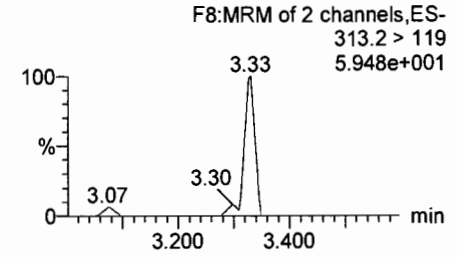
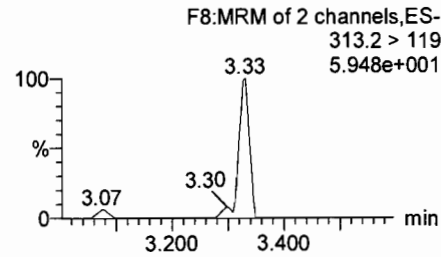
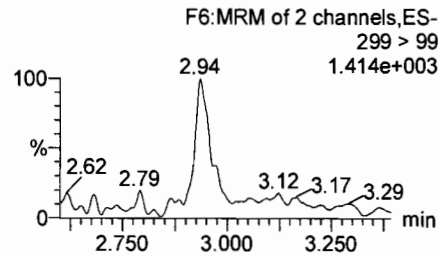
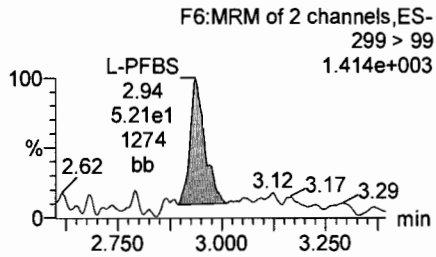
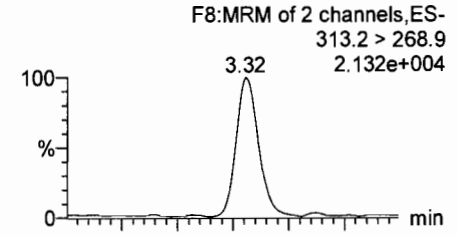
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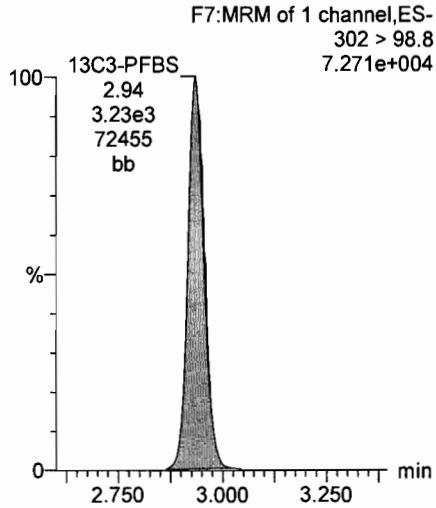
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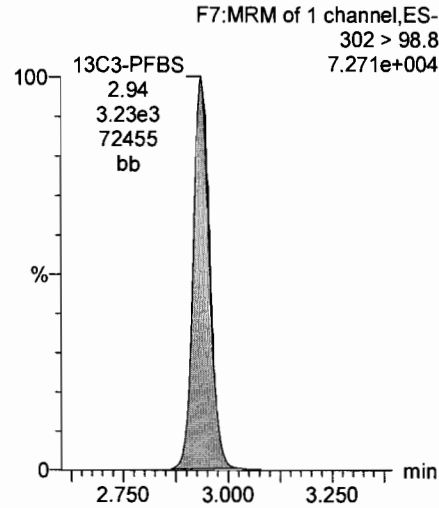
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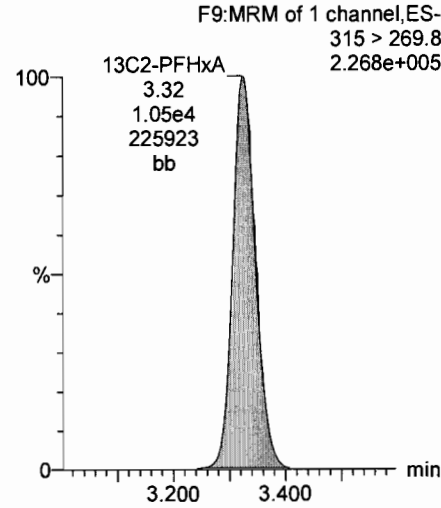
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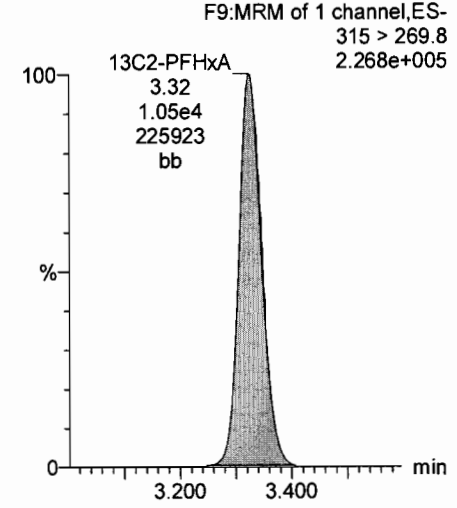
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13C2-PFHxA



13C2-PFHxA



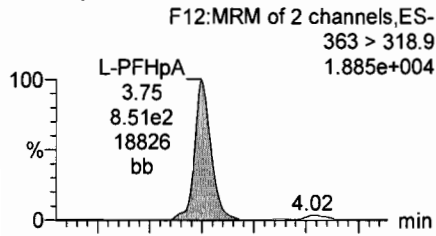
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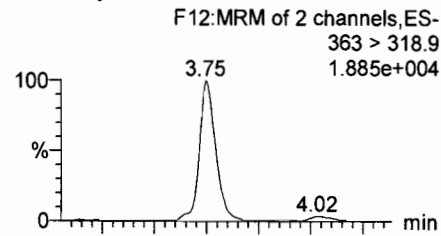
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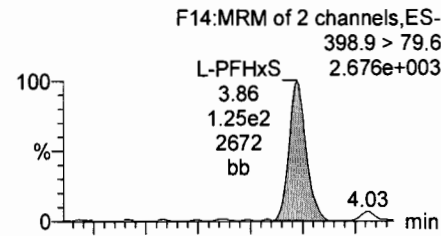
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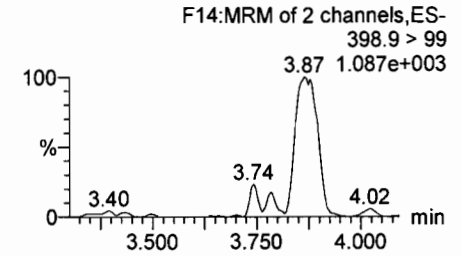
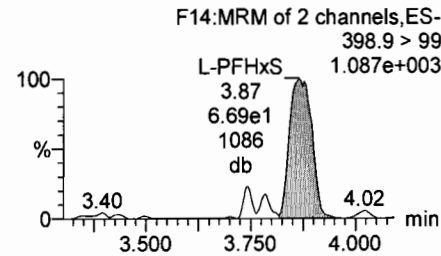
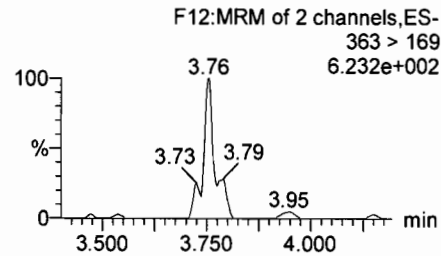
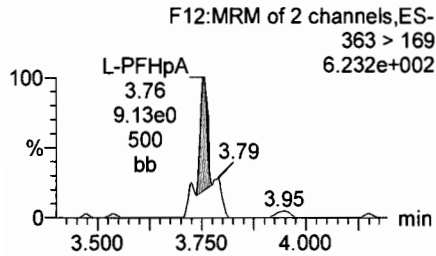
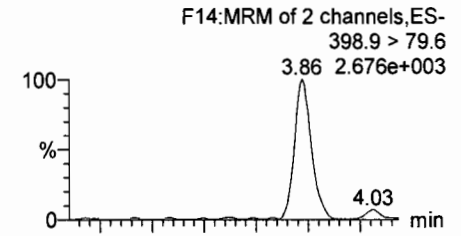
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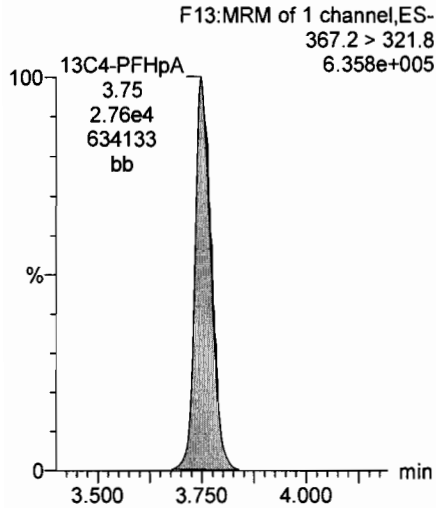
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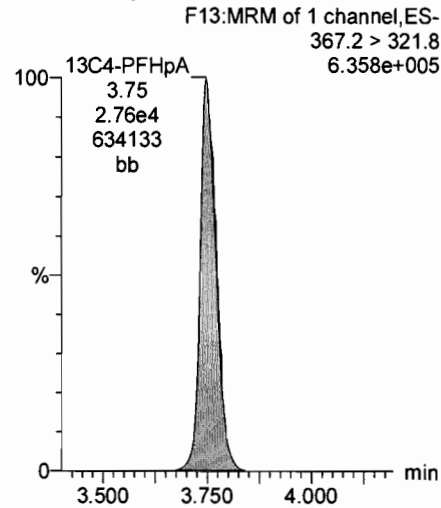
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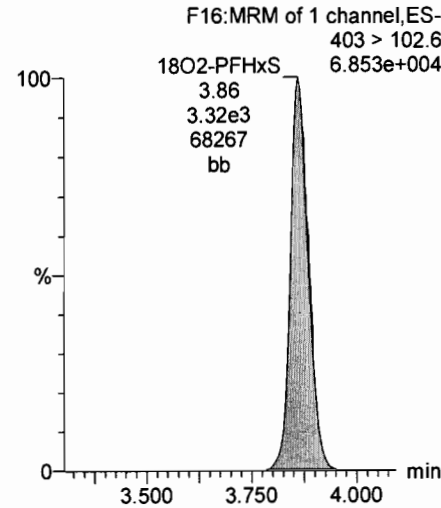
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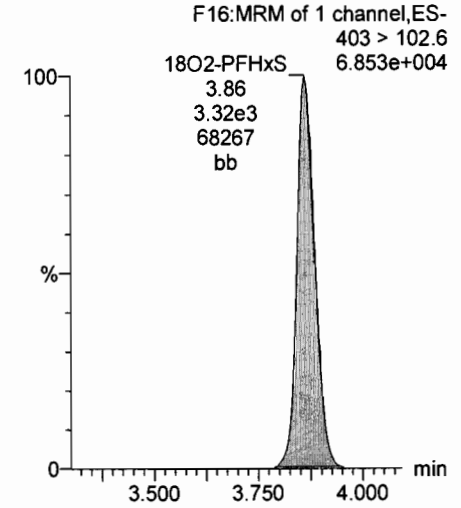
13C4-PFHpA



18O2-PFHxS



18O2-PFHxS



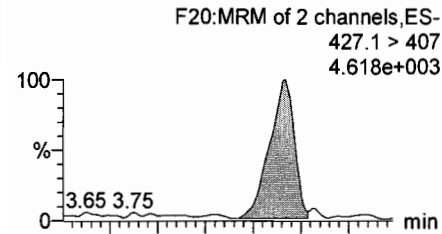
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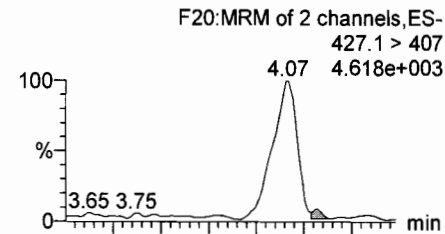
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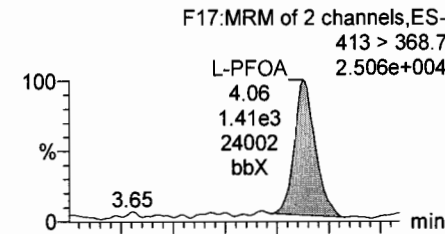
L-6:2 FTS



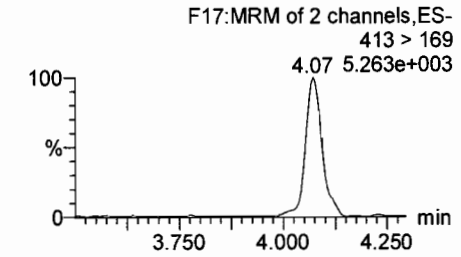
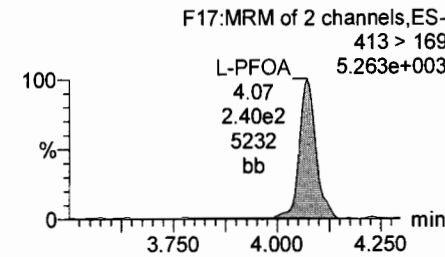
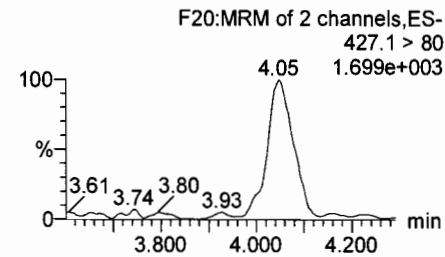
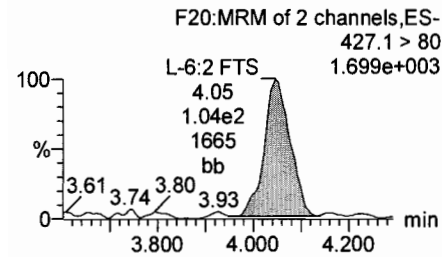
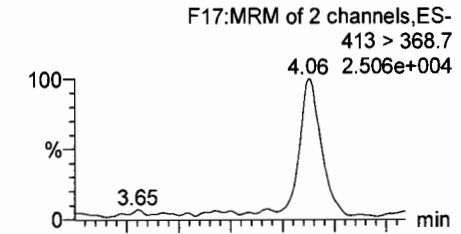
Br-6:2 FTS



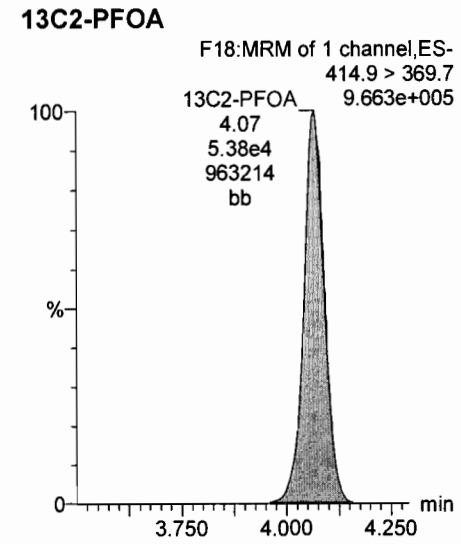
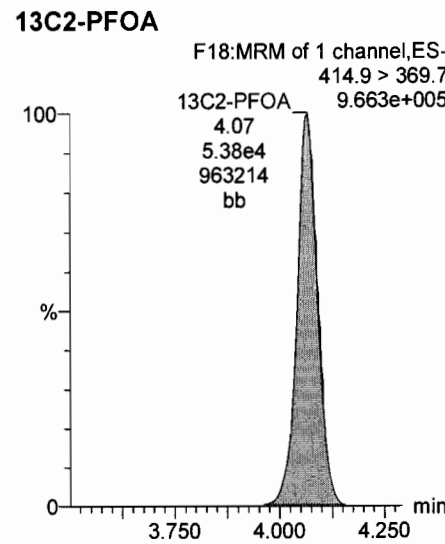
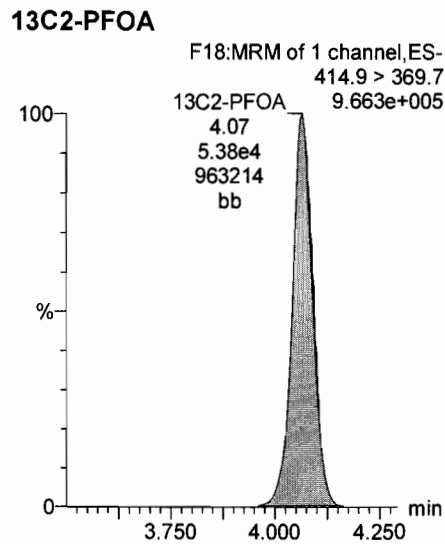
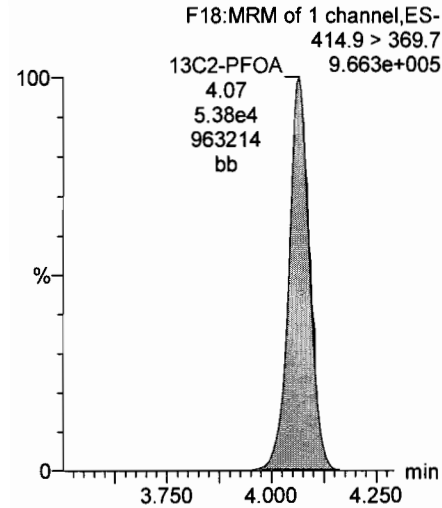
L-PFOA



Br-PFOA



13C2-PFOA



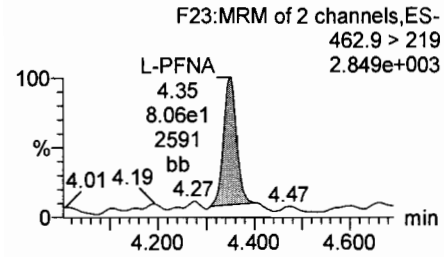
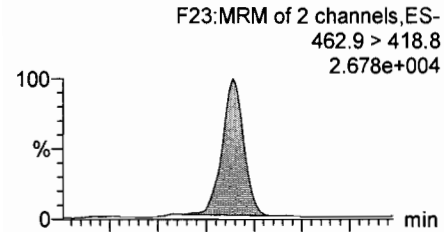
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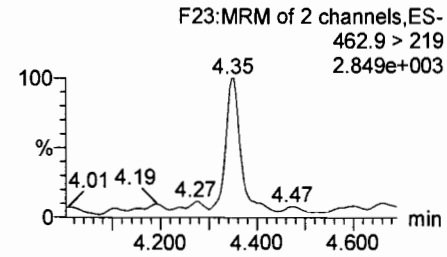
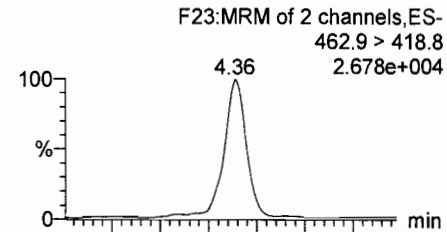
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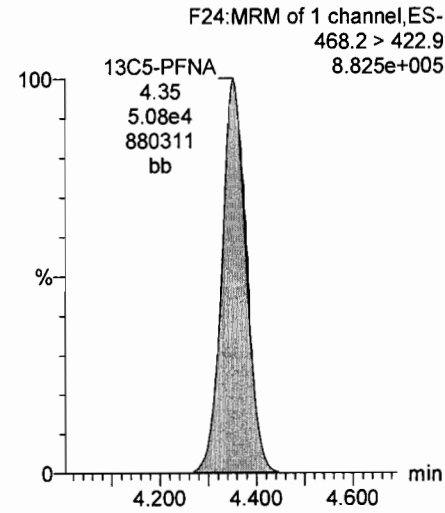
L-PFNA



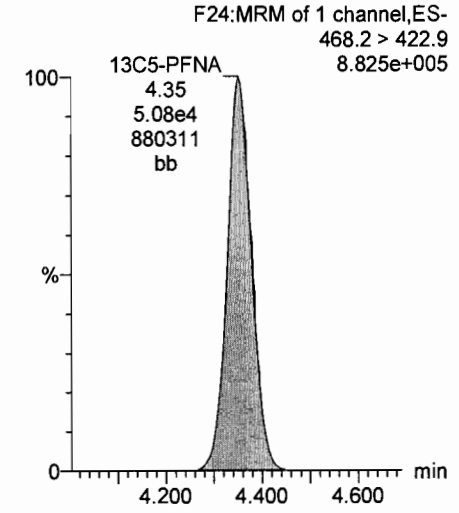
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13C5-PFNA



13C5-PFNA





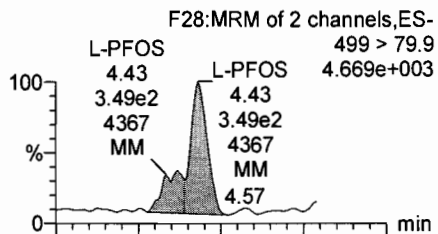
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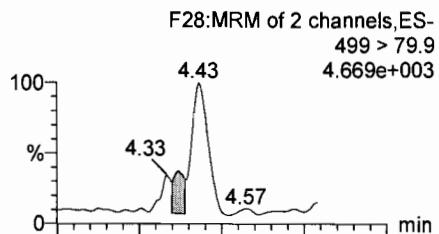
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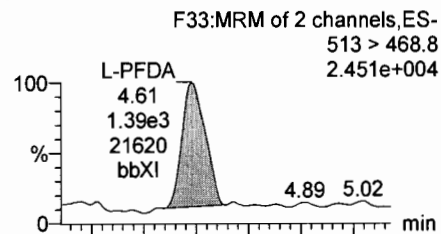
L-PFOS



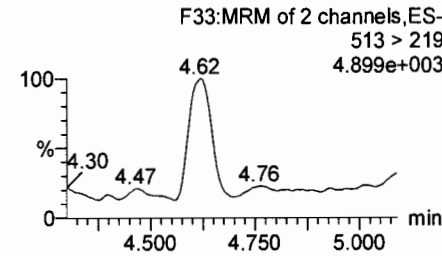
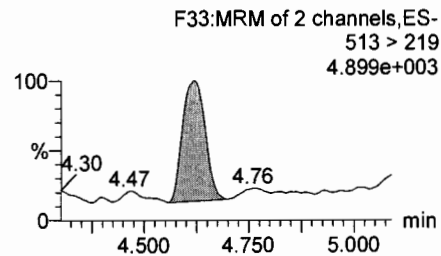
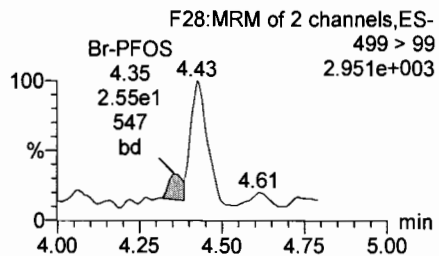
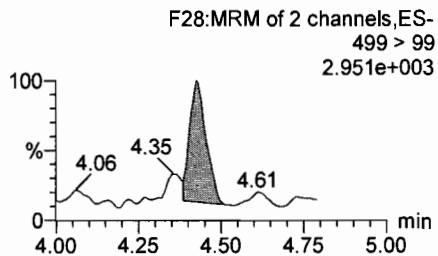
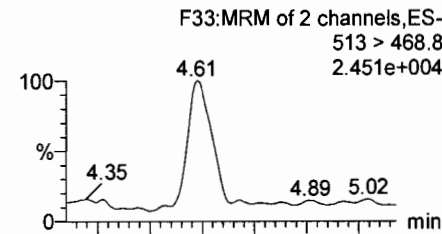
Br-PFOS



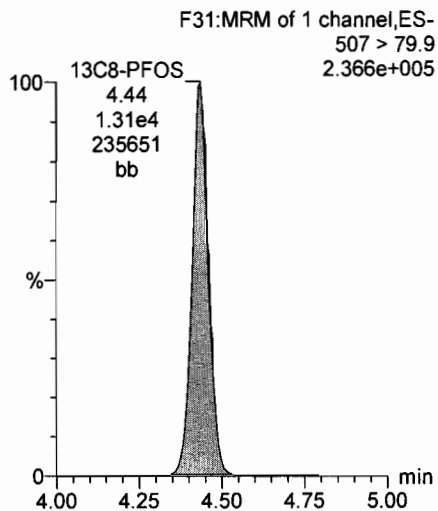
L-PFDA



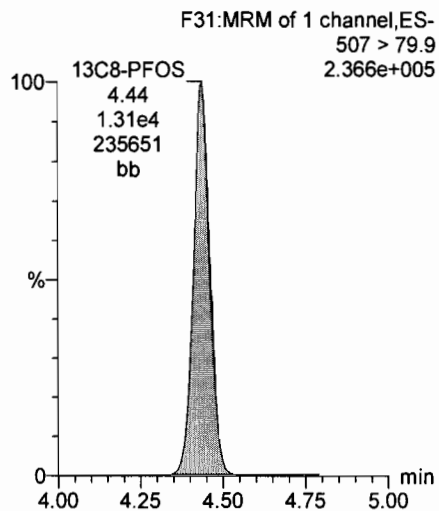
Br-PFDA



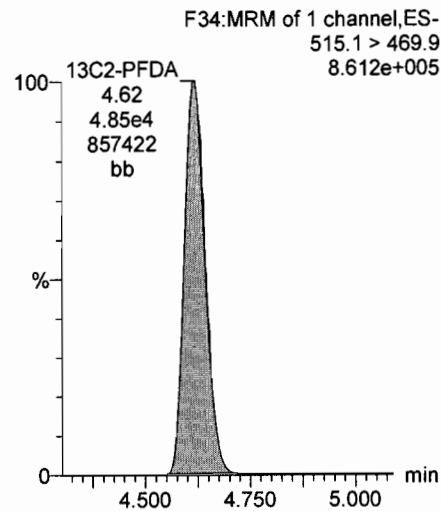
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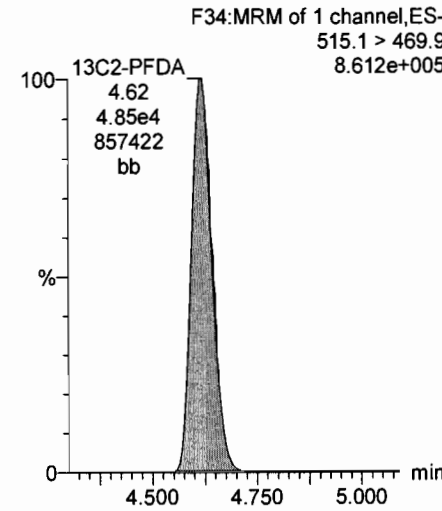
13C8-PFOS



13C2-PFDA



13C2-PFDA



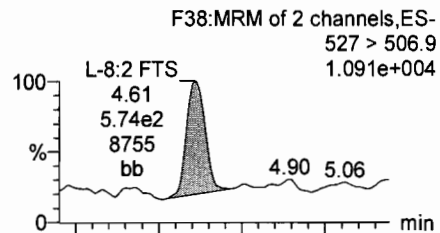
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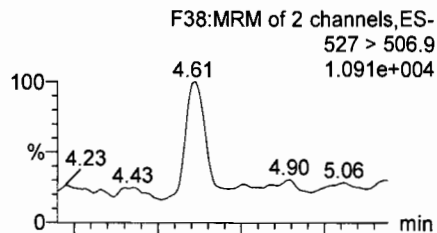
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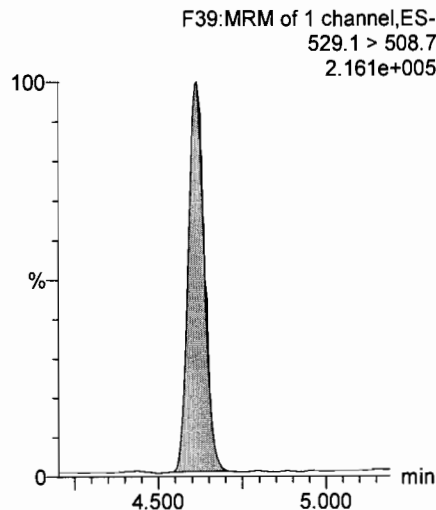
L-8:2 FTS



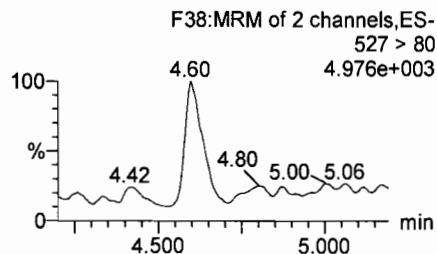
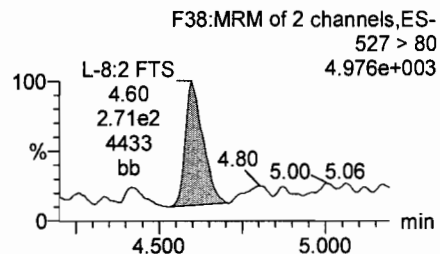
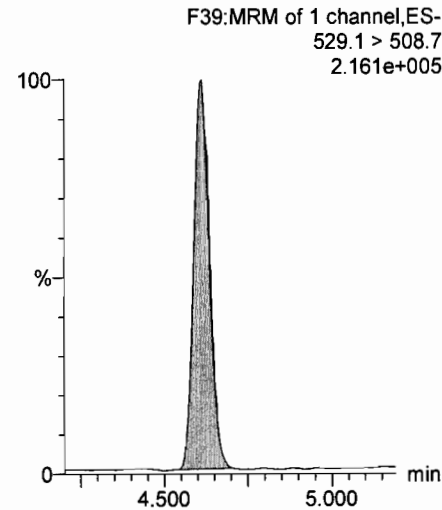
Br-8:2 FTS



13C2-8:2 FTS



13C2-8:2 FTS



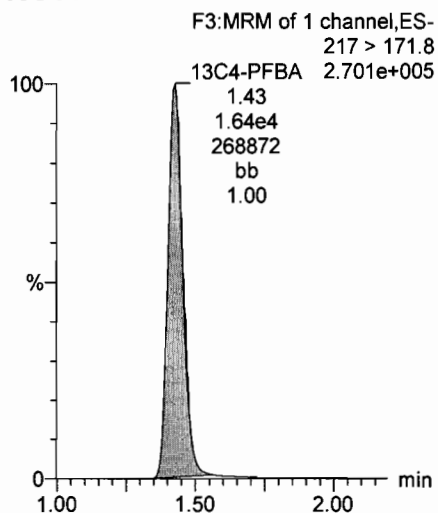
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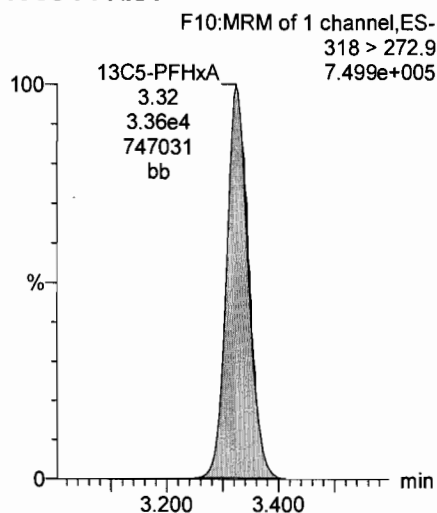
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Name: 170623M1\_3, Date: 23-Jun-2017, Time: 10:39:23, ID: ST170623M1-1 PFC CS-2 17F2213, Description: PFC CS-2 17F2213

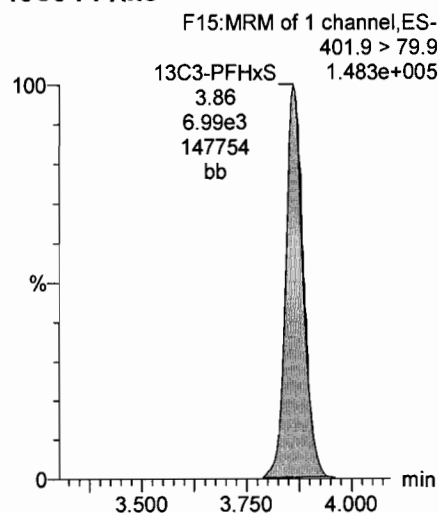
13C4-PFBA



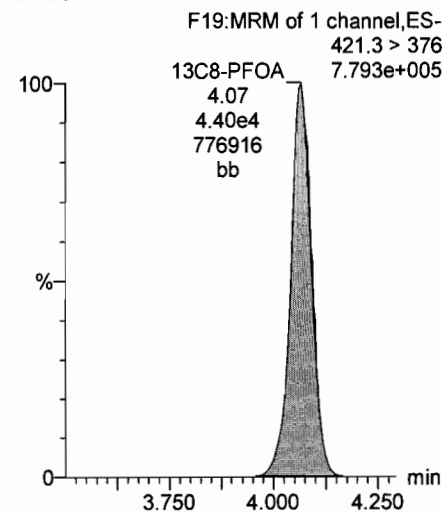
13C5-PFHxA



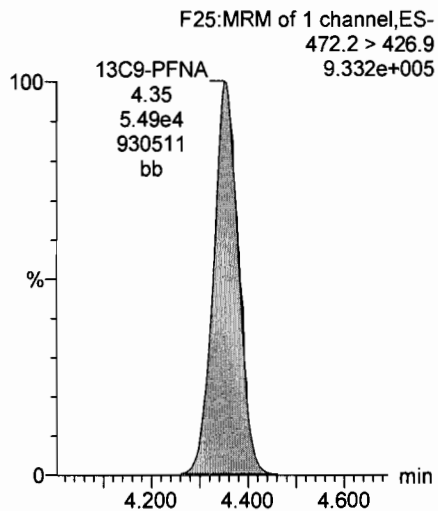
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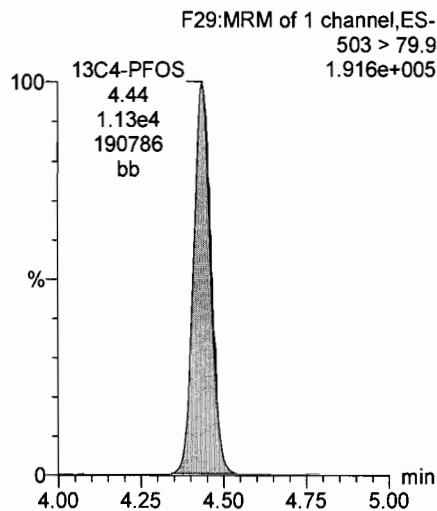
13C8-PFOA



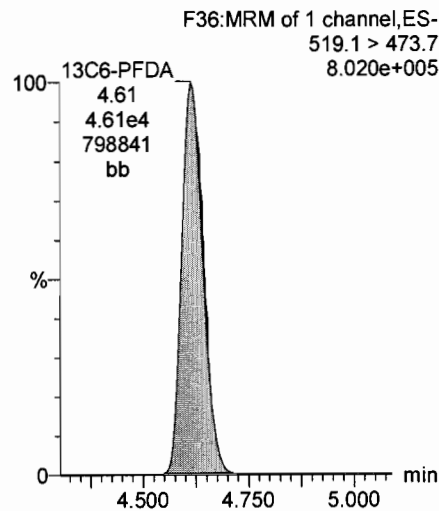
13C9-PFNA



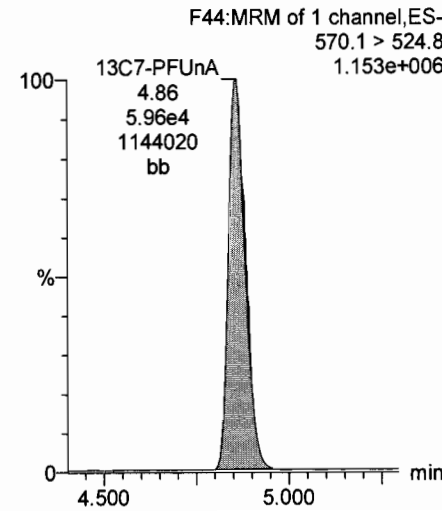
13C4-PFOS



13C6-PFDA



13C7-PFUnA



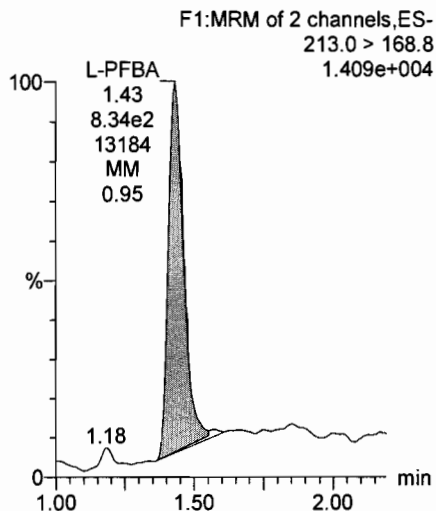
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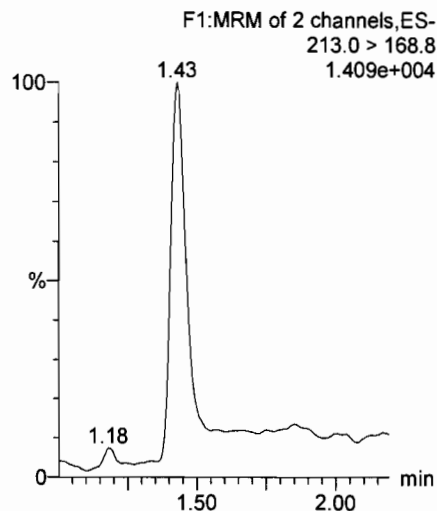
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Name: 170623M1\_4, Date: 23-Jun-2017, Time: 10:51:02, ID: ST170623M1-2 PFC CS-1 17F2214, Description: PFC CS-1 17F2214

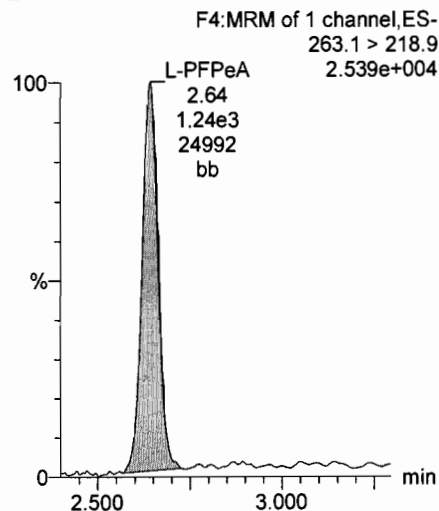
L-PFBA



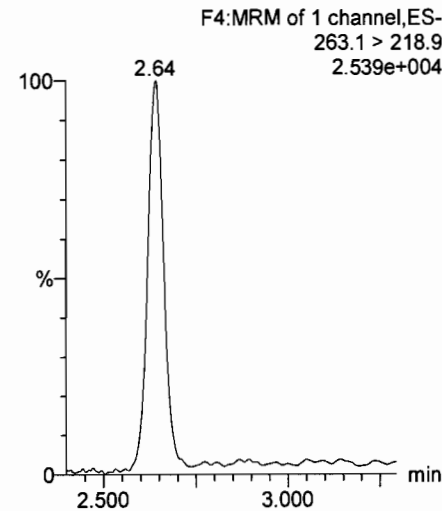
Br-PFBA



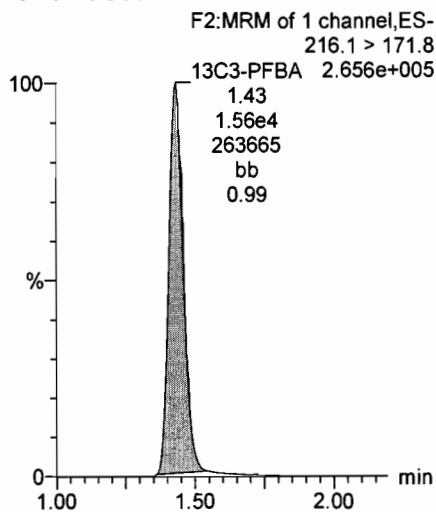
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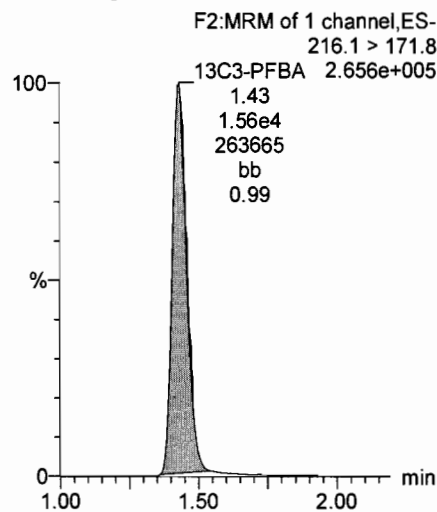
Br-PFPeA



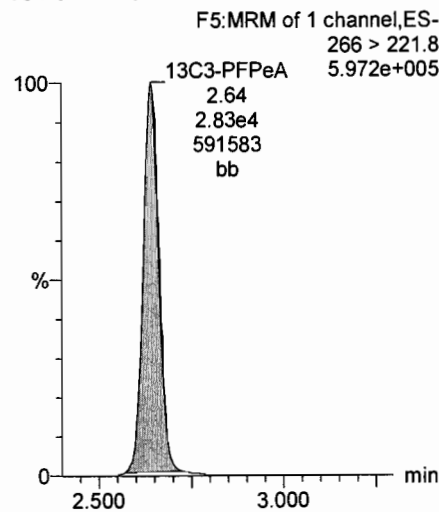
13C3-PFBA



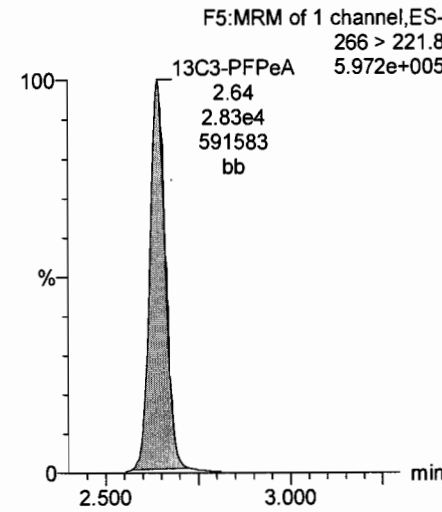
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13C3-PFPeA



13C3-PFPeA



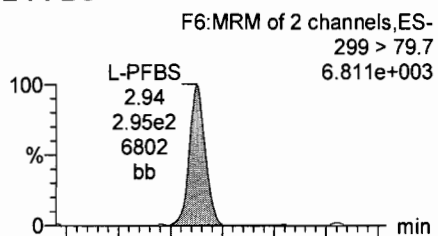
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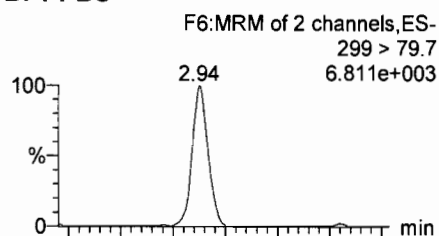
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Name: 170623M1\_4, Date: 23-Jun-2017, Time: 10:51:02, ID: ST170623M1-2 PFC CS-1 17F2214, Description: PFC CS-1 17F2214

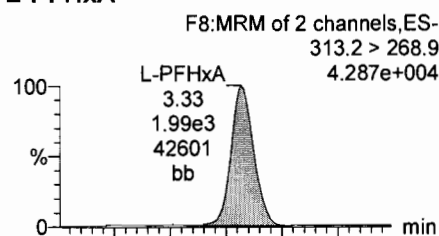
L-PFBS



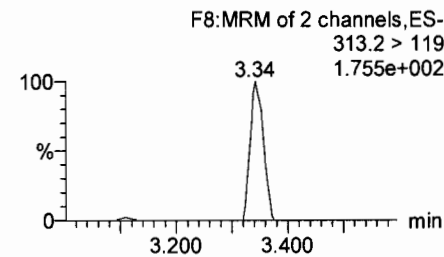
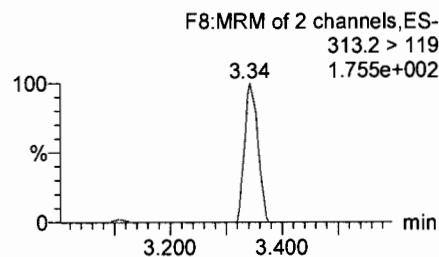
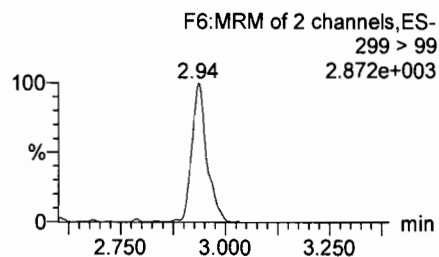
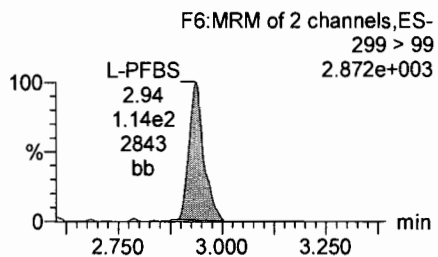
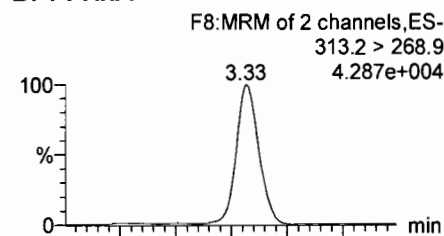
Br-PFBS



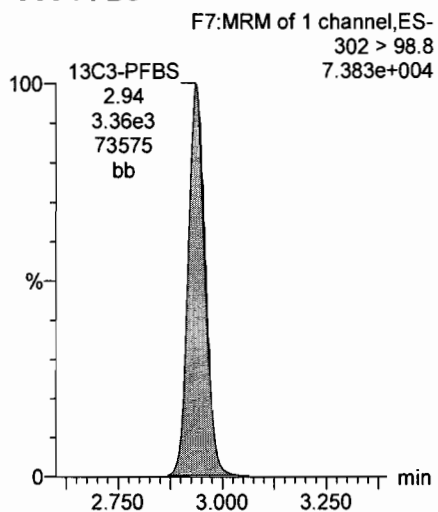
L-PFHxA



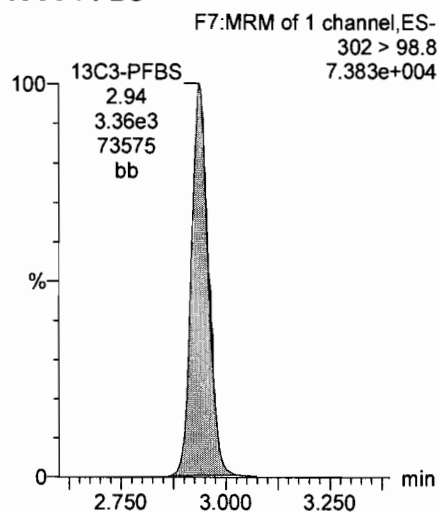
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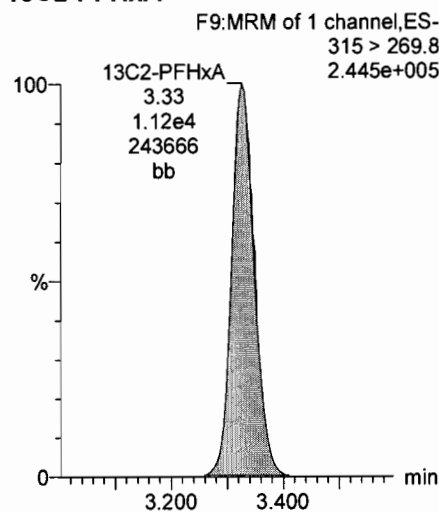
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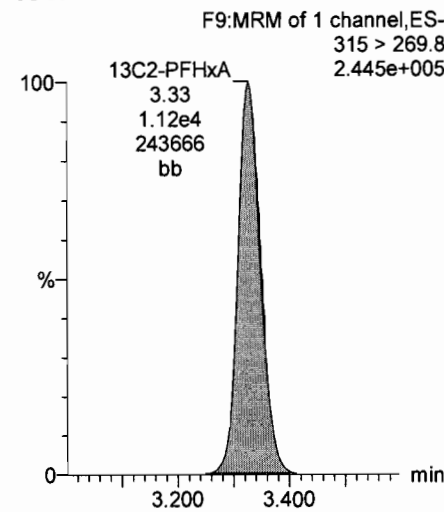
13C3-PFBS



13C2-PFHxA



13C2-PFHxA



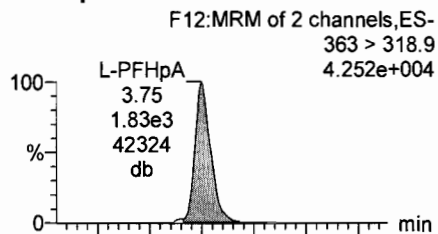
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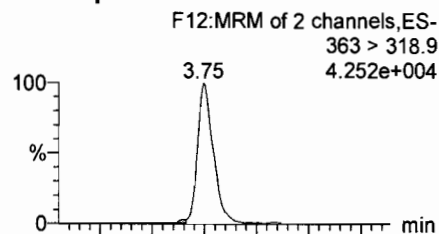
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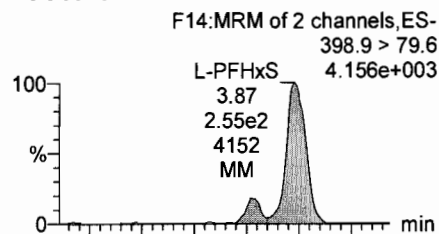
L-PFHpA



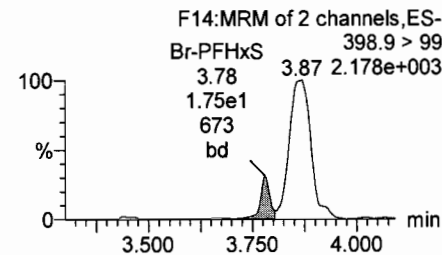
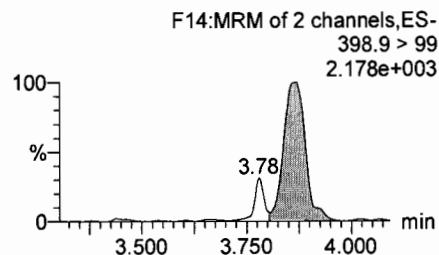
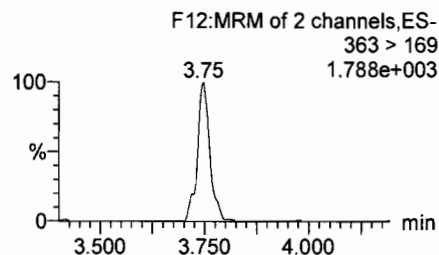
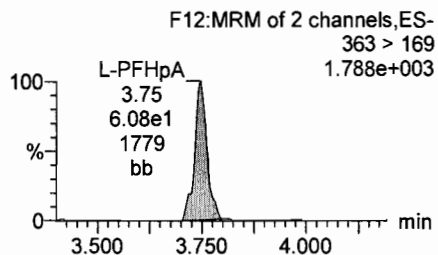
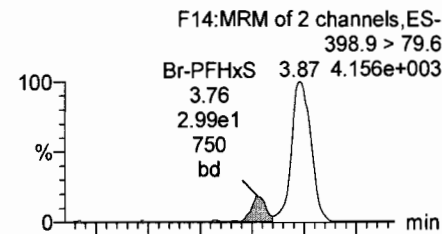
Br-PFHpA



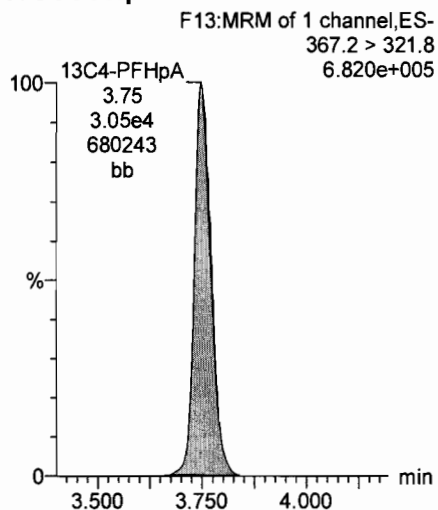
L-PFHxS



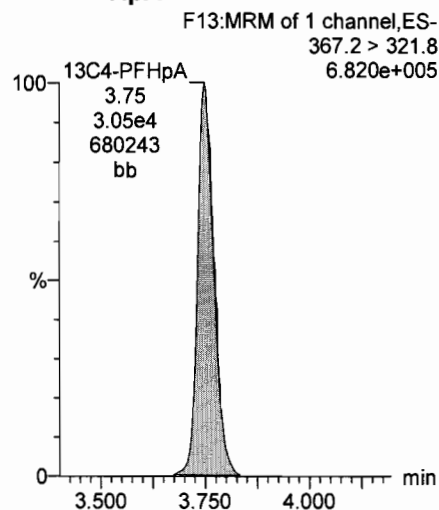
Br-PFHxS



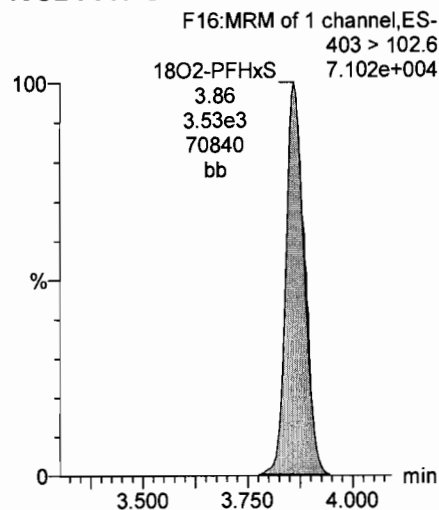
13C4-PFHpA



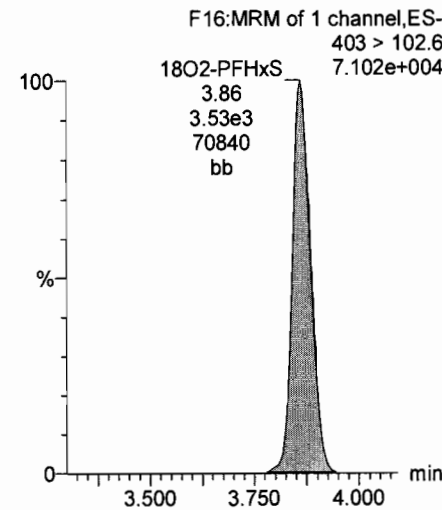
13C4-PFHpA



18O2-PFHxS



18O2-PFHxS



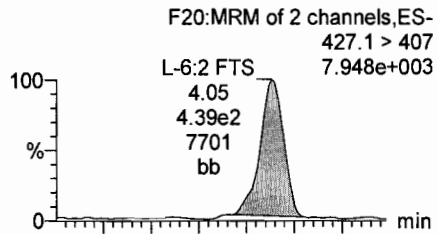
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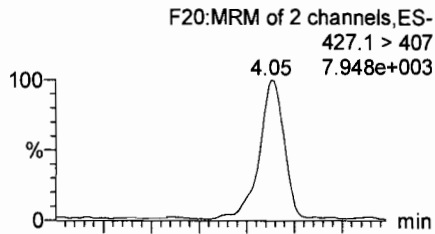
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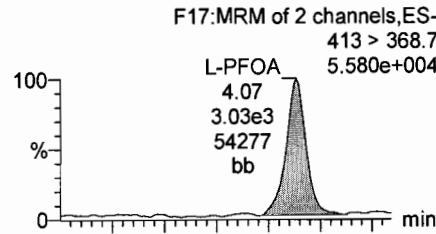
L-6:2 FTS



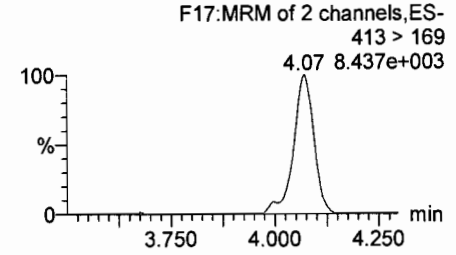
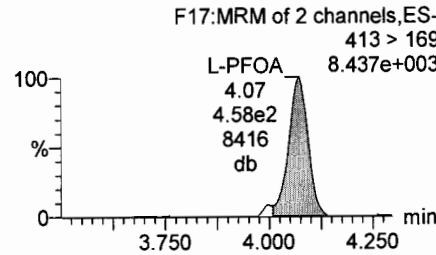
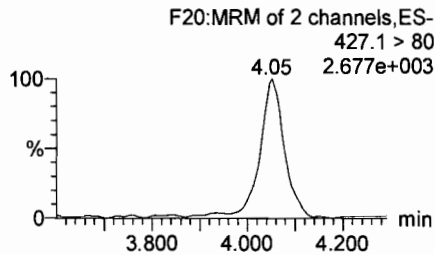
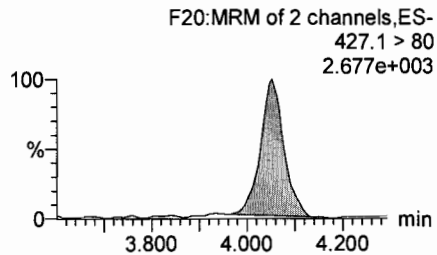
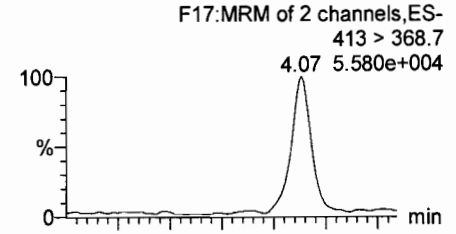
Br-6:2 FTS



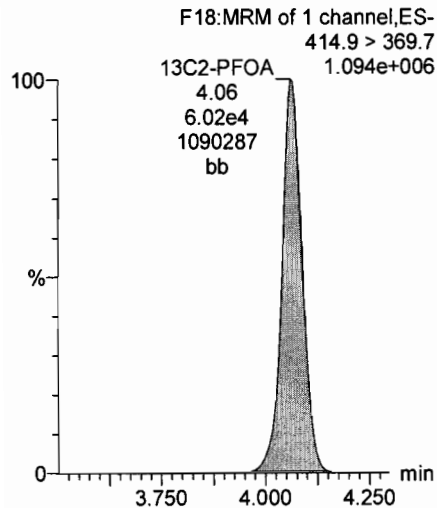
L-PFOA



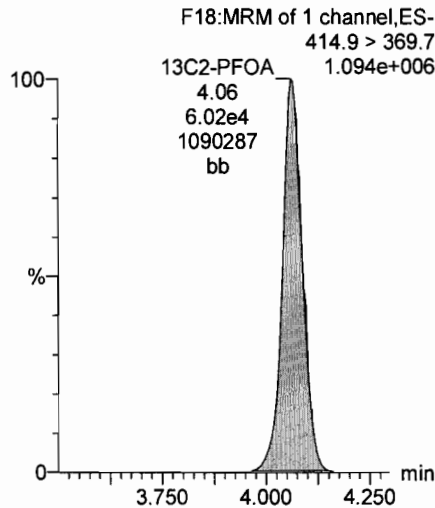
Br-PFOA



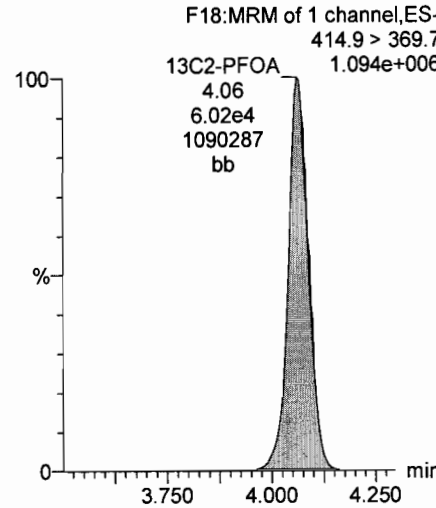
13C2-PFOA



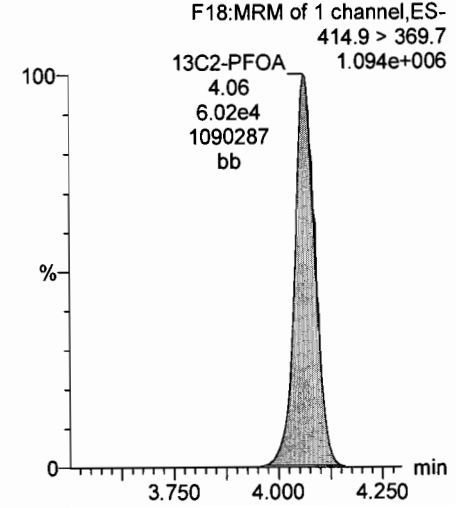
13C2-PFOA



13C2-PFOA



13C2-PFOA



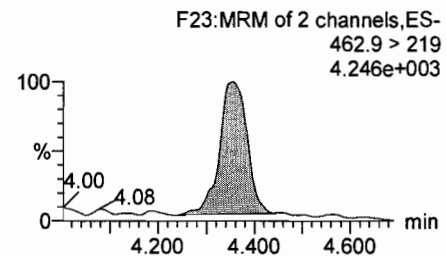
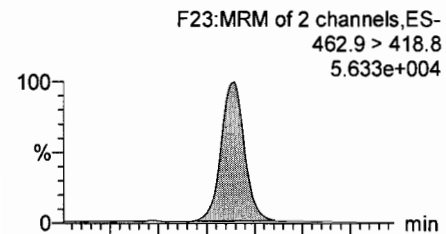
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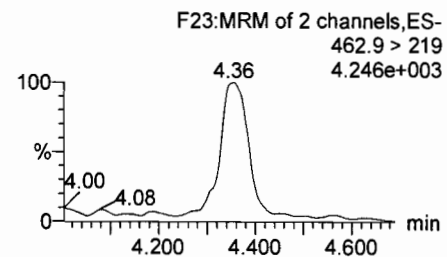
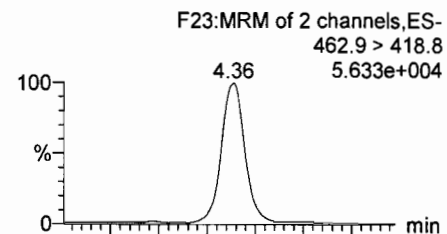
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Name: 170623M1\_4, Date: 23-Jun-2017, Time: 10:51:02, ID: ST170623M1-2 PFC CS-1 17F2214, Description: PFC CS-1 17F2214

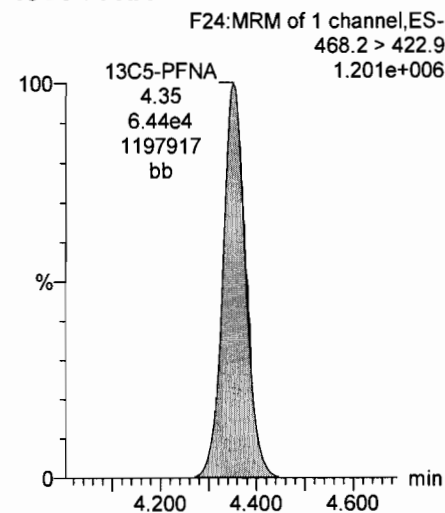
L-PFNA



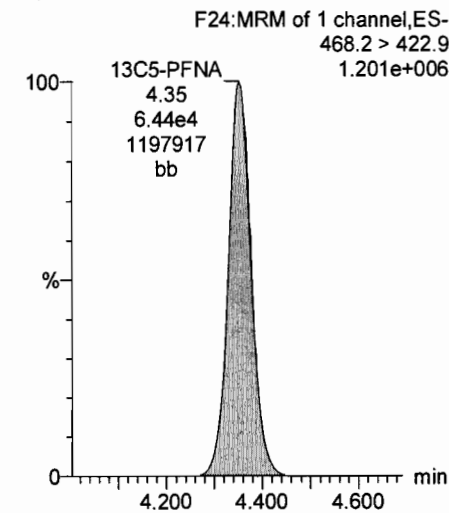
Br-PFNA



13C5-PFNA



13C5-PFNA





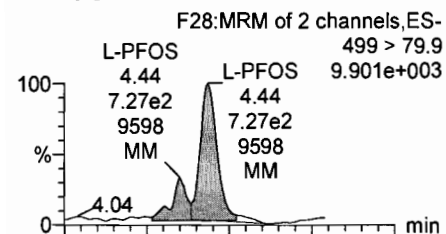
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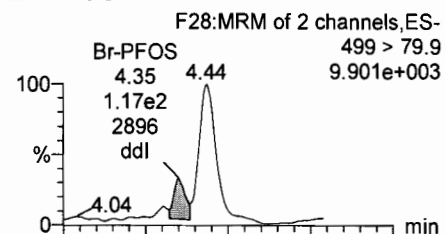
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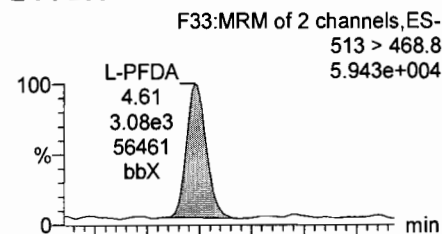
L-PFOS



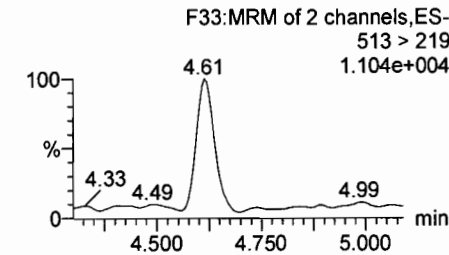
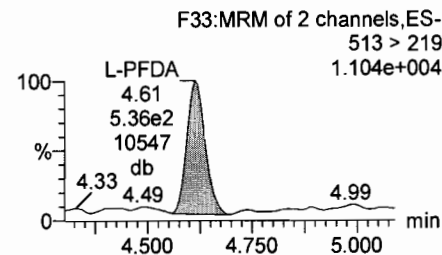
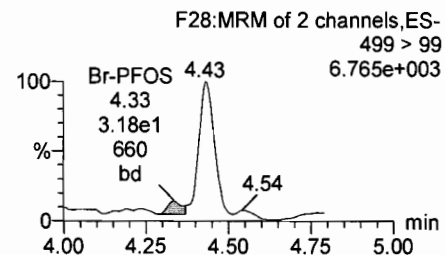
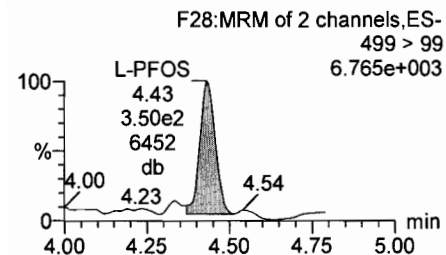
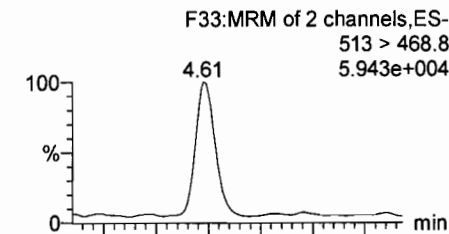
Br-PFOS



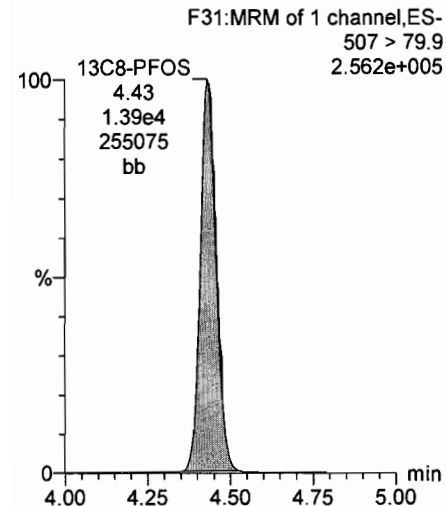
L-PFDA



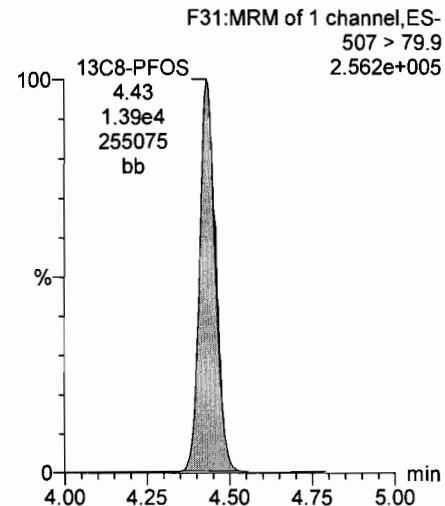
Br-PFDA



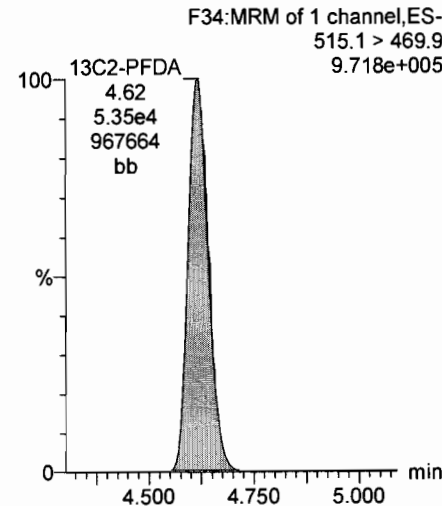
13C8-PFOS



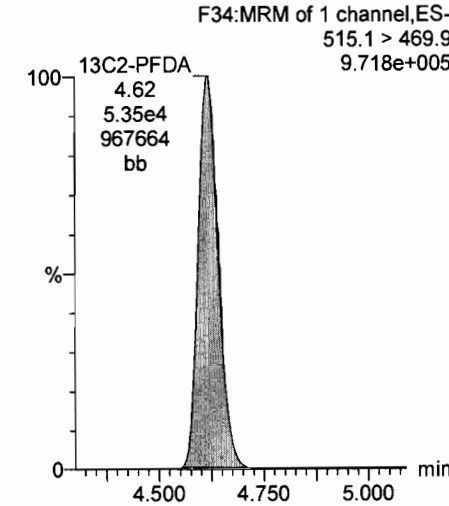
13C8-PFOS



13C2-PFDA



13C2-PFDA

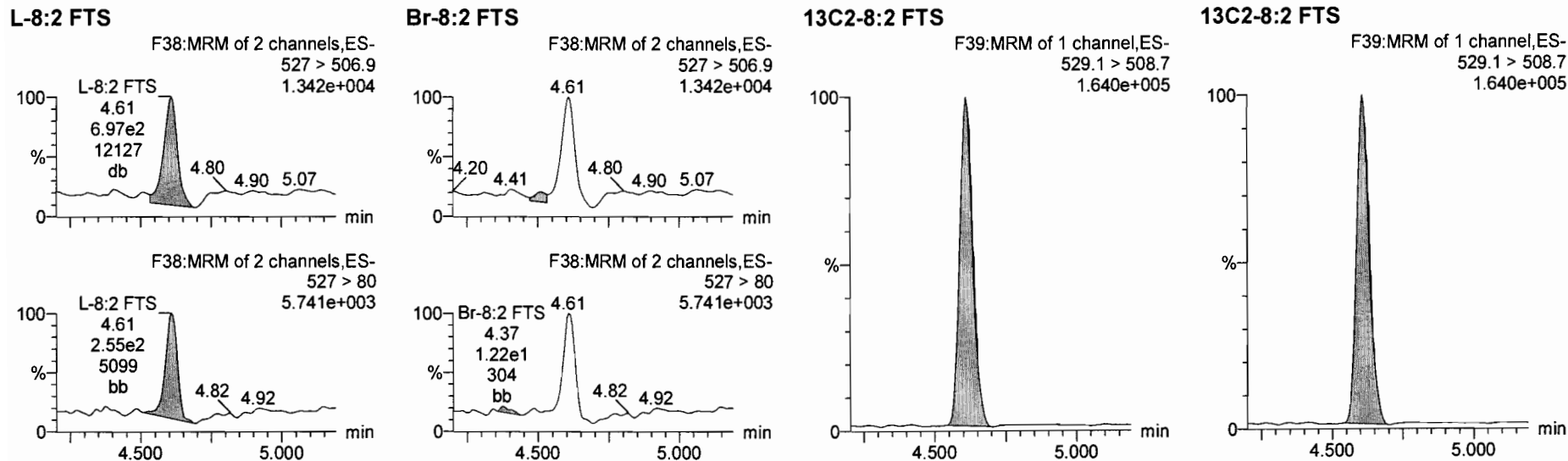


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Printed: Friday, June 23, 2017 13:25:43 Pacific Daylight Time

Name: 170623M1\_4, Date: 23-Jun-2017, Time: 10:51:02, ID: ST170623M1-2 PFC CS-1 17F2214, Description: PFC CS-1 17F2214



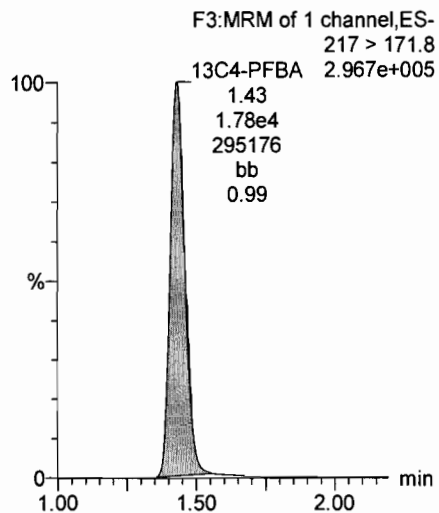
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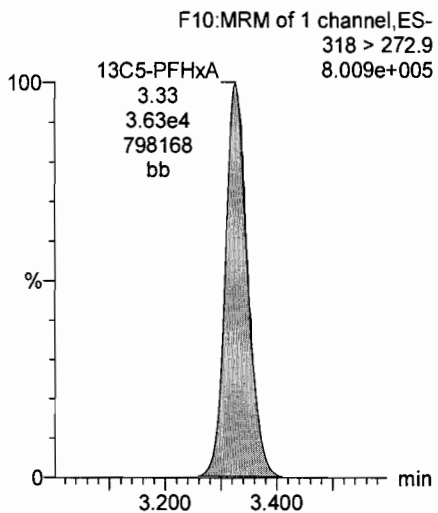
Printed: Friday, June 23, 2017 13:25:43 Pacific Daylight Time

Name: 170623M1\_4, Date: 23-Jun-2017, Time: 10:51:02, ID: ST170623M1-2 PFC CS-1 17F2214, Description: PFC CS-1 17F2214

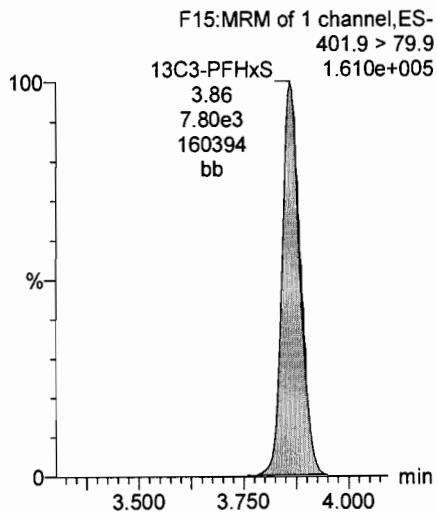
13C4-PFBA



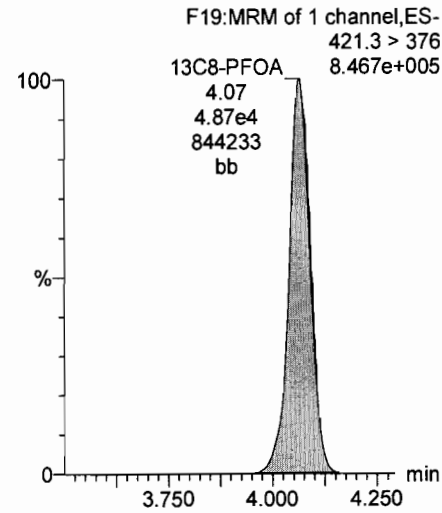
13C5-PFHxA



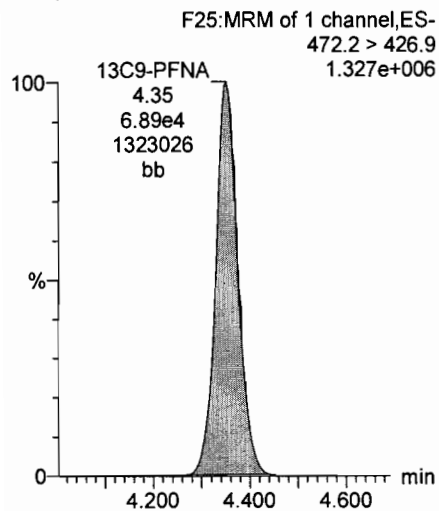
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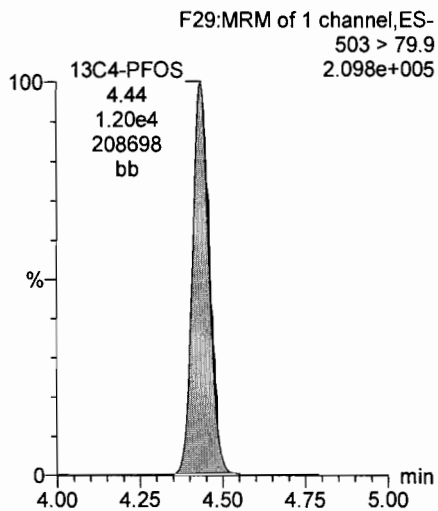
13C8-PFOA



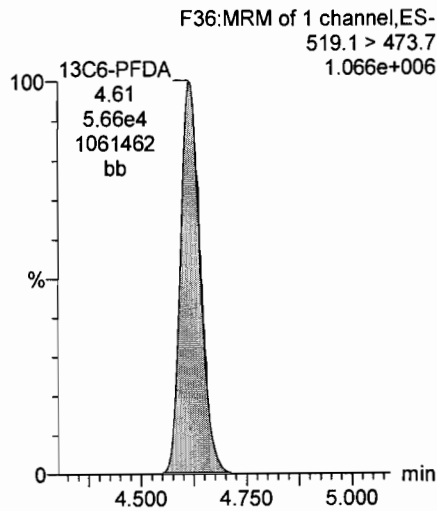
13C9-PFNA



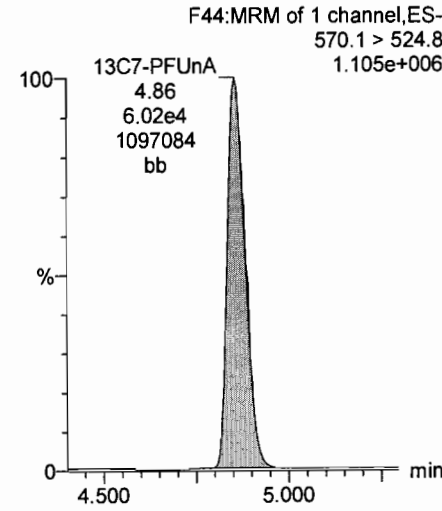
13C4-PFOS



13C6-PFDA



13C7-PFUnA



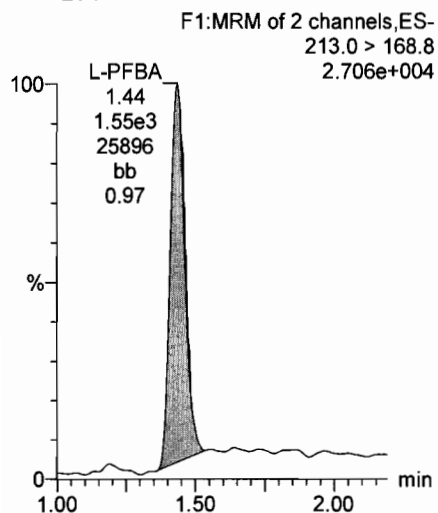
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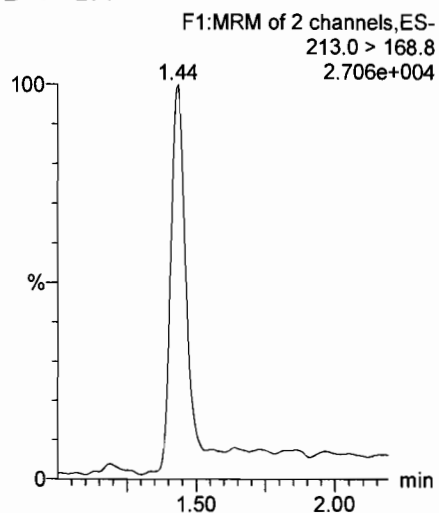
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Name: 170623M1\_5, Date: 23-Jun-2017, Time: 11:02:31, ID: ST170623M1-3 PFC CS0 17F2215, Description: PFC CS0 17F2215

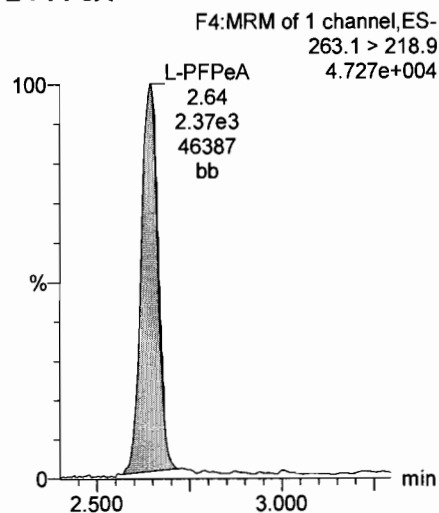
L-PFBA



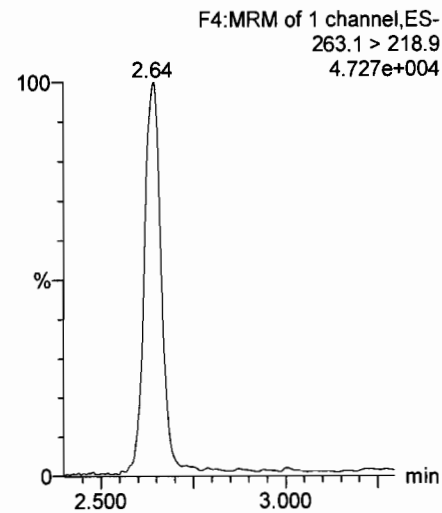
Br-PFBA



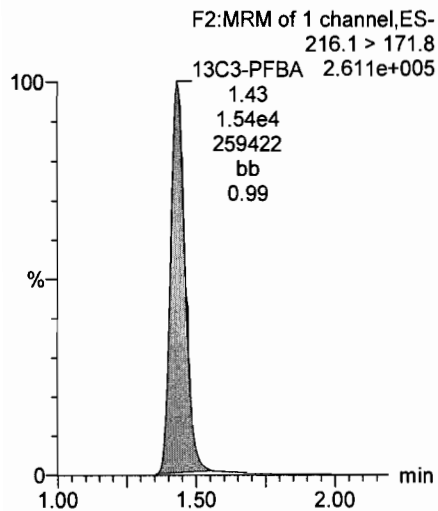
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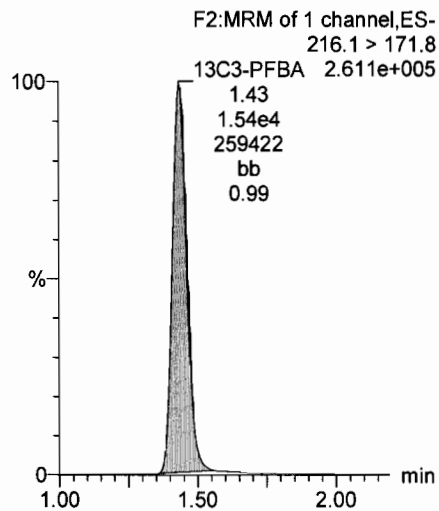
Br-PFPeA



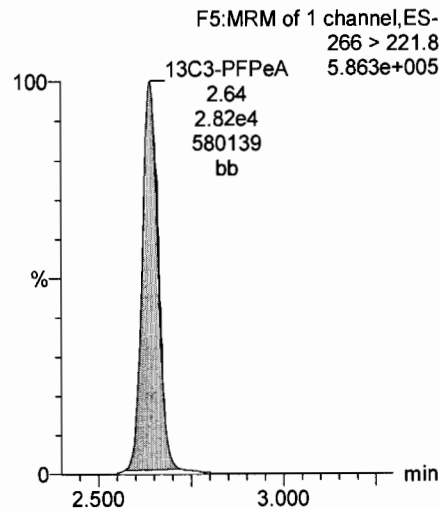
13C3-PFBA



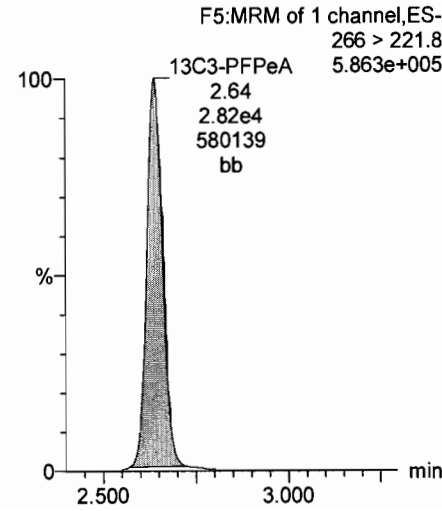
13C3-PFBA



13C3-PFPeA



13C3-PFPeA



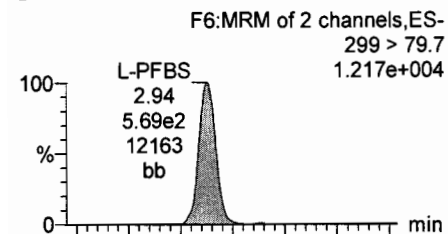
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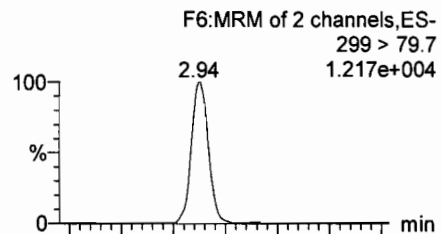
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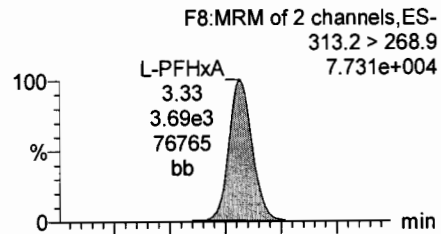
L-PFBS



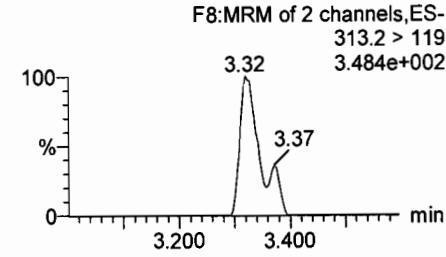
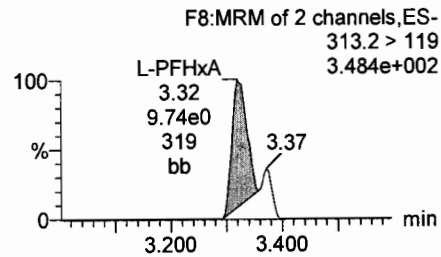
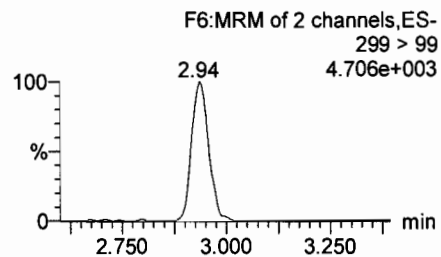
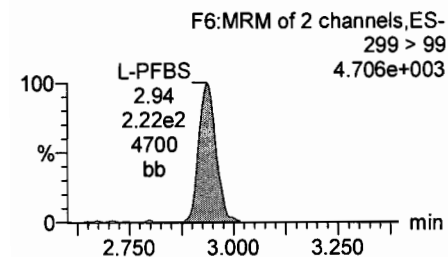
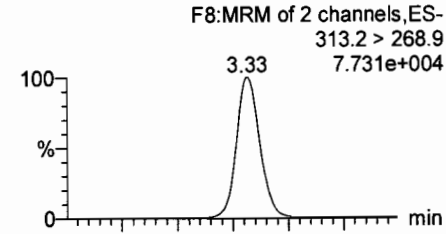
Br-PFBS



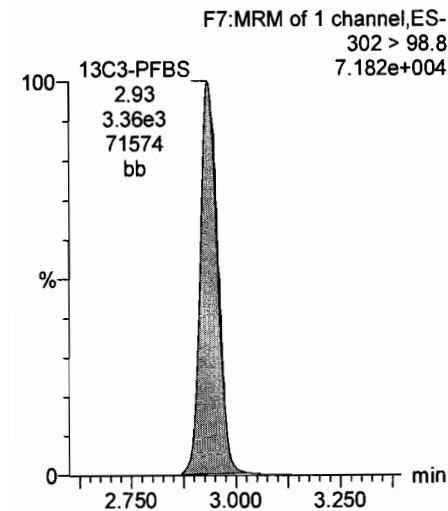
L-PFHxA



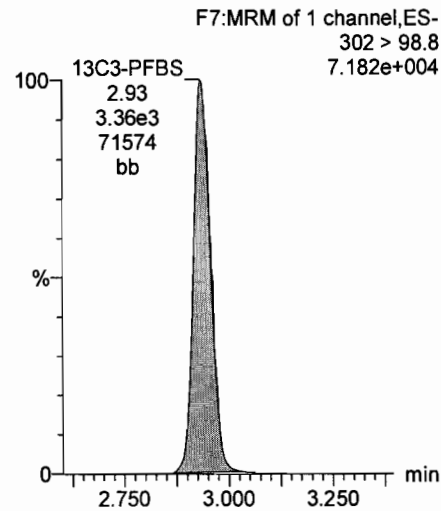
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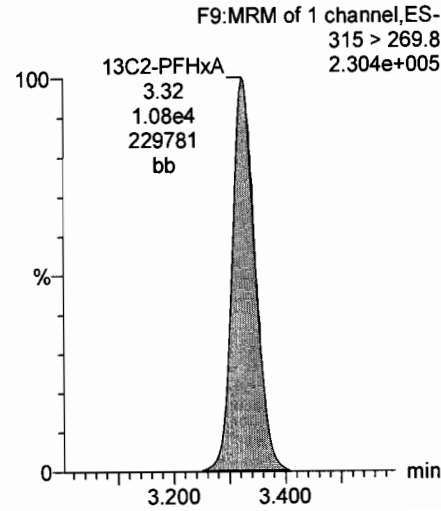
13C3-PFBS



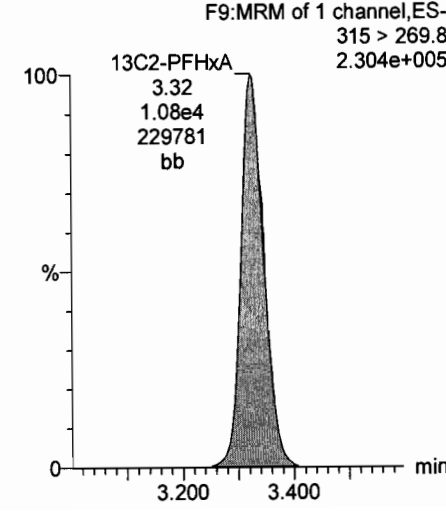
13C3-PFBS



13C2-PFHxA



13C2-PFHxA



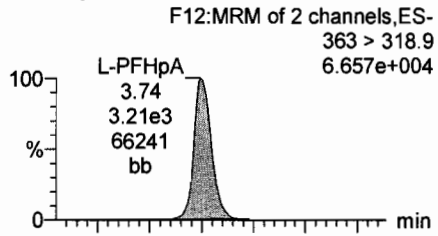
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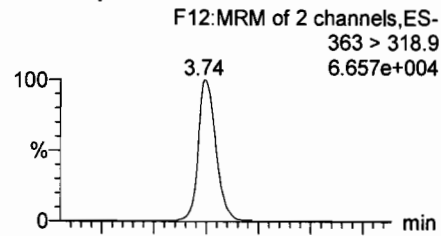
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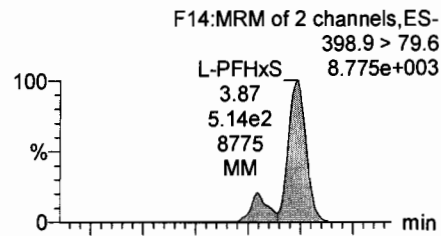
L-PFHpA



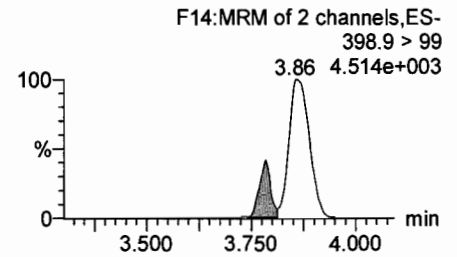
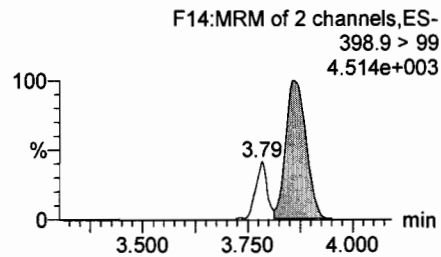
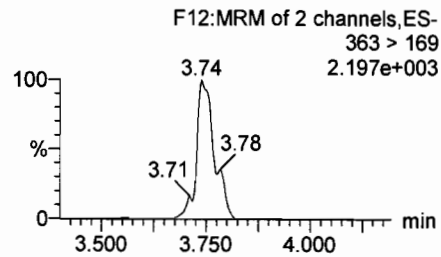
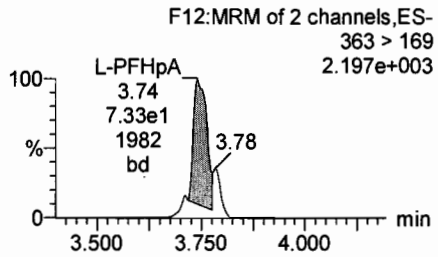
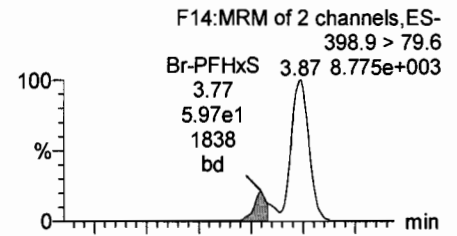
Br-PFHpA



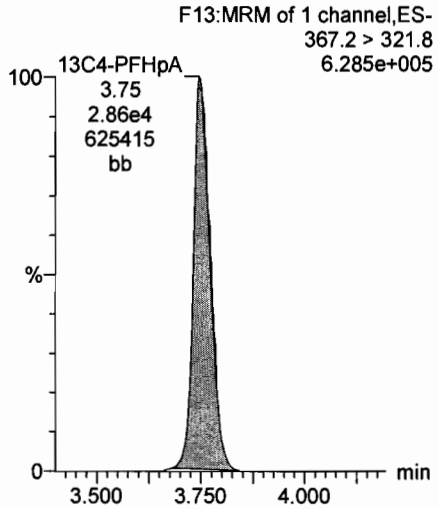
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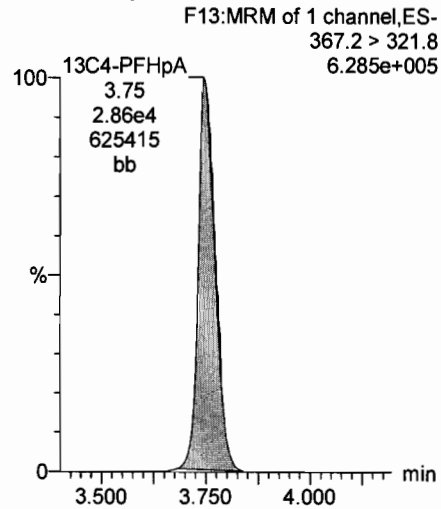
Br-PFHxS



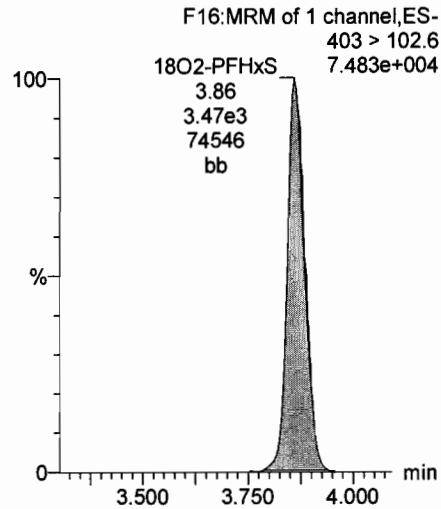
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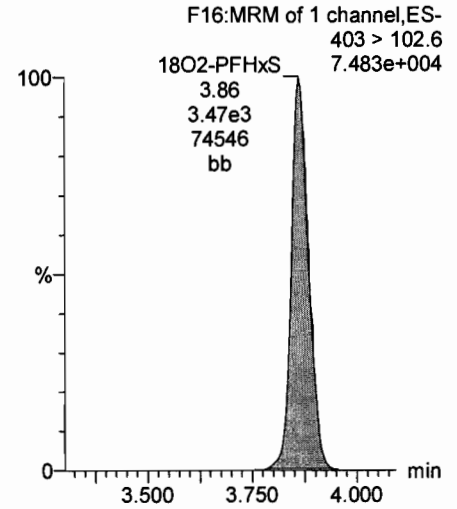
13C4-PFHpA



18O2-PFHxS



18O2-PFHxS



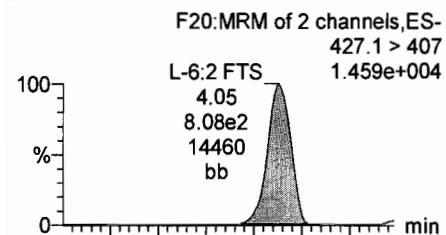
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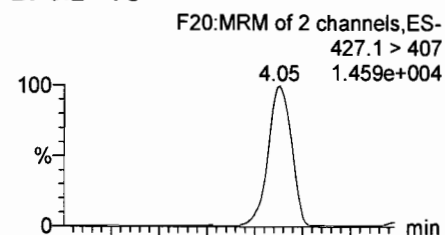
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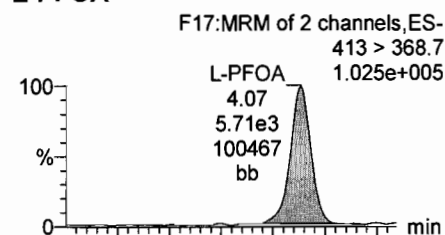
L-6:2 FTS



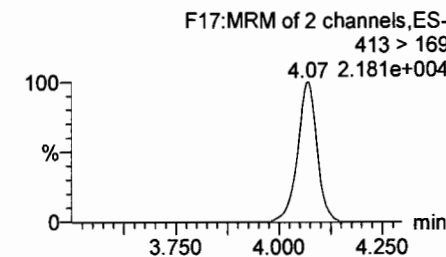
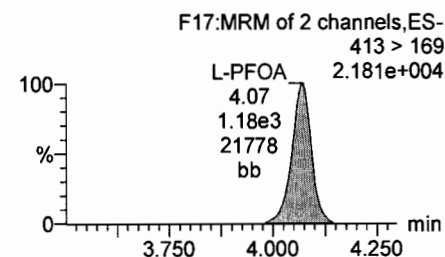
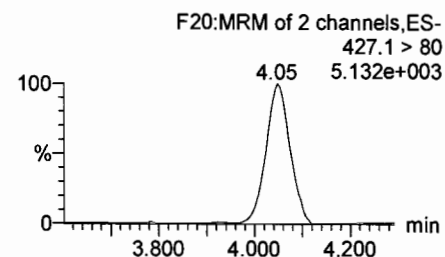
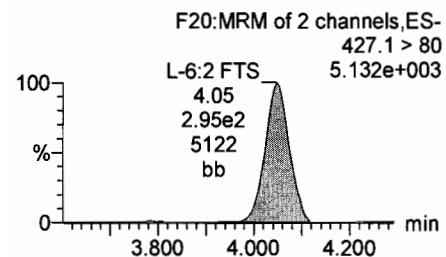
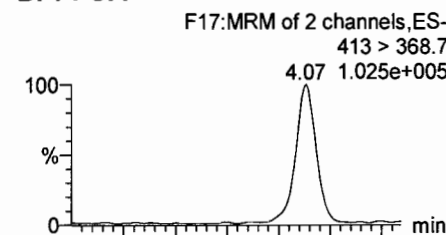
Br-6:2 FTS



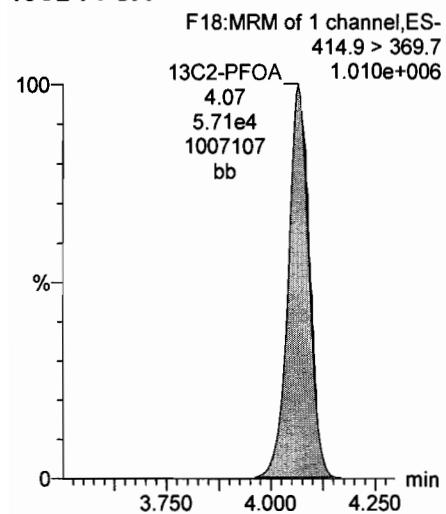
L-PFOA



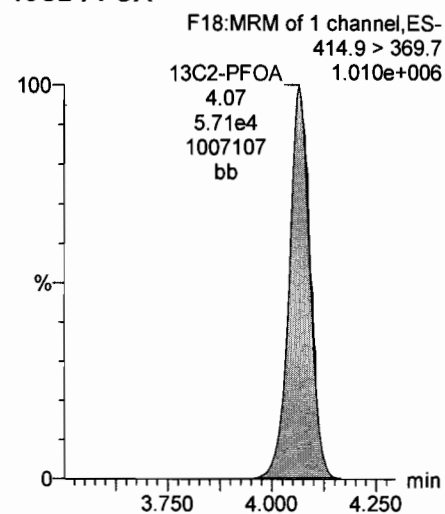
Br-PFOA



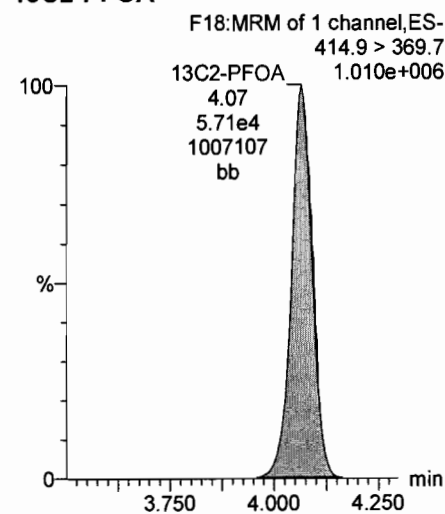
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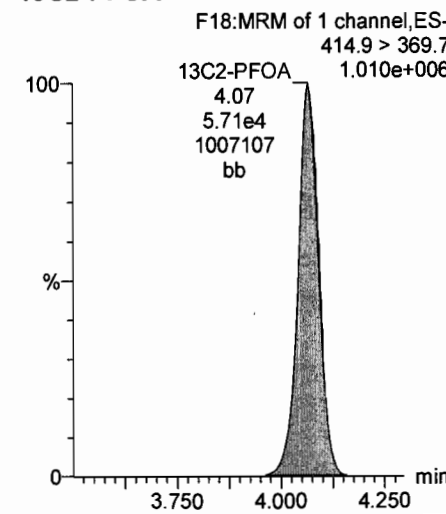
13C2-PFOA



13C2-PFOA



13C2-PFOA



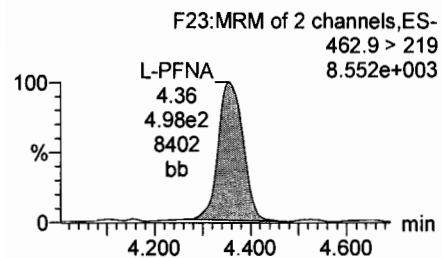
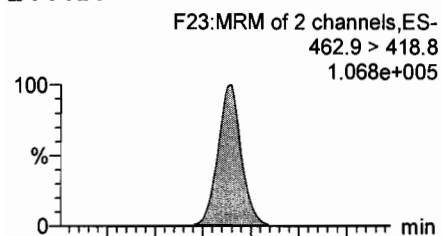
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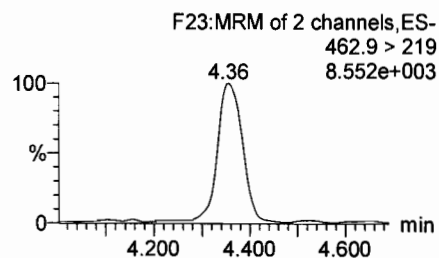
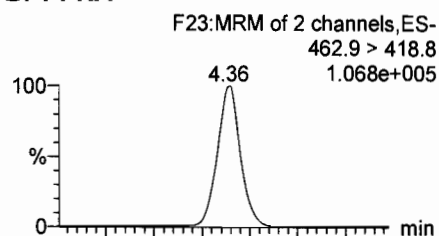
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Name: 170623M1\_5, Date: 23-Jun-2017, Time: 11:02:31, ID: ST170623M1-3 PFC CS0 17F2215, Description: PFC CS0 17F2215

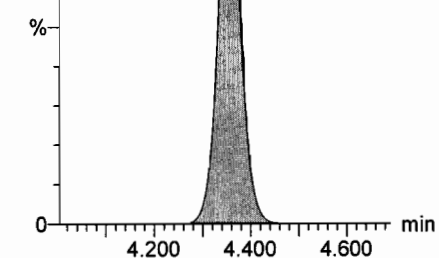
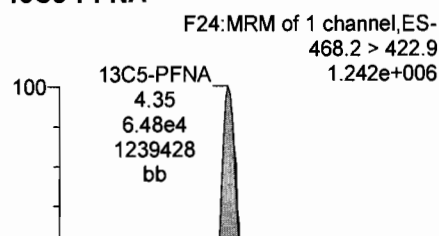
L-PFNA



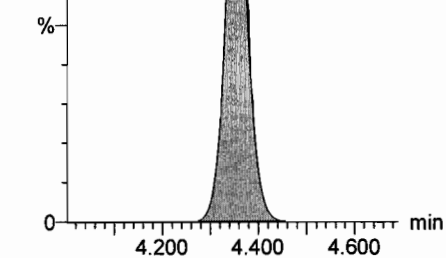
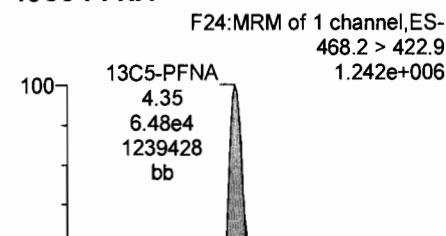
Br-PFNA



13C5-PFNA



13C5-PFNA





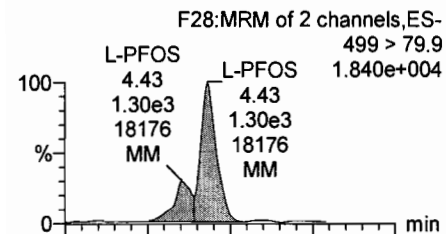
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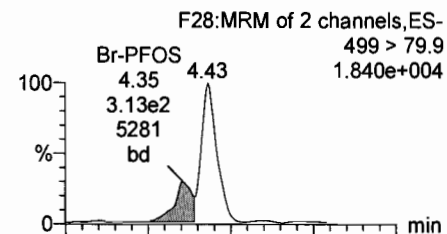
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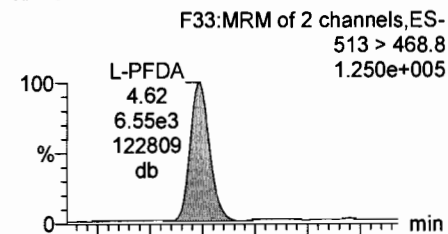
L-PFOS



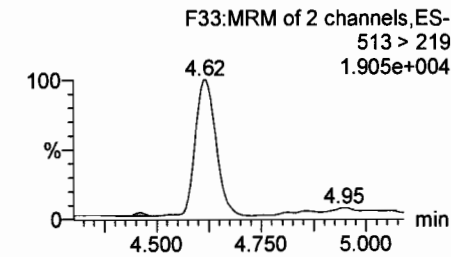
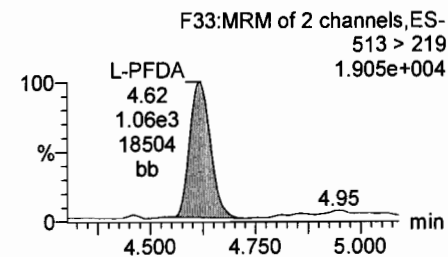
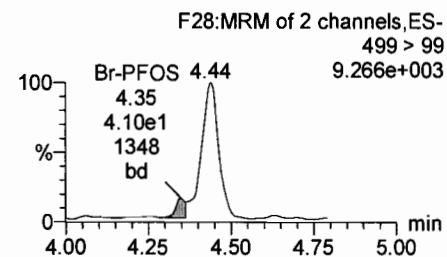
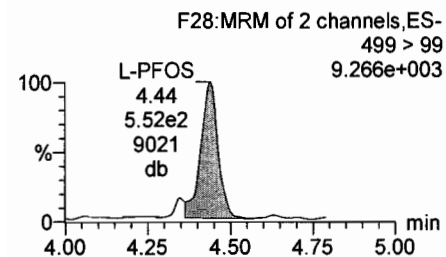
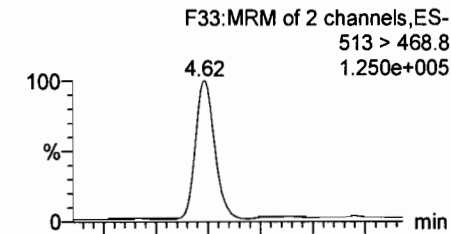
Br-PFOS



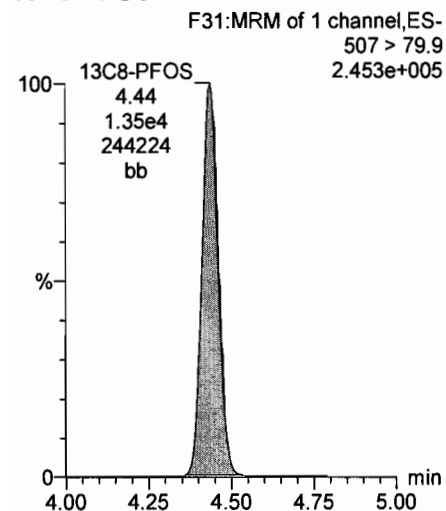
L-PFDA



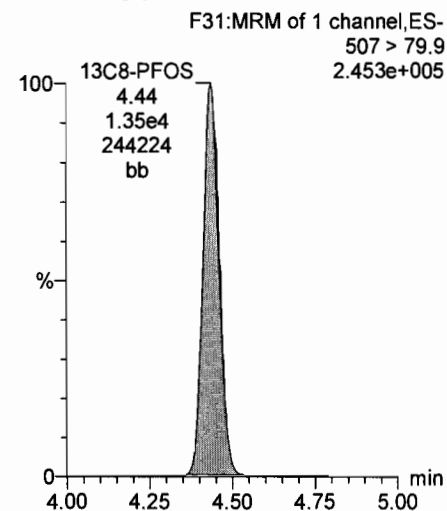
Br-PFDA



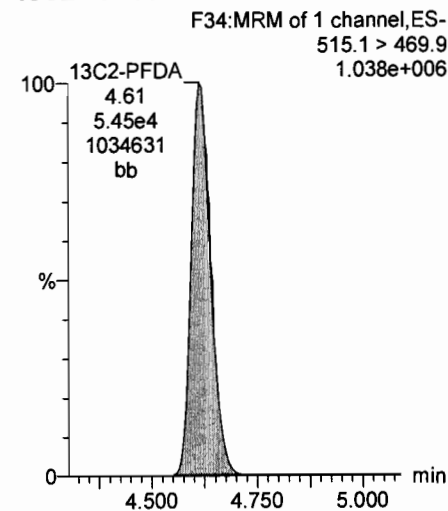
13C8-PFOS



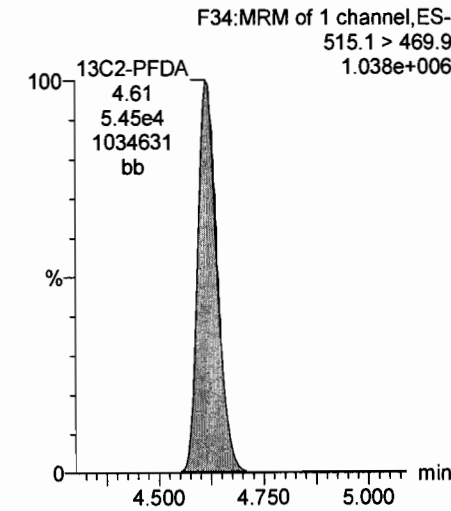
13C8-PFOS



13C2-PFDA



13C2-PFDA



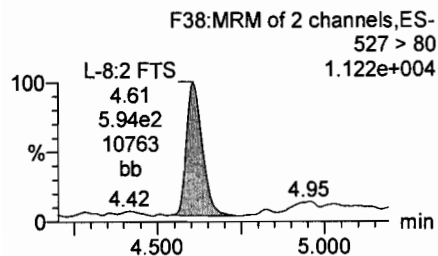
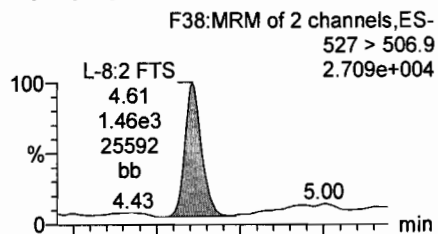
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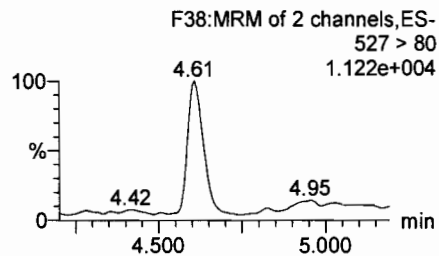
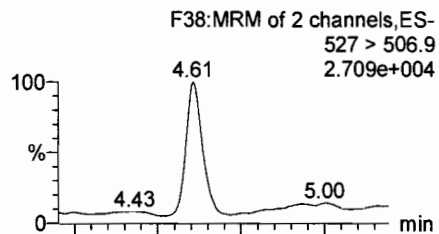
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Name: 170623M1\_5, Date: 23-Jun-2017, Time: 11:02:31, ID: ST170623M1-3 PFC CS0 17F2215, Description: PFC CS0 17F2215

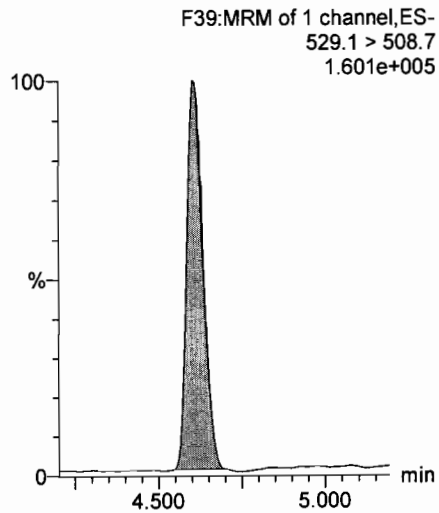
L-8:2 FTS



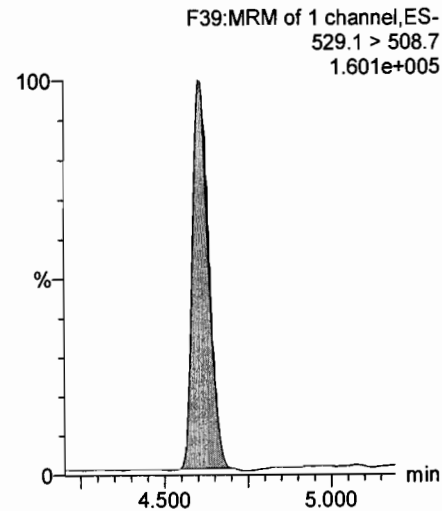
Br-8:2 FTS



13C2-8:2 FTS



13C2-8:2 FTS



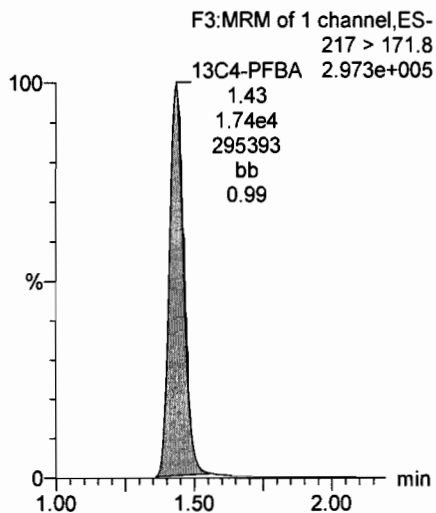
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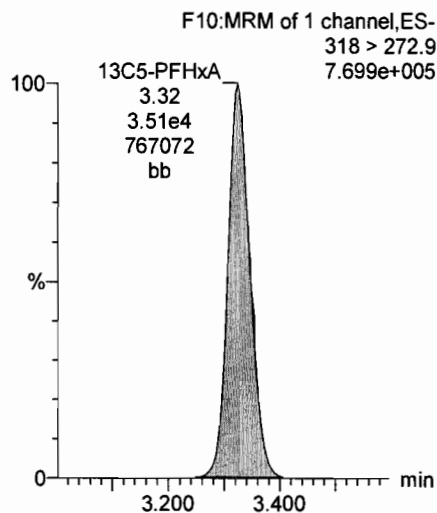
Printed: Friday, June 23, 2017 13:25:43 Pacific Daylight Time

Name: 170623M1\_5, Date: 23-Jun-2017, Time: 11:02:31, ID: ST170623M1-3 PFC CS0 17F2215, Description: PFC CS0 17F2215

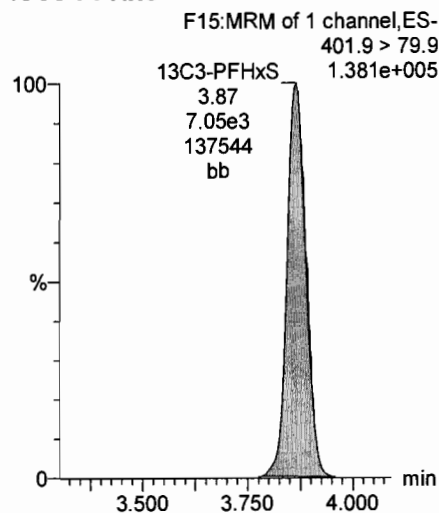
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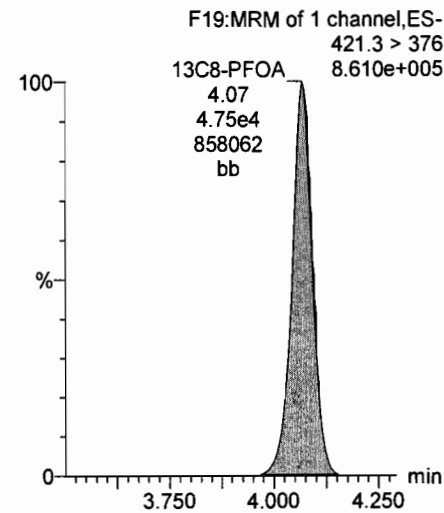
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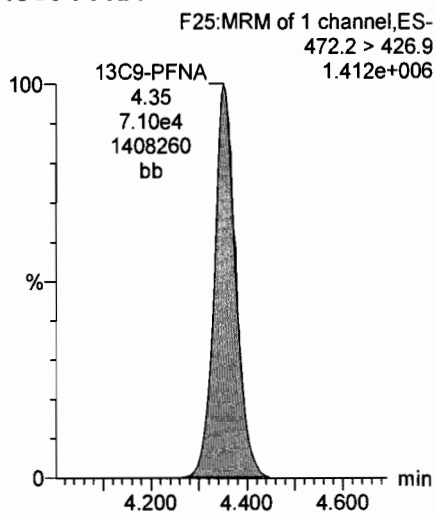
13C3-PFHxS



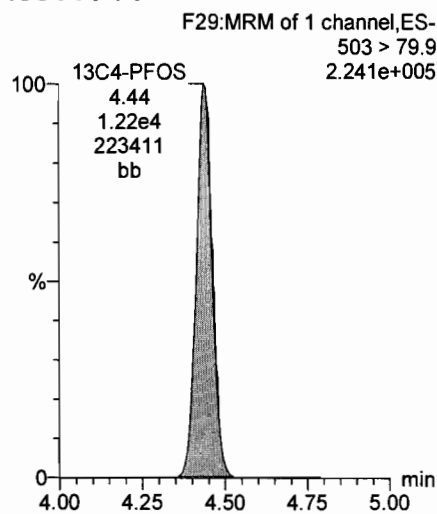
13C8-PFOA



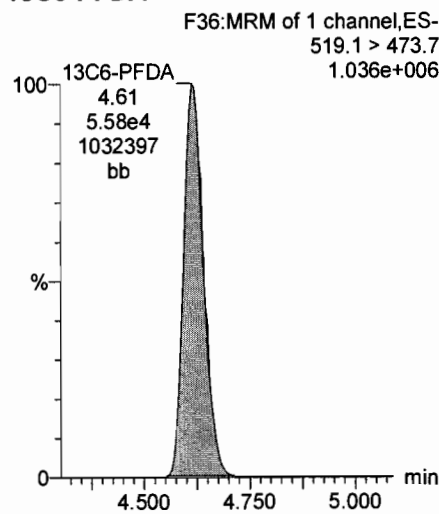
13C9-PFNA



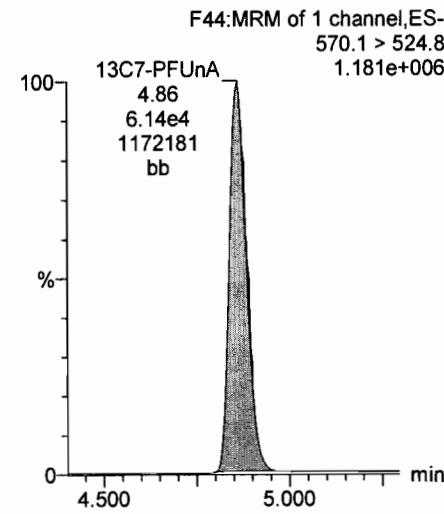
13C4-PFOS



13C6-PFDA



13C7-PFUnA



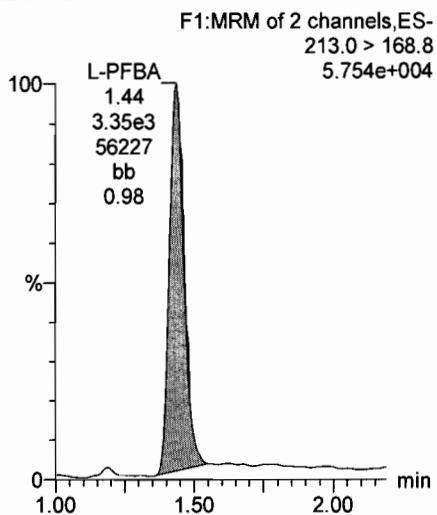
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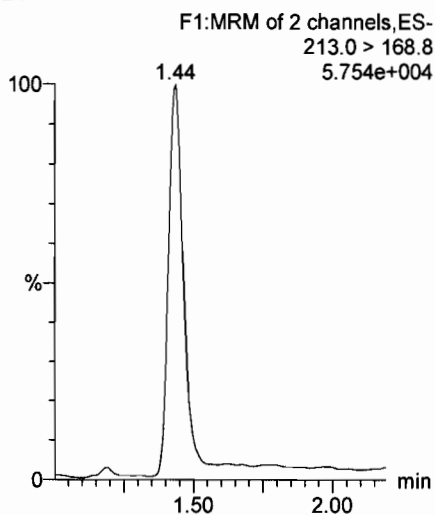
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Name: 170623M1\_6, Date: 23-Jun-2017, Time: 11:13:57, ID: ST170623M1-4 PFC CS1 17F2216, Description: PFC CS1 17F2216

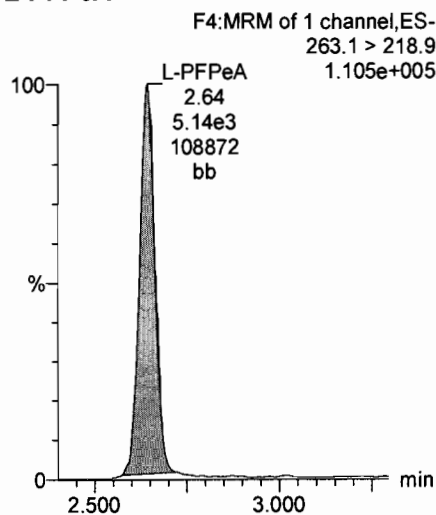
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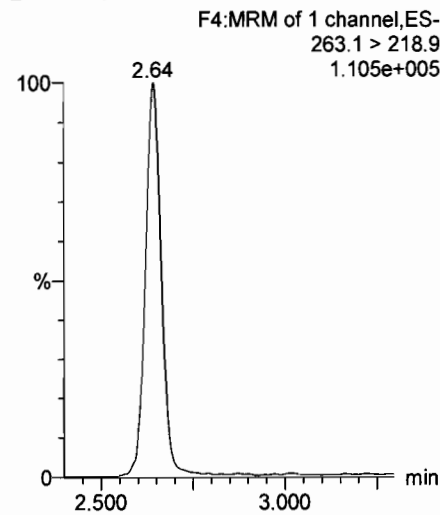
Br-PFBA



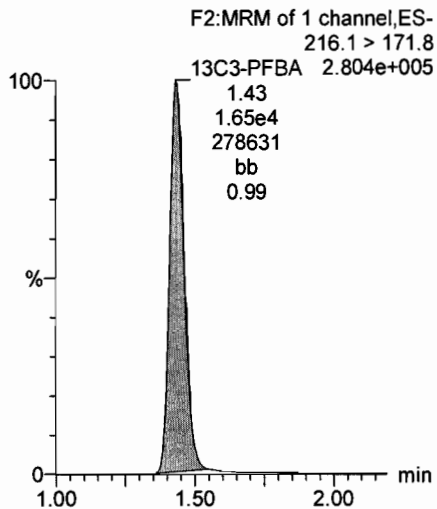
L-PFPeA



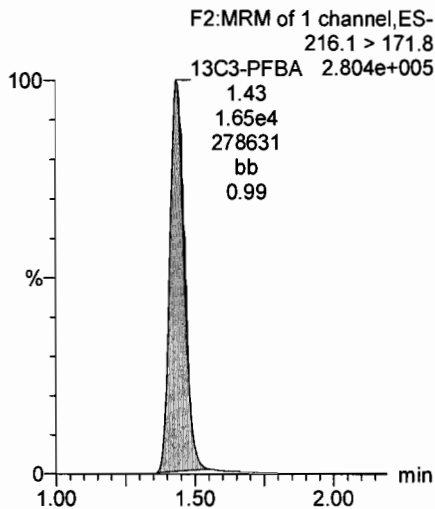
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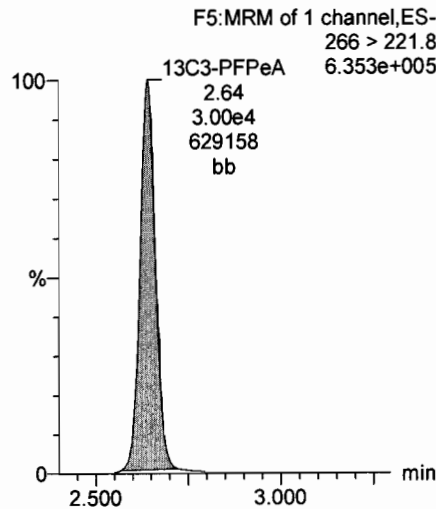
13C3-PFBA



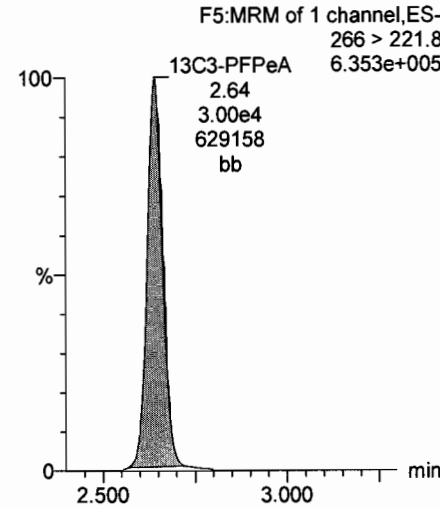
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13C3-PFPeA



13C3-PFPeA



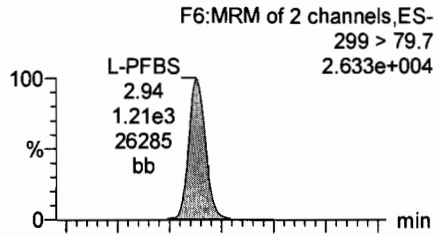
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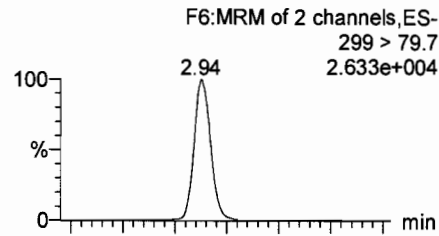
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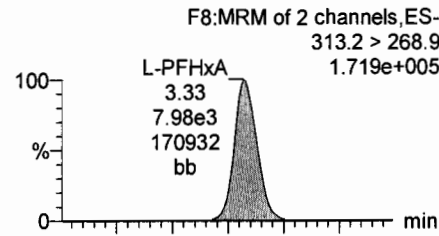
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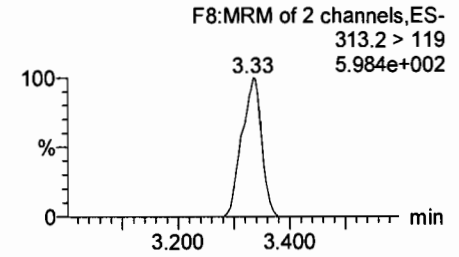
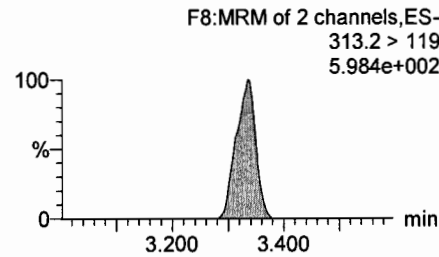
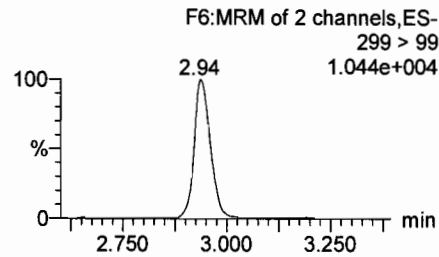
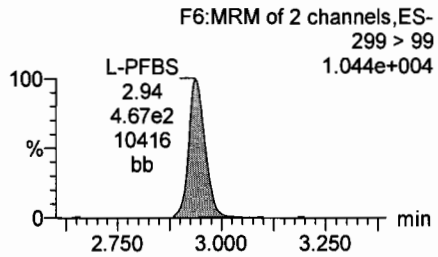
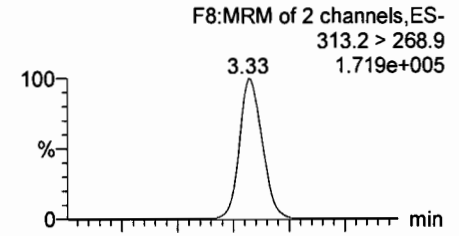
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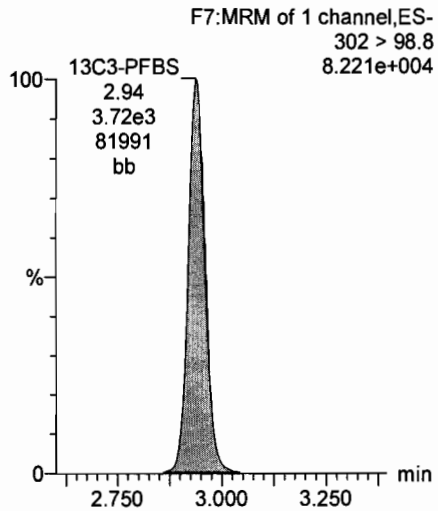
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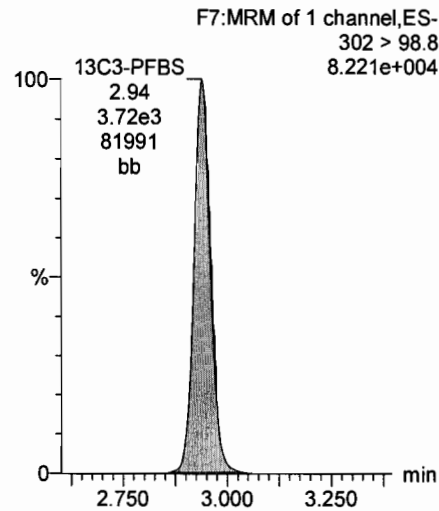
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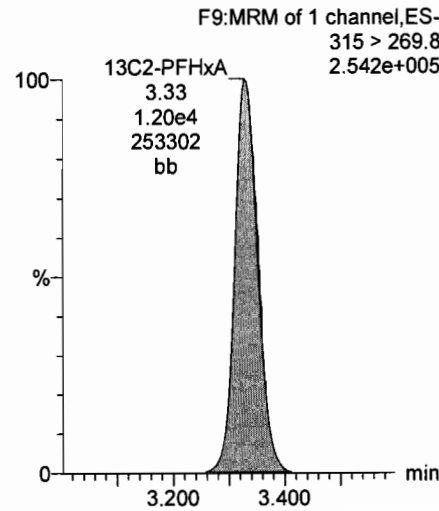
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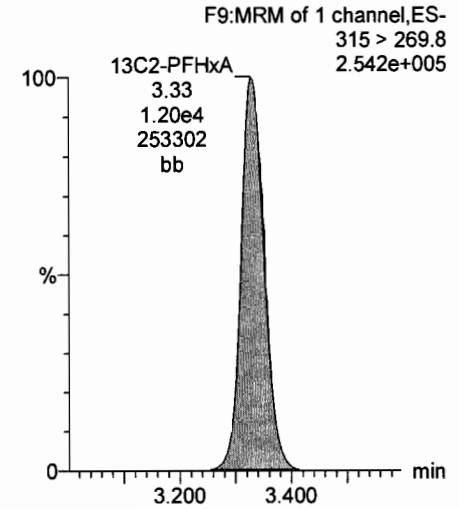
13C3-PFBS



13C2-PFHxA



13C2-PFHxA



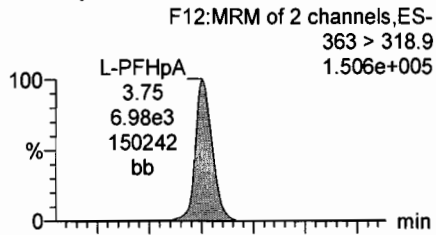
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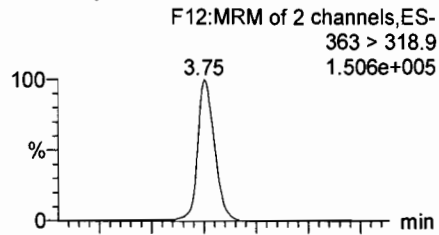
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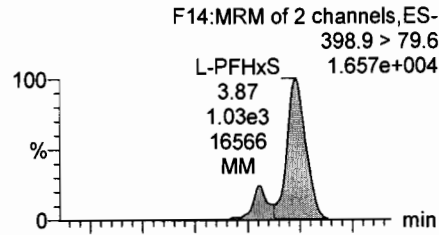
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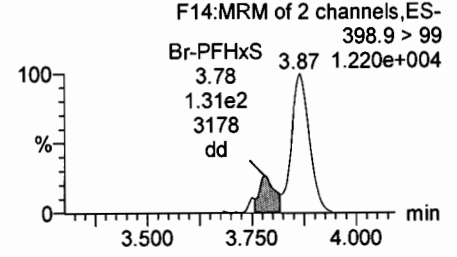
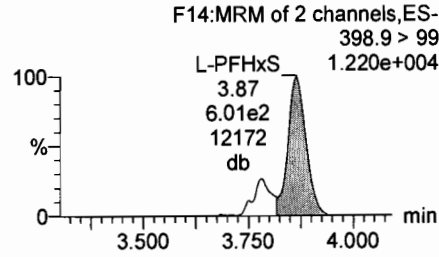
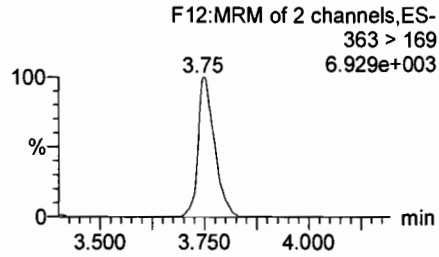
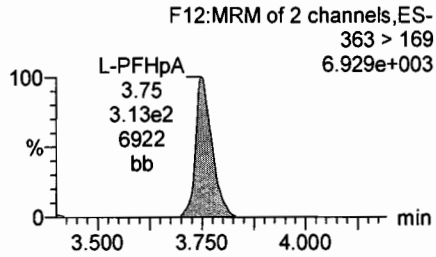
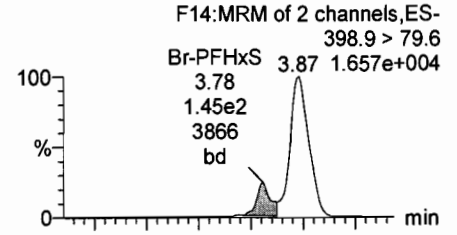
Br-PFHpA



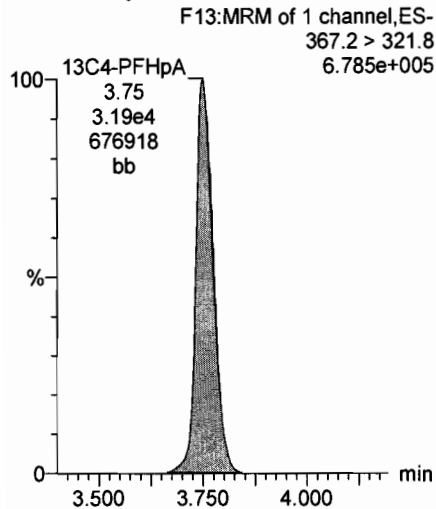
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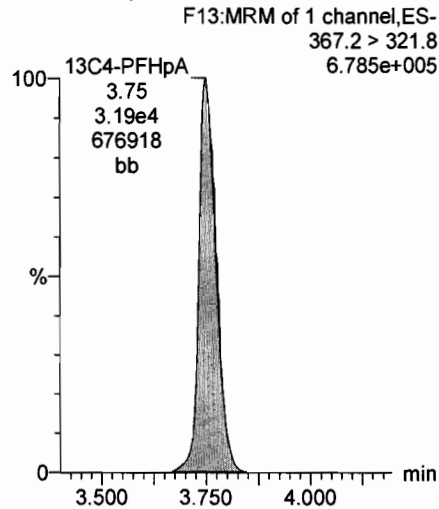
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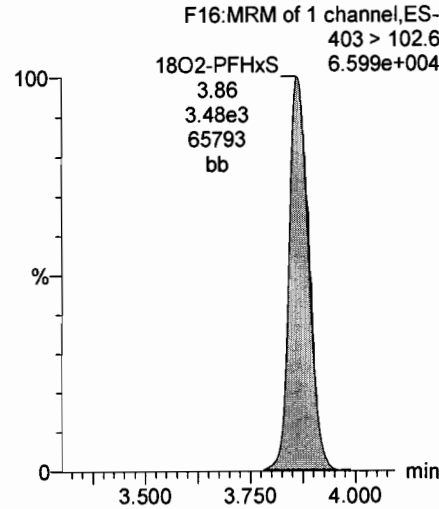
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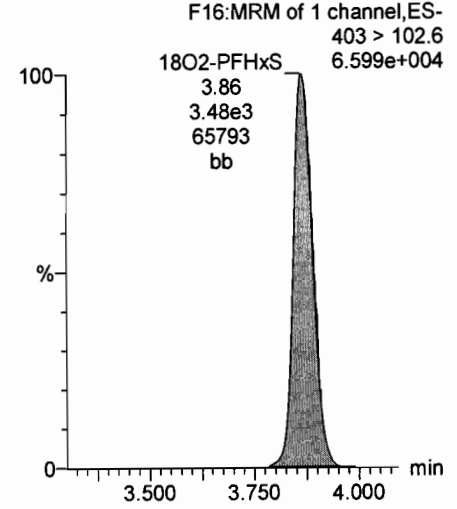
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18O2-PFHxS



18O2-PFHxS

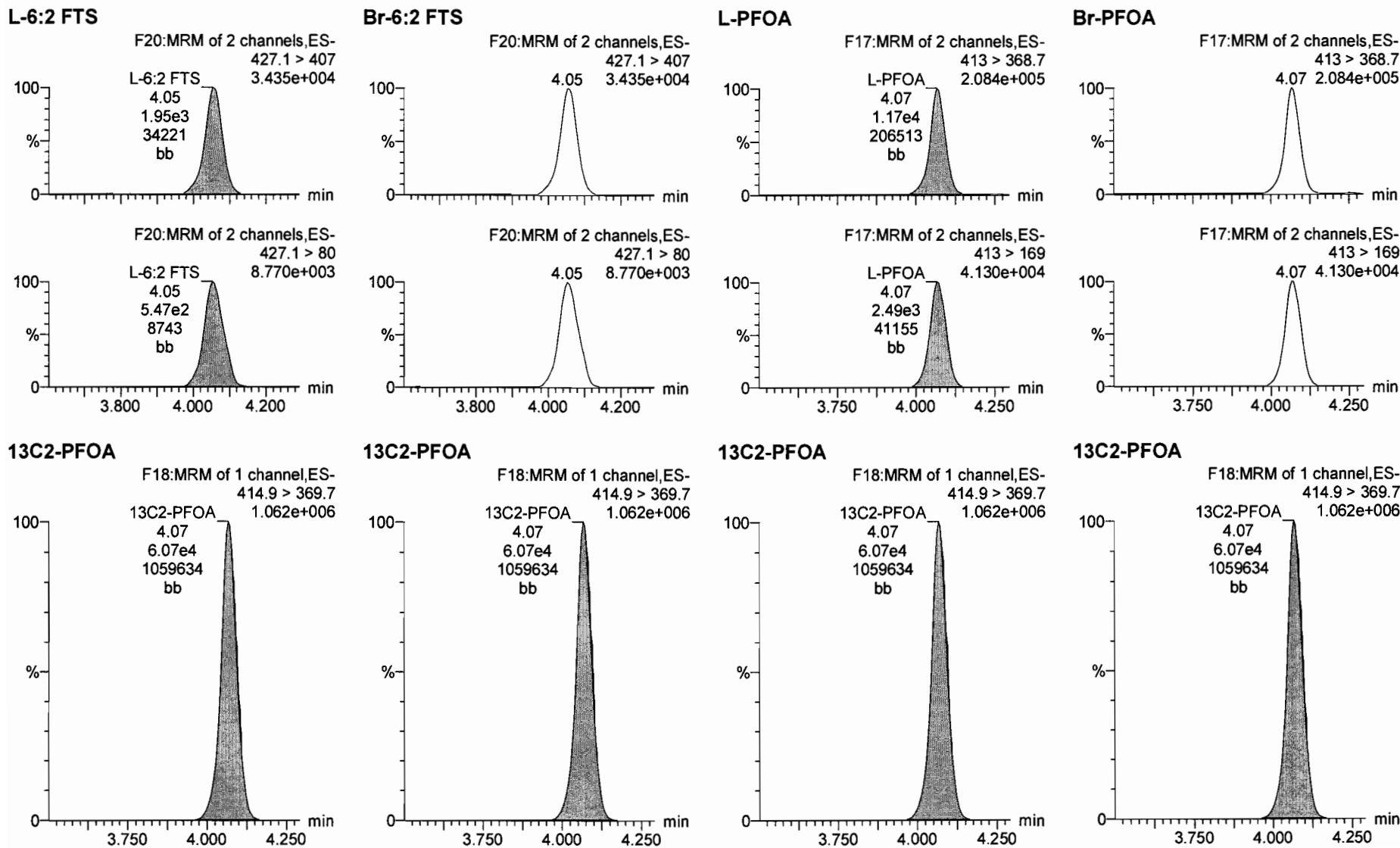


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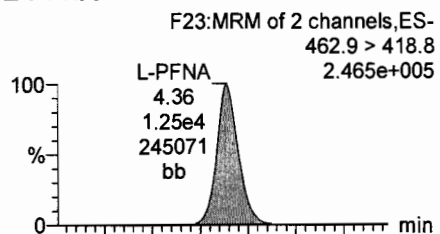
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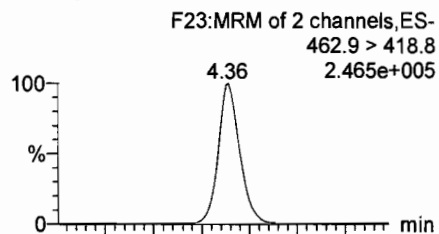
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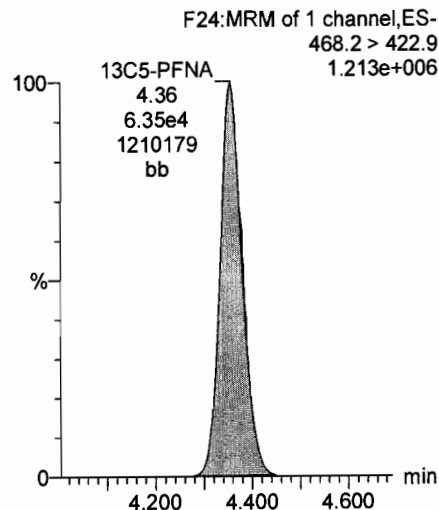
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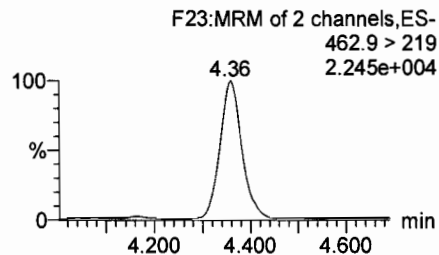
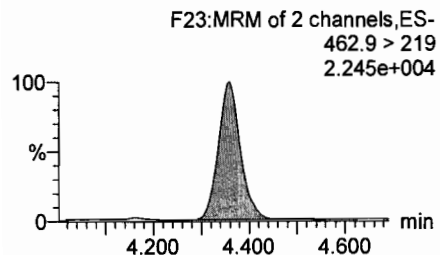
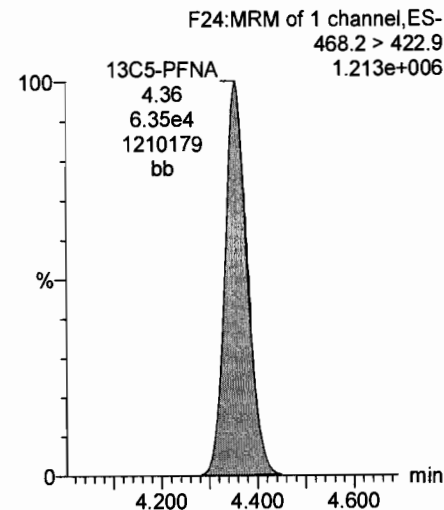
Br-PFNA



13C5-PFNA



13C5-PFNA





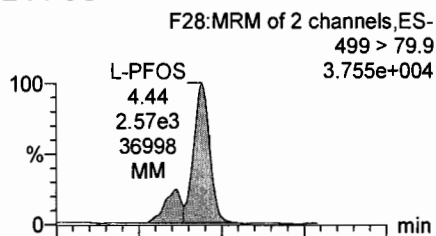
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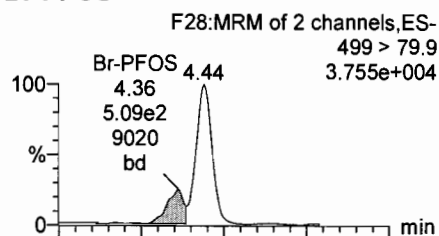
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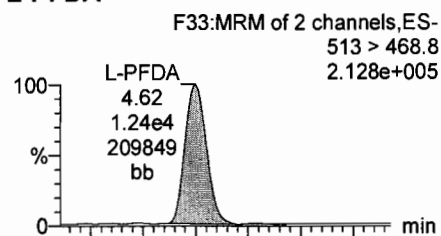
L-PFOS



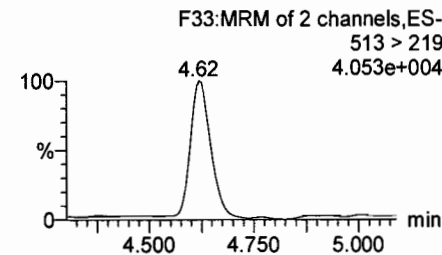
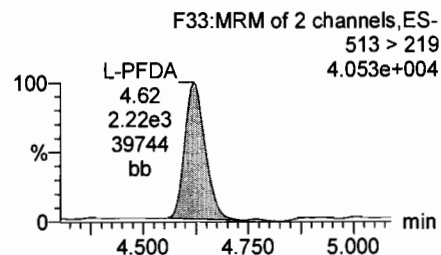
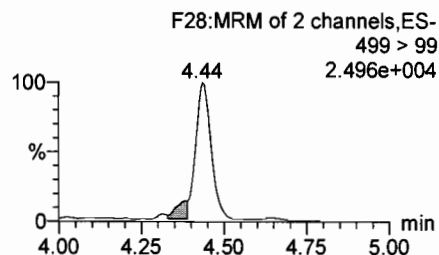
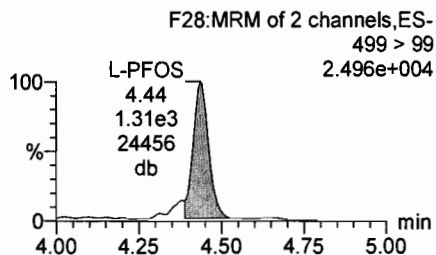
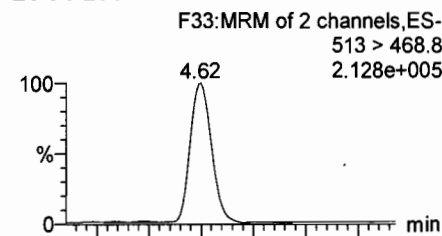
Br-PFOS



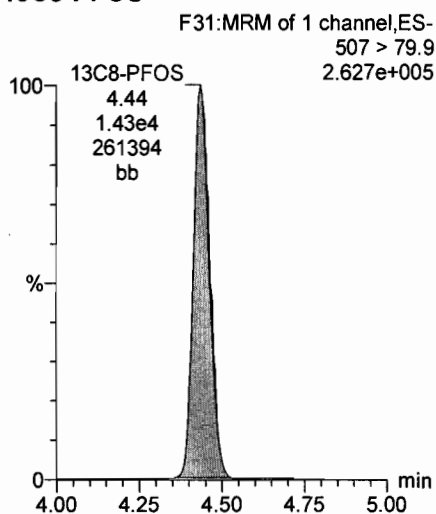
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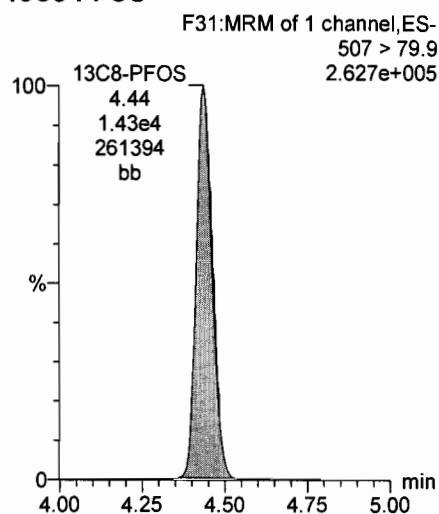
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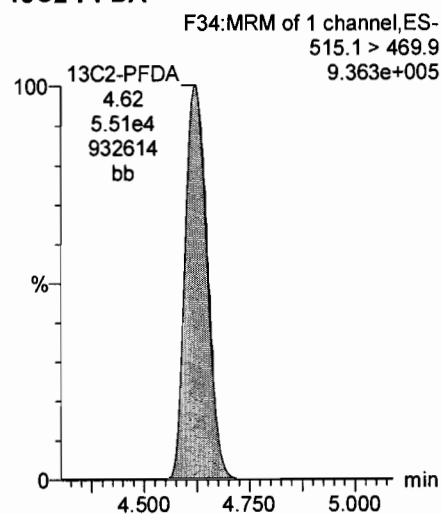
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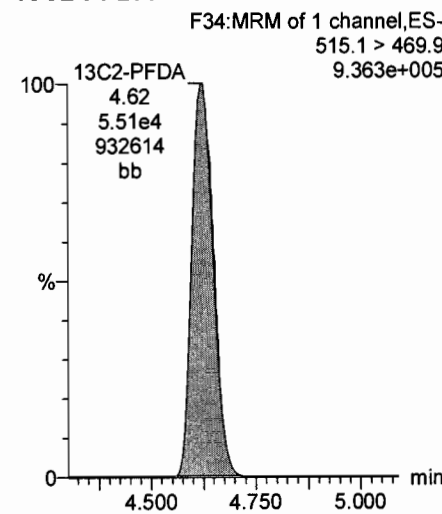
13C8-PFOS



13C2-PFDA



13C2-PFDA

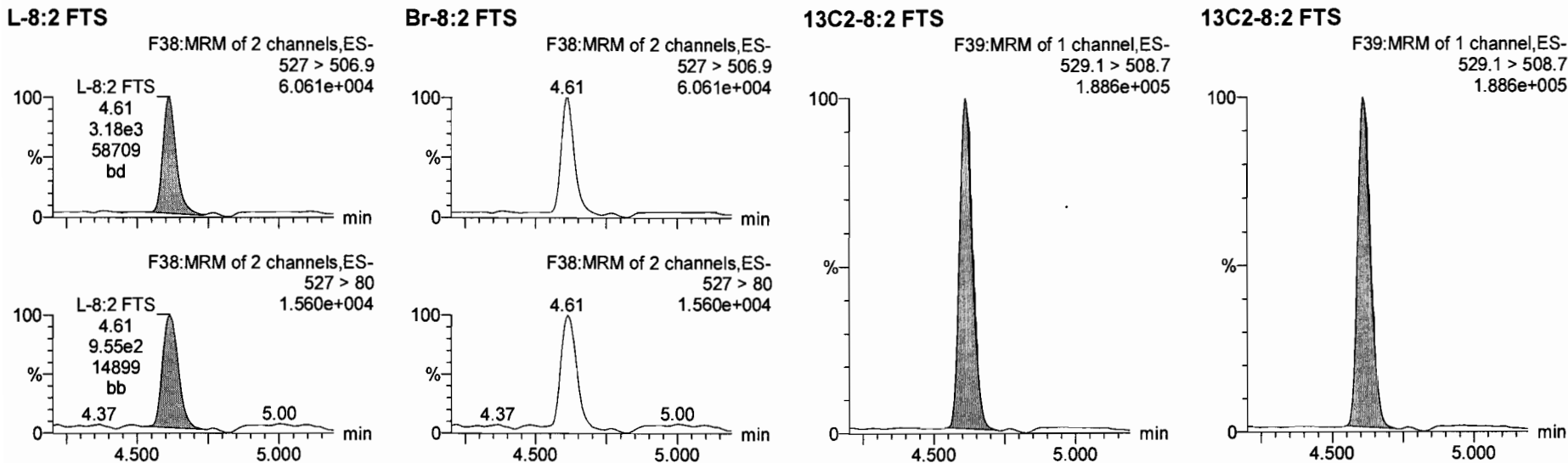


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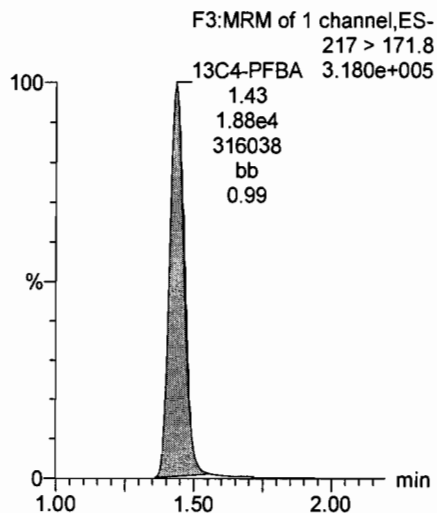
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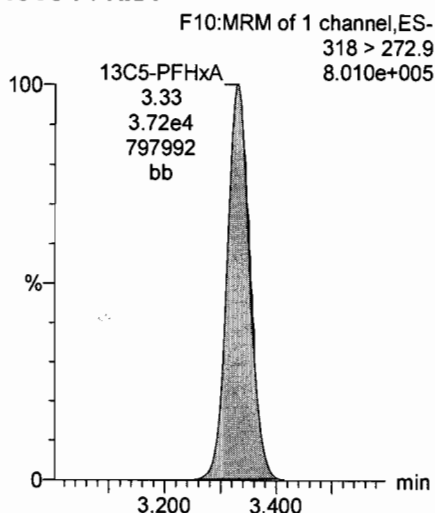
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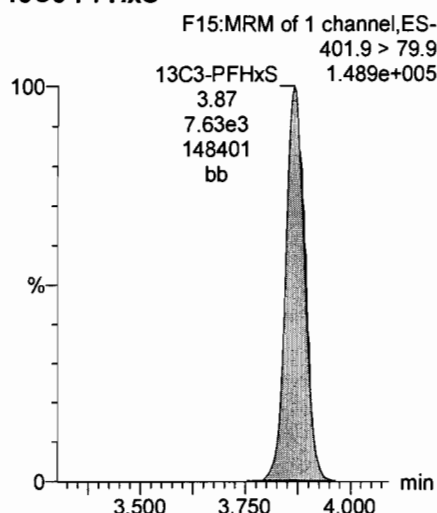
13C4-PFBA



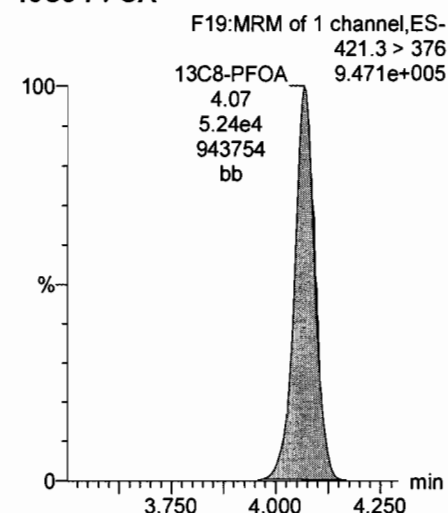
13C5-PFHxA



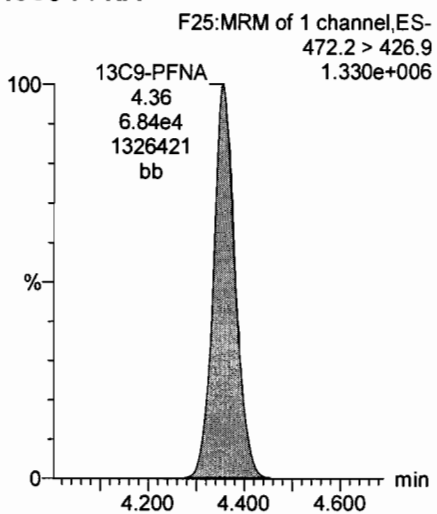
13C3-PFHxS



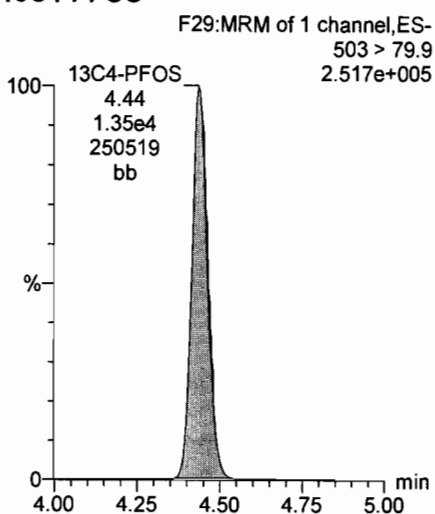
13C8-PFOA



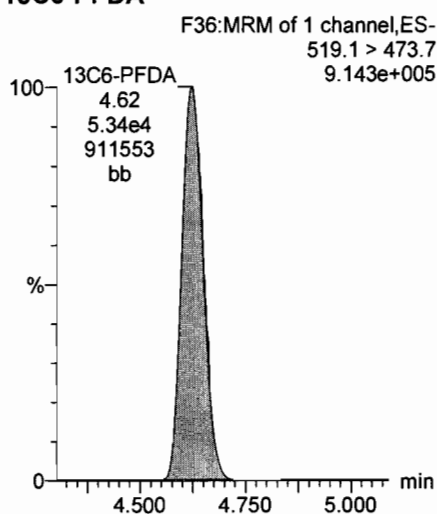
13C9-PFNA



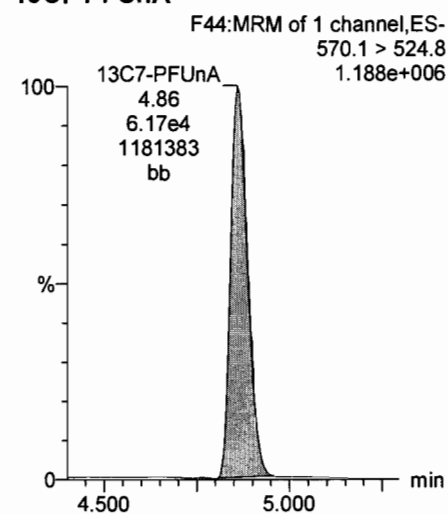
13C4-PFOS



13C6-PFDA



13C7-PFUnA



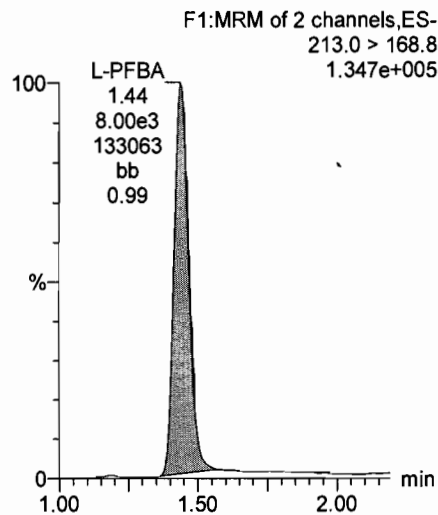
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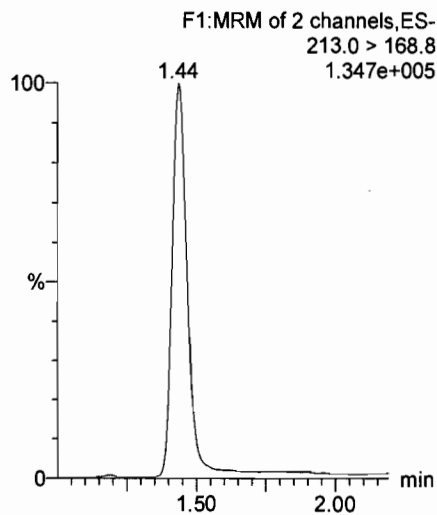
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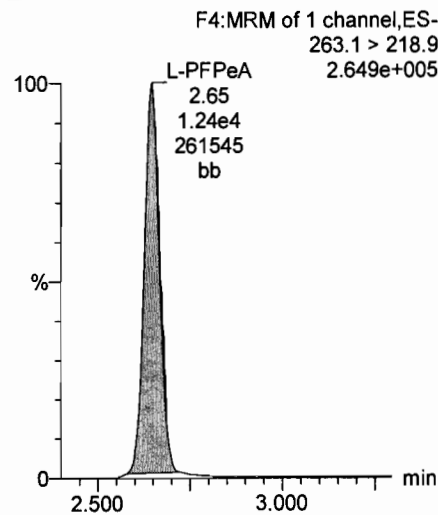
L-PFBA



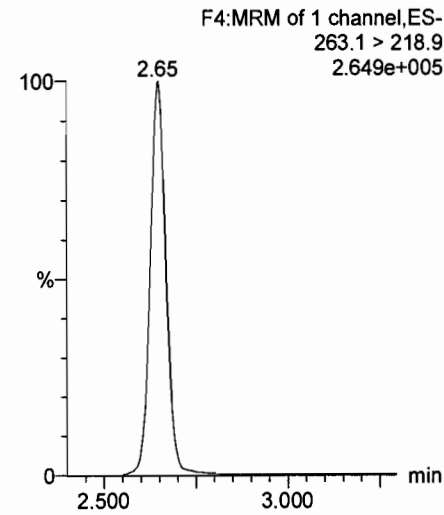
Br-PFBA



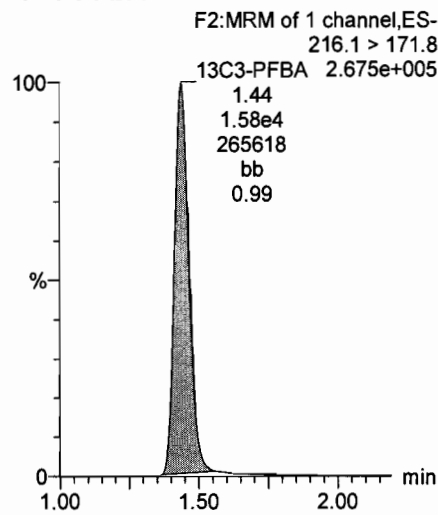
L-PFPeA



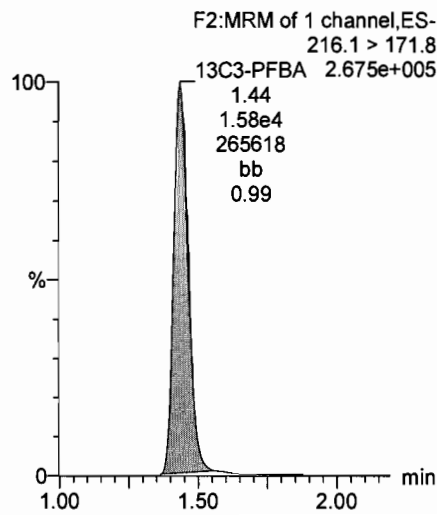
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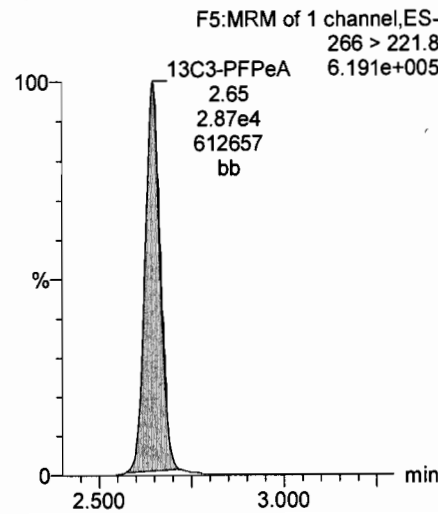
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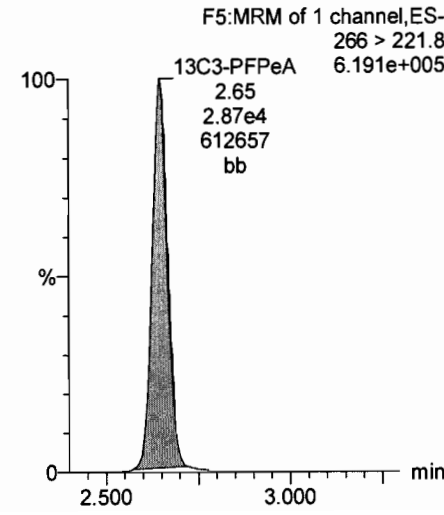
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13C3-PFPeA



13C3-PFPeA



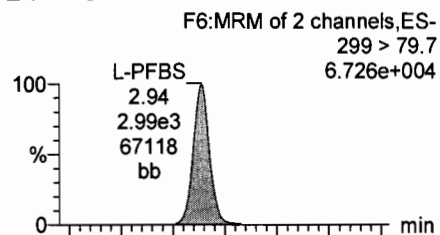
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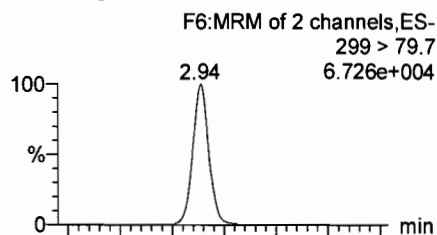
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Name: 170623M1\_7, Date: 23-Jun-2017, Time: 11:25:16, ID: ST170623M1-5 PFC CS2 17F2217, Description: PFC CS2 17F2217

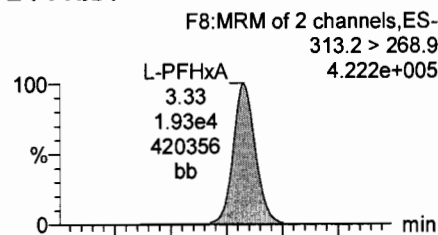
L-PFBS



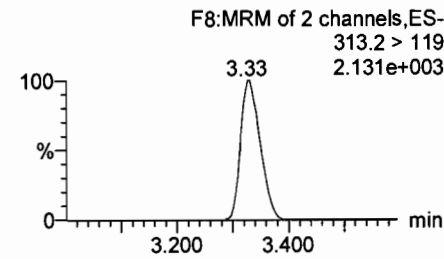
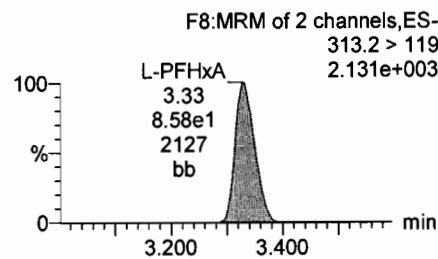
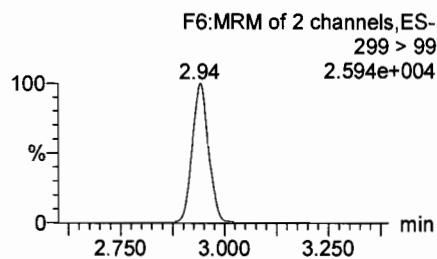
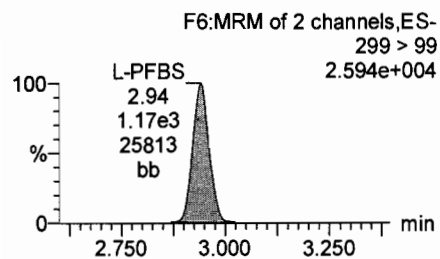
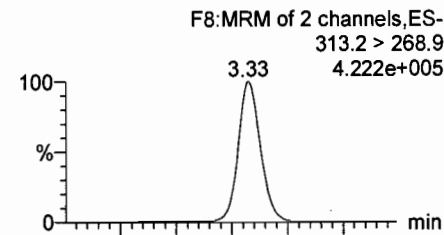
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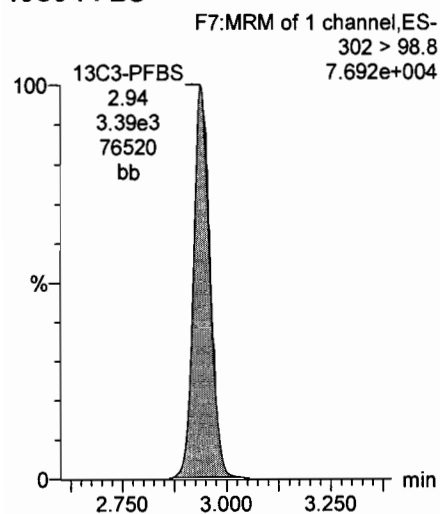
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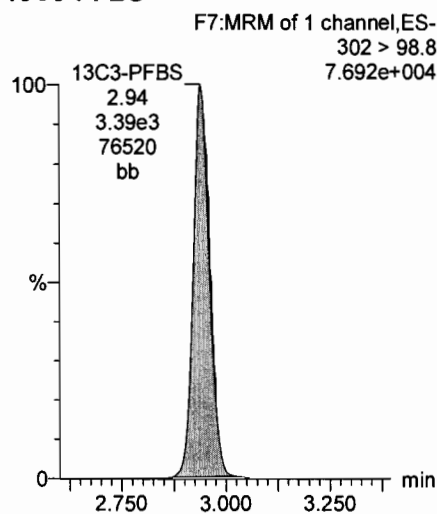
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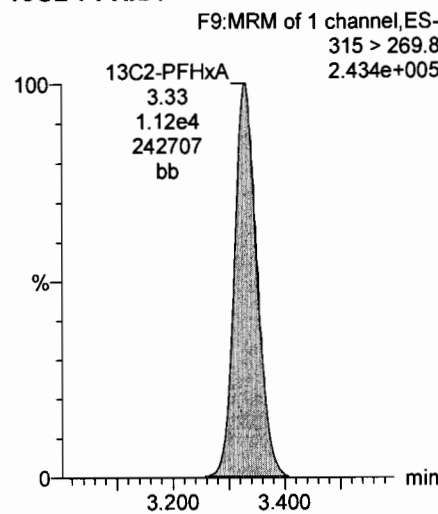
13C3-PFBS



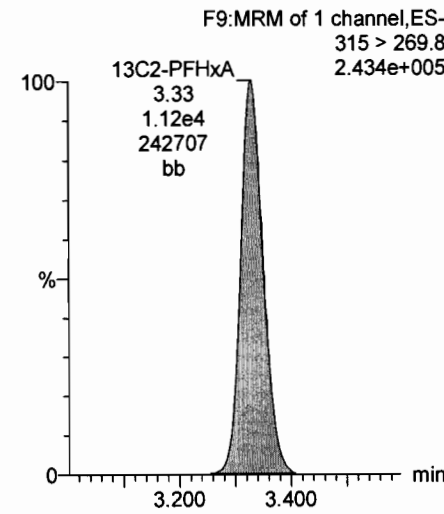
13C3-PFBS



13C2-PFHxA



13C2-PFHxA



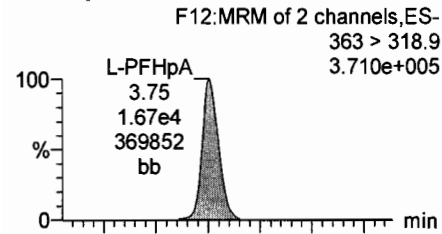
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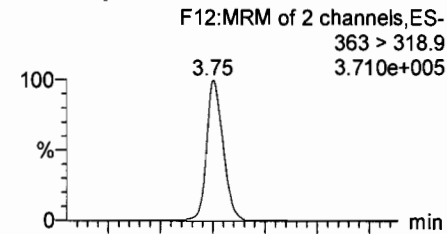
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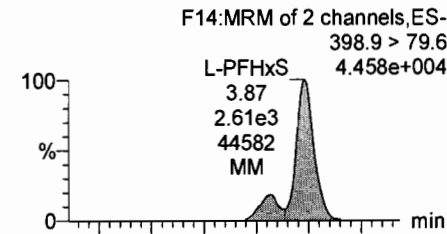
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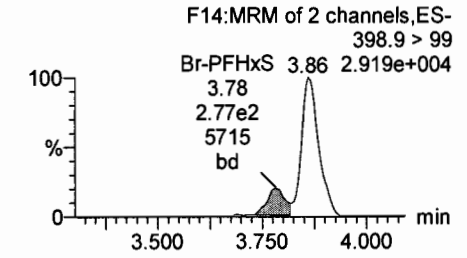
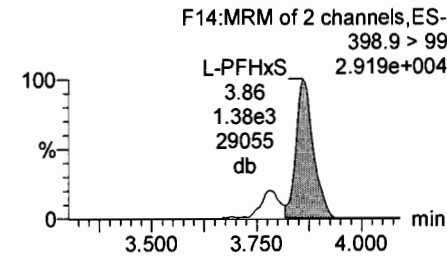
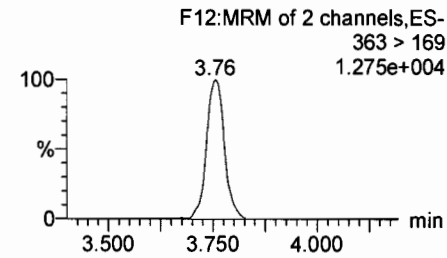
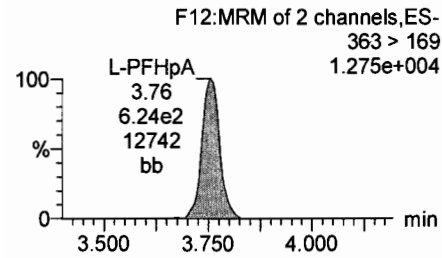
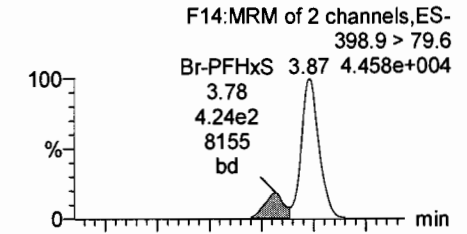
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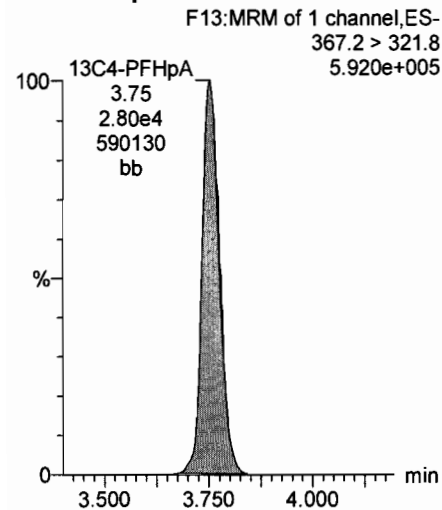
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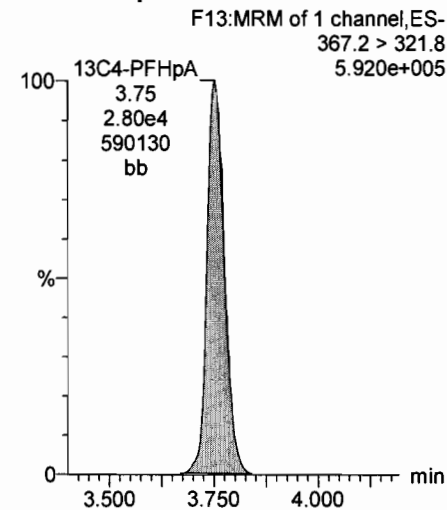
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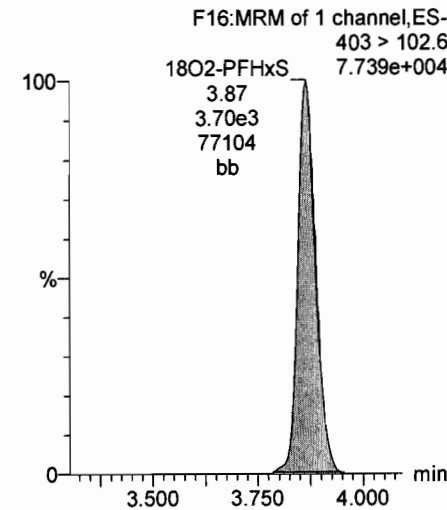
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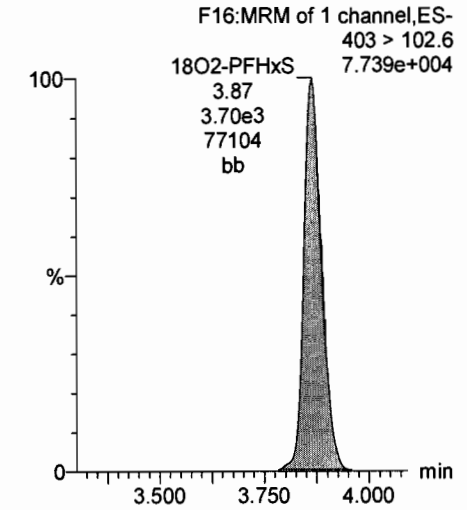
13C4-PFHpA



18O2-PFHxS



18O2-PFHxS



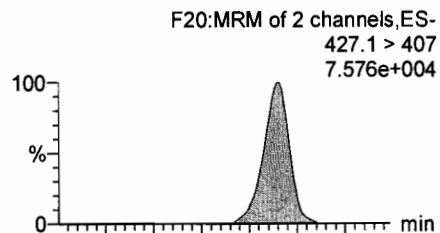
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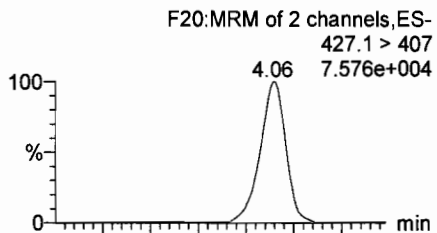
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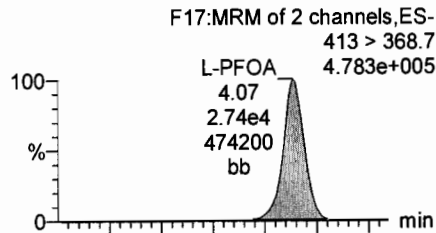
L-6:2 FTS



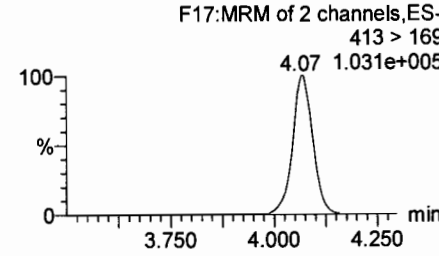
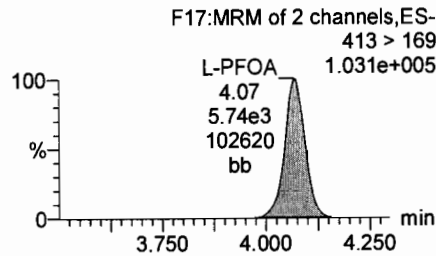
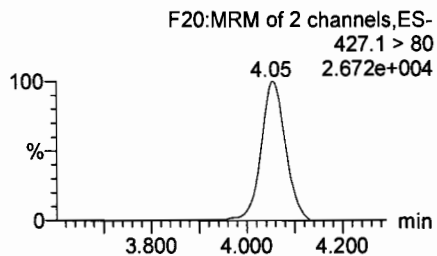
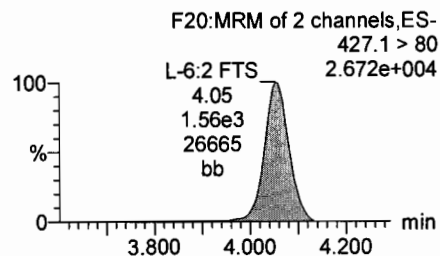
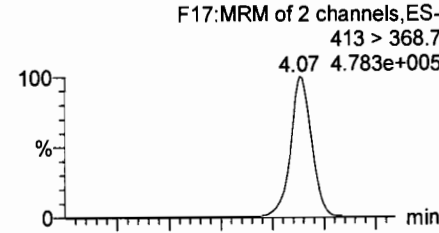
Br-6:2 FTS



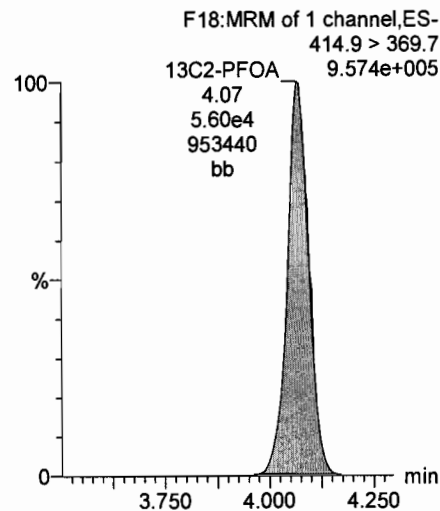
L-PFOA



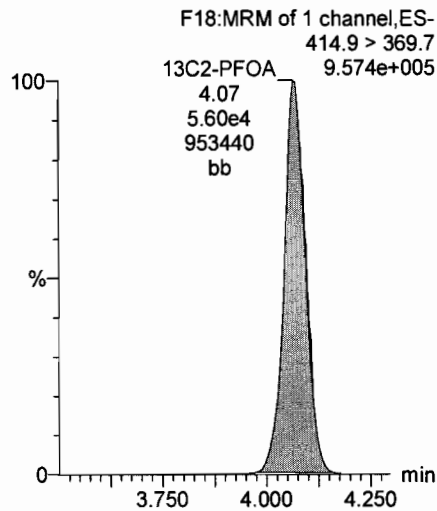
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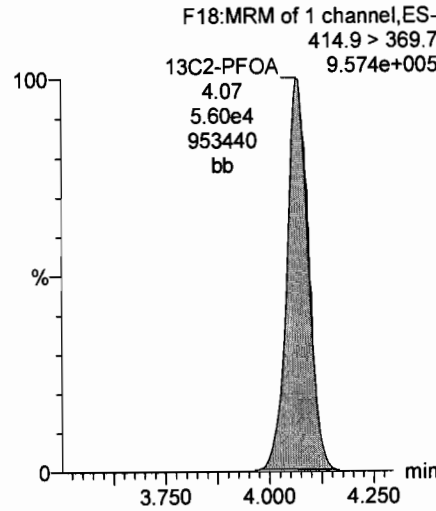
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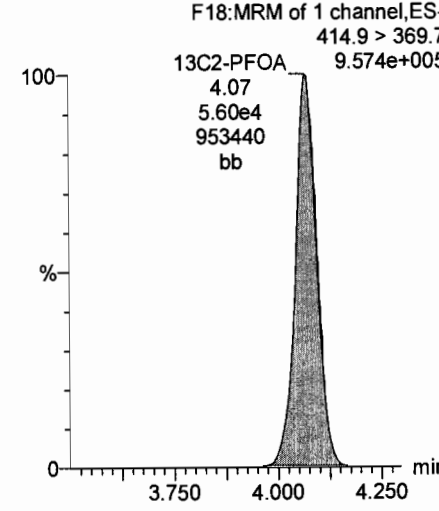
13C2-PFOA



13C2-PFOA



13C2-PFOA



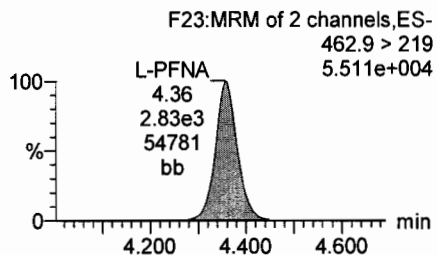
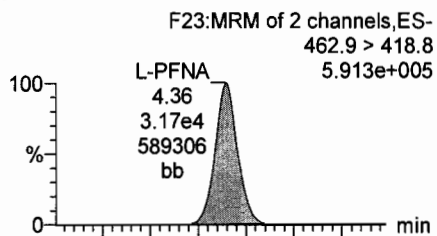
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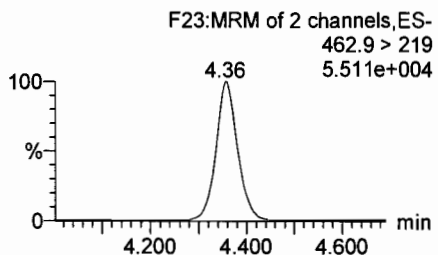
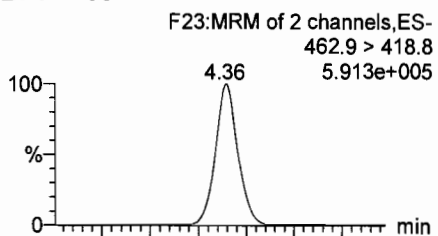
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Name: 170623M1\_7, Date: 23-Jun-2017, Time: 11:25:16, ID: ST170623M1-5 PFC CS2 17F2217, Description: PFC CS2 17F2217

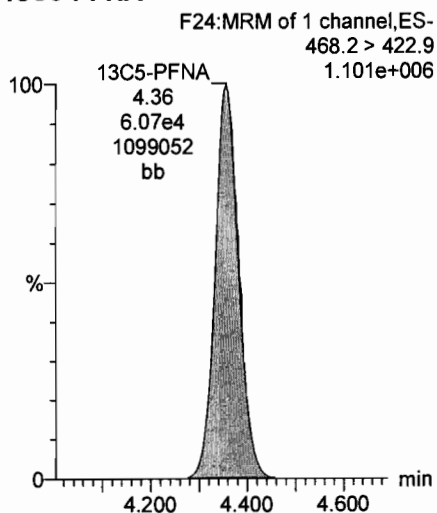
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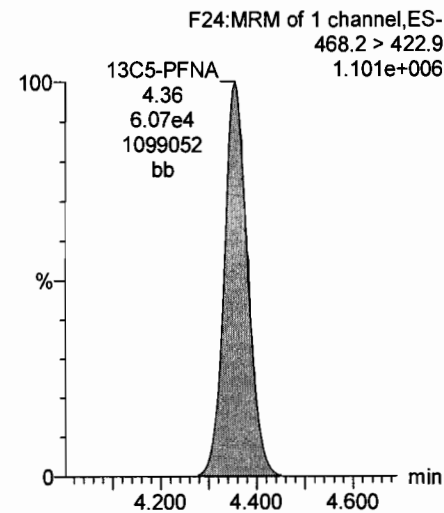
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13C5-PFNA



13C5-PFNA





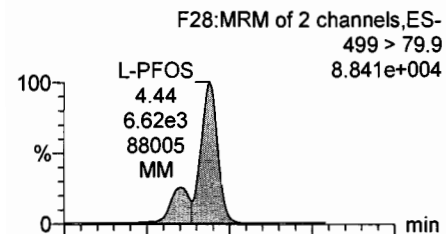
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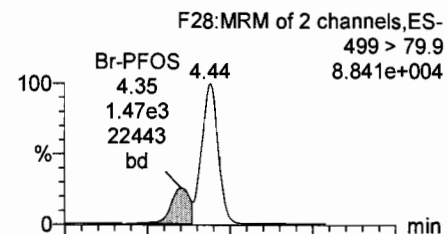
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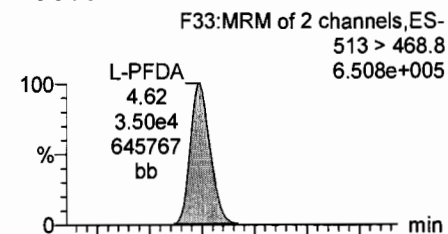
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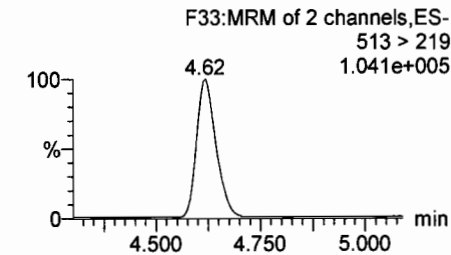
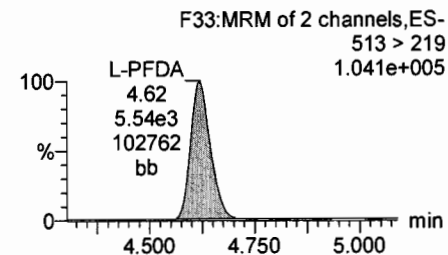
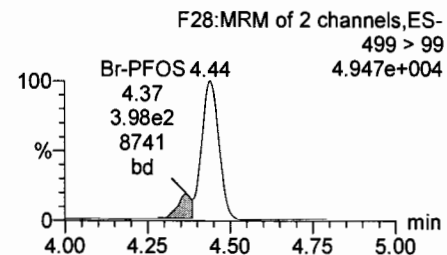
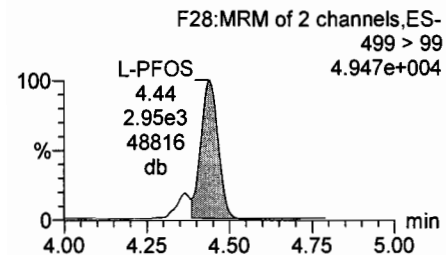
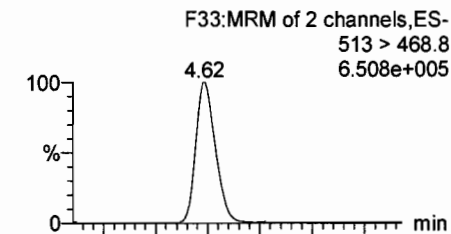
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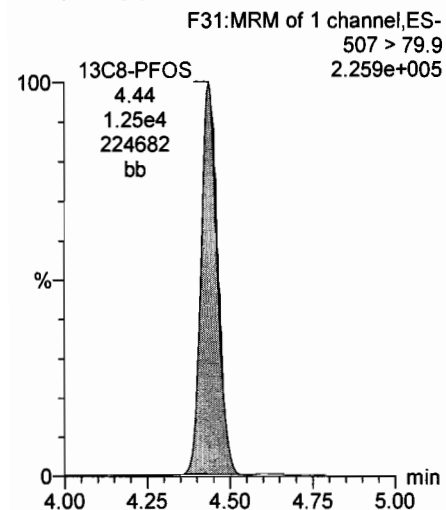
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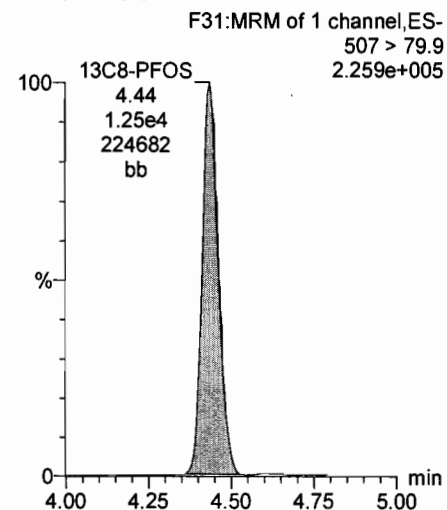
Br-PFDA



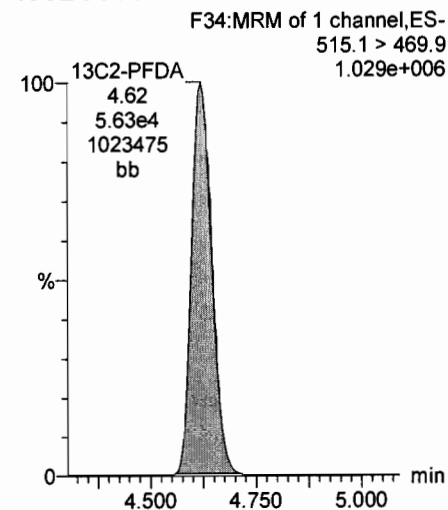
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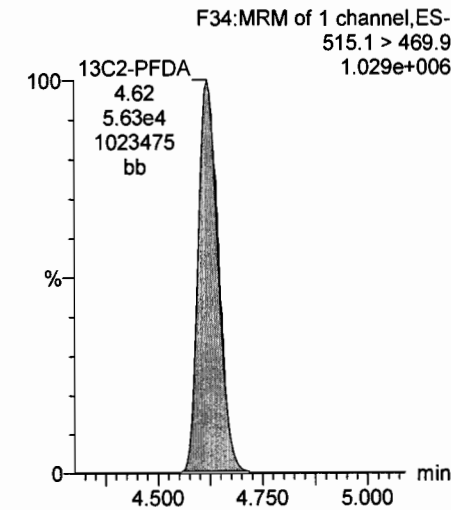
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13C2-PFDA



13C2-PFDA



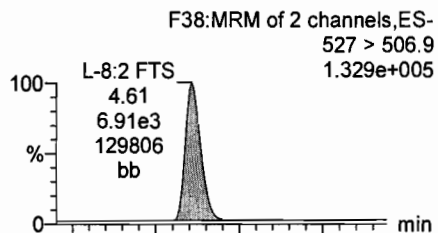
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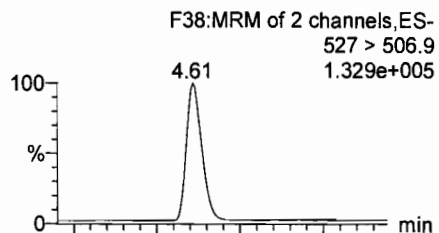
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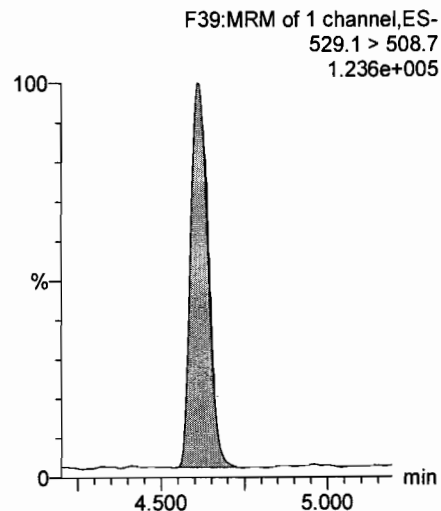
L-8:2 FTS



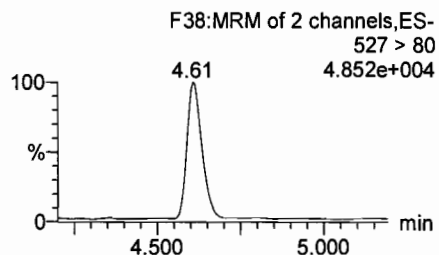
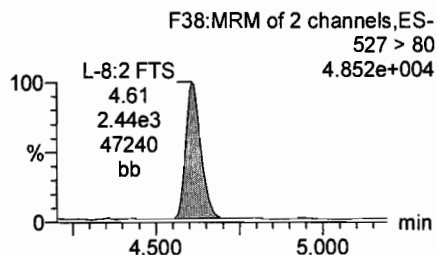
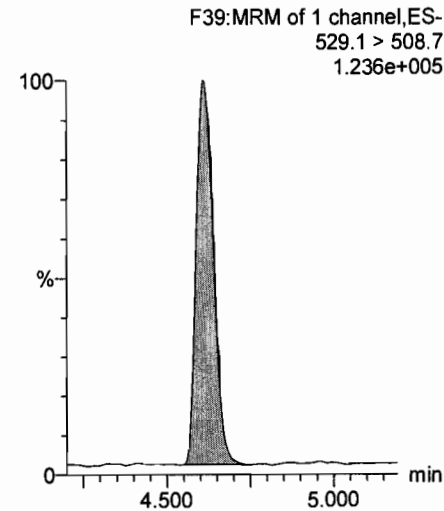
Br-8:2 FTS



13C2-8:2 FTS



13C2-8:2 FTS



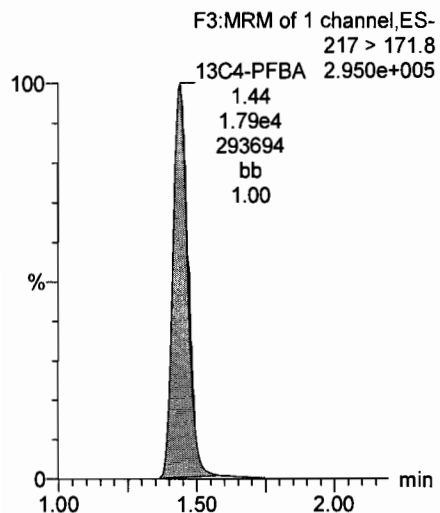
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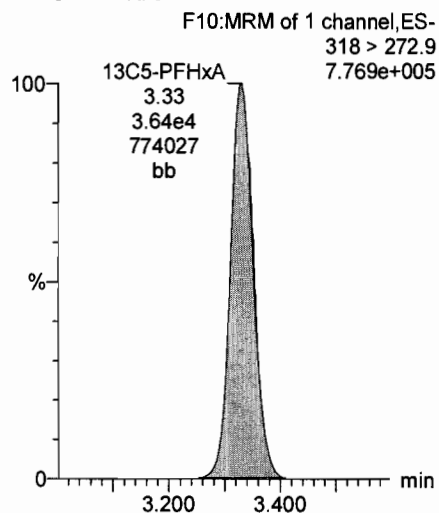
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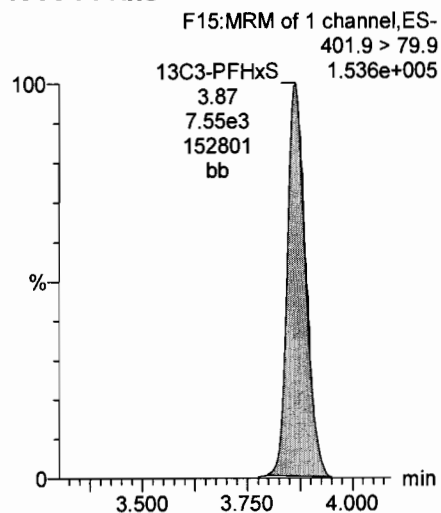
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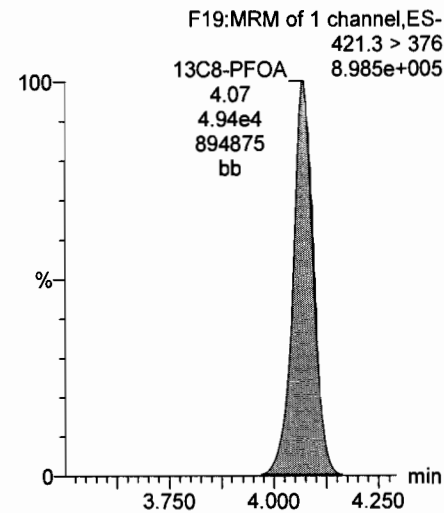
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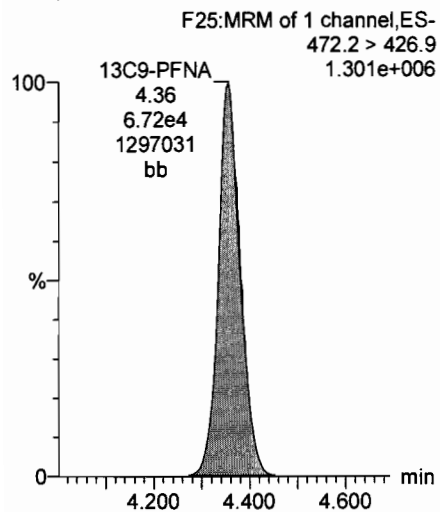
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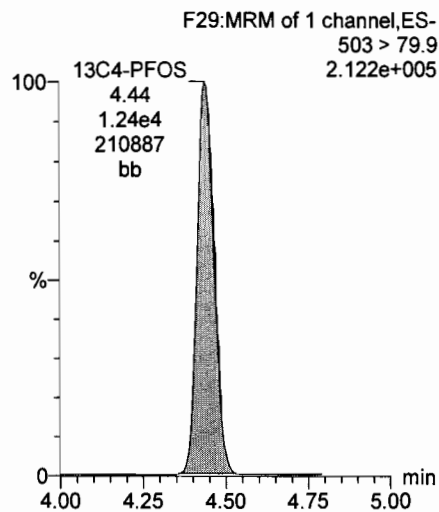
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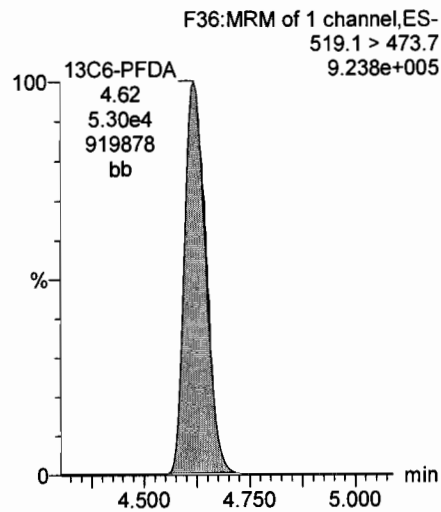
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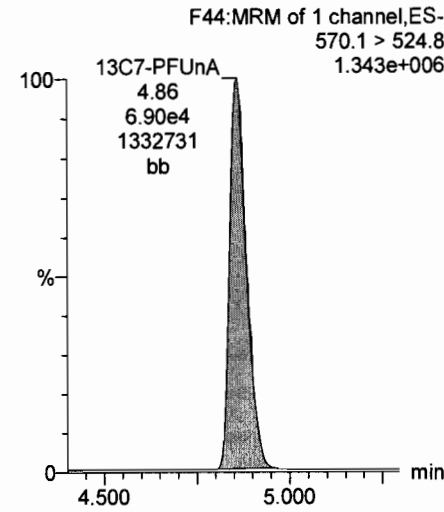
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUnA**



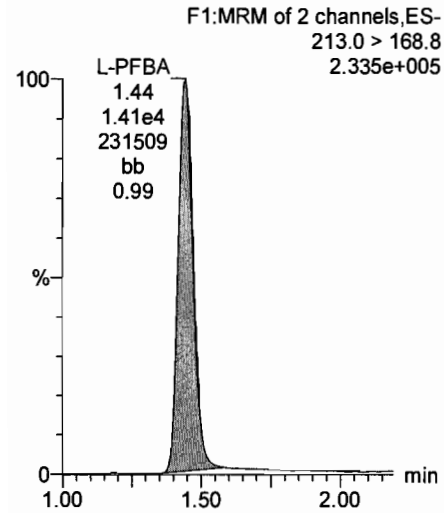
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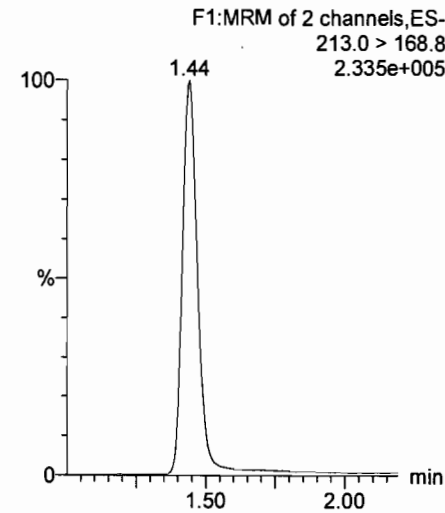
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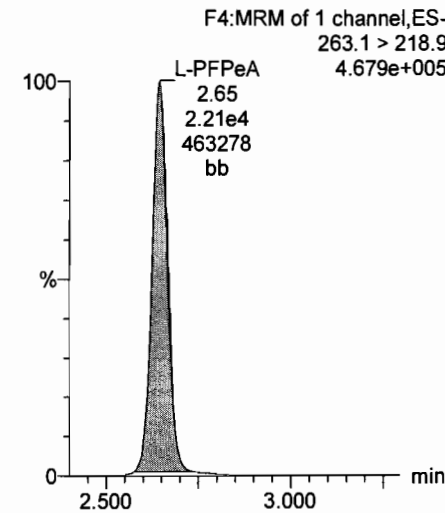
L-PFBA



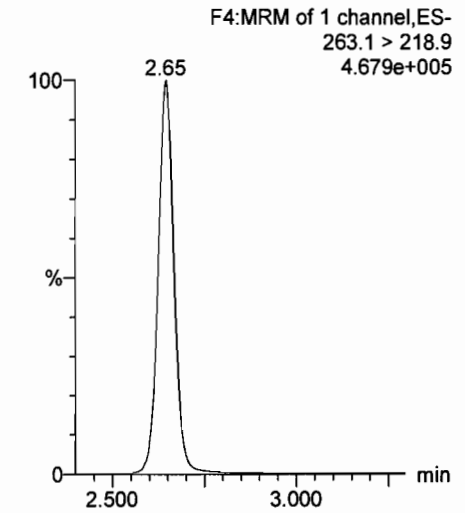
Br-PFBA



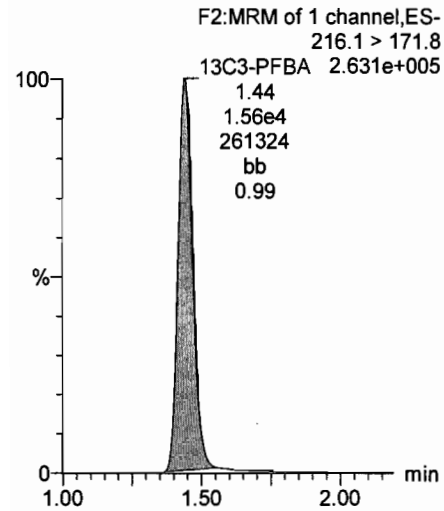
L-PFPeA



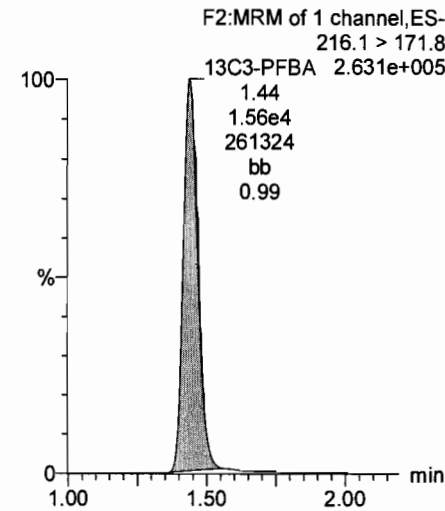
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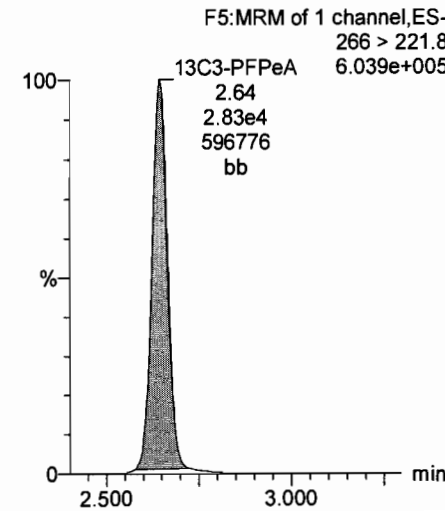
13C3-PFBA



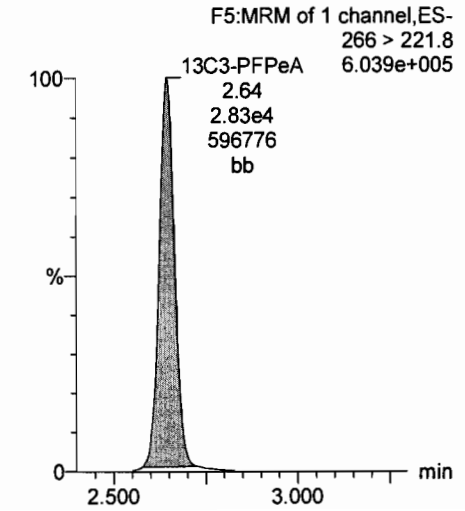
13C3-PFBA



13C3-PFPeA



13C3-PFPeA



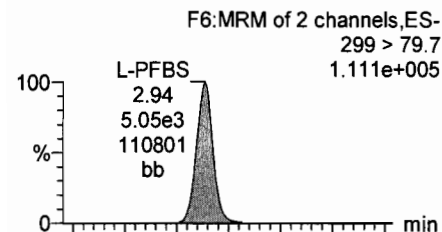
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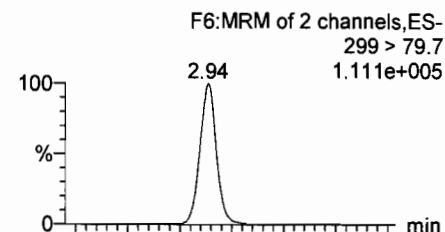
Printed: Friday, June 23, 2017 13:25:43 Pacific Daylight Time

Name: 170623M1\_8, Date: 23-Jun-2017, Time: 11:36:48, ID: ST170623M1-6 PFC CS3 17F2218, Description: PFC CS3 17F2218

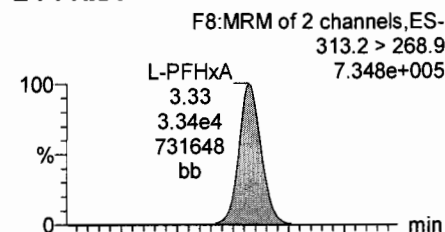
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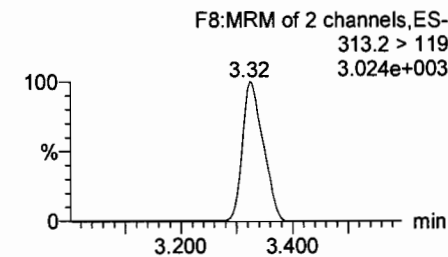
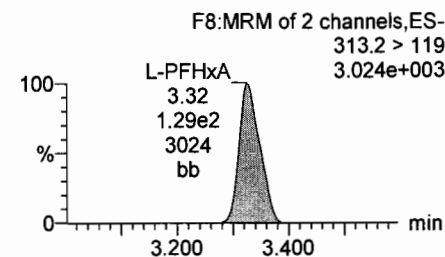
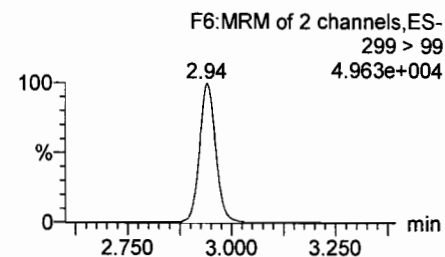
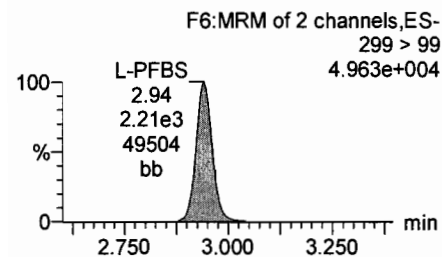
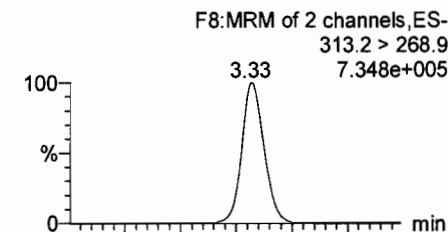
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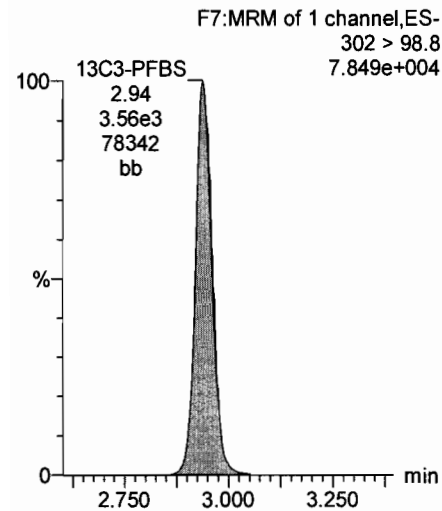
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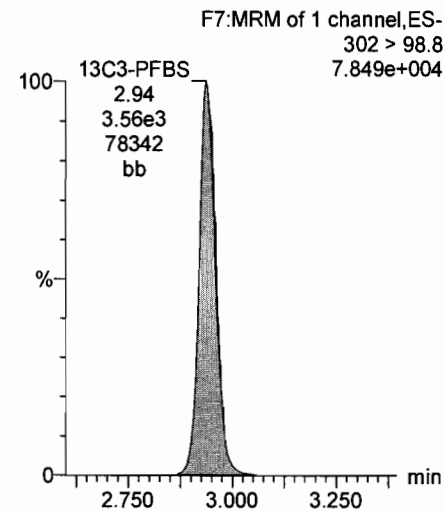
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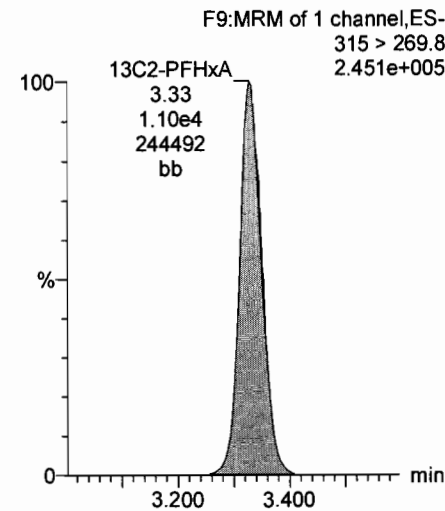
13C3-PFBS



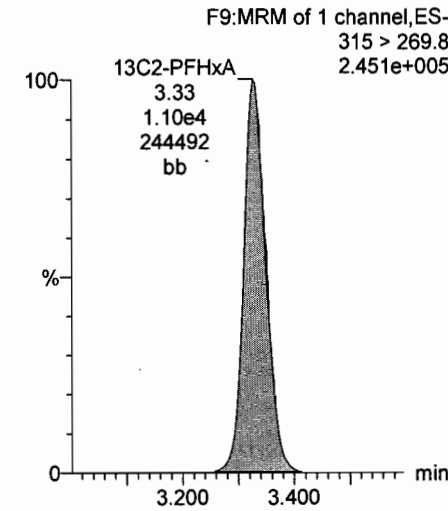
13C3-PFBS



13C2-PFHxA



13C2-PFHxA



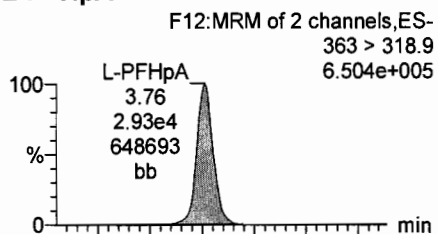
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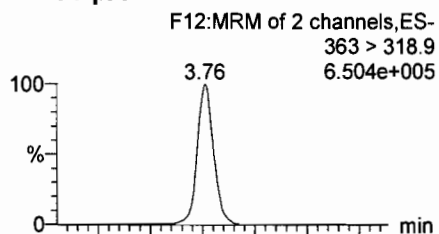
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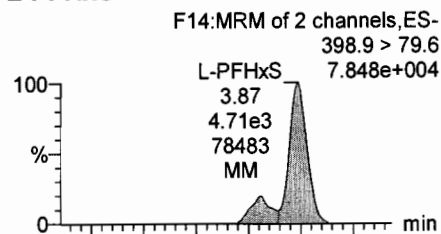
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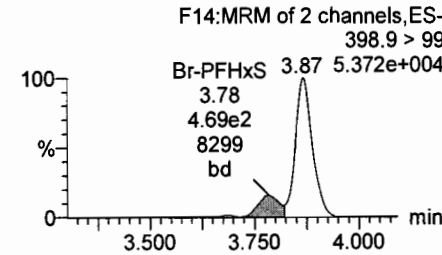
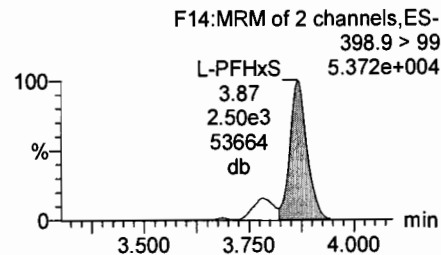
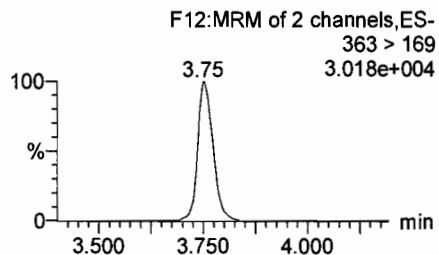
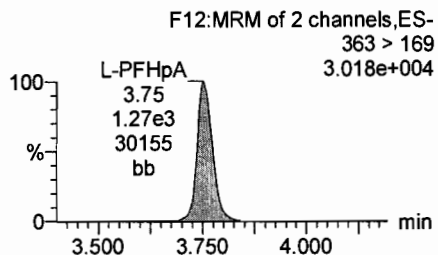
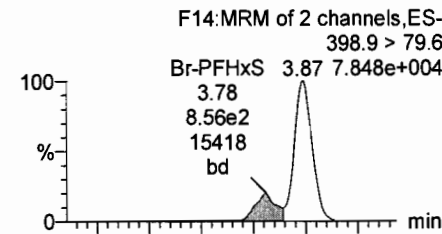
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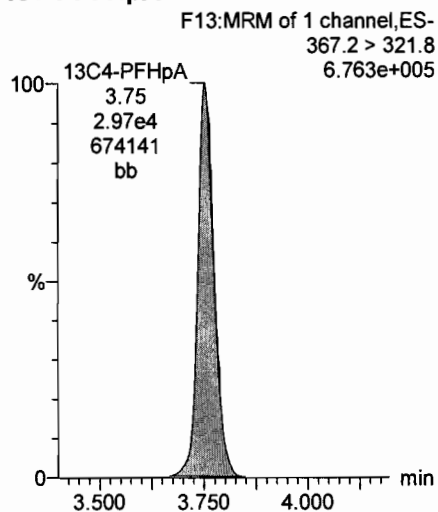
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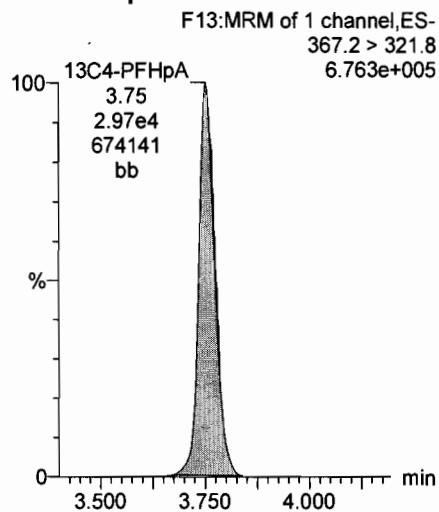
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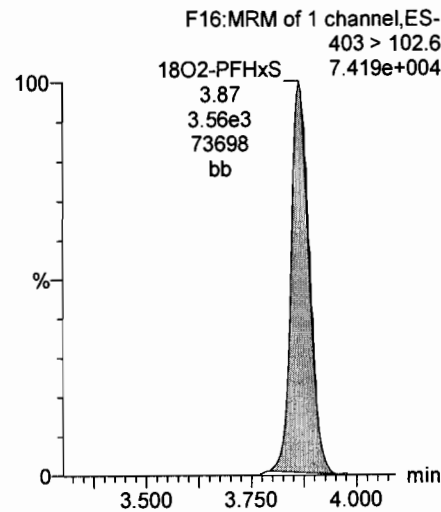
13C4-PFHpA



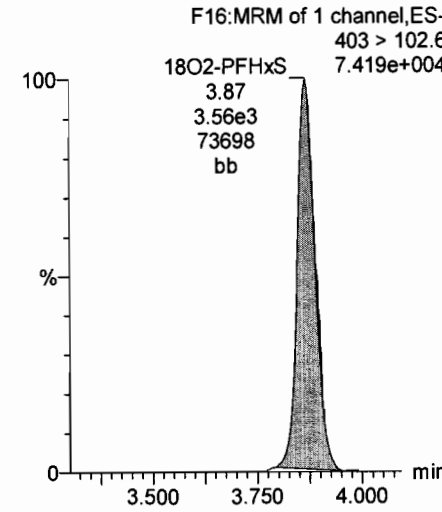
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18O2-PFHxS



18O2-PFHxS

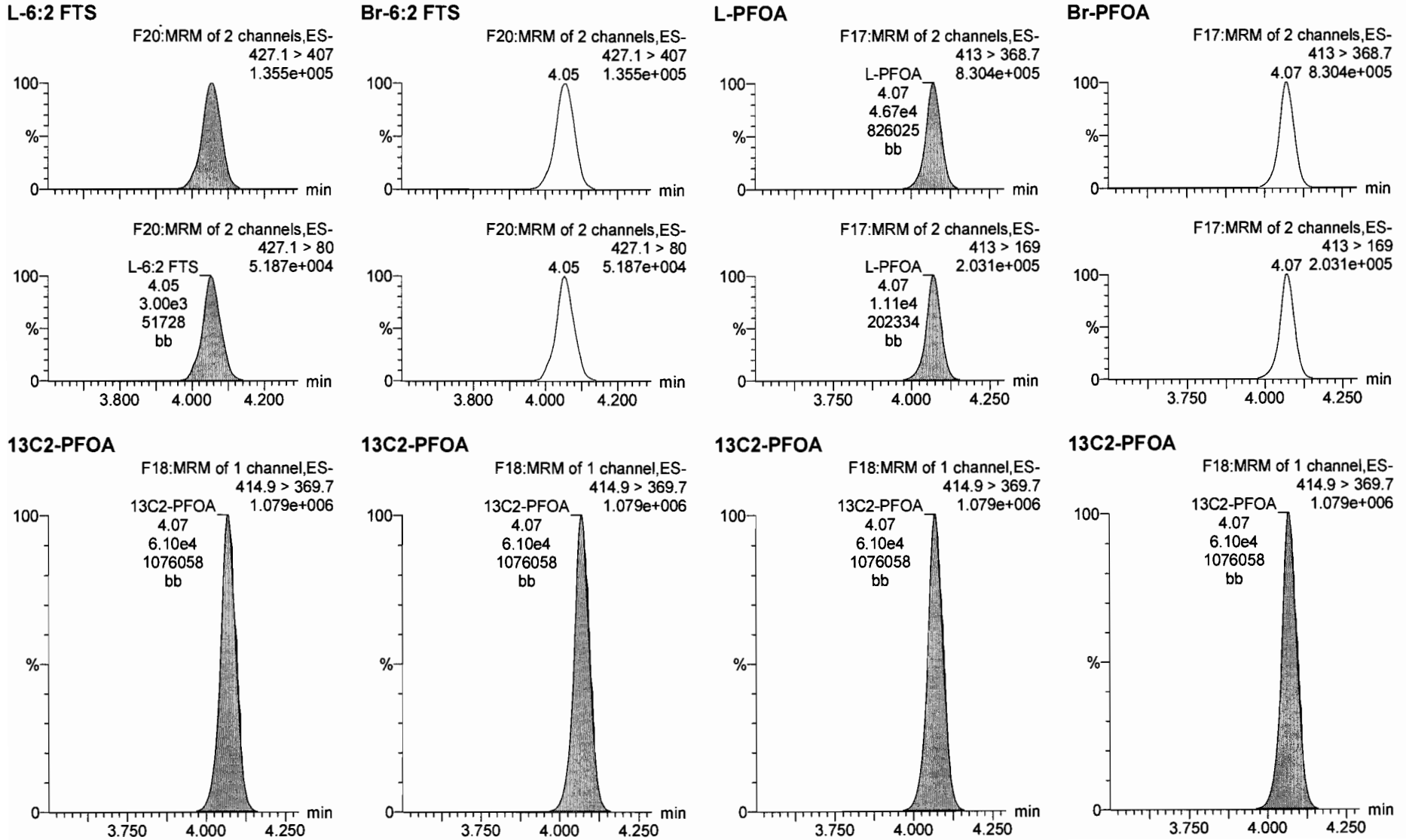


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Name: 170623M1\_8, Date: 23-Jun-2017, Time: 11:36:48, ID: ST170623M1-6 PFC CS3 17F2218, Description: PFC CS3 17F2218



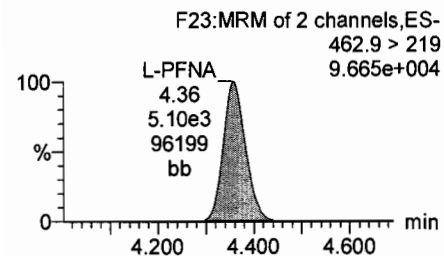
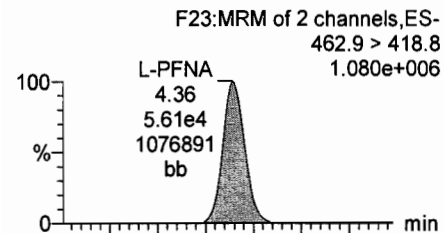
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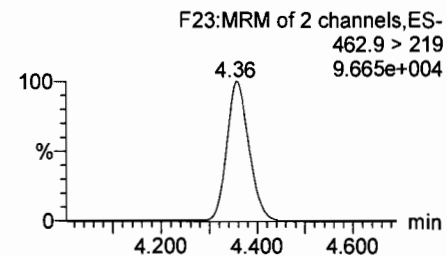
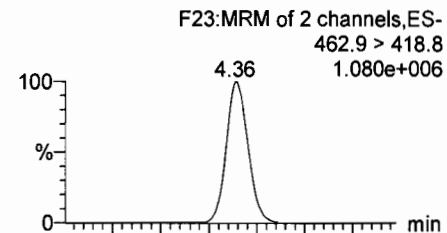
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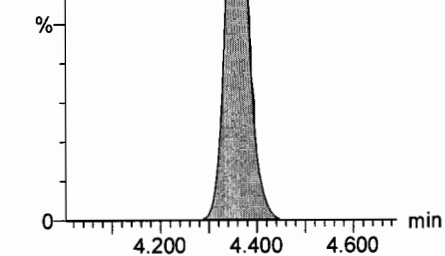
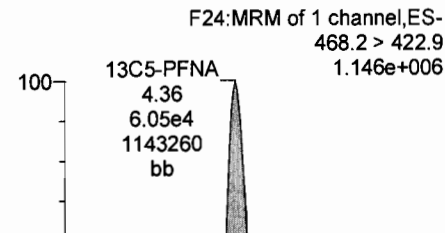
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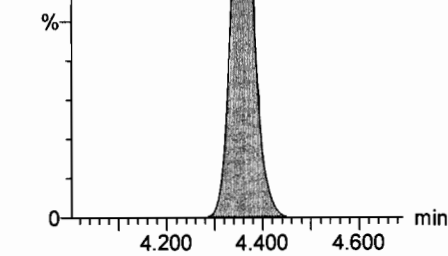
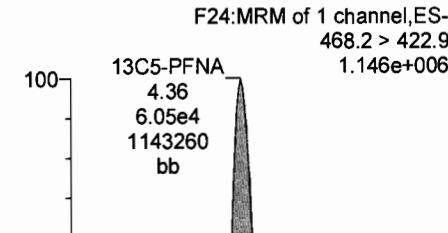
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13C5-PFNA



13C5-PFNA





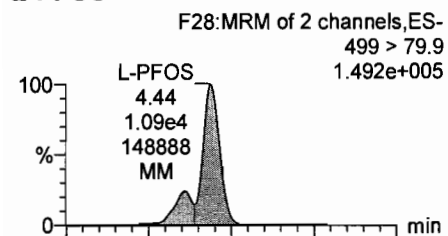
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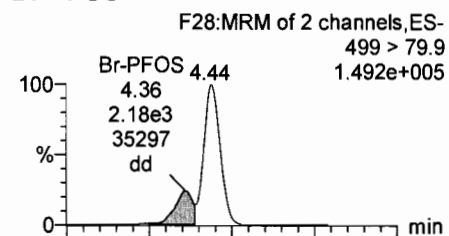
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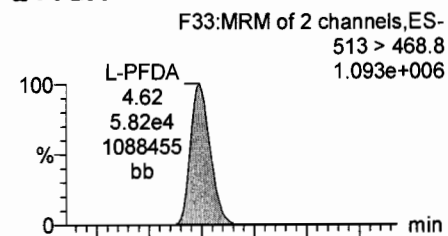
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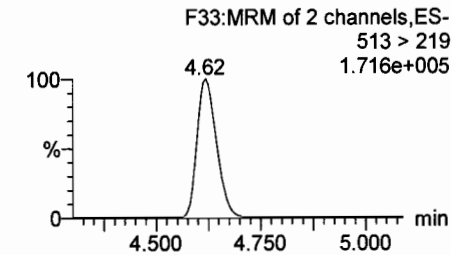
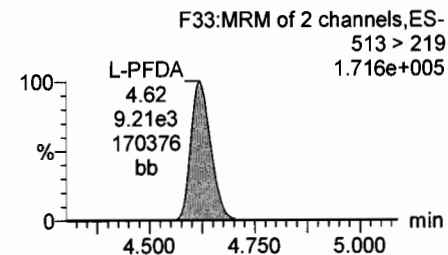
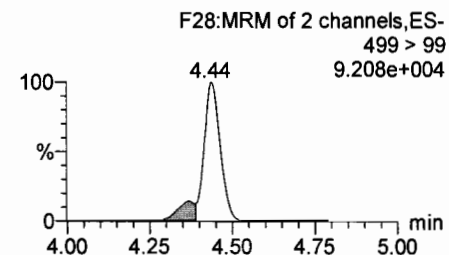
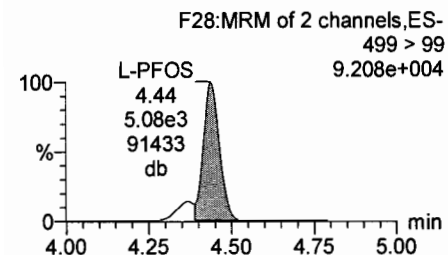
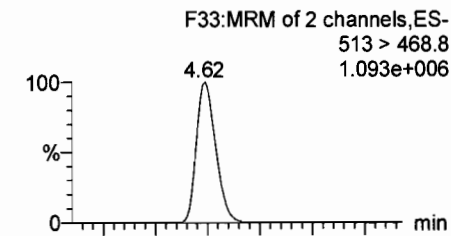
Br-PFOS



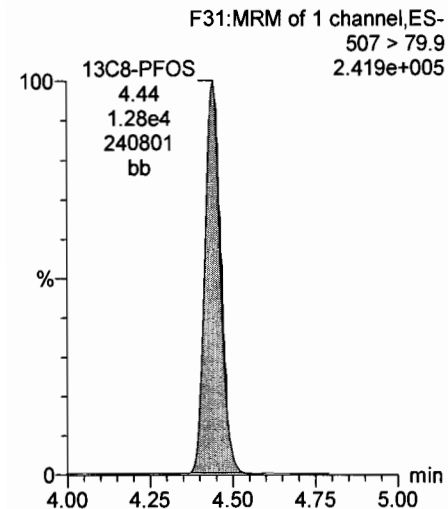
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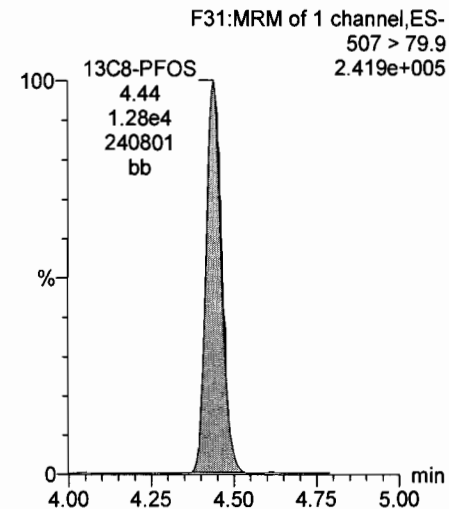
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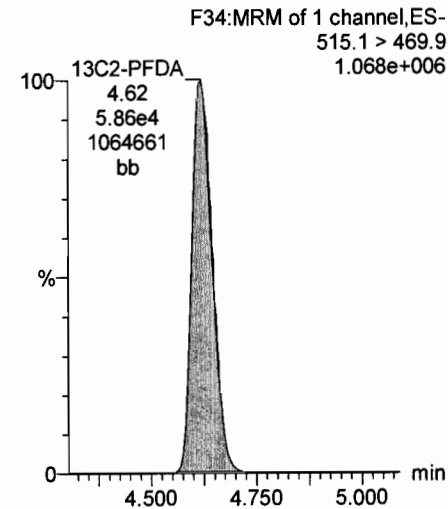
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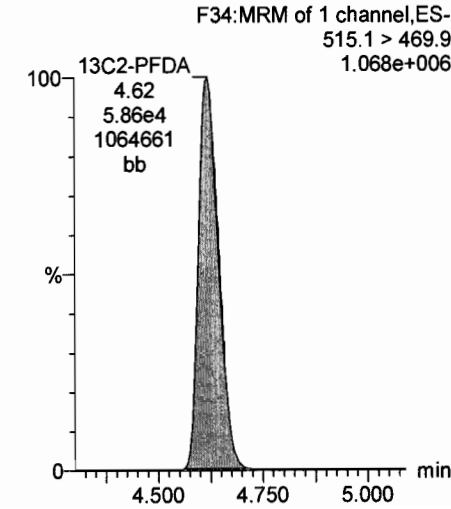
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13C2-PFDA



13C2-PFDA

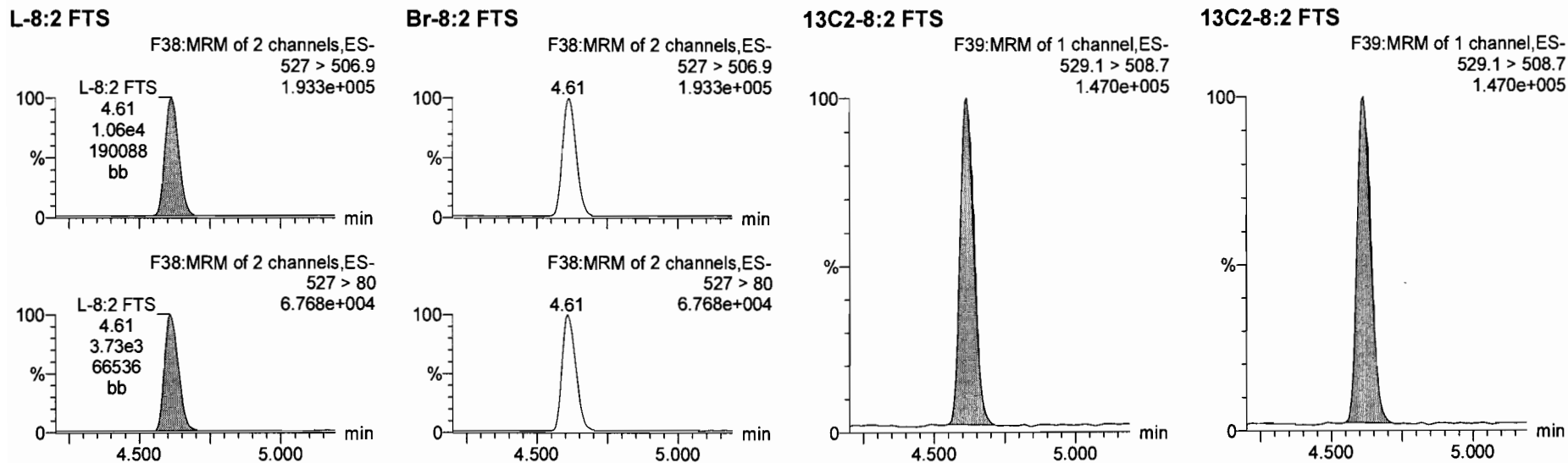


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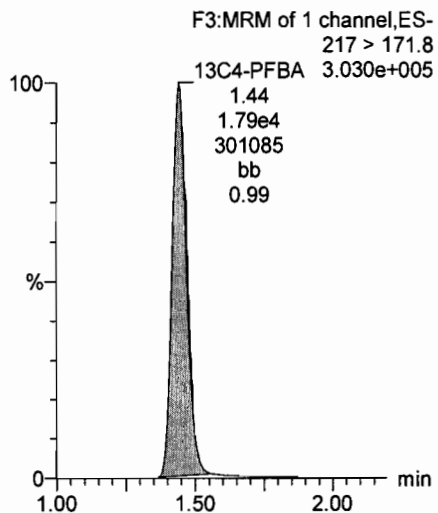
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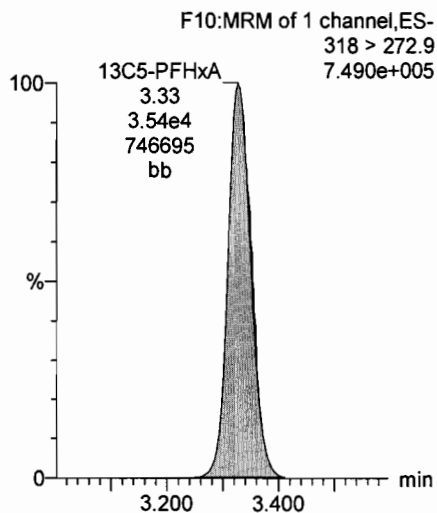
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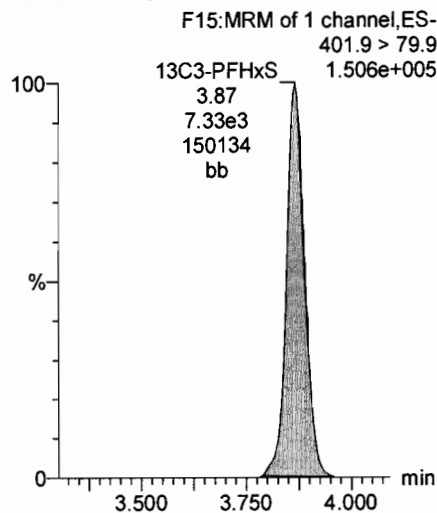
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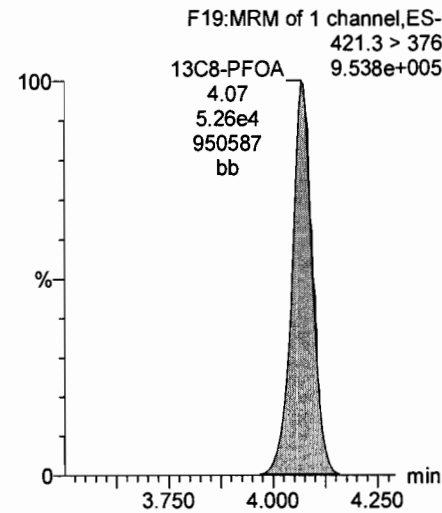
13C5-PFHxA



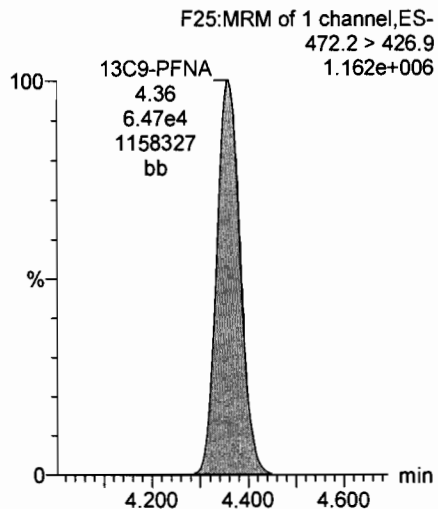
13C3-PFHxS



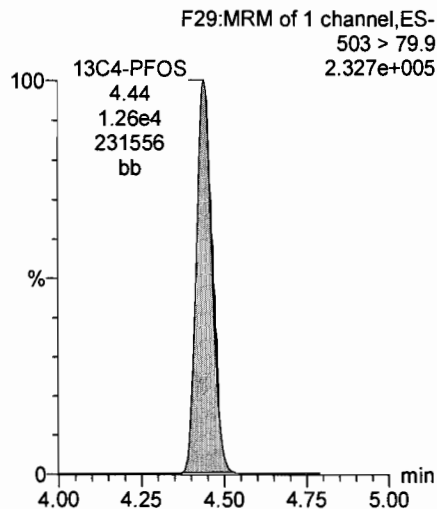
13C8-PFOA



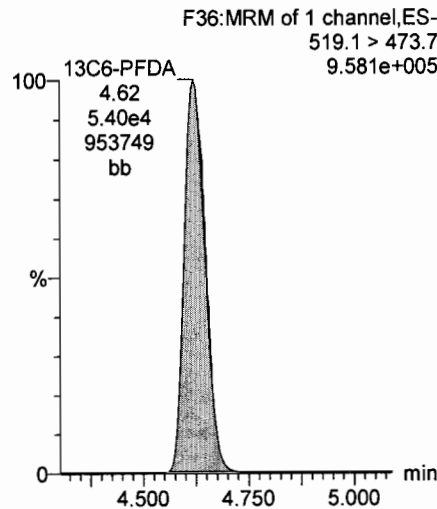
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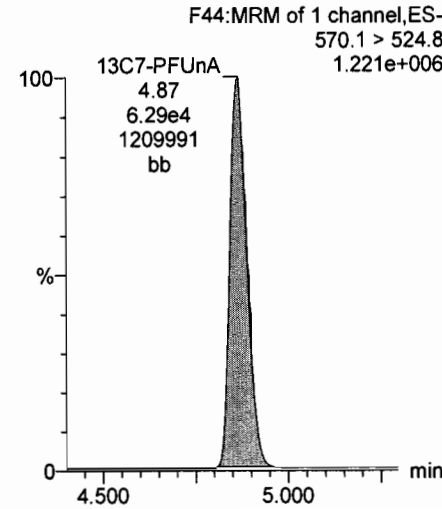
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13C6-PFDA



13C7-PFUnA



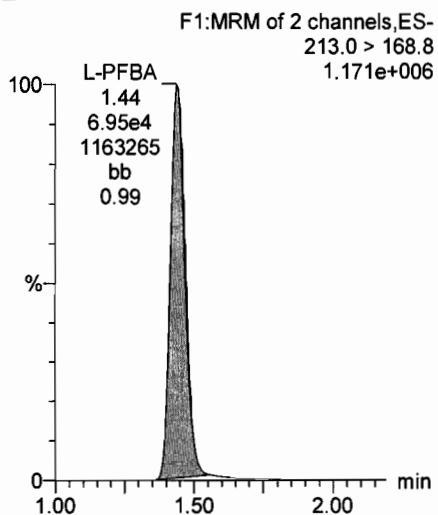
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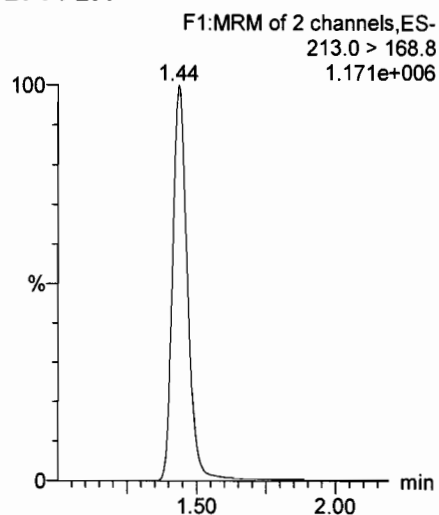
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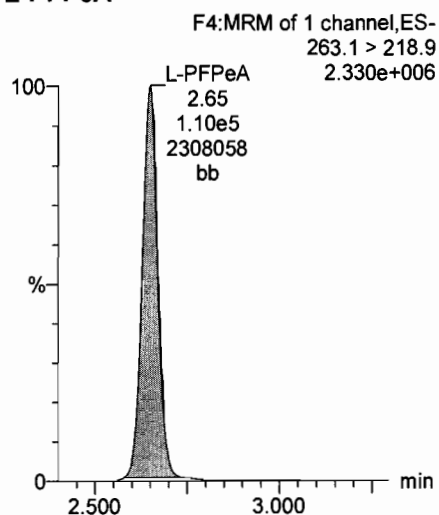
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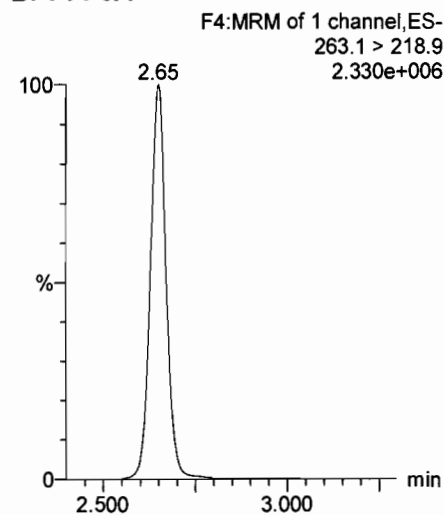
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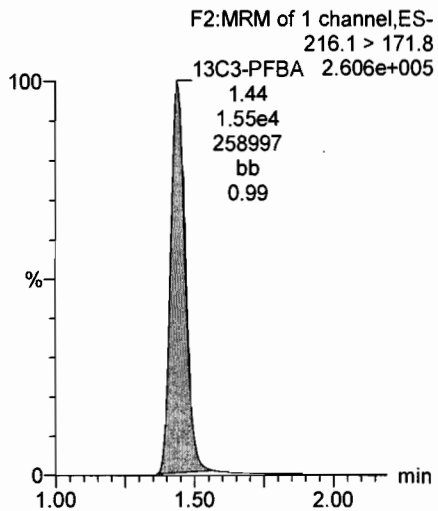
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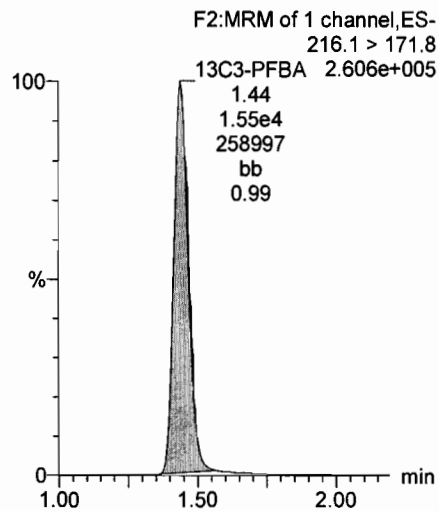
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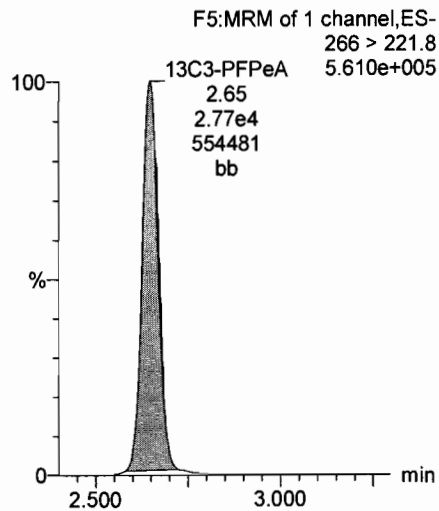
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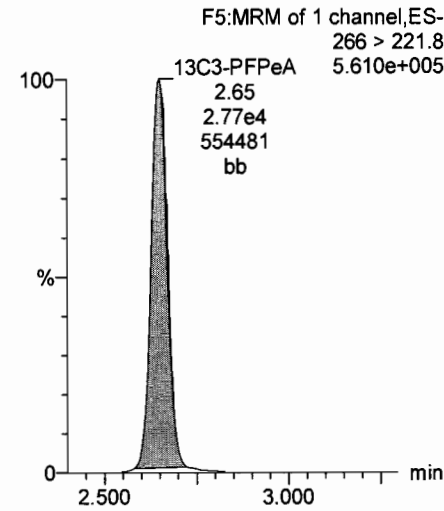
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13C3-PFPeA



13C3-PFPeA



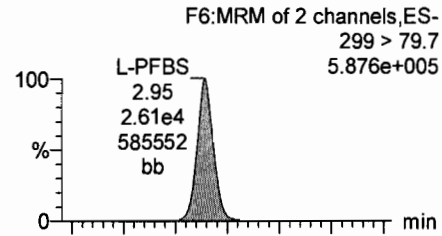
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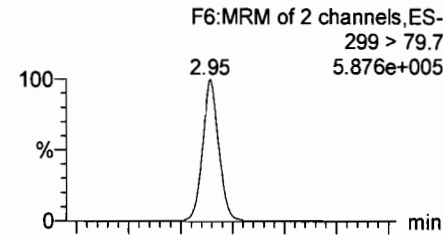
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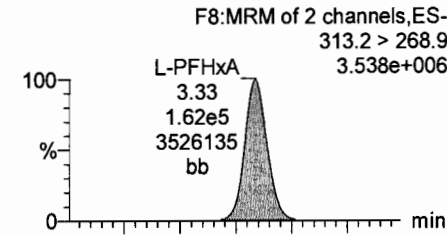
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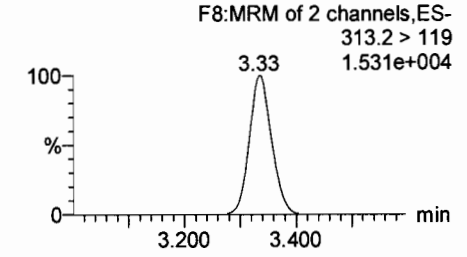
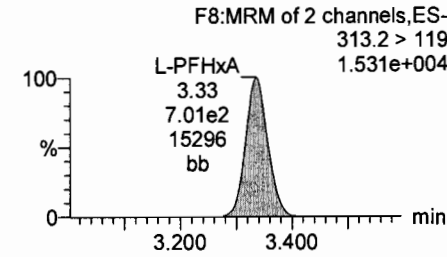
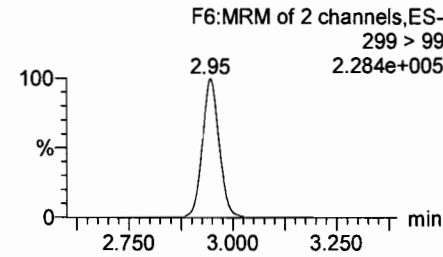
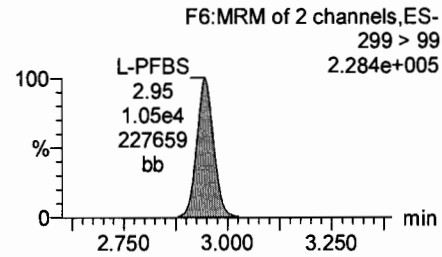
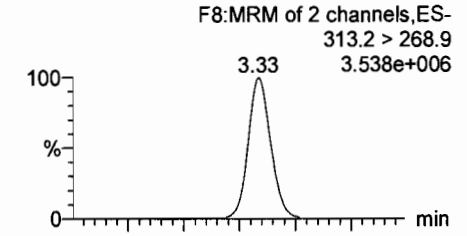
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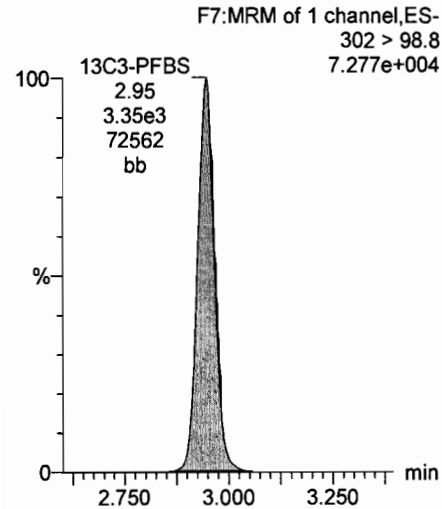
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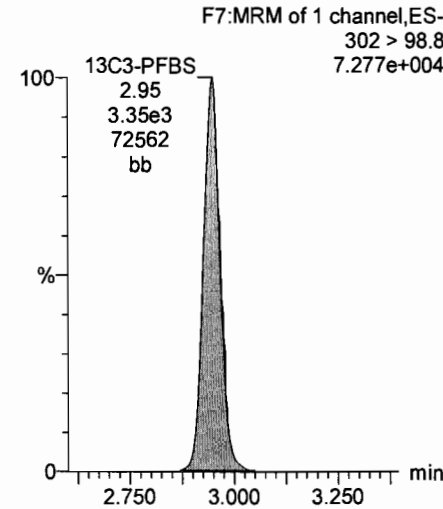
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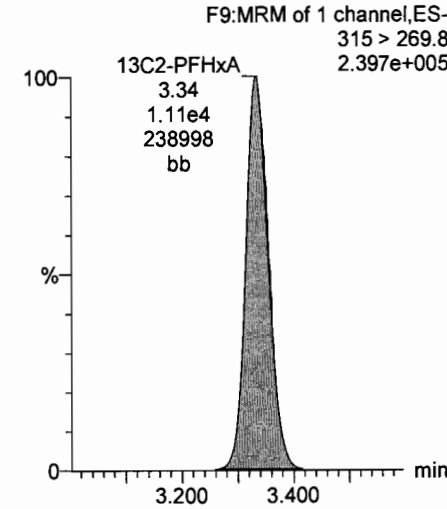
13C3-PFBS



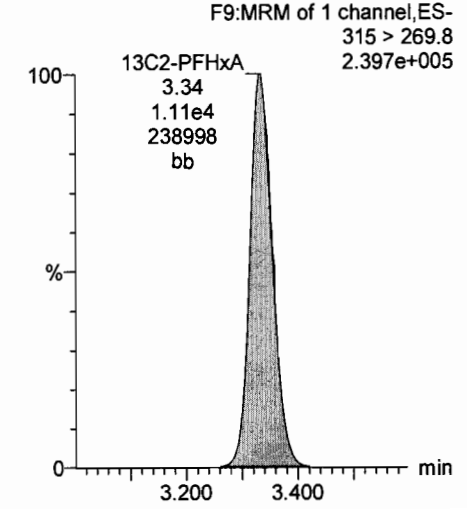
13C3-PFBS



13C2-PFHxA



13C2-PFHxA



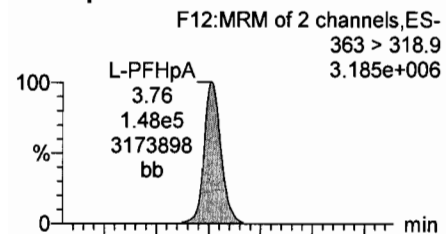
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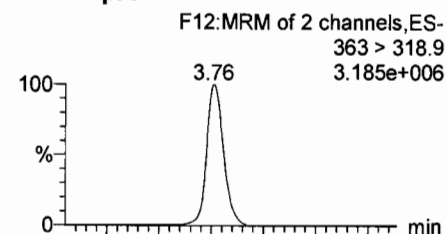
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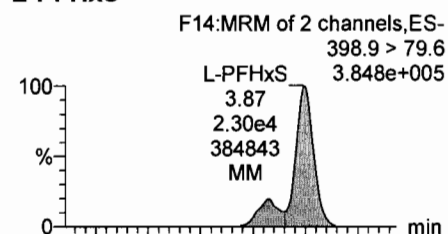
L-PFHpA



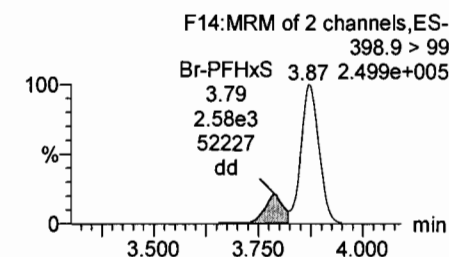
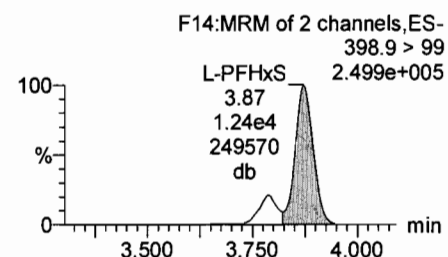
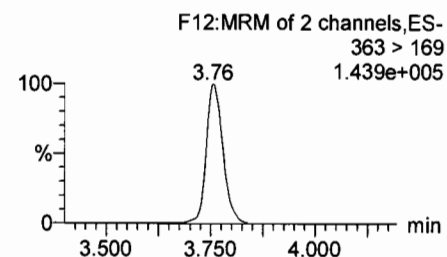
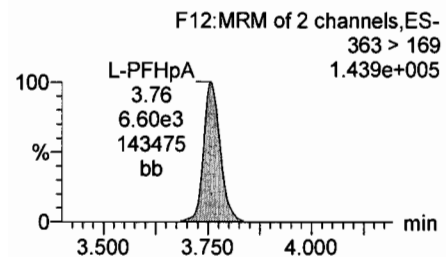
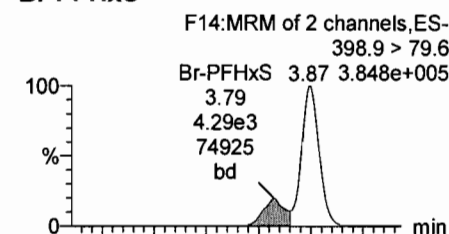
Br-PFHpA



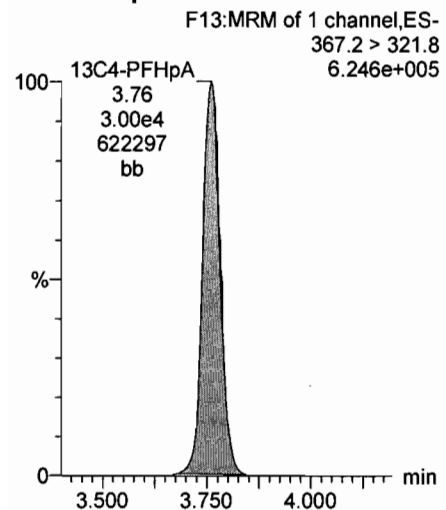
L-PFHxS



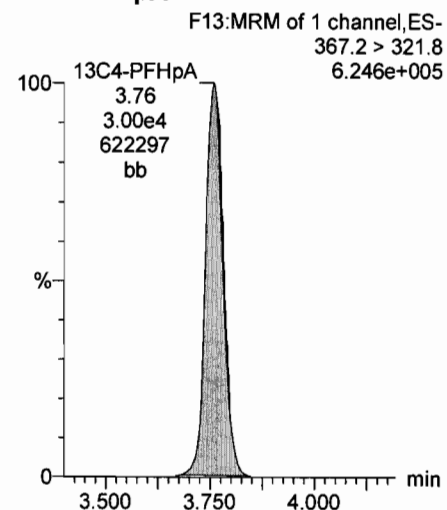
Br-PFHxS



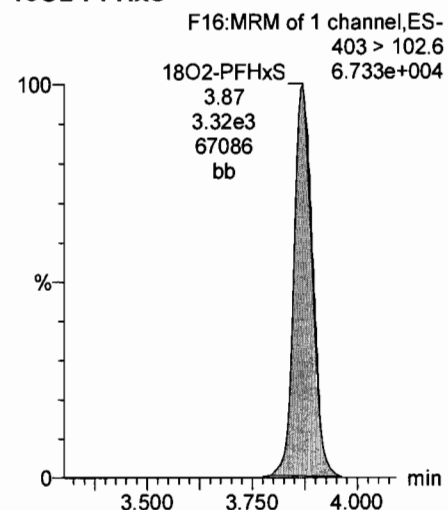
13C4-PFHpA



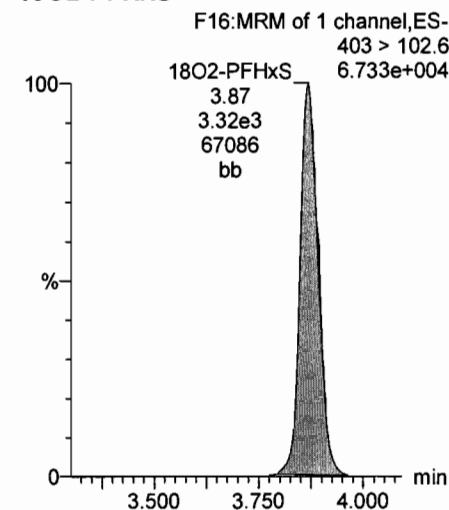
13C4-PFHpA



18O2-PFHxS



18O2-PFHxS



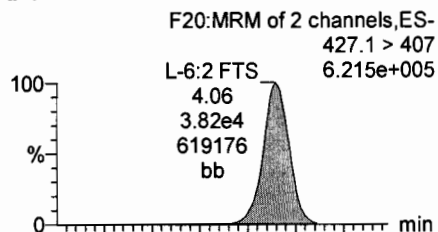
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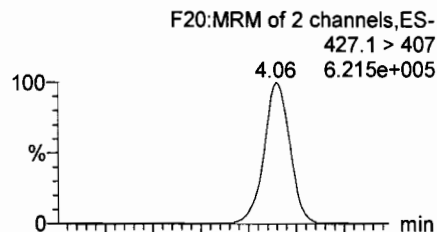
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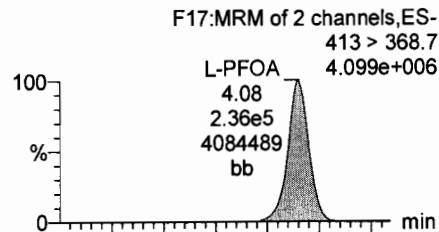
L-6:2 FTS



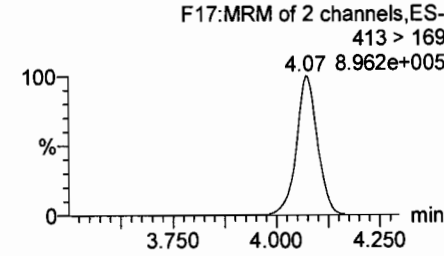
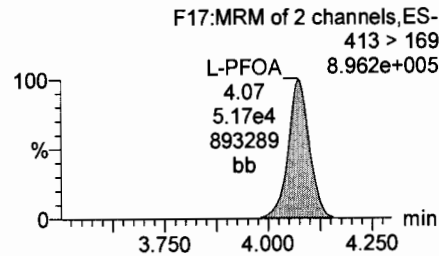
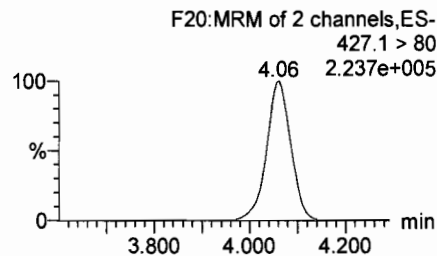
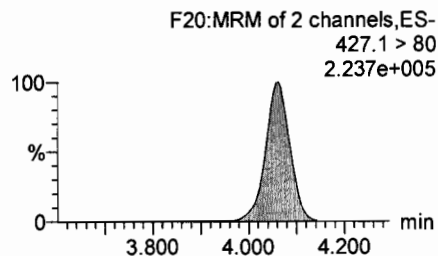
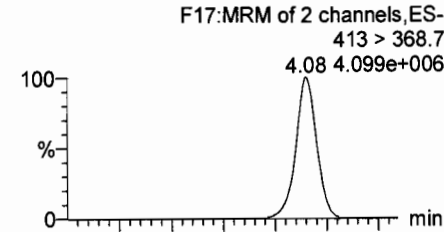
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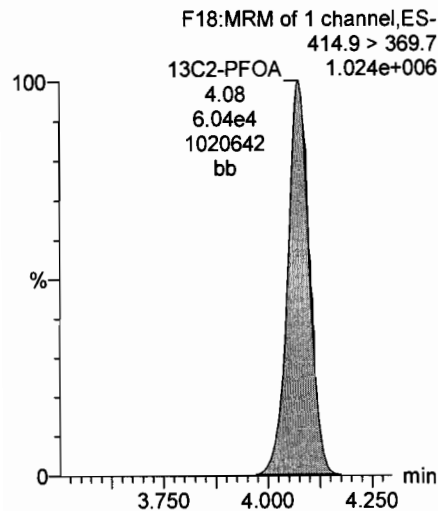
L-PFOA



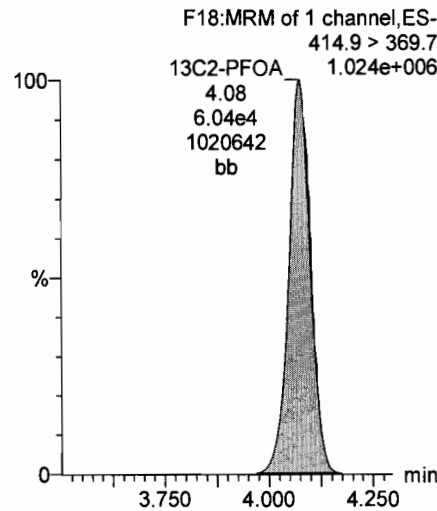
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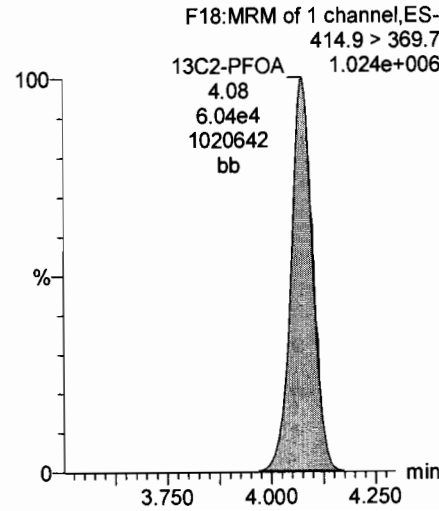
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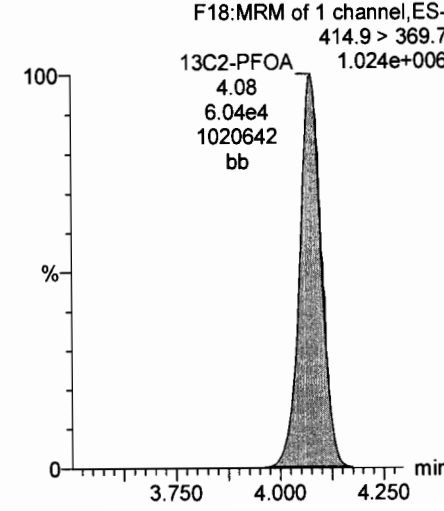
13C2-PFOA



13C2-PFOA



13C2-PFOA



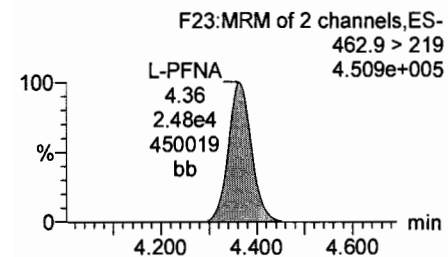
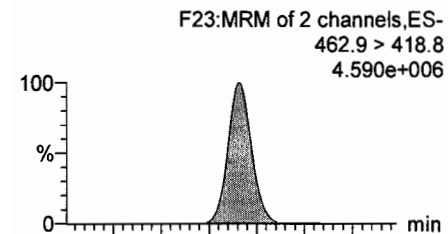
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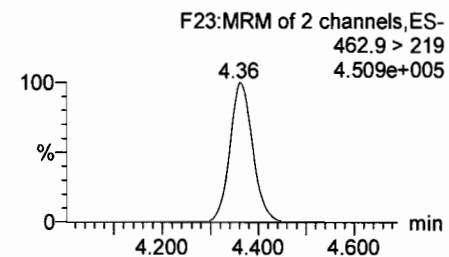
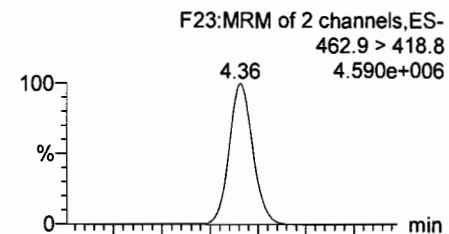
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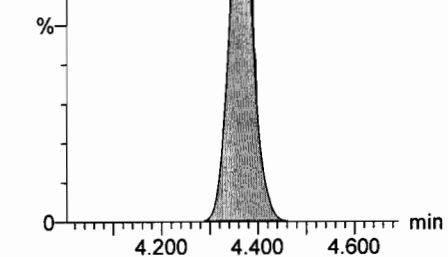
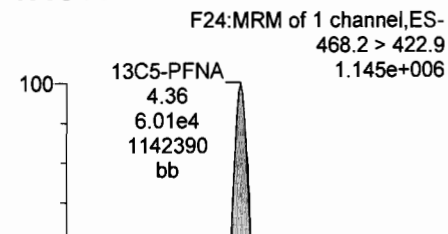
L-PFNA



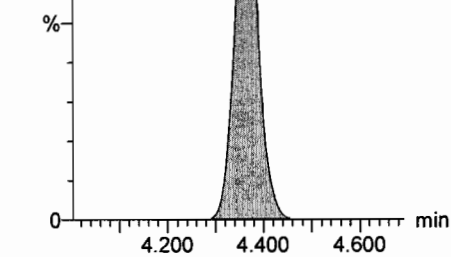
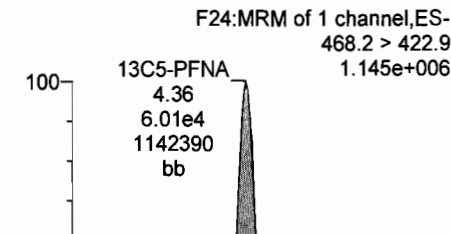
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13C5-PFNA



13C5-PFNA





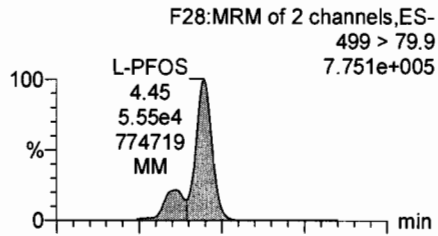
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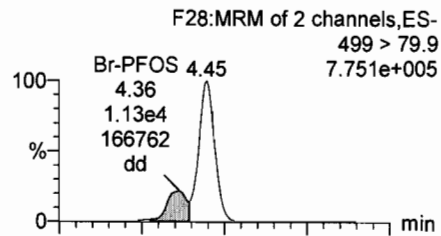
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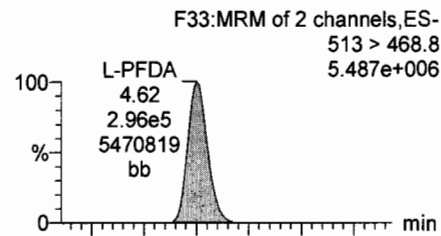
L-PFOS



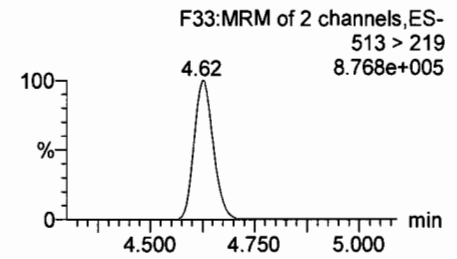
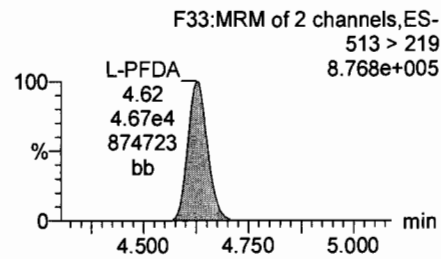
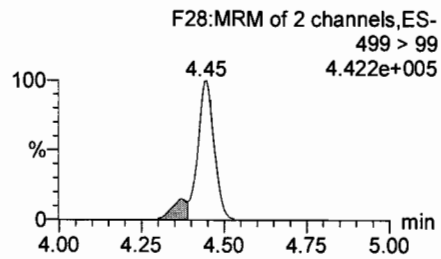
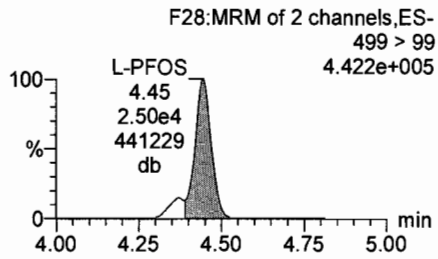
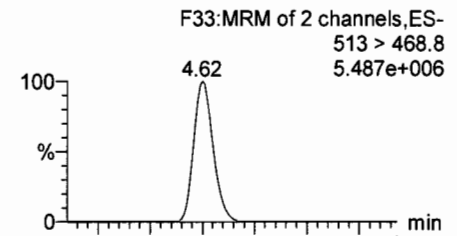
Br-PFOS



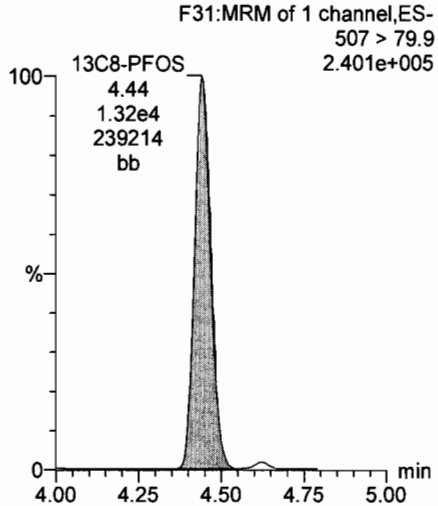
L-PFDA



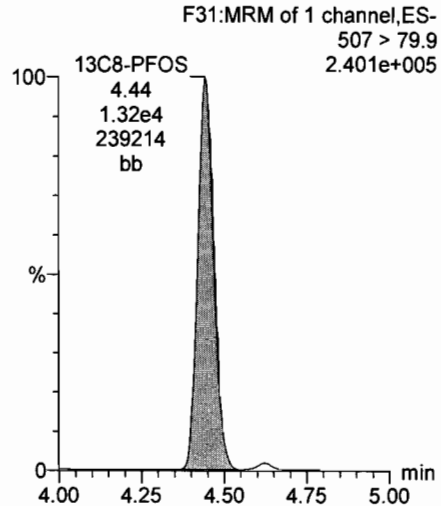
Br-PFDA



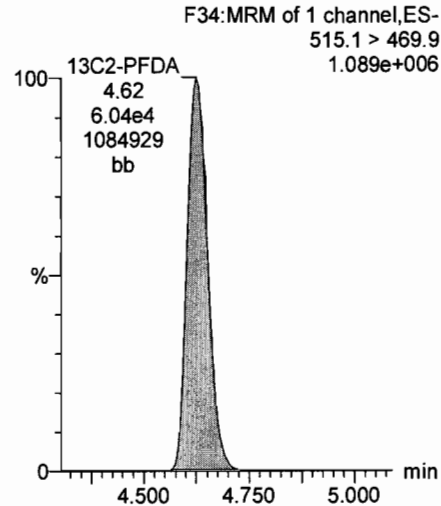
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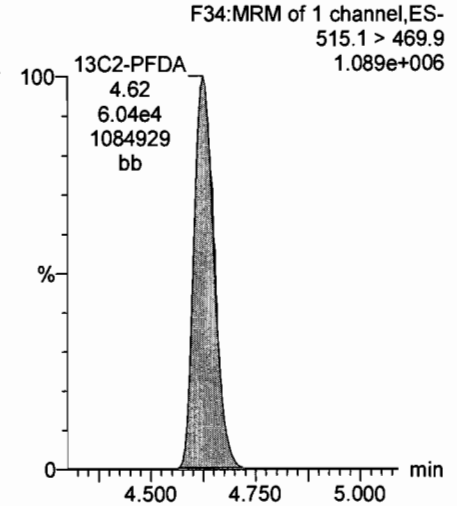
13C8-PFOS



13C2-PFDA



13C2-PFDA

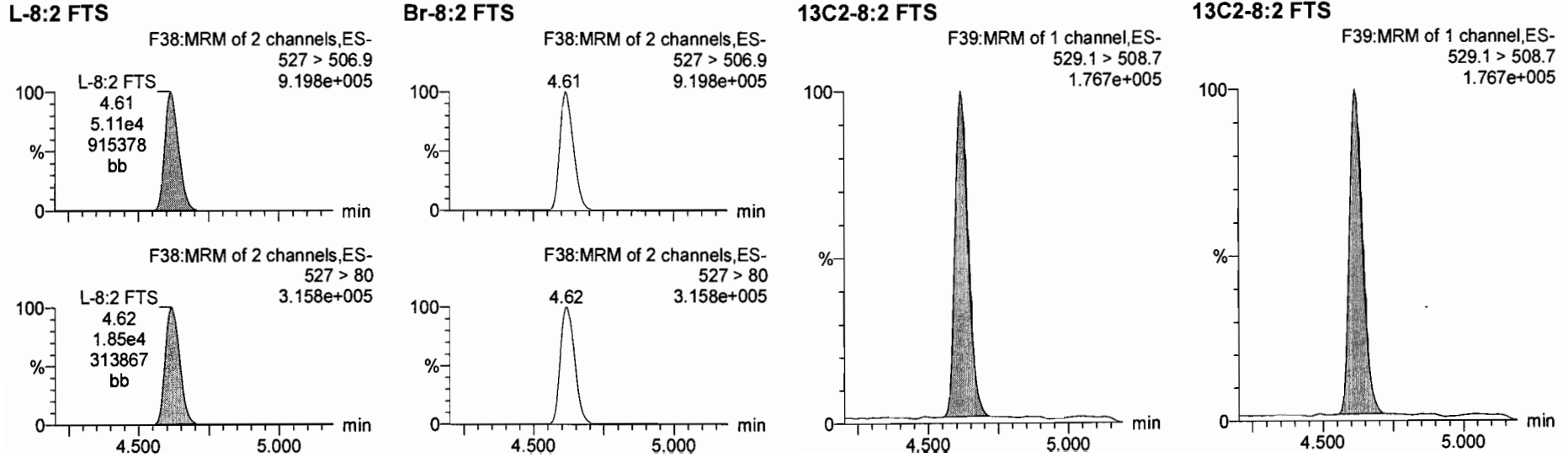


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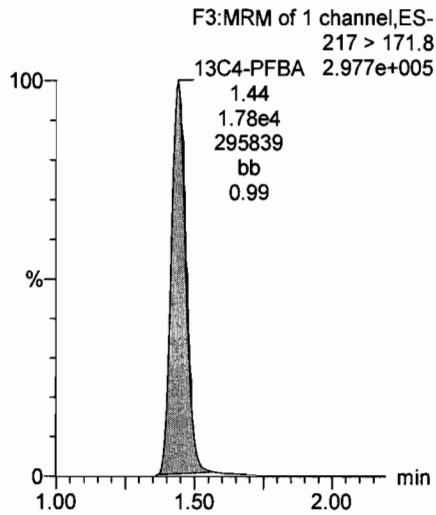
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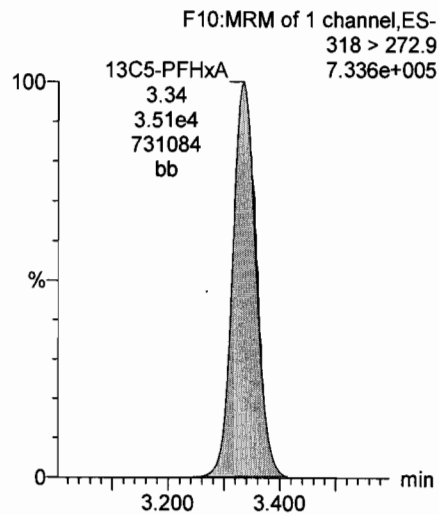
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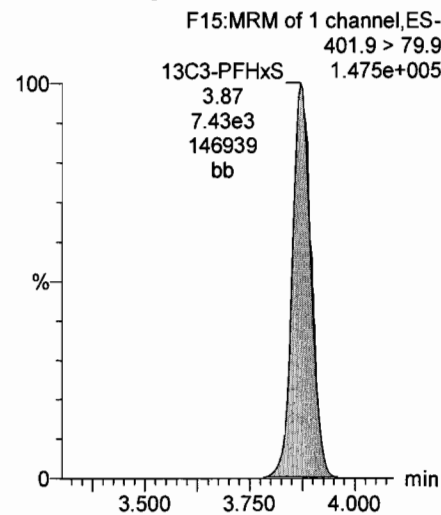
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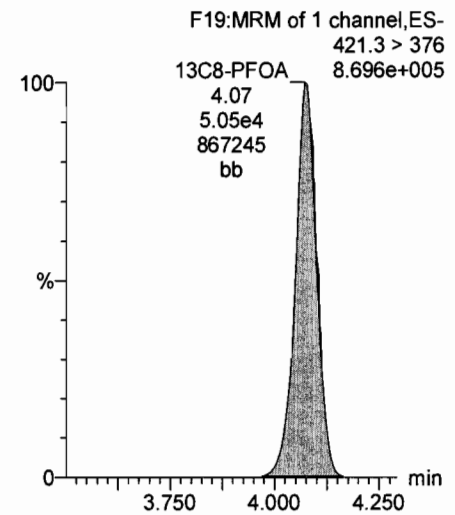
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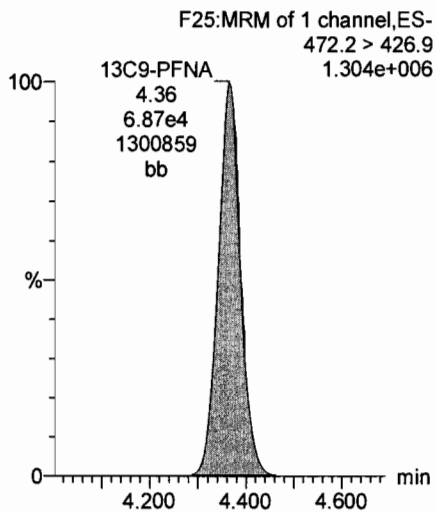
13C3-PFHxS



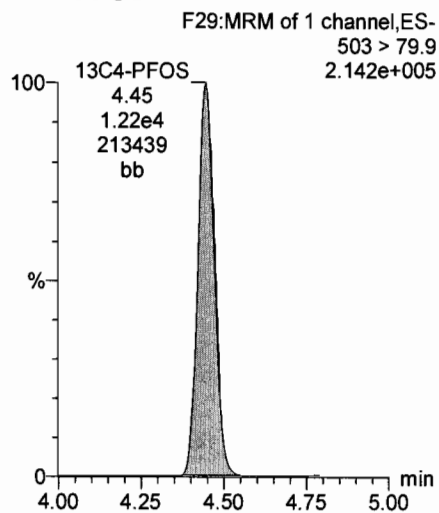
13C8-PFOA



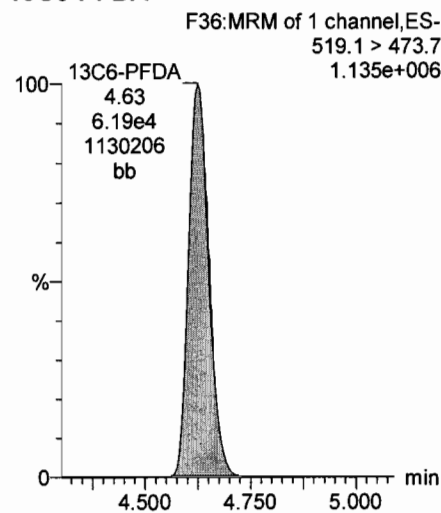
13C9-PFNA



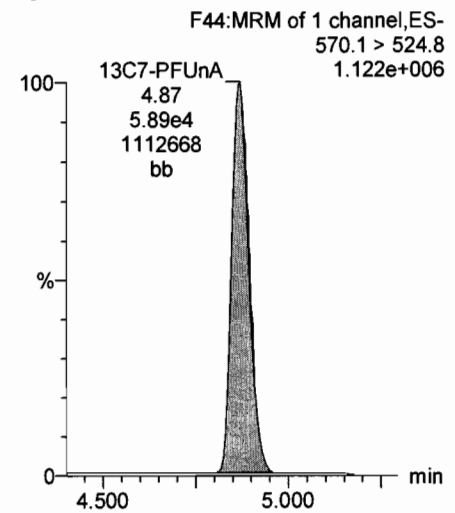
13C4-PFOS



13C6-PFDA



13C7-PFUnA



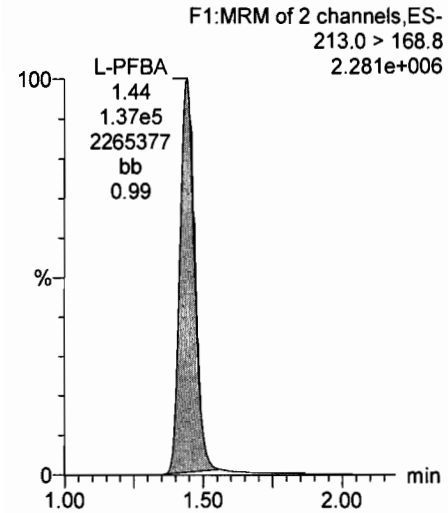
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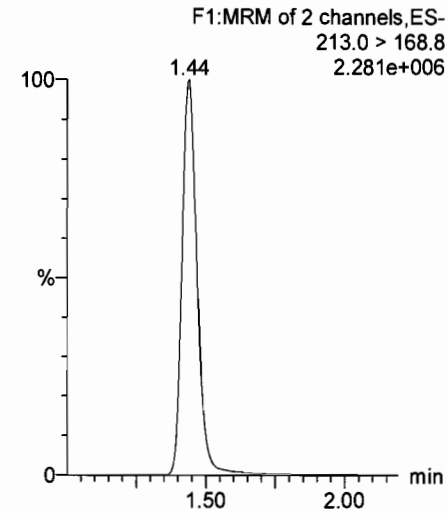
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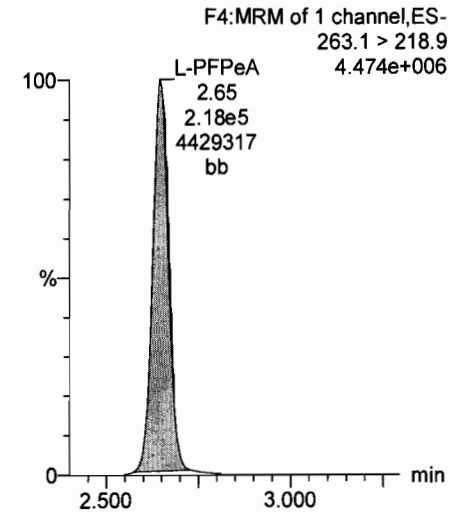
L-PFBA



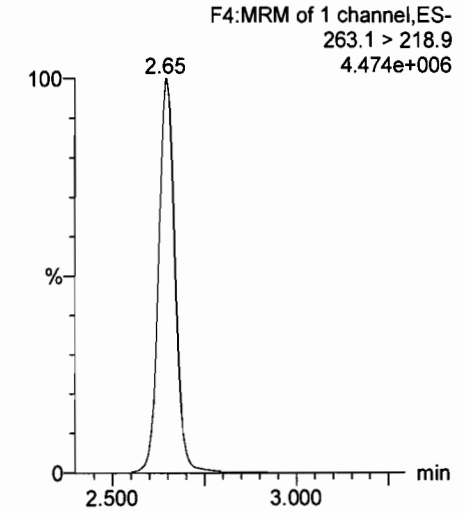
Br-PFBA



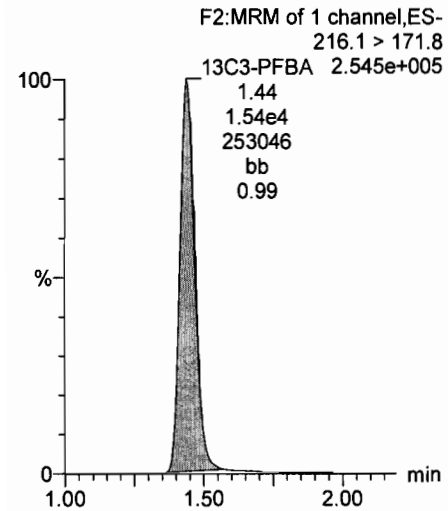
L-PFPeA



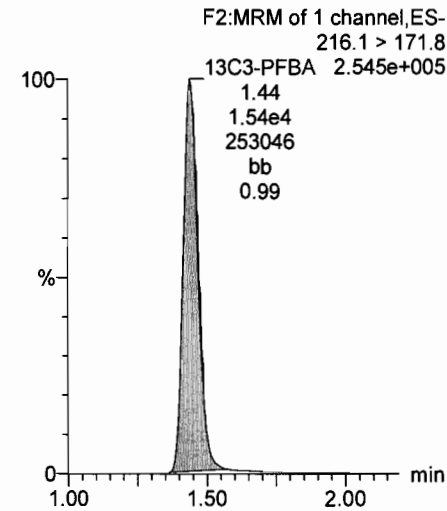
Br-PFPeA



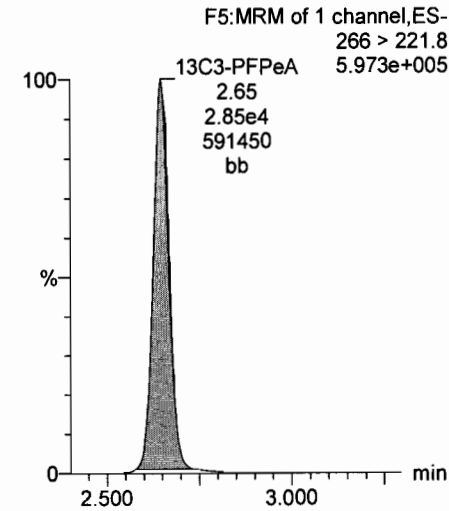
13C3-PFBA



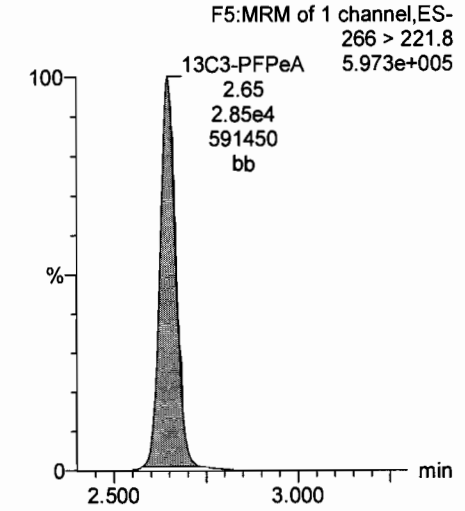
13C3-PFBA



13C3-PFPeA



13C3-PFPeA



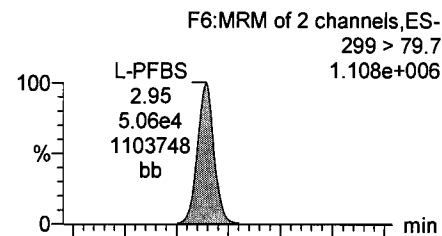
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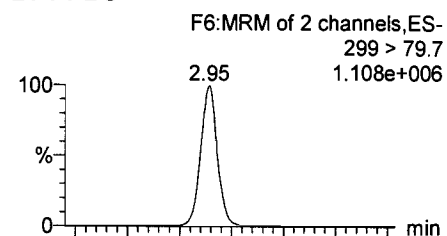
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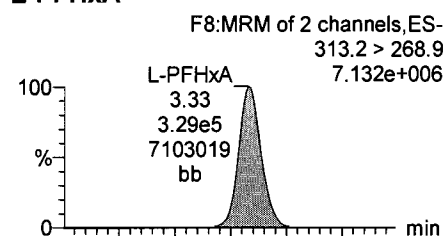
L-PFBS



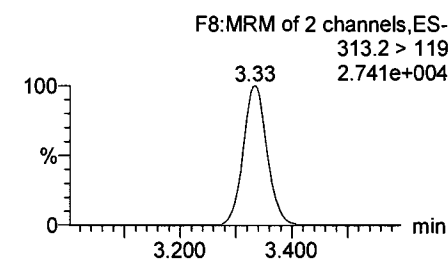
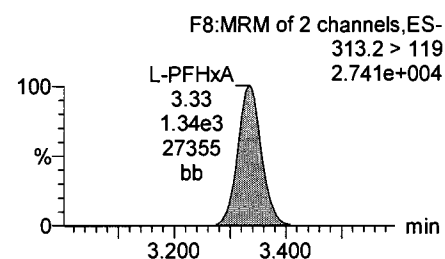
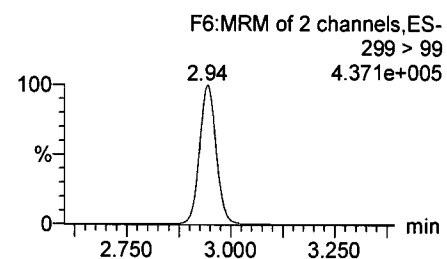
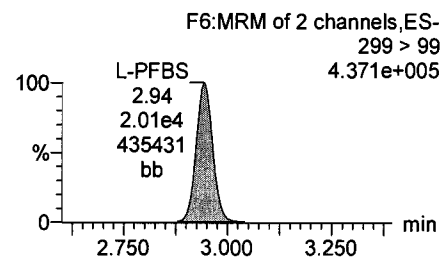
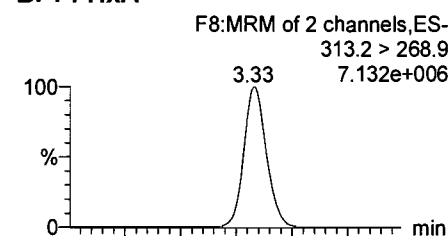
Br-PFBS



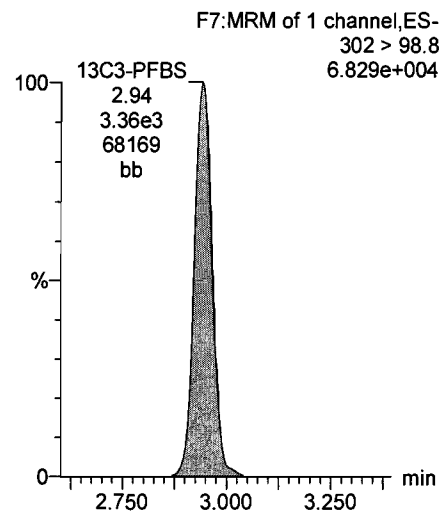
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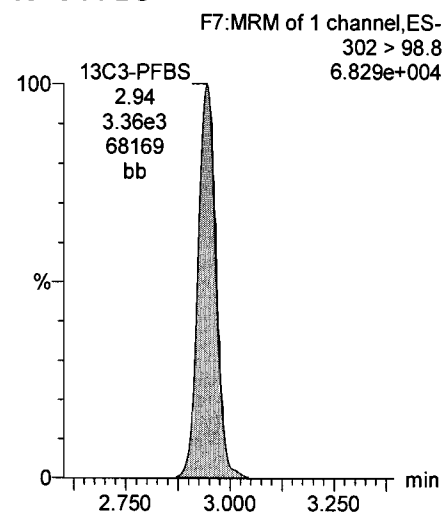
Br-PFHxA



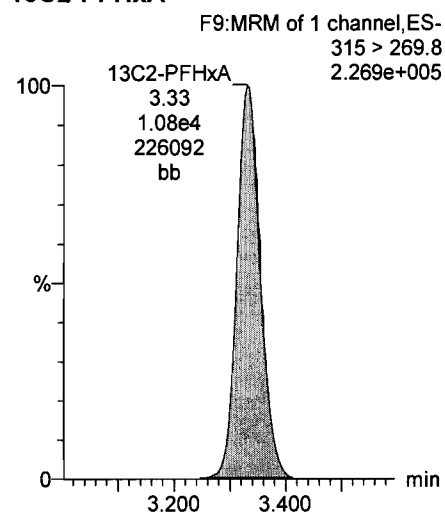
13C3-PFBS



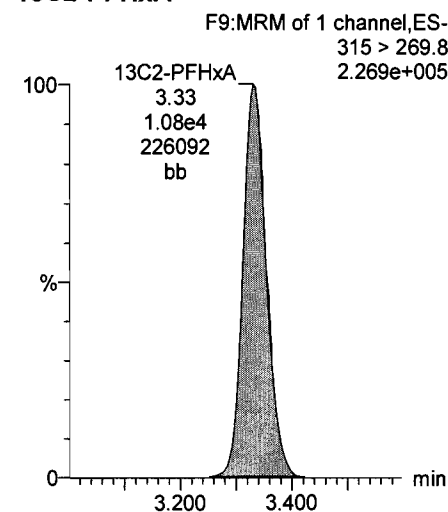
13C3-PFBS



13C2-PFHxA



13C2-PFHxA



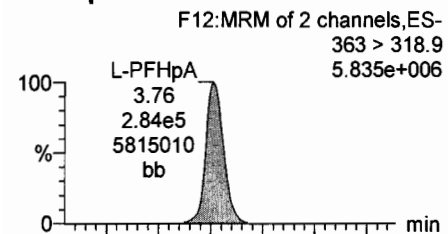
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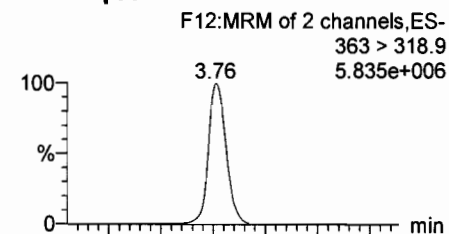
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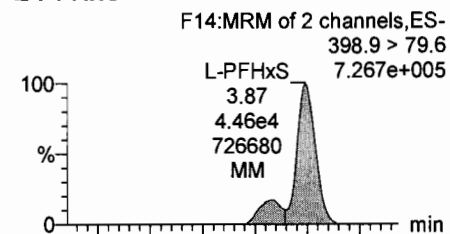
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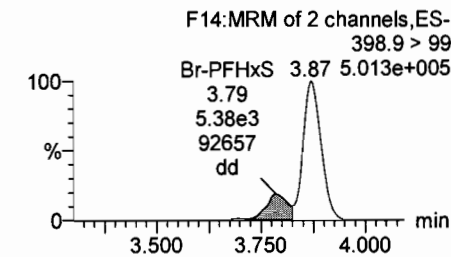
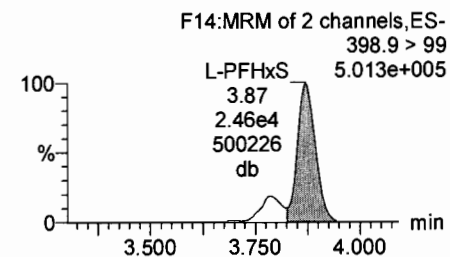
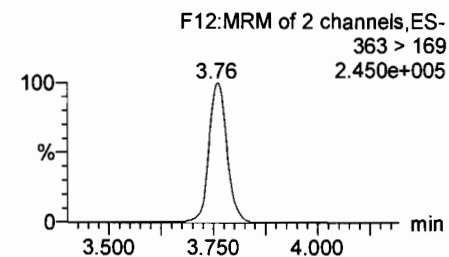
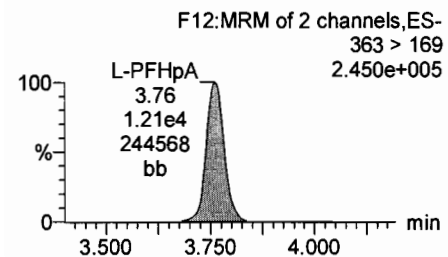
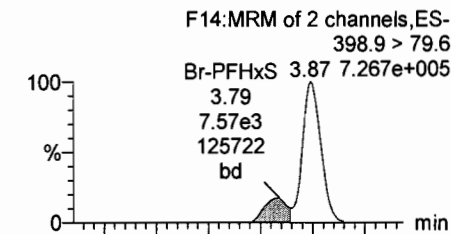
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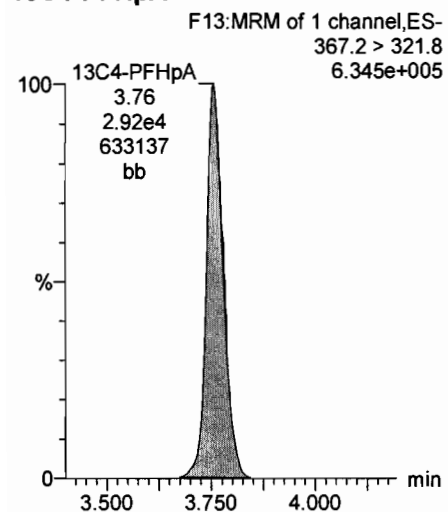
L-PFHxS



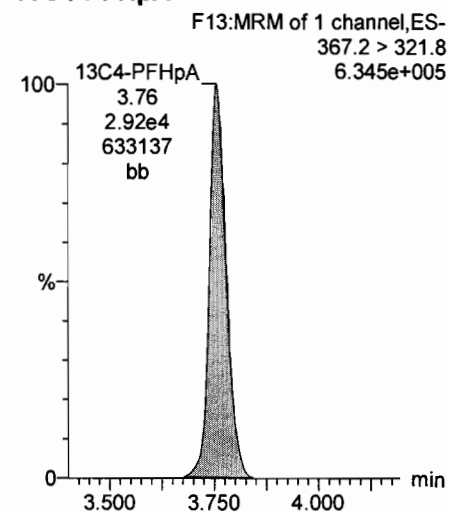
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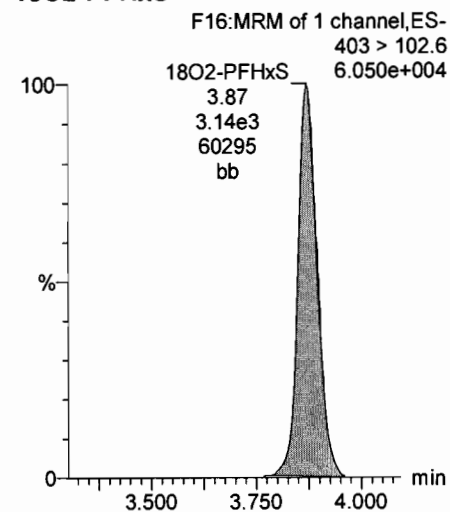
13C4-PFHpA



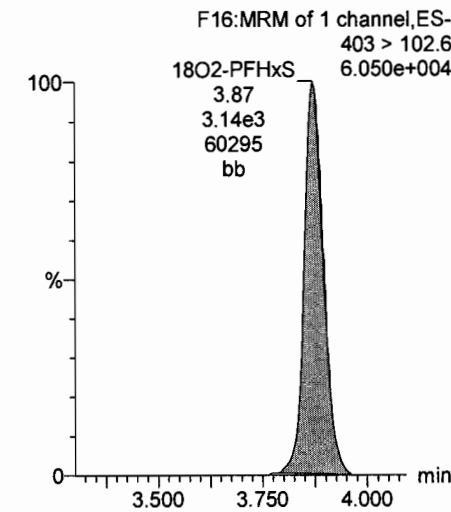
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18O2-PFHxS



18O2-PFHxS



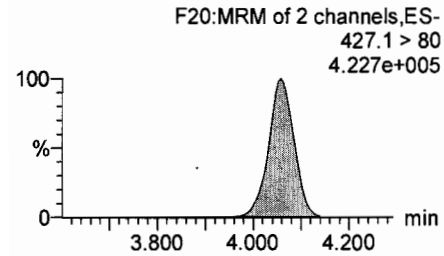
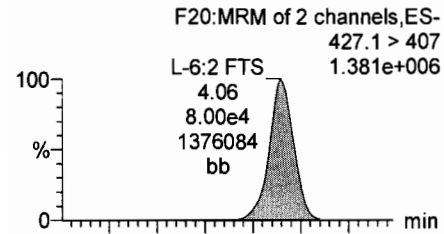
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Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

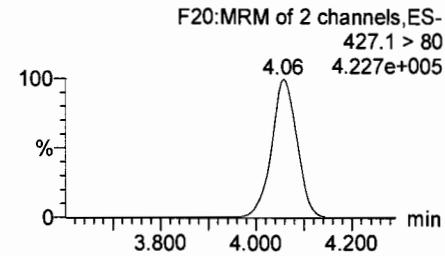
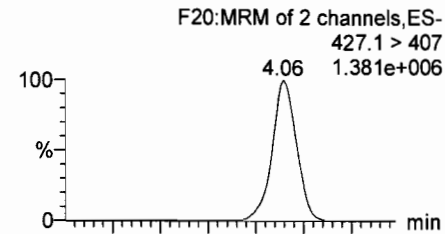
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Name: 170623M1\_10, Date: 23-Jun-2017, Time: 11:59:52, ID: ST170623M1-8 PFC CS5 17F2220, Description: PFC CS5 17F2220

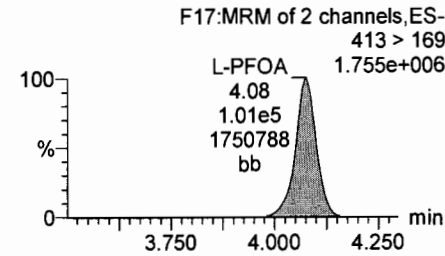
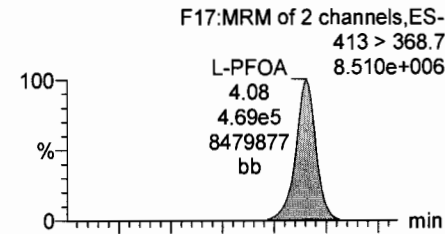
L-6:2 FTS



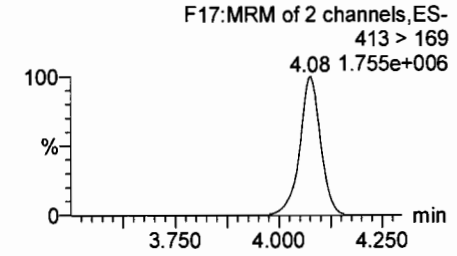
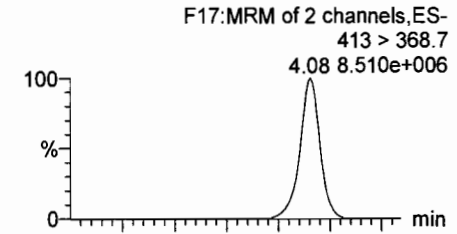
Br-6:2 FTS



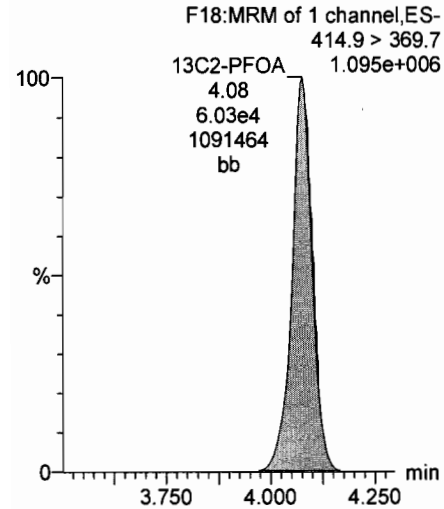
L-PFOA



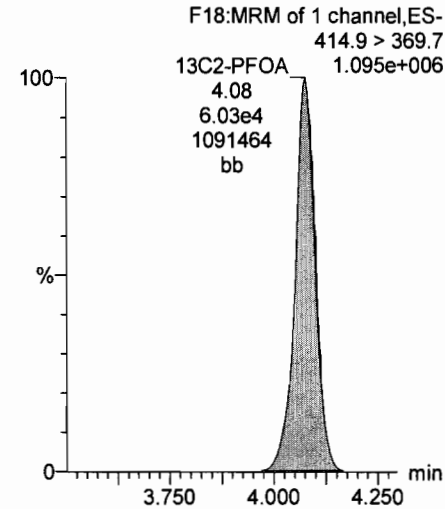
Br-PFOA



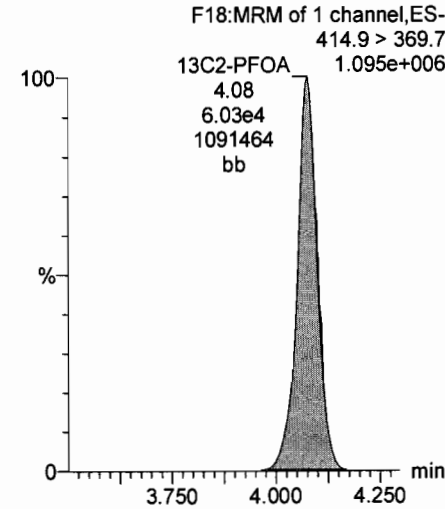
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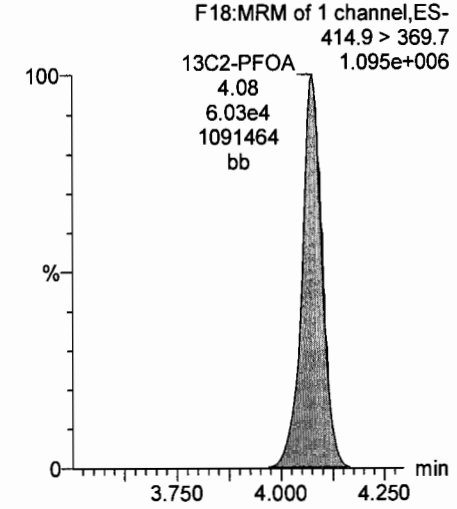
13C2-PFOA



13C2-PFOA



13C2-PFOA



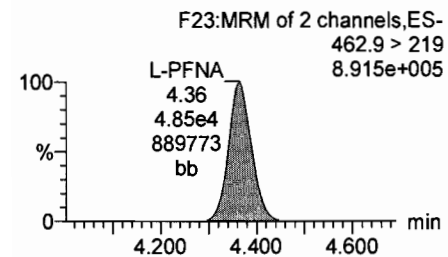
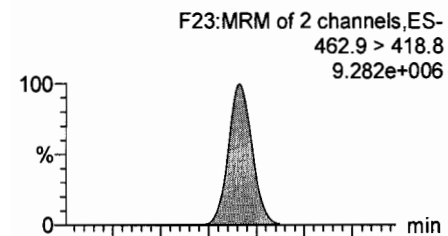
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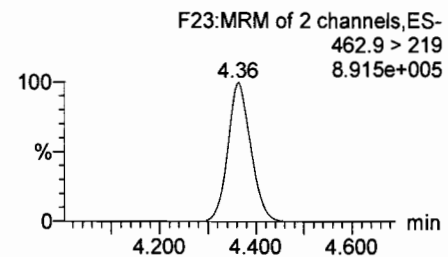
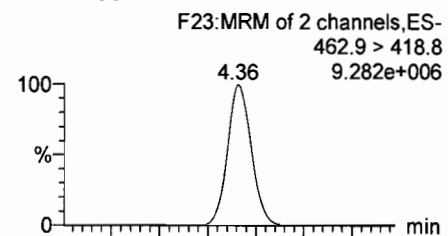
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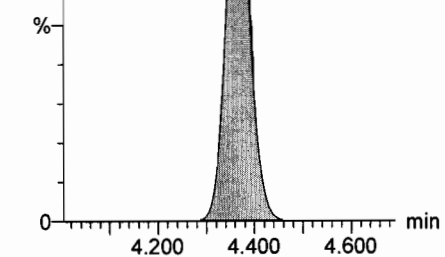
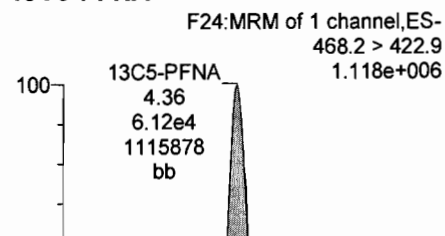
L-PFNA



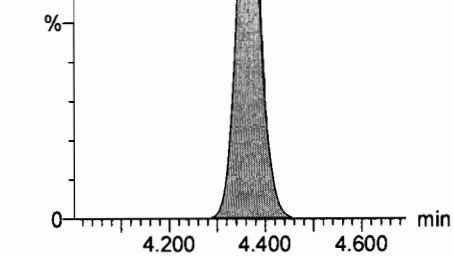
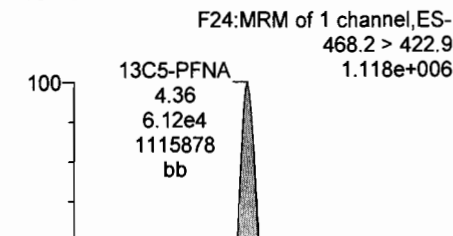
Br-PFNA



13C5-PFNA



13C5-PFNA





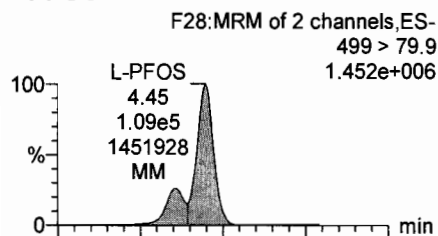
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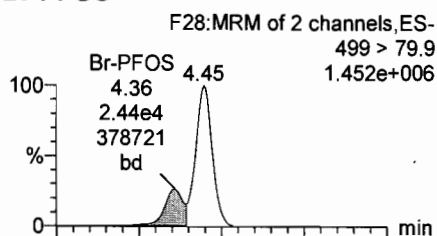
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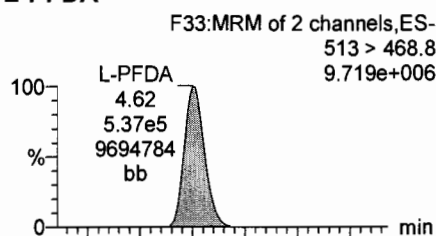
L-PFOS



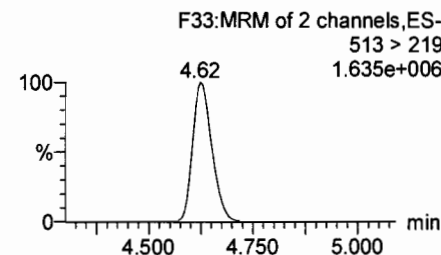
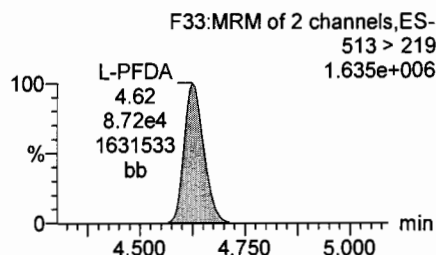
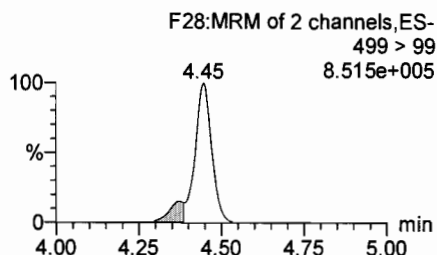
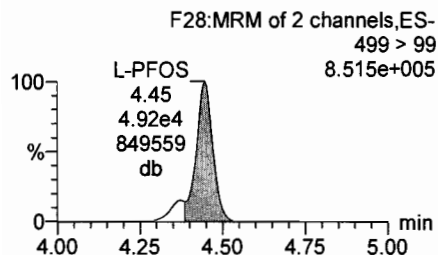
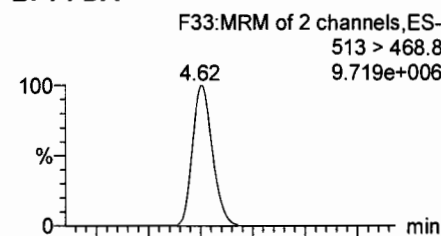
Br-PFOS



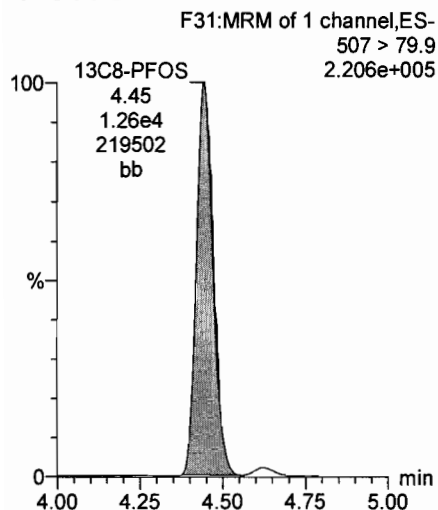
L-PFDA



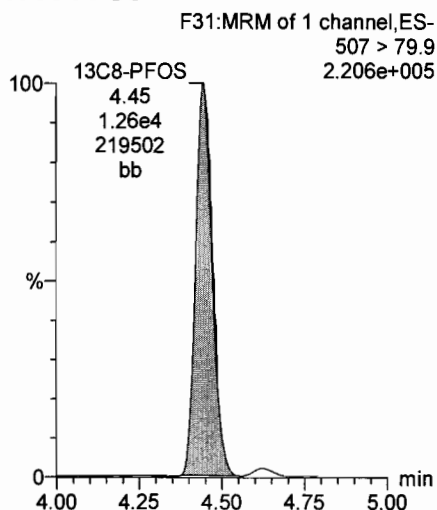
Br-PFDA



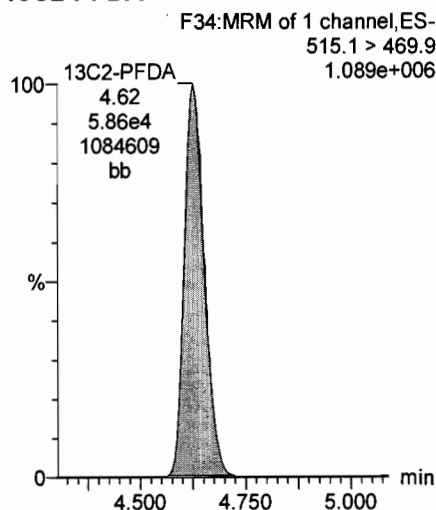
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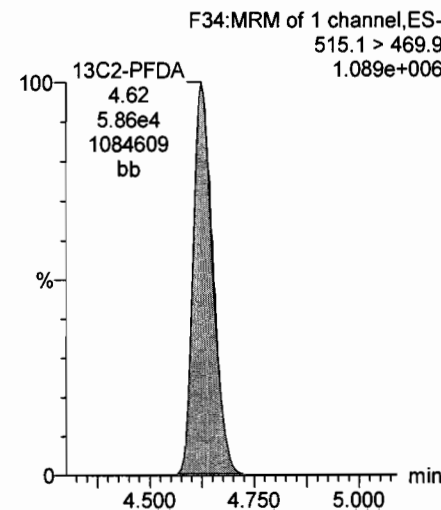
13C8-PFOS



13C2-PFDA



13C2-PFDA

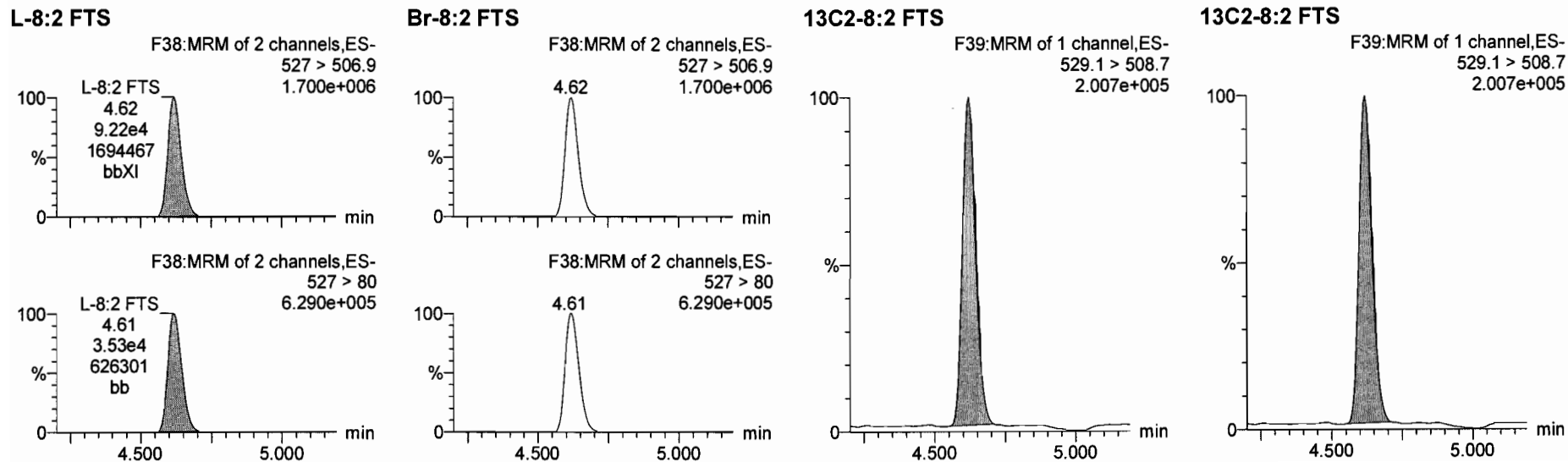


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Last Altered: Friday, June 23, 2017 13:21:10 Pacific Daylight Time

Printed: Friday, June 23, 2017 13:25:43 Pacific Daylight Time

Name: 170623M1\_10, Date: 23-Jun-2017, Time: 11:59:52, ID: ST170623M1-8 PFC CS5 17F2220, Description: PFC CS5 17F2220



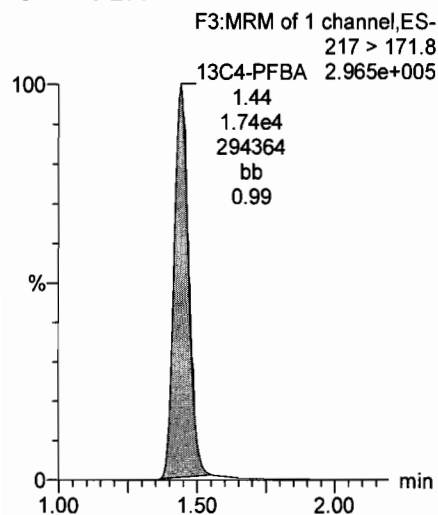
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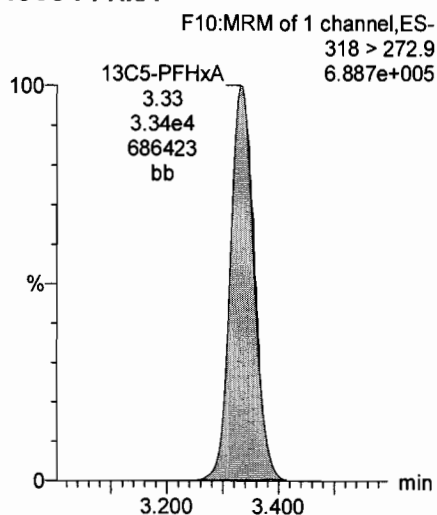
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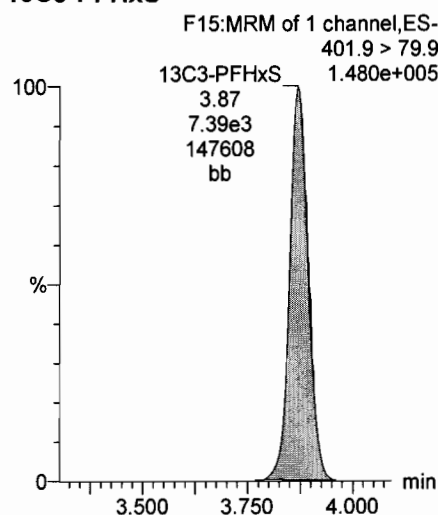
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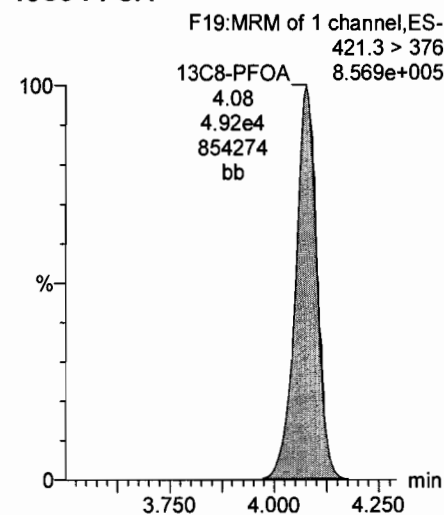
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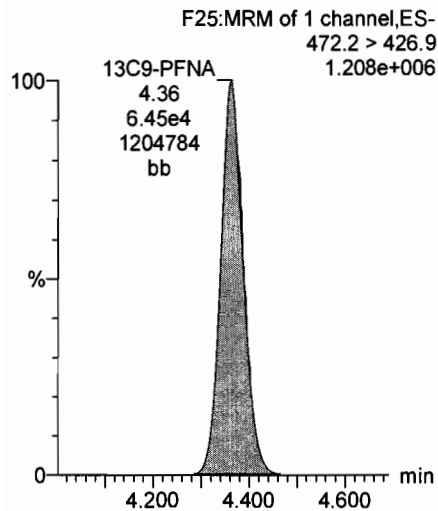
13C3-PFHxS



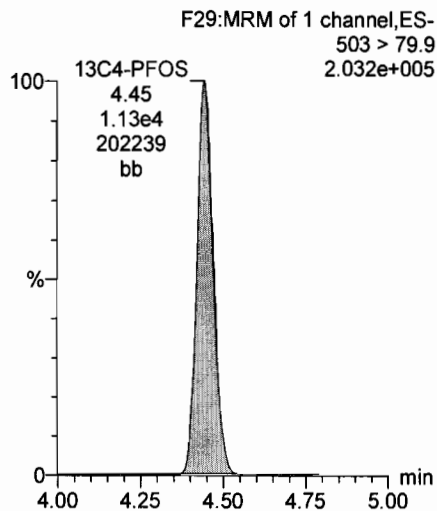
13C8-PFOA



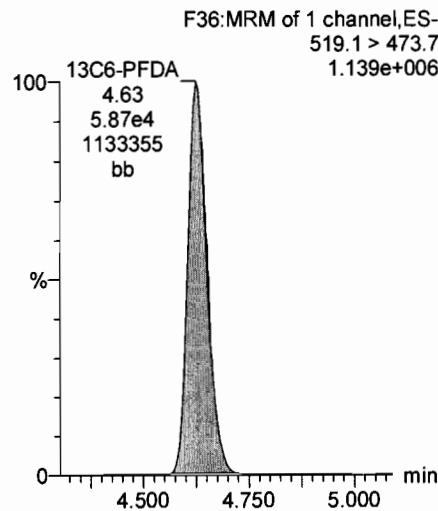
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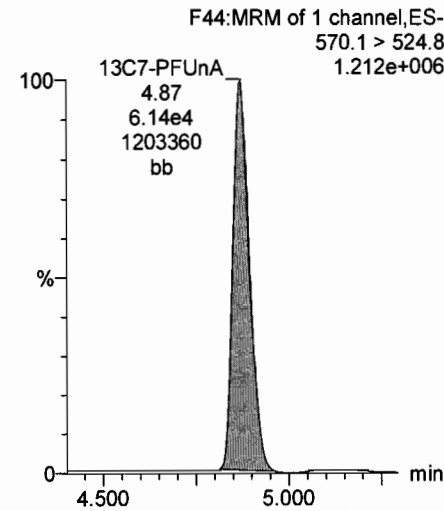
13C4-PFOS



13C6-PFDA



13C7-PFUnA



Dataset: U:\Q4.PRO\results\170623M1\170623M1-12.qld

Last Altered: Friday, June 23, 2017 14:46:26 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:47:27 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

AC 6/23/17

Name: 170623M1\_12, Date: 23-Jun-2017, Time: 12:53:03, ID: SS170623M1-1 PFC SSS 17F2212, Description: PFC SSS 17F2212

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc	%Rec
1	1 L-PFBA	213.0 > 168.8	1.43e4	1.58e4	1.0000		1.43	1.44	11.3	10.0	100.3
2	3 L-PFPeA	263.1 > 218.9	2.22e4	2.86e4	1.0000		2.64	2.65	9.72	9.93	99.3
3	5 L-PFBS	299 > 79.7	4.54e3	3.48e3	1.0000		2.94	2.94	16.3	8.52	85.2
4	7 L-PFHxA	313.2 > 268.9	3.28e4	1.11e4	1.0000		3.32	3.33	14.8	9.75	97.5
5	9 L-PFHpA	363 > 318.9	3.12e4	3.27e4	1.0000		3.75	3.75	11.9	9.61	96.1
6	11 L-PFHxS	398.9 > 79.6	4.62e3	3.55e3	1.0000		3.86	3.86	16.3	9.25	92.5
7	13 L-6:2 FTS	427.1 > 407	9.02e3	5.76e4	1.0000		4.07	4.05	1.96	11.5	115.3
8	15 L-PFOA	413 > 368.7	4.93e4	5.76e4	1.0000		4.06	4.07	10.7	10.7	107.0
9	17 L-PFNA	462.9 > 418.8	5.44e4	6.25e4	1.0000		4.36	4.35	10.9	9.94	99.4
10	19 L-PFOS	499 > 79.9	1.03e4	1.41e4	1.0000		4.43	4.44	9.14	8.37	83.7

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Dataset: U:\Q4.PRO\results\170623M1\170623M1-12.qld

Last Altered: Friday, June 23, 2017 14:46:26 Pacific Daylight Time

Printed: Friday, June 23, 2017 14:50:42 Pacific Daylight Time

Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_6-23-17\_LBT\_DILS.cdb 23 Jun 2017 13:21:10

Name: 170623M1\_12, Date: 23-Jun-2017, Time: 12:53:03, ID: SS170623M1-1 PFC SSS 17F2212, Description: PFC SSS 17F2212

#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	21 L-PFDA	513 > 468.8	5.46e4	5.32e4	1.0000		4.61	4.61	12.8	10.5	104.7
2	23 L-8:2 FTS	527 > 506.9	1.10e4	8.04e3	1.0000		4.61	4.61	17.2	9.06	90.6
3	25 13C3-PFBA	216.1 > 171.8	1.58e4	1.77e4	1.0000	0.880	1.43	1.44	11.1	12.6	101.1
4	26 13C3-PFPeA	266 > 221.8	2.86e4	1.77e4	1.0000	1.598	2.64	2.64	20.1	12.6	100.8
5	27 13C3-PFBS	302 > 98.8	3.48e3	1.77e4	1.0000	0.193	2.94	2.94	2.45	12.7	101.6
6	28 13C2-PFHxA	315 > 269.8	1.11e4	3.60e4	1.0000	0.314	3.32	3.33	1.54	4.90	97.9
7	29 13C4-PFHpA	367.2 > 321.8	3.27e4	3.60e4	1.0000	0.333	3.75	3.75	4.54	13.6	108.9
8	30 18O2-PFHxS	403 > 102.6	3.55e3	7.58e3	1.0000	0.465	3.86	3.87	5.86	12.6	100.7
9	31 13C2-6:2 FTS	429.1 > 408.9	1.10e4	5.76e4	1.0000	0.186	4.07	4.05	2.38	12.8	102.8
10	32 13C2-PFOA	414.9 > 369.7	5.76e4	4.93e4	1.0000	1.192	4.06	4.07	14.6	12.3	98.0
11	33 13C5-PFNA	468.2 > 422.9	6.25e4	7.03e4	1.0000	0.920	4.36	4.35	11.1	12.1	96.6
12	34 13C8-PFOS	507 > 79.9	1.41e4	1.18e4	1.0000	1.090	4.43	4.43	14.9	13.7	109.7
13	35 13C2-PFDA	515.1 > 469.9	5.32e4	5.34e4	1.0000	1.016	4.61	4.61	12.4	12.2	97.9
14	36 13C2-8:2 FTS	529.1 > 508.7	8.04e3	5.32e4	1.0000	0.167	4.61	4.61	1.89	11.4	90.8
15	37 13C4-PFBA	217 > 171.8	1.77e4	1.77e4	1.0000	1.000	1.43	1.43	12.5	12.5	100.0
16	38 13C5-PFHxA	318 > 272.9	3.60e4	3.60e4	1.0000	1.000	3.32	3.33	5.00	5.00	100.0
17	39 13C3-PFHxS	401.9 > 79.9	7.58e3	7.58e3	1.0000	1.000	3.86	3.86	12.5	12.5	100.0
18	40 13C8-PFOA	421.3 > 376	4.93e4	4.93e4	1.0000	1.000	4.06	4.07	12.5	12.5	100.0
19	41 13C9-PFNA	472.2 > 426.9	7.03e4	7.03e4	1.0000	1.000	4.36	4.35	12.5	12.5	100.0
20	42 13C4-PFOS	503 > 79.9	1.18e4	1.18e4	1.0000	1.000	4.43	4.44	12.5	12.5	100.0
21	43 13C6-PFDA	519.1 > 473.7	5.34e4	5.34e4	1.0000	1.000	4.61	4.61	12.5	12.5	100.0
22	44 13C7-PFUnA	570.1 > 524.8	6.32e4	6.32e4	1.0000	1.000	4.86	4.86	12.5	12.5	100.0

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Dataset: U:\Q4.PRO\results\170623M1\170623M1-12.qld

Last Altered: Friday, June 23, 2017 14:46:26 Pacific Daylight Time

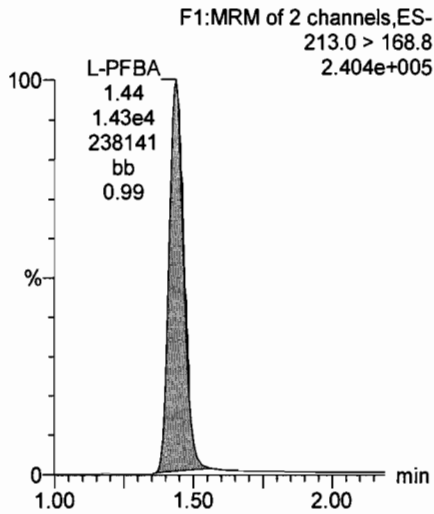
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Method: U:\Q4.PRO\MethDB\PFAS\_L21\_6-23-17\_LBT\_DILS.mdb 23 Jun 2017 13:12:34

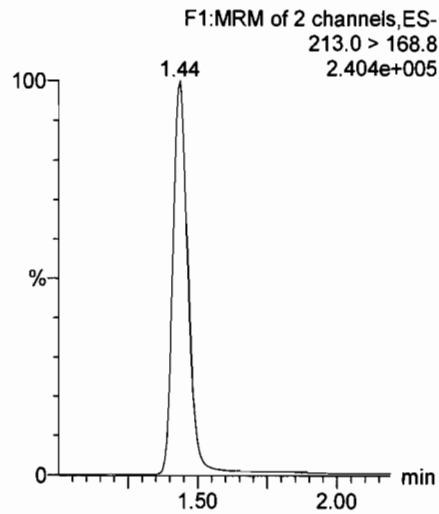
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Name: 170623M1\_12, Date: 23-Jun-2017, Time: 12:53:03, ID: SS170623M1-1 PFC SSS 17F2212, Description: PFC SSS 17F2212

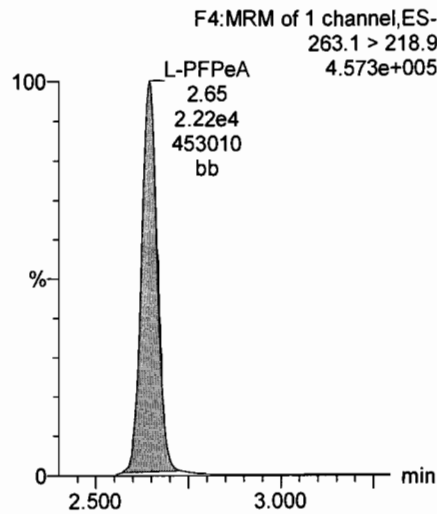
L-PFBA



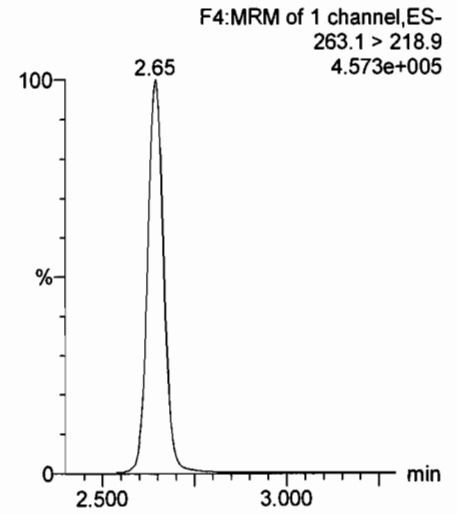
Br-PFBA



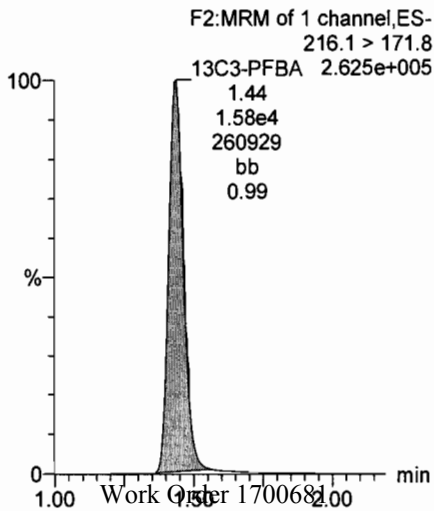
L-PFPeA



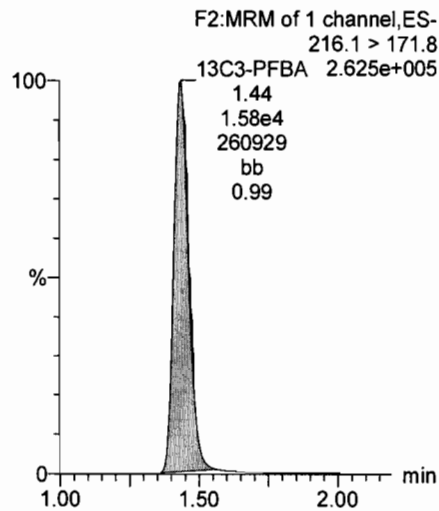
Br-PFPeA



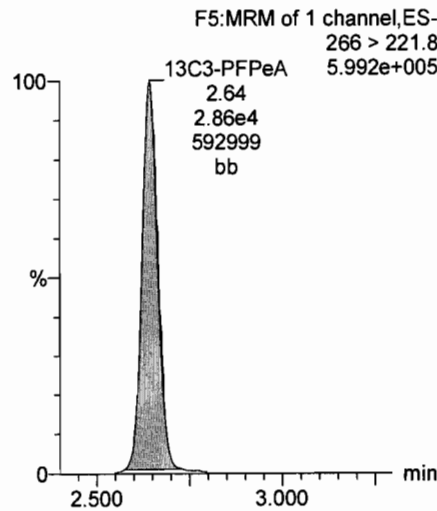
13C3-PFBA



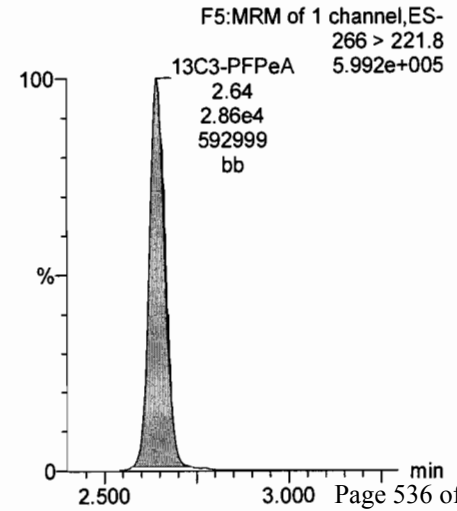
13C3-PFBA



13C3-PFPeA



13C3-PFPeA



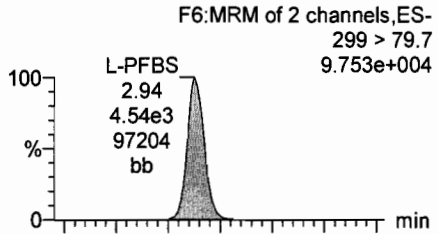
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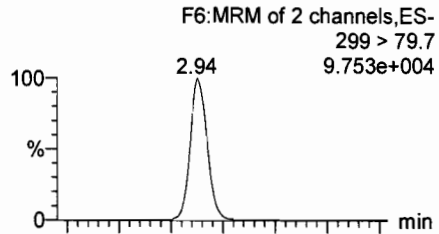
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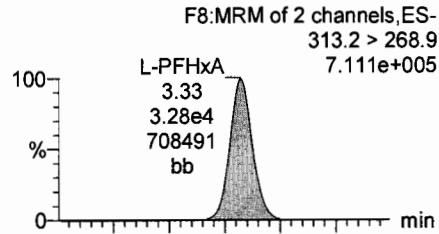
L-PFBS



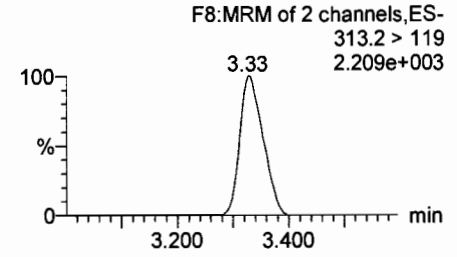
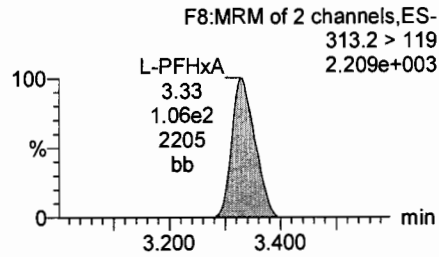
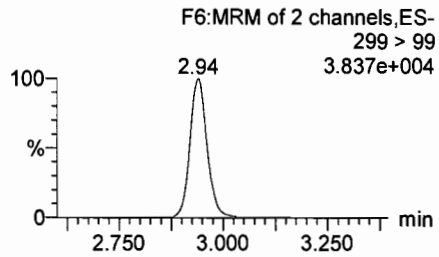
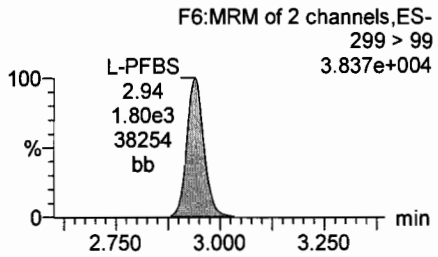
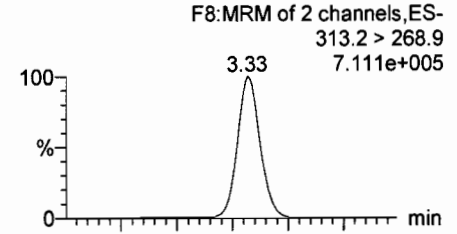
Br-PFBS



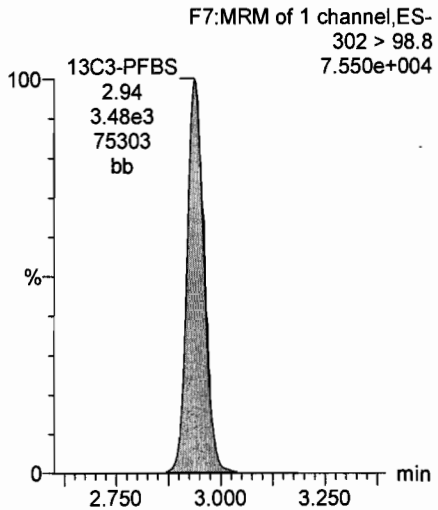
L-PFHxA



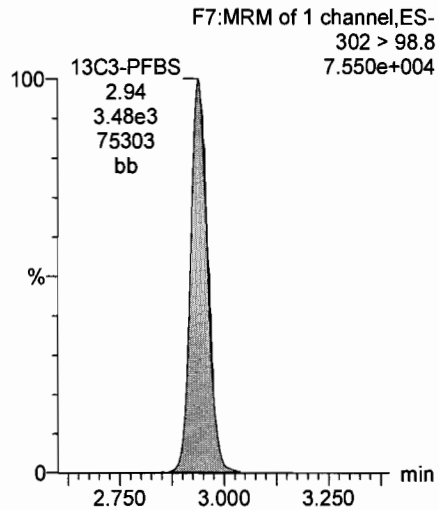
Br-PFHxA



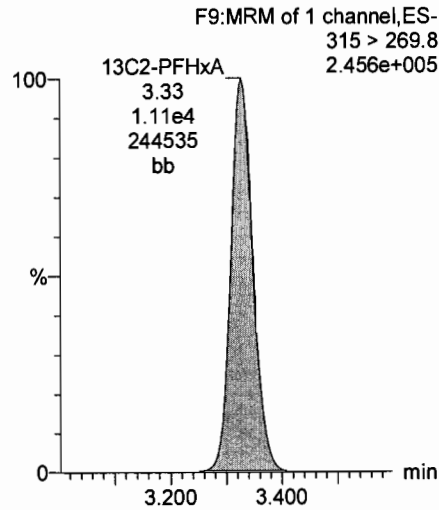
13C3-PFBS



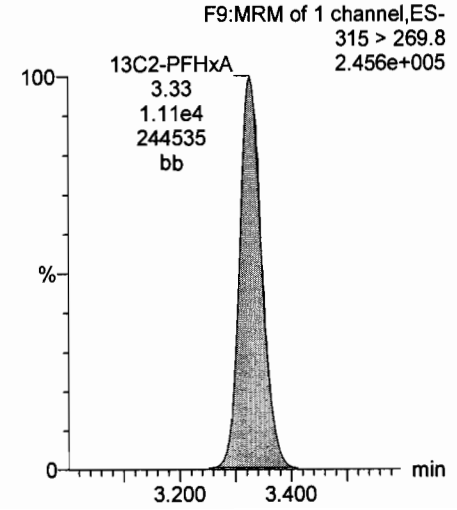
13C3-PFBS



13C2-PFHxA



13C2-PFHxA



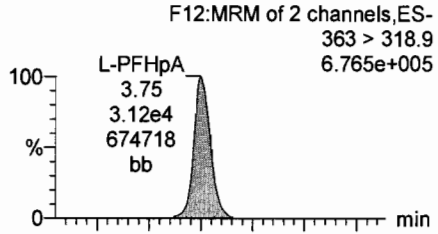
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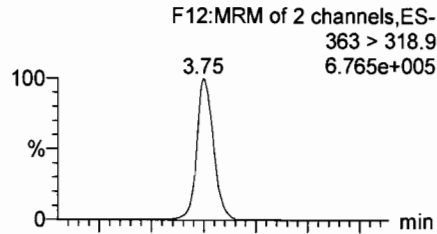
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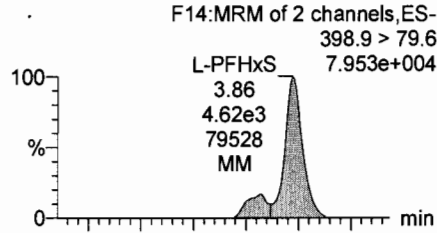
L-PFHpA



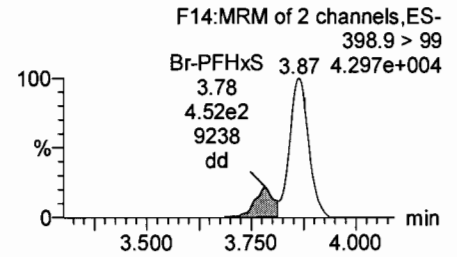
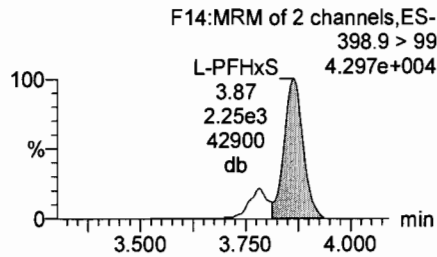
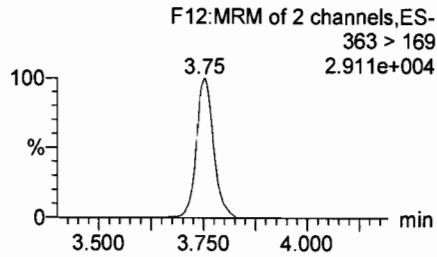
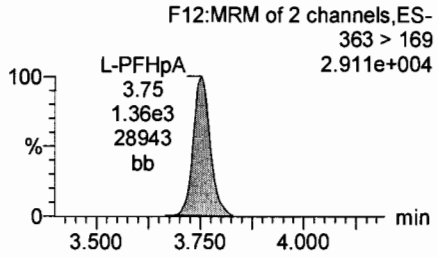
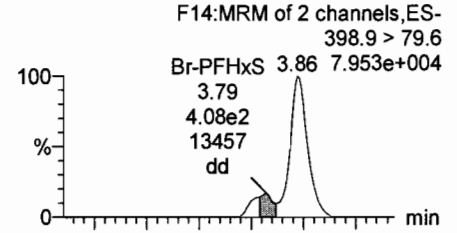
Br-PFHpA



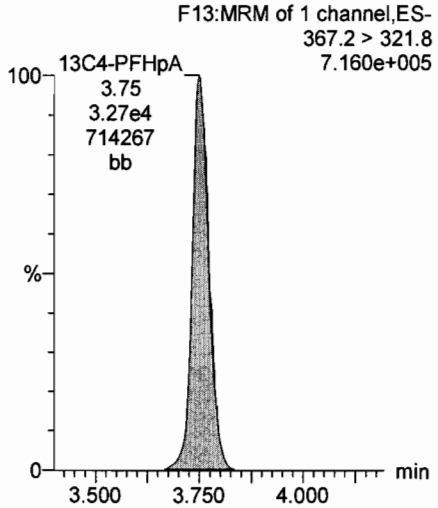
L-PFHxS



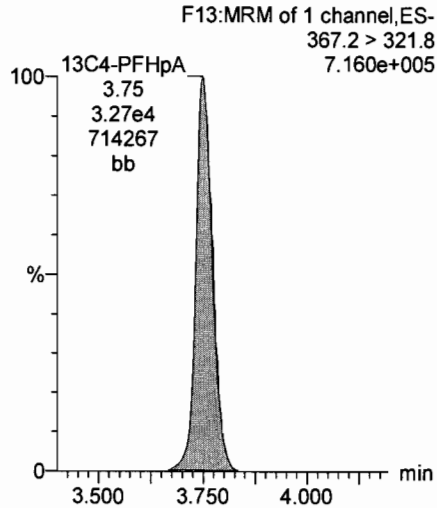
Br-PFHxS



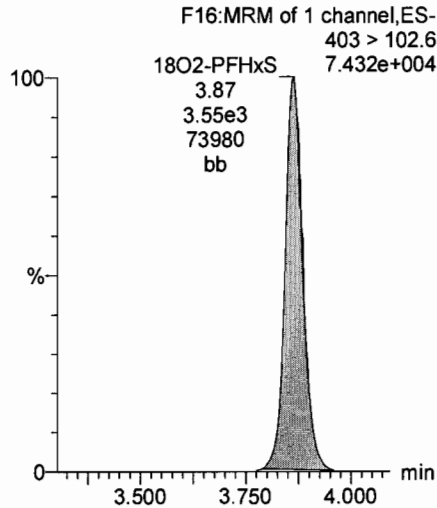
13C4-PFHpA



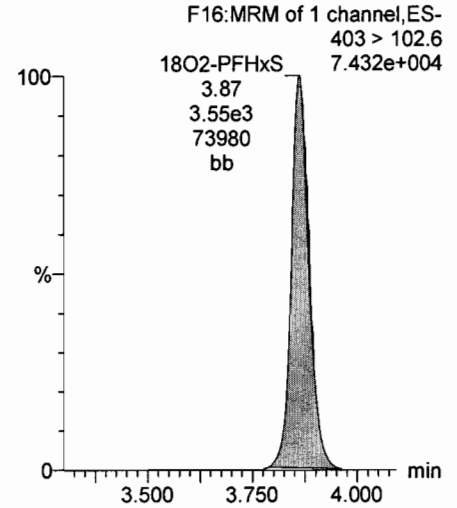
13C4-PFHpA



18O2-PFHxS



18O2-PFHxS





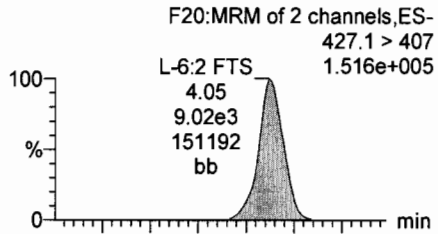
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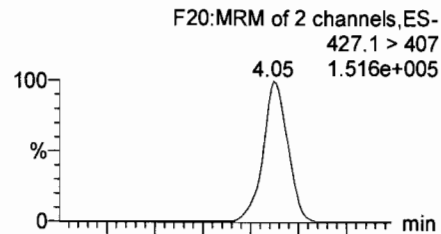
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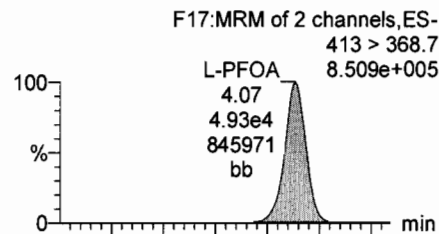
L-6:2 FTS



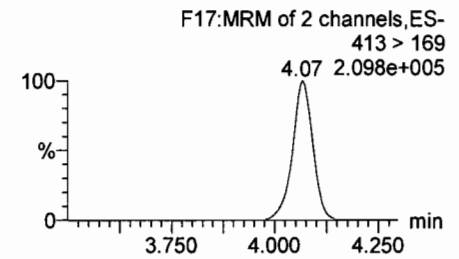
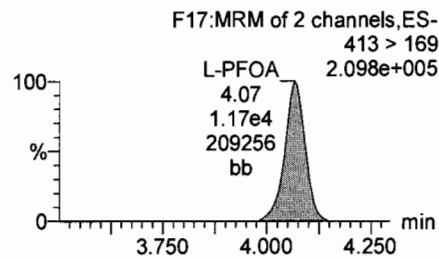
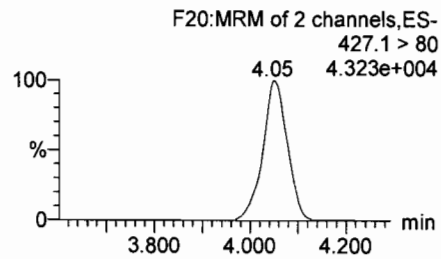
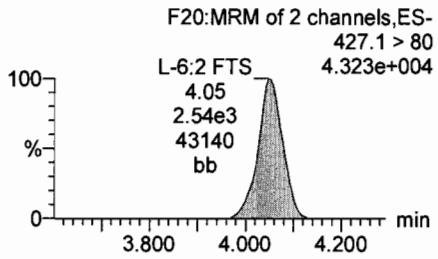
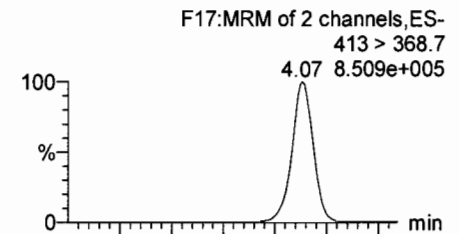
Br-6:2 FTS



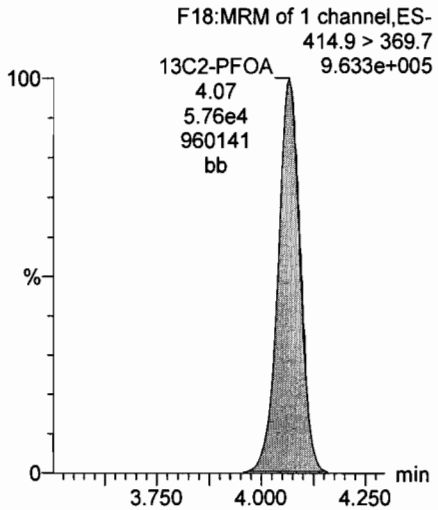
L-PFOA



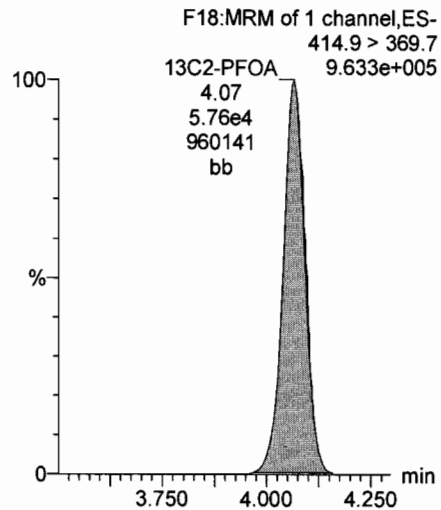
Br-PFOA



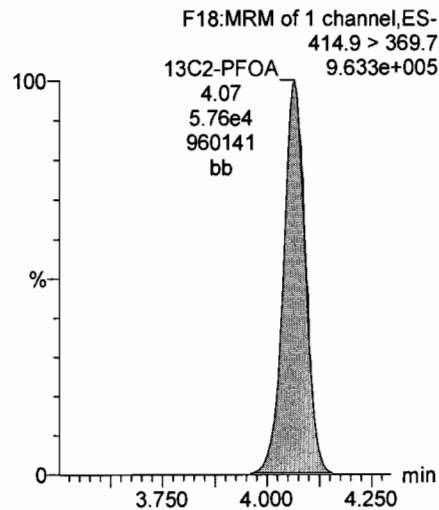
13C2-PFOA



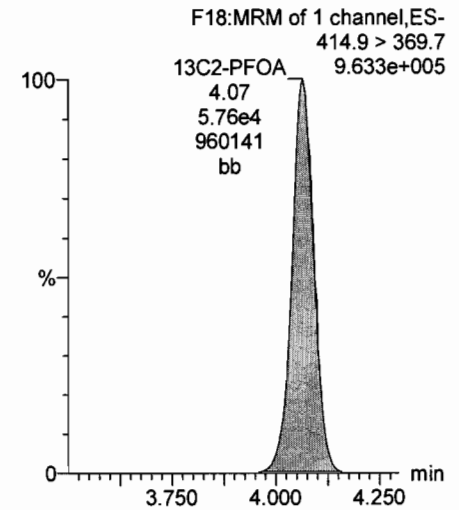
13C2-PFOA



13C2-PFOA



13C2-PFOA



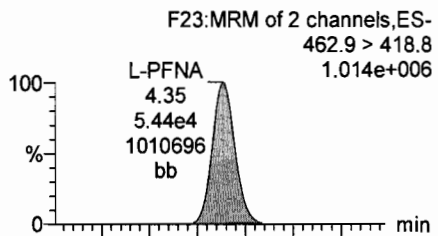
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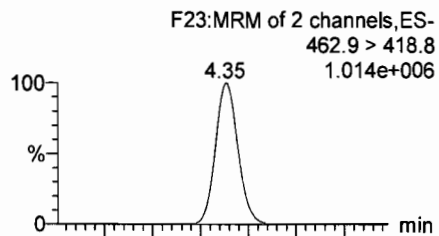
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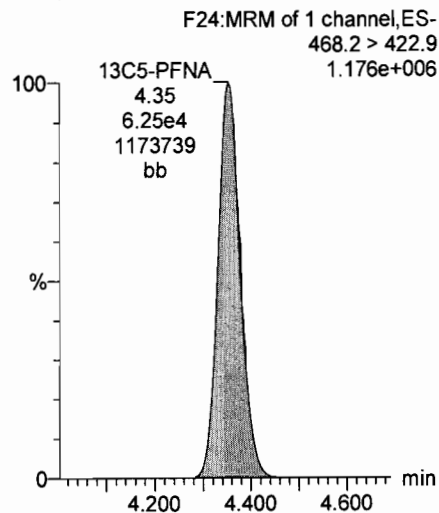
L-PFNA



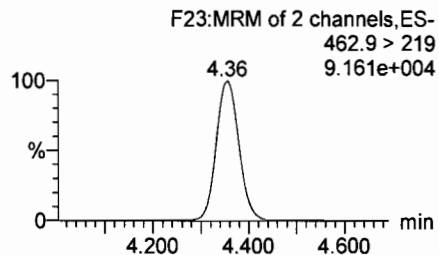
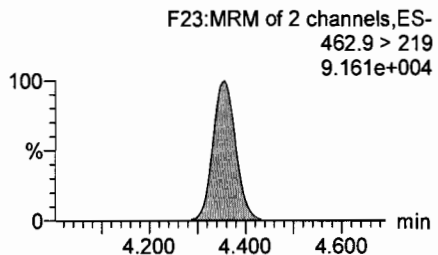
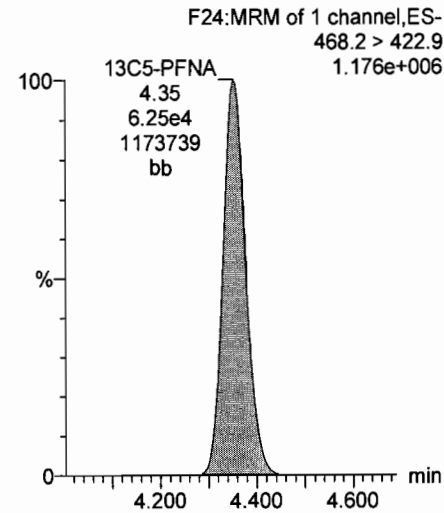
Br-PFNA



13C5-PFNA



13C5-PFNA



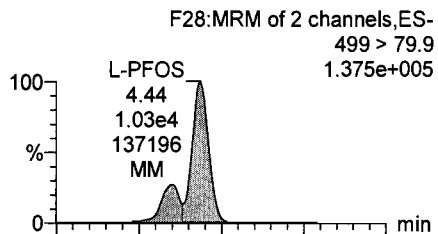
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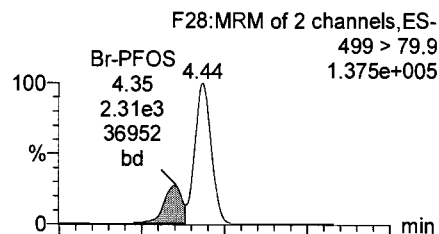
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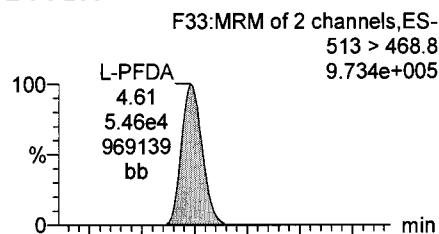
L-PFOS



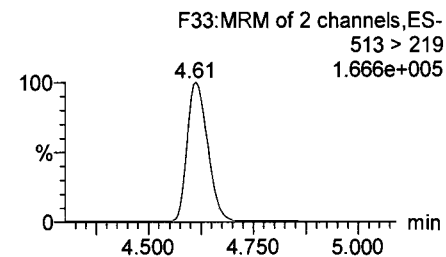
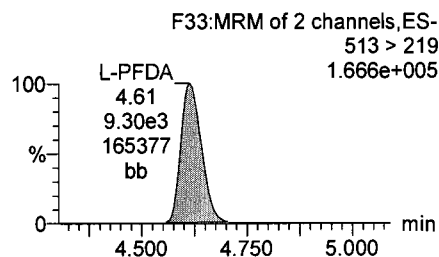
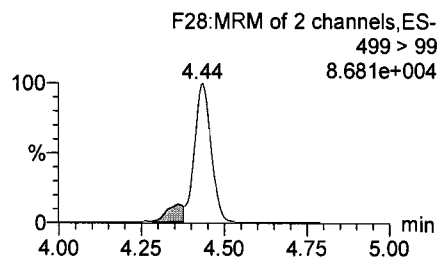
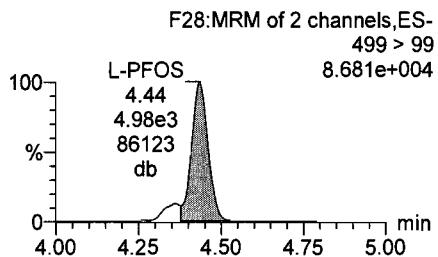
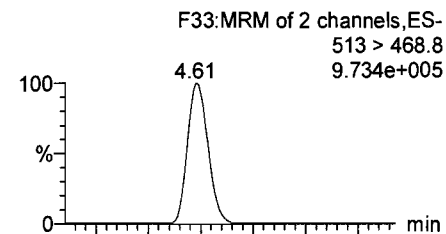
Br-PFOS



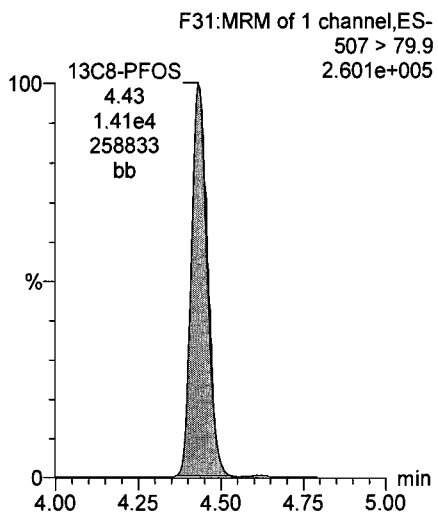
L-PFDA



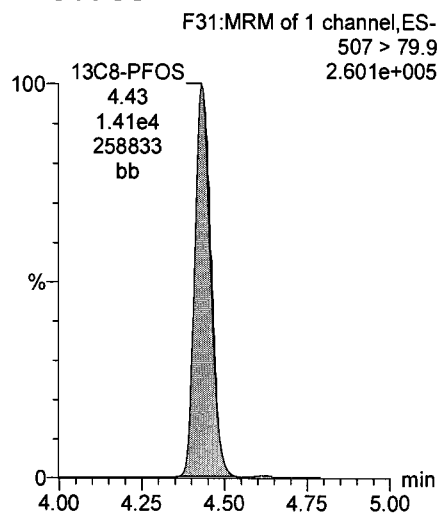
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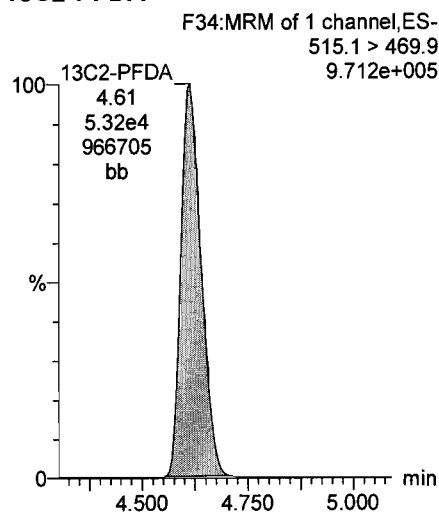
13C8-PFOS



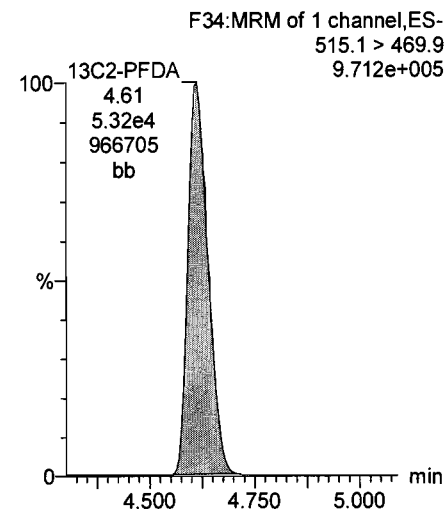
13C8-PFOS



13C2-PFDA



13C2-PFDA



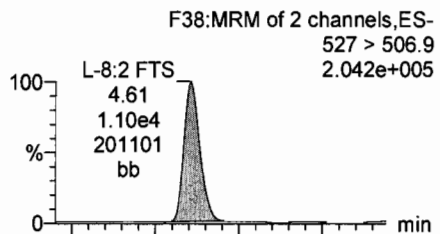
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Last Altered: Friday, June 23, 2017 14:46:26 Pacific Daylight Time

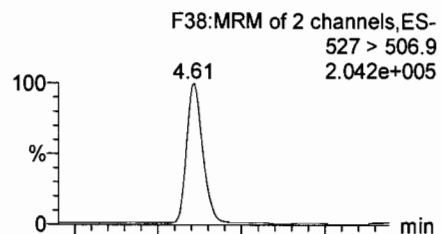
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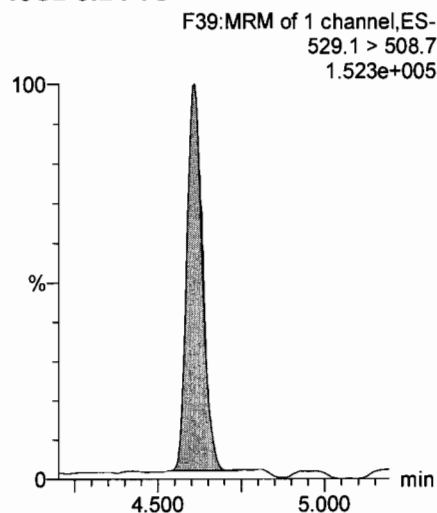
L-8:2 FTS



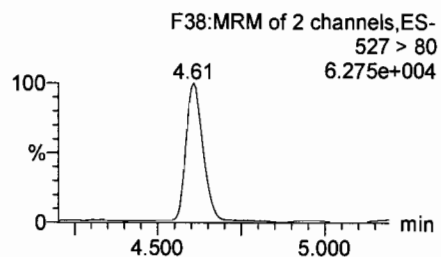
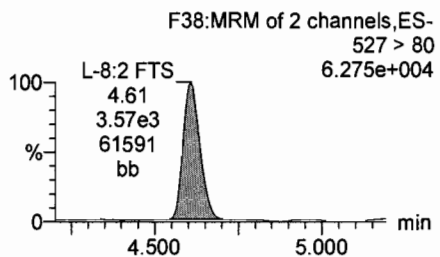
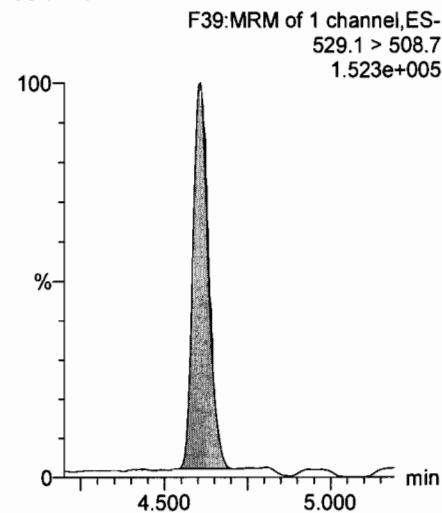
Br-8:2 FTS



13C2-8:2 FTS



13C2-8:2 FTS



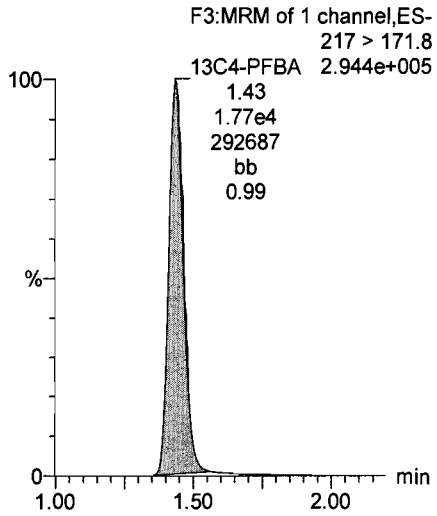
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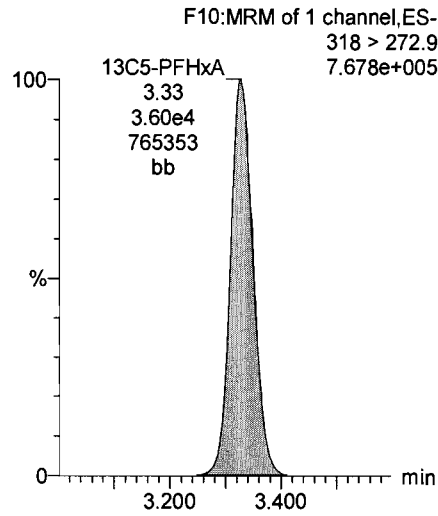
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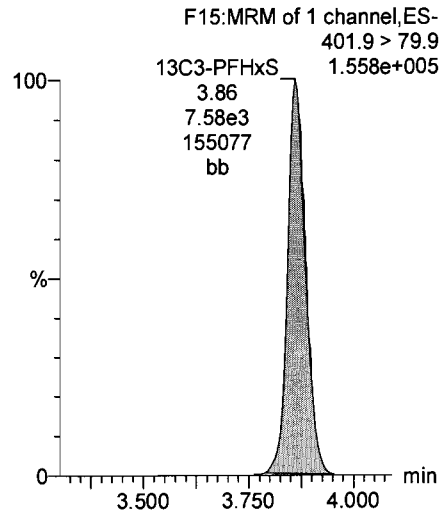
**13C4-PFBA**



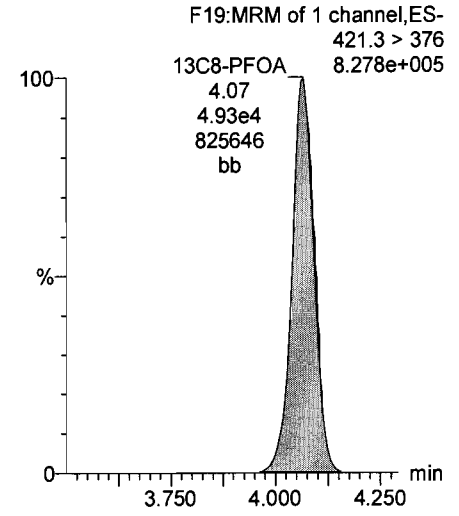
**13C5-PFHxA**



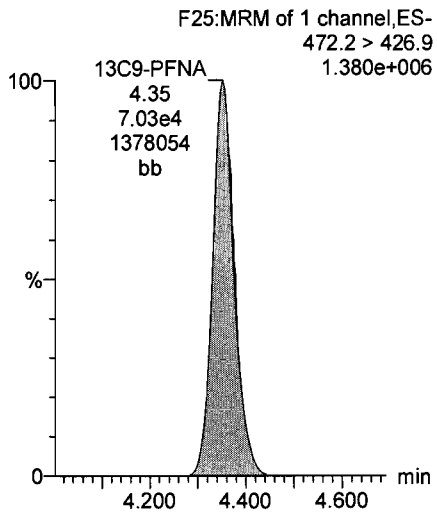
**13C3-PFHxS**



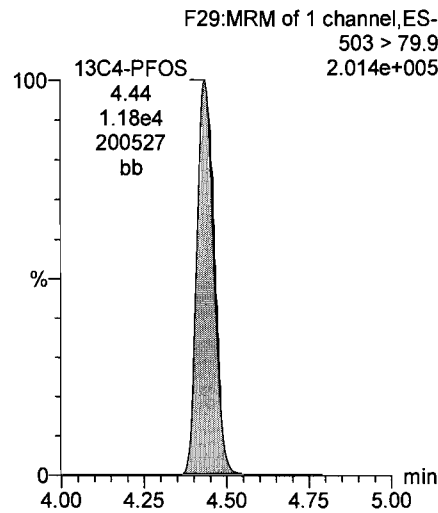
**13C8-PFOA**



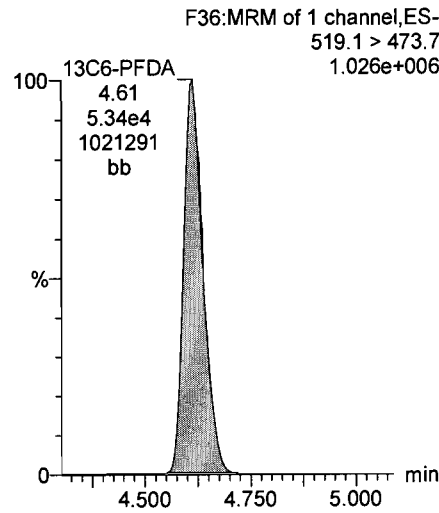
**13C9-PFNA**



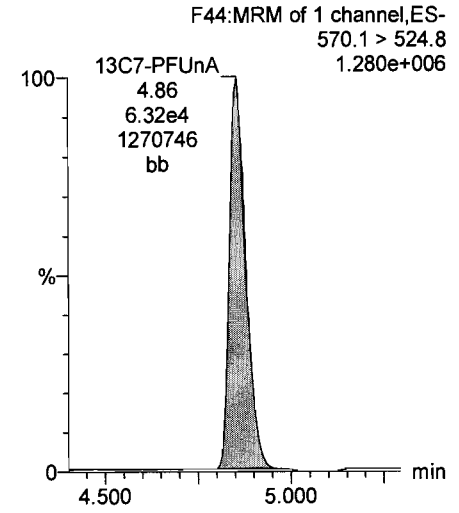
**13C4-PFOS**



**13C6-PFDA**



**13C7-PFUnA**





**DATA VALIDATION SUMMARY REPORT  
NALF FENTRESS, VIRGINIA**

Client: CH2M HILL, Inc., Corvallis, Oregon  
 SDG: 1700681  
 Laboratory: Vista Analytical Laboratory, El Dorado Hills, California  
 Site: NALF Fentress, CTO-WE01, Virginia  
 Date: July 17, 2017

PFCs			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	OF17-MW02-0517	1700681-01	Water
2	OF17-MW03-0517	1700681-02	Water
2MS	OF17-MW03-0517MS	1700681-02MS	Water
2MSD	OF17-MW03-0517MSD	1700681-02MSD	Water
3	OF17-MW01-0617	1700681-03	Water
4	OF17-MW01P-0617	1700681-04	Water
5	OF17-FB060117	1700681-05	Water
6	OF17-MW04-0617	1700681-06	Water
7	OF17-EB060117	1700681-07	Water

A full data validation was performed on the analytical data for five water samples, one aqueous equipment blank sample and one aqueous field blank sample collected on May 31-June 1, 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,” August 2014;
- 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 as qualified for the data quality indicator criteria as detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

## **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

- The field blank samples were free of contamination.

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
OF17-EB060117	None - ND	-	-	-
OF17-FB060117	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 ID	Compound	MS %R/MSD %R/RPD	Qualifier	Affected Samples
2	PFBS	66%/228%/110	None	4X Rule Applies
	PFHpA	-11.2%/263%/218	None	
	PFHxS	1480%/6220%/123	None	
	PFOA	219%/-172%/1660	None	
	PFOS	1930%/-405%/306	None	
	PFNA	53.9%/OK/31.3	None	

**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 except for the following.

Sample ID	Internal Standard	%R	Qualifier
2	18C2-PFHxS	162%	J
3	13C3-PFBS	158%	J
4	13C3-PFBS	157%	J
6	13C3-PFBS	164%	J

**Target Compound Identification**

- All mass spectra and quantitation criteria were met.

**Compound Quantitation**

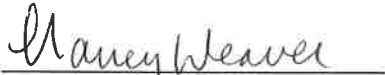
- EDS Sample ID #6 exhibited a high concentration of PFOS over the calibration range of the instrument and was flagged (E) by the laboratory. The sample was not diluted and reanalyzed and the PFOS result has been qualified as estimated (J).

**Field Duplicate Sample Precision**

- Field duplicate results are summarized below. The precision was acceptable.

Compound	OF17-MW01-0617 ng/L	OF17-MW01P-0617 ng/L	RPD	Qualifier
PFBS	181	184	2%	None
PFHpA	1390	1500	8%	
PFHxS	4590	3640	23%	
PFOA	1840	1710	7%	
PFOS	14000	13000	7%	
PFNA	403	388	4%	

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:  Dated: 7/17/17  
Nancy Weaver  
Senior Chemist

<b>Data Qualifier</b>	<b>Definition</b>
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: OF17-MW02-0517				Modified EPA Method 537					
Client Data		Sample Data		Laboratory Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-01	Date Received:	02-Jun-2017 9:00		
Project:	674207.51.51	Sample Size:	0.116 L	QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19		
Date Collected:	31-May-2017 12:20			Date Analyzed:	09-Jun-17 06:53	Column:	BEH C18		
Location:	NALF SITE 17				23-Jun-17 14:24	Column:	BEH C18		
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	I.C.L.-U.C.L.	Qualifiers
PFBS	67.9	1.94	5.39	8.65		IS 13C3-PFBS	146	50 - 150	
PFHpA	672	0.639	5.39	8.65		IS 13C4-PFHpA	125	50 - 150	
PFHxS	3850	25.6	135	216	⊘	IS 18O2-PFHxS	94.1	50 - 150	⊘
PFOA	816	0.704	5.39	8.65		IS 13C2-PFOA	107	50 - 150	
PFOS	8770	8.73	53.9	86.5	⊘	IS 13C8-PFOS	102	50 - 150	⊘
PFNA	292	0.876	5.39	8.65		IS 13C5-PFNA	118	50 - 150	

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

FILE MW 7/17/17

Sample ID: OF17-MW03-0517				Modified EPA Method 537					
Client Data		Sample Data		Laboratory Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-02	Date Received:	02-Jun-2017 9:00		
Project:	674207.51.51	Sample Size:	0.114 L	QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19		
Date Collected:	31-May-2017 14:05			Date Analyzed:	09-Jun-17 07:04	Column:	BEH C18		
Location:	NALF SITE 17				16-Jun-17 08:29	Column:	BEH C18		
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	739	1.97	5.48	8.79		IS 13C3-PFBS	148	50 - 150	
PFHpA	1750	16.2	137	220	<del>D</del>	IS 13C4-PFHpA	102	50 - 150	<del>D</del>
PFHxS	11100	52.0	274	439	<del>D</del> <i>ISH</i>	IS 18O2-PFHxS	162	50 - 150	<del>D</del> <i>H</i>
PFOA	2760	17.9	137	220	<del>D</del>	IS 13C2-PFOA	96.7	50 - 150	<del>D</del>
PFOS	10400	22.2	137	220	<del>D</del>	IS 13C8-PFOS	114	50 - 150	<del>D</del>
PFNA	714	0.890	5.48	8.79		IS 13C5-PFNA	128	50 - 150	

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

*filler*

Sample ID: OF17-MW01-0617				Modified EPA Method 537					
Client Data		Sample Data		Laboratory Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-03	Date Received:	02-Jun-2017 9:00		
Project:	674207.51.51	Sample Size:	0.114 L	QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19		
Date Collected:	01-Jun-2017 11:45			Date Analyzed:	09-Jun-17 07:39	Column:	BEH C18		
Location:	NALF SITE 17				23-Jun-17 14:35	Column:	BEH C18		
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	181	1.95	5.48	8.74	JSH	IS 13C3-PFBS	158	50 - 150	J
PFHpA	1390	32.3	274	437	D	IS 13C4-PFHpA	102	50 - 150	D
PFHxS	4590	51.7	274	437	D	IS 18O2-PFHxS	67.6	50 - 150	D
PFOA	1840	35.5	274	437	D	IS 13C2-PFOA	113	50 - 150	D
PFOS	14000	17.6	110	175	D	IS 13C8-PFOS	129	50 - 150	D
PFNA	403	0.884	5.48	8.74		IS 13C5-PFNA	120	50 - 150	D

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

7/17/17

Client Data		Sample Data		Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-04				
Project:	674207.51.51	Sample Size:	0.122 L	QC Batch:	B7F0010				
Date Collected:	01-Jun-2017 11:50			Date Analyzed:	09-Jun-17 08:27				
Location:	NALF SITE 17			Column:	BEH C18				
				Column:	BEH C18				
				Date Received:	02-Jun-2017 9:00				
				Date Extracted:	08-Jun-2017 8:19				
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	184	1.84	5.12	8.22	IS	13C3-PFBS	157	50 - 150	
PFHpA	1500	12.1	102	164	IS	13C4-PFHpA	100	50 - 150	
PFHxS	3640	48.6	256	411	IS	18O2-PFHxS	111	50 - 150	
PFOA	1710	13.4	102	164	IS	13C2-PFOA	112	50 - 150	
PFOS	13000	16.6	102	164	IS	13C8-PFOS	121	50 - 150	
PFNA	388	0.832	5.12	8.22	IS	13C5-PFNA	124	50 - 150	

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

7/17/17



Sample ID: OF17-FB060117				Modified EPA Method 537					
Client Data		Sample Data		Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-05	Date Received:	02-Jun-2017 9:00		
Project:	674207.51.51	Sample Size:	0.121 L	QC Batch:	B7F0010	Date Extracted:	08-Jun-2017 8:19		
Date Collected:	01-Jun-2017 12:30			Date Analyzed:	09-Jun-17 08:38	Column:	BEH C18		
Location:	NALF SITE 17								
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	I.L.-UCL	Qualifiers
PFBS	ND	1.85	5.17	8.26		IS 13C3-PFBS	143	50 - 150	
PFHpA	ND	0.610	5.17	8.26		IS 13C4-PFHpA	120	50 - 150	
PFHxS	ND	0.977	5.17	8.26		IS 18O2-PFHxS	128	50 - 150	
PFOA	ND	0.672	5.17	8.26		IS 13C2-PFOA	108	50 - 150	
PFOS	ND	0.833	5.17	8.26		IS 13C8-PFOS	119	50 - 150	
PFNA	ND	0.836	5.17	8.26		IS 13C5-PFNA	111	50 - 150	

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

see 3.1.7.1.7

**Sample ID: OF17-MW04-0617**

**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-06				
Project:	674207.51.51	Sample Size:	0.116 L	QC Batch:	B7F0010				
Date Collected:	01-Jun-2017 13:10			Date Analyzed:	09-Jun-17 08:49				
Location:	NALF SITE 17			Column:	BEH C18				
				16-Jun-17 06:46	Column: BEH C18				
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	156	1.93	5.39	8.61	JSH	IS 13C3-PFBS	164	50 - 150	H
PFHpA	2340	6.36	53.9	86.1	D	IS 13C4-PFHpa	108	50 - 150	D
PFHxS	3770	51.0	269	431	D	IS 18O2-PFHxS	108	50 - 150	D
PFOA	3400	7.01	53.9	86.1	D	IS 13C2-PFOA	119	50 - 150	D
PFOS	44500	43.4	269	431	LR	IS 13C8-PFOS	140	50 - 150	D
PFNA	627	0.872	5.39	8.61		IS 13C5-PFNA	128	50 - 150	D

LCL-UCL - Lower control limit - upper control limit

Results reported to DL

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

Only the linear isomer is reported for all other analytes

new file 1.17

**Sample ID: OF-EB060117**

**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700681-07				
Project:	674207.51.51	Sample Size:	0.118 L	QC Batch:	B7F0010				
Date Collected:	01-Jun-2017 13:20			Date Analyzed:	09-Jun-17 09:01				
Location:	NALF SITE 17			Date Received:	02-Jun-2017 9:00				
				Date Extracted:	08-Jun-2017 8:19				
				Column:	BEH C18				
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.89	5.30	8.45		IS 13C3-PFBS	141	50 - 150	
PFHpA	ND	0.624	5.30	8.45		IS 13C4-PFHpA	133	50 - 150	
PFHxS	ND	1.00	5.30	8.45		IS 18O2-PFHxS	133	50 - 150	
PFOA	ND	0.688	5.30	8.45		IS 13C2-PFOA	109	50 - 150	
PFOS	ND	0.852	5.30	8.45		IS 13C8-PFOS	126	50 - 150	
PFNA	ND	0.856	5.30	8.45		IS 13C5-PFNA	129	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL

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

Only the linear isomer is reported for all other analytes

NEW 7/17/17

